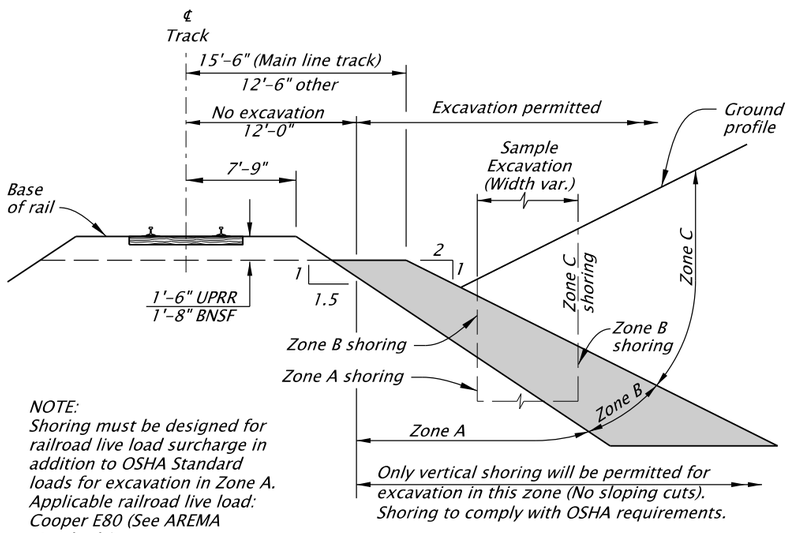
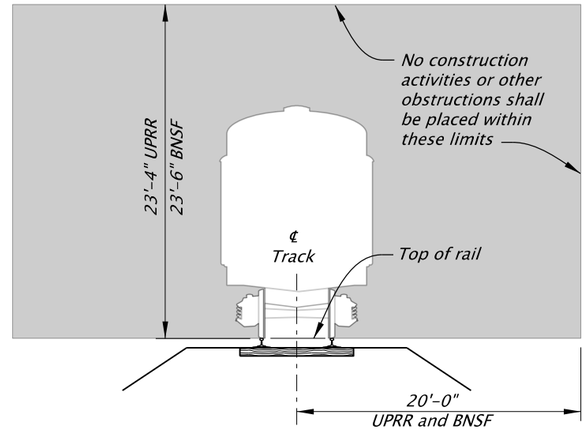
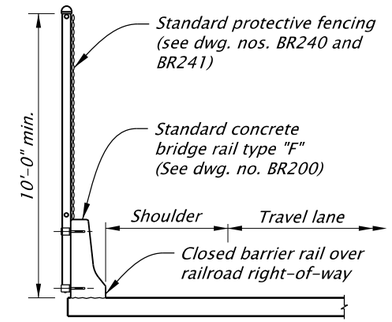


NOTE:
Shoring must be designed for railroad live load surcharge in addition to OSHA Standard loads for excavation in Zone A. Applicable railroad live load: Cooper E80 (See AREMA standards).

GENERAL EXCAVATION ZONES



MINIMUM CONSTRUCTION CLEARANCE ENVELOPE



TYPICAL FENCE ON BARRIER DETAIL

RAILROAD GENERAL NOTES:

1. Railroad review and approval of shoring, erection, demolition, and falsework is required. Allow up to 65 calendar days for each submittal to include a minimum of four weeks for railroad review and approval.
2. The proposed grade separation project shall not increase the quantity and/or characteristics of the flow in the Railroad's ditches and/or drainage structures.
3. The elevation of the existing top-of-rail profile shall be verified before beginning construction. All discrepancies shall be brought to the attention of the Railroad prior to construction.
4. The contractor must submit a proposed method of erosion and sediment control and have the method approved by the Railroad.
5. All shoring systems that impact the Railroad's operations and/or supports the Railroad's embankment shall be designed and constructed per current Railroad Guidelines for Temporary Shoring.
6. All demolitions within the Railroad's right-of-way and/or demolition that may impact the Railroad's tracks or operations shall be in compliance with the Railroad's Demolition Guidelines.
7. Erection over the Railroad's right-of-way shall be designed to cause no interruption to the Railroad's operation, enabling the track(s) to remain open to traffic per the Railroad's requirements.
8. All construction phasing that may impact the Railroad operations shall be designed to cause no interruption to the Railroad's operation, enabling the track(s) to remain open to traffic per the Railroad's requirements.
9. False-work clearances shall comply with minimum construction clearances.
10. All permanent clearances shall be verified by the agency before project closing.
11. For Railroad coordination refer to the Railroad Coordination Requirements as part of Special Provisions.

Refer to the Plan and Elevation of the Situation & Layout sheets (TS & L) for the following information required by the Railroad (Ref. Railroad Plan No. 711100, Sheet 2 in "Guidelines for Railroad Grade Separation Projects"):

1. Centerline of bridge and/or centerline of project.
2. Track layout and limits of Railroad right-of-way with respect to centerline of main lines.
3. Future tracks, access roadways and existing tracks as main line, siding, spur, etc.
4. Point of minimum vertical clearance and distance, measured perpendicular, from the centerline of nearest track.
5. Horizontal clearance at right angle from centerline of nearest existing or future track to the face of obstruction such as substructure above grade.
6. Horizontal clearance at right angle from centerline of nearest existing or future track to the face of nearest foundation below grade.
7. Horizontal spacing at right angle between centerlines of existing and/or future tracks.
8. Limits of shoring and minimum distance at right angle from centerline of nearest track.
9. All existing facilities and utilities and their proposed relocation, if required.
10. Toe of slope and/or limits of retaining wall.
11. Existing and proposed contours.
12. Railroad Milepost and direction of increasing Milepost.
13. Direction of flow for all drainage systems within project limits.
14. Limits of barrier rail and fence with respect to centerline of track.
15. Depth of foundation below bottom of tie.
16. Top and bottom of pier protection wall elevation relative to top of rail elevation.
17. Controlling dimensions of drainage ditches and/or drainage structures.
18. Top of rail elevations for all tracks.
19. Minimum permanent vertical clearance above top of high rail to the lowest point under the bridge.
20. Existing and proposed ground lines and roadway profile.
21. Type of slope paving.
22. Location of deck drains.
23. Total width of superstructure.
24. Width of shoulder and/or sidewalk.

GENERAL SHORING NOTES:

1. All dimensions measured perpendicular to ℄ of track.
2. Prior to commencing any work, submit to the Railroad for approval, detailed plans indicating the nature and extent of the track protection shoring proposed. Install the temporary shoring system per the approved plans. Design the temporary shoring system to comply with the Railroad's "Guidelines for Temporary Shoring".
3. For excavations which encroach into Zone A or B, submit calculations with shoring plans. Plans and calculations must be signed and stamped by a Professional Engineer registered in the State of Oregon.

TOP OF RAIL ELEVATIONS

(STATIONS INCREASE WITH MILEPOST INCREASE)
(STATIONS DECREASE WITH MILEPOST INCREASE)

MAIN LINE			
ALIGNMENT: LEFT RAIL		ALIGNMENT: RIGHT RAIL	
STATION	ELEVATION	STATION	ELEVATION

To be filled in by the road authority (Roadway designer)

The selection and use of this detail, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

OREGON DEPARTMENT OF TRANSPORTATION

ENGINEERING AND TECHNICAL SERVICES BRANCH

RAILROAD CROSSING GRADE SEPARATION DETAILS

DETAIL NO. DET1200

DET1200.dgn 31-AUG-2023