



Floyd Hill Design Technical Team Meeting Summary

May 5, 2023, 9:00 AM to 12:00 PM

CDOT Golden Office – Lookout Mountain Conference Room and Virtual (Zoom)

1. Introductions, Meeting Purpose and Project Updates

Daniel Estes, CDR Associates, opened the meeting, prompted introductions, and reviewed the agenda.

The purpose of the meeting was to discuss:

- *Project Updates & Early Projects*
- *Follow Up: Structure Barrier Types*
- *Hillside Access Road (Bridge A)*
- *Greenway Construction Access Requirements*
- *Look Ahead & Next Steps*

TT members confirmed the meeting agenda with no changes.

2. Project Updates

- **Early Projects:** Jeff Hampton (CDOT) provided updates on the early projects.
 - The Genesee Wildlife Crossing is moving forward. The deck pour was completed last week and will take about 5-7 days to cure, followed by paving
 - Utilities are being relocated for the US 40 Roundabout project.
 - The Homestead roundabout project is working on getting a pipeline across the road.
 - The Empire Wildlife Crossing has run into some challenges with geotech. The team is gathering more information about the talus slope to prevent slippage. Utilities relocation is delayed.
 - The Parking lot designs at El Rancho are moving forward.

To conclude the Early Project updates, Daniel Estes shared photos from the Genesee Wildlife Crossing project (below).



- **Environmental Updates:** Mandy Whorton (PEAK) shared that the air quality monitors are on track to be up and running in a few weeks. There will be a project status update meeting next Thursday and she invited representatives from Clear Creek County to join, as this is a key part of 1041 commitments. Additionally, the team is moving forward with designs for the riparian bench in the West section. Through this part of the project, the Colorado Stream Quantification Tool will be used to collect data and calculate actual stream improvements.



- Kurt Kionka, CDOT, shared that the team has reached a tentative agreement on cost negotiations with Kraemer for the East Section Package. This agreement still needs approval from key stakeholders like FHWA. However, this is an exciting milestone and the team is still on track for construction of the East Section to begin in late June.

3. Follow Up Discussion: Bridge Barrier Types

Transitioning into the next agenda topic, Daniel Estes reviewed the previous TT discussions on Bridge Barrier Types. The goal for today is to confirm the recommendation of Bridge Barrier Types for the project team. Daniel turned it over to Matt Aguierre (Atkins) to provide more detail on the discussion. Matt Aguierre reviewed the highlights of previous discussions, indicating that Type 9 was favored due to differentiating factors including lower maintenance costs and consistency of corridor aesthetics. Today the team wanted to ensure that the TT is on board to move forward with Type 9 along the entire project length.

- **TT Comment:** Another key benefit of Type 9 is that the solid barrier provides for more snow/debris containment. This allows for runoff to be piped off the bridge. As much as I like the open aesthetics of the Type 10.
- **TT Question:** Can you describe how Type 9 is more consistent aesthetically? There are different barrier types throughout this corridor.
 - **Response:** Consistency refers to different applications more than different barrier types, for example, moving from bridge to on grade to bridge, a Type 9 barrier blends in better with the concrete barriers on grade as well as solid concrete walls where there is rock cut.

Daniel Estes summarized the key differentiators from this discussion as maintenance costs/needs, construction/aesthetic consistency, and containment of debris.

The group came to consensus around moving forward with Type 9 Bridge Barriers.

TT Agreement: Confirmation of support for Project Team to move forward with Type 9 Barriers for the whole project area.



4. Hillside Access Road (Bridge A)

Matt Aguirre and Alan Carter (Atkins) transitioned to the next agenda item by presenting updates on the discussion of opportunities for the Hillside Access Road.



- **TT Question:** The piers appear to be very close to the creek, will there be any structures to keep debris from construction and from the Bridge out of the creek?
 - **Response:** During construction, there will be a berm or concrete barrier along the creek for safety and to keep sediment and debris from the road out of the creek. The wind is a big safety concern in this corridor, so that will be a large focus during construction, mitigating risk and ensuring debris is not blown into the creek or onto the roadway.
- **TT Question:** Considering the weight of construction vehicles, what treatment do you expect to use on the road?
 - **Response:** We will conduct significant geotech research to ensure stability. We are currently unsure what surface treatment we will use but it will likely not be paved during construction. However, it could be paved afterwards for the Greenway.



- **TT Question:** Timing wise, when will this access road be constructed?
 - **Response:** The access roads are a separate package from the three main sections, critical for starting construction. Construction of these access roads could begin as soon as early next year (2024).

- **TT Question:** Are there any additional considerations for permitting?
 - **Response:** We aim to pair this access package with the West Section, as the timing will line up well. However, this is an ongoing conversation, so we may need to set up meetings with Clear Creek County and Idaho Springs.

The project team summarized that access is necessary to build this project, the real question for this group is whether or not these access areas are left for future use or removed after construction and the area restored back to existing conditions.

- **TT Question:** Where will the Access Road for Bridge A be in relation to the creek?
 - **Response:** The road will be 10-30 feet above water level.

The TT expressed a desire to better understand where the access road/future greenway trail would be and how that interacts with the natural surroundings. The project team indicated that another Greenway Site Visit would be the best way to accomplish this.

ACTION: CDR to plan a Greenway Site Visit to better understand construction access areas.

In addition to the location of the Access Road for Bridge A, the project team presented initial concepts for some construction materials, specifically Gabion Walls (examples pictured below).





Matt Hogan (Kraemer) and Kevin Shanks (THK) described that Gabion walls are constructed from wire baskets filled with rock. The first role of this Gabion wall will be to support heavy construction equipment. Therefore, this wall will need to meet those structural needs. The project team acknowledged that they will need to refine design details, however, they wanted to gather a sense of preferred aesthetics from the TT. The TT voiced that they didn't like large gauge wire, as it starts to appear like a metal fence. They preferred the natural look of the rock and appreciate that the rock can be sourced locally to match surrounding rock type and colors.

The project team discussed the location of this Gabion Wall along the Access Road; large trees along the creek will be preserved to ensure bank stability and as a visual barrier. Within the corridor, this wall will not be a significant visual component.

- **TT Question:** Will rock removed from this area be reused?
 - **Response:** The project team would like to reuse all the materials we can, however, the challenge is where it can be stored for +/- 3 years. Luckily, the Quarry in this area will have similar rock that matches the colors of the surrounding area.

TT Agreement: The TT is supportive of this Access Road remaining and potentially becoming part of the Greenway Trail. The TT is also supportive of using rock from the area for the Gabion wall.

The project team thanked the TT for support of this direction and indicated that they will design and plan for this road to remain after construction.



5. Construction Access Requirements Along the Greenway

Moving to the next agenda item, Daniel Estes introduced the topic of construction access requirements along the length of the project. As the group has discussed with the Access Road for Bridge A, similar access roads and areas will be required throughout the corridor in order to construct this project.

Matt Hogan (Kraemer), walked the TT through a series of maps that indicate initial access and staging areas required for construction. Through these maps, he pointed out challenging areas as well as seasonal considerations. He also indicated constraint areas and how that impacts construction sequencing. For example: construction of Pier 15 will restrict access and through traffic along the Greenway Trail, so that will need to be completed early on in order to provide construction access for the subsequent piers and roadway.

Matt highlighted certain areas where the design innovations had incorporated creative solutions for construction access, for example: through the Narrows section, pier locations can be accessed from across the creek to minimize construction traffic on I-70. A crane will be parked on the Greenway trail on the South side of the creek. This example highlights how there will need to be closures along the Greenway Trail during construction.

In the Saddle Cut area, in order to protect riparian habitat, the team will construct temporary bridges to access the areas from existing I-70 and US 6. The team has planned for one way traffic coming off I-70 and traveling along the Greenway in a one way loop to manage the narrow areas of the trail. Exiting off of I-70 is also much safer than trying to merge onto the highway.

- **TT Question:** Will there be vegetation clearing along the trail?
 - **Response:** No.

- **TT Question:** How will pedestrian and cyclist traffic be managed during construction?
 - **Response:** This is an important aspect of this conversation we want to discuss with the TT. There will be a lot happening along the Greenway and we will need to think through if and where we can maintain Greenway Trail recreation during construction. Communication with recreationalists will be key to mitigate risk. It is likely that many areas of the Greenway Trail will not be safe for recreationalists during construction.



- **TT Question:** How long will access be cut off?
 - **Response:** As we mentioned, we anticipate that the construction access package will begin early 2024 through the Fall of 2024. We will aim to begin on pier foundations, Pier 15 as a critical starting place. We aim to deal with construction by the creek in the Winter of 2024-early 2025 to avoid impacts to the creek/rafting recreation. The WB Viaduct construction is set to begin from late 2024- early2026, impacts into early 2027.
 - The necessary Greenway closures will be shaped around construction access and then the bridge construction.
 - This is another example of where a Greenway site visit can be helpful for understanding needs and potential challenges.

- **TT Question:** Will there be an access road to each pier location for bridge construction?
 - **Response:** Yes. Cranes required for pier construction require a 30 ft wide road. However, these areas will be returned to existing condition after construction, or select areas can be permanently improved for continued use. For example, access for Bridge X could permanently improve the road up through Sawmill Gulch. Revegetation will take into consideration native species and species with more likelihood to thrive under 70 ft bridge.

- **TT Question:** Will CDOT purchase the land needed for construction access? Or lease it from Clear Creek County?
 - **Response:** This is TBD. We are looking at the potential of getting an easement. Formal ROW process is underway after submitting our letter of intent.

- **TT Question:** Have you thought of different potential future uses if the county does keep the land such as picnic areas or rest areas for Greenway users?
 - **Response:** That is something we hope to keep exploring through discussions with the TT. We are starting by showing the areas that will be impacted through construction and can begin thinking about opportunities from there.

ACTION: Project team to distribute draft access plan to TT in the slides.



The group discussed construction sequencing in regards to some of the access and construction areas. For example, understanding that the Saddle Cut area will be under construction for around three years, the TT asked how much of that time will the trail be closed? The project team indicated that the Central Section will reach 60% design around Thanksgiving of this year. Some of the design elements and access needs will change. Once the team has a better understanding of exactly what they will build, they will be better able to define how they will build it.

- **TT Question:** What is the design schedule at this point?
 - 30% for Central Section on May 17, 2023
 - FOR for West Section July 12, 2023
 - 60% for Central Section Nov 10, 2023
 - FOR for Central Section May 6, 2024

ACTION: CDR to work with the project team to provide a high level overview of construction sequencing (i.e. WB will be constructed then EB bridge foundations, then new US 6.)

- **TT Question:** Assuming that construction and planning can change even day to day, will there be a webpage to communicate updates on the construction impacts?
 - **Response:** Yes. There are many different user groups to inform. This is the initiative of the PILT. A key agenda topic for the upcoming PLT meeting is the Strategic Communications Plan for the PILT.
 - Are the rafters included in those communication groups?
 - Yes, absolutely.

6. Upcoming TT Topics

Having reached the end of the meeting, Daniel reviewed the details for the next meeting on May 19th: the PLT meeting will be held from 8:30-10:00 am followed by the TT Meeting from 10:30 am-12:00 pm. The TT meeting will primarily be focused on a presentation from CDOT maintenance on deicing strategies and materials.

ACTION: TT to send questions to Daniel ahead of time to prepare the maintenance crew.



Daniel quickly fielded the group to determine a good date in the coming weeks for the Greenway Site Visit discussed. There was not an apparent best date due to a few conflicts.

ACTION: CDR to coordinate with the Project Team to determine date/time for upcoming Greenway Site Visit.

The project team also indicated that CDOT will be doing renovations at Golden offices so, starting around June, the regular TT meetings may move to the Kraemer Office.

ACTION: CDR to coordinate with the Project Team about changing the regular TT meeting location.

7. Next Steps

The project team thanked all participants for joining the meeting and wished all members a Happy Cinco de Mayo!

Summary of Action Items, Agreements, & Decisions:

TT Agreement: Confirmation of support for Project Team to move forward with Type 9 Barriers for the whole project area.

TT Agreement: The TT is supportive of this Access Road (for Bridge A) remaining and potentially becoming part of the Greenway Trail. The TT is also supportive of using rock from the area for the Gabion wall.

ACTION: CDR to plan a Greenway Site Visit to better understand construction access areas.

ACTION: Project team to distribute draft access plan to TT in the slides.

ACTION: CDR to work with the project team to provide a high level overview of construction sequencing (i.e. WB will be constructed then EB bridge foundations, then new US 6.)

ACTION: TT to send questions to Daniel ahead of time to prepare the maintenance crew.



ACTION: CDR to coordinate with the Project Team to determine date/time for upcoming Greenway Site Visit.

ACTION: CDR to coordinate with the Project Team about changing the regular TT meeting location.

8. Attendees

Cindy Neely, Amy Saxton (Clear Creek County); Stefi Szrek (Jefferson County); Jessica North (Clear Creek County School District); Jonathan Cain (Idaho Springs); Mike Raber (Clear Creek Bicycle User Group); Sam Hoover (Central City); Bill Coffin, Lisa Wolff (Floyd Hill POA); Margaret Bowes (I-70 Coalition); Brian Dabling (FHWA); JoAnn Sorenson (Upper Clear Creek Watershed Association (SWEEP)); Gary Frey (Trout Unlimited); James Proctor (Bridge Enterprise/AECOM); Tracy Sakaguchi (CMCA); Tyler Brady, John Gregory, Jeff Hampton, Badr Husini, Kurt Kionka, Ryan Sullivan, Francesca Tordonato (CDOT); Alan Carter, Anthony Pisano (Atkins); Matt Hogan, Koichiro Shimomura, Tim Maloney, Brandon Simao (Kraemer); Larry Quirk (Rocksol); Mandy Whorton, Vanessa Halladay (PEAK Consulting); Tammy Heffron (HDR); Kevin Shanks (THK Associates); Jonathan, Cara Potter (CDR Associates)