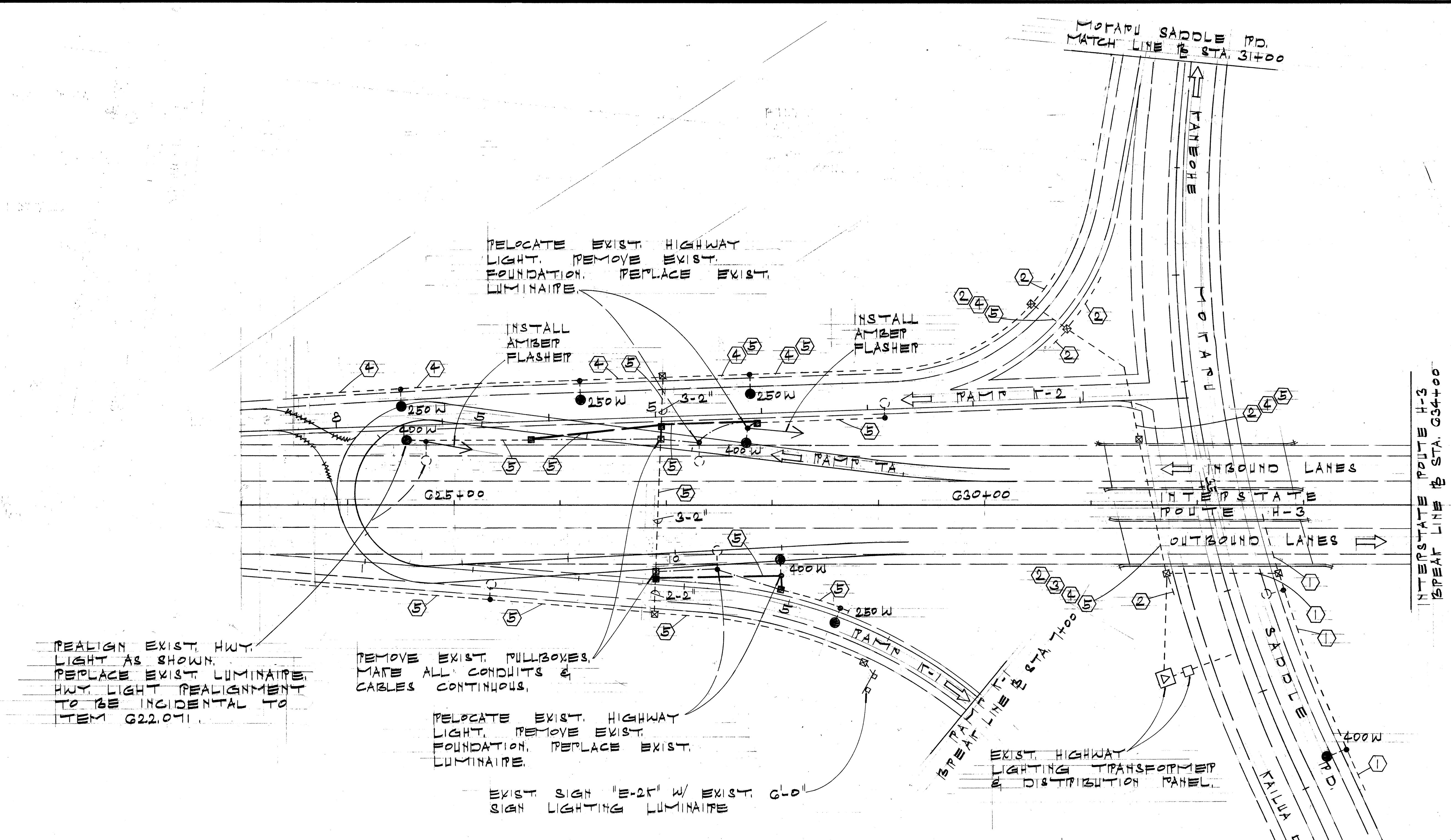
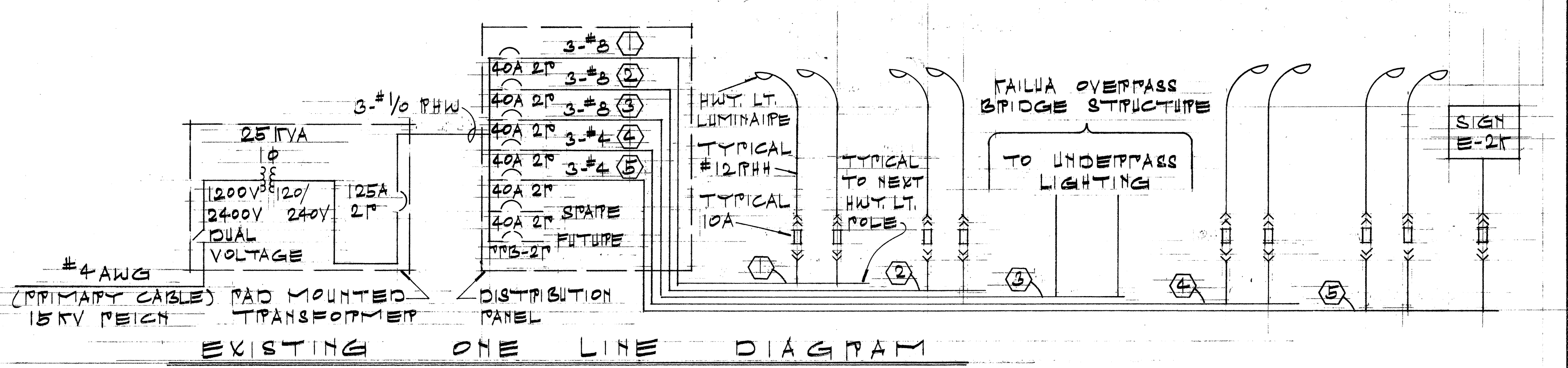


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(28)13	1977	13	55



DESIGNED BY	DATE
PLANNED BY	
TRACED BY	
NOTED BY	
CHECKED BY	



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HIGHWAY LIGHTING SYSTEM

MOANALU INTERCHANGE

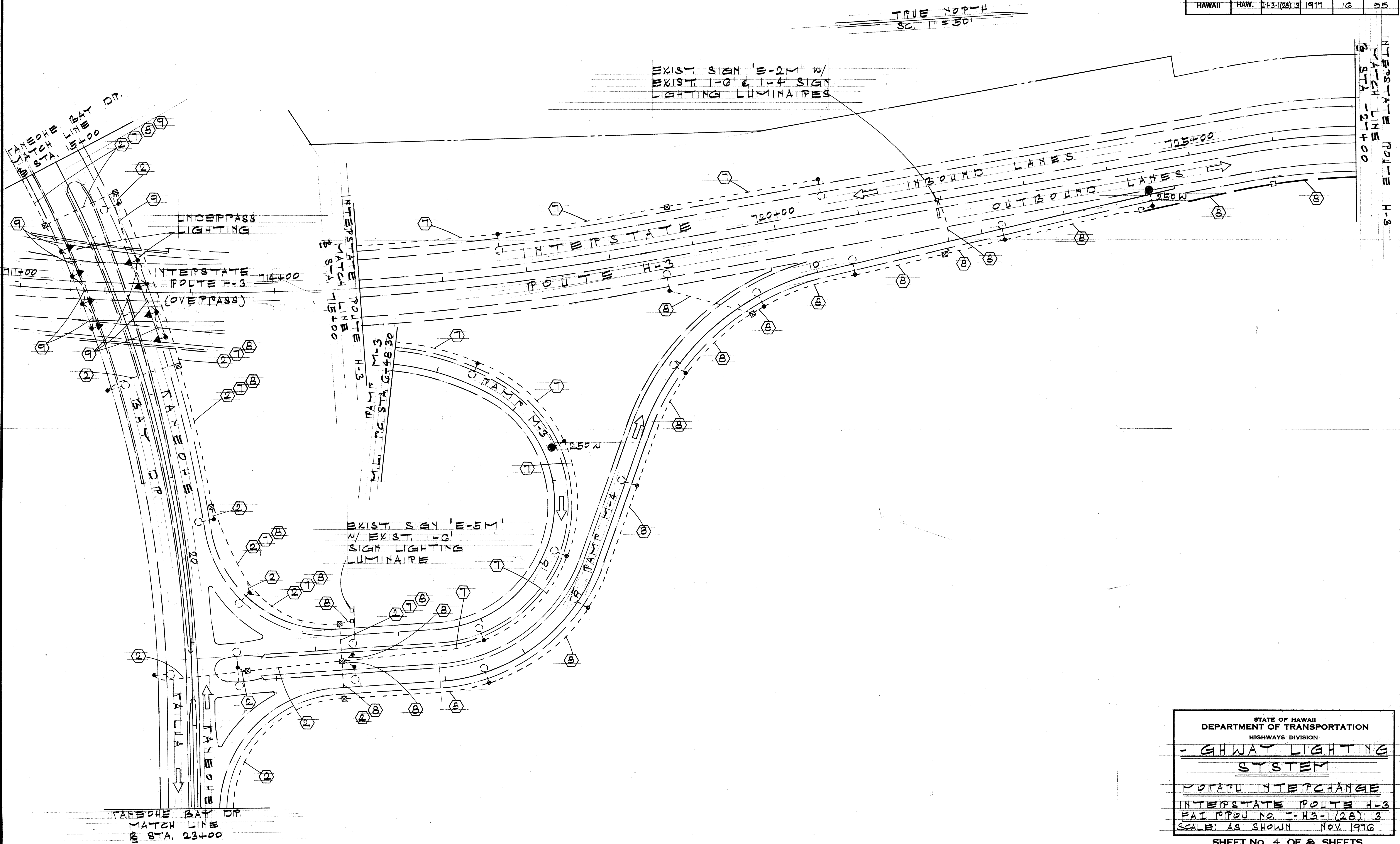
INTERSTATE ROUTE H-3

FAI PROJ. NO. I-H3-1(28)13

SCALE: AS SHOWN NOV. 1976

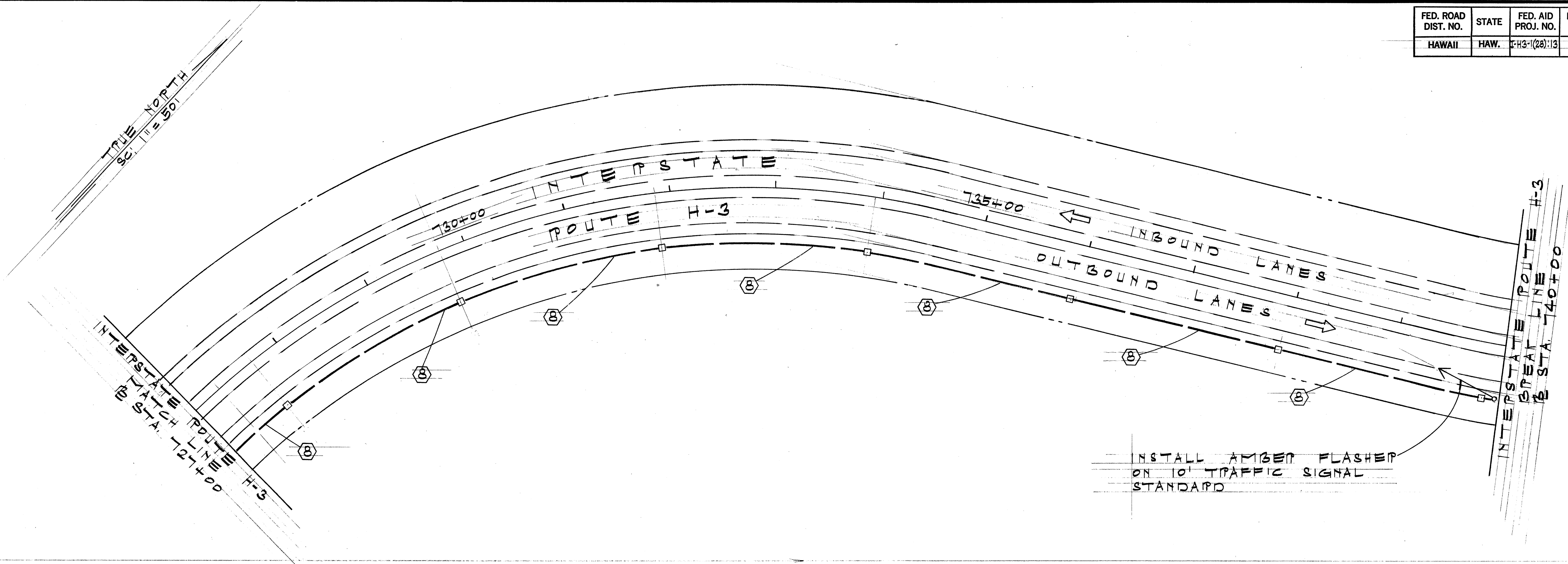
SHEET NO. 1 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(28)13	1977	16	55



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
HIGHWAY LIGHTING SYSTEM
MOTAPU INTERCHANGE
INTERSTATE ROUTE H-3
FAI PROJ. NO. I-H3-1(28)13
SCALE AS SHOWN NOV. 1976
SHEET NO. 4 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(28)13	1971	17	55



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HIGHWAY LIGHTING SYSTEM

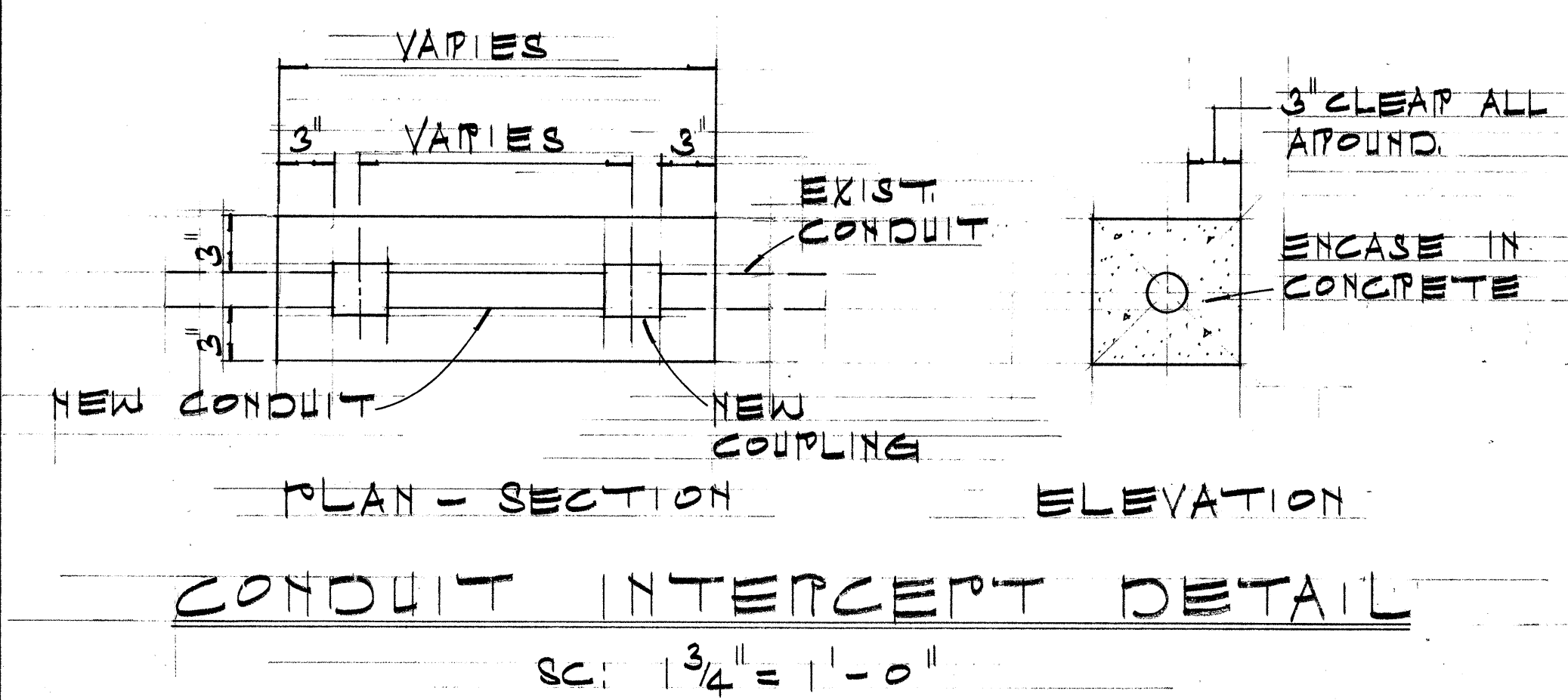
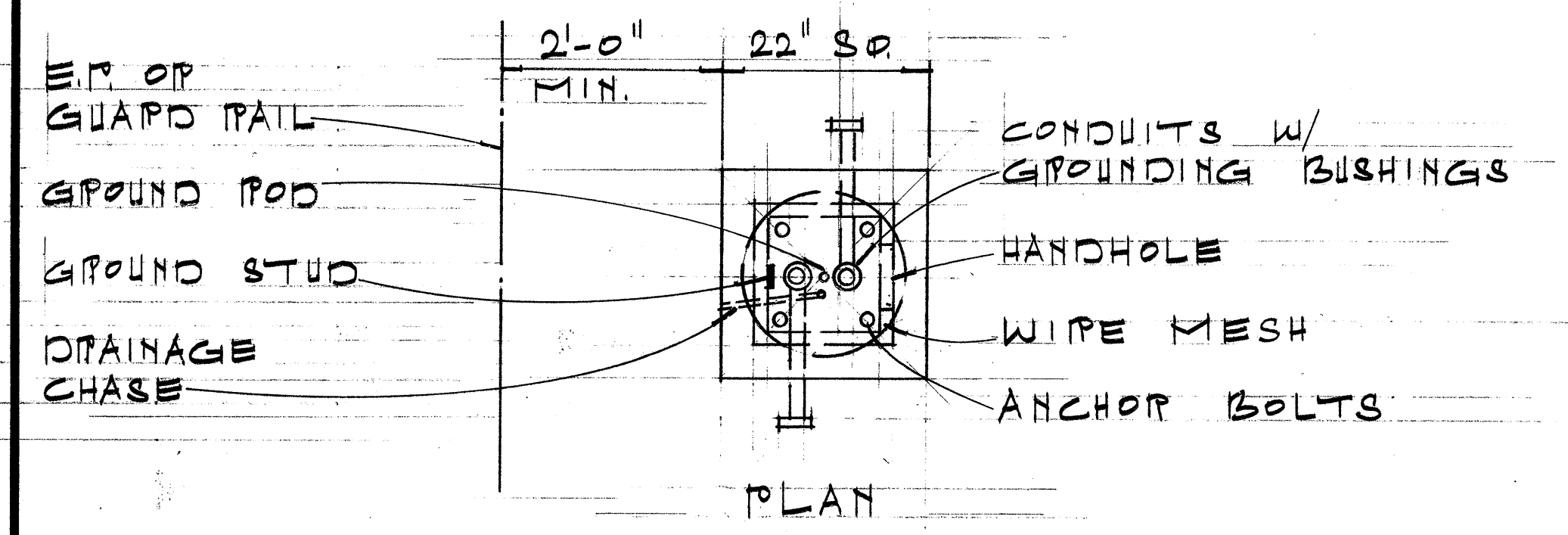
MOKAPU INTERCHANGE

INTERSTATE ROUTE H-3
FAI PROJ. NO. I-H3-1(28)13
SCALE AS SHOWN NOV. 1976

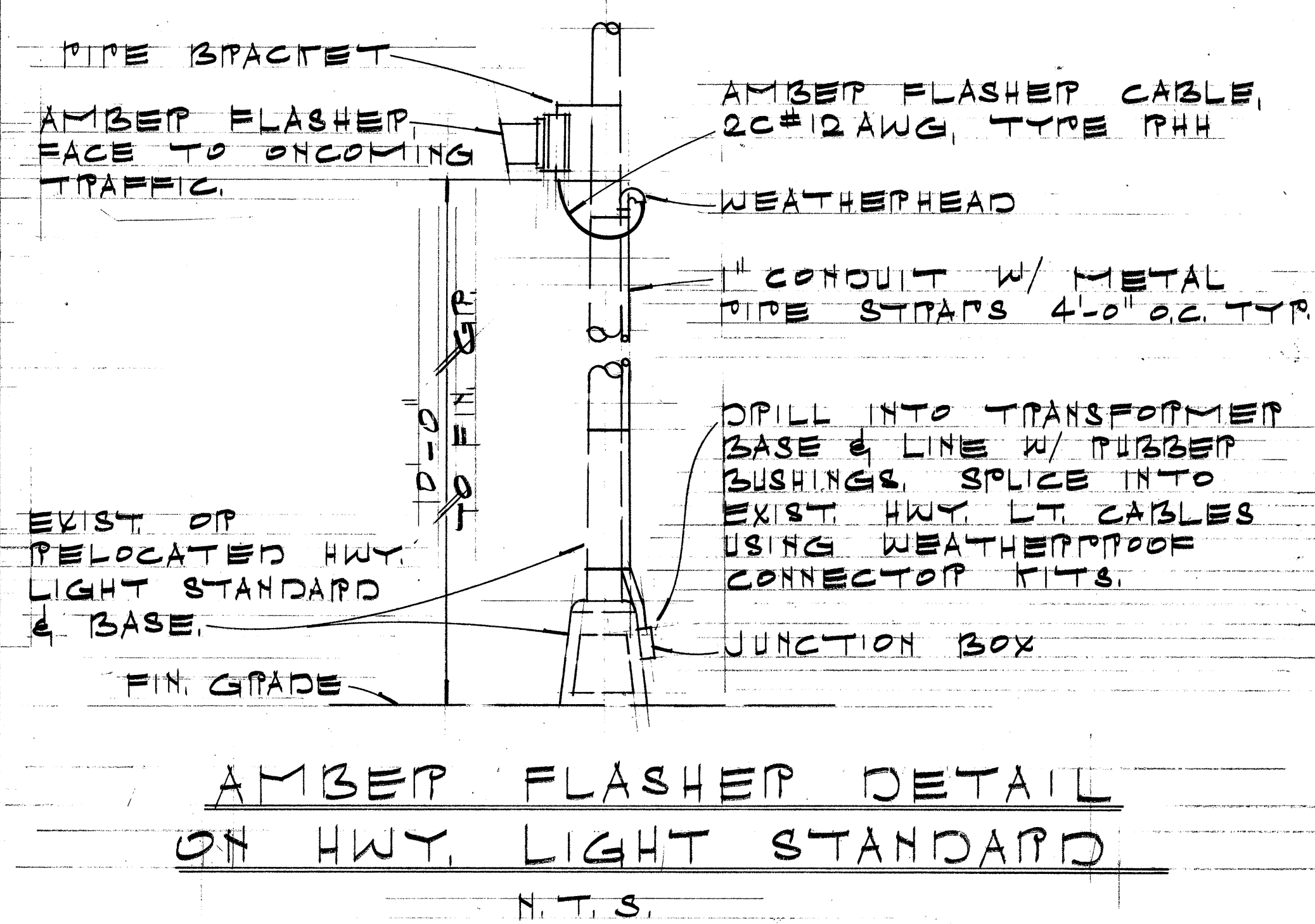
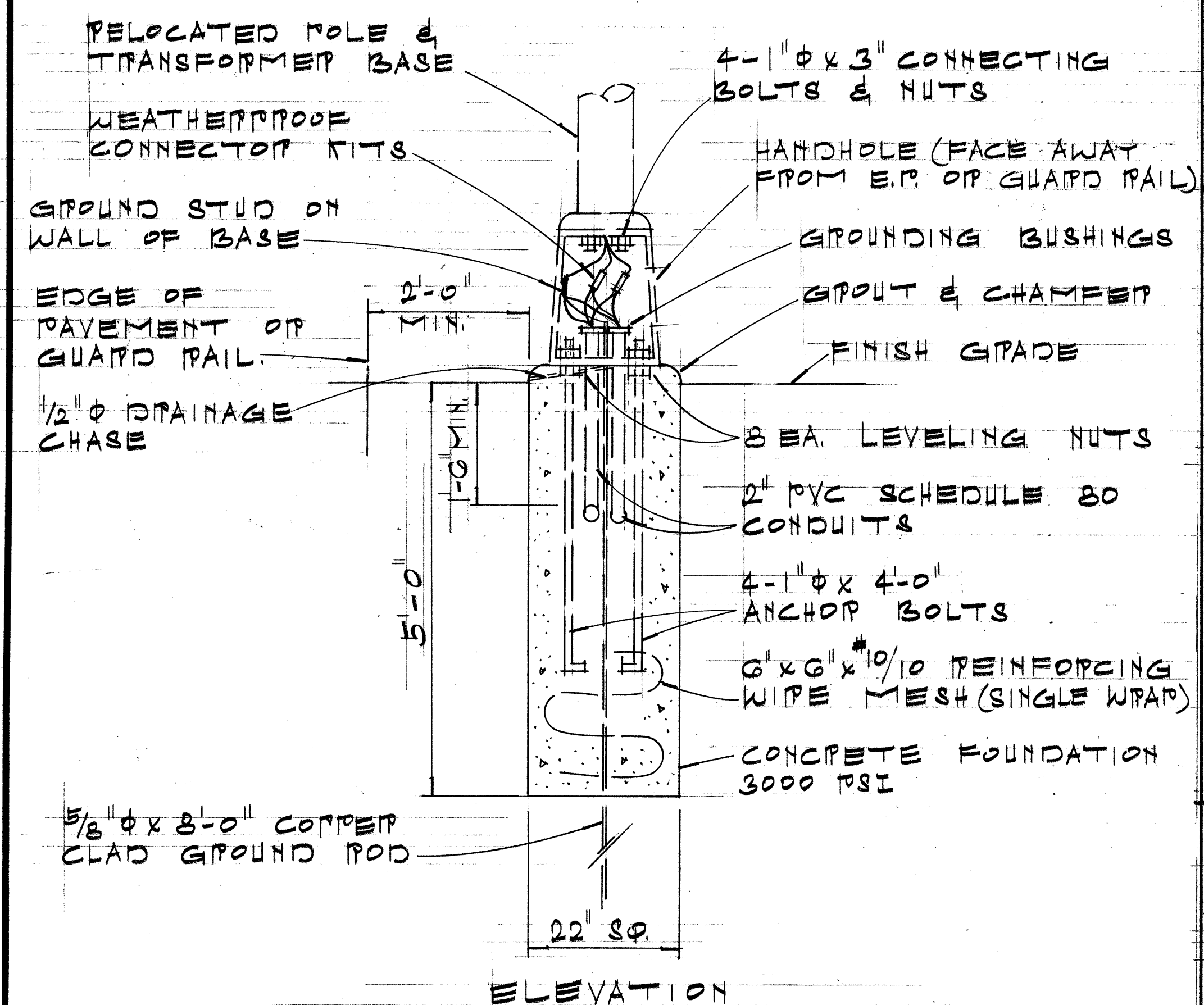
SHEET NO. 5 OF 8 SHEETS

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(28)13	1977	18	55



- ### LEGEND
- EXISTING HIGHWAY LIGHT
 - EXIST. HWY. LIGHT REPLACE EXIST. LUMINAIRE W/ NEW LUMINAIRE, MERCURY VAPOR, MULTIPLE CIRCUIT, IES TYPE III DISTRIBUTION, TYPE AS REQ'D. (400W LUMINAIRE INDICATED) W/ PHOTO-CELL.
 - EXIST. HWY. LIGHTING DUCTLINE (SYSTEM CIRCUIT 5 INDICATED).
 - EXIST. HWY. LIGHTING DUCTLINE TO BE ABANDONED.
 - NEW HWY. LIGHTING DUCTLINE (1-2" PVC SCHEDULE 80 CONDUIT, W/ 3C#4 CABLE) BURIED A MINIMUM OF 36" UNDER FINISH GRADE AT MAIWA INTERCHANGE & A MINIMUM OF 18" AT MOKAPI INTERCHANGE.
 - EXISTING HWY. LIGHTING PULLBOX
 - NEW TYPE "C" PULLBOX
 - NEW TYPE "B" PULLBOX
 - NEW 12" AMBER FLASHER.
 - NEW TYPE I TRAFFIC SIGNAL STANDARD (10' HIGH)
 - EXISTING UNDERPASS LIGHTING LUMINAIRE TO BE REPLACED, 250W MERCURY VAPOR, IES TYPE III DISTRIBUTION.



- ### GENERAL NOTES
- LOCATION OF EXIST. DUCTLINES, PULLBOXES, HIGHWAY LIGHTS & CONTROL PANEL STATIONS ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY LOCATION & CONDITION OF SAME.
 - THE CONTRACTOR SHALL VERIFY THE LOCATION & CONDITION OF EXIST. UTILITY SYSTEMS.
 - THE CONTRACTOR SHALL INFORM THE STATE ELECTRIC SHOP (MR. BILL WINSTON, PH. NO. 548-4077) BEFORE DOING ANY WORK ON EXIST. CIRCUITS.

TRANSFORMER BASE DETAIL
SC: 3/4" = 1'-0"

AMBER FLASHER DETAIL
ON HWY. LIGHT STANDARD
N.T.S.

- ### NOTE:
- SEAL CONDUITS WITH DUCT SEAL AFTER INSTALLATION OF HWY. LIGHT CABLES
 - HIGHWAY LIGHT CABLE SHIELDS SHALL BE GROUNDED TO GROUND ROD.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

HIGHWAY LIGHTING
SYSTEM

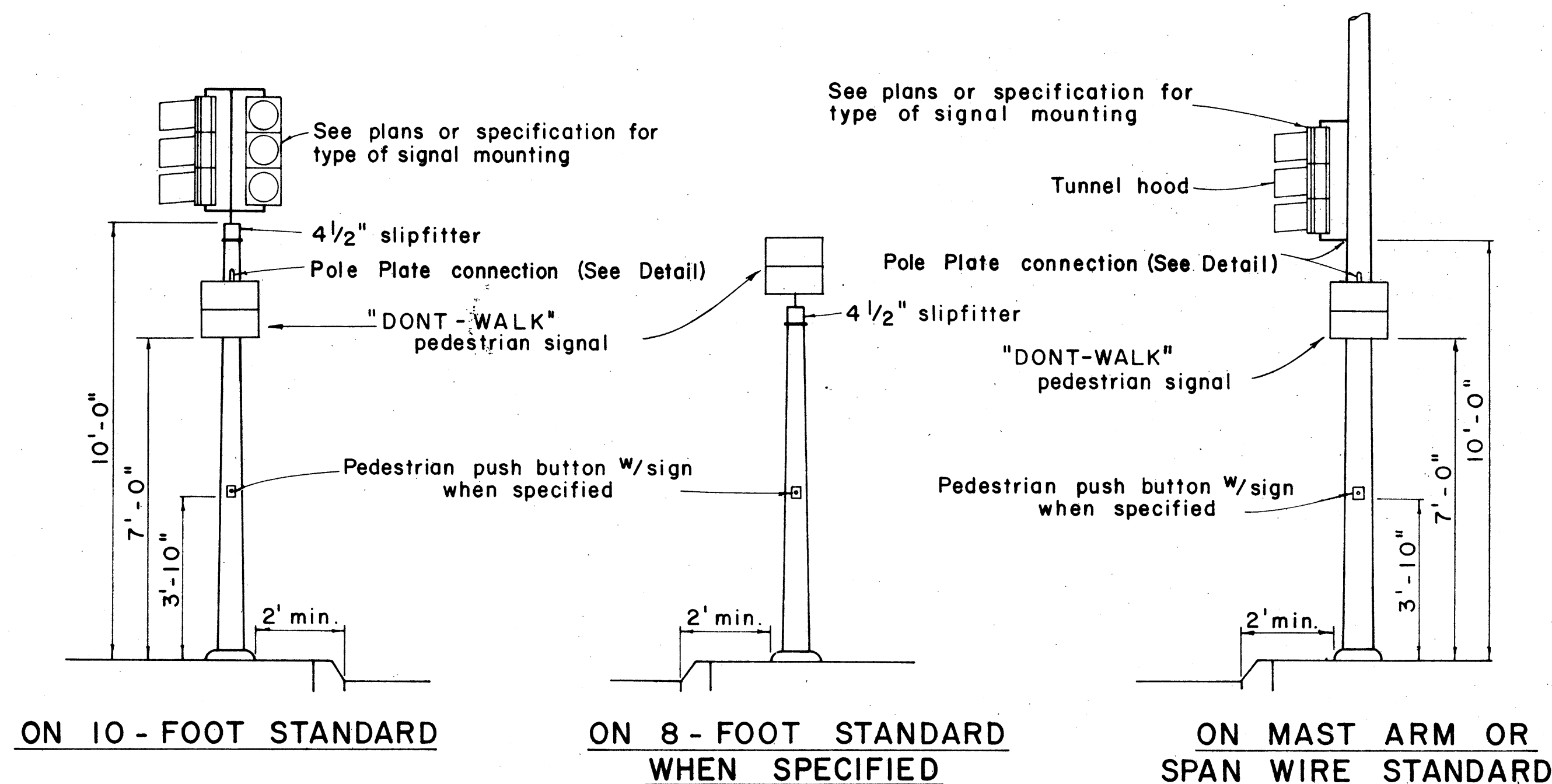
MISCELLANEOUS DETAILS

INTERSTATE ROUTE H-3
FAI PROJ. NO. I-H3-1(28)13
SCALE AS SHOWN NOV. 1976

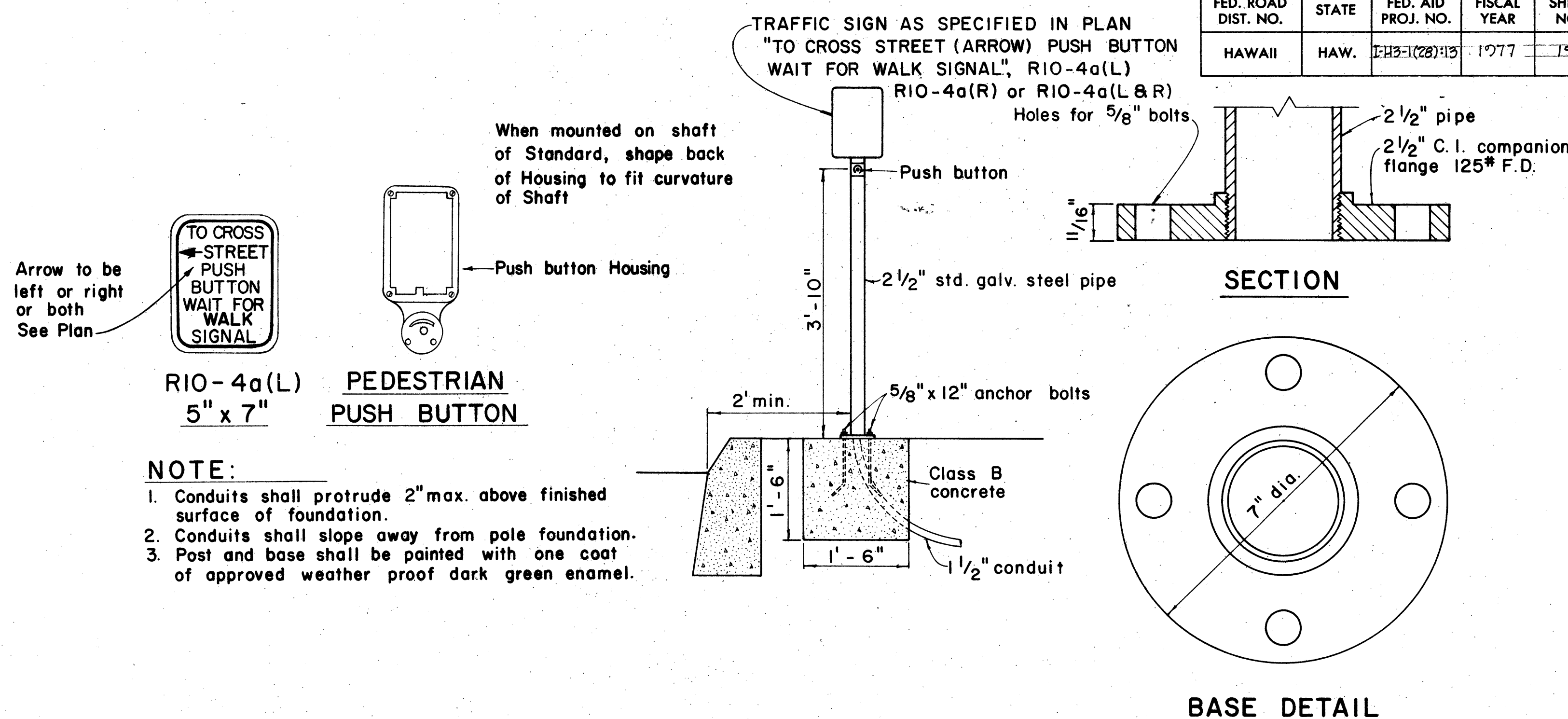
SHEET NO. 6 OF 8 SHEETS

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

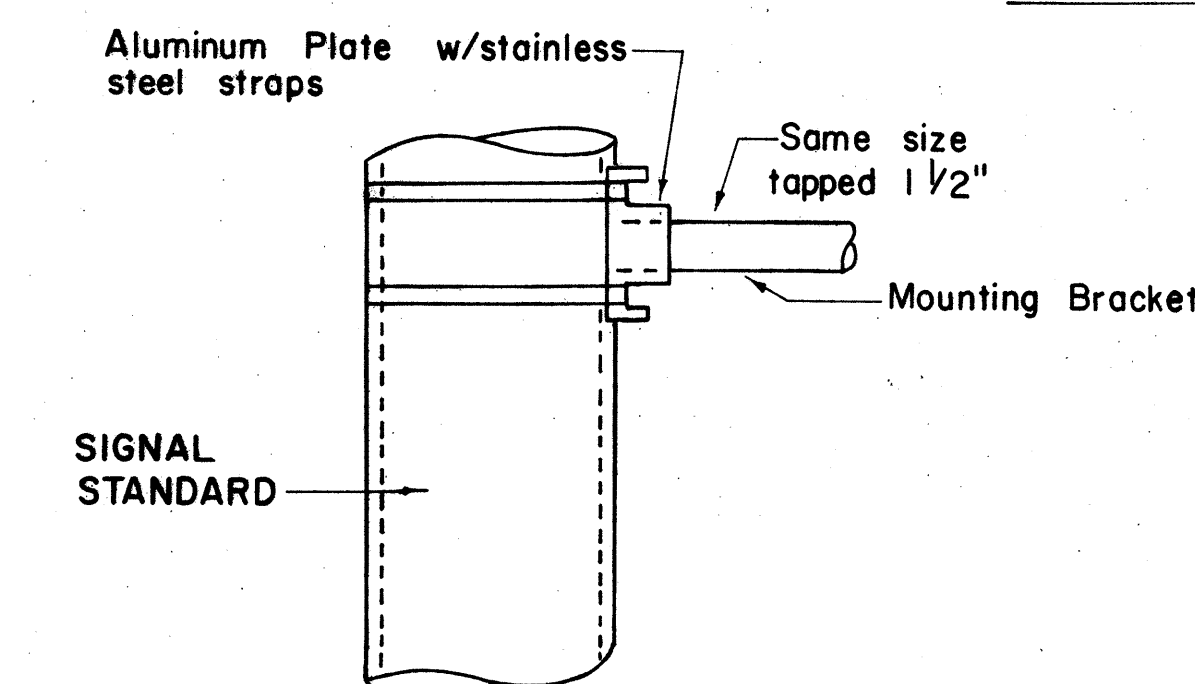
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	133-1(28)15	1977	19	55



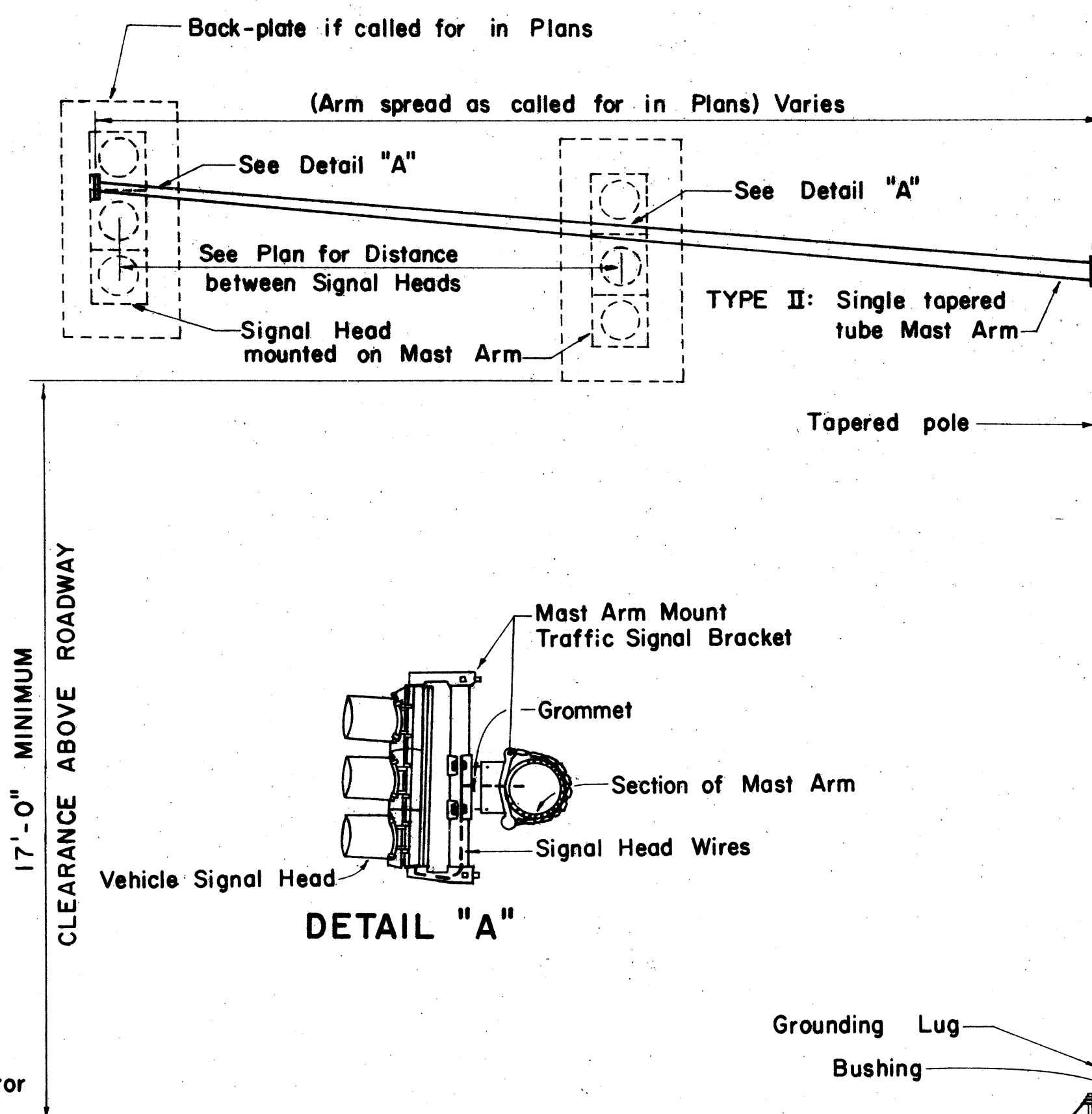
TYPICAL EQUIPMENT MOUNTINGS



PEDESTRIAN PUSH BUTTON POST AND FOOTING



DETAIL OF POLE PLATE CONNECTIONS

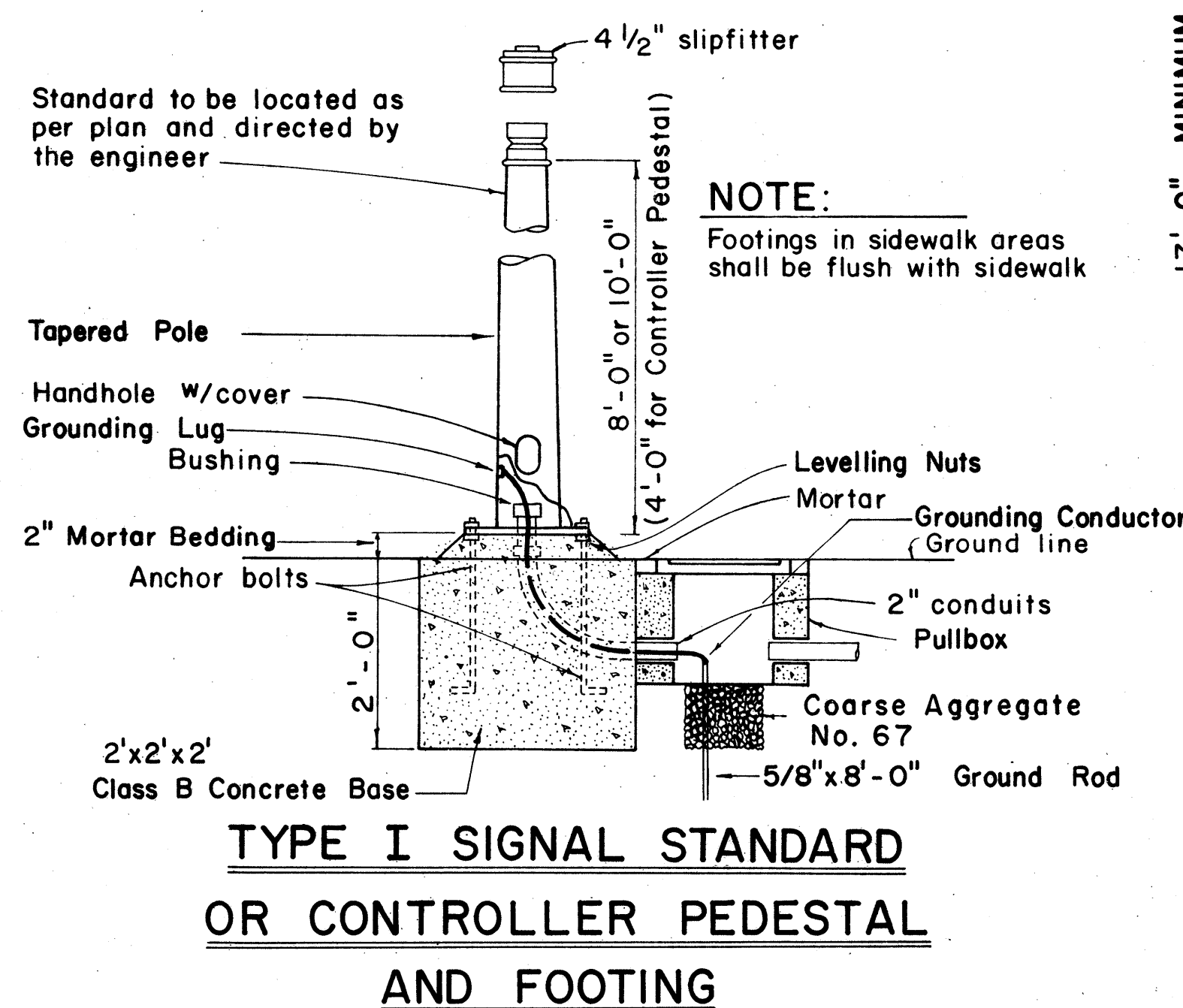


SLIPFITTER MOUNTINGS

BRACKET MOUNTINGS

MASTARM MOUNTINGS

TYPICAL VEHICULAR AND PEDESTRIAN SIGNAL MOUNTINGS



TYPE I SIGNAL STANDARD OR CONTROLLER PEDESTAL AND FOOTING

TYPE II MAST ARM AND STANDARD

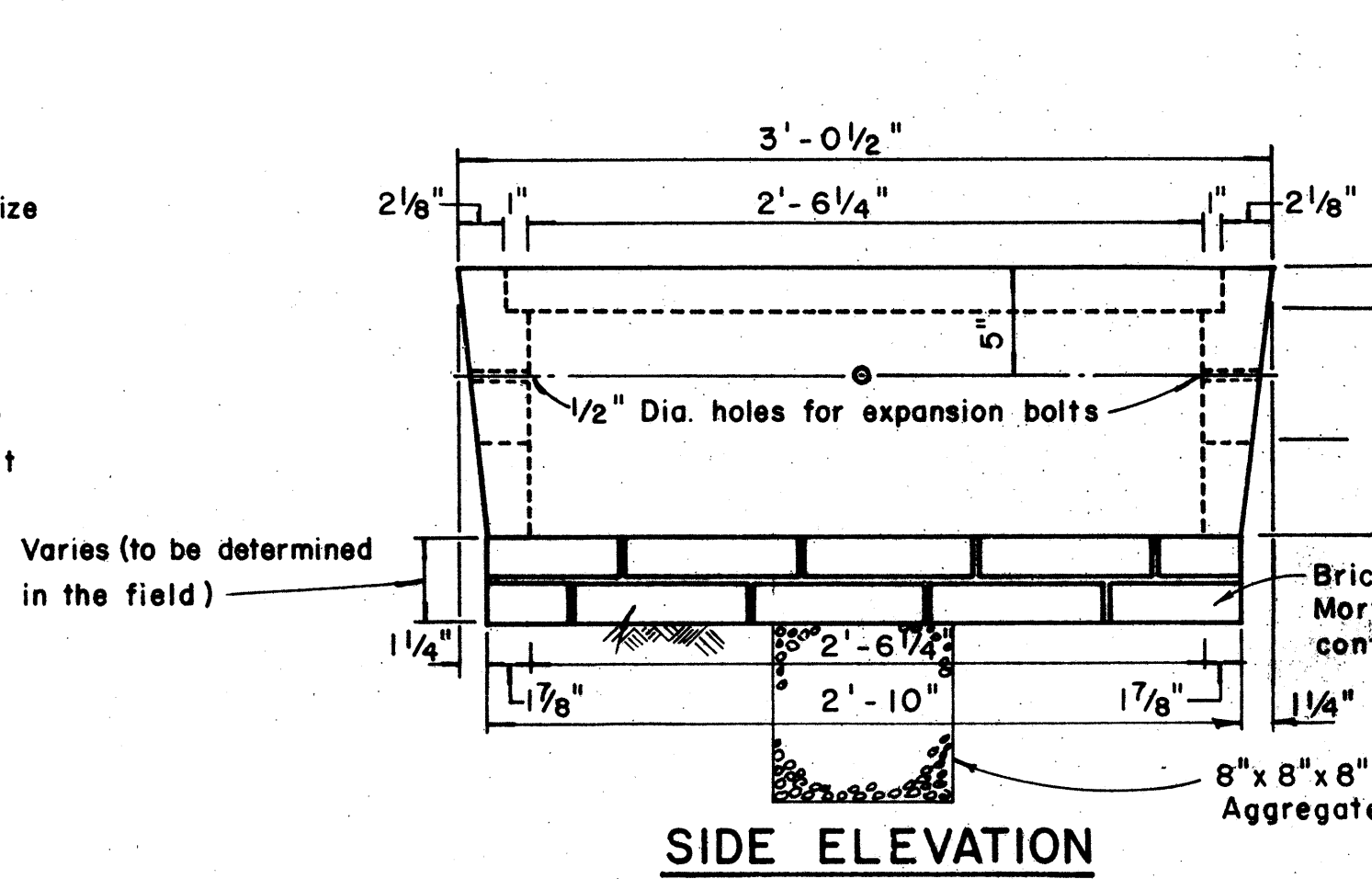
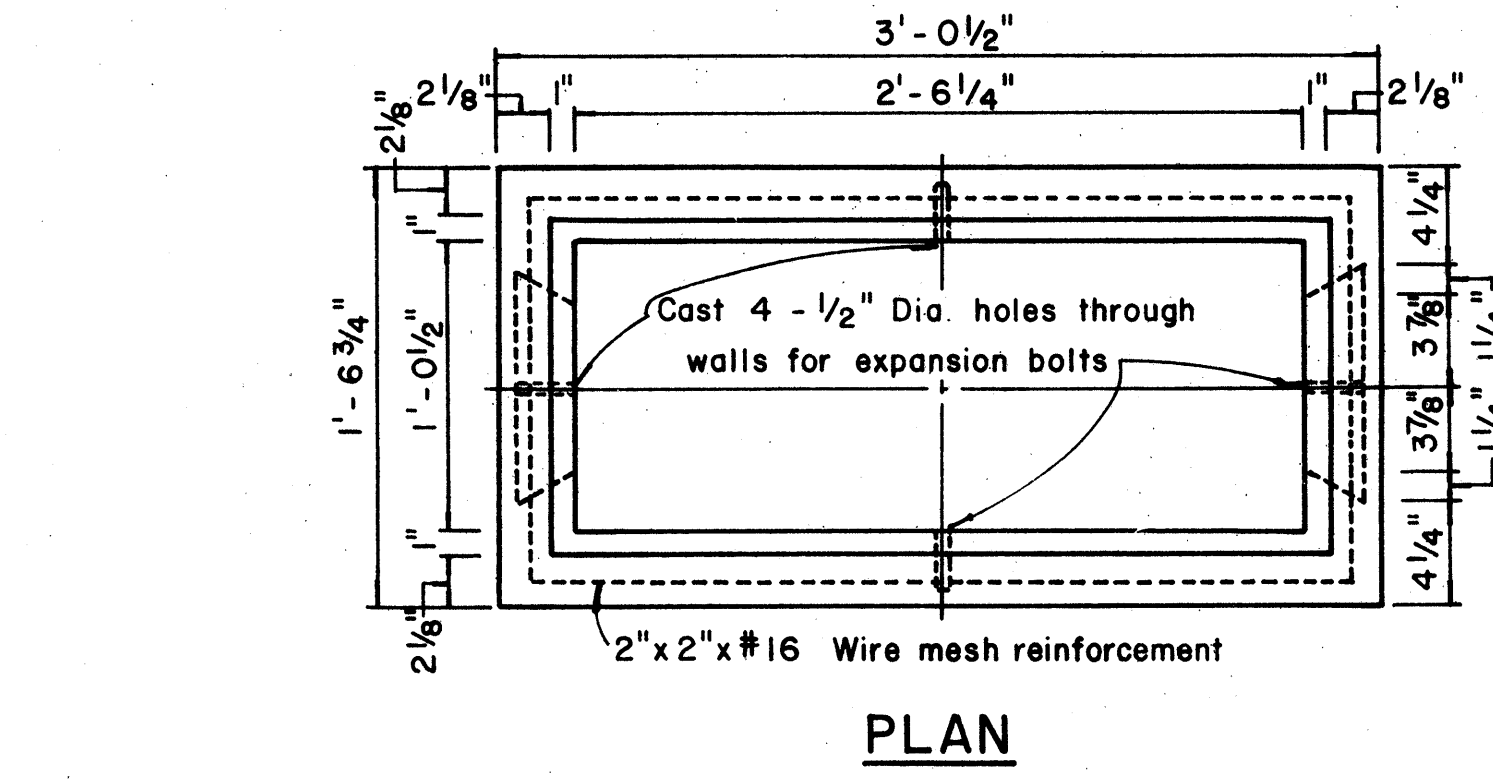
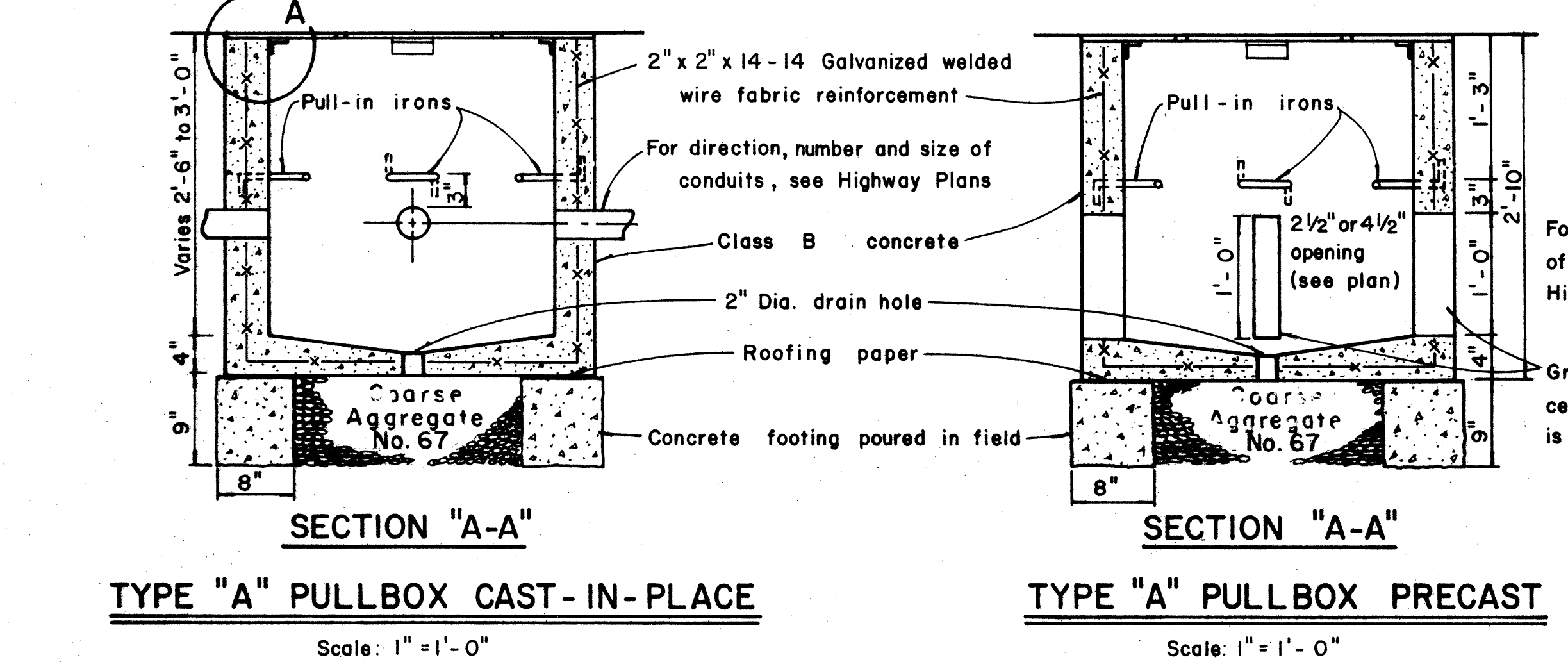
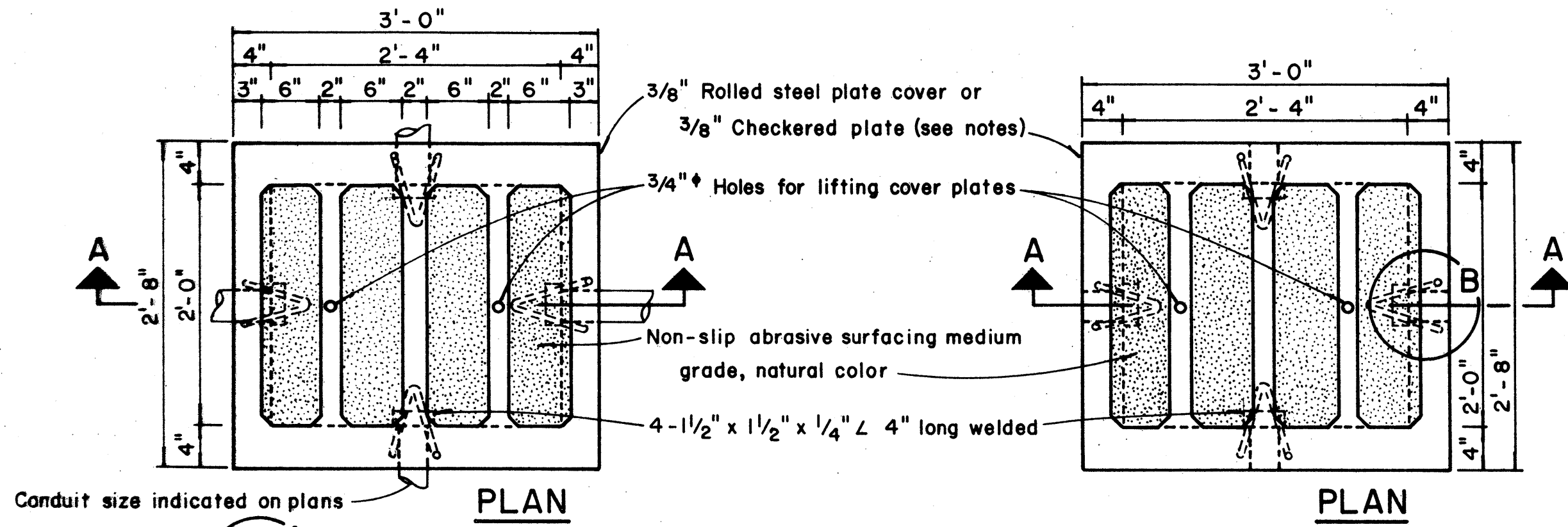
TYPICAL SIGNAL ARRANGEMENTS

NO.	REVISION	APPROVED BY	DATE
1	Revise code nos. for Pedestrian Push Button signs.	H.T.	3/23/72
2	Revise Details of Traffic and Pedestrian Signals, Standards and Pedestrian Push Button and Signs.	H.T.	3/5/76
3	Revise signal indications.	H.T.	9/22/76

APPROVAL RECOMMENDED:
Erich Tanaka 12/29/69
 TRAFFIC ENGINEER DATE
John J. J. J. 12/29/69
 ASSISTANT CHIEF, ENGINEERING DATE

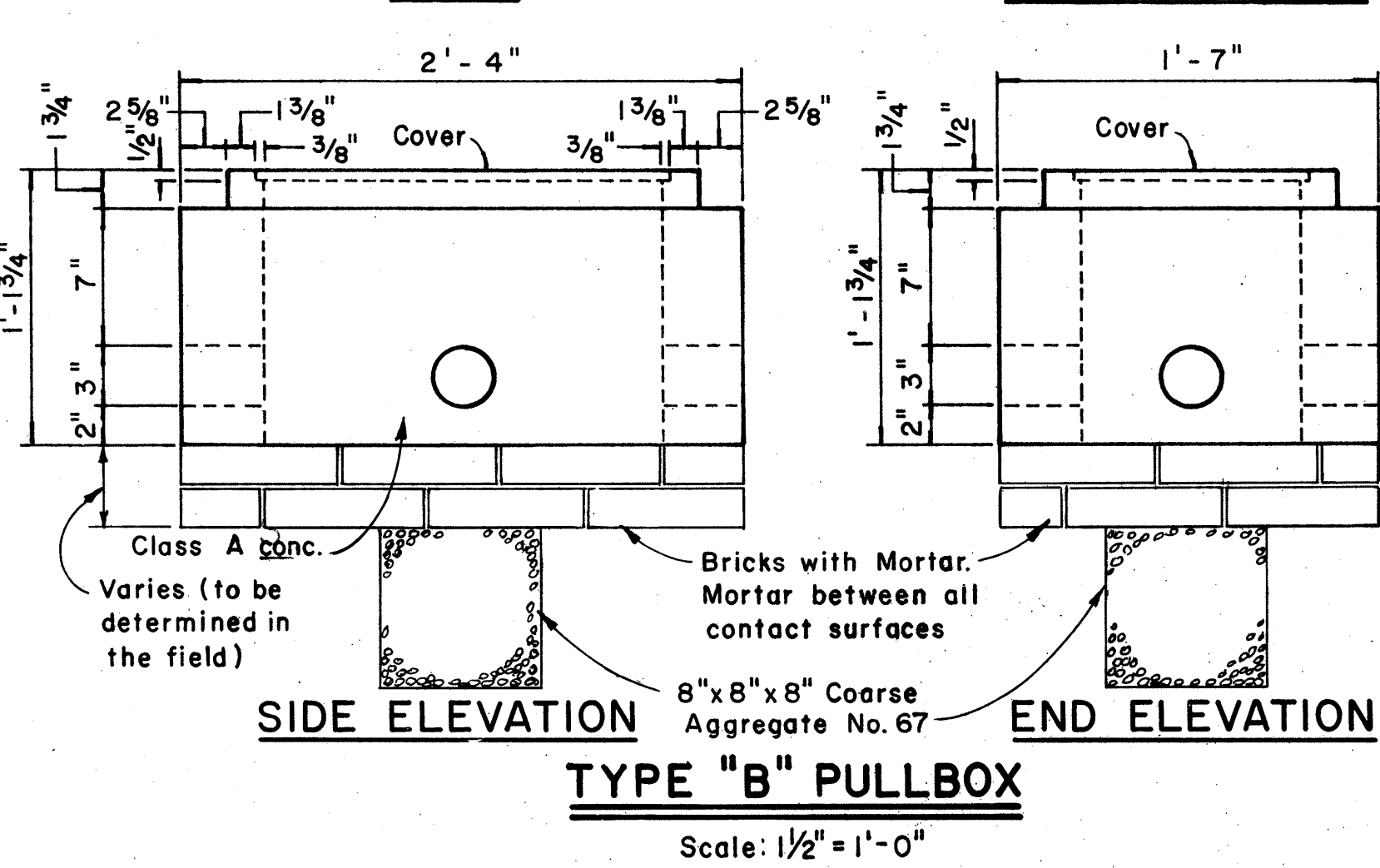
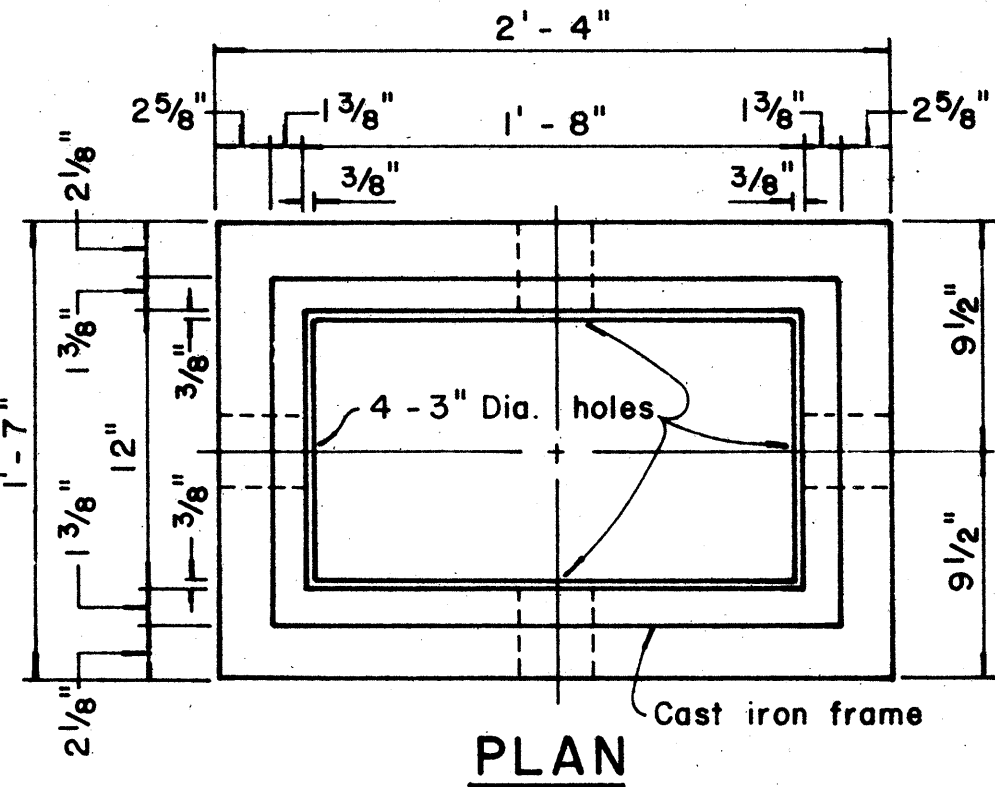
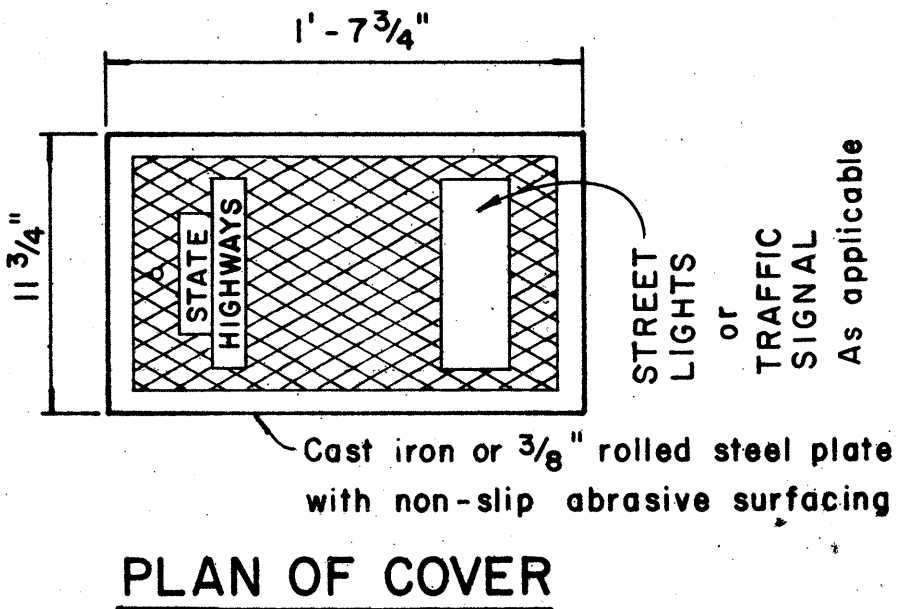
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
TRAFFIC SIGNAL SYSTEM
 MISCELLANEOUS DETAILS
 Not to Scale
 SHEET No. 7 OF 8 SHEETS DT 400

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HA3-1(28)33	1977	20	55

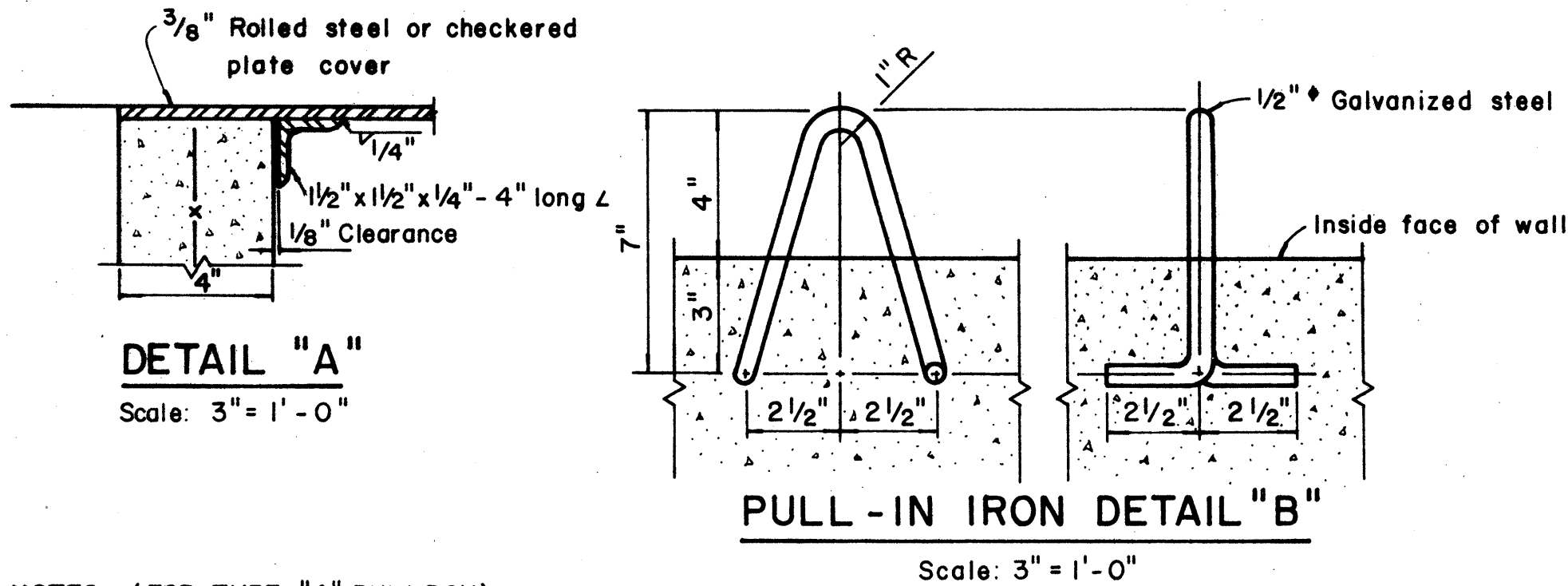
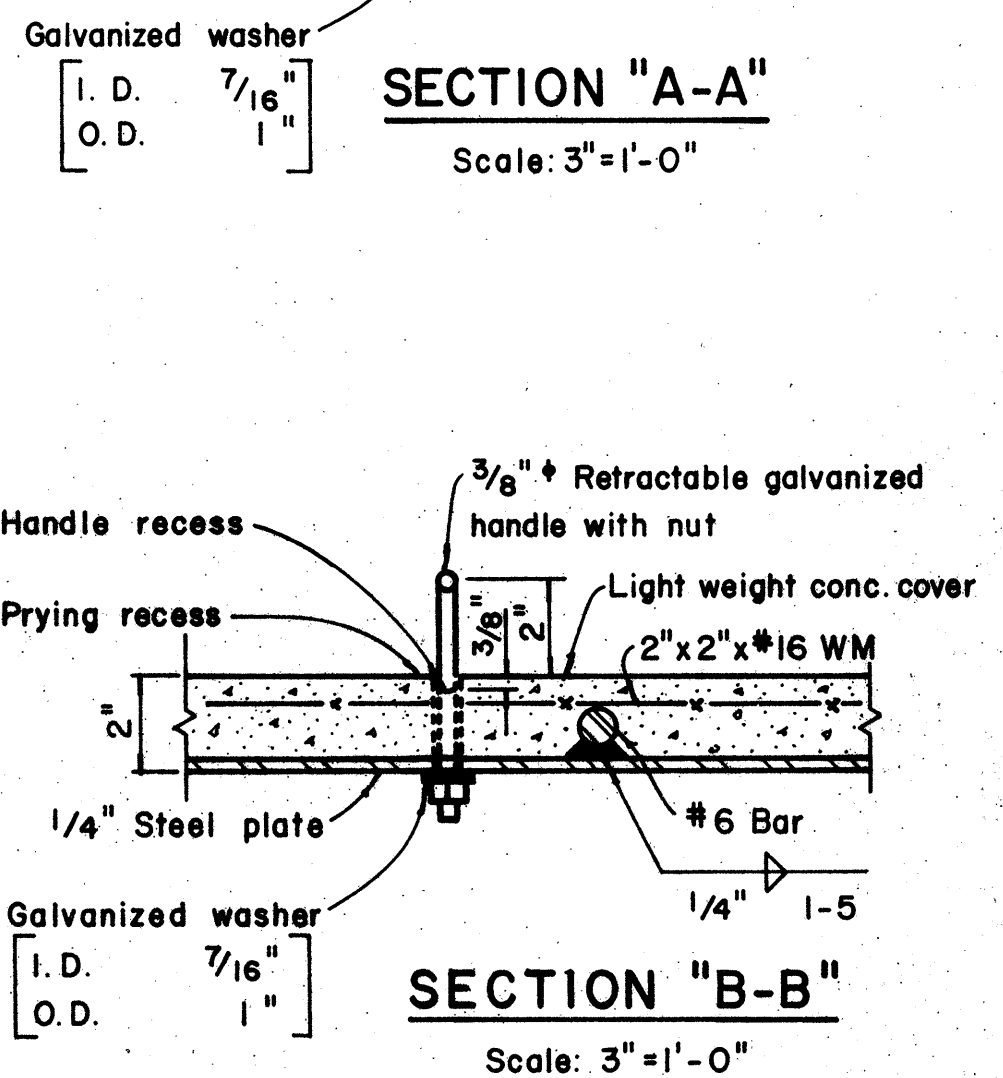
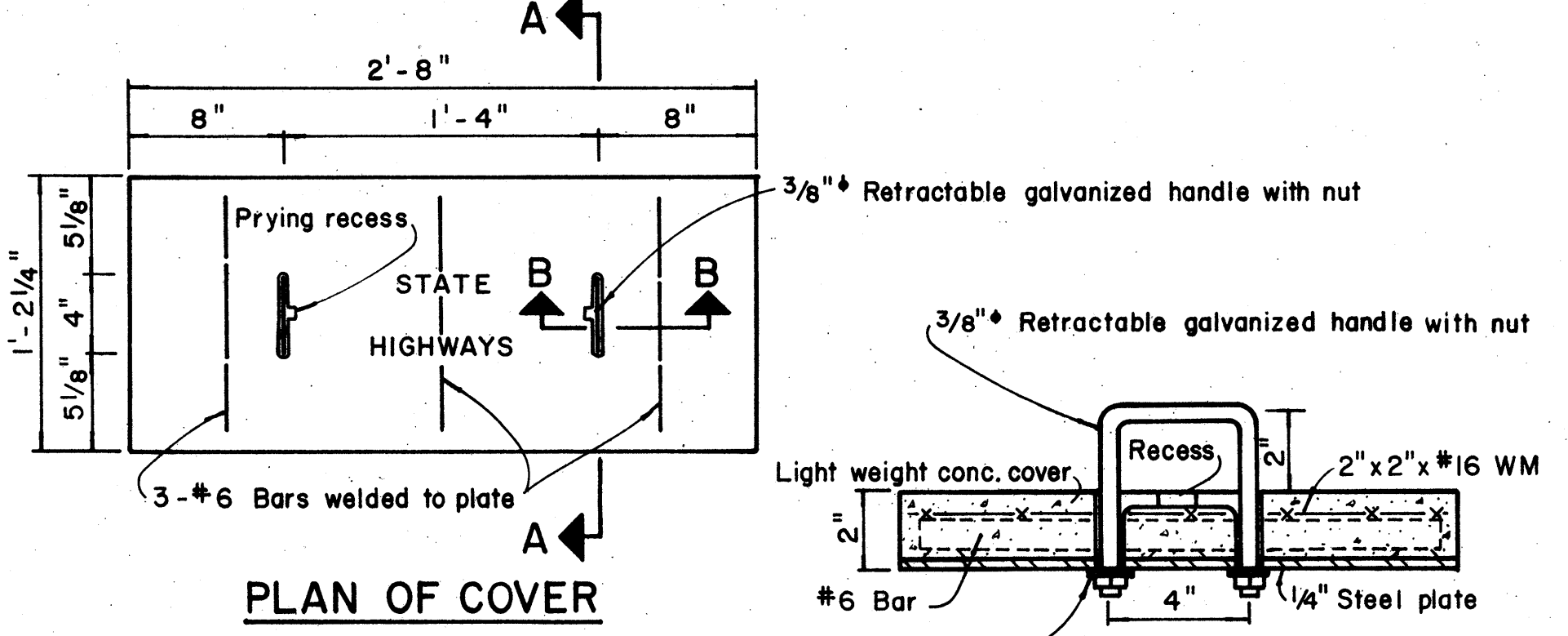


TYPE "C" PULLBOX
Scale: 1/2" = 1'-0"

NOTE:
Steel rim shall be welded to bottom of steel cover if necessary so that top of cover and frame are flush.



TYPE "B" PULLBOX
Scale: 1/2" = 1'-0"



- NOTES: (FOR TYPE "A" PULLBOX)
- 3/8" Rolled steel plate cover with non-slip abrasive surfacing medium grade, natural color shall be used on all pullboxes located on sidewalk areas where pedestrians are walking.
 - 3/8" Checkered plate cover shall be used on all pullboxes located in median areas and other locations where there are no pedestrians walking.
 - Pull irons shall be placed opposite each conduit slot.
 - Covers on all pullboxes located in sidewalk areas shall be set flush with the concrete sidewalk.
 - Each pullbox shall have a pair of pull irons opposite each other for lifting purposes.

APPROVAL RECOMMENDED:
Erich Tanaka 12/7/62
TRAFFIC ENGINEER DATE

APPROVED:
W. W. J. J. 12-30-69
ASSISTANT CHIEF, ENGINEERING DATE

NO.	REVISION	APPROVED BY	DATE
1	Revised Type B & C Pullbox details	H.T.	5-5-76

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
PULLBOXES

Scale as noted Date

SHEET No. 8 OF 8 SHEETS DT 40