

# ROADWAY TEAM MINUTES

**April 8, 2021**

**Teams Meeting**

**8:30AM – 10:30AM**

Attend	Member	Company	Phone	E-mail
	Buck Allen	Hamilton	541.359.0897	ballen@hamil.com
X	Mark Allen	WSDOT	509.324.6232	allenmv@wsdot.wa.gov
	Bruce Chattin	WACA	206.571.3395	bchattin@washingtonconcrete.org
X	Jeff Daly	Nutter Corp.	360.907.9408	jeffdaly@nuttercorp.com
	Terry Drochak	WSDOT	360.705.7405	drochT@wsdot.wa.gov
X	Dan Glover	Tucci & Sons	253.922.6676	dglover@tucciandsons.com
X	Barry Fitzgerald	Graham	425.410.9991	barry.fitzgeral@grahamus.com
X	*Marco Foster	WSDOT	360.705.7824	fosterm@wsdot.wa.gov
X	*Bill Grady	KLB Const.	425.355.7335	billg@klbconstruction.com
X	Bobby Scarsella	Scarsella Bros.	253.269.1381	Bobby.s@scarsellabros.com
	Gil McNabb	WSDOT	206.440.4758	mcnabbg@wsdot.wa.gov
X	Colin Newell	WSDOT	360.740.8603	newellc@wsdot.wa.gov
	Steve Strand	WSDOT	206.440.4672	strands@wsdot.wa.gov
	Roger Palfenier	Totem Electric	253.722.2838	rogerp@totemelectric.com
	Brian Pearson	WSDOT	509.667.2881	pearsonb@wsdot.wa.gov
	Joseph Rooney	Snohomish Co.	425-330-6668	Joseph.Rooney@co.snohomish.wa.us
X	Ron Reilly	Apply-A-Line	253.735.3232	ron@applyaline.com
	John Romero	WSDOT	360.538.9502	romeroj@wsdot.wa.gov
X	Larry Smith	Atkinson Const.	253-350-5814	larry.smith@atkn.com
X	Neal Uhlmeier	WSDOT	360.705.7816	uhlmeyn@wsdot.wa.gov
X	Travis Walken	Granite	425.551.3152	travis.walken@gcinc.com
	<b>Guests</b>			
X	Gabe Ng	WSDOT	360.705.6839	nggabe@wsdot.wa.gov
X	Steve Haapala	WSDOT	360.705.7241	haapals@wsdot.wa.gov
X	Doug McClanahan	WSDOT	360.705.7984	mcclando@wsdot.wa.gov
X	Tyler Pierce	SPM	253 777-7698	tylerpierce@spmnw.com

## **Welcome and Review of Agenda**

Marco welcomed the group and reviewed the agenda. Meeting minutes from the February 18<sup>th</sup> meeting were accepted. Introductions were made.

### **Temporary Misc. Pavement Marking – update**

Marco showed new temporary striping specifications for short duration and long duration temporary striping. Additions include short term Temporary Miscellaneous Pavement Markings, and long term for Temporary Centerline, Temporary Edge line, Temporary Lane Line, and Temporary Miscellaneous Pavement Markings. The difference between short duration and long duration Temporary Miscellaneous Pavement Markings was discussed. Short duration Temporary Miscellaneous Pavement Markings should mimic those shown in the standard plans, while long duration Temporary Miscellaneous Pavement Markings should be per the standard plan dimensions. Steve Haapala from HQ Traffic Operations asked for comments on the new specifications. Suggestions included paying for stop bar and cross walks by the square foot as the overall dimensions vary and to add items that cover striping found in roundabouts. Steve will review to match the permanent specs.

### **New Pay Item for Wide Line Striping**

Marco brought up a question concerning how to incorporate the many wide line striping types/symbols into the standard specs for payment. It has been suggested that a fill in item similar to HMA Class \_\_\_\_\_ XX-XX be used to reduce the number of bid items used in each contract. The team had no objections.

### **High Reflectivity Striping**

Doug McClanahan from the WSDOT HQ Traffic Operations was on hand to discuss and ask for feedback on high reflectivity striping. While WSDOT is not currently using it they may in the future partly due to the onset of autonomous vehicles. Ron Riley from Apply-A-Line and Tyler Pierce from SPM provided feedback. Both Apply-A-Line and SPM have put down a significant amount of high reflectivity striping. Both Ron and Tyler prefer the California specification. While the visibility improvement is remarkable the cost increase is significant. States can not afford to apply in all locations and line types, so selection of routes and line types is important. Applying high reflectivity on 6-inch lines, if WSDOT adopts that width, may be cost prohibitive. Applying on plastics is the best economically due to the durability of the line. It is also best used on protected (recessed) applications to preserve the investment. Marco would like to do a pilot but recognizes that the results may be a few years out. Ron suggested that the pilot be in a high-volume area.

### **Cost Escalation & Procurement Delays**

Marco asked the group if procurement delays and price escalations are being realized on projects due to recent industry factors such as weather in the SE US, Covid and trucking. Ron responded yes for pavement marking materials and while nothing is definite it appears there will be shortages. Price increases are already being reflected in bids. Most suppliers are sending notifications now. Hardest hit are resin based materials. This also includes plastic pipe which is becoming harder to get. Luminaire procurement has remained steady at 120 days and steel cost is escalating. This item will be kept on the agenda. Industry suggested that WSDOT will need to be flexible on granting substitutions.

### **Streambed Gravel**

Marco recapped difficulties projects are having procuring small quantities of streambed gravel for fish passage projects. In most cases a streambed gravel mix is specific to a single project. Standardized mix components with different mixing ratios for the components is desirable. Gabe Ng from WSDOT HQ Hydraulics was on hand to discuss the current revisions being made to the specifications. Gabe indicated that material requirements for sediments and cobbles were currently in the standard specifications. Proposed changes would be to provide proportions by volume as a project specific special provision. The hope is to encourage suppliers to mass produce components as fish passage demands go up. The question was asked if the proportioned components from different sources could be mix on site and the answer was yes. Gabe said that streambed material matching the design streambed gradation could be obtained from pit run sources. Streambed sediment can also be excavated from the existing channel if the project design permits it. Gabe pointed out that placement requirements would be focused on ensuring that there is no flow loss. Gabe asked the team for comments on the draft specification.

### **E-ticketing – How is it going**

Marco asked for updates on E-ticketing from the field. Feedback included:

- Some rural pits are not participating.
- HMA is going smoothly and ahead of concrete.
- Bill said that three suppliers have stepped up. All with different systems, including some with inspector portals.

### **CCP Payment Changes / Sawing CCP**

Marco updated the team on CCP payment and relief cut discussions. WSDOT will keep the relief cut specifications as proposed at the last meeting. Concerning tolerances for payment WSDOT will keep the tolerances as they are in the 2020 specifications (+ 0.04 to -0.04). WSDOT is investigating the potential of breaking payment into two pay items, one for concrete and one for finishing. This effort is being done with other industry groups.

### **Future Business**

- Unifier (e-documentation) - update (Mark Allen/Wendy Stroschein)
- Media Filter Drain Payment (Marco)
- Stake less Construction (Marco)

**Next Meeting Date – May 27<sup>th</sup>**

# ROADWAY TEAM MINUTES

**May 27, 2021**

**Teams Meeting**

**8:30AM – 10:30AM**

Attend	Member	Company	Phone	E-mail
X	Buck Allen	Hamilton	541.359.0897	ballen@hamil.com
X	Mark Allen	WSDOT	509.324.6232	allenmv@wsdot.wa.gov
	Bruce Chattin	WACA	206.571.3395	bchattin@washingtonconcrete.org
X	Jeff Daly	Nutter Corp.	360.907.9408	jeffdaly@nuttercorp.com
	Terry Drochak	WSDOT	360.705.7405	drochT@wsdot.wa.gov
X	Dan Glover	Tucci & Sons	253.922.6676	dglover@tucciandsons.com
X	Barry Fitzgerald	Graham	425.410.9991	barry.fitzgeral@grahamus.com
X	*Marco Foster	WSDOT	360.705.7824	fosterm@wsdot.wa.gov
X	*Bill Grady	KLB Const.	425.355.7335	billg@klbconstruction.com
X	Bobby Scarsella	Scarsella Bros.	253.269.1381	Bobby.s@scarsellabros.com
	Gil McNabb	WSDOT	206.440.4758	mcnabbg@wsdot.wa.gov
X	Colin Newell	WSDOT	360.740.8603	newellc@wsdot.wa.gov
X	Steve Strand	WSDOT	206.440.4672	strands@wsdot.wa.gov
	Roger Palfenier	Totem Electric	253.722.2838	rogerp@totemelectric.com
	Brian Pearson	WSDOT	509.667.2881	pearsonb@wsdot.wa.gov
X	Joseph Rooney	Snohomish Co.	425-330-6668	Joseph.Rooney@co.snohomish.wa.us
X	Ron Reilly	Apply-A-Line	253.735.3232	ron@applyaline.com
X	John Romero	WSDOT	360.538.9502	romeroj@wsdot.wa.gov
	Larry Smith	Atkinson Const.	253-350-5814	larry.smith@atkn.com
X	Neal Uhlmeyer	WSDOT	360.705.7816	uhlmeyn@wsdot.wa.gov
	Travis Walken	Granite	425.551.3152	travis.walken@gcinc.com
	<b>Guests</b>			
X	Chris Christopher	WSDOT	360.705.7821	christc@wsdot.wa.gov
X	Maury Margol	Proxet	770 289-1769	maury.margol@proxet.com
X	Olena Soloshenko	Proxet		
X	Jim Zusy	Atkinson Const.		James.zusy@atkn.com

- Co-chair

## **Welcome and Review of Agenda**

Marco welcomed the group and reviewed the agenda. Introductions were made.

### **COVID Update**

State Construction Engineer Chris Christopher addressed the team concerning recent changes to masking requirements. New guidance suggests that if contractors can verify full vaccination, then masking and social distancing are not required for that employee. COVID plans will need to be updated to reflect the new guidance should the contractor chose to implement it. All other requirements for WSDOT projects remain in place. WSDOT employees are not part of the new guidance and will continue to wear masks and social distance.

Chris also took the opportunity to acknowledge Marco Foster's retirement and thank him publicly for his many years of service to WSDOT and the AGC Roadway Team.

### **E-ticketing presentation – Proxet**

Maury Margol and Olena Soloshenko from Proxet were on hand to present the Proxet E-ticketing web based solution. The solution offers paperless ticketing from order to acceptance, real-time monitoring of delivery by all parties, Proof of delivery, ability to accept load and enter comments, and provide a digital paper trail among other features. Marco will distribute the PowerPoint.

### **Temporary Misc. Pavement Marking – update**

Marco told the team that comments on measurement and payment for crosswalks and stop bars had been addressed and will be included in the 2022 Standard Specifications.

### **8-22 update**

Marco mentioned that there were no tolerances for pavement marking grooving. Marco shared the spec where he has included tolerances for length and width and asked the team to comment on the specification.

### **High Reflectivity Striping**

WSDOT is still working on the wet reflective specifications. The basis of the WSDOT specification is the California spec. Marco asked for feedback on the pounds of beads to be used. Ron suggested that the manufactures recommendation be used. Ron also suggested that the specification be expanded to include extruded applications. A pilot was discussed for this fall. WSDOT will determine West side locations with varying ADT's.

### **Common Borrow Measurement**

The team discussed various issues associated with pit cross section and re-cross for common borrow measurements including multiple sources and the inclusion of recycled material that comes from a stockpile. Mark Allen described a change that he implemented that used the calculation of embankment minus roadway excavation quantity to determine borrow quantity for pay. This enabled the project to utilize multiple sources and stockpiles that may have other project using them as well as a way to use recycled material. Several team members were not in favor of this measurement being a new method for measuring common borrow as it relies solely on the quality of survey, thoroughness of modeling, and any contingency added by the designer. It was suggested that it could be an option but should not be a wholesale change.

### **Cost Escalation & Procurement Delays**

The team identified multiple materials that are experiencing both cost increases and procurement issues. Lumber has seen a 100% increase in cost, and procurement for lumber packages is taking 2 to 3 months. Pipe continues to increase in cost, but availability is the larger issue. This includes ductile iron. For electrical work wire, conduit and cabinets have all been impacted.

Marco asked if WSDOT should be increasing the use of existing fuel and steel escalation clauses in new contracts (asphalt is standard). It was suggested for fuel that it depends on the size and duration. Marco encouraged contractors to use the Q and A process during bid if it appears a clause makes sense and it is not part of the contract. This item will stay on the agenda.

### **Streambed Gravel**

Marco let the team know that Hydraulic Office has revised the streambed gravel specification and it is with Gabe Ng, who presented at the previous meeting, for comment. Gabe made changes to make use of onsite material easier and added a project specific test section GSP with fill ins so that issues could be worked out prior to a fish window closure.

### **Future Business**

- Unifier (e-documentation) - update (Mark Allen/Wendy Stroschein)
- Media Filter Drain Payment (Marco)
- Stake less Construction (Marco)

**Next Meeting Dates after summer break – September 23, November 4, and December 16**

# ROADWAY TEAM MINUTES

October 7, 2021

Teams Meeting  
8:30AM – 10:30AM

Attend	Member	Company	Phone	E-mail
X	Buck Allen	Hamilton	541.359.0897	ballen@hamil.com
X	Mark Allen	WSDOT	509.324.6232	allenmv@wsdot.wa.gov
	Bruce Chattin	WACA	206.571.3395	bchattin@washingtonconcrete.org
X	Jeff Daly	Nutter Corp.	360.907.9408	jeffdaly@nuttercorp.com
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X	Dan Glover	Tucci & Sons	253.922.6676	dglover@tucciandsons.com
X	Ryan Gilmore	Graham		ryan.gilmore@grahamus.com
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X	Bobby Scarsella	Scarsella Bros.	253.269.1381	Bobby.s@scarsellabros.com
	Gil McNabb	WSDOT	206.440.4758	mcnabbg@wsdot.wa.gov
X	Steve Strand	WSDOT	206.440.4672	strands@wsdot.wa.gov
X	Roger Palfenier	Totem Electric	253.722.2838	rogerp@totemelectric.com
	Brian Pearson	WSDOT	509.667.2881	pearsonb@wsdot.wa.gov
X	Joseph Rooney	Snohomish Co.		joseph.rooney@co.snohomish.wa.us
X	Ron Reilly	Apply-A-Line	253.735.3232	ron@applyaline.com
X	John Romero	WSDOT	360.705.7824	romeroj@wsdot.wa.gov
X	Larry Smith	Atkinson Const.	253-350-5814	larry.smith@atkn.com
X	Jason Streuli	Graham	425.508.2787	jasonstr@grahamus.com
X	*Neal Uhlmeier	WSDOT	360.705.7816	uhlmeyn@wsdot.wa.gov
X	Travis Walken	Granite	425.551.3152	travis.walken@gcinc.com
	Brian Whitehouse	WSDOT	360.412.3421	whitehb@wsdot.wa.gov
	<b>Guests</b>			
X	Chris Christopher	WSDOT	360.705.7821	christc@wsdot.wa.gov
X	Jon Deffenbacher	WSODT	360.705.7829	deffenj@wsdot.wa.gov
X	Michael Rosa	WSDOT	360.705.7156	rosam@wsdot.wa.gov
X	Doug McClanahan	WSDOT	360.705.7984	mcclando@wsdot.wa.gov

\*Co-chair

## **Welcome and Review of Agenda**

Neal welcomed the group and reviewed the agenda. Introductions were made.

### **Vaccine Mandate Discussion**

Chris Christopher, WSDOT State Construction Engineer, attended the meeting and gave an update on the status of where WSDOT is at with the mandate.

Chris shared that WSDOT has approximately 6,600 employees, and that around 6,000 employees have been validated to date. About 600 employees still needing validation, with about half of these working in the ferry system. For the highway construction side, WSDOT has approximately 2,000 employees, but have around 150-200 that have yet to be validated.

WSDOT has sent letters to all Contractors with active contracts with WSDOT and have heard from many Contractors that implementation of the mandate may affect their work schedule due to potential labor shortages.

Bill asked the Team what they are hearing from others about labor shortages. The Team had vaccination rates ranging from 30%-35%. Statements from some of the Team is that they are having issues during bidding getting subcontractors that will comply with the Mandate. This is limiting the number of subcontractors willing to do the work and prices are coming in higher.

Chris said that the Project Office will be the one that receives the declarations and that the Project Engineer will be verifying that the person that signed the declaration has the authority to do so (same as signatures on change orders for example). Jon Deffenbacher added that WSDOT's expectation is that only one form is submitted by the prime contractor to cover the project including subcontractors. Jon also included at link in the Teams chat to the Vaccine Mandate FAQ - <https://www.governor.wa.gov/VaccineMandateFAQ>

The team asked if WSDOT would be revisiting how working days are determined on projects going out to bid due to potential workforce shortages. Chris responded WSDOT will need to look at what is being seen in current bid opens and future bid openings after 10/19/2021. WSDOT will continue to be putting in realistic timeframes into our contracts, but will look to identify if there are supply chain issues related to a project that may require an additional time component. Chris also said that that WSDOT will continue to be a reasonable owner and will look at time extensions on a case by case basis.

### **Buried Structures Precast Standard Plans Update**

Mike Rosa, WSDOT Bridge and Structures Office, gave an update on the status of developing Standard Plans for buried structures.

WSDOT signed a contract with WSP on 9/13/2021, with a target completion date of 7/21/2022 for 3-sided (including foundation design) and 4-side structures. Span ranges will be from 12' - 30', with fill depths ranging from 0' - 60'.

This WSDOT/WSP team has been working with Precast Industry to determine their typical capabilities related to wall heights, span lengths, and wall thicknesses. Based on their feedback, WSP will be looking at span ranges that will be in 2' or 5' increments, and height ranges in 2' to 5' increments for their design development of these Standard Plans. Mike also stated that his



team and WSP will be working with Kim Mueller's group before finalizing structure sizes in the Standard Plans. A lot of the upfront work with Precasters for their capabilities has already been done. Mike said WSP will be requested to follow up on the two different joint types (ship lap or welded joint). When asked if picking points will be evaluated Mike responded that picking points are typically left to the precaster.

Neal mentioned to the team, based on a meeting last week with Precast Industry, that they are hesitant to stockpile these types of structures because it is risky due to the varying sizes, cost uncertainty and a lack of storage capacity.

Mike asked the Team to let Neal know of any lessons learned on the Standard Specification 6-20 related to contractor supplied designs.

### **High Reflectivity Striping Pilot**

Doug McClanahan, WSDOT HQ Traffic Office, presented to the Team that his office will be looking at locations across the State to find areas that are experiencing crashes related to striping to set a baseline for a before and after with a pilot project next year to use wet performing beads. This will be most likely several locations that total as much as 150-200 miles in length.

Doug said that reflective testing and before and after analysis will be by a third party and that he is working with vendors on the wet application and how to measure reflectivity. He also stated that this would be a striping contract only so that the before and after analysis would be directly related to the striping application. This is why he doesn't want to include it with any paving project.

Neal mentioned to the Team that a draft specification was included in a previous email to the group and asked the Team to look at the specification and provide any comments back to him if necessary.

### **Vaccine Proclamation Thoughts**

Bill wanted to know from the Team if the 30%-35% was correct for everyone. The Team confirmed that this was generally accurate, with one group being closer to 50% of their staff. All agreed that this is a pretty polarizing subject amongst their workers.

Jon stated that if the Team is hearing of a difficulty of finding locations for the Johnson and Johnson vaccine to let WSDOT know so that we can get this issue up to the Governor's Office since we have been told that this vaccine is readily available in the State. Here is a link to find vaccine locations - <https://vaccinelocator.doh.wa.gov/>

A discussion was had that Labor Unions are starting to offer accommodations to offer vaccinated members for WSDOT projects.

A question was raised about the lack of guidance related to exemptions and accommodations. Jon stated that WSDOT is reluctant to give Contractors a direction on these items. Jon mentioned that AGC has put information out there for this guidance. Jon shared the following links in the Teams meeting.

- <https://www.agc.org/covid-19-vaccine-toolkit>

- [https://www.agc.org/sites/default/files/Galleries/enviro\\_members\\_file/Vaccine%20QAs.pdf](https://www.agc.org/sites/default/files/Galleries/enviro_members_file/Vaccine%20QAs.pdf)

### **Cost Escalation & Procurement Delays**

Neal asked the Team what is being seen in the industry for cost Escalation and procurement.

- Precast girders are needing 10-14 months of lead time.
- Ductile iron pipe, 24" or greater is taking about 8-10 weeks
- PVC and ADS material prices have gone up 50%-100% as compared to earlier this year.
- Pavement marking material such as plastic and the beads are having supply challenges.
- Electrical poles (signal and luminaires) still typically running at 180 days for lead times
- Oil prices seem to have settled down at the moment.

Jon Deffenbacher asked the Team if it was time to introduce additional cost escalation specifications to contracts. No conclusion was reached.

### **Partnership for Excellence in Contract Admin Awards**

Neal reminded the Team to nominate their projects for this award. The process for the submittal for nominations is now electronically to a drop box, which allows for videos and drone footage. The application form is a shorter one and doesn't require a defined completion status, just that major components of work are completed. The award presentations will show all of the nominations, not just the winning projects.

### **Solicitation of Future Topics**

Neal asked the group if there was any topics we should start discussing.

- Recycled concrete should be back on the list
- Update on wet bead pavement marking

### **To Do Items**

- Send out new ASCE PE Responsibility chart (Neal)
- Send out errata for changes to Standard Specifications (Neal)

### **Future Business**

- Unifier (e-documentation) (Mark Allen/Wendy Stroschein)
- Stakeless Construction (Neal)

**Next Meeting Date** – November 4<sup>th</sup> 18, December 16

# ROADWAY TEAM MINUTES

**November 18, 2021**

**Teams Meeting  
8:30AM – 10:30AM**

Attend	Member	Company	Phone	E-mail
	Buck Allen	Hamilton	541.359.0897	ballen@hamil.com
X	Mark Allen	WSDOT	509.324.6232	allenmv@wsdot.wa.gov
X	Mike Briggs	WSDOT	360.759.1302	briggsm@wsdot.wa.gov
	Bruce Chattin	WACA	206.571.3395	bchattin@washingtonconcrete.org
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	Roger Palfenier	Totem Electric	253.722.2838	rogerp@totemelectric.com
	Brian Pearson	WSDOT	509.667.2881	pearsonb@wsdot.wa.gov
X	Tyler Pierce	SPMNW		tylerpierce@spmnh.com
X	Joseph Rooney	Snohomish Co.		joseph.rooney@co.snohomish.wa.us
X	John Romero	WSDOT	360.705.7824	romeroj@wsdot.wa.gov
	Bobby Scarsella	Scarsella Bros.	253.269.1381	Bobby.s@scarsellabros.com
X	Larry Smith	Atkinson Const.	253-350-5814	larry.smith@atkn.com
	Steve Strand	WSDOT	206.440.4672	strands@wsdot.wa.gov
	Jason Streuli	Graham	425.508.2787	jasonstr@grahamus.com
X	*Neal Uhlmeyer	WSDOT	360.705.7816	uhlmeyn@wsdot.wa.gov
X	Travis Walken	Granite	425.551.3152	travis.walken@gcinc.com
	Brian Whitehouse	WSDOT	360.412.3421	whitehb@wsdot.wa.gov
	<b>Guests</b>			
	Shaun MacIntosh	Propeller	720.299.8723	shaun@propelleraero.com

\*Co-chair

## **Welcome and Review of Agenda**

Neal welcomed the group and reviewed the agenda. Introductions were made. Neal informed the group that Buck Allen is no longer on the AGC Roadway Team and has elected to be part of the AGC Structures Team. Ron Reilly has also left the team for retirement.

### **Propeller Drone Survey**

Shaun MacIntosh, Propeller, gave a presentation on what Propeller can do with analyzing information from drones to overlay images onto GIS or CADD files.

Shaun's presentation focuses on the following key items for Drone specifications that are needed to have the desired outcome.

1. Sensors – Photogrammetry cameras that have a mechanical shutter with a minimum resolution of 20 MP.
2. GNSS Receiver – Have capability for both course & image position correction.
  - a. Preference is to have craft be capable of RTK (real time processing) or PPK (post processing).
    - i. For drone surveys, Shaun believes PPK is the better option.
  - b. If RTK or PPK is not possible, then use Ground Control Points (GCP) placed at every 300 yards.
3. Post Processing Software and Data Validation – Have capability of post-processing the image tags further and process in a localized coordinate system. Should have ability to export quality report, showing RMSE of both GCPs and checkpoints.

Cost of items.

- Ground Control Point Targets - \$800 per target. These come in either 5-packs or 10-packs
- Drones – List three Drones for consideration
  - Phantom P4RTK - \$8,200
  - M-300 - \$27,250
  - Wingtra - \$24,040

Shaun stated that most of the customers fly the drones themselves, and then send the data to Propeller to process. It typically takes 8-12 hour to process the data and turn it back to the customer.

The Team asked Shaun about some of the pitfalls/biggest issues with Drone Survey.

1. Shaun responded that one of the biggest issues is being in compliance to fly near airports, but that this issue is getting easier since airports have been working with drone manufactures to address their concerns.
2. Vegetation is tough to deal with, especially if you have trees with lots of overhangs. If this is the case, the using a drone with LiDAR would be better.

The Team asked Shaun about how other states are using drones. Shaun responded that he is mostly involved with Alaska who does about 200-300 flights per year. Shaun stated that he can reach out to Alaska and ask them if they would like to talk with this Team.

## **RCA Update**

Neal gave an update on the 2021 usage of RCA. For the year, only 1007 tons of RCA was used. The most common reason for Contractors not using RCA was that the RCA material was too costly to use.

WSDOT Environmental Office is engaging in an effort to have dialog with WSDOE to get better understanding on compliance items and enhanced BMPS that will allow easier use of RCA on projects.

Neal mentioned that this group had earlier discussions on using this material as structural backfill, and that he has run into concerns from the WSDOT Geotechnical Office because of the issues of pH and resistivity on steel, and with pH on polyester geo-reinforcement. So, this item hasn't moved any further.

The Team then asked about other areas of applications where RCA such as bag walls, geosynthetic walls, and trench backfill. Neal said he would look into possibly of the additional uses mentioned.

## **Media Filter Drain**

John gave a status update to the Team on where we left off on the Media Filter Drain discussion over 1.5 years ago.

There has been inconsistency over the last decade on how the measurement and payments for the same MFD types have been called out in contracts. The most used MFD's are Type 1 (Sheet Flow Application with underdrain on Shoulder) and Type 3 (Sheet Flow Application without underdrain, drains to slope, on Shoulder), and the Hydraulics Office have developed DRAFT Specs for these two items.

John presented the two specials for general comments, and the general comments from the Team were that the measure and payment should be an area measurement, not a linear one.

The Team then asked about the effectiveness of MFD's and if any studies have been done. Neal stated that John and he would look into this. John asked the Team to review the two specials, which will be attached to the minutes, and provide any comments or suggested revisions.

## **Roadside Features**

Neal gave an update on guardrail and ITS widening areas related to earthwork.

Neal presented on screen that the Standard Plan details for Type 31 non-flared terminals has been updated so that the pad dimensions can be used for all three terminal systems.

Also, WSDOT Plans Preparation Manual has a statement that the design shall *“Estimate and include in the contract earthwork quantities associated with features installed outside the typical shoulder break point. These installations include, but are not limited to, guardrail terminals, luminaires, and ITS equipment. Refer to the layout and dimensions shown in the standard plans or project details when calculating quantities, and provide a separate tabulation for each location.”*

The Team stated that this is not always shown on WSDOT plan sets, and that this makes it hard to include these areas in their bids when there is a large amount of earthwork on the project. Neal stated that he will engage the appropriate WSDOT groups to focus on this to make sure they are identified in the plans.

### **AGC Admin, AGC Structures, and AGC Design Build Update**

Neal gave a brief update on what the other AGC teams are doing.

#### **AGC Admin**

- Rental Truck- contractors were concerned with the difficulty of tracking down all the paperwork for rented trucks when they may only be on a project site once.
- Bonding- Why is this a barrier? How does this become a barrier? Bonding requirements that challenge subcontractors.
- Retainage- What changes would help?
- Subcontractor Insurance- Is the contract language clear on what subcontractors need?
- Vaccine Mandate- Overall the discussion landed on there isn't a lot of WSDOT work right now so the workforce needs aren't that great.
- Unifier Implementation- How's it going, Improvements and Upgrades, and What's next?

#### **AGC Structures**

- Precast procurement issue. How can we get precasters to produce more efficiently and in other times of the year?
- Potential for expanding our use of escalation payment factors to other materials, more than steel asphalt and fuel.

#### **AGC/ACEC Design Build Team**

- Reviewing current template language in the General Provisions, *Section 1-07.17, Utilities Relocations and Technical Requirements Section 2.10, Utilities and Relocations Agreements.*
- *Organizational Conflicts of Interest Manual* and suggesting edits.
- Forward Compatibility requirements, warranty work, debrief feedback, and experience requirements.

### **Other Discussion Items**

#### **Fish Barrier Utility Relocations**

Bill remembered an earlier discussion about making sure that private utilities are pre-relocated prior to the project starting. This has been causing delays on projects because the utility relocation is delaying construction. Neal asked if this is regards to DB projects since for DBB projects, utility relocations have to happen prior to the Contract going out. Bill responded that this is happening on both delivery methods for projects.

#### **TESC Plans for Contracts**

Bill asked why there is not any consistency with Contracts to contain TESC Plans. Some Contracts have them while others don't. Neal stated that he will investigate this item.

### **To Do Items**

- Send out Propellor's PowerPoint Presentation to Team (Neal)
  - This was emailed by Shaun to those in the meeting invite.
- MFD Effectiveness (John)
- Neal to investigate TESC Plan requirements.

### **Future Business**

- Stakeless Construction (Neal)
- Unifier (e-documentation) (Wendy Stroschein)
- Fish Passage – update (Kim Mueller)
- E-ticketing feedback (Kevin Waligorski)

**Next Meeting Date** –~~December 16~~ **January 13, 2022**