

Illinois Tollway Base Sheet Revisions			
Section M	Base Sheet Drawings		
	Drawing	Modification Summary	Effective: 03-31-2016
	All	The electronic (pdf) version of the Standard Drawing are now made searchable (text).	
Erosion Sediment Control (ESC)-Series 200			
M-ESC-205	Sediment Basin Dewatering Device		
	Revised Note 7, removed proprietary name from skimmer device.		
Roadway (RDY)-Series 400			
M-RDY-408	Approach Slab, Mainline		
All	Changed Transverse Reinforcement size and spacing in the bottom mat of the bridge approach slab and transition approach shoulder slabs from #6@9" to #8@4" to be in conformance with IDOT ABD Memo 15.8.		
All	Changed Transverse Reinforcement size and spacing in the top mat of the bridge approach slab and transition approach shoulder slabs from #5@12" to #5@6" to be in conformance with IDOT ABD Memo 15.8.		
All	Changed Longitudinal Reinforcement size and spacing in the top mat of the bridge approach slab and transition approach shoulder slabs from #4@15" to #5@6" to be in conformance with IDOT ABD Memo 15.8.		
All	Added note *** to clarify that base sheet reinforcement is for approach slabs not located on retaining walls. If approach slab is placed on retaining wall, reinforcement shall be designed for TL-5 crash loading.		
All	Changed spacing and shape of both dxv vertical bars in the barrier on the bridge approach slab and transition approach shoulder slab to match the vertical bars in the bridge parapet and moment slab barrier.		
All	Changed top mat reinforcement cover to 2.25" to be consistent with deck and moment slab clearances.		
Sheets 1,2	Updated Note to Designer for Drainage Structures. Designer to determine size, type and location.		
Sheets 1,2	Changed approach slab shoulder width requirements to match Structures Design Manual.		
Sheet 3	Added option of using subgrade aggregate, special under the transition approach slab.		
Sheet 3	Added additional Approach Slab Barrier Elevation to distinguish between non-integral and integral/semi-integral abutments.		
Sheet 3	Eliminated Optional Longitudinal Joint Within a Traffic Lane detail.		
Sheet 4	Changed Neoprene Sheet to Elastomeric Sheet to keep call out generic and not specific.		
Sheet 5	Revised Bill of Material to clarify Pay Items and Pay Item Numbers to be included.		
Sheet 5	Added note to Typical Barrier Transition Detail to clarify where the 1'-9" dimension should be measured.		
M-RDY-409	Approach Slab, Ramp		
All	Changed Transverse Reinforcement size and spacing in the bottom mat of the bridge approach slab and transition approach shoulder slabs from #6@9" to #8@4" to be in conformance with IDOT ABD Memo 15.8.		
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Sheet 5	Added note to Typical Barrier Transition Detail to clarify where the 1'-9" dimension should be measured.		
M-RDY-410	Reserved		
M-RDY-411	Emergency Turnaround Median Width ≥ 35 Ft		
Bridge (BRG)-Series 500			
M-BRG-506	Expansion Joint Repair		
	Base Sheet was removed since details did not match Special Provision.		
M-BRG-507	Crash Wall Modifications Median Piers		
	Note 4 - Changed Reinforcing bars to Reinforcement Bars.		
M-BRG-508	Crash Wall Modifications Shoulder Piers		
	Note 4 - Changed Reinforcing bars to Reinforcement Bars.		
M-BRG-525	Slopedwall Details		
Drainage (DRN)-Series 600			
M-DRN-601	Slope Drain		
	Revised storm sewer to "Class B, 12".		
M-DRN-602	Bioswale		

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	Maintenance of Traffic (MOT)-Series 700	
	M-MOT-700	Temporary Concrete Barrier "Y" Connector Segment
		Revised Barrier Details Notes.
		Changed barrier edges chamfered from 1/2" to 1" on all edges (optional).
	Overhead Sign (OHS)-Series 720	
	M-OHS-720	Overhead Sign Structure Span Type Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
	M-OHS-721	Overhead Sign Structure Cantilever Type Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
	M-OHS-722	Overhead Sign Structure Entrance Monotube Type (Steel) Mainline Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
		Clarified Concrete Structures is for Single Face Barrier and included in Summary Table and Total Bill of Material.
	M-OHS-723	Overhead Sign Structure Exit Monotube Type (Steel) Mainline Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
		Clarified Concrete Structures is for Single Face Barrier and included in Summary Table and Total Bill of Material.
	M-OHS-724	Overhead Sign Structure Butterfly Type (Steel) Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
		Removed Truss Extension for Mounting Walkway detail and references
		Added "L" column and removed TGL and TGL1 from the Summary Table
	M-OHS-725	Overhead Sign Structure Entrance Monotube Type (Steel) AET Ramp Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
		Clarified Concrete Structures is for Single Face Barrier and included in Summary Table.
	M-OHS-726	Overhead Sign Structure Exit Monotube Type (Steel) AET Ramp Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
		Clarified Concrete Structures is for Single Face Barrier and included in Summary Table.
	M-OHS-727	Overhead Sign Structure Exit Monotube Type (Steel) Cash-IPO Ramp Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
		Clarified Concrete Structures is for Single Face Barrier and included in Summary Table.
	M-OHS-728	Overhead Sign Structure Span Type (Steel) Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
	M-OHS-729	Overhead Sign Structure ITS Gantry Frame (Steel) Single Span Structure Details
	Sheet 1	Revised Material Specification Table to specify ASTM A500 Gr C & B for Frame & Mounting Beam HSS, respectively.
	Sheet 4	Removed Note 6, referring to ASTM requirements of HSS members.
	Sheet 5	Revised Note 1 to clarify requirements for Contractor when soil conditions are not met in the field.
	Sheet 5	Removed Protective Coat quantity since not required to be applied to shoulder foundation.
	Sheet 5	Updated anchor bolt note to allow ASTM F1554 bolts.
	Sheet 6	Revised Note 1 to clarify requirements for Contractor when soil conditions are not met in the field.
	Sheet 6	Removed Protective Coat quantity since not required to be applied to shoulder foundation.
	Sheet 7	Added note 5 to clarify limits of protective coat and revised protective coat quantity in Median Foundation Schedule.
	M-OHS-730	Overhead Sign Structure ITS Gantry Frame (Steel) Two-Span Structure Details
	Sheet 1	Revised Material Specification Table to specify ASTM A500 Gr C & B for Frame & Mounting Beam HSS, respectively.
	Sheet 4	Removed Note 6, referring to ASTM requirements of HSS members.
	Sheet 6	Revised Note 1 to clarify requirements for Contractor when soil conditions are not met in the field.
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	Sheet 8	Added note 5 to clarify limits of protective coat and revised protective coat quantity in Median Foundation Schedule.
	Pole Assembly-Series 1000	
	M-ITS-1000	ELEVATION VIEWS POLE MOUNTED ITS ELEMENT ASSEMBLY
		Added 30A-2P NEMA 4X DISC MTD ON SUPPORT DETAIL.
	M-ITS-1001	GENERAL NOTES POLE MOUNTED ITS ELEMENT ASSEMBLY
		Added Note 16 regarding disconnect switch usage.
	M-ITS-1002	ITS STANDARD FOUNDATION: New Sheet
	Dynamic Message Sign (ITS) - Series 1100	
	M-ITS-1100	Revised conduit call-outs
	M-ITS-1103	Revised 30A-2P NEMA 4X DISC MTD ON SUPPORT DETAIL. Removed pad mounted transformer.
	M-ITS-1104	Revised 30A-2P NEMA 4X DISC MTD ON SUPPORT DETAIL. Revised Note 2 to eliminate 120/208V and pad mount.
	Cabinet Wiring-Series 1200	
	M-ITS-1200	Cabinet Wiring
	All	Added HOT3, NB, and GB to Duplex Receptacle.
	M-ITS-1255	Added HOT5 to Duplex Receptacle.
	M-ITS-1256	Deleted HOT5 from Video Distribution Panel.

Base Sheet Drawings		
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Tollway Base Sheet Revisions		
	Weigh-In-Motion - Series 1600	
Section M	M-WIM-1600	WEIGH-IN-MOTION CABINET AND FOUNDATION DETAILS
	M-WIM-1601	WEIGH-IN-MOTION IP CAMERA DETAILS
	M-WIM-1602	WEIGH-IN-MOTION LOOP DETECTOR DETAILS
	M-WIM-1603	WEIGH-IN-MOTION DETECTOR LOOP AND QUARTZ SENSOR DETAIL
	M-WIM-1604	INSTALLATION DETAIL DETECTOR HOUSING & DETECTOR HOUSING ADAPTER
	M-WIM-1605	WEIGH-IN-MOTION DETECTOR HOUSING DETAIL
	Flashing Sign Beacon - Series 1700	
	M-ITS-1700	FLASHING SIGN BEACON INSTALLATION BREAKAWAY ELECTRICAL DETAIL
	M-ITS-1701	FLASHING SIGN BEACON INSTALLATION WIRING DIAGRAM
	Conduit Details at Integral Abutment-Series 1900	
	M-ITS-1900	CONDUIT DETAILS AT INTEGRAL ABUTMENT BRIDGE STANDARD SLOPE WALL
	Business Systems (BUS)- Series 2500	
	M-BUS-2500	CABLE CONDUIT SCHEDULE AND GENERAL NOTES
	M-BUS-2501	LEGEND SYMBOL LIST, ABBREVIATIONS AND EQUIPMENT SCHEDULES
	M-BUS-2502	SINGLE LINE DIAGRAM AND UTILITY POWER CABLE/CONDUIT SCHEDULE
	M-BUS-2503	CONTROL BUILDING LIGHTING PLAN AND MISCELLANEOUS DETAILS - MAIN PLAZA
	M-BUS-2504	CONTROL BUILDING LIGHTING PLAN AND MISCELLANEOUS DETAILS - REMOTE PLAZA
	M-BUS-2505	CONTROL BUILDING GROUNDING DETAILS - MAIN PLAZA
	M-BUS-2506	CONTROL BUILDING GROUNDING DETAILS - REMOTE PLAZA
	M-BUS-2507	GROUNDING SCHEMATIC
	M-BUS-2508	CONTROL BUILDING MISCELLANEOUS DETAILS
	M-BUS-2509	UPS SINGLE LINE AND WIRING DIAGRAM
	M-BUS-2510	MISCELLANEOUS SCHEMATIC DIAGRAMS
	M-BUS-2511	VIDEO POWER JUNCTION BOX DETAIL - MAIN PLAZA
	M-BUS-2512	VIDEO POWER JUNCTION BOX DETAIL - REMOTE PLAZA
	M-BUS-2513	VIDEO WATCHDOG CAMERA DETAILS
	M-BUS-2514	RAMP PLAZA MONOTUBE DETAILS ACM AND IPO LANES
	M-BUS-2515	LOOP JUNCTION BOX DETAIL
	M-BUS-2516	CONTROL BUILDING LIGHTING AND RECEPTACLE PLAN - MAIN PLAZA
	M-BUS-2517	CONTROL BUILDING LIGHTING AND RECEPTACLE PLAN -REMOTE PLAZA
	M-BUS-2518	MISCELLANEOUS CROSS SECTION DETAILS
	M-BUS-2519	COMED TRANSFORMER PAD DETAIL
	M-BUS-2520	ELECTRICAL SITE PLAN - ACM AND IPO LANES
	M-BUS-2521	UNDERGROUND ELECTRICAL PLAN - ACM AND IPO LANES - MAIN PLAZA
	M-BUS-2522	PLAZA I-PASS PLANS - ACM AND IPO LANES
	M-BUS-2523	UNDERGROUND ELECTRICAL PLAN - ACM AND IPO LANES - REMOTE PLAZA
	M-BUS-2524	AUTOMATIC LANE ISLAND PLAN AND DETAILS 12 FOOT WIDE LANE
	M-BUS-2525	IPASS ONLY (IPO) LANE ISLAND PLAN AND DETAILS 12 FOOT WIDE LANE
	M-BUS-2526	TOLL EQUIPMENT WIRING DIAGRAM - ACM AND IPO LANES
	M-BUS-2527	LOOP AND TREADLE INSTALLATION DETAILS - ACM AND IPO LANES
	M-BUS-2528	CONTROL BUILDING TSIC - ACM AND IPO LANES - MAIN PLAZA
	M-BUS-2529	CONTROL BUILDING TSIC - ACM AND IPO LANES - REMOTE PLAZA
	M-BUS-2530	TSIC TERMINAL BLOCK LAYOUT - ACM AND IPO LANES
	M-BUS-2531	CONTROL BUILDING EQUIPMENT LAYOUT - ACM AND IPO LANES - MAIN PLAZA
	M-BUS-2532	CONTROL BUILDING EQUIPMENT LAYOUT - ACM AND IPO LANES - REMOTE PLAZA
	M-BUS-2533	CONTROL BUILDING R3 RACK - MAIN PLAZA
	M-BUS-2534	CONTROL BUILDING R3 RACK - REMOTE PLAZA
	M-BUS-2535	MISCELLANEOUS DETAILS -ACM AND IPO LANES
	M-BUS-2536	PANELBOARD SCHEDULES FOR TP1 AND TP2 - ACM AND IPO LANES
	M-BUS-2537	PANELBOARD SCHEDULES FOR MDP AND UPS UNITS - ACM AND IPO LANES
	M-BUS-2538	FIBER INTERCONNECTIONS BETWEEN MAIN AND REMOTE PLAZAS - ACM AND IPO LANES
	M-BUS-2539	PLAZA LANE CONTROL SIGNAL - ACM AND IPO LANES
	M-BUS-2540	TRAFFIC LIGHT DETAILS - ACM LANES
	M-BUS-2541	TRAFFIC LIGHT DETAILS - IPO LANES
	M-BUS-2542	ELECTRICAL SITE PLAN AET LANES
	M-BUS-2543	UNDERGROUND CONDUIT PLAN - MAIN PLAZA
	M-BUS-2544	UNDERGROUND CONDUIT PLAN - MAIN PLAZA PLAN - REMOTE PLAZA
	M-BUS-2545	CONTROL BUILDING EQUIPMENT LAYOUT - REMOTE PLAZA
	M-BUS-2546	CONTROL BUILDING EQUIPMENT LAYOUT - MAIN PLAZA
	M-BUS-2547	CONTROL BUILDING TSIC - MAIN AND REMOTE PLAZAS - AET LANES
	M-BUS-2548	TSIC TERMINAL BLOCK LAYOUT - ACM AND IPO LANES REMOTE PLAZAS - AET LANES
	M-BUS-2549	PANELBOARD SCHEDULES - MAIN PLAZA AET LANES
	M-BUS-2550	PANELBOARD SCHEDULES - REMOTE PLAZA AET LANES
	M-BUS-2551	WIRING DIAGRAM - AET 1-LANE LAYOUT
	M-BUS-2552	WIRING DIAGRAM - AET 3-LANE LAYOUT
	M-BUS-2553	LOOP PLAN - AET 1-LANE LAYOUT
	M-BUS-2554	LOOP PLAN - AET 3-LANE LAYOUT
	M-BUS-2555	VES WASH SYSTEM ENCLOSURE DETAIL
	M-BUS-2556	VES WASH SYSTEM PANEL DETAIL
	M-BUS-2557	VES WASH SYSTEM FLOW DIAGRAM AND MECHANICAL DETAIL
	M-BUS-2558	VES WASH SYSTEM SUGGESTED CONDUIT ROUTING
	M-BUS-2559	VES WASH SYSTEM MISCELLANEOUS POWER WIRING DIAGRAM
	M-BUS-2560	VES WASH SYSTEM CONTROL SWITCH SCHEMATIC

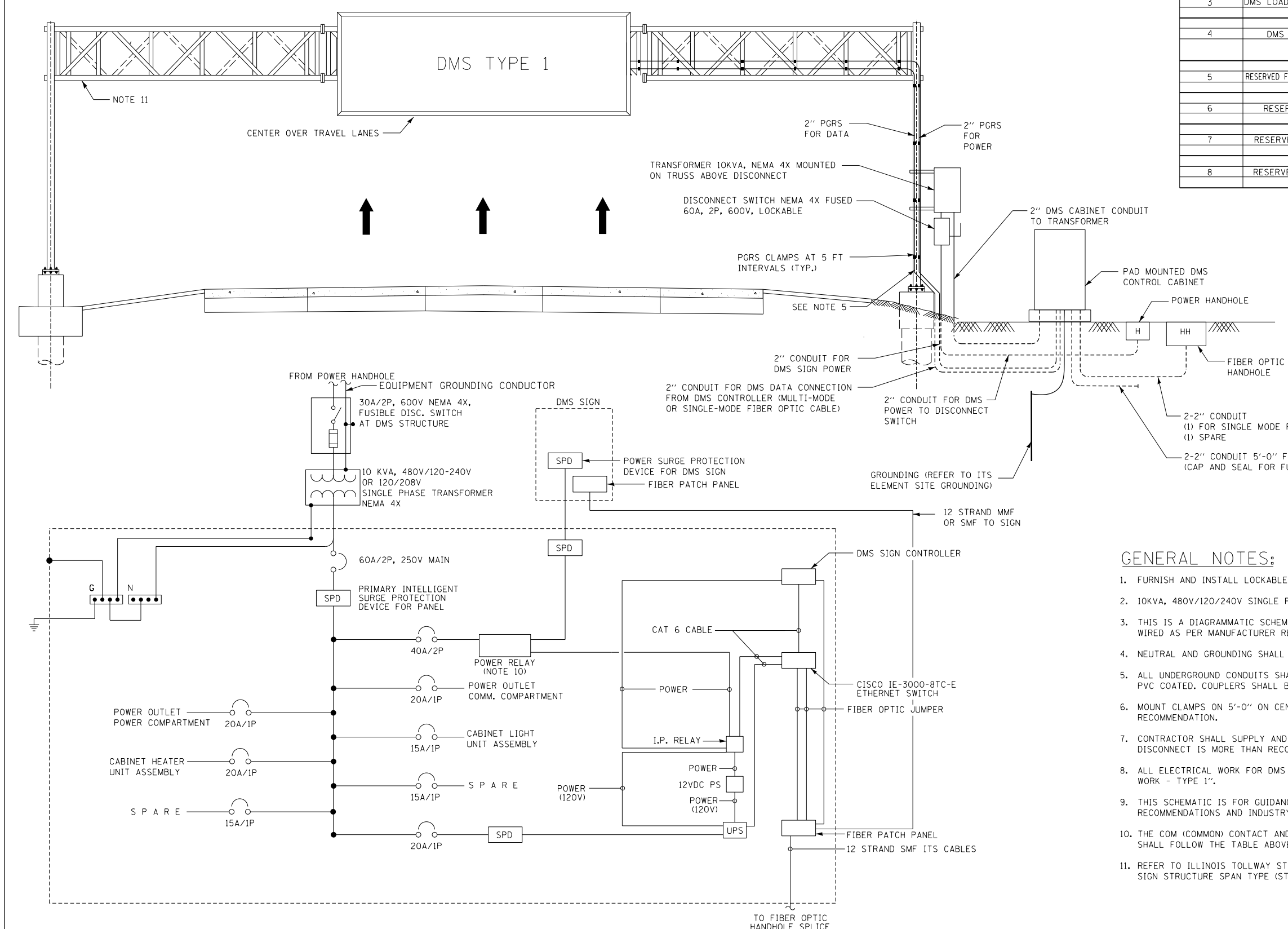
New Sheet

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	M-OHS-720	Overhead Sign Structure Span Type Summary and Total Bill of Material
		Added Protective Coat (SQ YD) to Summary Table
		Clarified Class SI and Class DS Concrete are included in Foundation For Overhead Sign Structure.
	M-OHS-721	Overhead Sign Structure Cantilever Type Summary and Total Bill of Material
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		Removed Truss Extension for Mounting Walkway detail and references
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	Sheet 1	Revised Material Specification Table to specify ASTM A618 for Frame HSS, ASTM A500 for Mounting Beam HSS.
	Sheet 4	Removed Note 6, referring to ASTM requirements of HSS members.
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Tollway Base Sheet Revisions		
	Weigh-In-Motion - Series 1600	
Section M	M-WIM-1600	WEIGH-IN-MOTION CABINET AND FOUNDATION DETAILS
	M-WIM-1601	WEIGH-IN-MOTION IP CAMERA DETAILS
	M-WIM-1602	WEIGH-IN-MOTION LOOP DETECTOR DETAILS
	M-WIM-1603	WEIGH-IN-MOTION DETECTOR LOOP AND QUARTZ SENSOR DETAIL
	M-WIM-1604	INSTALLATION DETAIL DETECTOR HOUSING & DETECTOR HOUSING ADAPTER
	M-WIM-1605	WEIGH-IN-MOTION DETECTOR HOUSING DETAIL
	Flashing Sign Beacon - Series 1700	
	M-ITS-1700	FLASHING SIGN BEACON INSTALLATION BREAKAWAY ELECTRICAL DETAIL
	M-ITS-1701	FLASHING SIGN BEACON INSTALLATION WIRING DIAGRAM
	Conduit Details at Integral Abutment-Series 1900	
	M-ITS-1900	CONDUIT DETAILS AT INTEGRAL ABUTMENT BRIDGE STANDARD SLOPE WALL
	Business Systems (BUS)- Series 2500	
	M-BUS-2500	CABLE CONDUIT SCHEDULE AND GENERAL NOTES
	M-BUS-2501	LEGEND SYMBOL LIST, ABBREVIATIONS AND EQUIPMENT SCHEDULES
	M-BUS-2502	SINGLE LINE DIAGRAM AND UTILITY POWER CABLE/CONDUIT SCHEDULE
	M-BUS-2503	CONTROL BUILDING LIGHTING PLAN AND MISCELLANEOUS DETAILS - MAIN PLAZA
	M-BUS-2504	CONTROL BUILDING LIGHTING PLAN AND MISCELLANEOUS DETAILS - REMOTE PLAZA
	M-BUS-2505	CONTROL BUILDING GROUNDING DETAILS - MAIN PLAZA
	M-BUS-2506	CONTROL BUILDING GROUNDING DETAILS - REMOTE PLAZA
	M-BUS-2507	GROUNDING SCHEMATIC
	M-BUS-2508	CONTROL BUILDING MISCELLANEOUS DETAILS
	M-BUS-2509	UPS SINGLE LINE AND WIRING DIAGRAM
	M-BUS-2510	MISCELLANEOUS SCHEMATIC DIAGRAMS
	M-BUS-2511	VIDEO POWER JUNCTION BOX DETAIL - MAIN PLAZA
	M-BUS-2512	VIDEO POWER JUNCTION BOX DETAIL - REMOTE PLAZA
	M-BUS-2513	VIDEO WATCHDOG CAMERA DETAILS
	M-BUS-2514	RAMP PLAZA MONOTUBE DETAILS ACM AND IPO LANES
	M-BUS-2515	LOOP JUNCTION BOX DETAIL
	M-BUS-2516	CONTROL BUILDING LIGHTING AND RECEPTACLE PLAN - MAIN PLAZA
	M-BUS-2517	CONTROL BUILDING LIGHTING AND RECEPTACLE PLAN -REMOTE PLAZA
	M-BUS-2518	MISCELLANEOUS CROSS SECTION DETAILS
	M-BUS-2519	COMED TRANSFORMER PAD DETAIL
	M-BUS-2520	ELECTRICAL SITE PLAN - ACM AND IPO LANES
	M-BUS-2521	UNDERGROUND ELECTRICAL PLAN - ACM AND IPO LANES - MAIN PLAZA
	M-BUS-2522	PLAZA I-PASS PLANS - ACM AND IPO LANES
	M-BUS-2523	UNDERGROUND ELECTRICAL PLAN - ACM AND IPO LANES - REMOTE PLAZA
	M-BUS-2524	AUTOMATIC LANE ISLAND PLAN AND DETAILS 12 FOOT WIDE LANE
	M-BUS-2525	IPASS ONLY (IPO) LANE ISLAND PLAN AND DETAILS 12 FOOT WIDE LANE
	M-BUS-2526	TOLL EQUIPMENT WIRING DIAGRAM - ACM AND IPO LANES
	M-BUS-2527	LOOP AND TREADLE INSTALLATION DETAILS - ACM AND IPO LANES
	M-BUS-2528	CONTROL BUILDING TSIC - ACM AND IPO LANES - MAIN PLAZA
	M-BUS-2529	CONTROL BUILDING TSIC - ACM AND IPO LANES - REMOTE PLAZA
	M-BUS-2530	TSIC TERMINAL BLOCK LAYOUT - ACM AND IPO LANES
	M-BUS-2531	CONTROL BUILDING EQUIPMENT LAYOUT - ACM AND IPO LANES - MAIN PLAZA
	M-BUS-2532	CONTROL BUILDING EQUIPMENT LAYOUT - ACM AND IPO LANES - REMOTE PLAZA
	M-BUS-2533	CONTROL BUILDING R3 RACK - MAIN PLAZA
	M-BUS-2534	CONTROL BUILDING R3 RACK - REMOTE PLAZA
	M-BUS-2535	MISCELLANEOUS DETAILS -ACM AND IPO LANES
	M-BUS-2536	PANELBOARD SCHEDULES FOR TP1 AND TP2 - ACM AND IPO LANES
	M-BUS-2537	PANELBOARD SCHEDULES FOR MDP AND UPS UNITS - ACM AND IPO LANES
	M-BUS-2538	FIBER INTERCONNECTIONS BETWEEN MAIN AND REMOTE PLAZAS - ACM AND IPO LANES
	M-BUS-2539	PLAZA LANE CONTROL SIGNAL - ACM AND IPO LANES
	M-BUS-2540	TRAFFIC LIGHT DETAILS - ACM LANES
	M-BUS-2541	TRAFFIC LIGHT DETAILS - IPO LANES
	M-BUS-2542	ELECTRICAL SITE PLAN AET LANES
	M-BUS-2543	UNDERGROUND CONDUIT PLAN - MAIN PLAZA
	M-BUS-2544	UNDERGROUND CONDUIT PLAN - MAIN PLAZA PLAN - REMOTE PLAZA
	M-BUS-2545	CONTROL BUILDING EQUIPMENT LAYOUT - REMOTE PLAZA
	M-BUS-2546	CONTROL BUILDING EQUIPMENT LAYOUT - MAIN PLAZA
	M-BUS-2547	CONTROL BUILDING TSIC - MAIN AND REMOTE PLAZAS - AET LANES
	M-BUS-2548	TSIC TERMINAL BLOCK LAYOUT - ACM AND IPO LANES REMOTE PLAZAS - AET LANES
	M-BUS-2549	PANELBOARD SCHEDULES - MAIN PLAZA AET LANES
	M-BUS-2550	PANELBOARD SCHEDULES - REMOTE PLAZA AET LANES
	M-BUS-2551	WIRING DIAGRAM - AET 1-LANE LAYOUT
	M-BUS-2552	WIRING DIAGRAM - AET 3-LANE LAYOUT
	M-BUS-2553	LOOP PLAN - AET 1-LANE LAYOUT
	M-BUS-2554	LOOP PLAN - AET 3-LANE LAYOUT
	M-BUS-2555	VES WASH SYSTEM ENCLOSURE DETAIL
	M-BUS-2556	VES WASH SYSTEM PANEL DETAIL
	M-BUS-2557	VES WASH SYSTEM FLOW DIAGRAM AND MECHANICAL DETAIL
	M-BUS-2558	VES WASH SYSTEM SUGGESTED CONDUIT ROUTING
	M-BUS-2559	VES WASH SYSTEM MISCELLANEOUS POWER WIRING DIAGRAM
	M-BUS-2560	VES WASH SYSTEM CONTROL SWITCH SCHEMATIC

New Sheet



DMS CABINET - IP RELAY WIRING TABLE					
IP TERMINAL	IP TERMINAL ASSIGNMENT	CONNECTION FROM		CONNECTION TO	
		DEVICE	CONNECTION	DEVICE	CONNECTION
1	RESERVED FOR CCTV1				
2	RESERVED FOR CCTV2				
3	DMS LOAD SHEDDING RELAY	IP_RELAY CB	12VDC (+) CB1B	CB IP_RELAY	CB1A 3 COMM
4	DMS CONTROLLER	IP_RELAY SPLICE BLOCK	3 NO 120 V	LOAD SHED RELAY IP_RELAY	COIL (+) NC
5	RESERVED FOR FLASHING BEACONS			POWER OUTLET #1 (COMMUNICATION)	HOT
6	RESERVED FOR WIM				
7	RESERVED FOR MVDS 1				
8	RESERVED FOR MVDS 2				

NOTE TO DESIGNER

THIS BASE SHEET SHOWS TYPICAL NEW CONSTRUCTION BUT IT IS NOT A STANDARD DRAWING. IT REQUIRES COMPLETION BY THE DESIGNER PRIOR TO INSERTION INTO A CONTRACT. MICROSTATION FILES AND THE "CADD STANDARDS MANUAL" AVAILABLE ON THE ILLINOIS TOLLWAY WEBSITE. THE DESIGNER SHALL ACCEPT THE RESPONSIBILITY OF THE DESIGN OF THIS SHEET UPON ITS COMPLETION AND INSERTION INTO A CONTRACT. ALL "NOTE TO DESIGNER" BOXES SHALL BE REMOVED PRIOR TO INSERTION OF THE DRAWING INTO THE PLAN SET.

GENERAL NOTES:

- FURNISH AND INSTALL LOCKABLE SERVICE DISCONNECT AT PROPOSED STRUCTURE.
- 10KVA, 480V/120/240V SINGLE PHASE TRANSFORMER SHALL BE MOUNTED ABOVE DISCONNECT.
- THIS IS A DIAGRAMMATIC SCHEMATIC, ALL BREAKERS, TRANSFORMER LOAD CENTER SHALL BE SIZED AND WIRED AS PER MANUFACTURER RECOMMENDATIONS.
- NEUTRAL AND GROUNDING SHALL BE BONDED AT SERVICE ENTRANCE DISCONNECT.
- ALL UNDERGROUND CONDUITS SHALL BE NON-METALLIC CNC AND ABOVE GRADE CONDUITS SHALL BE RGS PVC COATED. COUPLERS SHALL BE UTILIZED WHEN TRANSITIONING FROM CNC TO PGRS
- MOUNT CLAMPS ON 5'-0" ON CENTER MOUNTING. HARDWARE SHALL BE USED AS PER CONDUIT MANUFACTURER RECOMMENDATION.
- CONTRACTOR SHALL SUPPLY AND INSTALL CABLE REDUCER LUGS WHERE SIZE OF CABLE ENTERING THE DISCONNECT IS MORE THAN RECOMMENDED SIZE DUE TO VOLTAGE DROP.
- ALL ELECTRICAL WORK FOR DMS TYPE 1 SHALL BE PAID UNDER PAY ITEM "JT132621 - DMS ELECTRICAL WORK - TYPE 1".
- THIS SCHEMATIC IS FOR GUIDANCE ONLY. CONTRACTOR SHALL WIRE THE DMS CABINET AS PER MANUFACTURER RECOMMENDATIONS AND INDUSTRY STANDARDS.
- THE COM (COMMON) CONTACT AND NO (NORMALLY OPEN) CONTACT ON RELAY CONTACTS OF DIN RELAY SHALL FOLLOW THE TABLE ABOVE.
- REFER TO ILLINOIS TOLLWAY STANDARD DRAWING F17 FOR OVERHEAD SIGN STRUCTURE SPAN TYPE (STEEL) STRUCTURE DETAILS.

M-ITS-1100

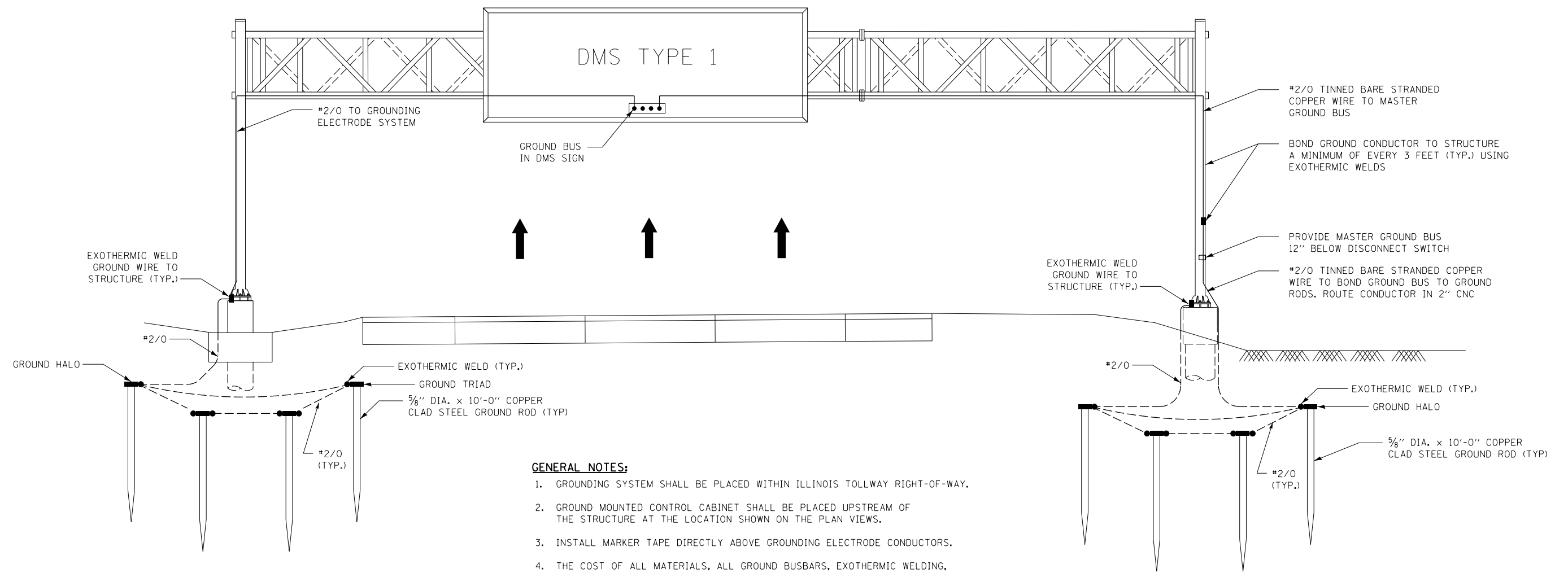


DMS TYPE 1
ELECTRICAL PLAN

DATE
3-31-2016

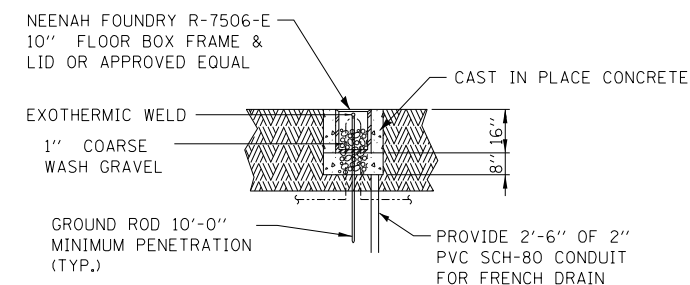
POWER WIRING SCHEMATIC FOR 100A PANEL,
120 / 240V LOAD CENTER OF DMS CABINET
SCALE: NTS

COMMUNICATION RISER
SCALE: NTS



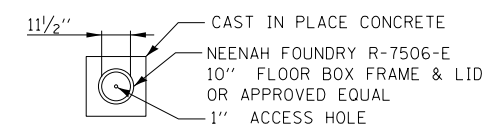
GENERAL NOTES:

1. GROUNDING SYSTEM SHALL BE PLACED WITHIN ILLINOIS TOLLWAY RIGHT-OF-WAY.
2. GROUND MOUNTED CONTROL CABINET SHALL BE PLACED UPSTREAM OF THE STRUCTURE AT THE LOCATION SHOWN ON THE PLAN VIEWS.
3. INSTALL MARKER TAPE DIRECTLY ABOVE GROUNDING ELECTRODE CONDUCTORS.
4. THE COST OF ALL MATERIALS, ALL GROUND BUSBARS, EXOTHERMIC WELDING, GROUND WELL, GROUND RODS AND ALL OTHER ITEMS TO COMPLETE THE GROUNDING ELECTRODE SYSTEM SHALL BE INCLUDED IN PAY ITEM JT132621 - DMS ELECTRICAL WORK - TYPE 1.
5. REFER TO SHEET M-ITS-M3 FOR DMS TYPICAL SITE DETAIL WIRNIG.



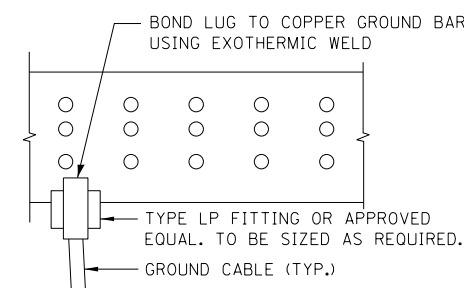
GROUND WELL ELEVATION DETAIL

N.T.S. (NOTE 3)



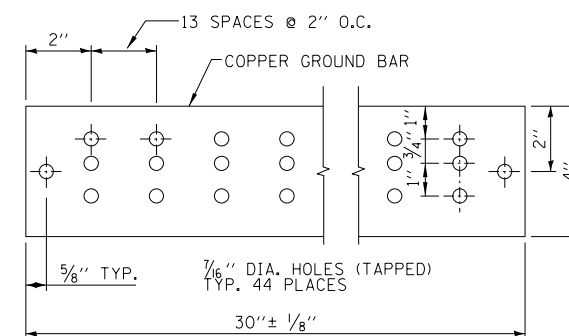
GROUND WELL PLAN DETAIL

N.T.S. (NOTE 3)



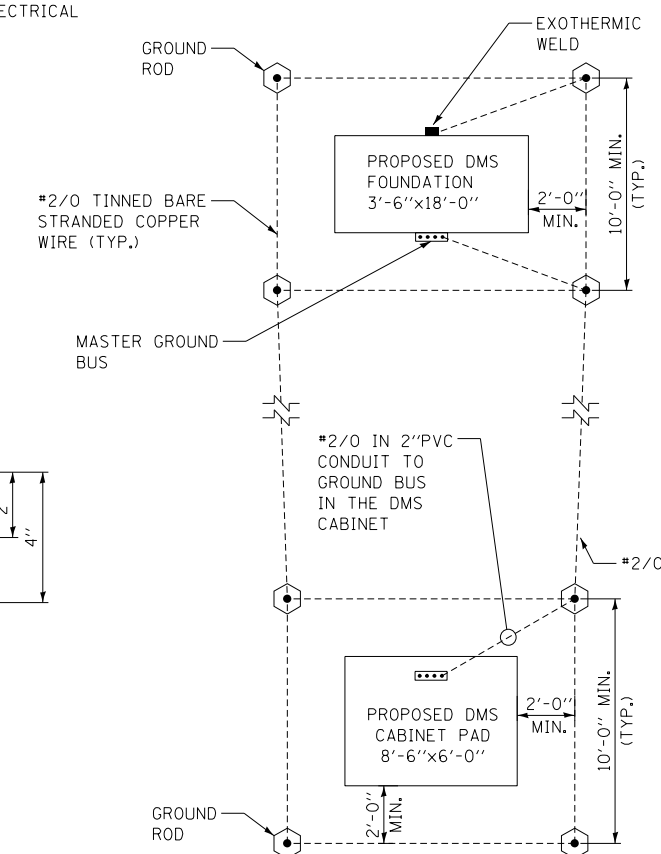
MASTER GROUND BUSBAR CONNECTION DETAIL

N.T.S.



MASTER GROUND BUSBAR SUPPORT SPACING DETAIL

N.T.S.



GROUNDING SCHEMATIC

NOTE TO DESIGNER

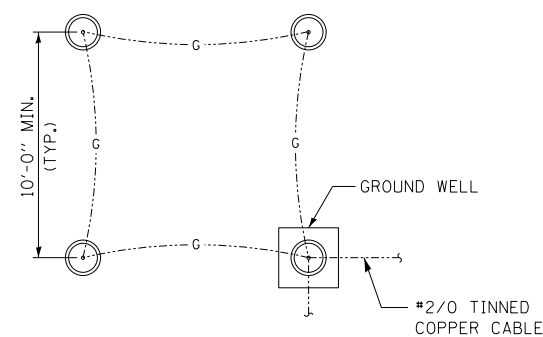
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M-ITS-1101



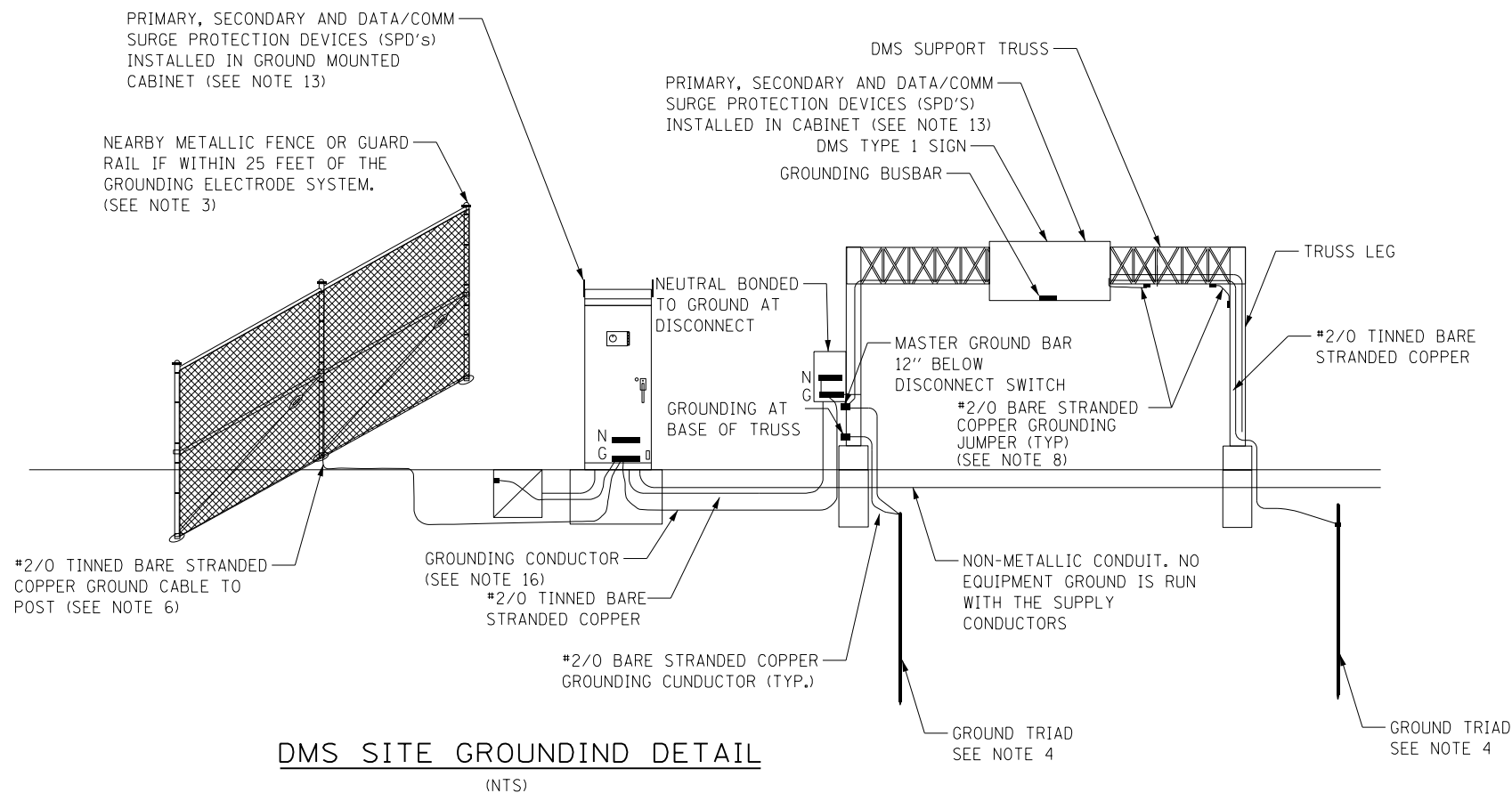
DMS TYPE 1
SITE GROUNDING PLAN

DATE
3-31-2016



GROUND HALO DETAIL

N.T.S.



NOTES:

1. ADDITIONAL GROUND RODS SHALL BE ADDED TO GROUNDING ELECTRODE CONDUCTOR AS REQUIRED UNTIL RESISTANCE TO GROUND IS 5 OHMS OR LESS. FOR DEVICE AND POWER SERVICE LOCATIONS. IF ADDITIONAL GROUND ROD ELECTRODES ARE REQUIRED IN ORDER TO ACHIEVE REQUIRED RESISTANCE THEY SHALL RADIATE OUT FROM EXISTING GROUND ROD ELECTRODES, THESE SHALL BE CONNECTED WITH #2/0 TINNED BARE STRANDED CONDUCTOR, AND SHALL BE 20' FROM CONNECTED GROUND ROD. ALL COMMUNICATION EQUIPMENT GROUNDING SITES SHALL BE TESTED FOR RESISTANCE TO GROUND USING THE THREE-POINT FALL-OF-POTENTIAL TEST PER ANSI/IEEE STD 81. SEE ITS ELEMENT SITE GROUNDING SPECIAL PROVISION FOR PROCEDURES.
2. GROUND RODS SHALL NOT BE ROUTED THROUGH FOUNDATIONS.
3. FENCES AND OTHER METALLIC STRUCTURES WITH PATHS TO GROUND SHALL BE CONNECTED TO EQUIPMENT GROUND IF THEY ARE LOCATED WITHIN 25' OF THE GROUNDING ELECTRODE SYSTEM OR ANY OBJECT GROUND TO THE GROUNDING ELECTRODE SYSTEM.
4. GROUND RODS SHALL BE INSTALLED IN GROUND WELLS IN FINISHED GRADE UNLESS INSTALLED UNDER SHOULDERS OR PAVEMENT.
5. ALL EQUIPMENT GROUNDS SHALL BE PROPERLY CONNECTED TO A CHASSIS: ALL PAINT AND OTHER COATINGS, INCLUDING GALVANIZATION, SHALL BE REMOVED PRIOR TO TERMINATION OF A GROUND, AFTER THE GROUND IS TERMINATED A NON-OXIDIZING COATING SHALL BE PAINTED OVER THE EXPOSED METAL SURFACES.
6. GROUNDING ELECTRODE SYSTEM CONNECTIONS TO FENCING SHALL BE MADE USING HEAVY DUTY TINNED LISTED PIPE CLAMPS DESIGNED FOR GROUNDING AND STAINLESS STEEL HARDWARE.
7. ALL GROUNDING DIAGRAMS ARE SCHEMATIC ONLY.
8. ALL METALLIC MEMBERS OF THE DMS TRUSS AND THE DMS SIGN WITHIN 6 FEET OF EACH OTHER SHALL BE BONDED TOGETHER. WELDS SHALL BE CONSIDERED AN ACCEPTABLE BONDING METHOD. U-BOLT CONNECTIONS SHALL NOT BE CONSIDERED AN ACCEPTABLE BONDING METHOD.
9. AT LEAST AN 8 INCH MINIMUM BENDING RADIUS SHALL BE MAINTAINED ON ALL GROUNDING ELECTRODE CONDUCTORS. THE ANGLE OF ANY BENDING SHALL NOT BE LESS THAN 90 DEGREE.
10. GROUNDING CONDUCTORS SHALL ALWAYS ROUTE AS STRAIGHT AS POSSIBLE. "U" FORM JUMPERS SHALL BE ACCEPTABLE ONLY FOR GATES AND DOORS.
11. THE QUANTITY OF GROUNDING ELECTRODE CONDUCTORS CONNECTED TO A GROUND ROD ELECTRODE SHALL BE LIMITED TO THREE.
12. WHENEVER POSSIBLE, GROUND ROD ELECTRODES SHALL BE INSTALLED NO CLOSER THAN 11' FROM A FOUNDATION.
13. EVERY COPPER CONDUCTOR OR CABLE ENTERING OR LEAVING A DMS ENCLOSURE, THE DMS CONTROLLER, OR THE CCTV ELECTRONICS ENCLOSURE SHALL BE PROTECTED, WITH A SURGE PROTECTION DEVICE.
14. DIAGRAM OMITS EQUIPMENT GROUNDING INSIDE ENCLOSURES.
15. GROUNDING CONDUCTOR SHALL BE #2/0 TINNED BARE STRANDED COPPER. CONTRACTOR SHALL INSTALL GROUND RODS AS NECESSARY TO ENSURE GROUND RESISTANCE AT DMS CABINET IS 5 OHMS OR LESS.
16. IF THERE IS A METAL HANDRAIL WITHIN 20 FEET OF CONTROL CABINET CONNECT HANDRAIL TO GROUNDING SYSTEM WITH #2/0 TINNED BARE STRANDED COPPER CONDUCTOR.

NOTE TO DESIGNER

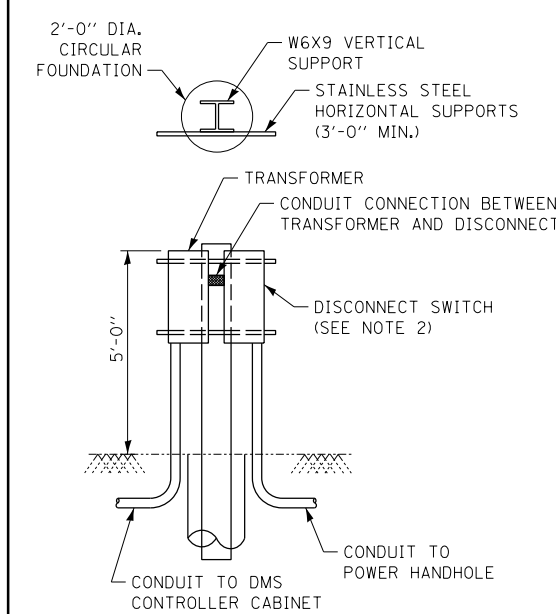
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M-ITS-1102

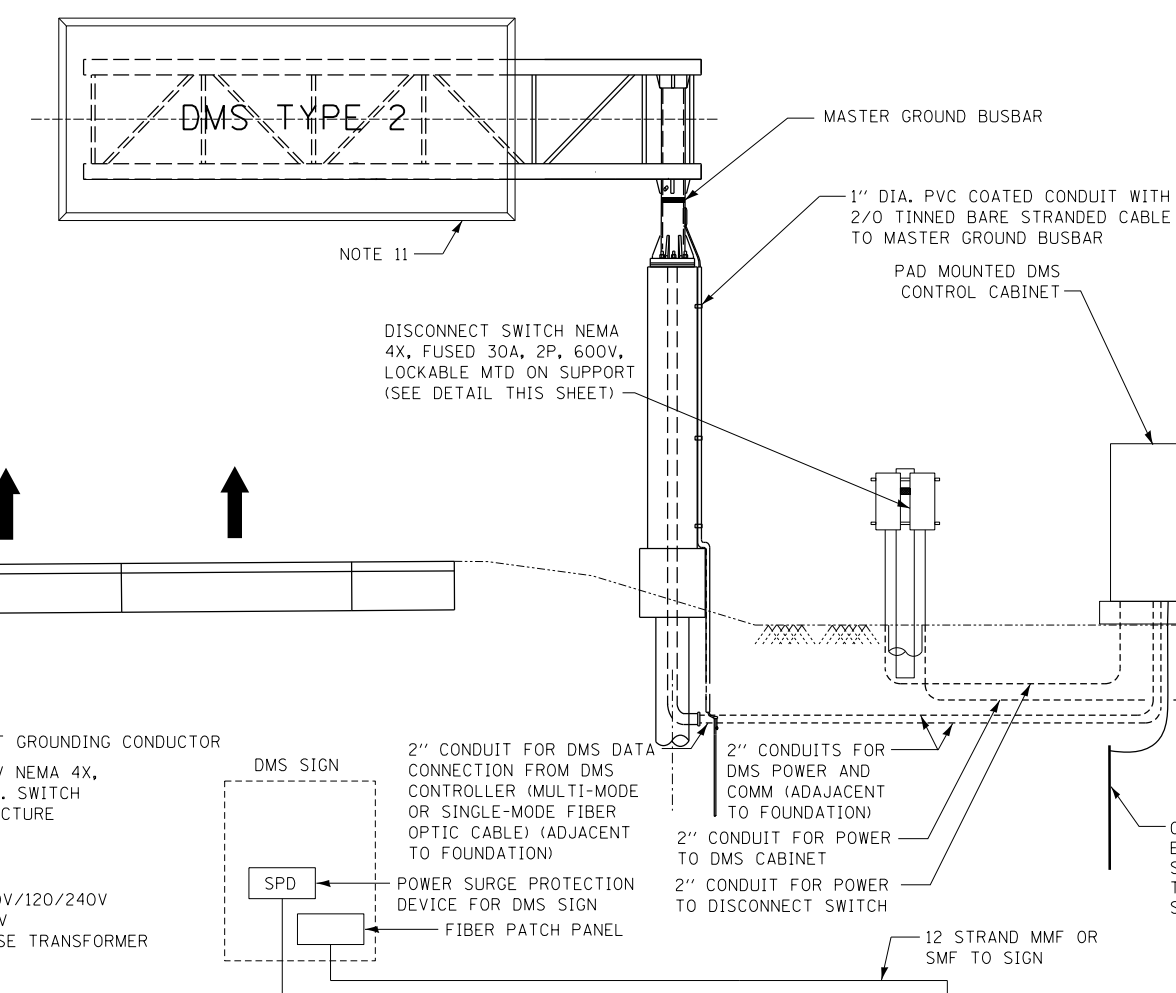


DMS TYPE 1
TYPICAL SITE WIRING DETAIL

DATE
3-31-2016



30A-2P NEMA 4X
DISC MTD ON
SUPPORT DETAIL
SCALE: NTS



DMS CABINET - IP RELAY WIRING TABLE					
DESCRIPTION	CONNECTION FROM		CONNECTION TO		
IP TERMINAL	IP TERMINAL ASSIGNMENT	DEVICE	CONNECTION	DEVICE	CONNECTION
1	RESERVED FOR CCTV1				
2	RESERVED FOR CCTV2				
3	DMS LOAD SHEDDING RELAY	IP_RELAY CB	12VDC (+)	CB	CB1A
		IP_RELAY	3 NO	IP_RELAY	3 COMM
		SPLICE BLOCK	120 V	LOAD SHED RELAY	COIL (+)
4	DMS CONTROLLER	IP_RELAY	4 NC	IP_RELAY	NC
				POWER OUTLET #1 (COMMUNICATION)	HOT
5	RESERVED FOR FLASHING BEACONS				
6	RESERVED FOR WIM				
7	RESERVED FOR MVDS 1				
8	RESERVED FOR MVDS 2				

NOTE TO DESIGNER

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GENERAL NOTES:

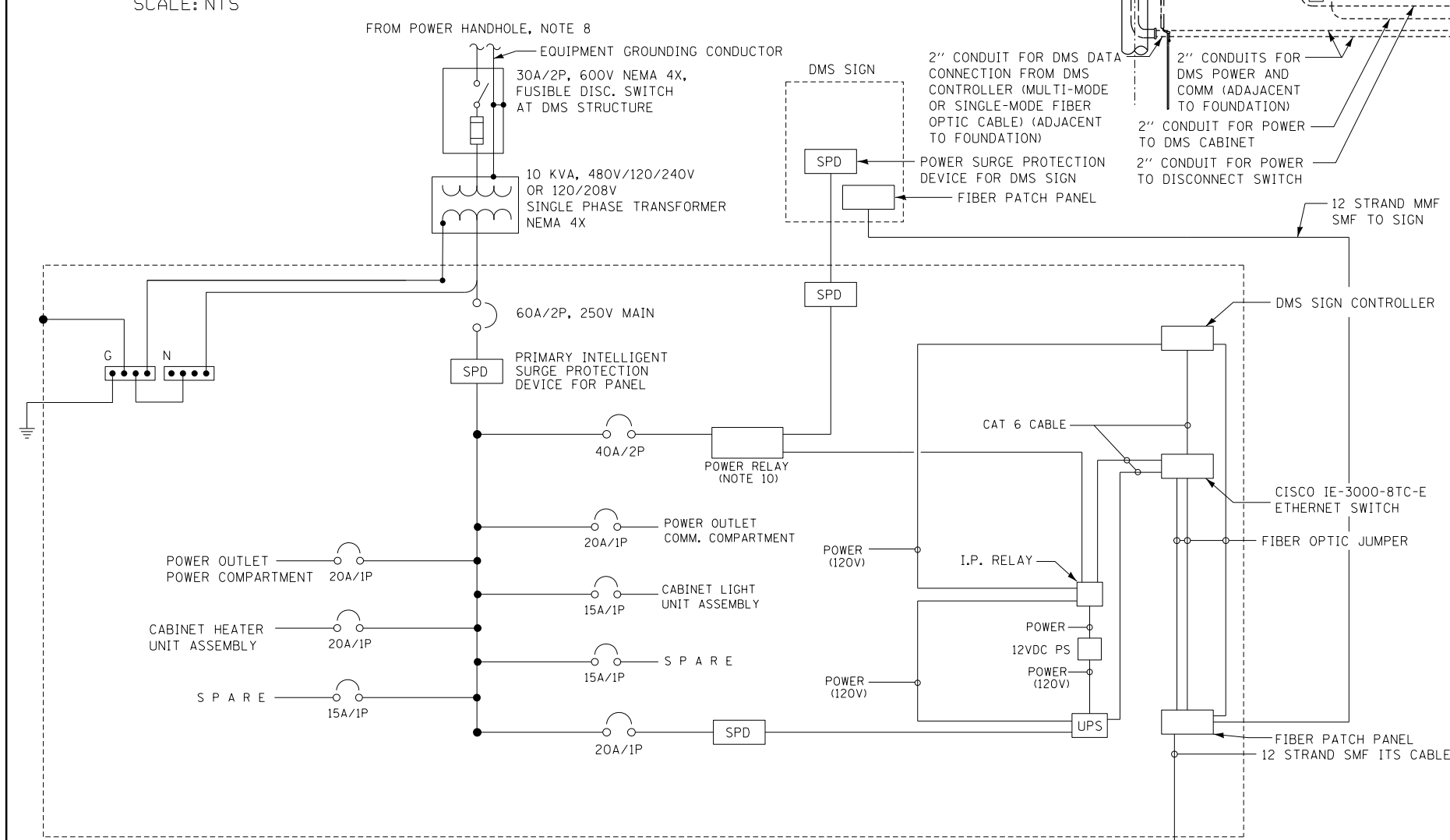
- FURNISH AND INSTALL SERVICE DISCONNECT ON UNISTRUT STRUCTURE.
- 10KVA, 480V/120/240V SINGLE PHASE TRANSFORMER.
- THIS IS A DIAGRAMMATIC SCHEMATIC, ALL BREAKERS, TRANSFORMER LOAD CENTER SHALL BE SIZED AND WIRED AS PER MANUFACTURER RECOMMENDATIONS.
- ENTIRE COMPLETED SYSTEM SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH MOTOROLA R56 MANUAL AND THE APPLICABLE ARTICLES OF SECTION 250 OF THE NATIONAL ELECTRICAL CODE.
- ALL UNDERGROUND CONDUITS SHALL BE NON-METALLIC PVC AND ABOVE GRADE CONDUITS SHALL BE RGS PVC COATED. COUPLERS SHALL BE USED WHEN TRANSITIONING FROM CNC TO PRGS.
- MOUNT CLAMPS ON 5'-0" ON CENTER MOUNTING. HARDWARE SHALL BE USED AS PER CONDUIT MANUFACTURER RECOMMENDATION.
- CONTRACTOR SHALL SUPPLY AND INSTALL CABLE REDUCER LUGS WHERE SIZE OF CABLE ENTERING THE DISCONNECT IS MORE THAN RECOMMENDED SIZE DUE TO VOLTAGE DROP.
- ALL ELECTRICAL WORK FOR DMS TYPE 2 SHALL BE PAID UNDER PAY ITEM JT132622 - DMS ELECTRICAL WORK - TYPE 2.
- THIS SCHEMATIC IS FOR GUIDANCE ONLY. CONTRACTOR SHALL WIRE THE DMS CABINET AS PER MANUFACTURER RECOMMENDATIONS AND INDUSTRY STANDARDS.
- THE COM (COMMON) CONTACT AND NO (NORMALLY OPEN) CONTACT ON RELAY CONTACTS OF DIN RELAY SHALL FOLLOW THE TABLE ABOVE.
- REFER TO ILLINOIS TOLLWAY STANDARD DRAWING F4 FOR OVERHEAD SIGN STRUCTURE CANTILEVER TYPE STRUCTURE DETAILS.
- PAD MOUNTED TRANSFORMER SHALL BE FURNISHED BY UTILITY COMPANY. FOUNDATION AND TRANSFORMER GROUNDING BY CONTRACTOR SHALL BE IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS AND MUST BE TIED INTO DMS SITE GROUNDING ELECTRODE SYSTEM.
- FOR THE DISCONNECT SWITCH, HORIZONTAL SUPPORT SHALL BE SIZED TO ALLOW CONDUITS TO VERTICALLY DROP OUTSIDE OF THE FOUNDATION WITHOUT BENDS.

M-ITS-1103



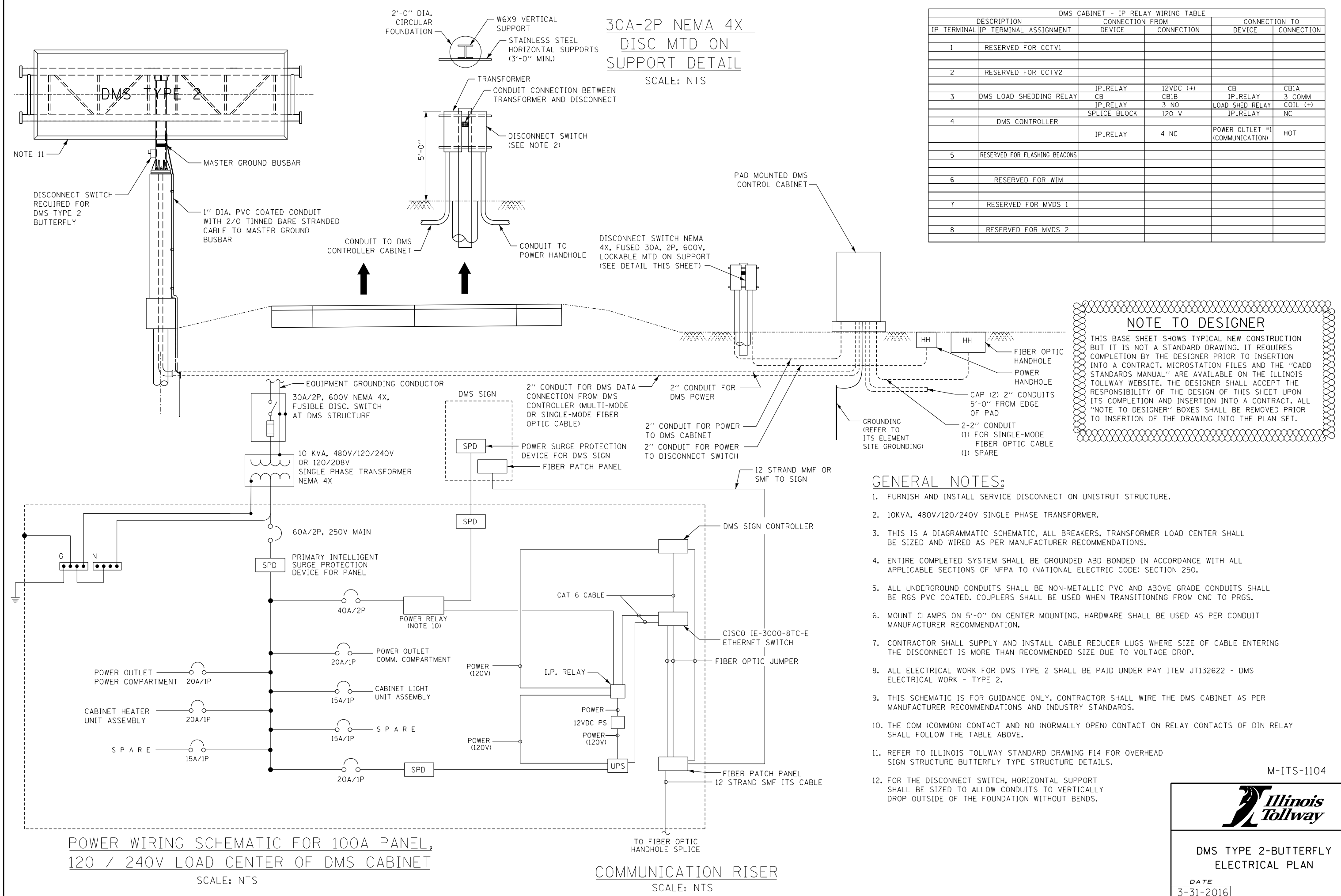
**DMS TYPE 2-CANTILEVER
ELECTRICAL PLAN**

DATE
3-31-2016



POWER WIRING SCHEMATIC FOR 100A PANEL,
120 / 240V LOAD CENTER OF DMS CABINET
SCALE: NTS

COMMUNICATION RISER
SCALE: NTS



DMS CABINET - IP RELAY WIRING TABLE					
DESCRIPTION		CONNECTION FROM		CONNECTION TO	
IP TERMINAL	IP TERMINAL ASSIGNMENT	DEVICE	CONNECTION	DEVICE	CONNECTION
1	RESERVED FOR CCTV1				
2	RESERVED FOR CCTV2				
3	DMS LOAD SHEDDING RELAY	IP_RELAY CB	12VDC (+) CB1B	CB IP_RELAY	CB1A 3 COMM
4	DMS CONTROLLER	IP_RELAY SPLICE BLOCK	3 NO 120 V	LOAD SHED RELAY IP_RELAY	COIL (+) NC
5	RESERVED FOR FLASHING BEACONS			POWER OUTLET #1 (COMMUNICATION)	HOT
6	RESERVED FOR WIM				
7	RESERVED FOR MVDS 1				
8	RESERVED FOR MVDS 2				

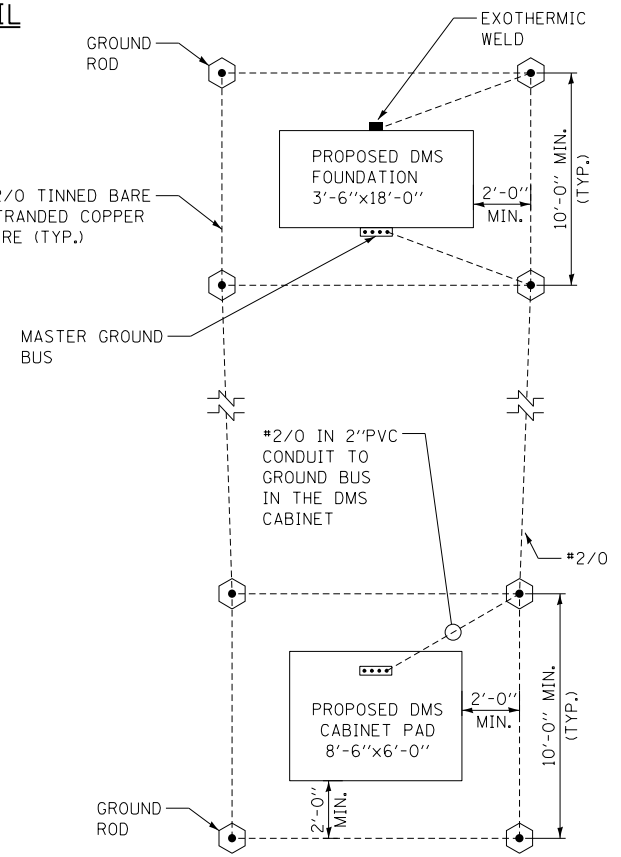
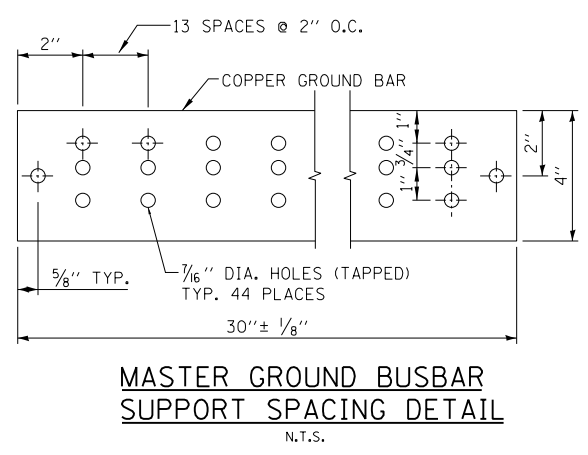
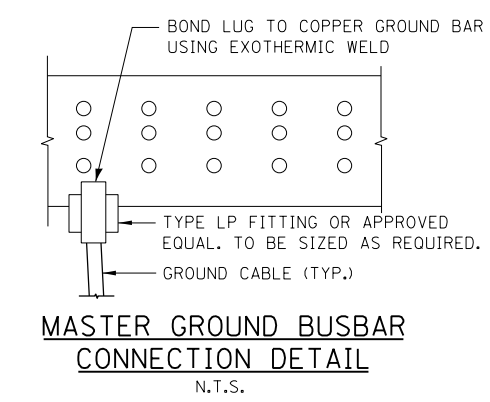
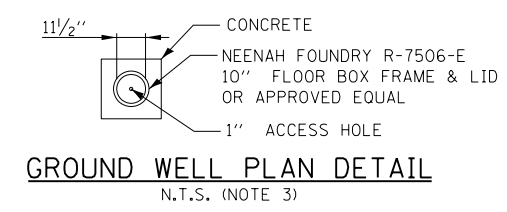
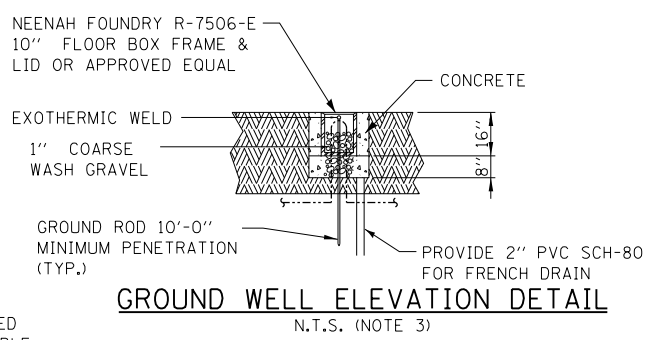
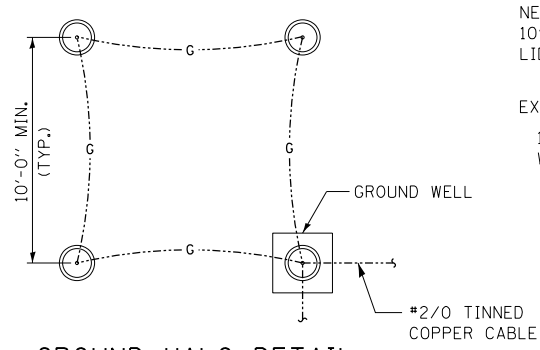
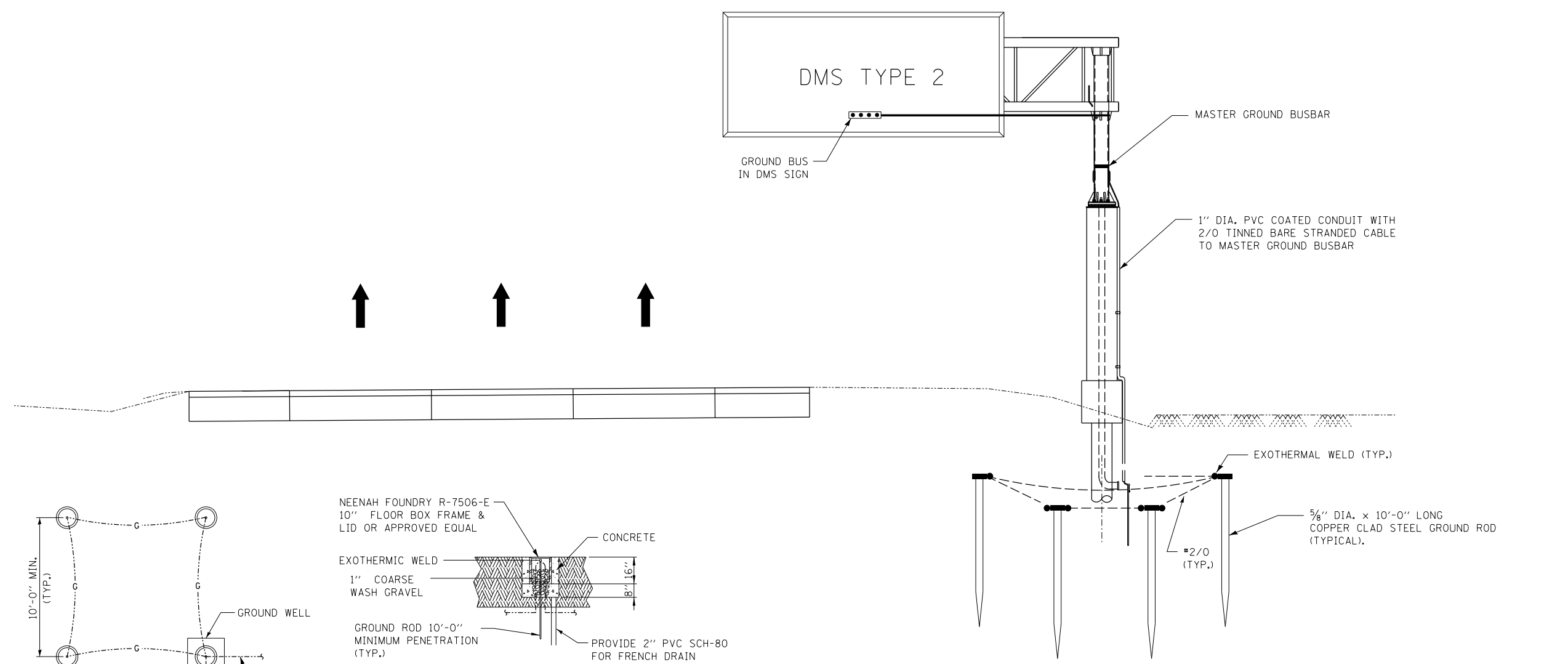
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- GENERAL NOTES:**
- FURNISH AND INSTALL SERVICE DISCONNECT ON UNISTRUT STRUCTURE.
 - 10KVA, 480V/120/240V SINGLE PHASE TRANSFORMER.
 - THIS IS A DIAGRAMMATIC SCHEMATIC, ALL BREAKERS, TRANSFORMER LOAD CENTER SHALL BE SIZED AND WIRED AS PER MANUFACTURER RECOMMENDATIONS.
 - ENTIRE COMPLETED SYSTEM SHALL BE GROUNDED AND BONDED IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF NFPA TO (NATIONAL ELECTRIC CODE) SECTION 250.
 - ALL UNDERGROUND CONDUITS SHALL BE NON-METALLIC PVC AND ABOVE GRADE CONDUITS SHALL BE RGS PVC COATED. COUPLERS SHALL BE USED WHEN TRANSITIONING FROM CNC TO PRGS.
 - MOUNT CLAMPS ON 5'-0" ON CENTER MOUNTING. HARDWARE SHALL BE USED AS PER CONDUIT MANUFACTURER RECOMMENDATION.
 - CONTRACTOR SHALL SUPPLY AND INSTALL CABLE REDUCER LUGS WHERE SIZE OF CABLE ENTERING THE DISCONNECT IS MORE THAN RECOMMENDED SIZE DUE TO VOLTAGE DROP.
 - ALL ELECTRICAL WORK FOR DMS TYPE 2 SHALL BE PAID UNDER PAY ITEM JT132622 - DMS ELECTRICAL WORK - TYPE 2.
 - THIS SCHEMATIC IS FOR GUIDANCE ONLY. CONTRACTOR SHALL WIRE THE DMS CABINET AS PER MANUFACTURER RECOMMENDATIONS AND INDUSTRY STANDARDS.
 - THE COM (COMMON) CONTACT AND NO (NORMALLY OPEN) CONTACT ON RELAY CONTACTS OF DIN RELAY SHALL FOLLOW THE TABLE ABOVE.
 - REFER TO ILLINOIS TOLLWAY STANDARD DRAWING F14 FOR OVERHEAD SIGN STRUCTURE BUTTERFLY TYPE STRUCTURE DETAILS.
 - FOR THE DISCONNECT SWITCH, HORIZONTAL SUPPORT SHALL BE SIZED TO ALLOW CONDUITS TO VERTICALLY DROP OUTSIDE OF THE FOUNDATION WITHOUT BENDS.

POWER WIRING SCHEMATIC FOR 100A PANEL,
120 / 240V LOAD CENTER OF DMS CABINET
SCALE: NTS

COMMUNICATION RISER
SCALE: NTS

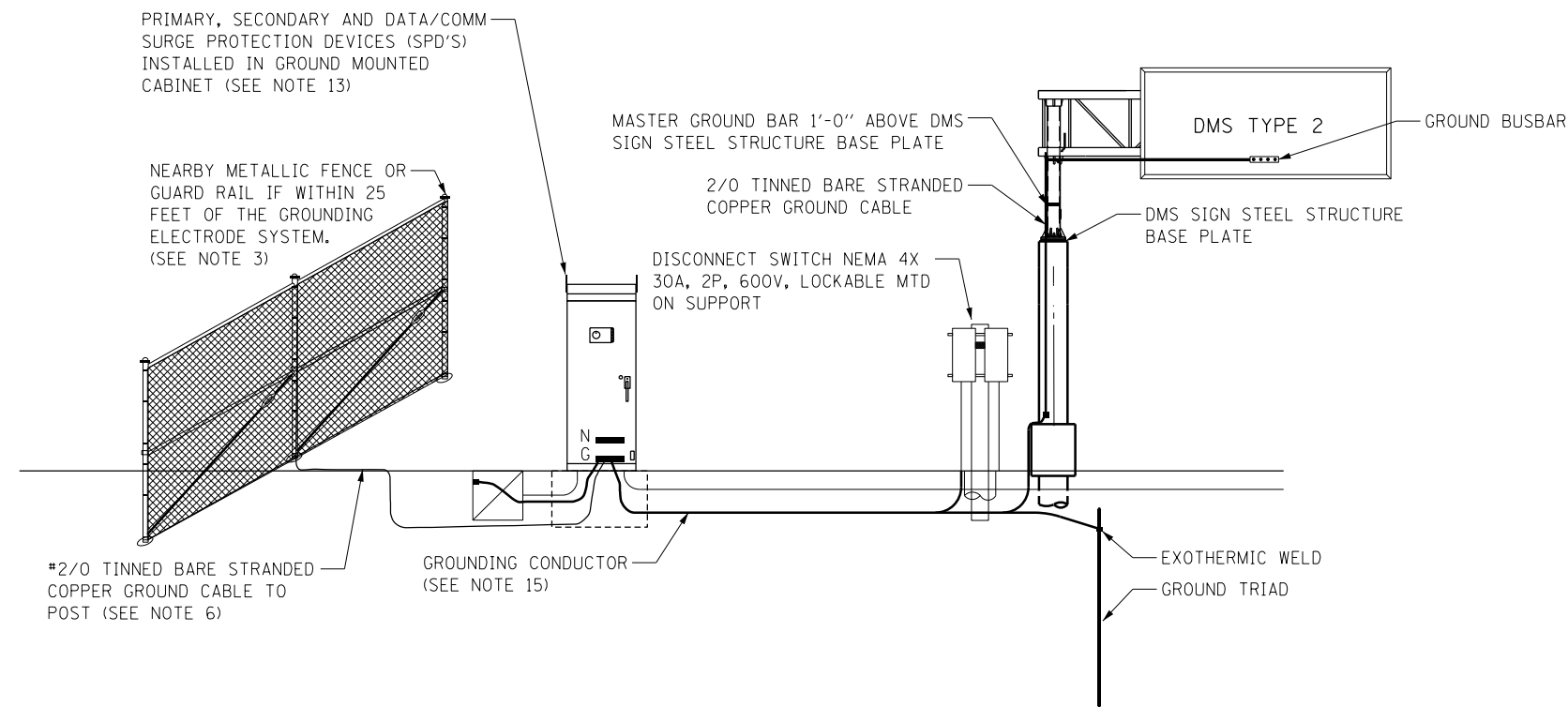


- GENERAL NOTES:**
1. GROUNDING SYSTEM SHALL BE PLACED WITHIN ILLINOIS TOLLWAY RIGHT-OF-WAY.
 2. GROUND MOUNTED CONTROL CABINET SHALL BE PLACED UP STREAM OF THE STRUCTURE AT THE LOCATION SHOWN ON THE PLAN VIEW.
 3. INSTALL MARKER TAPE DIRECTLY ABOVE GROUNDING ELECTRODES AND CONDUCTORS.
 4. THE COST OF ALL MATERIALS, ALL GROUND BUSBARS, EXOTHERMIC WELDING, GROUND WELL, OTHER ITEMS TO COMPLETE THE GROUNDING SYSTEMS SHALL BE INCLUDED IN PAY ITEM JT132622 - DMS ELECTRICAL WORK - TYPE 2.

NOTE TO DESIGNER

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THIS TYPICAL DMS TYPE 2 GROUNDING PLAN IS APPLICABLE TO BOTH DMS TYPE 2 CANTILEVER AND BUTTERFLY SIGNS. DMS TYPE 2 CANTILEVER SIGN IS SHOWN ON THIS DRAWING FOR CLARITY. DESIGNER SHALL MODIFY AND COMPLETE THIS DRAWING FOR DMS TYPE 2 BUTTERFLY SIGN.



DMS SITE GROUNDING DETAIL

NOTE TO DESIGNER

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THIS TYPICAL DMS TYPE 2 GROUNDING PLAN IS APPLICABLE TO BOTH DMS TYPE 2 CANTILEVER AND BUTTERFLY SIGNS. DMS TYPE 2 CANTILVER SIGN IS SHOWN ON THIS DRAWING. FOR CLARITY, DESIGNER SHALL MODIFY AND COMPLETE THIS DRAWING FOR DMS TYPE 2 BUTTERFLY SIGN.

NOTES:

1. ADDITIONAL GROUND RODS SHALL BE ADDED TO GROUNDING ELECTRODE CONDUCTOR AS REQUIRED UNTIL RESISTANCE TO GROUND IS 5 OHMS OR LESS. FOR DEVICE AND POWER SERVICE LOCATIONS. IF ADDITIONAL GROUND ROD ELECTRODES ARE REQUIRED IN ORDER TO ACHIEVE REQUIRED RESISTANCE THEY SHALL RADIATE OUT FROM EXISTING GROUND ROD ELECTRODES, THESE SHALL BE CONNECTED WITH #2/0 TINNED BARE STRANDED CONDUCTOR, AND SHALL BE 20' FROM CONNECTED GROUND ROD. ALL COMMUNICATION EQUIPMENT GROUNDING SITES SHALL BE TESTED FOR RESISTANCE TO GROUND USING THE THREE-POINT FALL-OF-POTENTIAL TESTPER ANSI/IEEE STD 81. SEE ITS ELEMENT SITE GROUNDING SPECIAL PROVISIONS FOR PROCEDURES.
2. GROUND RODS SHALL NOT BE ROUTED THROUGH FOUNDATIONS.
3. FENCES AND OTHER METALLIC STRUCTURES WITH PATHS TO GROUND SHALL BE CONNECTED TO EQUIPMENT GROUND IF THEY ARE LOCATED WITHIN 25' OF THE GROUNDING ELECTRODE SYSTEM OR ANY OBJECT GROUNDED TO THE GROUNDING ELECTRODE SYSTEM.
4. GROUND RODS SHALL BE INSTALLED IN GROUND WELLS IN FINISHED GRADE.
5. ALL EQUIPMENT GROUNDS SHALL BE PROPERLY CONNECTED TO A CHASSIS; ALL PAINT AND OTHER COATINGS, INCLUDING GALVANIZATION, SHALL BE REMOVED PRIOR TO TERMINATION OF A GROUND, AFTER THE GROUND IS TERMINATED A NON-OXIDIZING COATING SHALL BE PAINTED OVER THE EXPOSED METAL SURFACES.
6. GROUNDING ELECTRODE SYSTEM CONNECTIONS TO FENCING SHALL BE MADE USING HEAVY DUTY TINNED LISTED PIPE CLAMPS DESIGNED FOR GROUNDING AND STAINLESS STEEL HARDWARE.
7. ALL GROUNDING DIAGRAMS ARE SCHEMATIC ONLY.
8. ALL METALLIC MEMBERS OF THE DMS TRUSS AND THE DMS SIGN WITHIN 6 FEET OF EACH OTHER SHALL BE BONDED TOGETHER. WELDS SHALL BE CONSIDERED AN ACCEPTABLE BONDING METHOD. U-BOLT CONNECTIONS SHALL NOT BE CONSIDERED AN ACCEPTABLE BONDING METHOD.
9. AT LEAST AN 8 INCH MINIMUM BENDING RADIUS SHALL BE MAINTAINED ON ALL GROUNDING ELECTRODE CONDUCTORS. THE ANGLE OF ANY BENDING SHALL NOT BE LESS THAN 90 DEGREES.
10. GROUNDING CONDUCTORS SHALL ALWAYS ROUTE AS STRAIGHT AS POSSIBLE. "U" FORM JUMPERS SHALL BE ACCEPTABLE ONLY FOR GATES AND DOORS.
11. THE QUANTITY OF GROUNDING ELECTRODE CONDUCTORS CONNECTED TO A GROUND ROD ELECTRODE SHALL BE LIMITED TO THREE.
12. WHENEVER POSSIBLE, GROUND ROD ELECTRODES SHALL BE INSTALLED NO CLOSER THAN 11' FROM A FOUNDATION.
13. EVERY COPPER CONDUCTOR OR CABLE ENTERING OR LEAVING A DMS ENCLOSURE, THE DMS CONTROLLER, OR THE CCTV ELECTRONICS ENCLOSURE SHALL BE PROTECTED WITH A SURGE PROTECTION DEVICE.
14. DIAGRAM OMITS EQUIPMENT GROUNDING INSIDE ENCLOSURES.
15. GROUNDING CONDUCTOR SHALL BE #2/0 TINNED BARE STRANDED COPPER. CONTRACTOR SHALL INSTALL GROUND RODS AS NECESSARY TO ENSURE GROUND RESISTANCE AT DMS CABINET IS 5 OHMS OR LESS.
16. IF THERE IS A METAL HANDRAIL WITHIN 20 FEET OF CONTROL CABINET CONNECT HANDRAIL TO GROUNDING SYSTEM WITH #2/0 TINNED BARE STRANDED COPPER CONDUCTOR.

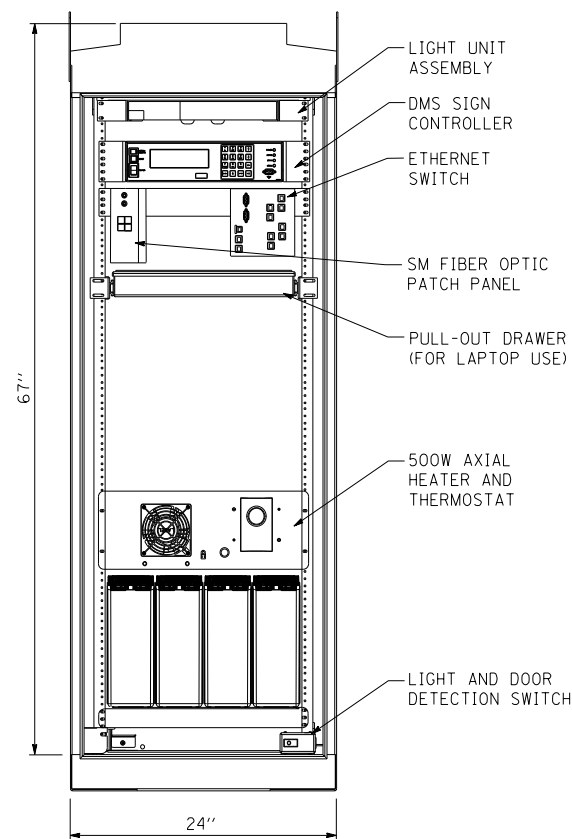
M-ITS-1106



DMS TYPE 2
SITE WIRING DETAILS

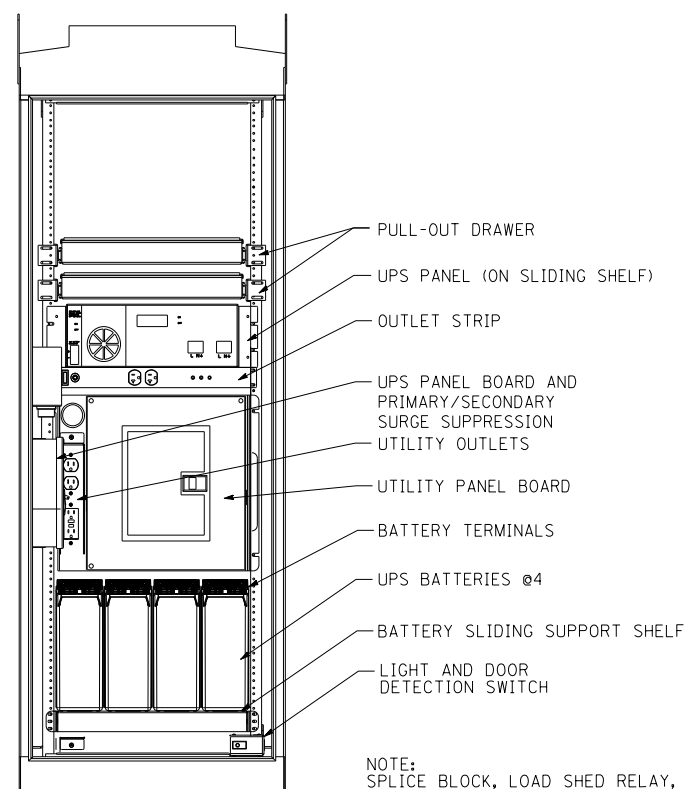
DATE

3-31-2016



SECTION B-B FRONT VIEW
(NO DOOR SHOWN)

RACK UNIT
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SECTION A-A REAR VIEW
(NO DOOR SHOWN)

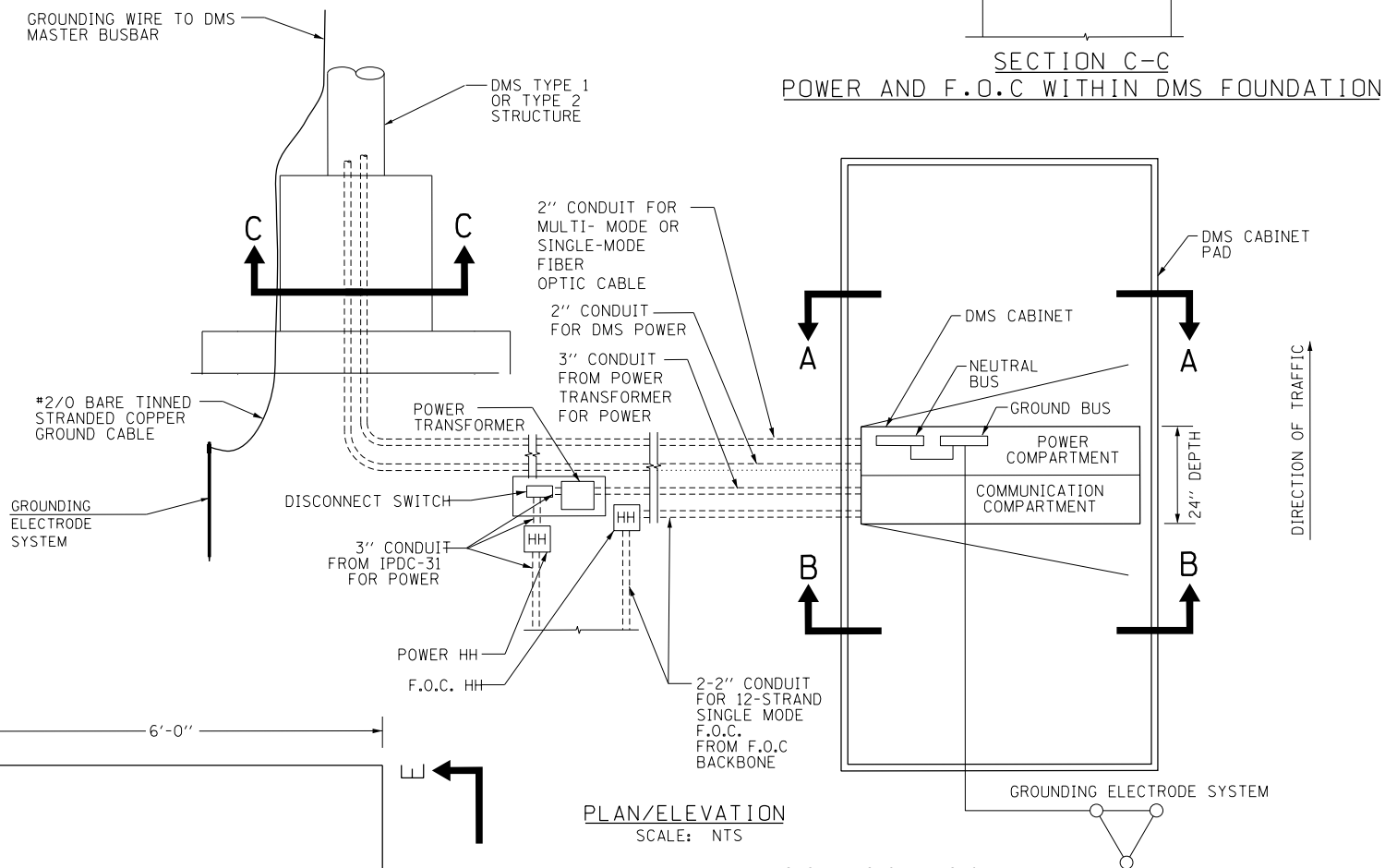
TYPE 334 DMS CABINET LAYOUT DETAILS
SCALE: NTS

DMS CABINET NOTES:

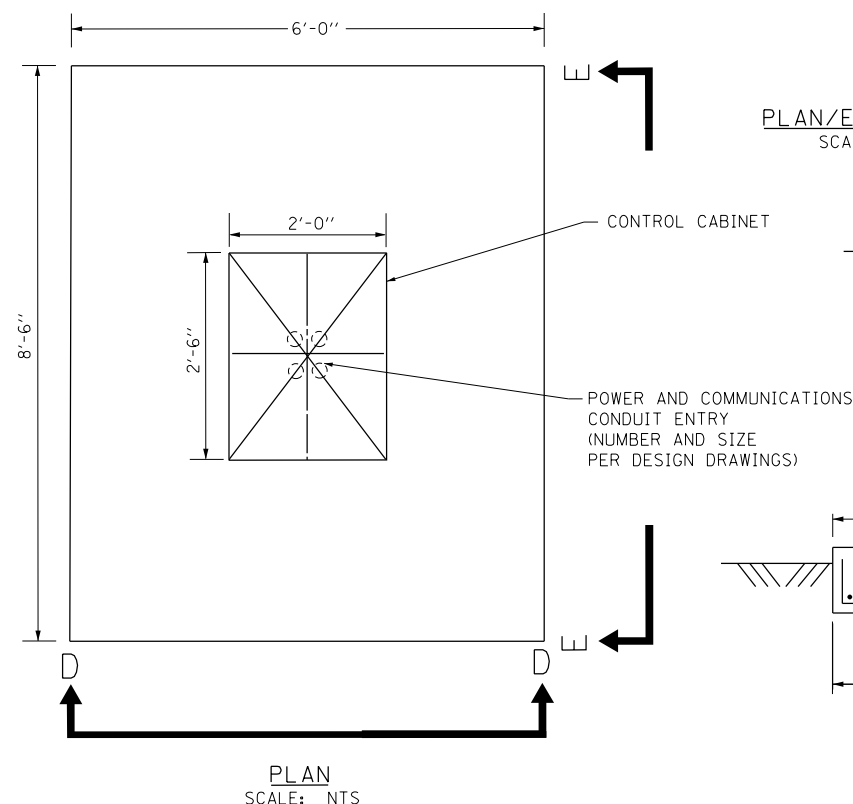
- PAD MOUNT CONFIGURATION
- 0.125" ALUMINUM 5052-H34 CONSTRUCTION WITH CONTINUOUSLY WELDED EXTERNAL SEAMS
- THREE POINT LATCH WITH SST HANDLE
- DOUBLE FLANGED DOOR SEAL WITH 1*2" X 2" CLOSED CELL NEOPRENE GASKET
- FULL LENGTH EIA GAGE FOR 19" EQUIPMENT
- ADJUSTABLE PULL OUT DRAWER
- DOOR OPENING: 21.50" X 54.75"
- FULL LENGTH STAINLESS STEEL HINGE
- ALL STAINLESS STEEL HARDWARE
- CORBIN #2 LOCK
- NEMA 3R ENCLOSURE
- SHIPPED ON WOOD PALLET
- MOUNT LAYER 2 ETHERNET SWITCH (DIN-RAIL MOUNT) USING DIN-RAIL MOUNT
- BATTERIES AND UPS SHALL BE PLACED ON A SLIDING SHELF
- CABINET DIMENSION 24"X30"X67"

NOTE TO DESIGNER

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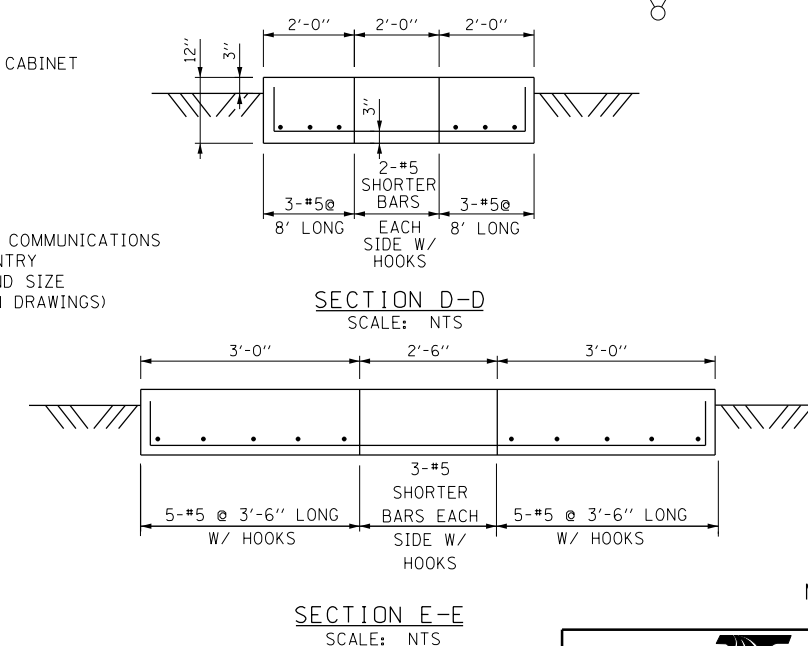
PLAN/ELEVATION
SCALE: NTS



DMS CABINET FOUNDATION NOTES:

- COORDINATE SIZE OF OPENING WITH DMS CONTROLLER CABINET BOTTOM CONDUIT CUT-OUTS
- CONCRETE = 4,000 PSI (MIN.)
- REBAR=EPOXY COATED FY=60,000 PSI (MIN.)
- PROVIDE SHOP DRAWINGS PRIOR TO CONSTRUCTION
- INCLUDE CONDUITS

DMS CONTROLLER FOUNDATION DETAILS
SCALE: NTS



M-ITS-1107



DMS CABINET LAYOUT
DETAIL

DATE
8-8-2014

