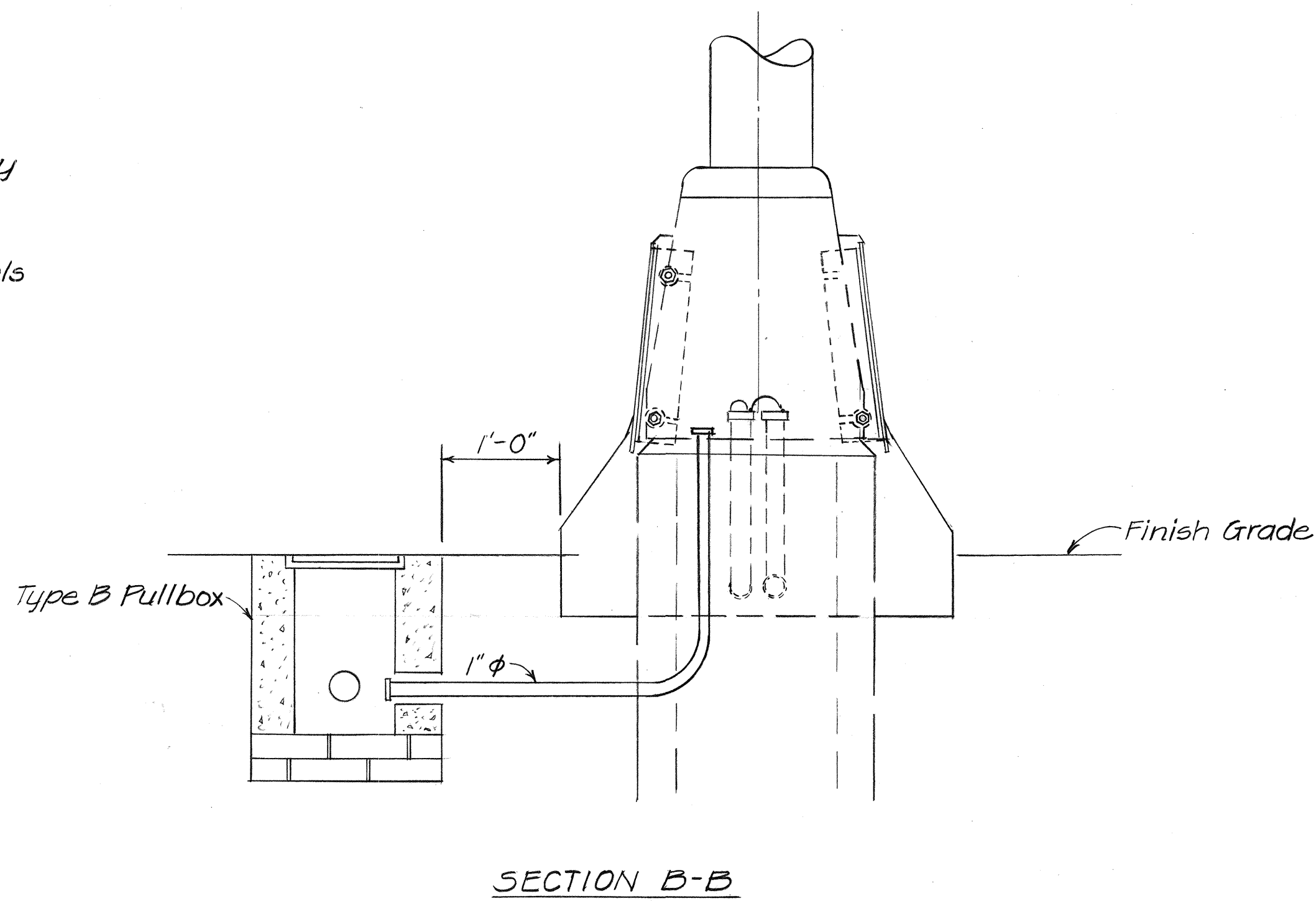
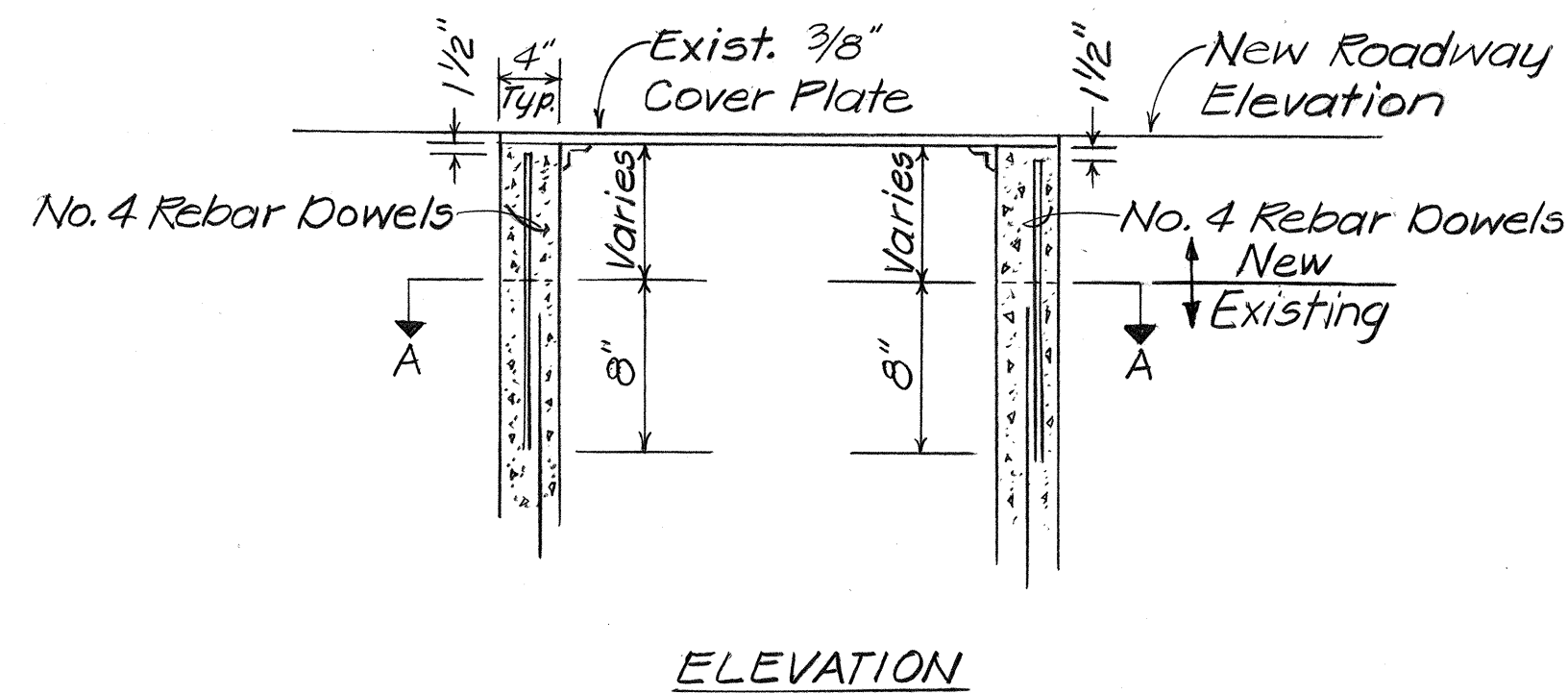
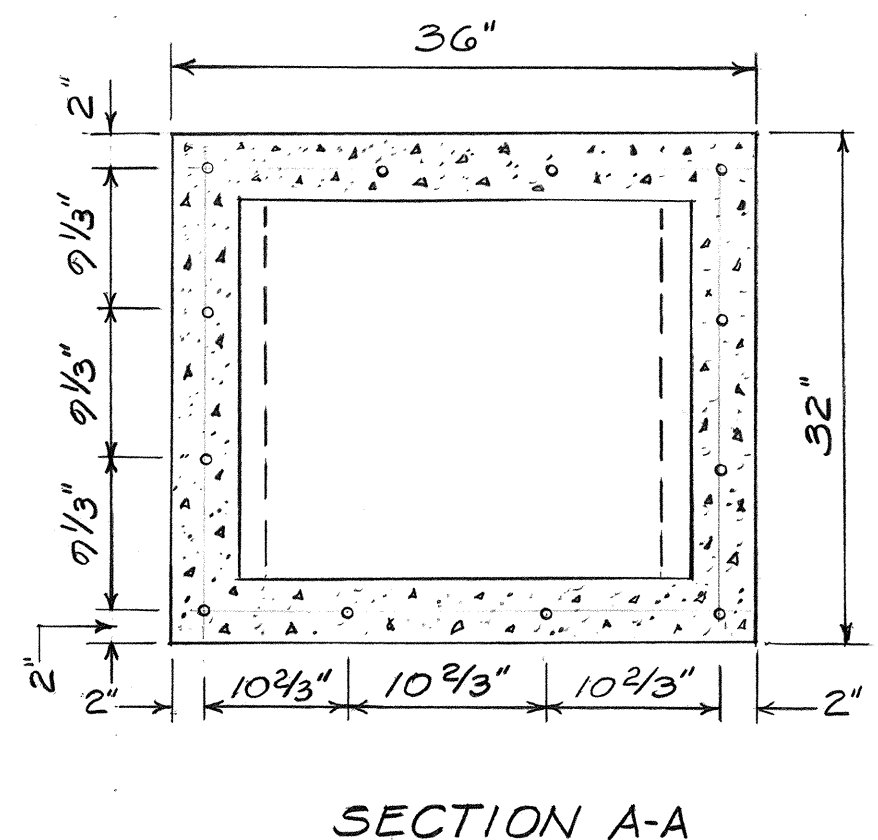
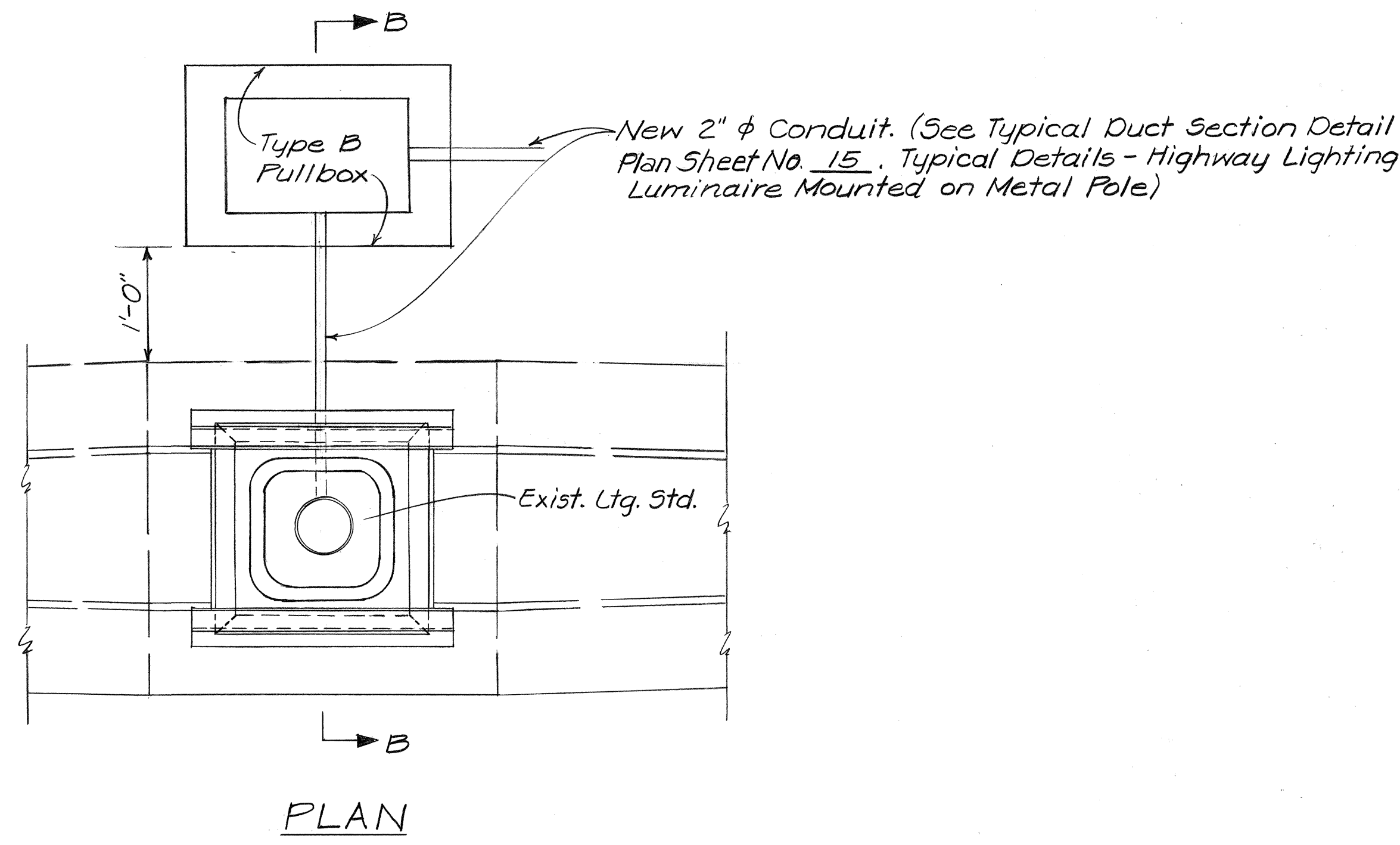
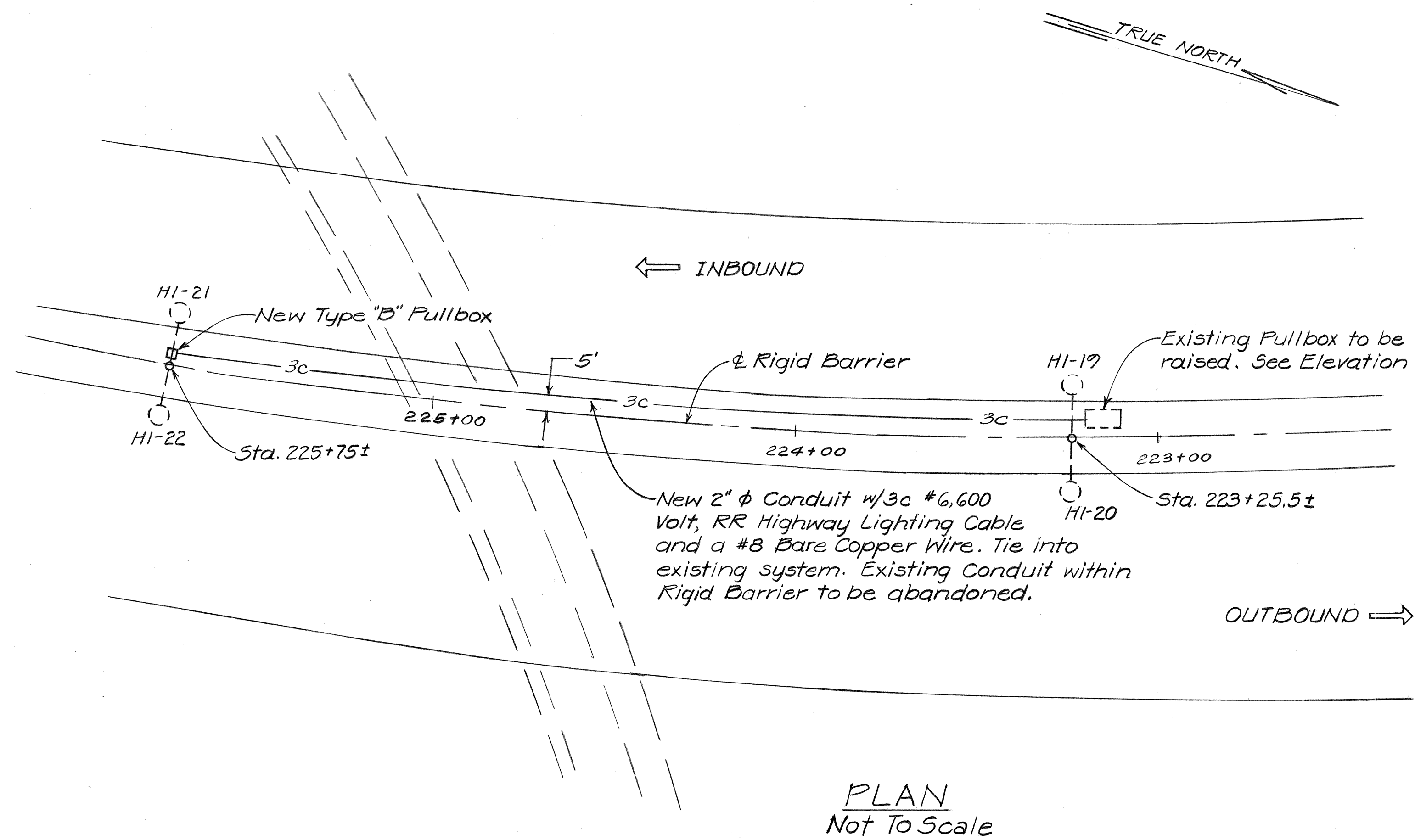


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-HI-1 (196)	1986	12	22



HIGHWAY LIGHTING ELECTRICAL PULLBOX
N.T.S.

SECTION B-B
LIGHT STANDARD @ STA. 225+75±
N.T.S.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLAN AND DETAILS
HWY. LTG. STANDARDS

INTERSTATE ROUTE H-1
HALAWA INTERCHANGE
F.A.I. PROJ. NO. IR-HI-1 (196)

Scale: As Shown Date: July 1985

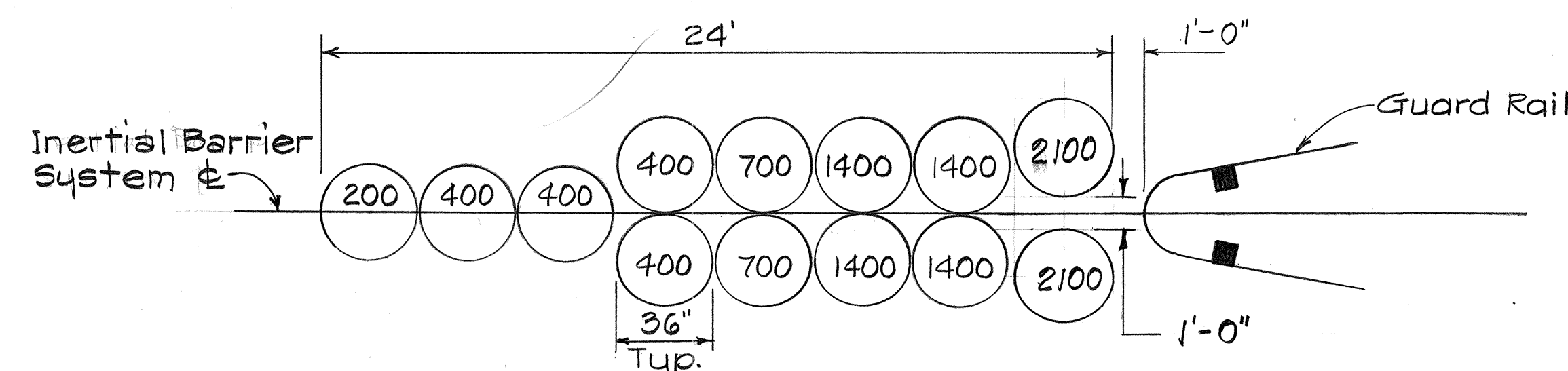
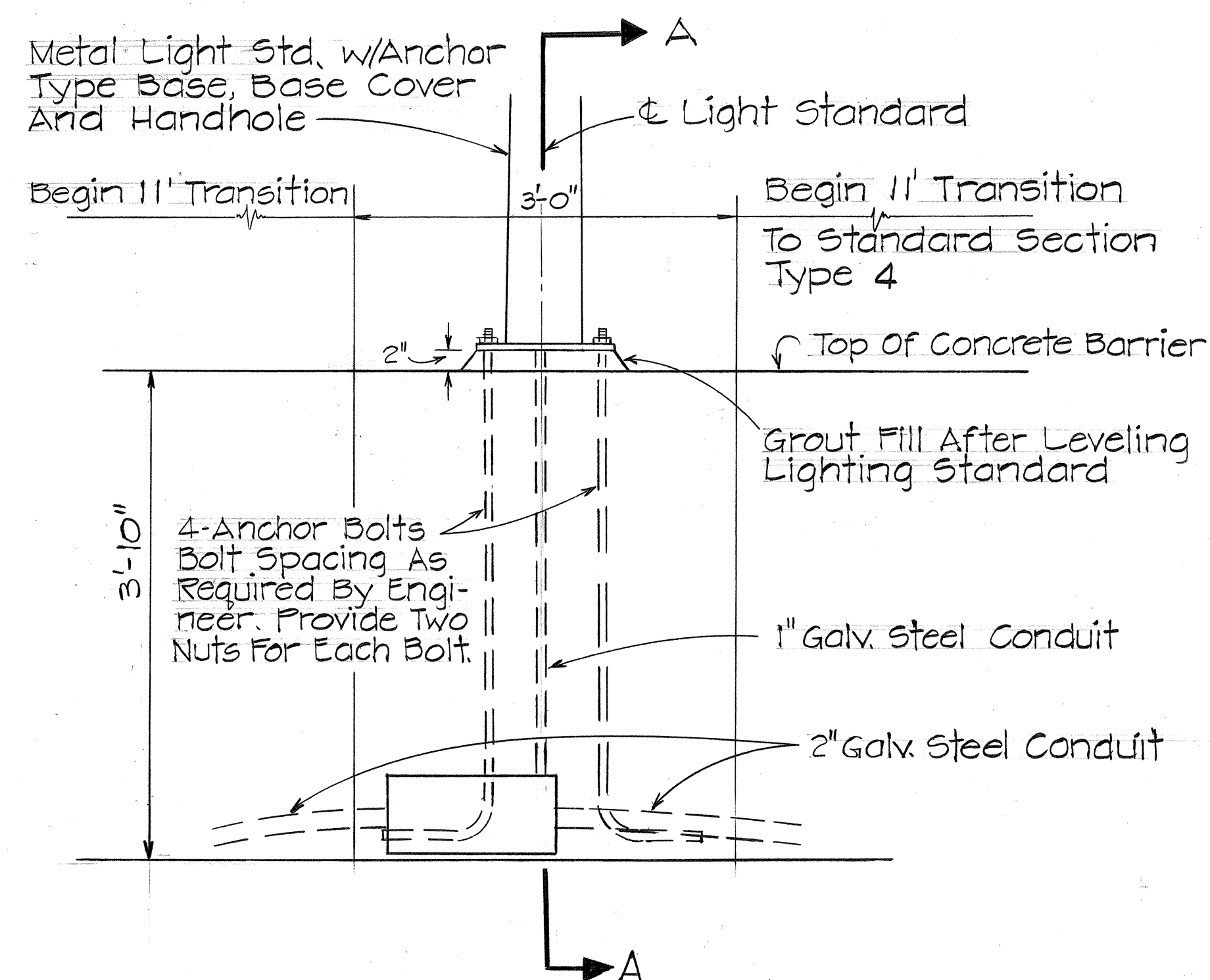
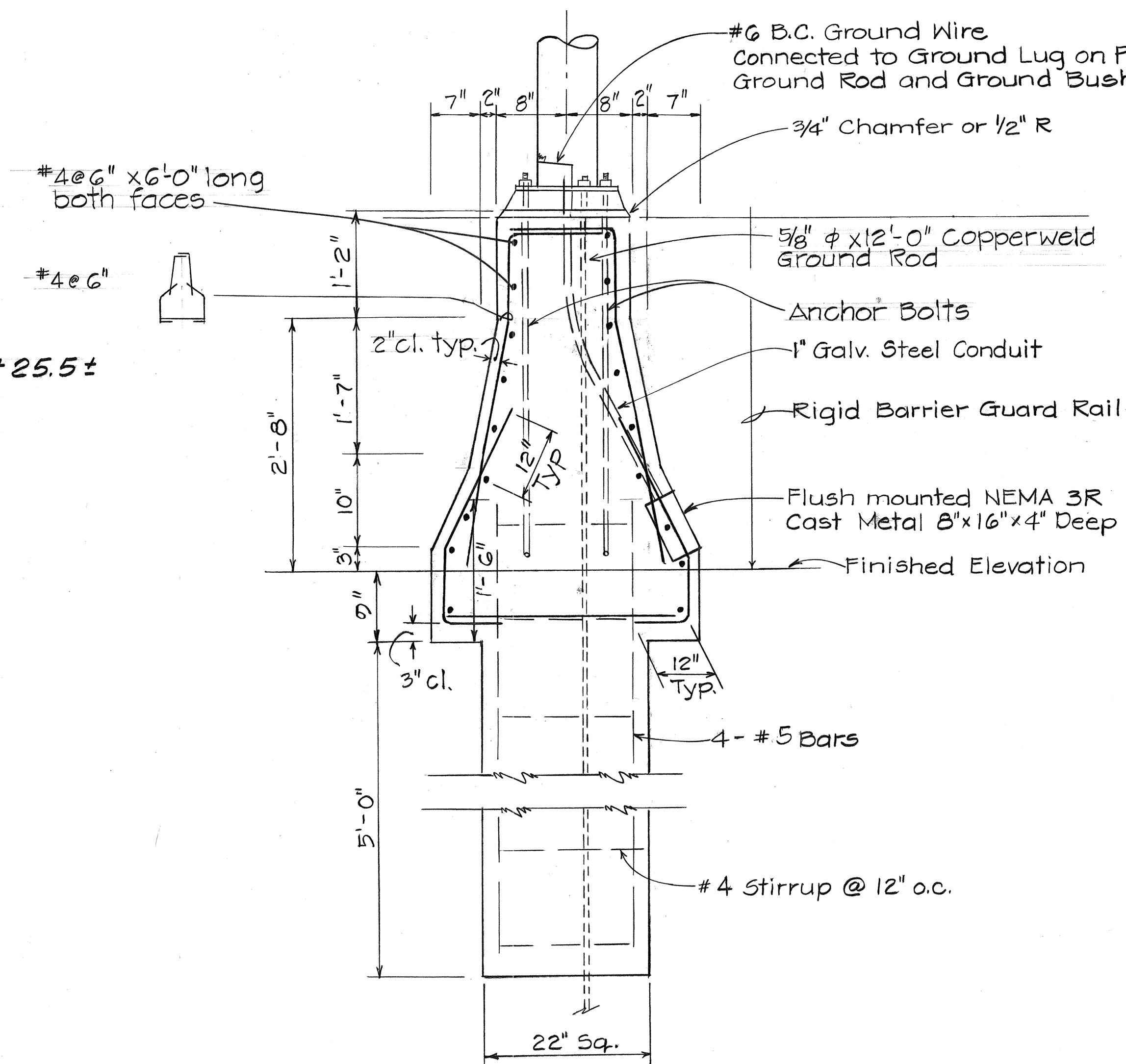
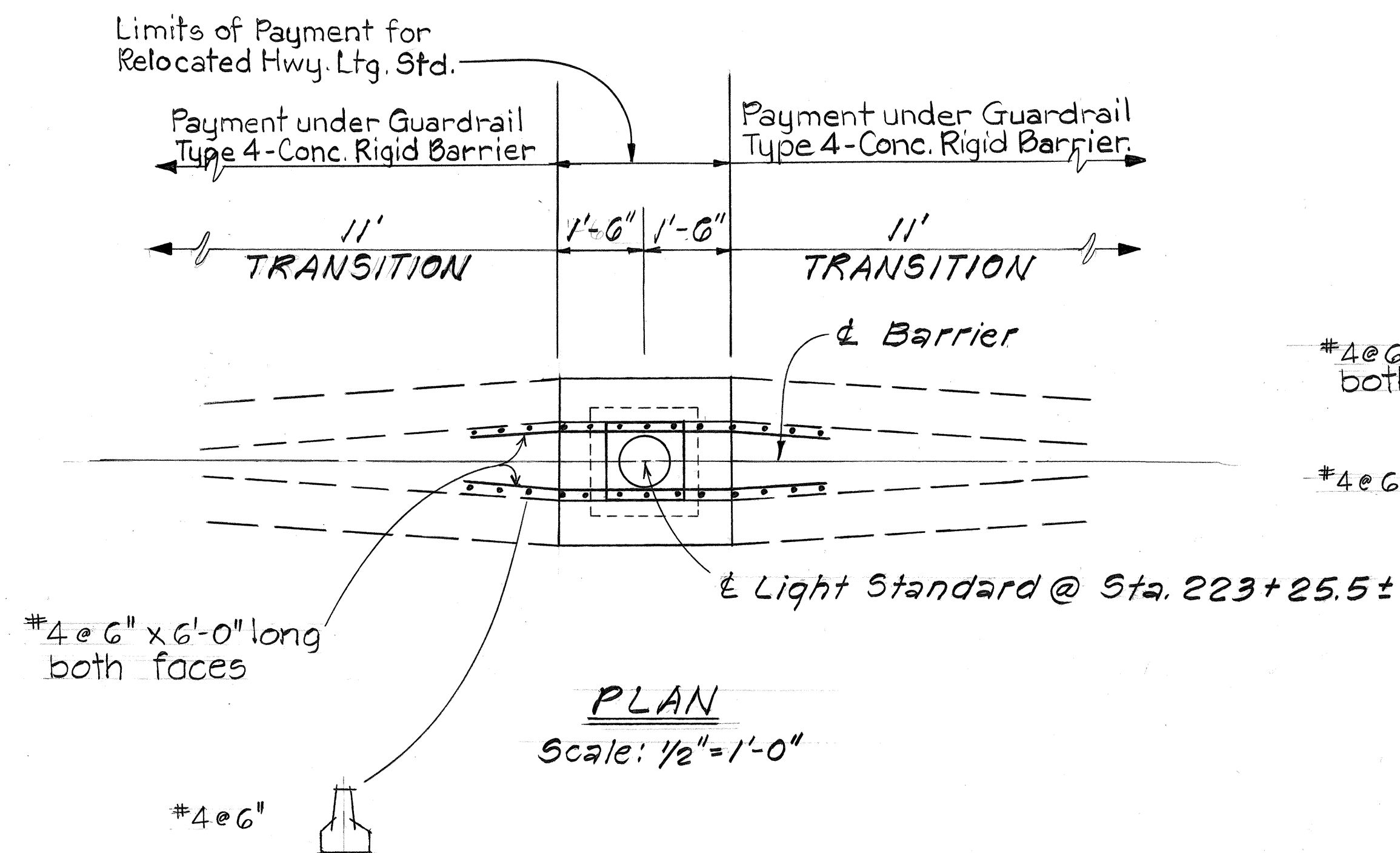
SHEET NO. 1 OF 5 SHEETS

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.	IR-HI-1(196)	1986	13	22

HIGHWAY LIGHTING NOTES

1. The final locations of all highway lighting equipment shall be approved by the Engineer.
2. All highway lighting equipment not incorporated into the final lighting system shall be abandoned or removed as directed by the Engineer. Costs shall be incidental to the various highway lighting contract items.
3. The Contractor shall verify the locations of all existing utilities with the respective owners prior to start of construction.
4. Existing highway lighting standards to be replaced or relocated shall be removed together with its respective footing or foundations. Costs shall be considered incidental to Item No. 622.1710 Highway Lighting System.
5. Existing highway lighting equipment to be reinstalled shall be cleaned prior to such installation. Costs shall be considered incidental to Item No. 622.1710 Highway Lighting System.
6. Contractor shall not place construction joint within limit of transition section.



* Tape Exposed Threads, Nuts And End Of Conduit For Protection During Construction.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

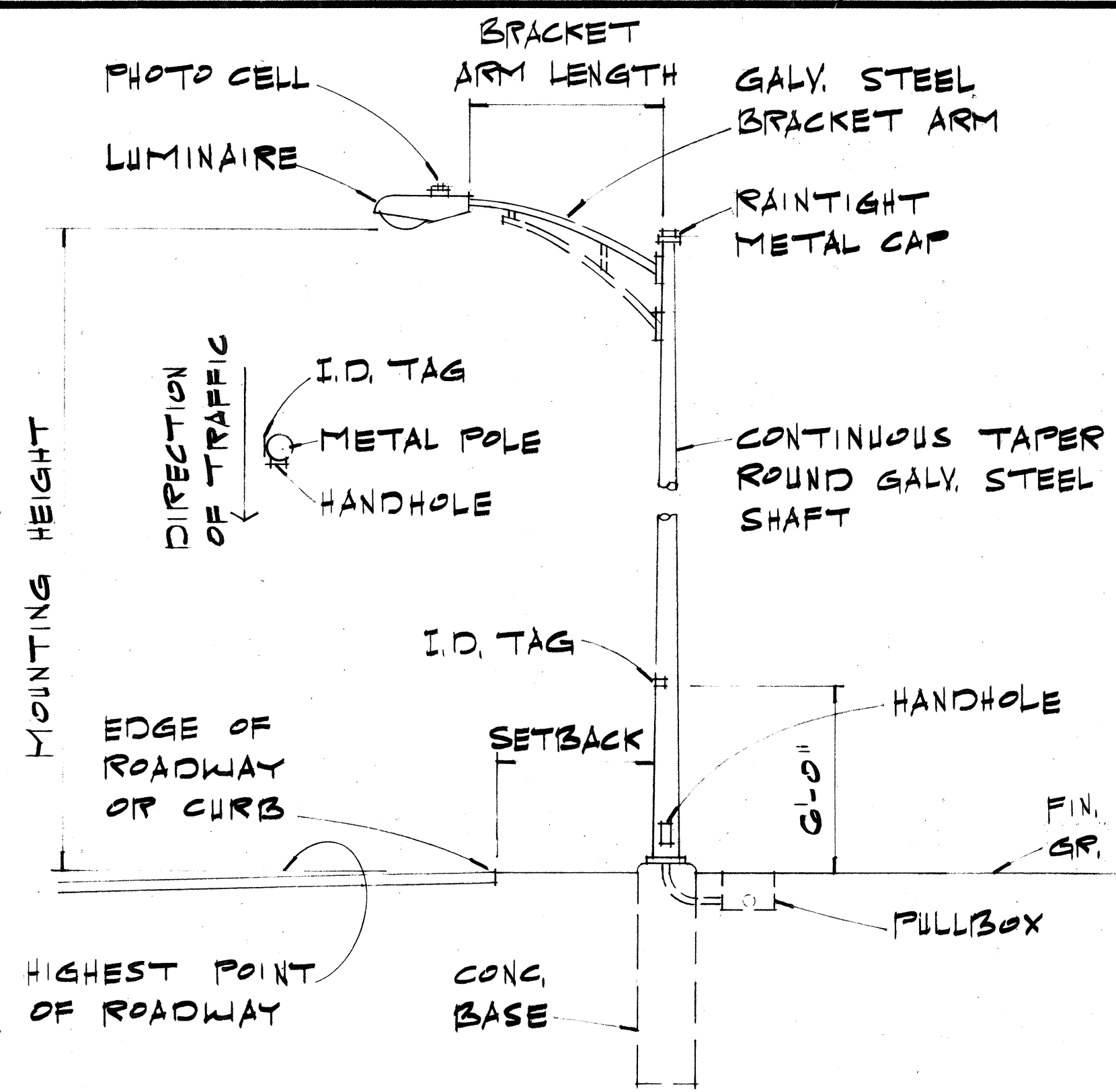
**LIGHTING DETAILS AND
INERTIAL BARRIER SYSTEM**

INTERSTATE ROUTE H-1
HALAWA INTERCHANGE
F.A.I. PROJ. NO. IR-HI-1(196)
Scale: As Shown Date: July 1985
SHEET No. 2 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-HI-1 (1986)	1986	14	22

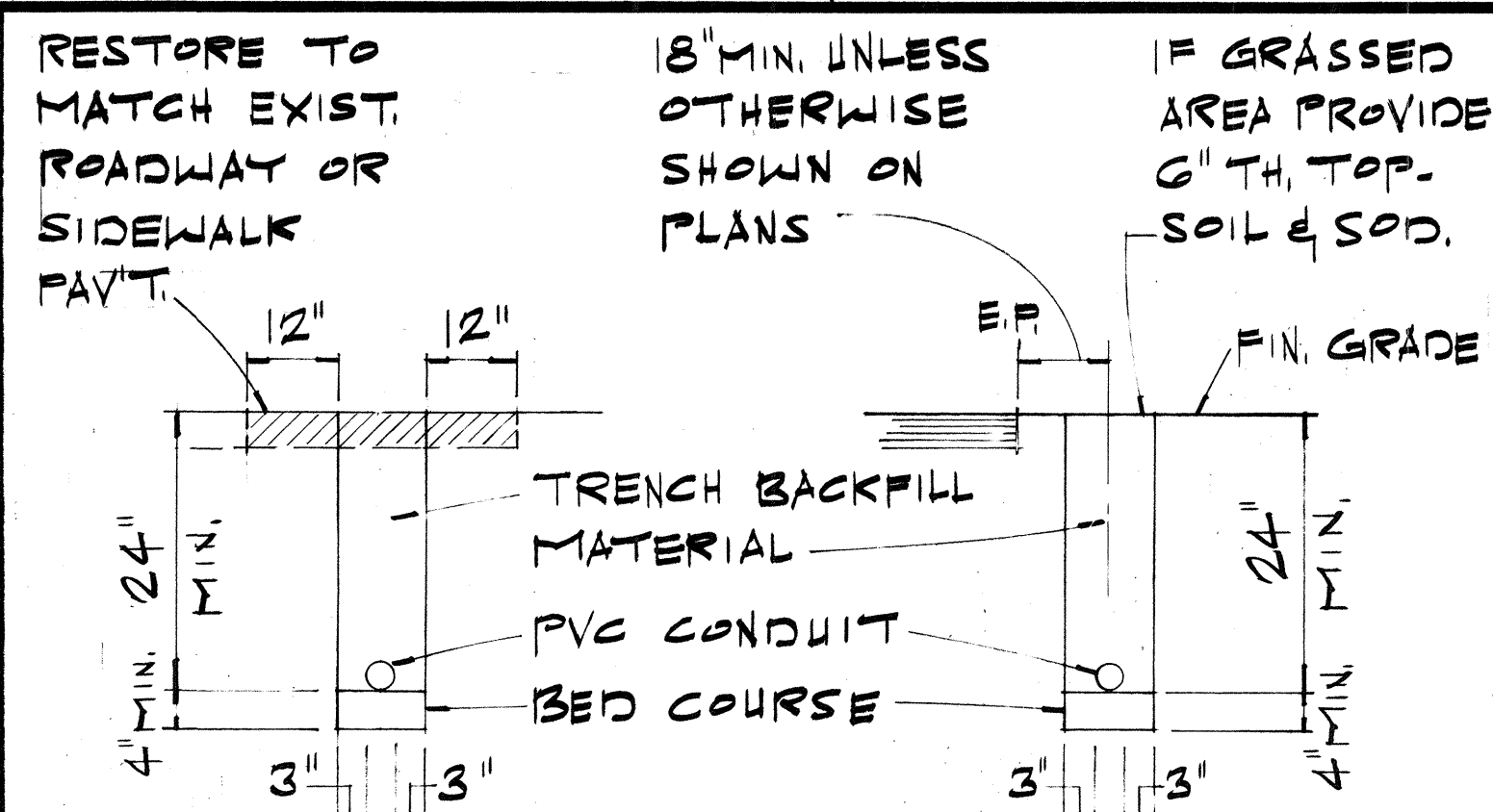
GENERAL NOTES

- ALL LUMINAIRES SHALL BE HIGH PRESSURE SODIUM TYPE W/ WATTAGE & IES TYPE LIGHT DISTRIBUTION AS SHOWN ON PLANS.
- ALL SECONDARY CIRCUIT EXTENSIONS TO SERVICE SHALL BE PROVIDED BY CONTRACTOR. ALL CONNECTIONS MADE BY SUBJECT TO CHARGE SHALL BE PAID BY THE CONTRACTOR.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING & INFORMING OF STREET LIGHT LOCATIONS ON PROJECT SITE PRIOR TO INSTALLATION OF SECONDARY CIRCUIT CONNECTION.
- THE CONTRACTOR SHALL NOTIFY & COORDINATE WORK W/ THE STATE ELECTRICAL MAINTENANCE SECTION, ADDRESS: PHONE: 72 HOURS IN ADVANCE OF COMMENCING INSTALLATION OF STREET LIGHT SYSTEM.
- THE CONTRACTOR SHALL LOCATE & VERIFY EXISTING STREET LIGHT SECONDARY VOLTAGE BEFORE ORDERING LIGHTING EQUIPMENT.



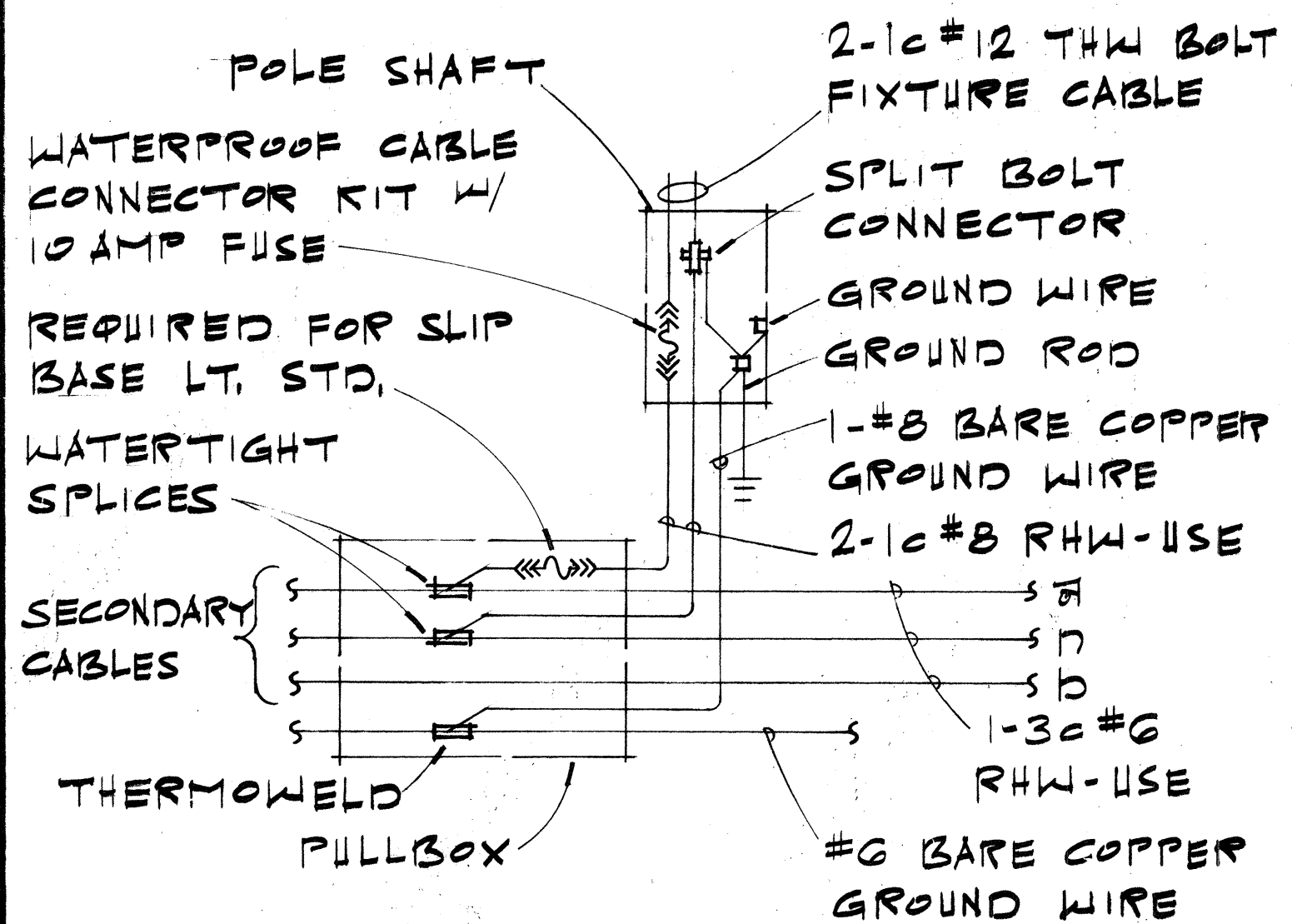
STREET LIGHT DETAIL

SCALE: 1/4" = 1'-0"

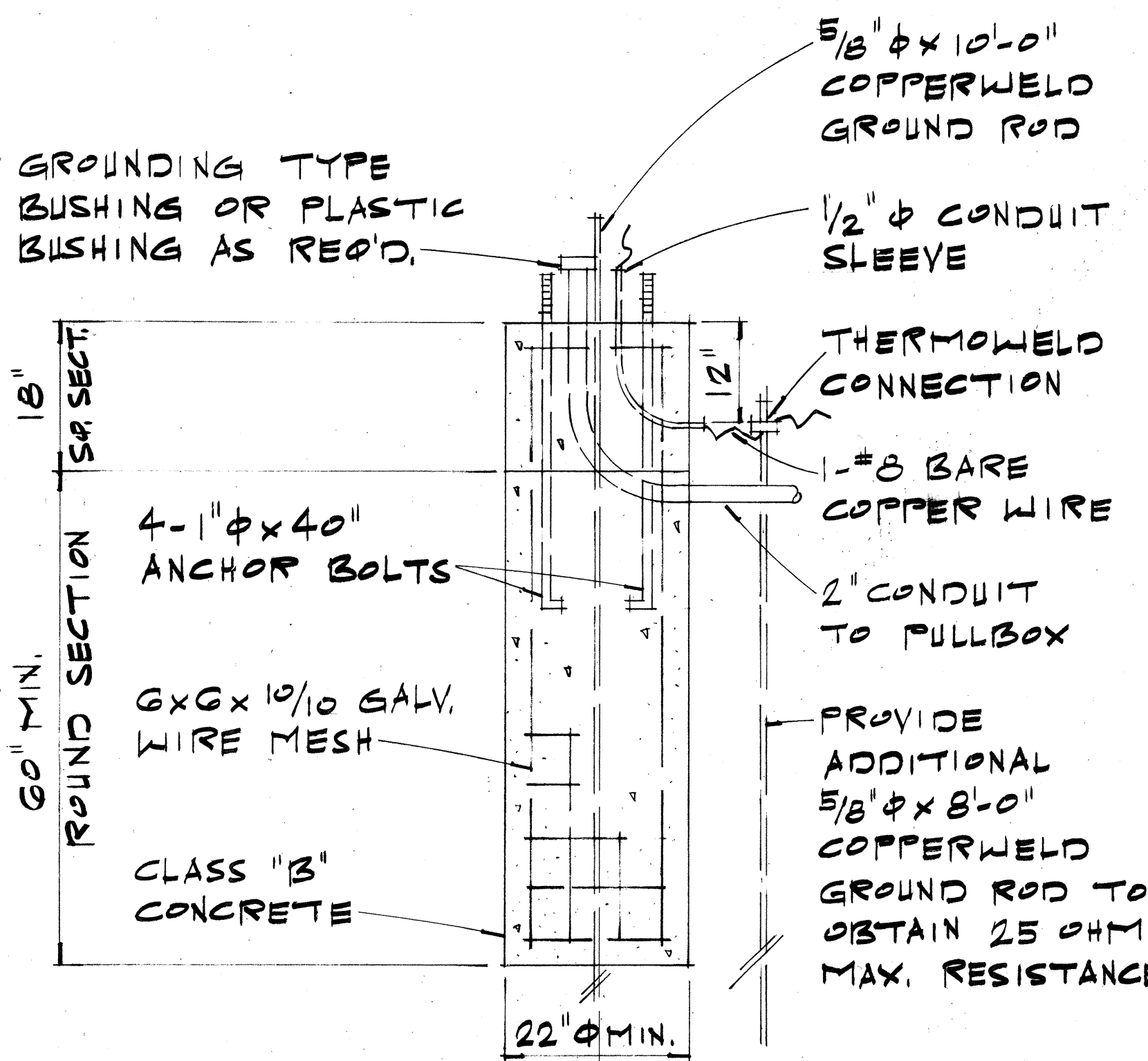


TYPICAL DUCT SECTION DETAIL

NOTE: SCALE: 1/2" = 1'-0"
FOR MULTIPLE CONDUIT LAYOUTS PROVIDE 3" CL. SPACING BETWEEN CONDUITS.

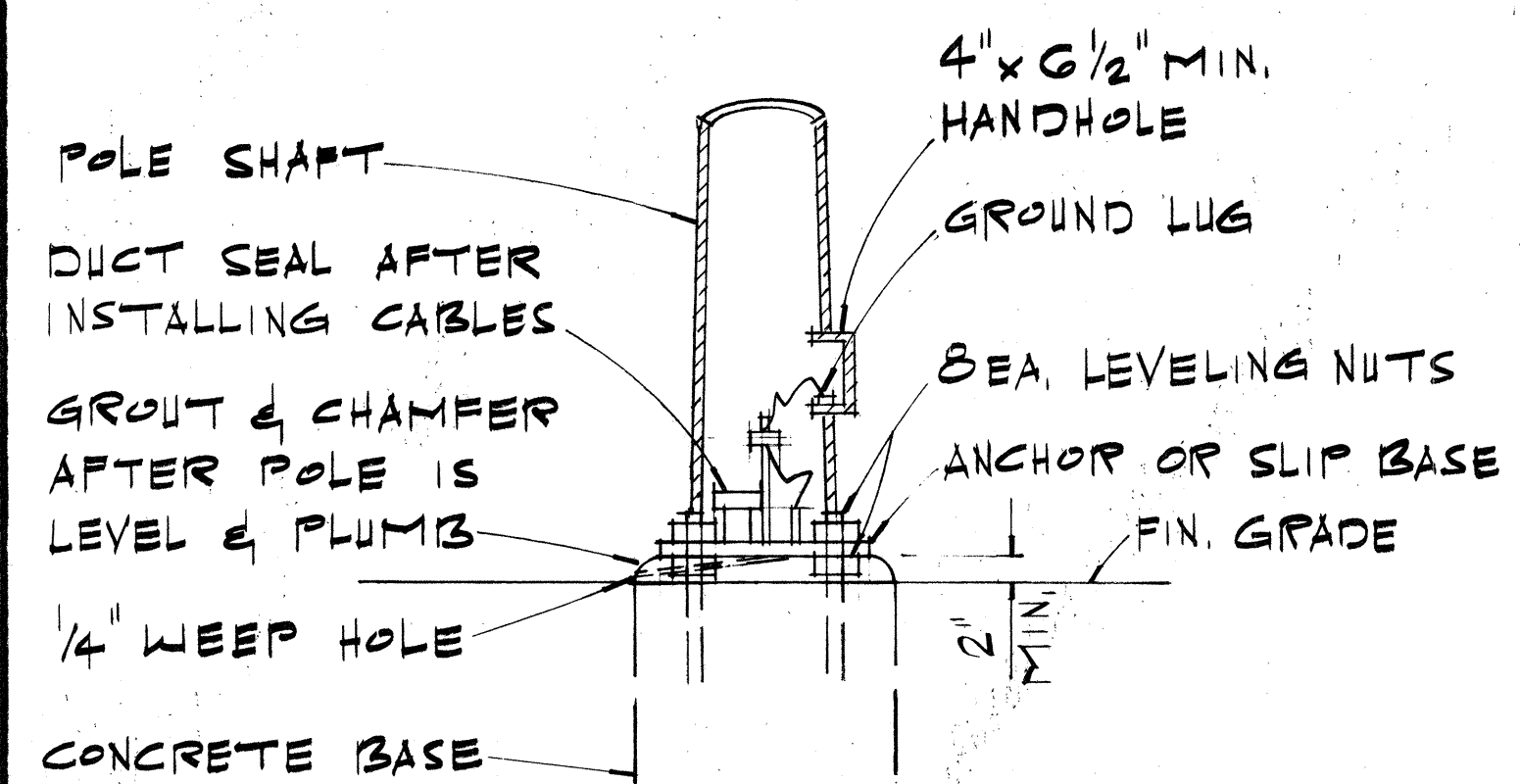


WIRING CONNECTION DIAGRAM



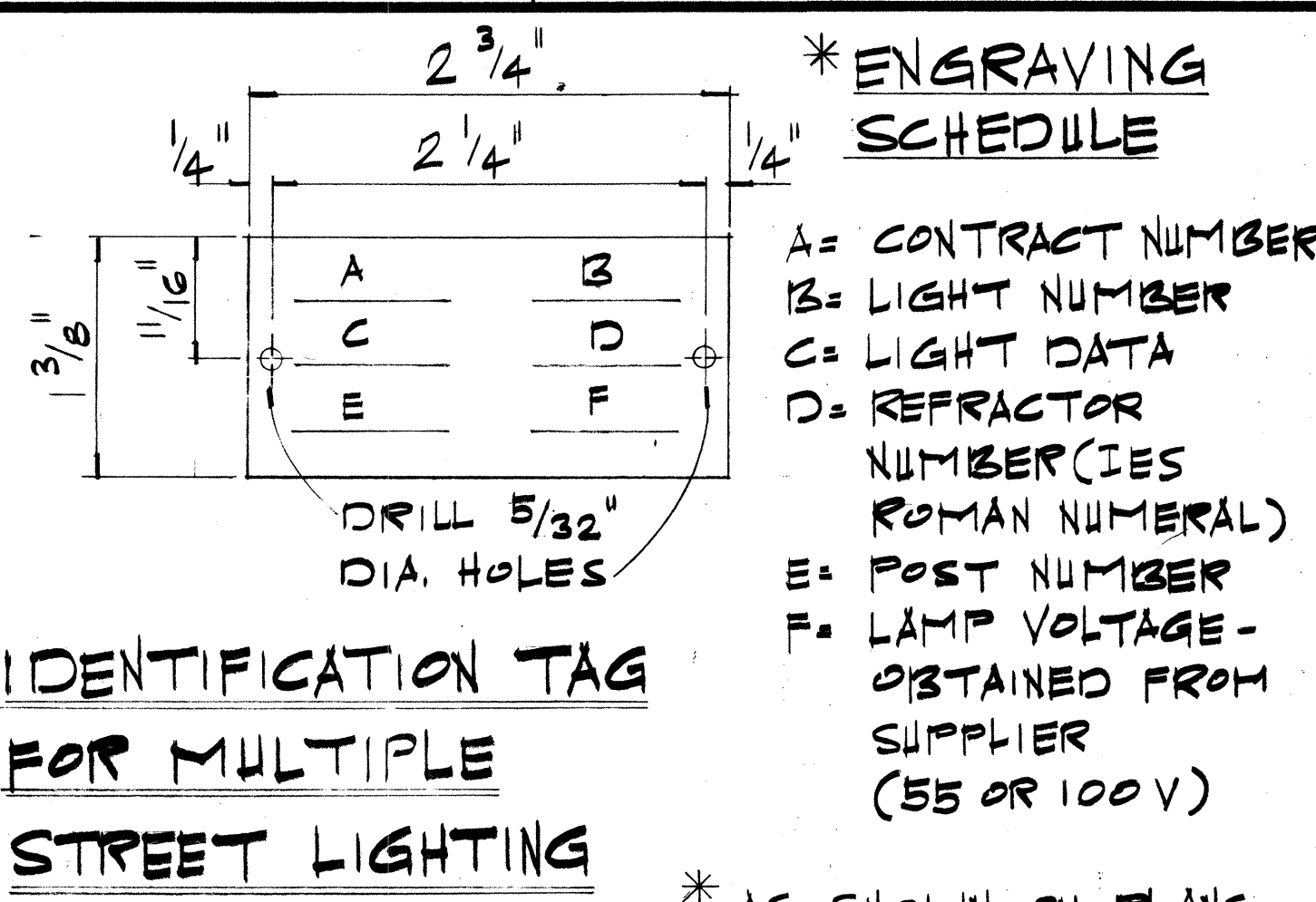
CONCRETE BASE DETAIL

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



POLE MOUNTING DETAIL

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



IDENTIFICATION TAG FOR MULTIPLE STREET LIGHTING

- NOT TO SCALE
- NOTE:
- MAKE FROM 3-PLY LAMINATED PLASTIC (BLACK-WHITE-BLACK) W/ 1/5" HIGH COMMERCIAL GOTHIC LETTERS ENGRAVED.
 - ATTACH TO POLE W/ #7 CADMIUM PLATED SCREWS.

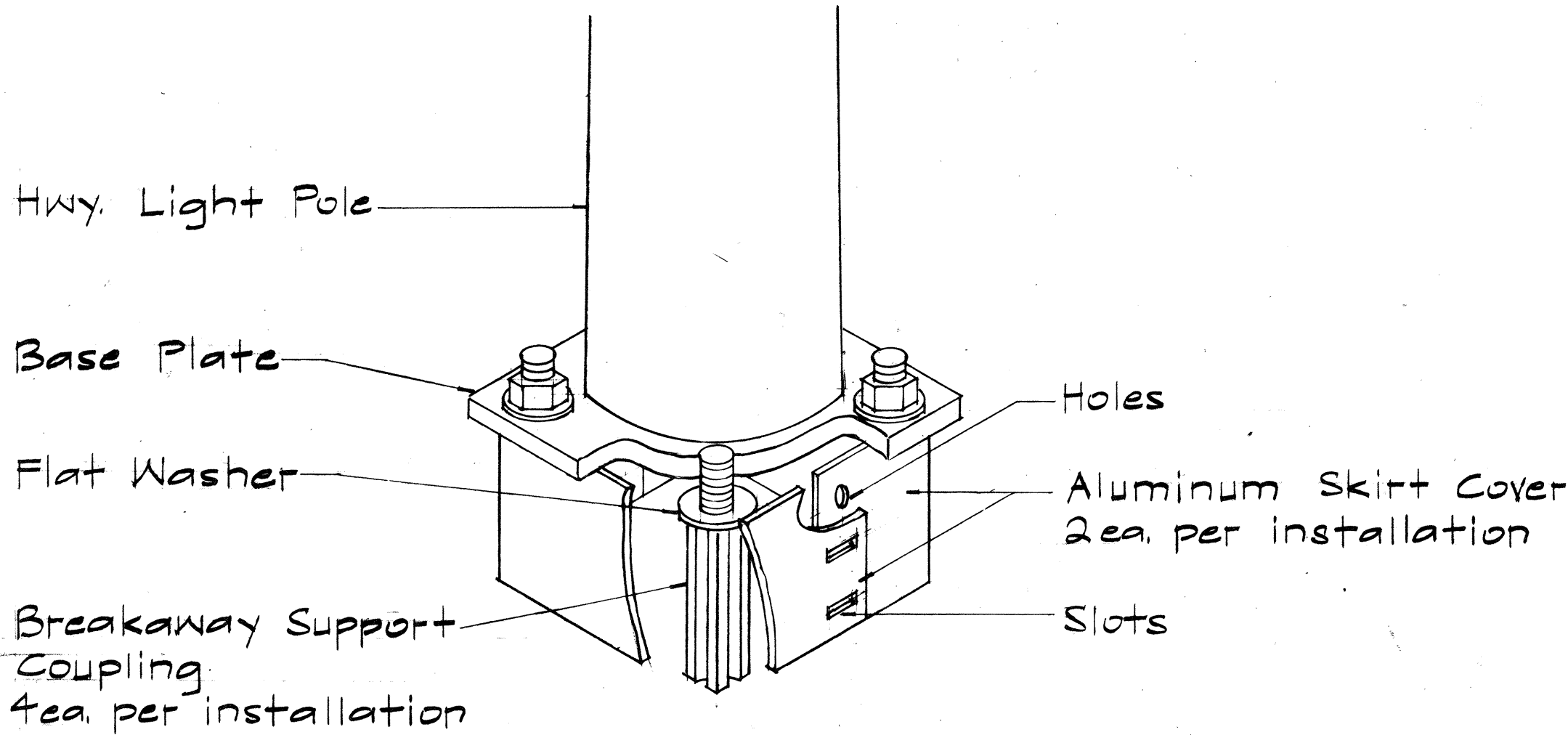
* AS SHOWN ON PLANS

* ENGRAVING SCHEDULE

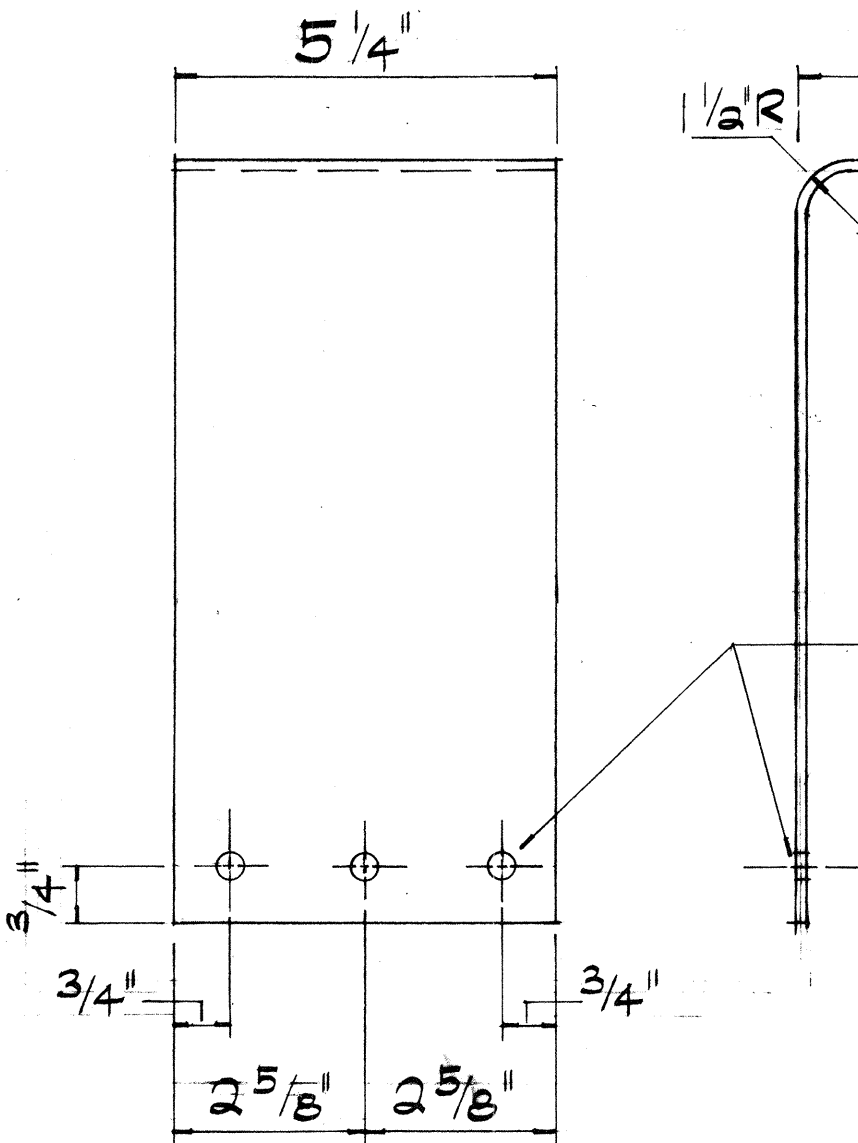
- A = CONTRACT NUMBER
B = LIGHT NUMBER
C = LIGHT DATA
D = REFRACTOR NUMBER (IES ROMAN NUMERAL)
E = POST NUMBER
F = LAMP VOLTAGE - OBTAINED FROM SUPPLIER (55 OR 100 V)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
TYPICAL DETAILS
HIGHWAY LIGHTING LUMINAIRE MOUNTED ON METAL POLE
INTERSTATE ROUTE H-1
HALAWA INTERCHANGE
FAI PROJ. NO IR-HI-1 (1986)
Scale: As Shown Date: July 1985
SHEET NO. 3 OF 5 SHEETS

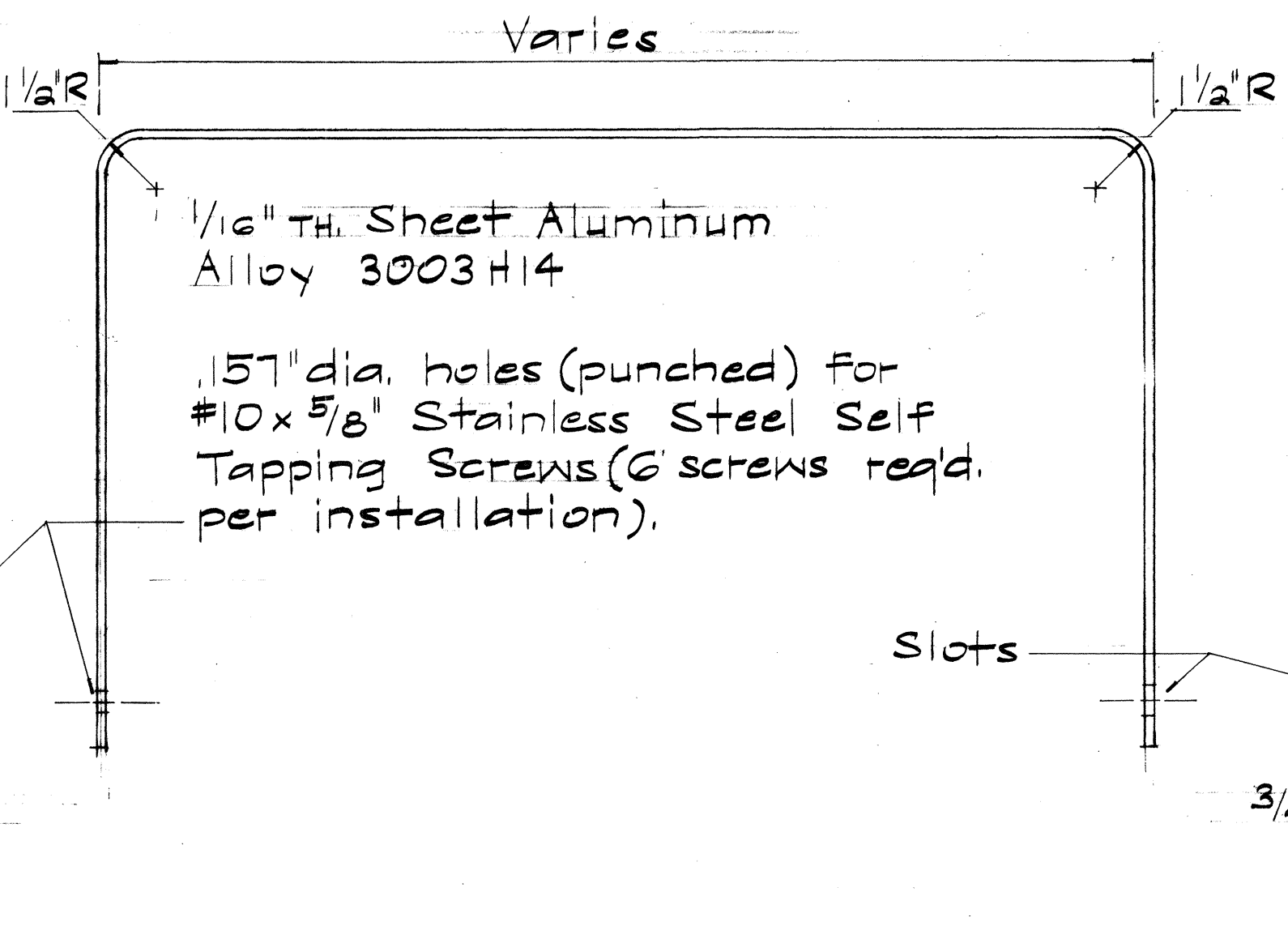
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-H-1-1(196)	1986	15	22



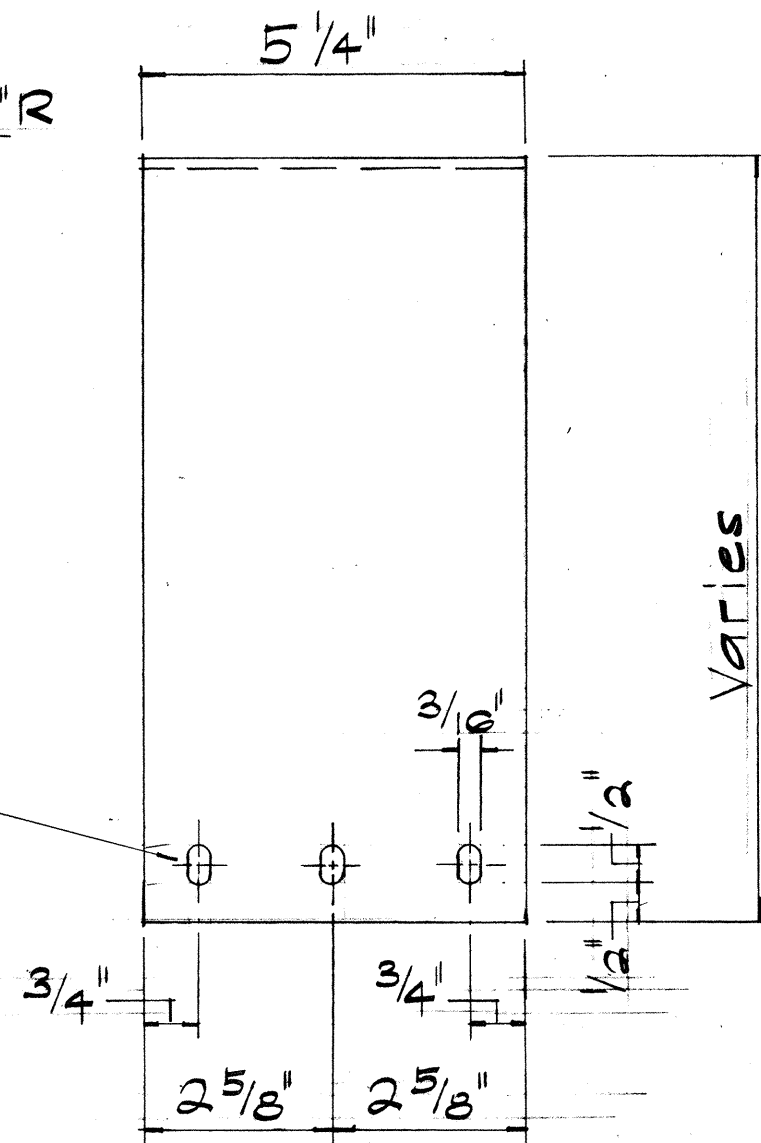
SKIRT COVER DETAIL



LEFT SIDE VIEW



TOP VIEW

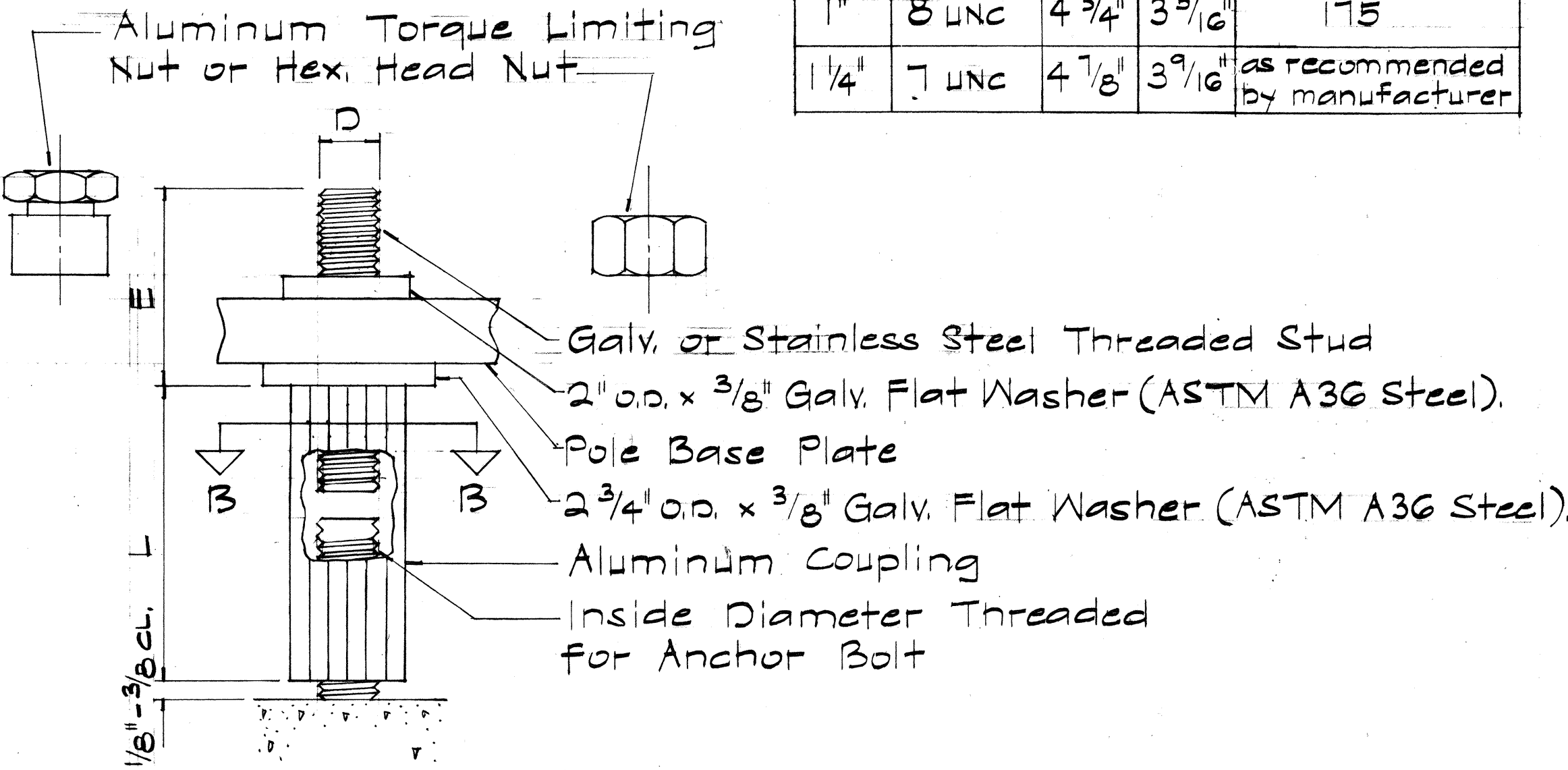


RIGHT SIDE VIEW

SKIRT COVER FOR BREAKAWAY SUPPORT COUPLING

Not to Scale

SECTION "B-B"



DETAIL "A"
Not to Scale

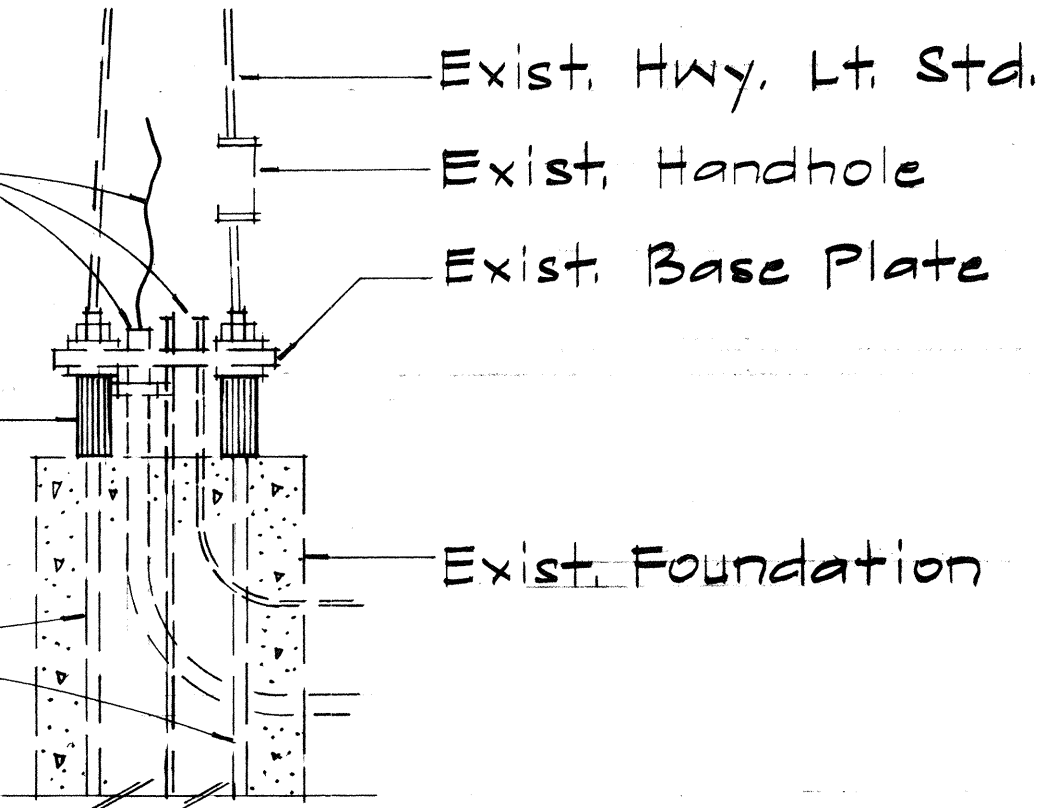
DIMENSION SCHEDULE

D	THREAD	L	E	NUT TORQUE ± 25 FT. LBS.
1"	8 UNC	4 3/4"	3 5/16"	175
1 1/4"	7 UNC	4 7/8"	3 9/16"	as recommended by manufacturer

Extend Cable & Conduit as req'd (Extensions to match existing)

Breakaway Support Coupling (See Detail "A")

Exist. Anchor Bolts.



MOUNTING DETAIL

Scale: 3/4" = 1'-0"

GENERAL NOTES:

- Contractor shall verify size of exist. anchor bolts & base plates prior to ordering couplings & skirt covers.
- Breakaway support coupling shall conform to the applicable requirements of AASHTO standards & shall be fabricated from either die cast aluminum alloy 380 according to ASTM B85, or extruded from alloy 2024-T8511 according to ASTM B221.
- Hex. nut shall meet the requirements of ASTM A563 grade A, and ANSI B18.2.2.
- Torque nut shall be fabricated from aluminum alloy and grooved to separate at the specified torque.
- Threaded stud shall meet the requirements of ASTM A 675 grade 90 or AISI stainless steel.

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

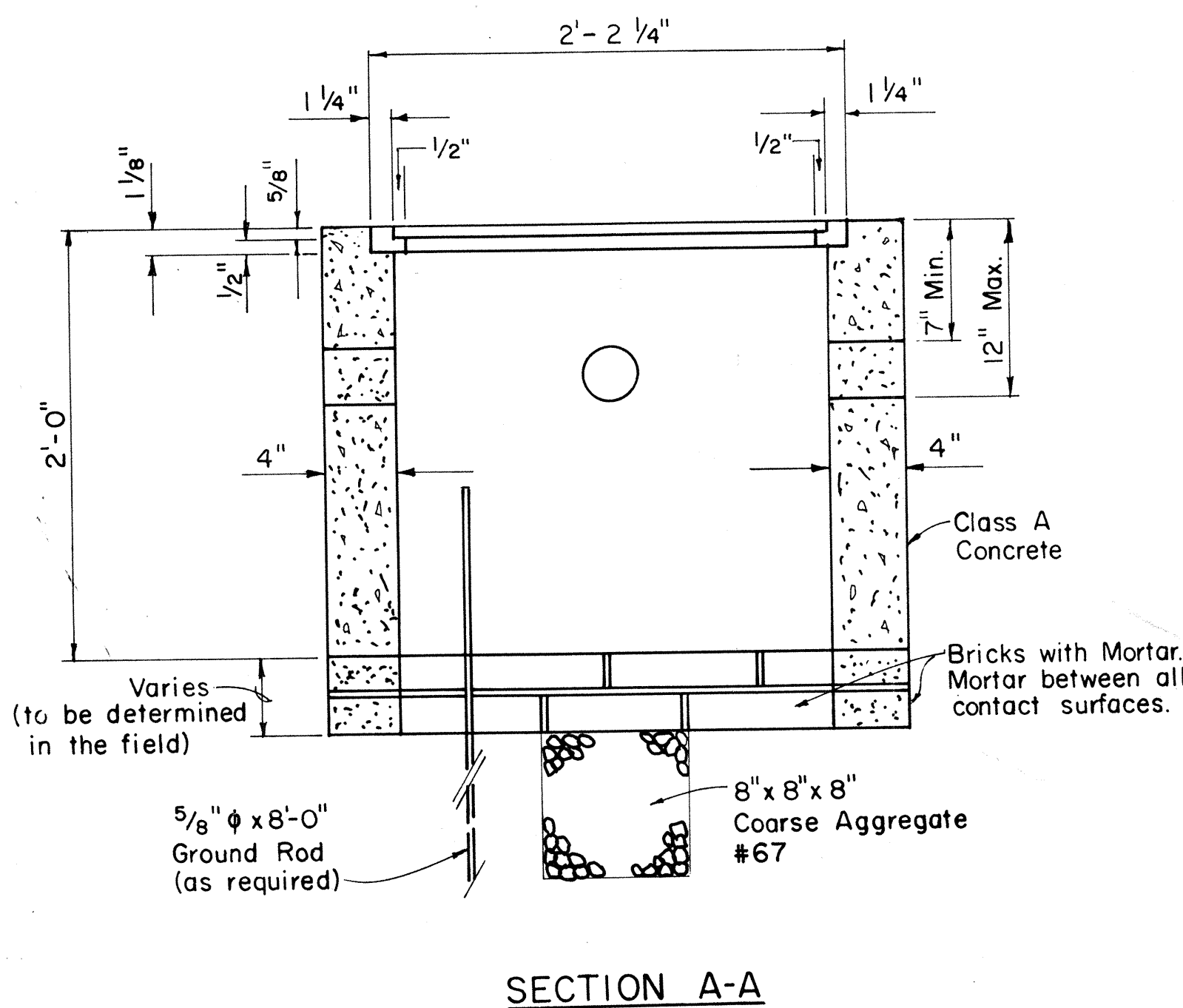
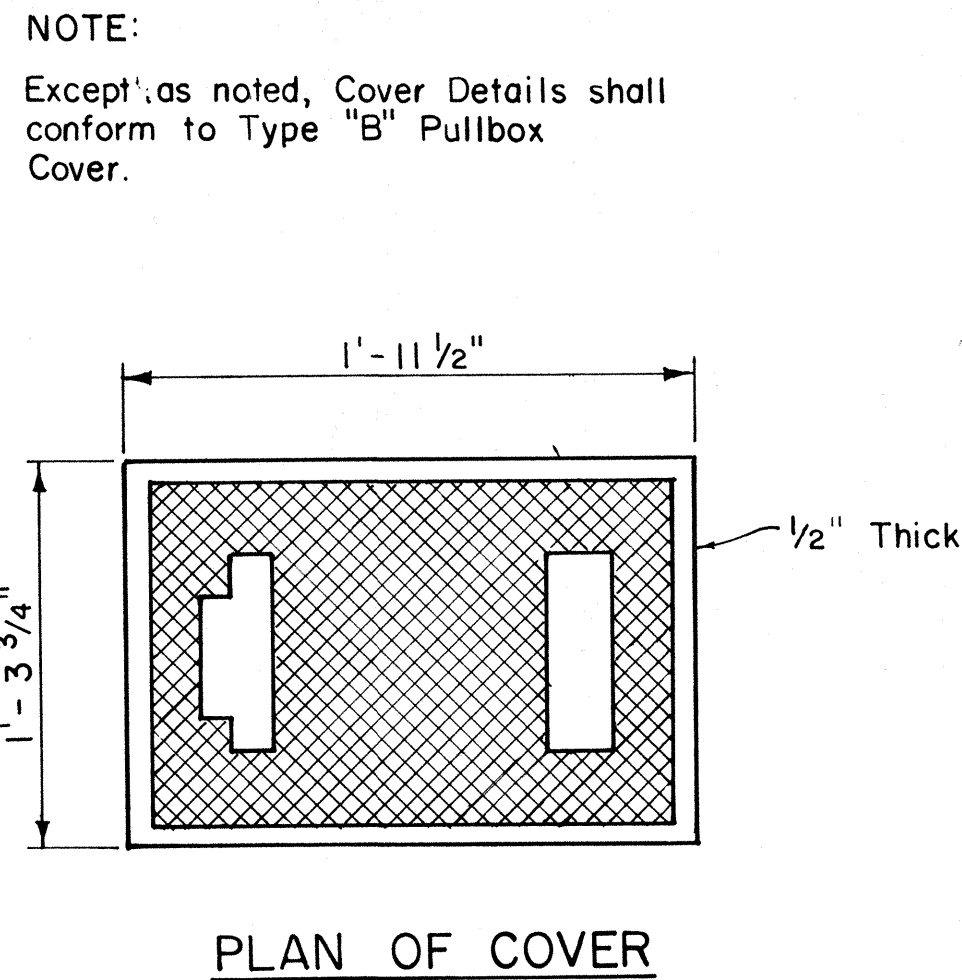
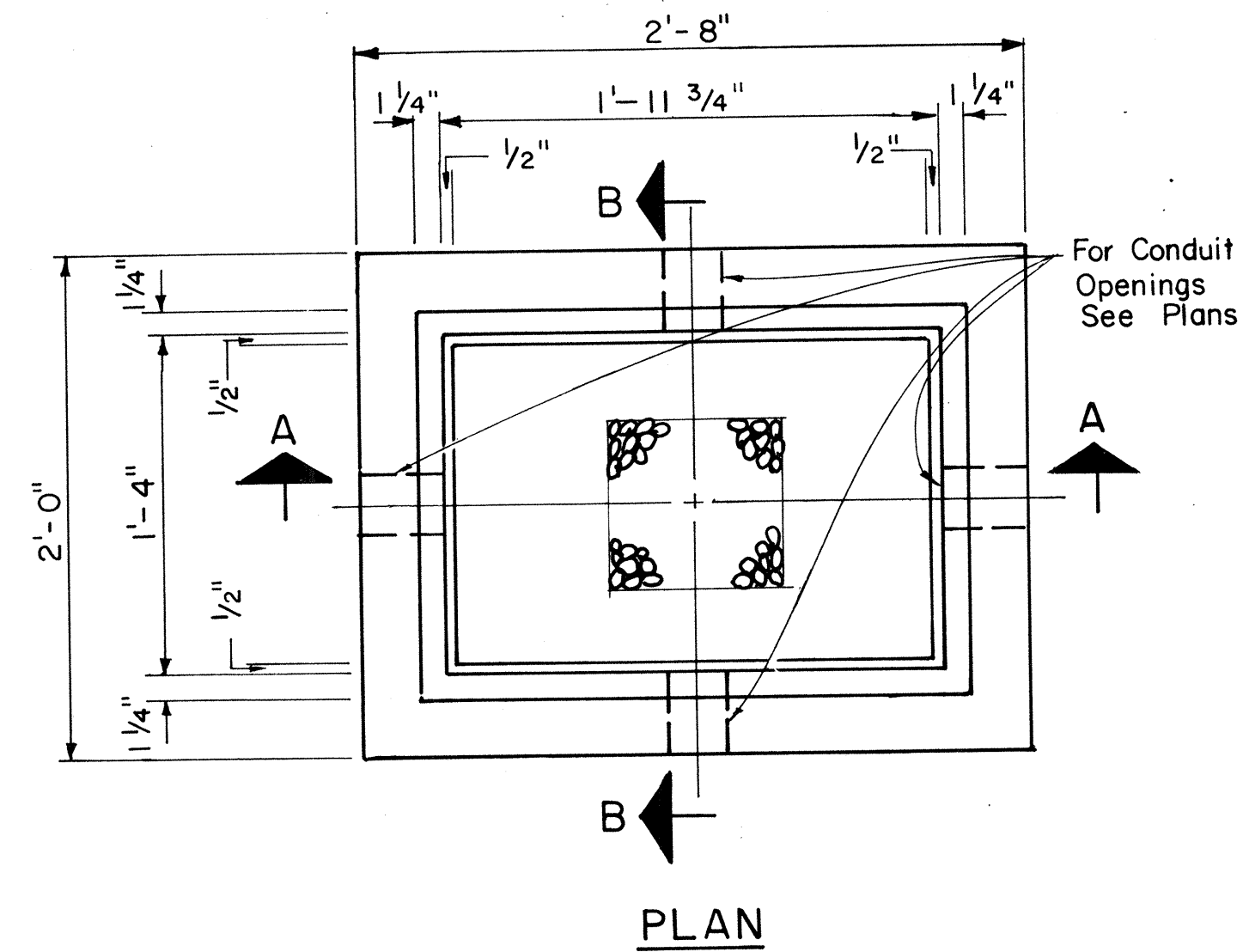
BREAKAWAY SUPPORT COUPLING

Scale: As Shown

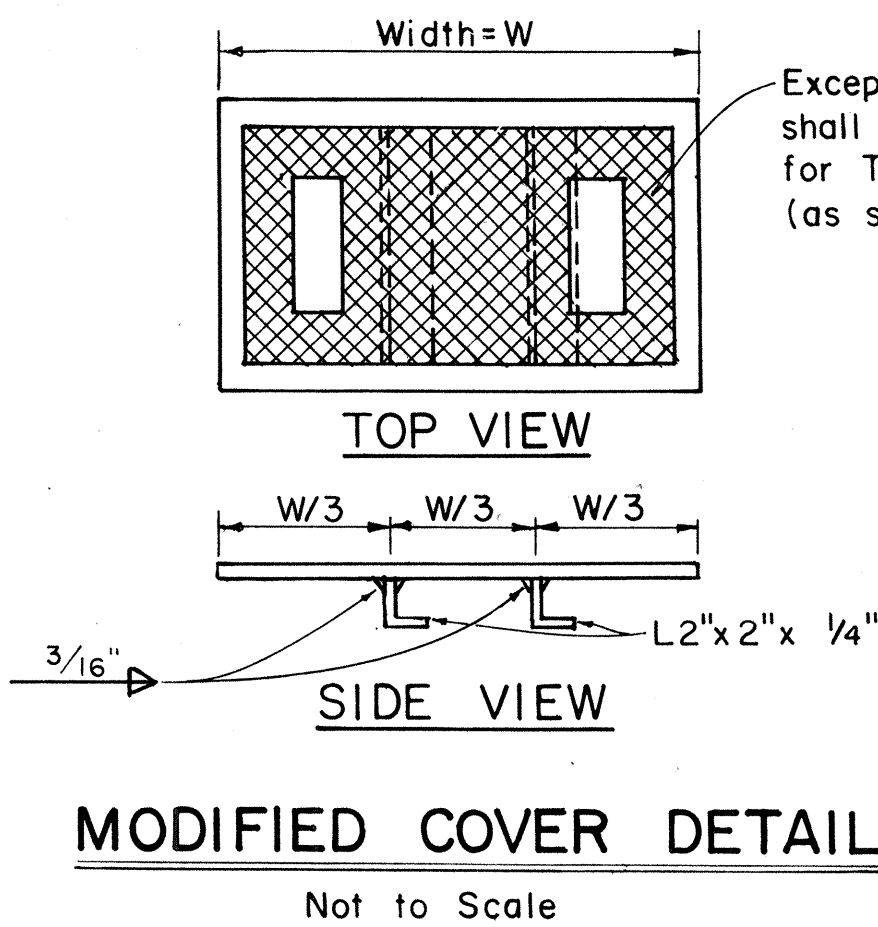
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
TYPICAL DETAILS
BREAKAWAY SUPPORT
COUPLING & SKIRT COVER

Scale: As Shown
SHEET NO. 4 OF 5 SHEETS

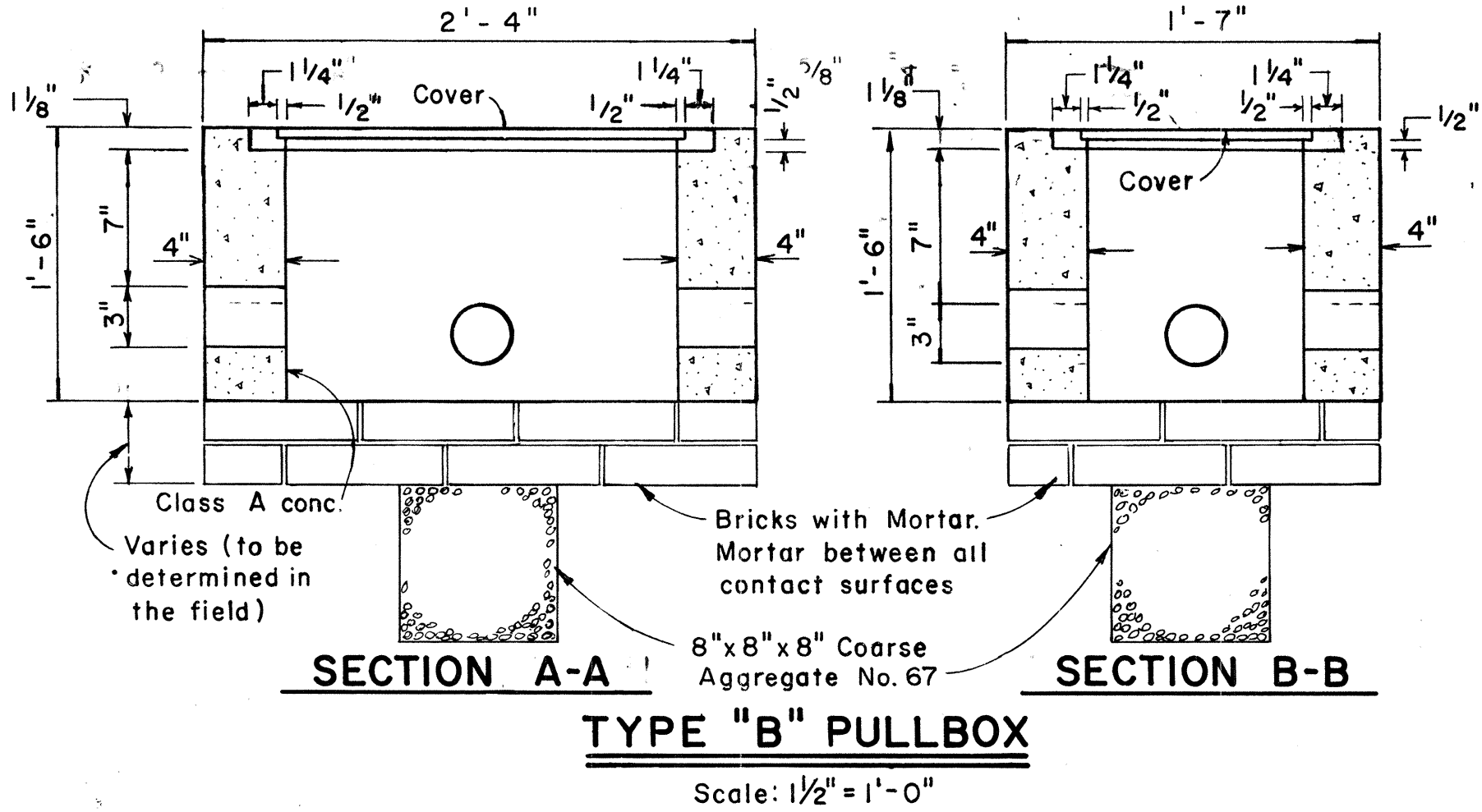
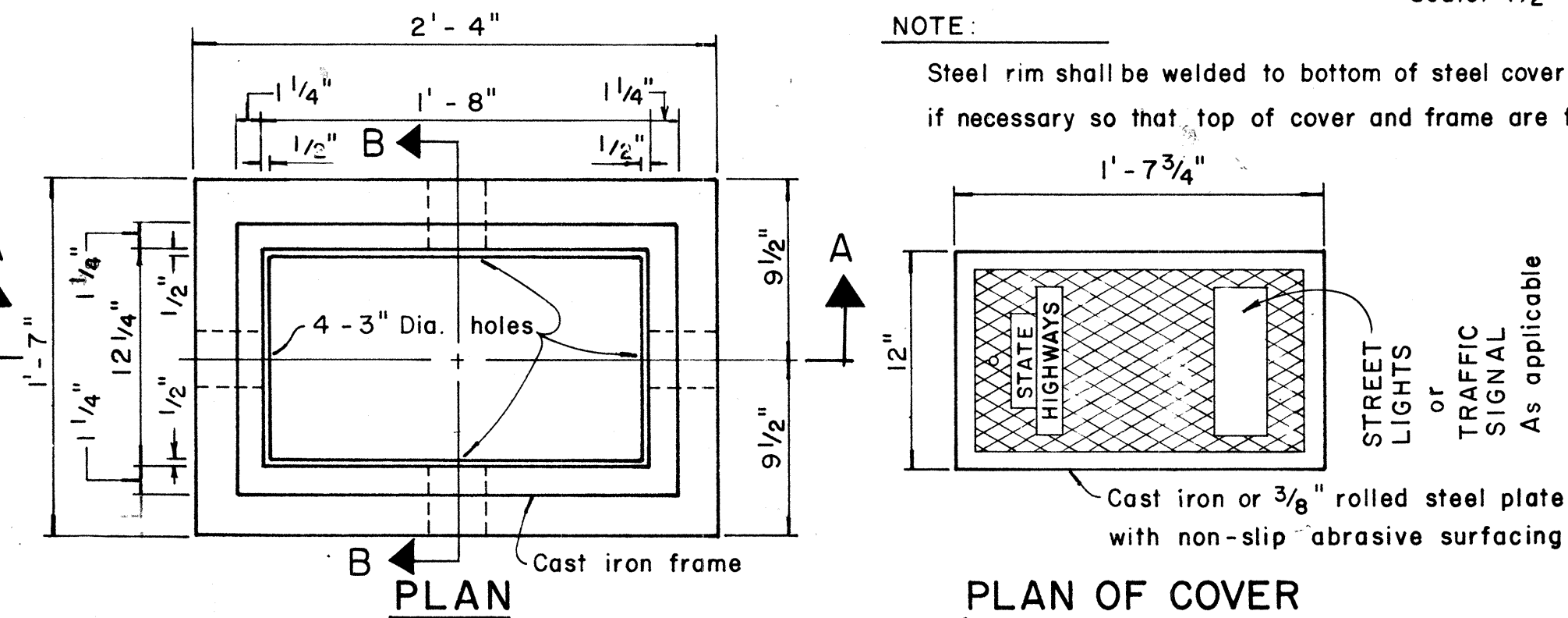
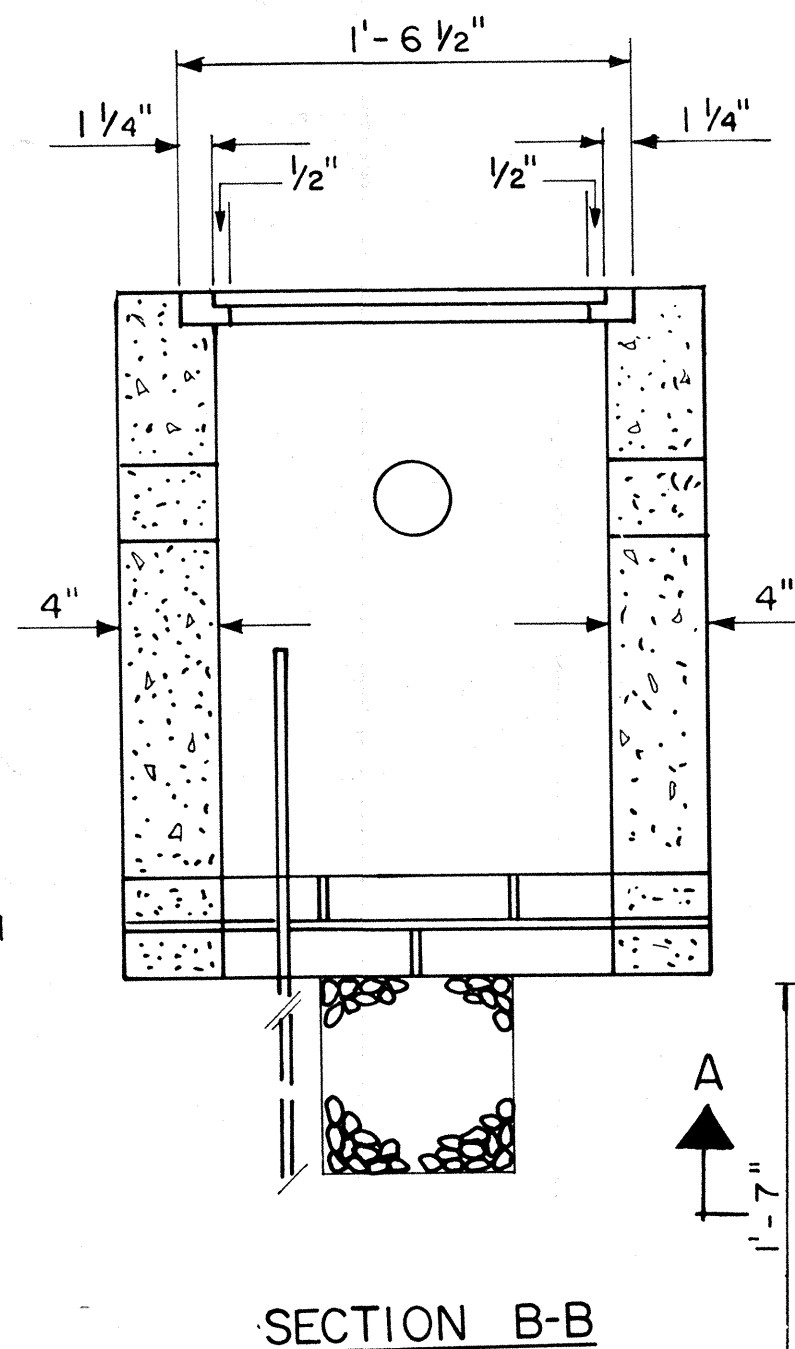
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IR-HI-1(178)	1986	16	22



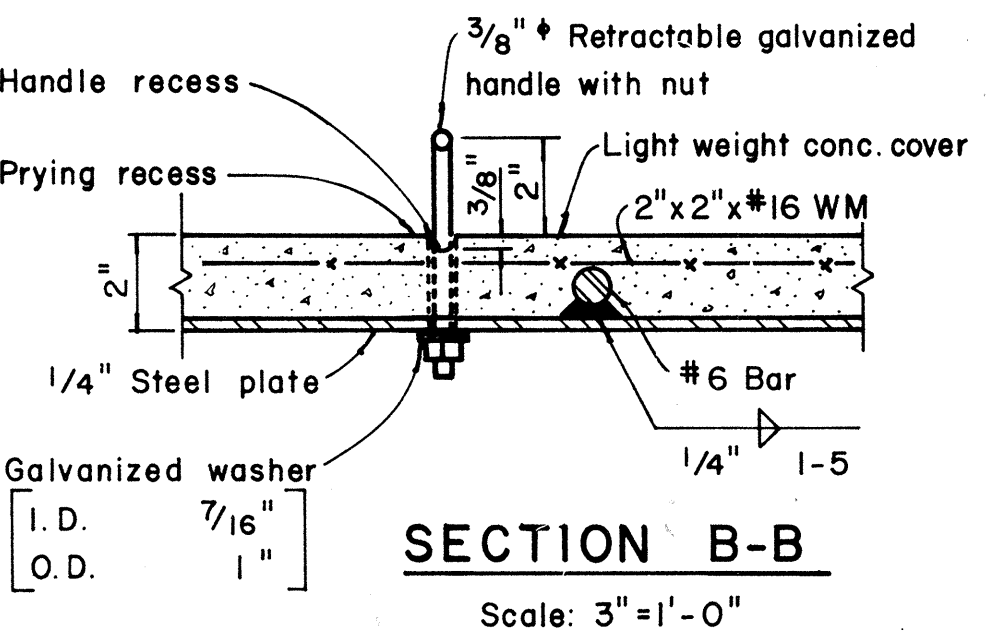
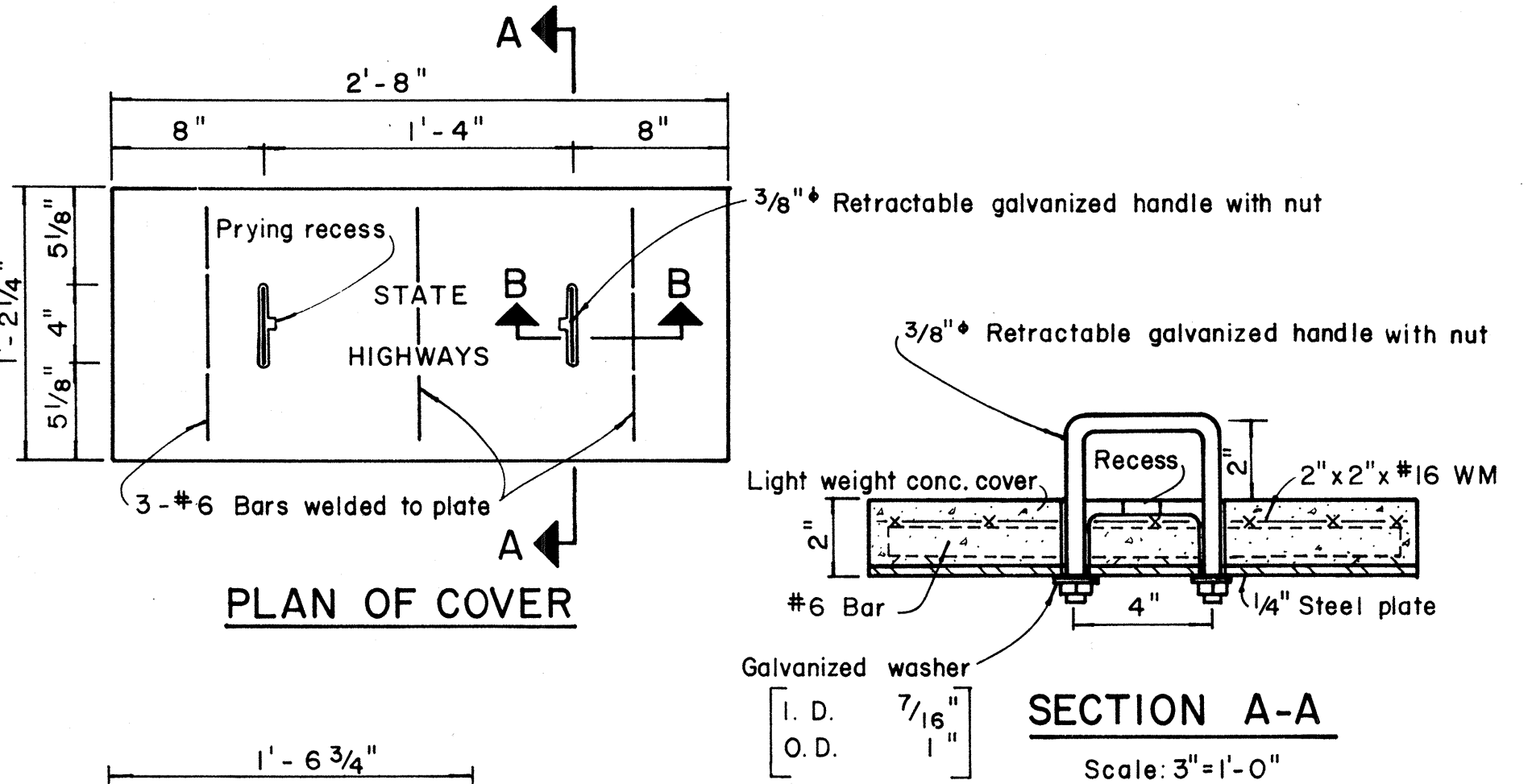
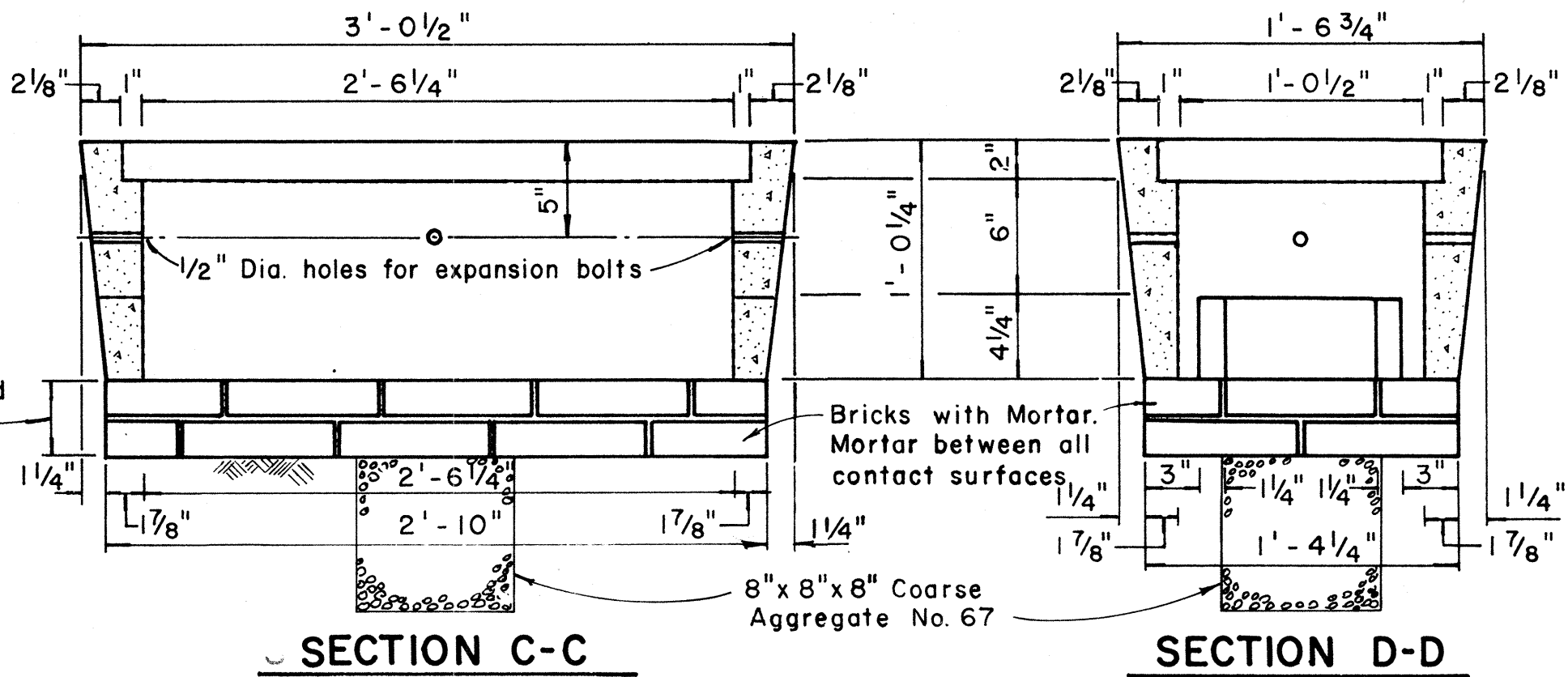
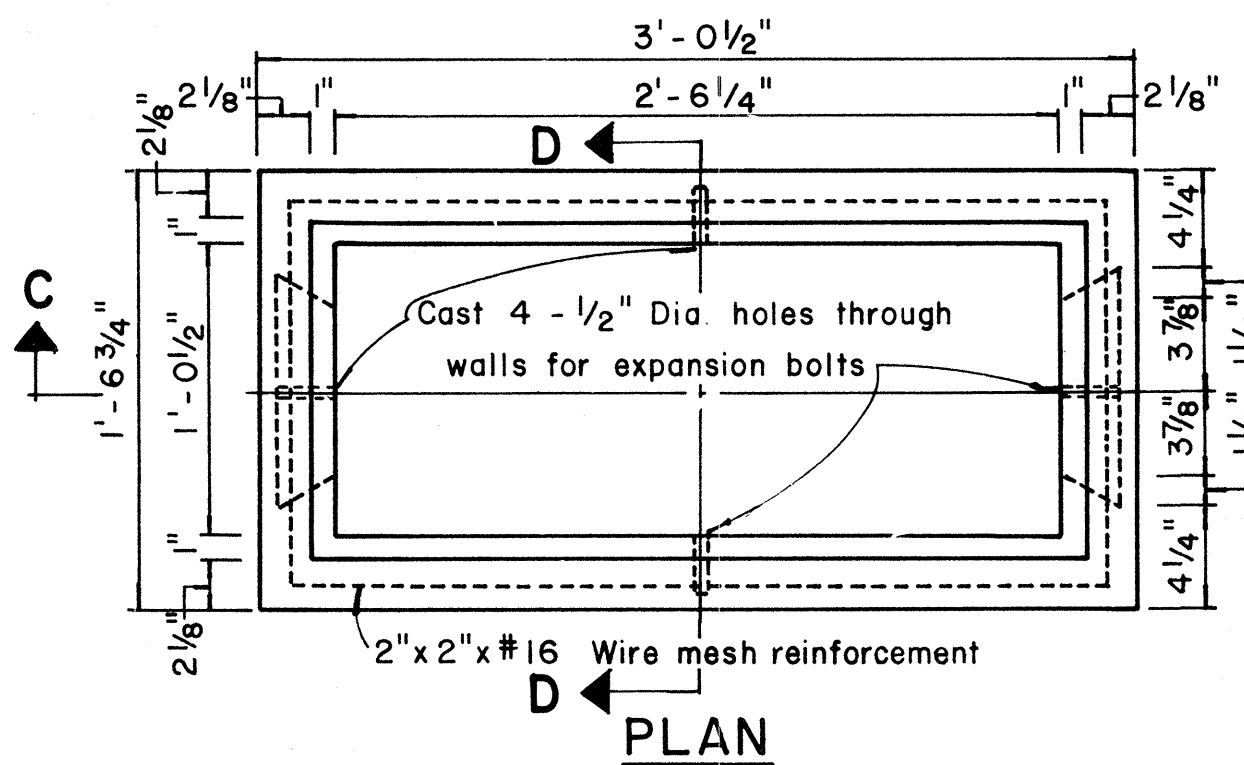
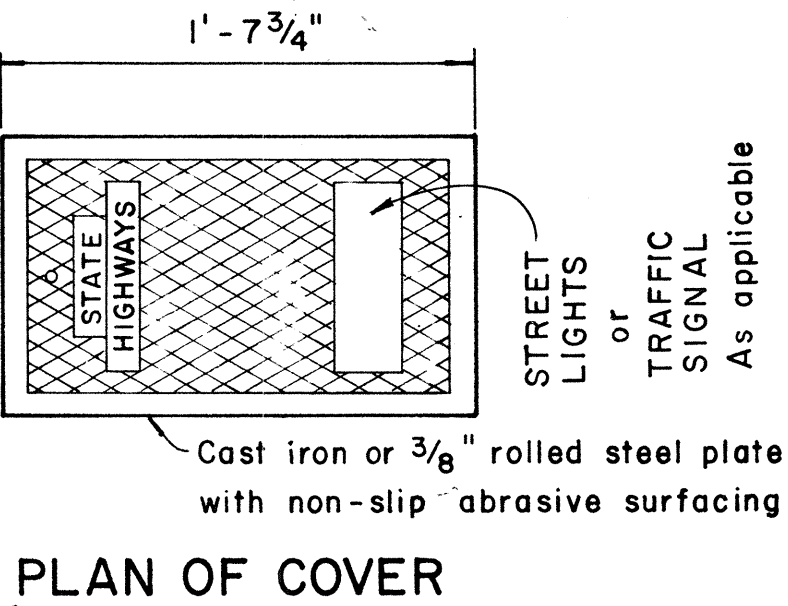
TYPE "A" PULLBOX
Scale: 1 1/2" = 1'-0"



NOTE:
Hot dip galvanize after fabrication. Modified cover shall be furnished when called for on plans.



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



APPROVAL RECOMMENDED:
TRAFFIC ENGINEER
DATE: 12/29/62

APPROVED:
ASSISTANT CHIEF, ENGINEERING
DATE: 12-30-69

NO.	REVISION	APPROVED BY	DATE
1	Revised Type B & C Pullbox details	H.T.	3-5-76
2	Revised Type "A" Pullbox & Added Modified Cover.	H.T.	1-31-80
3	Revised Type B & C Pullbox details.	H.T.	2-1-83

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
PULLBOXES

Scale as noted Date

SHEET No. 5 OF 5 SHEETS DT 401