MINUTES
Traffic Standards Sub-Committee Meeting

MEETING DATE: September 18, 2019 (9:30 AM EDT)
TO: Subcommittee Members
FROM: Joe Bruno
RE: Meeting Minutes

Attendees:
1. Ashley Aiken, ICI
2. Bruce Barney, Traffic Administration
3. Andrew Blackburn, Materials Management
4. Dave Boruff, Traffic Administration
5. Joe Bruno, Traffic Administration
6. Peter Carleton, Maintenance Management
7. Josh Coulter, Hoosier Co
8. Rick Drumm, FHWA
9. Eryn Fletcher, FHWA
10. Lalit Garg, Traffic Administration
11. Tom Harris, Construction Management
12. Dave Henkel, CHA
13. Mischa Kachler, Work Zone Safety
15. Tim McNelis, ISB
16. Andrew Meeks, 3M
17. Ting Nahrwold, Construction Management
18. Paul Nitiss, Hoosier Co
19. Dan Osborn, ICI
20. Mike Pelham, Materials Management
22. Dana Plattner, Fort Wayne District
23. Kurt Schleter, Ind. ATSSA
24. Todd Scott, Gridlock Traffic
25. Rick Smith, RoadSafe
26. Lt. Terry Treon, State Police
27. Brian Triska, TCS

803, 805, 807, 809, AND OVERHEAD SIGNS WORKING GROUP (I)

OLD BUSINESS

Item #1 Updates to lighting standards. [Garg]

INDOT is in the process of making revisions to the spec and standard drawings. INDOT is revising the standards for lighting poles and high mast towers as per 2015 AASHTO (LRFD) Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals. New tables for high mast towers will include data for towers between 60 ft and 200 ft. The luminaire rings for high mast towers will hold up to 12 luminaires, and we are considering allowing galvanized steel ring assemblies in addition to stainless steel. Luminaire warranty requirements will be revised as well as the performance requirement for thermal management (LED Junction Temperature) and power driver reliability (Mean Time to Failure). The approved materials list for LED luminaires has been established and posted.
NEW BUSINESS

Item #1 Proposed Standard Drawing series (802-SBTX) on extended span box truss structures or sign areas up to 1200 sft. [Boruff]

*It was noted that there may be some duplication between the dynamic message sign (DMS) and extended span box truss structures. If the loading for a 1200 sft total sign area is similar to the DMS loading, it may be possible to consolidate the number of drawings. Dave Boruff will look into this possibility (note Dave has made this suggestion to Traffic Design as they are coordinating the structural analysis/design). Class X excavation item is on the agenda for the September Standards Committee meeting agenda-standard payment will be set at $1000 for first cubic yard, $125 for each cy thereafter, payment for mob & demob at traffic structures will be eliminated (note it passed at the Standards Committee).*

Item #2 AASHTO Manual for Assessing Safety Hardware [MASH] implementation update. [Boruff]

*Elizabeth Phillips has prepared INDOT’s implementation plan for MASH, which will mirror the Ohio and other DOT implementation plans to provide industry with needed consistency. One of the primary concepts in our proposed policy is to allow the use of NCHR 350 tested and approved hardware until MASH tested and approved of a particular type is approved, so as the draft is there are no specific sunset date on use of 350 devices.*

Item #3 Draft unique special provision for rectangular rapid flashing beacons (RRFB’s). [Bruno]

*Two initial questions on the spec were: [1] whether it could be conventionally powered and [2] whether it was proprietary. While RRFB’s don’t have to be solar powered, most if not all of the installations so far have been solar powered. The RRFB’s are only on when activated by a pedestrian so the solar panel provides sufficient power to the device. RRFB manufacturers include Carmanah, TAPCO, and K&K Systems.*

801, 802, 804, AND 808 WORKING GROUP (II)

OLD BUSINESS

Item #1 The use of temporary edge line markings in work zones. Review of draft specification and IMUTCD §6F.77 requirements. [Bruno]

*There were several comments on the draft specification. It was noted that the draft specification should more clearly define the temporary marking patterns for edge, center, and skip lines. It was also requested that temporary RPM option for edge lines be limited to short work zones. FHWA was supportive of the draft requirements for edgeline placement on long-term stationary work zones. The Indiana ATSSA members present had several proposals related to this item and to late season markings. It was decided to form a smaller working group of the following individuals to resolve the issues and concerns with the draft specification: [1] Dave Boruff, [2] Joe Bruno, [3] Rick Drumm, [4] Eryn Fletcher, [5] Mischa Kachler, [6] Dan Osborn, [7] Dana Plattner, [8] Kurt Schleter, [9] Rick Smith, and [10] Brian Triska. It is anticipated that this small working group will be able to complete its work by the end of the calendar year.*
FHWA requested a list of the contracts containing a special provision to apply liquidated damages per one mile segment if markings are not installed within 14 days of the final pavement surface.

Item #2 Standard Drawing 801-TCFO series update for flagging operations and the use of portable rumble strips for flagging on higher speed two lane highways. [Bruno]

For the draft version of 801-TCFO, it was suggested to add the word stationary before location in note 5 to clarify that the requirement would not apply to mobile flagging operations. However, others indicated that portable rumble strips should not be required as designers will have to specify the portable rumble strip pay item, which should be used based on design guidance and site conditions. Another comment was that consideration should be given to including a rumble strips ahead sign in the advance signing sequence when portable rumble strips are used. Industry expressed concern that portable rumble strips are a proprietary item. John McGregor will get with Joe Bruno to finalize the update based on these comments and Texas and Virginia DOT standards.

Item #3 Local law enforcement officers for work zones and proposed revisions to RSP 801-R-672 and the guidelines in 801-R-672A. [McGregor]

ICI has sent out a survey to members on the hourly rate for law enforcement officers. There is a perception that with additional duties the rate should increase from $34. The National Highway Institute (NHI) training course for law enforcement officers is no longer free so when the training is needed payment for the training is being added to construction contracts via a change order. Kim Peters is working on a replacement for the NHI training course. As these updates are completed RSP 801-R-672A could be merged with 801-R-672, or it could remain a separate document – the subcommittee members did not have a preference.

NEW BUSINESS

Item #1 Draft RSP for variable speed limit signs. [Bruno]

During the JTRP research project on variable speed limit signs, control over the speed limit setting was by INDOT’s Indianapolis Traffic Management Center. Under the draft RSP, the intent is for the INDOT project engineer or area engineer to have control over the speed limit setting, with programming done by the Contractor. However, the construction requirements section of the draft RSP needs to state this process more directly. Another comment was to consider using queue detection and smart work zone technology to assist with setting the speed limits.

State Police indicated that both the worksite speed limit when flashing and two step speed limit reductions are difficult to enforce and expressed concerns with the variable speed limit signs for this reason. The draft RSP for variable speed limits has requirements for electronic records that avoids some of the limitations of the worksite speed limit when flashing assemblies. For now, INDOT is only looking to try variable speed limits out and see if they are an improvement over current methods for signing worksite speed limits. ICI will continue to lobby the legislature for photo enforcement of worksite speed limits.
If variable speed limits will be used more regularly, the Traffic Evaluations Section agreed to add them to the approved materials list for solar powered traffic control devices provided a test method can be established. There is NTPEP data for arrow boards and portable changeable message signs that can be the basis for some of the test method. Construction Memo 14-06 on worksite speed limits will also be updated if usage of the variable speed limits increases beyond the initial trial projects.

Item #2  Draft spec for panel signs with Type XI sheeting. [Garg]

One comment on the draft specification was that any route shields on panel signs will also need to have Type XI sheeting. Two initial questions on the draft specification were: [1] why not focus on overhead panel signs for Type XI sheeting and [2] whether Type VIII sheeting for red background sheet signs is still being made. Traffic Administration responded that ground mounted panel signs are typically 30 ft from the edge of the traveled way and the Type XI sheeting will improve the visibility of the signs at this distance as well. Regarding the question about Type VIII sheeting, INDOT’s approved materials list for reflective sheeting indicates that manufacturers are still producing this sheeting.

Item #3  Grinding to remove grooved markings (§808.10). The grinding will be wider and deeper than the existing marking so clarification is needed. [Bruno]

Water blasting would be industry’s preferred method to remove markings from a groove. However, §808.10 or the INDOT General Instructions to Field Employees could have additional information regarding grinding in a groove (e.g. up to 10 mils deeper and 1 in. wider).

Item #4  Update on potential alternatives to the liquid asphalt sealant requirements in §401.15. [Bruno]

The Pavement Division is researching alternatives to liquid asphalt sealant AE-NT, also known as the fog seal. One possible alternative is a rapid penetrating emulsion (RPE) that may not affect pavement marking adhesion as significantly as other asphalt emulsions. There was a 2019 Road School presentation on RPE entitled “Use of Penetrating Asphalt Emulsions to Address High- Void Pavement Areas”. Ohio DOT is experimenting with a clear sealant that could be applied after the pavement markings. INDOT is proceeding with an evaluation of HPS-8 markings from Ennis-Flint but not the Ennis-Flint fog seal alternative as INDOT requested chemical information that Ennis-Flint viewed as a trade secret.

Item #5  Procedures to use the inlay installation method for preformed plastic markings on HMA. [Bruno]

Inlaying preformed plastic markings is normally not an option due to the liquid asphalt sealant. However, on contracts where the liquid asphalt sealant will not be applied, the inlay installation method may be allowed with a unique special provision. Alternatively, if there are late season issues on a project and there isn’t sufficient time to apply both the liquid asphalt sealant and groove the preformed plastic, the INDOT project engineer may approve the inlay method. 3M will provide the same warranty for both grooved and inlaid preformed plastic markings, but finds that grooved preformed plastic markings will have a longer service life.
Industry members indicated that their standard practice is to remove the curing compound on PCCP before applying traffic paint. The curing compound is not used on bridge decks and with the grooving of durable markings on high AADT roadways, traffic paint is seldom used on PCCP segments with curing compound.