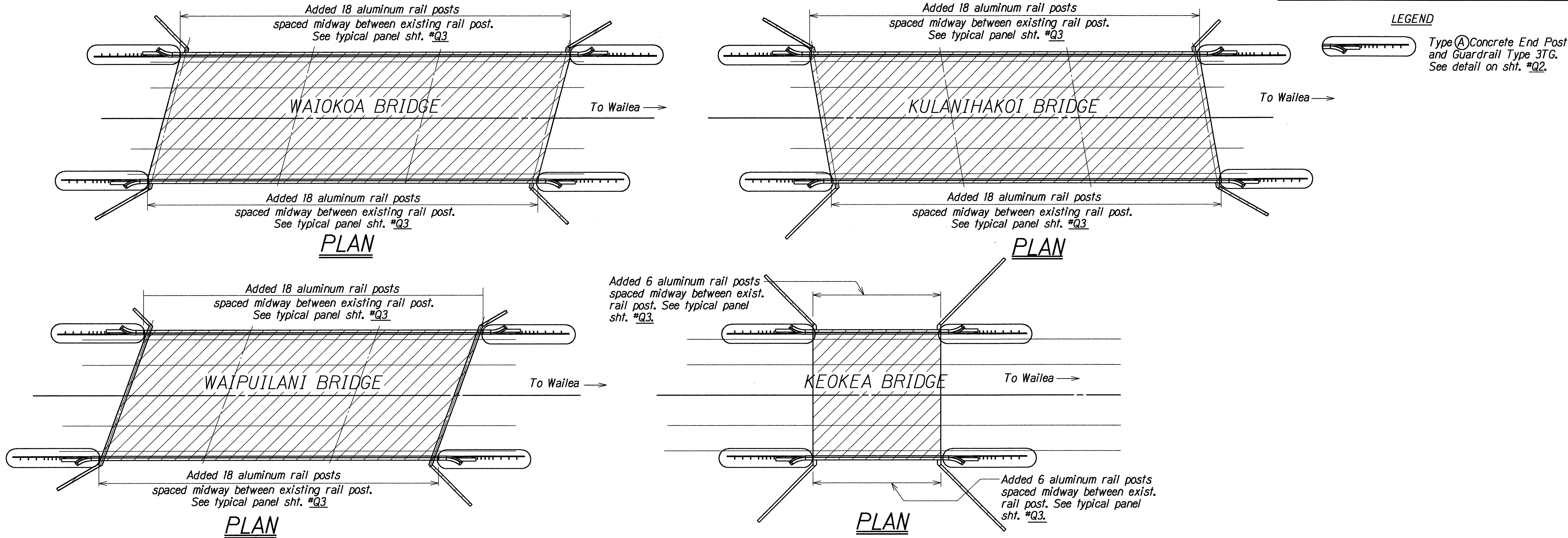


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-031-1(8)	1994	23	48



GENERAL NOTES:

- See Standard Specifications for Road & Bridge Construction, (Hawaii, 1985) & Special Provisions.
- See State of Hawaii, D.O.T. Standard Plans; Sht. #TE-57 for metal guardrail and "terminal connector" details.
- All anchor bolts shall be high strength bolts conforming to the requirements of ASTM A 325.
- "Terminal Connector" shall be fabricated from 10 gauge steel conforming to the requirements AASHTO M 180.
- "Terminal Connector" including all anchor bolts, cap PL's, nuts and washers, shall be hot-dip galvanized after fabrication.
- 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.
- Existing bridge structure shown by hatched area.
- 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 structures 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 the 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.
- The work necessary to connect guardrail to concrete end post shall include all labor, materials, tools, equipment and incidentals necessary to complete the work and shall be incidental to the metal guardrail and will not be paid for separately.
- Contract items will paid for in units indicated in the Estimated Quantities.

ESTIMATED QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITIES				TOTAL
			WAIKOA BR.	KULANIHAKOI BR.	WAIPIULANI BR.	KEOKEA BR.	
507.3700	Installation of Aluminum Rail Post	Ea.	36	36	36	12	120
507.7610	Type A Extended Concrete End Post	Ea.	4	4	4	4	16
606.3112	Guardrail Type 3TG	Lin. ft.	100	100	100	100	400

SURVEY PLOTTED BY	DATE
DRAWN BY	May 1994
TRACED BY	May 1994
NOTE BOOK	May 1994
QUANTITIES BY	May 1994
CHECKED BY	May 1994

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**SAFETY IMPROVEMENTS AT WAIKOA, KULANIHAKOI,
WAIPIULANI AND KEOKEA BRIDGES**

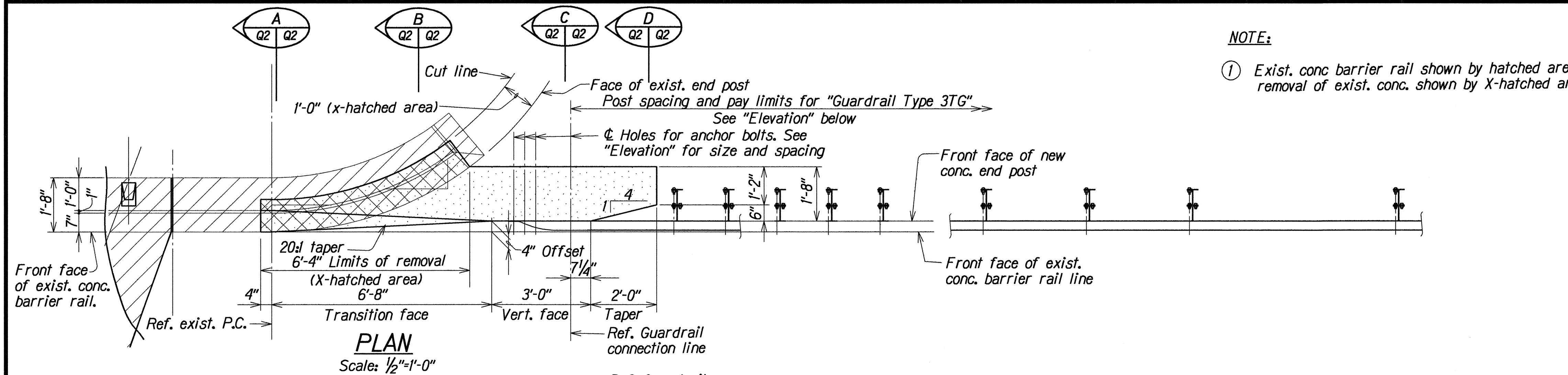
LAYOUT PLANS, GENERAL NOTES AND ESTIMATED QUANTITIES

PILIPIHI HIGHWAY RESURFACING
Vicinity of Kealia Pond to Kilohana Drive
Project No. STP-031-1(8)

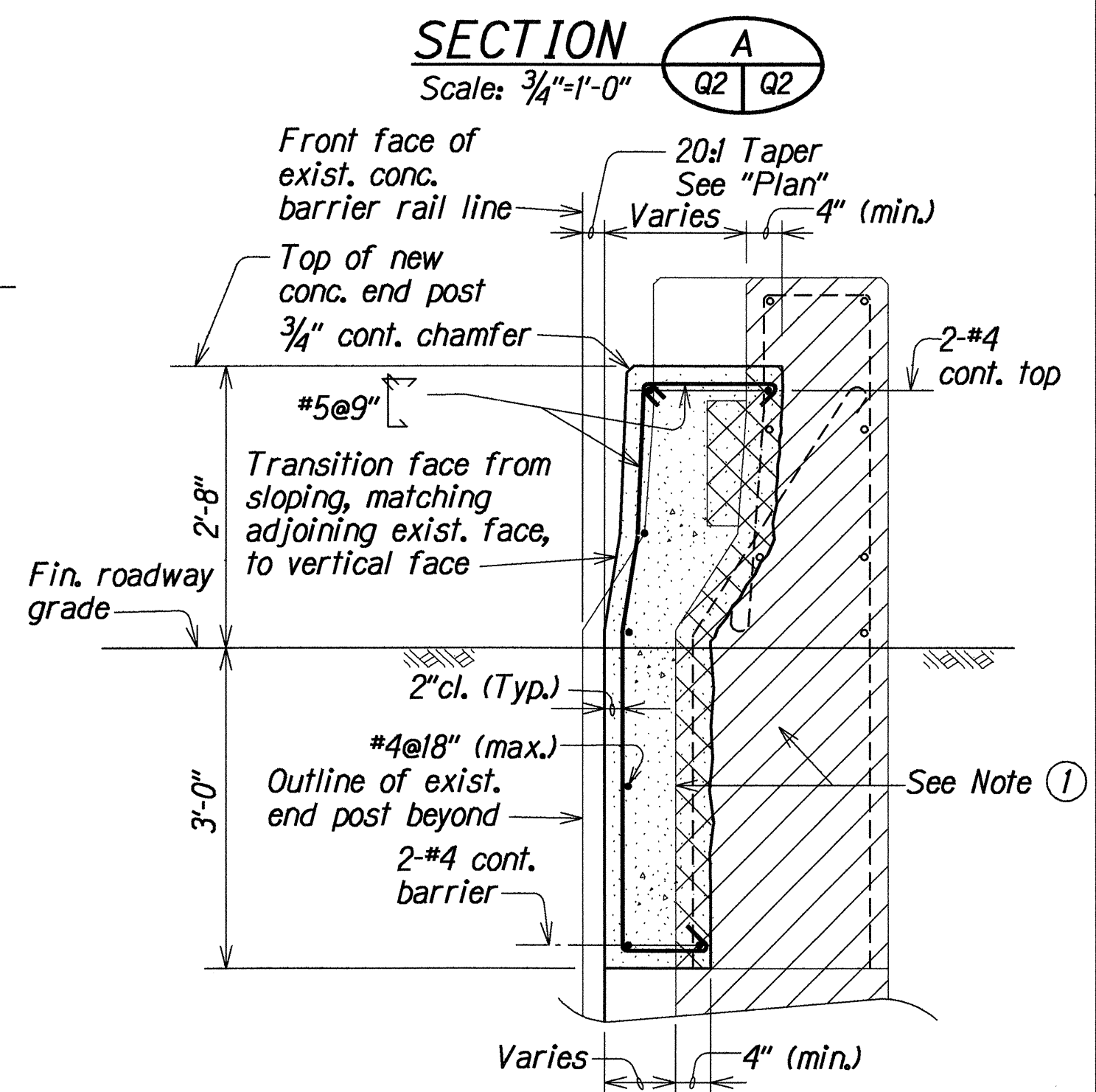
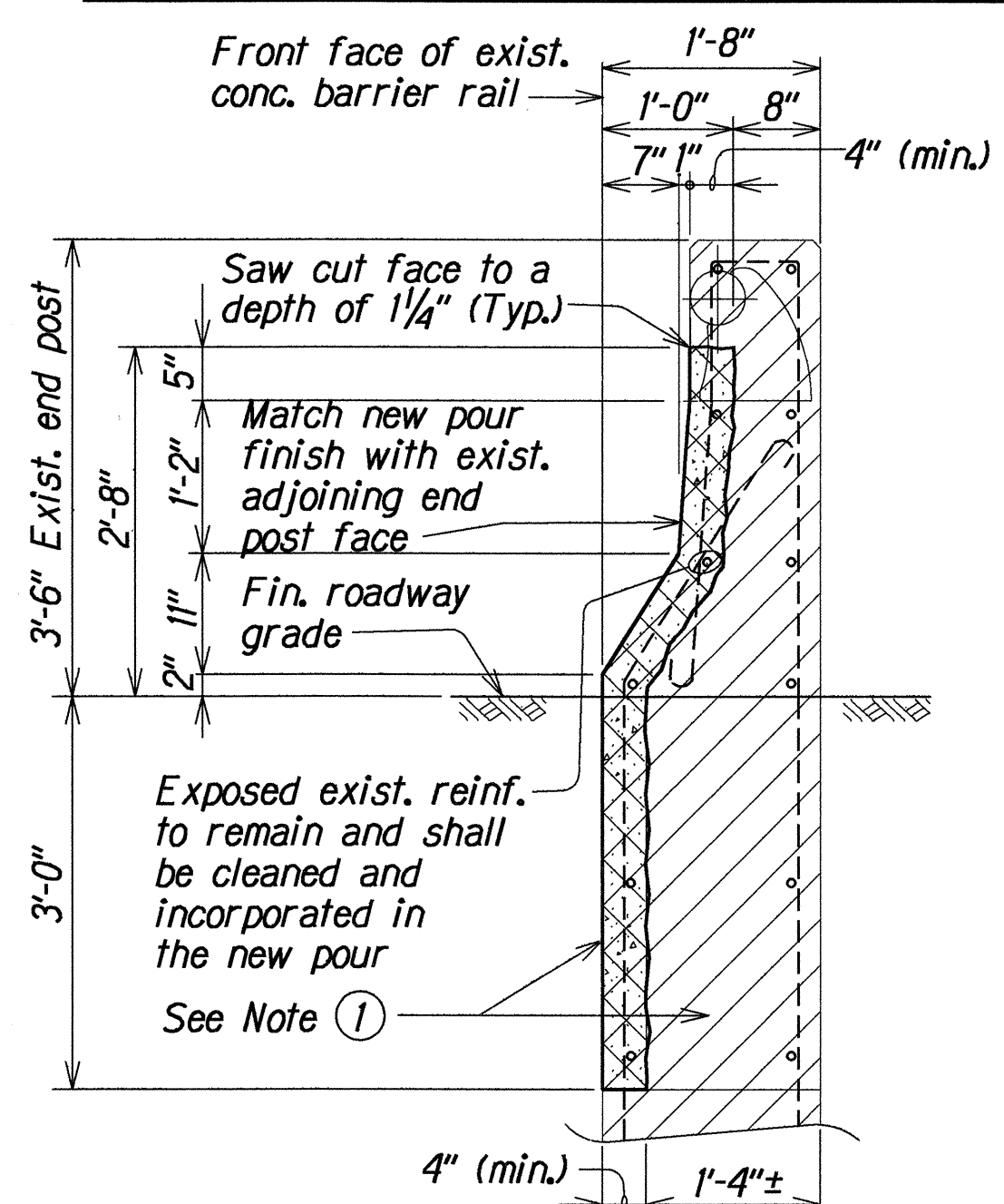
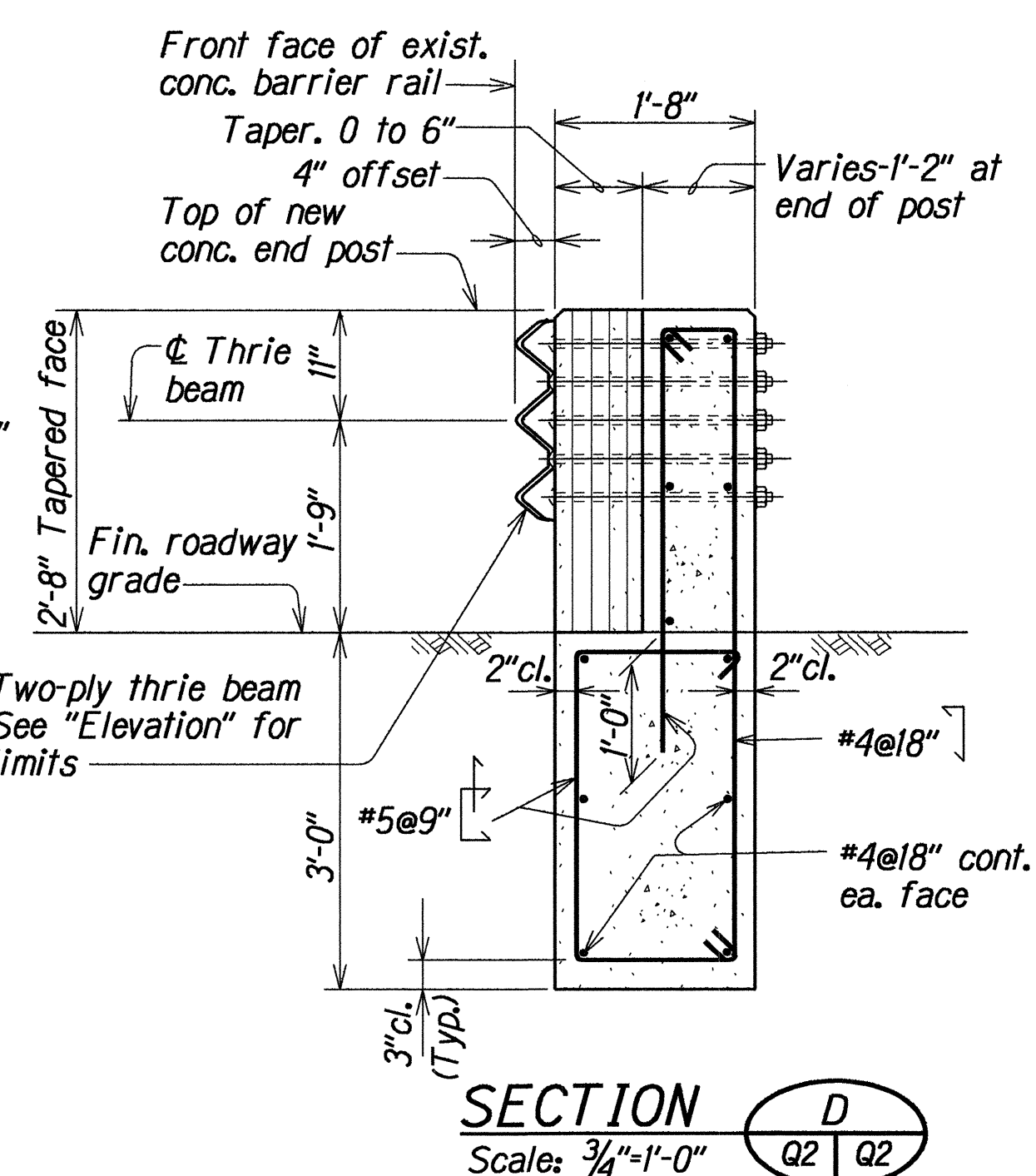
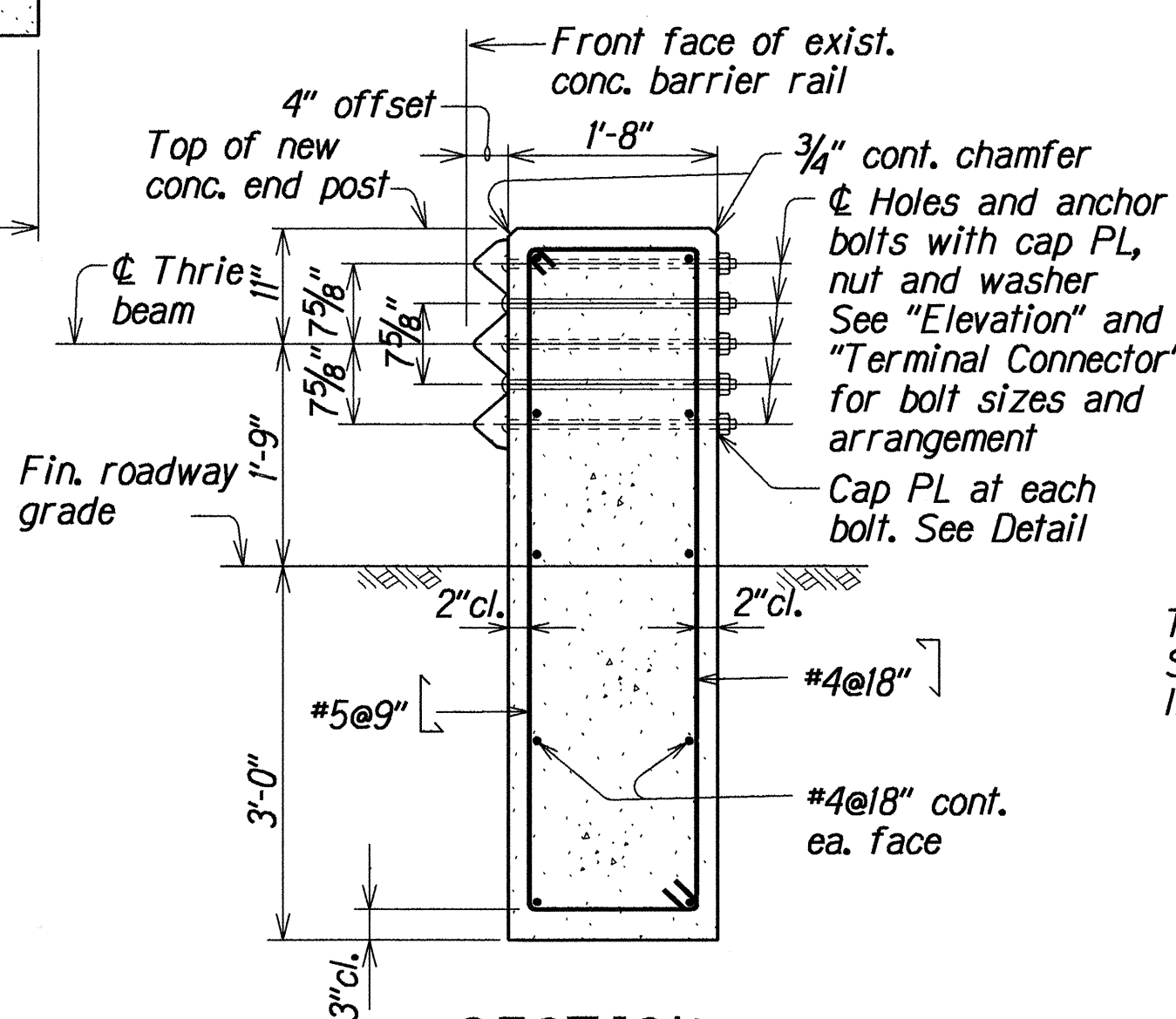
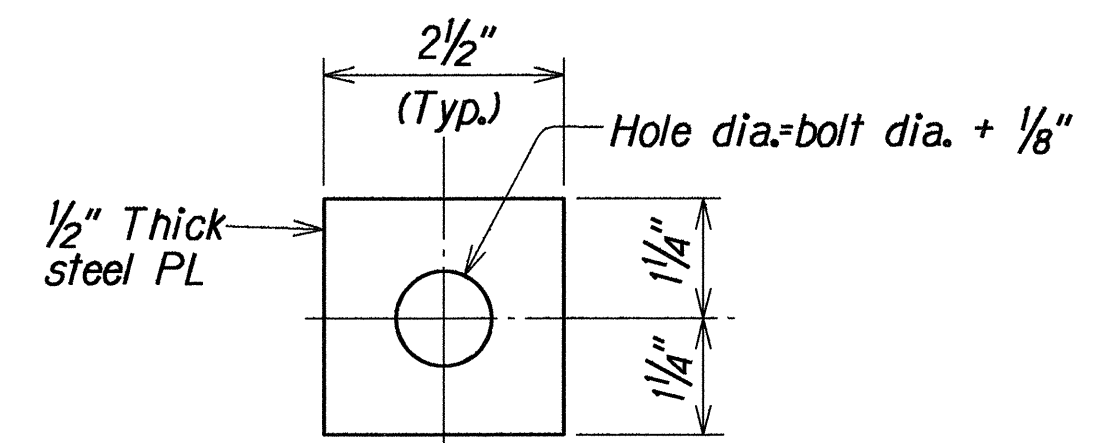
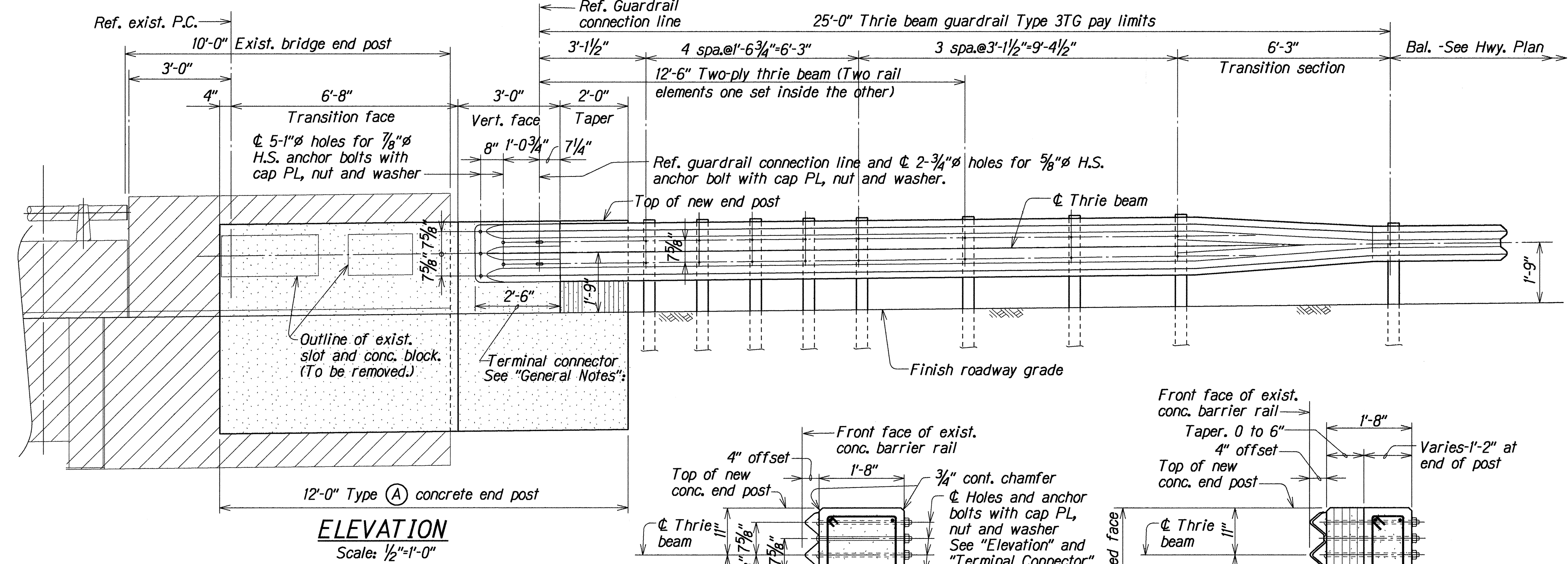
Scale: As Noted Date: May, 1994

SHEET No. 01 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	STP-031-1(8)	1994	24	48



NOTE:
 ① Exist. conc barrier rail shown by hatched area and removal of exist. conc. shown by X-hatched area.



TYPICAL TYPE (A) CONCRETE END POST AND GUARDRAIL TYPE 3TG DETAILS

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
SAFETY IMPROVEMENTS AT WAIKOA, KULANIHAKOI, WAIPIULANI AND KEOKEA BRIDGES
TYPE (A) END POST AND GUARDRAIL TYPE 3TG
 PULANI HIGHWAY RESURFACING
 Vicinity of Kealia Pond to Kiloahana Drive
 Project No. STP-031-1(8)
 Scale: As Noted Date: May, 1994
 SHEET No. Q2 OF 4 SHEETS

