



MEETING NOTES

PROJECT:	23982-23929 I-70 West Vail Pass Safety and Operations Improvements
PURPOSE:	Combined Project Leadership Team (PLT) and Technical Team (TT) Meeting #33
DATE HELD:	November 14, 2022
LOCATION:	Online Google Meet Meeting
ATTENDING:	Karen Berdoulay, Program Engineer, CDOT Region 3 John Kronholm, Project Manager, CDOT Region 3 Sarah Navarro, CDOT Region 3 David Cesark, CDOT Region 3 Environmental Zebulon White, CDOT Region 3 Traffic and Operations Patrick Chavez, CDOT I-70 Operations Lisa Schoch, CDOT Historian Kristin Salamack, CDOT USFWS Liaison Michelle Cowardin, DNR Danielle Neumann, DNR Jeff Bellen, FHWA Stephanie Gibson, FHWA Marcus Dreux, USFS Mark Hane, USFS Dick Cleveland, Town of Vail Pete Wadden, Town of Vail Ben Gerdes, Eagle County Kevin Sharkey, Eagle County ECO Trails Larissa Read, ERWSD Jon Stavney, NWCOG Tracy Sakaguchi, Colorado Motor Carriers Jon Stavney, NWCOG Randal Lapsley, R S & H Sam Stavish, CIG Mary Jo Vobejda, Jacobs Laura Meyer, Jacobs Pat Hickey, Jacobs Jim Clarke, Jacobs Amy Hopkins, Jacobs Loretta LaRiviere, Jacobs
COPIES:	Attendees

SUMMARY OF DISCUSSION:

1. Introductions & Meeting Purpose

- a. Karen introduced the attendees at today's meeting.
- b. Mary Jo said today's agenda will review work completed since the last PLT/TT meeting, provide a funding update, an explanation of the environmental mitigation commitment tracking, fen restoration work, a construction update, and review the Schedule and Next Steps

2. Review of Work Completed Since the Last PLT/TT Meeting

- a. Randal said our design work continues to progress. We have submitted the FOR (90%) plans for Construction Package #4 and are having a FOR meeting this afternoon. When we resolve their comments, we will proceed with putting together the final bid package plans and specs. In the meantime, we also continue working on Construction Package #5 Plans and specs.



3. Funding Update

Karen said we've made some great progress with identifying our funding sources to address our funding gap. The funding gap was originally around \$60 million dollars on this \$250 million dollar job. A lot of it was inflation and material supply challenges driving up costs. The estimates for this project were developed in fall of 2019 right before the pandemic. The design team incorporated a lot of value engineering and was able to cut the estimate down by \$20 million dollars. It was a massive undertaking by the design unit, trying to home in on things where we wouldn't necessarily lose the value we're getting on Vail Pass.

One of the big savings was transitioning a wall and that really changed not only the cost of the wall itself but also the amount of earthwork that had to be brought off the site. We were able to define some other resources for the project from regional funding and we are currently applying for a freight grant that I think we will be successful with. We are also going to apply for a loan to advance some other CDOT funds from fiscal years '25, '26, and '27. The request for this loan will go to the Transportation Commission in December. If we're successful in getting this loan approved, we will be fully funded without having to cut any major items of scope.

The last piece is getting this loan approved, and the type of loan we are requesting is from our Regional Priority Prioritization (RPP) funding as well as the 10-year plan. There was some money for Vail Pass but it's out in the fiscal year 2027 plus column. We're asking to advance around \$17 million of that to the current fiscal year because we need to budget this money for CP #4 by January.

It seems like it's coming together and huge, huge, kudos to the team for all the value engineering they did. It's been a case of looking at everything to figure out if we could find a little pots of money here and there, in some cases taking \$50,000 from certain pots. So, whatever we could do to pull together, the team has basically got there, as long as the loans are approved next month.

Michelle said to clarify, is it is now a \$20 million gap: not a \$40 million gap. Is that correct?

Karen said it was brought down from a \$60 million dollar gap to a \$35 million dollar gap, but we've now closed the \$35 million dollar gap to zero so long as these loans are approved, and we are fully funded.

Karen said one thing that's exciting is that we weren't sure we could fund the truck parking expansion and relocation and had to remove the existing truck parking because it was too close to the interchange, so we were going to relocate the truck parking slightly. Currently, it is eastbound just before the top of the Pass; we are moving it about a half a mile further west. We were able with the original project to build a platform for it and get some of the utility work, such as conduits, put in place to be ready for a future project. Now if the freight grant gets approved, we will be finalizing that truck parking in the current location with lighting and pavement, and it will be bigger. From a truck parking perspective, it's going be amazing because the rest areas add additional truck parking and then we'll have this other truck parking area that will be expanded from what it is today.

Another thing that's outstanding is getting the freight grant approved for the full amount, but it sounds like that will come together.

1. Larissa asked if that advance of the loan of '24 and '25 monies would affect any future caps.

Karen said that's a great question and the answer is no. We're fully funded for Construction Package #4, which is going to ad in early '23, and Construction Package #5 is a fully funded by Bridge Enterprise Money.



CDOT had allocated \$50 million dollars for Vail Pass in the future, and unfortunately, we're having to use some of that money now, so it does affect future projects outside of this phase of the project. That money is out in the 2027 plus column, so it's still five years away and in this scope wasn't fully defined for the next phases of the overall EA for the Vail Pass project so we'll be reducing that \$50 million by \$17 million so we will still have some money for another phase in the future.

Randal said one of the value engineering elements that that helped was the extension of the acceleration lane on that eastbound lane that occurred at the top of the Pass. We were able to bring that back and so it was a win that reduced costs and continues to make traffic operations safe and is a win-win for everyone. Another element that was critical and helps to reduce cost is lessening the earthwork volume that we were hauling off site. We worked closely with the Rest Area project to provide them the dirt that they needed for that project.

We also looked at how we build some of the walls, and the last TT meeting we showed one of the value engineering ideas that we had for MSSE walls which are a combination of a mechanically stabilized wall and a soil nail wall and that allows us to avoid additional excavation that would be needed for the traditional type of wall. We did soil nail wall into solid material through there, which prevented a lot of hauling of material being excavated out.

John said the phasing of the overall construction was also a cost savings. We added a year to the project and instead of going head-to-head and having a lot of detour pavement, we are proposing some more efficient phasing on the first lane, where we can use a slightly thinner pavement section and that's helped us a lot with the curve, the crown corrections, and the super elevations.

Also, at the top five miles of Vail Pass, there are over 1700 linear feet of culverts that were built in the 1970s and a lot of them are in pretty bad shape. We TV'd them by running a little truck with a camera on it through to get a look at the conditions and selectively fine-tuned what needed to be replaced, what could be repaired in place, and what could simply wait till the next phase.

Randal said we shortened up the wildlife crossings to reduce costs and that does two things; makes it easier for animals to use them because there is more daylight, and the tunnels are not quite as long and dark; and we looked at how to do the grading on the approaches so we weren't doing more excavation work than needed.

We have a list of 30 or so different ideas that have come across in terms of value engineering or risk mitigation through the course of design.

Mary Jo said this is exactly what everyone always intended for Context Sensitive Solutions and it's a great example of how well working with the design team makes it all come together. Laura is going to take us through meeting and tracking our commitments and this is another great example of how integrated this team is.

4. Environmental Mitigation Commitment Tracking

Laura said the tracking started when we kicked off the INFRA project and our environmental team provided all the design and ITF leads with the EA commitments that were relevant to their discipline. We really wanted to take a proactive approach to ensure that all the EA commitments were being met and being integrated into the design. A lot of these, as Mary Jo mentioned, were focused on carrying this CSS process forward into the design and that was accomplished through the various Issue Task Force meetings which addressed things like the SCAP and the Maintenance Manual. The Aesthetic Guidance, wildlife crossing designs – all these things were commitments from the EA, and, through the course of those meetings, the ITF and design leads collaborated well to integrate all the guidance coming out of those meetings into the plans and the specs.



There were also other commitments outside of the ITF process that were very design focused and we had a lot of cross-discipline design weekly coordination meetings between the environmental and design staff to make sure that all these commitments were getting translated appropriately and being reflected in the plans and specs. Then on the back end of that design process, for each construction package, our environmental team also reviewed the plans and specs to make sure that everything was reflected all the way through from the initial packages to the final plan sets. At that point is when we handed it off to construction team, and the construction phase compliance is overseen by the construction manager, Jen Babcock.

CDOT has a very detailed mitigation tracking table that they use to document all their projects and how NEPA commitments are being met through the design and construction process. In the table we must record the section number and page in the plan set where each commitment is met. If anyone ever wanted to go back and look at that, it is all there in detail how each commitment is reflected in the plans and specs, and it's all logged in that mitigation table to document the compliance. We keep one of these and complete one of these for each construction package. For construction packages #1, 2, and 3, the mitigation tracking is all complete and up on the project Google Drive. We are in the process of tracking the mitigation for Construction Package #4.

I've been overseeing all of this, and I can say that so far, between ITFs and the design process, the team has done a great job of honoring the commitments from the EA. In Construction Package #3 we had a revision adding those embankment areas and there was one commitment that we had intended to add into the specs that didn't make it in. And even in those cases, that are rare, we were still able to integrate that into the construction phase. I coordinated with Jen Babcock, and she was able to get that guidance out to the construction team and make sure that we are meeting every single EA requirement through the construction phase.

1. Larissa said thank you for the EA segment. That's what I'm always most interested in, thanks.
2. Michelle asked if the commitment tables are available for us to look at. I just like to see how it was tracked.

John said for transparency we're happy to share those with you. We normally share the finished product rather than the work in progress.

5. Mitigation Update

Pat said, as some of you are aware we proposed to do fen restoration as part of our early mitigation effort on-site along with purchase of in-lieu credits from the National Foresters Foundation Bank. Prior to restoration, the fen ditch was about two feet deep about two or three feet wide. That drained the fen complex and the lower hydrology in the fen led to decomposition of the fen soil, which is a solid organic material, and the degradation of the fen complex as a whole. The restoration work started in September, and we plan to do more planting in the spring and summer of next year. It involved filling the ditch with native wetland topsoil, a high organic topsoil, not nearly as high as fen itself, but it does have a Carex or sedge rhizomes. This was harvested from the impact zone at the rest area just across the highway. It was filled in to meet grade. The existing live rhizomes will likely sprout next spring. There were sedges there, but we wanted to get some diversity in the soil, so flowering Forbes were placed in there as well. The idea here is that in a few years, hopefully you won't even be able to tell the ditch was even there.

As part of that fan restoration, the fen comes off the hillside around a large rock escarpment, and it drains down behind the maintenance shed. There are no wetlands there but quite a bit of water



comes through that location especially during the spring runoff and we felt this was a great opportunity to not only control the water from infiltrating into the shed and maintenance facility, but also create some wetlands. Work started this past summer to install a terrace slope wetland system using the same high quality wetland topsoil salvage from the rest area.

We did encounter a few populations of moonwort on the site where we were going to be working. Thankfully they weren't in the direct line of right where we were working so we were able to work around most of those populations, which is nice.

Construction Package #4 mitigation on-site will involve some restoration work proposed around the Basin of Last Resort. As many of you know, the Basin of Last Resort is a location where CDOT can collect and capture sediment before it goes further downstream. Unfortunately, there is some that is not exactly natural looking now. The plan for mitigation is to provide some wetland habitat vegetation and bank stability and improve the aesthetics of the facility as well. We have proposed a soil lift at the toe of the very steep slope which will provide about a three-foot wide bank full bench on the stream. It will provide some riparian wetland habitat dominated by willows and some aquatic habitat for fish.

In another location we are proposing to fill in what is currently a rock-riprap embankment with soil and cover it with a live willow brush mattress that will grow in and then over the years will look completely natural. The riprap will still be intact underneath. The other thing that will be part of this project is a lot of riparian enhancement or planting of the areas immediately up slope of these treatments with native shrubs, spruce, and lodge pole pine to fill in the barren areas that were affected by the original construction of US 6. Eventually they'd look more like other areas in the vicinity where there are nice trees and shrub cover. We will also purchase some additional credits with the in-lieu fee bank.

1. Mary Jo asked what is the process for tracking this? You'll be planting some more in the spring and then is there a program for how you watch over these.

Pat said this this work will happen with the Construction Package #4 and may even extend a little bit longer depending on the availability of plant material and the installation. Obviously, we're limited in our season when we can plant and how with the limited planting windows at this higher elevation, so there is a little bit of phasing that needs to occur and that hasn't been worked out with contractor yet. But the idea with this would be Package #4. Beyond that, there's not much of a monitoring component to this other than taking some photos and watching to make sure that we're adaptively managing anything that might be happening out there to make sure it works.

6. Construction Update

John said we're wrapping up the construction season now and it is the intent is to be done by November 22nd. All the bike path construction will be completely relocated, and the intent is to have it open by Memorial Day weekend of next spring. There's a couple of punch list items that will need to take place in in the early spring, one of which is the installing the permanent pedestrian guardrail. The temporary rail out there now is OSHA compliant.

For the westbound bridge, one of the aesthetic components is to match the existing, as well as the shape of the piers themselves and this will be stained. The abutments are going to be stained and will have a stamped concrete pattern.



John said we have finished the truck ramp. The remote closure system did have a delay due to material availability but that should be completed by December 1st.

Construction Package #2 is the recreation trail that will wrap up by Thanksgiving.

Construction, Package #3, which started in August, of this summer is the new bridge and a little bit of the recreation path realignment up above the bridge. In that section is an 18-foot-wide path existing on old US 6, so that has been constructed in its permanent location and is open.

Construction Package #4 will be going out to add this spring and that'll be the bulk of the project. That's the third lane going up Vail Pass and all the wildlife crossings.

Construction Package #5 is the uphill eastbound bridge.

Sam Stavish said the team is working to wrap up the recreation path work by November 22nd and then they will go quiet for the holiday weekend from Thursday November 24th through Sunday, November 27th. There may be some work in December at the westbound bridge location and there will be still some shoulder and very limited lane closures that people may see into December at that location. The team is working to take advantage of as much time as they can and working on pier caps at that new bridge.

1. Marcus asked if all the dirt work for the east Vail berm has been completed and hauled at the bed down there.

Karen said I'm pretty sure it's all done.

Marcus said he will check in with a with Olivia and let her know that it's pretty much wrapped up.

2. Dick said he's pleasantly surprised by the amount of work that all these teams got done this year, considering the challenges with money and everything else. Great job!

7. Next Steps

Mary Jo said this afternoon is the FOR Meeting for Construction Package #4.

Construction Package #4 final submittal is planned for January 23rd and Construction Package #5 submittals begin in January with a plan for final design in July.

She said you can tell everything is winding down and we don't want to hold a meeting if we don't have new information to present, so we're choosing not to have a meeting in December. So, enjoy your holidays and then we'll resume in January. We will send out that meeting invite soon.