



MEETING NOTES

PROJECT:	23982-23929 I-70 West Vail Pass Safety and Operations Improvements
PURPOSE:	Technical Team (TT) Meeting #23
DATE HELD:	January 24, 2022
LOCATION:	Online Google Meet Meeting
ATTENDING:	Karen Berdoulay, Resident Engineer, CDOT Region 3 John Kronholm, Project Manager, CDOT Region 3 Matt Figgs, Project Manager, CDOT Region 3 Patrick Chavez, CDOT I-70 Corridor Operations Lisa Schoch, CDOT Historian James Proctor, CDOT Bridge Enterprise Danielle Neumann, DNR Jeff Bellen, FHWA Marcus Dreux, US Forest Service Pete Wadden, ECO Trails Jon Stavney, NWCOG Greg Hall, Town of Vail Dick Cleveland, Town of Vail Pete Wadden, Town of Vail Kristin Salamack, USFWS CDOT Liaison Ben Wilson, USACE Siri Roman, ERWSD Len Wright, PhD, ERWSD Larissa Read, ERWSD Stephanie Gibson, FHWA Shannon Anderson, Bicycle Colorado Randal Lapsley, R S & H Dan Logsdon, R S & H Mark Talvitie, R S & H Brian Hearn, R S & H Mary Jo Vobejda, Jacobs Candice De, Jacobs Diana Yates, 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 our goal for this meeting is to update you on the design status, construction progress and the recreational trail design.

2. Review of Work Completed Since the Last Technical Team (TT) Meeting

- a. CP #2 design is being finalized and the FOR Meeting is scheduled for January 31st.
- b. The SWEEP ITF Meeting #7 was on January 10th. Prior to the meeting the ITF reviewed the body of the SCAP document and the Map Book from MM180-185. The project team had received and addressed comments through individual meetings. There were some



questions about basin sizing and monitoring and those have all been addressed and some of the work is being done outside of this project as a larger group.

The next SWEEP ITF meeting will be scheduled for some time in April, and ITF members will receive the Map Book MM 185 -190 and the Maintenance Manual to review in advance of the meeting.

3. Ongoing Work

- Preparing a submittal for the Section 106 consulting parties
- Upcoming CP#2 FOR Plans review and updates
- Design refinements due to updated topographic wetland surveys and analysis
- Updated Environmental compliance tracking
- Emergency Management Coordination Meeting #4 is February 7th

4. Design Updates

a. Construction Package #2

The Recreation Trail alignment has been set. A lot of the design work in Construction Package #2 is locating and grading the sediment control features between the recreation trail and the proposed improvements on I-70 in conjunction with the design work in Construction Package #4 so that both packages work together.

The walls and two bridges that cross Black Gore Creek which are necessary for getting the recreation trail alignment to work are laid out and we are finalizing the design.

We are in the process of completing and submitting the permits that are necessary for Construction Package #2. This includes SB 40 which goes to Parks and Wildlife for disturbances of vegetation in riparian areas.

For all of the construction packages we look at the EA to see if there is any design that needs to be changed to comply.

b. Construction Package #3

This package will include the I-70 westbound bridge over Polk Creek and some recreation trail work that was not included in CP #2. We split the work between the two packages because we wanted the trail work underneath the bridge and around the abutments to be done in conjunction with the bridge package.

There is a portion of the recreation trail that needed to be relocated because of the realignment of I-70 and to avoid a Fen wetland. Because I-70 is moving over quite a bit there is a significant wall that is going in that area which will be part of this package.

5. Recreational Trail Update

- a. Candice said the trail will have a 2:1 maximum slope mainly because that is the existing condition. The trail will be 6' each direction for a total of 12' paved. We have 5' shoulders where there are really steep slopes but narrower shoulders if we have a shallower slope. Our landscape architect has done a great job of incorporating landscape treatments to make these slopes look more natural such as rounding at the top of each slope and natural features such as boulders and undulating the slopes. A lot

- of trail reconstruction is in the Narrows, so we're working through how the rock areas look to make sure they all blend into the natural environment.
- b. We have two fill walls on the west part of the trail reconstruction. We moved the drainage away from the walls and we're just tying into existing ground in the design for CP#2, but we have looked at I-70 widening to make sure that all of these fill walls tie into all the future construction packages.
 - c. With the success of the shotcrete wall that was part of the truck escape ramp, we made some aesthetic changes to the cut walls. Randal said this is a sculpted shotcrete wall with a soil nailed anchoring system, that go back into the existing hillside. The face of this would look similar to like what we see adjacent to the truck ramp.
 - d. Candice said we have curb and gutter to collect the drainage against the wall when we are adjacent to a wall. The path is closer to I-70 in this area but protected by the wall and as it gets closer we still have 2 ½' and another ½' minimum from edge of pavement to the front of the retaining wall to ensure user comfort.
 1. Shannon asked if the gutters will have an indentation in the pavement?

Candice said the path is asphalt and the curb and gutter will be concrete. The platform will go from a 2% cross slope on the asphalt path to an 8% cross slope in the gutter, so there is definitely a break line. The actual vertical face of the gutter is 2' away from the edge of the path.
 - e. Candice said the bridges will have an extra foot of width and will have arches and trusses. Randal said there will also be approach rails leading up to the bridge. Candice said it's a metal rail, which will be Forest Service Brown. It will tie in with the bridge rails and will offer protection on the wing walls approaching the bridges. There's one other section closer to the downstream bridge that will have railing. We couldn't meet the 5' offset because it's a really constrained area where we are in between steep slopes, wetlands and the creek. All other railings will be at the bridges and fill walls.
 - f. Candice said during our site walk we discovered there is an area where we cut through the trees and there's an existing clearing which we worked to accommodate. We ended up moving the path a little bit further east to accommodate the retaining walls and reduce earthwork. We found that it was more advantageous to try to get the bike path up high and reduce that cut, however, this required steep grades. We have about 300' of more than 10% grade and about 150' is at a 13% grade. It's not ideal but it really allows us to take advantage of the tree clearing and minimize big cuts. We decided the steep grade for that short section were worth the benefits to the environment.
 - g. We're working with very steep slopes and to fit the path in there would be a lot of excavation. We estimate there is about \$1,000,000 for hauling dirt off the project site and what we have proposed is to use some of that earth on site. Across the creek there are two areas where there are minimal trees and wetlands, and we are proposing a berm to place some of the earth there. We are still working through the this with our landscape architect and wetland folks to determine what that berm could look like. It allows some flexibility for the contractor so if they end up excavating more dirt, they can

use the berm and if they end up excavating less, the berm can get smaller. It will provide some wetland mitigation particularly where the water comes down the slope, we can create a bio swale where the berm ties in with existing. We are working to make sure it looks natural. It's not ideal to have 100' of impacts but we felt like it was a good tradeoff for the costs and the environment benefits that it could provide.

2. Stephanie asked if we have given any thought to revegetation in this area. Perhaps salvage some of the underlying vegetation to put on top of the berm or build one area and transfer the plants so at least you're saving the plant diversity.

Randal said yes, the existing topsoil and seeding, will be stockpiled off the site before we put new earth on there and then we will spread that topsoil over the top of the berm. We would include any stumps or boulders we found in the area as well to make it as similar to the existing conditions as we can.

3. Marcus asked Candice to send him the shape file of the berm in order to check and make sure the berm is within the disturbance limits.

Candice said it had been reviewed to make sure it was within our environmental survey and EA limits, and we're happy to send the file.

- h. For construction phasing we are proposing 11' lanes and 2' shoulders which will likely require reduced speed limits. We are proposing pinned barrier and fence between I-70 and the trail. We are still finalizing what that looks like but some sort of protection above the barrier. Then we have the outside barrier where construction access is right adjacent to the path.

There are some constrained areas where they would need to be up close and need additional space for the construction, particularly where we're building the cut wall because they will use the soil nails. When the path is on the other side of the creek there's a little bit more room for construction access, we're proposing the contractor give at least 5' minimum from the path to the construction. This lets us eliminate the outside barrier so that it doesn't feel too constricted.

There are three construction access points that we have called out in our plans where construction and path users might be interacting on the trail. There is one at the beginning of the project and because the lanes are narrow we want to make sure that we provide two emergency pull offs if someone has a breakdown. These would also serve as access points for the construction vehicles where the path is adjacent to the highway so the construction vehicles will have to yield to the path users.

Matt added CDOT and our contractor have talked about separating the emergency pullouts from construction access. We have discussed the conflicts between construction vehicle gaining access when trail users are using that space to pull out. The team is going to look into separating those two uses for the benefit of the traveling public. If needed, we will have flaggers posted at those access points to make sure that there is a safe interaction between trail users and construction access because that is that's very, very important to us.

4. Stephanie Gibson asked if the new CDOT bike and ped coordinator, Nate Vander Brock been involved in this? We're working on an MOU with the Forest Service, BLM, CDOT and Federal Highways that does involve this portion of the trail once it's constructed. It would be good to connect with him in and tell him the types of things you're talking about.

John said he has been in contact with Nate and will make sure he gets these plans.

5. Shannon said it is her understanding the bike path will not be shut down at all this summer. Shannon said it is important that when things start to happen, it gets it into the newspaper and the word gets out on how it will affect people

Matt said that is correct, the trail will remain open. He said we've been discussing multi-faceted public outreach that will include advertising in the newspaper, email blasts, and working directly with event organizers and outfitter guides that take people to the top and drop them off. We have all their contact information and worked with the race organizers last year and we will continue to do so. We've also been talking through having signage and messaging on sandwich boards in the field to let people know what is going on.

Stephanie suggested to also reach out to trail website owners that talk about Vail Pass to notify them of the work that is being done to try to get it on their websites so people who are further away and traveling to the location will know before they drive up.

Matt said that's a great idea, we will contact them.

6. SCAP Design Concepts in Construction Package 2

- Randal said the sediment ponds along the eastbound side of the project between the recreation trail and I-70 are being designed in coordination with the recreation trail and many of those ponds are going to be constructed in CP #2.
- We looked at minimizing the number of locations of ponds because it is easier for the maintenance staff to maintain fewer ponds. Therefore, they get done more frequently and more easily. We're looking for the easiest path to get maintenance vehicles to the ponds, in and out, and turned around. The ponds are being designed based on the sediment control plan and the criteria that came out of that is to capture as much sand as possible. Some of the sand may be thrown over the barrier and land on the trail. The curb and gutter Candice mentioned earlier allows us to capture that sediment.
- We worked closely with maintenance on how best to design these to accommodate their construction equipment in terms of the width of the equipment, having a concrete bottom on the ponds making it easy to distinguish how deep they need to take their equipment to remove the sediment without removing excess ground. The other thing we have to consider is in a larger storm event what would happen to the ponds and sediment, so we created some overflow areas that allow large storm events to be able to exit the pond itself without taking all the sediment with it. There

are a lot of the elements that have gone into the design of these sediment ponds. We're still in the process of trying to minimize the grading and the visual aspects.

7. Updates to Construction Packages

- a. As design refinements continue, the Construction Packages adjust based on input from the contractor and CDOT financial decisions.
 - CP #2 includes the Rec Trail, Rec Trial bridges and the SCAP ponds and some other walls
 - CP #3 includes the I-70 westbound bridge, the remaining portions of the recreation trail that aren't completed in CP #2, walls near MP 187 that allow us to get create a detour configuration needed for CP #4. Both CP #2 & CP #3 include utility work. Along the existing recreation trail there is a Lumen line that will be relocated to the new trail and there are utilities along the westbound lanes of I-70 that in CP #3 will need to be moved to a location that allows us to do the improvements in CP #4.
 - CP #4 will include I-70 eastbound roadway work and the six wildlife crossings
 - CP #5 is a different way of bringing the work out. Packages 2, 3 & 4 will be done with the CMGC process with Kiewit. Because of the I-70 eastbound bridge being added to the project, to increase the total dollar amount, CDOT has made the decision that they wanted to put this package out as a Design, Bid, Build which will be open to other contractors to bid on that package. This package will also include the wildlife fencing.

8. Construction Progress

Matt said the truck escape ramp was completed in November and is now fully open. Governor Polis came out to celebrate the opening, along with Colorado Motor Carriers and CDOT's Executive Director. We are very excited about this new facility, and it really highlights the improvements we've already been able to bring to the Corridor. Moving forward, the rest of this construction package work is the westbound closure system at the MM 190 interchange which will resume in the spring.

On February 7th we will have an Emergency Services ITF meeting where CDOT and Kiewit will meet with our emergency services providers to work on coordination for this upcoming year and talk through what the trail looks like, and the construction activities planned.

9. Westbound Walls - MP 187.7

- a. Randal said through the course of the design work on I-70 and trying to balance the safety, improve the radius and flatten the curves out to make accidents less frequent in this area, we wound up with a narrow area with walls both on the uphill and downhill side. Wall 16 is a cut wall above I-70 and will be part of CP #3. Walls 15 and 17 are fill walls below I-70.



- b. We used a matrix analysis based on the project's core values. We asked our designers to consider:
- Safety, operations, the corridor aesthetics
 - How do we minimize these walls in the locations, how do we determine what the wall type is that blends in and looks as natural as we can?
 - How do we minimize wetland, tree, and slope impacts?
 - How do we work with the recreation trail to make sure the trail and the walls we are putting adjacent to its function?
 - How do we create an area that is sustainable, and that maintenance folks can get out there to maintain them?
 - We also worked closely with our contractor about how we build these to maintain safe travel for both the public and workers.
- c. We looked at three different alternative alignments. We started with the base configuration from the EA. We knew that had been reviewed and vetted but it was only done to a 10% design level, and we needed to continue the refinement process in this area.
- Alternative 1 had the highest fill wall and we wanted to minimize the height.
 - Alternative 2, we moved the alignment by 20' and the walls were not as high but are longer.
 - Alternative 3 moved the alignment by 30' and we were able to create the shortest walls possible. We reduced the overall size of the walls without increasing the height of the walls.
- d. Our selection is Alternative 3 which is 25' high at its highest point. There are two benches or areas we are going to use to help break the wall up, create some vegetative areas through there and really try to make them look as natural as possible.

Brian said the wall height depends on the final details of the terracing. But generally, the cut wall went up from 20' to 25' and the outside fill walls got further from the trail. This provides more separation and takes the wall heights down for those walls.

Randal said this is a sculpted shotcrete style wall with planting areas. The ends of the wall can be curved back in and make them conform to the natural topography. This helps make the wall look more natural, with some vegetation or dirt at the toe of the wall. Also sculpted shotcrete can allow the top of the wall to vary from a straight line. We will be working with our landscape architects and geologists to get the lines to match up with the existing geology.

In the process, we did look at the scalloped walls and sculpting the existing rock walls and really felt like the shotcrete wall provided the best alternative.

We did consider if the existing rock in this area could be rock sculpted and our geologist told us the existing material, although it is stone, degrades fairly quickly so the rock sculpting process wouldn't work effectively.



These walls need to accommodate both the project we are doing now and also the future lane that will be constructed later, so we wanted to make sure the walls were put in a location that we wouldn't have to modify them in the future. We also had to make sure we could provide drainage, snow storage, and ensure that if something were to roll down the face of the wall that it would land in an area that would be safe.

We looked at different ways to break the wall up because of the height of the wall and also create some ways to bring vegetation into the wall at the front, tops, and sides. Our goal is to have the wall looking like the wall at the truck ramp. The colors would be matched to the surrounding geology and the stone because we know the color of the rock changes as you move along the Pass.

1. Greg asked was the Design Exception for all walls 12' above the surface of the roadway or is it do we need a Design Exception for this?

Mary Jo said the Design Exception we agreed upon, to terrace or tier the walls and have vegetation between them, was for the whole Corridor. To date we have agreed on walls if they are more than 12' high in a specific location. What we are saying here is if we go to two tiers, the individual walls are not over 12'.

Karen said when we were originally picturing the scallop wall which is tiered out there now and so it made sense to tier the walls in the future. Now we are talking about the sculpted shotcrete walls and how natural they can look. We are trying to use this to our advantage because there are quite a few rock outcrops along the Corridor and our goal is to try to blend in with the natural environment.

We'd like to have the flexibility to use some more staggered benching where you have a rock face that is maybe a little taller than 12' but we would want to break it up with the right benches to blend it with the environment.

2. Greg said he's just trying to make sure we don't make up our own rules as we go along in this area but also other parts of the Corridor. Where do you get clarification for the rules of the whole CSS and did it anticipate this type of wall or not?

Stephanie said because it wasn't envisioned, we can kind of make up the rules, but will we be setting precedence for other locations in the Corridor. It might be worthwhile to write up a semi-exception saying we have this new wall type. Create an explanation of why it's a little different, why we think it's okay and how we plan to use it on this Corridor, and then say if it is going to be used elsewhere, within the CSS, that it should be discussed at the beginning when you are talking about Design Exceptions.

Greg said I think the person who sculpted the Truck Escape Ramp wall did a really good job but you can also do a really bad job with these type of walls so I don't think you can just generalize these type of walls.

Mary Jo suggested the intent of the whole idea of limiting wall height above the road for the Corridor was to encourage road design that kept things in a more natural state. The idea of using shotcrete walls that are really well done especially in an area where there are rock outcroppings and having those walls potentially higher than



what is currently part of the guidelines makes sense, especially when it is mimicking the natural look.

- Stephanie asked which body has to approve the Design Exceptions.

Mary Jo said the Technical Team makes the recommendation to approve the Design Exceptions and the PLT weighs in on the fact that you followed the Context Sensitive Solutions guidelines while making the recommendation.

- Stephanie asked should we make a recommendation that we do a Design Exception by location at this point because we are getting into the details, and we don't want to say you can do this anywhere in the EA without checking. It might be good for us to go through the Design Exception discussion and decide if we agree that we are following the process.

- Jon asked if someone could summarize the Design Exception being requested? If the exception is for height related to shotcrete. He's very much in favor of some exceptions for that, but when you start to step back and tier, doing that to a sculpted shotcrete wall doesn't really look natural.

Mary Jo said we didn't formulate a Design Exception statement for today so maybe that's a next step.

Karen said the exception would be for shotcrete walls whether we decide to do it for the two walls we are discussing today or make it an across the board for sculpted shotcrete walls, would we allow greater than 12' without tiering. But maybe we don't need another Design Exception. If the original guidelines said you couldn't have tiers, and then we got the exception that said yes, you can have tiers, the exception would be to have walls over 12' height.

Mary Jo said I think that is one of our challenges right now is if we look at it at certain locations, then we can answer that question that it would be at such and such a height. If we try to think of it generally then it gets a lot more difficult. There are locations where the rock outcroppings are taller than 12' and if you were trying to mimic the existing rock, maybe you would want it to be more than 12'.

Karen said it sounds like in general, everyone supports this approach. I don't think we will go with a 25' wall with no benching, and so if everyone is supportive and don't see any fatal flaws, let's follow up with some text over email. We'll give a two-week timeline for comments and feedback, and if people have concerns we can talk about it at our next meeting.

Randal said these walls are in CP #3 and that package is in the process of being designed now so if we decide to do something different we would need a decision to continue the design in the next few weeks.

Mary Jo said we will put the process together and email it to you in the next few weeks. We will make sure you recognize this is the Design Exception, that we are looking for a response and put the date we need a response back in the subject line so there is no delay in the design.



6. Larissa asked for confirmation that an email reply regarding the design exception will be sufficient.

Karen said email replies are fine.

10. Trail Realignment and Cut Wall to Avoid Fen at MM 184.5

- a. Randal said the alignment of I-70 shifting into the hillside was done to allow the bridges to be built offline and maintain traffic in its existing configuration which is safest way to do that. In that alignment process we are shifting I-70 away from creek which helps from the sediment control standpoint. But in this area we also have a wall area that we have to create to make up the difference in topography from the I-70 up to where the trail is.

This wall is similar to the wall at MM 187 where we are accommodating the future lanes. We looked at putting a precast wall panel in there. One of the challenges with a precast panel piece of it is that it is very linear so the tops of the walls are very parallel to I-70 whereas the shotcrete wall we can vary those tops a little bit, we can create benches and curve the ends of the walls to make the area look as natural as possible. We concluded the shotcrete wall was the best balance between those elements. We are also trying to stay as far away as we can from the Fen location. The shotcrete wall allows us to increase the distance from the Fen by 6'. We think that will help us maintain the Fen and preserve it during the construction process and thereafter.

1. Greg said long term it seems like we are going away from the scalloped walls which are very engineered, and you know it is manmade. With the sculpted shotcrete walls, I am concerned about fading long-term. In 20-25 years are they going to be the same color, or will they really start to fade out?

And the other thing is repair. If some reason they crack or break, being able to go back and do any kind of repair work, is CDOT committed to that or are we going to have gouges and concrete repairs?

John said Matt was the project manager for a repair on a scalloped wall at the bottom of Vail Pass and because it is an historical district, we coordinated with Lisa Schoch, the State Historian and we matched colors and same configuration of the scalloped wall, so we did make an effort to rebuild it as it was originally constructed.

Matt said we didn't do a cast in place type of repair. Those repairs were done in shotcrete. That shows us the flexibility we have with a shotcrete type application because you can custom make the shotcrete to however you need it whether it's the nose of a scalloped wall or whether you need to do some light sculpting in an area you are drilling in rebar anchors.

The coloration is an interesting question to see how that looks over time. We did do an integral color to the shotcrete as a base with a two-part stain on top of it. We did that intentionally because if it ever got nicked, you don't want a grey exposed concrete look.



2. Mary Jo inquired if we could ask the subcontractor who did the work at the Truck Escape Ramp about fading and color?

Matt said we also have all the product data submittals, so we know everything that went into the integral color and stain on top. We can also work with the manufacturers to see if they have any data on durability and longevity.

Randal agreed that it would be good to have examples of other walls these producers have done in other locations that could be a testament to how it stands up to the test of time.

Jon said things do fade over time. This may be a maintenance question about how long the colors last. Maybe every 20 years another coat of something needs to be put on the walls. I would ask the question in a slightly different way because UV light is going to affect those.

Randal said the existing rock fades as well. Anything that gets exposed to the sun will get oxidized and you don't want a big difference between the natural and shotcrete wall. Even the walls we are building out there now will need to be maintained and often maintenance is done in terms of the stability and structural elements of the wall. But there might be a need for maintenance in terms of the aesthetics of the walls that could change over time.

11. Wetland Delineation Update

- a. Randal said over the course of the summer our wetlands biologists were out in the field updating the preliminary wetland delineation conducted for EA. They looked at all the different areas that we were impacting and actually uncovered the Fen in the recreational trail area.

We met with the Corps of Engineers in the field to review and get concurrence on the delineation process that we used. The formal wetland delineation was completed in late summer 2021.

- b. Some wetland boundaries changed from what was in the EA. The EA was done with methodology that was very conservative which is what you want at the beginning to make sure you understand where things are. Then the determination of the wetland boundaries from the field visits were conducted and those field investigations look at more information than what was done originally. Where we are impacting wetlands we looked at strategies to mitigate them. With each construction package we're determining the impact to those wetlands and then developing strategies for how to mitigate those impacts.
- c. During our field visit for the recreation trail, the original location for the bridge crossing and our new bridge location actually reduced the impact to the wetlands. That is a win-win for trail users and the environment. Those are the kind of interactive processes that we're using to minimize the wetlands impacts.
- d. There are wetlands in the Polk Creek area underneath the existing bridges. One of the things we looked at with the bridges was optimizing the span configurations and pier



- locations to make sure we were staying out of the creek and avoiding the wetlands to the greatest extent possible.
- e. We looked at a number of different trail alignments alternatives to minimize the impacts to both the Fen and the adjacent forested area. In that process we wound up staying away from the Fen. We also looked at grades and the disturbance areas from the toes of slopes for the rec trail to try to minimize the impacts to the forested areas and optimize the trail user's experience.
 - f. Other strategies used for wetland avoidance and minimization include:
 - Wetland delineation integrated into the design
 - SCAP design recommendations integrated into design
 - Consolidation of drainage outfalls
 - Use of low tailwater basin energy dissipators to avoid degradation of the wetlands
 - Steepen roadside slopes by adding guardrails or barriers
 - Retaining walls to reduce footprint with guardrails or barriers
 - Bioswales
 - Preservation of existing vegetation
 - Revegetation of temp impacts
 - g. One of the locations that has a Fen but isn't impacted by our project is near the maintenance shed. Over time there has been some grading for ditches that degraded the quality of this Fen. This is a great opportunity for us to potentially improve this Fen area through some of the work we are doing so we are exploring ways to improve the health and vitality of this Fen.

12. Schedule

- a. The schedule has changed slightly as it now includes Construction Package #5. We've also laid out the PLT Meetings quarterly all the way through construction, the TT meetings are monthly through the end of design which is about August of 2023. After that, per your request, we will be including the TT in the PLT Meetings.

13. Next Steps

- EMS ITF Meeting #4 – February 7th
- PLT Meeting #11 - February 11th
- TT Meeting #24 – February 14th
- SWEEP Meeting – April – not scheduled yet