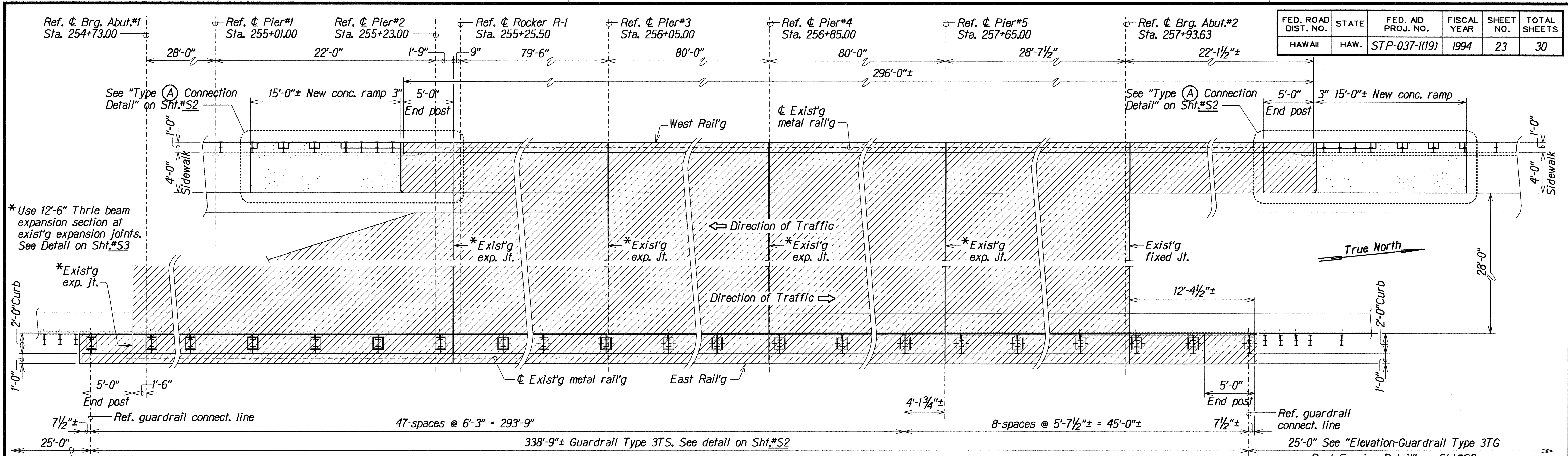
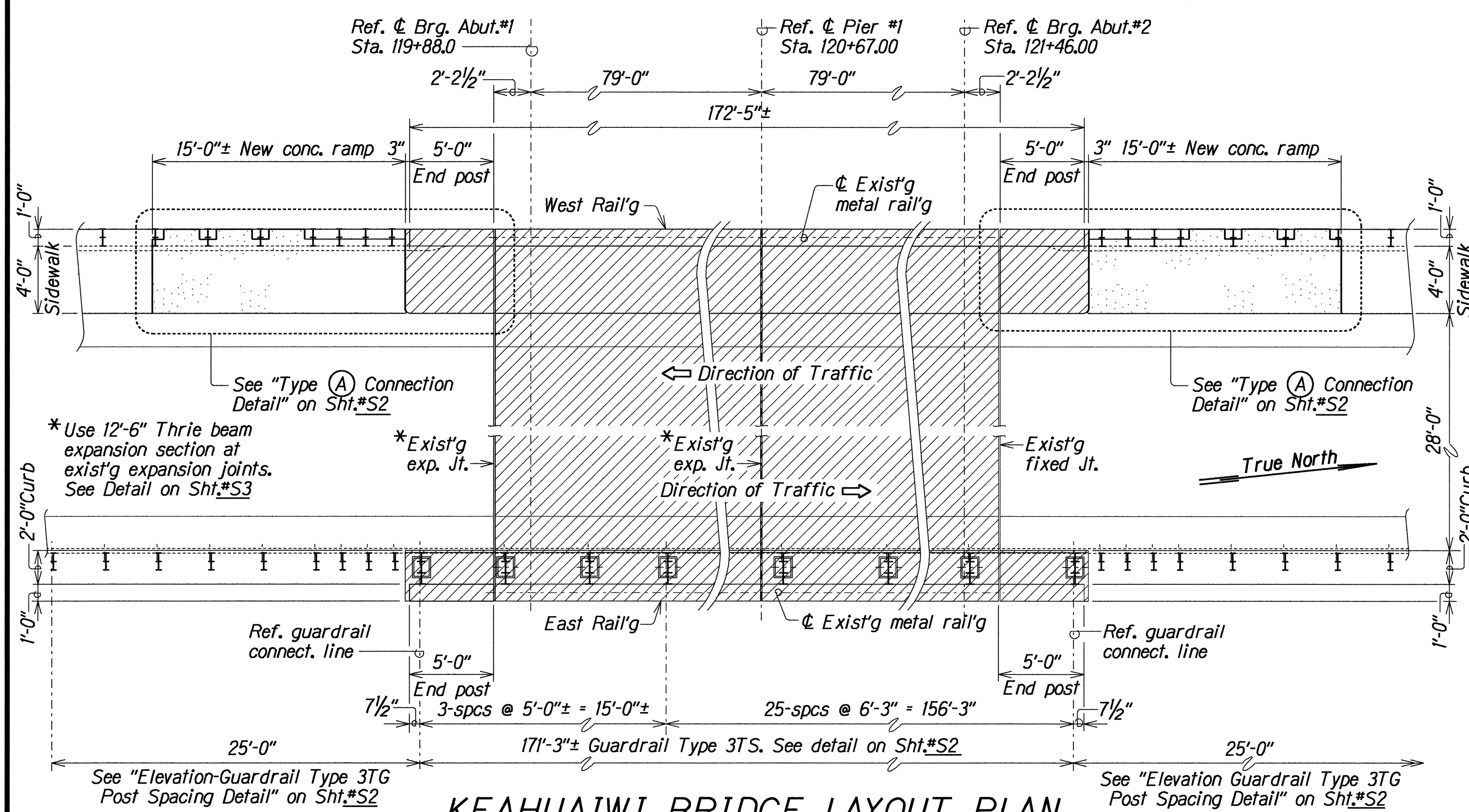




KALIALINUI BRIDGE LAYOUT PLAN
Scale: 1" = 5'-0"

GENERAL NOTES

1. See Standard Specifications for Road & Bridge Construction, (Hawaii, 1985) & Special Provisions.
2. Guardrail Type 3 Thrie Beam-see "Department of Transportation Standard Plan TE-57", and additional details on Sht.#S3
3. "Terminal Connector" shall be fabricated from 10 gauge steel conforming to the requirements of AASHTO M 180.
4. All anchor bolts shall be high strength bolts conforming to the requirements of ASTM A 325 and Special Provisions, Section 713.04.
5. Anchor bolt length or embedment depth shall be such that a snug fit of the elements and full thread engagement plus 1/4"(max) is attained.
6. "Terminal Connector", W8x10 spacer with rail post on base plate, and standard spacer; including all anchor bolts, cap PL's, nuts and washers, shall be hot-dip galvanized after fabrication.
7. First 25'-0" of guardrail adjoining "Terminal Connector" shall be of galvanized steel and supports spaced as shown on the detail drawings. This section of rail shall be placed on tangent to end post or parallel to roadway unless conditions at site renders it impossible to do so. Flare point to be determined in field.
8. Heads of through anchor bolts shall be placed on the traffic side of the rail.
9. Large impacting or vibratory type of equipment will not be permitted for drilling.
10. Drilling of through holes shall be done in such a manner as to prevent cone puncturing of the daylighting end.
11. Contract items will be paid for in units indicated in the Estimated Quantities.
12. The Contractor shall verify all dimensions in field before commencing with work.
13. The Contractor shall verify the location of all existing utility lines near structures and notify their respective owners before commencing with work.
14. The Contractor shall be responsible for the maintenance of the roadway prism and the protection of the adjacent property, utilities and existing and new structures from damage due to his operation and shall repair any damage at his expense to the satisfaction of the Engineer.
15. Existing bridge structure shown by hatch lines.



KEAHUAIWI BRIDGE LAYOUT PLAN
Scale: 1" = 5'-0"

ESTIMATED QUANTITIES					
ITEM NO.	DESCRIPTION	UNIT	QUANTITIES		
			Kalialinui Br.	Keahuaiwi Br.	Total
606.3112	Guardrail Type 3TG	L.F.	100'-0"	100'-0"	200'-0"
606.3221	Guardrail Type 3TS	L.F.	338'-9"	171'-3"	510'-0"
606.8010	Type (A) Connection	Ea.	2	2	4

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
**LAYOUT PLANS, GENERAL NOTES
AND ESTIMATED QUANTITIES**
**THRIE BEAM CONNECTION FOR
KEAHUAIWI BRIDGE AND KALIALINUI BRIDGE**
*Kula Highway Guardrail and Shoulder Improvement
F.A.P. No. STP-037-1(19)*
Scale: As Noted Date: May, 1994
SHEET No. 51 OF 3 SHEETS

ORIGINAL PLAN	DATE	BY
MAILED	MAY 1994	KSG
TRACED BY	DATE	BY
DESIGNED BY	DATE	BY
QUANTITIES BY	DATE	BY
CHECKED BY	DATE	BY