FINAL ENVIRONMENTAL IMPACT REPORT

CITY RANCH SPECIFIC PLAN

STATE CLEARINGHOUSE NUMBER 89090619

prepared for:
City of Palmdale

prepared by:
Envicom Corporation
Draft
Environmental Impact Report
for the Proposed
City Ranch Specific Plan
SCH #89090619

Prepared For:
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October 1, 1991
TABLE OF CONTENTS (Cont.)

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.23</td>
<td>Parks and Recreation</td>
</tr>
<tr>
<td>5.24</td>
<td>Road Maintenance</td>
</tr>
<tr>
<td>5.25</td>
<td>Archaeology</td>
</tr>
<tr>
<td>5.26</td>
<td>Paleontology</td>
</tr>
<tr>
<td>5.27</td>
<td>Electromagnetic Radiation</td>
</tr>
<tr>
<td>5.28</td>
<td>Hazardous/Toxic Materials</td>
</tr>
<tr>
<td>5.29</td>
<td>Antelope Valley Public Landfill</td>
</tr>
<tr>
<td>6.0</td>
<td>GROWTH-INDUCING IMPACTS</td>
</tr>
<tr>
<td>7.0</td>
<td>THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY</td>
</tr>
<tr>
<td>8.0</td>
<td>SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES WHICH WOULD RESULT FROM IMPLEMENTATION OF THE PROPOSED PROJECT</td>
</tr>
<tr>
<td>9.0</td>
<td>ALTERNATIVES</td>
</tr>
<tr>
<td>9.1</td>
<td>No Project</td>
</tr>
<tr>
<td>9.2</td>
<td>Reduced Residential Density</td>
</tr>
<tr>
<td>9.3</td>
<td>College Campus</td>
</tr>
<tr>
<td>9.4</td>
<td>Alternate Site A - Willow Springs</td>
</tr>
<tr>
<td>9.5</td>
<td>Alternate Site B - Quail Lake</td>
</tr>
<tr>
<td>9.6</td>
<td>Environmentally Superior Alternative</td>
</tr>
<tr>
<td>10.0</td>
<td>ORGANIZATIONS AND PERSONS CONSULTED</td>
</tr>
<tr>
<td>11.0</td>
<td>REFERENCES</td>
</tr>
<tr>
<td>12.0</td>
<td>MITIGATION MONITORING PLAN</td>
</tr>
</tbody>
</table>

APPENDICES

APPENDIX A - NOP and Initial Study
APPENDIX B - Responses to the NOP
APPENDIX C - Jobs/Housing Balance Analysis (Separate Volume)
APPENDIX D - Geotechnical Report (Separate Volume)
APPENDIX E - Hydrology Reports (Separate Volume)
APPENDIX F - Biology Reports (Separate Volume)
APPENDIX G - Technical Studies (Separate Volume)
APPENDIX H - Archaeology Report (Separate Volume)
APPENDIX I - Paleontology Report (Separate Volume)
APPENDIX J - Electromagnetic Radiation Reports (Separate Volume)
APPENDIX K - Hazardous/Toxic Materials Reports (Separate Volume)
APPENDIX L - Notice of Determination
APPENDIX M - City Council Resolution 92-58
APPENDIX N - Minutes of the City Council Meetings
APPENDIX O - City Council Staff Report
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY</td>
<td>5-1</td>
</tr>
<tr>
<td>1.0 INTRODUCTION</td>
<td>1-1</td>
</tr>
<tr>
<td>2.0 PROJECT DESCRIPTION</td>
<td>2-1</td>
</tr>
<tr>
<td>2.1 Project Location</td>
<td>2-1</td>
</tr>
<tr>
<td>2.2 Project Objectives</td>
<td>2-1</td>
</tr>
<tr>
<td>2.3 Project Characteristics</td>
<td>2-1</td>
</tr>
<tr>
<td>2.4 Permits and Approvals</td>
<td>2-20</td>
</tr>
<tr>
<td>3.0 ENVIRONMENTAL SETTING</td>
<td>3-1</td>
</tr>
<tr>
<td>3.1 Regional Setting</td>
<td>3-1</td>
</tr>
<tr>
<td>3.2 Local Setting</td>
<td>3-3</td>
</tr>
<tr>
<td>4.0 CUMULATIVE PROJECTS DESCRIPTION</td>
<td>4-1</td>
</tr>
<tr>
<td>5.0 ANALYSIS OF ENVIRONMENTAL ISSUES</td>
<td>5-1</td>
</tr>
<tr>
<td>5.1 Overview</td>
<td>5-1</td>
</tr>
<tr>
<td>5.2 Land Use</td>
<td>5-3</td>
</tr>
<tr>
<td>5.3 Population</td>
<td>5-14</td>
</tr>
<tr>
<td>5.4 Housing</td>
<td>5-21</td>
</tr>
<tr>
<td>5.5 Earth (Geology)</td>
<td>5-26</td>
</tr>
<tr>
<td>5.6 Hydrology</td>
<td>5-65</td>
</tr>
<tr>
<td>5.7 Biology</td>
<td>5-82</td>
</tr>
<tr>
<td>5.8 Transportation</td>
<td>5-109</td>
</tr>
<tr>
<td>5.9 Air Quality</td>
<td>5-152</td>
</tr>
<tr>
<td>5.10 Noise</td>
<td>5-176</td>
</tr>
<tr>
<td>5.11 Aesthetics</td>
<td>5-187</td>
</tr>
<tr>
<td>5.12 Light and Glare</td>
<td>5-206</td>
</tr>
<tr>
<td>5.13 Energy</td>
<td>5-211</td>
</tr>
<tr>
<td>5.14 Electricity</td>
<td>5-215</td>
</tr>
<tr>
<td>5.15 Natural Gas</td>
<td>5-219</td>
</tr>
<tr>
<td>5.16 Water</td>
<td>5-222</td>
</tr>
<tr>
<td>5.17 Sewage Disposal</td>
<td>5-231</td>
</tr>
<tr>
<td>5.18 Solid Waste</td>
<td>5-238</td>
</tr>
<tr>
<td>5.19 Communications</td>
<td>5-242</td>
</tr>
<tr>
<td>5.20 Sheriff’s Services</td>
<td>5-249</td>
</tr>
<tr>
<td>5.21 Fire and Emergency Medical Services</td>
<td>5-256</td>
</tr>
<tr>
<td>5.22 Schools</td>
<td>5-263</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Project Site Location</td>
<td>2-2</td>
</tr>
<tr>
<td>2. Development Plan</td>
<td>2-3</td>
</tr>
<tr>
<td>3. Phasing Plan</td>
<td>2-5</td>
</tr>
<tr>
<td>4. Conceptual Grading Plan</td>
<td>2-7</td>
</tr>
<tr>
<td>5. Conceptual Design for Planning Areas 5 and 10</td>
<td>2-10</td>
</tr>
<tr>
<td>6. Conceptual Design for Planning Area 8</td>
<td>2-11</td>
</tr>
<tr>
<td>7. Circulation Plan</td>
<td>2-13</td>
</tr>
<tr>
<td>8. Street Cross-sections</td>
<td>2-14</td>
</tr>
<tr>
<td>9. Conceptual Design for Planning Areas 1, 9 and 35</td>
<td>2-19</td>
</tr>
<tr>
<td>10. Regional Setting</td>
<td>3-2</td>
</tr>
<tr>
<td>11. Project Site Geomorphological Regions</td>
<td>3-4</td>
</tr>
<tr>
<td>12. Cumulative Projects Locations</td>
<td>4-3</td>
</tr>
<tr>
<td>13. Existing Land Uses</td>
<td>5-4</td>
</tr>
<tr>
<td>14. City of Palmdale General Plan Land Use Designations</td>
<td>5-5</td>
</tr>
<tr>
<td>15. County of Los Angeles General Plan Land Use Designations</td>
<td>5-7</td>
</tr>
<tr>
<td>16. Existing County of Los Angeles and City of Palmdale Zoning</td>
<td>5-8</td>
</tr>
<tr>
<td>17. Population Growth 1984-2010</td>
<td>5-15</td>
</tr>
<tr>
<td>18. Comparison of Subregional, City of Palmdale and Project Population Growth</td>
<td>5-17</td>
</tr>
<tr>
<td>19. Soils and Geology</td>
<td>5-27</td>
</tr>
<tr>
<td>20. Local and Vicinity Faults</td>
<td>5-29</td>
</tr>
<tr>
<td>21. Seismic Epicenters</td>
<td>5-34</td>
</tr>
<tr>
<td>22. Liquefaction Potential and High Groundwater Areas</td>
<td>5-39</td>
</tr>
<tr>
<td>23. Potential Slope Instability</td>
<td>5-42</td>
</tr>
<tr>
<td>24. Potential Expansive Soil Areas</td>
<td>5-43</td>
</tr>
<tr>
<td>25. Potential Hydroconsolidation Areas</td>
<td>5-44</td>
</tr>
<tr>
<td>26. Restricted Use Zones</td>
<td>5-47</td>
</tr>
<tr>
<td>27. Special Foundation Areas</td>
<td>5-56</td>
</tr>
<tr>
<td>28. Flood Hazard Areas (Undeveloped Condition)</td>
<td>5-67</td>
</tr>
<tr>
<td>29. Debris Potential Areas</td>
<td>5-68</td>
</tr>
<tr>
<td>30. Hydrology-Undeveloped Site (50-year Rainfall)</td>
<td>5-71</td>
</tr>
<tr>
<td>31. Flood Hazard Areas (Developed Condition)</td>
<td>5-73</td>
</tr>
<tr>
<td>32. Hydrology-Developed Site (50-year Rainfall)</td>
<td>5-75</td>
</tr>
<tr>
<td>33. Master Drainage Plan</td>
<td>5-76</td>
</tr>
<tr>
<td>34. Conceptual Design for Low-flow Detention Basin</td>
<td>5-80</td>
</tr>
<tr>
<td>35. Project Site Plant Communities</td>
<td>5-83</td>
</tr>
<tr>
<td>36. Joshua Tree Locations</td>
<td>5-85</td>
</tr>
<tr>
<td>37. Project Site Sensitive Plants</td>
<td>5-95</td>
</tr>
<tr>
<td>38. Pierson’s Morning Glory Mitigation</td>
<td>5-105</td>
</tr>
<tr>
<td>39. Existing Circulation System</td>
<td>5-110</td>
</tr>
<tr>
<td>40. Current Traffic Volumes</td>
<td>5-115</td>
</tr>
<tr>
<td>41. Master Planned Circulation System</td>
<td>5-125</td>
</tr>
<tr>
<td>42. Typical Street Cross-Sections (Palmdale)</td>
<td>5-126</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>43.</td>
<td>Project Traffic Assignment</td>
</tr>
<tr>
<td>44.</td>
<td>Year 2010 Daily Traffic Volumes Without City Ranch</td>
</tr>
<tr>
<td>45.</td>
<td>Study Intersections and Assumed Lane Configurations</td>
</tr>
<tr>
<td>46.</td>
<td>Year 2010 Traffic Volumes and Level of Service</td>
</tr>
<tr>
<td>47.</td>
<td>Project Traffic Contribution on Regional Network</td>
</tr>
<tr>
<td>48.</td>
<td>Traffic Analysis Zones for 2010 Areawide Traffic Study</td>
</tr>
<tr>
<td>49.</td>
<td>Southeast Desert Air Basin</td>
</tr>
<tr>
<td>50.</td>
<td>Surface Wind Summary Wind Roses - Palmdale Station</td>
</tr>
<tr>
<td>51.</td>
<td>Land Use Compatibility for Noise Exposure</td>
</tr>
<tr>
<td>52.</td>
<td>Noise Levels for Typical Construction Equipment Referenced to 50 feet</td>
</tr>
<tr>
<td>53.</td>
<td>Visual Features of the Project Site</td>
</tr>
<tr>
<td>54.</td>
<td>View Northward Over the Project Site from the Sierra Pelona Area of the Site</td>
</tr>
<tr>
<td>55.</td>
<td>View Across the Project Site From the Verde Ridge Area</td>
</tr>
<tr>
<td>56.</td>
<td>View Toward the Southern Boundary of the Project Site</td>
</tr>
<tr>
<td>57.</td>
<td>Off-Site Visual Analysis</td>
</tr>
<tr>
<td>58.</td>
<td>Conceptual Landscape Plan</td>
</tr>
<tr>
<td>59.</td>
<td>Bridge Road Entry Statement</td>
</tr>
<tr>
<td>60.</td>
<td>Avenue S Entry Statement</td>
</tr>
<tr>
<td>61.</td>
<td>Avenue S Streetscape</td>
</tr>
<tr>
<td>62.</td>
<td>Bridge Road Streetscape</td>
</tr>
<tr>
<td>63.</td>
<td>Existing Electric Lines</td>
</tr>
<tr>
<td>64.</td>
<td>Off-Site Water Plan</td>
</tr>
<tr>
<td>65.</td>
<td>On-Site Water Plan</td>
</tr>
<tr>
<td>66.</td>
<td>Sewer Plan</td>
</tr>
<tr>
<td>67.</td>
<td>Communication Lines</td>
</tr>
<tr>
<td>68.</td>
<td>Antelope Valley Sheriff Station Locations</td>
</tr>
<tr>
<td>69.</td>
<td>Fire Station Locations</td>
</tr>
<tr>
<td>70.</td>
<td>Hospital and Trauma Center Locations</td>
</tr>
<tr>
<td>71.</td>
<td>Existing and Proposed Schools</td>
</tr>
<tr>
<td>72.</td>
<td>Bicycle and Pedestrian Trail System</td>
</tr>
<tr>
<td>73.</td>
<td>Open Space and Recreation Concept</td>
</tr>
<tr>
<td>74.</td>
<td>Hazardous Materials Locations</td>
</tr>
<tr>
<td>75.</td>
<td>Potential Hazard Areas</td>
</tr>
<tr>
<td>76.</td>
<td>Location of Antelope Valley Public Landfill in Relation to Project Site</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>77.</td>
<td>Landfill Mitigation</td>
</tr>
<tr>
<td>78.</td>
<td>Alternative 2 - Reduced Residential Density</td>
</tr>
<tr>
<td>79.</td>
<td>Alternative 3 - College Campus</td>
</tr>
<tr>
<td>80.</td>
<td>Alternate Site Locations</td>
</tr>
<tr>
<td>81.</td>
<td>Alternative 4 - Alternate Site A: Willow Springs</td>
</tr>
<tr>
<td>82.</td>
<td>Alternative 5 - Alternate Site B: Quail Lake</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cumulative Projects</td>
<td>4-2</td>
</tr>
<tr>
<td>2. Project and Cumulative Population and Employment</td>
<td>5-18</td>
</tr>
<tr>
<td>3. Building Permits Issued for New Homes in the City of Palmdale</td>
<td>5-22</td>
</tr>
<tr>
<td>4. Characteristics of On-site Faults or Lineations Outside the</td>
<td>5-31</td>
</tr>
<tr>
<td>San Andreas, Little Rock and Nadeau Fault Zone</td>
<td></td>
</tr>
<tr>
<td>5. Significant Recorded Earthquakes in the Palmdale Area</td>
<td>5-36</td>
</tr>
<tr>
<td>6. Modified Mercalli Intensity Scale of 1931 (1956 version)</td>
<td>5-37</td>
</tr>
<tr>
<td>7. Sensitive Species Considered for City Ranch Specific Plan</td>
<td>5-91</td>
</tr>
<tr>
<td>8. Level of Service Criteria</td>
<td>5-116</td>
</tr>
<tr>
<td>10. Current Daily Volume-to-Capacity Ratio</td>
<td>5-120</td>
</tr>
<tr>
<td>and Level of Service Summary</td>
<td></td>
</tr>
<tr>
<td>11. Existing Intersection Lane Geometrics</td>
<td>5-122</td>
</tr>
<tr>
<td>12. Current Peak Hour ICU and LOS Summary</td>
<td>5-123</td>
</tr>
<tr>
<td>13. Project-Related Unadjusted Trip Generation</td>
<td>5-129</td>
</tr>
<tr>
<td>14. Adjusted Trip Generation Forecast</td>
<td>5-131</td>
</tr>
<tr>
<td>15. Year 2010 Daily Traffic Volumes and Levels of Service</td>
<td>5-134</td>
</tr>
<tr>
<td>16. Year 2010 ICU and LOS Summary</td>
<td>5-139</td>
</tr>
<tr>
<td>17. Year 2010 Traffic Volume Projections</td>
<td>5-140</td>
</tr>
<tr>
<td>18. Forecast Year 2010 Land Use</td>
<td>5-149</td>
</tr>
<tr>
<td>19. Description of Selected Air Contaminants and Emission Comparisons</td>
<td>5-158</td>
</tr>
<tr>
<td>20. Ambient Air Quality Standards</td>
<td>5-160</td>
</tr>
<tr>
<td>21. Episodic Criteria</td>
<td>5-162</td>
</tr>
<tr>
<td>22. Measured Ambient Air Quality Lancaster Monitoring Site 1985-1988</td>
<td>5-164</td>
</tr>
<tr>
<td>23. Estimated Grading and Site Preparation Vehicle Emissions</td>
<td>5-168</td>
</tr>
<tr>
<td>24. Project Generated and Estimated Buildout Emissions</td>
<td>5-169</td>
</tr>
<tr>
<td>25. Cumulative Plus Project Estimated Emissions</td>
<td>5-174</td>
</tr>
<tr>
<td>26. Existing Exterior Noise Exposure Levels Adjacent to Nearby</td>
<td>5-179</td>
</tr>
<tr>
<td>Roadways</td>
<td></td>
</tr>
<tr>
<td>27. Year 2000 Plus Project Exterior Noise Exposure Levels Adjacent</td>
<td>5-183</td>
</tr>
<tr>
<td>to Area Roadways</td>
<td></td>
</tr>
<tr>
<td>28. Proposed Project a Cumulative Estimated Daily Energy Use</td>
<td>5-213</td>
</tr>
<tr>
<td>29. Proposed Project and Cumulative Daily Electrical Usage</td>
<td>5-217</td>
</tr>
<tr>
<td>30. Proposed Project and Cumulative Daily Gas Consumption</td>
<td>5-220</td>
</tr>
<tr>
<td>31. Proposed Project and Cumulative Daily Water Usage</td>
<td>5-224</td>
</tr>
<tr>
<td>32. Proposed Project and Cumulative Sewage Generation</td>
<td>5-235</td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>33. Proposed Project and Cumulative Solid Waste Generation</td>
<td>5-240</td>
</tr>
<tr>
<td>34. Proposed Project and Cumulative Sheriff’s Officers to Population</td>
<td>5-251</td>
</tr>
<tr>
<td>Ratios</td>
<td></td>
</tr>
<tr>
<td>35. Proposed Project and Cumulative Student Generation</td>
<td>5-267</td>
</tr>
<tr>
<td>36. City Park Space Requirements for the Proposed Project</td>
<td>5-278</td>
</tr>
<tr>
<td>37. Archaeological Sites and Isolated Finds Found on the Project Site</td>
<td>5-288</td>
</tr>
<tr>
<td>38. Comparison of Proposed Project and Alternatives</td>
<td>9-2</td>
</tr>
</tbody>
</table>
SUMMARY

S.1 Project Description

The proposed project consists of the development of the 1985-acre project site under a Specific Plan that would result in the construction of 5,200 dwelling units, 260,000 square feet of commercial space, and a 216-acre golf course with sites set aside for four elementary schools, five parks and a fire station. Approximately 404 acres of the project site would be set aside as natural open space.

S.2 Project Location

The project site is located in an unincorporated portion of the Antelope Valley area of Los Angeles County contiguous to the City of Palmdale approximately two miles west of the Antelope Valley Freeway (SR-14) along the southern edge of Elizabeth Lake Road, south of the intersection with 25th Street West.

S.3 Analysis of Environmental Issues

The following environmental issues were assessed in the EIR. The impacts associated with these issues are listed below:

LAND USE

Project Impacts

Development of the proposed project would transform the existing undeveloped site to a developed suburban site with up to 5,200 residential dwelling units (at a 2.62 units per gross acre density) comprised of a mix of single-family, townhouse and condominium units, along with 260,000 square feet of neighborhood commercial space, a golf course and clubhouse, hillside natural open space uses, and sites for four elementary schools, six public parks, and a fire station. Proposed uses would be compatible with other residential and mixed-used projects proposed in the project vicinity. Development of the proposed project would pose a potential land use conflict with regard to proximity of the proposed Antelope Valley Public Landfill expansion to the east.

Development of the proposed project would require the following approvals with regard to land use controls:

- The project site will need to be annexed into the City of Palmdale jurisdictional area. Annexation will include amending the City’s sphere of influence boundary to include the entire project site.

- A General Plan Amendment will be necessary to formally incorporate the Specific Plan land use designations into General Plan Land Use Element.
• In order to establish site zoning, the project site will need to be prezoned to SP (Specific Plan) with an overall limit of 5,200 permitted residential units.

• The project site will need to be subdivided into 38 planning area parcels.

• Certain uses within the Specific Plan (e.g., townhome and condo, recreational, commercial and community facilities) may also require Conditional Use Permits as delineated in the development regulations of the Specific Plan.

• Certain elements of the Specific Plan may require Site Plan Review.

• The Specific Plan will need to be adopted by City Council Ordinance.

• Amendments to the Specific Plan would require adoption by ordinance.

Without these approvals, project development would constitute a significant impact with regard to land use.

In addition to the required approvals listed above, the following actions may also be required as part of the permitting and approval process for the proposed project.

• California Department of Fish and Game Stream or Lake Alteration Agreements (per Section 1603 of the State Fish and Game Code) for alterations to the Anaverde and Amargosa Creeks.

• Army Corps of Engineers Section 404 Permit for the discharge of fill material into waters of the United States pursuant to the Clean Water Act of 1977, as amended, for any improvements made in the alkali meadow/transmontaine alkali marsh portions of Planning Area 13 south of the proposed City Ranch Road alignment and north of the California Aqueduct, designated to be within the jurisdiction of the Corps. (At a minimum, lost wetland acreage will be replaced in kind on a one-to-one acre basis.)

Mitigation Measures

Implementation of the following measures would reduce significant adverse project-related land use impacts to a level of "not significant":

• Obtain required land use approvals.

• The annexation process and time frame for annexation shall conform to the City of Palmdale and Los Angeles County Local Agency Formation Commission (LAFCO) provisions.
• The proposed Specific Plan will comply with the State Specific Plan and Municipal Code requirements (California Government Code, Title 7, Division 1, Chapter 3, Article 8, Sections 65430 through 65457 and City of Palmdale Specific Plan Guidelines).

• The proposed project shall comply with the site specific zoning and subdivision standards contained in the City Ranch Specific Plan and applicable City of Palmdale Zoning ordinances.

• The applicant shall cause to be prepared an annual monitoring report. The report shall evaluate compliance with the design guidelines and development standards of the City Ranch Specific Plan and the mitigation measures of the City Ranch Specific Plan Final EIR. The report shall be submitted to the Planning Director the first quarter of each year through the buildout of the project. In addition, aerial photos of the active construction areas of the project site will be taken and submitted to the Planning Director on a monthly basis during the construction process. The aerial photos shall be of a scale approved by the Public Works Department. Monitoring and verification of compliance with adopted Specific Plan development standards shall also be performed prior to subsequent approvals to determine if the proposed measures are achieving their intended purpose. Future discretionary approvals may include additional conditions based upon City staff review of the Annual Monitoring Report.

Unavoidable Adverse Impacts

Following implementation of the recommended mitigation measures, project impacts regarding land use would not be significant.

POPULATION

Project Impacts

Development of the proposed project would add approximately 14,040 persons to the project site. This population would be expected to create a proportional increase in demand for public services including schools, utilities, and health and social services. The proposed project would also create job opportunities. Total project-generated employment opportunities would number about 1,093 jobs. In addition, project development could indirectly create an impetus for increased employment activity in the Palmdale area. Because the City of Palmdale is planning for substantial population increase, the project's population increase is not considered significant. The population generated by this project will, however, contribute to cumulative vehicular traffic generation and the resultant secondary adverse air quality and noise impacts. (See discussions of noise and air quality impacts.)
Mitigation Measures

Mitigation Identified for Air Quality, Noise, Traffic and Public Services, are described in Sections 5.9, 5.10, 5.8, and 5.13 through 5.24 of this report. These mitigation measures address the significant population growth impacts.

Unavoidable Adverse Impacts

None.

HOUSING

Project Impacts

The proposed project would provide a range of housing types. The additional housing provided by the proposed project would increase the City’s 1991 housing stock by 19%. The jobs to housing ratio of the proposed project is 0.17. Thus, this project would continue the existing development trend in the area (housing intensive with few local job opportunities) and would not markedly support SCAG’s goal of becoming more “jobs rich.” Development of this project would further exacerbate the imbalance of jobs and housing in the area, thus encouraging longer trip lengths between home and the work place. In this context, the increased housing resulting from development of the proposed project can be considered a significant impact.

Mitigation Measures

To mitigate the secondary impacts of the jobs/housing imbalance, the applicant shall implement the traffic and air quality mitigation measures listed in Sections 5.8 and 5.9 of this EIR.

Unavoidable Adverse Impacts

Development of the proposed project would contribute additional housing to an area which is already rich in housing but poor in employment opportunities. In the long run, additional housing construction in the area would provide a local workforce base which may serve to attract large employers to the Palmdale area. However, even after implementation of the recommended mitigation measures, the proposed project’s “housing rich” JHR cannot be fully mitigated and remains a significant unavoidable adverse impact.
EARTH (GEOLOGY)

Project Impacts

Development of the project site would expose residents and users of the project site to geologic hazards associated with faulting, seismic shaking, liquefaction, seismic settlement, seismic ground failure and landslides. These potential impacts are considered significant.

Mitigation Measures

Implementation of the following measures would reduce impacts related to geologic hazards:

Surface Fault Rupture

- No structures intended for human habitation as previously defined shall be constructed in Restricted Use Zones I, II or III. Further specific fault hazard studies may reveal the existence of additional buildable areas within previously identified Restricted Use Zone areas.

- Special foundations have been recommended for select areas of the site adjacent to defined Restricted Use Zones (Figure 27 of the EIR). Special foundations should consist of more heavily reinforced foundations and concrete slabs. Actual design of the foundations should be determined by the project structural engineer as approved by the City Building and Safety Department.

- Each deed or other conveyance of Real Property shall include the following statement: "Portions of the City Ranch Specific Plan area are traversed by major traces of the San Andreas Rift Zone, a geologic feature capable of producing a magnitude 8.3 earthquake. The active fault zone has been identified by extensive site specific testing and analysis. All buildings are prohibited by the Specific Plan from being constructed across the trace of an active fault throughout the Specific Plan area. Due to the proximity of portions of the property to the San Andreas Fault, there is a higher risk of experiencing surface fault rupture than other locations not adjacent to an active fault. An active fault is any fault that has been determined to have experienced movement within the last eleven thousand (11,000) years." Additionally, where applicable, each disclosure statement and deed record shall contain language which denotes the possibility of building restrictions on residential additions for human occupancy on those parcels which are located in either the Special Seismic Foundation or Seismic Setback Zones.
Seismic Shaking

• Develop site specific earthquake response spectra for critical facilities such as water tanks, schools and the fire station which consider effects of ground shaking associated with events in the San Andreas Rift Zone. These reports are intended to provide specific engineering design criteria related to structural design and selection of building materials.

• All structures on the project site shall be designed in accordance with at least the minimum code standards for Seismic Zone 4 as described in the Los Angeles County Building Code.

• Structural and foundation designs, detailed drawings and specifications shall be incorporated into architect designs and construction plans. Specifications for the construction plans may include soil improvements or other remedial measures.

• The project geotechnical consultant shall perform grading observation and testing to confirm adherence to specifications and recommendations, and shall certify that all grading complies with the provisions of all approved plans and specifications, pursuant to the Los Angeles County Uniform Building Code (U.B.C.).

Liquefaction and Seismic Settlement

• A liquefaction study of the site shall include the following:
  - Subsurface exploration (by borings) to depths of thirty to forty feet below existing native soil grades in areas of known shallow groundwater. Relatively undisturbed soil samples should be obtained from the borings for determination of soil density and grain-size analysis. (A sufficient number of borings should be drilled to obtain a reasonable amount of knowledge relative to the soil conditions and depths to groundwater.)

• Testing to determine engineering characteristics of the soil shall include the following:
  - Soil sampling blowcounts, soil density measurements, and grain-size analysis to determine the susceptibility of the soil in shallow groundwater areas to liquefaction. Recommendations for remedial grading or foundation design shall be made for areas in which it is determined that liquefaction is a significant hazard. Typical recommendations may include deeper foundations, densification of the susceptible soils, or construction of subdrains.

• Tests and observations shall be performed by the project geotechnical consultant during grading operations to assure adherence to recommendations in identified liquefaction hazard areas, and shall certify that all grading complies with the
provisions of all approved plans and specifications pursuant to the Los Angeles County U.B.C.

Landslides

- Any hillside areas of the property where planned grading would result in artificial slopes greater than ten feet in height shall be evaluated specifically relative to slope stability by preparing the following geologic and geotechnical engineering studies:

  - Detailed geologic mapping of surface features in the areas of the proposed cut slopes.

  - Subsurface exploration with backhoe test pits and trenches to expose the shallow geologic conditions in and around the proposed graded areas.

  - Deep subsurface exploration with borings including small diameter auger borings or large diameter bucket borings at the specific cut slope locations. (It is suggested that the subsurface exploration be extended to depths at least equal to, and ideally greater than, the proposed depths of grading.)

  - Laboratory tests on the soils and rocks collected from the exploration programs for determination of density, moisture content, shear strength, and compaction characteristics.

  - Detailed engineering analyses utilizing the data obtained from the field exploration and laboratory testing programs relative to stability of the existing and planned graded slopes. Recommendations shall be provided for remedial grading to repair or replace any potential unstable slopes.

- The findings and recommendations of the Slope Stability Study shall be incorporated into construction plans and site grading activities, and a slope maintenance plan. Grading, slope maintenance, and construction plans shall be reviewed and approved by the City Engineer.

- The project geotechnical consultant shall be responsible to perform confirmatory tests and observations during grading to assure that the geotechnical recommendations are being followed and shall certify that all grading complies with the provisions of all approved plans and specifications, pursuant to the Los Angeles County U.B.C.

- Recommendations for slope planting and irrigation shall be prepared by a qualified landscape architect and reviewed by the City Planning Department and by the City Engineer. Approved plans by the City Engineer will be required prior to approval of a final map by Engineering.
• Temporary erosion control measures shall be employed as follows:

  - The surface of all slopes more than three (3) feet in vertical height shall be covered with North American Green S 150 or approved erosion control blankets or application of an approved latex soil binder included in a hydroseed mix designed for germinating with natural rainfall. This would consist of slope stabilizing, low water consuming grasses and ground covers. Installation shall conform to all manufacturer's specifications.

  - Erosion mitigation measures shall be performed to the satisfaction of the City of Palmdale Landscape Architect prior to the acceptance of rough grading.

• Permanent erosion control measures shall be employed as follows:

  - The surface of all slopes more than three (3) feet in vertical height shall be covered with North American Green S 150 approved equal erosion control blankets or be permanently landscaped and irrigated per approved landscape plans, and have obtained 80% coverage of groundwater. Installation shall conform to manufacturer's specifications.

  - The surface of all slopes more than three (3) feet in vertical height shall be protected against damage from erosion by planting with groundcover plants. Slopes exceeding fifteen (15) feet in vertical height shall also be planted with shrubs at not to exceed 10 feet on centers; or a combination of shrubs and trees at equivalent spacing, in addition to the groundcover plants.

• Planting need not be provided for cut slopes which are rocky in character and not subject to damage by erosion and any slopes protected against erosion damage by other methods when such methods have been specifically recommended by a soils engineer, engineering geologist or equivalent authority, and found to offer erosion protection equal to that provided by the planting specified in this section.

• All required landscaping and irrigation shall conform to the City of Palmdale's Slope Erosion Control Landscaping Standards.

• All planting and irrigation shall be installed to the satisfaction of the City of Palmdale Landscape Architect prior to the acceptance of final grading.

• All slope banks less than 30 feet in height within single-family residential lots shall be maintained by individual homeowners enforced through deed restrictions. Slopes in common open space areas of multi-family and attached single-family unit planning areas and slopes greater than 30 feet high in rear yards of private residential lots shall be maintained by homeowners associations. Slopes in landscape easements along public rights-of-way shall be maintained by a special City maintenance district. Slopes in park areas shall be maintained by the City. Where maintenance is to be provided by a maintenance district or
homeowner's association, said area shall have an easement recorded over it for access and maintenance purposes.

• Slope plantings and irrigation systems shall be maintained.

• Berms, swales or devices shall be provided at the top of cut or fill slopes to prevent surface waters from overflowing onto and damaging the face of the slope. Gutters or other special drainage controls shall be provided where the proximity of runoff from buildings or other structures is such as to pose a potential hazard to slope integrity.

• Manufactured down slopes to property lines shall be prohibited except for corner lot conditions. Where walls occur at the tops of slopes, access shall be provided to the homeowner or designated maintenance party to permit maintenance of slopes and landscaping.

• The drainage outlets shall be periodically inspected and cleaned of silt and debris.

• In accordance with California Department of Real Estate disclosure format and procedures, all potential buyers of residential lots containing slopebanks greater than 30 feet in height shall be notified of the condition.

Soils

• Soils engineering recommendations listed on pages 40-63 of the May, 1989 Buena Engineering report entitled "Preliminary Engineering Geotechnical Report, City Ranch Property" (Appendix D of the EIR) shall be strictly followed.

• Reshaping of the natural terrain to permit access and construction of facilities such as water tank sites, utility lines and easements, service roads, fire access, etc., shall be kept to a minimum in areas of greater than 25% slope.

• The geotechnical consultant shall control construction activities through confirmatory observations and testing and quality control procedures. Special attention must be given to the hydroconsolidation issue and specific plans for treating or removing the susceptible soils. Present recommendations appear adequate but may require reassessment depending on location specific conditions.

• For areas within "medium" or higher soil expansion potential (refer to Figure 24 of the EIR), post-tensioned foundations shall be required.

Seismic Ground Failure

• Prohibit construction of habitable structures in Restricted Use Zone I, and in Restricted Use Zones II and III, conduct in-grading inspections and identify
precautionary measures (e.g., enhance foundations, adjust building locations slightly) where trench exposures show evidence of soil filled cracks along lineaments or buried geologic contacts.

Flooding Potential

- Construct flood control channels along the main washes and maintain drainage diversion devices locally (e.g., under roads, engineered fills and along the Aqueduct).

- For the Aqueduct embankment failure event, construct protective berms to the elevation sufficient to control the design flooding event specified by the State for this area. In addition, the structures shall be elevated above the flooding levels by increasing the height of fills.

Groundwater

- Provisions shall be made for adequate drainage of the site both during construction and operational phases of the project. To avoid problems associated with rising groundwater levels in Planning Area 15, subsurface drainage (for example, gravel drains, herring bone drains or french drains) would be required.

- If required during construction, a dewatering or drainage diversion program shall be developed and implemented subject to review by the County of Los Angeles Department of Public Works and/or the City of Palmdale as required by the City Engineer.

Unavoidable Adverse Impacts

Implementation of the recommended mitigation measures would reduce adverse geologic impacts, however, they would not eliminate all the significant impacts associated with geologic hazards. Geologic impacts are therefore considered unavoidable adverse impacts.

HYDROLOGY

Project Impacts

As part of the grading plan for the proposed project, building pads and roadways in areas situated within the existing 100-year floodplain of the Anaverde Creek will be raised above the 100-year floodzone and drainage will be channelized in these areas thereby eliminating 100-year flood hazards from the project site. However, following project development, portions of Planning Areas 2, 4, 9, 13 and 22 would be subject to flooding hazards from failure of the California Aqueduct. Any structures built in impacted portions of these park or golf course areas would be
damaged by flooding if an Aqueduct failure occurred. Of particular concern is the location of the golf course clubhouse. This is considered a significant impact.

Following project development, storm runoff for a 50-year storm event would increase by 9% over existing conditions. A series of drainage improvements including closed conduits, open channels, earthen swales, debris basins, and flood control basins would be needed to adequately handle post-development runoff.

Post-development runoff could pick up and transport urban pollutants. Of particular concern is low flow non-storm runoff in which water volumes are low and pollutant concentrations high. The low flow non-storm runoff poses a danger to the wetland habitat which is in the path of existing and future runoff flows.

Mitigation Measures

The following mitigation measures would eliminate significant flooding/surface drainage impacts:

- Habitable structures and public facilities including the golf course clubhouse shall be constructed above the flood plain level determined by the 50-year Los Angeles County Capital Event. Water will be conveyed off-site via proposed storm drainage facilities.

- Building pads and roadways in areas which would be flooded in the event of a failure of the California Aqueduct (Figure 31 of the EIR) shall be raised above the anticipated floodwater levels.

- All storm drainage improvements depicted on Figure 32 of the EIR shall be implemented as part of the proposed project. This includes storm drains, channels, and detention and debris basins.

- Low flow containment system will need to be constructed to accommodate and evaporate urban runoff flows during the dry seasons to prevent deterioration of water quality in wetland areas and streams. (See Figure 34 of the EIR for a conceptual design of the kind of low flow containment system.

- The proposed golf course will need to have a separate runoff collection system along City Ranch Road to direct flows away from the wetland area. This collection system shall be subject to the applicable laws for point source discharge of the Regional Water Quality Control Board.

- The applicant shall submit an Erosion Control Plan for each development application for review and approval by the City Engineer prior to issuance of grading permits. In addition, the applicant will demonstrate each development application complies with the provisions of any National Pollution Discharge Elimination System permit requirements that may be required by other
regulatory agencies. At the time of submittal of a development application for
the golf course, the applicant shall provide for the controlled use of pesticides
and fertilizers on the golf course by limiting the frequency and type of
fertilizers/pesticides used and requiring application by qualified persons.

- Modifications to natural drainage courses shall conform to City, County, State,
and Federal Law.

- Fencing shall be installed along constructed drainage channels, as appropriate,
for safety purposes.

- Modification of drainage patterns will not be permitted across property lines
without written consent of affected property owners.

- Final Subdivision Maps shall be accompanied by Drainage Improvement Plans
prepared by a licensed Civil Engineer and approved by the City Engineer.

- In accordance with the California Department of Real Estate
disclosure format and procedures, all potential purchasers of
real property which is shown within the FEMA 100-year flood
plain on the Flood Insurance Rate Maps most recently circulated
by FEMA, shall be notified of the situation, regardless of
whether the actual flood hazard has been abated by other methods.
Also, the applicant shall contact FEMA as soon as possible after
eliminating areas from the 100-year flood hazard zone to request
modifications of the Flood Insurance Rate Maps. The applicant
shall then diligently pursue revisions of the maps until the 100-
year flood hazard zone as modified by the development is depicted
on them.

Unavoidable Adverse Impacts

With the adoption of the proposed storm drainage plans and mitigation measures
indicated, project impacts with regard to hydrology would not be significant.

BIOLOGY

Project Impacts

Construction of the proposed project would result in direct elimination of plant and
wildlife habitat and consequently the loss of biological resources within areas of the
project site where residential lots, streets, the golf course, commercial development,
school, and community parks are intended. Two sensitive plants known to occur
on the site, Perisor's morning glory and the short-joint beavertail cactus, would be
disturbed as a result of project development. Grading to construct City Ranch Road
may impact the east alkali meadow/transmontane alkali marsh habitat. As a result
of project development, a large portion of the area of project site containing the
Joshua tree woodland will be developed as a golf course (Planning Areas 4 and 13).
Another portion of the Joshua tree woodland would be developed as a single-family
residential area (Planning Area 8). The rest would be converted to community park
space (Planning Areas 1 and 9) or would remain as natural open space (Planning
Areas 2 and 7). The California juniper seedling area would be eliminated.

Development of the proposed project would result in the potential for impaired
wildlife movements in an east-west direction along the foothills of the Sierra
Pelona and the San Andreas Rift Zone. Construction of the proposed project would result in a reduction of habitat for five sensitive animal species that utilize the project site. Loss of this sensitive species habitat would adversely impact these territorial species which rely upon large expanses of land for their home ranges. Project development would result in the loss of part of the raptor foraging habitat in the region which would directly affect the raptor species known to be on-site: sharp-shinned hawk, golden eagle and prairie falcon. A trapping effort to locate the Mojave ground squirrel indicated that it is not present on the project site.

Overall, implementation of the proposed project would result in fragmentation of the existing habitat of plants and animals into smaller discontinuous parcels. After a few years, the species diversity on the remaining fragments would be expected to decline. Impacts with regard to biological resources are considered significant. The preservation of approximately 404 acres of the project site as natural open space would allow maintenance of a portion of the existing biological habitat, and provide an area into which plants dislocated elsewhere on the project site can be transplanted.

Mitigation Measures

Implementation of the following measures would reduce project-related impacts to biological resources to an acceptable level:

Disturbance to or Loss of Sensitive Flora and Fauna

- Individuals of short-jointed beavertail in the impacted areas of Planning Areas 17 and 31 shall be transplanted into Planning Area 32. Similarly, those individuals impacted in Planning Areas 8 and 13 shall be transplanted into Planning Area 7. A written plan for such relocation shall be prepared and shall be subject to approval by the City Planning Department (which may require independent review) prior to site grading. The plan shall be prepared and implemented by a qualified horticulturist/botanist/restoration biologist, with thorough familiarity of the Antelope Valley region and demonstrated experience in transplantation of cacti.

- A portion of Planning Area 31 shall be transferred to Planning Area 32 in order to preserve approximately 40% of the known occupied extent of Peirson’s morning-glory located therein. The boundaries of Planning Areas 31 and 32 shall be modified as shown on Figure 38 of the EIR.

- A written plan for seed collection from impacted individuals of Peirson’s morning-glory located in the portion of Planning Area 31 which shall be disturbed, for subsequent redistribution into Planning Area 32 shall be subject to approval by the City Planning Department (may require independent review) prior to site grading. The plan shall be prepared and implemented by a qualified
botanist/horticulturist/restoration biologist, with thorough familiarity with the Antelope Valley region.

- The applicant shall consult with the Department of Fish and Game in order that potential impacts to Mohave ground squirrel may be addressed. If an endangered species permit is warranted, the permit must be completed and mitigation measures fully dedicated before issuance of a grading permit. Therefore, the consultation with CDFG will occur prior to issuance of any grading permit for the proposed project.

Alkali Meadows/Transmontane Alkali Marsh

- The land in Planning Area 13 south of the City Ranch Road alignment and north of the California Aqueduct property shall be set aside and designated as natural open space to preserve the east alkali meadow and transmontaine alkali marsh habitat.

- The City Ranch Road alignment shall avoid the wetland areas. Landscaping, grading, and irrigation along the south side of the segment of City Ranch Road adjacent to the wetlands shall be kept to a minimum.

- If avoidance of the alkali meadow/transmontane alkali marsh is impossible, permits and agreements under Section 404 of the Clean Water Act and under 1603 of the State Fish and Game Code will be required from the U.S. Army Corps of Engineers and the California Department of Fish and Game, respectively. At a minimum, lost wetland acreage will be replaced in kind on a one-to-one acre basis. Also, a mitigation and monitoring plan, subject to CDFG approval, will be required in the event of any loss of alkali meadow/transmontane marsh habitat.

- Provisions will be made to divert low-flow surface runoff from entering the east alkali meadow/transmontane alkali marsh habitat. (See Hydrology Section Mitigation Measures.)

Native Plant Landscaping

- Native species such as California juniper, Great Basin sagebrush, four-winged saltbush, holly-leaf cherry (Prunus ilicifolia), and big-berry manzanita, and trees such as Joshua tree, Fremont cottonwood (Populus fremontii) and California sycamore (Platanus racemosa) for landscaping purposes to the maximum extent feasible. Use of these species may encourage some local wildlife species to continue to utilize the area. The construction of a golf course on the site provides an opportunity for a great number of native plants, particularly trees, to be incorporated into the project site. In addition to the encouragement of continued wildlife use of the area, all of these plants are drought tolerant.

Joshua Trees and California Junipers

- The applicant shall comply with all City of Palmdale policies regarding the preservation or transplantation of Joshua trees and California junipers on the project site.

- Development of Planning Areas 4, 8 and 13 shall include the preservation or relocation of Joshua trees such that approximately two trees per acre graded shall be preserved or transplanted into suitable natural open space areas or
undisturbed areas of the golf course. As a result of this measure, approximately 398 trees would be preserved in Planning Areas 4, 8 and 13.

- California juniper seedlings located in Planning Areas 1, 9 and 10 shall be relocated to natural open space areas of the project site under the guidance of a certified botanist.

Natural Open Space Maintenance

- To preserve the biological integrity of the natural open space areas, measures shall be implemented assuring that off-road vehicles, ornamental or non-indigenous landscaping, domestic animals (especially dogs), hunting or other discharge of firearms, livestock grazing, plant, animal or rock collecting, pedestrian, equestrian or bicycle use off marked trails or at night are excluded from natural open space areas. This shall be accomplished by signing and the construction of exclusionary walls or fences. Provisions shall be made to maintain open space areas.

Unavoidable Adverse Impacts

Implementation of the recommended mitigation measures would reduce project impacts on biological resources on the project site to an acceptable level.

TRANSPORTATION

Project Impacts

Development of the proposed project is expected to generate approximately 49,970 daily trip-ends, of which 38,310 would have either an origin or a destination off-site (external trips). If the proposed project-related traffic volumes and the estimated 5% annual growth rate assumed in the traffic analysis conducted for this project are distributed onto the roadway system prior to construction of the off-site master-planned roadway improvements, project-related traffic impacts would be considered significant.

Mitigation Measures

Implementation of the following mitigation measures would reduce significant circulation impacts associated with the proposed project to a level of "not significant":

- All roadways shall be built out by the applicant to City approved roadway cross-sections per Figure 42 of the EIR.
• The proposed internal cross-sections and circulation layout shall be subject to review and approval of the City Traffic Engineer during the development review process to insure compliance with City access and design standards.

• Collector roadways which cross Avenue S shall be signalized. The applicant shall be required to contribute funds on a pro rata basis toward the purchase and installation of the aforementioned traffic signals as determined by the City Traffic Engineer.

• Landscaping and signage on-site shall be low and shall not interfere with sight distances at the site access points or at internal intersections. Street lights and sidewalks shall be provided in accordance with City standards.

• Prior to future development application approvals, the Applicant will be required to submit a Transportation Demand Management Plan and a Focused Traffic Study for review and approval by the Director of Planning and the Traffic Engineer, as appropriate, to determine the necessary improvements for impacts generated by that project. These plans shall be prepared in accordance with the Los Angeles County Transportation Commission’s Congestion Management Plan and the City’s transportation analysis guidelines, the City’s transportation plan, and the Engineering Design Standards. Necessary improvements shall be determined by the City Traffic Engineer, and shall include, but not be limited to, all on-site and off-site road improvements to achieve a Level of Service D (peak period) or better with ultimate traffic projections. On the basis of this and other studies, the developer will improve or fund a pro rata share of improvements. The developer shall pay appropriate traffic impact fees in accordance with City Ordinance 825, and all other fees for facilities and services that may be in place at the time of issuance of certificates of occupancy.

• The applicant shall participate in the construction of a park-and-ride facility to be located on- or off-site at a location within the Palmdale Southwest Planning Area designated by the City of Palmdale as determined by the City Traffic Engineer.

• The project applicant shall pay applicable traffic impact fees or provide improvements pursuant to future agreements with the City of Palmdale in lieu of fees as required by City Ordinance or Resolution.

• If, as a result of project impacts, the level of service falls below either the standards set by the Los Angeles County Transportation Commission's Congestion Management Plan, or the policies set by the City's General Plan, the applicant shall implement improvements or services necessary to bring the roadway segment into compliance. The Final Draft CMP, dated August 14, 1991, includes SR-14 and Route 138, and identifies Sierra Highway as a roadway requiring additional study.

• The applicant shall be required to contribute a pro-rata share of the cost of extension of Avenue S to Tierra Subida as determined by the City of Palmdale Traffic Engineer.
• Improvements to the portion of City Ranch Road east of Bridge Road shall be financed by the applicant and/or surrounding property developers as determined by the City of Palmdale Traffic Engineer.

Unavoidable Adverse Impacts

None.

AIR QUALITY

Project Impacts

Short-term Impacts - Significant short-term air quality impacts would primarily occur as a result of fugitive dust emissions generated during grading and construction activities and diesel emissions generated by heavy-duty construction vehicles.

Long-term Impacts - Development of the proposed project would result in the generation of approximately 2,943 pounds of carbon monoxide (CO), 955 pounds of nitrogen oxides (NOx), 199 pounds of particulates and 244 pounds of reactive organic gases (ROG). These long-term project-related mobile and stationary emissions would exceed South Coast Air Quality Management District (SCAQMD) daily emissions threshold criteria for all of these contaminants. Project stationary emissions alone exceed SCAQMDs suggested threshold for NOx only, while project mobile emissions exceed guidelines established for criteria air pollutants. Project-related air emissions are not expected to be reduced to non-significant levels in the long term. Odor and dust problems from the adjacent Antelope Valley Public Landfill to the east, would not be anticipated to create significant impacts at the project site. The proposed project would not be in conformance with SCAQMD’s Air Quality Management Plan (AQMP) and therefore would be considered to have a significant adverse impact on air quality.

Mitigation Measures

In addition to the mitigation measures listed under Section 5.8, Traffic, 5.13 Energy, and 5.29 Antelope Valley Public Landfill, implementation of the following mitigation measures would reduce short-term construction-related impacts to a level of “not significant”:

• South Coast Air Quality Management District Rule 403 (Fugitive Dust) shall be adhered to, to ensure the clean up of construction-related dirt on approach routes to sites within the project site.

• Building construction shall comply with energy use guidelines in Title 24 of the California Code of Regulations.
• Adequate watering techniques shall be employed to reduce by 50% construction-generated dust emissions.

• Diesel-powered construction equipment shall be preferred over gasoline-powered equipment to reduce exhaust emissions and reduce fuel evaporation and crankcase hydrocarbon emissions. Low sulfur diesel fuels shall be preferred in accordance with SCAQMD’s Rule 431.

• Construction equipment shall be properly maintained and serviced to minimize exhaust emissions.

• Construction activities shall be suspended on days when ozone levels are high.

• Operations that tend to create fugitive dust shall be suspended during Stage 2 smog alerts in the project area.

• Grading activity, which creates dusty conditions, shall be suspended when, in the opinion of the City Engineer, local winds exceed acceptable levels. To validate wind velocities and/or rainfall amounts, the installation of a minimum of two remote weather stations in the vicinity of the project site’s active grading areas will be required at locations determined by the City Engineer.

The following mitigation measures would reduce long-term operational impacts:

• The applicant shall implement all applicable air quality control measures listed in SCAQMD’s 1989 AQMP as may be subsequently amended.

• Energy efficient street and parking lot lighting shall be required on-site to minimize power plant emissions.

• Pedestrian walkways shall be provided throughout the project site in order to encourage walking as an integral mode of transportation between school and residences.

• Bus turnouts shall be provided along major arterials as required by the City Traffic Engineer in order to facilitate use of public transit.

• Traffic signals installed in conjunction with development of the proposed project will be synchronized with other signals in the vicinity.

• The applicant shall participate in appropriate future trip reduction programs adopted by the City for future development applications.
The project applicant shall submit a Transportation Demand Management Plan that will 1) create a City Ranch Transportation Management Association; 2) investigate the feasibility of developing a telecommute center on site; and, 3) start a vanpool demonstration program for City Ranch residents. The plan will be submitted to the Planning Director prior to issuance of any certificates of occupancy for the proposed project.

The project shall comply with all SCAQMD Rules and Regulations, including those pertaining to paving materials and architectural coatings. Specifically, use nonsolvent based, high-solid, or water based coating on buildings where feasible.

In order to provide additional reductions in air emissions, the following list of mitigation measures was provided by the SCAQMD. Because these measures cannot be applied to all development applications that may be submitted for the City Ranch Specific Plan, each development application will be reviewed and those measures from the list which are deemed appropriate by the Planning Director will be applied to that development application.

Minimize Construction Activity Emissions:

- Schedule construct activity during off-peak hours and require a phased-schedule of construction to even out emissions peaks.
- Remove silt by paving construction roads, sweeping streets, and washing trucks leaving construction site.
- Suspend grading operations during first and second stage smog alerts.
- Maintain construction equipment engines by keeping them tuned.
- Use low-sulfur fuel for equipment.
- Use existing power sources; avoid using temporary power generation.

Reduce Construction-Related Traffic Congestion:

- Provide rideshare and transit incentives for construction personnel.
- Configure construction parking to minimize traffic interferences.
- Minimize obstruction of through traffic lanes.
- Provide a flagperson to guide traffic properly.
- Schedule operations affecting traffic for off-peak hours.

Limit Emissions from Vehicle Trips:

- Establish telecommuting programs, alternative work schedules, and satellite work centers.
- Schedule goods movements for off-peak traffic hours.
- Provide local shuttle and regional transit systems, transit shelter, bicycle lanes, storage areas and amenities, and ensure efficient parking management.
• Provide dedicated turn lanes as appropriate.
• Work with cities/developers/citizens in the region to implement TDM goals.
• Ensure streamlined traffic synchronization.
• Provide park-and-ride facilities.
• Implement parking management at commercial facilities and other places attracting traffic.
• Provide preferential parking to high occupancy vehicles and shuttle services; and charge parking lot fees on low occupancy vehicles.
• Provide temporary roadway controls at peak-hours, such as one-way streets; and install directional traffic signs; and synchronize traffic signals to relieve congestion on surrounding streets; and manage street intersections to improve level of service.

Maximize Energy Conservation:

• Implement energy conservation measures beyond state and local requirements.
• Include energy costs in capital expenditure analysis.
• Landscape with native drought-resistant species to reduce water consumption and to provide passive solar benefits.
• Improve thermal integrity of buildings, and reduce thermal load with automated time clocks or occupant sensors.
• Introduce glazed windows, wall insulation, and efficient ventilation methods; install window-systems to reduce thermal gain and loss.
• Introduce energy efficient heating and other appliances.
• Incorporate appropriate passive solar design.
• Ensure sealing of all buildings.
• Control mechanical systems, or equipment with time clocks or computer systems.
• Implement waste separation and recycling programs."

Limit Emissions from Architectural Coatings and Asphalt Usage:

• Nonsolvent-based coatings should be used on buildings. Solvent-based coatings, if used, should minimize solvent emissions.
• Use of high-solid or water-based coatings should be encouraged.
Unavoidable Adverse Impacts

Development of the proposed project would add emissions to the already poor regional air quality. Implementation of the recommended mitigation measures would reduce emissions. However, because the Antelope Valley has been classified by the EPA as a non-attainment area under the federal Clean Air Act, operational emissions will add to an already critically polluted air basin. Therefore, the proposed project is anticipated to create unavoidable adverse impacts with regard to air quality.

NOISE

Project Impacts

Short-term Impacts - Project-related grading and construction activities would result in increased noise levels in areas adjacent to area access routes and on the project site. Construction and grading noise impacts are considered significant short-term impacts.

Long-term Impacts - Operation of the proposed project would result in increased noise levels on-site and in the surrounding area. This increase would primarily result from increased vehicular traffic and human-related activities on the site. The proposed project would generate an audible noise increase (greater than 3.0 decibels) along 25th Street West, 20th Street West, Elizabeth Lake Road (east and west of 25th Street West) and Avenue S. A potentially audible noise increase (greater than 1.0 dB(A)) could occur along Tierra Subida Avenue (north of Barrel Springs Road), Elizabeth Lake Road, (west of 10th Street West), Rayburn Road and Barrel Springs Road. As these roadways are master planned as either secondary or major highways, future off-site adjacent uses to these roadways must anticipate increased noise levels and are required, through the planning and design process, to mitigate current and future noise to acceptable levels. Significant noise level increases would result on Elizabeth Lake Road, Bridge Road and Avenue S (south of Elizabeth Lake Road). Unless site design measures are incorporated as part of the proposed project or attached as conditions of approval, significant on-site noise impacts could occur as a result of ultimate motor vehicle volumes on Avenue S and Elizabeth Lake Road and City Ranch Road.

Mitigation Measures

The following measures are proposed to reduce noise impacts during grading and construction to a level of "not significant":

- Construction activities adjacent to residential areas shall take place only between the hours of 6:30 a.m. and 8:00 p.m., Monday through Saturday, as specified by the City of Palmdale Noise Ordinance.
• Grading and construction equipment shall be stored at the project site.

• Repair of construction vehicles on-site shall be restricted to the same working hours stated above, 6:30 a.m. to 8:00 p.m., Monday through Saturday.

• All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers.

• Stationary equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.

• Temporary noise attenuation barriers, such as walls and/or berms, shall be placed between construction areas and sensitive noise receivers.

The following site design measures are recommended to ensure that the ultimate noise exposure does not exceed 60 dB(A) CNEL in residential areas and 65 dB(A) CNEL at school sites to meet City of Palmdale normally acceptable noise standards. These measures would reduce operational noise impacts to a level of not significant:

• Reduction of intrusive noise levels in residential and school areas shall be accomplished through the incorporation of design measures or structural measures which will reduce noise levels to acceptable levels within the living or recreational portions (as defined by the City) of any lot. The measures that may be utilized to reduce noise impacts include, but are not limited to, placement of parking structures in such a manner as to act as a buffer, increasing the setbacks along the roadway, creation of landscaped berms, or construction of other barriers such as walls. The acceptable noise level CNEL which will be applied to future projects will be that level which is in place, either by ordinance, resolution or General Plan policy, at the time that future development applications are deemed complete.

• Carports and parking areas in multi-family residential areas shall be located adjacent to the heavily traveled roadways to create building setbacks and shield more sensitive uses.

• Multi-family structures shall be oriented away from adjacent roadways to insure that room arrangements, window size and placement, and balcony, roof and courtyard design minimize intrusive noise levels.

• Truck access, parking area design and air conditioning refrigeration units within commercial land uses shall be carefully designed and evaluated at more detailed levels of planning to minimize the potential for acoustic impacts to adjacent noise sensitive development.
• The design of the elementary schools shall locate administration buildings, noise-insulated structures (such as gymnasiums and auditoriums), locker facilities, parking areas and bus loading zones adjacent to roadways to buffer more sensitive uses such as classrooms and playgrounds.

Unavoidable Adverse Impacts

Provided the recommended mitigation measures are properly applied, construction and operation of the proposed project are not expected to create significant noise impacts on site.

AESTHETICS

Project Impacts

Development of the proposed project would transform the project site from an essentially undeveloped area to a largely suburban setting. The majority of the residential development would occur in the flatter portions of the project site along the Anaverde Valley. These areas would not be visible off-site. Following project development approximately 793 acres of the project site or more than 40% would supply visual open space opportunities by being developed as parks, golf course, open space, or natural open space. In addition, the school sites would also provide visual open space opportunities. Although the site would be substantially altered visually as a result of project development, areas of the project site that would be developed are not visually prominent. The ridgelines, the most prominent visual resources on the project site, would remain intact subsequent to project development. Therefore, in this respect, project impacts are not considered significant. However, as a result of project development, many areas of the project site would have views of the Antelope Valley Public Landfill located to the east. These views, if not properly shielded, can be considered offensive and therefore potentially significant.

Mitigation Measures

Implementation of the following mitigation measures would reduce the project’s aesthetic impacts:

• All roadways within the project site shall be tree-lined and landscaped in accordance with City of Palmdale street design requirements and the streetscape guidelines provided in the Specific Plan.

• All new and relocated utility distribution lines shall be placed underground within developed areas.
• All storage, including cartons, containers or trash, shall be shielded from view within a building or area enclosed by a masonry wall not less than six (6) feet in height. No such area shall be located within fifty (50) feet of any residential area.

• Screening shall be required when the following abut residential uses:
  
  a) Loading areas;
  
  b) Visually obtrusive above-ground utility equipment and appurtenances;
  
  c) Antelope Valley Public Landfill

• A screen, as referred to above, may consist of two (2) of the following types:
  
  a) Walls: A wall shall consist of concrete, stone, brick, tile or similar type of solid masonry material a minimum of four (4) inches thick.
  
  b) Berms: A berm shall be constructed of earthen materials and it shall be landscaped.
  
  c) Fences, solid: A solid fence shall be constructed of masonry, wood or other materials a minimum thickness of two (2) inches and it shall form an opaque screen.
  
  d) Landscaping: Plant materials, when used as a screen, shall consist of densely planted evergreen plants.

• Screening established near intersections shall consider safe sight distances so that adequate visual conditions are maintained for pedestrians and drivers of motor vehicles.

• Rooftop mechanical equipment shall be fully screened from view.

• Landscaping, consisting of trees, shrubs, and/or ground cover, shall be installed and maintained subject to the following standards:
  
  a) Landscaping shall be required along all property lines abutting streets except where provided in landscape easements adjacent to rights-of-way. Minimum tree and shrub size shall be fifteen (15) gallon and spaced a minimum of 30 feet average.
  
  b) Landscaping shall be required along all property lines abutting residential uses.
  
  c) Planting shall be designed so as not to hinder sight distance at intersections.
d) Permanent irrigation facilities shall be provided for landscaped areas.

e) Landscaping shall be maintained by property owners in a neat, clean and healthy condition.

f) Areas of native vegetation within all open space and natural open space areas are exempted from the landscape standards identified above except they shall be maintained free from trash and debris. Fuel modification zones will be required where fire hazards warrant them.

- Residential structures shall be limited to 35 feet in height or two stories.

- The colors and textures of building materials shall blend with the landscape as set forth in Section VI, Design Guidelines of the City Ranch Specific Plan.

- All downdrains shall utilize colored concrete chosen to blend with the adjacent terrain. Downdrains shall be located in less visually prominent locations where practical. When this is not feasible, downdrains shall be aesthetically mitigated by the use of a combination of landscaping, rock, and screening, or may be diagonally angled down the slope when practical and when it will reduce the visual impact. These measures shall be designed to the satisfaction of the Director of Planning and City Engineer, and shall be reviewed for conformance at the Tentative Tract Map stage. Details of these conditions shall be indicated on the Tentative Tract Map.

- On-site water tanks shall be painted in earth tone colors.

- City Ranch Specific Plan grading standards shall be strictly adhered to, to avoid negative impacts with regard to hillside grading. The Specific Plan policies which govern grading design and may affect the aesthetics of the site are as follows:

a) Major ridgelines shall be preserved. Specifically, the Sierra Pelona and Verde Ridge ridgelines shall be preserved in their existing states with ridgetop elevations retained at natural elevations.

b) Large contiguous open spaces shall be preserved. Specifically, areas of natural slope above 45% which total over one-half acre in size and which are visible from off-site areas shall be preserved in their existing state. This condition occurs in Planning Areas 2, 7, 29 and 32.

c) No construction shall be permitted in areas above 40% slope except for isolated pockets of steep slope which are not visually prominent, and only if required for reasons of health, safety, welfare, protection of property and for necessary public facilities. Isolated pockets of steep slope shall be defined as sloping areas up to 50 feet in height and up to 200 feet in horizontal length.
d) Grading design and site planning design shall consider the aesthetic impacts of proposed slopes and structures as seen from off-site developed areas of the City of Palmdale, and shall employ measures to lessen the visual impacts to off-site areas if defined as sloping areas up to 50 feet in height and up to 200 feet in horizontal length.

e) Mass graded “mega pads” shall be prohibited. Design of residential subdivisions shall utilize grade breaks, curvilinear streets and smaller steps of grade change rather than single large slopes. The grading of the commercial site at Planning Area 3 may utilize a large graded pad design provided slope height does not exceed thirty (30) feet in height and provided the buildings are placed to provide nearly complete visual screening of slopes above twenty (20) feet in height.

f) Large manufactured slopes greater than three hundred feet in “visual length” shall be designed so as to simulate the curvature of a naturally shaped slope, or shall be blended into natural slopes by gradually adjusting the contours and slope orientation.

Unavoidable Adverse Impacts

As a result of implementation of the recommended mitigation measures, project impacts with regard to aesthetics will remain because implementation of the City Ranch Specific Plan will permanently transform the project site from its current undevelopment condition into a semi-urban environment. However, the ridgelines which are the most visually prominent features on the project site will be left intact.

LIGHT AND GLARE

Project Impacts

Development of the proposed project would result in the conversion of the night environment of the project site from that of a dark remote area to a lighted, suburbanized condition. Because development of the adjacent properties is anticipated to be concurrent with proposed project construction, project lighting impacts are not expected to be significant. However, if development of adjacent properties never occurs, development of the proposed project would cause significant impacts with regard to loss of existing nighttime darkness amenities. If surrounding property development occurs but only after proposed project development, temporary significant impacts would occur. South-facing windows of project site structures may create a source of glare. According to the streetscape plans for Avenue S and Bridge Road, a row of trees and dense landscaping would be planted in the parkway strip along the sides of these streets. This would reduce on-site glare impacts for motorists. Because glare impacts would not create hazardous
conditions on surrounding roads and would not intrude on existing developments, glare impacts are not considered significant.

Mitigation Measures

While impacts are not considered significant with regard to light and glare, implementation of the following measures can reduce project-related light and glare impacts:

- All exterior lighting shall be designed and located to confine direct rays to the premises. A photometric lighting plan is required pursuant to Section 86.05 (9)(A)-(H) of the Palmdale Municipal Code.

- Maximum overall height of fixtures shall be not more than fourteen feet in, or adjacent to residential areas; and not more than twenty feet in non-residential areas.

- Fixtures shall possess sharp cut-off qualities at property lines.

- Low intensity downward focused street lamps shall be used in the southern portion of Planning Area 19A, the southern half of Planning Area 17, portions of Planning Area 28A above 15% grade and in all of Planning Area 31.

- No low pressure sodium lighting fixtures are allowed.

- Lights shall be shielded with internal silvering, external opaque reflectors or other comparable techniques.

- Flashing lights shall be prohibited.

- Lighting plans for athletic courts and fields shall be reviewed by the City of Palmdale Planning Department.

- Lighting intensity within commercial or multi-family planning areas shall be a minimum of one foot-candle, maintained.

- Where appropriate, landscaping shall be used to screen night lighting.

Unavoidable Adverse Impacts

The project will contribute to the cumulative loss of a dark nighttime sky which is considered an unavoidable adverse impact.
ENERGY

Project Impacts

Upon project completion, total energy demand for the proposed project would be approximately 973,000 million British Thermal Units (BTUs) daily. Energy impacts are not considered significant because the existing deliverable capacity for natural gas and electricity are adequate to supply the proposed project. In addition, almost unlimited solar energy is available at the project site for future use.

Mitigation Measures

While energy impacts are not considered significant, implementation of all energy conservation measures listed as mitigation measures in Sections 5.8 (Traffic), 5.9 (Air Quality), 5.14 (Electricity) and 5.15 (Natural Gas) of this report, and the following measures would reduce energy use at the project site:

- Energy efficient water heaters and space heating units, insulation, dual glazed windows and thermally efficient building materials shall be installed in all structures constructed on the project site.
- Structures and landscaping shall be situated to maximize solar access.
- Ventialbe windows shall be installed to maximize use of passive heating, cooling and air exchange.
- Restrictive water fixtures shall be installed as identified by the California Department of Water Resources.
- Encourage the placement of dwelling units to take full advantage of solar energy for natural heating and cooling in order to reduce the use of electricity and natural gas within the project area.

Unavoidable Adverse Impacts

None.

ELECTRICITY

Project Impacts

Development of the proposed City Ranch project would create an increased demand for approximately 99,975 kilowatt-hours of electricity daily. Southern California Edison (SCE) has determined that they have sufficient capacity to serve the proposed project. Therefore, proposed project impacts are not considered significant with regard to electricity use. The 12 kV distribution line crossing the southern portion of the project site may need to be realigned along Avenue S as a result of project development.
Mitigation Measures

Although impacts related to electricity use are not considered significant, implementation of the following measures would reduce electricity use:

• Installation of thermal insulation must meet or exceed the requirements of California Code of Regulations Title 24.

• Natural gas shall be used for space heating and cooking.

• Attic ventilation devices shall be installed.

• Windows and vents shall be used to provide room ventilation where possible.

With regard to the 12 kV line:

• Depending on project design, the 12 kV line crossing the southern portion of the project site may need to be removed or realigned. It shall be done so in accordance with SCE regulations.

Unavoidable Adverse Impacts

None.

NATURAL GAS

Project Impacts

Development of the proposed City Ranch project would require approximately 922,300 cubic feet of natural gas daily. The Southern California Gas Company has indicated that the proposed project can be served from the existing 4-inch main located one-quarter mile east of the project site along Elizabeth Lake Road at Foxholm Avenue without a significant impact on overall system quality, service to existing customers, or the environment. Extension of the main to the project site would be done and paid for by the Southern California Gas Company.

Mitigation Measures

Although the Southern California Gas Company has indicated that it would be able to supply the project's anticipated demand, the following mitigation measures are required to reduce natural gas consumption:

• Install thermal wall and ceiling insulations and double glazed windows that meet or exceed California Code of Regulations Title 24 insulation standards.

• Use pilotless ignition stoves, water heaters, dryers and heating/cooling units.

• Insulate gas water heaters with gas company approved insulated blankets.
Unavoidable Adverse Impacts

None.

WATER

Project Impacts

Estimated water consumption by the proposed project's combined uses is expected to be 5.22 million gallons of water per day. Approximately 1.25 million gallons per day of this amount would be required for irrigation. In order to supply and distribute the water necessary to support the proposed project's domestic, emergency and fire flow demands, the City Ranch property will need to be annexed into Los Angeles County Water Works District No. 34 (District 34) and water infrastructure extensions to and through the project site would be necessary. District 34 has indicated that they would be capable of delivering water necessary to serve the proposed project through existing and proposed supply facilities and irrigation water is available from an existing on-site non-potable water supply. However, without annexation into District 34 and the construction of necessary water infrastructure extensions, development of the proposed project would create significant impacts.

Mitigation Measures

Implementation of the following mitigation measures would reduce project impacts with regard to water to a level of "not significant":

- The City Ranch property shall be annexed into District 34.

- Following annexation into District 34, the applicant shall negotiate the provision of and financing for major infrastructure facilities (reservoir sites, transmission lines, pumping equipment, etc.) as part of a water system agreement with District 34.

- All water infrastructure extensions and improvements shall be constructed by the applicant as depicted on Figures 64 and 65 of the EIR and described in the Project Impacts subsection of the Water section of the EIR, and as required by Waterworks District #34.

Interior Water Consumption Reduction Measures:

- Install a pressure regulator on all water services and maintain a building water pressure of 40 pounds per square inch or less;
• Use ultra-low flush toilets (1.5 to 1.6 gallons per flush) in all residential buildings.

• Use water-saver type shower heads.

• Use low-flow faucet fixtures.

Exterior Water Consumption Reduction Measures:

• Non-potable water shall be used for all golf course, park and community landscaping irrigation needs where available and determined feasible by the City Engineer and the Planning Director.

• Landscape street rights-of-way, easements, medians, project entry statements, and all manufactured slopes with drought tolerant species where feasible.

• Lawn turf shall consist of drought-tolerant species, warm season grasses, hybrid fescues, or lawn substitutes (i.e., Achillea species etc.).

• Landscape easements right-of-way medians, entry statements, and all manufactured slope shall be landscaped with drought-tolerant species.

• Improve the soil to increase water retention. Use mulch and other inorganic and organic groundcover extensively in appropriate landscaped areas. Ground covering applied on top of soil will improve the water-holding capacity of the soil by reducing evaporation and soil compaction.

• Group plants of similar water demand to reduce over-irrigation of low-water-using plants.

• Install efficient irrigation systems that minimize runoff and evaporation and maximize the water applied to reach plant root zone.

Unavoidable Adverse Impacts

Development of the project may contribute to potentially significant impacts to groundwater, if in the future, it is determined that the Lancaster subunit can not support the levels of development in the Antelope Valley.

SEWAGE DISPOSAL

Project Impacts

In order to provide sewage service to the proposed project, a trunk sewer would need to be extended to the project site. Without implementation of the recommended infrastructure extensions, the proposed project would create
significant impacts with regard to sewage infrastructure. The proposed project would generate an estimated 1,272,832 gallons of wastewater per day. This would exceed Palmdale WRP’s current capacity by 1.27 mgd. There will be additional capacity added to the Palmdale WRP in the future to a maximum capacity of 15.0 mgd, however there is no definite work schedule established for this expansion. Provided this expansion occurs, the Palmdale WRP will be able to treat the proposed project’s wastewater generation.

Mitigation Measures

Implementation of the following mitigation measures would reduce impacts with regard to sewage infrastructure to a level of “not significant”:

- All sewer infrastructure extensions and improvements depicted on Figure 66 and described in the project impacts subsection of this section of the EIR shall be constructed by the applicant. In the event that Assessment District 90-1 is not formed, and Developer constructs off-site trunk sewer lines within the San Andreas fault zone, the Developer shall use state-of-the-art designs for the trunk sewer line to minimize the risk of rupture, and subsequent contamination, caused by a seismic event. Also, the Developer shall cause the preparation of an emergency spill response plan. The plan shall include provisions for spilled sewage retention, spill response measures, cleanup and disinfection measures, and training and funding for implementation of the spill plan. The plan shall be reviewed by the Lanhontan Regional Water Quality Control Board and Sanitation District No. 20, and reviewed and approved by the Director of Public Works and the Director of Planning.

- Sizing of these lines shall be dependent upon County of Los Angeles Sanitation Districts' specifications. The Districts may require over-sizing of sewer lines to accommodate future growth in the area. (The responsibility of installing relief sewers and expanding District No. 20's wastewater treatment plant (WTP) to accommodate flows generated by the proposed project and other developments belongs to County Sanitation District No. 20.)

- The Los Angeles County Sanitation Districts are empowered by the California Health and Safety Code to charge a fee (approximately $1,350.00 per dwelling unit) for the privilege of connecting to the Sanitation Districts' sewer system. The applicant will pay the connection fee.

In addition to the mitigation measures listed in Section 5.16 (Water) under measures to conserve water, implementation of the following mitigation measures would reduce the amount of wastewater flow generated by the project:

- The applicant shall consider the installation of an on-site water reclamation plant to provide a source of non-potable water suitable for landscape irrigation. Consideration shall be based on final siting of project components and economic environmental, and regulatory agency requirements.

Unavoidable Adverse Impacts

None.
SOLID WASTE

Project Impacts

Development of the proposed project would generate an estimated 54,019 pounds of solid waste per day, plus additional amounts of grass, leaf and other vegetative materials as a result of regular maintenance of the proposed parks and golf course. Full development of the proposed project represents approximately a 7.7% increase in the quantity of waste currently deposited at Antelope Valley Public Landfill. Solid waste impacts are not considered significant because of existing and potential landfill capacities available at the Antelope Valley Public Landfill.

Mitigation Measures

Although impacts related to solid waste disposal are not considered significant, implementation of the following measures would help to reduce solid waste generation:

- On-site source separation for commercial uses.

- "Curbside" recycling programs should be implemented to reduce the amount of solid waste brought to the Antelope Valley Public Landfill. The recycling program should focus on paper, glass, aluminum, tin, plastics and other recyclables.

- Where applicable, the applicant shall comply with the provisions of the City's Source Reduction and Recycling Element and the City's Household Hazardous Waste Element after those elements are adopted by the City Council.

Unavoidable Adverse Impacts

In the event that expansion of the Antelope Valley Landfill does not occur in a timely manner, the project, along with the other surrounding developments would contribute to cumulative impacts to solid waste disposal.

COMMUNICATIONS

Project Impacts

In order to service the project site, telephone and cable TV infrastructure would have to be brought out to the project site via communication line extensions. According to Pacific Bell, who serve the site, telephone service can be supplied to the project site without effecting existing levels of service. Therefore, project impacts with regard to telephone service are not considered significant. Jones Intercable TV who provide cable television service to the project site, have indicated that they would be able to provide service to the project site following annexation of the site.
into the City of Palmdale. Project impacts with regard to cable television service are not considered significant. As a result of project construction, the AT&T-C high capacity transcontinental communication line easements on the project site may be encroached upon. Disturbance to these lines could damage the lines or cause unanticipated interruption of AT&T's long distance telephone service. This is considered a potentially significant impact.

The project site is in a location that is presently outside the range of the current radio communications systems which serve the City. This system is used for daily radio communications as well as for emergency communications for City employees. If this condition is not remedied, this could represent a potentially significant impact to public health and safety. However, the required mitigation measures will minimize this impact to less than significant levels.

Mitigation Measures

Implementation of the following protective measures would enable AT&T to protect the existing communication system(s), permit future growth and in most cases allow AT&T to make repairs without having to damage streets, landscaping, parks, fencing, trees, etc. and would reduce impacts on the AT&T's high capacity transcontinental communication lines to a level of "not significant":

- No work may take place within the boundaries of the AT&T-C easements without prior written approval.

- Any lowering of lines required to maintain the proper depth of cover shall be at the developer's expense.

- A dedicated easement for access to all splices, manholes, valves and load points is required. This access shall be shown on the final plot plans and be of size and width sufficient to permit the passage of AT&T maintenance and construction vehicles.

- The developer may be required to expose the existing communications systems and place spare ducts (4 inch PVC pipe) alongside the existing system and cover the duct and system with concrete top protection at various locations within the development. Long runs may require the installation of pull pits and dedicated access to them.

- The AT&T-C easement boundary should be either the common boundary between the lots, if in side or back yards, or located within a lot in such a manner as to present the minimum exposure to future building additions and other hazards. Whenever possible, the system(s) should be located under a sidewalk area with the remaining easement width in the street.
• The AT&T-C easement description may be broad and may encumber or cloud a large area of a proposed development. In these cases AT&T-C may stake the system(s) location so the developer can survey the line and provide a certified survey and legal description. AT&T-C may then amend the easement and remove the broad description to satisfy the requirement of lenders, title companies, city planning and zoning agencies, etc.

• Structures shall not be permitted in the AT&T-C easement. This includes walls, concrete slabs, buildings, patios, etc. In the event of an emergency restoration of the communications system, the removal of unauthorized structures will be at the property owner’s expense.

• Other utility easements (longitudinal) shall not be dedicated or plotted within the boundary of the AT&T-C easement. All crossings to be made by water lines, sewers, gas, power, etc., need to be planned well in advance to arrange for proper clearances and protective measures. The crossing utility shall coordinate all crossings with AT&T-C prior to any construction.

• In those areas where AT&T-C consents to streets, curbs, parkways, sidewalks, parks, open space or other public use, AT&T-C would continue to require and maintain an easement and right-of-way for all the purposes for which the easement was acquired.

• Preliminary plot plans showing the easement and the proposed uses should be submitted to AT&T-C for approval prior to the preparation and filing of final plot plans. Four (4) copies of all plot plans, preliminary and final grade plans and any other engineering data affecting the easement shall be provided to AT&T-C as soon as possible.

• The developer shall provide their pro-rata share towards the implementations of the findings of the radio communications needs study currently being prepared by the City. This may include providing a site for the constructions of a radio repeater, construction of the repeater, or providing funding for the acquisition and construction of such improvements, as determined necessary by the City’s Emergency Services Coordinator.

Unavoidable Adverse Impacts

None.

SHERIFF’S SERVICES

Project Impacts

According to the Los Angeles County Sheriff’s Department, thefts of construction materials can be expected during the construction phase of the project. This short-
term impact is not considered significant. Based on area averages, implementation of the proposed project could increase the number of calls for police response by 5.1%. The Sheriff's Department has indicated that they have a need for a station in the project vicinity due to existing and anticipated growth in the area. Development of a station in Palmdale would double the Antelope Valley area's Sheriff's staff and would greatly improve the area's officer-to-population ratio. In addition, development of the station would reduce emergency calls response times in the Palmdale area. However, until expansion of Sheriff's facilities is accomplished, development of the proposed project and cumulative projects may have a significant impact on their services.

Mitigation Measures

The following measures are required to reduce the demands on the Sheriff's Department:

- During the construction phase of the project, the developer shall assist the Los Angeles County Sheriff's Department in preventing crime by providing adequate fencing, security, lighting, and access for Sheriff's Department personnel, as determined appropriate by the Los Angeles County Sheriff's Department.

- Proper street and address signs will be required for easy identification of locations in emergencies. Street signs and dwelling numbers will be installed prior to occupancy as each phase of project is developed.

- Proper street and address signs will be required for easy identification of locations in emergencies. Street signs and dwelling numbers will be installed prior to occupancy as each phase of project is developed.

- Landscape features shall be designed so as not to conceal potential criminal activities around residences, commercial buildings, and parking areas.

- Security devices, such as deadbolt locks on doors, should be installed in all residences.

- Review of the project site plan shall be conducted by the Sheriff's Department prior to final approval of the project in order to assure that all concerns of the Sheriff's Department are met.

There are no additional feasible mitigation measures which can be placed on this project to alleviate significant project-related impacts to sheriff services.

Unavoidable Adverse Impacts

Development of the proposed project, as well as development of the other projects in the vicinity of the project site, could result in a significant impact on police services should the cost of providing Sheriff's services become prohibitively expensive in the future as to cause a reduction in manpower, facilities or services to the community as a whole.
FIRE AND EMERGENCY MEDICAL SERVICES

Project Impacts

The project area is located within Fire Zone 4 (high fire hazard). The addition of approximately 14,040 new residents to the project site is expected to result in an increase to the number of fire and paramedic calls received by the Fire Department and exposure to high fire hazards. According to the Los Angeles County Fire Department, fire protection service for the proposed project appears to be adequate. The County Fire Department is currently creating a developer fee mechanism to provide funding for additional Fire Department facilities. As part of the City Ranch Specific Plan Development Plan, a one-acre site at the intersection of Avenue S and Bridge Road is being set aside to accommodate a fire station. Development of a fire station on the site would provide adequate local emergency medical response and fire fighting services on-site.

Mitigation Measures

Although project impacts on the Fire Department are not considered significant, the following measures are required to reduce demands on the Fire Department:

- The applicant shall provide a fire station in Planning Area 34, a 12,500-gallon per minute pumper and a fully equipped paramedic squad as determined by the Los Angeles County Fire Department. The applicant shall work with the Los Angeles County Fire Department to determine the final siting of the fire station in Planning Area 34.

- Water line placements and extensions shall ensure the delivery of 1,250 gallons per minute of fire flow for a two-hour duration at 20 pounds per square inch residual pressure with 150,000 gallons storage in the residential areas and 5,000 gallons per minute at 20 pounds per square inch residual pressure with 1,500,000 gallons of storage for a five hour duration in the commercial areas.

- Fire hydrants shall be located a maximum of 600 feet apart.

- Smoke detectors shall be installed in all residential structures.

- Fire sprinkler systems shall be installed in all commercial and public structures.

- Roof materials shall be made of fire retardant materials such as clay tile, concrete tile or fire resistant composite shingles. No wood shake shingles or wood materials will be permitted.

- Access to all portions of the structures must be provided for the Fire Department.
• Driveways shall be a minimum of 26 feet wide. Cul-de-sacs shall have a maximum length of 750 feet and a minimum turning radius of 32 feet.

• Fire safety design, adequacy of access, fire flow and hydrant placement plans shall be reviewed by the County Fire Department Subdivision Committee prior to approval of tentative subdivision maps by the City.

Because the project site is located within Fire Zone 4 (high fire hazard), the following mitigation measures are required to reduce the potential loss of life and property in the event of a large fire:

• Natural vegetation shall be cleared within a 30-foot radius from all structures. No flammable vegetation shall be placed within the 70 feet beyond the 30-foot line. To achieve this, the branches of all trees shall be trimmed to remain off the ground and leaf litter shall be collected from the grounds.

• Common open space areas in residential and commercial planning areas shall be landscaped with fire resistant plants native to California.

Unavoidable Adverse Impacts

None.

SCHOOLS

Project Impacts

Development of the proposed project would increase the number of school children in all three school districts serving the project site. Based upon student generation factors provided by the individual school districts, a total of 4,544 students are estimated to be generated by this project. The proposed project includes the designation of four elementary school sites, three located in Westside Union School District and one in the Palmdale School District. In the Palmdale District portion of the project site, it is expected that the anticipated 431 elementary students generated by the proposed project could be accommodated in the proposed on-site school. The 114 6-8th grade students in Palmdale District would attend Juniper Intermediate School which is already 175 students over capacity. Project development would, therefore, have a significant impact with regard to intermediate schools in the Palmdale School District. In the Westside Union District area of the site, the 1,829 elementary school students generated by the proposed project could be accommodated in the three proposed on-site elementary schools in that district. An estimated 610 6-8th grade students would most likely attend the proposed new Hill View Intermediate School or other off-site intermediate schools. It is not certain at this time whether or not there will be remaining capacity in the Westside Union District intermediate schools at the time of the proposed project completion. Therefore, project impacts with regard to the Westside Union School District are
also considered potentially significant. The 1,560 9-12th grade students generated by
the proposed project are considered to create a significant impact on the Antelope
Valley Union High School District because of their contribution to the need for two
additional high schools in the Highland High School attendance area of which the
project site is a part.

Mitigation Measures

In order to reduce the significant and potentially significant adverse impacts with
regard to schools to a level of "not significant", the following measures are required.

(a) Palmdale School District: The developer shall
comply with the terms of the agreement, dated October 8, 1990,
between the developer and the Palmdale School District as
mitigation for impacts caused by development of the project on
the Palmdale School District. The terms of that agreement are
as follows:

(i) Participate in the Mello Roos Community Facilities
District created by the Palmdale School District for
financing school construction.

(b) Westside Union School District: The developer shall
comply with the terms of the agreement, dated January 22, 1992,
between the developer and the Westside Union School District as
mitigation for impacts caused by development of the project on
the Westside Union School District. The terms of that
agreement are as follows:

(i) refer to agreement attached to this Exhibit.

(c) Antelope Valley Union High School District:

The Developer shall provide the following mitigation to the
District, in order to provide its contribution to the
District's fifty (50) percent share of funding a new high
school to serve the City Ranch Specific Plan area, pursuant to
Government Code Section 65995 and Education Code Section 17700
et. seq. (School Facility Funding Law):

(i) Mello-Roos Development Fees.

The applicant shall participate in a Mello-Roos Community
Facilities District which will fund up to 50% of the cost
of that portion of the school necessary to serve the City Ranch project based upon a student generation factor of .2
pupils per single family dwelling. Only residentially
zoned property for which a building permit has been issued
will be subject to the annual tax. The District may
increase this annual tax by no more than 2% in each year.
In lieu of paying an annual special tax, a property owner
may prepay the annual special tax at the time a building permit is issued on the property. A fee equal to $1.30 per square foot of habitable residential construction shall serve to prepay the special tax. This fee shall be subject to an annual adjustment pursuant to increases or decreases in the School Construction Cost Index of the Office of Local Assistance with January 1, 1992 as the base. This prepayment fee shall be reduced to $1.20 per square foot if the school site is not located within Planning Area 3A of the Ritter Ranch Specific Plan.

(ii) Other Development Fees.

In addition to the fees specified in subparagraph (i) above, Developer shall pay to the District a fee of twenty-six cents ($ .26) per gross leasable square foot of commercial construction prior to the issuance of each commercial building permit. All such fees shall be subject to annual adjustment pursuant to increases or decreases in the School Construction Cost Index of the Office of Local Assistance with January 1, 1992 as the base.

(iii) Site Preparation Expenses.

In the event that a high school is constructed in Planning Area 3A of the Ritter Ranch Specific Plan, and the site preparation work for a school to be located on that site, including provision of access to Elizabeth Lake Road and utilities, exceeds the amount of $4,650,000, the Developer shall pay the District fifty (50) percent of the District's costs for such work over $4,650,000, not to exceed a total of $350,000.

Unavoidable Adverse Impacts

None.

PARKS AND RECREATION

Project Impacts

The City Ranch Specific Plan designates six park sites totaling 159.3 acres (38.3 acres of which are buildable), a 216-acre golf course, and approximately 404 acres of natural open space. The Specific Plan also includes off-street bicycle paths and a 3.5 mile looped combined pedestrian/hiking/mountain biking trail and vista point opportunities. According to the Specific Plan, all six parks sites shall be dedicated to
the City of Palmdale for parkland credit. The City Department of Parks and Recreation standards requires a total of 88.62 acres of park space to be developed as part of proposed project development. The proposed project park acreage exceeds this standard by over 70 acres. However, several of the park sites contain development constraints and may not, therefore, qualify for full parkland dedication requirement credit. Impacts regarding to parks and recreation are considered potentially significant.

Mitigation Measures

Implementation of the following measures would reduce impacts with regard to parks and recreation to a level of "not significant."

- The applicant shall dedicate and construct the improvements for the proposed community, and neighborhood park facilities shown in the Specific Plan as approved by the Director of Parks and Recreation.

- The relocation of the Northside Trail shall be approved by the County Department of Parks and Recreation.

- Trails shall be designed to connect to existing and proposed trails on adjacent parcels.

- Design of Planning Areas located along the bicycle and hiking trails shall incorporate extensions and connections to the trail system. Each Planning Area adjacent to designated trails shall provide a minimum of two (2) connections to these trails at safe locations. Said connections shall be indicated on Tentative Tract Maps filed for all such Planning Areas. This shall include Planning Areas 1, 3, 4, 9, 12, 14, 15, 16, 17, 19A, 20, 21, 23, 24, 27, 28A, 30A, 32 and 33.

- The configuration, trail widths and clear areas adjacent to the trails must be designed to allow Sheriff and emergency vehicular access, but shall prohibit other non-emergency motor vehicle use.

- As set forth in the Development Standards of the City Ranch Specific Plan, the development of recreational uses are subject to the Site Plan Review provisions.

- Drought tolerant and native plant materials shall be used for park and golf course landscaping.

- Fertilizer and pesticide use shall be controlled in golf course area.

- Exhibit 16 of the Final Specific Plan will be amended to include an equestrian staging area in Planning Area I, and if feasible, an equestrian staging area in Planning Area 18, and an equestrian trail through the powerline easement. Trails planned in the City Ranch Specific Plan will be coordinated with those planned for the Ritter Ranch Specific Plan. Future developments adjacent to this project will be required to coordinate with the trails shown on the trails plan adopted for City Ranch.

Unavoidable Adverse Impacts

None.
FACILITIES MAINTENANCE

Project Impacts

Development of the project will result in the creation 159 acres of parks, 15 acres of parkway, 56 miles of streets, 7.5 miles of trails and 20 acres of flood control basins which will be maintained by the City of Palmdale. This represents a significant increase in the City’s maintenance responsibilities. The mitigation measures proposed will reduce the impacts from project maintenance to less than significant levels.

The development of the City Ranch will significantly increase the City’s street drainage, parkway and park maintenance liability. A part of these costs will be offset by an increase in the City’s general fund revenue generated by the development. However, the increases will not be sufficient to meet the maintenance costs created by the development. In addition to the maintenance costs, maintenance support facilities to serve the project site and surrounding developments will be needed in the vicinity of the project.

Development of the proposed project would include the construction of an internal landscaped roadway network. After the City of Palmdale has formally accepted the proposed streets as public streets, any additional road maintenance necessary on public streets within City Ranch, will be the responsibility of the City of Palmdale Department of Public Works. Project development is anticipated to increase the need for winter snow removal, roadway tree-trimming and street-sweeping services for the internal roadways. According to the City Department of Public Works, impacts with respect to providing additional tree-trimming service are not considered significant. By the year 2000, it is anticipated that the City Department of Public Works will also be responsible for all other road maintenance activities including snow removal, and street sweeping services. Therefore impacts with regard to Facilities Maintenance are considered potentially significant.

Mitigation Measures

There are no feasible mitigation measures which can be placed on this project to alleviate significant project-related impacts to existing maintenance facilities.
Unavoidable Adverse Impacts

The impacts to facilities maintenance will be partially mitigated by increases in the City's General Fund generated by the development. However, full mitigation of maintenance impacts by the project is determined to be infeasible, due to the inconsistency of such requirement with previous development project approvals within the City.

ARCHAEOLOGY

Project Impacts

Development of the proposed project would disturb two significant archaeological sites and one significant historical site located on the project site. This is considered a significant adverse impact.

Mitigation Measures

The following mitigation measures would enable the proper removal and preservation of cultural materials found on the project site:

- All work will be done under the supervision of a qualified archaeologist.

- Excavation of 100% of Loci A through C as described in the Phase II Archaeological Assessment (July, 1991) shall be conducted at LAn-949. It is estimated that approximately 500 cubic meters of cultural deposit will have to be removed. An excavation plan detailing strategy and research goals shall be submitted to the City of Palmdale for review prior to excavation activities.

- At least a 4 x 4 meter square unit at the approximate center of the deposit at LAn-1756 and at LAn-1757 shall be excavated.

- If preservation of the site at LAn-1758H is not feasible, a Phase III Salvage Program shall be conducted. The Phase III Salvage Program shall include full excavation of the stone enclosure and machine excavation of six 4 x 4 meter units placed in a pattern across the site. All backdirt from the units shall be screened through 1/4-inch mesh.

- In the event that future development would adversely affect the cupule boulders (LAn-1767 and LAn-1768) or the bedrock milling feature (LAn-1772), it is recommended that they be carefully removed and relocated elsewhere on the

S-41
subject property. An archaeologist shall be consulted to arrange for relocation of these boulders if removal is necessary.

- The location of significant historic and archaeological resources shall be recorded with the Archaeological Information Center at the UCLA.

- Significant historic and archaeological materials recovered in the field shall be delivered to the collection an appropriate archaeological repository.

- The following sites which were augered require additional testing for subsurface deposits: LAN-1746, LAN-1747, LAN-1748, LAN-1749, LAN-1750, LAN-1752, LAN-1753, LAN-1756, LAN-1772, LAN-1774, LAN-1767 and LAN-1768. At least one additional 1x1 meter test unit needs to be excavated at each of these sites, within site areas with the greatest densities of surface artifacts. These excavations are important to determine whether auger testing has missed subsurface deposits and to get a clearer, vertically-controlled picture of such deposits and their depositional context.

The following important petroglyph, bedrock mortar, and rock ring sites were not subject to any subsurface testing. They need to be tested through excavation of a minimum of one 1x1 meter units utilizing 1/8" screen in the immediate vicinity of these features: LAN-1767, LAN-1768, LAN-1759, LAN-1760, LAN-1761, LAN-1762, LAN-1763, LAN-1765, LAN-1766, LAN-1769, LAN-1770, LAN-1771. The "hunting blind" sites are important structures whose function needs to be determined through further testing.

The important apparent habitation site, LAN-949, should be avoided through realignment of the proposed roadway. However, in the event that avoidance is not possible, salvage of the site shall be performed in accordance with an excavation plan.

The important apparent habitation site, LAN-949, should be avoided through realignment of the proposed roadway. However, in the event that avoidance is not possible, salvage of the site shall be performed in accordance with an excavation plan. Excavation of 100 percent of Loci A through C as described in the Phase II Archaeological Assessment (July, 1991) shall be conducted at LAN-949. It is estimated that approximately 500 cubic meters of cultural deposit will have to be removed. The excavation plan detailing strategy and research goals shall be submitted to the City of Palmdale for review and approval prior to excavation activities. In addition, this excavation plan shall contain a subregional analysis of the archaeological sites within and immediately adjacent to City Ranch to provide a basis for significance determinations. As part of the subregional analysis, a research design that would set standards for future work in the vicinity of the City Ranch project shall be proposed. The subregional analysis of the archaeological sites may be prepared in cooperation with other adjacent property owners, as approved by the Planning Director.
Those sites, not listed above, which contained surface artifacts but were only auger tested shall be tested with at least one standard test unit per site. The testing program shall be submitted to the City Planning Department for review and approval prior to commencement. In addition, untested cupule sites, rock rings and hunting blinds shall also be tested in this manner. Any additional mitigation recommended as a result of the additional testing shall be required as mitigation measures for initial and subsequent development applications, as appropriate.

Relocation of cupule boulders must be done under the direction of a qualified archaeologist who will give careful attention to orientation of the boulders. The boulders shall be moved prior to site disturbance in their immediate vicinity to a location approved by the Planning Director. Since context will be lost, some shall be relocated to a repository approved by the Planning Director where they can be used for educational purposes. Representative artifacts should be displayed at this repository.

The work described above shall be performed by a qualified archaeologist, retained by the applicant and approved by the Planning Director. Because the introduction of residents into the area will result in the degradation of archaeological sites, required testing shall be completed and approved by the Planning Director prior to recordation of the first parcel map or tract map for the project.

Unavoidable Adverse Impacts

Development of the proposed project would disturb the portions of the site containing archaeological site LAN-949, LAN-1756/1757 and LAN-1758H. Although disturbance of these sites is considered significant, implementation of the recommended mitigation measures would reduce these impacts to a level of "not significant."

PALEONTOLOGY

Project Impacts

Direct significant adverse impacts to paleontologic resources would result from ground-disturbing activities associated with development of the City Ranch Specific Plan. Grading activities in areas containing rock units of high paleontological importance have the potential to disturb or bury fossil sites, as well as fossiliferous and potentially fossiliferous rocks, and would result in the loss of fossil specimens and associated geologic data. In addition, fossiliferous rock in these areas would become permanently unavailable for future investigation of fossil remains. Potentially significant indirect adverse impacts could occur as a result of collection of fossil remains by construction personnel, rock hounds, and amateur and commercial collectors. This could result in the loss of specimens and data.

Mitigation Measures

Implementation of the following mitigation measures would reduce impacts to paleontological resources:

- A paleontologist, approved by the City of Palmdale Planning Department shall submit a program for paleontologic resource recovery and preservation to the City of Palmdale Planning Department for approval prior to issuance of the development permit. Prior to initiation of construction, the paleontologist shall conduct a field survey of exposures of the late Miocene fossil leaf-bearing rock unit on the project site to document locations of previously unrecorded fossil sites. All sites shall be plotted on a topographic map of the project site. Representative plant fossils shall be collected from each site. The paleontologist shall excavate those sites, including any previously recorded sites, having the
highest potential for yielding comparatively well preserved and taxonomically diverse plant assemblages. If necessary, the applicant will supply a backhoe and operator to further expose a fossil site for hand excavation.

- The paleontologist shall collect rock samples from selected locations (including recorded fossil sites) and horizons (particularly paleosols and other fine-grained rocks) in the rock units of high and unknown paleontologic importance to process for smaller fossil remains. Each sample shall contain up to 1,000 pounds of rock. If fossil remains are found during processing, up to 5,000 pounds of rock shall be collected from the fossil-bearing rock unit and processed.

- Following completion of these tasks, the paleontologist shall prepare a report summarizing the results of the preconstruction phase of the mitigation program presenting an inventory and describing the significance of any accessioned fossil remains. The report shall be submitted to the City of Palmdale Planning Department.

- During the construction phase, the paleontologist shall monitor grading and any other ground-disturbing activity in areas underlain by rock units of high paleontologic importance on a full-time basis, moderate and unknown importance on a half-time basis and low importance on a quarter-time basis as identified in the pre-construction field survey. If more than 25,000 cubic yards of rock are moved per day, the level of monitoring effort shall be doubled. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, dry screening excavated spoils for smaller vertebrate remains. Grading in areas underlain by rock units of no importance shall not be monitored except in the immediate vicinity of a fossil site.

- If larger fossil remains are uncovered by ground disturbance, the paleontologist shall divert the ground-disturbing activity away from the fossil site until the remains have been removed and a 1,000 pound rock sample has been collected. Grading of the fossil-bearing bed in the immediate vicinity of the site shall be monitored on a full-time basis. If sufficient sites are discovered in any rock unit during construction, earth-moving activities in the entire area underlain by this rock unit shall be monitored on a full-time basis.

- If fossil remains are found during grading by construction crews (including in areas underlain by rock units of low paleontologic importance), grading activities on the fossil site shall be stopped and the paleontologist shall be called to the site immediately to remove the remains. If sufficient sites are discovered, grading activities at the fossil site shall be submitted on a full-time basis.

- During grading, the paleontologist shall collect 1,000-pound rock samples from selected locations and stratigraphic levels (particularly paleosols or other fine-grained rocks) to process for small mammal and other microvertebrate remains. Additional 5,000-pound rock samples shall be collected from any productive
sampling site, including any site discovered as a result of dry screening by the monitor, for processing. The grading contractor may be needed to assist in removing rock samples to an adjacent location for initial processing. Sampling sites shall be documented on the topographic map of the plan area.

- Both before and after construction, the paleontologist shall conduct the initial processing (wet and/or dry screening) of the rock samples for small age-diagnostic mammal remains and other microvertebrate specimens while on-site. The resulting concentrate shall be transported to a museum facility. If sufficient fossil sites and remains are found in a rock of unknown paleontological importance, this unit shall be reclassified as moderately or highly important. If no remains are recovered, this rock unit shall be reclassified as being of low paleontological importance.

- During grading, the paleontologist shall collect all identifiable vertebrate and plant remains. All fossil sites shall be plotted on the topographic map of the project site.

- All fossil remains collected before and during construction shall be prepared, identified, catalogued, curated and accessioned into the collection of a designated repository, such as the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County (LACM). Accompanying notes, maps, and photographs shall also be filed at the repository.

- Following completion of these tasks, the paleontologist shall prepare a report summarizing the results of the construction phase of the mitigation program and presenting an inventory and describing the significance of any accessioned fossil remains. The report shall be submitted to the City of Palmdale Planning Department and shall signify completion of the paleontologic mitigation program. Because development of the proposed project is phased, separate reports may be required to summarize mitigation for certain fossil sites.

- Subsequent to construction, the applicant shall allow future access to and investigation and excavation of these exposed rocks, particularly at any fossil site set aside from development, by qualified paleontologists approved by the LACM to ensure fossil remains are recovered. (If paleontologists do not recover these fossil remains, the fossils and associated scientific data might be lost to weathering and erosion or to unauthorized fossil collecting.)

Unavoidable Adverse Impacts

While the mitigation measures proposed would reduce adverse impacts associated with development of the project site, they do not necessarily insure that all direct and indirect adverse environmental impacts on paleontologic resources caused by development of the City Ranch project site would be reduced to an insignificant level and that all remains would be preserved. Unavoidable or residual impacts
may still remain. Fossil remains and associated geologic data, recorded and possibly unrecorded fossil sites, and fossiliferous rocks may be lost to or made inaccessible by ground-disturbing activities; covering with fill, pavement, or structures; and unauthorized fossil collecting.

**ELECTROMAGNETIC RADIATION**

**Project Impacts**

The proximity of the high-tension electric lines to proposed residential Planning Areas 16, 17 and 19A and elementary school site (Planning Area 19B), could result in potential health risks to residents and users within these planning areas. Health risks associated with active recreational activity in close proximity to high-tension electric lines are unknown. Active recreational uses such as softball and soccer fields are proposed within the power line easements in Planning Area 18. These impacts are considered potentially significant. Noise from transmission lines is expected to affect areas outside high-tension transmission line easements. Depending upon atmospheric conditions, this noise may be a moderate to severe nuisance.

**Mitigation Measures**

Implementation of the following mitigations would reduce impacts associated with the high-tension electric lines:

- Residential areas abutting transmission line rights-of-way shall be separated by continuous six-foot-high non-conductive fencing.

- In accordance with California Department of Real Estate disclosure format and procedures, all potential buyers of real property within City Ranch within 500-feet of an easement containing a 220 kV or higher voltage electric transmission line shall be notified of the proximity to the easement and conditions regarding proximity.

- Active recreational uses shall be prohibited within the 220 kV and 500 kV power line easements in Planning Area 18.

- All residential units constructed along the perimeter of high-tension power line easements shall use double glazed windows on all sides that face these lines to minimize noise effects generated by the electrical transmission lines.

- The location of the proposed elementary school sites shall reflect the recommended guidelines of the California Department of Education regarding buffer zones between school site locations and high voltage power lines.
Unavoidable Adverse Impacts

As proposed, the Specific Plan would locate a park within and residential uses adjacent to high-tension power line easements. In addition, an elementary school is proposed near the easement. If in the future a clear link between proximity to high-tension electric lines and deleterious health effects is determined, impacts would be considered unavoidable adverse impacts.

HAZARDOUS/TOXIC MATERIALS

Project Impacts

Without proper remediation and clean up procedures, hazardous materials found on the project site including partially filled jugs of chlordane, partially filled cans of paint, paint thinner, herbicides, roofing tar and DDT concentrate, septic systems and gasoline and oil contaminated soils could create health risks to project construction workers and potential site residents. Any exposure of hazardous materials to a human population may be considered significant.

Mitigation Measures

Implementation of the following mitigation measures would reduce impacts to a level of "not significant."

- Septic systems shall be abandoned prior to grading operations in areas where they are located. Septic systems shall be cleaned and abandoned in accordance with Title 28, Chapter 11, Section 1119 of The Los Angeles County Health and Safety Code. A permit for this action will be required by the Los Angeles County Department of Public Works Building and Safety Division in Lancaster.

- Soil testing shall be conducted in all areas where hazardous/toxic materials were found. Soils contaminated with hydrocarbons (gas and oil spillage), specifically at the former underground storage tank site (Location A) and soil stained area (Location D) on the east side of the ranch compound, shall be removed and disposed of at a facility authorized to accept hazardous waste from the site prior to grading operations within the specified area. Soil removal shall be supervised by a qualified hazardous waste scientist. The final quantity of soil to be removed shall be determined. Contaminated soil shall be transported and disposed of in accordance with all applicable hazardous waste disposal regulations. A manifest, a formal document verifying receipt by an authorized hazardous waste facility of soils contaminated with hydrocarbons or other hazardous wastes shall be provided to the County Department of Public Works. A closure report verifying complete removal of contaminants from the site shall be provided to the County Department of Public Works. Both shall be approved prior to the acceptance of dedication.
• An additional study determining the lateral and vertical extent of soil contamination and the possible impact on groundwater shall be prepared for the former site of the underground fuel storage tank.

• Empty or partially full containers of pesticides, herbicides, and veterinary supplies (Locations B and C) shall be reviewed by a qualified hazardous waste scientist to determine which are considered hazardous as determined by state, county, or local statutes. Hazardous materials and hazardous waste shall be disposed of in accordance with all applicable hazardous waste disposal regulations.

• Hazardous materials in the disposal area at Location G, Figure 74 of the EIR shall be analyzed for chemical composition, removed and taken to a facility licensed to accept such material. Soil samples shall be examined in this area to ascertain whether soil has been impacted by manifested disposed contaminants. If the other disposal areas are excavated, a manifest for the contaminated soils and a site closure report shall be provided to the County Public Works Department prior to the acceptance of dedication.

• Wells on the property not used for irrigation or other non-potable uses shall be abandoned and sealed to eliminate the potential for degradation of ground water beneath the site in accordance with the requirements set forth in California Department of Water Resources Bulletin 71-88. Well destruction will require permitting through the Los Angeles County Department of Health Services, and possibly the local water agency.

• Refuse from disposal areas E and F (Figure 74 of the EIR) shall be collected and disposed of at an appropriate disposal site.

• The storage building near Location B which was not inspected on the site investigation and whose contents are, therefore, unknown, shall be opened and evaluated by a qualified site investigator. The contents of the building shall be inventoried and analyzed for potential health hazards. If hazardous materials are identified, appropriate remediation measures shall be implemented. All local, county, state and federal regulations shall be applied to ensure proper disposal of any hazardous material that may be found. If hazardous materials are found at this location, a manifest and a site closure report shall be provided to the County Department of Public Works prior to the issuance of a building permit.

Unavoidable Adverse Impacts

Implementation of the recommended mitigation measures would reduce project impacts regarding hazardous/toxic materials to a level of "not significant."
ANTELOPE VALLEY PUBLIC LANDFILL

Project Impacts

Development of the proposed project would bring developed uses up to the boundary of the Antelope Valley Public Landfill's proposed expansion area. This area would abut a 1,270 foot length of Planning Area 13 (golf course) north of City Ranch Road. A portion of residential Planning Area 8 would be within 1,000 feet of the landfill expansion boundary. This is considered a significant adverse impact.

Mitigation Measures

Implementation of the following measures would reduce project impacts to a level of "not significant."

- The applicant shall keep all residential development a minimum of 1,000 feet west of the proposed landfill expansion boundary in accordance with the City of Palmdale's proposed Solid Waste Management Plan. The southeast corner of Planning Area 8 would need to be in the landfill buffer area and kept free of residential development (Figure 77 of the EIR). Prior to development occurring within Planning Area 8, a permanent easement which includes land within 1,000 feet of the northwest and southwest corners of the landfill expansion area shall be recorded. Within this easement, the construction of residences shall be prohibited.

- To minimize dust and visual impacts, the applicant shall provide a landscape buffer of mature vegetation along the common boundary line with the Antelope Valley Public Landfill and along the boundary of Planning Area 8 or any other residential properties that may be affected.

- In accordance with California Department of Real Estate disclosure format and procedures, all potential buyers purchasing real estate in City Ranch located within 1,200 feet of the landfill boundary shall be notified of that circumstance.

Unavoidable Adverse Impacts

Implementation of the recommended mitigation measures and effective enforcement of landfill-associated mitigation procedures should reduce landfill impacts to a level of "not significant."
LIBRARY SERVICES

Project Impacts

National library standards provided by the City Librarian recommend 2.5 volumes per capita, 0.5 staff per thousand population and an area of 0.8 square feet per capita. The library needs for the City Ranch project, using these standards and a household size of 2.7 persons per dwelling unit, is 35,100 volumes, 7 staff persons, and 11,232 square feet of library facility. The adjoining Ritter Ranch Specific Plan area will be required to construct a branch library facility, 16,000 square feet in size. Therefore, a branch facility in the City Ranch project would be redundant. However, the applicant could provide a pro-rata share of funding for upgrading the main library or assist in the construction of the branch library proposed on the Ritter Ranch project. The location of the branch facility in the Ritter Ranch project with expanded library facilities at the main library would provide adequate library services for the City Ranch Specific Plan residents.

Mitigation Measures

There are no feasible mitigation measures which can be placed on this project to alleviate significant project-related impacts to library services.

Unavoidable Adverse Impacts

Development of the proposed project will contribute to cumulative significant adverse impacts to library services.
S.4 Cumulative Impacts

Development of the proposed project would create cumulative impacts with regard to:

**LAND USE** - The currently rural Leona Valley and Anaverde Valley area would be transformed to that of a suburban setting.

**POPULATION** - Areawide population would increase by approximately 49,531 persons which would almost double Palmdale’s existing population.

**HOUSING** - Cumulative development would increase housing by approximately 18,500 dwelling units. The resultant cumulative areawide jobs/housing ratio would remain heavily jobs poor.

**GEOLOGY** - Increased numbers of persons would be exposed to the high seismically-related geologic hazards of the area. Increased numbers of persons could be injured by an earthquake event in this area as a result.

**BIOLOGY** - Cumulative development would result in a significant loss of biological habitat and diversity in the region.

**AIR QUALITY** - Cumulative development would result in significant short-term (construction) and long-term (operational) impacts.

**NOISE** - Noise levels on and along surface streets in the project vicinity would increase as a result of cumulative projects development. The most significant increases would occur on Elizabeth Lake Road and Avenue S. Sensitive receptors such as residences and schools may be significantly impacted.

**AESTHETICS** - Irreversible losses of open space vistas would result from cumulative project development. Developed areas replacing the open space areas would be visible over substantial distances. These impacts are considered significant.

**LIGHT AND GLARE** - Cumulative development would result in the irreversible loss of a dark nighttime sky. This is considered a significant cumulative impact.

**ENERGY** - Energy use would increase by 3.3 billion BTU’s daily as a result of cumulative project development.

**WATER** - Water demand would increase by approximately 11 million gallons per day. This is 25% of future AVEK supply capacity.
SOLID WASTE - As a result of cumulative development, solid waste generation would increase by 201,663 pounds daily. This is a 16.6% increase over the amount currently deposited at the Antelope Valley Public Landfill.

FIRE AND EMERGENCY MEDICAL SERVICES - Cumulative development would impact the services of the Fire Department and emergency medical treatment services. All new developments are required to provide for appropriate fire protection facilities in an amount proportionate to the demand created by the development. Cumulative impacts on fire and emergency medical services are therefore not considered significant.

SCHOOLS - As a result of cumulative development, Westside Union School District enrollment would increase by 289%; Palmdale School District enrollment would increase by 207% and Antelope Valley Union High School District would experience 68% enrollment growth.

PARKS AND RECREATION - Unless cumulative projects provide adequate on-site recreational facilities in accordance with City of Palmdale and County of Los Angeles park space requirements, cumulative projects development would increase pressure on existing City and County park space which is already deficient.

ARCHAEOLOGY - Cumulative development may contribute to the overall loss of archaeological resources in the area.

PALEONTOLOGY - Cumulative development may contribute to progressive loss of fossiliferous rocks and fossil sites in the region.

S.5 Effects Found Not to be Significant

The Initial Study for the proposed project (see Appendix A of the EIR) determined that the proposed project would not have a potentially significant effect on the environment with regard to Natural Resources or Housing. Because Natural Resources was not identified by the Initial Study as an area of concern, it was not analyzed in this EIR. Housing issues were analyzed per the direction of City staff subsequent to the issuance of the Initial Study.

S.6 Areas of Controversy

The City of Palmdale Planning Department has identified the following areas of concern regarding development of the proposed project:

WATER RESOURCES

Concern: That continued growth in the Palmdale area, such as that anticipated by the development of the proposed project, could jeopardize water service provision to existing customers.
Discussion: While the proposed project would increase demand for water resources in the area, the water supplier in the area, LACWD No. 34, have indicated their ability to serve the site based on existing and proposed supply facilities. In addition, available on-site non-potable water resources could provide all of the irrigation water needed for the proposed golf course and parks thereby reducing potable water demand.

TRAFFIC

Concern: The direct and cumulative traffic impacts associated with project development especially with regard to the off-site circulation network.

Discussion: The traffic analysis for the proposed project reveals that project-generated traffic will not have a direct or cumulative adverse impact on the local circulation network provided off-site master planned roadway improvements identified in the City's General Plan area constructed prior to project buildout.

LOSS OF NATURAL OPEN SPACE

Concern: The rapid conversion of open space in the Palmdale area to suburban use.

Discussion: While project development would result in the conversion of the project site to a largely residential setting, approximately 404 acres of the project site area proposed to remain as natural open space. In addition, the proposed project includes 159 acres of proposed public parks and over 216 acres of golf course space. This accounts for approximately 40% of the project site acreage. Proposed school sites would provide additional open space resources. While visual open space would still be available, biological habitat would be greatly reduced.

ANTELOPE VALLEY PUBLIC LANDFILL

Concern: The proximity of the Antelope Valley Public Landfill to the project site.

Discussion: The landfill is currently located .6 miles east of the project site. An application has been filed by the landfill operator to expand the landfill boundary up to the eastern boundary of the project site north of City Ranch Road, alongside a portion of the proposed golf course. While proximity of the proposed expansion to the project site does pose potential land use conflicts, implementation of the mitigation measures recommended in this EIR and in the EIR for the proposed landfill expansion would reduce impacts to a level of not significant.

HILLSIDE DEVELOPMENT

Concern: Hillside areas of the project site could be developed such that proposed development may conflict with the intent of a hillside management ordinance
currently being drafted by the City which is expected to recommend limiting hillside development to slopes of 25% or less.

Discussion: The grading standards proposed in the City Ranch Specific Plan recommend limiting grading of natural hillsides to slopes of less than 25% except for reasons of public health, safety, welfare, protection of property and provision of necessary public facilities. Grading design guidelines prohibit construction in areas of greater than 25% slope except for areas which are not visually prominent. These standards and guidelines conflict with a policy of the City of Palmdale’s proposed hillside management ordinance that recommends no grading in areas above 25% slope. This issue would have to be resolved between the applicant and the City Engineer prior to approval of the proposed project, if the ordinance is passed.

S.7 Alternatives

The following alternatives to the proposed project were assessed in the EIR:

Alternative 1 - No Project

Under the “No Project” alternative, the proposed project would not be developed and the project site would remain in its present undeveloped condition. The central portion of the project site would continue to be used for cattle grazing and hazardous materials currently found on the site would not be removed. However, the potential project-related impacts discussed in Section 5.0 of this report would not occur.

Alternative 2 - Reduced Residential Density

Under this alternative, the 1,985-acre project site would be developed in a manner similar to the proposed project but with reduced residential density and some land use changes. Under this alternative, 3,120 dwelling units would be developed on a total of approximately 900 acres of the project site. Overall residential density across the entire project site would be 1.57 dwelling units per gross acre. Four neighborhood commercial sites are identified on the Alternative 2 site plan. Retail building space would total 300,000 square feet. Office space would total 285,000 square feet. Employment opportunities on-site would increase, resulting in a more balanced jobs to housing ratio (JHR) of 0.70 (the future regional balanced JHR is 0.72). Alternative 2 would include increased amounts of natural open space as compared to the proposed project. Natural open space acreage will total 462.2 acres, open space 122.6 acres, parks 167.6 acres and golf course 157.1 acres. A total of two elementary school sites are designated in Alternative 2. One site would support a 600 student school on 10 acres. The other would support 800 students on 17.1 acres. This alternative includes a 1-acre fire station site as in the proposed project development.
Alternative 3 - College Campus

Under the "College Campus" alternative, the proposed project would not be developed and the project site would be used instead as a campus for a four-year college. Development of this project would require an amendment to the General Plan to allow a college campus use. The University of California Irvine Campus which closely matches the size of the project site developable acreage was used as a model for this alternative. Land use of the college would be distributed in 32 Planning Areas. The core of the campus would be situated in the central portion of the project site and would contain the five major academic Quads including Biological Sciences, Engineering, Physical Sciences, Social Science, Health Sciences and Humanities and Fine Arts. Two planning areas totaling approximately 25 acres of the project site would accommodate university facilities such as the central plant, public services and facilities management. Three planning areas totaling nearly 87 acres will house joint university and private sector projects. Three commercial areas totaling approximately 54 acres of the project site are intended to accommodate student-oriented and on-site faculty and staff retail uses and activities. One 37-acre planning area is designated for mixed-use facilities which would include research and development, support commercial and residential uses. Forty acres of the project site would be used for campus playing fields, tracks and sports stadiums. Buildings on the site may house indoor pools, courts and locker rooms. A total of 1,573 dormitory rooms and 200 apartments would be provided for undergraduates in complexes 2-10 stories high. Graduate student/married student housing would be provided in apartment buildings. A total of 862 graduate/married student units would be provided. Additional housing would be provided for faculty and staff in the form of 80 mobile homes, 100 apartments, 18 condominiums, and 281 single-family detached homes. Two planning areas totaling 172 acres are proposed as park sites which could be developed with ball fields, tennis courts and other improvements. Almost 600 acres of the campus would be comprised of natural open space suitable for hiking trails and equestrian trails.

Alternative 4 - Alternate Site A: Willow Springs

Under this alternative, all components of the proposed project would be developed on a 2,185-acre parcel of land in Willow Springs near the City of Rosamond, California. Willow Springs is located in the southwest portion of the Antelope Valley in Kern County. The project site currently consists of an undeveloped desert vegetation area, with commercial agriculture and mineral resource management area land use designations. Overall site topography slopes less than five percent from 3,000 feet down to 2,400 feet above mean sea level. Flash flooding from intermittent streams can occur on the relatively flat terrain of the project site. High-tension electric lines cross the southeast corner of the project site. Overall residential density at the Willow Springs site is 2.38 dwelling units per gross acre which is similar to the 2.62 units per gross acre proposed for the City Ranch site. As in the proposed City Ranch site plan, one commercial area is in the north-central portion of the site and the other is in the southeast corner. A total of 321.5 acres of
the project site are set aside as natural open space. The golf course occupies approximately 255 acres. Four parks occupy a total of 166.5 acres of the project site. A 97-acre open space area is provided between the electric line easements and areas that would contain habitable structures. Four elementary school sites are provided on the Willow Springs site plan. Each school site is approximately 10 acres in size and would provide space for approximately 600 students. This alternative includes a 1-acre fire station site as in the proposed project development.

Alternative 5 - Alternate Site B: Quail Lake

Under this alternative, all components of the proposed project would be developed on a 2,136-acre parcel near Quail Lake in North Los Angeles County. This alternate project site is located at the intersection of Interstate Highway 5 and State Highway 138 south of Gorman in the Tejon Pass area. The Quail Lake project site consists of moderately rugged hillside terrain separated by a broad alluvial valley. Drainage in the portion of the site south of State Highway 138 flows northerly toward the valley portion of the site. Drainage in the northwestern end of the property flows downslope in all directions from a prominent hill. Vegetation on the site is predominantly chaparral with oak trees on the northerly facing slopes and canyon bottoms. Eight planning areas would be designated for residential use on a total of 783.5 acres for a density of 5.42 dwelling units per acre. Overall residential density is 2.43 per gross acre which is similar to the density of the proposed project. The buildable area of one of the planning areas is constrained by liquefaction potential and would require site-specific engineering studies and mitigation prior to development. Buildings in a second planning area would require 50-foot setbacks from all faults. Building pads in a third planning area would need to be raised to avoid the 100-year flood plain. Two of the residential planning areas contain oak tree groves and other sensitive vegetation. Therefore, two commercial areas on the Quail Lake development plan comprising 260,000 square feet of retail space. All commercial activity would be located on the southern tip of the project site bounded by Interstate 5. Open space, park and golf course development is planned for the area of the project site within the Alquist-Priolo special studies zone. Additional natural open space area is designated in the planning areas containing tree groves, chaparral vegetation, liquefaction constraints and slide zones. Another open space planning area contains some land within the 100-year flood plain. Four elementary school sites are provided on the Quail Lake site plan. Each school site will be approximately 10 acres in size and accommodate approximately 600 students each. The sites are dispersed throughout the project site in order to serve all areas of the project site containing residential development. This alternative includes a 1-acre fire station site as in the proposed project development. The Quail Lake development plan contains an existing electric utility substation. This is located in the Alquist Priolo Special Study area.
Environmentally Superior Alternative

In general, the environmentally superior alternative is the alternative which causes the least adverse impacts to the project site and the surrounding environment. Of the alternatives presented other than the “no project” alternative, Alternative 2 - reduced residential density would create the least impacts. It would generate less population and therefore less vehicle trips, air pollutant emissions, mobile noise, students, utility and public service use and would expose less people to the geologic and hydrologic hazards associated with the project site. In addition, development of Alternative 2 would eliminate significant impacts with regard to housing, biological resources, and proximity of schools, parks and residential uses to the high-tension electric lines and would leave less unavoidable adverse impacts than would the proposed project.

S.8 Issues to be Resolved

The proposed project would have greater environmental impacts than the reduced residential alternative identified in this EIR. It is, therefore, up to the City Council and Planning Commission to decide whether or not to approve the proposed project or to choose the environmentally preferred alternative.
1.0 INTRODUCTION

This Environmental Impact Report (EIR) analyzes the potential environmental impacts associated with the development of the City Ranch Specific Plan. The Specific Plan proposes to develop a largely residential community with single- and multi-family residential units, neighborhood commercial space, a golf course, public parks, and open space areas. The Specific Plan also proposes to make sites available for elementary schools, and a fire station. The project site is a 1,985-acre site located in the unincorporated area of Los Angeles County adjacent to the City of Palmdale. Annexation of the project site into the jurisdiction of the City of Palmdale is proposed. The purpose of this EIR is to provide information to assist the City of Palmdale Planning Commission, City Council, other governmental agencies and the public-at-large in their consideration of the environmental implications of development of the proposed project.

This EIR has been prepared in accordance with the environmental impact report preparation requirements established under the California Environmental Quality Act (CEQA) of 1970 as amended. State of California Office of Planning and Research CEQA guidelines were strictly followed along with advice and guidance from the City of Palmdale Planning Department. The principal objectives of CEQA are that the environmental review process be a public one, and that the EIR be an informational document that will inform members of the general public, City decision-makers and technical reviewers about the environmental impacts associated with implementation and operation of the proposed project. EIR’s are also required to describe mitigation measures to reduce significant adverse impacts and to develop reasonable alternatives which may reduce impacts while achieving the objectives of the proposed project.

In accordance with CEQA Guidelines, the City of Palmdale prepared an Initial Study for the proposed project and solicited agency comments through a Notice of Preparation (Appendix A). The Initial Study and comments received in response to the NOP (Appendix B) determined the technical focus of this EIR.
Subsequent to the preparation of this Draft Environmental Impact Report and in accordance with CEQA requirements, a 45-day public review period and review process will be initiated for the Draft EIR. Public comments on the Draft EIR will be formally heard and considered. Copies of this document are available for public review at both the Palmdale Central Library, 700 East Palmdale Boulevard and at the City of Palmdale, Department of Planning, 38306 9th Street East.
2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION

The project site is a 1,985-acre parcel located in an unincorporated portion of the Antelope Valley area of Los Angeles County contiguous to the City of Palmdale. A portion of the project site is located within the sphere of influence of the City of Palmdale. An annexation application and sphere of influence amendment have been filed with the City of Palmdale. The annexation application will be processed through the Los Angeles County Local Agency Formation Commission (LAFCO). The site is located approximately two miles west of the Antelope Valley Freeway (SR-14) along the southern edge of Elizabeth Lake Road, south of the intersection with 25th Street West. Figure 1 shows the location of the project site.

2.2 PROJECT OBJECTIVES

The applicant proposes to develop the site under a Specific Plan that would result in the construction of 5,200 residential units with supporting commercial, school, fire department, and recreational uses. Approximately 404 acres of the project site, containing the prominent ridgelines, would be set aside as natural open space. The purpose of the Specific Plan is to serve as a planning tool to create a comprehensive approach to the development of the City Ranch property consistent with the goals and policies of the City of Palmdale General Plan. The City Ranch Specific Plan Development Standards are intended to operate in conjunction with the City of Palmdale Municipal Code.

2.3 PROJECT CHARACTERISTICS

The City Ranch Specific Plan divides the 1,985-acre project site into 35 planning areas classified by the proposed primary use (i.e., single-family development, open space/golf course, etc.). The proposed development plan is provided in Figure 2. The
overall development approach is to locate residential development in the central portions of the site where they would be relatively hidden from developed areas of the City. Large portions of the site are designated to provide various forms of open space. These open space areas include areas containing significant landforms (such as hillsides and ridgelines where the slope is above 25% grade), seismic hazard areas, and environmentally-sensitive areas. Compatibility between land uses is addressed by the gradual transition of densities and uses from open space through single-family detached to single-family attached and multi-family residential development. Schools, parks and open spaces are situated adjacent to residential areas to provide visual relief and recreational opportunities within safe walking distances to homes. Distribution of the proposed land uses is as follows:

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acres</th>
<th>% of Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>1,057</td>
<td>53</td>
</tr>
<tr>
<td>Commercial</td>
<td>42</td>
<td>2</td>
</tr>
<tr>
<td>Roadways</td>
<td>55</td>
<td>3</td>
</tr>
<tr>
<td>Schools</td>
<td>36</td>
<td>2</td>
</tr>
<tr>
<td>Parks</td>
<td>159</td>
<td>8</td>
</tr>
<tr>
<td>Golf Course</td>
<td>216</td>
<td>11</td>
</tr>
<tr>
<td>Open Space</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Natural Open Space</td>
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<td>20</td>
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<tr>
<td>Fire Station</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>1,985.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The project is proposed to be built in eight phases (Figure 3). Total project buildout is anticipated by the year 2000.

Grading

The overall grading approach for the proposed project is to place higher density uses on the flatter portions of the site, thereby lessening grading difficulty and impacts, and to set aside large contiguous areas of sloping land as permanent natural open space where very little grading and no residences are permitted. Though the majority of residential
and commercial areas (except for portions of Planning Areas 3, 6, 8, 17, 27, 28A and 31) have gentle slopes below six percent grade, the majority of the sites within residential, commercial, school, park and golf course planning areas will require grading. The areas proposed to be graded are shown on the Conceptual Grading Plan (Figure 4). It is anticipated that grading will occur by phases over the 10-year construction period.

The grading concept for City Ranch can be divided into three categories: 1) areas of little or no grading; 2) grading necessary for roadway access, flood control, accommodation of fill generated by off-site regional improvements, or other similar reasons; and 3) grading to create properly-draining streets and buildable sites. Grading will be balanced on-site.

Planning Areas 2, 7, 29 and 32 are proposed to have little or no grading. Grading in these areas shall primarily be permitted only to satisfy health, safety, general welfare and similar circumstances including construction and access to water tanks and flood control basins, and to establish hiking and equestrian trails. A very small portion of Planning Area 7 along the Bridge Road entry to the project site will be graded to incorporate the project entry statement. The majority of these Planning Areas will remain in their natural condition.

Grading associated with major and minor arterial roads will occur adjacent to all planning areas which abut Elizabeth Lake Road, Avenue S, City Ranch Road and Bridge Road. This includes the majority of the development areas. For this reason, enlarged landscape easements of 10 to 30 feet are proposed to accommodate grade differences to be gradually transitioned at 3:1 slopes or flatter, rather than consistent 2:1 slopes throughout.

Planning Areas 5, 10, 11, 12, 14, 15, 16, 20, 21, 22, 23, 24, 25, 28B, 30A, 30B, 33 and 35 which contain flat or gently sloping terrain averaging between two and five percent in slope are proposed to be graded so as to provide efficient drainage, elimination of a 100-year flood plain, efficient sanitary sewer operation and balanced cut and fill within the
phases. Within these planning areas, grading is anticipated to average less than 5,000 cubic yards per acre. These planning areas will be subject to general grading standards applicable to conventional development.

Planning Areas 1, 3, 4, 6, 8, 9, 10, 13, 17, 18, 19A, 19B, 26, 27, 28A and 31 contain some portions which have natural slopes between 10 and 25 percent. Grading of these areas is estimated to average 6,500 cubic yards per acre. Portions of these planning areas which are below 15 percent in average slope shall conform to general grading standards. Areas above 25% slope will be subject to more stringent standards.

Fill operations are anticipated to occur in Planning Area 8 to accommodate excess fill material generated by the construction of Amargosa Creek improvements to the north. The intent is to fill the central portion of Planning Area 8 running east/west by “daylight filling.” Slopes created by the fill will be less than 30 feet in height except for up to three locations where slopes will be between 30 to 50 feet high.

Residential

Approximately 1,057 acres of the project site are proposed for residential uses. Overall residential density across the entire project site will be 2.62 dwelling units per gross acre. The residential mix is proposed as follows:

<table>
<thead>
<tr>
<th></th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-family detached</td>
<td>3,253 units</td>
</tr>
<tr>
<td>Single-family attached</td>
<td>1,634 units</td>
</tr>
<tr>
<td>Multiple-family</td>
<td>313 units</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,200 units</strong></td>
</tr>
</tbody>
</table>

- **Single-family Detached** - Planning Areas 5, 6, 8, 10, 16, 17, 19A, 20, 24, 27, 28A, 30A and 31 are designated as areas to be developed with single-family detached units. Planning Areas 17 and 31 will contain some large lot sizes (approximately 10,000 square feet) in order to accommodate curvilinear street design within sloping portions of these planning areas.
Portions of Planning Areas 5, 8, and 10 are in Fault Hazard Restricted Use Zones. Buildings in these planning areas will incorporate setbacks from areas of probable rupture to provide sufficient safety margins for habitable structures. Figures 5 and 6 depict how buildings would be sited to avoid hazards associated with probable ground rupture. Approximately 15.0 acres of Planning Area 5, approximately 11.7 acres of Planning Area 10 and approximately 66.4 acres of Planning Area 8 are buildable. The intent is to place recreation, landscaping, open space, streets and other non-habitable uses in the Restricted Use Zones. No habitable structures will be built in Restricted Use Zones.

• **Single-family Attached** - Planning Areas 14, 15, 21 and 23 are designated as areas to be developed at 8 to 10 dwellings per gross acre. The intended housing types in this area are typically described as two attached units (duplexes) on fee ownership lots, three or more attached units (townhomes), clustered detached single-family homes with a condominium form of common space ownership and other housing types of a similar nature and density.

• **Multi-family Residential** - Planning Area 12 is designated for multiple-family use. Density is proposed at approximately 10.1-16.0 dwellings per gross acre and the intended housing types to be constructed include townhomes, condominiums and stacked units.

**Commercial**

Two neighborhood commercial sites are identified as part of the City Ranch Development Plan. Planning Area 3 is an approximately 32-acre area adjacent to Elizabeth Lake Road, and Planning Area 33 is an approximately 10-acre site along Avenue S at the southeast corner of the project site.
Planning Area 3, with an estimated total of 151,000 gross square feet of floor space, is designed to accommodate two of three anchor uses, such as a major chain discount department store, a home improvement store and/or a supermarket or drug store at opposite ends of the planning area. Approximately 30% of Planning Area 3 is restricted from the construction of habitable structures due to faults. This portion of Planning Area 3 will be limited to landscaping, parking, loading and temporary storage areas, and other non-habitable structural uses.

Planning Area 33, located in the southeast corner of the project site, will contain approximately 109,000 gross square feet of floor space. This area will accommodate a primary anchor (such as a drug store or supermarket) with multiple smaller tenants (dry cleaner, take-out restaurant, video rental, or specialty retail business).

Roadways

The project site will be served by four major arterial roadways. Elizabeth Lake Road will provide regional access to the site. Avenue S will serve as the major internal roadway through the site, traversing the City Ranch Specific Plan area in an east-west orientation. Bridge Road will provide a primary connection between Elizabeth Lake Road and the center of City Ranch. A secondary east-west arterial road (City Ranch Road) through the project site will be required to link properties to the west of the project site to Tierra Subida Avenue two miles east of the site. In addition to arterial roads, collector streets, local residential streets, and cul-de-sacs will serve the project site (Figure 7). Street standards for project roadways are depicted in Figure 8.

- **Elizabeth Lake Road** - Elizabeth Lake Road is currently a two-lane undivided roadway along the northern boundary of the City Ranch property. It is proposed to be realigned and improved as part of the City’s Assessment District 90-1 in conformance with the City of Palmdale’s street design requirements to permit design speed and sight distances appropriate for a major arterial road. Elizabeth
NOTE: LOCATIONS OF SECTIONS G, H, I, AND J ARE NOT SHOWN. THESE WILL BE DESIGNATED INTO INDIVIDUAL SUBDIVISIONS.
Lake Road is designated as a major highway on the Master Plan of Highways, with a designated 100-foot right-of-way and 84-foot paved roadway width. The City of Palmdale Traffic Engineer has determined that east of Bridge Road, ultimate traffic capacity will need to be accommodated by a 6-lane road with a 100-foot minimum right-of-way. West of Bridge Road, traffic would decrease such that four lanes would supply adequate capacity. East of Bridge Road, Elizabeth Lake Road will be 84 feet wide with a 14-foot wide raised median and 35 feet of pavement on either side. West of Bridge Road, Elizabeth Lake Road will be 64 feet wide with a 14-foot wide raised median and 25 feet of pavement on either side. Landscape easements east of Bridge Road adjacent to the right-of-way width include landscaping, and a 10-foot off-road bicycle path on the north side. The overall Elizabeth Lake Road corridor width varies between 120 and 135 feet east of Bridge Road, and between 122 and 147 feet west of Bridge Road, including landscape easements. A full 5-foot-wide sidewalk will be constructed along the south side of Elizabeth Lake Road.

- **Avenue S** - Avenue S is designated as a major highway with a 100-foot right-of-way. As the major roadway through the City Ranch property, Avenue S is proposed as an enhanced thoroughfare with a landscaped median and landscape easements greater than 10-feet wide along both sides of the right-of-way. This expanded landscape easement area is intended to provide the visual and functional greenbelt through the project site. East of Bridge Road, the street right-of-way for Avenue S includes a width of 100 feet, with a 14-foot-wide raised, landscaped median and 35 feet of paving on each side of the median. West of Bridge Road, Avenue S reduces to an 80-foot right-of-way with a 14-foot-wide median and 25 feet of paving on each side of the median. In addition to these rights-of-way, a varying-width landscape easement of 10 to 30 feet is proposed on each side of the street throughout the project site to permit wide enhanced streetscapes. On the north side of the street, the landscape easement includes a 10-foot-wide bike lane. Five-foot-wide sidewalks are proposed on both sides of the street.
• **Bridge Road** - Bridge Road which also serves as a primary spine throughout the project site will provide a connection from Avenue S to Elizabeth Lake Road. Bridge Road is designed as a four lane arterial with 80 feet of right-of-way with a 14-foot-wide raised median and 25 feet of paving on each side. A four-lane bridge with a raised median, bicycle lanes and sidewalks will be constructed across the California Aqueduct. The design of Bridge Road closely parallels that of Avenue S.

• **City Ranch Road** - From the eastern boundary of the project site the City Ranch road will roughly parallel the existing City Ranch Road alignment northwesterly through Planning Area 13 until Bridge Road. The roadway will then continue west of the bridge across the California Aqueduct. From Bridge Road, the road will continue northwesterly between Planning Areas 9 and 12, 10 and 12, 10 and 35, then between Planning Areas 1 and 5 to the northwest corner of the project site. City Ranch Road will be constructed as part of the proposed project and dedicated to the City of Palmdale. The road will consist of an 80-foot right-of-way with a 14-foot-wide street median and 64 feet of pavement curb-to-curb.

• **Collector Streets** - Residential two lane collector streets will be incorporated into residential planning areas within 64-foot rights-of-way. These streets will be required at all points where two-lane access to arterial roads occur. Four four-way collector street intersections have been designated at approximately 1/4 mile intervals along Avenue S. Preliminary locations and configurations of the collector streets are indicated in Figure 7. These roads are conceptual with respect to alignments. Precise alignments to street sections, horizontal and vertical street design standards shall conform to applicable City of Palmdale standards at the time of individual planning area tentative tract map design as approved by the City Traffic Engineer.
• **Residential Streets** - Standard residential streets as well as cul-de-sacs and single-loaded streets are intended to be incorporated into the design of individual residential tracts.

• **Adjacent Property Access** - Access to the “Sagebrush” property directly adjacent to the south boundaries of Planning Areas 27 and 28A shall be provided by three residential collector streets through either Planning Areas 27 or 28A. The locations of the three tentative points of access to the Sagebrush property are shown on Figure 7. Major roadway access to the proposed “Ritter Ranch” property directly to the west shall be via City Ranch Road and Avenue S. Collector street access shall be provided to the proposed Ritter Ranch property through Planning Area 17.

**Schools**

A total of four elementary school sites (one 8-, two 9- and one 10-acre site) are proposed within the project site to accommodate children living within the Specific Plan area. According to the Development Plan, school sites will be located in Planning Areas 11, 19B, 25 and 30B. Three schools will be within the Westside Union School District and one within Palmdale School District.

**Recreation**

Proposed recreational land uses include six parks, a golf course, and trails. Planning Areas 18, 22 and 28B (48 acres total) are proposed as neighborhood park sites. Each neighborhood park site will include opportunities for active play areas (softball, basketball, tot lots, etc.) and passive use areas (picnic tables, open turf). Planning Areas 1, 9 and 35 (111 acres total) are proposed as community park sites. All neighborhood and community park sites shall be fully improved and offered to the City of Palmdale for dedication.
The majority of Planning Areas 1 and 9 and all of Planning Area 35 are designated as seismically Restricted Use Zone I areas (where habitable structures are prohibited). These areas are, however, suitable for construction of community facilities such as lighted ball fields, picnic areas, soccer fields, basketball, tennis, volleyball, and other hardcourts, and parking lots. The community parks contain approximately 13.7 acres of buildable area which can accommodate facilities such as a gymnasium, multi-purpose rooms, a pool and poolhouse, restrooms and park offices. No community buildings shall be built within areas falling within Restricted Use Zone I (see Figure 9).

An approximately 216-acre regulation 18-hole golf course is planned for Planning Areas 4 and 13. The golf course is intended to include a driving range, practice greens, clubhouse and parking areas. The clubhouse is anticipated to be sited in Planning Area 4. Approximately 1.9 acres of buildable land are available for construction of the clubhouse in this planning area. The proposed golf course is intended to be a privately-owned facility open to public for public use. Future City Ranch road will traverse the golf course in Planning Area 13.

In addition, a system of off-street bicycle paths, pedestrian trails, equestrian riding trails, and hiking/mountain bicycle trails have been designed into the overall plan for City Ranch. Off-street bicycle paths are proposed along Avenue S, Bridge Road, Elizabeth Lake Road. Two staging areas are proposed along Avenue S to provide trail rest areas and parking for hikers and bicyclers. Trails will interconnect the residential areas to open space areas, parks, schools, commercial centers and the golf course. These trails connect to the expanded landscape along Bridge Road and Avenue S. A hiking/mountain bicycle trail traverses open space Planning Areas 29 and 32 and connects to a looped pedestrian hiking trail system west of the California Aqueduct. The Northside Equestrian Trail, an existing County trail, currently traversing the site, will be relocated on-site to be compatible with proposed uses.
Open Space

Planning Area 26 (14.5 acres total) is designated as an open space area. It will contain the Avenue S project entry statement. After construction of the entry statement, the rest of the area will be landscaped and maintained as open space. According to the City Ranch Specific Plan, Planning Area 26 may contain future access roads and improvements for utility easements.

Approximately 404 acres of the project site are proposed to be designated as natural open space (Planning Areas 2, 7 and 32). These areas for the most part contain the higher elevations and natural ridgelines of the project site where slopes exceed 25 percent. These areas, visually the most prominent of the project site, will provide space for preservation of natural habitat, native desert vegetation and opportunities for hiking, bicycling and equestrian trails. Additionally, passive recreation areas and/or vista points to scenic resources may be provided. A small portion of Planning Area 7 will contain the Bridge Road entry statement. The natural open space and open space planning areas shall be offered to the City of Palmdale for dedication.

Fire Station

The City Ranch property will include a one-acre fire station site within Planning Area 34 east of the intersection of Avenue S and Bridge Road. The site is located and sized in accordance with the Los Angeles County Fire Department requirements. The fire station site shall be conveyed to the Los Angeles County Fire Department or dedicated to the County of Los Angeles.

2.4 PERMITS AND APPROVALS

The City Ranch EIR is intended to be used as the environmental review document by the following agencies for their permitting/approval processes. The following permits and approvals described in detail in Land Use Section 5.2 are required in order to
implement the proposed project.

- Annexation of the project site into the City of Palmdale. Annexation would include amending the City's "sphere of influence" boundary to include the entire project site. This annexation procedure will be processed through the Los Angeles County Local Agency Formation Commission (LAFCO).

- Adoption of the City Ranch Specific Plan by City Council ordinance.

- Pre-zone of the project site as SP (Specific Plan) by City Council ordinance.

- General Plan Amendment to redesignate the land use designations depicted on the Land Use map of the City of Palmdale General Plan by City Council ordinance.

- Subdivision of the project site into 38 planning area parcels by Planning Commission approval.

- California Department of Fish and Game Stream or Lake Alteration Agreements (per Section 1603 of the State Fish and Game Code) for alterations to the Anaverde and Amargosa Creeks.

- Army Corps of Engineers Section 404 permit for the discharge of fill material into waters of the United States pursuant to the Clean Water Act of 1977, as amended, for any improvements made in the portions of Planning Area 13 south of the proposed City Ranch Road alignment and north of the California Aqueduct, designated to be within the Corps' jurisdiction.
3.0 ENVIRONMENTAL SETTING

3.1 REGIONAL SETTING

The City Ranch property is located in the unincorporated Antelope Valley area of Los Angeles County west and south of the City of Palmdale boundary. The project site is located about 65 miles from downtown Los Angeles, and is situated at the southern edge of the Mojave Desert, within and adjacent to the northern foothills of the Sierra Pelona. The Sierra Pelona is a part of the Transverse Ranges which extend in a southeast-northwest direction across much of southern California (Figure 10). The project site is situated five miles west of the Palmdale Regional Airport. Surrounding communities include the Acton, Leona Valley and Anaverde communities of the County of Los Angeles and the City of Lancaster.

At the project site, the Transverse Ranges are separated from the Mojave Desert by the Anaverde Valley and the San Andreas Rift Zones. The San Andreas Rift Zone, which is up to several miles wide in places, is evident in the landscape south of Palmdale with classic fault features and geologic structure. This zone extends from the Gulf of California to Cape Mendocino in northern California. Numerous faults within the San Andreas Rift Zone lie north and south of the main San Andreas fault. These include the Little Rock, Cemetery, Nadeau, and abundant subsidiary faults. There is evidence of movement in the last 11,000 years; therefore, these faults are considered active by geologists.

The Antelope Valley area is going through a rapid transition from a rural and agricultural setting to a suburban region. Because of limited employment opportunities, Palmdale serves as a “bedroom community” to the Los Angeles Basin employment area. Palmdale is considered one of the fastest growing cities in California according to the Center for Continuing Study of the California Economy (1989 Annual Survey). Recently, Tentative Tract Maps have been filed and approved for residential and mixed-use developments on properties adjacent to the north, northeast and east
The 1,985-acre (approximately 3.1 square mile) project site is located on the south side of Elizabeth Lake Road approximately two miles west of the Antelope Valley Freeway (SR-14) (Figure 1). Access to the site is currently from a paved loop road off Elizabeth Lake Road, 1,300 feet west of the T-intersection with 25th Street West. The access loop road includes a 2-lane bridge across the Aqueduct. The California Aqueduct traverses the project site. Built in the late 1960s, the California Aqueduct occupies approximately 116 acres of land within the boundaries of the project site. However, this acreage is not part of the project site. Five sets of high-tension Southern California Edison electric transmission lines traverse the southern portion of the project site. Additionally, two above ground Southern California Edison distribution lines cross the project site (one through the southern portion of the site and one along the aqueduct). Two buried AT&T high capacity transcontinental communications lines cross the project site (one from the north to south in the eastern portion of the project site, the other across the site’s southeast corner).

The northeastern and southwestern portions of the site are characterized by gentle slopes that gradually exceed 25 percent natural gradient. Total relief on the property is approximately 1,000 feet with the highest elevation at the southwesterly ridgeline and the lowest point along Elizabeth Lake Road at 25th Street West.

The project site comprises four distinct geomorphic zones, the San Andreas Rift Zone and Verde Ridge on the north, the Anaverde Valley floor in the center, and the Sierra Pelona foothills on the south. Each of the zones depicted in Figure 11 is described in the following paragraphs.
The northern portion of the site consists of the San Andreas Rift Zone and two
prominent slopes of the Verde Ridge Zone with an intervening parallel valley. Within
these areas, slopes range from very steep (4:1 or greater) along the ridge flanks to flat
within the valley floors. Elevations range between 2,670 feet above sea level near
Elizabeth Lake Road to 3,180 feet at the Verde Ridge. The northern portion of the
project site contains a drainage tributary to the Amargosa Creek (to the north of the
project site). This drainage is usually dry. The southern portion of this zone is
dominated by the Anaverde Creek, an easterly trending drainage course which
normally has surface water several months of the year. In the valley between the San
Andreas Rift Zone and Verde Ridge, drainage flows to the northwest towards
Amargosa Creek. The southern ridge is very rugged as a result of severely eroding
drainages and associated escarpments.

The Anaverde Valley floor spans the central portion of the project site from southeast to
west. The central portion of the site consists of relatively flat alluvial fan surfaces with
intervening drainage courses of the Anaverde Creek. The alignment of the creek roughly
parallels that portion of the California Aqueduct also located in the Anaverde Valley
section of the site.

Several decades of agricultural use in the Anaverde Valley have had an effect on
present vegetation types. Ground cover in the Anaverde Valley Zone consists almost
exclusively of dry grasses, including some “volunteer” cereal species. Today, the valley
floor is divided into fields by fencing and dirt roads. The City Ranch facilities, which
include two houses, a wooden barn with outbuildings, two hay barns, an office, a very
large propane tank, two silos, and a water tank are concentrated in a complex in the
north-central area of the valley. To the east, across the Aqueduct, are a mobile home,
barn, stable, and water tank which represent additional ranch facilities. Numerous cor-
rals form a network around the facilities.

The southern portion of the site consists of the northern flank of the Sierra Pelona. This
is an area of steep mountain slopes with deeply incised drainage courses. The highest
point on the property is found in the Sierra Pelona foothill zone. The 3,845-foot elevation is located at the southwestern portion of the project site. From there, the mountains increase in elevation as one moves south, finally attaining a height of 4,725 feet at Harold Beacon, about two miles south of the southern boundary.

Existing vegetation on the project site consists of desert woodland, Great Basin sagebrush scrub, alkali meadow, transmontaine alkali marsh and wild grass pastureland. Native desert plants including California junipers and Joshua trees are located along the northeastern faces of the hillsides. A California juniper seedling area is situated in the north-central portion of the project site west of the California Aqueduct. The northern slopes of the southern ridge also contain stands of manzanita. The vegetation in the foothill zone is dominated by grasses interspersed with occasional buckwheat and yucca plants.
4.0 CUMULATIVE PROJECTS DESCRIPTION

The California Environmental Quality Act (Government Code Section §15355) defines "cumulative impacts" as two or more individual effects that, when considered together, are considerable or compound other environmental impacts. The cumulative impacts are the changes in the environment that result from the incremental impact of development of the proposed project and other nearby projects. For example, traffic impacts of two projects in close proximity may be insignificant when analyzed separately, but could have a significant impact when the projects are analyzed together. Cumulative impact analysis allows the EIR to provide a reasonable forecast of future environmental conditions and to more reasonably gauge project effects.

The project site is located within the unincorporated area of Los Angeles County within the sphere of influence of the City of Palmdale. There are 50 other projects either proposed, approved or under construction within a one mile radius of the project site: 5 commercial projects, 41 residential projects, one mixed-use commercial/residential project, one mixed use residential/public library/school project, a high school and elementary school and an 85-acre landfill expansion. This EIR examines the cumulative impacts of simultaneous development of these projects and the proposed project.

The set of projects used for cumulative impact analysis in this EIR was developed from discussions with the City of Palmdale Planning Department and from a printout of all proposed projects in the Antelope Valley area of Los Angeles County (September, 1991). Table 1 lists these projects and Figure 12 shows their locations. Cumulative impacts are discussed within each of the specific impact analysis discussions in Section 5.0, Analysis of Environmental Issues. Construction of the cumulative projects would add 5,143,496 square feet of commercial space, and 13,165 residential units, a high school, a middle school, 6 elementary schools, a public library, and increased landfill space to the Palmdale area.
<table>
<thead>
<tr>
<th>Map No.</th>
<th>Case No.</th>
<th>Location</th>
<th>Use</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TT44526</td>
<td>Southeast corner of 20th St. West and Elizabeth Lake Road</td>
<td>SFR</td>
<td>156 units</td>
</tr>
<tr>
<td>2</td>
<td>TT44573</td>
<td>Northeast corner of Avenue Q and 20th St. West</td>
<td>SFR</td>
<td>233 units</td>
</tr>
<tr>
<td>3</td>
<td>TT45291</td>
<td>South of Avenue Q-8 along Tierra Subida</td>
<td>SFR</td>
<td>94 units</td>
</tr>
<tr>
<td>4</td>
<td>TT45364</td>
<td>Southeast corner of Avenue P and 25th St. West</td>
<td>SFR</td>
<td>38 units</td>
</tr>
<tr>
<td>5</td>
<td>TT45365</td>
<td>Northeast corner of Avenue P-8 and 30th St. West</td>
<td>SFR</td>
<td>344 units</td>
</tr>
<tr>
<td>6</td>
<td>TT45573</td>
<td>South of Avenue P &amp; east of 20th St. West</td>
<td>SFR</td>
<td>167 units</td>
</tr>
<tr>
<td>7</td>
<td>TT45742</td>
<td>Northeast corner of Avenue P-* and 25th St. West</td>
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<td>42 units</td>
</tr>
<tr>
<td>8</td>
<td>TT45743</td>
<td>West of 25th St. West &amp; south of Avenue P.</td>
<td>SFR</td>
<td>86 units</td>
</tr>
<tr>
<td>9</td>
<td>TT45916</td>
<td>South of Elizabeth Lake Road &amp; east of 15th St. West</td>
<td>SFR</td>
<td>35 units</td>
</tr>
<tr>
<td>10</td>
<td>TT46017</td>
<td>Northeast corner of 20th St. West &amp; Avenue P-8</td>
<td>SFR</td>
<td>57 units</td>
</tr>
<tr>
<td>11</td>
<td>TT46123</td>
<td>Sagetree and Yucca Tree</td>
<td>SFR</td>
<td>118 units</td>
</tr>
<tr>
<td></td>
<td>TT46368</td>
<td>South of Elizabeth Lake Road between 15th St. West &amp; 20th St. West</td>
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<td>37 units</td>
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<td>12</td>
<td>TT46430</td>
<td>East of 20th St. West &amp; south of Avenue P-4.</td>
<td>SFR</td>
<td>84 units</td>
</tr>
<tr>
<td>13</td>
<td>TT46452</td>
<td>Southeast corner of Avenue P-8 &amp; 30th St. West</td>
<td>SFR</td>
<td>446 units</td>
</tr>
<tr>
<td>14</td>
<td>TT46454</td>
<td>Southwest corner of Date Palm &amp; 15th St. West</td>
<td>SFR</td>
<td>125 units</td>
</tr>
<tr>
<td>15</td>
<td>TT47062</td>
<td>Southwest corner of 22nd St. West &amp; Avenue P-8</td>
<td>SFR</td>
<td>43 units</td>
</tr>
<tr>
<td>16</td>
<td>TT47911</td>
<td>Southwest corner of 5th St. West &amp; Tierra Subida</td>
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<tr>
<td>17</td>
<td>TT48014</td>
<td>North of Amargosa Creek &amp; east of the alignment of 17th St. West</td>
<td>SFR</td>
<td>90 units</td>
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<tr>
<td>18</td>
<td>TT48032</td>
<td>Northeast corner of Dianron &amp; Mesquite</td>
<td>SFR</td>
<td>37 units</td>
</tr>
<tr>
<td>19</td>
<td>TT48664</td>
<td>Northwest corner of Elizabeth Lake Road &amp; 20th St. West</td>
<td>SFR</td>
<td>591 units</td>
</tr>
<tr>
<td>20</td>
<td>TT50317</td>
<td>Southwest corner of Avenue P &amp; 22nd St. West</td>
<td>SFR</td>
<td>10 units</td>
</tr>
<tr>
<td>21</td>
<td>CUP 90-03</td>
<td>Southeast corner Tierra Subida &amp; Rayburn Road</td>
<td>MFR</td>
<td>30 units</td>
</tr>
<tr>
<td></td>
<td>Ritter Ranch</td>
<td></td>
<td>SFR</td>
<td>7200 units</td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
<td>Comm</td>
<td>3,179,880 sq. ft.</td>
</tr>
<tr>
<td>23</td>
<td></td>
<td></td>
<td>Schools</td>
<td>5,270,760 sq. ft.</td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
<td>SFR</td>
<td>1105 units</td>
</tr>
<tr>
<td>25</td>
<td>Santa Fe</td>
<td>Specific Plan</td>
<td>MFR</td>
<td>80 units</td>
</tr>
<tr>
<td></td>
<td>Valley Ranch</td>
<td></td>
<td>Schools</td>
<td>68,000 sq. ft.</td>
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<tr>
<td>26</td>
<td>49263</td>
<td>Southwest corner of Avenue Q &amp; Antelope Valley Freeway Between 5th St. West &amp; Avenue Q &amp; Avenue P-8</td>
<td>Comm</td>
<td>50,000 sq. ft.</td>
</tr>
<tr>
<td>27</td>
<td>49556</td>
<td></td>
<td>Comm</td>
<td>304,920 sq. ft.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Comm</td>
<td>1,045,440 sq. ft.</td>
</tr>
<tr>
<td>28</td>
<td>CUP 09-10</td>
<td>South of Palmdale Blvd. &amp; east of 5th St. West</td>
<td>Comm</td>
<td>108,920 sq. ft.</td>
</tr>
<tr>
<td>29</td>
<td>auto mall</td>
<td></td>
<td>Comm</td>
<td>450,000 sq. ft.</td>
</tr>
<tr>
<td>30</td>
<td>Highland</td>
<td>Southwest corner of Avenue P-8 &amp; 25th St. West</td>
<td>School</td>
<td>192,000 sq. ft.</td>
</tr>
<tr>
<td></td>
<td>High School elementary school</td>
<td>adjacent to high school</td>
<td>School</td>
<td>75,000 sq. ft.</td>
</tr>
<tr>
<td>31</td>
<td>Lane Prop</td>
<td></td>
<td>SFR</td>
<td>365 units</td>
</tr>
<tr>
<td>32</td>
<td>Landfill</td>
<td></td>
<td>Landfill</td>
<td>85 acres</td>
</tr>
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## County Projects

<table>
<thead>
<tr>
<th>Number</th>
<th>Code</th>
<th>Description</th>
<th>Type</th>
<th>Units</th>
</tr>
</thead>
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<tr>
<td>33</td>
<td>48307</td>
<td>Southeast corner of Lakeview and El Camino</td>
<td>SFR</td>
<td>68</td>
</tr>
<tr>
<td>34</td>
<td>89237</td>
<td>West of 10th St. West, between R-8 and Avenue S</td>
<td>SFR</td>
<td>24</td>
</tr>
<tr>
<td>35</td>
<td>35117</td>
<td>Barrel Springs &amp; Camares</td>
<td>SFR</td>
<td>37</td>
</tr>
<tr>
<td>36</td>
<td>20647</td>
<td>Northeast corner of El Camino and S-14</td>
<td>SFR</td>
<td>4</td>
</tr>
<tr>
<td>37</td>
<td>48308</td>
<td>Northeast corner of Tierra Subida &amp; Hacienda</td>
<td>SFR</td>
<td>15</td>
</tr>
<tr>
<td>38</td>
<td>21985</td>
<td>N/S Hacienda, west of Tierra Subida</td>
<td>SFR</td>
<td>2</td>
</tr>
<tr>
<td>39</td>
<td>45950</td>
<td>East of Camares, south of Avenue S</td>
<td>SFR</td>
<td>9</td>
</tr>
<tr>
<td>40</td>
<td>90375</td>
<td>Tierra Subida between R-8 &amp; R-12</td>
<td>SFR</td>
<td>13</td>
</tr>
<tr>
<td>41</td>
<td>21140</td>
<td>Avenue S between Tierra Subida &amp; Camares</td>
<td>SFR</td>
<td>4</td>
</tr>
<tr>
<td>42</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>43</td>
<td>45982</td>
<td>North of Avenue S &amp; east of 7th St. West</td>
<td>SFR</td>
<td>22</td>
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<td>44</td>
<td>49361</td>
<td>Sierra Ancha &amp; Tovey Rd.</td>
<td>SFR</td>
<td>7</td>
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<tr>
<td>45</td>
<td>43198</td>
<td>Southwest corner of R-8 &amp; 3rd West</td>
<td>SFR</td>
<td>82</td>
</tr>
<tr>
<td>46</td>
<td>49954</td>
<td>Tierra Subida &amp; Avenue S-8 &amp; R-12</td>
<td>SFR</td>
<td>13</td>
</tr>
<tr>
<td>47</td>
<td>47528</td>
<td>West side of 10th St. West between R-8 &amp; Avenue S</td>
<td>SFR</td>
<td>24</td>
</tr>
<tr>
<td>48</td>
<td>35117</td>
<td>Barrel Springs &amp; Camares</td>
<td>SFR</td>
<td>37</td>
</tr>
<tr>
<td>49</td>
<td>90395</td>
<td>Shaner Rd. between 6th St. West &amp; Camares</td>
<td>SFR</td>
<td>2</td>
</tr>
<tr>
<td>50</td>
<td>17851</td>
<td>Southeast corner of El Camino and S-14</td>
<td>SFR</td>
<td>2</td>
</tr>
</tbody>
</table>

## Cumulative Project Summary

- **Residential**
  - Single-Family Dwellings: 13,065 units
  - Multi-Family Dwellings: 110 units

- **Commercial**
  - 5,143,496 sq. ft.

- **Public Library**
  - 16,000 sq. ft.

- **Schools**
  - 5,605,760 sq. ft.

- **Landfill**
  - 85 acre expansion
5.0 ANALYSIS OF ENVIRONMENTAL ISSUES

5.1 OVERVIEW

Format of Analysis

The following potential impact areas were identified in the Initial Study for this project. The Initial Study and the Notice of Preparation for this project are included as Appendix A of this report.

- Land Use
- Population
- Housing
- Earth (Geology)
- Water (surface water runoff and flooding [Hydrology])
- Plant and Animal Life
- Transportation and Circulation (Traffic and Circulation)
- Air Quality
- Noise
- Aesthetics
- Light and Glare
- Public Services (Fire, Police, Schools, Parks and Recreation, and Road Maintenance)
- Utilities (Electricity, Natural Gas, Communications, Water, Sewers, Storm Drainage, and Solid Waste)
- Energy
- Cultural Resources (Archaeology and Paleontology)
- Human Health (Hazardous Waste, Electromagnetic Radiation and the Antelope Valley Public Landfill)

Impact analysis of each issue is presented in five subsections as described below:

- **Existing Conditions** - This subsection provides information describing the existing conditions on, or surrounding, the project site which may be subject to change as a result of development of the proposed project.
• **Project Impacts** - This subsection provides information on the characteristics of the proposed project which would have an effect with regard to the environmental concern, the nature and extent to which the project is expected to change the existing environment, and whether or not project impacts meet or exceed the threshold levels of significance.

• **Mitigation Measures** - This subsection identifies specific measures which will be imposed on the applicant to reduce adverse impacts.

• **Cumulative Impacts** - This subsection discusses the combined effects of development of the proposed project and other nearby projects, which are proposed, approved for development, or under construction. Development of these cumulative projects in conjunction with proposed project development may have an impact beyond that of development of any one project alone.

• **Unavoidable Adverse Impacts** - This subsection identifies the residual effects of proposed project development which would result even after mitigation measures have been applied.
5.2 LAND USE

5.2.1 Existing Conditions

The project site is located in an unincorporated area of Los Angeles County adjacent to and partially within the sphere of influence of the City of Palmdale. Predominant uses in this area have, until recently, been agricultural and undeveloped. The area is presently undergoing a transition from a rural to a suburban setting. The Ana Verde residential community of Los Angeles County is located southeast of the project site and is subdivided into minimum lot sizes of 2.5 acres. Tract map applications have been approved for residential and school projects for parcels located north and northeast of the project site. Active project proposals are on file for properties south and west of the project site.

The Antelope Valley Public Landfill is located approximately 2/3 miles east of the central portion of the project site. An application to expand the landfill by 85 acres would bring the landfill boundary up to the project site along the central portion of the eastern boundary north of the present City Ranch Road alignment (Figure 13).

The central portion of the project site, used as a dairy farm from the 1920s to the late 1950s, was used for cattle grazing until late 1990. Approximately eight farm buildings and ancillary structures previously used for the dairy farm are located in the central portion of the project site. The remainder of the site contains several dirt roads and undeveloped hillside areas.

The City of Palmdale General Plan Land Use Element designates the project site (Figure 14) to be developed with the following: 1,110 acres of residential uses; commercial, golf course and park uses on a total of 356 acres; and 519 acres of open space. A total of 5,200 dwelling units would be permitted to be built on the project site equating to a maximum density of 2.62 du/ac. The City of Palmdale is currently in the process of updating its General Plan. It is assumed that the Land Use Element which will be
EXISTING LAND USES

LEGEND

- PROJECT SITE BOUNDARY
- EXISTING RESIDENTIAL
- UNDEVELOPED
- ANTELOPE VALLEY PUBLIC LANDFILL
- PROPOSED SPECIFIC PLAN
- CATTLE GRAZING
- PROPOSED LANDFILL EXPANSION
- CALIFORNIA AQUEDUCT
- SUBDIVISION UNDER CONSTRUCTION
- EXISTING ROADS (unpaved)

FIGURE 13
updated as part of this process will not change the density designation. The Plan Update is expected to go before the City Council for approval in late 1991.

The site is designated in the County’s Antelope Valley Areawide General Plan as “Non-Urban I” except for two small areas at the extreme northeast corner of the site. One is designated as “Urban II” and the other as “Commercial”. The “Non-Urban I” designation allows 0.5 dwelling unit per acre, and the “Urban II” designation allows 6.6 units per acre (Figure 15). The “Urban II” area covers about 25 acres, the “Commercial” area approximately ten. Existing designations would permit a total of about 1,140 dwelling units to be built on the project site and assuming a one-quarter lot coverage for structures, about 109,000 square feet of commercial space.

The San Andreas Rift Zone, which encompasses approximately 20% of the site, is designated as a County Seismic Safety Management Area (Los Angeles County, 1986). This designation recommends low density residential and local commercial uses as long as no primary structures lie across the trace of the fault.

The site is currently zoned A-2-2 according to the Los Angeles County Zoning Ordinance. This zone allows heavy agricultural uses and a two-acre minimum residential lot size (Figure 16). County zoning would permit the development of 992 dwelling units on the project site.

5.2.2 Project Impacts

Section 3 of the City Ranch Specific Plan describes how the Specific Plan conforms to the existing City of Palmdale General Plan on a policy-by-policy basis. In this Specific Plan section, each applicable General Plan is presented along with a statement of how the Specific Plan conforms to that policy. Through this analysis, the Specific Plan concludes that it is in conformance with the City’s existing General Plan.
EXISTING COUNTY OF LOS ANGELES AND CITY OF PALMDALE ZONING

LEGEND

--- PROJECT SITE BOUNDARY

CITY OF PALMDALE:
R1 RESIDENTIAL SINGLE FAMILY
RPD RESIDENTIAL PLANNED DEVELOPMENT
R3 RESIDENTIAL MULTIPLE FAMILY
CPD COMMERCIAL PLANNED DEVELOPMENT
A-1 LIGHT AGRICULTURE

LOS ANGELES COUNTY:
A-2-2 HEAVY AGRICULTURE
2 ACRE MINIMUM LOT SIZE

SOURCE: City Ranch Specific Plan, 1991
Azeka de Almeida Planning

FIGURE 16
Development of the proposed project would transform the existing undeveloped site to a developed suburban site with up to 5,200 residential dwelling units (at a 2.62 units per acre density) comprised of a mix of single-family, townhouse and condominium units, along with 260,000 square feet of neighborhood commercial space, a golf course and clubhouse, hillside natural open space uses, and sites for four elementary schools, six public parks and a fire station. Proposed uses would be compatible with other residential and mixed-use projects proposed for the project vicinity with the exception of the Antelope Valley Public Landfill. The Specific Plan proposes residential land uses in the southeast corner of the project site which are designed to be compatible with the surrounding existing residential uses in that area (i.e., the Anaverde community). To the southwest, the Specific Plan proposes to leave a large natural open space area contiguous to the undeveloped hillside areas to the south. The northern portion of the site will also be developed with uses compatible to the tracts adjacent to them. The Specific Plan proposes uses along its western boundary which are compatible with the proposed uses of Ritter Ranch Specific Plan to the west.

Development of the proposed project in such close proximity to the proposed Antelope Valley Public Landfill expansion area may result in a conflict of land uses due to potential incompatibility. This is discussed further in Section 5.29, Antelope Valley Public Landfill. In addition, single-family homes are proposed within the area designated by the County as within the Seismic Safety Management Area. The Plan indicates, however, that no homes or residential lots will lie across fault traces. Because no primary structures will lie across fault traces and because residential densities are generally low in the Seismic Management Area, the proposed project is considered to be consistent with this designation.

Development of the proposed project would require several approvals with regard to land use controls. Without these approvals, project development would constitute a significant impact with regard to land use. Necessary approvals are discussed below.
It is anticipated that the project site will be annexed into the City of Palmdale jurisdictional area. An annexation application has been filed with the City of Palmdale for processing through the Los Angeles County Local Agency Formation Commission (LAFCO). Annexation would include amending the City's sphere of influence boundary to include the entire project site.

The proposed project will be processed as a Specific Plan under the regulations of the City of Palmdale Zoning Ordinance and the Palmdale General Plan Land Use Element. The proposed project will also be subject to the City's Specific Plan Guidelines and State General Plan Guidelines. The Specific Plan will need to be adopted by City Council Ordinance. The intent of the Specific Plan is to provide land use policies and development regulations to govern the development of the City Ranch property. The proposed City Ranch Specific Plan, which would serve as a Master Plan of development, is intended to function as both a land and zoning regulatory plan.

The proposed Specific Plan proposes 5,200 dwelling units which is compatible with the City's current Land Use Element's designation of 5,200 dwelling units maximum for the site; the plan also contains the basic uses identified for the site. However, the proposed Specific Plan includes additional uses, such as a fire station, and arranges the uses in a different manner than currently designated by the Land Use Element. Therefore, a General Plan Amendment will be necessary to formally redesignate the proposed Specific Plan land use designations and locations into General Plan Land Use Element.

In anticipation of the proposed annexation into the City of Palmdale, in order to establish site zoning, an application has been submitted to the Palmdale Planning Commission and City Council to prezone the site to SP (Specific Plan) with an overall limit of 5,200 permitted residential units.

The City Ranch Specific Plan will be implemented through a series of Tentative Subdivision Maps to subdivide the entire site into the 38 planning area parcels designated on the Development Plan. Subsequently, in conjunction with the phasing plan, each
parcel or parcels designated for development purposes will have a Tentative Subdivision Map submitted to create developable lots or parcels. All of the Tentative Subdivision Maps will be followed by Final Maps at the appropriate times for phased development. The Tentative Subdivision and Final Maps shall be consistent with the City of Palmdale Subdivision Ordinance and the State Subdivision Map Act.

Certain uses within the Specific Plan (e.g., residential planned development, recreational, commercial and community facility plans) may also require Conditional Use Permits delineated in the development regulations of the Specific Plan. Certain elements of the Specific Plan may also require Site Plan Review. Amendments to the Specific Plan would require adoption by ordinance.

**Additional Actions**

In addition to the required approvals listed above, the following actions may also be required as part of the permitting and approval process for the proposed project.

- California Department of Fish and Game Stream or Lake Alteration Agreements (per Section 1603 of the State Fish and Game Code) for alterations to the Anaverde and Amargosa Creeks.

- U.S. Army Corps of Engineers Section 404 Permit for the discharge of fill material into waters of the United States pursuant to the Clean Water Act of 1977, as amended, for any improvement made in the alkali meadow/transmontaine alkali marsh portions of Planning Area 13 south of the proposed City Ranch Road alignment and north of the California Aqueduct, determined to be within the Corps' jurisdiction. (At a minimum, lost wetland acreage will be replaced in kind on a one-to-one acre basis.)
• Development of the site would result in a change in use from existing agricultural uses to a suburban use. The increase in population on the site will result in a number of impacts to public services, infrastructure, air quality, traffic and noise (these impacts are discussed more fully in other sections of this EIR; see Sections 5.4, 5.8, 5.9, 5.10, 5.13, 5.14, 5.15, 5.16, 5.17, 5.18, 5.19, 5.20, 5.21, 5.22, 5.23, and 5.24). In addition, physical development of the site will result in loss of biological resources, loss of archaeological resources, topographic changes and increased erosion, among other things (these impacts are also discussed elsewhere in the EIR; see Sections 5.5, 5.6, 5.7, 5.11, 5.12, 5.25, and 5.26).

5.2.3 Mitigation Measures

Implementation of the following measures would reduce significant adverse project-related land use impacts to a level of not significant:

• Obtain required land use approvals.

• The annexation process and time frame for annexation shall conform to the City of Palmdale and Los Angeles County Local Agency Formation Commission (LAFCO) provisions.

• The proposed Specific Plan will comply with the State Specific Plan and Municipal Code requirements (California Government Code, Title 7, Division 1, Chapter 3, Article 8, Sections 65450 through 65457 and City of Palmdale Specific Plan Guidelines).

• The proposed project shall comply with the site specific zoning and subdivision standards contained in the City Ranch Specific Plan and applicable City of Palmdale Zoning ordinances.
• The applicant shall cause to be prepared an annual monitoring report. The report shall evaluate compliance with the design guidelines and development standards of the City Ranch Specific Plan and the mitigation measures of the City Ranch Specific Plan Final EIR. The report shall be submitted to the Planning Director the first quarter of each year through the buildout of the project. In addition, aerial photos of the active construction areas of the project site will be taken and submitted to the Planning Director on a monthly basis during the construction process. The aerial photos shall be of a scale approved by the Public Works Department. Monitoring and verification of compliance with adopted Specific Plan development standards shall also be performed prior to subsequent approvals to determine if the proposed measures are achieving their intended purposes. Future discretionary approvals may include additional conditions based upon City staff review of the Annual Monitoring Report.

5.2.4 Cumulative Impacts

Development of the proposed and cumulative projects will transform the character of the presently mostly rural Leona Valley and Anaverde Valley areas to that of a suburban setting. As a result of anticipated cumulative development, undeveloped and agricultural land will be lost. Some of these areas are designated as agricultural opportunity areas according to the Antelope Valley Areawide General Plan. If the projects in the unincorporated Los Angeles County area within the sphere of influence of the City of Palmdale are annexed into the City of Palmdale, the area within the City’s jurisdictional boundary would greatly increase. This would create secondary impacts of increased burdens on City public services.

5.2.5 Unavoidable Adverse Impacts

Following implementation of the recommended mitigation measures, project impacts regarding land use would not be significant. However, the project will contribute to significant cumulative land use impacts including loss of open space.
5.3 POPULATION

5.3.1 Existing Conditions

According to the most recent survey prepared by the Center for the Continuing Study of the California Economy, Palmdale is one of the fastest growing cities in the State. This rapid population growth is depicted graphically in Figure 17. The 1991 resident population of Palmdale was estimated to be 78,046 (California Department of Finance, 1991). The Southern California Association of Governments (SCAG) has estimated that the North Los Angeles subregion, which includes Palmdale, Lancaster and all unincorporated portions of the Antelope Valley, had a 1988 population of 165,700. SCAG's projected subregional population for the year 2010 is 529,600 people (Figure 17).

The most recent complete survey of employment within the Antelope Valley area in 1990 and revealed a total employment base of approximately 72,930 jobs (Gobar, 1990). The employment-to-population ratio (EPR), which describes the number of local jobs to residents, was 0.30 for the Antelope Valley region in 1990. This ratio was low in comparison to Los Angeles County's ratio of 0.52. SCAG's 1984 baseline employment for the Antelope Valley (RSA 10) was approximately 13,540 (SCAG, 1987). SCAG forecasts additional growth of about 25,000 jobs between 2000 and 2010.

A study of the City's General Plan was undertaken by Economics Research Associates (ERA) to determine the implications on growth as a result of proposed land use scenarios (December 1987). This study indicates that, depending on the rate of population growth, Palmdale will support a work force of between 18,170 to 25,560 by the year 2000 based on a projected City population ranging from 58,140 to 78,360 by that year.
POPULATION GROWTH 1984 - 2010
The resulting EPR based on these projections would range from 0.31 to 0.33. These projections indicate that Palmdale's employment opportunities will remain at relatively low levels over the next decade.

5.3.2 Project Impacts

Development of the proposed project will add 5,200 dwelling units to the area, resulting in a resident population of approximately 14,040 persons\( ^* \). The project-related population increase is compared graphically to City and subregional projected growth for the years 1984-2010 in Figure 18. This figure indicates the phased nature of the project whose buildout is expected to occur by 2000. The population of the North Los Angeles subregion is projected to grow at a rate of 7.4% annually while the population of the City of Palmdale is expected to grow at a rate of 4.8% annually (SCAG, 1987). Throughout its development phases, the project will represent a relatively consistent proportion of the City's total population. However, as indicated on the graph, the project will contribute a lesser portion of the subregional population by the year 2010. By 2000, when the project is completed, the proposed project population will represent approximately 20% of the projected population of Palmdale. This population can be expected to create a proportional increase in demands for public services including schools, utilities, and health and social services. The population generated by this project will, however, contribute to additional vehicle traffic causing secondary adverse air quality and noise impacts. All of these impacts are discussed in more detail in other sections of this EIR.

The proposed project will also create job opportunities (Table 2). Two portions of the project site area (totaling 42.1 acres) have been designated for neighborhood commercial uses with a total of 260,000 gross square feet of retail space. Assuming one

\( ^* \) Proposed project population was estimated using the population ratio provided by the California Department of Finance (2.7 persons per household).
COMPARISON OF SUBREGIONAL, CITY OF PALMDALE AND PROJECT POPULATION GROWTH

Source: California Department of Finance Estimates (1984-1989)
City of Palmdale General Plan Update (1987)
City Ranch Specific Plan (1991)
### TABLE 2

**Proposed Project and Cumulative Population and Employment**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Population¹</th>
<th>Employment Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proposed Project</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5,200 dwelling units</td>
<td>14,040</td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>260,000 sq.ft. retail</td>
<td></td>
<td>531²</td>
</tr>
<tr>
<td>Schools - 4 elementary</td>
<td></td>
<td>231³</td>
</tr>
<tr>
<td>2,400 student capacity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recreation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>159.3 acres of Park Space</td>
<td>32⁴</td>
<td></td>
</tr>
<tr>
<td>215.6 acre Golf Course</td>
<td></td>
<td>91⁵</td>
</tr>
<tr>
<td>Fire Station</td>
<td></td>
<td>4⁶</td>
</tr>
<tr>
<td><strong>Subtotal Proposed Project</strong></td>
<td>14,040</td>
<td>1,093*</td>
</tr>
<tr>
<td><strong>Cumulative Projects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13,145 dwelling units</td>
<td>35,491</td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 dealership auto centers</td>
<td></td>
<td>840⁷</td>
</tr>
<tr>
<td>4,693,496 sq.ft. retail</td>
<td></td>
<td>9,578²</td>
</tr>
<tr>
<td>Schools - 6 elementary, 1 middle school and 1 high school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6,300 student capacity (estimated total)</td>
<td></td>
<td>606³</td>
</tr>
<tr>
<td>Public Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16,000 sq.ft.</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Land Fill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>85 acre expansion</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal Cumulative Projects</strong></td>
<td>35,491</td>
<td>11,034</td>
</tr>
<tr>
<td><strong>Total Cumulative Population and Employment</strong></td>
<td><strong>49,331</strong></td>
<td><strong>11,923</strong></td>
</tr>
</tbody>
</table>

---

1. Assumes 2.7 persons per dwelling unit (City of Palmdale).
2. Assumes one employee per 490 sq.ft. (Urban Land Institute, 1986).
3. Assumes one employee per 10.4 students (derived from Westside Union School District).
4. Assumes one employee per five acres of park (City of Palmdale Recreation Department).
5. Assumes 0.125 maintenance employees per acre and 64 clubhouse employees.
6. County of Los Angeles Fire Department.
7. Assumes 120 employees per dealership.

*The proposed project employment has been adjusted upward to 1,093 jobs.*
employee per 490 square feet (Urban Land Institute, 1986), these commercial areas will generate an estimated 531 employees. Many of these retail jobs are likely to be service jobs. The proposed project also includes the construction of four elementary schools. Assuming one employee per 10.4 students (Westside Union High School District), a total of 231 employees would be needed to operate the four schools. One hundred thirteen (113) employees are estimated to be generated as a result of development of the various on-site recreational facilities. In addition, the on-site fire station would add about 4 additional employment opportunities (County of Los Angeles Fire Department, 1990). Total project-generated employment opportunities would, therefore, number about 1,093 jobs. *

Project development also could create some impetus for increased employment activity in the Palmdale area for professional services in fields such as medicine, law, and accounting; in personal services such as housekeeping, day care, and dry cleaning; in home improvement and maintenance fields such as gardening, painting, plumbing, electrical work, carpentry, and pool maintenance, as well as numerous other indirect commercial and entertainment job opportunities.

5.3.3 Mitigation Measures

Mitigation identified for Air Quality, Noise, Traffic and Public Services, are described in Sections 5.9, 5.10, 5.8, and 5.13 through 5.24 of this report. These mitigation measures address the significant population growth impacts.

5.3.4 Cumulative Impacts

Development of the cumulative projects will result in a residential population increase of approximately 35,491 persons and will potentially generate an estimated 11,034 additional jobs (Table 2). When the cumulative projects and the proposed project are combined, a total of approximately 49,531 additional residents and 11,923 jobs will result.

* The proposed project employment has been adjusted upward to 1,093 jobs.
This growth represents a 63% increase over the City's 1991 population and a 16% increase from the Region's 1990 employment base. The proposed project represents 28% of this total cumulative population and 27% of the total cumulative employment force. The cumulative project's EPR of 0.24 is "jobs poor". However, employment in Palmdale and the immediately surrounding areas is anticipated to increase to between 12,000 to 32,000 jobs by the year 2010 (Economic Research Associates, 1987).

Other impacts of population, including impacts to public serviced, infrastructure, air quality, traffic and noise, are discussed in other sections of this EIR (See Sections 5.4, 5.8, 5.9, 5.10, 5.13, 5.14, 5.15, 5.16, 5.17, 5.18, 5.19, 5.20, 5.21, 5.22, 5.23, and 5.24). Mitigation for these impacts are also provided in these sections of the document.

5.3.5 Unavoidable Adverse Impacts

None.
5.4 HOUSING

5.4.1 Existing Conditions

The housing stock in the City of Palmdale is estimated to be 27,670 dwelling units (California Department of Finance, 1991). The Housing Element of the Palmdale Draft General Plan Update estimates that housing stock in the City will need to increase to 34,802 by the year 1994 to accommodate anticipated population growth.

Between 1984 and 1990, 20,124 building permits were issued for new homes in the City of Palmdale (Table 3). In 1989 alone, 6,869 building permits were issued.

Eighty-three percent (83%) of the new home building permits issued between 1984 and 1990 were for single-family homes. This indicates that Palmdale is attracting and supporting a growing market for single-family housing. According to the Palmdale Board of Realtors (September, 1991) the median selling price of new and used single-family homes combined was $141,548. Palmdale home prices are lower than the Los Angeles county-wide median housing price of $190,500.00 (Los Angeles Times, 9/29/91; Dataquick Information Systems).

The housing vacancy rate in Palmdale during the 1990 Census was estimated to be 10.03%. The overall housing vacancy rate in Los Angeles County was estimated to be 5.49% (L.A. County Department of Regional Planning, 1991). The high vacancy rate in Palmdale is attributed to availability of recently built single-family homes. In addition, multi-family units are slow in renting because single-family house purchase costs in the area are generally considered affordable.

The most recent year in which accurate estimates of both jobs and housing units are available in 1987. The housing stock in Palmdale in 1987 was 13,983 dwelling units (California Department of Finance); local employment in that year was approximately 10,000 jobs (SCAG, 1990). Therefore, the local jobs to housing ratio (JHR) in 1987 was 1.09.
TABLE 3

Building Permits Issued for New Homes
in the City of Palmdale

<table>
<thead>
<tr>
<th>Year</th>
<th>Single-family&lt;sup&gt;1&lt;/sup&gt; Units</th>
<th>Multi-family Units</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1984</td>
<td>1,255</td>
<td>395</td>
<td>1,650</td>
</tr>
<tr>
<td>1985</td>
<td>1,564</td>
<td>1,007</td>
<td>2,571</td>
</tr>
<tr>
<td>1986</td>
<td>1,577</td>
<td>1,205</td>
<td>2,732</td>
</tr>
<tr>
<td>1987</td>
<td>2,168</td>
<td>366</td>
<td>2,534</td>
</tr>
<tr>
<td>1988</td>
<td>2,929</td>
<td>213</td>
<td>3,142</td>
</tr>
<tr>
<td>1989</td>
<td>6,747</td>
<td>122</td>
<td>6,869</td>
</tr>
<tr>
<td>1990</td>
<td>552</td>
<td>24</td>
<td>576</td>
</tr>
<tr>
<td>Total</td>
<td>16,792</td>
<td>3,332</td>
<td>20,124</td>
</tr>
</tbody>
</table>

<sup>1</sup> Includes single-family attached and detached.

Source: City of Palmdale Building and Safety Department, August 1991.
Edwards Air Force Base, located in Kern County, approximately 13 miles northeast of the project site is the largest single employer in the Antelope Valley area. The Base itself provides about 10,000 military jobs, and 3,000 civilian employment opportunities (Edwards Air Force Base, 1990). Associated with the Base are more than a dozen major aerospace employers including NASA, Lockheed, Rockwell International, Northrop, General Dynamics, Rocketdyne, ITT, Boeing, McDonnell Douglas, Computer Sciences, etc. With an average employment base of 2,000 jobs per employer, these firms provide nearly an additional 30,000 local employment opportunities (Lancaster Chamber of Commerce, 1990). Together with the associated aerospace industry employers, the Air Force Base provides approximately 43,000 local job opportunities.

In order to evaluate Palmdale's local JHR, it can be compared to the JHR of the surrounding area. The Cities of Palmdale and Lancaster, as well as immediately surrounding communities, are located in an area identified by the Southern California Association of Governments (SCAG) as the North Los Angeles Subregion. SCAG estimates that North Los Angeles subregional housing stock in 1988 was 64,900 dwelling units. SCAG projects that housing stock in this area will grow to 235,000 dwelling units by the year 2010. The subregion's JHR in 1984 was 0.71 which is the same as Palmdale's JHR in 1987. This JHR is considered "housing rich" as compared to the entire SCAG region's 1984 (balanced) JHR of 1.27. SCAG projects that by the year 2010, the North Los Angeles subregion will decrease its JHR to 0.54. This is considered even more "jobs poor" in comparison to the entire SCAG region's future year 2010, "balanced" JHR of 1.22.

The Regional Growth Management Plan (February, 1989) recommends that the North Los Angeles subregion return to a JHR of 0.72 by 2010 in order to reach SCAG's regional jobs/housing balance goals. This means that jurisdictions within the North Los Angeles subregion need either to limit housing growth or to look at ways to encourage increased employment opportunities in the subregion.
Because Kern County is not within SCAG's regional planning area, the Edwards Air Force Base employment center is not factored into SCAG's JHR projections. It is, however, likely that this employment center does provide job opportunities to residents of the North Los Angeles subregion. Factoring of this employment center into the subregional JHR would reflect a more balanced local JHR.

5.4.2 Project Impacts

The proposed City Ranch project includes the construction of 5,200 dwelling units: 3,253 single-family detached; 1,634 single-family attached; and 313 multi-family units. Development of the proposed project would provide a range of housing types. Development of the Specific Plan could provide housing for employees of the Edwards Air Force Base employment center. The additional housing provided by the proposed project would increase the City's 1991 housing stock by 19 percent.

The proposed project will create 1,093 direct job opportunities and numerous indirect employment opportunities (See Population, Section 5.3) and therefore, will create a project-wide JHR of .21. Although the subregion is trending towards a JHR of 0.54, SCAG is seeking to boost job growth in the subregion to bring the JHR to 0.72. As a result, the proposed project's impacts on the jobs/housing balance for the subregion can also be described in terms of the jobs shortfall that it will contribute to subregionally. Utilizing procedures drafted by SCAG in their document Guidance for Implementation of Conformity Procedures, March, 1990, (Appendix C) the number of jobs which should be associated with the proposed project is 1,248. The proposed project only provides 1,093 jobs, which is 155 jobs short of SCAG's goal. Therefore, the project's impacts on the subregion's jobs/housing balance is considered to be significant. This analysis indicates that development of the proposed project would continue the development trend of the area (housing intensive with few local job opportunities) and would not markedly support SCAG's goal of becoming more "jobs rich." Development of this project will therefore further exacerbate the imbalance of jobs and housing in the area, thus encouraging longer trip lengths between home and the work place. In this context, the

5-24
increased housing resulting from development of the proposed project can be considered a significant impact.

5.4.3 Mitigation Measures

To mitigate the secondary impacts of the jobs/housing imbalance, the applicant shall implement the traffic and air quality mitigation measures listed in Sections 5.8 and 5.9.

5.4.4 Cumulative Impacts

Development of the cumulative projects listed in Section 4.0 will result in the construction of 13,145 additional dwelling units in the local area (Table 1). When the cumulative projects are combined with the proposed project, a cumulative total of 18,345 units will be constructed. The proposed project represents 28% of this total. The cumulative projects include the construction of public and private services which have the potential to generate employment. However, the JHR of the cumulative projects (proposed project plus cumulative projects) remains jobs poor at 0.65. The cumulative housing increase of 18,345 dwelling units is within SCAG’s projected 1988-2010 subregional increase of 157,700.

5.4.5 Unavoidable Adverse Impacts

The proposed project would contribute additional housing to an area which is already rich in housing but poor in employment opportunities. In the long run, additional housing construction in the area would provide a local workforce base which may serve to attract large employers to the Palmdale area. However, even after implementation of the recommended mitigation measures, the proposed project’s “housing rich” JHR cannot be fully mitigated and remains a significant unavoidable adverse impact.
5.5 EARTH (GEOLOGY)

A report prepared by Buena Engineers entitled “Preliminary Geotechnical Engineering Report,” City Ranch Property, Elizabeth Lake Road and 25th Street West, Palmdale, Los Angeles County, California, May 8, 1989, amended August 24, October 13, November 16 and December 7, 1989, and April 19 and August 31, 1990, was used in the preparation of the following section. The full text appears in Appendix D.

5.5.1 Existing Conditions

City Ranch is located in the western Antelope Valley. For general discussion purposes, the site can be divided into four geomorphologic zones (Figure 11): 1) the Sierra Pelona area consisting of rock outcrops above about 3,100 feet elevation in the south and southwest portions of the project site; 2) the Anaverde Valley comprising areas below 3,100 feet elevation and south of the San Andreas Rift Zone; 3) the San Andreas Rift Zone marked by the main San Andreas fault and including the Little Rock and Nadeau faults; and 4) the Verde Ridge area northeast of the San Andreas Rift Zone. Geologic materials within the site boundaries range in age and composition from pre-Tertiary metamorphic and granitic bedrock to Tertiary sandstone and shale, lower Quaternary alluvium (older alluvium) and Holocene alluvium (younger alluvium) (Figure 19).

The Sierra Pelona area consists of the pre-Tertiary Pelona schist, a structurally complex schist having distinct foliation. The rock is highly weathered, soft-to-moderately hard in outcrop and moderate-to-very hard at depth (Buena Engineers, 1989). Local landslides have been noted in exploratory trenches and at one location on the edge of the property. The Sierra Pelona outcrops are sometimes draped with other soil and rock material.

Younger and older alluvium predominate in the Anaverde Valley south of the San Andreas Rift Zone. Younger alluvium is more abundant in the northwest section of the valley.
The San Andreas Rift Zone, the dominant structural feature in the area, controls the landscape as well as the distribution of geologic materials. Structural features include recently active to inactive faults, bedding, foliation, jointing and folding. The San Andreas Rift Zone is within the northern one-third of the site and trends from northwest to southeast. Younger Quaternary alluvium and Quaternary Harold Formation and Nadeau gravels predominate in the northwestern portion of the Rift Zone. Quaternary alluvium and the Tertiary Anaverde Formation shales and arkose predominate in the southeastern portion of the zone.

North of the San Andreas Rift Zone, in the Verde Ridge area, younger alluvium predominates with outcrops of the pre-Tertiary Holcomb quartz monzonite with older alluvium also being present. Holcomb quartz monzonite is present in and adjacent to the Little Rock fault zone near Verde Ridge, and is also found in contact with younger and older alluvium in the Nadeau fault zone. The above deposits often contain abundant sand and gravel which has been used locally for aggregate.

Faulting

The San Andreas Rift Zone dominates considerations at the project site in regards to both ground rupture and shaking potential. This fault zone overshadows the other faults and credible earthquakes in the region. The central section of the San Andreas fault from the Carrizo Plain to Cajon Pass is capable of producing maximum credible earthquakes of 8.3 magnitude and significant surface rupture. Parallel auxiliary faults (e.g., Little Rock, Nadeau) also show evidence of geologically recent fault activity.

Numerous other faults and lineations (outside the zones discussed above) have been mapped, or inferred to exist, based on aerial photographic interpretation, field mapping or the work of others. Figure 20 shows the location of the local faults. Each of these faults, with the exception of two have proven to be inactive or nonexistent within the

5-28
LOCAL AND VICINITY FAULTS

Source: Preliminary Geotechnical Engineering Report, May 1989
Buena Engineers, Inc.

FIGURE 20
site boundaries and the potential for ground rupture from movement on these faults is considered nil. The specific characteristics of these local faults and lineations are summarized in Table 4. The two faults classified as potentially active are Fault D and Lineation B; each has offset older Quaternary alluvium.

A subsurface exploration program was carried out by Buena Engineers (1989, 1990) to assess the location of potentially hazardous faults and to document the age of last movement on known or suspected faults. Figure 19 shows trench and test pit locations as well as site geologic conditions.

The main San Andreas Rift Zone encompasses approximately 20 percent of the overall site. It is characterized by classic features indicating its recent activity, e.g., sag ponds, closed depressions, linear ridges and valleys, aligned saddles and offset drainage channels. Movement in the rift zone has been mainly right lateral strike slip (one side moved relatively to the right with little vertical movement) with probable significant vertical movement locally. Offset drainage channels within the site boundaries indicate an average of 10 to 13 feet of horizontal movement in the 1857 Fort Tejon earthquake event (magnitude of 8.2) (Buena Engineers, 1989). Evidence suggests a maximum horizontal displacement of about 30 feet near Parkfield, California and approximately 10 feet in Palmdale during the Fort Tejon earthquake. The distance between individual fault segments within the zone varies from 50 to 800 feet but more commonly is from 100 to 300 feet. Most traces are throughgoing, i.e., continuous as a single trace or merge with others to trend continuously along the zone. In only a few cases do major and minor traces seem to terminate abruptly within the zone.

The San Andreas Rift Zone is designated within the Alquist-Priolo Special Studies Zones (APSSZ) (Figure 20). The APSSZ Act signed into law in 1972 requires that areas delineated as special studies zones (having active or potentially active faults) are subject to regulation for certain development projects. The APSSZ Act defines active faults as those that have been determined to have displacement within the last 11,000 years. Development and construction permits will not be issued for projects within the San
<table>
<thead>
<tr>
<th>Designation</th>
<th>Approximate Location</th>
<th>Mapped Length</th>
<th>Youngest Offset Formation</th>
<th>Structural Attitude</th>
<th>Comments/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fault A</td>
<td>Trend toward NE corner of site; may merge with EZ-B</td>
<td>Not on-site 4,800' overall</td>
<td>Pre-Qoa</td>
<td>WNW dip unknown</td>
<td>Possible offsets alluvium 3,300 feet southeast of the site; inactive based on site data.</td>
</tr>
<tr>
<td>Fault Zone B</td>
<td>Avenue R and Tierra Subida (off-site)</td>
<td>5,000' not on site</td>
<td>Anaverde Fm and granitic</td>
<td>NW dip unknown</td>
<td>SE of the site; inactive based on off-site data.</td>
</tr>
<tr>
<td>Fault C</td>
<td>North site on City Ranch north</td>
<td>Not on-site 1,600' overall</td>
<td>Portal schist; pre-Qal</td>
<td>WNW dip unknown</td>
<td>-</td>
</tr>
<tr>
<td>Fault D</td>
<td>Anaverde Valley north of Little Rock Fault Zone</td>
<td>900' on-site</td>
<td>Qoa; pre-Qal</td>
<td>EW dip unknown</td>
<td>Movement pre-Holocene; but considered potentially active on site.</td>
</tr>
<tr>
<td>Fault Zone E</td>
<td>Sierra Pelona SE corner of site</td>
<td>1,700' on-site</td>
<td>Pelona schist; pre-Qoa (100,000 years) fan surface</td>
<td>ENE, vertical</td>
<td>Zone of clay gouge, deformed schist and undeformed paleo B horizon over projected trace; inactive based on site data.</td>
</tr>
<tr>
<td>Fault Zone F</td>
<td>Sierra Pelona S edge</td>
<td>600' on-site</td>
<td>Pelona schist; pre-Qoa (100,000 years) fan surface</td>
<td>NW-SE dip 54 NE</td>
<td>Shearing, soil fillings, offset foliation; inactive based on site data.</td>
</tr>
<tr>
<td>Fault Zone G</td>
<td>Sierra Pelona S Central</td>
<td>1,800' on-site</td>
<td>Pelona schist; pre-paleo B horizon and pre-Qoa (100,000 years) fan surface</td>
<td>NE-SW, vertical to 51 NW</td>
<td>Sheared bedrock, deep soil fillings, caliche in gouge zones and undeformed paleo B horizon over projected trace; inactive based on site data.</td>
</tr>
</tbody>
</table>

Qoa = older Quaternary alluvium
Qal = younger Quaternary alluvium
<table>
<thead>
<tr>
<th>Designation</th>
<th>Approximate Location</th>
<th>Mapped Length</th>
<th>Youngest Offset Formation</th>
<th>Structural Attitude</th>
<th>Comments/Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lineation 1</td>
<td>SE corner of site, 1,400' S of Aqueduct</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Subtle geomorphic expression; not evident in T-44, therefore considered inactive on site.</td>
</tr>
<tr>
<td>Lineation 2</td>
<td>Trends E-W at S margin of site</td>
<td>550'</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Considered inactive on site.</td>
</tr>
<tr>
<td>Lineation 3</td>
<td>S margin of site sub-parallel to Fault Zone “G” in Anaerode Valley</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Apparently crosses undisturbed Qoa fan surface; inactive based on site data.</td>
</tr>
<tr>
<td>Lineations 4-8</td>
<td>In Sierra Pelona, SW portio of site</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Joint controlled; follows radial drainage; inactive based on site data.</td>
</tr>
<tr>
<td>Lineations 9 &amp; 10</td>
<td>Anaerode Valley south of San Andreas Fault Zone</td>
<td>9=1,500’ on-site Pre-Qoa and paleo B horizon (100,000 years)</td>
<td>NW-SE, near vertical (?)</td>
<td>Not evident in T-21, T-23 or T-45; differential erosion, inactive based on site data.</td>
<td></td>
</tr>
<tr>
<td>Lineation A</td>
<td>North of site trends toward NE corner</td>
<td>5,100 off-site to NW</td>
<td>Pre-Qoa</td>
<td>NW-SE, dip unknown</td>
<td>Projects toward site from City Ranch north; inactive based on off-site data.</td>
</tr>
<tr>
<td>Lineation B</td>
<td>Trends NW from south side of Verde Ridge through City Ranch north off-site</td>
<td>4,000’ on-site 8,100’ overall</td>
<td>Qoa; pre-Qsw</td>
<td>WNW, dip 155 in T-39</td>
<td>Lineation off-site links up with unnamed on-site fault; T-39 shows quartz monzonite thrust over Qoa; potentially active based on site data.</td>
</tr>
<tr>
<td>Lineation C</td>
<td>Trends toward site from NW on City Ranch north.</td>
<td>2,200’ off-site Unknown</td>
<td>NW-SE, dip unknown</td>
<td>Trenching on City Ranch north &quot;indicates no active faults&quot;; considered inactive.</td>
<td></td>
</tr>
</tbody>
</table>

Andreas Rift Zone until it is demonstrated that the sites are not underlain by known active faults. The San Andreas Rift Zone has been designated as a “Seismic Safety Management Area” by the Los Angeles County General Plan, 1986. This designation recommends very low density residential use and local commercial use (provided no primary structures lie across the trace of the fault) in this area.

The Little Rock fault zone is typified by a series of steeply dipping strike slip faults and shallow thrust and normal faults generally subparallel to the San Andreas Rift Zone. Within the project site, the Little Rock fault zone consists of two subparallel segments extending nearly continuously through the site. Based on exploratory trenching within the site, the Little Rock fault on the project site is considered “potentially active”. The fault apparently terminates to the northwest between trenches T-24 and T-42 with more active faulting apparently shifting to the south along the San Andreas Rift Zone.

The Nadeau fault zone is expressed as a discreet entity at the eastern site boundary north of the California Aqueduct and south of the San Andreas Rift Zone. It extends to the northwest and apparently either merges into the Rift Zone or terminates north of trench T-46. Dip angles on the faults vary from vertical to 33 degrees. In Trench T-46 the youngest materials offset are younger Quaternary alluvium faulted against the older Quaternary-age Harold Formation.

Seismic Shaking

Severe seismic shaking is a factor that must be considered throughout the entire Los Angeles County area including the Palmdale-Antelope Valley because of the many active and potentially active faults in the region. An evaluation of past earthquake activity in the area, was made by Buena Engineers (1989) considering faults which could detrimentally affect the project site during strong shaking events. Regional seismic activity for the years 1932-72 is shown in Figure 21.
1972 THROUGH 1972, EVENTS EQUAL OR GREATER THAN MAGNITUDE-4

SOURCE: Preliminary Geotechnical Engineering Report, May 1989
Buena Engineers, Inc.

SEISMIC EPICENTERS
Very little activity has occurred on the segment of the San Andreas in the area of the site since the 1857 Fort Tejon earthquake (M=8.2) severely shook the region. The most prominent earthquakes to affect the site since that time are the M=8.2 Owens Valley earthquake of 1872, the M=7.7 Arvin-Tehachapi in 1952 and the M=6.5 San Fernando earthquake of 1971 (Table 5). These events generated intensities (Modified Mercalli Intensity Scale) of VI to VIII (Table 6) at the site (Buena Engineers, 1989).

Although recorded seismicity near the site has been low, there are many faults nearby which are potentially active and could produce significant seismic shaking at the project site (Table 5). The San Andreas Rift Zone has the potential for the largest earthquake and has a recurrence interval (average 145 years) which makes it the design basis fault given the types of structures proposed. Maximum credible earthquake magnitudes along the San Andreas Fault could register as high as 8.3 on the Richter scale. A summary of the main seismic shaking parameters estimated for the project site related to the San Andreas fault are as follows:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Credible Earthquake Richter Magnitude</td>
<td>8.3</td>
</tr>
<tr>
<td>Maximum Credible Bedrock Acceleration</td>
<td>+0.70g</td>
</tr>
<tr>
<td>Estimated Repeatable Peak Ground Acceleration</td>
<td>0.50g</td>
</tr>
<tr>
<td>Estimated Modified Mercalli Intensity</td>
<td>VIII-IX</td>
</tr>
</tbody>
</table>

Bedrock acceleration values of 0.50-0.70 g are considered significant for purposes of design. This is reflected in the empirical descriptions found in Table 4.

**Liquefaction Potential**

Liquefaction is the loss of soil strength (and therefore bearing capacity) of saturated cohesionless soil generally as a result of seismic shaking. Earthquake-induced liquefaction occurs when a saturated, low-relative density, granular deposit loses (under earthquake loading) strength or stiffness due to increased pore water pressure and tends to act like a liquid for short periods of time during an earthquake event. Low liquefaction potential exists on-site along a northwest to southeast orientation roughly
TABLE 5
Significant Recorded Earthquakes in the Palmdale Area

<table>
<thead>
<tr>
<th>Earthquake (Fault)</th>
<th>Distance to Epicenter (Miles)</th>
<th>Earthquake Magnitude*</th>
<th>Estimated Intensity at the Site**</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fort Tejon (San Andreas)</td>
<td>43</td>
<td>8.2</td>
<td>VIII</td>
<td>1857</td>
</tr>
<tr>
<td>Owens Valley (Sierra Nevada-Owens Valley)</td>
<td>141</td>
<td>8.2</td>
<td>VI</td>
<td>1872</td>
</tr>
<tr>
<td>Arvin-Tehachapi (White Wolf)</td>
<td>58</td>
<td>7.7</td>
<td>VII</td>
<td>1952</td>
</tr>
<tr>
<td>San Fernando (San Fernando)</td>
<td>17</td>
<td>6.5</td>
<td>VI</td>
<td>1971</td>
</tr>
<tr>
<td>Whittier</td>
<td>37</td>
<td>6.1</td>
<td>IV</td>
<td>1987</td>
</tr>
</tbody>
</table>

Anticipated Bedrock Accelerations

<table>
<thead>
<tr>
<th>Fault/Epicenter</th>
<th>Maximum Credible Earthquake*</th>
<th>Maximum Credible Bedrock Acceleration(g)</th>
<th>Estimated Repeatable Peak Ground Acceleration(g)</th>
<th>Nearest Distance to Site (Miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Andreas</td>
<td>8.3</td>
<td>+0.70</td>
<td>0.5</td>
<td>0</td>
</tr>
<tr>
<td>White Wolf</td>
<td>7.7</td>
<td>0.10</td>
<td>0.1</td>
<td>53</td>
</tr>
<tr>
<td>San Fernando</td>
<td>6.5</td>
<td>0.12</td>
<td>0.1</td>
<td>24</td>
</tr>
<tr>
<td>Garlock</td>
<td>7.7</td>
<td>0.18</td>
<td>0.1</td>
<td>33</td>
</tr>
<tr>
<td>San Gabriel</td>
<td>7.0</td>
<td>0.25</td>
<td>0.2</td>
<td>19</td>
</tr>
<tr>
<td>Helendale</td>
<td>7.5</td>
<td>0.10</td>
<td>0.1</td>
<td>50</td>
</tr>
</tbody>
</table>


* Richter Magnitude.
** Modified Mercalli Scale.
<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Not felt. Marginal and long-period effects of large earthquakes.</td>
</tr>
<tr>
<td>II</td>
<td>Felt by persons at rest, on upper floors, or favorably placed.</td>
</tr>
<tr>
<td>IV</td>
<td>Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing motor cars rock. Windows, dishes, doors rattle. Glasses clink. Crockery clashes. In the upper range of IV wooden walls and frame creak.</td>
</tr>
<tr>
<td>VII</td>
<td>Difficult to stand. Noticed by drivers of motor cars. Hanging objects quiver. Furniture broken. Damage to masonry D, including cracks. Weak chimneys broken at roof line. Fall of plaster, loose bricks, stones, tiles, cornices also unbraced parapets and architectural ornaments. Some cracks in masonry C. Waves on ponds; water turbid with mud. Small slides and caving in along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.</td>
</tr>
<tr>
<td>VIII</td>
<td>Steering of motor cars affected. Damage to masonry C; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monumemts, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.</td>
</tr>
<tr>
<td>IX</td>
<td>General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. General damage to foundations. Frame structures, if not bolted, shifted off foundations. Frames rocked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. In alluvial areas sand and mud ejected, earthquake fountains, sand craters.</td>
</tr>
<tr>
<td>X</td>
<td>Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.</td>
</tr>
<tr>
<td>XI</td>
<td>Rails bent greatly. Underground pipelines completely out of service.</td>
</tr>
<tr>
<td>XII</td>
<td>Damage nearly total. Large rock masses displaced. Lines of sight and level distorted. Objects thrown into the air.</td>
</tr>
</tbody>
</table>

---


Modified Mercalli intensity scale of 1931 (1955 version)

SOURCE: Preliminary Geotechnical Engineering Report, May 1989
Busca Engineers, Inc.
coinciding with the flood plain of the Anaerade Creek (Figure 22) (Buena Engineers, 1989). Sand samples from two borings on the site indicate the water table is within 30 feet of the ground surface at those locations. The depth to groundwater south of the former City Ranch compound may be as shallow as 10 feet. At the seasonal high level, the water table lies 7 to 8 feet below ground at the eastern side of the property and about 37 feet below ground at the western side (Earth Sciences Consultants, 1990). Seasonal variation is approximately 2 to 3 feet. The gradations of the tested soils fall partially outside (and partially inside) the "liquefiable soils" envelope. Based on tests on soil samples from three borings that penetrated more than 31 feet, and the types and distribution of soils encountered below the water table, the potential for liquefaction at the site was rated low (Buena Engineers, 1989).

**Seismic Settlement**

Post liquefaction settlement will occur when excess pore water pressures dissipate following an earthquake. Even if liquefaction does not occur in relatively loose granular deposits, seismic settlements detrimental to structural performance (National Research Council, 1985) may occur when seismic shaking dynamically compacts (densifies) the soils and settlement (including differential) follows. Dynamic compaction or minor liquefaction can cause settlements (uniform or differential) of a few to several inches, depending on the thickness and relative density of granular layers. No specific analysis has been performed to evaluate this possibility at the project site. Based on the distribution of surficial deposits, it would most likely occur in the younger alluvium areas.

**Seismic Ground Failure**

Ground failure is a broad term which can encompass liquefaction and seismic settlement. Here it is more narrowly defined to include the lesser manifestations of earthquake-induced ground shaking, namely lurching, ground cracking, and landslides.
LEGEND

- Area where shallow groundwater may exist within 30’ of the existing ground surface and where there may be a “low” liquefaction potential.

SOURCE: Buena Engineering, Inc. August 1990

LIQUEFACTION POTENTIAL AREAS

FIGURE 22
The site geology and topography are such that these occurrences are very likely. However, any slopes or open ground areas on the site or immediately adjacent are susceptible to ground failures (e.g., slope failure, cracking, lateral displacement) during seismic shaking. Evidence is presented (Buena Engineers, 1989) which indicates that past areas of lurching have been observed in exploratory trenches southeast of the site area. Such areas may coincide with the traces of “older” faults or geologic contacts at relatively shallow depths between materials of unlike physical characteristics. These zones may concentrate the seismic energy intensifying the response of shallow soil materials.

Seiche-, Earthquake-Induced Flooding

With the California Aqueduct passing through the site, the potential exists for seiche occurrence (water being thrown, or sloshed, out of the Aqueduct during strong shaking) and local flooding due to embankment failure. Seiche occurrence and embankment failure could occur where the Aqueduct crosses the San Andreas Rift Zone. Design of the Aqueduct by the State has apparently accounted for this type of an event (Buena Engineers, 1989). If a breach of the Aqueduct occurs, flood control gates which isolate that section of Aqueduct can be activated as soon as a breach is reported to the Department of Water Resources or when a significant drop in water level is detected (by personnel) at an Aqueduct control station. The water level in the Aqueduct is monitored 24 hours a day, 7 days a week. Alarms alert personnel at Aqueduct control stations to a water level change. At that time, the gates can be closed either remotely from the control station or manually at the site. Aqueduct flow would be cut off at the damaged section(s), thereby minimizing water loss (California Department of Water Resources, May, 1990). In addition to the shutoff system, the Department of Water Resources maintains an overflow channel along the length of the Aqueduct to accept any overflow spillover that could occur in the event of a breach of the Aqueduct (see Hydrology Section 5.6 for further discussion).
Landslides

Three landslides have been identified in natural exposures on the project site, two in the Sierra Pelona and one in the San Andreas Rift Zone near the Leona siphon (Figure 23). Landslide material has been mapped and observed in exploratory trenches at these sites (Buena Engineers, 1989). Landslide potential is increased during severe near-field seismic shaking in hillside terrains. The Anaverde Formation shales can be unstable if not properly engineered and designed. The Pelona schist due to its foliated nature, degree of weathering, presence of joints and faults and relatively steep slopes would be more susceptible to landslides in natural and cut slopes under seismic loading. Slope stability analyses performed by Buena Engineers (1989) assume static conditions and a 1.5 factor of safety; this means that the analyzed slopes were found to be stable without earthquake loads because resistive forces are 1.5 times driving forces. Figure 23 indicates areas that are subject to potential slope instability.

Soils

In the Sierra Pelona, the upper several feet of bedrock is generally weathered schist forming soft-to-moderately hard rock. Weathering generally extends from 3 to 15 feet deep. Seismic velocities of the schist at these depths range up to 5,500 feet/second (Buena Engineers, 1989). The schist is also present at relatively shallow depths (within 10-15 feet) in the upper pediment areas of Anaverde Valley. Where fault gouge zones are present, the expansion potential of the Sierra Pelona is considered high (Figure 24).

The Quaternary deposits in the Anaverde Valley (predominantly younger and older alluvium) are sands and clayey and silty sands with gravel. The sands range from loose to dense and are variably cemented. Based on seismic, drilling and trenching data, nearly all should be readily excavated. The upper 1 to 2 feet of older alluvium and 1 to 7 feet of younger alluvium show a strong tendency to hydroconsolidation (significant volume loss upon wetting) (Figure 25). Expansion potential is low to very low.
LEGEND

- Denotes bedrock or hillside areas where site specific geotechnical evaluations should be required relative to slope stability.

AREA I - Moderate to high potential for adverse geologic conditions relative to hillside or cut slope stability.

AREA II - Low potential for presence of adverse geologic conditions.

SOURCE: Buena Engineers, Inc. August 1990

POTENTIAL SLOPE INSTABILITY AREAS
LEGEND

- AREA I - Area where "low" to "medium" expansive soils may be encountered.

- AREA II - Area where "low" to "high" expansive soils may be encountered. (Anaverde clay shale exists in this area)

- AREA III - Schist bedrock where isolated lenses of expansive clay may be encountered.

Source: Buena Engineers, Inc. August 1990

POTENTIAL EXPANSIVE SOILS AREAS
LEGEND

- Area of site where shallow younger and older soils subject to hydroconsolidation may exist.

SOURCE: Buena Engineers, Inc. August 1990

POTENTIAL HYDROCONSOLIDATION AREAS

FIGURE 25
Nadeau gravels (Quaternary) form very coarse-grained, variably cemented (loose to very dense) soils consisting predominantly of gravels and cobbles in a sandy matrix. Interbeds of poorly consolidated materials are found throughout. Excavation should generally be achieved without difficulty.

The granitic rocks (Holcomb quartz monzonite on Verde Ridge) show significant weathering up to 10 feet deep, most often the monzonite could be excavated by a large backhoe. However, some areas will be very difficult to excavate with conventional equipment. Fractures and joints range from inches to a few feet apart. These granitic rocks form very solid foundation materials.

Anaverde Formation rocks vary in composition from clayey shales to coarse arkosic sandstones. They tend to weather fairly deeply and should be readily excavatable.

The Harold Formation comprises a wide variety of clast sizes from boulders to clay. The predominant lithology is silty sand with gravel and sandy gravels. Beds are often caliche (calcium carbonate precipitate) cemented and have an abundance of Pelona schist clasts. Excavation should be easy to moderately difficult.

Groundwater

Depth to groundwater varies across the site from approximately 10 feet to over 100 feet. As indicated on Figure 22 areas with shallow groundwater (areas where groundwater occurs within 30 feet of the existing ground surface) occur roughly along the Anaverde Valley Floodplain which runs northwest/southeast across the site. Groundwater was encountered in borings and trenches in the Anaverde Valley flood plain (2 borings) and in the San Andreas Rift Zone (2 borings, 3 trenches) just north of the southeast extension of the California Aqueduct (Buena Engineers, 1989). Seasonal fluctuations may occur in these water levels. No groundwater depth or elevation contours exist for the site beyond these individual data points.
5.5.2 Project Impacts

Development of the project site will introduce full-time residents to the geologically complex project site. Additional people (employees at the project schools and commercial and recreational facilities plus visitors and passing motorists) could be present on-site and exposed to site conditions at any given time.

The City Ranch Specific Plan divides the project site into 35 planning areas classified by primary land use (i.e., single-family residential, open space, etc.). As such, planning area requirement and constraints are addressed individually to provide for site drainage, infrastructure improvements, sensitive grading design and consideration of geologic hazards. Specific geologic hazards posed to future residents and site users are discussed below.

Faulting

Surface displacements along the San Andreas, or its related faults which were determined to have experienced relatively recent (Holocene) movement, could range from a few feet up to as much as 30 feet horizontally and a few inches to several feet vertically. Extensive geologic and geotechnical investigative work has been done to detect these faults in order to avoid them during project construction. As a result, the proposed Specific Plan identifies restricted use areas that preclude construction of habitable structures.

Studies to date by Buena Engineers (1989; 1990) have delineated faults, identified lineations, and have determined the age of last movement for each fault based on inspection and analysis of numerous trenches. Restricted use zones, which include 100-foot building setbacks from faults, have been delineated to indicate where habitable structures should not be located and where more study is needed before specific structures are planned and constructed (Figure 26). A habitable structure is defined as a structure for human occupancy which is used or intended for supporting or sheltering any use or
LEGEND

- PROJECT SITE BOUNDARY
- RESTRICTED USE ZONE I - INCLUDES 100' SETBACK OF UNKNOWN OR SUSPECTED POTENTIALLY ACTIVE FAULTS WHERE PROBABILITY OF FUTURE FAULT RUPTURE IS CONSIDERED MODERATE TO HIGH
- RESTRICTED USE ZONE II - INCLUDES 100' SETBACK OF KNOWN OR SUSPECTED POTENTIALLY ACTIVE OR INACTIVE FAULTS WHERE PROBABILITY OF FUTURE FAULT RUPTURE IS CONSIDERED LOW TO MODERATE
- RESTRICTED USE ZONE III - INCLUDES 100' SETBACK WHERE ACTIVITY OF FAULTS IS QUESTIONABLE. ADDITIONAL EVALUATION PRIOR TO LOCATION OF HABITABLE STRUCTURES IN THIS AREA IS RECOMMENDED

AREAS WHERE NO RESTRICTIONS RELATIVE TO FAULTS HAZARDS ARE RECOMMENDED. "SF" DENOTES BUILDABLE AREAS WHERE SPECIAL REINFORCED FOUNDATIONS ARE RECOMMENDED

Revised April 19, 1990

FIGURE 26
occupancy expected to have a human occupancy rate of more than 2,000 person hours per year (Buena Engineers, 1990). According to the City Ranch Specific Plan, part or all of Planning Areas, 1, 2, 3, 4, 5, 7, 8, 9, 10, 12, 13, 15 and 35 are located in Restricted Use Zones.

Restricted Use Zone I encompasses the San Andreas Rift Zone and associated faults that show evidence of movement within the past 11,000 years. The Restricted Use Zone I (Buena Engineers, 1990) roughly corresponds to, but is wider than, the APSSSZ through the site.

The following planning areas are encroached upon by the fault traces governing Restricted Use Zone I: Planning Areas 1 (open space/community park); 2 (natural open space); 4 (open space/golf course); 5 (single-family detached); 9 (community park); 10 (single-family detached); 12 (multi-family); 13 (open space/golf course); 15 (single-family attached) and 35 (open space/community park). Buena Engineers (1989) have delineated the "edges" of the San Andreas Rift Zone based on information gathered from exploration trenches dug on the project site (T-17, T-48, T-10, T-11, T-43, T-23, T-30, T-30b, T-42, T-51, T-24, T-27, T-13, T-61, and T-65 through T-71). Construction of habitable structures in this zone is not recommended. If fault rupture were to occur beneath a structure built in this area, very serious structural damage would result and serious injury would be likely. According to the City Ranch Specific Plan no structures will be built within Restricted Use Zone I. (See Project Description and Figures 5 and 9.) If the above planning areas are built as specified in the project description and depicted on Figures 5 and 9, no significant impacts are anticipated.

Activities supporting development such as recreation and infrastructure systems (such as water, power, gas and sewer lines and Avenue S, Bridge Road, City Ranch Road, collector streets and residential roadways along with the bridge across the Aqueduct) will be allowed within the main San Andreas Rift Zone (Restricted Use Zone I; Buena Engineers, 1990). The survival of these systems during large earthquakes and ground rupture will be highly dependent on their design. Their disruption during and follow-
ing a major earthquake on the San Andreas Rift Zone could substantially affect the ability of local residents to move into, out of or around the area. These types of infrastructure systems have been designed and installed in other similar situations along the San Andreas and related faults.

Restricted Use Zone II encompasses the main trace of the Little Rock fault zone the probability of future fault rupture potential is considered to be low to moderate. Location of habitable structures within this zone is not recommended without further subsurface exploration and analysis and implementation of setbacks from the fault (Buena Engineers, 1989). The Restricted Use Zone II area coincides with parts of Planning Areas 3, 7 and 8. As discussed in the project description, the impacted portion of Planning Area 3 will be limited to landscaping, parking, loading, temporary storage areas and other non-habitable structural uses. As shown in Figure 6, all lots in Planning Area 8 will be setback 100 feet from the fault traces. Planning Area 7 will remain as natural open space. If Planning Areas 3, 7 and 8 are developed as described above, no significant impacts are anticipated.

Restricted Use Zone III which covers most of the Verde Ridge is described as an area where fault activity is questionable. This zone coincides with parts of Planning Areas 7 and 8. No habitable structures are proposed to be located within the restricted portions of these planning areas. Therefore, impacts with regard to Restricted Use Zone III are not anticipated to be significant.

Seismic Shaking

The overall risk from seismic shaking at the project site is higher than for other sites in the Antelope Valley. This represents a very significant adverse impact. The severity of ground shaking at the site depends on many factors, but since the site lies astride the San Andreas Rift Zone (source distance = zero miles), the earthquake magnitude and the nature of the earth materials beneath the site are most critical. Because a conservative magnitude must be assumed, the effect of this shaking depends upon the design of
the various structures (including their foundations) and the specific soil conditions at each location within the site.

**Design Level Acceleration in Percent Gravity (g)**

<table>
<thead>
<tr>
<th>Maximum Credible Peak Ground Acceleration</th>
<th>Estimated Repeatable Ground Acceleration</th>
</tr>
</thead>
<tbody>
<tr>
<td>70-100%g (0.70-1.00g)</td>
<td>50%g (0.50g)</td>
</tr>
</tbody>
</table>

The most serious potential impact would develop if inadequate geotechnical and structural studies were performed as a basis for the specific seismic design of the single-family, multi-family, commercial and critical (school) structures. Buildings not constructed to the seismic building code requirements may be susceptible to damage and pose potential injury to occupants during the maximum credible shaking event.

**Liquefaction Potential**

Because of the presence of a relatively shallow groundwater table (less than 30 feet) and potentially loose-to-medium dense fine-grained sands in the alluvium, liquefaction potential is a concern to dwellings or structures proposed in portions of Planning Areas 1, 3, 5, 7, 10, 11, 12, 13, 14, 15, 20, 21, 22, 23, 24 and 25. While depth to water data alone are insufficient to make firm conclusions, it appears these planning areas are in areas of relatively high groundwater where liquefaction could occur if susceptible soil conditions exist. According to Buena Engineers, liquefaction potential, while it does exist, is considered to be low. Liquefaction could produce failure (including lateral spreading) of shallow building foundations leading to substantial structural damage and possible bodily injury. This is considered a significant impact. As with seismic shaking, liquefaction effects are well understood and many buildings have been designed to withstand these effects in similar geologic environments.
Seismic Settlement

While liquefaction is the potentially greater hazard in specific areas of the project site, other areas of the project site may contain granular materials of greatly different densities. This creates a potential for differential settlement across an overlying structure during and after a severe earthquake. Damage to structures from seismic settlement can range from minor to significant. Damage will be manifest as minor-to-severe cracking of foundations and the overlying structure; collapse is unlikely. These settlements have been predicted and accommodated for in the design and construction of other buildings in similar geologic environments. The potential for seismic settlement on this property is not significantly different than elsewhere in the greater Palmdale area.

Seismic Ground Failure

The most probable earthquake-induced ground failures at the site are fill slope failures, shallow liquefaction with attendant lateral displacement and general ground lurching and cracking. Based on the project development plan, some areas with earthquake-induced ground failure potential will exist on site. A primary concern is the potential for failure of the cut and fill slopes adjacent to occupied dwellings. Should this occur, earth materials could move downslope and onto or into structures causing structural as well as cosmetic damage and possibly injury. Also other fill slopes created for roadways, berms, drainage control structures, etc. may be susceptible to failures which may affect supported structures (e.g., pavements, abutments, bridges, walkways). This would pose safety problems to drivers and inhibit post-earthquake relief efforts. These impacts are considered significant.

Seiche and Flooding Effects

Seiche effects could include some minor sloshing of water over the California Aqueduct embankment. In a more severe case, failure of the embankment could release large
quantities of water. In a worst case scenario, portions of Planning Areas 2, 4, 9, 13 and 22 could be impacted by flooding. Though these areas are park, golf course and open space areas, some buildable areas exist within these locations. Aqueduct flooding of clubhouse or park facility structures would be considered significant. For further discussion, see Hydrology Section 5.6.

Landslides

The stability of natural slopes on the project site is of concern because evidence of previous slope failures has been observed. These concerns are greatest in Sierra Pelona hillside areas in the southern portion of the site and in the Anaverde shales in the San Andreas Rift Zone. Earthquake loading would exacerbate any existing problems related to adverse bedding plane and foliation orientations, and weak clayey layers or gouge zones. Failure of substantial areas of bedrock, alluvium or fill above or below structures could cause substantial structural damage or bodily injury. This would be considered a significant impact. There is no evidence to suggest that the project site is susceptible to major earthquake-induced rock avalanche such as the Blackhawk landslide which occurred near Lucerne, California (Wilson and Keefer, 1985).

It has been assumed that grading for areas of the development in younger and older Quaternary alluvium, Pelona schist and Holcomb quartz monzonite will result in cut slopes. Because of the soil and rock properties and depending on height of cuts and the severe seismic shaking, there may be a potential for slope instability. This is of particular concern in the Sierra Pelona in the area of Fault Zone G (Planning Areas 30A and 31) where intersecting faults, joints and foliation may occur in these high cut slopes. Proper design and support is commonly provided on construction projects in geotechnically similar materials and environments.
For proposed new cut and fill slopes, stability analyses have been performed per Chapter 70 of the Los Angeles County Building Code for several cases (Buena Engineers, 1989). Stable results including a 1.5 Factor of Safety were obtained as follows:

<table>
<thead>
<tr>
<th>Soil Type</th>
<th>Stable Slope Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Younger alluvial soils</td>
<td></td>
</tr>
<tr>
<td>30 feet high fill at</td>
<td>2:1</td>
</tr>
<tr>
<td>40 feet high cut</td>
<td>2.5:1</td>
</tr>
<tr>
<td>with recompacted face)</td>
<td>(2:1)</td>
</tr>
<tr>
<td>Older alluvial soils</td>
<td></td>
</tr>
<tr>
<td>30 feet high fill at</td>
<td>2:1</td>
</tr>
<tr>
<td>40 feet high cut</td>
<td>2:1</td>
</tr>
<tr>
<td>Bedrock</td>
<td></td>
</tr>
<tr>
<td>To be compatible with bedding and foliation/joint conditions</td>
<td></td>
</tr>
</tbody>
</table>

Soils

Soil concerns relate to excavation characteristics, bearing capacity, hydroconsolidation, shrink/swell potential and erodability. The site soil materials are relatively easy to excavate and are suitable as fill materials (if properly prepared). As shown in Figures 24 and 25, several areas within the development are known to contain potentially expansive soils and hydro-compactable soils. Where these soils are found, special design and construction precautions should be taken to minimize damage to structures. Bearing capacities in all areas will be suitable for the presently contemplated spread footings if soils are properly prepared. Suitability for heavy loads must be determined by geotechnical borings, appropriate laboratory tests and engineering analysis specifically for the planned structure. Other similar single-, multi-family and commercial-type structures have been successfully constructed in similar soil materials.

Anaverde Formation soils should generally be acceptable for foundations or as fill. The clay shale members are expansive and where encountered will require special measures.
in design and construction (e.g., removal, over-excavation, drainage measures). Such considerations are routinely made for similar projects.

Bedrock in the Sierra Pelona and Verde Ridge areas may be difficult to excavate using standard equipment; some local blasting may be required. Blasting imposes certain normal construction risks to worker safety; these are similar to those found on other similar projects. Resulting soils or residuum should be suitable as fill material if properly prepared.

Groundwater

Groundwater will not likely be found in excavations for the structures presently contemplated. However, should excavations be planned in areas where water is 10 feet deep or less (Planning Area 15), hazardous working conditions for both construction personnel and equipment can be created. This potential impact is routinely handled by pumping and drainage techniques to minimize the significance. The development of the proposed project could raise groundwater levels in Planning Area 15. This could create soggy ground, nuisance moisture relative to landscaping, and in the worst case, surface water ponding. This could be considered a significant impact.

5.5.3 Mitigation Measures

To fully mitigate impacts to geologic hazards, the project would have to be redesigned to eliminate the introduction of people into the areas susceptible to seismic impact. This mitigation measure has not been required by this EIR since it would make development of the project infeasible. However, implementation of the following measures would minimize adverse impact or reduce impacts related to geologic hazards to an acceptable level:
Surface Fault Rupture

- No structures intended for human habitation as previously defined shall be constructed in Restricted Use Zones I, II or III. Further specific fault hazard studies may reveal the existence of additional buildable areas within previously identified Restricted Use Zone areas.

- Special foundations have been recommended for select areas of the site adjacent to defined Restricted Use Zones (Figure 27). Special foundations should consist of more heavily reinforced foundations and concrete slabs. Actual design of the foundations should be determined by the project structural engineer as approved by the City Building and Safety Department.

- In accordance with California Department of Real Estate disclosure format and procedures, all potential buyers purchasing real property in City Ranch shall be advised of potential seismic hazards in accordance with the following disclosure language:

- Each deed or other conveyance of Real Property shall include the following statement: "Portions of the City Ranch Specific Plan area are traversed by major traces of the San Andreas Rift Zone, a geologic feature capable of producing a magnitude 8.3 earthquake. The active fault zone has been identified by extensive site specific testing and analysis. All buildings are prohibited by the Specific Plan from being constructed across the trace of an active fault throughout the Specific Plan area. Due to the proximity of portions of the property to the San Andreas Fault, there is a higher risk of experiencing surface fault rupture than other locations not adjacent to an active fault. An active fault is any fault that has been determined to have experienced movement within the last eleven thousand (11,000) years." Additionally, where applicable, each disclosure statement and deed record shall contain language which denotes the possibility of building restrictions on residential additions for human occupancy on those parcels which
LEGEND

\[
\square \quad \text{Area where more heavily reinforced foundations are recommended relative to seismic hazards.}
\]

SOURCE: Buena Engineers, Inc. August 1990

SPECIAL FOUNDATION AREAS

FIGURE 27
are located in either the Special Seismic Foundation or Seismic Setback Zones.

Seismic Shaking

- Develop site specific earthquake response spectra for critical facilities such as water tanks, schools and the fire station which consider effects of ground shaking associated with events in the San Andreas Rift Zone. These reports are intended to provide specific engineering design criteria related to structural design and selection of building materials.

- All structures on the project site shall be designed in accordance with at least the minimum code standards for Seismic Zone 4 as described in the Los Angeles County Building Code.

- Structural and foundation designs, detailed drawings and specifications shall be incorporated into architect designs and construction plans. Specifications for the construction plans may include soil improvements or other remedial measures.

- The project geotechnical consultant shall perform grading observation and testing to confirm adherence to specifications and recommendations and shall certify that all grading complies with the provisions of all approved plans and specifications, pursuant to Los Angeles County Uniform Building Code.

Liquefaction and Seismic Settlement

- A liquefaction study of the site shall include the following:

  - Subsurface exploration (by borings) to depths of thirty to forty feet below existing native soil grades in areas of known shallow groundwater. Relatively undisturbed soil samples should be obtained from the borings for determination of soil density and grain-size analysis. (A sufficient number of
borings should be drilled to obtain a reasonable amount of knowledge relative to the soil conditions and depths to groundwater.)

- Testing to determine engineering characteristics of the soil shall include the following:

  - Soil sampling blowcounts, soil density measurements, and grain-size analysis to determine the susceptibility of the soil in shallow groundwater areas to liquefaction. Recommendations for remedial grading or foundation design shall be made for areas in which it is determined that liquefaction is a significant hazard. Typical recommendations may include deeper foundations, densification of the susceptible soils, or construction of subdrains.

- Tests and observations shall be performed by the project geotechnical consultant during grading operations to assure adherence to recommendations in identified liquefaction hazard areas and shall certify that all grading complies with the provisions of all approved plans and specifications, pursuant to Los Angeles County Uniform Building Code.

**Landslides**

- Any hillside areas of the property where planned grading would result in artificial slopes greater than ten feet in height shall be evaluated specifically relative to slope stability by preparing the following geologic and geotechnical engineering studies:

  - Detailed geologic mapping of surface features in the areas of the proposed cut slopes.
- Subsurface exploration with backhoe test pits and trenches to expose the shallow geologic conditions in and around the proposed graded areas.

- Deep subsurface exploration with borings including small diameter auger borings or large diameter bucket borings at the specific cut slope locations. (It is suggested that the subsurface exploration be extended to depths at least equal to, and ideally greater than, the proposed depths of grading.)

- Laboratory tests on the soils and rocks collected from the exploration programs for determination of density, moisture content, shear strength, and compaction characteristics.

- Detailed engineering analyses utilizing the data obtained from the field exploration and laboratory testing programs relative to stability of the existing and planned graded slopes. Recommendations shall be provided for remedial grading to repair or replace any potential unstable slopes.

- The findings and recommendations of the Slope Stability Study shall be incorporated into construction plans and site grading activities, and a slope maintenance plan. Grading, slope maintenance, and construction plans shall be reviewed and approved by the City Engineer.

- The project geotechnical consultant shall be responsible to perform confirmatory tests and observations during grading to assure that the geotechnical recommendations are being followed and shall certify that all grading complies with the provisions of all approved plans and specifications, pursuant to the Los Angeles County Uniform Building Code.

- Recommendations for slope planting and irrigation shall be prepared by a qualified landscape architect and reviewed by the City Planning Department and by the City Engineer. Approved plans by City Engineer will be required prior to
approval of final map by Engineering.

• Temporary erosion control measures shall be employed as follows:

  - The surface of all slopes more than three (3) feet in vertical height shall be covered with North American Green S 150 or approved erosion control blankets or application of an approved latex soil binder included in a hydroseed mix designed for germinating with natural rainfall. This would consist of slope stabilizing, low water consuming grasses and ground covers. Installation shall conform to all manufacturer’s specifications.

  - Erosion mitigation measures shall be performed to the satisfaction of the City of Palmdale Landscape Architect prior to the acceptance of rough grading.

• Permanent erosion control measures shall be employed as follows:

  - The surface of all slopes more than three (3) feet in vertical height shall be covered with North American Green S 150 approved equal erosion control blankets or be permanently landscaped and irrigated per approved landscape plans, and have obtained 80 percent coverage of groundwater. Installation shall conform to manufacturer’s specifications.

  - The surface of all slopes more than three (3) feet in vertical height shall be protected against damage from erosion by planting with groundcover plants. Slopes exceeding fifteen (15) feet in vertical height shall also be planted with shrubs at not to exceed 10 feet on centers; or a combination of shrubs and trees at equivalent spacing, in addition to the groundcover plants.
• Planting need not be provided for cut slopes which are rocky in character and not subject to damage by erosion and any slopes protected against erosion damage by other methods when such methods have been specifically recommended by a soils engineer, engineering geologist or equivalent authority, and found to offer erosion protection equal to that provided by the planting specified in this section.

• All required landscaping and irrigation shall conform to the City of Palmdale’s Slope Erosion Control Landscaping Standards.

• All planting and irrigation shall be installed to the satisfaction of the City of Palmdale Landscape Architect prior to the acceptance of final grading.

• All slope banks less than 30 feet in height within single-family residential lots shall be maintained by individual homeowners enforced through deed restrictions. Slopes in common open space areas of multi-family and attached single-family unit planning areas and slopes greater than 30 feet high in rear yards of private residential lots shall be maintained by homeowners associations. Slopes in landscape easements along public rights-of-way and roadway slopes within tracts shall be maintained by homeowners associations unless reviewed and approved by the Director of Engineering to be included in a maintenance district. Slopes in park areas shall be maintained by the City of Palmdale. Where maintenance is to be provided by a maintenance district or homeowner's association, said area shall have an easement recorded over it for access and maintenance purposes.

• Slope plantings and irrigation systems shall be maintained.

• Berms, swales or devices shall be provided at the top of cut or fill slopes to prevent surface waters from overflowing onto and damaging the face of the slope. Gutters or other special drainage controls shall be provided where the
proximity of runoff from buildings or other structures is such as to pose a potential hazard to slope integrity.

- Manufactured down slopes to property lines shall be prohibited except for corner lot conditions. Where walls occur at the tops of slopes, access shall be provided to the homeowner or designated maintenance party to permit maintenance of slopes and landscaping.

- The drainage outlets shall be periodically inspected and cleaned of silt and debris.

- In accordance with California Department of Real Estate disclosure format and procedures, all potential buyers of residential lots containing slope banks greater than 30 feet in height shall be notified of the condition.

Soils

- Soils engineering recommendations listed on pages 40-63 of the May, 1989 Buena Engineering report entitled “Preliminary Engineering Geotechnical Report, City Ranch Property” (Appendix D) shall be strictly followed.

- Reshaping of the natural terrain to permit access and construction of facilities such as water tank sites, utility lines and easements, service roads, fire access, etc., shall be kept to a minimum in areas of greater than 25% slope.

- The geotechnical consultant shall control construction activities through confirmatory observations and testing and quality control procedures. Special attention must be given to the hydroconsolidation issue and specific plans for treating or removing the susceptible soils. Present recommendations appear adequate but may require reassessment depending on location specific conditions.
• For areas within “medium” or higher soil expansion potential (refer to Figure 24), post-tensioned foundations shall be required.

Seismic Ground Failure

• Prohibit construction of habitable structures in Restricted Use Zone I and in Restricted Use Zones II and III, conduct in-grading inspections and identify precautionary measures (e.g., enhance foundations, adjust building locations slightly) where trench exposures show evidence of soil filled cracks along lineaments or buried geologic contacts.

Flooding Potential

• Construct flood control channels along the main washes and maintain drainage diversion devices locally (e.g., under roads, engineered fills and along the Aqueduct).

• For the Aqueduct embankment failure event, construct protective berms to the elevation sufficient to control the design flooding event specified by the State for this area. In addition, the structures shall be elevated above the flooding levels by increasing the height of fills.

Groundwater

• Provisions shall be made for adequate drainage of the site both during construction and operational phases of the project. To avoid problems associated with rising groundwater levels in Planning Area 15, subsurface drainage (for example, gravel drains, herring bone drains or french drains) would be required.

• If required during construction, a dewatering or drainage diversion program shall be developed and implemented subject to review by the County of Los An-
5.5.4 Cumulative Impacts

As the project vicinity becomes built out through the development of this and the cumulative projects, increased numbers of persons would be exposed to the geologic hazards of seismically-induced effects in this high geologic hazards potential area. Increased numbers of persons could be injured by an earthquake event in this area.

5.5.5 Unavoidable Adverse Impacts

Implementation of the recommended mitigation measures would reduce many adverse geologic impacts; however, they would not eliminate all the significant impacts associated with geologic hazards. Geologic impacts are, therefore, considered unavoidable adverse impacts.
5.6 HYDROLOGY

5.6.1 Existing Conditions

The City Ranch site contains two drainage areas, the Anaverde Creek and Amargosa Creek drainages. The majority of the project site (73%) falls within the Anaverde Creek drainage which flows northeasterly from the south and southwest portions of the site to the center of the site. From there, runoff drains under the Aqueduct via culverts and then east along the north side of the Aqueduct through a wetland area. The source of moisture for the wetland is groundwater. At this time there is no surface water flow to the wetland in the dry season. The Amargosa Creek drainage area includes the northern portion of the project site. This area drains north off the project site then east, north of Elizabeth Lake Road. The Amargosa Creek is proposed to be channelized and improved per City of Palmdale proposed Assessment District 90-1. The Anaverde and Amargosa Creek drainages, which serve as accumulators for inflow from many local sources, have been designated “Flood Plain Management Areas” by the Los Angeles County General Plan (Los Angeles County, 1986, Map 5). The City is currently in the process of developing a regional drainage solution for the Anaverde basin along the lines of that developed for the Amargosa Creek basin. The flood control facilities proposed in the Specific Plan for this basin may be modified in the future if additional flood water detention or channelization is determined to be appropriate for the regional solution that may be proposed.

Flooding

Water sources which may cause flooding on the project site are as follows: 1) the Anaverde Creek; 2) overland and channelized runoff from the Sierra Pelona Highland and Anaverde Plain; 3) overland and channelized runoff from the hills of the Verde Ridge and San Andreas Rift Zone; 4) abnormal precipitation events over the site and/or its upstream drainage basin; and 5) the California Aqueduct which trends roughly diagonally (northwest-southeast) through the site and could be a source of flooding in
the event of levee failure (Figure 28).

The project site contains 1,800 acres of the 7,400-acre area of the Anaverde Creek watershed. The 100-year Federal Emergency Management Agency (FEMA) flood area of the Anaverde Creek coincides with the central portion of the project site (Figure 28). This designation, which indicates areas subject to flooding during a 100-year FEMA flood under existing conditions, also mandates procedures to be followed in altering the flood plain for development. A 100-year storm is defined as the volume of precipitation expected to be equaled or exceeded once every 100 years. In any given year, there is a one percent chance of a 100-year storm occurring. The City of Palmdale and the Federal Emergency Management Agency regulate development within the 100-year FEMA flood plain to protect new development and existing adjacent property. There has been one recorded occurrence of flooding on the project site. This occurred in the vicinity of the existing ranch buildings adjacent to Anaverde Creek. The flood was due to blockage of a culvert under the Aqueduct by debris.

The nearby desert areas are generally susceptible to flash flooding and erosion, often with debris/mudflow occurrences, during seasonal peak periods of precipitation. Because the project vicinity contains many individual drainage areas, this susceptibility is variable depending on location.

The Sierra Pelona foothills and the adjacent Anaverde Plain alluvial fans/bajadas contain separate drainage channels and sloping plains. The majority of the Sierra Pelona area lies within the designated Hillside Management area (areas where slopes are greater than 25% and debris potential is high) (Los Angeles County, 1985, Map 5). The potential for debris flows across the project site is considered nil to high depending on slope gradient, soil type and drainage concentration (Buena Engineers, 1989) (Figure 29).
Small portions of the Verde Ridge and San Andreas Rift Zone are also occupied by slopes designated as Hillside Management Areas (Buena Engineers, 1989; Los Angeles County, 1986, Map 5). Though these slopes are not as steep as those of the Sierra Pelona foothills, the possibility of debris flows during abnormally high precipitation events should not be discounted.

The California Aqueduct which traverses the project site, occupies the valley floor between the Verde Ridge and the Sierra Pelona foothills. Based on annual volumes delivered downstream from Palmdale (California Water Atlas, 1978), water flow in the California Aqueduct normally ranges between 500 to 1,450 cubic feet per second. No failures of the Aqueduct system have occurred within the project site or in immediately surrounding areas.

Figure 29 also identifies the probable maximum flood inundation areas that could occur as a result of an Aqueduct levee breach on either side of the Aqueduct under existing conditions. This area is based on Aqueduct flow volumes, topography and the existing drainage system.

Areas to the east of the Aqueduct could be subject to floodwater inundation if the east Aqueduct levees are breached. However, the areal extent of any flooding from this breach would primarily be confined to the Anaverde Creek area immediately to the east of the Aqueduct. The volume of waters that would be released in the event of a breach would be controlled by the shut-off system in place along the length of the entire Aqueduct system. There is one shut-off gate within the City Ranch site, approximately 1/4 mile west of the eastern project site boundary and another shut-off gate just 1/8 mile north of the northern project boundary. The two structures are approximately 1 and 1/2 miles apart. Additional control structures exist at the Ritter Siphon approximately 1/2 mile north of the site and approximately 7 miles east of the site. In addition to the shut-off system, the Department of Water Resources maintains a graded channel within its right-of-way capable of conveying flood waters from a 500-year storm to and away from the Aqueduct storm drain culverts. This channel also controls
the spread of water from an Aqueduct failure and protects the central portion of the project site from high velocity flows and erosion.

Areas to the west of the Aqueduct and south of the Amargosa siphon could also be subjected to floodwater inundation if the west Aqueduct levees failed. However, the areal extent and duration of any flooding would be minimal. Any waters released from the western portion of the project site would intrude onto areas immediately adjacent to the Aqueduct. These waters would flow primarily southeastward following topography to either of two existing box culverts systems that extend under the Aqueduct on the project site. The existing culverts have capacities of 5,590 and 1,650 cfs (PHB, 1990), respectively, while the peak flow in the Aqueduct is approximately 1,450 cfs (Figure 30). This provides adequate drainage relief to prevent extended flooding or standing water west of the Aqueduct.

Storm Drainage

A hydrology analysis was completed for the project site (PHB, 1990, Appendix D) using a 50-year capital storm frequency analysis per the Los Angeles County Flood Control District’s criteria. Assuming a 50-year frequency rainfall, runoff within Anaverde Creek at the eastern boundary of the project site would be 2,449 cubic feet per second (cfs). Estimated northerly drainage flow into the Amargosa Creek watershed from the City Ranch site for the 50-year recurrence storm event would be 280 cubic feet per second (PHB, 1990) (Figure 30).

Presently existing storm drain systems are limited to two box culvert systems which pass beneath the Aqueduct; one is near the old ranch buildings (triple-box with a total free capacity of 5,590 cfs), and one is to the southeast (double-box with a total free capacity of 1,650 cfs) (Figure 30). Localized grading has been done in selected areas to control surface flow away from roads and at canyon crossings. No other engineered storm drainage devices presently exist on the project site.
5.6.2 Impacts

Flooding

As part of the grading plan for the proposed project, building pads and roadways in planning areas situated in the area flooded by the 50-year capital storm within the AnaVerde Creek will be raised above the level of the 50-year capital flood zone as required by City Engineering Design Standards. Flood Control basins and storm drain channels will be created to handle storm runoff from these areas. According to the development plan for the proposed project, this grading would occur in portions of residential Planning Areas 10, 12, 14, 15, 16 and 19A, school site 11, open space areas 9, 13, 18 and 35, and portions of the City Ranch Road alignment, Bridge Road and Avenue S. Upon completion of the proposed project, hazards associated with the 50-year capital storm will be eliminated from the project site (Figure 31).

Failure of the California Aqueduct could cause flooding in parts of Planning Areas 2, 4, 9, 13, 15, 20, 21, 22, 23 and 24 (Figure 31). As part of the grading plan for the project site, building pads and roadways will also be elevated in low areas adjacent to the Aqueduct in Planning Areas 3, 15, 20, 21, 23 and 24 to raise these areas from possible Aqueduct failure flooding. Planning Areas 2, 4, 9, 13 and 22, however, would not be elevated above potential flood hazards. Any structures built in impacted portions of these park or golf course areas would be damaged by flooding in the case of an Aqueduct failure or breach of the Aqueduct. In particular, the golf course clubhouse site may be impacted. This is considered a significant impact.

Proposed Storm Drainage

According to the hydrology study (PHB, 1990), peak surface water flow discharge for a 50-year capital flood event for the developed site will be 2,671 cfs. This is 9% greater than runoff from the undeveloped site. Northerly flows into Amargosa Creek from the project-site after development are estimated to be 394 cubic feet per second for a 50-year
capital storm event (Figure 32).

Preliminary drainage studies (PHB, 1990) have determined the need for drainage improvements to channel storm runoff and separate debris flow. This could be accomplished by a system of closed conduits, open channels, earthen swales and flood control basins. Figure 33 depicts storm drainage facilities 24 inches in diameter or larger. These storm drains range in size from 24 to 96 inches depending upon accumulation of flows. These systems would need to be designed in conjunction with surface water collection features such as inlets from natural channels in the foothills and catch basins in streets. Pipes would need to carry flows up to approximately 700 cfs. Pipes would need to be sized to prevent runoff from backing up into inlet facilities. Open channels and culverts would need to run along Planning Area 19A across Avenue S then between Planning Areas 15 and 20. These would need to be approximately ten feet deep and twenty feet wide. The channel would need to carry flows of approximately 2,000 cfs. The construction would need to be of reinforced concrete.

Several flood control basins would also be needed. These basins would collect natural drainage runoff, screen debris and rocks and reduce peak surface water flows. The debris basins will need to be permanent facilities. In locations where natural channels are intercepted from adjacent property which may be developed in the future, flood control basins are shown as temporary in anticipation of relocation upstream onto adjacent developments. Temporary basins shall be constructed as though they will be permanently maintained and operated.

To control the increase in runoff due to proposed project development, approximately 150 acre feet of storage capacity in flood control basins would be needed. Figure 33 shows several potential flood control basin locations. Some of these basins may not be needed. Final configuration and location of these basins will be determined with State Department of Water Resources, the Los Angeles County Flood Control District, the
City of Palmdale Department of Public Works, the City Engineer, the Parks and Recreation Department, and the Planning Department. One of the potential flood control basin locations is north of the Aqueduct in a wetland area. Development in this area would require a 404 Permit from the U.S. Army Corps of Engineers and a 1603 Agreement from the California Department of Fish and Game.

Proposed Assessment District 90-1 drainage improvements to the Amargosa Creek would adequately accommodate increased northerly flows from the project site into the Amargosa Creek. If the Assessment District does not get approved or the proposed improvement built, the applicant has property north of the project site in which sufficient flood control basin facilities could be built which will adequately handle increased northerly flows. Runoff impacts into Amargosa Creek are therefore not considered significant.

Water collected from the flood control basins and general tract areas would need to flow through pipes, closed conduits or open channels. Inlet/outlet drainage structures, catch basins and culverts (e.g., along streets) would need to connect to these major conduits and channels. The improvements on the Master Drainage Plan show that Planning Areas 17, 27, 28A and 31 would accept hillside runoff, collect it in flood control basins and convey it northeasterly to flood control basins in Planning Areas 15 and 23. Surface flow from the west which enters City Ranch would be collected in a system of swales and channels and conveyed to the flood control basin in Planning Area 15 before crossing under the Aqueduct. On-site developed areas are anticipated to use a combination of street, curb and gutters, catch basins, underground conduits and open channels to convey storm runoff safely through the developed areas of City Ranch.

Post-development runoff has the ability to pick up and transport urban pollutants such as pesticides, fertilizers, and household and commercial chemical products into the storm drains. This is of particular concern with regard to the wetland area north of the Aqueduct as the storm drainage improvements necessary to handle on-site runoff
would direct flows to this area. Low flow non-storm runoff originating from excess irrigation or household flows such as from car washing, etc., could contain these contaminants and therefore pose as a harmful impact to the wetland habitat. Storm flows, on the other hand, would be able to dilute urban pollutants with large volumes of water thereby minimizing risk to plant and animal life. Low-flow urban runoff has been estimated at approximately 1,300 cubic feet of water daily (PHB, 1990). A low-flow containment system may be needed to contain these low-flow non-storm discharges upstream of the Aqueduct culverts and upstream of the wetland area to protect the area from urban pollutants.

All of the proposed storm drains for Anaverde Creek connect to the culverts which drain under the Aqueduct. The Department of Water Resources (DWR) has designed the channels downstream of the Aqueduct to be non-eroding as a protection for their facilities. DWR culverts and the topography downstream of those culverts are the controlling factors for storm drain discharges from City Ranch. The construction of storm drains west of the Aqueduct would not change flow velocities east of the Aqueduct. The wetlands area, east of the Aqueduct would, therefore, not be subject to more frequent or higher velocity flows as a result of development of the proposed project.

5.6.3 Mitigation Measures

The following mitigation measures would eliminate significant flooding/surface drainage impacts:

- Habitable structures and public facilities, including the golf course clubhouse, shall be constructed above the flood plain level determined by the 50-year Los Angeles County capital storm event. Water will be conveyed off-site via proposed storm drainage facilities.
• Building pads and roadways in areas which would be flooded in the event of a failure of the California Aqueduct (Figure 31) shall be raised above the anticipated floodwater levels.

• All storm drainage improvements depicted on Figure 32 shall be implemented as part of the proposed project. This includes storm drains, channels, and detention and debris basins.

• Low flow containment system will need to be constructed to accommodate urban runoff flows during the dry seasons to prevent deterioration of water quality in wetland areas and streams as required by the City Engineer. (See Figure 34 for a conceptual design of the kind of low flow containment system.)

• The proposed golf course will need to have a separate runoff collection system along City Ranch Road to direct flows away from the wetland area. This collection system shall be subject to the applicable laws for point source discharge of the Regional Water Quality Control Board.

• The applicant shall submit an Erosion Control Plan for each development application for review and approval by the City Engineer prior to issuance of grading permits. In addition, the applicant will demonstrate each development application complies with the provisions of any National Pollution Discharge Elimination System permit requirements that may be required by other regulatory agencies. At the time of submittal of a development application for the golf course, the applicant shall provide for the controlled use of pesticides and fertilizers on the golf course by limiting the frequency and type of fertilizers/pesticides used and requiring application by qualified persons.

• Modifications to natural drainage courses shall conform to City, County, State, and Federal Law.
OVERLAND FLOW PERCOLATION FACILITY CAPTURES NUISANCE FLOW AND FIRST FLOW OF SMALL STORM EVENTS.

18" OUTLET PIPE

TO AQUEDUCT UNDERCROSSING

12" INLET PIPE

FLOOD CONTROL BASIN

STORM DRAIN INLET

Source: PSOMAS 1990

CONCEPTUAL DESIGN FOR LOW FLOW RUNOFF MITIGATION
• Fencing shall be installed along constructed drainage channels, as appropriate, for safety purposes.

• Modification of drainage patterns will not be permitted across property lines without written consent of affected property owners.

• Final Subdivision Maps shall be accompanied by Drainage Improvement Plans prepared by a licensed Civil Engineer and approved by the City Engineer.

• In accordance with the California Department of Real Estate disclosure format and procedures, all potential purchasers of real property which is shown within the FEMA 100-year flood plain on the Flood Insurance Rate Maps most recently circulated by FEMA, shall be notified of the situation, regardless of whether the actual flood hazard has been abated by other methods. Also, the applicant shall contact FEMA as soon as possible after eliminating areas from the 100-year flood hazard zone to request modifications of the Flood Insurance Rate Maps. The applicant shall then diligently pursue revisions of the maps until the 100-year flood hazard zone as modified by the development is depicted on them.

5.6.4 Cumulative Impacts

As development of the project site and surrounding vicinity occurs, overland flow and runoff volumes are expected to increase as a result of increased impervious surfaces and compaction of natural ground area which impedes infiltration. However, the City of Palmdale Public Works Department requires that post-development peak runoff volumes from new developments be equal to or less than peak runoff volumes prior to development. Therefore, cumulative runoff impacts are not anticipated.

5.6.5 Unavoidable Adverse Impacts

With adoption of proposed storm drainage plans and mitigation measures indicated above, project impacts with regard to hydrology would not be significant.
5.7 BIOLOGY

5.7.1 Existing Conditions

The biological resources of the project site are primarily influenced by arid climatic conditions, varied topography, site geology, and historic and present day land use patterns. Five distinct plant communities can be recognized on the project site: desert woodland (an intergrade between California juniper woodland and Joshua tree woodland), Great Basin sagebrush scrub, alkali meadow, transmontane alkali marsh and non-native grass-land/pastureland. The designations follow the terminology of Holland (1986). The plant communities present on the project site are delineated in Figure 35. The vegetation associated with the site are those able to adapt to extreme moisture stress levels ranging from drought to torrential rainstorms. Land use disturbances affecting vegetation distribution include extensive clearing of the natural areas for agricultural use and development of the California Aqueduct.

Wildlife associated with the plant communities of the project site comprise a diverse assemblage of species. Wildlife habitat on the site is generally of high quality, especially in those areas containing native plant communities. Several sensitive animal species utilize habitat within the project site.

Plant Communities

The desert woodland community occupies much of the portion of the project site between Elizabeth Lake Road and the San Andreas Rift Zone. This open woodland is characterized by a mixture of California junipers and Joshua trees, with various other shrubs interspersed. The understory is dominated by Cooper's and linear-leaf goldenbush, Great Basin sagebrush, rabbitbrush, fourwinged saltbush, California buckwheat, Nevada joint-fir, and paperbag bush, along with grasses such as cheat grass, red brome, and desert needlegrass. Approximately 4,000 Joshua trees have been identified within the desert woodland community on the project site (Lee Newman and Associates, 1989; Figure 36). Trees range in size from 6 inches to 15 feet in height. Diameters vary from (4) four to (11) eleven inches. The overall health of the trees is satisfactory and the project site contains some remarkable specimens. In the northeastern portion of the project site lies an east-west running ridge which contains components of mixed chaparral and junipers. Scrub oak, mountain mahogany, and holly-leaf redberry are present, but most notable in this area is an abundance of bigberry manzanita. A juniper seedling area occupies a portion of the northwest section of the project site south of the ridge.

Great Basin sagebrush scrub occupies a flat area bordering Elizabeth Lake Road in the northeast corner of the site. Great Basin sagebrush is the dominant perennial plant at this location, with small amounts of rabbitbrush and goldenbush interspersed. This dense scrub community has a poorly developed understory, mainly of introduced grasses.

Two meadows are located on the project site along the southern edge of the San Andreas Rift Zone. Utilizing the vegetation community classifications provided by Holland (1986), the vegetation found in these areas best fits the description of alkali meadow. As defined, alkali meadows consist of dense to fairly open growth of salt-tolerant plants, including perennial grasses and sedges that are usually low-growing.
NOTE: (1) All ellipsoid-type figures as indicated on the map are representative of approximate Joshua Tree locations and actual number of trees.

(2) All trees were field located by LNA October 19 - 21, 1989


JOSHUA TREE LOCATIONS
For purposes of differentiation, the meadows on the project site are termed the west meadow and the east alkali meadow (Figure 35).

Soils in the two meadow areas are of the Hanford-Greenfield association described by the Soil Conservation Service (1969) as “slightly acid to mildly alkaline throughout....” A range of alkalinity is therefore normal for this association. Based on surface inspection, the west meadow does not appear to have alkali soils. The east alkali meadow, however, is very alkaline and obvious salt deposits are present on the soil surface.

Vegetation diversity in the west meadow is low as a result of years of grazing. The pastureland here is dominated by wire grass, but salt grass, alkali dropseed, sedge, yerba mansa and alkali mallow also occur. The site of this meadow area has apparently increased from its original condition as a result of irrigation to improve the pasture. Although irrigation ceased in 1986, this area still remains green and supports obligate wetland plants (species whose estimated probability of occurrence in wetlands is >99% under natural conditions; Reed 1988). However, it appears that drier vegetation is gradually encroaching along the margins.

The east alkali meadow community occurs along the north side of the California Aqueduct from the bend (in the Aqueduct) to the eastern property boundary. At its eastern end, the east alkali meadow intergrades with a marsh. The marsh vegetation community here best fits Holland’s definition of transmontane alkali marsh (Figure 35). Transmontane alkali marshes are dominated by perennial, emergent, herbaceous monocots with short summer growing seasons. The transmontane alkali marsh on the project site contains a flora characteristic of alkaline soils, meadows and wetlands. Examples of alkali plants present are frankenia, salt grass, alkali dropseed, alkali goldenbush and two species of saltbush. Meadow plants include saltgrass, alkali dropseed, rushes and wiregrass. Wetland plants include cattails, alkali bulrush, pickleweed, yerba mansa, heliotrope and wiregrass. This marsh was dry in 1990 and has been somewhat degraded by grazing.
The two portions of the east alkali meadow qualify as wetlands under federal wetlands criteria (Sanders and Associates, 1990). One wetland area (2.9 acres) occurs in a depression of a former stream channel of the Anaverde Creek. It contains obligate wetland species and facultative wetland species (species whose estimated probability of occurrence in wetlands is 67% to 99% under natural conditions). In this area, wetland hydrology is suggested. The second wetland area (18.3 acres), consists of a former stream channel of Anaverde Creek and a broader depression on the east side of the bend in the Aqueduct (Figure 35). Vegetation in this area is dominated by salt-tolerant plants such as the facultative wetland species frankenia and saltgrass. Pickleweed, an obligate wetland species, also commonly occurs throughout this area, but is not usually a dominant species. Isolated pockets of cattails, also an obligate wetland plant, occur in areas where standing water is often present.

Non-native grassland or pastureland communities occupy the remainder of the project site. These areas have all been subject to past disturbances, mainly livestock grazing. Dominants of the non-native grasslands include red brome, cheat grass, red-stem filaree and various mustards. Some native annual wildflowers are present in these areas. Most of this area is currently used as pasture. Other portions appear to have been used for crops or grazing in the past, and are currently in early successional stages of what may be described as “rabbitbrush” scrub.

The north facing hillsides along the southern property boundary appear to have burned sometime in the past, and now contain mostly non-native grassland species, scattered junipers and other shrubs, and various annuals. It is likely that prior to burning, this area was a sparse California juniper woodland. Even though many of the annual grasses in this area are the same as those found in the pasturelands of the flatter portions of the project site, wildlife use is much higher on the slopes than in the pasture areas. This higher biological diversity can be attributed to the scattered shrub cover, rock outcrops, and a relative lack of disturbances from livestock and humans. A prominent drainage in the southwestern portion of the project site contains a noteworthy “subcommunity” comprised mainly of desert olive, elderberry, rock gooseberry,
and sticky nama. These shrubs form an almost solid band of vegetation along this drainage.

**Wildlife**

Wildlife diversity is high within the desert woodland, around the agricultural fields and eastern alkali meadow. The presence of the California Aqueduct and a small ranch pond just south of the existing ranch structures increases the amount of invertebrates (mainly insects) in the area. Insectivorous birds are plentiful in the area. Cliff swallows, which nest in colonies, often around manmade structures near water, were observed nest building under the roadway bridge over the Aqueduct near the ranch house. These birds forage widely over the area, especially over open water and the agricultural fields. The agricultural fields also provide abundant seeds for granivorous birds and mammals.

A total of 70 bird species were observed on the site; others are expected within the area and on-site during other times of the year. Among the birds which are resident on the site are northern mockingbird, scrub jay, horned lark, cactus wren, Bewick's wren, rock wren, common raven, California thrasher, California quail, California (brown) towhee, rufous-sided towhee, and house finch. Species which are winter visitants to the project site include white-crowned sparrow, dark-eyed junco, savannah sparrow and yellow-rumped warbler. The field survey performed in late April 1989, revealed the presence of species which spend only spring and summer in the region, such as ash-throated flycatcher, northern oriole, and Scott's oriole. One pair each of barn and great horned owls occupy the site, with the barn owls nesting inside the ranch's barn. An unusually large number of ravens are present near the ranch with up to 46 birds observed at one time; seven active raven nests were located in 1990. Several birds which preyer meadows frequent the eastern alkali meadow and marsh, including western meadowlark, lark sparrow and three species of blackbirds. Western meadowlark was also observed at the western meadow. Northern harrier (marsh hawk), a bird characteristic of wetland areas, was observed hunting over the eastern meadow.
Reptiles observed during field investigations included side-blotched lizard, western fence lizard, desert night lizard, western whiptail and coachwhip. Lizards were common to abundant in the desert woodland and Great Basin sagebrush scrub. Only two species of snakes were seen during the field surveys, (gopher snake and coachwhip) and their numbers appear to be locally depleted relative to the amount of habitat available.

Black-tailed hare and Audubon's cottontail appear to be common throughout the property. California ground squirrels were seen in several areas, and are very abundant in the agricultural fields. Indirect observations of mammals in the form of sign (tracks, scat, burrows) were noted throughout the property, and included species such as coyote, grey fox, Botta's pocket gopher, and woodrat. Many nocturnal rodents were captured in the spring 1990 live trapping effort.

Because the project site is within approximately 2-1/2 miles of a recorded occurrence of the Mohave ground squirrel, a State threatened species, diurnal trapping surveys were performed in 1989 and 1990 to ascertain its presence or absence on the site. No Mohave ground squirrels were captured or observed during the survey. The upland habitat on the City Ranch site is considered marginal for this species. The California ground squirrel is dominant over the site and the two species are rarely found together. Although the Mohave ground squirrel has been reported in Palmdale, the last record is of its occurrence is from 1920, at a location approximately 2.5 miles northeast of the project site.

**Wildlife Movements**

The movements of animals on the project site such as deer, coyote, fox and badger, are expected to take place largely east-to-west along the flanks of the Sierra Pelona and the San Andreas Rift Zone, where vegetation provides both food and cover. Dispersal across the Anaverde Valley between these mountainous areas is more tenuous because of the open, flat terrain, and is additionally blocked by the Aqueduct. Of course, the
movements of flying species across the valley is relatively unrestricted.

**Sensitive Species**

A review of the lists of state and federally designated threatened and endangered species and the California Department of Fish and Game's Natural Diversity Data Base and the California Native Plant Society's *Inventory of Rare and Endangered Vascular Plants of California* revealed that two sensitive plants and nine sensitive animals have been previously recorded in the region of the project site. None of these occurrences were recorded on the project site itself. During the field survey, six additional sensitive species (one plant, five animals) were recorded. All sensitive species either occurring (observed) or potentially occurring (as reported by the literature) on the site are presented in Table 7. Sensitive species and communities are so called because of their limited distribution, restricted habitat requirements, particular susceptibility to human disturbance, or a combination of these factors.

**Alkali mariposa lily** occurs in alkaline meadows and springy places, often within creosote bush scrub, at elevations ranging from 2,500 to 4,000 feet. It occurs in the Mohave Desert at the north base of the San Bernardino Mountains, and in the San Gabriel Mountains and ranges east to Las Vegas. In the vicinity of the project site, alkali mariposa lily is known within the City of Lancaster, several miles to the northeast. This plant is a bulbous geophyte which flowers from April to June. During a site survey on April 28, 1990 a focused search was conducted within the eastern alkali meadow and marsh areas and the western meadow on the site, but alkali mariposa lily was not found. The marsh area was in a very dry condition during 1989 and 1990, and it is possible that alkali mariposa lily, if present, failed to come up this year. Despite the fact that habitat on the City Ranch site appears suitable, it is believed that this species does not occur on-site.
<table>
<thead>
<tr>
<th>Species &amp; (Habitat)</th>
<th>Status*</th>
<th>Occurrence Probability**</th>
<th>Number of Sightings</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Calochortus striatus</em></td>
<td>C2</td>
<td>High</td>
<td>0</td>
</tr>
<tr>
<td>Alkali mariposa lily (Alkali meadows and springs)</td>
<td>ND</td>
<td>(Not found in 1989 or 1990)</td>
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</tr>
<tr>
<td></td>
<td>List 1</td>
<td>R-2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>D-2</td>
<td></td>
</tr>
<tr>
<td><em>Calystegia peirsonii</em></td>
<td>C2</td>
<td>Occurs</td>
<td>&lt;100</td>
</tr>
<tr>
<td>Peirson’s morning-glory (Joshua tree woodland, pinyon-juniper woodland, chaparral)</td>
<td>ND</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>List 4</td>
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</tr>
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<td></td>
<td></td>
<td>E-1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>D-3</td>
<td></td>
</tr>
<tr>
<td><em>Opuntia basilaris</em> var. brachyclada*</td>
<td>C2</td>
<td>Occurs</td>
<td>330</td>
</tr>
<tr>
<td>Short-jointed beavertail (Dry desert slopes)</td>
<td>ND</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>List 1</td>
<td>R-2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>D-3</td>
<td></td>
</tr>
<tr>
<td><em>Phrynosoma coronatum blainvillei</em></td>
<td>C2</td>
<td>Moderate</td>
<td>0</td>
</tr>
<tr>
<td>San Diego horned lizard (Chapparal, coastal sage scrub, woodlands)</td>
<td>CSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Accipiter cooperii</em></td>
<td>ND</td>
<td>High</td>
<td>0</td>
</tr>
<tr>
<td>Cooper’s hawk (Woodlands; many habitats during migration)</td>
<td>CSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Accipiter striatus</em></td>
<td>ND</td>
<td>Occurs</td>
<td>1</td>
</tr>
<tr>
<td>Sharp-shinned hawk (Woodlands; many habitats during migration)</td>
<td>CSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Agelaius tricolor</em></td>
<td>C2</td>
<td>Occurs</td>
<td>1</td>
</tr>
<tr>
<td>Tricolored blackbird (Marshes, agricultural areas)</td>
<td>ND</td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Asio otus</em></td>
<td>ND</td>
<td>Occurs</td>
<td>1</td>
</tr>
<tr>
<td>Long-eared owl (Riparian woodlands, orchards)</td>
<td>CSC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species &amp; (Habitat)</td>
<td>Status*</td>
<td>Occurrence Probability**</td>
<td>Number of Sightings</td>
</tr>
<tr>
<td>------------------------------</td>
<td>---------</td>
<td>--------------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td><em>Aquila chrysaetos</em> Golden eagle (Mountainous areas grasslands)</td>
<td>1) ND 2) CSC</td>
<td>Occurs</td>
<td>2</td>
</tr>
<tr>
<td><em>Circus cyaneus</em> Northern harrier (Marshes; agricultural areas during winter)</td>
<td>1) ND 2) CSC</td>
<td>Occurs</td>
<td>1</td>
</tr>
<tr>
<td><em>Elanus caeruleus</em> Black-shouldered kite (Oak and riparian woodlands; agricultural areas)</td>
<td>1) ND 2) CP</td>
<td>Moderate</td>
<td>0</td>
</tr>
<tr>
<td><em>Falco mexicanus</em> Prairie falcon (Steep cliffs, open areas)</td>
<td>1) ND 2) CSC</td>
<td>Occurs</td>
<td>1</td>
</tr>
<tr>
<td><em>Toxostoma lecontei</em> Le Conte's thrasher (Creosote bush scrub saltbush scrub)</td>
<td>1) ND 2) CSC</td>
<td>Occurs</td>
<td>1</td>
</tr>
<tr>
<td><em>Plecotus townsendii pallescens</em> Pale big-eared bat (Desert areas)</td>
<td>1) ND 2) CSC</td>
<td>Low</td>
<td>0</td>
</tr>
<tr>
<td><em>Taxidea taxus</em> American badger (Grasslands, other open areas)</td>
<td>1) ND 2) CSC</td>
<td>High</td>
<td>0</td>
</tr>
<tr>
<td><em>Vulpes macrotis arsipus</em> Desert kit fox (Desert scrub)</td>
<td>1) ND 2) SA</td>
<td>Moderate</td>
<td>0</td>
</tr>
<tr>
<td><em>Spermophilus mohavensis</em> Mohave ground squirrel (Creosote bush scrub, saltbush scrub)</td>
<td>1) C2 2) CT</td>
<td>Absent</td>
<td>0</td>
</tr>
</tbody>
</table>

* For Status Designations, see page 14.
** For definitions of Occurrence Probability, see page 15.
KEY TO TABLE 7

* For Status Designations, see below.

Status Designations

1) Federal Designations:

E = Federally listed, endangered.
T = Federally listed, threatened.
CI = Category 1 candidate species. Enough data are on file to support the federal listing.
C2 = Category 2 candidate species. Threat and/or distribution data are insufficient to support federal listing.
C3a = Extinct.
C3b = Taxonomically invalid.
C3c = Too widespread and/or not threatened. No longer considered as a federal candidate for listing.
ND = Not designated.

2) State Designations:

CE = State listed, endangered.
CT = State listed, threatened (previously listed as rare).
CP = Fully protected under California Fish and Game Code, Sections 3511, 4700, 5050, 5515.
CSC = California Department of Fish and Game Species of Special Concern.
W = Watch list, the California Department of Fish and Game is currently collecting distribution information on these species.
SA = California Department of Fish and Game “Special Animals” list.
ND = Not designated.

3) California Native Plant Society (CNPS):

List 1 - Plants rare and endangered in California and elsewhere.
List 2 - Plants rare or endangered in California, but more common elsewhere.
List 3 - Plants about which we need more information.
List 4 - Plants of limited distribution (a watch list).

R-E-D CODE:

R (Rarity)
1 - Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction or extirpation is low at this time.
2 - Occurrence confined to several populations or one extended population.
3 - Occurrence limited to one or a few highly restricted populations, or present in such small numbers that it is seldom reported.

E (Endangerment)
1 - Not endangered.
2 - Endangered in a portion of its range.
3 - Endangered throughout its range.

D (Distribution)
1 - More or less widespread outside California.
2 - Rare outside California.
3 - Endemic to California (i.e., does not occur outside California).

** Definitions of occurrence probability:
Occurs: Observed on the project site by TMC biologist.
High: Reported sightings in surrounding region, habitat on the site is a type often utilized by the species.
Moderate: Reported sightings in surrounding region, habitat on the site is a type occasionally utilized by the species; or site is within known range of the species and habitat on the site is a type occasionally utilized by the species.
Low: Site is within the known range of the species but habitat on the site is rarely used by the species.
Absent: A focused survey for this species failed to reveal its presence.
Information sources of status descriptions are derived from the California Natural Diversity Data Base and California Native Plant Society.
Peirson's morning-glory occurs only in Los Angeles County, in habitat ranging from creosote bush scrub and Joshua tree woodland on the desert slopes of the San Gabriel Mountains, to chaparral and coastal sage scrub in the more cismontane portion of its range. It is a perennial, trailing or twining herb which produces small white flowers in May or June. This plant was found on the project site during the field survey on steep north facing hillsides in the south central portion of the project site. At least 30 individuals were seen in this area, which appears to have been burned within recent years. The plants were just beginning to flower during the last field survey performed during early spring. During the Mohave ground squirrel trapping survey, this area was again visited, and the dried remnants of approximately 100 plants were found. Figure 37 indicates the area where this plant was located during site surveys, although, the entire mountainous upland southwest portion of the project site would appear to be suitable habitat for this species.

The current endangerment status of Peirson's morning-glory is that it has been placed on the California Native Plant Society's List 4, a "watch list" which includes "[species] of limited distribution in the state whose vulnerability or susceptibility to threat appears low at this time. While these plants cannot be considered rare from a statewide perspective, they are uncommon enough that their status should be monitored regularly. Many areas where the plants occur may be significant locally" (Smith and Berg, 1988). This species does, however, not meet the definition of Section 1901, Chapter 10 (Native Plant Protection) of the California Fish and Game Code, and is therefore not eligible for state listed status. There are no specific provisions in CEQA for the protection of this species.

Short-jointed beavertail cactus occurs in Joshua tree and California juniper woodland at elevations ranging from 4,000 to 7,500 feet on the desert slopes of the San Bernardino and San Gabriel Mountains and in the Providence Mountains. According to the California Natural Diversity Data Base, the western edge of this species' known range is in the vicinity of Pearblossom, approximately 20 miles east of the project site. However, at least 330 short-jointed beavertails were noted on the project site during the current
study. Tierra Madre Consultants biologists also located this species recently on a property near the intersection of Barrel Springs Road and the California Aqueduct, approximately 5 miles east of the City Ranch site. Much of the remaining undisturbed land on the project site contains short-jointed beavertails, as shown on Figure 37.

The short-jointed beavertail has been placed on the California Native Plant Society's List 1B; plants that are rare, threatened or endangered in California and elsewhere, and are "judged to be vulnerable under present circumstances, or to have a high potential for becoming so because of their limited vulnerable habitat, the low number of individuals per population, or the limited number of populations. These plants meet definitions of Section 1901 and are eligible for state listing. However, like the Peirson's morning-glory, there are no protections in CEQA for this species.

The San Diego horned lizard frequents a variety of habitat types including coastal sage scrub, broad-leaved woodlands, and chaparral. This species is common in areas where there is loose sandy soil with low-growing brush nearby. Ants are the primary food source of this species, although it also eats beetles and other insects. Distinctive fecal pellets containing mostly ant parts can often aid in the detection of this species. Populations of this lizard are declining due to extensive collecting on wildlands near urban development areas and as a result of its habitat being converted to agricultural and urban lands. Records of San Diego horned lizards occur throughout much of the north slope of the San Gabriel Mountains. There is a moderate probability that they are present on the project site; this species was not observed on site during the site survey.

Cooper's hawk is an uncommon permanent resident of southern California which prefers lowland riparian woodland or less frequently, mountain canyons for nesting and foraging activities. It is considered a declining species due to habitat loss and the effects of the presence of pesticides in the food chain resulting in egg shell thinning. No suitable nesting habitat exists on the property, but migrant or wintering birds could occur occasionally on-site to forage.
A sharp-shinned hawk was observed foraging over the desert woodland during the March 21 site survey. This individual was most likely a migrant, although wintering sharp-shinned hawks may also utilize the site. This raptor feeds on small birds, such as white-crowned sparrows and juncos, which it captures during swift flights through woodlands or scrub. The sharp-shinned hawk is a fairly common migrant and winter visitor in southern California.

Tricolored Blackbirds are very gregarious marsh birds which occur only in California, Oregon, and Baja California. This species nests in colonies within cattail marshes, with colonies sometimes numbering thousands of birds. Tricolored blackbirds have suffered population declines in recent times due mainly to the destruction of freshwater marshes. Site surveys determined that nesting of tricolors did not occur on the project site in 1989. A single individual seen during June was foraging, not nesting, in an agricultural field on-site.

The long-eared owl is an uncommon resident of riparian woodlands and orchards, occurring most commonly in southern California in the desert regions. This species is known to nest in colonies of three or four family groups. A single individual of this species was observed on-site and was probably a migrant.

Golden eagles nest in rugged mountainous areas which have adjacent open grassland or scrubland where prey occurs. This species feeds mainly on ground squirrels, rabbits, and other small to medium sized mammals. Its home range averages approximately 35 square miles. There are numerous sites in this region of southern California where suitable nesting habitat may be found. No suitable nesting sites exist on the project site, however, the more open areas of the property, such as the agricultural fields, may be utilized for foraging.

Northern harriers (formerly called marsh hawks) are migratory throughout much of North America and are permanent residents in many parts of their range including portions of California. Harriers inhabit coastal and river marshes, wet meadows, and
open lands. They usually nest on the ground in areas with tall brush, rushes, or reeds. This species feeds on ground-dwelling mammals, reptiles, crustaceans, small birds, and carrion. Although nesting on the City Ranch property is very unlikely, one individual, a female, was observed on the site in April, 1990. It is believed that this harrier was migrating north because it was not seen again in May despite several searches of the east and west meadows.

Black-shouldered kites inhabit oak and riparian woodlands and utilize adjacent open areas for foraging. The City Ranch site is outside of the breeding range of this species. There is a moderate probability that kites may occasionally utilize the site for foraging.

A prairie falcon was observed foraging over pastureland near the central portion of the project site. The range of this species extends over much of the western United States. It inhabits arid, open lands and occasionally woodlands. Its nests are usually on high cliff faces in crevices or caves. The prairie falcon is a year-round resident in much of its range, descending to open agricultural lands and coastal plains during fall and winter months. This species feeds primarily on small birds but also on small mammals and reptiles. Threats to this species include pesticide contamination, robbing of aeries by falconers, hunting, human activities near nest sites, and habitat conversion by development activities. Suitable nesting sites may be located nearby in the San Gabriel Mountains, but not on the project site.

Le Conte's thrashers inhabit areas with sparse desert scrub, especially those which contain small washes. This bird can be found throughout much of the Mojave and Colorado Deserts, and an isolated population exists in southwestern San Joaquin Valley, near Taft and Maricopa. Its population densities in the Mojave Desert are among the lowest of passerine (perching) birds, with estimated densities in optimum habitat of less than five birds per square mile. This low population density together with their secretive habits decreases the probability of their detection by observers. Only during breeding activities, when males sing from exposed perches (often the tops of shrubs), are they relatively easy to detect. Silver cholla and saltbush are the plants
most preferred by this species for nesting sites. The 1989 field surveys were conducted during the breeding season of this species, but it was not detected. However, a single bird was seen in late April 1990, during the ground squirrel trapping studies. The location was searched again several times in May 1990, but the LeConte’s thrasher was not seen again. Therefore, it may have been passing through rather than nesting in the marginal habitat on the City Ranch site. Perhaps it was displaced from more suitable habitat on the desert floor nearby, where a great deal of construction is underway.

The pale big-eared bat is a sub species of the Townsend’s big-eared bat and is generally known to occur in the Central Valley and southeast desert area. The probability of occurrence on the project site is low. These bats need roost sites away from human disturbance. The only potential roost sites would be ranch buildings of the former City Ranch, but agricultural activities over the years have probably been too disruptive for this species to utilize the site. It is possible that these bats forage on the site.

The American badger is a seldom-seen animal which, in California, occupies a wide variety of habitats. Open areas are preferred, but almost anywhere prey can be found seems to suit this species. Nearly all of its food sources, mainly gophers, ground squirrels, or kangaroo rats, are obtained by digging out the victim’s burrow. Although direct observations of badgers are infrequent, scats or fresh diggings around rodent burrows can indicate their presence. Although no badgers, or definitive sign of their presence were detected on the City Ranch site, all of the habitat requirements seem to be present. In addition, the species is known to occur within Joshua tree and juniper habitats on the north slopes of the San Gabriel Mountains. There is a high probability that it occurs on the City Ranch property.

The desert kit fox is a small, primarily nocturnal fox which occurs throughout the deserts of North America. It is found in a wide variety of habitats including creosote bush scrub, shadscale scrub, alkali sink and Joshua tree woodland. The desert woodland or Great Basin sagebrush habitats found on the project site may be suitable for the kit fox, but none were found during the on-site survey.
The *Mohave ground squirrel* occurs in a restricted portion of the Mojave Desert, and in a wide variety of habitat types, including saltbush scrub, creosote bush scrub, shadscale scrub and Joshua tree woodland. It is absent from rocky, steep slopes and dry lake playas. It is diurnal and active from March through July; during the remainder of the year it becomes torpid within underground burrows. The most important threat to this species is habitat loss. This species was captured within 2.5 miles northeast of the site in 1920. The trapping survey performed for the current study indicated that the Mohave ground squirrel is not present on the project site.

5.7.2 Project Impacts

Construction of the proposed project would result in direct elimination of plant and wildlife habitat and consequently loss of biological resources within areas of the project site where residential lots, streets, the golf course, commercial development, school, and community parks are intended. According to the development plan for the proposed project, Planning Areas 2, 7, 29 and 32 with a combined total of approximately 404 acres would remain as natural open space. Although no rare, threatened, or endangered species of plant or animal as designated by the California Fish and Game Commission or the U.S. Fish & Wildlife Service will be affected by approval of the City Ranch Specific Plan, two sensitive plants known to occur on the site, Peirson’s morning-glory and the short-joint beavertail cactus, would be greatly disturbed as a result of project development.

Although approximately 404 acres of the project site are designated as natural open spaces, these areas do not, for the most part, coincide with the location of the short-jointed beavertails and Peirson’s morning-glories occurring on the site. Thus most individuals of each species would be destroyed as a result of construction activities. Planning Area 32, which is designated as natural open space, contains habitat for Peirson’s morning-glories but no known occupied habitat areas. All known-occupied locations of Peirson’s morning-glory would be lost to single-family residential development in Planning Areas 30A and 31. Short-jointed beavertails are present in 5-100
Planning Areas 2, 32 and a small portion of Planning Area 7. Therefore, individuals within these areas would be preserved on-site. Planning Areas 8, 17 and 31 proposed for single-family detached residential use, and Planning Area 13 proposed as a golf course also contain numbers of the short-jointed beavertail. Individuals in these areas would be eliminated by proposed project development.

According to the City Ranch Specific Plan, development standards (p. V-60) "disturbance or grading which causes the removal or elimination of short-jointed beavertail shall be avoided. When these [sic] species will be disturbed, transplantation to Planning Areas 7 or 32 shall be performed". Furthermore, the plan states (p. V-60) that "prior to development of Planning Area 31, a program of mitigation by seed or other method shall be implemented which results in the establishment of these [sic] plant in suitable locations on or off the property as identified in the City Ranch EIR". While the cacti can be readily propagated vegetatively from the cactus stems or "pads" and therefore transplanted to an ex situ location with a reasonable chance for success, there is no precedent for restoration of the morning glory using seed, or any other method, and any such attempt to do so must be considered "experimental" with no guarantee for success. Moreover, officials of the Department of Fish and Game's Endangered Plant Program do not generally consider relocation of rare plants to be a viable mitigation alternative.

Under the proposed development plan, the east alkali meadow/transmontane alkali marsh habitat area coincides with a portion of Planning Area 13, south of the City Ranch Road alignment, designated as golf course/open space. This habitat continues just north of the California Aqueduct in the area owned by the State Department of Water Resources, not considered part of the project site. Grading to construct City Ranch Road, which would occur along the northern boundary of the east alkali meadow/transmontane alkali marsh habitat may encroach upon the alkali meadow wetland habitat. In addition, runoff volumes from the developed project site which would drain through the wetland area, may contain urban pollutants including fertilizers, pesticides, herbicides, salts, and detergents. Entrance of these pollutants into
the area and/or increased volumes of runoff and velocity could degrade the quality of the east alkali meadow/transmontane alkali marsh habitat.

As a result of project development, a large portion of the area containing the Joshua tree/juniper woodland would be developed as a golf course (Planning areas 4 and 13). The densest and best developed stands of these trees are located in the proposed golf course area. Another portion of the Joshua tree/juniper woodland would be developed as a single-family residential area (Planning Area 8). The rest would be converted to community park space (Planning Areas 1 and 9) or would remain as natural open space (Planning Areas 2 and 7). Though the opportunity exists to incorporate some of the trees into residential and golf course designs, up to 3,044 (or 75%) of the Joshua trees would be eliminated from the project site as a result of project development. (This assumes 50% of golf course area would be graded, avoiding the ridge area of Planning Area 13, and that all trees would be lost in Planning Areas 1, 4, 8 and 9.) The California juniper seedling area which coincides with portions of Planning Areas 1, 4, 10 and a portion of the City Ranch Road alignment would be eliminated.

Development of the proposed project would result in the potential for impaired wildlife movements in an east-west direction along the foothills of the Sierra Pelona and the San Andreas Rift Zone. Some especially shy species would likely avoid the developed project site environment entirely. Other species such as deer and coyote may continue to use the proposed open spaces but in fewer numbers than without project implementation.

At least five sensitive animal species utilize the site at least on an intermittent basis: golden eagle, prairie falcon, tricolored blackbird, sharp-shinned hawk and long-eared owl. Other species with a high or moderate chance of occurring on-site include: San Diego horned lizard, northern harrier, black-shouldered kite, American badger and desert kit fox. Construction of the proposed project would result in a reduction of habitat for these species.
Because the site has habitat for these sensitive species, it can be considered a valuable open space resource. Loss of this resource would contribute to the cumulative reduction of contiguous open space in the region. This reduction of contiguous open space adversely impacts territorial species which rely upon large expanses of land for their home ranges. Project development would result in the loss of part of the raptor foraging habitat in the region which would directly affect the raptor species known to be on-site: sharp-shinned hawk, golden eagle and prairie falcon.

Overall, implementation of the proposed project would result in fragmentation of the existing habitat of plants and animals into smaller discontinuous parcels. After a few years, the species diversity on the remaining fragments would be expected to decline. Preservation of 404 acres of natural open space on the project site would allow maintenance of a portion of the existing biological habitat and area for the transplantation of plants displaced elsewhere on the project site by project development.

5.7.3 Mitigation Measures

Implementation of the following measures would reduce project-related impacts on biological resources to an acceptable level:

**Disturbance to or Loss of Sensitive Flora and Fauna**

- Individuals of short-jointed beavertail in the impacted areas of Planning Areas 17 and 31 shall be transplanted into Planning Area 32. Similarly, those individuals impacted in Planning Areas 8 and 13 shall be transplanted into Planning Area 7. A written plan for such relocation shall be prepared and shall be subject to approval by the City Planning Department (which may require independent review) prior to site grading. The plan shall be prepared and implemented by a qualified horticulturist/botanist/restoration biologist, with thorough familiarity of the Antelope Valley region and demonstrated experience in transplantation of
cacti.

- A portion of Planning Area 31 shall be transferred to Planning Area 32 in order to preserve approximately 40 percent of the known occupied extent of Peirson's morning-glory located therein. The boundaries of Planning Areas 31 and 32 may be modified as shown on Figure 38, or as approved by the Director of Planning at the time of approval of tentative maps for Planning Area 31.

- A written plan for seed collection from impacted individuals of Peirson's morning-glory located in the portion of Planning Area 31 which shall be disturbed, for subsequent redistribution into Planning Area 32 shall be subject to approval by the City Planning Department (may require independent review) prior to site grading. The plan shall be prepared and implemented by a qualified botanist/horticulturist/restoration biologist, with thorough familiarity with the Antelope Valley region.

- The applicant shall consult with the Department of Fish and Game in order that potential impacts to Mohave ground squirrel may be addressed. If an endangered species permit is warranted, the permit must be completed and mitigation measures fully dedicated before issuance of a grading permit. Therefore, the consultation with CDFG will occur prior to issuance of any grading permit for the proposed project.

Alkali Meadows/Transmontane Alkali Marsh

- The land in Planning Area 13 south of the City Ranch Road alignment and north of the California Aqueduct property shall be set aside and designated as natural open space to preserve the east alkali meadow and transmontane alkali marsh habitat.

- The City Ranch Road alignment shall avoid the wetland areas. Landscaping, grading, and irrigation along the south side of the segment of City Ranch Road adjacent to the wetlands shall be kept to a minimum.
• If avoidance of the alkali meadow/transmontane alkali marsh is impossible, permits and agreements under Section 404 of the Clean Water Act and under 1603 of the State Fish and Game Code will be required from the U.S. Army Corps of Engineers and the California Department of Fish and Game, respectively. At a minimum, lost wetland acreage will be replaced in kind on a one-to-one acre basis. Also, a mitigation and monitoring plan, subject to CDFG approval, will be required in the event of any loss of alkali meadow/transmontane marsh habitat.

• Provisions will be made to divert low-flow surface runoff from entering the east alkali meadow/transmontane alkali marsh habitat. (See Hydrology Section Mitigation Measures.)

Native Plant Landscaping

• Native species such as California juniper, Great Basin sagebrush, four-winged saltbush, holly-leaf cherry (Prunus ilicifolia), and big-berry manzanita, and trees such as Joshua tree, Fremont cottonwood (Populus fremontii) and California sycamore (Platanus racemosa) shall be used for landscaping purposes to the maximum extent feasible. Use of these species may encourage some local wildlife species to continue to utilize the area. The construction of a golf course on the site provides an opportunity for a great number of native plants, particularly trees, to be incorporated into the project site. In addition to the encouragement of continued wildlife use of the area, all of these plants are drought tolerant.

Joshua Trees and California Junipers

• The applicant shall comply with all City of Palmdale policies regarding the preservation or transplantation of Joshua trees and California junipers on the project site.
• Development of Planning Areas 4, 8 and 13 shall include the preservation or relocation of Joshua trees such that approximately two trees per acre graded shall be preserved or transplanted into suitable natural open space areas or undisturbed areas of the golf course. As a result of this measure, approximately 398 trees shall be preserved in Planning Areas 4, 8 and 13.

• California juniper seedlings located in Planning Areas 1, 9 and 10 shall be relocated to natural open space areas of the project site under the guidance of a certified botanist.

Natural Open Space Maintenance

• To preserve the biological integrity of the natural open space areas, measures shall be implemented assuring that off-road vehicles, ornamental or non-indigenous landscaping, domestic animals (especially dogs), hunting or other discharge of firearms, livestock grazing, plant, animal or rock collecting, pedestrian, equestrian or bicycle use off marked trails or at night are excluded from natural open space areas. This shall be accomplished by signing and the construction of exclusionary walls or fences. Provisions shall be made to maintain open space areas.

5.7.4 Cumulative Impacts

Development of the proposed project would contribute to the cumulative reduction of contiguous open space in the region. This reduction of contiguous open space would adversely impact territorial species which rely upon large expanses of land for their home ranges, such as large birds of prey, upland game birds and carnivores, would result in loss of regional biological habitat, and would result in an overall decrease in regional biological diversity.
In addition, cumulative impacts would result from increased off-road vehicle use, collection of wildlife species as pets (lizards, snakes, etc.), harassment and predation of native wildlife species by dogs and cats, and degradation of natural vegetation due to increased foot traffic or bicycle use in undisturbed areas. Cumulative impacts to biological resources would be significant.

5.7.5 Unavoidable Adverse Effects

Implementation of the recommended mitigation measures would reduce project impacts to biological resources on the project site to an acceptable level.
5.8 TRANSPORTATION

A report prepared by Endo Engineering entitled “City Ranch Specific Plan Technical Studies,” May 1990, updated August 5, 1991 was used in the preparation of this section. The full text is provided in Appendix G. Since the preparation of the May 1990 report, the Specific Plan was revised. The prior version of the Specific Plan, which had a slightly different mix of housing unit types, more park acreage, and a sheriff’s station located on-site, generated approximately 3% more traffic trips than the currently proposed project. Therefore, the calculations in this report reflect a slightly worse case situation than would result from development of the currently proposed project.

5.8.1 Existing Conditions

Regional access to the project site is currently available from the Antelope Valley Freeway located approximately two miles east of the project site. Local access is available from Avenue P, Avenue S, Palmdale Boulevard and Elizabeth Lake Road. Figure 39 depicts the existing circulation system in the project vicinity. The number of through lanes and existing traffic control devices shown are based upon field reconnaissance in the project vicinity.

Surrounding Street System

The Antelope Valley Freeway (State Route 14) is a north/south freeway located two miles east of the project site. It provides primary access for the entire Antelope Valley. To the south, the Antelope Valley Freeway becomes an east/west route providing access to the San Fernando Valley and the Los Angeles basin. The Antelope Valley Freeway has four travel lanes south of Avenue P-8, and six travel lanes north of Avenue P-8.

Palmdale Boulevard is a 84-foot-wide east/west roadway that provides an interchange at the Antelope Valley Freeway. Palmdale Boulevard is a four-lane divided highway east of 10th Street West and is a designated truck route. The posted speed limit west
of the Antelope Valley Freeway is 50 mph. East of the Antelope Valley Freeway, the posted speed limit is 40 mph. East of 5th Street West, current improvements include curbs, gutters, sidewalks and streetlights. The intersections of Division Street, 5th Street West and 10th Street West are signalized.

Elizabeth Lake Road is an east/west roadway that forms the northern project boundary. It is currently a two-lane undivided roadway west of Foxholm Drive. East of Foxholm Drive to 10th Street West, Elizabeth Lake Road is a four lane roadway. East of 10th Street West, Elizabeth Lake Road continues as Palmdale Boulevard. Current improvements do not include curbs, gutters, sidewalks, or streetlights west of Foxholm Drive. The posted speed limit in the project vicinity is generally 45.

Avenue P is a four-lane east/west undivided roadway both east and west of the Antelope Valley Freeway except for a six-lane divided portion west of the freeway to 15th Street West. West of 15th Street West, Avenue P is a four-lane roadway. The posted speed limit is 50 mph. Avenue P is a designated truck route east of 10th Street West. Avenue P is fully improved with several signalized intersections.

Avenue Q is an east/west roadway that extends east from Palmdale Boulevard, and passes under the Antelope Valley Freeway. It does not provide direct freeway access. Avenue Q is a two-lane undivided roadway east of Palmdale Boulevard. Avenue Q has a posted speed limit of 35 mph. Avenue Q is currently being widened and improved west of the freeway. The intersection at 5th Street West is signalized.

30th Street West is a north/south two-laned undivided roadway with graded shoulders. This roadway terminates immediately south of Avenue P and is currently controlled by a four-way stop at Avenue P. Improvements south of Avenue P are currently
being made in conjunction with adjacent residential construction. Current improvements north of Avenue P do not include curbs, gutters, sidewalks, or streetlights. The posted speed limit along 30th Street West north of Avenue P is 55 mph.

25th Street West is a north/south two-lane undivided roadway between Avenue P and Elizabeth Lake Road which provides access to the project site. Immediately north of Elizabeth Lake Road there is a bridge crossing at Amargosa Creek. The bridge is 28 feet wide and provides two travel lanes. In areas adjacent to development along 25th Street West, curbs, gutters, sidewalks and streetlights currently exist. The posted speed limit is 55 mph. At the Elizabeth Lake Road intersection, the sight distance to the west for southbound motorists stopped on 25th Street West is limited to approximately 275 feet by the curvilinear alignment of Elizabeth Lake Road.

20th Street West is a north/south two-lane undivided roadway extending north and south of Avenue P. Access to Avenue P is controlled by stop signs on 20th Street West. Access to Avenue P is controlled by stop signs on 20th Street West. Improvements such as curbs, sidewalks or street lights currently exist along 20th Street West north of Avenue P adjacent to development. The posted speed limit is 55 mph.

10th Street West is a north/south access route located west of the Antelope Valley Freeway. North of Avenue 0-8, 10th Street West is a four-lane undivided roadway providing access to the northbound Antelope Valley Freeway. From Avenue 0-8 to Palmdale Boulevard, 10th Street West is a six-lane divided highway. The 10th Street West interchange allows southbound vehicles on the freeway to exit.

Tierra Subida is a north/south two-lane undivided roadway, 26 feet in width extending southerly from 10th Street West. Tierra Subida has a posted speed limit of 55 mph. Improvements along Tierra Subida include curbs, gutters and streetlights.
Barrel Springs Road is a two-lane undivided roadway that passes over the Antelope Valley Freeway without providing direct access to the freeway. Barrel Springs Road has a posted speed limit of 55 mph.

Rayburn Road is an east/west two-lane undivided roadway that extends east from Tierra Subida, and passes under the Antelope Valley Freeway. Rayburn Road does not provide direct freeway access. A stop-sign control at the Tierra Subida intersection, where the sight distance to the south for westbound motorists stopped on Rayburn Road, is limited to approximately 350 feet by the grade and curvature of the roadway. Rayburn Road is a designated truck route and has a posted speed limit of 55 mph.

Avenue S is a two-lane east/west undivided roadway. It provides an interchange at the Antelope Valley Freeway which will serve project-related traffic. Avenue S generally provides 24± feet of pavement and 14-foot graded shoulders and is currently controlled by a four-way stop at Tierra Subida. The southern side of Avenue S on either side of the Antelope Valley Freeway overpass is used for ride-sharing participants. Avenue S is a designated truck route in this area.

Public Transportation

The study area is not served by public transportation at present. As more development occurs and connects the site to other developed areas, the demand for transit services will increase and public transportation may be justified. It is important, therefore, that planning for new developments incorporate the means to accommodate future public transportation services.

Current Traffic Volumes

Typical weekday evening peak hour turning movement counts were made on September 29 and November 16, 1988 at 16 intersections in the project vicinity. The count data were collected to establish: (1) the extent to which the current peak hour in-
tersection capacities are being utilized by existing traffic volumes, (2) average daily two-way traffic volume (ADT) estimates for the vicinity, and (3) the directional orientation of traffic in the area. The count data are included in the Appendix of the Traffic Report with a map depicting the manual traffic count locations.

Current average daily traffic volumes for the project vicinity are shown in Figure 40. These volumes were taken from published 1990 Caltrans count data and a map depicting 1990 average daily traffic volumes provided by the City of Palmdale Public Works Department.¹

Seasonal fluctuations in traffic demands are quantified by Caltrans along the Antelope Valley Freeway in terms of the peak month average daily traffic volumes (54,000 ADT), which are seven percent higher than the annual average daily traffic (52,000 AADT) north of Palmdale Boulevard. Peak hour volumes (4,700 vehicles per hour or VPH) currently comprise nine percent of the AADT on the Antelope Valley Freeway north of Palmdale Boulevard.²

Roadway Capacity Considerations

Roadway capacity has been defined as the maximum number of vehicles that can pass over a given roadway during a given time period under prevailing roadway and traffic conditions. By comparison, Levels of Service are a relative measure of driver satisfaction, with values ranging from A (free flow) to F (forced flow) as described in Table 8. Levels of Service (LOS) reflect a number of factors such as speed and travel time, traffic interruptions, vehicle delay, freedom to maneuver, driver comfort and convenience, safety and vehicle operating costs.

¹ Source: Caltrans, “1990 Traffic Volumes on California State Highways”.

² Source: Caltrans, “1990 Traffic Volumes on California State Highways”.

5-114
### TABLE 8
Level of Service Criteria\(^1\)

<table>
<thead>
<tr>
<th>Level of Service</th>
<th>Traffic Flow Characteristics</th>
<th>Stopped Delay V/C Ratio(^2) Per Vehicle (sec)</th>
<th>Range</th>
<th>ICU(^3) Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Extremely favorable progression with very low delay. Most vehicles do not stop at all.</td>
<td>(\leq 5.0)</td>
<td>.00-.75</td>
<td>.00-.60</td>
</tr>
<tr>
<td>B</td>
<td>Good progression and stable flow with an occasional approach phase fully utilized.</td>
<td>5.1-15.0</td>
<td>.76-.87</td>
<td>.61-.70</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory operation with fair progression and longer cycle lengths. Individual cycle failures may begin to appear.</td>
<td>15.1-25.0</td>
<td>.88-1.00</td>
<td>.71-.80</td>
</tr>
<tr>
<td>D</td>
<td>Tolerable delay where congestion becomes noticeable and many vehicles stop.</td>
<td>25.1-40.0</td>
<td>1.01-1.12</td>
<td>.81-.90</td>
</tr>
<tr>
<td>E</td>
<td>Unstable flow with poor progression and frequent cycle failures. This is considered the limit of acceptable delay.</td>
<td>40.1-60.0</td>
<td>1.13-1.25</td>
<td>.91-1.00</td>
</tr>
<tr>
<td>F</td>
<td>Oversaturation with arrival flow rates exceeding the capacity of the intersection. Considered unacceptable to most drivers.</td>
<td>(&gt; 60.0)</td>
<td>1.26+</td>
<td>1.01+</td>
</tr>
</tbody>
</table>

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2. Determined by Endo Engineering for roadway link (mid-block) applications, based upon a daily design capacity at the upper limit of LOS C.
3. Determined by Endo Engineering for signalized intersection applications, based upon the peak hour maximum capacity of intersection approach lanes at the upper limit of LOS E.

Source: Endo Engineering, May 1990.
An important distinction exists between the concepts of capacity and Levels of Service. A given lane or roadway may provide a wide range of service levels depending upon traffic volumes and speeds, but it has only one maximum capacity. The maximum capacity is determined from roadway factors such as lane widths, lateral clearance, shoulders, surface conditions, alignment and grades as well as traffic factors (such as vehicle composition, truck and bus mix, distribution by lane, peaking characteristics, traffic control devices, intersections, etc.). It is usually given as the hourly service volume at the upper limit of LOS E.

The Palmdale Draft General Plan suggests the use of LOS C for design applications and evaluation purposes. LOS C represents a condition where traffic volume and vehicle density begin to restrict motorist's freedom to select speed, change lanes, or pass.

Table 9 presents daily vehicle volumes at the upper limit of LOS C on typical master planned roadways throughout the City of Palmdale. These capacity values can be applied at the General Plan level as guidelines relating the daily traffic volume to the number of lanes needed mid-block to serve that volume. The City also uses LOS D for peak hour design purposes at intersections.

It should be kept in mind that the roadway capacity estimates in Table 9 are "rule-of-thumb" estimates. They are affected by site specific factors such as the number and configuration of intersections, the degree of access control, roadway grades, standard design geometrics (horizontal and vertical alignment), sight distance, the level of truck and bus traffic, the percentage of turning movements, and the level of pedestrian and bicycle traffic.

The daily service volume at the upper limit of LOS E is the absolute maximum volume that can be accommodated under ideal conditions (assuming improvement to full City standards under optimum operating conditions). This Level of Service is characterized by unstable flows, extremely high volumes, limited operating speeds, and intermittent
<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Number of Lanes</th>
<th>Lane Configuration (Mid-Block)</th>
<th>R/W (Feet)</th>
<th>Daily Design Capacity (Vehicles/Day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freeway</td>
<td>6</td>
<td>Divided</td>
<td>Varies</td>
<td>115,000</td>
</tr>
<tr>
<td>Freeway</td>
<td>4</td>
<td>Divided</td>
<td>Varies</td>
<td>65,000</td>
</tr>
<tr>
<td>Major Highway</td>
<td>6</td>
<td>Divided</td>
<td>100</td>
<td>45,000</td>
</tr>
<tr>
<td>Major Highway</td>
<td>4</td>
<td>Divided</td>
<td>100</td>
<td>30,000</td>
</tr>
<tr>
<td>Secondary Highway</td>
<td>4</td>
<td>Undivided</td>
<td>80</td>
<td>20,000</td>
</tr>
<tr>
<td>Collector Street</td>
<td>2</td>
<td>Undivided</td>
<td>64</td>
<td>10,000</td>
</tr>
<tr>
<td>Local Street</td>
<td>2</td>
<td>Undivided</td>
<td>60</td>
<td>2,500</td>
</tr>
</tbody>
</table>

1. These daily capacity estimates represent the upper limit of LOS C for surface streets and the upper limit of LOS D for freeways.
vehicle queuing. Peak hour capacities for LOS E are assumed to be 8% of the average daily traffic volumes (based on high volumes spread over a longer period of time).

Volume-To-Capacity Analysis

A comparison of daily traffic volumes to the daily design capacity gives the proportion of the roadway capacity being utilized by the traffic volumes present. Therefore, a volume-to-capacity (V/C) ratio of 1.0 indicates that the facility is handling the maximum traffic volume that it can accommodate while maintaining the Level of Service deemed appropriate for design purposes (LOS C). Smaller volume-to-capacity ratios imply better operational characteristics and Levels of Service. Ratios which exceed 1.0 imply less favorable operating conditions and lower Levels of Service.

Table 10 shows the current daily volume-to-capacity ratios and corresponding Levels of Service on area roadways. Current daily volume-to-capacity (V/C) ratios in the project vicinity range from 0.19 (LOS A) to 1.37 (LOS F) on the roadway links analyzed. All links are operating at acceptable Levels of Service (LOS C or better) except one. Avenue S, east of SR 14 is operating at LOS F on a daily basis at present, with a V/C ratio of 1.37. Thus, current daily volumes on Avenue S (east of SR 14) exceed the daily design capacity of the roadway by 37 percent.

Route 14 is currently operating at 48 percent of the daily design capacity where it is a six-lane freeway and is operating at 74 to 80 percent of the design capacity where it is a four-lane freeway. It provides LOS B or better on a daily basis in the project vicinity. It is generally acknowledged that LOS D is the maximum acceptable service level for freeways in urban areas in view of the additional expense involved in providing LOS C.

It should be noted that daily V/C ratios usually reflect mid-block operations based upon daily traffic volumes and capacities derived from the number of through lanes on each roadway. More detailed analyses typically include an analysis of peak hour capacity at key intersections. Since peak hour traffic creates the heaviest demand on the
<table>
<thead>
<tr>
<th>Roadway Link</th>
<th>A.D.T.</th>
<th>Daily Capacity¹</th>
<th>V/C² Ratio</th>
<th>Level of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Veh/Day)</td>
<td>(Veh/Day)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Antelope Valley Freeway</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- West of 10th St. West</td>
<td>55,000</td>
<td>115,000</td>
<td>0.48</td>
<td>A</td>
</tr>
<tr>
<td>- East of 10th St. West</td>
<td>52,000</td>
<td>115,000</td>
<td>0.45</td>
<td>A</td>
</tr>
<tr>
<td>- North of Palmdale Blvd.</td>
<td>52,000</td>
<td>65,000</td>
<td>0.80</td>
<td>B</td>
</tr>
<tr>
<td>- North of Avenue S</td>
<td>48,000</td>
<td>65,000</td>
<td>0.74</td>
<td>A</td>
</tr>
<tr>
<td>- South of Avenue S</td>
<td>48,500</td>
<td>65,000</td>
<td>0.75</td>
<td>A</td>
</tr>
<tr>
<td>30th Street West</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- North of Avenue P</td>
<td>4,100</td>
<td>10,000</td>
<td>0.41</td>
<td>A</td>
</tr>
<tr>
<td>25th Street West</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- North of Elizabeth Lake Rd.</td>
<td>3,200</td>
<td>10,000</td>
<td>0.32</td>
<td>A</td>
</tr>
<tr>
<td>10th Street West</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- North of Route 14</td>
<td>10,000</td>
<td>30,000</td>
<td>0.33</td>
<td>A</td>
</tr>
<tr>
<td>- North of Avenue P</td>
<td>10,000</td>
<td>45,000</td>
<td>0.22</td>
<td>A</td>
</tr>
<tr>
<td>- North of Elizabeth Lake Rd.</td>
<td>11,600</td>
<td>45,000</td>
<td>0.26</td>
<td>A</td>
</tr>
<tr>
<td>Tierra Subida Avenue</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- North of Rayburn Rd.</td>
<td>5,600</td>
<td>30,000</td>
<td>0.19</td>
<td>A</td>
</tr>
<tr>
<td>- North of Avenue S</td>
<td>4,900</td>
<td>10,000</td>
<td>0.49</td>
<td>A</td>
</tr>
<tr>
<td>Rancho de la Vista</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- West of 30th St. West</td>
<td>7,300</td>
<td>30,000</td>
<td>0.24</td>
<td>A</td>
</tr>
<tr>
<td>Avenue P</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- West of 25th St. West</td>
<td>11,400</td>
<td>30,000</td>
<td>0.38</td>
<td>A</td>
</tr>
<tr>
<td>- West of Route 14</td>
<td>19,300</td>
<td>30,000</td>
<td>0.64</td>
<td>A</td>
</tr>
<tr>
<td>- East of Route 14</td>
<td>19,400</td>
<td>30,000</td>
<td>0.65</td>
<td>A</td>
</tr>
<tr>
<td>Elizabeth Lake Road</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- West of 25th St. West</td>
<td>2,900</td>
<td>10,000</td>
<td>0.29</td>
<td>A</td>
</tr>
<tr>
<td>- West of 10th St. West</td>
<td>11,500</td>
<td>20,000</td>
<td>0.58</td>
<td>A</td>
</tr>
<tr>
<td>Palmdale Boulevard</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- West of Route 14</td>
<td>15,200</td>
<td>30,000</td>
<td>0.51</td>
<td>A</td>
</tr>
<tr>
<td>- East of Route 14</td>
<td>27,200</td>
<td>30,000</td>
<td>0.91</td>
<td>C</td>
</tr>
<tr>
<td>Rayburn Road</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- East of Tierra Subida Ave.</td>
<td>5,600</td>
<td>10,000</td>
<td>0.56</td>
<td>A</td>
</tr>
<tr>
<td>Avenue S</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- West of Route 14</td>
<td>4,900</td>
<td>10,000</td>
<td>0.49</td>
<td>A</td>
</tr>
<tr>
<td>- East of Route 14</td>
<td>13,700</td>
<td>10,000</td>
<td>1.37</td>
<td>F</td>
</tr>
</tbody>
</table>

1. These values represent the current daily design capacity (upper limit of LOS C) in Table 2.
2. These values were calculated using the daily capacity at the upper limit of LOS C.
circulation system and the lane configuration at intersections is the limiting factor in roadway capacity, peak hour intersection capacity analyses are useful indicators of “worst-case” conditions.

Intersection Capacity Utilization

The current Intersection Capacity Utilization (ICU) values at the key intersections in the project vicinity have been determined based upon the current peak hour traffic volume and the existing intersection geometrics which are shown in Table 11. ICU values represent the sum of the V/C ratios of conflicting movements at intersections (as shown in the ICU worksheets in the Appendix) and are indicative of the portion of the intersection capacity which is being utilized by peak hour traffic volumes. The City of Palmdale utilizes an ICU level of 0.90 (indicating the upper limit of LOS D) as the maximum desirable criteria for design purposes.

Table 12 provides the Intersection Capacity Utilization and corresponding Level of Service findings at the key intersections for evening peak hour conditions. ICU values have been correlated with Level of Service designations as shown in Table 8. Within the project vicinity, evening peak hour volumes typically exceed morning peak hour volumes and therefore represent a “worst case” peak hour scenario.

As shown in Table 12, the key intersections are currently operating with ICU values ranging from 0.21 to 0.56 during evening peak hours. This represents Level of Service A operation (extremely favorable progression with very low delay).

Relevant Circulation Plans

The Circulation element of the City of Palmdale General Plan details the general location and extent of the circulation system required to serve future traffic demands associated with development per the Land Use Element of the General Plan. Currently, the Circulation Element of the City of Palmdale General Plan is undergoing revision to
<table>
<thead>
<tr>
<th>Intersection</th>
<th>Northbound</th>
<th>Southbound</th>
<th>Eastbound</th>
<th>Westbound</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T</td>
<td>R</td>
<td>L</td>
<td>T</td>
</tr>
<tr>
<td>Avenue P @</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 30th Street West</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>- 25th Street West</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Elizabeth Lake Road @</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 25th Street West</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>- 10th Street West</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Palmdale Boulevard @</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Route 14 SB Ramps</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>- Route 14 NB Ramps</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Avenue S @</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Tierra Subida Ave.</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>- Route 14 SB Ramps</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>- Route 14 NB Ramps</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

1. T = Through Lane; R = Exclusive Right Turn Lane; L = Exclusive Left Turn Lane.
<table>
<thead>
<tr>
<th>Intersection</th>
<th>Evening Peak Hour Operation</th>
<th>Intersection Capacity Utilization</th>
<th>Level of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avenue P @</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 30th Street West</td>
<td></td>
<td>0.56</td>
<td>A</td>
</tr>
<tr>
<td>- 25th Street West</td>
<td></td>
<td>0.25</td>
<td>A</td>
</tr>
<tr>
<td>Elizabeth Lake Road @</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 25th Street West</td>
<td></td>
<td>0.22</td>
<td>A</td>
</tr>
<tr>
<td>- 10th Street West</td>
<td></td>
<td>0.51</td>
<td>A</td>
</tr>
<tr>
<td>Palmdale Boulevard @</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Route 14 SB Ramps</td>
<td></td>
<td>0.41</td>
<td>A</td>
</tr>
<tr>
<td>- Route 14 NB Ramps</td>
<td></td>
<td>0.42</td>
<td>A</td>
</tr>
<tr>
<td>Avenue S @</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Tierra Subida Ave.</td>
<td></td>
<td>0.35</td>
<td>A</td>
</tr>
<tr>
<td>- Route 14 SB Ramps</td>
<td></td>
<td>0.32</td>
<td>A</td>
</tr>
<tr>
<td>- Route 14 NB Ramps</td>
<td></td>
<td>0.21</td>
<td>A</td>
</tr>
</tbody>
</table>
update each roadway alignment and designation in conjunction with changes to the Land Use Element.

Figure 41 illustrates the most likely alignments and roadway designations for master planned roadways in the project vicinity. It does not reflect the currently adopted Circulation element, but rather the City's current position on the updated Circulation Element, which is being developed at present. Figure 42 illustrates the typical cross-sections for the various roadway designations applied throughout the City of Palmdale.

Avenue P-8 is master planned as a major highway from 10th Street West to the Freeway. Palmdale Boulevard, 30th Street West, 25th Street West, 10th Street West, Tierra Subida (north of Avenue S), Elizabeth Lake Road, Avenue S and Avenue P are also master planned as major highways. The design standards for major highways include four or six lanes with a 100-foot right-of-way and an 84-foot curb-to-curb width.

Avenue Q and 20th Street West are master planned as secondary highways. Barrel Springs Road, east of Tierra Subida, is classified as a four-lane undivided secondary highway on the Los Angeles County Highway Plan. South of Avenue S, Tierra Subida is designated as a secondary highway. Secondary highways have four lanes with 64 feet curb-to-curb within an 80-foot right-of-way.

The Los Angeles County Highway Plan preserves rights-of-way in all future areas where growth might occur to insure that areas develop with adequate access by requiring private developers to dedicate sections of the master planned system adjacent to their developments.

Planned Roadway and Intersection Improvements

Roadway improvements are currently being planned in conjunction with the construction of Amargosa Creek drainage improvements which would realign 25th
Street West to intersect Elizabeth Lake Road east of the existing intersection. These improvements are anticipated to be implemented by late 1992.

To adequately serve future cumulative demand, Elizabeth Lake Road/Palmdale Boulevard will need to be widened. Initially, the roadway would be widened to six lanes from the project site to the Antelope Valley freeway. As demand increases, the segment between 10th Street West and the freeway will require further widening to eight lanes. Future refined traffic studies will help to identify the timing of these improvements.

5.8.2 Project Impacts

Traffic Generation Forecast

The potential trip generation from the proposed development was estimated by multiplying appropriate trip generation rates by the land use quantities proposed. Trip generation rates were determined from the regression equations included in the Institute of Transportation Engineers publication entitled “Trip Generation - An Informational Report” (1987).

The trip generation regression equations developed by the Institute of Transportation Engineers for single-family residential dwellings (based on 320 traffic studies) demonstrate that as the number of dwellings within a development increases, the trip generation rate per dwelling decreases. This occurs because a portion of the home-based trips have destinations to other residences within the development. However, only eight of the studies were on developments with more than 1,000 units. In view of the relatively small number of substantiating studies for large developments, a “worst case” value of 9 trips per single-family dwelling was assumed to determine the unadjusted trip generation forecast shown in Table 13. Similarly, a weekday trip generation rate of 4.68 per multi-family attached dwelling was assumed.
The trip generation potential of the proposed 1-acre fire station facilities was estimated from field observations at existing similar fire stations in southern California. The trip generation for the proposed fire station was estimated from the El Toro, California fire station which serves the neighboring commercial, industrial and Leisure World Retirement Community. This station responding to an average of 30 calls daily is the busiest of 42 stations in Orange County.

Table 13 shows the unadjusted daily and peak hour trip generation forecast by land use type for the proposed project. It should be noted, however, that the forecast provided in Table 13 does not account for trip overlap on-site (i.e., trip interactions on-site between the residential, commercial, recreational and educational land uses proposed), and therefore is a conservative estimate.

The development of mixed-use projects reduces the trip generation below that which is forecast directly from ITE trip generation rates for the individual land uses. The ITE rates were developed from isolated single-use developments and therefore ignore trip overlap. When different land uses are combined on one site, the actual trip generation decreases. For example, fewer residents will drive off-site if commercial uses, recreational opportunities and elementary schools are provided on-site.

Trips by motorists who drive between uses on-site are overstated by a direct application of the ITE rates because they are counted twice (once as exiting the residential use and then again as entering the school) even though only one trip was made between the two land uses on-site. When a trip generation forecast does not explicitly handle trip overlap, it can overstate traffic demands on the circulation system upon project build-out. To determine as accurately as possible the traffic impact of the proposed project, trip interactions on-site have been estimated and taken into account.
### TABLE 13

Project-Related Unadjusted Trip Generation

<table>
<thead>
<tr>
<th>Land Use</th>
<th>AM Peak Hour</th>
<th></th>
<th>PM Peak Hour</th>
<th></th>
<th>Daily 2-Way</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In</td>
<td>Out</td>
<td>Total</td>
<td>In</td>
<td>Out</td>
</tr>
<tr>
<td>Residential Trips</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 3,372 detached units</td>
<td>610</td>
<td>1,640</td>
<td>2,250</td>
<td>2,040</td>
<td>1,190</td>
</tr>
<tr>
<td>- 1,828 attached units</td>
<td>110</td>
<td>590</td>
<td>700</td>
<td>590</td>
<td>290</td>
</tr>
<tr>
<td>Residential Subtotal</td>
<td>720</td>
<td>2,230</td>
<td>2,950</td>
<td>2,630</td>
<td>1,480</td>
</tr>
<tr>
<td>Commercial Trips</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 151,000 sq.ft.</td>
<td>160</td>
<td>70</td>
<td>230</td>
<td>380</td>
<td>390</td>
</tr>
<tr>
<td>- 109,000 sq.ft.</td>
<td>130</td>
<td>60</td>
<td>190</td>
<td>320</td>
<td>330</td>
</tr>
<tr>
<td>Commercial Subtotal</td>
<td>290</td>
<td>130</td>
<td>420</td>
<td>700</td>
<td>720</td>
</tr>
<tr>
<td>Recreation Trips</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Golf Course (216.1 acres)</td>
<td>50</td>
<td>10</td>
<td>60</td>
<td>10</td>
<td>80</td>
</tr>
<tr>
<td>- Park (171 acres)</td>
<td>20</td>
<td>20</td>
<td>40</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Recreational Subtotal</td>
<td>70</td>
<td>30</td>
<td>90</td>
<td>40</td>
<td>110</td>
</tr>
<tr>
<td>Fire Station</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1 station</td>
<td>10</td>
<td>10</td>
<td>20</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>School Trips</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 4 Elementary schools</td>
<td>400</td>
<td>240</td>
<td>640</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>1,490</td>
<td>2,640</td>
<td>4,120</td>
<td>3,380</td>
<td>2,360</td>
</tr>
</tbody>
</table>

The unadjusted trip generation forecast shown in Table 13 was adjusted to eliminate the double counting of those trips which are generated on-site and remain on-site. The adjusted daily trip generation forecast for buildout on-site by land use type is shown in Table 14. The unadjusted trip generation, the number of internal trips (including double counted trips), the number of external trips, and the adjusted total trip generation are also provided therein.

As shown in Table 14, the project as proposed is expected to generate 49,970 daily trip-ends, of which 38,050 will have either an origin or a destination off-site (external trips). There are 11,920 which will have both an origin and a destination on-site (internal trips). An estimated 33,590 trips will be generated by the residential development and 16,380 trips will be generated by the other land uses proposed on-site on an average weekday.

**Trip Distribution and Assignment**

Traffic distribution is the determination of the directional orientation of traffic. It is based upon the geographical location of the site and land uses which will serve as trip origins and destinations. Traffic assignment is the determination of which specific routes project-related traffic will use, once the generalized traffic distribution is determined. The basic factors affecting route selection are minimizing time and distance. Other considerations might be the aesthetic quality of alternate routes, street grades, number of turning maneuvers and avoidance of congestion. Site access locations directly affect the project traffic assignment.

Figure 43 illustrates the traffic assignment associated with the proposed project, including two-way weekday traffic volume projections associated with buildout on-site. Figure 43 also provides the percentage of the project-related traffic expected to utilize each roadway link.
### TABLE 14

Adjusted Trip Generation Forecast

<table>
<thead>
<tr>
<th>Trip Type</th>
<th>Unadjusted Trips¹</th>
<th>Internal Trips²</th>
<th>External Trips</th>
<th>Adjusted Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Residential Trips</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Daily Two-Way</td>
<td>39,450</td>
<td>11,720</td>
<td>27,730</td>
<td>33,590</td>
</tr>
<tr>
<td>- AM Inbound</td>
<td>720</td>
<td>200</td>
<td>520</td>
<td>620</td>
</tr>
<tr>
<td>- AM Outbound</td>
<td>2,230</td>
<td>540</td>
<td>1,690</td>
<td>1,960</td>
</tr>
<tr>
<td>- AM Total</td>
<td>2,950</td>
<td>740</td>
<td>2,210</td>
<td>2,580</td>
</tr>
<tr>
<td>- PM Inbound</td>
<td>2,630</td>
<td>530</td>
<td>2,100</td>
<td>2,370</td>
</tr>
<tr>
<td>- PM Outbound</td>
<td>1,480</td>
<td>390</td>
<td>1,090</td>
<td>1,290</td>
</tr>
<tr>
<td>- PM Total</td>
<td>4,110</td>
<td>920</td>
<td>3,190</td>
<td>3,660</td>
</tr>
<tr>
<td><strong>Commercial/Recreation/Fire/Educational Trips</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Daily Two-Way</td>
<td>22,440</td>
<td>12,120</td>
<td>10,320</td>
<td>16,380</td>
</tr>
<tr>
<td>- AM Inbound</td>
<td>810</td>
<td>540</td>
<td>270</td>
<td>540</td>
</tr>
<tr>
<td>- AM Outbound</td>
<td>430</td>
<td>200</td>
<td>230</td>
<td>330</td>
</tr>
<tr>
<td>- AM Total</td>
<td>1,240</td>
<td>740</td>
<td>500</td>
<td>870</td>
</tr>
<tr>
<td>- PM Inbound</td>
<td>770</td>
<td>390</td>
<td>380</td>
<td>580</td>
</tr>
<tr>
<td>- PM Outbound</td>
<td>930</td>
<td>530</td>
<td>400</td>
<td>670</td>
</tr>
<tr>
<td>- PM Total</td>
<td>1,700</td>
<td>920</td>
<td>780</td>
<td>1,250</td>
</tr>
<tr>
<td><strong>All Trips Combined</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Daily Two-Way</td>
<td>61,890</td>
<td>23,840</td>
<td>38,050</td>
<td>49,970</td>
</tr>
<tr>
<td>- AM Inbound</td>
<td>1,530</td>
<td>740</td>
<td>790</td>
<td>1,160</td>
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<tr>
<td>- AM Outbound</td>
<td>2,660</td>
<td>740</td>
<td>1,920</td>
<td>2,290</td>
</tr>
<tr>
<td>- AM Total</td>
<td>4,170</td>
<td>1,440</td>
<td>2,710</td>
<td>3,450</td>
</tr>
<tr>
<td>- PM Inbound</td>
<td>3,400</td>
<td>920</td>
<td>2,480</td>
<td>2,940</td>
</tr>
<tr>
<td>- PM Outbound</td>
<td>2,410</td>
<td>920</td>
<td>1,490</td>
<td>1,950</td>
</tr>
<tr>
<td>- PM Total</td>
<td>5,810</td>
<td>1,840</td>
<td>3,970</td>
<td>4,890</td>
</tr>
</tbody>
</table>

1. Taken from Table 13 without accounting for trip overlap.
2. Each value is double counted and must be halved to eliminate the double counting.
Legend

110 Project-Related ADT (49,970)
(10%) Percent of Daily Project Traffic

SOURCE: City Ranch South Specific Plan Technical Studies
July 1991, Endo Engineering

PROJECT TRAFFIC ASSIGNMENT

FIGURE 43
Future Daily Traffic Conditions

As an extension of the General Plan modeling effort, DKS Associates completed a year 2010 assessment of the Palmdale Southwest Planning Area to determine the roadway cross-sections necessary to provide an adequate level of service (DKS Associates, July 1990). DKS assessed potential development in the southwest portion of Palmdale by the year 2010, determined traffic generated by this development, and then, using a computer model, assigned that traffic to the proposed road network in the vicinity of the project. The study details DKS' findings, including the impact that the City Ranch Specific Plan will have on nearby roadways. In the course of their study, DKS prepared model runs with and without the City Ranch Specific Plan. These model runs demonstrate the difference in traffic volumes on the circulation system caused by the City Ranch project. The model assumed that roadway segments would be widened as shown on Table 15.

Year 2010 Ambient Conditions

The year 2010 ambient daily traffic volumes, V/C ratios, and LOS designations without development of the City Ranch project are shown in Figure 44. As shown in Figure 44, not all of the links analyzed will operate at acceptable levels in the year 2010 without the addition of project-related traffic. Even with expanded roadways, one link would exceed acceptable levels of service. This link is 10th Street West north of Elizabeth Lake Road. With the exception of this link, the remaining surface streets analyzed would provide acceptable levels of service.

Year 2010 Plus Project Conditions

The V/C ratio analysis is intended to demonstrate: (1) what roadway link improvements would be needed to accommodate project-related traffic at acceptable Levels of Service, and (2) whether or not the master planned circulation system would
<table>
<thead>
<tr>
<th>Roadway</th>
<th>Location (From/To)</th>
<th>Stripping/Geometrics</th>
<th>Facility Type</th>
<th>Capacity</th>
<th>Volume</th>
<th>V/C</th>
<th>LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Santa Fe Hills Dr</td>
<td>Elizabeth Lake Rd/25th St W</td>
<td>4 LANEs</td>
<td>DIV. MINOR</td>
<td>28,000</td>
<td>12,300</td>
<td>0.44</td>
<td>A</td>
</tr>
<tr>
<td>Elizabeth Lake Rd</td>
<td>West of Leona Valley</td>
<td>2 LANEs</td>
<td>MAJOR</td>
<td>15,000</td>
<td>11,200</td>
<td>0.74</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Leona Valley/Bouquet Canyon Rd</td>
<td>2 LANEs</td>
<td>MAJOR</td>
<td>15,000</td>
<td>15,100</td>
<td>1.01</td>
<td>F *</td>
</tr>
<tr>
<td></td>
<td>Bouquet Canyon Rd/Godde Hill Rd</td>
<td>4 LANEs</td>
<td>DIV. MAJOR</td>
<td>36,000</td>
<td>19,900</td>
<td>0.55</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Godde Hill Rd/Santa Fe Hills Dr</td>
<td>2 LANEs</td>
<td>DIV. MAJOR</td>
<td>18,000</td>
<td>11,200</td>
<td>0.62</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Santa Fe Hills Dr/Ranch Center Dr</td>
<td>4 LANEs</td>
<td>DIV. MAJOR</td>
<td>36,000</td>
<td>10,600</td>
<td>0.29</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Ranch Center Dr/Bridge Rd</td>
<td>4 LANEs</td>
<td>DIV. MAJOR</td>
<td>36,000</td>
<td>16,600</td>
<td>0.46</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Bridge Rd/25th St W</td>
<td>6 LANEs</td>
<td>DIV. U. MAJOR</td>
<td>60,000</td>
<td>49,000</td>
<td>0.82</td>
<td>D *</td>
</tr>
<tr>
<td></td>
<td>25th St W/20th St W</td>
<td>6 LANEs</td>
<td>DIV. U. MAJOR</td>
<td>60,000</td>
<td>47,200</td>
<td>0.79</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>20th St W/10th St W</td>
<td>6 LANEs</td>
<td>DIV. U. MAJOR</td>
<td>60,000</td>
<td>55,200</td>
<td>0.92</td>
<td>E *</td>
</tr>
<tr>
<td>Palmdale Blvd</td>
<td>10th St W/Antelope Valley Fwy</td>
<td>8 LANEs</td>
<td>DIV. MAJOR</td>
<td>72,000</td>
<td>48,000</td>
<td>0.67</td>
<td>B</td>
</tr>
<tr>
<td>City Ranch Rd</td>
<td>Ritter Ranch Rd/Ranch Center Dr</td>
<td>2 LANEs</td>
<td>DIV. MINOR</td>
<td>14,000</td>
<td>5,700</td>
<td>0.41</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Ranch Center Dr/Bridge Rd</td>
<td>4 LANEs</td>
<td>DIV. MINOR</td>
<td>28,000</td>
<td>15,900</td>
<td>0.57</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Bridge Rd/20th St W alignment</td>
<td>4 LANEs</td>
<td>MINOR</td>
<td>24,000</td>
<td>13,300</td>
<td>0.55</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>20th St W alignment/Tierra Subida Ave</td>
<td>4 LANEs</td>
<td>MINOR</td>
<td>24,000</td>
<td>16,400</td>
<td>0.68</td>
<td>B</td>
</tr>
<tr>
<td>Avenue R</td>
<td>Tierra Subida Ave/Division St</td>
<td>6 LANEs</td>
<td>DIV. MAJOR</td>
<td>54,000</td>
<td>31,500</td>
<td>0.58</td>
<td>A</td>
</tr>
<tr>
<td>Ritter Ranch Rd</td>
<td>Godde Hill Rd/City Ranch Rd</td>
<td>2 LANEs</td>
<td>DIV. MAJOR</td>
<td>18,000</td>
<td>13,300</td>
<td>0.74</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>South of Elizabeth Lake Rd</td>
<td>2 LANEs</td>
<td>DIV. MAJOR</td>
<td>18,000</td>
<td>14,800</td>
<td>0.82</td>
<td>D *</td>
</tr>
<tr>
<td></td>
<td>40th St W alignment/Ranch Center Dr</td>
<td>4 LANEs</td>
<td>DIV. MAJOR</td>
<td>36,000</td>
<td>26,500</td>
<td>0.74</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Ranch Center Dr/Bridge Rd</td>
<td>4 LANEs</td>
<td>DIV. U. MAJOR</td>
<td>40,000</td>
<td>31,800</td>
<td>0.80</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Bridge Rd/20th St W alignment</td>
<td>6 LANEs</td>
<td>DIV. MAJOR</td>
<td>54,000</td>
<td>36,700</td>
<td>0.68</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>20th St W alignment/Tierra Subida Ave</td>
<td>6 LANEs</td>
<td>DIV. MAJOR</td>
<td>54,000</td>
<td>45,300</td>
<td>0.84</td>
<td>D *</td>
</tr>
<tr>
<td>Avenue S</td>
<td>Tierra Subida Ave/Antelope Valley Fwy</td>
<td>6 LANEs</td>
<td>DIV. U. MAJOR</td>
<td>60,000</td>
<td>34,800</td>
<td>0.58</td>
<td>A</td>
</tr>
<tr>
<td>Bouquet Canyon Rd</td>
<td>South of Elizabeth Lake Rd</td>
<td>4 LANEs</td>
<td>DIV. MINOR</td>
<td>28,000</td>
<td>5,200</td>
<td>0.19</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>W of City Thrift</td>
<td>2 LANEs</td>
<td>MINOR</td>
<td>12,000</td>
<td>5,800</td>
<td>0.48</td>
<td>A</td>
</tr>
<tr>
<td>Godde Hill Rd</td>
<td>60th St West/Elizabeth Lake Rd</td>
<td>4 LANEs</td>
<td>MAJOR</td>
<td>30,000</td>
<td>22,300</td>
<td>0.74</td>
<td>C</td>
</tr>
<tr>
<td>Ranch Center Dr</td>
<td>Elizabeth Lake Rd/City Ranch Rd</td>
<td>2 LANEs</td>
<td>DIV. MINOR</td>
<td>14,000</td>
<td>9,600</td>
<td>0.69</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>City Ranch Rd/Ritter Ranch Rd</td>
<td>2 LANEs</td>
<td>DIV. MINOR</td>
<td>14,000</td>
<td>10,100</td>
<td>0.72</td>
<td>C</td>
</tr>
<tr>
<td>Bridge Rd</td>
<td>Elizabeth Lake Rd/City Ranch Rd</td>
<td>4 LANEs</td>
<td>DIV. MAJOR</td>
<td>36,000</td>
<td>28,900</td>
<td>0.80</td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>City Ranch Rd/Ritter Ranch Rd</td>
<td>4 LANEs</td>
<td>DIV. MAJOR</td>
<td>36,000</td>
<td>20,300</td>
<td>0.56</td>
<td>A</td>
</tr>
<tr>
<td>25 St West</td>
<td>Ave P-8/Elizabeth Lake Rd</td>
<td>6 LANEs</td>
<td>MAJOR</td>
<td>45,000</td>
<td>27,500</td>
<td>0.61</td>
<td>B</td>
</tr>
<tr>
<td>20 St West</td>
<td>Ave P-8/Elizabeth Lake Rd</td>
<td>4 LANEs</td>
<td>MAJOR</td>
<td>30,000</td>
<td>23,900</td>
<td>0.80</td>
<td>C</td>
</tr>
<tr>
<td>10 St West</td>
<td>Ave P-8/Palmdale Blvd</td>
<td>6 LANEs</td>
<td>DIV. U. MAJOR</td>
<td>60,000</td>
<td>51,800</td>
<td>0.86</td>
<td>D *</td>
</tr>
<tr>
<td>Tierra Subida Ave</td>
<td>Palmdale Blvd/S. of Palmdale Blvd</td>
<td>6 LANEs</td>
<td>DIV. MAJOR</td>
<td>54,000</td>
<td>16,200</td>
<td>0.30</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>S. of Palmdale Blvd/Ave R</td>
<td>6 LANEs</td>
<td>DIV. MAJOR</td>
<td>54,000</td>
<td>24,800</td>
<td>0.46</td>
<td>A</td>
</tr>
<tr>
<td></td>
<td>Ave R/Ave S</td>
<td>4 LANEs</td>
<td>DIV. MAJOR</td>
<td>36,000</td>
<td>21,500</td>
<td>0.60</td>
<td>B</td>
</tr>
<tr>
<td></td>
<td>Ave S/Barrel Springs Rd</td>
<td>2 LANEs</td>
<td>MINOR</td>
<td>12,000</td>
<td>9,300</td>
<td>0.78</td>
<td>C</td>
</tr>
</tbody>
</table>
LEGEND

11.3  Daily Traffic Volume in 1000's
*
Deficient Segments


YEAR 2010 DAILY TRAFFIC VOLUMES WITHOUT CITY RANCH

FIGURE 44
be adequate to meet the travel demands generated by the proposed project. Tenth (10th) Street West, discussed above shown to exceed acceptable levels of service, would carry a relatively small portion of the project-related traffic (four percent (4%) of the project related traffic).

Table 15 provides the year 2010 plus project daily V/C ratios and corresponding Levels of Service. The values in Table 15 assume master planned improvements on roadway links in the project vicinity. The assumed roadway striping and geometrics are shown on Figure 45.

Figure 46 indicates forecast year 2010 daily volumes and levels of service with City Ranch. The majority of the area arterials are projected to operate at an acceptable daily level of service by the year 2010. Facilities which are projected to operate at an unacceptable level of service are mostly limited to roadways near the Antelope Valley Freeway. These potentially deficient arterial segments are indicated with an asterisk in Table 15.

For the purposes of the Southwest Planning area Traffic Study (July, 1999) the unsignalized existing intersections and all planned intersections were assumed to warrant a signal by the year 2010. The 19 study intersections under consideration for the year 2010 were shown in Figure 45.

The Planning Application of the Critical Movement Analysis procedures, which are outlined in Transportation Research Board Circular 212, was the methodology used to determine the intersection utilization. The results of the intersection capacity analysis for the 2010 AM and PM peak hour volumes are shown in Table 16.

The following paragraphs compare the forecast year 2010 total traffic volumes on the arterial network to the "no project" scenario (Figures 44 with 46). Table 17 also presents a comparison of traffic volumes on selected key arterial segments.
## Table 16

Year 2010 ICU and LOS Summary

<table>
<thead>
<tr>
<th>Intersection</th>
<th>AM Peak ICU-LOS</th>
<th>PM Peak ICU-LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palmdale Boulevard @</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- SR 14 SB Ramp</td>
<td>0.82-D</td>
<td>0.89-D</td>
</tr>
<tr>
<td>- SR 14 NB Ramp</td>
<td>0.43-A</td>
<td>0.82-D</td>
</tr>
<tr>
<td>- 10th Street West</td>
<td>0.85-D</td>
<td>0.89-D</td>
</tr>
<tr>
<td>Elizabeth Lake Road @</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 20th Street West</td>
<td>0.83-D</td>
<td>0.79-C</td>
</tr>
<tr>
<td>- 25th Street West</td>
<td>0.66-B</td>
<td>0.75-C</td>
</tr>
<tr>
<td>- Bridge Road</td>
<td>0.88-D</td>
<td>0.81-D</td>
</tr>
<tr>
<td>City Ranch Road @</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Tierra Subida</td>
<td>0.77-C</td>
<td>0.89-D</td>
</tr>
<tr>
<td>- Bridge Road</td>
<td>0.64-B</td>
<td>0.79-C</td>
</tr>
<tr>
<td>Avenue S @</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- SR 14 SB Ramp</td>
<td>0.24-A</td>
<td>0.81-D</td>
</tr>
<tr>
<td>- SR 15 NB Ramp</td>
<td>0.33-A</td>
<td>0.87-D</td>
</tr>
<tr>
<td>- Tierra Subida</td>
<td>0.89-D</td>
<td>0.89-D</td>
</tr>
<tr>
<td>- Bridge Road</td>
<td>0.43-A</td>
<td>0.85-D</td>
</tr>
</tbody>
</table>

Source: Circulation and Transportation Needs Study for Palmdale Southwest Planning Area, DKS Associates; Revised July, 1990; Table 3-4.
## TABLE 17

Year 2010 Traffic Volume Projections

<table>
<thead>
<tr>
<th>Roadway Link</th>
<th>Year 2010 Without Project</th>
<th>Year 2010 With Project</th>
<th>Percent Reduction Without Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elizabeth Lake Road</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 10th to 20th St. W.</td>
<td>57,300</td>
<td>55,200</td>
<td>1%</td>
</tr>
<tr>
<td>- 20th to 25th St. W.</td>
<td>43,600</td>
<td>47,200</td>
<td>13%</td>
</tr>
<tr>
<td>- 25th to Bridge Road</td>
<td>37,600</td>
<td>44,000</td>
<td>33%</td>
</tr>
<tr>
<td>- W. of Bouquet Cyn.</td>
<td>15,300</td>
<td>15,100</td>
<td>0%</td>
</tr>
<tr>
<td>10th Street West</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- N. of Palmdale Blvd.</td>
<td>46,400</td>
<td>51,900</td>
<td>11%</td>
</tr>
<tr>
<td>Avenue S</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- W. of Tierra Subida</td>
<td>35,000</td>
<td>46,200</td>
<td>24%</td>
</tr>
<tr>
<td>City Ranch Road</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- E. of Project Site</td>
<td>8,700</td>
<td>13,300</td>
<td>41%</td>
</tr>
</tbody>
</table>

**Source:** Circulation and Transportation Needs Study for Palmdale Southwest Planning Area, DKS Associates; Revised July, 1990; Table 3-5.
• **Elizabeth Lake Road between 20th Street West and 25th Street West.** Traffic volumes without City Ranch would be reduced by 3,400 daily trips. Without the City Ranch project, daily volumes on this segment of Elizabeth Lake Road would be within LOS C and clearly would not require additional lanes beyond the six lanes proposed.

• **Elizabeth Lake Road between 25th Street West and Bridge Road.** This segment would be the most heavily impacted segment. Traffic volumes without City Ranch would be 12,100 daily trips lower than with the project. Daily volumes on this segment of Elizabeth Lake Road would be 36,900 trips without the proposed project, which would be at or below LOS C and would not require more than six lanes.

• **Avenue S/Ritter Ranch Road.** Year 2010 forecasts had indicated that additional lanes may be needed on this segment. Without City Ranch, volumes would be lower by 13,000 daily trips; operating level would be LOS B and additional lanes would not be required. This would suggest a direct adverse impact due to the project. However, examination of the traffic patterns on this link indicates that heavy volumes are mainly due to the traffic loading from the Valley Ranch development located southeast of the project site. Approximately 12,000 daily trips would be loaded on this link from the Valley Ranch development. In addition, capacity deficiencies appear only on a short segment east of the Valley Ranch property and are not present for a significant length of the proposed roadway. Therefore, the impacts at this location would be mainly a result of traffic from the Valley Ranch development.

• **Elizabeth Lake Road west of Bouquet Canyon Road.** This segment would require additional lanes regardless of the trips from the proposed project. Traffic volumes on this link without the projects would be only 300 lower than the base case. The primary reason for capacity deficiencies on this segment is its assumed
two-lane cross section. In addition, investigation of traffic patterns shows that most of the traffic volumes causing the deficiency would be traffic between points north on Godde Hill Road and developments in Leona Valley. Capacity deficiencies only exist on the short segment west of Bouquet Canyon Road and to the east of Leona Valley.

- **10th Street West north of Elizabeth Lake Road.** Traffic volumes without City Ranch are 2,100 trips lower than the base case. However, V/C ratios are within the LOS D range and the need for additional lanes on this segment would exist regardless of the proposed project.

- **25th Street West north of Elizabeth Lake Road.** Traffic volumes without City Ranch would be 3,700 daily trips lower and the impacts would be relatively insignificant. There would be no capacity problems on this segment with or without the proposed project.

- **City Ranch Road west of Tierra Subida.** Volumes without City Ranch would be 4,600 lower. However, there would not be any capacity problems on this arterial and all segments would operate at or better than LOS C.

In summary, one segment of Elizabeth Lake Road between Bridge Road and 25th Street West would require additional improvements because of the City Ranch and adjacent Ritter Ranch project. The segment of 10th Street West just north of Palmdale Boulevard would also be adversely impacted when the City Ranch project is developed, and would require improvement.

All other deficient arterial segments would either have capacity problems regardless of the proposed project or the capacity deficiency would be mostly due to traffic impacts of developments other than City Ranch.
Project Traffic Contribution On Regional Network

For comparison purposes, probable traffic contributions of the City Ranch project was calculated based on a series of forecasting computer outputs under various alternatives. The percent contribution of the project on the regional circulation system was calculated by comparing total year 2010 volumes to traffic volumes under the scenarios without the project. Probable percent contribution of the project was assumed to be the percent reduction of traffic volume on a particular link as a result of taking the project out of the forecast model. Figure 47 shows the projected probable percentage contribution of the City Ranch project to the total traffic. Contribution values less than 0.5 percent are shown as insignificant in this analysis.

Site Access and Internal Circulation

The placement of the access points meets the City's minimum intersection spacing criteria and is satisfactory in terms of the distance from existing intersections. With regard to internal circulation, two lane collector streets will occur at all points where two-lane access to arterial roads occur. This is expected to result in a satisfactory flow of traffic.

Other Considerations

The proposed project would create a mixed-use development which would benefit from bikeway and pedestrian linkages that encourage local trips by modes other than the private automobile. The growing use of bicycles makes the integration of bikeways on-site particularly beneficial. The location of bicycle lanes within roadway rights-of-way allows the maintenance of the bicycle lanes to occur in conjunction with the maintenance of the road.
Proposed Phasing

To maximize effectiveness and efficiency of the street network, circulation improvements have been proposed in the Specific Plan and will be implemented in phases corresponding to the eight development phases of the project itself. Circulation improvements will proceed as follows:

- **During Phase 1**, Elizabeth Lake Road will be improved from Bridge Road to 20th Street West.

- **During Phase 2**, construction of Bridge Road between Elizabeth Lake Road and the southern boundary of Planning Area 12. The eastern half of Bridge Road from the southern boundary of Planning Area 12, to Avenue S will be constructed. Construction of City Ranch Road from Bridge Road to the western perimeter of Planning Area 10. In addition, Avenue S (east of Bridge Road) will be improved to its half-width on the eastbound side as far as the eastern perimeter of Planning Area 20.

- **During Phase 3**, the remainder of Bridge Road will be improved from the southern boundary of Planning Area 12 to Avenue S. The southern half of Avenue S between Bridge Road and the eastern perimeter of Planning Area 19A will be improved in Phase 3. Construction of Avenue S from Bridge Road to the western project boundary will also be improved during Phase 3.

- **During Phase 4**, a second portion of Avenue S east of Bridge Road to the eastern boundary of Planning Area 19A will be completed. Construction on the southern half of Avenue S will begin from the eastern perimeter of Planning Area 21 to the eastern boundary of the project site. Connection from the eastern boundary of the project site to the 14 Freeway as determined by the Mitigation Monitoring Plan will be initiated.
• During Phase 5, Avenue S will be fully improved from the western perimeter to the eastern perimeter of Planning Area 23.

• Begin construction of required improvements to Avenue S from the western boundary of Planning Area 24 to the eastern boundary of the project site. During Phase 6, Avenue S will be improved from the eastern project boundary to the 14 Freeway. All improvements to Avenue S will be completed during Phase 6.

• (Phase 7 will not have any additional roadway improvements to the primary circulation system on-site.)

• During Phase 8, the last portion of City Ranch Road West (located on-site) will be completed.

5.8.3 Mitigation Measures

Implementation of the following mitigation measures would reduce significant circulation impacts associated with the proposed project to a level of “not significant”:

• All roadways shall be built out by the applicant to City approved roadway cross-sections per Figure 42 of the EIR.

• The proposed internal cross-sections and circulation layout shall be subject to review and approval of the City Traffic Engineer during the development review process to insure compliance with City access and design standards.

• Collector roadways which cross Avenue S shall be signalized. The applicant shall be required to contribute funds on a pro rata basis toward the purchase and installation of the aforementioned traffic signals as determined by the City Traffic Engineer.
• Landscaping and signage on-site shall be low and shall not interfere with sight distances at the site access points or at internal intersections. Street lights and sidewalks shall be provided in accordance with City standards.

• Prior to future development application approvals, the Applicant will be required to submit a Transportation Demand Management Plan and a Focused Traffic Study for review and approval by the Director of Planning and the Traffic Engineer, as appropriate, to determine the necessary improvements for impacts generated by that project. These plans shall be prepared in accordance with the Los Angeles County Transportation Commission’s Congestion Management Plan and the City’s transportation analysis guidelines, the City’s transportation plan, and the Engineering Design Standards. Necessary improvements shall be determined by the City Traffic Engineer, and shall include, but not be limited to, all on-site and off-site road improvements to achieve a Level of Service D (peak period) or better with ultimate traffic projections. On the basis of this and other studies, the developer will improve or fund a pro rata share of improvements. The developer shall pay appropriate traffic impact fees in accordance with City Ordinance 825, and all other fees for facilities and services that may be in place at the time of issuance of certificates of occupancy.

• The applicant shall participate in the construction of a park-and-ride facility to be located on- or off-site at a location within the Palmdale Southwest Planning Area designated by the City of Palmdale as determined by the City Traffic Engineer.

• The project applicant shall pay applicable traffic impact fees or provide improvements pursuant to future agreements with the City of Palmdale in lieu of fees as required by City Ordinance or Resolution.

• If, as a result of project impacts, the level of service falls below either the standards set by the Los Angeles County Transportation Commission’s Congestion Management Plan, or the policies set by the City's General Plan, the applicant
shall implement improvements or services necessary to bring the roadway segment into compliance. The Final Draft CMP, dated August 14, 1991 includes SR-14 and Route 138, and identifies Sierra Highway as a roadway requiring additional study.

- The applicant shall be required to contribute a pro-rata share of the cost of extension of Avenue S to Tierra Subida as determined by the City of Palmdale Traffic Engineer.

- Improvements to the portion of City Ranch Road east of Bridge Road shall be financed by the applicant and/or surrounding property developers as determined by the City of Palmdale Traffic Engineer.

5.8.4 Cumulative Impacts

Cumulative Projects Scenario

Palmdale Southwest Planning Area Circulation and Transportation Needs Study

As an extension of the General Plan modeling effort, DKS Associates completed a year 2010 cumulative assessment of the Palmdale Southwest Planning Area to determine the roadway cross-sections necessary to provide an adequate level of service (DKS Associates, July 1990). This analysis provides a longer range projection (i.e., year 2010) of future traffic conditions than does the cumulative projects scenario described above.

The list of cumulative projects utilized by DKS Associates in their analysis is provided on Table 18. Figure 48 illustrates the boundaries of the traffic analysis zones (TAZs) in which these projects are located. Based on this list of projects, traffic volumes were modeled for the year 2010 (see Table 17). Because of the interactive nature of the computer model, a detailed City Ranch South traffic assignment was not provided by DKS. The “without project” numbers shown in Table 17 represent the traffic model run without volumes in the City Ranch traffic analysis zones.
<table>
<thead>
<tr>
<th>Project Area</th>
<th>Analysis Zone (TAZ)</th>
<th>Single-family (Units)</th>
<th>Multi-family (Units)</th>
<th>Retail (Acres)</th>
<th>School (Students)</th>
<th>Park (Acres)</th>
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<td>Villages of Ritter Ranch</td>
<td>111,116</td>
<td>6,305</td>
<td>895</td>
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<td>198.0</td>
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<td></td>
<td>600</td>
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<td>1,642</td>
<td>17.9</td>
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<td>98.4</td>
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<td>3.8</td>
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<tr>
<td>Lazy T</td>
<td>114</td>
<td>5</td>
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<td><strong>TOTAL</strong></td>
<td><strong>15,908</strong></td>
<td><strong>4,003</strong></td>
<td><strong>84.7</strong></td>
<td><strong>7,800</strong></td>
<td><strong>401.0</strong></td>
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</tr>
</tbody>
</table>


Note: Forecast land uses are based on a project list prepared in July, 1990. Minor subsequent changes in dwelling unit numbers have occurred; however these changes do not significantly modify the above estimates or end results of the cumulative analysis.
The majority of the traffic volumes projected for 10th Street West and Elizabeth Lake Road will be generated from the heavy commercial development proposed north of Elizabeth Lake Road. **Table 18** shows that the contribution to the congestion along Elizabeth Lake Road. **Figure 47** shows that the contribution to the congestion along Elizabeth Lake Road from project-related traffic is .5% (from 20th to 10th Streets West) and 0% (east of 10th Street West). Generally, project-related traffic will divert around this congested area unless it is destined for land uses within this zone.

**Table 16** provides a summary of the intersection capacity utilization values and corresponding levels of service for intersections in the project vicinity for the year 2010. All of the intersections analyzed were mitigable to LOS D or better within the cross-sections recommended in the General Plan. Therefore, assuming that master-planned roadway improvements are implemented, cumulative traffic impacts are not expected to be significant.

### 5.8.5 Unavoidable Adverse Impacts

None.
5.9 AIR QUALITY

5.9.1 Existing Conditions

Air quality is affected by the rate and location of pollutant emissions and by climatic conditions that influence the movement and dispersion of pollutants. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients, along with local and regional topography, and surrounding land uses provide the links between air pollutant emissions and air quality.

The project site is located within the Southeast Desert Air Basin. The Southeast Desert Air Basin encompasses portions of Kern, Los Angeles, San Diego, Riverside and San Bernardino counties, and all of Imperial County (Figure 49). The Southeast Desert Air Basin contains the Mojave and Colorado Deserts where climate is largely determined by latitude, position on the North American continent, distance from oceans, and topography.

The project site is located in the Anaverde Valley portion of the Antelope Valley at the southern edge of the Mojave Desert. Antelope Valley encompasses approximately 1,200 square miles bounded on the south by the San Gabriel Mountains and on the west by the Tehachapi Mountains. Antelope Valley is an area of relatively slight relief with elevations ranging from 2000 to 2700 feet (Rowlands, et al., 1982).

Presently, the project site is mostly undeveloped. The adjacent Antelope Valley Public Landfill to the east is a source of dust and methane emissions which may create objectionable odors on the project site when winds blow from the east. This condition occurs less than 5% of the time (18 days) annually and because no sensitive receptors are currently on-site, odors are not a significant problem.
Climate and Meteorology

The Southeast Desert Air Basin is generally dominated by the Hawaiian subtropical high pressure zone of the Eastern Pacific Ocean during the summer and the Great Basin high pressure zone during the winter. Antelope Valley is dominated by warm and dry continental air during much of the year. Based upon climatic records for the period 1951-80, Anaverde and Antelope Valleys have an arid climatic classification with a large annual deficit of moisture (Mather, 1985).

The coolest months are December through February with a mean monthly minimum temperature of 46.7°F. The warmest months are June through September with a mean monthly maximum temperature of 93.9°F. Compared with a daily mean temperature base of 65°F, Palmdale has an annual mean of 2,908 heating-degree days and 1,760 cooling-degree days. There is often a large daily temperature range, with variations of up to 77°F, between maximum and minimum temperatures in a twenty-four hour period. The daily range is greater in summer than in winter (NOAA, 1982).

Mean annual precipitation, for the 30-year period 1951-80, measured at the National Weather Service climatic station in Palmdale, is 7.38 inches. Anaverde- Antelope Valley is characterized by three kinds of precipitation sources: winter cyclonic storms, monsoon summer storms, and intense tropical storms. Precipitation is extremely variable but generally distributed throughout the year. Based on a 30-year precipitation distribution, 2.9% percent occurs June-August, 18.9% September-November, 54.6% December-February, and 23.4% March-May (Rowlands, et al., 1982; USD, 1982). Mean annual potential evapotranspiration is estimated to be a minimum of 50 inches annually. Forty-five percent of annual potential evapotranspiration occurs during the summer months of June through August. Anaverde Valley has an estimated mean annual moisture deficit of 45 inches. The large mean negative Index of Moisture (-90) value for Anaverde Valley indicates that even in years of high precipitation and low evapotranspiration, there is a large annual moisture deficit (NOAA, 1982).
A temperature inversion, with a base between 6,000 to 8,000 feet above the Anaverde-Antelope Valley floor, is present at night throughout the year. The inversion tends to dissolve early in the day during summer. The inversion may persist throughout most of the day during winter when mixing in the lower atmosphere is limited to a height of 200 to 2,000 feet above the surface (Bennett, 1975; Rowlands, et al., 1982). Such inversions restrict the vertical dispersion of air pollutants, and together with strong sunlight, can produce worst case conditions for the formation of photochemical smog. The combination of low wind speeds and low inversions produces the greatest concentration of air pollutants. On days without inversions or days when wind speed is greater than 15 miles per hour, smog potential is greatly reduced.

On an annual basis the predominant wind directions in Palmdale are from the south, and southwest 51.7 percent of the time. Average wind speeds from these directions are 11.5 mph. Winds from the east and northeast occur only five percent of the time on an annual basis. Average wind speeds from these directions are 8.9 mph (Figure 50).

The Southeast Desert Air Basin is sheltered from maritime influences and gross interbasin transport of air pollution by mountain barriers to the west and south. Entry points into the Southeast Desert Air Basin where some limited interbasin transport of air pollutants may take place include Tehachapi Pass, Tejon Pass (4,183 ft.), Soledad Canyon, Cajon Pass (4,260 ft.), Morongo Valley, Yucca Valley, and San Gorgonio Pass (2,559 ft.) (Bennett, 1975).

**Air Quality Regulations and Plans**

The Anaverde Valley has been classified by the U.S. Environmental Protection Agency as a "non-attainment area" under the Federal Clean Air Act. This means that the area exceeds federally established ambient air quality standards for specific criteria air pollutants. National Ambient Air Quality Standards (NAAQS) have been established for carbon monoxide (CO), ozone (O₃), sulfur oxides (SOₓ), nitrogen oxides (NOₓ), fine
NOTE: Diagrams indicate percentage of time wind blows from various directions.
particulate matter (PM$_{10}$) and lead (Pb) (Table 19). California has established ambient air quality standards for additional pollutants. California standards are generally more stringent than corresponding Federal standards (Table 20). The Southeast Desert Air Basin exceeds state and national ambient air quality standards on as many as 166 days per year. Potentially unhealthful air conditions are described by the SCAQMD as Stage 1 through 3 conditions. Episodic criteria for these stages and the actions to be taken are provided in Table 21.

The South Coast Air Quality Management District is empowered to regulate stationary sources in Palmdale and within the Southeast Desert Air Basin. The SCAQMD develops and enforces air quality rules and regulations in air quality planning, and operates the regional air quality monitoring network. In 1989, SCAQMD adopted the Regional Air Quality Management Plan (AQMP). The AQMP establishes air pollution control strategies in an effort to set forth a comprehensive program to lead Los Angeles County into compliance with all Federal and California air quality standards. As of 1991, all of Los Angeles County including outlying areas of Palmdale and the project site will be covered under this AQMP.

Local jurisdictions are expected to come into conformity with this Plan, essentially by adopting an Air Quality Element as part of their General Plans. The Air Quality Element must contain transportation, land use and energy conservation control measures recommended in the AQMP. The City of Palmdale General Plan does not have an Air Quality Element. Until a local government adopts an Air Quality Element, all regionally significant general development projects as defined by SCAG's Guidance for Implementation of Conformity Procedures are subject to review by SCAG as to conformity with the AQMP. The three conformity criteria by which a project is judged are:

5-157
TABLE 19

Description of Selected Air Contaminants and Emission Comparisons

PHOTOCHEMICAL OXIDANT (O₃)

Characteristics - Photochemical oxidants include several different pollutants, but consist primarily of ozone (more than 90 percent) and a group of chemicals called organic peroxynitrates. Photochemical oxidants are created in the atmosphere rather than emitted directly into the air. Reactive organic gases, including hydrocarbons, and oxides of nitrogen are the emitted contaminants that participate in the reaction. Ozone is a pungent, colorless toxic gas that is produced by the photochemical process. Photochemical oxidant is a characteristic of Southern California smog and reaches highest concentrations during the summer and early fall.

Sources - Photochemical smog is caused by complex atmospheric reactions involving oxides of nitrogen and reactive organic gases with ultraviolet energy from sunlight. Motor vehicles are the major source of oxides of nitrogen and reactive organic gases in the basin.

Effects - The common manifestations of oxidants are damage to vegetation and cracking of untreated rubber. Photochemical oxidants in high concentrations can also directly affect the lungs, causing respiratory irritation and possible changes in lung functions.

CARBON MONOXIDE (CO)

Characteristics - CO is a colorless, odorless, toxic gas produced through the incomplete combustion of fossil fuels. Concentrations are higher in winter when more fuel is burned and weather conditions favor the buildup of directly emitted contaminants.

Sources - The use of gasoline powered engines is the major source of this contaminant, with automobiles being the primary contributor. However, various industrial processes also produce CO emissions through incomplete combustion of fossil fuels.

Effects - CO does not irritate the respiratory tract, but it passes through the lungs directly into the blood stream and, by interfering with the transfer of oxygen, deprives sensitive tissues of oxygen.

NITROGEN OXIDES (NOₓ)

Characteristics - Nitrogen oxides consist primarily of nitric oxide (NO) (a colorless, odorless gas formed from atmospheric nitrogen and oxygen when petroleum combustion takes place under high temperatures and/or pressure) and nitrogen dioxide (NO₂) (a reddish-brown irritating gas formed by the combination of nitric oxide with oxygen).

Sources - High combustion temperatures cause nitrogen and oxygen to combine and form nitric oxide. Further reaction produces additional oxides of nitrogen. Combustion in motor vehicle engines, power plants, refineries, and other industrial operations are the primary sources in the region. Ships, railroads, and aircraft are other significant sources.

Effects - Oxides of nitrogen contribute directly to photochemical smog reactions. The emitted compound, nitric oxide, combines with oxygen in the atmosphere in the presence of hydrocarbons and sunlight to form nitrogen dioxide and ozone. Nitrogen dioxide, the most significant of these pollutants, can color the atmosphere at concentrations as low as 0.5 ppm on days of 210-mile visibility. NOₓ is an important air pollutant in the region because it is a primary receptor of ultraviolet light, which initiates the reactions producing photochemical smog. It will also react in the air to form nitrate particulates.
TABLE 19 (Cont.)

**SULFUR DIOXIDE (SO₂)**

**Characteristics** - SO₂ is a colorless, pungent, irritating gas formed primarily by the combustion of sulfur-containing fossil fuels. In humid atmospheres, some SO₂ may be changed to sulfur trioxide and sulfuric acid mist, some of the latter of which can eventually react with other materials to produce sulfate particulates.

**Sources** - This contaminant is the natural combustion product of sulfur or sulfur-containing fuels. Fuel combustion is the major source and chemical plants, sulfur recovery plants, and metal processing are minor contributors. SO₂ can harm lung tissues. Sulfur oxides, in combination with moisture and oxygen, can yellow plant leaves, dissolve marble, and eat away iron and steel. Sulfur oxides can also react to form sulfates that reduce visibility and diminish light from the sun.

**PARTICULATES (TSP and PM₁₀)**

**Characteristics** - Atmospheric particulates are made up of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. By weight, about 90% of the emitted particles are larger than 10 microns in diameter, but about 90% of the total number of particulates are less than 5 microns in diameter. The aerosols formed in the atmosphere, primarily sulfate and nitrate, are usually smaller than 1 micron. In areas close to major sources, particulate concentrations are generally higher in the winter, when more fuel is burned and meteorological conditions favor the buildup of directly emitted contaminants. However, in areas remote from major sources and subject to photochemical smog, particulate concentrations are higher during summer months.

**Sources** - Particulate matter consists of particles in the atmosphere resulting from many kinds of dust- and fume-producing industrial and agricultural operations, from combustion, and from atmospheric photochemical reactions. Natural activities also release particulates to the atmosphere; wind-raised dust and ocean spray are two such sources.

**Effects** - In the respiratory tract, very small particles of certain substances may produce injury by themselves or may contain absorbed gases that are injurious. Suspended in the air, particulates of aerosol size can both scatter and absorb sunlight, producing haze and reducing visibility. They can also cause a wide range of damage to materials.

**HYDROCARBONS AND OTHER ORGANIC GASES (THC, CH₄, NMHC, AHC, NHC)**

**Characteristics** - Hydrocarbons include any of the vast family of compounds consisting of hydrogen and carbon in various combinations. Fossil fuels are included in this group. Many hydrocarbon compounds are major air pollutants, and those classified as olefins or aromatics are highly photochemically reactive. Atmospheric hydrocarbon concentrations are generally higher in winter when the reactive hydrocarbons react more slowly and meteorological conditions are more favorable to their accumulating in the atmosphere to higher concentrations before producing photochemical oxidants.

**Sources** - Motor vehicles are a major source of anthropogenic hydrocarbons (AHC) in the basin. Other sources include evaporation of organic solvents and petroleum refining and marketing operations. Trees are the principal emitters of biogenic or natural hydrocarbons (NHC) (Chameides, 1988).

**Effects** - Certain hydrocarbons can damage plants by inhibiting growth and causing flowers and leaves to fall. Levels of hydrocarbons currently measured in urban areas are not known to cause adverse effects in humans. However, certain members of this contaminant group are important components in the reactions that produce photochemical oxidants.
<table>
<thead>
<tr>
<th>Air Pollutant</th>
<th>Avg. Time</th>
<th>Concentration</th>
<th>Method</th>
<th>CALIFORNIA</th>
<th>FEDERAL</th>
<th>Method</th>
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<td>Oxidant</td>
<td>1 hour</td>
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<td>Ultraviolet</td>
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<td>(100 µg/m³)</td>
<td>Chemiluminescence</td>
</tr>
<tr>
<td></td>
<td>8 hour</td>
<td>9 ppm</td>
<td>Non-dispersive</td>
<td></td>
<td>0.03 ppm</td>
<td>Pararosaniline</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(10 µg/m³)</td>
<td></td>
<td></td>
<td>(40 µg/m³)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 hour</td>
<td>20 ppm</td>
<td>Infrared</td>
<td></td>
<td>0.14 ppm</td>
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</tr>
<tr>
<td>Carbon Monoxide</td>
<td></td>
<td>(23 µg/m³)</td>
<td>Spectroscopy</td>
<td></td>
<td>(80 µg/m³)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(NDIR)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 hour</td>
<td>0.25 ppm</td>
<td>Chemiluminescence</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>(470 µg/m³)</td>
<td>Ultraviolet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>24 hour</td>
<td>0.053 ppm</td>
<td>Fluorescence</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>(131 µg/m³)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>3 hour</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>1 hour</td>
<td>0.25 ppm</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>(655 µg/m³)</td>
<td></td>
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</tr>
<tr>
<td>Total Suspended Particulate (TSP)</td>
<td>Annual Geometric Mean</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>24 hour</td>
<td>30 µg/m³</td>
<td>Size segregated</td>
<td></td>
<td></td>
<td>High Volume Sampling</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>inlet high volume</td>
<td></td>
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<td></td>
<td></td>
<td>sampling</td>
<td></td>
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<tr>
<td>Suspended Particulate Matter (PM₁₀)</td>
<td>Annual Geometric Mean</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>24 hour</td>
<td>50 µg/m³</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Air Pollutant</td>
<td>Avg. Time</td>
<td>CALIFORNIA Concentration</td>
<td>CALIFORNIA Method</td>
<td>FEDERAL Primary Concentration</td>
<td>FEDERAL Secondary Concentration</td>
<td>FEDERAL Method</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------</td>
<td>--------------------------</td>
<td>---------------------------------</td>
<td>--------------------------------</td>
<td>--------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Sulfates</td>
<td>24 hour</td>
<td>25 μg m⁻³</td>
<td>Turbid metric</td>
<td></td>
<td>1.5 μg m⁻³</td>
<td>High Volume Sampling</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Barium sulfate</td>
<td></td>
<td>1.5 μg m⁻³</td>
<td>Atomic absorption</td>
</tr>
<tr>
<td>Lead</td>
<td>30-day</td>
<td>1.5 μg m⁻³</td>
<td>High Volume Sampling</td>
<td></td>
<td></td>
<td>Spectrophotometry</td>
</tr>
<tr>
<td></td>
<td>Average</td>
<td></td>
<td>X-ray Fluorescence</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Calendar</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quarter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hydrogen Sulfide</td>
<td>1 hour</td>
<td>0.03 ppm (42 μg m⁻³)</td>
<td>Cadmium Hydroxide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stractan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vinyl Chloride</td>
<td>24 hour</td>
<td>0.010 ppm (26 μg m⁻³)</td>
<td>Tedlar Bag Collection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(chloroethene)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethylene</td>
<td>8 hour</td>
<td>0.10 ppm</td>
<td>Gas Chromatography</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 hour</td>
<td>0.50 ppm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visibility Reducing</td>
<td>1 observation</td>
<td>In sufficient amount to reduce prevailing visibility to less than 16 kilometers at relative humidity &lt;70%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Particles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### TABLE 21

Episodic Criteria

<table>
<thead>
<tr>
<th>Air Pollutant</th>
<th>SCAQMD AND CALIFORNIA</th>
<th>FEDERAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Avg. Time</td>
<td>Stage 1</td>
</tr>
<tr>
<td>Ozone</td>
<td>1 hour</td>
<td>0.20 ppm</td>
</tr>
<tr>
<td>Carbon</td>
<td>12 hour</td>
<td>20 ppm</td>
</tr>
<tr>
<td>Monoxide</td>
<td>8 hour</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>1 hour</td>
<td>40 ppm</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>24 hour</td>
<td>-</td>
</tr>
<tr>
<td>Dioxide</td>
<td>1 hour</td>
<td>-</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>24 hour</td>
<td>0.20 ppm</td>
</tr>
<tr>
<td></td>
<td>1 hour</td>
<td>0.50 ppm</td>
</tr>
<tr>
<td>Sulfur Dioxide and Particulate Matter Combined</td>
<td>24 hour</td>
<td>-</td>
</tr>
</tbody>
</table>

**Particulate Sulfates**

| Actions to be Taken | 24 hour | - | 25 μglm⁻³ combined with ozone >0.20 ppm 1 hour average Intermediate stage. Abatement actions taken to reduce concentration of pollutant at issue. | - | 375 μgm⁻³ | 625 μgm⁻³ | 875 μgm⁻³ |

**Health advisory to a) persons with respiratory and coronary disease; b) school officials in order to curtail students' participation in strenuous activities. First steps in abatement plans.**

**Open burning prohibited. Reduction in vehicle operation required. Further industrial curtailment.**

**Incinerator use prohibited. Industry shut-down or curtailment. Public activities ceased.**

*Product of Sulfur dioxide (ppm), particulate matter (μgm⁻³) and a factor (2620).

**Not classified according to stages.

1) whether or not the project has a positive or neutral effect on the subregion's jobs/housing performance ratio;

2) whether or not the project reduces vehicle miles traveled to the greatest extent feasible through transportation demand management strategies; and

3) whether or not the project employs transportation, land use and energy control measures such that the project will not have a significant negative impact on air quality in the long term.

**Existing Air Quality**

The Lancaster air quality monitoring station, approximately 10 miles northeast of City Ranch, is the nearest air quality monitoring station to the project site (California Air Resources Board, 1988). The Lancaster air quality monitoring station monitors ozone ($O_3$), carbon monoxide (CO), nitrogen oxides ($NO_x$), and particulates, and noncriteria pollutants of toxic gases, toxic metals, and sulfates.

The California Air Resources Board which regulates mobile emissions oversees the activities of regional air quality management districts in California, has identified Lancaster as an area that frequently exceeds California and Federal standards for 8-hour and 1-hour peak concentrations of ozone ($O_3$) (California Air Resources Board, 1985, 1986, 1987, 1988, 1989). NAAQS for ozone ($O_3$) were exceeded during 1985 through 1989. While information on ten micron particulates is not available from the Lancaster station, the California PM$_{10}$ standard was exceeded in the Southeast Desert Air Basin as a whole during 1985 through 1988. Soil dust and motor vehicles are believed to contribute the largest proportion of particulates in Anaverde Valley. Other pollutant concentrations are presently being recorded below California and Federal standards at the Lancaster air quality monitoring site (Table 22).
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CARBON MONOXIDE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Concentration ppm 1hr</td>
<td>9.0</td>
<td>12.0</td>
<td>11.0</td>
<td>13.0</td>
</tr>
<tr>
<td>Maximum Concentration ppm 8hr</td>
<td>4.60</td>
<td>3.90</td>
<td>2.47</td>
<td>2.45</td>
</tr>
<tr>
<td><strong>No. Days Exceeded</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal ≥9.5 ppm 8hr</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Federal &gt;35 ppm 1hr</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>California ≥9.1 ppm 8hr</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>California &gt; 20 ppm 1hr</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>OZONE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Concentration ppm 1hr</td>
<td></td>
<td></td>
<td>0.18</td>
<td>0.21</td>
</tr>
<tr>
<td><strong>No. Days Exceeded</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal &gt; .12 ppm 1hr</td>
<td>47</td>
<td>32</td>
<td>44</td>
<td>27</td>
</tr>
<tr>
<td>California ≥.10 ppm 1hr</td>
<td>108</td>
<td>105</td>
<td>105</td>
<td>95</td>
</tr>
<tr>
<td><strong>NITROGEN DIOXIDE (NO₂)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Concentration ppm 1hr</td>
<td>0.9</td>
<td>0.9</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Standard Criterion: Federal</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Mean ppm</td>
<td>0.014</td>
<td>0.016</td>
<td>0.016</td>
<td>0.19</td>
</tr>
<tr>
<td><strong>No. Days Exceeded</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>California &gt; .25 ppm 1hr</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>SUSPENDED PARTICULATES (TSP)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Samples</td>
<td>59</td>
<td>60</td>
<td>58</td>
<td>60</td>
</tr>
<tr>
<td>Maximum 24-Hr. Concentration µg m⁻³</td>
<td>137</td>
<td>187</td>
<td>257</td>
<td>154</td>
</tr>
<tr>
<td><strong>No. Samples Exceeding Standard</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;150 µg m⁻³</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>&gt;100 µg m⁻³</td>
<td>4</td>
<td>11</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Geometric Mean Concentration µg m⁻³</td>
<td>61.5</td>
<td>64.2</td>
<td>69.9</td>
<td>72.6</td>
</tr>
<tr>
<td><strong>SULFATE (SO₄)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum 24-Hr. Concentration µg m⁻³</td>
<td>8.9</td>
<td>7.3</td>
<td>5.7</td>
<td>6.7</td>
</tr>
<tr>
<td><strong>Number of Sample Exceeding Std.</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>California ≥25 µg m⁻³ 24-Hour</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>NITRATE (NO₃)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Maximum 24 hour Mean</td>
<td></td>
<td></td>
<td></td>
<td>15.3</td>
</tr>
<tr>
<td>Annual Mean µg m⁻³</td>
<td></td>
<td></td>
<td></td>
<td>2.12</td>
</tr>
</tbody>
</table>

**Notes:**
- PPM - Parts by volume per million parts of air; NM - Pollutant not monitored; * - Data received from FAA.; µg m⁻³ - micrograms per cubic meter.

1. The federal standard is annual arithmetic mean NO₂ greater than 0.0534 ppm.
Sensitive Receptors

Land uses such as schools, playgrounds, day care centers, convalescent homes, retirement homes, hospitals, and clinics are considered sensitive to air pollutant emissions due to the population groups typically occupying such areas. (Air Quality Handbook for Preparing Environmental Impact Reports, SCAQMD, 1987). The young, the old and the infirm are generally more susceptible to respiratory infections and other air quality-related health problems than are other members of the general population. Residential uses are also considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time resulting in sustained exposure to any pollutants present.

While the area immediately surrounding the project site is undeveloped, sensitive receptors are located within one mile of the project site. Octotillo Elementary School is located approximately 1/2 mile to the east, Juniper Intermediate School is located approximately one mile to the east. Highland High School is located 1/2 mile north of the project. Residential and school projects are approved for sites within one mile of the project site to the north. There are no agricultural crop areas in the vicinity of the project site.

5.9.2 Project Impacts

The following air quality analysis is based upon vehicle trips estimated for the May, 1990 version of the City Ranch Specific Plan. This previous plan generated 3% more vehicle trips than the currently proposed project. Therefore, this air quality analysis represents a slightly worse case condition.

The proposed project would contribute to the air emissions inventory in the Anaverde Valley/Palmdale area on a short- and long-term basis, and would incrementally affect Antelope Valley and the Southeast Desert Air Basin air quality.
Short-term Impacts

Significant short-term air quality impacts would primarily occur as a result of fugitive dust emissions generated during grading and construction activities and diesel emissions generated by heavy-duty construction vehicles.

The proposed project is expected to be constructed over a 10-year period. Grading and the generation of fugitive dust will occur on approximately 1,500 acres of the site. Assuming an average emission factor for grading activities of 1.2 tons of dust per month of activity per acre disturbed and a three month grading period per construction phase, grading would generate approximately 5,400 tons of dust over the life of the project. This factor can be reduced by half through dust suppression techniques such as regular watering during the grading phase (particularly on unpaved roads used by construction vehicles).

Fugitive dust is typically chemically inert. Large diameter particles are readily filtered by human breathing passages and therefore do not represent a significant health concern. Fine-grained particle emissions may be dispersed over greater distances, especially during Santa Ana wind conditions. It has been estimated the 30 to 40 percent of the suspended particulate matter generated during grading is comprised of these fine-grained particles called \( PM_{10} \) particulates whose diameters are less than ten microns, small enough to be of concern from a public health perspective.

Existing nearby sensitive receptors may be affected by project grading dust emissions (Octotillo Elementary School and Juniper Intermediate School). Also, because proposed project construction is phased over a 10-year period, the approved school and residential projects approximately one mile to the north of the site may be operating during City Ranch grading operation periods. These sensitive receptors may suffer adverse health impacts as a result of project-related grading.
Short-term emissions would also be generated by the operation of construction vehicles. As shown on Table 23, daily construction-related vehicle emissions would exceed the SCAQMD threshold for NO\textsubscript{x} emissions.

Long-term Impacts

Project Emissions

Upon completion of the project, emissions would be generated by mobile and stationary sources generated by the proposed project. Stationary emissions include those from the use of natural gas and electricity. Mobile emissions are those from motor vehicle combustion. Estimated long-term stationary and mobile emissions were projected using SCAQMD’s Air Quality Handbook for Preparing Environmental Impact Reports (April, 1987) generation factors. Emissions calculations are shown in Table 24. Development of the proposed project would result in the daily generation of approximately 2,943 pounds of carbon monoxide (CO), 955 pounds of nitrogen oxides (NO\textsubscript{x}), 198 pounds of particulates and 244 pounds of reactive organic gases (ROG). These long-term project-related mobile and stationary emissions would exceed South Coast Air Quality Management District daily emissions threshold criteria for all of these contaminants. Project stationary emissions alone exceed SCAQMDs suggested threshold for NO\textsubscript{x} only, while project mobile emissions exceed guidelines established for criteria air pollutants.

Air quality impacts associated with development of the proposed project would cause further degradation of the air quality in the Antelope Valley and Southeast Desert Air Basin. Substances emitted into the air from the project site would predominantly affect the Anaverde Valley, Palmdale, adjacent downwind areas, and Antelope Valley in the northern portion of the Southeast Desert Air Basin. Project-related air emissions are not expected to be reduced to non-significant levels in the long term.
### TABLE 23
Estimated Grading and Site Preparation Vehicle Emissions

<table>
<thead>
<tr>
<th>Equipment</th>
<th>CO Emissions</th>
<th>NO\textsubscript{x} Emissions</th>
<th>Particulates</th>
<th>ROG Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Factor\textsuperscript{-1}</td>
<td>lbs day</td>
<td>Factor\textsuperscript{-1}</td>
<td>lbs day</td>
</tr>
<tr>
<td><strong>Diesel</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Watering Trucks (2)</td>
<td>816.81</td>
<td>33.06</td>
<td>1,889.16</td>
<td>76.48</td>
</tr>
<tr>
<td>Scrapers (5)</td>
<td>568.29</td>
<td>57.52</td>
<td>1,740.74</td>
<td>176.18</td>
</tr>
<tr>
<td>Bulldozer (1)</td>
<td>91.25</td>
<td>1.84</td>
<td>375.22</td>
<td>7.59</td>
</tr>
<tr>
<td>Compactors (1)</td>
<td>137.97</td>
<td>2.79</td>
<td>392.90</td>
<td>7.95</td>
</tr>
<tr>
<td><strong>Daily</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>95.21</td>
<td></td>
<td>268.20</td>
<td></td>
</tr>
<tr>
<td>SCAQMD Criteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exceed Criteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

Emissions factors are listed in grams hour\textsuperscript{-1}.
Emissions assume 10-hour work day.
Assumes 700 work days for watering trucks, scrapers and compactors and 350 work days for the bulldozer.
<table>
<thead>
<tr>
<th>SOURCE</th>
<th>CO</th>
<th>NOx</th>
<th>Particulates</th>
<th>ROG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Kilowatt hours per day</td>
<td>98,975</td>
<td>98,975</td>
<td>98,975</td>
<td>98,975</td>
</tr>
<tr>
<td>Electricity Emission Factor</td>
<td>0.20</td>
<td>1.15</td>
<td>0.04</td>
<td>0.01</td>
</tr>
<tr>
<td>(pounds per 1000 KWH)(1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Electrical Emissions</td>
<td>19.80</td>
<td>113.82</td>
<td>3.96</td>
<td>0.99</td>
</tr>
<tr>
<td>Project cubic ft. per day - commercial</td>
<td>38,702</td>
<td>38,702</td>
<td>38,702</td>
<td>38,702</td>
</tr>
<tr>
<td>Project cubic ft. per day - domestic</td>
<td>883,598</td>
<td>883,598</td>
<td>883,598</td>
<td>883,598</td>
</tr>
<tr>
<td>Emission Factor - commercial(1)</td>
<td>20</td>
<td>120</td>
<td>0.15</td>
<td>5.3</td>
</tr>
<tr>
<td>Emission Factor - domestic(1)</td>
<td>20</td>
<td>80</td>
<td>0.15</td>
<td>5.3</td>
</tr>
<tr>
<td>(pounds per million ft3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Natural Gas Emissions</td>
<td>18.45</td>
<td>75.33</td>
<td>0.14</td>
<td>4.89</td>
</tr>
<tr>
<td>• TOTAL STATIONARY EMISSIONS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Distance per day (miles)(2)</td>
<td>327,700</td>
<td>327,700</td>
<td>327,700</td>
<td>327,700</td>
</tr>
<tr>
<td>Vehicular Emission Factor(1)(3)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(grams per mile)</td>
<td>4.02</td>
<td>1.06</td>
<td>0.269</td>
<td>0.33</td>
</tr>
<tr>
<td>Total Vehicular Emissions</td>
<td>2,905</td>
<td>766</td>
<td>194</td>
<td>238</td>
</tr>
<tr>
<td>• TOTAL PROJECT EMISSIONS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Coast Air Quality Management District Threshold Criteria for Requiring an Air Quality Analysis (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• EXCEEDENCE OVER THRESHOLD</td>
<td>2,393</td>
<td>855</td>
<td>48</td>
<td>169</td>
</tr>
</tbody>
</table>

3. Assumes year 2000 buildout and average speed of 30 mph.
Odors

Perception of the objectionable odors on the project site from the Antelope Valley Public Landfill by future site residents and users will primarily be dependent on landfill operations and predominant wind direction and speed.

Winds from the east, northeast and south in the Palmdale area occur less than 5% of the time. Assuming site conditions are similar to those of the Palmdale vicinity, winds blowing over the project site from the landfill would occur less than 18 days per year. On those days, odors and dust impacts at the project site could be moderate to severe.

Conformance With the Air Quality Management Plan (AQMP)

Because the City of Palmdale has not yet adopted an Air Quality Element, the proposed project, which is considered regionally significant by SCAG's Guidance for Implementation of Conformity Procedures because the Specific Plan proposes over 500 dwelling units, is subject to SCAG review for conformity with the AQMP.

As discussed in the Housing section of this EIR, Section 5.4, the Regional Growth Management Plan (February, 1989) recommends that the North Los Angeles subregion return to a JHR of 0.72 in order to reach SCAG's regional jobs/housing balance goals. The proposed project would continue the area trend of developing housing with few jobs opportunities. The project JHR is 0.17. The JHR of the cumulative projects also remains housing rich at 0.65. The proposed project does not; therefore, conform to Criteria 1 of conformance with the AQMP (see page 5-176).

The proposed project provides for pedestrian as well as bicycle trails throughout the project site. These trails which would connect residential areas with the commercial centers could result in a reduction in overall vehicle miles traveled. In addition, the Specific Plan proposes to participate in the development of a park-and-ride facility off-site at Avenue S and the 14 Freeway, or on-site, in order to further reduce vehicle miles traveled.
For these reasons, the project is considered to be in conformity with Criteria 2 of the AQMP.

The City Ranch Specific Plan includes 260,000 square feet of retail uses and on-site school and recreational facility locations. Together with the proposed park-and-ride and pedestrian and bicycle trails, the proposed project would minimize vehicle miles traveled and would promote alternate forms of transportation. Overall, air pollutant emissions would be reduced. However, even with these features, the proposed project would further degrade air quality in the Antelope Valley and the Southeast Desert Air Basin on a long-term basis. Therefore, the proposed project does not conform with Criteria 3 of the AQMP. In conclusion, the proposed project would not be in conformance with two of the three AQMP conformity criteria and thus would have a significant negative impact on air quality.

5.9.3 Mitigation Measures

In addition to the implementation of all mitigation measures listed under Sections 5.8, Traffic, 5.13 Energy, and 5.29 Antelope Valley Public Landfill, the following mitigation measures would reduce short-term construction-related impacts to a level of “not significant”:

- South Coast Air Quality Management District Rule 403 (on Fugitive Dust) shall be adhered to, to ensure the clean up of construction-related dirt on approach routes to sites within the project site. Rule 403 covers measures such as the removal of particulate matter from equipment prior to movement on paved streets and the prompt removal of any material from paved streets onto which such material has been deposited.

- Building construction shall comply with energy use guidelines in Title 24 of the California Code of Regulations.
• Adequate watering techniques shall be employed to reduce construction-generated dust emissions.

• Diesel-powered construction equipment shall be preferred over gasoline-powered equipment to reduce exhaust emissions and reduce fuel evaporation and crankcase hydrocarbon emissions. Low sulfur diesel fuels shall be preferred in accordance with SCAQMD's Rule 431.

• Construction equipment shall be properly maintained and serviced to minimize exhaust emissions.

• Construction activities shall be suspended on days when ozone levels are high.

• Operations that tend to create fugitive dust shall be suspended during Stage 2 smog alerts in the project area.

• Grading activity, which creates dusty conditions, shall be suspended when, in the opinion of the City Engineer, local winds exceed acceptable levels. To validate wind velocities and/or rainfall amounts, the installation of a minimum of two remote weather stations in the vicinity of the project site's active grading areas will be required at locations determined by the City Engineer.

The following mitigation measures would reduce long-term operational impacts:

• The applicant shall implement all applicable air quality control measures listed in SCAQMD's 1989 AQMP, as may be subsequently amended.
• Energy efficient street and parking lot lighting shall be required on-site to minimize power plant emissions.

• Pedestrian walkways shall be provided throughout the project site in order to encourage walking as an integral mode of transportation between school and residences.

• Bus turnouts shall be provided along major arterials as required by the City Traffic Engineer in order to facilitate use of public transit.

• Traffic signals installed in conjunction with development of the proposed project shall be synchronized with other signals in the vicinity.

• The applicant shall participate in appropriate future trip reduction programs adopted by the City for future development applications.

• The project applicant shall submit a Transportation Demand Management Plan that will 1) create a City Ranch Transportation Management Association; 2) investigate the feasibility of developing a telecommuting center on site; and, 3) start a vanpool demonstration program for City Ranch residents. The plan will be submitted to the Planning Director prior to issuance of any certificates of occupancy for the proposed project.

• The project shall comply with all SCAQMD Rules and Regulations, including those pertaining to paving materials and architectural coatings. Specifically, use nonsolvent based, high-solid, or water based coating on buildings where feasible.

• In order to provide additional reductions in air emissions, the following list of mitigation measures was provided by the SCAQMD. Because these measures cannot be applied to all development applications that may be submitted for the City Ranch Specific Plan, each development application will be reviewed and those measures from the list which are deemed appropriate by the Planning Director will be applied to that development application.
Minimize Construction Activity Emissions:

- Schedule construct activity during off-peak hours and require a phased-schedule of construction to even out emissions peaks.
- Remove silt by paving construction roads, sweeping streets, and washing trucks leaving construction site.
- Suspend grading operations during first and second stage smog alerts.
- Maintain construction equipment engines by keeping them tuned.
- Use low-sulfur fuel for equipment.
- Use existing power sources; avoid using temporary power generation.

Reduce Construction-Related Traffic Congestion:

- Provide rideshare and transit incentives for construction personnel.
- Configure construction parking to minimize traffic interferences.
- Minimize obstruction of through traffic lanes.
- Provide a flagperson to guide traffic properly.
- Schedule operations affecting traffic for off-peak hours.

Limit Emissions from Vehicle Trips:

- Establish telecommuting programs, alternative work schedules, and satellite work centers.
- Schedule goods movements for off-peak traffic hours.
- Provide local shuttle and regional transit systems, transit shelter, bicycle lanes, storage areas and amenities, and ensure efficient parking management.
- Provide dedicated turn lanes as appropriate.
- Work with cities/developers/citizens in the region to implement TDM goals.
- Ensure streamlined traffic synchronization.
- Provide park-and-ride facilities.
- Implement parking management at commercial facilities and other places attracting traffic.
- Provide preferential parking to high occupancy vehicles and shuttle services; and charge parking lot fees on low occupancy vehicles.
- Provide temporary roadway controls at peak-hours, such as one-way streets; and install directional traffic signs; and synchronize traffic signals to relieve congestion on surrounding streets; and manage street intersections to improve level of service.
Maximize Energy Conservation:

- Implement energy conservation measures beyond state and local requirements.
- Include energy costs in capital expenditure analysis.
- Landscape with native drought-resistant species to reduce water consumption and to provide passive solar benefits.
- Improve thermal integrity of buildings, and reduce thermal load with automated time clocks or occupant sensors.
- Introduce glazed windows, wall insulation, and efficient ventilation methods; install window-systems to reduce thermal gain and loss.
- Introduce energy efficient heating and other appliances.
- Incorporate appropriate passive solar design.
- Ensure sealing of all buildings.
- Control mechanical systems, or equipment with time clocks or computer systems.
- Implement waste separation and recycling programs."

Limit Emissions from Architectural Coatings and Asphalt Usage:

- Nonsolvent-based coatings should be used on buildings. Solvent-based coatings, if used, should minimize solvent emissions.
- Use of high-solid or water-based coatings should be encouraged.

5.9.4 Cumulative Impacts

Development of the proposed project and cumulative projects would result in the generation of an estimated 27,025 pounds of carbon monoxide (CO), 7,040 pounds of nitrogen oxides (NOx), 1,492 pounds of particulates and 2,158 pounds of reactive organic gases (ROG) emissions daily (Table 25). The South Coast Air Quality Management District does not specifically address control requirements for cumulative and adjacent areas, but recognizes that control measures at a project site assist downwind areas to comply with California and Federal air quality standards (SCAQMD, 1988).

5.9.5 Unavoidable Adverse Impacts

Development of the proposed project would add emissions to the already poor regional air quality. Implementation of the recommended mitigation measures would reduce
### TABLE 25

**CUMULATIVE PLUS PROPOSED PROJECT ESTIMATED EMISSIONS**

(pounds per day)

<table>
<thead>
<tr>
<th>Source</th>
<th>CO</th>
<th>NOx</th>
<th>Particulates</th>
<th>ROG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cumulative Kilowatt hours per day</td>
<td>579,238</td>
<td>579,238</td>
<td>579,238</td>
<td>579,238</td>
</tr>
<tr>
<td>Electricity Emission Factor (pounds per 1000 KWH)(1)</td>
<td>0.20</td>
<td>1.15</td>
<td>0.04</td>
<td>0.01</td>
</tr>
<tr>
<td>Total Daily Electrical Emissions</td>
<td>115.85</td>
<td>666.12</td>
<td>16.22</td>
<td>5.79</td>
</tr>
<tr>
<td>Cumulative cubic ft. per day - commercial</td>
<td>898,157</td>
<td>898,157</td>
<td>898,157</td>
<td>898,157</td>
</tr>
<tr>
<td>Cumulative cubic ft. per day - domestic</td>
<td>3,199,396</td>
<td>3,199,396</td>
<td>3,199,396</td>
<td>3,199,396</td>
</tr>
<tr>
<td>Emissions Factor - commercial (1)</td>
<td>20</td>
<td>120</td>
<td>0.15</td>
<td>5.3</td>
</tr>
<tr>
<td>Emissions Factor - domestic(1) (pounds per one million ft(3)</td>
<td>20</td>
<td>80</td>
<td>0.15</td>
<td>5.3</td>
</tr>
<tr>
<td>Total Daily Natural Gas Emissions</td>
<td>81.95</td>
<td>363.73</td>
<td>0.61</td>
<td>21.72</td>
</tr>
</tbody>
</table>

**• TOTAL STATIONARY EMISSIONS**

<table>
<thead>
<tr>
<th>Source</th>
<th>CO</th>
<th>NOx</th>
<th>Particulates</th>
<th>ROG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle Miles Travelled per day (2)</td>
<td>2,477,903</td>
<td>2,477,903</td>
<td>2,477,903</td>
<td>2,477,903</td>
</tr>
<tr>
<td>Vehicular Emission Factor (grams per mile)(1)(3)</td>
<td>4.91</td>
<td>1.1</td>
<td>0.27</td>
<td>0.39</td>
</tr>
<tr>
<td>• TOTAL VEHICULAR EMISSIONS</td>
<td>26,827</td>
<td>6,010</td>
<td>1,475</td>
<td>2,131</td>
</tr>
</tbody>
</table>

**• TOTAL CUMULATIVE EMISSIONS**

<table>
<thead>
<tr>
<th>Source</th>
<th>CO</th>
<th>NOx</th>
<th>Particulates</th>
<th>ROG</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Coast Air Quality Management</td>
<td>550</td>
<td>100</td>
<td>150</td>
<td>75</td>
</tr>
<tr>
<td>District Threshold Criteria for Requiring Air Quality Analysis(1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• EXCEEDANCE OVER THRESHOLD</td>
<td>26,475</td>
<td>6,940</td>
<td>1,342</td>
<td>2,083</td>
</tr>
</tbody>
</table>

2. Estimated using average ADT rates for the projects listed on Table 1 added to the proposed project's ADT. Assumes trip length of 7.5 miles.
3. Assumes year 2000 buildout and average speed of 30mph.
emissions. However, because the Antelope Valley has been classified by the EPA as a non-attainment area under the Federal Clean Air Act, operational emissions will add to an already polluted air basin. Therefore, the proposed project is anticipated to create unavoidable adverse impacts with regard to air quality.
5.10 NOISE

A report prepared by Endo Engineering entitled "City Ranch South Specific Plan Technical Studies," May 1990, was used in the preparation of this section. The full text is provided in Appendix G. The May 1990 report reflects noise levels from the May 1990 version of the City Ranch Specific Plan. The prior plan generated 3% more traffic trips than the currently proposed project. The noise calculations in this report therefore reflect a slightly worse case situation than would result from the proposed project.

5.10.1 Existing Conditions

The proposed project site is located within an unincorporated portion of the Antelope Valley and partially within the sphere of influence of the City of Palmdale. The major source of noise in the project vicinity is motor vehicle noise from area surface streets. The project site is removed from freeways, railroads, public and private airports or other significant noise generators.

Noise from motor vehicles is generated by the engine vibrations, the interaction between the tires and the road and the exhaust system. Reducing the speed of motor vehicles reduces the noise exposure of listeners inside the vehicle and those located adjacent to the roadway.

The Highway Traffic Noise Prediction Model developed by the Federal Highway Administration was used to evaluate current noise conditions near the project site. This model accepts various parameters including: the traffic volume; vehicle mix and speed; and roadway geometry, in computing equivalent noise levels during typical daytime, evening, and nighttime hours. The resultant noise levels are then weighted, summed over 24 hours, and output as the CNEL value at the observer*. Various CNEL contours

* CNEL: Community Noise Equivalent Level. The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five decibels to sound levels in the evening from 7 p.m. to 10 p.m and after addition of ten decibels to sound levels in the night before 7 a.m. and after 10 p.m.
are subsequently located through a series of computerized iterations designed to isolate the 60, 65 and 70 CNEL contour locations for planning purposes.

The City of Palmdale recommends various noise policies in the General Plan Noise Element (adopted 1975). The City has adopted development guidelines which specify maximum allowable noise levels for various land use categories. A land use compatibility chart for community noise was taken from the Palmdale Community General Plan Noise Element and is shown in Figure 51. "Clearly acceptable", "normally acceptable", "normally unacceptable" and "clearly unacceptable" noise levels for various land use types are identified.

A "normally unacceptable" designation implies that new construction or developments must include noise insulation features incorporated in the project design. By comparison, a "normally acceptable" designation indicates that standard construction can occur with no special noise reduction requirements. An external "normally acceptable" maximum noise level of 60 dB(A) CNEL is specified in the City of Palmdale Noise Element for outdoor areas in residential developments. Residential uses are "normally unacceptable" in exterior environments between 60 and 75 dB(A) CNEL. Other sensitive land uses such as school classrooms, playgrounds, libraries, churches and neighborhood parks are "normally acceptable" up to 65 dB(A) CNEL, and "normally unacceptable" between 65 and 75 dB(A) CNEL. Recreational uses including golf courses, riding stables and water areas are "normally acceptable" up to 70 dB(A) CNEL.

Existing noise levels adjacent to roadways in the vicinity of the proposed project site are provided in Table 26. The noise levels at 100 feet from the centerline of those roadways within the project vicinity currently range from a low of 51.9 dB(A) CNEL at 100 feet from 25th Street West and Elizabeth Lake Road to a high of 65.6 dB(A) CNEL at 100 feet from Avenue P. The 70 dB(A) noise contours presently fall within the right-of-way along all roadways analyzed except: Palmdale Boulevard and Avenue P. The 65 dB(A)
### Land Use Compatibility Guidelines

<table>
<thead>
<tr>
<th>Land Use Category</th>
<th>Maximum Interior Exposure, dBA CNEL*</th>
<th>Land Use Interpretation for CNEL Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential - Single Family, Duplex, Mobile Home</td>
<td>45</td>
<td>![Image]</td>
</tr>
<tr>
<td>Residential - Multiple Family, Dormitories, etc.</td>
<td>45</td>
<td>![Image]</td>
</tr>
<tr>
<td>Transient Lodging</td>
<td>45</td>
<td>![Image]</td>
</tr>
<tr>
<td>School Classrooms, Libraries, Churches</td>
<td>45</td>
<td>![Image]</td>
</tr>
<tr>
<td>Hospitals, Nursing Homes</td>
<td>45</td>
<td>![Image]</td>
</tr>
<tr>
<td>Auditorium, Concert Halls, Music Shells</td>
<td>35</td>
<td>![Image]</td>
</tr>
<tr>
<td>Sports Arenas, Outdoor Spectator Sports</td>
<td></td>
<td>![Image]</td>
</tr>
<tr>
<td>Playgrounds, Neighborhood Parks</td>
<td></td>
<td>![Image]</td>
</tr>
<tr>
<td>Golf Courses, Riding Stables, Water Res., Campgrounds</td>
<td>50</td>
<td>![Image]</td>
</tr>
<tr>
<td>Office Buildings, Personal, Business and Professional</td>
<td>50</td>
<td>![Image]</td>
</tr>
<tr>
<td>Commercial - Retail, Movie Theaters, Restaurants</td>
<td>50</td>
<td>![Image]</td>
</tr>
<tr>
<td>Commercial - Wholesale, Same Retail, Ind., Mfg., Util.</td>
<td>50</td>
<td>![Image]</td>
</tr>
<tr>
<td>Manufacturing, Communications (Noise Sensitive)</td>
<td></td>
<td>![Image]</td>
</tr>
<tr>
<td>Livestock Farming, Animal Breeding</td>
<td></td>
<td>![Image]</td>
</tr>
<tr>
<td>Agriculture (except Livestock), Mining, Fishing</td>
<td></td>
<td>![Image]</td>
</tr>
<tr>
<td>Public Right-of-Way</td>
<td></td>
<td>![Image]</td>
</tr>
<tr>
<td>Extensive Natural Recreation Areas</td>
<td></td>
<td>![Image]</td>
</tr>
</tbody>
</table>

*Due to offshore sources

### Land Use Acceptability Classifications

- **Clearly Acceptable:**
  - The noise exposure is such that the activities associated with the land use may be carried out with essentially no interference.
  - (Residential areas: both indoor and outdoor noise environments are pleasant.)

- **Normal Acceptable:**
  - The noise exposure is great enough to be of some concern, but, common building constructions will make the indoor environment acceptable, even for sleeping quarters.
  - (Residential areas: the outdoor environment will be reasonably pleasant for recreation and play at the quiet end and will be tolerable at the noisy end.)

- **Normally Unacceptable:**
  - The noise exposure is significantly more severe so that unusual and costly building constructions are necessary to ensure adequate performance of activities.
  - (Residential areas: barriers must be erected between the site and prominent noise sources to make the outdoor environment tolerable.)

- **Clearly Unacceptable:**
  - The noise exposure at the site is so severe that construction costs to make the indoor environment acceptable for performances of activities would be prohibitive.
  - (Residential areas: the outdoor environment would be intolerable for normal residential use.)

Source: North Los Angeles County Palmdale Community General Plan; November 1975
**TABLE 26**

Existing Exterior Noise Exposure Levels
Adjacent to Nearby Roadways

<table>
<thead>
<tr>
<th>Roadway</th>
<th>A.D.T. 1</th>
<th>CNEL @ 100 Feet</th>
<th>Distance to Contours (2^\text{nd} \text{ft.})</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(vehicles per day)</td>
<td></td>
<td>70 dBA</td>
</tr>
<tr>
<td>30th Street West</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- North of Avenue P</td>
<td>3,900</td>
<td>60.0</td>
<td>R/W</td>
</tr>
<tr>
<td>25th Street West</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- North of Elizabeth Lake Rd.</td>
<td>600</td>
<td>51.9</td>
<td>R/W</td>
</tr>
<tr>
<td>20th Street West</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- North of Avenue P</td>
<td>1,100</td>
<td>54.5</td>
<td>R/W</td>
</tr>
<tr>
<td>Tierra Subida</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- North of Rayburn Rd.</td>
<td>2,900</td>
<td>58.8</td>
<td>R/W</td>
</tr>
<tr>
<td>- North of Avenue S</td>
<td>1,800</td>
<td>56.7</td>
<td>R/W</td>
</tr>
<tr>
<td>- North of Barrel Springs Rd.</td>
<td>800</td>
<td>53.2</td>
<td>R/W</td>
</tr>
<tr>
<td>Palmdale Boulevard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- West of Route 14</td>
<td>10,600</td>
<td>64.6</td>
<td>49</td>
</tr>
<tr>
<td>Avenue Q</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- East of Palmdale Blvd.</td>
<td>1,500</td>
<td>53.8</td>
<td>R/W</td>
</tr>
<tr>
<td>Elizabeth Lake Road</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- West of 25th St. West</td>
<td>2,400</td>
<td>57.9</td>
<td>R/W</td>
</tr>
<tr>
<td>- East of 25th St. West</td>
<td>2,700</td>
<td>56.3</td>
<td>R/W</td>
</tr>
<tr>
<td>- West of 10th St. West</td>
<td>6,500</td>
<td>60.2</td>
<td>R/W</td>
</tr>
<tr>
<td>Rancho Vista</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- West of 30th St. West</td>
<td>4,600</td>
<td>60.9</td>
<td>R/W</td>
</tr>
<tr>
<td>Avenue P</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- West of 25th St. West</td>
<td>5,000</td>
<td>62.3</td>
<td>38</td>
</tr>
<tr>
<td>- West of 20th St. West</td>
<td>4,700</td>
<td>61.9</td>
<td>R/W</td>
</tr>
<tr>
<td>- West of 10th St. West</td>
<td>8,200</td>
<td>63.3</td>
<td>36</td>
</tr>
<tr>
<td>- West of Route 14</td>
<td>13,600</td>
<td>65.6</td>
<td>53</td>
</tr>
<tr>
<td>Rayburn Road</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- East of Tierra Subida</td>
<td>1,700</td>
<td>54.2</td>
<td>R/W</td>
</tr>
<tr>
<td>Avenue S</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- West of Tierra Subida</td>
<td>1,200</td>
<td>53.9</td>
<td>R/W</td>
</tr>
<tr>
<td>- West of Route 14</td>
<td>2,200</td>
<td>56.5</td>
<td>R/W</td>
</tr>
<tr>
<td>Barrel Springs Road</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- East of Tierra Subida</td>
<td>600</td>
<td>51.9</td>
<td>R/W</td>
</tr>
</tbody>
</table>

1. A.D.T. means average daily two-way traffic volume.
2. All distances are measured from the centerline. R/W means the contour falls within the right-of-way.

Source: City Ranch South Specific Plan Technical Studies, Endo Engineering, May 1990.
contour presently falls within the right-of-way along eleven of the twenty links analyzed.

5.10.2 Project Impacts

Short-term Impacts

Project-related grading and construction activities would result in increased noise levels adjacent to site access routes and on the project site during construction. The proposed project will be completed in eight phases and is expected to be completed by the year 2000. Grading processes, which create the highest noise levels, will take place in all four development phases. Heavy equipment such as bulldozers, loaders, and dump trucks will produce the highest noise levels. Typical noise levels generated by one piece of earth moving machinery may range from 70 dB(A) to 95 dB(A) at a distance of 50 feet (Figure 52). During later phases of development, grading and construction processes may present a short-term nuisance to residents occupying dwelling units completed in earlier phases and residents of residential projects to the north. Construction and grading noise impacts are considered significant short-term impacts.

Long-term Impacts

Operation of the proposed project would result in increased noise levels on-site and in the surrounding area. This increase would primarily result from increased vehicular traffic and human-related activities on the site. Development of the proposed project would generate an estimated 49,970 adjusted average daily vehicle trips (ADT). Future noise levels in the area were quantified based upon proposed project plus year 2000 generated traffic volumes.

* The ambient or background traffic volumes in 2000 were determined by assuming a 5% annual traffic growth rate on all surface streets and a growth rate of 2% on State Highway 14.
<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>Noise Level (dBA @ 50 Feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPACTERS (ROLLERS)</td>
<td></td>
</tr>
<tr>
<td>FRONT LOADERS</td>
<td></td>
</tr>
<tr>
<td>BACKHOES</td>
<td></td>
</tr>
<tr>
<td>TRACTORS</td>
<td></td>
</tr>
<tr>
<td>SCRAPERS, GRADERS</td>
<td></td>
</tr>
<tr>
<td>PAVERS</td>
<td></td>
</tr>
<tr>
<td>TRUCKS</td>
<td></td>
</tr>
<tr>
<td>CONCRETE MIXERS</td>
<td></td>
</tr>
<tr>
<td>CONCRETE PUMPS</td>
<td></td>
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<tr>
<td>CRANES (MOVABLE)</td>
<td></td>
</tr>
<tr>
<td>CRANES (DERICK)</td>
<td></td>
</tr>
<tr>
<td>PUMPS</td>
<td></td>
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<tr>
<td>GENERATORS</td>
<td></td>
</tr>
<tr>
<td>COMPRESSORS</td>
<td></td>
</tr>
<tr>
<td>PNEUMATIC WRENCHES</td>
<td></td>
</tr>
<tr>
<td>JACK HAMMERS &amp; ROCK DRILLS</td>
<td></td>
</tr>
<tr>
<td>PILE DRIVERS (PEAKS)</td>
<td></td>
</tr>
<tr>
<td>VIBRATOR</td>
<td></td>
</tr>
<tr>
<td>SAWS</td>
<td></td>
</tr>
</tbody>
</table>

Note: Based on limited available data samples.

Source: EPA, 1971 "Noise from Construction Equipment and Operations, Building Equipment and Home Appliances," NTID 300-1

NOISE LEVELS FOR TYPICAL CONSTRUCTION EQUIPMENT REFERENCED TO 50 FEET

FIGURE

52
As shown in Table 27, future noise levels at 100 feet from the centerline of surface streets in the project area range from a low of 54.3 dB(A) CNEL along Avenue Q to a high of 67.6 dB(A) CNEL along Avenue P. The proposed project would generate an audible noise increase (greater than 3.0 decibels) along 25th Street West, 20th Street West, Elizabeth Lake Road (east and west of 25th Street West) and Avenue S. A potentially audible noise increase (greater than 1.0 dB(A)) could occur along Tierra Subida Avenue (north of Barrel Springs Road), Elizabeth Lake Road (west of 10th Street West), Rayburn Road and Barrel Springs Road. However, as these roadways are master planned as either secondary or major highways, future off-site uses adjacent to these roadways must anticipate increased noise levels and are required, through the planning and design process, to mitigate current and future noise to acceptable levels.

Significant noise level increases will result on Elizabeth Lake Road, Bridge Road and Avenue S (south of Elizabeth Lake Road). Vehicular traffic on Avenue S would be expected to generate noise levels of up to 65.8 dB(A) CNEL at 100 feet from the centerline. Motor vehicle noise generated on Elizabeth Lake Road would be expected to be as high as 65.6 dB(A) CNEL at 100 feet from the centerline. The year 2000 noise level on Bridge Road is estimated to be 66.1 dB(A) CNEL. These noise levels are considered “normally acceptable” for commercial and open space land uses but “normally unacceptable” for sensitive land uses.

Residential land uses proposed on-site within 230 feet of the Avenue S, Bridge Road and the Elizabeth Lake Road right-of-way will be required to attenuate noise levels to comply with City noise standards (60 dB(A) CNEL). City Ranch Road is expected to be planned as a secondary roadway through the project site. Assuming a 4-lane undivided cross-section, the residential land uses proposed within 142 feet of the roadway centerline for City of Palmdale noise standards (68 feet for County standards) will be required to attenuate noise to acceptable levels below 60 dB(A) CNEL. Unless site design measures are incorporated as part of the proposed project or attached as conditions of approval, significant on-site noise impacts could occur as a result of
<table>
<thead>
<tr>
<th>Roadway</th>
<th>A.D.T. 1(^1) (vehicles per day)</th>
<th>CNEL @ 100 Feet</th>
<th>Distance to Contours 2 (ft.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>70 dBA</td>
<td>65 dBA</td>
</tr>
<tr>
<td>30th Street West</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- North of Avenue P</td>
<td>9,010</td>
<td>62.6</td>
<td>R/W</td>
</tr>
<tr>
<td>25th Street West</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- North of Elizabeth Lake Rd.</td>
<td>10,940</td>
<td>65.3</td>
<td>R/W</td>
</tr>
<tr>
<td>20th Street West</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- North of Avenue P</td>
<td>3,990</td>
<td>60.1</td>
<td>R/W</td>
</tr>
<tr>
<td>Tierra Subida Avenue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- North of Rayburn Rd.</td>
<td>5,550</td>
<td>61.6</td>
<td>R/W</td>
</tr>
<tr>
<td>- North of Avenue S</td>
<td>4,070</td>
<td>60.2</td>
<td>R/W</td>
</tr>
<tr>
<td>- North of Barrel Springs Rd.</td>
<td>2,440</td>
<td>58.0</td>
<td>R/W</td>
</tr>
<tr>
<td>Rancho de la Vista</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>- West of 30th St. West</td>
<td>9,600</td>
<td>64.0</td>
<td>R/W</td>
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<td>Avenue P</td>
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<td></td>
<td></td>
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<tr>
<td>- West of 25th St. West</td>
<td>12,330</td>
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<tr>
<td>- West of 20th St. West</td>
<td>13,640</td>
<td>64.6</td>
<td>R/W</td>
</tr>
<tr>
<td>- West of 10th St. West</td>
<td>17,920</td>
<td>66.0</td>
<td>62</td>
</tr>
<tr>
<td>- West of Route 14</td>
<td>25,590</td>
<td>67.6</td>
<td>74</td>
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<tr>
<td>Elizabeth Lake Road</td>
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<tr>
<td>- West of Bridge Rd.</td>
<td>4,970</td>
<td>61.1</td>
<td>R/W</td>
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<tr>
<td>- West of 25th St. West</td>
<td>22,170</td>
<td>65.6</td>
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<td>- East of 25th St. West</td>
<td>13,220</td>
<td>63.3</td>
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<td>- West of 10th St. West</td>
<td>19,350</td>
<td>65.0</td>
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<td>Palmdale Boulevard</td>
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<td></td>
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<tr>
<td>- West of Route 14</td>
<td>24,570</td>
<td>67.2</td>
<td>67</td>
</tr>
<tr>
<td>Avenue Q</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>- East of Palmdale Blvd.</td>
<td>3,190</td>
<td>54.3</td>
<td>R/W</td>
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<tr>
<td>Rayburn Road</td>
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<td>- East of Tierra Subida Ave.</td>
<td>4,220</td>
<td>58.2</td>
<td>R/W</td>
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<tr>
<td>Bridge Road</td>
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<tr>
<td>- North of Avenue S</td>
<td>24,820</td>
<td>66.1</td>
<td>58</td>
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<tr>
<td>Avenue S</td>
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<td></td>
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<tr>
<td>- East of Bridge Road</td>
<td>23,140</td>
<td>65.8</td>
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<tr>
<td>- West of Tierra Subida Ave.</td>
<td>16,940</td>
<td>64.4</td>
<td>R/W</td>
</tr>
<tr>
<td>- West of Route 14</td>
<td>17,230</td>
<td>64.5</td>
<td>R/W</td>
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<tr>
<td>Barrel Springs Road</td>
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<tr>
<td>- East of Tierra Subida Ave.</td>
<td>1,580</td>
<td>56.1</td>
<td>R/W</td>
</tr>
</tbody>
</table>

2. All distances are measured from the centerline. R/W means the contour falls within the right-of-way.

Source: City Ranch South Specific Plan Technical Studies, Endo Engineering, May 1990.
ultimate motor vehicle volumes on Avenue S and Elizabeth Lake Road and City Ranch Road.

City noise standards consider noise levels below 65 CNEL to be acceptable for school uses. According to Los Angeles County standards, noise levels around schools in excess of 70 CNEL require noise attenuation to bring noise levels inside classrooms to acceptable levels. Currently no school sites are proposed adjacent to major roadways.

Location of a fire station on-site has the potential to create noise impacts due to use of sirens by fire engines exiting the fire station during emergency situations. Because the project site is proposed to be a residential community, it is expected that siren use will be kept to a minimum and only used when necessary. Therefore, noise generation during the sensitive evening and nighttime hours will be minimized. However, sensitive receptors in proximity to the fire station will find this noise a nuisance.

5.10.3 Mitigation Measures

The following measures are proposed to reduce noise impacts during grading and construction to a level of “not significant”:

- Construction activities adjacent to residential areas shall take place only between the hours of 6:30 a.m. and 8:00 p.m., Monday through Saturday, as specified by the City of Palmdale Noise Ordinance.

- Grading and construction equipment shall be stored at the project site.

- Repair of construction vehicles on-site shall be restricted to the same working hours stated above, 6:30 a.m. to 8:00 p.m., Monday through Saturday.

- All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers.
- Stationary equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.

- Temporary noise attenuation barriers, such as walls and/or berms, shall be placed between construction areas and sensitive noise receivers.

The following site design measures are recommended to ensure that the ultimate noise exposure does not exceed 60 dB(A) CNEL in residential areas and 65 dB(A) CNEL at school sites to meet City of Palmdale normally acceptable noise standards. These measures would reduce operational noise impacts to a level of not significant:

- Reduction of intrusive noise levels in residential and school areas shall be accomplished through the incorporation of design measures or structural measures which will reduce noise levels to acceptable levels within the living or recreational portions (as defined by the City) of any lot. The measures that may be utilized to reduce noise impacts include, but are not limited to, placement of parking structure in such a manner as to act as a buffer, increasing the setbacks along the roadway, creation of landscaped berms, or construction of other barriers such as walls. The acceptable noise level CNEL which will be applied to future projects will be that level which is in place, either by ordinance, resolution or General Plan policy, at the time that future development applications are deemed complete.

- Carports and parking areas in multi-family residential areas shall be located adjacent to the heavily traveled roadways to create building setbacks and shield more sensitive uses.
• Multi-family structures shall be oriented away from adjacent roadways to insure that room arrangements, window size and placement, and balcony, roof and courtyard design minimize intrusive noise levels.

• Truck access, parking area design and air conditioning refrigeration units within commercial land uses shall be carefully designed and evaluated at more detailed levels of planning to minimize the potential for acoustic impacts to adjacent noise sensitive development.

• The design of the elementary schools shall locate administration buildings, noise-insulated structures (such as gymnasiums and auditoriums), locker facilities, parking areas and bus loading zones adjacent to roadways to buffer more sensitive uses such as classrooms and playgrounds.

5.10.4 Cumulative Impacts

Noise levels on surface streets in the project vicinity will increase as a result of development of the proposed project and the cumulative projects in the area. The most significant increases will occur on Elizabeth Lake Road and Avenue S. As stated above, both of these roads are master planned as major highways and future off-site and adjacent land uses must anticipate high noise levels along these roadways.

5.10.5 Unavoidable Adverse Impacts

Provided the recommended mitigation measures are properly applied, construction and operation of the proposed project are not expected to create significant noise impacts on-site. However, some areas along Elizabeth Lake Road containing sensitive receptors such as residences and schools may be significantly impacted.
5.11 AESTHETICS

5.11.1 Existing Conditions

The project site, located in the foothill portion of the Sierra Pelona Mountain Range, offers a variety of natural visual features characteristic of the western Antelope Valley as well as several man-made features. Major scenic features on the project site include the San Andreas Rift Zone, the California Aqueduct, the Sierra Pelona Mountain Range along the southern project site boundary, the Verde Ridge in the northeast portion, a wetland and Joshua tree woodland north of the California Aqueduct, a Joshua tree woodland in the San Andreas Rift Zone, and the Anaverde Valley floor across the central portion of the project site (Figure 53).

The Anaverde Valley floor area of the project site, which presently contains an abandoned ranch compound with silos and water tanks and cattle grazing activities, provides a rural aesthetic setting as viewed from undeveloped areas to the northwest and southeast and from several higher elevation locations on the project site (Figure 54).

The San Andreas Rift Zone and the Sierra Pelona Range with slopes over 25% provide important regional visual topographic relief (Figure 55). The Joshua tree woodland area located in the Rift Zone is an important scenic stand. The wetland and woodland areas north of the Aqueduct serve important biological and visual features.

Five sets of high power transmission lines cross the southwest corner of the project site (Figure 56). Three sets of lines traverse diagonally from the adjacent site to the west across the Anaverde Valley floor and up through the Sierra Pelona foothills. The other two lines pass along the southern property line at the highest site elevation line, one from the southwest corner to the center of the southern property line, the other crossing the extreme southwest corner only.
LEGEND

PROMINENT FOREGROUND RIDGE - VISIBLE FROM SURROUNDING ON-SITE & OFF-SITE OUTSIDE AREAS

BLUFF / STEEP SLOPE EDGE - VISIBLE FROM ADJACENT AREAS

GENTLE TERRAIN - VISIBLE FROM MAJOR ROADS AND OFF-SITE AREAS

GENTLY TO MODERATELY SLOPING TERRAIN

MAJOR FOOTHILLS - PROMINENTLY VISIBLE FROM ON-SITE & OFF-SITE

FLAT OPEN TERRAIN - GENERALLY NOT PROMINENTLY VISIBLE FROM OFF-SITE DEVELOPED AREAS

ON-SITE DEVELOPMENT WHICH CAN READILY SEE THE PALMDALE DISPOSAL LANDFILL

SOURCE: City Ranch Specific Plan, 1991
Azeka de Almeda Planning

VISUAL FEATURES OF THE PROJECT SITE

FIGURE 53
VIEW TOWARD THE SOUTHERN BOUNDARY OF THE PROJECT SITE
The California Aqueduct (not a part of the project site) bends through the Anaverde Valley portion of the site, providing an almost river-like appearance. The Northside Riding and Hiking Trail traverses the project site along the Anaverde Creek (see Figure 72 in Section 5.23, Parks and Recreation). This trail traverses the whole of Los Angeles County. Scenic views of the Ritter Ridge Mountain Range to the northwest and of the Sierra Pelona and the San Gabriel Mountain Ranges to the south are provided along the Northside Riding and Hiking Trail.

Because of the topography of the project site and surrounding areas, a number of vistas of the City Ranch property are available from off-site locations (Figure 57). These include both near and far field vistas.

Near field views presently occur from Elizabeth Lake Road, 25th Street West, areas of the Anaverde Valley (including the Antelope Valley Landfill), Ritter Ranch and portions of Avenue S, west of the Antelope Valley Freeway. Elizabeth Lake Road, which forms a portion of the project site’s northern boundary, is a County-designated scenic corridor. Views of the project site from Elizabeth Lake Road and 25th Street West are limited to the Verde Ridge hills on the northern portion of the project site and to the existing City Ranch project site entrance located just west of 25th Street West. The eastern portion of the Anaverde Valley area of the project site is visible from the Antelope Valley Public Landfill and from portions of Avenue S to the southeast. From Ritter Ranch to the west, almost the entire central portion of the City Ranch project is visible. The project site is not visible from the south as it is shielded by the ridgeline of the Sierra Pelona range.

Far field vistas of the project site exist along three primary view corridors: along 25th Street West to the north, from portions of northwest Palmdale northeast of City Ranch, from portions of central Palmdale and along the Antelope Valley Freeway (Highway 14). The eastern far field vistas may extend along Highway 138 as far as the community
of Littlerock. The far field views from 25th Street West and from northwest Palmdale are limited to the extreme northern portions of the site. The remainder of the site is shielded from these viewing areas by the ridgeline of the Verde Hills and slopes of the San Andreas Rift Zone which cross the northern portions of the project site.

South-central portions of the City Ranch project site, consisting of the northern slopes of the Sierra Pelona, and small areas of the central project site south of the California Aqueduct are visible from the far field view corridors to the east. Other portions of the project site are not visible from the far field as they are shielded either by the Antelope Valley Landfill, the ridge line of the Verde Hills, or the slopes of the Rift Zone.

5.11.2 Project Impacts

Development of the proposed project would transform the project site from an essentially undeveloped area to a largely suburban setting. The majority of the residential development would primarily occur on the flatter portions of the project site along the Anaverde Valley floor. These areas would not be visible off-site.

Following project development, approximately 793 acres of the project site or more than 40% would supply visual open space opportunities by being developed as either parks, golf course, open space or natural open space. In addition, the school sites would also provide visual open space opportunities (Figure 58).

The majority of the San Andreas Rift Zone would be transformed into public recreation areas comprised of public parkland and golf course areas (Planning Areas 1, 4, 9 and 13). Sierra Pelona hillsides and a large portion of the Verde Ridge would remain as undeveloped natural open space (Planning Areas 2, 7, 29 and 32).

The majority of the Joshua tree woodland would be converted into a golf course (Planning Areas 4 and 13). Part of the Joshua tree woodland would be converted into a
single-family residential area (Planning Area 8). The rest would be converted into public park space (Planning Area 9) or would remain as natural open space (Planning Areas 2 and 7).

The only developed areas of the project site that would be visible from off-site locations will be higher elevation residential areas (Planning Areas 6, 31 and a portion of 28A) and both commercial areas (Planning Areas 3 and 33) from locations to the north, northeast and east. In addition, the easternmost portions of school Planning Area 25 and residential Planning Areas 8 and 24 would be visible from developed areas directly to the east (Figure 57). From the west, the entire residentially developed Anaverde Valley floor would be visible.

Southward views from the scenic Elizabeth Lake Road corridor into the project site would be largely blocked by a landscaped parkway strip of varying width along the south side of the road (Figure 58) and by the Verde Ridge. Only higher elevation portions of Planning Area 6 and portions of commercial area Planning Area 3 near Bridge Road would be visible. A major landscaped community entry statement is proposed to be established along Elizabeth Lake Road at the Bridge Road entry point into the project site (Figure 59). A second landscaped community entry statement is planned to be established in the southeast corner of the project site along Avenue S (Figure 60). Avenue S and Bridge Road which would pass through the project site, would be major landscaped roadways.

The Northside Riding and Hiking Trail currently passes through proposed golf course Planning Areas 4 and 13. According to the Specific Plan, this trail would be realigned along the northern perimeter of Planning Area 4, then along the northern perimeter of Bridge Road and along the northern perimeter of the City Ranch Road alignment through Planning Area 13 or alternately through the enter of Planning 1, and along the northern and western perimeters of Planning Area 9, then across the bridge across the Aqueduct then along the northern perimeter of the City Ranch Road alignment through
Planning Area 13. The trail will be constructed as determined by the City Department of Parks and Recreation (see Figure 72, Section 5.23, Parks and Recreation).

Following development of the proposed project, views of the project site from the realigned Northside Riding and Hiking Trail would be substantially altered. Views along the north side of the trail would consist of the proposed golf course or alternately of the northern portion of the Aqueduct and community park and open space areas. Views on the south side of the trail would consist of City Ranch Road, wetland areas along the Aqueduct, the Aqueduct itself, and single-family residential areas, and a park site beyond or alternately, in addition, portions of the community park and residential areas beyond. Views of the San Gabriel, Sierra Pelona Range and Ritter Ridge would not be significantly altered.

The five high-tension electric transmission lines would remain as currently situated. A neighborhood park would be developed along the path of the three diagonally trending lines (Planning Area 18). The other two high-tension transmission line rights-of-way would be contained within Planning Area 32 designated as natural open space.

To accommodate water supply requirements, the Specific Plan identifies three reservoirs to be constructed on the southern portion of the site; two of these would be located in Planning Area 32 and one would be located in Planning Area 29. The water reservoir located in Planning Area 32 would be located at elevations of 3,240 feet (3.0 million gallons) and 3,430 feet (1.0 million gallons); the water reservoir located in Planning Area 29 would be at an elevation of 3,240 feet (3.0 million gallons). The facilities located in Planning Area 32 would be visible in the near field by Ritter Ranch to the west and in the far field by portions of northwest Palmdale. The facilities to be located in Planning Area 29 may be visible to the north and east far fields.

Infrastructure improvements would also include the installation of flood control basins. Grading for several debris basins will occur along the northern boundary of Planning Area 32 and along the southern boundary of the project site in Planning Areas 27 and
28A. This grading would be visible on-site and may be visible from portions of Ritter Ranch to the west and the Antelope Valley Public Landfill to the east.

As mentioned in the Light and Glare section (Section 5.12) of this report, the nighttime setting would be converted from a dark sky to an illuminated suburban setting. Although the site would be substantially altered visually as a result of project development, areas of the project site that would be developed are not visually prominent. The ridgelines, the most prominent visual resources on the project site would remain intact subsequent to project development. In addition, as a result of project development, many areas of the project site would have views of the Antelope Valley Public Landfill located to the east (Figure 53). These views, if not properly shielded, can be considered offensive and, therefore, potentially significant.

5.11.3 Mitigation Measures

Implementation of the following mitigation measures would reduce the project's aesthetic impacts:

- All roadways within the project site shall be tree lined and landscaped in accordance with City of Palmdale street design requirements and the streetscape guidelines provided in the Specific Plan.

- All new and relocated utility distribution lines shall be placed underground within developed areas.

- All storage, including cartons, containers or trash, shall be shielded from view within a building or area enclosed by a masonry wall not less than six (6) feet in height. No such area shall be located within fifty (50) feet of any residential area.
• Screening shall be required when the following abut residential uses:
  a) Loading areas;

b) Visually obtrusive above-ground utility equipment and appurtenances;

c) Antelope Valley Public Landfill

• A screen, as referred to above, may consist of two (2) of the following types:

  a) Walls: A wall shall consist of concrete, stone, brick, tile or similar type of solid masonry material a minimum of four (4) inches thick.

  b) Berms: A berm shall be constructed of earthen materials and it shall be landscaped.

  c) Fences, solid: A solid fence shall be constructed of masonry, wood or other materials a minimum thickness of two (2) inches and it shall form an opaque screen.

  d) Landscaping: Plant materials, when used as a screen, shall consist of densely planted evergreen or deciduous plants.

• Screening established near intersections shall consider safe sight distances so that adequate visual conditions are maintained for pedestrians and drivers of motor vehicles.

• Rooftop mechanical equipment shall be fully screened from view.
• Landscaping, consisting of trees, shrubs, and/or ground cover, shall be installed and maintained subject to the following standards:

a) Landscaping shall be required along all property lines abutting streets except where provided in landscape easements adjacent to rights-of-way. Minimum tree and shrub size shall be fifteen (15) gallon and spaced a minimum of 30 feet average.

b) Landscaping shall be required along all property lines abutting residential uses.

c) Planting shall be designed so as not to hinder sight distance at intersections.

d) Permanent irrigation facilities shall be provided for landscaped areas.

e) Landscaping shall be maintained by property owners in a neat, clean and healthy condition.

f) Areas of native vegetation within all open space and natural open space areas are exempted from the landscape standards identified above except that they shall be maintained free of trash and debris. Fuel modification zones will be required where fire hazards warrant them.

• Residential structures shall be limited to 35 feet in height.

• The colors and textures of building materials shall blend with the landscape as set forth in Section VI, Design Guidelines of the City Ranch Specific Plan.

• All downdrains shall utilize colored concrete chosen to blend with the adjacent terrain. Downdrains shall be located in less visually prominent locations where practical. When this is not feasible, downdrains shall be aesthetically mitigated
by the use of a combination of landscaping, rock, and screening, or may be diagonally angled down the slope when practical and when it will reduce the visual impact. These measures shall be designed to the satisfaction of the Director of Planning and City Engineer, and shall be reviewed for conformance at the Tentative Tract Map stage. Details of these conditions shall be indicated on the Tentative Tract Map.

- On-site water tanks shall be painted in earth tone colors.

- City Ranch Specific Plan grading standards shall be strictly adhered to, to avoid negative impacts with regard to hillside grading. The Specific Plan policies which govern grading design and may affect aesthetics of the site are as follows:

a) Major ridgelines shall be preserved. Specifically, the Sierra Pelona and Verde Ridge ridgelines shall be preserved in their existing states with ridgetop elevations retained at natural elevations.

b) Large contiguous open spaces shall be preserved. Specifically, areas of natural slope above 45 percent which total over one-half acre in size and which are visible from off-site areas shall be preserved in their existing state. This condition occurs in Planning Areas 2, 7, 29, and 32.

c) No construction shall be permitted in areas above 40 percent slope except for isolated pockets of steep slope which are not visually prominent, and only if required for reasons of health, safety, welfare, protection of property and for necessary public facilities. Isolated pockets of steep slope shall be defined as sloping areas up to 50 feet in height and up to 200 feet in horizontal length.

d) Grading design and site planning design shall consider the aesthetic impacts of proposed slopes and structures as seen from off-site developed areas of the City of Palmdale, and shall employ measures to lessen the visual impacts to
off-site areas if required. Criteria for mitigation required shall include visual prominence, height of slope banks, “visual length” of slope banks, landscaping and erosion control.

e) Mass graded “mega pads” shall be prohibited. Design of residential subdivisions shall utilize grade breaks, curvilinear streets and smaller steps of grade change rather than single large slopes. The grading of the commercial site at Planning Area 3 may utilize a large graded pad design provided slope height does not exceed thirty (30) feet in height and provided the buildings are placed to provide nearly complete visual screening of slopes above twenty (20) feet in height.

f) Large manufactured slopes greater than three hundred feet in “visual length” shall be designed so as to simulate the curvature of a naturally shaped slope, or shall be blended into natural slopes by gradually adjusting the contours and slope orientation.

5.11.4 Cumulative Impacts

Development of the proposed project and cumulative projects will permanently convert the project vicinity from a rural open space area to a developed residential suburban setting. This development, which is in accord with the City of Palmdale General Plan land use policies, will extend the physical and visual boundary of the Palmdale City limits. As a result of both development and cumulative projects in the area, irreversible losses to open space vistas in the Leona and Anaverde Valleys will result. Because these losses are irreversible and because developed areas replacing open space would be visible from substantial distances off-site, these impacts are considered significant.
5.11.5 Unavoidable Adverse Impacts

As a result of implementation of the recommended mitigation measures, project impacts with regard to aesthetics will remain because implementation of the City Ranch Specific Plan will permanently transform the project site from its current undevelopment condition into a semi-urban environment. However, the ridgelines which are the most visually prominent features on the project site will be left intact.
5.12 LIGHT AND GLARE

5.12.1 Existing Conditions

The project site is presently largely undeveloped and is unlighted at night. The adjacent sites are presently also undeveloped. The site receives no spillover night lighting or glare from adjacent properties.

5.12.2 Project Impacts

Development of the proposed project would result in the conversion of the project site from an undeveloped to a primarily residential setting. The night environment would change from that of a dark remote area to a lighted, suburbanized condition. The major sources of lighting would be from the residences, commercial and recreational buildings, yard lighting, street lighting, and from vehicles along the project site streets. As the surrounding properties are currently undeveloped, this increase in night lighting may affect existing nighttime darkness amenities. Motorists along 25th Street West and Elizabeth Lake Road may also be affected by this change in night lighting.

The majority of the surrounding properties are anticipated to be developed residually within the next 10-15 years. Most likely, they would have night lighting similar to that of the proposed project. Because development of the adjacent properties is anticipated to be concurrent with proposed project construction, project lighting impacts are not expected to be significant. However, if development of adjacent properties never occurs, development of the proposed project would cause significant impacts with regard to loss of existing nighttime darkness amenities. If surrounding property development occurs but only after proposed project development, temporary significant impacts would occur.

South-facing windows of project site structures may create a source of glare. South-facing windows would potentially affect motorists along Avenue S and Bridge Road.
The Sierra Pelona range blocks views from properties to the south and therefore obstruct glare impacts that would occur on parcels to the south. According to the streetscape plans for Avenue S and Bridge Road, a row of trees and dense landscaping would be planted in the parkway strip along the sides of the streets (Figures 61 and 62). This would reduce on-site glare impacts for motorists. Because glare impacts would not create hazardous conditions on surrounding roads and would not intrude on existing developments, glare impacts are not considered significant.

5.12.3 Mitigation Measures

While impacts are not considered significant with regard to light and glare, implementation of the following measures can reduce project-related light and glare impacts:

- All exterior lighting in commercial and multi-family planning areas shall be designed and located to confine direct rays to the premises. A photometric lighting plan is required pursuant to Section 86.05 (9)(A)-(H) of the Palmdale Municipal Code.

- Maximum overall height of fixtures shall be not more than fourteen feet in, or adjacent to residential areas; and not more than twenty feet in non-residential areas.

- Fixtures shall possess sharp cut-off qualities at property lines.

- Low intensity downward focused street lamps shall be used in the southern portion of Planning Area 19A, the southern half of Planning Area 17, portions of Planning Area 28A above 15% grade and in all of Planning Area 31.

- No low pressure sodium lighting fixtures are allowed.
UPRIGHT DECIDUOUS TREES
BROAD PINE TREES
FLOWERING CANOPY MEDIAN TREES
MEANDERING SIDEWALK
WHERE POSSIBLE, MINIMUM
FIVE FOOT PLANTING BETWEEN
WALK AND CURB/WALL
TREES SELECTIVELY PLACED
TO ALLOW VIEWS TO
OPEN SPACE

PRIMARY INTERSECTION
DESSERTSCAPE PLANTING
PROSTRATE EVERGREEN
SHRUB MASS
UPRIGHT EVERGREEN TREE
24" BOX @ 15' O.C.

Source: Florian Martinez Associates

BRIDGE ROAD STREETSCAPE
• Lights shall be shielded with internal silvering or external opaque reflectors or other comparable techniques.

• Flashing lights shall be prohibited.

• Lighting plans for athletic courts and fields shall be reviewed by the City of Palmdale Planning Department.

• Lighting intensity within commercial or multi-family planning areas shall be a minimum of one foot-candle, maintained.

• Where appropriate, landscaping shall be used to screen night lighting.

5.12.4 Cumulative Impacts

Development of the proposed project along with the cumulative projects will increase night lighting in the presently rural, unlighted areas of the project vicinity as the area is transformed from an undeveloped rural environment to a suburban setting resulting in the loss of a dark nighttime sky. This is considered a significant cumulative impact.

5.12.5 Unavoidable Adverse Impacts

The project will contribute to the cumulative loss of a dark nighttime sky which is considered an unavoidable adverse impact.
5.13 ENERGY

5.13.1 Existing Conditions

The project site, in its present undeveloped state, uses only negligible amounts of energy in the form of electricity and natural gas. Southern California Edison and Southern California Gas Company supply the unincorporated area of Los Angeles County with electricity and natural gas. Sections 5.14 and 5.15 of this report discuss electricity and natural gas supplies and infrastructure in the vicinity of the project site. Incoming solar radiation, also available on the project site, is presently not utilized.

At 34°35' north latitude, the project site receives 40 percent of solar radiation June through August and 60 percent September through May of each year. Solar energy has not been extensively utilized in the City Ranch area but is expected to increase in importance as passive and active solar technology becomes more efficient and affordable (Buffo, 1972). Passive and active solar energy for thermal mass, space, and water heating is readily available and highly suitable to the project site. The relative low number of cooling-degree days (1,760) and higher number of heating-degree days (2,908) is an indicator that solar energy is important during winter months for thermal mass and space heating.

Energy requirements for cooling and heating building interiors in the project area are relatively high because of the distance from oceans. Additionally, cold air inversions are frequent in the Anaverde Valley (Rowlands, et al., 1982). Buildings in the Anaverde Valley can easily be kept warm or cool through detailed attention to climatic constraints and the best available current technological conservation measures.

5.13.2 Project Impacts

Upon project completion, electrical energy use from proposed on-site uses is estimated to be approximately 98,975 kilowatt-hours daily. Natural gas use is estimated to be
approximately 924,300 cubic feet daily. These long-term imported energy use requirements are computed in Section 5.14, Electricity and 5.15 Natural Gas, Tables 29 and 30, respectively. Distant water, insolation or fissionable materials would be used to generate electricity for the proposed project. Fossil fuels in the form of petrochemicals and natural gas would be used for transportation within, to and from the project site, to provide interior space heating, space cooling, and to operate commercial and residential machinery. Incoming solar radiation and waste heat from streets, sidewalks, roofs and walls of buildings, and appliances within the Anaverde Valley would warm lower level ambient air and help to maintain a new urban heat island that would encompass the project site (Brazel, 1987).

The proposed project would generate an estimated 49,970 average daily trips (11,600-site trips and 38,310 off-site trips); resulting in an estimated total daily vehicle miles traveled of 327,680. Assuming an average fuel economy of 15 miles per gallon, travel generated directly by the proposed project would use approximately 21,845 gallons of gasoline daily (Table 28).

Total energy demand for the proposed project would be approximately 972,940 million British Thermal Units (BTUs) daily. Overall, energy impacts are not considered significant because the existing deliverable capacity for natural gas and electricity are adequate to supply the proposed project. In addition, almost unlimited solar energy is available at the project site for future use.

5.13.3 Mitigation Measures

While energy impacts are not considered significant, implementation of all energy conservation measures listed as mitigation measures in Sections 5.8 (Traffic), 5.9 (Air Quality), 5.14 (Electricity) and 5.15 (Natural Gas) of this report and the following measures would reduce energy use at the project site:
### TABLE 28
Proposed Project and Cumulative Estimated Daily Energy Use

<table>
<thead>
<tr>
<th>Energy Type</th>
<th>Volume</th>
<th>Energy Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Project</td>
<td></td>
<td>(million BTUs)*</td>
</tr>
<tr>
<td>Electricity</td>
<td>98,975 kilowatt-hours</td>
<td>337.8</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>922,300 cubic feet</td>
<td>968,415.0</td>
</tr>
<tr>
<td>Gasoline</td>
<td>21,845 gallons</td>
<td>2,084.4</td>
</tr>
<tr>
<td>Subtotal Proposed Project</td>
<td></td>
<td>970,837.2</td>
</tr>
<tr>
<td>Cumulative Projects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electricity</td>
<td>482,245 kilowatt hours</td>
<td>1646.5</td>
</tr>
<tr>
<td>Natural Gas</td>
<td>3,148,358 cubic feet</td>
<td>3,305,776.0</td>
</tr>
<tr>
<td>Gasoline</td>
<td>75,275 gallons</td>
<td>7,182.6</td>
</tr>
<tr>
<td>Subtotal Cumulative Projects</td>
<td></td>
<td>3,314,605.1</td>
</tr>
<tr>
<td>Total Cumulative Energy Use</td>
<td></td>
<td>4,285,442.3</td>
</tr>
</tbody>
</table>

---

* 1 cubic foot of natural gas = 1,050,000 BTUs.  
1 kilowatt hour = 3,414.4 BTUs  
1 gallon of gasoline = 95,418 BTUs.
• Energy efficient water heaters and space heating units, insulation, dual glazed windows and thermally efficient building materials shall be installed in all structures constructed on the project site.

• Structures and landscaping shall be situated to maximize solar access.

• Ventable windows shall be installed to maximize use of passive heating, cooling and air exchange.

• Restrictive water fixtures shall be installed as identified by the California Department of Water Resources.

• Encourage the placement of dwelling units to take full advantage of solar energy for natural heating and cooling in order to reduce the use of electricity and natural gas within the project area.

5.13.4 Cumulative Impacts

There would be an increase in energy use as a result of proposed project and cumulative projects development (Table 28). Cumulative energy consumption including the proposed project, would be approximately 581,220 kilowatts of electricity, 4,070,658 cubic feet of natural gas and 97,120 gallons of gasoline daily. A total of 4,285,442.3 million BTUs of energy would be consumed daily as a result of proposed and cumulative projects development.

5.13.5 Unavoidable Adverse Impacts

None.
5.14 ELECTRICITY

5.14.1 Existing Conditions

The project vicinity receives electrical service from the Southern California Edison Company (SCE). Five sets of high-tension electric transmission lines and one 12 kV distribution line cross the project site (Figure 63). According to Southern California Edison, service within its service areas is currently adequate.

5.14.2 Project Impacts

Development of the proposed City Ranch project would create an increased demand for approximately 99,975 kilowatt-hours of electricity daily (Table 29). The proposed location of service lines capable of serving the project site have yet to be determined and would be contingent upon the developer’s proposed phasing of the project. SCE, (August, 1989) has determined that they have sufficient capacity to serve the proposed project. Therefore, proposed project impacts are not considered significant with regard to electricity use.

The five sets of existing above-ground high-tension SCE transmission lines would not be disturbed by development of the proposed project. These lines would pass through Planning Area 18 which is designated as a park, and Planning Area 32 designated as natural open space. The 12 kV distribution line crossing the southern portion of the project site may need to be realigned along Avenue S as a result of project development.

5.14.3 Mitigation Measures

Although impacts related to electricity use are not considered significant, implementation of the following measures would reduce electricity use:
TABLE 29

Proposed Project and Cumulative Daily Electrical Usage

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Usage Factor¹ (kilowatt-hours/sq.ft./year)</th>
<th>Electricity Usage (kilowatt-hours/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proposed Project</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential 5,200 dwelling units</td>
<td>6,081/unit</td>
<td>86,633</td>
</tr>
<tr>
<td>Commercial 260,000 sq.ft.</td>
<td>11.8</td>
<td>8,405</td>
</tr>
<tr>
<td>Schools 170,000 sq.ft.</td>
<td>6.3</td>
<td>2,934</td>
</tr>
<tr>
<td>Golf Course Clubhouse 15,000 sq.ft.²</td>
<td>8.8</td>
<td>362</td>
</tr>
<tr>
<td>Community Recreation Building 20,000 sq.ft.²</td>
<td>8.8</td>
<td>482</td>
</tr>
<tr>
<td>Fire Station 6,600 sq.ft.</td>
<td>8.8</td>
<td>159</td>
</tr>
<tr>
<td><strong>Subtotal Proposed Project</strong></td>
<td></td>
<td>98,975</td>
</tr>
<tr>
<td><strong>Cumulative Projects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential 13,145 dwelling units</td>
<td>6,081/unit</td>
<td>219,000</td>
</tr>
<tr>
<td>Commercial 5,143,496 sq.ft.</td>
<td>11.8</td>
<td>166,169</td>
</tr>
<tr>
<td>Public Library 16,000 sq.ft.</td>
<td>8.8</td>
<td>385</td>
</tr>
<tr>
<td>Schools 5,605,760 sq.ft.</td>
<td>6.3</td>
<td>96,691</td>
</tr>
<tr>
<td><strong>Subtotal Cumulative Projects</strong></td>
<td></td>
<td>482,245</td>
</tr>
<tr>
<td><strong>Total Cumulative Electrical Usage</strong></td>
<td></td>
<td>581,220</td>
</tr>
</tbody>
</table>

². For estimating purposes only.
• Installation of thermal insulation must meet or exceed the requirements of California Code of Regulations Title 24.

• Natural gas shall be used for space heating and cooking.

• Attic ventilation devices shall be installed.

• Windows and vents shall be used to provide room ventilation where possible.

With regard to the 12 kV line:

• Depending on project design, the 12 kV line crossing the southern portion of the project site may need to be removed or realigned. It shall be done so in accordance with SCE regulations.

5.14.4 Cumulative Impacts

Development of the cumulative projects in the vicinity of the proposed project would increase electrical demand by approximately 482,245 kilowatt-hours per day (Table 29). Together with the proposed project, the cumulative demand for electricity would be approximately 581,220 kilowatt-hours per day. The proposed project demand represents approximately 17 percent of the total cumulative electric demand. According to Southern California Edison, they would be able to meet this demand.

5.14.5 Unavoidable Adverse Impacts

None.
5.15 NATURAL GAS

5.15.1 Existing Conditions

The proposed City Ranch development is located within the Southern California Gas Company Foothill Division service area; the Foothill Division currently serves the majority of the population in the Antelope Valley area. The project site is currently not served by Southern California Gas Company. The nearest service line is a 4-inch main located one-quarter of a mile east of the site at the intersection of Elizabeth Lake Road and Foxholm Drive. Those not using Southern California Gas Company services use private propane services. Two propane tanks are located on the project site.

5.15.2 Project Impacts

Development of the proposed City Ranch project would require approximately 922,300 cubic feet of natural gas daily (Table 30). The Southern California Gas Company (July, 1989) has indicated that the proposed project can be served from the existing 4-inch main located one-quarter mile east of the project site along Elizabeth Lake Road at Foxholm Drive without a significant impact on overall system quality, service to existing customers, or the environment. Extension of the main to the project site and provision of a number of 2-inch mains within the project site will, however, be necessary. This would be done and paid for by the Southern California Gas Company. A gas main is proposed to be constructed in the Elizabeth Lake Road right-of-way as part of assessment district 90-1 improvements.

5.15.3 Mitigation Measures

Although the Southern California Gas Company has indicated that it would be able to supply the project's anticipated demand, the following mitigation measures are required to reduce natural gas consumption:
<table>
<thead>
<tr>
<th>Land Use</th>
<th>Consumption Factor (cubic feet/month)</th>
<th>Natural Gas Consumption (cubic feet/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proposed Project</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3,253 single-family detached</td>
<td>5,300/unit</td>
<td>566,824</td>
</tr>
<tr>
<td>1,634 townhomes (single-family attached)</td>
<td>5,300/unit</td>
<td>284,719</td>
</tr>
<tr>
<td>313 condominiums (multiple-family)</td>
<td>3,115/unit</td>
<td>32,055</td>
</tr>
<tr>
<td>Commercial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>260,000 sq.ft.</td>
<td>2.9/sq.ft.</td>
<td>44,789</td>
</tr>
<tr>
<td>Schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>170,000 sq.ft.</td>
<td>2.0/sq.ft.</td>
<td>11,178</td>
</tr>
<tr>
<td>Golf Course Clubhouse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15,000 sq.ft.</td>
<td>2.0/sq.ft.</td>
<td>986</td>
</tr>
<tr>
<td>Community Recreational Buildings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20,000 sq.ft.</td>
<td>2.0/sq.ft.</td>
<td>1,315</td>
</tr>
<tr>
<td>Fire Station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6,600 sq.ft.</td>
<td>2.0/sq.ft.</td>
<td>434</td>
</tr>
<tr>
<td><strong>Subtotal Proposed Project</strong></td>
<td></td>
<td>922,300</td>
</tr>
<tr>
<td><strong>Cumulative Projects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13,035 single-family units</td>
<td>5,300/unit</td>
<td>2,296,749</td>
</tr>
<tr>
<td>110 multi-family units</td>
<td>5,300/unit</td>
<td>19,154</td>
</tr>
<tr>
<td>Commercial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5,143,496 sq.ft.</td>
<td>2.9/sq.ft.</td>
<td>490,058</td>
</tr>
<tr>
<td>Schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5,605,760 sq.ft.</td>
<td>2.0/sq.ft.</td>
<td>368,346</td>
</tr>
<tr>
<td>Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16,000 sq.ft.</td>
<td>2.0/sq.ft.</td>
<td>1,051</td>
</tr>
<tr>
<td><strong>Subtotal Cumulative Projects</strong></td>
<td></td>
<td>3,148,358</td>
</tr>
<tr>
<td><strong>Total Cumulative Natural Gas Consumption</strong></td>
<td></td>
<td>4,070,638</td>
</tr>
</tbody>
</table>


1. For estimating purposes only.
• Install thermal wall and ceiling insulations and double glazed windows that meet or exceed California Code of Regulations Title 24 insulation standards.

• Use pilotless ignition stoves, water heaters, dryers and heating/cooling units.

• Insulate gas water heaters with gas company approved insulated blankets.

5.15.4 Cumulative Impacts

Development of the cumulative projects in the Antelope Valley area is expected to require approximately 3,148,358 cubic feet of natural gas per day (Table 30). When combined, development of the proposed project, cumulative demand for natural gas is expected to require approximately 4,070,658 cubic feet per day. The proposed project demand represents approximately 23 percent of cumulative demand. The Southern California Gas Company is obligated under contract to the County of Los Angeles to supply all of the proposed projects with natural gas.

5.15.5 Unavoidable Adverse Impacts

None.
5.16 WATER

5.16.1 Existing Conditions

The project site is located within the Antelope Valley East Kern Water Agency (AVEK) boundary and is adjacent to the Los Angeles County Water Works District 34, Desert View Highlands (District 34) boundary at 20th Street West and Elizabeth Lake Road. District 34 is interconnected with Los Angeles County Waterworks District 4 (District 4) in 10th Street West at Avenue N and in Avenue P at 28th Street West. District 34 receives its water supply from AVEK and groundwater wells located in District 4.

AVEK obtains its water supply from the California Aqueduct at the Quartz Hill Water Treatment Plant near Avenue N and 65th Street West. This facility presently treats 54 million gallons per day (mgd) and is expected to be expanded to an ultimate capacity of 65 mgd in a few years. At this location, water is treated and pumped to local water purveyors through the South Feeder, the 60th Street West Lateral, and the Leona Valley Feeder. District 34 receives water from AVEK through three metered turnout stations on the South Feeder.

If the AVEK water supply is interrupted, continuity of supply is maintained by pumping water from wells located in the Lancaster Groundwater Subunit. These wells are part of District 4 and have a combined capacity of approximately 43 mgd. Some of this capacity is available to District 34 through the connection with District 4 on 10th Street West. During 1990, the total groundwater production within the Lancaster Groundwater Subunit was 40,000 acre-feet. Approximately 18,500 acre-feet of this total was pumped by District 4.

The total consumption for both districts in 1990 was approximately 32,000 acre-feet. This is equivalent to an average daily consumption of 28.6 mgd. AVEK supplied approximately 42 percent of this water. There were a total of 32,620 connections in the two districts as of December, 1990.
Twelve and three tenths (12.3) to nine and seven tenths (9.7) million gallons of untreated water per day are currently available on-site from an AVEK turnout located at the California Aqueduct. The capacity of this turnout depends on the water level in the Aqueduct. This untreated water is suitable for construction and irrigation purposes. Additional water may be available from three existing on-site groundwater wells.

The project site is located southwest of District 34’s 2,911-foot Service Zone and west of its 3,240-foot Service Zone. Existing mains in the 2,911-foot Service Zone include a 36-inch main in 25th Street West 5,300 feet south of Avenue P and a 24-inch main in Elizabeth Lake Road at 20th Street West. The closest existing point of connection to the 3,240-foot Service Zone is a 12-inch main in Elizabeth Lake Road at 20th Street West.

5.16.2 Project Impacts

Water supply for the proposed project would be provided by Los Angeles County Water Works District 34, Desert View Highlands. The estimated water requirement for the entire project is 5.22 mgd as shown on Table 31. Approximately 1.25 mgd of this amount would be required for irrigation. Irrigation water can be taken from the existing supply of non-potable water available on-site.

In the future, gray water may be available from the Sanitation District to supplement the use of raw water for irrigation purposes. The water mains that provide this water are separate from the potable water supply lines. The project developer has indicated that AVEK or another entity will be responsible for the long-term maintenance of the nonpotable water mains. However, confirmation of this has not yet been received from AVEK. In the event that AVEK declines the maintenance responsibility, the project developer will have to identify another maintenance entity or abandon these nonpotable water mains. The city will not maintain the raw water line.

The remaining 3.97 mgd of water demand would require a potable source, i.e., District 34. This amount represents a 16% increase in District 34’s current water consumption.
<table>
<thead>
<tr>
<th>Land Use</th>
<th>Consumption Factor (gallons/day)</th>
<th>Average Daily Water Usage (million gallons/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proposed Project</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3,253 units single-family detached</td>
<td>752/unit</td>
<td>2.44</td>
</tr>
<tr>
<td>1,634 units single-family attached</td>
<td>668/unit</td>
<td>1.09</td>
</tr>
<tr>
<td>313 multi-family</td>
<td>585/unit</td>
<td>0.18</td>
</tr>
<tr>
<td>Commercial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42.1 acres</td>
<td>3,340/acre</td>
<td>0.14</td>
</tr>
<tr>
<td>Schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36 acres</td>
<td>3,340/acre</td>
<td>0.12</td>
</tr>
<tr>
<td>Golf Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>215.6 acres</td>
<td>3,340/acre</td>
<td>0.72</td>
</tr>
<tr>
<td>Public Parks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>159.3 acres</td>
<td>3,340/acre</td>
<td>0.53</td>
</tr>
<tr>
<td>Fire Station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 acre</td>
<td>3,340/acre</td>
<td>Negligible</td>
</tr>
<tr>
<td><strong>Subtotal Proposed Project</strong></td>
<td></td>
<td>5.22</td>
</tr>
<tr>
<td><strong>Cumulative Projects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13,035 single-family detached</td>
<td>752/unit</td>
<td>9.80</td>
</tr>
<tr>
<td>110 multi-family</td>
<td>585/unit</td>
<td>0.06</td>
</tr>
<tr>
<td>Commercial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>170 acres*</td>
<td>3,340/acre</td>
<td>0.57</td>
</tr>
<tr>
<td>Schools*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>125 acres</td>
<td>3,340/acre</td>
<td>0.42</td>
</tr>
<tr>
<td>Public Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 acres</td>
<td>3,340/acre</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>Subtotal Cumulative Projects</strong></td>
<td></td>
<td>10.86</td>
</tr>
<tr>
<td><strong>Total Cumulative Water Usage</strong></td>
<td></td>
<td>16.08</td>
</tr>
</tbody>
</table>

Source of consumption factors: Los Angeles County Water Works.

* Represents estimated acreages.
demand of 25 mgd. In order to receive water from District 34, it would be necessary for the project to annex into its service area. Once annexed, the existing 2,911-foot and 3,240-foot Service Zones would have to be extended to the project site. Pumping capacities at existing stations are not sufficient to meet the additional needs of the proposed project, therefore, additional capacity would be required. Likewise, additional water storage would be required to serve the domestic, emergency, and fire flow requirements for the project. In addition to improvements to the 2,911-foot and 3,240-foot Service Zones, a third 3,430-foot Service Zone would be required to service the higher elevations on the project site.

The principal water supply from AVEK will be delivered to District 34 via the line along 10th Street West. It would be conveyed to the City Ranch property through proposed and existing water system facilities in the 2,696-foot and 2,911-foot Service Zones (Figure 64). When the AVEK supply is not available, groundwater from the Lancaster Subunit will be delivered to District 34 from a pumping station proposed to be located on an existing utility site at Avenue M and 5th Street East (M5E). This water would be conveyed through a proposed 30-inch main from the M5E utility site to Avenue O-4 and 10th Street West and then conveyed through District 34 facilities to the project site. Water infrastructure is also required through the site to serve proposed facilities (Figure 65).

District 34 has indicated that they would be capable of delivering water necessary to serve the proposed project through existing and proposed supply facilities. However, without annexation into District 34 and without implementation of water infrastructure extensions shown on Figures 64 and 65, the proposed project would have a significant impact with regard to water supply.

With regards to groundwater supply, several different studies were reviewed that appear to have conflicting opinions concerning the ability of the aquifer to accommodate additional growth in the Antelope Valley. The following studies were reviewed with respect to groundwater supply: Proposal for Antelope Valley Subsidence and Groundwater Resources Evaluation, prepared by U.S.G.S., May 2015.

The conclusions expressed in the various groundwater studies demonstrate that a disagreement exists between experts on groundwater supply, groundwater recharge and, safe yield from the aquifer. For example, the report prepared by Los Angeles County Waterworks District, March 1991, concludes that the Valley's existing water resources (groundwater and state-imported water) were sufficient to support SCAG's 2010 population projection for the Antelope Valley. However, the water resources study prepared by the Antelope Valley United Water Purveyors concluded that the overdraft in the aquifer in 1990 was at least 60,500 acre-feet, and implied that additional growth would jeopardize the availability of water in the future. Two of the studies reviewed discussed water levels in various locations of the aquifer; in one study location, well levels were rising, in the other, water levels were falling (Loundagin, Slade). Also, estimates of the annual recharge to the aquifer, and therefore, the safe yield, was reported to be 76,000 acre-feet, 58,000 acre-feet and 40,700 acre-feet in the various studies.

However, Los Angeles County Waterworks District No. 34 has repeatedly indicated that there is sufficient water supply using a conjunctive use policy to accommodate this project, as well as other planned development. The Waterworks District has described their conjunctive use policy in the following manner: state water project water will be used in times when water is plentiful to recharge the groundwater basin; in times when state water project water is scarce, the groundwater stored in the aquifer will be withdrawn and used as the primary source of supply. Application of this policy is anticipated to keep the groundwater levels above the 1980 historic low so as to preserve the capability to replenish the aquifer while at the same time providing sufficient water to serve the growing needs of the Antelope Valley.

Therefore, based upon the evidence presented, development of the project will not result in significant cumulative effects on the groundwater supply. However, if, in the future imported water is not available to support project development, a supplemental EIR would be required to address project impacts to regional groundwater resources.
5.16.3 Mitigation Measures

Implementation of the following mitigation measures would reduce project impacts with regard to water to a level of "non significant."

- The City Ranch property shall be annexed into District 34.

- Following annexation into District 34, the applicant shall negotiate the provision of and financing for major infrastructure facilities (reservoir sites, transmission lines, pumping equipment, etc.) as part of a water system agreement with District 34.

- All water infrastructure extensions and improvements shall be constructed by the applicant as depicted on Figures 64 and 65 and described in the Project Impacts subsection of this section of the EIR, and as required by Waterworks District #34.

Interior Water Consumption Reduction Measures:

- Install a pressure regulator on all water services and maintain a building water pressure of 40 pounds per square inch or less;

- Use ultra-low flush toilets (1.5 to 1.6 gallons per flush) in all residential buildings.

- Use water-saver type shower heads.

- Use low-flow faucet fixtures.
Exterior Water Consumption Reduction Measures:

All mitigation measures listed below shall be in accordance with City standards as approved by the City Engineer and the Planning Director.

- Non-potable water shall be used for all golf course, park and community landscaping irrigation needs where available and determined feasible by the City Engineer.

- Landscape street rights-of-way, easements, medians, project entry statements, and all manufactured slopes with drought tolerant species where feasible.

- Lawn turf shall consist of drought tolerant species, warm season grasses, hybrid fescues, or lawn substitutes (i.e., Achillea species etc.).

- Landscape easements, right-of-way medians, entry statements, and all manufactured slopes shall be landscaped with drought-tolerant species.

- Improve the soil to increase water retention. Use mulch and other inorganic and organic groundcover extensively in appropriate landscaped areas. Ground covering applied on top of soil will improve the water-holding capacity of the soil by reducing evaporation and soil compaction.

- Group plants of similar water demand to reduce over-irrigation of low-water-using plants.

- Install efficient irrigation systems that minimize runoff and evaporation and maximize the water applied to reach plant root zones.

5-229
5.16.4 Cumulative Impacts

The cumulative projects, if developed as planned, would have a water demand of approximately 10.86 mgd (Table 31). When combined with the proposed project's estimated 5.22 mgd water demand, cumulative water demand would be expected to be 16.08 mgd. This would represent 25 percent of the current 65 mgd AVEK supply capability.

5.16.5 Unavoidable Adverse Impacts

Development of the project may contribute to potentially significant impacts to ground-water, if in the future, it is determined that the Lancaster subunit can not support the levels of development in the Antelope Valley.
5.17 SEWAGE DISPOSAL

5.17.1 Existing Conditions

The project site is located outside of the area served by the Los Angeles County Sanitation Districts (LACSD). Annexation of the project site into the City of Palmdale and into the LACSD will locate the project site within LACSD No. 20. The District presently serves a population of approximately 72,800 in the Antelope Valley area. Sewage generated within District No. 20 is conveyed through trunk sewers to the Palmdale Water Reclamation Plant (Palmdale WRP) located approximately 5.7 miles east of the project site at 39300 30th Street East in Palmdale. The Palmdale WRP currently has an average daily flow capacity of 8.0 million gallons per day (mgd). At this time, the Palmdale WRP is operating at capacity, with daily flows often ranging from 7.3 to 8.2 mgd. Expansion of the Palmdale WRP, scheduled for completion in March 1992, will increase the plant capacity to an influent capacity of 12.0 mgd and an effluent discharge limitation of 10.0 mgd. There will be additional capacity added to the Palmdale WRP in the future to a maximum capacity of 15.0 mgd, however, there is no definite work schedule established for this expansion (Sakai, 1992).

The nearest District trunk sewer to the project site is the recently constructed LACSD No. 20 Trunk "C" Relief Sewer. The point of connection to Trunk "C" is located approximately 3 miles away at the intersection of Division Street and Avenue P-8. The Trunk "C" Relief Sewer operates by gravity flow and is a 21 to 39-inch diameter vitrified clay pipe sewer which varies in capacity from 18.3 to 36.7 mgd.

Trunk Sewer "A," also made of vitrified clay pipe, connects to Trunk Sewer "C" at the intersection of Division Street and Avenue P-8. It varies in diameter from 18 to 30 inches increasing in capacity as it increases in diameter. At Avenue P-8 near Sierra Highway, Trunk Sewer "A" has a capacity of 3.6 mgd; flow however is only at 28% of capacity. At Avenue P-8 near 15th Street East, capacity is 4.8 mgd with flow at 50% of capacity. At 15th Street East and Avenue P the sewer increases from 18 to 24 inches in diameter with a capacity of 5.6 mgd and a 60% flow; and at 30th Street East near the
Palmdale WRP, it is a 30-inch sewer with 9.2 mgd capacity and a 37% flow. All flow measurements were made in January of 1990.

The abandoned structures located on the project site utilized septic tanks for sewage disposal.

5.17.2 Project Impacts

In order to provide sewage service to the project site, a trunk sewer would need to be extended to the project site (Figure 66) from District 20 Trunk “C” Relief Sewer. Without implementation of infrastructure extensions shown on Figure 66, and described below, the proposed project would create significant impacts with regard to sewerage infrastructure.

From the point of connection of the Trunk “C” Relief Sewer at 10th Street West and Amargosa Creek, the Amargosa Creek Trunk Sewer (shown on Figure 66) would need to be extended to the project site. The Amargosa Creek Trunk Sewer would need to be extended along the Amargosa Creek drainage channel, then along Elizabeth Lake Road to Bridge Road. From the extension of Bridge Road at Elizabeth Lake Road to 25th Street West, a 27-inch trunk sewer would be required to connect on-site sewer mains to the Amargosa Creek Trunk Sewer.

From Elizabeth Lake Road, a 27-inch subtrunk sewer would be needed extending southwesterly along the alignment off Bridge Road to the California Aqueduct, then south 800 feet to a triple box stormdrain culvert where the trunk sewer would need to cross under the Aqueduct. After crossing under the Aqueduct, the trunk sewer would need to split into three other sewer mains at Planning Area 15.

The first sewer main off the three-way split (18 inches in diameter) would need to continue easterly and parallel to the California Aqueduct, through Planning Areas 20 and 21. In the eastern corner of Planning Area 21, the sewer main would need to route
around Planning Area 22 and continue in a southerly direction through Planning Area 23 to Avenue S, then southeasterly along Avenue S as a 15-inch diameter sewer main to the southeastern boundary of the property.

The second sewer main would serve Planning Areas 14, 15, 16, 17, 18, 19, 30 and 31, and a portion of the adjacent development to the west and would be tributary to a sewer main in Avenue S. This sewer main would be 15 to 18 inches in diameter. The third sewer main would be 12 inches in diameter and would need to extend to Planning Area 5 between Planning Areas 10 and 12, then along Bridge Road to the trunk sewer crossing under the California Aqueduct. The areas northeast of the Aqueduct need to be sewered either directly to the Amargosa Creek Trunk Sewer or to the trunk sewer along Bridge Road.

Development of the proposed project would generate an estimated 1,272,832 gallons of wastewater per day (Table 32). This would exceed Palmdale WRP's current capacity by approximately 1.27 mgd. However, as mentioned above, the Los Angeles County Sanitation Districts are planning for the expansion of the Palmdale WRP which would provide for the treatment of wastewater flows up to 15.0 mgd, an increase of 7.7 mgd.

If the proposed project is approved, the Palmdale WRP would be expanded to provide the necessary additional capacity, provided that the connection fees to the Sanitation District's sewer system have been paid by the applicant. Expansion would occur during the time between payment of connection fees and final buildout of the proposed project. Therefore, impacts with regard to sewage disposal are considered to be "not significant."

5.17.3 Mitigation Measures

Implementation of the following mitigation measures would reduce impacts with regard to sewage infrastructure to a level of "not significant":

5-234
<table>
<thead>
<tr>
<th>Land Use</th>
<th>Generation Factor (gpd)</th>
<th>Daily Sewage Generation (gpd)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proposed Project</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3,253 single-family units</td>
<td>260/unit</td>
<td>845,780</td>
</tr>
<tr>
<td>1,634 townhomes</td>
<td>156/unit</td>
<td>254,904</td>
</tr>
<tr>
<td>313 condominiums</td>
<td>156/unit</td>
<td>48,828</td>
</tr>
<tr>
<td>Commercial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>260,000 sq.ft.</td>
<td>325/1,000 sq.ft.</td>
<td>84,500</td>
</tr>
<tr>
<td>School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>170,000 sq.ft.</td>
<td>200/1,000 sq.ft.</td>
<td>34,000</td>
</tr>
<tr>
<td>Golf Course Clubhouse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15,000 sq.ft.</td>
<td>100/1,000 sq.ft.</td>
<td>1,500</td>
</tr>
<tr>
<td>Community Facility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20,000 sq.ft.</td>
<td>100/1,000 sq.ft.</td>
<td>2,000</td>
</tr>
<tr>
<td>Fire Station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6,600 sq.ft.</td>
<td>200/1,000 sq.ft.</td>
<td>1,320</td>
</tr>
<tr>
<td><strong>Subtotal Proposed Project</strong></td>
<td></td>
<td>1,279,832</td>
</tr>
<tr>
<td><strong>Cumulative Projects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13,035 single-family</td>
<td>260/unit</td>
<td>3,389,100</td>
</tr>
<tr>
<td>110 multi-family</td>
<td>156/unit</td>
<td>17,160</td>
</tr>
<tr>
<td>Commercial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5,143,496 sq.ft.</td>
<td>325/1,000 sq.ft.</td>
<td>1,671,636</td>
</tr>
<tr>
<td>Public Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16,000 sq.ft.</td>
<td>200/1,000 sq.ft.</td>
<td>3,200</td>
</tr>
<tr>
<td>Schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5,605,760 sq.ft.</td>
<td>200/1,000 sq.ft.</td>
<td>1,121,000</td>
</tr>
<tr>
<td><strong>Subtotal Cumulative Projects</strong></td>
<td></td>
<td>6,202,096</td>
</tr>
<tr>
<td><strong>Total Cumulative Sewage Generation</strong></td>
<td></td>
<td>7,481,928</td>
</tr>
</tbody>
</table>

Source of generation factors: Los Angeles County Sanitation Districts.
• All sewer infrastructure extensions and improvements depicted on Figure 66 and described in the project impacts subsection of this section of the EIR shall be constructed by the applicant. In the event that Assessment District 90-1 is not formed, and Developer constructs off-site trunk sewer lines within the San Andreas fault zone, the Developer shall use state-of-the-art designs for the trunk sewer line to minimize the risk of rupture, and subsequent contamination, caused by a seismic event. Also, the Developer shall cause the preparation of an emergency spill response plan. The plan shall include provisions for spilled sewage retention, spill response measures, cleanup and disinfection measures, and training and funding for implementation of the spill plan. The plan shall be reviewed by the Lanhontan Regional Water Quality Control Board and Sanitation District No. 20, and reviewed and approved by the Director of Public Works and the Director of Planning.

• Sizing of these lines shall be dependent upon County of Los Angeles Sanitation Districts’ specifications. The Districts may require over-sizing of sewer lines to accommodate future growth in the area. (The responsibility of installing relief sewers and expanding District No. 20’s wastewater treatment plant (WTP) to accommodate flows generated by the proposed project and other developments belongs to County Sanitation District No. 20.)

• The Los Angeles County Sanitation Districts are empowered by the California Health and Safety Code to charge a fee (presently $1,350.00 per dwelling unit) for the privilege of connecting to the Sanitation Districts’ sewer system. The applicant will pay the connection fee.

In addition to the conservation measures listed in Section 5.16 (Water), the following mitigation measure would reduce the amount of wastewater flow generated by development of the proposed project:

• The applicant shall consider the installation of an on-site water reclamation plant to provide a source of nonpotable water suitable for landscape irrigation. Consideration shall be based on final siting of project components and economic environmental, and regulatory agency requirements.
5.17.4 Cumulative Impacts

Fifty other development projects have been identified in the vicinity of the project site which will also contribute sewage to the sewerage system. Development of these projects is expected to generate approximately 6.20 mgd of sewage (Table 32). Together with the proposed project sewage, cumulative sewage generation is expected to reach 7.48 mgd. Expansion of the Palmdale WRP treatment facility to a capacity of 15.0 mgd would provide sufficient capacity to serve identified and cumulative projects. Proposed project and cumulative projects' discharge would represent approximately 49% of the Palmdale WRP's future capacity. Expansion of the treatment facility and improvements to the sewerage system to meet increased capacity demand will be mitigated through the implementation of the Sanitation Districts sewage connection fees paid by each project developer. The Sanitation Districts' schedules expansion of its facilities upon payment of connection fees and following project approval so that their facilities are on-line prior to project buildout and occupancy.

5.17.5 Unavoidable Adverse Impacts

None.
5.18 SOLID WASTE

5.18.1 Existing Conditions

Solid waste generated in the City of Palmdale and the surrounding unincorporated areas of Los Angeles County is collected by the Palmdale Disposal Company. Each home and business is billed directly by the disposal company for this service. The waste is transported to the Antelope Valley Public Landfill Class III Landfill which is also owned and operated by the Palmdale Disposal Company; the private disposal companies serving cities and communities in the Antelope Valley also utilize this landfill. The landfill receives 127,400 tons of waste per year and as of November, 1990, had a remaining permitted capacity of 1,750,000 tons (Palmdale Disposal Company, 1990). Present capacity may be exhausted as soon as July, 1996. In addition, the landfill has an expansion potential of 3,850,000 tons, and is proposed to be enlarged in 1997. The Antelope Valley Public Landfill does not accept hazardous materials. When it is feasible, recyclable wastes are separated out by the Palmdale Disposal Company prior to dumping in the landfill.

On January 1, 1990, the California State Legislature enacted the California Integrated Solid Waste Management Act of 1989 (AB 939). The purpose of this Act is to reduce, recycle and reuse solid waste generated in the State to the maximum amount feasible. City and County jurisdictions must identify an implementation schedule to divert 25% of their total solid waste stream within the jurisdiction from landfill disposal by the year 1995 and 50% of the total waste stream from landfill disposal by the year 2000.

The City is presently in the process of adopting a Source Reduction and Recycling Element and a Household Hazardous Waste Element to the City's General Plan. These documents will provide long-term guidance on the City's policies on solid waste disposal and recycling in compliance with AB939. These documents will recommend methods of diverting waste from the Antelope Valley Landfill, prolonging the usable life of the facility.
Although the City of Palmdale has yet to implement any source reduction or curbside recycling programs, if AB 939 were fully implemented, at least 63,700 tons of waste per year would be diverted from the Antelope Valley Public Landfill.

5.18.2 Project Impacts

Development of the proposed project would generate an estimated 54,019 pounds of solid waste per day (Table 33), plus materials generated by regular maintenance of the project’s proposed parks and golf course. Full development of the proposed project represents approximately a 7.7 percent increase in the current quantity of waste deposited at Antelope Valley Public Landfill. Assuming expansion of the landfill occurs, this increase in solid waste disposal by the proposed project would not be considered an adverse impact due to the sufficient amount of existing and potential landfill capacities. Future homeowners would be required to pay disposal service fees to Palmdale Disposal Company for trash removal and disposal.

5.18.3 Mitigation Measures

Although impacts related to solid waste disposal are not considered significant, implementation of the following measures would help to reduce solid waste generation:

- **On-site source separation for commercial uses.**

- **“Curbside” recycling programs should be implemented to reduce the amount of solid waste brought to the Antelope Valley Landfill.** The recycling program should focus on paper, glass, aluminum, tin, plastics and other recyclables.

- **Where applicable, the applicant shall comply with the provisions of the City’s Source Reduction and Recycling Element and the City’s Household Hazardous Waste Element after those elements are adopted by the City Council.**
# TABLE 33

Proposed Project and Cumulative Solid Waste Generation

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Generation Factor (pounds per day)</th>
<th>Daily Solid Waste (pounds per day)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proposed Project</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3,253 single-family units (detached)</td>
<td>10/unit</td>
<td>32,530</td>
</tr>
<tr>
<td>1,634 townhomes (single-family attached)</td>
<td>10/unit</td>
<td>16,340</td>
</tr>
<tr>
<td>313 condominiums (multiple-family)</td>
<td>7/unit</td>
<td>2,191</td>
</tr>
<tr>
<td>Commercial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>260,000 sq.ft. retail</td>
<td>6/1,000 sq.ft.</td>
<td>1,560</td>
</tr>
<tr>
<td>Schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>170,000 sq.ft.</td>
<td>7/1,000 sq.ft.</td>
<td>1,190</td>
</tr>
<tr>
<td>Recreation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20,000 sq.ft. recreation building</td>
<td>5/1,000 sq.ft.</td>
<td>100</td>
</tr>
<tr>
<td>15,000 sq.ft. golf course clubhouse</td>
<td>5/1,000 sq.ft.</td>
<td>75</td>
</tr>
<tr>
<td>Fire Station</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6,600 sq.ft.</td>
<td>5/1,000 sq.ft.</td>
<td>33</td>
</tr>
<tr>
<td><strong>Subtotal Proposed Project</strong></td>
<td></td>
<td>54,019</td>
</tr>
<tr>
<td><strong>Related Projects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13,035 single-family units</td>
<td>10/unit</td>
<td>130,350</td>
</tr>
<tr>
<td>110 multi-family units</td>
<td>10/unit</td>
<td>1,100</td>
</tr>
<tr>
<td>Commercial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5,143,496 sq.ft.</td>
<td>6/1,000 sq.ft.</td>
<td>30,861</td>
</tr>
<tr>
<td>Schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5,605,760 sq.ft.</td>
<td>7/1,000 sq.ft.</td>
<td>39,240</td>
</tr>
<tr>
<td>Public Library</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16,000 sq.ft.</td>
<td>7/1,000 sq.ft.</td>
<td>112</td>
</tr>
<tr>
<td><strong>Subtotal Cumulative Projects</strong></td>
<td></td>
<td>201,663</td>
</tr>
<tr>
<td><strong>Total Cumulative Solid Waste Generation</strong></td>
<td></td>
<td>255,682</td>
</tr>
</tbody>
</table>

Source of generation factors: City of Los Angeles, 1972 (modified).

1. For estimating purposes only.
5.18.4 Cumulative Impacts

Development of the cumulative projects would generate an estimated 201,663 pounds of solid waste per day (Table 33). Development of the proposed project combined with the cumulative projects would generate an estimated 255,682 pounds per day. Project-generated waste represents 21.1 percent of the cumulative quantity of solid waste. Cumulative solid waste generation represents approximately a 37.7 percent increase in the current quantity deposited at the Antelope Valley Public Landfill.

5.18.5 Unavoidable Adverse Impacts

In the event that expansion of the Antelope Valley Landfill does not occur in a timely manner, the project, along with the other surrounding developments would contribute to cumulative impacts to solid waste disposal.
5.19 COMMUNICATIONS

5.19.1 Existing Conditions

Telephone service and facilities in the vicinity of the project site are provided by Pacific Bell. Cable television service in Palmdale is provided by Jones Intercable TV. Jones Intercable presently services 50,000 homes in the Antelope Valley. They do not presently service the unincorporated areas of Los Angeles County in the sphere of influence of the City of Palmdale. The nearest Jones Intercable television cable line is located at the intersection of Elizabeth Lake Road and 20th Street West.

Pacific Bell’s area central office is located at 9th Street East and Palmdale Boulevard in Palmdale. The closest Pacific Bell communication line is located along Avenue S southeast of the project site.

Two buried American Telephone and Telegraph (AT&T) high capacity transcontinental communications lines cross the project site (Figure 67). One line crosses from north to south across the eastern half of the project site. The other line crosses the southeast corner in a north-south then east-west direction. These lines are contained in AT&T Communications (AT&T-C) easements.

The City of Palmdale uses radios to communicate with field personnel on a day to day basis, as well as during emergency situations. As of July, 1991, the City of Palmdale maintains one repeater on top of the City’s Cultural Center. This repeater has a tower height of 50 feet and is capable of providing service to an area of operations within a ten mile radius. At the present time, the City utilizes 70 handheld radios and 13 vehicular radios to communicate with field employees.

The City is currently experiencing difficulty in communicating in parts of the City. Certain areas are beyond the range of the repeater, or within “shadow” areas where radio signals do not penetrate. As a result of this known deficiency, the City is in the process
of defining the parameters of a City-wide study to determine existing capabilities and projected needs for radio communications.

The City Ranch project site contains locations where the City's existing radio communications system is known to be ineffective.

5.19.2 Project Impacts

Pacific Bell which presently serves the project site and vicinity would be able to service the project site. However, in order to do so, telephone infrastructure would have to be brought out to the project site via communication line extensions. Lines would likely be extended from the existing line south of the site at Avenue S along the proposed extension of Avenue S through the project site. All communication lines would be placed underground in conduits. Manholes would likely be shared with Southern California Edison. Above-ground serving area interface (SAI) boxes would need to be installed along the conduit right-of-way. Existing Pacific Bell communication facilities on the project site will need to be removed. According to Pacific Bell, telephone service can be supplied to the project site without effecting existing levels of service. Therefore, project impacts with regard to provision of telephone service are not considered significant.

As a result of project construction, the AT&T-C high capacity transcontinental communications line easements may be encroached upon. Of particular concern is the installation of utility infrastructure south of Avenue S and the construction of storm drain facilities along the AT&T-C easement south of the California Aqueduct. According to the proposed plan for storm drains (Figure 33), the drainage channel south of Avenue S would be situated to the east of the AT&T-C easement. Therefore, development of the proposed storm drain would not have a significant impact with regard to the AT&T-C easement. Development of utility infrastructure, however, could result in physical damage to the AT&T lines causing unanticipated interruption of AT&T's long distance telephone service. This is considered a potentially significant
Jones Intercaible TV have indicated that they would be able to provide service to the project site following annexation of the site into the City of Palmdale. Jones Intercaible TV expects to be able to serve the project site via their microwave station located at 12th Street East and Palmdale Boulevard. They would use off-site Southern California Edison box facilities for access to the project site. Project impacts with regard to cable television service are not considered significant.

Development of the proposed project would exacerbate the existing communications problems experienced in the outlying portions of Palmdale. The development would increase the number of maintenance employees and field inspectors in the project area which, in turn, would increase the need for dependable radio communications. In cases of emergency situations where City staff is responsible for taking action, the lack of adequate radio communications could result in an impact to public health and safety.

5.19.3 Mitigation Measures

Implementation of the following protective measures would enable AT&T to protect the existing communication system(s), permit future growth and in most cases allow AT&T to make repairs without having to damage streets, landscaping, parks, fencing, trees, etc. and would reduce impacts on the AT&T’s high capacity transcontinental communication lines to a level of “not significant”:

- No work may take place within the boundaries of the AT&T-C easements without prior written approval.

- Any lowering of lines required to maintain the proper depth of cover shall be at the developer’s expense.
- A dedicated easement for access to all splices, manholes, valves and load points is required. This access shall be shown on the final plot plans and be of size and width sufficient to permit the passage of AT&T maintenance and construction vehicles.

- The developer may be required to expose the existing communications systems and place spare ducts (4 inch PVC pipe) alongside the existing system and cover the duct and system with concrete top protection at various locations within the development. Long runs may require the installation of pull pits and dedicated access to them.

- The AT&T-C easement boundary shall be either the common boundary between the lots, if in side or back yards, or located within a lot in such a manner as to present the minimum exposure to future building additions and other hazards. Whenever possible, the system(s) should be located under a sidewalk area with the remaining easement width in the street.

- The AT&T-C easement description may be broad and may encumber or cloud a large area of a proposed development. In these cases AT&T-C may stake the system(s) location so the developer can survey the line and provide a certified survey and legal description. AT&T-C may then amend the easement and remove the broad description to satisfy the requirement of lenders, title companies, city planning and zoning agencies, etc.

- Structures shall not be permitted in the AT&T-C easement. This includes walls, concrete slabs, buildings, patios, etc. In the event of an emergency restoration of the communications system, the removal of unauthorized structures will be at the property owner's expense.

- Other utility easements (longitudinal) shall not be dedicated or plotted within the boundary of the AT&T-C easement. All crossings to be made by water lines,
sewers, gas, power, etc., need to be planned well in advance to arrange for proper clearances and protective measures. The crossing utility shall coordinate all crossings with AT&T-C prior to any construction.

- In those areas where AT&T-C consents to streets, curbs, parkways, sidewalks, parks, open space or other public use, AT&T-C would continue to require and maintain an easement and right-of-way for all the purposes for which the easement was acquired.

- Preliminary plot plans showing the easement and the proposed uses should be submitted to AT&T-C for approval prior to the preparation and filing of final plot plans. Four (4) copies of all plot plans, preliminary and final grading plans and any other engineering data affecting the easement shall be provided to AT&T-C as soon as possible.

- The developer shall provide their pro-rata share towards the implementation of the findings of the radio communications needs study currently being prepared by the City. This may include providing a site for the construction of a radio repeater, construction of the repeater, or providing funding for the acquisition and construction of such improvements, as determined necessary by the City's Emergency Services Coordinator.

5.19.4 Cumulative Impacts

According to Pacific Bell and Jones Intercable, development of the project and cumulative projects would not create significant service level problems with regard to telephone or cable TV service provision. It would, however, increase Jones Intercable and Pacific Bell service areas.
5.19.5 Unavoidable Adverse Impacts

None.
5.20 SHERIFF’S SERVICES

5.20.1 Existing Conditions

Police protection is provided to the proposed project site and vicinity by the Los Angeles County Sheriff’s Department Antelope Valley Station located at 1010 West Avenue J in Lancaster. The Sheriff’s Department Antelope Valley Station provides general law enforcement services covering 1,368 square miles and serving a population of approximately 220,000 (Figure 68). The California Highway Patrol Station located at 2041 West Avenue I in Lancaster provides traffic enforcement for the unincorporated areas of the Antelope Valley. The City of Palmdale contracts with the Sheriff’s Department for both general law and traffic enforcement.

The proposed project site is located approximately 12 miles from the Sheriff’s Department Antelope Valley Station. Average emergency response time to the project site from police cars on patrol is 3.2 minutes using lights and sirens and 7.9 minutes when obeying all rules of the road. The Sheriff’s Department reports that these times are adequate for the Antelope Valley. Back-up police service is available from the Sheriff’s Department Santa Clarita Valley Station located 35 miles away. The Los Angeles County Sheriff’s Department provides a complete range of law enforcement services to the Antelope Valley including drug enforcement, special programs and jails. These services can be offered in an extremely efficient manner because of the Sheriff Department’s large role and responsibility throughout Los Angeles County.

Currently, one Captain, seven Lieutenants, 23 Sergeants, 199 Deputies, and 12 Community Service Officers are assigned to the Antelope Valley Station of which approximately 40 Deputies and three Community Service Officers are assigned to the City of Palmdale. The 242 officers provide a 0.87 officers to 1,000 population ratio (Table 34) within the Antelope Valley Sheriff’s Station’s service area.

5-249
### Table 34

Proposed Project and Cumulative Sheriff's Officers to Population Ratios

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Population</th>
<th>Officers Per 1,000 Population Ratio (Based on 242 officers/population)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Conditions</td>
<td>278,000(^1)</td>
<td>0.87 officers</td>
</tr>
<tr>
<td>Proposed Project</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5,200 dwelling units</td>
<td>+14,040(^2)</td>
<td>0.83 officers</td>
</tr>
<tr>
<td>Cumulative Projects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13,145 dwelling units</td>
<td>+35,492(^2)</td>
<td>0.74 officers</td>
</tr>
</tbody>
</table>

---

1. Los Angeles County Sheriff's Department, 1991.
2. From Table 2.
5.20.2 Project Impacts

Development of the proposed City Ranch project would create short-term impacts on the services of the Sheriff's Department during the project's construction phase. According to the Sheriff's Department, thefts of construction materials can be expected during the construction phase of the project. These short-term impacts on Sheriff's Department services are not considered significant.

According to the Sheriff's Department, any development in the Antelope Valley will have an impact on the ability of the Los Angeles County Sheriff's Department to provide law enforcement services. Manpower increases necessary to accommodate such a project are determined by computing response times, calls for service, and population. As the project develops, reports of burglary and theft to both the residential and commercial areas are expected, along with an increase in traffic enforcement calls and accidents. Generally, as additional calls for service are received, increased deployment of manpower is needed. Based on area averages, implementation of the proposed project could increase the number of calls for police response by 5.1 percent [14,040 new residents (Table 2) in an area of approximately 278,000 residents]. The ratio of Sheriff's officers to 1,000 population will also decrease from 0.87 to 0.83 (Table 34).

Recently, the Los Angeles County Sheriff's Department has expressed an interest in locating a stations within Palmdale. No site has been determined for this facility, although several alternative locations are being considered in the developed area of Palmdale. The Sheriff's Department has estimated that a 15 to 20 acre site will be required to provide a full service sheriff's facility. A location central to the City is preferred to provide maximum service. Therefore, a site in the City Ranch Specific Plan area would be too remote to accommodate the needs of the Sheriff's Department, and is therefore, not being considered as an alternative.
Development of a station would increase the Antelope Valley area's Sheriff's staff and would greatly improve the area's officer-to-population ratio. The station's development would reduce the time needed to respond to emergency calls in the Palmdale area. Until expansion of Sheriff's facilities is accomplished, development of the proposed project may have a significant impact on their services.

Presently, the City of Palmdale provides funding for sheriff's services through the City's General Fund. Each year, the City negotiates a contract with the Los Angeles County Sheriff's Department for police protection for its residents as an alternative to providing a City Police force. When the City Ranch Specific Plan Area is annexed to the City, that area will also fall under the protection of the City's contract with the Sheriff's Department. The Los Angeles County Sheriff's Department does not have any mechanism for collecting development fees at this time to assist in bearing the cost of the increased need of manpower, facilities and services caused by continued development.

5.20.3 Mitigation Measures

The following measures are required to reduce the demands on the Sheriff's Department:

- During the construction phase of the project, the developer shall assist the Los Angeles County Sheriff's Department in preventing crime by providing adequate fencing, security, lighting, and access for Sheriff's Department personnel, as determined appropriate by the Los Angeles County Sheriff's Department.

- Proper street and address signs will be required for easy identification of locations in emergencies. Street signs and dwelling numbers will be installed prior to occupancy as each phase of project is developed.

- Landscape features shall be designed so as not to conceal potential criminal activities around residences, commercial buildings, and parking areas.
• Security devices, such as deadbolt locks on doors, should be installed in all residences.

• Review of the project site plan shall be conducted by the Sheriff's Department prior to final approval of the project in order to assure that all concerns of the Sheriff's Department are met.

There are no additional feasible mitigation measures which can be placed on this project to alleviate significant project-related impacts to sheriff services.

5.20.4 Cumulative Impacts

Development of the other projects within the vicinity of the proposed project site are expected to generate a population increase of 35,492 people (Table 2). This would decrease the existing officers per 1,000 persons ratio from 0.87 to 0.73 (Table 34), assuming no additional staffing increases. Based on area averages, development of cumulative projects in the vicinity of the proposed project site could increase the number of calls received by the Sheriff's Department by approximately 13.0 percent (35,492 new residents in an area of approximately 278,000 residents).

The proposed project and cumulative projects combined would create an estimated population increase of 49,532 residents (Table 34). The combined impacts create a potential 23.4 percent increase in calls over existing conditions and a decrease in the officer to 1,000 persons ratio from 0.90 to 0.73 assuming no increase in staffing by the year 2000 (Table 32). Manpower increases at the proposed new Sheriff's station will be determined by the number of additional calls received by the Sheriff's Department. The City of Palmdale has funded new sheriff department personnel as the City's population has increased, in an effort to maintain officer to 1,000 population ratios at acceptable levels.
5.20.5 Unavoidable Adverse Impacts

Development of the proposed project, as well as development of the other projects in the vicinity of the project site, could result in a significant impact on police services should the cost of providing Sheriff’s services become prohibitively expensive in the future as to cause a reduction in manpower, facilities or services to the community as a whole.
5.21 FIRE AND EMERGENCY MEDICAL SERVICES

5.21.1 Existing Conditions

Fire protection and emergency medical service is provided to the project site and vicinity by the County of Los Angeles Fire Department. The closest or "first-in" fire station to the project site is Station No. 24, located at 1050 West Avenue P in Palmdale. Station No. 24 would receive back-up service from Station Nos. 37, located at 38318 9th Street East in Palmdale, and 129, located at 421 West Avenue M in Lancaster, for fire emergencies (Figure 69). The following table describes the three fire stations:

<table>
<thead>
<tr>
<th></th>
<th>Station 24</th>
<th>Station 37</th>
<th>Station 129</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance to Site</td>
<td>2.5 miles</td>
<td>5.5 miles</td>
<td>6.5 miles</td>
</tr>
<tr>
<td>Response Time to Site</td>
<td>4.3 minutes</td>
<td>9.5 minutes</td>
<td>11.1 minutes</td>
</tr>
<tr>
<td>Equipment</td>
<td>1 engine company</td>
<td>1 engine company</td>
<td>1 engine company</td>
</tr>
<tr>
<td></td>
<td>1 truck company</td>
<td>1 paramedic squad</td>
<td></td>
</tr>
<tr>
<td>Personnel</td>
<td>5 persons</td>
<td>5 persons</td>
<td>3 persons</td>
</tr>
</tbody>
</table>

The project site is located within the area described by the County Forester and Fire Warden as Fire Zone 4 (high fire hazard), and must comply with all applicable code and ordinance requirements for construction, access, water mains, fire hydrants, fire flows and brush clearance.

The Level I trauma hospitals servicing the Antelope Valley are Holy Cross Hospital located 29 miles by air from the project site at 15031 Rinaldi Street in Mission Hills, and Henry Mayo Newhall Medical Center located 26 miles away by air at 23895 McBean Parkway in Valencia. These hospitals are used when air ambulance/helicopter transportation is available (Figure 70). Otherwise, the patient(s) are taken 8 miles away to Antelope Valley Hospital Medical Center at 1600 West Avenue J in Lancaster. There are currently no trauma centers in the Antelope Valley since the Antelope Valley Medical Center withdrew from the trauma center system.
FIRE STATION LOCATIONS

LEGEND

- - - - - - PROJECT SITE BOUNDARY

□ EXISTING FIRE STATION

□ PROPOSED FIRE STATION

SOURCE: Palmdale Fire Department

FIGURE 69
5.21.2 Project Impacts

The addition of approximately 14,040 new residents (Table 2) to the project site is expected to increase the number of fire and paramedic calls received by the Fire Department. In addition, development of the Specific Plan area would increase exposure to the high fire hazards of the project site. The County Fire Department is currently developing a fee-based funding mechanism to provide additional facilities.

As part of the City Ranch Specific Plan Development Plan, a one-acre site at the intersection of Avenue S and Bridge Road (Planning Area 34) would be set aside to accommodate a fire station (Figure 2). According to Fire Department personnel, they anticipate developing an approximately 6,600 square-foot station staffed with two fire fighters, a fire specialist and a Captain and initially equipped with one truck (1,250-gallon pumper). As a result of development of a fire station on-site, response times to fire emergency calls to the project site and vicinity would substantially decrease. According to the Fire Department, fire protection service for the proposed project appears to be adequate.

Fire flow requirements, determined by the Fire Department, would vary from 1,250 gallons per minute at 20 pounds per square inch residual pressure for a two-hour duration in the residential areas to up to 5,000 gallons per minute at 20 pounds per square inch residual pressure for a five hour duration in the commercial areas. Water would be supplied to the project site by the Los Angeles County Waterworks District (LACWD) No. 34. The water infrastructure will consist of 24-, 20- and 12-inch mains, supply lines, two pumping stations and 7 million gallons of water storage in 3 reservoirs. After completion of on-site and off-site water system facilities and improvements, LACWD No. 34 would have the capability of delivering 5,000 gpm for five hours.

Because of the location of the San Andreas Rift Zone across the project site, and the probability of a maximum credible 8.3M Richter scale earthquake, earthquake hazard
potential at the project site is considered high. Residential development of the project site will expose additional population to this earthquake-prone area and will thus substantially increase the probability of earthquake-related damage and injury in the event of an earthquake. As with many areas in California, an earthquake could cause water infrastructure rupture and/or interruption of water flow preventing adequate fire flow to the project site. Those portions of the project site with access to the California Aqueduct could use the Aqueduct as an emergency back-up fire-fighting water supply in an earthquake event. Emergency medical response services could be greatly stressed in such an earthquake event. The proposed on-site fire station would provide adequate local emergency medical response and fire-fighting services on-site.

5.21.3 Mitigation Measures

Although project impacts on the Fire Department are not considered significant, the following measures are required to reduce demands on the Fire Department:

- The applicant shall provide a fire station in Planning Area 34, a 12,500-gallon per minute pumper and a fully equipped paramedic squad as determined by the Los Angeles County Fire Department. The applicant shall work with the Los Angeles County Fire Department to determine the final siting of the fire station in Planning Area 34.

- Water line placements and extensions shall ensure the delivery of 1,250 gallons per minute of fire flow for a two-hour duration at 20 pounds per square inch residual pressure with 150,000 gallons storage in the residential areas and 5,000 gallons per minute at 20 pounds per square inch residual pressure with 1,500,000 gallons of storage for a five hour duration in the commercial areas.

- Fire hydrants shall be located a maximum of 600 feet apart.

- Smoke detectors shall be installed in all residential structures.
- Fire sprinkler systems shall be installed in all commercial and public structures.

- Roof materials shall be made of fire retardant materials such as clay tile, concrete tile or fire resistant composite shingles. No wood shake shingles or wood materials will be permitted.

- Access to all portions of the structures must be provided for the Fire Department.

- Driveways shall be a minimum of 26 feet wide. Cul-de-sacs shall have a maximum length of 750 feet and a minimum turning radius of 32 feet.

- Fire safety design, adequacy of access, fire flow and hydrant placement plans shall be reviewed by the County Fire Department Subdivision Committee prior to approval of tentative subdivision maps by the City.

Because the project site is located within Fire Zone 4 (high fire hazard), the following mitigation measures are required to reduce the potential loss of life and property in the event of a large fire:

- Natural vegetation shall be cleared within a 30-foot radius from all structures or farther if determined necessary by the Los Angeles County Fire Department. No flammable vegetation shall be placed within the 70 feet beyond the 30-foot line. To achieve this, the branches of all trees shall be trimmed to remain off the ground and leaf litter shall be collected from the grounds.

- Common open space areas in residential and commercial planning areas shall be landscaped with fire resistant plants native to California.
5.21.4 Cumulative Impacts

Development of the other surrounding projects is expected to increase the local population by approximately 35,492 persons (Table 2). Together with proposed project development, approximately 49,532 new residents are expected in the area. This number of people would create an increase in demand for the Fire Department and Emergency Medical Treatment (EMT) services. As each additional development creates greater demands on existing resources, these projects would likely have a significant cumulative impact on the adequacy of Fire Department and EMT levels of service. However, the Fire Department has indicated that all new developments will be required to provide for appropriate fire protection facilities in an amount proportionate to the demand created by these new developments. Thus, cumulative impacts related to Fire and Emergency Medical services are not considered significant.

5.21.5 Unavoidable Adverse Impacts

None.
5.22 SCHOOLS

5.22.1 Existing Conditions

The City Ranch project site is located within the jurisdiction of three local school districts: the Westside Union and Palmdale School Districts, providing kindergarten through 8th-grade education, and the Antelope Valley Union High School District, providing 9th-through 12th-grade education. The jurisdictional boundary between the two elementary and intermediate school districts runs north-south along 25th Street West, extending south through the project site, thereby bisecting the site (Figure 71).

Westside Union School District's current capacity (in terms of permanent classrooms) is 4,358 students. Current districtwide enrollment is 4,500 or about four percent over permanent capacity (this number is expected to increase to 4,700 in the 1991-1992 school year).

In September, 1991, the Cottonwood Elementary School opened. Cottonwood Elementary is the closest elementary school to the proposed project site and is operated by the Westside Union School District. Cottonwood Elementary is a K-5th grade school and is located at 30th Street West, south of Avenue P-8 approximately one-half mile from the project site. The closest middle school, Joe Walker, is located 5 miles away at 5632 West Avenue L-8.

A new 6-8th grade middle school, Hill View School, slated to be open by September, 1993, will be located at Rancho Vista Boulevard and Peonza Lane four miles from the project site. Hill View School will have a capacity of 700-800 students.

Palmdale School District's current permanent capacity is 7,620 students. Current district-wide enrollment is 14,452 or 190% over permanent capacity. The Palmdale School District's closest elementary school is Ocotillo School, located less than one-half
mile from the project site at 38737 Ocotillo Drive. The closest middle school, Juniper Intermediate, is located approximately one mile away at 39066 Palm Tree Way. Ocotillo School's current enrollment is 903 students with permanent capacity for 720 students. Juniper Intermediate School's current enrollment is 955 students with permanent capacity for 780.

Palmdale School District has plans to renovate and expand the square footage of Juniper Intermediate School. However, these plans do not include the addition of classroom space. The District is not able to provide any additional schools near the project site at this time because it does not own any property there.

The Antelope Valley Union High School District opened Highland High School in September, 1991. Highland High School is located less than one mile north of the project site at Avenue P-8 and 25th Street West (Figure 71). Current enrollment at Highland High School is 1,938 students and permanent capacity is 2,079. Antelope Valley Union High School District's current permanent capacity is 9,341 students. Current districtwide enrollment for the Antelope Valley Union High School District is approximately 11,919 or 128% over capacity. Two other high schools are located approximately an equal distance from the project site: Quartz Hill High School, located at 6040 West Avenue L, and Palmdale High School located at 2137 East Avenue R. Quartz Hill High School has a current enrollment of 2,550 with a permanent capacity of 1,432. Palmdale High School has a current enrollment of 2,410 with a permanent capacity of 1,684. The District recently opened another High School in September, 1991, Little Rock High School, which is located at 110 East and Avenue R. Little Rock's enrollment is 1,342 students with a capacity of 2,079.

As indicated above, all three school districts are currently unable to construct schools fast enough to keep pace with the growth of the student population in the area. As a result, students awaiting construction of permanent classrooms and schools are accommodated in temporary classroom structures on existing school grounds.
5.22.2 Project Impacts

Development of the proposed project would increase the number of school children in all three school districts serving the project site. Based upon student generation factors provide by the individual school districts, the number of additional students generated by this project is estimated to be 4,024: 2,260 K-5th grade students, 724 6-8th grade students and 1,040 9th-12th grade students (Table 35). Because most of the project site is located within Westside Union School District's jurisdiction, the majority of the primary school students (2,439 students; 1,829 elementary and 610 middle school students), would attend Westside Union schools. A total of 545 students are expected to attend schools in the Palmdale School District: 431 elementary and 114 middle school students. All 1,040 of the estimated high school students would attend high schools in the Antelope Valley Union High School District.

The proposed project includes four elementary school sites, three located in Westside Union School District and one located in the Palmdale School District. The Westside Union School District is expected to accommodate a 660-student elementary school and the Palmdale School District sites will each accommodate 600 students for a total capacity of 2,460 students. The 431 K-5th grade students anticipated to reside within the Palmdale School District portion of the project site can be accommodated by the proposed on-site elementary school. It is expected that in addition 114 6-8th grade students would attend Juniper Intermediate School and other intermediate schools off-site. However, as noted previously, Juniper Intermediate School is already 175 students over capacity. Development of the proposed project would therefore have a significant impact with regard to intermediate schools in the Palmdale School District.

The 1,829 elementary students anticipated to reside in the Westside Union School District portion of the project site can be accommodated in the three proposed on-site elementary schools in the Westside Union District area of the site. The estimated 610 6-8th grade students would most likely attend the proposed new Hill View Intermediate School or other off-site intermediate schools. It is not certain at this time whether or
# Table 35

**Proposed Project and Cumulative Student Generation**

<table>
<thead>
<tr>
<th>School District</th>
<th>Households</th>
<th>School Grades</th>
<th>Student Generation Factor</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Proposed Project</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Westside Union</td>
<td>4,064</td>
<td>K-5</td>
<td>.45</td>
<td>1,829</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6-8</td>
<td>.15</td>
<td>610</td>
</tr>
<tr>
<td>Palmdale</td>
<td>1,136</td>
<td>K-5</td>
<td>.38</td>
<td>431</td>
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<tr>
<td></td>
<td></td>
<td>6-8</td>
<td>.10</td>
<td>114</td>
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<tr>
<td>Antelope Valley Union</td>
<td>5,200</td>
<td>9-12</td>
<td>.20</td>
<td>1,640</td>
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<tr>
<td><strong>Subtotal Proposed Project</strong></td>
<td></td>
<td></td>
<td></td>
<td>4,024</td>
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<td><strong>Cumulative Projects</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Westside Union</td>
<td>10,500</td>
<td>K-5</td>
<td>.45</td>
<td>4,725</td>
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<td></td>
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<td>.15</td>
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</tr>
<tr>
<td>Palmdale</td>
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<td>K-5</td>
<td>.38</td>
<td>1,017</td>
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<td></td>
<td></td>
<td>6-8</td>
<td>.10</td>
<td>268</td>
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<tr>
<td>Antelope Valley Union</td>
<td>13,175</td>
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<td>2,635</td>
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<td><strong>Subtotal Cumulative Projects</strong></td>
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<tr>
<td><strong>Total Cumulative Student Generation</strong></td>
<td></td>
<td></td>
<td></td>
<td>14,244</td>
</tr>
</tbody>
</table>

---

1. Factors provided by the Westside Union, Palmdale and Antelope Valley Union School Districts.  
2. Numbers of Households attributed to each school district has been approximated.
not there will be remaining capacity in the intermediate schools at the time of the proposed project completion. Therefore, project impacts with regard to the Westside Union School District are considered potentially significant.

The Antelope Valley Union High School District indicates that by 1992, Highland High School will be over capacity. The District estimates that at least two additional high school sites will be required in the Highland High School attendance area and that development of the proposed project would have a significant impact on the District because of its contribution to this demand for the additional high schools.

5.22.3 Mitigation Measures

In order to reduce the significant and potentially significant adverse impacts with regard to schools to a level of “not significant”, the following measures are required.

(a) Palmdale School District: The developer shall comply with the terms of the agreement, dated October 8, 1990, between the developer and the Palmdale School District as mitigation for impacts caused by development of the project on the Palmdale School District. The terms of that agreement are as follows:

(i) Participate in the Mello Roos Community Facilities District created by the Palmdale School District for financing school construction.

(b) Westside Union School District: The developer shall comply with the terms of the agreement, dated January 22, 1992, between the developer and the Westside Union School District as mitigation for impacts caused by development of the project on the Westside Union School District. The terms of that agreement are as follows:

(i) refer to agreement attached to this Exhibit.

(c) Antelope Valley Union High School District:

The Developer shall provide the following mitigation to the District, in order to provide its contribution to the District’s fifty (50) percent share of funding a new high school to serve the City Ranch Specific Plan area, pursuant to Government Code Section 65995 and Education Code Section 17700 et. seq. (School Facility Funding Law):

5-268
(i) Mello-Roos Development Fees.

The applicant shall participate in a Mello-Roos Community Facilities District which will fund up to 50% of the cost of that portion of the school necessary to serve the City Ranch project based upon a student generation factor of .2 pupils per single family dwelling. Only residentially zoned property for which a building permit has been issued will be subject to the annual tax. The District may increase this annual tax by no more than 2% in each year. In lieu of paying an annual special tax, a property owner may prepay the annual special tax at the time a building permit is issued on the property. A fee equal to $1.30 per square foot of habitable residential construction shall serve to prepay the special tax. This fee shall be subject to an annual adjustment pursuant to increases or decreases in the School Construction Cost Index of the Office of Local Assistance with January 1, 1992 as the base. This prepayment fee shall be reduced to $1.20 per square foot if the school site is not located within Planning Area 3A of the Ritter Ranch Specific Plan.

(ii) Other Development Fees.

In addition to the fees specified in subparagraph (i) above, Developer shall pay to the District a fee of twenty-six cents ($.26) per gross leasable square foot of commercial construction prior to the issuance of each commercial building permit. All such fees shall be subject to annual adjustment pursuant to increases or decreases in the School Construction Cost Index of the Office of Local Assistance with January 1, 1992 as the base.

(iii) Site Preparation Expenses.

In the event that a high school is constructed in Planning Area 3A of the Ritter Ranch Specific Plan, and the site preparation work for a school to be located on that site, including provision of access to Elizabeth Lake Road and utilities, exceeds the amount of $4,650,000, the Developer shall pay the District fifty (50) percent of the District's costs for such work over $4,650,000, not to exceed a total of $350,000.
5.22.4 Cumulative Impacts

Based on a 1991 total of 13,175 dwelling units proposed for this area, an estimated 11,538 students would be generated as a result of other surrounding project buildout (Table 35). When the proposed project and the areawide surrounding projects list are combined, the total number of students generated will be 16,082. The proposed project represents 28% of total cumulative student growth. Of the two elementary school districts serving the area, Westside Union would receive the larger proportion of additional students. Because Westside’s existing capacity is smaller, impacts on their facilities would be greater. Westside would experience a 289% increase in enrollment while Palmdale would experience a 207% increase based on students generated from the
cumulative projects list. Both of these school districts are already operating well over their capacities. Antelope Valley Union High School District which is already 128% over capacity would experience an additional 68% enrollment growth as a result of development of the proposed project and other cumulative projects. Cumulative impacts on the three area school districts are considered significant. Each individual project will need to offset school impacts via the provision of additional school sites, facilities, or fees.

5.22.5 Unavoidable Adverse Impacts

None.
5.23 PARKS AND RECREATION

5.23.1 Existing Conditions

The project site is currently served by the County of Los Angeles Department of Parks and Recreation. There are approximately 95 acres of County parkland in the Antelope Valley. Two County parks serve the project site, George Lane County Park and Apollo Community Regional County Park. Together Apollo and Lane Parks represent about 75 percent of the Antelope Valley area's County park space.

George Lane County Park, located at 5520 West Avenue L-8, is approximately six miles from the project site. This 15-acre park offers a variety of recreational opportunities including a recreational activity building with an auditorium and a crafts and meeting room, a lighted baseball diamond, soccer and football fields, a shuffleboard court, lighted basketball, volleyball and tetherball courts, a badminton court, picnic tables and park benches, a children's play area, a senior citizens area, and a swimming pool and bathhouse.

Apollo Community Regional County Park located at 4445 West Avenue G in Lancaster, is about 9 miles from the project site. This 56-acre park has three lakes for boating and fishing and contains the Apollo Space Capsule on permanent display.

According to the County Subdivision Ordinance (County of Los Angeles Code, Title 21), the Antelope Valley area should contain 561 acres of park space or approximately three acres of parkland per 1,000 people. Park acreage in the Antelope Valley is, therefore, deficient.

The City of Palmdale parkland standards are 2 acres of parkland per 100 single-family units, 2 acres per 160 duplex or triplex units and 2 acres per 200 apartment units. This standard roughly equates to five acres of parkland per 1,000 residents. According to the
City Department of Parks and Recreation, existing City park acreage in the City is substantially less than required by the City parkland standards.

Proposed recreational facilities on the project site include the unimproved Northside Hiking and Riding Trail which traverses the project site east of the California Aqueduct. This regional recreational facility traverses the entire length of Los Angeles County.

5.23.2 Impacts

The City Ranch Specific Plan development plan contains several planning areas that can provide recreational opportunities: six park sites totaling 159.3 acres, a 216-acre golf course, and approximately 404 acres of natural open space (Figure 2). Buildable acreage in the six park sites total 38.3 acres. The Specific Plan also includes off-street bicycle paths and a 3.5 mile looped combined pedestrian/hiking/mountain bicycling trail and vista point opportunities (Figure 72). In addition, the four proposed elementary school sites could provide additional neighborhood recreational facilities such as ball fields, hard courts and activity space.

According to the City Ranch South Specific Plan, all six park sites shall be dedicated to the City for parkland credit. Each is proposed to provide both passive and active recreational opportunities for local and community residents. The majority of the land in park sites is gently sloping terrain suitable for the location of playgrounds, ball fields and other active play facilities, as well as picnic, barbecue, open turf and other passive recreational facilities (Figure 73).

Together Planning Areas 1 and 9 are proposed as one continuous community park. These sites contain a combined acreage of approximately 111 acres. About 2.9 acres of Planning Area 1, and 10.8 acres of Planning Area 9 are suitable for the construction of park or community facility structures such as a gymnasium, multi-purpose room, a pool, pool house, restrooms and park offices. Planning Area 35 contains no buildable acreage. According to the geotechnical report for the project site, the remainder of these
LEGEND

- - - - - PEDESTRIAN / HIKING TRAIL
(SEE TRAIL STANDARDS)

- - - OFF-STREET 10' BICYCLE PATH

- - - EXISTING AQUEDUCT
SERVICE ROAD TRAIL
(WITHIN STATE LANDS)

- BICYCLE STAGING AREA

- - - - - HIKING/MOUNTAIN BIKE TRAIL

- - - - - NORTH SIDE TRAIL
(EQUESTRIAN TRAIL)

- - - - - NORTH SIDE TRAIL
ALTERNATE ALIGNMENT
(EQUESTRIAN TRAIL)

SOURCE: City Ranch Specific Plan, 1991
Azeka de Almeida Planning

BICYCLE AND PEDESTRIAN TRAIL SYSTEM

FIGURE 72
planning areas which are situated in Fault Hazard Restricted Areas are suitable for picnic areas, ball fields, play courts, parking lots, playgrounds and other unenclosed activity facilities. According to the City of Palmdale Planning Department, the size and location of Planning Area 35 makes it inappropriate for community park designation. Instead, it would be more appropriate for use as a neighborhood park. Because it does not include any land suitable for habitable structures, full parkland credit may not be given to this site.

Planning Areas 18, 22 and 28B are designated as neighborhood park sites with approximate acreages of 33.3, 10.0 and 5.0 acres respectively. Each park is surrounded by residential areas, and is intended to serve residents within a 1/2 mile walking distance.

Recreational Planning Area 18 (neighborhood park) contains two high-voltage electric line easements. Approximately 10 acres of this site is situated outside the easement. Concern regarding proximity of habitable structures and active recreational uses to high-voltage power lines is discussed in Section 5.27 of this EIR. Although no structures are proposed within the easements, ballfields, play areas, paved hard courts, picnic and other park facilities and activity areas are proposed within the high-voltage electric line easements. According to the City of Palmdale Department of Parks and Recreation, only passive recreational uses shall be allowed within the easements. Thus, only partial credit towards the project's parkland dedication requirements would be considered for this area.

The 216-acre golf course is intended to contain an 18-hole golf course, a driving range, practice greens and a clubhouse. While the golf course is proposed to be located in seismically-restricted areas, the clubhouse would be constructed on a buildable site. The golf course is intended to be open to the public.

The natural open space areas, Planning Areas 2, 7, 29 and 32 generally coincide with areas of the site where elevations are highest and slopes exceed 25%. These natural
open space areas may be dedicated to the City of Palmdale, or other governmental agencies or conveyed to a private non-profit organization or HOA. These areas which would contain natural ridgelines and preservation areas for native vegetation would provide opportunities for hiking trails and scenic vistas. Planning Areas 29 and 32 would contain parts of the looped trail system. Equestrian and mountain bike access would be available on the portion of the trail traversing these planning areas.

Off-street bicycle and pedestrian trails are proposed to be located along the north sides of Avenue S, Elizabeth Lake Road, and Bridge Road. Trails would interconnect the residential areas to open space areas, parks, schools, commercial centers and the golf course. Two staging areas are proposed along Avenue S to provide trail rest areas and parking for hikers and bikers.

The existing Northside Trail currently passes through what would be the center of Planning Areas 4 and 13 proposed for golf course use. According to the City Ranch Specific Plan, the trail is proposed to be relocated. The two alternate alignments for the relocation of the Northside Trail currently under consideration are shown on Figure 73. The first alternate alignment traverses between Planning Areas 3 and 4, then turns to the west and continues along the south side of Elizabeth Lake Road. The second alternative alignment would instead cross the Aqueduct at the existing bridge, extend west through the Community Park in Planning Areas 9 and 1, and connect to Ritter Ranch at the west end of Planning Area 1. The ultimate trail alignment is subject to further refinement at the time of tentative tract maps or prior to site improvements of Planning Areas 1, 3, 4, 9, and 13, subject to conditions imposed by the Department of Water Resources of the State of California and preferred alignment requirements by the City of Palmdale Parks and Recreation and the Planning Department. Both realignments would avoid potential conflicts between golf course and biking and equestrian uses. The City Department of Parks and Recreation standards require a total of 88.62 acres of park space to be developed as part of proposed project development (Table 36).
## TABLE 36

City Park Space Requirements for the Proposed Project

<table>
<thead>
<tr>
<th>Proposed Project</th>
<th>Generation Rate</th>
<th>Required Park Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>City Requirement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3,253 single-family units (single-family detached)</td>
<td>2 acres/100 units</td>
<td>65.06</td>
</tr>
<tr>
<td>1,634 duplex or triplex units (single-family attached)</td>
<td>2 acres/160 units</td>
<td>20.43</td>
</tr>
<tr>
<td>313 apartment units (multiple-family)</td>
<td>2 acres/200 units</td>
<td>3.13</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>88.62</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: City of Palmdale Department of Parks and Recreation Standards.
5.23.3 Mitigation Measures

Implementation of the following measures would reduce impacts with regard to parks and recreation to a level of "not significant":

- The relocation of the Northside Trail shall be approved by the County Department of Parks and Recreation.

- Trails shall be designed to connect existing and proposed trails on adjacent parcels.

- Design of Planning Areas located along the bicycle and hiking trails shall incorporate extensions and connections to the trail system. Each Planning Area adjacent to designated trails shall provide a minimum of two (2) connections to these trails at safe locations. Said connections shall be indicated on Tentative Tract Maps filed for all such Planning Areas. This shall include Planning Areas 1, 3, 4, 9, 12, 14, 16, 16, 17, 19A, 20, 21, 23, 24, 27, 28A, 30A, 32 and 33.

- The configuration, trail widths and clear areas adjacent to the trails must be designed to allow Sheriff and emergency vehicular access, but shall prohibit other non-emergency motor vehicle use.

- As set forth in the Development Standards of the City, Ranch Specific Plan, the development of recreational uses are subject to the Site Plan Review provisions.

- The applicant shall dedicate and construct the improvements for the proposed community, and neighborhood park facilities shown in the Specific Plan as approved by the Director of Parks and Recreation.

- The applicant shall install lighting along pedestrian trails located within the urban areas to provide adequate public safety as determined appropriate by the
City Traffic Engineer.

- Drought tolerant and native plant materials shall be used for park and golf course landscaping.

- Fertilizer and pesticide use shall be controlled in the golf course area.

- Exhibit 16 of the Final Specific Plan will be amended to include an equestrian staging area in Planning Area 1, and if feasible, an equestrian staging area in Planning Area 18, and an equestrian trail through the powerline easement. Trails planned in the City Ranch Specific Plan will be coordinated with those planned for the Ritter Ranch Specific Plan. Future developments adjacent to this project will be required to coordinate with the trails shown on the trails plan adopted for City Ranch.

5.23.4 Cumulative Impacts

Thirty-three of the 50 other surrounding projects, project numbers 1-33 (Figure 12) are proposed for locations within the jurisdiction of the City of Palmdale. Together these projects would add 10,432 single-family, and 110 multi-family dwelling units to the City. According to the City Parks and Recreation Standards, these projects would require the development of a total of 209.74 acres of park space.

The remaining seventeen cumulative projects are proposed for development in the jurisdiction of the County of Los Angeles. According to County park land requirements, development of these projects would require the development of 2.96 acres of County park land. Unless the cumulative projects provide on-site recreational facilities in accordance with City or County park land requirements, development of these projects would increase the pressure on existing County park land which is already deficient. However, the City Ranch project does not contribute to this cumulative parkland deficit.

5.23.5 Unavoidable Adverse Impacts

None.
5.24 FACILITIES MAINTENANCE

5.24.1 Existing Conditions

The County of Los Angeles Department of Public Works Palmdale Division currently provides road maintenance services such as road patching, curb repair, traffic marking, signal maintenance, weed clearing, and trash clearing in unincorporated areas of the County and within the City of Palmdale under a contract with the City. The Department also provides roadside tree-trimming service in unincorporated County areas only. The City of Palmdale Department of Public Works has its own tree-trimming service. According to the City and County Departments of Public Works, services provided by the City and County are presently adequate in terms of staffing and equipment.

As of July, 1991, the City is responsible for the maintenance of 210 miles of streets, 44 acres of parkway and 67.5 acres of parkland, and detention basins. Maintenance labor is provided by a mix of City personnel and public service contracts. The City employs 29 maintenance employees who are predominantly utilized for park and parkway maintenance. The remainder of the City maintenance services are contracted to Los Angeles County.

According to the City Department of Public Works, it is anticipated that road maintenance service will be provided by the City within the next few years. Initially, the City plans to maintain a small emergency crew of City employees and provide regular service via contracts with private contractors.

5.24.2 Project Impacts

The development of the City Ranch site will significantly increase the City's street drainage, parkway and park maintenance liability. It is estimated by the City's Public Works Department that this project would increase the City's maintenance inventory
and related annual maintenance costs in today's dollars by the following:

<table>
<thead>
<tr>
<th>Maintenance</th>
<th>Unit</th>
<th>% Increase</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parks</td>
<td>159 acres</td>
<td>235</td>
<td>$2,385,000</td>
</tr>
<tr>
<td>Parkways</td>
<td>15 acres</td>
<td>34</td>
<td>426,000</td>
</tr>
<tr>
<td>Streets</td>
<td>56 miles</td>
<td>27</td>
<td>560,000</td>
</tr>
<tr>
<td>Trails</td>
<td>7.5 miles</td>
<td></td>
<td>22,500</td>
</tr>
<tr>
<td>Drainage Basins</td>
<td>20 acres</td>
<td></td>
<td>20,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>$3,413,500</td>
</tr>
</tbody>
</table>

A part of the costs shown above will be offset by an increase in the City's general fund revenue generated by the development, however, the increases will not be sufficient to meet the maintenance costs created by the development.

In addition to the maintenance costs, maintenance support facilities to serve the project site and surrounding developments will be needed in the vicinity of the project. In addition, maintenance equipment will need to be acquired as necessary to accommodate project maintenance. Costs for construction of the facility (excluding property acquisition) and acquisition of maintenance equipment may exceed $1.7 million. In addition, the Public Works Department has anticipated that more will need to be spent within 10 years following the project's completion to cover the costs of major public facility improvements and repairs which are not covered by the regular maintenance costs. These improvements to streets, parks, parkways, etc. may include overlays, seal coats, roof repairs and major facilities upgrades.

Development of the proposed project would include the construction of an internal landscaped roadway network. After the City of Palmdale has formally accepted the proposed streets as public streets, any additional road maintenance necessary on public streets within City Ranch, would be the responsibility of the City of Palmdale Department of Public Works.
Project development is anticipated to increase the need for winter snow removal, roadway tree-trimming and street-sweeping services for the internal roadways. The rate at which surrounding roads develop cracks and potholes would increase because of the addition of the estimated 49,970 project-related vehicle-trips onto the local roadways.

The need for additional tree-trimming service would decrease the City's current tree-trimming service levels. According to the City Department of Public Works, impacts with respect to providing additional tree-trimming service can be mitigated through additional staffing and equipment.

By the year 2000, it is anticipated that the City Department of Public Works would also be responsible for all other road maintenance activities, including snow removal and street sweeping. The project-related population increase would create a need for more road maintenance service. Impacts with regard to facilities maintenance are considered potentially significant.

5.24.3 Mitigation Measures

There are no feasible mitigation measures which can be placed on this project to alleviate significant project-related impacts to existing maintenance facilities.
5.24.4 Cumulative Impacts

The proposed project, along with the cumulative development, will also increase the need for maintenance services. According to the City's Public Works Department, the current annual cost of maintenance is summarized as follows:

<table>
<thead>
<tr>
<th>Maintenance Area</th>
<th>Annual Cost</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parks</td>
<td>$15,000</td>
<td>Acre</td>
</tr>
<tr>
<td>Parkways</td>
<td>$28,400</td>
<td>Acre</td>
</tr>
<tr>
<td>Boulevards</td>
<td>$15,400</td>
<td>Acre</td>
</tr>
<tr>
<td>Streets</td>
<td>$10,000</td>
<td>Mile</td>
</tr>
<tr>
<td>Trails</td>
<td>$3,000</td>
<td>Mile</td>
</tr>
<tr>
<td>Drainage Basins</td>
<td>$1,000</td>
<td>Acre</td>
</tr>
</tbody>
</table>

As development in the area continues, the addition of new street mileage will necessitate the diversion of more City general fund revenues to maintenance operations. A small part of these costs will be offset by an increase in general fund revenue generated by the development, but the increases will not provide a significant fraction of the maintenance costs created by City Ranch and the surrounding developments. This shortfall could result in a cumulative fiscal impact to the City if additional revenue sources are not identified for maintenance purposes.
5.24.5 Unavoidable Adverse Impacts

The impacts to facilities maintenance will be partially mitigated by increases in the City's General Fund generated by the development. However, full mitigation of maintenance impacts by the project is determined to be infeasible, due to the inconsistency of such requirement with previous development project approvals within the City.
5.25 ARCHAEOLOGY

Reports prepared by Archaeological Associates, Ltd. entitled "Phase I Cultural Resources Study: City Ranch Property in the City of Palmdale, Los Angeles County, California", (April 24, 1989); Phase II Cultural Resources Study: City Ranch Property (October, 1990); and Phase II Archaeological Investigations at the City Ranch (July 23, 1991) were used in the preparation of this section. The full text of these reports (referred to as Appendix H) are available for review by qualified investigators at the City of Palmdale Planning Department.

5.25.1 Existing Conditions

The Sierra Pelona range was probably the territory of a people known today as a "Tataviam" or "Alliklik." There is so little known about these people that one could almost characterize them as "mysterious." The lack of information concerning the Tataviam is due to their assimilation into other cultures early in the historic era:

By 1810, virtually all of the Tataviam had been baptized at San Fernando Mission. By the time secularization occurred in 1834, the descendants of most of the missionized Tataviam had married members of other groups, either at the mission or in the Tejon region. By 1916, the last speaker of the Tataviam language was dead, and any real opportunity for collecting firsthand information on this obscure group had vanished forever. (King and Blackburn 1978:536).

Several small settlements are recorded in the general region of the project site and these were probably the campsites of Tataviam people who traveled into the high elevations of the Sierra Pelona.

A review of the literature and archaeological site archives of the Archaeological Information Center, UCLA, by Archaeological Associates, Ltd. (April 24, 1989) indicates that one previously recorded site is present within the boundaries of the project site. The site, LAn-949, is located within the San Andreas Rift Zone.

5-286
LAN-949 was recorded in May, 1977 as a “thin lithic scatter consisting of silicates and rhyolites” measuring about 30 x 30 meters. Field inspection suggests that the area is probably closer to 50 x 50 meters and that the contents of the scatter are fairly diverse. Artifacts include manos and mano fragments, metate fragments, a pestle fragment, cores, hammerstones, flakes, and a cottonwood triangular point fragment. A Phase II investigation indicates the presence of two archaeological deposits at the site ranging from 40-60 centimeters in depth, covering areas of about 450 and 650 square meters. Prehistoric cultural materials recovered from these deposits include marine shell and stone beads, groundstone milling equipment and chipped stone implements. Because LAN-949 is believed to contain important data relating to the prehistory of the Palmdale area, the site is considered to be an archaeologically significant site.

Surface reconnaissance conducted in February and March of 1989 resulted in the discovery of 27 additional prehistoric sites, one historic site and 17 isolated finds. A list of the sites and artifacts found appears in Table 37. The prehistoric sites tend to be concentrated in the San Andreas Rift Zone in the northern area of the ranch and the Sierra Pelona foothill zone on the south. The historic archaeological site, probably the remains of one of the original ranch houses, was found in the southwestern area of the site. All 28 sites were also the subject of a Phase II investigation during September, 1990 to determine archaeological significance.

The historic site contains various historic artifacts such as metal equipment parts, nails, cans, glass, ceramic debris and shotgun shells dated “1901”. The Phase II investigation revealed a stone enclosure, and two cut and fill pads. Analysis of historic USGS maps indicates a structure at that location, which perhaps was an early ranch house.

The prehistoric sites are of three different types. The most frequent site type consists of lithic scatters. The term “lithic,” refers principally to chipped stone tools and the cores
### TABLE 37

Archaeological Sites and Isolated Finds Found on the Project Site

<table>
<thead>
<tr>
<th>Site No.</th>
<th>Site Type</th>
<th>Artifacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAN-949</td>
<td>Lithic scatter</td>
<td>Mano fragments, metate fragments, a pestle fragment, cores, hammerstones, flakes, and a cottonwood triangular point fragment.</td>
</tr>
<tr>
<td>S-1 (LAN-1746)</td>
<td>Lithic scatter (small)</td>
<td>Chert and quartz flakes, chert and quartz scrapers, a jasper core fragment, and a quartz hammerstone.</td>
</tr>
<tr>
<td>S-2 (LAN-1747)</td>
<td>Lithic scatter (large)</td>
<td>Chert and quartzite scrapers, a chert core, quartzite flakes, and a leaf-shaped point fragment.</td>
</tr>
<tr>
<td>S-3 (LAN-1748)</td>
<td>Lithic scatter (large)</td>
<td>Chert, quartz, and quartzite flakes, a granitic mano, a quartzite hammerstone, a scraper, and a core.</td>
</tr>
<tr>
<td>S-4 (LAN-1749)</td>
<td>Lithic and groundstone scatter (medium)</td>
<td>Granitic bowl fragment, metavolcanic and quartzite flakes and shatter.</td>
</tr>
<tr>
<td>S-5 (LAN-1750)</td>
<td>Lithic and groundstone scatter (small)</td>
<td>Two granitic mano fragments, quartz, quartzite, and jasper flakes, a scraper and a schist spatula.</td>
</tr>
<tr>
<td>S-6 (LAN-1751)</td>
<td>Lithic scatter (small)</td>
<td>Quartzite and andesite flakes, and a quartzite core.</td>
</tr>
<tr>
<td>S-7 (LAN-1752)</td>
<td>Lithic and groundstone scatter (small)</td>
<td>Chert, obsidian, quartzite, and rhyolite flakes, a granitic pestle fragment, a quartz hammerstone, quartzite and rhyolite cores, a rhyolite cottonwood triangular point and a jasper leaf shaped point.</td>
</tr>
<tr>
<td>S-8 (LAN-1753)</td>
<td>Lithic scatter (small)</td>
<td>Quartz and rhyolite flakes, and a fused shale Marymount point.</td>
</tr>
<tr>
<td>S-9 (LAN-1754)</td>
<td>Lithic scatter (small)</td>
<td>Quartzite and rhyolite flakes.</td>
</tr>
<tr>
<td>S-10 (LAN-1755)</td>
<td>Lithic and groundstone scatter (large)</td>
<td>Quartzite flakes, cores, and hammerstones, a schist pestle, a point tip, an intact schist slab metate and a fragment of either a second metate or a bowl.</td>
</tr>
<tr>
<td>S-11 (LAN-1756)</td>
<td>Groundstone scatter (large)</td>
<td>A bedrock milling feature, consisting of a single shallow mortar on a schist boulder, schist slab metates, a schist bowl fragment, three schist unifacial manos (one fragmentary) and one granitic bifacial mano.</td>
</tr>
<tr>
<td>S-12 (LAN-1757)</td>
<td>Lithic scatter (small)</td>
<td>Two rhyolite, one chalcedony flake, one obsidian flake, a fused shale flake and quartzite flakes.</td>
</tr>
<tr>
<td>S-13 (LAN-1759H)</td>
<td>Historic site</td>
<td>Stone foundation (kitchen area), two shallow pits, fragmented ceramic and glassware, square nails, ceramic tile (from a roof or well-lining), a fragment of a piece of jewelry (probably a cameo), shotgun shells, wood and sheet metal.</td>
</tr>
<tr>
<td>S-16 (LAN-1761)</td>
<td>Hunting blind</td>
<td>Single hunting blind, an asphaltum cache and a basket hopper mortar fragment.</td>
</tr>
<tr>
<td>S-17 (LAN-1762)</td>
<td>Hunting blind</td>
<td>Single hunting blind.</td>
</tr>
<tr>
<td>S-18 (LAN-1763)</td>
<td>Hunting blind</td>
<td>Four separate hunting blinds.</td>
</tr>
<tr>
<td>Site No.</td>
<td>Site Type</td>
<td>Artifacts</td>
</tr>
<tr>
<td>----------</td>
<td>----------------------------</td>
<td>---------------------------------------------------------------------------</td>
</tr>
<tr>
<td>S-19 (LAn-1764)</td>
<td>Hunting blind</td>
<td>Single hunting blind and a flaking station (quartz flakes).</td>
</tr>
<tr>
<td>S-21 (LAn-1766)</td>
<td>Hunting blind</td>
<td>Hunting blind/rock shelter.</td>
</tr>
<tr>
<td>S-22 (LAn-1767)</td>
<td>Rock art</td>
<td>Three cupule boulders.</td>
</tr>
<tr>
<td>S-23 (LAn-1768)</td>
<td>Rock art</td>
<td>Single cupule boulder.</td>
</tr>
<tr>
<td>S-24 (LAn-1769)</td>
<td>Hunting blind</td>
<td>Two hunting blinds.</td>
</tr>
<tr>
<td>S-25 (LAn-1770)</td>
<td>Hunting blind</td>
<td>Three hunting blinds, marine shell, quartz flakes, and a granitic bowl fragment.</td>
</tr>
<tr>
<td>S-27 (LAn-1772)</td>
<td>Groundstone feature</td>
<td>A bedrock milling feature consisting of three rolling holes on a single schist boulder and a schist metate fragment.</td>
</tr>
<tr>
<td>S-28 (LAn-1773)</td>
<td>Groundstone scatter (small)</td>
<td>A schist slab metate, four fragmentary schist slab metates, four quartz cores, a two bifacial granite mano fragments.</td>
</tr>
<tr>
<td>S-29 (LAn-1774)</td>
<td>Groundstone scatter</td>
<td>Contains series of isolated millingstones.</td>
</tr>
<tr>
<td>I-1</td>
<td>Isolated find</td>
<td>Quartzite flake</td>
</tr>
<tr>
<td>I-2</td>
<td>Isolated find</td>
<td>Retouched quartz flake.</td>
</tr>
<tr>
<td>I-3</td>
<td>Isolated find</td>
<td>Double-sided schist metate.</td>
</tr>
<tr>
<td>I-4</td>
<td>Isolated find</td>
<td>Quartzite scraper.</td>
</tr>
<tr>
<td>I-5</td>
<td>Isolated find</td>
<td>Chalcedony flake.</td>
</tr>
<tr>
<td>I-6</td>
<td>Isolated find</td>
<td>Bifacial granitic mano.</td>
</tr>
<tr>
<td>I-7</td>
<td>Isolated find</td>
<td>Granitic mano fragment.</td>
</tr>
<tr>
<td>I-8</td>
<td>Isolated find</td>
<td>Granitic mortar/bowl fragment (has ground inner bottom).</td>
</tr>
<tr>
<td>I-9</td>
<td>Isolated find</td>
<td>Quartzite single platform core.</td>
</tr>
<tr>
<td>I-10</td>
<td>Isolated find</td>
<td>Granitic shallow basin metate fragment.</td>
</tr>
<tr>
<td>I-12</td>
<td>Isolated find</td>
<td>Quartz hammerstone and a portable schist metate fragment.</td>
</tr>
<tr>
<td>I-13</td>
<td>Isolated find</td>
<td>Bifacial granitic mano fragment.</td>
</tr>
<tr>
<td>I-15</td>
<td>Isolated find</td>
<td>Quartz scraper.</td>
</tr>
<tr>
<td>I-16</td>
<td>Isolated find</td>
<td>Portable schist mortar and a fragmented granitic basket hopper mortar.</td>
</tr>
<tr>
<td>I-17</td>
<td>Isolated find</td>
<td>Quartz flake scraper.</td>
</tr>
<tr>
<td>I-19</td>
<td>Isolated find</td>
<td>Granitic mortar fragment.</td>
</tr>
<tr>
<td>I-20</td>
<td>Isolated find</td>
<td>Schist slab metate fragment.</td>
</tr>
</tbody>
</table>

Notes: I-11, 14, and 18 were ultimately associated with the above-listed archaeological sites.
(or nuclei) and chips (waste flakes) which normally accompany them. However, groundstone milling implements including milling stones (metates), handstone (manos), mortars, and pestles sometimes accompany the chipped material.

The second most frequent prehistoric sites on the project site are comprised of hunting blinds of which there are two kinds. The first consists of a low rock wall built around a natural niche or ledge in a rock outcrop. Normally, the walls consist simply of stacked or piled rocks of varying size. The second kind of hunting blind, which is found in open areas, consists of a circular rock wall which encloses a shallow depression. The enclosure generally measures between one and two meters in diameter. Usually the rock wall has fallen; probably most having been knocked over by cattle grazing in the area.

Rock art sites are the third classification of prehistoric site. However, it should be understood that the term “rock art” used by anthropologists describes virtually any type of aboriginal rock engravings of unknown function. The specimens found on and around the project site consists of “cupule” boulders or boulders exhibiting multiple shallow depressions.

Fifteen of the prehistoric sites are chipped stone scatters including groundstone milling equipment. Eleven of the sites had one or more stacked stone hunting blinds. Two of the sites contained rock art.

Lithic scatters are more frequent in the San Andreas Rift Zone while the hunting blinds are found in the foothills of the Sierra Pelona (a range in which hunting blinds have been recorded in the past, cf. Archaeological Associates (1985). The location of the latter is to be expected since the blinds would have been used to hunt deer as the Tataviam moved back and forth between the high elevations of the mountains and the valley lowland.
Milling equipment, on the other hand, tends to be concentrated in the Rift Zone. Thus, the San Andreas Rift Zone of the study area seems to have been used for plant food procurement and preparation. The focus in the foothill zone, on the other hand, seems to have been upon hunting. Nothing was found within the valley proper. Of course, this may be a function of the fact that surface visibility in the valley floor was extremely poor. Also, clearing of the fields in the valley may have resulted in removal of surface milling stones or other large stone cultural materials.

Except for the historical site (the remains of a ranch house) there were no definite signs of permanent or semi-permanent habitation observed on the project site. Clear signs of midden soil, the usual archaeological indicator of a heavily used location, were not observed anywhere within the study area. Similarly, there are no indications of mortuary remains.

The Phase I and II surveys and records search results indicate that the study area was intensively foraged during the prehistoric era but did not contain any villages, major camps, or cemeteries. With regard to the significance of all these sites, the Phase II investigation indicates that, in addition to LAn-949, only two other sites are important archaeological resources within the meaning of CEQA and are, therefore, considered significant sites. LAn-1756/1757 (later determined to be one archaeological site) has been identified as a resource which contains important data relating to the prehistory of the Palmdale region because the complex is dateable and contains materials which must have been imported over considerable distances during the prehistoric era. The complex is even believed to predate the deposits found at LAn-949, thereby adding to the project site's chronological sequence. The deposits at LAn-1756 is estimated to cover an area of approximately 300 square meters. The two deposits at LAn-1757 are estimated to cover 250 square meters each. LAn-1758H, which may represent the location of one of the original ranch houses, holds the potential for shedding considerable light on the material character of local ranching facilities at the turn of the century.
Two types of chronologically useful data were encountered during the Phase I and Phase II site surveys. The first consists of a time-sensitive artifact type in the form of a Marymount style arrowhead found on the surface of LAn-1753 (S-8) in the Rift Zone. Like the vast majority of Marymount points, it is manufactured from fused shale, a curious stone which occurs only in the Grimes Canyon area, south of Fillmore, in eastern Ventura County. A fused shale flake was also found at LAn-1757. Marymount points are known only from sites in western Los Angeles and eastern Ventura Counties. Available chronological data suggest that Marymount points were in use principally in the period between 400-500 AD. and 1000-1100 A.D. Thus, the presence of a Marymount point at LAn-1753 (S-8) suggests that the study area was in use by prehistoric peoples at least as early as the first millennium A.D.

The second type of chronological data occurred in the form of three obsidian chips found on the surface of LAn-1752 (S-7) and one obsidian flake at LAn-1757. Obsidian is volcanic glass, a material which begins to absorb water from the atmosphere at a regular rate when a fresh surface is exposed (as when a new tool is flaked). The three obsidian chips were examined microscopically by Archaeological Associates. Hydration layers were discovered on two of the three specimens making it possible to date the artifacts.

The dates (1428 A.D. and 1461 A.D.) indicate a Late Prehistoric use of LAn-1753 (S-8). Combined with the date range inferred from the Marymount point, it is possible to conclude a probable period of use for the study area spanning the years 400 A.D. through 1461 A.D. or about 1,000 years. At a minimum, the data indicate site use between about 1,000 A.D. and 1461 A.D. or for a period of about 400 years.

The Marymount point found at LAn-1753 (S-8) and the stone spatula found on the surface of S-4, traits of the Shoshonean Indian sites observed along the Ballona Escarpment, hint that the desert counterparts of the early Shoshoneans of the Ballona Escarpment were foraging in the Rift Zone of the project site. If this is so, the sites in the study area could add important data to the pool of information being collected on the
problem of Shoshonean movement. The project site is situated at the gateway of a natural lowland route from the desert to the Pacific Coast (i.e., the Soledad Canyon/Santa Clarita Valley route to the Oxnard Plain).

According to the Archaeological Information Center, many other sites have been recorded in the San Andreas Rift Zone northwest and southeast of the study area. Their presence indicates that the sites found on the project site are part of a chain of prehistoric archaeological sites strung along the rift.

Records of five locations northwest of the study area indicate that apparently none have been excavated so that all available data are based upon surface observation. Four of the five locations are reported to be lithic scatters containing fairly diverse artifact arrays. The presence of steatite, olivella shell beads, and small projectile points (probably arrowheads) at several of these sites suggest that they are Late Prehistoric in date (post 500 A.D.). The fifth site is reported to be a "cemetery" but no descriptive data are provided.

LAn-405 recorded due west of the project site is of particular interest with regard to the project site. Recorded in December of 1969, it is described as a "Pit, ca. 2 M (sic) diameter, 50 cm. deep, bottom covered with hand to head-sized rocks (schist). No midden." The investigators interpreted this feature as a roasting pit, observing that some of the rocks "show some sign of oxidation and reduction when broken open." Archaeological Associates believe that the recorder's interpretation of LAn-450 is in error, that the site actually represents a fallen hunting blind. Several similar features were found during field reconnaissance of the project site.

LAn-1035, a second nearby site of particular interest, consists of a "cluster of 16 cupule petroglyphs on a single schistose outcrop." A probable schist slab metate was found next to the cupule boulder. The presence of this cupule boulder combined with the ones observed on-site seem to be sufficient to indicate that this type of rock art is typical of the region. LAn-1035 was recorded in September of 1979.
Two other locations reported east of the project site, LAn-875 and LAn-876, consist of "sandy blowouts exposing bone, soapstone, agate, beads, manos" and an area of dark soil including "Obsidian and agate flaking, burnt bone, broken manos, portable mortar with check marks, rhyolite flaking and soapstone" respectively. Both of these locations may be habitation areas, the latter may be a midden deposit. If this is the case, it is possible that LAn-875 and/or 876 are campsites used by individuals who conducted activities within the project site.

5.25.2 Project Impacts

Three significant historic or archaeological sites coincide with portions of the project site earmarked for development. Deposits at LAn-949 coincide with the proposed project's Bridge Road alignment; deposits at LAn-1756 coincide with Planning Area 35; deposits at LAn-1757 lie within Planning Area 11; and deposits at LAn-1758 lie within Planning Area 31. The other archaeological sites and isolated finds identified by Archaeological Associates (April 24, 1989) also fall within areas proposed for development. The processes of grading and construction would affect identified archaeological artifacts and could uncover additional cultural material below the surface. The additional population brought to the project site could increase the potential disturbance to existing or future identified sites.

The non-significant sites have been mapped and illustrated as part of the Phase II investigation. The disturbance of these sites by the proposed project is not considered significant. However, the disturbance of sites LAn-949, LAn-1756/1757 and LAn-1758H by the proposed project can be considered significant due to the significance of the sites themselves.
5.25.3 Mitigation Measures

The following mitigation measures would enable the proper removal and preservation of cultural materials found on the project site.

- All work will be done under the supervision of a qualified archaeologist.

- Excavation of 100 percent of Loci A through C as described in the Phase II Archaeological Assessment (July, 1991) shall be conducted at LAN-949. It is estimated that approximately 500 cubic meters of cultural deposit will have to be removed. An excavation plan detailing strategy and research goals shall be submitted to the City of Palmdale for review prior to excavation activities.

- At least a 4 x 4 meter square unit at the approximate center of the deposit at LAN-1756 and at LAN-1757 shall be excavated.

- If preservation of the site at LAN-1758H is not feasible, a Phase III Salvage Program shall be conducted. The Phase III Salvage Program shall include full excavation of the stone enclosure and machine excavation of six 4 x 4 meter units placed in a pattern across the site. All backdirt from the units shall be screened through 1/4-inch mesh.

- In the event that future development would adversely affect the cupule boulders (LAN-1767 and LAN-1768) or the bedrock milling feature (LAN-1772), it is recommended that they be carefully removed and relocated elsewhere on the subject property. A qualified archaeologist shall be consulted to arrange for relocation of these boulders if removal is necessary.

- The location of significant historic and archaeological resources shall be recorded with the Archaeological Information Center at the UCLA.
• Significant historic and archaeological materials recovered in the field shall be delivered to the collection of an appropriate archaeological repository.

• The following sites which were augered require additional testing for subsurface deposits: LAN-1746, LAN-1747, LAN-1748, LAN-1749, LAN-1750, LAN-1752, LAN-1753, LAN-1756, LAN-1772, LAN-1774, LAN-1767 and LAN-1768. At least one additional 1x1 meter test unit needs to be excavated at each of these sites, within site areas with the greatest densities of surface artifacts. These excavations are important to determine whether auger testing has missed subsurface deposits and to get a clearer, vertically-controlled picture of such deposits and their depositional context.

The following important petroglyph, bedrock mortar, and rock ring sites were not subject to any subsurface testing. They need to be tested through excavation of a minimum of one 1x1 meter units utilizing 1/8" screen in the immediate vicinity of these features: LAN-1767, LAN-1768, LAN-1759, LAN-1760, LAN-1761, LAN-1762, LAN-1763, LAN-1765, LAN-1766, LAN-1769, LAN-1770, LAN-1771. The “hunting blind” sites are important structures whose function needs to be determined through further testing.

The important apparent habitation site, LAN-949, should be avoided through realignment of the proposed roadway. However, in the event that avoidance is not possible, salvage of the site shall be performed in accordance with an excavation plan.

The important apparent habitation site, LAN-949, should be avoided through realignment of the proposed roadway. However, in the event that avoidance is not possible, salvage of the site shall be performed in accordance with an excavation plan. Excavation of 100 percent of Loci A through C as described in the Phase II Archaeological Assessment (July, 1991) shall be conducted at LAN-949. It is estimated that approximately 500 cubic meters of cultural deposit will have to be removed. The excavation plan detailing strategy and research goals shall be submitted to the City of Palmdale for review and approval prior to excavation activities. In addition, this excavation plan shall contain a subregional analysis of the archaeological sites within and immediately adjacent to City Ranch to provide a basis for significance determinations. As part of the subregional analysis, a research design that would set standards for future work in the vicinity of the City Ranch project shall be proposed. The subregional analysis of the archaeological sites may be prepared in cooperation with other adjacent property owners, as approved by the Planning Director.
Those sites, not listed above, which contained surface artifacts but were only auger tested shall be tested with at least one standard test unit per site. The testing program shall be submitted to the City Planning Department for review and approval prior to commencement. In addition, untested cupule sites, rock rings and hunting blinds shall also be tested in this manner. Any additional mitigation recommended as a result of the additional testing shall be required as mitigation measures for initial and subsequent development applications, as appropriate.

Relocation of cupule boulders must be done under the direction of a qualified archaeologist who will give careful attention to orientation of the boulders. The boulders shall be moved prior to site disturbance in their immediate vicinity to a location approved by the Planning Director. Since context will be lost, some shall be relocated to a repository approved by the Planning Director where they can be used for educational purposes. Representative artifacts should be displayed at this repository.

The work described above shall be performed by a qualified archaeologist, retained by the applicant and approved by the Planning Director. Because the introduction of residents into the area will result in the degradation of archaeological sites, required testing shall be completed and approved by the Planning Director prior to recordation of the first parcel map or tract map for the project.

5.25.4 Cumulative Impacts

Development of the cumulative projects has the potential to disturb the previously recorded archaeological sites in the project vicinity. It is unknown whether the cumulative project sites contain significant archaeological resources or whether the previously recorded sites in the vicinity contain significant archaeological resources. Unrecorded prehistoric sites may occur along the San Andreas Rift Zone. Several of the proposed projects fall within the Rift Zone. Development of these projects may disturb the prehistoric sites likely to occur in this area and contribute to the loss of archaeological resources in this area. Mitigation for this loss must occur on a project by project basis as development is proposed for the area. Mitigation for this loss must occur on a project by project basis as development is proposed for the area.
5.25.5 Unavoidable Adverse Impacts

Development of the proposed project would disturb the portions of the site containing archaeological site LAn-949, LAn-1756/1757 and LAn-1758H. Although disturbance of these sites is considered significant, implementation of the recommended mitigation measures would reduce these impacts to a level of "not significant."
5.26 PALEONTOLOGY

A report prepared by Paleo Environmental Associates entitled "Paleontologic Resource Assessment, City Ranch Specific Plan Area," April 23, 1990, included as Appendix I of this report, was used to prepare this section. The full text of this report is on file with the City of Palmdale Planning Department and will be released only to qualified investigators.

5.26.1 Existing Conditions

Paleontologic resources on the project site include fossil remains, seven recorded fossil sites and rock units with the potential to yield further paleontological resources. Rock units exposed on the project site contain pre-Tertiary igneous, metamorphic and late Miocene to Holocene nonmarine sedimentary rock units. Each rock unit exposed within the project site has been assigned a level of paleontologic importance based on the types and densities of fossil remains and recorded fossil sites it has produced on the project site and vicinity, and the potential for additional remains or sites to occur within the project site. The igneous and metamorphic rock units are considered to be of no paleontologic importance because they have no potential for containing any fossil remains. The sedimentary rock units, however, are of low to high paleontologic importance, based on their potentials for yielding fossil remains on the project site. The distribution of these rock units is presented in Appendix I.

Fossils of 21 species of land plants, including pine, palm, sycamore, cottonwood and oak, were identified at six of the seven fossil sites. These were all located in one of the late Miocene rock units. One of the Pleistocene rock units which is exposed on the project site has yielded a diversity of continental vertebrates, including bird, rabbit (two species), squirrel, pack rat, vole, pocket mouse, gopher, kangaroo rat, dire wolf, horse, camel, mastodon and mammoth at an off-site location approximately 3.5 miles to the southeast.
5.26.2 Project Impacts

Direct significant adverse impacts to paleontologic resources would result from ground-disturbing activities associated with development of the City Ranch Specific Plan. Impacts would arise primarily from grading to create building pads, parking lots, roads, parks, and the golf course. Portions of Planning Areas 1 and 9 proposed as community parks; Planning Areas 4 and 13 proposed as a golf course and Planning Area 10 proposed for single-family housing have rock units considered to be highly important paleontologically. Grading activities in these areas have high potential to disturb or bury fossil sites, as well as fossiliferous and potentially fossiliferous rocks, and would result in the loss of fossil specimens and associated geologic data. In addition, fossiliferous rock in these areas would become permanently unavailable for future investigation for fossil remains.

Portions of all of the rest of the planning areas on the project site contain paleontologic resources of low paleontologic importance. Potential to disturb fossil remains in these areas is low.

Potentially significant indirect adverse impacts could occur as a result of collection of fossil remains by construction personnel, rock hounds, and amateur and commercial collectors. This could result in the loss of specimens and data.

5.26.3 Mitigation Measures

Implementation of the following mitigation measures would reduce impacts to paleontological resources:

- A paleontologist, approved by the City of Palmdale Planning Department shall submit a program for paleontologic resource recovery and preservation to the City of Palmdale Planning Department for approval prior to issuance of the development permit. Prior to initiation of construction, the paleontologist shall
conduct a field survey of exposures of the late Miocene fossil leaf-bearing rock unit on the project site to document locations of previously unrecorded fossil sites. All sites shall be plotted on a topographic map of the project site. Representative plant fossils shall be collected from each site. The paleontologist shall excavate those sites, including any previously recorded sites, having the highest potential for yielding comparatively well preserved and taxonomically diverse plant assemblages. If necessary, the applicant will supply a backhoe and operator to further expose a fossil site for hand excavation.

- The paleontologist shall collect rock samples from selected locations (including recorded fossil sites) and horizons (particularly paleosols and other fine-grained rocks) in the rock units of high and unknown paleontologic importance to process for smaller fossil remains. Each sample shall contain up to 1,000 pounds of rock. If fossil remains are found during processing, up to 5,000 pounds of rock shall be collected from the fossil-bearing rock unit and processed.

- Following completion of these tasks, the paleontologist shall prepare a report summarizing the results of the preconstruction phase of the mitigation program presenting an inventory and describing the significance of any accessioned fossil remains. The report shall be submitted to the City of Palmdale Planning Department.

- During the construction phase, the paleontologist shall monitor grading and any other ground-disturbing activity in areas underlain by rock units of high paleontologic importance on a full-time basis, moderate and unknown importance on a half-time basis and low importance on a quarter-time basis as identified in the preconstruction field survey. If more than 25,000 cubic yards of rock are moved per day, the level of monitoring effort shall be doubled. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, dry screening excavated spoils for smaller
vertebrate remains. Grading in areas underlain by rock units of no importance shall not be monitored, except in the immediate vicinity of a fossil site.

- If larger fossil remains are uncovered by ground disturbance, the paleontologist shall divert the ground-disturbing activity away from the fossil site until the remains have been removed and a 1,000 pound rock sample has been collected. Grading of the fossil-bearing bed in the immediate vicinity of the site shall be monitored on a full-time basis. If sufficient sites are discovered in any rock unit during construction, earth-moving activities in the entire area underlain by this rock unit shall be monitored on a full-time basis.

- If fossil remains are found during grading by construction crews (including in areas underlain by rock units of low paleontologic importance), grading activities on the fossil site shall be stopped and the paleontologist shall be called to the site immediately to remove the remains. If sufficient sites are discovered, grading activities at the fossil site shall be monitored on a full-time basis.

- During grading, the paleontologist shall collect 1,000-pound rock samples from selected locations and stratigraphic levels (particularly paleosols or other fine-grained rocks) to process for small mammal and other microvertebrate remains. Additional 5,000-pound rock samples shall be collected from any productive sampling site, including any site discovered as a result of dry screening by the monitor, for processing. The grading contractor may be needed to assist in removing rock samples to an adjacent location for initial processing. Sampling sites shall be documented on the topographic map of the plan area.

- Both before and after construction, the paleontologist shall conduct the initial processing (wet and/or dry screening) of the rock samples for small age-diagnostic mammal remains and other microvertebrate specimens while on-site. The resulting concentrate shall be transported to a museum facility. If sufficient fossil sites and remains are found in a rock unit of unknown paleontological im-
portance, this unit shall be reclassified as moderately or highly important. If no remains are recovered, this rock unit shall be reclassified as being of low paleontological importance.

- During grading, the paleontologist shall collect all identifiable vertebrate and plant remains. All fossil sites shall be plotted on the topographic map of the project site.

- All fossil remains collected before and during construction shall be prepared, identified, catalogued, curated and accessioned into the collection of a designated repository, such as the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County (LACM). Accompanying notes, maps, and photographs shall also be filed at the repository.

- Following completion of these tasks, the paleontologist shall prepare a report summarizing the results of the construction phase of the mitigation program and presenting an inventory and describing the significance of any accessioned fossil remains. The report shall be submitted to the City of Palmdale Planning Department and shall signify completion of the paleontologic mitigation program. Because development of the proposed project is phased, separate reports may be required to summarize mitigation for certain fossil sites.

- Subsequent to construction, the applicant shall allow future access to, and investigation and excavation of exposed rocks, particularly at any fossil site set aside from development, by qualified paleontologists approved by the LACM to ensure fossil remains are recovered. (If paleontologists do not recover these fossil remains, the fossils and associated scientific data might be lost to weathering and erosion or to unauthorized fossil collecting.)
5.26.4 Cumulative Impacts

Development of the City Ranch project site and other future developments in the Palmdale area, may contribute to the progressive loss of fossiliferous rocks and fossil sites that can be investigated for fossil remains.

5.26.5 Unavoidable Adverse Impacts

The mitigation measures described above would allow the recovery and preservation of some scientifically important fossil remains and associated geologic data that might otherwise be discovered. If mitigation measures are carefully implemented, grading could be beneficial by exposing fresh rock and allowing the collection of fossil remains that otherwise might not have been collected. Moreover, these remains could be deposited in a museum, where they would be available for future study by qualified investigators.

While the mitigation measures proposed would reduce adverse impacts associated with development of the project site, they do not necessarily ensure that all direct and indirect adverse environmental impacts on paleontologic resources caused by development of the City Ranch project site would be reduced to an insignificant level and that all remains would be preserved. Unavoidable or residual impacts may still remain. Fossil remains and associated geologic data, recorded and possibly unrecorded fossil sites, and fossiliferous rocks may be lost to or made inaccessible by ground-disturbing activities; covering with fill, pavement, or structures; and unauthorized fossil collecting.
5.27 ELECTROMAGNETIC RADIATION

5.27.1 Existing Conditions

The City Ranch project site is traversed by five sets of high-voltage electric transmission lines (Figure 63). Two sets of these transmission lines carrying 220 kV each, within a 200-foot wide easement, cross the southwestern corner of the property diagonally. These two lines intersect each other at the approximate midpoint along their path across the project site. Immediately adjacent to this easement is a 155-foot wide easement which contains a single 500 kV transmission line. An additional line (500 kV) enters the project site approximately midway along the southern border and continues due west within a 330-foot easement. Another 500 kV line within a 330 foot easement cuts across the extreme southwest corner of the project site. A 220 kV line ("Sagebrush Power-Line") parallels the southwestern project boundary just outside the project site (Figure 63).

Immediately adjacent to the southern half of the western project site boundary and along the south side of the project site's western half of the southern boundary line is an easement containing a 220 kV electric transmission line. This transmission line was recently built to serve the proposed Sagebrush residential project to the south. This easement varies in width from 70-140 feet.

In addition to the high-voltage transmission lines, a 12 kV distribution line is located on the project site (Figure 63). The line, which is situated within a 6-foot easement, runs generally east-west across the southern half of the site. Several smaller power lines also cross the property. These lines link the former caretaker residence and Aqueduct facilities to the distribution lines.

All of the electrical power lines traversing the property have alternating currents (AC) with frequencies of 60 Hertz. All on-site lines are owned and maintained by Southern California Edison (SCE) and are located within SCE right-of-way easements. SCE
retains rights within the easements in order to maintain and repair all of these lines and their associated equipment. The easements were established to provide clearance areas around the electrical lines, access to towers unimpeded by structures, and buffer distances for safety from contact with electrical equipment.

The design and electrical characteristics of the on-site high-voltage transmission lines are typical of lines of their respective voltage classifications. The basic electrical design used by SCE for the 220 kV lines is a single 60 Hertz circuit, with three phases per circuit, and each circuit arranged in a vertical phase configuration. SCE 220 kV transmission lines consist of two 1,033,500 circular mil, 1.244-inch diameter aluminum conductor steel-reinforced (ACSR) conductors per electrical phase. The transmission line towers are constructed with galvanized lattice steel members ranging in height and span lengths depending on topography and tower configuration.

Alternating electrical currents such as those transmitted by electric power lines create electromagnetic fields. Electromagnetic fields are composed of electric fields produced when electric charges are introduced into wire and magnetic fields which are created as a result of the motion of those electrical charges. Electromagnetic fields radiate with frequencies ranging from high frequency (short wave length) ionizing radiation such as x-rays to lower frequency (longer wave length) nonionizing radiation such as microwaves, television and radio transmissions. Magnetic fields pass through normal residential structures and are diminished only by barriers containing large amounts of ferrous or other specific metals, while electrical fields are diminished by barriers of all materials. The intensity of a magnetic field does, however, diminish with distance. The electric and magnetic fields of the lines on-site are similar to other lines in service in California and throughout the U.S.

There has been concern recently that nonionizing electromagnetic fields emitted by electricity installations and equipment using alternating currents at 50-60 Hertz might have long-term health effects on those living or working near electrical facilities. Electromagnetic radiation is strongly suspected of causing childhood cancers including
brain tumors and leukemia. High voltage power lines which produce electric and magnetic fields in excess of the ambient electromagnetic field levels of exposure may be potential sources of hazard. Although scientific investigators have been unable to demonstrate a statistically significant causal relationship between living near electric fields and deleterious health effects, several scientific review groups have postulated a link between 60 Hertz electromagnetic fields and adverse public health effects. Some scientific groups have recommended precautionary measures to limit electromagnetic field exposures and indicated that careful consideration should be exercised in planning for development of land that is likely to incur long-term exposure to electromagnetic fields. Specific standards do not currently exist for the determination of appropriate development setbacks.

Transmission lines can also produce interference with radio and television reception. This factor is primarily a nuisance and does not present a planning constraint for study purposes.

5.27.2 Project Impacts

The City Ranch South Specific Plan designates that the high-voltage transmission line easements be maintained either within park areas (Planning Area 18) or undeveloped open space (Planning Area 32) (Figure 63). The Specific Plan proposes residential uses (Planning Areas 16, 17 and 19A) and an elementary school site (Planning Area 19B) along the boundaries of the proposed park (Planning Area 18). The proposed park (Planning Area 18) has been designed to encompass the easements and to provide additional buffer where adjacent to the school site (Planning Area 19B). Residential Planning Areas 16 and 17 would be situated immediately adjacent to the off-site easement containing the 220 kV transmission line serving the proposed Sagebrush project.

The 12 kV distribution line crosses several planning areas (16, 10, 18, 19A, 19B, 30A, 30B, 28A, 28B, 27, 24 and 33), most of which are proposed for single-family or school uses.
Although these areas may be subject to electromagnetic fields from the power lines, no significant impacts are anticipated as long as habitable structures are not constructed within the line's right-of-way.

No analysis of electromagnetic field strength for the 220 or 500 kV lines on-site has been conducted. However, it is anticipated that electromagnetic radiation levels would be expected to be higher within the easements than outside them. No structures for occupancy are proposed within the portions of Planning Areas 18 (park) and 32 (open space) containing the power line easements. It is anticipated that the EMF exposure of users of the park would be short in duration and intermittent in nature.

The proximity of the on-site high-voltage electric transmission lines to proposed residential Planning Areas 16, 17 and 19A and elementary school site (Planning Area 19B), and proximity of the off-site transmission line serving the proposed Sagebrush project to residential Planning Areas 16 and 17 could result in potential health risks to residents and users within these planning areas. Health risks associated with active recreational activity in close proximity to high-voltage electric lines are unknown. Active recreational uses such as softball and soccer fields are proposed within the power line easements in Planning Area 18. Because there is disagreement in the scientific community on the relationship between electromagnetic radiation exposure and health effects, the location of these uses in proximity to the high-voltage electric lines is considered potentially significant. The California Department of Education requires buffer zones between high voltage power lines and school sites. California Department of Education requires an additional 100 foot buffer for 100 to 110 kV lines from the edge of right-of-way. A 150 foot buffer is required for 200 to 230 kV lines. A 250 foot buffer is required for 345 kV lines and a 350-foot buffer for 500 kV lines or larger. These buffers represent additional land on either side of the utility corridor (State Site Selection and Approval Guide, School Facilities Planning Division, Department of Education). Buffer area has been designed in Planning Area 18 to reflect State Department of Education buffer requirements adjacent to the school site (Planning Area 19B). The State of California requires that, at a minimum, potential residential unit
buyers be notified of conditions affecting the safety and value of residences. This could apply to residential lots adjacent to high-voltage transmission lines.

Noise from transmission lines is expected to affect areas outside high-voltage transmission line easements. Depending upon atmospheric conditions, this noise may be a moderate to severe nuisance.

5.27.3 Mitigation Measures

Implementation of the following mitigations would reduce impacts associated with the high-voltage electric lines:

- Residential areas abutting transmission line rights-of-way shall be separated by continuous six-foot-high non-conductive fencing.

- In accordance with California Department of Real Estate disclosure format and procedures, all potential buyers of real property within City Ranch within 500-feet of an easement containing a 220 kV or higher voltage electric transmission line shall be notified of the proximity to the easement and conditions regarding proximity.

- Active recreational uses shall be prohibited within the 220 kV and 500 kV powerline easements in Planning Area 18.

- All residential units constructed along the perimeter of high-voltage power line easements shall use double glazed windows on all sides that face these lines to minimize noise effects generated by the electrical transmission lines.

- The location of the proposed elementary school sites shall reflect the recommended guidelines of the California Department of Education regarding buffer zones between school site locations and high voltage power lines.
5.27.4 Cumulative Impacts

As discussed with regard to the proposed project, health effects may result from living and/or using areas containing high-voltage electrical lines. Cumulative development projects proposing permanent structures for occupancy within close proximity to high-voltage electric lines may subject future residents to adverse health effects.

5.27.5 Unavoidable Adverse Impacts

As proposed, the Specific Plan would locate a park within and residential uses adjacent to high-voltage power line easements. In addition, an elementary school is proposed near the easement. If in the future a clear link between proximity to high-voltage electric lines and deleterious health effects is determined, impacts would be considered unavoidable adverse impacts.
5.28 HAZARDOUS/TOXIC MATERIALS

5.28.1 Existing Conditions

The mountainous southern portion of the project site is in an essentially natural state, with the exception of the presence of five sets of electric transmission lines and associated service roads. The central portion of the project site, currently used for cattle grazing contains a former dairy ranch compound area consisting of small abandoned residences, shop buildings, storage sheds, corrals, stables and barns. Several water tanks, grain silos, a boiler and two propane tanks are also present in this area. The Ranch compound has been in its basic location since at least the late 1920's; buildings have been added and demolished during the last 60 years. Presently, the original Ranch structures are abandoned and in general disrepair. The nearest site documented by regulatory agencies as containing hazardous materials is approximately four miles to the east. Hazardous materials include materials that may be injurious to human health or the environment on contact and as defined by the State.

Four primary areas of environmental concern have been identified on the City Ranch property as a result of a site assessment investigation conducted on June 1 and 15, 1989 (Earth Systems Environmental, 1989, Appendix J): 1) an underground fuel storage tank in the ranch compound area; 2) surface storage areas for pesticides, herbicides, and veterinary supplies; 3) surface disposal areas containing both empty and partially full paint, paint thinner, pesticide containers, and other household items and apparently oil-stained soil; 4) six water wells observed or reported to be on the property; and 5) several septic systems used for the former ranch facilities and caretaker residence. These five areas are shown on Figure 74. The project site was not tested to determine levels of subsurface or other hazardous substances.
Underground Storage Tanks

At the ranch compound area, an abandoned gasoline pump and a fill riser for a 550-gallon underground storage tank containing regular gasoline were located south of the existing storage building (Figure 74, Location A).

In February, 1990, the underground tank was removed under permit from the Los Angeles County Department of Public Works and Building and Safety. The tank was rinsed, pumped out and removed in accordance with applicable regulations. Analytical testing of the soil samples taken beneath the tank detected elevated levels of total petroleum hydrocarbons and aromatic hydrocarbons (benzene, toluene, etc.). Subsequent excavation indicated that groundwater was located 19 feet below grade and may be contaminated with hydrocarbons. A more thorough characterization of the extent of soil and, possibly, groundwater contamination has not yet been completed.

The nearest existing water well to this location is situated approximately 2,000 feet to the southeast (Figure 74). Contamination of this water well is not expected due to the distance and direction of groundwater flow.

Surface Storage Area

To the north of the underground tanks a partially demolished storage building was found to contain empty and partially filled containers of paints, paint thinners and herbicides (Figure 74, Location B). Other items found in the building include veterinary supplies, motor oil, grease, antifreeze and car batteries. A second storage building located in this area was locked at the time of site inspection, therefore, its contents were not observed.

Four partly full one-gallon jugs of chlordane were found on the porch of an abandoned bunkhouse. No signs of spillage or leakage were observed in the area of the containers (Figure 74, Location C).
Surface Disposal Areas

On the east side of the ranch compound, a small area of stained soil, approximately 10 feet in diameter and about six inches deep was found (Figure 74, Location D). The nature of this stain is not known, although it appears to be oil.

Three ranch-related refuse disposal areas were found on the site. Two of these areas contain what appear to be non-hazardous materials comprising hay bales, tree cuttings, lumber, and scrap metal (Figure 75, Location E and F). The third area contains large amounts of tree and brush cuttings, large appliances, old farm equipment, tires as well as several containers of paint, paint thinner, and roofing tar. Also found in this area was a one-gallon metal container labeled "Black Leaf DDT Concentrate" which was partially buried and appeared to be leaking (Figure 74, Location G).

Wells

Six wells are located on the project site (see Figure 74 for well location). Three wells are located in near proximity to the Ranch buildings (Earth Systems Environmental, 1989). Two of these wells, presently equipped with electric pumps, appear to be used for watering livestock. The third well, a two-inch diameter PVC piezometer is apparently used to monitor ground water levels beneath the site. Three other wells which appear to be inactive are located to the south and east of the Ranch buildings (USGS Ritter Ridge Quadrangle map).

Septic Tanks

Septic systems are located in the former ranch compound area and at the site of the former caretaker's residence east of City Ranch Road (Figure 74, Location H).

According to the Los Angeles County Agricultural Commissioner (June 1987), pesticide testing of surface waters, soils, and animal tissues in the Antelope Valley region had not
revealed any residual pesticide contamination in the area. The Commissioner's office is currently not aware of any water quality concerns in the valley associated with the use of pesticides or herbicides.

5.28.2 Project Impacts

Without proper remediation, hazardous materials found on the proposed project site could create health risks to project construction workers and future site residents. Public parkland and residential land uses are considered the most sensitive uses because these areas would be most heavily used by site residents. Potential areas of environmental concern found on the project site have been plotted on the site development plan (Figure 75) and are described below:

- Septic systems located in the area of the former caretaker residence coincide with Planning Area 13. Those in the ranch compound area coincide with Planning Area 15.

- Four partially full one-gallon jugs of "Chlordane" found on the porch of an abandoned bunkhouse (Figure 75, Location C), and a storage building containing empty and partially filled containers of paints, paint thinners and herbicides (Figure 75, Location B) coincide with Planning Area 9.

- One ground water well would be located in Planning Area 20, three in Planning Area 13, one within Planning Area 24, and another within Planning Area 30.

- At the location where the underground storage tank was removed (Location A), gasoline contamination still exists (Planning Area 9) (Figure 75). An oil-stained area approximately ten feet in diameter (Figure 75, Location D) coincides with Planning Area 9.

5-314
• In the southeast portion of Planning Area 1, a ranch-related disposal site was found (Figure 75, Location G). Several containers of paint, paint thinner, roofing tar and a metal container labeled "DDT Concentrate" were discovered at this disposal site.

Unless proper clean-up and disposal procedures are carried out, these sites contain potentially hazardous materials which could pose a health threat. Any exposure of hazardous materials to human population may be considered significant.

5.28.3 Mitigation Measures

Implementation of the following mitigation measures would reduce impacts to a level of "not significant”.

• Septic systems shall be abandoned prior to grading operations in areas where they are located. Septic systems shall be cleaned and abandoned in accordance with Title 28, Chapter 11, Section 1119 of The Los Angeles County Health and Safety Code. A permit for this action will be required by the Los Angeles County Department of Public Works Building and Safety Division in Lancaster.

• Soil testing shall be conducted in all areas where hazardous/toxic materials were found. Soils contaminated with hydrocarbons (gas and oil spillage), specifically at the former underground storage tank site (Location A) and soil stained area (Location D) on the east side of the ranch compound, shall be removed and disposed of at a facility authorized to accept hazardous waste from the site prior to grading operations within the specified area. Soil removal shall be supervised by a qualified hazardous waste scientist. The final quantity of soil to be removed shall be determined. Contaminated soil shall be transported and disposed of in accordance with all applicable hazardous waste disposal regulations. A manifest, a formal document verifying receipt by an authorized hazardous waste facility of soils contaminated with hydrocarbons or other hazardous wastes shall

5-315
be provided to the County Department of Public Works. A closure report verifying complete removal of contaminants from the site shall be provided to the County Department of Public Works. Both shall be approved prior to the acceptance of dedication.

- An additional study determining the lateral and vertical extent of soil contamination and the possible impact on groundwater shall be prepared for the former site of the underground fuel storage tank.

- Empty or partially full containers of pesticides, herbicides, and veterinary supplies (Locations B and C) shall be reviewed by a qualified hazardous waste scientist to determine which are considered hazardous as determined by state, county, or local statutes. Hazardous materials and hazardous waste shall be disposed of in accordance with all applicable hazardous waste disposal regulations.

- Hazardous materials in the disposal area at Location G, Figure 75 shall be analyzed for chemical composition, removed and taken to a facility licensed to accept such material. Soil samples shall be examined in this area to ascertain whether soil has been impacted by manifested disposed contaminants. If the other disposal areas are excavated, a manifest for the contaminated soils and a site closure report shall be provided to the County Public Works Department prior to the acceptance of dedication.

- Wells on the property not used for irrigation or other non-potable uses shall be abandoned and sealed to eliminate the potential for degradation of ground water beneath the site in accordance with the requirements set forth in California Department of Water Resources Bulletin 71-88. Well destruction will require permitting through the Los Angeles County Department of Health Services, and possibly the local water agency.
• Groundwater testing for hydrocarbons shall be conducted prior to the construction of any future water wells within 1,000 feet of Location A (the abandoned subsurface gasoline storage tank, Figure 75 of the EIR). If pollutant levels in exceedance of threshold levels set by the California Health Services Department (CHSD) are discovered in the groundwater, those locations shall not be used as well sites. (Present CHSD thresholds include 0.7 parts per billion (ppb) benzene, 640 ppb ethyl benzene, 100 ppb toluene, and 680 ppb zylene).

• Refuse from disposal areas E and F (Figure 75) shall be collected and disposed of at an appropriate disposal site.

• The storage building near Location B which was not inspected on the site investigation and whose contents are, therefore, unknown, shall be opened and evaluated by a qualified site investigator. The contents of the building shall be inventoried and analyzed for potential health hazards. If hazardous materials are identified, appropriate remediation measures shall be implemented. All local, county, state and federal regulations shall be applied to ensure proper disposal of any hazardous material that may be found. If hazardous materials are found at this location, a manifest and a site closure report shall be provided to the County Department of Public Works prior to the issuance of a building permit.

5.28.4 Cumulative Impacts

Removal of potential hazardous materials and their disposal are site specific.

5.28.5 Unavoidable Adverse Impacts

Implementation of the recommended mitigation measures would reduce project impacts regarding hazardous/toxic materials to a level of “not significant.”
5.29 ANTELOPE VALLEY PUBLIC LANDFILL

5.29.1 Existing Conditions

The Antelope Valley Public Landfill is located approximately 0.6 miles east of the project site's eastern boundary (Figure 76). Privately operated for 35 years by the Palmdale Disposal Company with a Class III permit (no acceptance of hazardous wastes), this public landfill accepts 230,000 tons of waste per year from the Antelope Valley area and is rapidly reaching its permitted capacity. Potential off-site impacts associated with operation of this landfill as with any landfill include noise, odors, landfill gas migration, dust, blowing of litter, and vectors.

Noise is generated at the landfill site from refuse collection trucks, compaction and grinding machinery, bulldozers and loaders. The significance of these noise sources on off-site receptors depends on wind direction, topographic barriers and distance.

Landfill odors are caused by uncovered refuse and by landfill gas. Landfill gas is the product of natural biological decomposition of organic materials and typically contains nearly equal amounts of carbon dioxide (CO₂) and methane (CH₄) and traces of other decomposition gases. It is the trace gases which contain odor-producing components. The maximum rate of gas generation in sanitary landfills occurs soon after the solid waste is buried and then decreases with time. If not properly controlled, landfill gas is capable of subsurface migration and escape into the atmosphere, causing potential odor problems. Safety problems could also occur if the gas were allowed to migrate underground laterally to off-site areas and to accumulate. In air, concentrations ranging from 5 to 15 percent, would be explosive if ignited. As required by the County, the landfill operator monitors both water quality and methane gas migration to ensure compliance with State and County standards.

Because of the great propensity of the local area for strong winds, dust blown from graded surfaces or from loose soils could be another potential off-site impact. It is likely
that both dust and odors make their way to the proposed project site, on an average of 18 days per year when the wind blows from the east to the west.

Litter may also escape off-site from two sources: refuse collection trucks and daily landfill activity prior to covering with soil. Particularly during periods of strong winds, control of litter becomes more difficult, resulting in some litter, particularly plastic bags, blowing away off site.

The County Department of Health Services, responsible for enforcement of landfill regulations, noted only one complaint of landfill violations at the Antelope Valley Public Landfill in the last 10 years. Reported on May 15, 1990, a complaint of windblown newspapers and plastic bags from the Antelope Valley Public Landfill was submitted to the County Department of Health Services (County Department of Health Services, January, 1991). In addition, the City of Palmdale Planning Department has received numerous other complaints regarding blowing dust and trash.

Vectors (rodents and birds) pose a potential off-site impact. With regard to rodents, studies performed for Los Angeles County Sanitation Districts Landfill (LACSD, 1983) indicated that rodents brought into the disposal areas with the refuse were not able to survive the compaction process. Rodent species living at the landfill which are nocturnal would be killed outright in their burrows during daytime clearing operations; diurnal rodents would most likely seek shelter in burrows in their immediate vicinity when frightened, and would also be killed during operations. Therefore, migration of rodents off-site is not likely to be significant.

With regard to birds, some landfills host large numbers of gulls during winter months when storms at sea, drive the birds inland. Gulls may act as vectors by transporting small pieces of waste away from a landfill if they are allowed to land in the working areas of the landfill.
The County Department of Health Services, responsible for enforcement of landfill regulations, has not cited violations regarding the Antelope Valley Public Landfill. As required by the County, the landfill operator monitors both water quality and methane gas migration to ensure compliance with State and County standards.

5.29.2 Project Impacts

Development of the proposed project would bring residential uses within .6 miles of the Antelope Valley Public Landfill. However, Palmdale Disposal Company is currently seeking to obtain an expansion permit from the County Department of Public Works, the Department of Health Services and the Regional Water Quality Control Board to expand 85 acres westward from the existing landfill boundary (Figure 76). This would result in bringing the landfill's westernmost boundary alongside the proposed project's eastern boundary and, therefore, the uses to be developed on the project site in the future would abut the landfill. Specifically, a common boundary would exist for about 1,270 feet alongside the proposed project's golf course (Planning Area 13), north of City Ranch Road. The residential areas closest to that common boundary would be located approximately 600 feet to the north (Planning Area 8) and 1,860 feet to the south (Planning Area 24).

It should also be noted that the Palmdale Disposal Company proposes a potential further future expansion to the north of the existing and currently proposed landfill sites. This future expansion would occur on property which would also abut the proposed project boundary and would be directly adjacent to the homes in Planning Area 8. However, this property is not yet under the ownership of the landfill operator.

An established County setback regulation for developments adjacent to landfill does not exist (Los Angeles County, Building and Safety Department, 1990). The County, however, does require that land uses within 1,000 feet of a sanitary landfill be compatible with the operation of the landfill (California Department of Health Services, 1990). In addition, the California Government Code Section 66784.2 states that the
distance between a landfill site and a residential site be sufficient to prevent noise, odors and other landfill-associated impacts from affecting residential areas [California Integrated Waste Management Board (IWMB), 1990a]. The California Integrated Waste Management Board also recommends a one-quarter mile or 1,000-foot buffer zone to protect public health and safety, primarily from methane gas.

The City's proposed Solid Waste Management Plan is recommending residential uses be separated from landfill property lines by at least 1,000 feet. This would mean that 2.6 acres of Planning Area 8 which fall within 1,000 feet of the landfill property boundary would need to be in the buffer area. This would affect approximately 10 lots. Although all the uses within the proposed project area would to some extent be subject to off-site impacts associated with operation of a landfill (as described above), those homes within the 1,000-foot zone would likely be the most affected. Whereas dust, litter, vectors and odors would become an occasional nuisance to inhabitants of most of the project site, homes within the 1,000 foot buffer would be subject to significant levels of these impacts. The visual impacts of the landfill on the project site are discussed in Aesthetics, Section 5.11.

The proposed landfill expansion will require the preparation of a Disposal Site Information Report and an EIR, and is subject to approval by the County Department of Regional Planning (Los Angeles County, Public Works Department, 1990b).

It should be noted that the landfill operator will necessarily have to include several mitigation measures to minimize the off-site impacts to obtain and maintain permits to operate the landfill expansion. The measures are likely to include methane gas migration detection and prevention systems, lines or webbing across open refuse areas to prevent the scavenging by gulls, watering trucks for dust control and a small working area of open, exposed refuse. Operation of the Class III landfill will continue to be regulated by the County of Los Angeles (through a Conditional Use Permit) with additional oversight by State agencies such as the Regional Water Quality Control Board and Department of Health Services. Each of these Agencies can require
additional mitigation measures to reduce potential impacts or to achieve regulatory requirements.

However, the location of residential uses within 1,000 feet of the expanded landfill remains a significant impact.

5.29.3 Mitigation Measures

Implementation of the following measures would reduce project impacts related to proximity to the Antelope Valley Public Landfill to a level of “not significant”:

- The applicant shall to keep all residential development a minimum of 1,000 feet west of the proposed landfill expansion boundary in accordance with the City of Palmdale’s proposed Solid Waste Management Plan. The southeast corner of Planning Area 8 would need to be in the landfill buffer area and kept free of residential development (Figure 77). Prior to development occurring within Planning Area 8, a permanent easement which includes land within 1,000 feet of the northwest and southwest corners of the landfill expansion area shall be recorded. Within this easement, the construction of residences shall be prohibited.

- To minimize dust and visual impacts, the applicant shall provide a landscape buffer of mature vegetation along the common boundary line with the Antelope Valley Public Landfill and along the boundary of Planning Area 8 or any other residential properties that may be affected.

- In accordance with California Department of Real Estate disclosure format and procedures, all potential buyers purchasing real estate in City Ranch located within 1,200 feet of the landfill boundary shall be notified of that circumstance.
5.29.4 Cumulative Impacts

None.

5.29.5 Unavoidable Adverse Impacts

Although nuisances associated with operation of a landfill are likely to affect inhabitants and property within the proposed project site, implementation of the above mitigation measures and effective enforcement of landfill-associated mitigation procedures should reduce these impacts to non-significance.

5.30 LIBRARY SERVICES

5.30.1 Existing Conditions

Library Services in Palmdale are presently provided by the Palmdale City Library, located at the southeast corner of the intersection of Palmdale Boulevard and Sierra Highway. This facility is 12,400 square feet in size and can accommodate 75,000 volumes. However, according to the City Librarian, the need exists for a larger facility with more extensive services. The physical constraints of the library currently limit the types of services which can be offered and which are presently demanded by the community.

5.30.2 Project Impacts

National library standards provided by the City Librarian recommend 2.5 volumes per capita, 0.5 staff per thousand population and an area of 0.8 square feet per capita. The library needs for the City Ranch project, using these standards and a household size of 2.7 persons per dwelling unit, is 35,100 volumes, 7 staff persons, and 11,232 square feet of library facility. The adjoining Ritter Ranch Specific Plan area will be required to construct a branch library facility, 16,000 square feet in size. Therefore, a branch facility in the City Ranch project would be redundant. However, the applicant could provide a pro-rata share of funding for upgrading the main library or assist in the construction of the branch library proposed on the Ritter Ranch project. The location of the branch facility in the Ritter Ranch project with expanded library facilities at the main library would provide adequate library services for the City Ranch Specific Plan residents.
5.30.3 Mitigation Measures

There are no feasible mitigation measures which can be placed on this project to alleviate significant project-related impacts to library services.

5.30.4 Cumulative Impacts

Development of the cumulative projects would result in a need for library facilities of 28,393 square feet in size with 88,728 volumes and 17 staff persons. Mitigation on a project by project basis may not be feasible unless a City-wide financing mechanism can be developed to reduce the impacts of this cumulative development on library facilities. Therefore, development of the City Ranch and other cumulative projects may represent a significant cumulative impact to library services.

5.30.5 Unavoidable Adverse Impacts

Development of the proposed project will contribute to cumulative significant adverse impacts to library services.
6.0 GROWTH-INDUCING IMPACTS

In general terms, a project may be considered to foster spatial, economic or population growth in a geographic area if it meets any one of the four criteria identified below:

1) Removal of an impediment to growth (e.g., establishment of an essential infrastructure or the provision of new access to an area).

2) Economic expansion or growth (e.g., changes in revenue base, employment and population expansion, etc.).

3) Establishment of a precedent-setting action (e.g., an innovation or a radical change in land use).

4) Development or encroachment in an isolated or adjacent area of open space (being distinct from an “infill” type of project).

The growth-inducing impacts of the proposed project are evaluated below with regard to the above listed criteria.

6.1 REMOVAL OF AN IMPEDIMENT TO GROWTH

Development of the proposed project will require the extension of water supply, telephone, cable TV, sewer, natural gas and electrical infrastructure out to the project site. These utility extensions will bring service out to presently unserviced areas of Los Angeles County. In addition, Avenue S will be extended through the project site connecting its existing northern terminus southeast of the project site to the western edge of the project site. This will provide a new alternate access route to the project vicinity. The proposed project can for these reasons be considered growth-inducing under this criterion.
6.2 ECONOMIC GROWTH

Development of the proposed project would create economic growth in the area both during the construction period when construction-related job opportunities would be created, and as a result of project operation. In the short-term, secondary growth impacts would be expected in order to service construction crews during the approximately ten-year construction period. In the long-term, project development will result in the addition of 14,040 people to the Palmdale area and the creation of approximately 889 new jobs on-site.

This population and employment growth will subsequently increase the demand for public services and utilities which would in turn create secondary off-site employment demand. These would include services such as libraries, postal service, road maintenance, public transportation, day care, health care and other social services as well. It can be anticipated that additional developments will attempt to locate in close proximity to the project site in order to capture spillover demand for services and other commercial facilities currently not provided in the project vicinity. For the aforementioned reasons, the proposed project can be considered growth-inducing with respect to economic growth.

6.3 PRECEDENT-SETTING ACTION

Development of the proposed project is anticipated to include annexation of the project site into the jurisdiction of the City of Palmdale, and adjustment of the City's sphere of influence boundary. Project development will also require the adoption of the City Ranch Specific Plan by City Council ordinance. The proposed project is in conformance with the City of Palmdale General Plan which according to the Land Use Plan designates the site as "City Ranch Specific Plan". A General Plan Amendment to adopt the Specific Plan land use designations into the General Plan would be necessary. The area will also need to be pre-zoned SP (Specific Plan).
Because the City's intended land use designation, according to the Land Use Element of the General Plan, is Specific Plan with an overall density of three dwelling units per acre, adoption of the proposed City Ranch Specific Plan which conforms with the designations is not considered a radical change in land use. Therefore, the proposed project is not considered growth-inducing under this criterion.

6.4 DEVELOPMENT OF OPEN SPACE

The proposed project site is located adjacent to the City of Palmdale in an area of unincorporated Los Angeles County. Development of the proposed project would increase the jurisdictional area of the City of Palmdale by 3.1 square miles and would increase the suburbanized acreage in the City. Development of the site would permanently eliminate some open space on the project site. For these reasons the proposed project would also be considered growth-inducing with respect to the development of open space.

6.5 CONCLUSION

The proposed project meets three of the four growth-inducing criteria specified in this section. Therefore, development of the proposed project would be expected to foster growth of the economic and spatial environment of the local area and would be considered growth-inducing.
7.0 RELATIONSHIP BETWEEN LOCAL SHORT-TERM USE OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The project site presently contains undeveloped hillside areas with cattle grazing activities in the central portion of the site. Development of the proposed City Ranch Specific Plan would commit about 1,585 acres of the project site to a pattern of development that would preclude preservation of the site as natural open space, an agricultural area, or alternate future uses of the site.

Project development will result in long-term increases in local population; alteration of the project site landform; suburbanization of the project site; increases in local traffic generation, air pollutant emissions and ambient noise levels; exposure to geologic hazards and potential hazards associated with electromagnetic radiation; removal of Joshua trees; fragmentation of biological habitats; and consumption of energy.

Cumulative impacts associated with project development include an increase in areawide population and traffic, an incremental decrease in air quality, an increase in ambient noise levels in the area, suburbanization of the mostly rural properties in the unincorporated area of Los Angeles County adjacent to the City of Palmdale, decreased biological value in that area of the County, increased requirements for regional sewage treatment and solid waste disposal capacity, a decrease in the subregional jobs to housing ratio, increase in exposure to geologic hazards of the area, and increased areawide energy use.

Approval of the City Ranch Specific Plan would implement the City of Palmdale’s General Plan land use designation for the project site, as a largely residentially developed area. Because residential communities are proposed or approved for properties to the north, south, east and west, development of the project site at this time (rather than reserving an option for further alternatives to the proposed project) is justified because it would allow development compatible with future surrounding uses...
and provide the opportunity to develop and plan the area in an orderly fashion, especially with regard to area infrastructure, roadways, and public services. In addition, development of the proposed project would provide the opportunity to develop a local fire service station, thus fulfilling a long standing demand for location of such a facility in the Palmdale area of the County.
8.0 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES RESULTING FROM IMPLEMENTATION OF THE PROPOSED PROJECT

Construction of the proposed City Ranch Specific Plan will require the consumption of substantial amounts of non-renewable resources for use as building materials and to fuel construction-related vehicles and machinery. Project development will commit future generations to the use of fossil fuels for the lifetime of the project for project operation and maintenance.

Project development will remove existing on-site abandoned buildings and hazardous wastes and will permanently replace the existing undeveloped land with suburban land uses. Given the types of uses proposed, it is unlikely that existing environmental conditions would be restored subsequent to project development. The construction of Avenue S, Bridge Road and the internal street system will result in a new pattern of vehicular circulation and access to a previously inaccessible area. Proposed uses would pose the danger of an environmental accident due to exposure of increased numbers of people to seismic hazards.

In addition, development of the project site will result in the irreversible loss of archaeological sites and paleontological sites. Changes to biological resources will result in loss of habitat and potential loss of biological diversity.
9.0 ALTERNATIVES

Under the California Environmental Quality Act (CEQA), an Environmental Impact Report is required to compare impacts of the proposed project to alternatives which could feasibly achieve the objectives of the proposed project [CEQA Guidelines §15126(d)]. The discussion of alternatives should focus on optional development strategies which would be capable of reducing some or all of the significant adverse impacts associated with the proposed project to a level of nonsignificance. The “No Project” alternative must also be evaluated.

The range of alternatives to be addressed in an EIR by CEQA is governed by the “rule of reason” and requires the document to address only those alternatives necessary to permit a reasoned choice. The key issue in determining the range of alternatives evaluated is whether or not the selection and discussion of alternatives fosters informed decision making and public participation. The range of alternatives considered in comparison to the proposed project include the following:

- Alternative 1 - No Project
- Alternative 2 - Reduced Residential Density
- Alternative 3 - College Campus
- Alternative 4 - Alternate Site A: Willow Springs
- Alternative 5 - Alternate Site B: Quail Lake

A City Planning Department survey of the area determined that other sites in the City of Palmdale of comparable size to the project site had more severe environmental constraints than the project site. The only other feasible sites identified in the Antelope Valley area were the ones chosen as alternatives 4 and 5 listed above.

The potential impacts of the development of alternatives are compared to those potentially generated by development of the proposed project in Table 38. Impacts for the proposed project and the alternatives represent the impacts of development assuming
<table>
<thead>
<tr>
<th>Will the project result in:*</th>
<th>Proposed Project</th>
<th>Alternative 1 No Project</th>
<th>Alternative 2 Reduced Density</th>
<th>Alternative 3 College Campus</th>
<th>Alternative 4 Willow Springs</th>
<th>Alternative 5 Quail Lake</th>
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<tr>
<td>PROJECT DESCRIPTION</td>
<td>City Ranch</td>
<td>Existing Condition</td>
<td>3,120 Residential Units</td>
<td>4-year college</td>
<td>Same components as City Ranch Specific Plan</td>
<td>Same components as City Ranch Specific Plan</td>
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<td>1. LAND USE</td>
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<td>a. An alteration of the present or planned land use of the area?</td>
<td>no</td>
<td>no</td>
<td>no</td>
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<td>yes</td>
<td>yes</td>
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<tr>
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</tr>
<tr>
<td>2. POPULATION</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>a. Change in the distribution density or growth rate of the human population in the area?</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td>b. Population increase</td>
<td>14,040</td>
<td>0</td>
<td>8,424</td>
<td>17,904</td>
<td>14,040</td>
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<tr>
<td>c. Employment opportunities</td>
<td>889</td>
<td>0</td>
<td>2,197</td>
<td>3,322</td>
<td>889</td>
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<td>no</td>
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<td>no</td>
</tr>
<tr>
<td>3. HOUSING</td>
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<td></td>
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<td>a. Affect the jobs to housing ratio?</td>
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<td>no</td>
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<tr>
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<td>no</td>
<td>no</td>
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<td>yes</td>
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</table>

1. Estimates and calculations are based on projections made in EIR for the University of Irvine, Long Range Development Plan, August 1989.

* The issues addressed in this table are those which were addressed in the EIR and the Initial Study for the proposed project. Impacts indicated reflect impacts which would result without implementation of mitigation measures.
### TABLE 38 (Cont.)

<table>
<thead>
<tr>
<th>Will the project result in:</th>
<th>Proposed Project</th>
<th>Alternative 1</th>
<th>Alternative 2 Reduced Density</th>
<th>Alternative 3 College Campus</th>
<th>Alternative 4 Willow Springs</th>
<th>Alternative 5 Quail Lake</th>
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<tbody>
<tr>
<td>4. EARTH (GEOLOGY)</td>
<td></td>
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<tr>
<td>a. Unstable earth conditions or changes in geologic substructure?</td>
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<td>yes</td>
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<tr>
<td>b. Disruptions of the soil?</td>
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<td>no</td>
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<tr>
<td>c. Change in topography or surface features?</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td>d. Exposure of people or property to geologic hazards?</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<tr>
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<td>yes</td>
<td>yes</td>
<td>yes</td>
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<td>5. HYDROLOGY</td>
<td></td>
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</tr>
<tr>
<td>a. Changes in currents or course of fresh or marine waters?</td>
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<td>no</td>
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<td>b. Changes in absorption rates, drainage patterns or surface runoff?</td>
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<tr>
<td>c. Alterations to the storm drain system?</td>
<td>yes</td>
<td>no</td>
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<td>d. Exposure of people or property to water related hazards?</td>
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<tr>
<td>6. BIOLOGY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Change in diversity of species or number of any species</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td>b. Reduction of the numbers of any unique, rare, or endangered species?</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>unknown</td>
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<tr>
<td>c. Introduction of new species or barrier to migration or existence of existing species?</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
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<td>d. Destruction of wildlife habitat?</td>
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<td>maybe</td>
<td>maybe</td>
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<tr>
<td>Will the project result in:</td>
<td>Proposed Project</td>
<td>Alternative 1</td>
<td>Alternative 2 Reduced Density</td>
<td>Alternative 3 College Campus</td>
<td>Alternative 4 Willow Springs</td>
<td>Alternative 5 Quail Lake</td>
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<td>7. TRANSPORTATION</td>
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</tr>
<tr>
<td>a. Generation of additional vehicular trips (trips per day)?</td>
<td>49,970</td>
<td>none</td>
<td>42,480</td>
<td>28,763</td>
<td>49,970</td>
<td>49,970</td>
</tr>
<tr>
<td>b. Effects on existing parking facilities or demand for new parking?</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>c. Impacts upon existing transportation systems?</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td>d. Alterations to present patterns of circulation?</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td>e. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td>Significant?</td>
<td>potentially</td>
<td>no</td>
<td>potentially</td>
<td>potentially</td>
<td>potentially</td>
<td>potentially</td>
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<tr>
<td>8. AIR QUALITY</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Total Emissions:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO (lbs. per day)</td>
<td>2,943</td>
<td>0</td>
<td>2,147</td>
<td>2,448</td>
<td>2,943</td>
<td>2,943</td>
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<tr>
<td>NOx (lbs. per day)</td>
<td>955</td>
<td>0</td>
<td>691</td>
<td>651</td>
<td>955</td>
<td>955</td>
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<tr>
<td>Particulates (lbs. per day)</td>
<td>199</td>
<td>0</td>
<td>145</td>
<td>128</td>
<td>199</td>
<td>199</td>
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<tr>
<td>ROG (lbs. per day)</td>
<td>244</td>
<td>0</td>
<td>178</td>
<td>195</td>
<td>244</td>
<td>244</td>
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<tr>
<td>Significant?</td>
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<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td>9. NOISE</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>a. Exceedance of State land use compatibility standards for noise?</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>maybe</td>
<td>maybe</td>
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<tr>
<td>Significant?</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>maybe</td>
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### TABLE 38 (Cont.)

<table>
<thead>
<tr>
<th>Will the project result in:</th>
<th>Proposed Project</th>
<th>Alternative 1</th>
<th>Alternative 2 Reduced Density</th>
<th>Alternative 3 College Campus</th>
<th>Alternative 4 Willow Springs</th>
<th>Alternative 5 Quail Lake</th>
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<tbody>
<tr>
<td>10. AESTHETICS</td>
<td></td>
<td></td>
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<tr>
<td>a. The obstruction of any public scenic vista or view?</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
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<tr>
<td>b. The destruction of a locally recognized desirable aesthetic natural feature?</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
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<td>no</td>
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<tr>
<td>c. Any negative aesthetic effect? Significant?</td>
<td>no</td>
<td>no</td>
<td>no</td>
<td>no</td>
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<td>no</td>
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<td>11. LIGHT AND GLARE</td>
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<td></td>
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<td></td>
<td></td>
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<tr>
<td>a. Produce new light or glare from street lights or other sources? Significant?</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<tr>
<td>a. Increase in demand upon existing energy sources or require development of new energy sources? Significant?</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
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<td>13. ELECTRICITY</td>
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<td></td>
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<tr>
<td>a. Kilowatt-hours/day Significant?</td>
<td>98,975</td>
<td>0</td>
<td>72,123</td>
<td>90,011</td>
<td>98,975</td>
<td>98,975</td>
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<td></td>
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<tr>
<td>a. Million cubic feet/day Significant?</td>
<td>0.92</td>
<td>0</td>
<td>0.58</td>
<td>0.35</td>
<td>0.92</td>
<td>0.92</td>
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<td>15. WATER</td>
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<td></td>
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<tr>
<td>a. Million gallons per day Significant</td>
<td>5.22</td>
<td>0</td>
<td>3.58</td>
<td>5.70</td>
<td>5.22</td>
<td>5.22</td>
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<tr>
<td>Will the project result in:</td>
<td>Proposed Project</td>
<td>Alternative 1</td>
<td>Alternative 2</td>
<td>Alternative 3</td>
<td>Alternative 4</td>
<td>Alternative 5</td>
</tr>
<tr>
<td>---------------------------</td>
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<td>---------------</td>
<td>---------------</td>
<td>---------------</td>
<td>---------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No Project</td>
<td>Reduced Density</td>
<td>College Campus</td>
<td>Willow Springs</td>
<td>Quail Lake</td>
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<td>16. SEWAGE DISPOSAL</td>
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<td>a. Million gallons per day</td>
<td>1.28</td>
<td>0</td>
<td>0.86</td>
<td>0.95</td>
<td>1.28</td>
<td>1.28</td>
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<td>Significant?</td>
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<td>yes</td>
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<td>17. SOLID WASTE</td>
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<tr>
<td>a. Pounds per day</td>
<td>54,019</td>
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<td>34,668</td>
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<td>no</td>
<td>no</td>
<td>no</td>
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<td>18. COMMUNICATIONS</td>
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<td>potentially</td>
<td>potentially</td>
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<td>unknown</td>
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<tr>
<td>19. POLICE</td>
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<tr>
<td>a. Officers to population ratio</td>
<td>.83</td>
<td>.91</td>
<td>.85</td>
<td>.82</td>
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<td>20. FIRE/EMERGENCY SERVICES</td>
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<td>potentially</td>
<td>no</td>
<td>potentially</td>
<td>potentially</td>
<td>maybe</td>
<td>maybe</td>
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<td>21. SCHOOLS</td>
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<td></td>
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<tr>
<td>a. Additional students?</td>
<td>4,544</td>
<td>0</td>
<td>2,808</td>
<td>776</td>
<td>4,544</td>
<td>4,544</td>
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<tr>
<td>Significant?</td>
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<td>no</td>
<td>yes</td>
<td>yes</td>
<td>maybe</td>
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<td>22. PARKS AND RECREATION</td>
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<td>no</td>
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<td>23. ROAD MAINTENANCE</td>
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<td>maybe</td>
<td>no</td>
<td>maybe</td>
<td>maybe</td>
<td>unknown</td>
<td>unknown</td>
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<tr>
<td>Significant?</td>
<td>potentially</td>
<td>no</td>
<td>potentially</td>
<td>potentially</td>
<td>unknown</td>
<td>unknown</td>
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</tbody>
</table>

Assumes a police force of 242 officers.
<table>
<thead>
<tr>
<th>Will the project result in:</th>
<th>Proposed Project</th>
<th>Alternative 1</th>
<th>Alternative 2 Reduced Density</th>
<th>Alternative 3 College Campus</th>
<th>Alternative 4 Willow Springs</th>
<th>Alternative 5 Quail Lake</th>
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</thead>
<tbody>
<tr>
<td>25. PALEONTOLOGY</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>a. Disturbance or destruction of paleontological resources?</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>unknown</td>
<td>unknown</td>
</tr>
<tr>
<td>Significant?</td>
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<td>no</td>
<td>yes</td>
<td>yes</td>
<td>maybe</td>
<td>maybe</td>
</tr>
<tr>
<td>26. ELECTROMAGNETIC RADIATION</td>
<td>maybe</td>
<td>no</td>
<td>maybe</td>
<td>maybe</td>
<td>maybe</td>
<td>maybe</td>
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<tr>
<td>a. Exposure of people to health hazards?</td>
<td>potentially</td>
<td>no</td>
<td>potentially</td>
<td>potentially</td>
<td>potentially</td>
<td>potentially</td>
</tr>
<tr>
<td>Significant?</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>yes</td>
<td>unknown</td>
<td>unknown</td>
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<td>27. HAZARDOUS/TOXIC MATERIALS</td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
<td>maybe</td>
<td>maybe</td>
</tr>
</tbody>
</table>
no implementation of mitigation measures. Each of these alternatives is described and discussed below.

9.1 ALTERNATIVE 1 - NO PROJECT

Under the "No Project" alternative, the proposed project would not be developed and the project site would remain in its present undeveloped condition. The central portion of the project site would continue to be used for cattle grazing. Under this alternative, hazardous materials currently found on the site would not be removed. However, the potential project-related impacts discussed in Section 5.0 of this report would not occur.

9.2 ALTERNATIVE 2 - REDUCED RESIDENTIAL DENSITY ALTERNATE DEVELOPMENT SCHEME

Under this alternative, the 1,985-acre project site would be developed in a manner similar to the proposed project but with reduced residential density and some land use changes. Figure 78 shows the size, location and use of each of the 35 planning areas assumed under this scenario. Components of this alternative include the following:

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acres</th>
<th>% of Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>900.3</td>
<td>45.3</td>
</tr>
<tr>
<td>Commercial</td>
<td>52.9</td>
<td>2.7</td>
</tr>
<tr>
<td>Office</td>
<td>26.1</td>
<td>1.3</td>
</tr>
<tr>
<td>Schools</td>
<td>27.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Parks</td>
<td>167.6</td>
<td>8.4</td>
</tr>
<tr>
<td>Open Space</td>
<td>122.6</td>
<td>6.2</td>
</tr>
<tr>
<td>Natural Open Space</td>
<td>475.2</td>
<td>23.9</td>
</tr>
<tr>
<td>Golf Course</td>
<td>157.1</td>
<td>7.9</td>
</tr>
<tr>
<td>Fire Station</td>
<td>1.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Roadways</td>
<td>55.1</td>
<td>2.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,985.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
Residential

The residential component of this alternative represents a 40% reduction in the number of dwelling units as compared to the proposed project. Under this alternative, approximately 900 acres of the site are proposed for residential uses. Overall residential density across the entire project site would be 1.57 dwelling units per gross acre. The residential mix is as follows:

<table>
<thead>
<tr>
<th>Type</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single-family detached</td>
<td>1,842</td>
</tr>
<tr>
<td>Single-family attached</td>
<td>903</td>
</tr>
<tr>
<td>Multi-family</td>
<td>375</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,120</strong></td>
</tr>
</tbody>
</table>

- **Single-family detached** - Planning Areas 5, 6, 8, 16, 17, 19, 20, 24, 27, and 31 would be developed with detached single-family homes. Planning Areas 16, 19, and 31 would contain larger residential lots.

- **Single-family attached** - Planning Areas 8, 21, 28, and 30 are designated to be developed with duplexes and townhome housing units. Residential densities on these sites would be 2.96, 3.49, 3.81, and 4.4 dwelling units per gross acre, respectively.

- **Multi-family** - Planning Areas 12 and 23 are designated to be developed with multi-family units at a density of 6.94 and 6.32 dwelling units per acre, respectively. Housing types in these areas would include townhomes and condominiums.

Commercial

Four neighborhood commercial sites are identified on the Alternative 2 site plan (Figure 78). Retail building space would total 300,000 square feet with Planning Areas 3, 10, and 33 containing 180,000, 60,000 and 60,000 square feet of retail space respectively.
Uses in these three areas would include a major chain department store, home improvement store and/or a supermarket or drug store. Planning Area 14 is designated for office use with a Floor-Area Ratio of 0.25. This would translate into approximately 285,000 sq.ft. of office space. Increased commercial retail and office acreage would reduce off-site project-generated trips and project-generated trip lengths. Employment opportunities on-site would increase to 2,197 jobs (as compared to 889 jobs which would be generated as a result of proposed project development), resulting in a more balanced jobs to housing ratio (JHR) of 0.70 (the future sub-regional balanced JHR goal is 0.72).

Open Space and Recreation

Alternative 2 would include increased amounts of natural open space as compared to the proposed project. Natural open space acreage would total 475.2 acres, open space 122.6 acres, parks 167.6 acres and golf course 157.1 acres.

Schools

A total of two elementary school sites are designated in Alternative 2. Planning Area 25 would support a 600 student school on 10 acres and Planning Area 35 would support 800 students on 17.1 acres.

Community Service Facilities

This alternative includes a 1-acre fire station site (Planning Area 11) as in the proposed project development.

9.3 ALTERNATIVE 3 - COLLEGE CAMPUS

Under the “College Campus” alternative, the proposed project would not be developed and the project site would instead be used as a campus for a four-year college.
Development of this project would require an amendment to the General Plan to allow a college campus use. If open space and natural open space acreage is excluded from the project site acreage, 1,524 acres remain. This land area closely matches the 1,510-acre campus of University of California, Irvine. Therefore, UCI was used as a model for a college campus of this size.

Land use of the college would be distributed in 32 Planning Areas. Figure 79 shows the location of the uses described under this scenario. Components of this alternative include the following:

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acres</th>
<th>% of Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic</td>
<td>209.9</td>
<td>10.6</td>
</tr>
<tr>
<td>University Facility</td>
<td>24.7</td>
<td>1.2</td>
</tr>
<tr>
<td>Research and Development</td>
<td>86.7</td>
<td>4.3</td>
</tr>
<tr>
<td>Commercial</td>
<td>54.2</td>
<td>2.7</td>
</tr>
<tr>
<td>Mixed-use</td>
<td>37.0</td>
<td>1.9</td>
</tr>
<tr>
<td>University Recreation</td>
<td>40.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Housing</td>
<td>546.7</td>
<td>27.5</td>
</tr>
<tr>
<td>Park</td>
<td>172.0</td>
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<tr>
<td>Open Space</td>
<td>108.5</td>
<td>5.5</td>
</tr>
<tr>
<td>Natural Open Space</td>
<td>593.2</td>
<td>29.9</td>
</tr>
<tr>
<td>Parking</td>
<td>57.0</td>
<td>2.9</td>
</tr>
<tr>
<td>Roadways</td>
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<td>2.8</td>
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<tr>
<td><strong>Total</strong></td>
<td>1,985.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Academic**

The core of the campus would be situated in the central portion of the project site and would contain the five major academic Quads including Biological Sciences, Engineering, Physical Sciences, Social Science, Health Sciences and Humanities and Fine Arts (Planning Areas 7, 9, and 19).
ALTERNATIVE 3 - COLLEGE CAMPUS

LEGEND

<table>
<thead>
<tr>
<th>LAND USE</th>
<th>ACRES</th>
</tr>
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<tbody>
<tr>
<td>HOUSING</td>
<td>84.5</td>
</tr>
<tr>
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<td>278.9</td>
</tr>
<tr>
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<td>72.8</td>
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<tr>
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<tr>
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<tr>
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<tr>
<td>ROADWAYS</td>
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<tr>
<td></td>
<td>1985.0</td>
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</table>

GROSS ACRES

<table>
<thead>
<tr>
<th>LAND USE</th>
<th>ACRES</th>
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</thead>
<tbody>
<tr>
<td>ACADEMIC</td>
<td>209.9</td>
</tr>
<tr>
<td>UNIVERSITY FACILITY</td>
<td>24.7</td>
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<tr>
<td>RESEARCH &amp; DEVELOPMENT</td>
<td>86.7</td>
</tr>
<tr>
<td>COMMERCIAL</td>
<td>54.2</td>
</tr>
<tr>
<td>MIXED USE</td>
<td>37.0</td>
</tr>
<tr>
<td>UNIVERSITY RECREATION</td>
<td>40.0</td>
</tr>
<tr>
<td>CAMPUS HOUSING</td>
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</tr>
<tr>
<td>PARK</td>
<td>17.0</td>
</tr>
<tr>
<td>OPEN SPACE</td>
<td>108.5</td>
</tr>
<tr>
<td>NATURAL OPEN SPACE</td>
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<tr>
<td>PARKING</td>
<td>57.0</td>
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<tr>
<td>ROADWAYS</td>
<td>55.1</td>
</tr>
<tr>
<td></td>
<td>1985.0</td>
</tr>
</tbody>
</table>

% OF SITE

- ACADEMIC: 10.6%
- UNIVERSITY FACILITY: 1.2%
- RESEARCH & DEVELOPMENT: 4.3%
- COMMERCIAL: 2.7%
- MIXED USE: 1.9%
- UNIVERSITY RECREATION: 2.0%
- CAMPUS HOUSING: 27.5%
- PARK: 8.7%
- OPEN SPACE: 5.5%
- NATURAL OPEN SPACE: 29.9%
- PARKING: 2.9%
- ROADWAYS: 2.8%

Envircom Macintosh Graphic

FIGURE 79
University Facilities

Planning Areas 8 and 18 (totaling approximately 25 acres) would accommodate university facilities such as the central plant, public services and facilities management.

Research and Development

Buildings developed in Planning Areas 5, 20, and 23 (totaling nearly 87 acres) would house joint university and private sector projects.

Commercial

Planning Areas 22, 29, and 30 (totaling approximately 54 acres) are intended to accommodate student-oriented and on-site faculty and staff retail uses and activities.

Mixed-use

Planning Area 13 (37 acres) is designated for mixed-use facilities which would include research and development, support commercial and residential uses. The actual acreage devoted to each use would depend on need.

University Recreation

Planning Area 15 (40 acres) would be used for campus playing fields, tracks and sports stadiums. Buildings on the site may house indoor pools, courts and locker rooms.

Housing

A total of 1,573 dormitory rooms and 200 apartments would be provided for undergraduates in complexes 2-10 stories high. Graduate student/married student housing would be provided in apartment buildings. A total of 862 graduate/married
student units would be provided.

Additional housing would be provided for faculty and staff in the form of 80 mobile homes, 100 apartments, 18 condominiums, and 281 single-family detached homes. The areas of Planning Areas 1, 4, 10, 14, 26, and 28 total approximately 547 acres to be used for housing.

Parks and Open Space

Planning Areas 16 and 32 are proposed as park sites which could be developed with ball fields, tennis courts and other improvements. In addition, almost 600 acres of the campus would be comprised of open space suitable for hiking trails and equestrian trails.

9.4 ALTERNATIVE 4 - ALTERNATE SITE A: WILLOW SPRINGS

Under this alternative, all components of the proposed project would be developed on a 2,185-acre parcel of land in Willow Springs near the City of Rosamond, California. Willow Springs is located in the northwest portion of the Antelope Valley in Kern County (Figure 80). The Tehachapi Mountains lie to the northwest of Willow Springs and are visible from the project site. This alternate project site is bounded to the north by Hamilton Road, to the south by Rosamond Boulevard and is located between 100th Street West and 120th Street West.

The project site currently consists of an undeveloped desert vegetation area, with commercial agriculture and mineral resource management area land use designations. Overall site topography slopes less than five percent from 3,000 feet down to 2,400 feet above mean sea level. Flash flooding from intermittent streams could occur on the relatively flat terrain of the project site. High-voltage electric lines cross the southeast corner of the project site.

9-15
Development of the Willow Springs site would include all the same components as the proposed project (Figure 81).

Residential

Total residential acreage on the Willow Springs site would be approximately 1,025 acres. Planning Areas 3, 5, 9, and 14 would contain 3,372 single-family detached units at a density of 3.31 units per acre. The area of single-family detached housing accounts for almost half of the total project site acreage. Single-family attached housing would be developed in Planning Areas 1 and 7 with 1,203 units on 153 acres of land at a density of 7.86 units per acre. All of the single-family attached housing units will be located in the northwest corner of the project site. Planning Area 20 on the southern border of the project site would be developed with 625 multi-family units at a density of 14.20 dwelling units per acre. As in the proposed project, a total of 5,200 dwelling units are proposed. Overall density at the Willow Springs site is 2.38 dwelling units per gross acre which is similar to the 2.62 units per gross acre proposed for the City Ranch site.

Commercial

Two commercial sites, Planning Areas 2 and 16 are provided on the Willow Springs site plan. The 43.5 acres would be developed with a total of 260,000 square feet of retail space. As in the proposed City Ranch site plan, one commercial area is in the north-central portion of the site and the other is in the southeast corner.

Open Space and Recreation

Planning Area 6 (321.5 acres) is designated as natural open space. Planning Area 12 (approximately 255 acres) is designated as golf course. Both of these areas are limited for development by seismic constraints. No habitable structures would be located in any area of seismic hazard. Planning Areas 8, 10, 13, and 19 are proposed as parks. These parks totaling 166.5 acres are located near and support the majority of the residential areas (Planning Areas 9, 14, 20, 21, 22, and 24). Planning Area 17 (open
space) is crossed by high-voltage electrical lines. The size of this planning area (97 acres) provides an open space buffer between areas that would contain habitable structures and areas that would contain the electric line easements.

Schools

Four elementary school sites are provided on the Willow Springs site plan (Planning Areas 4, 11, 15, and 18). Each school site is approximately 10 acres in size and would provide space for approximately 600 students.

Community Service Facilities

This alternative includes a 1-acre fire station site (Planning Area 25) as in the proposed project development.

9.5 ALTERNATIVE 5 - ALTERNATE SITE B: QUAIL LAKE

Under this alternative, all components of the proposed project would be developed on a 2,136-acre parcel near Quail Lake in North Los Angeles County. This alternate project site is located at the intersection of Interstate Highway 5 and State Highway 138 south of Gorman in the Tejon Pass area (Figure 82). Gorman Peak is located northwest of the site, with Bald Mountain to the southeast. The broad valley formed by the San Andreas Rift Zone separates the two. The Quail Lake project site consists of moderately rugged hillside terrain separated by a broad alluvial valley. Drainage in the portion of the site south of State Highway 138 flows northerly toward the valley portion of the site. Drainage in the northwestern end of the property flows downslope in all directions from a prominent hill. The site contains a 100-year frequency flood area. Vegetation on the site is predominantly chaparral with oak trees on the northerly facing slopes and canyon bottoms.
Development of the Quail Lake site would include all the same components as the proposed project (Figure 82).  

Residential

Eight planning areas totaling 783.5 acres of the project site would be developed residentially. Planning Areas 1, 2, 3, and 13 would contain 3,372 single-family detached units on a total of 622.4 acres. Three other planning areas (5, 6, 7) are designated for a total of 1,203 single-family attached units. Planning Area 8 (40.7 acres) would provide 625 multi-family units. Overall residential density on the project site is 2.43 dwelling units per gross acres, which is similar to the density of the proposed project. The buildable area of Planning Area 1 is constrained by liquefaction potential and would require site-specific engineering studies and mitigation prior to development. Buildings in Planning Area 13 would require 50-foot setbacks from all faults. Building pads in Planning Area 5 would need to be raised to avoid damage from flash floods. Planning Areas 13 and 12 contain oak tree groves and other sensitive vegetation. Development in these areas would require some mitigation.

Commercial

Two commercial areas are designated (Planning Areas 10 and 11) on the Quail Lake development plan. Approximately 260,000 square feet of retail space would be provided on these sites. All commercial activity would be located on the southern tip of the project site bounded by Interstate 5.

Open Space and Recreation

Open space, park and golf course development is planned for the areas of the project site within the Alquist-Priolo special studies zone. (Planning Areas 15A, 15B, 15C, 18, 20, 21, and 27). Additional natural open space area is designated in Planning Areas 24, 25, and 26 in order to avoid areas with tree groves, chaparral vegetation, liquefaction
constraints and slide zones. The natural open space Planning Area 28 contains some land within the 100-year flood plain.

Schools

Four elementary school sites are provided on the Quail Lake site plan (Planning Areas 4, 9, 12, and 14). Each school site will be approximately 10 acres in size and accommodate approximately 600 students each. The sites are dispersed throughout the project site in order to serve all areas of the project site containing residential development.

Community Service Facilities

This alternative includes a 1-acre fire station site (Planning Area 10) as in the proposed project development.

Public Utilities

Planning Area 29 contains an existing electric utility substation. This facility is situated in the Alquist-Priolo Special Studies Zone.

9.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

In general, the environmentally superior alternative is the alternative which causes the least adverse impacts to the project site and the surrounding environment. Because the “No Project” alternative does not create any new impacts, it can generally be identified as being environmentally superior to a project which would create environmental impacts. However, CEQA requires the identification of another “environmentally superior” alternative when the “No Project” is chosen. In the present instance, any of the alternatives which reduce impacts with regard to land use, the jobs to housing ratio, geologic and hydrologic hazards, biological resources, traffic, air pollutant emissions,
noise, sewage disposal, disruption of underground AT&T lines and schools could be considered environmentally superior to the proposed project.

Of the alternatives presented, Alternative 2 - Reduced Residential Density would create the least impacts. It would generate less population and therefore less vehicle trips, air pollutant emissions, mobile noise, students, utility and public service use and would expose less people to the geologic and hydrologic hazards associated with the project site. In addition, development of Alternative 2 would eliminate significant impacts with regard to housing, biological resources, and proximity of schools, parks and residential uses to the high-voltage electric lines. Development of this project would leave less unavoidable adverse impacts than would the proposed project.

Although development of Alternative 3 - College Campus would reduce school and utility use impacts, it still would create several significant impacts not generated by development of the proposed project. This alternative would require a General Plan amendment to allow a college campus use. Because this alternative does not create less impacts than those of the proposed project, it is rejected in favor of the proposed project.

Development of Alternatives 4 or 5 could have greater environmental impacts than the development of the City Ranch site. In addition to geologic and biological constraints, the Willow Springs site contains mineral resources and is subject to flash flooding. The Quail Lake site, in addition to geologic, hydrologic and biologic constraints, has protected oak trees and is harder to develop because of its irregular shape. Because these alternative sites have potentially greater constraints than the project site, they are rejected in favor of the proposed project.
10.0 ORGANIZATIONS AND PERSONS CONSULTED

The following organizations and individuals were consulted in the preparation of this Environmental Impact Report:

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Theresa Clemen, Graphics Technician  
Chuck Smith, Graphics Technician  
Albert Valenzuela, Graphic Artist  
Mary Predmore, Word Processor  
Brenda Housego, Word Processor  
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Ultrasystems Environmental Services
Marti Klein, Senior Planner
11.0 REFERENCES

11.1 PRINTED MATERIALS


Los Angeles County. Antelope Valley Areawide General Plan, Department of Regional Planning, 1986.


11.2 PERSONAL COMMUNICATIONS

American Telephone and Telegraph (AT&T), Denise Fowler, Supervisor, correspondence, February 17, 1989.


Buena Engineers, Inc., Mark S. Spykerman, Vice President, correspondence, August 22, 1989.


California, State of, Department of Transportation, Gary McSweeney, JGR/CEQA Coordinator, correspondence, September 18, 1989.


California State University, David Rosso, Facility Planner, correspondence, October 10, 1989.

Converse Consultants, Greg Rzonca, Geologist, telephone conversation and visit, June 23, 1989.

Engineering and Environmental Geology, Kenneth Wilson, Geologist, correspondence, August 18, 1989.


HDR Engineering, Hugh Walker, Project Engineer, telephone conversation, September 6, 1990.


Lancaster Chamber of Commerce, Connie Wilson, telephone conversation, June 12, 1990.

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11-6
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12.0 MITIGATION MONITORING PLAN

In compliance with Public Resources Code Section 21081.6, public agencies approving projects which have the potential to cause significant environmental impacts must adopt a reporting and monitoring program for adopted or required changes to the proposed project to mitigate or avoid the significant effects. Development of the proposed City Ranch Specific Plan would result in significant environmental impacts in the following areas: Land Use, Housing, Earth (Geology), Hydrology, Biology, Transportation, Air Quality, Noise, Aesthetics, Water, Sewage Disposal, Communications, Schools, Parks and Recreation, Archaeology, Paleontology, Electromagnetic Radiation, Hazardous/Toxic Materials, and Antelope Valley Public Landfill. This Mitigation Monitoring Plan ensures implementation of the mitigation measures identified in the findings of the Draft Environmental Impact Report.

The City Ranch Mitigation Monitoring Plan consists of the following elements: identification of the issue in which the significant impact occurs; a description of the specific environmental impact and its significance; the mitigation that shall be implemented to reduce the level of significance below threshold levels; the schedule for implementing the measure; and finally, the agency or individual responsible for regulation and enforcement of the mitigation measures.

Issue- Land Use

Impacts- Development of the proposed project would transform the existing undeveloped site to a developed suburban site with up to 5,200 residential dwelling units (at a 2.62 units per gross acre density) comprised of a mix of single-family, townhouse and condominium units, along with 260,000 square feet of neighborhood commercial space, a golf course and clubhouse, hillside natural open space uses, and sites for four elementary schools, six public parks, and a fire station. Proposed uses would be compatible with other residential and mixed-used projects proposed in the project vicinity. Development of the proposed project would pose a potential land use conflict with regard to proximity of the proposed Antelope Valley Public Landfill expansion to the east.

Development of the proposed project would require the following approvals with regard to land use controls:

- The project site will need to be annexed into the City of Palmdale jurisdictional area. Annexation will include amending the City’s sphere of influence boundary to include the entire project site.

- A General Plan Amendment will be necessary to formally incorporate the Specific Plan land use designations into General Plan Land Use Element.
• In order to establish site zoning, the project site will need to be prezoned to SP (Specific Plan) with an overall limit of 5,200 permitted residential units.

• The project site will need to be subdivided into 38 planning area parcels.

• Certain uses within the Specific Plan (e.g., townhome and condo, recreational, commercial and community facilities) may also require Conditional Use Permits as delineated in the development regulations of the Specific Plan.

• Certain elements of the Specific Plan may require Site Plan Review.

• The Specific Plan will need to be adopted by City Council Ordinance.

• Amendments to the Specific Plan would require adoption by ordinance.

Without these approvals, project development would constitute a significant impact with regard to land use.

In addition to the required approvals listed above, the following actions may also be required as part of the permitting and approval process for the proposed project.

• California Department of Fish and Game Stream or Lake Alteration Agreements (per Section 1603 of the State Fish and Game Code) for alterations to the Anaverde and Amargosa Creeks.

• Army Corps of Engineers Section 404 Permit for the discharge of fill material into waters of the United States pursuant to the Clean Water Act of 1977, as amended, for any improvements made in the alkali meadow/transmontane alkali marsh portions of Planning Area 13 south of the proposed City Ranch Road alignment and north of the California Aqueduct, designated to be within the jurisdiction of the Corps. (At a minimum, lost wetland acreage will be replaced in kind on a one-to-one acre basis.)

Mitigation Measures

• Obtain required land use approvals.

• The annexation process and time frame for annexation shall conform to the City of Palmdale and Los Angeles County Local Agency Formation Commission (LAFCO) provisions.

• The proposed Specific Plan will comply with the State Specific Plan and Municipal Code requirements (California Government Code, Title 7, Division 1, Chapter 3, Article 8, Sections 65450 through 65457 and City of Palmdale Resolution No. 88-9).
• The proposed project shall comply with the site specific zoning and subdivision standards contained in the City Ranch Specific Plan and applicable City of Palmdale Zoning ordinances.

• The applicant shall cause to be prepared an annual monitoring report. The report shall evaluate compliance with the design guidelines and development standards of the City Ranch Specific Plan and the mitigation measures of the City Ranch Specific Plan Final EIR. The report shall be submitted to the Planning Director the first quarter of each year through the buildout of the project. In addition, aerial photos of the active construction areas of the project site will be taken and submitted to the Planning Director on a monthly basis during the construction process. The aerial photos shall be of a scale approved by the Public Works Department. Monitoring and verification of compliance with adopted Specific Plan development standards shall also be performed prior to subsequent approvals to determine if the proposed measures are achieving their intended purposes. Future discretionary approvals may include additional conditions based upon City staff review of the Annual Monitoring Report.

Implementation Procedures- The Director of the City of Palmdale Planning Department shall determine the order of the necessary land use approvals and will inform the applicant of the order. Planning Department staff shall review the Specific Plan for compliance with State and local requirements and will report to the City Planning Commission on the Plan's compliance.

Implementation Schedule- The Director of Planning shall report to the City Planning Commission on the compliance of the Specific Plan with State and local requirements before the City votes on approval of the Plan.

Regulatory/Enforcement Agency- The City of Palmdale Planning Department and possibly the California Department of Fish and Game and the United States Army Corps of Engineers.

Issue- Housing

Impacts- Development of the proposed project would provide a range of housing types. The additional housing provided by the proposed project would increase the City's 1991 housing stock by 19 percent. The jobs to housing ratio of the proposed project is 0.17. Thus, this project would continue the existing development trend in the area (housing intensive with few local job opportunities) and would not markedly support SCAG's goal of becoming more "jobs rich." Development of this project would further exacerbate the imbalance of jobs and housing in the area, thus encouraging longer trip lengths between home and the work place. In this context, the increased housing resulting from development of the proposed project can be considered a significant impact.
Mitigation Measures- To mitigate the secondary impacts of the jobs/housing imbalance, the applicant shall implement the traffic and air quality mitigation measures listed in Sections 5.8 and 5.9 of this EIR.

Implementation Procedures- The applicant shall implement the mitigation measures set forth in the Transportation and Air Quality sections of the EIR. The applicant shall report to the City of Palmdale Planning Department the results of the implementation efforts.

Implementation Schedule- The schedule will be determined by the Transportation and Air Quality implementation schedules.

Regulatory/Enforcement Agency- The City of Palmdale Planning Department.

Issue- Earth (Geology)

Impacts- Development of the project site would expose residents and users of the project site to geologic hazards associated with faulting, seismic shaking, liquefaction, seismic settlement, seismic ground failure and landslides. These potential impacts are considered significant.

Sub-issue- Surface Fault Rupture

Mitigation Measures

- No structures intended for continuous use for human habitation shall be constructed in Restricted Use Zones I, II or III. Further specific fault hazard studies may reveal the existence of additional buildable areas within previously identified Restricted Use Zone areas.

- Special foundations have been recommended for select areas of the site adjacent to defined Restricted Use Zones (Figure 27 of the EIR). Special foundations should consist of more heavily reinforced foundations and concrete slabs. Actual design of the foundations should be determined by the project structural engineer as approved by the City Building and Safety Department.

- Each deed or other conveyance of Real Property shall include the following statement: "Portions of the City Ranch Specific Plan area are traversed by major traces of the San Andreas Rift Zone, a geologic feature capable of producing a magnitude 8.3 earthquake. The active fault zone has been identified by extensive site specific testing and analysis. All buildings are prohibited by the Specific Plan from being constructed across the trace of an active fault throughout the Specific Plan area. Due to the proximity of portions of the property to the San Andreas Fault, there is a higher risk of experiencing surface fault rupture than other locations not adjacent to an
active fault. An active fault is any fault that has been determined to have experienced movement within the last eleven thousand (11,000) years. Additionally, where applicable, each disclosure statement and deed record shall contain language which denotes the possibility of building restrictions on residential additions for human occupancy on those parcels which are located in either the Special Seismic Foundation or Seismic Setback Zones.

Implementation Procedures- Construction of habitable structures shall be prohibited in Restricted Use Zones I, II, and III. The geotechnical consultant shall conduct necessary field studies to determine and map site-specific fault hazard areas and required setbacks. The results of the field studies including a detailed map showing specific fault hazard areas and required setbacks shall be provided by the applicant to the City. Foundation designs prepared by the structural engineer, for areas of the site where special foundations will be necessary shall be submitted to the Palmdale City Engineer for approval.

Implementation Schedule- A fault hazards/setback map, field study results and special foundation designs shall be provided to the Palmdale City Engineer before the issuance of building permits. The applicant shall provide Alquist-Priolo Special Studies Zone Act disclosure to all perspective buyers of real property within or adjacent to Restricted Use Zone areas prior to signing any purchase agreements.

Regulatory/Enforcement Agency- City of Palmdale City Engineer.

Sub-issue- Seismic Shaking

Mitigation Measures

• Develop site specific earthquake response spectra for critical facilities such as water tanks, schools and the fire station which consider effects of ground shaking associated with events in the San Andreas Rift Zone. These reports are intended to provide specific engineering design criteria related to structural design and selection of building materials.

• All structures on the project site shall be designed in accordance with at least the minimum code standards for Seismic Zone 4 as described in the Los Angeles County Building Code.

• Structural and foundation designs, detailed drawings and specifications shall be incorporated into architect designs and construction plans. Specifications for the construction plans may include soil improvements or other remedial measures.

• The project geotechnical consultant shall perform grading observation and testing to confirm adherence to specifications and recommendations and shall certify that all grading complies with the provisions of all approved
Implementation Procedures- A geotechnical consultant/earthquake engineer shall develop and execute a subsurface response spectra investigation for the location of critical structures on the project site. Design and remediation recommendations for all structures on the project site shall be presented by the applicant to the City. The recommendations shall be used by the City Engineer in the preparation of building and grading permits. During grading, the geotechnical consultant shall be present on-site to monitor compliance.

Implementation Schedule- The subsurface investigation and report, and design and remediation recommendations, shall be completed before the issuance of grading or building permits. During grading, the geotechnical consultant shall report on a weekly basis to the City Engineer the results of his testing and observations.

Regulatory/Enforcement Agency- City of Palmdale City Engineer

Sub-issue- Liquefaction and Seismic Settlement

Mitigation Measures

- A liquefaction study of the site shall include the following:
  - Subsurface exploration (by borings) to depths of thirty to forty feet below existing native soil grades in areas of known shallow groundwater. Relatively undisturbed soil samples should be obtained from the borings for determination of soil density and grain-size analysis. (A sufficient number of borings should be drilled to obtain a reasonable amount of knowledge relative to the soil conditions and depths to groundwater.)

- Testing to determine engineering characteristics of the soil shall include the following:
  - Soil sampling blowcounts, soil density measurements, and grain-size analysis to determine the susceptibility of the soil in shallow groundwater areas to liquefaction. Recommendations for remedial grading or foundation design shall be made for areas in which it is determined that liquefaction is a significant hazard. Typical recommendations may include deeper foundations, densification of the susceptible soils, or construction of subdrains.

- Tests and observations shall be performed by the project geotechnical consultant during grading operations to assure adherence to recommendations in identified liquefaction hazard areas and shall certify that
all grading complies with the provisions of all approved plans and specifications, pursuant to Los Angeles County Uniform Building Code.

Implementation Procedures- The results of the geotechnical subsurface investigation shall be provided by the applicant to the City including a detailed map of areas susceptible to liquefaction and a location-specific materials model prior to the start of construction. In addition, the consultant shall provide the structural engineer written recommendations as to placement of structures and their design. The City of Palmdale City Engineer shall review all building plans to ensure that the plans are in compliance with the geotechnical recommendations. During construction, the geotechnical consultant shall report to the City Engineer, on a weekly basis, the results of testing and observations to assure compliance.

Implementation Schedule- A liquefaction map, materials model and recommendations shall be provided to the City Engineer for approval before issuance of building permits.

Regulatory/Enforcement Agency- City of Palmdale City Engineer.

Sub-issue- Landslides

Mitigation Measures

- Any hillside areas of the property where planned grading would result in artificial slopes greater than ten feet in height shall be evaluated specifically relative to slope stability by preparing the following geologic and geotechnical engineering studies:

  - Detailed geologic mapping of surface features in the areas of the proposed cut slopes.

  - Subsurface exploration with backhoe test pits and trenches to expose the shallow geologic conditions in and around the proposed graded areas.

  - Deep subsurface exploration with borings including small diameter auger borings or large diameter bucket borings at the specific cut slope locations. (It is suggested that the subsurface exploration be extended to depths at least equal to, and ideally greater than, the proposed depths of grading.)

  - Laboratory tests on the soils and rocks collected from the exploration programs for determination of density, moisture content, shear strength, and compaction characteristics.

  - Detailed engineering analyses utilizing the data obtained from the field exploration and laboratory testing programs relative to stability of the
existing and planned graded slopes. Recommendations shall be provided for remedial grading to repair or replace any potential unstable slopes.

- The findings and recommendations of the Slope Stability Study shall be incorporated into construction plans and site grading activities, and a slope maintenance plan. Grading, slope maintenance, and construction plans shall be reviewed and approved by the City Engineer.

- The project geotechnical consultant shall be responsible to perform confirmatory tests and observations during grading to assure that the geotechnical recommendations are being followed and shall certify that all grading complies with the provisions of all approved plans and specifications, pursuant to the Los Angeles County Uniform Building Code.

- Recommendations for slope planting and irrigation shall be prepared by a qualified landscape architect and reviewed by the City Planning Department and by the City Engineer. Approved plans by City Engineer will be required prior to approval of final map by Engineering.

- Temporary erosion control shall be accomplished as follows:

  - The surface of all slopes more than three (3) feet in vertical height and steeper shall be covered with City-approved erosion control blankets. Installation shall conform to the manufacturer's specifications.

  - Erosion mitigation measures shall be performed to the satisfaction of the City of Palmdale Landscape Architect prior to the acceptance of rough grading.

- Permanent erosion control shall be accomplished as follows:

  - The surface of all slopes more than three (3) feet in vertical height shall be covered with North American Green S 150 approved equal erosion control blankets or be permanently landscaped and irrigated per approved landscape plans, and have obtained 80 percent coverage of groundwater. Installation shall conform to manufacturer's specifications.

  - The surface of all slopes more than three (3) feet in vertical height shall be protected against damage from erosion by planting with groundcover plants. Slopes exceeding fifteen (15) feet in vertical height shall also be planted with shrubs at not to exceed 10 feet on centers; or a combination of shrubs and trees at equivalent spacing, in addition to the groundcover plants.

- Planting need not be provided for cut slopes rocky in character and not subject to damage by erosion and slopes protected against erosion damage by other
methods when such methods have been specifically recommended by a soils engineer, engineering geologist or equivalent authority, and found to offer erosion protection equal to that provided by the planting specified in this section.

- All required landscaping and irrigation shall conform to the City of Palmdale's Slope Erosion Control Landscaping Standards.

- All planting and irrigation shall be installed to the satisfaction of the City of Palmdale Landscape Architect prior to acceptance of final grading.

- All slope banks less than 30 feet in height within single-family residential lots shall be maintained by individual homeowners enforced through deed restrictions. Slopes in common open space areas of multi-family and attached single-family unit planning areas and slopes greater than 30 feet high in rear yards of private residential lots shall be maintained by homeowners associations. Slopes in landscape easements along public rights-of-way and roadway slopes within tracts shall be maintained by homeowners associations unless reviewed and approved by the Director of Engineering to be included in a maintenance district. Slopes in park areas shall be maintained by the City of Palmdale. Where maintenance is to be provided by a maintenance district or homeowner's association, said area shall have an easement recorded over it for access and maintenance purposes.

- Slope plantings and irrigation systems shall be maintained.

- Berms, swales or devices shall be provided at the top of cut or fill slopes to prevent surface waters from overflowing onto and damaging the face of the slope. Gutters or other special drainage controls shall be provided where the proximity of runoff from buildings or other structures is such as to pose a potential hazard to slope integrity.

- Manufactured down slopes to property lines shall be prohibited except for corner lot conditions. Where walls occur at the tops of slopes, access shall be provided to the homeowner or designated maintenance party to permit maintenance of slopes and landscaping.

- The drainage outlets shall be periodically inspected and cleaned of silt and debris.

- In accordance with California Department of Real Estate disclosure format and procedures, all potential buyers of residential lots containing slopebanks greater than 30 feet in height shall be notified of the condition.

*Implementation Procedures*- The geotechnical consultant shall provide to the City Engineer, as part of the soils and bedrock investigation program, results of soils
stability tests along with recommendations regarding cut and fill operations. The City Engineer shall review site plans prior to issuance of grading and building permits. The geotechnical consultant shall provide weekly reports to the City Engineer on the results of tests and observations made during grading.

Implementation Schedule: The soils and bedrock investigation program and recommendations shall be made prior to the issuance of grading and building permits. All plans shall be reviewed by the City Engineer for compliance with the geotechnical recommendations prior to issuance of building permits. During grading, weekly reports shall be made by the geotechnical consultant to the City Engineer. Temporary control measures shall be implemented at the completion of rough grading. Permanent erosion control measures shall be implemented upon acceptance of final grading and prior to issuance of certificates of occupancy.

Regulatory/Enforcement Agency: City of Palmdale City Engineer and the City of Palmdale Landscape Architect.

Sub-issue: Soils

Mitigation Measures

- Soils engineering recommendations listed on pages 40-63 of the May, 1989 Buena Engineering report entitled “Preliminary Engineering Geotechnical Report, City Ranch Property” (Appendix D of the EIR) shall be strictly followed.

- Reshaping of the natural terrain to permit access and construction of facilities such as water tank sites, utility lines and easements, service roads, fire access, etc., shall be kept to a minimum in areas of greater than 25% slope.

- The geotechnical consultant shall control construction activities through confirmatory observations and testing and quality control procedures. Special attention must be given to the hydroconsolidation issue and specific plans for treating or removing the susceptible soils. Present recommendations appear adequate but may require reassessment depending on location specific conditions.

- For areas within “medium” or higher soil expansion potential (refer to Figure 24 of the EIR), post-tensioned foundations shall be required.

Implementation Procedures: The geotechnical consultant shall provide to the Department of Public Works, as part of their soils investigation, results and recommendations for cut and fill operations. The Department shall review site plans prior to issuance of grading and building permits. Landscape plans shall be reviewed and approved by the City Engineer prior to the issuance of building permits. The applicant shall provide to the first homeowner, a slope maintenance
plan developed by the geotechnical consultant. The slope maintenance plan shall be incorporated into the title of ownership of the property to ensure that slopes will be maintained past the first homeowner. The applicant shall also provide to the City the names of property owners to whom the applicant has transferred the responsibility of slope maintenance.

Implementation Schedule - Test results and recommendations are to be made prior to the issuance of grading and building permits. The Department of Public Works and the City Engineer shall review all plans for compliance with the soils investigation recommendations prior to issuing permits.

Regulatory/Enforcement Agency - City of Palmdale City Engineer.

Sub-issue - Seismic Ground Failure

Mitigation Measures

- Prohibit construction of habitable structures in Restricted Use Zones I, II and III and conduct in-grading inspections and precautionary measures (e.g., enhance foundations, adjust building locations slightly) where trench exposures show evidence of soil filled cracks along lineaments or buried geologic contacts.

Implementation Procedures - Construction of habitable structures shall be prohibited in Restricted Use Zones I, II and III unless further subsurface study shows portions of these areas capable of supporting habitable structures. The geotechnical consultant shall conduct on-site in-grading inspections prior to grading to determine the exact potential ground failure sites. Recommendations for precautionary measures shall be submitted to the City Engineer for approval.

Implementation Schedule - Inspections shall occur prior to grading. A map showing exact potential ground failure sites shall be submitted City Engineer prior to issuance of grading permits for each phase of development.

Regulatory/Enforcement Agency - City of Palmdale City Engineer.

Sub-issue - Flooding Potential

Mitigation Measures

- Construct flood control channels along the main washes and maintain drainage diversion devices locally (e.g., under roads, engineered fills and along the Aqueduct).

- For the Aqueduct embankment failure event, construct protective berms to the elevation sufficient to control the design flooding event specified by the
State for this area. In addition, the structures shall be elevated above the flooding levels by increasing the height of fills.

Implementation Procedures- The applicant shall provide to the Department of Public Works the designs for flood control channels and flood protective measures.

Implementation Schedule- Flood control designs shall be provided to the Department of Public Works prior to the issuance of any work permits.

Regulatory/Enforcement Agency- City of Palmdale Department of Public Works.

Sub-issue - Groundwater

Mitigation Measures

• Provisions shall be made for adequate drainage of the site both during construction and operational phases of the project. To avoid problems associated with rising groundwater levels in Planning Area 15, subsurface drainage (for example, gravel drains, herring bone drains or french drains) would be required.

• If required during construction, a dewatering or drainage diversion program shall be developed and implemented subject to review by the County of Los Angeles Department of Public Works and/or the City of Palmdale as required by the City Engineer.

Implementation Procedures- Subsequent to site-specific investigations, the geotechnical consultant shall make recommendations regarding proper drainage of the site. If recommendations require dewatering or drainage diversion, a dewatering/drainage diversion program shall be prepared to be reviewed and approved by the City Engineer.

Implementation Schedule- Recommendations regarding site drainage shall be made prior to start of grading in coordination with the City Engineer.

Regulatory/Enforcement Agency- City of Palmdale City Engineer.

Issue - Hydrology

Impacts- As part of the grading plan for the proposed project, building pads and roadways in areas situated within the existing 100-year floodplain of the Anaverde Creek will be raised above the 100-year floodzone and drainage will be channelized in these areas thereby eliminating 100-year flood hazards from the project site. However, following project development, portions of Planning Areas 2, 4, 9, 13 and 22 would be subject to flooding hazards from failure of the California Aqueduct. Any structures built in impacted portions of these park or golf course areas would be
damaged by flooding if an Aqueduct failure occurred. Of particular concern is the location of the golf course clubhouse. This is considered a significant impact.

Following project development, storm runoff for a 50-year storm event would increase by 9% over existing conditions. A series of drainage improvements including closed conduits, open channels, earthen swales, debris basins, and detention basins would be needed to adequately handle post-development runoff.

Post-development runoff could pick up and transport urban pollutants. Of particular concern is low flow non-storm runoff in which water volumes are low and pollutant concentrations high. The low flow non-storm runoff poses a danger to the wetland habitat which is in the path of existing and future runoff flows.

**Mitigation Measures**

- Habitable structures and public facilities shall be constructed above the flood plain level noted on the Federal Emergency Management Agency Flood Insurance Rate Maps and Amendments thereto. Water will be conveyed off-site via proposed storm drainage facilities.

- Building pads and roadways in areas which would be flooded in the event of a failure of the California Aqueduct (Figure 31 of the EIR) shall be raised above the anticipated floodwater levels.

- All storm drainage improvements depicted on Figure 32 of the EIR shall be implemented as part of the proposed project. This includes storm drains, channels, and detention and debris basins.

- Low flow containment system will need to be constructed to accommodate and evaporate urban runoff flows during the dry seasons to prevent deterioration of water quality in wetland areas and streams as required by the City Engineer. (See Figure 34 of the EIR for a conceptual design of the kind of low flow containment system.) Approximately three 31,000 square foot basins shall be necessary to accommodate anticipated flows.

- The proposed golf course will need to have a separate runoff collection system along City Ranch Road to direct flows away from the wetland area. This collection system shall be subject to the applicable laws for point source discharge of the Regional Water Quality Control Board.

- The applicant shall submit an Erosion Control Plan for each development application for review and approval by the City Engineer prior to issuance of grading permits. In addition, the applicant will demonstrate each development application complies with the provisions of any National Pollution Discharge Elimination System permit requirements that may be required by other regulatory agencies. At the time of submittal of a
development application for the golf course, the applicant shall provide for the controlled use of pesticides and fertilizers on the golf course by limiting the frequency and type of fertilizers/pesticides used and requiring application by qualified persons.

- Modifications to natural drainage courses shall conform to City, County, State, and Federal Law.
- Fencing shall be installed along constructed drainage channels, as appropriate, for safety purposes.
- Modification of drainage patterns will not be permitted across property lines without written consent of affected property owners.
- Final Subdivision Maps shall be accompanied by Drainage Improvement Plans prepared by a licensed Civil Engineer and approved by the City Engineer.
- In accordance with California Department of Real Estate disclosure format and procedures, all potential purchasers of real property subject to flood inundation resulting from Aqueduct failure shall be notified of the situation.
  - In accordance with the California Department of Real Estate disclosure format and procedures, all potential purchasers of real property which is shown within the FEMA 100-year flood plain on the Flood Insurance Rate Maps most recently circulated by FEMA, shall be notified of the situation, regardless of whether the actual flood hazard has been abated by other methods. Also, the applicant shall contact FEMA as soon as possible after eliminating areas from the 100-year flood hazard zone to request modifications of the Flood Insurance Rate Maps. The applicant shall then diligently pursue revisions of the maps until the 100-year flood hazard zone as modified by the development is depicted on them.

Implementation Procedures- A licensed Civil Engineer shall prepare a drainage improvement plan which shall include all improvements depicted on Figure 32 of the EIR. The plan shall be reviewed by the City Engineer and the Director of Public Works. The Director of Public Works shall review design plans for modifications to the natural drainage for conformity with applicable laws. The applicant shall provide the City proof of written consent of property owners where proposed drainage modifications cross their property lines. Flood control basins shall be cleaned and residue removed from the site by the City of Palmdale Department of Public Works. Disclosure of properties located within the FEMA flood zone will be made pursuant to Department of Real Estate procedures for disclosure.

Implementation Schedule- The approved drainage improvement plan shall be built out prior to the issuance of building permits.

Regulatory/Enforcement Agency- City of Palmdale City Engineer and the City of Palmdale Department of Public Works.

Issue- Biology

Impact- Construction of the proposed project would result in direct elimination of plant and wildlife habitat and consequently the loss of biological resources within areas of the project site where residential lots, streets, the golf course, commercial development, school, and community parks are intended. Two sensitive plants known to occur on the site, Peirson’s morning glory and the short-joint beavertail cactus, would be disturbed as a result of project development. Grading to construct
City Ranch Road may impact the east alkali meadow/transmontane alkali marsh habitat. As a result of project development, a large portion of the area of project site containing the Joshua tree woodland would be developed as a golf course (Planning Areas 4 and 13). Another portion of the Joshua tree woodland would be developed as a single-family residential area (Planning Area 8). The rest would be converted to community park space (Planning Areas 1 and 9) or would remain as natural open space (Planning Areas 2 and 7). The California juniper seedling area would be eliminated.

Development of the proposed project would result in the potential for impaired wildlife movements in an east-west direction along the foothills of the Sierra Pelona and the San Andreas Rift Zone. Construction of the proposed project would result in a reduction of habitat for five sensitive animal species that utilize the project site. Loss of this sensitive species habitat would adversely impact these territorial species which rely upon large expanses of land for their home ranges. Project development would result in the loss of part of the raptor foraging habitat in the region which would directly affect the raptor species known to be on-site: sharp-shinned hawk, golden eagle and prairie falcon. A trapping effort to locate the Mojave ground squirrel indicated that it is not present on the project site.

Overall, implementation of the proposed project would result in fragmentation of the existing habitat of plants and animals into smaller discontinuous parcels. After a few years, the species diversity on the remaining fragments would be expected to decline. Impacts with regard to biological resources are considered significant. The preservation of approximately 404 acres of the project site as natural open space would allow maintenance of a portion of the existing biological habitat, and provide an area into which plants dislocated elsewhere on the project site can be transplanted.

Sub-issue- Disturbance to or Loss of Sensitive Flora and Fauna

Mitigation Measures

- The Applicant shall consult with the California Department of Fish and Game in order that potential impacts to Mohave ground squirrel may be addressed. If an endangered species permit is warranted, the permit must be completed and mitigation measures fully dedicated before issuance of a grading permit. Therefore, the consultation with CDFG will occur prior to issuance of any grading permit for the proposed project.

- Individuals of short-jointed beavertail in the impacted areas of Planning Areas 17 and 31 shall be transplanted into Planning Area 32. Similarly, those individuals impacted in Planning Areas 8 and 13 shall be transplanted into Planning Area 7. A written plan for such relocation shall be prepared and shall be subject to approval by the City Planning Department (which may require independent review) prior to site grading. The plan shall be prepared and implemented by a qualified horticulturist/botanist/restoration biologist, with thorough familiarity of the Antelope Valley region and demonstrated experience in transplantation of cacti.

- A portion of Planning Area 31 shall be transferred to Planning Area 32 in order to preserve approximately 40 percent of the known occupied extent of Peirson's morning-glory located therein. The boundaries of Planning Areas
31 and 32 shall be modified as shown on Figure 38 of the EIR, or as approved by the Director of Planning at the time of approval of tentative maps for Planning Area 31.

- A written plan for seed collection from impacted individuals of Peirson’s morning-glory located in the portion of Planning Area 31 which shall be disturbed, for subsequent redistribution into Planning Area 32 shall be subject to approval by the City Planning Department (may require independent review) prior to site grading. The plan shall be prepared and implemented by a qualified botanist/horticulturist/restoration biologist, with thorough familiarity with the Antelope Valley region.

Implementation Procedure- A botanist, experienced in restoration biology and approved by the City of Palmdale Planning Department, shall prepare a plan for the relocation of the short-jointed beavertails and a plan for the Peirson’s morning-glory mitigation. The beavertail relocation plan shall address the following:

- location of all impacted individuals

- selection of receptor sites

- methods for removal, transportation, interim care and transplantation to receptor sites

- schedule and timing designed to optimize success

- maintenance for a minimum of five years (starting at the date when all individual have been placed in their new locations)

- establishment criteria for success, monitoring and reporting of relocation program, and remedial actions or penalties which shall be taken should these criteria not be met after five years.

Specific elements to be addressed in the Peirson’s morning-glory plan include the following:

- location of impacted individuals, and projection for percentage of total seed crop to be harvested

- selection of receptor sites

- method and timing of seed collection, interim storage (if necessary) and redistribution

- site or see pre-treatments proposed

- minimum five year monitoring, reporting program.
The botanist shall oversee the placement of fences to protect the individuals to be transplanted during grading and construction, shall oversee the actual transplantation of the beavertails, and shall arrange for the collection of morning-glory seeds.

Implementation Schedule—The Final Specific Plan development plan shall be modified per Figure 38 of the EIR with regard to the boundary between Planning Areas 31 and 32. The finalized Specific Plan shall be subject to Planning Department review. The Planning Department shall review the beavertail relocation plans and implementation measures and the Peirson's morning glory mitigation plans prior to the approval of affected area development applications. Grading permits shall reflect measures to protect the beavertails to be relocated. Individuals to be relocated shall be physically tagged by a qualified biologist prior to initiation of grading. Monitoring shall be conducted on a semi-annual basis for a period of three years following implementation of the measures to report on the success of the beavertail relocation and Peirson's morning glory mitigation plans. These plans shall be modified as necessary depending on the success of the mitigation measures. Consultation with the California Department of Fish and Game regarding potential impacts to Mohave ground squirrel shall occur prior to issuance of grading permits for the property.

Regulatory/Enforcement Agency—City of Palmdale Planning Department.

Sub-issue—Alkali Meadows/Transmontane Alkali Marsh

Mitigation Measures

- The land in Planning Area 13 south of the City Ranch Road alignment and north of the California Aqueduct property shall be set aside and designated as natural open space to preserve the east alkali meadow and transmontane alkali marsh habitat.

- The City Ranch Road alignment shall avoid the wetland areas. Landscaping, grading, and irrigation along the south side of the segment of City Ranch Road adjacent to the wetlands shall be kept to a minimum.

- If avoidance of the alkali meadow/transmontane alkali marsh is impossible, permits and agreements under Section 404 of the Clean Water Act and under 1603 of the State Fish and Game Code will be required from the U.S. Army Corps of Engineers and the California Department of Fish and Game, respectively. At a minimum, lost wetland acreage will be replaced in kind on a one-to-one-acre basis. Also, a mitigation and monitoring plan, subject to CDFG approval, will be required in the event of any loss of alkali meadow/transmontane marsh habitat.

- Provisions will be made to divert low-flow surface runoff from entering the east alkali meadow/transmontane alkali marsh habitat. (See Hydrology Section Mitigation Measures.)
Implementation Procedures- The applicant shall coordinate with the City Planning Department the boundaries of the portion of Planning Area 13 to be designated as natural open space. The applicant shall provide to the Planning Department any permits required for any development occurring in areas of the meadows or marshes.

Implementation Schedule- The natural open space area shall be designated as natural open space as part of the project approval process. The applicant shall provide copies of necessary wetland permits before City issues any grading permits for wetland areas.

Regulatory/Enforcement Agency- City of Palmdale Planning Department and possibly the California Department of Fish and Game and the United States Army Corps of Engineers.

Sub-issue- Native Plant Landscaping

Mitigation Measure

- Native species such as California juniper, Great Basin sagebrush, four-winged saltbush, holly-leaf cherry (Prunus ilicifolia), and big-berry manzanita, and trees such as Joshua tree, Fremont cottonwood (Populus fremontii) and California sycamore (Platanus racemosa) for landscaping purposes to the maximum extent feasible. Use of these species may encourage some local wildlife species to continue to utilize the area. The construction of a golf course on the site provides an opportunity for a great number of native plants, particularly trees, to be incorporated into the project site. In addition to the encouragement of continued wildlife use of the area, all of these plants are drought tolerant.

Implementation Procedures- The applicant shall develop and submit for approval to the Planning Department landscape plans prepared by a licensed landscape architect, reviewed and approved by the City Landscape Architect, that provide for preferential use of native plants, on the project site. The applicant shall, for a period of ten years, from the commencement of construction of the project, report annually on the amount of area within the project site that is landscaped with native plants.

Implementation Schedule- The applicant shall provide landscape design plans to the Planning Department for approval by the City Landscape Architect as part of the development review process.

Regulatory/Enforcement Agency- City of Palmdale Planning Department.
Sub-issue- Joshua Trees and California Junipers

Mitigation Measures

- The applicant shall comply with all City of Palmdale policies regarding the preservation or transplantation of Joshua trees and California junipers on the project site.

- Development of Planning Areas 4, 8 and 13 shall include the preservation or relocation of Joshua trees such that approximately two trees per acre graded shall be preserved or transplanted into suitable natural open space areas or undisturbed areas of the golf course. As a result of this measure, approximately 398 trees would be preserved in Planning Areas 4, 8 and 13.

- California juniper seedlings located in Planning Areas 1, 9 and 10 shall be relocated to natural open space areas of the project site under the guidance of a certified botanist.

Implementation Procedures- A botanist, hired by the applicant and approved by the City, shall coordinate with the City of Palmdale Planning Department the Joshua tree and California juniper preservation and transplantation efforts. These efforts shall include mapping which trees shall be preserved in place and which trees shall be transplanted and marking in the field those trees to be preserved and those to be transplanted. All trees to be protected shall be fenced off to prevent damage to trees during grading. During grading of Planning Areas 4, 8 and 13, the botanist shall monitor grading to ensure that areas fenced off for preservation or transplantation of trees are not damaged. In addition, the botanist shall supervise the transplantation of any trees to be transplanted to ensure the survival of these trees. The biologist shall then monitor the success of the transplantation effort and modify plans as necessary.

Implementation Schedule- The botanist shall provide a tree preservation/transplantation map to the City of Palmdale Planning Department for review and approval by the City Landscape Architect prior to the approval of grading permits in Planning Areas 1, 4, 8, 9, and 13. Trees to be preserved or relocated shall be fenced off prior to the initiation of grading in affected planning areas. Results of the actual plant preservation/transplantation efforts shall be submitted to the Planning Department on a weekly basis during the preservation/transplantation efforts during grading and during the transplantation effort. In addition, long-term monitoring on the success of the transplantation effort shall be monitored on an annual basis for a period of three years following tree transplantation.

Regulatory/Enforcement Agency- City of Palmdale Planning Department

12-19
Sub-issue - Natural Open Space Maintenance

Mitigation Measures

- To preserve the biological integrity of the natural open space areas, measures shall be implemented assuring that off-road vehicles, ornamental or non-indigenous landscaping, domestic animals (especially dogs), hunting or other discharge of firearms, livestock grazing, plant, animal or rock collecting, pedestrian, equestrian or bicycle use off marked trails or at night are excluded from natural open space areas. This shall be accomplished by signing and the construction of exclusionary walls or fences. Provisions shall be made to maintain open space areas.

Implementation Procedures- The applicant shall offer natural open space planning areas to the City for dedication. In those areas accepted for dedication, indicated excluded uses shall be posted. Infractions shall be subject to penalty of law. Areas not dedicated to the City shall be subject to a conservation easement in favor of the City. Indicated excluded uses shall not be permitted under restrictions of the conservation easement.

Implementation Schedule- Natural open space areas shall be dedicated to the City prior to the issuance of building permits. All signage and exclusionary walls or fences shall be provided by the applicant during construction of planning areas adjacent to natural open space areas.

Regulatory/Enforcement Agency- City of Palmdale Planning Department/County of Los Angeles Sheriff’s Department.

Issue - Transportation

Impacts- Development of the proposed project is expected to generate approximately 49,970 daily trip-ends, of which 38,050 would have either an origin or a destination off-site (external trips). If the proposed project-related traffic volumes and the estimated 5% annual growth rate assumed in the traffic analysis conducted for this project are distributed onto the roadway system prior to construction of the off-site master-planned roadway improvements, project-related traffic impacts would be considered significant.

Mitigation Measures

- All roadways shall be built out by the applicant to City approved roadway cross-sections per Figure 42 of the EIR.

- The proposed internal cross-sections and circulation layout shall be subject to review and approval of the City Traffic Engineer during the development review process to insure compliance with City access and design standards.

12-20
• Collector roadways which cross Avenue S shall be signalized. The applicant shall be required to contribute funds on a pro rata basis toward the purchase and installation of the aforementioned traffic signals as determined by the City Traffic Engineer.

• Landscaping and signage on-site shall be low and shall not interfere with sight distances at the site access points or at internal intersections. Street lights and sidewalks shall be provided in accordance with City standards.

• Prior to future development application approvals, the Applicant will be required to submit a Transportation Demand Management Plan and a Focused Traffic Study for review and approval by the Director of Planning and the Traffic Engineer, as appropriate, to determine the necessary improvements for impacts generated by that project. These plans shall be prepared in accordance with the Los Angeles County Transportation Commission's Congestion Management Plan and the City's transportation analysis guidelines, the City's transportation plan, and the Engineering Design Standards. Necessary improvements shall be determined by the City Traffic Engineer, and shall include, but not be limited to, all on-site and off-site road improvements to achieve a Level of Service D (peak period) or better with ultimate traffic projections. On the basis of this and other studies, the developer will improve or fund a pro rata share of improvements. The developer shall pay appropriate traffic impact fees in accordance with City Ordinance 825, and all other fees for facilities and services that may be in place at the time of issuance of certificates of occupancy.

• The applicant shall participate in the construction of a park-and-ride facility to be located off-site at a location within the Palmdale Southwest Planning Area designated by the City of Palmdale as determined by the City Traffic Engineer.

• The project applicant shall pay applicable traffic impact fees or provide improvements pursuant to future agreements with the City of Palmdale in lieu of fees as required by City Ordinance or Resolution.

• If, as a result of project impacts, the level of service falls below either the standards set by the Los Angeles County Transportation Commission's Congestion Management Plan, or the policies set by the City's General Plan, the applicant shall implement improvements or services necessary to bring the roadway segment into compliance. The Final Draft CMP, dated August 14, 1991, includes SR-14, and Route 138, and identifies Sierra Highway as a roadway requiring additional study.

• The applicant shall be required to contribute a pro-rata share of the cost of extension of Avenue S to Tierra Subida as determined by the City of Palmdale Traffic Engineer.

12-21
• Improvements to the portion of City Ranch Road east of Bridge Road shall be financed by the applicant and/or surrounding property developers as determined by the City of Palmdale Traffic Engineer.

Implementation Procedures- The applicant shall make a payment of applicable fair share fees to help offset off-site master planned roadway improvements and park-and-ride facility costs or shall build indicated roadway improvements and park-and-ride facilities as determined by the City Traffic Engineer. Design elements of the Specific Plan regarding transportation improvements shall be reviewed by the City Planning Department during the site review process. Concurrently, the City Traffic Engineer shall review and approve circulation and trip reduction elements.

Implementation Schedule- Payment of fair share fees to the satisfaction of the City Traffic Engineer shall be made prior to the issuance of building permits. Review of design and circulation elements shall occur during the development review process and prior to approval of appropriate tract maps or other development applications.

Regulatory/Enforcement Agency- City of Palmdale Planning Department/City Traffic Engineer.

Issue- Air Quality

Impacts- Short-term Impacts - Significant short-term air quality impacts would primarily occur as a result of fugitive dust emissions generated during grading and construction activities and diesel emissions generated by heavy-duty construction vehicles.

Long-term Impacts - Development of the proposed project would result in the generation of approximately 2,943 pounds of carbon monoxide (CO), 955 pounds of nitrogen oxides (NOx), 199 pounds of particulates and 244 pounds of reactive organic gases (ROG). These long-term project-related mobile and stationary emissions would exceed South Coast Air Quality Management District (SCAQMD) daily emissions threshold criteria for all of these contaminants. Project stationary emissions alone exceed SCAQMD's suggested threshold for NOx only, while project mobile emissions exceed guidelines established for criteria air pollutants. Project-related air emissions are not expected to be reduced to non-significant levels in the long term. Odor and dust problems from the adjacent Antelope Valley Public Landfill to the east, would not be anticipated to create significant impacts at the project site. The proposed project would not be in conformance with SCAQMD's Air Quality Management Plan (AQMP) and therefore would be considered to have a significant adverse impact on air quality.
Sub-issue - Short-term Impacts

Mitigation Measures

- South Coast Air Quality Management District Rule 403 (Fugitive Dust) shall be adhered to, to ensure the clean up of construction-related dirt on approach routes to sites within the project site.

- Building construction shall comply with energy use guidelines in Title 24 of the California Administrative Code.

- Adequate watering techniques shall be employed to reduce by 50% construction-generated dust emissions.

- Diesel-powered construction equipment shall be preferred over gasoline-powered equipment to reduce exhaust emissions and reduce fuel evaporation and crankcase hydrocarbon emissions. Low sulfur diesel fuels shall be preferred in accordance with SCAQMD’s Rule 431.

- Construction equipment shall be properly maintained and serviced to minimize exhaust emissions.

- Construction activities shall be suspended on days when ozone episodes are called.

- Operations that tend to create fugitive dust shall be suspended during times of high wind velocities and Stage 1 smog alerts in the project area.

- Grading activity, which creates dusty conditions, shall be suspended when, in the opinion of the City Engineer, local winds exceed acceptable levels. To validate wind velocities and/or rainfall amounts, the installation of a minimum of two remote weather stations in the vicinity of the project site’s active grading areas will be required at locations determined by the City Engineer.

Implementation Procedures - Dust suppression procedures shall be part of the grading plans. The applicant shall specify in all construction contracts vehicle maintenance and fuel and fugitive dust reduction requirements.

Implementation Schedule - Grading plans including dust suppression procedures must be approved by the City Engineer prior to approval of grading permits. Construction contractors must have signed contracts stating agreement with vehicle maintenance, fuel, and dust reduction requirements prior to work start.

Regulatory/Enforcement Agency - City of Palmdale City Engineer.
Sub-issue - Long-term Operational Impacts

- The applicant shall implement all applicable air quality control measures listed in SCAQMD's 1989 AQMP.

- Energy efficient street and parking lot lighting shall be required on-site to minimize power plant emissions.

- Pedestrian walkways shall be provided throughout the project site in order to encourage walking as an integral mode of transportation between school and residences.

- Bus turnouts shall be provided along major arterials in accordance with transit district requirements in order to facilitate use of public transit.

- Traffic signals installed in conjunction with development of the proposed project shall be synchronized with other signals in the vicinity.

- The applicant shall participate in appropriate future trip reduction programs adopted by the City for future development applications.

- The project applicant shall submit a Transportation Demand Management Plan that will 1) create a City Ranch Transportation Management Association; 2) investigate the feasibility of developing a telecommuting center on site; and, 3) start a vanpool demonstration program for City Ranch residents. The plan will be submitted to the Planning Director prior to issuance of any certificates of occupancy for the proposed project.

- The project shall comply with all SCAQMD Rules and Regulations, including those pertaining to paving materials and architectural coatings. Specifically, use nonsolvent based, high-solid, or water based coatings on buildings where feasible.

- In order to provide additional reductions in air emissions, the following list of mitigation measures was provided by the SCAQMD. Because these measures cannot be applied to all development applications that may be submitted for the City Ranch Specific Plan, each development application will be reviewed and those measures from the list which are deemed appropriate by the Planning Director will be applied to that development application.

Minimize Construction Activity Emissions:

- Schedule construct activity during off-peak hours and require a phased-schedule of construction to even out emissions peaks.

- Remove silt by paving construction roads, sweeping streets, and washing trucks leaving construction site.

12-23A
Suspend grading operations during early and second stage smog alerts.
Maintain construction equipment engines by keeping them tuned.
Use low-sulfur fuel for equipment.
Use existing power sources; avoid using temporary power generation.

Reduce Construction-Related Traffic Congestion:

- Provide rideshare and transit incentives for construction personnel.
- Configure construction parking to minimize traffic interferences.
- Minimize obstruction of through traffic lanes.
- Provide a flagperson to guide traffic properly.
- Schedule operations affecting traffic for off-peak hours.

Limit Emissions from Vehicle Trips:

- Establish telecommuting programs, alternative work schedules, and satellite work centers.
- Schedule goods movements for off-peak traffic hours.
- Provide local shuttle and regional transit systems, transit shelter, bicycle lanes, storage areas and amenities, and ensure efficient parking management.
- Provide dedicated turn lanes as appropriate.
- Work with cities/developers/citizens in the region to implement TDM goals.
- Ensure streamlined traffic synchronization.
- Provide park-and-ride facilities.
- Implement parking management at commercial facilities and other places attracting traffic.
- Provide preferential parking to high occupancy vehicles and shuttle services; and charge parking lot fees on low occupancy vehicles.

Provide temporary roadway controls at peak-hours, such as one-way streets; and install directional traffic signs; and synchronize traffic signals to relieve congestion on surrounding streets; and manage street intersections to improve level of service.

Maximize Energy Conservation:

- Implement energy conservation measures beyond state and local requirements.
- Include energy costs in capital expenditure analysis.
- Landscape with native drought-resistant species to reduce water consumption and to provide passive solar benefits.
- Improve thermal integrity of buildings, and reduce thermal load with automated time clocks or occupant sensors.
- Introduce glazed windows, wall insulation, and efficient ventilation methods; install window-systems to reduce thermal gain and loss.
- Introduce energy efficient heating and other
appliances.

- Incorporate appropriate passive solar design.
- Ensure sealing of all buildings.
- Control mechanical systems, or equipment with time clocks or computer systems.
- Implement waste separation and recycling programs.

Limit Emissions from Architectural Coatings and Asphalt Usage:

- Nonsolvent-based coatings should be used on buildings. Solvent-based coatings, if used, should minimize solvent emissions.
- Use of high-solid or water-based coatings should be encouraged.

Implementation Procedures—The applicant shall incorporate the design measures described above into future development applications prior to submittal.

Implementation Schedule—Design guidelines for providing additional job opportunities shall be provided to the City of Palmdale Planning Department prior to final project approval. The Transportation Demand Management Plan will be submitted to the Planning Director prior to issuance of certificates of occupancy for the project.

Regulatory/Enforcement Agency—City of Palmdale Planning Department.

Issue—Noise

Impacts—Short-term Impacts—Project-related grading and construction activities would result in increased noise levels in areas adjacent to area access routes and on the project site. Construction and grading noise impacts are considered significant short-term impacts.

Long-term Impacts—Operation of the proposed project would result in increased noise levels on-site and in the surrounding area. This increase would primarily result from increased vehicular traffic and human-related activities on the site. The proposed project would generate an audible noise increase (greater than 3.0 decibels) along 25th Street West, 20th Street West, Elizabeth Lake Road (east and west of 25th Street West) and Avenue S. A potentially audible noise increase (greater than 1.0
dB(A)) could occur along Tierra Subida Avenue (north of Barrel Springs Road), Elizabeth Lake Road, (west of 10th Street West), Rayburn Road and Barrel Springs Road. As these roadways are master planned as either secondary or major highways, future off-site adjacent uses to these roadways must anticipate increased noise levels and are required, through the planning and design process, to mitigate current and future noise to acceptable levels. Significant noise level increases would result on Elizabeth Lake Road, Bridge Road and Avenue S (south of Elizabeth Lake Road). Unless site design measures are incorporated as part of the proposed project or attached as conditions of approval, significant on-site noise impacts could occur as a result of ultimate motor vehicle volumes on Avenue S and Elizabeth Lake Road and City Ranch Road.

Sub-issue- Short-term Impacts

Mitigation Measures

- Construction activities adjacent to residential areas shall take place only between the hours of 6:30 a.m. and 8:00 p.m., Monday through Saturday, as specified by the City of Palmdale Noise Ordinance.

- Grading and construction equipment shall be stored at the project site.

- Repair of construction vehicles on-site shall be restricted to the same working hours stated above, 6:30 a.m. to 8:00 p.m., Monday through Saturday.

- All construction equipment, fixed or mobile, shall be equipped with properly operating and maintained mufflers.

- Stationary equipment shall be placed such that emitted noise is directed away from sensitive noise receivers.

- Temporary noise attenuation barriers, such as walls and/or berms, shall be placed between construction areas and sensitive noise receivers.

Implementation Procedures- Violations of the City of Palmdale Noise Ordinance and the noise mitigation measures shall be reported during grading and construction as part of regular inspections by City inspectors.

Implementation Schedule- Reports on compliance with noise mitigation measures shall be included as part of regular inspection reports during grading and construction.

Regulatory/Enforcement Agency- City of Palmdale, Planning Department
Sub-issue - Long-term Impacts

Mitigation Measures

- Reduction of intrusive noise levels in residential and school areas shall be accomplished through the incorporation of design measures or structural measures which will reduce noise levels to acceptable levels within the living or recreational portions (as defined by the City) of any lot. The measures that may be utilized to reduce noise impacts include, but are not limited to, placement of parking structures in such a manner as to act as a buffer, increasing the setbacks along the roadway, creation of landscaped berms, or construction of other barriers such as walls. The acceptable noise level CNEL which will be applied to future projects will be that level which is in place, either by ordinance, resolution or General Plan policy, at the time that future development applications are deemed complete.

- Carports and parking areas in multi-family residential areas shall be located adjacent to the heavily traveled roadways to create building setbacks and shield more sensitive uses.

- Multi-family structures shall be oriented away from adjacent roadways to insure that room arrangements, window size and placement, and balcony, roof and courtyard design minimize intrusive noise levels.

- Truck access, parking area design and air conditioning refrigeration units within commercial land uses shall be carefully designed and evaluated at more detailed levels of planning to minimize the potential for acoustic impacts to adjacent noise sensitive development.

- The design of the elementary schools shall locate administration buildings, noise-insulated structures (such as gymnasiums and auditoriums), locker facilities, parking areas and bus loading zones adjacent to roadways to buffer more sensitive uses such as classrooms and playgrounds.

Implementation Procedure - Final lot layout, pad elevations and building and noise attenuation designs shall be reviewed by a qualified acoustic consultant, retained by the applicant and approved by the Planning Department prior to approval of development applications.

Implementation Schedule - Prior to the approval of development applications, the acoustic consultant's review shall be submitted to the Planning Department. Noise attenuation structures shall be shown on the development plan prior to the approval of development applications. Noise attenuation structures and structural improvements shall be constructed prior to the issuance of building permits.
Monitoring to verify effectiveness of noise reduction measures shall demonstrate adequate noise reduction prior to the issuance of occupancy permits in affected areas.

Regulatory/Enforcement Agency- City of Palmdale Planning Department.

Issue- Aesthetics

Impacts- Development of the proposed project would transform the project site from an essentially undeveloped area to a largely suburban setting. The majority of the residential development would occur in the flatter portions of the project site along the Anaverde Valley. These areas would not be visible off-site. Following project development approximately 793 acres of the project site or more than 40% would supply visual open space opportunities by being developed as parks, golf course, open space, or natural open space. In addition, the school sites would also provide visual open space opportunities. Although the site would be substantially altered visually as a result of project development, areas of the project site that would be developed are not visually prominent. The ridgelines, the most prominent visual resources on the project site, would remain intact subsequent to project development. Therefore, in this respect, project impacts are not considered significant. However, as a result of project development, many areas of the project site would have views of the Antelope Valley Public Landfill located to the east. These views, if not properly shielded, can be considered offensive and therefore potentially significant.

Mitigation Measures

- All roadways within the project site shall be tree lined and landscaped in accordance with City of Palmdale street design requirements and the streetscape guidelines provided in the Specific Plan.

- All new and relocated utility distribution lines shall be placed underground within developed areas.

- All storage, including cartons, containers or trash, shall be shielded from view within a building or area enclosed by a masonry wall not less than six (6) feet in height. No such area shall be located within fifty (50) feet of any residential area.

- Screening shall be required when the following abut residential uses:
  a) Loading areas;
  b) Visually obtrusive above-ground utility equipment and appurtenances;
  c) Antelope Valley Public Landfill

12-27
• A screen, as referred to above, may consist of two (2) of the following types:
  
a) Walls: A wall shall consist of concrete, stone, brick, tile or similar type of solid masonry material a minimum of four (4) inches thick.
  
b) Berms: A berm shall be constructed of earthen materials and it shall be landscaped.
  
c) Fences, solid: A solid fence shall be constructed of masonry, wood or other materials a minimum thickness of two (2) inches and it shall form an opaque screen.
  
d) Landscaping: Plant materials, when used as a screen, shall consist of densely planted evergreen or deciduous plants.
  
• Screening established near intersections shall consider safe sight distances so that adequate visual conditions are maintained for pedestrians and drivers of motor vehicles.
  
• Rooftop mechanical equipment shall be fully screened from view.
  
• Landscaping, consisting of trees, shrubs, and/or ground cover, shall be installed and maintained subject to the following standards:
  
a) Landscaping shall be required along all property lines abutting streets except where provided in landscape easements adjacent to rights-of-way. Minimum tree and shrub size shall be fifteen (15) gallon and spaced a minimum of 30 feet average.
  
b) Landscaping shall be required along all property lines abutting residential uses.
  
c) Planting shall be designed so as not to hinder sight distance at intersections.
  
d) Permanent irrigation facilities shall be provided for landscaped areas.
  
e) Landscaping shall be maintained by property owners in a neat, clean and healthy condition.
  
f) Areas of native vegetation within all open space and natural open space areas are exempted from the landscape standards identified above except that they shall be maintained free of trash and debris. Fuel modification zones will be required where fire hazards warrant them.

12-28
- Residential structures shall be limited to 35 feet in height.

- The colors and textures of building materials shall blend with the landscape as set forth in Section VI, Design Guidelines of the City Ranch Specific Plan.

- All downdrains shall utilize colored concrete chosen to blend with the adjacent terrain. Downdrains shall be located in less visually prominent locations where practical. When this is not feasible, downdrains shall be aesthetically mitigated by the use of a combination of landscaping, rock, and screening, or may be diagonally angled down the slope when practical and when it will reduce the visual impact. These measures shall be designed to the satisfaction of the Director of Planning and City Engineer, and shall be reviewed for conformance at the Tentative Tract Map stage. Details of these conditions shall be indicated on the Tentative Tract Map.

- On-site water tanks shall be painted in earth tone colors.

- City Ranch Specific Plan grading standards shall be strictly adhered to, to avoid negative impacts with regard to hillside grading. The Specific Plan policies which govern grading design and may affect aesthetics of the site are as follows:

  a) Major ridgelines shall be preserved. Specifically, the Sierra Pelona and Verde Ridge ridgelines shall be preserved in their existing states with ridgetop elevations retained at natural elevations.

  b) Large contiguous open spaces shall be preserved. Specifically areas of natural slope above 45 percent which total over one-half acre in size and which are visible from off-site areas shall be preserved in their existing state. This condition occurs in Planning Areas 2, 7, 29 and 32.

  c) No construction shall be permitted in areas above 40 percent slope except for isolated pockets of steep slope which are not visually prominent, and only if required for reasons of health, safety, welfare, protection of property and for necessary public facilities. Isolated pockets of steep slope shall be defined as sloping areas up to 50 feet in height and up to 200 feet in horizontal length.

  d) Grading design and site planning design shall consider the aesthetic impacts of proposed slopes and structures as seen from off-site developed areas of the City of Palmdale, and shall employ measures to lessen the visual impacts to off-site areas if required. Criteria for mitigation required shall include visual prominence, height of slope banks, "visual length of slope banks", landscaping and erosion control.
e) Mass graded "mega pads" shall be prohibited. Design of residential subdivisions shall utilize grade breaks, curvilinear streets and smaller steps of grade change rather than single large slopes. The grading of the commercial site at Planning Area 3 may utilize a large graded pad design provided slope height does not exceed thirty (30) feet in height and provided the buildings are placed to provide nearly complete visual screening of slopes above twenty (20) feet in height.

f) Large manufactured slopes greater than three hundred feet in "visual length" shall be designed so as to simulate the curvature of a naturally shaped slope, or shall be blended into natural slopes by gradually adjusting the contours and slope orientation.

*Implementation Procedures*- Landscape plans prepared by a qualified landscape architect and building designs prepared by qualified architects, shall be reviewed by the City of Palmdale Planning Department and by the City Landscape Architect. All utility providers shall be required to underground all utility lines; all above ground facilities shall be painted in earth tones. Grading plans shall be approved by the Palmdale Department of Planning with regard to aesthetics issues. In particular, adequacy of screening in areas with direct visibility of the Antelope Valley Public Landfill shall be reviewed by the Palmdale Planning Department.

*Implementation Schedule*- Landscape, architectural, utility and grading plans shall be reviewed and approved prior to approval of the development applications.

*Regulatory/Enforcement Agency*- City of Palmdale Planning Department.

*Issue - Water*

*Impacts*- Estimated water consumption by the proposed project's combined uses is expected to be 5.22 million gallons of water per day. Approximately 1.25 million gallons per day of this amount would be required for irrigation. In order to supply and distribute the water necessary to support the proposed project's domestic, emergency and fire flow demands, the City Ranch property will need to be annexed into Los Angeles County Water Works District No. 34 (District 34) and water infrastructure extensions to and through the project site would be necessary. District 34 has indicated that they would be capable of delivering water necessary to serve the proposed project through existing and proposed supply facilities and irrigation water is available from an existing on-site non-potable water supply. However, without annexation into District 34 and the construction of necessary water infrastructure extensions, development of the proposed project would create significant impacts.
Mitigation Measures

- The City Ranch property shall be annexed into District 34.

- Following annexation into District 34, the applicant shall negotiate the provision of and financing for major infrastructure facilities (reservoir sites, transmission lines, pumping equipment, etc.) as part of a water system agreement with District 34.

- All water infrastructure extensions and improvements shall be constructed by the applicant as depicted on Figures 64 and 65 of the EIR and described in the Project Impacts subsection of the Water section of the EIR.
Interior Water Consumption Reduction Measures:

- Install a pressure regulator on all water services and maintain a building water pressure of 40 pounds per square inch or less;

- Use ultra-low flush toilets (1.5 to 1.6 gallons per flush) in all residential buildings.

- Use water-saver type shower heads.

- Use low-flow faucet fixtures.

Exterior Water Consumption Reduction Measures:

All mitigation measures listed below shall be in accordance with City standards as approved by the City Engineer and the Planning Director.

- Non-potable water shall be used for all golf course, park and community landscaping irrigation needs where available and determined feasible by the City Engineer.

  - Landscape street rights-of-way, easements, medians, project entry statements, and all manufactured slopes with drought tolerant species where feasible.

- Lawn turf shall consist of drought tolerant species, warm season grasses, hybrid fescues, or lawn substitutes (i.e., Achillea species etc.).

- Landscape easements, right-of-way medians, entry statements, and all manufactured slopes shall be landscaped with drought-tolerant species.

- Improve the soil to increase water retention. Use mulch and other inorganic and organic groundcover extensively in appropriate landscaped areas. Ground covering applied on top of soil will improve the water-holding capacity of the soil by reducing evaporation and soil compaction.

- Group plants of similar water demand to reduce over-irrigation of low-water-using plants.

- Install efficient irrigation systems that minimize runoff and evaporation and maximize the water applied to reach plant root zones.

Implementation Procedures- The applicant shall make arrangements for annexation of the project site into Los Angeles County Water Works District No. 34 and provision of water infrastructure facilities up to and through the project site. Water infrastructure plans shall be reviewed by the City of Palmdale City Engineer. The
City Landscape Architect shall review the landscape plans to ensure that drought-tolerant plants are included in the landscape plans.

Implementation Schedule- Infrastructure plans shall be approved by the Department of Public Works prior to infrastructure construction. Construction of water infrastructure up to and through the project site shall be completed prior to issuance of Certificates of Occupancy. The water conservation measures shall be included as conditions of approval of building permits and landscape plans.

Regulatory/Enforcement Agency- City of Palmdale City Engineer and City Landscape Architect.

Issue- Sewage Disposal

Impacts- In order to provide sewage service to the proposed project, a trunk sewer would need to be extended to the project site. Without implementation of the recommended infrastructure extensions, the proposed project would create significant impacts with regard to sewage infrastructure. The proposed project would generate an estimated 1,272,832 gallons of wastewater per day. This would exceed Palmdale WRP's current capacity by 1.27 mgd. The Palmdale WRP is scheduled for a 1.5 mgd expansion which will begin construction in late 1991. This and other future expansions will be able to treat the proposed project's wastewater generation.

Mitigation Measures

- All sewer infrastructure extensions and improvements depicted on Figure 66 and described in the project impacts subsection of this section of the EIR shall be constructed by the applicant. In the event that Assessment District 90-1 is not formed, and Developer constructs off-site trunk sewer lines within the San Andreas fault zone, the developer shall use state-of-the-art designs for the trunk sewer line to minimize the risk of rupture, and subsequent contamination, caused by a seismic event. Also the developer shall cause the preparation of an emergency spill response plan. The plan shall include provisions for spilled sewage retention, spill response measures, cleanup and disinfection measures, and training and funding for implementation of the spill plan. The plan shall be reviewed by the Luhontan Regional Water Quality Control Board and Sanitation District No. 20, and reviewed and approved by the Director of Public Works and the Director of Planning.*

- Sizing of these lines shall be dependent upon County of Los Angeles Sanitation Districts specifications. The Districts may require over-sizing of sewer lines to accommodate future growth in the area. (The responsibility of installing relief sewers and expanding District No. 20’s wastewater treatment plant (WTP) to accommodate flows generated by the proposed project and other developments belongs to County Sanitation District No. 20.)

- The Los Angeles County Sanitation Districts are empowered by the California Health and Safety Code to charge a fee (approximately $1,350.00 per dwelling unit) for the privilege of connecting to the Sanitation Districts' sewer system. The applicant will pay this connection fee.

- The applicant shall consider the installation of an on-site water reclamation plant to provide a source of non-potable water suitable for landscaping irrigation. Consideration shall be based on final siting of project components and economic environmental, and regulatory agency requirements.
**Implementation Procedures**- The applicant shall provide to the County Sanitation Districts, for approval, designs for the on- and off-site sewer line infrastructure extensions and improvements. Once County approval has been received, the applicant shall present the sewer plans to the City of Palmdale City Engineer to obtain necessary permits to begin construction of sewer lines.

**Implementation Schedule**- The applicant shall submit County Sanitation Districts approved sewer plans to the City of Palmdale City Engineer prior to the approval of grading permits. Sewer infrastructure must be completed as approved prior to the issuance of Certificates of Occupancy.

**Regulatory/Enforcement Agency**- City of Palmdale City Engineer, County of Los Angeles Sanitation Districts.

**Issue - Communications**

**Impacts**- In order to service the project site, telephone and cable TV infrastructure would have to be brought out to the project site via communication line extensions. According to Pacific Bell, who serve the site, telephone service can be supplied to the project site without affecting existing levels of service. Therefore, project impacts with regard to telephone service are not considered significant. Jones Intercable TV who provide cable television service to the project site, have indicated that they would be able to provide service to the project site following annexation of the site into the City of Palmdale. Project impacts with regard to cable television service are not considered significant. As a result of project construction, the AT&T-C high capacity transcontinental communication line easements on the project site may be encroached upon. Disturbance to these lines could damage the lines or cause unanticipated interruption of AT&T's long distance telephone service. This is considered a potentially significant impact.

**Mitigation Measures**

- No work may take place within the boundaries of the AT&T-C easements without prior written approval.

- Any lowering of lines required to maintain the proper depth of cover shall be at the developer's expense.

- A dedicated easement for access to all splices, manholes, valves and load points is required. This access shall be shown on the final plot plans and be of size and width sufficient to permit the passage of AT&T maintenance and construction vehicles.

- The developer may be required to expose the existing communications systems and place spare ducts (4 inch PVC pipe) alongside the existing system
and cover the duct and system with concrete top protection at various locations within the development. Long runs may require the installation of pull pits and dedicated access to them.

- The AT&T-C easement boundary shall be either the common boundary between the lots, if in side or back yards, or located within a lot in such a manner as to present the minimum exposure to future building additions and other hazards. Whenever possible, the system(s) should be located under a sidewalk area with the remaining easement width in the street.

- The AT&T-C easement description may be broad and may encumber or cloud a large area of a proposed development. In these cases AT&T-C may stake the system(s) location so the developer can survey the line and provide a certified survey and legal description. AT&T-C may then amend the easement and remove the broad description to satisfy the requirement of lenders, title companies, city planning and zoning agencies, etc.

- Structures shall not be permitted in the AT&T-C easement. This includes walls, concrete slabs, buildings, patios, etc. In the event of an emergency restoration of the communications system, the removal of unauthorized structures will be at the property owner's expense.

- Other utility easements (longitudinal) shall not be dedicated or plotted within the boundary of the AT&T-C easement. All crossings to be made by water lines, sewers, gas, power, etc., need to be planned well in advance to arrange for proper clearances and protective measures. The crossing utility shall coordinate all crossings with AT&T-C prior to any construction.

- In those areas where AT&T-C consents to streets, curbs, parkways, sidewalks, parks, open space or other public use, AT&T-C shall continue to require and maintain an easement and right-of-way for all the purposes for which the easement was acquired.

- Preliminary plot plans showing the easement and the proposed uses should be submitted to AT&T-C for approval prior to the preparation and filing of final plot plans. Four (4) copies of all plot plans, preliminary and final grade plans and any other engineering data affecting the easement shall be provided to AT&T-C as soon as possible.

- The developer shall provide their pro-rata share towards the implementation of the findings of the radio communications needs study currently being prepared by the City. This may include providing a site for the construction of a radio repeater, construction of the repeater, or providing funding for the acquisition and construction of such improvements, as determined necessary by the City's Emergency Services Coordinator.
Implementation Procedure- The applicant shall provide a written schedule of grading and construction activities to AT&T-C and receive written approval to carry out grading and construction in areas of the project site containing AT&T-C easements. The approval letter shall be provided to the City Planning Department.

Implementation Schedule- The approval letter from AT&T-C shall be provided to the Planning Department prior to issuance of grading and construction permits in areas of the project site containing the AT&T-C easements.

Regulatory/Enforcement Agency- City of Palmdale Planning Department.

Issue- Schools

Impacts- Development of the proposed project would increase the number of school children in all three school districts serving the project site. Based upon student generation factors provided by the individual school districts, a total of 4,544 students are estimated to be generated by this project. The proposed project includes the designation of four elementary school sites, three located in Westside Union School District and one in the Palmdale School District. In the Palmdale District portion of the project site, it is expected that the anticipated 431 elementary students generated by the proposed project could be accommodated in the proposed on-site school. The 114 6-8th grade students in Palmdale District would attend Juniper Intermediate School which is already 175 students over capacity. Project development would, therefore, have a significant impact with regard to intermediate schools in the Palmdale School District. In the Westside Union District area of the site, the 1,829 elementary school students generated by the proposed project could be accommodated in the three proposed on-site elementary schools in that district. An estimated 610 6-8th grade students would most likely attend the proposed new Hill View Intermediate School or other off-site intermediate schools. It is not certain at this time whether or not there will be remaining capacity in the Westside Union District intermediate schools at the time of the proposed project completion. Therefore, project impacts with regard to the Westside Union School District are also considered potentially significant. The 1,560 9-12th grade students generated by the proposed project are considered to create a significant impact on the Antelope Valley Union High School District because of their contribution to the need for two additional high schools in the Highland High School attendance area of which the project site is a part.

Mitigation Measures

In order to reduce the significant and potentially significant adverse impacts with regard to schools to a level of “not significant”, the following measures are required.
(a) Palmdale School District: The developer shall comply with the terms of the agreement, dated October 8, 1990, between the developer and the Palmdale School District as mitigation for impacts caused by development of the project on the Palmdale School District. The terms of that agreement are as follows:

(i) Participate in the Mello Roos Community Facilities District created by the Palmdale School District for financing school construction.

(b) Westside Union School District: The developer shall comply with the terms of the agreement, dated January 22, 1992, between the developer and the Westside Union School District as mitigation for impacts caused by development of the project on the Westside Union School District. The terms of that agreement are as follows:

(i) refer to agreement attached to this Exhibit.

(c) Antelope Valley Union High School District:

The Developer shall provide the following mitigation to the District, in order to provide its contribution to the District's fifty (50) percent share of funding a new high school to serve the City Ranch Specific Plan area, pursuant to Government Code Section 65995 and Education Code Section 17700 et. seq. (School Facility Funding Law):

(i) Mello-Roos Development Fees.

The applicant shall participate in a Mello-Roos Community Facilities District which will fund up to 50% of the cost of that portion of the school necessary to serve the City Ranch project based upon a student generation factor of .2 pupils per single family dwelling. Only residentially zoned property for which a building permit has been issued will be subject to the annual tax. The District may increase this annual tax by no more than 2% in each year. In lieu of paying an annual special tax, a property owner may prepay the annual special tax at the time a building permit is issued on the property. A fee equal to $1.30 per square foot of habitable residential construction shall serve to prepay the special tax. This fee shall be subject to an annual adjustment pursuant to increases or decreases in the School Construction Cost Index of the Office of Local Assistance with January 1, 1992 as the base. This prepayment fee shall be reduced to $1.20 per square foot if the school site is not located within Planning Area 3A of the Ritter Ranch Specific Plan.

(ii) Other Development Fees.

In addition to the fees specified in subparagraph (i) above, Developer shall pay to the District a fee of twenty-six cents ($.26) per gross leasable
square foot of commercial construction prior to the issuance of each commercial building permit. All such fees shall be subject to annual adjustment pursuant to increases or decreases in the School Construction Cost Index of the Office of Local Assistance with January 1, 1992 as the base.

(iii) Site Preparation Expenses.

In the event that a high school is constructed in Planning Area 3A of the Ritter Ranch Specific Plan, and the site preparation work for a school to be located on that site, including provision of access to Elizabeth Lake Road and utilities, exceeds the amount of $4,650,000, the Developer shall pay the District fifty (50) percent of the District's costs for such work over $4,650,000, not to exceed a total of $350,000.

Implementation Procedures- The applicant shall pay fees to the applicable school districts and shall dedicate sites for four elementary schools and construct new and/or interim school facilities as determined necessary by all three school districts. The applicant shall provide a letter from each school district to the City of Palmdale Planning Department confirming conformance with district requirements.

Implementation Schedule- The elementary school sites shall be approved by the school districts and the City Planning Department. The developer shall then dedicate the sites approved by the school districts prior to approval of appropriate tract maps. The applicant shall pay fees to the appropriate school district at the commencement of construction of each building phase. The applicant shall pay its pro rata share of funds for an additional high school site and related facilities as determined by the Antelope Valley Union High School District.

Regulatory/Enforcement Agency- Palmdale and Westside Union School Districts, Antelope Valley Union High School District and the City of Palmdale Planning Department.

Issue- Parks and Recreation

Impacts- The City Ranch Specific Plan designates six park sites totaling 159.3 acres (38.3 acres of which are buildable), a 216-acre golf course, and approximately 404 acres of natural open space. The Specific Plan also includes off-street bicycle paths and a 3.5 mile looped combined pedestrian/hiking/mountain biking trail and vista point opportunities. According to the Specific Plan, all six parks sites shall be dedicated to the City of Palmdale for parkland credit. The City Department of Parks and Recreation standards requires a total of 88.62 acres of park space to be developed as part of proposed project development. The proposed project park acreage exceeds
this standard by over 70 acres. However, several of the park sites contain development constraints and may not, therefore, qualify for full parkland dedication requirement credit. Impacts regarding to parks and recreation are considered potentially significant.

**Mitigation Measures**

- The relocation of the Northside Trail shall be approved by the County Department of Parks and Recreation.

- Trails shall be designed to connect existing and proposed trails on adjacent parcels.

- Design of Planning Areas located along the bicycle and hiking trails shall incorporate extensions and connections to the trail system. Each Planning Area adjacent to designated trails shall provide a minimum of two (2) connections to these trails at safe locations. Said connections shall be indicated on Tentative Tract Maps filed for all residential and commercial Planning Areas containing trails. This shall include Planning Areas 1, 3, 4, 9, 12, 14, 15, 16, 19A, 20, 21, 23, 24, 27, 28A, 30A, and 33.

- The configuration, trail widths and clear areas adjacent to the trails must be designed to allow Sheriff and emergency vehicular access, but shall prohibit other non-emergency motor vehicle use.

- As set forth in the Development Standards of the City Ranch Specific Plan, the development of recreational uses are subject to the Site Plan Review provisions.

- Drought tolerant and native plant materials shall be used for park and golf course landscaping.

- Fertilizer and pesticide use shall be restricted in park and golf course areas.

  Exhibit 16 of the Final Specific Plan will be amended to include an equestrian staging area in Planning Area 1, and if feasible, an equestrian staging area in Planning Area 18, and an equestrian trail through the powerline easement. Trails planned in the City Ranch Specific Plan will be coordinated with those planned for the Ritter Ranch Specific Plan. Future developments adjacent to this project will be required to coordinate with the trails shown on the trails plan adopted for City Ranch.

**Implementation Procedures** - The applicant shall submit park site plans indicating power line easements and seismic restricted use areas to the Department of Parks and Recreation for an evaluation of parkland dedication credit. If parkland dedication requirements are not fully satisfied, additional parkland, park fees, or improvements in-lieu-of fees shall be provided by the applicant to the satisfaction of the Department of Parks and Recreation. A preferred alignment plan for the relocation of the Northside Trail shall be submitted to the County of Los Angeles Department of Parks and Recreation for approval. A final trails plan for the entire project site shall be submitted to the City of Palmdale Planning Department for review and approval. The approved trails plan shall be translated into trail easements indicated on the Tentative Tract Maps for portions of Planning Areas containing trails and submitted to the Planning Department and County of Los
Angeles Sheriff’s Department for review and or approval. Landscape plans developed for parks and the golf course shall be reviewed by the City of Palmdale Planning Department.

Implementation Schedule- The City of Palmdale Planning Department shall report to the City of Palmdale Planning Commission regarding fulfillment of parkland dedication requirements prior to approval of the Specific Plan and regarding compliance with parks and recreation mitigation prior to tentative tract approvals in residential and commercial planning areas containing trails. Trails shall be built prior to issuance of occupancy permits in residential and commercial planning areas containing or adjacent to trails.

Regulatory/Enforcement Agency- City of Palmdale Department of Parks and Recreation, County of Los Angeles Department of Parks and Recreation, Los Angeles County Sheriff’s Department, and City of Palmdale Planning Department.

Issue- Archaeology

Impacts- Development of the proposed project would disturb two significant archaeological sites and one significant historical site located on the project site. This is considered a significant adverse impact.

Mitigation Measures

- All work will be done under the supervision of a qualified archaeologist.

- Excavation of 100 percent of Loci A through C as described in the Phase II Archaeological Assessment (July, 1991) shall be conducted at LAn-949. It is estimated that approximately 500 cubic meters of cultural deposit will have to be removed. An excavation plan detailing strategy and research goals shall be submitted to the City of Palmdale for review prior to excavation activities.

- At least a 4 x 4 meter square unit at the approximate center of the deposit at LAn-1756 and at LAn-1757 shall be excavated.

- If preservation of the site at LAn-1758H is not feasible, a Phase III Salvage Program shall be conducted. The Phase III Salvage Program shall include full excavation of the stone enclosure and machine excavation of six 4 x 4 meter units placed in a pattern across the site. All backdirt from the units shall be screened through 1/4-inch mesh.

- In the event that future development would adversely affect the cupule boulders (LAn-1767 and LAn-1768) or the bedrock milling feature (LAn-1772), it is recommended that they be carefully removed and relocated elsewhere on the subject property. An archaeologist shall be consulted to arrange for relocation of these boulders if removal is necessary.

12-40
• The location of significant historic and archaeological resources shall be recorded with the Archaeological Information Center at the UCLA.

• Significant historic and archaeological materials recovered in the field shall be delivered to the collection an appropriate archaeological repository.

• The following sites which were augered require additional testing for subsurface deposits: LAN-1746, LAN-1747, LAN-1748, LAN-1749, LAN-1750, LAN-1752, LAN-1753, LAN-1756, LAN-1772, LAN-1774, LAN-1767, LAN-1768. At least one additional 1x1 meter test units need to be excavated at each of these sites, within site areas with the greatest densities of surface artifacts. These excavations are important to determine whether auger testing has missed subsurface deposits and to get a clearer, vertically-controlled picture of such deposits and their depositional context.

The following important petroglyph, bedrock mortar, and rock ring sites were not subject to any subsurface testing. They need to be tested through excavation of a minimum of one 1x1 meter units utilizing 1/8" screen in the immediate vicinity of these features: LAN-1767, LAN-1768, LAN-1759, LAN-1760, LAN-1761, LAN-1762, LAN-1763, LAN-1765, LAN-1766, LAN-1769, LAN-1770, LAN-1771. The "hunting blind" sites are important structures whose function needs to be determined through further testing.

The important apparent habitation site, LAN-949, should be avoided through realignment of the proposed roadway. However, in the event that avoidance is not possible, salvage of the site shall be performed in accordance with an excavation plan. Excavation of 100 percent of Loci A through C as described in the Phase II Archaeological Assessment (July, 1991) shall be conducted at LAN-949. It is estimated that approximately 500 cubic meters of cultural deposit will have to be removed. The excavation plan detailing strategy and research goals shall be submitted to the City of Palmdale for review and approval prior to excavation activities. In addition, this excavation plan shall contain a subregional analysis of the archaeological sites within and immediately adjacent to City Ranch to provide a basis for significance determinations. As part of the subregional analysis, a research design that would set standards for future work in the vicinity of the City Ranch project shall be proposed. The subregional analysis of the archaeological sites may be prepared in cooperation with other adjacent property owners, as approved by the Planning Director.

Those sites, not listed above, which contained surface artifacts but were only auger tested shall be tested with at least one standard test unit per site. The testing program shall be submitted to the City Planning Department for review and approval prior to commencement. In addition, untested cupule sites, rock rings and hunting blinds shall also be tested in this manner. Any additional mitigation recommended as a result of the additional testing shall be required as mitigation measures for initial and subsequent development applications, as appropriate.

12-41
Relocation of cupule boulders must be done under the direction of a qualified archaeologist who will give careful attention to orientation of the boulders. The boulders shall be moved prior to site disturbance in their immediate vicinity to a location approved by the Planning Director. Since context will be lost, some shall be relocated to a repository approved by the Planning Director where they can be used for educational purposes. Representative artifacts should be displayed at this repository.

The work described above shall be performed by a qualified archaeologist, retained by the applicant and approved by the Planning Director. Because the introduction of residents into the area will result in the degradation of archaeological sites, required testing shall be completed and approved by the Planning Director prior to recording of the first parcel map or tract map for the project."

Implementation Procedures- An archaeologist, approved by the City of Palmdale Planning Department, shall perform the additional testing required in the mitigation measures and carry out any excavation or salvage as indicated by that testing or as described in the mitigation measures in Section 5.25.3. All significant historic and archaeological site locations shall be recorded with the Archaeological Information Center at UCLA. If relocation of resources is necessary, the archaeologist shall monitor the relocation. The artifacts will be provided to an approved repository pursuant to the mitigation measure.

Implementation Schedule- The archaeological testing shall be completed and the findings reviewed by the City of Palmdale Planning Department prior to recording of any subdivision map for the project. Excavations will be completed and prior to the start of grading on the property. Any relocation of materials shall be scheduled and monitored by the archaeologist, who shall also inform the Planning Department before the relocation is initiated. Results of the relocation efforts will be reported to the Planning Department within thirty days of completion of the relocation. Recorrdation of significant archaeological sites and delivery of significant materials recovered to appropriate repository shall be carried out as sites and materials are identified and recovered."

Regulatory/Enforcement Agency- City of Palmdale Planning Department.

Issue- Paleontology

Impacts- Direct significant adverse impacts to paleontologic resources would result from ground-disturbing activities associated with development of the City Ranch Specific Plan. Grading activities in areas containing rock units of high paleontological importance have the potential to disturb or bury fossil sites, as well as fossiliferous and potentially fossiliferous rocks, and would result in the loss of fossil specimens and associated geologic data. In addition, fossiliferous rock in these areas would become permanently unavailable for future investigation of fossil remains. Potentially significant indirect adverse impacts could occur as a result of collection of fossil remains by construction personnel, rock hounds, and amateur and commercial collectors. This could result in the loss of specimens and data.

Mitigation Measures

- A paleontologist, approved by the City of Palmdale Planning Department shall submit a program for paleontologic resource recovery and preservation to the City of Palmdale Planning Department for approval prior to issuance of the development permit. Prior to initiation of construction, the paleontologist shall conduct a field survey of exposures of the late Miocene
fossil leaf-bearing rock unit on the project site to document locations of previously unrecorded fossil sites. All sites shall be plotted on a topographic map of the project site. Representative plant fossils shall be collected from each site. The paleontologist shall excavate those sites, including any previously recorded sites, having the highest potential for yielding comparatively well preserved and taxonomically diverse plant assemblages. If necessary, the applicant will supply a backhoe and operator to further expose a fossil site for hand excavation.

- The paleontologist shall collect rock samples from selected locations (including recorded fossil sites) and horizons (particularly paleosols and other fine-grained rocks) in the rock units of high and unknown paleontologic importance to process for smaller fossil remains. Each sample shall contain up to 1,000 pounds of rock. If fossil remains are found during processing, up to 5,000 pounds of rock shall be collected from the fossil-bearing rock unit and processed.

- Following completion of these tasks, the paleontologist shall prepare a report summarizing the results of the preconstruction phase of the mitigation program presenting an inventory and describing the significance of any accessioned fossil remains. The report shall be submitted to the City of Palmdale Planning Department.

- During the construction phase, the paleontologist shall monitor grading and any other ground-disturbing activity in areas underlain by rock units of high paleontologic importance on a full-time basis, moderate and unknown importance on a half-time basis and low importance on a quarter-time basis as identified in the pre-construction field survey. If more than 25,000 cubic yards of rock are moved per day, the level of monitoring effort shall be doubled. Monitoring shall consist of visually inspecting fresh exposures of rock for larger fossil remains and, where appropriate, dry screening excavated spoils for smaller vertebrate remains. Grading in areas underlain by rock units of no importance shall not be monitored except in the immediate vicinity of a fossil site.

- If larger fossil remains are uncovered by ground disturbance, the paleontologist shall divert the ground-disturbing activity away from the fossil site until the remains have been removed and a 1,000 pound rock sample has been collected. Grading of the fossil-bearing bed in the immediate vicinity of the site shall be monitored on a full-time basis. If sufficient sites are discovered in any rock unit during construction, earth-moving activities in the entire area underlain by this rock unit shall be monitored on a full-time basis.

- If fossil remains are found during grading by construction crews (including in areas underlain by rock units of low paleontologic importance), grading
activities on the fossil site shall be stopped and the paleontologist shall be called to the site immediately to remove the remains. If sufficient sites are discovered, grading activities at the fossil site shall be submitted on a full-time basis.

- During grading, the paleontologist shall collect 1,000-pound rock samples from selected locations and stratigraphic levels (particularly paleosols or other fine-grained rocks) to process for small mammal and other microvertebrate remains. Additional 5,000-pound rock samples shall be collected from any productive sampling site, including any site discovered as a result of dry screening by the monitor, for processing. The grading contractor may be needed to assist in removing rock samples to an adjacent location for initial processing. Sampling sites shall be documented on the topographic map of the plan area.

- Both before and after construction, the paleontologist shall conduct the initial processing (wet and/or dry screening) of the rock samples for small age-diagnostic mammal remains and other microvertebrate specimens while on-site. The resulting concentrate shall be transported to a museum facility. If sufficient fossil sites and remains are found in a rock of unknown paleontological importance, this unit shall be reclassified as moderately or highly important. If no remains are recovered, this rock unit shall be reclassified as being of low paleontological importance.

- During grading, the paleontologist shall collect all identifiable vertebrate and plant remains. All fossil sites shall be plotted on the topographic map of the project site.

- All fossil remains collected before and during construction shall be prepared, identified, catalogued, curated and accessioned into the collection of a designated repository, such as the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County (LACM). Accompanying notes, maps, and photographs shall also be filed at the repository.

- Following completion of these tasks, the paleontologist shall prepare a report summarizing the results of the construction phase of the mitigation program and presenting an inventory and describing the significance of any accessioned fossil remains. The report shall be submitted to the City of Palmdale Planning Department and shall signify completion of the paleontologic mitigation program. Because development of the proposed project is phased, separate reports may be required to summarize mitigation for certain fossil sites.

- Subsequent to construction, the applicant shall allow future access to and investigation and excavation of these exposed rocks, particularly at any fossil site set aside from development, by qualified paleontologists approved by the
LACM to ensure fossil remains are recovered. (If paleontologists do not recover these fossil remains, the fossils and associated scientific data might be lost to weathering and erosion or to unauthorized fossil collecting.)

Implementation Procedures- The applicant shall retain the services of a City-approved paleontologist to conduct a field survey of the project site to identify previously unrecorded fossil sites. The paleontologist shall plot the fossil site locations, both vertebrate and plant, on a topographic map of the project site and shall report to the Planning Department those sites to be excavated and those areas of the project site to be monitored during grading. The paleontologist shall recommend which portions of the site need to be monitored full, half or quarter time. During grading, the paleontologist shall be empowered to stop grading if fossils are uncovered. The paleontologist shall report to the Planning Department results of monitoring activities, including number of hours present on-site, sites monitored, whether sites were monitored on a full- or part-time basis, the number and types of fossils found, amount of material graded or disturbed, methods used to recover fossils, any occurrence of having to stop grading activities and the repository to which recovered fossils are being placed.

Implementation Schedule- Prior to grading, the paleontologist shall complete a field survey, recommend sites to be excavated, and identify areas of the project site to be monitored during grading. During grading, the paleontologist shall monitor and report findings to the Planning Department on an on-going basis. All paleontological resources shall be provided to an appropriate repository as they are recovered. The Final Paleontology Reports shall be submitted to the Planning Department no later than six months following final grading in affected planning areas.

Regulatory/Enforcement Agency- City of Palmdale Planning Department

Issue- Electromagnetic Radiation

Impacts- The proximity of the high-tension electric lines to proposed residential Planning Areas 16, 17 and 19A and elementary school site (Planning Area 19B), could result in potential health risks to residents and users within these planning areas. Health risks associated with active recreational activity in close proximity to high-tension electric lines are unknown. Active recreational uses such as softball and soccer fields are proposed within the power line easements in Planning Area 18. These impacts are considered potentially significant. Noise from transmission lines is expected to affect areas outside high-tension transmission line easements. Depending upon atmospheric conditions, this noise may be a moderate to severe nuisance.
Mitigation Measures

- Residential areas abutting transmission line rights-of-way shall be separated by continuous six-foot-high non-conductive fencing.

- In accordance with California Department of Real Estate disclosure format and procedures, all potential buyers of real property within City Ranch within 500-feet of an easement containing a 220 kV or higher voltage electric transmission line shall be notified of the proximity to the easement and conditions regarding proximity.

- Active recreational uses shall be prohibited within the 220 kV and 500 kV power line easements in Planning Area 18.

- All residential units constructed along the perimeter of high-tension power line easements shall use double glazed windows on all sides that face these lines to minimize noise effects generated by the electrical transmission lines.

- The location of the proposed elementary school sites shall reflect the recommended guidelines of the California Department of Education regarding buffer zones between school sites locations and high-voltage power lines.

Implementation Procedures- The applicant shall prepare for Planning Department approval, a buyer information package indicating the location of high-voltage electrical transmission lines.

Implementation Schedule- The City of Palmdale Planning Department shall show evidence of compliance with the mitigation measure outlined above, with regard to the high-voltage power line easements, before approval of appropriate tract maps. The City-approved buyer information package shall be supplied to all prospective buyers of property within 500 feet of 220 kV or higher voltage electric transmission lines. The applicant shall provide to the City Planning Department signed disclosure statements from prospective buyers of real property within 500 feet of any easement containing a 220 kV or higher voltage electric transmission line, prior to finalization of any purchase agreements.

Regulatory/Enforcement Agency- City of Palmdale Planning Department.

Issue- Hazardous/Toxic Materials

Impacts- Without proper remediation and clean up procedures, hazardous materials found on the project site including partially filled jugs of chlordane, partially filled cans of paint, paint thinner, herbicides, roofing tar and DDT concentrate, septic systems and gasoline and oil contaminated soils could create health risks to project
construction workers and potential site residents. Any exposure of hazardous materials to a human population may be considered significant.

**Mitigation Measures**

- Septic systems shall be abandoned prior to grading operations in areas where they are located. Septic systems shall be cleaned and abandoned in accordance with Title 28, Chapter 11, Section 1119 of The Los Angeles County Health and Safety Code. A permit for this action will be required by the Los Angeles County Department of Public Works Building and Safety Division in Lancaster.

- Soil testing shall be conducted in all areas where hazardous/toxic materials were found. Soils contaminated with hydrocarbons (gas and oil spillage), specifically at the former underground storage tank site (Location A) and soil stained area (Location D) on the east side of the ranch compound, shall be removed and disposed of at a facility authorized to accept hazardous waste from the site prior to grading operations within the specified area. Soil removal shall be supervised by a qualified hazardous waste scientist. The final quantity of soil to be removed shall be determined. Contaminated soil shall be transported and disposed of in accordance with all applicable hazardous waste disposal regulations. A manifest, a formal document verifying receipt by an authorized hazardous waste facility of soils contaminated with hydrocarbons or other hazardous wastes shall be provided to the County Department of Public Works. A closure report verifying complete removal of contaminants from the site shall be provided to the County Department of Public Works. Both shall be approved prior to the acceptance of dedication.

- An additional study determining the lateral and vertical extent of soil contamination and the possible impact on groundwater shall be prepared for the former site of the underground fuel storage tank.

- Empty or partially full containers of pesticides, herbicides, and veterinary supplies (Locations B and C) shall be reviewed by a qualified hazardous waste scientist to determine which are considered hazardous as determined by state, county, or local statutes. Hazardous materials and hazardous waste shall be disposed of in accordance with all applicable hazardous waste disposal regulations.

- Hazardous materials in the disposal area at Location G, Figure 74 of the EIR shall be analyzed for chemical composition, removed and taken to a facility licensed to accept such material. Soil samples shall be examined in this area to ascertain whether soil has been impacted by manifested disposed contaminants. If the other disposal areas are excavated, a manifest for the
contaminated soils and a site closure report shall be provided to the County Public Works Department prior to the acceptance of dedication.

- Wells on the property not used for irrigation or other non-potable uses shall be abandoned and sealed to eliminate the potential for degradation of ground water beneath the site in accordance with the requirements set forth in California Department of Water Resources Bulletin 71-88. Well destruction will require permitting through the Los Angeles County Department of Health Services, and possibly the local water agency.

- Groundwater testing for hydrocarbons shall be conducted prior to the construction of any future water wells within 1,000 feet of Location A (the abandoned subsurface gasoline storage tank, Figure 74 of the EIR). If pollutant levels in exceedance of levels set by the California Health Services Department (CHSD) are discovered in the groundwater, those locations shall not be used as well sites. (Present CHSD pollutant level thresholds include 0.7 parts per billion (ppb) benzene, 640 ppb ethyl benzene, 100 ppb toluene, and 680 ppb zylene.)

- Refuse from disposal areas E and F (Figure 74 of the EIR) shall be collected and disposed of at an appropriate disposal site.

- The storage building near Location B which was not inspected on the site investigation and whose contents are, therefore, unknown, shall be opened and evaluated by a qualified site investigator. The contents of the building shall be inventoried and analyzed for potential health hazards. If hazardous materials are identified, appropriate remediation measures shall be implemented. All local, county, state and federal regulations shall be applied to ensure proper disposal of any hazardous material that may be found. If hazardous materials are found at this location, a manifest and a site closure report shall be provided to the County Department of Public Works prior to the issuance of a building permit.

*Implementation Procedures-* The applicant shall retain the services of a certified hazardous materials consultant to remove the hazardous materials from the locations identified on the project site. The consultant shall coordinate clean up with the City, County, State and Federal agencies responsible for clean-up of hazardous materials. The consultant shall report to the City Planning Department on progress of the clean-up of the site including information as to what non-City agency requirements were fulfilled.

*Implementation Schedule-* Hazardous materials shall be removed from the site prior to the issuance of grading permits in affected areas of the site.
Regulatory/Enforcement Agency- City of Palmdale Planning Department, Los Angeles County Public Works Department, Los Angeles County Department of Health Services.

Issue- Antelope Valley Public Landfill

Impacts- Development of the proposed project would bring developed uses up to the boundary of the Antelope Valley Public Landfill’s proposed expansion area. This area would abut a 1,270 foot length of Planning Area 13 (golf course) north of City Ranch Road. A portion of residential Planning Area 8 would be within 1,000 feet of the landfill expansion boundary. This is considered a significant adverse impact.

Mitigation Measures

- The applicant shall keep all residential development a minimum of 1,000 feet west of the proposed landfill expansion boundary in accordance with the City of Palmdale’s proposed Solid Waste Management Plan. The southeast corner of Planning Area 8 would need to be in the landfill buffer area and kept free of residential development (Figure 77 of the EIR). Prior to development occurring within Planning Area 8, a permanent easement which includes land within 1,000 feet of the northwest and southwest corners of the landfill expansion area shall be recorded. Within this easement, the construction of residences shall be prohibited.

- To minimize dust and visual impacts, the applicant shall provide a landscape buffer of mature vegetation along the common boundary line with the Antelope Valley Public Landfill and along the boundary of Planning Area 8 or any other residential properties that may be affected.

- In accordance with California Department of Real Estate disclosure format and procedures, all potential buyers purchasing real estate in City Ranch located within 1,200 feet of the landfill boundary shall be notified of that circumstance.

Implementation Procedures- Tract maps for Planning Area 8 shall be designed to keep residential structures out of the area within 1,000 feet of the Antelope Valley Public Landfill property line. Landscape plans shall be reviewed by the Planning Department with regard to the adequacy of screening in areas from which the Antelope Valley Public Dump would be visible. The applicant shall prepare a buyer information package indicating the location of the Antelope Valley Public Landfill and areas of the site where the landfill would be visible.

Implementation Schedule- Tentative tract maps for tracts within 1,000 feet of the Antelope Valley Public Landfill boundary shall be submitted by the applicant to the Los Angeles County Department of Health Services for review prior to approval by
the Palmdale Planning Department. Landscape plans shall be reviewed by the City Landscape Architect with regard to adequacy of screening against the Antelope Valley Public Landfill prior to issuance of building permits for affected lots. The City approved buyer information package shall be supplied by the applicant to all prospective owners of property within 1,200 feet of the Antelope Valley Public Landfill. Prior to the finalization of any purchase agreements for property within 1,200 feet of the Antelope Valley Public Landfill, the applicant shall provide to the City Planning Department signed disclosure statements from prospective buyers of such property.

*Regulatory/Enforcement Agency-* City of Palmdale Planning Department and the Los Angeles County Department of Health Services.
APPENDICES
APPENDIX A

Notice of Preparation
NOTICE OF PREPARATION

TO: [Responsible or Trustee Agency]  FROM: [Lead City Agency]

Planning Department
712 East Palmdale Boulevard
Palmdale, California 93550

SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT

Project Title: City Ranch Specific Plan  Case No.

Project Applicant (if any): Kaufman & Broad Land Company of Southern California, Inc.

The City of Palmdale will be the Lead Agency and will prepare an environmental impact report for the project identified above. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by this City when considering your permit or other approval for the project.

The project description, location and the probable environmental effects are contained in the attached materials.

☐ A copy of the Initial Study is attached.

☐ A copy of the Initial Study is not attached.

Because of the time limits mandated by state law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to ______________________ at the address of the lead City Agency as shown above. We will need the name of a contact person in your agency.

NOTE: If the responsible or trustee agency is a state agency, a copy of this form must be sent to the State Clearinghouse in the Office of Planning and Research, 1400 Tenth Street, Sacramento, California 95814. A state identification number will be issued by the Clearinghouse and should be thereafter referenced on all correspondences regarding the project, specifically on the title page of the draft and final EIR and on the Notice of Determination.

Signature: ______________________  Date: ______________________

Title: ______________________  Telephone No. (805) 272-9673
City of Palmdale
Planning Department
712 East Palmdale Boulevard
Palmdale, California  93550

CALIFORNIA ENVIRONMENTAL QUALITY ACT

INITIAL STUDY AND CHECKLIST

Lead City Agency ____________________________     Date _____________

Planning Department ____________________________

Project Title/No. ______________________________     Case No. ____________

City Ranch Specific Plan
Project Description: The City Ranch Specific Plan is a Land Use Regulatory Plan and Master Plan of Development. The project site consists approximately 1,985 acres proposed for residential (1,110.1 acres), commercial (14.7 acres), open space/parkland/schools (823.4 acres) and roadways (36.8 acres). The residential uses will include 3,691 single-family detached units, 962 single-family attached units and 547 multi-family units.

Project Location: Approximately 1,985 acres approximately two (2) miles west of the Antelope Valley Freeway (SR14) south of Elizabeth Lake Road.

<table>
<thead>
<tr>
<th>Existing Zoning Specific Plan Zone</th>
<th>Max. Density Zoning</th>
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<td>3.0 du/acre</td>
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<th>Max. Density Plan</th>
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<th>Does not conform to Plan</th>
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<td>City Ranch Specific Plan</td>
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<tr>
<th>Plan Density Range</th>
<th>Project Density</th>
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</thead>
<tbody>
<tr>
<td>3.0 du/acre</td>
<td>2.62 du/acre (gross)</td>
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DETERMINATION (to be completed by Lead City Agency)

On the basis of the attached initial study checklist and evaluation:

NEGATIVE DECLARATION ☐ I find the proposed project could not have a significant effect on the environment, and a Negative Declaration will be prepared.

MITIGATED NEGATIVE DECLARATION ☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described on an attached sheet have been added to the project. A Mitigated Negative Declaration will be prepared. (See attached condition(s).)

ENVIRONMENTAL IMPACT REPORT ☑ I find the proposed project may have a significant effect on the environment, and an Environmental Impact Report is required.

Signature: ____________________________________  Title: __________________________
**BACKGROUND**

Proponent Name  
Kaufman & Broad Land Company of Southern California, Inc.  
Antelope Valley Division  

Phone  
(213) 312-1200

Proponent Address  
11601 Wilshire Boulevard, 11th Floor  
Los Angeles, California  
90025-1748

Agency Requiring Checklist  
Date Submitted

Proposal Name (if applicable)

**ENVIRONMENTAL IMPACTS** (Explanations of all “yes” and “maybe” answers are required to be attached on separate sheets.)

1. **EARTH.** Will the proposal result in:  
   a. Unstable earth conditions or in changes in geologic substructure?  
   b. Disruptions, displacements, compaction or overcovering of the soil?  
   c. Change in topography or ground surface relief features?  
   d. The destruction, covering or modification of any unique geologic or physical features?  
   e. Any increase in wind or water erosion of soils, either on or off the site?  
   f. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake?  
   g. Exposure of people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards?  

2. **AIR.** Will the proposal result in:  
   a. Air emissions or deterioration of ambient air quality?  
   b. The creation of objectionable odors?  
   c. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?  
   d. Expose the project residents to severe air pollution conditions?  

3. **WATER.** Will the proposal result in:  
   a. Changes in currents, or the course or direction of water movements, in either marine or fresh waters?  
   b. Changes in absorption rates, drainage patterns, or the rate and amounts of surface water runoff?  
   c. Alterations to the course or flow of flood waters?  
   d. Change in the amount of surface water in any water body?  
   e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?  
   f. Alteration of the direction or rate of flow of ground waters?  
   g. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?  
   h. Reduction in the amount of water otherwise available for public water supplies?  
   i. Exposure of people or property to water related hazards such as flooding or tidal waves?  
   j. Changes in the temperature, flow, or chemical content of surface thermal springs?
4. PLANT LIFE. Will the proposal result in:
   a. Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops and aquatic plants)?.. x
   b. Reduction of the numbers of any unique, rare or endangered species of plants?.. x
   c. Introduction of new species of plants into an area, or is a barrier to the normal replenishment of existing species?.. x
   d. Reduction in acreage of any agricultural crop?.. x

5. ANIMAL LIFE. Will the proposal result in:
   a. Change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms or insects)?.. x
   b. Reduction of the numbers of any unique, rare or endangered species of animals?.. x
   c. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?.. x
   d. Deterioration to existing fish or wildlife habitat?.. x

6. NOISE. Will the proposal result in:
   a. Increases in existing noise levels?.. x
   b. Exposure of people to severe noise levels?.. x

7. LIGHT AND GLARE. Will the proposal result in:
   a. Produce new light or glare from street lights or other sources?.. x
   b. Reduce access to sunlight of adjacent properties due to shade and shadow?.. x

8. LAND USE. Will the proposal result in an alteration of the present or planned land use of an area?.. x

9. NATURAL RESOURCES. Will the proposal result in:
   a. Increase in the rate of use of any natural resources?.. x
   b. Depletion of any non-renewable natural resource?.. x

10. RISK OF UPSET. Will the proposal involve:
    a. A risk of an explosion or the release of hazardous substances (including, but not limited to, oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions?.. x
    b. Possible interference with an emergency response plan or an emergency evacuation plan?.. x

11. POPULATION. Will the proposal result in:
    a. The relocation of any persons because of the effects upon housing, commercial or industrial facilities?.. x
    b. Change in the distribution, density or growth rate of the human population of an area?.. x

12. HOUSING. Will the proposal result in:
    a. Affect existing housing, or create a demand for additional housing?.. x
    b. Have an impact on the available rental housing in the community?.. x
    c. Result in demolition, relocation or remodeling of residential, commercial, or industrial buildings or other facilities?.. x

13. TRANSPORTATION/CIRCULATION. Will the proposal result in:
    a. Generation of additional vehicular movement?.. x
    b. Effects on existing parking facilities, or demand for new parking?.. x
    c. Impact upon existing transportation systems?.. x
    d. Alterations to present patterns of circulation or movement of people and/or goods?.. x
    e. Alterations to waterborne, rail or air traffic?.. x
    f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians?.. x
14. PUBLIC SERVICES. Will the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:
   a. Fire protection?................................................................. X
   b. Police protection?............................................................. X
   c. Schools?............................................................................. X
   d. Parks or other recreational facilities?................................... X
   e. Maintenance of public facilities, including roads?................ X
   f. Other governmental services?.............................................. X

15. ENERGY. Will the proposal result in:
   a. Use of exceptional amounts of fuel or energy?..................... X
   b. Increase in demand upon existing sources of energy, or require the development of new sources of energy?......................... X

16. UTILITIES. Will the proposal result in a need for new systems, or alterations to the following utilities:
   a. Power or natural gas?.......................................................... X
   b. Communications systems?.................................................... X
   c. Water?.................................................................................. X
   d. Sewer or septic tanks?.......................................................... X
   e. Storm water drainage?.......................................................... X
   f. Solid waste and disposal?...................................................... X

17. HUMAN HEALTH. Will the proposal result in:
   a. Creation of any health hazard or potential health hazard (excluding mental health)?......................................................... X
   b. Exposure of people to potential health hazards?........................ X

18. AESTHETICS. Will the proposed project in:
   a. The obstruction of any scenic vista or view open to the public?... X
   b. The creation of an aesthetically offensive site open to public view?.. X
   c. The destruction of a stand of trees, a rock outcropping or other locally recognized desirable aesthetic natural feature?.................. X
   d. Any negative aesthetic effect?.................................................. X

19. RECREATION. Will the proposal result in an impact upon the quality or quantity of existing recreational opportunities?......................... X

20. CULTURAL RESOURCES:
   a. Will the proposal result in the alteration of or the destruction of a prehistoric or historic archaeological site?........................... X
   b. Will the proposal result in adverse physical or aesthetic effects to a prehistoric or historic building, structure, or object?............... X
   c. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values?.................... X
   d. Will the proposal restrict existing religious or sacred uses within the potential impact area?....................................................... X

21. MANDATORY FINDINGS OF SIGNIFICANCE.
   a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?................................. X

4
b. Does the project have the potential to achieve short-term, to the
disadvantage of long-term, environmental goals?..........................  
YES  MAYBE  NO

c. Does the project have impacts which are individually limited, but
cumulatively considerable?  
YES  MAYBE  NO

d. Does the project have environmental effects which cause substantial
adverse effects on human beings, either directly or indirectly?.........  
YES  MAYBE  NO

**DISCUSSION OF ENVIRONMENTAL EVALUATION** (Attach additional sheets if necessary.)

Discussions of environmental evaluation for earth, air, water, plant life, animal life, noise, light and glare, land use, risk of upset, population, transportation/circulation, public services, energy, utilities, human health, aesthetics, recreation, cultural resources and mandatory findings of significance are attached.

<table>
<thead>
<tr>
<th>Prepared by</th>
<th>Title</th>
<th>Telephone</th>
<th>Date</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>(805) 277-9673</td>
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* "Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.*
1. Earth

The proposed project site is located in an area that can be divided into three geomorphic regions. Each region exhibits a different geologic character.

The southern portion of the site is located along the northern flank of the Sierra Pelona. This is an area of steep mountain slopes with deeply incised drainage courses. Runoff from the Sierra Pelona flows onto the site predominantly by sheet flow.

The central portion of the site consists of gently sloping alluvial fans that have relatively uniform topographic expression. The surfaces are moderately dissected with intervening drainage courses which direct runoff to the north and northeast. Slopes are relatively flat or gently sloping to the north or northeast.

The northern portion of the site is located within the San Andreas rift zone and includes two prominent northwest-southeast trending ridges with intervening parallel valleys. Within this area, slopes range from very steep along the ridge flanks to flat within the valley floors. Drainage in this area varies but is predominately to the east, south of the San Andreas fault and to the north/northwest elsewhere.

The site is located across both the San Andreas and Little Rock fault zones and may be subject to severe seismic intensities. A portion of the site is subject to the Alquist-Priolo Special Studies Zone provisions.

According to Plate No. 14.7 of the Palmdale Community Plan (November, 1975), a portion of site appears to be an area of moderate to high soil erosion potential. According to Plate No. 14.5, a portion of the site appears to be located in an area designated as having moderately unstable to unstable slopes.

2. Air

The proposed development of the site will increase both stationary and mobile emissions. The proposed 5,200 residential living units and commercial uses will require an increase in electrical power plant generation which will result in off-site increases in stationary emissions. Additionally, vehicle traffic to and from the site will increase mobile emissions. No uses are anticipated on-site that would generate extraordinary emissions.
3. Water

The site is located in an area that drains predominately to the north and east. Development of the site may require alteration of existing drainages. Additionally, the California Aqueduct crosses the northeastern portion of the site. Because the southern portion of the site is adjacent to the steep mountain slopes of the northern flank of the Sierra Pelona, portions of the site are exposed to sheetwash and local flooding potential. Several of the drainages crossing the site are identified as blue-line streams. A portion of the site is in the 100-year flood line of the Ana Verde Creek.

Wells may be developed on the property to provide irrigation water. Potable water will be acquired by the County Waterworks District No. 34 who have indicated that most of the water supply will be taken through AVEK's allotment of aqueduct water. However, should that supply be interrupted, groundwater would be pumped from existing off-site wells to provide continued service.

4. Plant Life

The existing vegetation of the site consists of primarily low brush, wild grassland and native desert vegetation including junipers and Joshua trees. At least one rare plant, the beaver tail cactus, has been located on-site.

5. Animal Life

The site is primarily vacant and adjacent areas that provide habitat for various animals and birds. Although no unique habitat exists on-site, it provides an area of transition for migratory wildlife. The area may provide habitat for Mohave ground squirrel (*Spermophilus mohavensis*), Le Conte's thrasher (*Toxostoma lecontei*), Cooper's hawk (*Accipiter cooperii*), San Diego horned lizard (*Phrynosoma coronatum blainvillei*), southern rubber boa (*Charina bottae umbratica*), and possibly, Least Bell's vireo (*Vireo bellii arizonae*).

6. Noise

As a result of development, ambient noise levels will most likely increase. During grading and construction, noise levels may be intense. The majority of the site is proposed for residential development. Depending upon project phasing, grading and construction activities may generate noise levels that exceed 65 dB(A), the state standard for exterior noise levels in residential areas.

7. Light and Glare

Development will introduce new sources of light and glare. Street lighting, exterior home/commercial lighting and automobile traffic will substantially increase ambient evening light conditions.
8. Land Use

The project site is currently within the sphere of influence of the City of Palmdale and is included in the planning area of the City’s General Plan Land Use Element; the site is designated as City Ranch Specific Plan, maximum density 3 dwelling units per acre. The site is designated in the County of Los Angeles’ Antelope Valley Areawide General Plan as “non-urban.” Development of the site would result in a substantial change in land use (agricultural to residential).

9. Natural Resources

No discussion required.

10. Risk of Upset

With the presence of the California Aqueduct on-site and its proximity to the San Andreas rift zone, emergency response plans, if they exist, need to be considered in light of potential changes that may be required as a result of the proposed development.

11. Population

The population of the area will change. Based on 2,698 persons per household (Department of Finance), the proposed project will increase area population by 14,030 people. The resultant density will be 4,524 people per square mile.

12. Housing

No discussion required.

13. Transportation/Circulation

The proposed project will have significant effects on the local road system; as a result of the residential developments, 43,444 average daily trips (ADT) will be generated; depending on the commercial uses realized, the commercial area can generate 5,000 and 15,000 ADTs.

Increased traffic demands will likely occur on Elizabeth Lake Road/Avenue Q, Avenue S, 25th Street West and corresponding interchanges with SR14 (Antelope Valley Freeway). Specific intersections that may be impacted include:

- Elizabeth Lake Road/25th Street West
- Elizabeth Lake Road/Avenue P-8
- Elizabeth Lake Road/Palmdale Boulevard/10th Street West
- Avenue S/10th Street West
Avenue Q/SR 14
Avenue S/SR14
Avenue R/10th Street West

As a result of increased traffic, potential traffic hazards to motor vehicles, bicyclists and pedestrians may increase.

14. Public Services

The proposed development will have a need for fire and police protection. Presently, the area is serviced by the County of Los Angeles for both fire and police requirements.

The project is located in the Antelope Valley School District and will generate a substantial number of students at all levels. The project is proposing two elementary school sites of 10 acres each with an additional two potential sites identified.

The proposed project has identified open space and parklands including:

- 393.8 acres of open space/conservation area
- 109.4 acres of open space/public parks
- 232.2 acres of open space/golf course

The site will be accessed through a site circulation plan consisting of public roadways.

15. Energy

The project may require an increase in demand upon existing electric and natural sources.

16. Utilities

A complete infrastructure will need to be constructed for the site. New or improved service supply systems for natural gas and electricity, water, sewer and communications will be required. Although the project area is serviced by the Palmdale Wastewater Reclamation Plant, lines do not extend to the project site. Water supply to the site is provided by District No. 34. Because of the site's proximity to the California Aqueduct, storm water drainage systems will need to be designed to direct surface water runoff away from the aqueduct. As a result of the increased site population, additional solid waste will be generated.
17. Human Health

Because the site has been previously used for agricultural purposes, residue from herbicides/pesticides that may have been used on-site may be present in on-site soils. Presence of high-tension electric transmission lines traversing the project site may expose future residents to electromagnetic radiation. Underground gasoline tanks present on-site must be assessed for a determination of proper abandonment and the possibility of leakage. Proximity of the Antelope Valley Landfill, in light of proposed expansion plans, may pose potential health impacts to project residents.

18. Aesthetics

Development of the site will substantially alter the present aesthetic conditions of the site. The primarily open rural condition will be transformed, albeit gradually, into a developed urbanized environment. The site is located below areas (topographically) and along hiking trails (North Side Trail) that will experience significant change in the viewshed.

19. Recreation

The proposed project may require additional recreational services/areas to accommodate the anticipated site population.

20. Cultural Resources

As a result of grading activities, archaeological or paleontological resources on-site may be disturbed.

21. Mandatory Findings of Significance

The proposed project may negatively impact rare plants known to exist on-site.

As a result of the environmental analyses resulting from the City's General Plan update and the consideration given to the project site under proposed land use designation changes (from "non-urban" to "specific plan"), long-term impacts may be identified.

The proposed project and cumulative projects will have impacts on traffic, air quality and other issues when considered together.
APPENDIX B

Responses to the
Notice of Preparation
Ms. Laurie Lile  
City of Palmdale  
Planning Department  
38306 - 9th Street, East  
Palmdale, CA 93550

September 28, 1989  
(916) 445-8733

Dear Ms. Lile:

Subject: Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) for the City Ranch Specific Plan  
SCH# 89008619

The Department of Conservation's Division of Mines and Geology has reviewed the NOP for the City Ranch Specific Plan project. We offer the following comments.

Due to the proximity of the San Andreas fault to the project site, the Draft EIR should include a detailed geologic and geotechnical investigation. Emphasis should be given to the potential for severe ground shaking and surface fault rupture in the project area.

If you have any questions regarding these comments, please contact Zoe McCrea, Division of Mines and Geology Environmental Review Officer, at (916) 322-2562.

Sincerely,

Dennis J. O'Bryant  
Environmental Program Coordinator

cc: Zoe McCrea, Division of Mines and Geology  
Richard B. Saul, Division of Mines and Geology
September 18, 1989

City of Palmdale
Planning Department
38306 - 9th Street East
Palmdale, CA 93550

Attn: Ms. Laurie Lile

Dear Ms. Lile:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above-referenced project. Items which should be covered in the draft environmental report for the project include, but are not limited to:

A. Trip generation/distribution including the method used to develop the percentages and assignment.

B. ADT, AM and PM peak-hour volumes for both the existing and future conditions. This should also include State Route 14 (Antelope Valley Freeway) and its interchanges with Palmdale Boulevard and Avenue S.

C. An analysis of future conditions which include project traffic and the cumulative traffic generated for all approved developments in the area.

D. Any mitigation proposed should be fully discussed in the document. These discussions should include, but not be limited to, the following:

* financing
* scheduling considerations
* implementation responsibilities
* monitoring
City of Palmdale
Attn. Ms. Laurie Lile

E. Other strategies, such as:

* ridesharing
* park-and-ride lots
* staging areas

The number of parking spaces should be determined based on a ratio of 25 spaces per 1,000 dwelling units.

We look forward to reviewing the DEIR. We expect to receive a copy from the State Clearinghouse. However, to expedite the review process, you may send two copies in advance to the undersigned at the following address:

Gary McSweeney
District 7 IGR/CEQA Coordinator
Transportation Planning & Analysis Branch
120 So. Spring Street
Los Angeles, CA 90012

Thank you for this opportunity to comment. If you have any questions regarding these comments, please contact me at (213) 620-2376.

Sincerely,

[Signature]

GARY McSWEENEY
IGR/CEQA Coordinator
Transportation Planning & Analysis Branch

cc: State Clearinghouse
DATE: September 7, 1989

TO: Reviewing Agencies

RE: The Palmdale Planning Department's NOP for the City Ranch Specific Plan SCH# 89090619

Attached for your comment is the Palmdale Planning Department's Notice of Preparation of a draft environmental Impact Report (EIR) for the City Ranch Specific Plan Project.

Responsible agencies must transmit their concerns and comments on the scope and content of the EIR, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of this notice. We encourage commenting agencies to respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Ms. Laurie Lile
Palmdale Planning Department
38306 9th Street East
Palmdale, CA 93550

with a copy to the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the review process, call Garrett Ashley at 916/445-0613.

Sincerely,

David C. Nunerkamp
Chief
Office of Permit Assistance

Attachments

cc: Laurie Lile
Appendix L

Notice of Determination
NOTICE OF DETERMINATION

TO:  County Clerk
     County of Los Angeles
     111 North Hill Street
     Los Angeles, CA  90012

FROM:  City of Palmdale
        Planning Department
        38306 9th Street East
        Palmdale, CA  93550

Case Planner:  Laurie Lile

Applicant:  Kaufman and Broad of Southern California

Address:  38345-A 30th Street East
          Palmdale, CA 93550

Case:  Environmental Impact Report 89-03
       (City Ranch) for General Plan
       Amendment 91-04, Prezone 89-06 and
       Specific Plan 89-03 (City Ranch
       Specific Plan)

Description of Project:  Specific Plan 89-03, General Plan
                        Amendment 91-04, Prezone 89-06 and
                        Annexation of 1,985 acres of territory
                        into the City of Palmdale. The City
                        Ranch Specific Plan allows the
                        development of 5,200 dwelling units,
                        42 acres of commercial uses, and parks
                        and schools on the 1,985 acre site.
                        The General Plan Amendment and Prezone
                        support the Specific Plan.

Location:  The project is generally located south
           of Elizabeth Lake Road, east of the
           alignment of 40th Street West, north
           of the alignment of Avenue S, and west
           of 20th Street West.

The Environmental Impact Report was certified by the City
Council of the City of Palmdale on March 24, 1992. It has been
determined that the project will have a significant effect on
the environment in the following areas: electromagnetic
radiation, population impacts in regard to air quality,
off-site noise due to traffic, solid waste disposal, sheriff
services, facilities maintenance, library services,
jobs/housing balance, geologic hazards due to ground shaking and rupture associated with a seismic event, aesthetic and light and glare impacts caused by loss of open space and vegetation and grading and viewshed impacts, paleontological resources, and cumulative impacts to land use due to the change of land use on the site from existing agriculture uses to a suburban use. The City Council adopted a Statement of Overriding Considerations for the project in compliance with the provisions of the California Environmental Quality Act, as amended.

The EIR is on file and available for review at the City of Palmdale, Planning Department, 38306 9th Street East, Palmdale, California 93550

Dated: March 25, 1992

Molly Bogh, Director of Planning
City of Palmdale

MEB/lob

wp9266
Appendix M

City Council Resolution
CITY OF PALMDALE
COUNTY OF LOS ANGELES, CALIFORNIA

RESOLUTION NO. 92-58

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE, CALIFORNIA CERTIFYING ENVIRONMENTAL IMPACT REPORT 89-03 AND APPROVING GENERAL PLAN AMENDMENT 91-04 RELATING TO THE CITY RANCH PROJECT, SUBJECT TO CERTAIN SPECIFIED CONDITIONS

THE CITY COUNCIL OF THE CITY OF PALMDALE DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Applications were duly filed by the applicant, Kaufman and Broad, with respect to 1,985 acres of real property (hereinafter referred to as "the Territory") which is described in Exhibit "A" and depicted on Exhibit "B", attached hereto, requesting approval of General Plan Amendment 91-04, Pre-Zone 89-06 and Specific Plan 89-03. The Territory is within an area generally bounded by Elizabeth Lake Road on the north, the alignment of the extension of Avenue S on the south, the alignment of the extension of 20th Street West on the east and the alignment of the extension of 40th Street West on the west.

Section 2. The Territory is currently outside the territorial limits of the City and is the subject of a request for annexation to the City of Palmdale. The existing County General Plan Land Use designation for the Territory is Non-Urban 1 (.5 du/acre), and the existing zoning designation of the Territory is A-2-2 (Light Agricultural 2-acre minimum lot size). The City of Palmdale's existing General Plan Land Use designation for the Territory is City Ranch Specific Plan (maximum density 3 du/ac gross). The Territory is surrounded by property containing single family residences, a landfill, vacant County land having a County Zoning designation of A-2-2 (Light Agricultural 2-acre minimum lot size) and the proposed Ritter Ranch Specific Plan.

Section 3. General Plan Amendment 91-04 consists of two proposals: (1) eliminate the designation of individual planning areas in the City Ranch Specific Plan on the General Plan Land Use Map; and, (2) to amend the Land Use Plan and Land Use Element of the Palmdale General Plan to establish a designation of "City Ranch Specific Plan (2.62 du/gross acre)" for the 1,985-acre Territory.

Section 4. An initial study was prepared for the Project by the Planning Department Staff, pursuant to Section 15063 of the State CEQA Guidelines. The initial study, which was completed on September 1, 1989, identified that there was substantial evidence that the Project may have a significant environmental impact on several environmental resources and governmental services. Pursuant to State CEQA Guidelines 15064 and 15081, a decision was made to prepare an Environmental Impact Report ("EIR") for the Project.

Section 5. On September 6, 1989, a Notice of Preparation for the EIR was prepared and sent to the State Clearinghouse in the Office of Planning and Research for the
State of California and to other responsible agencies.

Section 6. On November 10, 1989 a contract was entered into between the City, the applicant and Environ Corporation ("Environ") of Calabasas, California whereby Environ agreed to be the lead consultant for the preparation of the Draft EIR for the Project. Thereafter, screencheck versions of the Draft EIR were presented to the City in June 1990, October 1990, and January 1991.

Section 7. On October 1, 1991, the Draft EIR was completed. Pursuant to State CEQA Guidelines Section 15065, the City prepared a Notice of Completion of the Draft EIR which was filed with the State Office of Planning and Research on October 3, 1991. The EIR was circulated to interested agencies between October 3, 1991 and November 18, 1991 for a 45 day comment period pursuant to State CEQA Guidelines Section 15087. Comments were received and responses prepared and incorporated into the EIR. A copy of the EIR is on file in the office of the Planning Department.

Section 8. On March 8, 1991, a contract was entered into between the City, the applicant and Gruen Associates ("Gruen") of Los Angeles, California, whereby Gruen agreed to be the lead consultant for the preparation of the Final EIR for the Project. Thereafter, responses were prepared and incorporated in the EIR for comments received during the 45-day comment period.


Section 10. Evidence, both written and oral, was duly presented to and considered by the Planning Commission at the aforesaid public hearings, including but not limited to staff reports dated December 18, 1991, January 15, 1992, and the additional correspondence provided for the Planning Commission meetings of January 15, January 20, January 23, January 27, January 30, February 5, February 6, and February 24, 1992, along with testimony by the applicant and other members of the public.

Section 11. The Planning Commission adopted Resolution No. 91-114 on February 24, 1992, recommending that the City Council certify the EIR, and certain amendments thereto as contained in Exhibits "A" and "B", attached to that Resolution.
Section 12. The Planning Commission adopted Resolution No. 92-13 on February 24, 1992, recommending that the City Council approve General Plan Amendment 91-04, Pre-Zone 89-06 and Specific Plan 89-03 for the Territory described in Exhibit "A", depicted on Exhibit "B" subject to the following conditions: (1) that the Draft "City Ranch Specific Plan (2.62 du/gross acres)" dated August 1, 1991 be revised to incorporate the changes to the text and exhibits of the Specific Plan which are listed in Exhibit "C" to Planning Commission Resolution 92-13; (2) that a development agreement within the meaning of California Government Code Sections 65864 through 65869.5 and acceptable to the City of Palmdale be approved and adopted by the City Council concurrently with the City Ranch Specific Plan; and (3) that the ordinance approving the development agreement between the City of Palmdale and the applicant for the area covered by the City Ranch Specific Plan become effective prior to the approval and completion of annexation of the Territory into the City. Additionally, the Planning Commission expressed its concern regarding the fiscal impacts of the Project and recommended that the City Council review such fiscal impacts and ensure that provisions are included in the development agreement to address any fiscal impacts to the City that have not adequately been addressed in the Specific Plan.

Section 13. The City Council conducted public hearings on EIR 89-03, General Plan Amendment 91-04, Pre-Zone 89-06 and Specific Plan 89-03 on March 17, 1992 and conducted a further public meeting on the applications and documents on March 24, 1992 at 7:30 p.m. at City Hall, Council Chambers, 708 E. Palmdale Blvd., Palmdale California. Notices of the time, place and purpose of the aforesaid meetings were duly provided in accordance with California Government Code Sections 65355 and 65090, and Public Resources Code Section 21092. A copy of the final EIR, including the Draft EIR, the comments to the EIR, the responses to the comments, the Planning Commission’s Resolution with amended language to the EIR and mitigation measures, and copies of Planning Commission minutes, have been available for public inspection in the Planning Department of the City and in the Council Chambers during public meetings on the Project.

Section 14. Evidence, both written and oral, was duly presented to and considered by the City Council at the aforesaid public hearings, including but not limited to staff reports dated March 10, and March 18, 1992, along with testimony by the applicant and other members of the public.

Section 15. With respect to General Plan Amendment 91-04, Pre-Zone 89-06, and Specific Plan 89-03, the City Council finds that the Draft EIR, the comments to the EIR and the responses to those comments have been received by the City Council, that the City Council has reviewed and considered those documents prior to acting on the applications, and finds, pursuant to State CEQA Guidelines Section 15090, that the Final EIR has been completed in compliance with CEQA, the State CEQA Guidelines and the City's CEQA guidelines. The City Council further finds, pursuant to Public Resources Code Section
21082.1 and State CEQA Guidelines Section 15084 (e) that the 
EIR has been independently analyzed by City Staff, the Planning 
Commission and the City Council, and that the EIR represents 
and reflects the independent judgement of the City with respect 
to these applications. With respect to Development Agreement 
92-2, the City Council withholds any environmental 
determination until it has reviewed the Development Agreement 
for consistency with the Environmental Impact Report.

Section 16. The City Council finds that the 
additional information provided in the staff reports 
accompanying the EIR, and the evidence presented in written and 
oral testimony presented at the above reference hearings and 
meetings, does not represent significant new information so as 
to require recirculation of the EIR pursuant to Public 
Resources Code Section 21082.1

Section 17. With respect to the potential significant 
environmental effects identified in the EIR, the City Council 
finds as follows:

A. PUBLIC HEALTH AND SAFETY: The EIR identifies the 
Project as having potential significant effects to health and 
safety caused by the possible existence of electromagnetic 
radiation, hazardous/toxic materials, and the proximity of the 
Project to the Antelope Valley Landfill.

1. Electromagnetic Radiation. With respect to, 
possible health effects caused by extremely low frequency (ELF) 
electromagnetic fields associated with overhead power lines, 
mitigation measures have been added (Section 5.27.3 of the EIR) 
to require a continuous six (6) foot high non-conductive fence 
along the perimeter of the high-voltage power line right of 
way. Additionally, active recreational uses have been 
prohibited in the powerline easement in Planning Area 18.

However, even with these mitigation measures, 
there may still be some potential unavoidable adverse impacts 
caused by locating housing and other uses in proximity to power 
transmission lines. The City Council finds that based upon the 
current state of scientific knowledge of this issue, these 
risks are speculative and do not warrant increased regulations 
and standards beyond what is specified in the EIR and Specific Plan. The 
City Council finds that such potential health risks have not 
been proven and thus do not warrant more significant changes to 
the Project. Thus, pursuant to Public Resources Code Section 
21081(c), the City Council finds that the potential health 
risk associated with the construction of habitable structures 
neat overhead transmission lines cannot be reasonably reduced 
unless greater setbacks are imposed which would have a 
significant effect on the available uses of the Project site 
and the overall design of the Project. The benefits of 
reducing the potential, but still unknown, health risks 
associated with residing near these lines do not outweigh the 
environmental benefits of the proposed Project, including the economic 
benefits to the City from the creation of new jobs and the 
construction of important and needed public improvements and 
infrastructure.
2. Hazardous/Toxic Materials. Development of the Project would be constrained by the presence of seven sites identified in the EIR as potential hazard areas. Unless proper cleanup and disposal procedures are carried out, the hazards contained in these sites could pose a health threat. Requirements have been imposed on the Project to investigate, test, remove and dispose of soil contaminated with hazardous/toxic materials (Section 5.28.3 of the EIR). Implementation of the mitigation measures as set forth in that section of the EIR will reduce Project-related impacts with regards to hazardous/toxic materials to less than significant levels.

3. Antelope Valley Landfill. Development of the proposed Project will bring residential units within .6 miles of the existing landfill, and within approximately 600 feet of the common boundary between the two properties. With respect to the Landfill, a 1,000 foot setback has been required between the residential portions of the Project and the landfill. Mitigation measures have been included (Section 5.29.3 of the EIR) which require disclosure of the landfill to residents within a 1,200 feet of the landfill and a landscape buffer of mature vegetation along the eastern boundary of Planning Area 8 to minimize dust and visual impacts. Implementation of these mitigation measures will reduce Project-related impacts to the Antelope Valley Landfill to less than significant levels.

B. LAND USE: The EIR identifies that the proposed Project will result in an increase in population, and a subsequent increase in demands for City services, in traffic volumes, in air pollution emissions, and other human-related impacts. These issues are specifically addressed in Sections 5.4, 5.8, 5.9, 5.10, 5.13, 5.14, 5.15, 5.16, 5.17, 5.18, 5.19, 5.20, 5.21, 5.22, 5.23 and 5.24 of the EIR. Discussion of potentially significant effects and proposed mitigation measures relative to these issues are discussed in Section 17 (C), subparagraphs 1 through 4 of this Resolution.

Mitigation measures have been required which will reduce significant adverse Project-related land use impacts to a level of insignificance if implemented. These mitigation measures require that the proposed Project comply with the site specific zoning and subdivision standards contained in the City Ranch Specific Plan and that an annual monitoring report indicating compliance with the Specific Plan document be provided.

However, the EIR additionally indicates that the Project will contribute to significant cumulative land use impacts due to the change of land use on the site from existing agriculture uses to a suburban use. With respect to these cumulative effects, the City Council finds, pursuant to Public Resources Code Section 21081, that the remaining environmental effects are acceptable due to the fact that a reduction in the size of the Project or adoption of the environmentally superior alternative to the Project is not economically feasible in this instance because significant public infrastructure for the Project will be required to serve the Project even if the
Project is developed at reduced densities. The ability of the Project applicant and property owners to pay the costs of those infrastructure improvements requires a project of sufficient size to make the required public infrastructure costs affordable. Thus, the feasibility of the Project is dependent on the proposed size of the Project. Consequently, these economic factors, as further defined in Section 17 of this Resolution, make infeasible further mitigation alternatives to the Project which would lessen or reduce the impacts of the Project on open space. In addition, the Project is anticipated to provide needed economic benefits to the City, including the creation of new jobs, needed facilities for schools, parks and other public facilities, and will assist in the orderly expansion of the City of Palmdale.

C. POPULATION: The EIR identifies that the Project will result in an increase in population. This increase in population will affect Air Quality, Traffic, Noise and Public Services and Infrastructure as described in Sections 5.9, 5.10, 5.8 and 5.13 through 5.24 of the EIR. Mitigation measures listed in the EIR will lessen the impact of increased population. However, many of the natural resources on site will be significantly impacted by the Project even after mitigation is applied to them. These are discussed in the following paragraphs.

1. Air Quality. The EIR indicates that the Project will have a potentially significant environmental effect on air quality (EIR pages 5-165 through 5-171). Long and short term impacts include an increase in the fugitive dust emissions generated during grading and construction activities and from motor vehicle and stationary source emissions during and after Project buildout. Mitigation measures have been incorporated into the Project which reduce but not eliminate the environmental impacts. The measures include compliance with dust control regulations and cessation of grading construction activities during times of high winds or stage 2 smog alerts. The applicant shall be required to comply with applicable regulations of the South Coast Air Quality Management District, to provide pedestrian walkways throughout the Project, bus turnouts along major arterials and participate in any trip reduction programs adopted by the City for future development applications (Section 5.9.3, 1 through 15 in the EIR).

With respect to the significant impacts to air resources that cannot be mitigated to a level of insignificance, the City Council finds, pursuant to Public Resources Code Section 21081(c), that the benefits of the Project, including but not limited to the creation of new jobs and the expansion and improvement to the economy of the Antelope Valley area, the preservation of a significant amount of open space, and the establishment of recreational areas for the public, outweigh the unavoidable impact that the Project will have on air quality.

2. Transportation. The EIR indicates that the Project will have significant environmental impacts on traffic circulation. Mitigation measures have been imposed to change
the Project so as to reduce significant circulation impacts associated with the Project to a level of insignificance. These measures, as contained in Section 5.8.3 of the EIR, require that the applicant construct all necessary roadways subject to City standards and that the applicant prepare a Transportation Demand Management Plan to determine the necessary improvements for impacts generated by the Project. Also, the applicant will participate in the construction of a park-and-ride facility located on- or off-site to reduce vehicle trips and vehicle miles traveled. Additional mitigation to alleviate impacts to State Route 14 cannot feasibly be applied to this project due to the fact that these impacts are regional in nature and will be addressed in the Los Angeles County Transportation Commission's Congestion Management Plan.

3. Noise. The EIR identifies the Project as having potentially significant short-term impacts from increased noise levels due to construction activities, and long-term impacts from increased noise levels resulting from vehicular traffic and human-related activities on the site. Construction impacts will primarily result from Project-related grading and construction and may present a short-term nuisance to residents occupying dwelling units in the Project area and to residents of the residential projects to the north. To mitigate these short-term impacts, measures contained in Section 5.10.3 of the EIR require that hours of construction activities be limited, that temporary noise attenuation barriers be provided, and that stationary equipment be placed such that emitted noise is directed away from sensitive noise receivers.

Long-term impacts associated with increased noise levels will necessitate the placement of noise attenuation barriers along certain arterials adjacent to residential and school planning areas (Section 5.10.3 of the EIR). Also, residential and school site planning shall be designed to locate noise sensitive areas away from adjacent roadways to minimize intrusive noise levels (Section 5.10.3 of the EIR).

Provided the recommended mitigation measures are properly applied, construction and operation of the proposed Project are not expected to create significant noise impacts on-site. However, some off-site areas along Elizabeth Lake Road containing sensitive receptors such as residences and schools may be significantly impacted. With respect to this significant impact, the City Council finds pursuant to Public Resources Code Section 21081(c) that the benefits of the Project, including but not limited to the creation of jobs and the expansion and improvement to the economy of the Antelope Valley area, the preservation of open space and the creation of recreational areas, outweigh the unavoidable impact that the Project will have on noise levels.

4. Public Services and Infrastructure. The EIR identifies the Project as having a potentially significant effect on various public services and utilities (as addressed in Section 5.16.2, Water; Section 5.17.2, Sewage Disposal; Section 5.18.2, Solid Waste; Section 5.19.2, Communications; Section 5.20.2, Sheriff Services; Section 5.21.2, Fire and Emergency Medical Services; Section 5.13.2, Energy; Section 5.14.2, Electricity; Section 5.15.2, Natural Gas; Section 5.22.2, Schools; Section 5.23.2, Parks and Recreation; and,
Section 5.24.2, Facilities Maintenance.

a. Water Service. The Project site will require annexation to Los Angeles County Waterworks District No. 34. The Waterworks District obtains its water from groundwater wells and the State Water Project supplier, AVEX. On-site, groundwater wells and a turnout from the aqueduct provide a supply of untreated water suitable for landscape irrigation and construction water. After development, the Project will require 5.22 million gallons per day of water, 3.97 million gallons per day of which must be potable. District 34 has indicated that they would be capable of delivering the water necessary to serve the proposed Project through existing and proposed water delivery systems, and through existing sources of water supply.

With respect to potentially significant effects to ground water supply, the impacts were considered in the EIR, the comments to the EIR and the responses to those comments, as well as at the public hearing on the Project. Based upon the evidence presented, the City Council finds that this Project will not have a significant individual or cumulative effect on ground water supplies due in part to water conservation measures incorporated into the Project, including the use of low-flow toilets, faucets and shower heads, low water-consuming landscape plantings and drip irrigation systems as specified in Section 5.16.3 of the EIR and the "conjunctive use policy" (use of State Water Project water in conjunction with ground water resources) of the Project’s water supplier, Los Angeles County Waterworks District Number 34. The conjunctive use policy of the Waterworks District will use State Water Project water in times when plentiful to recharge the groundwater basin and use groundwater in times when State water is scarce. Application of this policy is anticipated to keep groundwater levels above the 1980 historic low so as to preserve the capability to replenish the aquifer while at the same time providing sufficient water to serve the growing needs of the Antelope Valley.

b. Sewage Disposal. A trunk sewer line will need to be constructed in the vicinity of the Project site to accommodate the 1.27 million gallons of wastewater generated by the Project. Although this amount of wastewater would exceed the current capacity of the Water Reclamation Plant by 1.27 mgd, planned expansions to the plant will accommodate this volume of wastewater. The applicant will be required to construct all sewer infrastructure extensions and improvements as specified in the EIR and pay a fee in order to connect to the Sanitation District’s system. The mitigation measures will reduce the Project-related impact to sewage disposal to less than significant levels (Section 5.17.3 of the EIR).

c. Solid Waste. The proposed Project would generate approximately 54,000 pounds of solid waste per day. This waste would be deposited in the Antelope Valley Landfill. Assuming that the landfill expansion occurs, the contribution of solid waste by this Project could be accommodated. However, in the event that the expansion does not occur, impacts to solid waste disposal could be
significant. In the event that expansion of the Antelope Valley Landfill does not occur in a timely manner, the Project, along with the other surrounding developments, would contribute to cumulatively significant impacts to solid waste disposal (Section 5.19.3 of the EIR).

With respect to the significant impacts to the need for solid waste disposal facilities that cannot be mitigated to a level of insignificance, the City Council finds, pursuant to Public Resources Code Section 21061(c), that some of these impacts will be mitigated in the future by the City's Recycling Element and that the benefits of the Project, including but not limited to the creation of new jobs and the expansion and improvements to the economy of the Antelope Valley area, the preservation of open space, and the establishment of recreational areas for the public, outweigh the unavoidable impacts that the Project will have on the generation of solid waste and the need for solid waste disposal facilities.

d. Communications. Development of the Project site will require the extension of telephone infrastructure into the Project area. Pacific Bell has indicated that provision of service to the Project site will not affect existing service levels. The high capacity transcontinental lines are contained within easements which may be encroached upon with development of the site. Development along the AT&T easement could result in physical damage to the lines causing unanticipated interruption of AT&T's long distance telephone service. Also, development of the Project site will exacerbate the existing radio communications problems experienced in the outlying portions of Palmdale.

In order to mitigate impacts on telephone service, the applicant will be required to get written approval for all work proposed within the boundaries of the AT&T easements. Additionally, the applicant will be required to mitigate the impacts on the need for emergency communications facilities by the contribution of a fair share towards the implementation of the findings of the radio communications needs study currently being prepared for the City (Section 5.19.3 of the EIR).

e. Sheriff Services. Development of the Project would necessitate additional sheriff personnel to accommodate the increased demand on sheriff services. Short-term impacts will occur during the construction phase of the Project caused by construction material thefts. After residents occupy the area, impacts typical of any suburban development will occur. The Project's impacts to sheriff services will be partially mitigated through payment of property taxes to the County of Los Angeles, a portion of which is returned to the City of Palmdale and utilized to finance police services. Full mitigation of impacts to police services by the Project is determined to be infeasible at this time, due to fiscal constraints and the City's lack of authority to determine sheriff facility construction and operation. With regard to this impact, the City Council finds that the benefits of the Project, including but not limited to creation of new
jobs and the expansion and improvements to the economy of the Antelope Valley area, as contained in Section 19 of this Resolution, will outweigh sheriff service impacts.

f. Fire and Emergency Medical Services. Development of the Project would increase the need for additional fire services within and adjacent to the Project. Impact to the need for fire services will be mitigated by the requirement that the applicant provide a fire station in Planning Area 34 of the Specific Plan (Section 5.21.3 of the EIR). The proposed on-site fire station would provide adequate local emergency medical response and fire-fighting services for the proposed Project and reduce Project-related impacts to fire and emergency medical services to less than significant levels.

g. Energy Sources. Development of the Project as currently proposed would result in the expenditure of 98,975 kilowatt hours of electrical energy, 924,300 cubic feet of natural gas, and 21,845 gallons of gasoline on a daily basis. No unavoidable adverse impacts are expected to occur due to consumption of electricity. Impacts on natural gas consumption will be mitigated by the provision of thermal wall and ceiling insulation, double glazed windows, pilotless ignition stoves, water heaters and heating and cooling systems (Section 5.15.3 of the EIR).

h. Schools. In order to mitigate the impacts of the Project on the need for school facilities, the applicant will be required to dedicate school sites and construct new and/or interim school facilities as determined necessary by the applicable School District (Section 5.22.3 of the EIR). Additionally, mitigation measures as specified in Section 5.22.3 include the applicant's participation in a Mello-Roos district, and payment of a percentage of school construction costs. With these mitigation measures, the City Council finds that the Project's impacts on school facilities have been mitigated to a level of insignificance.

i. Parks and Recreation. The need for park and recreational facilities caused by the Project will be mitigated by the dedication and construction of one community park and four neighborhood parks (Section 5.23.3 of the EIR). Additionally, hiking, bicycling and equestrian trails will be provided throughout the Project site.

j. Facilities Maintenance. Development of the proposed Project will increase the City's maintenance responsibilities by adding significant areas of streets, drainage facilities, parks and parkways. These increases will be partially mitigated by increases in the City's general fund generated by the development. However, full mitigation of maintenance impacts by the Project is determined to be infeasible, due to the inconsistency of such requirement with previous development Project approvals within the City. The City Council finds that impacts to maintenance services will be outweighed by the benefits of the Project, including but not limited to creation of new jobs and the expansion and improvements to the economy of the Antelope Valley area, as
described in Section 19 of this Resolution.

k. Library Services: Development of the City Ranch project would result in a population requiring library services equal to 35,100 volumes, 7 staff persons, and 11,232 square feet of library facilities. The Project's impacts to library services have not been mitigated to a level of non-significance through the provisions of the Specific Plan and Environmental Impact Report. The City Council has determined that full mitigation of library impacts by this Project would be inconsistent with previous City approvals of development projects, and is therefore infeasible. With regard to library impacts, the City Council finds that the benefits of the Project, including but not limited to creation of new jobs and the expansion and improvements to the economy of the Antelope Valley area, as contained in Section 19 of this Resolution, will outweigh library service impacts.

D. Housing: The EIR identifies as a potential significant environmental effect, the impact to the jobs/housing balance. Should the Project be developed as proposed, it would exacerbate the region's declining jobs/housing balance ratio. Mitigation measures (Section 5.6.3 and Section 5.9.3 of the EIR) require that the applicant implement traffic and air quality measures to mitigate the secondary impacts associated with increased residents and housing. However, even after implementation of the recommended mitigation measures, the proposed Project's impact on the jobs/housing balance cannot be fully mitigated and remains a significant unavoidable adverse impact.

With respect to significant impacts to the jobs/housing balance that cannot be mitigated to a level of insignificance, the City Council finds, pursuant to Public Resources Code Section 21061(c), that the benefits of the Project, including but not limited to the creation of new jobs and the expansion and improvements to the economy of the Antelope Valley area, the preservation of open space, and the establishment of recreational areas for the public, outweigh the unavoidable impacts that the Project will have on the jobs/housing balance of the subregion.

E. Earth (Geology): The EIR identifies that the Project will be subject to certain geologic risks from seismic shaking, liquefaction, seismic settlement, seismic ground failure, earthquake-induced flooding, and landslides. Changes or alterations have been required in, or incorporated into, the Project which will reduce the geologic risks to the Project from landslides and adverse soil conditions. These changes include requiring detailed geotechnical investigations, including recommended design, construction and maintenance measures to reduce these risks, as required by qualified engineering geologists, as approved by the City Engineer (Section 5.5.3, Landslides, of the EIR).

Changes or alterations have also been required in, or incorporated into, the Project which will reduce the geologic risks to the Project from liquefaction and seismic settlement, and seismically related flooding to a level of insignificance.
and reduce but not eliminate risks caused by ground shaking and rupture. These changes include requiring comprehensive geotechnical investigations prior to construction, exploratory fault trenching prior to issuance of grading permits, more heavily reinforced foundations within certain active fault areas, and elevation of structures above flooding levels (Section 5.5.3 of the EIR).

Implementation of the recommended mitigation measures would reduce many adverse geological impacts. However, they would not eliminate all the significant impacts associated with geologic hazards, specifically hazards associated with ground shaking and rupture caused by a seismic event. With respect to certain unavoidable risks to the Project caused by seismic activity on the San Andreas Fault, the City Council finds that similar risks exist throughout the Antelope Valley and depend more on the type of soil on which structures are constructed than on the proximity to the fault line. Pursuant to Public Resources Code Section 21081 (c), the City Council also finds that the benefits of the proposed Project, including but not limited to, the creation of new jobs, and the Project’s contribution to the expansion and improvement in the economy of the Antelope Valley area outweigh the unavoidable risks of seismic activity that are left unmitigated.

F. HYDROLOGY: The EIR identifies as a potential significant environmental effect the Project’s impacts on Drainage. Implementation of the Project is anticipated to create a risk of flooding and to significantly alter the existing drainage patterns of the site. Changes or alterations to the Project have been made to reduce the risk of flooding to a level of insignificance. These changes include construction of Drainage facilities required by the City Master Plan of Drainage so as to accommodate a 50-year Los Angeles County Capital Flood (Section 5.6.3 of the EIR) and that final subdivision maps be accompanied by Drainage Improvement Plans prepared by a licensed Civil Engineer and approved by the City. With the incorporation of these measures, the environmental impacts associated with hydrology will be reduced to a level of insignificance.

G. BIOLOGY: With regard to significant effect to biological resources, including the loss of 3,044 Joshua trees and numerous California junipers and 1,581 acres of plant and animal habitat, changes have been made to the Project to partially mitigate these impacts. These changes include the transplantation of short-jointed beavertail cactus from Planning Areas 17 and 31 to Planning Area 32, and the modification of Planning Areas 31 and 32 in order to preserve the Peirson’s Morning-Glory located in these areas (Section 5.7.3 of the EIR). Implementation of the recommended mitigation measures would reduce Project impacts on biological resources to acceptable levels. However, the development of the Project will contribute to a cumulatively significant loss of habitat in the vicinity of the Project.

With respect to these significant cumulative effects, the City Council finds, pursuant to Public Resources Code Section 21081, that the remaining environmental effects are
Resolution No. 92-58
Page 13

acceptable due to the fact that a reduction in the size of the Project or adoption of the environmentally superior alternative to the Project is not economically feasible in this instance because significant public infrastructure for the Project will be required to serve the Project even if the Project is scaled down substantially. The ability of the applicant and the property owners in the Project to pay the costs of those infrastructure improvements requires a project of sufficient size to make the required public infrastructure costs affordable. Thus, the feasibility of the Project is dependent on the proposed size of the Project. Consequently, these economic factors, as further defined in Section 17 of this Resolution, make infeasible further mitigation or Project alternatives which would lessen or reduce the impacts of the Project on biological resources. In addition, the Project is anticipated to provide needed economic benefits to the City, including the creation of new jobs, needed facilities for schools, parks and other public facilities, and will assist in the orderly expansion of the City of Palmdale.

H. AESTHETICS AND LIGHT AND GLARE: The EIR identifies as a potential significant environmental effect the aesthetic and light and glare impacts associated with the proposed Project. Impacts are anticipated to occur to scenic views and from the introduction of new sources of light and glare.

Changes or alterations have been required in, or incorporated into, the Project which reduce aesthetic impacts. For the aesthetic impacts caused by grading, mitigation measures require that large contiguous open space areas and major ridgelines be preserved and that mass graded pads "mega pads" be prohibited in the Project area (Section 5.11.3 of the EIR). Measures in Section 5.11.3 additionally require that all water tanks be earth tone colors and that all storage or trash areas be shielded from view by an enclosed masonry wall no less than six (6) feet in height.

For impacts associated with light and glare, Project design is required to incorporate methods for reduction of light and glare, such as photometric lighting plans, and minimizing the amount of direct light necessary for public safety (Section 5.12.3 of the EIR).

With respect to unmitigated aesthetic and light and glare impacts caused by loss of open space and vegetation, and grading and viewed impacts from adjacent and surrounding areas, the City Council finds, pursuant to Public Resources Code Section 21081(c) that these remaining environmental effects are acceptable due to the fact that a large portion of the Project site will be preserved as open space and that important scenic and viewed areas, such as the Verde Ridge and Sierra Pelona foothills, will be preserved in their natural state. In addition, the Project will provide new jobs new public facilities and will help expand and support the economic and business base of the Antelope Valley area. The City Council further finds that a reduction in the size of the Project or adoption of the environmentally superior alternative to the Project is not economically feasible in this instance because significant public infrastructure for the Project will
be required to serve the Project even if the Project is scaled down substantially. The ability of the applicant and the property owners in the Project to pay the cost of those infrastructure improvements requires a project of sufficient size to make the required public infrastructure costs affordable. Thus, the feasibility of the Development is dependent on the Project size. Consequently, these economic factors, as further discussed in Section 17 of this Resolution, make infeasible further mitigation or alternatives to the Project which would lessen or reduce the impacts of the Project on aesthetics and light and glare.

I. ARCHAEOLOGY: The EIR identifies the Project as having a potentially significant effect on archaeological resources. Development of the Project, as proposed, would result in the loss of three significant prehistoric sites, as well as most of the other sites identified in the initial archaeological survey. Measures have been imposed on the Project to reduce the impacts to archaeological resources. These measures include the requirement that research, salvage and/or protection of known archaeological sites occur under the direction of an archaeologist during the grading of the Project (Section 5.23.3 of the EIR). Implementation of the mitigation measures proposed in the EIR will reduce Project-related impacts to archaeological resources to less than significant levels.

J. PALEONTOLOGY: The EIR identifies the Project as having a potentially significant effect on paleontological resources. Ground disturbing activities associated with development of the Project will adversely impact paleontological resources present on-site. Grading within the areas containing sedimentary rock would disturb or bury fossil sites, and could destroy fossil specimens. In addition, fossiliferous rock in these areas would become permanently unavailable for further study. Measures have been imposed on the Project to reduce impacts to paleontological resources. These measures include the requirement that a Paleontological Monitoring Program be imposed which requires monitoring, salvaging and/or protection of exposed fossils (Section 5.26.3 of the EIR). However, even with mitigation measures, there will still be some inadvertent loss of significant paleontological resources.

With respect to unmitigated impacts to paleontological resources, the City Council finds, pursuant to Public Resources Code Section 21081(c) that this remaining impact is acceptable due to the fact that a portion of the Project site will be preserved as open space and that economic benefits to the City from the creation of new jobs and the construction of important and needed public improvements and infrastructure.

The City Council further finds that a reduction in the size of the Project or adoption of the environmentally superior alternative to the Project which may reduce ground-disturbing activity lessening potential significant impacts to paleontology, is not economically feasible in this instance because significant public infrastructure for the Project will be required to serve the Project even if the Project is scaled
down substantially. A need exists for this infrastructure due to the fact that the Project site does not presently have the required infrastructure inside or around it. The ability of the applicant and the property owners in the Project to pay the costs of those infrastructure improvements requires a project of sufficient size to make the required public costs affordable. Thus, the feasibility of the Project is dependent on the proposed size of the Project. Consequently, these economic factors, as further discussed in Section 17 of this Resolution, make infeasible further mitigation or alternatives to the Project which would lessen or reduce the impacts of the Project on land use.

K. The City Council recognizes that during buildout of the City Ranch Specific Plan Project, substantial changes may occur with respect to the circumstances under which the Project is undertaken or that new information of substantial importance may become available which shows that the Project may have substantially more severe environmental effects than shown in the EIR. The City Council therefore expresses its intent to reserve the City’s authority to require additional environmental review of the Project under those and other circumstances pursuant to State CEQA Guidelines Sections 15162 and 15163 and any other applicable laws and regulations, with regard to one or several of the environmental and public resources discussed in paragraphs A through J of this Section 17.

Section 18. The City Council has reviewed and considered the alternatives to the Project discussed in the EIR. Those alternatives are: (1) a “No Project” alternative (page 9-8); (2) a “Reduced Residential Density Alternate Development Scheme” alternative (pages 9-8 to 9-11); (3) a “College Campus” alternative (pages 9-11 to 9-15); (4) an “Alternative Site A – Willow Springs” alternative (pages 9-15 to 9-19); and (5) an “Alternative Site B – Quail Lake” alternative (pages 9-19 to 9-22).

With respect to these alternatives to the Project, the City Council finds, pursuant to Public Resources Code Section 21081, that there are economic, social and other considerations of the Project that make these alternatives infeasible. Specifically, the City Council finds that the Reduced Residential Density Alternate Scheme alternative, which the City Council finds to be the environmentally superior alternative to the Project, is not economically feasible in this instance because the significant public infrastructure required for this Project could not be financed by the applicant or by the property owners of the Project if the size of the Project is reduced. One reason for this conclusion is that the Project on this site will generate a need for significant infrastructure improvements to serve the Project. Such infrastructure presently does not exist at all or does not exist in a sufficient capacity in and around the site to serve a project on this site. The need for infrastructure improvements will exist even if the Project is substantially scaled down in size. However, the ability of the applicant and the property owners in the Project to pay the cost of those infrastructure improvements requires a project of sufficient
size to make the required public infrastructure costs affordable. The City Council has received written evidence and oral testimony during the public hearings and public meetings on this Project of the cost of these infrastructure improvements and the required size of the Project in order to properly finance and support the cost of these improvements. Based on this evidence, the City Council finds that these economic factors require a project of the size proposed which makes infeasible the alternatives to the Project discussed in the EIR. The City Council further finds that other benefits of the Project as contained in Section 19 of this Resolution, provide additional social and economic benefits to the Project that outweigh the remaining environmental effects of the Project, as set forth more specifically in Section 17 of this Resolution.

In addition to the general reasons stated above, the Council specifically finds the following: 1) that Alternative 1, "No Project," is not feasible due to the fact that this alternative does not meet the goals and policies of the General Plan and the Specific Plan; 2) that Alternative 2, "Reduced Residential Density," (the environmentally superior alternative) is not economically feasible for the reasons stated in the preceding paragraph; 3) that Alternative 3, "College Campus," is not feasible because this alternative would not result in less environmental impacts than the proposed Project; and, 4) that Alternative 4, "Alternative Site A - Willow Springs," and Alternative 5, "Alternative Site B - Quail Lake," involve proposed sites that have greater site constraints than the proposed Project site and thus could result in potentially greater environmental impacts.

Section 19. The City Council finds that individual and cumulative adverse impacts generated by the Project will be mitigated to the extent feasible through the Mitigation Measures as contained in the Environmental Impact Report. Irrespective of these measures, the City Council finds that some impacts cannot be feasibly mitigated to a level of non-significance. In addition, the City Council finds that the Project may result in significant individual or cumulative impacts which have not been identified at this time. The City Council finds that the benefits provided by the Project, as contained in the Specific Plan and Environmental Impact Report, will outweigh any adverse impacts caused by the Project. These benefits are found by the Council to include the following, based upon information in the Specific Plan, the EIR, and as provided by the applicant in public testimony and written correspondence at the above-referenced meetings and hearings:

A. The property is being planned as a comprehensive and cohesive recreational community with sufficient commercial development, schools, parks, trails, golf, community facilities and other elements to support the residents of the City Ranch Project as well as provide regional benefits to the City of Palmdale.

B. Preserving 419 acres of natural open space, not previously accessible to the public, where biological resources and wildlife will be protected and where public passive
enjoyment of these resources in a protected environment will be enhanced.

C. Providing quality housing opportunities which meet the needs of a variety of lifestyles and income levels.

D. Providing approximately 1,093 permanent jobs created by service and supply demands from Project residents and commercial tenants as well as providing a significant number of construction related and real estate sales related jobs.

E. Designing and developing the property with a circulation system that meets local needs and provides safe and efficient transportation solutions.

F. Protecting scenic viewsheds both to and from the property and preserving the Verde Ridge and Sierra Pelona ridgeline.

G. Designing and developing regional infrastructure to distribute the use of Antelope Valley East Kern and Los Angeles County Waterworks water for use by City of Palmdale residents.

H. Providing quality community design and circulation elements conducive to efficient public health and safety issues as well as efficient operations for Sheriff services.

I. Developing infrastructure improvements to meet Project requirements and serve other regional needs for water, sewage disposal, storm drainage, utilities, etc.

Section 20. With respect to General Plan Amendment 91-04, the City Council finds that such Amendment is consistent with the goals and policies of the existing General Plan for the reasons indicated in Section III of the City Ranch Specific Plan and as specified below:

A. The proposed General Plan Land Use designation of "City Ranch Specific Plan (2.62 du/gross acre)" is consistent with the General Plan Land Use Element in that it will allow for the development of the Project under a comprehensive specific plan document as encouraged in the Land Use Element.

B. The proposed General Plan Land Use designation of "City Ranch Specific Plan (2.62 du/gross acre)" is consistent with the intent of the General Plan Land Use Element in that the proposed amendment will result in a mix of different, but compatible land uses with a cohesive land use pattern taking into consideration adjacent uses, hazard areas and topography.

C. The proposed General Plan Land Use designation of "City Ranch Specific Plan (2.62 du/gross acre)" is consistent with the General Plan Land Use Element in that approximately 419 acres of permanent open space are proposed on the City Ranch which is consistent with the Land Use policy of
utilizing open space to create a visually pleasing environment as well as distinguish City and neighborhood boundaries.

D. The proposed General Plan Amendment is consistent with the intent of the General Plan in that the City Council has reviewed all applicable policies of the General Plan Elements and has determined that the adoption of the "City Ranch Specific Plan (2.62 du/gross acre)" land use designation is consistent with such policies.

Section 21. Based upon the afore-mentioned findings, the City Council hereby certifies Final EIR 99-03 which consists of the Draft EIR, any comments received, any responses of the City to the comments received, and other materials as set forth in the staff reports specified in Section 14 of this Resolution with respect to the Annexation of Territory, General Plan Amendment 91-04, Pre-Zone 89-06 and Specific Plan 89-03, subject to the following conditions:

A. That Revisions to the Environmental Impact Report Text are made as contained in Exhibit "C" of this Resolution;

B. That revisions to specified mitigation measures are made as contained in Exhibit "D" of this Resolution;

Section 22. With respect to Development Agreement 92-2, the City Council withholds any environmental findings until such time as it has reviewed the Development Agreement for consistency with the Environmental Impact Report.

Section 23. The City Council has reviewed and considered the Mitigation Monitoring Program for the EIR that has been prepared pursuant to the requirements of Public Resources Code Section 21081.6 and finds that such Program is designed to ensure compliance with the mitigation measures during Project implementation. The City Council hereby adopts the Mitigation Monitoring Program for EIR 89-03, subject to the following condition:

A. That revisions to the Mitigation Monitoring Program be made so as to reflect changes to Mitigation Measures as specified in Exhibit "D" of this Resolution.

Section 24. Based upon the aforementioned findings, the City Council hereby approves General Plan Amendment 91-04 for the Territory described in Exhibit "A", depicted on Exhibit "B", subject to the condition that these approvals shall not be effective until Ordinance 971 approving Prezons 89-06 and Specific Plan 89-03 becomes effective and the ordinance approving Development Agreement 92-2 becomes effective.

Section 25. The City Clerk shall certify to the adoption of this Resolution, and shall transmit a copy of this Resolution to the applicant.
PASSED, APPROVED and ADOPTED this 24th day of March, 1992, by the following vote:

AYES: Councilmembers Ledford, Davies, DeLaTorre, Root & Mayor Knight

NOES: None

ABSENT: None

ABSTAIN: None

William J. Knight, Mayor

ATTEST:

Victoria L. Denham, City Clerk

Approved As to Form:

City Attorney

wp 9175
LIST OF ATTACHMENTS

Exhibit A - Legal Description of Territory
Exhibit B - Map of Territory
Exhibit C - Text Changes to the City Ranch EIR
Exhibit D - Changes to Mitigation Measures Contained in the City Ranch EIR
LEGAL DESCRIPTION, CITY RANCH SOUTH

PARCEL 1:

All of Section 29, Township 6 north, Range 12 west, San Bernardino Meridian, in the County of Los Angeles, State of California, according to the official plat of said land, except those portions described as follows:

Beginning at the northwest corner of said Section 29; thence south 89° 30' 17" east 2619.96 feet along the north line of said Section 29; thence south 89° 43' 48" east, 2133.59 feet to the beginning of a tangential curve concave southerly and having a radius of 500.00 feet, said curve being the centerline of Elizabeth Lake Road; thence southeasterly along said curve through a central angle of 13° 07' 30" a distance of 289.07 feet; thence south 36° 18' 18" west, 317.33 feet to the beginning of a tangential curve concave northerly and having a radius of 1,000.00 feet; thence westerly along said curve through a central angle of 18° 36' 40" a distance of 324.03 feet; thence south 75° 14' 58" west, 383.29 feet to the beginning of a tangential curve concave to the southeast and having a radius of 500.00 feet; thence southeasterly along said curve through a central angle of 34° 19' 25" a distance of 299.53 feet; thence south 40° 53' 13" west, 549.60 feet to the beginning of a tangential curve concave to the north and having a radius of 500.00 feet; thence along said curve through a central angle of 54° 36' 24" a distance of 476.43 feet; thence north 34° 26' 03" west 2373.21 feet to the intersection of the west line of said section 29; thence north 00° 42' 26" west along said westerly line of section 29, 1,186.88 feet to the point of beginning.

Also except those portions included within the lines of the lands conveyed to the State of California by Parcels 1 and 10 of the deed recorded on October 04, 1966 as Document No. 415 in Book D-4153 Page 629 official records, in the office of the county recorder of said County.

PARCEL 2:

The southeast quarter and also the south half of the north half of Section 29, Township 6 north, Range 12 west, San Bernardino Meridian, in the County of Los Angeles, State of California, according to the official plat of said land.

Except that portion included within the lines of the land conveyed to the State of California by Parcel 1 of the deed recorded on October 04, 1966 as Document No. 415 in Book D-4153 Page 629 official records, in the office of the county recorder of said County.
PARCEL 3:

All of Section 31, Township 6 north, Range 12 west, San Bernardino Meridian, in the County of Los Angeles, State of California, according to the official plat of said land.

PARCEL 4:

All of Section 32, Township 6 north, Range 12 west, San Bernardino Meridian, in the County of Los Angeles, State of California, according to the official plat of said land.

Except that portion included within the lines of land conveyed to the State of California by Parcel 11 of the deed recorded on October 04, 1968 as Document No. 415, in Book D-415 Page 623 official records, in the office of the county recorder of said County.

PARCEL 5:

All these certain easements, non-exclusive easements, rights of way and permanent easements, for roads, bridges and ingress and egress, as reserved by Geo. E. Platt Company, in the deed to the State of California, recorded on October 04, 1968 as Document No. 413 in Book D-413 Page 623 official records, in the office of the county recorder of said County.

Known as City Ranch South, containing 1985 acres, more or less.
ASSessor's parcel numbers

Within the City Ranch Specific Plan

Section 29
3206-019-02 (portion)
3206-019-03
3206-019-04
3206-019-05
3206-019-07
3206-019-10
3206-019-11 (portion)

Section 30
3206-020-01
3206-020-02
3206-020-03
3206-020-06
3206-020-07
3206-020-08

Section 31
3206-023-01
3206-023-02

Section 32
3206-024-01
3206-024-02
3206-024-03
EXHIBIT C
EIR TEXT

The City Council's certification of EIR 89-03 is subject to the following changes being made to the text of the Final EIR:

General:

Where a future park and ride facility is referenced, revise the text to indicate that the facility may be constructed on-site.

Where the number of permanent jobs which would be created by the project area is discussed, revise the number to 1,093.


The conclusions expressed in the various groundwater studies demonstrate that a disagreement exists between experts on groundwater supply, groundwater recharge and, safe yield from the aquifer. For example, the report prepared by Los Angeles County Waterworks District, March 1991, concludes that the Valley's existing water resources (groundwater and state-imported water) were sufficient to support SCAG's 2010 population projection for the Antelope Valley. However, the water resources study prepared by the Antelope Valley United Water Purveyors concluded that the safe yield in 1990 was at least 60,500 acre-feet, and implied that additional growth would jeopardize the availability of water in the future. Two of the studies reviewed discussed water levels in various locations of the aquifer; in one study location, well levels were rising, in the other, water levels were falling (Loundagin, Slade). Also, estimates of the annual recharge to the aquifer, and therefore, the safe yield, was reported to be 75,000 acre-feet, 58,000 acre-feet and 40,700 acre-feet in the various studies.

However, Los Angeles County Waterworks District No. 34 has repeatedly indicated that there is sufficient water supply using a conjunctive use policy to accommodate this project, as well as other planned development. The Waterworks District has described their conjunctive use policy in the following manner: state water project water will be used in times when water is plentiful to recharge the groundwater basin; in times when state water project water is scarce, the groundwater stored in the aquifer will be withdrawn and used as the primary source of supply. Application of this policy is anticipated to keep the groundwater levels above the 1980 historic low so as to preserve the capability to replenish the aquifer while at the same time providing sufficient water to serve the growing needs of the Antelope Valley.

Therefore, based upon the evidence presented, development of the project will not result in significant cumulative effects on the groundwater supply. However, if, in the future imported water is not available to support project development, a supplemental EIR would be required to address project impacts to regional groundwater resources.

Section 5.17 Revisions:

Section 5.17.1, paragraph: "The project site is located outside of area served by the Los Angeles County Sanitation Districts (LACSD). Annexation of the project site into the
City of Palmdale and into the LACSD will locate the project site within LACSD No. 20. The District presently serves a population of approximately 72,800 in the Antelope Valley area. Sewage generated within District No. 20 is conveyed through trunk sewers to the Palmdale Water Reclamation Plant (Palmdale WRP) located approximately 5.7 miles east of the project site at 39300 30th Street East in Palmdale. The Palmdale WRP currently has an average daily flow capacity of 3.0 MDL million gallons per day (mgd). At this time, the Palmdale WRP is operating at capacity, with daily flows often ranging from 7.3 to 8.2 MDL/MA/MA/MA mdg. Expansion of the Palmdale WRP, scheduled for completion in March 1992, will increase the plant capacity to an influent capacity of 12.0 mdg and an effluent discharge limitation of 10.0 mdg. There will be additional capacity added to the Palmdale WRP in the future to a maximum capacity of 15.0 mdg, however, there is not a definite work schedule established for this expansion (Sakari, 1992, Visser, 1992).

Subsection 5.17.1, paragraph 2: revise second and third sentences: "The point of connection to Trunk "C" is located approximately 3 1/2 miles away at the intersection of Division Street and Avenue P-8. The Trunk "C" Relief Sewer operates by gravity flow and is a 21.2-inch/21.2/21.2/21.2/21.2/21.2 diameter vitrified clay pipe sewer which varies in capacity from 18.3 to 36.7 MDL/MDL/MDL/MDL/MDL.

Subsection 5.17.1, paragraph 3: revise fourth sentence to read: "At 15th Street East and Avenue P, the sewer increases from 18 to 24 inches in diameter with a capacity of 5.6 mdg and a 60%/60% flow; at 30th Street East near the Palmdale WRP, it is a 30 inch sewer with 9.2 mdg capacity and a 70%/70% flow.

Subsection 5.17.2, paragraph 2: revise first sentence to read: "From the point of connection of the Trunk "C" Relief Sewer at 10th Street West and Amargosa Creek/Amargosa Creek/Amargosa Creek/Amargosa Creek, the Amargosa Creek Trunk Sewer (shown on Figure 66) would need to be extended to the project site.

Section 12 (page 12-31): delete the text following "Interior Water Consumption Reduction Measures" and "Exterior Water Consumption Reduction Measures." (The text under these headings is incorrect; the correct text appears on the following page.)

Add the following section:

5.30 LIBRARY SERVICES

5.30.1 Existing Conditions

Library Services in Palmdale are presently provided by the Palmdale City Library, located at the southeast corner of the intersection of Palmdale Boulevard and Sierra Highway. This facility is 12,400 square feet in size and can accommodate 75,000 volumes. However, according to the City Librarian, the need exists for a larger facility with more extensive services. The physical constraints of the library currently limit the types of services which can be offered and which are presently demanded by the community.
5.30.2 Project Impacts

National library standards provided by the City Librarian recommend 2.5 volumes per capita, 0.5 staff per thousand population and an area of 0.8 square feet per capita. The library needs for the City Ranch project, using these standards and a household size of 2.7 persons per dwelling unit, is 35,100 volumes, 7 staff persons, and 11,232 square feet of library facility. The adjoining Ritter Ranch Specific Plan area will be required to construct a branch library facility, 16,000 square feet in size. Therefore, a branch facility in the City Ranch project would be redundant. However, the applicant could provide a pro-rata share of funding for upgrading the main library or assist in the construction of the branch library proposed on the Ritter Ranch project. The location of the branch facility in the Ritter Ranch project with expanded library facilities at the main library would provide adequate library services for the City Ranch Specific Plan residents.

5.30.3 Mitigation Measures

There are no feasible mitigation measures which can be placed on this project to alleviate significant project-related impacts to library services.

5.30.4 Cumulative Impacts

Development of the cumulative projects would result in a need for library facilities of 28,393 square feet in size with 88,728 volumes and 17 staff persons. Mitigation on a project by project basis may not be feasible unless a City-wide financing mechanism can be developed to reduce the impacts of this cumulative development on library facilities. Therefore, development of the City Ranch and other cumulative projects may represent a significant cumulative impact to library services.

5.30.5 Unavoidable Adverse Impacts

Development of the proposed project will contribute to cumulative significant adverse impacts to library services.
EXHIBIT D

MITIGATION MEASURES

The City Council's certification of EIR 89-03 is subject to the following changes being made to the text of the mitigation measures listed below:

To Section 5.6.3, add: "In accordance with the California Department of Real Estate disclosure format and procedures, all potential purchasers of real property which is shown within the FEMA 100-year flood plain on the Flood Insurance Rate Maps most recently circulated by FEMA, shall be notified of the situation, regardless of whether the actual flood hazard has been abated by other methods. Also, the applicant shall contact FEMA as soon as possible after eliminating areas from the 100-year flood hazard zone to request modifications of the Flood Insurance Rate Maps. The applicant shall then diligently pursue revisions of the maps until the 100-year flood hazard zone as modified by the development is depicted on them."

To Section 5.7.3, add: "The Applicant shall consult with the California Department of Fish and Game in order that potential impacts to Mohave ground squirrel may be addressed. If an endangered species permit is warranted, the permit must be completed and mitigation measures fully dedicated before issuance of a grading permit. Therefore, the consultation with CDFG will occur prior to issuance of any grading permit for the proposed project."

To Section 5.7.3, revise existing mitigation measure to state: "If avoidance of the alkali meadow/transmontane alkali marsh is impossible, permits and agreements under Section 404 of the Clean Water Act and under 1603 of the State Fish and Game Code will be required from the U.S. Army Corps of Engineers and the California Department of Fish and Game, respectively. At a minimum, lost wetland acreage will be replaced in kind on a one-to-one-acre basis. Also, a mitigation and monitoring plan, subject to CDFG approval, will be required in the event of any loss of alkali meadow/transmontane marsh habitat."

In Section 5.8.2, revise existing mitigation measure to state: "If, as a result of project impacts, the level of service falls below either the standards set by the Los Angeles County Transportation Commission's Congestion Management Plan, or the policies set by the City's General Plan, the applicant shall implement improvements or services necessary to bring the roadway segment into compliance. The Final Draft CDP, dated August 14, 1991, includes SR-14 and Route 18 and identifies Sierra Highway as a roadway requiring additional study."

In Section 5.9.3, revise existing mitigation measure as follows: The applicant shall participate in any appropriate future trip reduction programs adopted by the City for future development applications.

In Section 5.9.3, add: "The project applicant shall submit a Transportation Demand Management Plan that will 1) create a City Ranch Transportation Management Association; 2) investigate the feasibility of developing a telecommuting center on site; and, 3) start a vanpool demonstration program for City Ranch residents. The plan will be submitted to the Planning Director prior to issuance of any certificates of occupancy for the proposed project."

In Section 5.9.3, delete: "In order to conform to the jobs/housing balance criteria of the AQMP, additional job
opportunities should be provided on the project site."

In Section 5.9.3, add a mitigation measure that states: "The project shall comply with all SCAQMD Rules and Regulations, including those pertaining to paving materials and architectural coatings. Specifically, use non-solvent based, high-solids, or water based coatings on buildings where feasible.

In Section 5.9.3, add a mitigation measure that states: "In order to provide additional reductions in air emissions, the following list of mitigation measures was provided by the SCAQMD. Because these measures cannot be applied to all development applications that may be submitted for the City Ranch Specific Plan, each development application will be reviewed and those measures from the list which are deemed appropriate by the Planning Director will be applied to that development application.

Minimize Construction Activity Emissions:
- Schedule construct activity during off-peak hours and require a phased-schedule of construction to even out emissions peaks.
- Remove silt by paving construction roads, sweeping streets, and washing trucks leaving construction site.
- Suspend grading operations during first and second stage smog alerts.
- Maintain construction equipment engines by keeping them tuned.
- Use low-sulfur fuel for equipment.
- Use existing power sources; avoid using temporary power generation.

Reduce Construction-Related Traffic Congestion:
- Provide rideshare and transit incentives for construction personnel.
- Configure construction parking to minimize traffic interferences.
- Minimize obstruction of through traffic lanes.
- Provide a flag person to guide traffic properly.
- Schedule operations affecting traffic for off-peak hours.

Limit Emissions from Vehicle Trips:
- Establish telecommuting programs, alternative work schedules, and satellite work centers.
- Schedule goods movements for off-peak traffic hours.
- Provide local shuttle and regional transit systems, transit shelter, bicycle lanes, storage areas and amenities, and ensure efficient parking management.
- Provide dedicated turn lanes as appropriate.
- Work with cities/developers/citizens in the region to implement TDM goals.
- Ensure streamlined traffic synchronization.
- Provide park-and-ride facilities.
- Implement parking management at commercial facilities and other places attracting traffic.
- Provide preferential parking to high occupancy vehicles and shuttle services; and charge parking lot
fees on low occupancy vehicles.
• Provide temporary roadway controls at peak-hours, such as one-way streets; and install directional traffic signs; and synchronize traffic signals to relieve congestion on surrounding streets; and manage street intersections to improve level of service.

Maximize Energy Conservation:
• Implement energy conservation measures beyond state and local requirements.
• Include energy costs in capital expenditure analysis.
• Landscape with native drought-resistant species to reduce water consumption and to provide passive solar benefits.
• Improve thermal integrity of buildings, and reduce thermal load with automated time clocks or occupant sensors.
• Introduce glazed windows, wall insulation, and efficient ventilation methods; install window-systems to reduce thermal gain and loss.
• Introduce energy efficient heating and other appliances.
• Incorporate appropriate passive solar design.
• Ensure sealing of all buildings.
• Control mechanical systems, or equipment with time clocks or computer systems.
• Implement waste separation and recycling programs.”

Limit Emissions from Architectural Coatings and Asphalt Usage:
• Nonsolvent-based coatings should be used on buildings. Solvent-based coatings, if used, should minimize solvent emissions.
• Use of high-solid or water-based coatings should be encouraged.

To Section 5.10.3, add: “Reduction of intrusive noise levels in residential and school areas shall be accomplished through the incorporation of design measures or structural measures which will reduce noise levels to acceptable levels within the living or recreational portions (as defined by the City) of any lot. The measures that may be utilized to reduce noise impacts include, but are not limited to, placement of parking structures in such a manner as to act as a buffer, increasing the setbacks along the roadway, creation of landscaped berms, or construction of other barriers such as walls. The acceptable noise level CNEL which will be applied to future projects will be that level which is in place, either by ordinance, resolution or General Plan policy, at the time that future development applications are deemed complete.”

From Section 5.10.3, delete: “Reduction of intrusive traffic-related noise levels in residential and school areas shall be accomplished through the placement of noise attenuation barriers along Avenue S and Bridge Road and Elizabeth Lake Road and City Ranch Road where they front on residential and school planning areas.” Delete: “The location of bedrooms and quiet living areas in residential dwellings shall face away from noise sources while areas (such as kitchens, garages, bathrooms and playrooms) that are more noise tolerant shall face the source.” Delete: “Two-story
residential units located within the ultimate unattenuated 60 dB(A) CNEL contour as specified by City Standards will require architectural treatments which should be addressed at more detailed levels of planning."

To Section 5.13.3, add: "Encourage the placement of dwelling units to take full advantage of solar energy for natural heating and cooling in order to reduce the use of electricity and natural gas within the project area."

In Section 5.16.3, delete: "Landscape street right-of-ways, entry statements, manufactured slopes, etc. with drought tolerant plants where feasible."

In Section 5.16.3, revise the following measure to state: "Landscape street rights-of-way, easements, medians, project entry statements, and all manufactured slopes with drought tolerant species where feasible."

In Section 5.17.3, revise existing mitigation measure to state: "All sewer infrastructure extensions and improvements depicted on Figure 66 and described in the project impacts subsection of this section of the EIR shall be constructed by the applicant. In the event that Assessment District 20-1 is not formed, and developer constructs off-site trunk sewer lines within the San Andreas fault zone, the developer shall use state-of-the-art designs for the trunk sewer line to minimize the risk of rupture, and subsequent contamination, caused by a seismic event. Also the developer shall cause the preparation of an emergency spill response plan. The plan shall include provisions for spilled sewage retention, spill response measures, cleanup and disinfection measures, and training and funding for implementation of the spill plan. The plan shall be reviewed by the Lahontan Regional Water Quality Control Board and Sanitation District No. 20, and reviewed and approved by the Director of Public Works and the Director of Planning."

To Section 5.20.3, state: "There are no additional feasible mitigation measures which can be placed on this project to alleviate significant project-related impacts to sheriff services."

Within Section 5.22.3, replace existing Mitigation Measure with: "(a) Palmdale School District: The developer shall comply with the terms of the agreement, dated October 8, 1990, between the developer and the Palmdale School District as mitigation for impacts caused by development of the project on the Palmdale School District. The terms of that agreement are as follows:

(i) Participate in the Nello Roos Community Facilities District created by the Palmdale School District for financing school construction.

(b) Westside Union School District: The developer shall comply with the terms of the agreement, dated January 22, 1992, between the developer and the Westside Union School District as mitigation for impacts caused by development of the project on the Westside Union School District. The terms of that agreement are as follows:

(i) refer to agreement attached to this Exhibit."
(c) Antelope Valley Union High School District:

The Developer shall provide the following mitigation to the District, in order to provide its contribution to the District's fifty (50) percent share of funding a new high school to serve the City Ranch Specific Plan area, pursuant to Government Code Section 65995 and Education Code Section 17700 et. seq. (School Facility Funding Law):

(i) Mello-Roos Development Fees.

The applicant shall participate in a Mello-Roos Community Facilities District which will fund up to 50% of the cost of that portion of the school necessary to serve the City Ranch project based upon a student generation factor of .2 pupils per single family dwelling. Only residentially zoned property for which a building permit has been issued will be subject to the annual tax. The District may increase this annual tax by no more than 2% in each year. In lieu of paying an annual special tax, a property owner may prepay the annual special tax at the time a building permit is issued on the property. A fee equal to $1.30 per square foot of habitable residential construction shall serve to prepay the special tax. This fee shall be subject to an annual adjustment pursuant to increases or decreases in the School Construction Cost Index of the Office of Local Assistance with January 1, 1992 as the base. This prepayment fee shall be reduced to $1.20 per square foot if the school site is not located within Planning Area 3A of the Ritter Ranch Specific Plan.

(ii) Other Development Fees.

In addition to the fees specified in subparagraph (i) above, Developer shall pay to the District a fee of twenty-six cents ($.26) per gross leasable square foot of commercial construction prior to the issuance of each commercial building permit. All such fees shall be subject to annual adjustment pursuant to increases or decreases in the School Construction Cost Index of the Office of Local Assistance with January 1, 1992 as the base.

(iii) Site Preparation Expenses.

In the event that a high school is constructed in Planning Area 3A of the Ritter Ranch Specific Plan, and the site preparation work for a school to be located on that site, including provision of access to Elizabeth Lake Road and utilities, exceeds the amount of $4,650,000, the Developer shall pay the District fifty (50) percent of the District’s costs for such work over $4,650,000, not to exceed a total of $350,000.

To Section 5.23.3, add: "Exhibit 16 of the Final Specific Plan will be amended to include an equestrian staging area in Planning Area 1, and if feasible, an equestrian staging area in Planning Area 18, and an equestrian trail through the powerline easement. Trails planned in the City Ranch Specific Plan will be coordinated with those planned for the Ritter Ranch Specific Plan. Future developments adjacent to this project will be
required to coordinate with the trails shown on the trails plan adopted for City Ranch."

To Section 5.24.3, replace existing text with the following language: "There are no feasible mitigation measures which can be placed on this project to alleviate significant project-related impacts to existing maintenance facilities."

To Section 5.25.3, add: "The following sites which were augered require additional testing for subsurface deposits: Lan-1746, Lan-1747, Lan-1748, Lan-1749, Lan-1750, Lan-1752, Lan-1753, Lan-1756, Lan-1772, Lan-1774, Lan-1767, Lan-1768. At least one additional 1x1 meter test units need to be excavated at each of these sites, within site areas with the greatest densities of surface artifacts. These excavations are important to determine whether auger testing has missed subsurface deposits and to get a clearer, vertically-controlled picture of such deposits and their depositional context.

The following important petroglyph, bedrock mortar, and rock ring sites were not subject to any subsurface testing. They need to be tested through excavation of a minimum of one 1x1 meter units utilizing 1/8" screen in the immediate vicinity of these features: Lan-1767, Lan-1768, Lan-1759, Lan-1760, Lan-1761, Lan-1762, Lan-1763, Lan-1765, Lan-1766, Lan-1769, Lan-1770, Lan-1771. The "hunting blind" sites are important structures whose function needs to be determined through further testing.

The important apparent habitation site, Lan-949, should be avoided through realignment of the proposed roadway. However, in the event that avoidance is not possible, salvage of the site shall be performed in accordance with an excavation plan. Excavation of 100 percent of Loci A through C as described in the Phase II Archaeological Assessment (July, 1991) shall be conducted at Lan-949. It is estimated that approximately 500 cubic meters of cultural deposit will have to be removed. The excavation plan detailing strategy and research goals shall be submitted to the City of Palmdale for review and approval prior to excavation activities. In addition, this excavation plan shall contain a subregional analysis of the archaeological sites within and immediately adjacent to City Ranch to provide a basis for significance determinations. As part of the subregional analysis, a research design that would set standards for future work in the vicinity of the City Ranch project shall be proposed. The subregional analysis of the archaeological sites may be prepared in cooperation with other adjacent property owners, as approved by the Planning Director.

Those sites, not listed above, which contained surface artifacts but were only auger tested shall be tested with at least one standard test unit per site. The testing program shall be submitted to the City Planning Department for review and approval prior to commencement. In addition, untested cupule sites, rock rings and hunting blinds shall also be tested in this manner. Any additional mitigation recommended as a result of the additional testing shall be required as mitigation measures for initial and subsequent development applications, as appropriate.
Relocation of cupule boulders must be done under the direction of a qualified archaeologist who will give careful attention to orientation of the boulders. The boulders shall be moved prior to site disturbance in their immediate vicinity to a location approved by the Planning Director. Since context will be lost, some shall be relocated to a repository approved by the Planning Director where they can be used for educational purposes. Representative artifacts should be displayed at this repository.

The work described above shall be performed by a qualified archaeologist, retained by the applicant and approved by the Planning Director. Because the introduction of residents into the area will result in the degradation of archaeological sites, required testing shall be completed and approved by the Planning Director prior to recordation of the first parcel map or tract map for the project."

In Section 12 of the EIR (Mitigation Monitoring Program) the following revisions shall be made:

Page 12-14, Implementation Procedure for Hydrology, add the following sentence: "Disclosure of properties located within the FEMA flood zone will be made pursuant to Department of Real Estate procedures for disclosure."

Page 12-17, Implementation Schedule for Biology/Disturbance to or Loss of Sensitive Species, add the following sentence: "Consultation with the California Department of Fish and Game regarding potential impacts to Mohave ground squirrel shall occur prior to issuance of grading permits for the property.

Page 12-24, Implementation Schedule for Air Quality/Long-term Operational Impacts, add the following sentence: "The Transportation Demand Management Plan will be submitted to the Planning Director prior to issuance of certificates of occupancy for the project."

Page 12-41, Implementation Procedure for Archaeology, revise the paragraph to read: "An archaeologist, approved by the City of Palmdale Planning Department, shall perform the additional testing required in the mitigation measures and carry out any excavation or salvage as indicated by that testing or as described in the mitigation measures in Section 5.25.3. All significant historic and archaeological site locations shall be recorded with the Archaeological Information Center at UCLA. If relocation of resources is necessary, the archaeologist shall monitor the relocation. The artifacts will be provided to an approved repository pursuant to the mitigation measure."

Page 12-41, Implementation Schedule for Archaeology, revise the paragraph to read: "The archaeological testing shall be completed and the findings reviewed by the City of Palmdale Planning Department prior to recordation of any subdivision map for the project. Excavations will be completed and prior to the start of grading on the property. Any relocation of materials shall be scheduled and monitored by the archaeologist, who shall also inform the Planning Department before the relocation is initiated. Results of the relocation
Efforts will be reported to the Planning Department within thirty days of completion of the relocation. Recordation of significant archaeological sites and delivery of significant materials recovered to appropriate repository shall be carried out as sites and materials are identified and recovered."
This AGREEMENT ("Agreement") is made and entered into this 25th day of January, 1992 by and between the WESTSIDE UNION SCHOOL DISTRICT (the "District") and KAUFMAN AND BROAD OF SOUTHERN CALIFORNIA, INC., a California Corporation ("K&B") with respect to the following recitals:

RECITALS

A. K&B is the owner of certain properties described in Exhibits A-1, A-2 and A-3, each attached hereto and incorporated herein by reference (collectively, the "Property") which Property K&B proposes to develop for various land uses. The portion of the Property described in Exhibit A-1 shall be referred to as the "City Ranch Development", the portion of the Property described in Exhibit A-2 shall be referred to as the "Quarts Hill II Development" and the portion of the Property described in Exhibit A-3 shall be referred to as the "Quarts Hill III Development".

B. On April 17, 1989, District passed a resolution levying developer fees (school impact fees) on residential construction within its boundaries pursuant to Government Code sections 53080 and 65995.

C. The fee levied by District is inadequate to meet the needs created by the development projects proposed by K&B for the Property. The District acknowledges that this Agreement shall provide funds in excess of the fees it has established pursuant to Government Code section 53080. The District and K&B desire to establish a method of financing the District's acquisition and improvement of certain permanent school sites and facilities.

D. Palmdale and Lancaster, which cities are responsible for approving the proposals of K&B, are unwilling to grant discretionary approvals necessary to complete K&B projects because of the lack of school facilities to meet the needs of future residents of K&B projects pursuant to Mira Development Corp. v. San Diego (1983) 205 Cal.App.3d 1261.
E. K&B desires to obtain the District's support for its development plans for the Property and District agrees to support such plans based upon the mutual promises contained herein.

NOW, THEREFORE, in consideration of the mutual terms and conditions contained herein, the District and K&B agree as follows:

AGREEMENT

1. Site Donations. The District and K&B acknowledge that K&B has previously sold the "Sundown School Site" within the Quarts Hill II Development to the District which site is more fully described in Exhibit B-1 attached hereto and made a part hereof. The parties have agreed to exchange the Sundown School Site described in Exhibit B-1 for a site within the Quarts Hill III Development, which site is more particularly described in Exhibit B-1-A attached hereto and made a part hereof. Upon such exchange, which shall be accomplished at no cost to the District, the site described in Exhibit B-1-A shall thereafter be referred to as the "Sundown School Site". K&B shall donate to the District at no cost to the District two (2) additional school sites within the City Ranch Development pursuant to the schedule described below. The two sites are more particularly described in Exhibits B-2 and B-3 attached hereto and made a part hereof and shall be collectively referred to as the "School Sites". The School Site described in Exhibit B-2 shall be known as "School Site A" and the School Site described in Exhibit B-3 shall be known as "School Site B". School Site A is also designated as "Planning Area 11" within that certain Development Plan for the City Ranch Development which is dated July 18, 1991 and attached and made part of this Agreement as Exhibit C (the "Development Plan Map"). School Site B is also designated as "Planning Area 10B" within the Development Plan Map.

The donations of the School Sites shall be timed in accordance with the following schedule:

(a) K&B shall donate School Site A to the District concurrently with the recording of a final subdivision tract map (which tract map, upon recording, shall create a legal subdivision) comprising one of the following "Planning Areas" designated on the Development Plan Map: Planning Areas 5, 10, 12, 14, 13, 16, 17, 19A or 19. For the purposes of this Agreement, these Planning Areas shall be collectively referred to as "Region One".

2
(b) K&B shall donate School Site B to the District concurrently with the recording of a final subdivision tract map comprising one of the following Planning Areas designated on the Development Plan Map: Planning Areas 6, 8, 21, 23, 24, 27, 28A, 30A, or 31 (to the extent that any portion of such Planning Areas are actually located within the Westside Union School District). For the purposes of this Agreement, these Planning Areas shall be collectively referred to as "Region Two".

Each site shall be donated to the District free and clear of any and all liens, encumbrances, assessments, covenants, easements and conditions, except as otherwise expressly provided herein. In addition, K&B shall mass grade the site so that the site will be brought to a "superped" condition as such term is defined in Exhibit B-4 attached hereto and made a part hereof. The District shall have the option of requiring K&B to rough grade each site to the District's specifications at the time K&B performs any rough grading on any adjacent property with the difference in the cost of mass grading the school site and rough grading the school site to be entirely borne by the District. K&B shall give written notice to the District at least 40 days in advance of rough grading any adjacent property with an itemization of all costs (in excess of mass grading costs) to rough grade the applicable school site. District shall notify K&B within 10 days of receipt of the notice and cost itemization of the District's willingness to proceed with the rough grading at the District's incremental expense with respect to each site.

2. Site Dedication. A third school site (School Site C) more particularly described in Exhibit B-5 shall be reserved for purchase by the District within six (6) years from the date of issuance of the eight hundred fifty-first occupancy permit in either Region One or Region Two, whichever comes later. The District may exercise its option to purchase the site by sending written notice to K&B. Within ten (10) days of receipt of notice the parties shall open escrow with instructions to close escrow as follows: K&B shall deposit a grant deed conveying title free and clear of all encumbrances, liens, assessments, covenants, conditions and easements (except those for utilities) to the District. District shall deposit the purchase price which shall be determined by the then fair market value (FMV) which in no event shall exceed $100,000 per acre. In the event that the parties cannot agree on the fair market value, each party shall obtain an appraisal from an MAA certified appraiser. If the two appraisals are within $8,000 per acre of each other the FMV shall be the lowest value plus one-half the difference. If the difference between the two appraisals is more than $8,000 per acre, then the County Superintendent of Schools shall designate a third appraiser who shall conclusively establish the fair market
value. The cost of the third appraisal shall be borne equally by the parties. Notwithstanding anything contained herein to the contrary, in no event shall the cost of the property to the
District exceed $100,000 per acre.

In the event that this site is not developed as a school
within six (6) years of the issuance of eight hundred fifty-five-
acre occupancy permit in either Region One or Region Two, whichever
comes later, and the District determines to sell it within that
period of time, K&B shall be given the opportunity to purchase it
at the highest offer received by the District. K&B shall
exercise this option in writing within twenty-four (24) hours of
receipt of an offer by the District. All terms and conditions
shall be identical to the highest bona fide offer received by the
District.

3. Off-Site Improvements. In addition to its donations of
School Site A and School Site B and the sale to District of
School Site C, K&B shall perform all off-site improvements for
the benefit of the School Sites and for the benefit of the
Sundown School Site (such as construction of roads, curbs,
gutters, sewers, utilities and water to the District's or City's
specifications whichever is applicable by law, and mass grading,
as defined above). K&B's obligations for off-site improvements
to the School Sites and the Sundown School site shall be
expressly limited to the specific obligations set forth as
Exhibit D to this Agreement.

With respect to such off-site improvements, the District
expressly acknowledges that such improvements shall be performed
by K&B concurrently with other off-site improvements or on-site
improvements within the City Ranch Development, the Quartz Hill
II Development or the Quartz Hill III Development, as applicable.
The District and K&B acknowledge that the off-site improvements
will be bonded by K&B with the City of Palmdale or the City of
Lancaster, as applicable. K&B shall be obligated only to
complete the off-site improvements as described in Exhibit D.

The School Sites and the Sundown School site have been
approved by the District after consultation with K&B and the
District acknowledges that it is satisfied with the acreage of
such sites. The deed(s) granting School Site A and/or School
Site B from K&B to the District shall be in the form attached to
this Agreement and made a part hereof as Exhibit E. K&B and the
District acknowledge that for each School Site K&B may reserve
easements for slopes, construction, utilities and similar rights
to K&B so that K&B shall have the right to reasonably utilize the
site provided K&B holds the District harmless from any and all
claims arising from its utilization of the School Site(s) for
such purposes in connection with the City Ranch Development, Quartz Hill II Development or Quartz Hill III Development, as applicable, and provided that K&B's use is coordinated with the District's use and does not interfere with the District's use.

4. **Construction Expenditures.** As more particularly described in this Paragraph 4 and Paragraph 5 below, K&B shall pay sixty-six and two-thirds percent (66 2/3%) of the cost of constructing each permanent school on School Site A, School Site B and the Sundown School Site.

With respect to each of the School Sites and the Sundown School Site, the applicable Payment shall be subject to the following:

(a) The District shall make no demand and K&B shall have no obligation to make a Payment with respect to School Site A unless K&B has obtained building permits with respect to two hundred twenty-five (225) residential units within Region One and the District has issued a notice to proceed for the construction of a public school at School Site A to a general contractor.

(b) The District and K&B shall have no obligation to make a Payment with respect to School Site B unless K&B has obtained building permits with respect to two hundred twenty-five (225) residential units within Region Two and the District has issued a notice to proceed for the construction of a public school at School Site B to a general contractor.

(c) K&B shall have no obligation to make a Payment with respect to the Sundown School Site unless K&B has obtained building permits with respect to two hundred twenty-five (225) residential units within either the Quartz Hill II Development or Quartz Hill III Development and the District has issued a notice to proceed for the construction of a public school at the Sundown School Site to a general contractor.

5. **Calculation of Payment for Elementary School Construction.** The schools to be constructed at School Site A, School Site B and the Sundown School Site shall be modeled after the Valencia Valley Elementary School located at 23601 Carrizo Drive in Valencia, CA. A detailed description of the costs of construction of the Valencia School are attached hereto and made a part hereof as Exhibit F. For the purposes of this Agreement, the total cost set forth in Exhibit F is $4,247,543 (the "Valencia Costs"). With respect to each payment owed by K&B, the Valencia Costs shall be adjusted, to account for the percentage increase or decrease occurring in the School Construction Cost Index published by the Office of Local Assistance, California.
Department of General Services from July 1, 1987 until the date the Payment is due. Such adjusted cost shall be referred to herein as the "Adjusted Valencia Cost". An amount equal to two-thirds of the Adjusted Valencia Cost shall be deemed "K&B's Share of AVC". In addition, at least 60 days prior to the date the Payment is due, the District shall have complied with the provisions of the Public Contracts Code regarding school construction. The bid selected by the District shall be deemed the "Actual Costs Amount"; provided, however, for the purpose of calculating K&B's Share of AVC only, such Actual Costs Amount shall not include any amount for the administrative services of school personnel, furniture or equipment costs. However, the costs shall include architectural, engineering and other professional services. An amount equal to two-thirds of the Actual Costs Amount shall be deemed "K&B's AC Share". The Payment shall be equal to K&B's AC Share; provided, however, the Payment shall not exceed 10% of K&B's AVC Share if K&B's AC Share exceeds K&B's AVC Share; and provided, further, the Payment shall not be less than 95% of K&B's AVC Share of Adjusted Valencia Cost in the event K&B's AC Share is less than K&B's AVC Share.

In addition, the parties acknowledge that the Payment shall be made by K&B in accordance with the standard contract for school construction approved by the Office of Local Assistance. Completion of a particular progress payment stage shall be certified by (i) a joint certificate of the general contractor and the District, and (ii) an appropriate invoice from the District. K&B shall pay the applicable percentage of the Payment within ten (10) days after its receipt of an appropriate certificate and invoice.

6. **Middle School Site**. District shall identify a twenty (20) acre Middle School Site within the Ritter Ranch Development project reasonably suitable as the Middle School Site in light of the plans for the Ritter Ranch Development. K&B's payment contribution (see below) for the acquisition of the Middle School Site shall be due on the earlier to occur of (a) five days prior to the statutory requirement deadline for depositing the funds in court in the event condemnation proceedings are filed in order for the District to take possession of the Middle School Site or (b) twenty (20) days prior to the scheduled close of escrow for the District's acquisition of the Property through a purchase and sale transaction. K&B's contribution shall be twenty-seven (27%) of the purchase price plus all costs of acquisition of the Middle School Site, including costs of litigation, actually reasonably and necessarily incurred by the District. In the event of each condemnation, K&B shall initially contribute 27% of the District's last offer to the property owner in connection with
the condemnation proceedings. The balance of 27% of the sum of actual condemnation purchase price plus the above-described costs shall be due and payable five (5) days after the completion of such condemnation proceedings.

7. Calculation of Payment for Middle School Construction.

The Middle School to be constructed shall be modeled after the Hillview Middle School currently under construction by the District and located at 40535 Peonza Lane, Palmdale, CA. A detailed description of the costs of construction of the Hillview Middle School will be provided by the District when it is available but in no event more than 30 days after completion of the school which description shall be called the "Hillview Costs". With respect to each payment owed by K&B, the Hillview Costs shall be adjusted, to account for the percentage increase or decrease occurring in the School Construction Cost Index published by the Office of Local Assistance, California Department of General Services from the date of July 1, 1991 until the date the Payment is due. Such adjusted cost shall be referred to herein as the "Adjusted Hillview Cost". An amount equal to twenty-seven percent (27%) of the Adjusted Hillview Cost shall be deemed "K&B's Share of AMC". In addition, at least 60 days prior to the date the Payment is due, the District shall have complied with the provisions of the Public Contracts Code regarding school construction. The bid selected by the District shall be deemed the "Middle School Actual Costs Amount"; provided, however, for the purposes of calculating K&B's Share of AMC only, such Middle School Actual Costs Amount shall not include any amount for the administrative services of school personnel, furniture or equipment costs. However, the costs shall include architectural, engineering and other professional services. An amount equal to twenty-seven percent (27%) of the Middle School Actual Costs Amount shall be deemed "K&B's AC Share". The Payment shall be equal to K&B's AC Share; provided, however, the Payment shall not exceed 105% of K&B's AMC Share if K&B's AC Share exceeds K&B's AMC Share; and provided, further, the Payment shall not be less than 95% of K&B's AMC Share of Adjusted Hillview Cost in the event K&B's AC Share is less than K&B's AMC Share.

In addition, the parties acknowledge that the Payment shall be made by K&B in accordance with the standard contract for school construction approved by the Office of Local Assistance. Completion of a particular progress payment stage shall be certified by (i) a joint certificate of the general contractor and the District, and (ii) an appropriate invoice from the District. K&B shall pay the applicable percentage of the Payment within ten (10) days after its receipt of an appropriate certificate and invoice.
8. Letter of Credit. It is understood and agreed that in order to secure K&B's obligations to make each of the Payments described in paragraphs 4, 5, 6 and 7 above, as applicable, prior to the issuance of a building permit within the properties described within Region One, Region Two and the Quartz Hill III Development, K&B shall provide the District with a three separate irrevocable demand letter of credit (the "Letters of Credit"), one each for School Site A, School Site B and the Sundown School Site, each in the initial principal amount of $200,000 issued in favor of the District by institutional lenders doing business in Los Angeles, California. The Letters of Credit shall be comprised of the "Site A Letter of Credit" for subparagraph 4(a), "Site B Letter of Credit" for subparagraph 4(b), "Sundown Letter of Credit" for subparagraph 4(c). The timing of each Letter of Credit shall be triggered by the issuance of a building permit within the applicable Region or Development. Each letter of credit shall provide security for the funding the construction of the particular elementary school the Site A Letter of Credit and Site B Letter of Credit shall also provide security for one-half of twenty-seven (27%) of the cost of acquisition of the Middle School Site and the construction of a middle school thereon. Each Letter of Credit shall provide that it may be drawn down upon delivery by the District to the issuing bank of (1) a certificate stating that the District is entitled to receive the applicable Payment (pursuant to either subparagraph 4(a), 4(b), 4(c) or paragraph 6 of the Agreement) and that K&B has breached such obligation, with all such notice and grace periods expired, together with (2) a statement of the amount of the requested reimbursement.

a. (1) Commencing on the date thirty (30) days after the date of this Agreement until the date that K&B makes all of the payments described in subparagraph 4(a), paragraph 5 for School Site A and paragraphs 6 and 7 for the Middle School, K&B shall, prior to the issuance of each building permit in Region One, be obligated either to (x) increase the principal amount of the Site A Letter of Credit by the amount equal to the product of (I) $3,600 multiplied by (II) the number of builder permits for residential units within Region One to be requested by K&B (the "Region One Product") or (y) replace the Site A Letter of Credit with a "Substitute Site A Letter of Credit" posted by K&B under the same terms and conditions set forth above, except that the amount of the Substitute Site A Letter of Credit shall be increased to equal the sum of $200,000 plus the Region One Product as such term is defined above. Notwithstanding anything contained herein to the contrary, under no circumstances shall K&B be obligated to increase the amount of the Site A Letter of Credit or provide the Substitute Site A Letter of Credit in a principal amount in excess of the sum of two-thirds of
the Adjusted Valencia Costs plus the Adjusted Hillview Costs with respect to the Payment described in subparagraph 4(a) and paragraph 5 for School Site A, and one-half of the Payment described in Paragraphs 6 and 7 for the Middle School.

(ii) Commencing on the date thirty (30) days after the date of this Agreement until the date that K&B makes all of the payments described in subparagraph 4(b), and paragraph 5 for School Site B and paragraphs 6 and 7 of the Middle School, K&B shall, prior to the issuance of each building permit in Region Two, be obligated either to (x) increase the principal amount of the Site B Letter of Credit by the amount equal to the product of (i) $3,400 multiplied by (ii) the number of building permits for residential units within Region Two to be requested by K&B (the “Region Two Product”) or (y) replace the Site B Letter of Credit with a “Substitute Site B Letter of Credit” posted by K&B under the same terms and conditions set forth above, except that the amount of the Substitute Letter of Credit shall be increased to equal the sum of $200,000 plus the Region Two Product as such term is defined above. Notwithstanding anything contained herein to the contrary, under no circumstances shall K&B be obligated to increase the amount of the Site B Letter of Credit to a principal amount in excess of the sum of two-thirds of the Adjusted Valencia Costs plus the Adjusted Hillview Costs with respect to the Payment described in subparagraph 4(c) and paragraph 5 for School Site B and one-half of the Payment described in paragraphs 6 and 7 for the Middle School.

(iii) Commencing on the date thirty (30) days after the date of this Agreement until the date that K&B makes all the payments described in subparagraph 4(c) and Paragraph 3 for the Sundown School Site, K&B shall, prior to the issuance of any building permits after the date of this Agreement in the Quartz Hill III Development, be obligated either to (x) increase the principal amount of the Sundown Letter of Credit by the amount equal to the product of (i) $3,400 multiplied by (ii) the number of building permits for residential units within the Quartz Hill III Development to be requested by K&B during such quarter (the “Quartz Hill Product”) or (y) replace the Sundown Letter of Credit with a “Substitute Sundown Letter of Credit” posted by K&B under the same terms and conditions set forth above, except that the amount of the Substitute Sundown Letter of Credit shall be increased to equal the sum of $200,000 plus the Quartz Hill Product as such term is defined above. Notwithstanding anything contained
b. (i) When K&E becomes obligated to make payments described in subparagraph 4(a) and paragraph 5 for School Site A, K&E shall be entitled to, not more than once each calendar month, either (x) reduce the principal amount of the Site A Letter of Credit by the amount of the "Site A Obligation Expenditures" (as defined below) or (ii) replace the Site A Letter of Credit with a Substitute Site A Letter of Credit on the same terms and conditions set forth above, except that the amount of the Substitute Site A Letter of Credit shall be reduced to equal the difference between the maximum amount of the Site A Letter of Credit or Substitute Site A Letter of Credit, as applicable, less the total "Site A Obligation Expenditures" as such term is defined below. As used herein, the term "Site A Obligation Expenditures" shall mean, with respect to any of the obligations under subparagraph 4(a) and paragraph 5 for School Site A and up to one-half of their obligations under Paragraphs 6 or 7 for the Middle School Site, the actual cost expended by K&E with respect to the performance of such obligations. It is understood and agreed that K&E’s obligation to keep the Site A Letter of Credit (or Substitute Site A Letter of Credit) intact shall remain until K&E has fulfilled all of its obligations with respect to the Payments described in subparagraph 4(a) and paragraph 5 for School Site A.

(ii) When K&E becomes obligated to make the Payments described in subparagraph 4(b) and paragraph 5 for School Site B, K&E shall be entitled to, not more than once each calendar month, either (x) reduce the principal amount of the Site B Letter of Credit by the amount of the "Site B Obligation Expenditures" (as defined below) or (ii) replace the Site B Letter of Credit with a Substitute Site B Letter of Credit with a Substitute Site B Letter of Credit on the same terms and conditions set forth above, except that the amount of the Substitute Site B Letter of Credit shall be reduced to equal the difference between the maximum amount of the Site B Letter of Credit or Substitute Site B Letter of Credit, as applicable, less the total "Site B Obligation Expenditures" as such term is defined below. As used herein, the term "Site B"
Obligation Expenditures" shall mean, with respect to any of the obligations under subparagraph 4(b) and paragraph 5 for School Site B and up to one-half of the obligations under Paragraphs 6 or 7 for the Middle School Site, the actual cost expended by K&B with respect to the performance of such obligations. It is understood and agreed that K&B's obligation to keep the Site B Letter of Credit (or Substitute Site B Letter of Credit) intact, shall remain until K&B has fulfilled all of its obligations with respect to the Payment described in subparagraph 4(b) and paragraph 5 for School Site B.

(iii) When K&B becomes obligated to make the Payment described in subparagraph 4(c) and paragraph 5 for Sundown School, K&B shall subsequently be entitled to, not more than once each calendar month, either (x) reduce the principal amount of the Sundown Letter of Credit by the amount of the "Sundown Obligation Expenditures" (as defined below) or (y) replace the Sundown Letter of Credit with a Substitute Sundown Letter of Credit on the same terms and conditions set forth above, except that the amount of the Substitute Sundown Letter of Credit shall be reduced to equal the difference between the maximum amount of the Sundown Letter of Credit or Substitute Sundown Letter of Credit, as applicable, less the total "Sundown Obligation Expenditures" as such term is defined below. As used herein, the term "Sundown Obligation Expenditures" shall mean, with respect to any of the obligations under subparagraph 4(c) for the Sundown School and as described in paragraph 5 of the Agreement, the actual cost expended by K&B with respect to the performance of its obligation to make the payment described in subparagraph 4(c) and paragraph 5. It is understood and agreed that K&B's obligation to keep the Sundown Letter of Credit (or Substitute Sundown Letter of Credit) intact, shall remain until K&B has fulfilled all of its obligations with respect to the Payment described in subparagraph 4(c) and paragraph 5 for the Sundown School.

c. Prior to making any demand on funds secured by any of the above-described letters of credit, the District shall give written notice to K&B and at least five (5) business days for K&B to pay all amounts owed at that time.

9. Plan Preparation Fee Advance. K&B agrees to advance $200,000 per School Site, to assist the District in the development of plans as preparation fees. Each $200,000 plan preparation fee shall be applied as a partial payment of the
applicable total Payment. The plan preparation fee for the Sundown School Site shall be paid upon the execution of this Agreement and each other plan preparation fee (for the School Sites) will be paid upon K&B's donation of the applicable School Site. One Hundred Thousand Dollars ($100,000) shall be paid to the District as an advance on amounts owed by K&B for the construction of the Middle School at the time the District acquires title to the Middle School Site.

10. Facilities. The District, in its reasonable discretion, shall determine when facilities shall be built and the precise use and configuration of the facilities so long as the facilities are located at the School Sites described herein, are substantially modeled after the Valencia School and, meet the requirements of Paragraph 17.

11. No Further Fees. The District covenants and agrees that, with respect to the projects specified in this Agreement being developed by K&B, it shall not assist or engage in any of the following actions if their result, directly or indirectly, would be to require dedication of, payment for school facilities other than those specifically provided for hereunder:

a. The District shall not exercise any power or authority (under Section 53080 of the Government Code or any other provision of applicable law now or hereafter enacted) to levy any fee, charge, or dedication, against the Project for the purpose of funding or financing any school facilities.

b. The District shall not require, request or petition any other government entity to exercise, or cooperate with any City or other governmental entity in the exercise of the power under Title 7, Division 1, Chapter 4, 7 of the Government Code (commencing with Section 65970) which requires the dedication of land, and the payment of taxes in lieu thereof and/or the payment of special fees or taxes for interim or permanent school facilities as a condition to any approval related to the construction of residences at the City Ranch Development, the Quarts Hill IX development and/or the Quarts Hill III development.

c. The District shall not oppose, object to or condition the acceptance or issuance of (i) building permits, (ii) certificates of occupancy, (iii) environmental impact reports or (iv) any other form of approval related to the development of property described in Exhibits A-1, A-2 or A-3 on the basis of inadequate school facilities or seek other forms of mitigation with respect to the adequacy of school facilities to serve the projects, including, but not limited to, the
establishment of developer fees, the dedication of land, or the reduction in density or intensity of use, against any property permitted by present state law, rulings, regulations and court decisions.

d. The District shall not issue bonds or incur any other forms of indebtedness, payable from taxes or assessments of any kind (other than the District's portion of the existing property taxes) levied on any portion of the Property, the proceeds of which are to be used in whole or in part, directly or indirectly, for funding or financing school facilities; provided, however, that nothing contained in this Agreement shall preclude the District from issuing bonds which are payable from ad valorem taxes or special taxes levied and authorized under the Nello-Roos Act or other applicable law, and which ad valorem and special taxes are approved by the registered voters of the District or the Nello-Roos District, or both, at a successful election.

12. Support for Development. Additionally, the District agrees that, with respect to the Quartz Hill II Development, the Quartz Hill III Development and the City Ranch Development, it shall send, within ten (10) days after the complete execution of this Agreement and ratification thereof by the governing board of the District, an original of the letter attached hereto and marked as Exhibit "G", to the applicable governing municipal agency.

13. Entire Agreement and Amendments. This Agreement constitutes the entire agreement and understandings between the parties. There are no oral understandings, terms or conditions, and no party has relied upon any representation, express or implied, not contained in this Agreement. All prior understandings, terms or conditions are deemed merged into this Agreement. This Agreement cannot be changed or supplemented orally and may be modified or superseded only by written instrument executed by both parties.

14. Governing Law and Venue. This Agreement shall be governed by and construed in accordance with the laws of the State of California existing at the time of its execution. In the event that any party initiates litigation involving any matter arising out of this Agreement, venue shall lie in the appropriate state court.

15. Attorney's Fees; Covenant Not to Sue. In the event that either party initiates legal action to enforce the terms of this Agreement, the prevailing party shall be entitled to all costs of suit, including all amounts paid in attorneys' fees. Both parties agree not to initiate, file or in any way support
any action challenging the validity of the provisions of this Agreement.

16. **Covenant Running with the Land.**

a. This Agreement and the covenant created thereby for the benefit of the City Ranch Development and/or the Quarts Hill II Development and/or the Quarts Hill III Development are intended to preserve the value of said developments and enhance their development. K&B agrees, for the benefit of the District, that the City Ranch Development (or portions thereof) shall be held, transferred and encumbered subject to the provisions of the Agreement which are for the use and benefit of its and of each and every person who now or in the future owns any portion or portions of the real property within the City Ranch Development. This Agreement and all the rights and obligations thereunder shall be binding upon and inure to the benefit of the parties hereto and their heirs, successors, assigns, and personal representatives.

b. The transfer of ownership of any parcel of property subject to this Agreement shall transfer to the new owner of the property the rights and obligations under this Agreement with respect to the transferred parcel. Neither the District's consent nor special reference to the obligation in the document by which ownership is transferred shall be necessary to effect the transfer of such rights and obligations.

c. Concurrently with the execution of this Agreement, the parties shall execute a Memorandum of Agreement in the form of Exhibit B which may be recorded by either party.

17. **Architectural Unity.** District is aware of K&B's desire to maintain architectural unity within the City Ranch Development, the Quarts Hill II Development and the Quarts Hill III Development and agrees that the final elevations and external architectural designs for the three schools shall be appropriate for the particular development in which the particular school site is located. Prior to finalization of the construction plans on each elementary school site, District shall provide K&B with a reasonable opportunity to review the preliminary plans and to offer any suggestions.

18. **Reimbursement Obligation.** The parties acknowledge that the effective term of the provisions of this Paragraph is shall be for a period of ten (10) years. The parties further acknowledge that throughout such effective term, various sources of school construction funding may be made available to the
District from the State of California. The District agrees to make good faith efforts to seek funds from the State for new school facilities within the District boundaries; provided, however, that the District shall not be obligated to apply for public funds if, in the reasonable discretion of its superintendent or its Board of Trustees, the cost of applying and qualifying for the funds is not justified after taking into account the amount of available public funding, the probability of the District's receiving funds and the estimated amount of the funds the District may receive.

District understands and agrees that K&B's financial obligations under this Agreement constitute obligations in excess of the current statutory school fees of $1.58 per square foot. K&B's willingness to undertake such financial obligations is based upon the lack of an applicable alternative funding mechanism for the District. Therefore, if public funds or new financing methods result in the District acquiring funds limited to the purchase of real property or the construction of school facilities in K&B's projects herein specified in excess of the total construction cost of the facilities after K&B has made the Payment or any portion thereof, then District shall reimburse K&B first for any portion of the Payments made and then for the Fair Market Value of the School Site(s) donated (to the extent the District receives such funding) less the amount of the $1.58 per square foot development fee which would be K&B's statutory obligation with respect to schools. If the parties cannot agree upon the Fair Market Value when necessary, such applicable FMV shall be determined in the same manner as described in Paragraph 2 above. Notwithstanding any provision in this Agreement to the contrary, K&B shall in no event be entitled to any refund of fees paid prior to the date of this Agreement, except that $73,653 paid by K&B for its Quarts Hill III development shall be applied to reduce its last payment to the District less $7,140 incurred by the District in acquiring the Sundown School Site in the Quarts Hill III development pursuant to the provisions of this Agreement.

19. Significant Change in Circumstances. In the event that (a) a substantial change in California's existing school facility finance programs occurs within six (6) years after the acquisition of the applicable school site by the District, (b) such change results in the failure of the State of California through the State Allocation Board to provide sufficient funds to the District to complete the facilities provided in part by this Agreement, (c) the District has not at such time previously received State Funds for the completion of the construction of schools to the extent described in this Agreement and (d) that District has been unable at that time to otherwise raise sufficient funds (in addition to funds and property to be contributed by K&B under this Agreement) to complete the facilities specified herein, a "Substantial Change" shall be
deemed to have occurred. In the event of such a substantial change, the outstanding construction financing and site acquisition obligations of K&B under this Agreement shall be subject to renegotiation as set forth below. The parties agree that, in the event of such renegotiations, they shall agree upon revisions to the remaining construction financing obligations of K&B under the Agreement; provided, however, K&B shall receive full credit for any contributions of construction funds previously made under the terms of this Agreement. In the event no agreement is reached in the renegotiations, K&B shall be obliged to pay (a) Eighty-three and 33/100 percent (83.33%) of the construction costs of then-uncompleted schools at School Site A, School Site B and the Sundown School Site and (b) thirty percent (30%) of the then-completed construction costs of the school at the Middle School Site. Notwithstanding anything contained herein to the contrary, the funding of construction costs shall not be subject to renegotiation with respect to any of the schools described herein after a period of six (6) years has elapsed from the date of the acquisition of the applicable school site by the District.

IN WITNESS WHEREOF, the parties executed this Agreement as of the day and year first written above.

DATED: January 22, 1991

WESTSIDE UNION SCHOOL DISTRICT
By: [Signature]
Superintendent

DATED: 1-22-92

KAUFMAN AND BROAD OF SOUTHERN CALIFORNIA, INC.
By: [Signature]
President

STATE OF CALIFORNIA
COUNTY OF LOS ANGELES

On January 22, 1991 before me, [Signature] personally appeared [Name of Officiant] and [Name of Officiant] personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) is/are acting, executed the instrument.

WITNESS my hand and official seal.

[Signature]

WTC WORLD TITLE COMPANY

OFFICIAL SEAL
SUSANN J. BANKS
REGISTRY NO. CALIFORNIA
LOS ANGELES COUNTY
/by Susan N. Banks, Apr 14, 1993
In the event of such a substantial change, the outstanding construction financing and site acquisition obligations of K&B under this Agreement shall be subject to renegotiation as set forth below. The parties agree that, in the event of such renegotiations, they shall agree upon revisions to the remaining construction financing obligations of K&B under the Agreement; provided, however, K&B shall receive full credit for any contributions of construction funds previously made under the terms of this Agreement. In the event no agreement is reached in the renegotiations, K&B shall be obliged to pay (a) Eighty-three and 33/100 percent (83.33%) of the construction costs of then-uncompleted schools at School Site A, School Site B and the Sundown School Site and (b) thirty percent (30%) of the then-completed construction costs of the school at the Middle School Site. Notwithstanding anything contained herein to the contrary, the funding of construction costs shall not be subject to renegotiation with respect to any of the schools described herein after a period of six (6) years has elapsed from the date of the acquisition of the applicable school site by the District.

IN WITNESS WHEREOF, the parties executed this Agreement as of the day and year first written above.

DATED: January 22, 1992

WESTSIDE UNION SCHOOL DISTRICT

By: [Signature]

Superintendent

DATED: 1-22-92

KAUFMAN AND BROAD OF SOUTHERN CALIFORNIA, INC.

By: [Signature]

President

Approved as to form and content:

Counsel for District
Losano, Smith, Smith
Woliver & Behrens

By: [Signature]

Louis T. Losano, Esq.

Approved as to form and content:

By: [Signature]

Barton P. Fachino
Vice President, Corporate Counsel
Kaufman and Broad Home Corporation

watt,agut
Exhibit

A-1 - Description of City Ranch Development
A-2 - Description of Quarts Hill II Development
A-3 - Description of Quarts Hill III Development
B-1 - Sundown School Site
B-1A - Exchange Sundown School Site in Quarts Hill III
B-2 - School Site A
B-3 - School Site B
B-4 - Definition of Superpad Condition
B-5 - School Site C
C - City Ranch Development Plan Map
D - Off-Site Improvements Required for School Sites and Sundown School Site
E - Forms of Deeds Granting School Sites to District
F - Description of Valencia Valley Elementary School Costs
G - Form of Letters of Support for Quarts Hill II Development and City Ranch Development
H - Form of Memorandum of Agreement
EXHIBIT A-1

Description of City Ranch Development
EXHIBIT 8-4

- Definition of Superpad Condition

A superpad is a graded pad, contoured to control drainage, sloping at 1 to 0.3. The horizontal limit of grading is constructed to a tolerance of ± 1.0'. The vertical tolerance on grading should not exceed ± 0.5'. The completed superpad should be stable with respect to erosion and contain sufficient drainage devices to convey runoff without damage to the pad or adjacent land.

The grading operation should be complete to include canyon cleanouts, removal of unsuitable material before starting fills, removal of rock where it may interfere with future underground construction, placement of subdrains, undercutting of pads to eliminate "cut/fill" lines and construction of graded slopes to finish grade including stabilization.

If the specific intended use and design of the building pads to be constructed from the superpad are known in advance of the superpad design, it can be designed to permit rough and final grading without significant import or export of fill materials.

Superpad construction does not include rough grading to create specific building pad or pavement undercuts nor precise grading to create final finish surfaces. Any retaining walls necessary should be constructed between rough and final grade.
EXHIBIT D

Off-Site Improvements Required for School Sites and Sundown School Site
Form of Letters of Support for Quartz Hill II Development and City Ranch Development
January 14, 1992

Re: Kaufman & Broad’s City Ranch and Quarts Hill II Development Proposals

To Whom It May Concern:

This purpose of this letter is to inform you that the Westside Union School District has reached an agreement with the Kaufman & Broad Company to mitigate the impact of its above-referenced project. The District is fully satisfied that the Agreement will enable the District to adequately meet the need for school facilities created by the projects.

Very truly yours,

George Reams
Superintendent

EXHIBIT C
EXHIBIT H

MEMORANDUM OF AGREEMENT BETWEEN
KAUFMAN AND BROAD OF SOUTHERN CALIFORNIA, INC.
AND THE WESTSIDE UNION SCHOOL DISTRICT

This Memorandum of Agreement Between Kaufman and Broad of Southern California, Inc. and the Westside Union School District (the "Memorandum") is entered on this 23rd day of January, 1992, by and between the Westside Union School District ("DISTRICT") and Kaufman and Broad of Southern California, Inc. ("KB").

RECITALS

Whereas, the DISTRICT and KB have entered into that certain Agreement Between the Westside Union School District and Kaufman and Broad of Southern California, Inc. dated January 22nd, 1992 (the "Agreement").

Whereas, it is the intent of the parties that all the provisions of said Agreement create a covenant for the benefit of the City Ranch Development, Quarts Hill II Development, and Quarts Hill III Development projects, (as such terms are defined in the Agreement and which terms are more particularly described on Exhibits A-1, A-2 and A-3 attached hereto and incorporated herein).

The parties hereby agree that this Memorandum is entered into and may be recorded for the purpose of giving notice to future purchasers of the existence of the Agreement, a copy of
which is available at the District Office of the Westside Union School District located at 46809 North 70th Street West, Lancaster, CA.

Date: 1-22-1992

KAUFHAN AND BROOK OF SOUTHERN CALIFORNIA, INC.

By: B. D. Dwyer

WESTSIDE UNION SCHOOL DISTRICT

By:

NOTARY

State of California )

County of Los Angeles ) S.S.

On this 22nd day of January, 1992, before me, Suzanne M. Banks, the undersigned, a Notary Public in and for the State of California, personally appeared Geraldine A. Farrell, George A. Flann and B. Dwyer, personally known to me, or proved to me on the basis of satisfactory evidence, to be the person(s) whose names are subscribed to the within instrument and acknowledged to me that they executed the same in their authorized capacity and that by their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Seal:

Suzanne M. Banks
Notary Public in and for the State of California, residing at Lancaster, California.

exh.116

EXHIBIT A-1
Appendix O

Minutes of the City Council Meetings
Appendix N
City Council Staff Report
DATE: March 10, 1992

SUBJECT: Environmental Impact Report 89-03, General Plan Amendment 91-4, Prezone 89-06, and Specific Plan 89-03 (City Ranch Specific Plan)

ISSUING DEPARTMENT: Planning

I. SUMMARY

Issues

1) Should the City Council certify Environmental Impact Report 89-03 for the annexation of territory, General Plan Amendment 91-4, Prezone 89-06, Specific Plan 89-03 (City Ranch Specific Plan) and Development Agreement 92-27?

2) Should the City Council approve General Plan Amendment 91-4, Prezone 89-06 and Specific Plan 89-03 (City Ranch Specific Plan)?

Recommendation

1) That the City Council certify EIR 89-03 as recommended by the Planning Commission at their meeting of February 24, 1992.

2) That the City Council approve General Plan Amendment 91-4, Pre-zone 89-06, and Specific Plan 89-03 as recommended by the Planning Commission at their meeting of February 24, 1992.

Fiscal Impact

1) Certification of EIR 89-03 would have no fiscal impact to the City of Palmdale.

2) Approval of the General Plan Amendment, Pre-zone and Specific Plan would have both short-term and long-term fiscal impacts on the City of Palmdale. A complete analysis of the potential fiscal impacts associated with the Specific Plan is discussed in greater length in the Fiscal Impact Report prepared by the Nathanson Company, Inc. and a memo from Bill Ramsey, Director of Finance, dated February 4, 1992 (See Attachment VII).

II. BACKGROUND

1) Environmental Impact Report:

The Draft EIR was prepared by Envirom Corporation with consultation and review by Planning Department Staff.
This document identified that development of the City Ranch Specific Plan would result in significant adverse environmental impacts to the following areas: introduction of residents to seismic hazards, direct and cumulative degradation of air quality, loss of visual resources, introduction of people to potentially harmful electromagnetic radiation, and significant cumulative impacts including loss of open space, increase in population, jobs/housing imbalance, loss of biological resources, increased noise levels in the project vicinity, impacts from light and glare, impacts to water supply, impacts to community services and utilities, and cumulative loss of archaeological and paleontological resources. The impacts to these resources will remain significant even after all feasible mitigation measures have been applied to the project and therefore, Statements of Overriding Considerations must be adopted in order to approve the City Ranch project. The Planning Commission made all necessary findings as reflected in the attached Planning Commission Resolution 92-13 (See Attachment II).

Other issues identified in the EIR will be mitigated to a level of insignificance with the implementation of the mitigation measures proposed in the document. A detailed discussion of all issues, mitigation measures and alternatives presented in the document is given in the Planning Department Staff Report, which is attached to this report.

The Planning Commission conducted hearings regarding the Draft EIR on January 15, January 20, January 23, January 27, January 30, February 5, February 6, and February 24, 1992. The minutes of these hearings are included as Attachment III.

At the Planning Commission meeting of January 15, four (4) speakers commented on the Draft EIR. The speakers raised such issues as mitigation for schools, mitigation for sheriff’s facilities, access to the adjacent Pacton-Sagebrush property, provision for regional equestrian trails, and protection of archaeological resources. The Planning Commission then closed the public hearing and continued discussion of this item to January 20, 1992. At the subsequent meetings listed above, the Planning Commission requested additional information from staff and deliberated on the adequacy of the Draft EIR. As a result of this deliberation, the Planning Commission recommended modifications to several mitigation measures (Refer to Exhibit B of Planning Commission Resolution 91-114) to more closely address project impacts. These changes, along with many of the changes suggested in the comments received on the Draft EIR, are reflected in Exhibits A and B of Planning Commission Resolution 91-114. On February 24, the Planning Commission voted approval of Resolution 91-114
(Attachment I) recommending that the Mayor and City Council certify the EIR, with four commissioners in favor and one abstaining. Exhibits A and B of Resolution 91-114 contain the changes to the EIR recommended to the City Council.

2) General Plan Amendment, Prezone and Specific Plan:

General Plan Amendment 91-4 is a request to 1) eliminate the designation of individual planning areas in the City Ranch Specific Plan on the General Plan Land Use Map, and 2) designate the project site to City Ranch Specific Plan (2.62 du/ac) on the General Plan Land Use Map. Pre-zone 89-06 will maintain the existing designation of City Ranch Specific Plan for the property affected by the General Plan Amendment. The City Ranch Specific Plan proposes to develop 5,200 dwelling units, 42 acres of commercial uses, with related park, school, open space and public facility uses on approximately 1,985 acres of land located generally south of Elizabeth Lake Road, east of the alignment of 40th Street West, north of the alignment of Avenue S., and west of the alignment of 20th Street West.

The Planning Commission considered the General Plan Amendment, Prezone, and Draft Specific Plan on January 20, January 23, January 27, January 30, February 5, February 6, and February 24, 1992. The Planning Commission recommended approval of the above mentioned projects on February 24, with four in favor and one abstaining. Major issues discussed during the public hearing process included the transfer of dwelling units out of a small residential planning area (Area 10) that was surrounded by a community park site (Area 1 and 9) to create a more functional park design; providing procedures for the mitigation of residential densities while limiting potential land use conflicts; provision of additional criteria to ensure proper buffering between residential and commercial land uses; the relocation of nine (9) acres of active parkland under the Edison easement to a more functional location; and the establishment of high school overlays in three planning areas. Based on these discussions, as well as minor textual adjustments contained in the staff report, the Planning Commission recommended a number of changes to the Specific Plan as itemized in Exhibit C of Resolution 92-13 (See Attachment II). The Commission also included a statement in their resolution recommending approval concerning the potential fiscal impacts of the project to the City and residents of Palmdale and the need to fully mitigate those impacts under the Development Agreement. For that reason the Planning Commission conditioned the Specific Plan approval to become effective only upon approval of the Development Agreement by the City Council.
Subsequent to the Planning Commission's action, staff and the applicant met to discuss several minor textual changes to the EIR and Specific Plan. Staff supports these changes in that they represent clarifications, are minor in nature, and do not conflict with the integrity of the Commission's action. The recommended changes are itemized in Attachment VIII.

Reviewed by,

Robert W. Toone, Jr.
City Administrator

Respectfully submitted,

Molly Beigh
Director of Planning

MEB/LKL/wp9036
LIST OF ATTACHMENTS TO THE CITY COUNCIL STAFF REPORT
FOR THE CITY RANCH PROJECT

ATTACHMENT I: Planning Commission Resolution 91-114,
   Recommending Certification of EIR 89-03.

ATTACHMENT II: Planning Commission Resolution 92-13,
   Recommending Approval of General Plan
   Amendment 91-4, Prezone 89-06, and Specific
   Plan 89-03.

ATTACHMENT III: Minutes of the Planning Commission Meetings
   Dated January 15, January 20, January 23,
   January 27, February 5, February 6, and
   February 24, 1992.

ATTACHMENT IV: Staff Report to the Planning Commission Dated
   January 15, 1992, for Draft EIR 89-03.

ATTACHMENT V: Staff Report to the Planning Commission Dated
   January 15, 1992, for General Plan Amendment
   91-4, Prezone 89-06, and Specific Plan 89-03.

ATTACHMENT VI: Additional Staff Correspondence Provided to
   the Planning Commission Regarding the City
   Ranch Specific Plan Project and EIR.

ATTACHMENT VII: Fiscal Impact Report and Finance Director
   Memo.

ATTACHMENT VIII: Minor Changes Requested by the Applicant and
   Staff for the Final EIR and Specific Plan.

ATTACHMENT IX: Written Comments Received on Draft EIR 89-03
   and Written Responses to those Comments.
ATTACHMENT I

Planning Commission Resolution 91-114
Recommending Certification of EIR 89-03.
A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PALMDALE RECOMMENDING THAT THE CITY COUNCIL CERTIFY THE ENVIRONMENTAL IMPACT REPORT NUMBER 89-03 FOR CITY RANCH SPECIFIC PLAN 89-03, GENERAL PLAN AMENDMENT 91-4, PREZONE 89-06, THE ANNEXATION OF TERRITORY AND THE CITY RANCH DEVELOPMENT AGREEMENT.

NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF PALMDALE FINDS, RESOLVES AND ORDERS AS FOLLOWS:

Section 1. Applications were duly filed by the applicant, Kaufman and Brod, requesting the annexation of 1,985 acres of territory into the City, and approval of General Plan Amendment 91-4, Prezone 89-06, Specific Plan 89-03 and the City Ranch Development Agreement. The territory is within an area generally bounded by Elizabeth Lake Road on the north, the alignment of the extension of 40th Street West on the west, the alignment of the extension of Avenue S on the south, and the alignment of the extension of 20th Street West on the east.

Section 2. An initial study was prepared for the project by the Planning Department Staff, pursuant to Section 15063 of the State CEQA Guidelines. The initial study, which was completed on September 1, 1989, identified that there was substantial evidence that the project may have a significant impact on several environmental resources and governmental services. Pursuant to State CEQA Guidelines 15064 and 15061, a decision was made to prepare an Environmental Impact Report ("EIR") for the project.

Section 3. On September 6, 1989, a Notice of Preparation for the EIR was prepared and sent to the State Clearinghouse in the Office of Planning and Research for the State of California and to other responsible agencies.

Section 4. On November 10, 1989, a contract was entered into between the City, the applicant and Envison Corporation ("Envison") of Calabasas, California whereby Envison agreed to be the lead consultant for the preparation of the Draft EIR for the project. Thereafter, screencheck versions of the Draft EIR was presented to the City in June 1990, October 1990, and January 1991.
Section 8. On October 1, 1991, the Draft was completed. Pursuant to State CEQA Guidelines Section 15065, the City prepared and Notice of Completion of the Draft EIR which was filed with the State Office of Planning Research on October 3, 1991. The EIR was circulated to interested agencies between October 3, 1991 and November 1, 1991 for a 45-day comment period pursuant to State CEQA Guidelines Section 15067. A copy of the EIR is on file in the office of the Planning Department.

Section 6. On March 8, 1991, a contract was entered into between the City, the applicant and Gruen Associates ("Gruen") of Los Angeles, California whereby Gruen agreed to be the lead consultant for the preparation of the Final EIR for the project. Thereafter, responses prepared a for incorporated into the EIR for the comments received during the 45-day comment period.

Section 7. The Planning Commission conducted a public hearing on EIR 89-03 on January 15, 1992 and conduct public hearings on General Plan Amendment 91-4, Prezone 89- and Specific Plan 89-03 on January 20, 1992, January 23, 1992, January 27, 1992, January 30, 1992, February 5, 1992, February 6, 1992 and February 24, 1992 at City Hall Council Chamber 708 E. Palmdale Blvd., Palmdale California. Notice of the time, place and subject matter of the public hearing was published in the Antelope Valley Press on October 4, 1991 a January 3, and January 28, 1992, in accordance with the requirements of Public Resources Code Section 21092.5 and a copy of such notice was filed with the Los Angeles County Clerk, in accordance with the requirements of Public Resources Code Section 21092.3.

Section 8. The Planning Commission here finds that the Draft EIR, the comments to the EIR and the response to those comments have been received by the Commission, that the Commission has reviewed and considered those documents prior to acting on the applications, that the content of the EIR represents their independent judgment, and that the Final EIR has been completed in compliance with CEQA, State CEQA Guidelines and the City's CEQA Guidelines.

Section 9. The Planning Commission finds that the additional information provided in the staff report accompanying the EIR, dated December 18, 1991, and additional correspondence provided for the Planning Commission meetings of January 15, January 20, January 23, January 28, January 30, February 5, February 6 and February 24, 1992, dc
Resolution 91-114
Page Three

not represent significant new information so as to requi:
recirculation of the EIR pursuant to Public Resources Co
Section 21092.1.

Section 10. The Planning Commission hereby
recommends that the City Council certify Final EIR 90-04 whic
consists of the Draft EIR, any comments received, any response
of the City to the comments received, and other materials a
set forth in the staff report dated December 18, 1991 an
exhibits thereto, which EIR was prepared for the Annexation o
Territory, General Plan Amendment 91-4, Presone 89-06, Specifi
Plan 89-03 and the City Ranch Development Agreement. Th
Planning Commission's recommendation is subject to thes
conditions contained in Exhibits "A" and "B" to this Resolution

Section 11. The Planning Commission has als
reviewed and considered the Mitigation Monitoring Program fo
the EIR that has been prepared pursuant to the requirements o
Public Resources Code Section 21061.6 and finds that suc
Program is designed to ensure compliance with the mitigatio
measures during project implementation. The Planning
Commission therefore recommends that the City Council adopt
a Mitigation Monitoring Program for EIR 90-04.

PASSED, APPROVED AND ADOPTED THIS 24th DAY o

John Mayfield, Chairman
Fairdale Planning Commission

ATTEST:

Sue Thompson, Deputy City Clerk
EXHIBIT A

EIR TEXT

The Planning Commission's recommendation to the City Council for certification of EIR 89-03 is subject to the following changes being made to the text of the Final EIR:

Page 2-16 (paragraph two, last sentence) revise to read: "22.5-foot-wide landscape easement will be provided on the south side of the road, east of Bridge Road, and will include sidewalk and equestrian trail."

Page 5-136 (paragraph five, last line): "the 2010 AM and PM peak hour volumes are shown in Table 16."

Page 5-266 (paragraph one, second sentence) revise to read: "Based upon student generation factors provided by the individual school district, the number of additional student-generated by this project is estimated to be 4,024/4,444: 2,145 K-5th grade students, 724 6-8th grade students, and 1,040/1,166 9-12th grade students (Table 35)."

Page 5-266 (paragraph one, last sentence) revise to read: "All 1,040/1,166 of the estimated high school students would attend high schools in the Antelope Valley Union High School District."

Page 5-131 (paragraph one, second sentence) revise to read: "Table 15/16/17/A shows that the contribution to congestion along Elizabeth Lake Road from project related traffic is 1% (from 20th to 10th Street West) and 0% (east of 10th Street West)."

Figure 6, revise cross-section (F) to show correct right-of-way.

Figure 49, revise source to read: "City Ranch South Specific Plan Technical Studies August 5, 1991, Enco Engineering."

Figure 47, revise label for Elizabeth Lake Road between 10th Street West and 20th Street West to show "40".

Figure 68, delete the word "Proposed" from the legend.

Table 14, Second land use category, revise to state "Commercial/Recreation/Residential/Fire/Educational Trip."

Table 35, revise high school student generation rate from .3 to .2; revise number of students accordingly.
Section 3.16.2. add the following text: "With regard to groundwater supply, several different studies were reviewed that appear to have conflicting opinions concerning the ability of the aquifer to accommodate additional growth in the Antelope Valley. The following studies were reviewed with respect to groundwater supply:


The conclusions expressed in the various groundwater studies demonstrate that a disagreement exists between experts regarding groundwater supply, groundwater recharge, and safe yield from the aquifer. For example, the report prepared by Los Angeles County Waterworks District, March 1991, concludes that the Valley's existing water resources (groundwater and state-imported water) were sufficient to support SCAG's 201 population projection for the Antelope Valley. However, the water resources study prepared by the Antelope Valley United Water Purveyors concluded that the overdraft in the aquifer in 1990 was at least 60,500 acre-feet, and implied that additional growth would jeopardize the availability of water in the future. Two of the studies reviewed discussed water levels at various locations of the aquifer; in one study location, well levels were rising, in the other, water levels were falling (Loundagin, Slade). Also, estimates of the annual recharge to the aquifer, and therefore, the safe yield, was reported to be 76,000 acre-feet, 58,000 acre-feet and 40,700 acre-feet in various studies.

However, Los Angeles County Waterworks District No. 14 has repeatedly indicated that there is sufficient water supply using a conjunctive use policy to accommodate this project, as well as other planned development. The Waterworks District has
described their conjunctive use policy in the following manner: State water project water will be used in times when water is plentiful to recharge the groundwater basin; in times when state water project water is scarce, the groundwater stored in the aquifer will be withdrawn and used as the primary source of supply. Application of this policy is anticipated to keep groundwater levels above the 1980 historic low so as to preserve the capability to replenish the aquifer while at the same time providing sufficient water to serve the growing need of the Antelope Valley.

Therefore, based upon the evidence presented, development of the project will not result in significant cumulative effects on the groundwater supply. However, if, in the future imported water is not available to support project development, a supplemental EIR would be required to address project impacts to regional groundwater resources."

Section 5.17 Revisions:

Section 5.17.1, paragraph: “The project site is located outside of an area served by the Los Angeles County Sanitation Districts (LACSD). Annexation of the project site into the City of Palmdale and into the LACSD will locate the project site within LACSD No. 20. The District presently serves a population of approximately 72,800 in the Antelope Valley area. Sewage generated within District No. 20 is conveyed through trunk sewers to the Palmdale Water Reclamation Plant (Palmdale WRP) located approximately 5.7 miles east of the project site at 19300 10th Street East in Palmdale. The Palmdale WRP currently has an average daily flow capacity of 8.0 MGD million gallons per day (mgd). At this time, the Palmdale WRP is operating at capacity, with daily flows often ranging from 7.2 to 8.2 MGD. Expansion of the Palmdale WRP, scheduled for completion in March 1992, will increase the plant capacity to an influent capacity of 12.0 MGD and an effluent discharge limitation of 10.0 MGD. There will be additional capacity added to the Palmdale WRP in the future to a maximum capacity of 15.0 MGD. However, there is not a definite work schedule established for this expansion (Sakai 1992 VREER 1991)."
Subsection 5.17.1, paragraph 2: revise second and third sentences: "The point of connection to Trunk "C" is located approximately 1 1/2 miles away at the intersection of Division Street and Avenue P-A. The Trunk "C" Relief Sewer operates by gravity flow and is a 21 to 39-inch/22/26/28/45 diameter vitrified clay pipe sewer which varies in capacity from 10.3 to 16.7 mgd/22/24/26/50 mgd."

Subsection 5.17.1, paragraph 3: revise fourth sentence to read: "At 15th Street East and Avenue P, the sewer increases from 18 to 24 inches in diameter with a capacity of 5.6 mgd and a 60%/80% flow; and at 30th Street East near the Palmdale WRP, it is a 10 inch sewer with 9.2 mgd capacity and a 17%/83% flow."

Subsection 5.17.2, paragraph 2: revise first sentence to read: "From the point of connection of the Trunk "C" Relief Sewer at 10th Street West and Amargosa Creek/Avenue P-A, the Amargosa Creek Trunk Sewer (shown on Figure 66) would need to be extended to the project site."

Section 12 (page 12-31): delete the text following "Interior Water Consumption Reduction Measures" and "Exterior Water Consumption Reduction Measures." (The text under these headings is incorrect; the correct text appears on the following page.)

Add the following section:

3.30 LIBRARY SERVICES

3.30.1 Existing Conditions

Library Services in Palmdale are presently provided by the Palmdale City Library, located at the southeast corner of the intersection of Palmdale Boulevard and Sierra Highway. This facility is 12,400 square feet in size and can accommodate 75,000 volumes. However, according to the City Librarian, the need exists for a larger facility with more extensive services. The physical constraints of the library currently limit the types of services which can be offered and which are presently demanded by the community.
5.30.2 Project Impacts

National library standards provided by the City Librarian recommend 2.5 volumes per capita, 0.3 staff per thousand population and an area of 0.8 square feet per capita. Therefore, library needs for the City Ranch project, using these standards and a household size of 2.7 persons per dwelling unit suggest 15,100 volumes, 7 staff persons, and 11,132 square feet of library facility. The adjoining Ritter Ranch Specific Plan area will be required to construct a branch library facility 16,000 square feet in size. Therefore, a branch facility to the City Ranch project would be redundant. However, the applicant could provide a pro-rata share of funding for upgrading the main library or assist in the construction of the branch library proposed on the Ritter Ranch project. The location of the branch facility in the Ritter Ranch project with expanded library facilities at the main library would provide adequate library services for the City Ranch Specific Plan residents.

5.30.3 Mitigation Measures

The developer will contribute 42% of the costs associated with construction and equipping of the branch library facility within the proposed Ritter Ranch project.

In the event that the Ritter Ranch project is not constructed, the developer will contribute a pro-rata share towards the construction of 11,232 square feet of library facilities and purchase of 15,100 volumes. In determining the applicant's pro-rata share, the criteria will include, but will not be limited to: area of benefit for the main library and/or a branch library; number of units within the area benefitted, and the cost of the facility. The actual amount and terms of the applicant's contribution under this measure may be agreed upon by the applicant, the Planning Director and the City Librarian.

5.30.4 Cumulative Impacts

Development of the cumulative projects would result in a need for library facilities of 28,393 square feet in size with 88,728 volumes and 17 staff persons. Mitigation on a project by project basis or by a City-wide financing mechanism can reduce the impacts of this cumulative development on library facilities. Therefore, this is does not represent significant cumulative impact.

5.30.5 Unavoidable Adverse Impacts

Implementation of the mitigation measure listed above will reduce project impacts to library services to less than significant levels.
MITIGATION MEASURES

The Planning Commission's recommendation to the City Council for certification of EIR 89-03 is subject to the following changes being made to the text of the mitigation measures listed below:

To Section 5.6.1, add: "In accordance with the California Department of Real Estate disclosure format and procedures, a potential purchaser of real property which is shown within the FEMA 100-year flood plain on the Flood Insurance Rate Maps most recently circulated by FEMA, shall be notified of the situation, regardless of whether the actual flood hazard has been abated by other methods. Also, the applicant shall contact FEMA as soon as possible after eliminating areas from the 100-year flood hazard zone to request modifications of the Flood Insurance Rate Maps. The applicant shall then diligently pursue revisions of the maps until the 100-year flood hazard zone as modified by the development is depicted on them."

To Section 5.7.1, add: "The Applicant shall provide Cumulative Human Impact Evaluation to California Department of Fish and Game in order that impacts to Mojave ground squirrel may be addressed. The information contained in the evaluation will be utilized by CDFG to draft an endangered species management permit, if warranted. The permit, if warranted, must be completed and mitigation measures fully dedicated before project initiation. Therefore, the consultation with CDFG will occur prior to issuance of any grading permit for the proposed project."

To Section 5.7.1, revise existing mitigation measure to state: "If avoidance of the alkali meadow/transmontane alkali marsh is impossible, permits and agreements under Section 404 of the Clean Water Act and under 1603 of the State Fish and Game Code will be required from the U.S. Army Corps of Engineers and the California Department of Fish and Game, respectively. A minimum, lost wetland acreage will be replaced in kind on one-to-one-acre basis. Also, a mitigation and monitoring plan subject to CDFG approval, will be required in the event of an loss of alkali meadow/transmontane marsh habitat."

In Section 5.8.3, revise existing mitigation measure to state: "If, as a result of project impacts, the level of service fails below either the standards set by the Los Angeles County Transportation Commission's Congestion Management Plan, or the policies set by the City's General Plan, the applicant shall implement improvements or services necessary to bring the roadway segment into compliance. The Final Draft CWP, dated August 14, 1991, includes SR-14, and Route 118, and identifies Sierra Highway as a roadway requiring additional study."
In Section 5.9.1, revise existing mitigation measure follows: The applicant shall participate in any approved future trip reduction programs adopted by the City for future development applications.

In Section 5.9.1, add: "The project applicant shall submit a Transportation Demand Management Plan that will 1) create a City of Ranch Transportation Management Association; 2) investigate the feasibility of developing a telecommuting center on site; and, 3) start a vanpool demonstration program for City Ranch residents. The plan will be submitted to the Planning Director prior to issuance of any certificates of occupancy for the proposed project."

In Section 5.9.1, delete: "In order to conform to the jobs/housing balance criteria of the AQMP, additional on-site opportunities should be provided on the project site."

In Section 5.9.1, add a mitigation measure that states: "Soil binders or ground cover will be used to mitigate dust emission for disturbed areas left inactive for over 96 hours after grading."

In Section 5.9.1, add a mitigation measure that states: "The project shall comply with all SCAQMD Rules and Regulations including those pertaining to paving materials and architectural coatings. Specifically, use nonsolvent based high-solid, or water based coatings on buildings where feasible.

In Section 5.9.3, add a mitigation measure that states: "In order to provide additional reductions in air emissions, the following list of mitigation measures was provided by the SCAQMD. Because these measures cannot be applied to all development applications that may be submitted for the City Ranch Specific Plan, each development application will be reviewed and those measures from the list which are deemed appropriate by the Planning Director will be applied to the development application.

Minimize Construction Activity Emissions:

- Schedule construction activity during off-peak hours and require a phased-schedule of construction to even out emissions peaks.
- Remove silt by paving construction roads, sweeping streets, and washing trucks leaving from construction site.
- Suspend grading operations during first and second stage smog alerts.
• Maintain construction equipment engines by keeping them tuned.
• Use low-sulfur fuel for equipment.
• Use existing power sources; avoid using temporary power generation.

Reduce Construction-Related Traffic Congestion:
• Provide rideshare and transit incentives for construction personnel.
• Configure construction parking to minimize traffic interferences.
• Minimize obstruction of through traffic lanes.
• Provide a flagperson to guide traffic properly.
• Schedule operations affecting traffic for off-peak hours.

Limit Emissions from Vehicle Trips:
• Establish telecommuting programs, alternative work schedules, and satellite work centers.
• Schedule goods movements for off-peak traffic hours.
• Provide local shuttle and regional transit systems, transit shelter, bicycle lanes, storage areas, amenities, and ensure efficient parking management.
• Provide dedicated turn lanes as appropriate.
• Work with cities/developers/citizens in the region to implement TDM goals.
• Ensure streamlined traffic synchronization.
• Provide park-and-ride facilities.
• Implement parking management at commercial facilities and other places attracting traffic.
• Provide preferential parking to high occupancy vehicles and shuttle services; and charge parking fees on low occupancy vehicles.
• Provide temporary roadway controls at peak-hours, such as one-way streets; and install directional traffic signs; and synchronize traffic signals to relieve congestion on surrounding streets; and manage street intersections to improve level of service.

Maximize Energy Conservation:
• Implement energy conservation measures beyond state and local requirements.
• Include energy costs in capital expenditure analysis.
• Landscape with native drought-resistant species to reduce water consumption and to provide passive solar benefits.
- Improve thermal integrity of buildings and reduce thermal load with automated time clocks or occupant sensors.
- Introduce glazed windows, wall insulation, and efficient ventilation methods; install window systems to reduce thermal gain and loss.
- Introduce energy-efficient heating and other appliances.
- Incorporate appropriate passive solar design.
- Ensure sealing of all buildings.
- Control mechanical systems, or equipment with time clocks or computer systems.
- Implement waste separation and recycling programs.

Limit Emissions from Architectural Coatings and Asphalt Usage:

- Nonsolvent-based coatings should be used in buildings. Solvent-based coatings, if used, should minimize solvent emissions.
- Use of high-solid or water-based coatings should be encouraged.

To Section 5.10.3, add: “Reduction of intrusive noise levels in residential and school areas shall be accomplished through the incorporation of design measures or structural measures which will reduce noise levels to acceptable levels within the living or recreational portions (as defined by the City) of any lot. The measures that may be utilized to reduce noise impacts include, but are not limited to, placement of parking structures in such a manner as to act as a buffer, increasing the setbacks along the roadway, creation of landscaped berms, or construction of other barriers such as walls. The acceptable noise level CNEL which will be applied to future projects will be that level which is in place, either by ordinance, resolution or General Plan policy, at the time that future development applications are deemed complete.”

From Section 5.10.3, delete: “Reduction of intrusive traffic-related noise levels in residential and school areas shall be accomplished through the placement of noise attenuation barriers along Avenue S and Bridge Road and Elizabeth Lake Road and City Ranch Road where they front on residential and school planning areas.” Delete: “The location of bedrooms and quiet living areas in residential dwellings shall face away from noise sources while areas (such as kitchens, garages, bathrooms and playrooms) that are more noise tolerant shall face the source.” Delete: “Two-story
residential units located within the ultimate unattenuated dB(A) CNEL contour as specified by City Standards will require architectural treatments which should be addressed at more detailed levels of planning.

To Section 5.13.3 add: "Encourage the placement of dwellings units to take full advantage of solar energy for heating and cooling in order to reduce the use of electricity and natural gas within the project area."

In Section 5.16.3, delete: "Landscape street right-of-ways, entry statements, manufactured slopes, etc. with drought tolerant plants where feasible."

In Section 5.16.3, revise the following measure to state: "Landscape street rights-of-way, easements, medians, project entry statements, and all manufactured slopes with drought tolerant species where feasible."

In Section 5.17.3, revise existing mitigation measure to state: "All sewer infrastructure extensions and improvements depicted on Figure 66 and described in the project impacts subsection of this section of the EIR shall be constructed by the applicant. In the event that Assessment District 20-1 is not formed, and Developer constructs off-site trunk sewer lines within the San Andreas fault zone, the developer shall use state-of-the-art designs for the trunk sewer line to minimize the risk of rupture, and subsequent contamination, caused by a seismic event. Also, the developer shall cause the preparation of an emergency spill response plan. The plan shall include provisions for spill containment, cleanup and disinfection measures, and training and funding for implementation of the spill plan. The plan shall be reviewed by the Lahontan Regional Water Quality Control Board and Sanitation District No. 20, and approved by the Director of Public Works and the Director of Planning."

To Section 5.20.3 add: "The applicant shall contribute its pro-rata share of: 1) the cost of acquiring property for the police station; 2) the cost of construction of the station; and 3) the cost of reasonably necessary associated equipment. The station shall be sufficient to serve the City Ranch project and other surrounding properties at a service capacity of 1 deputy per 1,000 population and without causing a decrease in the City's current level of police capability and standards of service. The amount and terms of the applicant's contribution under this mitigation measure may be agreed upon by the applicant, the Los Angeles County Sheriff's Department and the Planning Director and may take into account..."
anticipated tax revenues generated by the project, but --
applicant’s contribution toward any credit is
anticipated tax revenues shall not be less than the applicant’s
reasonable share of the cost of constructing and equipping
the Sheriff's station sufficient to accommodate the additional sheriff’s
officers and support staff required to provide police service
for the increased population created by the City Ranch Project.

The applicant shall pay its pro-rata share of the acquisition
costs upon the selection of a site by the Sheriff's
Department. The applicant shall pay its pro-rata share of the
construction costs upon the commencement of construction. The
applicant shall pay one-half of its pro-rata share of the costs
of reasonably necessary equipment upon the issuance of the
1,400th occupancy permit for the project. The applicant shall
also pay the remaining one-half of its pro-rata share of the costs
of reasonably necessary equipment upon the issuance of the
5,000th occupancy permit for the project.

Within Section 5.22.1., replace existing Mitigation Measure
with:

"(a) Palmdale School District: The developer shall
comply with the terms of the agreement, dated October 8, 1990,
between the developer and the Palmdale School District as
mitigation for impacts caused by development of the project on
the Palmdale School District. The terms of that agreement are
as follows:

(i) Participate in the Mello Roos Community Facilities
    District created by the Palmdale School District for
    financing school construction.

(b) Westside Union School District: The developer shall
    comply with the terms of the agreement, dated January 22, 1992,
between the developer and the Westside Union School District as
    mitigation for impacts caused by development of the project on
    the Westside Union School District. The terms of that
    agreement are as follows:

(i) refer to agreement attached to this Resolution as
    Exhibit C.

(c) Antelope Valley Union High School District:

The developer of the project shall:

(i) Participate in a Mello Roos Community Facilities
    District created to provide funding for construction and
    equipping high schools within the Antelope Valley Union
    High School District. The level of funding shall be
adequate to provide 50% of the requirement for a generation factor of .2 high school students per single family dwelling. The balance of the funding would come from the state.

(ii) A site will be required to house the students generated by this project and by the adjacent Ritter Ranch project. The District requests that the two developers jointly designate, for purchase by the District, a site located on their common boundary that will satisfy the need for a 50 acre site. Based on the projected number of students generated by the two projects, City Ranch would be required to furnish 22 acres of the required 50 acres. The District staff has reviewed the two specific plans and find that proportional portions from the following planning areas would satisfy the District requirements. These are listed in order of preference and are shown on a composite map of portions of the two tracts:

A. Ritter Ranch - Planning Area 5X and City Ranch - Planning Area 14.
B. Ritter Ranch - Planning Area 6Y and City Ranch - Planning Area 17.
C. Ritter Ranch - Planning Area 5W and City Ranch - Planning Area 5.

(iii) The final site designation shall be subject to approval by the District and shall meet the following conditions:

1. The site shall be made available for purchase by the District at a price not to exceed the average of three appraisals.
2. The site shall be economically and technically suitable for construction of a school site and its associated facilities. It shall meet all geological and seismic requirements.
3. The site shall be subject to the approval of all local and state agencies having jurisdiction and shall meet all those requirements in effect at the time of purchase.
4. Utility services, water, sewer, gas, electricity and telephone, shall be available to the site at no cost to the District prior to start of sch

...
construction or prior to completion of 25% of total dwelling units within either project whichever is earlier.

5. Access to the site, improved to the appropriate city or county standards, shall be provided to the site at no cost to the District.

In the event that the applicant does not conclude negotiations of the agreement referred to in the District's letter, dated January 23, 1992, to terms satisfactory to the Antelope Valley Unified High School District, prior to completion of 25% of the total dwelling units within the City Ranch Specific Plan, then the following measures will apply:

(i) The applicant shall dedicate the property specified in the City Ranch Specific Plan for use as a high school site to the Antelope Valley Union High School District, as such site is designated in the City Ranch Specific Plan as adopted, without restriction, reservation or expense to the school district.

(ii) The applicant shall pay the school district, or its successors, the reasonable cost of constructing new and/or interim school facilities on that site, which school is necessary to accommodate the students generated by the City Ranch Project. The applicant shall receive credit for payment made to the school district pursuant to agreements between the applicant and the school district. The applicant shall also receive credit for the amount of state grant money reasonably available to the school district for construction of new school facilities at the time the applicant's contribution is due.

(iii) The size and type of facilities to be constructed shall correspond to established standards for reasonable school construction and school/student ratios and shall comply with specifications provided by the school district as determined reasonable by the Planning Director of the City of Palmdale.

(iv) The applicant shall make its payments to the school district for construction of the required school facilities sufficiently in advance, as determined by the school district, so as to permit completion of construction of the school facilities at the time the Project has generated the student population sufficient to require such school facility. However, the time frames for dedication and payment shall meet the following minimum standards:
(a) The school site shall be dedicated to the district at the time the first phase of a final permit for the project is recorded.

(b) The high school shall be constructed in an operational prior to the issuance of the 7,000-square-foot occupancy permit for the project.

To Section 5.23.3. add: "Exhibit 16 of the proposed Specific Plan will be amended to include an equestrian staging area at Planning Area 1, an equestrian staging area in Planning Area 2, and an equestrian trail through the powerline easement. Trails planned in the City Ranch Specific Plan will be coordinated with those planned for the Ritter Ranch Specific Plan. Future developments adjacent to this project will be required to coordinate with the trails shown on the trails plan adopted for City Ranch."

To Section 5.23.1. add: "The following sites which were augered require additional testing for subsurface deposits: LA-1746, LA-1747, LA-1748, LA-1749, LA-1750, LA-1752, LA-1753, LA-1755, LA-1756, LA-1772, LA-1774, LA-1767, LA-1768. At least two additional 1x1 meter test units need to be excavated at each of these sites, within site areas with the greatest densities of surface artifacts. These excavations are important to determine whether auger testing has missed subsurface deposits and to get a clearer, vertically-controlled picture of such deposits and their depositional context.

The following important petroglyph, bedrock mortar, and rock ring sites were not subject to any subsurface testing. They need to be tested through excavation of a minimum of two 1x1 meter units utilizing 1/8" screen in the immediate vicinity of these features: LA-1767, LA-1768, LA-1759, LA-1760, LA-1761, LA-1762, LA-1763, LA-1764, LA-1765, LA-1766, LA-1769, LA-1770, LA-1771. The "hunting blind" sites are important structures whose function needs to be determined through further testing.

The important apparent habitation site, LA-949, should be avoided through realignment of the proposed roadway.

Those sites, not listed above, which contained surface artifacts but were only auger tested shall be tested with at least one standard test unit per site. The testing program shall be submitted to the City Planning Department for review and approval prior to commencement. In addition, untested cupule sites, rock rings and hunting blinds shall also be..."
tested in this manner. Any additional mitigation requirements as a result of the additional testing shall be required mitigation measures for initial and subsequent development applications, as appropriate.

A subregional analysis shall be prepared to provide a basis for significance determinations. It shall include a research design that would set standards for future work in the Ar-Verde-Sierra Pelona subregion.

Relocation of cupule boulders must be done under the directi- of a qualified archaeologist who will give careful attention to orientation of the boulders. The boulders shall be moved prior to site disturbance in their immediate vicinity to a location approved by the Planning Director. Since context will be lost, some shall be relocated to an interpretive center where they can be used for educational purposes. Representative artifacts should be displayed at this interpretive center. Development of a subregional interpretive center should be coordinated with nearby specific plan areas.

The work described above shall be performed by a qualified archaeologist, retained by the applicant and approved by the Planning Director. Because the introduction of residents into the area will result in the degradation of archaeological sites, required testing and preparation of a subregional report shall be completed and approved by the Planning Director prior to recording of the first parcel map or tract map for the project.
AGREEMENT BETWEEN THE WESTSIDE UNION SCHOOL DISTRICT
AND KAUFMAN AND BROAD OF SOUTHERN CALIFORNIA, INC.

This AGREEMENT ("Agreement") is made and entered into this 22nd
day of January, 1991 by and between the WESTSIDE UNION SCHOOL
DISTRICT (the "District") and KAUFMAN AND BROAD OF SOUTHERN
CALIFORNIA, INC., a California Corporation ("K&B") with respect
to the following recitals:

RECITALS

A. K&B is the owner of certain properties described in
Exhibits A-1, A-2 and A-3, each attached hereto and incorporated
herein by reference (collectively, the "Property") which Property
K&B proposes to develop for various land uses. The portion of
the Property described in Exhibit A-1 shall be referred to as the
"City Ranch Development", the portion of the Property described
in Exhibit A-2 shall be referred to as the "Quartz Hill II
Development" and the portion of the Property described in Exhibit
A-3 shall be referred to as the "Quartz Hill III Development".

B. On April 17, 1989, District passed a resolution levying
developer fees (school impact fees) on residential construction
within its boundaries pursuant to Government Code sections 51080
and 65995.

C. The fee levied by District is inadequate to meet the
needs created by the development projects proposed by K&B for the
Property. The District acknowledges that this Agreement shall
provide funds in excess of the fees it has established pursuant
to Government Code section 51080. The District and K&B desire to
establish a method of financing the District's acquisition and
improvement of certain permanent school sites and facilities.

D. Palmdale and Lancaster, which cities are responsible
for approving the proposals of K&B, are unwilling to grant
discretionary approvals necessary to complete K&B projects
because of the lack of school facilities to meet the needs of
future residents of K&B projects pursuant to Mira Development
E. K&B desires to obtain the District's support for its development plans for the Property and District agrees to support such plans based upon the mutual promises contained herein.

NOW, THEREFORE, in consideration of the mutual terms and conditions contained herein, the District and K&B agree as follows:

AGREEMENT

1. Site Donations. The District and K&B acknowledge that K&B has previously sold the "Sundown School Site" within the Quartz Hill II Development to the District which site is more fully described in Exhibit B-1 attached hereto and made a part hereof. The parties have agreed to exchange the Sundown School Site described in Exhibit B-1 for a site within the Quartz Hill III Development, which site is more particularly described in Exhibit B-1-A attached hereto and made a part hereof. Upon such exchange, which shall be accomplished at no cost to the District, the site described in Exhibit B-1-A shall thereafter be referred to as the "Sundown School Site". K&B shall donate to the District at no cost to the District two (2) additional school sites within the City Ranch Development pursuant to the schedule described below. The two sites are more particularly described in Exhibits B-2 and B-3 attached hereto and made a part hereof and shall be collectively referred to as the "School Sites". The School Site described in Exhibit B-2 shall be known as "School Site A" and the School Site described in Exhibit B-3 shall be known as "School Site B". School Site A is also designated as "Planning Area 11" within that certain Development Plan for the City Ranch Development which is dated July 18, 1991 attached and made part of this Agreement as Exhibit C (the "Development Plan Map"). School Site B is also designated as "Planning Area 308" within the Development Plan Map.

The donations of the School Sites shall be timed in accordance with the following schedule:

(a) K&B shall donate School Site A to the District concurrently with the recordation of a final subdivision tract map (which tract map, upon recordation, shall create a legal subdivision) comprising one of the following "Planning Areas" designated on the Development Plan Map: Planning Areas 5, 10, 12, 14, 15, 16, 17, 19A or 20. For the purposes of this Agreement, these Planning Areas shall be collectively referred to as "Region One".
(b) K&B shall donate School Site B to the District concurrently with the recording of a final subdivision tract map comprising one of the following Planning Areas designated on the Development Plan Map: Planning Areas 6, 7, 11, 12, 24, 27, 28A, 30A, or 31 (to the extent that any portion of such Planning Areas are actually located within the Westside Union School District). For the purposes of this Agreement, these Planning Areas shall be collectively referred to as "Region Two".

Each site shall be donated to the District free and clear of any and all liens, encumbrances, assessments, covenants, easements and conditions, except as otherwise expressly provided herein. In addition, K&B shall mass grade the site so that the site will be brought to a "superpad" condition as such term is defined in Exhibit B-4 attached hereto and made a part hereof. The District shall have the option of requiring K&B to rough grade each site to the District's specifications at the time K&B performs any rough grading on any adjacent property with the difference in the cost of mass grading the school site and rough grading the school site to be entirely borne by the District. K&B shall give written notice to the District at least 60 days in advance of rough grading any adjacent property with an itemization of all costs (in excess of mass grading costs) to rough grade the applicable school site. District shall notify K&B within 30 days of receipt of the notice and cost itemization of the District's willingness to proceed with the rough grading at the District's incremental expense with respect to each site.

3. Site Dedication. A third school site (School Site C) more particularly described in Exhibit B-5 shall be reserved for purchase by the District within six (6) years from the date of issuance of the eight hundred fifty-first occupancy permit in either Region One or Region Two, whichever comes later. The District may exercise its option to purchase the site by sending written notice to K&B. Within ten (10) days of receipt of notice, the parties shall open escrow with instructions to close escrow as follows: K&B shall deposit a grant deed conveying title free and clear of all encumbrances, liens, assessments, covenants, conditions and easements (except those for utilities) to the District. District shall deposit the purchase price which shall be determined by the then fair market value (FMV) which in no event shall exceed $100,000 per acre. In the event that the parties cannot agree on the fair market value, each party shall obtain an appraisal from an MAI certified appraiser. If the two appraisals are within $5,000 per acre of each other the FMV shall be the lowest value plus one-half the difference. If the difference between the two appraisals is more than $5,000 per acre, then the County Superintendent of Schools shall designate a third appraiser who shall conclusively establish the fair market value.
value. The cost of the third appraisal shall be borne equally by the parties. Notwithstanding anything contained herein to the contrary, in no event shall the cost of the property to the District exceed $100,000 per acre.

In the event that this site is not developed as a school within six (6) years of the issuance of eight hundred fifty-first occupancy permit in either Region One or Region Two, whichever comes later, and the District determines to sell it within that period of time, K&B shall be given the opportunity to purchase it at the highest offer received by the District. K&B shall exercise this option in writing within twenty-four (24) hours of receipt of an offer by the District. All terms and conditions shall be identical to the highest bona fide offer received by the District.

3. **Off-site Improvements.** In addition to its donations of School Site A and School Site B and the sale to District of School Site C, K&B shall perform all off-site improvements for the benefit of the School Sites and for the benefit of the Sundown School Site (such as construction of roads, curbs, gutters, sewers, utilities and water to the District’s or City’s specifications whichever is applicable by law, and mass grading, as defined above). K&B’s obligations for off-site improvements to the School Sites and the Sundown School site shall be expressly limited to the specific obligations set forth as Exhibit D to this Agreement.

With respect to such off-site improvements, the District expressly acknowledges that such improvements shall be performed by K&B concurrently with other off-site improvements or on-site improvements within the City Ranch Development, the Quartz Hill II Development or the Quartz Hill III Development, as applicable. The District and K&B acknowledge that the off-site improvements will be bonded by K&B with the City of Palmdale or the City of Lancaster, as applicable. K&B shall be obligated only to complete the off-site improvements as described in Exhibit D.

The School Sites and the Sundown School site have been approved by the District after consultation with K&B and the District acknowledges that it is satisfied with the acreage of such sites. The deed(s) granting School Site A and/or School Site B from K&B to the District shall be in the form attached to this Agreement and made a part hereto as Exhibit E. K&B and the District acknowledge that for each School Site K&B may reserve easements for slopes, construction, utilities and similar rights to K&B so that K&B shall have the right to reasonably utilize the site provided K&B holds the District harmless from any and all claims arising from its utilization of the School Site(s) for
such purposes in connection with the City Ranch Development, Quartz Hill II Development or Quartz Hill III Development, as applicable, and provided that K&B's use is coordinated with the District's use and does not interfere with the District's use.

4. **Construction Expenditures.** As more particularly described in this Paragraph 4 and Paragraph 5 below, K&B shall pay sixty-six and two-thirds percent (66 2/3%) of the cost of constructing each permanent school on School Site A, School Site B and the Sundown School Site.

With respect to each of the School Sites and the Sundown School Site, the applicable Payment shall be subject to the following:

(a) The District shall make no demand and K&B shall have no obligation to make a Payment with respect to School Site A unless K&B has obtained building permits with respect to two hundred twenty-five (225) residential units within Region One and the District has issued a notice to proceed for the construction of a public school at School Site A to a general contractor.

(b) The District and K&B shall have no obligation to make a Payment with respect to School Site B unless K&B has obtained building permits with respect to two hundred twenty-five (225) residential units within Region Two and the District has issued a notice to proceed for the construction of a public school at School Site B to a general contractor.

(c) K&B shall have no obligation to make a Payment with respect to the Sundown School Site unless K&B has obtained building permits with respect to two hundred twenty-five (225) residential units within either the Quartz Hill II Development or Quartz Hill III Development and the District has issued a notice to proceed for the construction of a public school at the Sundown School Site to a general contractor.

5. **Calculation of Payment for Elementary School Construction.** The schools to be constructed at School Site A, School Site B and the Sundown School Site shall be modeled after the Valencia Valley Elementary School located at 23401 Carrizo Drive in Valencia, CA. A detailed description of the costs of construction of the Valencia School are attached hereto and made a part hereof as Exhibit F. For the purposes of this Agreement, the total cost set forth in Exhibit F is $4,247,542 (the "Valencia Costs"). With respect to each payment owed by K&B, the Valencia Costs shall be adjusted, to account for the percentage increase or decrease occurring in the School Construction Cost Index published by the Office of Local Assistance, California
Department of General Services from July 1, 1967 until the date the Payment is due. Such adjusted cost shall be referred to herein as the "Adjusted Valencia Cost". An amount equal to two-thirds of the Adjusted Valencia Cost shall be deemed "K&B's Share of AVC". In addition, at least 60 days prior to the date the Payment is due, the District shall have complied with the provisions of the Public Contracts Code regarding school construction. The bid selected by the District shall be deemed the "Actual Costs Amount"; provided, however, for the purpose of calculating K&B's Share of AVC only, such Actual Costs Amount shall not include any amount for the administrative services of school personnel, furniture or equipment costs. However, the costs shall include architectural, engineering and other professional services. An amount equal to two-thirds of the Actual Costs Amount shall be deemed "K&B's AC Share". The Payment shall be equal to K&B's AC Share; provided, however, the Payment shall not exceed 103% of K&B's AVC Share if K&B's AC Share exceeds K&B's AVC Share; and provided, further, the Payment shall not be less than 95% of K&B's AVC Share of Adjusted Valencia Cost in the event K&B's AC Share is less than K&B's AVC Share.

In addition, the parties acknowledge that the Payment shall be made by K&B in accordance with the standard contract for school construction approved by the Office of Local Assistance. Completion of a particular progress payment stage shall be certified by (i) a joint certificate of the general contractor and the District, and (ii) an appropriate invoice from the District. K&B shall pay the applicable percentage of the Payment within ten (10) days after its receipt of an appropriate certificate and invoice.

6. Middle School Site. District shall identify a twenty (20) acre Middle School Site within the Ritter Ranch Development project reasonably suitable as the Middle School Site in light of the plans for the Ritter Ranch Development. K&B's payment contribution (see below) for the acquisition of the Middle School Site shall be due on the earlier to occur of (a) five days prior to the statutory requirement deadline for depositing the funds in court in the event condemnation proceedings are filed in order for the District to take possession of the Middle School Site or (b) twenty (20) days prior to the scheduled close of escrow for the District's acquisition of the Property through a purchase and sale transaction. K&B's contribution shall be twenty-seven (27%) of the purchase price plus all costs of acquisition of the Middle School Site, including costs of litigation, actually reasonably and necessarily incurred by the District. In the event of such condemnation, K&B shall initially contribute 27% of the District's last offer to the property owner in connection with
the condemnation proceedings. The balance of 27% of the sum of actual condemnation purchase price plus the above-described costs shall be due and payable five (5) days after the completion of such condemnation proceedings.

7. **Calculation of Payment for Middle School Construction.**

The Middle School to be constructed shall be modeled after the Hillview Middle School currently under construction by the District and located at 40535 Peonna Lane, Palmdale, CA. A detailed description of the costs of construction of the Hillview Middle School will be provided by the District when it is available but in no event more than 30 days after completion of the school which description shall be called the "Hillview Costs". With respect to each payment owed by K&B, the Hillview Costs shall be adjusted, to account for the percentage increase or decrease occurring in the School Construction Cost Index published by the Office of Local Assistance, California Department of General Services from the date of July 1, 1991 until the date the Payment is due. Such adjusted cost shall be referred to herein as the "Adjusted Hillview Cost". An amount equal to twenty-seven percent (27%) of the Adjusted Hillview Cost shall be deemed "K&B's Share of AMC". In addition, at least 60 days prior to the date the Payment is due, the District shall have complied with the provisions of the Public Contracts Code regarding school construction. The bid selected by the District shall be deemed the "Middle School Actual Costs Amount"; provided, however, for the purposes of calculating K&B's Share of AMC only, such Middle School Actual Costs Amount shall not include any amount for the administrative services of school personnel, furniture or equipment costs. However, the costs shall include architectural, engineering and other professional services. An amount equal to twenty-seven percent (27%) of the Middle School Actual Costs Amount shall be deemed "K&B's AC Share". The Payment shall be equal to K&B's AC Share; provided, however, the Payment shall not exceed 105% of K&B's AMC Share if K&B's AC Share exceeds K&B's AMC Share; and provided, further, the Payment shall not be less than 95% of K&B's AMC Share of Adjusted Hillview Cost in the event K&B's AC Share is less than K&B's AMC Share.

In addition, the parties acknowledge that the Payment shall be made by K&B in accordance with the standard contract for school construction approved by the Office of Local Assistance. Completion of a particular progress payment stage shall be certified by (1) a joint certificate of the general contractor and the District, and (2) an appropriate invoice from the District. K&B shall pay the applicable percentage of the Payment within ten (10) days after its receipt of an appropriate certificate and invoice.
8. Letter of Credit. It is understood and agreed that in order to secure K&B's obligations to make each of the Payments described in paragraphs 4, 5, 6 and 7 above, as applicable, prior to the issuance of a building permit within the properties described within Region One, Region Two and the Quartz Hill III Development, K&B shall provide the District with a three separate irrevocable demand letter of credit (the "Letters of Credit"), one each for School Site A, School Site B and the Sundown School Site, each in the initial principal amount of $200,000 issued in favor of the District by institutional lenders doing business in Los Angeles, California. The Letters of Credit shall be comprised of the "Site A Letter of Credit" for subparagraph 4(a), "Site B Letter of Credit" for subparagraph 4(b), "Sundown Letter of Credit" for subparagraph 4(c). The timing of each Letter of Credit shall be triggered by the issuance of a building permit within the applicable Region or Development. Each letter of credit shall provide security for the funding the construction of the particular elementary school the Site A Letter of Credit and Site B Letter of Credit shall also provide security for one-half of twenty-seven (27%) of the cost of acquisition of the Middle School Site and the construction of a middle school thereon. Each Letter of Credit shall provide that it may be drawn down upon delivery by the District to the issuing bank of (1) a certificate stating that the District is entitled to receive the applicable Payment (pursuant to either subparagraph 4(a), 4(b), 4(c) or paragraph 6 of the Agreement) and that K&B has breached such obligation, with all such notice and grace periods expired, together with (2) a statement of the amount of the requested reimbursement.

a. (1) Commencing on the date thirty (30) days after the date of this Agreement until the date that K&B makes all of the payments described in subparagraph 4(a), paragraph 5 for School Site A and paragraphs 6 and 7 for the Middle School, K&B shall, prior to the issuance of each building permit in Region One, be obligated either to (x) increase the principal amount of the Site A Letter of Credit by the amount equal to the product of (I) $3,600 multiplied by (II) the number of building permits for residential units within Region One to be requested by K&B (the "Region One Product") or (y) replace the Site A Letter of Credit with a "Substitute Site A Letter of Credit" posted by K&B under the same terms and conditions set forth above, except that the amount of the Substitute Site A Letter of Credit shall be increased to equal the sum of $200,000 plus the Region One Product as such term is defined above. Notwithstanding anything contained herein to the contrary, under no circumstances shall K&B be obligated to increase the amount of the Site A Letter of Credit or provide the Substitute Site A Letter of Credit in a principal amount in excess of the sum of two-thirds of...
the Adjusted Valencia Costs plus the Adjusted Hillview Costs with respect to the Payment described in subparagraph 4(a) and paragraph 5 for School Site A, and one-half of the Payment described in Paragraphs 6 and 7 for the Middle School.

(ii) Commencing on the date thirty (30) days after the date of this Agreement until the date that K&B makes all of the payments described in subparagraph 4(b), and paragraph 5 for School Site B and paragraphs 6 and 7 of the Middle School, K&B shall, prior to the issuance of each building permit in Region Two, be obligated either to (x) increase the principal amount of the Site B Letter of Credit by the amount equal to the product of (I) $3,600 multiplied by (II) the number of building permits for residential units within Region Two to be requested by K&B (the "Region Two Product") or (y) replace the Site B Letter of Credit with a "Substitute Site B Letter of Credit" posted by K&B under the same terms and conditions set forth above, except that the amount of the Substitute Letter of Credit shall be increased to equal the sum of $200,000 plus the Region Two Product as such term is defined above. Notwithstanding anything contained herein to the contrary, under no circumstances shall K&B be obligated to increase the amount of the Site B Letter of Credit to a principal amount in excess of the sum of two-thirds of the Adjusted Valencia Costs plus the Adjusted Hillview Costs with respect to the Payment described in subparagraph 4(c) and paragraph 5 for School Site B and one-half of the Payment described in paragraphs 6 and 7 for the Middle School.

(iii) Commencing on the date thirty (30) days after the date of this Agreement until the date that K&B makes all the payments described in subparagraph 4(c) and Paragraph 5 for the Sundown School Site, K&B shall, prior to the issuance of any building permits after the date of this Agreement in the Quarts Hill III Development, be obligated either to (x) increase the principal amount of the Sundown Letter of Credit by the amount equal to the product of (I) $3,600 multiplied by (II) the number of building permits for residential units within the Quarts Hill III Development to be requested by K&B during each quarter (the "Quarts Hill Product") or (y) replace the Sundown Letter of Credit with a "Substitute Sundown Letter of Credit" posted by K&B under the same terms and conditions set forth above, except that the amount of the Substitute Sundown Letter of Credit shall be increased to equal the sum of $200,000 plus the Quarts Hill Product as such term is defined above. Notwithstanding anything contained
b. (i) When K&B becomes obligated to make payments described in subparagraph 4(a) and paragraph 5 for School Site A, K&B shall be entitled to, not more than once each calendar month, either (x) reduce the principal amount of the Site A Letter of Credit by the amount of the "Site A Obligation Expenditures" (as defined below) or (ii) replace the Site A Letter of Credit with a Substitute Site A Letter of Credit on the same terms and conditions set forth above, except that the amount of the Substitute Site A Letter of Credit shall be reduced to equal the difference between the maximum amount of the Site A Letter of Credit or Substitute Site A Letter of Credit, as applicable, less the total "Site A Obligation Expenditures" as such term is defined below. As used herein, the term "Site A Obligation Expenditures" shall mean, with respect to any of the obligations under subparagraph 4(a) and paragraph 5 for School Site A and up to one-half of their obligations under Paragraphs 6 or 7 for the Middle School Site, the actual cost expended by K&B with respect to the performance of such obligations. It is understood and agreed that K&B's obligation to keep the Site A Letter of Credit (or Substitute Site A Letter of Credit) intact shall remain until K&B has fulfilled all of its obligations with respect to the Payments described in subparagraph 4(a) and paragraph 5 for School Site A.

(ii) When K&B becomes obligated to make the Payment described in subparagraph 4(b) and paragraph 5 for School Site B, K&B shall be entitled to, not more than once each calendar month, either (x) reduce the principal amount of the Site B Letter of Credit by the amount of the "Site B Obligation Expenditures" (as defined below) or (ii) replace the Site B Letter of Credit with a Substitute Site B Letter of Credit on the same terms and conditions set forth above, except that the amount of the Substitute Site B Letter of Credit shall be reduced to equal the difference between the maximum amount of the Site B Letter of Credit or Substitute Site B Letter of Credit, as applicable, less the total "Site B Obligation Expenditures" as such term is defined below. As used herein, the term "Site B
Obligation Expenditures" shall mean, with respect to any of the obligations under subparagraph 4(b) and paragraph 5 for School Site B and up to one-half of the obligations under Paragraphs 6 or 7 for the Middle School Site, the actual cost expended by K&B with respect to the performance of such obligations. It is understood and agreed that K&B's obligation to keep the Site B Letter of Credit (or Substitute Site B Letter of Credit) intact, shall remain until K&B has fulfilled all of its obligations with respect to the Payment described in subparagraph 4(b) and paragraph 5 for School Site B.

(iii) When K&B becomes obligated to make the Payment described in subparagraph 4(c) and paragraph 5 for Sundown School, K&B shall subsequently be entitled to, not more than once each calendar month, either (x) reduce the principal amount of the Sundown Letter of Credit by the amount of the "Sundown Obligation Expenditures" (as defined below) or (y) replace the Sundown Letter of Credit with a Substitute Sundown Letter of Credit on the same terms and conditions set forth above, except that the amount of the Substitute Sundown Letter of Credit shall be reduced to equal the difference between the maximum amount of the Sundown Letter of Credit or Substitute Sundown Letter of Credit, as applicable, less the total "Sundown Obligation Expenditures" as such term is defined below. As used herein, the term "Sundown Obligation Expenditures" shall mean, with respect to any of the obligations under subparagraph 4(c) for the Sundown School and as described in paragraph 5 of the Agreement, the actual cost expended by K&B with respect to the performance of its obligation to make the payment described in subparagraph 4(c) and paragraph 5. It is understood and agreed that K&B's obligation to keep the Sundown Letter of Credit (or Substitute Sundown Letter of Credit) intact, shall remain until K&B has fulfilled all of its obligations with respect to the Payment described in subparagraph 4(c) and paragraph 5 for the Sundown School.

c. Prior to making any demand on funds secured by any of the above-described letters of credit, the District shall give written notice to K&B and at least five (5) business days for K&B to pay all amounts owed at that time.

9. Plan Preparation Fee Advance. K&B agrees to advance $200,000 per School Site, to assist the District in the development of plans as preparation fees. Each $200,000 plan preparation fee shall be applied as a partial payment of the
applicable total Payment. The plan preparation fee for the Sundown School Site shall be paid upon the execution of this Agreement and each other plan preparation fee (for the School Sites) will be paid upon K&B's donation of the applicable School Site. One Hundred Thousand Dollars ($100,000) shall be paid to the District as an advance on amounts owed by K&B for the construction of the Middle School at the time the District acquires title to the Middle School Site.

10. Facilities. The District, in its reasonable discretion, shall determine when facilities shall be built and the precise use and configuration of the facilities so long as the facilities are located at the School Sites described herein, are substantially modeled after the Valencia School, and meet the requirements of Paragraph 17.

11. No Further Fees. The District covenants and agrees that, with respect to the projects specified in this Agreement being developed by K&B, it shall not assist or engage in any of the following actions if their result, directly or indirectly, would be to require dedication of, payment for school facilities other than those specifically provided for hereunder:

a. The District shall not exercise any power or authority (under Section 53080 of the Government Code or any other provision of applicable law now or hereafter enacted) to levy any fee, charge, or dedication, against the Project for the purpose of funding or financing any school facilities.

b. The District shall not require, request or petition any other governmental entity to exercise, or cooperate with any City or other governmental entity in the exercise of the power under Title 7, Division 1, Chapter 4, 7 of the Government Code (commencing with Section 65870) which requires the dedication of land, and the payment of taxes in lieu thereof and/or the payment of special fees or taxes for interim or permanent school facilities as a condition to any approval related to the construction of residences at the City Ranch Development, the Quarts Hill II development and/or the Quarts Hill III development.

c. The District shall not oppose, object to or condition the acceptance or issuance of (i) building permits, (ii) certificates of occupancy, (iii) environmental impact reports or (iv) any other form of approval related to the development of property described in Exhibits A-1, A-2 or A-3 on the basis of inadequate school facilities or seek other forms of mitigation with respect to the adequacy of school facilities to serve the projects, including, but not limited to, the
establishment of developer fees, the dedication of land, or the reduction in density or intensity of use, against any property permitted by present state law, rulings, regulations and court decisions.

d. The District shall not issue bonds or incur any other forms of indebtedness, payable from taxes or assessments of any kind (other than the District's portion of the existing property taxes) levied on any portion of the Property, the proceeds of which are to be used in whole or in part, directly or indirectly, for funding or financing school facilities; provided, however, that nothing contained in this Agreement shall preclude the District from issuing bonds which are payable from ad valorem taxes or special taxes levied and authorized under the Mello-Roos Act or other applicable law, and which ad valorem and special taxes are approved by the registered voters of the District or the Mello-Roos District, or both, at a successful election.

12. **Support for Development.** Additionally, the District agrees that, with respect to the Quarts Hill II Development, the Quarts Hill III Development and the City Ranch Development, it shall send, within ten (10) days after the complete execution of this Agreement and ratification thereof by the governing board of the District, an original of the letter attached hereto and marked as Exhibit "G", to the applicable governing municipal agency.

13. **Entire Agreement and Amendments.** This Agreement constitutes the entire agreement and understandings between the parties. There are no oral understandings, terms or conditions, and no party has relied upon any representation, express or implied, not contained in this Agreement. All prior understandings, terms or conditions are deemed merged into this Agreement. This Agreement cannot be changed or supplemented orally and may be modified or superseded only by written instrument executed by both parties.

14. **Governing Law and Venue.** This Agreement shall be governed by and construed in accordance with the laws of the State of California existing at the time of its execution. In the event that any party initiates litigation involving any matter arising out of this Agreement, venue shall lie in the appropriate state court.

15. **Attorneys' Fees; Covenant Not to Sue.** In the event that either party initiates legal action to enforce the terms of this Agreement, the prevailing party shall be entitled to all costs of suit, including all amounts paid in attorneys' fees. Both parties agree not to initiate, file or in any way support
any action challenging the validity of the provisions of this Agreement.

16. **Covenant Running with the Land.**

a. This Agreement and the covenant created thereby for the benefit of the City Ranch Development and/or the Quartz Hill II Development and/or the Quartz Hill III Development are intended to preserve the value of said developments and enhance their development. K&B agrees, for the benefit of the District, that the City Ranch Development (or portions thereof) shall be held, transferred and encumbered subject to the provisions of the Agreement which are for the use and benefit of its and of each and every person who now or in the future owns any portion or portions of the real property within the City Ranch Development. This Agreement and all the rights and obligations thereunder shall be binding upon and inure to the benefit of the parties hereto and their heirs, successors, assigns, and personal representatives.

b. The transfer of ownership of any parcel of property subject to this Agreement shall transfer to the new owner of the property the rights and obligations under this Agreement with respect to the transferred parcel. Neither the District’s consent nor special reference to the obligation in the document by which ownership is transferred shall be necessary to effect the transfer of such rights and obligations.

c. Concurrently with the execution of this Agreement, the parties shall execute a Memorandum of Agreement in the form of Exhibit H which may be recorded by either party.

17. **Architectural Unity.** District is aware of K&B’s desire to maintain architectural unity within the City Ranch Development, the Quartz Hill II Development and the Quartz Hill III Development and agrees that the final elevations and exterior architectural designs for the three schools shall be appropriate for the particular development in which the particular school site is located. Prior to finalization of the construction plans on each elementary school site, District shall provide K&B with a reasonable opportunity to review the preliminary plans and to offer any suggestions.

18. **Reimbursement Obligation.** The parties acknowledge that the effective term of the provisions of this Paragraph 18 shall be for a period of ten (10) years. The parties further acknowledge that throughout such effective term, various sources of school construction funding may be made available to the
District from the State of California. The District agrees to make good faith efforts to seek funds from the State for new school facilities within the District boundaries; provided, however, that the District shall not be obligated to apply for public funds if, in the reasonable discretion of its superintendent or its Board of Trustees, the cost of applying and qualifying for the funds is not justified after taking into account the amount of available public funding, the probability of the District’s receiving funds and the estimated amount of the funds the District may receive.

District understands and agrees that K&B’s financial obligations under this Agreement constitute obligations in excess of the current statutory school fees of $1.58 per square foot. K&B’s willingness to undertake such financial obligations is based upon the lack of an applicable alternative funding mechanism for the District. Therefore, if public funds or new financing methods result in the District acquiring funds limited to the purchase of real property or the construction of school facilities in K&B’s projects herein specified in excess of the total construction cost of the facilities after K&B has made the Payment or any portion thereof, then District shall reimburse K&B first for any portion of the Payments made and then for the Fair Market Value of the School Site(s) donated (to the extent the District receives such funding) less the amount of the $1.58 per square foot development fee which would be K&B’s statutory obligation with respect to schools. If the parties cannot agree upon the Fair Market Value when necessary, such applicable FMV shall be determined in the same manner as described in Paragraph 2 above. Notwithstanding any provision in this Agreement to the contrary, K&B shall in no event be entitled to any refund of fees paid prior to the date of this Agreement, except that $73,653 paid by K&B for its Quartz Hill III development shall be applied to reduce its last payment to the District less $7,140 incurred by the District in acquiring the Sundown School Site in the Quartz Hill III development pursuant to the provisions of this Agreement.

19. Significant Change in Circumstances. In the event that (a) a substantial change in California’s existing school facility finance programs occurs within six (6) years after the acquisition of the applicable school site by the District, (b) such change results in the failure of the State of California through the State Allocation Board to provide sufficient funds to the District to complete the facilities provided in part by this Agreement, (c) the District has not at such time previously received State Funds for the completion of the construction of schools to the extent described in this Agreement and (d) that District has been unable at that time to otherwise raise sufficient funds (in addition to funds and property to be contributed by K&B under this Agreement) to complete the facilities specified herein, a “Substantial Change” shall be
deemed to have occurred. In the event of such a Substantial Change, the outstanding construction financing and site acquisition obligations of K&B under this Agreement shall be subject to renegotiation as set forth below. The parties agree that, in the event of such renegotiations, they shall agree upon revisions to the remaining construction financing obligations of K&B under the Agreement; provided, however, K&B shall receive full credit for any contributions of construction funds previously made under the terms of this Agreement. In the event no agreement is reached in the renegotiations, K&B shall be obliged to pay (a) Eighty-three and 33/100 percent (83.33%) of the construction costs of then-uncompleted schools at School Site A, School Site B and the Sundown School Site and (b) thirty percent (30%) of the then-completed construction costs of the school at the Middle School Site. Notwithstanding anything contained herein to the contrary, the funding of construction costs shall not be subject to renegotiation with respect to any of the schools described herein after a period of six (6) years has elapsed from the date of the acquisition of the applicable school site by the District.

IN WITNESS WHEREOF, the parties executed this Agreement as of the day and year first written above.

DATED: January 22, 1991

WESTSIDE UNION SCHOOL DISTRICT
By: [Signature]
Superintendent

DATED: 1-22-91

KAUFMAN AND BROAD OF SOUTHERN CALIFORNIA, INC.
By: [Signature]
President

STATE OF CALIFORNIA
COUNTY OF LOS ANGELES

On January 22, 1991 before me, Suzanne H. Banks, a notary public in and for the County of Los Angeles, personally appeared in the presence of Ronald A. Farrel, a shareholder of WTC World Title Company and a duly licensed real estate broker, and personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature: Suzanne H. Banks
deemed to have occurred. In the event of such a Substantial
Change, the outstanding construction financing and site
acquisition obligations of K&B under this Agreement shall be
subject to renegotiation as set forth below. The parties ar
that, in the event of such renegotiations, they shall agree on
revisions to the remaining construction financing obligations of
K&B under the Agreement; provided, however, K&B shall receive
full credit for any contributions of construction funds
previously made under the terms of this Agreement. In the event
no agreement is reached in the renegotiations, K&B shall be
obliged to pay (a) Eighty-three and 33/100 percent (83.33%) of
the construction costs of then-uncompleted schools at School Site
A, School Site B and the Sundown School Site and (b) thirty
percent (30%) of the then-completed construction costs of the
school at the Middle School Site. Notwithstanding anything
contained herein to the contrary, the funding of construction
costs shall not be subject to renegotiation with respect to any
of the schools described herein after a period of six (6) years
has elapsed from the date of the acquisition of the applicable
school site by the District.

IN WITNESS WHEREOF, the parties executed this Agreement as
of the day and year first written above.

DATED: 5--3--9--

WESTSIDE UNION SCHOOL DISTRICT
By: [Signature]
Superintendent

DATED: 1--2--9--

KAUFMAN AND BROAD OF
SOUTHERN CALIFORNIA INC.
By: [Signature]
President

Approved as to form
and content:

Counsel for District
Losano, Smith, Smith
Weller & Behrens

By: [Signature]
Louis T. Losano, Esq.

Approved as to form
and content:

By: [Signature]
Barton F. Fachi
Vice President, Corporate Counsel
Kaufman and Broad Home Corporation

16
Exhibit

A-1 - Description of City Ranch Development
A-2 - Description of Quartz Hill II Development
A-3 - Description of Quartz Hill III Development
B-1 - Sundown School Site
B-1-A - Exchange Sundown School Site in Quartz Hill III
B-2 - School Site A
B-3 - School Site B
B-4 - Definition of Superpad Condition
B-5 - School Site C
C - City Ranch Development Plan Map
D - Off-Site Improvements Required for School Sites and Sundown School Site
E - Forms of Deeds Granting School Sites to District
F - Description of Valencia Valley Elementary School Costs
G - Form of Letters of Support for Quartz Hill II Development and City Ranch Development
H - Form of Memorandum of Agreement
EXHIBIT A-1

Description of City Ranch Development
EXHIBIT A-2
Description of Quartz Hill II Development
EXHIBIT B-1-A

Exchange Sundown School Site in Quartz Hill III
EXHIBIT B-3

School Site B
EXHIBIT 8-4

- Definition of Superpad Condition

A superpad is a graded pad, contoured to control drainage, sloping at 1 to 2%. The horizontal limit of grading is constructed to a tolerance of ± 1.0'. The vertical tolerance of grading should not exceed ± 0.5'. The completed superpad should be stable with respect to erosion and contain sufficient drainage devices to convey runoff without damage to the pad or adjacent land.

The grading operation should be complete to include canyon cleanouts, removal of unsuitable material before starting fills, removal of rock where it may interfere with future underground construction, placement of subdrains, undercutting of pads to eliminate "cut/fill" lines and construction of graded slopes to finish grade including stabilization.

If the specific intended use and design of the building pads to be constructed from the superpad are known in advance of the superpad design, it can be designed to permit rough and final grading without significant import or export of fill materials.

Superpad construction does not include rough grading to create specific building pad or pavement undercuts nor precise grading to create final finish surfaces. Any retaining walls necessary should be constructed between rough and final grade.
EXHIBIT C

City Ranch Development Plan Map
EXHIBIT C

Q24-Site Improvements Required for School Sites and Sundown School Site
EXHIBIT F

Description of Valencia Valley Elementary School Costs
EXHIBIT G

Form of Letters of Support for Quartz Hill II
Development and City Ranch Development
January 14, 1992

Re: Kaufman & Broad's City Ranch and Quartz Hill II Development Proposals

To Whom It May Concern:

This purpose of this letter is to inform you that the Westside Union School District has reached an agreement with the Kaufman & Broad Company to mitigate the impact of its above-referenced project. The District is fully satisfied that the Agreement will enable the District to adequately meet the need for school facilities created by the projects.

Very truly yours,

George Ream
Superintendent

EXHIBIT G
EXHIBIT H

- Form of Memorandum of Agreement
EXHIBIT H

MEMORANDUM OF AGREEMENT BETWEEN KAUFMAN AND BROAD OF SOUTHERN CALIFORNIA, INC. AND THE WESTSIDE UNION SCHOOL DISTRICT

This Memorandum of Agreement Between Kaufman and Broad of Southern California, Inc. and the Westside Union School District (the "Memorandum") is entered on this 22nd day of January, 1992, by and between the Westside Union School District ("DISTRICT") and Kaufman and Broad of Southern California, Inc. ("K&B").

RECITALS

Whereas, the DISTRICT and K&B have entered into that certain Agreement Between the Westside Union School District and Kaufman and Broad of Southern California, Inc. dated January 22nd, 1992 (the "Agreement").

Whereas, it is the intent of the parties that all the provisions of that Agreement create a covenant for the benefit of the City Ranch Development, Quarts Hill II Development, and Quartz Hill III Development projects, (as such terms are defined in the Agreement and which terms are more particularly described on Exhibits A-1, A-2 and A-3 attached hereto and incorporated herein).

The parties hereby agree that this Memorandum is entered into and may be recorded for the purpose of giving notice to future purchasers of the existence of the Agreement, a copy of
which is available at the District Office of the Westside Union
School District located at 46809 North 70th Street West,
Lancaster, CA.

Date: January 22, 1992

KAUFMAN AND BROAD OF
SOUTHERN CALIFORNIA, INC.

by:

Date: 1-22-1992

WESTSIDE UNION SCHOOL DISTRICT

by:

NOTARY

State of California    )
                   ) s.s.
County of Los Angeles   )

On this 22nd day of January, 1992, before me,

Suzanne M. Banks, the undersigned, a Notary Public in and
for the State of California, personally appeared Guadalupe A. Farrell,
George A. Farrell and B. Duane Buetz, personally known to me, or proved
to me on the basis of satisfactory evidence, to be the person(s)
whose names are subscribed to the within instrument and
acknowledged to me that they executed the same in
their authorized capacity and that by their signature on the
instrument the persons, or the entity upon behalf of which the
person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Seal: Suzanne M. Banks

Notary Public in and for the State of California, residing
at Lancaster, California.

exh. 116

EXHIBIT A-1
ATTACHMENT II:

Planning Commission Resolution 92-13
Recommending Approval of General Plan Amendment 91-4,
Prezone 89-06, and Specific Plan 89-03.
A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PALMDALE RECOMMENDING THAT THE CITY COUNCIL APPROVE GENERAL PLAN AMENDMENT 91-04, PREZONE 89-06 AND SPECIFIC PLAN 89-03 RELATING TO THE CITY RANCH PROJECT AREA, SUBJECT TO CERTAIN SPECIFIED CONDITIONS

THE PLANNING COMMISSION OF THE CITY OF PALMDALE HEREBY FINDS, RESOLVES AND ORDERS AS FOLLOWS:

Section 1. Applications were duly filed by the applicant, Kaufman and Broad, with respect to 1,985 acres of real property (hereinafter referred to as "the Territory") which is described in Exhibit "A" and depicted on Exhibit "B", attached hereto, requesting approval of General Plan Amendment 91-04, Prezone 89-06 and Specific Plan 89-03. The Territory is within an area generally bounded by Elizabeth Lake Road on the north, the alignment of the extension of Avenue S on the south, 20th Street West on the east and the alignment of the extension of 40th Street West on the west.

Section 2. The Territory is currently outside the territorial limits of the City and is the subject of a request for annexation to the City of Palmdale. The existing County General Plan Land Use designation of the Territory in the County is Non-Urban 1 (.5 du/ac), and the existing zoning designation of the Territory in the County is A-2-2 (Light Agricultural 2-acre minimum lot size). The existing City of Palmdale General Plan Land Use designation for the Territory is City Ranch Specific Plan Max. Density 3 du/ac. The Territory is surrounded by property containing single family residences, a landfill, vacant County land having a County Zoning designation of A-2-2 (Light Agricultural 2-acre minimum lot size) and the proposed Ritter Ranch Specific Plan.

Section 3. General Plan Amendment 91-04 consists of a request to modify the City's General Plan Land Use Map to: (1) eliminate the designation of the individual planning areas in the Territory on the General Plan Land Use Map; and (2) to re-designate the Territory to City Ranch Specific Plan, Maximum Density 2.62 du/acre.

Section 4. Prezone 89-06 consists of a proposal to prezone the Territory from Los Angeles County A-2-2 (Light Agricultural 2-acre minimum lot size) to City of Palmdale designation of City Ranch Specific Plan, Maximum Density 2.62 du/acre.

Section 5. Specific Plan 89-03 (the "City Ranch Specific Plan, Maximum Density 2.62 du/ac gross") as proposed to the Planning Commission would permit the construction 5,200 residential units, 260,000 square feet of gross leasable commercial space covering 42.1 acres, 159.3 acres of Community and Neighborhood Parks, a 18-hole golf course and other open space areas covering 215.6 acres, 36 acres for schools, and 404.4 acres of Open space, and 55.1 acres for arterial roadways.

Section 6. A Draft Environmental Impact Report ("EIR") was prepared for the applications by Envicom Corporation and the Final EIR was prepared by Gruen and Associates, both environmental consultants. The EIR was circulated to interested agencies between October 3, 1991 and November 18,
1991 as part of the 45 day comment period. Comments were received and responses prepared and incorporated into the EIR. A copy of the final EIR, including the Draft EIR, the comments to the EIR, the Responses to the Comments, has been available for public inspection in the Planning Department of the City and in the Council Chambers during public meetings on the project.


Section 8. Evidence, both written and oral, was duly presented to and considered by the Planning Commission at the aforesaid public hearings, including but not limited to staff reports prepared for the meetings of January 15, 1992, January 20, 1992, January 23, 1992, January 27, January 30, February 5, and February 24, 1992 along with testimony by the applicant and other members of the public.

Section 9. The Planning Commission adopted Resolution No. 91-114 on February 24, 1992, recommending that the City Council adopt and certify the EIR for the project, with certain amendments thereto as contained in Exhibits "A" and "B", attached to that Resolution.

Section 10. With respect to the potential significant environmental effects identified in the EIR, the Planning Commission finds as follows:

A. PUBLIC HEALTH AND SAFETY: The EIR identifies the Project as having potential significant effects to health and safety caused by the possible existence of electromagnetic radiation, hazardous/toxic materials, and the proximity of the Project to the Antelope Valley Landfill.

1. Electromagnetic Radiation. With respect to possible health effects cause by extremely low frequency (ELF) electromagnetic fields associated with overhead power lines, mitigation measures have been added (Section 5.27.3 of the EIR) to require a continuous six (6) foot high non-conductive fence along the perimeter of the high-voltage power line right of way. Additionally, active recreational uses have been prohibited in the powerline easement in Planning Area 18.

However, even with these mitigation measures, there may still be some potential unavoidable adverse impacts caused by locating housing and other uses in proximity to power transmission lines. The Planning Commission finds that based upon the current state of scientific knowledge of this issue, these risks are speculative and do not warrant increased regulations beyond what is specified in the EIR and Specific Plan. The Planning Commission finds that such potential health risks have not been proven and thus do not warrant more significant changes to the Project. Thus, pursuant to Public Resources Code Section 21081(c), the Planning Commission finds that the potential health risks associated with the construction of habitable structures near overhead transmission lines cannot be reasonably reduced unless greater setbacks are imposed which would have a significant effect on the available uses of the Project site and the overall design of the Project. The benefits of reducing the potential, but
still unknown, health risks associated with residing near these lines do not outweigh the benefits of the proposed Project, including the economic benefits to the City from the creation of new jobs and the construction of important and needed public improvements and infrastructure.

2. Hazardous/Toxic Materials. Development of the project would be constrained by the presence of seven sites identified in the EIR as potential hazard areas. Unless proper cleanup and disposal procedures are carried out, the hazards contained in these sites could pose a health threat. Requirements have been imposed on the Project to investigate, test, remove and dispose of soil contaminated with hazardous/toxic materials (Section 5.28.3 of the EIR). Implementation of the mitigation measures as set forth in that section of the EIR will reduce project related impacts with regards to hazardous/toxic materials to less than significant levels.

3. Antelope Valley Landfill. Development of the proposed project will bring residential units within .6 miles of the existing landfill, and within approximately 600 feet of the common boundary between the two communities. With respect to the Landfill, a 1,000 foot setback has been required between the residential portions of the project and the landfill. Mitigation measures have been included (Section 5.29.3 of the EIR) which require disclosure of the landfill to residents within a 1,200 feet of the landfill and a landscape buffer of mature vegetation along the eastern boundary of the landfill. Measures to minimize impacts. Implementation of these mitigation measures will reduce project related impacts to the Antelope Valley Landfill less than significant levels.

B. LAND USE: The EIR identifies that the proposed project will result in an increase in population, and a subsequent increase in demands for city services, in traffic volumes, in air pollution emissions, and other human-related impacts. These issues are specifically addressed in Sections 5.4, 5.8, 5.9, 5.10, 5.13, 5.14, 5.15, 5.16, 5.17, 5.18, 5.19, 5.20, 5.21, 5.22, 5.23 and 5.24 of the EIR. Discussion of potentially significant effects and proposed mitigation measures relative to these issues are discussed in Section C, subparagraphs 1 through 4 of this Resolution.

Mitigation measures have been required which will reduce significant adverse project related land use impacts to a level of insignificance if implemented. These mitigation measures require that the proposed project comply with the site specific zoning and subdivision standards contained in the City Ranch Specific Plan and that an annual monitoring report indicating compliance with the Specific Plan document be provided.

However, the EIR additionally indicates that the project will contribute to significant cumulative land use impacts due to the change of land use on the site from existing agriculture uses to a suburban use. With respect to these cumulative effects, the Planning Commission finds, pursuant to Public Resources Code Section 21081, that the remaining environmental effects are acceptable due to the fact that a reduction in the size of the project or adoption of the environmentally superior alternative to the project is not economically feasible in this instance because significant public infrastructure for the project will be required to serve the project even if the project is developed at reduced densities. The ability of the project applicant and property owners to pay the costs of those infrastructure improvements
The Project requires a project of sufficient size to make the required public infrastructure costs affordable. Thus, the feasibility of the project is dependent on the proposed size of the project. Consequently, these economic factors, as further defined in Section II of this Resolution, make infeasible further mitigation alternatives to the project which would lessen or reduce the impacts of the project on open space. In addition, the Project is anticipated to provide needed economic benefits to the City, including the creation of new jobs, needed facilities for schools, parks and other public facilities, and will assist in the orderly expansion of the City of Palmdale.

C. POPULATION: The EIR identifies that the project will result in an increase in population. This increase in population will affect Air Quality, Traffic, Noise and Public Services and Infrastructure as described in Sections 5.9, 5.10, 5.8 and 5.13 through 5.24 of the EIR. Mitigation measures listed in the EIR will lessen the impact of increased population. However, many of the natural resources on site will be significantly impacted by the project even after mitigation is applied to them. These are discussed in the following paragraphs.

1. Air Quality. The EIR indicates that the Project will have a potentially significant environmental effect on air quality (EIR pages 5-165 through 5-171). Long and short term impacts include an increase in the fugitive dust emissions generated during grading and construction activities and from motor vehicle and stationary source emissions during and after Project buildout. Mitigation measures have been incorporated into the Project which reduce but not eliminate the environmental impacts. The measures include compliance with dust control regulations and cessation of grading construction activities during times of high winds or stage 2 smog alerts. The applicant shall be required to comply with applicable regulations of the South Coast Air Quality Management District, to provide pedestrian walkways throughout the project, bus turnouts along major arterials and participate in any trip reduction programs adopted by the City for future development applications (Section 5.9.1, 1 through 15 in the EIR).

With respect to the significant impacts to air resources that cannot be mitigated to a level of insignificance, the Planning Commission finds, pursuant to Public Resources Code Section 21081(c), that the benefits of the Project, including but not limited to the creation of new jobs and the expansion and improvement to the economy of the Antelope Valley areas, the preservation of a significant amount of open space, and the establishment of recreational areas for the public, outweigh the unavoidable impact that the Project will have on air quality.

2. Transportation. The EIR indicates that the project will have significant environmental impacts on traffic circulation. Mitigation measures have been imposed to change the Project so as to reduce significant circulation impacts associated with the project to a level of insignificance. These measures as contained in Section 5.8.3 of the EIR require that the applicant construct all necessary roadways subject to City standards and that the applicant prepare a Transportation Demand Management Plan to determine the necessary improvements for impacts generated by the project. Also, the applicant will participate in the construction of a park and ride facility located off-site to reduce vehicle trips and vehicle miles traveled.
3. Noise. The EIR identifies the project as having potentially significant short-term impacts from increased noise levels due to construction activities, and long-term impacts from increased noise levels resulting from vehicular traffic and human-related activities on the site. Construction impacts will primarily result from project-related grading and construction and may present a short-term nuisance to residents occupying dwelling units in the project area and to residents of the residential projects to the north. To mitigate these short-term impacts, measures contained in Section 5.10.1 of the EIR require that hours of construction activities be limited, that temporary noise attenuation barriers be provided, and that stationary equipment be placed such that emitted noise is directed away from sensitive noise receivers.

Long-term impacts associated with increased noise levels will necessitate the placement of noise attenuation barriers along certain arterial adjacent to residential and school planning areas (Section 5.10.3 of the EIR). Also, residential and school site planning shall be designed to locate noise sensitive areas away from adjacent roadways to minimize intrusive noise levels (Section 5.10.3 of the EIR).

Provided the recommended mitigation measures are properly applied, construction and operation of the proposed project are not expected to create significant noise impacts on-site. However, some off-site areas along Elizabeth Lake Road containing sensitive receptors such as residences and schools may be significantly impacted. With respect to this significant impact, the Planning Commission finds pursuant to Public Resources Code Section 21081(c) that the benefits of the Project, including but not limited to the creation of jobs and the expansion and improvement to the economy of the Antelope Valley area, the preservation of open space and the creation of recreational areas, outweigh the unavoidable impact that the Project will have on noise levels.

4. Public Services and Infrastructure. The EIR identifies the Project as having a potentially significant effect on various public services and utilities (as addressed in Section 5.16.2, Water; Section 5.17.2 Sewage Disposal; Section 5.18.2, Solid Waste; Section 5.19.2 Communications, Section 5.20.2, Sheriff Services; Section 5.21.2, Fire and Emergency Medical Services; Section 5.11.2, Energy; Section 5.14.2, Electricity; Section 5.15.2, Natural Gas; Section 5.22.2, Schools; Section 5.23.2, Parks and Recreation and Section 5.24.2, Facilities Maintenance.

a. Water Service. The project site will require annexation to Los Angeles County Waterworks District No. 34. The Waterworks District obtains its water from groundwater wells and the State Water Project supplier, AVEK. On-site, groundwater wells and a turnout from the aqueduct provide a supply of untreated water suitable for landscape irrigation and construction water. After development, the project will require 5.22 million gallons per day of water, 3.97 million gallons per day of which must be potable. District 34 has indicated that they would be capable of delivering the water necessary to serve the proposed project through existing and proposed water delivery systems, and through existing sources of water supply.

With respect to potentially significant effects to ground water supply, the impacts were considered in the EIR, the comments to the EIR and the responses to those comments, as well as at the public hearing on the Project. Based upon the evidence presented, the Planning Commission...
finds that this Project will not have a significant individual or cumulative effect on ground water supplies due in part to water conservation measures incorporated into the Project, including the use of low-flow toilets, faucets and shower heads, low water-consuming landscape plantings and drip irrigation systems as specified in Section 5.16.3 of the EIR and the "conjunctive use policy" (use of State Water Project water in conjunction with ground water resources) of the Project's water supplier, Los Angeles County Waterworks District Number 34. The conjunctive use policy of the Waterworks District will use State Water Project water in times when plentiful to recharge the groundwater basin and use groundwater in times when State water is scarce. Application of this policy is anticipated to keep groundwater levels above the 1980 historic low so as to preserve the capability to replenish the aquifer while at the same time providing sufficient water to serve the growing needs of the Antelope Valley.

b. Sewage Disposal. A trunk sewer line will need to be constructed in the vicinity of the project site to accommodate the 1.27 million gallons of wastewater generated by the Project. Although this amount of wastewater would exceed the current capacity of the Water Reclamation Plant by 1.27 mgd, planned expansions to the plant will accommodate this volume of wastewater. The applicant will be required to construct all sewer infrastructure extensions and improvements as specified in the EIR and pay a fee in order to connect to the Sanitation District's ion system. These measures will reduce the project related impact to sewage disposal to less than significant levels (Section 5.17.3 of the EIR).

c. Solid Waste. The proposed project would generate approximately 54,000 pounds of solid waste per day. This waste would be deposited in the Antelope Valley Landfill. Assuming that the landfill expansion occurs, the contribution of solid waste by this project could be accommodated. However, in the event that the expansion does not occur, impacts to solid waste disposal could be significant. In the event that expansion of the Antelope Valley Landfill does not occur in a timely manner, the project, along with the other surrounding developments, would contribute to cumulatively significant impacts to solid waste disposal (Section 5.19.3 of the EIR).

With respect to the significant impacts to the need for solid waste disposal facilities that cannot be mitigated to a level of insignificance, the Planning Commission finds, pursuant to Public Resources Code Section 21081(c), that some of these impacts will be mitigated in the future by the City’s Recycling Element and that the benefits of the Project, including but not limited to the creation of new jobs and the expansion and improvements to the economy of the Antelope Valley area, the preservation of open space, and the establishment of recreational areas for the public, outweigh the unavoidable impacts that the Project will have on the generation of solid waste and the need for solid waste disposal facilities.

d. Communications. Development of the project site will require the extension of telephone infrastructure into the project area. Pacific Bell has indicated that provision of service to the project site will not affect existing service levels. The high capacity transcontinental lines are contained within easements which may be encroached upon with development of the site. Development along the AT&T easement could result in physical damage to the lines causing unanticipated interruption of AT&T’s long distance telephone
service. Also, development of the project site will exacerbate the existing radio communications problems experienced in the outlying portions of Palmdale.

In order to mitigate impacts on telephone service, the applicant will be required to get written approval for all work proposed within the boundaries of the AT&T easements. Additionally, the applicant will be required to mitigate the impacts on the need for emergency communications facilities by the contribution of a pro rata share towards the implementation of the findings of the radio communications needs study currently being prepared for the city (Section 5.19.3 of the EIR).

e. **Sheriff Services:** Development of the project would necessitate additional sheriff personnel to accommodate the increased demand on sheriff services. Short-term impacts will occur during the construction phase of the project caused by construction material thefts. After residents occupy the area, impacts typical of any suburban development will occur. The mitigation measure contained in the Draft EIR, Section 5.20.1, applies that the applicant shall contribute its pro rata share of (1) the cost of acquiring property for a new police station; (2) the cost of construction of the station; and (3) the cost of reasonably necessary associated equipment. With this mitigation measure the project’s impact on police services will be mitigated to a level of insignificance.

f. **Fire and Emergency Medical Services.** Development of the project would increase the need for additional fire services within and adjacent to the project. Impact to the need for fire services will be mitigated by the requirement that the applicant provide a fire station in Planning Area 34 of the Specific Plan (Section 5.21.3 of the EIR). The proposed on-site fire station would provide adequate local emergency medical response and fire-fighting services for the proposed project and reduce project-related impact to fire and emergency medical services to less than significant levels.

g. **Energy Sources:** Development of the project as currently proposed would result in the expenditure of 98,975 kilowatt hours of electrical energy, 97,300 cubic feet of natural gas, and 21,845 gallons of gasoline on a daily basis. No unavoidable adverse impacts are expected to occur due to consumption of electricity. Impacts on natural gas consumption will be mitigated by the provision of thermal wall and ceiling insulation, double glazed windows, pilotless ignition stoves, water heaters and heating and cooling systems (Section 5.15.3 of the EIR).

h. **Schools.** In order to mitigate the impacts of the Project on the need for school facilities, the applicant will be required to dedicate school sites and construct new and/or interim school facilities as determined necessary by the applicable School District (Section 5.22.3 of the EIR). Additionally, mitigation measures as specified in Section 5.22.3 include the applicant’s participation in a Helly-Roos district, payment of a percentage of school construction costs, and dedication of school sites. With these mitigation measures, the Planning Commission finds that the Project’s impacts on school facilities have been mitigated to a level of insignificance.

i. **Parks and Recreation.** The need for park and recreational facilities caused by the Project will be mitigated by the dedication and construction of one community
park and four neighborhood parks (Section 5.23.1 of the EIR). Additionally, hiking, bicycling and equestrian trails will be provided throughout the project site.

4. Facilities Maintenance. Development of the proposed project will increase the City’s maintenance responsibilities by adding significant areas of streets, drainage facilities, parks and parkways. The applicant shall construct a facility and pay (a fair share) for equipment to mitigate the impact to facilities maintenance in the Specific Plan area. Additionally, the applicant shall agree to participate in an Assessment District for the maintenance of streets, drainage facilities, parks, parkways, trails and other public facilities.

D. HOUSING: The EIR identifies as a potential significant environmental effect, the impact to the jobs/housing balance. Should the project be developed as proposed, it would exacerbate the region’s declining jobs/housing balance ratio. Mitigation measures (Section 5.8.1 and Section 5.9.3 of the EIR) require that the applicant implement traffic and air quality measures to mitigate the secondary impacts associated with increased jobs and housing. However, even after implementation of the recommended mitigation measures, the proposed project’s impact on the jobs/housing balance cannot be fully mitigated and remains a significant unavoidable adverse impact.

With respect to significant impacts to the jobs/housing balance that cannot be mitigated to a level of insignificance, the Planning Commission finds, pursuant to Public Resources Code Section 21081(c), that the benefits of the Project, including but not limited to the creation of new jobs and the expansion and improvements to the economy of the Antelope Valley area, the preservation of open space, and the establishment of recreational areas for the public, outweigh the unavoidable impacts that the Project will have on the jobs/housing balance of the subregion.

E. EARTH (Geology): The EIR identifies that the Project will be subject to certain geologic risks from seismic shaking, liquefaction, seismic settlement, seismic ground failure, earthquake-induced flooding, and landslides. Changes or alterations have been required in, or incorporated into, the Project which will reduce the risks to the project from landslides and adverse soil conditions. These changes include requiring detailed geotechnical investigations, including recommended design, construction and maintenance measures to reduce these risks, as required by qualified engineering geologists, as approved by the City Engineer (Section 5.5.3, Landslides, of the EIR).

Changes or alterations have also been required in, or incorporated into, the Project which will reduce the geologic risks to the Project from liquefaction and seismic settlement, and seismically related flooding to a level of insignificance and reduce but not eliminate risks caused by ground shaking and rupture. These changes include requiring comprehensive geotechnical investigations prior to construction, exploratory fault trenching prior to issuance of grading permits, more heavily reinforced foundations within certain active fault areas, and elevation of structures above flooding levels (Section 5.5.1 of the EIR).

Implementation of the recommended mitigation measures would reduce many adverse geological impacts. However, they would not eliminate all the significant impacts associated with geologic hazards, specifically hazards associated with
ground shaking and rupture caused by a seismic event. With respect to certain unavoidable risks to the Project caused by seismic activity on the San Andreas Fault, the Planning Commission finds that similar risks exist throughout the Antelope Valley and depend more on the type of soil on which structures are constructed than on the proximity to the fault line. Pursuant to Public Resources Code Section 21081(c), the Planning Commission also finds that the benefits of the proposed project, including but not limited to, the creation of new jobs, and the Project's contribution to the expansion and improvement in the economy of the Antelope Valley area outweigh the unavoidable risks of seismic activity that are left unmitigated.

F. HYDROLOGY: The EIR identifies as a potential significant environmental effect the Project's impacts on Drainage. Implementation of the Project is anticipated to create a risk of flooding and to significantly alter the existing drainage patterns of the site. Changes or alterations to the Project have been made to reduce the risk of flooding to a level of insignificance. These changes include the construction of drainage facilities required by the City Master Plan of Drainage so as to accommodate a 50-year Los Angeles County Capital Flood (Section 5.6.3 of the EIR) and that final subdivision maps be accompanied by Drainage Improvement Plans prepared by a licensed Civil Engineer and approved by the City. With the incorporation of these measures, the environmental impacts associated with hydrology will be reduced to a level of insignificance.

G. BIOLOGY: With regard to significant effect to biological resources, including the loss of 1,044 Joshua trees and numerous California junipers and 1,581 acres of plant and animal habitat, changes have been made to the Project to partially mitigate these impacts. These changes include the transplantation of short-jointed beavertail cactus from Planning Areas 17 and 31 to Planning Area 32, and the modification of Planning Areas 31 and 32 in order to preserve the Peirson's Morning-Glory located in these areas (Section 5.7.3 of the EIR). Implementation of the recommended mitigation measures would reduce project impacts on biological resources to acceptable levels. However, the development of the project will contribute to a cumulatively significant loss of habitat in the vicinity of the project.

With respect to these significant cumulative effects, the Planning Commission finds, pursuant to Public Resources Code Section 21081, that the remaining environmental effects are acceptable due to the fact that a reduction in the size of the project or adoption of the environmentally superior alternative to the project is not economically feasible in this instance because significant public infrastructure for the project will be required to serve the project even if the project is scaled down substantially. The ability of the applicant and the property owners in the project to pay the costs of those infrastructure improvements requires a project of sufficient size to make the required public infrastructure costs affordable. Thus, the feasibility of the project is dependent on the proposed size of the project. Consequently, these economic factors, as further defined in Section 11 of this Resolution, make infeasible further mitigation or project alternatives which would lessen or reduce the impacts of the project on biological resources. In addition, the project is anticipated to provide needed economic benefits to the City including the creation of new jobs, needed facilities such as schools, parks and other public facilities, and will assist in the orderly expansion of the City of Palmdale.
H. AESTHETICS AND LIGHT AND GLARE: The EIR identifies as a potential significant environmental effect the aesthetic and light and glare impacts associated with the proposed Project. Impacts are anticipated to occur to scenic views and from the introduction of new sources of light and glare.

Changes or alterations have been required in, or incorporated into, the Project which reduce aesthetic impacts. For the aesthetic impacts caused by grading, mitigation measures require that large contiguous open space areas and major ridgelines be preserved and that mass graded pads "mega pads" be prohibited in the Project area (Section 5.11.1 of the EIR). Measures in Section 5.11.1 of the EIR include: measures to ensure that all water tanks be earth tone colors and that all storage or trash areas be shielded from view by an enclosed masonry wall no less than six (6) feet in height.

For impacts associated with light and glare, project design is required to incorporate methods for reduction of light and glare, lighting plans, and minimizing the amount of direct light necessary for public safety (Section 5.12.1 of the EIR).

With respect to unmitigated aesthetic and light and glare impacts caused by loss of open space and vegetation, and grading and viewshed impacts from adjacent and surrounding areas, the Planning Commission finds pursuant to Public Resources Code Section 21081(c) that these remaining environmental effects are acceptable due to the fact that a large portion of the Project site will be preserved as open space and that important scenic and viewshed areas, such as the Verde Ridge and Sierra Pelona foothills, will be preserved in their natural state. In addition, the Project will provide new jobs, new public facilities and will help expand and diversify the business base of the Antelope Valley Area. The Planning Commission further finds that a reduction in the size of the project or adoption of the environmentally superior alternative to the project is not economically feasible in this instance because significant public infrastructure for the project will be required to serve the project even if the project is scaled down substantially. The ability and willingness, such as photometric lighting plans in the project to pay the cost of those infrastructure improvements requires a project of sufficient size to make the required public infrastructure costs affordable. Thus, the feasibility of the Development is dependent on the project size. Consequently, these economic factors, as further discussed in Section II of this Resolution, make infeasible further mitigation or alternatives to the project which would lessen or reduce the impacts of the project on aesthetics and light and glare.

I. ARCHAEOLOGY: The EIR identifies the Project as having a potentially significant effect on archaeological resources. Development of the project, as proposed, would result in the loss of three significant prehistoric sites, as well as most of the other sites identified in the initial archaeological survey. Measures have been imposed on the Project to reduce the impacts to archaeological resources. These measures include the requirement that research, salvage and/or protection of known archaeological sites occur under the direction of an archaeologist during the grading of the Project (Section 5.23.1 of the EIR). Implementation of the mitigation measures proposed in the EIR will reduce project related impacts to archaeological resources to less than significant levels.
J. PALEONTOLOGY: The EIR identifies the Project having a potentially significant effect on paleontological resources. Ground disturbing activities associated with development of the project will adversely impact paleontological resources present on-site. Grading within the areas containing sedimentary rock would disturb or bury fossil sites, and could destroy fossil specimens. In addition, fossiliferous rock in these areas would become permanently unavailable for further study. Measures have been imposed on the Project to reduce impacts to paleontological resources. These measures include the requirement that a Paleontological Monitoring Program be imposed which requires monitoring, salvaging and/or protection of exposed fossils (Section 5.26.3 of the EIR). However, even with mitigation measures, there will still be some inadvertent loss of significant paleontological resources.

With respect to unmitigated impacts to paleontological resources, the Planning Commission finds, pursuant to Public Resources Code Section 21081(c) that this remaining impact is acceptable due to the fact that a portion of the Project site will be preserved as open space and that economic benefits to the City from the creation of new jobs and the construction of important and needed public improvements and infrastructure.

The Planning Commission further finds that a reduction in the size of the project or adoption of the environmentally superior alternative to the project which may reduce ground-disturbing activity lessening potential significant impacts to paleontology, is not economically feasible in this instance because significant public infrastructure for the project will be required to serve the project even if the project is scaled down substantially. A need exists for this infrastructure due to the fact that the project site does not presently have the required infrastructure inside or around it. The ability of the applicant and the property owners in the project to pay the costs of those infrastructure improvements requires a project of sufficient size to make the required public costs affordable. Thus, the feasibility of the project is dependent on the proposed size of the project. Consequently, these economic factors, as further discussed in Section 11 of this Resolution, make infeasible further mitigation or alternatives to the project which would lessen or reduce the impacts of the project on land use.

K. The Planning Commission recognizes that during buildout of the City Ranch Specific Plan project, substantial changes may occur with respect to the circumstances under which the project is undertaken or that new information of substantial importance may become available which shows that the project may have substantially more severe environmental effects than shown in the EIR. The Planning Commission therefore expresses its intent to reserve the City's authority to require additional environmental review of the project under those and other circumstances pursuant to State CEQA Guidelines Sections 15162 and 15163 and any other applicable laws and regulations, with regard to all or several of the environmental and public resources discussed in paragraphs A through J of this Section 10.

Section 11. The Planning Commission has reviewed and considered the alternatives to the project discussed in the EIR. Those alternatives are (1) a "No Project" alternative (page 9-8), (2) a "Reduced Residential Density Alternate Development Scheme" alternative (pages 9-9 to 9-11), (3) "College Campus" alternative (pages 9-11 to 9-15), (4) "Alternative Site A - Willow Springs" alternative (pages 9-15
to 9-19) and (5) an "Alternative Site B - Quail Lake" alternative (pages 9-19 to 9-22).

With respect to these alternatives to the project, the Planning Commission finds, pursuant to Public Resources Code Section 21081, that there are economic, social and other considerations of the project that make these alternatives infeasible. Specifically, the Planning Commission finds that the Reduced Residential Density Alternate Scheme alternative, which the Planning Commission finds to be the environmentally superior alternative to the project, is not economically feasible in this instance because the significant public infrastructure required for this project could not be financed by the applicant or by the property owners of the project if the size of the project is reduced. One reason for this conclusion is that a project on this site will generate a need for significant infrastructure improvements to serve the project. Such infrastructure presently does not exist at all or does not exist in a sufficient capacity in and around the site to serve a project of this size. The need for infrastructure improvements will exist even if the project is substantially scaled down in size. However, the ability of the applicant and the property owners in the project to pay the cost of those infrastructure improvements requires a project of sufficient size to make the required public infrastructure costs affordable. The Planning Commission has received written evidence and oral testimony during the public hearings and public meetings on this project of the cost and these infrastructure improvements and the required size proposed which makes infeasible the alternatives to the project discussed in the EIR. The Planning Commission further finds that other benefits of the project, including but not limited to the creation of new jobs and the expansion and improvement to the economy of the Antelope Valley area, the preservation of open space, and the establishment of recreation areas for the public, provide additional social and economic benefits to the project that outweigh the remaining effects of the project, as set forth more specifically in Section 10 of this Resolution.

In addition to the general reasons stated above, the Commission specifically finds the following: 1) that Alternative 1 "No Project" is not feasible due to the fact that this alternative does not meet the goals and policies of the General Plan and the Specific Plan. 2) that Alternative 2 "Reduced Residential Density" (the environmentally superior alternative) is not economically feasible for the reasons stated in the preceding paragraph. 3) that Alternative 3 "College Campus" is not feasible because this alternative would not result in less environmental impacts than the proposed project and 4) that Alternative 4 "Alternative Site A - Willow Springs" and Alternative 5 "Alternative Site B - Quail Lake" involve proposed sites that have greater site constraints than the proposed project site and thus could result in potentially greater environmental impacts.

Section 12. The Planning Commission finds that individual and cumulative adverse impacts generated by the project will be mitigated to the extent feasible through the Mitigation Measures as contained in the Environmental Impact Report. Irrespective of these measures, the Planning Commission finds that some impacts cannot be feasibly mitigated to a level of non-significance. In addition, the Planning Commission finds that the Project may result in significant individual or cumulative impacts which have not been identified at this time. In addition to the individualized findings of overriding consideration contained in Section 10 above, the Planning Commission finds that the benefits provided by the
project, as contained in the Specific Plan and as contemplated in the draft Development Agreement 92-2, will outweigh any adverse impacts cause by the project. These benefits are understood by the Planning Commission to include the following, based upon information in the Specific Plan, the EIR, and as provided by the applicant in public testimony and written correspondence at the above-referenced meetings and hearings:

A. The property is being planned as a comprehensive and cohesive recreational community with sufficient commercial development, schools, parks, trails, golf, community facilities and other elements to support the residents of the City Ranch project as well as provide regional benefits to the City of Palmdale.

B. Preserving 419 acres of natural open space, not previously accessible to the public, where biological resources and wildlife will be protected and where public passive enjoyment of these resources in a protected environment will be enhanced.

C. Providing quality housing opportunities which meet the needs of a variety of lifestyles and income levels.

D. Providing approximately 889 permanent jobs created by service and supply demands from project residents and commercial tenants as well as providing a significant number of construction related and real estate sales related jobs.

E. Designing and developing the property with a circulation system that meets local needs and provides safe and efficient transportation solutions.

F. Protecting scenic viewsheds both to and from the property and preserving the Verde Ridge and Sierra Pelona ridgeline.

G. Designing and developing regional infrastructure to distribute the use of Antelope Valley East Kern and Los Angeles County Waterworks water for use by City of Palmdale residents.

H. Providing quality community design and circulation elements conducive to efficient public health and safety issues as well as efficient operations for Sheriff services.

I. Developing infrastructure improvements to meet project requirements and serve other regional needs for water, sewage disposal, storm drainage, utilities, etc.

Section 12. With respect to General Plan Amendment 91-04, the Planning Commission finds that such amendment is consistent with the goals and policies of the existing General Plan in that:

A. The proposed General Plan Designation of City Ranch Specific Plan, Maximum Density 2.62 du/ac is consistent with the intent of the General Plan Land Use Element and will result in a mix of different, but compatible land uses with a cohesive land use pattern.

B. The proposed General Plan Amendment Land Use designation does not encroach into an area where natural and/or man-made hazards may threaten life, property, or public facilities.

C. The proposed General Plan Land Use Amendment will provide for an orderly and natural progression of urban
development in that urban development has occurred up to the
existing limits of those areas designated for urban
development on the General Plan Land Use Map.

D. The proposed General Plan Amendment is consistent
with the intent of the General Plan in that the Planning
Commission has reviewed all applicable policies of the General
Plan Elements and has determined that the adoption of GPA 91-4
is consistent with such policies.

Section 14. With respect to Prezone 89-06, the Planning
Commission finds:

A. The proposed prezone from Los Angeles County A-2-2
(Light Agricultural - 2 acre minimum lot size) to City of
Palmdale City Ranch Specific Plan Maximum Density 2.62 du/ac
on 1,985 acres is consistent with the General Plan in that the
uses allowed in the proposed zones are consistent with the
adopted General Plan land use designation of City Ranch
Specific Plan (Maximum Density 2.62 du/ac).

B. Staff has considered the water supply requirements
and availability in relation to this prezone and determined
the change will not adversely affect fire protection.

Section 15. With respect to Specific Plan No. 89-03, the
Planning Commission finds:

A. Specific Plan No. 89-03 (the City Ranch Specific
Plan Maximum Density 2.62 du/ac), which is on file in the
office of the City Clerk and is incorporated herein by
reference, will comply with the requirements of California
Government Code Section 65451 in that, as revised to
incorporate the conditions contained in Exhibit "C" entitled
"Textual and Graphic Changes to City Ranch Specific Plan",
which document is incorporated herein by reference, the
Specific Plan does specify in detail:

(1) The distribution, location and extent of the
uses of land, including open space within the area covered by
the Plan (Section 4 of the Specific Plan);

(2) The proposed distribution, location, extent and
intensity of major components of public and private
transportation, sewage, water, drainage, solid waste disposal,
energy and other essential facilities proposed to be located
within the areas covered by the Plan and needed to support the
land uses as described in the Plan (Section 4 of the Specific
Plan);

(3) Standards and criteria by which development will
proceed and standards for the conservation, development and
utilisation of natural resources (Sections 5 and 6 of the
Specific Plan);

(4) A program of implementation measures including
regulations, programs, public works projects and financing
measures necessary to carry out the Specific Plan (Sections 4
and 7 of the Specific Plan);

(5) A statement of the relationship of the Specific
Plan to the General Plan (Section 2 of the Specific Plan);

B. Specific Plan No. 89-01, as amended by the
conditions imposed, permits uses and types of development that
are consistent with the General Plan, which designates the
property for residential, neighborhood commercial, open space,
school and public facility uses.
C. The site is adequate in size, shape, topography and location so as to accommodate the proposed uses. The property consists of 1,985 acres and is presently unoccupied open space area.

D. There will be adequate street access and traffic capacity for the proposed uses and development. The subject property will be served by Elizabeth Lake Road, Avenue S and proposed City Ranch Road and several on-site roads.

E. The Specific Plan contains development standards for the provision of street lights, undergrounding of all new utilities and similar infrastructure, and for maintenance of all structures, grounds, parking facilities, landscaping and facilities in a neat and orderly manner at all times (Section 4 and 5 of the Specific Plan).

F. The Specific Plan contains provisions requiring the Project and the individual structures thereto to undergo subsequent development review to assure appropriate placement and architectural compatibility between adjacent uses (Section 5, 6 and 7).

Section 16. Based upon the aforementioned findings, the Planning Commission hereby recommends that the City Council approve General Plan Amendment 91-04, Prezona 89-06 and Specific Plan 89-03 with respect to the Territory described on Exhibit "A" and depicted on Exhibit "B", subject to the following conditions: (1) that the Draft "City Ranch Specific Plan (2.62 du/gross acre) dated August 1, 1991 be revised to incorporate the changes to the Specific Plan which are listed in Exhibit "C" attached hereto and incorporated herein reference; (2) that a development agreement within the meaning of California Government Code Sections 65864 through 65869.5 and acceptable to the City of Palmdale be approved and adopted by the City Council concurrently with the City Ranch Specific Plan; and (3) that the ordinance approving the development agreement between the City of Palmdale and the applicant become effective prior to the approval and completion of annexation of the Territory into the City.

Additionally, the Planning Commission expresses its concern regarding the fiscal impacts of the project and recommends that the City Council review such fiscal impacts and ensure that provisions are included in the development agreement to address any fiscal impacts to the City that have not adequately been addressed in the Specific Plan.

Section 17. The Deputy Clerk shall certify to the adoption of this Resolution and shall transmit copies of this Resolution to the applicant, the City Clerk and City Council.

PASSED, APPROVED AND ADOPTED THIS 24th day of February, 1992.

[Signature]
Chairman

ATTEST:

[Signature]
Deputy City Clerk

8670wp
LIST OF EXHIBITS

Exhibit A - Legal Description of Territory
Exhibit B - Map of Territory
Exhibit C - Planning Commission Recommended Changes to the City Ranch Specific Plan
LEGAL DESCRIPTION, CITY RANCH SOUTH

PARCEL 1:

All of Section 29, Township 6 north, Range 12 west, 6th
Bernardino Meridian, in the County of Los Angeles, State of
California, according to the official plat of said land, except
those portions described as follows:

Beginning at the northeast corner of said Section 29; thence
south 49° 36' 17" east 1633.96 feet along the north line of said
Section 29; thence south 89° 43' 48" east 2151.59 feet to the
beginning of a tangential curve concave outward and having a
radius of 460.00 feet, said curve being the centerline of
Elizabeth Lake Road; thence southwesterly along said curve
through a central angle of 33° 07' 36" a distance of 289.07 feet;
thence south 96° 10' 18" west, 332.73 feet to the beginning of a
tangential curve concave outward and having a radius of
1,000.00 feet; thence westerly along said curve through a central
angle of 19° 36' 40" a distance of 534.81 feet; thence south 75°
14' 18" west, 183.99 feet to the beginning of a tangential curve
concave to the southeast and having a radius of 500.00 feet;
thence southeasterly along said curve through a central angle of
34° 19' 28" a distance of 299.52 feet; thence south 46° 55' 51"
west, 149.86 feet to the beginning of a tangential curve concave
to the south and having a radius of 300.00 feet, thence along
said curve through a central angle of 34° 16' 06" a distance of
474.22 feet; thence north 46° 28' 03" west 3273.21 feet to the
intersection of the west line of said Section 29; thence north
42° 26' west along said westerly line of Section 29, 1,196.48
feet to the point of beginning.

Also except those portions included within the lines of the
lands conveyed to the State of California by Parcels 3 and 18 of
the deed recorded on October 04, 1963 as Document No. 413 in
Book D-4153 Page 623 official records, in the office of the county
recorder of said County.

PARCEL 2:

The southeast quarter and also the south half of the north
half of Section 29, Township 6 north, Range 12 west, 6th
Bernardino Meridian, in the County of Los Angeles, State of
California, according to the official plat of said land.

Except that portion included within the lines of the land
conveyed to the State of California by Parcel 1 of the deed
recorded on October 04, 1963 as Document No. 413 in Book D-4153:
Page 623 official records, in the office of the county recorder
of said County.
PARCEL 1:

- All of Section 11, Township 6 north, Range 12 west, Bernardino Meridian, in the County of Los Angeles, State California, according to the official plat of said land.

PARCEL 2:

All of Section 12, Township 6 north, Range 12 west, Bernardino Meridian, in the County of Los Angeles, State California, according to the official plat of said land.

Except that portions included within the lines of land conveyed to the State of California by Parcel 11 of that parcel recorded on October 04, 1966 as Document No. 411, in Book 613 official records, in the office of the county recorder of said County.

PARCEL 3:

All those certain easements, non-exclusive easements of ways and permanent easements for roads, bridges and land schools, as reserved by V. E. Platt Company, in the State of California, recorded on October 04, 1966 as No. 413 in Book B-4153 Page 633 official records, in the office of the county recorder of said County.

Known as City Ranch South, containing 1900 acres, less.
ASSessor's Parcel Numbers
Within the City Ranch Specific Plan

Section 10
1206-019-02 (portion)
1206-019-03
1206-019-04
1206-019-05
1206-019-07
1206-019-10
1206-019-11 (portion)

Section 11
1206-020-01
1206-020-02
1206-020-03
1206-020-06
1206-020-07
1206-020-08

Section 12
1206-024-01
1206-024-02
1206-024-03
Page I-7, Section b (Policies):

This section shall be revised as follows:

"b) Policies:

1) Encourage a diverse housing stock at City Ranch.

2) Create development standards which allow flexibility to respond to changing community needs.

3) Ensure that all development maintains a consistent level of quality in terms of materials, construction and design, in order to achieve a uniformly attractive community.

4) Ensure that all necessary support services can be provided to new developments so that they are well maintained and attractive.

5) Create opportunities for a mix of product types and transition of residential densities between and within planning areas so as to ensure proper buffering between residential and non-residential land uses."

Page I-8, Section 5(b):

The following text should be added to this section:

"6) Ensure that regional circulation connections are considered and provided for at the appropriate time."

Page IX-5, (Environmental Documentation):

The second paragraph on this page incorrectly states in two places that "...a focused E.I.R., E.I.R Addendum or Supplemental E.I.R will be required." This language shall be revised to read "a subsequent EIR or Supplemental EIR will be required." The references to Focused and Addendum EIRS shall be deleted. This language also applies to the last sentence of page VII-3.

Page IV-4, Section 2. (School Sites):

The following language shall be added to the last paragraph:

"The Antelope Valley Union High School District serves the City Ranch Specific Plan area. The District has indicated that a high school site is needed in the vicinity of the boundary between the City Ranch and Ritter Ranch area. Three potential locations (Planning Areas 5, 14 and 16) in City Ranch, each encompassing approximately 22 acres have been designated with an overlay for High School, and are indicated on the Development Plan as potential High School locations."

Page IV-10, Section 6:

The following text shall be added after the last paragraph of this section:
"d. Transitional Planning Areas

Certain Planning Areas which, because of their location, adjacent uses, size or proximity to commercial, have been designated as "transitional" Planning Areas. These include Planning Areas 8, 14, 19A, 20, 21, 23, 24, 28A and 30A. As outlined in the Specific Plan policies and Design Guidelines Sections (pages I-7, V-5, V-16 and VI-16), the purpose and objectives in designating these transitional Planning Areas is to encourage and permit the mixing of housing types within large Planning Areas. Rather than having the effect of increasing density in City Ranch, this allows for the coordinated re-distribution of the same number of dwellings within designated Planning Areas in a manner which enhances a variety of housing products, utilizes buffering of land uses which are of a dissimilar density or provides a compatible method to transition from single family detached to commercial. By designating the Transitional Planning Areas as outlined above, the appearance of large expanses of the same housing products and densities spread over large areas of City Ranch can be avoided."

Page IV-15, Section 5:

The following text shall be added to the end of the third paragraph:

"Subdivision design shall coordinate alignment and timing of street connections to adjacent or off-site properties in a timely manner."

Page IV-26, Section (b), (Water Plan):

The following text shall be added to this section:

"The use of turf shall be limited and the use of xeriscape landscaping shall be considered wherever feasible."

Page IV-28, Section II:

The following text shall be added at the end of the first paragraph:

"Subdivision design shall consider appropriate adjacent tract requirements for utilities and shall coordinate alignments and facility sizing according to requirements by the Public Works department."

Page IV-29, Section II:

The fourth and fifth paragraph of this section shall be revised as follows:

"Planning Area 8 constitutes a long, rectangular arroyo situated between two large areas of open space. The grading of this Planning Areas can be accomplished in one of two ways. If an off-site regional detention basin is constructed in the vicinity of 25th Street West and Elizabeth Lake Road as part of the Assessment District 90-01 improvements, there would be excess fill material generated which would need to be placed. In order to provide the District with an economically attractive site close-by, Kaufman and Broad has offered Planning Area 8 as a suitable alternative for placement of excess fill. Under such a scenario, daylight filling of the central arroyo running east to west in Planning Area 8 would occur to a
depth, which ranges from approximately five feet to thirty feet in small areas. With this filling, the resultant house pads would be approximately ten to one hundred feet below the golf course area in most areas. Because daily fill does not leave exposed graded slopes, very few visible slope banks would be created under this alternative.

If excess off-site material is not generated by construction of regional detention facilities off-site, Planning Area 8 would be graded utilizing an on-site balanced cut and fill approach which would result in minor cut slopes of thirty feet or lower, except in one limited location adjacent to Bridge Road, where slopes would be below fifty feet in height. Nearly all of Planning Area 8 is in an area of limited visibility, and therefore impacts due to grading are not significant from a visual standpoint."

Page V-1. (General Regulations) (NEW)

The following text shall be added to this section:

"The maximum unit counts within the individual planning areas are subject to Planning Commission approval in conformance with the design guidelines and development standards contained in the Specific Plan. Should review of subsequent projects and site specific criteria relating to the physical characteristics of such areas demonstrate that the proposed number of units cannot conform with the requirements of the Specific Plan, a lesser number of units may be permitted."

Page V-1. (General Regulations) (NEW):

The following text shall be added as a new section:

"11. Except as otherwise reviewed and approved by the City Engineer and L.A. County Fire Department, all private streets shall be constructed to a minimum twenty-six (26) feet of asphalt concrete pavement, with a minimum two (2) feet clear on both sides when providing access to less than four lots. Pavement width shall be increased to thirty (30) feet, with a minimum two (2) feet clear on both sides when providing access to four or more lots.

Notwithstanding the terms of the preceding two sentences, the City Engineer and the Los Angeles County Fire Department shall have the authority to require greater private street widths or standards in certain areas where such greater widths or standards are determined reasonably necessary to protect the public health, safety or welfare of residents and motorists. However, in no event shall such greater widths or standards exceed those required by the City for public streets."

Page V-2. Section (6). General Regulations:

This section shall be revised as follows:

"... and Subdivision Codes and Subdivision Design Guidelines as required by the City of Palmdale in effect at the time of individual project submittals."

Page V-4. Section (20). (General Provisions):

This section shall be revised to the following:
"Flag lots may be permitted in hillside areas above .5 percent slope under the following circumstances:

1. Where it can be shown that grading impacts will be reduced; or

2. Where units are clustered on hillside streets to minimize the number of driveways accessing the hillside street; or

3. Where it can be shown visual impacts will be reduced.

The stem of a flag lot shall not be counted in the total lot area. The total length of the stem of a flag lot shall only be as long as the depth of the adjacent lots. Final configuration and location of flag lots are subject to Planning Commission review and approval."

Page V-5, Section C(1):

The following text shall be added to this section after the first paragraph:

"To ensure proper buffering between dissimilar land uses, transition of density and mix of unit types will be allowed for residential development when adjacent to non-residential land uses."

Page V-6, Section 3, (Accessory Uses Permitted):

The following text shall be added after "Household pets...":

"(Any domesticated animal commonly maintained in residence with man)..."

The text would also apply to page V-11, Section 3 and page V-18, Section 3.

Page V-6, Section (4)(b), (Accessory Uses Permitted):

The section shall be revised to read:

"The following wild animals, but in no event more than three (3) such animals in any combination on a lot or parcel of land."

The text would also apply to page V-11, Section 4(b) and page V-19, Section 4(b).

Page V-6, Section (4)(c), (Accessory Uses Permitted):

A text change from "Other similar animals which, in the opinion of the Planning Commission" to "Other similar animals as determined by the Planning Commission". Additionally, the following sentence shall be added:

"The Planning Commission shall also determine the permitted number of animals for those not previously specified."

This language also pertains to page V-11, Section 3 and page V-19, Section 4(c).

Page V-7, Section (7), (Accessory Uses Permitted):

The text shall be revised to read:
"Homes—for children, foster family, six or fewer persons."

This language would also apply to page V-12, Section 6 and page V-19, Section 6.

**Page V-8, Section (11), (Uses Subject to a Conditional Use Permit):**

The text shall be revised to read:

"Homes for aged persons, group home, over six persons."

This language would also apply to page V-14, Section 15 and page V-20, Section 12.

**Page V-8, Section (12), (Uses Subject to a Conditional Permit):**

The text shall be revised to read:

"Homes for children, special boarding, over 6 persons."

This language would also apply to page V-13, Section 10 and page V-20, Section 13.

**Page V-8, Section (20), (Uses Subject to a Conditional Use Permit):**

The text shall be changed from "Other uses, similar in nature, as deemed appropriate by the Planning Director." to "Other uses similar in character, intensity, and use to those listed above, as determined by the Director of Planning."

Similar changes would also apply to page V-14, section 3 (20) and page V-21, Section (20) and page V-29, section (67).

**Page V-9, Section 1(a), (Building Setbacks):**

The following text shall be added to this section:

"Variable setbacks shall be incorporated between each dwelling unit, with an average of twenty (20) feet and a minimum of fifteen (15) feet. Variation in the front setback shall average 20 feet. The minimum front setback shall be 15 feet. Variation of setbacks on curvilinear streets may be reduced or waived."

This language would also apply page V-10, section (f).

**Page V-10, Section 5(a), (Fences and Walls):**

The text shall be revised to read:

"Front Yard Setback: Maximum three (3) feet six (6) inches."

"Side and Rear Yard Setback: Maximum six (6) feet (except in the required front yard setback area)."

This language would also apply to page V-15 section (h) and page V-17, Section (h).

**Page V-14, Section 1(b), (SPA Type A):**

The following text shall be added to the end of this sentence:

"...contained on page V-23, Section D."

This language would also apply to page V-16, section 2 (b).
Page V-14, Section 1:
The following text shall be added to this section as a new item:

"No more than eight dwelling units may be contained within a single building."

Page V-14, Section (f)(1), (SPA Type A):
This section shall be revised as follows:

"f. Building Setbacks.

1. Front Setbacks:

   Garage setbacks, front facing garage:
   Twenty (20) feet to public street or private drive.
   Garage setbacks, side-in garage:
   Fifteen (15) feet to public street, ten (10) feet to private drive.

   Building setbacks:
   Twenty (20) feet to public street or private drive. Front setback may be decreased to fifteen (15) feet if rear yard setback is fifteen (15) feet or greater. If rear yard setback is less than fifteen (15) feet, then front setback shall be twenty (20) feet to public street or private drive.

   Uncovered Parking:
   Five (5) feet to public street or private drive."

The following text shall additionally be added to this section:

"Garages with parking aprons less than 20 feet in length shall have automatic garage door openers and sectional roll-up doors."

This language would also be added to Page V-16 under section (f)(1), (2), (3); and page V-22, section (7)

Page V-20, Section (c)(3). (Uses Subject to Site Plan Review):
The reference to "public or quasi-public uses" shall be deleted.

Page V-21, Section E(5):
The text shall be revised as follows:

"Development site coverage: The Seventy (70) percent maximum, including impervious surfaces. Impervious surfaces shall include building, streets, sidewalk and driveway (not including walkways and open space or recreation pavement)."

Page V-24, Section D/(1):
The following text shall be added to this section:

"1. The City Ranch Residential Planning Development (R-PD) Standards are established to promote residential amenities beyond those expected under conventional development, to achieve greater flexibility in design, to encourage well-planned neighborhoods through creative and imaginative planning as a unit, to provide for a balanced distribution of residential densities and unit types, to provide..."
appropriate transitions of densities between residential and
two-residential land uses, and to provide for appropriate
use of land which is sufficiently unique in its physical
characteristics or other circumstances to warrant spec
methods of development."

Page V-24, Section (a):

The text shall be revised as follows:

"The development shall be proposed on a parcel or parcels
not containing less than one (1) acre. A greater emphasis
shall be placed on functional private open space areas for
individual dwelling units where parcel size is less than
five (5) acres."

Page V-25, Section 3(d)(6):

The text shall be modified to read as follows:

"Other facilities approved by the Planning Commission
during Conditional Use Permit review."

Page V-25, Section 5:

This section shall be revised to the following:

"The Planning Commission shall approve a progress schedule
indicating the development of open space and recreational
amenities relative to the construction of residential
dwelling units, which shall become a condition of
approval. Where development is to be completed in phases,
said development may be so completed with approval of the
Planning Commission. The Planning Director may modify,
without a hearing, this condition pertaining to the
development schedule, based upon the affirmative showing of
substantial written evidence of hardship by the project
applicant and provided that recreational amenities are
reasonably provided as development occurs."

Page V-25, Section (7):

The first sentence shall be revised to read:

"A preliminary plan for the landscaping of all open areas,
where appropriate, shall be submitted to and approved by
the Planning Commission along with the Conditional Use Permit."

Page V-29, Section (5)(i) (Standards):

The text shall be revised to the following:

"Restaurants, including the permitted serving of alcohol."

Page V-30, Section (c)(6) (Uses permitted subject to a
Conditional Use Permit):

The following text shall be added to this section:

"Automobile service stations, including vehicle
maintenance, provided that all operations take place wholly
within an enclosed structure; specifically excludes heavy
automobile repair uses such as welding, auto body, painting
and similar uses."
Page V-10. Section c(9). (Uses permitted subject to Conditional Use Permit):

The text shall read "Day Care Centers" with the reference to a number of children deleted.

The same language would apply to page V-35, Section B(2).

Page V-11. Section (a)(1). (Site Development Standards):

This section shall be revised to read:

"Building site: 5,000 square foot minimum."

Page V-12. Section (11). (Site Development Standards):

The following text shall be added to this section to provide design guidance:

"Some elements of design or architectural features shall be carried through on all sides of primary structures and on accessory structures."

The following text shall be added to page VI-11 as additional commercial design guidelines:

"Pedestrian walkways should be provided to connect to public sidewalks and adjacent residential neighborhoods where appropriate.

Pedestrian oriented features such as seating areas and outdoor eating areas should be incorporated where feasible.

Pedestrian circulation shall be emphasized between buildings and from major tenants to public streets.

Drive through features shall be screened through the use of landscaped berms, building orientation and/or other design elements to minimize adverse aesthetic impacts."

Page V-12. Section (11)(a). (Site Development Standards):

The following text shall be added to this section:

"The minimum height of screening shall be six feet. In cases where there are grade differentials or where walls must be higher for noise attenuation, wall height shall be reduced to eight feet or less on the residential side by use of earthen berms, use of two shorter walls in combination, combinations of berms, walls, open fencing, landscaping or similar measures."

Page V-12. Section (11)(b)(2). (Site Development Standards):

The following sentence shall be added to this section:

"A berm shall be constructed of earthen materials and it shall be landscaped with drought tolerant plants and water saving irrigation where possible. The use of turf is discouraged."


The first sentence of this paragraph shall be revised to read:

"Roof top mechanical equipment shall be completely screened from view of adjacent streets or contiguous development areas by architectural means such as parapet walls or
rooftop wells which are integrated into the building's architecture."

Similar changes would also apply to page V-22, section (14), page V-37, Section 8(d) and page V-40, Section 6(d).

Page V-34, Section (a). (Landscaping):
The following text shall be added after the first sentence:

"The use of drought tolerant plants and xeriscape materials should be implemented as the preferred landscaping method wherever feasible."

Page V-34, Section (i). (Landscaping):
The following text shall be added to this paragraph:

"Drip irrigation or other water-conserving irrigation should be used where appropriate."

This language also applies to page IV-26, Section 2(f), page V-37, Section 9(d) and page V-41, Section 7(d).

Page V-34, Section 2(a)(4). (Standards):
This section shall be revised to delete the reference to community facilities. The reference to City of Palmdale Maintenance Facility shall be deleted from this section and relocated to the Community Facility Use Standards section and Exhibit 13A shall be revised to indicate a portion of Planning Area I as Community Facility. The uses listed as "temporary storage of materials and equipment for construction of public works and any similar agricultural, conservation, park and recreation, maintenance, open space use or accessory uses which are approved as an appropriate use by the Director of Planning" shall be put under a new section titled Temporary Use Permit.

The following language shall be additionally added to this section:

"(f). Any other use similar in nature which is found compatible with the purpose of this Open Space section, and which is deemed appropriate by the Planning Director."

Page V-35, Section 2(b)(4). (Uses Permitted Subject to a Conditional Use Permit):
The reference to "Sewage waste disposal" shall be deleted from this section.

Page V-36, Section 2(a). (Standards):
This section shall be revised as follows:

The references to Community Centers, Public and private recreation centers and facilities, civic and cultural facilities, special community events, day care facilities and community information center shall be moved to the Conditional Use Permit section. The references to Temporary real estate sales offices and information centers in conjunction with the sale of new homes and Temporary storage of materials and construction equipment used in construction or maintenance of streets and highways, sewers, storm drains, underground conduits, flood control works, pipelines and similar uses shall
be incorporated in a new section titled, "Uses permitted subject to a Temporary Use Permit."

Page V-19, Section (b)(12), (Uses Permitted Subject to a Conditional Use Permit):
The reference to solid waste landfill projects shall be deleted from the list of uses permitted subject to a conditional use permit.

Page V-43, Section 3(a)(1), (Parking Space Requirements):
The first sentence of this section shall be modified to the following:

"Off-street parking spaces for Single Family Detached dwellings shall be located on the same lot or parcel on which the dwelling is located and shall consist of two enclosed spaces."

Page V-51, Section I, (Sign Standards):
The following text shall be added in the beginning of this section as a new item:

"The area of a sign face (which is also the sign area of a wall sign or other sign with only one face) shall be computed by means of the smallest square, circle, rectangle, triangle, or combination thereof that will encompass the extreme limits of the writing, representation, emblem, or other display, together with any material or color forming an integral part of the background of the display or used to differentiate the sign from the backdrop or structure against which it is placed, but not including any supporting framework, bracing, or decorative fence or wall when such fence or wall otherwise meets zoning ordinance regulations and is clearly incidental to the display itself.

The sign area for a sign with more than one face shall be computed by adding together the area of all sign faces visible from any one point. When two identical sign faces are placed back to back, so that both faces cannot be viewed from any point at the same time, and when such sign faces are part of the same sign structure and are not more than forty-two (42) inches apart, the sign area shall be computed by the measurement of one of the faces."

This text would also apply to page C-18, Section (c) and should be revised accordingly.

Page V-51, Section 2(b), (Temporary signs):
The first sentence shall be revised to read, "The following temporary signs are allowed subject to the issuance of a sign permit by the city of Palmdale."

Page V-51, Section 2(b)(2), (Temporary signs):
The sentence shall be revised to read, "Real estate signs greater than six (6) square feet in area, but no greater than thirty-two (32) square feet in area."

Page V-51, Section 2(b)(3)(d), (Temporary signs):
The reference to five (5) feet shall be changed to ten (10) feet consistent with the City's existing standard.
Page V-54. Section (q). (Temporary signs):
This section shall be deleted.

Page V-54. Section 4. (Temporary signs):
The fifth sentence shall be deleted from this section.

Page V-57. Section (2)(d). (Free standing Signs):
The last sentence shall be revised to the following:

"Such signs shall be a minimum ten (10) feet from the property line."

Page V-58. Section 4 (Signs Seal Program):
The references to "sign seal" have been changed to read "sign decal". The first sentence of the section shall be revised to read:

"Every sign for which this Chapter imposes standards shall have a decal provided by the city which will include the identification number, the name of the installer and the installation."

Page V-59. Section (b). (Grading Policies):
The following grading policy shall be added to encourage landform grading and minimize adverse visual impacts in hillside areas, where appropriate:

"Contour and landform" grading that follows the existing natural contours, rather than geometric grading which does not consider natural topography, shall be required except when determined to be infeasible by the City Engineer. Grading for residential pads in highly visible areas such as near the crest of a ridgeline, along the edge of a daylight cut or manufactured landform embankment shall be designed to avoid the image of linear rows of houses stepping up and down the hillside."

Page V-60. Section (10). (Grading Policies):
This section shall be revised to read:

"Large visually prominent manufactured slopes shall be designed so as to simulate the curvature of a naturally shaped slope, or shall be blended into natural slopes by gradually adjusting the contours and slope orientation. Utilization of curvilinear street patterns maybe an element in establishing conformance with this standard."

This text change would also apply to the first sentence of page V-68, section (2)(4).

Page V-64. Section (20). (Grading Standards-General):
The following language shall be added to this section:

"Where the Planning Director determines that development is being proposed in visually prominent hillside areas of Planning Areas 17, 19A, 20A or 31, submittal of architectural elevations, visual analysis, or similar measures may be required as part of the tentative map review process."
Page VI-14, Item (b). (Walls Between Residential Lots):

The following language shall be added to the first sentence of this section:

"pressure treated wood"

Page VI-14, Section 6. (Equestrian Trail Fencing):

The first sentence of this section shall be revised to read:

"Approved split-rail type equestrian fencing (made from such materials as PVC, woodcrete, etc.) should be included along the equestrian trail where control of horses or separation from potential safety hazards exist."

Page VI-14, Section 3(a)(3). (Design Guidelines):

This section shall be revised to the following:

"§3. Solar Design and Access: For all projects, site planning and architectural design should strongly consider passive solar access issues. This review should include, but not be limited to, the following measures:

a. Street and lot orientation should provide for maximum exposure of primary building mass in a south facing direction to the extent physically feasible. Attached garages shall not be located so as to inhibit solar access on south building sides.

b. Roof overhangs should be utilized to shade windows from the high summer sun.

c. Large window expanses should be oriented in a southerly direction to capture the heating opportunities associated with the low winter sun.

d. Window areas should be minimized on west facing sides of buildings except if appropriate window screening is utilized.

e. Creative landscape plantings should be utilized. For example, selective placement of certain deciduous trees can provide summer shading while allowing solar penetration during the leafless winter months."

The following statement shall be added as a new guideline in this section to address pedestrian circulation in residential areas:

"§11. Emphasis should be on the strategic placement of pathways, easements or other means at cul-de-sac ends which encourage pedestrian access to connections with arterials, trails, bicycle paths, park and school facilities within the planning area and which promote neighborhood interaction."

Page VI-14, Section 3(a)(8). (Design Guidelines):

This section shall be revised as follows:

"Creation of irregularly shaped lots which are difficult to utilize should be avoided, except for the use of flag lots in areas of greater than fifteen percent slope where this technique results in reduced grading or visual impacts."

In order to provide a transition of density and variety in the community structure, the following guidelines for Planning Areas 8, 19A, 20, 21, 23, 24, 28A and 30A shall apply:

1) Single Family Detached (SFD) Planning Areas which are adjacent to Commercial uses shall consider the appropriate placement of Single Family Attached (SFA) housing types to serve as a transition between Single Family Detached and Commercial uses.

2) The size and configuration of a transitional single Family Attached area should be determined by topography, access and related conditions specific to that given area. However, SFA sites used for transitional purposes should in no case exceed twenty (20) acres in area.

3) SFA homes should be located in a manner which avoids excessive mixing of product types of dissimilar densities within a particular tract or on the same street; however, the intent is to permit diversity of products within Planning Areas.

4) Site plan layout of residential tracts should consider the placement of a street, greenbelt or landscaped setback between commercial and residential uses to serve as a buffer which is appropriate, unless otherwise addressed by other mitigative measures.

5) Transitional SFA development which occurs adjacent to SFD lots are encouraged to employ design measures which lessen the effects of density at the interface between the two uses. These could include the use of single story SFA Attached Type B housing types, architectural styles which are of a harmonious design, placement of parking, open space or access between the two housing types, or other methods as approved by the Planning Director which serve as a buffering element.

In order to provide a compatible transition of density and variety in the community structure, the following guidelines for Planning Area 14 shall apply:

1) Single Family Attached (SFA) Planning Areas adjacent to School sites or Multiple Family Planning Areas shall consider the appropriate placement of Multiple Family (MF) housing types to serve as a transition between Single Family Attached uses, in order to promote variety and diversity in community structure where site configuration, topography and access conditions are suitable.

2) The size and configuration of such area should be determined by topography, access and related conditions specific to that given area. However
"MF sites used for transitional purposes should in no case exceed ten (10) acres in area.

3) Multiple Family buildings should be located in a manner which avoids excessive mixing of product types or dissimilar densities within a particular tract or on the same street; however, the intent is to permit diversity of products within Planning Areas."

Page VI-18, Section (d) (New):

The following language shall be added as a new subsection in this section:

"19) Carport structures should receive design treatments that reflect the architectural design, color treatment and materials consistent with those of the primary residential structures, including:

1) Use of consistent roofing materials;

2) Provision of roof pitch and design that is compatible with other residential structures.

3) Utilization of colors, trim, and building materials that are consistent with those used on primary residential structures."

Page VII-6, Section I. (Administrative Review/Staff Review):

The second paragraph, third sentence shall be revised to read as follow:

"The Planning Director may, at his or her discretion, forward a Staff Review approval item or a use consistency determination to the Planning Commission for an interpretation of the purpose and intent of the Specific Plan relative to the project under review."

Page VII-8, Section H:

The following text shall be added to this section:

"Transitional Planning Areas

In order to assure the coordination of densities, product types, buffering and compatibility within and adjacent to certain uses, a Conceptual Site Plan shall be reviewed and approved by the Planning Director for Transitional Planning Areas 8, 14, 19A, 20, 21, 23, 24, 28A, and 30A. Said Conceptual Site Plan approval shall be required prior to approval of any Tentative Tract Map, R-PD, Site Plan Review or CUP approval within these Planning Areas. Said Conceptual Site Plan shall be evaluated for conformance with requirements of the Design Guidelines, Development Standards and Policies contained in this Specific Plan relative to Transitional Planning Areas."

Page VII-10, Section (o). (Specific Plan Amendments):

This section shall be revised to read as follows:

"Transfer of units as outlined in Section VII. U., "Transfer of Dwelling Units" and outlined on Table 2 therein, except for Planning Areas $3 and $33 which will require Specific Plan Amendments."
Page VII-15. Section U. (Transfer of Dwelling Units):

The last sentence in the fourth paragraph shall be revised to read as follows:

"All transfers of units shall be approved by the Director of Planning except for transfers into Planning Areas #3 and #13, which will require a Specific Plan Amendment."

Exhibit 15. (Circulation Plan):

The exhibit shall be revised to indicate the following:

"The curb to curb paved roadway, 0-5 feet of landscaping, a 5 foot sidewalk, 8 feet of landscaping, a 10 foot bicycle path and then 0-5 feet of landscaping."

Exhibit 11. (Development Plan):

The exhibit shall be revised as follows:

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<th>BUILDABLE ACRES</th>
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Total 1,293.0 6,059
ATTACHMENT III

Minutes of the Planning Commission Meetings dated January 15, January 20, January 23, February 5, and February 6, 1992, are attached. Minutes of the Planning Commission Meetings dated January 27, and February 24, 1992 have not yet been approved by the Planning Commission. These minutes will be forwarded to the Council as soon as they have been accepted by the Planning Commission.
The adjourned regular meeting of the Planning Commission of the City of Palmdale was called to order at 7:00 p.m. on Wednesday, January 15, 1992, in the City Council Chambers at 708 East Palmdale Boulevard, Palmdale, California.

The Pledge of Allegiance was led by Molly Bogh, Director of Planning.

Four members of the Planning Commission were present: Chairman Mayfield, Vice Chairman Jones, and Commissioners Myers and Thompson.

Director Bogh announced that Commissioner Bittenbinder was delayed out of town but would be listening to the tapes of this meeting.

Approximately 25 members of the public were present and two members of the press.

REVIEW OF AGENDA

Chairman Mayfield, after polling the Commission, announced that Item 6A - Joshua Tree Bank - would be heard first.

Motion was made by Commissioner Myers and seconded by Vice Chairman Jones to waive further reading of all resolutions on the agenda for this meeting. No objection; so ordered.

CONSENT CALENDAR

Motion was made by Vice Chairman Jones and seconded by Commissioner Myers to approve the Consent Calendar as presented by Staff. No objection; so ordered.


PUBLIC HEARINGS

5. NEW BUSINESS

6. JOSHUA TREE BANK (CITY OF PALMDALE, APPLICANT: License agreement with Plant 42 for Use of 60 acres as a Joshua Tree Bank) -- Staff report presented by Sonja Wilson.

Director Bogh introduced Sonja Wilson, Senior Planner, who gave the Staff report. Commissioner Myers and Vice Chairman Jones clarified points regarding the land use policy as adopted in
Motion was made by Commissioner Thompson and seconded by Vice Chairman Jones to approve the motions as presented in the Staff report. Motion carried 4-0.

5. OLD BUSINESS

5A. EIR 89-03 (KAUFMAN & BROAD, APPLICANT: EIR for City Ranch Specific Plan, a project that would allow the development of 5,200 dwelling units, 42 acres of commercial uses, and parks and schools on a 1.985 acre site. The project is generally bounded by Elizabeth Lake Road to the north, the alignment of Avenue S to the south, the alignment of 20th Street West to the east, and the alignment of 40th Street West to the west) -- Staff report presented by Laurie Lile.

Director Bogh asked for direction from the Commission as to combining the public hearings on items 5A (EIR for City Ranch) and 5B (GPA 91-4, Pre-Zone 89-6, Specific Plan 89-3 (City Ranch Specific Plan) and Development Agreement) as both had been advertised. The Commission decided to hear comments from the public on each item separately.

Vice Chairman Jones stated for the record that she will abstain from the City Ranch deliberations as she had received income from the applicant in the last twelve months, and left the dais. John Mayfield stated for the record that there was a quorum.

Director Bogh introduced Laurie Lile who presented the Staff report.

Kyle Kollar, representing the applicant, gave a brief presentation and advised the Commission that consultants for the project were in the audience and available to answer questions. Mr. Kollar set forth distinctions of the City Ranch project as compared to the Ritter Ranch project such as installation and location of improvements, the small percentage of slopes exceeding 25%, grading and landform issues. Mr. Kollar stated the applicants are meeting with the School Districts to reach agreements on school site locations and financing. He stated the applicants object to the mitigation measures for school and sheriff impacts as stated in the staff report. City Attorney Kevin Ennis addressed financing of sheriff's station and school facilities.

Public testimony was offered by Don Carroll (Pacton-Sagebrush), Rosemary Elitzer, and David Earle (President, West Antelope Valley Historical Society).
Minutes of the Planning Commission
January 15, 1992
Page 3

Director Bogh solicited comment from the Commission as to whether the Commissioners would like to see an informational item on the Agenda regarding adjacent land development proposals in order to see how they interrelate. The Commission concurred.

Motion was made by Commissioner Myers and seconded by Commissioner Thompson to close the public hearing. No objection; so ordered.

Chairman Mayfield called for a recess at 8:25 p.m. The meeting resumed at 8:45 p.m.

Chairman Mayfield announced that the public hearing on EIR 89-03 (City Ranch EIR) had been closed.

The Commission considered the Staff report on an item by item basis, and continued the discussion to January 20, 1992. Duane Betty, representing the applicant, addressed issues related to water. Tom Horne, City Traffic Engineer, and Greg Endo, Endo Engineering, traffic engineer for the original study, addressed the requirements of the Congestion Management Plan and traffic impact issues.

Director Bogh announced that Staff is awaiting park plan revisions from the applicant as well as a fiscal impact report. The Staff report containing wording revisions to the Specific Plan and information on impacts to libraries will be delivered Friday to the applicant and Planning Commission. Kyle Kollar will arrange to have a representative of the water purveyors in attendance at the Planning Commission meeting on January 20, 1992.

PUBLIC COMMENTS - None.

The meeting was adjourned at 10:15 p.m. to the adjourned regular meeting of the Planning Commission to be held January 20, 1992, at 7:00 p.m. in the City Council Chambers of the City of Palmdale, 708 E. Palmdale Blvd., Palmdale, California.

ATTESTED:

John Mayfield/Chairman

Sue Thompson, Deputy City Clerk

pst/pcl1532
PLANNING COMMISSION MINUTES

Palmdale, California

January 20, 1992

The adjourned regular meeting of the Planning Commission of the City of Palmdale was called to order at 7:15 p.m. on Monday, January 20, 1992 in the City Council Chambers at 708 East Palmdale Boulevard, Palmdale, California.

The Pledge of Allegiance was led by Commissioner Thompson.

Four members of the Commission were present, representing a quorum: Chairman Mayfield, Commissioners Bittenbinder, Myers and Thompson. Vice Chairman Jones was absent.

Approximately 18 members of the public and 2 members of the press were present.

REVIEW OF AGENDA

Molly Bogh, Director of Planning, announced that there were no changes to the agenda.

PUBLIC HEARINGS

OLD BUSINESS

Item 3A: EIR 89-03 (KAUFMAN AND BROAD, APPLICANT - EIR for City Ranch Specific Plan, a project that would allow the development of 5,200 dwelling units, 42 acres of commercial uses, and parks and schools on a 1,905 acre site. The project is generally bounded by Elizabeth Lake Road to the north, the alignment of Avenue S to the south, the alignment of 20th Street West to the west, and the alignment of 40th Street West to the west).

Kyle Kollar, representing Kaufman and Broad, announced that he would like to hold his comments on the draft EIR until the meeting of 1-23-92.

Ms. Bogh informed the Planning Commission that the applicants may wish to proceed with the project without a Development Agreement.

The Planning Commission directed Staff to review the EIR and the Specific Plan documents and advise the Commission as to the best way to proceed without a Development Agreement.
Motion was made by Commissioner Myers and seconded by Commissioner Thompson to continue EIR 89-03 indefinitely pending Staff’s review as per direction. Motion carried 4-0.

Item 5B: GPA 91-4, PRE-ZONE 89-6, SPECIFIC PLAN 89-3, CITY RANCH SPECIFIC PLAN AND DEVELOPMENT AGREEMENT (KAUFMAN AND BROAD, APPLICANT) - A request to consider development of a project that would allow 5,200 residential dwelling units, 42 acres of neighborhood commercial development, four school sites, 135 acres of parks, a golf course, and 419 acres of open space. The General Plan Amendment proposes to eliminate the existing land use nodes and redesignate the entire project site to City Ranch Specific Plan (3 du/ac). The Pre-Zone proposes zoning on the property of City Ranch Specific Plan (3 du/ac). The City Ranch Development Agreement outlines some of the terms and conditions of development of the property. The project is generally bounded by Elizabeth Lake Road to the north, the alignment of Avenue 9 to the south, the alignment of 20th Street West to the east, and the alignment of 40th Street West to the west.

Testimony was given by: Kyle Kollar, representing Kaufman and Broad.

Motion was made by Commissioner Thompson to continue General Plan Amendment 91-4, Pre-zone 89-6, Specific Plan 89-3, City Ranch Specific Plan and the Development Agreement indefinitely until Staff can review and come back to Commission with a recommendation on proceeding with the project without a Development Agreement.

After further discussion with Staff and Deputy City Attorney Kevin Ennis, an amended motion was made by Commissioner Thompson and seconded by Commissioner Bittenbinder to continue the above to the meeting of January 23, 1992. Motion carried 4-0.
Planning Commission Minutes
January 20, 1992
Page 3

SPECIAL REPORTS: - None

PUBLIC COMMENTS - None

STAFF COMMUNICATIONS - None

The meeting adjourned at 7:50 p.m. to the adjourned regular meeting of the Planning Commission on January 23, 1992 at 7:00 p.m. in the City of Palmdale Council Chambers.

John Mayfield, Chairman

ATTESTED:

Deputy City Clerk, Kathy Stevenson

KAS:pc1992
The adjourned regular meeting of the Planning Commission of the City of Palmdale was called to order at 7:01 p.m. on Thursday, January 23, 1992, in the City Council Chambers at 708 East Palmdale Boulevard, Palmdale, California.

The Pledge of Allegiance was led by Commissioner Myers.

Four members of the Planning Commission were present: Chairman Mayfield, and Commissioners Bittenbinder, Myers and Thompson. Chairman Mayfield announced that there was a quorum.

Chairman Mayfield asked those who wished to speak to fill out a speaker slip and deposit it with the Deputy City Clerk.

Approximately 25 members of the public were present and one member of the press.

REVIEW OF AGENDA

Molly Bogh, Director of Planning, announced that there were no changes to the agenda.

Motion was made by Commissioner Myers and seconded by Commissioner Thompson to waive further reading of all resolutions on the agenda for this meeting. No objection; so ordered.

CONSENT CALENDAR

Motion was made by Commissioner Thompson and seconded by Commissioner Myers to approve the Consent Calendar as presented by staff. No objection; so ordered.

The Consent Calendar consisted of the Minutes of the Planning Commission’s meeting of January 15, 1992.

PUBLIC HEARINGS

5. OLD BUSINESS

5B. CEA 91-4. ERS-ZONE 82-6. SPECIFIC PLAN 89-3 (CITY RANCH SPECIFIC PLAN) AND DEVELOPMENT AGREEMENT (KAUFMAN & BROAD, APPLICANT): A request to consider development of a project that would allow 5,200 residential dwelling units, 42 acres of neighborhood commercial development, four school sites, 159 acres of parks, a golf course, and 419 acres of open space.
The General Plan Amendment proposes to eliminate the existing land use nodes and redesignate the entire project site to City Ranch Specific Plan (3 du/ac). The Pre-Zone proposes zoning on the property of City Ranch Specific Plan (3 du/ac). The City Ranch Development Agreement outlines some of the terms and conditions of development of the property. The project is generally bounded by Elizabeth Lake Road to the north, the alignment of Avenue S to the south, the alignment of 30th Street West to the east, and the alignment of 40th Street West to the west) -- Staff report presented by Tara Hullinger.

Molly Bogh, Director of Planning, stated that the Planning Commission had opened the hearing on the City Ranch EIR 89-03 at the meeting of January 15, 1992, and continued it to January 20. On January 20 the Planning Commission continued the EIR indefinitely and the Specific Plan to this evening; therefore, staff recommended that any discussions be focused on the Specific Plan only. Director Bogh stated that this is the third meeting for the Planning Commission’s consideration of the City Ranch project.

At the last meeting of the Planning Commission on this project, Staff had indicated that there was some question as to whether a Development Agreement would ultimately be adopted for the City Ranch Specific Plan. The Commission directed Staff to research whether any modification of the Specific Plan would be necessary if the Development Agreement was not ultimately part of the project.

Staff has prepared a memo to the Planning Commission dated January 23, 1992, summarizing some of the sections within the draft Specific Plan and EIR which would require revision if the Development Agreement is not adopted. This language would apply primarily to the infrastructure and public facilities, specifically the library, City maintenance yard, high school, transportation, golf course, parks, open space, fire station, drainage and the Park and Ride Facility. In addition to existing language which would need to be changed in the Plan, Staff also recommends that the Plan should be much more specific regarding the timing and phasing of infrastructure such as in the construction of parks relative to number of dwelling units, for example.

Many of the items which have been deferred to the Development Agreement stage of the current draft should now be addressed much more specifically in the absence of a Development Agreement. At this time, then, Staff can offer the Planning Commission two alternative courses of action.

First, the Planning Commission may determine that it is appropriate to require a Development Agreement on a project of this size and complexity to insure that the impacts of the
project do not have a negative fiscal impact on the City of Palmdale or its existing residents. Under this alternative, the Planning Commission could continue its review of the Specific Plan and make its recommendation for approval contingent upon the adoption of a Development Agreement.

Alternatively, the Planning Commission could determine that a Development Agreement is not a mandatory component of the project and direct Staff to work with the applicant to prepare the necessary modifications to the Specific Plan and EIR. If the Commission chooses this alternative, Staff would request an indefinite continuance of the hearing. In addition, Staff would suggest that a public facilities phasing and financing program or something of an equivalent nature should be prepared and adopted concurrently with the Specific Plan.

If the Planning Commission wishes to continue the hearing process on the project based upon an ultimate recommendation for a Development Agreement, then Staff would be prepared to continue its report on the Specific Plan. Director Bogh requested the Commission to make a decision on this issue as to how to treat the Development Agreement decision.

At the request of Chairman Mayfield, Duane Betty, President of the Antelope Valley Division of Kaufman and Broad, approached the podium to address the Commission. Commissioner Myers announced for the record that he had met with Duane Betty, Kyle Kollar and Greg McWilliams of Kaufman and Broad.

Assistant City Attorney Kevin Ennis addressed whether the Planning Commission should condition its recommendation of the Specific Plan upon adoption of the Development Agreement, stating that by provisions of State law the Commission is asked to make a recommendation to City Council on a Specific Plan. The Commission can fashion its recommendation to take into account the proposed structure of the Specific Plan, while advice the Council can or cannot take.

After the discussion,

Motion was made by Commissioner Myers and seconded by Commissioner Thompson to say a polite no to the applicant and his request of Monday, January 20, in terms of the objection to Staff’s recommendation and that we continue with the hearings on the Specific Plan, conditioning upon adoption of a Development Agreement. Motion carried 4-0.

Director Bogh stated that Staff would move into the staff report and gave a brief overview of what Staff had prepared. The EIR and Planner Laurie Lile’s report will be discussed Monday, January 27. Letters submitted by the School District and a representative from the Water District addressing
previously identified concerns of the Commission will be covered tonight.

Motion was made by Commissioner Myers and seconded by Commissioner Bittenbinder to continue the City Ranch EIR 89-03 to January 27, 1992. Motion carried 4-0.

Tara Hullinger presented the Staff report. The Commission and Staff discussed the Specific Plan design criteria and Staff's recommendation to use different types of units as transition areas between Commercial areas and Single-Family Residential areas, for example, and along major arterials to allow flexibility and encourage a diversity of neighborhoods. Staff identified development criteria as to how the mix should occur such as setbacks, lot sizes, greenbelts etc.

Tom Horne, City Traffic/Transportation Engineer, discussed the interface of the circulation system between Ritter Ranch and City Ranch.

Motion was made by Commissioner Myers and seconded by Commissioner Bittenbinder to open the public hearing on General Plan Amendment 91-4, Pre-Zone 89-6, Specific Plan 89-3 (City Ranch Specific Plan) and Development Agreement. Motion carried 4-0.

Public testimony was offered by: Laird Doctor, representing Sagebrush, a project to the south of City Ranch; Steve Buswell, representing CalTrans; Kyle Kollar, representing Kaufman and Broad; and Gary Hartley, representing the Los Angeles County Waterworks Districts.

The Commission directed questions to Mr. Hartley who stated the Water District takes the position that it can provide water for the City Ranch project through 2010 based on current projections.

Chairman Mayfield called for a recess at 8:19 p.m. The meeting resumed at 8:28 p.m.

Duane Betty, of Kaufman and Broad, addressed land use issues in different planning areas as well as the location of the high school and electromagnetic radiation concerns in planning area 18 which applicant has agreed to designate as Open Space, not Park, because of this issue.

Kyle Kollar reviewed wording changes in the Staff report with the Commission such as sign standards, common boundary issues of Ritter and City and grading policies. He stated the applicant will provide language for Staff to review and revise regarding the 25% slope grading reference to allow flexibility for golf course architect and grading issues in planning area 8.
Minutes of the Planning Commission
January 23, 1992
Page 5

Director Bogh stated that Monday, January 27, is the date the Commission will continue its discussion of the EIR. Ta Hullinger said the fiscal impact report will be provided to the Commission when it is received by Staff.

Motion was made by Commissioner Myers and seconded by Commissioner Bittenbinder to continue the hearing on Item 5B (General Plan Amendment 91-4, Pre-Zone 89-6, Specific Plan 89-3 and Development Agreement) to Monday, January 27, 1992. Motion carried 4-0.

Commissioner Myers noted for the record that the public hearing has not been closed on this item.

PUBLIC COMMENTS - None.

The meeting was adjourned at 9:15 p.m. to the adjourned regular meeting of the Planning Commission to be held January 27, 1992, at 7:00 p.m. in the City Council Chambers of the City of Palmdale, 708 E. Palmdale Blvd., Palmdale, California.

ATTESTED:

Sue Thompson, Deputy City Clerk

pst/pc1557

John Mayfield, Chairman
The adjourned regular meeting of the Planning Commission to be held January 30, 1992 was adjourned for lack of quorum by the Deputy City Clerk to an adjourned regular meeting of the Planning Commission to be held on February 5, 1992 at 7:00 p.m. in the City of Palmdale Council Chambers, 708 E. Palmdale Boulevard, Palmdale.

The adjourned regular meeting of the Planning Commission of the City of Palmdale was called to order at 7:02 p.m. on Wednesday, February 5, 1992, in the City Council Chambers at 708 East Palmdale Boulevard, Palmdale, California.

The Pledge of Allegiance was led by Chairman John Mayfield.

Four members of the Planning Commission were present: Chairman Mayfield, Commissioners Bittenbinder, Myers and Thompson. Chairman Mayfield announced a quorum. Vice Chairman Jones was absent due to her abstention from the subject matter of the meeting.

Chairman Mayfield asked those who wished to speak to fill out a speaker slip and deposit it with the Deputy City Clerk. Chairman Mayfield asked all speakers to stand and be sworn in.

Approximately 20 members of the public were present and one member of the press.

REVIEW OF AGENDA

Molly Bogh, Director of Planning, requested the continuance of Item 4C, Minutes of the Planning Commission Meeting of January 27, 1992, to a date to be decided upon by the Commission later in the meeting.

Motion was made by Commissioner Myers and seconded by Commissioner Thompson to waive further reading of all resolutions on the agenda for this meeting. No objection; so ordered.

Commissioner Myers listed changes to the Minutes of January 23 as follows: page 2, fourth paragraph, line 2 add "", 1992." after January 23; page 3, penultimate paragraph, delete "assuming ultimate" in the fifth line and insert in their place, "conditioning upon"; page 5, second paragraph, add "l" to "Genera".
Motion was made by Commissioner Myers and seconded by Commissioner Bittenbinder to approve item 4A (Minutes of the Planning Commission meeting of January 20, 1992) and item 4B (Minutes of the Planning Commission meeting of January 13, 1993), as amended. No objection; so ordered.

PUBLIC HEARINGS

5. OLD BUSINESS

5B. GPA 91-4, PRE-ZONE 89-6, SPECIFIC PLAN 89-3 (CITY RANCH SPECIFIC PLAN) AND DEVELOPMENT AGREEMENT (KAUFMAN & BROAD

APPLICANT: A request to consider development of a project that would allow 5,300 residential dwelling units, 42 acres of neighborhood commercial development, four school sites, 159 acres of parks, a golf course, and 419 acres of open space. The General Plan Amendment proposes to eliminate the existing land use nodes and redesignate the entire project site to City Ranch Specific Plan (3 du/ac). The Pre-Zone proposes zoning on the property of City Ranch Specific Plan (3 du/ac). The City Ranch Development Agreement outlines some of the terms and conditions of development of the property. The project is generally bounded by Elizabeth Lake Road to the north, the alignment of Avenue 3 to the south, the alignment of 20th Street West to the east, and the alignment of 40th Street West to the west).

Molly Bogh, Director of Planning, stated that this meeting was a continuance of the hearing on the City Ranch EIR 89-03, GPA 91-4, Pre-Zone 89-6, Specific Plan 89-3, and City Ranch Development Agreement and that this is the fifth meeting of the Planning Commission on the City Ranch Specific Plan, Environmental Impact Report and related applications. Staff had a number of items to review with the Commission (contained in three separate Staff memos provided to the Commission) which were carried over from the last meeting of the Planning Commission and finalized in meetings between Staff and the applicant.

Director Bogh introduced the Director of Finance, Bill Ramsey, who presented the fiscal impact report.

Director Ramsey pointed out differences in figures as presented in the fiscal impact report prepared by the applicant and the City Staff numbers in the recurring revenues section:

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Minutes of the Planning Commission
February 5, 1992
Page 1

The report refers to 146.8 acres of parks but computed the costs on 76.4 acres for a difference of approximately $6 million dollars. The street maintenance cost per lane mile was figured at $2,000 per lane mile by the applicant. After consulting with Public Works and figures in the budget, Staff feels that $4,500 per lane mile is a more accurate figure.

Commissioner Bittenbinder initiated a discussion on the methods of accounting used. John Mundweil, City Engineer, said the development fees for traffic, drainage and other improvements are applied as credit to the developer if the developer constructs reimbursable improvements, i.e., master drainage facilities. The costs for those improvements can be credited against those fees which is City policy. Application of any money remaining can go to, for example, traffic improvements citywide. The $37 million operating cost is offset by a $21 million operating revenue which presents a $16 million deficit. Commissioner Bittenbinder stated the accounting process is seriously flawed with $24 million put against an operating cost and queried the use of development costs and their allocation to fixed assets.

An item of discussion was that the City looks at park maintenance as a project line item while the applicant, Kaufman and Broad represented by Ben Anderson, views it as a Citywide regional benefit. Commissioners Myers and Thompson stated projects should carry their own weight. Commissioner Bittenbinder stated that neither the City figures of an $16 million deficit nor the applicant figure of an $8 million deficit is acceptable.

Director Ramsey discussed the allocation of property tax revenues between the City and Los Angeles County and referred to Senate Bill AB 1197 which mandates the property tax allocation. Commissioner Myers stated his understanding that the State has the ability "to pull the rug out from under" the City if they need the money. Director Ramsey confirmed that the State has the ability to alter the allocation.

Commissioner Myers queried Ben Anderson on the statement regarding phasing of the infrastructure that two commercial/retail sites of 215,780 square feet will be in place in 1994 (roughly 70% complete) with only 10.1% of the infrastructure in place. Director Ramsey said he looked at sales tax on a per capita basis which is the way he tracks it for the City using the official population figure and feels the sales tax projections are accurate. Ben Anderson responded to a question regarding infrastructure phasing, saying that the California Marquis project is being developed and pointed out its location on an exhibit with approximately 125 units remaining to be sold out of 400 units. The commercial site identified in the fiscal impact report is in Planning Area 3 of
the Specific Plan and is the largest commercial site (located directly on Elizabeth Lake Road at the ultimate entry to City Ranch project).

Commissioner Myers said that his property tax transfer figures using the $907,020 figure in the report x 13 years equals $200,000 (approximately) less than is shown in the report assuming from year 1 there are $55,734 of property tax coming into the City. Mr. Nadelson, author of applicant's fiscal impact report, indicated that each year when product is put in place it is inflated the following year by 2% to allow for the increase in valuation. This is the inflation figure built into the model which accounts for the difference.

Commissioner Myers said this is another reason to require a development agreement that takes all the factors into consideration at buildout.

In response to a question from Commissioner Bittenbinder regarding the library, Director Ramsey said the 17.66 per capita figure was arrived at by taking the 91-92 Palmdale City library budget and dividing by official population which is 78,046.

Commissioner Bittenbinder would like to see some adjudication between the operating costs and operating revenues in one column and determining what the fixed asset costs are and how the City is paying for them. They are mixed in the current report which presents an inaccurate bottom line as the fixed assets can't be applied to the operating expenses.

Commissioner Myers suggested handling it the same way as the Ritter Ranch situation, i.e., condition the recommendation to City Council to include a development agreement. Commissioner Thompson said the project should be fiscally neutral to the City and that he agreed with Commissioners Myers a. Bittenbinder.

Staff was directed to make note that there are serious concerns about the fiscal impact to the City in the formal resolution when the project goes to City Council. Director Bogh said Staff would incorporate language to this effect in the final draft resolution for consideration by the Commission. If no development agreement is negotiated and/or if Council determines the development agreement is not necessary, Council could forward the project back to the Commission but how Council would proceed in this projected situation is not known.

Bill Eilen and Tara Mullinger answered questions from the Commission regarding the Staff report dated February 4, 1992 entitled, "Text Additions and Modifications - City Ranch
Specific Plan which described correspondence received from the applicant containing possible changes to the Specific Plan text.

Director Bogh noted that the first item in the packet is new text to be added to the Goals and Objectives section that would ensure continued cooperation with and coordination with adjacent properties in terms of street and infrastructure planning. Staff is in agreement with these suggested changes. Other language that was developed by the applicant related to transfers of densities and six of unit types in Planning Areas 11 and 23 to allow for a better transition between commercial landuses and adjacent single-family attached and detached uses. Staff is requesting usage of conceptual planning for each Planning Area prior to approval of initial projects.

Staff concurred with the applicant’s language regarding Planning Area 8. A discussion ensued regarding private street issues which Staff recommends be constructed to City standards while the applicant is requesting alternatives. The City Traffic Engineer, Tom Horne, responded to questions from the Commission stating that in his experience, when a Homeowners Association is not able to keep up the maintenance for private streets, the cost for this will ultimately be borne by whatever City is involved due to safety and hazard avoidance issues for citizens.

Tom Horne, City Traffic Engineer, reviewed the standards set forth in item 13 at the top of page 6 of applicant’s letter and noted that the Fire Department requires a 26’ clear drive aisle which basically means there would be no parking if you built a 26’ street. Typical City standard for a local street is 16’. If you count 8’ on both sides for parking, you really have 20’ in the middle which is the minimum for a fire truck to get through. Streets would not allow for parking and most residents will want to park. Sheriffs have trouble gaining entry to the gated developments to enforce parking standards.

The following items covered in applicant’s memorandum were agreed upon by applicant and Staff: recreational amenities phasing, commercial site screening standards, the maintenance facility in Planning Area 1, allowance of fences utilizing wood split-rail construction in open trail areas, front building setbacks in the SPA development, and clarification of proposed permitted recreational uses for Open Space.

Antelope Valley Union High School District had indicated to Staff that the City Ranch project is in need of 22 acres to mitigate its impacts on high schools; thus, Staff is recommending deletion of the third and fourth sentences in the revised language submitted by applicant on page IV-4, bottom paragraph, of the Specific Plan (item 9 of applicant’s
February 3, 1992 memo to Director Bogh) and inclusion of Planning Areas 5, 14 and 16 to add clarity as to locations.

Chairman Mayfield called for a recess at 8:36 p.m. The meeting resumed at 8:55 p.m.

Senior Planner Bill Eslan discussed the applicant's proposal for visual review in relation to the subdivision review process discussed in the proposed text. Because lot pattern strongly influences visual impacts (review of elevations, floor plans, etc.), it is not the site plan review process but the tentative map review where this type of information may be requested by the Planning Commission. Staff drafted the following language:

"Where the Planning Director determines that development is being proposed in visually prominent hillside areas of Planning Areas 17, 28A or 31, submittal of architectural elevations, visual analysis or similar measures may be required as part of the tentative map review process."

City Attorney Ennis read into the record language regarding private street widths as follows:

"All private streets shall be constructed to a minimum of 25' asphalt concrete pavement, with a minimum two (2) feet clear on both sides when providing access to less than four lots. Pavement width shall be increased to thirty (30) feet, with a minimum two (2) feet clear on both sides when providing access to four (4) or more lots. Notwithstanding the terms of the preceding two sentences, the City Engineer and the Los Angeles County Fire Department shall have the authority to require greater private street widths or standards in certain areas where such greater widths or standards are determined reasonably necessary to protect the public health, safety or welfare of residents or motorists. However, in no event shall such greater widths or standards exceed those required by the City for public streets."

Director Bogh stated that the changes as set forth above and in applicant's memorandum dated January 25, 1992, and Staff's cover memorandum dated February 4, 1992, will be incorporated into the final resolution for review by the Commission.

Motion was made by Commissioner Myers and seconded by Commissioner Bittner to move that the comments in the City Staff memorandum dated February 4, 1992 as amended be inserted into the Specific Plan. No objection; so carried.
5A. RTR 89-01 (KAUFMAN & BROAD: EIR for City Ranch Specific Plan).

Director Bogh made opening comments regarding the Staff Memorandum dated February 4, 1992, concerning the City Ranch EIR which addresses items identified by the Commission at the January 27, 1992 meeting as items of concern.

Regarding the trunk sewer lines, Director Bogh stated that at the direction of the Commission, Laurie Lile had listened to the Ritter Ranch hearing tapes from the November 5, November 12, November 13, November 21 and November 26 meetings and determined there were no misleading statements concerning some of the devices such as isolation valves and other equipment. Planner Lile determined that the discussion centered primarily on construction and what would happen in the event of a rupture and emergency clean up, etc. Most of the discussion was provided by Mr. Charles Brockmeier, consultant for applicant, and revolved on the construction standards such as compaction of the base, etc. but not the physical portions of the line such as isolation valves, etc.

Staff was unable to obtain a referral to a source of information from the Regional Water Quality Control Board and is recommending that the changes recommended by Mr. Mundvall at the January 27, 1992, meeting be incorporated into the mitigation measure. Commissioner Myers stated he felt there were two issues: (1) that of Mr. Mundvall’s recommendation which Commissioner Myers is ready to accept and (2) that he felt the public was misled, stating that people left the Ritter meeting thinking the Commission would mandate isolation valves or other equipment. Commissioner Myers elected to review the tapes.

Regarding the Library mitigation measure, Staff’s February 5, 1992, memorandum set forth language regarding determining the pro rata share for library services which included area of benefit for the main library and/or the branch library, the number of units within the area benefitted and the cost of the facility. The Commission and Staff discussed the pro rata share determination of the City Ranch project and Ritter Ranch project. Following the discussion, Staff was directed to draft language to the effect that the developer shall contribute 40% (equal to the total population generated by both developments) of the cost of construction of a 16,000 s.f. library. In the event the project to the west is not constructed, then the developer shall contribute the cost to construct an 11,232 s.f. library. City Attorney Kevin Ennis was directed to draft this language and bring it to the next City Ranch meeting.

The applicant felt that a nexus had not been established as to the impact of the project. The Commission disagreed,
Commissioner Myers stating there was a nexus and this is not a development agreement item. Commissioner Thompson stated - pro rata share should be based on the population of the C Ranch and Ritter Ranch projects.

Regarding school mitigation, Westside Union School District has requested that the project not be approved by the Commission until the school site is selected and the applicant has a signed agreement with the school district regarding all mitigation measures.

Regarding the westernmost trail, Staff reviewed the topography and ownership in that area and concluded there are a number of different ways that trail could be aligned that could affect both City and Ritter Ranch. The ultimate trail alignment is difficult to determine at this time. Staff recommended that a dotted line in that western area be shown with text added to state that there is a need for this westernmost north/south trail link into the regional system. Applicant is in concurrence with this conceptual alignment.

Director Bogh addressed Duane Betty's comments at the January 27 meeting regarding significant adverse impacts and their mitigation. The remaining issues are revised Staff responses to comments, the preparation of the resolution and the final exhibits to the resolution. Commissioner Myers stated for the record he has comments on the EIR and Specific Plan which he will provide to Staff in the form of his handwritten notes in order that they may be addressed due to the limitations of time remaining in the meeting. He felt Staff should respond to Mr. Kollar's January 22, 1992, letter which summarized Duane Betty's comment on unavoidable adverse impacts.

City Attorney Kevin Ennis clarified for the applicant that if the Commission is inclined to make the required findings of overriding consideration on 13 points of unavoidable adverse impacts, the Commission needs to have specific social, economic or other reasons why additional mitigation of those impacts is infeasible. In other words, benefits to the project outweigh those unavoidable impacts. The letter, Mr. Ennis said, generally addresses the issue of whether or not the EIR properly determined that those unavoidable impacts. It may be helpful to have additional information from the applicant which would go toward the issue of the benefits of the project outweighing those impacts and other social and economic reasons why additional mitigation is not feasible.

Commissioner Myers stated for the record that the public hearing on the Specific Plan is still open.

The Minutes of the January 27, 1992 were continued to the next meeting of the Planning Commission regarding City Ranch.
PUBLIC COMMENT

Public testimony was offered by Ron Druschen, Vice President of Civic Engineering, representing Bud Pickle of Toyo West.

Mr. Druschen requested an opportunity at the next hearing date to make a presentation of their concerns. Chairman Mayfield requested that Mr. Druschen and his client meet with Staff and the applicant prior to being heard at the next Commission meeting regarding City Ranch.

Motion was made by Commissioner Bittenbinder and seconded by Commissioner Thompson to continue consideration of City Ranch EIR 89-03, and public hearing on General Plan Amendment 91-4, Pre-Zone 89-6, Specific Plan 89-3 (City Ranch Specific Plan) and Development Agreement to February 6, 1992 at 7:00 p.m., City Council Chambers, 708 E. Palmdale Boulevard, Palmdale. No objection; so ordered.

The meeting was adjourned at 10:19 p.m. to the regular business meeting of the Planning Commission to be held February 6, 1992, at 7:00 p.m. in the City Council Chambers of the City of Palmdale, 708 E. Palmdale Blvd., Palmdale, California, at which time the next City Ranch meeting date will be determined.

John Mayfield, Chairman

ATTESTED:

Sue Thompson, Deputy City Clerk

pst/pc1577
The regular business meeting of the Planning Commission of the City of Palmdale was called to order at 7:05 p.m. on Thursday, February 6, 1992 in the City Council Chambers at 708 East Palmdale Boulevard, Palmdale, California.

The Pledge of Allegiance was led by Chairman Mayfield.

All five members of the Planning Commission were present: Chairman Mayfield, Vice Chairman Jones, Commissioners Bittenbinder, Myers and Thompson.

Approximately 110 members of the public and 2 members of the press were present.

**REVIEW OF AGENDA**

Molly Bogh, Director of Planning, requested the continuation of Item 5D (Vesting Tentative Tract 46597 (TE) to March 5, 1992; Item 5E (Vesting Tentative Tract 45217 (TE) to March 5, 1992; Item 6D (Tentative Tract 47856 (TE)/Site Plan Review 10-91-1 to March 5, 1992 and Item 7C under Special Reports be continued to March 5, 1992.

Motion was made by Commissioner Myers and seconded by Vice Chairman Jones to continue these items to the next regular Planning Commission meeting of March 5, 1992. Motion carried 5-0.

At this time, Molly Bogh, Director Planning, also requested Item 6A (Site Plan Review 11-90-1) be taken first and moved to the beginning of the agenda as there were a number of people in attendance who desired to speak on this item. With the Commission's permission, staff also recommended taking Item 7th (Discussion of Draft Subdivision Guidelines) as the next item and taking the other items in the order of the agenda.

Commissioner Myers moved to place Items 6A and 7C to the front of the agenda as recommended by staff. Commissioner Bittenbinder seconded the motion. No objection; so ordered.

Chairman Mayfield asked all speakers to stand and be sworn in by the Deputy City Clerk, Carol Sicilia.

**PUBLIC COMMENTS AND DISCUSSION OF CONSENT CALENDAR - None**

**CONSENT CALENDAR**

Motion was made by Vice Chairman Jones and seconded by Commissioner Thompson to approve the Minutes of the January 2, 1992 meeting.

Motion carried 5-0.

Commissioner Thompson asked if this was the appropriate time to discuss the continuation of the Planning Commission meeting of February 5, 1992 (City Ranch hearings)? Kevin Ennis, Assistant City Attorney, stated "Let the record reflect that this meeting is a regular meeting of the Planning Commission and it is also an adjourned regular meeting of the Planning Commission to consider the items that were continued from last night's meeting. Those two items which were continued were EIR 89-03.
Planning Commission Minutes
February 6, 1992
Page 2

...for City Ranch, GPA 91-4, Prezone 89-6, and Specific Plan 89-3.
also relating to the City Ranch project. These items are
therefore before you tonight for your action and/or continuance
to a subsequent meeting date."

After discussion among the Commission regarding possible
dates to continue the meeting of February 5, 1992 to,
Commissioner Thompson moved to continue the items, as
enumerated by the Assistant City Attorney, to February 24,
1992. Motion seconded by Commissioner Bittenbinder.
Motion carried 4-0, Vice Chairman Jones abstaining.

PUBLIC HEARINGS:

NEW BUSINESS

ITEM 6A: SITE PLAN REVIEW 11-90-1 (State Sand and Gravel,
Applicant: A request to construct and operate a concrete batch
plant and locate a 400 square foot office trailer on a 3 acre
site containing an existing quarry site located south of the
California Aqueduct, approximately 200 feet east of 70th Street
West) -- Staff Report presented by Courtney Grossman and
Peggy Malone-Brown, environmental planner, with Staff
recommending approval as conditioned.

Staff noted a correction to the staff report that states the
project is 200 feet east of 70th Street West. This should be
changed to “900 feet east of 70th Street West.”

Testimony was given by the City Traffic Engineer, Tom Horne,
regarding street grades and vehicle trip counts.

Barry Munz, engineer, representing the applicant, requested
continuation of this item to the meeting of March 5, 1992, as
the applicant was unable to attend due to a similar meeting in
Wilmington, and they had not had time to prepare additional
information requested 2 days earlier.

Commission discussed the continuation and decided to open
public hearing and listen to testimony as there were many
people who had specifically come to the meeting for this item.

Testimony in favor of the project was given by George Lane,
Mike Haycox, representing State Sand and Gravel; Bud
Pickel, owner of approximately 75 to 80 acres of property
that adjoins the 70th St. West property; Neil Bale, Larry
Lumanog for State Sand and Gravel, Barry Munz for State
Sand and Gravel, and Frank Lane.

Speaking in opposition to the project was Rita Fox, on
behalf of Lee Richardson, President of the Quartz Hill
Community Association; Timothy Rote, Mike Madama, Jerry
Anderson, Ranney Adams (Mr. Adams offered a signed petition
in opposition to the project for the record), George
Haymer, David Threlfall, Thomas Dee, Robert Farmer,
(submitted a copy of a petition with approximately 403
signatures), Jane Skwarra, and Orlando Gonzales.

Brian Daly of Envirotech, Inc. gave a report on the noise
study they had done for State Sand and Gravel.
Steve Lohnes, representing State Sand and Gravel, gave additional information regarding the equipment that would be used and how the truck loading operation would handled.

Steve Hofbauer, representing Palmdale Heights Homeowners Association, John Nutt and Larry Voronyak also spoke opposing the project.

Major concerns of the opponents were noise, hours of operation, air pollution, dust, road deterioration, safety of children due to increased trucks in the area, security, decrease in property values, and health problems arising from the operation of the plant.

Vice Chairman Jones asked staff to come back to the March 5th meeting with a response regarding the Zoning Ordinance on an issue that was brought up that a batch plant would not be allowed in less than five acres; a determination by the City Traffic Engineer as to whether, based on the new information on the number of trips, a traffic study would be required; comments on the grades the trucks will be traveling from a safety perspective as far as the public is concerned; information from AVEK regarding the vibration from trucks on water pipes under Avenues N and M to see if that is a concern we should look at; information on costs vs. revenues to see if the City's maintenance costs are going to far exceed revenues generated by the project; and analysis of impacts on the value of surrounding property.

Chairman Mayfield requested that the applicant and homeowners set up meetings, with possibly someone from staff attending, to insure that all these concerns are addressed before the next Planning Commission meeting of March 5, 1992.

Commissioner Myers moved to close the public hearing. Commissioner Bittenbinder seconded the motion. Motion carried 3-0.

Commissioner Myers moved to continue Site Plan Review 11-90-1 to the meeting of March 5, 1992. motion seconded by Commissioner Bittenbinder. Motion carried 5-0.

Chairman Mayfield called for a recess at 9:40 p.m. The meeting resumed at 9:50 p.m.

SPECIAL REPORT

ITEM 7B: DISCUSSION OF DRAFT SUBDIVISION GUIDELINES

Bill Emlen, Senior Planner, presented an update and status report on issues that have been worked on by staff, members of the Building Industry Association and the California Council of Civil Engineers in an effort to supplement existing standards for tracts in terms of circulation and internal subdivision design. Items discussed were 1) circulation and neighborhood planning issues; 2) infrastructure; 3) lot design issues; 4) traffic engineering issues; and 5) alternative modes of circulation needs. The Commission expressed concurrence with the revised guidelines, and recommended that they be forwarded to the City Council for review.
OLD BUSINESS

ITEM 5A: VESTING TENTATIVE TRACT 46454 TIME EXTENSION (West Venture Development. Applicant: A request for a time extension on a previously approved tentative map to subdivide a 40 acre site into 122 single-family residential lots and one drainage basin lot located at the southwest corner of 15th Street West and Date Palm Drive) -- Staff report given by Bill Emlen and John Doughty, with staff recommending approval as conditioned.

Matt Breiner, representing West Venture Development, was available for questions.

Motion was made by Vice Chairman Jones and seconded by Commissioner Myers to close the public hearing. Motion carried 5-0.

Motion was made by Vice Chairman Jones and seconded by Commissioner Myers to approve the motions in the staff report and Conditions Subject to the changes in Mitigation Measures and Conditions of Approval as follows:

Mitigation Measures:

#1 shall read: The applicant shall pay all applicable fees to the affected school districts. Written verification of compliance from the school districts will be required prior to the issuance of a building permit.

#2 shall read: If paleontological resources are encountered during the course of grading, work shall be halted until a qualified paleontologist can determine the best method of mitigation and such measures as are deemed appropriate by the paleontologist and approved by the Director of Planning can be carried out.

Conditions of Approval:

Condition A.2. shall read: Prior to submittal of the landscape plan for the slope, parkway, and detention basin, located along the northern boundary of Vesting Tentative Tract 46454, the subdivider shall consult the City Landscape Architect and City Planning Staff. Said plans and comments, as noted by responsible City staff, shall be provided for review by the residents on Date Palm Drive. Comments of the residents shall be incorporated into the landscape plan to the extent feasible. In addition to the City of Palmdale landscaping Guidelines, "Landscape Maintenance District", the subdivider shall provide landscape improvements under the following guidelines:

1. The slope adjacent to the parkway on Date Palm Drive shall be improved with hardscape (i.e., river rock or earth tone manufactured blocks) and xeriscape softscape (i.e., Joshua trees and other drought tolerant plants) in order to provide an aesthetic and low maintenance landscape.
2. The slopes of the basin, inside the enclosure above the water line, should be hydro-seeded with the City recommended drought-tolerant mixture and include groundcover/trees/shrubs in order to reduce the visual impact of an expansive barren slope while providing erosion control.

3. A crib wall shall be provided along the slope and adjacent to the parkway or Date Palm Drive in areas where retention of slope is necessary.

Condition A.4. shall read: The parkway along Date Palm Drive shall be treated in a manner which is equal in quality to that proposed within Vesting Tentative Tract 48454.

Motion carried 5-0.

ITEM 5B. ZONE CHANGE 89-41/TENTATIVE TRACT 48031/CONDITIONAL USE PERMIT 89-44 (Land Concepts, Inc., Applicant: A request to rezone the subject site from A-1-1 and R-3 to CPD (Commercial Planned Development - office, business and professional use only), subdivide the project area into seven (7) lots for commercial condominium purposes and to construct three commercial office buildings with a total of 76,450 gross square feet on an 8.52 acre site located on the west side of Tierra Subida at the terminus of Rayburn Road) -- Staff report presented by Courtney Grossman, with staff recommending approval as conditioned.

Kamyar Lashgari, representing Land Concepts, was available for questions. Steve Hofbauer spoke in favor of the proposal.

Commissioner Myers moved to close the public hearing motion seconded by Commissioner Bittenbinder. Motion carried 5-0.

Motion was made by Vice Chairman Jones and seconded by Commissioner Myers to approve the motions, as amended, as presented in the staff report with the following amendments:

Planning Condition for Tentative Tract 48031:

New Condition A.6 shall read: The subdivider shall comply with all requirements of the Palmdale Municipal Code, and all requirements of the City of Palmdale ordinances, resolutions, engineering standards and other applicable standards, that are in effect at the time that building permits are issued for the development.

Planning Condition for Conditional Use Permit 89-44:

Condition 14.c. shall be revised to read: Trees -- 80% shall be of 15 gallon size or greater, 20% may be no less than five (5) gallon size. Shrubs -- 40% shall be of five (5) gallon size or greater, 60% may be no less than one (1) gallon. Grass/Ground Cover -- 100% coverage of slope, ground cover plugs may be planted no greater than one foot (1) apart on center.
Engineering Conditions, Drainage:

Condition #12 shall be revised to read: The subdivider shall comply with the provisions of Chapter 3.38 (Drainage Fee ordinance) of the Palmdale Municipal Code and the requirements of Section 88.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable drainage fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.38 of the Palmdale Municipal Code.

Traffic:

Condition #1 shall be revised to read: The subdivider shall comply with the provisions of Chapter 3.40 (Traffic Impact Fee Ordinance) of the Palmdale Municipal Code and the requirements of Section 88.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable traffic impact fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.40 of the Palmdale Municipal Code.

Miscellaneous:

New Condition #22 shall read: The subdivider shall comply with the provisions of Chapter 3.34 (Parkland Dedication and Parkland Fee Ordinance) of the Palmdale Municipal Code and the requirements of Section 88.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable parkland development fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.34 of the Palmdale Municipal Code.

ITEM 5C. TENTATIVE TRACT 47911/ZONE CHARGE 90-15 (Lilly Enterprises, Applicant: A request to rezone 9.93 acres located on the west side of Tierra Subida Avenue at the southern terminus of 5th Street West from A-1 to R-1-7000 and subdivide it into 30 single-family residential lots and one (1) retention basin lot) - Staff report given by Derek Empey, with staff recommending approval as conditioned.

Jake Maevers, representing Lilly Enterprises, agreed to the Conditions of Approval and was available for questions.

Commissioner Myers moved to close public hearing, motion seconded by Commissioner Thompson. Motion carried 5-0.

Motion was made by Commissioner Myers and seconded by Vice Chairman Jones to approve the motions as presented in the staff report with the following amendments:

Planning Condition for Tentative Tract 47911:

New Condition A.44 shall read: The subdivider shall comply with all requirements of the Palmdale Municipal Code, and all requirements of the City of Palmdale ordinances, resolutions, engineering standards and other applicable standards, that are in effect at the time that building permits are issued for the development.
Engineering Conditions, Drainage:

Condition #37 shall be revised to read: The subdivider shall comply with the provisions of Chapter 3.38 (Drainage Fee ordinance) of the Palmdale municipal Code and the requirements of Section 88.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable drainage fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.38 of the Palmdale Municipal Code.

Traffic:

Condition #46 shall be revised to read: The subdivider shall comply with the provisions of Chapter 3.40 (Traffic Impact Fee Ordinance) of the Palmdale Municipal Code and the requirements of Section 88.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable traffic impact fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.40 of the Palmdale Municipal Code.

Miscellaneous:

New Condition #84 shall read: The subdivider shall comply with the provisions of Chapter 3.34 (Parkland Dedication and Parkland Fee Ordinance) of the Palmdale Municipal Code and the requirements of Section 88.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable parkland development fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.34 of the Palmdale Municipal Code.

Motion carried 5-0.

ITEM 5F. TENTATIVE TRACT 50543 (Stitt and Associates,
Applicant: A request to subdivide 5 acres into 21
single-family lots and one (1) detention basin lot located 800
feet south of Avenue S on an approximate alignment with 55th
Street East) — Staff report presented by Linda Voytilla, with
staff recommending approval as conditioned.

Dan Stitt, applicant, was available for questions.

Commissioner Myers moved to close public hearing, motion
seconded by Commissioner Bittenbinder. Motion carried 5-0.

Motion was made by Vice Chairman Jones and seconded by
Commissioner Myers to approve the motions as presented in
the staff report with the following amendments:

Planning Conditions:

New Condition A.8. shall read: The subdivider shall comply
with all requirements of the Palmdale Municipal Code, and
all requirements of the City of Palmdale ordinances,
resolutions, engineering standards and other applicable
standards, that are in effect at the time that building
permits are issued for the development.
Engineering Conditions, Drainage:

Condition #34 shall be revised to read: The subdivider shall comply with the provisions of Chapter 3.38 (Drainage Fee ordinance) of the Palmdale municipal Code and the requirements of Section 89.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable drainage fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.38 of the Palmdale Municipal Code.

Traffic:

Condition #42 shall be revised to read: The subdivider shall comply with the provisions of Chapter 3.40 (Traffic Impact Fee Ordinance) of the Palmdale Municipal Code and the requirements of Section 89.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable traffic impact fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.40 of the Palmdale Municipal Code.

Miscellaneous:

New Condition #80 shall read: The subdivider shall comply with the provisions of Chapter 3.34 (Parkland Dedication and Parkland Fee Ordinance) of the Palmdale Municipal Code and the requirements of Section 89.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable parkland development fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.34 of the Palmdale Municipal Code.

Motion carried 5-0.

ITEM 5G. TENTATIVE TRACT 47456 (TIME EXTENSION) (P & V Enterprises, Applicant: A request for a one (1) year time extension to a previously approved request to subdivide 10 acres into 45 single-family lots located on the east side of Rockie Lane, 660 feet south of Avenue R) - Staff report presented by John Doughty, with staff recommending approval as conditioned.

Dan Stitt, representing P & V Enterprises, was available for questions.

Commissioner Bittenbinder moved to close public hearing. Motion seconded by Vice Chairman Jones. Motion carried 5-0.

Motion was made by Commissioner Myers and seconded by Commissioner Bittenbinder to approve the motions as presented in the staff report with the following amendments:

Planning Conditions:

New Condition A.7. shall read: The subdivider shall comply with all requirements of the Palmdale Municipal Code and all requirements of the City of Palmdale ordinances, resolutions, engineering standards and other applicable standards, that are in effect at the time that building permits are issued for the development.
Engineering Conditions, Drainage:

Condition #45 shall be revised to read: The subdivision shall comply with the provisions of Chapter 3.38 (Drainage Fee ordinance) of the Palmdale Municipal Code and the requirements of Section 88.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable drainage fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.38 of the Palmdale Municipal Code.

Traffic:

Condition #53 shall be revised to read: The subdivider shall comply with the provisions of Chapter 3.40 (Traffic Impact Fee Ordinance) of the Palmdale Municipal Code and the requirements of Section 88.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable traffic impact fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.40 of the Palmdale Municipal Code.

Miscellaneous:

New Condition #90 shall read: The subdivider shall comply with the provisions of Chapter 3.34 (Parkland Dedication and Parkland Fee Ordinance) of the Palmdale Municipal Code and the requirements of Section 88.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable parkland development fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.34 of the Palmdale Municipal Code.

Motion carried 5-0.

NEW BUSINESS

ITEM 4B. CONDITIONAL USE PERMIT 91-20 (Sverdrup Corporation. Applicant: A request to construct a 300,000 square foot office building on Lockhead Plant 10, at the northwest corner of 8th Street East and Lockhead Way) Staff report presented by Paul Huckabee, with staff recommending approval as conditioned.

Rod Hickerson, representing Lockhead Advance Development Company was available for questions.

Motion was made by Commissioner Myers and seconded by Commissioner Thompson to close public hearing. Motion carried 4-0, Commissioner Bittenbinder abstaining.

Motion was made by Vice Chairman Jones and seconded by Commissioner Myers to approve the motions as presented in the staff report.

Motion carried 4-0, Commissioner Bittenbinder abstaining.

ITEM 6C. TENTATIVE TRACT 47936 (Time Extension) (Valmot Development, Inc., Applicant: Request for approval of a one (1) year time extension for Tentative Tract Map 47936 to
subdivide a 9.64 acre site into fourteen industrial lots located at the southwest corner of Avenue P and 8th Street East) - Staff report presented by Courtney Grossman, with staff recommending approval as conditioned.

Mr. Karl Mallick, representing the applicant, was available for questions.

Motion made by Vice Chairman Jones and seconded by Commissioner Myers to close public hearing. Motion carried 5-0.

Motion was made by Commissioner Myers and seconded by Commissioner Thompson to approve the motions in the staff report with the following amendments:

Finding #8 in the staff report shall be changed to read: 
"The design of the subdivision and the proposed improvements are not likely to cause serious public health problems because conditions of approval have been applied to the project to require compliance with applicable codes and ordinances designed to protect public health and safety."

Planning Condition:

New Condition #9 shall read: The subdivider shall comply with all requirements of the Palmdale Municipal Code, and all requirements of the City of Palmdale ordinances, resolutions, engineering standards and other applicable standards, that are in effect at the time that building permits are issued for the development.

Engineering Condition, Drainage:

Condition #12 shall be revised to read: The subdivider shall comply with the provisions of Chapter 3.38 (Drainage Fee ordinance) of the Palmdale municipal Code and the requirements of Section 88.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable drainage fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.38 of the Palmdale Municipal Code.

Traffic:

Condition #20 shall be revised to read: The subdivider shall comply with the provisions of Chapter 3.40 (Traffic Impact Fee Ordinance) of the Palmdale Municipal Code and the requirements of Section 88.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable traffic impact fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.40 of the Palmdale Municipal Code.

Miscellaneous:

New Condition #47 shall read: The subdivider shall comply with the provisions of Chapter 3.34 (Parkland Dedication and Parkland Fee Ordinance) of the Palmdale Municipal Code and the requirements of Section 88.04 of the Palmdale
Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable development fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.34 of the Palmdale Municipal Code.

Motion carried 5-0.

ITEM 6R. CONDITIONAL USE PERMIT 90-07/VESTING TENTATIVE TRACT 49427 (Mackel Development, Applicant: A request to construct a 76,472 square foot light industrial complex and subdivide 4.1 acres into 12 industrial lots located on the east side of Division Street, approximately 529 feet south of Avenue P-3.)

Staff report presented by Paul Huckabee, with staff recommending approval as conditioned.

The applicant, Lawrence Mackel, was available for questions.

Mr. Marvin Himlin asked questions regarding how this project would affect the zoning on his property to the north along Division Street.

Vice Chairman Jones moved to close public hearing, motion seconded by Commissioner Thompson. Motion carried 5-0.

Motion was made by Commissioner Thompson and seconded by Vice Chairman Jones to approve the motions as presented in the staff report with the following amendments:

Planning Condition for Vesting Tentative Tract 49427:

New Condition #8 shall read: The applicant or successor in interest shall sign and record a Grant of Avigation Easement to the United States Air Force. A recorded copy of the Avigation Easement shall be submitted to the Planning Department and the United States Air Force prior to the issuance of buildings permit.

New Condition #9 shall read: Except as otherwise provided in the Subdivision Map Act, as amended, the subdivider shall comply with all requirements of the Palmdale Municipal Code and all requirements of the City of Palmdale ordinance, resolutions, engineering standards, and other standards, that were in effect at the time that the developer's application for a vesting tentative map was deemed complete.

Furthermore, as provided in Government Code Section 66498.1(e) and other provisions of the Subdivision Map Act, as amended, the City may impose conditions on subsequently required approvals and permits as authorized by City of Palmdale Ordinances, resolutions, engineering standards, and other applicable policies and standards.

Planning Conditions for CUP 90-07:

New Condition #35 shall read: The applicant or successor in interest shall sign and record a Grant of Avigation Easement to the United States Air Force. A recorded copy of the Avigation Easement shall be submitted to the Planning Department and the United States Air Force prior to the issuance of buildings permit.
Planning Conditions for VTT 49427 and CUP 90-07

Change Engineering Condition #49 to read: The subdivider shall comply with the provisions of Chapter 3.38 (Drainage Fee ordinance) of the Palmdale municipal Code and the requirements of Section 38.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable drainage fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.38 of the Palmdale Municipal Code.

Traffic:

Condition #57 shall be revised to read: The subdivider shall comply with the provisions of Chapter 3.40 (Traffic Impact Fee Ordinance) of the Palmdale Municipal Code and the requirements of Section 38.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable traffic impact fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.40 of the Palmdale Municipal Code.

Miscellaneous:

New Condition #98 shall read: The subdivider shall comply with the provisions of Chapter 3.34 (Parkland Dedication and Parkland Fee Ordinance) of the Palmdale Municipal Code and the requirements of Section 38.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable parkland development fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.34 of the Palmdale Municipal Code.

Motion carried 5-0.

ITEM 6F. CONDITIONAL USE PERMIT 91-14 (Normandy Properties. Applicant: A request to construct a 12,753 square foot car wash facility on 1.3 acres located on the southwest corner of 5th Street West and Auto Center Drive.) - Staff report presented by Paul Huckabee, with staff recommending approval as conditioned.

Bob Powell, representing the applicant, was available for questions.

Motion was made by Commissioner Myers and seconded by Vice Chairman Jones to close public hearing. Motion carried 5-0.

Motion was made by Vice Chairman Jones and seconded by Commissioner Thompson to approve the motions as presented in the staff report with the following amendments:

Add new Planning Condition #30 to read "The applicant shall recycle the water used in the car wash."

Special Engineering Conditions
Drainage:

Condition #2 shall read "Drywells may be required: on-site nuisance water disposal subject to the approval of the City Engineer. No waste water will be allowed into drywells."

Motion carried 5-0.

**ITEM 6G. VARIANCE 91-4** (Mina-Tree Signs, Inc., Applicant: A request for approval of a Variance to install more than 100 square feet of signage on the north building elevation of the Lucky store located at 4644 E. Avenue S.) -- Staff report presented by Sharon McCaughey, with staff recommending approval as conditioned.

Janet Smith, representing Mina-Tree Signs and her client Bank of America was available for questions.

Commissioner Bittenbinder moved to close public hearing, motion seconded by Commissioner Thompson. Motion carried 5-0.

The Commission discussed whether the required finding for the granting of a Variance had been satisfied in this instance.

Motion was made by Vice Chairman Jones and seconded by Commissioner Bittenbinder to approve the motions as presented in the staff report.

Motion carried 5-0.

**ITEM 6H. CONDITIONAL USE PERMIT 91-18** (Gary W. Miller, Architects & Associates, Applicant: A request to construct 1,598 square foot church on approximately 5 acres located the southeast corner of Avenue P and 23rd Street West.) -- Staff report presented by John Doughty, with staff recommending approval as conditioned.

Gary Bronson, representing the owner, was available for questions.

Commissioner Bittenbinder moved to close the public hearing, motion seconded by Vice Chairman Jones. Motion carried 5-0.

Motion was made by Commissioner Myers and seconded by Commissioner Bittenbinder to approve the motions as presented in the staff report.

Motion carried 5-0.

**ITEM 6I. TENTATIVE TRACT 45710 (Time Extension)** (Stitt and Associates, Applicant: A request for a one (1) year time extension for Tentative Tract 47936 to subdivide 2.5 acres located on the southeast corner of Avenue R and Tackseam Street into 9 single-family residential lots.) -- Staff report presented by Derek Empey, with staff recommending approval as conditioned.
Dan Stitt, the applicant, was available for questions.

Motion was made by Commissioner Bittenbinder and seconded by Vice Chairman Jones to close the public hearing. Motion carried 5-0.

Motion was made by Vice Chairman Jones and seconded by Commissioner Myers to approve the motions as presented in the staff report with the following amendments:

Planning Condition:

New Condition A.5. shall read: The subdivider shall comply with all requirements of the Palmdale Municipal Code, and all requirements of the City of Palmdale ordinances, resolutions, engineering standards and other applicable standards, that are in effect at the time that building permits are issued for the development.

Engineering Conditions, Drainage:

Condition #39 shall be revised to read: The subdivider shall comply with the provisions of Chapter 3.38 (Drainage Fee ordinance) of the Palmdale Municipal Code and the requirements of Section 88.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable drainage fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.38 of the Palmdale Municipal Code.

Traffic:

Condition #47 shall be revised to read: The subdivider shall comply with the provisions of Chapter 3.40 (Traffic Impact Fee Ordinance) of the Palmdale Municipal Code and the requirements of Section 88.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable traffic impact fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.40 of the Palmdale Municipal Code.

Miscellaneous:

New Condition #87 shall read: The subdivider shall comply with the provisions of Chapter 3.34 (Parkland Dedication and Parkland Fee Ordinance) of the Palmdale Municipal Code and the requirements of Section 88.04 of the Palmdale Zoning Ordinance (Drainage, Parkland and Traffic Facilities Required). The subdivider shall pay the applicable parkland development fees in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of Chapter 3.34 of the Palmdale Municipal Code.

Motion carried 5-0.

PUBLIC COMMENTS None

SPECIAL REPORTS No action was taken on Item 7A (Addendum to Environmental Impact Report 90-07; Eastside General Plan Amendment).
Planning Commission Minutes  
February 6, 1992  
Page 15

STAFF COMMUNICATIONS None

The meeting was adjourned at 11:20 p.m. to the adjourned regular meeting of the Planning Commission on February 24, 1992 at 7:00 p.m. in the City of Palmdale Council Chambers.

John Mayfield, Chairman

ATTESTED:

Carol Sicilia, Deputy City Clerk

cs/gc 1585
Recommend, to the Mayor and City Council, certification of the EIR for City Ranch Specific Plan, a project which would allow the development of 5,200 dwelling units, 42 acres of commercial uses, and parks and schools on a 1,985-acre site.

The project is generally located south of Elizabeth Lake Road, east of the alignment of 40th Street West, north of the alignment of Avenue S, and west of 20th Street West.

See attached legal description prepared for the annexation (Exhibit A).

Kaufman and Broad
10877 Wilshire Blvd.
Los Angeles, CA 90024

Same as above.

Enviros Corporation, Draft EIR
Gruen and Associates, Final EIR
ATTACHMENT IV:

Staff Report to the Planning Commission
Dated January 15, 1992, for Draft EIR 89-03.
Staff Recommendation: Staff recommends that the Planning Commission recommend to the Mayor and City Council, certification of the EIR for the City Ranch Specific Plan.

Existing Zoning: L.A. County A-2-2

General Plan: The existing General Plan land use designation is City Ranch Specific Plan (3 du/acre).

Existing Land Use: The City Ranch site is primarily vacant. Cattle grazing occurs on a seasonal basis.

Surrounding Land Uses:

North: Existing Land Use: Single family residences under construction, open space, vacant residential property.

Existing Zoning: RPD-3U

Existing General Plan: Urban Residential, Open Space

South: Existing Land Use: Vacant land

Existing Zoning: L.A. County A-2-2

Existing General Plan: L.A. County Non-Urban I, City of Palmdale Non-Urban (1du/10ac)

East: Existing Land Use: Antelope Valley Landfill, vacant residential land, single family residences

Existing Zoning: L.A. County A-2-2, City of Palmdale A-1

Existing General Plan: Urban Residential, Suburban Residential, Open Space, Non-Urban

West: Existing Land Use: Vacant land (proposed Ritter Ranch Specific Plan)

Existing Zoning: L.A. County A-2-2

Existing General Plan: L.A. County Non-Urban I
Background:

This item was originally scheduled for consideration at the Planning Commission Meeting of November 4, 1991. At that meeting the Planning Commission voted 2-1, with Commissioner Bittenbinder objecting and Commissioner Jones abstaining, to continue the EIR to the meeting of December 4, 1991.

On December 4, 1991, the Planning Commission again continued discussion of this item to the meeting of December 18, 1991, by a vote of 3-0, Commissioner Bittenbinder absent and Commissioner Jones abstaining. On December 18, 1991, the Planning Commission continued this EIR to January 15, 1992. These continuances were made by the Planning Commission to permit completion of the review of the Ritter Ranch Specific Plan and related applications, located west of this project site.

1. SITE LOCATION AND DESCRIPTION

A. Project Area:

The area affected by the proposed City Ranch Specific Plan covers approximately 1,985 acres located in the southwest foothills of the Antelope Valley. The project consists of the following land uses:

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential (5200 units)</td>
<td>1,057</td>
</tr>
<tr>
<td>Commercial</td>
<td>42</td>
</tr>
<tr>
<td>Schools (4 sites)</td>
<td>16</td>
</tr>
<tr>
<td>Parks, Golf Course</td>
<td>375</td>
</tr>
<tr>
<td>Roadways</td>
<td>55</td>
</tr>
<tr>
<td>Open Space</td>
<td>419</td>
</tr>
<tr>
<td>Fire Station</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,985</strong></td>
</tr>
</tbody>
</table>

The prominent physical features as noted in the EIR include Verde Ridge, the Sierra Pelona foothills, and the Amargosa and Anaverde Creeks. These creeks originate in the upper reaches of the Sierra Pelona Mountain range, southwest of the project site. Anaverde Creek passes through the central portion of the property, while Amargosa Creek passes to the north of the site. The San Andreas Fault Zone traverses east-west through the northern portion of the property. The terrain is variable across the project site from rolling foothills, to flatlands along the Anaverde Valley. Existing vegetation varies with the terrain. The flatlands are covered with semi-desert
grasslands, such as slender oats, ripgut brome, and soft
chees. One wetland area is present on the eastern side of
the property. This site supports saltgrass, cattails, and
rushes. A desert woodland with Joshua trees and California
juniper is present between Elizabeth Lake Road and the San
Andreas rift zone.

B. Relationship between the Proposed Specific Plan and
Other Adjacent Projects:

The southwest portion of Palmdale has been the location of
numerous proposed developments. In addition to the City
Ranch project, other proposed developments include Ritter
Ranch Specific Plan (10,625 acres, 7200 dwelling units),
Santa Fe Hills Specific Plan (794 acres, 1,361 dwelling
units), Sagebrush/Facton Specific Plan (1,308 acres and 680
dwelling units) and the Amargosa Creek Assessment District
90-1. The Ritter Ranch, Sagebrush/Facton, and Santa Fe
Specific Plans, similar to the proposed City Ranch project,
propose residential development. Ritter Ranch Specific
Plan includes a commercial component as well. The Ritter
Ranch project is located directly west of, and adjacent to,
the City Ranch project. Santa Fe Specific Plan is located
to the northwest of the City Ranch project. Although these
specific plans are separate from the proposed City Ranch
Specific Plan, and will be considered as independent
development proposals, they will contribute to cumulative
impacts resulting from the significant amount of
development proposed in southwest Palmdale.

The proposed Amargosa Creek Assessment District is a public
improvement project for flood control facilities within the
Amargosa channel, widening of Elizabeth Lake Road, and
installation of utilities within the Elizabeth Lake
Road/Amargosa Creek right-of-way. The assessment district
would affect Amargosa Creek from a point near Bouquet
Canyon Road to where it leaves the City of Palmdale at
Avenue M. The improvements to Elizabeth Lake Road are
proposed from a point just west of Goddard Hill Road to 20th
Street West. Utilities are slated to be installed along
the widened portion of Elizabeth Lake Road and in the
bankment of Amargosa Creek. This project, if eventually
constructed, will provide utilities for the proposed City
Ranch project. Also, improvements to Elizabeth Lake Road
and flood control facilities for Amargosa Creek will
provide some benefits to the City Ranch developer and
residents. If the Amargosa Creek Assessment District is
not approved, the developer of the City Ranch project will
be required to provide necessary improvements for that
project; however, the provision of these improvements may
vary from the improvements proposed by the Assessment District in that the full scope of the improvements may not be required. Therefore, while the improvements proposed by the District will benefit the proposed project, they are not directly related to, or a part of, this development.

2. ISSUES DISCUSSED DURING THE RITTER RANCH PUBLIC HEARINGS:

During the public hearings held on the Ritter Ranch Specific Plan EIR, many issues were raised and discussed by the Planning Commission. In many instances, modifications were made to mitigation measures and text in the EIR document. Although the discussion was oriented exclusively to the Ritter Ranch project, many of the issues also apply to the City Ranch project. The following analysis provides some recommended modifications to the City Ranch EIR:

A. SCHOOLS

Kaufman and Broad has not yet signed agreements with the Westside Union and Antelope Valley Union High School Districts. An agreement has been reached with the Palmdale School District which requires participation in the District’s Mello-Roos Community Facilities District.

The discussion of schools during the Ritter Ranch hearings led to a modification of the proposed mitigation measure. For consistency between the two projects, the mitigation measure under Section 5.22.3 of the City Ranch EIR shall be modified to read:

(a) Palmdale School District: The developer shall comply with the terms of the agreement, dated October 8, 1990, between the developer and the Palmdale School District as mitigation for impacts caused by development of the project on the Palmdale School District. The terms of that agreement are as follows:

(i) Participate in the Mello-Roos Community Facilities District created by the Palmdale School District for financing school construction.

(b) Westside Union School District: In the event that the applicant and the Westside Union School District enter into a development agreement prior to the certification of the final EIR for this project, then the terms of that development agreement shall supersede the following mitigation measures and shall be applied as the full
mitigation for impacts caused by development of this project on the Westsides Union School District. In the event such an agreement is not reached prior to certification of this EIR, then the following measures will apply:

(i) The applicant shall dedicate the property specified in the City Ranch Specific Plan for use as elementary school sites to the Westside Union School District, as such sites are designated in the City Ranch Specific Plan as adopted, without restriction, reservation or expense to the school district.

(ii) The applicant shall pay the school district, or its successors, the reasonable cost of constructing new and/or interim school facilities on that site, which school is necessary to accommodate the students generated by the City Ranch Project. The applicant shall receive credit for payment made to the school district pursuant to agreements between the applicant and the school district. The applicant shall also receive credit for the amount of state grant money reasonably available to the school district for construction of new school facilities at the time the applicant's contribution is due.

(iii) The size and type of facilities to be constructed shall correspond to established standards for reasonable school construction and school/student ratios and shall comply with specifications provided by the school district as determined reasonable by the Planning Director of the City of Palmdale.

(iv) The applicant shall make its payments to the school district for construction of the required school facilities sufficiently in advance, as determined by the school district, so as to permit completion of construction of the school facilities at the time the Project has generated the student population sufficient to require such school facility. However, the time frames for dedication and payment shall meet the following minimum standards:

(a) The school sites shall be dedicated to the school district at the time the first phase of a Final Map for the project is recorded.

(b) An elementary school shall be constructed and operational prior to the issuance of the 1,000th occupancy permit for the portion of the project
contained within the Westside Union School District's jurisdiction. In addition, for each subsequent 1,400 occupancy permits, an additional elementary school shall be constructed.

(v) In addition to the foregoing, the applicant shall pay a per capita fee for each middle school student generated by the project, less any credit for payment made pursuant to an agreement between the applicant and the Westside Union School District.

(c) Antelope Valley Union High School District: In the event that the applicant and the Antelope Valley Union High School District enter into a development agreement prior to the certification of the final EIR for this project, then the terms of that development agreement shall supersede the following mitigation measures and shall be applied as the full mitigation for impacts caused by development of this project on the Antelope Valley Union High School District. In the event such an agreement is not reached prior to certification of this EIR, then the following measures will apply:

(i) The applicant shall dedicate the property specified in the Ritter Ranch Specific Plan for use as a high school site to the Antelope Valley Union High School District, as such site is designated in the Ritter Ranch Specific Plan as adopted, without restriction, reservation or expense to the school district.

(ii) The applicant shall pay the school district, or its successors, the reasonable cost of constructing new and/or interim school facilities on that site, which school is necessary to accommodate the students generated by the Ritter Ranch Project. The applicant shall receive credit for payment made to the school district pursuant to agreements between the applicant and the school district. The applicant shall also receive credit for the amount of state grant money reasonably available to the school district for construction of new school facilities at the time the applicant's contribution is due.

(iii) The size and type of facilities to be constructed shall correspond to established standards for reasonable school construction and school/student ratios and shall comply with specifications provided by the school district as determined reasonable by the Planning Director of the City of Palmdale.
(iv) The applicant shall make its payments to the school district for construction of the required school facilities sufficiently in advance, as determined by the school district, so as to permit completion of construction of the school facilities at the time the Project has generated the student population sufficient to require such school facility. However, the time frames for dedication and payment shall meet the following minimum standards:

(a) The school site shall be dedicated to the school district at the time the first phase of a Final Map for the project is recorded.

(b) The high school shall be constructed and operational prior to the issuance of the 7,000th occupancy permit for the project.

R. WATER SUPPLY:

This issue was thoroughly discussed during the deliberation of the Ritter Ranch EIR. For that document Staff was directed to provide an additional discussion on cumulative water supply which was inserted into the text of the Final EIR for Ritter Ranch. The same language could be placed in the City Ranch EIR, and the existing text modified accordingly.

"With regards to groundwater supply, several different studies were reviewed that appear to have conflicting opinions concerning the ability of the aquifer to accommodate additional growth in the Antelope Valley. The following studies were reviewed with respect to groundwater supply: Proposal for Antelope Valley Subsidence and Groundwater Resources Evaluation, prepared by U.S.G.S., May 30, 1991; Water Resources Study of the Antelope Valley, prepared by the Antelope Valley United Water Purveyors, April 1991; Report on Existing and Projected Water Demands and Source of Supply For the Antelope Valley, prepared by Los Angeles County Waterworks District, March 1991; Ground Water Supply Study for the Ritter Ranch, Antelope Valley Los Angeles County, California, prepared by C.B. Lundagin, February 1990; Hydrogeologic Assessment for Construction of New Emergency Supply Water Well, Antelope Valley, Los Angeles County, prepared by Richard Slade, August 1989; Geohydrology of the Antelope Valley Area California and Design for a Ground-water-quality Monitoring Network, prepared by U.S.G.S., 1987; and Planned Utilization of the Water Resources in the Antelope Valley, prepared by State of California Department of Water Resources, October, 1980."
The conclusions expressed in the various groundwater studies demonstrate that a disagreement exists between experts on groundwater supply, groundwater recharge and, safe yield from the aquifer. For example, the report prepared by Los Angeles County Waterworks District, March 1991, concludes that the Valley's existing water resources (groundwater and state-imported water) were sufficient to support SCAG's 2010 population projection for the Antelope Valley. However, the water resources study prepared by the Antelope Valley United Water Purveyors concluded that the overdraft in the aquifer in 1990 was at least 60,500 acre-feet, and implied that additional growth would jeopardize the availability of water in the future. Two of the studies reviewed discussed water levels in various locations of the aquifer; in one study location, well levels were rising, in the other, water levels were falling (Loudagin, Slade). Also, estimates of the annual recharge to the aquifer, and therefore, the safe yield, was reported to be 76,000 acre-feet, 58,000 acre-feet and 40,700 acre-feet in the various studies.

However, Los Angeles County Waterworks District No. 14 has repeatedly indicated that there is sufficient water supply using a conjunctive use policy to accommodate this project, as well as other planned development. The Waterworks District has described their conjunctive use policy in the following manner: state water project water will be used in times when water is plentiful to recharge the groundwater basin; in times when state water project water is scarce, the groundwater stored in the aquifer will be withdrawn and used as the primary source of supply. Application of this policy is anticipated to keep the groundwater levels above the 1980 historic low so as to preserve the capability to replenish the aquifer while at the same time providing sufficient water to serve the growing needs of the Antelope Valley.

Therefore, based upon the evidence presented, development of the project will not result in significant cumulative effects on the groundwater supply.

C. CONGESTION MANAGEMENT PLAN CONFORMANCE:

One of the mitigation measures in the Ritter Ranch document was revised to reflect the roadways presently shown in the Draft L.A. County CHP. The same mitigation measure could be revised in the Ritter Ranch document.
"If, as a result of project impacts, the level of service falls below either the standards set by the Los Angeles County Transportation Commission's Congestion Management Plan, or the policies set by the City's General Plan, the applicant shall implement improvements or services necessary to bring the roadway segment into compliance. The Final Draft CDP, dated August 14, 1991, includes SR-14, and Route 138, and identifies Sierra Highway as a roadway requiring additional study."

D. SHERIFF'S FACILITY:

The Ritter Ranch EIR included a mitigation measure requiring payment of a pro-rata share for acquisition and construction of a Sheriff's station in Palmdale. This mitigation measure was not included in the City Ranch EIR. Instead, the conclusion in the EIR indicated that the project could have an adverse impact on Sheriff's service in the future. If the mitigation inserted in the Ritter Ranch document were applied to the City Ranch EIR, staff feels that the impacts to Sheriff's services would be mitigated to a level of insignificance. The project applicant has expressed opposition to this mitigation measure, however.

"The applicant shall contribute its pro-rata share of 1) the cost of acquiring property for a new police station; 2) the cost of construction of the station; and 3) the cost of reasonably necessary associated equipment. The station shall be sufficient to serve the City Ranch project and other surrounding properties at a service capacity of 1 deputy per 1,000 population and without causing a decrease in the City's current level of police capability or standards of service. The actual amount and terms of the applicant's contribution under this mitigation measure may be agreed upon by the applicant, the Los Angeles County Sheriff's Department and the Planning Director and may take into account the anticipated tax revenues generated by the project, but the applicant's contribution together with any credit for anticipated tax revenues shall not be less than the applicant's reasonable share of the cost of constructing and equipping a station sufficient to accommodate the additional sheriff's officers and support staff required to provide police service for the increased population created by the City Ranch Project."

The applicant shall pay its pro-rata share of the acquisition costs upon the selection of a site by the Sheriff's Department. The applicant shall pay its pro-rata share of the construction costs upon the commencement of
construction. The applicant shall pay one-half of its pro-rata share of the costs of reasonably necessary equipment upon the issuance of the 1,400th occupancy permit for the project. The applicant shall pay the remaining one-half of its pro-rata share of the costs of reasonably necessary equipment upon the issuance of the 5,000th occupancy permit for the project."

E. SEWER LINE DESIGN LANGUAGE:

At the request of the Planning Commission, Sanitary Sewer mitigation was modified in the Ritter Ranch EIR to require state-of-the-art design. The City Ranch EIR could be modified in a similar manner. The first mitigation measure in Section 5.17.1 should be revised to read: "All sewer infrastructure extensions and improvements depicted on Figure 66 and described in the project impacts subsection of this section of the EIR shall be constructed by the applicant. In the event that Assessment District 90-1 is not formed, and Developer constructs off-site trunk sewer lines within the San Andreas fault zone, the developer shall use state-of-the-art designs for the trunk sewer line to minimize the risk of rupture, and subsequent contamination, caused by a seismic event. Also the developer shall cause the preparation of an emergency spill response plan. The plan shall include measures to detect early warning of a sewage trunk leak, the installation of manual or automatic isolation valves, provisions for spilled sewage retention, spill response measures, cleanup and disinfection measures, and training and funding for implementation of the spill plan. The plan shall be reviewed by the Lahontan Regional Water Quality Control Board and Sanitation District No. 20, and reviewed and approved by the Director of Public Works and the Director of Planning."

F. NOISE MITIGATION TO DISCOURAGE WALLS:

At the request of the Planning Commission, Noise mitigation was modified in the Ritter Ranch EIR to constrain the use of noise mitigation other than walls. The City Ranch EIR could be similarly modified by amending the seventh mitigation measure in Section 5.10.3 to read: "Reduction of intrusive noise levels in residential and school areas shall be accomplished through the incorporation of design measures or structural measures which will reduce noise levels to acceptable levels within the living or recreation portions (as defined by the City) of any lot. The measures that may be utilized to reduce noise impacts include placement of non-residential buildings adjacent to the
arterial roadway, increasing the setbacks along the roadway, creation of landscaped berms or other unobtrusive barriers. The acceptable noise level CNEL which will be applied to future projects will be that level which is in place, either by ordinance, resolution or General Plan policy, at the time that future development applications are deemed complete."

G. SOLAR OPPORTUNITIES:

The Ritter Ranch EIR was modified at the request of the Planning Commission, regarding solar access/opportunities. By adding a mitigation measure to Section 5.9.3 of the City Ranch EIR, a similar consideration could be assured for development of this project: "Encourage the placement of dwelling units to take full advantage of solar energy for natural heating and cooling in order to reduce the use of electricity and natural gas within the project area."

1. DISTRIBUTION OF THE DRAFT EIR

A. Distribution List

After completion of the Draft EIR, copies were sent to the list of persons and organizations shown on the Notice of Completion, attached to this staff report as Exhibit C.

B. Comments Received

At the time of preparation of this staff report, the following agencies/individuals had submitted comments. These comments are attached as Exhibit B.


3. Fred Worthley, California Department of Fish and Game, letter received October 18, 1991.


C. RESPONSE TO COMMENTS

Responses to all comments are being prepared by Gruen and Associates and staff and will be transmitted to the Planning Commission prior to their taking action on this item.

4. PROCEDURAL COMPLIANCE AND PUBLIC REVIEW

A Notice of Preparation and Initial Study were prepared and sent to the State Clearinghouse on September 7, 1989. Comments received are included in Appendix B of the EIR. The Draft EIR was advertised and released for local public review on October 4, 1991. A Notice of Completion was prepared and the Draft EIR was sent to the State Clearinghouse. The document was subject to a 45-day State Clearinghouse review period which began on October 3, 1991 and ended on November 18, 1991. All comments received to date are included herein.
5. OTHER MATERIALS INCORPORATED INTO THE FINAL EIR

A. Draft EIR
B. Addendum
C. State Clearinghouse Form
D. State Clearinghouse Letters
E. Notice of Completion
F. Staff Report and Minutes of the Public Hearing and Planning Commission and City Council meetings on the Final EIR
G. Planning Commission’s Resolution Recommending Certification of the Final EIR
H. City Council’s Resolution of Certification of the Final EIR
I. Notice of Determination

6. APPROVALS USING THIS EIR

At the present time, the EIR serves as the environmental document for the following applications:

Specific Plan 89-03 (City Ranch South Specific Plan)
General Plan Amendment 91-04
Pre-Zone 89-06
Annexation 89-06
City Ranch South Development Agreement

The EIR may also serve as the environmental document for any community facilities district which may be formed in the future to fund the construction of project infrastructure. Subsequent approvals which may use the EIR as a "tier" in the environmental review process include: tentative tract and parcel maps, conditional use permits, and site plan reviews as may be necessary for development of the project site. Also, the EIR could be used by the Local Agency Formation Commission (LAFCO) for approval of the Annexation; by the California Department of Fish and Game for approval of Section 1603 Streambed Alteration Agreements; and, by the U.S. Army Corps of Engineers for approval of Section 404 permits.

7. SIGNIFICANT EFFECTS AND MITIGATION MEASURES

The following discussion is a summary of the impacts and mitigation measures contained in the EIR document.

A. LAND USE

Existing Conditions: At present, the project is located in an unincorporated area of Los Angeles County. Under the Los Angeles County General Plan, the site is designated as Non-Urban I, Urban II and Commercial. The existing zoning on the site is A-2-2 (Heavy Agriculture) which would allow
the development of residential lots a minimum of two acres in size.

Most of the site is vacant, used seasonally for grazing. A portion of the site is occupied by the existing City Ranch complex, consisting of eight buildings and ancillary structures. The California Aqueduct passes through the project site, but is "not a part" of the project.

Project Impacts: The proposed project is generally consistent with the existing City of Palmdale General Plan Land Use Designation of City Ranch Specific Plan. However, several redesigns of the project have necessitated a General Plan Amendment to redistribute the land uses around the project site to reflect the current proposal.

The proposed project, if developed, would replace the existing grazing/open space with an urban setting over the majority of the site. Portions of the area, including Verde Ridge and the Sierra Pelona foothills, will remain as open space.

The project is located adjacent to the Antelope Valley Landfill property. Development of this project in proximity to the landfill could result in interface problems due to occasional blowing dust and trash, noise, and the visual unattractiveness of the landfill. The proposed landfill expansion could bring the landfill itself within approximately 600 feet of the City Ranch property. The proximity of residential development to the landfill could result in a number of complaints about landfill operations.

Development of the site will result in an increase in residents, and a subsequent increase in demands for City Services, in traffic volumes, in air pollution emissions, and other human-related impacts.

Level of Significance after Mitigation: The project will contribute to significant cumulative land use impacts including loss of open space.

B. POPULATION

Existing Conditions: On the project site, there is currently one vacant residence. In other areas of Palmdale, however, the City supports a population of approximately 65,000 residents.

Project Impacts: Development of the site with 5200 residential units would result in a population for City
Ranch of approximately 14,040 people, based on a factor of 2.7 residents per unit. Compared to the City's projected 2010 population (171,831), City Ranch would represent approximately 8% of the City's total population. This population would, in turn, demand increased services such as schools, police and fire protection, library services, etc., thereby impacting the existing levels of service for the City. In addition, that population will contribute to an increase in vehicle trips and associated air pollutant emissions.

Level of Significance After Mitigation: Since the impacts from population affect other aspects of the environment, mitigation measures listed in other sections of the document will lessen the impact of increased population on the project site. However, many of the natural resources on site will be significantly impacted by the project even after mitigation is applied to them. The impacts to these resources, such as biological resources and air quality, are discussed more fully elsewhere in this staff report, as well as in the EIR, itself.

C. HOUSING

Existing Conditions: At present, the site contains only one residential unit which is currently vacant. Elsewhere in Palmdale, the California Department of Finance has estimated that there are approximately 20,109 (1989) residential dwelling units. The current jobs/housing ratio, as estimated by the Southern California Association of Governments (SCAG) is .71, meaning that there are .71 jobs for every household within the City of Palmdale. SCAG projects that, based upon its current trend of increasing residential growth and limited growth in commercial and industrial development, in 2010 the City will have a jobs/housing ratio of .94. To offset this decline, SCAG has set a jobs/housing ratio goal of .72 for the Antelope Valley subregion.

Projected Impacts: The proposed project has a jobs/housing ratio of .17. Should the project be developed as proposed, it would exacerbate the region's declining jobs/housing balance ratio. In order to balance the jobs/housing ratio, the project should provide an additional 359 jobs on-site.

Level of Significance After Mitigation: The project will contribute to the increase in the subregion's jobs/housing imbalance which will remain a significant unavoidable adverse impact.
D. EARTH (Geology)

Existing Conditions: Four topographic features dominate the City Ranch site: the Sierra Pelona foothills, the Anaverde Valley, the San Andreas Rift Zone, and Verde Ridge.

Potential geologic hazards currently present on the site include seismic shaking, liquefaction, seismic settlement, seismic ground failure, earthquake-induced flooding, and landslides. Two potentially active faults, associated with the San Andreas Fault, cross the northern portion of the property. The maximum credible earthquake that could occur on the San Andreas Fault in this region is a magnitude 8.3. Should a quake of this magnitude occur, the project site could experience severe ground shaking and portions of the property could experience liquefaction, although the potential for this has been determined to be low. Compaction or minor liquefaction attributable to a large earthquake would be evidenced by seismic settlement, possibly damaging on-site structures. Also, in the event of a large earthquake, phenomena such as lurching, ground cracking, and landslides could affect the project site. Lastly, should a large earthquake occur, flooding, caused by aqueduct seiching, could impact adjacent properties.

Project Impacts: Development of the project site would introduce approximately 14,000 full-time residents to the area's potential geologic hazards. To reduce the magnitude of the seismic hazards, several Restricted Use Zones have been established on the subject property to ensure that residential developments are not placed directly over potentially active faults.

The risk from surface fault rupture is higher on the project site than for other locations in the Antelope Valley because of the proximity of the San Andreas Fault zone. Buildings which are not constructed to seismic building codes would be susceptible to damage and could pose a potential for injury.

Liquefaction potential has been determined to be low. At the time of grading, additional testing can be applied to confirm this conclusion. In the event that liquefaction hazards are determined to be higher than previously believed, remedial grading can be utilized to minimize these hazards. Seismic settlement and ground failure may occur in the event of a large earthquake. Compliance with established codes for grading and construction will minimize these effects.
Failure of the aqueduct, including seismic seiching, would impact the proposed golf course, a park, and open space areas. Mitigation has been recommended in the EIR to minimize these impacts.

Impacts from landslides and adverse soil conditions are considered to be mitigable, and therefore, can be reduced to insignificant levels.

Level of Significance After Mitigation: Implementation of the recommended mitigation measures would reduce many adverse geological impacts; however, they would not eliminate all the significant impacts associated with geologic hazards, specifically hazards associated with a seismic event. Geologic impacts are, therefore, considered unavoidable adverse impacts.

E. HYDROLOGY

Existing Conditions: The project area contains two significant drainage areas: Amargosa Creek and Anaverde Creek. Most of the project area drains into Anaverde Creek, the flood zone which affects the central portion of the project. In addition, the California Aqueduct traverses the project site. Should the Aqueduct rupture, an area near the aqueduct could be inundated. Biological surveys have established the presence of an alkali marsh/wetland on the site, associated with the Anaverde Creek drainage.

Project Impacts: Development within the Specific Plan area will be required to be above the level of the flood plain identified by the Federal Emergency Management Agency (FEMA) and the Los Angeles County 50-year Capital Storm. A drainage concept is shown in Figure 33 of the EIR. This concept proposes that most of the natural drainage courses on the project site be channelized. Drainage would be directed toward flood control basins to limit the intensity of the stormwater flows, thereby reducing flooding hazards both onsite and offsite. In order to protect the wetland area from urban pollutants, a low flow containment system is proposed to capture the low flow nuisance water before it enters the wetland system.

Level of Significance After Mitigation: With adoption of the proposed storm drainage plans and mitigation measures indicated in the EIR, project impacts with regard to hydrology would not be significant.
F. BIOLOGY

Existing Conditions: At the present time, several distinct biological communities are present on the project site. They are described as: desert woodland, Great Basin sage scrub, alkali meadow, non-native grassland/pastureland, juniper seedling area, transmontane alkali marsh, and a desert olive-elderberry-rock gooseberry subcommunity.

Although some of this habitat is in good condition, the majority of the site has been grazed in the past and the quality of the habitat, especially in the non-native grassland/pastureland, has been degraded.

The biological survey performed on the site noted approximately 4,000 juniper trees in the desert woodland community. Biologists also noted a variety of wildlife, including small mammals and 70 species of birds. In addition, a number of sensitive species were observed on City Ranch. Those sensitive species are as follows: Peirson's morning-glory, short-jointed beavertail cactus, sharp-shinned hawk, tri-colored blackbird, long-eared owl, golden eagle, northern harrier, prairie falcon and Le Conte's thrasher. Several other sensitive species may occur on the project site but were not observed during the biological surveys. None of the species observed have been formally listed as rare, threatened or endangered by the State or Federal governments.

The biota report prepared for the project concluded that none of the sensitive bird species noted during the surveys were believed to occupy the area on a full-time basis. Suitable nesting sites for the raptor species are not present on the property, therefore use of the site for these birds would be for foraging only. Suitable nesting sites for Le Conte's thrasher also do not occur on City Ranch since this species prefers silver cholla and saltbush for nesting. Although tri-colored blackbirds nest in freshwater marsh habitats, the individual observed was foraging in the area; no nest was evident. Therefore, it is believed that these species utilize this area on an intermittent basis.

Project Impacts: Development of the project site will result in the loss of biological resources currently occupying the City Ranch property. Although the Specific Plan identifies 424 acres of natural open space, the habitat in this area will be degraded by the introduction of people into the project area. The open space areas are also discontinuous; the fractionalized habitat will reduce
in value over time due to loss of diversity. This loss will also translate into a loss of sensitive species presently utilizing the project site and a reduction of their overall habitat. Construction of the golf course will result in the removal of as many as 3,044 Joshua trees and numerous California junipers.

Level of Significance After Mitigation: Implementation of the recommended mitigation measures would reduce project impacts on biological resources to acceptable levels. However, the development of the project will contribute to a cumulatively significant loss of habitat in the vicinity of the project.

G. TRANSPORTATION

Existing Conditions: At the present time, access to the project site is provided by Elizabeth Lake Road, a two-lane paved roadway, and Avenue S, a graded dirt road. The Antelope Valley Freeway (SR-14) is located approximately two miles to the east. Current traffic volumes in the vicinity of the project are low and the levels of service on the proximate roadways are generally acceptable. However, Avenue S is operating at LOS F on a daily capacity basis to the east of SR-14.

Project Impacts: Development of the proposed specific plan is expected to generate approximately 49,970 average daily vehicle trips (ADT). These trips will affect the existing and proposed circulation network. To accommodate this traffic volume, as well as the volume of traffic generated by cumulative development in the area, extensive improvements to the roadway network will be required. The affected roadways include Elizabeth Lake Road, Avenue S, Tierra Subida/10th Street West, City Ranch Road/Avenue R, 23rd Street West, and Bridge Road. The project will also contribute to cumulative impacts to State Route 14. The developer of the proposed project will be required to provide certain improvements to these local roadways or contribute their pro-rata share towards improving the circulation network. Assuming that these roadways are constructed and/or improved in a timeframe which will accommodate the traffic generated by the proposed development, traffic impacts will be minimized.

Level of Significance After Mitigation: Implementation of the mitigation measures listed in the EIR will reduce project-related impacts to the local transportation system to a level of insignificance.
H. AIR QUALITY

Existing Conditions: The City Ranch project is presently undeveloped and therefore, emission levels from the project site are insignificant. Dust, picked up by the wind, from the undeveloped site would constitute the largest portion of emissions at the present time.

The site is located within the Southeast Desert Air Basin. This basin has been identified as a non-attainment area in which the air quality does not achieve minimum standards set by the State and Federal Government for ozone and 10-micron particulates.

Project Impacts: Impacts to air quality will occur on both a short- and long-term basis. During construction and grading, dust and emissions from construction equipment will constitute a short-term impact to air quality. As residents occupy the project, emissions from motor vehicles, natural gas combustion, and stationary source emissions such as dry cleaners, will increase constituting a long-term impact. The EIR estimates that vehicle emissions attributable to the proposed project could, each day, generate 2,943 pounds of carbon monoxide (CO), 955 pounds of nitrogen oxides (NOx), 199 pounds of particulates, and 244 pounds of reactive organic gases. These emissions exceed the thresholds suggested by AQMD for significant impacts to air quality.

Level of Significance After Mitigation: Development of the project would add emissions to a non-attainment air basin in amounts that exceed suggested acceptable thresholds. Therefore, the project will have a significant unavoidable adverse impact to air quality.

I. NOISE

Existing Conditions: The project site is not developed and contains no notable sources of noise. Traffic on Elizabeth Lake Road generates the majority of ambient noise currently affecting the City Ranch property.

Project Impacts: Development of the project would result in two distinct sources of noise: construction related noise, and noise emanating from vehicles. The construction related noise will be temporary within any one location on-site. Construction and grading noise impacts could be significant without mitigation measures.

Increased vehicular traffic will represent the primary
noise source which will affect the project on a long-term basis. Audible increases, greater than 1dB, are expected along 20th Street West, 25th Street West, Elizabeth Lake Road and Avenue S. Mitigation can be applied on-site as development occurs to ensure that noise levels within residential lots do not exceed acceptable limits. However, existing residences and schools along Elizabeth Lake Road may experience unacceptable noise levels as a result of the construction of this project and the cumulative growth in the project area.

Level of Significance After Mitigation: Provided the recommended mitigation measures are properly applied, construction and operation of the proposed project are not expected to create significant noise impacts on-site. However, some areas along Elizabeth Lake Road containing sensitive receptors such as residences and schools may be significantly impacted.

J. AESTHETICS

Existing Conditions: At present, the site is characterized primarily as open space. Natural features dominate the landscape and a dark nighttime sky currently prevails. Major scenic features on the project site include the San Andreas Rift Zone, the California Aqueduct, the Sierra Pelona Mountain Range, Verde Ridge, wetland and Joshua Tree woodland plant communities, and the Antelope Valley floor. High power transmission lines traverse the site, detracting from the area's natural character.

The Verde Ridge portion of the site is visible from Elizabeth Lake Road, 25th Street West, and points north the area. Some development will be visible to these south-facing views, particularly the residential development of Planning Area 6 and the commercial development in Planning Area 3. The topography of the Ridge, however, will screen the majority of the proposed development from views looking south. The site is also visible from areas to the east. To the east, the site is easily visible from the Antelope Valley Freeway, and as far as Barret Springs Road. The easterly vistas provide a more direct view to the site, and views of the proposed development will be more visible than from the north. Proposed development on the Ritter Ranch property to the west will have views of the City Ranch project site, with most of the proposed development areas visible.

From the site, future residences could have views of the Sierra Pelona Range, Verde Ridge, the Antelope Valley
Landfill, or portions of central Palmdale, depending on the orientation of their home.

**Project Impacts:** Views of the project site from distant areas will not be significantly affected. These views will focus on the prominent physical features which will generally not be affected by the proposed development. Views of the Sierra Pelona (primarily outside of the proposed project) and views of the upper portions of Verde Ridge will remain unchanged.

However, in the foreground, development of the project site will eliminate the current prevailing aesthetic character of open space and replace that character with one of a suburban area. Although open space areas are included in the Specific Plan, these areas will serve as a backdrop for the residential development and will not be a prominent aesthetic feature. Because of the screening affect of the surrounding topography, these near field views will primarily affect only development on-site, and development immediately adjacent to the City Ranch property.

**Level of Significance After Mitigation:** The project will continue to significantly impact visual resources even after all mitigation measures proposed in the EIR have been applied.

**K. LIGHT AND GLARE**

**Existing Conditions:** The site is currently undeveloped. Sources of light and glare are minimal.

**Project Impacts:** The present dark nighttime sky will be affected by the presence of street lights, car headlights, and lighting emanating from the future buildings. Signs associated with the commercial development will contribute to the light generated by the project. Glare from windows will affect motorists along Avenue S and Bridge Road. However, this source of glare is not considered significant because of the landscape screening proposed along these roadways.

**Level of Significance After Mitigation:** The project will contribute to the cumulative loss of a dark nighttime sky which is considered an unavoidable adverse impact.

**L. ENERGY**

**Existing Conditions:** The project site in its undeveloped condition expends negligible amounts of energy. The main
source of energy presently available on the City Ranch property is solar radiant energy which is available in abundant supply.

Project Impacts: Development of the project as currently proposed would result in the expenditure of 98,975 kilowatt hours of electrical energy, 924,300 cubic feet of natural gas, and 21,845 gallons of gasoline on a daily basis. An unlimited supply of solar energy will continue to be available on-site.

Level of Significance After Mitigation: No unavoidable adverse impacts are expected to occur due to energy consumption.

N. ELECTRICITY

Existing Conditions: Five sets of high tension transmission lines and a 12kv distribution line cross the project site.

Project Impacts: Development of the site is anticipated to require 99,975 kilowatt hours of electricity per day. Southern California Edison has determined that they have sufficient capacity to serve the proposed project. No impacts are expected to occur to the existing electrical lines on-site. The Specific Plan proposes a park and natural open space within the easement containing the transmission lines.

Level of Significance After Mitigation: No unavoidable adverse impacts are expected to occur due to consumption of electricity.

N. NATURAL GAS

Existing Conditions: The project site is undeveloped and natural gas service is not provided on-site. The area is within the service zone of the Southern California Gas Company Foothill Division.

Project Impacts: Development of the site would require the extension of natural gas service on-site. Proposed development on the site would consume approximately 922,300 cubic feet of natural gas per day.

Level of Significance After Mitigation: Implementation of the proposed mitigation measures would reduce impacts to natural gas service to less than significant levels.
0. WATER

Existing Conditions: The project site is located adjacent to the Los Angeles County Waterworks District No. 34 boundary at 20th Street West and Elizabeth Lake Road. The Waterworks District obtains its water from groundwater wells and the State Water Project supplier, AVEK. On-site, groundwater wells and a turnout from the aqueduct provide a supply of untreated water suitable for landscape irrigation and construction water. The project applicant is entering into water service agreements with the Waterworks District to provide service for the proposed project. Three separate agreements cover the project site; one has been finalized and negotiations for the other two are on-going.

Project Impacts: After development, the project will require 5.22 million gallons per day of water, 3.97 million gallons per day of which must be potable. District 34 has indicated that they would be capable of delivering the water necessary to serve the proposed project through existing and proposed water delivery systems, and through existing sources of water supply. The district utilizes a conjunctive use policy, using State water project water when it is available, and groundwater when the imported water supply is interrupted. The City Ranch EIR concluded, however, that the development of the project will contribute to the continued pumping of the groundwater supply in the Antelope Valley, which represents a potentially significant impact. The Planning Commission, during their discussion of this issue relative to the Ritter Ranch EIR, concluded differently. They found that implementation of the Waterworks District’s conjunctive use water policies will ensure that groundwater supplies would not be adversely impacted by the development of the proposed Ritter Ranch project. Section I.C. of this Staff Report provides alternative language, consistent with the modifications to the Ritter Ranch EIR, which may be inserted into the City Ranch EIR regarding impacts to water supply should the Planning Commission determine that development of the City Ranch project would result in impacts similar to those anticipated for Ritter Ranch.

Level of Significance After Mitigation: Development of the project may contribute to potentially significant impacts to groundwater, if in the future, it is determined that the Lancaster subunit cannot support the levels of development in the Antelope Valley.
P. SEWAGE DISPOSAL

Existing Conditions: The project site is located outside of the Los Angeles County Sanitation District’s service area. The developer will be required to annex to District No. 20 to connect to sanitary sewer lines. The nearest trunk sewer to the project site is located approximately 1.5 miles away at the intersection of 10th Street West and Avenue P-4. The Palmdale Water Reclamation Plant, operated by the County Sanitation District, is operating at capacity (7.0 to 7.3 million gallons per day). However, the facility is currently undergoing an expansion to a capacity of 12.0 mgd. This expansion is expected to be completed in March, 1992. Future expansion to 15.0 mgd is planned by the Sanitation District; however, no time frame has been established for this larger expansion.

Project Impacts: A trunk sewer line will need to be constructed in the vicinity of the project site to accommodate wastewater generated by the proposed development. Figure 66 of the EIR shows the proposed sewer plan for the project. The EIR estimates that after construction, the project will generate approximately 1.27 million gallons of wastewater per day. Although this would exceed the current capacity of the Water Reclamation Plant by 1.27 mgd, the planned expansions will accommodate this volume of wastewater.

Level of Significance After Mitigation: Implementation of the mitigation measures proposed in the EIR will reduce project related impacts to less than significant levels.

Q. SOLID WASTE

Existing Conditions: The project site, in its presently vacant condition, does not contribute to the waste stream entering the Antelope Valley Landfill. This landfill is nearing capacity, but the landfill owner has applied for a expansion of the existing facility. This expansion would provide for significant additional capacity for this facility.

Project Impacts: The proposed project would generate approximately 54,000 pounds of solid waste per day. This waste would be deposited in the Antelope Valley Landfill. Assuming that the landfill expansion occurs, the contribution of solid waste by this project could be accommodated. However, in the event that the expansion does not occur, impacts to solid waste disposal could be significant.
Level of Significance After Mitigation: In the event that expansion of the Antelope Valley Landfill does not occur in a timely manner, the project, along with the other surrounding developments, would contribute to cumulatively significant impacts to solid waste disposal.

R. COMMUNICATIONS

Existing Conditions: Jones Interabole provides cable service to the City of Palmdale. Telephone service to the project site vicinity is provided by Pacific Bell. Two buried AT&T high capacity transcontinental communications lines pass through the project site.

The City of Palmdale utilizes radios to communicate with field personnel on a day-to-day and emergency basis. Portions of the project site are not within the present range of the City's radio communications system.

Project Impacts: Development of the project site will require the extension of telephone infrastructure into the project area. Pacific Bell has indicated that provision of service to the project site will not affect existing service levels. The high capacity transcontinental lines are contained within easements which may be encroached upon with development of the site. Development along the AT&T easement could result in physical damage to the lines causing unanticipated interruption of AT&T's long distance telephone service. Also, development of the project site will exacerbate the existing radio communications problems experienced in the outlying portions of Palmdale. Mitigation has been proposed in the Draft EIR which addresses each of these impacts.

Level of Significance After Mitigation: Implementation of the mitigation measures proposed in the EIR will reduce project related impacts on communications capabilities to less than significant levels.

S. SHERIFF'S SERVICES

Existing Conditions: Police protection to the project site and the surrounding area is provided by the Los Angeles County Sheriff's Department. The Antelope Valley Station, located in Lancaster, is the closest sheriff's facility to the project site.

Project Impacts: Development of the project would necessitate additional sheriff's personnel to accommodate the increased demand on sheriff's services. Short-term impacts will occur during the construction phase of the
project caused by construction material thefts. After residents occupy the area, impacts typical of any suburban development will occur. Presently, the City provides funding for sheriff’s services through the City’s General Fund. When the City Ranch property is annexed to Palmdale, the area will be covered by the City’s contract for police services. At the present time, there is no mechanism in place for recouping the expense associated with providing police protection for the proposed development. The mitigation measures recommended in the Draft EIR do not fully mitigate the potential direct and cumulative impacts which may occur should the proposed project be developed.

Level of Significance After Mitigation: Development of the proposed project, as well as development of the other projects in the vicinity of the project site, could result in a significant impact on police services should the cost of providing Sheriff’s services become so expensive in the future as to cause a reduction in manpower, facilities or services to the community as a whole.

T. FIRE AND EMERGENCY MEDICAL SERVICES

Existing Conditions: Los Angeles County Fire Station 24 is the closest fire station to the project site. It is located near the intersection of Avenue P and 10th Street West, approximately 2.3 miles northeast of the project.

Project Impacts: The addition of residents to the project site will require the need for additional fire suppression facilities and equipment. Planning Area 34 of the Specific Plan is proposed as a fire station site. According to the Los Angeles County Fire Department, they would construct 6,600 square foot facility, equipped with one 1,250 gallon pumper. The proposed on-site fire station would provide adequate local emergency medical response and fire-fighting services for the proposed project.

Level of Significance After Mitigation: Implementation of the mitigation measures proposed in the EIR will reduce project related impacts to fire and emergency medical services to less than significant levels.

U. SCHOOLS

Existing Conditions: The project site is located within the jurisdiction of three school districts: Palmdale School District, Westside Union School District, and Antelope Valley Union High School District. There are no schools on-site and no students are generated within the project.
area. All three school districts are in the process of constructing new school facilities, but at the present time, all have enrollments which exceed capacity.

**Project Impacts:** Development of the proposed project is expected to generate approximately 4,544 students: approximately 2,439 students would attend Westside Union schools; 545 students would attend Palmdale schools; and 1,560 would attend Antelope Valley high schools. The proposed project includes four elementary school sites, three located within Westside Union School District and one located within Palmdale School District. No middle schools or high schools are proposed in the Specific Plan. However, correspondence from the Antelope Valley Union High School District has expressed a desire for a shared site near the boundary between Ritter Ranch and City Ranch.

**Level of Significance After Mitigation:** Implementation of the mitigation measures proposed in the EIR will reduce project related impacts to schools to less than significant levels.

V. PARKS AND RECREATION

**Existing Conditions:** The project site is vacant, and therefore does not generate park users. The park nearest to the project site is Manzanita Park, located near the southeast corner of Elizabeth Lake Road and 15th Street West. George Lane County Park, located approximately six miles north of the project site, is the closest park operated by the County.

**Project Impacts:** According to present City parkland standards, the proposed development should include 88.62 acres of parkland. The Specific Plan proposes six park sites totaling 139.3 acres, a golf course, and 404 acres of natural open space which can support passive recreational activities such as hiking and nature study. Of the parks proposed, those located in Planning Areas 22, 28B and 18 are proposed as neighborhood parks. Planning Area 9 is shown as a Community Park on the project's land plan. Planning Area 1 serves as an extension to the Community Park. Planning Area 15 provides additional park opportunities adjacent to the elementary school site proposed in Planning Area 11.

**Level of Significance After Mitigation:** Implementation of the mitigation measures proposed in the EIR will reduce project related impacts on parks and recreational facilities to less than significant levels.
W. FACILITIES MAINTENANCE

Existing Conditions: Road maintenance in the project area is currently provided by the Los Angeles County Department of Public Works. Because road maintenance in the City is performed by the County under contract, the County will continue to maintain roads in this area after annexation occurs. The City of Palmdale employs maintenance crews to maintain parkways, parks and detention basins.

Project Impacts: Development of the proposed project will increase the City's maintenance responsibilities by adding significant areas of streets, drainage facilities, parks and parkways. A maintenance facility in the vicinity of this site will be needed to accommodate the equipment and personnel necessary to provide maintenance services for this project as well as the other projects proposed in the area. The developer will be required to provide a pro-rata share for this facility.

Level of Significance After Mitigation: Implementation of the mitigation measures proposed in the EIR will reduce project related impacts on the City for maintenance activities to less than significant levels.

X. ARCHAEOLOGY

Existing Conditions: An archaeological survey performed on the project site by Archaeological Associates in April, 1989, identified 28 prehistoric sites, one historic site and 17 isolated finds. The historic site contains the remains of an early ranch house, including metal equipment parts, nails, cans, glass, ceramic debris and shotgun shells. Three different types of prehistoric sites were noted: lithic scatters, hunting blinds, and rock art sites. The isolated finds consist of stone flakes and tools.

As a result of this survey, a Phase II testing program was carried out on the site. The testing determined that three of the prehistoric sites were significant in the context of CEQA.

Project Impacts: Development of the project, as presently proposed, would result in the loss of the three significant prehistoric sites, as well as most of the other sites identified in the initial survey. The introduction of people into the area will likely cause the degradation of any remaining sites not directly lost through grading.
Level of Significance After Mitigation: Implementation of the mitigation measures proposed in the EIR will reduce project related impacts to archaeological resources to less than significant levels.

Y. PALEONTOLOGY

Existing Conditions: Fossils of 21 species of plants were noted at six separate sites within the project area. One Pleistocene rock unit found within the Specific Plan area has produced a diversity of vertebrate fossils at a location off-site, and therefore, can be expected to contain fossils within the project.

Project Impacts: Ground disturbing activities associated with development of the project will adversely impact paleontological resources present on-site. Grading within the areas containing sedimentary rock would disturb or bury fossil sites, and could destroy fossil specimens. In addition, fossiliferous rock in these areas would become permanently unavailable for further study.

Level of Significance After Mitigation: Development of the project site may result in the inadvertent loss of significant paleontological resources.

Z. ELECTROMAGNETIC RADIATION

Existing Conditions: Five sets of high-voltage power lines cross the project site and another set runs along the western and southern boundary, immediately adjacent to the property. Alternating electrical currents such as those transmitted by the power lines create electromagnetic fields which emit various frequencies of radiant energy. At the present time, electromagnetic radiation is suspected of causing childhood cancers. However, statistical evidence has not been conclusively generated.

Project Impacts: The proposed project will not affect the transmission lines which pass through the site. Residential development is proposed adjacent to the transmission line easement, and portions of the easement are proposed for park purposes and open space (however, the Planning Commission, during consideration of the Ritter Ranch Specific Plan, has recommended prohibiting the use of the powerline easements as park land). Development of the site will expose more people to the electromagnetic fields. Although the exposure of most residents will likely be infrequent and of short duration, the potential risks could be significant if future studies conclusively determine that electromagnetic radiation is a cause of adverse health effects.
Level of Significance After Mitigation: If, in the future, a clear link between proximity to high-voltage electric lines and deleterious health effects is determined, impacts associated with electromagnetic radiation would be significant.

AA. HAZARDOUS/TOXIC MATERIALS

Existing Conditions: A site assessment performed on the project site identified nine locations where potentially hazardous materials exist. The sites include: an underground fuel storage tank; surface storage areas for pesticides, herbicides, and veterinary supplies; surface disposal of paint, paint thinner, pesticide containers and other household items at five separate locations; and septic systems located at two sites. Also, six well sites were identified on the property.

Project Impacts: Development of the project would be constrained by the presence of these sites. Unless proper cleanup and disposal procedures are carried out, the hazards described above could pose a health threat. However, the impacts can be mitigated with appropriate removal and disposal of the hazardous material found on the site.

Level of Significance After Mitigation: Implementation of the mitigation measures proposed in the EIR will reduce project related impacts with regards to hazardous/toxic materials to less than significant levels.

BB. ANTELOPE VALLEY LANDFILL

Existing Conditions: The Antelope Valley Landfill is located on property which is adjacent to the proposed specific plan. The landfill operator has requested a permit to expand the operation of the current facility to the west, bringing it closer to the boundary of the Ritter Ranch Development. The Specific Plan proposes a golf course/open space area in the location closest to the landfill. However, Planning Area 8 is proposed for single family residences. The residents occupying these units may be subject to noise, odors, blowing dust, and litter emanating from the landfill operation.

Project Impacts: Development of the proposed project will bring residential units within .6 miles of the existing landfill, and within approximately 600 feet of the common boundary between the two properties. The presence of these
residents may jeopardize future use of the existing landfill and landfill expansion if incompatibilities arise between these land uses. The Source Reduction and Recycling Element, recently adopted by the City, recommends a 1,000-foot setback for future residential use from the landfill property line to minimize conflicts between these uses.

Level of Significance After Mitigation: Implementation of the mitigation measures proposed in the EIR will reduce project related impacts to the Antelope Valley Landfill to less than significant levels.

8. LONG-TERM IMPLICATIONS OF THE PROPOSED PROJECT

A. Growth-inducing Impacts. The EIR identified four criteria to determine whether the project will induce additional growth. These criteria are: removal of an impediment to growth; economic expansion or growth; establishment of a precedent setting action; and, development or encroachment in an isolated or adjacent area of open space. The proposed project would remove impediments to growth to adjoining areas by the extension of utilities and infrastructure. The population residing in the proposed project will represent economic growth to the Palmdale area, thereby increasing the demand for goods and services. Development of a site presently characterized by open-space. Therefore, the project meets three of the four criteria identified in the EIR.

B. Relationship Between Short-term Uses and Long-term Productivity. Development of the project will change the use of the site from grazing to suburban residential. Long-term increases in local population, alteration of the site’s landforms, increases in local traffic generation, air pollutant emissions and ambient noise levels, and exposure to geologic hazards and electromagnetic radiation will all occur. The biological productivity of the site will diminish significantly.

However, approval of the project would implement the City’s General plan land use designation for the site in a comprehensively planned manner.

C. Significant Irreversible Environmental Changes. Construction of the proposed project will commit the use of building materials and the consumption of energy. The existing environment will be permanently replaced by a suburban setting. Development will result in the irreversible loss of archaeological and paleontological sites, the loss of biological habitat and the potential loss of biological diversity.
9. ALTERNATIVES TO THE PROPOSED PROJECT

The Draft EIR analyzed five alternatives to the proposed project: No Project; Reduced Density; College Campus; Alternative Site, Willow Springs; and Alternative Site, Quail Lake. A discussion of these alternatives is provided in Section 9 of the Draft EIR.

The EIR concluded that the Reduced Density Alternative was the environmentally superior alternative to the proposed project. This alternative, proposing 3,120 units, would lessen the magnitude of the environmental impacts expected to occur with development of the site. It would not, however, reduce the significant impacts identified with the proposed project to levels of insignificance, in most instances (refer to Table 38 of the Draft EIR).

10. INVENTORY OF MITIGATION MEASURES

A comprehensive list of all the mitigation measures proposed for the project are included in the Draft Mitigation Monitoring Program, presented in Section 12 of the Draft EIR.

11. INVENTORY OF UNAVOIDABLE ADVERSE IMPACTS

The following list of unavoidable adverse impacts are expected to occur should the proposed project be implemented. These impacts can not be mitigated to a level of insignificance with the mitigation measures described in the Draft EIR.

1. The project will contribute to significant cumulative land use impacts, including loss of open space.

2. The proposed project would contribute additional housing to an area which is already rich in housing but poor in employment opportunities. The proposed project’s "housing rich" jobs/housing ratio cannot be fully mitigated and remains a significant unavoidable adverse impact.

3. Implementation of the recommended mitigation measures would reduce many adverse geological impacts; however, they would not eliminate all the significant impacts associated with geologic hazards, specifically hazards associated with a seismic event. Geologic impacts are, therefore, considered unavoidable adverse impacts.

4. The project will contribute to a significant cumulative loss of biological habitat and diversity in the region.
5. Development of the proposed project would add emissions to the already poor regional air quality. Therefore, the proposed project is anticipated to create unavoidable adverse impacts with regard to air quality.

6. The project will contribute to traffic noise along Elizabeth Lake Road. Some areas along Elizabeth Lake Road containing sensitive receptors such as residences and schools may be significantly impacted.

7. Implementation of the proposed project will permanently transform the project site from its currently undeveloped condition into a semi-urban environment. Therefore, the project will have a significant direct and cumulative impact to visual resources.

8. The project will contribute to the cumulative loss of a dark nighttime sky which is considered an unavoidable adverse impact.

9. Development of the project may contribute to potentially significant impacts to groundwater, if in the future, it is determined that the Lancaster subunit cannot support the levels of development in the Antelope Valley.

10. In the event that expansion of the Antelope Valley Landfill does not occur in a timely manner, the project, along with the other surrounding developments, would contribute to cumulative impacts to solid waste disposal.

11. Development of the proposed project, as well as development of the other projects in the vicinity of the project site, could result in a significant impact on police services should the cost of providing Sheriff’s services become prohibitively expensive in the future as to cause a reduction in manpower, facilities or services to the community as a whole.

12. Development of the project site may result in the inadvertent loss of significant paleontological resources.

13. If, in the future, a clear link between proximity to high-voltage electric lines and deleterious health effects is determined, impacts associated with electromagnetic radiation would be significant.
12. EFFECTS NOT FOUND TO BE SIGNIFICANT

The Initial Study for the proposed project, attached as Exhibit A to the EIR, identified two areas which would not be significantly impacted with implementation of the proposed project. The two areas which would not be significantly affected were Natural Resources and Housing. Issues regarding housing were addressed in the EIR per the direction of staff subsequent to the issuance of the Initial Study. The EIR concluded that construction of the project would add dwelling units to an area which was already “housing rich” and would, therefore, result in a significant unavoidable adverse impact.

13. EXHIBITS TO THIS STAFF REPORT

A. Draft EIR (previously transmitted to the Planning Commission)
B. Legal Description of the Project Area
C. Comments on the EIR, Responses to Comments
D. Notice of Completion

RECOMMENDATION

Staff recommends that the Planning Commission:

1. Certify that it has reviewed and considered the Final EIR for the Environmental Impact Report 89-03 (SCH# 89090619) and that the EIR has been completed in compliance with CEQA.

2. Recommend to the Mayor and City Council that EIR 89-03 be certified.

MOTION

If the Planning Commission wishes to recommend certification of the EIR, the following motions should be made:

1. Move that the Planning Commission certify that they have reviewed and considered the Environmental Impact Report 89-03, and the staff report and attachments thereto, for City Ranch Specific Plan, that the document reflects the independent judgement of this Planning Commission, and that the EIR has been completed in compliance with the California Environmental Quality Act; and

2. That the Planning Commission recommends that the Mayor and City Council certify EIR 89-03 for City Ranch Specific Plan.
Exhibit A to this staff report is the Draft EIR prepared for the project, dated October 1, 1991. This document has been previously circulated.
EXHIBIT B

LEGAL DESCRIPTION OF THE PROJECT AREA
CITY RANCH SPECIFIC PLAN

THOSE PORTIONS OF SECTION 29, 30, 31 AND 32 ALL OF TOWNSHIP 5
NORTH, RANGE 12 WEST, IN THE COUNTY OF LOS ANGELES, STATE OF
CALIFORNIA, OFFICIAL RECORD. DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTH WEST CORNER OF SAID SECTION 31,
THENCE NORTH 00 DEGREES 00 MINUTE 07 SECONDS WEST A DISTANCE OF
2625.36 FEET;

THENCE NORTH 00 DEGREES 26 MINUTES 44 SECONDS WEST A DISTANCE OF
2628.52 FEET;

THENCE SOUTH 89 DEGREES 26 MINUTES 57 SECONDS EAST A DISTANCE OF
2654.12 FEET;

THENCE NORTH 01 DEGREES 19 MINUTES 29 SECONDS WEST A DISTANCE OF
2629.99 FEET;

THENCE NORTH 89 DEGREES 18 MINUTES 07 SECONDS WEST A DISTANCE OF
2601.96 FEET;

THENCE NORTH 03 DEGREES 40 MINUTES 41 SECONDS WEST A DISTANCE OF
1327.16 FEET;

THENCE SOUTH 89 DEGREES 09 MINUTES 47 SECONDS EAST A DISTANCE OF
2656.72 FEET;

THENCE SOUTH 89 DEGREES 09 MINUTES 48 SECONDS EAST A DISTANCE OF
2696.76 FEET;

THENCE NORTH 00 DEGREES 42 MINUTES 26 SECONDS WEST A DISTANCE OF
123.87 FEET;

THENCE SOUTH 84 DEGREES 28 MINUTES 03 SECONDS EAST A DISTANCE OF
2173.23 FEET;

TO THE BEGINNING OF A 500.00 FOOT TANGENT CURVE, CONCAVE TO THE
NORTH;

THENCE EASTERLY, ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 54
DEGREES 36 MINUTES 24 SECONDS AN ARC DISTANCE OF 476.53 FEET:
THENCE TANGENT TO SAID CURVE, NORTH 40 DEGREES 55 MINUTES 11 SECONDS EAST A DISTANCE OF 549.80 FEET;

TO THE BEGINNING OF A 500.00 FOOT TANGENT CURVE, CONCAVE TO THE SOUTHEAST;

THENCE NORTHEASTERLY, ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 34 DEGREES 19 MINUTES 25 SECONDS AN ARC DISTANCE OF 299.53 FEET;

THENCE TANGENT TO SAID CURVE, NORTH 75 DEGREES 14 MINUTES 58 SECONDS EAST A DISTANCE OF 585.29 FEET;

TO THE BEGINNING OF 1000.00 FOOT TANGENT CURVE, CONCAVE TO THE NORTHWEST;

THENCE NORTHEASTERLY, ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 18 DEGREES 36 MINUTES 40 SECONDS AN ARC DISTANCE OF 324.83 FEET;

THENCE TANGENT TO SAID CURVE, NORTH 56 DEGREES 38 MINUTES 18 SECONDS EAST A DISTANCE OF 532.73 FEET;

TO THE BEGINNING OF A 500.00 FOOT TANGENT CURVE, CONCAVE TO THE SOUTH;

THENCE EASTERLY, ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 33 DEGREES 07 MINUTES 30 SECONDS AN ARC DISTANCE OF 289.07 FEET;

THENCE TANGENT TO SAID CURVE, NORTH 89 DEGREES 45 MINUTES 48 SECONDS EAST A DISTANCE OF 496.14 FEET;

THENCE SOUTH 00 DEGREES 54 MINUTES 52 SECONDS EAST A DISTANCE OF 2617.53 FEET;

THENCE SOUTH 00 DEGREES 53 MINUTES 03 SECONDS EAST A DISTANCE OF 2617.05 FEET;

THENCE SOUTH 00 DEGREES 01 MINUTES 49 SECONDS EAST A DISTANCE OF 2649.98 FEET;

THENCE SOUTH 00 DEGREES 00 MINUTES 21 SECONDS WEST A DISTANCE OF 2649.81 FEET;

THENCE NORTH 89 DEGREES 30 MINUTES 56 SECONDS WEST A DISTANCE OF 2662.10 FEET;

THENCE NORTH 89 DEGREES 31 MINUTES 26 SECONDS WEST A DISTANCE OF 2638.92 FEET;

THENCE NORTH 89 DEGREES 30 MINUTES 13 SECONDS WEST A DISTANCE OF 2638.84 FEET;

THENCE NORTH 89 DEGREES 30 MINUTES 15 SECONDS WEST A DISTANCE OF 2655.92 FEET;

TO THE POINT OF BEGINNING.
EXHIBIT C

COMMENTS
AND RESPONSES TO COMMENTS
RECEIVED ON THE DRAFT EIR

Copies of the comments are attached; the responses to comments are still being prepared and will be transmitted to the Planning Commission at a later date.
In order to eliminate duplicate information, the information contained in Exhibit C of the Planning Commission staff report is now located in Attachment IX of the City Council Staff Report.
EXHIBIT D

NOTICE OF COMPLETION
MEMORANDUM

TO: All Interested Parties
FROM: Planning Department
SUBJECT: REQUEST FOR REVIEW OF THE DRAFT EIR 89-03, CITY RANCH SOUTH SPECIFIC PLAN DRAFT EIR.
DATE: October 4, 1991

The attached Draft Environmental Impact Report 89-03, prepared for City Ranch Specific Plan, has been forwarded to you for review and comment. Comments will be received by the Planning Department for 45 days from the date shown above. Comments should be directed to: Laurie Lile, City of Palmdale Planning Department, 38306 9th Street East, Palmdale, CA 93550 or telephone (805) 272-9613.

Copies sent to:
City of Palmdale
City Council (5)
Planning Commission (5)
City Administrator
Planning Director
Building and Safety Director
City Engineer
Traffic Engineer
City Geologist
Emergency Services Coordinator
Parks and Recreation Director
Public Works Director
City Attorney's Office
Case Planner
Environmental Planner
Planning Counter Copy
City Hall Counter Copy
Library

County of Los Angeles
L.A. Co. Dept. of Public Works
L.A. Co. Regional Planning
L.A. Co. Sheriff's Dept.
L.A. Co. Fire Dept.

State Agencies
State Clearinghouse
Caltrans
Native American Heritage Com.
RWQCB Lahontan Region
Department of Water Resources
Waste Management Board
Air Resources Board
Department of Fish and Game

School Districts
Palmdale School District
Westside Union School District
Antelope Valley Union High School District

Federal Agencies
U.S. Fish and Wildlife Service
U.S. Forest Service
Army Corps of Engineers
Utilities/Services

Antelope Valley Transit
Antelope Valley Landfill
Southern California Edison
Southern California Gas
Pacific Bell
A.V. Water Purveyors Association
L.A. Co. Sanitation Districts
L.A. Co. Water Works Districts
Antelope Valley/East Kern (AVEK) Water Agency

Other

City of Lancaster
City of Santa Clarita
Leona Valley Town Council
Southern California Association of Governments
South Coast AQMD
UCLA Archaeological Survey Office
A.V. Archaeological Society
San Bernardino County Museum
West A.V. Historical Society
Palmdale Community Association
Palmdale Chamber of Commerce
Palmdale Board of Realtors
Applicant
ATTACHMENT V:

Staff Report to the Planning Commission
Dated January 15, 1992, for General Plan Amendment 91-4,
Prezone 89-06, and Specific Plan 89-03.
REQUEST:

A proposed General Plan Amendment, Pre-Zone, Specific Plan and Development Agreement to establish land use and development standards and to provide for infrastructure planning and financing for 5,250 residential units, 42 acres of neighborhood commercial and public facilities on approximately 1,985 acres of land.

Location:

The project is generally located south of Elizabeth Lake Road, east of the alignment of 40th Street West, north of the alignment of Avenue S. and west of 20th Street West.

Assessor's Parcel Number(s):

See attached legal description prepared for the project area.

Applicant:

Kaufman and Broad of Southern California, Inc.
38345-A 30th St. East
Palmdale, CA 93550

Owner:

Same as above

Staff Recommendation:

That the Planning Commission consider the proposed General Plan Amendment 91-4, Pre-Zone 89-06, Specific Plan 89-3 and Development Agreement, open the public hearing, and continue the item to a specified date and time.

Existing Zoning:

L.A. County A-2-2

General Plan:

The existing General Plan land use designation is City Ranch Specific Plan (3 du/ac) with individual planning area land use designations.

Existing Land Use:

The City Ranch site is primarily vacant. Cattle grazing occurs on a seasonal basis.
SURROUNDING LAND USES

<table>
<thead>
<tr>
<th>Direction</th>
<th>Existing Land Use</th>
<th>Existing Zoning</th>
<th>Existing General Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>North</td>
<td>Single family residences, vacant residential property, open space.</td>
<td>RPD-3U</td>
<td>Urban Residential, Open Space</td>
</tr>
<tr>
<td>South</td>
<td>Vacant land</td>
<td>L.A. County A-2-2</td>
<td>L.A. County Non-Urban 1, City of Palmdale Non-Urban (1 du/10ac)</td>
</tr>
<tr>
<td>East</td>
<td>Landfill, vacant residential land, single family residences</td>
<td>L.A. County A-2-2, City of Palmdale A-1, R-1</td>
<td>Urban Residential, Suburban Residential, Open Space, Non-Urban</td>
</tr>
<tr>
<td>West</td>
<td>Vacant land (proposed Ritter Ranch Specific Plan, .68/ac)</td>
<td>L.A. County A-2-2</td>
<td>L.A. County Non-Urban 1</td>
</tr>
</tbody>
</table>

I. BACKGROUND

Pre-Zone, Specific Plan, Development Agreement applications and the initial Screencheck Specific Plan document were submitted to the City for review on July 29, 1989.

In September, 1990 the Planning Commission initiated a General Plan Amendment for the Specific Plan Area.

On April 11, 1991, the City Council adopted Resolution 91-61 requesting that the Local Agency Formation Commission (LAFCO) amend the City's Sphere of Influence to include the entire City Ranch Specific Plan area. On August 14, 1991, the Local Agency Formation Commission (LAFCO) formally amended the City's Sphere of Influence to include the City Ranch Specific Plan property. The project site is located outside the incorporated boundaries of the City. Annexation 1989-06 was initiated by the City Council on July 19, 1991, but has not yet been approved by LAFCO.

On May 5, 1991 a final screencheck of the City Ranch Specific Plan was submitted to staff for review and revision. After intensive review by all affected departments, the Specific Plan was sent back to the consultant for final revision. The Draft
Specific Plan document was resubmitted on August 1, 1991. The Draft Specific Plan document was formally released for public review on August 20, 1991. The Environmental Impact Report was formally released for a 45-day review period on October 3, 1991 (ending November 18, 1991).

II. SUMMARY OF STAFF REPORT

This staff report specifically addresses the Pre-zone, General Plan Amendment and Specific Plan document. The City Ranch Development Agreement will also be reviewed; however, the final text of the agreement has not been completed at this time. A copy of the Agreement and a supplemental staff report will be forwarded to the Commission for review when the draft agreement is finalized. As with the Commission's action on Ritter Ranch, staff would recommend the Commission's recommendation on the General Plan Amendment, Pre-zone and/or the Specific Plan be contingent upon approval of the Development Agreement.

Issues relative to Prezone 89-06 and General Plan Amendment are discussed in Section III of the report. A summary of significant impacts as identified in the draft EIR for this project is contained on page 38 of this staff report, for reference.

Section IV, the main body of the report, addresses issues related to the Specific Plan document. The focus of discussion is the Specific Plan design. Recommended modifications to the specific plan text are also included. Issues related to fiscal impacts are not addressed, because the final report has not been submitted by the applicant. The Fiscal Impact Report is expected to be submitted within the next few days. Staff will forward a copy of the report and a supplemental staff report to the Commission when available.

The environmental section of the report (section V) contains a review of the significant impacts generated by the specific plan and a discussion of possible bases for Statements of Overriding Considerations. As can be expected for a project of this size, there are a number of significant impacts that cannot be mitigated to a level of insignificance. The final terms of the Development Agreement will be critical in determining if the benefits of the project outweigh the significant impacts.

III. GENERAL PLAN AMENDMENT AND PREZONE

A. General Plan Amendment 91-4

On September 6, 1990, at the request of Kaufman and Broad, the Planning Commission voted to initiate a
General Plan Amendment (GPA) for the City Ranch property.

At present, the City Ranch property is within the Planning Area of the current General Plan and has a City of Palmdale designation of City Ranch Specific Plan Max Density 3 du/acre. Additionally, the Land Use Map indicates planning areas and densities within the boundaries of the specific plan.

The planning areas and densities currently shown on the Land Use Map are not consistent with the current Draft Specific Plan. General Plan Amendment 91-4 is a request to modify the General Plan Land Use Map to: 1) eliminate the designation of the individual planning areas on the General Plan Land Use Map; and 2) redesignate the site to City Ranch Specific Plan Max. Density 2.62 du/acre. The density of 2.62 du/acre is consistent with the density proposed under the Specific Plan and would allow a maximum of 5,200 dwelling units. Additionally, the elimination of the individual planning areas from the map would allow the transfer of units under the provisions of the Specific Plan without the necessity of future General Plan Amendments.

General Plan Amendment 91-4 is consistent with the current General Plan and Land Use map and is proposed as a "clean-up" to the map rather than a substantive change. The designation remains consistent with the goals, policies and objectives of the General Plan, proposed adjacent land uses and would ultimately result in a potential net decrease in density (from 3 du/ac to 2.62 du/ac). The Specific Plan document does contain a policy by policy analysis of General Plan consistency.

Staff has not included findings for GPA 91-4 within this report. An addendum will be provided upon the determination of the Planning Commission that the GPA is consistent with the applicable General Plan policies, for reference in adopting the final resolution.

B. Pre-Zone 89-06

The 1.985 acres included within the City Ranch Specific Plan area is currently not located within the City of Palmdale. In order to facilitate annexation of this property, a pre-zoning of the site must be approved be approved by the City.

Pre-Zone 89-06 is a request to pre-zone the area included within Annexation 1989-06 (City Ranch) from Los Angeles County A-2-2 to City of Palmdale City Ranch Specific Plan. The pre-zone would bring the property into
conformance with the General Plan designation proposed under GPA 91-4, as required by State Law. Additionally, the designation will allow the continued processing of the Specific Plan (consistent with the proposed zoning designation) and ultimately allow the annexation request to be forwarded to the LAFCO for final deliberation.

Staff has not included findings for PZ 89-06 in this report. An addendum will be provided upon the determination of the Planning Commission that PZ 89-06 is consistent with proposed GPA 91-4, for reference in the resolution.

IV. SPECIFIC PLAN

A. Structure of the Specific Plan Document

Following is a brief summary of the components of the City Ranch Specific Plan document. A discussion of various issues associated with the project area is contained in part B of this section. The Specific Plan is organized into seven chapters as follows:

1. Executive Summary

This chapter provides an overview of the project's proposed land use plan, location, setting and various site constraints impacting the property. Additionally, the project's goals, objectives and policies are discussed as they relate to the City's General Plan requirements regarding land use, circulation, housing, public services and utilities, design, noise, and public safety. These goals, objectives, and policies further define the planning approach to the project area and also outline how various issues will be addressed in the Specific Plan.

2. Introduction

This chapter addresses the governmental requirements for the preparation, content and adoption of specific plans, citing specifically the governmental code sections authorising local jurisdictions to adopt such plans as a tool for implementing the General Plan. This chapter further discusses the project's location and the plan's conformance with CEQA (California Environmental Quality Act). The relationship of the Specific Plan to other regulations is also identified.

The chapter also identifies the targeted home buyer and describes housing characteristics proposed within
the proposed project. A complete site analysis of the project area, including an examination of existing land use, zoning, general plan, topography, and slope, geology, seismic analysis, biological resources, archaeological and paleontological resources and existing circulation, is also included along with an identification of site constraints.

3. General Plan Conformance

Chapter 5 of the Specific Plan discusses the plan's conformance with the currently adopted General Plan, including consistency with the goals, policies and objectives of each General Plan element.

4. Development Plan

As discussed in the development plan chapter, the plan includes the land use concept, vehicular and pedestrian circulation concepts, the open space and recreation plan, residential densities and commercial square footages, the grading concept, and infrastructure (including drainage, water and sewerage). Additionally, issues relating to the Antelope Valley Landfill expansion and the Southern California Edison Base Station are discussed.

5. Development Standards

This chapter contains the development standards for the City Ranch Specific Plan, including land uses (permitted, accessory, conditional, etc.) and regulations such as setbacks, and minimum lot size, are established for each land use category. Regulations governing parking, signage, grading general regulations are also contained within this chapter.

6. Design Guidelines

This chapter contains design guidelines to govern all uses within the plan area. The guidelines address issues such as community design, open space and recreation concepts, landscape design, fencing and wall design, residential site planning for single family detached, attached and multiple family units; exterior building colors, commercial design guidelines and trail standards. This chapter describes specific design requirements which all subsequent projects proposed in the Specific Plan area must incorporate into their design in order to be consistent with the objectives of the Specific Plan.
7. Implementation

The document concludes with implementation procedures for the City Ranch Specific Plan and subsequent projects within the plan area boundaries. Governmental processing issues such as annexation, general plan amendments, the environmental analysis (EIR) and development agreements are discussed. Review procedures for subsequent development applications are outlined with required findings stated. The proposed phasing of the Specific Plan area is also outlined in this section.

Several disclosures are contained in this chapter relating to potential hazards which may be associated with residential occupancy of the project area. Another implementation procedure also discussed in this section is the transfer of dwelling units. A chart outlining the maximum number of permitted units and the procedures for allowing transfers of units are also provided in this section. Lastly, the developer proposes several sources of financing which are potentially available for financing infrastructure and public facilities.

B. Staff Analysis

The City Ranch Specific Plan and Development Agreement proposes to govern all aspects of development of the City Ranch property. The area involves over 1,785 acres of land and at project build-out will have a population of approximately 14,000 residents. The Specific Plan area is divided into a total of 35 Planning Areas. The Environmental Impact Report identifies thirteen significant impacts which will occur as a result of approval of this project (See page 38). The development of this site will change the land use of the property from that of undeveloped seasonal cattle-grazing land to a fully developed suburban community featuring residential, commercial, open space, park, school and public facility uses. Additionally, a complete network of arterial, collector and neighborhood streets will provide a circulation network linking to regional roadways. Staff has identified four major issues of discussion regarding the proposal, which are addressed in the following sections of this report.

1. Issue: Specific Plan Design

The City Ranch Specific Plan is primarily designed for residential land uses, although supportive uses are being proposed, including a fire station, a golf
course, a public works maintenance facility, several school and park sites, two commercial sites, and natural open space. The California Aqueduct bisects the site, creating both design opportunities and constraints. Site topography is variable, with a low ridgeline separating Planning Areas 1 and 5 from the core development area to the south. Much of the central area is flat, with terrain steepening in the southerly planning areas at the base of the Sierra Pelona mountains.

Although there are some environmental conditions on this project that are similar to those evaluated under the Ritter Ranch Plan, there are differences between the two projects in terms of land use and design. For example, there are no established rural communities adjacent to this development, minimizing land use compatibility issues. Grading issues are pertinent, although impacted topographic features are less significant than those within the Ritter Ranch Plan. Nonetheless, significant grading will occur in certain planning areas. The grading proposed in Planning Area 8 and the limits of grading in Planning Areas 17, 19A, and 31 will be further discussed in this report.

Aside from the environmental issues that pertain to this site, staff believes the primary planning issues relate to the distribution and intensity of land uses and their integration into a cohesive community. In that respect, the land use plan reflects a conventional approach to community design. The plan is dominated by single family detached uses, although several planning areas contain significant numbers of single family attached units. Multifamily uses are limited to one planning area. The commercial, designated planning areas, are located on the periphery of the project area, rather than in a central location.

The most challenging design issue for a project of this type is integration of the various land use components into a cohesive community that will meet the needs of its residents as it builds out. In that respect, the potential lack of a central commercial facilities should be considered. The larger commercial area located at Bridge Road and Elizabeth Lake Road is physically isolated from the main development area by a low ridgeline. Although bicycle and pedestrian trails provide a linkage, it is a distant one. However, staff notes that the physical separation of that planning area from residential uses minimizes compatibility problems.
The absence of a central commercial area in City Ranch will be less problematic if the Ranch Center area in Ritter Ranch is ultimately developed. Due to its proximity to City Ranch, the Ranch Center would provide an important commercial center for residents of City Ranch. Without the Ranch Center, City Ranch would lack core facilities that could normally be expected for a community of approximately 14,000 at build out.

Planning Area 13 provides a neighborhood commercial area on the eastern perimeter of the Specific Plan. Because it directly abuts single family detached uses, it is important that proper buffer techniques are utilized. As currently drafted, there is little in the Specific Plan to address this interface area. To address this issue, concepts such as single loaded streets separating commercial and residential uses, transitional densities, open space buffers, or a combination of these measures should be considered. Should the Commission concur, staff can work with the applicant to add appropriate text to the Specific Plan to accomplish an effective transitional buffer.

The City Ranch Plan as drafted does not provide much variation in respect to mixing of land uses and residential densities. In essence, the plan consists of large planning areas each containing a single use type. With single family detached being the most prevalent development type in the City, the preponderance of single family detached within the central area of the Specific Plan would be consistent with City trends and the outlying nature of this site. However, the plan may benefit from greater variation. The City and the applicant have discussed the merits of the larger open space buffer of single family detached units in Planning Areas 21 and 22, which would allow approximately 1,000 units on 108 acres. Densities would range up to 10 units per acre. Townhouses containing multiple units and duplex type development can be expected in these areas. Modified small lot single family development concepts including 2 lots and zero lot line may also be allowed in this category. It may be desirable to consider dispersing some of the multiple family products throughout some of the other planning areas, particularly where they can be utilized to establish land use transitions and buffer areas.

In respect to the SFA standards and guidelines that are provided in the plan, the plan provides some design guidelines to ensure that developments in
these areas are well designed. Nonetheless, the Commission should consider the merits of grouping many units of this type into such a large area. Because many of the housing types possible in SFA are compatible with single family detached, there is the potential for integration of this housing type into a less segregated neighborhood concept with single family detached. Although it is not being suggested that such uses be mixed within a block or small neighborhood, it is feasible to integrate and transition SFA and SFD uses in a larger neighborhood concept. This would provide greater variation to neighborhoods, and in conjunction with integration of school and park sites, would serve to break up the massing of large, undifferentiated expanses of single produce type development.

Site constraints and natural topography should be considered in evaluating certain planning areas. For example, the community park/open space areas in Planning Areas 1 and 35 and the golf course site are both highly impacted by the San Andreas fault. In respect to Planning Areas 1 and 9, the location of Planning Area 10 (SFD, 53 units maximum) will constrain overall park design. The Parks Director has commented on the need to modify this arrangement. To allow for continuity of park design, these units should be transferred elsewhere in the plan.

In summary, staff generally finds the overall design of the Specific Plan to be adequate. The plan is clearly functional as currently proposed. Nonetheless, there are alternative design concepts that should be evaluated, particularly in regard to siting of commercial facilities, the need to consider providing greater variation to large planning areas, including a reduction in the size of the SFA designated areas, elimination or transfer of units out of the small single family detached area that is surrounded by the community park site, and the extent of grading that will be required in the vicinity of the golf course. These issues are further addressed in the analysis section.

2. Issue: Land Use Plan

Open Space and Recreation

The City Ranch Specific Plan proposes a variety of open space and recreational land uses and an
off-street trail system consisting of equestrian, hiking and bicycling trails. These trails all provide a regional trail link with the master trail plan currently being drafted by the City. The various recreational land uses can, for the purposes of evaluation, be classified into three categories: natural open space, golf course and neighborhood/community parks.

1) Natural Open Space

The Specific Plan proposes to retain over 400 acres, including Planning Areas 1, 2, 7, 26, 29 and 32 as permanent natural open space. The applicant proposes to offer these areas to the City. Maintenance responsibilities for these areas as well as all land uses in the Specific Plan area are discussed in Section IV of the Specific Plan document. The plan proposes that the City of Palmdale would be responsible for maintenance of those planning areas it accepts dedication of. Areas not accepted by the City would be the responsibility of a homeowner's association, assessment district or entity other than the City of Palmdale. Since the open space land use designation generally permits relatively low intensity land uses such trails and parks, no compatibility issues are anticipated in this category. However, there are various issues which affect certain Planning Areas and should be considered.

Planning Area 1 consists of approximately 55 acres of generally flat open space land. This area would potentially allow for the expansion of the community park that directly abuts the site to the east. The majority of Planning Area 1 is impacted by the San Andreas fault zone; however, approximately 2.9 acres of land located on the western portion of the planning area, is appropriate for habitable structures. This portion of Planning Area 1 is proposed to be used for a City of Palmdale maintenance facility. This facility would serve the City Ranch project and adjacent areas. The Public Works Department has tentatively approved the general location of the site for this facility and has indicated that approximately ten (10) acres should be provided. Staff would recommend redesignating the ten (10) acres required for the maintenance facility to Community Facility designation, to provide a land use designation reflective of the proposed use.

Planning Areas 26, 29 and 32 provide a total of approximately 300 acres of open space land. This area consisting of hillside slopes predominantly
above 25 percent. These areas link to off-site if of similar topography which may provide opportunity for a regional open space network in the future. If the City assumes responsibility for such areas, the costs of maintenance will need to be weighed against the public access benefit. Land use compatibility with off-site areas to the south will ultimately be determined when the Sagebrush/Facton Specific Plan and other adjacent properties are developed. It is expected that similar land uses will be proposed on those properties.

2) Golf Course

Planning Areas 4 and 13, consisting of over 200 acres, are proposed as an 18 hole golf course. The golf course design is conceptual at this time; therefore, specific design information is not available for review. The final design of the golf course will require the Commission's approval of a conditional use permit.

Site constraints which may affect the design of the course include the San Andreas Fault zone, slopes over 25 percent and wetlands. Additionally, City Ranch Road bisects Planning Area 13, separating the golf course into two separate areas. A geotechnical study has determined that approximately 1.9 acres of land located in Planning Area 4 would be suitable for the construction of a club house and related facilities. The study further indicates that a golf course is generally considered compatible with areas impacted by fault zones. Portions of the golf course contain slopes above 25 percent and will require grading. Grading regulations for the golf course area are contained in Section V, page V-69 of the Specific Plan. A wetlands area is located in that portion of Planning Area 13 south of City Ranch Road. The Specific Plan states that any proposed alteration to the wetland area shall comply with all requirements of Fish and Game, the U.S. Army Corp of Engineers and the City of Falmouth.

The North Side Equestrian Trail alignment currently bisects Planning Area 13. The proposed trail has been realigned to run along the south side of City Ranch Road, in order to provide a continuous regional trail link through the Specific Plan area. Staff feels that the proposed realignment of the trail provides separation from the golf course area and conceptually offers an acceptable alignment.
3) Neighborhood and Community Parks

A total of 104 acres are designated for active park uses in the Specific Plan area. Four neighborhood parks (ranging in size from 3.8 to 33 acres) and one community park (51 acres) are proposed throughout the project site. The plan also designates 55 acres of open space area (Planning Area 1) as potential expansion area for the community park.

The Specific Plan requires approximately 70 acres of active park land based on the City standard of 5 acres per 1,000 persons. While the Specific Plan currently states that it is in excess of the required acreage, site constraints such as the San Andreas fault zone and the Southern California Edison easement significantly impact a large portion of the total park acreage. Given these site impacts, staff feels that the placement and configuration of the community park (Planning Area 9) and one of the neighborhood parks (Planning Area 18) should be re-evaluated.

In Planning Area 9, 51.9 acres are proposed as community park. Since the San Andreas Fault zone bisects the site, approximately 10 acres of the site is appropriate for habitable park structures such as recreational buildings, gymnasiums and pool buildings (See Exhibit 43A). The remainder of the park site would be used for play fields, basketball courts, tot lots and other uses not restricted in a fault zone area. Staff has concerns regarding the design constraints that the fault area will have on the ultimate placement of park facilities. As currently shown on Exhibit 43A, it will be necessary to cluster all the habitable structures on the eastern portion of the site, largely separated from the remainder of the park. The Director of the Parks and Recreation Department has indicated that the proposed conceptual design of the park area is not desirable since ultimate placement of facilities will be limited and portions of the park may be difficult for park rangers to monitor.

Another issue relative to the design of this community park is land use interface with Planning Area 10, which proposes 53 single family units (minimum 7,000 sq. ft. lots) on 21 gross acres. This planning area is surrounded by the community park on three sides. Interface and nuisance problems such as noise, light, loitering and parking could affect residents in Planning Area 10. Staff would recommend the elimination of residential uses in Planning Area
10 and a redesignation of this planning area as Community Park. By redesignating Planning Area 10 as Community Park, a total of 14 acres of buildable area would be added to the park and would allow for improved and safer park design. Redesignating Planning Area 10 would eliminate 53 single family detached units. The overall number of units in the Specific Plan area could be transferred to another Planning Area.

Planning Area 10 is proposed as a neighborhood park consisting of 33 acres, located within and along the Southern California Edison Easement. Exhibit 14B in the Specific Plan shows a conceptual park design for the easement area. However, a recent park design presentation has been revised to show only turf area within the easement. Southern California Edison restricts other uses in the easement areas, such as structures, parking lots, and similar facilities. The Specific Plan provides approximately 9 acres of parkland distributed in 3 separate areas along and outside of the easement. Although these areas are not impacted by easement use restrictions, they are separated from each other and do not allow for the efficient placement of park facilities. For this reason, the Director of Parks and Recreation has indicated that the design of this park is not desirable as proposed. As an alternative, it is proposed to designate a location which would permit joint use with the elementary school (Planning Area 19B) and which would additionally buffer the school from the Southern California Edison easement.

The Commission has recently expressed concern regarding the designation of power line easement areas for active use park facilities. The Commission discussed such issues as the liability, health and maintenance ramifications associated with park uses in such areas. In the Ritter Ranch Specific Plan, easement areas were redesignated to open space and not counted in the total parkland acreage. Staff recommends that the areas within the easement be designated as an natural open space area containing only native vegetation and hiking trails and that remaining 9 acres be relocated south of the easement. The area in the easement would not be counted as active parkland and the maintenance for the area could then be assigned to a homeowner's association or other entity approved by the City.

School Sites:

A total of 4 elementary school sites are currently identified in the Specific Plan. The project site is
located within the jurisdictional boundaries of the Westside Union School District, Palmdale School District, and the Antelope Valley Union High School District. Three of the proposed elementary school sites range in size from 8 to 10 acres (located in Planning Areas 11, 30B, and 19B) and will serve the residents in the Westside Union School District Planning Area 25, consisting of 10 acres, will serve residents in the Palmdale School District. Both school districts have approved the proposed school sites and sizes as generally acceptable.

Westside Union District has indicated that it is acceptable for the school sites to contain less than 10 acres in size (the District’s standard) if located in combination with a park. The Specific Plan currently proposes neighborhood parks next to the three Westside Union school sites with the intent of providing joint use. Staff has concerns regarding the ability of Planning Area 19B (the easement park) to permit joint use facilities as envisioned by the school district. As discussed above, staff has recommended relocating the park along the southern boundary of the easement to provide for improved park design and to buffer the school from the easement. The relocation of the park would additionally serve to permit joint use with the elementary school. Staff would recommend that the following statement be added to the Specific Plan to clarify that elementary school sites may only be less than 10 acres if provided in joint use with an adjoining park and approved by the applicable school district.

"All school sites shall be 10 gross acres in size unless provided in combination with a fully developed neighborhood park. In such case, school sites may be 8 and 9 acres in size if approved by the applicable school district and the Director of Parks and Recreation."

The Antelope Valley Union High School District school has indicated that students generated from the Ritter Ranch and City Ranch Specific Plans combined will necessitate a new high school site. The District has indicated that the City Ranch Specific Plan will require 21 acres to mitigate its impact on the High School District. The District has further indicated that a portion of Planning Area 14 would provide an acceptable area for a portion of the high school site. Planning Area 14 consists of 24 acres proposed for single family attached uses. The Planning Area directly abuts the Ritter Ranch High School overlay site (Planning Unit 5X) and has acceptable site
characteristics. If the majority of the planning area were developed as a high school use, the C Ranch Specific Plan area would lose 21 acres of single family attached development (210 SFA units). However, the entire Planning Area would not be affected by the designation of a high school overlay. A total of 50 single family attached units would still be permitted on the remaining 5 acres of the Planning Area. The 210 SFA units that would be lost could be redesignated to other Planning Areas in order to maintain the Specific Plan's overall unit count. Staff would recommend that a high school overlay be designated in this Planning Area and that language be added to the document dealing with the transfer or redesignation of units to other areas should the high school district ultimately acquire this site. The High School overlay would not prohibit the development of the single family attached units as proposed, in the event the High School District chooses not to locate the high school site in this area.

Commercial

A total of 42 acres is designated for commercial uses in the Specific Plan area. A 32 acre commercial site (Planning Area 3) is located at the southeast intersection of Elizabeth Lake Road and Bridge Road. The site will have high visibility from Elizabeth Lake Road and from the residential development directly to the north. However, since similar suburban type of development has occurred adjacent to the site, the visual impact associated with development of the site should not be significant. Barring and landscaping combined with architectural design should effectively screen and reduce the visual or aesthetic impacts of any development proposed in this area.

The site is impacted by the San Andreas Fault zone. Therefore, the site design for a subsequent commercial center may be somewhat constrained (See Exhibit 22D of the Specific Plan). The Specific Plan indicates that the required parking and landscaping would potentially be located in areas impacted by the fault zone, while the buildable portions of the site would be developed with habitable buildings and structures. The design of the commercial center is only conceptual at this time and will require subsequent development review.
Residential

The Specific Plan proposes a variety of lot sizes, densities and housing types. Residential land uses consist of single family detached (3,523 units), single family attached (1,634 units) and multiple family (313) dwelling types. Following is a discussion of the three residential land use designations.

Multiple Family

Multiple family residential comprises approximately 1% of the Specific Plan area and 6% of the proposed residential units. Product types permitted in this designation include townhomes, condominiums and stacked units. Planning Area 12, consisting of 21 acres, is the only planning area proposed for multiple family units. Portions of Planning Area 12 are impacted by restricted use fault zones, and are proposed for parking and landscaping, with the remaining unrestricted portions for habitable structures. The highest residential densities in this Specific Plan area, consist of approximately 15 du/acre gross. Planning Area 12 is located in close proximity to an elementary school and two parks, thereby providing pedestrian access to recreational and educational facilities. Additionally, the site directly abuts Bridge Road providing excellent north/south access through the project area. Slope in this area is generally less than 10% percent. The visual analysis prepared for the project site indicates that this planning area will not result in off-site visual impacts.

Single Family Attached

Planning Areas 14, 15, 21 and 23 are proposed as single family attached residential areas. This designation constitutes 8% of the Specific Plan area and 31% percent of the proposed residential units. In some areas, it will serve as a transitional land use between the multiple family and single family detached type housing. Housing types in these areas will include attached townhomes, clustered detached single family homes within a condominium form of common space ownership, and other housing types of a similar nature and density. The Specific Plan indicates that sites were chosen for single family attached uses which were relatively flat (less than 10 percent slope), had primary access to major arterial roads and were not visible from developed
off-site areas. While a variety of product types permitted in this land use designation, the Specific Plan does not limit or specify the number of units of one product type that could be constructed within any planning area.

Staff's primary concern regarding this land use designation is the large number of single family attached units proposed within Planning Areas 21 and 23. Over 1,000 single family attached units (minimum lot size 3,500 sq. ft.) are proposed to be located in these two areas. The single family attached standards as specified in the Specific Plan permit several product types including attached multifamily and small lot single family detached units. As previously discussed, there is no limitation on how many units of one product type could be built in each planning area. Potentially, 1,000 attached units of the same product type could be proposed. Since the lotting concepts proposed for this Planning Areas 21 and 23 have not been presented, the ultimate design of these areas is unknown. The potential exists for the area to be very densely developed. While reducing the number of units would not necessarily guarantee a better residential design, the redesigning of these planning areas with a variety of residential uses and/or the incorporation of additional pedestrian green belts or recreational amenities should be considered as alternatives to promoting improved residential design. Consideration should be given to redesignating portions of these planning areas (P.A. 20, 21, 21.23 and 24) to lower density residential land uses and integrating some of the attached units into other planning areas to reduce the homogeneity of product types.

Single Family Detached

The single family detached land use category comprises over 43% of the Specific Plan area and 63% of the proposed residential units. Planning Areas 5, 6, 8, 10, 16, 17, 19A, 20, 24, 27, 28A, 30A and 31 are proposed for single family detached land uses. Two single family detached residential zones with corresponding minimum lot sizes are proposed. In areas of gentle to moderate slopes which are not prominently visible, the minimum lot size will be 7,000 square feet. In prominent areas and areas of 15 to 25 percent slopes, the minimum lot size will be 10,000 square feet. Exhibit 13A (Development Standards Designations) illustrates the minimum lot size applicable to each single family detached planning area.
The majority of the single family residential development will occur on relatively flat topography. Grading of areas in excess of 25% slope will occur in isolated pockets of Planning Areas 17, 19A and 21. Standards governing the grading of slopes above 25% percent are contained on page V-69 of the Specific Plan. Additionally, those portions of Planning Areas 20, 21, 22, 23 and 24 adjacent to the California Aqueduct are proposed for grading in order to mitigate any potential flood inundation which could occur in the event of an aqueduct failure.

Staff has concerns regarding the proposed grading and design concepts proposed in Planning Area 8, where approximately 277 single family units (minimum lot size 7,000 sq. ft.) are proposed. This area is geographically located in a small valley situated between two low ridges. The grading concept proposes to fill the valley area to provide view lots over the golf course. Several faults bisect the northern and southern portions of Planning Area 8. Areas impacted by faults (See Exhibit 22 B) are proposed to be used as non-habitable portions of individual residential lots and/or for roadways. The most northern portion of this area are located approximately 1,000 feet from the future landfill expansion area.

Staff’s concerns relate to the development concepts proposed for this Area. The General Plan states that “Physical land use development should be carefully integrated into the natural environment (e.g., hillside development should respect natural contours rather than utilizing massive grading to reshape the site).” Compliance of this design concept with this policy should be evaluated given the substantial filling and reshaping proposed for this area. Additionally, the owner of the landfill is currently processing a conditional use permit through the County to expand the landfill capacity. It appears, based upon analysis of the On-site Visual Analysis (Exhibit 10), that the landfill may be highly visible from Planning Area 8. The Planning Area is located over 1,000 feet from the landfill; however, the potential exists for interface problems to occur. The Specific Plan requires that a disclosure of the proximity of the landfill facility be made to buyers of property located within 1,200 feet of the landfill.

Lastly, in regard to Planning Area 8, the Commission has previously discussed the suitability of allowing primary access streets to be constructed over active
fault zones. In reviewing the conceptual design of the Planning Area on Exhibit 22B, it is apparent that access possibilities are somewhat limited due to topography and narrow design of this Planning Area. Street access to Planning Areas 5 and 10 will also cross active fault zones. If it is the intent of the Commission to limit access roads over active fault areas, it would be appropriate to add a statement to the Specific Plan to address this issue.

There is a potential for on-site land use interface issues to occur in Planning Areas 6, 8, 17, 19A, 27, 28A and 31, since residents will be residing in close proximity to major open space areas. Wildlife may pose a nuisance (coyotes and raccoons scavenging garbage cans, etc.) to the residents living there. Planning Areas which abut open space areas are also subject to increased risk of wildfire hazards. The Specific Plan requires the incorporation of fuel modification zones (to provide for brush clearing in conformance with Los Angeles County Fire Department Standards) around development areas and prohibits the use of wood shake roofs to lessen wildfire hazards; however, some risk may still be present.

Public Facilities

Planning Area 34 is proposed as a one acre fire station site. The general location of the site has been approved by the Los Angeles County Fire Department. The fire station facility design has not been submitted to the City for review, so impacts on surrounding residential land uses cannot be fully assessed at this time. The fire station will require approval of a conditional use permit, and specific design and compatibility issues will be addressed during that review process.

3. Issue: Access to Adjacent Properties

The Sagebrush/Facton Specific Plan area is proposed south of Planning Areas 27 and 28A. Single family detached residential uses similar to the City Ranch project are proposed in this area. Future access to the Sagebrush property and other properties to the south will be provided through three street access points located in these Planning Areas. Subsequent tentative tract maps proposed in these Planning Areas will be required to incorporate these street access points. Phasing of access in not addressed in the Specific Plan. It is the position of the City that this is a private matter to be resolved between the applicant and the adjacent property owner.
within existing public rights of way or property to be acquired by
DISTRICT, subject to approval of AGREEMENT by DISTRICT'S Board
Directors and approval of plans and specifications by the Los Angeles
County Director of Public Works or the Assistant Deputy Director
charge of DISTRICT or his designee.

In order to provide water transmission capacity for future development
 certain elements of PROJECT will be oversized beyond the capacity
 needed to serve DEVELOPMENTS contemplated by BUILDER and PARTICIPANTS
 DISTRICT agrees that BUILDER is entitled to reimbursement for the
cost of this oversizing, and will enter into separate reimbursement
agreements with BUILDER pursuant to which DISTRICT will not provide
water service to any property benefited by such oversizing or issue a
will serve letter in respect of any such future developments, until
such time as the owner of the future development has contributed its
proportionate share of the cost of PROJECT, as adjusted per the
reimbursement agreements.

D. To complete PROJECT (see Exhibit B) pursuant to DISTRICT approved plans
and specifications will require BUILDER to perform the following:

1. Payment for portion of the existing AVEX turnout at Avenue O-4 and
   10th Street West (portion is equivalent to 2cfs allocation of the
   19 cfs available).

2. Participate in expansion of the existing Avenue P and 10th Street
   West pumping station (portion is equivelant to 2 cfs of the 16 cfs
   total available capacity).

3. Oversize, to 24-inch diameter, the water transmission main at
   Elizabeth Lake Road from 10th Street West to 20th Street West.

4. Install 24-inch diameter water transmission main in Elizabeth Lake
   Road from 20th Street West to 25th Street West.

5. Install 36-inch diameter water transmission main in 25th Street West
   from Avenue P to Elizabeth Lake Road.

6. Oversize the in-tract water main to 16-inch diameter in Barrington
   Street, Elder Creek Court, Alexander Avenue, Cottonwood Court,
   Redington Street, Avenue P-12 (Loop) and in Avenue P-8 (72 feet
   west of 25th Street West).

7. Oversize, to 12-inch diameter, the in-tract water main in Avenue P-8
   from approximately 72 feet west of 25th Street West to Hubbard
   Street.

8. Install 20-inch diameter water transmission main from Loop to
   Reservoirs.

9. Grade reservoir site, construct one 2,500,000 gallon and one
   1,500,000 gallon welded steel reservoirs, install on-site and
   off-site piping and appurtenances (Reservoirs).
E. The proposed service area for PROJECT is all the lands within City Limits. Construction of PROJECT is to take place on or upon public or privately owned property. As such, BUILDER with the approval of DISTRICT and on behalf of DISTRICT, shall purchase the necessary right of way to construct and maintain PROJECT. Nothing in AGREEMENT shall be construed as limiting usage of PROJECT only to DEVELOPMENTS.

F. DISTRICT imposes four types of water supply charges on new construction in its service areas. DISTRICT shall credit the funds contributed by BUILDER and PARTICIPANT to BUILDER'S or PARTICIPANT'S Acres Charges and Tank Capacity Unit Charges. In the event BUILDER'S or PARTICIPANT'S share of the cost of the design and construction of PROJECT is less than the total of Tank Capacity Unit Charges and Acres Charges attributable to their DEVELOPMENT, DISTRICT reserves the right to bill BUILDER and PARTICIPANT for the difference between the respective shares of the cost of PROJECT and the total of Tank Capacity Unit Charges plus Acres Charges applicable to their respective DEVELOPMENT. Tank Capacity Unit Charges and Acres Charges for PARTICIPANTS shall be those in effect at the time of PARTICIPANT's execution of sub-agreement with BUILDER. Tank Capacity Unit Charges and Acres Charges for BUILDER shall be those in effect at the time of BUILDER'S execution of AGREEMENT. All other applicable water supply charges shall be paid by BUILDER and PARTICIPANT to DISTRICT and BUILDER or PARTICIPANT shall be required to develop their DEVELOPMENT. The four types of water supply charges imposed by DISTRICT are set forth below:

1. ACREAGE CHARGES - Acreage charges are based on property usage and fire-flow protection requirements and are computed on a gross acreage basis (see attached Exhibit C). BUILDER and PARTICIPANT shall receive credit against Acreage Charges for their financial participation in the design and construction of PROJECT.

<table>
<thead>
<tr>
<th>Fire Flow at 20 psi</th>
<th>Duration</th>
<th>Charge Per Acre</th>
<th>(GPM)</th>
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<td>1251 to 1750</td>
<td>2 hours</td>
<td>$1,459</td>
<td>Normal Residential Requirement</td>
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<tr>
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<td>Lowest Commercial Requirement</td>
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<td>4251 to 5000</td>
<td>5 hours</td>
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<td>Highest Commercial Requirement</td>
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</tbody>
</table>

2. TANK CAPACITY UNIT CHARGES - Tank Capacity Unit Charges are based on domestic water demands and fire-flow projection requirements (see attached Exhibit D). These charges are calculated by multiplying Domestic Water Service Billing Units times Fire Flow Demand Units. BUILDER and PARTICIPANT will receive credit against Tank Capacity Unit Charges for their financial participation in the design and construction of PROJECT.

(AGMT 95) 1/91 Page 3 of 15
3. FRONTAGE CHARGES - Frontage Charges are based on benefited footage, required fire-flow and the size of the water main which fire-flow is to be available (see attached Exhibit). DISTRICT shall accept fronting water mains to be installed part of PROJECT by BUILDER or by PARTICIPANTS as part of the DEVELOPMENTS in lieu of the Frontage Charges.

4. WATER SYSTEM ENGINEERING CHARGES - These charges are made by DISTRICT to review developments, establish water system construction requirements, check plans and other documents needed for development to carry out their construction work, inspect the construction work, process water service applications and inspect the installation service connections and meters. These charges will be invoiced to BUILDER and PARTICIPANT prior to plan check and inspection of the development and processing of water service applications. There will be no Water System Engineering Charges for PROJECT.

G. The Antelope Valley-East Kern Water Agency (hereinafter "AVEK") impose a charge (called the FACILITY CAPACITY FEE) upon DISTRICT customers in order to finance the construction of AVEK's capital facilities which are necessary to meet supplemental water supply demands created by DISTRICT and its customers.

This charge shall be applied to any subdivision which had not receive final approval of the subdivision map by the appropriate government entity on or before June 1, 1990 and to any commercial or industrial development which did not have a scheduled hearing date on or before June 1, 1990 for its conditional use permit or site approval.

This charge is set at $1,791 per equivalent dwelling unit during calendar year 1991. AVEK has processed through the State an amendment to its Act which allows it to invoice and collect the Facility Capacity Fee.

H. DISTRICT has determined PROJECT as described in Recital D is require to provide additional water supplies of both California Aqueduct water and well water to serve approximately 1,975 single-family residences in the equivalent in commercial/industrial development.

I. BUILDER shall engage a private engineer, registered in the State of California (hereinafter "ENGINEER") to prepare the construction plan for PROJECT. The plans, specifications, cost estimate and per unit charge for PROJECT shall be reviewed and approved by DISTRICT prior to the commencement of construction.

J. The contractor's work must be approved by DISTRICT as set forth herein. Therefore, DISTRICT'S Lancaster office shall be contacted prior to beginning any work on PROJECT. Failure to do so may result in rejection of any work not inspected by DISTRICT.

K. BUILDER is to receive an administrative/overhead fee equal to eight percent (8%) of the total cost of PROJECT (excluding, however, the acquisition cost of land for the water storage reservoirs and other rights-of-way). The estimated cost of PROJECT, as presently planned is as follows:

(AGMT 95) 1/91
1. Participate in expansion of the Avenue P and 10th Street West Pumping Station (portion is equivalent to 2 cfs allocation of the 19 cfs total). $33,100

2. Upsize, to 24-inch diameter, the water transmission main in Elizabeth Lake Road from 10th Street West to 20th Street West. 100.

3. Install 24-inch diameter water transmission main in Elizabeth Lake Road from 20th Street West to 25th Street West. 62,900

4. Install 36-inch diameter water transmission main in 25th Street West from Avenue P to Elizabeth Lake Road. 83,100

5. Upsize, to 16-inch diameter, the in-tract water main in Barrington Street, Cottonwood Court, Elder Creek Court, Alexander Avenue, Redington Street, Avenue P-12 (Loop) and Avenue P-8 West (to approximately 72 feet west of 25th Street West). 128,800

6. Install 20-inch diameter water transmission main from Loop to Reservoir. 47,600

7. Upsize, to 12-inch diameter, the in-tract water main in Avenue P-8 from approximately 72 feet west of 25th Street West to Hubbard Street. 31,500

8. Grade reservoir site, construct one 2,500,000 gallon and one 1,500,000 gallon welded steel reservoirs, install on-site and off-site piping and appurtenances (Reservoir). 2,000,000

Estimated Construction Cost (ECC) $2,538,900

9. Contingencies (15% of ECC) $380,500

Subtotal $2,917,400

10. Final design engineering and inspection (10%). $291,800

11. Preliminary engineering services including surveying, geology, soils, water system studies and agreements. 140,000

12. Legal fees for OWR/LACHRO No. 34 Reservoir Access Road Joint Use Agreement. 10,000
13. Payment for portion of AVEK turnout at Avenue O-4 and 10th Street West (portion is equivalent to 2 cfs allocation). $22,500

Subtotal of PROJECT Costs $3,389,726

14. BUILDER's Administrative Fee (8% of Subtotal of PROJECT Costs). $271,274

15. Land for Water Storage Reservoirs and Right-of-Way Costs. $230,000

Total PROJECT Costs* $3,951,200

**Final costs to be determined from actual engineering, construction, acquisition, rights of way and other expenses and costs to BUILDER.

AGREEMENT

NOW, THEREFORE, intending to be legally bound, the parties hereto covenant and agree as follows:

1. FUNDING OF PROJECT CONSTRUCTION AND OPENING OF ESCROW ACCOUNT

1.1 Term

AGREEMENT shall expire at the end of ten (10) years, beginning with date AGREEMENT is entered into.

1.2 Opening of Escrow Account and Number of PARTICIPANTS

Within forty-five (45) business days after DISTRICT signs AGREEMENT, BUILDER will establish, at a reliable financial institution in California, an interest-bearing escrow account (hereinafter "ESCROW ACCOUNT") for PROJECT by submission to the financial institution a copy of AGREEMENT. BUILDER will deposit into said ESCROW ACCOUNT funds as letter of credit of BUILDER and all funds and letters of credit receive from PARTICIPANTS. DISTRICT shall allocate to BUILDER a total of 1,37 water units for PROJECT. BUILDER shall provide DISTRICT with a list of BUILDER'S and PARTICIPANT'S DEVELOPMENTS for PROJECT so that DISTRICT may keep accurate records of water units sold for PROJECT.

1.3 Construction Funds

All funds in ESCROW ACCOUNT shall be used to pay the legal fees, rights of way processing and acquisition costs, construction costs, engineering, pavement repairs, permit fees, inspections and any reasonable charges incurred by BUILDER in the construction of PROJECT and BUILDER'S administrative/overhead fee, which shall equal eight percent (8%) of the total cost of PROJECT excluding land and
rights-of-way acquisition costs. BUILDER shall submit血脉 invoices to DISTRICT for approval of disbursements from ESCROW ACCOUNT. From time to time, as monies are needed for the payment of PROJECT expenses, in addition to initial cash deposits made by BUILDER and PARTICIPANTS, BUILDER will send invoices to PARTICIPANTS in the amount of their respective pro-rata shares of the amount of PROJECT expenses. BUILDER will deposit in ESCROW ACCOUNT (1) BUILDER'S administrative/overhead fee, (2) all payments made by PARTICIPANTS of their pro-rata shares of the amount of PROJECT expenses. A PARTICIPANT who pays into ESCROW ACCOUNT must provide DISTRICT in proof of said payment by means of a receipt from the financial institution. Each receipt shall be accompanied by the specific address(es) of properties for which escrow deposits have been made as well as the total amount of escrow deposits which BUILDER PARTICIPANT will then submit to DISTRICT. Supporting invoices and such other appropriate documentation as may be required by DISTRICT will be required from BUILDER before funds held in ESCROW ACCOUNT can be disbursed. All payments from ESCROW ACCOUNT or reimbursements of expenses for BUILDER'S costs must be signed by BUILDER administrator and by the Assistant Deputy Director in charge of DISTRICT, the Director of Public Works or his designee. Any interest earned on the funds held in ESCROW ACCOUNT shall accrue to pay for all costs associated with the construction of PROJECT. Any residual funds remaining in ESCROW ACCOUNT after completion of PROJECT and payment of all PROJECT costs shall be returned to BUILDER and PARTICIPANTS based on the pro-rata contribution to PROJECT of BUILDER and PARTICIPANTS. BUILDER'S and PARTICIPANT'S pro-rata contribution shall equal a fraction, the numerator of which shall equal the number of water units purchased by BUILDER or PARTICIPANT and the denominator of which shall equal 1975. The product realized by multiplying the fraction by the total amount of funds remaining in ESCROW ACCOUNT shall equal the amount of funds to be distributed to BUILDER and PARTICIPANTS.

1.4 Escrow Instructions

Escrow instructions for PROJECT shall incorporate AGREEMENT to shall provide that BUILDER shall be entitled to withdraw BUILDER'S administrative/overhead fee from ESCROW ACCOUNT as other costs are paid from ESCROW ACCOUNT. Such escrow instructions shall also provide that in the event any letter of credit deposited in ESCROW ACCOUNT has not been extended or replaced within thirty days prior to its date of expiry, or upon receipt of a written statement signed by BUILDER certifying that a PARTICIPANT has failed either to replace letter of credit timely prior to its date of expiry, or to make payment as required by the terms of PARTICIPANT'S sub-agreement with BUILDER, escrow holder will, within five business days thereafter (but in no event later than the date of expiry of the letter of credit), draw the maximum amount permitted under the letter of credit and will hold the proceeds of such drawing in ESCROW ACCOUNT in lieu of such PARTICIPANT'S letter of credit.
Escrow for PROJECT shall terminate upon: (1) the expiration or performance period of AGREEMENT per Section 2.4; or (2) completion of PROJECT and acceptance by DISTRICT of PROJECT for which ESCROW ACCOUNT was established. In the event of default by BUILDER, as prov. herein, escrow may terminate at the option of DISTRICT, after notice been given in accordance with the terms of Section 5 herein and subject to the provisions of Section 2.7. Escrow instructions shall provide that in the event DISTRICT terminates the escrow due to BUILDER default, any and all funds remaining in ESCROW ACCOUNT shall (subject to the provisions of Section 1.3) become the property of DISTRICT and shall be used by DISTRICT solely to construct all or any remaining portion of PROJECT. In the event of BUILDER’S default, DISTRICT shall assume all responsibility for the completion of PROJECT. BUILDER’S default shall not impair, infringe upon or compromise BUILDER’S or PARTICIPANT'S rights to receive a statement of water availability or well serve fees from DISTRICT for the number of water units purchased by BUILDER or PARTICIPANTS from DISTRICT under the terms of AGREEMENT.

2. BUILDER’S DUTIES

2.1 Cost of PROJECT

BUILDER shall pay all costs associated with PROJECT by using funds from ESCROW ACCOUNT as stipulated in Section 1 of AGREEMENT.

2.2 Construction of PROJECT

BUILDER shall construct or cause to be constructed PROJECT, as set forth in Recital 0, to the standards and specifications of DISTRICT.

2.3 Performance of Work

The contracts for PROJECT shall be between BUILDER and its contractor. BUILDER shall cause its contractor to commence construction as diligently as practicable to the construction of PROJECT to completion. BUILDER shall be responsible for supervision of its contractor’s work so that PROJECT is constructed expeditiously, in a workmanlike manner and in substantial accord with the plans, specifications and permit requirements. BUILDER will inform DISTRICT’S Lancaster office when construction of PROJECT is to commence so that DISTRICT, its employees, representatives or agents may review the construction and progress of work. Construction of PROJECT shall be deemed substantially complete when DISTRICT has approved the construction and testing of PROJECT.

BUILDER shall make all reasonable efforts to ensure that its contracts fully comply with all laws regarding employment of aliens and others, and that all employees performing services hereunder meet citizenship or alien status requirements contained in Federal and State statutes and regulations including, but not limited to, the Immigration Reform and Control Act of 1986 (P.L. 99-603). BUILDER’S contracts shall obtain, from all covered employees performing services hereunder.
all verification and other documentation of employment and regulatory coverage currently exist and as they may be hereafter amended. BUILDER shall require its contractor to retain such documentation for
DEFEND and hold HARMLESS DISTRICT, its officers and employees from employer sanctions or any other liability which may be assessed on
DISTRICT in connection with any alleged violation of federal statutes, regulations pertaining to the eligibility for employment of person
performing services under AGREEMENT.

2.4 Performance Period

BUILDER shall complete construction of PROJECT within three (3) years beginning with the date AGREEMENT is entered into.

In the event BUILDER'S diligent performance of the construction of PROJECT is prevented or impaired by circumstances beyond its control and not foreseeable by BUILDER (e.g., labor strike, inability to obtain materials because of strikes, economic conditions causing delays in construction of PROJECT etc.), BUILDER may apply to DISTRICT for an extension of the completion date of PROJECT. Said extension shall not be unreasonably withheld by DISTRICT.

In addition, in the event BUILDER is unable to secure commitments from sufficient number of PARTICIPANTS to pay for the entire cost of PROJECT, BUILDER may apply to DISTRICT for an extension of the completion date with respect to the portion of PROJECT involving the construction of the 1,500,000 gallon reservoir and related appurtenances; consent to said request will not be unreasonably withheld by DISTRICT and DISTRICT will not condition statements of water availability or well serve letter or the provision of water service to BUILDER or PARTICIPANTS on completion of construction of the 1,500,000 gallon reservoir.

2.5 Change Orders

BUILDER shall issue no change order relating to construction of PROJECT without prior written approval of DISTRICT. If approved, additional time may be granted to BUILDER so the change order construction will be properly completed.

2.6 Dedication of Facilities

Upon completion of the construction and payment of all bills for construction, materials, engineering, pavement repairs, permits and related costs of PROJECT, BUILDER shall, in writing, dedicate PROJECT to DISTRICT. DISTRICT shall accept the dedication of PROJECT as promptly as practicable following BUILDER'S offer of dedication and shall maintain and operate PROJECT after said acceptance at DISTRICT'S sole cost and expense. Nothing in AGREEMENT shall be construed as limiting DISTRICT'S usage of PROJECT to any specific single-family residential or commercial/industrial development.
2.7 Default

In the event of BUILDER'S default during construction of PROJECT, DISTRICT shall notify BUILDER in writing of the default and describe the nature of the default. BUILDER shall have thirty (30) days from receipt of DISTRICT'S notice of default to cure the default (or if the default cannot be cured within thirty (30) days, BUILDER shall cease to cure the default within the 30-day period and diligently proceed the cure to completion thereafter) to DISTRICT'S satisfaction. BUILDER fails to cure (or commence to cure) the default, any and all funds remaining in ESCROW ACCOUNT for PROJECT shall become the proper of DISTRICT and shall be used by DISTRICT solely to construct the remaining portion of PROJECT. BUILDER'S default shall not impair infringe upon or compromise BUILDER'S or PARTICIPANT'S right to receive a statement of water availability or will-sure letter from DISTRICT for the number of water units purchased by BUILDER or PARTICIPANT under the terms of AGREEMENT.

2.8 Water Distribution Plans for BUILDER'S and PARTICIPANT'S DEVELOPMENTS

BUILDER and PARTICIPANTS shall have water distribution plans for DEVELOPMENTS prepared by a registered engineer and shall submit said plans showing the Fire Department's requirements to DISTRICT for review and approval. The plans shall be subject to all DISTRICT charges for these developments minus those funds contributed to BUILDER and PARTICIPANTS to the costs of PROJECT. These contributions shall be credited against BUILDER'S and PARTICIPANT'S Tank Cistern Unit Charges and Accrue Charges. Upon completion of PROJECT, BUILDER will supply DISTRICT with a full accounting of costs so that DISTRICT may credit BUILDER'S and PARTICIPANT'S Tank Capacity Unit and Accrue Charges and determine if any additional charges are due to DEVELOPMENTS.

3. DISTRICT ISSUANCE OF STATEMENT OF WATER AVAILABILITY AND WILL-SERVE LETTER

As consideration for BUILDER'S and PARTICIPANT'S contributions toward construction of PROJECT, DISTRICT shall immediately issue to BUILDER and PARTICIPANTS a conditional statement of water availability sufficient to satisfy the requirements of the City of Palmdale or Los Angeles County with respect to evidence of water availability for purposes of grant or conditional approval of any tentative tract map. Such statements of water availability shall state that BUILDER and PARTICIPANTS will receive credit against Accrue Charges and Tank Capacity Unit Charge to the extent of their financial participation in the design and construction of PROJECT, and that DISTRICT will issue conditional will-sure letters for water service contingent upon: (1) DISTRICT verification of PARTICIPANT'S participation in PROJECT; and (2) approval by DISTRICT of BUILDER'S and PARTICIPANT'S water distribution system for DEVELOPMENTS, and that, upon satisfaction of the conditions contained therein, DISTRICT will provide water service to DEVELOPMENTS.
4. TERMINATION OF AGREEMENT

AGREEMENT shall terminate and be of no further force and effect as the first to occur of the following: (1) the expiration of the term limit of AGREEMENT; (2) all the water units have been sold and PRICE has been completed, inspected and accepted by DISTRICT, PARTICIPANTS have subscribed for all water units in excess of BUILDER'S, and BUILDER has issued conditional statements of water availability for BUILDER and all PARTICIPANTS.

5. NOTICE AND APPROVALS

Any approval, disapproval, demand, document or other notice ("Notice") which either party may desire to give to the other party must be written and may be given by personal delivery, overnight mail, courier, or by United States Registered or Certified Mail return receipt requested to the party to whom Notice is directed at the address set forth below or at any other address as the parties may later designate in writing:

TO BUILDER: Kaufman and Broad of Southern California, Inc.
38345-A 30th Street East
Palmdale, California 93550

TO DISTRICT: Los Angeles County Waterworks
District No. 34, Desert View Highlands
900 South Fremont Avenue, 9th Floor
Alhambra, California 91803

6. ADMINISTRATION

BUILDER agrees that it shall promptly designate an Administrator to administer and carry out the provisions of AGREEMENT. BUILDER also agrees that it will not hold DISTRICT liable for any actions or failures to act by BUILDER'S Administrator, engineer or employees.

7. FORCE MAJEURE

All parties hereto shall comply with the time limitations set forth in AGREEMENT provided, however, that said time limitations may be extended for a period or periods of time equal to any period of delay caused by strikes, lockouts, fire or other casualty, the elements or Acts of God, refusal or failure of governmental authorities or public utilities to grant necessary approvals, authorizations, and/or permits for the construction of PROJECT contemplated hereunder (the parties agreeing to use reasonable diligence to procure the same with dispatch) or other causes, unforeseen and beyond their reasonable control.
8. INSURANCE

The Builder shall cause its contractors or subcontractors to purchase and maintain at their own expense the forms and amounts of insurance set forth below. Such insurance shall be provided by insurance satisfactory to the District and evidence of such programs shall be delivered to the District on or before the commencement of construction of the Project. Such evidence shall specifically identify the Agreement and shall contain express conditions that the District is to be given written notice by Registered Mail at least thirty (30) days in advance of any modification or termination of any program of insurance.

Failure on the part of the Builder to cause its contractors or subcontractors to procure and maintain required insurance shall constitute a material breach of contract upon which the District may immediately terminate or suspend the Agreement or purchase and charge the Builder for any insurance.

8.1 Liability

Such insurance shall be primary to and not contributing with any other insurance maintained by the District or the County of Los Angeles, or name the Los Angeles County Waterworks District No. 34, Desert Vicinity, and the County of Los Angeles as additional insureds, as shall include, but not be limited to:

1. Comprehensive General Liability insurance endorsed for Premises-Operations, Products/Completed Operations, Explosion Underwater and Collapse, Contractual, Broad Form Property Damage and Personal Injury with a combined single limit of less than $1,000,000 per occurrence.

2. Comprehensive Auto Liability insurance endorsed for all owned, non-owned, leased and hired vehicles with combined single limit of at least $500,000 per occurrence.

8.2 Worker’s Compensation

A program of Worker’s Compensation insurance shall be maintained in an amount and form to meet all applicable requirements of the Labor Code of the State of California, including Employers Liability with a $500,000 limit, covering all persons providing service on behalf of the Builder for all risks to such persons under the Agreement.

8.3 Property Damage

Builder’s All Risk Insurance, including flood and earthquake coverage covering the entire work against loss or damage shall be maintained. Insurance shall be an amount equal to the replacement cost of the subject construction and improvements and endorsed for broad form property damage. Deductibles not exceeding five percent (5%) of the construction cost and ten percent (10%) for earthquake will be permitted.
3.4 **BUILDER'S Indemnification**

BUILDER agrees to indemnify, defend and save harmless DISTRICT and the County of Los Angeles, and DISTRICT'S agents, officers and employees from and against any and all liability, expense (including costs and legal fees), and claims for damages of any nature whatsoever, including, but not limited to claims for bodily injury, death, or property damage arising from any negligent act or omission, or reckless or willful misconduct, of BUILDER in connection with the construction of PROJECT, or from workers' compensation claims made by employees of BUILDER. The foregoing indemnifications do not apply in the event that it is determined that the injury or damage in question was caused by the negligent act or omission, or reckless or willful misconduct of DISTRICT, the County of Los Angeles or any of the agents, officers or employees of either.

9. **ATTORNEY'S FEES**

Should any party or parties hereto institute any action or proceeding in court to enforce any provision hereof, for declaratory or similar relief or for damages by reason of alleged breach by another party of any provision of AGREEMENT, the prevailing party in such action shall be entitled to recover from the other party(s) its reasonable costs including attorney's fees and court costs.

10. **NO WAIVER**

Failure of a party to insist upon strict and punctual performance of any covenant, conditions or other provisions of AGREEMENT or of any instrument or other writing herein provided for, shall constitute a waiver of, or estoppel against, that party's right to require such performance. In addition, a waiver by any of the parties of any failure by another party to perform as required by any instrument or other writing provided for herein shall not be deemed to be waiver of any preceding or succeeding breach of the same or of any other covenant, condition or provision, including, without limitation, the time for performance thereof.

11. **GOVERNING LAW**

AGREEMENT and any instrument, certificate or other writing herein provided for shall be governed by and construed and enforced in accordance with the laws of the State of California and shall be interpreted according to their fair meaning and not in favor of or against any party.

12. **INVALIDITY**

Nothing contained in AGREEMENT or in any instrument, certificate or other writing herein provided for shall be construed to require the commission of any act contrary to law, and wherever there is any
conflict between any provision of AGREEMENT or of any instrument, certificate or other writing herein provided for and any code, statute, law, ordinance or regulation contrary to which the parties have no legal right to contract, the statute shall prevail. Notwithstanding the preceding sentence, in the event that any such provision shall be invalid, illegal, or unenforceable, the provisions so affected shall be curtailed and limited to the extent necessary to bring it within the legal requirements. The remainder of that provision and of the other provisions of AGREEMENT and of any instrument, certificate or other writing herein provided for shall continue in full force and effect and shall in no way be affected impaired or invalidated, and the parties shall immediately employ the best efforts in good faith to negotiate a valid provision to substitute for the invalidated one.

13. AMENDMENTS

AGREEMENT may be amended, modified, superseded or canceled at the option of the parties, in their respective discretion and at their cost and expense, only by written instrument executed in writing by the parties;

14. COUNTERPARTS

AGREEMENT and any amendment or supplement hereto, and any document to be executed and delivered hereunder, may be executed in any number of counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument; provided, however, that such counterparts, in the aggregate, shall have been executed by the parties.

15. PARTIES IN INTEREST

Each and every provision contained herein shall be binding upon and shall inure to the benefit of the parties, their respective assigns and successors in interest, whether said assigns and successors be private parties or public entities. Both parties shall require that their respective assigns and successors in interest are to be bound and to uphold each and every provision of AGREEMENT.
IN WITNESS WHEREOF, the parties hereto have caused AGREEMENT to be executed by their respective officers, duly authorized by Kaufman and Broad of Southern California, Inc., on January 15, 1991 and by the LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 34, DESERT VIEW HIGHLANDS on February 12, 1991.

ADOPTED
BOARD OF SUPERVISORS
COUNTY OF LOS ANGELES

45 FEB 12 1991

By: 
President

By: 
Asst. Secretary

KAUFMAN AND BROAD OF SOUTHERN CALIFORNIA, INC.

By: 
CHAIRMAN OF THE BOARD OF SUPERVISORS OF THE COUNTY OF LOS ANGELES AS THE GOVERNING BODY THEREOF

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 34, DESERT VIEW HIGHLANDS

APPROVED AS TO FORM: 
LAWYER W. CLINTON
County Counsel

ATTEST: 
LARRY J. MONTEILH
Executive Office-Clerk of the Board of Supervisors

By: 
Deputy

(AGMT 99) 1/91
Page 15 of 15
RULE 4-A-11 WATERWORKS DISTRICT NO. 33 - SUN VILLAGE: (Continued)

3. All lands lying within the boundaries of the area of the District known as the former area of service of the former water purveyors listed following this part of this subrule, including all lands fronting, backing, or siding on the water mains of the water system acquired by the District from said water purveyors, receive no credit pursuant to Rule 1-1-2d against the Capital Improvement Charges remaining after consideration of credits applicable, pursuant to said Rule 1-1-2a, b, and c. Rule 1-A-49 shall also apply.

<table>
<thead>
<tr>
<th>Water Purveyor</th>
<th>B/S Agreement No.</th>
<th>Date Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sun Village Water &amp; Improvement Co.</td>
<td>7980</td>
<td>March 19, 1964</td>
</tr>
<tr>
<td>Shadow Mountain Mutual Water Co.</td>
<td>9371</td>
<td>April 20, 1965</td>
</tr>
<tr>
<td>Sunnyvale Mutual Water Company</td>
<td>9918</td>
<td>May 11, 1965</td>
</tr>
<tr>
<td>Antelope Canyons Mutual Water Co.</td>
<td>9790</td>
<td>July 13, 1965</td>
</tr>
<tr>
<td>Little Rock Farms/Prosit, Inc.</td>
<td>33350</td>
<td>October 10, 1970</td>
</tr>
</tbody>
</table>

4-A-1m WATERWORKS DISTRICT NO. 34 - DESERT VIEW HIGHLANDS:

1. All lands lying within the boundaries of Waterworks District No. 34, as of July 1, 1966 and for which the Waterworks District has, at any time prior to July 1, 1966, provided water service or for which the Waterworks District was as of July 1, 1966, providing water service, are hereby deemed not to be subject to the Capital Improvement (acreage) Charges of said Waterworks District, except as stated in the first paragraph of Rule 4-A-1 and Rule 1-A-49 and any applicable parts of this subrule.

4-A-11 Added 8/68, Rev. 4/22/75, 2/1/77-Sch. 41R, 10/10/78, 5/29/79-Sch. 62, 8/18/81-Sch. 66, 8/3/82-Sch. 67A, 8/2/83-Sch. 68, 9/4/84-Sch. 73

4-A-11 Renumbered Para. 2 to Para. 3 and Rev. 9/4/84-Sch. 73.

4-A-1m Added 8/68, Rev. 8/69, 4/22/75, 6/13/78-Sch. 53, 5/29/79-Sch. 62, 8/18/81-Sch. 66, 8/3/82-Sch. 67A, 8/2/83-Sch. 68, New Para. 1 and Rev. 9/4/84-Sch. 73

4-A-1m Renumbered Para. 1 to Para. 2 and Rev. 9/4/84-Sch. 73, 8/13/85-Sch. 78

(WWDO3189) 1/50 - 417 - C-1
PART 4 - SCHEDULE OF WATER SUPPLY CHARGES (Continued)
SECTION A - CAPITAL IMPROVEMENT CHARGES (Continued)

RULE 4-A-1m WATERWORKS DISTRICT NO. 34 - DESERT VIEW HIGHLANDS:
(Continued)

2. All lands lying within the boundaries of Waterworks District No. 34, as of July 1, 1966, not previously provided with water service prior to July 1, 1966, or not being provided with water service as of July 1, 1966 by the District, and lying outside of the areas defined in Part 3 of this subrule are hereby subject to a Capital Improvement Charge as follows, except as stated in Rule 1-A-49, less applicable credits defined in Rule 1-I-2c. No credit pursuant to Rule 1-I-2a and d is applicable to the lands of the area defined in Part 2 of this subrule.

a. Lands where there is no fire flow requirement for the premises, per acre ............... $1,287.00

b. Lands where the fire flow requirement of the premises is:

<table>
<thead>
<tr>
<th>Fire Flow @ 20 psi (gpm)</th>
<th>Duration</th>
<th>Charge Per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 750</td>
<td>2 Hours</td>
<td>$1,334.00</td>
</tr>
<tr>
<td>751 to 1,250</td>
<td>2 Hours</td>
<td>$1,192.00</td>
</tr>
<tr>
<td>1,251 to 1,750</td>
<td>2 Hours</td>
<td>$1,159.00</td>
</tr>
<tr>
<td>1,751 to 2,250</td>
<td>2 Hours</td>
<td>$1,119.00</td>
</tr>
<tr>
<td>2,251 to 2,750</td>
<td>2 Hours</td>
<td>$1,085.00</td>
</tr>
<tr>
<td>2,751 to 3,250</td>
<td>3 Hours</td>
<td>$1,046.00</td>
</tr>
<tr>
<td>3,251 to 3,750</td>
<td>3 Hours</td>
<td>$1,013.00</td>
</tr>
<tr>
<td>3,751 to 4,250</td>
<td>4 Hours</td>
<td>$972.00</td>
</tr>
<tr>
<td>4,251 to 5,000</td>
<td>5 Hours</td>
<td>$917.00</td>
</tr>
</tbody>
</table>

For other conditions of fire flow and duration, the per acre charge will be based on an engineering estimate of costs.

4-A-1m Added 8/06, Rev. 8/09, 4/22/75, 6/13/78-Sch. 53, 5/29/79-Sch. 62, 8/18/81-Sch. 66, 8/3/82-Sch. 67A, 8/2/83-Sch. 68, 9/4/84-Sch. 73
4-A-1m Renumbered Para. 1 to Para. 2 and Rev. 9/4/84-Sch. 73, 8/13/85-Sch. 75
4-A-1m Renumbered Para. 2 to Para. 3 and Rev. 9/4/84-Sch. 73
4-A-1m Added and revised Para. 2 9-02-86, Exhibit 78

(WOD3189) 1/90 - 418 -
C - 2
4. All lands not previously served with water service within or annexing to the District or presently served and requesting a larger metered service and/or require a greater fire protection capability shall be subject to a Capital Improvement (Tank Capacity Unit) Charge, in addition to the Capital Improvement (Acreage) Charge defined elsewhere in this Rule. The only ones exempt from this charge are developers of lands who enter into formal agreements with the District to construct water storage, conveyance or well facilities and their appurtenances.

The Capital Improvement (Tank Capacity Unit) Charge for upgrading an existing metered service from the smaller to the larger size will be the difference in the Tank Capacity Units represented by the existing meter and the new meter multiplied by the calculated dollar amount of the charge.

The Capital Improvement (Tank Capacity Unit) Charge for a new service will be the Billing Units for the respective size of the metered service multiplied by the fire flow demand units (see table) times the calculated dollar amount of the Capital Improvement (Tank Capacity Unit) Charge.

This charge shall remain in effect until changed by the Board of Directors of the District. No credits shall be given for this charge.

The initial calculated dollar amount for those developments not entering into agreements with the District shall be $480 per Tank Capacity Unit.

The dollar amount per tank capacity unit for negotiated agreements between developers and the District shall be set by the District Engineer and approved by the Board of Directors.
**DOMESTIC AND FIRE SPRINKLER METERS**

| Water Size (Inches) | Meter Flow (gpm) | Billing Units (B.U.) | Fire Flows (Public or Private-on-Site)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4 x 1 &amp; smaller</td>
<td>10 &amp; less</td>
<td>1</td>
<td>0 - 500 2 60 1.0</td>
</tr>
<tr>
<td>1</td>
<td>20</td>
<td>2</td>
<td>601 - 700 2 60 1.5</td>
</tr>
<tr>
<td>1 1/2</td>
<td>100</td>
<td>3</td>
<td>751 - 1,000 2 120 2.0</td>
</tr>
<tr>
<td>2</td>
<td>150</td>
<td>4</td>
<td>1,001 - 1,250 2 150 2.5</td>
</tr>
<tr>
<td>4</td>
<td>1,000</td>
<td>5</td>
<td>1,251 - 1,500 2 150 2.5</td>
</tr>
<tr>
<td>8</td>
<td>1,600</td>
<td>6</td>
<td>1,501 - 2,000 2 150 3.0</td>
</tr>
<tr>
<td>12</td>
<td>1,800</td>
<td>7</td>
<td>2,001 - 2,500 2 240 4.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2,501 - 3,000 2 240 5.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3,001 - 3,500 2 240 6.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3,501 - 4,000 2 240 6.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4,001 - 4,500 2 240 6.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4,501 - 5,000 2 240 6.0</td>
</tr>
</tbody>
</table>

*For meters over 2-inch, the number of Billing units will be determined by adding together all domestic and sprinkler fire protection flows to the premises and dividing by 30 (30 being the gallons per minute equivalent to one billing unit).*

**Fire Flow Demand Units (F.F.D.U.)**

<table>
<thead>
<tr>
<th>Fire Flow (gpm)</th>
<th>Duration (Hrs.)</th>
<th>Capacity (Thousands of gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 500</td>
<td>2</td>
<td>60</td>
</tr>
<tr>
<td>601 - 700</td>
<td>2</td>
<td>60</td>
</tr>
<tr>
<td>751 - 1,000</td>
<td>2</td>
<td>120</td>
</tr>
<tr>
<td>1,001 - 1,250</td>
<td>2</td>
<td>150</td>
</tr>
<tr>
<td>1,251 - 1,500</td>
<td>2</td>
<td>150</td>
</tr>
<tr>
<td>1,501 - 2,000</td>
<td>2</td>
<td>240</td>
</tr>
<tr>
<td>2,001 - 2,500</td>
<td>2</td>
<td>300</td>
</tr>
<tr>
<td>2,501 - 3,000</td>
<td>2</td>
<td>540</td>
</tr>
<tr>
<td>3,001 - 3,500</td>
<td>2</td>
<td>630</td>
</tr>
<tr>
<td>3,501 - 4,000</td>
<td>2</td>
<td>660</td>
</tr>
<tr>
<td>4,001 - 4,500</td>
<td>2</td>
<td>1,000</td>
</tr>
<tr>
<td>4,501 - 5,000</td>
<td>2</td>
<td>1,500</td>
</tr>
</tbody>
</table>

**Actual number of units to be calculated by fire flow x duration divided by 60,000 gallons.**

**EXAMPLES: Typical developments:**

1. Single family residences: Public Fire Flow = 1,125 gpm = 2.5 F.F.D.U., 3/4 x 1" domestic water meter = 1 B.U.; 1 B.U. x 2.5 F.F.D.U. = 2.5 tank capacity units

2. Multi-residential: Fire Flow 2,000 gpm, five (5) 2-inch domestic water meters [(5 meters) x 5 B.U.] x 4 F.F.D.U. = 100 tank capacity units

3. Office Building: Fire Flow 3,500 gpm, one (1) 2-inch water meter [(1 meter) x 5 B.U.] x 10.5 F.F.D.U. = 52.5 tank capacity units

4. Shopping Center, Private System: 1 Fire Flow 1,250 gpm, 100 tank capacity units.
**PART 3 - SCHEDULES OF RATES AND CHARGES FOR ENGINEERING AND CONSTRUCTION SERVICES—SECTION A - CHARGES (Continued)**

**RULE 3-A-4**

**LOCAL SYSTEM IMPROVEMENT CHARGES FOR EXISTING WATER MAINS OR WATER MAIN EXTENSIONS:** All charges described in this Rule are subject to the credits allowable under Rule 1-J-3. Applicable notes after Rule 3-A-4b and applicable parts of Rule 1-A-49 shall apply.

**3-A-4a**

**LOCAL SYSTEM IMPROVEMENT CHARGE, WATER SERVICE FROM AN EXISTING FRONTING WATER MAIN:** For premises to be served with water service from existing adequate capacity main(s) of the District, one of the following charges shall apply.

<table>
<thead>
<tr>
<th>Size of Water Main</th>
<th>Range of Fire Flow Required &amp; Available GPM</th>
<th>Charge per Benefited Front Foot of the Applicant's Premises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 6 inches</td>
<td>to 750 GPM</td>
<td>$14.61</td>
</tr>
<tr>
<td>6</td>
<td>751 to 1,250 GPM</td>
<td>15.88</td>
</tr>
<tr>
<td></td>
<td>1,251 to 1,750 GPM</td>
<td>16.49</td>
</tr>
<tr>
<td></td>
<td>1,751 to 2,250 GPM</td>
<td>17.20</td>
</tr>
<tr>
<td>8</td>
<td>751 to 1,250 GPM</td>
<td>18.82</td>
</tr>
<tr>
<td></td>
<td>1,251 to 1,750 GPM</td>
<td>19.02</td>
</tr>
<tr>
<td></td>
<td>1,751 to 2,250 GPM</td>
<td>19.80</td>
</tr>
<tr>
<td></td>
<td>2,251 to 2,750 GPM</td>
<td>20.95</td>
</tr>
<tr>
<td>10</td>
<td>751 to 1,250 GPM</td>
<td>22.27</td>
</tr>
<tr>
<td></td>
<td>1,251 to 1,750 GPM</td>
<td>22.83</td>
</tr>
<tr>
<td></td>
<td>1,751 to 2,250 GPM</td>
<td>23.60</td>
</tr>
<tr>
<td></td>
<td>2,251 to 2,750 GPM</td>
<td>24.70</td>
</tr>
<tr>
<td></td>
<td>2,751 to 3,250 GPM</td>
<td>26.07</td>
</tr>
<tr>
<td>12</td>
<td>751 to 1,250 GPM</td>
<td>27.34</td>
</tr>
<tr>
<td></td>
<td>1,251 to 1,750 GPM</td>
<td>27.95</td>
</tr>
<tr>
<td></td>
<td>1,751 to 2,250 GPM</td>
<td>28.67</td>
</tr>
<tr>
<td></td>
<td>2,251 to 2,750 GPM</td>
<td>29.77</td>
</tr>
<tr>
<td></td>
<td>2,751 to 3,250 GPM</td>
<td>31.15</td>
</tr>
<tr>
<td></td>
<td>3,251 to 3,750 GPM</td>
<td>31.72</td>
</tr>
<tr>
<td></td>
<td>3,751 to 4,250 GPM</td>
<td>33.74</td>
</tr>
<tr>
<td></td>
<td>4,251 to 5,000 GPM</td>
<td>34.23</td>
</tr>
</tbody>
</table>

**Note:** Charges given on this page are applicable to all Waterworks District, except District No. 36 (See Page 509).

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**3-A-4** Added 2/63, 10/68

**3-A-4a** Rev. 2/63, 10/68, 4/22/75, 2/1/77-Sch. 41R, 6/13/78-Sch. 53; 5/29/79-Sch. 62; 8/18/81-Sch. 86; 8/3/82-Sch. 67A, 8/2/83-Sch. 68, 8/23/83-Sch. 69, 9/6/83-Sch. 70, 9/4/84-Sch. 73, 11/6/84-Sch. 74, 8/13/85-Sch. 75, 11/26/85-Sch. 77.

- 307 -

(WWD3188) 1/93

E - 1
### PART 3 - SCHEDULES OF RATES AND CHARGES FOR ENGINEERING AND CONSTRUCTION SERVICES - SECTION A - CHARGES (Continued)

#### RULE

3-A-4a LOCAL SYSTEM IMPROVEMENT CHARGE, WATER SERVICE FROM AN EXISTING FRONTING WATER MAIN: (Continued)

<table>
<thead>
<tr>
<th>Size of Water Main Inches</th>
<th>Range of Fire Flow GPM to</th>
<th>Charge per Benefited Front Foot of the Applicant's Premises</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>750</td>
<td>$34.18</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,251 to 1,750</td>
<td>34.67</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>1,751 to 2,250</td>
<td>35.28</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,251 to 2,750</td>
<td>36.33</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,751 to 3,250</td>
<td>37.38</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3,251 to 3,750</td>
<td>38.15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3,751 to 4,250</td>
<td>40.52</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4,251 to 5,000</td>
<td>41.13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>to 750</td>
<td>41.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>751</td>
<td>41.62</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,251 to 1,750</td>
<td>42.34</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>1,751 to 2,250</td>
<td>43.51</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,251 to 2,750</td>
<td>44.93</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,751 to 3,250</td>
<td>45.61</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3,251 to 3,750</td>
<td>46.83</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3,751 to 4,250</td>
<td>49.41</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4,251 to 5,000</td>
<td>51.16</td>
<td></td>
</tr>
<tr>
<td></td>
<td>to 750</td>
<td>49.23</td>
<td></td>
</tr>
<tr>
<td></td>
<td>751</td>
<td>49.99</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1,251 to 1,750</td>
<td>50.93</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>1,751 to 2,250</td>
<td>52.31</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,251 to 2,750</td>
<td>53.86</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2,751 to 3,250</td>
<td>54.96</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3,251 to 3,750</td>
<td>56.38</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3,751 to 4,250</td>
<td>59.28</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4,251 to 5,000</td>
<td>61.42</td>
<td></td>
</tr>
</tbody>
</table>

Note: Charges given on this page are applicable to all Waterworks District, except District No. 36 (See Page 610).

3-A-4 Added 2/63, 10/68
3-A-4a Rev. 2/63, 10/68, 4/22/75, 2/1/77-Sch. 41R, 6/13/78-Sch. 53; 5/29/79-Sch. 62; 8/18/81-Sch. 66; 8/13/82-Sch. 87A, 8/2/83-Sch. 68, 8/23/83-Sch. 69, 9/8/83-Sch. 70, 9/4/84-Sch. 73, 11/6/84-Sch. 74, 8/13/85-Sch. 75, 11/28/88-Sch. 77.
VERDE RIDGE
WATER SYSTEM AGREEMENT
LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 36, DESERT VIEW HIGHLANDS
WATER SYSTEM AGREEMENT WITH KAUFMAN AND BROAD OF SOUTHERN CALIFORNIA, INC.

1. IDENTIFICATION

This Agreement (hereinafter "AGREEMENT") is made by and between Kaufman and Broa of Southern California, Inc., 38346-A 30th Street East, Palmdale, California 93550, (hereinafter "BUILDER") and Los Angeles County Waterworks District No. 36, Desert View Highlands, (hereinafter "DISTRICT"), a public water district formed pursuant to Division 16 of the State Water Code.

2. RECITALS

A. DISTRICT’s analysis has shown that existing water supply facilities and water mains cannot properly service the growing water needs of DISTRICT. As such, DISTRICT has determined that additional pumping capacity, water transmission mains and gravity storage reservoirs are needed for the further development of single-family residences, shopping centers, schools and other residential, commercial, or industrial development in or adjacent to DISTRICT.

B. BUILDER is the owner and developer of the property located southwest of the City of Palmdale, in Los Angeles County, California, commonly referred to as City Ranch (see attached Exhibit A). BUILDER agrees to improve the existing water system with additional pumping capacity, water transmission mains, water storage reservoirs, and necessary appurtenances (hereinafter "PROJECT") for DISTRICT to provide additional supplies of California aqueduct water and well water to the southwest portion of the City of Palmdale.

C. BUILDER and DISTRICT understand that other developers (hereinafter "PARTICIPANTS" collectively and "PARTICIPANT" individually) have an anticipated need for additional water supplies and have expressed an interest in developing properties. Further, DISTRICT understands that construction of PROJECT will be beneficial to provide access to water supplies for BUILDER’s and PARTICIPANTS’ property (hereinafter "DEVELOPMENT" collectively and "DEVELOPMENT" individually, hereinafter "DISTRICT") be 1,949 single-family residences or the equivalent in commercial/industrial development. This is equivalent to 1,949 water units. BUILDER plans to use a portion of these water units for City Ranch and intends to seek financial participation for the balance of water units from PARTICIPANTS to meet the development cost of PROJECT proposed in this AGREEMENT.

BUILDER will contract with PARTICIPANTS, collect funds from PARTICIPANTS and deposit said funds into an escrow account as a reliable financial institution, design PROJECT, acquire rights of way, order materials, and engage contractors to construct PROJECT as outlined in Recital D within existing public rights of way or property to be acquired for DISTRICT. Subject to approval of this AGREEMENT by DISTRICT’s Board of Directors and approval of plans and specifications by the Los Angeles County Director of Public Works or the Assistant Deputy Director in charge of DISTRICT or his designee.

D. To complete PROJECT (see Exhibit 2) pursuant to DISTRICT approved plans and specifications will require BUILDER to perform the following:
1. Grade reservoir site, construct two 2,000,000 gallon elevated steel reservoirs, and install onsite piping at Verda Ridge.

2. Install approximately 1,900 feet of 16-inch diameter intake/pipeline at transmission main from reservoir to Tentative Tract No. 48818.

3. Convert hydropneumatic pumping station to reservoir controlled station at Avenue O-8 and Sierra Subida Avenue.

4. Payment for portion of the existing AVEK turnout capacity at Avenue J and 10th Street West (portion is equal to 3 cfs allocation of the 19 cfs turnout capacity).

5. Payment for portion of pumping station in the vicinity of Elizabeth L Road and 25th Street West.

6. Payment for portion of pumping station in the vicinity of Avenue M and 5th Street East.

E. The proposed service area for PROJECT is all the lands within DISTRICT. Construction of PROJECT is to take place on or under public and privately owned property. As such, BUILDER, with the approval of DISTRICT and on behalf of DISTRICT, shall purchase the necessary rights of way to construct and maintain PROJECT. Nothing in this AGREEMENT shall be construed as limiting usage of PROJECT only to DEVELOPMENTS.

F. DISTRICT imposes four types of water supply charges on new construction in its service areas. DISTRICT shall credit the funds contributed to PROJECT.Builder and PARTICIPANTS to BUILDER's or that particular PARTICIPANT's acreage charges and tank capacity unit charges. In the event BUILDER's or any PARTICIPANT's, share of the cost of the design and construction of the PROJECT is less than the total of Tank Capacity Unit Charges and Acreage Charges attributable to its DEVELOPMENT, DISTRICT reserves the right to bill BUILDER and PARTICIPANTS for the difference between their respective shares of the cost of the PROJECT and the total of Tank Capacity Unit Charges plus Acreage Charges applicable to their respective DEVELOPMENT. Tank Capacity Unit Charges and Acreage Charges for PARTICIPANTS shall be those in effect at the time of PARTICIPANT's execution of sub-agreement with BUILDER. Tank Capacity Unit Charges and Acreage Charges for BUILDER shall be those in effect at the time of BUILDER's execution of AGREEMENT. All other applicable water supply charges shall be paid by BUILDER and PARTICIPANTS to DISTRICT when BUILDER or PARTICIPANT seeks to develop their DEVELOPMENT. The four types of water supply charges imposed by DISTRICT are set forth below:

1. ACREAGE CHARGES - Acreage charges are based on property usage and fire flow protection requirements and are computed on a gross acre basis (See attached Exhibit A). BUILDER and PARTICIPANTS will receive credit against Acreage Charges for their financial participation in the development and construction of the PROJECT.
Acreage Charges are currently as follows:

<table>
<thead>
<tr>
<th>Fire Flow at 20 psi (600 kPa)</th>
<th>Duration</th>
<th>Charge Per Acre</th>
<th>Land Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>1251 to 1750</td>
<td>2 hours</td>
<td>$1,439</td>
<td>(Normal Residential Requirement)</td>
</tr>
<tr>
<td>2751 to 3230</td>
<td>3 hours</td>
<td>$1,566</td>
<td>(Lowest Commercial Requirement)</td>
</tr>
<tr>
<td>3251 to 4250</td>
<td>4 hours</td>
<td>$1,772</td>
<td>(Median Commercial Requirement)</td>
</tr>
<tr>
<td>4251 to 5000</td>
<td>5 hours</td>
<td>$1,997</td>
<td>(Highest Commercial Requirement)</td>
</tr>
</tbody>
</table>

2. **TANK CAPACITY UNIT CHARGES** - Tank Capacity Unit Charges are based on domestic water demands and fire flow projection requirements (see attached Exhibit C). These charges are calculated by multiplying Domestic Water Service Billing Units times Fire Flow Demand Units. **BUILDER** and **PARTICIPANTS** will receive credit against Tank Capacity Unit Charges for their financial participation in the design and construction of the PROJECT.

3. **FRONTAGE CHARGES** - Frontage Charges are based on benefitted front footage, required fire flow and the size of the water main from which fire flow is to be available (see attached Exhibit D). **DISTRICT** shall accept fronting water mains to be installed by **BUILDER** or by **PARTICIPANTS** as part of DEVELOPMENTS in lieu of the Frontage Charges.

4. **WATER SYSTEM ENGINEERING CHARGES** - These charges are made by **DISTRICT** to review developments, establish water system construction requirements, check plans, and other documents needed for developers to carry out their construction work, inspect the construction work, process water service applications, and inspect the installation of service connections and meters. These charges will be invoiced to **BUILDER** and **PARTICIPANTS** prior to plan check and inspection of their DEVELOPMENT or processing of water service applications. There will be no Water System Engineering Charges for the PROJECT.

G. The Antelope Valley-East Kern Water Agency (hereinafter “AVEK”) imposes a charge (hereinafter “FACILITY CAPACITY FEE”) upon **DISTRICT** customers to finance the construction of AVEK’s capital facilities which are needed to meet supplemental water supply demands created by **DISTRICT** and its customer orders.

This charge shall be applied to any subdivision which had not received final approval of the subdivision map by the appropriate governmental entity on or before June 1, 1990, and to any commercial or industrial development which did not have a scheduled starting date on or before June 1, 1990, for its conditional use permit or site approval.

This charge is set at $1,791 per water unit during calendar year 1991. AVE has processed through the State an amendment to its Act which allows it to invoice and collect the FACILITY CAPACITY FEES.

H. **DISTRICT** has determined **PROJECT** as described in Recital D is required to provide additional water supplies of both California Aqueduct water and well water to serve approximately 1,940 single-family residences or the equivalent in commercial/industrial development.

I. **BUILDER** shall engage Beckman Consulting Engineers, Inc., registered in the State of California (hereinafter “ENGINEER”) to prepare the construction plans for **PROJECT**. The plans, specifications, cost estimates, and per unit
charge for PROJECT shall be reviewed and approved by DISTRICT prior to the commencement of construction.

J. The contractor's work must be approved by DISTRICT as set forth herein. Therefore, DISTRICT's Lancaster office shall be contacted prior to the start of any work on PROJECT. Failure to do so may result in rejection of an item not inspected by DISTRICT.

K. BUILDER is to receive an administrative/overhead fee equal to eight percent (8%) of the total cost of the PROJECT. The estimated cost of the PROJECT presently planned, is as follows:

**PHASE I**

1. Grade reservoir site, construct one 2,000,000 gallon welded steel reservoir, and install onsite piping at Verde Ridge.  
   $1,756

2. Install approximately 1,900 feet of 16-inch diameter inlet/outlet water transmission main from reservoir to Tentative Tract No. 48858  
   137.

3. Convert hydropneumatic pumping station to reservoir controlled pumping station at Avenue Q-8 and Tierra Subida Avenue  
   Subtotal  
   $1,873.

4. Contingencies  
   Subtotal  
   $2,154.

5. Engineering services  
   Subtotal of Costs  
   $2,486.

6. BUILDER'S administrative fee (8% of Subtotal of Costs)  
   Subtotal  
   $197.

7. Cost for procurement of utility and drainage acceptance easements  
   $75.

8. Payment for portion of existing AVEK curtailment capacity at Avenue Q-8 and 10th Street East (portion is equal to 3 cfs allocation of the 19 cfs curtailment capacity)  
   96.

9. Land for reservoir site at Verde Ridge  
   150.

**Total Estimated Cost, Phase I**  
$7,334.
PHASE II

10. Construct one 2,000,000 gallon welded steel reservoir at Verda Ridge. $500

11. Payment for portion of pumping station in the vicinity of Elizabeth Lake Road and 23rd Street West (2,500/23,000) ($1,000,000) $100

12. Payment for portion of pumping station in the vicinity of Avenue M and 3rd Street East (2,500/20,000) ($1,000,000) $100

Subtotal $700

13. Contingencies $100

Subtotal $805

14. Design services $13

Subtotal of Costs $87

15. BUILDER’S administrative fee (% of Subtotal of Costs) $25

Total Estimated Cost, Phase II $35

Total Estimated PROJECT Cost $33,320

**Final costs to be determined from actual engineering, construction, other expenses and costs to BUILDER.**
AGREEMENT

NOW, THEREFORE, intending to be legally bound, the parties hereto do covenant to agree as follows:

SECTIONS

1. FINDING OF PROJECT CONSTRUCTION AND OPENING OF ESCROW ACCOUNT

1.1 Term

This AGREEMENT shall expire at the end of ten (10) years, beginning with the date this AGREEMENT is entered into.

1.2 Opening of Escrow Account and Number of Participants

Within 45 business days after DISTRICT signs AGREEMENT, BUILDER will establish a reliable financial institution in California, an interest bearing escrow account (hereinafter "ESRow ACCOUNT") for PROJECT by submission to the financial institution of a copy of this AGREEMENT. BUILDER will deposit into said ESCROW ACCOUNT all funds and letters of credit received from PARTICIPANTS. BUILDER shall provide DISTRICT with a listing of BUILDER's and PARTICIPANTS' DEVELOPMENTS for PROJECT so that DISTRICT may keep accurate records of all units sold for PROJECT.

1.3 Construction Funds

All funds in the ESCROW ACCOUNT shall be used to pay legal fees, rights of way processing and acquisition costs, construction costs, engineering, pavement repairs, permit fees, inspections, and any other reasonable charges incurred by BUILDER in the construction of PROJECT, and BUILDER's administrative/overhead fee which shall equal eight percent (8%) of the cost of PROJECT minus the cost of land, reimbursements, and/or joint use agreements. BUILDER shall submit supporting invoices to DISTRICT for approval of disbursements from the ESCROW ACCOUNT. From time to time, as monies are needed for the payment of PROJECT expenses, in addition to initial cash deposits made by BUILDER and PARTICIPANTS, BUILDER will send invoices to PARTICIPANTS in the amount of their respective pro-rata shares of the amount of PROJECT expenses, and BUILDER will deposit in the ESCROW ACCOUNT (i) BUILDER's pro-rata share of such expenses (less, if BUILDER elects, BUILDER's 8% administrative/overhead fee), and (ii) all payments made by PARTICIPANTS of their pro-rata shares of the amount of PROJECT expenses. All payments from the ESCROW ACCOUNT must provide DISTRICT with proof of said payment by means of a receipt from the financial institution. Each receipt shall be accompanied by the specific address of DEVELOPMENTS for which escrow payments have been made; as well as the total amount of escrow deposits with BUILDER or PARTICIPANT will then submit to DISTRICT. Supporting invoices and other accounting documentation as may be required by DISTRICT will be requested from BUILDER before funds held in escrow can be disbursed. All payments from the ESCROW ACCOUNT or reimbursement authorizations for BUILDER's costs must be signed by BUILDER's administrative and by the Assistant Deputy Director in charge of DISTRICT, the Director of Public Works or his designee. Any interest earned on the ESCROW ACCOUNT shall accrue to pay for any costs associated with the construction of PROJECT. Any residual funds remaining in the ESCROW ACCOUNT after completion of PROJECT and payment of all PROJECT costs shall be returned to BUILDER and PARTICIPANTS based on the pro-rata contribution to PROJECT of BUILDER and PARTICIPANTS. BUILDER's and PARTICIPANT's pro-rata contribution shall equal the fraction, the numerator of which shall equal the number of units purchased by BUILDER or PARTICIPANTS and the denominator of which shall equal 1,947. The product realized by multiplying the fraction by the amount of funds remaining in the ESCROW ACCOUNT shall equal the amount of funds to be distributed to the BUILDER and PARTICIPANTS.
1.4 Escrow Instructions

Escrow Instructions for PROJECT shall incorporate AGREEMENT and shall provide that ESCROW ACCOUNT be used to withdraw BUILDER’s 8% administrative/overhead fee from the ESCROW ACCOUNT as other PROJECT costs are paid from the ESCROW ACCOUNT. Such escrow instructions shall also provide that in the event any letter of credit deposited in ESCROW ACCOUNT has not been extended or replaced within thirty days prior to its date of expiry, or upon receipt of a written statement signed by BUILDER certifying that a PARTICIPANT has failed either to replace a letter of credit timely prior to its date of expiry, or to make a payment as required by terms of PARTICIPANT’s sub-agreement with BUILDER, escrow holder will, within business days thereafter (but in no event later than the date of expiry of the letter of credit) draw the maximum amount permitted under the letter of credit and will hold the proceeds of such drawing in the ESCROW ACCOUNT in lieu of any PARTICIPANT’s letter of credit.

Escrow for PROJECT shall terminate upon: (1) the expiration of the performance period of AGREEMENT per Section 2.1; or (2) completion by BUILDER and acceptance by DISTRICT of PROJECT for which the ESCROW ACCOUNT was established. In the event of default by BUILDER, as provided herein, escrow may terminate at the option of DISTRICT, after notice has been given in accordance with the terms of Section 6 herein subject to the provisions of Section 7. Escrow instructions shall provide that in the event DISTRICT terminates the escrow due to BUILDER’s default, any and all funds remaining in the ESCROW ACCOUNT shall (subject to the provisions of Section 1.1) become the property of DISTRICT and shall be used by DISTRICT solely to construct all or any remaining portion of PROJECT. In the event of BUILDER’s default, DISTRICT shall assume full responsibility for the completion of PROJECT. BUILDER’s default shall not impair, infringe upon, or compromise BUILDER’s or PARTICIPANT’s right to receive a Statement of Water Availability.

2. BUILDER’S DUTIES

2.1 Cost of PROJECT

BUILDER shall pay all costs associated with PROJECT by using funds from the ESCROW ACCOUNT established as stipulated in Section 1 of AGREEMENT.

2.2 Construction of PROJECT

BUILDER shall construct or cause to be constructed PROJECT as set forth in Recital D to the standards and specifications of DISTRICT.
2.3 Performance of Work

The contracts for PROJECT shall be between BUILDER and its contractor. BUILDER shall cause its contractor to commence construction and diligently pursue the construction of PROJECT to completion. BUILDER shall be responsible for supervision of its contractor's work so that PROJECT is constructed expeditiously in a workmanlike manner and in substantial accord with the plans, specifications, and permit requirements. BUILDER will inform DISTRICT'S Lancaster Office when construction of PROJECT is to commence so that DISTRICT, its employees, representatives or agents may review the construction and progress of work. Construction of PROJECT shall be deemed substantially complete when DISTRICT has approved the construction and testing of PROJECT.

BUILDER shall make all reasonable efforts to ensure that its contractor fully complies with all laws regarding employment of aliens and others, and that all their employees performing services hereunder meet the citizenship or alien status requirements contained in Federal and State statutes and regulations including, but not limited to, the Immigration Reform and Control Act of 1986 (P.L. 99-603). BUILDER'S contractor shall obtain, from all covered employees performing service hereunder, all verification and other documentation of employment and residence as they currently exist and as they may be hereafter amended. BUILDER shall require its contractor to retain such documentation for all covered employees for the period prescribed by law and shall indemnify, defend, and hold harmless DISTRICT, its officers and employees from any liability which may be assessed against DISTRICT in connection with any alleged violation of Federal statutes or regulations pertaining to the eligibility for employment of persons performing services under this AGREEMENT.

2.4 Performance Period

BUILDER shall complete construction of PROJECT within three (3) years, beginning with the date this AGREEMENT is entered into.

In the event BUILDER'S diligent performance of the construction of PROJECT is prevented or impaired by circumstances beyond its control and not foreseeable by BUILDER (e.g., labor, strike, inability to obtain materials because of strikes, accidents, or acts of God), BUILDER may apply to DISTRICT for an extension of the completion date of PROJECT. Said extension shall not be unreasonably withheld by DISTRICT.

In addition, in the event BUILDER is unable to secure commitments from a sufficient number of PARTICIPANTS to pay for the entire cost of the PROJECT, BUILDER may apply to DISTRICT for an extension of the completion date with respect to the portion of the PROJECT remaining unconstructed; consent to such request will not be unreasonably withheld by DISTRICT and DISTRICT will not consider statements of water availability or well site letters or the provisions of service to PARTICIPANTS or completion of remaining portions of PROJECT.

2.5 Change Orders

BUILDER shall issue no change order relating to construction of PROJECT without prior written approval of DISTRICT. If approved, additional time may be granted to BUILDER so the change order construction work may be properly completed.
2.6 Dedication of Facilities

Upon completion of the construction and payment of all bills for construction materials, engineering, pavement repairs, permits and related costs of PROJECT, DISTRICT shall, in writing, dedicate PROJECT to DISTRICT. DISTRICT shall accept the dedication of PROJECT as promptly as practicable following BUILDER’s offer of dedication and shall maintain and operate PROJECT after said acceptance at DISTRICT’s sole cost and expense. Nothing in this AGREEMENT shall be construed to limit DISTRICT’s usage of PROJECT to any specific single-family residential, commercial/industrial development.

2.7 Default

In the event of BUILDER’s default during construction of PROJECT, DISTRICT shall notify BUILDER in writing of the default and describe the nature of the default. BUILDER shall have thirty (30) days after receipt of DISTRICT’s notice of default to cure the default (or if such default cannot be cured within thirty (30) days, BUILDER shall commence to cure the default within the thirty (30)-day period and diligently prosecute the cure to completion thereafter) to DISTRICT’s satisfaction. If BUILDER fails to cure (or commence to cure) the default, any and all funds remaining in the ESCROW ACCOUNT FOR PROJECT shall become the property of DISTRICT and shall be used by DISTRICT solely to construct any remaining portion of PROJECT. BUILDER’s default shall not impair, infringe upon or compromise BUILDER’s or PARTICIPANT’s rights to receive a statement of Water Availability will serve letter from DISTRICT for the number of water units purchased by BUILDER or PARTICIPANT under the terms of this AGREEMENT.

2.8 Water Distribution Plans for BUILDER’s and PARTICIPANT’S DEVELOPMENTS

BUILDER and PARTICIPANTS shall have water distribution system plans for DEVELOPMENTS prepared by Brockmeier Consulting Engineers, Inc., and shall submit said plans showing the Fire Department’s requirements to DISTRICT for review and approval. The plans shall be subject to all DISTRICT charges for those DEVELOPMENTS minus those funds contributed by BUILDER and PARTICIPANTS to the costs of PROJECT. These contributions shall be credited against BUILDER’s and PARTICIPANT’s Tank Capacity Unit Charges and Acreage Charges. Upon completion of PROJECT, BUILDER will supply DISTRICT with a full accounting of costs so that DISTRICT may credit BUILDER’s and PARTICIPANT’s Tank Capacity Unit and Acreage Charges and determine if any additional charges are due for DEVELOPMENTS.

3. DISTRICT Issuance of Statement of Water Availability and "Will-Serve" Letter

As consideration for BUILDER’s and PARTICIPANT’S contributions toward construction of PROJECT, DISTRICT shall immediately issue to BUILDER and PARTICIPANT a conditional statement of Water Availability sufficient to satisfy the requirements of City of Palmdale or Los Angeles County with respect to evidence of water availability for purposes of granting conditional approval of any tentative tracts. Such statements of water availability shall state that BUILDER and PARTICIPANT will receive credit against Acreage Charges and Tank Capacity Unit Charges to the extent of their financial participation in the design and construction of PROJECT. That DISTRICT will issue conditional will-serves letters for water service contingent upon: (1) DISTRICT’s verification of PARTICIPANT’s water distribution system for DEVELOPMENTS, and that upon
satisfaction of the conditions contained therein, DISTRICT will provide water service to DEVELOPMENTS.

4. TERMINATION OF AGREEMENT

AGREEMENT shall terminate and be of no further force and effect upon the occurrence of the following: (1) the expiration of the three year limit of Article 4; (2) all of the water units have been sold and PROJECT has been completed, inspected, and accepted by the DISTRICT; PARTICIPANTS have subscribed for all water units in excess of BUILDER’s; and DISTRICT has issued conditional statements of water availability for BUILDER and all PARTICIPANTS.

5. NOTICE AND APPROVALS

Any approval, disapproval, demand, document or other notice (“Notice”) which either party may desire to give to the other party must be in writing and may be given by personal delivery, overnight mail courier, or by United States Registered or Certified Mail return receipt requested to the party to whom the Notice is directed at the address of the party set forth below or at any other address as the parties may later designate in writing:

TO BUILDER: Kaufman and Broad of Southern California, Inc.
18345-A 30th Street East
Palmdale, California 93550

TO DISTRICT: Los Angeles County
Waterworks District No. 3a, Desert View Highlands
900 South Frontage Avenue, 9th Floor
Alhambra, California 91803

6. ADMINISTRATION

BUILDER agrees that it shall promptly designate an Administrator to administer and carry out the provisions of this AGREEMENT. BUILDER also agrees that it will hold DISTRICT liable for any action or failures to act by BUILDER’s Administrator or employees.

7. FORCE MAJEURE

All parties hereto shall comply with the time limitations set forth in this AGREEMENT provided, however, that said time limitations may be extended for a period or periods of time equal to any period of delay caused by strikes, lockouts, fire or other casualty, the elements or acts of God, refusal or failure of governmental authorities or public utilities to grant necessary approvals or authorizations, and/or permits for the construction of PROJECT contemplated hereunder (the parties agreeing to use reasonable diligence to procure these with dispatch) or other causes, unforeseen and beyond their reasonable control.

8. INDEMNITY

BUILDER shall cause its contractors or subcontractors to provide and maintain their own expense the following forms and amounts of insurance set forth below. Such insurance shall be provided by insurer(s) satisfactory to DISTRICT and
evidence of such programs shall be delivered to DISTRICT on or before the commencement of construction of PROJECT. Such evidence shall specifically identify this AGREEMENT and shall contain express conditions that DISTRICT is to be given written notice by Registered Mail at least thirty (30) days in advance of any modification or termination of any program of insurance.

Failure on the part of the BUILDER to cause its contractors or subcontractors to procure or maintain required insurance shall constitute a material breach of contract upon which DISTRICT may immediately terminate or suspend this AGREEMENT or purchase and charge BUILDER for this insurance.

8.1 Liability

Such insurance shall be primary to and not contributing with any other insurance maintained by DISTRICT or County of Los Angeles, shall name the Los Angeles County Waterworks District No. 14, Desert View Highlands, and the County of Los Angeles as additional insured, and shall include, but not be limited to:

1. Comprehensive General Liability insurance endorsed for Premises-Operations, Products/Completed Operations, Explosions, Underground and Collapse, Contractual, Broad Form Property Damage and Personal Injury with a combined single limit of not less than $1,000,000 per occurrence.

2. Comprehensive Auto Liability insurance endorsed for all owned, non-owned, leased and hired vehicles with combined single limit of at least $500,000 per occurrence.

8.2 Worker's Compensation

A program of Worker's Compensation insurance shall be maintained in an amount and form to meet all applicable requirements of the Labor Code of the State of California, including Employers Liability with a $500,000 limit, covering all persons providing service on behalf of BUILDER and all risks to such persons under this AGREEMENT.

8.3 Property Damage

BUILDER's All Risk Insurance, including flood and earthquake coverage, covering the entire work against loss or damage shall be maintained. Insurance shall be in amount equal to the replacement cost of the subject construction and improvements and endorsed for broad form property damage. Deductibles not exceeding five percent (5%) of the construction cost and ten percent (10%) for earthquake will be permitted.

8.4 BUILDER'S Indemnification

BUILDER agrees to indemnify, defend and save harmless DISTRICT and the County of Los Angeles, and DISTRICT's agents, officers and employees, from and against any and all Liability, expense (including defense costs and legal fees), and claims for damages of any nature whatsoever, including, but not limited to claims for bodily injury, death, or property damage arising from any negligent act or omission, or reckless or willful misconduct, of BUILDER in connection with the construction of the PROJECT, or from workers' compensation claims made by
employees of BUILDER. The foregoing indemnifications do not apply in the event that it is determined that the injury or damage in question was caused by the negligent act or omission, or reckless or willful misconduct of DISTRICT, the County of Los Angeles or any of the agents, officers or employees of either.

9. ATTORNEY’S FEES

Should any party or parties hereto institute any action or proceeding in court to enforce any provision hereof, for declaratory or similar relief or for damages reason of alleged breach by another party of a provision of this AGREEMENT, the prevailing party in such action will be entitled to recover from the other party(ies) its reasonable costs including attorney’s fees and court costs.

10. NO WAIVER

Failure of a party to insist upon strict and punctual performance of any covenant, conditions or other provisions of this AGREEMENT or of any instrument or other writing herein provided for, shall not constitute a waiver of, or estoppel against, that party’s right to require such performance. In addition, a waiver by any of the parties of any failure by another party to perform as required by an instrument or other writing provided for herein shall not be deemed to be waiver of any preceding or succeeding breach of the same or of any other covenant, condition or provision, including, without limitation, the time for performance thereof.

11. GOVERNING LAW

This AGREEMENT and any instrument, certificates or other writing herein provide for shall be governed by and construed and enforced in accordance with the law of the State of California and shall be interpreted according to their fair meaning and not in favor of or against any party.

12. INVALIDITY

Nothing contained in this AGREEMENT or in any instrument, certificate or other writing herein provided for shall be construed to require the commission of any act contrary to law, and wherever there is any conflict between any provision of this AGREEMENT or of any instrument, certificate or other writing herein provided for and any material statute, law, ordinance or regulation contrary to which the parties have no legal right to contract, the statute shall prevail. However, in the event that any such provision shall be invalid, illegal or unenforceable, the provisions so affected shall be curtailed and limited only to the extent necessary to bring it within the legal requirements. The remainder of that provision and the other provisions of this AGREEMENT and of any instrument, certificates or other writing herein provided for shall continue in full force and effect and shall not be invalidated, and the parties shall immediately employ their best efforts in good faith to negotiate a valid provision to substitute for the invalidated one.
13. AMENDMENTS

This AGREEMENT may be amended, modified, superseded or canceled, and terms, conditions and covenants hereof may be waived, and agreements supplemental hereto may be made, only by written instrument executed by the parties, or, in the case of waiver, by the party waiving compliance in writing.

14. COUNTERPARTS

This AGREEMENT and any amendment or supplement hereto, and any document or instrument to be executed and delivered hereunder, may be executed in any number of counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument; provided, however, that such counterparts, in the aggregate, shall have been executed by the parties.

15. PARTIES IN INTEREST

Each and every provision contained herein shall be binding upon and shall inure to the benefit of the parties, their respective assigns and successors in interest; whether said assigns and successors are private parties or public entities. It is parties shall require that their respective assigns and successors in interest to be bound by and to uphold each and every provision of this AGREEMENT.
IN WITNESS WHEREOF, the parties hereto have caused this AGREEMENT to be executed by their respective officers, duly authorized by Kaufman and Broad of Southern California, Inc. on December 1, 1991 and by the LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 34, DESERT VIEW HIGHLANDS on December 1, 1991.

KAUFMAN AND BROAD OF SOUTHERN CALIFORNIA.

By: ____________________________
    President

By: ____________________________
    Secretary

LOS ANGELES COUNTY WATERWORKS
DISTRICT NO. 34, DESERT VIEW HIGHLANDS

By: ____________________________
    CHAIRMAN OF THE BOARD OF SUPERVISORS OF THE COUNTY OF LOS ANGELES AS THE GOVERNING BODY THEREOF

APPROVED AS TO FORM:

DEWITT W. CLINTON
County Counsel

By: ____________________________
    Deputy

ATTEST:

LARRY J. MONTEILH
Executive Officer-Clerk of the Board of Supervisors

By: ____________________________
    Deputy
1. Construct groundwater wells 2,500 gpm capacity in the vicinity of Avenue K and 30th Street East and Avenue K and 35th Street East.

2. Install well discharge main from Avenue K and 10th East and Avenue K and 35th East wells to Avenue K-8 and 35th Street East until

3. Construct chlorination capacity and 0.30 MG Forebay at Avenue K-8 and 35th Street East.

4. Construct 2,500 gpm pumping station expansion at Avenue K-8 and 35th Street East.

5. Construct or payment for 2,500 gpm portion of 20,000 gpm pumping station at the existing Avenue M and 6th Street East Utility Site.

6. Install 10-inch water transmission main in Avenue M from 4th Street East to Division Street, in Division Street from Avenue M to Avenue 0-4, and in Avenue 0-4 from Division Street to 10th Street West.

7. Install 20-inch water transmission main in Avenue N from Division Street to 10th Street West.

8. Construct 6,000 gpm expansion at Avenue P and 10th Street West Pumping Station.

9. Install 20-inch water transmission main in Avenue P from 15th to 25th Street West.

10. Install 16-inch water transmission main in 25th Street West from Avenue P to Elizabeth Lake Road.

11. Install 24-inch water transmission main in Elizabeth Lake Road from 10th to 25th Street West.

12. Install 16-inch transmission main in Elizabeth Lake Road from 20th to 25th Street West.

13. Construct or payment for 6,000 gpm portion of 26,500 gpm pumping the vicinity of Elizabeth Lake Road and 23rd Street West.

14. Install 16-inch water transmission main in Elizabeth Lake Road from 25th Street West to Bridge Road.

15. Install 24-inch onsite water transmission main in Bridge Road from Elizabeth Lake Road to Avenue S.


17. Install 16-inch onsite water transmission main.

18. Construct two 3.0 MG reservoirs onsite.

19. Construct 600 gpm pumping station onsite.

20. Install 12-inch water main onsite.
E. The proposed service area for PROJECT is all lands within DISTRICT. Construction of PROJECT is to take place on or under public and privately owned property. As such, BUILDER, with the approval of DISTRICT and on behalf of DISTRICT, shall purchase the necessary rights of way to construct and maintain PROJECT. Nothing in this AGREEMENT shall be construed as limiting usage of PROJECT only to DEVELOPMENTS.

F. DISTRICT imposes four types of water supply charges on new construction in its service areas. DISTRICT shall credit the funds contributed to PROJECT by BUILDER and PARTICIPANTS to BUILDER's or any PARTICIPANT's Acreage Charges and Tank Capacity Unit Charges. In the event BUILDER's or any PARTICIPANT's, share of the cost of the design and construction of the PROJECT is less than the total of Acreage Charges and Tank Capacity Unit Charges attributable to its DEVELOPMENT, DISTRICT reserves the right to bill BUILDER and/or PARTICIPANTS for the difference between their respective shares of the cost of the PROJECT and the total of Acreage Charges plus Tank Capacity Unit Charges applicable to their respective DEVELOPMENTS. PARTICIPANTS Acreage Charges and Tank Capacity Unit Charges shall be those in effect at the time of execution of PARTICIPANT's Sub-agreement with BUILDER. BUILDER's Acreage Charges and Tank Capacity Unit Charges shall be those in effect at the time of BUILDER's execution of AGREEMENT. All other applicable water supply charges shall be paid by BUILDER and PARTICIPANTS to DISTRICT when BUILDER or PARTICIPANT seeks to develop its DEVELOPMENT. The four types of water supply charges imposed by DISTRICT are set forth below:

1. ACREAGE CHARGES - Acreage charges are based on property usage and fire flow protection requirements and are computed on a gross basis (see attached Exhibit "C"). BUILDER and PARTICIPANTS will receive credit against Acreage Charges to the extent of their financial participation in the design and construction of the PROJECT.
Acreage Charges are currently as follows:

<table>
<thead>
<tr>
<th>Fire Flow at 20 psi (gpm)</th>
<th>Duration (hours)</th>
<th>Charge Per Acre ($/acre)</th>
</tr>
</thead>
<tbody>
<tr>
<td>751 to 1,250</td>
<td>2</td>
<td>$1.193</td>
</tr>
<tr>
<td>1,251 to 1,750</td>
<td>2</td>
<td>$1.459</td>
</tr>
<tr>
<td>2,751 to 3,250</td>
<td>3</td>
<td>$1.646</td>
</tr>
<tr>
<td>3,251 to 4,250</td>
<td>4</td>
<td>$1.772</td>
</tr>
<tr>
<td>4,251 to 5,000</td>
<td>5</td>
<td>$1.897</td>
</tr>
</tbody>
</table>

Should these charges be increased by DISTRICT during the time the water units are being sold, only PARTICIPANTS who purchase water units after the Acreage Charge has been increased shall pay the new rate.

2. TANK CAPACITY UNIT CHARGES - Tank Capacity Unit Charges are based on domestic meter demands and fire flow projection requirements (see attached Exhibit "D"). These charges are calculated by multiplying Domestic Water Service Billing Units times Fire Flow Demand Units. BUILDERS and PARTICIPANTS will receive credit against Tank Capacity Unit Charges to the extend of their financial participation in the design and construction of the PROJECT.

3. FRONTAGE CHARGES - Frontage Charges are based on benefitted front footage, required fire flow and the size of the water main from which fire flow is to be available (see attached Exhibit "E"). DISTRICT shall accept fronting water mains to be installed as part of PROJECT by BUILDER or by PARTICIPANTS as part of DEVELOPMENTS in lieu of the Frontage Charges.

4. WATER SYSTEM ENGINEERING CHARGES - These charges are made by DISTRICT to review developments, establish water system construction requirements, check plans and other documents needed for developers to carry out their construction work, inspect the construction work, process water service applications and inspect the installation of service connections and meters. These charges are typically imposed by BUILDERS and PARTICIPANTS prior to plan check and inspection of their DEVELOPMENT and processing of the water service applications. There will be no Water System Engineering Charges for the PROJECT.

5. The Antelope Valley-East Kern Water Agency (hereinafter "AVEK") imposes a fee (hereinafter "FACILITY CAPACITY FEE") upon DISTRICT customers to finance the construction of AVEK's capital facilities which are needed to meet supplemental water demands created by DISTRICT and its customers.
This fee shall be applied to any subdivision which has not received final approval of the subdivision map by the appropriate governmental entity on or before June 1, 1990 and to any commercial or industrial development which did not have a scheduled hearing date on or before June 1, 1990 for its conditional use permit or site approval.

Within the water service area or boundary of DISTRICT, this fee is set at $1,791 and $1,850 per water unit or equivalent dwelling unit during calendar years 1991 and 1992, respectively. AVW has processed through the State an amendment to its act which allows it to invoice and collect FACILITY CAPACITY FEES.

H. DISTRICT has determined PROJECT described in Recital D is required to provide additional water supplies of both California Aqueduct water and well water to serve approximately single-family residences or the equivalent in commercial/industrial development.

I. BUILDER shall engage a private engineer, registered in the State of California (hereinafter the "ENGINEER") to prepare the construction plans for PROJECT. The plans, specifications, cost estimate and per unit charge for PROJECT shall be reviewed and approved by DISTRICT prior to the commencement of construction.

J. The contractor's work must be approved by DISTRICT as set forth herein below. Therefore, DISTRICT's Lancaster office shall be contacted prior to beginning any work on PROJECT. Failure to do so may result in rejection of any work not inspected by DISTRICT.

K. BUILDER is to receive an administrative/overhead fee equal to eight percent (8%) of the total cost of the PROJECT (excluding cost of land, reimbursement agreements, joint use agreements, and rights-of-way acquisition costs). The estimated cost of the PROJECT, as presently planned, is as follows:

1. Construct groundwater wells 2,500 gpm capacity in the vicinity of Avenue K and 30th Street East and Avenue K and 35th Street East. $ 800,000

2. Install well discharge main from Avenue K and 30th Street East and Avenue K and 35th East wells to Avenue K-8 and 35th Street East utility site. 222,000

3. Construct chlorination capacity and 0.30 MG forebay in the vicinity of Avenue K-8 and 35th Street East. $ 200,000

4. Construct 2,500 gpm pumping station expansion at Avenue K-8 and 35th Street East. 400,000

5. Construct or payment for 2,500 gpm portion of 20,000 gpm pumping station at the existing Avenue K and 35th Street East Utility Site. 125,000

6. Install 30-inch water transmission main in Avenue N from 4th Street East to Division Street, in Division Street from Avenue N to Avenue 0-4, and in Avenue 0-4 from Division Street to 10th Street East. 520,000

7. Install 20-inch water transmission main in Avenue N from Division Street to 10th Street East. 444,000

5 of 15
9. Install 20-inch water transmission main in Avenue P from 15th to 25th Street West.  
10. Install 36-inch water transmission main in 25th Street West from Avenue P to Elizabeth Lake Road.  
11. Install 26-inch water transmission main in Elizabeth Lake Road from 10th to 25th Street West.  
12. Install 16-inch transmission main in Elizabeth Lake Road from 20th to 25th Street West.  
13. Construct or payment for 8,000 portion of 26,300 gpm pumping station in the vicinity of Elizabeth Lake Road and 25th Street West.  
14. Install 36-inch water transmission main in Elizabeth Lake Road from 25th Street West to Bridge Road.  
15. Install 24-inch onsite water transmission main in Bridge Road from Elizabeth Lake Road to Avenue S.  
17. Install 16-inch onsite water transmission main.  
18. Construct two 3.0 MG reservoirs onsite.  
19. Construct 600 gpm pumping station onsite.  
20. Install 12-inch water main onsite.  
21. Construct one 1.0 MG reservoir onsite.  

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct 9,200 gpm pumping station expansion at Avenue P and 10th Street West pumping station</td>
<td>$400,000</td>
</tr>
<tr>
<td>Install 20-inch water transmission main in Avenue P from 15th to 25th Street West</td>
<td>$50,000</td>
</tr>
<tr>
<td>Install 36-inch water transmission main in 25th Street West from Avenue P to Elizabeth Lake Road</td>
<td>$199,500</td>
</tr>
<tr>
<td>Install 26-inch water transmission main in Elizabeth Lake Road from 10th to 25th Street West</td>
<td>$488,000</td>
</tr>
<tr>
<td>Install 16-inch transmission main in Elizabeth Lake Road from 20th to 25th Street West</td>
<td>$196,000</td>
</tr>
<tr>
<td>Construct or payment for 8,000 portion of 26,300 gpm pumping station in the vicinity of Elizabeth Lake Road and 25th Street West</td>
<td>$225,000</td>
</tr>
<tr>
<td>Install 36-inch water transmission main in Elizabeth Lake Road from 25th Street West to Bridge Road</td>
<td>$31,000</td>
</tr>
<tr>
<td>Install 24-inch onsite water transmission main in Bridge Road from Elizabeth Lake Road to Avenue S</td>
<td>$625,000</td>
</tr>
<tr>
<td>Install 20-inch onsite water transmission main</td>
<td>$98,000</td>
</tr>
<tr>
<td>Install 16-inch onsite water transmission main</td>
<td>$360,000</td>
</tr>
<tr>
<td>Construct two 3.0 MG reservoirs onsite</td>
<td>$3,600,000</td>
</tr>
<tr>
<td>Construct 600 gpm pumping station onsite</td>
<td>$500,000</td>
</tr>
<tr>
<td>Install 12-inch water main onsite</td>
<td>$128,000</td>
</tr>
<tr>
<td>Construct one 1.0 MG reservoir onsite</td>
<td>$300,000</td>
</tr>
</tbody>
</table>

Subtotal $11,949,000

22. Contingencies(15%) | $1,792,000

Subtotal $13,741,000

23. Engineering Services(15%) | $2,061,000

Subtotal $15,802,000

24. Administration fee(8%) | $1,264,000

25. Land for onsite pumping stations and reservoirs, 10 acres | $500,000

Total Project Cost $17,566,000

**Final PROJECT cost to be determined from actual engineering, construction, land acquisition, rights of way, other expenses, and costs to BUYER.**
NOW, THEREFORE, intending to be legally bound, the parties hereto agree as follows:

1. **FINANCING OF PROJECT, CONSTRUCTION AND OPENING OF ESCROW ACCOUNT**

1.1 **Term**

AGREEMENT shall expire at the end of twenty (20) years, beginning with the date AGREEMENT is entered into.

1.2 **Opening of ESCROW ACCOUNT and Number of PARTICIPANTS**

Within 45 business days after DISTRICT signs this AGREEMENT, BUILDER will establish, at a reliable financial institution in California, an interest bearing ESCROW ACCOUNT (hereinafter “ESCROW ACCOUNT”) for PROJECT by submission to the financial institution of a copy of this AGREEMENT. BUILDER will deposit into said ESCROW ACCOUNT all funds and letters of credit received from PARTICIPANTS. DISTRICT shall allocate to BUILDER a total of _____ water units for PROJECT. BUILDER shall provide DISTRICT with a listing of BUILDER’s and PARTICIPANTS’ DEVELOPMENTS for PROJECT so that DISTRICT may keep accurate records of all water units sold for PROJECT.

1.3 **Construction Funds**

All funds in the ESCROW ACCOUNT shall be used to pay legal fees, interest, and costs, construction costs, engineering, pavement repairs, permit fees, inspections and any other reasonable charges incurred by BUILDER in the construction of PROJECT and BUILDER’s administrative/overhead fee, which shall equal eight percent (8%) of the total cost of PROJECT excluding cost of land, reimbursements, joint use agreements, and rights-of-way acquisition costs. BUILDER shall submit supporting invoices to DISTRICT for approval of disbursements from the ESCROW ACCOUNT. From time to time, as monies are needed for the payment of PROJECT expenses, in addition to initial cash deposits made by BUILDER and PARTICIPANTS, BUILDER will send invoices to PARTICIPANTS in the amount of their respective pro-rata shares of the amount of PROJECT expenses, and BUILDER will deposit in the ESCROW ACCOUNT (i) BUILDER’s pro-rata share of such expenses (less, if BUILDER so elects, BUILDER’s 8% administrative/overhead fee), and (ii) all payments made by PARTICIPANTS toward their pro-rata shares of the amount of PROJECT expenses. All PARTICIPANTS who pay into the ESCROW ACCOUNT must provide DISTRICT with proof of said payment by receipt from the financial institution. Each receipt shall include the specific address(es) of properties for which escrow deposits have been made; as well as the total amount of escrow deposits which BUILDER or PARTICIPANT will then submit to DISTRICT. Supporting invoices and such other appropriate documentation as may be required by DISTRICT will be required from BUILDER before funds held in escrow can be disbursed. All payments from the ESCROW ACCOUNT or reimbursement authorizations for BUILDER’s costs must be signed by BUILDER’s administrator and by the Assistant Deputy Director in charge of DISTRICT, the Director of Public Works or his designee. Any interest earned on the funds in the ESCROW ACCOUNT shall accrue to pay for any costs associated with the construction of PROJECT. Any residual funds remaining in the ESCROW ACCOUNT after completion of PROJECT and payment of all PROJECT costs shall be returned to BUILDER and PARTICIPANTS. BUILDER’s and PARTICIPANT’s pro-rata contribution shall equal a fraction, the numerator of which shall equal the number of water units purchased by
1.4 Escrow Instructions

Escrow instructions for PROJECT shall incorporate this AGREEMENT. shall provide that BUILDER shall be entitled to withdraw BUILDER’s administrative/overhead fee from the ESCROW ACCOUNT as other PROJECT costs are paid from the ESCROW ACCOUNT.

Such Escrow instructions shall also provide that in the event any letter of credit deposited in ESCROW ACCOUNT has not been extended or replaced within thirty days prior to its date of expiry, or upon receipt of a written statement signed by BUILDER certifying that a PARTICIPANT has failed either to replace a letter of credit timely prior to its date of expiry, or to make a payment as required by the terms of PARTICIPANT’S sub-agreement with BUILDER, escrow holder will, within five business days thereafter (but in no event later than the date of expiry of the letter of credit) draw the maximum amount permitted under the letter of credit, and will hold the proceeds of such drawing in the ESCROW ACCOUNT in lieu of such PARTICIPANT’S letter of credit.

Escrow for PROJECT shall terminate upon: (1) the expiration of the performance period of AGREEMENT per Section 2.6; or (2) completion by DISTRICT of PROJECT for which the ESCROW ACCOUNT was established. In the event of default by BUILDER, as provided herein, escrow may terminate at the option of DISTRICT, after notice has been given in accordance with the terms of Section 5 herein subject to the provisions of Section 2.7. Escrow instructions shall provide that in the event DISTRICT terminates the escrow due to BUILDER’s default, any and all funds remaining in the ESCROW ACCOUNT shall (subject to the provisions of Section 1.3) become the property of DISTRICT and shall be used by DISTRICT solely to construct all or any remaining portion of PROJECT. In the event of BUILDER’s default, DISTRICT shall assume full responsibility for the completion of PROJECT. BUILDER’s default shall not impair, infringe upon or compromise BUILDER’s or PARTICIPANT’s right to receive a Statement of Water Availability or well serve letter from DISTRICT for the number of water units purchased by BUILDER or PARTICIPANTS from DISTRICT under the terms of AGREEMENT.

2. BUILDER’S DUTIES

2.1 Cost of PROJECT

BUILDER shall pay all costs associated with PROJECT by using funds from the ESCROW ACCOUNT established as stipulated in Section 1 of AGREEMENT.

2.2 Construction of PROJECT

BUILDER shall construct or cause to be constructed PROJECT as set forth in Recital D to the standards and specifications of DISTRICT.

2.3 Performance of Work

The contracts for PROJECT shall be between BUILDER and its contractor. BUILDER shall cause its contractor to commence construction and diligently pursue the construction of PROJECT to completion. BUILDER shall be responsible for supervision of its contractor’s work so that
PROJECT is constructed expeditiously, in accordance with the plans, specifications and permit requirements. BUILDER will inform DISTRICT's Lancaster office when construction of PROJECT is to commence so that DISTRICT's representatives or agents may review the construction and progress of work. Construction of PROJECT shall be deemed substantially complete when DISTRICT has approved the construction and testing of PROJECT.

BUILDER shall make all reasonable efforts to ensure that its contractor fully complies with all laws regarding employment of aliens and others and that all their employees performing services hereunder meet the citizenship or alien status requirements contained in Federal and State statutes and regulations including, but not limited to, the Immigration Reform and Control Act of 1986 (P.L. 99-603). BUILDER's contractor shall obtain, from all covered employees performing services hereunder, all verification and other documentation of employment and regulation as they currently exist and as they may be hereafter amended. BUILDER shall require its contractor to retain such documentation for all covered employees for the period prescribed by law and shall indemnify and defend, and hold harmless DISTRICT, its officers and employees from any damage, loss, or expense incurred by the negligence of the covered employee's employer sanctions and any other liability which may be assessed against DISTRICT in connection with any alleged violation of federal statutes or regulations pertaining to the eligibility for employment of persons performing services under AGREEMENT.

2.4 Performance Period

BUILDER shall complete construction of PROJECT within twenty (20) years beginning with the date AGREEMENT is entered into.

In the event BUILDER's diligent performance of the construction of PROJECT is prevented or impaired by circumstances beyond its control and not foreseeable by BUILDER (e.g., labor, strike, inability to obtain materials because of strikes, economic conditions causing delays in construction of the PROJECT, etc.) BUILDER may apply to DISTRICT for an extension of the completion date of PROJECT. Said extension shall not be unreasonably withheld by DISTRICT.

In addition, in the event BUILDER is unable to secure commitments from a sufficient number of PARTICIPANTS to pay for the entire cost of the PROJECT, BUILDER may phase PROJECT. DISTRICT will not condition statements of water availability or will-serve letters or the provision of water service to the PARTICIPANTS on the completion of entire PROJECT.

2.5 Change Orders

BUILDER shall issue no change order relating to construction of PROJECT without prior written approval of DISTRICT. If approved, additional time may be granted to BUILDER so the change order construction work may be properly completed.

2.6 Dedication of Facilities

Upon completion of the construction and payment of all bills for construction, materials, engineering, pavement repairs, permits and related costs of PROJECT, BUILDER shall, in writing, dedicate PROJECT to DISTRICT. DISTRICT shall accept the dedication of PROJECT as promptly as practicable following BUILDER's offer of dedication and shall maintain and operate PROJECT after said acceptance at DISTRICT's sole cost and expense. Nothing in this AGREEMENT shall be construed as
2.7 Default

In the event of BUILDER's default during construction of PROJECT, DISTRICT shall notify BUILDER in writing of the default and describe nature of the default. BUILDER shall then have thirty (30) days after receipt of DISTRICT's notice of default to cure the default (or default cannot be cured within thirty (30) days, BUILDER shall commence to cure the default within the 30-day period and diligently prosecute the cure to completion thereafter) to DISTRICT's satisfaction. If BUILDER fails to cure (or commence to cure) the default, any and all funds remaining in the ESCHROW ACCOUNT for PROJECT shall become the property of DISTRICT and shall be used by DISTRICT solely to construct any remaining portion of PROJECT. BUILDER's default shall not impair, infringe upon or compromise BUILDER's or PARTICIPANTS' rights to receive a statement of water availability or will-served letter from DISTRICT for the number of water units purchased by BUILDER or PARTICIPANTS under terms of this AGREEMENT.

2.8 Water Distribution Plans for BUILDER's and PARTICIPANTS' DEVELOPMENTS

BUILDER and PARTICIPANTS shall have water distribution system plans for DEVELOPMENTS prepared by an engineer registered in the State of California and shall submit said plans showing the Fire Department's requirements to DISTRICT for review and approval. The plans shall be subject to all DISTRICT charges for these DEVELOPMENTS minus those funds contributed by BUILDER and PARTICIPANTS toward the costs of PROJECT. These contributions shall be credited against BUILDER and PARTICIPANTS' Tank Capacity Unit Charges and Acreage Charges. Upon completion of PROJECT, BUILDER will supply DISTRICT with a full accounting of costs that DISTRICT may credit BUILDER's and PARTICIPANTS' Acreage Charge and Tank Capacity Unit Charge and determine if any additional charges are due for DEVELOPMENTS.
3.1 Issuance of Statement of Water Availability and Dilution water

As consideration for BUILDER'S and PARTICIPANT'S financial contributions toward construction of PROJECT, DISTRICT shall immediately issue to BUILDER and each PARTICIPANT a conditional statement of water availability sufficient to satisfy the requirements of the City of Lancaster or Los Angeles County with respect to evidence of water availability for purposes of granting approval of any tentative tract map. Such statements of water availability shall state that BUILDER and PARTICIPANTS will receive credit against Tank Capacity Unit Charges and Acreage Charges to the extent of their financial participation in the design and construction of PROJECT, and that DISTRICT will issue conditional water service letters for water service, contingent upon (1) DISTRICT'S verification of PARTICIPANT'S participation in PROJECT, and (2) approval by DISTRICT of BUILDER'S or PARTICIPANT'S water distribution system for BUILDER'S or PARTICIPANT'S DEVELOPMENT, and that, upon satisfaction of the conditions contained in its conditional water service letter, DISTRICT will provide water service to BUILDER'S or PARTICIPANT'S DEVELOPMENT.

4. TERMINATION OF AGREEMENT

AGREEMENT shall terminate and be of no further force and effect upon the first to occur of the following: (1) the expiration of the twenty (20) year limit of this AGREEMENT; and (2) all the water units have been sold and PROJECT has been completed, inspected and accepted by DISTRICT. PARTICIPANTS have subscribed for all water units in excess of BUILDER'S, and DISTRICT has issued conditional statements of water availability for BUILDER and all of the PARTICIPANTS.

5. NOTICE AND APPROVALS

Any approval, disapproval, demand, document or other notice ("NOTICE") which either party may desire to give to the other party must be in writing and may be given by personal delivery, overnight mail courier, or by United States Registered or Certified Mail return receipt requested to the party to whom the NOTICE is directed at the address of the party set forth below or at any other address as the parties may designate in writing:

TO BUILDER:  Kaufman and Broad of Southern California
38345-A 30th Street East
Palmira, California 93550

TO DISTRICT:  Los Angeles County
Waterworks District No. 34, Desert View Highlands
900 South Fremont Avenue, 9th Floor
Alhambra, California 91803

6. ADMINISTRATION

BUILDER agrees that it shall promptly designate an Administrator to administer and carry out the provisions of AGREEMENT. BUILDER also agrees that it will not hold DISTRICT liable for any action or failures to act by BUILDER'S Administrator, ENGINEER or employees.
All parties hereto shall comply with the time limitations set forth in this AGREEMENT provided, however, that said time limitations may be extended for a period or periods of time equal to any period of delay caused by strikes, lockouts, fire or other casualty, the elements or Acts of God, refusal or failure of governmental authorities or public utilities to grant necessary approvals, authorizations, and/or permits for the construction of PROJECT contemplated hereunder (the parties agreeing to use reasonable diligence to procure the same with dispatch or other causes, unforeseen and beyond their reasonable control.

6. INSURANCE

BUILDER shall cause its contractors or subcontractors to provide and maintain at their own expense the following forms and amounts of insurance set forth below. Such insurance shall be provided by insurer(s) satisfactory to DISTRICT and evidence of such programs shall be delivered to DISTRICT on or before the commencement of construction of PROJECT. Such evidence shall specifically identify AGREEMENT and shall contain express conditions that DISTRICT is to be given written notice by Registered Mail at least thirty (30) days in advance of any modification or termination of any program of insurance.

Failure on the part of the BUILDER to cause its contractors or subcontractors to procure or maintain required insurance shall constitute a material breach of contract upon which DISTRICT may immediately terminate or suspend AGREEMENT or purchase and charge BUILDER for this insurance.

3.1 Liability

Such insurance shall be primary to and not contributing with any other insurance maintained by DISTRICT or County of Los Angeles, shall name the Los Angeles County Waterworks District No. 36, Desert View Highlands, and the County of Los Angeles as additional insureds, and shall include, but not be limited to:

1. Comprehensive General Liability insurance endorsed for Premises-Operations, Products/Completed Operations, Explosions, Underground and Collapse, Contractual, Broad Form Property Damage and Personal Injury with a combined single limit of not less than $1,000,000 per occurrence.

2. Comprehensive Auto Liability insurance endorsed for all non-owned, leased and hired vehicles with combined single limit of at least $500,000 per occurrence.

3.2 Worker’s Compensation

A program of Worker’s Compensation insurance shall be maintained in an amount and form to meet all applicable requirements of the Labor Code of the State of California, including Employers Liability with a $500,000 limit, covering all persons providing service on behalf of BUILDER and all risks to such persons under AGREEMENT.
8 1. Property Damage

BUILDERS All Risk Insurance, including flood and earthquake coverage covering the entire work against loss or damage shall be maintained. Insurance shall be an amount equal to the replacement cost of the subject construction and improvements and endorsed for broad form property damage. Deductibles not exceeding five percent (5%) of the construction cost and ten percent (10%) for earthquake will be permitted.

8 4. Builders Indemnification

BUILDERS agrees to indemnify, defend and save harmless DISTRICT and the County of Los Angeles, and DISTRICT'S agents, officers and employees, from and against any and all liability, expense (including defense costs and legal fees), and claims for damages of any nature whatsoever, including, but not limited to claims for bodily injury, death, or property damage arising from any negligent act or omission, or reckless or willful misconduct, of BUILDERS in connection with the construction of the PROJECT, or from workers’ compensation claims made by employees of BUILDERS. The foregoing indemnifications do not apply in the event that it is determined that the injury or damage in question was caused by a negligent act or omission, or reckless or willful misconduct of DISTRICT, the County of Los Angeles or any of the agents, officers or employees of either.

9. Attorneys Fees

Should any party or parties hereto institute any action or proceeding in court to enforce any provision hereof, for declaratory or similar relief or for damages by reason of alleged breach by another party of a provision of AGREEMENT, the prevailing party in such action be entitled to recover from the other party(ies) its reasonable costs including attorneys fees and court costs.

10. No Waiver

Failure of a party to insist upon strict and punctual performance of all covenant, conditions or other provisions of AGREEMENT or of any instrument or other writing herein provided for, shall not constitute a waiver of, or estoppel against, that party’s right to require such performance. In addition, a waiver by any of the parties of any failure by another party to perform as required by any instrument or other writing provided for herein shall not be deemed to be waiver of any preceding or succeeding breach of the same or of any other covenant, condition or provision, including, without limitation, the time for performance thereof.

11. Governing Law

AGREEMENT and any instrument, certificates or other writing herein provided for shall be governed by and construed and enforced in accordance with the laws of the State of California and shall be interpreted according to their fair meaning and not in favor of or against any party.
4. Issue: Visual Impacts

The visual analysis prepared for the Specific Plan area indicates that the majority of the project is not visible from off-site areas (see Exhibit 11 of the Specific Plan). However, the exhibit illustrates that Planning Areas 6, 27, 28A and 31 may be visible from limited off-site locations from two narrow view corridors. Planning Area 6 includes 292 single family lots (7,000 sq. ft. minimum lot size) located on the north facing slopes of the Verde Ridge. The Planning Area will be visible from a limited area to the north. The type of development proposed in this planning area is consistent with the development pattern which has historically occurred in the general area. The visual impact caused by the development of the planning area is not expected to be significantly different than that which currently exists.

Portions of Planning Areas 27, 28A and 31 will additionally be marginally visible from off-site areas along the Antelope Valley Freeway in the general vicinity of Avenue S. Although these Planning Areas will be somewhat visible from an even a greater area to the east at a distance of more than 5-10 miles, the scale of the project will have a minimal impact on existing views of the Sierra Pelonias. Due to the limited area visible from off-site areas, the existing day viewsheet from the majority of Palmdale will not be significantly impacted. Since the site is currently an undeveloped open space area and there is no light source currently existing on the site, the introduction of lighting will affect the existing dark night sky. The Specific Plan has hillside lighting measures to potentially decrease the visual effects of night lighting in hillside areas. The standards require that outdoor lighting be kept to a minimum and that all exterior lighting reduce impacts to the night sky.

3. Issue: General Plan Conformance

The City Ranch Specific Plan contains a extensive discussion of the project's conformance with the General Plan. In reviewing the General Plan conformance section of the Specific Plan (Chapter 3, page III-1), staff feels that the Plan demonstrates substantial conformance with the goals, objectives and policies of the General Plan. However, certain policies pertaining to landform modification and nuisance issues may require further review, as noted above.
Government Code Section 65359 requires that all specific plans be found consistent with the General Plan in order to be approved. Staff would recommend that the Commission closely evaluate the General Plan conformance section of the Specific Plan to ensure that the project appropriately implements the intent of the General Plan.

6. Issue: Modifications to the Specific Plan Text

Following is a list of items in the Specific Plan for which staff recommends additional wording to clarify requirements or procedures. Staff has discussed these items with the applicant, who has expressed concurrence with a majority of these recommended revisions. Those revisions where there is not agreement are so noted.

Page II-5. (Environmental Documentation):

The second paragraph on this page incorrectly states in two places that "...a focused E.I.R., E.I.R Addendum or Supplemental E.I.R will be required." This language should be revised to read "a subsequent EIR or Supplemental EIR will be required." The references to Focused and Addendum EIRS should be deleted. This language would also apply to the last sentence of page VII-3.

Page IV-26. Section (b). (Water Plan):

The following text should be added to this section to encourage the conservation of water in relation to landscaping irrigation:

"The use of turf shall be limited and the use of xeriscape landscaping shall be considered wherever feasible."

Page V-1. (General Regulations). (NEW)

A broad statement should be included in this section that qualifies that the maximum unit counts in individual planning areas are subject to the demonstration that unit counts can be achieved in conformance with all design guidelines and development standards contained in the Specific Plan. Staff feels it is premature for the City to commit to a specific number of units without accompanying data that verifies that the unit counts in any one planning area are achievable while maintaining consistency with the Specific Plan's design and density standards. The following language is recommended to be added as a new item under the General Provisions section:
The maximum unit counts within the individual planning areas are subject to Planning Commission approval based on site specific evidence that dwelling unit counts can be achieved in conformance with the design guidelines and development standards contained in the Specific Plan. Should review of subsequent projects and site specific criteria relating to the physical characteristics of such areas demonstrate that the proposed number of units cannot conform with the requirements of the Specific Plan, to a lesser number of units may be permitted.

Page V-1, (General Regulations), (NEW):

The issue of private streets is not currently addressed in the Specific Plan. In order to provide additional clarification of this issue, the following language should be added to the Specific Plan:

"All private streets shall be constructed in accordance with the residential street standards specified in the Specific Plan, except as approved by the City Engineer."

Page V-2, Section (6), General Regulations:

This section should be modified to clearly set forth that the submittal should be governed by the Subdivision Ordinance in effect at the time of submittal. The current reference to applicable subdivision requirements is less specific and could create interpretation problems. The language should be revised to read:

"... and Subdivision Codes and guidelines required by the City of Palmdale in effect at the time of submittal."

Page V-4, Section (20), (General Provisions):

This section should be revised in order to provide additional clarification and regulation of the flag lot issue. The language should read as follows:

"Flag lots may be permitted in hillside areas above 15 percent under the following circumstances:

1. Where it can be shown that grading impacts will be reduced; or

2. Where units are clustered on hillside streets to minimize the number of driveways accessing the hillside street; or
3. Where it can be shown visual impacts will be reduced.

The stem of a flag lot shall not be counted in the total lot area. The total length of the stem of a flag lot shall only be as long as the depth of the adjacent lots. Final configuration and location of flag lots are subject to Planning Commission review and approval.

Page V-6, Section 3, (Accessory Uses Permitted):
The following text should be added after "Household pets...":

"(Any domesticated animal commonly maintained in residence with man)"

The text would also apply to page V-11, section 3 and page V-18, section 3.

Page V-6, Section (4)(b), (Accessory Uses Permitted):
The section should be revised to read:

"The following wild animals, but in no event more than three (3) such animals in any combination on a lot or parcel of land."

The text would also apply to page V-11, section 4(b) and page V-19, section 4(b).

Page V-6, Section (4)(c), (Accessory Uses Permitted):
A text change from "Other similar animals which, in the opinion of the Planning Commission" to "Other similar animals as determined by the Planning Commission". Additionally, the following sentence should be added:

The Planning Commission shall also determine the permitted number of animals for those not previously specified.

This language would also pertain to page V-11, Section 3 and page V-19, Section 4(c).

Page V-7, Section (7), (Accessory Uses Permitted):
The text should be revised to read:

"Homes for children, foster family, six or fewer persons."
This language would also apply to page V-12, Section 4 and page V-19, Section 6.

Page V-8, Section (11). (Uses Subject to a Conditional Use Permit):

The text should be revised to read:

"Homes for aged persons, group home, over six persons."

This language would also apply to page V-14, Section 15 and page V-20, Section 12.

Page V-8, Section (12). (Uses Subject to a Conditional Use Permit):

The text should be revised to read:

"Homes for children, special boarding, over 6 persons."

This language would also apply to page V-13, Section 10 and page V-20, Section 13.

Page V-8, Section (20). (Uses Subject to a Conditional Use Permit):

Staff would recommend a minor text change to this section. It currently reads: "Other uses, similar in nature, as deemed appropriate by the Planning Director." The suggested text is "Other uses similar in character, intensity, and use to those listed above, as determined by the Director of Planning."

Similar changes would also apply to page V-14, section 3 (20) and page V-21, Section (20) and page V-29, section (67).

Page V-9, Section 3(a). (Building Setbacks):

The following text should be added to this section to promote the variation of building setbacks and improve residential streetscapes:

"Variable setbacks shall be incorporated between each dwelling unit, with an average of twenty (20) feet and a minimum of fifteen (15) feet. Variation in the front setback shall average 20 feet. The minimum front setback shall be 15 feet. Variation of setbacks on curvilinear streets may be reduced or waived."
This language would also apply page V-10, section (f)

Page V-10, Section 5(a), (Fences and Walls):
The text should be revised to read:

"Front Yard Setback: Maximum three (3) feet six (6) inches".

"Side and Rear Yard Setback: Maximum six (6) feet (except in the required front yard setback area)."

This language would also apply to page V-15 section (h) and page V-17, Section (h).

Page V-14, Section 1(h), (SFA Type A):
The following text should be added to the end of this sentence:

"...contained on page V-23, Section D."

This language would also apply to page V-16, section 2 (b).

Page V-14, Section 1:
The following text should be added to this section as a new item:

"No more than eight dwelling units may be contained within a single building."

Page V-14, Section (f)(l), (SFA Type A):

This section is being revised by the applicant in order to clarify setback standards. These standards will be forwarded to the Commission as soon as they become available.

The following text should also be added to this section:

"Garages with parking aprons less than 20 feet in length shall have automatic garage door openers and sectional roll-up doors."

This language would also be added to Page V-16 under section (f)(1),(2),(3); and page V-22, section (7)
Page V-20. Section (c)(5). (Uses Subject to Site Plan Review):

The reference to "public or quasi-public uses" is not defined and overly broad. Staff recommends that this reference be deleted or further defined.

Page V-24. Section (a):

This section currently proposes a minimum parcel size of 5 acres although the second paragraph of this sub-section essentially waives this requirement. Staff would recommend that this entire sub-section be simplified by establishing a minimum RPD area of one (1) acre. This change would allow the RPD concept to be effectively applied to infill sites.

The revised text is as follows:

"The development shall be proposed on a parcel or parcels not containing less than one (1) acre. A greater emphasis shall be placed on functional private open space areas for individual dwelling units where parcel size is less than five (5) acres.

Page V-25. Section 3(d)(6):

Staff recommends that the text be modified to read:

"Other facilities approved by the Planning Commission during Conditional Use Permit review."

Page V-29. Section 5:

Staff recommends that the last sentence be modified to state:

"The Planning Director may modify the development schedule based upon a determination that said modification would not result in delay of provision of open space and recreational amenities to the project."

Page V-29. Section (7):

The first sentence should be revised to read:

"A preliminary plan for the landscaping of all open areas, where appropriate, shall be submitted to and approved by the Planning Commission along with the Conditional Use Permit."
Page V-29, Section (54), (Standards):
The text should be revised to the following:

"Restaurants, including the permitted serving of alcohol, provided all dining facilities are located within an enclosed building."

Page V-30, Section (c)(6), (Uses permitted subject to a Conditional Use Permit):
The following text should be added to this section:

"Automobile service stations, including vehicle maintenance, provided that all operations take place wholly within an enclosed structure; specifically excludes heavy automobile repair uses such as welding, auto body, painting and similar uses."

Page V-30, Section c(9), (Uses permitted subject to a Conditional Use Permit):
The text should read "Day Care Centers" with the reference to a number of children deleted.
The same language would apply to page V-33, Section 8(2).

Page V-31, Section (a)(1), (Site Development Standards):
This section should be revised to read:

"Building site: 5,000 square foot minimum."

Page V-32, Section (ll), (Site Development Standards):
The following text should be added to this section to provide design guidance:

"Some elements of design or architectural features shall be carried through on all sides of primary structures and on accessory structures."

Staff would also recommend adding these policies to page VI-31 as additional commercial design guidelines:

"Pedestrian walkways should be provided to connect to public sidewalks and adjacent residential neighborhoods where appropriate.

Pedestrian oriented features such as seating areas and outdoor eating areas should be incorporated where feasible."
Pedestrian circulation shall be emphasized between buildings and from major tenants to public streets.

Drive through features shall be screened through the use of landscaped berms, building orientation and/or other design elements to minimize adverse aesthetic impacts.

Page V-32. Section (13)(a). (Site Development Standards):

The following text should be added to this section:

"The minimum height of screening shall be six feet. In cases where there are grade differentials or where walls must be higher for noise attenuation, every effort shall be made to reduce wall height on the residential side by use of earthen berms, combinations of berming, walls, open fencing, landscaping and similar measures."

Page V-32. Section (13)(h)(2). (Site Development Standards):

The following sentence should be added to this section:

"A berm shall be constructed of earthen materials and it shall be landscaped with drought tolerant plants and water saving irrigation where possible. The use of turf is discouraged."

Page V-31. Section 13(d). (Landscaping):

The first sentence of this paragraph should be revised to read:

"Roof top mechanical equipment shall be completely screened from view of adjacent streets or contiguous development areas by architectural means such as parapet walls or rooftop walls which are integrated into the building's architecture."

Similar changes would also apply to page V-22, section (e) (14), page V-37, Section 8(d) and page V-40, Section 6(d).

Page V-34. Section (m). (Landscaping):

The following text should be added after the first sentence:
"The use of drought tolerant plants and xeriscape materials should be implemented as the preferred landscaping method wherever feasible."

**Page V-14. Section (i), (Landscaping):**

The following text has been added to this paragraph:

"Drip irrigation or other water-conserving irrigation should be used where appropriate."

This language also applies to page IV-26, Section 2(f), page V-37, Section 9(d) and page V-41, Section 7(d).

**Page V-14. Section 2(a)(4), (Standards):**

This section should be revised as follows to delete the reference to community facilities from this category, since it has already addressed specifically in other sections. The City of Palmdale Maintenance Facility should be moved to the Community Facility Use Standards section and Exhibit 13A should be revised to indicate a portion of Planning Area I as Community Facility. The uses listed as "temporary storage of materials and equipment for construction of public works and any similar agricultural, conservation, park and recreation, maintenance, open space use or accessory uses which are approved as an appropriate use by the Director of Planning" should be put under a new section titled Temporary Use Permit.

**Page V-15. Section 2(b)(5), (Uses Permitted Subject to a Conditional Use Permit):**

The reference to "Sewage waste disposal" should be deleted from this section.

**Page V-16. Section 2(a), (Standards):**

This section should be revised as follows:

The references to Community Centers, Public and private recreation centers and facilities, civic and cultural facilities, special community events, daycare facilities and community information center should be moved to the Conditional Use Permit section. The references to Temporary real estate sales offices and information centers in conjunction with the sale of new homes and Temporary storage of materials and construction equipment used in construction or maintenance of streets and highways, sewers, storm drains, underground conduits, flood
control works, pipelines and similar uses should be incorporated in a new section titled, "Uses permitted subject to a Temporary Use Permit."

Page V-39. Section (b)(12). (Uses Permitted Subject to a Conditional Use Permit):

The reference to solid waste landfill projects should be deleted from the list of uses permitted subject to a conditional use permit.

Page V-43. Section 3(a)(1). (Parking Space Requirements):

The reference to carport structures is mentioned in this section. Since carports are not permitted in the single family detached designation, the first sentence of this section should modified to the following to clarify this issue:

"Off-street parking spaces for Single Family Detached dwellings shall be located on the same lot or parcel on which the dwelling is located and shall consist of two enclosed spaces."

Page V-53. Section I. (Sign Standards):

The following text should be added in the beginning of this section as a new item:

"The area of a sign face (which is also the sign area of a wall sign or other sign with only one face) shall be computed by means of the smallest square, circle, rectangle, triangle, or combination thereof that will encompass the extreme limits of the writing, representation, emblem, or other display, together with any material or color forms an integral part of the background of the display or used to differentiate the sign from the backdrop or structure against which it is placed, but not including any supporting framework, bracing, or decorative fence or wall when such fence or wall otherwise meets zoning ordinance regulations and is clearly incidental to the display itself.

The sign area for a sign with more than one face shall be computed by adding together the area of all sign faces visible from any one point. When two identical sign faces are placed back to back, so that both faces cannot be viewed from any point at the same time, and when such sign faces are part of the same sign structure and are not more than forty-two (42) inches apart, the sign area shall be computed by the measurement of one of the faces."
This text would also apply to page C-18, Section 2: and should be revised accordingly.

**Page V-51. Section 2(h). (Temporary signs):**

The first sentence should be revised to read: "The following temporary signs are allowed subject to the issuance of a sign permit by the City of Fairdale."

**Page V-51. Section 2(h)(2). (Temporary signs):**

The sentence should be revised to read: "Real estate signs greater than six (6) square feet in area, but no greater than thirty-two (32) square feet in area."

**Page V-51. Section 2(h)(3)(d). (Temporary signs):**

The reference to five (5) feet should be changed to ten (10) feet consistent with the City's existing standard.

**Page V-54. Section (g). (Temporary signs):**

This section should be deleted as the City no longer requires a deposit.

**Page V-54. Section 4. (Temporary signs):**

The fifth sentence should be deleted from this section since cash deposits are no longer required by the City.

**Page V-57. Section 2(d). (Free standing signs):**

The last sentence should be revised to the following: "Such signs shall be a minimum ten (10) feet from the property line."

**Page V-58. Section 4 (Signs Seal Program):**

The references to "sign seal" should be changed to read "sign decal". The first sentence of the section should be revised to read:

"Every sign for which this Chapter imposes standards shall have a decal provided by the City which will include the identification number, the name of the installer and the installation."

**Page V-59. Section (h). (Grading Policies):**

The following grading policy should be added to encourage landform grading and minimize adverse visual impacts in hillside areas, where appropriate:
"Contour and landform" grading that follows existing natural contours, rather than geometric grading which does not consider natural topography shall be required except when determined to be infeasible by the City Engineer. Grading for residential pads in highly visible areas such as near the crest of a ridgeline, along the edge of a daylight cut or manufactured landform embankment shall be designed to avoid the image of linear rows of houses stepping up and down the hillsides."

The applicant has expressed concerns over the proposed policy.

**Page V-60, Section (10), (Grading Policies):**

This section currently requires that large manufactured slopes over 30 feet in visual length simulate the curvature of naturally shaped slopes or blend into the natural slope by gradually adjusting the contours and slope orientation. Staff feels that the slopes less than 30 feet and greater than 100 feet are also significant slope areas and should be subject to this requirement. Staff would recommend that the length at which this requirement becomes effective be revised to 150 feet rather than the current 300 feet in areas that are visually prominent. This section should be revised to read:

"Large visually prominent manufactured slopes greater than 150 feet in "visual length" shall be designed so as to simulate the curvature of a naturally shaped slope, or shall be blended into natural slopes by gradually adjusting the contours and slope orientation. Utilization of curvilinear street patterns is a necessary element in establishing conformance with this standard."

This text change would also apply to the first sentence of page V-69, section (f)(4).

**Page V-64, Section (20), (Grading Standards-General):**

The following language should be added to this section:

"Residential structures constructed on manufactured pads (production housing) near the crest of a ridgeline, along the exposed edge of a daylight cut or manufactured landform embankment shall utilize a combination of the following architectural, grading and landscaping elements as required to integrate and blend residential structures into the existing landform:"
a. Increase (rear) setback to reduce visibility of structure.
b. Align roof pitch parallel to the slope of the landform.
c. Restrict second story areas to within the shape of the roof.
d. Limit the height of structure to one story.
e. Undercut pad (backgrade) to hide a portion of the structure.
f. Group trees to soften the effect of window and wall areas.

Architectural elevations and plot plans for individual lots shall be reviewed by the Planning Commission at the tentative map review if available, or by the Planning Director during the Subdivision Development review process.

The applicant has indicated concerns regarding the proposed language.


The Specific Plan currently requires a variety of fencing materials for interior residential walls. Staff would recommend adding "pressure treated wood" to the first sentence of this section, in order to provide an alternative wood fencing material.


The first sentence of this section should be revised to read:

"Approved split-rail type equestrian fencing (made from such materials as PVC, woodcrete, etc.) should be included along the equestrian trail where control of horses or separation from potential safety hazards exist."

Page VI-16. Section 3(a)(5). (Design Guidelines):

This section should be revised to the following in order to more adequately address the solar design and access issue:

"§5. Solar Design and Access: For all projects, site planning and architectural design should strongly consider passive solar access issues. This review should include, but not be limited to, the following measures:
a. Street and lot orientation should provide maximum exposure of primary building mass in a south-facing direction to the extent physically feasible. Attached garages shall not be located so as to inhibit solar access on south building sides.

b. Roof overhangs should be utilized to shade windows from the high summer sun.

c. Large window expanses should be oriented in a southerly direction to capture the heating opportunities associated with the low winter sun.

d. Window areas should be minimized on west facing sides of buildings except if appropriate window screening is utilized.

e. Creative landscape plantings should be utilized. For example, selective placement of certain deciduous trees can provide summer shading while allowing solar penetration during the leafless winter months.

The following statement should also be added as a new guideline in this section to address pedestrian circulation in residential areas:

"#11. "Emphasis should be on the strategic placement of pathways, easements or other means at cul-de-sac ends which encourage pedestrian access to connections with arterials, trails, bicycle paths, park and school facilities within the planning area and which promote neighborhood interaction."

Page VI-16. Section 3(a)(8). (Design Guidelines):

This section should be revised to indicate that flag lots are permitted in areas greater than 15 percent slope rather than the 10 percent currently listed. The document previously permits flag lots in areas above 15 percent slope and this revision will provide consistency with that slope category.

Page VI-18. Section (d)(New):

Staff would recommend that a new subsection 19 be added to this section which addresses use of carports in multi-family developments. Emphasis should be given to the use of materials and overall architectural design that is fully consistent with the residential structures. The new text is as follows:
19) Carport structures should receive design treatments that reflect the architectural design, color treatment and materials consistent with those of the primary residential structures, including:

1) Use of consistent roofing materials;

2) Provision of roof pitch and design that is compatible with other residential structures.

3) Utilization of colors, trim, and building materials that are consistent with those used on primary residential structures.


The second paragraph, third sentence should be revised to read as follow:

"The Planning Director may, at his or her discretion, forward a Staff Review approval item or a use consistency determination to the Planning Commission for an interpretation of the purpose and intent of the Specific Plan relative to the project under review."

Page VII-10. Section (a). (Specific Plan Amendments):

This section should be revised to read as follows:

"Transfer of units as outlined in Section VII. U., "Transfer of Dwelling Units" and outlined on Table 2 therein, except for Planning Areas #3 and #33 which will require Specific Plan Amendments."

Page VII-18. Section U. (Transfer of Dwelling Units):

The last sentence in the fourth paragraph shall be revised to read as follows:

"All transfers of units shall be approved by the Director of Planning except for transfers into Planning Areas #3 and #33, which will require a Specific Plan Amendment."

Exhibit 15. (Circulation Plan):

This exhibit illustrates the street and parkway cross-sections for the project's circulation system. Cross sections "B" and "C" show the proposed parkway section for those areas which contain both a sidewalk
and a bicycle trail. The cross sections proposed for the Specific Plan are different than the cross sections recently approved in the Ritter Ranch Specific Plan. Where the two projects meet, the inconsistency between the two specific plans could potentially result in interface problems and a disruption in the trail system. In order to improve the interface between the two projects and the functionality of the trail system, staff would recommend that the cross section in the Specific Plan be revised to the parkway section approved for Ritter Ranch. The section is as follows: The curb to curb paved roadway, 0-5 feet of landscaping, a 5 foot sidewalk, 8 feet of landscaping, a 10 foot bicycle path and then 0-5 feet of landscaping.

Exhibit 22. (Conceptual Grading Plan):

This exhibit contains two errors. Planning Areas 21 and 23 are incorrectly shown as SFD (single family detached) areas whereas these planning areas are actually proposed as SFA (single family attached) areas. The exhibit should be revised to reflect the correct land use designations.

V. ENVIRONMENTAL REVIEW:

A complete discussion of all environmental issues is provided in the Draft Environmental Impact Report. A comprehensive list of all the mitigation measures proposed for the project are included in the Draft Mitigation Monitoring Program, presented in Section 12 of the Draft EIR. Additionally, project alternatives are discussed in Section 9 of the Environmental Impact Report.

Section 5 of the Draft Environmental Impact Report identifies areas where the project will have unavoidable significant impacts on the environment that can not be mitigated to a level of insignificance. These include:

1. The project will contribute to significant cumulative land use impacts, including loss of open space.

2. The proposed project would contribute additional housing to an area which is already rich in housing but poor in employment opportunities. The proposed project's "housing rich" jobs/housing ratio cannot be fully mitigated and remains a significant unavoidable adverse impact.

3. Implementation of the recommended mitigation measures would reduce many adverse geological impacts; however, they would not eliminate all the significant impacts associated
with geologic hazards, specifically hazards associated with a seismic event. Geologic impacts are, therefore, considered unavoidable adverse impacts.

4. The project will contribute to a significant cumulative loss of biological habitat and diversity in the region.

5. Development of the proposed project would add emissions to the already poor regional air quality. Therefore, the proposed project is anticipated to create unavoidable adverse impacts with regard to air quality.

6. The project will contribute to traffic noise along Elizabeth Lake Road. Some areas along Elizabeth Lake Road containing sensitive receptors such as residences and schools may be significantly impacted.

7. Implementation of the proposed project will permanently transform the project site from its currently undeveloped condition into a semi-urban environment. Therefore, the project will have a significant direct and cumulative impact to visual resources.

8. The project will contribute to the cumulative loss of a dark nighttime sky which is considered an unavoidable adverse impact.

9. Development of the project may contribute to potentially significant impacts to groundwater, if in the future, it is determined that the Lancaster subunit can not support the levels of development in the Antelope Valley.

10. In the event that expansion of the Antelope Valley Landfill does not occur in a timely manner, the project, along with the other surrounding developments, would contribute to cumulative impacts to solid waste disposal.

11. Development of the proposed project, as well as development of the other projects in the vicinity of the project site, could result in a significant impact on police services should the cost of providing Sheriff's services become prohibitively expensive in the future as to cause a reduction in manpower, facilities or services to the community as a whole.

12. Development of the project site may result in the inadvertent loss of significant paleontological resources.

13. If, in the future, a clear link between proximity to high-voltage electric lines and deleterious health effects is determined, impacts associated with electromagnetic radiation would be significant.
In cases where significant impacts cannot be reduced to a level of insignificance by mitigation measures, Section 15091 of the California Environmental Quality Act applies. That section states that no public agency shall approve or carry out a project for which an EIR has been completed which identifies one or more significant environmental effects, unless the public agency make one or more written findings for each of those significant effects, accompanied by an explanation of the rationale for each finding. The possible findings are:

1. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the draft EIR.

2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

3. Specific economic, social, or other consideration make infeasible the mitigation measure or project alternatives identified in the final EIR.

In respect to these findings, it would be difficult to determine that either #1 or #2 are applicable to this case. The significant impacts identified have not been mitigated to a level of insignificance and no other public agency is involved ultimately in this decision. Finding #3 is typically utilized in justifying a Statement of Overriding Considerations. Although it would be impossible to lessen all impacts associated with this project to a level of insignificance, it is appropriate to consider certain changes that would enhance applicability with Finding #1. These changes and specific plan modification would address issues raised in the analysis section of this report. However, it is recognized that significant impacts will remain. In such situations, Findings of Overriding Consideration will be necessary to approve the project. The applicant has provided the following possible rationale for these findings:

The City Ranch project will provide economic and social benefits which will outweigh the identified unavoidable impacts, including but not limited to:

1. Planning and developing the property as a comprehensive and cohesive recreational community with sufficient commercial development, schools, parks, trails, golf, community facilities and other elements to support the residents of the City of Palmdale.
2. Preserving 419 acres of natural open space where biological resources and wildlife will be protected and where public passive enjoyment of these resources in a protected environment will be enhanced.

3. Providing quality housing opportunities which meet the needs of a variety of lifestyles and income levels.

4. Providing approximately 889 permanent jobs created by service and supply demands from project residents and commercial tenants as well as providing a significant number of construction related and real estate sales related jobs.

5. Providing quality design architecture and sound engineering with appropriate setback requirements in case of a seismic event.

6. Designing and developing the property with a circulation system that meets local needs and provides safe and efficient transportation solutions.

7. Protecting scenic viewsheds both to and from the property and preserving the Verde ridge and Sierra Pelona ridgeline.

8. Designing and developing regional infrastructure to distribute the use of Antelope Valley East Kern and Los Angeles County Waterworks water for use by City of Palmdale residents.


10. Providing quality community design and circulation elements conducive to efficient public health and safety issues as well as efficient operations for Sheriff services.

11. Developing infrastructure improvement to meet project requirements and serve other regional needs for water, sewage disposal, storm drainage, utilities, etc.

12. Providing a community design to protect paleontological resources and/or implementing a mitigation program to preserve significant items.
LEGAL DESCRIPTION: CITY RANCH SOUTH

PARCEL 1:

All of Section 29, Township 6 north, Range 12 west, San Bernardino Meridian, in the County of Los Angeles, State of California, according to the official plat of said land, except those portions described as follows:

Beginning at the northwest corner of said Section 29; thence south 89° 50' 17" east 1639.96 feet along the north line of said Section 29; thence south 89° 45' 48" east, 2153.59 feet to the beginning of a tangential curve concave southerly and having a radius of 500.00 feet, said curve being the centerline of Elizabeth Lake Road; thence southwesterly along said curve through a central angle of 33° 07' 30" a distance of 289.07 feet; thence south 56° 38' 18" west, 532.73 feet to the beginning of a tangential curve concave northerly and having a radius of 1,000.00 feet; thence westerly along said curve through a central angle of 18° 34' 40" a distance of 324.83 feet; thence south 75° 14' 58" west, 585.29 feet to the beginning of a tangential curve concave to the southeast and having a radius of 500.00 feet; thence southwesterly along said curve through a central angle of 34° 19' 23" a distance of 299.53 feet; thence south 40° 59' 13" west, 549.86 feet to the beginning of a tangential curve concave to the north and having a radius of 500.00 feet, thence along said curve through a central angle of 34° 36' 24" a distance of 476.53 feet; thence north 84° 28' 03" west 2175.31 feet to the intersection of the west line of said section 29; thence north 00° 42' 26" west along said westerly line of section 29, 1,186.88 feet to the point of beginning.

Also except those portions included within the lines of the lands conveyed to the State of California by Parcels 2 and 10 of the deed recorded on October 04, 1968 as Document No. 415 in Book D-4153 Page 623 official records, in the office of the county recorder of said County.

PARCEL 2:

The southeast quarter and also the south half of the north half of Section 29, Township 6 north, Range 12 west, San Bernardino Meridian, in the County of Los Angeles, State of California, according to the official plat of said land.

Except that portion included within the lines of the land conveyed to the State of California by Parcel 1 of the deed recorded on October 04, 1968 as Document No. 415 in Book D-4153 Page 623 official records, in the office of the county recorder of said County.
PARCEL 1:

All of Section 31, Township 6 north, Range 12 west, San Bernardino Meridian, in the County of Los Angeles, State of California, according to the official plat of said land.

PARCEL 4:

All of Section 32, Township 6 north, Range 12 west, San Bernardino Meridian, in the County of Los Angeles, State of California, according to the official plat of said land.

Except that portion included within the lines of land conveyed to the State of California by Parcel 11 of the deed recorded on October 04, 1966 as Document No. 413, in Book D-411, Page 423 official records, in the office of the county recorder of said County.

PARCEL 5:

All those certain easements, non-exclusive easements, right of ways and permanent easements, for roads, bridges and ingress and egress, as reserved by Geo. E. Platt Company, in the deed to the State of California, recorded on October 04, 1966 as Document No. 413 in Book D-413, Page 423 official records, in the office of the county recorder of said County.

Known as City Ranch South, containing 1963 acres, more or less.
EXHIBIT B
ASSSESSOR'S PARCEL NUMBERS
WITHIN THE CITY RANCH SPECIFIC PLAN

Section 29
3206-019-02 (portion)
3206-019-03
3206-019-04
3206-019-05
3206-019-07
3206-019-10
3206-019-11 (portion)

Section 30
3206-020-01
3206-020-02
3206-020-03
3206-020-06
3206-020-07
3206-020-08

Section 31
3206-023-01
3206-023-02

Section 32
3206-024-01
3206-024-02
3206-024-03
EXHIBIT C

COMMENTS RECEIVED ON THE DRAFT
CITY RANCH SPECIFIC PLAN
September 30, 1991

Ms. Tara Hullinger
City of Palmdale
Planning Department
38306 9th Street East
Palmdale, CA 93550

Dear Ms. Hullinger:

RESPONSE TO A DRAFT SPECIFIC PLAN
CITY RANCH

Thank you for the opportunity to provide comments on the Draft Specific Plan for the proposed City Ranch. We have reviewed the subject document and offer the following comments:

Waste Management

Los Angeles County is experiencing a shortage in solid waste disposal capacity this year. The proposed development will adversely impact disposal facilities. To alleviate this crisis, the California Integrated Waste Management Act of 1989 requires development of programs for diverting 25 percent of the solid waste stream from landfills and transformation facilities by 1995 and 50 percent by the Year 2000. To meet these mandates, the Specific Plan should identify waste quantities that will be generated along with mitigation measures of waste reduction, recycling, and composting programs. Also, the Specific Plan should identify development standards to provide adequate "storage areas" within each type of development group and each type of handling for collecting recyclable materials.

The existing hazardous waste management (HWM) facilities in this County are inadequate to handle the hazardous waste currently being generated. The proposed residential development will generate hazardous waste, which could adversely impact existing HWM facilities. The DEIR should address this issue and provide mitigation measures.
The Plan should clearly recognize the potential for compliance with National Pollutant Discharge Elimination System (NPDES) permits for stormwater discharges as well as permits for construction activity. Although the stormwater discharge permit does not currently apply to the Antelope Valley area, it can be expected to impact the area during the development period of the project. Construction permits to be issued by the State should be expected to be required by early to mid-1992.

Should any operations at the subject facility include installation of underground storage tanks and/or industrial waste discharge, this office will have to be contacted for issuance of the necessary permit(s).

If you have any question regarding these comments, please contact Mr. Michael Bohlander of our Waste Management Division at (818) 458-1962.

Traffic/Circulation

We believe a development of this magnitude would generate a significant amount of traffic. Similar projects located within Los Angeles County unincorporated areas would require a traffic study to assess the impacts of this project and the cumulative impacts of this and other area projects on area circulation. We request that the traffic study be prepared for this project and reviewed by this Department since it will have a direct impact on the traffic within the surrounding unincorporated area. The traffic study should include estimates of traffic volumes generated, distribution onto the area roadways, Level Of Service (LOS) analysis for affected intersections and freeway interchanges, and propose any appropriate mitigation measures.

We recommend that 1,600 vehicles per hour per lane be used in an intersection capacity analysis and a mid-range LOS D (V/C = .31) is the point beyond which mitigation measures are required.

A copy of our Traffic/Access Guidelines is enclosed.
If you have any questions regarding these comments, please contact Mr. Joe Banales of our Traffic and Lighting Division at (818) 458-5909. Questions regarding the environmental reviewing process of this Department can be directed to Ms. Clarice Nash at the above address or at (818) 458-4334.

Very truly yours,

T. A. TIDEMANSON
Director of Public Works

CARL L. BLUM
Assistant Deputy Director
Planning Division

MA:as
WP51/.24

Enc.
Generally, the department staff is concerned with adverse impacts on traffic when: 1) traffic generated by a project considered alone or cumulatively with other projects, if added to existing traffic volumes, exceeds the design capacity of an intersection or roadway, contributes to an unacceptable level of service, or exacerbates an existing congested condition; and/or 2) project generated traffic interferes with the existing traffic flow (e.g., due to the location of access roads, driveways, parking facilities); and/or 3) proposed access locations do not provide for adequate safety (e.g., due to limited visibility on curving roadways); and/or 4) nonresidential uses generate commuter or truck traffic through a residential area; and/or 5) project generated traffic significantly increases on a residential street and alters its residential character.

(Note: Access as associated with the use of emergency vehicles is discussed under "Fire Hazard".)

These guidelines provide an outline of the information generally to be included in the Draft EIR you prepare or have prepared. Depending upon the specific concern(s) of the department staff, all of the material listed may not be required. A traffic report should be prepared by a registered civil or traffic engineer. A traffic report is generally needed if a project generates over 500 trips per day unless other possible adverse impacts (see page 3) are identified.

PROJECT DESCRIPTION

Note: This information may be included in another section of the EIR (e.g., Section I--Project Description).

1. A description of the project, including those factors which quantify traffic generators--e.g., dwelling units, square feet of office space, persons to be employed, restaurant seats, acres of raw land, etc., for residential developments, the description should indicate the type of residence, e.g., one level or townhouse condominiums, and if its use is for families, adults or retirees.

2. A plot plan showing proposed driveways, streets, internal circulation, and any parking facilities on the project site.

SETTING

1. A description of existing streets and roadways, both within the project site (if any) and in the surrounding area. Include information on the roadways' classifications, the number of lanes and roadway widths, signalized intersections, separate turn lanes, and the signal phases for turning movements.
2. Existing daily directional and peak-hour through and turning traffic volumes on the roadways surrounding and/or logically associated with the project site, including Secondary and Major highways and freeways. Local streets affected by the project should also be shown. If the proposed project is to be completed in several years, existing traffic volumes should be projected to that future date. Each report shall include appendices providing count data used in the preparation of the report. The source and date of the traffic volume information shall be indicated. Count data should not be over 1 1/2 years old. Since peak volumes vary considerably, a 10 percent daily variation is not uncommon, especially on recreational routes or roadways near shopping centers; therefore, representative peak-hour volumes are to be chosen carefully.

**ANALYSIS AND IMPACT**

1. Tabulate the estimated number of daily trips and peak-hour trips (a.m. and p.m.) generated by the proposed project entering and exiting the site. Trip generation factors and source are to be included. ITE rates should generally be used, except in the case of condos/townhomes when the following rates should be used per unit: eight trips/day; 0.54 trips/a.m. peak, 0.48 outgoing, 0.06 incoming; 0.73 trips/p.m. peak, 0.26 outgoing, 0.47 incoming. Also show a similar trip generation tabulation and a map of other nearby projects which would add traffic to the locations under study.

2. Diagrams should be provided showing the project and nearby project's peak-hour trips logically distributed on the roadway system, superimposed with current or projected peak-hour volumes. The study area should include arterial highways, freeways, and intersections generally within a one-mile radius of the project site. (Note: This distance may be greater than one mile for rural areas depending on the proximity to nearby signalized intersections and the availability of master plan access routes).

3. If it appears that the project's generated traffic alone or together with other projects in the area, could worsen the level of service (LOS) of an intersection or roadway a "before" and "after" level of service analysis is necessary. The Intersection Capacity Utilization (ICU) or Critical Movement Analysis (CMA) are two methods often used to assess existing and future levels of service at intersections.

If using the Intersection Capacity Utilization method, a maximum of 1,800 vehicles per hour per lane should be used (dual left-turn lanes have a capacity of 2,800 veh/hr) and a ten percent yellow clearance cycle should be included. Intersection levels of service analysis and calculation work sheets shall be included in the report for the following conditions: (a) existing traffic; (b) existing plus ambient growth to the year the project will be completed; (c) traffic in (b) plus project traffic; and (d) traffic in (c) plus the cumulative traffic of other known developments. The project's impact on two-lane roadways should also be analyzed if these two-lane roadways are the principal or only access to more fully developed Master Plan Highways.
Level of service C (volume to capacity ratio of 0.8) is considered acceptable. For most areas of the County, mid-range level C or volume to capacity ratio of 0.85 is the point beyond which mitigation measures are required. For roadways in a highly urbanized area, such as East Los Angeles, level of service D (volume to capacity ratio of 0.9) is the point beyond which mitigation measures are required.

If it is assumed that new routes will alter traffic patterns, adequate backup including traffic distribution maps should be provided showing how and why these new routes will alter traffic patterns.

Also, if it appears that the project's generated traffic, alone or with other projects in the area, could warrant traffic signals, signal warrant data should be provided.

4. Discuss other possible adverse impacts on traffic. Examples of these are: (1) the limited visibility of access points on curved roadways; (2) the need for pavement widening and left-turn lanes at access streets and driveways, and (3) the impact of increased traffic volumes on local residential streets.

5. Discuss conclusions regarding the adverse impacts caused by the proposed project on the roadway system. If the cumulative impact and other projects require mitigation measures, such as a traffic signal, estimate the percent share. When the proposed project and other nearby developments are expected to significantly impact adjacent roadways, the developer may be required to enter into a secured agreement to contribute to a benefit district to fund major roadway and bridge improvements in the region.

MITIGATION MEASURES

Note: Identify mitigation measures which are to be incorporated into the project and those which will be implemented by others.

1. Locate access points to optimize visibility and reduce potential conflict.
2. Design parking facilities to avoid queuing into public streets during peak arrival periods.
3. Provide additional off-street parking.
4. Dedicate visibility easements to assure adequate sight distance at intersections and driveways.
5. Signalize or modify traffic signals at an intersection.
6. Install left-turn phasing and/or multiple turning lanes to accommodate particularly heavy turning movements.
7. Widen the pavement to provide left or right turnout lanes to lessen the interference with the traffic flow.

8. Prohibit left turns to and from the proposed development.

9. Restrict on-street parking during peak hours to increase street capacity.

10. Widen intersection approaches to provide additional capacity.

11. Construct a grade separation.

12. Complete an alley to provide an alternate means of access.

13. Improve or construct alternate routes.

14. Complete proposed routes shown on the Los Angeles County Highway Plan.

15. Improve freeway interchanges (bridge widening, ramp modifications, etc.).

16. Transportation System Management
   a. Establish working hours which do not coincide with street peak-hour traffic.
   b. Encourage employee use of carpools and public transportation (specific measures must be indicated).
   c. Establish preferential parking for carpools.
   d. Restrict truck deliveries to major and secondary highways, and encourage delivery during the off-peak hours.

17. Contribute funds to a benefit district along with other developers to fund new routes in a region.

5/88
September 13, 1991

Laurie Lile
City of Palmdale Planning Department
32396 9th Street East
Palmdale, CA 93550

Re: School Facilities and Request for Environmental Data;
City Ranch Specific Plan

Dear Laurie:

Pursuant to your request for information concerning the ability of our school district to serve future development within your city, please be advised that without mitigation of the impact of future development within our school district, the school district will not be able to adequately serve future residents.

At the current time the school district is negotiating with the Kaiser and Sandoz Company regarding City Ranch in order to arrive at a mitigation that will permit us to continue to provide the level of services that we are presently providing.

The District's request is that K & B shall donate three (3) school sites in the City Ranch development. School sites shall be designated by the District after consultation with K & B and shall meet the following requirements:

- Two elementary school sites shall be no less than nine (9) acres with an adjacent park; and
- One elementary school site shall be no less than eight (8) acres with an adjacent park.

Title to each site shall be transferred to the District prior to the recording of any final map incorporating the school site.

In addition to the school sites, the developer will perform all off-site improvements such as roads, curbs, gutters, sewer, utilities, and water for the school sites, and shall also rough grade these sites to the District's specifications.
K & B shall pay sixty-six and two-thirds (66 2/3) of the cost of constructing a permanent school on each site it donates or has previously sold to the District.

No agreement to date has been reached, however. We would request that your city take no action approving further development proposals until a full mitigation has been achieved.

If you have any further questions, or need any further information I am, of course, available.

Very truly yours,

[Signature]

Allen Smith
Assistant Superintendent
Business Services

cc: George “Bud” Reagan
    Lou Lesman
October 4, 1991

Ms. Laurie Lile
Planning Department
City of Palmdale
38306 9th Street East
Palmdale, CA 93550

Dear Ms. Lile:

Subject: City Ranch Environmental Impact Report

The City Ranch project, which will have 5200 residential units, will generate approximately 1040 high school students. Based on our year round design capacity of 2500 students, the City Ranch project would generate students to fill 42% of a high school. The nearest high school, Highland High school, will be at capacity without this project, as a high school will be required in or near this project. The standard size size is 50 acres. The cost of a high school is $14,000.00 to $15,000.00 per student, amounting to approximately $35,000,000.00 per school.

In order to provide for the students generated by this project, we would request that the developer be required to do the following to mitigate the impact of the project:

1. Participate in a Malo Rose Community Facilities District created to raise funding for construction and equipping high schools within the Antelope Valley Union High School District. The level of funding shall be adequate to provide 50% of the requirement for schools generated by this development based on a generation factor of .2 high school students per single family dwelling. The balance of the funding would come from the state.

2. A site will be required to house the students generated by this project and by the adjacent River Ranch project. The District requests that the two developers jointly designate, for purchase by the District, a site, located on their common boundary that will satisfy the need for a 50 acre site. Based on the projected number of students generated by the two projects, City Ranch would be required to furnish 22 acres of the required 50 acres. The District staff has reviewed the two specific plans and find that proportional portions from the following planning...
areas would satisfy the District requirements. These are listed in order of preference and are shown on a composite map of portions of the two tracts:

A. Ritter Ranch - Planning area 5X and City Ranch - Planning area 14.
B. Ritter Ranch - Planning area 6Y and City Ranch - Planning area 17.
C. Ritter Ranch - Planning area 5W and City Ranch - Planning area 5.

The final site designation shall be subject to approval by the District and shall meet the following conditions:

1. The site shall be made available for purchase by the District at a price not to exceed the average of three appraisals.

2. The site shall be economically and technically suitable for construction of a school site and its associated facilities. It shall meet all geological and seismic requirements.

3. The site shall be subject to the approval of all local and state agencies having jurisdiction and shall meet all those requirements in effect at the time of purchase.

4. Utility services, water, sewer, gas, electricity, and telephone, shall be available to the site at no cost to the District prior to start of school construction or prior to the completion of 25% of the total dwelling units within either project whichever is earlier.

5. Access to the site, improved to the appropriate city or county standards, shall be provided to the site at no cost to the District.

Should you have any questions, please contact our District Engineer, Richard Aitken.

Sincerely,

Kenneth Brummel
Superintendent

RJA:kb
Attachment
August 26, 1991

Ms. Tara Hullinger
City of Palmale Planning Department
38308 - 9th Street East
Palmale, California 93550

Dear Ms. Hullinger:

The Department of Water Resources received the following submittals from you for review and comment pursuant to Senate Bill No. 2161:

1. City Ranch Specific Plan  OWR No. 12-P2-68  Date 6-12-91
2. ___________________ OWR No. __________ Date __________

PLEASE REFER TO THE OWR NO. ASSIGNED TO YOUR SUBMITTAL ON ALL CORRESPONDENCE OR WHEN MAKING TELEPHONE INQUIRIES TO OUR OFFICE.

The following action was taken on your submittal.

The following proposals do not affect or have no adverse impact on any facility of the State Water Resources Development System as defined by SB 2161:

The locations of the proposed projects listed below are not within the area located within one mile on either or both sides of any facility of the State Water Resources Development System; therefore, no review of your plans is necessary.

X  OWR will forward you any comments we have on the following submittals within 15 days of the date received by OWR for review:

   City Ranch Specific Plan

X  You may expect a response by 9-3-91.
Preliminary review of your tentative plans indicates a possible major impact on a State Water Project facility. Therefore, DWR requires a more extensive review of the plans listed below and a longer review period.

You may expect a response by ________________________.

Comments:

DEPARTMENT OF WATER RESOURCES CONTACT PERSON:

Gayle Dockrey
Land Agent
(916) 322-0879

Sincerely,

[Signature]

Gayle Dockrey
Land Agent
September 4, 1991

Tara Hullinger
City of Palmdale
Planning Department
38306 9th Street East
Palmdale, CA 93550

Dear Ms. Hullinger:

SUBJECT: ENVIRONMENTAL IMPACT REPORT -- CITY OF PALMDALE
(REVIEW OF THE DRAFT CITY RANCH SPECIFIC PLAN)

We have reviewed the Draft Specific Plan for the proposed
development in the City of Palmdale.

This draft proposal has addressed the areas of concern we
requested in the initial Environmental Impact Report dated

In response to the proposed developments at Ritter Ranch and
the Waste Recycling and Management Facility, this project
should address the cumulative impact to the entire area.

If you have any questions, please feel free to contact this
office at (213) 267-2481.

Very truly yours,

P. MICHAEL FREEMAN

BY
JOSEPH FERRARA, CHIEF, FORESTRY DIVISION
PREVENTION, PREPAREDNESS & CONSERVATION BUREAU
September 4, 1991

Ms. Tara Hullinger
City of Palmdale Planning Department
38308 - 9th Street East
Palmdale, California 93550

Dear Ms. Hullinger:

The Department of Water Resources received the following submittals from you for review and comment pursuant to Senate Bill No. 2161:

1. Draft City Ranch Specific Plan DWR No. 8-PB-68 Date 9-18-91

PLEASE REFER TO THE DWR NO. ASSIGNED TO YOUR SUBMITTAL ON ALL CORRESPONDENCE OR WHEN MAKING TELEPHONE INQUIRIES TO OUR OFFICE.

The following proposals do not affect or have no adverse impact on any facility of the State Water Resources Development System as defined by SB 2161:

The locations of the proposed projects listed below are not within the area located within one mile on either or both sides of any facility of the State Water Resources Development System; therefore, no review of your plans is necessary:

DWR will forward you any comments we have on the following submittals within 15 days of the date received by DWR for review:

You may expect a response by ___________________________.
Preliminary review of your tentative plans indicates a possible major impact on a State Water Project facility. Therefore, DWR requires a more extensive review of the plans listed below and a longer review period.

You may expect a response by ________________________.

Comments: This development is currently being addressed under Encroachment Permit No. 058. Therefore we have no further comments at this time. If you have any questions regarding this E.P., please contact Diane Garofalo at (916) 473-5604.

DEPARTMENT OF WATER RESOURCES CONTACT PERSON:

Gayle Dockrey
Land Agent
(916) 322-0679

Sincerely,

[Signature]
Gayle Dockrey
Land Agent
ATTACHMENT VI:

Additional Staff Correspondence Provided to the Planning Commission Regarding the City Ranch Specific Plan Project and EIR.

The following is a list of the additional correspondence included in Attachment VI:


MEMORANDUM

TO: Members of the Planning Commission
FROM: Molly Bogh, Director of Planning
SUBJECT: Issues Raised at the January 15, 1992, Planning Commission Meeting Regarding City Ranch EIR
DATE: January 20, 1992

The following items are in response to the issues raised by the Planning Commission regarding the City Ranch EIR.

1. EQUESTRIAN TRAIL ALIGNMENT: Staff met with Elaine Macdonald of the Antelope Valley Trails Council to discuss the possible alignments for the north-south trail discussed in her comment on the Draft EIR. After reviewing the land use plan, Ms. Macdonald indicated that she would amend her request to as follows: A staging area in Planning Area 1, a staging area in Planning Area 18, and an equestrian trail alignment through the powerline right-of-way, south of the proposed Alignment at Avenue S. Also, Ms. Macdonald expressed support for Alternate A for the alignment of the Northside Riding and Hiking Trail as depicted on Exhibit 16 of the City Ranch Specific Plan. Therefore, staff recommends modifying the response to the Trails Council’s letter to state: “As requested, the Final EIR will be revised to include the following mitigation measure:

“Exhibit 16 of the proposed Specific Plan will be amended to include an equestrian staging area in Planning Area 1, an equestrian staging area in Planning Area 18, and an equestrian trail through the powerline easement. Trails planned in the City Ranch Specific Plan will be coordinated with those planned for the Ritter Ranch Specific Plan. Future developments adjacent to this project will be required to coordinate with the trails shown on the trails plan adopted for City Ranch.”

2. TYPOGRAPHICAL ERROR: The incorrect references to Ritter Ranch have been corrected in the Staff Report. Revised mitigation measures will be included in Exhibit B of Resolution 91-114.
3. GROUNDWATER ISSUES: The applicant has indicated that they will have a representative of the Los Angeles County Waterworks District on hand at tonight's meeting to address the District's ability to provide water service to the project. Three water system agreements will be needed to provide water service to the entire site. One of these agreements has already been executed. The remaining two are still being negotiated. Copies of all three agreements are attached.

The Planning Commission also specifically asked about groundwater levels in the Anaverde Valley and the location of "emergency" wells. Staff has researched these issues and offers the following response. The Draft EIR discusses groundwater levels on the project site; Section 5.5.1, page 5-45 contains this discussion. Briefly, in 1989 when soil borings were conducted, the local groundwater levels varied from relatively shallow (10 feet deep) to much deeper (over 100 feet deep). The shallower groundwater levels typically occurred along the Anaverde Flood Plain. There are presently a number of wells on the project site. Two of the wells have been used in the recent past for livestock watering. These wells could be used as sources of non-potable water needed on-site for landscape irrigation or construction water. The aqueduct also serves as a source of non-potable water for the project.

With regards to "emergency" wells, staff assumes that the issue involves the location of the Waterworks District's back-up wells which would serve the project during times when imported water was not available. The proposed City Ranch Water System Agreement includes, as part of the terms of the agreement, construction of "groundwater wells 2,500 gpm capacity in vicinity of Avenue K and 30th Street East and Avenue K and 35th Street East." The other agreements do not require the construction of any wells.

4. ROADWAY CONSISTENCY BETWEEN RITTER RANCH AND CITY RANCH SPECIFIC PLANS: The roadway exhibits between the two Specific Plans have been reviewed by staff. The roadway cross-sections appear to be consistent; with the exception of the location of the pedestrian and bicycle trail adjacent to the arterial roadways. As discussed in the discussion of the Ritter Ranch project, the off-street bicycle trails should be nearer to the street than the pedestrian paths. During deliberations of the City Ranch Specific Plan, this issue should be discussed.

5. SANITATION DISTRICT SERVICE: Staff has been unable to speak with Sanitation District personnel who can respond to this issue. Staff will continue to try to solicit an answer from the Sanitation District to the questions raised at the hearing.
6. NOISE MITIGATION: Staff suggests that the following revisions to the mitigation measure recommended in the Staff report may convey the ideas expressed by the Planning Commission: “Reduction of intrusive noise levels in residential and school areas shall be accomplished through the incorporation of design measures or structural measures which will reduce noise levels to acceptable levels within the living or recreational portions (as defined by the City) of any lot. The measures that may be utilized to reduce noise impacts include, but are not limited to, placement of parking structures in such a manner as to act as a buffer, increasing the setbacks along the roadway, creation of landscaped berms, or construction of other barriers such as walls. The acceptable noise level CNEL which will be applied to future projects will be that level which is in place, either by ordinance, resolution or General Plan policy, at the time that future development applications are deemed complete.”

7. SOLAR ACCESS: The issue was raised regarding whether the solar access language would be observed and implemented on future development applications. To the extent that staff can address this issue at the tentative tract stage, the language will be implemented. However, at that stage, specific building designs and architectural treatments have not yet been submitted to the Planning Department for review.

8. LIBRARY IMPACTS: To address this issue, staff suggests amending the Draft EIR to include Section 5.30, Library Services. Language is attached to this memo which addresses this issue. If the Planning Commission concurs, this language will be attached to Resolution 91-114 as an addendum to the Draft EIR.

9. FLOOD PLAIN DISCLOSURE/FEMA MAP UPDATE: A mitigation measure can be added to Section 5.6.1 of the EIR which states, “In accordance with the California Department of Real Estate disclosure format and procedures, all potential purchasers of real property which is shown within the FEMA 100-year flood plain on the Flood Insurance Rate Maps most recently circulated by FEMA, shall be notified of the situation, regardless of whether the actual flood hazard has been abated by other methods. Also, the applicant shall contact FEMA as soon as possible after eliminating areas from the 100-year flood hazard zone to request modifications of the Flood Insurance Rate Maps. The applicant shall then diligently pursue revisions of the maps until the 100-year flood hazard zone as modified by the development is depicted on them.”

MEB/kl/wp8625

attachment
5.30 LIBRARY SERVICES

5.30.1 Existing Conditions

Library Services in Palmdale are presently provided by the Palmdale City Library, located at the southeast corner of the intersection of Palmdale Boulevard and Sierra Highway. The facility is 12,400 square feet in size and can accommodate 75,000 volumes. However, according to the City Librarian, the need exists for a larger facility with more extensive services. The physical constraints of the library currently limit the types of services which can be offered and which are presently demanded by the community.

5.30.2 Project Impacts

National library standards provided by the City Librarian recommend 2.5 volumes per capita, 0.5 staff per thousand population and an area of 0.8 square feet per capita. The library needs for the City Ranch project, using these standards and a household size of 2.7 persons per dwelling unit, is 35,100 volumes, 7 staff persons, and 11,232 square feet of library facility. The adjoining Ritter Ranch Specific Plan area will be required to construct a branch library facility, 16,000 square feet in size. Therefore, a branch facility in the City Ranch project would be redundant. However, the applicant could provide a pro-rata share of funding for upgrading the main library or assist in the construction of the branch library proposed on the Ritter Ranch project. The location of the branch facility in the Ritter Ranch project with expanded library facilities at the main library would provide adequate library services for the City Ranch Specific Plan residents.

5.30.3 Mitigation Measures

The developer will contribute its pro-rata share towards the construction of 11,232 square feet of library facilities and purchase of 35,100 volumes. The actual amount and terms of the applicant's contribution under this agreement may be agreed upon by the applicant, the Planning Director and the City Librarian.

5.30.4 Cumulative Impacts

Development of the cumulative projects would result in a need for library facilities of 28,393 square feet in size with 88,728 volumes and 17 staff persons. Mitigation on a project by project basis or by a City-wide financing mechanism can reduce the impacts of this cumulative development on library facilities. Therefore, this does not represent a significant cumulative impact.

5.30.5 Unavoidable Adverse Impacts

Implementation of the mitigation measure listed above will reduce project impacts to library services to less than significant levels.
To

PALMDALE CITY COUNCIL
PLANNING COMMISSION
PARKS & RECREATION
PLANNING STAFF

January 20th, 1992

The Antelope Valley Trails, Recreation and Environmental Council would like to resubmit a request regarding Multi-use trails in the proposed City Ranch Specific Plan. Meeting with Planning Staff Tara Hullinger and Lorie Lyle proved to be helpful in better clarifying specific trail alignments.

Therefore, we request an equestrian staging area in Plan Area 1 and the staging area in Plan Area 18 to be redesignated as hiking/equestrian.

We would like to see the North Side Trail (Alternate A Alignment) as an equestrian trail. In Plan 18 and 32 designated as natural open space, we request a multi-use trail that can be used by equestrians as well as hiking and mountain bikers.

We would also like to bring to your attention that in the past, equestrians have used powerline easements successfully with cooperation from the Edison Company.

Sincerely,

Elaine Macdonald
AVTREC President

AVTREC is dedicated to the acquisition and preservation of recreational trails and open space through greenbelt or linear parkways in the Antelope Valley.
CITY RANCH NORTH

WATER SYSTEM AGREEMENT

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 34, DESERT VIEW HIGHLANDS WATER SYSTEM AGREEMENT WITH KAUFMAN AND BROAD

1. IDENTIFICATION

This Agreement (hereinafter "AGREEMENT") is made by and between Kaufman Broad of Southern California, Inc., 38348-A 30th Street East, Palmdale California 93550, (hereinafter "BUILDER") and Los Angeles County Waterworks District No. 34, Desert View Highlands, Post Office Box 1460, Alhambra, California 91802-1460 (hereinafter "DISTRICT"), a public water district formed pursuant to Division 18 of the State Water Code.

2. RECITALS

A. DISTRICT'S analysis has shown that existing water supply facilities and water mains cannot properly service the growing water needs of DISTRICT. As such, DISTRICT has determined that additional pumping capacity, water transmission mains, water storage reservoirs and necessary appurtenances are needed for the further development of single-family residences, shopping centers, schools and other residential, commercial and industrial development in or adjacent to DISTRICT.

B. BUILDER is the owner and developer of the property located west of the City of Palmdale in Los Angeles County, California, commonly referred to as "City Ranch North" (see attached Exhibit A). BUILDER agrees to improve the existing water system with additional pumping capacity, water transmission mains, water storage reservoirs and necessary appurtenances (hereinafter "PROJECT") for DISTRICT to provide additional supplies of California Aqueduct water and well water to the west Palmdale area.

C. BUILDER and DISTRICT understand that other developers (herein referred to as "PARTICIPANTS" collectively and "PARTICIPANT" individually) have an anticipated need for additional water supplies and have expressed an interest in developing properties. Further, DISTRICT understands that construction of PROJECT will be beneficial if constructed to provide access to water supplies for BUILDER's and PARTICIPANT property (hereinafter "DEVELOPMENTS" collectively and "DEVELOPMENT" individually), estimated to be 1,975 single-family residences or the equivalent in commercial/industrial development. This is equivalent to 1,975 water units. BUILDER plans to use approximately 400 water units for City Ranch North and intends to seek financial participation for 1,575 water units from PARTICIPANTS to meet the development costs of PROJECT proposed in AGREEMENT.

BUILDER will contract with PARTICIPANTS, collect funds from PARTICIPANT and deposit said funds into an escrow account at a reliable financial institution, design PROJECT, acquire rights of way, order material and engage contractors to construct PROJECT as outlined in Recital O.
Nothing contained in AGREEMENT or in any instrument, certificate or other writing herein provided for shall be construed to require the commission of any act contrary to law, and wherever there is any conflict between any provision of AGREEMENT or of any instrument, certificate or other writing herein provided for and any material statute, law, ordinance or regulation contrary to which the parties have no legal right to contract, the statute shall prevail. However, in event that any such provision shall be invalid, illegal or unenforceable, the provisions so affected shall be curtailed and limited to the extent necessary to bring it within the legal requirements. The remainder of such provision and of the other provisions of AGREEMENT and of any instrument, certificate or other writing herein provided for shall continue in full force and effect and shall in no way be affected impaired or invalidated, and the parties shall immediately employ their best efforts in good faith to negotiate a valid provision to substitute for the invalidated one.

13. AMENDMENTS

AGREEMENT may be amended, modified, superseded or canceled, and terms, conditions and covenants hereof may be waived, and agreements supplemental hereto may be made, only by written instrument executed by the parties, or, in the case of waiver, by the party waiving compliance in writing.

14. COUNTERPARTS

AGREEMENT and any amendment or supplement hereto, and any document or instrument to be executed and delivered hereunder, may be executed in any number of counterparts, each of which shall be deemed an original but all of which together shall constitute one and the same instrument provided, however, that such counterparts, in the aggregate, shall have been executed by the parties.
Each and every provision contained herein shall be binding upon and shall inure to the benefit of the parties, their respective assigns and successors in interest, whether said assigns and successors are private parties or public entities. Both parties shall require that their respective assigns and successors in interest are to be bound by and to uphold each and every provision of AGREEMENT. IN WITNESS WHEREOF, the parties hereto have caused AGREEMENT to be executed by their respective officers, duly authorized by on_____, 1991 and by the LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 14, Desert View Highlands on__________, 1991.

By: ____________________________________________________________________________

President

By: ____________________________________________________________________________

Secretary

LOS ANGELES COUNTY WATERWORKS
DISTRICT NO. __, LANCASTER

By: ____________________________________________________________________________

CHAIRMAN OF THE BOARD OF SUPERVISORS
OF THE COUNTY OF LOS ANGELES AS
THE GOVERNING BODY THEREOF

APPROVED AS TO FORM:

DEWITT W. CLINTON
County Counsel

ATTEST:

LARRY J. MONTILH
Executive Office-Clk of
the Bd of Supervisors

By: ____________________________________________________________________________

Deputy

By: ____________________________________________________________________________

Deputy

15 of 15
RULE

4-A-11 WATERWORKS DISTRICT NO. 33 - SUN VILLAGE: (Continued)

3. All lands lying within the boundaries of the area of the District known as the former area of service of the former water purveyors listed following this part of this subrule, including all lands fronting, backing, or sitting on the water mains of the water system acquired by the District from said water purveyors, receive no credit pursuant to Rule 1-I-2a by capital improvement charges remaining after consideration of credits applicable, pursuant to said Rule 1-I-2a, b, and c. Rule 1-A-49 shall also apply.

<table>
<thead>
<tr>
<th>Water Purveyor</th>
<th>B/S Agreement No.</th>
<th>Date Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sun Village Water &amp; Improvement Co.</td>
<td>7988</td>
<td>March 19, 1964</td>
</tr>
<tr>
<td>Shadow Mountain Mutual Water Co.</td>
<td>9371</td>
<td>April 20, 1965</td>
</tr>
<tr>
<td>Sunnyvale Mutual Water Company</td>
<td>9416</td>
<td>May 11, 1965</td>
</tr>
<tr>
<td>Antelope Center Mutual Water Co.</td>
<td>9798</td>
<td>July 12, 1965</td>
</tr>
<tr>
<td>Little Rock Farms/Prosit, Inc.</td>
<td>33358</td>
<td>October 10, 1973</td>
</tr>
</tbody>
</table>

4-A-1m WATERWORKS DISTRICT NO. 34 - DESERT VIEW HIGHLANDS:

1. All lands lying within the boundaries of Waterworks District No. 34, as of July 1, 1966 and for which the Waterworks District has, at any time prior to July 1, 1966, provided water service or for which the Waterworks District was as of July 1, 1966, providing water service, are hereby deemed not to be subject to the Capital Improvement (acreage) Charges of said Waterworks District, except as stated in the first paragraph of Rule 4-A-1 and Rule 1-A-49 and any applicable parts of this subrule.

4-A-11 Added 8/66, Rev. 4/22/75, 2/1/77-Sch. 41R, 10/10/79, 5/29/79-Sch. 52, 6/18/81-Sch. 68, 8/3/82-Sch. 57a, 8/2/83-Sch. 68, 9/4/84-Sch. 73

4-A-1m Renumbered Para. 2 to Para. 3 and Rev. 9/4/84-Sch. 71.

4-A-11 Added 3/86, Rev. 8/69, 4/22/75, 6/13/78-Sch. 53.

4-A-1m Renumbered Para. 1 to Para. 2 and Rev. 9/4/84-Sch. 73.

8/13/85-Sch. 73

(WW03183) 1/90

- 417 -

C-1
RULE 4-A-Im WATERWORKS DISTRICT NO. 34 - DESERT VIEW HIGHLANDS

(Continued)

2. All lands lying within the boundaries of Waterworks District No. 34, as of July 1, 1966, not previously provided with water service prior to July 1, 1966, or not being provided with water service as of July 1, 1966 by the District, and lying outside of the areas defined in Part 3 of this subrule are hereby subject to a Capital Improvement Charge as follows, except as stated in Rule 1-A-49, less applicable credits defined in Rule 1-I-2A. No credit pursuant to Rule 1-I-2A and c is applicable to the lands of the area defined in Part 2 of this subrule.

a. Lands where there is no fire flow requirement for the premises, per acre .......... $1.257.00

b. Lands where the fire flow requirement of the premises is:

<table>
<thead>
<tr>
<th>Fire Flow @ 20 psf (gpm)</th>
<th>Duration</th>
<th>Charge Per Acre</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 750</td>
<td>2 Hours</td>
<td>$1.124.00</td>
</tr>
<tr>
<td>751 to 1,250</td>
<td>2 Hours</td>
<td>$1.269.00</td>
</tr>
<tr>
<td>1,251 to 1,750</td>
<td>2 Hours</td>
<td>$1.459.50</td>
</tr>
<tr>
<td>1,751 to 2,250</td>
<td>2 Hours</td>
<td>$1.619.00</td>
</tr>
<tr>
<td>2,251 to 2,750</td>
<td>2 Hours</td>
<td>$1.525.50</td>
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<tr>
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<td>3 Hours</td>
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<tr>
<td>3,251 to 3,750</td>
<td>3 Hours</td>
<td>$1.716.50</td>
</tr>
<tr>
<td>3,751 to 4,250</td>
<td>4 Hours</td>
<td>$1.772.00</td>
</tr>
<tr>
<td>4,251 to 5,000</td>
<td>5 Hours</td>
<td>$1.957.00</td>
</tr>
</tbody>
</table>

For other conditions of fire flow and duration, the per acre charge will be based on an engineering estimate of costs.

4-A-Im Added 8/66, Rev. 8/66, 4/22/74, 8/13/78-Sch. 53, 5/22/79-Sch. 62, 8/15/81-Sch. 86, 8/3/82-Sch. 57A, 8/2/83-Sch. 68, 9/4/84-Sch. 73
4-A-Im Renumbered Para. 1 to Para. 2 and Rev. 9/4/84-Sch. 73, 8/13/85-Sch. 75
4-A-Im Renumbered Para. 2 to Para. 3 and Rev. 9/4/84-Sch. 73
4-A-Im Added and revised Para. 2 9-02-86, Exhibit 78

(WWD41569) 1/90 - 418 - C - 2
4. All lands not previously served with water service within or annexed to the District or presently served and requesting a larger metered service and/or require a greater fire protection capability shall be subject to a Capital Improvement (Tank Capacity Unit) Charge, in addition to the Capital Improvement (Acreage) Charge defined elsewhere in this Rule. The only ones exempt from this charge are developers of lands who enter into formal agreements with the District to construct water storage, conveyance or well facilities and their appurtenances.

The Capital Improvement (Tank Capacity Unit) Charge for upgrading an existing metered service from the smaller to the larger size will be the difference in the Tank Capacity Units represented by the existing meter and the new meter multiplied by the calculated dollar amount of the charge.

The Capital Improvement (Tank Capacity Unit) Charge for a new service will be the Billing Units for the respective size of the metered service multiplied by the fire flow demand units (see table) times the calculated dollar amount of the Capital Improvement (Tank Capacity Unit) Charge.

This charge shall remain in effect until changed by the Board of Directors of the District. No credits shall be given for this charge.

The initial calculated dollar amount for those developments not entering into agreements with the District shall be $480 per Tank Capacity Unit.

The dollar amount per tank capacity unit for negotiated agreements between developers and the District shall be set by the District Engineer and approved by the Board of Directors.
## LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 34, DESERT VIEW HIGHLANDS

### CAPITAL IMPROVEMENT CHARGE

#### TANK CAPACITY UNITS

(BILLING UNITS & FIRE FLOW DEMAND UNITS)

---

**DEPARTMENT AND FIRE SPRINKLER METER**

<table>
<thead>
<tr>
<th>Meter Size (Inches)</th>
<th>Water Flow (gpm)</th>
<th>Billing Units (B.U.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/4 x 1 &amp; smaller</td>
<td>20 &amp; less</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>60</td>
<td>2</td>
</tr>
<tr>
<td>1 1/2</td>
<td>100</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>150</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>200</td>
<td>7</td>
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<td>6</td>
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<td>17</td>
</tr>
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<tr>
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<td>2,500</td>
<td>77</td>
</tr>
<tr>
<td>12</td>
<td>3,000</td>
<td>100</td>
</tr>
</tbody>
</table>

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**FIRE FLOWS (Public or Private-on-Site whichever is larger)**

<table>
<thead>
<tr>
<th>Fire Flow (gpm)</th>
<th>Duration (hrs.)</th>
<th>Tank Capacity (thousands of gallons)</th>
<th>Fire Flow Demand (F.F.D.U.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>50</td>
<td>0</td>
</tr>
<tr>
<td>500</td>
<td>2</td>
<td>500</td>
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<tr>
<td>1,000</td>
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<td>25</td>
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<td>80</td>
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<td>4,000</td>
<td>2</td>
<td>5,000</td>
<td>90</td>
</tr>
<tr>
<td>4,500</td>
<td>2</td>
<td>5,500</td>
<td>100</td>
</tr>
</tbody>
</table>

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*For meters over 2-inch, the number of Billing Units will be determined by adding together all domestic and sprinkler fire protection flows to the premises and dividing by 30 (30 being the gallons per minute equivalent to one billing unit).

**Actual number of units to be calculated by fire flow x duration divided by 60,000 gallons.**

---

**EXAMPLES:**

1. **Single family residence:** Public Fire Flow = 1,250 gpm = 2.5 F.F.D.U.,
   3/4 x 1" domestic meter = 1 B.U.; 1 B.U. x 2.5 F.F.D.U. = 2.5 Tank Capacity Units

2. **Multi-residential:** Fire Flow 2,000 gpm, five (5) 2-inch domestic water meters,
   [(5 meters) x 5 B.U.] x 4 F.F.D.U. = 100 Tank Capacity Units

3. **Office Building:** Fire Flow 3,500 gpm, one (1) 2-inch water meter
   [(1 meter) x 5 B.U.] x 10.5 F.F.D.U. = 52.5 Tank Capacity Units
### Part 3 - Schedules of Rates and Charges for Engineering and Construction Services - Section A - Charges (Continued)

**Rule 3-A-4**

**Local System Improvement Charges for Existing Water Mains and Main Extensions:** All charges described in this Rule are subject to the credits allowable under Rule I-D-3. Applicable notes after 3-A-4b and applicable parts of Rule I-A-49 shall apply.

**3-A-4a Local System Improvement Charge, Water Service from an Existing Fronting Water Main:** For premises to be served with water service from existing adequate capacity water main(s) of the District, the following charges shall apply.

<table>
<thead>
<tr>
<th>Size of Water Main Inches</th>
<th>Range of Fire Flow GPM</th>
<th>Charge per Benefited Front Foot of the Applicant's Premises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 6</td>
<td>to 750</td>
<td>$14.61</td>
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<tr>
<td>6</td>
<td>to 750</td>
<td>$13.38</td>
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<td>$12.49</td>
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<td>to 750</td>
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<td>$22.25</td>
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<td>to 750</td>
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**Note:** Charges given on this page are applicable to all Waterworks District, except District No. 36 (See Page 609).

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**3-A-4** Added 2/63, 10/68

**3-A-4a** Rev. 2/63, 10/68, 4/22/71, 2/1/77-Sch. 41R, 6/13/78-Sch. 53;
5/29/79-Sch. 52; 6/18/81-Sch. 66; 8/3/82-Sch. 57A.
8/2/83-Sch. 68, 8/23/83-Sch. 69, 9/6/83-Sch. 70,
9/4/84-Sch. 73, 11/6/84-Sch. 74, 8/13/85-Sch. 75, 11/23/85-I-145.

- 307 -

(NDQ133)
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Note: Charges given on this page are applicable to all water-work District, except District No. 36 (See Page 610).
1. Construct groundwater wells 2,500 gpm capacity in the vicinity of Avenue K and 30th Street East and Avenue K and 35th Street East

2. Install well discharge main from Avenue K and 30th Street East and Avenue K and 35th Street East wells to Avenue K-9 and 35th Street East Utility Site

3. Construct chlorination capacity and 0.30 MG lorraboy in the vicinity of Avenue K-9 and 35th Street East

4. Construct 2,500 gpm pumping station expansion at Avenue K-9 and 35th Street East

5. Construct or payment for 2,500 gpm portion of 20,000 gpm pumping station at the existing Avenue M and 5th Street East Utility Site

6. Install 36-inch water transmission main in Avenue M from 4th Street East to Division Street, in Division Street from Avenue M to Avenue O-4, and in Avenue O-4 from Division Street to 10th Street West

7. Install 20-inch water transmission main in Avenue M from Division Street to 10th Street West

8. Construct 6,000 gpm expansion at Avenue P and 10th Street West Pumping Station

9. Install 36-inch water transmission main in Avenue P from 15th to 25th Street West

10. Install 36-inch water transmission main in 25th Street West from Avenue P to Elizabeth Lake Road

11. Install 24-inch water transmission main in Elizabeth Lake Road from 10th to 25th Street West

12. Install 18-inch transmission main in Elizabeth Lake Road from 25th to 26th Street West

13. Construct or payment for 6,000 gpm portion of 26,500 gpm pumping station in the vicinity of Elizabeth Lake Road and 26th Street West

14. Install 36-inch water transmission main in Elizabeth Lake Road from 25th Street West to Bridge Road

15. Install 24-inch on site water transmission main in Bridge Road from Elizabeth Lake Road to Avenue S

16. Install 20-inch on site water transmission main

17. Install 18-inch on site water transmission main
18. Construct two 3.0 MG reservoirs onsite
   $500,000

19. Construct 600 gpm pumping station onsite
   $100,000

20. Install 12-inch water main onsite
    $25,000

21. Construct one 1.0 MG water storage reservoir onsite
    $800,000

    Subtotal $11,549,000

22. Contingencies (15%) Subtotal
    $1,732,000

23. Engineering Services (15%) Subtotal
    $2,561,000

24. Administration fee (5%) Subtotal $15,302,000

25. Land for onsite pumping stations and reservoirs, 10 acres
    $500,000

Total Project Cost $17,568,000
AVENUE S
ROADWAY SECTION COMPARISON

Ritter Ranch

SECTION B2  RITTER RANCH ROAD (4 LANE DIVIDED)
MCDILL MTN. ROAD TO AVE. 'S'

City Ranch (Note: North and South reversed from Ritter Ranch Section.)

Comparison

- Curb-to-curb dimensions consistent.
- South side: ROW 13' on Ritter Ranch and 8' on City Ranch. Sidewalk location precise on Ritter Ranch and 5' minimum distance from roadway on City Ranch. City Ranch sidewalk partially in easement. Landscape easement not shown on Ritter Ranch and variable easement shown on City Ranch.
- North side: ROW appears to be 28' on Ritter Ranch and variable as easement on City Ranch. Sidewalk and bicycle lane positions reversed. Precise dimensions on Ritter Ranch and variable dimensions on City Ranch.
CITY RANCH ROAD
ROADWAY SECTION COMPARISON

Ritter Ranch

SECTION D_2  CITY RANCH ROAD
EAST OF RANCH CENTER DRIVE

City Ranch

Comparison

- Curb-to-curb dimensions consistent.
- 90' total ROW on Ritter Ranch and 80' (dimensioned incorrectly) on City Ranch.
- Sidewalk locations precise on Ritter Ranch and 5' minimum on City Ranch. City Ranch sidewalk partially in landscape easement.
- Variable landscape easement width on south side only on Ritter Ranch. 10' landscape easement on both sides of City Ranch.
ELIZABETH LAKE ROAD
ROADWAY SECTION COMPARISON

Ritter Ranch

SECTION A, ELIZABETH LAKE ROAD (4 LANE DIVIDED)
COCO MILL TO EASTERN BOUNDARY

City Ranch

Comparison
- Both indicate some modifications to match Assessment District 90-1 plans.
- 100' ROW on each plan.
- Medians consistent. Curb-to-curb 64' on Ritter Ranch and 84' on City Ranch. Elizabeth Lake Road to be 4-lane, divided (64' is correct).
- Sidewalk and bicycle trial locations precise on Ritter Ranch and minimum distances on City Ranch. City Ranch sidewalk and bike lane partially in landscape easement. Equestrian trail only noted on south side of Ritter Ranch with 10' dimension. Only 5' sidewalk on south side of City Ranch.
- No landscape easements indicated on Ritter Ranch. 12' landscape easement on north side, and variable landscape easement on south side of City Ranch.
MEMORANDUM

TO: Members of the Planning Commission

FROM: Robert W. Toone, Jr., City Administrator

SUBJECT: Status Report on City Ranch Specific Plan

DATE: January 21, 1992

As you know, the City Ranch hearing process began on Wednesday, January 15th with the Planning Commission opening the public hearing on the project EIR. On Friday, January 17th, Molly Bogh was contacted by Kaufman and Broad to schedule two meetings regarding the project on Monday, January 20th: a luncheon meeting, and a later meeting with the Planning staff. During the luncheon meeting between Duane Betty, Kyle Kollar and Molly, she was informed that Kaufman & Broad wished to restructure the Specific Plan to delete any reference to a Development Agreement. It was noted that, while this change would not necessarily preclude future adoption of a Development Agreement, Kaufman & Broad had determined such an agreement was not a necessary component of Specific Plan adoption at this time. They wished staff to amend its recommendation to the Commission that the Specific Plan be recommended for approval subject to adoption of a Development Agreement. Mr. Betty and Mr. Kollar later restated this position to me at a brief meeting in my office on the afternoon of January 20th.

The current status of negotiations on a Development Agreement with Kaufman & Broad for the City Ranch project is that negotiations have never commenced. Several weeks ago a preliminary draft Development Agreement was transmitted to Kaufman & Broad for initial review. No further contacts have been made with my office since then.

As you have already noted in your comments at the January 20th hearing on City Ranch, eventual adoption of a Development Agreement has been consistently considered to be a vital element of the project as proposed. The combined growth impacts of the City and Ritter projects on existing Palmdale residents were assumed to be addressed through Development Agreements. In addition, the agreement was intended to function as a pre-annexation agreement.
Memo to the Members of the Planning Commission
Subject: Status Report on City Ranch Specific Plan
January 21, 1992
Page 2

If the Planning Commission and the City Council decides not to adopt a development agreement for Kaufman & Broad, then there are substantial issues that must be addressed within the Specific Plan document and E.I.R. Our staff is not sure that all of these issues could be legitimately addressed in the Specific Plan. Those issues that can not be addressed through the Specific Plan are items that can be appropriately included in a development agreement where both parties have a contractual binding obligation to each other. As an example, I am not sure how we would include in the Specific Plan the requirements to participate in an assessment district that would help eliminate some of the drainage problems in the Amargosa. There are other terms and conditions in the proposed development agreement that you as Commissioners may find very important for policy reasons. The proposed development agreement for both Ritter and Kaufman & Broad were distributed to you several weeks ago, and you may want to go back and review these documents once again.

I would strongly recommend that you seriously consider the magnitude of this project, what you want the developer to do for the City, and how you can accomplish it. I think you will find that in many respects you will need a development agreement to accomplish your goals. At this point, staff would recommend that this project be continued until we can begin and complete negotiations on these items in the development agreement. I would also like to report that if you do wish to include these items in a revised Specific Plan, this would require some time to go back to review and revise. This in fact will require some negotiations between the Planning Department, my office and the developer.

RWT:WEB:home
wp304

Post Script - This afternoon Albert Fraw, Chief Counsel, Kaufman & Broad called me and advised us that Kaufman & Broad does want to sit down and negotiate a development agreement. We will be meeting with him in the near future. We still, however, recommend that the Planning Commission proceed cautiously and insist that the development agreement be available before you decide on approval of the project.

RWT, Jr.

cc Mayor & Members of the City Council
City Attorney
Assistant City Attorney Ennis
Assistant City Attorney Lamken
Director of Planning
MEMORANDUM

TO: Members of the Planning Commission
FROM: Molly Bogh, Director of Planning
SUBJECT: Issues Raised at the January 20, 1992, Planning Commission Meeting Regarding the City Ranch Specific Plan and Development Agreement
DATE: January 23, 1992

The Planning Commission directed staff to review the City Ranch Specific Plan document and evaluate those areas which relate to or reference the development agreement. The following list discusses issues which are deferred in the Specific Plan to the development agreement and sections of the Specific Plan which were formulated on the assumption that an agreement would be executed between the City and the developer. Staff will provide a verbal briefing on this entire issue at the beginning of this evening's meeting.

The City Ranch Specific Plan:

Section III. General Plan Conformance

Page III-28: Library Facility: The library facility is referenced; however, no implementation or financing measures are discussed.

Page III-28: Maintenance Facility: Deferred to the Development Agreement.


Page III-39: Transportation Impacts: There is reference to a future Congestion Management Plan and deferrment of this issue to the Development Agreement.

Section IV. Development Plan

Page IV-1: There is a reference to a development agreement in the last sentence of the third paragraph. The issue involves the acquisition of an off-site high school site.
Page IV-2: Golf Course: The phasing plan indicates that the golf course will be developed in the fourth phase. Since the area is designated as open space, there is no guarantee that the golf course will develop in the proposed time frame or at the facilities indicated. The City may want to add some language to the document addressing this issue.

Page IV-4: High School: Deferred to the Development Agreement

Page IV-6: Parks: There is text discussing the dedication and improvement of park facilities. The Development Agreement is discussed in the context of the park issue. The phasing of all of the parks needs to be re-examined.

Page IV-6: Open Space: Areas of open space are outlined in this section. Staff would recommend that open space easements be required over all open space areas to better ensure that these areas remain as open space. Without a Development Agreement (which would require the transfer of development rights from these areas), requests may be submitted to the City requesting general plan/specific plan amendments that would allow units in the open space areas. Phasing of the open space areas also needs to be examined.

Page IV-7: Fire Station Site: Conveyance of the fire station site is deferred to the Development Agreement. The phasing of the fire station needs to be evaluated since it isn't specifically addressed in the Specific Plan.

Page IV-7: City Maintenance Facility: The City Maintenance facility is deferred to the Development Agreement.

Page IV-13: Off-site Road Improvements: The issue of off-site road improvements is deferred to the Development Agreement. The issue of street phasing (both on-site and off-site) should additionally be re-examined.

Page IV-13: Congestion Management Plan: There is discussion in the last paragraph of this section regarding future Congestion Management requirements. This issue is deferred to the Development Agreement.

Page IV-16: City Ranch Road: The dedication and construction of the road is deferred to the Development Agreement.

Page IV-22: Anaverde Drainage basin: The Developer's participation in the implementation of the Master Plan of Drainage for Anaverde Creek is deferred to the Development Agreement.
Page IV-34: Construction and Maintenance Responsibility: The section identifies various entities responsible for the improvement, financing and maintenance of various components of infrastructure and public facilities but references the Development Agreement. Since the chart assumes various financing mechanisms such as assessment districts and community facility districts may be used, with the details to be worked out under a development agreement, it is clear that this section would need to be modified to clarify which measures were acceptable to the City.

Page IV-35: Park and Ride Facility: The Developer's participation in the acquisition and construction of a regional park and ride facility located off-site is deferred to the Development Agreement.

Page IV-35: City of Palmdale Maintenance Facility: The Developer's participation in the acquisition and development of a City Maintenance facility is again deferred to the development agreement.

Section V. Development Regulations

Page V-1: General Provisions: This section was written with the assumption that a development agreement would be in place. Since it was assumed that subsequent zoning ordinances would not apply (due to the Development Agreement), the document references current ordinances rather than future ordinances. This section should be re-evaluated given this fact. Direct references to the Development Agreement are contained on pages V-1 and V-2.

Section VII. Implementation

The Implementation Section contains several references to the Development Agreement (Pages VII-2, VII-13, VII-15, VII-20 and VII-21). The phasing plan, general plan update, and infrastructure/facility financing should be re-examined.
MEMORANDUM

TO: Members of the Planning Commission

FROM: Molly Bogh, Director of Planning

SUBJECT: Kauerman & Broad Letter

DATE: January 30, 1992

I was given the attached letter in a meeting I had with Kauerman & Broad on January 29th at 3:00 p.m. I am passing it along to you for your perusal and comment.

MEB: pbb
Attachment

cc: K. Ennis
January 28, 1992

Chairman Mayfield and Planning Commission
Molly Bogh, Planning Director
City of Palmdale
38306 9th Street East
Palmdale, Ca. 93550

Dear Chairman Mayfield and Director Bogh:

The City’s January 15, 1992 staff report concerning draft Environmental Impact Report 89-03 contains, on pages 34-35, an inventory of unavoidable adverse impacts. Kaufman and Broad believes that this list should be substantially reduced since there is no factual basis to support a conclusion that the matters listed really represent unavoidable adverse impacts. Following are our comments to the inventory list in the order they appear in the staff report:

1. City Ranch will provide a total of 816 +/- acres of developed parks, golf course and open space for community use whereas at present, none of the property is available for public use. The developed parks alone (181 +/- acres) represent an increase of 225% over the City’s current 67 acre inventory of developed parks. To suggest that the public at large will be adversely impacted by a "loss of open space" to which it currently has no lawful access is simply illogical in the face of the obvious benefits which will accrue to the community through City Ranch’s development. This is particularly true in light of the fact, as set out in paragraph 4, that the City Ranch property is just that - a ranch which has been in existence for over 30 years.

2. We have previously submitted a letter pointing out (see attached letter dated January 22, 1992, to Laurie Lila) errors contained in DEIR 89-03 concerning the issue of jobs/housing balance. Our analysis demonstrates that the actual number of jobs generated by City Ranch will exceed 1240, the target deemed by the DEIR to be appropriate for the number of dwelling units proposed for the project. We have demonstrated that City Ranch will provide a balanced jobs/housing ratio and will therefore create no significant unavoidable adverse impact.
3. The DEIR correctly indicates that the City Ranch property is underlain by granite bedrock. As pointed out by geotechnical experts thoroughly experienced in evaluating local soil conditions and seismic potential (see January 14, 1993 letter from Earth Systems Consultants), the City Ranch property would likely be less severely impacted by a seismic event than the bulk of the already developed portions of Palmdale, most of which lies atop strata less stable than bedrock material. The fact that it may be necessary to cross an active fault to enter the property from off-site is no different than the requirement that one must cross an active fault to enter the entire City of Palmdale from the south. When viewed from a common sense perspective, the geological impacts associated with City Ranch are no more significant than for the rest of the City at large.

4. For more than 50 years, much of the City Ranch property has been under active use for cattle ranching purposes. Thus, most of the acreage which was previously "native habitat" has for decades been altered by commercial cattle raising activity. The staff's contention that the development of City Ranch will result in a "significant cumulative loss of biological habitat" simply ignores the fact that the portions of City Ranch which we propose to develop have not, for many years, been pristine, undisturbed biological habitat.

5. No comment.

6. To suggest that "sensitive receptors" along Elizabeth Lake Road (ELR) will be significantly and adversely impacted by traffic noise generated by City Ranch overlooks the fact that the project will contribute only minimal volumes of traffic to ELR, even at complete build-out. For example between 20th and 10th Streets West, our project contributes only 4% of the total traffic projected for ELR, and between 10th Street West and Freeway 14, our percentage contribution is negligible. When viewed in this factual context, it's obvious that City Ranch's noise impacts are insignificant.
7. As stated in paragraph 4, those portions of City Ranch which are proposed for "semi-urban" development lost their natural undisturbed status decades ago to active cattle ranching and related agricultural uses. This transformation of private property has occurred steadily and consistently without the property being available as a "visual resource" for the community at large. The most visible areas from off-site are being preserved from development. Thus the assertion that the public will lose a visual resource by virtue of City Ranch's development is a purely subjective opinion misrepresented as a statement of fact.

8. This concern arose in connection with the Ritter Ranch Specific Plan owing to its proximity to the established rural residential environment of Leona Valley. City Ranch is not immediately adjacent to established neighborhoods and should therefore present no "loss of dark nighttime sky" to anyone currently enjoying such. This concern is misapplied and irrelevant to our project.

9-13 Each of these suggested unavoidable adverse impacts are abstract possibilities, not demonstrable impacts with any real certainty of occurring. None of them would materialize unless certain unpredictable circumstances or scenarios take place. This is why they are qualified with such terminology as "may contribute", "if in the future", "could result in" and so on. We believe it is clearly contrary to the intent and requirements of CEQA to engage in such speculation in the name of disclosing unavoidable adverse impacts.

We therefore ask that DEIR 89-3 be review accordingly.

Sincerely,

[Signature]

Kyle F. Kollar
Director of Planning and Development

KPR:ts

cc: File
January 14, 1992

Kaufman and Broad Home Corporation
10377 Wilshire Boulevard
Los Angeles, California 90024

Attention: Mr. Robert M. Galloway

Subject: Supplement No. 8
Response to City of Palmdale EIR Review
CITY RANCH SOUTH PROPERTY
Palmdale, Los Angeles County, California

Per your request on January 13, 1992, we have reviewed the City of Palmdale staff report prepared for the January 15, 1992 Planning Commission meeting. The following comments relative to geotechnical issues are provided.

Staff Report, Page 17 (Geology)

The staff report states that "The risk from surface fault rupture is higher on the project site than for other locations in the Antelope Valley...". This is especially true for that portion of the City Ranch site which includes the actual fault zone. Other unsuited areas of the project site have a significantly less chance of experiencing surface fault rupture. The San Andreas fault is present within the northern portion of the property, however, we have demonstrated that other portions of the property have not experienced fault rupture within at least the last +100,000 years. This is also the case for areas north of City Ranch, within the City of Palmdale, where buried faults are known to exist, yet active fault rupture has not occurred. Therefore, it is our opinion that the risk of fault rupture is higher on portions of the City Ranch property than it is for other areas of the Antelope Valley, including the remainder of the City Ranch property.

The staff report also states that 14,000 full-time residents will be introduced to the area's potential geologic hazards. Primarily, these
residents will be exposed to the anticipated seismic shaking (earthquakes) generated by the local San Andreas fault. The residents of the general Palmdale and Lancaster areas will also be exposed to similar ground shaking intensities from the same earthquake.

The secondary effects of fault rupture along the San Andreas fault, relative to access roads, will also affect the general Palmdale area. Highway 14 (Antelope Valley Freeway) and Sierra Highway are major access roads to Palmdale from the south. Both of these routes cross the San Andreas fault near Avenue G. It is anticipated that vehicular access along these routes will be impacted by the anticipated fault rupture.

The staff report states "Buildings which are not constructed to seismic building codes would be susceptible to damage and could pose a potential for injury." We assume that this statement applies to existing structures on City Ranch that might not have been constructed under newer building codes that are currently in force. All new construction is recommended to be built using Los Angeles County Building Code Seismic Zone 4 criteria as a minimum. Certain areas designated as "Special Foundation" areas have additional recommendations for foundations.

Memorandum-Department of Conservation, Division of Mines and Geology

This Division of Mines and Geology letter discusses the term "acceptable" as related to our comments that the geologic hazards would be reduced to acceptable levels. The term "acceptable" has been utilized by other professionals and Buena Engineers, Inc. in the past relative to fault hazards and other geologic hazards when describing levels of risk. The use of the term "acceptable" is subjective and is based on past experience with reviewing agency requirements. With the use of restricted use areas, remedial grading, and appropriate structure design. It is our opinion that the geologic hazards encountered on the City Ranch site can be mitigated to levels that are currently accepted by the City of Palmdale and County of Los Angeles. The current "standard of care" for the geotechnical community was applied for the preparation of our reports.

We have attempted to define the areas of known active faults and have recommended "restricted use" zones where construction of habitable structures is not to be allowed. In areas where faults are not known to exist or where the faults have been demonstrated to be older than 11,000 years, location of structures is allowed, per current laws. It is the
general consensus of most geologists that future fault rupture will occur along pre-established faults or zones of weakness. We have also stated that there is no guarantee that future fault rupture will not occur at other locations. In the southwestern Antelope Valley, it is commonly allowed by both the City of Palmdale and the County of Los Angeles to construct habitable structures in the near proximity of known active faults, provided it can be shown that the structure is not endangered by an active fault. This is the intent of the Alquist-Priolo Act. Lake Elizabeth, Leona Valley, Anaverde Valley, southern Palmdale, Palmdale Hills, Juniper Hills, Valeyero, and Wrightwood are all local areas where construction of residences is allowed within the San Andreas rift zone pending the positive outcome of a site specific geologic study.

The implication by the Division of Mines and Geology that mitigation of fault hazards, ground shaking, and seismically induced flooding on this project may be difficult or impossible is, in our opinion, an overstatement. If these hazards were not mitigated for similar sites in the Antelope Valley, development in Palmdale, Leona Valley, and other areas would not have been allowed.

Relative to ground shaking, all of Palmdale and Lancaster will be subject to intense ground shaking resulting from an earthquake generated along the local San Andreas fault. Referring to CDMG Special Publication 60, Map No. 2N-9, both Palmdale and Lancaster are anticipated to experience Ross-Forl intensities of 9 assuming recurrence of an 1857 type event along the San Andreas fault. Bedrock portions of City Ranch are anticipated to have Ross-Forl intensities of 7 despite being closer to the fault than the general Palmdale or Lancaster areas. The higher the Ross-Forl number, the greater or more severe the anticipated ground shaking.

Ground shaking from earthquakes is a geologic hazard common to all of Southern California. No part of the State is exempt or free of this potential hazard. Intense ground shaking is certainly more probable to occur in this area based upon recurrence intervals of the San Andreas fault. However, the anticipated earthquake is going to impact most of Southern California, not just the 14,000 new residents of City Ranch. We are not aware that the State is recommending no development in Southern California because of anticipated future earthquakes. In fact, State and local agencies are attempting to educate the general public relative to anticipated earthquake hazards so that the public can be prepared. This implies a degree of acceptable risk by the public and governing agencies that earthquakes will occur, resulting in unavoidable impacts.
It is going to take creative engineering to minimize the effects of ground rupture on utilities that cross the fault. It is anticipated that these utilities will be damaged. Alternate sources of water and power should be considered in the event of disruption of primary services. Sewer lines should be designed to minimize effluent spillage and have accommodations for emergency pumping to transfer waste to undamaged mains.

We trust this provides the information requested. If you have any questions or require additional geotechnical services, please contact us.

Respectfully submitted,

Earth Systems Consultants Southern California

Mark S. Spikerman
C.E.G. #1174

cc: 3-Kaufman and Broad - Los Angeles
January 22, 1992

Ms. Laurie Lile
City of Palmdale Planning Department
38306 Ninth Street East
Palmdale, CA  93550

Re: Jobs/Housing Balance
City Ranch Draft EIR

Dear Laurie:

The Draft City Ranch EIR incorrectly calculates the employment opportunities provided by the City Ranch project at 889. That calculation is incorrect and should be revised to reflect the actual estimate 1248 jobs the project will provide.

The Draft EIR incorrectly identifies the proposed project to have 260,000 square feet of retail space when it is in fact 315,780 square feet (225,780 in Planning Area J, Specific Plan Exhibit 22D, and 100,000 square feet in Planning Area 33). Assuming one employee per 490 square feet, the commercial areas will generate 685 employees.

The Draft EIR also did not correctly identify the number of education jobs generated by the project because it gave the project no credit for education jobs located offsite but generated by the project. At .80 students per household, the 4160 students generated by the project would provide 400 jobs based on one employee per 10.4 students (Westside Union School District).

While the Draft EIR correctly identifies 32 and 91 jobs, as a result of park and golf course operation and maintenance, it does not identify any jobs associated with the maintenance of the 419 acres of open space. The Draft EIR also fails to account for jobs associated with the maintenance facility or for the maintenance of streets, drainage facilities, or landscaping to include right-of-way.

The Draft EIR also mistakenly assumes only four jobs at the Fire Station to be located on Planning Area 34. The current similar facility located at 10th Street West and Ave P currently employs 22.
The Draft EIR provides no credit to the project for jobs associated with the Sheriff’s Department or Library. Using the current deputy per thousand ratio of .87, the project would provide 12 jobs with the Sheriff’s Department. The recently proposed mitigation measures for library services also credits the project with a demand for seven library staff positions (EIR 5.30.2).

In summary, the EIR should credit the City Ranch project with a minimum of 1248 jobs as well as others associated with the maintenance of public facilities other than parks. As the EIR identifies the number of jobs to be associated with the project as 1248 (EIR 5.4.2), the project’s impact on the subregions jobs/housing balance should not be considered significant.

Sincerely,

B. Duane Betty
President
Antelope Valley Division
Kaufman and Broad of
Southern California, Inc.

BD8/1m
### CITY RANCH

**PROPOSED PROJECT POPULATION & EMPLOYMENT**

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1. Assumes 2.7 persons per dwelling (City of Palmdale)

2. Assumes 235,780 sq ft retail Planning Area 3 (Specific Plan Exhibit 22D)
   - Assumes 100,000 sq ft retail Planning Area 33
   - Assumes one employee per 490 sq ft (Urban Land Institute, 1986)

3. Assumes .80 students per dwelling
   - Assumes 1 employee per 10.4 students (Westside Union School District)

4. Assumes 1 employee per 3 acres of park (Palmdale Recreation Department)

5. Assumes 0.125 maintenance employees per acre and 64 clubhouse employees

6. Fire Station #24 10th Street West & Avenue P

7. Assumes existing officers per 1000 ratio of 0.87 per HR

8. Per City Librarian
MEMORANDUM

TO: Members of the Planning Commission

FROM: Molly Bogh, Director of Planning

SUBJECT: Text Additions and Modifications -- City Ranch Specific Plan

DATE: February 4, 1992

Attached please find copies of the most recent correspondence from the applicant regarding possible changes to the Specific Plan text. Most noteworthy are text additions relative to the transitional planning areas. Further explanation on these areas will be provided at the meeting. Staff generally finds this concept acceptable; however, it is still evolving and Staff has not had the opportunity to review the new text in detail.

In terms of other text revisions or additions contained in the applicant's attached correspondence, Staff will briefly itemize changes that have been deemed acceptable.

(1) January 30th transmittal: All revisions contained in this letter are acceptable to Staff.

(2) February 3rd transmittal: The following changes have been deemed acceptable by Staff:

- Page 4, Item 5
- Page 6, Items 7 and 8
- Page 7, Item 9
- Page 8, Item 11
- Page 9, Items 12 and 13

- Staff's position on Items 6 (private streets) and 10 (fence materials alternatives) is unchanged from the original City Ranch staff report. Staff continues to recommend the text changes contained in that report, pertaining to these items.

WEB: 555:pbb/pol573
Attachments
MEMORANDUM

DATE: January 30, 1992

TO: Molly Bogh

FROM: Mike Azeka

REGARDING: City Ranch language relative to Off-site Roadway and Utilities Connections

The following language should be added to the Specific Plan to accommodate regional circulation and off-site access, as well as address the issue of infrastructure connections to adjacent properties:

1. Specific Plan, Page I-8, C. Goals, Objectives and Policies
   5. b) 6) Ensure that regional circulation connections are considered and provided for at the appropriate time.

2. Specific Plan, Page IV-18, 5. Collector Streets
   Add the following paragraph at the end of the third paragraph:
   Subdivision design shall coordinate alignment and timing of street connections to adjacent or off-tract properties in a timely manner.

3. Specific Plan, Page IV-28, M. Public Utilities and Services
   Add the following at the end of the first paragraph:
   Subdivision design shall consider appropriate adjacent tract requirements for utilities and shall coordinate alignments and facility sizing according to requirements by the Public Works department.
TO:        Mrs. Molly Bogh
FROM:      Kyle Kollar
DATE:      February 3, 1992
SUBJECT:   Proposed Modifications to Staff Report
           City Ranch Specific Plan
           January 25, 1992

Per your request of January 31st, we have reviewed the
requested changes and language modifications which we had
previously sent to you, and consolidated them into one
memorandum. In reviewing these items, we have also decided
to exclude certain points we had previously raised in order
to move ahead in a timely manner.

The following are Kaufman & Broad's proposals for
modifications to the City Ranch Specific Plan in response to
the Staff Report. Except where otherwise indicated, page
and section references relate to the Staff Report's page
numbering and section outline structure. Items set off in
quotation marks are as shown in the Staff Report. Words
which are highlighted represent insertions of words into the
Staff Report which would result in clarifications or
corrections. Items without quotation marks are
explanations, additional information or comments by Kaufman
& Broad or Azeita da Almeida Planning.

Transition of Density:

Regarding the subject of transition of residential density,
the following language would supplement the policies,
standards and guidelines in the Specific Plan to create the
opportunity for dispersing units and particularly for utilizing Single Family Attached
development as a transition between Single Family Detached
and non-residential uses such as commercial or schools.
These changes address the appropriate areas where language
should be added to the Specific Plan.

1. Specific Plan
   Page 1-7.b. (Policies)

The following language should be added to this section:

b) Policies:

  1) Encourage a diverse housing stock at City Ranch.
2) Create development standards which allow flexibility to respond to changing community needs.

3) Ensure that all development maintains a consistent level of quality in terms of materials, construction and design, in order to achieve a uniformly attractive community.

4) Ensure that all necessary support services can be provided to new developments so that they are well maintained and attractive.

5) Create opportunities for a mix of product types and transition of residential densities between and within planning areas so as to ensure proper buffering between residential and non-residential land uses.

2. Specific Plan
Page V-2, C.1. (Residential Use Standards, Purpose and Intent)

The following language should be added to this section, after the first paragraph:

To ensure proper buffering between dissimilar land uses, transitions of density and mix of unit types will be allowed for residential development when adjacent to non-residential land uses.

3. Specific Plan
Page V-32. (Residential Planned Development Standards)

The following language should be added to the first paragraph in this section:

1. The City Ranch Residential Planned Development (R-PD) Standards are established to promote residential amenities beyond those expected under conventional development, to achieve greater flexibility in design, to encourage well-planned neighborhoods through creative and imaginative planning as a unit, to provide for a balanced distribution of residential densities and unit types, to provide appropriate transitions of densities between residential and non-residential land uses, and to provide for appropriate use of land which is sufficiently unique in its physical characteristics or other circumstances to warrant special methods of development.
The following language should be added to this section:


In order to provide a transition of density and variety in the community structure, the following guidelines for Planning Areas 19A, 20, 24, 28A and 30A shall apply:

1) Single Family Detached (SFD) Planning Areas which are adjacent to Commercial uses shall consider the appropriate placement of Single Family Attached (SFA) housing types to serve as a transition between Single Family Detached and Commercial uses.

2) The size and configuration of a transitional Single Family Attached area should be determined by topography, access and related conditions specific to that given area. However, SFA sites used for transitional purposes should in no case exceed twenty (20) acres in area.

3) SFA homes should be located in a manner which avoids excessive mixing of product types of dissimilar densities within a particular tract or on the same street; however, the intent is to permit diversity of products within Planning Areas.

4) Site plan layout of residential tracts should consider the placement of a street, greenbelt or landscaped setback between commercial and residential uses to serve as a buffer where appropriate, unless otherwise addressed by other mitigative measures.

5) Transitional SFA development which occurs adjacent to SFD lots are encouraged to employ design measures which lessen the effects of density at the interface between the two uses. These could include the use of single story SFA designs at the point of interface, Single Family Attached Type B housing types, architectural styles which are of a harmonious design, placement of parking, open space or access between the two housing types, or other methods as approved by the Planning Director which serve as a buffering element.
In order to provide a compatible transition of density and variety in the community structure, the following guidelines for Planning Area 14 shall apply:

1) Single Family Attached (SFA) Planning Areas adjacent to School sites or Multiple Family Planning Areas shall consider the appropriate placement of Multiple Family (MF) housing types to serve as a transition between Single Family Attached uses, in order to promote variety and diversity in community structure where site configuration, topography and access conditions are suitable.

2) The size and configuration of such area should be determined by topography, access and related conditions specific to that given area. However, MF sites used for transitional purposes should in no case exceed ten (10) acres in area.

3) Multiple Family buildings should be located in a manner which avoids excessive mixing of product types or dissimilar densities within a particular tract or on the same street; however, the intent is to permit diversity of products within Planning Areas.

The following comments and page references relate to the Staff Report for City Ranch dated January 18, 1988:

   Second Paragraph

Comments were raised regarding the grading of Planning Area 8, and questions were brought up by the Planning Commission at the January 23rd Public Hearing. Additional discussion could be added to the Specific Plan as outlined below to clarify this item.

Add the following to Page IV-29, replacing paragraphs 4 and 5:

Planning Area 8 constitutes a long, rectangular array situated between two large areas of open space. The grading of this Planning Area can be accomplished in one of two ways. If an off-site regional detention basin is constructed in the vicinity of 15th Street West and Elizabeth Lake Road as part of the Assessment District 90-01 improvements, there would be excess fill material generated which would need to be placed. In order to provide the District with an
economically attractive site close-by, Kaufman and Broad has offered Planning Area 6 as a suitable alternative for placement of excess fill. Under such a scenario, daylight filling of the central arroyo running east to west in Planning Area 8 would occur to a depth which ranges from approximately five feet to thirty feet in small areas. With this filling, the resultant house pad would be approximately ten to one hundred feet below the golf course area in most areas. Because daylight fill does not leave exposed graded slopes, very few visible slope banks would be created under this alternative.

If excess off-site material is not generated by construction of regional detention facilities off-site, Planning Area 8 would be graded utilizing an on-site balanced cut and fill approach which would result in minor cut slopes of thirty feet or less, except in one limited location adjacent to Bridge Road, where slopes would be below fifty feet in height. Nearly all of Planning Area 8 is in an area of limited visibility, and therefore impacts due to grading are not significant from a visual standpoint.

6. Page 24. Paragraph 1.1

This paragraph addresses the issue of private streets. Currently, the City has not adopted formal private street and private driveway standards, instead looking to a review and approval by the Public Works and L. A. County Fire Departments for standards on such streets. The most stringent of the two current standards applied by these departments indicates a minimum twenty-six (26) feet of pavement, with a minimum two (2) feet clear on each side for private streets or driveways serving less than four lots, with an increase to thirty (30) feet of paving (same side clearance requirement) for a greater number of units attended access. The appropriate use of these private street standards is internal to single family attached or multi-family developments, and for access within very low density hillside areas. In both cases, it is unnecessary and undesirable to require the added pavement, improvements, grading and area of impact which would result if the same width requirements are specified as for public rights-of-way.

We suggest instead the following language be added to Page V-2 of the Specific Plan:
13. Except as otherwise reviewed and approved by the City Engineer and L.A. County Fire Department, all private streets shall be constructed to a minimum twenty-six (26) feet of asphalt concrete pavement, with a minimum two (2) feet clear on both sides when providing access to less than four lots. Pavement width shall be increased to thirty (30) feet, with a minimum two (2) feet clear on both sides when providing access to four or more lots.

7. **Page 18, Paragraph 2**

The Staff Report suggests new language in the Specific Plan relative to R-PO zoning. The Specific Plan language is based, verbatim, on the adopted Palmdale Zoning Ordinance for R-PO projects. We suggest the language instead be modified as follows:

The Planning Commission shall approve a progress schedule indicating the development of open space and recreational amenities relative to the construction of residential dwelling units, which shall become a condition of approval. Where development is to be completed in phases, said development may be so completed with the approval of the Planning Commission. The Planning Director may modify, without a hearing, this condition pertaining to the development schedule, based upon the affirmative showing of substantial written evidence of hardship by the project applicant, and provided that recreational amenities are reasonably provided as development occurs.

We applaud the suggestion that this be an administrative issue; however, the purpose of the original language in the Specific Plan and the R-PO Ordinance from which the language came is to accommodate unforeseen market conditions and economic hardship. Therefore, this change would permit the consideration of economic hardship, when appropriate.

9. **Page 20, Paragraph 11**

Regarding Commercial Site Screening Standards, we recommend that the proposed language be further modified as follows to make the intent more clear:

"The minimum height of screening shall be six feet. In cases where there are grade..."
differentials or where walls must be higher for noise attenuation, wall height shall be reduced to eight feet or less on the residential side by use of earthen berms, use of two shorter walls in combination, combinations of berms, walls, open fencing, landscaping or similar measures."

Discussion: As proposed, the Staff Report's language could be construed to mean that all possible methods for wall height mitigation must be simultaneously employed. By making the changes highlighted in the paragraph above, the intent is clearer.

Paragraph 41.
The Staff Report refers to the Maintenance Facility in Planning Area 1. We suggest the wording be added to clarify that the Maintenance Facility is a portion of Planning Area 1 designated as a Community Facility use, and the potential High School designations be overlay designations in the Specific Plan.

Appropriate language for the Specific Plan relative to the High School is as follows:

Specific Plan
Page IV-6
Bottom Paragraph:
The Antelope Valley Union High School District serves the City Ranch Specific Plan area. The Highland High School is immediately adjacent to City Ranch on the north side. It is anticipated that this school will reach capacity prior to build-out of City Ranch. For this reason, additional high school capacity is needed in the vicinity of the boundary between the City Ranch and Ritter Ranch. Three potential locations in City Ranch, each encompassing approximately 22 acres have been designated with an overlay for High School, and are indicated on the Development Plan as potential High School locations.

Page UT-14.
Section 61.
The Staff Report has made a requirement here for PVC, woodcrete or other expensive and less aesthetically pleasing materials as compared to wood split-rail.
Currently, the local equestrian societies are responsible for maintenance of these fences which occur in open trail areas. Conversations with their members has indicated a desire and long-term commitment to maintenance of these horse trails, and a strong preference for construction standards which are both least costly and aesthetically pleasing. Therefore we highly recommend that the materials not preclude wood split-rail construction.

The following comments and page references are improvements to wording in the Specific Plan which will help clear up confusion. These have been discussed with you in a meeting last week and in a letter dated January 24, 1993 from Mike Aseka. These comments are included here in order to consolidate our comments into one memo.

11. Specific Plan  Front Building Setbacks. SPA Development

In order to make this language easier to implement, the following wording may be substituted:

(f) Building setbacks.

(1) Front Setbacks:

Garage setbacks, front facing garage:
Twenty (20) feet to public street or private drive.

Garage setbacks, side-in garage:
Fifteen (15) feet to public street, ten (10) feet to private drive.

Building setbacks:
Twenty (20) feet to public street or private drive. Front setback may be decreased to fifteen (15) feet if rear yard setback is fifteen (15) feet or greater. If rear yard setback is less than fifteen (15) feet, then front setback shall be twenty (20) feet to public street or private drive.

Uncovered parking:
Five (5) feet to public street or private drive.

(3) Rear Setbacks:
(same as written in Specific Plan)
13. For your request, we suggest the revision to the language on Page V-34, Section P.3.a.4):

2. Standards:

   a. Uses permitted subject to Site Plan Review:

   1) Biking, hiking and equestrian routes and trails.
   2) Conservation areas and wildlife refuge.
   3) Parks, picnic areas, playgrounds and ball fields.
   4) Passive recreation areas, vista points and scenic resource areas.
   5) Any other use similar in nature which is found compatible with the purpose of this Open Space section, and which is deemed appropriate by the Planning Director.

The three remaining items discussed at the January 11th meeting with yourself, Tara Hullinger and Bill Balen were as follows:

The first item was language in the Specific Plan relative to development in visually prominent areas. The following addition to the Specific Plan addresses this item:

13. Specific Plan
Page X-11

2. Development in Visually Prominent Areas

Where the Planning Commission determines that development will occur in visually prominent areas, the Planning Commission may require, at their discretion, a submittal and approval in accordance with the Site Plan Review process, including architectural elevations, building floor plans, grading plans and other items as required in the Site Plan Review.

The second item was to add language to Section V, Development Standards which explains the purpose for the Transitional Planning Areas. This could be addressed by the following:

14. Specific Plan
7. Transitional Planning Areas

Certain Planning Areas which, because of their location, adjacent uses, size or proximity to commercial, have been designated as "transitional" Planning Areas. These include Planning Areas 8, 14, 19A, 20, 21, 23, 24, 28A and 30A. As outlined in the Specific Plan Policies and Design Guidelines Sections (pages I-7, V-5, V-16 and VI-16), the purpose and objectives in designating these transitional Planning Areas is to encourage and permit the mixing of housing types within large Planning Areas. Rather than having the effect of increasing density in City Ranch, this allows for the coordinated re-distribution of the same number of dwellings within designated Planning Areas in a manner which enhances variety of housing products, utilizes buffering of land uses which are of a dissimilar density or provides a compatible method to transition from single family detached to commercial. By designating the Transitional Planning Areas as outlined above, the appearance of large expanses of the same housing products and densities spread over large areas of City Ranch can be avoided.

The third item discussed was to introduce language in the Specific Plan requiring that Conceptual Site Plans be prepared for Transitional Planning Areas, in order to assist in the review process and to assure the coordinated development of these areas. The following addition to the Specific Plan would accomplish this:

Specific Plan
Page VII-8. Implementation Design Guideline Conformance

The following should be added after the third paragraph at the top of page VII-8:

Transitional Planning Areas

In order to assure the coordination of densities, product types, buffering and compatibility within and adjacent to certain uses, a Conceptual Site Plan shall be reviewed and approved by the Planning Director for Transitional Planning Areas 8, 14, 19A, 20, 21, 23, 24, 28A and 30A. Said Conceptual Site Plan approval shall be required prior to approval of any Tentative Tract Map, Z-PO or CUP approval within these Planning Areas. Said Conceptual Site Plan shall be evaluated for conformance with requirements of the Design Guidelines,
Development Standards and Policies contained in this Specific Plan relative to Transitional Planning Areas.

Also enclosed is the new Development Plan Land Use Summary which reflects the modifications to accomplish the transitions of density and distributions of density into Single Family Planning Areas. We have highlighted the changes for your convenience.

I hope that the preceding items have clarified questions you have about the Specific Plan. Please give me a call if you have any additional questions relative to the above.
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Tota 1,998.0 5,200
MEMORANDUM

TO: Members of the Planning Commission
FROM: Molly Bogh, Director of Planning
SUBJECT: City Ranch EIR Discussion Items
DATE: February 5, 1992

I. ISSUES RAISED AT THE JANUARY 27 MEETING: At the meeting of January 27, 1992, the Planning Commission identified several issues which required additional clarification. The following are staff’s responses to the issues raised.

Trunk Sewer Line Mitigation:

Staff recommends revising the mitigation measure pursuant to the City Engineer’s suggestion, as discussed at the last meeting.

Staff has reviewed the audio tapes from the meetings of November 5, 12, 13, 21, and 26. There was no significant discussion of the isolation valves; discussion included impact of sewer line rupture, and construction standards for the sewer line.

Library Mitigation Measure:

To address the issue of pro-rata share for library services, staff suggests adding the following sentence: "In determining the applicant’s pro-rata share, the criteria will include, but will not be limited to: area of benefit for the main library and/or the branch library; number of units within the area benefitted; and, the cost of the facility."

Western Trail:

Staff has reviewed the land ownership patterns and topography for the area and has determined that connecting this trail to the south may be difficult. However, staff recognizes the
desirability of maintaining a north-south trail link somewhere within the western portion of the Planning Area. Therefore, staff recommends that the Specific Plan trails map be amended to show a dotted line showing this link, with the precise alignment of the trail to be determined later based on further analysis.

School Mitigation:

Westside Union School District: The terms of this agreement will be inserted into the EIR as school mitigation for the impacts to the Westside Union School District.

Antelope Valley Union High School District: Staff has received correspondence from the District Engineer indicating that the main terms of the agreement between the District and the applicant have been identified and are agreeable to both parties. Those terms will be inserted into the EIR as mitigation; with the provision that in the event that the High School District and the applicant fail to finalize an independent agreement, that the language currently set forth in the Staff Report dated January 15, 1992, will apply as mitigation for the impacts to the High School District. However, a second letter received today indicated that a high school site had not been selected, and requested that the Planning Commission not grant approval of the project until the District has a signed agreement with the applicant regarding all mitigation measures. A copy of today's letter is attached to this memo.

Significant Adverse Impacts:

The applicants have provided a letter in which they disagree with the conclusions reached in the Draft EIR regarding significant unavoidable adverse impacts. A copy of that letter is attached to this memo. Staff feels that extensive evidence has been presented which supports the conclusions reached in the EIR.
Text Changes:

Staff is prepared to discuss the text changes which were provided by the applicant.

II. REMAINING ISSUES: The following issues have yet to be reviewed and/or resolved by the Planning Commission regarding the City Ranch project:

Revised Responses to Comments:
Exhibits A and B to Resolution 91-114;
Fiscal Impact Report; and,
Planning Commission's Resolution 92-11.

Staff will make its best effort to complete the work on these items prior to the Commission's next meeting.

MEB/LKL/vp8784

cc: Bill Emlen
    Kevin Ennis
    Tara Hullinger
    Laurie Lile
    Sonja Wilson
February 5, 1993

Ms. Laurie Lile
City Planning Commission
38306 9th Street East
Palmade, CA 93550

Dear Ms. Lile:

Representatives of the Antelope Valley Union High School District and City Ranch have been negotiating over the past year on the impacts of the proposed City Ranch development on the high school district and the measures required to mitigate those impacts. Progress has been made in these negotiations, however, we do not have a final agreement particularly in the manner of an approved site. We would request the City Planning Commission not grant approval of this project until we have a signed agreement with City Ranch regarding all mitigation measures.

Sincerely,

[Signature]

Richard J. Altman
District Engineer

RJA:td

CC: Kyle Keller
January 28, 1992

Chairman Mayfield and Planning Commission
Molly Bogh, Planning Director
City of Palmdale
18106 9th Street East
Palmdale, Ca. 93550

Dear Chairman Mayfield and Director Bogh:

The City’s January 15, 1992 staff report concerning draft Environmental Impact Report 89-03 contains, on pages 34-35, an inventory of unavoidable adverse impacts. Kaufman and Broad believes that this list should be substantially reduced since there is no factual basis to support a conclusion that the matters listed really represent unavoidable adverse impacts. Following are our comments to the inventory list in the order they appear in the staff report:

1. City Ranch will provide a total of 816 +/- acres of developed parks, golf course and open space for community use whereas at present, none of the property is available for public use. The developed parks alone (181 +/- acres) represent an increase of 235% over the City’s current 67 acre inventory of developed parks. To suggest that the public at large will be adversely impacted by a "loss of open space" to which it currently has no lawful access is simply illogical in the face of the obvious benefits which will accrue to the community through City Ranch’s development. This is particularly true in light of the fact, as set out in paragraph 4, that the City Ranch property is just that - a ranch which has been in existence for over 50 years.

2. We have previously submitted a letter pointing out (see attached letter dated January 22, 1992, to Laurie Lile) errors contained in DEIR 89-03 concerning the issue of jobs/housing balance. Our analysis demonstrates that the actual number of jobs generated by City Ranch will exceed 1248, the target deemed by the DEIR to be appropriate for the number of dwelling units proposed for the project. We have demonstrated that City Ranch will provide a balanced jobs/housing ratio and will therefore create no significant unavoidable adverse impact.
3. The DEIR correctly indicates that the City Ranch property is underlain by granite bedrock. As pointed out by geotechnical experts thoroughly experienced in evaluating local soil conditions and seismic potential (see January 14, 1992 letter from Earth Systems Consultants), the City Ranch property would likely be less severely impacted by a seismic event than the bulk of the already developed portions of Palmdale, most of which lies atop strata less stable than bedrock material. The fact that it may be necessary to cross an active fault to enter the property from off-site is no different than the requirement that one must cross an active fault to enter the entire City of Palmdale from the south. When viewed from this common sense perspective, the geological impacts associated with City Ranch are no more significant than for the rest of the City at large.

4. For more than 50 years, much of the City Ranch property has been under active use for cattle ranching purposes. Thus, most of the acreage which was previously "native habitat" has for decades been altered by commercial cattle raising activity. The staff’s contention that the development of City Ranch will result in a "significant cumulative loss of biological habitat" simply ignores the fact that the portions of City Ranch which we propose to develop have not, for many years, been pristine, undisturbed biological habitat.

5. No comment.

6. To suggest that "sensitive receptors" along Elizabeth Lake Road (ELR) will be significantly and adversely impacted by traffic noise generated by City Ranch overlooks the fact that the project will contribute only minimal volumes of traffic to ELR, even at complete build-out. For example between 20th and 10th Streets West, our project contributes only 4% of the total traffic projected for ELR, and between 10th Street West and Freeway 14, our percentage contribution is negligible. When viewed in this factual context, it’s obvious that City Ranch’s noise impacts are insignificant.
7. As stated in paragraph 4, those portions of City Ranch which are proposed for "semi-urban" development lost their natural undisturbed status decades ago to active cattle ranching and related agricultural uses. This transformation of private property has occurred steadily and consistently without the property being available as a "visual resource" for the community at large. The most visible areas from off-site are being preserved from development. Thus the assertion that the public will lose a visual resource by virtue of City Ranch's development is a purely subjective opinion misrepresented as a statement of fact.

8. This concern arose in connection with the Ritter Ranch Specific Plan owing to its proximity to the established rural residential environment of Leona Valley. City Ranch is not immediately adjacent to established neighborhoods and should therefore present no "loss of dark nighttime sky" to anyone currently enjoying such. This concern is misapplied and irrelevant to our project.

9-13 Each of these suggested unavoidable adverse impacts are abstract possibilities, not demonstrable impacts with any real certainty of occurring. None of them would materialize unless certain unpredictable circumstances or scenarios take place. This is why they are qualified with such terminology as "may contribute", "if in the future", "could result in" and so on. We believe it is clearly contrary to the intent and requirements of CEQA to engage in such speculation in the name of disclosing unavoidable adverse impacts.

We therefore ask that CEIR 89-3 be review accordingly.

Sincerely,

Kyle P. Kollar
Director of Planning and Development

KPK:ts

cc: File
January 14, 1992

Kaufman and Broad Home Corporation
10877 Wilshire Boulevard
Los Angeles, California 90024

Attention: Mr. Robert M. Galloway

Subject: Supplement No. 9
Response to City of Palmdale EIR Review
CITY RANCH SOUTH PROPERTY
Palmdale, Los Angeles County, California

Per your request on January 13, 1992, we have reviewed the City of Palmdale staff report prepared for the January 13, 1992 Planning Commission meeting. The following comments relative to geotechnical issues are provided.

Staff Report, Page 17 (Geology)

The staff report states that "The risk from surface fault rupture is higher on the project site than for other locations in the Antelope Valley...". This is especially true for that portion of the City Ranch site which includes the actual fault zone. Other unsuitable areas of the project site have a significantly less chance of experiencing surface fault rupture. The San Andreas fault is present within the northern portion of the property, however, we have demonstrated that other portions of the property have not experienced fault rupture within at least the last 100,000 years. This is also the case for areas north of City Ranch, within the City of Palmdale, where buried faults are known to exist, yet active fault rupture has not occurred. Therefore, it is our opinion that the risk of fault rupture is higher on portions of the City Ranch property than it is for other areas of the Antelope Valley, including the remainder of the City Ranch property.

The staff report also states that 14,000 full-time residents will be introduced to the area's potential geologic hazards. Primarily, these
residents will be exposed to the anticipated seismic shaking (earthquakes) generated by the local San Andreas fault. The residents of the general Palmdale and Lancaster areas will also be exposed to similar ground shaking intensities from the same earthquake.

The secondary effects of fault rupture along the San Andreas fault, relative to access roads, will also affect the general Palmdale area. Highway 14 (Antelope Valley Freeway) and Sierra Highway are major access roads to Palmdale from the south. Both of these routes cross the San Andreas fault near Avenue B. It is anticipated that vehicular access along these routes will be impacted by the anticipated fault rupture.

The staff report states "Buildings which are not constructed to seismic building codes would be susceptible to damage and could pose a potential for injury." We assume that this statement applies to existing structures on City Ranch that might not have been constructed under newer building codes that are currently in force. All new construction is recommended to be built using Los Angeles County Building Code Seismic Zone 4 criteria at a minimum. Certain areas designated as "Special Foundation" areas have additional recommendations for foundations.

Memorandum-Department of Conservation, Division of Mines and Geology

This Division of Mines and Geology letter discusses the term "acceptable" as related to our comments that the geologic hazards would be reduced to acceptable levels. The term "acceptable" has been utilized by other professionals and Buena Engineers, Inc. in the past relative to fault hazards and other geologic hazards when describing levels of risk. The use of the term "acceptable" is subjective and is based on past experience with reviewing agency requirements. With the use of restricted use areas, remedial grading, and appropriate structure design, it is our opinion that the geologic hazards encountered on the City Ranch site can be mitigated to levels that are currently accepted by the City of Palmdale and County of Los Angeles. The current "standard of care" for the geotechnical community was applied for the preparation of our reports.

We have attempted to define the areas of known active faults and have recommended "restricted use" zones where construction of habitable structures is not to be allowed. In areas where faults are not known to exist or where the faults have been demonstrated to be older than 11,000 years, location of structures is allowed, per current laws. It is the
general consensus of most geologists that future fault rupture will occur along pre-established faults or zones of weakness. We have also stated that there is no guarantee that future fault rupture will not occur at other locations. In the southwestern Antelope Valley, it is commonly allowed by both the City of Palmdale and the County of Los Angeles to construct habitable structures in the near proximity of known active faults, provided it can be shown that the structure is not underlain by an active fault. This is the intent of the Atwater-Pintage Act. Lake Elizabeth, Leona Valley, Antelope Valley, southern Palmdale, Palmdale Hills, Juniper Hills, Valyermo, and Wrightwood are all local areas where construction of residences is allowed within the San Andreas rift zone pending the positive outcome of a site specific geologic study.

The implication by the Division of Mines and Geology that mitigation of fault hazards, ground shaking, and seismically induced flooding on this project may be difficult or impossible is, in our opinion, an overstatement. If these hazards were not mitigated for similar sites in the Antelope Valley, development in Palmdale, Leona Valley, and other areas would not have been allowed.

Relative to ground shaking, all of Palmdale and Lancaster will be subject to intense ground shaking resulting from an earthquake generated along the local San Andreas fault. Referring to CDMG Special Publication 60, Map No. 2H-8, both Palmdale and Lancaster are anticipated to experience Rossi-Forel Intensities of 9 assuming recurrence of an 1857 type event along the San Andreas fault. Bedrock portions of City Ranch are anticipated to have Rossi-Forel intensities of 7 despite being closer to the fault than the general Palmdale or Lancaster areas. The higher the Rossi-Forel number, the greater or more severe the anticipated ground shaking.

Ground shaking from earthquakes is a geologic hazard common to all of Southern California. No part of the State is exempt or free of this potential hazard. Intense ground shaking is certainly more probable to occur in this area based upon recurrence intervals of the San Andreas fault. However, the anticipated earthquake is going to impact most of Southern California, not just the 14,000 new residents of City Ranch. We are not aware that the State is recommending no development in Southern California because of anticipated future earthquakes. In fact, State and local agencies are attempting to educate the general public relative to anticipated earthquake hazards so that the public can be prepared. This implies a degree of acceptable risk by the public and governing agencies that earthquakes will occur, resulting in unavoidable impacts.
It is going to take creative engineering to minimize the effects of ground rupture on utilities that cross the fault. It is anticipated that these utilities will be damaged. Alternate sources of water and power should be considered in the event of disruption of primary services. Sewer lines should be designed to minimize effluent spillage and have accommodations for emergency pumping to transfer waste to undamaged mains.

We trust this provides the information requested. If you have any questions or require additional geotechnical services, please contact us.

Respectfully submitted,

Earth Systems Consultants Southern California

Mark S. Spykerman
C.E.G. #1174

cc: 3-Kaufman and Broad - Los Angeles
The Draft EIR provides no credit to the project for jobs associated with the Sheriff's Department or Library. Using the current deputy per thousand ratio of .87, the project would provide 12 jobs with the Sheriff's Department. The recently proposed mitigation measures for library services also credits the project with a demand for seven library staff positions (EIR 5.30.2).

In summary, the EIR should credit the City Ranch project with a minimum of 1248 jobs as well as others associated with the maintenance of public facilities other than parks. As the EIR identifies the number of jobs to be associated with the project as 1248 (EIR 5.4.2), the project's impact on the subregions jobs/housing balance should not be considered significant.

Sincerely,

B. Duane Betty
President
Antelope Valley Division
Kaufman and Broad of
Southern California, Inc.

BCB/1m
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1. Assumes 2.7 persons per dwelling (City of Palmhdale)
2. Assumes 235,780 sq ft retail Planning Area 3 (Specific Plan Exhibit 23D)
   Assumes 100,000 sq ft retail Planning Area 22
   Assumes one employee per 400 sq ft (Urban Land Institute, 1980)
3. Assumes .20 students per dwelling
   Assumes 1 employee per 10.4 students (Westside Union School District)
4. Assumes 1 employee per 5 acres of park (Palmhdale Recreation Department)
5. Assumes 0.125 maintenance employees per acre and 64 clubhouse employees
6. Fire Station 524 10th Street West & Avenue P
7. Assumes existing officers per 1000 ratio of 0.87 per HIR
8. Per City Librarian
January 15, 1992

Planning Commission
City of Palmdale
708 East Palmdale Boulevard
Palmdale, Ca. 93550

Dear Chairman Mayfield and Commissioners:

This is to provide Kaufman and Broad’s comments concerning the staff report and appendices dated January 15, 1992 for draft Environmental Impact Report 89-03 (City Ranch). These are intended to supplement our previously submitted written comments as well as any future comments arising during the public hearing process.

The staff report recommends various modifications to the mitigation measures and text of the City Ranch draft EIR. These recommendations are based upon revisions to the Ritter Ranch draft EIR which arose from that document’s public hearing process. In general, we challenge the staff’s blanket assumption that, for the sake of “consistency”, modifications deemed appropriate for the Ritter Ranch draft EIR should be automatically applied to the City Ranch draft EIR, where there is no factual evidence in the City Ranch draft to support such application. The kinds and degrees of mitigation proposed for City Ranch should reflect its unique and distinctive features and not merely mimic those applied to a different project.

More specifically, we object as follows to certain modifications recommended in connection with mitigation of City Ranch impacts upon schools and Sheriff’s facilities:

Westside Union School District (pgs. 6-8) - Kaufman and Broad and the district have negotiated an approach to mitigation whose framework is reflected in the current text of the City Ranch draft EIR. We believe no change to that existing language is necessary.

Antelope Valley Union High School District (pgs. 8 & 9) - The recommended modifications should be revised so as to reflect Kaufman and Broad’s willingness to: 1) Participate in a Malo-Ros district which would fund up to 50% of the costs for constructing and equipping a single high school campus to serve both the City Ranch and Ritter Ranch projects; and 2) Continue to work cooperatively with the district and the owners of Ritter Ranch to identify a campus site of mutual suitability.
Sheriff's Facility (pgs 11 & 12) - The recommended modifications would impose an inequitable and unjustified requirement that City Ranch fund the cost of facilities intended to serve and benefit the region at large. There simply is no reasonable nexus between identified project impact and the proposed mitigation. Moreover, the City Ranch draft EIR fails to demonstrate that current methods of funding Sheriff's facilities are inadequate to mitigate demand for law enforcement services created by the project.

In addition, we question the validity and applicability of the review and comment letter submitted by SCAG. Several of that agency's comments and recommendations are contradicted by correspondence provided by other agencies with specific expertise and jurisdiction in circulation, air quality and wastewater treatment. While SCAG may have exercised its mandate to render advice to the city, in our opinion such advice has little utility.

Sincerely,

[Signature]

Kyle P. Kollar
Director of Planning and Development

KPK:ts
January 22, 1992

Mr. John Mayfield  
Chairman, Planning Commission  
City of Palmdale  
38306 9th Street East  
Palmdale, Ca. 93550

Dear Mr. Chairman:

The following submittals summarize the information that was requested by the Planning Commission at previous meetings.

- **Schools:**
  - Westside Union School District - attached hereto is a copy of the Agreement between the Westside Union School District and Kaufman and Broad of Southern California, Inc.
  - Antelope Valley Union High School District - We have met with the District and have reached an agreement to satisfy the mitigation measures as set forth in the City Ranch Environmental Impact Report.
  - Palmdale Elementary School District - The mitigation has been fully satisfied with the agreement and participation in the already approved Helfo-Roos District.

- **Sewer:**

  Brockmeier Engineering Inc. has submitted two letters (copies attached), the first (dated 1-17-92) clarifies the issue of the capacity of the Palmdale Water Reclamation Plant the second (dated 1-18-92) outlines the design and construction methodology that will be utilized for the regional sewer infrastructure project.

- **Water:**

  A representative from the Los Angeles County Waterworks District is prepared to make a presentation outlining the availability of water service.
Mr. Chairman Mayfield  
January 22, 1992  
Page 2

- Archaeology:

Archaeological Associates has submitted a letter (attached) reviewing the comments and responses to the archaeological element of the City Ranch Specific Plan Environmental Impact Report.

- Jobs - Housing Element:

We have submitted a letter outlining the rational for re-calculating the job generation factor provided by City Ranch. As noted in the EIR the project would provide 889 jobs. Based on adjusted requirements the EIR should reflect a job generation factor to be realized from City Ranch of 1248 employment opportunities.

Sincerely,

B. Duane Betty  
President

BDB:ts

cc: File
January 23, 1992

Planning Department
City of Palmdale
38306 9th Street East
Palmdale, CA 93550

Dear Sirs:

Re: City Ranch Environmental Impact

Mr. Kyle Kowar of Kaufman and Broad has transmitted the attached letter to this district and agreed to those mitigation measures which the district had requested in our letter of October 4, 1991. While details of the agreement have to be resolved, the district confirms that Kaufman and Broad is willing to comply with the desired mitigation measures.

Sincerely,

Richard J. Aiken
District Engineer

RJA:rh
Attachment
January 21, 1992

Mr. Kenneth Brummal
Superintendent
Antelope Valley Union High School District
44811 Sierra Highway
Lancaster, Ca. 93534

Re: Mitigation of Environmental Impacts,
City Ranch Specific Plan.

Dear Ken:

In a letter to Lori Lile at the City of Palmdale dated October 4, 1992, you requested that the City include certain mitigation measures to the EIR for the City Ranch Specific Plan. Prior to your forwarding said letter, your District Engineer, Richard Aitken, courteously advised me of your proposed mitigations and I indicated that Kaufman and Broad would have no argument with them.

This letter is merely to memorialize the fact that Kaufman and Broad is willing to comply with the mitigation measures you've proposed, namely:

1). To participate in a Hellos Ranch CFD which will fund up to 50% of the costs to construct and equip the school(s) necessary to serve our project based upon a student generation factor of .3 per single family dwelling.

2). To jointly designate, with Ritter Park Associates, a site for the required high school campus which meets the conditions enumerated in your letter to the City.

Based on the foregoing, this is to request that you or your designee confirm to the City of Palmdale Planning Commission your understanding that Kaufman and Broad is willing to comply with the mitigations you've recommended. The Commission has asked that such confirmation be expressed in person and/or writing on or before their next hearing on the City Ranch EIR/Specific Plan scheduled for 7:00pm Thursday, January 23rd.

Thank you in advance for your cooperation.

Sincerely,

Kyle P. Kollar
Director of Planning and Development

cc: Richard Aitken
File
October 4, 1991

Ms. Laurie Lile  
Planning Department  
City of Palmdale  
38306 9th Street East  
Palmdale, CA 93550  

Dear Ms. Lile:

Subject: City Ranch Environmental Impact Report

The City Ranch project, which will have 5200 residential units, will generate approximately 1040 high school students. Based on our year round design capacity of 2500 students, the City Ranch project would generate students to fill 42% of a high school. The nearest high school, Highland High School, will be at capacity without this project, so a high school will be required in or near this project. The standard site size is 50 acres. The cost of a high school is $14,000.00 to $15,000.00 per student, amounting to approximately $35,000,000.00 per school.

In order to provide for the students generated by this project, we would request that the developer be required to do the following to mitigate the impact of the project:

1. Participate in a Mello Roes Community Facilities District created to provide funding for construction and equipping high schools within the Antelope Valley Union High School District. The level of funding shall be adequate to provide 50% of the requirement for schools generated by this development based on a generation factor of .2 high school students per single family dwelling. The balance of the funding would come from the state.

2. A site will be required to house the students generated by this project and by the adjacent Ritter Ranch project. The District requests that the two developers jointly designate, for purchase by the District, a site, located on their common boundary that will satisfy the need for a 50 acre site. Based on the projected number of students generated by the two projects, City Ranch would be required to furnish 22 acres of the required 50 acres. The District staff has reviewed the two specific plans and find that proportional portions from the following planning...
areas would satisfy the District requirements. These are listed in order of preference and are shown on a composite map of portions of the two tracts:

A. Ritter Ranch - Planning area 5X and City Ranch - Planning area 14.
B. Ritter Ranch - Planning area 6Y and City Ranch - Planning area 17.
C. Ritter Ranch - Planning area 5W and City Ranch - Planning area 5.

The final site designation shall be subject to approval by the District and shall meet the following conditions:

1. The site shall be made available for purchase by the District at a price not to exceed the average of three appraisals.

2. The site shall be economically and technically suitable for construction of a school site and its associated facilities. It shall meet all geological and seismic requirements.

3. The site shall be subject to the approval of all local and state agencies having jurisdiction and shall meet all those requirements in effect at the time of purchase.

4. Utility services, water, sewer, gas, electricity, and telephone, shall be available to the site at no cost to the District prior to start of school construction or prior to the completion of 25% of the total dwelling units within either project, whichever is earlier.

5. Access to the site, improved to the appropriate city or county standards, shall be provided to the site at no cost to the District.

Should you have any questions, please contact our District Engineer, Richard Aitken.

Sincerely,

Kenneth Brummal
Superintendent

RJA:kb
January 17, 1992

Kaufman and Broad of Southern California, Inc.
Attn: Mr. Robert Galloway
10877 Wilshire Blvd., 12th Floor
Los Angeles, CA  90024

Subject:  City Ranch EIR Comments
          Palmdale Water Reclamation Plant

Gentlemen:

Enclosed is a copy of a letter that was sent to Ms. Tara Hullinger on October 1, 1990 from Charles V. Garry of the County Sanitation Districts of Los Angeles County. This letter addresses the issue of how the Sanitation District is intending to expand the Palmdale Water Reclamation Plant to accommodate the anticipated sewage flows from City Ranch and other developments within District No. 20.

On Page 5-236 of the City Ranch EIR, Paragraph 5.17.4, Cumulative Impacts addresses the issue of the capacity of Palmdale Water Reclamation Plant (WRF) and when the WRF will be expanded to accommodate the City Ranch sewage flows and sewage flows from other developments.

We feel that the enclosed letter and paragraph 5.17.4 adequately cover the issue of the capacity of the Palmdale Water Reclamation Plant.

If you have further questions, please notify us.

Sincerely,

BROCKMEIER CONSULTING ENGINEERS, INC.

Gary O. Roepke, P.E.
Vice President Engineering

cc: Mike Azaka

GDR:pa
October 1, 1990

File No: 20-00.00-00

Ma. Tara Hullinger
City of Palmdale
708 E. Palmdale Boulevard
Palmdale, CA 93550

Dear Ma. Hullinger:

City Ranch Specific Plan Development Agreement
Bright Ranch Specific Plan Development Agreement

This is in response to your letter, which were received on August 16, 1990, regarding the proposed projects. We offer the following information and comments regarding sewerage service and Sanitation District facilities:

The proposed project areas are outside the jurisdictional boundaries of the Sanitation Districts and will require annexation to Sanitation District No. 20 before sewerage service can be provided to the proposed developments. For specific information regarding the annexation procedure and fees, please contact Ms. Alma Horvath at (213) 699-7411, extension 2708.

The wastewater generated by the proposed projects will discharge to, and be conveyed through, local sewer networks, which will not be maintained by the Sanitation Districts, to the proposed Amargosa Creek Trunk Sewer. The Amargosa Creek Trunk Sewer is proposed to be constructed along the Amargosa Creek, between 10th Street West and 25th Street West, and connect to the Sanitation Districts' existing trunk sewer network near Avenue P and 10th Street West (at the Trunk C Relief Sewer, formerly known as the Diverted Center Trunk Sewer). The proposed Amargosa Creek Trunk Sewer will be constructed as a City of Palmdale project and, upon completion and acceptance, will be transferred to Sanitation District No. 20 for operation and maintenance.

The wastewater will be treated at the Palmdale Water Reclamation Plant (WRF), located on 30th Street East, between Avenue P and Avenue P-8, in the City of Palmdale. The Palmdale WRF currently processes an average flow of 7.2 mgd. In order to meet the current service demand, the Sanitation Districts are presently expanding the treatment capacity of the Palmdale WRP through surface storage of the existing oxidation ponds. The Sanitation Districts will continue to incrementally expand facilities as needed to accommodate additional development, up to the allowable level addressed in the recently completed Addendum to the Final EIR and Supplemental Report Finalizes the Wateruser Facilities Plan for Los Angeles County Sanitation District No. 20. This document provides for the treatment of influent wastewater flows up to 15 mgd at the Palmdale WRF.
The Sanitation Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting to the Sanitation Districts' Sewerage System. Connection fees are required in order that necessary expansions to the Sewerage System can be constructed to accommodate new development. Payment of connection fees will be required before permits to connect to the sewer are issued. The Sanitation Districts also have an annual service charge to fund the operation and maintenance of the Sewerage System.

The average wastewater flow to be generated by the proposed projects are estimated to be 1.3 mgd for City Ranch, and 2.1 mgd for Ritter Ranch. The current service demand for wastewater treatment in District No. 20 is 7.2 mgd. The wastewater which is expected to be generated by the proposed projects, as well as the cumulative effect of additional wastewater resulting from other proposed projects in the Palomar area, will constitute a significant increase over the existing demand. However, recognizing that the development will be phased in over the next 10 years for City Ranch, and 20 years for Ritter Ranch, the anticipated flow increase would incrementally impact the Sewerage System, allowing the Sanitation Districts to expand facilities as needed to accommodate the increased demand. As stated above, the Connection Fee Program will provide the funds necessary to construct sewer relief and treatment plant expansion projects.

If you have any further questions, please contact the undersigned at (213) 699-7411, extension 2709.

Very truly yours,

Charles W. Cary

Kim M. Visser
Engineering Technician
Financial Planning &
Property Management Section

[Signature]

October 1, 1990
ATTACHMENT VII:

Fiscal Impact Report and Finance Director Memo.
TO: Tara Doughty, Planning Department
FROM: Bill Ramsey, Director of Finance
SUBJECT: City Ranch Fiscal Impact Report
DATE: February 4, 1992

Staff has reviewed the Fiscal Impact Report Dated January 1992 submitted by Kaufman & Broad. This report portrays what Kaufman & Broad representatives believe to be the revenues and expenditures generated by their proposed development over a thirteen (13) year period commencing in 1993 and ending in the year 2005. All revenue and expenditures referenced herein are expressed in constant 1990 dollars. No inflationary adjustments have been used or assumed.

Short Term Impact

The review of recurring revenues and recurring expenditures for the first 5 years of the proposed project indicates that there will be a negative cash flow to the City of $2.4 million. However, if nonrecurring development fees for drainage, traffic impact, and parks are included then there is positive cash flow of $7.4 million to the City. Development fees may only be used for restricted capital projects and do not impact the City’s general fund. I have omitted the impact of interest earnings on project surplus due to the assumption that excess funds would be spent as received.

Long Term Impact

Staff’s analysis of the long range impact indicates that annual recurring expenditures incurred by the City to service the City Ranch development will exceed annual recurring revenues by $16.1 million through the year 2005 (Table A). By 2005 the annual recurring deficit will be in excess of $2.6 million. However, if nonrecurring development fees are considered then there is an overall positive cash position of $8.0 million (Table A) through the year 2005 excluding interest earnings on excess funds and any impact from a developer proposed Mello-Roos option in the year 2005.
Not included in this analysis of the proposed City Ranch development, are benefits and costs that may be associated with a development agreement. As of this date the City does not have a development agreement with City Ranch. Items that may be included in a development agreement are park land dedication and improvements, a park and ride facility, public works maintenance facility, library facility and other improvements that may benefit the City. If a development agreement is negotiated the exactions could possibly be considered an overriding consideration with regard to the fiscal impact analysis.

Significant Issues Discussed with Developer

Public Works questions the amount used in the fiscal impact report for street maintenance. Kaufman & Brod is using $2,000 per lane mile for annual street maintenance costs while staff believes the cost to be $4,500 per lane mile.

Also staff noticed that the fiscal impact report states that there will be 146.8 acres of City Ranch parks. However, the annual park maintenance costs are computed on only 76.4 acres and not the entire 146.8 acres.

Staff has used $4,500 per lane mile which adds $3.1 million to street maintenance over the project life. Staff has also added $5.5 million to park maintenance to maintain 146.8 acres of parks instead of 76.4 acres.

WRR/lal
WF2001

Attachment
City Ranch Project Fiscal Impact Report
Summary of Recurring Fiscal Impact on City of Paladale

<table>
<thead>
<tr>
<th></th>
<th>City Ranch Total 1993-2005</th>
<th>Paladale Staff Total 1993-2005</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REVENUES:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property Tax</td>
<td>5,051,026</td>
<td>5,051,026</td>
</tr>
<tr>
<td>Transfer Tax</td>
<td>907,020</td>
<td>907,020</td>
</tr>
<tr>
<td>Sales Tax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On-Site</td>
<td>6,293,314</td>
<td>6,293,314</td>
</tr>
<tr>
<td>Off-Site</td>
<td>1,393,091</td>
<td>1,393,091</td>
</tr>
<tr>
<td>Franchise Fees</td>
<td>1,641,534</td>
<td>1,641,534</td>
</tr>
<tr>
<td>Business Licenses</td>
<td>31,886</td>
<td>31,886</td>
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<tr>
<td>Transfers From Other Agencies</td>
<td>5,477,878</td>
<td>5,477,878</td>
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<tr>
<td>Miscellaneous Revenue</td>
<td>1,088,565</td>
<td>1,088,565</td>
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<tr>
<td>Recurring Revenues</td>
<td>21,866,113</td>
<td>21,866,113</td>
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<tr>
<td><strong>COSTS:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Police Costs</td>
<td>8,258,955</td>
<td>8,258,955</td>
</tr>
<tr>
<td>Parks Maintenance</td>
<td>5,970,879</td>
<td>11,470,059</td>
</tr>
<tr>
<td>Street Maintenance</td>
<td>2,479,228</td>
<td>5,578,263</td>
</tr>
<tr>
<td>Storm Drain Maintenance</td>
<td>258,370</td>
<td>258,370</td>
</tr>
<tr>
<td>Cultural Recreation Programs</td>
<td>3,315,502</td>
<td>3,315,502</td>
</tr>
<tr>
<td>Library</td>
<td>1,795,160</td>
<td>1,795,160</td>
</tr>
<tr>
<td>Animal Control</td>
<td>438,862</td>
<td>438,862</td>
</tr>
<tr>
<td>City Administration and Overhead</td>
<td>6,871,434</td>
<td>6,871,434</td>
</tr>
<tr>
<td>Recurring Costs</td>
<td>29,188,390</td>
<td>37,988,608</td>
</tr>
<tr>
<td><strong>Recurring (Deficit)</strong></td>
<td>(7,502,077)</td>
<td>(16,100,292)</td>
</tr>
<tr>
<td>Development Fees</td>
<td>24,076,673</td>
<td>24,076,673</td>
</tr>
<tr>
<td>Interest on Proj. Surplus</td>
<td>1,322,797</td>
<td></td>
</tr>
<tr>
<td>Mello-Roos CPD</td>
<td>1,404,000</td>
<td></td>
</tr>
<tr>
<td>Net Surplus</td>
<td>19,101,153</td>
<td>7,976,381</td>
</tr>
<tr>
<td><strong>Ratio of Total Revenue to Cost</strong></td>
<td>1.66</td>
<td>1.21</td>
</tr>
<tr>
<td><strong>Net Surplus Per Unit</strong></td>
<td>3,712</td>
<td>1,534</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>48,689,743</td>
<td>45,962,986</td>
</tr>
</tbody>
</table>
FISCAL IMPACT REPORT

CITY RANCH DEVELOPMENT PROJECT
PALMDALE, CALIFORNIA

January 1992

Prepared for:
Kaufman & Broad of Southern California, Inc.

Prepared by:
The Natelson Company, Inc.
16633 Ventura Boulevard, Suite 1200
Encino, California 91436
(818) 501-5016
TABLE OF CONTENTS

I. INTRODUCTION 1

II. MAJOR FINDINGS 3

III. DEVELOPMENT ASSUMPTIONS 5

IV. FISCAL ASSUMPTIONS AND METHODOLOGY 9
   A. Recurring Fiscal Revenues 9
   B. Recurring Fiscal Costs 13
LIST OF TABLES AND FIGURES

TABLES IN TEXT:

A. Summary of Recurring Fiscal Impact 3
B. Land Use Distribution 5
C. Housing Unit Distribution 6
D. Projected Housing Units in Place 7
E. Infrastructure Improvements 7

APPENDICES:

A. Tables 1 to 12 - Fiscal Impact Calculation
B. Sales Tax Revenue Calculations
   Table 1 - City Ranch
C. Copy of Palmdale Budget Reconciliation
   Table 1 - 1989-90 Budget Line Items
This analysis estimates the financial impact resulting from development of City Ranch in the City of Palmdale. The proposed City Ranch project is primarily a single-family residential development including two neighborhood shopping centers as well as significant recreational park lands. Located to the southwest of the City, the project will be developed on a 1.985 acre site fronting on the south side of Elizabeth Lake Road. The project will consist of 5,200 residential units at buildout, 335,780 square feet of gross leasable retail/commercial space and approximately 375 acres of recreational park acreage including an 18-hole regulation golf course. All of the City Ranch site is currently located in unincorporated County jurisdiction. Annexation and a Sphere of Influence Amendment to the City has been initiated. Both the City Ranch Specific Plan and an EIR are in the final phases.

The analysis calculates both recurring and non-recurring fiscal revenues and recurring fiscal costs to the City of Palmdale that the proposed development will generate. Recurring revenues examined in detail include:

- Property tax revenue;
- Property transfer tax revenue;
- Sales tax revenue;
- Utility franchise revenue;
- Business license revenue;
- Subventions from other governmental agencies; and
- Other miscellaneous revenue including fines and interest income.

Development fee revenues were also examined due to the significant amount of revenue generated from this source. Metro-Rooz Community Facilities District financing was also examined as an option, to cover recurring costs beyond year 13 of the project.

The report examines in detail several recurring costs including:

- Police protection contracts;
- Public works maintenance expenditures, including parks maintenance, street maintenance and storm drain maintenance;
- Cultural/recreational service costs;
- Library costs;
- Animal control costs; and
- City administrative and overhead costs.

Annual fiscal impact of the project has been projected based on the development at full buildout - projected in 2005 - and for periodic years during the 13 years of buildout commencing in 1993. The focus of the analysis is on primary impacts originating on-site rather than secondary impacts resulting from off-site activity. The report examines primarily costs and revenues recurring on an annual basis. Finally, the analysis only examines fiscal impact resulting from new development and does not examine existing fiscal costs or benefits associated with current parcels comprising the project area.

The entire analysis is expressed in un-inflated 1991 dollars, which allows examination of future impact without any inflationary distortion.
The following sources, among others, have contributed to this analysis:

- The City of Palmdale 1990-1991 and 1991-1992 Annual Budgets and related documents have been utilized to determine various costs and revenue estimates and to verify estimates calculated through other means.

- The City of Palmdale staff and staff of various public agencies with jurisdiction within the study area have been consulted. In some instances, as noted in the report, the staff has provided qualitative inputs used in the analysis.

- A project description prepared for the development by Azaka De Almeida Planning has been used as the basis for identifying project components and phasing schedule.

- Incidental data such as taxable retail sales, income estimates, utility rates and utility usage have been used as appropriate.

The analysis attempts to thoroughly reconcile city-wide budget line items with project-specific fiscal revenues and costs, so that "hidden" revenues and costs - which might otherwise go unaccounted - are included. The body of the report explains in more detail the methodology used in determining fiscal impact projections for each revenue and cost category.

The report is organized into the following five sections:

I. Introduction
II. Major Findings
III. Development Assumptions
IV. Fiscal Assumptions and Methodology
V. Appendices
II. MAJOR FINDINGS

This section briefly discusses the results of the fiscal impact analysis. Table A below summarizes the cumulative fiscal impacts including recurring and non-recurring revenues and recurring expenditures. Development fees are combined with recurring revenues in this analysis because of the significant amount of revenue they represent to the City. Development fees accrue to the City at the time building permits and certificates of occupancy are obtained.

### Table A

City Ranch Project Fiscal Impact Report
Summary of Recurring Fiscal Impact on City of Palmdale

<table>
<thead>
<tr>
<th>TOTAL</th>
<th>12/31/2006</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REVENUES:</strong></td>
<td></td>
</tr>
<tr>
<td>Property Tax</td>
<td>3,661,259</td>
</tr>
<tr>
<td>Transfer Tax</td>
<td>967,038</td>
</tr>
<tr>
<td>Sales Tax:</td>
<td></td>
</tr>
<tr>
<td>On-Ro</td>
<td>6,708,216</td>
</tr>
<tr>
<td>Off-Ro</td>
<td>1,338,884</td>
</tr>
<tr>
<td>Franchise Fees</td>
<td>1,648,534</td>
</tr>
<tr>
<td>Business Licenses</td>
<td>31,260</td>
</tr>
<tr>
<td>Transfer From Other Agencies</td>
<td>8,177,379</td>
</tr>
<tr>
<td>Miscellaneous Revenue</td>
<td>1,636,566</td>
</tr>
<tr>
<td><strong>Recurring Revenues</strong></td>
<td>21,382,816</td>
</tr>
<tr>
<td>Development Fees</td>
<td>24,076,979</td>
</tr>
<tr>
<td>Interest on Project Surplus</td>
<td>1,315,787</td>
</tr>
<tr>
<td>Mult-Renter CFD Funding Option</td>
<td>1,094,000</td>
</tr>
<tr>
<td><strong>TOTAL Revenues</strong></td>
<td>66,658,433</td>
</tr>
</tbody>
</table>

| **COSTS:** | |
| Police Costs | 8,390,053 |
| Parks Maintenance | 6,590,970 |
| Street Maintenance | 2,470,220 |
| Storm Drain Maintenance | 263,790 |
| Cultural Recreation Programs | 2,314,560 |
| Library | 1,795,189 |
| Animal Control | 428,808 |
| City Administration and Overhead | 6,811,285 |
| **Recurring Costs** | 20,203,300 |
| Ratio of Total Revenues to Cost | 1.68 |
| Net Surplus (Deficit) | 15,455,133 |
| Net Surplus (Deficit) per Unit in Plan | 23,713 |
Recurrent revenues of $21.9 million, development fees of $24.1 million, interest on project surplus of $1.3 million and Meito-Roos funding of $1.4 million together total $48.68 million in revenues from 1993-2005. Recurring costs total $29.388.390 million. Together, total revenues exceed recurring costs in the period to 2005 by $19,301,353 or $3,712 per dwelling unit.
III. DEVELOPMENT ASSUMPTIONS

The fiscal impact summarized in Part II above is based upon a series of development, fiscal cost and fiscal revenue assumptions that correspond to the proposed land use plan for the City Ranch project. Part III discusses these assumptions in greater detail. The methodology employed to calculate fiscal impact is explained in Part IV.

City Ranch will cover 1,985 acres, of which, 1,037 are designated for residential, 42.1 for commercial/retail, and 375 for recreational park space and golf course development. Schools, open space and infrastructure improvements will occupy the remaining land area. Park area will include two community parks of 35 and 52 acres as well as a number of smaller neighborhood parks. The golf course includes approximately 216 acres. The project area will include 4,887 single-family and 313 multi-family homes at buildout, with 1990 values ranging from $100,000 to $250,000. The neighborhood shopping centers will be developed to support the residential development, one of 235,780 square feet and the other of 100,000 square feet. Projected absorption will occur over a 13-year period commencing in 1994.

In terms of infrastructure development, the project will ultimately include 141 lane miles of arterial and local roads, 13 miles of storm drainage pipes and 166 catch basins, as well as flood control improvements, sewer systems, utility lines and other infrastructure improvements. Construction phasing of the infrastructure considered in this report (streets and storm drain improvements) is projected to track residential absorption.

1. Land Use Distribution

The land use summary in the project's Specific Plan indicates the following distribution of land use:

<table>
<thead>
<tr>
<th>Project Summary</th>
<th>Gross Acres</th>
<th>Percentage of Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Development</td>
<td>42.1</td>
<td>2.1%</td>
</tr>
<tr>
<td>Open Space</td>
<td>14.5</td>
<td>0.7%</td>
</tr>
<tr>
<td>Natural Open Space</td>
<td>404.4</td>
<td>20.4%</td>
</tr>
<tr>
<td>Golf Course</td>
<td>215.6</td>
<td>10.9%</td>
</tr>
<tr>
<td>Parks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community</td>
<td>107.2</td>
<td>5.4%</td>
</tr>
<tr>
<td>Neighborhood</td>
<td>52.1</td>
<td>2.6%</td>
</tr>
<tr>
<td>Residential Development</td>
<td>1,037.0</td>
<td>53.2%</td>
</tr>
<tr>
<td>Schools</td>
<td>36.0</td>
<td>1.8%</td>
</tr>
<tr>
<td>Roadways</td>
<td>53.1</td>
<td>2.8%</td>
</tr>
<tr>
<td>Fire Station</td>
<td>1.0</td>
<td>0.1%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1,985.0</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
2. Product Type and Absorption

The residential acreage is expected to encompass a mix of product types, as shown in Table C below.

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Total Units at Buildout</th>
<th>Maximum Units Per Acre</th>
<th>Average Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>834</td>
<td>4.00</td>
<td>$250,000</td>
</tr>
<tr>
<td>2</td>
<td>1,348</td>
<td>4.00</td>
<td>200,000</td>
</tr>
<tr>
<td>3</td>
<td>2,445</td>
<td>4.00</td>
<td>170,000</td>
</tr>
<tr>
<td>4</td>
<td>260</td>
<td>4.00</td>
<td>150,000</td>
</tr>
<tr>
<td>5</td>
<td>311</td>
<td>2.00</td>
<td>100,000</td>
</tr>
<tr>
<td>Total/Weighted Average</td>
<td>5,200</td>
<td>4.30</td>
<td>$185,394</td>
</tr>
</tbody>
</table>

Average household population in the project is projected at 2,700, which is based on preliminary 1990 Census estimate for the City as of August 16, 1990. The projected population at buildout will be 14,040.

Two neighborhood commercial/retail sites are expected to total approximately 335,780 square feet; 235,780 square feet will be situated on 31.3 acres of land and should be completed by 1994, and 100,000 square feet will occupy 10.0 acres and is expected to be completed by 1997.

Projected absorption of the residential units is based on a Kaufman & Broad phasing schedule. Table D on the next page shows total units absorbed over a 13-year period commencing in 1993. Buildout is projected in 2005.
Table D  
Projected Housing Units in Place

<table>
<thead>
<tr>
<th>Dwelling Units and Population</th>
<th>Year 1</th>
<th>Year 7</th>
<th>Year 13</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1993</td>
<td>1999</td>
<td>2005</td>
</tr>
<tr>
<td>Product 1</td>
<td>0</td>
<td>349</td>
<td>614</td>
</tr>
<tr>
<td>Product 2</td>
<td>0</td>
<td>698</td>
<td>1,348</td>
</tr>
<tr>
<td>Product 3</td>
<td>150</td>
<td>1,347</td>
<td>2,445</td>
</tr>
<tr>
<td>Product 4</td>
<td>0</td>
<td>260</td>
<td>260</td>
</tr>
<tr>
<td>Product 5</td>
<td>0</td>
<td>113</td>
<td>113</td>
</tr>
<tr>
<td>TOTAL</td>
<td>150</td>
<td>2,967</td>
<td>5,200</td>
</tr>
</tbody>
</table>

Absorption of 233,780 square feet of the retail space is projected to occur in 1994, with the remainder occurring in 1997. Because the commercial acreage is likely to serve the on-site residential units, this lag time allows the local population to grow sufficiently to support the space.

3. Infrastructure Improvements

Infrastructure improvement of City Ranch will require local and arterial streets, catch basins, storm drains, flood control mitigation, water and sewer systems, and utilities such as electric and gas lines. For the purposes of projecting recurring fiscal impact, only the street related improvements and the storm drain improvements will affect the city, because the operation and maintenance of other improvements will be undertaken by non-municipal agencies. Fiscal public works expenses will also include park maintenance.

On-site street improvements and storm drain improvements at buildout are listed in the table below. This calculation of total infrastructure improvements is based upon the analysis by Pomus Engineering staff utilizing the proposed land use plan for the City Ranch project. Separation of total lane miles into arterial/collector and local street lane miles was assumed by TNCI based on previous fiscal impact experience.

Table E  
Infrastructure Improvements

<table>
<thead>
<tr>
<th></th>
<th>100.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arterial/Collector (4 lanes)</td>
<td></td>
</tr>
<tr>
<td>Local (2 lanes)</td>
<td>40.0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>140.8</td>
</tr>
</tbody>
</table>

Storm Drain Improvements

<table>
<thead>
<tr>
<th></th>
<th>106.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catch Basins</td>
<td></td>
</tr>
<tr>
<td>Storm Drains (Linear miles)</td>
<td>13.10</td>
</tr>
</tbody>
</table>

7
6. **Infrastructure Phasing**

   For the purpose of this fiscal analysis, it has been necessary to assume an infrastructure and park development phasing schedule. The schedule is considered reasonable in conjunction with the projected residential absorption. Full buildout of the infrastructure is projected to coincide with buildout of the project’s residential units in 2005. The phasing assumptions are as follows:

   - **Local Streets**: Construction is assumed equally proportional to residential unit absorption.

   - **Non-Local Streets**: Construction is assumed at a rate equal to twice the proportional rate of residential absorption. Buildout is projected in 1999.

   - **Storm Drain Improvements**: Construction is assumed to track non-local streets, i.e., a rate twice the proportional rate of residential absorption.

   - **Community Park Acres**: Community park acreage is assumed to be in place and operating by the beginning of 1995. Seventy-six acres of park acreage is phased in and explained in Park Maintenance section below.
IV. FISCAL ASSUMPTIONS AND METHODOLOGY

A. RECURRING FISCAL REVENUES

1. Property and Transfer Tax Revenue

The City Ranch area currently incorporates several Tax Rate Areas (TRAs) and consequently is subject to varying allocations of property tax revenue, depending upon the location of particular parcels. Upon complete annexation by the City, the parcels would be subject to new allocations after negotiations between the City and Los Angeles County. Furthermore, the City’s previous status as a “No-Tax” municipality further complicates projections of future tax revenue, because State Senate Bill AB 1197 mandates a property tax revenue phase-in over a seven-year period beginning in the 1989-90 fiscal year. The bill essentially requires the City’s share of revenue to rise to 7/100ths of each property tax dollar, from its previous no-tax level. However, the State has frozen the tax revenue rate into fiscal year 1990-91. According to City officials an annual rise of 1/100th will continue as of fiscal year 1991-92. In projecting property tax revenues accruing to the City from the City Ranch development, this analysis assumes that the initial property tax allocation is 3/100ths of the property tax dollar in 1992-93 assuming the annual 0.1% tax revenue increase will continue as of 1991-92. Based on AB 1197, the analysis assumes that the City’s allocation rises to 7/100ths by the 1996-97 fiscal year. These assumptions yield projected annual fiscal revenues at buildout.

Projected transfer (documentary stamp) tax revenues will total $55,734 annually at project buildout. This calculation assumes that 10% of existing property transfers annually. During the buildout period culminating in 2005, initial sales of newly constructed homes and retail space will also generate transfer tax revenue. The City’s share of this revenue is one-half of the 0.11% tax assessed by the County. The analysis assumes no non-taxable assumptions of mortgages.

2. Sales Tax Revenue

Projected sales tax revenue of $898,560 will accrue annually to the City at buildout as a result of the project. About 62% of this revenue ($558,234) will originate at on-site retail facilities planned for the development. The remainder ($340,326) will originate from residents’ purchases at off-site retail space. To project these revenues, it is necessary to make several assumptions regarding likely retail activity of on-site sales, including occupancy levels and taxable retail sales per square foot. For off-site sales, assumptions include resident income levels, taxable retail expenditures, and likely capture of these expenditures within City limits. The subsections below discuss in detail the assumptions utilized and the resultant revenue forecasts.

On-Site Tax Revenues. The projection of on-site sales tax revenue is based on likely sales performance in retail space on the project’s 41.3 acres of commercial sites. Assuming the space achieves stabilized occupancy of 95% and realizes taxable sales of $175.00 per square foot, it will generate $558,234 annually in revenue based on sales of $33.1 million. The center may achieve a total sales volume over $175.00 per square foot, but a significant share of sales
is likely to be food items which are non-taxable. It is assumed that ultimately project residents generate all sales in this space, because 1) their homes will surround the facilities and 2) potential retail space demand from residents (as determined in the analysis below) will exceed space available in the center by buildout. In initial years of development, residents' purchasing power will be insufficient to support the facility's full sales capacity; during this period it is assumed that some sales come from non-project residents.

Off-Site Sales Tax Revenue. The analysis calculates off-site sales tax revenue as the difference of total resident sales tax revenue generated within the City, less on-site revenue. City Ranch residents are projected to generate City sales tax revenue of $64 per person. Approximately 38% of this revenue is projected to originate off-site.

Determining an appropriate retail sales factor requires assumptions about the following:

a. City Ranch residents' income;
b. City Ranch residents' taxable retail expenditures as a share of income;
c. Existing capture of retail expenditures within City limits; and
d. Capture of City Ranch residents' retail expenditures within City limits.

a. Residents' Income

Table 1 in Appendix B estimates residents' income based on their home values (for apartments an equivalent value is calculated). The table is based on assumptions of down payment amounts and the proportion of income spent on mortgages which are appropriate for each price range. The calculations indicate an average per capita total personal income of $21,681.

b. Residents' Taxable Retail Expenditures

In the State of California the equivalent of 41% to 43% of total resident personal income is spent for retail goods, based upon historical time series data for total annual State personal income and total annual retail sales.

Based on discussions with City staff, and empirical evidence of sales tax and population data for the City, it was presumed that City Ranch would approximate the City average of $64 of sales tax revenue per capita.

3. Franchise Fee Revenue

Projected franchise fee revenue will total $217,522 annually at buildout. The City will collect this revenue through franchise fees on electric, gas, refuse collection and cable television billings to residents and businesses on the subject site. The revenue projection is based upon typical consumption patterns, current billing rates for utilities and other providers serving the City of Palmdale, and the City's current franchise fee rates. These assumptions are detailed below.
Electricity and Gas. The City assesses a 2.0% franchise fee on electricity and gas billings. The projections for both retail space and single-family homes utilize typical consumption figures published by the South Coast Air Quality Management District (SCAQMD). The calculations apply the current billing rates of the Southern California Gas Co. and the Southern California Edison Co. Annual fiscal revenue factors are projected as follows:

**Electric Billings:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Revenue</th>
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<tbody>
<tr>
<td>Fiscal Revenue per Single-Family Home</td>
<td>$11.38</td>
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<td>Fiscal Revenue per 1,000 Retail Square Foot</td>
<td>$33.66</td>
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**Gas Billings:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiscal Revenue per Single-Family Home</td>
<td>$7.06</td>
</tr>
<tr>
<td>Fiscal Revenue per 1,000 Retail Square Foot</td>
<td>$4.13</td>
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</table>

**Refuse Collection.** The City assesses a 7.5% fee on refuse collection billings. Current rates for residential waste removal services are regulated by the City through an exclusive franchise agreement with Palmdale Disposal Company. Refuse waste removal is calculated by dividing the number of customers Palmdale Disposal services by total monies received for an average billing fee. Annual fiscal revenue is projected to average $8.72 per single-family home and $14.85 per 1,000 occupied retail square foot.

4. **Business License Revenue**

Projected annual revenue from licenses issued to businesses on-site will total a minimum of $2,828 at buildout. This projection is based upon the City's most recent business license schedule and assumptions of retail center occupancy, projected number of employees and classification of retail stores within the two proposed centers. A fee of $3.00 per employee is assumed.

**Cable Television.** The City assesses a 5.0% fee on cable TV billings. The cable provider, should achieve a "capture" rate of about 70% of potential customers. For the City Ranch area, a similar capture rate of 70% is probable assuming the likelihood of achieving comparable market penetration in this relatively affluent area. The calculations assume that average billings are equivalent to the basic monthly rate. Franchise fee revenue from on-site retail space is likely to be negligible and is therefore excluded from the projections. Annual fiscal revenue is projected to average $11.32 per single-family home.

5. **Transfers from Other Agencies**

At buildout the proposed development will generate a projected $757,458 annually in transfer revenue from other governmental agencies. This revenue will consist of subventions from the State of California, such as the motor vehicle in lieu revenue, cigarette tax transfers, and gas tax transfers. The revenue projections utilize per capita factors, based upon revenue in the City's 1990-91 Annual Budget and the estimated City population on January 1, 1990.
which is the population figure the City of Palmdale utilizes in the calculation of the 1990-91 Annual Budget. The projected annual fiscal revenue factors are as follows:

<table>
<thead>
<tr>
<th>Fiscal Revenue per Capita</th>
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<tbody>
<tr>
<td>Motor Vehicle In Lieu</td>
<td>$37.78</td>
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<tr>
<td>Cigarette Tax Fiscal</td>
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<tr>
<td>State Gas Tax Fiscal Revenue per</td>
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<td>Capita</td>
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6. **Other Revenue**

Miscellaneous City operations will generate a projected $148,279 additional revenue as project buildout. This revenue will include motor vehicle and general fines, interest income from current bank accounts, and revenue from other recurring budget line items not accounted for elsewhere in this analysis. Motor vehicle fine, general fine and other revenue is projected per capita based on the City's 1990-91 Annual Budget and the City's projected average 1990-91 population. The interest income factor was derived from the 1990-91 Annual Budget. This analysis does not calculate fine and miscellaneous revenue generated by on-site employees, which will likely be negligible. The projected annual fiscal revenue factors are as follows:

<table>
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<tr>
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<td>Motor Vehicle Fine</td>
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<tr>
<td>all other revenue</td>
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7. **Mello-Rosa (CFD) Financing**

Beginning in year 13 of the project, recurring expenses exceed recurring revenues. Beyond build out, this amounts to approximately $1.4 million annually. This amounts to a deficit of $270 per housing unit. A CFD could be formed to raise these funds and maintain a positive fiscal balance.

8. **RECURRING FISCAL COSTS**

1. **Police Costs**

Police-related costs will total $1,142,014 annually at buildout of the City Ranch project. This cost will be incurred by the City as a General Fund fiscal cost. The police services cost is based upon a departmental projection of various officer actions as a ratio to population. Based on discussions with City staff, and recent budget and population data, the per capita cost for the project is estimated at $81.34 per capita.

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*Miscellaneous line items not listed as separate line items include the following: Fireworks permits, Mobile Home License fees, Off-Highway License fees, Absentee Ballet revenues, Other General Fees, Planning Code Violations, Seismic Education, Facility Rentals, Equipment Rentals, Other Revenues, Fall Festival Revenues, Training Seminars, Parental Reimbursement and Library User fees.*
2. **Public Works Maintenance Costs**

Projected fiscal costs incurred by the City's Annual Budget (FY90-91) for public works maintenance will total $1,869,967 annually. This includes $354,713 for street maintenance, $1,479,622 for park maintenance, and $35,634 for storm drain maintenance. The City currently contracts with Los Angeles County for maintenance and repair of the City's estimated 210 miles of City streets. This includes maintenance of storm drains and catch basins. Park maintenance is a section of the Public Works department under jurisdiction of the City of Palmdale.

To determine the fiscal costs of public works maintenance, a detailed examination was made of relevant City documents including the 1990-91 Annual Budget. Discussions with City and County staff also contributed to this analysis. All budget line items related to recurring maintenance have been assigned to streets, parks acres and storm drain improvements.

**Street Maintenance.** Projected on-site street maintenance costs are based on an estimate of $2,000 per lane mile, which includes sealing, signal maintenance, sweeping, and other basic maintenance, as well as non-direct costs including labor fringe benefits, vehicle operations costs. The cost per unit does not include departmental overhead associated with "basic" direct costs; overhead items include costs incurred by the Engineering and Traffic divisions, and general administrative costs to the Public Works department. Departmental overhead costs are approximately 23.4% of total Street Maintenance annual costs. TNC has used standard cost factors based on previous fiscal impact experience. Total annual costs generated at buildout will be the following:

<table>
<thead>
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<td>Basic Maintenance</td>
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<tr>
<td>Departmental Overhead</td>
<td>47,172</td>
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<td>$248,774</td>
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</table>

**Storm Drain Maintenance.** Annual storm drain maintenance costs are projected to total $175 per catch basin and $300 per linear mile of storm drain piping. As with street maintenance, the County of Los Angeles is contracted for this service. These cost estimates are based on previous fiscal impact experience.

<table>
<thead>
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<tr>
<td>Catch Basin Maintenance</td>
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<td>Storm Drain Pipe</td>
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**Park Maintenance.** Park maintenance costs are projected to total $0.26 per square foot of park area. The City Ranch development proposes to build two Community Parks of 35 and 52 acres as well as three to four smaller neighborhood parks ranging from 4 to 33 acres in size. Total park acres for City Ranch will be 139.3 acres. This will more than triple current park facilities within the City of Palmdale. Typical planning standards regarding park facilities for a residential community require one acre for every 200 residents. Using this figure, City Ranch residents would require approximately 76.4 acres of park land.
on this requirement, City Ranch residents will generate basic maintenance costs of $865,276 not including overhead. Departmental overhead costs are 15% of associated direct costs. Overhead costs consist of parks and recreation administrative costs taken as a percentage of maintenance and cultural/recreation costs.

<table>
<thead>
<tr>
<th>Basic Maintenance</th>
<th>$865,276</th>
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<tr>
<td>Departmental Overhead</td>
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3. Cultural/Recreation Program Costs

Based on the City budget and discussions with staff, at buildout City Ranch residents will incur cultural/recreational program costs projected to total $458,454 annually including departmental overhead costs which are approximately 23.5% of associated direct costs.

There is a 18-hole regulation golf-course planned for the development project consisting of approximately 216 acres. Presently, it is undetermined whether the course will be public or semi-private. Recognizing the fact that components of the new course will include amenities such as a driving range, practice green, a clubhouse and parking facilities as well as modern, cost-effective maintenance systems, revenues are generally expected to exceed costs. Therefore, the golf course should not incur any negative fiscal impact should it become public.

4. Library Costs

The Palmdale City Library currently provides service for approximately 130,000 residents in the City and surrounding areas. Based on current library operations and discussions with staff, library costs are estimated at $17.68 per capita.

5. Animal Control

City Ranch residents will incur animal control costs projected to total $59,082 annually at buildout. This calculation is derived from the City's 1990-91 Annual Budget. Based on the projection of 5,200 housing units at buildout, animal control services will cost City Ranch residents approximately $11.67 per dwelling unit.

6. Non-Departmental City Administration and Overhead

In addition to the recurring departmental costs enumerated above, the City will incur a projected $974,786 of unallocated overhead costs annually at project buildout. This projection is based upon an examination of the City's 1990-91 Annual Budget. Of 34 annual budget items, 12 items are recurring costs which are not accounted for elsewhere in the analysis. These costs represent unallocated overhead.
Table I in Appendix C shows the detailed calculation of overhead. In the current budget, City-wide overhead and administration represents an additional cost equivalent to 26.6% of departmental costs. In addition to legislature and managerial costs, overhead includes items such as City Community Programs and Rent Control costs.

7. Los Angeles County Fire Protection District

Fire protection services are provided by the Los Angeles County Fire Protection District (LACFPD) to the City of Palmdale. Fire protection services are subsidized through a share of property tax revenues in the City of Palmdale. Since fire protection services are a non-municipal fiscal impact they are therefore not included in the analysis.
APPENDIX A
City Ranch Project Fiscal Impact Report

| Table 1: | ASSUMED FACTORS FOR RECURRING CITY FISCAL REVENUE |
| Table 2: | SUMMARY OF RECURRING FISCAL IMPACT ON CITY OF PALMDALE |
| Table 3: | LAND USE ASSUMPTIONS |
| Table 4: | DWELLING UNIT AND RETAIL LAND ABSORPTION ASSUMPTIONS |
| Table 5: | INFRASTRUCTURE PHASING ASSUMPTIONS (CITY-MAINTAINED PORTIONS ONLY) |
| Table 6: | CALCULATION OF CUMULATIVE DWELLING UNITS AND RETAIL SPACE IN PLACE |
| Table 7: | CALCULATION OF CUMULATIVE INFRASTRUCTURE IN PLACE |
| Table 8: | DETAILED CALCULATION OF RECURRING REVENUES TO CITY OF PALMDALE - PROPERTY AND TRANSFER TAXES |
| Table 9: | DETAILED CALCULATION OF RECURRING REVENUES TO CITY OF PALMDALE - OTHER REVENUES |
| Table 10: | DETAILED CALCULATION OF RECURRING COSTS TO CITY OF PALMDALE |
| Table 11: | NON-RECURRING REVENUE: DEVELOPMENT FEE ASSUMPTIONS |
| Table 12: | NON-RECURRING REVENUE: CALCULATION OF DEVELOPMENT FEES |
Table 1

City Fiscal-Funded Impact Report

### ABANDONED FACTORS FOR RECURRING CITY FISCAL COSTS

| Property Taxes | 1.05% | Property Tax Rate  
| 3/15/2020 | Property Tax Allocation to Potomac General Fund—Initial Rate  
| 3/15/2020 | Property Tax Allocation to Potomac General Fund—Ultimate Rate  
| 10.25% | Percent Transferred Annually—Rodapal and Potomac (excluding own rate)  
| 14.36% | Transfer Tax Rate  
| 0.00% | Transfer Tax Allocation to Potomac General Fund  
| 1.65% | Sales Tax Allocated to Potomac General Fund  
| 0.00% | Sales Tax Allocated to Potomac General Fund—Initial Rate  
| 616.46 | Annual Fiscal Revenue from Electricity and Gas Revenue per Dwelling Unit  
| 602.30 | Annual Fiscal Revenue from Electricity and Gas Revenue per 1,000 Retail S.F.  
| 53.76 | Annual Fiscal Revenue from Non-Resident Charges per Dwelling Unit  
| 48.09 | Annual Fiscal Revenue from Non-Resident Charges per 1,000 Grossed Retail S.F.  
| 64.16 | Annual Fiscal Revenue from Cable TV per Dwelling Unit  
| 3.09 | Per Outpatient/Outpatient Laparotomy  
| 0.89 | Per Vehicle-In-Line Revenue Per Capita  
| 0.82 | Other Revenue Per Capita  
| 0.00 | Motor Vehicle Fees Per Capita  
| 0.00 | General Fee Per Capita  
| 0.00 | Motorfuels Revenue Per Capita  
| 0.00 | Unwould Revenue Factor On All Other Revenue  
| 7.69% | Interest on Payroll Taxes  
| 0.33% | Motor-Income Funding Option, Revenue R.U.  

### REVENUE LEADS AND INFRASTRUCTURE VARIABLES

| 0.00% | Off-Dwelling Motor/Outpatient Service Abatement  
| 0.00% | Off-Dwelling Infrastructure Abatement (except park)  
| 0.00% | Off-Dwelling Park Abatement  

| Property Department | 0.00% | Property Costs Per Capita (incl. overhead)  
| 0.00% | Without C.F.I. Financing  
| 0.00% | Property Maintenance  
| 0.00% | Total Maintenance Cost Per Square Foot of Park Area  
| 0.00% | Departmental Overhead Factor for Property Maintenance  
| 0.00% | Street Maintenance  
| 0.00% | On-Streets Maintenance Cost Per Lane Mile  
| 0.00% | Departmental Overhead Factor for Street Maintenance  
| 0.00% | Street Drain Maintenance  
| 0.00% | Storm Maintenance Cost Per Catch Basin (exc. dept. overhead)  
| 0.00% | Departmental Overhead Factor for Street Drain Maintenance  
| 0.00% | Cultural/Recreational Programs  
| 0.00% | Annual State Recreational Cost Per Capita  
| 0.00% | Departmental Overhead Factor for Cultural/Recreational Programs  
| 0.00% | Library  
| 0.00% | Annual Cost Per Estimated Number of People Using Library Facilities  
| 0.00% | Animal Control  
| 0.00% | Annual Cost Per Dwelling Unit  
| 0.00% | Non-Departmental City Administration and Overhead  
| 0.00% | Administration/Overhead Factor On Total Departmental Costs  

The Institute Co., Inc.
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* Based on 7% interest on prior year surplus  ** CGO Revenue of City/County

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*Based on 7% interest on prior year surplus

**CGO Revenue of City/County
Table 3
City Rank Project Fiscal Impact Report
LAND USE ASSUMPTIONS

Residential Projects:

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<tr>
<th>Product Category</th>
<th>Total Units</th>
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Retail Spaces:

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<th>Net Leasable Space</th>
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* Used for Business Licenses Fee Only
### Table 4

**City Green-Project Financial Impact Report**

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**Based on 76.1 park acres per standard of 6 acres/1000 population.**
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97-Jan-28 2694 FISCALA

Table 11
City Reuse Project Fiscal Impact Report

NON-RECURRING REVENUE: DEVELOPMENT FEE ASSUMPTIONS

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<thead>
<tr>
<th>DRAINAGE FEES</th>
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<tr>
<td>Drainage Basin</td>
<td>Units/Acre</td>
<td>Development Fee</td>
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<tr>
<td>Amenity Drainage Basin</td>
<td>500 units</td>
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<tr>
<td>Single Family Residential</td>
<td>500 units</td>
<td>$1,147 Amt</td>
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<tr>
<td>Multi-Family Residential</td>
<td>0 units</td>
<td>$1,147 Amt</td>
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<tr>
<td>Commercial Development</td>
<td>500 units</td>
<td>$1,147 Amt</td>
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<tr>
<td>Sub-Total</td>
<td>500 units</td>
<td>$1,147 Amt</td>
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<tr>
<td>Amenity Drainage Basin</td>
<td>4,200 units</td>
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<td>Single Family Residential</td>
<td>4,300 units</td>
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<tr>
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<td>Sub-Total</td>
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<table>
<thead>
<tr>
<th>TRAFFIC IMPACT FEES</th>
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<tr>
<td>Land Use Category</td>
<td>Units/Sq.Ft/Acre</td>
<td>Development Fee</td>
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<tr>
<td>Single Family Residential</td>
<td>4,500 units</td>
<td>$1,064 Amt</td>
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<td>Multi-Family Residential</td>
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<tr>
<td>Retail</td>
<td>220,000 Sq.Ft</td>
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<tr>
<td>Recreational</td>
<td>575 acres</td>
<td>$364 Amt</td>
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<td>Total</td>
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| PARKLAND DEVELOPMENT FEE | | |
|--------------------------|---|---|---|
| Residential Type | Units | Average Number of Bedrooms | Total Number of Bedrooms | Development Fee | Total Fees |
| | | | | | |
| Single Family Dwelling Unit | 4,500 | 3 | 14,029 | $716 per bedroom | $10,497,278 |
| Duplex or Triplex Dwelling Unit | 0 | 2 | 0 | $763 per bedroom | 0 |
| Apartment Dwelling Unit | 313 | 2 | 626 | $770 per bedroom | $492,352 |
| Total | | | | | $10,990,630 |

The Nettock Co., Inc.
<table>
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<tr>
<th></th>
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<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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<th>Year 8</th>
<th>Year 9</th>
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<th>Year 12</th>
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<td><strong>ACCOUNTS PAYABLE</strong></td>
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<tr>
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**TOTAL EXPENSE FEE**

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<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
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<th>Year 9</th>
<th>Year 10</th>
<th>Year 11</th>
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<th>Totals</th>
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**TOTAL**

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<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
<th>Year 9</th>
<th>Year 10</th>
<th>Year 11</th>
<th>Year 12</th>
<th>Totals</th>
</tr>
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<tbody>
<tr>
<td></td>
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<td>$700,000</td>
<td>$700,000</td>
<td>$8,400,000</td>
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### Table 1

City of Paterson Personal Income Report

**CAPS RANGING 50,000-200,000 INCLUSIVE PER CAPITA (in 1998 dollars)**

**Average Income Calculations.**

<table>
<thead>
<tr>
<th>Product Number</th>
<th>Units Sold</th>
<th>Units Sold</th>
<th>Average Assessed Value</th>
<th>Average Unit Population</th>
<th>Assessed Income</th>
<th>Spent on Mortgage (1)</th>
<th>Indicated Income</th>
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<td>1</td>
<td>006</td>
<td>0.09</td>
<td>$390,000</td>
<td>2.7</td>
<td>23.0%</td>
<td>25.0%</td>
<td>18,250</td>
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<tr>
<td>2</td>
<td>1,043</td>
<td>0.09</td>
<td>$390,000</td>
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<td>23.0%</td>
<td>25.0%</td>
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<tr>
<td>3</td>
<td>3,043</td>
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<td>37.0%</td>
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<td>4</td>
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<td>35.0%</td>
<td>37.0%</td>
<td>43,282</td>
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<tr>
<td>5</td>
<td>3,063</td>
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<td>35.0%</td>
<td>37.0%</td>
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**State of Average House Value**

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Notes: (1) Assessed mortgage income. 15% Fixed Rate mortgage with 30-year amortization.
### CITY OF PALMDALE 1999-00 BUDGET LINE ITEMS

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<th>ACCOUNT NUMBER</th>
<th>ACCOUNT NAME</th>
<th>BUDGET</th>
<th>REVENUE SOURCE</th>
<th>EXPENSE CATEGORY: RECURRING</th>
<th>NONRECURRING</th>
<th>F/R LINE ITEM COST</th>
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<td>Revenue Source</td>
<td>1st Line Item Cost</td>
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<td>Streets, Parks &amp; Repairs</td>
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<td>Recreation</td>
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<td>Additional Overseas Items</td>
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<td>Total</td>
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</tr>
</tbody>
</table>

Net Overhead Expenses: $5,891,628
Remaining Expenses: $21,397,550

Overhead as % of Expenses: 28.8%
ATTACHMENT VIII:

Minor Changes Requested by the Applicant and Staff for the Final EIR and Specific Plan.
ATTACHMENT VIII

MINOR CHANGES TO THE FINAL EIR AND SPECIFIC PLAN

On March 6, 1992, representatives from Kaufman and Broad met with staff to discuss minor changes to the Final EIR and Specific Plan. Staff concurs with several of the applicants' suggestions, and these are outlined below.

SPECIFIC PLAN:

General:

Where a future park and ride facility is referenced, revise the text to indicate that the facility may be constructed on-site.

Where the number of permanent jobs which would be created by the project area is discussed, revise the number to 1,093.

Modify Page IV-5, Section 3, Paragraph 5 to read as follows:

"Planning Area 18A is a 9 acre park located north of the Southern California Edison Easement adjacent to single family residential and an elementary school site. The site is designated as a neighborhood park and is located on gently sloping land (less than 10%). Site conditions are suitable for ball fields, play areas, play courts, such as tennis and basketball, picnic and other park facilities and activity areas."

Modify Page V-1 to read as follows:

"The maximum unit counts within the individual planning areas are subject to Planning Commission approval in conformance with the design guidelines and development standards contained in the Specific Plan. Should review of subsequent projects and site specific criteria relating to the physical characteristics of such areas demonstrate that the proposed number of units cannot conform with the requirements of the Specific Plan, a lesser number of units within a specific planning area may be permitted."

Modify Page V-2, Section (6) to read as follows:

"... and Subdivision Ordinance and Guidelines, not otherwise specifically addressed in the Specific Plan or modified by the Development Agreement, as required by the City of Palmdale in effect at the time of submittal of the tentative maps."

Modify Exhibit 13, (Development Plan) to clarify the following land use designations:

<table>
<thead>
<tr>
<th>Planning Area</th>
<th>Land Use</th>
<th>Gross Acres</th>
<th>Net Buildable Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>Open Space</td>
<td>23.7</td>
<td>0</td>
</tr>
<tr>
<td>18A</td>
<td>Park</td>
<td>9.6</td>
<td>9.6</td>
</tr>
</tbody>
</table>
Modify Exhibit 15, (Circulation Plan) to specify that the following description applies to Avenue S:

"Avenue S cross-section: The curb to curb paved roadway, 0-5 feet of landscaping, a 5-foot sidewalk, 6 feet of landscaping, a 10-foot bicycle path and then, 0-5 feet of landscaping."

**FINAL EIR:**

**General:**

Where a future park and ride facility is referenced, revise the text to indicate that the facility may be constructed on-site.

Where the number of permanent jobs which would be created by the project area is discussed, revise the number to 1,093.

Modify Figure 8 to revise cross-section (D) and (F) to conform with correct cross-sections in the Specific Plan.

Modify Page 5-151 (paragraph nine, second sentence) revise to read: "Figure 47 shows that the contributions to the congestion along Elizabeth Lake Road from project related traffic is .5% (from 20th to 10th Street West) and 0% (east of 10th Street West)."

To Section 5.7.3, add the following mitigation (as revised from the Planning Commission's Resolution 91-114):

"The Applicant shall consult with the California Department of Fish and Game in order that potential impacts to Mohave ground squirrel may be addressed. If an endangered species permit is warranted, the permit must be completed and mitigation measures fully dedicated before issuance of a grading permit. Therefore, the consultation with CDFG will occur prior to issuance of any grading permit for the proposed project."

To Section 5.23.3, add the following mitigation (as revised from the Planning Commission's Resolution 91-114):

"Exhibit 16 of the Final Specific Plan will be amended to include an equestrian staging area in Planning Area 1, and if feasible, an equestrian staging area in Planning Area 18, and an equestrian trail through the powerline easement. Trails planned in the City Ranch Specific Plan will be coordinated with those planned for the Ritter Ranch Specific Plan. Future developments adjacent to this project will be required to coordinate with the trails shown on the trails plan adopted for City Ranch."

From Section 5.9.3, delete the following mitigation (as revised from the Planning Commission's Resolution 91-114):

"Soil binders or ground cover will be used to mitigate dust emissions for disturbed areas left inactive for over 96 hours after grading."
To Section 5.25.3, revise the following mitigation measure (as revised from the Planning Commission's Resolution 91-114):

"The following sites which were augered require additional testing for subsurface deposits: LAN-1746, LAN-1747, LAN-1748, LAN-1749, LAN-1750, LAN-1752, LAN-1753, LAN-1756, LAN-1772, LAN-1774, LAN-1767, LAN-1768. At least one additional 1x1 meter test units need to be excavated at each of these sites, within site areas with the greatest densities of surface artifacts. These excavations are important to determine whether auger testing has missed subsurface deposits and to get a clearer, vertically-controlled picture of such deposits and their depositional context.

The following important petroglyph, bedrock mortar, and rock ring sites were not subject to any subsurface testing. They need to be tested through excavation of a minimum of one 1x1 meter units utilizing 1/8" screen in the immediate vicinity of these features: LAN-1767, LAN-1768, LAN-1759, LAN-1760, LAN-1761, LAN-1762, LAN-1763, LAN-1765, LAN-1766, LAN-1769, LAN-1770, LAN-1771. The "hunting blind" sites are important structures whose function needs to be determined through further testing.

The important apparent habitation site, LAN-949, should be avoided through realignment of the proposed roadway. However, in the event that avoidance is not possible, salvage of the site shall be performed in accordance with a excavation plan. Excavation of 100 percent of Loci A through C as described in the Phase II Archaeological Assessment (July, 1991) shall be conducted at LAN-949. It is estimated that approximately 500 cubic meters of cultural deposit will have to be removed. The excavation plan detailing strategy and research goals shall be submitted to the City of Palmdale for review and approval prior to excavation activities. In addition, this excavation plan shall contain a subregional analysis of the archaeological sites within and adjacent to City Ranch to provide a basis for significance determinations. As part of the subregional analysis, a research design that would set standards for future work in the vicinity of the City Ranch project shall be proposed.

Those sites, not listed above, which contained surface artifacts but were only auger tested shall be tested with at least one standard test unit per site. The testing program shall be submitted to the City Planning Department for review and approval prior to commencement. In addition, untested cupule sites, rock rings and hunting blinds shall also be tested in this manner. Any additional mitigation recommended as
a result of the additional testing shall be required as mitigation measures for initial and subsequent development applications, as appropriate.

Relocation of cupule boulders must be done under the direction of a qualified archaeologist who will give careful attention to orientation of the boulders. The boulders shall be moved prior to site disturbance in their immediate vicinity to a location approved by the Planning Director. Since context will be lost, some shall be relocated to a repository approved by the Planning Director where they can be used for educational purposes. Representative artifacts should be displayed at this repository.

The work described above shall be performed by a qualified archaeologist, retained by the applicant and approved by the Planning Director. Because the introduction of residents into the area will result in the degradation of archaeological sites, required testing and preparation of a subregional report shall be completed and approved by the Planning Director prior to recording of the first parcel map or tract map for the project.
ATTACHMENT IX:

Written Comments Received on Draft EIR 89-03
and Written Responses to those Comments.
City Ranch Specific Plan EIR

Palmdale, California

Final EIR: Response to Comments
SCH 89-090619

Gruen Associates
January 1992
During the 45-day public comment period regarding the Environmental Impact Report, seventeen (17) comment letters regarding the Draft EIR were received by the Planning Department, all of which are excerpted and responded to below (per CEQA Guidelines §15088). As some comments appear in several submittals, responses to repeated comments may refer back to the response to the original comment. Commenters are presented in the following order:

1. Stephen E. Oliva, Environmental Program Coordinator
   Department of Conservation - Office of the Director - November 12, 1991 ........ 3

2. Wilford Malm - District 07
   IGR/CEQA Coordinator, Advance Planning Branch
   Department of Transportation - November 18, 1991 .......................... 4

3. Fred Worthley, Regional Manager, Region 5
   Department of Fish and Game
   330 Golden Shore, Suite 50, Long Beach, CA 90802 - October 18, 1991 ....... 8

4. Robert M. Sakai, Project Engineer
   Financial Planning & Property Management Section
   for Charles W. Carty, Chief Engineer and General Manager
   County Sanitation Districts of Los Angeles County - November 13, 1991 .... 10

5. Thomas A. Tideman, Director
   County of Los Angeles Department of Public Works
   900 South Fremont Avenue, Alhambra, CA 91803-1331 - November 19, 1991 . 11

6. Dr. Kenneth Brumme, District Superintendent
   Antelope Valley Union High School District
   44811 Sierra Highway, Lancaster, CA 93534-3226 - October 4, 1991 .......... 14

7. Anne Baker, Director of Environmental Planning
   Southern California Association of Governments (SCAG)
   818 West Seventh Street, 12th Floor, Los Angeles, CA 90017-3435 ............ 15

8. Cindy S. Grasswald, Planning Manager, Office of Planning and Rules
   South Coast Air Quality Management District (SCAQMD)
   21865 E. Copley Drive, Diamond Bar, CA 91765-4182 - November 21, 1991 21
9. Elaine Macdonald, President and June Snow, Vice President
Antelope Valley Trails, Recreation and Environmental Council
POB 3580, Quartz Hill, California 93586-0580 - November 10, 1991

10. Petition with 90 signatures.
Antelope Valley Trails, Recreation and Environmental Council
POB 3580, Quartz Hill, California 93586-0580 - October 26, 1991

11. Mark Q. Sutton, Associate Professor
Sociology/Anthropology Department
California State University, Bakersfield
9001 Stockdale Hwy, Bakersfield, CA 93311-1099 - October 10, 1991

12. Melinda Walton, Environmental Review Committee Chair
Antelope Valley Archaeological Society
POB 4514, Lancaster, California 93539 - November 14, 1991

13. Scott Springer, Site Records Manager, Earth Sciences for
Dr. Allen D. Griesemer, Director
San Bernardino County Museum
2024 Orange Tree Lane, Redlands, CA 92374 - October 18, 1991

14. David D. Earle
Antelope Valley Archaeological Society
West Antelope Valley Historical Society
3335 E. Ave. Q-6, Palmdale, CA 93550 - November 15, 1991

15. David Bergstein, General Partner
Paton Development, Black Hills Homes
6700 Fallbrook Ave., Suite 173, West Hills, CA 91307 - November 18, 1991

16. Albert Z. Praw, Senior Vice President, General Counsel
Kaufman and Broad Home Corporation
10877 Wilshire Boulevard, Los Angeles, CA 90024 - November 18, 1991

17. Robert M. Galloway, Senior Vice President
Kaufman and Broad Home Corporation
10877 Wilshire Boulevard, Los Angeles, CA 90024 - November 23, 1991
1. Commentator: Stephen E. Oliva, Environmental Program Coordinator
Department of Conservation - Office of the Director
November 12, 1991

Comment 1.a. The primary concern of the geotechnical consultant, as well as DMG, is for those potential hazards that will result from a major earthquake (magnitude 7 to 8+) on the San Andreas fault zone which trends through the northern portion of the project site. The potential hazards identified in the geotechnical report include the following: • surface fault rupture, • ground shaking, • liquefaction, • seismic settlement and lateral spreading, • flooding due to rupture of the California Aqueduct, and, • slope failure.

With the application of the mitigation measures and standard building practices, the geotechnical report (page 5.54) states that these hazards would be reduced to an "acceptable" level. However, even with the use of these mitigation measures, the Draft EIR (page 5.49) states as cumulative impacts of the project: "increased numbers of persons would be exposed to the high seismically-related geologic hazards of the area. Increased numbers of persons could be injured by an earthquake event in this area as a result."

These conclusions do not support the statement that hazards can be mitigated to an "acceptable" level. DMG believes that the destructive surface rupture, severe ground shaking, and seismically-induced flooding are serious potential problems that may be difficult or impossible to mitigate.

Response: As stated in the Draft EIR (page 5.54), the mitigation measures proposed would "reduce impacts related to geologic hazards to an acceptable level". This is not inconsistent with the conclusion on pages 5.49 and 5.64 regarding the cumulative impacts of the project in the context of related developments in the project vicinity; if all projects mitigate impacts related to geologic hazards to the level proposed in the City Ranch Specific Plan EIR, a concomitant reduction would result for this cumulative impact.

Comment 1.b. There is more than a 30% chance in the next 30 years of a major earthquake occurring on the segment of the San Andreas fault which crosses the site, according to the Working Group on California Earthquake Probabilities (U.S. Geological Survey, 1988; page 2). This study supports the likelihood of an earthquake on the fault within the lifetime of the project. Conformance to building standards for UBC seismic zone 4 may not be adequate to withstand the extreme level and duration of ground shaking that will be experienced at the site.

Response: The Draft EIR specifies mitigation measures to address concerns relative to Seismic Shaking (page 5.57), including structural design in accordance with available standards for such a site - conformance with Los Angeles County Building Code Seismic Zone 4 standards, among other mitigation measures.
Comment 1.c. DMG has not seen or reviewed the trench, borehole, and geophysical logs that are a part of the geologic fault investigation report, but assume that this material has been reviewed by a consultant for the City of Palmdale and that it fulfills the requirements of the Alquist-Priolo (A-P) Special Studies Zone Act. Aside from the A-P Special Studies Zone Act, DMG is concerned about the safety of homes and lifeline structures (gas and water supply lines used for fire fighting) located within the zone of crushed and closely faulted rock constituting the San Andreas fault zone. Although the opinion of the majority of geologists is that the next rupture will occur along the most recent fault trace, there is no assurance that the next rupture may not occur elsewhere in the fault zone, where residential development is planned (DMG, 1976; p. 13 and 14). If you have any questions regarding these comments, please contact Roger Martin, Division of Mines and Geology Environmental Review Project Manager, at (916) 322-2562.

Response: The mitigation measures proposed in the Draft EIR relative to Seismic Shaking (page 5.57) do not differentiate among subareas of the site, and therefore are not dependent on whether the next rupture will occur along the most recent fault trace or elsewhere in the fault zone. Nevertheless, mitigation measures relative to Surface Fault Rupture (page 5.55) provide additional protections for Restricted Use Zones.

2. Commenter: Wilford Malton - District 67
IGR/CEQA Coordinator, Advance Planning Branch
Department of Transportation

November 18, 1991

Comment 2.a. Caltrans has reviewed the above-referenced document. In addition to our previous comments dated September 27, 1991, (copy attached), we have the following comments: Caltrans' comments on the Specific Plan Draft (9-17-91) were not addressed in the document.

Response: The Caltrans letter referenced in this comment was dated September 27, 1991, but was not received by Staff until after the Draft EIR was circulated on October 3, 1991. Therefore, Staff was unable to incorporate the comments received by Caltrans into the Draft EIR. The comment letter on the Specific Plan raises the following issues:

Comment 2.a.(i) The proposed development in this area will impact State Route 14 and especially the interchanges at Avenue "S" and Palmdale Boulevard. A Traffic Report...
should be prepared for this development assessing impacts to the capacity limitations of the Antelope Valley Freeway and impacts to SR 138 and the arterials in the vicinity of Phase I and for year 2010 should be addressed. Cumulative project traffic impacts including those generated by the Ritter Ranch development and other developments in the vicinity should also be considered.

Response: A Traffic Report was prepared for the project by Endo Engineering. The report was originally prepared in May, 1990 and was updated several times as conditions in the area changed. Also, a report was prepared by DKS to study the circulation needs and traffic generation of development throughout the southwest portion of Palmdale. These reports identified impacts to SR-14, SR-138, and other local and regional roadways. Copies of these reports are located in EIR Appendix G and at the City of Palmdale Planning Department. Both reports assessed cumulative impacts from development proposed in the southwest region, including the proposed Ritter Ranch project.

Comment 2.a.(III) An analysis of and recommendations for capacity improvements on the Freeway mainline should be based on 24-hour, as well as A.M./P.M. peak traffic. The number of hours of Level of Service (LOS) F is a critical measure.

Response: The City's General Plan update, which includes the southwest area, is currently being prepared. That document has projected that traffic volumes on the Antelope Valley Freeway in Palmdale would reach approximately 160,000 ADT by the year 2010. By the year 2010, the analysis assumes that the Freeway will be improved to 8 to 10 travel lanes. Under that scenario, Levels of Service in the vicinity of Palmdale would be at C and D. The proposed project's impact to this roadway is not significant on an individual basis; however, development of the site will contribute to cumulative impacts affecting the freeway.

Comment 2.a.(III) We suggest that the City of Palmdale impose developer agreements or mitigation impact fees to be used for required transportation related improvements. We believe that the assessment fees for this purpose should be extended to cover mitigation for mainline freeway deficiencies created by the additional traffic generated by the project (Freeway, bridge, and on/off ramp widening or dedication of park-and-ride lots, etc).

Response: The City has adopted an ordinance which requires developments to pay traffic impact fees or improve roadways. The traffic impact fee can fund circulation improvements throughout the City of
Pathdale but cannot be used to fund improvements to the Antelope Valley Freeway, according to the current ordinance authorizing the traffic impact fees. The suggestion to extend the ordinance to include the freeway may be considered by the City Council.

Comment 2.a.(iv) Any transportation related mitigation measures which involve State Right-of-Way or costs which exceed $250,000 will require a Project Studies Report. Any measures which cost less than $250,000 will require a Caltrans Encroachment Permit. (Freeway, bridge, or on/off ramp widening, signalization, grading, drainage, etc).

Response: The comment is noted; the appropriate permits and approvals will be obtained prior to undertaking any construction or improvements within the Caltrans Right-of-Way.

Comment 2.a.(v) The submitted document does not discuss Transportation Demand Management (TDM) or Transportation System Management (TSM) programs as part of the necessary mitigation measures to reduce the project traffic impact. These programs include, but are not limited to: Park-and-ride lot with staging areas; Ridesharing programs; Restricted HOV on-ramps. There are two documents prepared for this project: City Ranch Specific Plan and City Ranch EIR. The EIR Draft, prepared by Envicoa Corp., is not in our files.

Response: Although the Specific Plan does not fully address TDM and TSM measures, the Draft EIR provides a more detailed discussion of how these measures can be utilized to minimize project impacts. The Draft EIR was transmitted to Caltrans on October 3, 1991.

Comment 2.a.(vii) Once received, the EIR should contain a discussion addressing the project traffic impacts. Detailed discussion relating to financing, scheduling considerations, implementation responsibilities and monitoring of the proposed mitigative measures, including those for the mainline freeway, should also be addressed.

Response: Section 5.8 of the Draft EIR describes the proposed project's impacts relative to circulation.

Comment 2.a.(viii) As mentioned in the Specific Plan (Page II-19), “The discussion and evaluation of existing and projected circulation and ADT's are contained in the EIR draft”, which we are waiting to review.
Response: The Draft EIR was transmitted to Caltrans on October 3, 1991.

Comment 2.a.(viii) The proposed development lies close to the adopted Route 138 corridor alignment. Although there are no plans at the present time to construct a freeway, the many development proposals in this area may generate enough trips to warrant a freeway in the future. It is suggested that the developer contact the City of Palmdale or the County of Los Angeles with respect to the future alignment of Freeway Route 138 west of the Antelope Valley Freeway, SR 14.

Response: The comment is so noted; the applicant will be advised accordingly.

Comment 2.b. The Lead Agency also needs to impose developer agreements or mitigation fees to be used for mainline freeway deficiencies created by the additional traffic generated from this project.

Response: As indicated in the Draft EIR (Figure 43, page 5.132), depending on location, between 9-19% of the project’s daily trip generation would contribute to traffic volumes on the Antelope Valley Freeway (SR-14). Project incremental daily volumes on SR-14 would be 5,500 north of Avenue P; 4,710 north of Avenue S; and 9,410 south of Avenue S. The Draft EIR does not indicate significant peak period mainline deficiencies resulting from these volumes, and no mitigation is proposed. Mitigation measures listed in the Draft EIR (page 5.147) require compliance with the provisions of the Draft Los Angeles County Congestion Management Plan which, as presently proposed, would provide for a regional approach to mitigating impacts to SR-14.

Comment 2.c. There appear to be inconsistencies and errors between the report and the data presented in table 17 (see attached pages with notations in red). If you have any questions regarding these comments, please call me at (213) 897-1338.

Response: The comment is acknowledged. The Final EIR reflects the corrected values.
3. Commenter: Fred Worthley, Regional Manager, Region 5
   Department of Fish and Game
   330 Golden Shore, Suite 50, Long Beach, CA 90802
   October 18, 1

   Comment 3.a. The California Environmental Quality Act and the California Endangered Species Act require the lead agency to appropriately condition the project and fully implement the statutory mitigation and monitoring requirements to offset adverse impacts to the following resources which may be impacted by this project. Endangered or threatened species of plant and animals. If the project would result in take, on or off project site, of any State-listed species or habitat essential to its continued existence, the applicant must obtain authorization from the DFG pursuant to Fish and Game Code Section 2081. Since the proposed project lies within the historic range of the State-listed species threatened Mojave ground squirrel, an endangered species consultation with the Department will be necessary. The Cumulative Human Impact Evaluation required for the project site combined with information on any other impacted listed species must be provided to the Department. This information will be utilized to draft an endangered species management permit, if warranted. The permit must be completed and mitigation measures fully dedicated before project initiation.

   Response: As stated in the Draft EIR (page 5.100), a trapping study was performed on the site. The study, which conformed to CDFG protocol in effect at the time, did not locate any MGS on the site. However, in recognition of the revised CDFG policy, a mitigation measure will be added to the Final EIR which requires CDFG consultation with regards to this species. No rare, threatened or endangered species of plant or animal, as designated by the California Department of Fish and Game or the US Fish and Wildlife Service, were identified by biologists surveying the site in preparation of the biota report for the project. Nevertheless, two sensitive plants on site - Peirson's morning-glory and short-jointed beavertail cactus - would be affected by the project. The Draft EIR (beginning on page 5.103) presents mitigation measures relative to these flora impacts.

   Comment 3.b. Wetlands. Compliance with the DFG's Wetland Policy requires that the project should be so located as to minimize wetland acreage or wetland habitat values, either on or off project site, due to project development. A mitigation and monitoring plan subject to DFG approval should be required for loss of sensitive habitats, including, but not necessarily limited to, freshwater marsh, riparian woodland, oak woodland, and riparian scrub vegetation.

   Response: Mitigation measures in the Draft EIR (beginning on page 5.104) relative to Alkali Meadow & Transcontinental Alkali Marsh ensure no net loss of wetland acreage or wetland habitat value. However, these mitigation measures will be clarified to also state that the developer of the project will be required to
prepare a mitigation and monitoring program, consistent with CDFG policies and procedures, in the event that future development is proposed to encroach into the wetland area. No oak woodland habitat was identified on the project site.

Comment 3.c. Watercourses. The DFG opposes the elimination of watercourses and/or their conversion into subsurface drains. All watercourses, whether intermittent or perennial must be retained and provided with setback buffers appropriate to preserve the riparian and aquatic habitat values. Earthen channels should be interconnected with adjacent large open space areas to increase their effectiveness as wildlife corridors in urban surroundings. The DFG has direct jurisdiction under Fish and Game Code Sections 1601-1603 in regard to any proposed activities that would divert or obstruct the natural flow or change the bed, channel, or bank of any river, stream or lake. We recommend early consultation since modification of the proposed project may be required to avoid impacts to fish and wildlife resources. Formal notification (with fee) under Fish and Game Code Section 1603 should be made after all other permits and certifications have been obtained. Work cannot be initiated until a streambed alteration agreement is executed.

Responses The Draft EIR (page 5.77) indicates with regard to Hydrology Impacts that one of the potential flood control basin locations is north of the Aqueduct in a wetland area, and that development in this area would require a 404 Permit from the US Army Corp of Engineers and 1603 Agreement with the California Department of Fish and Game. Mitigation measures (page 5.79) include a requirement that modifications to natural drainage courses shall conform to City, County, State and Federal law.

Comment 3.d. User Fee. The project sponsor is subject to the user fee provided by Fish and Game Code Section 711.4, and the fee is payable to the County Clerk at the time of or prior to filing the Notice of Determination by the lead agency. If a Negative Declaration is filed, the user fee is $1,250. If an Environmental Impact Report is filed, the fee is $850. It is our assessment that this project will result in cumulative loss of fish and wildlife resources and is not exempt from the user fee. In conclusion, if your analysis reveals that the above-mentioned concerns have been fully addressed throughout your decision-making process, we would not object to the project approval. However we request that you provide us a copy of the final environmental document immediately upon approval and prior to filing the Notice of Determination. If you have any questions, please contact Ms. Kim McKee of our Environmental Services staff at the above address or by telephone at 213/990-5137.

Responses The comment is acknowledged; the applicant will be responsible for applicable user fees under State Fish & Game Code Section 711.4.
4. Commenter: Robert M. Sakai, Project Engineer
Financial Planning & Property Management Section
for Charles W. Curry, Chief Engineer and General Manager
County Sanitation Districts of Los Angeles County

November 13, 1991

Comment 4.a. The County Sanitation Districts of Los Angeles County have reviewed the Draft Environmental Impact Report (DEIR) 89-03 prepared for the City Ranch Specific Plan and have the following comments on section 5.17 "Sewage Disposal": Subsection 5.17.1 "Existing Conditions" (pages 5.231 and 5.232) Plant Location - It is incorrectly stated that the location of the Palmdale Water Reclamation Plant (Palmdale WRP) is at 39300 40th Street East. The Palmdale WRP is actually located at 39300 30th Street East.

Response: The comment is acknowledged; the Final EIR will reflect this correction.

Comment 4.b. Plant Capacity - The Palmdale WRP currently has a treatment capacity of 9.0 million gallons per day (mgd). The present wastewater flows to the facility have ranged from 7.3 to 8.2 mgd (March-September 1991 data). Expansion of the Palmdale WRP, scheduled for completion in March 1992, will increase the plant capacity to an influent capacity of 12.0 mgd and an effluent discharge limitation of 10.0 mgd. Expansion to an ultimate capacity of 15.0 mgd is still in the preliminary stages and no schedule has yet been established. These are the most current figures to date and should be noted.

Response: The comment is acknowledged; the Final EIR will reflect this correction.

Comment 4.c. Point of Connection - The Trunk "C" Relief Sewer does not connect to Trunk Sewer "C" at the intersection of 10th Street West and Avenue P-4 as stated on page 5.231. The point of connection of the Trunk "C" Relief Sewer to Trunk Sewer "C" is at the intersection of Division Street and Avenue P-8. This point is also where Trunk Sewer "D" connects. All three of these sewer lines subsequently tie into TrunkSewer "A" for conveyance to the Palmdale WRF.

Response: The comment is acknowledged; the Final EIR will reflect this correction.

Comment 4.d. Pipe Size - the portion of the Trunk "C" Relief Sewer which will be impacted by the proposed project is a 21 to 39-inch diameter vitrified clay pipes sewer which varies in capacity from 18.3 to 36.7 mgd (based on full pipe and a=0.013). It is not a 27 to 33-inch diameter sewer with a capacity from 23.0 to 28.6 mgd as mentioned on page 5.231.
Responses: The comment is acknowledged; the Final EIR will reflect this correction.

Comment 4.e. Sewer Capacity - Regarding the capacity of Trunk Sewer "A" on pages 5.231 and 5.232; at 15th Street East and Avenue P, a flow of 60% of capacity is more accurate than the 50% which is listed; at 30th Street East near the Palmdale WRP, 37% of capacity is a more accurate figure than the 30% listed.

Responses: The comment is acknowledged; the Final EIR will reflect this correction.

Comment 4.f. Subsection 5.17.2 "Project Impacts" (page 5.232) Point of Connection - It is stated that the proposed Amargosa Creek Trunk Sewer will connect to the Trunk "C" Relief Sewer at 10th Street West and Avenue P-4. A more accurate description of the point of connection would be 10th Street West and Amargosa Creek. If you have any questions regarding these comments/corrections, please contact me at (310) 699-7411.

Responses: The comment is acknowledged; the Final EIR will reflect this correction.

5. Commentor: Thomas A. Tideman, Director
County of Los Angeles Department of Public Works
909 South Fremont Avenue, Alhambra, California 91803-1331
November 19, 1991

Comment 5.a. Traffic/Circulation: The project’s proposed circulation network is designed based on the assumption that the southwest Palmdale area, including portions of Leona Valley, will ultimately be incorporated by the City of Palmdale and become urbanized. At present, however, much of the area above remains unincorporated and the Los Angeles County General Plan does not recognize the need for preserving a number of the arterials proposed by the project. Other proposed changes to the circulation system, such as the elimination of a direct connection between 30th Street West and Avenue S, disrupts planned regional highway connections and is inconsistent with the County Highway Plan. Should this project remain within unincorporated territory, it will need to file an amendment to the County Highway Plan to reflect the proposed changes to the circulation system.

Responses: Proposed roadway improvements in incorporated areas and areas for future annexation will be consistent with the City General Plan Circulation.
Element, which is currently in Draft form. Components of the City Circulation Element which require amendment of the County General Plan for consistency will be processed through review of the Element by the County during finalization of the City General Plan.

Comment 5.b. Should the project be incorporated into the City of Palmdale, the County Highway Plan will no longer need to be amended to reflect the proposed arterials within the project boundary. However, the County will not protect any extensions of the proposed arterials within unincorporated areas unless the project applicant pursues an amendment to the County Highway Plan. If you have any questions regarding these comments, please contact Mr. Bob Barragan of our Transportation Planning Section at 818/458-4353.

Response: The applicant will pursue amendments as appropriate for roadway extensions in County areas which require protection and which are not currently designated in the County Highway Plan.

Comment 5.e. Waste Management: Los Angeles County is experiencing a shortage in solid waste disposal capacity this year. The proposed development will adversely impact disposal facilities. To alleviate this crisis, the California Integrated Waste Management Act of 1989 requires development of programs for diverting 25 percent of the solid waste stream from landfills and transformation facilities by 1995 and 50 percent by the year 2000. To meet these mandates, the Draft Environmental Impact Report should identify waste quantities that will be generated along with mitigation measures of waste reduction, recycling, and composting programs. Also, the DEIR should identify development standards to provide adequate "storage areas" within each type of development group for collecting recyclable materials.

Response: The Draft EIR (page 5.239) has analyzed the impact of the proposed project on the existing solid waste disposal capacity in Palmdale. The City is aware of the California Integrated Waste Management Act of 1989 and, in response to that legislation, has prepared a Draft Source Reduction Element and Draft Household Hazardous Waste Element. These documents describe methods of reducing the volume of the waste stream to local landfills. Implementation of these programs will occur city-wide, and will therefore be applied to the City Ranch Specific Plan area. With regard to Unavoidable Adverse Impacts (page 5.241) the Draft EIR indicates that, in the event that the planned expansion of the Alta Loma Valley Landfill does not occur in a timely manner, the cumulative effect on solid waste disposal of the project and related projects would be significant.

Comment 5.d. The existing hazardous waste management facilities (HWM) in this County are inadequate to handle the hazardous waste currently being generated. The proposed residential
development will generate hazardous waste, which could adversely impact existing HWM facilities. The DEIR should address this issue and provide mitigation measures.

Response: The Draft EIR does not suggest that the project will comprise a significant source of hazardous waste. Nevertheless, mitigation measures (page 5.239) include compliance with the provisions of the City’s Household Hazardous Waste Element upon its adoption by City Council.

Comment 5.e. Section 5.6 Hydrology should include the need to comply with the Federal Clean Water Act, specifically 40 CFR Parts 122, 123, and 124. Should any operations at the subject facility include installation of underground storage tanks and/or industrial water discharge, this office will have to be contacted for issuance of the necessary permit(s).

Response: Mitigation measures proposed in the Draft EIR (page 5.79) indicate the need to obtain NPDES permits for discharges and conformity to applicable City, County, State and Federal laws.

Comment 5.f. Any mitigation measure monitoring program performed by the Los Angeles County Department of Public Works, Waste Management Division will require a funding account to be established by the project proponent to pay for the required services. The amount of necessary funds will be determined at the time monitoring will be performed. Waste Management Division must be contacted to establish the funding account. If you have any questions regarding these comments, please contact Mr. Michael Bohlander of our Waste Management Division at 818/458-3562. Questions regarding the environmental reviewing process of this Department can be directed to Ms. Clarice Nash at the above mailing address or at 818/458-4334.

Response: As noted in the Draft EIR (page 5.239), project impacts in the area of solid waste are not considered significant. Optional mitigation measures are recommended but not included in the mitigation monitoring program (DEIR pages 12.1 - 12.49).
Comment 6.a. The City Ranch project, which will have 5200 residential units, will generate approximately 1040 high school students. Based on our year-round design capacity of 2500 students, the City Ranch project would generate students to fill 42% of a high school. The nearest high school, Highland High School, will be at capacity without this project, so a high school will be required in or near this project. The standard site size is 50 acres. The cost of a high school is $14,000.00 to $15,000.00 per student, amounting to approximately $35,000,000.00 per school.

In order to provide for the students generated by this project, we would request that the developer be required to do the following to mitigate the impact of the project:

1. Participate in a Mello Roos Community Facilities District created to provide funding for construction and equipping high schools within the Antelope Valley Union High School District. The level of funding shall be adequate to provide 50% of the requirement for schools generated by this development based on a generation factor of .2 high school students per single family dwelling. The balance of the funding would come from the state.

2. A site will be required to house the students generated by this project and by the adjacent Ritter Ranch project. The District requests that the two developers jointly designate, for purchase by the District, a site, located on their common boundary that will satisfy the need for a 50 acre site. Based on the project number of students generated by the two projects, City Ranch would be required to furnish 22 acres of the required 50 acres. The District staff has reviewed the two specific plans and find that proportional portions from the following planning areas would satisfy the District requirements. These are listed in order of preference and are shown on a composite map of portions of the two tracts: A. Ritter Ranch - Planning area 5X and City Ranch - Planning area 14. B. Ritter Ranch - Planning area 6Y and City Ranch - Planning area 17. C. Ritter Ranch - Planning area 5W and City Ranch - Planning area 5.

The final site designation shall be subject to approval by the District and shall meet the following conditions:

1. The site shall be made available for purchase by the District at a price not to exceed the average of three appraisals.

2. The site shall be economically and technically suitable for construction of a school site and its associated facilities. It shall meet all geological and seismic requirements.
3. The site shall be subject to the approval of all local and state agencies having jurisdiction and shall meet all those requirements in effect at the time of purchase.

4. Utility services, water, sewer, gas, electricity, and telephone, shall be available to the site at no cost to the District prior to start of school construction or prior to the completion of 25% of the total dwelling units within either project whichever is earlier.

5. Access to the site, improved to the appropriate city or county standards, shall be provided to the site at no cost to the District. Should you have any questions, please contact our District Engineer, Richard Aitken.

Response: The Draft EIR schools impact analysis (pages 5.268 - 5.270) and draft mitigation monitoring program (12.37 - 12.38) recommended mitigation measures which are similar to those described above. The Final EIR will be modified to reflect the measures as revised.

7. Commenter: Anne Baker, Director of Environmental Planning
Southern California Association of Governments (SCAG)
818 West Seventh Street, 12th Floor, Los Angeles, CA 90017-3433

Note: SCAG has submitted a more recent letter, which indicates that the growth anticipated for the North Los Angeles County is sufficient to accommodate the growth associated with this project, and therefore, this project has been planned for in Regional Plans prepared by SCAG.

Comment 7.a. GROWTH MANAGEMENT Analysis: There are a number of regionally significant master planned communities within the immediate vicinity of City Ranch that are currently in various phases of project development and/or processing. The projects include Valley Ranch to the southeast, Ritter Ranch to the west, and Santa Fe Hills to the north. This pattern of urban development and land use will increase infrastructure construction and require new facilities or expansion of existing ones as indicated in the Draft EIR for City Ranch. Further, the significant increases in housing (18,500 dwelling units) and population (49,531 persons) from these projects will exacerbate transportation, air quality and the imbalance of local jobs and housing.

Response: The Draft EIR (pages 4.1 - 4.4) identifies the range of related projects included in the cumulative impact analysis. Each environmental analysis in the Draft EIR (pages 5.1 - 5.325) includes a cumulative impact analysis section.
which assess the project in the context of potential future development in the vicinity.

Comment 7.b. Jobs/Housing Balance: The Growth Management Plan specifically encourages cities to develop projects incorporating the regional and local jobs/housing balance objective. As SCAG has delineated subregions, the proposed project lies in the North Los Angeles County Subregion. The Draft EIR for the City Ranch Specific Plan indicates a net increase of 5,200 dwelling units and 889 permanent jobs to be associated with this project.

Appendix C of the Draft EIR correctly identifies the need for the project to create an additional 359 new jobs in the subregion or a reduction in VMT equivalent to the effect of the growth management policies would need to be achieved.

The GMP also encourages the achievement, to the degree possible, of a balance at the subregional level of the type of jobs with the price of housing. As a result from the lack of employment opportunities within reasonable commute distances, residents of City Ranch will be forced to work far away, causing increased congestion, air pollution and traffic problems. Therefore, the project’s impacts on the subregion’s job/housing balance is considered to be significant and the continuing development of projects such as City Ranch would encourage increased VMT between work and home.

Response: The Draft EIR (page 5.25) indicates that the project would represent an unavoidable adverse impact with regard to regional growth management and policies for achieving jobs-housing balance.

Comment 7.c. Wastewater Treatment: The Los Angeles County’s Palmdale Water Reclamation Plant (WRP) is currently operating at capacity. The proposed project will generate 1,279,832 gallons of sewage per day, all of which exceeds capacity. This will require the construction of major on-site and off-site improvements including the expansion of the Palmdale treatment facility. Additionally, cumulative sewage generation is expected to reach 7,480,000 gallons per day. Los Angeles County is proposing to provide additional wastewater treatment capacity through the collection of developer fees; however, in order to receive the necessary permits, a finding of conformity of the wastewater treatment project with the AQMP is needed.

It is essential that the Palmdale WRP be sized and phased in accordance with the GMP and that the conformity requirements of Chapter Three of Appendix IV-G of the AQMP be met. Unless a finding of conformity requirements of Chapter Three of Appendix IV-G of the AQMP be met. Unless a finding of conformity can be made, it may not be possible to serve the project with sewage treatment facilities that are necessary to support this type of development.
Response: The Draft EIR addresses the issue of wastewater transmission and treatment facility capacity in section 5.17 (page 5.231). The proposed Water Reclamation Plant expansion is a Sanitation District project which requires separate environmental review and approval. The Los Angeles County Sanitation Districts comments regarding the Draft EIR (see Comments 4.e-4.f, above) do not take issue with the finding that project impacts after mitigation result in no unavoidable adverse impacts.

Comment 7.d. Recommendations: SCAG recommends the City of Palmdale to consider adopting the environmentally superior alternative presented in the Draft EIR for the City Ranch Specific Plan. The reduced residential density would provide more employment opportunities and 2,080 less dwelling units resulting in a more jobs/housing balance ratio that is consistent with SCAG's North Los Angeles County subregion goal. Additionally, this alternative's unavoidable adverse impacts are more reasonable to be mitigated to a level of insignificance.

Response: The Draft EIR (page 9.23) identifies Alternative 2 - Reduced Residential Density - as the environmentally superior alternative, and indicates that this alternative would eliminate significant adverse impacts with regard to housing, biological resources, risk of exposure to electromagnetic fields, and would reduce impacts on transportation, air quality, mobile noise, schools, utilities, public services, and risk of exposure to geologic and hydrologic hazards. This information will be taken into consideration by the decision makers during deliberations regarding action on the proposed project.

Comment 7.e. REGIONAL MOBILITY Analysis: The proposed project is anticipated to generate 4,120 AM and 5,740 PM peak hour trips and 49,970 tripsends. The trips that City Ranch will generate will result in a significant increase in LOS on the Antelope Valley Freeway and Interstate 5. Additionally, the proposed project will result in surrounding intersections operating above capacity and streets exceeding LOS D.

Response: The transportation analysis in the Draft EIR (pages 5.109 - 5.151, and Appendix G) does not indicate that the project will result in impacts on Interstate 5, and indicates that cumulative plus-project conditions on the Antelope Valley Freeway (SR-14) would be LOS C. The project with mitigation would result in no unavoidable significant traffic impacts (DEIR page 5.151).

Comment 7.f. The project incorporates many Transportation Systems Management components but not Transportation Demand Management (TDM) to reduce transportation impacts. Although a TDM plan is required as part of the mitigation measures, the Draft EIR is not specific on what will be required. Further, the General Plan Update for the City of Palmdale does not include
a TDM Ordinance. Therefore, SCAG does not concur with the Draft EIR that the mitigation
measures would reduce the circulation impacts to a level of insignificance.

Response: The Draft EIR (page 5.147) does require submittal of a TDM plan
before approval of development applications, as well as compliance with the
TDM and LOS requirements of the LACTC Congestion Management Program
under development. Mitigation measures specifically include the TDM
component of project participation in the construction of a park-and-ride facility
(DEIR page 5.147).

Comment 7.g. Recommendations: SCAG encourages the City of Palmdale to adopt a TDM
Ordinance that will be in accordance with the State Implementation Program (Please refer to Air
Quality Management below) and the County of Los Angeles’ Congestion Management Plan
requirements. Specifically, SCAG recommends that the City of Palmdale require a TDM Plan
from the project proponent that will: 1) call for the creation of a City Ranch Transportation
Management Association; 2) investigate the feasibility of developing a telecommuting center on
site; and, 3) start a vanpool demonstration program for City Ranch residents.

Response: The Circulation Element of the General Plan will, upon adoption,
conform with the requirements of the State Implementation Program and County
of Los Angeles Congestion Management Program. Recommendations regarding
the content of the TDM plan will be considered during City review of the
project’s TDM plan, when submitted. However, the mitigation measure listed on
page 5.147 will be modified to require that the listed items be included in the
TDM plan.

Comment 7.h. AIR QUALITY MANAGEMENT Analysis: The 1991 AQMP was adopted
by the SCAQMD Board and by SCAG’s Executive Committee on July 19, 1991. All relevant
guidelines and measures of the AQMP and conformity procedures developed for general
development projects apply to this project.

As indicated in the Draft EIR substantial increases in NOx and ROG and increases in CO are
expected with implementation of the project. The project sponsor should show the components
of the mitigation program that will be used to mitigate negative air quality impacts to an
insignificant level. Transit, pedestrian and bicycle support facilities have been incorporated into
the project design. These design features will contribute to alternatives to the single occupant
vehicle and reduction in vehicular emissions.

As discussed above, one of the mitigation measures is for the development of a TDM plan. To
be adequate for the purpose intended by the State Implementation Plan (SIP), the TDM Plan
should include the following elements: 1. A detailed description of the TDM measures
incorporated into the project as mitigation measures or project conditions. 2. Expected effect and VMT/VT reduction targets for each component of the TDM program. 3. Funding sources for each program component. 4. Identification of the agencies or persons responsible for monitoring and administering the TDM program. 5. An implementation schedule for each TDM component.

Recommendations: SCAG recommends that the TDM Plan be project specific. The proposal needs to go beyond references to a TDM Plan, the project should be designed to include commitments to a TDM program with clear delineation of responsibilities, trip reduction targets, financial arrangements and specific schedules for action on each specific measure.

Response: The Draft EIR (page 5.170) indicates that the project conforms to Criteria 2 (trip reduction and TDM) of the AQMP, but does not conform to Criteria 1 and 3 (jobs-housing balance and long-term air quality degradation) of the AQMP. Sufficient mitigation measures beyond those included in the Draft EIR are not available to eliminate the significant adverse impacts of the proposed project. Recommendations regarding the content of the TDM plan will be considered during the City review of the project's TDM plan, when submitted.

No violations of the standards set by the State and Federal government with regards to CO and NOx have been recorded at the Lancaster monitoring station and levels of these pollutants are relatively low. Therefore, development of this project is not likely to generate sufficient levels of these pollutants to exceed the State and Federal Standards, even on a cumulative basis. Reactive Organic Gases contribute to the production of ozone; the maximum ozone levels are exceeded on occasion in this air basin and development of the project will contribute to cumulative increases in ozone levels downwind of the site. The EIR acknowledges that the project will exceed the New Source Review thresholds established by AQMD for the three pollutants listed above. However, these thresholds are provided only to determine whether review of impacts is required; they are not significance criteria, and are significantly different from the clean air standards established by the State and Federal Governments.

Comment 7.1. The proposed project needs to be revised so that it does not contribute to CO, NOx and ROG violations, and adoption of the reduced residential density alternative would be in accordance with this recommendation.

Response: See response to Comment 7.d.

Comment 7.4. CONFORMITY WITH THE SIP Analysis: A project is found to conform with the SIP when it has satisfied the following three criteria: 1. It improves the subregion's
jobs/housing balance performance ratio. 2. It reduces vehicle trips and vehicle miles traveled to the maximum extent feasible by implementing TDM strategies. 3. Its environmental document includes an air quality analysis which demonstrates that the project will not have significant negative impact on air quality in the long term.

As described in the Draft EIR, the proposed project has a negative impact on jobs/housing balance in the North Los Angeles subregion.

SCAG does not concur with the Draft EIR that it is able to mitigate the adverse effects of increased transportation demand. The Draft EIR does not include a detailed description of the mitigation plan.

The Draft EIR states that traffic associated with the project will cause a significant increase in both ROG and NOx emissions and local CO concentrations which are significant unavoidable adverse impacts.

Findings: SCAG finds that proposed City Ranch Specific Plan to not conform with the SIP at this time. The project does not reduce vehicle trips and vehicle miles traveled to the maximum extent feasible, and it does not mitigate the effects on air quality to a less than significant level. The project also contributes to violations of CO, NOx and ROG standards and therefore would not conform with the AQMP under the 1990 Clean Air Act Amendments.

Response: See response to Comment 7.h.

Comment 7.h. Recommendations: The transportation measures of the Draft EIR should be strengthened as recommended above to reduce impacts associated with vehicle trips and vehicle miles traveled. Analysis should then be conducted to determine that implementation of the project will not have a significant negative impact on air quality in the long term.

Response: As called for by SCAG, the Final EIR will add the following mitigation measures to those recommended in the Draft EIR for air quality impacts: (1) call for the creation of a City Ranch Transportation Management Association; (2) investigate the feasibility of developing a telecommuting center on site; and (3) start a vanpool demonstration program for City Ranch residents.

Comment 7.i. All mitigation measures associated with the project should be monitored in accordance with AB 3180 requirements and reported to SCAG through the Annual Reasonable Further Progress Report.

Response: All required mitigation measures are included in the mitigation monitoring program (DEIR pages 12.1 - 12.49).
8. Commenter: Cindy S. Greenwald, Planning Manager, Office of Planning and Rules South Coast Air Quality Management District (SCAQMD)
21865 E. Copley Drive, Diamond Bar, CA 91765-4182
November 21, 1991

Comment 8.a. The South Coast Air Quality Management District (District) has reviewed the Draft Environmental Impact Report (Draft EIR) for the proposed City Ranch South Specific Plan in the City of Palmdale. The District's review indicates that the project will generate significant adverse air quality impacts which have not been adequately addressed in the Draft EIR, especially in the area of vehicle miles traveled (VMT).

Response: The Draft EIR (pages 5.152 - 5.175) indicates that the proposed project will result in unavoidable adverse impacts with regard to air quality, recommends mitigation measures to reduce significant impacts, and presents a program (pages 12.22 - 12.24) to ensure monitoring of the measures' implementation. The analysis in the Draft EIR adequately addresses the potential for air quality impacts due to the project.

Comment 8.b. The District is responsible for adopting, implementing, and enforcing air quality regulations in the South Coast Air Basin (Basin), which includes the project area. As a responsible agency, the District reviews and analyzes environmental documents for projects that may generate significant adverse air quality impacts.

The proposed City Ranch South Specific Plan will cause potential adverse environmental impacts due to its size, scope, and location. The District's comments are intended to advise the City of Palmdale in addressing and mitigating these impacts. The attached staff assessment provides a detailed discussion of the District's analysis of the Draft EIR. Attachment 1 contains a list of mitigation measures intended to reduce project emissions.

The Draft EIR has not quantified all of the emissions which may occur as a result of the proposed project. In particular, emissions associated with the increased VMT, which the project will generate, have not been included. All sources of emissions should be quantified in order to fully assess the potential impacts of the project. Additionally, all feasible, reasonable, and enforceable mitigation measures must be applied to the project to reduce air quality impacts to the greatest extent possible.

Response: The Draft EIR (Table 24, page 5.169) quantifies the long-term emissions anticipated due to buildout of the proposed project, including those associated with vehicle-miles travelled (VMT); Table 25 (page 5.172) quantifies cumulative emissions due to the project and related projects; the basis for the VMT impacts analysis is included in Appendix G of the Draft EIR. The Draft
EIR (pages 5.171 - 5.173) includes a range of feasible, reasonable, and enforceable mitigation measures for reduction of air quality impacts to the greatest extent possible.

Comment 8.c. The California Environmental Quality Act (CEQA) requires the making of findings regarding significant impacts and the feasibility of alternatives prior to the adoption of an EIR (CEQA Guidelines section 15065). The Final EIR should analyze the air quality impacts of all the project alternatives, including emissions caused by increased VMT, in order to provide guidance to the decision makers in the adoption of the Final EIR.

Responses: The Draft EIR (Table 38, page 9.4) quantifies and compares the emissions projections for each of the alternatives to the proposed project. The Draft EIR (page 9.23) identifies Alternative 2 - Reduced Residential Density - as the environmentally superior alternative, and indicates that this alternative would eliminate significant adverse impacts with regard to housing, biological resources, risk of exposure to electromagnetic fields, and would reduce impacts on transportation, air quality, mobile noise, schools, utilities, public services, and risk of exposure to geologic and hydrologic hazards. This information will be taken into consideration by the decision makers during deliberations regarding action on the proposed project. No additional analysis is required in the Final EIR.

Comment 8.d. The District appreciates the opportunity to comment on the proposed City Ranch South Specific Plan, and looks forward to receiving a response to our comments prior to the public hearing. If you have any questions regarding these comments, please contact Connie Day, Program Supervisor, at 818/396-3035.

Project Description: The City Ranch South Specific Plan proposes to develop a 1,985-acre parcel of land to include 5,200 residential units, 260,000 square feet of commercial space, a 216-acre golf course, four elementary schools, five parks and a fire station (Draft EIR, page S.1). Approximately 404 acres will remain as natural open space. The project, including the accompanying infrastructure, would be completed over a 10-year period.

Air Quality Setting: The Draft EIR characterizes the air quality setting relative to the proposed project using 1988-89 data from the Lancaster monitoring station. The 1998-99 data is noted in the current data available. The Final EIR should use the attached 1990 monitoring data. According to air quality monitoring conducted in 1990 at the Lancaster monitoring station, ozone levels exceeded the federal and state standards on 7 and 52 days respectively; carbon monoxide and nitrogen dioxide levels did not exceed the state and federal standards. Levels of particulate matter less than 10 microns in diameter (PM10) exceeded the federal and state standards in 3.4 and 37.9 percent respectively of the samples monitored.
Response: As provided by the District, the Final EIR incorporates the most recent 1990 data from the Lancaster monitoring station. These data indicate a marked improvement over 1986-1989 conditions (as cited in the Draft EIR, Table 22, page 5.162, in 1989 federal and state ozone exceedances registered on 27 and 95 days, respectively).

Comment 8.e. Construction Related Air Quality Impacts: Construction-related air quality impacts would occur as a result of fugitive dust emissions generated during grading and construction activities and emissions from project-related equipment and vehicles. The potential for increased dust emissions due to a prolonged construction period should be addressed in the Final EIR. Soil binders or ground cover should be used to mitigate dust emissions for disturbed areas that are left inactive for over 96 hours after grading.

Response: The Draft EIR (page 5.166) addresses construction-related air quality impacts, and provides mitigation measures (DEIR pages 5.171 - 5.172). As recommended by the District, the Final EIR will add the detail that soil binders or ground cover will be used to mitigate dust emissions for disturbed areas left inactive for over 96 hours after grading.

Comment 8.f. The Draft EIR estimates the construction emissions to be 30 tons after mitigation during a 1-month period. The Final EIR should analyze daily emissions based on the actual number of construction days. Construction scheduling should be planned to ensure that the District’s air quality significance thresholds are not exceeded on any one day. The Final EIR should provide a construction schedule and incorporate fugitive dust control measures proposed in Attachment 1, in addition to those recommended in the Draft EIR.

Response: Details regarding construction phasing for this multi-year development project would be too speculative to warrant an emissions-per-day analysis of fugitive dust. Since existing air quality levels monitored at the Lancaster station indicate exceedances of state and federal standards, it is not possible to ensure that the District’s air quality significance thresholds are not exceeded on any one day through construction scheduling.

Comment 8.g. The Final EIR should consider emissions from architectural coatings, paints, and asphalt in estimating project emissions. Solventless, high-solid and water-based coatings should be used in order to further reduce the project’s emissions.

Response: Details regarding construction materials for structures within the proposed Specific Plan would be too speculative to warrant an emissions analysis of solvents, coatings, and paving materials. Nevertheless, the Final EIR will recognize the potential for a substantial contribution to area-wide emissions due...
to those sources, and incorporates the measures recommended to reduce project emissions, including use of non solvent-based coatings on buildings, as feasible; and encouragement of the use of high-solid or water-based coatings.

Comment 8.b. Since the project is located close to a landfill, an analysis of the potential for toxic contamination of the site soils should be included in the Final EIR.

Response: The Draft EIR (page 5.309 - 5.317) presents an analysis of hazardous materials and soil contamination for the 1,983-acre site. Technical information which forms the basis of this analysis is presented in Appendix J of the Draft EIR. Section 5.20 of the Draft EIR (pages 5.318 - 5.325) assesses the project relative to the Antelope Valley Landfill, indicating that this is a Class-III sanitary site which does not accept hazardous materials, and concluding that with mitigation the project would not result in significant adverse impacts or risks relative to the continued operation and expansion of the landfill.

Comment 8.i. Operation Related Air Quality Impacts: Operation related air quality impacts are primarily due to the additional vehicular traffic generated by the project. The peak-hour traffic levels for streets in the area, which are provided in the Draft EIR, do not indicate the increased vehicle miles traveled (VMT) as a result of the project. The overall net air quality effects of the project cannot be determined without VMT estimates. Likewise, it would be difficult to ensure that the proposed mitigation measures would effectively reduce the project’s impacts if these emissions are not quantified. The Final EIR must quantify the increased VMT and associated emissions, and include additional mitigation measures for reducing these emissions.

Response: See response to Comment 8.b.

Comment 8.j. The Draft EIR states that congestion could be reduced by off-site master planned roadway improvements which have been identified in the City’s General Plan area (Draft EIR - page 3.51). Roadway improvements may not be effective due to the impacts caused by approximately 50 projects approved or proposed to be built within a 5-mile radius of the project. In order to reduce the impacts caused by these projects, transportation systems management and transportation demand management (TSM and TDM) programs should be implemented in addition to the road improvements proposed in the Draft EIR.

Response: The transportation impacts analysis presented in the Draft EIR is based on the project’s impacts in the context of (assuming development of) the related projects cited as potential cumulative land use growth in the vicinity. The analyst is conservative in that it seeks to mitigate the project’s impacts without assuming the mitigation measures that related projects would be required to
January 22, 1992

Ms. Laurie Lile  
City of Palmdale Planning Department  
38306 Ninth Street East  
Palmdale, CA 93550

Rs: Jobs/Housing Balance  
City Ranch Draft EIR

Dear Laurie:

The Draft City Ranch EIR incorrectly calculates the employment opportunities provided by the City Ranch project at 889. That calculation is incorrect and should be revised to reflect the actual estimate 1246 jobs the project will provide.

The Draft EIR incorrectly identifies the proposed project to have 260,000 square feet of retail space when it is in fact 135,780 square feet (235,780 in Planning Area 3, Specific Plan Exhibit 22D, and 100,000 square feet in Planning Area 33). Assuming one employee per 490 square feet, the commercial area will generate 685 employees.

The Draft EIR also did not correctly identify the number of education jobs generated by the project because it gave the project no credit for education jobs located offsite but generated by the project. At .80 students per household, the 4160 students generated by the project would provide 400 jobs based on one employee per 10.4 students (Westside Union School District).

While the Draft EIR correctly identifies 32 and 91 jobs, as a result of park and golf course operation and maintenance, it does not identify any jobs associated with the maintenance of the 419 acres of open space. The Draft EIR also fails to account for jobs associated with the maintenance facility or for the maintenance of streets, drainage facilities, or landscaping to include right-of-way.

The Draft EIR also mistakenly assumes only four jobs at the Fire Station to be located on Planning Area 14. The current similar facility located at 10th Street West and Ave P currently employs 21.
implement as part of each of their individual traffic studies and environmental reviews.

Comment 8.k. Cumulative Impacts: The Draft EIR states that "cumulative development would increase by approximately 18,500 dwelling units. The resultant cumulative areawide jobs/housing ratio would remain heavily jobs poor" (Draft EIR, page 5.49). The Draft EIR predicts that the increase in VMT from approximately 30 areawide projects will be 2.4 million miles, which will cause substantial increases in vehicular emissions. Under the currently proposed scenario, the existing jobs to housing balance will further deteriorate and cause the VMT to spiral upwards. Without new mixed-use projects and the provision of jobs, the potential for increased VMT is unavoidable. The Final EIR should analyze available jobs within the project area, using the housing and employment trends.

Existing VMT levels will be aggravated by the addition of 5,200 housing units without a corresponding increase in jobs. The Final EIR must analyze the causes of VMT increase and include mitigation measures to reduce VMT.

Response: The Draft EIR (Table 2, page 5.18) estimates the employment development potential of the project (889 jobs) and of cumulative development (11,923 jobs). The Draft EIR (page 5.171) indicates that the proposed project includes components which reduce VMT, and includes additional mitigation measures (pages 5.172 - 5.173) to further reduce transportation impacts on air quality.

Comment 8.l. Congestion Management: The accelerated housing development and the corresponding increase in vehicular trips will cause the level of service (LOS) to deteriorate. The Draft EIR states that if LOS falls below either the standards set by the Congestion Management Plan (CMP), or the policies set by the City's General Plan, the developer/applicant of the project will implement improvements or services necessary to bring the roadway segment of the Specific Plan area into compliance. CMP compliance will begin on January 1, 1993, or when LOS levels deteriorate below D, whichever comes first. The applicant will also be required to contribute a pro-rata share of the cost of extension of arterials affected by the project under the CMP compliance requirements. However, the proposed provision fees and the contribution to street improvements will not ensure the timely construction of improvements to mitigate the emission increases brought about by rising VMT. Moreover, the completion of street improvements will be delayed even if the fees are paid as required. The Final EIR must address the issue of construction delay in order to prevent LOS deterioration in the interim.

Response: The Draft EIR (pages 5.145 - 5.146, and Appendix G) assesses trip generation and circulation improvements over eight (8) phases of development of the project. To ensure the timely construction of roadway improvements to
mitigate traffic impacts of the project, as stated in the Draft EIR (page 5.147) the applicant will provide a focused traffic analysis upon submitting applications for development of each of these project phases, which will mitigate impacts to the satisfaction of the City Engineer.

Comment 8.m. Public transit services are scarce in the area and should be developed due to the potential impact of the additional number of daily trips associated with the project. This may be accomplished through the provision of minimum transit standards such as access to employment centers, shuttle services from employment centers, transit schedules to meet the peak arrival and departure times of commuters, and conveniently located transit terminals to ensure frequent and adequate transit services. The Final EIR should analyze the availability of minimum transit standards.

Response: As stated in the Draft EIR (page 5.147), the project will comply with the City General Plan and the LACTC Congestion Management Plan, both of which are under development. The City General Plan will provide policies regarding transit service and the Congestion Management Plan will set minimum transit service standards.

Comment 8.n. Transportation Performance Standards: The Specific Plan proposes a network of streets to mitigate the increased traffic generation. Street improvements alone may not provide the increased mobility and reduced traffic levels needed for effective mitigation of the adverse air quality impacts of the project. The strategy to reduce project emissions based on a commitment to reduce vehicular trips and increase employment, should be analyzed in the Final EIR.

Response: The Draft EIR (pages 5.109 - 5.151, and Appendix G) presents an adequate assessment of the access and mobility impacts of the project.

Comment 8.o. The presence of Route-14 in the project vicinity provides an opportunity to implement TSM and TDM programs. For example, traffic impacts of Route-14 could be alleviated through improved transit planning, park-and-ride lots, shuttle services for commercial centers, and preferential parking for ride-sharing. The Final EIR should analyze the overall impact of implementing TSM programs relative to the highway.

Response: The Draft EIR (page 5.147) requires submittal of TDM plans before approval of development applications, as well as compliance with the TDM and LOS requirements of the LACTC Congestion Management Program under development. Mitigation measures specifically include the TDM component of project participation in the construction of a park-and-ride facility (DEIR page 5.147).
Comment 3.p. Energy Use: The project's energy needs have not been assessed in the Draft EIR. Energy usage could be reduced by conservation methods such as efficient heating and cooling systems, and passive solar design. Those methods should be analyzed in the Final EIR along with glazed windows, wall insulation, and efficient ventilation methods. Efficient appliances for heating, air-conditioning, cooking, refrigeration, and the provision of shade to buildings are mitigation measures that should also be included in the Final EIR. A comprehensive list of recommended mitigation measures is provided in Attachment 1.

Response: The Draft EIR presents the air quality impacts of project and cumulative energy consumption in Tables 24 and 25 (pages 5.169 and 5.174), respectively. As requested by the District, the Final EIR incorporates the following additional measures to reduce the air quality impacts of energy consumption:
- Implement energy conservation measures beyond state and local requirements.
- Include energy costs in capital expenditure analyses.
- Landscape with native drought-resistant species to reduce water consumption and to provide passive solar benefits.
- Improve thermal integrity of buildings, and reduce thermal load with automated time clocks or occupant sensors.
- Introduce glazed windows, wall insulation, and efficient ventilation methods; install window-sheers to reduce thermal gain and loss.
- Introduce energy-efficient heating and other appliances.
- Incorporate appropriate passive solar design.
- Ensure sealing of all buildings.
- Control mechanical systems, or equipment with time clocks or computer systems.
- Implement waste separation and recycling programs.

Comment 5.q. Project Alternatives: According to the Draft EIR, Alternative 2, a scaled-down proposal with 3,200 housing units, is the environmentally superior project alternative, and therefore the preferred alternative. Vehicle emissions from Alternative 2 would be lower than from any other alternative. The Draft EIR, however, does not recommend this alternative but states that "it is up to the City Council and Planning Commission to decide whether or not to approve the proposed project or choose the preferred alternative." (Draft EIR, page 5.55).

The findings of significance mandated by the California Environmental Quality Act (CEQA) require "the identification of effects to be analyzed in depth in the EIR, the requirements to make detailed findings on the feasibility of alternatives and mitigation measures to reduce or avoid the significant effects, and when found to be feasible, the making of changes in the project..."
to lessen the adverse environmental impacts.* (Discussion following CEQA Guidelines section 15065). The required findings regarding impacts must, therefore, be included in the Final EIR

Response: See response to Comment 8.c.

Comment 8.c. Conclusion: The project's overall impacts from construction activity and increased vehicular trips within the project area have not been adequately analyzed. The emission levels identified in the Draft EIR are not sufficiently detailed to enable a clear determination of whether the project will result in significant adverse air quality impacts. Before the EIR is certified, a more thorough analysis of air quality issues must be prepared for both the project and the alternatives. Such an analysis must consider all potential emission sources as discussed above, as well as any mitigation measures, their implementation and monitoring.

Recommended Mitigation Measures for the City Ranch South Specific Plan Draft EIR

Minimize Construction Activity Emissions:
- Schedule construction activity during off-peak-hours and require a phased-schedule of construction to avoid emissions peaks.
- Remove silt by paving construction roads, sweeping streets, and washing trucks leaving construction site.
- Suspend grading operations during first and second stage smog alerts.
- Maintain construction equipment engines by keeping them tuned.
- Use low-sulfur fuel for equipment.
- Use existing power sources; avoid using temporary power generation.

Reduce Construction-Related Traffic Congestion:
- Provide ride share and transit incentives for construction personnel.
- Configure construction parking to minimize traffic interferences.
- Minimize obstruction of through traffic lanes.
- Provide a flagperson to guide the traffic properly.
- Schedule operations affecting traffic for off-peak hours.

Limit Emissions from Vehicle Trips:
- Establish telecommuting programs, alternative work schedules, and satellite work centers.
- Schedule goods movements for off-peak traffic hours.
- Provide local shuttle and regional transit systems, transit shelters, bicycle lanes, storage areas and amenities, and ensure efficient parking management.
- Provide dedicated turn lanes as appropriate.
- Work with cities/developers/citizens in the region to implement TDM goals.
- Ensure streamlined traffic synchronization.
- Provide park-and-ride facilities.
- Implement parking management at commercial facilities and other places attracting traffic.
- Provide preferential parking to high occupancy vehicles and shuttle services; and charge parking lot fees on low occupancy vehicles.
- Provide temporary roadway controls at peak-hours, such as one-way streets; and install directional traffic signs; and synchronized traffic signals to relieve congestion on surrounding streets; and manage street intersections to improve level of service.

**Maximize Energy Conservation:**
- Implement energy conservation measures beyond state and local requirements.
- Include energy costs in capital expenditure analyses.
- Landscape with native drought-resistant species to reduce water consumption and to provide passive solar benefits.
- Improve thermal integrity of buildings, and reduce thermal load with automated time clocks or occupant sensors.
- Introduce glazed windows, wall insulation, and efficient ventilation methods; install window-systems to reduce thermal gain and loss.
- Introduce energy-efficient heating and other appliances.
- Incorporate appropriate passive solar design.
- Ensure sealing of all buildings.
- Control mechanical systems, or equipment with time clocks or computer systems.
- Implement waste separation and recycling programs.

**Limit Emissions from Architectural Coatings and Asphalts Usage:**
- Nonsolvent-based coatings should be used on buildings. Solvent-based coatings, if used, should minimize solvent emissions.
- Use high-solid or water-based coatings should be encouraged.

Response: As indicated in response to Comments 8.a-8.q, the Draft EIR adequately analyzes overall project impacts due to construction activity, project operation, and increased vehicular trips. The Draft EIR states that, with mitigation, the project would result in unavoidable significant adverse air quality impacts. The Final EIR will incorporate additional mitigation, as recommended by the District.
Comment 9.a. We are asking you and the Palmdale Planning Department to review the multi-use trails plan for the City Ranch Development. We would like to thank you and the Palmdale Planning Department for planning a North/South bicycle trail through the City Ranch Project, and would like to draw your attention to the fact that a North/South equestrian trail has been left out. We suggest this trail run somewhere between 30th and 50th Street West.

This trail is an integral part of the North County Trail System that has already been dedicated by the County of Los Angeles. An Equestrian Staging Area, where trailers may be parked while riders are on the North County Trails, has historically been used near the Aqueduct and Avenue S. Another staging area off Elizabeth Lake Road is also recommended.

A North/South trail through the City Ranch Development will allow riders to link with the multi-use trails to Pleasant Valley, Vincent Hill (and thereby Acton) and Leona Valley. These trails are vital to our trails system. We would like to suggest that planned trails connect with Ritter Ranch trails and Sagebrush/Pacton Specific Planned Development trails. We are available to assist you in any way we can with this worthwhile project. Please feel free to contact us.

Response: As requested, the Final EIR will be revised to include a mitigation measure recommending that a north-south equestrian trail between 30th and 50th Street West, an Equestrian Staging Area near the Aqueduct and Avenue S, and another staging area off of Elizabeth Lake Road be incorporated into the proposed project design. The EIR will also require that planned trails be coordinated with the Ritter Ranch and Sagebrush-Pacton Specific Plans.

Comment 10.a. We the undersigned petition the Palmdale Planning Department to review the multi-use trails plan for the City Ranch Development. An EQUESTRIAN STAGING AREA and a NORTH/SOUTH MULTI-USE TRAIL need to be addressed. Historically this area is used by equestrians as a starting point to reach the North County Trail System which links multi-use trails to Pleasant Valley and Vincent Hill as well as Leona Valley.

11. Commenter: Mark Q. Sutton, Associate Professor
Sociology/Anthropology Department
California State University, Bakersfield
9001 Stockdale Highway, Bakersfield, California 93311-1099

October 10, 1991

Comment 11.a. Thank you for the opportunity to comment on the "Phase II Archaeological Investigations at the City Ranch, Palmdale, Los Angeles County, California" (July 23, 1991) by Archaeological Associates, Ltd. I have read the document and offer the following.

1. The study reports on the evaluation of 30 sites on the City Ranch (1,985 acres). I have not read the inventory report and cannot comment on that. It is not clear to me who the author is. I assume either Van Horn, White, or Brown. Using company names is common and, in my view, unfortunate. It is better to know who wrote the piece.

2. The author(s) of the study appear to be unaware of some of the basic literature for the western Mojave Desert, specifically the synthetic monograph published in 1988 (Sutton, An Introduction to the Archaeology of the Western Mojave Desert, Coyote Press Archives of California Prehistory No. 14). This is a common flaw for many contractors working in the valley, they do not know the literature (having come from other areas to work) and so rely on an old (Warren 1984) bibliography. Clearly, better background research is needed for persons working in the region.

3. The report is well-organized and easy to follow. Few data on the artifacts (other than their occurrence and frequency) are included in the results sections for the various sites. The inclusion of maps, illustrations, and tables in the text makes understanding the results easier. It would be most useful to have had all the data included. While acknowledging the lack of a research design, one should have been included. There are a number of interesting research questions that could be addressed with baseline data. One major research question for the area is the boundaries of the various aboriginal populations. There is reason to believe that a cultural boundary (see Sutton 1980, "Some Aspects of Kitanemuk Prehistory," Journal of California and Great Basin Anthropology 2(2):214-225, and monograph noted above) exists in the immediate area. Also, the place of the western Mojave Desert in the interaction spheres postulated for the western Mojave Desert is unclear and should be investigated (see Sutton 1989, "Late Prehistoric Interaction Spheres in the Mojave Desert, California," North American Archaeologist 10(2):95-121).

Response: Comment acknowledged.

Comment 11.b. 4. While many of the sites were tested for subsurface remains (as they should be), the effectiveness of augers as a technique to detect buried deposits is questionable. In the
absence of a distinctive soil color that indicates a cultural deposit, auguring relies on encountering artifacts below the surface. Given the size of the augers (in this case 9", large "an auger), the chances of such an encounter are not good (but does occur). If the site contains a sparse deposit, it could easily be missed. Actual excavation units (e.g., 1 x 1 or 1 x 2 m.) are much better (but also are not perfect) to locate buried deposits.

Standard excavation units were placed at seven sites, the remainder being subjected to auger testing. I consider it possible that subsurface deposits at the augered sites were missed and that their evaluations are incorrect. In the Tehachapi Mountains, we recently found that seven of nine sites with no surface indications did contain a subsurface deposit of varying density. I doubt that an auger program would have detected such deposits. Of the subsurface deposits detected, two were located with the excavation units. Twelve sites initially had augering only and two subsurface deposits were detected (with subsequent excavation units being dug). Thus ten of the sites were determined not to have a subsurface deposit based on augering only. The term "testing" refers to an examination designed to determine something that is not known, that may or may not be true. The "testing" described at a number of sites (particularly the "hunting blinds") is recordation rather than testing. While this may be a point in semantics, the fact remains that those sites were not tested in the conventional archaeological meaning. (I am not suggesting that any further work be conducted at those sites if they are fully recorded.) Features (cupules, mortars, rock rings, etc.) should be fully documented, including maps and measurements. It appears that this mostly is done but I do not have all the maps or tables. If not done, it should be.

5. I agree with the recommendations given for further work (with the knowledge that I suspect some subsurface deposits were missed with the auguring program).

6. This is a better report than most. However, due to the lack of analysis of materials recovered (e.g., faunal, lithics, etc.) its usefulness is limited (but still better than most). Palmdale should require a full analytical report of all contractors conducting excavations. The obsidian was analyzed and those results are useful.

The conclusion of land use is quite simplistic. Except for the reported former occurrence of chia in the area and its known ethnographic use, there is no direct evidence that chia was processed at the milling sites. The same is true for the juniper. "Hunting" is a very nebulous concept archaeologically but likely did occur in the area, whether from the "blinds" is another question.

Responses: The following additional work shall be performed by a qualified archaeologist, retained by the applicant and approved by the Planning Director.

Because the introduction of residents into the area will result in the degradation of archaeological sites, required testing and preparation of a subregional report

City of Palmdale - January 1982
State Clearinghouse 85-090819 - 32 -
City Ranch Specific Plan Final EIR
Konaman and Broad Applicant
shall be completed and approved by the Planning Director prior to recordation of the first parcel map or tract map for the project.

The following sites which were augered require additional testing for subsurface deposits: LAN-1746, LAN-1747, LAN-1748, LAN-1749, LAN-1750, LAN-1752, LAN-1753, LAN-1756, LAN-1772, LAN-1774, LAN-1767, LAN-1768. At least two additional 1x1 meter test units need to be excavated at each of these sites, within site areas with the greatest densities of surface artifacts. These excavations are important to determine whether auger testing has missed subsurface deposits and to get a clearer, vertically-controlled picture of such deposits and their depositional context.

The following important petroglyph, bedrock mortar, and rock ring sites were not subject to any subsurface testing. They need to be tested through excavation of a minimum of two 1x1 meter units utilizing 1/8" screen in the immediate vicinity of these features: LAN-1767, LAN-1768, LAN-1759, LAN-1760, LAN-1761, LAN-1762, LAN-1763, LAN-1765, LAN-1766, LAN-1769, LAN-1770, LAN-1771.

The "hunting blind" sites are also important structures whose function needs to be determined through further testing.

The important apparent habitation site, LAN-949, should be avoided through realignment of the proposed roadway.

Those sites which contained surface artifacts but were only auger tested shall be tested with at least one standard test unit per site. The testing program shall be submitted to the City Planning Department for review and approval prior to commencement. In addition, untested cupule sites, rock rings, and hunting blinds shall also be tested in this manner. Any additional mitigation recommended as a result of the additional testing shall be required as a mitigation measure for initial and subsequent development applications, as appropriate.

A subregional analysis shall be prepared to provide a basis for significance determinations. It shall include a research design that would set standards for future work in the Ana Verde-Sierra Pelona subregion.

Relocation of cupule boulders must be done under the direction of a qualified archaeologist who will give careful attention to orientation of the boulders. The Boulders shall be moved prior to site disturbance in their immediate vicinity to a location approved by the Planning Director. Since context will be lost, some shall be relocated in an interpretative center where they can be used for educational
purposes. Representative artifacts should be displayed at this interpretive center. Development of the subregional interpretive center should be coordinated with nearby specific plan areas.

12. Commentator: Mallada Walton, Environmental Review Committee Chair
Antelope Valley Archaeological Society
POB 4514, Lancaster, California 93539

November 14, 1991

Comment 12.a. Thank you for providing the AVAS with the opportunity to review the City Ranch documents. The adequacy of the EIR mitigation measures are dependent upon the adequacy of the test report upon which they are based, more specifically, the determination of which sites are significant and therefore require mitigation. We do have some concerns about the adequacy of the Phase II report.

While augering is a useful method for sampling shell middens it has limited value in desert sites. It should not be used as the sole testing procedure. Several sites excavated by Mark Sutten had subsurface deposits that he feels probably would have been missed if auguring had been the only test method. He feels that anything less than a standard 1m x 1m test unit is inadequate and has a high margin of error. Those sites that were only augured should be test excavated.

The minimal synthesis in the comments on land use is a step in the right direction but does not go far enough. The City Ranch sites should be analyzed in relationship to the Ritter Ranch sites and possibly those on the Santa Fe Hills project area. We do not believe that the true significance of the sites can be determined without examining their relationship to each other and the larger Sierra Pelona area. A regional synthesis needs to be completed which may show that the sites are more significant than indicated by the site by site evaluation contained in this report.

Dr. Michael Glassow (Anthropology professor at UCSB) and others have argued convincingly that finding of non-significance need to be justified as do findings of significance. The report is weak in this area.

The level of documentation in the report is minimal. The hunting blinds should all be illustrated.

Several sites should be excavated since their research potential is not exhausted. LAN-1752 should have had a test unit in the area of the heaviest flake concentration. LAN-1759 should be excavated in such a way to provide a cross section which would provide data on the structure and construction of the hunting blind (if that is what it is). At least one unit in the midst of the
boulders at LAn-1767 might be productive as well. Testing should be done between hunting blinds A and B at LAn-1770. The milling feature at LAn-1772 should also be tested for subsurface deposits.

The supposition that most of the flakes at LAn-1746 "resulted from scraper manufacture and/or sharpening" is problematic since the report states that most of the flakes are quartzite yet none of the scrapers or tools are quartzite.

An analysis of the data recovered from the sites is lacking. The obsidian hydration data is helpful but what about other types of analysis such as lithic, faunal, or bead?

What is the basis for suggesting that the abalone fragments in LAn-949 may be dishes (p21)? Abalone shells could have served several purposes.

A project of this size should have a research design. The report acknowledges the value and importance of a research design yet fails to provide one.

There should be a section of the report which summarizes the conclusions and recommendations in one place.

We question the conclusion (assumption?) that all the rock structures are hunting blinds. This should be developed further.

We do not believe this study adequately answers the significance issue for most of the sites. Therefore, the mitigation measures in the EIR may not be adequate. Further testing (with a minimum of standard 1m x 1m test units) needs to be completed. A regional synthesis needs to be completed. We would be glad to make specific suggestions for additional testing if given additional time.

We await your response to our comments on what we regard as potentially significant resources that have not been adequately mitigated.

Responses: See responses to Comment 11.b.
13. Commenter: Scott Springer, Site Records Manager, Earth Sciences for
Dr. Allan D. Griesemer, Director
San Bernardino County Museum
2024 Orange Tree Lane, Redlands, CA 92374

October 18, 1991

Comment 13.a. The draft document mentioned above is correct. The project parcel is located
on sediments where non-renewable paleontologic resources must be considered.

The mitigation measures described on 5.297-301 comply with the guidelines established by the
Society of Vertebrate Paleontology and will satisfy the requirements to mitigate impacts to non-
renewable paleontologic resources.

Response: Comment acknowledged.

14. Commenter: David D. Earle
Antelope Valley Archaeological Society
West Antelope Valley Historical Society
3335 E. Ave. Q-6, Palmdale, CA 93550

November 15, 1991

Comment 14.a. I am responding to the City’s request for comment on A) the archaeological
resource management phase II report for the City Ranch Project, entitled “Phase II
Archaeological Investigations at the City Ranch, Palmdale, Los Angeles County, California, and
b) the companion archaeological recommendations section [Section 5.25] of the City Ranch
Project Environmental Impact Report. The archaeological research and recommendations
contained in these documents were developed by Archaeological Associates of Sun City, California.

I am a member of the Environmental Review Committee and Executive Board member of the
Antelope Valley Archaeological Society, and am President of the West Antelope Valley Historical
Society. I have for some time been involved in reviewing Cultural Resource Management
documents which provide documentation of and recommendations regarding management of
prehistoric and historic sites in the Antelope Valley. I have published and lectured on late
prehistoric and protohistoric settlement in the Antelope Valley, and am familiar with current and
archaeological research problems and practices in the valley and elsewhere in California. My
concern in making the following comments has not been to criticize personalities or impugn
professional reputations. My only concern, and the only concern of the Antelope Valley
Archaeological Society, has been to insist on minimum standards of performance in carrying out
archaeological testing and mitigation, with a view to protecting the prehistoric heritage of the Antelope Valley. Archaeological resources are gone forever once destroyed. It is imperative that important archaeological resources in the valley not be obliterated without adequate mitigation measures being implemented. We are presently experiencing a crisis in the valley in this regard. In the case of the City Ranch Project, a number of sites in an archaeologically very sensitive area have been "processed" in a way which guarantees a significant loss to the archaeological heritage of the valley.

The Phase II report and other documentation submitted by Archaeological Associates make recommendations concerning the extent to which impacts on sites have been mitigated by archaeological data recovery done to date, and the need for further data recovery or impact avoidance. These recommendations and the data recovery work they are based on raise a number of concerns. Archaeological Associates has recommended further excavation as a mitigation measure at several sites. These recommendations are to be supported. However, in a number of other cases, the mitigation recommendations made are not adequate. It appears that unfamiliarity with local desert-margin research questions and methods, and/or an unwillingness of the project developers to adequately fund Phase II and further mitigation work, may have given rise to inappropriate data recovery and mitigation strategies.

As has been the case with other archaeological work done in the area by non-local firms, it is unfortunate that Archaeological Associates did not avail itself of 1988 and 1990 publication of the Antelope Valley Archaeological Society, its Occasional Papers No. 1 and 2, which provided further information on regional research problems in the valley, including several articles bearing on the project area. Mark Sutton's important review of Antelope Valley prehistory, published in 1988, was also not consulted. The foothill and rift zone area in the southwestern Antelope Valley, as this and other recent publications point out, is an extremely sensitive and important area in the study of Antelope Valley prehistory.

In several important respects, Archaeological Associates has not seemed completely aware of research problems and data recovery methods current in the Antelope Valley and western Mojave Desert. To begin with, we note that auger holes were relied upon very heavily both to test for subsurface site components at City Ranch and to provide mitigational data recovery. While these holes had a diameter of 9" rather than being of the 4" type recently used by LSA Associates for the Ritter Ranch Project, the objection to the way they have been used remains the same. These auger holes, excavated with a power auger, had no means of controlling vertical stratigraphy. That is to say, it was impossible to determine the depth from which artifacts found in the holes had come. This and the relatively small cross-section of the holes makes them completely inappropriate for mitigational data recovery. This approach is also not considered adequate for subsurface site deposit testing except to determine the boundaries of dense midden deposits. In coastal areas of California the presence of shell debris and other densely deposited midden deposits makes the use of auger hole transects to test for the
boundaries of shell middens practicable. However, in the context of Antelope Valley archaeology, even as a site boundary testing strategy - a means of identifying the edges of cultural deposits - use of auger holes is considered rather unreliable. Site subsurface artifact trash deposits on the desert edge are less dense than in coastal areas. It is the accepted practice in the Antelope Valley that archaeological testing of subsurface deposits and mitigational data recovery be carried out, at a minimum, with 1 x 1 mt. test units.

Of the 29 prehistoric sites in the project area, only seven were tested via the conventional method of use of 1 x 1 meter units excavated in 10 centimeter levels (for vertical stratigraphic control). Of these seven, only three sites had more than one 1 x 1 mt. unit excavated. At eleven of the sites, no subsurface testing of any kind was undertaken. This approach does not conform to accepted professional practice.

The laying out of auger holes in single-file transects across a site, as was done at various sites in the present case, reflects their traditional use as midden site "edge-finders", rather than as means of testing the central area of a site. Such central area testing will usually require some sort of non-linear distribution of test excavation units - random sampling is sometimes used here. In cases where auger holes are positioned in straight-line transects and located away from the most likely areas of subsurface deposit, it is not to be expected that they will yield much in the way of artifacts. The use of this linear testing pattern, rather than a more conventional non-linear deployment of 1 x 1 mt. units, at sites such as LAn-1746, LAn-1748, and LAn-7149, is not a very reliable way to test subsurface deposits.

This use of auger testing contributed to various judgements made about the significance of lithic and other artifact assemblages found during the initial site surveys. It was frequently assumed that they were only surface scatters and that they were associated with juniper exploitation. This is not the place to discuss the validity of these judgements. Suffice it to say that the variety of surface artifacts found at various of these sites makes it all the more important that careful testing, rather than any jumping to conclusions, be done.

It is also difficult to understand why a number of sites of special archaeological significance within the context of regional research problems - the petroglyph (cupula) site and the hunting blind sites - are treated as having no further research potential. As I have on other occasions pointed out to the City Planning Department, these sites are of very great importance in dealing with current research questions bearing on religious activities and hunting activities in the valley. About both of these issues considerable controversies have developed. Unaware of the debate and ongoing research concerning circular rock structures in the Antelope Valley, Archaeological Associates has assumed as a given fact that the so-called "hunting blind" features are all hunting blinds, and has failed to carry out any subsurface archaeological testing at nine of the eleven "hunting blind" sites. On top of this, the firm has recommended that no further mitigation or preservation action be taken relative to these sites, beyond photographing and mapping them.
These sites are significant within CEQA guidelines, and meaningful mitigation or preservation options are required to deal with them. Two other sites, one containing a bedrock mortor and another a cupule (petroglyph) complex, also were not subjected to any subsurface testing. This also constitutes a lapse in commonly-accepted professional archaeological testing practice.

It might be added that the documentation of historic sites within the project area also does not always satisfy current standards for such documentation. The fact that historic structures were in several cases not researched so as to identify date of construction is an indication of the problems which exist in this area.

It is not our contention that Archaeological Associates cannot carry out high-quality archaeological work. It is also not a source of pleasure to be in the position of having to call aspects of testing and mitigation procedures developed by colleagues into question. We hope that it is understood that our comments are intended as constructive contributions to problem-solving. We can imagine circumstances, far too common in cultural resource management work, where client pressure puts professional consulting firms in very awkward situations. We are certain that the difficulties alluded to can be ascribed to this sort of unfortunate situation rather than to inexperience or incompetence on the part of the contracted archaeological firm. We can sympathize with the difficult predicament that client-imposed time and budget constraints place consulting firms in. Nevertheless, the Antelope Valley Archaeological Society maintains that, in accordance with CEQA guidelines, sites within the City Ranch project area deserve to be mitigated via standards accepted for the Antelope Valley by professionals familiar with this area. We know that Archaeological Associates and other archaeological firms will not be allowed by their clients to do a good job unless such professional standards are insisted upon. Unfortunately, for too long the valley has been perceived by certain interests as a region where cutting corners on financing archaeological and other EIR work would go unnoticed and uncommented.

To summarize, we would recommend that the City require additional testing of a number of sites where such work to date has been inadequate. We would also request that it additionally require effective preservation of high significance cupule and hunting blind sites. Specific recommendations for specific sites are contained in Attachment A. Even the archaeological importance of the area and the sites, it is important that these areas be preserved as part of our prehistoric heritage. I know that the Antelope Valley Archaeological Society and its membership will be interested in working with the City to develop specific strategies to allow better site documentation and site preservation in the project area.

Responses: See response to Comment 11.b.
15. Commentator: David Bergstein, General Partner
Pacton Development, Black Hills Homes
6700 Fallbrook Ave., Suite 173, West Hills, CA 91307

November 18, 19

Comment 15.a. We are the largest property owners within the Sagebrush/Pacton Specific Plan, immediately south of the City Ranch Specific Plan area. The Sagebrush/Pacton Specific Plan encompasses over 1300 acres that are being Specific Planned at the request of the City of Palmdale. The area is to be annexed to the City at the time of adoption of the Specific Plan. The same procedure that is being followed by City Ranch. The City has also required that Valley Ranch, the Walden Property and the Kinkshita Property, all east of our Specific Plan area also prepare Specific Plans for their projects. All four of these properties take access and utilities through City Ranch. The Sagebrush/Pacton Specific Plan is presently in preparation and will be submitted to the City before the end of the year. Since the phasing for the City Ranch Specific Plan starts north along Elizabeth Lake Road and proceeds south, it will be necessary for Sagebrush/Pacton and all of the other major projects to either obtain easements for access and utilities or for City Ranch to build and dedicate all of the necessary access and utility connections at the beginning of the project so that the projects to the south can proceed. We have met with the City and the City Ranch developers to express our concerns and we are working with both of them to establish an equitable arrangement for the extension of access and utilities to our sites and the properties to the east.

However, since no conclusion has been reached and the City has made no commitment to help us obtain these connections, we must request that the Environmental Impact Report (E.I.R.) consider the consequences of these connections being unavailable through the City Ranch project. For example, Avenue S would have to be extended west along its present alignment and this would require extensive grading of a ridge before it entered the Sagebrush/Pacton site. Water service would also have to be connected to the north, across the Ane Verde community near Highway 14. Sewer service would have to be connected to the north, across the California Aqueduct, then east to Tiscott Subdivision and on down Rayburn Road. All other utilities would also have to be extended to these properties.

Responses: The Draft EIR assumes extension of utilities through the project site and provision of facilities as required for service to adjacent development projects (for example pages 5.233-5.237 and 5.281-5.285). The issue of phasing of related projects relative to the proposed project is primarily an economic concern, and is beyond the scope of the environmental analysis. Early implementation of infrastructure lines would not change the total requirements for, or effect of, facility improvements, and would not change the profile of significant impacts resulting from project approval.
Comment 15.b.- Since no commitment has been made for these necessary connections the EIR must address alternative alignments and the environmental costs of these alternatives. Failure to do so would compromise the completeness of the analysis. It is necessary, under the circumstances, to examine these alternatives to balance competing public objectives, to minimize environmental costs, and to prepare an effective monitoring program for the project.

The City has requested that the Sagebrush/Pacton Specific Plan and the other areas join City Assessment District 90-1 to provide an equitable funding mechanism for the construction of these other improvements south of Elizabeth Lake Road. The failure to secure easements or to have these connections provided when needed for our development and the developments to the east, would require these projects to find another way to secure access and utility connections. Therefore, the EIR should also consider the alternative of no further involvement in Assessment District 90-1 and the impact of this would have on the District and the City Ranch project.

Since the city is requiring a master plan for all of the projects in this area including City Ranch, Ritter Ranch, Sagebrush/Pacton and the other areas to the east, the City should arrange for a mechanism to secure the necessary access and utility connections to allow for an orderly pattern of development in the area with a minimum of environmental impacts. At a minimum the issues raised above should be thoroughly examined by the EIR, and reasonable alternatives be developed before certification as provided in the California Environmental Quality Act. These issues should also be reasonably addressed before approval of a development agreement to protect the City and the City's rights to assure these necessary connections.

Response: The project, as noted in response to Comment 16.a, is proposed with the understanding that utility and infrastructure extensions and easements necessary for development of adjacent properties will be facilitated. Details regarding infrastructure phasing relative to adjacent projects does not affect the environmental analysis, and will be addressed through review of individual development applications and development agreements, as appropriate.

16. Commenter: Albert Z. Praw, Senior Vice President, General Counsel
Kaufman and Broad Home Corporation
10877 Wilshire Boulevard, Los Angeles, CA 90024
November 18, 1991

Comment 16.a. The following are Kaufman and Broad's comments to the draft Environmental Impact Report ("EIR") for the proposed City Ranch Specific Plan ("Specific Plan"). References herein to paragraph and page numbers are to those paragraphs in, and pages of, the EIR.
1. Paragraph 2.c at page 2-20 — The additional permits and approvals which are to be processed with reference to the EIR, and which shall be included within the project, should include any development agreement proposed to be entered into by and between Kaufman and Broad as developer of City Ranch and the City of Palmdale, all subdivision tract maps, any and all conditional use permits, and any other discretionary land use entitlements necessary or appropriate for the subdivision, development or improvement of City Ranch substantially in accordance with the Specific Plan. Public Resources Code Section 21166 spells out the only circumstances which permit further environmental review. Absent such the circumstances, the processing or issuance of any discretionary approval for any project substantially in accordance with the Specific Plan is subject to the findings of the EIR.

Response: The Draft EIR (page 2.1) defines the proposed project (the proposed discretionary action requiring environmental documentation) as approval of the Specific Plan for the site. Other discretionary actions, including but not limited to subdivision tract maps, conditional use permits, state and federal permits, development applications and development agreements, will be subject to independent environmental review; since such applications have not as yet been filed, they are clearly not the subject of the Draft EIR, and further environmental review would be permitted under CEQA §21166.

Comment 16.b. 2. Paragraph 5.2.3 at page 5-12 — Both the requirement that aerial photographs be taken and submitted to the Planning Director, as well as the frequency of such submission, are unreasonable. The purpose of a monitoring program is to ensure compliance during project implementation. See Public Resources Code Section 21081.6. Project implementation for City Ranch involves continuous governmental involvement with the development of City Ranch. This involvement includes the inspection by City officials as to the compliance of construction in accordance with the plans and specifications previously approved, inspections by county officials wherever county (or district) facilities are utilized, approval of City officials in connection with subsequently applied for discretionary approvals, etc. The development of City Ranch is unlike the construction of a single factory where a single entitlement is obtained, and compliance with CEQA requirements is carried on within the confines of a closed room. Development of City Ranch will be open, continuous, and continually subject to governmental supervision. In light of these factors, the imposition of monthly aerial photographs is excessive.

Response: The requirement of monthly aerial photographs of the project site during construction (Draft EIR page 5.13) is not excessive. The open, governmental supervision and mitigation monitoring must be documented and such a record is best established through aerial photographs of the site. The cost is less than that of assignment of a City staff persona for continuous monitoring...
of construction activities, and provides the overview and record that a person on
the ground cannot establish.

Comment 16.e. Paragraph 5.2.3 also provides that future discretionary approvals "may include
additional conditions based upon City staff review of the Annual Monitoring Report." As
written, there is no definition as to the scope of the City staff's review which could result in
additional conditions being imposed on future discretionary approvals. As written, this
mitigation measure could arguably permit the City to abdicate its obligations under law in the
review and approval of future discretionary approvals. Secondly, to the extent the
implementation of this mitigation measure results in the imposition of any additional conditions
in order to address (a) environmental impacts which are identified in the EIR as unavoidable,
or (b) environmental impacts which were not identified in the EIR, such action would be
violative of CEQA. Finally, the implementation of this mitigation must be qualified so as not
to permit the City to abrogate or vitiate the terms of any development agreement entered into
by Kaufman and Broad and the City of Palmdale or the vested rights otherwise acquired with
respect to City Ranch. In other words, CEQA is not intended as a device by which the City
may subvert the entitlements or vested rights otherwise obtained by a developer in the process
of developing a project. This mitigation measure should be limited solely to identifying a
mechanism whereby (i) the failure of a developer to comply with the mitigation measures is
enforced, or (ii) additional environmental review is required because of the operation of Public
Resource Code Section 21166.

Response: The Draft EIR (page 5.13) requires that the applicant will perform
mitigation monitoring, as required by CEQA §21081.6. The lead agency is
setting forth in the Draft EIR (pages 5.13 and 12.1-12.49) the procedures to be
followed in carrying out this law. If monitoring reveals that mitigation measures
are not adequate because they are not being implemented or because they are not
effective, the lead agency reserves the right to revise the mitigation program to
achieve the desired result of reducing significant impacts to the extent feasible.
If the monitoring reveals impacts not previously anticipated, or if it indicates the
need for additional mitigation which in itself requires a discretionary action, then
this would be considered new information under CEQA §21166(b) or §21166(c),
and may require supplemental environmental documentation.

Comment 16.a. 3. Paragraph 5.4 and the "Implementation Schedule" appearing at Page 12.24
-- The discussion of "Project Impacts" fails to include a discussion of the potential number of
construction jobs which the development of City Ranch will produce. In addition, the concept
that a single developer bear the burden for the jobs-housing imbalance in any manner is an
unreasonable and unfeasible mitigation measure. The specific requirement that the developer
of City Ranch design guidelines for providing additional job opportunities is too vague,
overbroad and excessive. There is no identification as to the scope, nature or effect of City's review of any such design guidelines.

Response: The jobs-housing analysis included in the Draft EIR (pages 5.14-5.25 and Appendix C) assesses the long-term project effects on housing and jobs in the subregion. Temporary employment changes due to project construction will be considered by the decision maker during action on the proposed Specific Plan. The mitigation measure cited for reduction of air quality impacts of jobs-housing imbalance (DEIR page 5.172), clearly indicates to the applicant to make every effort to revise the land use program towards increasing long-term job opportunities on-site, in order to reduce the unavoidable significant adverse impacts of the project as proposed.

Comment 16.3. 4. Paragraph 5.5 -- There is not sufficient evidence to justify the requirement that "all potential buyers" in City Ranch be advised of potential seismic hazards. The EIR clearly identifies impacted and unimpacted properties, and a distinction should be made as to the purchasers of property within impacted lands and those purchasers of unimpacted lands.

Response: The Draft EIR (pages 5.54-5.55) indicates that avoidance of significant impacts due to geologic risk would require redesign of the project and may not be feasible relative to the proposed land use program, and therefore requires disclosure to all potential buyers. Specially impacted properties are identified in the Draft EIR (Figure 26, page 5.47) and are restricted from development of structures for human habitation (DEIR page 5.55).

Comment 16.4. With respect to the Implementation Procedure identified on page 12-10, we interpret the requirement for a slope maintenance plan as only requiring that an appropriate procedure be implemented pursuant to which each homeowner accepts the responsibility for maintaining the slopes located solely within the boundary lines of that homeowner's lot. If the recorded covenants, conditions and restrictions provide for this, the mitigation measure would then be appropriately implemented.

Response: The commenter's interpretation is correct.

Comment 16.5. 5. Paragraph 5.8.3 at pages 5.146 through 5.148 -- The evidence does not support any finding that the improvement of City Ranch Road east of Bridge Road is necessary in order to accommodate the traffic flows generated by City Ranch. The traffic study dated May 10, 1990 and updated August, 1991, prepared by Enso Engineering -- clearly establishes that the more dedication of City Ranch Road within City Ranch, when taken together with the improvement of the other infrastructure roadways described in the Specific Plan, is adequate to mitigate any adverse traffic impact created by City Ranch.
Response to Comments

The Draft EIR (page 5.148) clearly states that the cost of improvements to City Ranch Road east of Bridge Road shall be borne by the applicant and surrounding developers as determined by the City Engineer, and therefore will be relative to the share of each project in the cumulative need for such improvements.

Comment 16.b. With respect to Elizabeth Lake Road, between 20th Street West and 25th Street West, Table 15 indicates that even with the development of City Ranch, LOS C is still achieved.

Response: The Draft EIR (pages 5.146-5.148) does not call for mitigation measures on Elizabeth Lake Road; this facility is scheduled for improvement as a part of the proposed project during Phase I (DEIR page 5.145), per the applicant's information.

Comment 16.l. The mitigation measures identified on Pages 5-147 and 5-148 are overly broad and, to the extent that they are comprehensible, are excessive. These mitigation measures constitute a "shopping list" of actions which the City may reserve for future imposition, and are based upon worst case and inaccurate analysis of the traffic studies. For example, Table 17 contains traffic volume projections which are inconsistent with the projections in Figures 44 and 46. The authors of the draft EIR do not purport to establish a "nexus" between the described impacts and the appropriateness of the imposition of any one of the proposed measures, let alone all of them.

Moreover, the mitigation measure which provides that if the level of service falls below either the standard set by the Los Angeles County Transportation Commission Congestion Management Plan, or the policy set by the City's General Plan, the developer "shall implement improvements or services necessary to bring the roadway segments into compliance" is clearly violative of the Nollan requirement of "nexus". This mitigation measure imposes upon the developer the entire obligation to bring roadways into compliance irrespective of the specific project impact.

Response: The Draft EIR (pages 5.133-5.143) indicates locations and levels of impact due to project buildout. Draft EIR mitigation measures (page 5.147) require follow-up traffic analyses for individual development applications to ensure the proper phasing of facility improvements relative to land use growth. The Draft EIR establishes the nexus for overall levels of mitigation relative to project impacts; later studies will establish the nexus for developer requirements relative to specific components of the project. See response to Comment 2.e. The traffic volumes presented in Figures 44 and 46 are accurate. Table 17 will be corrected in the Final EIR.
Comment 16.J. 6. Paragraph 5.9.3 at page 5-173 – The mitigation measure that applicant shall participate “in any trip reduction programs adopted by the City for future development applications” lacks sufficient specificity in order to determine whether compliance with it is feasible.

Response: Area-wide trip reduction requirements to be adopted by the City (including but not limited to those of the Circulation Element and local compliance programs for the AQMP and CMP) will be formulated with feasibility and implementability in mind, since such reasonableness tests are required by law (Planning and Zoning Law §65089.4 and §65400(b)).

Comment 16.J. 7. Paragraph 5.10 at page 5-185 – The mitigation measure concerning temporary noise attenuation barriers lacks sufficient specificity in order to determine whether compliance with it is feasible:

Response: The level of specificity of mitigation measures for construction noise impacts is commensurate with the level of specificity of construction plans submitted for approval. Upon review of specific development applications, added detail with regard to identification of potential construction noise sources and sensitive receptors will result in more specific mitigation measures.

Comment 16.J. The mitigation measures with respect to the location of bedrooms and quiet living areas, as well as those applicable to two story residential units, are not supported, nor are they supportable, by the evidence provided in the EIR. To the extent that an acceptable Db CNEL is desired within the house, neither the location of rooms nor the height of the building, has a relationship to compliance with that standard.

Response: Agreed; the Final EIR will reflect this change.

Comment 16.J. The generally accepted exterior noise level compatible with residential development is 65 Db CNEL. The standard of 60 Db CNEL is only a target goal of the General Plan and cannot be currently imposed as a maximum in all cases.

Response: The General Plan objectives of 60 dBA CNEL in residential areas and 65 dBA CNEL at school sites is used in the Draft EIR (page 5.185) as guidance in developing mitigation measures.

Comment 16.L. 8. Paragraph 5.11.3 at pages 5-203 through 5-204 – Initially, we interpret the mitigation measure with respect to storage as being applicable solely to commercial properties. Secondy, there is no evidence to support a prohibition for temporary superpads, as distinct from mass graded “megapads”. With respect to the mitigation measure concerning the
undergrounding of all new and relocated utility distribution lines, this requirement should be limited to where, given the size of the line and expense of its relocation or undergrounding, the undergrounding is feasible.

Response: Since the Draft EIR (page 5.200) states that such storage areas are not allowed within 50 feet of any residential area, the measure clearly applies to non-residential uses. The Draft EIR (pages 5.187-5.200) documents the salient visual resources of the project site and surrounding areas as the basis for maintenance of natural slopes and ridges to the extent feasible and disallowing megapads and streets which do not follow the natural form of the land. Utility lines will be placed underground in accordance with the City’s Undergrounding Ordinance.

Comment 16.g. 9. Paragraph 5.13.3 at page 5-214 — The mitigation measure concerning the siting of structures and landscaping to maximize solar access is not set forth with sufficient specificity in order to determine whether compliance is feasible.

Response: The level of specificity of mitigation measures for solar access is commensurate with the level of specificity of project plans submitted for approval. Upon review of specific development applications, added detail with regard to identification of solar access guidelines will result in more specific mitigation measures.

Comment 16.g. 10. Paragraph 5.19.3 at page 5-247 — The mitigation measure with respect to the implementation of the findings of a radio communication needs study lacks sufficient specificity in order to determine whether compliance is feasible. Moreover, the EIR clearly reflects that the need for a radio communications center exists without the development of City Ranch, and, therefore, any mitigation measure relating to this item cannot be related to the impacts of the project.

Response: The Draft EIR (page 5.245) states that the project would exacerbate radio communications problems in the area, and therefore requires (DEIR page 5.247) the applicant to fund a pro-rata share of improvements required by the City’s radio communication needs study currently underway.

Comment 16.g. 12. Paragraph 5.21.3 at page 5-260 — The draft EIR states that the impact of City Ranch upon the fire department “are not considered significant”. Nonetheless, the draft EIR suggests mitigation measures which are vague, excessive and which do not take into account the effect of the proposed Fire District Fees. The imposition of these mitigation measures cannot be justified in light of the findings made with respect to the impact of City Ranch, and cannot be justified under the “nexus” requirement.

City of Palmdale - January 1992
State Clearinghouse 89-090813 - 47 -
City Ranch Specific Plan Final EIR
Keuffman and Brook Applicar
Response: The statement that fire impacts are not considered significant is based on the project being proposed to include much of the proposed mitigation as part of the development program. The mitigation measures set out the specific requirements to ensure that codes and criteria are met and that fire hazard risk is minimized.

Comment 16.r. 13. Paragraph 5.22.3 at page 5-268 — Initially, Table 135 incorrectly identifies the student generation factor for Antelope Valley Union High School as .30 when it is, in fact, .20.

Response: The student generation factor was only recently revised by the Antelope Valley Union High School District from 0.3 students per household to 0.2 students per household. Planning Department Staff was unaware of this revision until receipt of the comment letter for this project. Therefore, the Final EIR will be revised to reflect this change.

Comment 16.s. We understand the mitigation measures with respect to school to require simply that one or more agreements among the Westside Union School District, Palmdale School District and the Antelope Valley Union High School District and Kaufman and Broad with respect to the provision of school sites, the construction of facilities, and/or the payment of fees in lieu thereof be entered into on whatever terms the contracting parties agree. To the extent that such agreement entails dedication, acquisition, improvement, or payment of fees requirements which are greater than or less than those described on Pages 5-268 through 5-270, the fact that such an agreement is entered into is sufficient to reduce the potentially significant adverse impact with regard to schools to a level of “not significant”.

Response: The Draft EIR (page 5.268) indicates that, with mitigation, project impacts on schools would be reduced to "not significant".

Comment 16.t. 14. Paragraph 5.23.3 at page 5-279 — The mitigation measure that the applicant “construct the improvements for the proposed community and neighborhood park facilities shown in the Specific Plan as approved by the Director of Parks and Recreation” cannot be justified in light of the amount of park land and open space to be dedicated by the applicant to the City of Palmdale. The amount of such park land exceeds all City standards, regulations and ordinances, and there is no evidence provided in the draft EIR which would support a finding that the impact of City Ranch would not be fully mitigated by the dedication alone.

Response: Dedication alone of park land does not result in parks and recreation facilities available for the community's use; the mitigation measures included in the Draft EIR (page 5.279) correctly require the applicant to dedicate and
construct improvements for the proposed community and neighborhood park facilities shown in the Specific Plan, as approved by Parks and Recreation.

Comment 16.a. 15. Paragraph 5.24.3 at page 5-283 – The mitigation measure that the applicant construct a maintenance facility, and pay a share of certain maintenance equipment cannot be justified on the basis of the project’s potential impact. Although the draft EIR references the fiscal impact upon the City from the addition of new street mileage, the draft EIR does not appropriately consider the economic benefits to the City from the development of City Ranch which should offset any adverse fiscal impact resulting solely from the new street mileage. In addition, the draft EIR does not reconcile the fact that the City contracts with the County for the necessary services with the dual requirement that the applicant participate in an Assessment District for maintenance as well as provide the maintenance facility.

Responses: The economic benefits of the project to the City have not been demonstrated by the commenter to be in terms of funds which are used to fund street maintenance, as opposed to being committed or otherwise used or earmarked for other purposes, therefore the Draft EIR cites the need for the applicant to participate in an Assessment District to maintain streets, drainage facilities, parks, parkways trails and other public facilities. The analysis required for establishment of the Assessment District will ensure that funds are not double-counted between the Maintenance Facility and the District.

Comment 16.v. Moreover, the project provides less than 50% of the traffic on any of the major arterials within the project, and, therefore, the EIR fails to establish the relationship between this exacting and the impact of the project.

Responses: The Draft EIR (page 5.284) states that the project shall contribute a fair share to the capital and operating costs of facility maintenance. The pro-rata participation is applicable whether the project’s contribution to impacts is determined to be less than or more than 50%.

Comment 16.w. 16. Paragraph 5.29.3 at page 5-323 – The evidence would support the finding that a buffer zone of 1000 feet from the edge of the actual landfill area (as distinct from the proposed landfill property expansion boundary) would reduce the affected impact to “not significant”.

Responses: The Draft EIR (page 5.323) states that impacts with mitigation would be “not significant”.

City of Palmdale - January 1992
State Clearinghouse 89-090619

City Ranch Specific Plan Final EIR
Kaufman and Broad Applicant
17. Commenter: "Robert M. Galloway, Senior Vice President
Kaufman and Broad Home Corporation
10877 Wilshire Boulevard, Los Angeles, CA 90024
November 25, 1995

Comment 17.a. The crosssection (F) in Figure 8 on page 2-14 incorrectly shows the limits of the 80 ft. right-of-way.

Response: The Final EIR will reflect this correction.

Comment 17.b. In the second paragraph on page 2-16 titled City Ranch Road, the last sentence is incorrect. Reference to Figures 7 and 8 will show the proposed crossections for City Ranch Road west and east of Bridge Road, and the equestrian trail occurs only on the eastern portion.

Response: The Final EIR will reflect this correction.

Comment 17.c. The following errors appear in Section 5.8 - TRANSPORTATION of the EIR:
a. On pages 5-112 and 5-113, there are 6 references to posted speed limits where the traffic study identified the speeds as "prima facie". Although not posted, the "prima facie" speeds represent our estimate of the safe speed limit based upon current roadway conditions.

Response: The Final EIR will reflect this correction.

Comment 17.d. b. The source on Figure 40 refers to the "City Ranch South Specific Plan Technical Studies, July 1991". However, the last revision to the study was completed in May 1990, with an update to the existing traffic conditions included in a letter dated August 5, 1991.

Response: The Final EIR will reflect this correction.

Comment 17.e. c. Table 14, the "Adjusted Trip Generation Forecast", includes an error in the traffic study. The reference to "Police" should be removed from the second land use.

Response: The Final EIR will reflect this correction.

Comment 17.f. d. On page 5-141 (third item) the segment of Avenue S/Blitzerland Ranch Road should be specified. Based upon discussion, it appears that the test refers to Avenue S west of Tierra Subida. Furthermore, the EIR refers to various sections of Avenue S as Blitlement Ranch Road. This should be corrected.

Response: The Final EIR will reflect this correction.
Comment 17.g. On page 5-141 (fourth item) the text addresses the impact on Elizabeth Lake Road (west of Bouquet Canyon Road) of the combined City Ranch and Ritter Ranch projects. The model actually shows a negative impact from the City Ranch development. The increase of 300 daily trips is the result of the Ritter Ranch project.

Response: The Final EIR will reflect this correction.

Comment 17.h. On page 5-142, the sixth paragraph reads "all other deficient arterial segments would either have capacity problems regardless of the proposed project or...". Yet the last sentence of the fifth paragraph specifically identifies 10th Street West, north of Palmdale Boulevard, as an adversely impacted link. Since this link shows impacts regardless of the project and City Ranch represents only 4% of the total traffic, why was this link identified as a special impact?

Response: The Draft EIR does not cite this as a significant impact, and no mitigation measures are proposed for 10th Street West (DEIR pages 5.146-5.148).

Comment 17.i. Figure 47 shows Elizabeth Lake Road between 10th Street West and 20th Street West as a 0.3% project impact. Actually the impact is 0.18%, based upon Figures 44 and 46, and should be labelled ** (negligible).

Response: The Final EIR will reflect this correction.

Comment 17.j. On page 5-151, the first paragraph references Table 18, but should reference Table 15. We trust that these inaccuracies can be addressed and corrected in the Final EIR document.

Response: The Final EIR will reflect this correction.
Comment 1.a. Revise response to state: The statement in EIR will be amended to indicate that the mitigation measures proposed will "reduce impacts related to geologic hazards to the extent feasible." The conclusion expressed on pages 3.4 and 3.64 that geologic hazards exist and cannot be mitigated to a level of insignificance is valid.

Comment 1.b. Revise response to state: The Draft EIR specifies mitigation measures to address concerns relative to Seismic Shaking (page 5.57), including structural design in accordance with available standards for such a site-specific engineering design requirements for critical facilities, setbacks from fault traces, and special foundation zones, among others. Nevertheless, mitigation measures relative to Surface Fault Rupture (page 5.55) provide additional protection for Restricted Use Zones.

Comment 1.c. Revise response to state: The mitigation measures proposed in the Draft EIR relative to Seismic Shaking (page 5.57) do not differentiate among subareas of the site and therefore are not dependent on whether the rupture will occur along the most recent fault trace or elsewhere in the fault zone. Mitigation measures relating to development in the fault zone include compliance with Building Codes for Seismic Zone 4, specific engineering design requirements for critical facilities, setbacks from fault traces, and special foundation zones, among others. Nevertheless, mitigation measures relative to Surface Fault Rupture (page 5.55) provide additional protection for Restricted Use Zones.

Comment 2.a. Revise response to state: As indicated in the Draft EIR (Figure 43, page 5.132), depending on location between 9-13% of the project's daily trip generation would contribute to traffic volumes on the Antelope Valley Freeway (SR-14). Project incremental daily volumes on SR-14 would be 5,500 north of Avenue F; 4,710 north of Avenue S; and 5,300 south of Avenue S. The Draft EIR indicates that significant peak period lane deficiencies will not result from these volumes, and consequently, no mitigation is proposed.

Comment 2.b. Revise response to state: The comment is acknowledged. The final EIR will reflect the corrected values that the traffic volumes present in Figures 44 and 46 are accurate and Table 17 will be corrected.

Comment 3.a. Revise response to state: Mitigation measures in the Draft EIR (beginning on page 5.104) relative to Alkali Meadow and Transmontane Alkali Marsh ensure no loss of one-acre basis, designation of part of Planning Area 13 to open space, and the requirement for Army Corps of Engineers permit and California Department of Fish and Game Stream Alteration Agreement for encroachment into the Anenarde Creek area.
Comment 3.c. Revise response to state: The Draft EIR (pg. 5.77) indicates with regard to Hydrology impacts that one of the potential flood control basin locations is north of the Aqueduct in a wetland area. And that development in this area would require a 404 permit from the U.S. Army Corps of Engineers and a 1603 Agreement with the California Department of Fish and Game.

Comment 4.b. Revise response to state: The comment is acknowledged; the Final EIR (Section 5.17, Page 5-231) will reflect this correction.

Comment 7.g. Revise response to state: The Draft EIR (pag 5.147) does require submittal of a TDM plan before approval of development applications, as well as compliance with the TDM and LOS requirements of the LACTC Congestion Management Program under development. Mitigation measures specifically include the TDM component of project participation in the construction of a park-and-ride facility (DEIR page 5.147). The mitigation measures listed on page 5.147 will be modified to require the items stated under SCAQ comment no. 7.g. be included in the TDM plan.

Comment 7.h. Revise response to state: See responses to Comment 7.d. and 7.h.

Comment 8.a. Revise response to state: The Draft EIR (page 5.166) addresses construction-related air quality impacts, and provides mitigation measures (DEIR pages 5.171 - 5.172). As recommended by the District, the Final EIR will include the detail that soil binders or ground cover will be used to mitigate dust emissions for disturbed area left inactive for over 96 hours after grading.

Comment 8.b. Revise response to state: Details regarding construction phasing for this multi-year development project have not been provided in the Specific Plan with sufficient detail to assess construction emissions. Until that information is provided in the site-specific development applications, it is not possible to determine air emissions per-day analysis of fugitive dust. Since existing air quality levels monitored at the Lancaster station indicate exceedences of state and federal standards, it is not possible to ensure that the District's air quality significance thresholds are not exceeded on any one day through construction scheduling.
Comment 8.g. Revise response to state: Details re: reconstruction materials for structures within the project have not been provided in the Specific Plan with sufficient detail to assess the emissions from solvents, coatings and paving materials. However, Section 5.9.3 of the Final EIR will be amended to include the use of non-solvent-based coatings and buildings, as feasible; and encourage the use of high-solid water-based coatings, as indicated in Exhibit B of Planning Commission Resolution 91-114.

Comment 8.m. Revise response to state: As stated in the Draft EIR (page 5.147), the project will comply with the City General Plan and the LACTC Congestion Management Plan, both of which are under development. The City General Plan will provide policies regarding transit service and the Congestion Management Plan will set minimum transit service standards.

Comment 8.n. Revise response to state: The Draft EIR (pages 5.109 - 5.151, and Appendix G) present an adequate assessment of the access and mobility impacts of the project. The Draft EIR (page 5.147) requires submittal of TDM plans before approval of development applications, as well as compliance with the TDM and LOS requirements of the LACTC Congestion Management Program under development. Mitigation measures specifically include the TDM component of project participants in the construction of a park-and-ride facility (DEIR page 5.147).

Comment 8.p. Revise the response to state: The Draft EIR presents the air quality impacts of project and cumulative energy consumption in Tables 24 and 25 (pages 5.169 and 5.174), respectively. As requested by the District Section 5.9.3 of the Final EIR incorporates the following additional measures to reduce the air quality impacts of energy consumption: [the measures which follow have not been amended].

Comment 8.r. Revise the response to state: As indicated in response to Comments 8.g. - 8.q., the Draft EIR adequately analyzes overall project impacts due to construction activity, project operation, and increased vehicular trips. The Draft EIR states that, with mitigation, the project would result in unavoidable significant adverse air quality impacts. Section 5.9.3 of the Final EIR will be revised to indicate that each development application within the Specific Plan project area will be reviewed and those measures from the above list which are deemed appropriate by the Planning Director will be applied to that development application.
Comment 15.a. Revise the response to state: The Draft EIR assumes extension of utilities through the project site as provision of facilities as required for service to adjacent development projects (for example, pages 5.232 - 5.237 and 5.261 - 5.265). The issue of phasing of related project relative to the proposed project is primarily an economic concern, and is beyond the scope of environmental analysis. Early implementation of infrastructure lines would not change the total requirements for, or effect of, facility improvement and would not change the profile of significant impacts resulting from project approval. It is a policy decision for the City whether provisions are to be added into the Specific Plan to assure utility and vehicular access to adjacent undeveloped property.

Comment 15.b. Revise the response to state: The project, as noted in response to Comment 16.a., is proposed with the understanding that utility and infrastructure extensions and easements necessary for development of adjacent properties will be facilitated. Details regarding infrastructure phasing relative to adjacent projects does not affect the environmental analysis, and will be addressed through review of the Specific Plan, individual development applications, and development agreements, as appropriate.

Comment 16.a. Revise the response to state: The Draft EIR (page 2.1) defines the proposed project (the proposed discretionary action requiring environmental documentation) as approval of the Specific Plan for the site. Other discretionary actions, including but not limited to subdivision tract maps, conditional use permits, state and federal permits, development applications and development agreements, will be subject to independent site-specific environmental review since such applications have not as yet been filed. They are clearly not the subject of the Draft EIR, and further site-specific environmental review would be permitted under CEQA § 21106.

Comment 16.c. Revise the response to state: The Draft EIR (page 9.12) requires that the applicant will perform mitigation monitoring, as required by CEQA § 21061.6. The lead agency is setting forth in the Draft EIR (pages 9.13 and 12.1 - 12.49) the procedures to be followed in carrying out this law. If monitoring reveals that mitigation measures are not adequate because they are not being implemented or because they are not effective, the lead agency reserves the right to review the mitigation program to achieve the desired result of reducing significant impacts to the extent feasible. If the monitoring reveals impacts not previously anticipated, or if it indicates the need for additional mitigation which is itself requires discretionary action, then this may be considered ne...
information under CEQA §21166(b) or §21166(c) and may require supplemental environmental documentation. The City recognizes that subsequent EIRs for the Specific Plan cannot be prepared unless one or more events as described in §21166 exist. However, the environmental impacts of individual projects, such as commercial projects requiring a Conditional Use Permit, will need to be reviewed in compliance with CEQA; the impacts of such project have not been analyzed in the EIR for the Specific Plan.

Comment 16.d. Revise the response to state: The jobs-housing analysis included in the Draft EIR (pages 5.14 - 5.25 and Appendix C) assesses the long-term project effects on housing and jobs in the subregion. Temporary employment changes due to project construction will be considered by the decision maker during action on the proposed Specific Plan. The mitigation measure cited in the comment has been recommended for removal from the EIR by the Planning Commission.

Comment 16.e. Revise the response to state: The Draft EIR (pages 5.54 - 5.55) indicates that avoidance of significant impacts due to geologic risk would require redesign of the project and may not be feasible relative to the proposed land use program, and therefore requires disclosure to potential buyers. Specially impacted properties are identified in the Draft EIR (Figure 26, page 5.47) and are restricted for development of structures for human habitation.

Comment 16.f. Revise the response to state: The Draft EIR (pages 5.133 - 5.143) indicates locations and levels of impact due to project buildout. Draft EIR mitigation measure (page 5.147) require follow-up traffic analysis for individual development applications to ensure proper phasing of facility improvements relative to land use growth. The mitigation measure specifically relates to project impact by requiring project participants to share contribution to construction of off-site facilities. The Draft EIR establishes the nexus for overall levels of mitigation relative to project impacts; later studies will also establish the nexus for developer requirements relative to specific components of the project. See response to Comment 2.c. The traffic volumes presented in Figures 44 and 46 are accurate. Table 17 will be corrected in the Final EIR.

Comment 16.j. Revise the response to state: Area-wide traffic reduction requirements to be adopted by the City (including but not limited to those of the Circulation Element and local compliance programs for the AGHP and CNHP) will be formulated with feasibility and implementability in mind, since such reasonableness tests are required by law (Planning and Zoning Law §65000.4 and §65000(b)). However, the mitigation measure will be amended to replace the word "any" with the word "applicable."
Comment 16.a. Revise the response to state: The Draft EIR (page 5.260) indicates that, with mitigation, the project impacts on schools would be reduced to "not significant." However, the City can not rely on future agreements as mitigation for impacts to schools. The City must find that there is evidence, prior to certification of the EIR, that the agreements will suffice to mitigate the project impacts.

Comment 16.w. Revise the response to state: The Draft EIR (page 5.323) states that impacts with mitigation would be "not significant." However, reduction of the mitigation with regard to the distance of the proposed buffer is not warranted by the evidence in the document.

Comment 17.c. Revise the response to state: The text on pages 5.112 and 5.113 is correct as written.

Comment 17.f. Revise the response to state: The text on page 5.141 is correct as written.

Comment 17.g. Revise the response to state: The model does not attribute specific trips to specific developments. The change in trips on the roadway can not be assigned to the Ritter Ranch development.
Mr. Robert Galloway  
Kaufman & Broad Home Corp  
10877 Wilshire Blvd.  
Los Angeles, CA 90024

Dear Mr. Galloway:

Thank you for requesting my assessment of the comments and responses to the archaeological element of the "City Ranch Specific Plan EIR." It is clear to me that there are some fundamental misunderstandings with regard to a developer applicant's legal responsibilities.

Generally, California state law requires that prior to impacting an archaeological site, a developer must identify those resources which are significant and either: (1) avoid them or (2) mitigate impacts to them (see CEQA Guidelines, Appendix K: Archaeological Impacts; hereinafter "App.K"). The law does not require that testing be conducted in order to evaluate an archaeological resource. Nor does it require that a developer mitigate impacts to insignificant sites (App.K section 17) or assess the significance of a resource which will not be impacted by the proposed development (App.K section III.A). Finally, and perhaps most important, the law expressly provides for mitigation of impacts to those sites which cannot reasonably be avoided (App.K section V et seq.).

The purpose of the archaeological section of the above-referenced EIR was to assess the significance of those archaeological sites within the study area which will be impacted by development. Unfortunately, the bulk of the comments relating to review of the EIR address academic matters which are completely unrelated to the function of that document.

In my judgment, only one comment relates directly to the issue of the EIR's adequacy pursuant to the statutory guidelines. I refer to the view that auger testing, when used exclusive of other means, may result in failure to identify a significant archaeological deposit. I beg to differ. However, in the spirit of cooperation and progress, I suggest that your company would probably profit by compromising on this point. Therefore, I suggest that you agree to excavate 1 x 1 m. test units at those locations which will be impacted by development and which were previously tested by auger only.

In addition, I suggest that we agree to modify the report by adding specified citations. We can also add illustrations of those hunting blinds which are not currently illustrated.
As you know, the law provides that a developer is required to pay only one-half of the expenses entailed in mitigating impacts to significant archaeological resources (App.K section VII A). As a final measure of good will, I recommend that Kavara and Broad offer to pay all of the expenses entailed in any mitigative effort.

I hope that these comments and suggestions meet with your approval. Please do not hesitate to contact me in the event that you have questions or require additional information.

Very truly yours,

[Signature]

David M. Van Horn, Ph.D.
Director

DVM;file:cityr.ai
Reviewers

The list of comments which follows represents individual commentaries offered by Prof. Mark Quinn, Mr. David Earle, and Mr. David Chouet.

Comment #1: A regional synthesis of archaeological sites was compiled.

Response: While compiling such a synthesis may be highly desirable from an academic point of view, the EIR is not an academic document. At the project is not required to study resources which are located on properties the EIR may not possibly be affected by his project. Moreover, CEQA requires that assessment of the importance of a resource be based upon existing scientific questions.

Comment #2: There is disagreement with regard to the interpretation of some resources and artifacts. In particular, the rock circles are not hunting blinds.

Response: According to CEQA Guidelines, disagreement among experts is no basis for rejection of an EIR. It seems very doubtful that further identification of the function of the rock circles would ever be possible.

Comment #3: All cupule and hunting blind sites should be preserved.

Response: Current plans call for avoidance of the hunting blind sites and moving the cupule boulders to safe locations.

City Response

The City responses conflict with one another. They recommend that two 1 x 1 m. units be excavated at a series of sites and then recommend that only one such unit be excavated at some of the same sites. Thus, no analysis of this portion of the City response is possible. Other items are addressed below:

City Response #1: LAN-949 should be avoided by realigning the development access road.

Comment: While preservation is always desirable, the law requires preservation only when the avoidance alternative is feasible within the framework of development plans.

City Response #2: The rock ring (hunting blind) sites were recorded but not tested.
City Response #1: A subregional analysis including studies of work in the Amador-Verde-Sierra Felona Subregion shall be prepared.

Comment: This response deals with a matter that is not unrelated to the function of the subject EIR.
January 22, 1992

Ms. Laurie Lile
City of Palmdale Planning Department
38306 Ninth Street East
Palmdale, CA  93550

Re: Jobs/Housing Balance
City Ranch Draft EIR

Dear Laurie:

The Draft City Ranch EIR incorrectly calculates the employment opportunities provided by the City Ranch project at 889. That calculation is incorrect and should be revised to reflect the actual estimate 1248 jobs the project will provide.

The Draft EIR incorrectly identifies the proposed project to have 260,000 square feet of retail space when it is in fact 115,780 square feet (235,780 in Planning Area 3, Specific Plan Exhibit 22D, and 100,000 square feet in Planning Area 33). Assuming one employee per 490 square feet, the commercial areas will generate 685 employees.

The Draft EIR also did not correctly identify the number of education jobs generated by the project because it gave the project no credit for education jobs located offsite but generated by the project. At .80 students per household, the 4160 students generated by the project would provide 400 jobs based on one employee per 10.4 students (Westside Union School District).

While the Draft EIR correctly identifies 32 and 91 jobs, as a result of park and golf course operation and maintenance, it does not identify any jobs associated with the maintenance of the 419 acres of open space. The Draft EIR also fails to account for jobs associated with the maintenance facility or for the maintenance of streets, drainage facilities, or landscaping to include right-of-way.

The Draft EIR also mistakenly assumes only four jobs at the Fire Station to be located on Planning Area 14. The current similar facility located at 10th Street West and Ave P currently employs 11.
The Draft EIR provides no credit to the project for jobs associated with the Sheriff’s Department or Library. Using the current deputy per thousand ratio of .87, the project would provide 12 jobs with the Sheriff’s Department. The recently proposed mitigation measures for library services also credits the project with a demand for seven library staff positions (EIR 5.30.2).

In summary, the EIR should credit the City Ranch project with a minimum of 1248 jobs as well as others associated with the maintenance of public facilities other than parks. As the EIR identifies the number of jobs to be associated with the project as 1248 (EIR 5.4.2), the project’s impact on the subregions jobs/housing balance should not be considered significant.

Sincerely,

B. Duane Betty
President
Antelope Valley Division
Kaufman and Broad of Southern California, Inc.

BDB/1m
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1. Assumes 2.7 persons per dwelling (City of Palmdale)
2. Assumes 235,780 sq ft retail Planning Area 3 (Specific Plan Exhibit 22D)
   Assumes 100,000 sq ft retail Planning Area 33
   Assumes one employee per 450 sq ft (Urban Land Institute, 1988)
3. Assumes .80 students per dwelling
   Assumes 1 employee per 10.4 students (Westside Union School District)
4. Assumes 1 employee per 5 acres of park (Palmdale Recreation Department)
5. Assumes 0.125 maintenance employees per acre and 64 clubhouse employees
6. Fire Station #26 10th Street West & Avenue P
7. Assumes existing officers per 1000 ratio of 0.87 per EIR
8. Per City Librarian
January 23, 1992

Mr. Chairman Mayfield and Commissioners:
City of Palmdale
38306 9th Street East
Palmdale, Ca. 93550

Dear Mr. Chairman & Commissioners:

This is to forward some of Kaufman and Broad's comments concerning
the Staff Report and appendices dated January 15, 1992 for General
Plan Amendment 91-4, pre-zone 89-6, and Specific Plan 89-3.

Page 4, Summary of Staff Report - We object to the staff's
suggestion that the Commission's recommendation for approval of the
City Ranch GPA, Pre-Zone and Specific Plan be "contingent upon
approval of the Development Agreement." While we are hopeful about
and desirous of the eventual execution of a development agreement,
we believe that the project EIR and aforesaid entitlements
should be considered and acted upon independent of a development
agreement. The intents and purposes of an EIR and Specific Plan
are and should be separate and distinct from those of a development
agreement.

Simply put, an EIR should identify a project's impacts and
establish mitigation measures commensurate with identified
impacts, while a specific plan should establish a project's
development and design standards and implementation procedures. By
contrast, a development agreement usually provides certain
protections and assurances to a developer not available through
standard entitlements in exchange for extraordinary benefits --
typically in the form of improvements, facilities and similar
exactions -- to be gained by the jurisdiction involved. It is
because of the unique and extra benefits which normally accrue to
the parties involved that development agreements should be
evaluated apart from any other entitlements associated with a given
project. Certainly, there is no provision of law which would
support a requirement that Kaufman and Broad enter into a
development agreement as a condition of the City's approval of our
specific plan.
Page 10-11. Specific Plan Design - We are in concurrence with the principle which staff appears to be advocating here, namely that the specific plan may be improved by introducing greater potential for flexibility by the transferring of densities and mixing of product types within and among certain planning areas. We believe this may be accomplished with simple modifications to certain narrative portions of the proposed specific plan involving goals and policies, and would propose a framework for so doing the attached chart establishing maximum density changes.

Sincerely,

B. Duane Betty
President
## CITY RANCH MAXIMUM DENSITY CHANGES

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Mr. John Mayfield  
Chairman, Planning Commission  
City of Palmdale  
18106 9th Street East  
Palmdale, Ca. 93550  

Dear Mr. Chairman:

In response to certain mitigation exactions contained in the Draft Environmental Impact Report for the City Ranch Specific Plan and Staff Report, we hereby submit our concern and objections.

- **Sheriff's Station** - The staff report for the subject EIR has set forth that City Ranch along with Ritter Ranch be subject to a pro-rata exaction for the construction, staffing and equipment for a Sheriff’s Station. Presently, the Los Angeles County Sheriff’s Department serves as the contract law enforcement agency for the City of Palmdale, the City of Lancaster and serves without contract all of Los Angeles County.

The Sheriff’s jurisdiction is a regional service extending east to the San Bernardino County line, north to the Kern County line, west to the Interstates, and south to Santa Clarita.

This exaction request asks two projects to pay for a regional service that extends beyond not only the boundaries of the project but the boundaries of the City of Palmdale into the county which already receives all the City of Palmdale property tax revenues without any return contribution for law enforcement service.

The City of Palmdale is already paying twice for said law enforcement service and the exaction asks the applicant to pay three times.

The EIR establishes that City Ranch will increase the total law enforcement related calls by five percent. The mitigation in the EIR sets forth an exaction of $5.2 million or sixteen percent of a regional station.
Library - The staff report of January 20th regarding the subject EIR redefines and requests a mitigation exaction for library services which were not included in the original EIR. The mitigation set forth in the staff report establishes a level of financing on a per dwelling unit average that is eleven times greater than any fee being discussed in the City of Palmdale General Plan process to date. This exaction is clearly beyond any nexus test and outside the realm of reasonableness.

Fire Department - The subject EIR mitigation exaction of City Ranch providing for the land purchase and construction of a fire station for the L.A. County Fire Department, coupled with the purchase of a 12,500 gallon per minute pumper truck and fully equipped paramedic squad, stems from a request by the Department. The request was based on a proposed .18 cent per square foot developer fee to be enacted City-wide and County-wide. The facilities were clearly intended to be in-lieu of that amount. To date this has not been approved and is not exacted from any other source. The County of Los Angeles Fire Department derives significant revenue from the City of Palmdale property tax base to be spread across a County-wide base. Likewise the fire service from this facility will extend far beyond the boundaries of the City Ranch project. This exaction request is not a mitigation with any nexus or reasonableness as it is a multiple (3 times) tax on the future homeowners of the project.

Maintenance Facility - The City Ranch Specific Plan Environmental Impact Report sets forth a mitigation exaction for the construction of a City maintenance facility in the project coupled with the provision of land (10 acres) and equipment. This facility and equipment will service an extensive area outside the boundaries of the subject project. The exaction reflects a multiple of 5 times the per capita amount spent on maintenance in the City of Palmdale. This multiple exaction far exceeds the parameters of reasonableness and does not in any way reflect nexus.

Sincerely,

B. Duane Betty
President

BDBits