

GENERAL NOTES

SPECIFICATIONS: DESIGN, AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1983. CONSTRUCTION, STATE OF WASHINGTON STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE AND MUNICIPAL CONSTRUCTION, CURRENT EDITION.

DEAD LOAD: CONCRETE 150 LBS. PER CU. FT. PAVING ALLOWANCE 25 LBS. PER SQ. FT. OF ROADWAY SURFACE. EARTH PRESSURE EQUIVALENT TO A FLUID WEIGHING 36 LBS. PER CU. FT.

DESIGN CRITERIA: REINFORCED CONCRETE DESIGNED BY LOAD FACTOR DESIGN WITH $F'_c = 4,000$ PSI. (CLASS AX CONCRETE) AND $F'_c = 3,000$ PSI. (CLASS B CONCRETE) AND REINFORCING STEEL $F_y = 60,000$ PSI. TRANSVERSE DECK SLAB SERVICEABILITY STRESSES LIMITED TO $F_c = 1,455$ PSI AND $F_c = 20,000$ PSI, AND TO 1983 AASHTO SPECIFICATION VALUES FOR OTHER REINFORCED CONCRETE ELEMENTS. SEISMIC DESIGN IS PROVIDED IN ACCORDANCE WITH THE AASHTO 1983 GUIDE SPECIFICATIONS FOR SEISMIC DESIGN OF HIGHWAY BRIDGES. PRECAST, PRESTRESSED GIRDERS DESIGNED IN ACCORDANCE WITH 1983 AASHTO CRITERIA.

CONCRETE: CONCRETE IN PRECAST, PRESTRESSED GIRDERS SHALL HAVE THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS: $F'_c = 6,500$ PSI AND $F'_c = 7,000$ PSI. ALL ABUTMENT FOOTING CONCRETE SHALL BE CLASS B, WITH $F'_c = 3,000$ PSI. ALL OTHER CAST-IN-PLACE CONCRETE SHALL BE CLASS AX, WITH $F'_c = 4,000$ PSI.

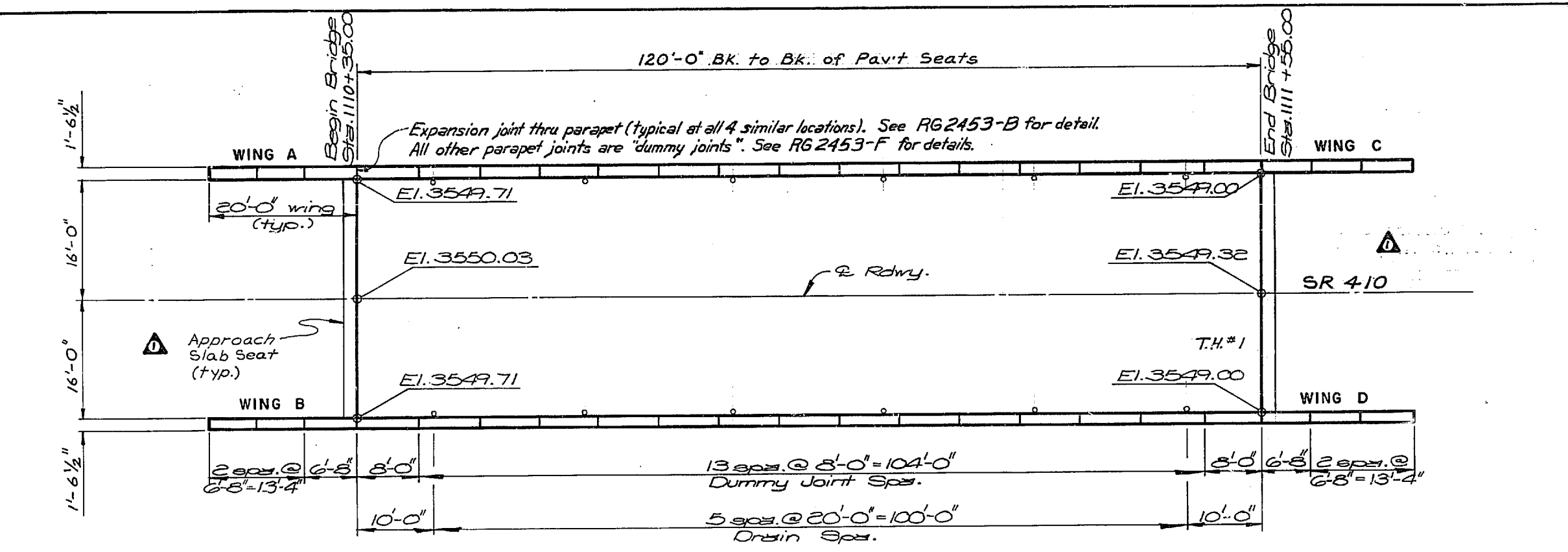
CONCRETE COVER: UNLESS OTHERWISE SHOWN ON THE PLANS THE MINIMUM CONCRETE COVER MEASURED FROM THE FACE OF THE CONCRETE TO THE FACE OF ANY REINFORCEMENT BAR SHALL BE 2 1/2" AT THE TOP OF THE ROADWAY SLAB, 1" AT THE BOTTOM OF THE ROADWAY SLAB, 3" AT THE BOTTOM OF THE FOOTINGS AND 1 1/2" AT ALL OTHER LOCATIONS.

REINFORCING STEEL: ALL REINFORCING STEEL SHALL CONFORM TO AASHTO M31, GRADE 60 (ASTM A615, GRADE 60). THOSE REINFORCING BARS IN THE DECK SLAB DESIGNATED BY AN * ON RG 2453-1 SHALL BE EPOXY-COATED.

PRESTRESSING STEEL: PRETENSIONED, PRESTRESSING STEEL SHALL BE 270K, 1/2-INCH SEVEN-WIRE, BRIGHT, STRESS-RELIEVED PRESTRESSING STRAND CONFORMING TO AASHTO M203 (ASTM A416). EACH STRAND SHALL BE PRETENSIONED TO A TOTAL LOAD OF 28,910 LBS., AT WHICH LOAD, $F'_{se} = 0.70$ ($F'_{se} = 189,000$ PSI). THE FINAL EFFECTIVE PRESTRESS FORCE PER STRAND (AFTER ESTIMATED LOSSES = 63,500 PSI) IS 19,214 LBS.

STEEL H-PILES: STEEL FOR PILES SHALL CONFORM TO AASHTO M183 (ASTM A36). ALL PILES SHALL BE DRIVEN TO A MINIMUM BEARING OF 60 TONS PER PILE. EACH PILE SHALL HAVE A PILE TIP. EACH TIP SHALL BE AN "H-PILE" POINT BP75750, AS MANUFACTURED BY THE ASSOCIATED PILE AND FITTING CORPORATION, OR HPA1042, AS MANUFACTURED BY THE INTERNATIONAL CONSTRUCTION EQUIPMENT COMPANY, OR AN APPROVED EQUAL.

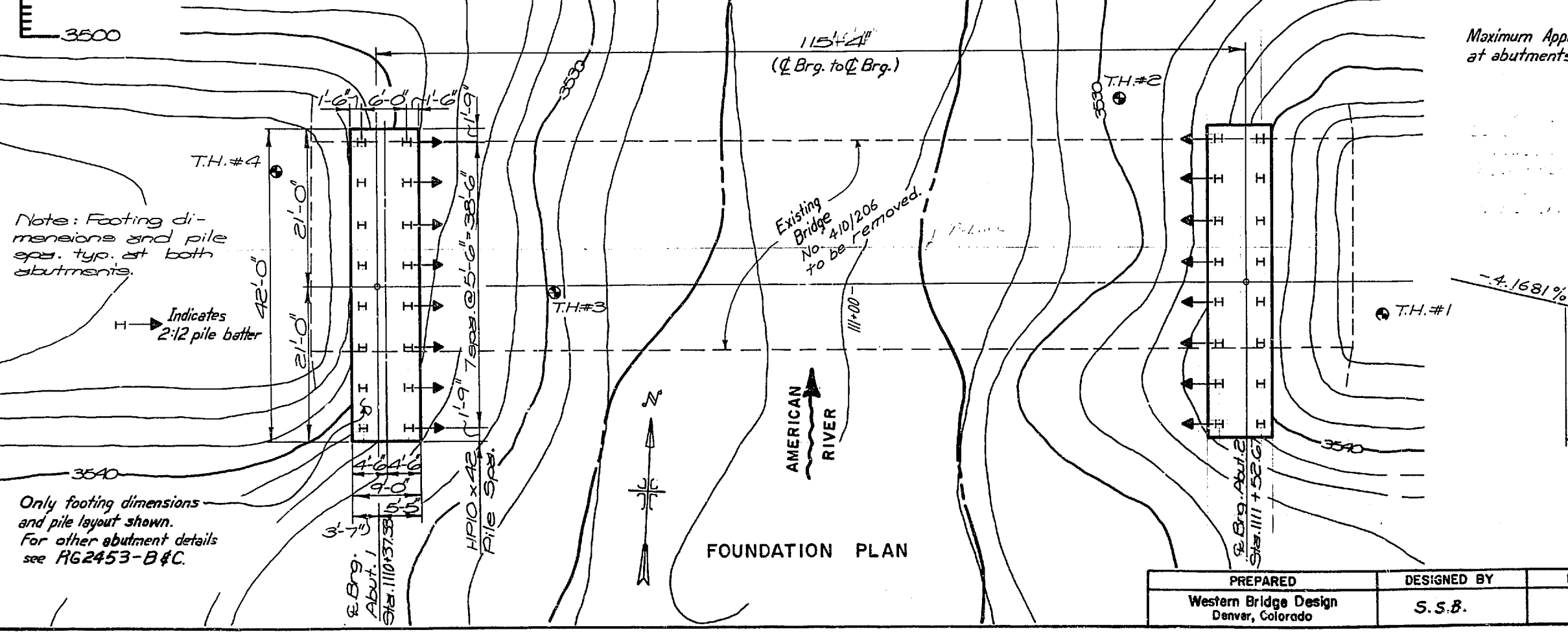
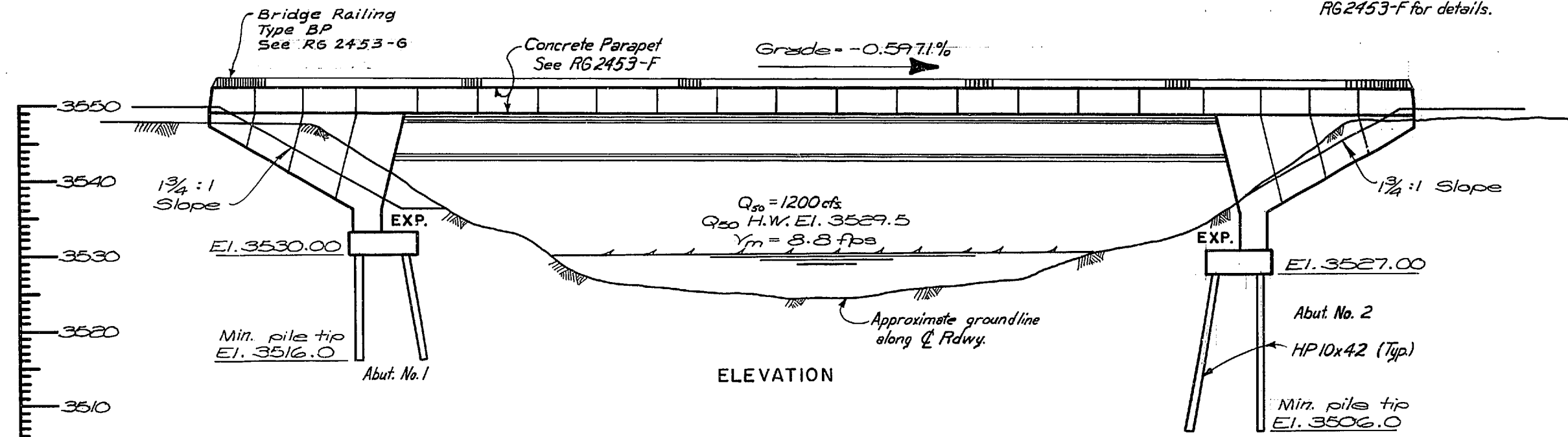
FOUNDATIONS: FOOTING ELEVATIONS AND, THEREFORE, SUBSTRUCTURE DETAILS, ARE SUBJECT TO CHANGE DEPENDING UPON FOUNDATION MATERIAL ENCOUNTERED. REINFORCING STEEL FOR PIERS AND WINGWALLS SHALL NOT BE CUT UNTIL FINAL FOOTING ELEVATIONS AND SUBSTRUCTURE DETAILS HAVE BEEN MODIFIED AS REQUIRED.



For drain details see RG 2453-C.

* Not included in Bridge Quantities.

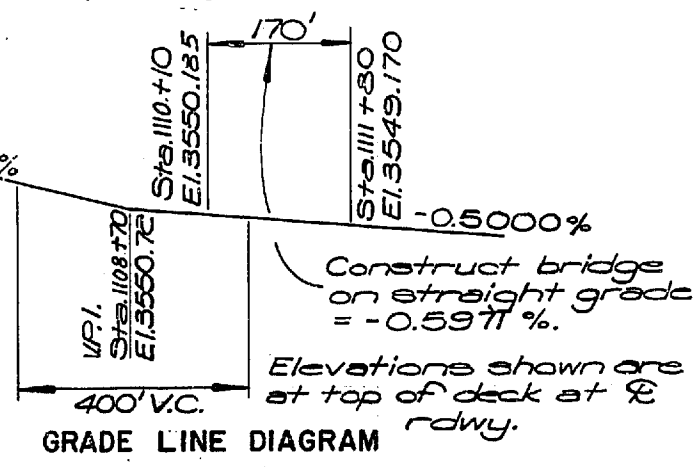
* Approach guardrail attached to concrete parapet at all 4 corners. See RG 2453-F for details.



Note: Footing dimensions and pile layout shown. For other abutment details see RG 2453-B#C.

Only footing dimensions and pile layout shown. For other abutment details see RG 2453-B#C.

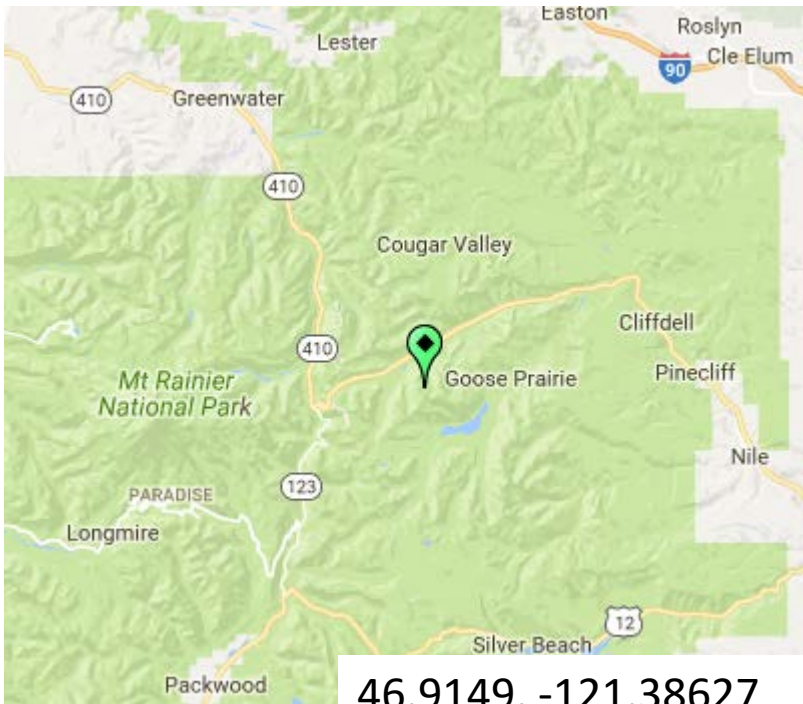
Maximum Applied Structural Load at abutments is 54 tons per pile.



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|---------------------------------------------------------------------------------|-----------|-----------------------|--|
| CONTRACT #3198 | | | |
| U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION | | | |
| SR 410 PIERCE COUNTY LINE TO UNION CREEK AMERICAN RIVER BRIDGE 410/206 | | | |
| LAYOUT 410/206 | | SHEET 75 OF 97 SHEETS | |
| BRIDGE DRAWING | DATE | DRAWING NO. | |
| 1 of 9 | NOV. 1985 | RG 2453-A | |

| | | | | |
|-------------------------------------------|-------------|----------|------------|-------|
| PREPARED | DESIGNED BY | DRAWN BY | CHECKED BY | SCALE |
| Western Bridge Design Denver, Colorado | S.S.B. | G.L.M. | JWK | |

APPROVED: James O. Reller
DIRECTOR, OFFICE OF WESTERN BRIDGE



46.9149, -121.38627

Time to hotel: 2hrs

Holiday Inn Yakima

802 East Yakima Avenue, Yakima, WA 98901

- ↑ Head east on E Yakima Ave toward N 9th St
0.5 mi
- ↗ Turn left to merge onto I-82 W toward Ellensburg
1.6 mi
- ↘ Take exit 31 for US-12 W toward Naches/White Pass
0.5 mi
- ↑ Continue onto US-12 W
17.1 mi
- ↑ Continue straight onto WA-410 W
 ⓘ Destination will be on the right
 39.6 mi

Washington 410

Naches, WA 98937



Holiday Inn Express Yakima

1001 S Sgt. Pendleton Way
Yakima, Washington 98901
United States
1 509 2491000

[Holiday Inn Seattle-Issaquah](#)

1801 12th Avenue NW, Issaquah,
Washington, 98027
1 425 3926421

0013198A00000000

Bridge 6 – Washington

[Portal Link](#)

NBI Data:

| | |
|-----------------------------------------|----------------------------------------------------------------|
| 1 - State Name | Washington |
| 8 - Structure Number | 0013198A00000000 |
| Bridge Name | SR 410 over AMERICAN RIVER |
| 26 - Functional Class Of Inventory Rte. | 7 - Rural Major Collector |
| 48 - Length Of Largest Span | 35.1 |
| 49 - Total Length | 36.6 |
| 52 - Deck Width | 10.8 |
| 34 - Skew | 0 |
| 22 - Owner | 1 - State Highway Agency |
| 27 - Year Built | 1987 |
| 37 - Historic Significance | 5 - Bridge is not eligible for the NRHP. |
| 31 - Design Load | 6 - MS 18+Mod / HS 20+Mod |
| 45 - Number Of Main Spans | 1 |
| 43A - Main Span Materials | 5 - Prestressed concrete * |
| 43B - Main Span Design | 2 - Stringer/Multi-beam or girder |
| 107 - Deck Type | 1 - Concrete Cast-in-Place |
| 108A - Wearing Surface | 1 - Monolithic Concrete (concurrently placed with structura... |