

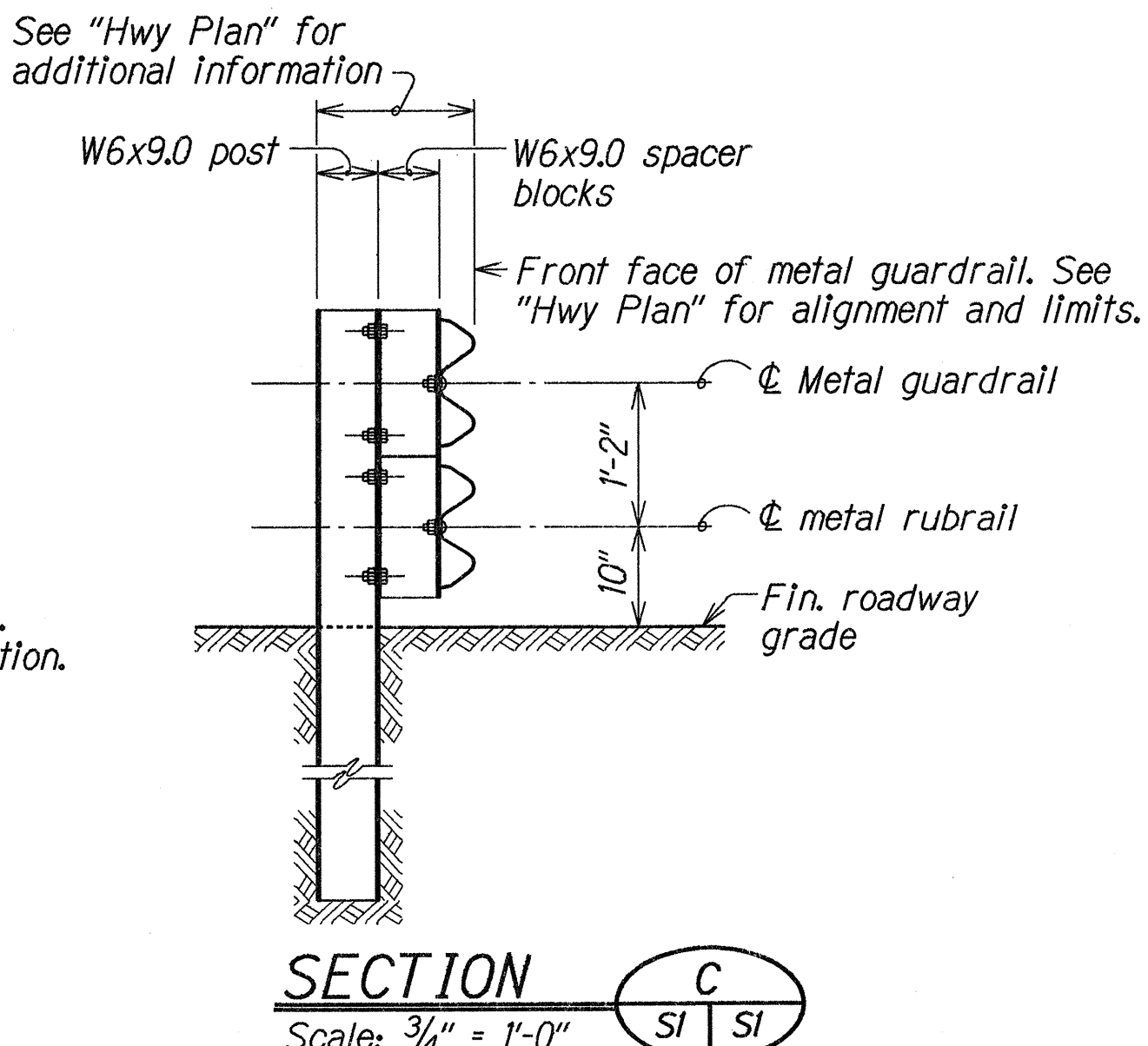
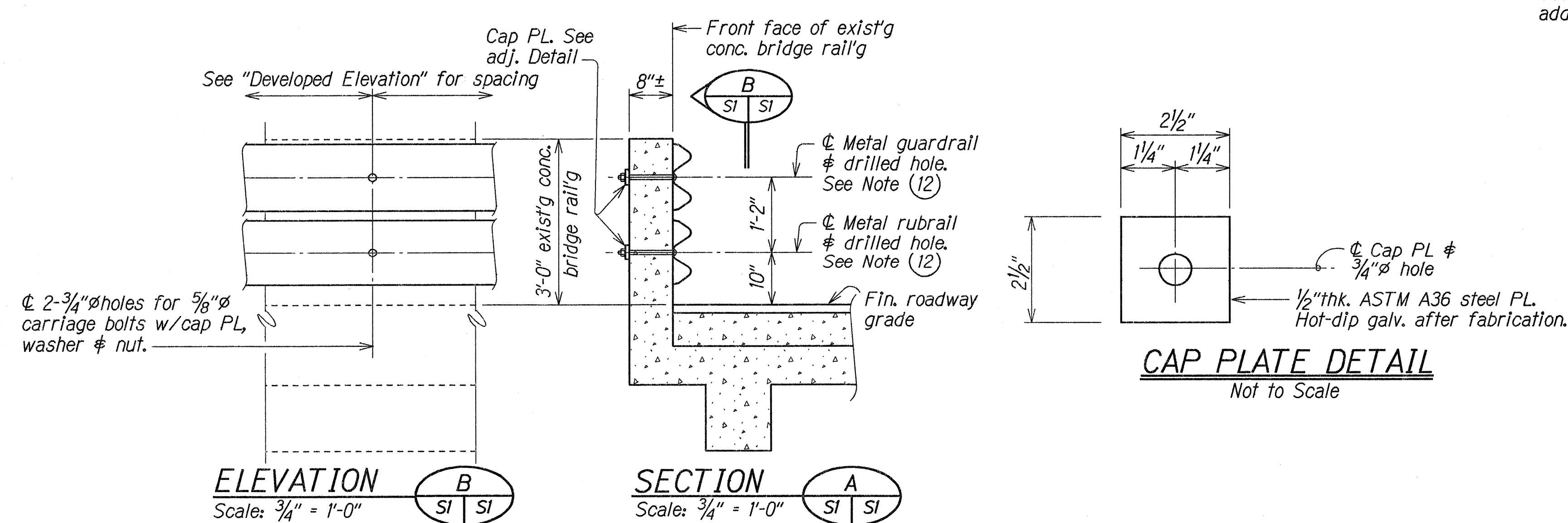
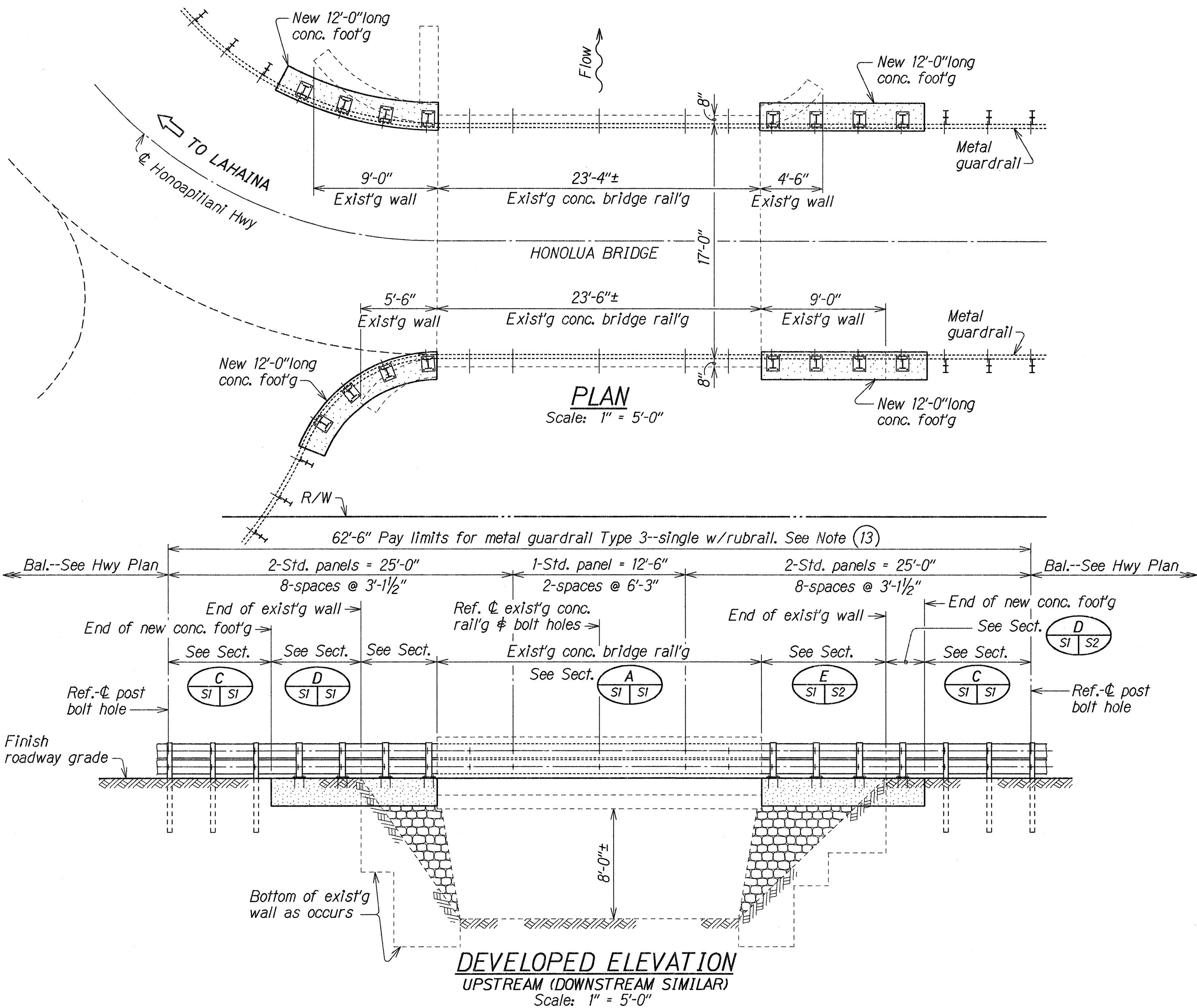
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	30A-01-91M	1992	C.O.15S-1	31

GENERAL NOTES

- See Standard Specifications for Road and Bridge Construction, (Hawaii 1985) and Special Provisions.
- See State of Hawaii, D.O.T. Standard Plan Sheet TE-50, TE-51, and TE-54 for additional details of metal guardrail.
- All anchor bolts shall be high-strength bolts conforming to the requirements of ASTM A325.
- All anchor bolts, cap plates, nuts, washers and guardrail posts with anchor plates shall be hot-dip galvanized.
- Large impacting or vibratory-type of equipment will not be permitted in the removal operation of the designated items nor for drilling of holes.
- Any damage to the existing structure due to the Contractor's operation shall be repaired at his expense, to the satisfaction of the Engineer.
- The Contractor shall verify all dimensions in field before commencing with work.
- The Contractor shall verify the location of all existing utility lines near structures and notify their respective owners before commencing with work.
- Cap plate and anchor plate for guardrail post shall be fabricated from ASTM A36 Steel.
- Limits of removal of existing rock wall (shown by hatched lines) shall be incidental to grouted rubble paving (GRP).
- Clean existing wall contact surfaces and apply bonding agent as needed before placement of new wall.
- Drilling of through holes shall be done in such a manner that will preclude cone puncturing of the daylight end.
- The work necessary to fabricate and install the metal guardrail post and metal guardrails on the concrete footings and concrete bridge railings shall include all labor, materials, tools, equipment and incidentals necessary to complete the work. This work shall be paid for under Item #606.3201 (Metal Guardrail Type 3--Single With Rubrail on Steel Post on Structure).

ESTIMATED QUANTITIES

ITEM NO.	ITEM DESCRIPTION	QUANTITY	UNIT
503.1901	Concrete in Footing	9	C.Y.
602.1360	Reinforcing Steel in Concrete Footing	420	Lb.
606.3201	Metal Guardrail Type 3--Single With Rubrail on Steel Post on Structure	125	Lin. Ft.
612.0100	Grouted Rubble Paving (GRP)	42	C.Y.



STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

GUARDRAIL DETAILS AT HONOLUA BRIDGE

HONOAPIILANI HIGHWAY RESURFACING

Honokahua To Honokohau

Project No. 30A-01-91M

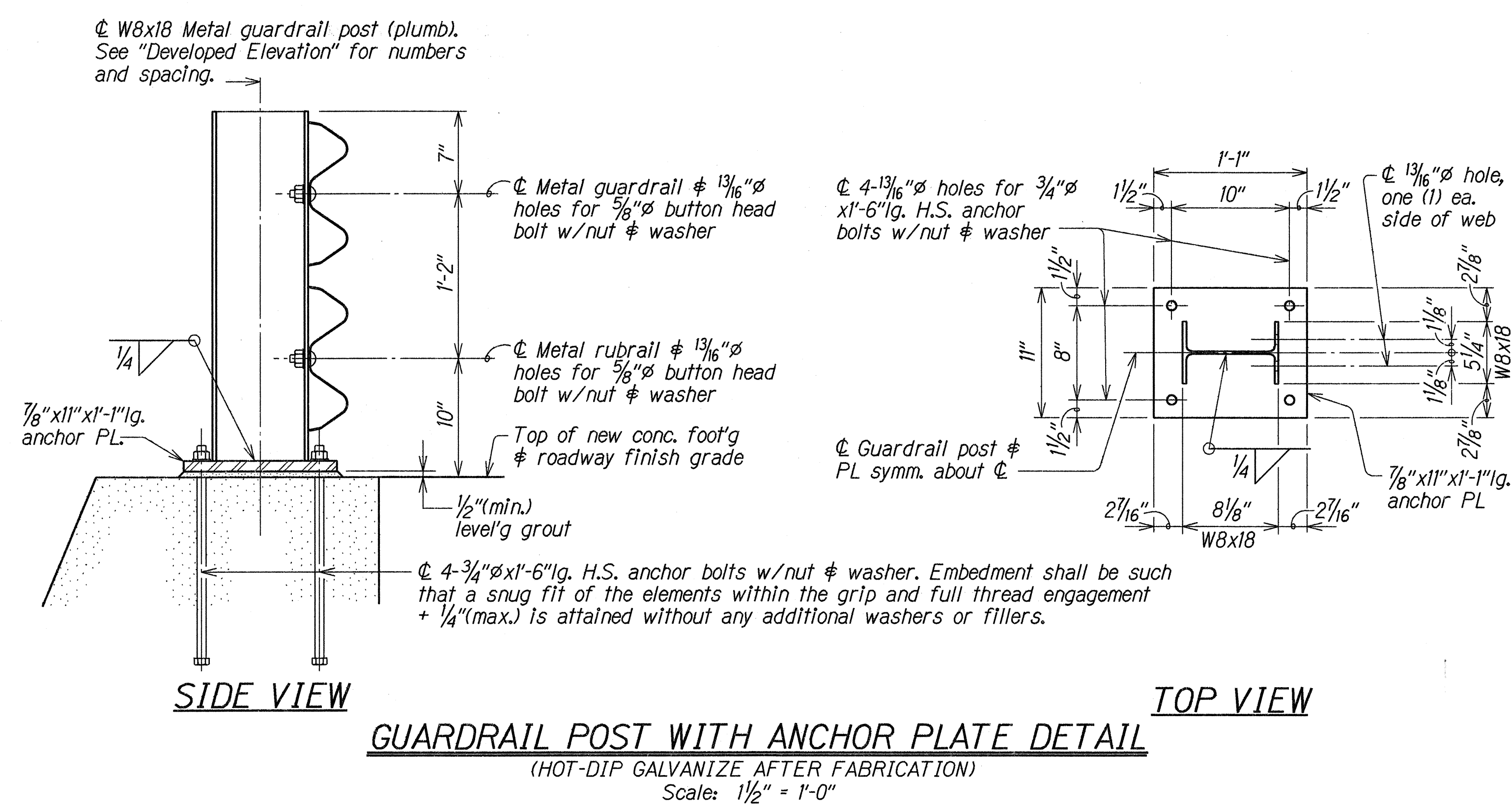
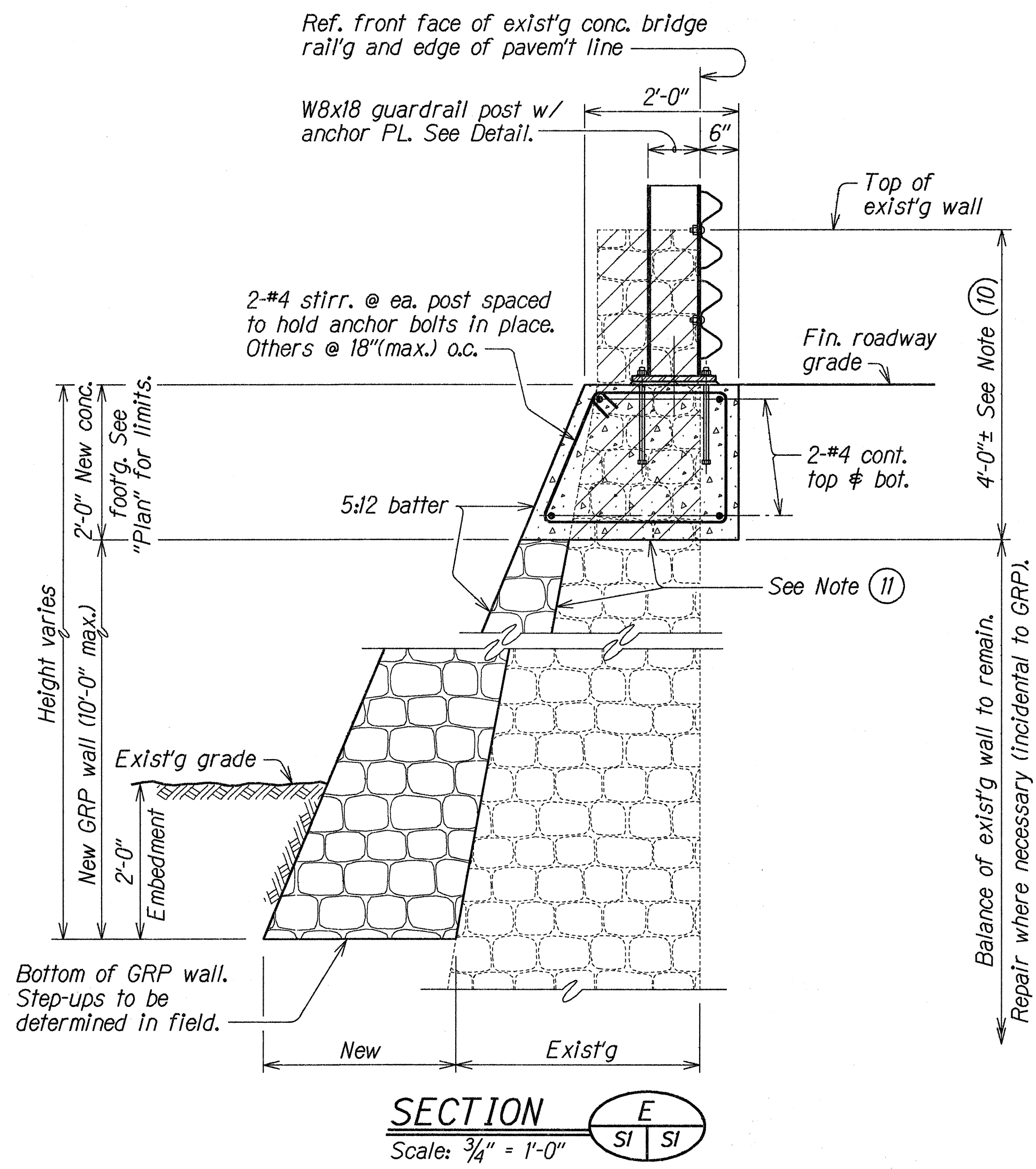
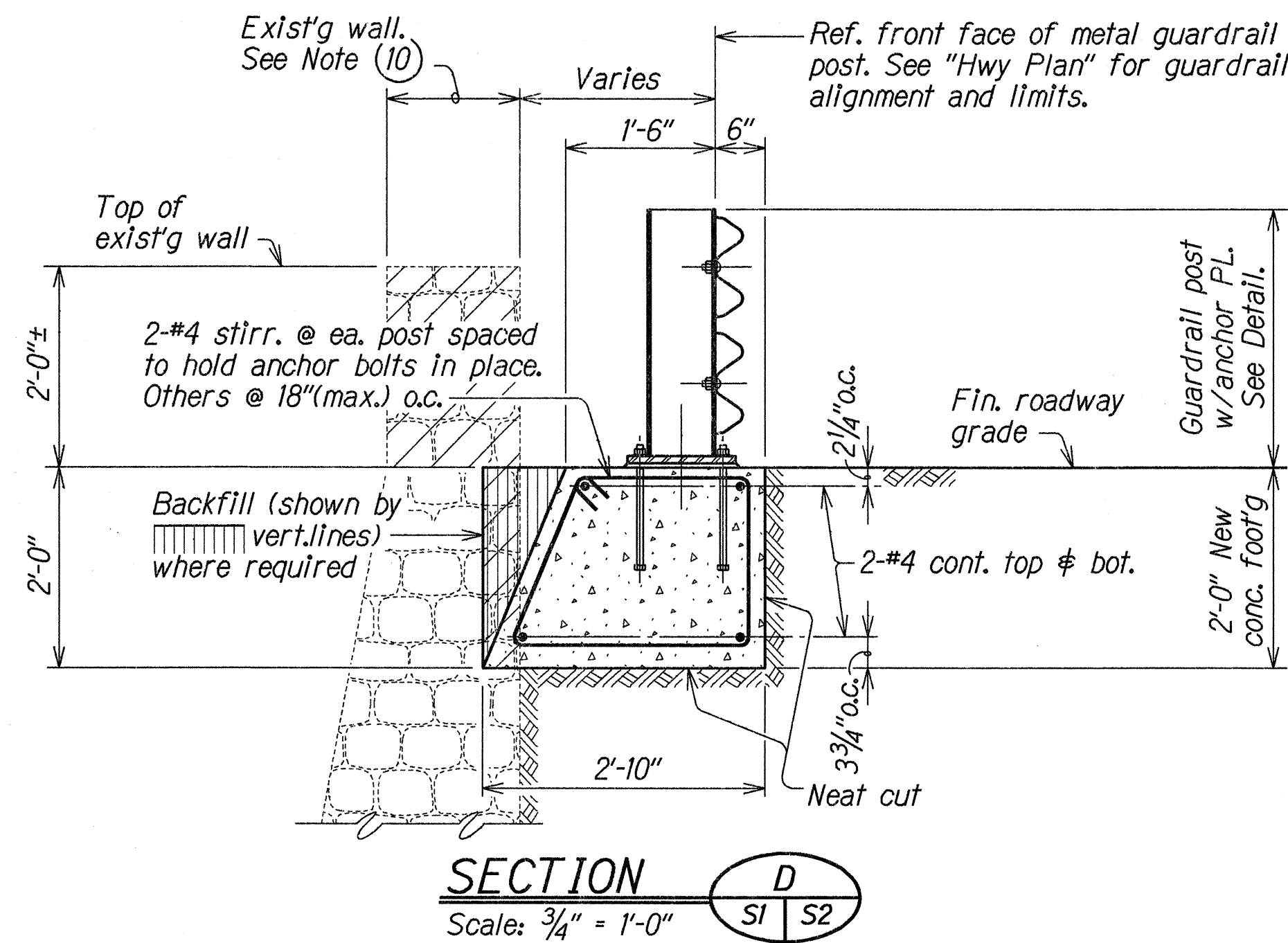
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SHEET No. 51 OF 2 SHEETS

C.O.15S-1

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	30A-01-91M	1992	C.O.15S-2	31



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GUARDRAIL DETAILS AT HONOLUA BRIDGE
HONOAPIILANI HIGHWAY RESURFACING
Honokahua To Honokohau
Project No. 30A-01-91M

Scale: As Noted
Date: Aug. 1991

SHEET No. S2 OF 2 SHEETS