TO: Mike Behen, City of Palmdale  
FROM: Roland Genick  
DATE: 03.29.2019  

SUBJECT: City Preferred Vertical HSR Alignment

Background

Over the past several months the City of Palmdale (CoP) and the California High Speed Rail Authority (CHSRA) have worked collaboratively on a number of potential vertical alignments for a new HSR rail alignment through the CoP. Over the course of that process it has become apparent that two components of the City’s overall Station Area Plan (SAP) and the resulting Palmdale Transit Areas Specific Plan (PTASP) matter most with respect to how the new HSR alignment engages the City. As a result, the CoP has established two main goals that any HSR alignment through the City needs to achieve:

- Provide a safe and comfortable, east-west connection across the HSR alignment along Avenue Q and Palmdale Boulevard for all users. This connection needs to be of high Urban Design quality and particularly address needs for bicyclists and pedestrians
- Deliver a high-quality passenger experience and overall Urban Design experience for users approaching the station from it’s main public plaza at 5th Street and Avenue Q3

Discussion

To achieve the goals established above, the CoP has explored potential alternative vertical alignments to those currently under consideration by CHSRA. The alternatives explored were focused on reducing the amount by which Avenue Q and Palmdale Boulevard need to be lowered to cross underneath the HSR alignment, and on achieving a more intuitive passenger experience by providing a “below track” passenger concourse at the station. This memorandum transmits two alternative alignments as well as a composite illustration of how the proposed alternative alignment compares to the currently proposed CHSRA alignment. It also transmits two alternate longitudinal sections for Avenue Q and Palmdale Boulevard, illustrating the benefits of their shallower profiles. Lastly it includes pictures of a sample underpass in the the City of Belmont in California that might serve as an inspiration.

Specifically, this Memo transmits:

1. A depiction of the currently planned CHSRA alignment for reference (Existing Alignment - CHSRA - 2019.03.29.pdf)
2. A conceptual alternative alignment maximizing east-west connectivity along Avenue Q and Palmdale Boulevard. This alternative pushes the HSR alignment to an elevation that allows Avenue Q and Palmdale Boulevard to stay as close to existing grade as possible while still respecting constraints by CHSRA, UP, and others. (Alternative Alignments - Depressed Plaza 1B _2019.03.29.pdf)
3. A conceptual alternative alignment that balances interests of the CHSRA with inerests of the CoP. This alternative lowers Avenue Q and Palmdale Boulevard as needed but elevates the HSR alignment to levels that make this lowering compatible with the safety and urban design goals established by CoP. (Alternative Alignments - Depressed Plaza 1A _2019.03.29.pdf)
4. A composite section that illustrates the differences between the CoP and CHSRA alignments. This exhibit illustrates that the suggested changes are minor, but are exercised in a way, and in locations where they truly matter. *(Alternative Alignments - Parsons vs CHSRA_2019.03.29.pdf)* Specifically, it illustrates:
   - The difference in vertical alignment at Palmdale Boulevard is minor (6’)
   - The profile of the station is virtually identical
   - The difference in vertical alignment at Avenue Q is negligible (1’)

5. Sample photographs of bridges similar to those envisioned for the HSR crossings at Avenue Q and Palmdale Boulevard within the City of Belmont. *(Ralston Crossing – City of Belmont)*

**Conclusion**

To achieve the goals established by the CoP, the vertical profile of a HSR alignment currently contemplated by the CHSRA will need to be modified to adequately address east-west connectivity, urban design, and quality of user experience. Based on a comparative analysis of the alignments currently under consideration, CoP establishes the following requirements that need to be met for any HSR alignment through the City:

- Bottom elevation of any bridge structure across Palmdale Boulevard needs to be a minimum of 7 feet above existing grade.
- Bottom elevation of any bridge structure across Avenue Q needs to be a minimum of 10 feet above existing grade.
- Access to any HSR platform needs to be from a below track passenger concourse.

Adhering to the minimum requirements above will allow for the delivery of a HSR station that is consistent with the vision established under the Palmdale HSR SAP.
TECHNICAL WORKING GROUP (TWG)  
MEETING #7  
Phone and WebEx | 03-28-19 – 10:00 – 11:30 AM

1 Opening Remarks

Welcome

Mike Behen provided introductory remarks, thanked participants for their time and welcomed everyone to the meeting.

Agenda

Roland Genick provided an overview of the project’s status and meeting agenda; Major goals for the meeting were an agreement on the preferred conceptual vertical alignment and roadway circulation network.

2 Project Updates

CHSRA

Michelle Boehm provided a status update of the HSR program. HSR is moving forward, with a focus on an initial operating segment of 170 miles from Merced to Bakersfield. Broader goals for the statewide program are still in place. Goals for the Southern California program over the next 3-5 years will be to complete the environmental documents currently underway. Revised Business Plan and Project Update Report will be available May 1, 2019.

Schedule

Project milestones over the next year include the following:
- City and TWG review of draft PTASP; Community Workshop May 2019
- Final review by City and TWG of draft PTASP July 2019
- Final TWG and Community Workshop September 2019
- Presentation of PTASP to Planning Commission October 2019
- Presentation of PTASP to City Council November 2019

Outstanding Deliverables

Multi-Modal Access Study
Value Capture Strategy
Final PTASP
Illustrative Site Plan
Conceptual Station Rendering (surrounding station area)

3 Technical Discussion

City Preferred Vertical HSR Alignment

Critical components of the vertical alignment will be east-west connectivity, passenger experience, minimizing visual impacts and an emphasis on urban design.

Illustrations with existing grade conditions for HSR alignment shown first, followed by overlay of City preferred alternative alignments with suggested modifications/improvements.

Comments:

MSchroll: UPRR will need to know why the City cannot do an over pass over UP
RGenick: We will provide sufficient rationale regarding the proposed alternative alignment
MBehen: I think it’s important to note that this is the first time HSR has seen these alternatives; In addition, there will need to be consideration for terminus of the east-west connection coming from Las Vegas.
RGenick: Correct and we understand HSR will need time to analyze this further. At this time, our concepts are preliminary in nature and focused on improvements to east-west connectivity and the passenger experience.
RPoston: What happened to the trench concept?
RGenick: We were not able to come to terms with that alternative. Many factors were involved in that decision; we can discuss in further detail following this meeting.

MDieden: I have concerns regarding maintaining urbanism in this proposed alignment. Walkability, bikeability and connectivity will be affected. In particular, women do not feel safe walking underneath structures.

RGenick: Right now this is just a proposal, the decisions for implementation will be made collectively. We are very sensitive to that connectivity (example of San Mateo/Belmont bridge shown and discussed).

**Multi-Modal Access Study / Circulation Network**

Plan is being revised based on comments received from the City. Once we have an agreement on the vertical profile, the plan will be updated with pertinent information on connectivity, public transit circulator, parking and other related components.

**Palmade Transit Area Specific Plan (PTASP)**

The PTASP will replace the existing Transit Village Specific Plan. Useful information from TVSP has been retained and unusable information is being rewritten. Two chapters are completely new (4&5) due to the change to a form-based code. Highlights of chapters 4 and 5 provided.

Comments:

RPoston: Are we considering space for parking structures here? Also, I don't see any design concept for the convention center in this area.

RGenick: We have not identified a specific area for the convention center within the PTASP.

MBoehn: We have a different location for the convention center identified, which is not in the core of the station area.

AMack: That does raise a good question on parking. Has the parking and ridership been factored into the station planning in regard to the assumed train boardings on the initial phase with connectivity to Metrolink?

RGenick: We are currently allowing for the same amount of parking that HSR is accommodating.

AMack: We need to reconcile whatever that parking number is with a reasonable parking assumption for the ridership study that we have jointly funded. That should be accounted for in this plan.

RGenick: As part of the additional services that the City has funded, we are in the middle of developing a joint programming document. This includes overlaid parking requirements and select station accessory function requirements.

AMack: The TOD will come in phases. At the point where that surface parking gets converted to structure, there may be a way to address it in the confines of a plan that is already mature.

MBoehn: We have laid out parking based on the HSR ridership models, but it is all surface parking. There is the very real possibility to do the phasing kind of parking that Andrew mentioned.

**Value Capture Strategy**

We will be updating this document based on the final identified land uses. The document outlines likely development based on current development demand and proves that the land use plan can accommodate that demand. It also provides discussion of potential strategies on how the City might be able to capture some of the value to reinvest it into the infrastructure.

**Concept Station Renderings**

Review and highlights of conceptual station area renderings. There are four key components: consolidated programming, illustrative site plan, integration into surrounding development and urban design vision. Based on project survey data, the community is open to suggestions and a vision on styling of the area. The element the City is in the best position to shape is the public amenity component.

**Information Required**

Legible engineering concepts for the preferred vertical alignment to be provided to the group for analysis.

Comments:

RGenick: If it's okay with the City, we can distribute the documents in an email to the entire group.

MBoehn: UPRR, Metrolink, HDC and HSR would need to review and then we should have a separate meeting with an engineering focus so that everyone can ask the questions they need to ask and bring their requirements to the table.

MSchroll: UPRR needs to see the plans well in advance so that we can do a thorough review.

RGenick: We will get them circulated quickly. Just to be clear before we send these out for review, if the approximations in dimensions change 1 or 2 feet in the process, that is immaterial to what we are doing. If a dimension needs to change by 12-13 feet vertically, then that is where we need to have a discussion. We only want to change what matters. We are looking at big picture and the rest will be for engineering to handle.

MSchroll: Requests clarification of comments from HSR regarding the Environmental Documents, both for the Palmdale section and other segments.

MBoehn: We plan to release our draft for this section, Bakersfield to Palmdale, in late summer 2019. There is still a lot of work to be done on that document so that would be the earliest you will see the draft ED. Then it would go through the regular hearing process, receive comments and from there we will prepare the final, which we anticipate...
will take a year. We are looking at the second half of 2020 for the first finalized ED. We also have the Palmdale to Burbank section, which is probably last in the queue. We anticipate a release of the draft sometime in early 2020, and then a year from then the final would be completed in the first half of 2021. We have Burbank to LA, which will come after Bakersfield to Palmdale, probably late fall of 2019 for the draft and then a year from there, late fall 2020 for the final. Then we have LA to Anaheim, which we have been in a lot of discussions with other operators on, similar to what I envision the discussions for this station will be, so we have pushed that document out and we are looking at the first half of 2020 for the draft document and then completing that in the first half of 2021, most likely in the summer because there are some really complicated issues that we are working through. We are looking at being done at the end of 2021 with final environmental documents for the four phase 1 Southern California sections.

GRomo: I didn’t see anything in the concepts regarding connectivity with buses. Is that something you will be addressing at the June 2019 meeting?

RGenick: Yes, it is part of the Multi-Modal Access Study and the vision is that the bus services that are happening at the current transportation center will be moved to just north of the station plaza. This will also be addressed in the Regional Transit Plan.

Next Steps and Action Items
- Distribute engineering drawings to group
- Schedule technical focus meeting
- Freeze vertical HSR profile
- Finalize roadway circulation
- Public Meeting on May 29th
- TWG meeting June 2019 focused on PTASP
- Interviews with City Council/Planning Commission in July 2019
Alignment Alternative 1
"Sierra Hwy, Avenue Q and Palmdale Blvd. Crossing at Grade"
2016.06.20

Alignment Alternative 2
"Avenue Q and Palmdale Blvd. Crossing at Grade"
2018.10.31

Existing Grade
Proposed Alignment

Station Platform
290' South of Avenue Q
Length: 1410'

Virgin / XpressWest Train

LIMITS OF INFORMATION

CHSRA Proposed Alignment

Platform Track Profile
Express Track Profile

27.5'
16.5'
9'2"
Alignment Alternative 2
"Avenue Q and Palmdale Blvd. Crossing at Grade"
2018.10.31

Alignment Alternative 1
"Sierra Hwy, Avenue Q and Palmdale Blvd. Crossing at Grade"
2016.06.20

Current CAHSR Alignment
Avenue Q and Palmdale Blvd. crossing elevated over HSR
2016.05.06

Platform Track Profile
Express Track Profile