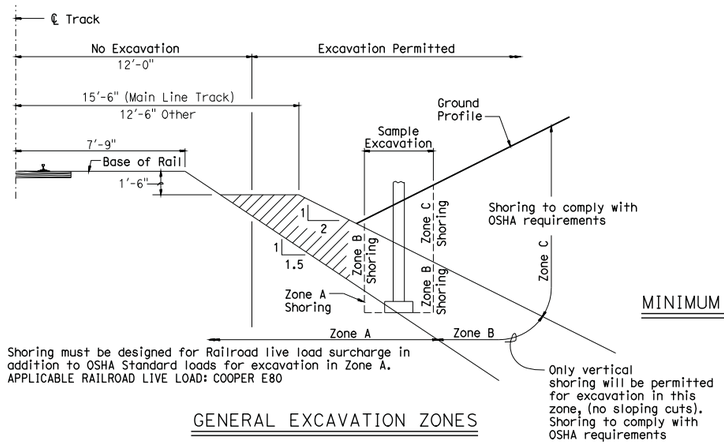
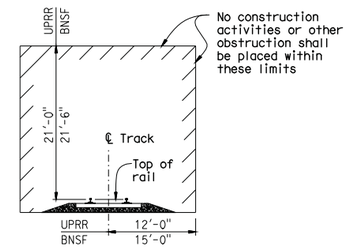
GENERAL SHORING NOTES:

1. All dimensions are measured perpendicular to ℄ Track.
2. Prior to commencing any work, the contractor shall submit for approval by the Railroad detailed plans indicating the nature and extent of the track protection shoring proposed. The contractor shall install the temporary shoring system per the approved plans. Design of the temporary shoring system to comply with GUIDELINES FOR TEMPORARY SHORING.
3. For excavations which encroach into Zone A or B, shoring plans shall be accompanied by design calculations. Plans and calculations must be signed and stamped by a Professional Engineer registered in the state of California.

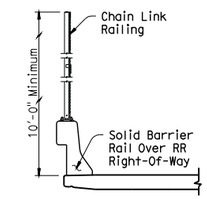


GENERAL EXCAVATION ZONES



MINIMUM CONSTRUCTION CLEARANCE ENVELOPE

(NORMAL TO RAILROAD)



TYPICAL FENCE ON BARRIER DETAIL

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

REGISTERED ENGINEER - CIVIL

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

THE FOLLOWING INFORMATION PER RAILROAD GUIDELINES SHALL BE PROVIDED ON THE BRIDGE PLANS

Railroad General Plan (GP):

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 identify the existing tracks as main, siding or spur etc.
4. Location of minimum vertical clearance.
5. Horizontal clearance at right angle from the centerlines of the nearest existing or future track to the face of obstruction such as substructure above grade or foundation below grade.
6. Horizontal spacing at right angle between the centerlines existing and/or future tracks.
7. Limits of shoring and minimum distance at right angle from the centerline of the nearest tracks.
8. Toe of slope and/or limits of retaining wall.
9. Railroad Milepost and direction of increasing Milepost.
10. Limits of barrier rail and fence over the railroad right-of-way.
11. Depth of foundation below bottom of tie.
12. Existing and proposed ground line & roadway profile.
13. Type of slope paving.
14. Total width of superstructure.
15. Width of shoulder and/or sidewalk.
16. Top and bottom of pier protection wall elevation relative to top of the rail elevation.
17. Top of rail elevation information as shown in the table for all tracks with permanent vertical clearance of less than 24 feet. (This information is only required for new structures)

Foundation Plan:

1. Existing contours.
2. All existing facilities and utilities.
3. Direction of flow for all drainage system within the project limits.

RAILROAD GENERAL NOTES:

1. Railroad requires review and approval of all submittals for shoring, demolition, erection and falsework. No work shall be allowed prior to written railroad approval. Allow a minimum of four weeks for the review and approval of each submittal unless specified otherwise in the contract special provisions.
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. Deck drains over the railroad right of way shall not be allowed. The flow from the deck shall be contained and directed away from the railroad drainage system.
3. The elevation of the existing top-of-rail profile shall be verified before beginning construction. All discrepancies shall be brought to the railroad authority for approval prior to beginning any construction activities.
4. The contractor must submit a proposed method of erosion and sediment control within the railroad right-of-way 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 Railroad Guidelines for Temporary Shoring.
6. All demolitions within the railroad 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. All erection over the railroad right-of-way shall be designed such that there is no interruption to the railroad's normal operation. Any train traffic interruption shall require prior railroad approval in writing.
8. All construction phases that may impact the railroad's normal operation shall be designed to cause no interruption to the railroad operation. Any train traffic interruption closure shall require prior railroad approval in writing.
9. All falsework clearances shall comply with the minimum construction clearances envelope.
10. All permanent clearances shall be verified prior to completion of the project.
11. For all railroad coordination during construction refer to the railroad's special provisions within the Contract Special Provisions documents and the approved Construction and Maintenance (C & M) Agreement.

TOP OF RAIL ELEVATIONS

(STATIONS INCREASE WITH MILEPOST INCREASE)

MAIN LINE			
ALIGNMENT: LEFT RAIL		ALIGNMENT: RIGHT RAIL	
STATION	ELEVATION	STATION	ELEVATION
0+00		0+00	
1+00		1+00	
2+00		2+00	
3+00		3+00	
4+00		4+00	
5+00		5+00	
6+00		6+00	
7+00		7+00	
8+00		8+00	
9+00		9+00	
(1) 10+00		(1) 10+00	
11+00		11+00	
12+00		12+00	
13+00		13+00	
14+00		14+00	
15+00		15+00	
16+00		16+00	
17+00		17+00	
18+00		18+00	
19+00		19+00	
20+00		20+00	

(1) ℄ EXISTING TRACK STA. 10+00

STANDARD DRAWING

FILE NO. xs11-010-X

APPROVED BY RAJ MANGAT (RESPONSIBLE TECHNICAL SPECIALIST)

APPROVAL DATE 02-01-08

RELEASED BY SHANNON POST (RESPONSIBLE OFFICE CHIEF)

RELEASE DATE - -

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

BRIDGE NO.

POST MILE

MINIMUM RAILROAD REQUIREMENTS FOR OVERHEAD STRUCTURES

XXXXXX

DS OSD 2147A (ENGLISH STANDARD DRAWING "XS" BORDER REV. 01/11/08)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

CU EA

DISREGARD PRINTS BEARING EARLIER REVISION DATES

REVISION DATES (PRELIMINARY STAGE ONLY) SHEET OF

USERNAME => susanng

rr_xs11-010.dgn

DATE PLOTTED => 04-APR-2008 TIME PLOTTED => 15:01