

TEO Signal Committee Meeting Minutes
Meeting Date: 5/7/2015
Water's Edge Conference Rm 176
Meeting Time: 9:00am – Noon

Meeting Attendees:

Jerry Kotzenmacher	Sue Zarling	Linda Heath	Mike Posch
Peter Skweres	Ed Andrajack	Tim Bangsund	Dave Crowley
Jim Deans	Steve Misgen	Mike Gerbensky	Mike Fairbanks
Clint McCullough	Al Espinoza	Mark Korwin-Kuczynski (phone)	
Chris Bosak	Greg Kern	Jeff Knofczynski	

Old Business-

ADA Pedestrian Accommodations –

- **New ped Station Design** – No recommended changes to the current ped station design. Anchor rods have been able to be reused on knockdowns. The base is working as intended.
- **Crosswalks** - There was a news story about MnDOT eliminating crosswalks at traffic signals because of the cost of ADA amenities. Since MnDOT does not eliminate crosswalks based entirely on costs, the story was not accurate. Although costs should be a consideration, crosswalks should only be eliminated when there is no destination need for the crosswalk.
- Faded signs are no longer under warranty. They should be replaced if the fading is so bad you can no longer read the information on it.
- ADA Ped Accommodations will be removed from “Old Business”.

Flashing Yellow Arrow – Metro and OTST have been working on a programming guide to help programming of the ASC/3 and the flashing yellow arrow by time-of day. This is a work in progress and will continue to evolve.

- Operators must understand the conditions that allow the flashing yellow arrow to be used and when protected only turns are the best option.
- When districts receive the controller from Electrical Services, the controllers typically only have default programming in the controller. The districts are responsible for all programming of the controller and must assure proper operation of the traffic signal. This includes everything from the basic front page timing to the TOD functioning of the FYA and detector cross switching.
- OTST set up a training webinar with TCC on the programming of the flashing yellow arrow. The training received good reviews and helped clear some of the confusion on the programming options. TCC gives these training webinars to their users and OTST could set up more training if needed or desired by users.

Cabinet/Controller Committee – A small group will be set up to put together a spec on a new controller. The group will include Steve, Peter, Sue, Jim, Robin, Kevin S and Jerry.

Cabinet Wrap – The committee reviewed a draft write up of guidelines for cabinet wraps. Some of the recommendations to the draft were to only allow wraps (no painting), state only objectives, (we are not recommending that cabinets are wrapped, but stating what needs to be met if it does happen), do not cover photo cell opening or any stickers. MnDOT attorney review may be needed.

New Business

EVP cables - In accordance with State Statute 169.06 EVP cables (3/c#14 and 3/c#20) need to be pulled from the cabinet up thru the mast arms even if no EVP system is installed. Outlet boxes also need to be placed on the mast arms. This has always been the policy but will now be included in the 2016 special provisions.

Buffalo Signal - A replacement signal will be installed at TH 55 at TH 25. The city engineer wants a separate service to monitor the lighting at the signal. This would require a special service cabinet that would add additional costs that the city would need to cover. The city has used this special service cabinet in the past on the lighting along TH 55. Sue will discuss with Tom D. to determine if using this cabinet is in MnDOT's best interest.

Also at this new signal in Buffalo will be the new BA series pole and foundation. A 70' mast arm will be used. The soils tests determined that the foundations should go down to 29', 5' beyond the standard plate specification. D3 will keep the committee informed on the process of the installation of these new BA series poles since they will be the first for MnDOT. The project is scheduled for 2016.

2016 Standard Specification for Construction (update) – Electronic copy will come out in June with and expected hard copy release of July. As long as the expected release happens, project lettings happening in October or November 2015 and thereafter should reference the new book. Watch for direction on this from the Standards group when the spec book is released.

Rail Road Preemption Signal Upgrade funding – OTST met with MnDOT Commercial Freight and Rail folks who suggested that funding for intersections needing upgrades related to the rail road may be coming available. With the recent accidents and explosions of rail freight, the state legislature may provide extra funding specific for rail safety. This would include traffic signals preempted by trains. Districts should know and prioritize signal related rail upgrade needs so we are ready with our rail related safety projects when or if funding becomes available.

Rail Road Preemption cards – Jim will talk to Ron to see where we are at with the CTC preemption cards.

Available Fault Current Calculations – On new signals, contractors are required to fill out the Electrical Service Information Form for Traffic Signal Systems and provide a fault current calculations on a label at the electric service cabinet. In most cases, this has not been done. This is NEC code requirement and needs to be done. Attached is a form for this requirement.

Round Robin –

Tim – Metro is using a cell modem for communications with traffic signals at 4 locations in the field. They are using the State Verizon service that is relatively low cost. Service can be slow at times. They are looking at purchasing the 4G models to try to help with this. This may be an option for the outstate districts to connect to traffic signals. Making sure there is coverage in the area for the modem is essential.

Jerry – there are a lot of ASC2's at Fort Snelling. Suggested changing Traconix controllers out with the ASC2's, but both Jeff K and Mike P said that they like the Traconix. The ASC2's can be looked at as a replacement option if something happens to the Traconix controller.

Next meeting: Wednesday, September 16th, 2015

Waters Edge **Conference Room 403**

9:00am – 12:00noon

Send agenda items to Jerry K.

Attachment –

A. Compliance with NEC Article 110. 24

Provide fault current calculations in accordance with 2565.3 CC and as follows:

1. Electric Service Information Form

Fill out the following electric service information form shown below for traffic control signal systems.

Provide to the Engineer, prior to final acceptance of the project, four (4) copies of the electric service information form for traffic control signal systems and the Engineer will distribute the copies as follows:

1. MnDOT Central Electrical Services Unit (Non-Metro Projects Only), or MnDOT Metro Electrical Services Unit (Metro Projects Only).
2. MnDOT Traffic Electrical Systems Engineer.
3. MnDOT District Traffic Engineer.
4. City of _____ or County of _____.

The Contractor provided "electrical service information form for traffic control signal systems" and available fault current calculations and labeling are considered incidental work.

(The following form should be left on its own page so it can be removed from the special provisions and used by the contractor) See the next page of this document

All Red text must be removed from the special provisions prior to the special provisions being submitted for project letting.

Electric Service Information Form For Traffic Signal Systems

Project Number: _____

Contractor: _____

Date: _____

MN/DOT Signal System ID	Intersection	Meter Address	Electric Utility Transformer Size In KVA	Transformer Primary Fuse Size and Type	Calculated Avaliable Fault Current at the line Side of the Meter Socket	Length of conductors in feet from transformer connection to meter socket connection.		
						L1 =	L2 =	Neutral
						L1 =	L2 =	Neutral
						L1 =	L2 =	Neutral
						L1 =	L2 =	Neutral
						L1 =	L2 =	Neutral
						L1 =	L2 =	Neutral
						L1 =	L2 =	Neutral

NEC Article 110.24