**TRAFFIC CONTROL TECHNICAL COMMITTEE (TC²) MEETING AGENDA**

# 9:30 AM – 11:00 AM

# August 28, 2024

TEAMS

1. **Introductions**
2. **Follow Up**
   1. **Work Zones**
      1. SPV for Performance Spec for Wet Reflective Paint/Epoxy
         1. Sent out to most of the people on this meeting.
         2. Currently a performance spec. The binder is all that is required from the APL. The contractor picks which beads and whether they want to use paint or epoxy.
         3. Most common question is why are the retros higher than permanent markings?
            1. We are trying to get better markings out there
         4. Application is similar to 646 but not requiring beads or thickness.
         5. Are we planning to do this in every work zone?
            1. Initially we are looking at high speed roadways.
            2. Hoping to move to all roadways.
         6. Are we moving tape to all Wet Reflective as well
            1. Currently 2 products were removed that were not wet reflective
            2. The remaining products are on NTPEP test decks this summer and we are hoping to look at the data when it is published and hopefully, they have wet data attached to them.
            3. BriteLine isn’t currently a wet marking, but it still may pass wet testing.
            4. More information to come in the winter.
         7. Current findings:

|  |  |  |
| --- | --- | --- |
| Color | Temporary Bead Pilot | Current Standards |
|  |
| White | 458 | 129 |  |
| Yellow | 213 | 125 |  |

|  |  |  |
| --- | --- | --- |
| White Wet Testing | | |
| Dry | Wet Right After | Wet Recoverable |
| 485 | 278 | 432 |

* 1. **Pavement Marking**
     1. Permanent Bead Pilot
        1. Wet testing and remaining 2 projects to follow:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Bead Combination** | **Line** | **Color** | **Two Stripe Average** | **Handheld** |
| VisiUltra and Ultra 1.9 | CEL | Yellow |  |  |
| REL | White |  |  |
| VisiUltra and P18+4 | CEL | Yellow | 387 | 365 |
| REL | White | 445 | 731 |
| E16 and P18+4 | CEL | Yellow |  |  |
| REL | White |  |  |
| Utah with 3M | CEL | Yellow | 580 |  |
| Type I with 3M  (2023 Project) | CEL | Yellow | 288 | 305 |
| REL | White | 346 | 508 |

* + - 1. Current Results

1. **New Topics**
   1. **Work Zones**
      1. Payment on Queue Warning Systems only when an interim lane closure is in place.
         1. This is hard to accurately price because contractors are paying data fees and rental fees on equipment daily (7 days a week for the life of the project). We can’t turn administration of the system, data, or system logic on/off during sporadic lane closures during the week.
            1. Should be getting paid for regardless as long as the system is out there. We are putting on a Smart Work Zone training to include this item to help field staff know to how to pay for it and that the quantity is correct in the design process.
            2. Mega asked if they should be asking for the Q&A session per bid.
         2. If the system is on the roadway, set-up, and functioning- why we would not want to use it in the event of a backup unrelated to the interim lane closure?
      2. Smart Work Zone Training in Fall
         1. September and October Training with design and construction staff.
      3. Digital Speed Reduction System Feedback and Update
         1. Plan to move forward with this in 2025
         2. Planning to remove the PCMS and get the speed reduction closer to workers. Remove this sign with a flashing beacon and the PCMS
         3. Matt Grove asked if there was a study done on the use of the digital versus fixed sign
            1. Erin said the data shows that it has resulted in good speed compliance.
            2. Mega noted it took some training upfront, but the app is very user friend and can change 18 signs simultaneously. It has eliminated the day-to-day exposure which is nice.
            3. Erin will share a summary once all 8 projects are collected. Only 6 projects have been collected so far.
         4. Plan to use on the daily, nightly, or weekly closures when the speed changes each day.
         5. Plan to have all projects in 2026 with daily or nightly closures
         6. Matt Grove asked how easy they are to get
            1. Several contractors said they have had no issues getting them.
         7. A good item to add to the training next month is that speed trailers do not need to be included with the feedback signs. There has been confusion on if speed feedback trailers are required with the DSRS system.
      4. Connected Work Zone Notification System Updates
         1. Realtime information about our work zones.
         2. These devices are verified which then can be posted on Google and Waze. Pushing towards this in 2025.
         3. 2026 all projects should have them unless a carryover project.
         4. Primarily VerMac and Icones were used in the 2024 pilot projects.
      5. One Arrow Board for Lane Closures in 2025
      6. Temporary Paint prior to Rumbles
         1. In 2022 lots of projects had delamination. This was occurring where we were placing epoxy on epoxy. In late 2023 all centerlines were switched to grooved wet reflective epoxy. Since the temporary marking is now grooved out temporary paint was added as the product of choice since it will be down for 2-14 days.
         2. SafeMark says it is a different process and should be separate item.
         3. In real life there is a big difference between paint and epoxy. Prime are separating the items.
         4. Century said that temporary marking layout doesn’t always happen so it is hard to install permanent markings correctly. This adds in a potential for has some temp markings to have to be removed.
         5. Matt Grove said we should get some work together.
         6. Mega added that we all need to work together. Contract to bid work verse allowing a competitor to do it verses having massive failures. Temporary paint saves a few bucks or a temporary epoxy. End goal was to ensure we had a permanent product that lasts.
   2. **Pavement Marking**
      1. Tape Removal Language
         1. Working on adding the correct design guidance. Language is still being sorted out.
         2. Matt Grove did not hear back from everyone and would like to reach out to them again.
         3. Mega is still fighting it on jobs, resistant to creating a change order for it.
      2. Groove Depth for Wet Reflective Epoxy
         1. Current standard 90 +/- 10
            1. This is the current 3M standards for groove depth.
            2. Century says tolerance is acceptable. Pavement crowns can be an issue. A couple of projects were outside of it for a few feet but overall, the job was acceptable.
            3. If pavement switched back and forth a lot, it is hard to keep an even groove.
            4. Biggest issues are with ramps.
            5. Asphalt contractors are not held to the joint layouts. Where they don’t line up with the SDDs to avoid crack filling issues.

Matt Grove has not heard a lot of conversations on this with asphalt.

Limited on how to do things on machine size. Matt is willing to bring it forward.

* 1. **Other**
  2. **Next Meeting** 
     1. Tuesday, November 19th, 11:00 AM – 12:00 PM