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The applicable typical section, plan, profile and cross section sheets and foundation information (i.e. borings, roadway soundings or consolidation information) for structures such as standard retaining walls, box culverts, etc., are to be furnished to the designer of the temporary sheeting or bulkheads. The final design details for these structures will be included in the road plans. Bridge or other structure plans, under the supervision of the Structure and Bridge Division, will include the temporary sheeting or bulkhead design, when necessary, along with their other design details.

When required, three (3) copies of the detail drawing along with calculations covering the proposed design are to be furnished to the Department of Rail and Public Transportation for their use in obtaining Railway Company approval.

## Criteria for Temporary Sheeting And Bulkheads To Protect Railway Track During Adjacent Highway Construction

- The live load surcharge from track adjacent to sheeting and bulkheads shall be taken into account in the sheeting and bulkhead design. The recommended live load for each track is the Cooper E 80 load.
- 2. Allowable stresses contained in the American Railway Engineering Association "Manual for Railway Engineering"\* (Chapters 7, 8 and 15) shall be used.
- 3. A construction procedure for temporary sheeting or bulkhead construction shall be included on the drawing. Show step by step sequence.
- 4. Safety railings shall be installed when temporary sheeting or bulkheads are within 15 feet of track.
- 5. A safety factor of 2 shall be used in the temporary sheeting or bulkhead design.

## **Drawings and Calculations Needed For Approval**

- 1. Three (3) copies of detailed drawings showing the following:
  - a. Timber, steel, bolt and weld sizes and details.
  - b. Dimensions showing distances from centerline track to temporary sheeting or bulkheads and between supporting elements.
  - c. Section showing temporary sheeting or bulkhead heights and track elevation.

<sup>\*</sup>Available from the Department of Rail and Public Transportation.