

Notes

WSDOT/ACEC PD Team Meeting

May 12, 2023

9:00am – 11:00am

Attendees:

- | | | |
|-------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------------|
| <input checked="" type="checkbox"/> Kevin Miller/WSDOT | <input checked="" type="checkbox"/> Cesar Mayor/WSDOT | <input type="checkbox"/> John Donahue/WSDOT |
| <input checked="" type="checkbox"/> Mike Fleming/WSDOT | <input type="checkbox"/> Chad Hancock/WSDOT | <input checked="" type="checkbox"/> Larry Larson/WSDOT |
| <input type="checkbox"/> Lisa Reid/SCJ Alliance | <input type="checkbox"/> Chris Keifenheim/WSDOT | <input checked="" type="checkbox"/> Manuel Feliberti/DEA |
| <input checked="" type="checkbox"/> Amir Rasaie/WSDOT | <input checked="" type="checkbox"/> Joseph Perez/WSDOT | <input checked="" type="checkbox"/> Steve Olling/Parametrix |
| <input checked="" type="checkbox"/> Ben Hoppe/JUB Engineers | <input type="checkbox"/> Daniel Babuca/WSP | <input type="checkbox"/> Suryata Halim/RHC Engineering |
| <input type="checkbox"/> Brian White/WSDOT | <input type="checkbox"/> Don Sims/HNTB | |
| | <input checked="" type="checkbox"/> Heather Weeks/Jacobs | |

Welcome & Introduction

No introductions were needed as all attendees previously met at past monthly meetings.

Upcoming Project Delivery Memos & Policy

PDM – Water Crossing & Woody Material - Julie Heilman presented information relating to the guidelines regarding the woody material near structures or within structures (a pdf of a PowerPoint presentation was provided after the meeting, see attachment called “WSDOT wood policy evolution”). WSDOT is trying to incorporate more wood on fish passage and stream restoration projects to better mimic nature and kick start the natural processes of the stream adjustments, especially when existing crossings are replaced. This is a discussion about “mobile” wood. There is already sufficient guidance on large woody debris. Julie covered the background and evolution of a policy relating to mobile wood debris going from restrictive and risk-based solutions to more natural stream restoration that includes mobile wood. A Project Delivery memorandum will be out soon and there is a goal to update the bridge and design manuals this year to provide the criteria and guidance in the use of mobile woody debris. The Hydraulics manual has already been updated to support this new guidance but will require annual updates as lessons are learned. WSDOT is a leader across the nation in this policy primarily due to the large amount of fish passage work being done in Washington State. This is a research-based approach and there will be more lessons learned as this policy is implemented. This policy will provide clear guidance on which storm event and clearance requirements will be necessary. Each project will have specific issues, such as the proximity of downstream crossings that are outside WSDOT responsibility. This design of mobile wood can’t add more risk downstream. The goal is to provide some consistency throughout the State. There was some discussion about the availability of small woody debris, whether on site or brought in. As this guidance is implemented, this could become an issue, but it’s not one at this time. There is also Tribal coordination on this guidance underway.

New Policy – Maintenance Access to Scour Protection – Evan Grimm works in the HQ’s Bridge Design Office. He provided two presentations, one about the evolution of the scour protection policy for bridges and one about the use of unmanned drones for above and below water bridge inspections.

As part of trying to implement the Fish passage program, there are a lot of challenges that WSDOT engineers and contractors face and there is a lot of pressure to remove barriers to streamline everything to keep costs low and to keep projects moving quickly forward. Part of this was to look back again at the WSDOT bridge design scour countermeasures policy. It is conservative and, in some cases, causing significant budget needs that may not be necessary. The Bridge Design Office was requested to take another look at the policy to find ways to peel back some of the conservatism and worked with Julie's team to see if there were other BMP's that can help rather than only focus on large generic buried rock revetments, which can be cost prohibitive in some cases. Evan showed a bridge section that described the variability of buried scour protection (this slide is part of Julie's Power Point Presentation as well, slide 15). This shows that there are ways to reduce costs and still provide the necessary protection from streams that may meander.

WSDOT is also developing a policy on scour protection maintenance access. This is access that is needed to inspect and maintain scour protection for the life of the structure. This access needs to be maintained so as not to need new permits every time they are accessed. WSDOT is still coordinating internally with Maintenance and Environmental Services on how these access points should be maintained in perpetuity. The Bridge Office is trying to get this guidance into the design manual this year. Otherwise, it will be provided in a Project Delivery Memo for the interim. The guidance should include the type and size of access that should remain in place and how it will be maintained, such as not letting large vegetation take over. The Roadside Manual also has some guidelines on post construction maintenance access (Section 830.06(3)) and that can be used to guide access to scour protection features as well. The manual updates need to provide a cross reference to the Roadside Manual, so the guidance is clear and complete. There was further discussion about the timing of manual updates.

Evan shared a portion of the presentation that was provided to the legislature regarding the drone bridge inspections and the link is here -

<https://app.leg.wa.gov/committeeschedules/?eventID=2023031434#//TRAN/////year>

This work involves both aerial and underwater inspections. Evan shared a figure that shows the two types of drones (included with these meeting notes, "DroneSlide"). Drones are just one tool to help with bridge inspections as other observation techniques will still be used such as under-bridge inspection trucks. Drones simply help to get up close in areas that can't be seen from the ground and an under-bridge inspection truck can't be used, such as bridges over water (i.e. the SR 520 floating bridge). Underwater inspections are mostly done with divers, but only to certain depths. The underwater drone (Underwater Remotely Operated Vehicle (ROV)) can assist with inspections at much greater depth, such as with the SR 520 floating bridge anchor cables and bottom of lake anchors.

Staff Updates

All

- HQ Development Division – Hydraulic Office recruitments advertisements are out for 4 positions (junior in training and experience). No other notable changes in HQ's.
- FHWA changes are happening as well - Susan Wimberly was promoted and leaving the area (to Minnesota). Gary Martindale will be taking her position in our Region. Michael Villnave is also leaving for a three month rotation in DC. There may be some changes in FHWA support for the Regions as these shifts are occurring. Stay tuned.
- WSDOT Regions & Consultants –

- NW Region changes in fish passage and major projects group. Amir is retiring at the end of June. There are also two Project Engineers positions open in the South King Area (fish passage and major projects group). Some retirements coming up at the Assistant RA level as well (Amir and Azim), recruitments are out.
- Olympic region changes – three Project Engineers positions have been filled due to retirements:
 - Ben Ford is the new PE for Port Angeles PEO
 - Mark Steingrebe is the new PE for Tumwater Design
 - Victoria Book replaced Jeff Sawyer for Environmental and Hydraulic Services Engineer
- WSF updates – hiring a lot of summer interns.
- South Central Region changes - Todd Trepanier is now RA. Chad Simonson is leading up the Construction side and Tom Brasch is leading the Developer Services section. These caused some backfilling of Project and Area Engineers as well.

Upcoming WSF Design Build Contracts

Challenges & Unique Requirements – Chun-Ho Chen provided a Power Point presentation (also attached to these meeting notes, “WSF TE DB”). This presentation was about the current direction WSF is going with potential future Design Build (DB). They currently don’t have any DB projects and are looking at how they can implement DB within their very specific environment. The presentation was an orientation on the different aspects of the marine environment and their facilities. WSF is looking for advice from the industry and consultants on how the market is set for contractors that can do this work. The Southworth Terminal is one that is coming up for potential DB (Chen described the project improvements). Julie mentioned that if this does go DB, the DB template needs to address coastal design issues. Mike Fleming suggested asking this question to industry. Most DB contractors have relationships with firms that can design this kind of project, so there could be some good feedback to help WSF make some decisions. WSF will start doing that.

GEC Support: How is it going? – Larry Larson briefed the team on GEC lessons learned that was discussed at the last WSDOT Project Development Engineers meeting. Larry asked the Consultants here on how the GEC experience is going. Manuel had some comments as he is working on the South Central Region GEC team. Things are going very well and there is a lot of good support from both WSDOT and the rest of the GEC team. One issue came up when they switched to ProjectWise as there can be quite a process to switch over for consultants, but it was manageable. DEA also works on the Olympic Region Fish Passage GEC, NW Region and Eastern Region GEC’s and Manuel hasn’t heard anything going wrong on any of those. Heather Weeks also mentioned that Jacobs is also on several GEC’s and they are going well. Heather will check in and provide any lessons learned to Larry if there are any to share.

Larry mentioned that several Regions may have stalled a bit to get GEC’s going because of the perception that Consultants cost more, but that hasn’t been the case, especially on preservation projects. For complex projects, where WSDOT may not have the expertise, GEC’s are a great option and those have been going well. On the construction side there have been more challenges in getting the resources as these need to be planned earlier due to the lack of CM resources across the board. Overall, GEC experience has been very positive, there may simply need to be a change in expectations in some areas and this will continue to be a challenge to deliver a large program with limited resources. Amir mentioned that the NW Region has been using a GEC for Fish Passage for quite some time and it has become very successful in the delivery of this program. The NW Region has just

started a GEC for the preservation program and have been gearing up for that work as there is a lot of preservation work coming up in the Region.

Larry also mentioned a challenge to keep the GEC staff busy. If there is even a day in delay of work, you could lose a GEC member as they must stay utilized on the consultant side, so better planning is necessary to keep staff engaged.

This will be an ongoing discussion with this group.

Design Manual Statewide Review

The Statewide Review will begin very soon, in June. As with last year, Steve will manage the consultant side of the review process and gather the updates for a single submittal to HQ's. Look for all of that very soon.

Adjourn

Attachments:

- WSDOT Wood Policy Evolution.pdf
- WSF TE DB.pdf
- DroneSlide.pdf