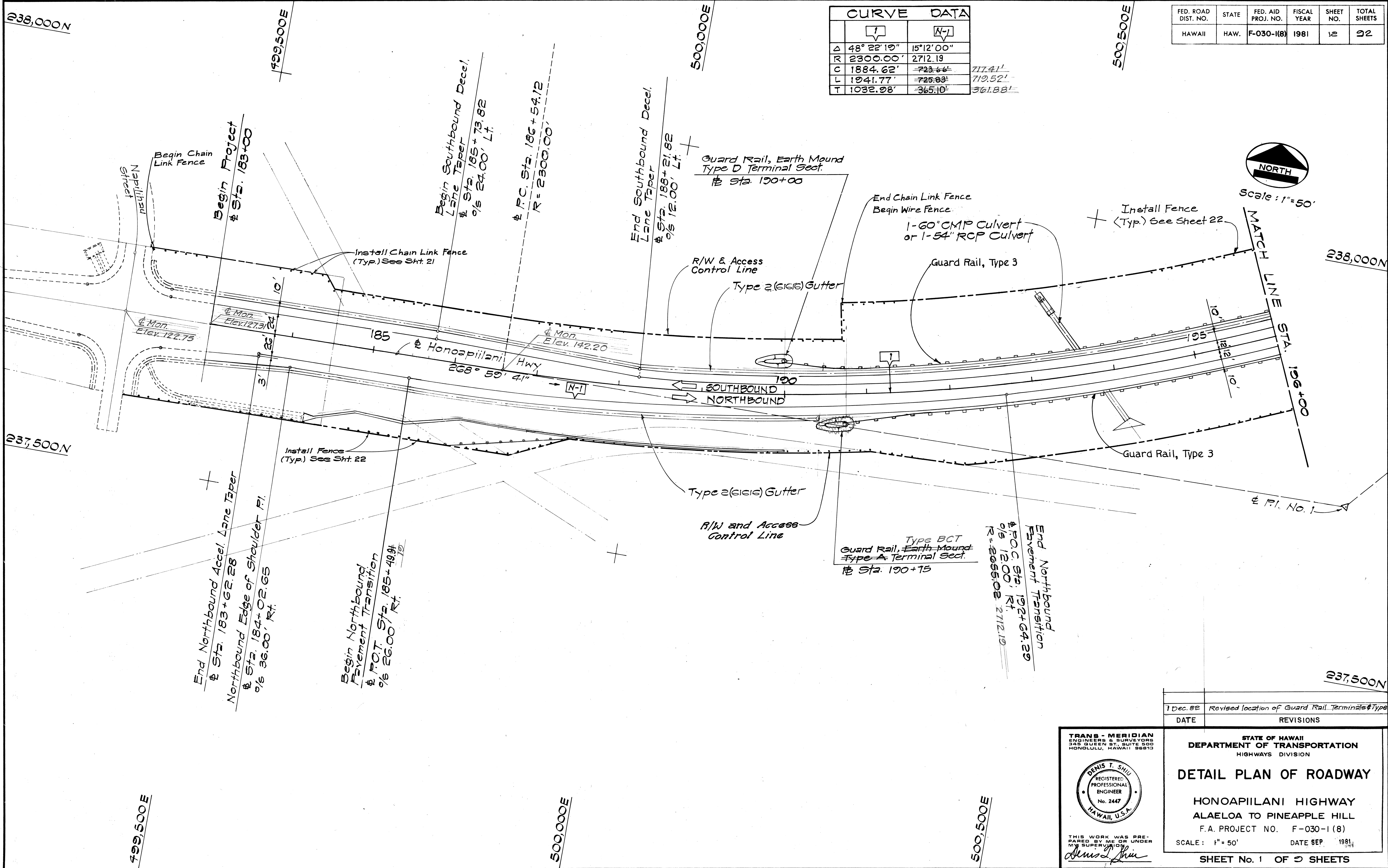


ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	TRACED BY	
	CHECKED BY	
	QUANTITIES BY	
	CHECKED BY	



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(8)	1981	12	22

DATE	REVISIONS
1 Dec. 82	Revised location of Guard Rail Terminals & Type

TRANS - MERIDIAN
ENGINEERS & SURVEYORS
345 QUEEN ST., SUITE 500
HONOLULU, HAWAII 96813

DENIS T. SHU
REGISTERED PROFESSIONAL ENGINEER
No. 2447
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Denis T. Shu

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

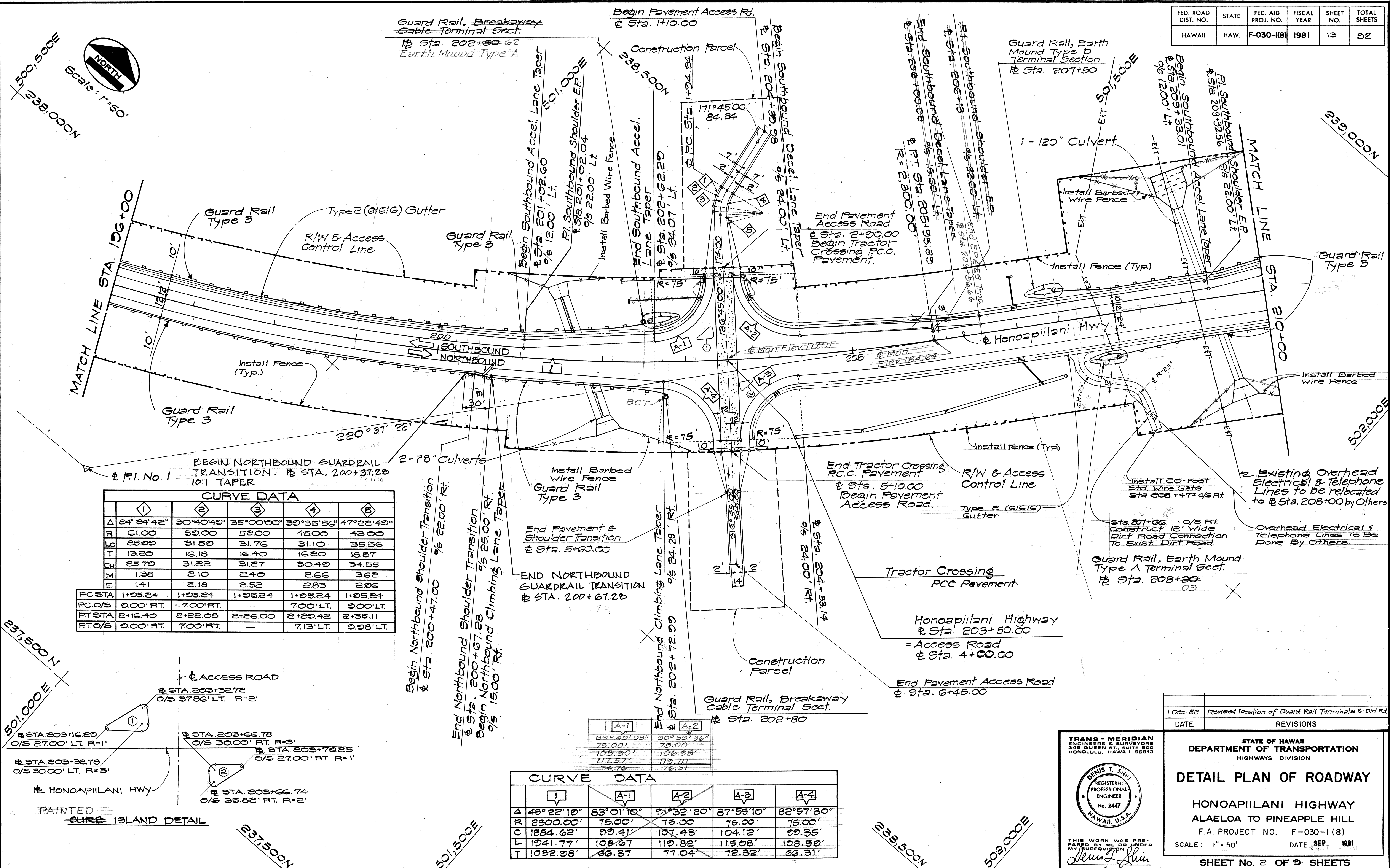
DETAIL PLAN OF ROADWAY

HONOAPIILANI HIGHWAY
ALAELOA TO PINEAPPLE HILL
F.A. PROJECT NO. F-030-1(8)
SCALE: 1" = 50' DATE SEP 1981

SHEET No. 1 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(8)	1981	13	22

Scale 1"=50'
NORTH



BEGIN NORTHBOUND GUARDRAIL TRANSITION. STA. 200+37.28 10:1 TAPER

	1	2	3	4	5
Δ	24° 24' 42"	30° 40' 42"	35° 00' 00"	32° 35' 56"	47° 22' 42"
R	61.00	59.00	52.00	45.00	43.00
LC	25.00	31.50	31.76	31.10	35.56
T	13.20	16.18	16.40	16.20	18.87
CH	25.73	31.22	31.27	30.49	34.55
M	1.38	2.10	2.40	2.66	3.62
E	1.41	2.18	2.52	2.83	2.96
PC STA	1+25.24	1+25.24	1+25.24	1+25.24	1+25.24
PT STA	2+16.40	2+28.08	2+26.00	2+29.42	2+35.11
PT O/S	9.00' RT.	7.00' RT.	—	7.00' LT.	9.00' LT.

	1	A-1	A-2	A-3	A-4
Δ	48° 22' 10"	83° 01' 10"	21° 32' 20"	87° 55' 10"	82° 57' 30"
R	2300.00'	75.00'	75.00'	75.00'	75.00'
C	1884.62'	99.41'	107.48'	104.12'	99.35'
L	1241.77'	108.67'	110.82'	115.03'	108.59'
T	1022.98'	66.37'	77.04'	72.32'	66.31'

DATE	
SURVEY PLATTED BY	
DRAWN BY	
TRACED BY	
NOTED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

TRANS - MERIDIAN
ENGINEERS & SURVEYORS
348 QUEEN ST., SUITE 500
HONOLULU, HAWAII 96813

REGISTERED PROFESSIONAL ENGINEER
No. 2447
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
DENIS T. SHU

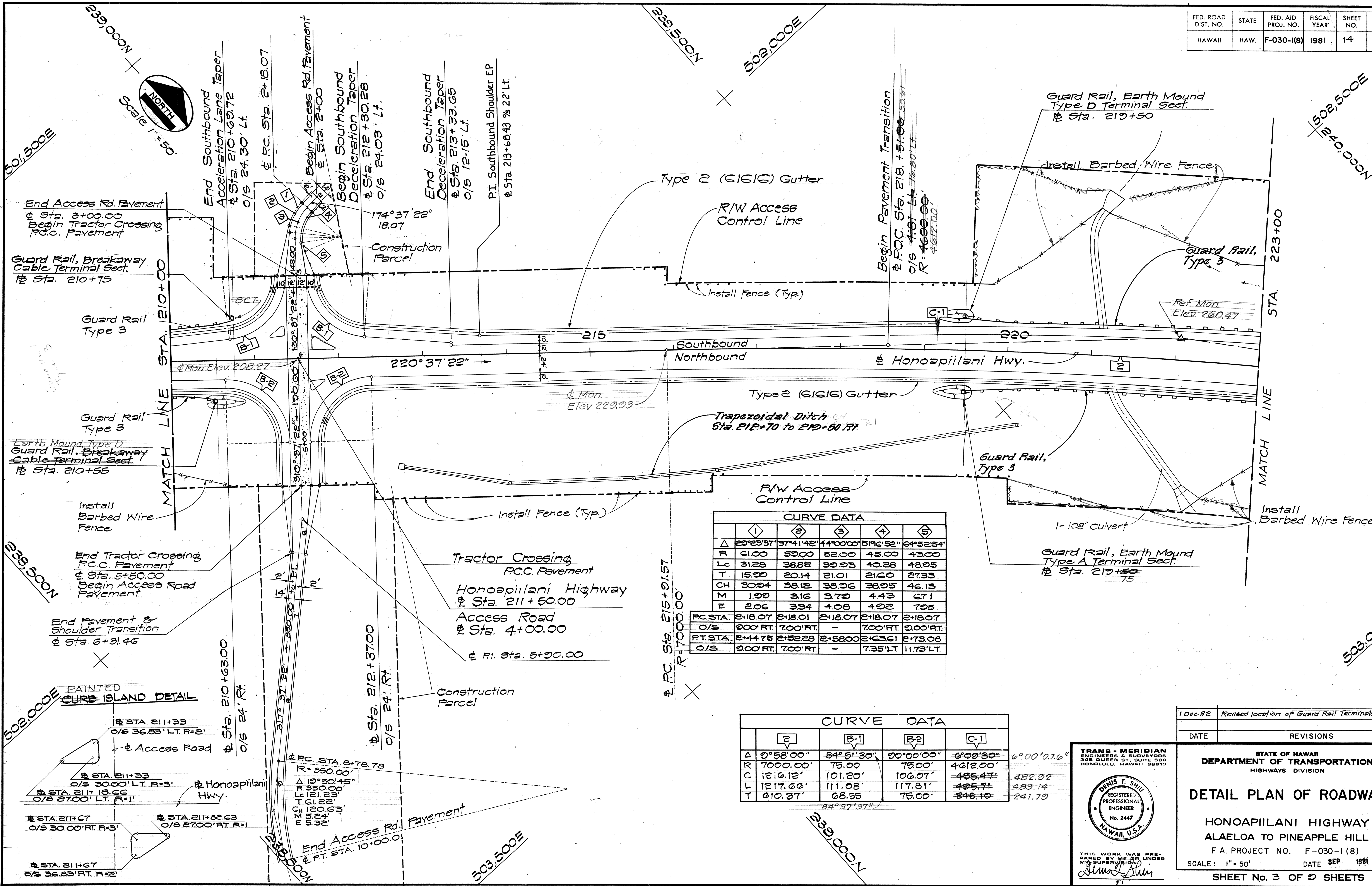
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAIL PLAN OF ROADWAY

HONOAPIILANI HIGHWAY
ALAELOA TO PINEAPPLE HILL
F.A. PROJECT NO. F-030-1(8)
SCALE: 1"=50' DATE SEP 1981

SHEET No. 2 OF 3 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(8)	1981	14	92



CURVE DATA					
Δ	1	2	3	4	5
22°23'37"	37°41'42"	14°00'00"	51°16'52"	64°52'54"	
R	61.00	52.00	52.00	45.00	43.00
Lc	31.28	38.82	39.23	40.28	48.25
T	15.20	20.14	21.01	21.60	27.33
CH	30.24	38.12	38.26	38.25	46.13
M	1.22	3.16	3.72	4.43	6.71
E	2.06	3.34	4.08	4.22	7.25
PC STA.	2+18.07	2+18.01	2+18.07	2+18.07	2+18.07
O/S	200' RT.	700' RT.	-	700' RT.	200' RT.
PT STA.	2+44.75	2+52.28	2+58.00	2+63.61	2+73.08
O/S	200' RT.	700' RT.	-	735' LT.	11.73' LT.

CURVE DATA					
Δ	2	B-1	B-2	C-1	
9°58'00"	84°51'30"	90°00'00"	6°00'30"	6°00'07.6"	
R	7000.00'	75.00	75.00'	4612.00'	
C	1216.12'	101.20'	106.07'	485.47'	482.92
L	1217.66'	111.08'	117.81'	485.71'	483.14
T	610.37'	68.55'	75.00'	248.10'	241.79

DATE	
DESIGNED BY	
CHECKED BY	
IN CHARGE	
NOTED BY	
DATE	

1 Dec 82

Revised location of Guard Rail Terminals & Type

DATE

REVISIONS

STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

DETAIL PLAN OF ROADWAY

HONOAPIILANI HIGHWAY

ALAELOA TO PINEAPPLE HILL

F.A. PROJECT NO. F-030-1(8)

SCALE: 1" = 50'

DATE SEP 1981

SHEET No. 3 OF 2 SHEETS

TRANS - MERIDIAN

ENGINEERS & SURVEYORS

345 QUEEN ST., SUITE 500

HONOLULU, HAWAII 96813

REGISTERED PROFESSIONAL ENGINEER

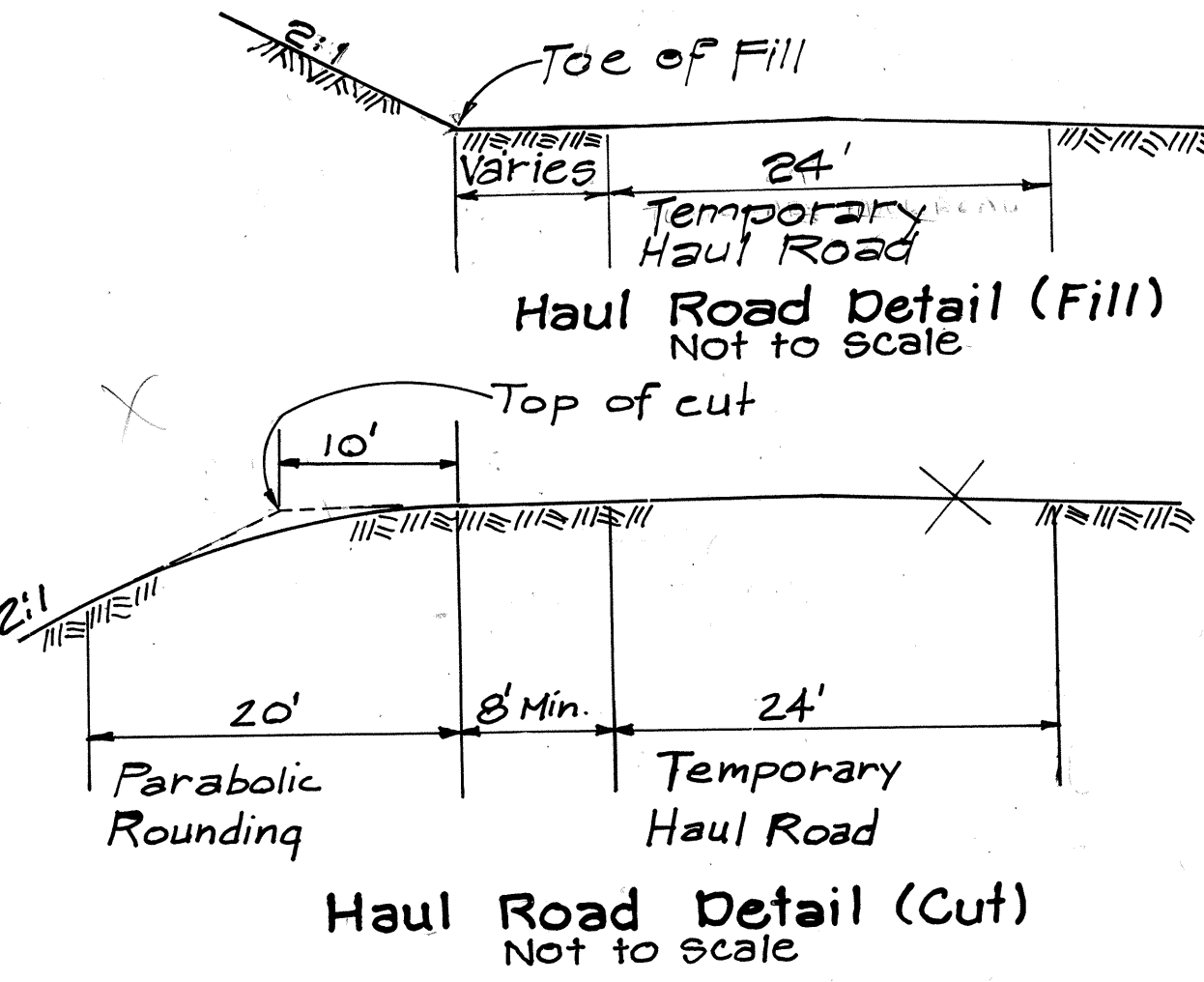
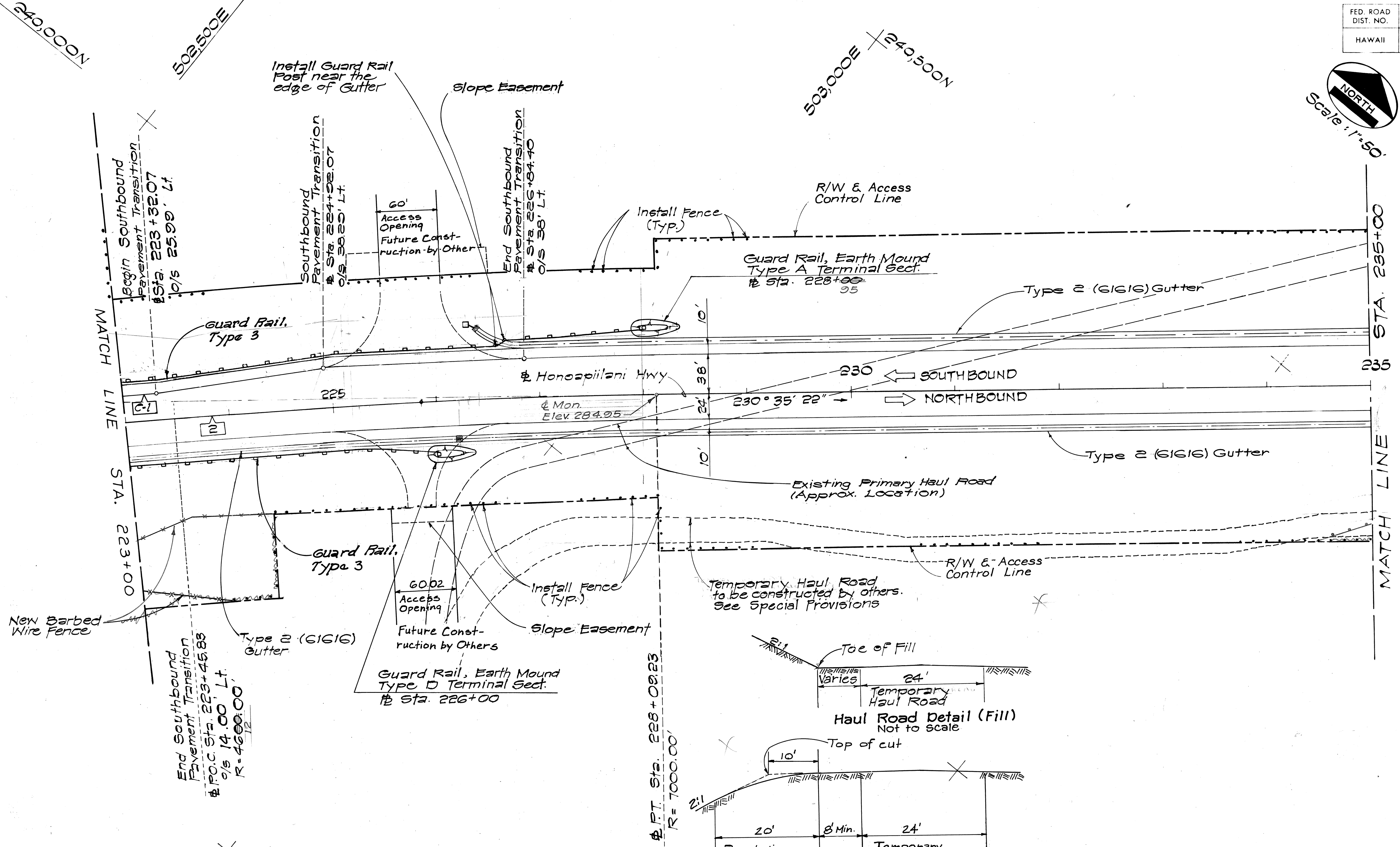
No. 2447

HAWAII, U.S.A.

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Denis T. Shiu

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(8)	1981	15	22



	[2]	[C-1]	[B-1]	[B-2]	[B-3]
Δ	2°58'00"	6°09'30"	84°12'40"	82°11'10"	20°43'20"
R	7000.00'	4612.00'	75.00'	75.00'	75.00'
C	1216.12'	495.47'	100.57'	105.31'	106.73'
L	1217.66'	495.71'	110.23'	116.74'	118.76'
T	610.37'	248.10'	67.78'	73.24'	75.25'

DATE	REVISIONS
1 Dec. 82	Revised location of Guard Rail Terminals & Type

TRANS - MERIDIAN
ENGINEERS & SURVEYORS
345 QUEEN ST., SUITE 500
HONOLULU, HAWAII 96813

REGISTERED PROFESSIONAL ENGINEER
No. 2447
HAWAII, U.S.A.

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Denis T. Shin

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAIL PLAN OF ROADWAY

HONOAPIILANI HIGHWAY
ALAELOA TO PINEAPPLE HILL
F.A. PROJECT NO. F-030-1(8)
SCALE: 1" = 50' DATE SEP 1981

SHEET No. 4 OF 2 SHEETS

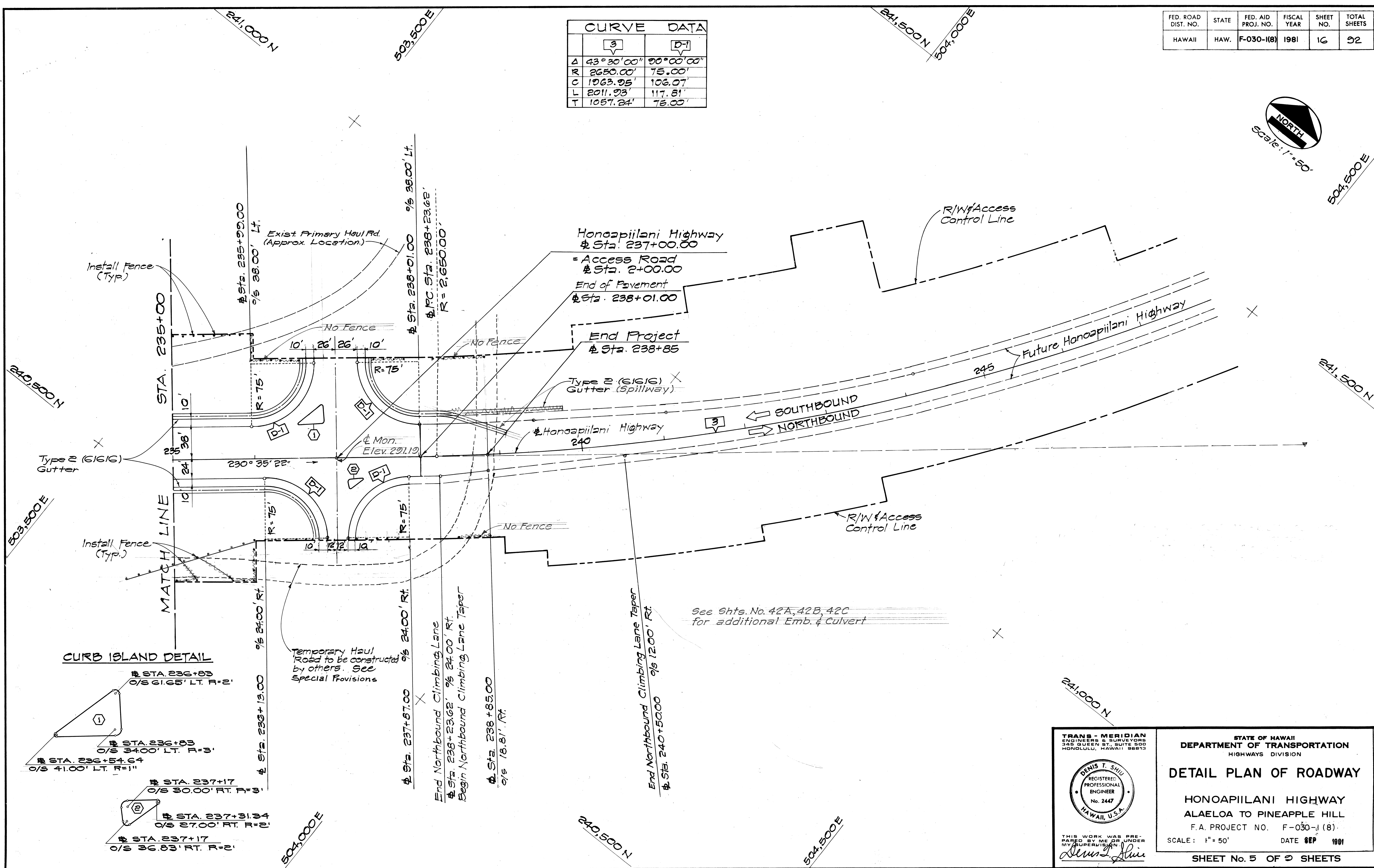
DATE	
DESIGNED BY	
DRAWN BY	
CHECKED BY	
NOTED BY	
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(8)	1981	16	32

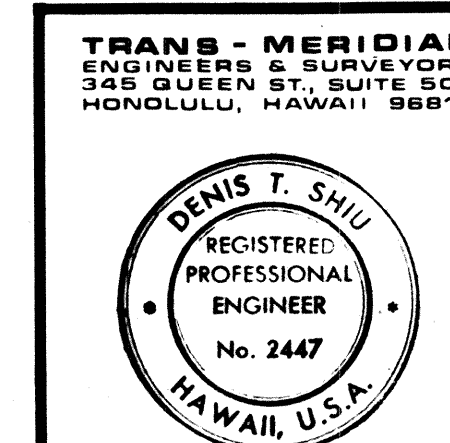
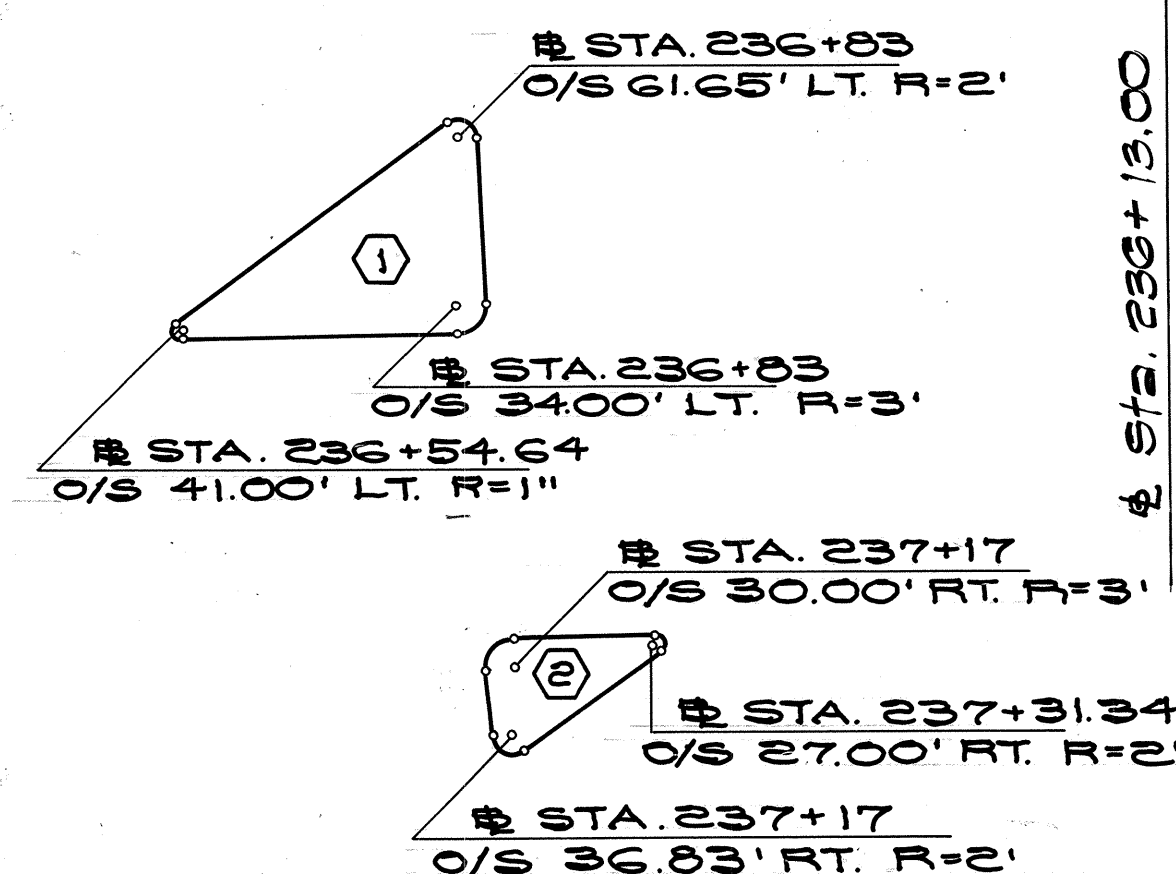


Scale: 1" = 50'

CURVE DATA	
	3
Δ	43°30'00"
R	2650.00'
C	1063.25'
L	2011.23'
T	1057.24'



CURB ISLAND DETAIL



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Denis T. Shiu

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

DETAIL PLAN OF ROADWAY

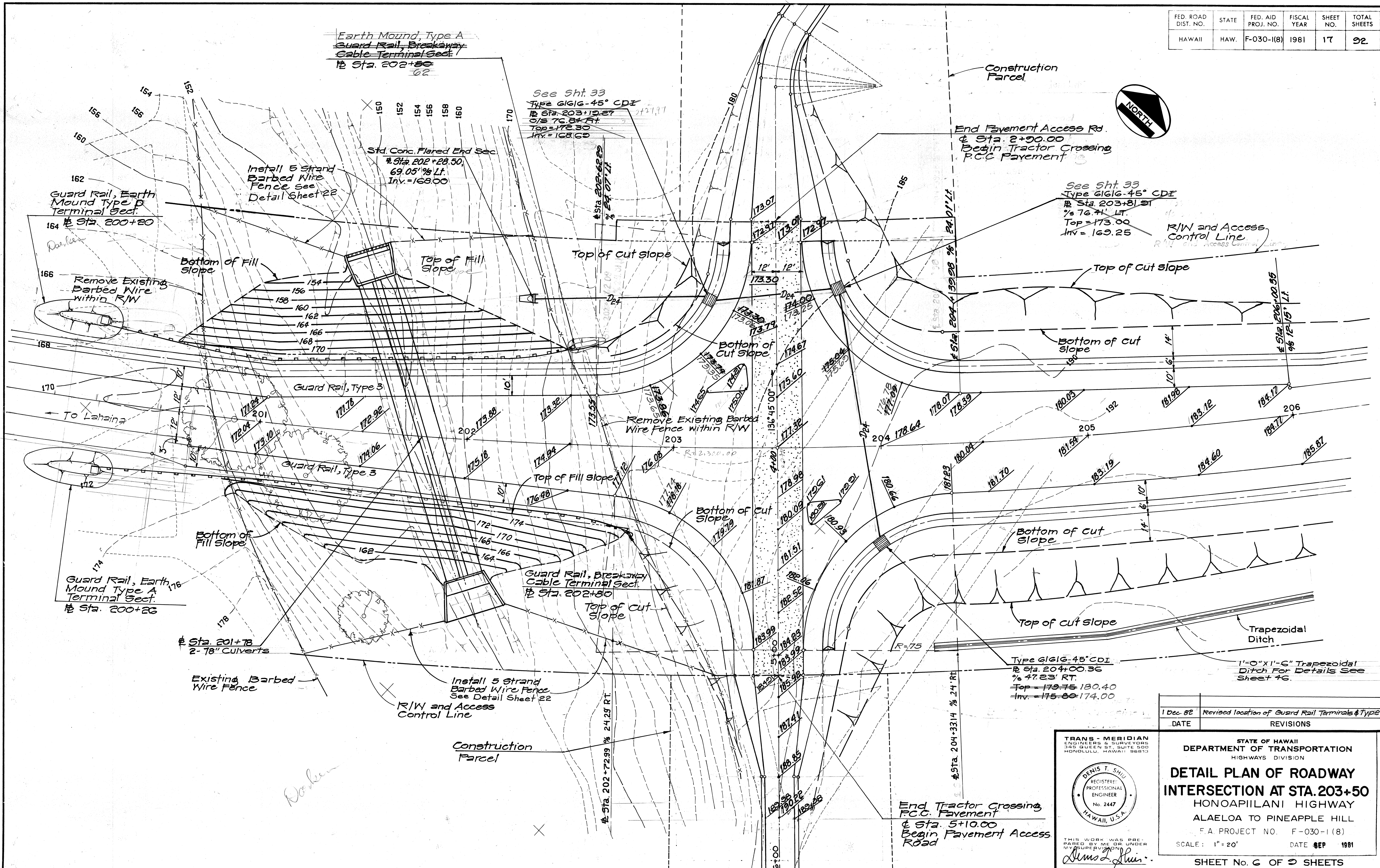
HONOAPIILANI HIGHWAY
 ALAELOA TO PINEAPPLE HILL
 F.A. PROJECT NO. F-030-1(8)

SCALE: 1" = 50' DATE SEP 1981

SHEET No. 5 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(8)	1981	17	92

DATE	
SURVEY PLOTTED BY	
DRAWN BY	
CHECKED BY	
NOTE BOOK	
No.	



TRANS - MERIDIAN
ENGINEERS & SURVEYORS
345 QUEEN ST., SUITE 500
HONOLULU, HAWAII 96813

DENIS T. SHIL
REGISTERED
PROFESSIONAL
ENGINEER
No. 2447
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION

Denis T. Shil

DATE	REVISIONS
1 Dec. 82	Revised location of Guard Rail Terminals & Type

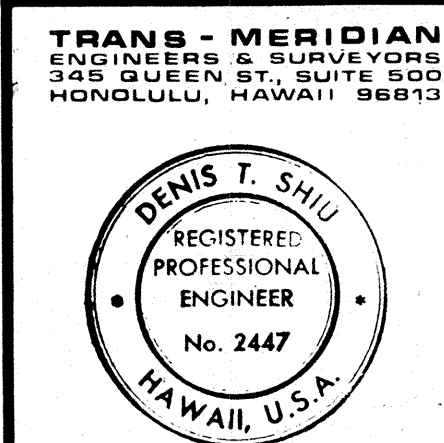
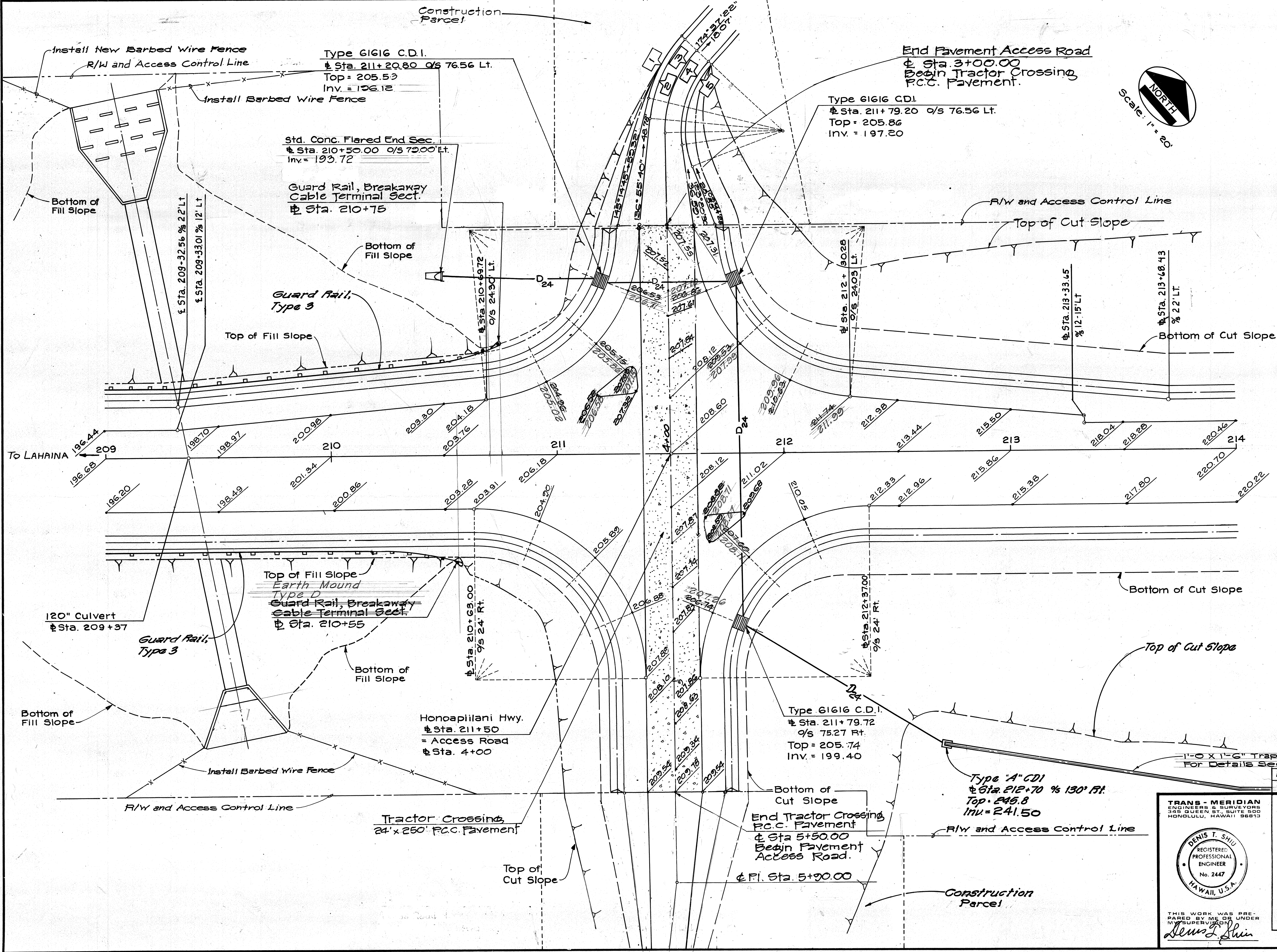
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**DETAIL PLAN OF ROADWAY
INTERSECTION AT STA. 203+50**
HONOAPIILANI HIGHWAY
ALAELOA TO PINEAPPLE HILL
F.A. PROJECT NO. F-030-1(8)
SCALE: 1" = 20' DATE SEP 1981

SHEET No. 6 OF 9 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(8)	1981	18	22

DATE	
SURVEY PLOTTED BY	
DRAWN BY	
TRACED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	



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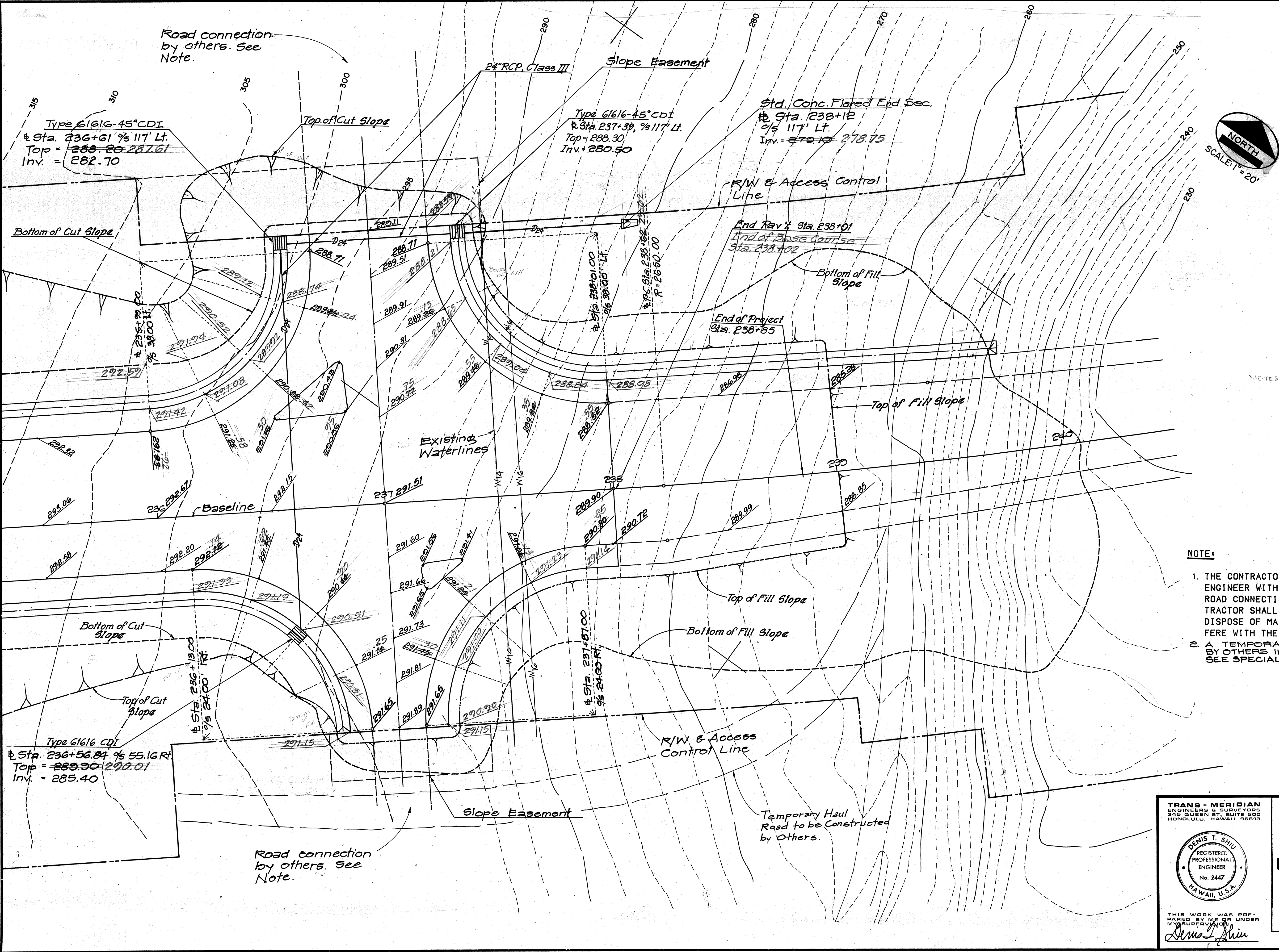
Denis T. Shu

1 Dec. 82	Revised location of Guard Rail Terminals
DATE	REVISIONS

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAIL PLAN OF ROADWAY INTERSECTION AT STA. 211+50
HONOAPIILANI HIGHWAY
ALAELOA TO PINEAPPLE HILL
F.A. PROJECT NO. F-030-1(8)
SCALE: 1" = 20' DATE SEP 1981
SHEET No. 7 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-030-1(8)	1981	10	22



Notes:

NOTE:

1. THE CONTRACTOR SHALL COOPERATE AS DIRECTED BY THE ENGINEER WITH OTHER CONTRACTORS WORKING ON THE SIDE ROAD CONNECTIONS AT THIS INTERSECTION. THE CONTRACTOR SHALL ARRANGE HIS WORK AND SHALL PLACE AND DISPOSE OF MATERIALS BEING USED SO AS NOT TO INTERFERE WITH THE OPERATIONS OF OTHER CONTRACTORS.
2. A TEMPORARY HAUL ROAD WILL BE CONSTRUCTED BY OTHERS IN THE APPROX. LOCATIONS SHOWN. SEE SPECIAL PROVISIONS.

DATE	
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
CHECKED BY	
NOTE BOOK	
No.	

TRANS - MERIDIAN
ENGINEERS & SURVEYORS
325 QUEEN ST., SUITE 500
HONOLULU, HAWAII 96813

DENIS T. SHIL
REGISTERED
PROFESSIONAL
ENGINEER
No. 2447
HAWAII, U.S.A.

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MY SUPERVISION
Denis T. Shil

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**DETAIL PLAN OF ROADWAY
INTERSECTION AT STA. 237+00**
HONOAPIILANI HIGHWAY
ALAELOA TO PINEAPPLE HILL
F.A. PROJECT NO. F-030-1 (8)
SCALE: AS SHOWN DATE MAR 1982
SHEET No. 8 OF 2 SHEETS

C-4-6

190-00
199-

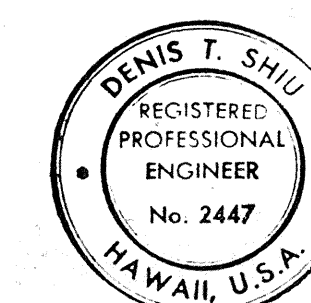
190-00
199-

LIST OF FENCES				ITEM NO.	ITEM NO.	ITEM NO.
				607.0060	607.9030	607.9130
LOCATION				6 FT. CHAIN LINK FENCE WITH TOP RAIL AND CONCRETE FOOTING	BARBED WIRE WITH METAL POST	STANDARD WIRE FENCE WITH METAL POST
STATION				LIN. FT.	LIN. FT.	LIN. FT.
183+00	190+70	LT.		800		
183+00 TO	200+75	RT.				1840
190+70 TO	200+75	LT.				1027
200+60 TO	201+35	LT.			74	
201+35 TO	201+95	RT.			70	
201+55 TO	202+28	LT.			70	
202+22 TO	203+22	RT.			108	
204+00 TO	208+00	RT.				415
204+00 TO	208+00	LT.				490
208+12 TO	208+85	LT.			78	
208+66 TO	209+32	RT.			71	
209+25 TO	209+86	LT.			63	
209+81 TO	210+62	RT.			84	
212+37 TO	220+00	RT.				780
212+37 TO	220+00	LT.				940
220+00 TO	221+00	LT.			105	
220+40 TO	222+16	RT.			162	
221+15 TO	222+55	LT.			144	
222+55 TO	223+90	RT.			155	
225+50 TO	236+72	RT.				1322
225+50 TO	236+58	LT.				1368
237+42 TO	238+85	LT.				143
237+27 TO	238+85	RT.				158
TOTAL				890	1184	8483

LIST OF MONUMENTS			
	ITEM NO.	ITEM NO.	ITEM NO.
	613.0100	614.0200	614.0100
	CENTERLINE MONUMENT	REFERENCE SURVEY MONUMENT	STANDARD C & C MONUMENT
LOCATION			
STATION	EACH	EACH	EACH
183+00	1		
185+54.12 (P.C.)	1		
203+50.00			1
205+95.89 (P.T.)	1		
211+50.00			1
215+91.57 (P.C.)	1		
221+99.63 (P.I.) 26.56 RT.		1	
228+09.23 (P.T.)	1		
237+00.00			1
238+23.62 (P.C.) (Not Constructed) ±			
TOTAL	5	1	3

1 Dec 82	Revised List of Guard Rails
DATE	REVISIONS

TRANS - MERIDIAN
ENGINEERS & SURVEYORS
345 QUEEN ST., SUITE 500
HONOLULU, HAWAII 96813



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James L. Shinn

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LIST OF GUARD RAILS,
FENCES AND MONUMENTS
HONOAPIILANI HIGHWAY
ALAELOA TO PINEAPPLE HILL
F.A. PROJECT NO. F-030-1 (8)

DATE SEP 1981

SHEET No. 2 OF 2 SHEETS

C.O.20