



Figure 1

## Montana Rail Link Shoring Specifications

**1.01.07** For any bridge demolition and/or falsework above any tracks or any excavations located with any part of the excavations located within, whichever is greater, twenty-five (25) feet of the nearest track or intersecting a slope from the plane of the top of rail on a 2 horizontal to 1 vertical slope beginning at eleven (11) feet from centerline of the nearest track, both measured perpendicular to center line of track, furnish the Railway a pdf electronic file (with included working drawings to be legibly printable on 11"x17" paper) showing details of construction affecting Railway Property and tracks. Ensure the working drawings include the proposed method of installation and removal of falsework, shoring or cribbing, not included in the contract plans and ensure each of the sets of plans includes complete structural calculations of any demolition, falsework, shoring, or cribbing. For all excavation and shoring submittal plans, the current "BNSF-UPRR Guidelines for Temporary Shoring" (<http://www.bnsf.com/in-the-community/pdf/bnsf-up-shoring-guide.pdf>) must be used for determining design loading conditions to be used in shoring design, and all calculations and submittals must be in accordance with the current "BNSF-UPRR Guidelines for Temporary Shoring". For all demolition and false work plans, the current "BNSF Guidelines for Preparation of Bridge Demolition & Removal Plan Over the BNSF Railway" (<http://www.bnsf.com/in-the-community/pdf/bnsf-demolition-guideline.pdf>) Sections I, II, III, IV and Appendixes must be followed. Ensure all submittal drawings and calculations are sealed by a currently registered Professional Engineer licensed in the State of Montana. Ensure all calculations take into consideration railroad surcharge loading and are designed to meet American Railway Engineering and Maintenance-of-Way Association (previously known as American Railway Engineering Association)(AREMA) Coopers E-80 live loading standard. The Railway will notify the Contractor of Railway's comments, and Railway will advise the City's Engineer and Contractor at the time when the Railway has no objections to submittals. Contractor may not begin work covered under submittals provided in accordance with this section until Railway has provided, in writing, a statement of no objections. The Contractor will be required to use lifting devices, such as cranes and/or winches, to place or to remove any false work over Railway's tracks. The Contractor is in no way to be relieved of responsibility for results obtained by the implementation of said plans. **Railway has 30 calendar days to review each submittal and provide comments.**

Excerpted from MRL Exhibit C Contractor Requirements for MDT Project 9928