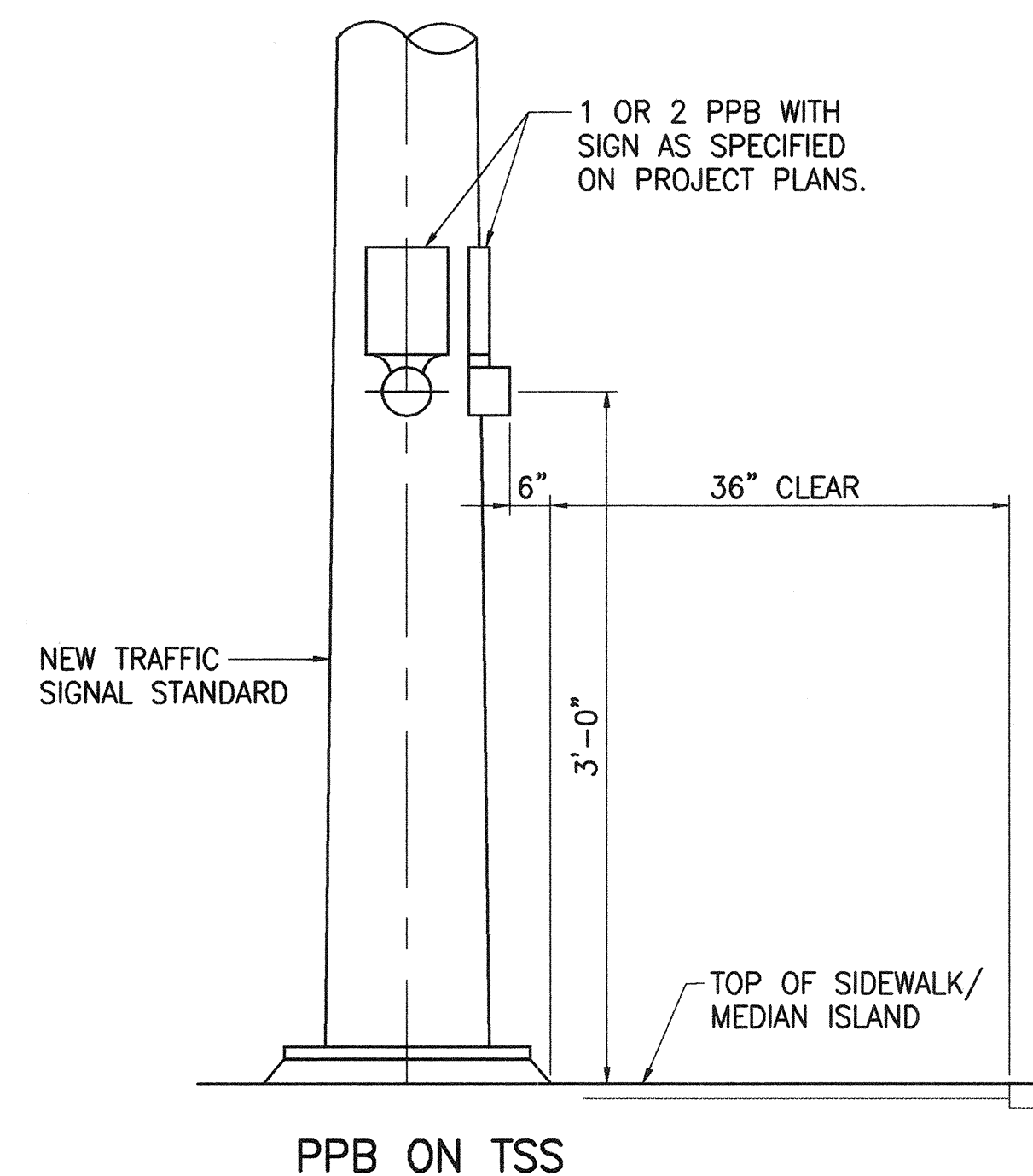
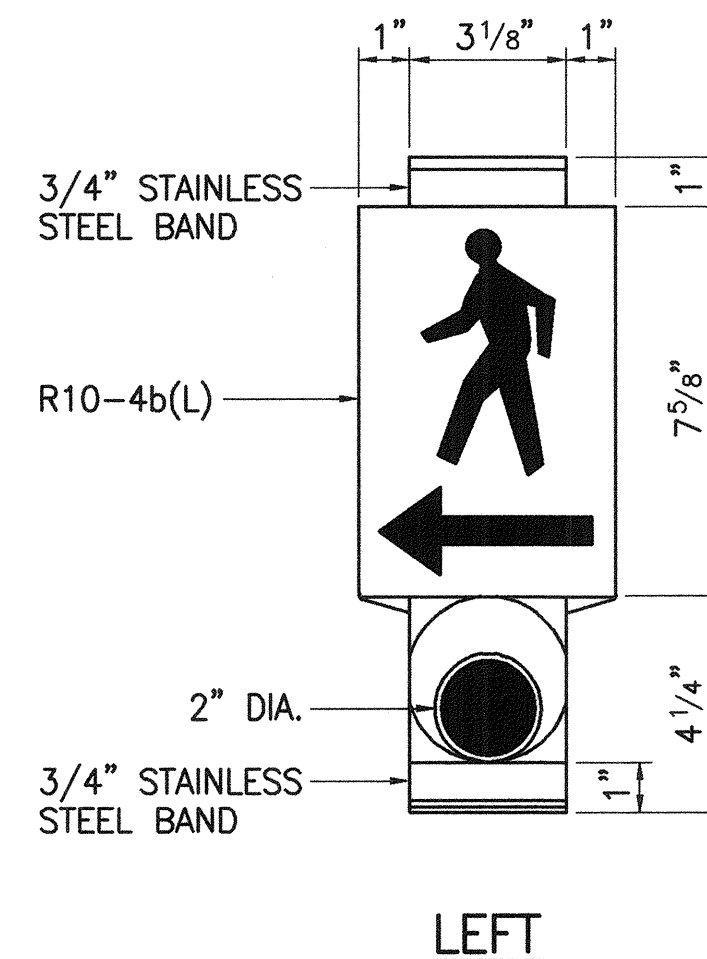


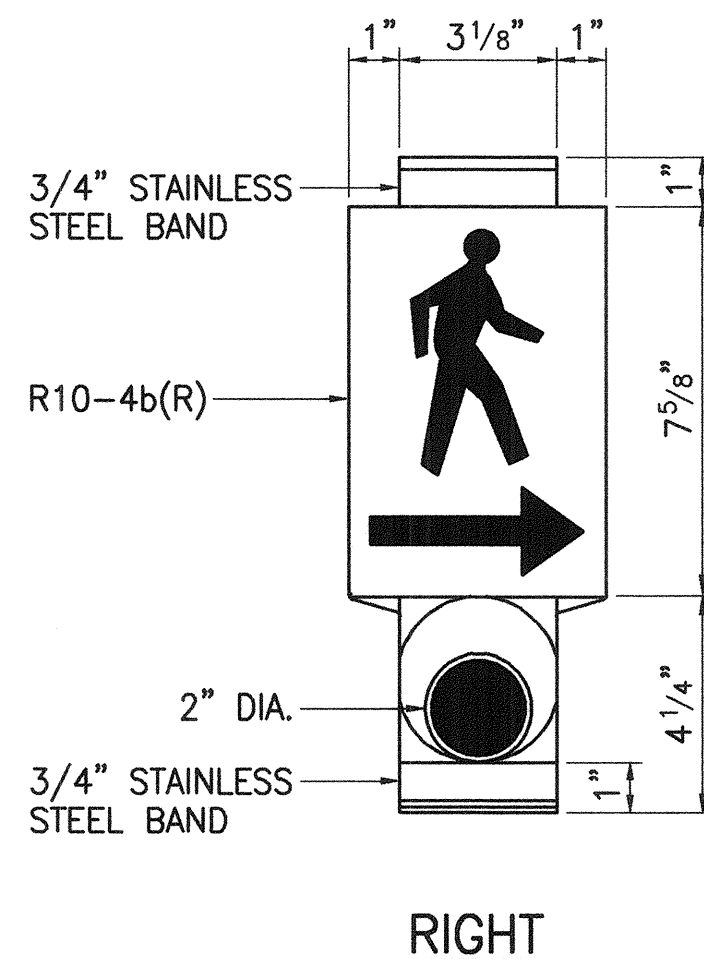
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-STP-030-1(27)	2000	15	19



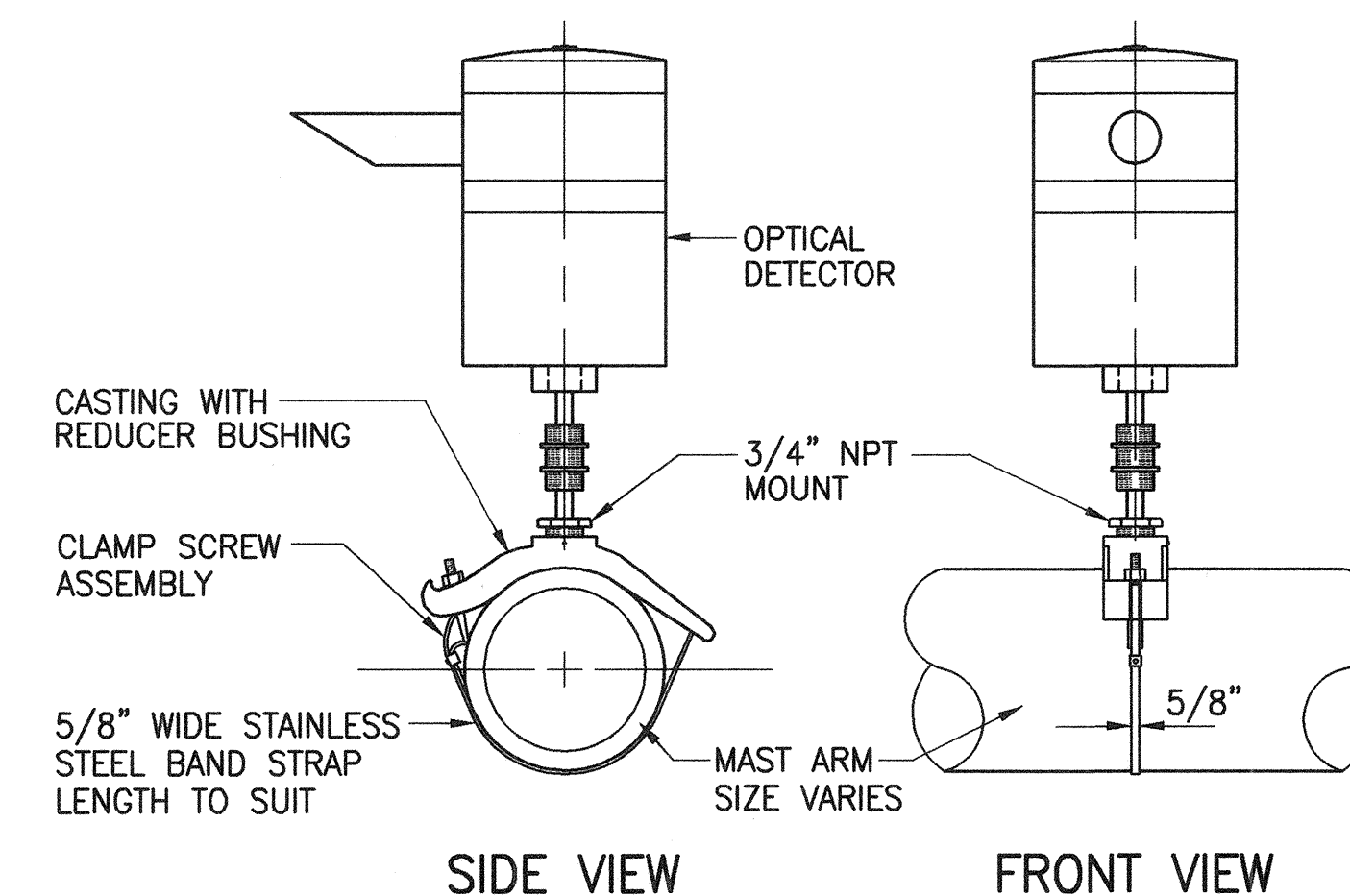
NOTE: ON PLAN SHEET, USE APPLICABLE DETAIL.



THE COLOR SCHEME SHALL BE:
WHITE - MAN, ARROW AND PUSH BUTTON
BLACK - BACKGROUND

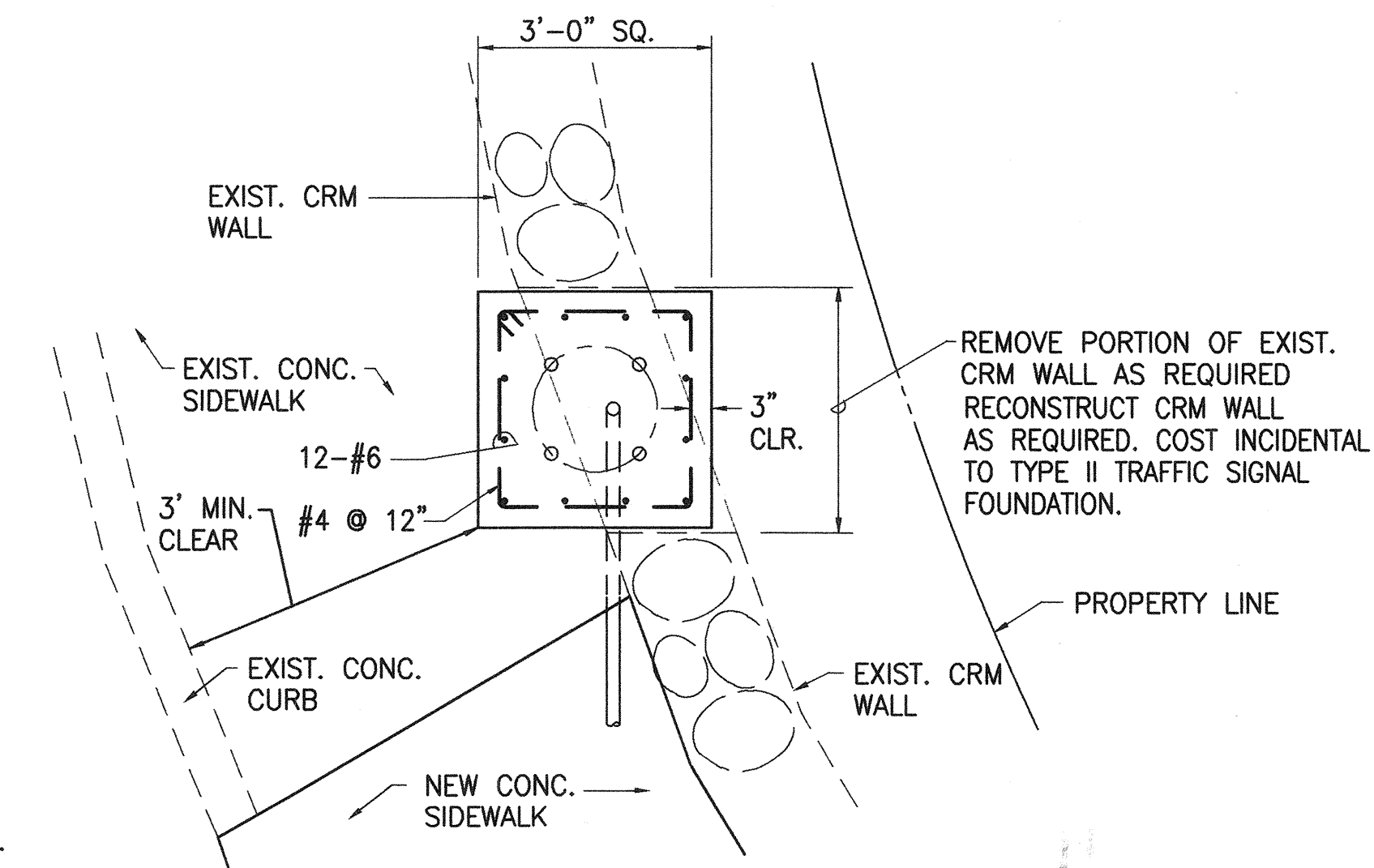


PEDESTRIAN PUSH BUTTON DETAILS
NOT TO SCALE

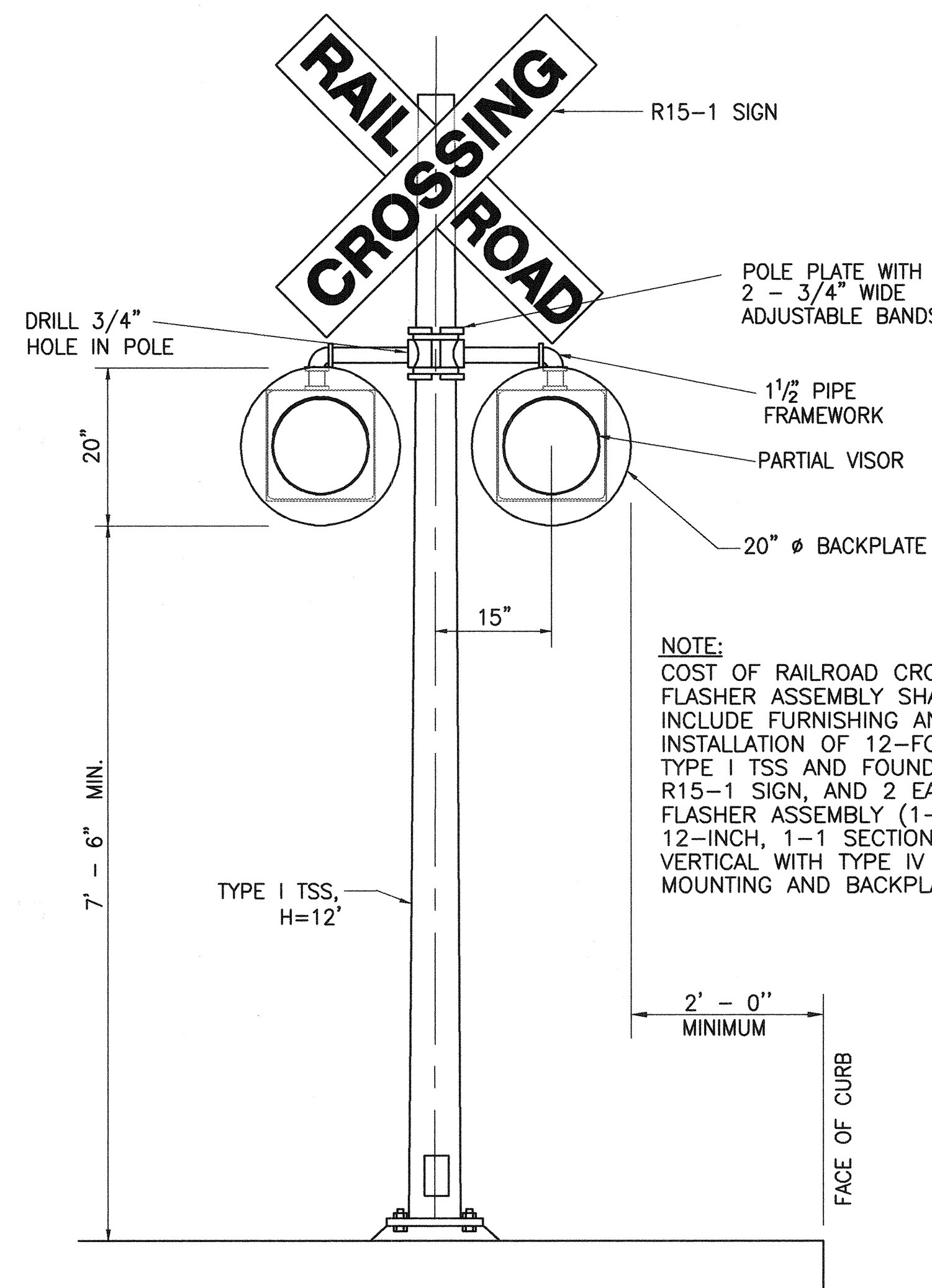


- NOTES:
- EVP DETECTOR SHALL BE "OPTICOM M711 OPTICAL DETECTOR", OR APPROVED EQUAL, UNLESS NOTED OTHERWISE IN THE SPECIAL PROVISIONS.
 - SUPPORT SADDLE ASSEMBLY SHALL BE "ASTRO MINI-BRAC, AB-0132-29", OR APPROVED EQUAL, UNLESS NOTED OTHERWISE IN THE SPECIAL PROVISIONS.

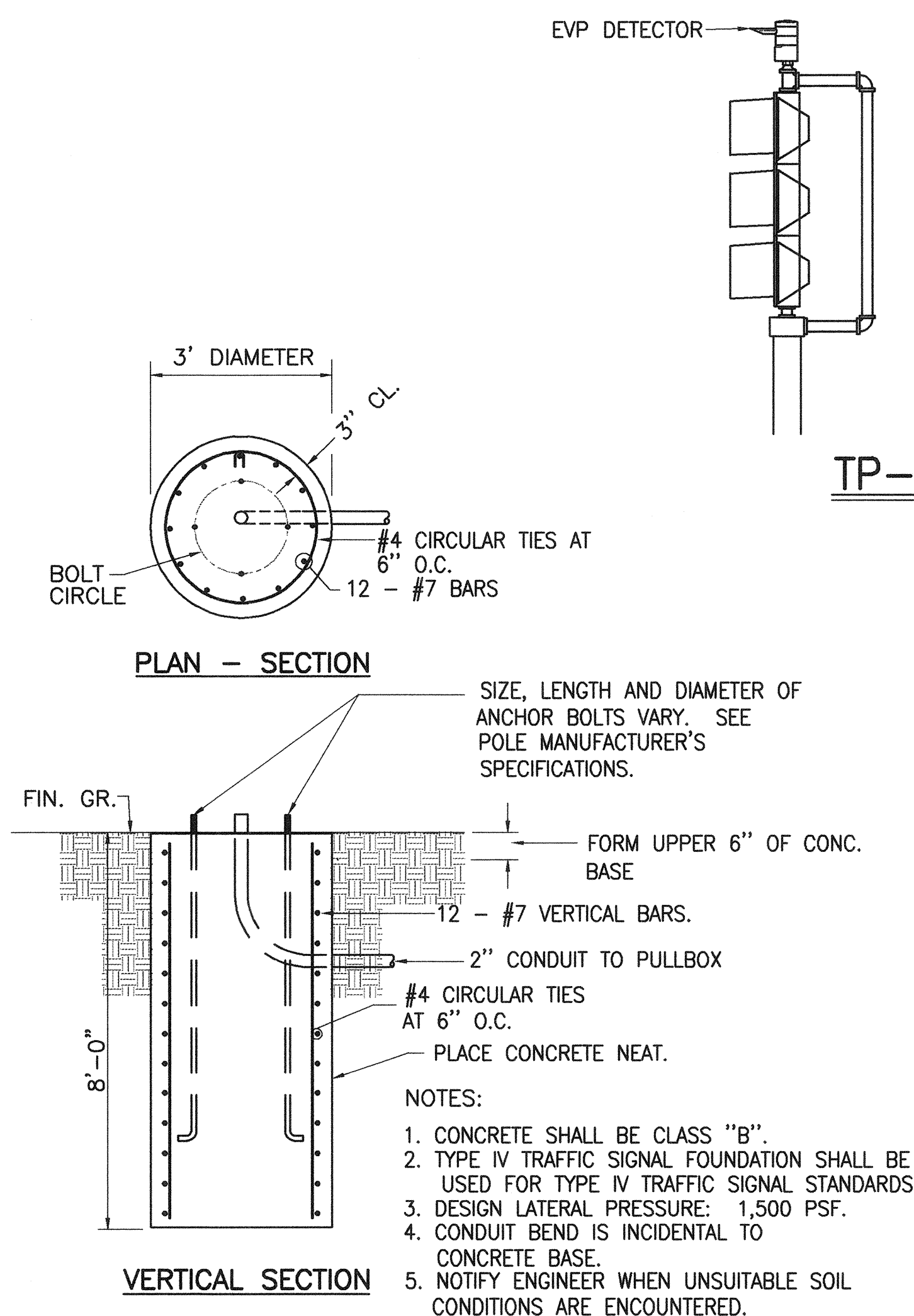
EVP DETECTOR FOR MAST ARM MOUNTING
NOT TO SCALE



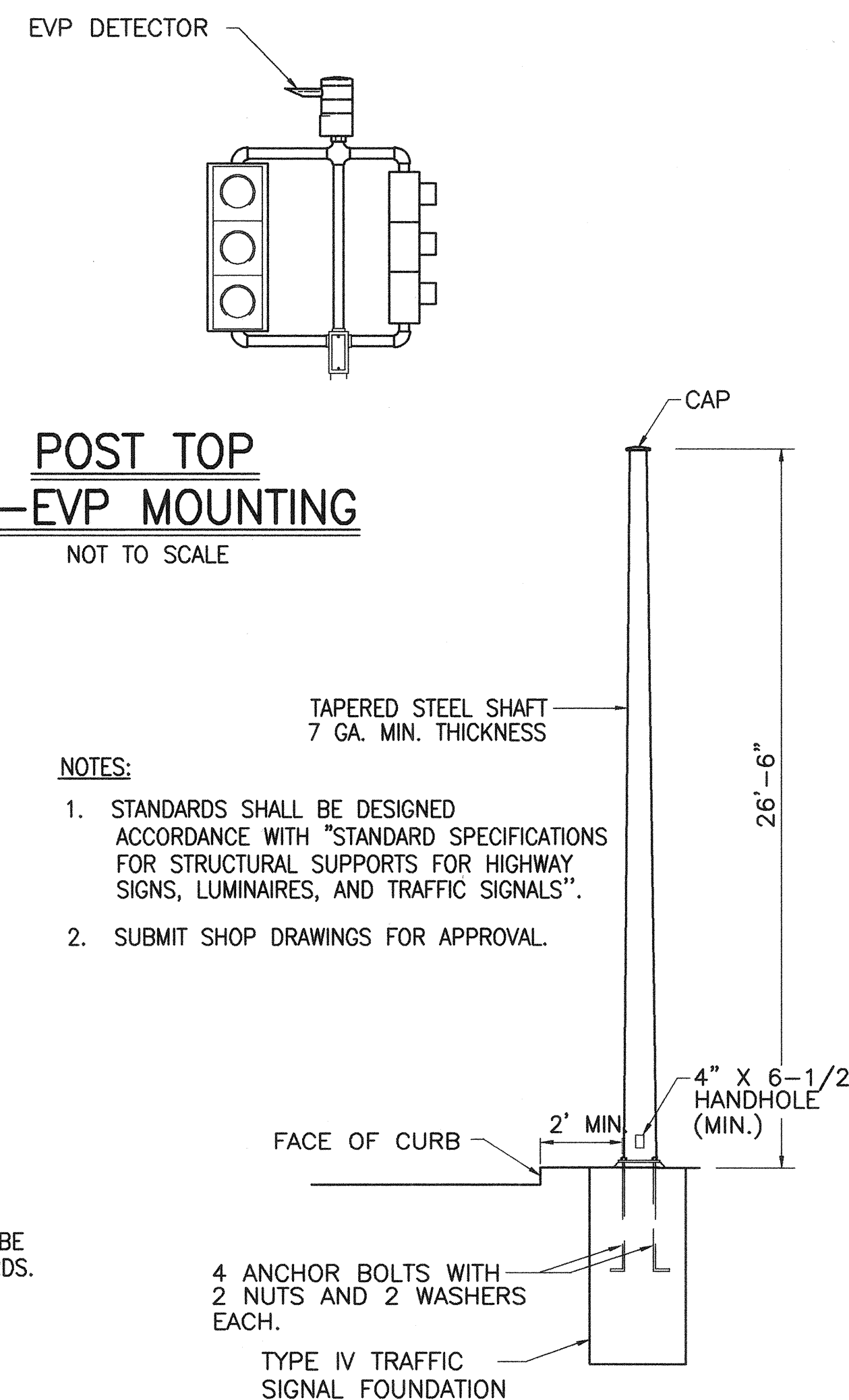
PLAN/SECTION



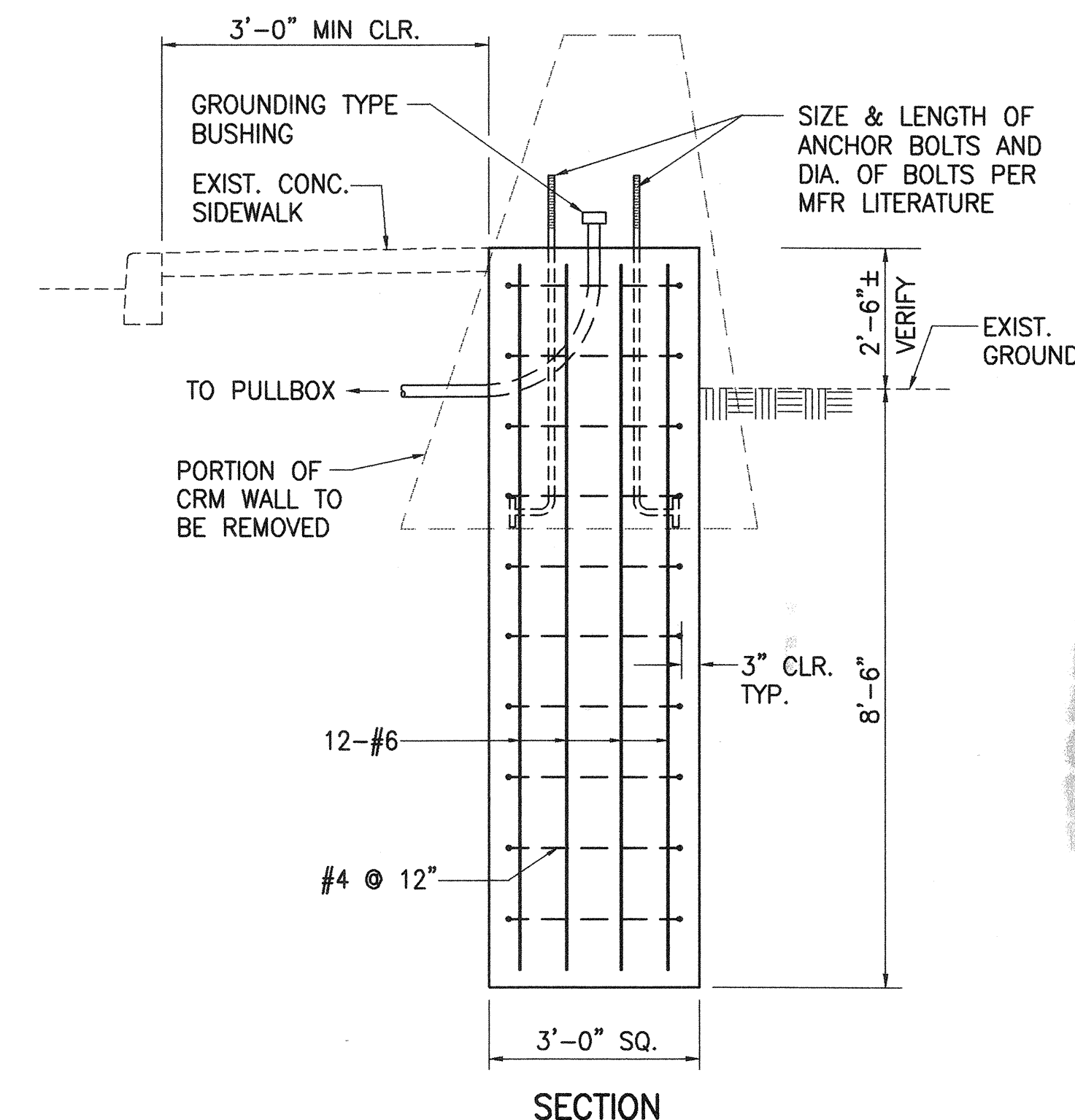
RAILROAD CROSSING FLASHER ASSEMBLY
NOT TO SCALE



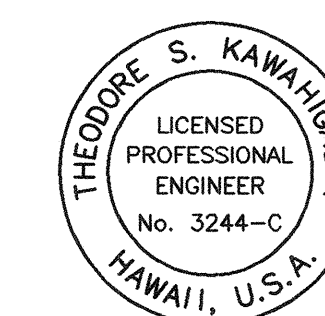
TYPE IV TRAFFIC SIGNAL FOUNDATION
NOT TO SCALE



TYPE IV TRAFFIC SIGNAL STANDARD (TSS)
NOT TO SCALE



MODIFIED TYPE II TRAFFIC SIGNAL FOUNDATION
SCALE: 1/2"=1'-0"



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION
Theodore S. Kawahigashi
Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

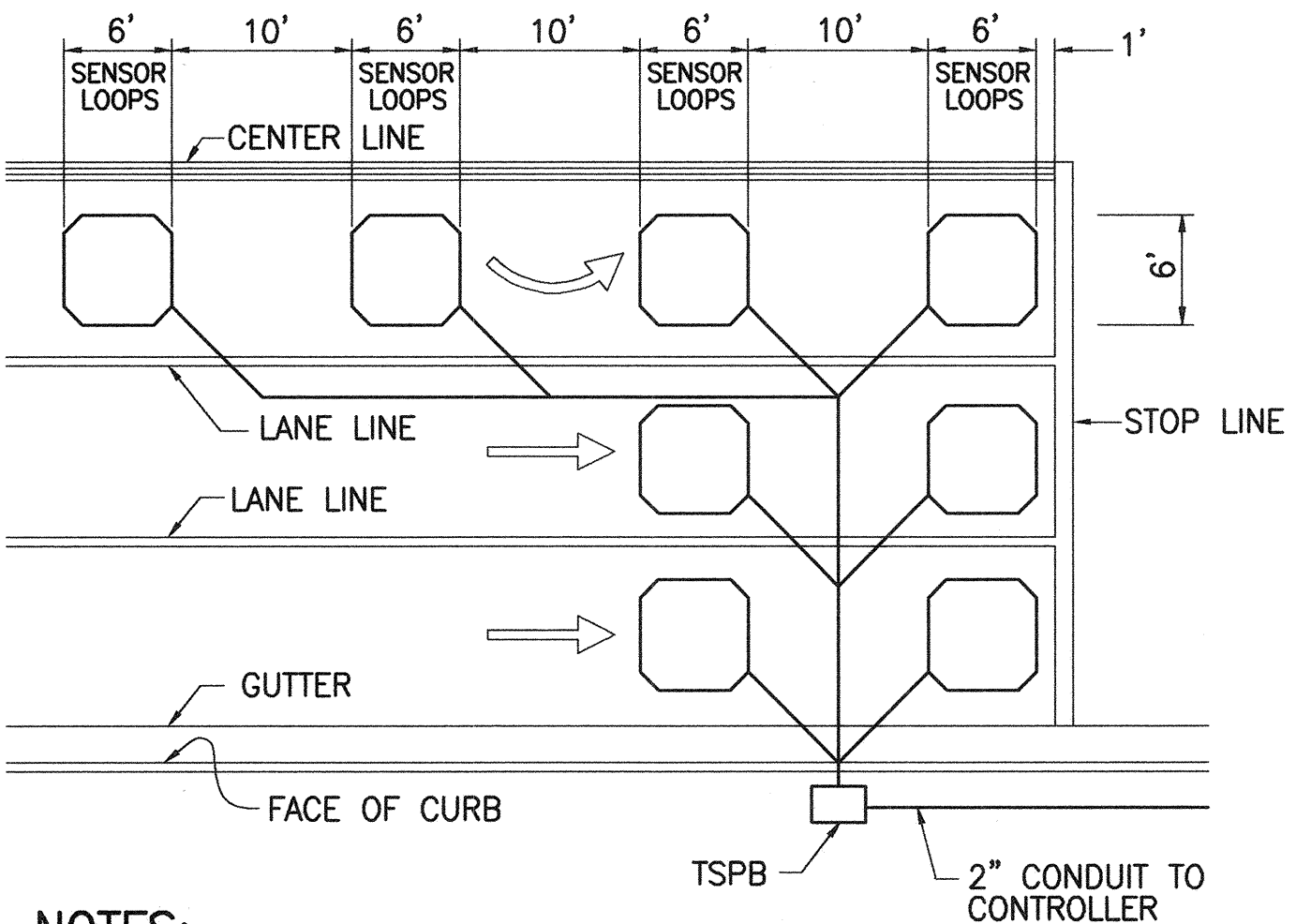
MISCELLANEOUS DETAILS

HONOAPIILANI HIGHWAY
TRAFFIC SIGNAL MODERNIZATION,
KAANAPALI TOWARDS LAHAINA
FED. AID PROJECT NO. NH-STP-030-1(27)

SCALE: AS NOTED DATE: MAY 1999

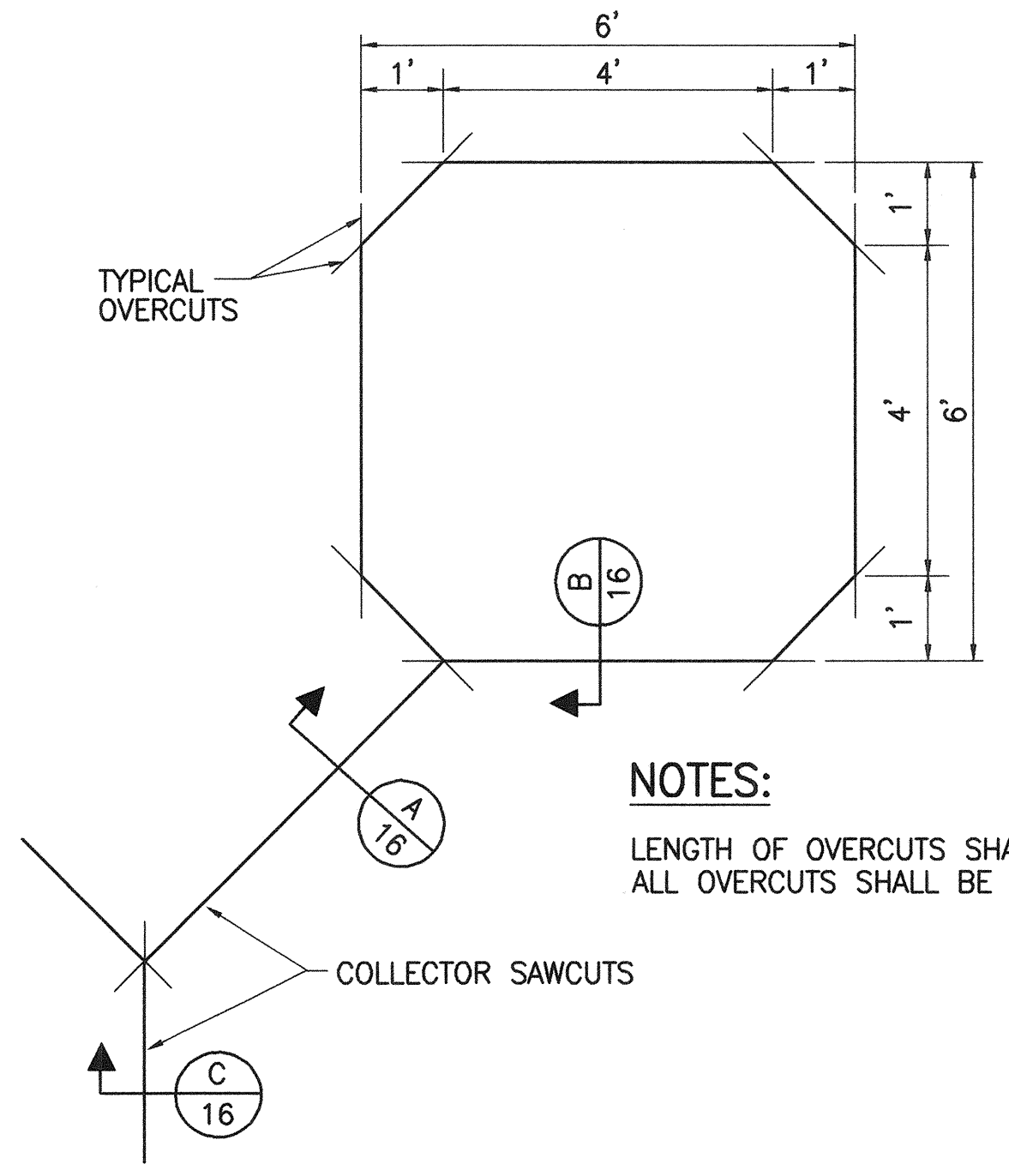
SHEET No. 1 OF 2 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-STP-030-1(27)	2000	16	19



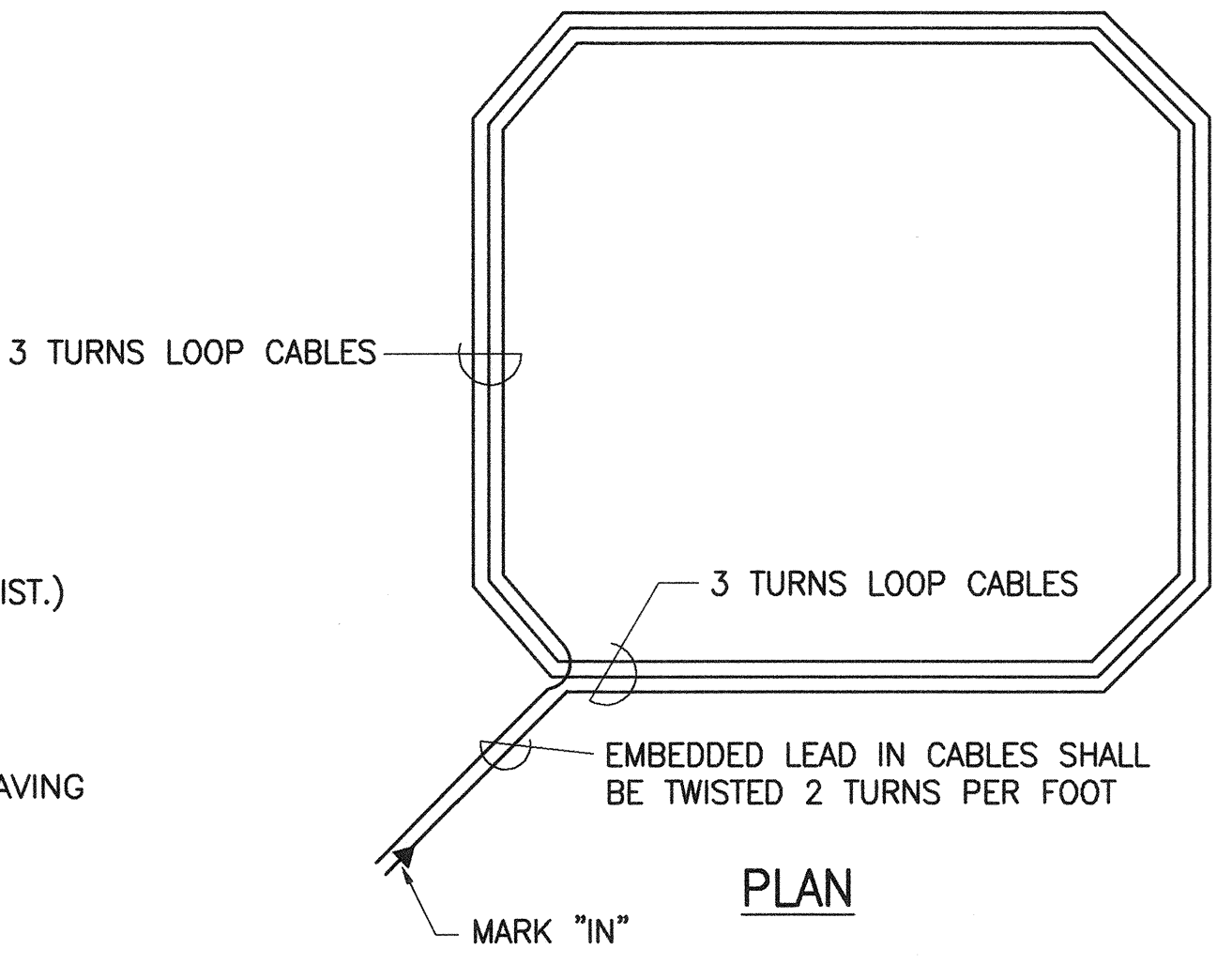
- NOTES:**
1. CENTER SENSOR LOOPS IN LANES.
 2. COLLECTOR CABLES SHALL BE TWISTED 2 TURNS PER FOOT.
 3. NUMBER OF LOOPS AND LOCATIONS VARY. SEE PROJECT PLANS.
 4. NUMBER AND LOCATIONS OF COLLECTOR SAWCUTS MAY BE VARIED IN THE FIELD TO SUIT.

TYPICAL SENSOR LOOP LAYOUT
NOT TO SCALE

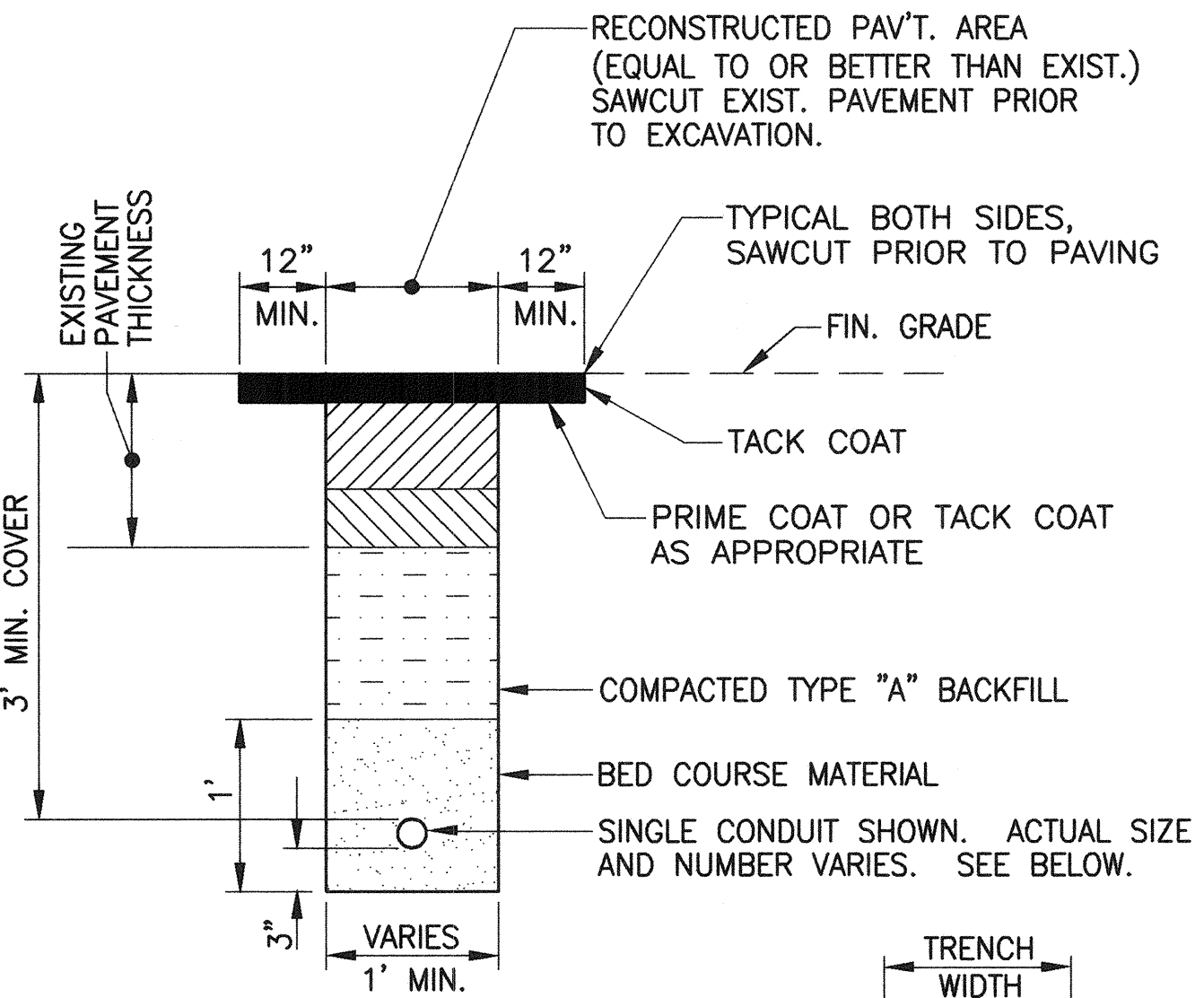


- NOTES:**
- LENGTH OF OVERCUTS SHALL BE KEPT TO A MINIMUM. ALL OVERCUTS SHALL BE BACKFILLED WITH HOT TAR.

TYPICAL SENSOR LOOP SAWCUT DETAIL
NOT TO SCALE

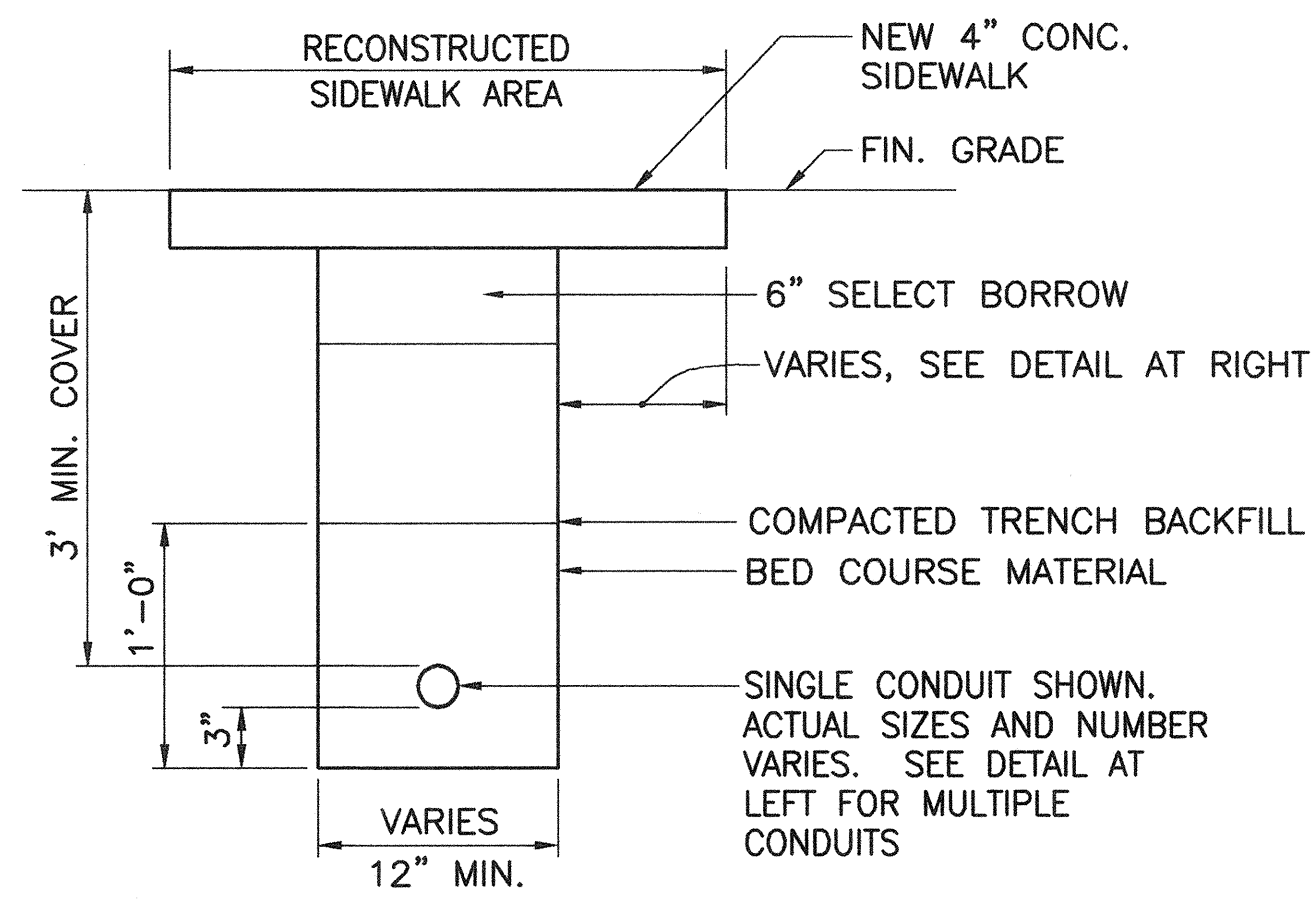


TYPICAL SENSOR LOOP WIRING DIAGRAM
NOT TO SCALE

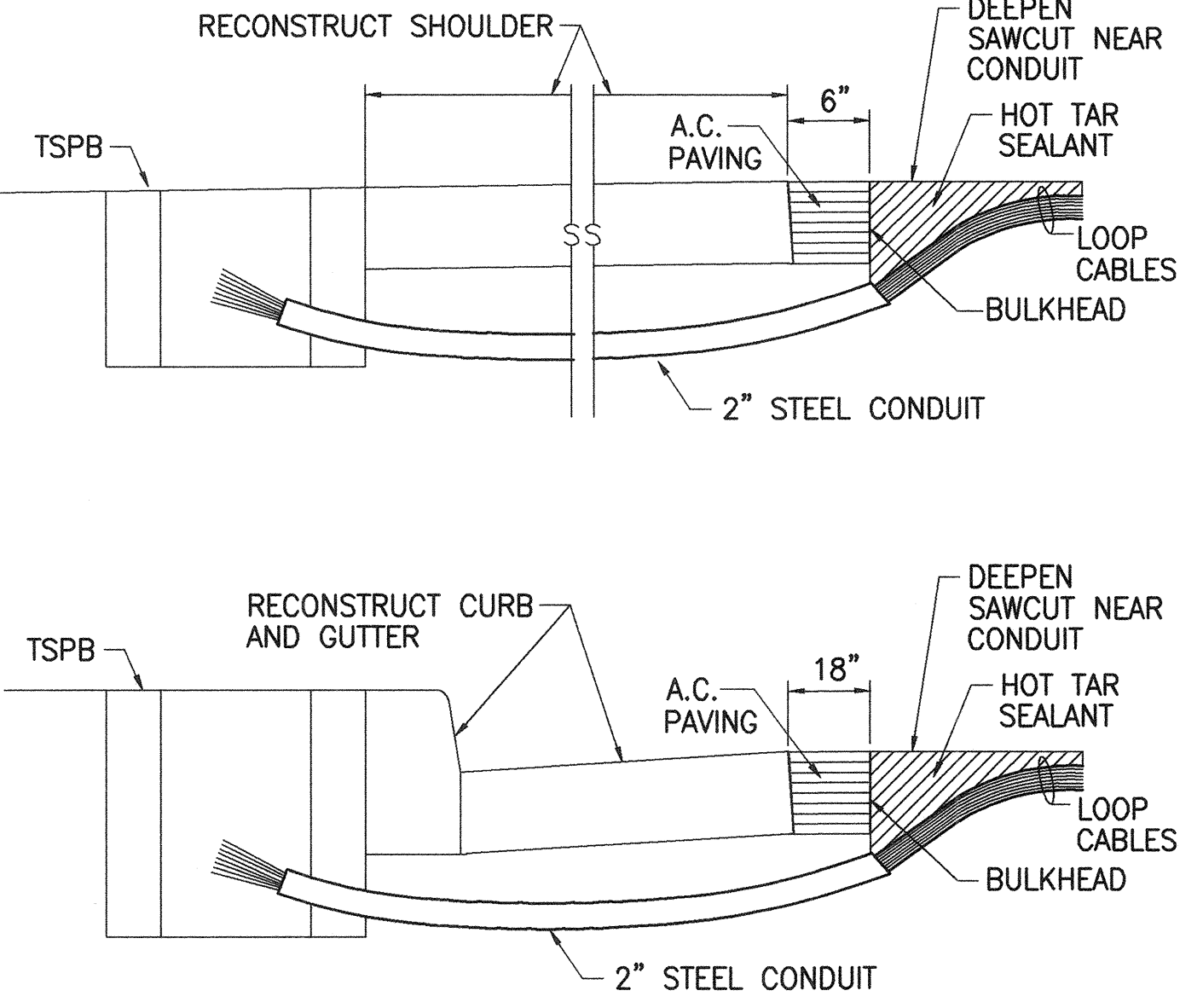


TYPICAL TRENCH DETAIL IN PAVEMENT AREAS
NOT TO SCALE

- NOTES:**
1. DETAIL FOR MULTIPLE CONDUIT TRENCHES SHALL BE SIMILAR. PROVIDE 3" MIN. CLEAR SPACING BETWEEN CONDUITS.
 2. BED COURSE MATERIAL SHALL BE BLACK SAND, BEACH SAND, CRUSHED ROCK, OR FINELY GRADED CORAL PASSING A 1/2 INCH SIEVE.

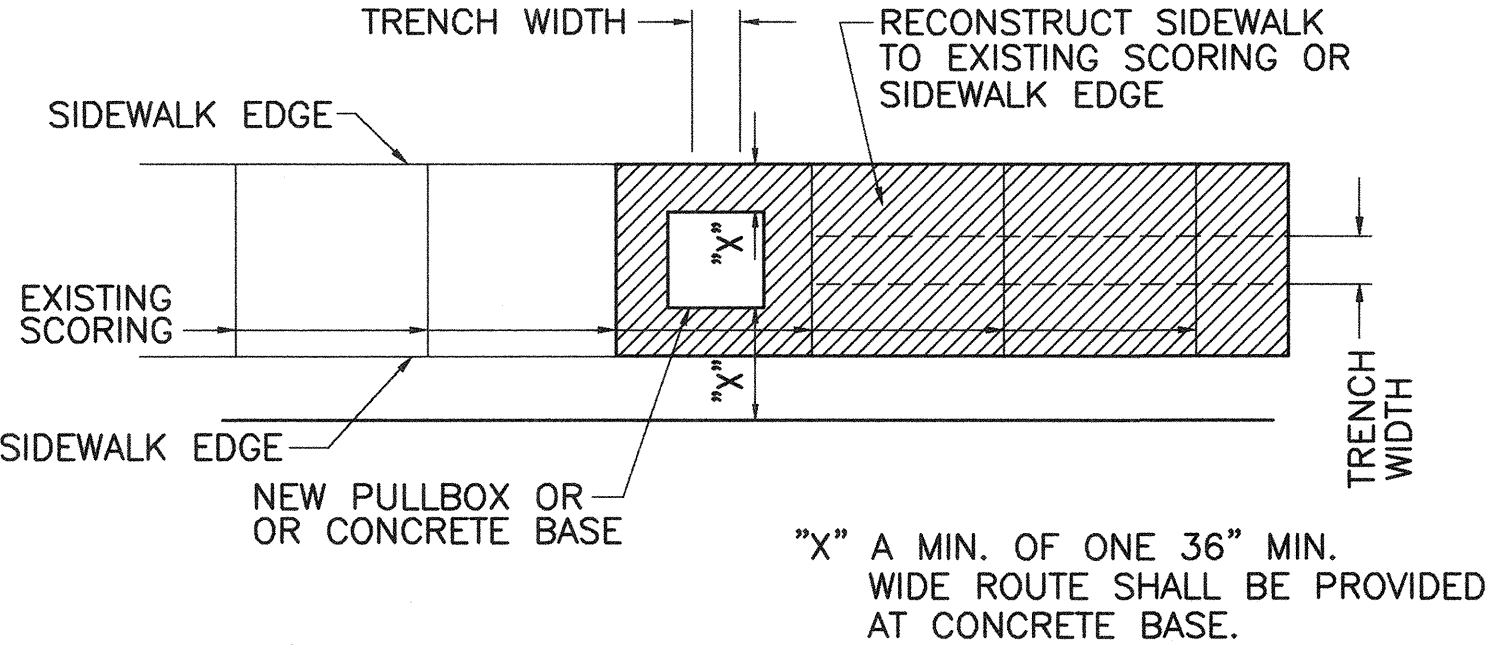


TYPICAL TRENCH DETAIL IN SIDEWALK AREAS
NOT TO SCALE

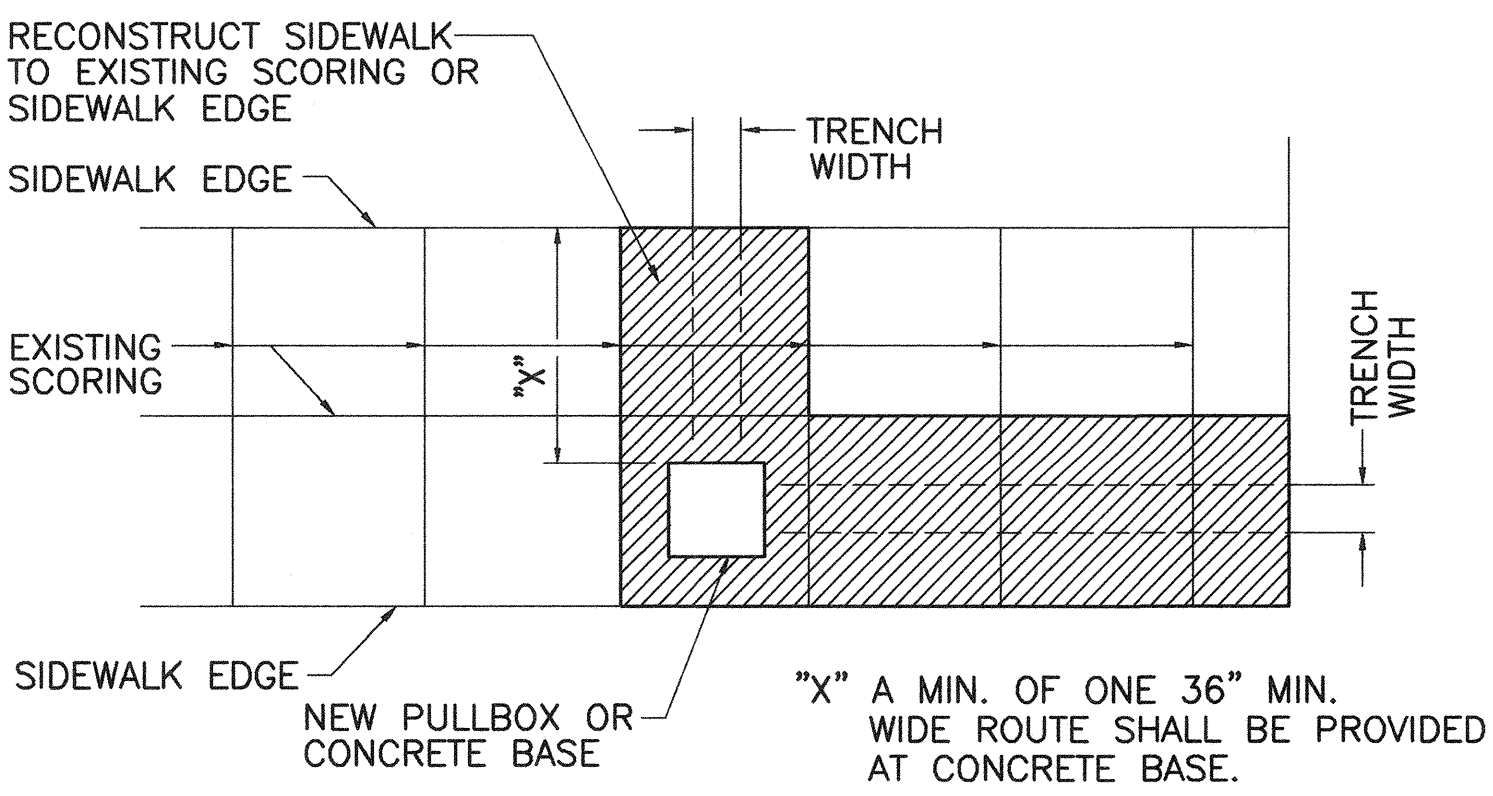


- NOTES ON CONSTRUCTION AT END OF SAWCUT**
1. SEAL ROADWAY END OF CONDUIT AFTER INSTALLATION OF CONDUCTORS
 2. INSTALL BULKHEAD ACROSS CONDUIT TRENCH.
 3. PLACE HOT TAR IN SAWCUT.
 4. BACKFILL OVER CONDUIT WITH NEW A.C.
 5. RECONSTRUCT CURB AND GUTTER AS REQUIRED.

DETAIL OF SENSOR LOOP INSTALLATION AT EDGE OF ROADWAY
NOT TO SCALE

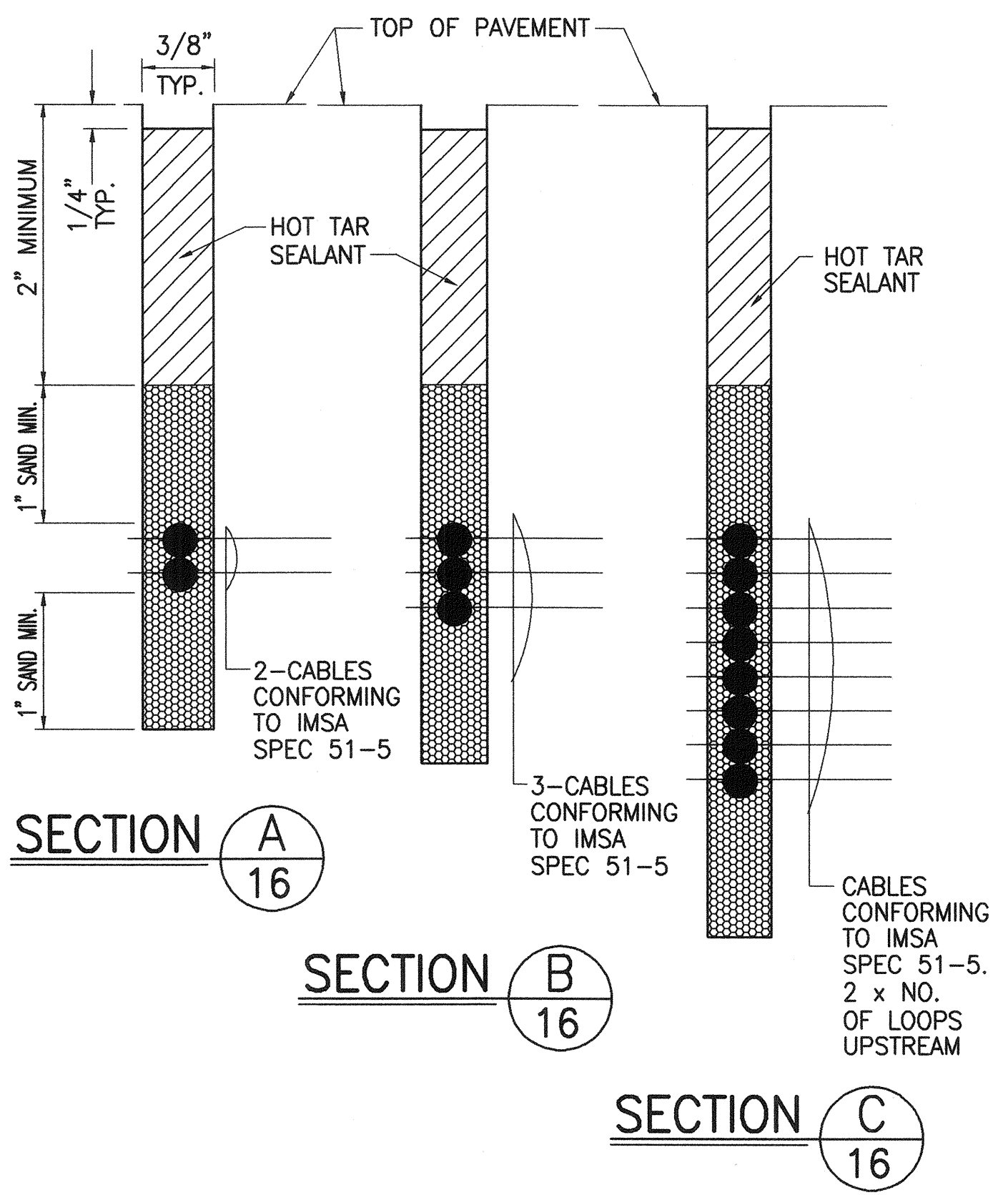


AT SINGLE BLOCK-WIDTH SIDEWALKS



AT MULTIPLE BLOCK-WIDTH SIDEWALKS

SIDEWALK RECONSTRUCTION DETAILS
NOT TO SCALE



THEODORE S. KAWAHIGASHI
LICENSED PROFESSIONAL ENGINEER
No. 3244-C
HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Shervin A. Kavaligah
Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS DETAILS

HONOAPIILANI HIGHWAY
TRAFFIC SIGNAL MODERNIZATION,
KAANAPALI TOWARDS LAHAINA
FED. AID PROJECT NO. NH-STP-030-1(27)

SCALE: AS NOTED DATE: MAY 1999

SHEET No. 2 OF 2 SHEETS