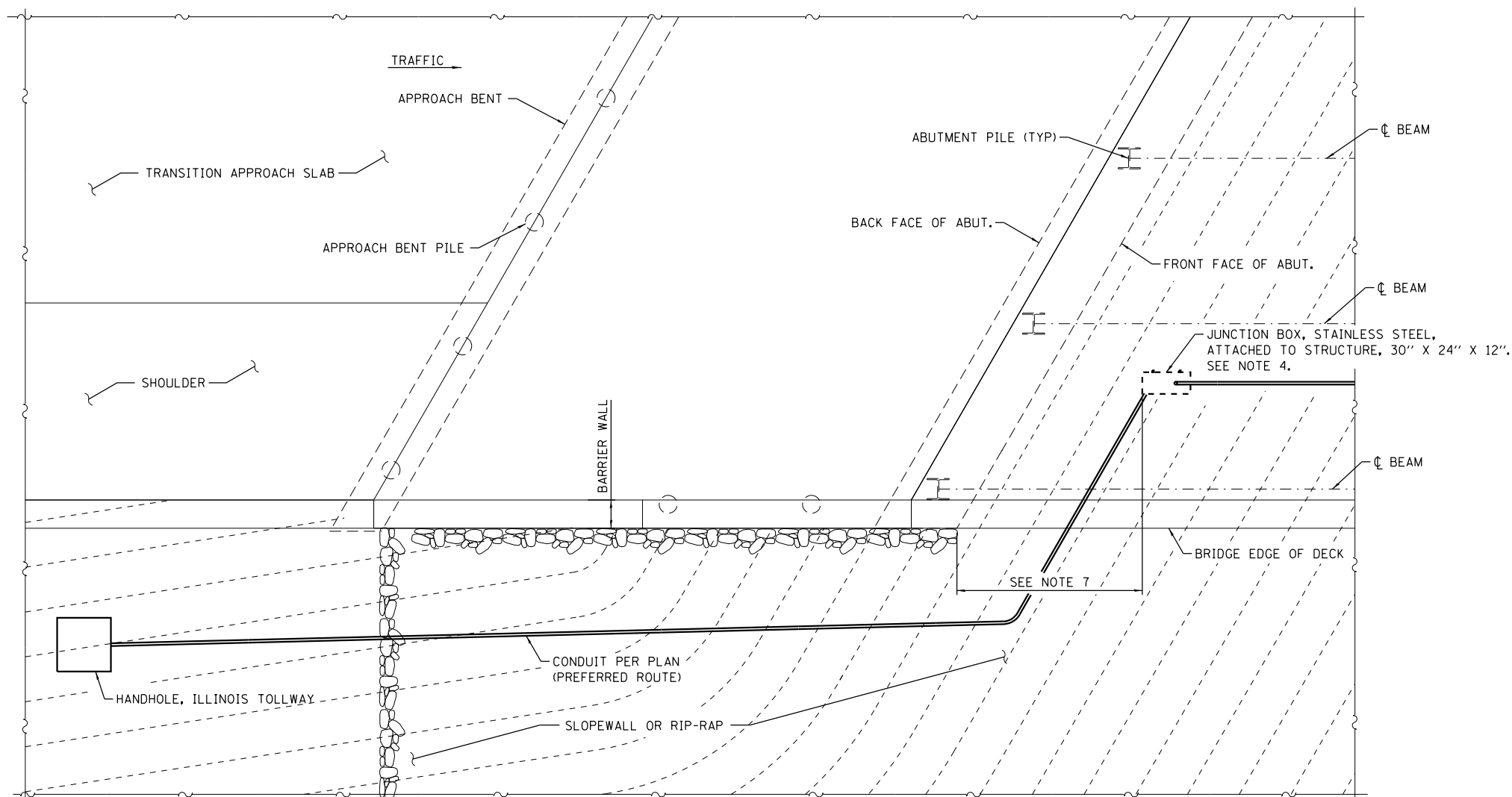


Illinois Tollway Base Sheet Revisions
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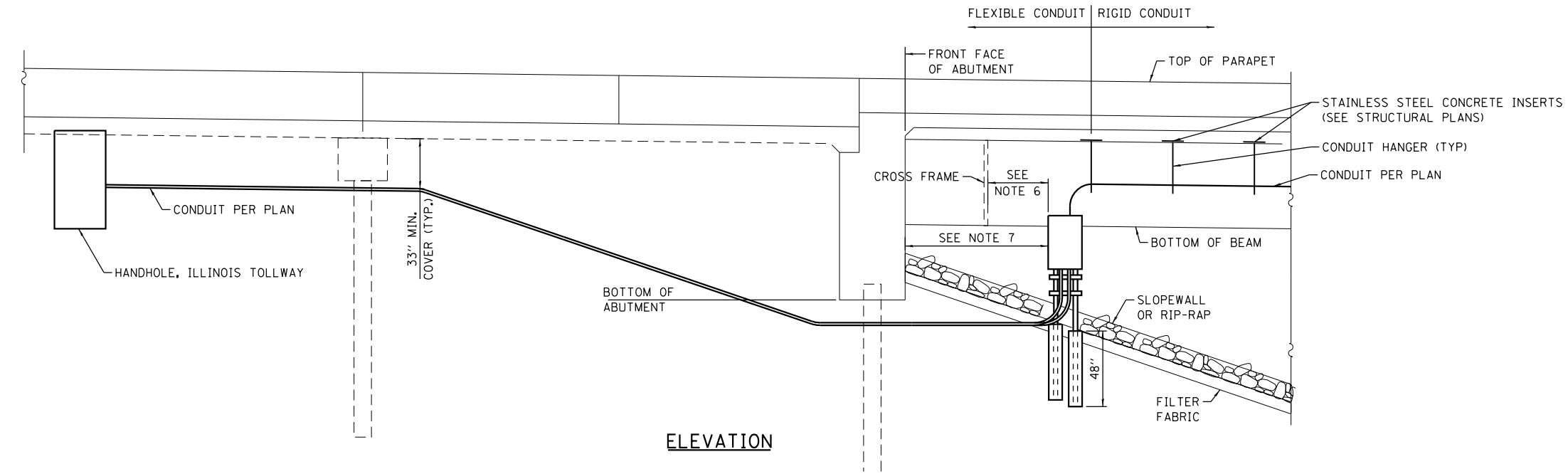
Section M	Base Sheet Drawings	
Drawing	Modification Summary	Effective: 2019-03-01
Pole Assembly (ITS)-Series 1000		
M-ITS-1000	Elevation Views Pole Mounted ITS Element Assembly Changed disconnect switch to unfused.	
M-ITS-1003	ITS Concrete Service Pad (2 sheets) New drawing with three types of service pads for ITS poles for flat and slope installation.	
M-ITS-1004	Cabinet Wiring Diagram - ITS Pole Mounted Enclosure (Solar Powered MVDS) (2 sheets) New cabinet layout separating ITS enclosure and dedicated co-located solar generator/battery cabinet with four 6 V batteries.	
Dynamic Message Sign (ITS)-Series 1100		
M-ITS-1108	DMS Cabinet Wiring Diagram Changed to Cisco 4000 series switch. Changed IP Relay to DIN IV.	
Cabinet Wiring (ITS)-Series 1200		
M-ITS-1200 to M-ITS-1217	Cabinet Wiring Diagrams 18 new ITS enclosure drawings replace old 56 ITS enclosure drawings for clarification. Drawings 1200 to 1217 have been redone completely. Consolidated equipment configurations. Standardized to-scale equipment layout. Changed to Cisco 4000 series switch. Eliminated 24 VAC transformer and 24 VAC CCTVs. Additional 24 VDC power supply. Cat6 Ethernet surge protectors revised to PoE++ compatible models.	
M-ITS-12018 to M-ITS-1255	Cabinet Wiring Diagrams Retired due to consolidation.	
Roadway Weather Information System (ITS)-Series 1300		
M-ITS-1300	RWIS Pole, Sensor Mounting Detail Pole height changed to 50 feet as standard pole for ITS with 17.5 inch bolt circle.	
M-ITS-1301	RWIS Cabinet Wiring Diagram Changed to Cisco 4000 series switch. Not connected to RWIS controller, for future use. Added IP Relay. Disconnected, for future use. Added secondary sensor pole cabinet wiring diagram. Cabinet is part of the design but was omitted in last year release.	
M-ITS-1303	Typical RWIS Grounding Schematic New drawing showing RWIS grounding system with grounding cable.	
Solar Powered Generator (ITS)-Series 1400		
M-ITS-1402	Pole Mounted Solar MVDS Assembly Co-located solar generator cabinet redesigned as M-ITS-1004.	
Tower Mounted CCTV (ITS)-Series 1500		
M-ITS-1500	Tower Mount Camera Details Cameras shown at offset height to avoid view obstruction. Pole mounting arm revised to Axis Q6155-E IP camera.	
M-ITS-1503	Cabinet Wiring Diagram - Tower Mounted CCTV Revised to show 24 VDC power supply, drawing drawn to scale.	
Flashing Beacon (ITS)-Series 1700		
M-ITS-1701	Flashing Sign Beacon Installation Wiring Diagram Revised to show full cabinet layout accomodating flasher beacon. Re-drawn to scale. Added flashing beacon, new surge suppressor.	
IPDC Facility (ITS)-Series 1800		
M-ITS-1802, 1803, 1805, 1806, 1809, 1810	IPDC Facility Building modified to accommodate larger generator room door, door stoppers. Additional exterior CCTV cameras. Added bird deterrant. Added exterior GFCI outlets.	
M-ITS-1802	Note 2: Seal door opening and protrusion/access against rodent and bugs. Note 3: Install removable stainless bollards per Illinois Tollway Maintenance.	
M-ITS-1803	Added 240 V service power outlet outside side wall.	
Conduit Details at Integral Abutment Bridge (ITS)-Series 1900		
M-ITS-1900	Conduit Details at Integral Abutment Bridge with MSE Wall (Sheet 3) Removed note stating concrete encasement to be placed monolithic with the approach slab. Added 0.5" PJF at the back of the abutment and approach bent. Added 0.75" PJF between the approach slab and encasement. Added detail for deflection and expansion fittings at the encasement and pile bent. Added detail for deflection fitting at encasement and abutment.	
100 FT. Monopole (ITS)-Series 2000		
M-ITS-2000 Sheet 4	100 FT. Monopole Closed Circuit Television (CCTV) Camera Tower Added sheet 4 of 4 showing hexagonal service pad.	

New Sheet

X Retired Sheet



PLAN



ELEVATION

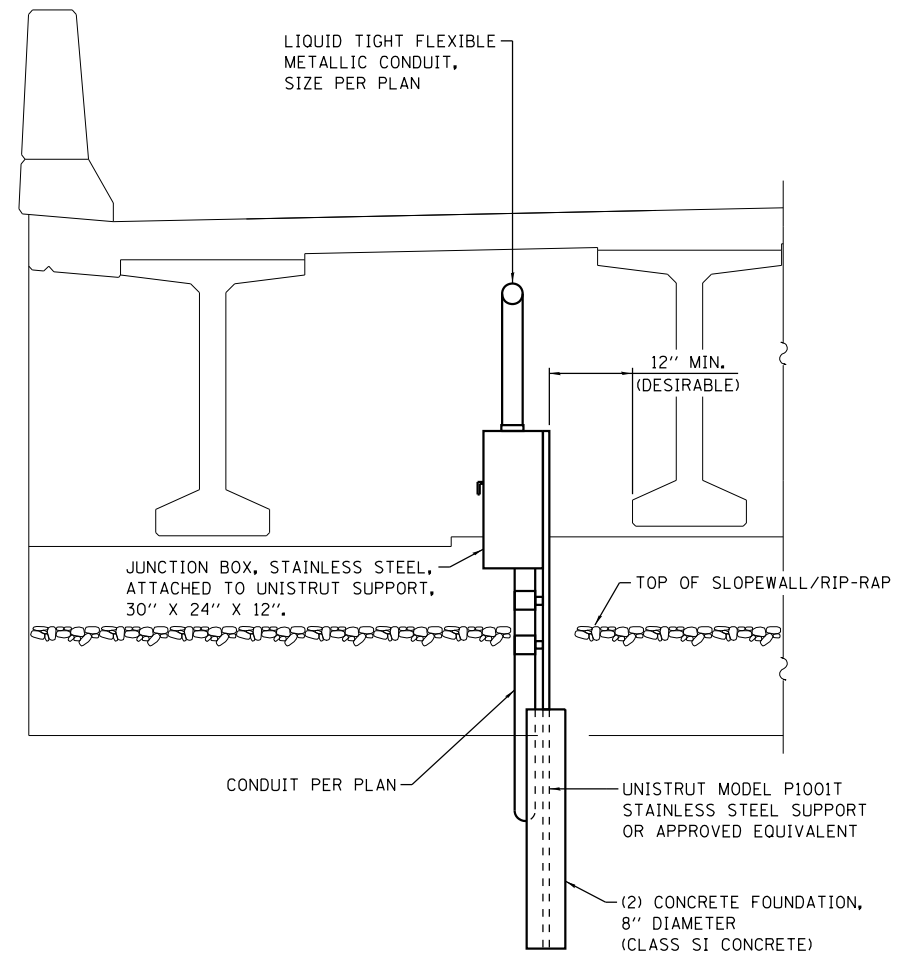
NOTE TO DESIGNER

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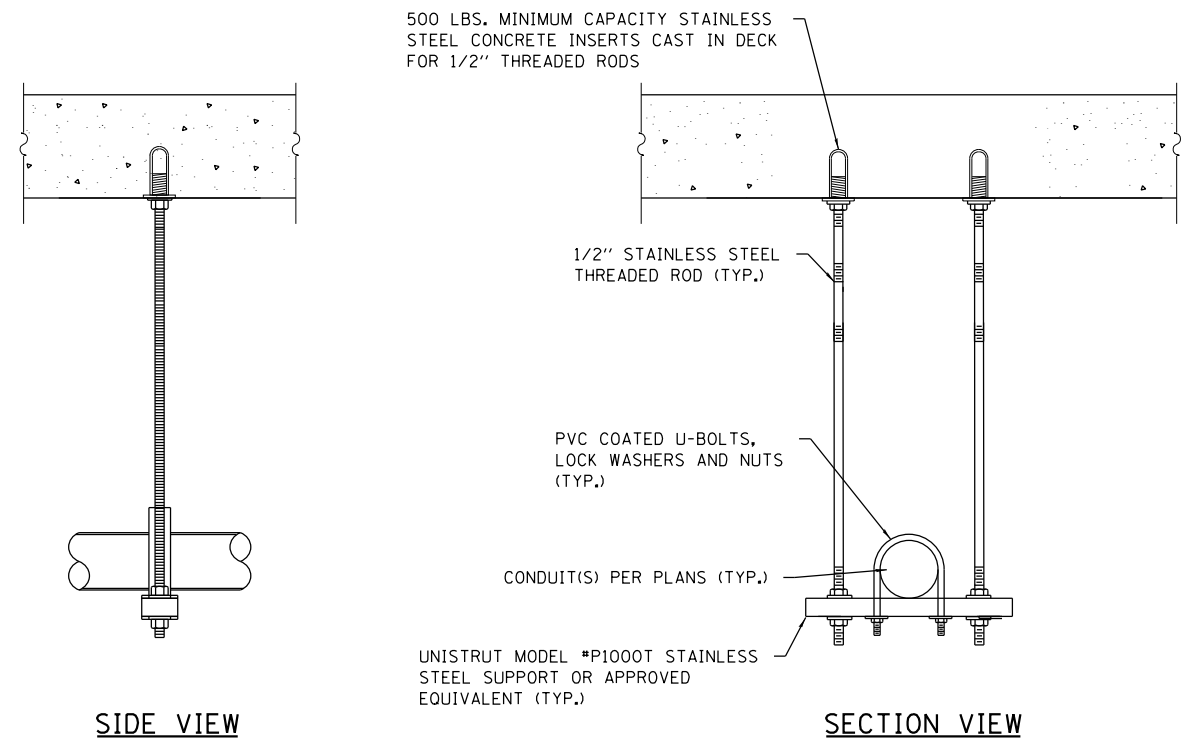
NOTES:

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2. ALL HARDWARE SHALL BE STAINLESS STEEL IN ACCORDANCE WITH ARTICLE 1006.31 OF THE STANDARD SPECIFICATIONS.
3. CONDUIT SHALL BE SUPPORTED AT A MAXIMUM INTERVAL OF 5' AND WITHIN 2.5' OF ANY JUNCTION BOX, COUPLING/FITTING, OR CHANGE IN DIRECTION.
4. THE JUNCTION BOX SHALL MEET THE REQUIREMENTS OF ARTICLE 1088.04 OF THE STANDARD SPECIFICATIONS. A HINGED DOOR AND PROVISIONS FOR 3-POINT LOCK OR A PAD-LOCK ARE REQUIRED.
5. FLEXIBLE CONDUIT SHALL BE LIMITED TO A MAXIMUM LENGTH OF 5'.
6. JUNCTION BOX SHALL BE LOCATED AT LEAST 24" FROM CROSS FRAMES.
7. PROVIDE DIMENSION FROM ABUTMENT.





VIEW AT ABUTMENT - GROUND MOUNTED JUNCTION BOX

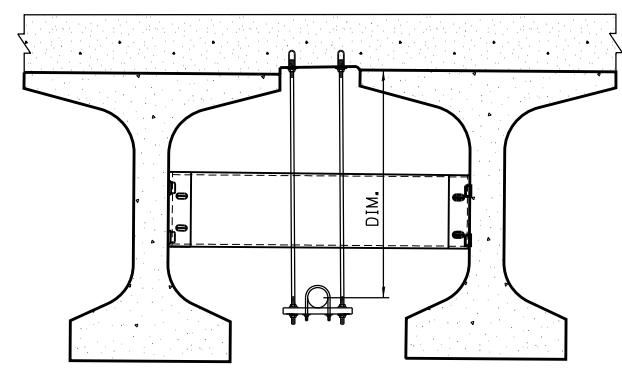


SIDE VIEW

SECTION VIEW

CONDUIT HANGER ASSEMBLY DETAIL

- NOTES:**
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 2. ALL HARDWARE SHALL BE STAINLESS STEEL IN ACCORDANCE WITH ARTICLE 1006.31 OF THE STANDARD SPECIFICATIONS.
 3. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE LOCATION OF THE CONCRETE INSERTS WITH THE BRIDGE CONTRACTOR.
 4. THE COST OF THE CONCRETE INSERTS SHALL BE INCLUDED IN THE COST OF CONDUIT ATTACHED TO STRUCTURE.
 5. CONDUIT SHALL BE CENTERED BETWEEN THE BEAMS.
 6. CONDUIT SHALL NOT COME INTO CONTACT WITH ANY BRACING OR OTHER STRUCTURAL MEMBERS.
 7. PROVIDE 1" MINIMUM CLEARANCE TO ALL STRUCTURAL MEMBERS.



CONDUIT ROUTING AT DIAPHRAGM

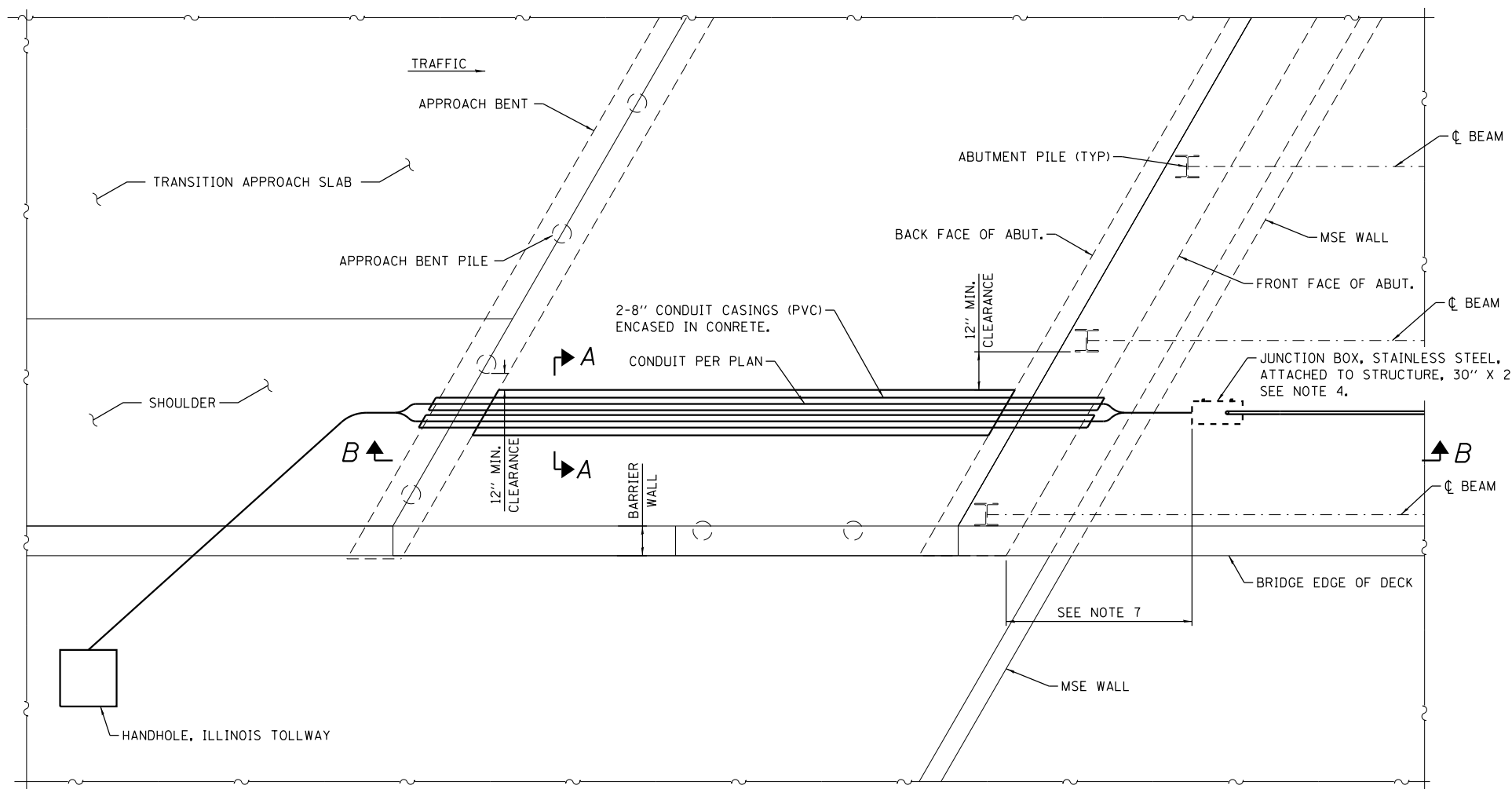
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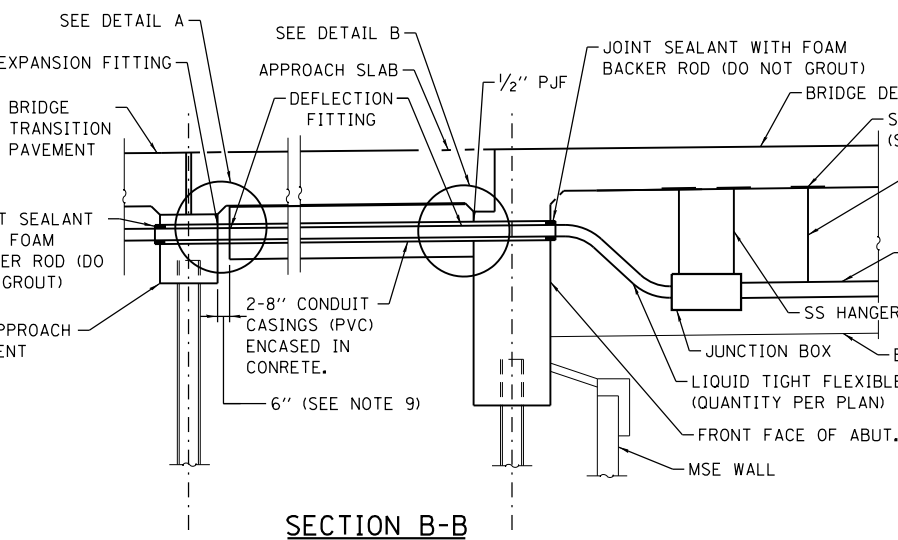


CONDUIT DETAILS AT
INTEGRAL ABUTMENT BRIDGE
STANDARD SLOPE WALL

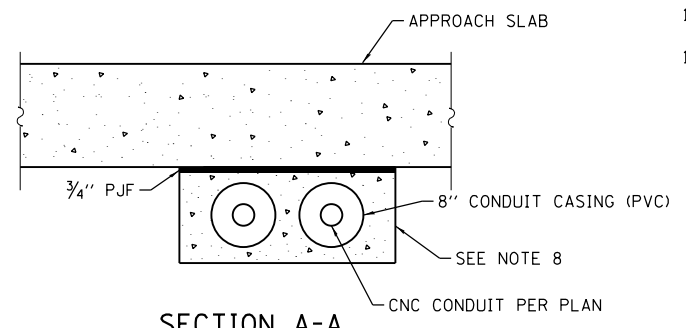
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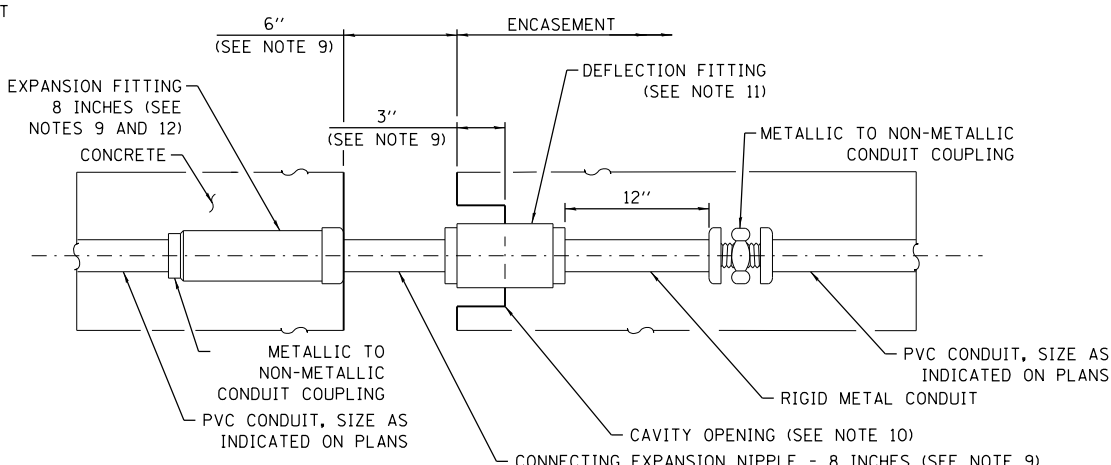
PLAN



SECTION B-B

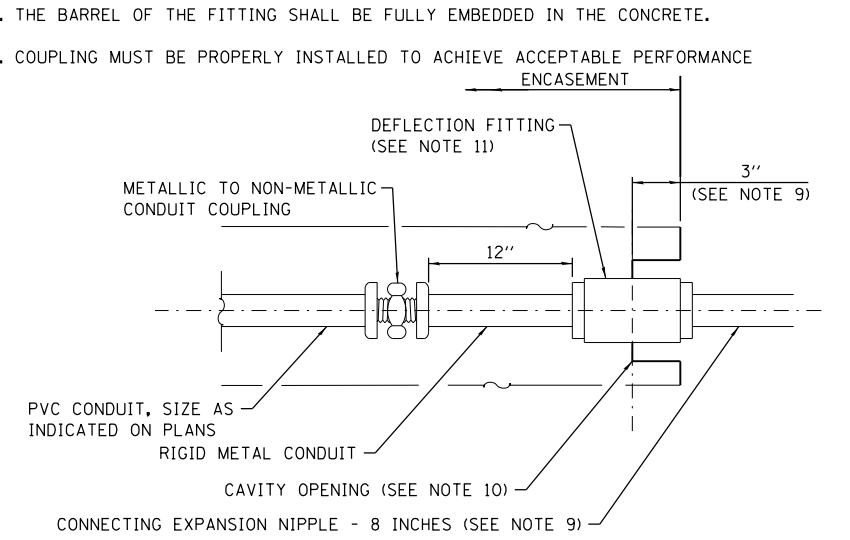


SECTION A-A



**DETAIL A
CONDUIT EXPANSION / DEFLECTION COUPLING DETAIL**

(ALL METALLIC PARTS SHALL BE STAINLESS STEEL)



**DETAIL B
DEFLECTION COUPLING DETAIL**

(ALL METALLIC PARTS SHALL BE STAINLESS STEEL)

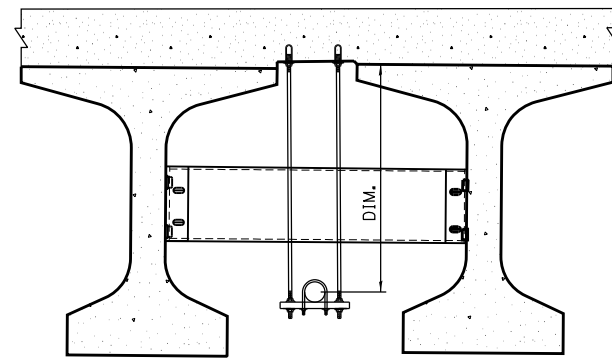
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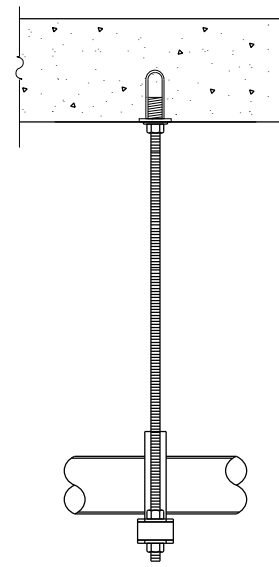
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5. FLEXIBLE CONDUIT SHALL BE LIMITED TO A MAXIMUM LENGTH OF 5'.
6. JUNCTION BOX SHALL BE LOCATED AT LEAST 24" FROM CROSS FRAMES.
7. PROVIDE DIMENSION FROM ABUTMENT.
8. PROVIDE A MINIMUM OF 3" CONCRETE ENCASEMENT AROUND CONDUIT.
9. DIMENSION SHOWN WILL VARY TO MEET THE REQUIREMENTS OF THE SPECIFIC PROJECT.
10. A CAVITY OPENING SHALL BE 3 IN. LARGER IN DIAMETER THAN THE DEFLECTION SLEEVE LENGTH.
11. THE DEFLECTION FITTING SHALL BE CENTERED IN THE OPENING AND EMBEDDED IN THE CONCRETE ONLY UP TO THE DEFLECTION FITTING CENTER.
12. THE BARREL OF THE FITTING SHALL BE FULLY EMBEDDED IN THE CONCRETE.
13. COUPLING MUST BE PROPERLY INSTALLED TO ACHIEVE ACCEPTABLE PERFORMANCE ENCASEMENT

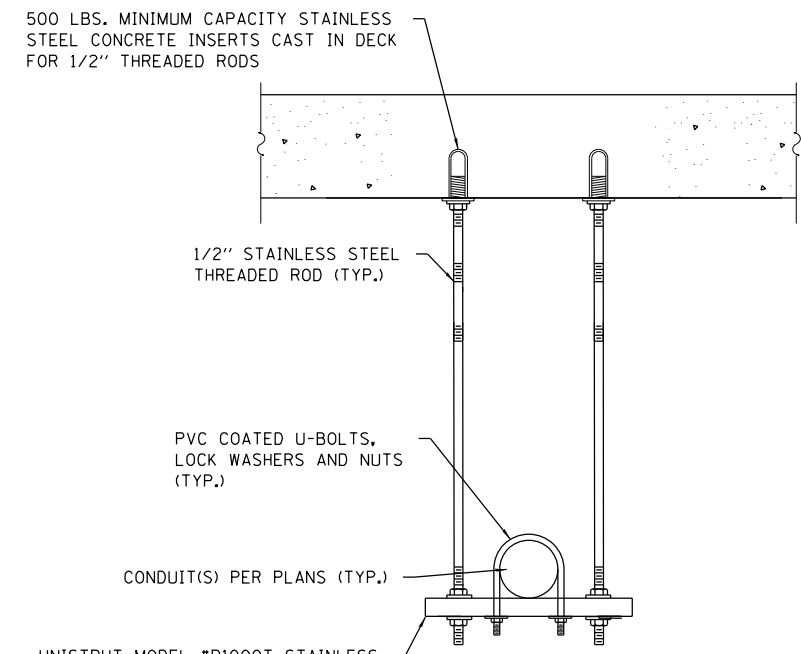




CONDUIT ROUTING AT DIAPHRAGM



SIDE VIEW



SECTION VIEW

CONDUIT HANGER ASSEMBLY DETAIL

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CONDUIT DETAILS AT
INTEGRAL ABUTMENT BRIDGE
WITH MSE WALL

DATE
3-31-2016