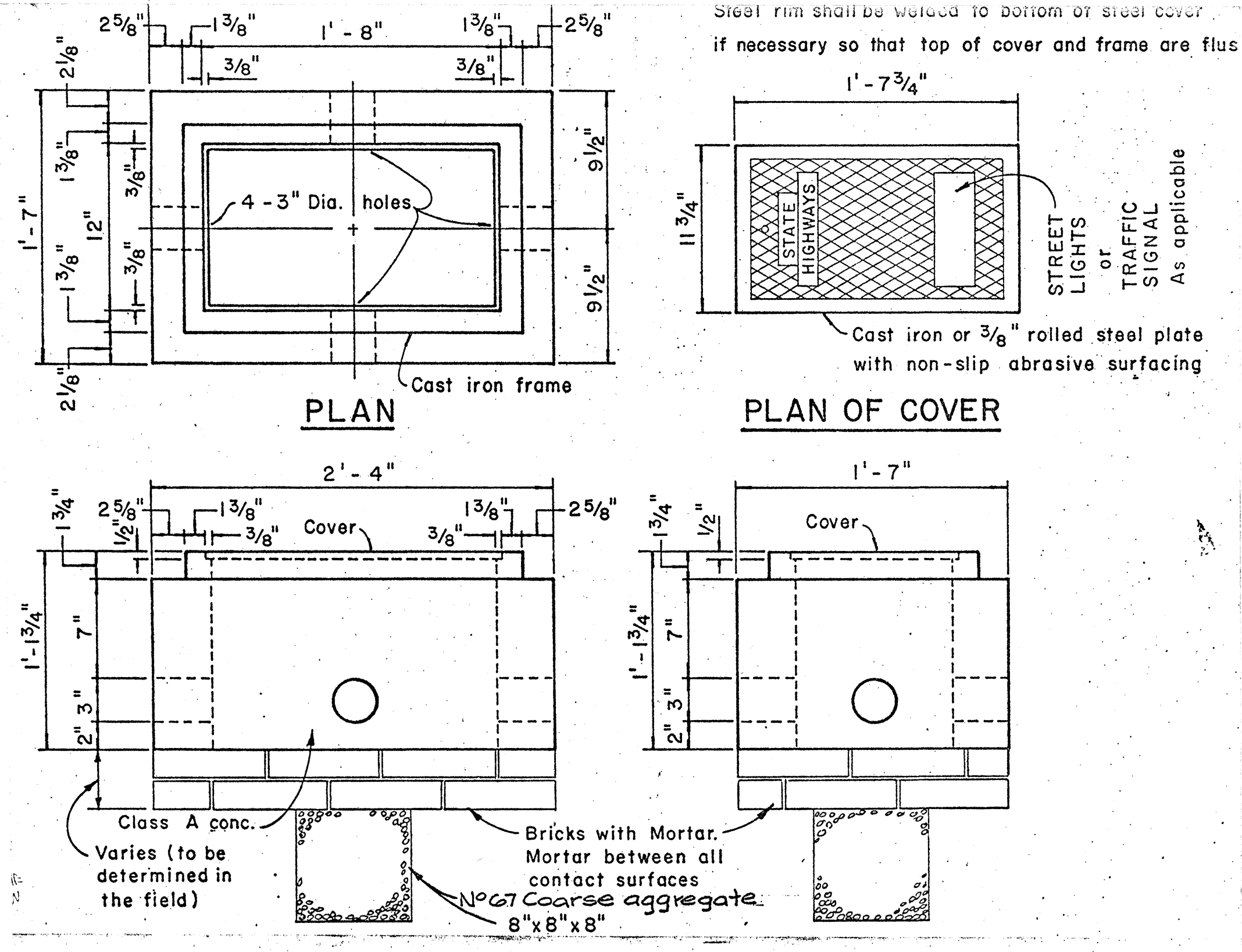


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1H1(130):17	1976	69	174

SEE NOTE 1/E1.

SYMBOL	REPRESENTS	LEGEND	
		REFERENCE	DETAIL NOTE
7	EXISTING WOOD POLE LTG. STD. OVERHEAD-WIRED; W/ LUMINAIRE I.D. NO. TO REMAIN UNLESS OTHERWISE INDICATED.		
S 43	METAL LTG. STD. ANCHORAGE, AND 250-WATT H.P.S. LUMINAIRE MOUNTED @ 35'; EXCEPT AS NOTED, W/LUMINAIRE I.D. NO.	4/E5 1/E6	
S 41	METAL LTG. STD., ANCHORAGE, AND 400-WATT H.P.S. LUMINAIRE MOUNTED @ 45'; W/LUMINAIRE I.D. NO.	2/E5 1/E6	
II	WOOD POLE LTG. STD. FOUNDATION TYPE AS NOTED, & 400-WATT H.P.S. OVERHEAD-WIRE LUMINAIRE MOUNTED @ 45'; W/LUMINAIRE I.D. NO.	1/E5 1/E8	
☀	UNDERDECK 250-WATT H.P.S. LUMINAIRE	5/E5 1/E2	
▲	PIER-MOUNTED H.P.S. 250-WATT LUMINAIRE, TYPE P-L2-S	3/E5 3/E8	
△	PIER-MOUNTED OR COLUMN-MOUNTED H.P.S. 150-WATT LUMINAIRE TYPE B-LI	6/E5 3/E8	
☐	PULL BOX TYPE B FOR LIGHTING SYSTEM		
☐	PULL BOX TYPE B FOR TRAFFIC SIGNAL SYSTEM	1/E1 1/E1	
■	PULL CAST IRON, SIZE AS INDICATED		
● C	WOOD POLE, W/I.D. NO.		
—	LIGHTING SYSTEM AERIAL CONDUCTORS		
---	UNDERGROUND RACEWAY	1/E7	G3, G4
---	RACEWAY RUN IN OR ON STRUCTURE		G3, G4 1/E2
TS	TRAFFIC SIGNAL SYSTEM AERIAL CONDUCTORS		
TS/SW	TRAFFIC SIGNAL SYSTEM AERIAL CONDUCTORS AND SIGNAL SPAN WIRE	3/E12	
40 ←	TRAFFIC SIGNAL HEAD, WITH I.D. NO. AND GREEN PHASE INDICATION	3/E12	
P10 ←	PEDESTRIAN SIGNAL, WITH I.D. NO. AND "WALK" PHASE INDICATION	3/E12	
☐	TRAFFIC SIGNAL SYSTEM VEHICLE DETECTOR LOOP	2/E7	
PPB (AI)	PEDESTRIAN PUSH BUTTON AND SIGN, WITH "WALK" PHASE INDICATION	2/E1 3/E1, 3/E12	
◐	PERMANENT SIGN LUMINAIRE, TYPE # S-M2	3/E7	
---	CAP AND MARK RACEWAY	4/E8	

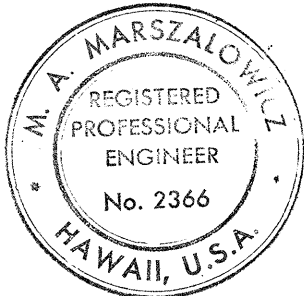
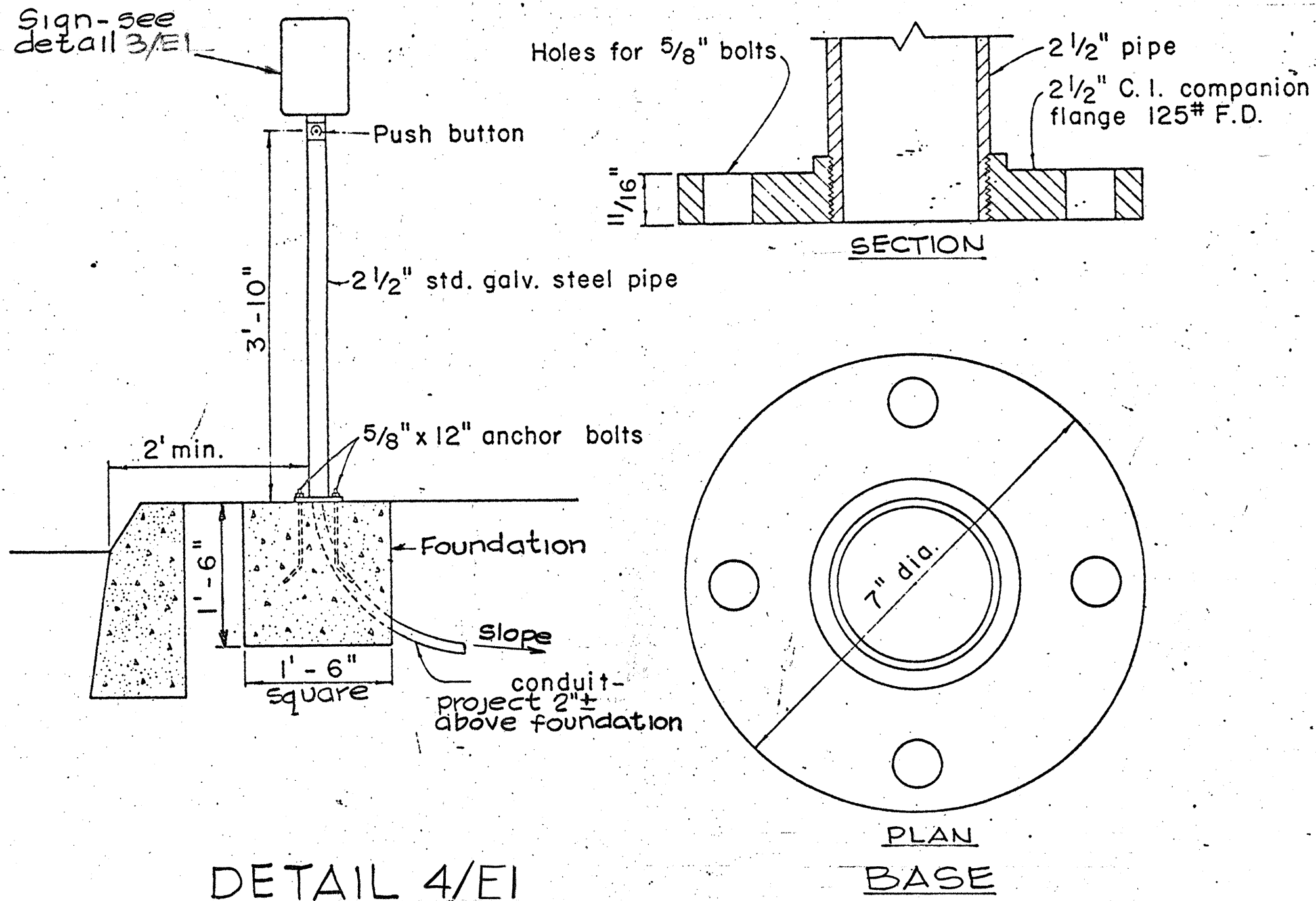
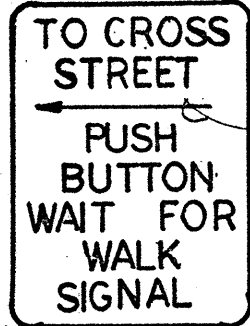
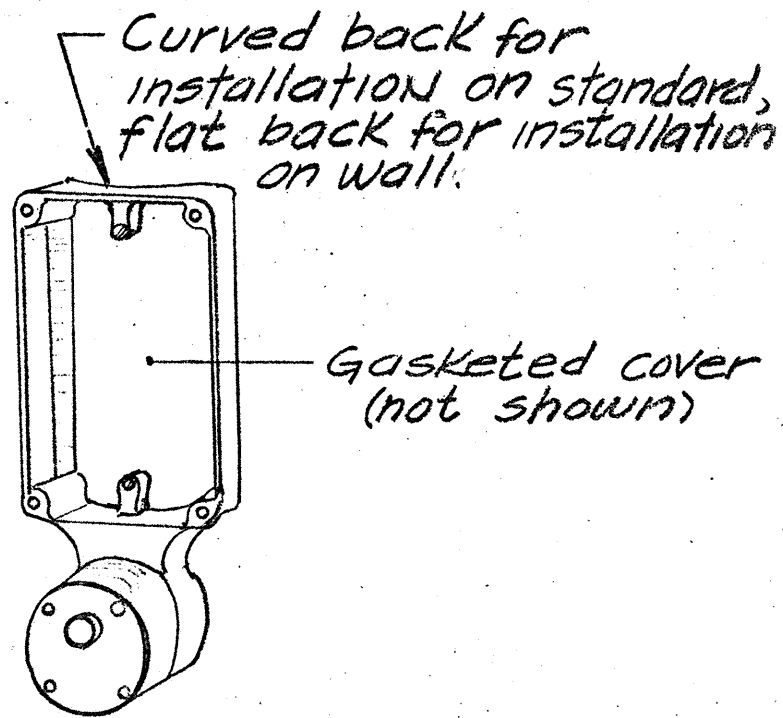


GENERAL NOTES

- ON PLAN SHEETS EXISTING FEATURES ARE DESIGNATED BY NOTATION OR THE LETTER (E) IN CONJUNCTION WITH THE SYMBOL.
- DETAIL AND NOTES ARE NUMBERED AS FOLLOWS:
DETAIL OR NOTE NUMBER
1/E3 ← ELECTRICAL SHEET ON WHICH DETAIL OR NOTE APPEARS.
- PROVIDE UNDERGROUND RACEWAYS AND RACEWAYS RUN IN STRUCTURE IN 2" SIZE, EXCEPT AS NOTED.
- FOR ALL RACEWAYS RUN UNDER TRAFFIC AREAS PROVIDE TYPE RGS OR PVC CONDUIT, WITH CONC. ENCASEMENT. FOR LIGHTING SYSTEM RACEWAYS RUN UNDER NON-TRAFFIC AREAS PROVIDE TYPE NMC DIRECTLY BURIED. FOR TRAFFIC SYSTEM RACEWAYS UNDER NON-PAVED AREAS PROVIDE TYPE NMC WITH CONC. ENCASEMENT. FOR ALL RACEWAYS RUN IN STRUCTURE PROVIDE TYPE NMC, EXCEPT PROVIDE TYPE RGS IN 1-INCH AND SMALLER SIZE. FOR RACEWAY SEGMENTS CROSSING A PIER FOOTING, PROVIDE TYPE RGS CONDUIT TO POINTS 5-FEET BEYOND FOOTING. FOR RACEWAYS RUN EXPOSED, PROVIDE TYPE RGS CONDUIT EXCEPT WHERE OTHERWISE INDICATED. (FOR ALL RACEWAY SYSTEMS WHICH ARE NOT METALLIC THROUGHOUT, PROVIDE A #8 COPPER WIRE BOND ACROSS ALL NON-METALLIC SEGMENTS.)

LIST OF ABBREVIATIONS

C	RACEWAY (TYPE AND SIZE AS INDICATED.)	CKT	CIRCUIT
NMR	NON-METALLIC RACEWAY (TYPE PVC, BFD, OR CAD)	FDR	FEEDER (OR BRANCH THEREOF)
RAL	RIGID ALUMINUM CONDUIT	GND	GROUND
PVC	POLYVINYLCARBONATE CONDUIT	N.T.S.	NOT TO SCALE
BFD	BITUMINUS FIBER DUCT	N.I.C.	NOT IN CONTACT
CAD	CEMENT ASBESTOS DUCT	FUT.	FUTURE
LTG	LIGHTING	EXIST.	EXISTING
LTG. STD.	LIGHTING STANDARD	CONC.	CONCRETE
BKT	BRACKET ARM	H.P.S.	HIGH PRESSURE SODIUM VAPOR LAMP
FND	FOUNDATION	Hg	MERCURY VAPOR LAMP
		RGS	Rigid Galvanized Steel



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

M.A. Marszalowicz

6/12/78	Revised 6th and 7th line of Legend
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
KEEHI INTERCHANGE ELECTRICAL PLAN - PART I	
INTERSTATE ROUTE H-1 PROJECT NO. I-HI-1(130):17	
SCALE: NONE	DATE: AUG. 16, 1976
SHEET No. E1 OF E12 SHEETS	

DATE	DATE
DESIGNED BY	DESIGNED BY
CHECKED BY	CHECKED BY
QUANTITIES BY	QUANTITIES BY
NOTE BOOK	NOTE BOOK
ORIGINAL	ORIGINAL

DETAIL 2/E1
PEDESTRIAN PUSHBUTTON

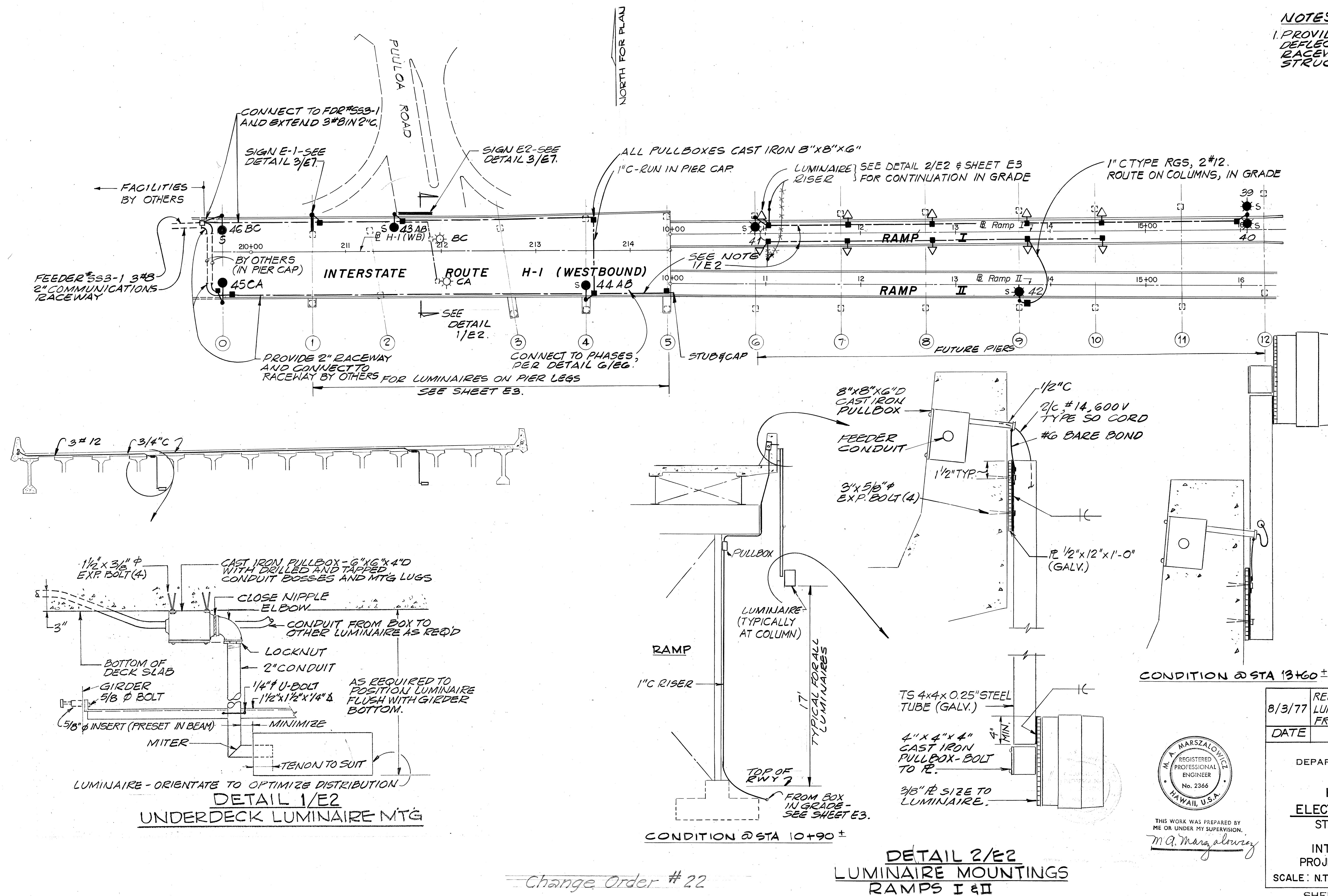
DETAIL 3/E1
PEDESTRIAN SIGNAL SIGN

DETAIL 4/E1
PEDESTRIAN SIGN & BUTTON STANDARD

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI(130):17	1976	70	174

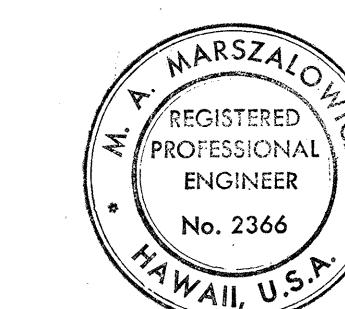
NOTES

1. PROVIDE A BONDED EXPANSION-DEFLECTION FITTING IN ALL RACEWAY RUNS CROSSING STRUCTURE EXP. JOINTS.



Change Order #22

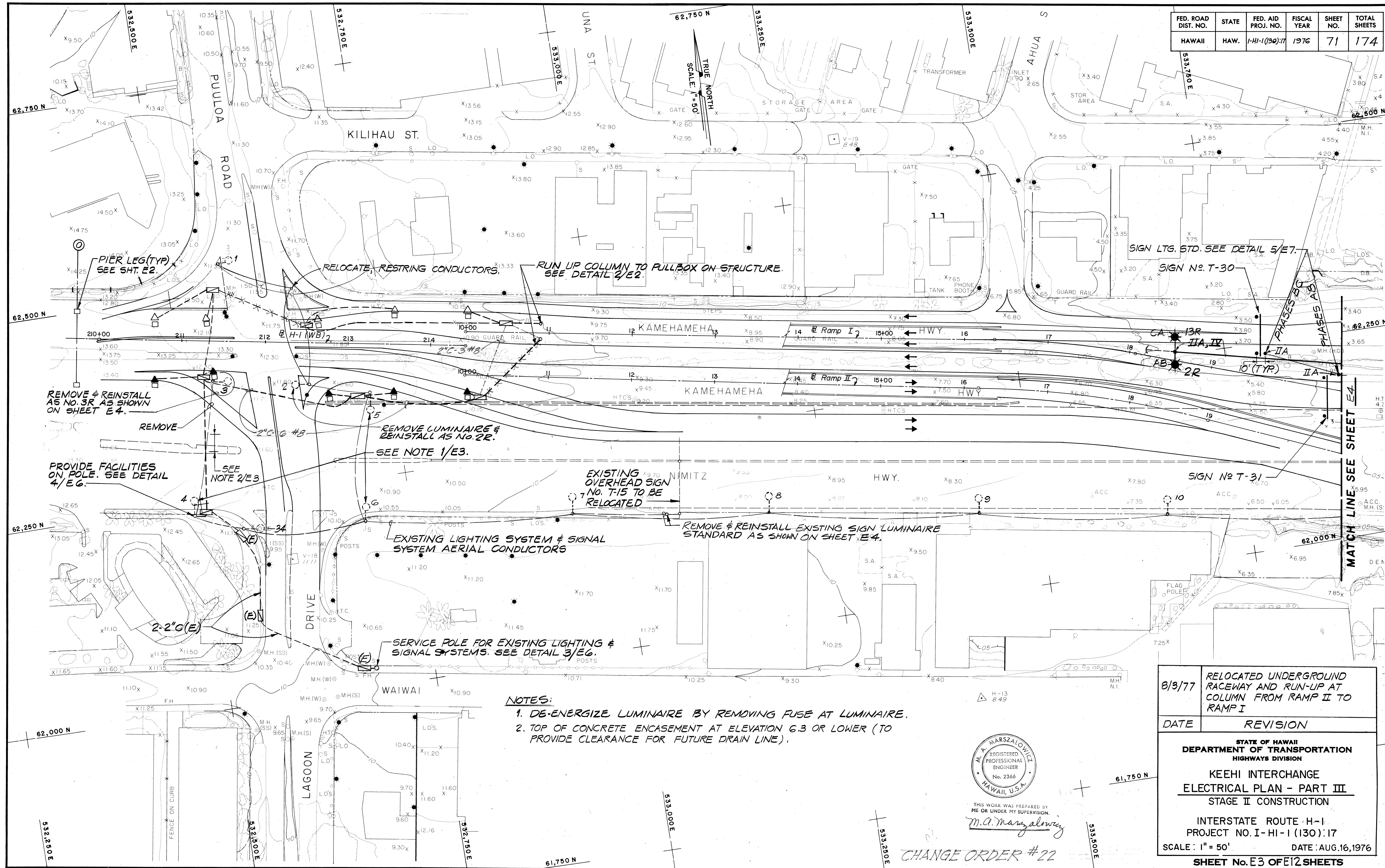
DETAIL 2/E2 LUMINAIRE MOUNTINGS RAMPS I & II



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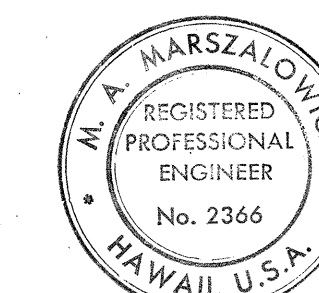
8/3/77	RELOCATED COLUMN MOUNTED LUMINAIRE FOR AT GRADE ROADWAY FROM RAMP II TO RAMP I
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
KEEHI INTERCHANGE ELECTRICAL PLAN - PART II STAGE II CONSTRUCTION	
INTERSTATE ROUTE H-1 PROJECT NO. I-HI-1 (130):17	
SCALE: N.T.S.	DATE: AUG. 16, 1976
SHEET NO. 52 OF 52 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(130):17	1976	71	174



NOTES:

1. DE-ENERGIZE LUMINAIRE BY REMOVING FUSE AT LUMINAIRE.
2. TOP OF CONCRETE ENCASMENT AT ELEVATION 6.3 OR LOWER (TO PROVIDE CLEARANCE FOR FUTURE DRAIN LINE).



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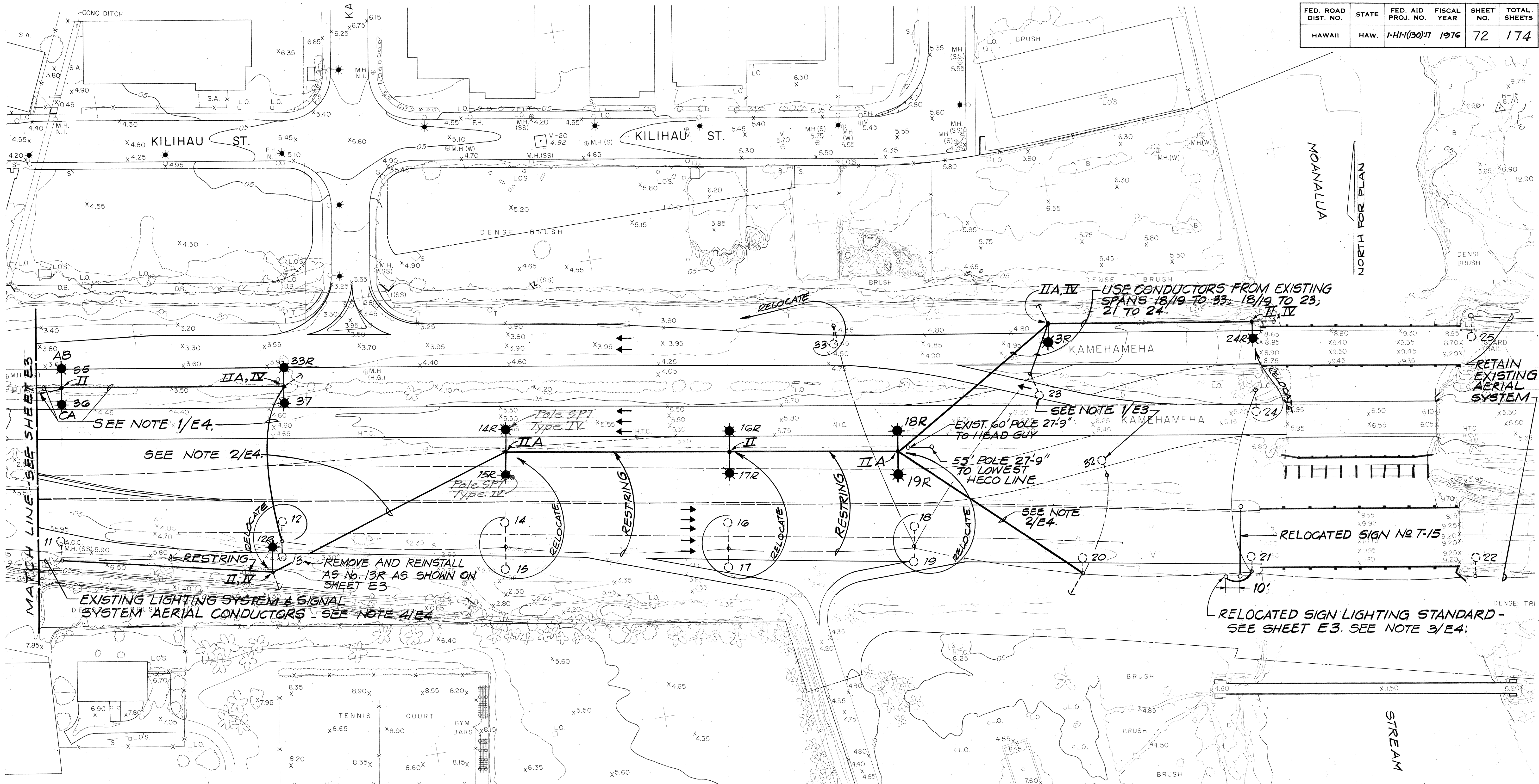
M.A. Marszalowicz

CHANGE ORDER #22

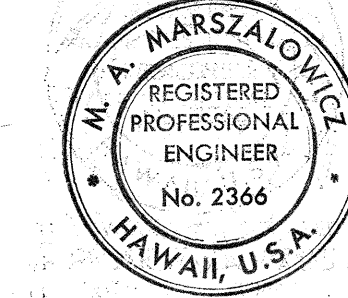
8/3/77	RELOCATED UNDERGROUND RACEWAY AND RUN-UP AT COLUMN FROM RAMP II TO RAMP I
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
KEEHI INTERCHANGE ELECTRICAL PLAN - PART III STAGE II CONSTRUCTION	
INTERSTATE ROUTE H-1 PROJECT NO. I-HI-1(130):17	
SCALE: 1" = 50'	DATE: AUG. 16, 1976
SHEET No. E3 OF 12 SHEETS	

0071

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(130)-17	1976	72	174



- NOTES:**
1. PROVIDE PRE-ASSEMBLED AERIAL CABLE - 3/C #1 & BARE MESSENGER.
 2. PROVIDE PRE-ASSEMBLED AERIAL CABLES 3/C #1 & BARE MESSENGER; 2/C #8 & BARE MESSENGER; AND A 10/C #16 CABLE & A 12/C #16 CABLE MATCHING EXIST'G INTERTIE CABLES.
 3. CONNECT RELOCATED LUMINAIRES TO PHASES THEY PRESENTLY CONNECT TO.
 4. EXISTING LIGHTING SYSTEM CONDUCTORS COMPRISE A 3/C #1 MESSENGER CABLE. EXISTING SIGNAL SYSTEM CONDUCTORS COMPRISE 2#8s, A 10/C #16 CABLE, AND A 12/C #16 CABLE.
 5. LIGHTING SYSTEM SHOWN ON THIS SHEET SHALL BE ACTIVATED AT THE END OF STAGE II, EXCEPT ACTIVATE LUMINAIRES 33R, 35, 36 & 37 AT THE END OF STAGE I.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**KEEHI INTERCHANGE
ELECTRICAL PLAN - PART IV
STAGE I & II CONSTRUCTION**

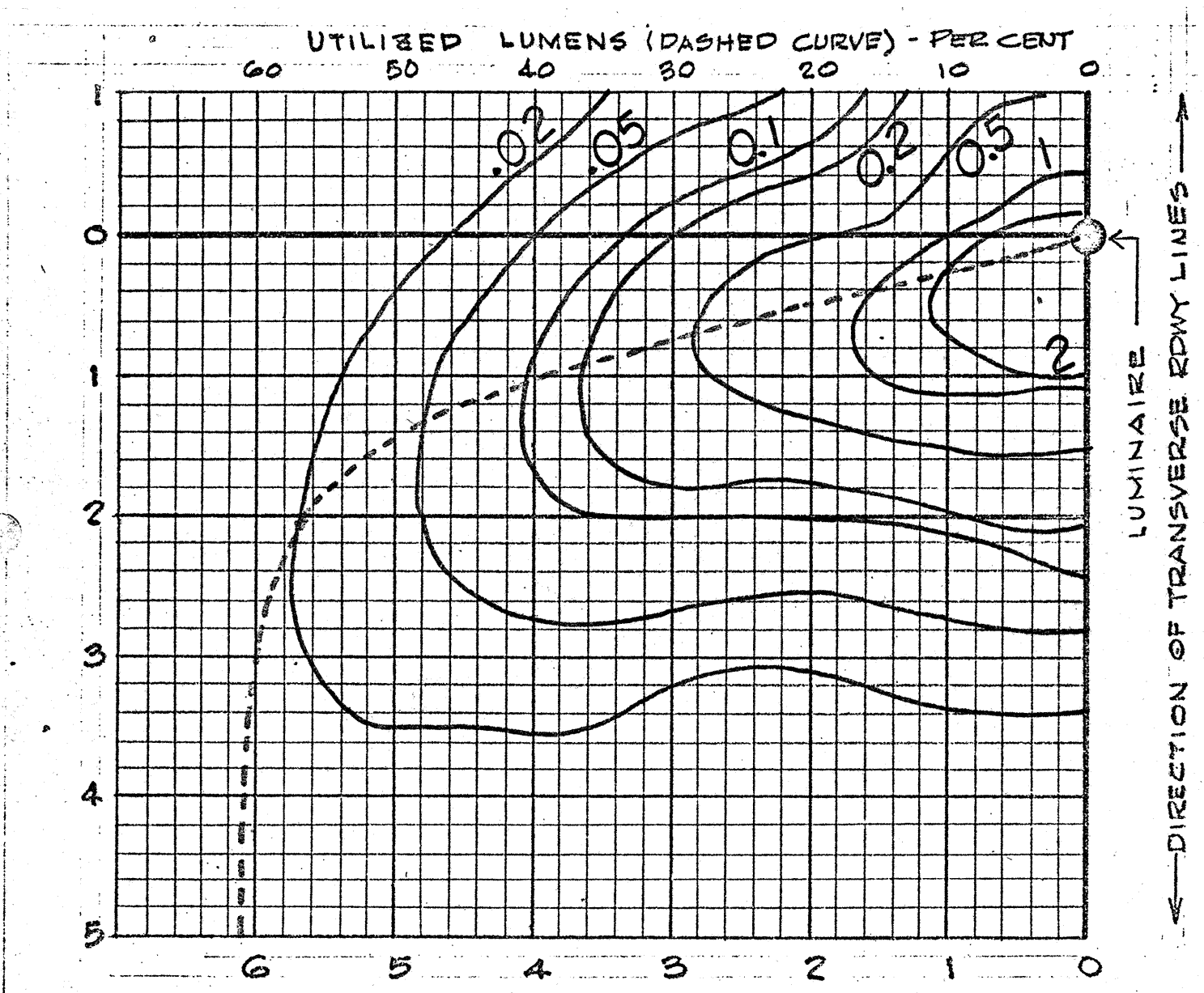
INTERSTATE ROUTE H-1
PROJECT NO. I-HI-1(130)-17
SCALE: 1" = 50' DATE: AUG. 16, 1976
SHEET NO. E4 OF E12 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-HI(130):17	1976	73	174

NOTES:

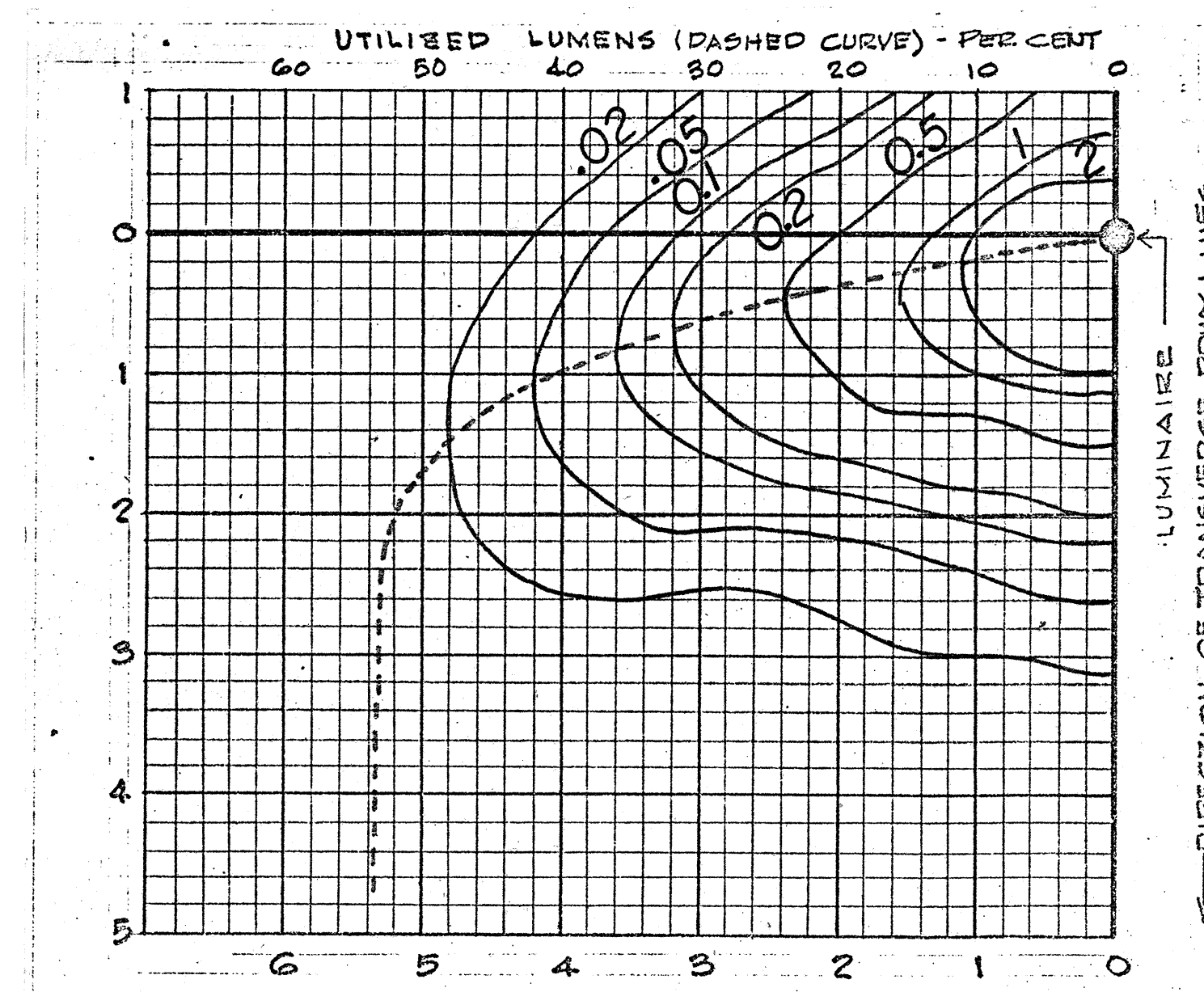
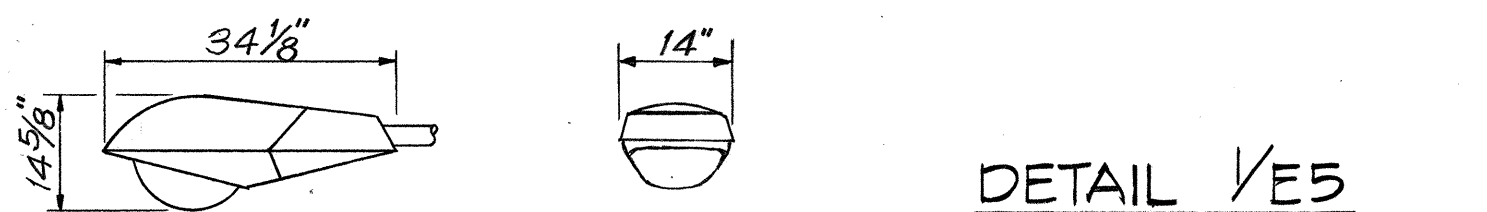
2.ISOFOOTCANDLE DISTRIBUTION IN RIGHT HAND QUADRANT IS AS SHOWN FOR LEFT QUADRANT, EXCEPT WHERE SHOWN OTHERWISE.

3.LIGHT DISTRIBUTION ABOVE THE HORIZONTAL SHALL NOT EXCEED 1/2% OF BARE BULB LUMENS ON THE STREET SIDE AND 1% ON THE HOUSE SIDE.



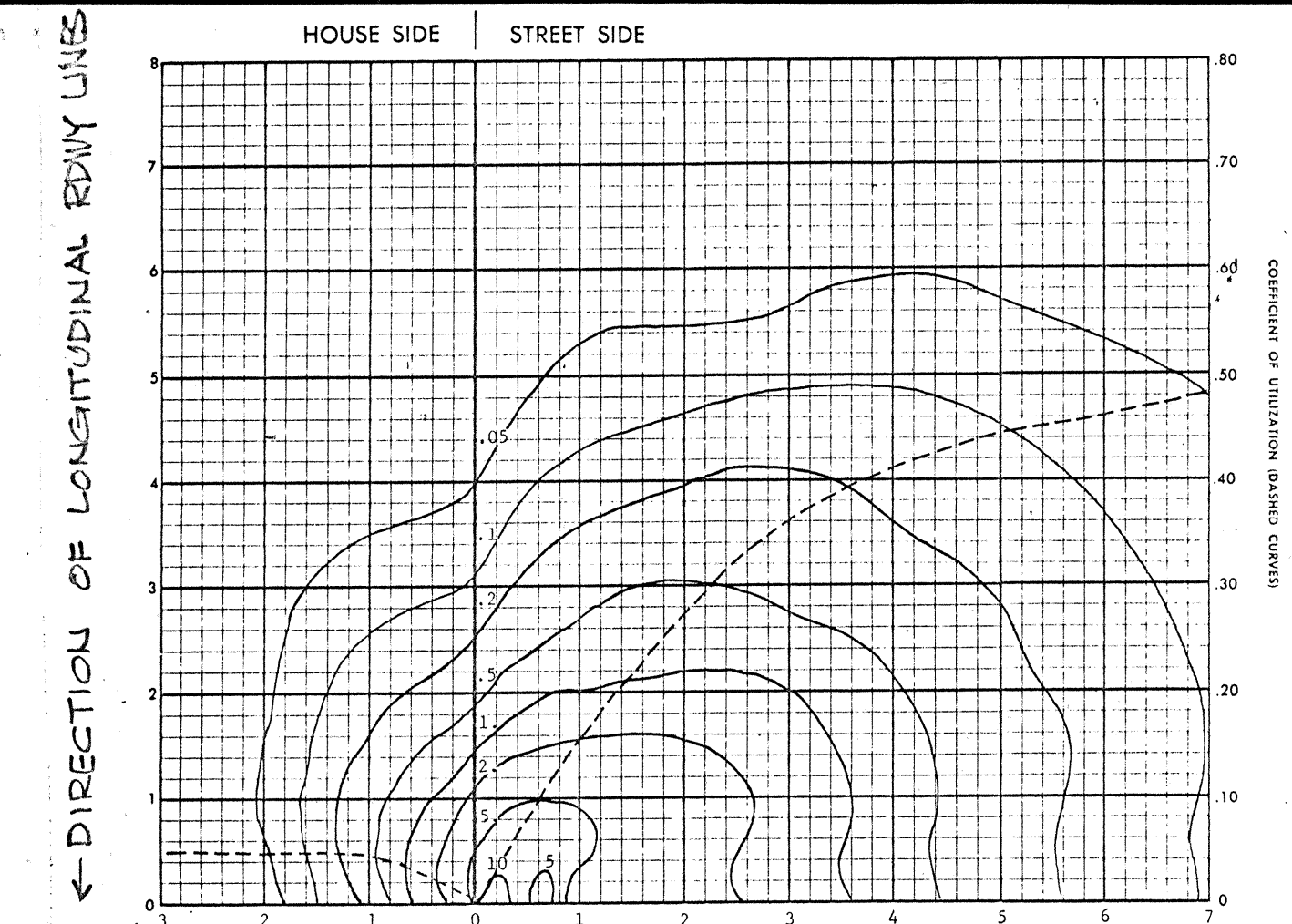
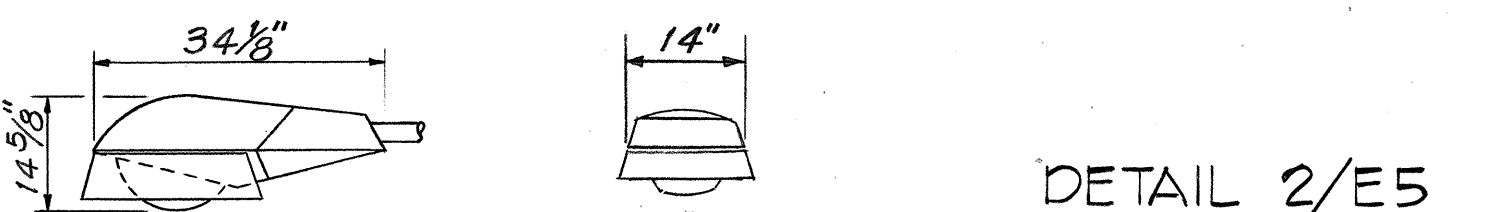
ISOFOOTCANDLE & UTILIZATION CURVES
LUMINAIRE TYPE
#L4-W (SYMBOL: *)

DATA BASED ON 400-WATT HPS 50,000-LUMEN LAMP @ 45' MTG.
PROVIDE LAMP DESIGNATION LU400/BD.



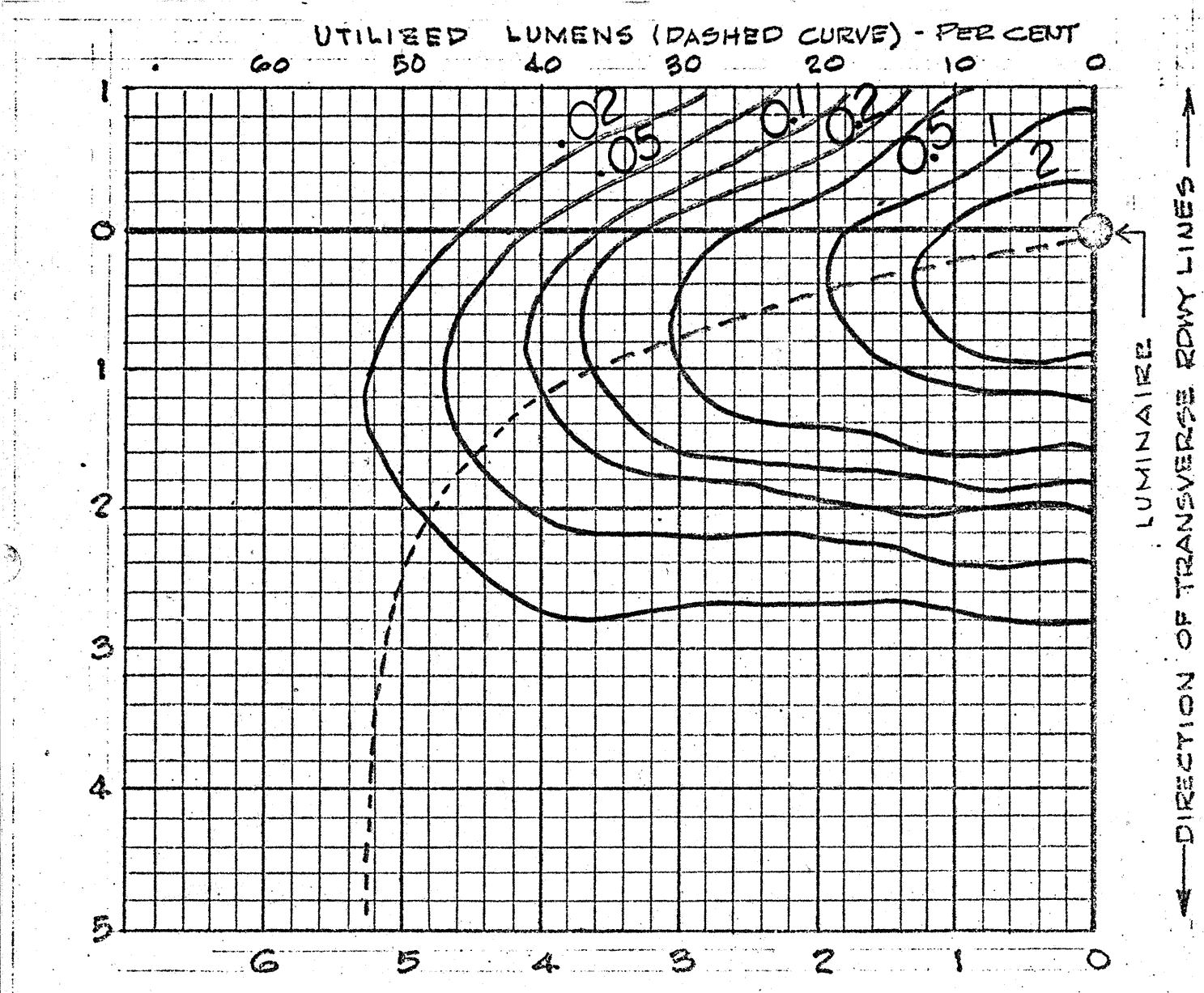
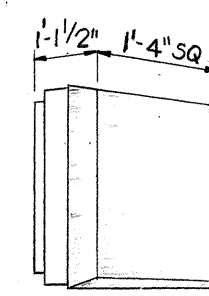
ISOFOOTCANDLE & UTILIZATION CURVES
LUMINAIRE TYPE
#L4-W-S (SYMBOL: *S)

DATA BASED ON 400-WATT HPS 50,000-LUMEN LAMP @ 45' MTG.
PROVIDE LAMP DESIGNATION LU400/BD.



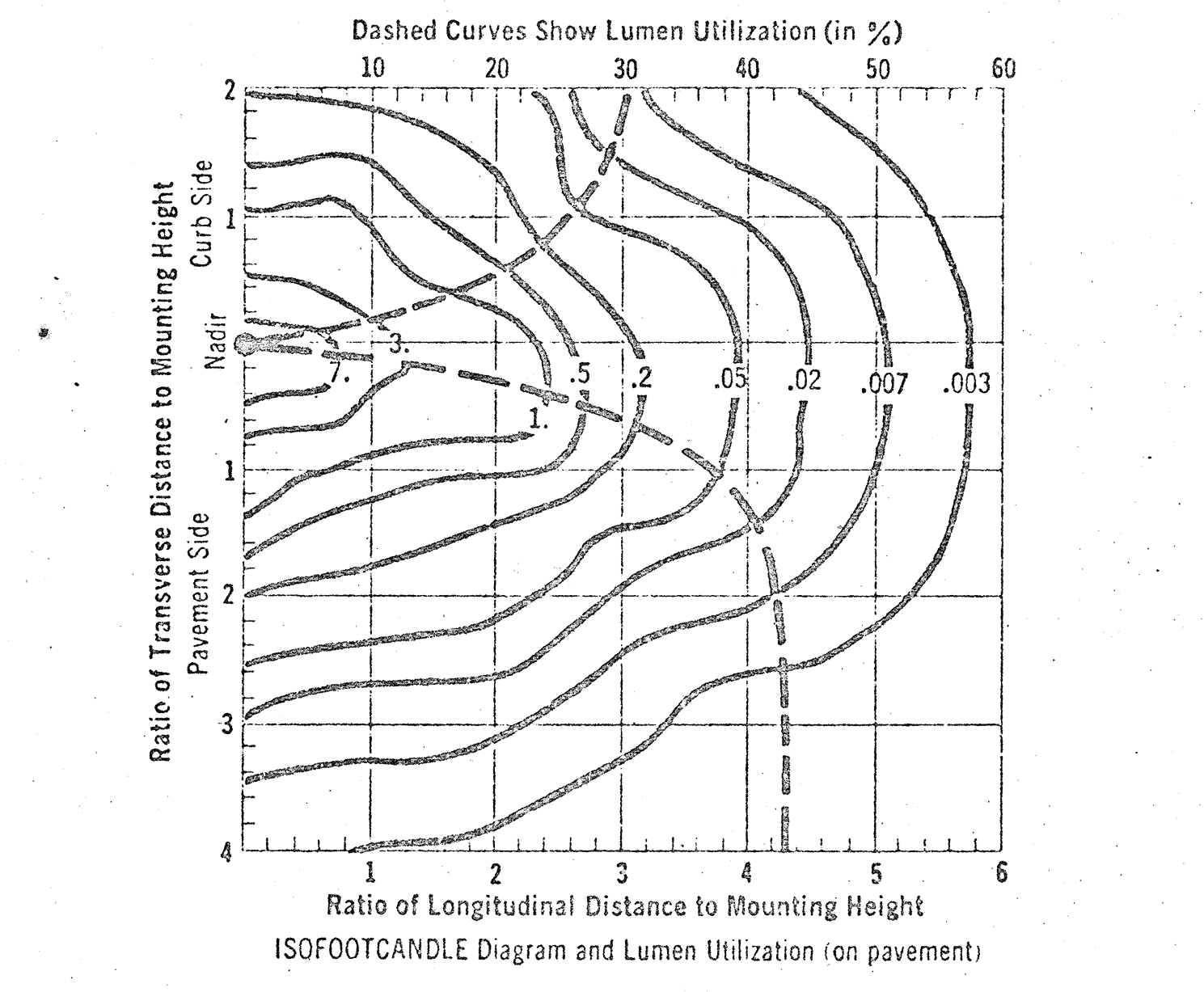
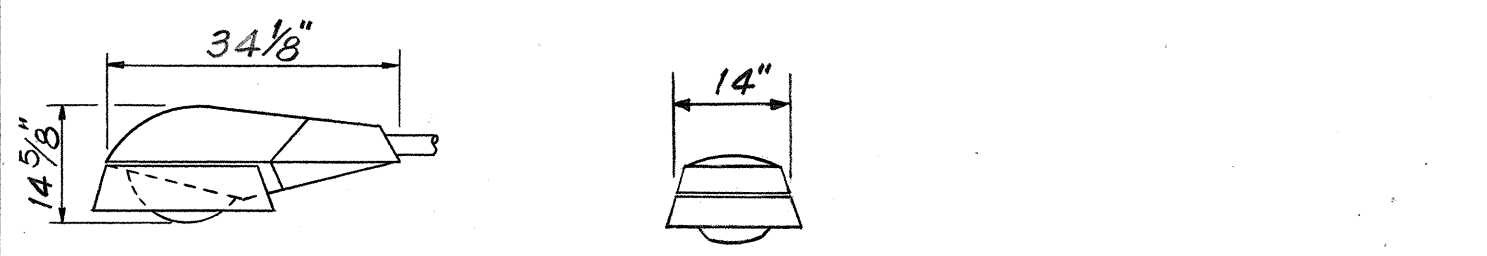
ISOFOOTCANDLE & UTILIZATION CURVES
LUMINAIRE TYPE
#D-L2-S (SYMBOL: Δ)

DATA BASED ON 250-WATT H.P.S. 25,500-LUMEN LAMP AT 15' MTG.
PROVIDE LAMP DESIGNATION LU250/BD/S.
PROVIDE SHIELD ON SIDE OF APPROACHING TRAFFIC.
NOTE: FOR 30,000-LUMEN LAMP MULTIPLY ISOFOOTCANDLE VALUES BY 1.18.



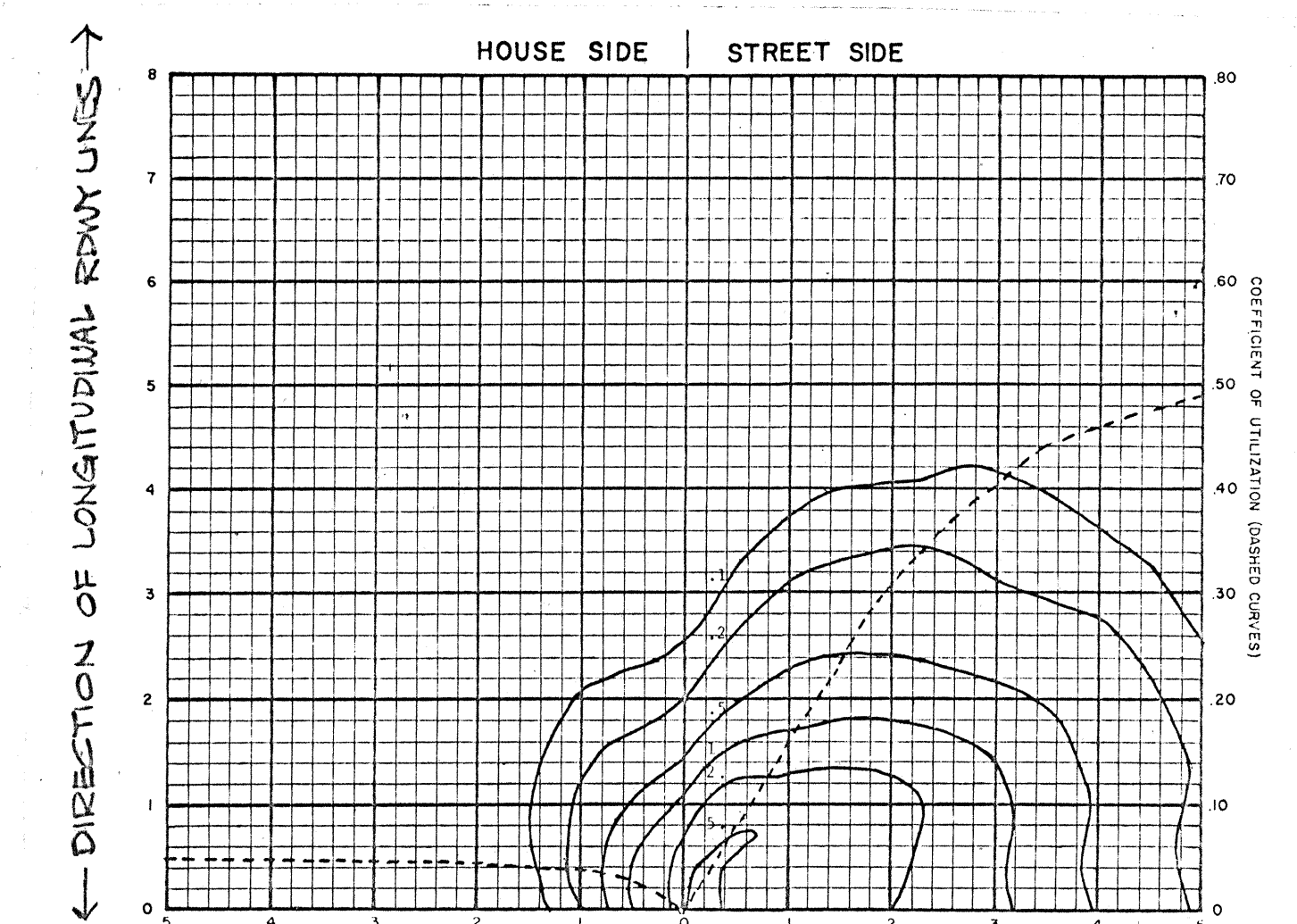
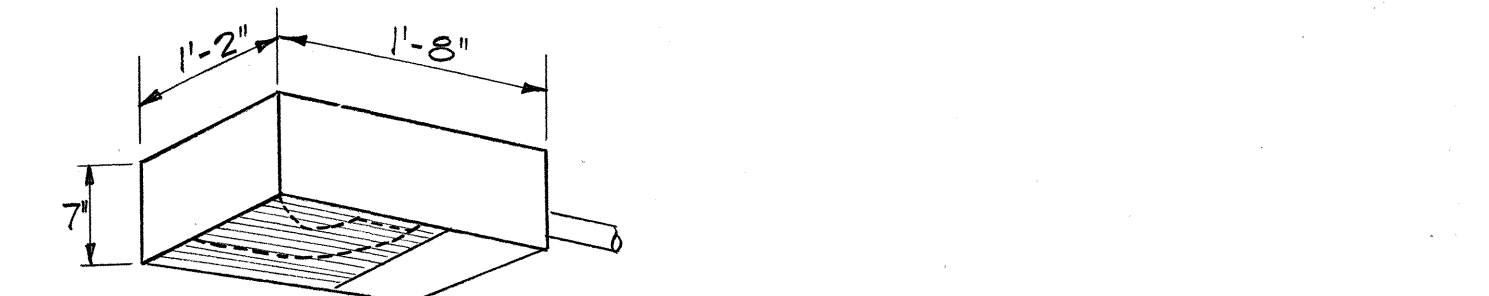
ISOFOOTCANDLE & UTILIZATION CURVES
LUMINAIRE TYPE
#L2-W-S (SYMBOL: *S)

DATA BASED ON 250-WATT HPS 25,500 LUMEN LAMP @ 30' MTG.
PROVIDE LAMP DESIGNATION LU250/BD.



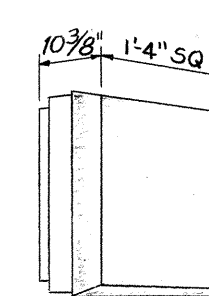
ISOFOOTCANDLE & UTILIZATION CURVES
LUMINAIRE TYPE
#U-L2 (SYMBOL: *)

DATA BASED ON 250-WATT HPS 25,500 LUMEN LAMP @ 25' MTG.
PROVIDE LAMP DESIGNATION LU250/BD.



ISOFOOTCANDLE & UTILIZATION CURVES
LUMINAIRE TYPE
#B-L1 (SYMBOL: Δ)

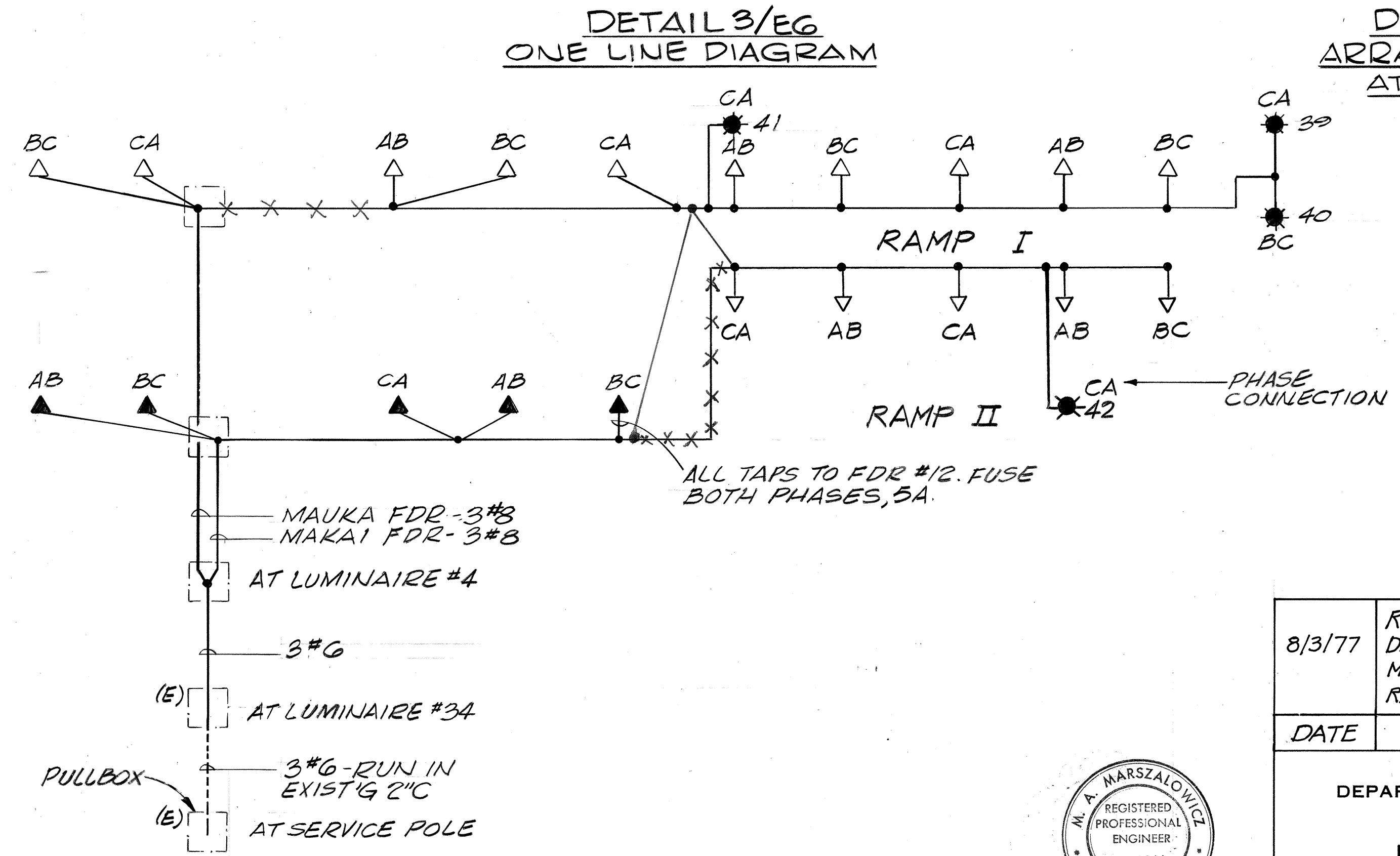
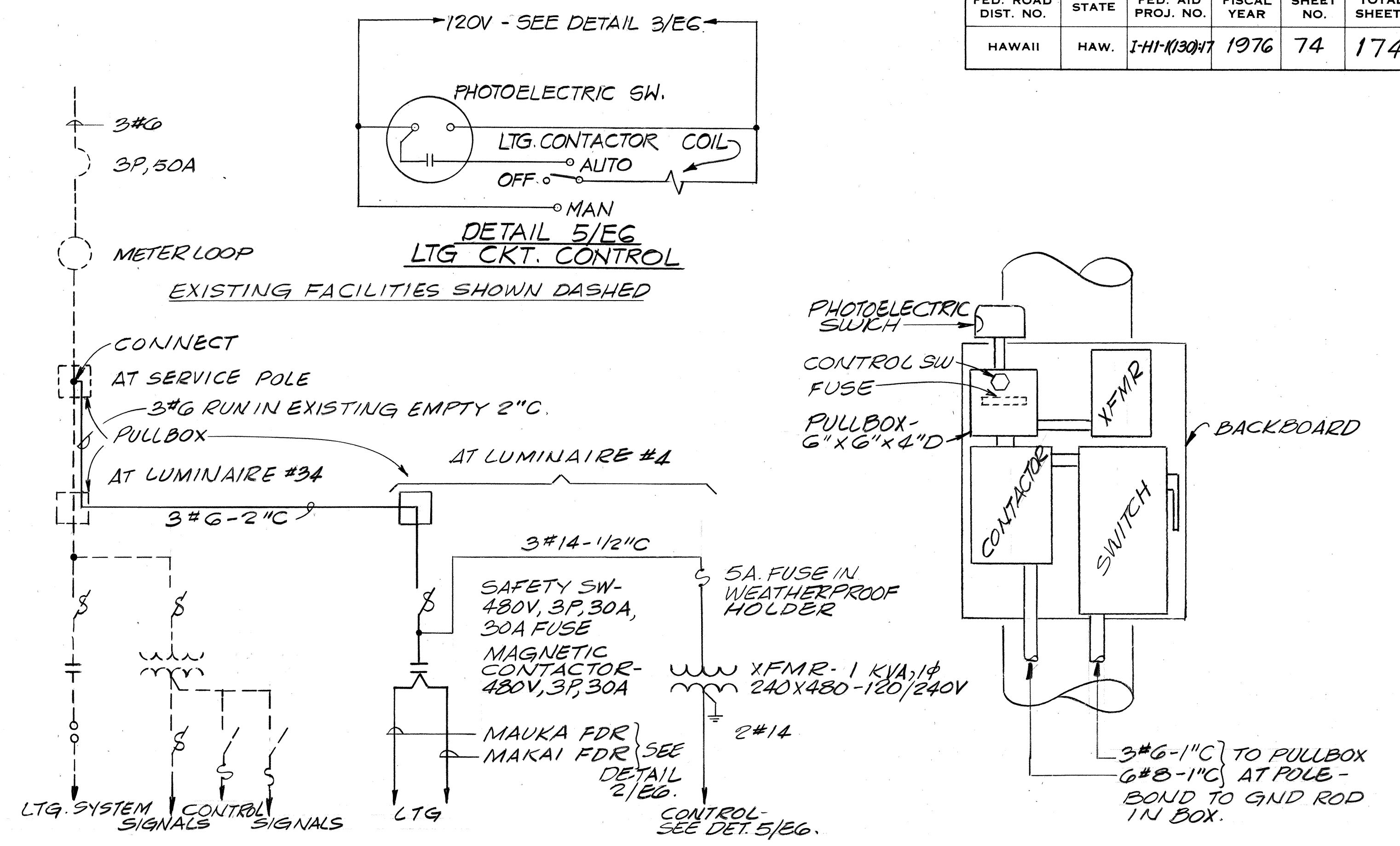
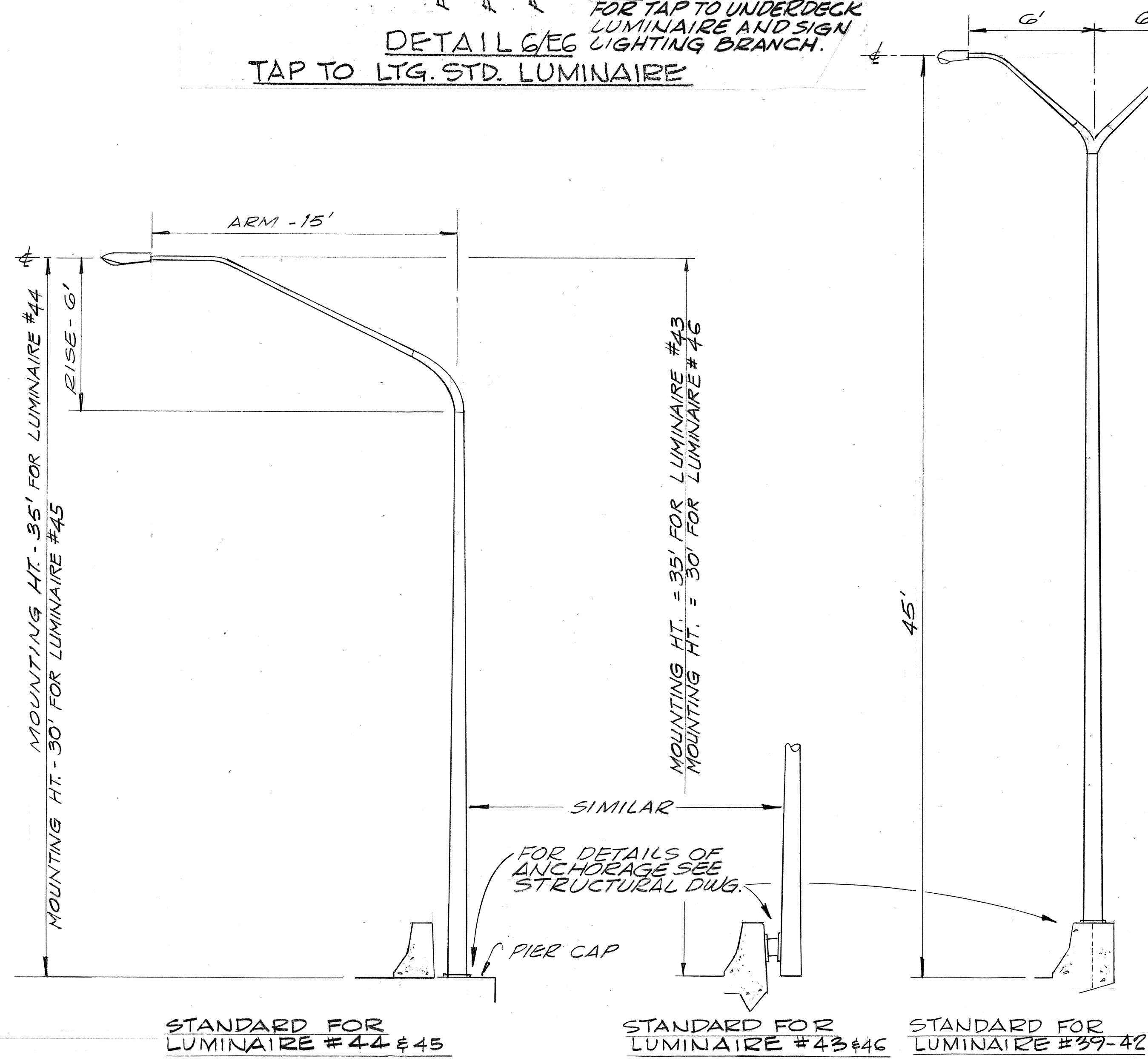
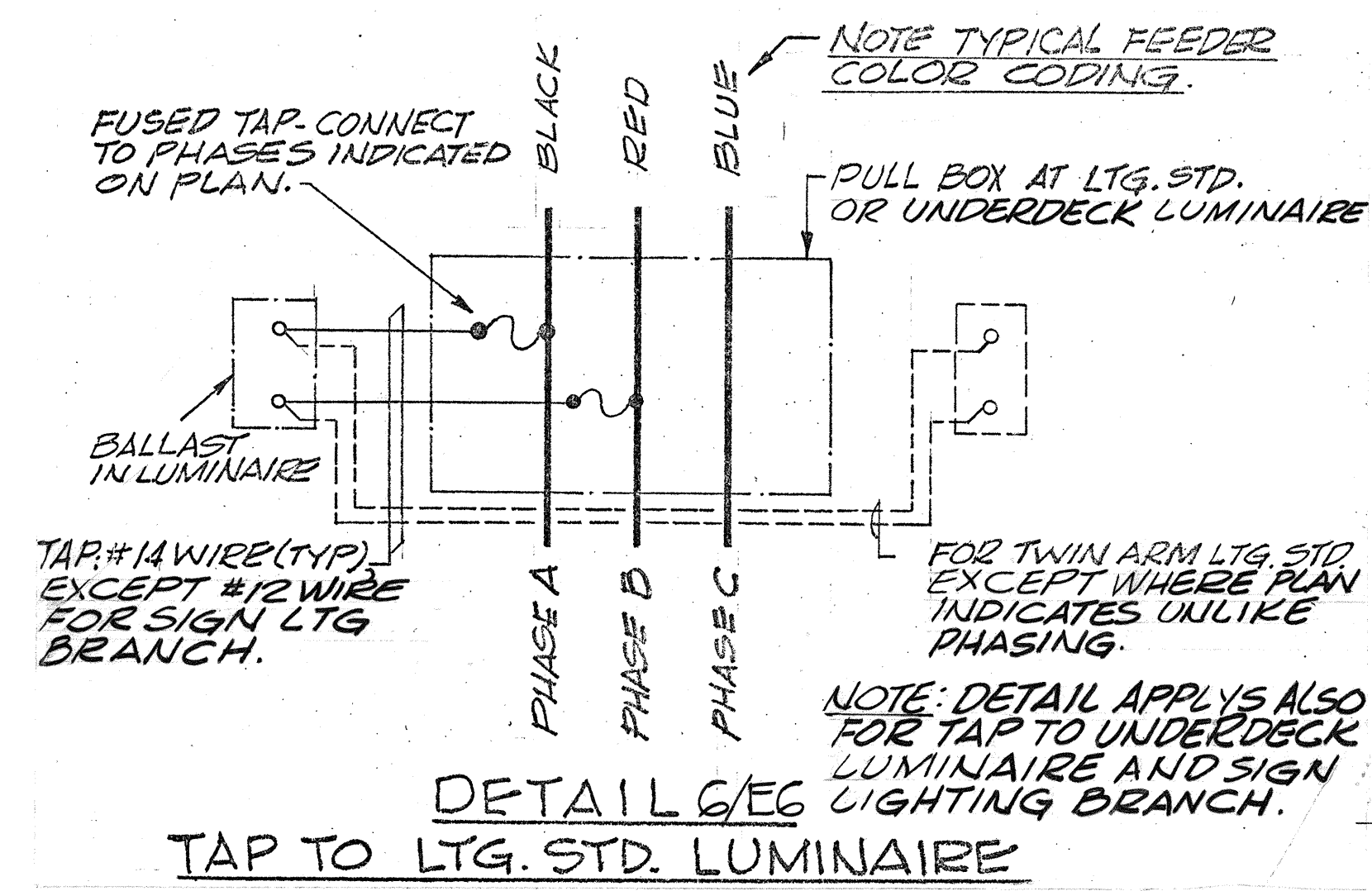
DATA BASED ON 150-WATT H.P.S. 10,000-LUMEN LAMP @ 15' MTG.
PROVIDE LAMP DESIGNATION LU150/BD.



6/12/78	Revised Details 3/E5 and 6/E5
10/20/76	Removed Note 1. Revised dimensions of luminaires.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION KEEHI INTERCHANGE ELECTRICAL PLAN - PART V INTERSTATE ROUTE H-1 PROJECT NO. I-HI-1(130):17 SCALE: NONE DATE: AUG.16,1976 SHEET No. E5 OF 12 SHEETS	

SURVEY PLOTTED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NO.	

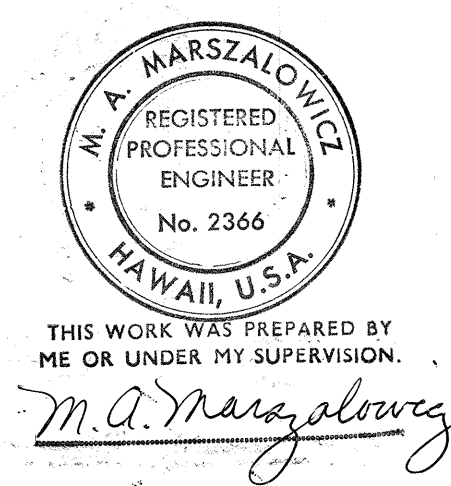
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(130)17	1976	74	174



DETAIL 4/EG
ARRANGEMENT OF EQUIPT
AT LUMINAIRE #4

DETAIL 1/EG
LIGHTING STANDARD TYPES

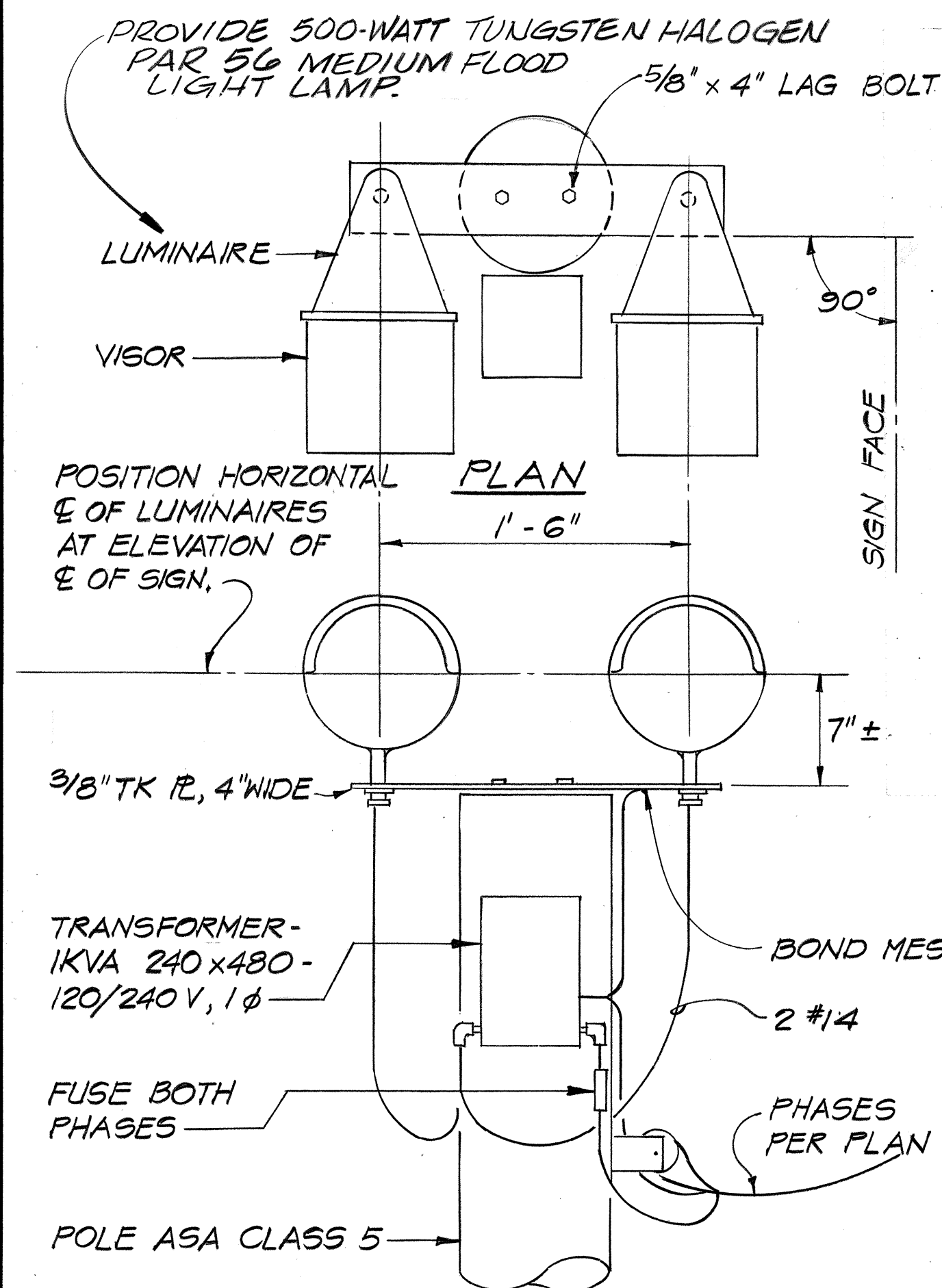
DETAIL 2/EG
FEEDER DIAGRAM



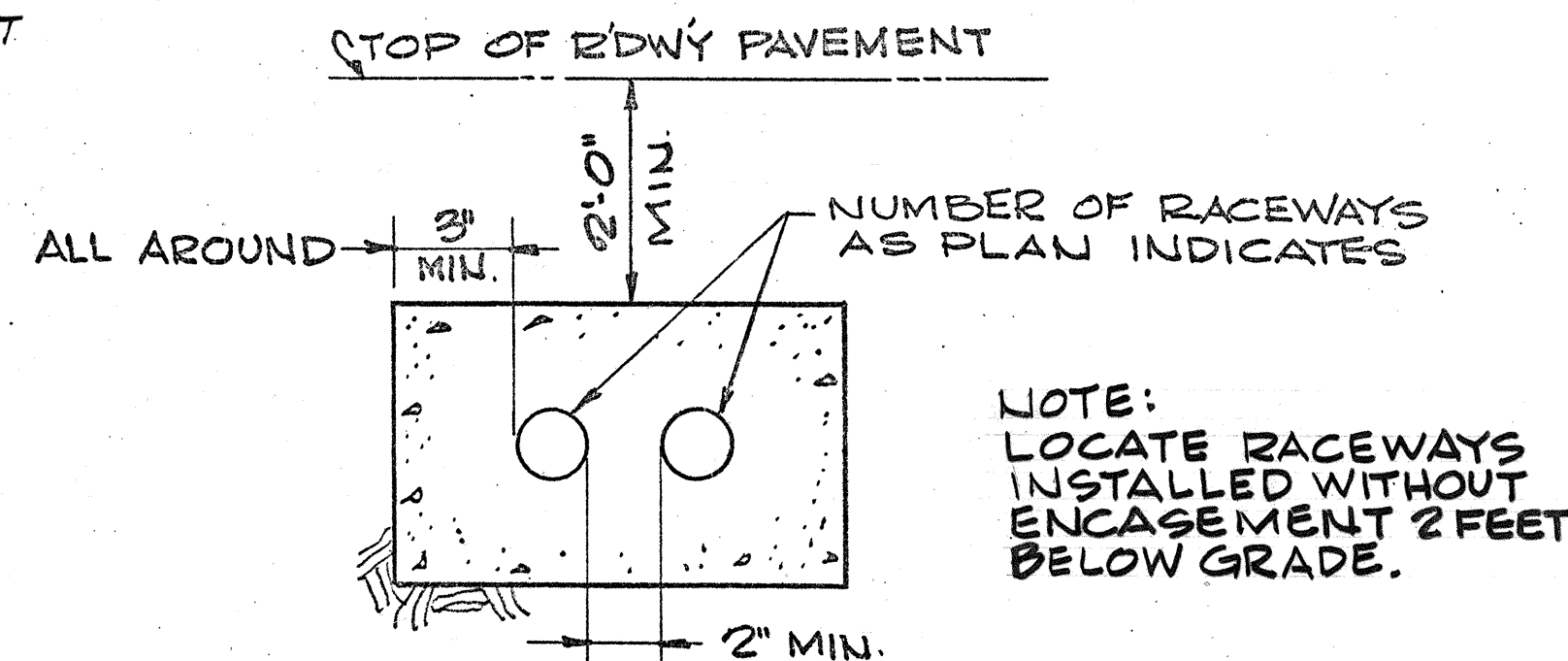
8/3/77	REVISED DETAIL 2/EG, FEEDER DIAGRAM, BY RELOCATING COLUMN MOUNTED LUMINAIRES FROM RAMP II TO RAMP I
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
KEEHI INTERCHANGE ELECTRICAL PLAN - PART VI	
INTERSTATE ROUTE H-1 PROJECT NO. I-HI-1 (130):17	
SCALE: NONE	DATE: AUG. 16, 1976
SHEET NO. EG OF E/2 SHEETS	

Change Order #22

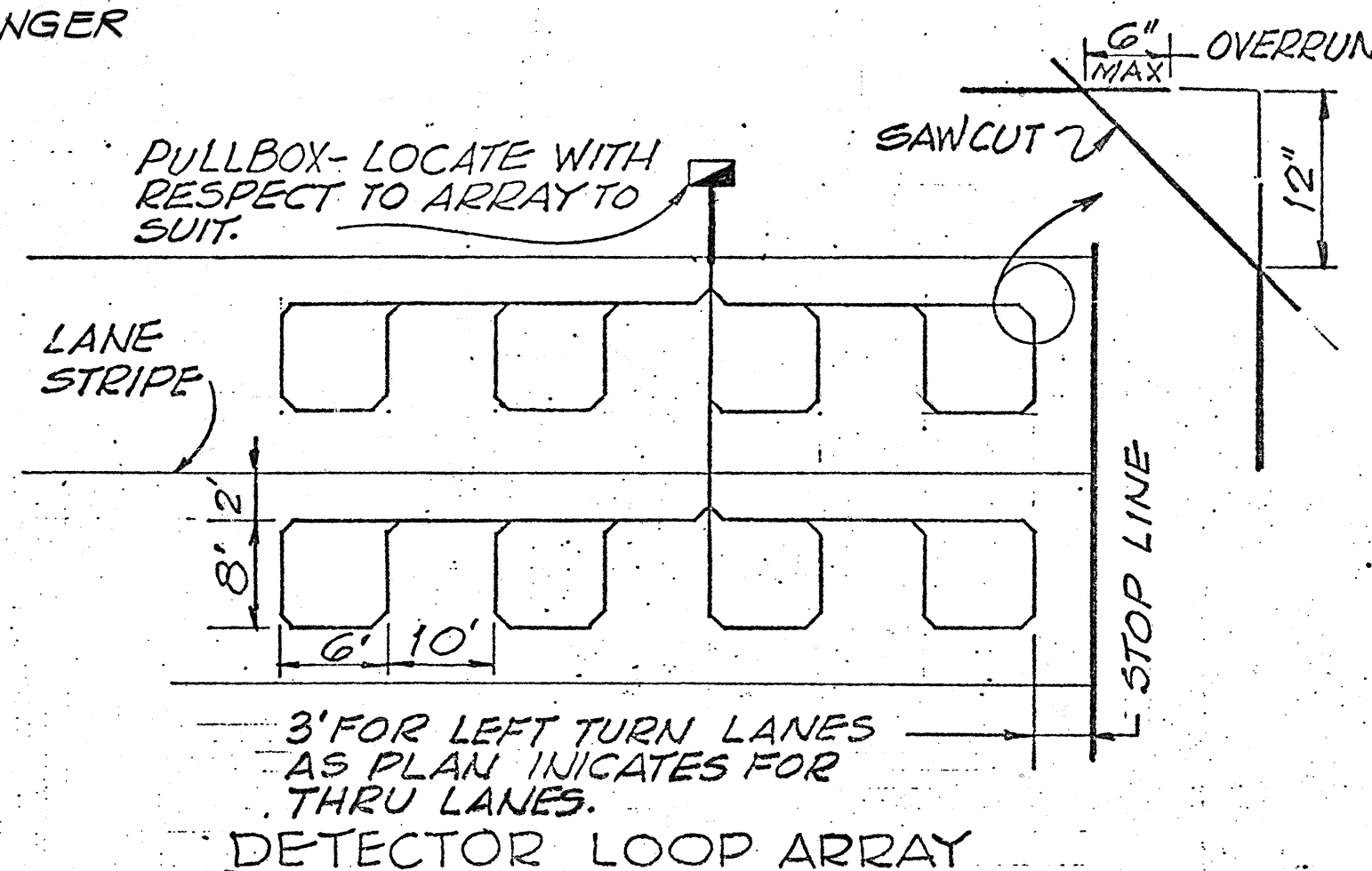
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(130):17	1976	75	174



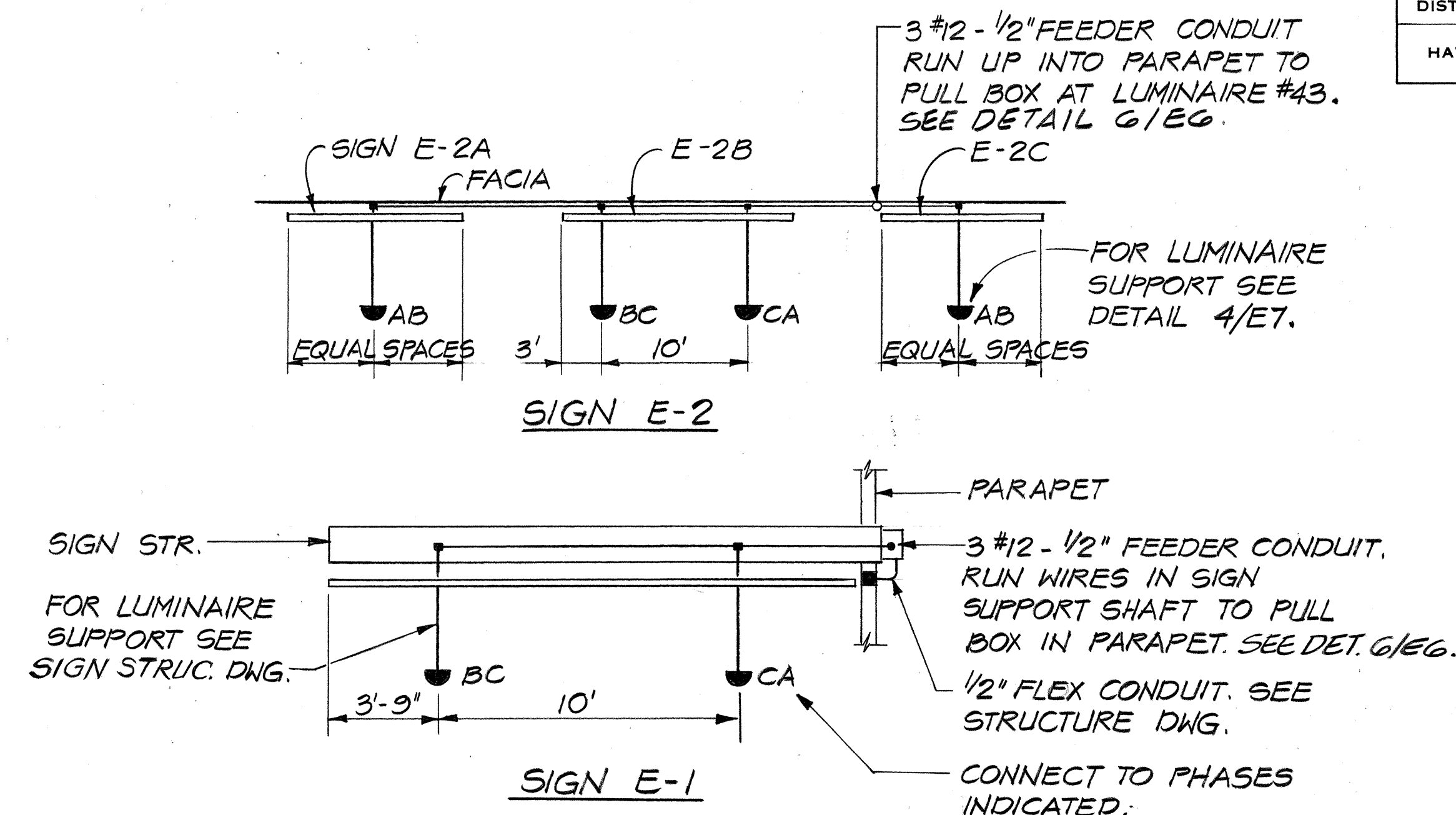
ELEV.
DETAIL 5/E7
SIGN LIGHTING STANDARD
(FOR SIGNS T-30 & T-31)



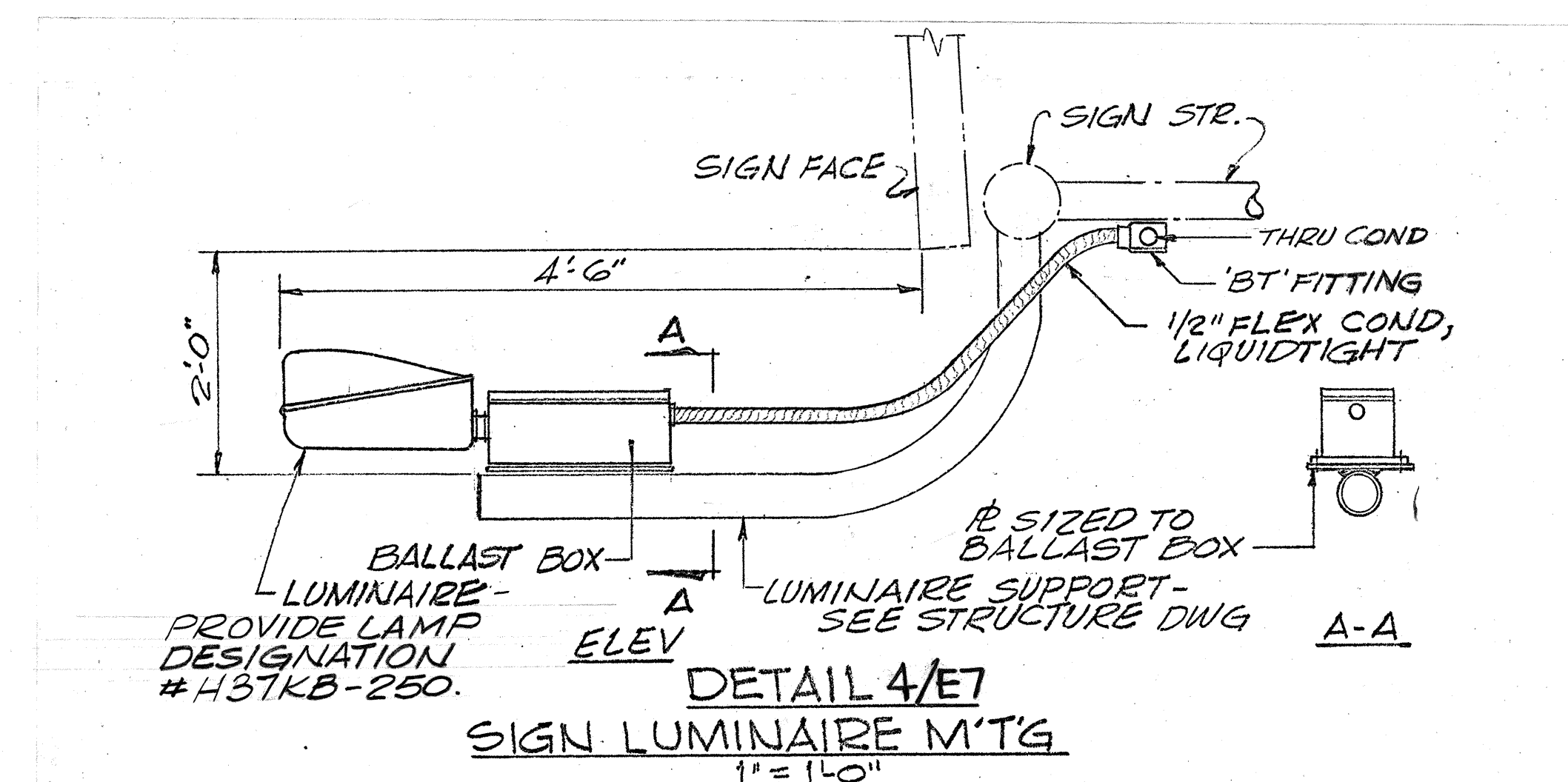
DETAIL 1/E7
RACEWAY CONCRETE ENCASEMENT
NO SCALE



DETAIL 2/E7
DETECTOR LOOP INSTALLATION



DETAIL 3/E7
PLANS SHOWING LUMINAIRE LOCATIONS
AND RACEWAY INSTALLATION



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

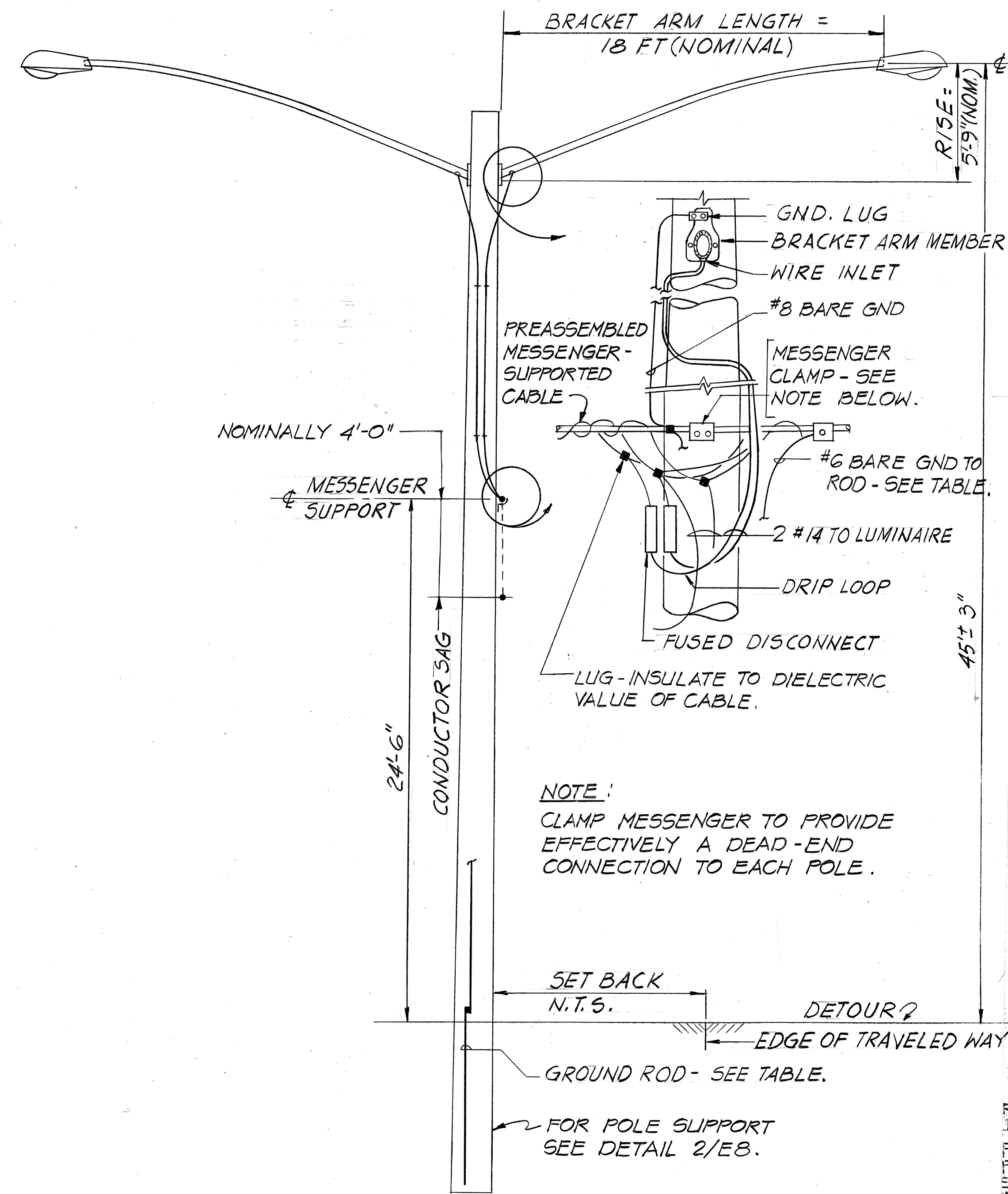


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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KEEHI INTERCHANGE
ELECTRICAL PLAN - PART VII

INTERSTATE ROUTE H-1
PROJECT NO. I-HI-1 (130):17
SCALE: AS SHOWN DATE: AUG. 16, 1976
SHEET No. E7 OF E12 SHEETS



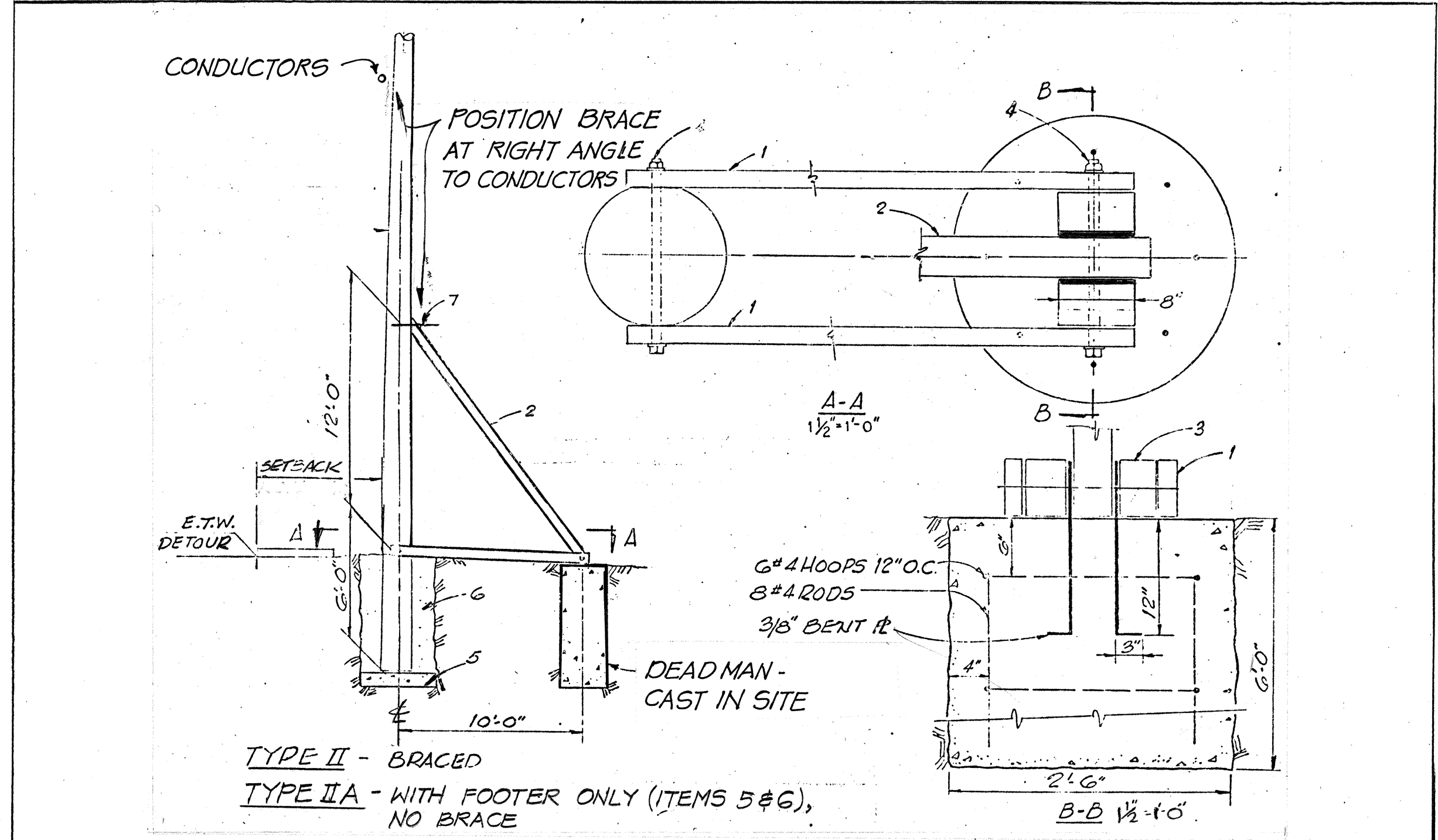
POLE	
FOR LUMIN'RE	SET BACK **
35/36	22'
37/38 *	14'
3R	10'
12R *	18'
13R/33R	22'
14R/15R	16'
16R/17R *	16'
18R/19R	16'
24R	10'

PROVIDE ASA CLASS 5 POLES.

RELOCATED STANDARD

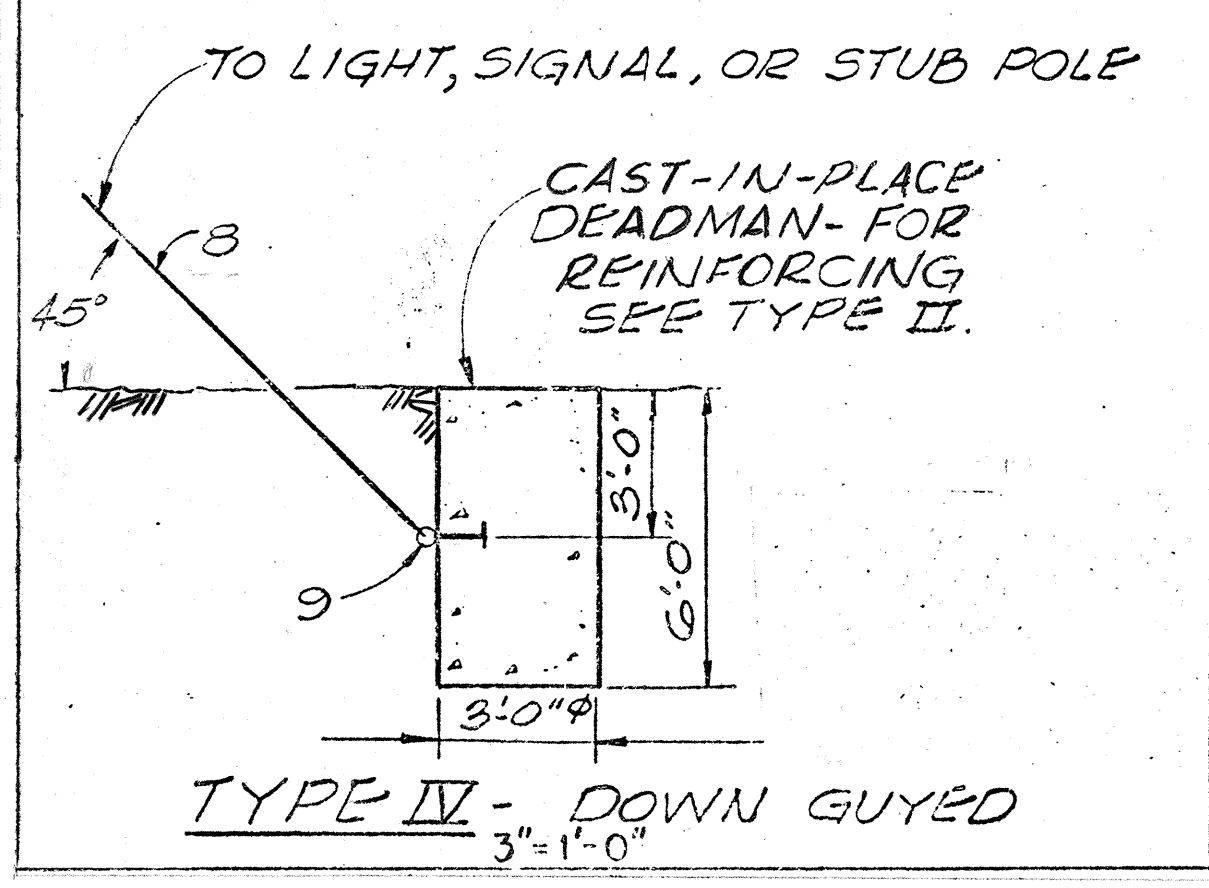
* PROVIDE GND ROD AT POLE AND BOND MESSENGER TO IT. BOND TO ROD AT POLES

** INDICATED SETBACK DISTANCE (IN FEET) IS APPROXIMATE - ADJUST TO CLEAR OBSTRUCTIONS.



MATERIALS

1	WOOD BRACE - 2" x 6"
2	" " - 4" x 6"
3	WOOD FILLER BLOCK - 6" x 8"
4	BOLT - 1" φ W/ 3" SQ. WASHERS
5	FOOTER - PRECAST CONC. 4'-0" φ x 8' W/ #4 @ 6" E.W.
6	COMPACTED FINE AGGREGATE
7	BOLT - 1" φ W/ 4" SQ. WASHER & BOLT SADDLE
8	ZINC STRAND ASTM 475-8000 PSI STRENGTH
9	ANGLE THIMBLEYE BOLT - 3/4" φ W/ 4" SQ. WASHER



DETAIL 2/E8 POLE SUPPORT TYPES

SURVEY PLOTTED BY: _____

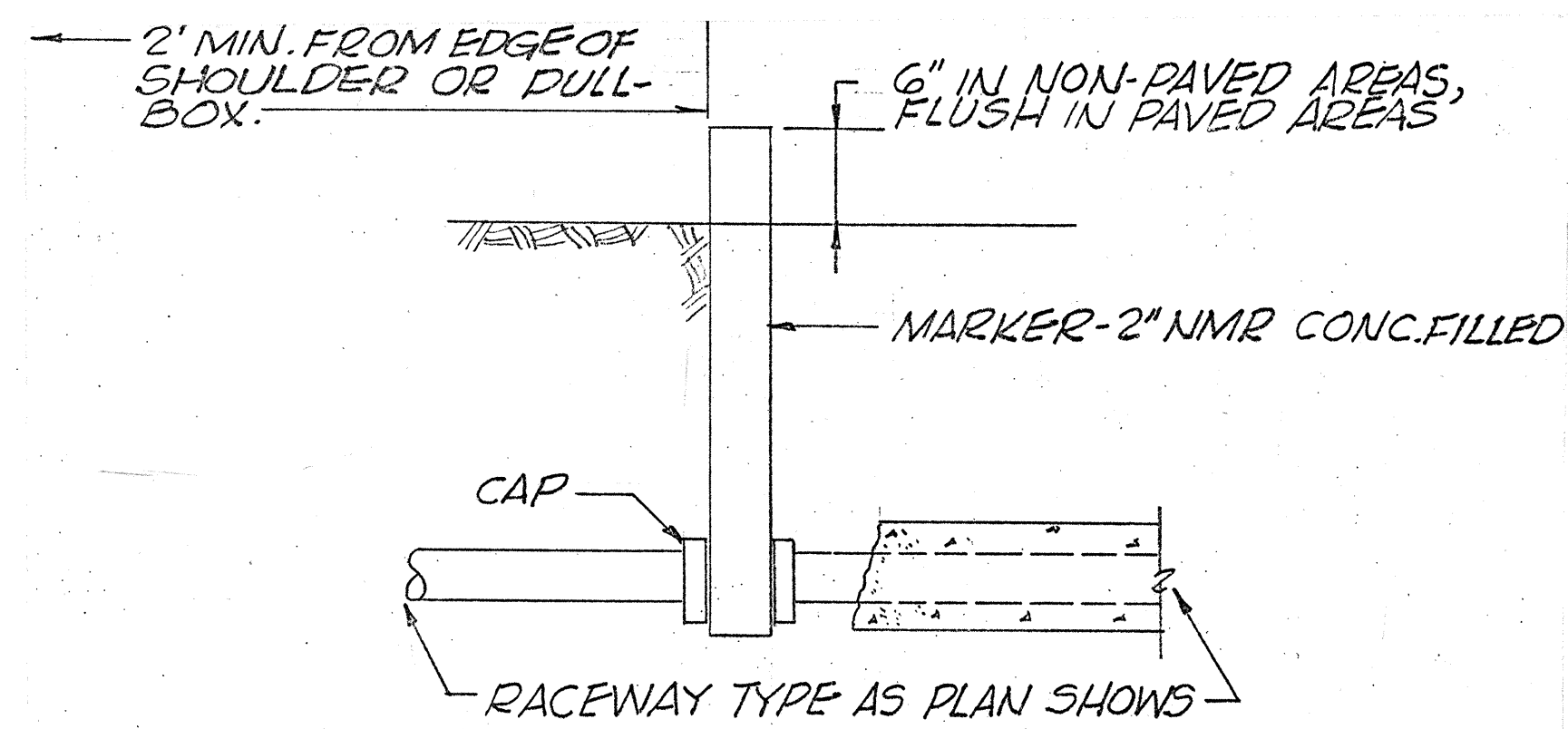
DATE: _____

DESIGNED BY: _____

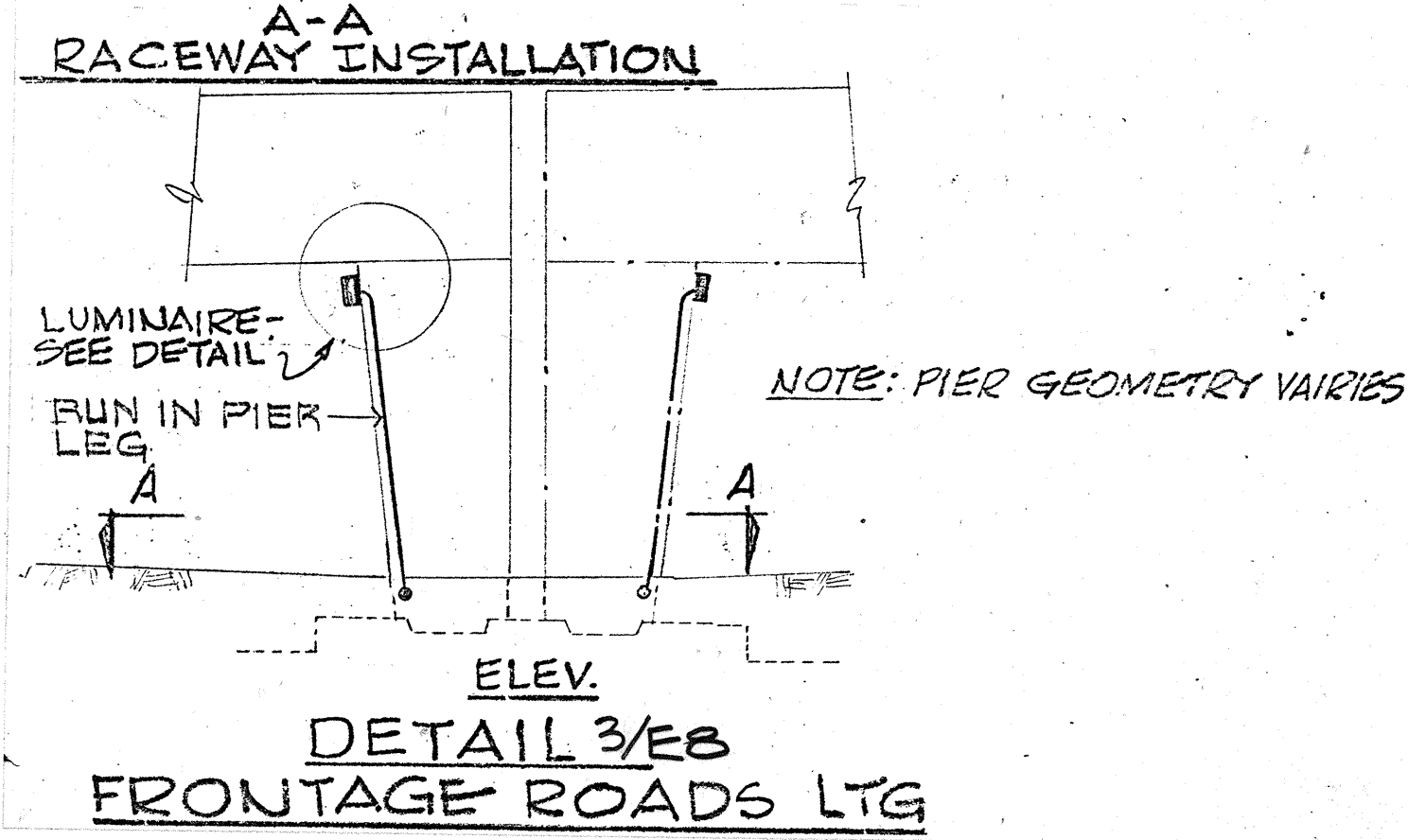
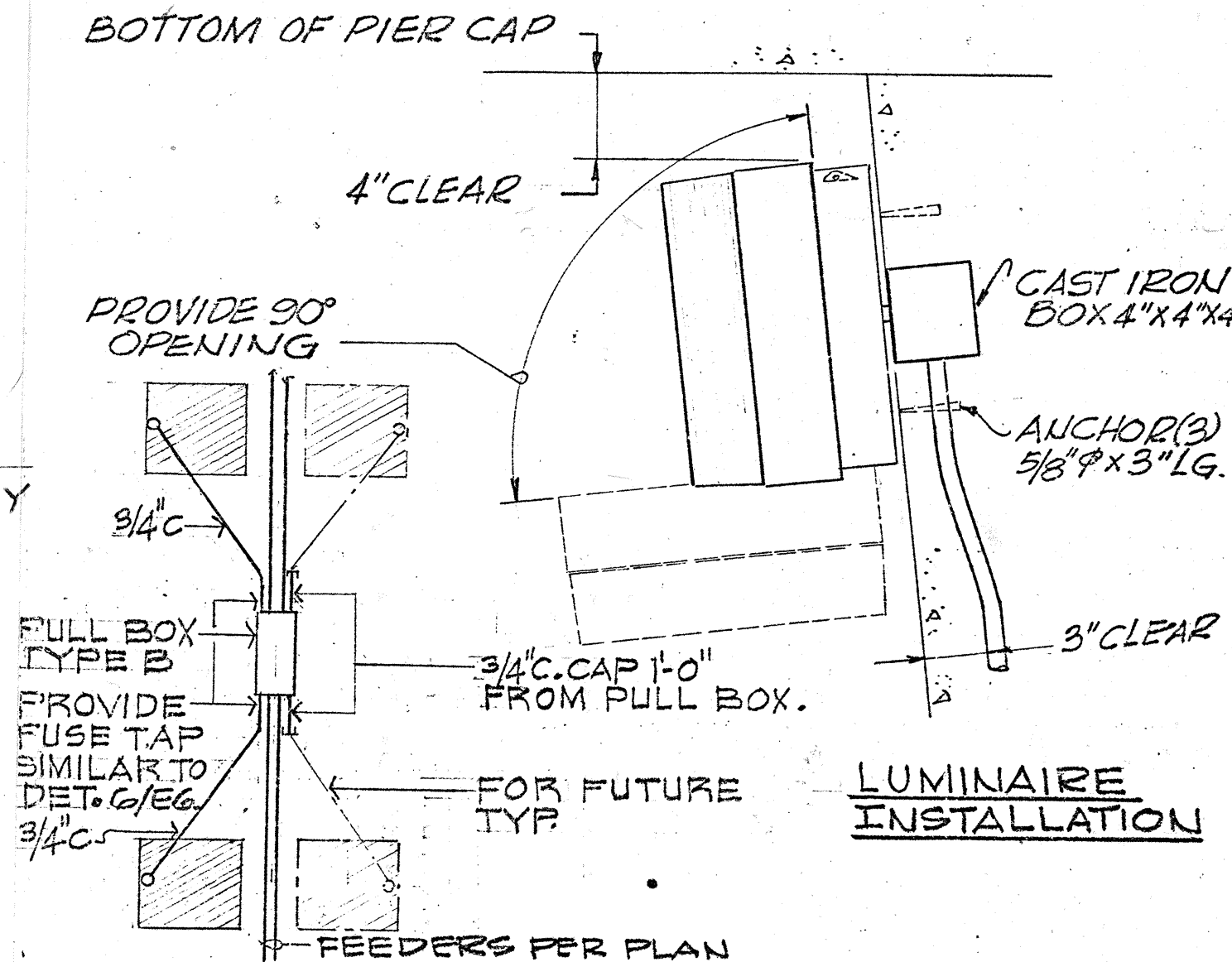
QUANTITIES BY: _____

CHECKED BY: _____

ORIGINAL PLAN NO. _____



DETAIL 4/E8 CAP & MARK RACEWAY



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M. A. Marszalowicz

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KEEHI INTERCHANGE
ELECTRICAL PLAN - PART VIII

INTERSTATE ROUTE H-1
PROJECT NO. I-HI-1(130):17

SCALE: AS SHOWN DATE: AUG. 16, 1976

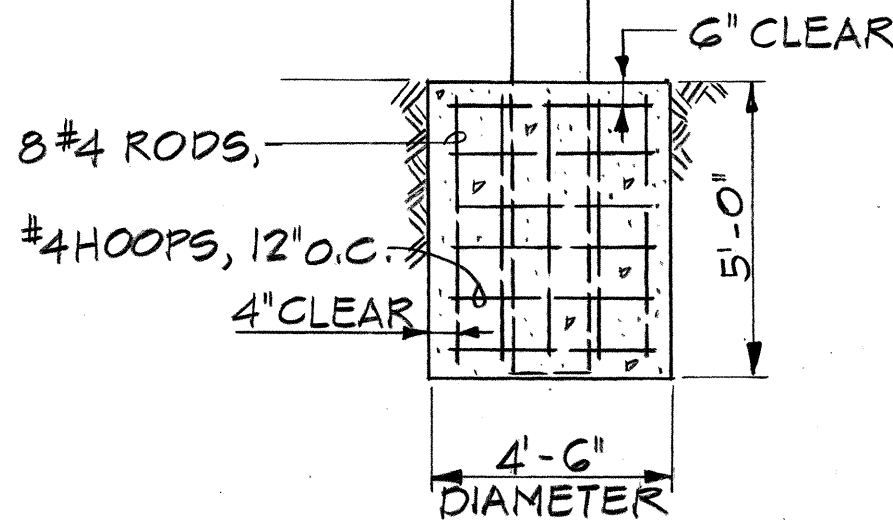
SHEET No. E8 OF E12 SHEETS

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



77

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	<i>I-HI-1(130):17</i>	<i>1976</i>	<i>78</i>	<i>174</i>



DETAIL 2/EIC
POLE SUPPORT

SEE DETAIL 2/E10.

PUULO A

ROAD

SEE NOTE 10

NOTES:

1. EXISTING SIGNAL AND LIGHTING SYSTEMS AT THIS LOCATION ARE SHOWN IN DETAIL 1/E9. MODIFY THOSE EXISTING FACILITIES TO PROVIDE THE SYSTEMS SHOWN IN DETAIL 1/E10. SEE NOTES 2/E10 & 3/E10.
2. REMOVE EXISTING SIGNALS NOT SHOWN IN DETAIL 1/E10 AND STOCKPILE. DISCONNECT AND ABANDON IN PLACE EXISTING DETECTOR LOOPS NOT SHOWN IN DETAIL 1/E10.
3. EXISTING ITEMS ASTERISKED ARE INACTIVE FOR DETAIL 1/E10 BUT ARE REQUIRED FOR DETAIL 1/E11.
4. REQUIRES TWO 19/C #14 SIGNAL CABLES BETWEEN POLES F-G-H-Q-B-C-F.
5. REQUIRED TRAFFIC PHASING FOR DETAIL 1/E10 IS AS FOR DETAIL 1/E9, EXCEPT PHASE OVERLAP IS DELETED.
6. SIGNALIZE ALL TRAFFIC MOVEMENTS AT ALL TIMES.
7. CHANGE GREEN ARROW OF SIGNAL 18 TO GREEN BALL.
8. SIGNAL I.D. NUMBERS IN DETAILS 1/E9 AND 1/E10 IS THE SAME.
9. PAYMENT FOR ADJUSTMENTS TO THE LIGHTING & TRAFFIC SIGNAL SYSTEMS REQUIRED DUE TO THE VIADUCT CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO VARIOUS CONTRACT ITEMS.
10. LOOP DETECTOR CABLE AERIAL TO CONTROLLER.
11. SIGNAL HEADS 8, P2 AND P5 TO BE MOVED TO POLE F UNDER I-HI-1(136):17 PROJECT.

Three 6'x6' loop
detectors at
Baseline Detour #1
Sta. 18+05. Connect
to traffic signal
interconnect system
at existing light pole
on Nimitz Hwy. outbound
C.O. #9

Actual Location -
C.O. No. 2

✓ RETAIN EXISTING LIGHTING
AND SIGNAL SERVICES.

EXISTING-
UTILITY
POLE

NORTH FOR PLAN
1" = 20'

- ELECTRICAL EQUIP'T RACK
- CONTROLLER- SEE NOTE 5/E10.

DETAIL 1/E10
SIGNAL AND LIGHTING PLAN
INTERSECTION NO. 2 - 1A.
SEE NOTE 1/E10.

3/12/77 REVISED DETAIL 1/E10
TO REFLECT USE OF
EXISTING POLES B4Q

10/20/76 REVISED DETAIL 1/E 10,
REVISED NOTE 4 AND
ADDED NOTE 10

DATE	REVISION
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KEEHI INTERCHANGE
ELECTRICAL PLAN - PART X
STAGE I CONSTRUCTION

INTERSTATE ROUTE H-1
PROJECT NO. I-HI-1 (130):17

SCALE: 1" = 20' DATE: AUG. 16, 1976

SHEET No. E10 OF E12 SHEETS

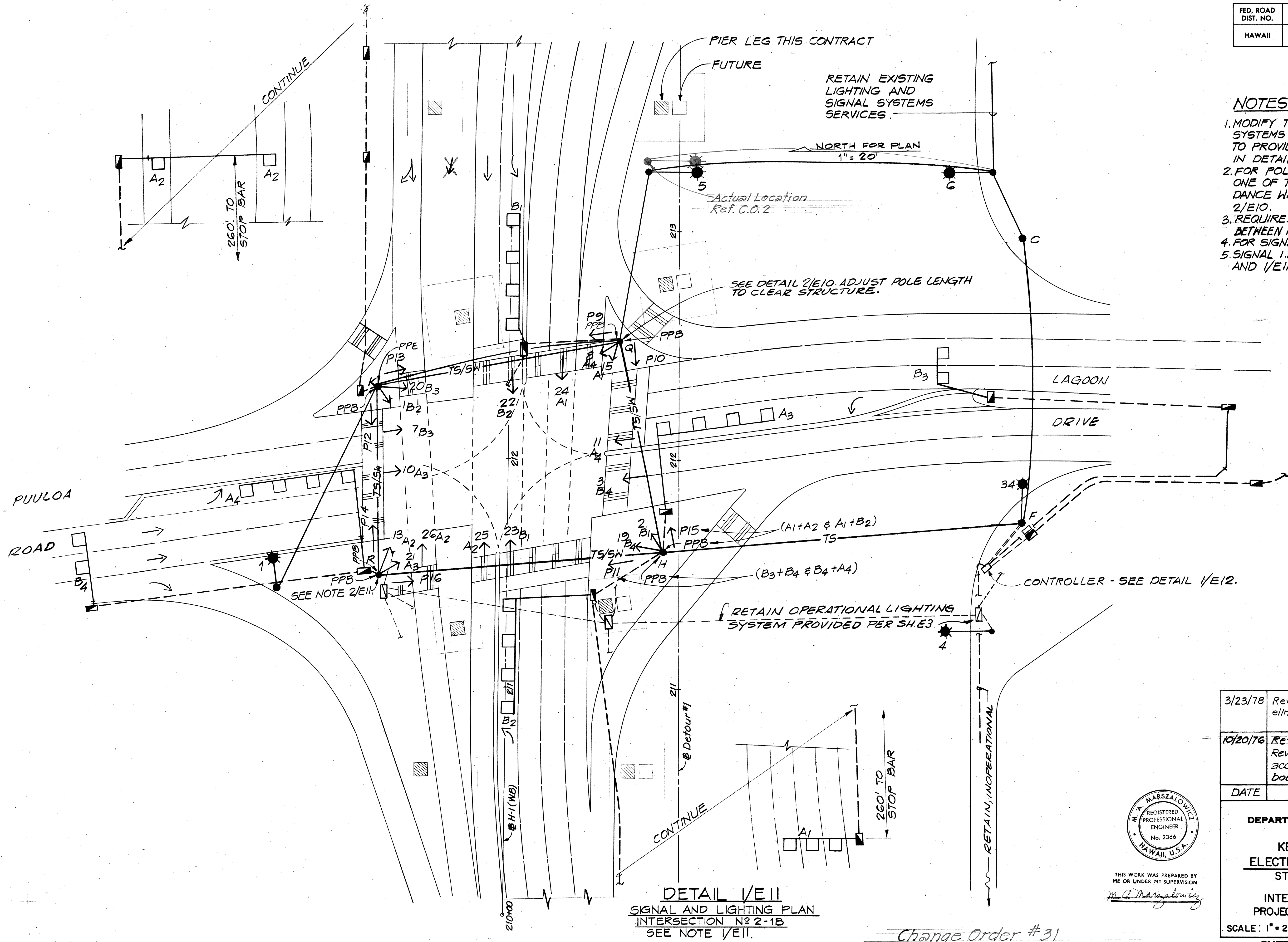
ADD. 78

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	FM-1(130)H	1976	79	174

- NOTES:**
1. MODIFY THE SIGNAL AND LIGHTING SYSTEMS SHOWN IN DETAIL 1/E10 TO PROVIDE THE SYSTEMS SHOWN IN DETAIL 1/E11.
 2. FOR POLE R USE AN APPROPRIATE ONE OF THOSE REMOVED IN ACCORDANCE WITH NOTE 1/E10. SEE DETAIL 2/E10.
 3. REQUIRES TWO 19/C #14 SIGNAL CABLES BETWEEN POLES F-H-R-K-Q-H-F.
 4. FOR SIGNAL TYPES SEE DETAIL 2/E12.
 5. SIGNAL I.D. NUMBERS IN DETAILS 1/E10 AND 1/E11 IS THE SAME.

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
IN CHARGE	
APPROVED BY	

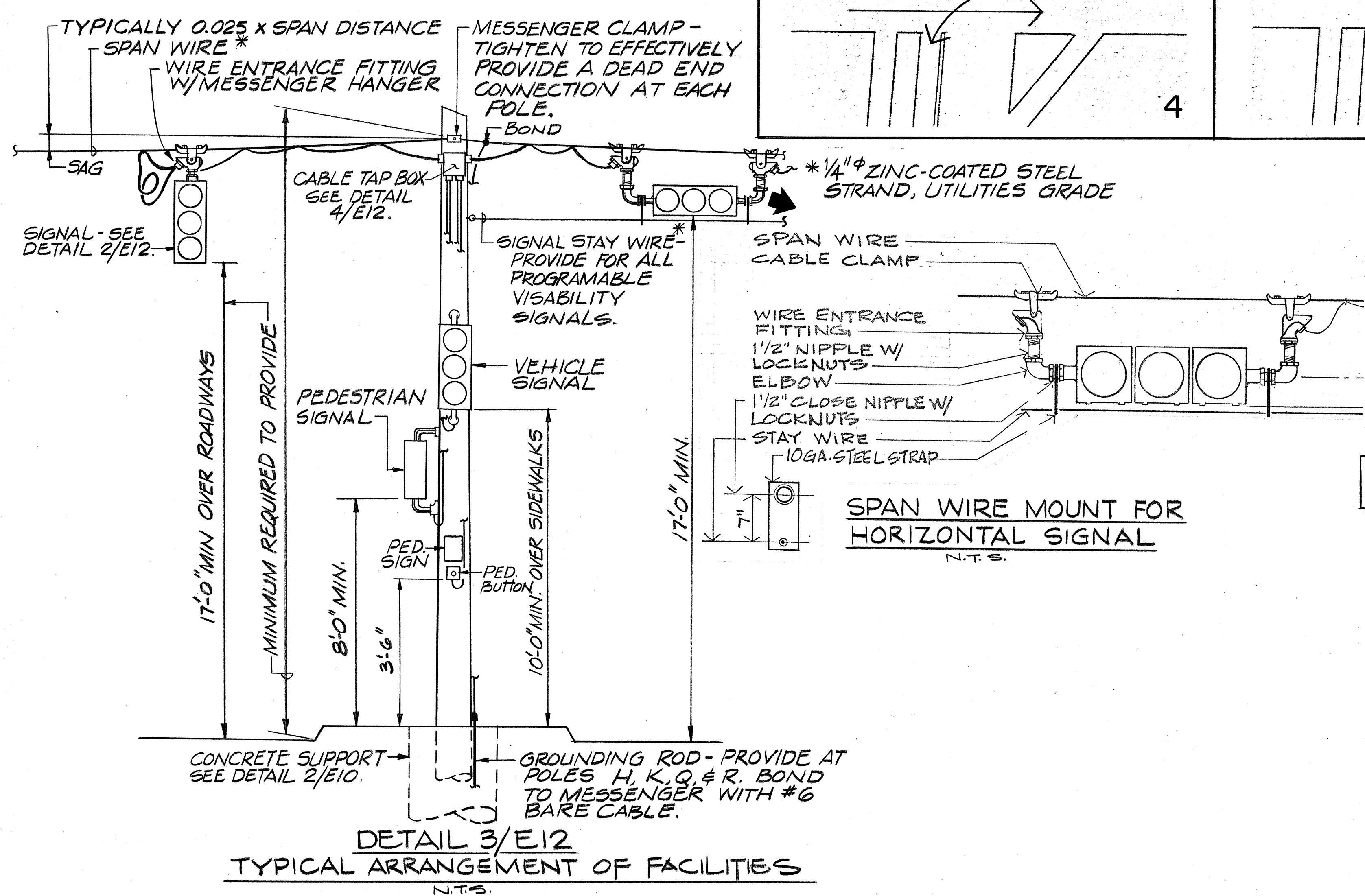
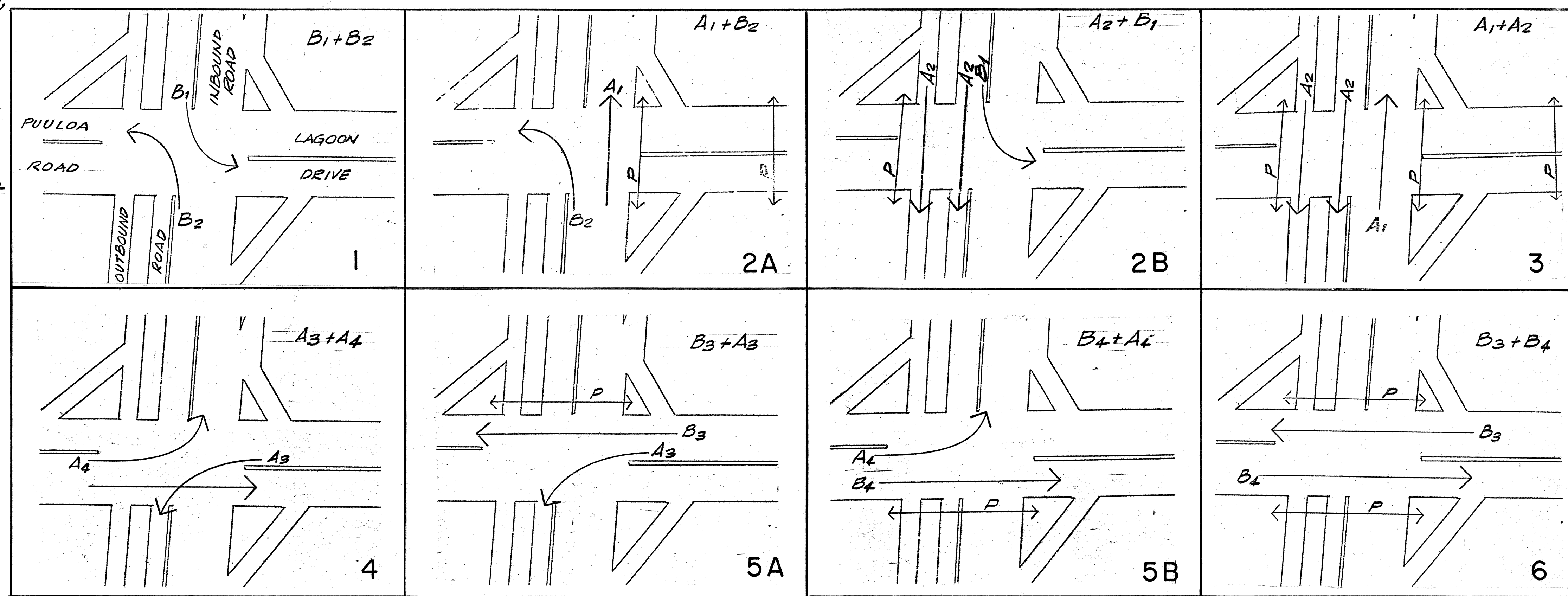
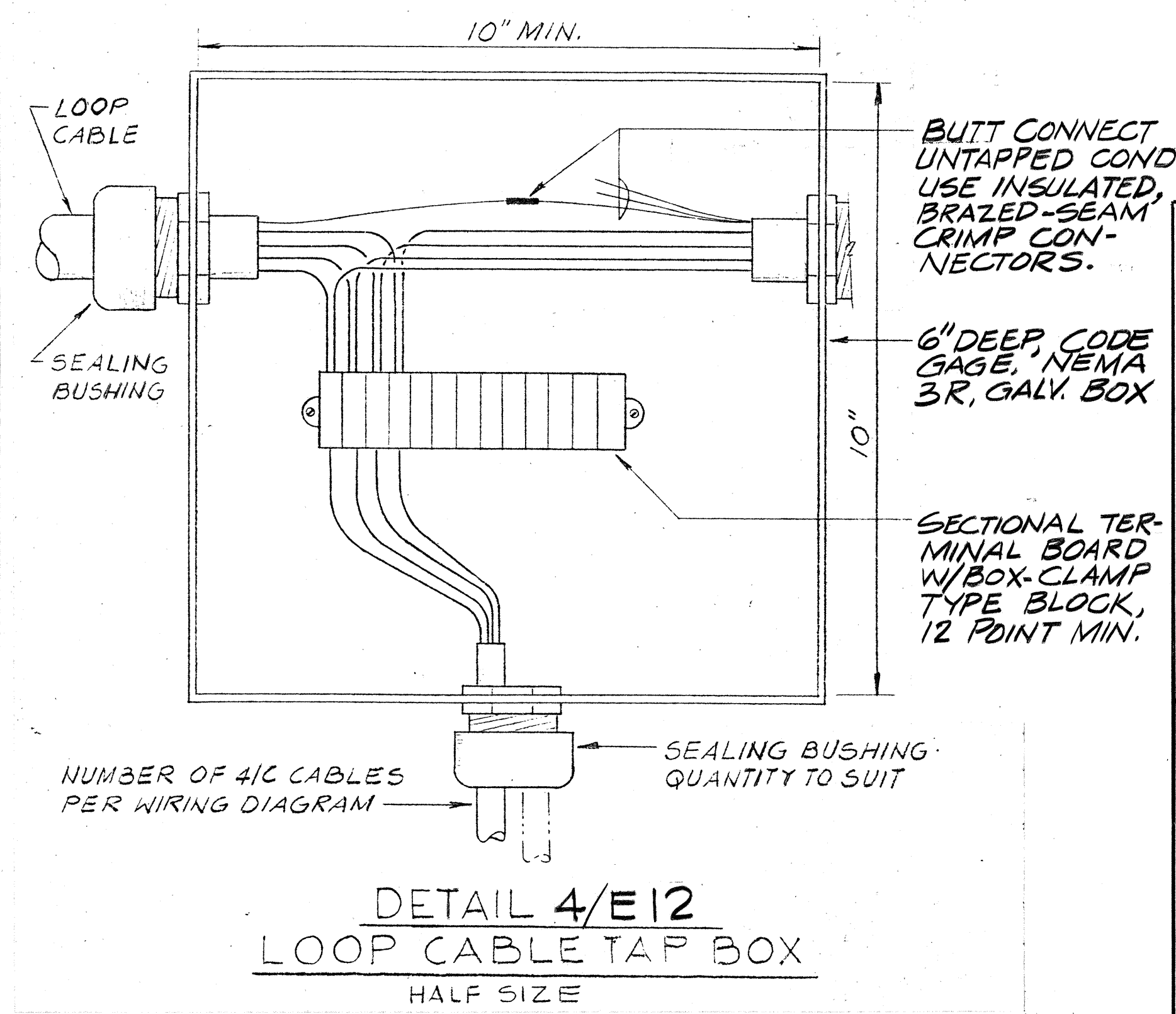


DETAIL 1/E11
 SIGNAL AND LIGHTING PLAN
 INTERSECTION NO 2-1B
 SEE NOTE 1/E11.

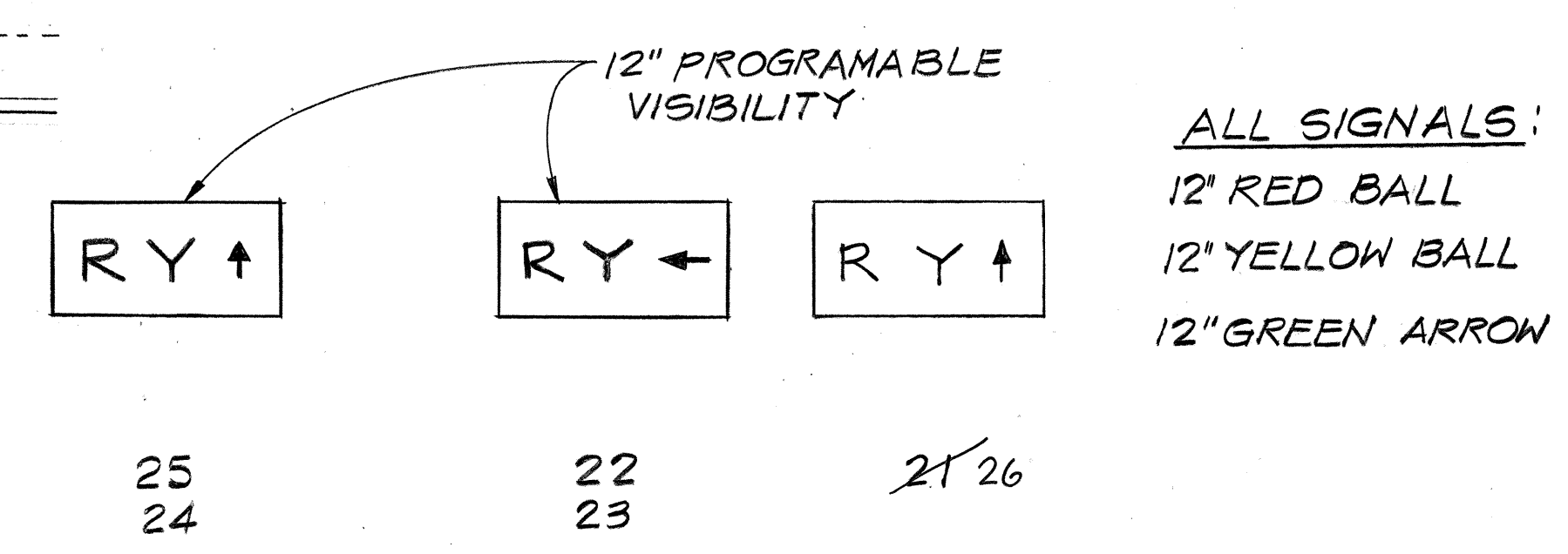
THIS WORK WAS PREPARED BY
 ME OR UNDER MY SUPERVISION.
M. A. Marszalowicz
 REGISTERED PROFESSIONAL ENGINEER
 No. 2366
 HAWAII, U.S.A.

3/23/78	Revised traffic channelization to eliminate one westbound lane.
10/20/76	Revised Note 3 Revised traffic channelization to accommodate additional westbound lane.
DATE	REVISION
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION KEEHI INTERCHANGE ELECTRICAL PLAN - PART XI STAGE II CONSTRUCTION INTERSTATE ROUTE H-1 PROJECT NO. I-HI-1 (130):17 SCALE: 1" = 20' DATE: AUG. 16, 1976 SHEET No. E11 OF E12 SHEETS	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HI-1(130):17	1976	80	174

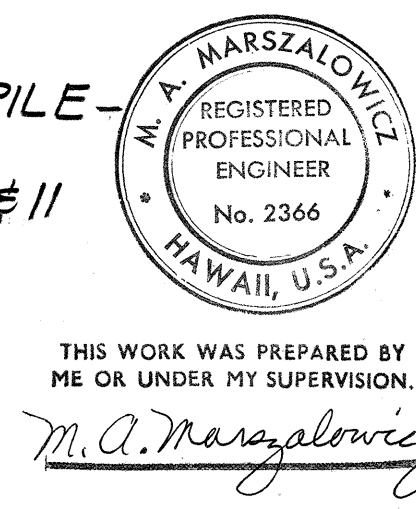


DETAIL 1/E12 TRAFFIC PHASES



NOTE: OBTAIN ALL OTHER SIGNALS FROM STOCKPILE - SEE NOTE 2/E10. CHANGE ARROW INDICATION ON SIGNALS 10 & 11 TO LEFT TURN

DETAIL 2/E12 SIGNAL TYPES



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KEEHI INTERCHANGE
ELECTRICAL PLAN - PART XII

INTERSTATE ROUTE H-1
PROJECT NO. I - HI-1 (130):17

SCALE: NONE DATE: AUG. 16, 1976

SHEET NO. E12 OF E12 SHEETS

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