

# GENERAL NOTES

- The work to be done involves the installation of a traffic signal system at the intersection of Like-like Hwy. and Kula Koea Drive. [The lengthening of a deceleration (inbound left turn) lane, and reconstruction of guard rails and traffic islands are to be done in the future and is not a part of this contract.]
- Location of two construction identification signs shall be determined in the field by the Engineer.
- Refer to the Special Provision for special requirements in the movement of public traffic through the work site, the ordering of certain materials and the use of optional materials and State-furnished materials.
- Reference to ASTM Designation A7 has been discontinued and shall be replaced by the appropriate ASTM Designations described below:
  - Steel plate covers and anchor bolts shall conform to the requirements of Grade D, ASTM Designation: A283 and Grade 60, ASTM Designation: A306, respectively.
  - Structural steel members shall be of structural carbon steel conforming to the requirements of ASTM Designation: A36.

INSTALL  
FIG. 2

MOVE  
ONLY IN  
DIRECTION  
OF  
GREEN  
ARROW

INSTALL  
FIG. 2

MOVE  
ONLY IN  
DIRECTION  
OF  
GREEN  
ARROW

Traffic Signal mounted on  
Ped. Overpass. For details  
see Plan Sht. No. 5-3

Future A.C. Curb for  
Deceleration Lane  
(N.I.C.)

Exist. conduit & cable  
to flashing amber signals

Traffic Signal mounted on  
Ped. Overpass. For details  
see Plan Sht. No. 5-3

Exist. Flasher  
to remain

STOP  
AHEAD  
WHEN  
FLASHING

INSTALL  
W3-4

INSTALL W3-3  
on Hwy. Ltd. Std. in median  
Sta. 81+50 ±

Remove exist. W3-1  
sign plate only.

Remove exist. W3-1  
sign plate only.

LIKE LIKE HWY.

KULA KOEA DR.

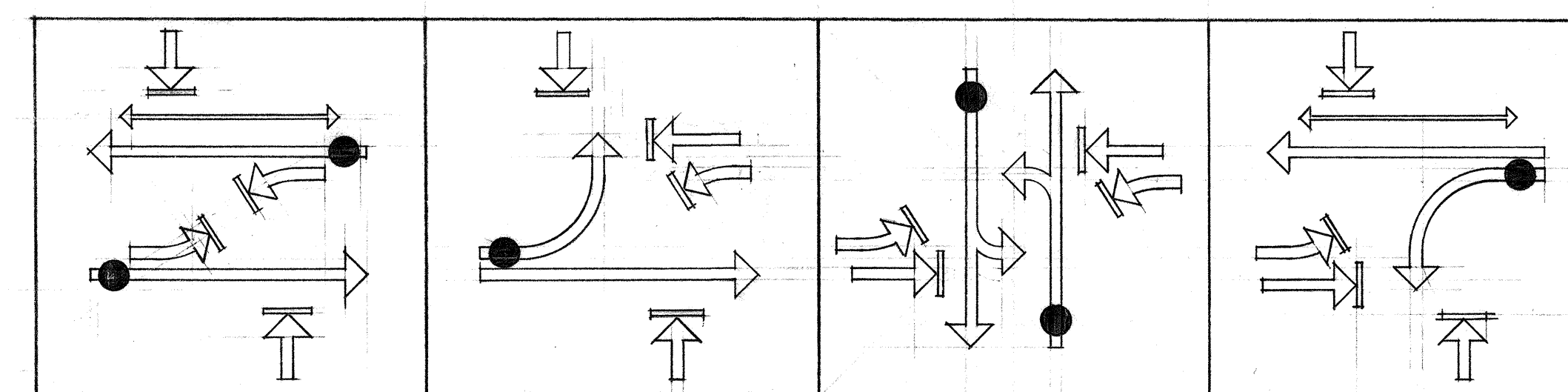
TRUE NORTH  
SCALE: 1"=20'

Inbound Lanes

Outbound Lanes

## LEGEND

- New Traffic Signal Standard 4 12" lens assembly or "DW-W" pedestrian signal
- New Vehicle Loop Detector
- ⊗ New Type "A" pullbox
- New Type "B" pullbox
- Existing pullbox
- ⊗ New Controller
- 1-1/2" steel New rigid steel conduit
- 1-2" New rigid steel or polyvinyl chloride conduit, No. 4 size as indicated. Conduits under roadways shall be encased in concrete.
- Existing flasher conduit
- Existing power pole
- Sig — Existing signal corp cable
- Gas — Existing gas line
- Tel — Existing telephone cable
- Water — Existing water line
- Sewer — Existing sewer line



PHASE DIAGRAMS

NOTE:

- Indicates vehicle actuation which will place call and extend phase.

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

## TRAFFIC SIGNAL SYSTEM

LIKE LIKE HIGHWAY IMPROVEMENTS  
at Kula Koea Drive  
Fed. Aid. Urban Proj. No. U-063-1(4)

Scale: 1"=20'

April, 1968

SHEET No. 1 OF 2 SHEETS

DATE  
DESIGNED BY  
CHECKED BY  
DRAWN BY  
NOTED BY  
ORIGINAL  
PLAN  
NOTE BOOK  
No.







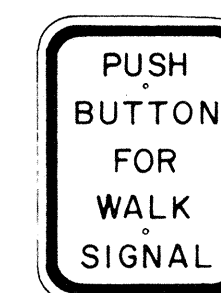
The diagrams illustrate three different mounting configurations for pedestrian signals:

- Standard Mounting (Left):** Shows a vertical pole with a "DONT WALK - WALK" pedestrian signal and a pedestrian push button with a sign. Dimensions include a total height of 10'-0", a signal height of 7'-0", a button height of 3'-10", and a minimum clearance of 2' min. at the base.
- Cantilever Mounting (Middle):** Shows a vertical pole with a "DONT WALK - WALK" pedestrian signal and a pedestrian push button with a sign. Dimensions include a total height of 10'-0", a signal height of 7'-0", a button height of 3'-10", and a minimum clearance of 2' min. at the base.
- Tunnel Hood Mounting (Right):** Shows a vertical pole with a "DONT WALK - WALK" pedestrian signal and a pedestrian push button with a sign. Dimensions include a total height of 10'-0", a signal height of 7'-0", a button height of 3'-10", and a minimum clearance of 2' min. at the base.

ON MAST ARM OR  
SPAN WIRE STANDARD

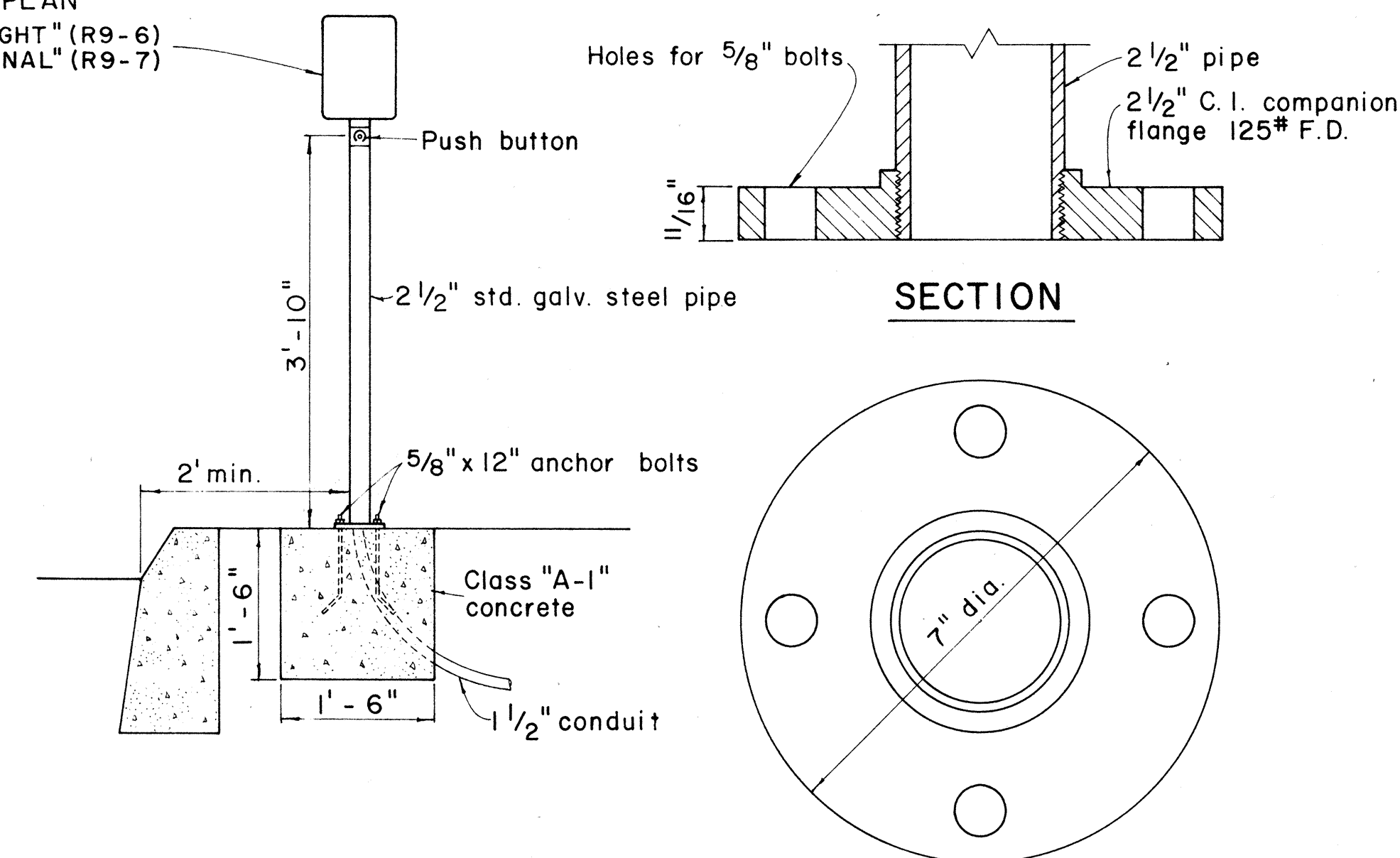
TRAFFIC SIGN AS SPECIFIED IN PLAN

1. "PUSH BUTTON FOR GREEN LIGHT" (R9-6)
2. "PUSH BUTTON FOR WALK SIGNAL" (R9-7)



R9 - 7  
9" x 12'

1. Conduits shall protrude 2" max. above finished surface of foundation.
2. Conduits shall slope away from pole foundation.
3. Post and base shall be painted with one coat of approved weather proof dark green enamel.



BASE DETAIL

Diagram illustrating a coupling on a pipe. The diagram shows a vertical pipe with a horizontal coupling attached. A line points to the coupling with the label "Signal standard". The coupling is labeled "1/2" pipe" and "1/2" coupling". A dimension line indicates a distance of "3/16" from the coupling to the pipe.

**NOTE:**  
Coupling shall be of the same material as the standard

Varies

(20' or 25' as indicated in the plans or specifications)

Wire inlet

Tapered pole

**NOTE:**  
Key may be omitted if the entire footing is poured monolithically

Nominal height 20' - 2"

TRAFFIC →

4' - 0"

4 1/2"

4' - 6"

4 1/2"

Class "A-1" concrete

Anchor bolts

2' - 0" sq

Bushing

4"

2" cl.

2" cl.

Conduits

4 - #4 bars @ 12" o.c. bothways

#5 bars

1' - 0"

1' - 0"

14" x 14" key

#5 bars @ 9" o.c. bothways

Excavate and pour to neat cut

5' - 0"

3' - 6"

1' - 6"

3" cl.

3" cl.

3" cl.

6"

3"

6"

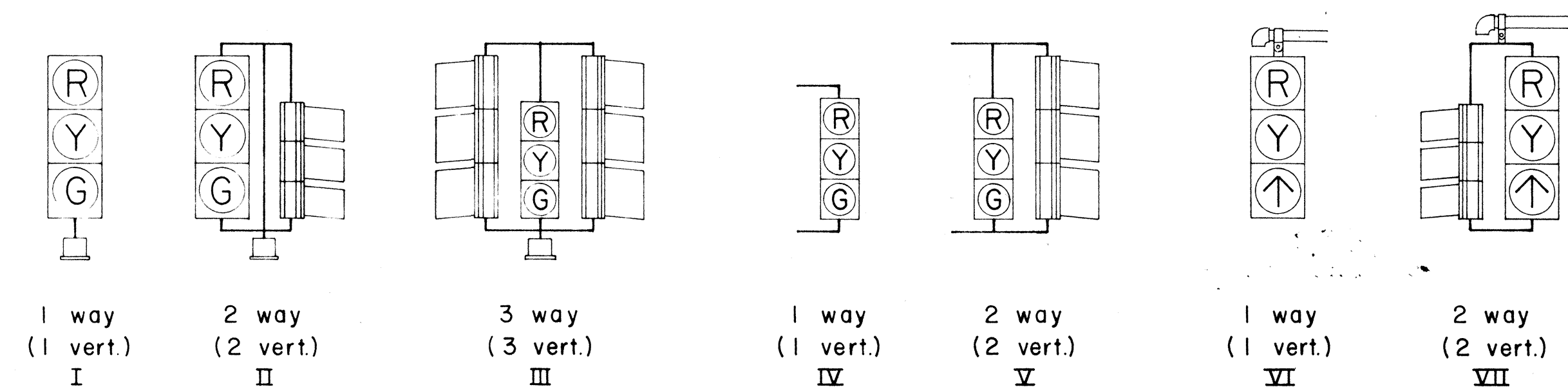
6"

3"

6"

4' - 0"

MAST ARM FOOTING  
AND STANDARD



## MASTARM MOUNTINGS

I - Dont Walk  
Walk

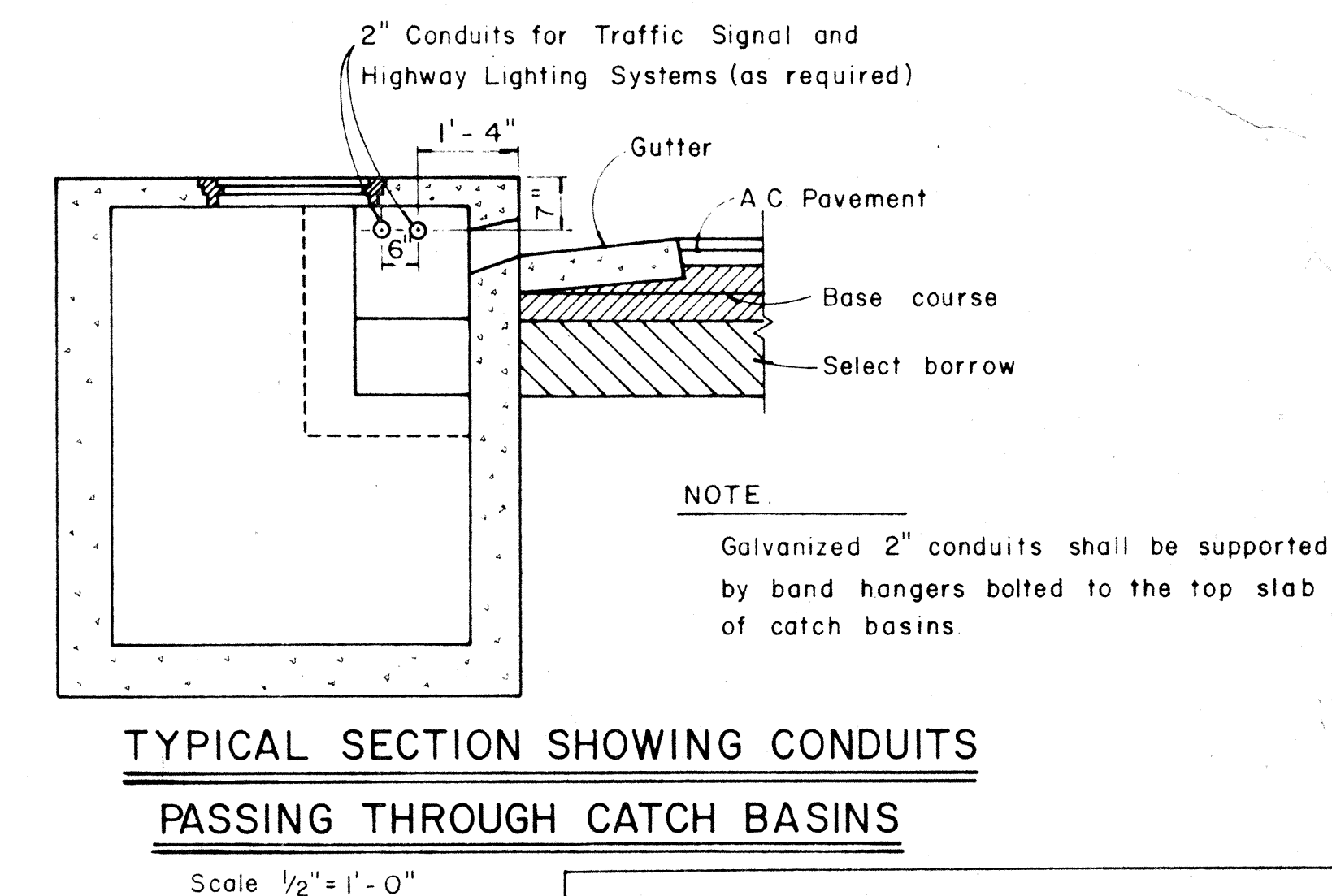
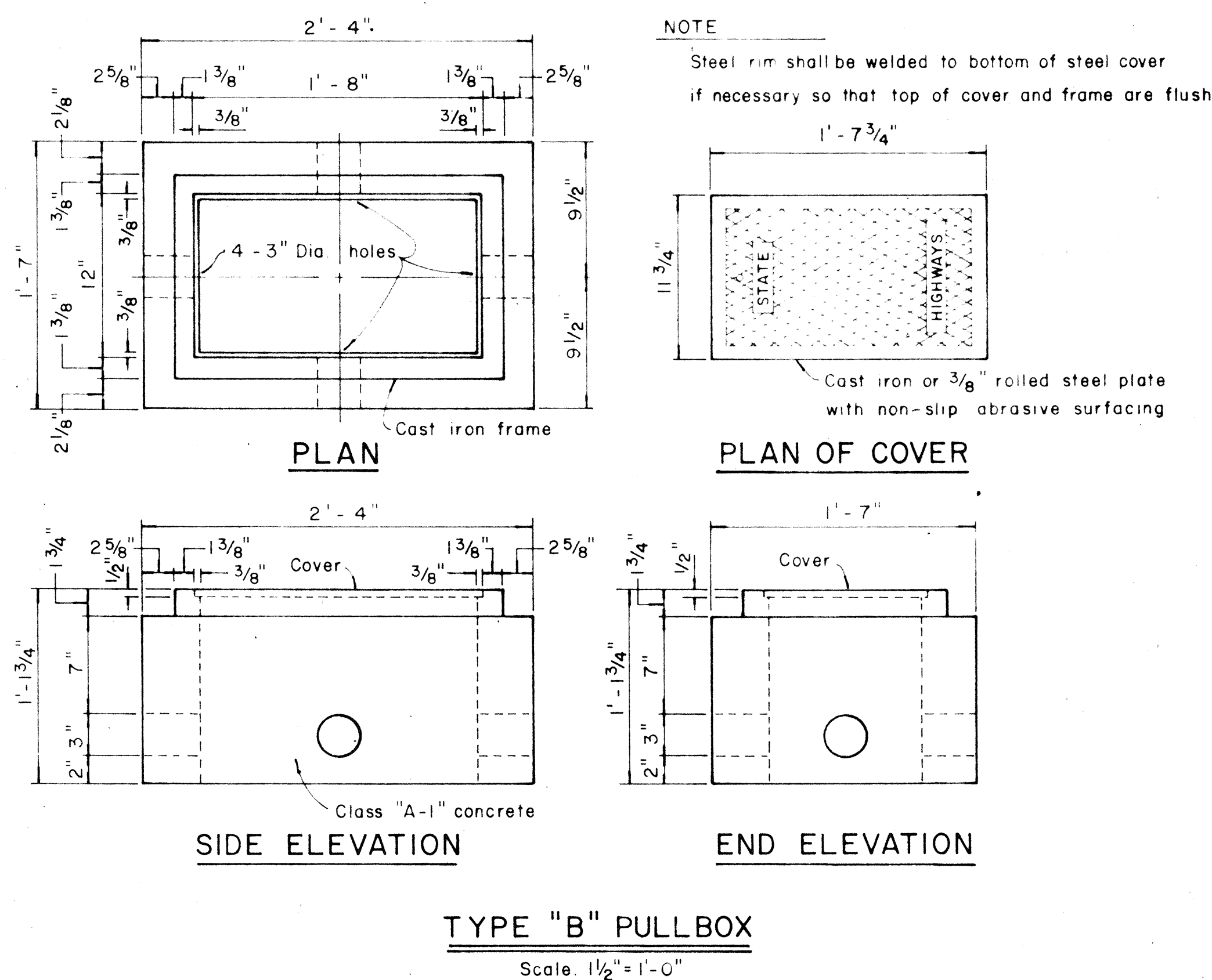
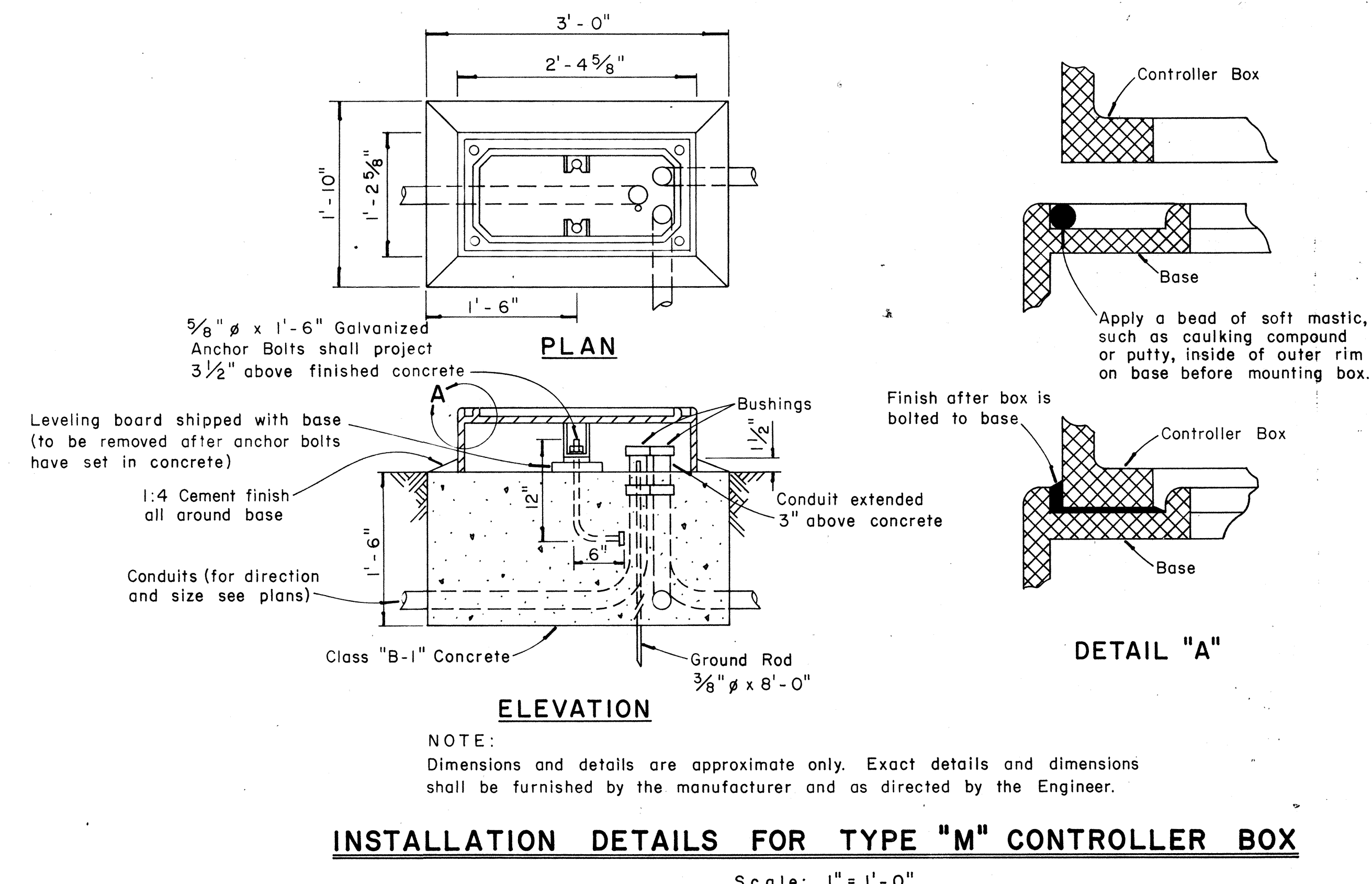
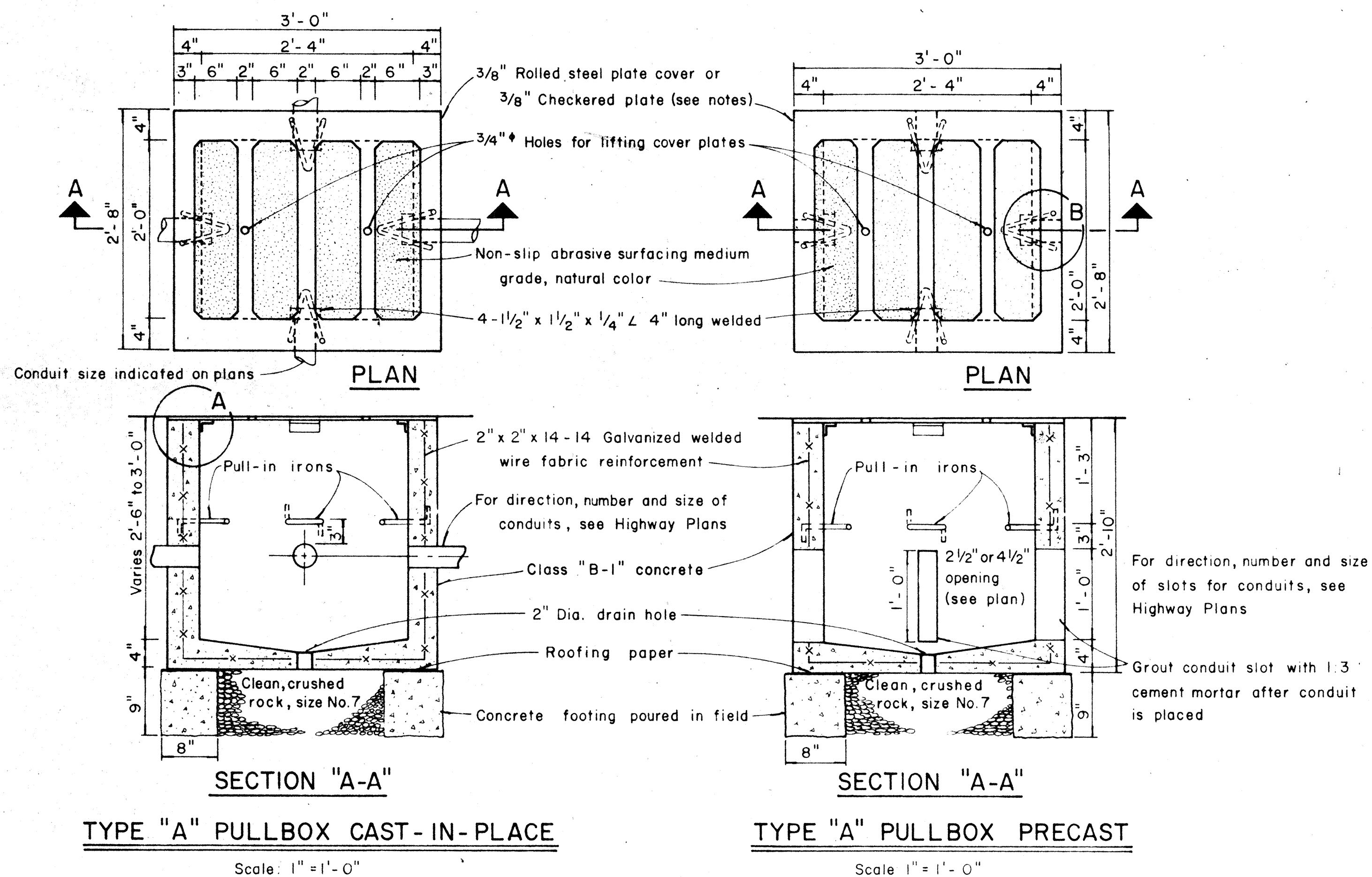
## TYPICAL SIGNAL ARRANGEMENTS

Not to Scale January, 1968

SHEET No. OF SHEETS



| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII              | HAW.  | 1-003-14           | 1968        | 5         | 8            |



|                                                                      |                 |
|----------------------------------------------------------------------|-----------------|
| STATE OF HAWAII<br>DEPARTMENT OF TRANSPORTATION<br>HIGHWAYS DIVISION |                 |
| STANDARD DETAILS<br>PULLBOXES<br>AND<br>TYPE "M" CONTROLLER BOX      |                 |
| Scale as noted                                                       | Date: Aug. 1968 |
| SHEET No. 5                                                          | OF 8 SHEETS     |

|               |      |
|---------------|------|
| DESIGNED BY   | DATE |
| DRAWN BY      |      |
| CHECKED BY    |      |
| NOTED BY      |      |
| ORIGINAL PLAN |      |
| NOTE BOOK     |      |
| No.           |      |