Illinois Tollway M-ITS  Base Sheet Revisions

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**Pole Assembly (ITS)-Series 1000**

- **M-ITS-1000**
  - Elevation Views Pole Mounted ITS Element Assembly
    - Sheet 1 of 3: Added title for one section detail; Added note on wires from solar panels to battery box then to ITS enclosure then Cables to ITS devices installed on the ITS pole
    - Sheet 2 of 3: Added title for ITS Disconnect Switch Cast In place
    - Sheet 3 of 3: Added new assembly detail for ITS Disconnect Switch Pre-cast (simplified installation)

- **M-ITS-1001**
  - General Notes Pole Mounted ITS Element Assembly
    - Added Note 22: Cables shall enter poles through a grommet. Grommet size shall be chosen so that the center hole forms a water tight seal around the cables

**Dynamic Message Sign (ITS)-Series 1100**

- **M-ITS-1103**
  - DMS Front Access-Cantilever Electrical Plan
    - Revised assembly details for DMS Type 2 Cantilever pushed further away so the edge of the DMS clears Lane 1

- **M-ITS-1104**
  - DMS Front Access-Butterfly Electrical Plan
    - Revised assembly details for DMS Butterfly Type 2 Front Access pushed further away to the edge of the DMS clears Lane 1

**Cabinet Wiring (ITS)-Series 1200**

- **M-ITS-1200**
  - Cabinet Layout and Wiring ITS Pole Mounted Enclosure (1-MVDS)
- **M-ITS-1201**
  - Cabinet Layout and Wiring ITS Pole Mounted Enclosure (2-MVDS)
- **M-ITS-1202**
  - Cabinet Layout and Wiring ITS Pole Mounted Enclosure (3-MVDS)
- **M-ITS-1203**
  - Cabinet Layout and Wiring ITS Pole Mounted Enclosure (1-CCTV camera)
- **M-ITS-1204**
  - Cabinet Layout and Wiring ITS Pole Mounted Enclosure (1-CCTV and 1-MVDS)
- **M-ITS-1205**
  - Cabinet Layout and Wiring ITS Pole Mounted Enclosure (1-CCTV camera and 2-MVDS)
- **M-ITS-1206**
  - Cabinet Layout and Wiring ITS Pole Mounted Enclosure (1-CCTV and 3-MVDS)
- **M-ITS-1207**
  - Cabinet Layout and Wiring ITS Pole Mounted Enclosure (2-CCTV cameras)
- **M-ITS-1208**
  - Cabinet Layout and Wiring ITS Pole Mounted Enclosure (2-CCTV cameras and 1-MVDS)
- **M-ITS-1209**
  - Cabinet Layout and Wiring ITS Pole Mounted Enclosure (2-CCTV cameras and 2-MVDS)
- **M-ITS-1210**
  - Cabinet Layout and Wiring ITS Pole Mounted Enclosure (2-CCTV cameras and 3-MVDS)
- **M-ITS-1211**
  - Cabinet Layout and Wiring ITS Pole Mounted Enclosure (1-MVDS) Solar Generator and FOC
- **M-ITS-1212**
  - Cabinet Layout and Wiring ITS Pole Mounted Enclosure (2-MVDS) Solar Generator and FOC
- **M-ITS-1213**
  - Cabinet Layout and Wiring ITS Pole Mounted Enclosure (3-MVDS) Solar Generator and FOC

- **M-ITS-1217**
  - Cabinet Wiring Diagram in Pavement Detection System AP, PoE and Injector ITS Assembly
    - Revised to show the fiber optic conduit and power conduit interface with the ITS Enclosure for location and size
    - Revised note to Designer: The DSE shall specify the Gator Patch length per site

**Roadway Weather Information System (ITS)-Series 1300**

- **M-ITS-1300**
  - RWIS Pole, Sensor Mounting Detail
    - Added Note 8: Wind sensor can be installed on the secondary pole if primary pole is close to tree line
    - Added Note 9: All cables installed in a pole shall use a grommet to connect to ITS device installed on the pole

- **M-ITS-1302**
  - Typical RWIS Site Installation Plan
    - Added Note 5: Note to Designer: In the event the Primary and Secondary poles cannot be installed within the 40 foot maximum radius of the bridge deck, the DSE shall consult with the Tollway and GEC on an alternate placement solution
    - Added Note 6: Note to Designer: Installation of the Primary and Secondary pole for bridge installation: pole to be installed near immediate entrance of the bridge so non-invasive laser temperature sensor can monitor bridge deck temperature and bridge approach temperature
### Modification Summary

**Effective:** 2020-03-01

#### Solar Powered Generator (ITS)-Series 1400

- Added Note to Designer: The simplified solar power arrangement shall only be used for a maximum of 3 MVDS. For all other arrangements use the 1400 Series

#### Tower Mounted CCTV (ITS)-Series 1500

- Added note to Designer: The 2 CCTV shall be placed on the leg facing the roadway with a clear field of view
- Added Note 23: The CCTV cameras shall be mounted on the same tower leg with an Axis T932842 mounting arm with T94A01D pendant kit, or equivalent as approved by the engineer. There will be 24in vertical spacing between the cameras
- Removed details for Part AS: removed PoE power injector
- Removed Item AS: removed reference to Cohu PoE injector

#### Flashing Sign Beacon (ITS)-Series 1700

- Added wires for second pair of flashing lights and connection to the circuit breakers
- Added Note 1: see plans for required conductor sizes
- Added Note 2: All three conductors shall be in one harness
- Added Note 3: As an alternative to the conduit body on foundation, use thermoplastic junction boxes
- Added Note 4: Slack in line side cable shall be provided in handhole
- Added Note to Designer: Install new CCTV within 500 feet upstream of the static beacon sign
- Added note to Designer: If an existing ITS enclosure lies within the immediate proximity of the flashing sign then power can be connected to that enclosure, otherwise install a new ITS enclosure near the flashing sign

#### IPDC Facility (ITS)-Series 1800

- Added new sheet for IPDC and Combination Plaza/PLDC Concrete Foundation details

#### Conduit Details at Integral Abutment Bridge (ITS)-Series 1900

- Added material type for ITS conduit attached to bridge: PVC coated steel or FRE conduit per plan

#### 100 FT. Monopole (ITS)-Series 2000

- Sheet 404: Added details to install the ITS Enclosure and ITS Disconnect Switch onto the concrete slab of 100 foot monotube

#### Video Power Junction Box (ITS)-Series 2100

- New drawing created to standardize Video Power Junction Box arrangement - Without Cisco switch when the box is installed and can use Cat 6 cables when distance is less than 300 feet from Plaza Communication room
- New drawing created to standardize Video Power Junction Box arrangement - With Cisco switch 4000 switch when the box is installed at a distance greater than 300 feet from the Cisco switch in the Plaza Communication Room
NOTE TO DESIGNER

ILLINOIS TOLLWAY. SEE SHEET M-ITS-1004.

THIS CONFIGURATION IS NOT TO BE USED WITHOUT PRIOR APPROVAL BY THE

DATE

SHEET 1 OF 1

M-ITS-1214

AND WIRELESS (1-MVDS) SOLAR GENERATOR ITS POLE MOUNTED ENCLOSURE CABINET LAYOUT AND WIRING 3-01-2020
NOTE TO DESIGNER

THIS CONFIGURATION IS NOT TO BE USED WITHOUT PRIOR APPROVAL BY THE
ILLINOIS TOLLWAY. SEE SHEET M-ITS-1004.

DATE
SHEET 1 OF 1
M-ITS-1215
3-01-2020
NOTE TO DESIGNER

THIS CONFIGURATION IS SPECIFIC TO THIS SPECIFIC PROJECT. ANY MODIFICATIONS OR ALTERATIONS TO THE DESIGN MUST BE APPROVED IN WRITING BY THE PROJECT MANAGER.