
Subject: Technical Team Meeting # 6

Client: CDOT Region 1

Project: I-70 Peak Period Shoulder Lane

Project No: 215164

Meeting Date: October 28, 2013

Meeting Location: CDOT Golden

Notes by: Lorena Jones

ATTENDEES: See attached sign-in sheet

DISTRIBUTION: Attendees, Technical Team Members, Project File

INTRODUCTIONS AND OVERVIEW

Steve Long opened the meeting and welcomed everybody.

Project Schedule

1. Concept of Operations Report is scheduled for late fall 2013.
2. Preliminary design meeting is scheduled for November 2013. This meeting is the Field inspection review, which means the design is at 20% to 30%.
3. Environmental Analysis is expected to be completed in January 2014. Some analyses have been completed. We are making good progress.
4. Open to traffic in July 2015.

Other Project Efforts:

1. RAMP Recommendations—These were approved by the Transportation Commission.
2. Traffic and Revenue—Level 1 modeling toward the end of the year.
3. Twin Tunnels—CDOT is looking at widening the westbound bore of the Twin Tunnels in the coming months. Some efficiencies are recognized by using the same team currently working on the existing project. Identifying funding to see if it is something worth pursuing for the 2014 construction season
4. AGS—Nothing new to report.
5. CCC Transportation Visioning—The kick-off meeting was held.

Parking Lot

1. Stephanie White summarized the items in the parking lot. Items that are grayed out are for future discussions. Topics that are currently in discussion are:
 - a. Interim definition
 - b. Highway 103 bridge

- c. Enhancement opportunities along creek (revegetation, etc.)
- d. ROD Compatibility

Definition of Interim

1. Consists of two parts:
 - a. Time frame (number of years)
 - i. CDOT commits to reassess the PPSL in 2020 corresponding with ROD reassessment.
 - ii. CDOT will continually collect data annually and conduct a reassessment prior to 2020 if needed.
 - iii. Data that will be collected:
 - I-70 Travel Time Reliability
 - I-70 Traffic Volume and Traffic Type
 - I-70 Safety/Crash Data
 - b. Agreement relative to days/hours of operation
 - i. PPSL will run as needed between 11:00 a.m. and 8:00 p.m.
 - ii. Saturdays and Sundays from December through March and from July through September.
 - iii. Holidays throughout the year.
 - iv. During emergency closures of general purpose lanes when necessary (not included in normal operation count).
 - v. PPSL operations are weather dependent.
 - vi. CDOT commits to run PPSL as described above and not to exceed 20% of the annual days or 7.5% of the annual hourly time.
2. Documentation will be needed through:
 - a. An MOU with FHWA. The MOU is currently being drafted for review by FHWA. Technical Team review is anticipated by November/December 2013.
 - b. A Form 464 (Variance Package submitted to FHWA for approval).
 - c. The Concept of Operations Report.
3. Who is doing data collection? Someone here at the CDOT Traffic Operations Center would collect data.
4. With weather dependent—do you mean if the weather is bad with heavy snow? Yes, if you can't see the lane lines or if snow removal issues are a concern.
5. Who would that information be available to? It hasn't been determined.

6. Would be nice to have this information somewhere so people know what is coming; especially given that this impacts CCC emergency services.

ROD Compatibility

1. David Singer: There was discussion earlier about how this project fits and how it is compatible with the ROD. As long as it has its own logical termini and its own independent utility, as long as it does not preclude the ROD, FHWA is still comfortable with this separate action interpretation. We have this in draft form, and it's at FHWA with their counsel, and we hope to finalize it and have it for this group for review.
2. Cindy Neely: Not sure if this question belongs to this Technical Team. The group should know that the CCC legal counsel has some difficulty with this and would prefer the project be a Tier 2 project, because the ROD does provide for a non-operation, non-infrastructure improvements. The CCC legal counsel would probably want to discuss this with FHWA's counsel. It does not belong to the Technical Team but just want to bring it up to the group.
3. Steve Long: Do we still need a CatEx? Gina McAfee: Yes, we still need a CatEx
4. Cindy Neely: The ROD has a set of mitigation that we agreed to. But essentially you have relieved yourselves of that responsibility by making the PPSL project as a separate action, that's why the CCC legal counsel would want to discuss it with FHWA's legal counsel.

Issue Task Force Meetings:

1. SH 103 Task Force meetings were held October 11, 2013 and October 24, 2013.
2. Section 106 Issues Task Force meeting was held October 8, 2013.

CSS Tracking Schedule

The items shaded in blue on the schedule are items we have discussed. Was going to talk about drainage today, we slid it to the next meeting. Interim is still not done, so we continue to talk about it. We want to make sure the group has the latest information, so we always talk about this schedule and let the group know of any changes.

Glossary of Terms

Nothing was added to the Glossary of Terms recently.

CSS Process

1. No new items were added to this chart.

Widening Median Versus Creek

1. Preliminary Wall Summary: Existing walls are included on the list so that we know all the walls that currently exist. This list is based on the last Technical Team meeting where we talked about where the retaining walls were. The table shows total length of the walls and total square feet and height of exposed wall.

2. The Design Team looked at the Dumont and Fall River locations and decided to go toward the creek in these locations because of drainage issues.
3. Between Dumont and Fall River, we can better control the drainage down the slope by putting a retaining wall. There is no vegetation in this area due to mag chloride.
4. No wall numbers for the SH 103 interchange yet.
5. For total number of walls, if you take off the existing wall, the new wall would be 3,000 feet, which is considerably down from where we started.
6. The reason for going to the median or creek was shown on the screen.

Emergency Response Strategies

1. Staged assets—light duty vehicles and courtesy patrol
2. Manned Traffic Management Operations—continuous camera coverage; traffic monitoring; facilitation of dispatch; dedicated staff to corridor
3. Active traffic management (ability to close the lane through technology)—cameras, signs, person

SH 103 Interchange

1. At one time we labeled this as SH 103 bridge, but after we determined that there is so much more here than just the bridge, we decided to rename this as SH 103 interchange, because it does not only impact the bridge but the whole interchange. Two SH 103 Issue Task Force (ITF) meetings were held. Steve gave a summary of what came out of the ITF meetings and directed the group to the charts hanging on the walls outlining the items that came from the ITF brainstorming meeting.
2. Heard that there are some concerns today of how this greenway park area works. If we had an option or choice to do something with it, how do we impact it?
3. Changes were made to the Community Concept Diagram (that was included in the today's presentation) after it was distributed last Thursday (10/24). Kevin directed the group to the changes on the screen.
4. If we go to the north, toward the Town, this is a very tightly constrained spot. Three options—widen north, widen south, or split. Five feet to 12 feet of widening that we probably have to make up somewhere. Widening to both sides would not make a lot of sense. Started with widening to the north—need about five feet or six feet, move the highway's centerline to the north some, and really impact Water Street and the ability of the town to park on Water Street. Widening to the south would impact the Water Wheel park. There would be a lot less impact if we went to the south. Widening is slightly less if we go to the south. This opened up an opportunity about how to enhance the park area.

5. Potential Park Enhancements: There is very steep access down to the creek; very loud because it is right next to I-70 and the on-ramp. There is a chain link fence mainly because the banks are so steep. By virtue of what elevation we set the Greenway path, we might be able to lessen the noise. If we lower the trail four feet lower than it is today, you could literally set the trail at 100-year flood level. Moving on farther west, there is the merge from SH 103 to EB I-70, literally right at the pinch point. Very little space here, at the same elevation as the interstate. Illustration shows the 10-year and 100-year flood. If we lower to the 10-year elevation and the roadway slid over, a four-foot wall with a combination of a solid barrier would help with the noise issue as well. If we are thinking about aesthetic guidelines, here is where maybe we use a solid barrier rather than a Type 10 barrier.
6. As we start getting closer to the actual park itself, there is a lot of opportunity. Farther east, the trail naturally starts to descend down to underneath the bridge; close to Idaho Springs City Hall. Again, we can look at lowering the trail.
7. Other trails that go along the creek like downtown Boulder, you go under Broadway, they are probably below the one- to two-year floodplain, maybe you don't need a chain link fence if the slopes aren't as steep. Lowering the trail would not only alleviate the noise but address the accessibility to the creek. There is some real justification in making access to the creek safer.
8. Conceptual Site Plan map: Shifting the interstate to the south—what opportunities does that create and do we still have a viable park enhancement? Kevin Shanks discussed the conceptual site plan on the screen. We could include historic interpretation for the mining in the area. Create sort of a focal point. Idea that instead of just putting up a wall, we can do some sort of interpretation in this area. Opportunities for a garden; we could install riparian vegetation along that edge and reconstruction of the banks along that edge. Right now, there are a lot of weeds on the steep bank. When it is so steep you don't get native vegetation to grow.
9. Conceptual Wall Elevations—There is a solid barrier that is not a Type 10. Creating more of a visual separation from the interstate. Wall can be interpretive with some items that explain the aquatic ecosystem of the creek. For the other wall, we might do mining interpretation using the same materials. Narrowing this section up four feet to five feet doesn't impact our opportunity to make some enhancements to the park.
10. We felt this is a unique situation; it is legitimate to have some unique walls in this location. We could explore a gabion interpretive wall, stamped concrete; this is just a concept. For the engineering side, there is a sewer line here that is really shallow that will need to be incorporated into the design.

Bridge Options

1. Reuse of existing bridge—first option.
 - a. Started first looking at the area in context and what's around there and how the area is being used—traffic phasing and pedestrian phasing; trail to SH 103 and trail toward the park; what we need to accommodate during construction. Currently, structure is a four-

- span structure. To fit in the PPSL lane, we need to remove one pier. Current bridge sufficiency rating is 62.
- b. Would not be able to change the profile of SH 103. Would have to lower I-70 in order to get adequate vertical clearance.
 - c. Width: Inadequate sidewalk and shoulders; phasing challenges—only one lane; dangerous pedestrian movements.
 - d. Structure: North half is older and weaker than the newer south half.
 - e. Lower I-70: Sump condition is lower than 100-year flood event.
 - f. “Band-Aid” look—not aesthetically appealing.
 - g. Full closure: two months.
 - h. Phased construction: six to nine months
 - i. Increased construction duration risks: retrofits; more traffic control
2. Clear span—second option
- a. Raise the elevation of SH 103 profile 1 foot (+) more than two-span—more impacts to ramps and bridge over the creek.
 - b. Requires full closure of SH 103.
 - c. Costs five times more.
 - d. Increase construction time twice as long (9 to 12 months)
 - e. This type of bridge cannot be widened in the future.
3. Two-span—third option
- a. Meets current load and safety standards.
 - b. Allows SH 103 to remain open during construction.
 - c. Improved pedestrian movements and safety.
 - d. Improved shoulders and added turning lane—facilitates future development (access to AGS)
 - e. Improved aesthetics (future discussions)
 - f. New span configuration allows for future flexibility.
 - g. Full closure of the bridge for two months. If you want to access the southern part of SH 103, you would have two miles of detour for those two months. Want to keep after spring break, do the main part of construction during that time period (first of April through June) to minimize traffic impacts. The ramps would remain open for access. At some point, there will be work on the ramps but it would not be for as long as two months.

- h. Phased construction (six months to nine months)
- i. Could other things be done during that period? Yes.
- j. Aesthetic Ideas: city seal and name
- k. Trail connectivity
- l. Art Ballah asked about restrictions on I-70 itself. Tammy Heffron replied impacts to I-70 would be minimized. We would phase traffic keeping the same number of lanes open all the time. There will be night closures when setting girders, but will be very short closures. We should not have height restrictions.
- m. Cindy Neely suggested adding restrictions to our list. She asked about other things that would be happening on the road as the bridge is being rebuilt for two months.
- n. Nicolena Johnson suggested the team communicate with CCC Road and Bridge as they have a lot of construction activities going on.
- o. Cindy Neely agreed and stated that at some point the Team needs to sit down with CCC Road and Bridge and put this topic on their agenda. Steve Long asked Cindy if she could assist the Team in setting up this meeting with CCC Road and Bridge.
- p. Need to coordinate with the rafting community. Will they be affected by all this construction? Eventually, yes.

I-70 Bridges

1. Outcome from meeting with FHWA:
 - a. No widening required on bridges carrying I-70. Would leave structures as they are today and not have to widen them.
 - b. East Idaho Springs bridge requires lowering of I-70 for vertical clearance. We will look at how water drains and see if we need more inlets to capture it. We will look at drainage on I-70 as we lay out the profile.
 - c. Existing clearance is 15'1" which is what we are going to keep. The whole roadway profile will be lowered.
2. Cindy Neely expressed her appreciation to FHWA for helping keep the very narrow condition of the bridges.
3. Phyllis Adams asked if all three lanes will shrink. The answer is no, only the shoulder will shrink, and there will be no change in striping.
4. Dick Bauman asked whether the approval is qualified upon the fact that it is a temporary project. Melinda Urban replied yes, that is correct. And that is why FHWA is allowing these kinds of variances.

Issue-Specific Criteria

1. Pullout Locations

- a. Will use opportunities where there is already space available for the pullout. Probably not formalize the pullout so much. We might sign those, so people know that they are there. The emergency responders will know where these locations are. We are not building additional infrastructures specifically for the pull outs. For off-peak, we have 13 feet of shoulders for breakdown, but on peak period, we have to move these vehicles to these refuge areas.
- b. Cindy Neely asked if the Team has a list of the items just mentioned. Kevin Shanks replied not at this point, but they will be captured as part of the design criteria.

2. Signage

- a. Efficiency and consolidation (including old signs)
- b. Location for tie-in would be important.
- c. Will present a gamut of options to the Tech Team. Important to limit the signs. This is important to the community.

3. Managed Lane Access—Frequency and Location

- a. How it affects signage

Next Steps

1. Public Involvement

- a. Working on providing information for the public on the Website. Coordination with CDOT to get it on their Web site. It does exist, just not populated with all the information yet.
- b. Phyllis Adams is concerned about the lag in getting this information out the public. A sign just went up stating that the third lane for Twin Tunnels will be managed. She and others have been getting a lot of calls about this, and she suggested getting the information out to people in town as quickly as possible, because of what happened with the signage on Twin Tunnels. The managed lane information for Twin Tunnels really needs to be handled better by the Twin Tunnels public information team.
- c. Cindy Neely stated the public information system for the Twin Tunnels had an information sheet about what a managed lane is and what it is intended. She suggested having something like that to place in the town's visitor centers for the PPSL project.
- d. Information about how license plate tolling gets billed—should be addressed to your physical address.
- e. For toll lanes—communication needs to be clear. Because people think all lanes are tolled lanes.

2. Local Roadway Network: Cindy Neely will help in setting up a meeting with the CCC Roadway and Bridge.
3. Issue Task Force Meetings (SWEEP, ALIVE, and Section 106)
 - a. Cindy Neely announced that the Lawson historic survey identified an interesting group of historic structures that are backed right up the highway. Would like to suggest that consideration might be enough for us to put that noise mitigation on the table.
 - b. Will certainly look at the effect to the historic properties—noise and visual are two of those aspects that we will look at.
 - c. Art Ballah asked about technology failsafe we have in place. That is on our list to plan for.
 - d. What is the SH 103 bridge replacement estimate? It was included in the overall project budget. Everything is within budget right now.
4. Next Technical Team meetings:
 - a. November 18, 8:30 a.m. to 2:30 p.m. in Idaho Springs
 - b. December 16, 8:30 a.m. to 2:30 p.m. at CDOT Golden