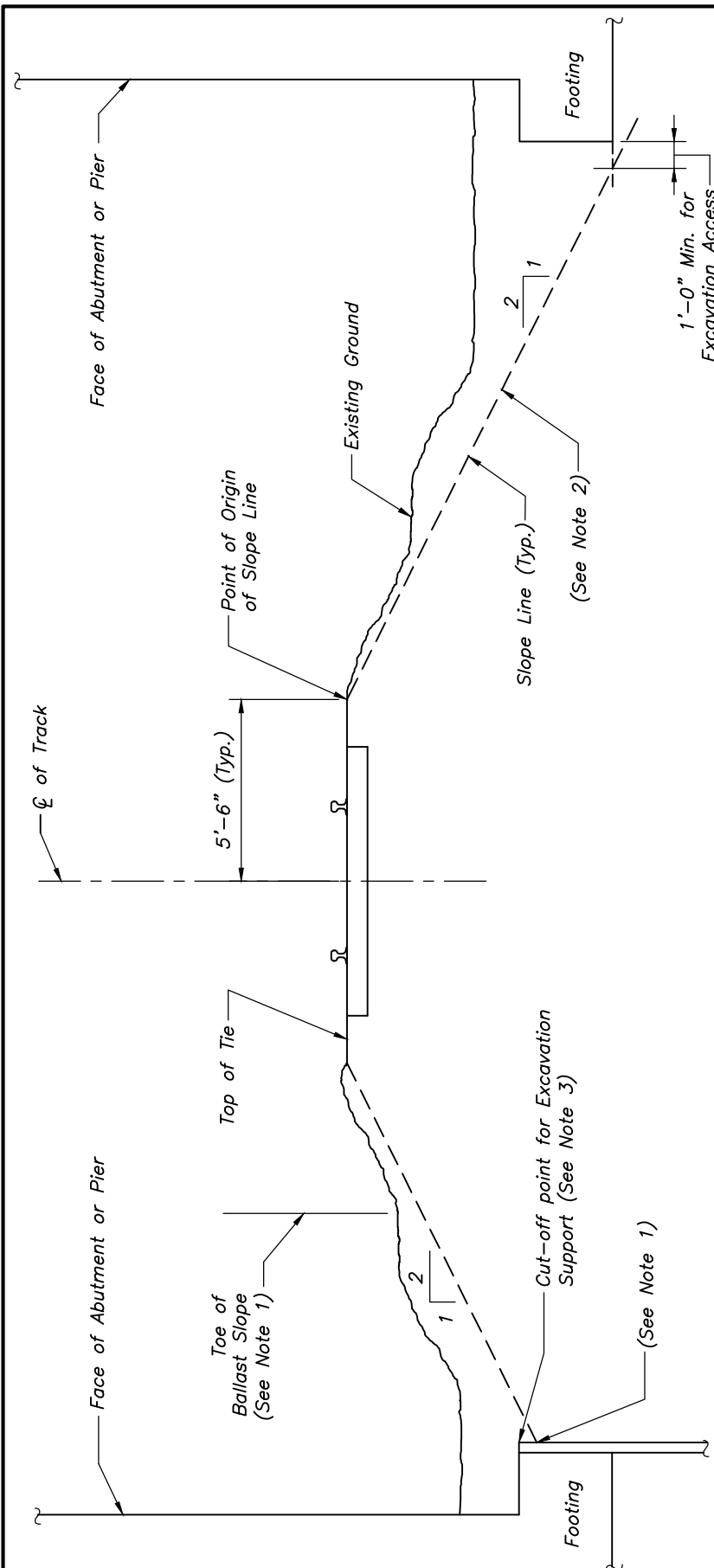




LONGITUDINAL SECTION

SCALE: $\frac{1}{4}'' = 1'-0''$

NOTES:

1. Provide excavation support whenever the 2:1 slope line would be disturbed in the placement of the structure. Excavation support must not be closer to track than toe of ballast slope.
2. If elevation of Bottom of Footing falls at or above the 2:1 slope line, excavation support is not required.
3. Excavation support shall be cut off at top of tie during construction. After construction and backfilling is completed, the excavation support within 12'-0" of the track centerline shall be cut off 2'-0" below the bottom of the tie or 2'-0" below finished grade, whichever is greater. In no case shall the cut-off point be below the top of footing.
4. Excavation support for the protection of railroad shall be designed in accordance with provisions of AREMA specifications. Extent of excavation support shall be dimension on plan view of bridge.
5. Excavation support is to be designed for a lateral earth pressure from E-80 vertical loading surcharge plus 50% impact (8'-6") and axle spacing (5'-0"). Horizontal pressure on the excavation support due to the E-80 tie length (8'-6") and axle spacing (5'-0"). Horizontal pressure on the excavation support due to the E-80 surcharge shall be determined using the strip load formula shown in the AREMA specifications. Allowable stresses for materials shall be in accordance with AREMA.



LRFD BRIDGE
MANUAL, PART II

EXCAVATION SUPPORT REQ'S MBTA COMMUTER RAIL CLEARANCES UNDER BRIDGE

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