

INSTALL NEW GUARD RAIL, RUB RAIL (25 LF) AND POSTS BETWEEN
 @ CHANNEL STA 17 + 29.51 (O/S 0.41' RIGHT)
 @ KAUMUALII HWY STA 278+34.09 (O/S 78.61' RIGHT)
 ATTACH GUARD RAIL TO HEADWALL (SEE SH. 8A).
 AND
 @ CHANNEL STA 16 + 75.03 (O/S 134.90' LEFT)
 @ KAUMUALII HWY STA 279+73.23 (O/S 24.60' RIGHT)
 INSTALL W-BEAM END SECTION (FLARED).
 INSTALL REFLECTOR MARKERS (RM-3) (6 TOTAL)

CONSTRUCT CRM WALL WITH CHAIN LINK FENCE
 @ CHANNEL STA 16 + 70.06 (O/S 22.86' LEFT)
 @ KAUMUALII HWY STA 278+59.52 (O/S 21.22' RIGHT)
 TOP WALL = 12.50, FINISH GROUND = 12.00
 AND
 @ CHANNEL STA 16 + 75.07 (O/S 71.72' LEFT)
 @ KAUMUALII HWY STA 279+9.42 (O/S 25.68' RIGHT)
 TOP WALL ELEV. = 12.50, FINISH GROUND = 11.50
 TOP CONC APRON ELEV. = 11.00

CRM WALL WITH CHAIN LINK FENCE
 @ CHANNEL STA 17+06.40 (O/S 39.86' LEFT)
 @ KAUMUALII HWY STA 278+76.23 (O/S 56.73' RIGHT)
 TOP WALL ELEV = 13.00', FINISH GROUND ELEV = 12.50'
 TOP CONC APRON ELEV = 4.20'

CONSTRUCT CRM WALL WITH CHAIN LINK FENCE BETWEEN
 @ CHANNEL STA 17 + 22.30 (O/S 5.51' LEFT)
 @ KAUMUALII HWY STA 278+40.15 (O/S 71.04' RIGHT)
 MATCH INTO EXIST CRM WALL ELEV. (TOP WALL = 13.70')
 AND
 @ CHANNEL STA 16 + 93.3 (O/S 71.92' LEFT)
 @ KAUMUALII HWY STA 279+9.35 (O/S 43.95' RIGHT)
 TOP WALL ELEV = 12.50', FINISH GROUND ELEV = 11.50
 TOP CONC APRON ELEV. = 11.50

CONSTRUCT NEW
 CONCRETE APRON
 (SEE DETAIL SH. 20)

BEGIN CRM WALL WITH
 CHAIN LINK FENCE (51 LF ±)
 @ CHANNEL STA 17 + 24.03
 (O/S 12.66' RIGHT)
 @ KAUMUALII HWY STA 278+21.2
 (O/S 72.56' RIGHT)
 TOP WALL ELEV. = 12.50 (TYP.)

CORNER CRM WALL WITH
 CHAIN LINK FENCE.
 @ CHANNEL STA 17 + 19.98
 (O/S 10.84' RIGHT)
 @ KAUMUALII HWY STA 278+23.3
 (O/S 68.60' RIGHT)

INSTALL NEW GUARD RAIL AND POSTS BETWEEN
 @ CHANNEL STA 16 + 79.25 (O/S 35.5' RIGHT)
 @ KAUMUALII HWY STA 278+00.6 (O/S 26.5' RIGHT)
 INSTALL W-BEAM END SECTIONS (ROUNDED).
 AND
 @ CHANNEL STA 17 + 21.85 (O/S 12.78' RIGHT)
 @ KAUMUALII HWY STA 278+21.1 (O/S 70.37' RIGHT)
 INSTALL W-BEAM END SECTIONS (FLARED).

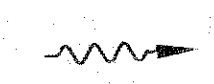
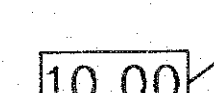
@ CHANNEL STA 16 + 88.69
 (O/S 32.62' RIGHT)
 @ KAUMUALII HWY STA 278+02.6
 (O/S 36.17' RIGHT)
 CORNER CRM WALL WITH
 CHAIN LINK FENCE

INSTALL ATTENUATORS
 SEE DETAIL SHEET 8A

@ CHANNEL STA 16 + 80.70
 (O/S 32.62' RIGHT)
 @ KAUMUALII HWY STA 278+03.1
 (O/S 28.20' RIGHT)
 END CRM WALL WITH CHAIN LINK FENCE

INSTALL NEW GUARD RAIL, RUB RAIL (25 LF) AND POSTS BETWEEN
 @ CHANNEL STA 16 + 31.87 (O/S 33.43' RIGHT)
 @ KAUMUALII HWY STA 278+05.17 (O/S 20.68' LEFT)
 ATTACH BEGIN GUARD RAIL TO HEADWALL (SEE SH. 8A).
 AND
 @ CHANNEL STA 16 + 18.15 (O/S 59.01' RIGHT)
 @ KAUMUALII HWY STA 277+80.87 (O/S 35.94' LEFT)
 INSTALL W-BEAM END SECTION (ROUNDED).
 INSTALL REFLECTOR MARKERS (RM-3) (2 TOTAL)

LEGEND

-  SWALE
-  FINISH GRADE ELEVATION
-  FINISH GRADE CONTOUR
-  EXISTING GRADE CONTOUR

INSTALL NEW GUARD RAIL, RUB RAIL (25 LF),
 AND POSTS BETWEEN
 @ CHANNEL STA 16 + 70.73 (O/S 23.00' LEFT)
 @ KAUMUALII HWY STA 278+61.13 (O/S 20.71' RIGHT)
 ATTACH BEGIN GUARD RAIL TO HEADWALL (SEE SH. 8A).
 AND
 @ CHANNEL STA 16 + 73.54 (O/S 134.71' LEFT)
 @ KAUMUALII HWY STA 279+72.97 (O/S 23.12' RIGHT)
 INSTALL W-BEAM END SECTION (FLARED).
 INSTALL REFLECTOR MARKERS (RM-3) (5 TOTAL)

CORNER CRM WALL
 @ CHANNEL STA 16 + 80.29 (O/S 62.00' LEFT)
 @ KAUMUALII HWY STA 278+98.98 (O/S 31.10' RIGHT)
 TOP WALL ELEV = 12.50, FINISH GROUND ELEV = 12.00
 TOP CONC. APRON ELEV = 9.70

CORNER CRM WALL
 @ CHANNEL STA 16 + 80.29 (O/S 39.98' LEFT)
 @ KAUMUALII HWY STA 278+76.91 (O/S 30.36' RIGHT)
 TOP WALL ELEV = 12.50, FINISH GROUND ELEV = 12.00
 TOP CONC. APRON ELEV = 4.20

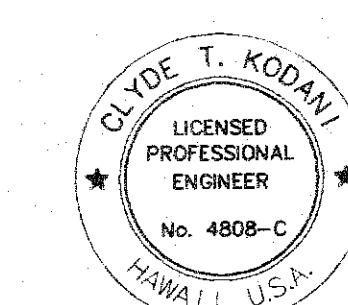
INSTALL NEW GUARD RAIL, RUB RAIL (25 LF)
 AND POSTS BETWEEN
 @ CHANNEL STA 16 + 29.47 (O/S 23.00' LEFT)
 @ KAUMUALII HWY STA 278+61.02 (O/S 20.57' LEFT)
 ATTACH BEGIN GUARD RAIL TO HEADWALL (SEE SH. 8A).
 AND
 @ CHANNEL STA 16 + 20.57 (O/S 93.91' LEFT)
 @ KAUMUALII HWY STA 279+31.03 (O/S 28.89' LEFT)
 INSTALL W-BEAM END SECTION (FLARED).
 INSTALL REFLECTOR MARKERS (RM-3) (3 TOTAL)

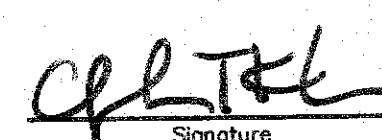
KAUMUALII HIGHWAY CULVERT CROSSING

SCALE: 1" = 20'

TRUE NORTH

TO
 LIHUE



THIS WORK WAS PREPARED BY ME
 OR UNDER MY SUPERVISION

 May 24, 1995

THIS SHEET REPLACES SHEET NO. 6				
REVISION	DATE	DESCRIPTION	BY	APPROVED
STATE OF HAWAII				
HOUSING FINANCE AND DEVELOPMENT CORPORATION				
HANAPEPE DRAINAGE IMPROVEMENT PROJECT				
KAUMUALII HIGHWAY CULVERT CROSSING				
KODANI AND ASSOCIATES, INC.				
LIHUE, KAUAI, HAWAII 96766				
DESIGNED BY:	DRAWN BY:	CHECKED BY:	SHEET 6A OF 22 SHEETS	