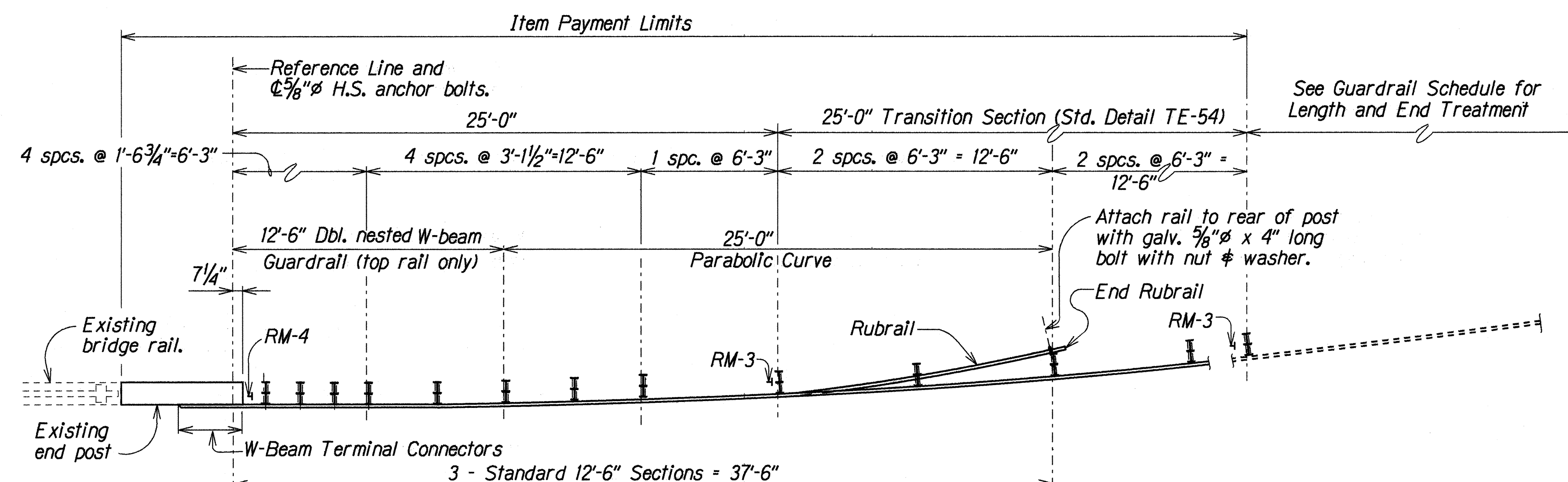
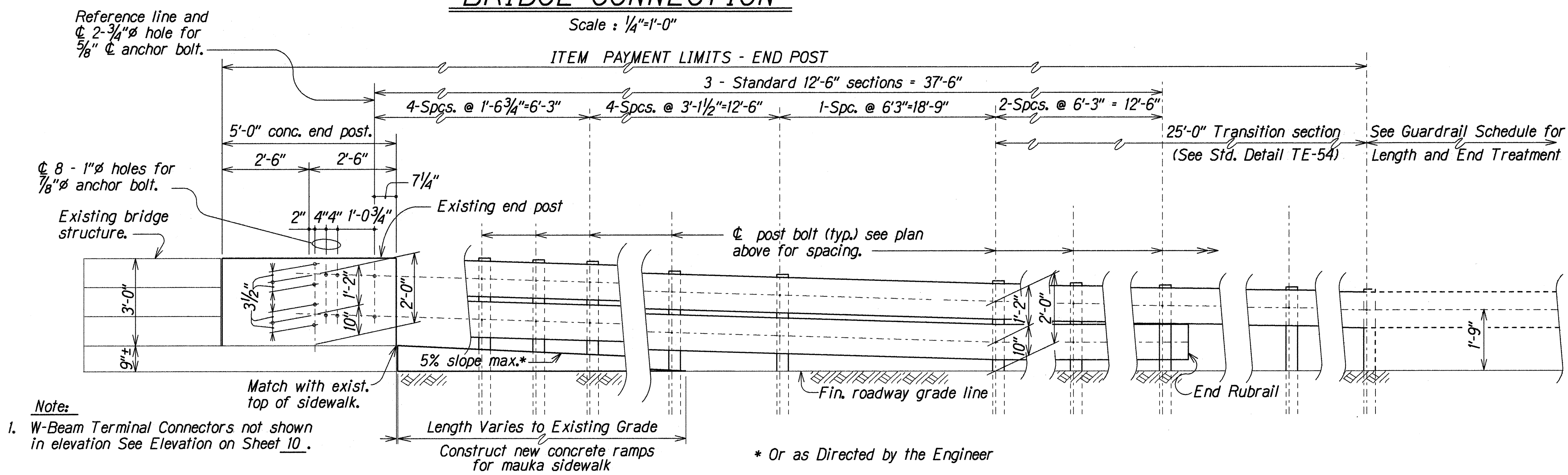


FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-019-1(25)	1997	9	13



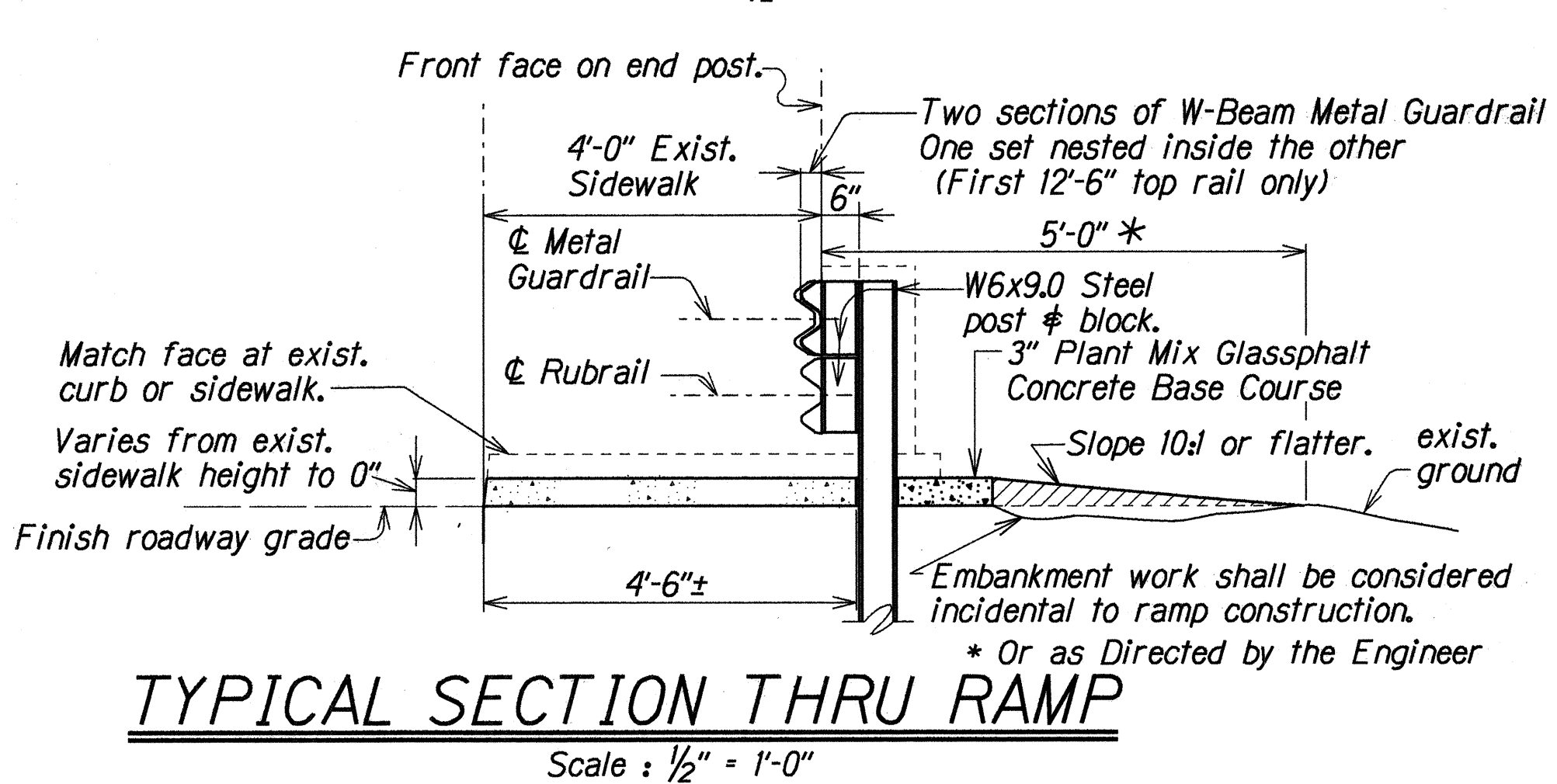
GUARDRAIL PLAN WITH BRIDGE CONNECTION

Scale : $\frac{1}{4}$ " = 1'-0"

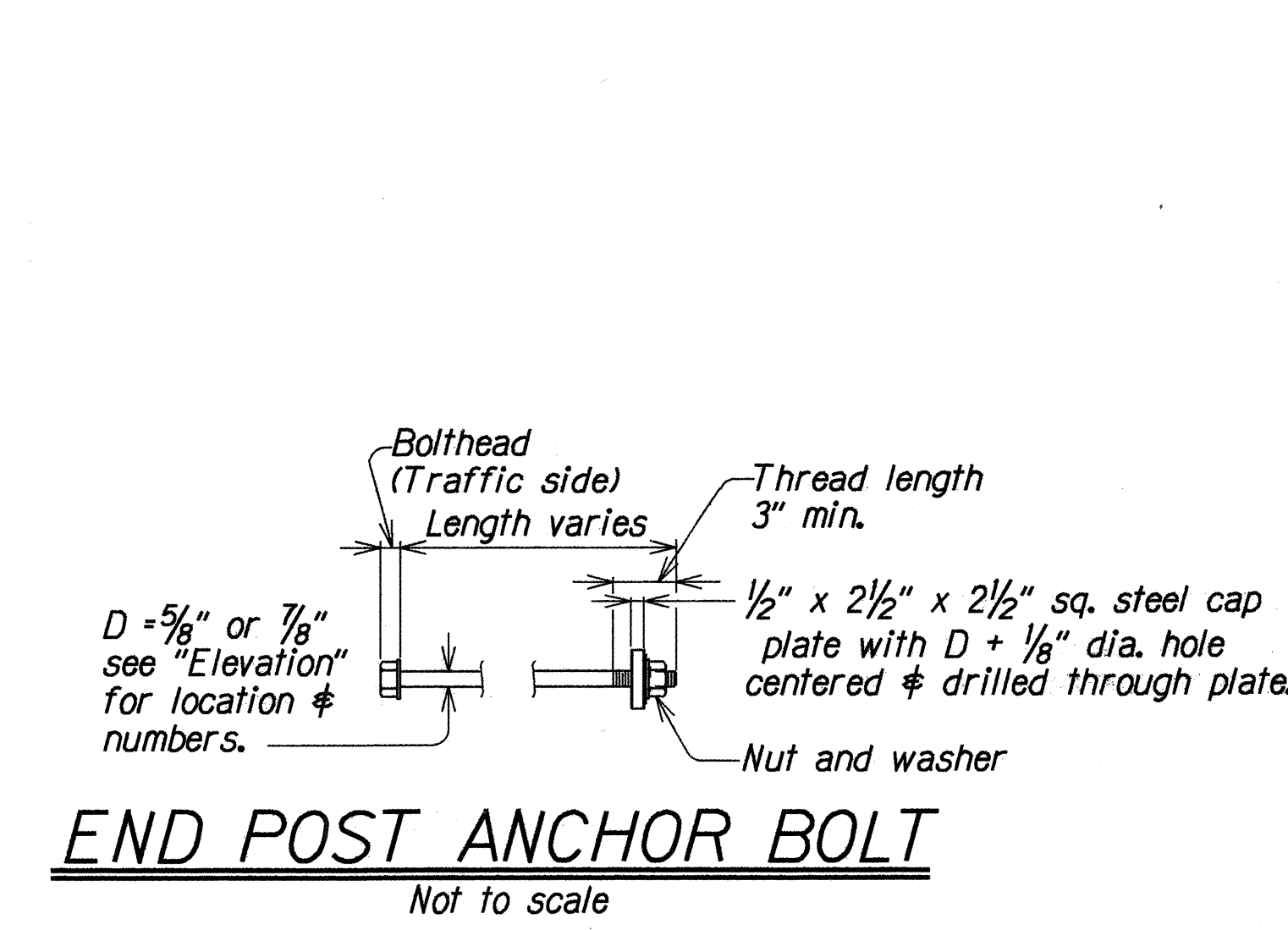
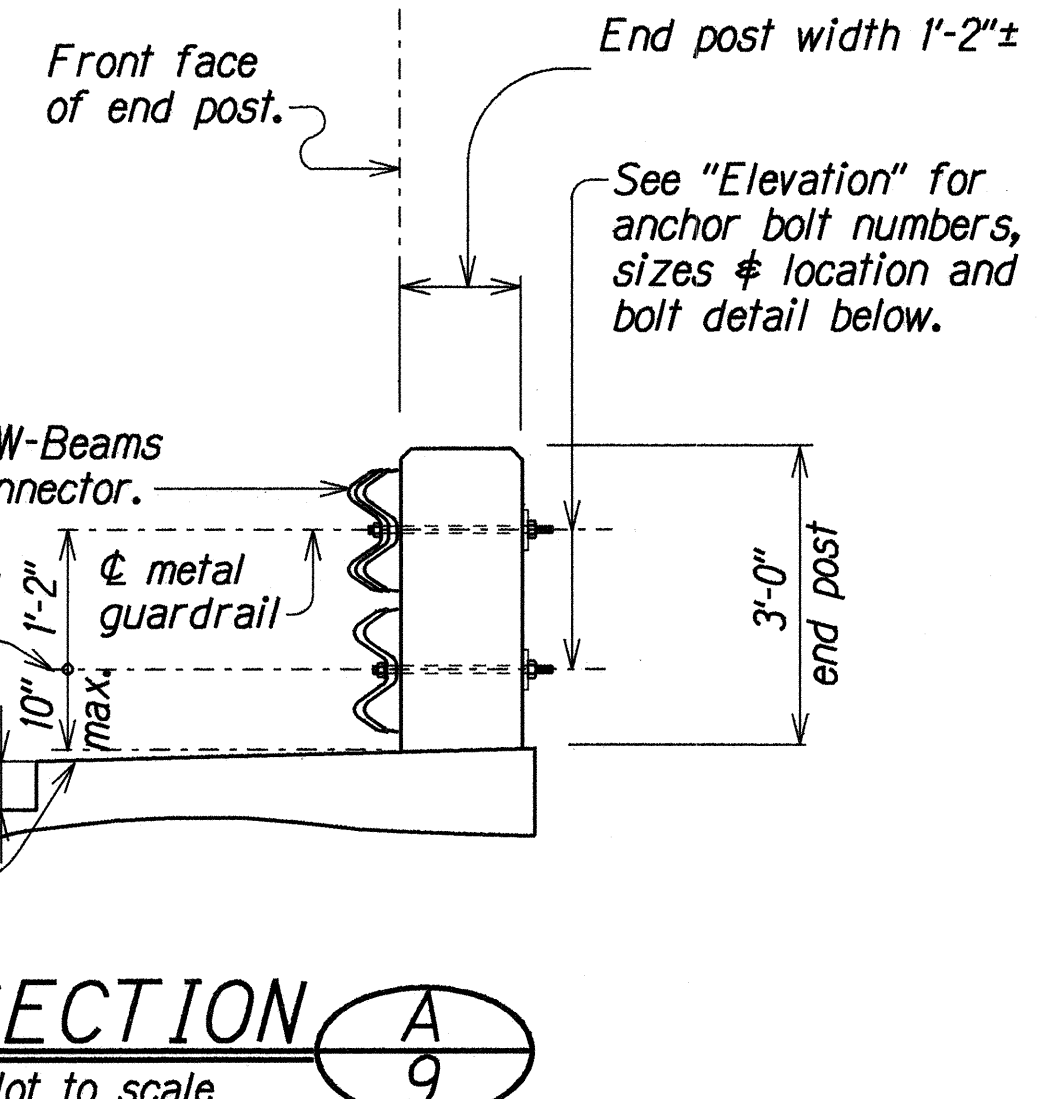


ELEVATION AT BRIDGE CONNECTION

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



TYPICAL SECTION THRU RAMP



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

NIENIE BRIDGE CONNECTION
DETAILS AND NOTES
GUARDRAIL AND SHOULDER IMPROVEMENTS,
HAWAII BELT ROAD, HONOKAA TO WAIMEA
F.A. PROJECT NO. STP-019-1(25)

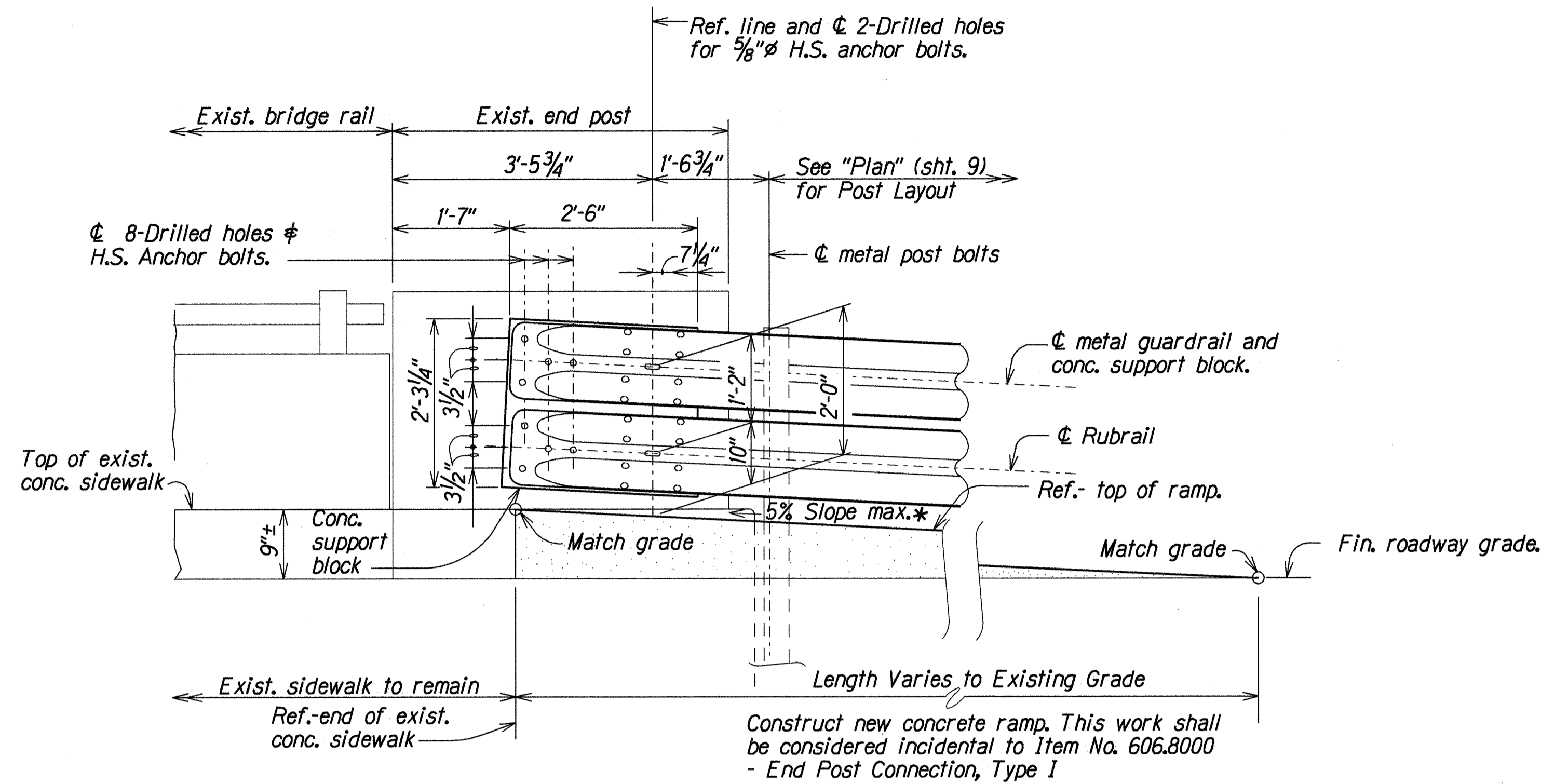
Scale: As Shown Date: Sept., 1996

SHEET No. 1 OF 2 SHEETS

FED. ROAD DIST.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-019-1(25)	1997	10	13

NOTES:

- 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.
- Construction of ramp shall conform to the requirements of Section 608-Sidewalks, of the Standard Specifications.
- 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, concrete and reinforcing for ramps, premolded joint filler, 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-58, TE-59, and TE-60.
- 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.



ELEVATION Not to scale

* Or as Directed by the Engineer

ORIGINAL PLAN	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	
DATE	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
NIENTE BRIDGE CONNECTION
DETAILS AND NOTES
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HAWAII BELT ROAD, HONOKAA TO WAIMEA
F.A. PROJECT NO. STP-019-1(25)
Scale: As Shown Date: Sept., 1996
SHEET No. 2 OF 2 SHEETS