



MEETING NOTES

PROJECT:	23982-23929 I-70 West Vail Pass Safety and Operations Improvements
PURPOSE:	Project Leadership Team (PLT) Meeting #8
DATE HELD:	March 26, 2021
LOCATION:	Online Google Meet Meeting
ATTENDING:	John Kronholm, Project Manager, CDOT Region 3 Karen Berdoulay, Resident Engineer, CDOT Region 3 Rob Beck, Program Engineer, CDOT Region 3 Matt Figgs, CDOT Region 3 Lisa Schoch, CDOT Historian Greg Hall, Town of Vail Ben Gerdes, Eagle County Dick Cleveland, Town of Vail Stephanie Gibson, FHWA Jeff Bellen, FHWA Jim Thomsen, Kiewit Mark Gutknecht, Kiewit Randal Lapsley, R S & H Mary Jo Vobejda, Jacobs Loretta LaRiviere, Jacobs
COPIES:	Attendees

SUMMARY OF DISCUSSION:

1. Introductions & Meeting Purpose

- a. Karen began the meeting by introducing the PLT attendees' names and organizations.
 - 1. John mentioned that Tom Gosiorowski has left his position as the Summit County Engineer and was wondering if we had reached out to determine if the County was still interested in being a part of this project. Karen said she sent an email to Bentley Henderson but didn't hear back from him and will reach out again. If they are interested, we will send them the meeting notes to catch up.

2. Agenda Review and Meeting Goal

- a. Mary Jo said the goal of today's meeting is to review our progress and give us feedback on how we are doing being consistent with Context Sensitive Solutions. This includes the methodology which we are using for the PLT, TT and ITFs.
- a. CSS Guidance and the West Vail Pass EA outline the guidelines for the Design Exception ITF. It was agreed by the TT the Design Exceptions ITF would be the same members and it would be most efficient to combine these meetings, when needed, with the TT meetings. There has been one meeting of this ITF in February which endorsed the Design Exception for Tiered Walls. Today we will be discussing this first Design Exception request recommended by the TT for your consideration and endorsement.

3. Work Completed Since the Last PLT Meeting

- a. Mary Jo said since the last time the PLT met, the FONSI was signed in February.
- b. The TT and ITF meeting details are described in Section 4 of these meeting notes. Mary Jo said all of the meetings are going well. We have great participation and good discussions and comments that challenge us to think a little bigger or outside the approach we were taking. We appreciate everyone's flexibility.

4. Review of Technical Team (TT) and ITF Meetings

- a. Mary Jo said we have met with the TT in January, February, and March. There has been great collaboration among TT members on the work they are doing in other groups.
- b. It's been necessary to have monthly TT meetings since there is so much going on right now. As the design progresses, there may be times when we don't have anything significant to discuss and we may cancel that month's meeting.
 - i. Topics of discussion at the January Meeting included:
 - Provided input on Scope Specific Differentiating Criteria (SSDC) for the bridge alignment and the Lower Truck Escape Ramp
 - Endorsed the Design Refinement and Design Exception processes
 - Agreed TT and the Design Exceptions ITF would be the same members and it would be most efficient to combine these meetings, when needed, with the TT meetings.
 - Comments on the wall designs and where to use them has been forwarded on to the Aesthetics Team to include in the guidelines.
 - ii. The February Meeting topics included:
 - Reviewed the Lower Truck Escape Ramp analysis
 - Provided input on SSDC for the Recreational Trail and the Roadway Phasing
 - iii. The March Meeting was focused on reviewing the Bridge Alignment Analysis.
- c. The SWEEP ITF Meeting #3 was held on January 25th. The next meeting has been moved to May and we are tentatively planning meeting again in June or July, with a final meeting in early fall.
 - i. Topics of discussion at the January meeting were:
 - Revisited the SWEEP Implementation Matrix that was completed during the environmental assessment work
 - Reviewed the outline of the Sediment Control Action Plan (SCAP) and Maintenance Manual
 - The design Team is continuing to design the drainage and sediment control at the Lower Truck Escape Ramp.



- We discussed the option of on-site wetland mitigation possibilities and future partnerships outside of this project.
 - The SCAP and Maintenance Manual continue to be written and we anticipate a review of the first draft sections at the next meeting and the complete draft documents for review at the following meeting.
- d. The 106/Aesthetics ITF Meeting #3 was on February 1st and Meeting #4 on March 1st. The second meeting was moved up so we could discuss the guideline sections related to the Lower Truck Escape Ramp.
- Reviewed the Aesthetic Guidelines outline and format
 - Gathered input on the Aesthetic Guidelines for sections related to the Lower Truck Escape Ramp
 - Gathered input on the memo for Precast Concrete Curved Walls. This is being finalized and will go to Lisa Schoch who will forward it to SHPO and the consulting parties as part of their review process.
 - The team is developing the rest of the Aesthetic Guidelines sections for anticipated review in July.
 - i. There has been some concern about the Aesthetic Guidelines and whether they were needed before the design started but they aren't completed yet. Jim Clarke confirmed in the meeting that CDOT's EA/FONSI commitment is to develop project-specific aesthetic guidance but that nothing in the commitment states that the guidance must be completed prior to construction.
 - ii. We discussed how landscaping and planting fit into water quality and wetlands and the design team will consider this as they move forward with the design.
 - iii. There has been some concern about the curved wall design. We have talked about different types of walls, and where and when to use them. We have added this information to the Aesthetic Guidelines.
 - iv. We are getting ready for a first review in the next couple of weeks of the Aesthetic Guideline chapters which will be used to guide the Lower Truck Escape Ramp design.
 - 1. Greg said he submitted additional comments after the last meeting but hasn't heard back from anyone on who should get the photos he wants to submit.

Karen created a folder on Google Drive for the photos and emailed the link to Greg.
- e. The ALIVE ITF Meeting #3 was held on February 10th. Topics of discussion were:
- Reviewed and discussed the sizing and location methodology
 - Reviewed and discussed the targeted species



- Discussed past studies
- The team is now working to refine the locations of the crossings. Some of the crossings have moved slightly from locations identified in the original EA.
- Working on wildlife fencing locations
- We discussed tracking success and what the measurements we may use.
- The April Meeting will be moved to May and then will plan to meet again in July.
 - i. This ITF has requested to review the locations and size refinements, and this is one of the reasons we have postponed the meeting. We want to be sure at the next meeting we can present the size and location refinements.
- f. There will be an EMS ITF Meeting #2 on March 29th. We've put together a great presentation that focuses on construction phasing and on construction issues at the Lower Truck Escape Ramp. It will be a great forum to make the first responders aware of the other improvements that are being designed, discuss what things they would like to see as construction goes forward, and how it will impact their ability to respond during construction.
 - 1. Greg acknowledged that it might be difficult during COVID but was wondering if we would consider having a field reconnaissance trip this spring to make sure everything that we are putting on paper makes sense before the design is finalized. It's very helpful to drive the corridor and stop to look at areas instead of relying on photographs.

Stephanie said the FHWA has no anticipated timeline for when they will be able to resume field reviews and in-person meetings.

Karen said it's an interesting idea to think about. She said they did a field trip with our stakeholders in Summer 2019. There are a lot of additional safety things to work out now (wearing masks, combining cars). We'll think about these issues and the timeline for when this could be beneficial.

5. Review of the INFRA Grant Design and Construction Schedule

- a. Karen said the schedule is more developed since you saw it in December. We are looking at four construction packages. The first package will finish up design in May and includes the Lower Truck Escape Ramp and the highway closure system. Construction on that package will start this summer and will be completed in 2022.
- b. There are three more construction packages. The rest of the project is going to 30% design review (FIR) in September and we will start staggering those designs out to hit the different advertisement dates.
- c. Package 2 is coming together for a February or March 2022 CAP agreement with the contractor and construction will start in in the spring of 2022. This will likely be the Recreation Trail and some other work TBD.



- d. Package 3 will finish design in the May 2022 timeframe and construction will start in 2022. This will likely be the bridge replacement.
- e. Package 4 will finish design in November or December 2022 and construction will be in 2023-2024.
- f. The CSS process will continue through construction. We now have quarterly PLT meetings set up through December. The TT meetings have been scheduled monthly through September. We are working with all the ITFs to make sure we have the adequate number of meetings to get their feedback.
- g. We are planning to have public meetings in June right before each construction season begins.

6. Review of CAP 1 Design Refinement Process

- a. Mary Jo said the Design Review Process was shown to you in December, but we wanted to review it again to give you an update on how we are progressing through the process. The steps include:
 - i. Develop Scope Specific Differentiating Criteria (SSDC). The Success Factors Flow Chart lists the context statement, core values, critical issues and success factors taken directly from the EA.
 - ii. Seek TT and ITF feedback.
 - iii. Develop design options or refinements.
 - iv. Review options using SSDC
 - v. Present the refinement with feedback considered
 - In January, we gathered input from the ITFs and TT on the Lower Truck Escape Ramp. We looked at the angle of departure, how quickly does the truck ramp pull away from the highway, what is the optimum length for the Truck Ramp, and how do we balance the design with the impacts to the trees. Using the feedback we received, we are further refining the Lower Truck Escape Ramp design which is very close to being completed.
 - John clarified the photo of the Truck Ramp in the presentation is the Upper Truck Escape Ramp.
 - In February we received input on the Recreational Trail SSDC. We discussed the bridge crossings, where the walls are located, and the impacts to trees and wetlands. You get a great user experience when you are further away from the highway into a more natural area, but you have a bigger impact on trees, wetlands, and wildlife habitat. We are also looking very closely at what the closure duration is of any refinement. The Recreational Trail design refinements are progressing using the input received and we are hoping to present this in May.



1. John said the Forest Service has provided him a list of major trail events during construction. He said he will respond that we will work around major events to keep the trail open.
- In February we presented the Roadway Phasing Options. We presented criteria such as the number of times traffic would be shifted, efficiency in construction and construction duration. Mary Jo noted that construction phasing is unique to each project and type of design. For any project the phasing will be presented in the preliminary design plans.
- Mary Jo said the Bridge Refinement has three options:
 - Alignment #1: Match Existing West Abutment
 - Alignment #2: Offline Single-Phase Bridge
 - Alignment #3: Two Phase Bridge
- Karen explained Option 2 was chosen for replacing the bridge at MM 185.5 east bound. It is an 800' long bridge. The design that was in the EA showed the bridge going right over Black Gore Creek. We wanted to refine that alignment to improve the radius to meet design standards, shift the bridge away from the creek as much as possible and add the third lane.
- Karen said we looked at differentiators and tried to find the right balance with all the core values. Some of the reasons we chose Alignment #2 include the ability to build the bridge offline. Anytime you build a bridge that overlaps an existing bridge, you have to demo certain portions of a bridge or widen the other bridge which adds a lot of risk.
- This option will improve safety. By building the bridge offline and having a cleaner demolition of the existing bridge it reduces the length of trail closures, there is a lot less overhead work and opportunity for cost reduction.
- We were able to gain some distance away from the creek. We are still looking for ways to mitigate where we are close to the creek for one section of the bridge. We feel this option is the right balance when we evaluated everything in our core values.

7. Design Exception Recommendation

- a. Mary Jo said this is the part of the presentation when we want to engage you and ensure you understand the Design Exception for Tiered Walls that is being requested. We developed this Design Exception Request with our TT and had a robust discussion around it which resulted in them endorsing the Design Exception to send on to the PLT for approval.
- b. The I-70 Design Criteria states tiered walls are not allowed. They have been used on other portions of the Mountain Corridor and we checked with Vanessa



Henderson/CDOT whose role is to ensure design consistency throughout the Mountain Corridor. She told us that exceptions for terraced walls have been allowed in other locations on I-70.

- c. CSS Guidelines state that design exceptions may assist a designer in finding a transportation solution that balances impacts to scenic, historic, and culturally or environmentally sensitive areas while still providing for safety and mobility.
- d. West Vail Pass already has tiered walls that are a contributing feature to the historic district, and they were originally built to reflect the terrain. The challenge is that we want to recreate these walls in some new locations, and we need the Design Exception to build tiered walls.

Greg commented there are two issues with this design exception. One is 12' tall height above the surface and then the tiering. The tiered walls are historic, so he agrees that we should build tiered walls. It's notable that almost all walls except for three small locations are fill walls. These are interior to the surface but outside the travel lanes. In this situation he thinks there are only three cut walls above the roadway surface outside the right of way between Vail and Copper Mountain. He thinks that's why the original I-70 discussion of walls no higher than 12' above the roadway surface is in the Design Criteria.

The original walls are outside the travel lanes toward the edges of the right of way or the forest. That's why when he thinks you look at the overall I-70 Design Criteria Guidelines, they talk about only minimizing walls to a 12' height on the outside above the roadway shoulder. There are some walls on the interior between the two lanes that are of significant height. You might say it's above, in this case, the westbound lane and that's more than 12' high but he thinks it was all part of the built environment.

Mary Jo said they have started to address wall heights in the Aesthetic Guidelines for walls that are above the road surface that if you are going to see a lot of the wall, there will be height restrictions. We have started to deal with this because it is very specific to the type of wall we are building. This Design Exception proposal is consistent with the Design Guidelines as far as the height of the walls.

Karen thanked Greg for his insight, and asked Greg to confirm that he supported the tiered walls.

Greg said he supports the Design Exception Request for Tiered Walls to meet historic context of existing walls.

Dick said he is supportive of the Design Exception but wants to make it clear to the designers that this exception is not there to make their jobs easier, it's to accomplish what we're trying to do which is to match the existing and do the best we can to improve what we have out there.



Lisa said, as the person interested in historic preservation of the Corridor, she thinks it's always hard to balance trying to improve the transportation facilities and maintain historic integrity. But she endorses the tiered walls because it is important to the design and the aesthetics of the district.

Jeff Bellen/FHWA supports the design exception.

Ben Gerdes said Eagle County supports the design exception.

Karen said we appreciate your endorsement of the Tiered Walls Design Exception. We will continue to work hard to seek feedback from our stakeholders as we progress through design and try to find the balance of our core values through our refinements.

8. Next Steps

- a. Mary Jo asked if everyone is comfortable that we are meeting your expectations for the Context Sensitive Solutions in this phase of the project. A lot of us have done CSS in Project development and Environmental Assessments but this is new territory for many of us.

Greg said he thinks the team has taken the ITFs very seriously and are working in great detail on the issues. The hard part is some may have wanted these issues to be discussed in the EA phase. But he thinks everyone understands this is a real project that will be constructed and are rolling up their sleeves and working hard to get the intent of CSS. He complements the team on their progress.

- b. Mary Jo outlined the next steps:

- Finalizing design on CAP #1 for the Lower Truck Escape Ramp and Highway Closure System
- Continue preliminary design on Packages #2, 3, and 4 for 30% design review (FIR) meeting in September
- Continue the development of the SCAP and Maintenance Manual, Aesthetic Guidelines and wildlife crossing size and locations
- Next PLT meetings in June/Aug will review preliminary plans and public outreach plan, and Design Exceptions (medians, wall heights).