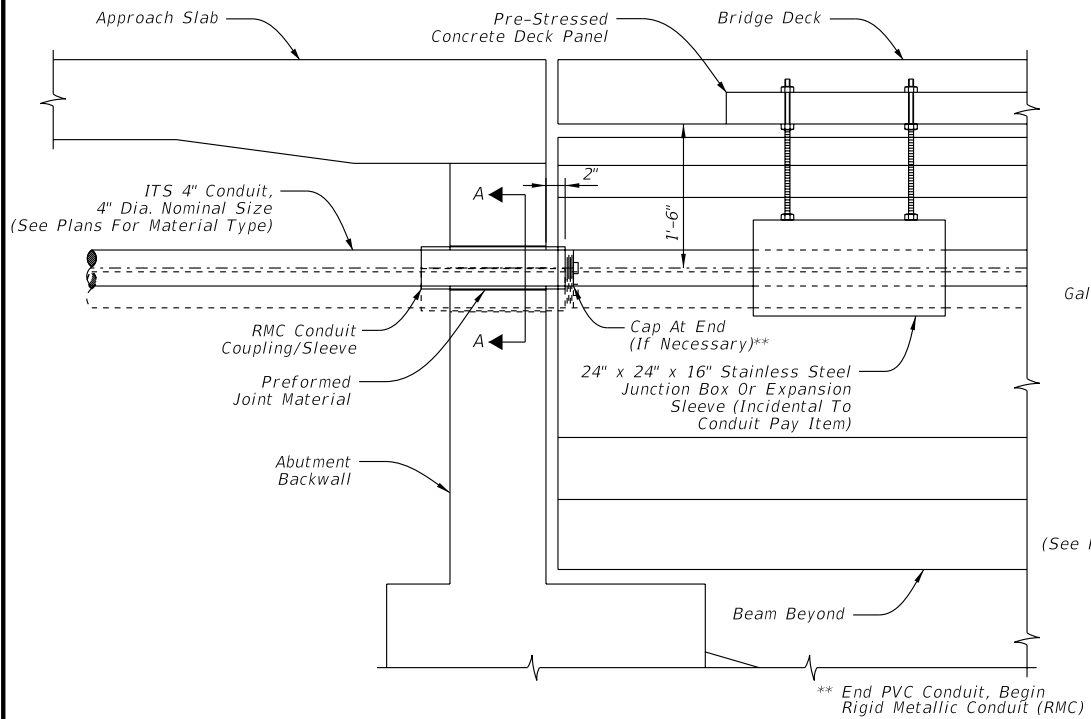


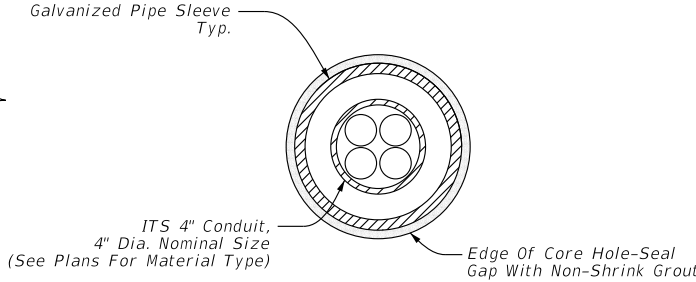
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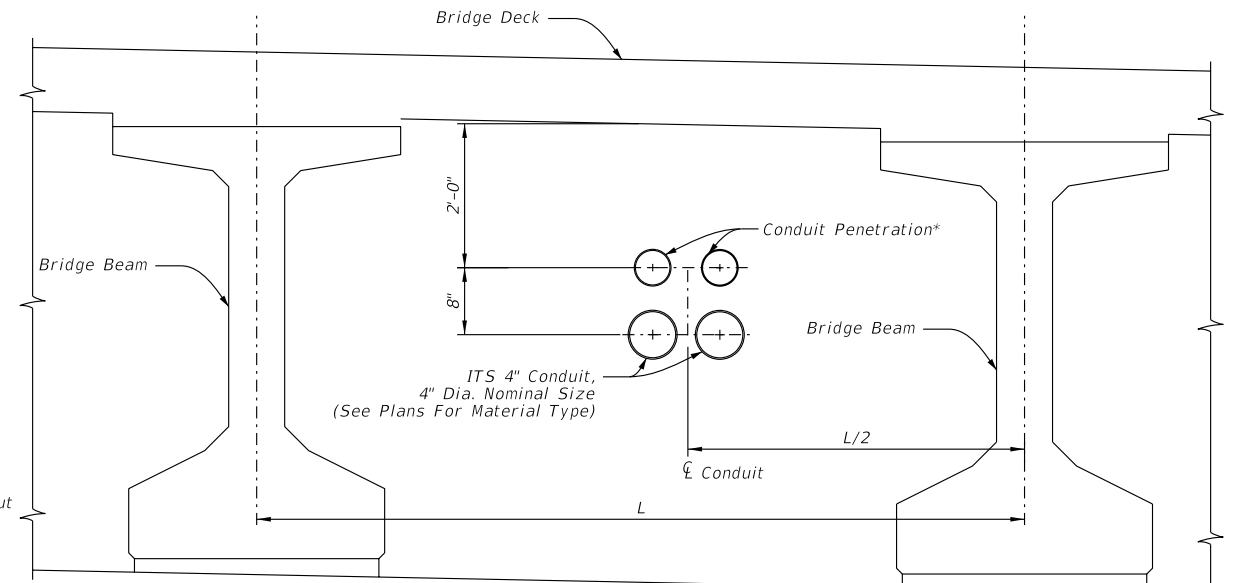
Section Through New Construction Abutment Backwall

Standard Notes:

1. If constant conduit elevation is maintained from the abutment backwall to the underside conduit hangers, provide an expansion joint sleeve (same size as conduit) with one travel overlap. If conduit elevation varies from the abutment backwall to the underside conduit hangers, provide an abutment wall mounted transition junction box (NEMA 3R rated).
2. Provide separate pipe sleeve for each conduit through abutment backwall. Size sleeve per manufacturer recommendations.



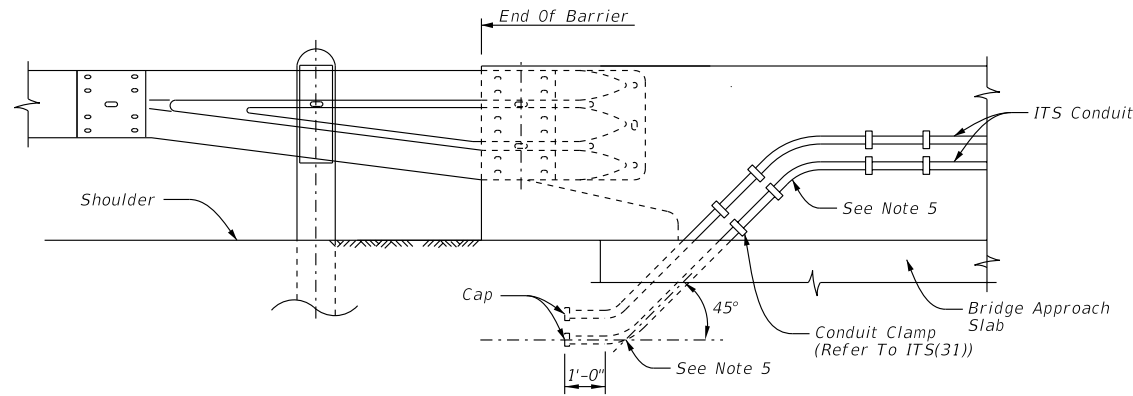
Section A-A (Typical Pipe Sleeve)



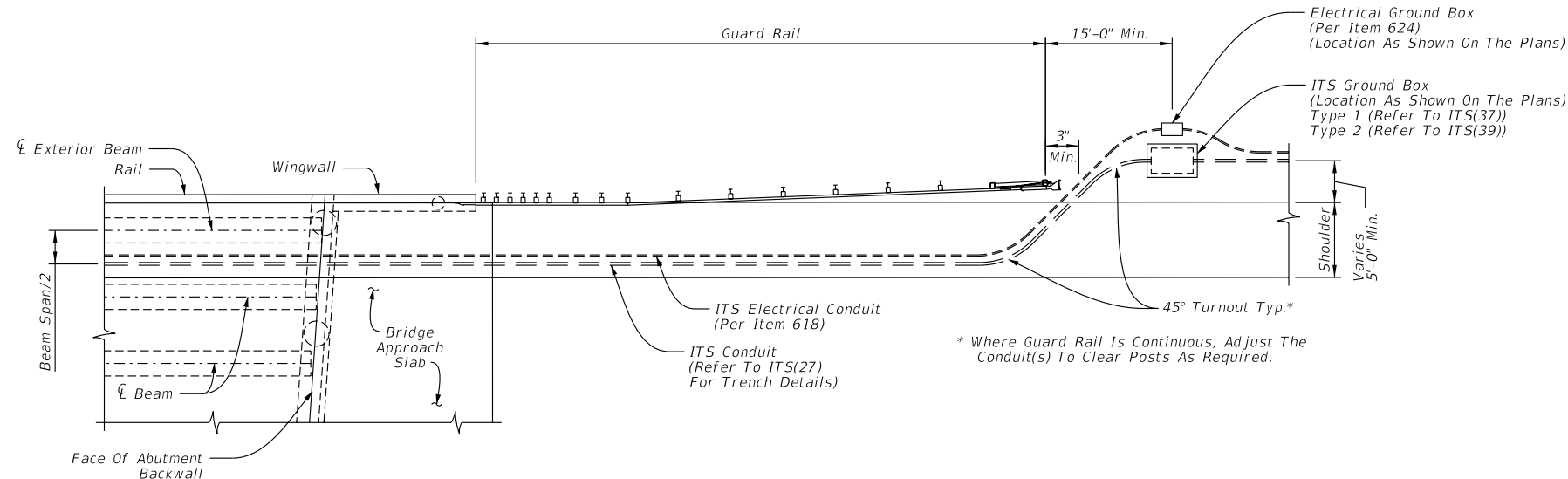
Abutment Elevation

* Showing Control Dimensions For Conduits Thru Abutment Backwall. 2 x 2 Conduit Configuration Shown.

ITS Conduit Transition At Bridge Abutment Detail



Parapet Mounted Conduit Transition To Ground Detail



Conduit Through Abutment Backwall Transition To Ground Box Detail

General Notes:

1. An alternative option to conduit mountings shown is conduit encased within parapet or bridge structure at crossings. Submit shop drawings and specifications to the engineer for approval.
2. Install expansion sleeves at bridge expansion joints and per manufacturer recommendations.
3. For conduit crossings over bridges, provide ITS communications junction boxes at 1000' maximum spacing and electrical junction boxes at 450' maximum spacing.
4. Keep all junction boxes sufficiently clear of guard rail or other obstructions to maintain clear access.
5. Install conduit sweep at an angle that accommodates cable bend radius. Do not exceed 45 degrees to the shoulder line. Refer to ITS(28) for conduit turn-out details.
6. Do not install junction boxes within paved shoulder area.
7. Ensure all work is in compliance with the latest edition of NFPA 70, National Electrical Code.
8. Junction boxes and associated appurtenances are incidental to ITS conduit.
9. For installation requiring ITS conduit transition within mechanically stabilized earth (MSE) walls with select fill, locate conduit to avoid reinforced straps. Refer to retaining wall standards for further details.
10. Bond all external structure mounted conduit throughout entire length of run and ground the run at ground box locations according to ITS(37) and ITS(39).

Sheet Details
Not to Scale

		Traffic Operations Division Standard	
<h2>ITS CONDUIT TRANSITION AT ABUTMENT</h2>			
<h3>ITS(33)-16</h3>			
FILE: its(33)-16.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT
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