**GLS Tech Team Meeting – Meeting Minutes**

**WEMA, WisDOT, Industry and Partners**

**Wednesday, March 22, 2023; 1:00 - 4:00 PM**

**{Hybrid Meeting – WisDOT Truax Building – Antigo Silt Loam Conference Room/Teams Virtual Meeting)**

**Introduction/Welcome** – Dave Staab

* Membership updates:
  + Clark Wantoch -Wisconsin Concrete Pipe Association (WCPA) is no longer a GLS member. Brian Kolden of County Materials said that he was a member of the board for WCPA and said they are “moving in a different direction” and may transition into the American Concrete Pipe Association with a representative from Illinois and Wisconsin. He volunteered to be the contact for concrete pipe issues.
  + Eric Gwidt – NER PD stepped down from GLS, Jesse Hansen – NER PD will take his place.
  + Mike Hoelker, BPD added. (Membership list attached)
* Meeting Notes - Brian DuPont/Dave Staab, Dave mentioned that he got one comment on the minutes and updated them. He asked if there were any other comments, and there weren’t.
* Approval of previous meeting minutes (Minutes attached). Minutes are approved.

**Grass Seed Mixes & Seed and Sod Specification Updates** –

Mark Polega-

Last year seed availability was difficult, particularly for “fine fescues”. After discussions with seed producers, they have had a better harvest of seed, and so WisDOT reverted to the original standard seed mix at the beginning of 2023.

New native seed mixes: Christa and I have been working with a consultant on new seed mixes, and six (6) new mixes have been developed that may replace the 70 or 70a mixes or be additions. They address three different types of soil and identified for northern or southern parts of the state. The new mixes are more cost effective, diverse and pollinator friendly. Updates to nurse crop guidelines for seeding on bare soil are also being completed.

There will be updated special provisions for the following:

* 6 new mixes, including nurse crop for seeding on bare soil, and
* Updated 75 and 80 mixes which have updated surveillance and care cycle,

Optional specials include:

* + Native seed surveillance and care cycles
  + Pre-planting vegetation treatment
  + Seed bed preparation
  + Prosecution and progress - notification for native seed planting and care
  + Notice to Contractor – Subcontractor Pre-Certification

Josh Wade asked if there will be contractor prequalification for the mixes above 60, because it is difficult to be certified and not many subcontractors have certified staff. Mark said he would have to check on this.

Mark is also working on updating the entire seed section of the standard specs (about 90% completed):

* In general, trying to improve structure to the section that is easier to read, follow and understand.
* Update the Descriptions section and added definitions,
* Combined Purity, Germination and Composition into one section with some proposed changes involving coated seed use and labeling requirements,
* Seed Mixtures – Simplify and better define this section. Created tables for all seed types that better capture requirements. Adding two standard seed mixes to improve performance and reduce maintenance. Included the applications of the mixtures right after the tables:
* Temporary Seed
* Standard Highway Seed Mixtures – adding two new seed mixes to address ph levels and lower maintenance
* Native Seed Mixtures
* Hybrid Seed Mixtures (A mix of the above seed mixtures)
* Nurse Crop Seed
* Sowing Methods – Better defined what the methods are, especially Method B for Hydraulic Seeding / Hydro Seeding. Hopefully this will clarify what Hydro Seeding is and how it is applied, etc.
* Establishment Period for Standard Highway Seed Mixtures – Updating including the watering line item.

These updates won’t be ready for the 2024 specs, but he would like feedback from this group when they are finalized.

David suggested sending them out to this group when they are ready and not waiting to present at GLS meeting. Mark said he would do so.

**Environmental Topics** - Hans Hallanger and Jeremy Ashauer

* **Transportation Construction General Permit (TCGP) update** – Jeremy Stated the TCGP was being worked on with WDNR. We are in the “public notice” phase of the renewal and though the permit expires on March 31st a new permit should be issued a few weeks later, which is typical. After the permit is issued there will be updates provided to contractors regarding implementation requirements.

Jake David asked about “clearing and grubbing” restrictions. Jeremy and Hans mentioned this is for endangered species protection for “long-eared bats” and all tree cutting needed to occur by April 1st. Barry Paye stated that if tree cutting is not finished by April 1st, then the regional environmental teams need to coordinate with WDNR to have the area reviewed to determine when a project can proceed. This could cause months of delay. WisDOT has been using local force accounts to have County forces or separate lets to perform tree clearing before the deadline.

Jake brought up an example of overhead wires that needed to be relocated before clearing, and the utility was behind causing a delay. Matt Grove mentioned that they ran a temporary line away from the tree clearing to keep the project moving.

**UPDATE**: TCGP was renewed mid-April 2023.

* **Transportation Separate Storm Sewer System (TS4) update** – Hans said the staff is continuing to work with WDNR on renewing the TS4 permit which will expire in a couple months. The new permit will be in effect from 2023-2028 (5 years). It has been reviewed by OGC and should be finalized shortly.

# Previous Meeting Carryover Topics:

**QMP Subgrade Update** – Dave Staab

Status of special provision review and updates: Dave provided an update of the WisDOT technical committee looking at the QMP (Quality Management Program) Subgrade Special Provision (SPV). The committee has reviewed the comments provided by WEMA during a meeting in December 2022, and the technical committee is trying to meld the SPV’s from the SE and NE Regions; the goal is to have a unified SPV. The committee has met twice since the joint meeting with WEMA to update the SPV and are approximately 70% of the way through the updates. After the SPV is updated, the draft will be sent to others in WisDOT and then to WEMA for comments. The intent is to then meet with WEMA prior to finalizing the SPV followed completing a pilot project using the updated SPV to evaluate the updates.

Based on our initial meeting with WEMA, the contractor’s biggest QMP Subgrade concern involves satisfying moisture content requirements. The technical committee is exploring possibly increasing the four-point moving average from 105% to 110% of the optimum moisture content but including an individual test maximum moisture content of 115%.

Proposed compaction changes would eliminate the lower compaction zone (with lower compaction requirements), and the entire fill thickness would have the same compaction requirements of the current upper zone, which is 95% compaction based on standard Proctor (AASHTO T99). Test frequency may be increased so that problems can be identified sooner.

Lift stability under construction traffic would also be a requirement of the evaluation process.

There was contractor concern regarding the variability in borrow soil rendering the Proctor difficult to determine. For example, in a ten-foot cut there may be five layers of material. Larry (Peterson Contractors) indicated that Michigan uses Dynamic Cone Penetrometer (DCP) to assess fill placement as a supplement to the nuclear density gauge. Dave said that a lightweight deflectometer (LWD) or DCP (and other methods) have the potential to supplement compaction evaluations but would require additional study.

Another technique to address soil variability is to perform one-point Proctors in the field as the work is progressing and material may be changing.

Jake offered to have WEMA members meet with WisDOT once the proposed SPV is updated, and before they are adopted, to provide feedback in a timely manner. Dave indicated that it is the intention to meet with WEMA after they have an opportunity to review and comment before an updated SPV is implemented in the pilot project.

**Standardized Proof-Rolling** – Dave Staab

In WEMA’s March 2022 letter to the department, they support standardizing the proof-rolling process, and they the Wisconsin Department of Administration (DOA) specs for proof rolling as an example. Dave indicated the QMP Subgrade and Excavation Waste Item are prioritized over an update to the proof rolling item. Additional concerns regarding standardizing proof-rolling:

* Additionally, for historical context, the department and industry invested considerable time and effort in the late 1990’s to develop a standardized test rolling method. A test trailer was fabricated to perform the testing, but shortly before widespread implementation, industry opposed this method, and the standardized test roll method was abandoned. Dave mentioned that if we pursue a standardized proof-rolling effort again, all parties (WisDOT, WEMA/contractors, consultants) need to agree that the standardized method would be implemented, so that the effort is successful.
* Based on the subjective nature of proof-rolling due to the large variability in soils, it is uncertain if a standardized proof roll can be developed that applies for all (or most) situations.
* WisDOT staff has expressed concern about a standardized proof-roll constraining inspector judgement and experience.

Jake said there is still interest from WEMA to investigate a proof rolling standard, and they have engaged a consultant (Buck Barker, River Valley Engineering) to study this topic further.

**Rock Excavation for Culvert Installations** – Dave Staab

WisDOT is incorporating a separate bid item for rock excavation for culvert pipe installation to match how this is handled for storm sewer (Section 608). This will be incorporated in the 2024 standard specs (Sections 520, 521, 522, 524, 525, and 530). Matt Grove thanked WisDOT for addressing this and asked if it is currently in special provisions or an ASP 6 item. Update: Dave checked with BPD, and there was a decision not to include this in an ASP-6 due to the relatively few occurrences and low level of risk. If there is a situation where rock is encountered for CY2023 construction projects be addressed as in has been previously: The Contractor can request a revision to the contract (SS 104.2) and notify the engineer of the requested contract revision by following the notification process (SS 104.3).

**Excavation Waste Bid Item** - David Staab

Bob Arndorfer had interviewed staff that worked on the six pilot projects using the Excavation Waste bid item. The specification language was clear to everyone, however, there remains concern on how to track the quantity of the item. Most of the projects were urban locations that had all cut for excavation and therefore the waste was easy to track.

The department continues to study Excavation Waste and is looking for more complex pilot projects (cut/fill), as well as a project in the SE Region. The STH 15 project (NE Region) was recently completed, and the SE Region is completing a pilot project in 2023 (STH 59, Waukesha Co.). WisDOT continues to seek pilot projects.

Jake thought that simply keeping track of load counts would be acceptable for tracking the waste bid item. Jesse Hansen, NE Region worked on both waste bid item project in that region and both were bid as a penny. It is difficult to analyze the item when there are penny bids.

Matt Grove and Jake thought that the volume calculations for the amount of waste were important. These are in-place volumes and may not reflect the amount of material due to expansion. Therefore, the excavation waste item measurement is needed.

Chris Goss asked about existing pavement that was removed being separated out of the common excavation and excavation waste items. There was discussion that this was previously discussed through GLS and pavement removal was supposed to be separated, but pavement removal was still being included in the common excavation item on projects.

Update: Brian DuPont checked with Wayne Chase, who indicated that separating pavement from common excavation was attempted on some pilot projects, but is was ultimately decided not to adopt this practice.

Jonathon Engerson (SE Region) thought the payment for pavement removal was included in the common excavation item so that a separate surface shot after pavement was removed to calculate the cut after the pavement was gone was not required. Discussion ensued about if the pavement volume was to be measured or could be calculated by typical section. Stacy Hagenbucher mentioned that we don’t have staff to put a lot of effort into measuring the difference in the field.

Update: The SER pilot project was let, and the winning bidder used $0.01/cubic yard for excavation waste. Due to the penny bid, and that four of the previous six pilot projects also had penny bids for excavation waste, there is concern that there is less incentive to rigorously track excavation waste, which defeats the intent of the excavation waste pilot projects. As result, there is discussion about discontinuing the excavation waste pilot project effort.

# New Topics:

* Concrete removal as separate bid item, not included in common excavation. The department will check on this topic (see discussion above).
* Trench safety with QMP Subgrade

Dave inquired if trench safety associated with implementing QMP subgrade was still a concern. Jake confirmed it was still a concern of WEMA members who mentioned concerns of requiring compaction testing in deep utility trenches that may result in unsafe conditions. Dave indicated that WisDOT would not require (or condone) contractors or testers ignoring OSHA safety requirements. Discussion took place on how to test compaction in trenches that were deeper than 4 feet. A possible alternative would involve full-time inspection of trench backfilling to visually document that appropriate material and compaction methods were being used in deeper trenches. Tad Owens indicated that full-time inspection of trenches is typical. Dave agreed to keep this as an item for the next agenda.

# Other/Additional Topics -All

Meeting ended at 2:59pm

**Next Meeting:** September 27, 2023. 1-4 PM (Virtual/In-person TBD)

(This meeting is midway between Sept. and Oct. bid lettings.)

# Attachments:

* GLS Membership List
* Previous Meeting (09-21-22) Minutes -Virtual meeting

**GLS 03-22-2023 Agenda.docx**

**DAS**