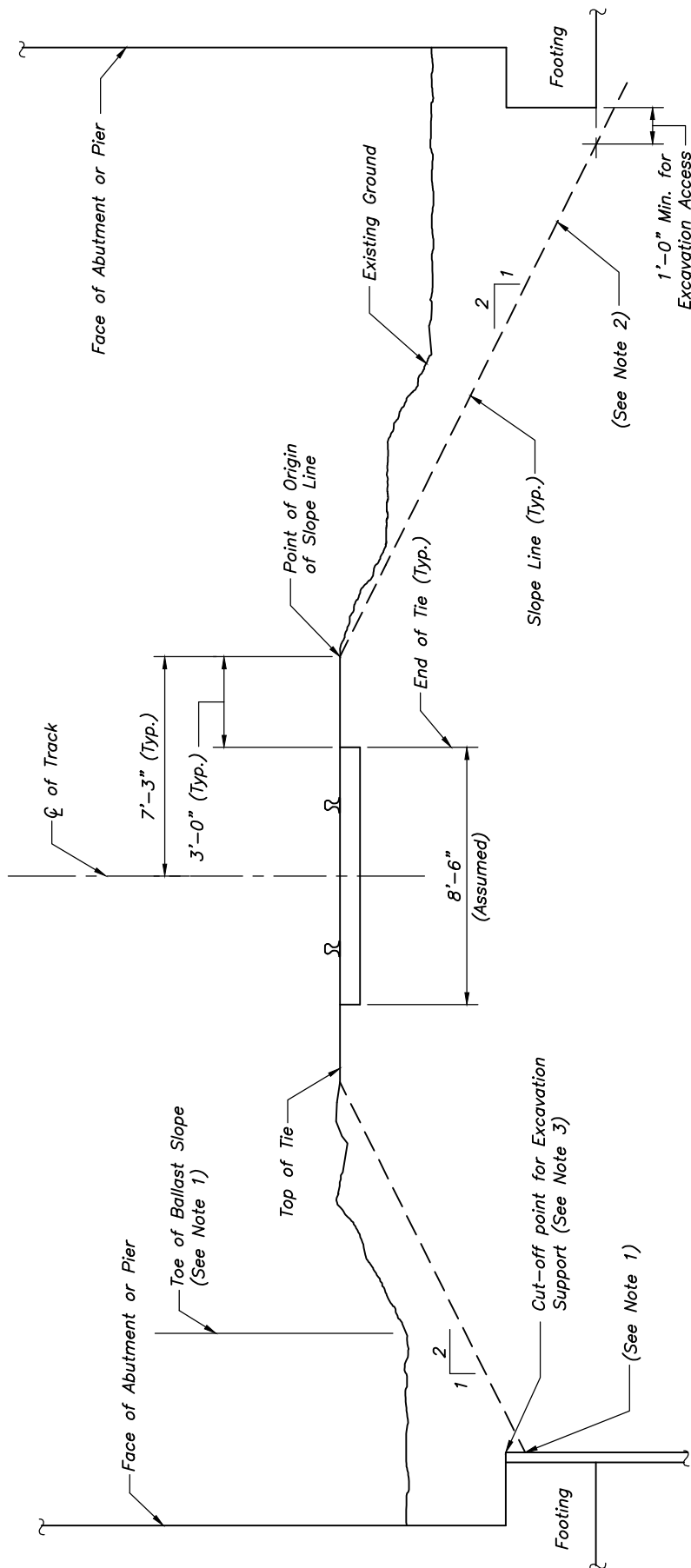




## LONGITUDINAL SECTION

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.
  2. Excavation support must not be closer to track than toe of ballast slope.
  3. If elevation of Bottom of Footing falls at or above the 2:1 slope line, excavation support is not required.
  4. Excavation support shall be cut off at top of footing or intersection with the influence line, whichever is higher.
  5. Excavation support for the protection of railroad shall be designed in accordance with provisions of AREMA specifications. Extent of excavation support shall be dimensioned on plan view of bridge.
- Excavation support is to be designed for a lateral earth pressure from E-80 vertical loading surcharge plus 50% impact in addition to active earth pressure. The 80 kips surcharge shall be uniformly distributed over the 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  
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