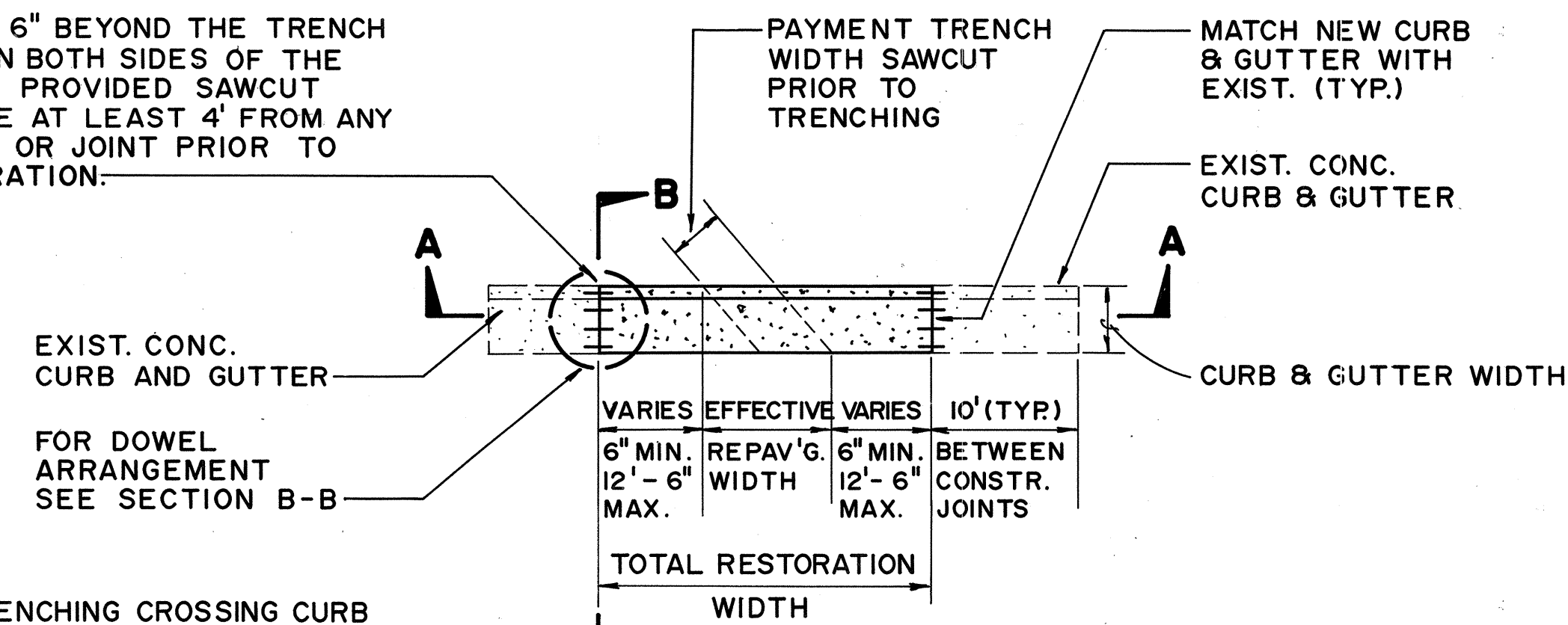


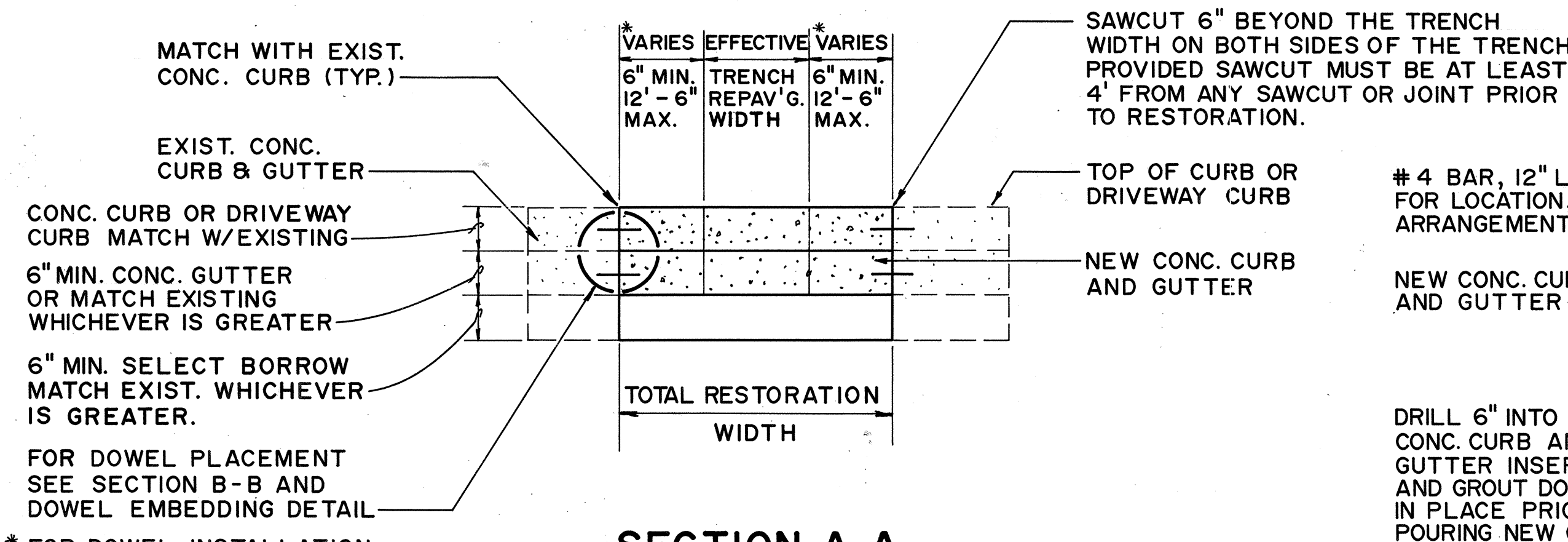
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H2-1(29)	1997	34	129

SAWCUT 6" BEYOND THE TRENCH WIDTH ON BOTH SIDES OF THE TRENCH PROVIDED SAWCUT MUST BE AT LEAST 4' FROM ANY SAWCUT OR JOINT PRIOR TO RESTORATION.



NOTE:
* FOR TRENCHING CROSSING CURB AND GUTTER, ADJUST THE TOTAL RESTORATION WIDTH UP TO THE ADJACENT CONSTR. JOINT AT LEAST 6' BEYOND THE LIMITS OF THE EFFECTIVE TRENCH WIDTH AS SHOWN.

PLAN

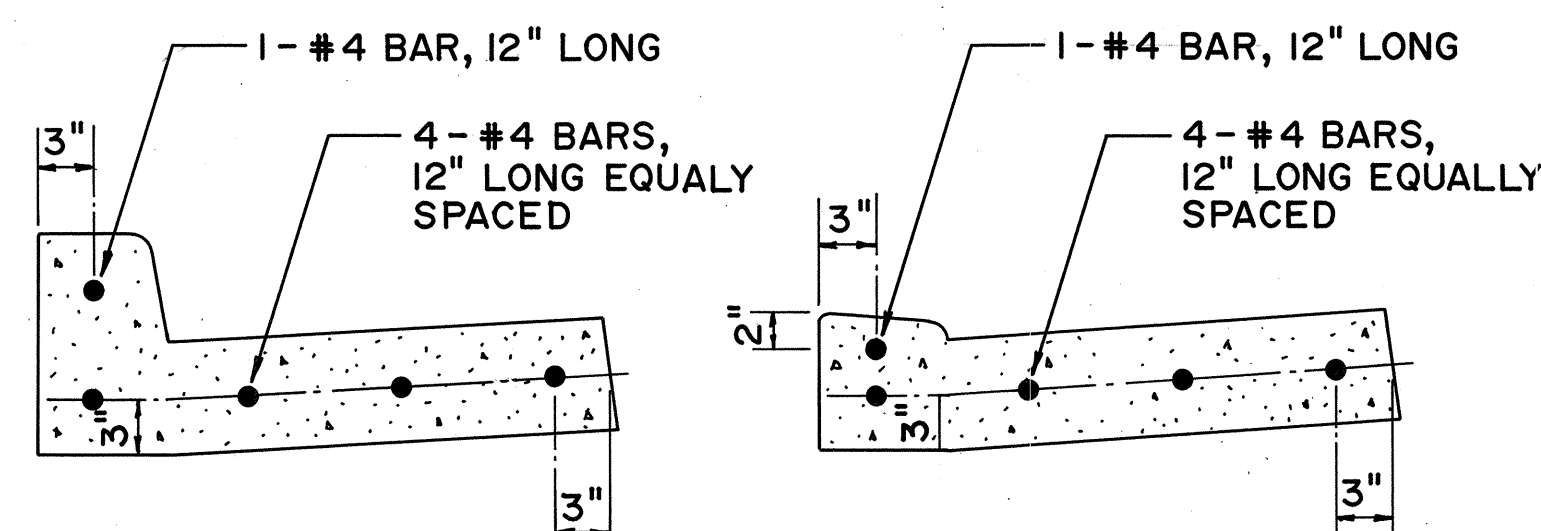


* FOR DOWEL INSTALLATION DRILL 6" DEEP IN EXIST. CONC. AND USE EPOXY.

SECTION A-A

CURB AND GUTTER RESTORATION DETAIL FOR UTILITY TRENCHES WITHIN CITY RIGHT - OF - WAY ONLY

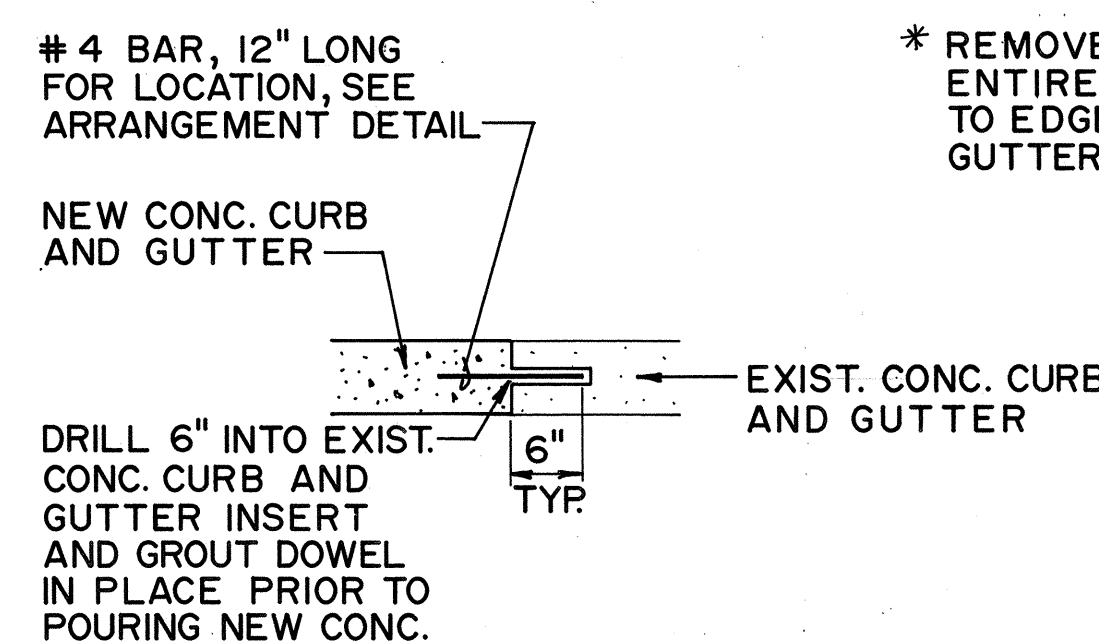
NOT TO SCALE



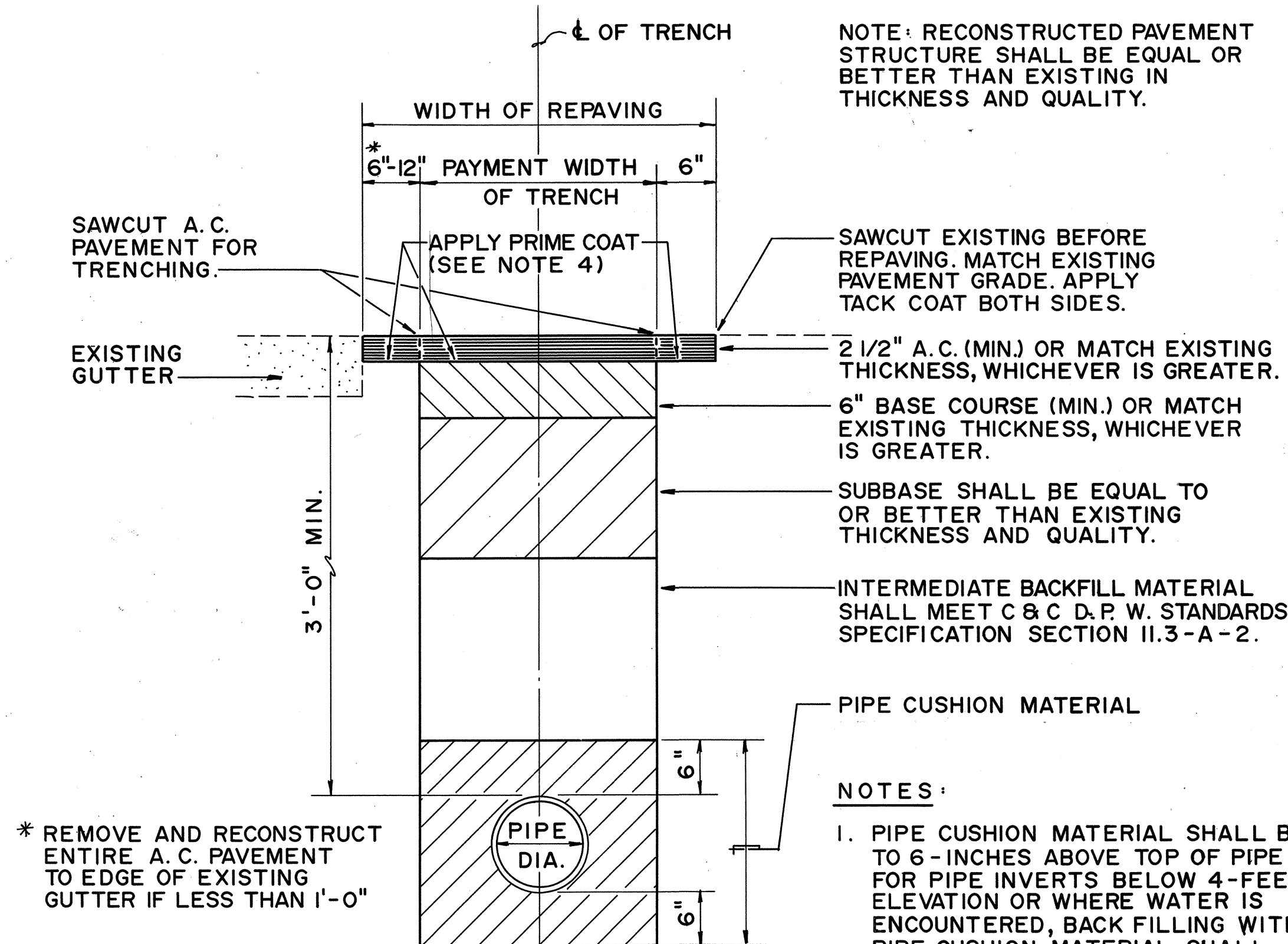
SECTION B-B

DOWEL ARRANGEMENT FOR CURB AND GUTTER D/W CURB AND GUTTER

NOT TO SCALE



DOWEL EMBEDDING DETAIL FOR CURB AND GUTTER N.T.S.



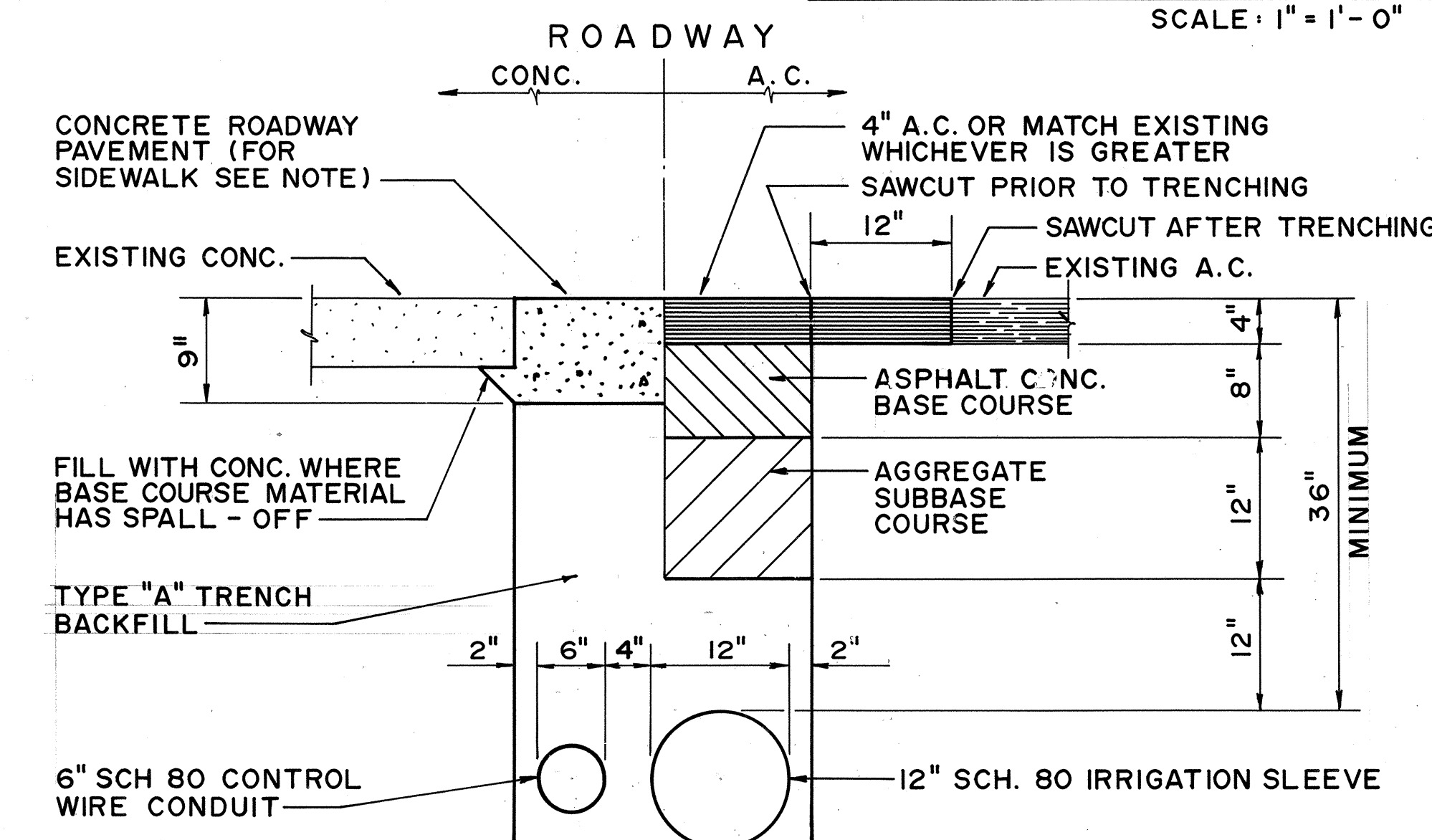
NOTE: RECONSTRUCTED PAVEMENT STRUCTURE SHALL BE EQUAL OR BETTER THAN EXISTING IN THICKNESS AND QUALITY.

NOTES:

- PIPE CUSHION MATERIAL SHALL BE TO 6-INCHES ABOVE TOP OF PIPE FOR PIPE INVERTS BELOW 4-FOOT ELEVATION OR WHERE WATER IS ENCOUNTERED, BACK FILLING WITH PIPE CUSHION MATERIAL SHALL CONTINUE TO 12-INCHES ABOVE THE TOP OF PIPE.
- MINIMUM COVER OVER PIPE SHALL BE 2.5- FEET FOR 4-INCH AND 3.0 FEET FOR PIPE OVER 4-INCHES DIAMETER.
- PAVEMENT STRUCTURE SHALL BE EQUAL TO OR BETTER THAN THE EXISTING IN QUALITY AND THICKNESS.
- FOR ROAD GRADES 0% TO 7.99% AND PRIME COAT IS NOT AVAILABLE USE 6" MINIMUM BASE COURSE OR MATCH EXISTING WHICHEVER IS GREATER. IF PRIME COAT IS AVAILABLE, USE PRIME COAT.

TYPICAL DETAIL - RECONSTRUCTION OF TRENCH AND TRENCH REPAVING WITHIN CITY RIGHT - OF - WAY ONLY

SCALE: 1" = 1' - 0"

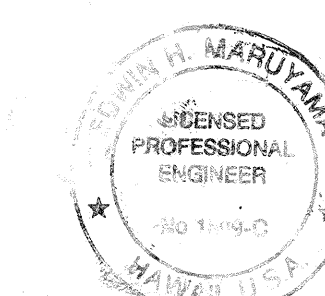


TYPICAL IRRIGATION SLEEVE TRENCHING DETAIL (STATE RIGHT - OF - WAY)

NOT TO SCALE

APPROVED:

Doonan 4/12/95
CHIEF, DIVISION OF ENGINEERING, D.P.W.
(FOR CONSTRUCTION WITHIN CITY RIGHT - OF - WAY ONLY) DATE



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By *Edwin H. Maruyama*
RUITA & ASSOCIATES

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS DETAILS

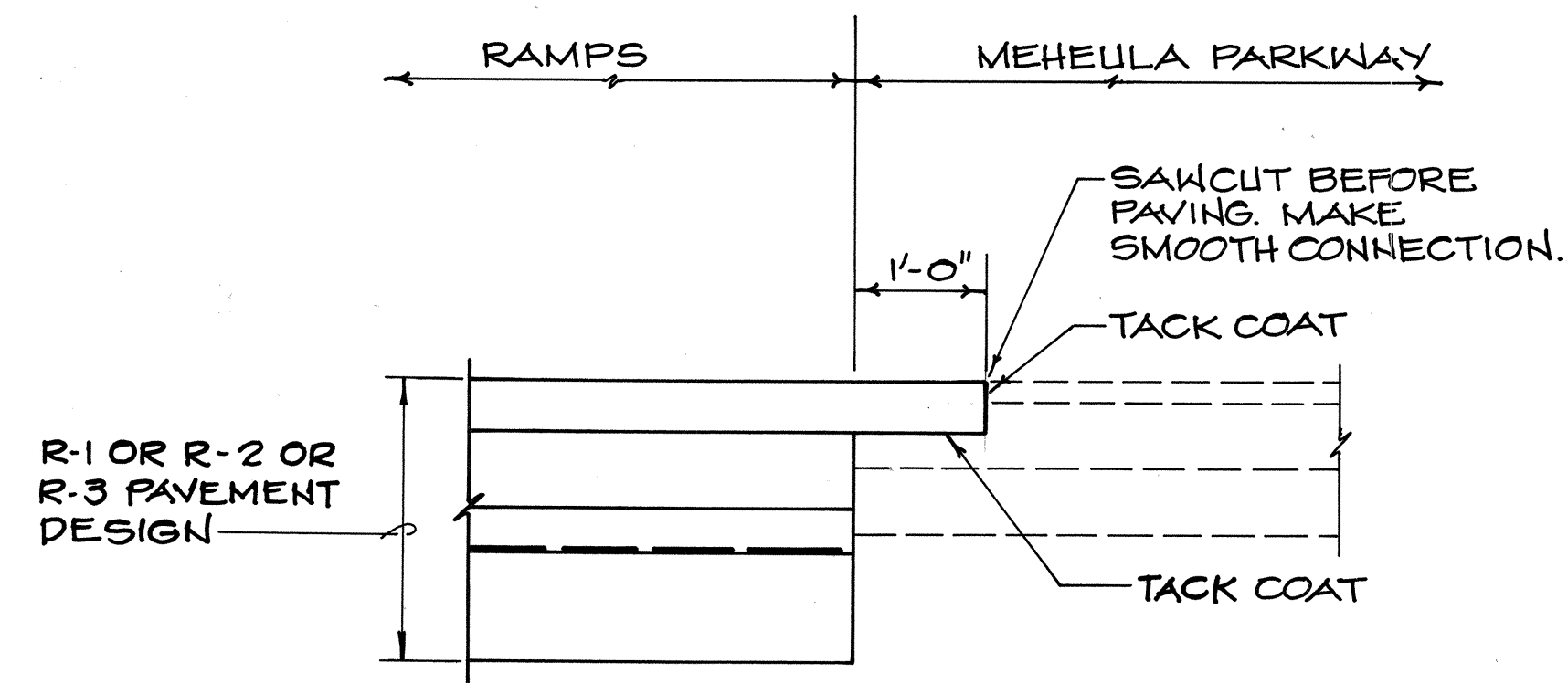
INTERSTATE ROUTE H-2
MILILANI INTERCHANGE
SOUTHBOUND ON- AND OFF-RAMPS

F.A.I. Proj. No. IM-H2-1 (29)
SCALE: AS NOTED DATE: MAR. 1997

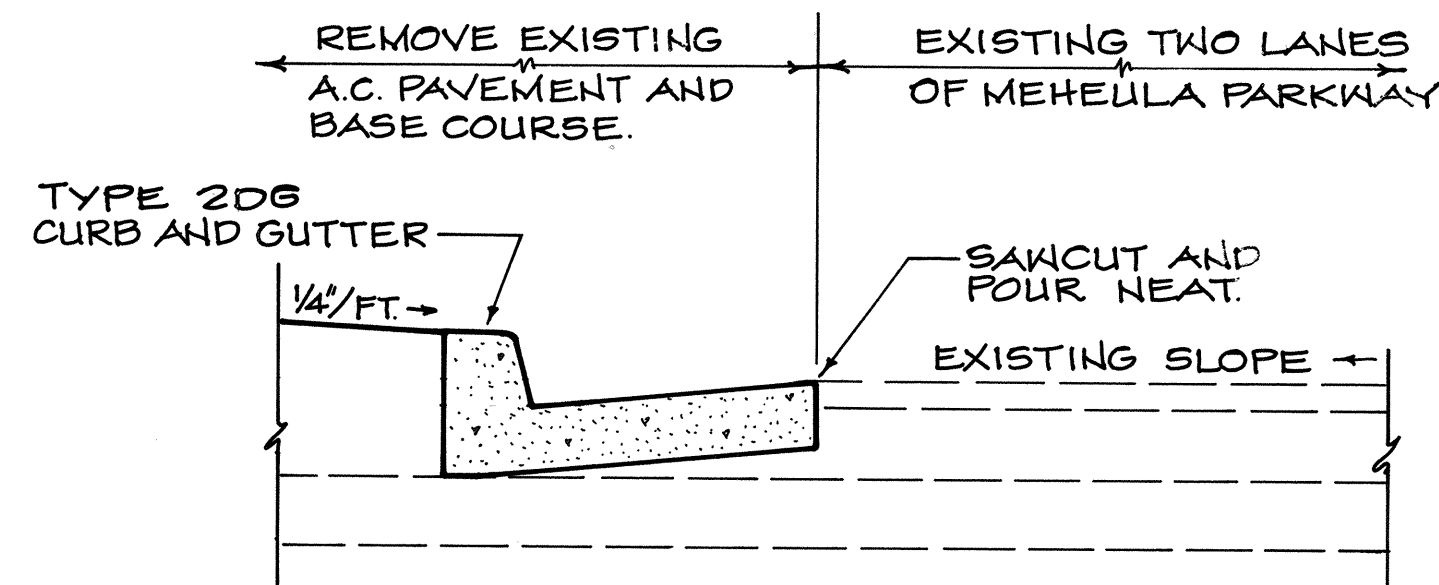
SHEET NO. M1 OF 13 SHEETS

"AS-BUILT" 34

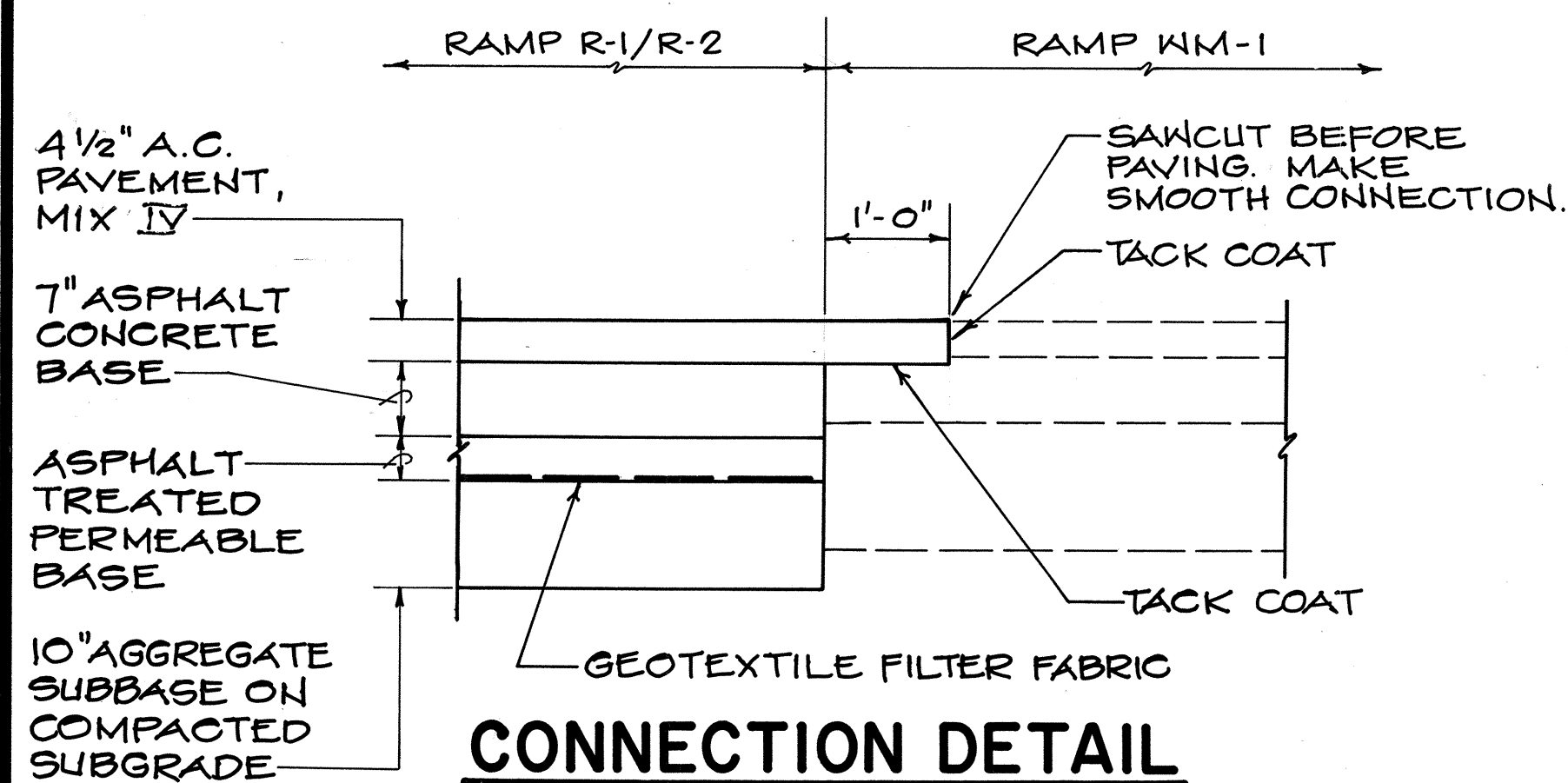
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H2-1 (29)	1997	35	129



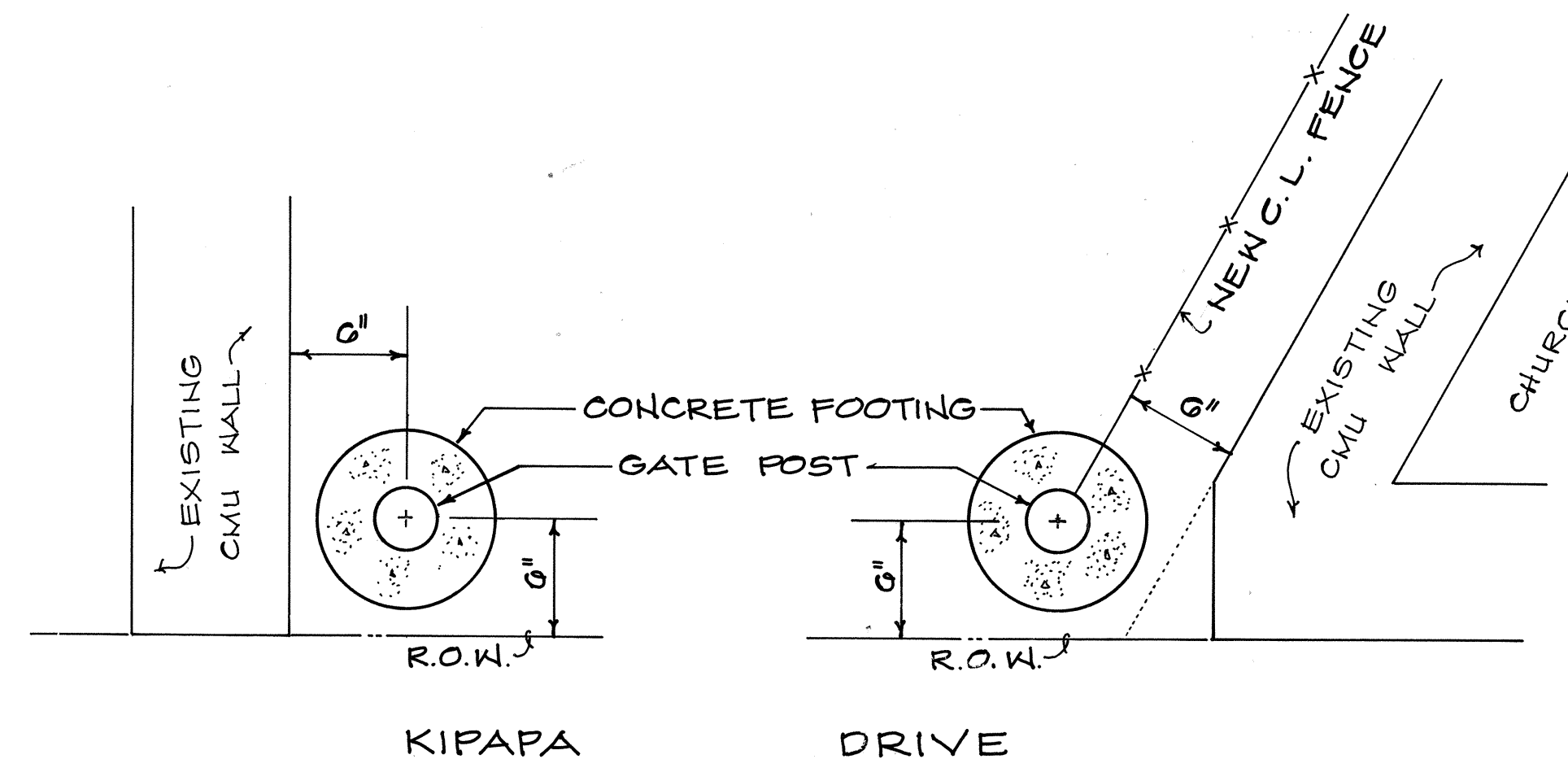
CONNECTION DETAIL
RAMPS R-1, R-2, R-3 TO MEHEULA PARKWAY
SCALE: 3/4" = 1' - 0"



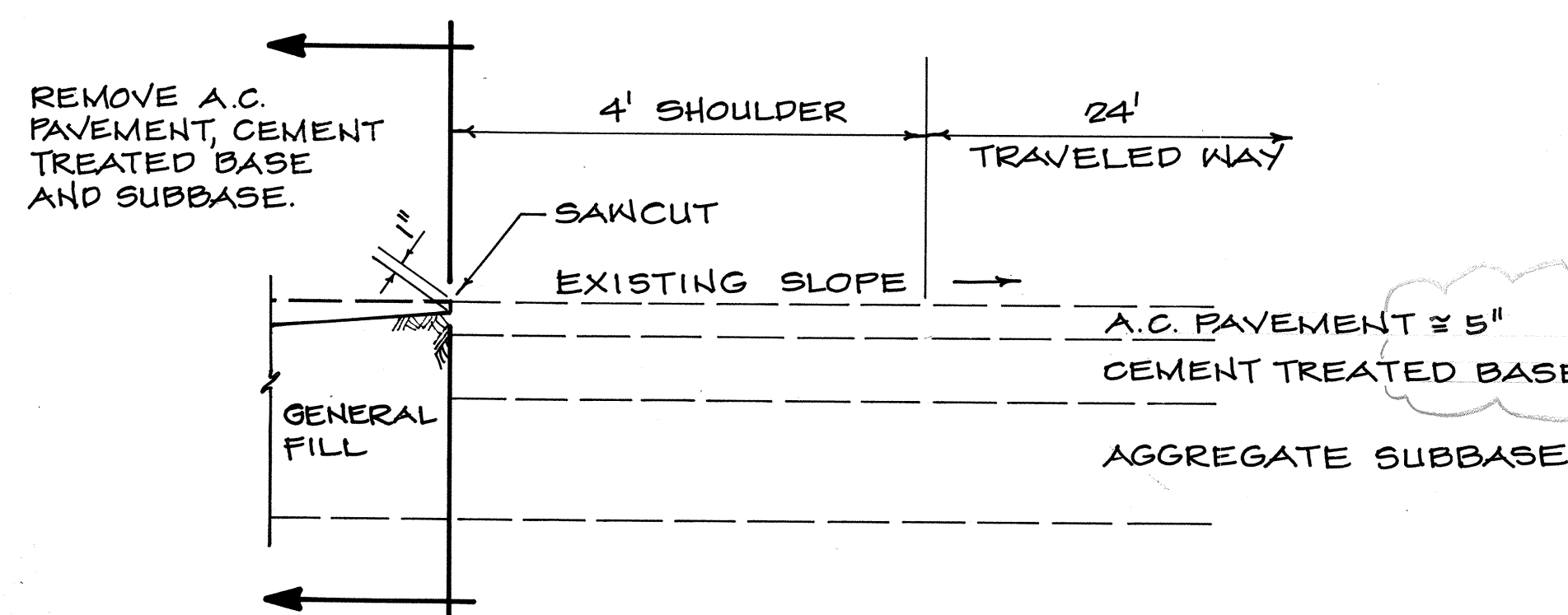
DETAIL OF NEW CURB AND GUTTER
STA. 31+20 TO 32+70.39 MEHEULA PKWY.
SCALE: 3/4" = 1' - 0"



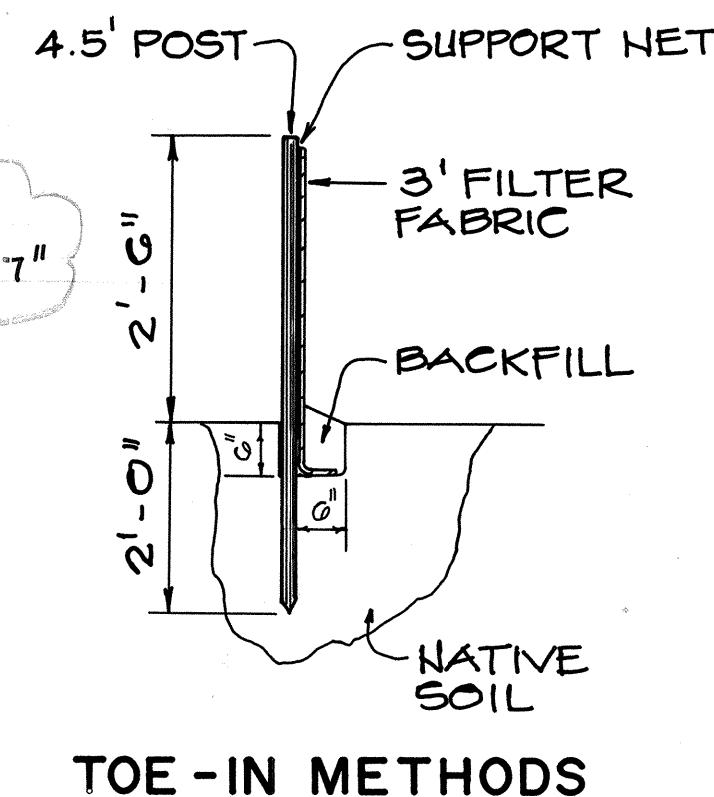
CONNECTION DETAIL
RAMP WM-1 TO R-1/R-2
SCALE: 3/4" = 1' - 0"



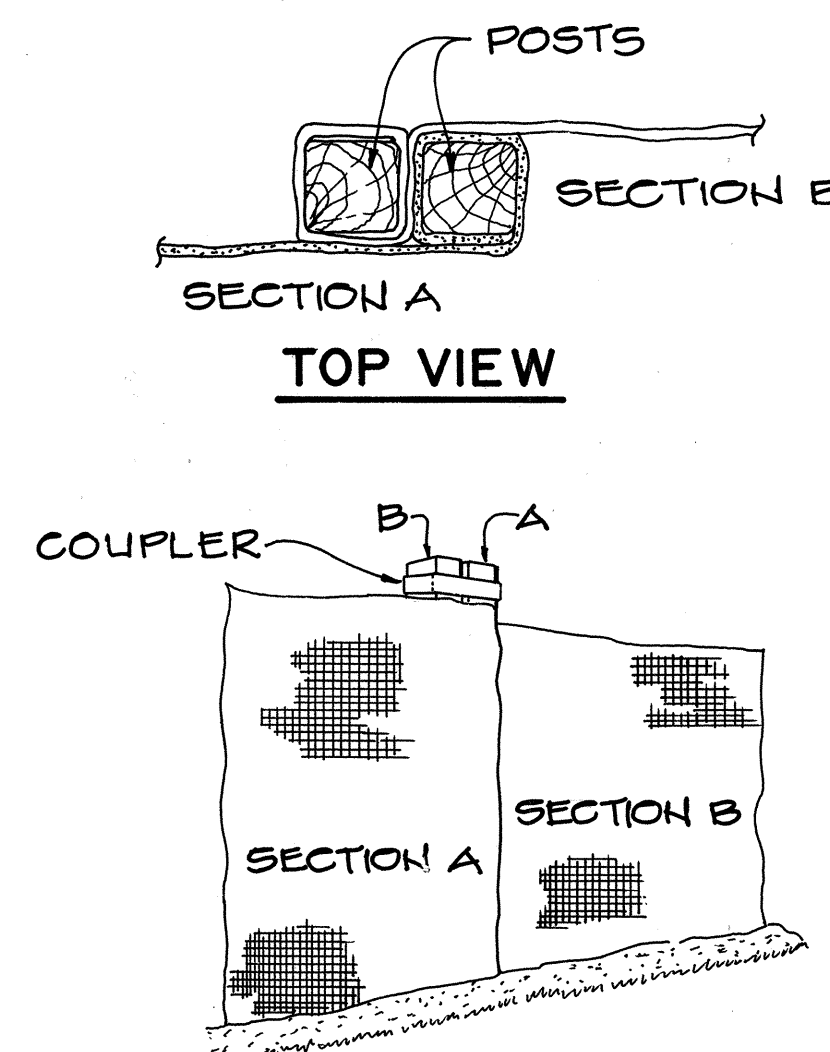
GATE POST LOCATION
AT KIPAPA DRIVE
SCALE: 1 1/2" = 1'-0"



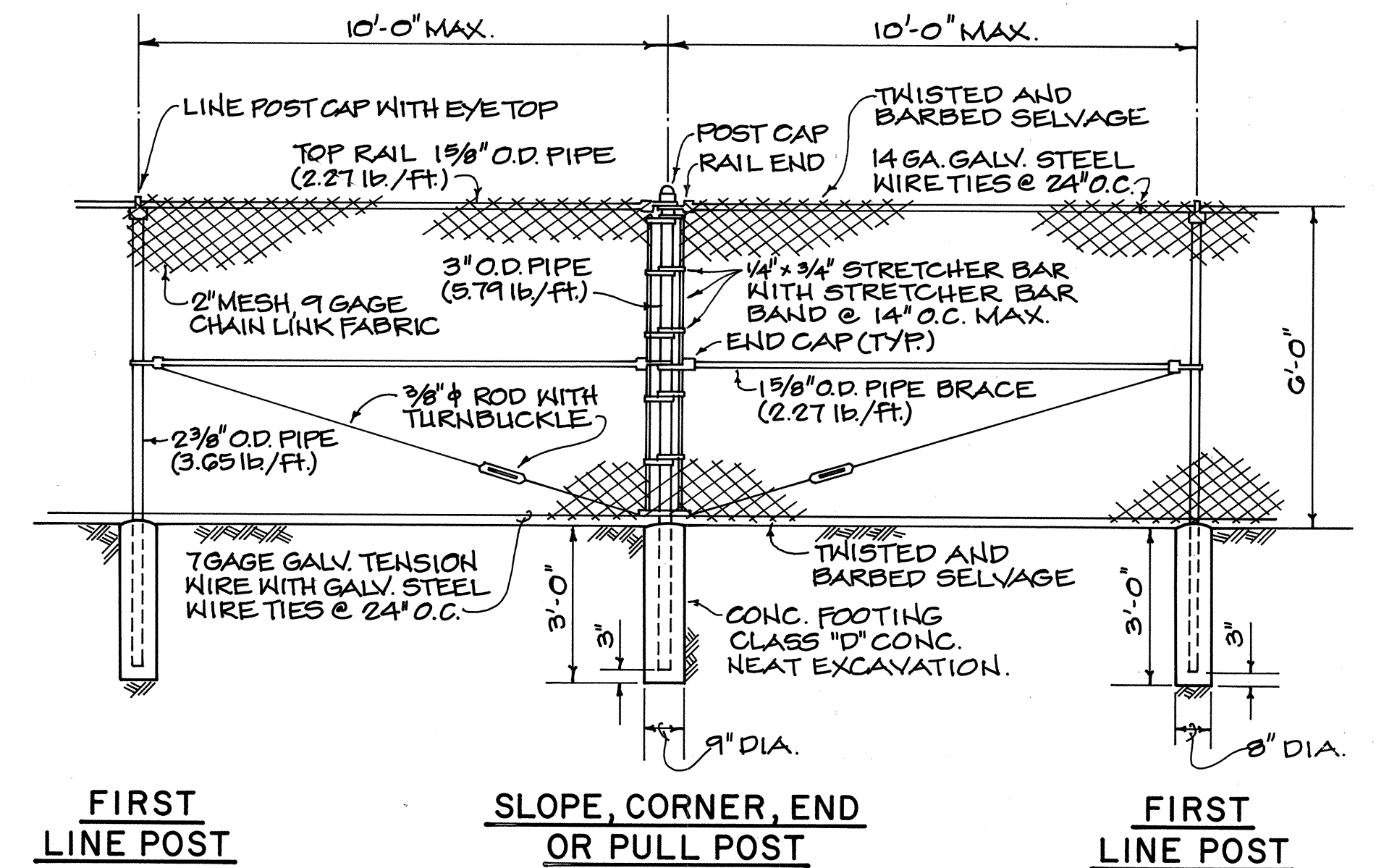
DETAIL OF RAMP MH-2
EDGE TREATMENT
SCALE: 3/4" = 1' - 0"



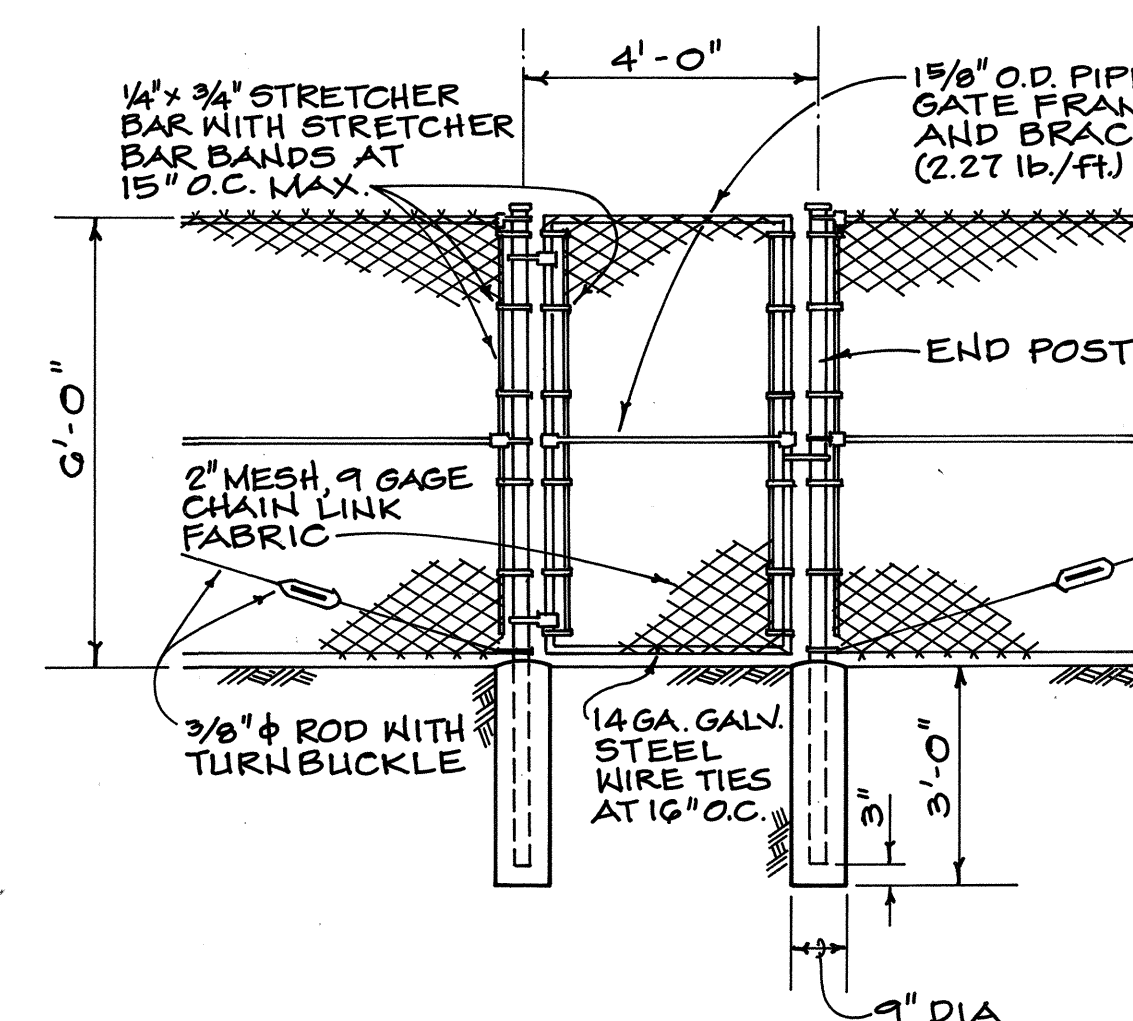
TOE-IN METHODS



JOINING SECTIONS OF SILT FENCE
SILT FENCE DETAIL
NOT TO SCALE

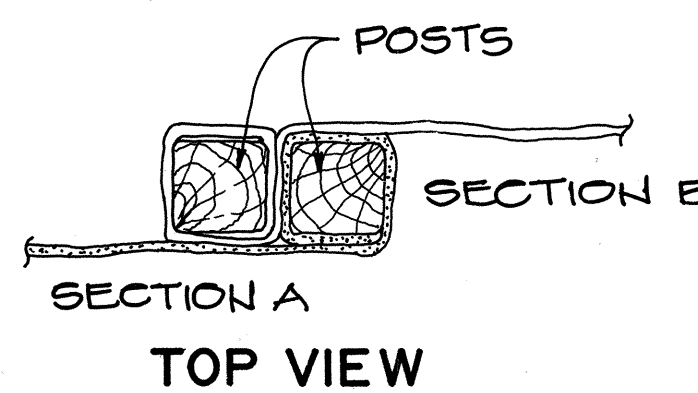


CHAIN LINK FENCE DETAIL

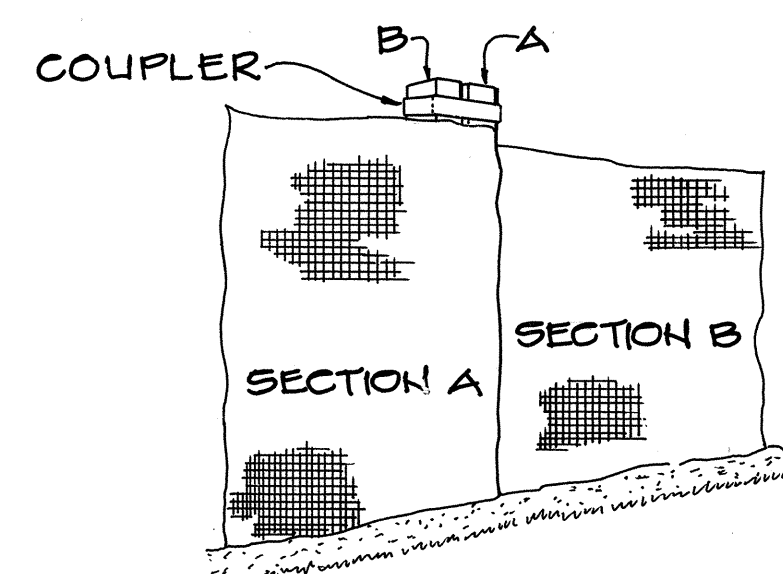


TYPICAL PERSONNEL GATE
SCALE: 3/8" = 1' - 0"

- ### NOTES:
- 1- ALL FENCING MATERIAL, INCLUDING GATE HARDWARE, SHALL BE GALVANIZED STEEL.
 - 2- POSTS, BRACES, AND GATE FRAMES SHALL BE SCHEDULE 40 (STANDARD WEIGHT) PIPE. SIZES SPECIFIED ARE OUTSIDE DIAMETER.
 - 3- GATE SHALL BE PROVIDED WITH PROVISIONS FOR PADLOCKING.
 - 4- CORNER FITTINGS FOR GATE FRAMES MAY BE USED IN LIEU OF WELDING.
 - 5- GATE SHALL HAVE KNUCKLED SELVAGE TOP AND BOTTOM.
 - 6- TOP OF CONCRETE FOOTING SHALL BE CROWNED TO SHED WATER.
 - 7- CENTER LINE OF FENCE SHALL BE 6" FROM KIPAPA DRIVE RIGHT-OF-WAY LINE.



TOP VIEW



JOINING SECTIONS OF SILT FENCE

- SILT FENCE INSTALLATION STEPS ARE AS FOLLOWS:**

1. EXCAVATE 6-INCH X 6-INCH TRENCH ALONG THE LOWER PERIMETER OF THE SITE.
2. UNROLL SILT FENCE A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH (NET SIDE AWAY FROM DIRECTION OF FLOW).
3. DRIVE THE POST INTO THE GROUND UNTILL THE NETTING IS APPROXIMATELY 2-INCHES FROM THE TRENCH BOTTOM.
4. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. TOE-IN CAN ALSO BE ACCOMPLISHED BY LAYING THE FABRIC FLAP ON UNDISTURBED GROUND AND PILING AND TAMPING FILL AT THE BASE.
5. JOIN SILT FENCE SECTIONS AS SHOWN ON THIS SHEET.



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FUJITA & ASSOCIATES

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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS DETAILS

INTERSTATE ROUTE H-2
MILILANI INTERCHANGE
SOUTHBOUND ON-AND-OFF-RAMPS
F.A.I. Proj. No. IM-H2-1 (29)

SCALE: AS NOTED DATE: _____

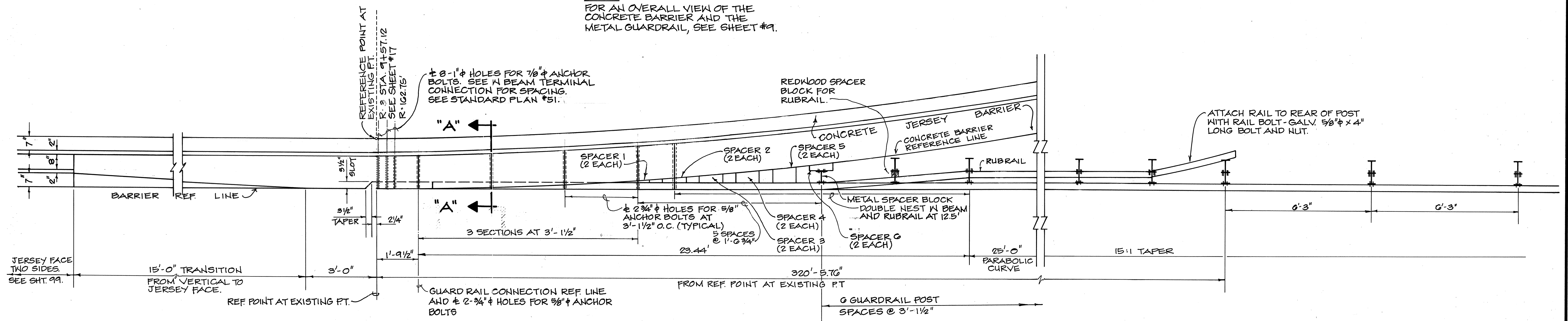
SHEET No. M2 OF 13 SHEETS

"AS-BUILT" 35

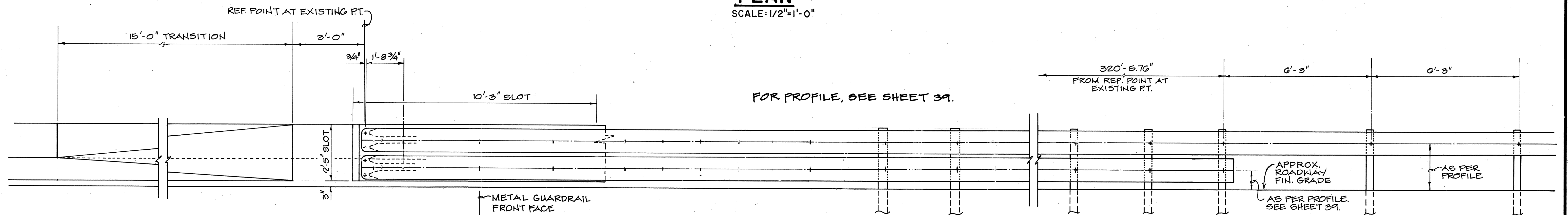
"AS-BUILT" 35

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H2-1 (29)	1997	36	129

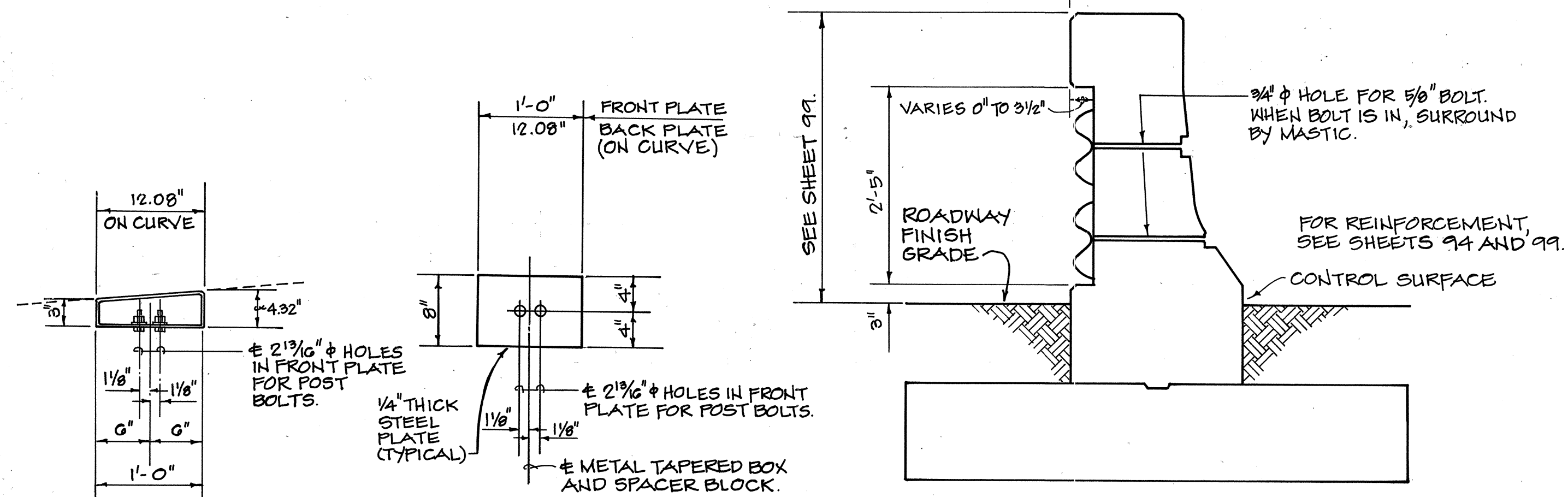
NOTE:
FOR AN OVERALL VIEW OF THE
CONCRETE BARRIER AND THE
METAL GUARDRAIL, SEE SHEET #9.



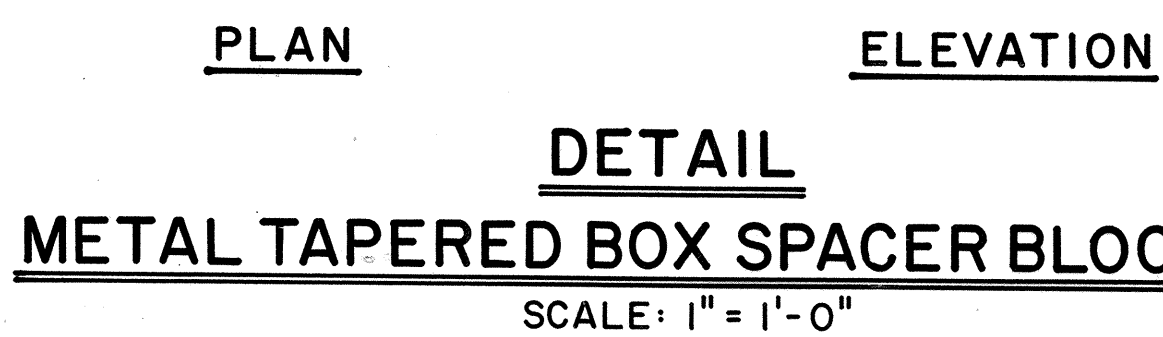
PLAN
SCALE: 1/2"=1'-0"



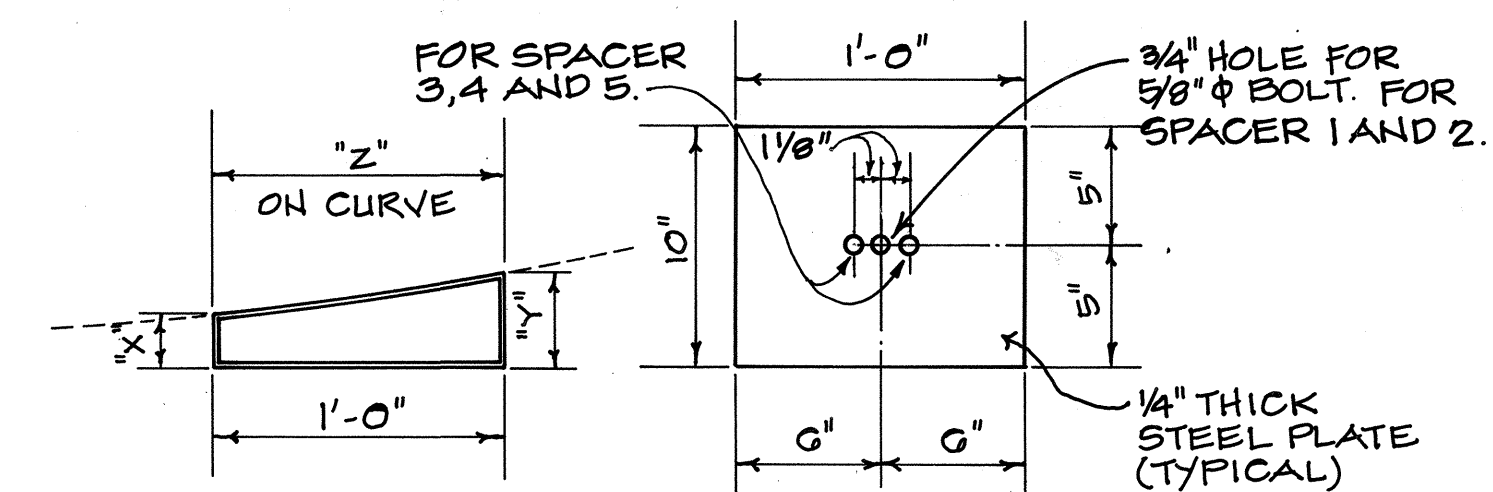
ELEVATION
SCALE: 1/2" = 1'-0"



SECTION "A-A"
SCALE: 3/4" = 1'-0"



METAL TAPERED BOX SPACER BLOCK 6



PLAN ELEVATION

DETAIL - METAL TAPERED BOX
SPACER BLOCKS 1,2,3,4 AND 5

SPACER	"X"	"Y"	"Z"
1	0.6"	1.44"	12.03"
2	1.92"	3.48"	12.04"
3	3.48"	4.44"	12.05"
4	5.16"	6.24"	12.06"
5	6.96"	8.28"	12.07"

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

H-2 METAL GUARD RAIL #1

CONNECTION DETAILS #1

INTERSTATE ROUTE H-2
MILILANI INTERCHANGE
SOUTHBOUND ON-AND-OFF-RAMPS

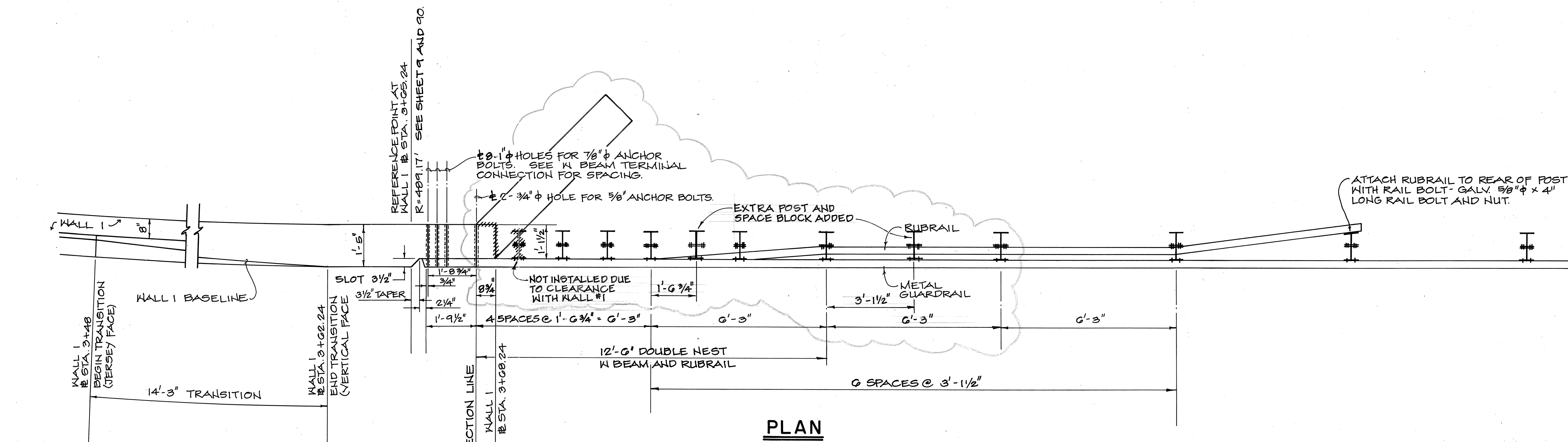
F.A.I. Proj. No IM-H2-1 (29)

SCALE: AS NOTED DATE: MAR. 1997

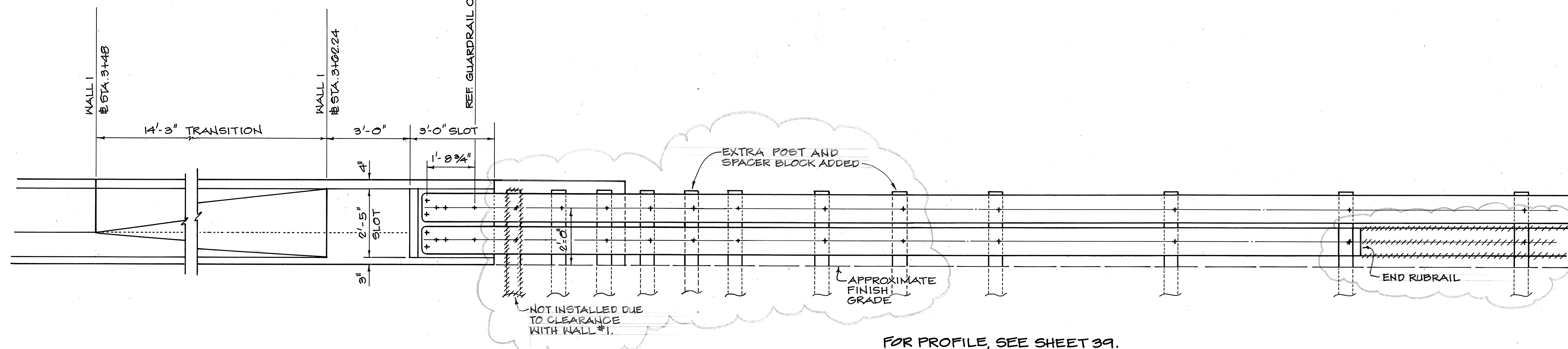
SHEET NO. M3 OF 13 SHEETS

"AS-BUILT" 36

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H2-1(29)	1997	37	129



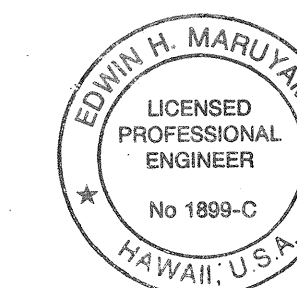
PLAN



ELEVATION

CONNECTION DETAILS-METAL GUARD RAIL #3 TO WALL #1

SCALE: 1/2" = 1'-0"



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RUITA & ASSOCIATES

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**CONNECTION DETAILS -
METAL GUARD RAIL #3 TO WALL #1**

INTERSTATE ROUTE H-2
MILILANI INTERCHANGE
SOUTHBOUND ON-AND-OFF-RAMPS
F.A.I. Proj. No. IM-H2-1(29)

SCALE: 1/2" = 1'-0" DATE: MAR. 1997

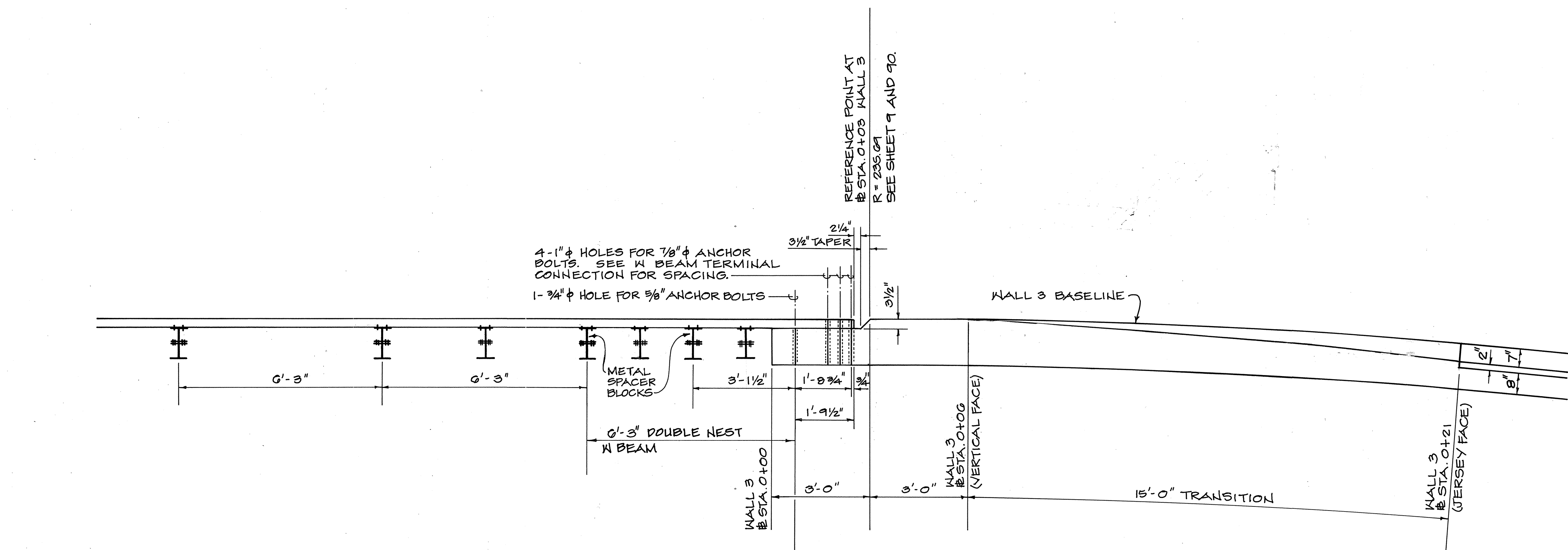
SHEET NO. M4 OF 13 SHEETS

"AS-BUILT"

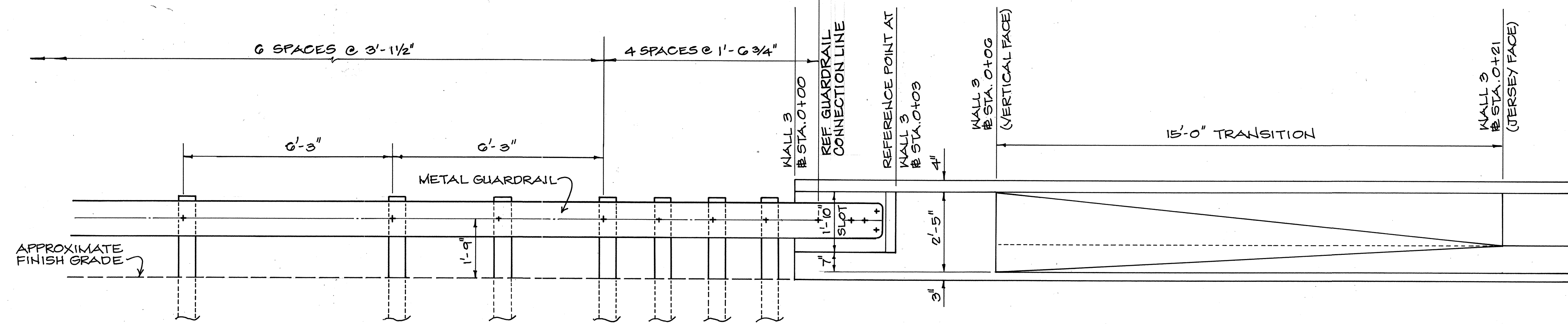
37

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H2-1 (29)	1997	38	129



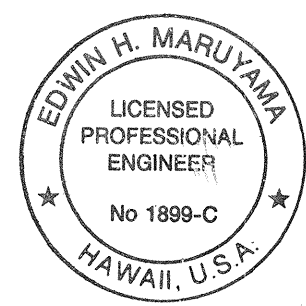
PLAN



ELEVATION

CONNECTION DETAILS-METAL GUARD RAIL #5 TO WALL #3

SCALE: 1/2" = 1'-0"



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FUJITA & ASSOCIATES

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**CONNECTION DETAILS -
METAL GUARD RAIL #5 TO WALL #3**

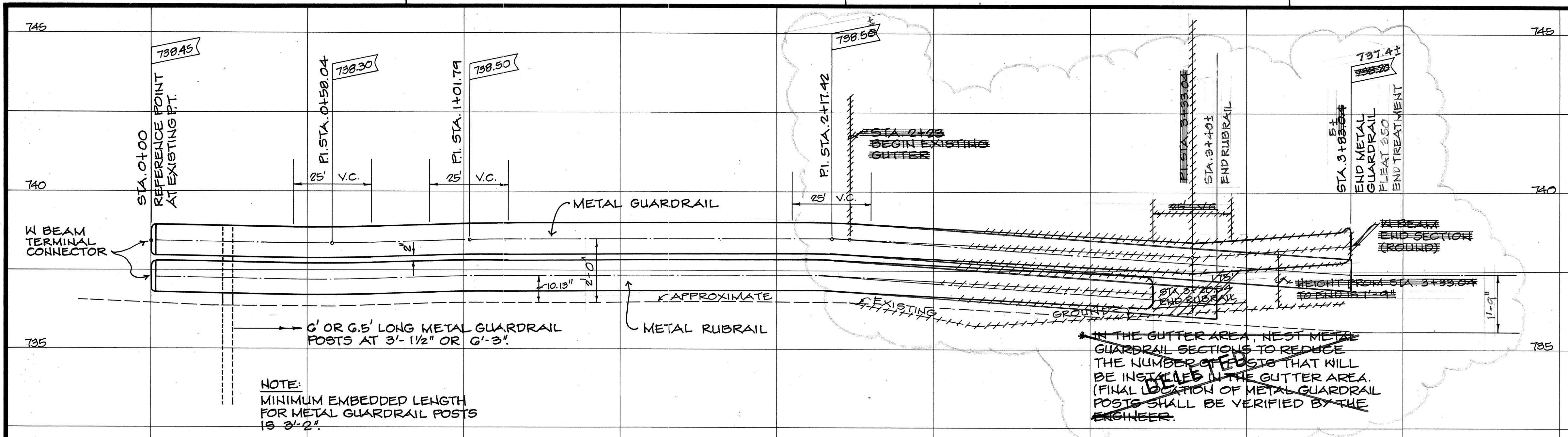
INTERSTATE ROUTE H-2
MILILANI INTERCHANGE
SOUTHBOUND ON-AND-OFF-RAMPS
F.A.I. Proj. No. IM-H2-1 (29)

SCALE: 1/2" = 1'-0" DATE: MAR. 1997

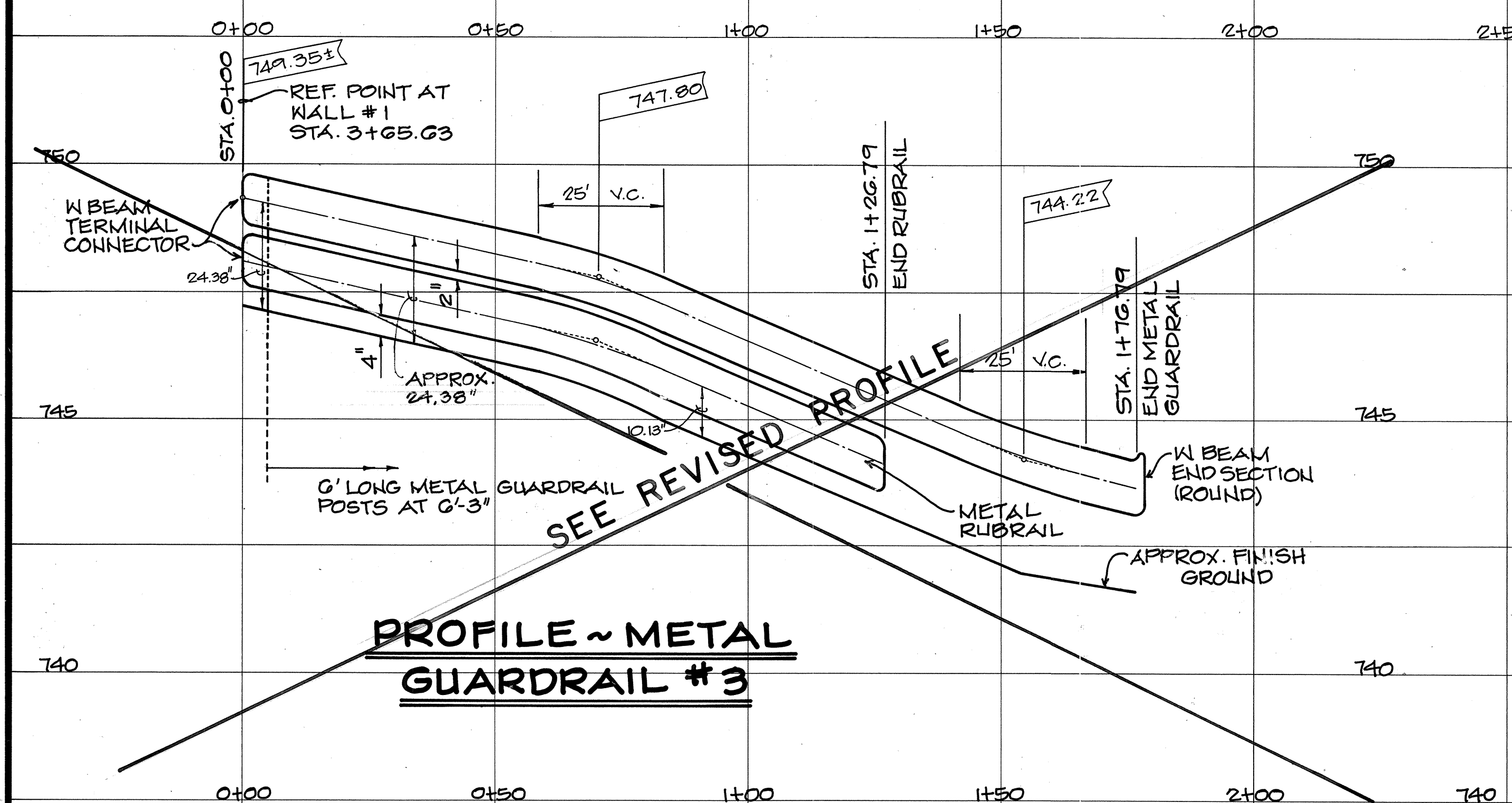
SHEET NO. M5 OF 13 SHEETS

ORIGINAL PLAN	DATE
DRAWN BY	
TRACED BY	
NOTED BY	
CHECKED BY	
NO.	

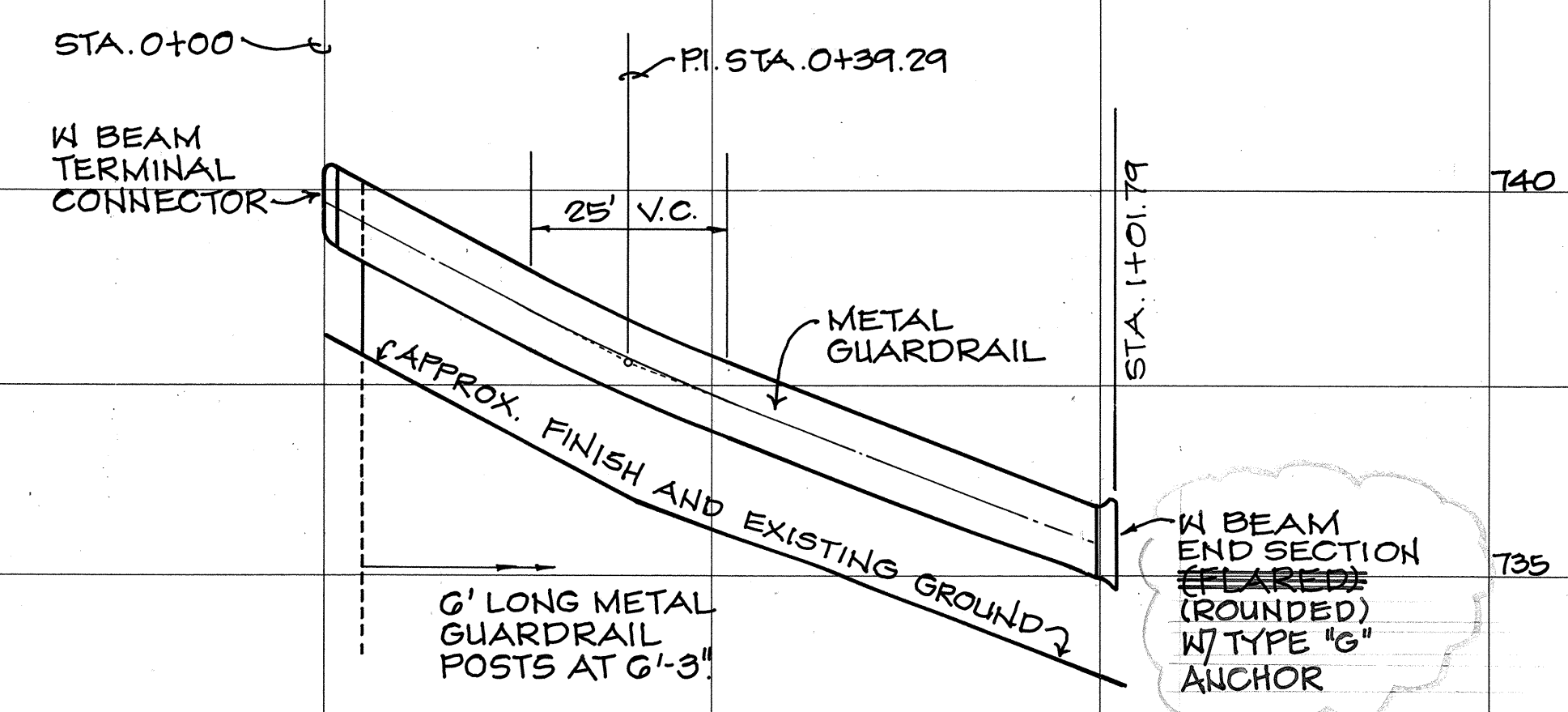
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H2-1(29)	1997	39	129



PROFILE ~ METAL GUARDRAIL #1



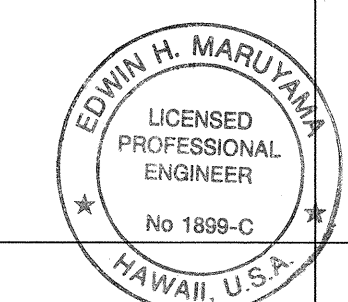
PROFILE ~ METAL GUARDRAIL #3



PROFILE ~ METAL GUARDRAIL #5

SCALE: (ALL PROFILES)
HORIZ. 1" = 20'-0"
VERT. 1" = 2'-0"

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	



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HIGHWAYS DIVISION

**PROFILES FOR
METAL GUARDRAILS**

INTERSTATE ROUTE H-2
MILILANI INTERCHANGE
SOUTHBOUND ON-AND-OFF-RAMPS
F.A.I. Proj. No. IM-H2-1(29)

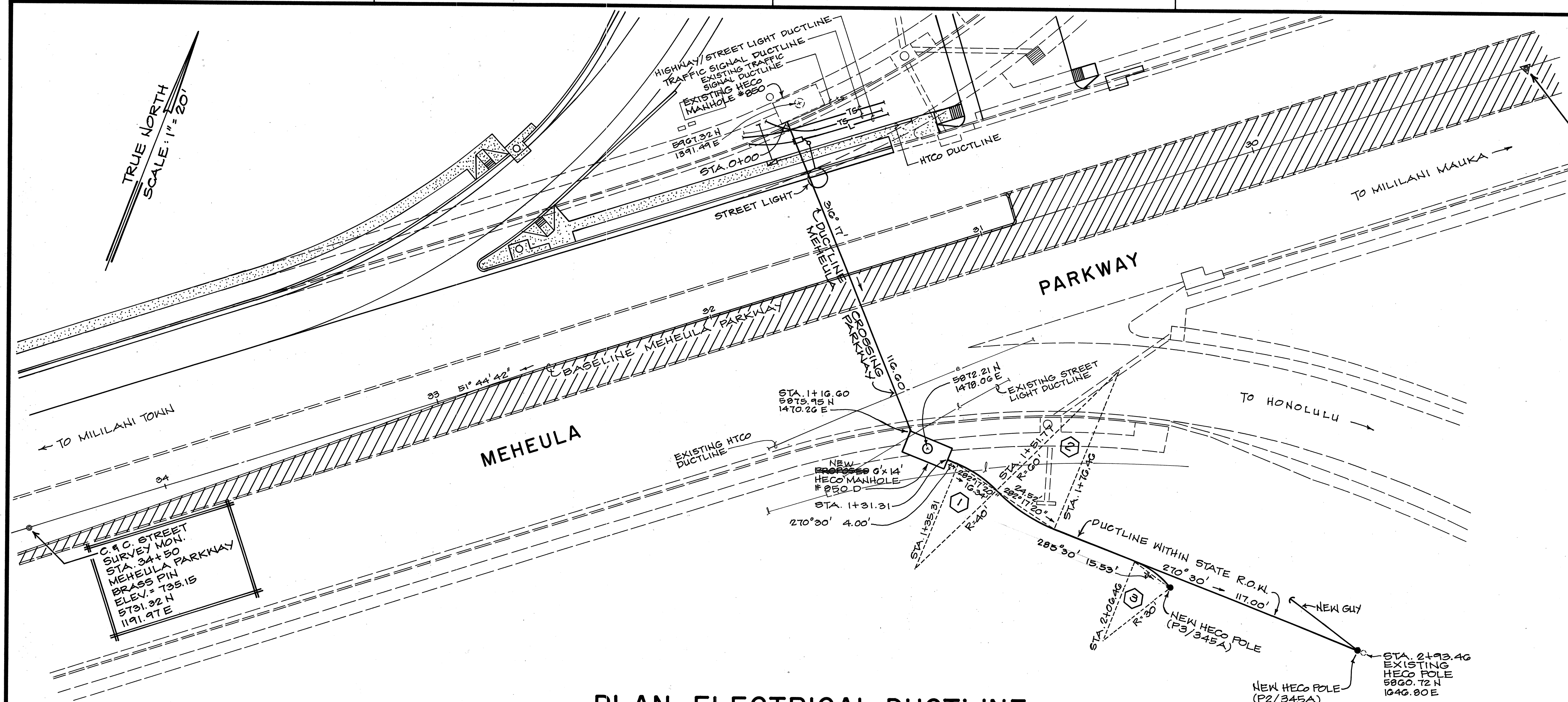
SCALE: AS NOTED DATE: MAR. 1997

SHEET NO. M6 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H2-1(29)	1997	40	129

BENCH MARK:
INT-3
BRASS PIN
ELEV. = 755.96

	①	②	③
Δ	23°34'40"	23°34'40"	30°00'00"
4/2	11°47'20"	11°47'20"	15°00'00"
R	40.00'	60.00'	30.00'
T	8.35'	12.52'	8.04'
C	16.34'	24.52'	15.53'
Lc	16.46'	24.69'	15.71'

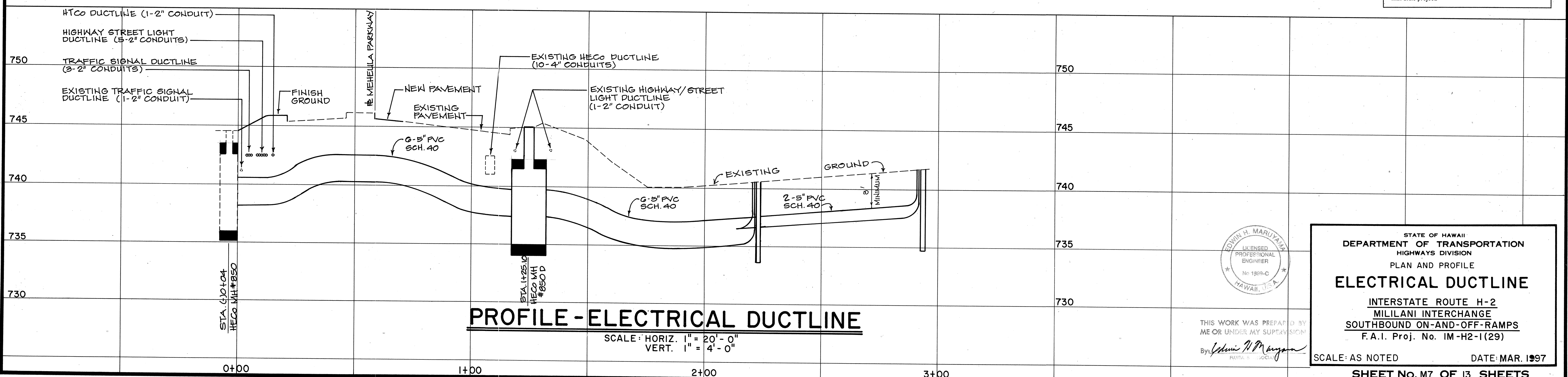


PLAN-ELECTRICAL DUCTLINE

SCALE: 1" = 20'-0"

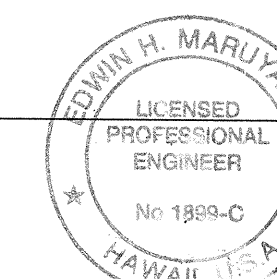
DRAWING REVIEW
Reviewed for HECO's
Facilities Only
Date 2/23/96 By J.K.L.
Engineering & Project Management Dept.
Hawaiian Electric Company, Inc.

HECO's review of these drawings shall in no way relieve the Customer, its Consultant, its Contractor or anyone acting on the Customer's behalf from the responsibility for engineering, design, materials and any liability associated with this project.



PROFILE-ELECTRICAL DUCTLINE

SCALE: HORIZ. 1" = 20'-0"
VERT. 1" = 4'-0"



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PLAN AND PROFILE
ELECTRICAL DUCTLINE
INTERSTATE ROUTE H-2
MILILANI INTERCHANGE
SOUTHBOUND ON-AND-OFF-RAMPS
F.A.I. Proj. No. IM-H2-1(29)

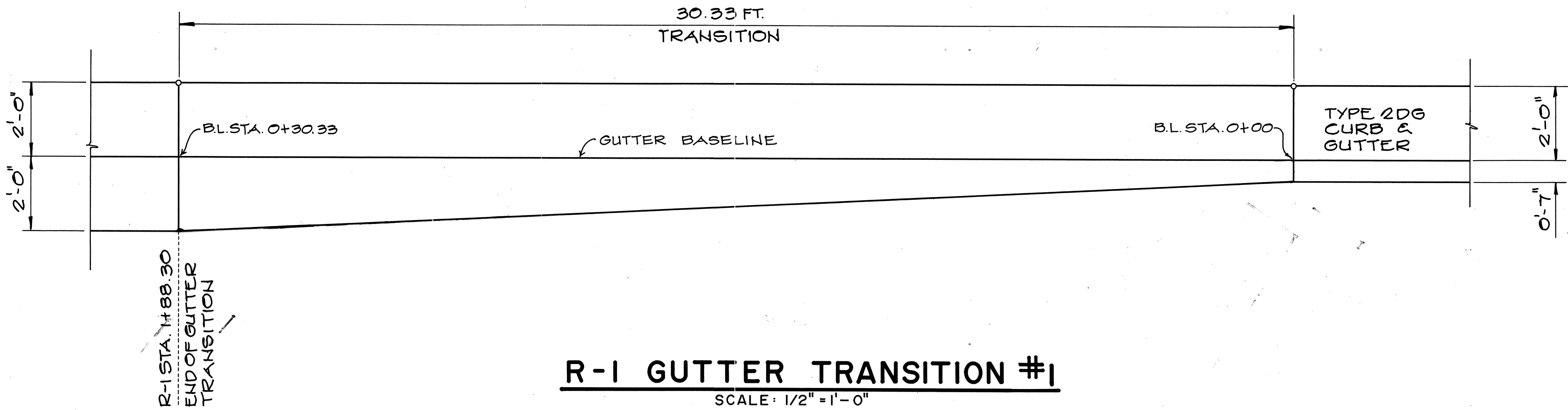
SCALE: AS NOTED DATE: MAR. 1997

SHEET No. M7 OF 13 SHEETS

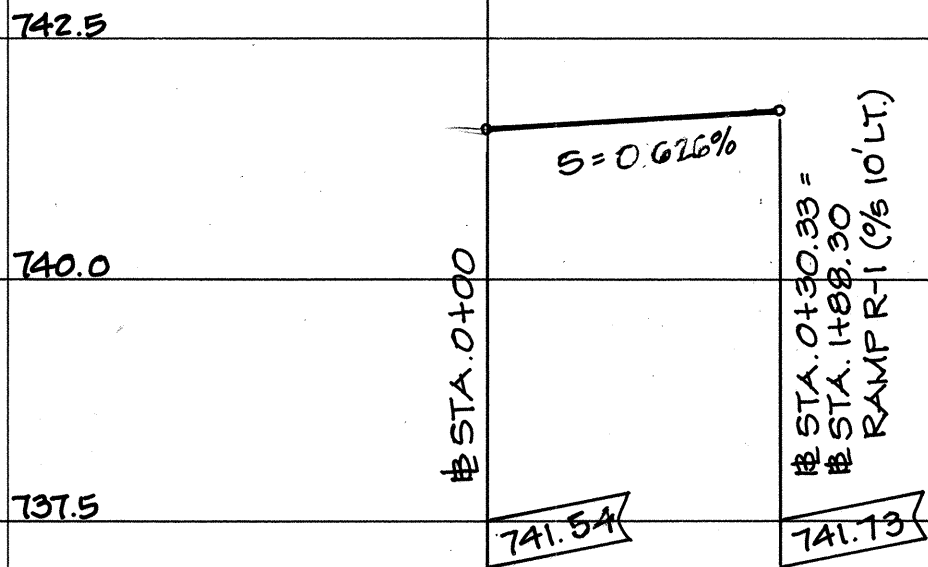
"AS-BUILT" 40

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
NO.	

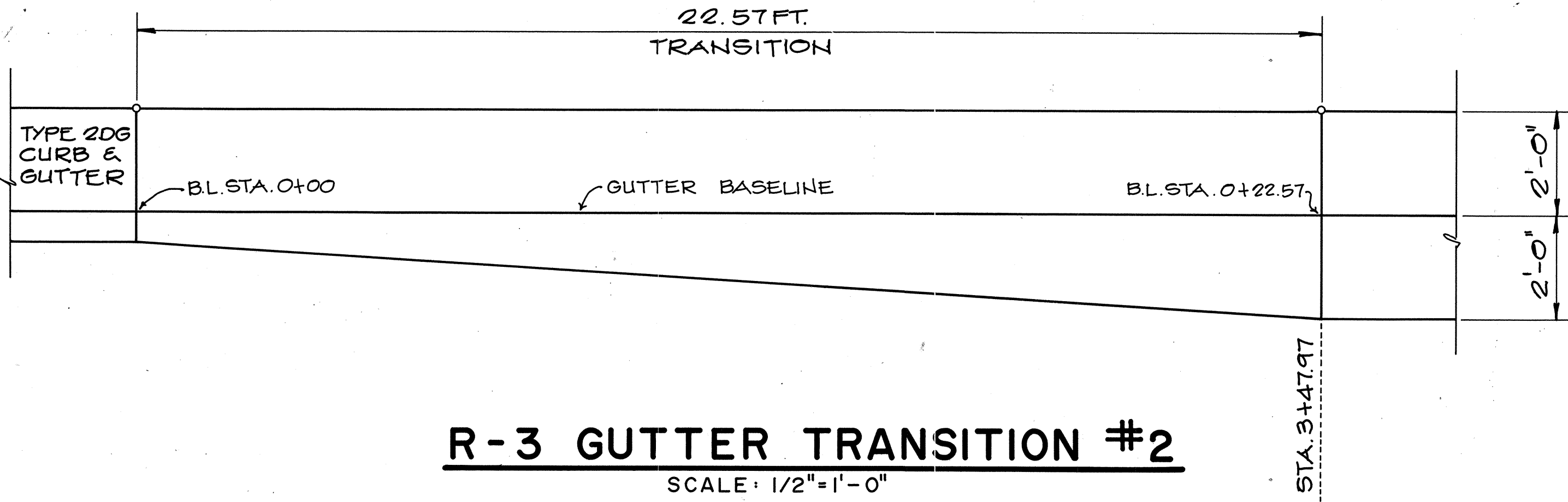
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H2-1(29)	1997	41	129



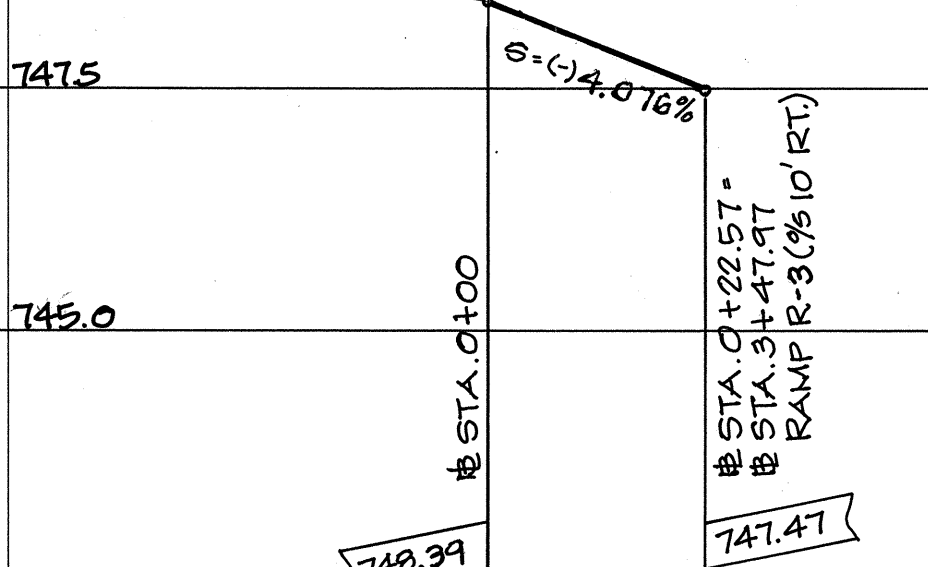
R-1 GUTTER TRANSITION #1
SCALE: 1/2" = 1'-0"



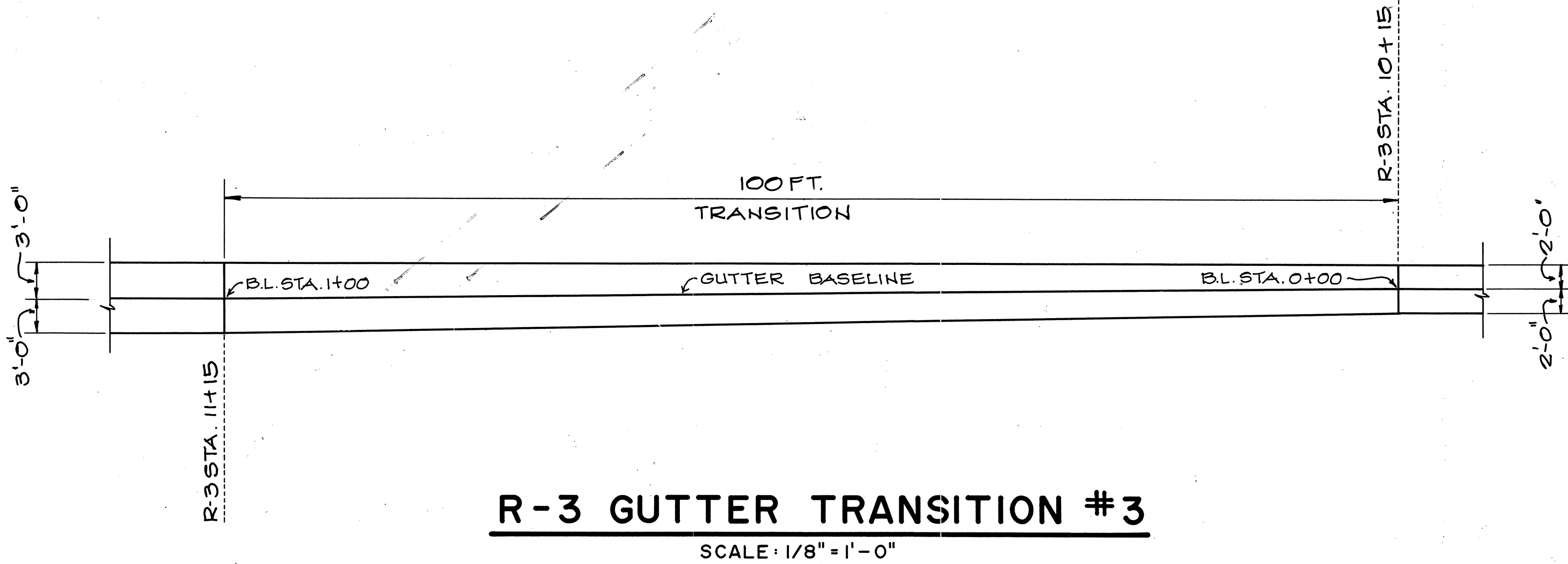
PROFILE ~ GUTTER TRANSITION #1
SCALE: HORIZ. 1" = 20'-0"
VERT. 1" = 2'-0"



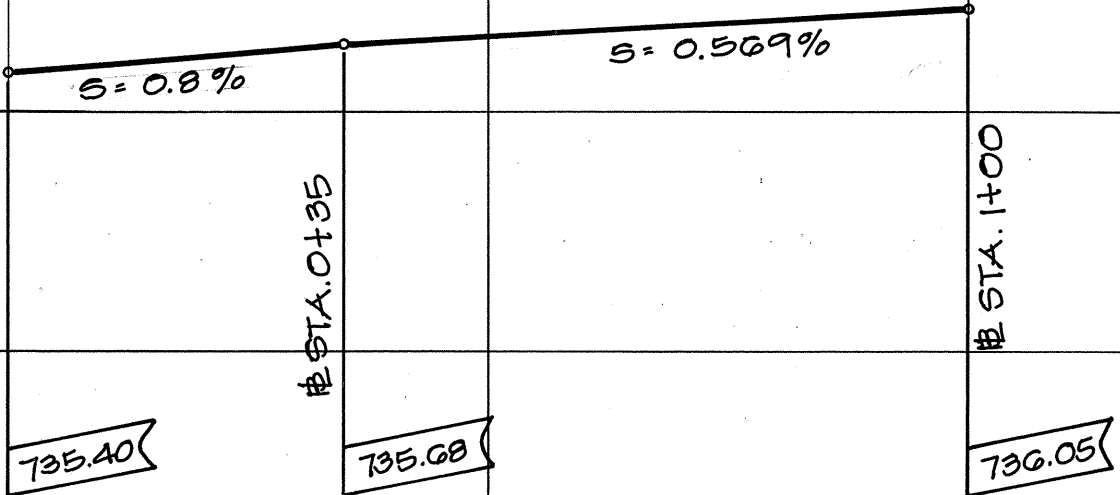
R-3 GUTTER TRANSITION #2
SCALE: 1/2" = 1'-0"



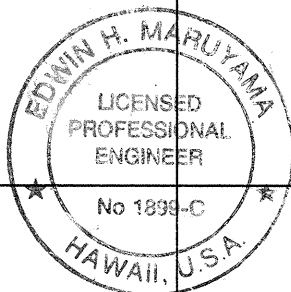
PROFILE - GUTTER TRANSITION #2
SCALE: HORIZ. 1" = 20'-0"
VERT. 1" = 2'-0"



R-3 GUTTER TRANSITION #3
SCALE: 1/8" = 1'-0"



PROFILE ~ GUTTER TRANSITION #3
SCALE: HORIZ. 1" = 20'-0"
VERT. 1" = 2'-0"



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Fujita & Associates

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GUTTER TRANSITION

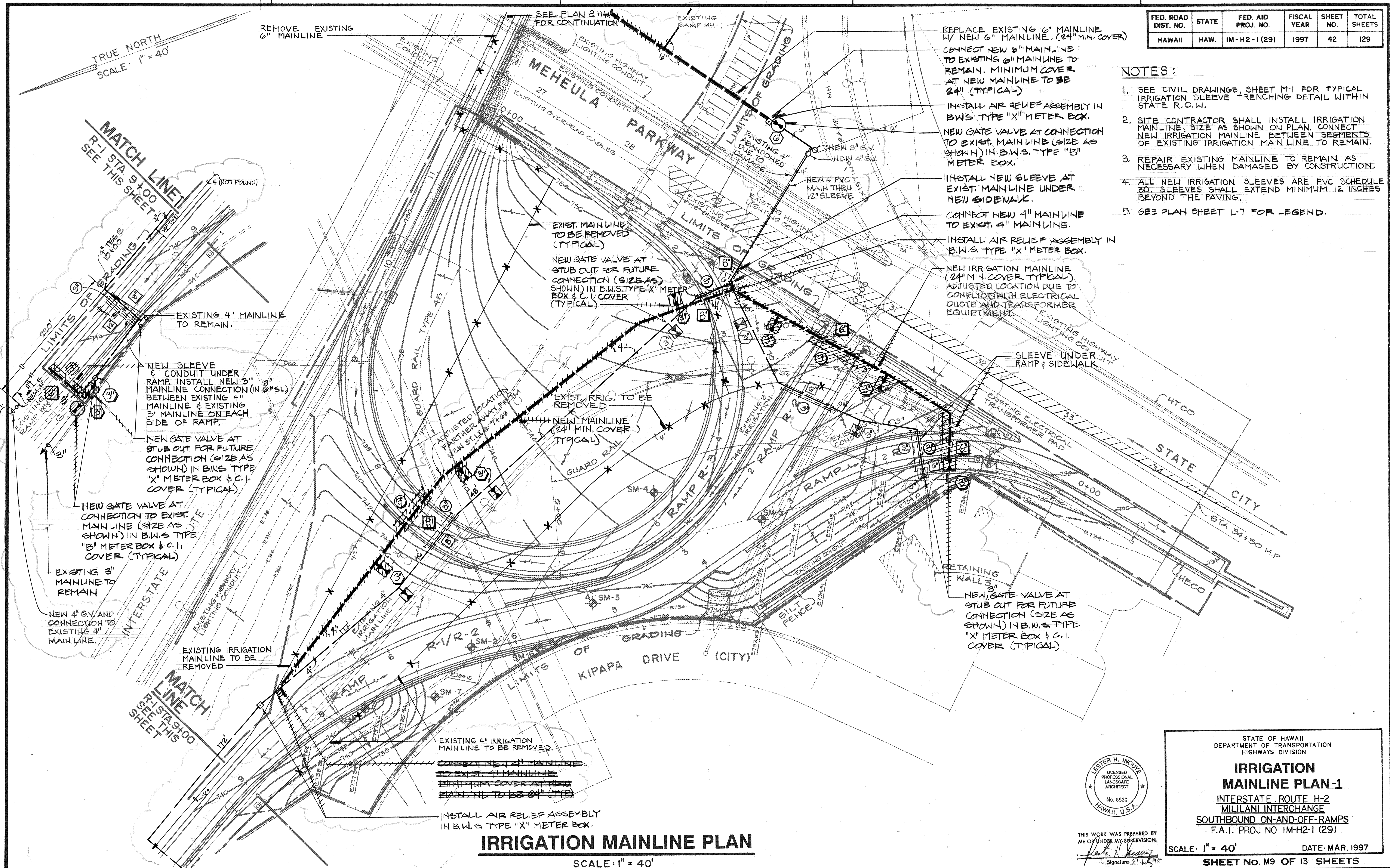
INTERSTATE ROUTE H-2
MILILANI INTERCHANGE
SOUTHBOUND ON-AND-OFF-RAMPS
F.A.I. Proj. No. IM-H2-1 (29)

SCALE: AS NOTED
DATE: MAR. 1997
SHEET NO. M8 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H2-1 (29)	1997	42	129

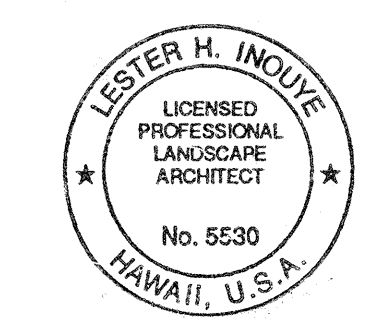
NOTES:

- SEE CIVIL DRAWINGS, SHEET M-1 FOR TYPICAL IRRIGATION SLEEVE TRENCHING DETAIL WITHIN STATE R.O.W.
- SITE CONTRACTOR SHALL INSTALL IRRIGATION MAINLINE, SIZE AS SHOWN ON PLAN, CONNECT NEW IRRIGATION MAINLINE BETWEEN SEGMENTS OF EXISTING IRRIGATION MAIN LINE TO REMAIN.
- REPAIR EXISTING MAINLINE TO REMAIN AS NECESSARY WHEN DAMAGED BY CONSTRUCTION.
- ALL NEW IRRIGATION SLEEVES ARE PVC SCHEDULE 80. SLEEVES SHALL EXTEND MINIMUM 12 INCHES BEYOND THE PAVING.
- SEE PLAN SHEET L-7 FOR LEGEND.



IRRIGATION MAINLINE PLAN

SCALE: 1" = 40'



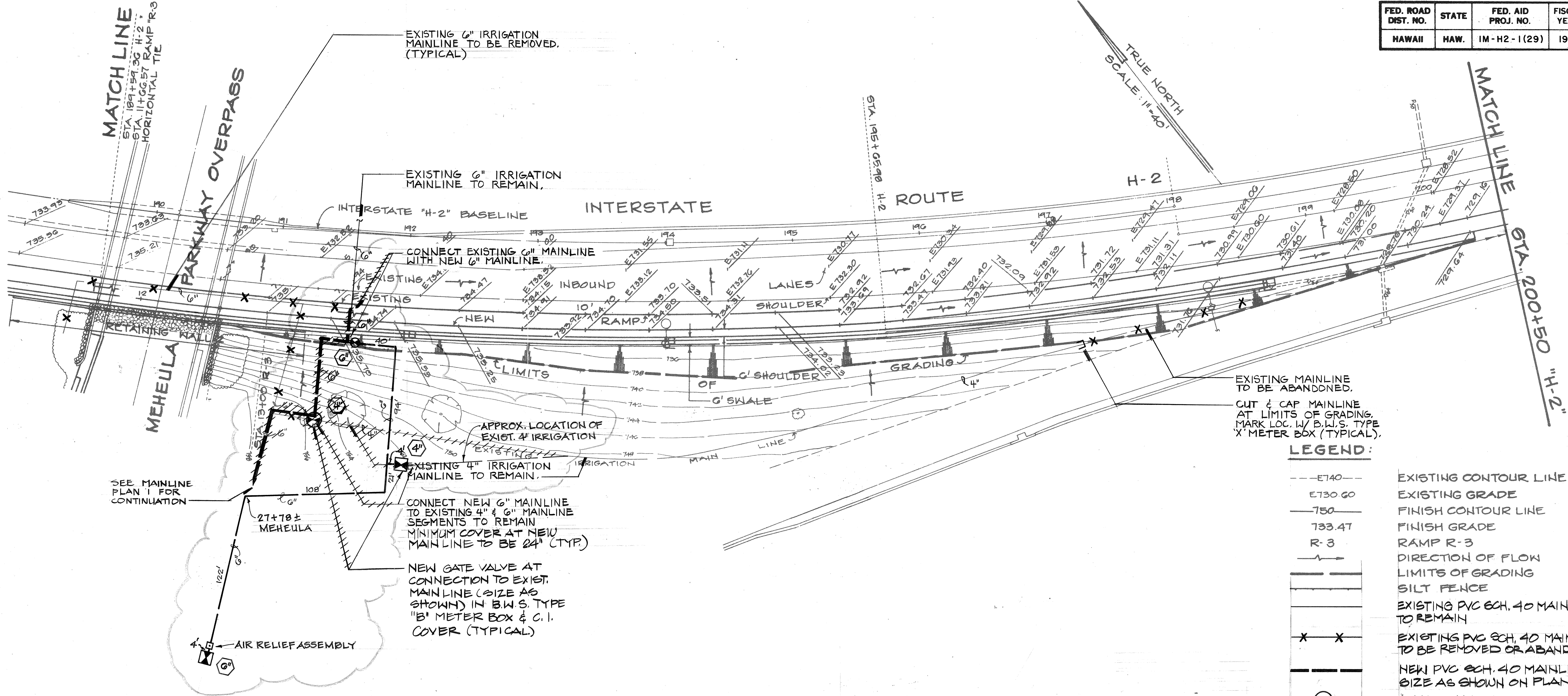
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Signature
 Signature 2/1/95

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

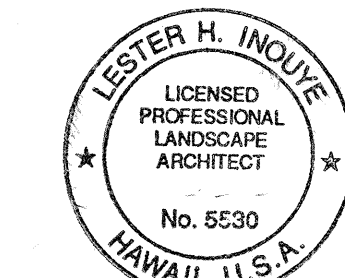
**IRRIGATION
MAINLINE PLAN-1**
INTERSTATE ROUTE H-2
MILILANI INTERCHANGE
SOUTHBOUND ON-AND-OFF-RAMPS
F.A.I. PROJ NO IM-H2-1 (29)

SCALE: 1" = 40'
DATE: MAR. 1997
SHEET No. M9 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO	TOTAL SHEETS
HAWAII	HAW.	IM-H2-1(29)	1997	43	129



IRRIGATION MAINLINE PLAN
SCALE: 1" = 40'



THIS WORK WAS PREPARED BY
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[Signature]
2/24/95

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

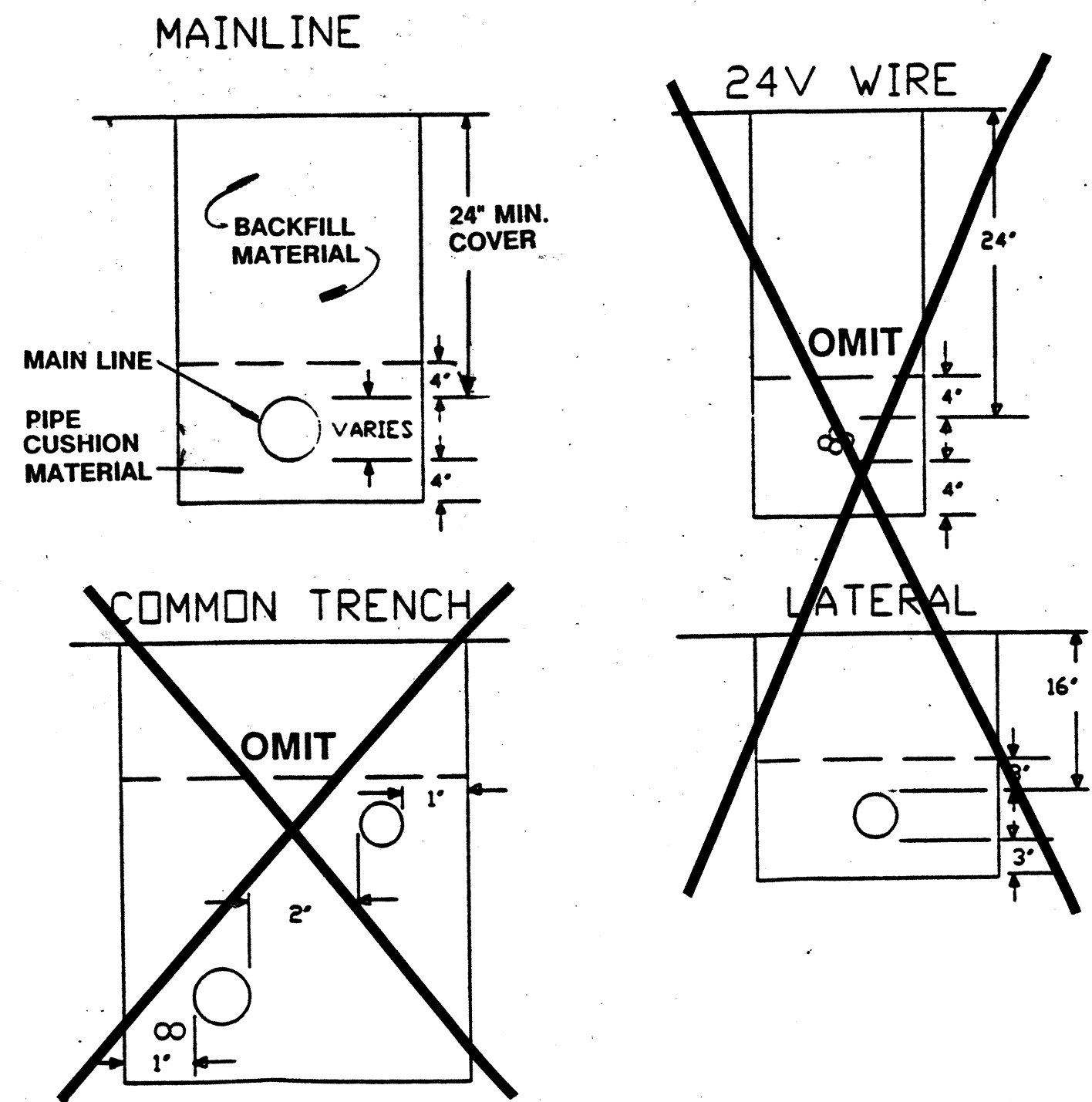
**IRRIGATION
MAINLINE PLAN - 2**
INTERSTATE ROUTE H-2
MILILANI INTERCHANGE
SOUTHBOUND ON-AND-OFF-RAMPS
F.A.I. Proj. No. IM-H2-1 (29)

SCALE: 1" = 40' DATE: MAR. 1997

SHEET NO. M10 OF 13 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H2-1(29)	1997	44	129



BACKFILL SHALL BE INSTALLED IN LIFTS AS INDICATED, BUT NOT EXCEEDING 6" AND COMPACTED FIRMLY AROUND THE PIPE.

INSTALL ALL PIPE PER MANUFACTURER'S RECOMMENDATIONS AND ASTM STANDARD D 2774

INSTALL ALL 120 V. PER LOCAL CODES AND SPECIFICATIONS

OMIT

MIN. TRENCH WIDTH DETERMINED BY MAINTAINING A MIN. OF 1" ON BOTH SIDES OF PIPE. COMMON TRENCH REQUIRES A MIN. OF 2" TO SEPERATE PIPES AS DETAILED.

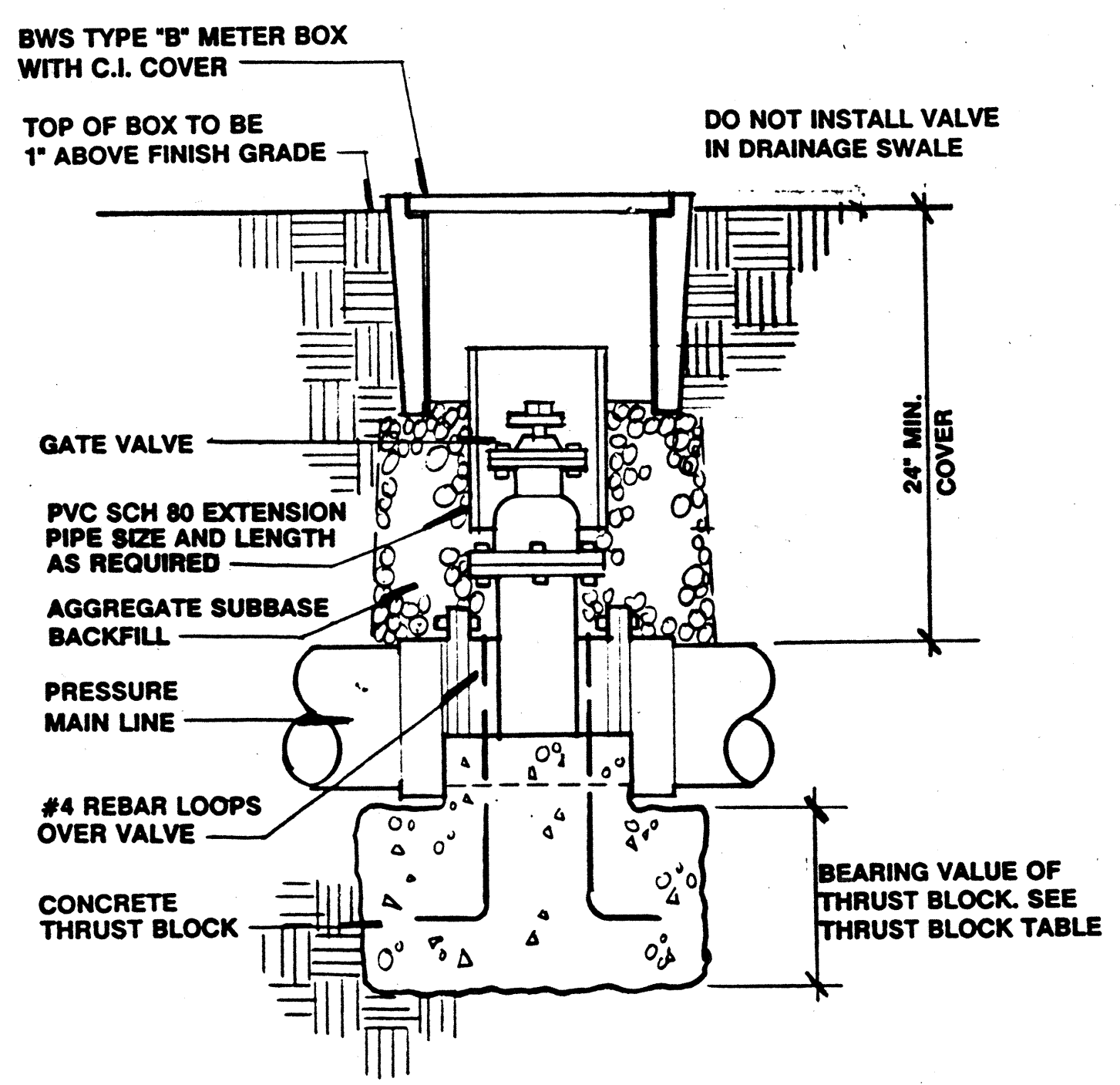
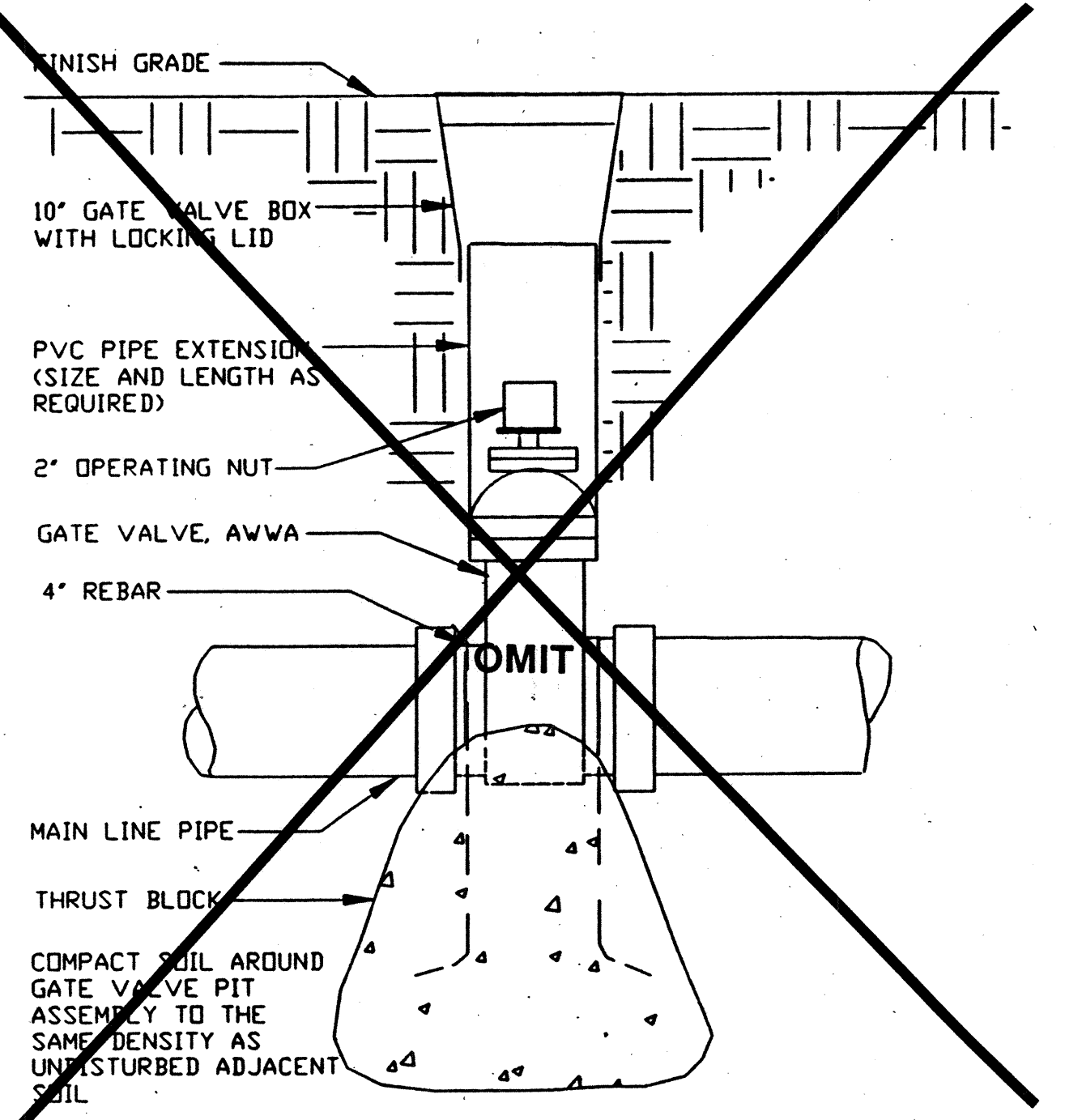
INSTALL ALL COMMUNICATION AND COMPUTER SIGNAL WIRE PER MANUFACTURER'S SPECIFICATIONS.

TAPE A LOOSE 20" LOOP IN ALL WIRING AT ALL DIRECTIONAL CHANGES GREATER THAN 30°. UNTAPE AFTER ALL CONNECTIONS ARE COMPLETED

OMIT

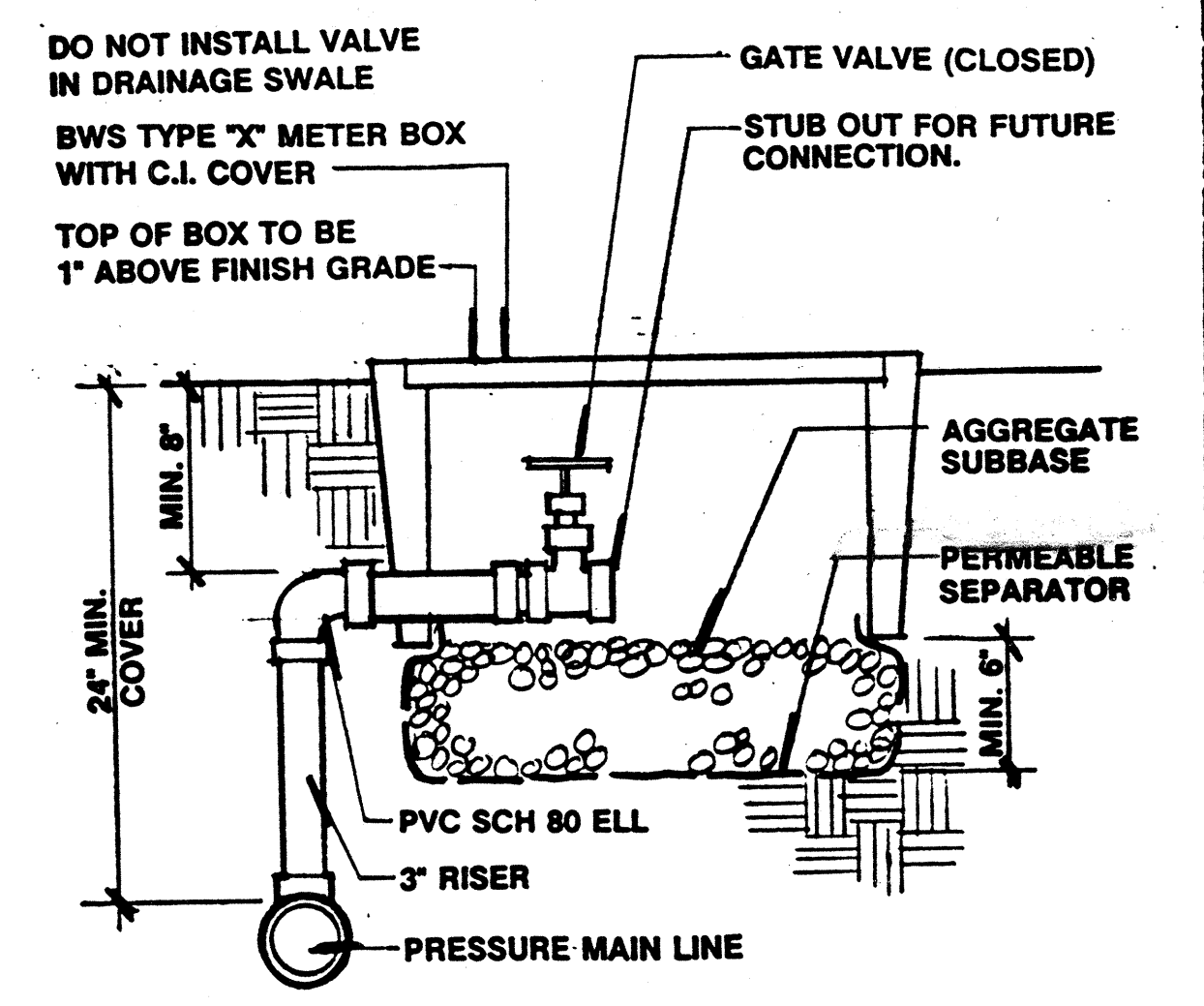
TAPE AND BUNDLE ALL WIRE AT 10' MAX. INTERVALS

INSTALL ALL 24 V. WIRE BY DIRECT BURIAL



GATE VALVE AT CONNECTION TO EXISTING MAIN LINE DETAIL

NOT TO SCALE



GATE VALVE AT STUB OUT FOR FUTURE CONNECTION DETAIL

NOT TO SCALE

TRENCH DETAIL

NOT TO SCALE

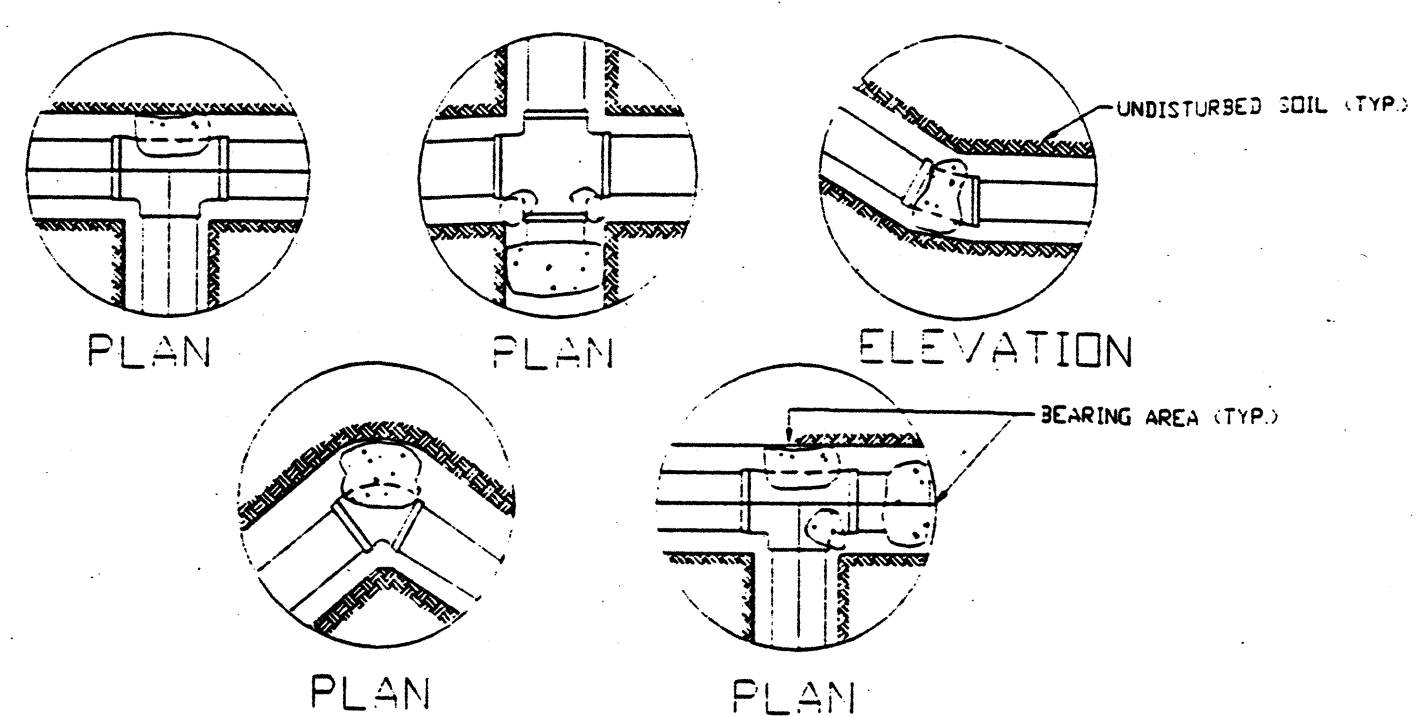


TABLE OF AREAS IN SQ. FT. AT THRUST BLOCK IN VERTICAL CONTACT WITH SOIL OF VARYING BEARING VALUES. WATER PRESSURE = 225 P.S.I.

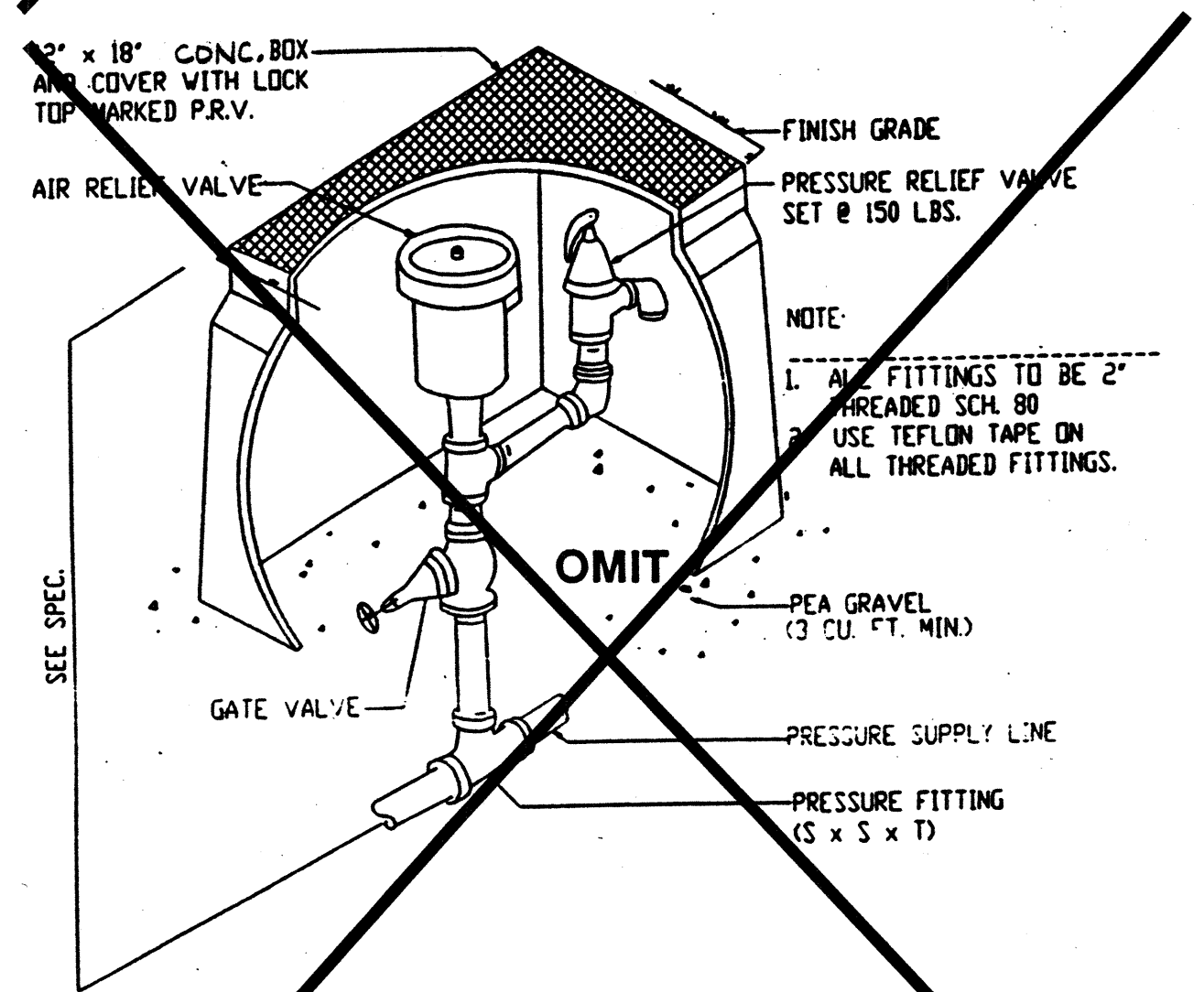
SIZE PIPE	TEES, BENDS, ENDS				90 DEG. BEND				45 DEG. BEND				22-1/2 DEG. BEND			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
4"	6.7	4.5	3.0	1.7	5.1	3.0	2.5	1.5	4.5	2.5	1.5	2.5	2.0	1.0	1.0	1.0
6"	10.0	7.5	3.0	1.7	1.0	10.5	4.5	3.5	1.5	6.0	2.5	3.0	4.0	3.0	1.5	1.0
8"	15.0	10.0	3.0	1.7	1.0	15.5	6.2	5.5	1.5	9.5	3.5	4.0	6.0	4.5	2.5	1.5
12"	21.0	15.5	3.5	1.5	1.0	22.0	9.0	7.5	1.0	12.0	5.0	4.0	8.5	6.5	2.5	2.5

CONDITION OF SOIL

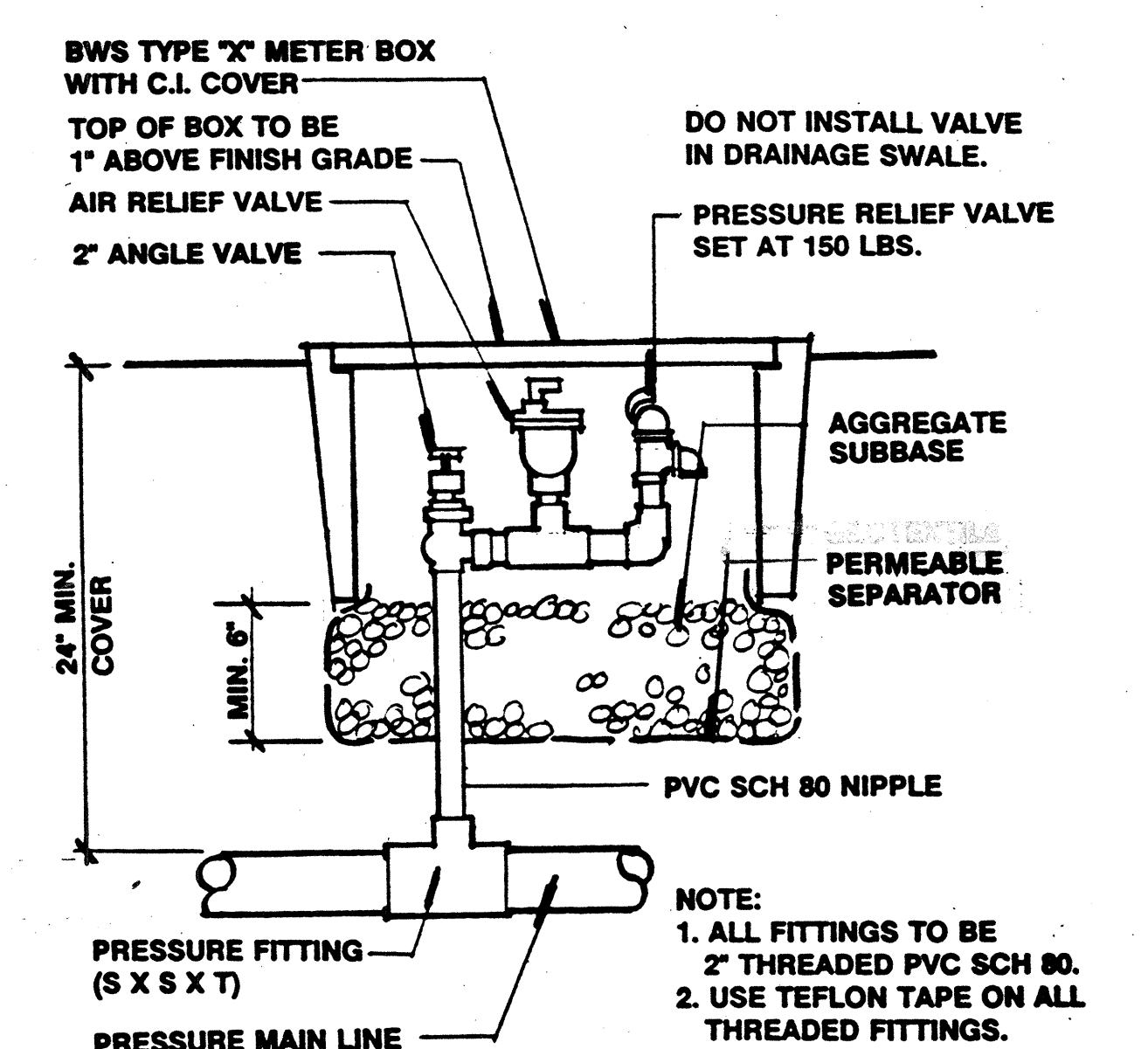
A - SAND	1,500 LBS./SQ. FT.
B - SAND & GRAVEL	2,000 LBS./SQ. FT.
C - SAND, GRAVEL, & CEMENTED CLAY	3,000 LBS./SQ. FT.
D - SHALE	6,000 LBS./SQ. FT.

THRUST BLOCK DETAIL

NOT TO SCALE

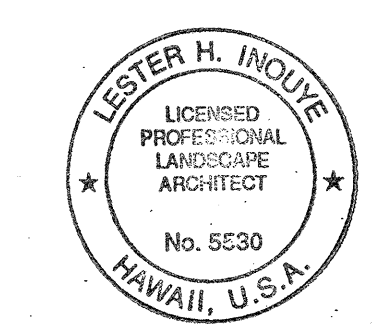


AIR RELIEF & PRESSURE RELIEF VALVE ASSEMBLY DETAIL



AIR RELIEF ASSEMBLY

NOT TO SCALE



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature: [Signature]

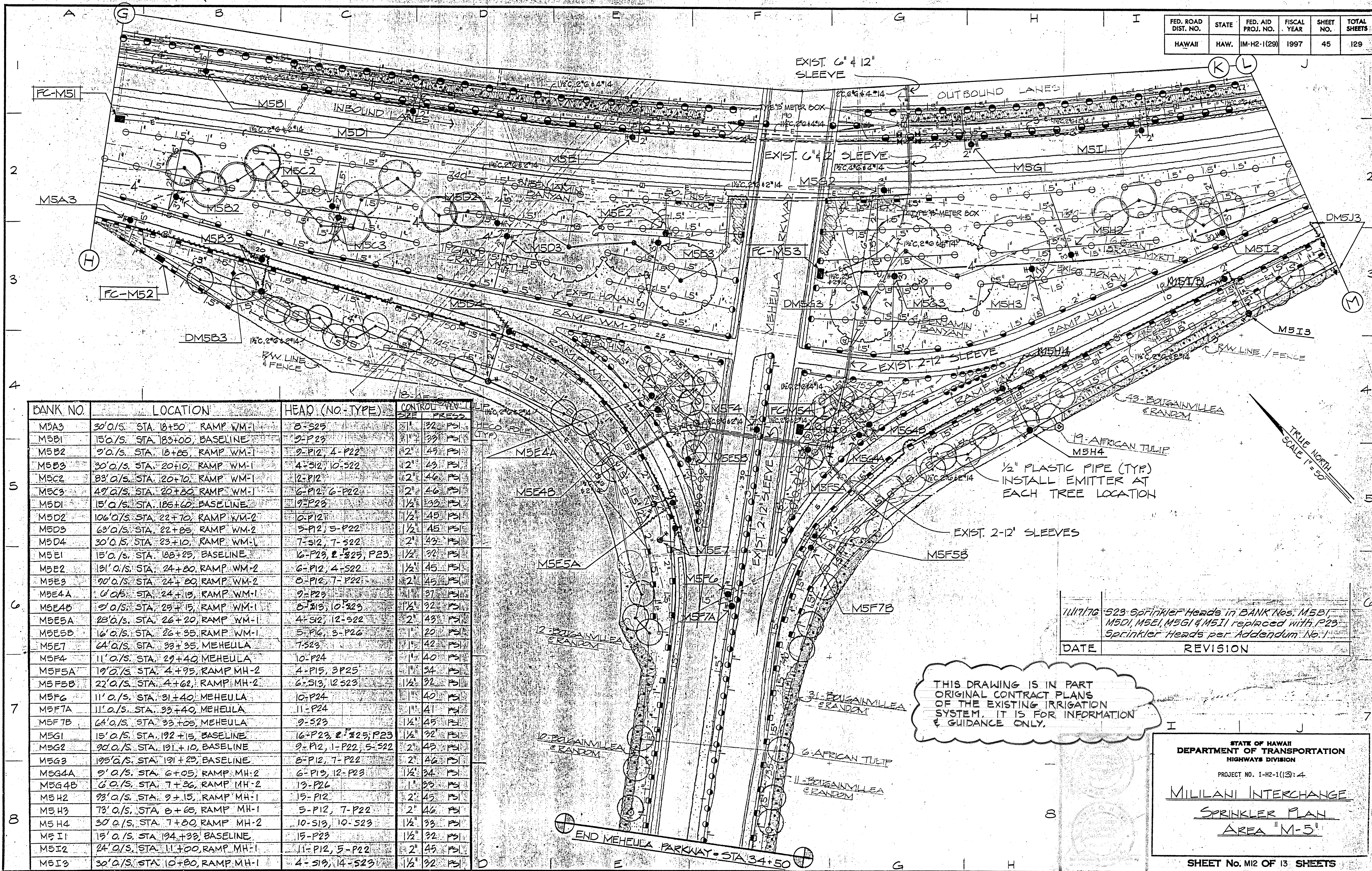
Date: 21 July 95

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**IRRIGATION
MAINLINE DETAILS**
INTERSTATE ROUTE H-2
MILILANI INTERCHANGE
SOUTHBOUND ON-AND-OFF-RAMPS
F.A.I. PROJ NO IM-H2-1 (29)

DATE: MAR. 1997
SHEET No. 111 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H2-1(29)	1997	45	129



BANK NO.	LOCATION	HEAD (NO.-TYPE)	CONTROL VALVE SIZE	PRESS.
M5A3	30' O/S. STA. 18+50, RAMP WM-1	8-525	1"	32 PSI
M5B1	15' O/S. STA. 183+00, BASELINE	9-P23	1"	32 PSI
M5B2	9' O/S. STA. 18+85, RAMP WM-1	9-P12, 4-P22	2"	45 PSI
M5B3	30' O/S. STA. 20+10, RAMP WM-1	4-512, 10-522	2"	43 PSI
M5C2	83' O/S. STA. 20+10, RAMP WM-1	12-P12	2"	46 PSI
M5C3	49' O/S. STA. 20+80, RAMP WM-1	6-P12, 6-P22	2"	46 PSI
M5D1	15' O/S. STA. 186+60, BASELINE	9-P23	1/2"	32 PSI
M5D2	106' O/S. STA. 22+70, RAMP WM-2	6-P12	1/2"	45 PSI
M5D3	63' O/S. STA. 22+85, RAMP WM-2	5-P12, 5-P22	1/2"	45 PSI
M5D4	30' O/S. STA. 23+10, RAMP WM-1	7-512, 7-522	2"	43 PSI
M5E1	15' O/S. STA. 188+25, BASELINE	6-P23, 2-525, P23	1/2"	32 PSI
M5E2	181' O/S. STA. 24+80, RAMP WM-2	6-P12, 4-522	1/2"	45 PSI
M5E3	90' O/S. STA. 24+80, RAMP WM-2	8-P12, 7-P22	2"	45 PSI
M5E4A	0' O/S. STA. 24+15, RAMP WM-1	9-P23	1"	37 PSI
M5E4B	9' O/S. STA. 25+15, RAMP WM-1	8-513, 10-523	1/2"	32 PSI
M5E5A	23' O/S. STA. 26+20, RAMP WM-1	4-512, 12-522	2"	43 PSI
M5E5B	16' O/S. STA. 26+35, RAMP WM-1	5-P16, 3-P26	1"	22 PSI
M5E7	64' O/S. STA. 33+35, MEHEULA	7-523	1"	42 PSI
M5F4	11' O/S. STA. 29+40, MEHEULA	10-P24	1"	40 PSI
M5F5A	19' O/S. STA. 4+95, RAMP MH-2	4-P15, 3-P25	1"	34 PSI
M5F5B	22' O/S. STA. 4+62, RAMP MH-2	6-513, 12-523	1/2"	32 PSI
M5F6	11' O/S. STA. 31+40, MEHEULA	10-P24	1"	40 PSI
M5F7A	11' O/S. STA. 33+40, MEHEULA	11-P24	1"	41 PSI
M5F7B	64' O/S. STA. 33+05, MEHEULA	9-523	1/2"	45 PSI
M5G1	15' O/S. STA. 192+15, BASELINE	16-P23, 8-P25, P23	1/2"	32 PSI
M5G2	92' O/S. STA. 191+10, BASELINE	9-P12, 1-P22, 5-522	2"	43 PSI
M5G3	195' O/S. STA. 191+25, BASELINE	8-P12, 7-P22	2"	46 PSI
M5G4A	9' O/S. STA. 6+05, RAMP MH-2	6-P13, 12-P23	1/2"	34 PSI
M5G4B	6' O/S. STA. 7+36, RAMP MH-2	13-P26	1"	35 PSI
M5H2	93' O/S. STA. 9+15, RAMP MH-1	15-P12	2"	45 PSI
M5H3	73' O/S. STA. 8+65, RAMP MH-1	5-P12, 7-P22	2"	46 PSI
M5H4	30' O/S. STA. 7+80, RAMP MH-2	10-513, 10-523	1/2"	33 PSI
M5I1	15' O/S. STA. 194+33, BASELINE	15-P23	1/2"	32 PSI
M5I2	24' O/S. STA. 11+00, RAMP MH-1	11-P12, 5-P22	2"	45 PSI
M5I3	30' O/S. STA. 10+80, RAMP MH-1	4-513, 14-523	1/2"	32 PSI

11/17/76	523 Sprinkler Heads in BANK Nos. M5B1, M5D1, M5E1, M5G1 & M5I1 replaced with P23 Sprinkler Heads per Addendum No. 1
DATE	REVISION

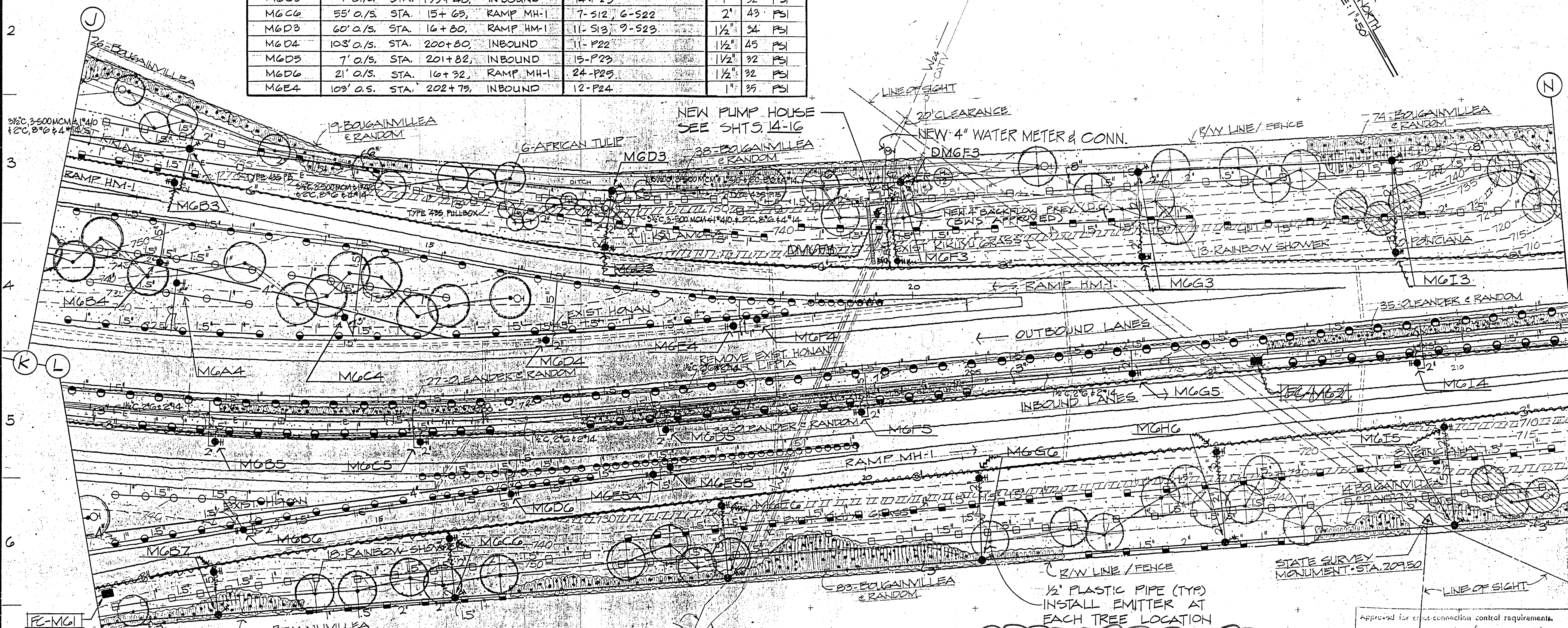
THIS DRAWING IS IN PART ORIGINAL CONTRACT PLANS OF THE EXISTING IRRIGATION SYSTEM. IT IS FOR INFORMATION & GUIDANCE ONLY.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PROJECT NO. I-H2-1(13):4
MILILANI INTERCHANGE
SPRINKLER PLAN
AREA "M-5"
SHEET No. M12 OF 13 SHEETS

BANK NO.	LOCATION	HEAD (NO.-TYPE)	CONTROL VLV SIZE PRESS
MGA4	81' O/S. STA. 196+80. BASELINE	5-P12, 6-P22	1 1/2" 45 PSI
MGB3	34' O/S. STA. 13+42. RAMP MH-1	4-S12, 8-S22	1 1/2" 43 PSI
MGB4	158' O/S. STA. 196+60. BASELINE	6-P12, 6-P22	1 1/2" 45 PSI
MGB5	15' O/S. STA. 197+20. BASELINE	15-P23	1 1/2" 32 PSI
MGB6	24' O/S. STA. 13+58. RAMP MH-1	5-P13, 13-P23	1 1/2" 34 PSI
MGB7	42' O/S. STA. 13+20. RAMP MH-1	8-S13	1" 33 PSI
MGC4	103' O/S. STA. 198+70. INBOUND	5-P12, 9-P22	2" 45 PSI
MGC5	7' O/S. STA. 199+40. INBOUND	14-P23	1" 32 PSI
MGC6	55' O/S. STA. 15+65. RAMP MH-1	7-S12, 6-S22	2" 43 PSI
MGD3	60' O/S. STA. 16+80. RAMP MH-1	11-S13, 9-S23	1 1/2" 34 PSI
MGD4	103' O/S. STA. 200+80. INBOUND	11-P22	1 1/2" 45 PSI
MGD5	7' O/S. STA. 201+82. INBOUND	15-P23	1 1/2" 32 PSI
MGD6	21' O/S. STA. 16+32. RAMP MH-1	24-P23	1 1/2" 32 PSI
MGE4	103' O/S. STA. 202+75. INBOUND	12-P24	1" 35 PSI

DATE	REVISION
11/17/76	523 Sprinkler Heads in BANK Nos. MGB5, MGC5, MGD5, MGF5, MGG5 & MGI4 replaced with P23 Sprinkler Heads per Addendum No. 1 Reference (A) in grid F3 revised to read (B) Meter and connection in grid F3 revised to read "New 4" WATER METER AND CONNECTION."

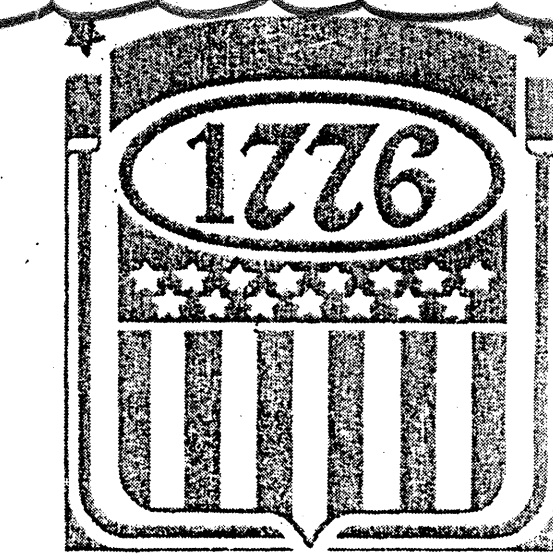
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IM-H2-1(29)	1987	46	129



BANK NO.	LOCATION	HEAD (NO.-TYPE)
MGE5A	36' O/S. STA. 202+80. INBOUND	14-P26
MGE5B	36' O/S. STA. 203+20. INBOUND	11-X-P26
MGE6	44' O/S. STA. 18+50. RAMP MH-1	8-S13, 9-S23
MGF3	68' O/S. STA. 19+80. RAMP MH-1	6-S12, 8-S22
MGF4	6' O/S. STA. 19+30. RAMP MH-1	8-P26
MGF5	7' O/S. STA. 204+00. INBOUND	14-P23
MGG3	13' O/S. STA. 21+33. RAMP MH-1	7-S12, 5-S22
MGG5	7' O/S. STA. 206+70. INBOUND	11-P23
MGG6	107' O/S. STA. 199+97. INBOUND	8-S13, 8-S23
MGG6	108' O/S. STA. 207+50. INBOUND	6-S12, 12-S22
MGI3	150' O/S. STA. 209+50. INBOUND	9-S12, 6-S22
MGI4	7' O/S. STA. 209+68. INBOUND	20-P23
MGI5	105' O/S. STA. 209+84. INBOUND	6-S12, 6-S22

BANK NO.	CONTROL VLV SIZE PRESS
MGE5A	1" 17 PSI
MGE5B	1" 31 PSI
MGE6	1 1/2" 33 PSI
MGF3	2" 43 PSI
MGF4	1" 20 PSI
MGF5	1" 32 PSI
MGG3	2" 45 PSI
MGG5	1" 33 PSI
MGG6	1 1/2" 33 PSI
MGG6	2" 45 PSI
MGI3	2" 43 PSI
MGI4	1 1/2" 33 PSI
MGI5	2" 45 PSI

THIS DRAWING IS IN PART ORIGINAL CONTRACT PLANS OF THE EXISTING IRRIGATION SYSTEM. IT IS FOR INFORMATION & GUIDANCE ONLY.



Approved for cross connection control requirements.
Board of Water Supply
10-8-76
Date

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SPRINKLER PLAN
AREA M-6
INTERSTATE ROUTE H-2
MILILANI INTERCHANGE
SOUTHBOUND ON-AND-OFF-RAMPS
F.A.I. Proj. No. IM-H2-1(29)

SCALE: 1" = 50' DATE: MAR. 1997
SHEET No. M13 OF 13 SHEETS