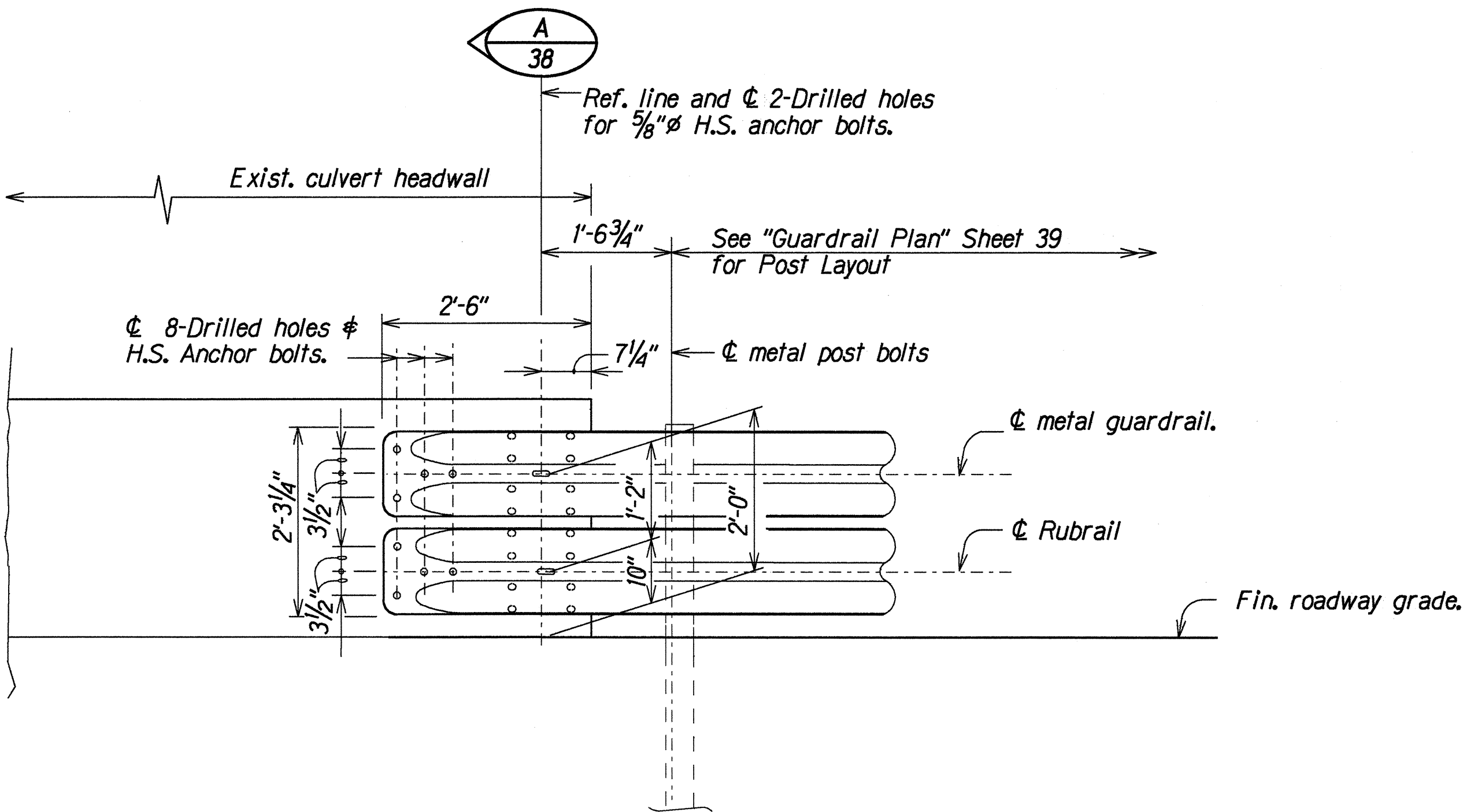


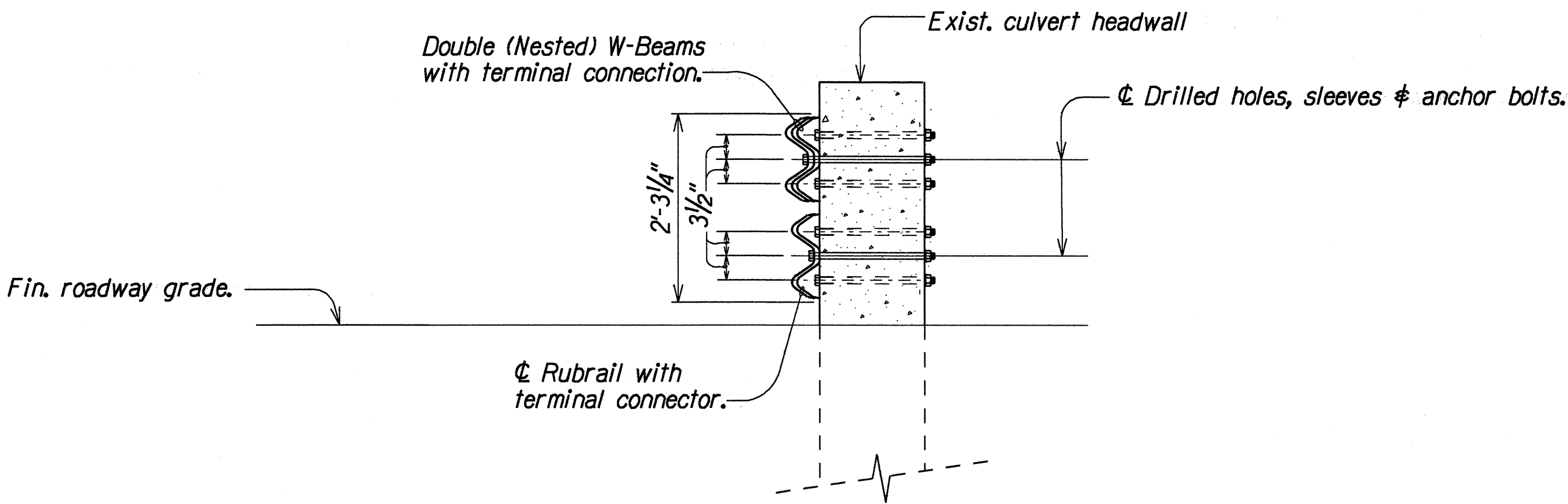
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-019-2(34)	1995	38	40

GUARDRAIL NOTES: (TYPE I)

- See Standard Specifications for Road and Bridge Construction (Hawaii 1994) and special provisions.
- Anchor bolts shall be high strength bolts conforming to the requirements of ASTM A 325. Bolt length shall be such that a snug fit of the elements and full thread engagement plus 1/4" (Max.) is attained.
- "Terminal Connector," anchor bolts, nuts and washers shall be hot-dip galvanized after fabrication.
- Any damage to existing structures or roadway due to the Contractor's operation shall be repaired at his expense, to the satisfaction of the Engineer.
- The work necessary to connect guardrail to concrete end post shall include all labor, materials, tools, equipment and incidentals necessary to complete the work.
- The Contractor shall verify all dimensions in field before commencing with work.
- The Contractor is responsible to locate and avoid damage to any underground utilities or structures that will be affected by his operations. The Contractor shall be responsible for any and all damages to utilities or structures arising from his operations.
- The work involved in the bridge connection consists of all preparations for the connection, including but not limited to drilling of holes, removal and reconstruction of portion of concrete, erection of concrete support block, guardrail materials, excavation, and grading work within the pay limits specified on the plans. The various type of connections shall be paid for as provided in Section 606 - Guardrail of the Special Provisions.
- For additional information, and/or information not shown on this plan see State of Hawaii, Department of Transportation Standard Plan Nos. TE-50, TE-51, TE-52, TE-54, TE-57, TE-58, TE-59, TE-60, TE-61, AND TE-62.
- Drilling of through holes shall be done in such a manner that will preclude cone puncturing of the daylight end.
- Large impacting or vibratory type of equipment will not be permitted in the removal operation of the designated items nor for drilling of holes.
- All guardrail sections shall be 12'-6" in length, unless otherwise noted in the plans or directed by the Engineer.



ELEVATION
Not to scale



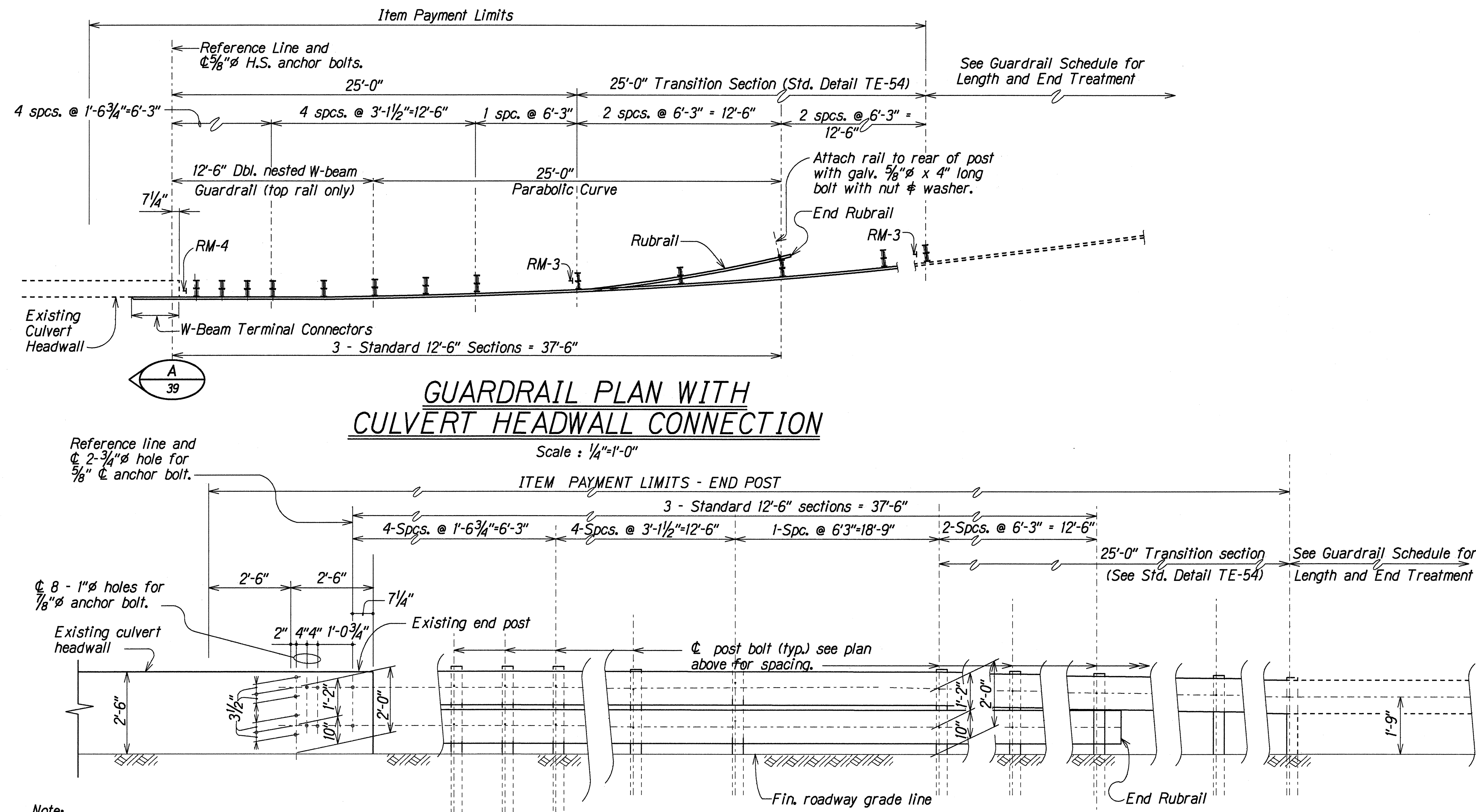
SECTION
Not to scale

ORIGINAL PLAN	DATE	BY
DESIGNED BY	DATE	BY
NOTED BY	DATE	BY
CHECKED BY	DATE	BY

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GUARDRAIL CONNECTION
TYPE-I DETAILS AND NOTES
HAWAII BELT ROAD RESURFACING
KULANA STREET TO WAILUKU BRIDGE
F. A. Project No. STP-019-2(34)
Scale: As Shown Date: March, 1995
SHEET No. 1 OF 2 SHEETS

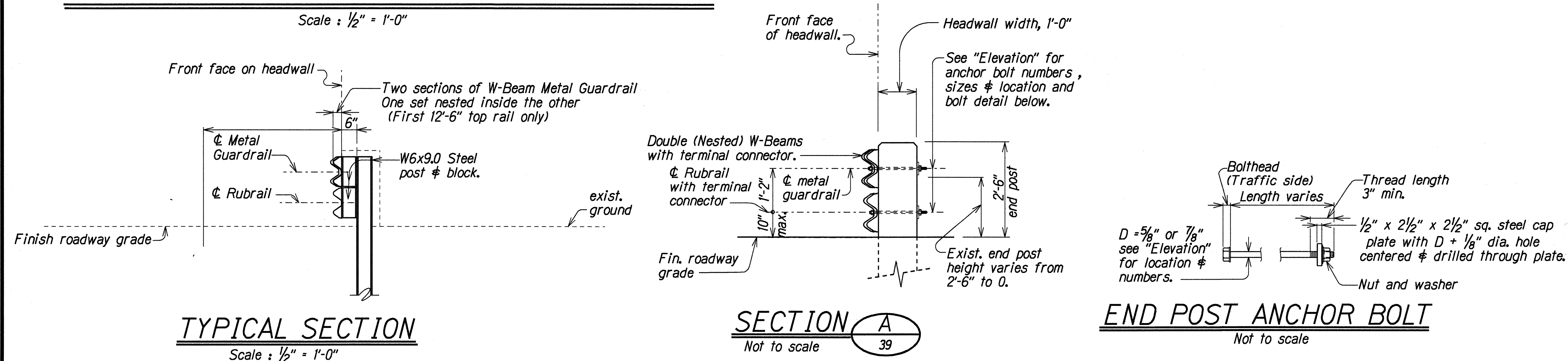
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-019-2(34)	1995	39	40



- Note:
- W-Beam Terminal Connectors not shown in elevation See Elevation on Sheet 38.

ELEVATION AT CULVERT HEADWALL CONNECTION

Scale : $\frac{1}{2}$ " = 1'-0"



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
GUARDRAIL CONNECTION TYPE-I DETAILS AND NOTES	
HAWAII BELT ROAD RESURFACING KULANA STREET TO WAILUKU BRIDGE F. A. Project No. STP-019-2(34)	
Scale: As Shown	Date: March, 1995
SHEET No. 2 OF 2 SHEETS	