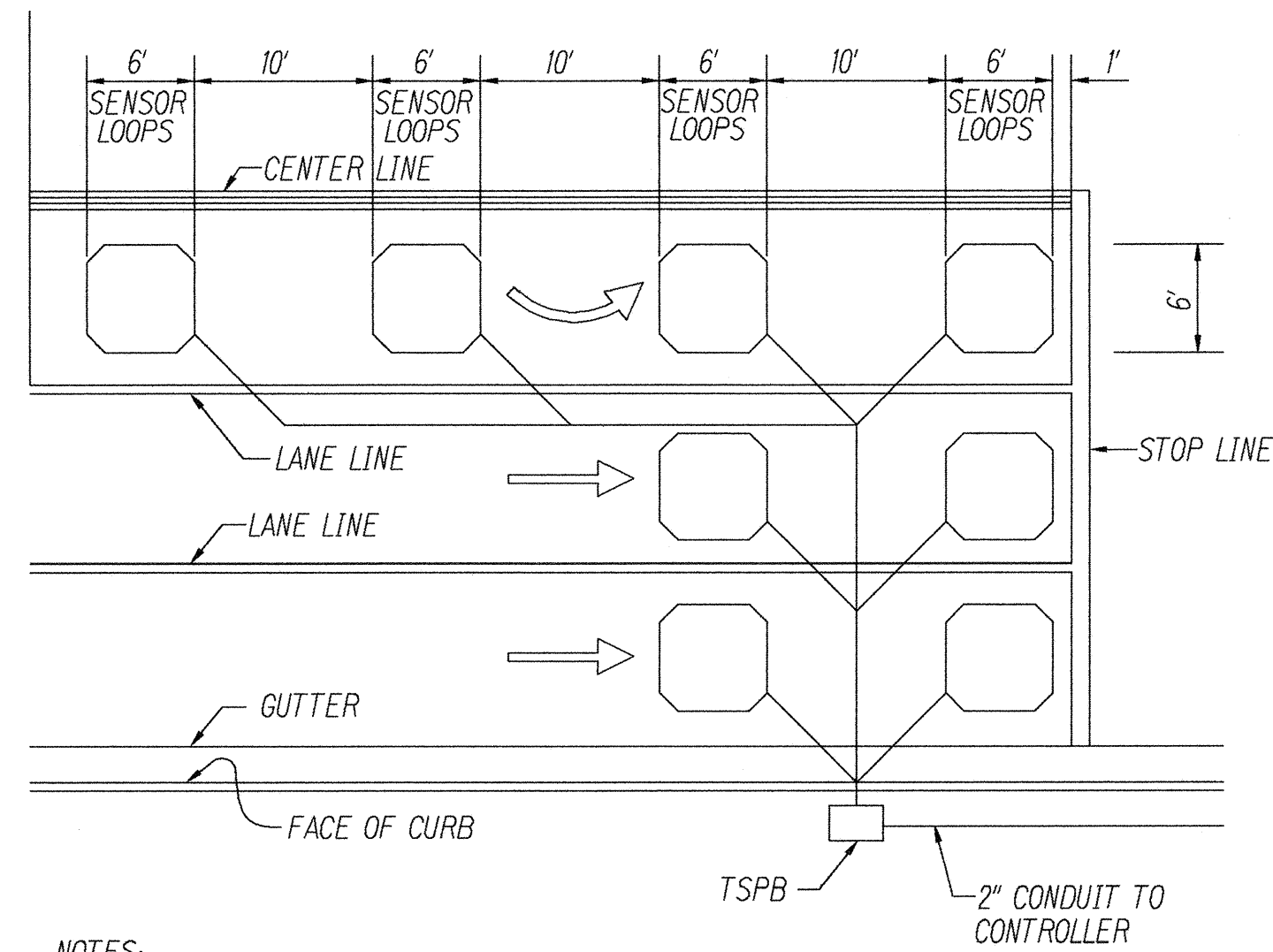
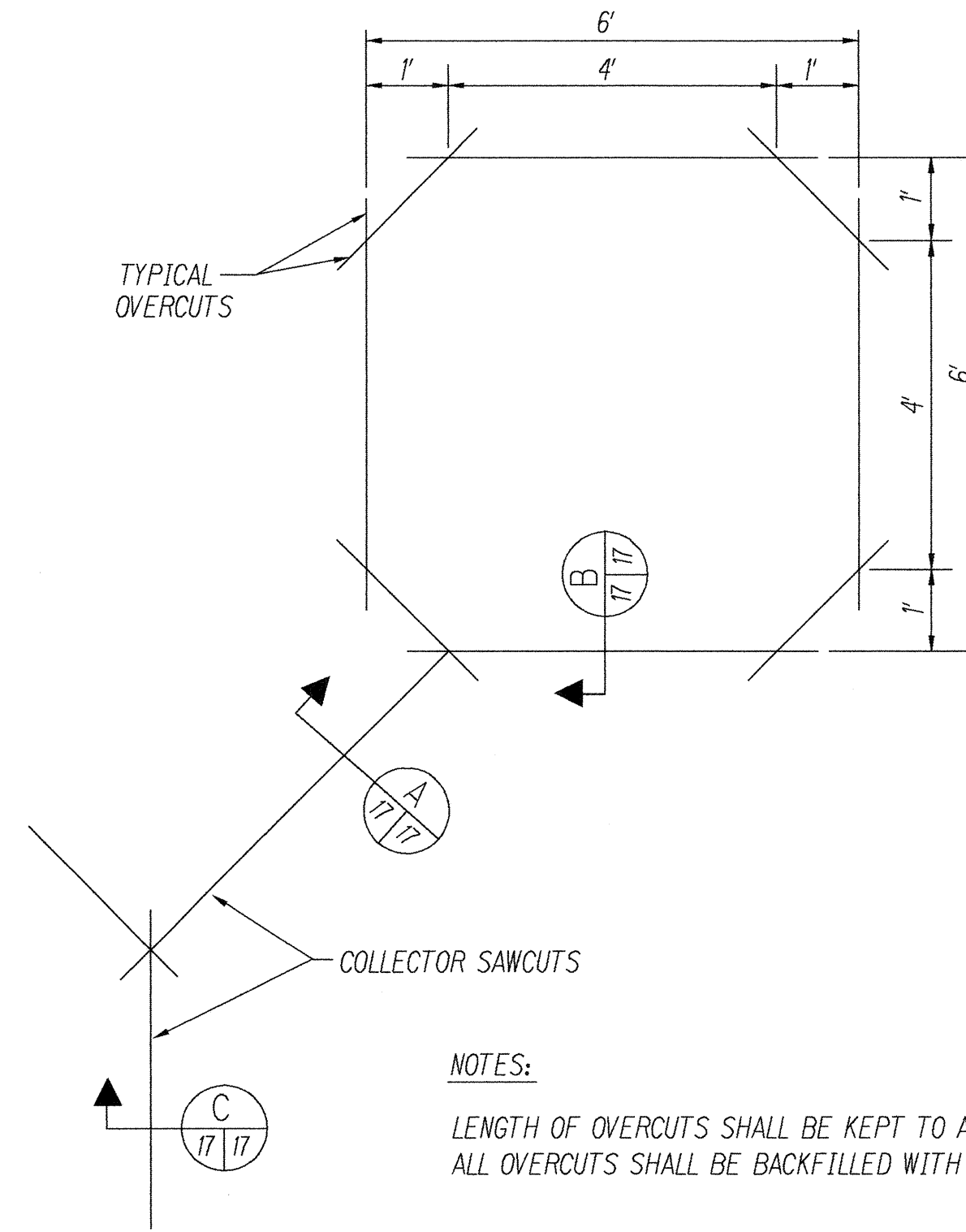


| FED. ROAD DIST. NO. | STATE | FED. AID PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS |
|---------------------|-------|--------------------|-------------|-----------|--------------|
| HAWAII | HAW. | STP-051-1(9) | 1999 | 17 | 23 |



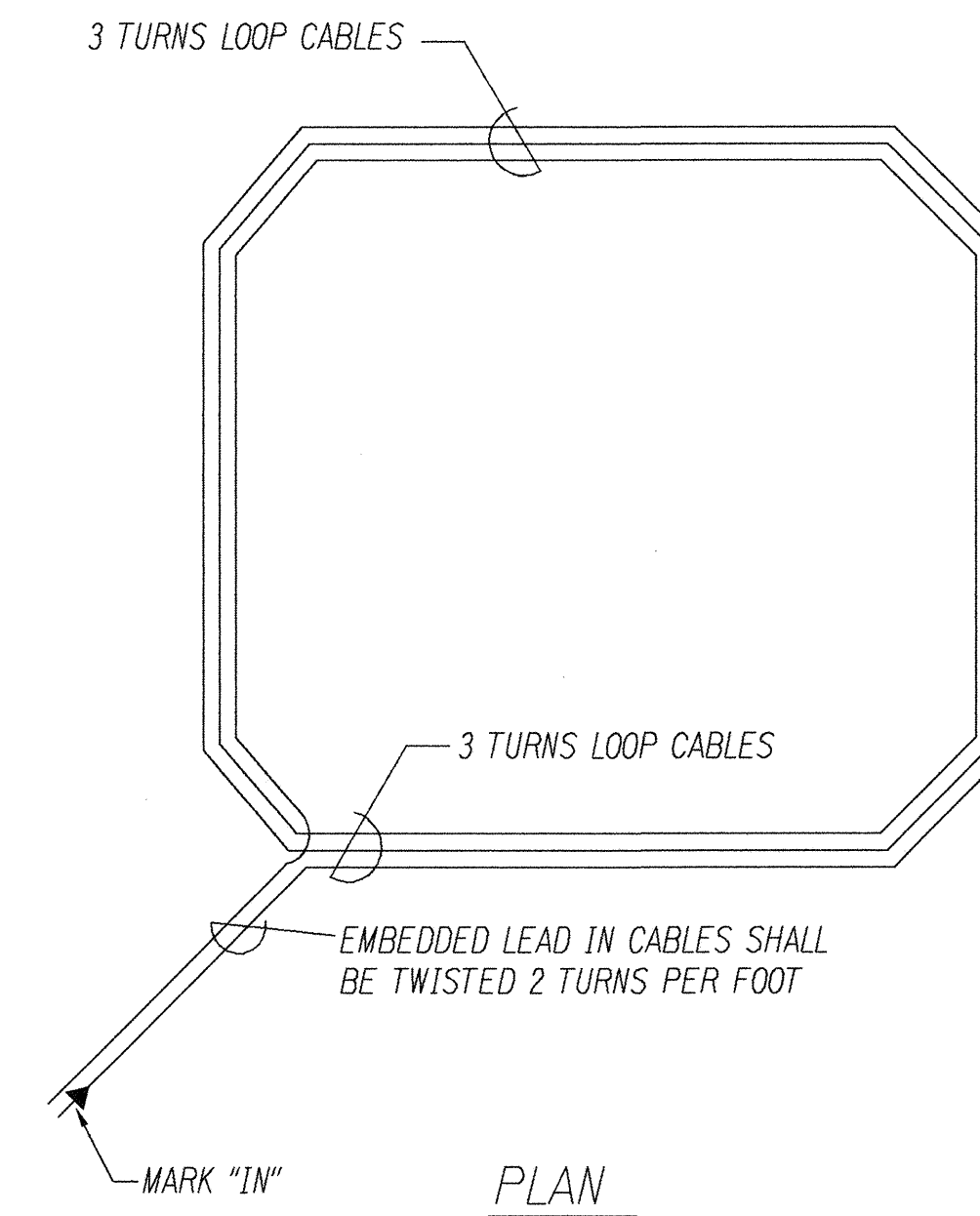
- NOTES:
1. CENTER SENSOR LOOPS IN LANES.
 2. COLLECTOR CABLES SHALL BE TWISTED 2 TURNS PER FOOT.
 3. NUMBER OF LOOPS AND LOCATIONS VARY. SEE PROJECT PLANS.
 4. NUMBER AND LOCATIONS OF COLLECTOR SAWCUTS MAY BE VARIED IN THE FIELD TO SUIT.

TYPICAL SENSOR LOOP LAYOUT
NOT TO SCALE

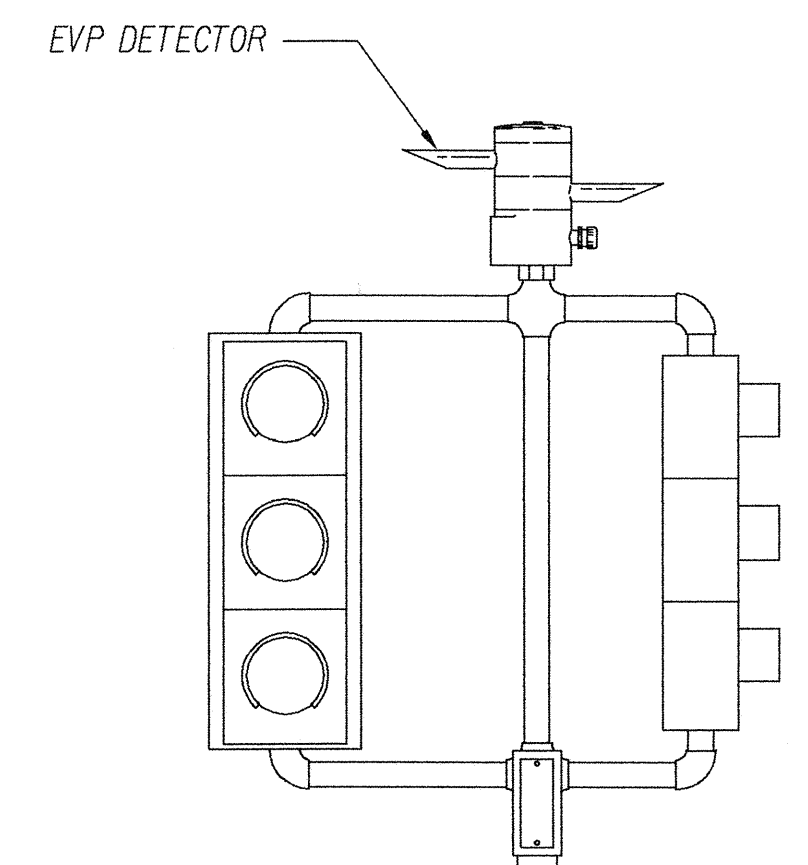


- NOTES:
- LENGTH OF OVERCUTS SHALL BE KEPT TO A MINIMUM.
ALL OVERCUTS SHALL BE BACKFILLED WITH HOT TAR.

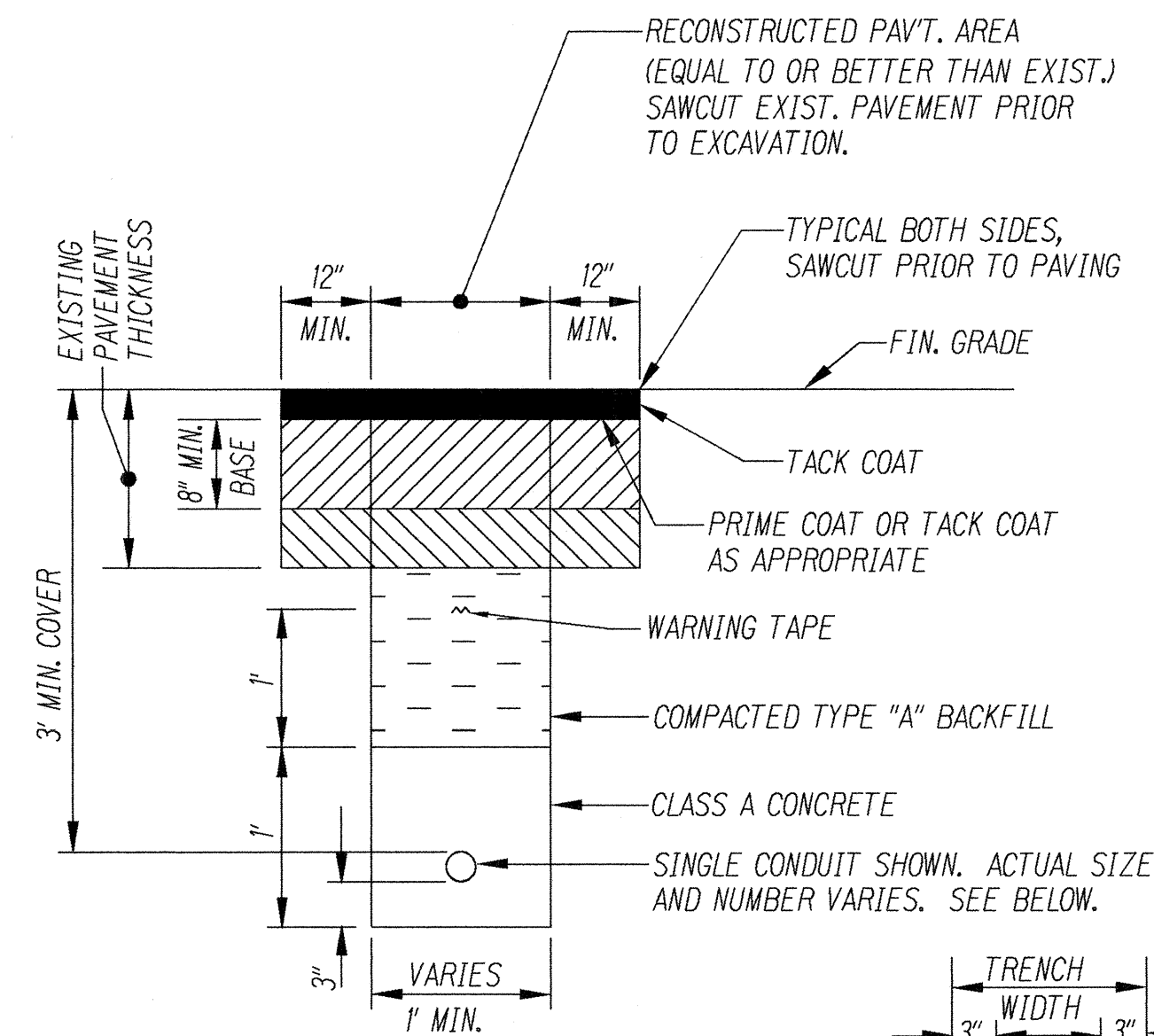
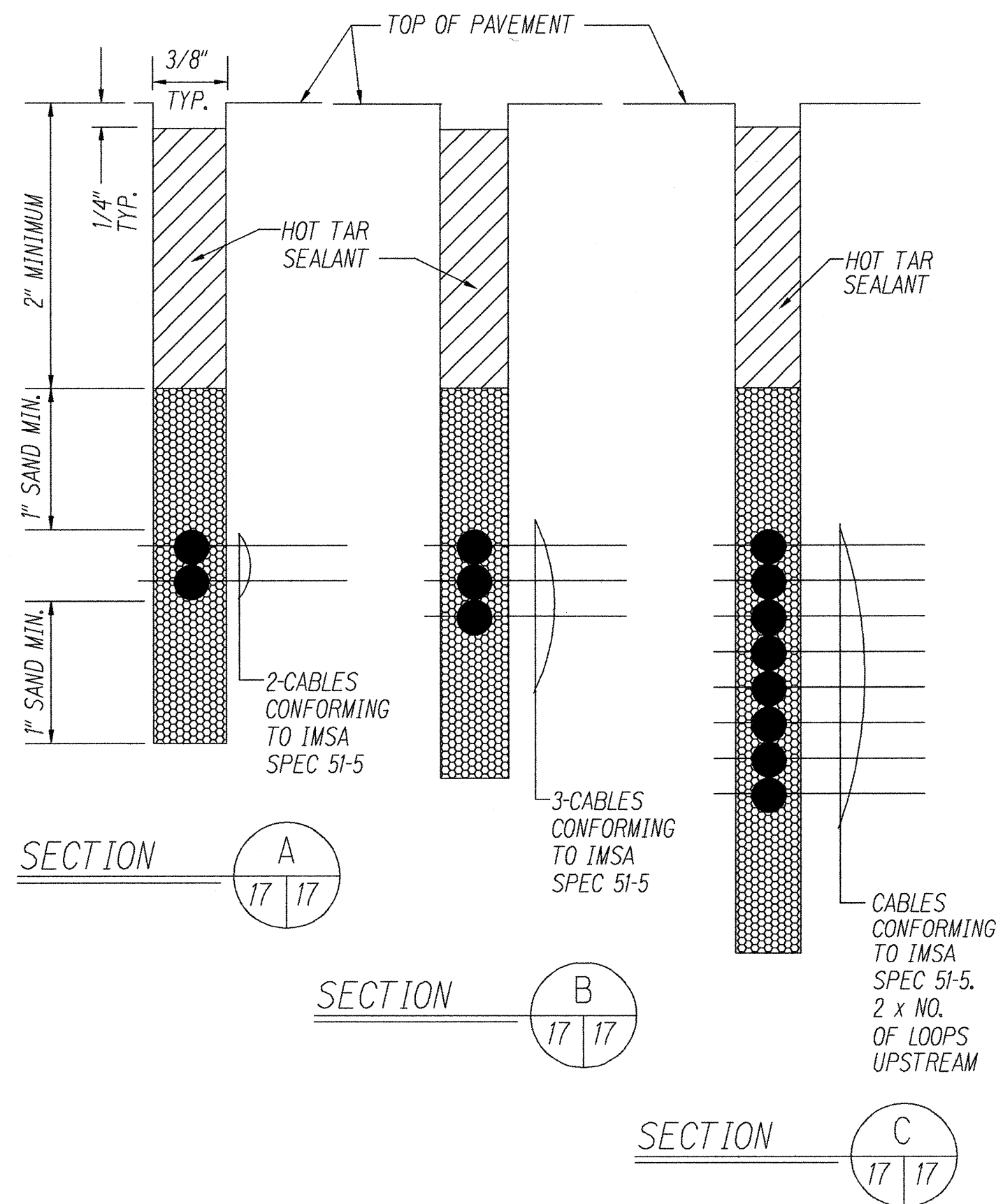
TYPICAL SENSOR LOOP SAWCUT DETAIL
NOT TO SCALE



TYPICAL SENSOR LOOP WIRING DIAGRAM
NOT TO SCALE

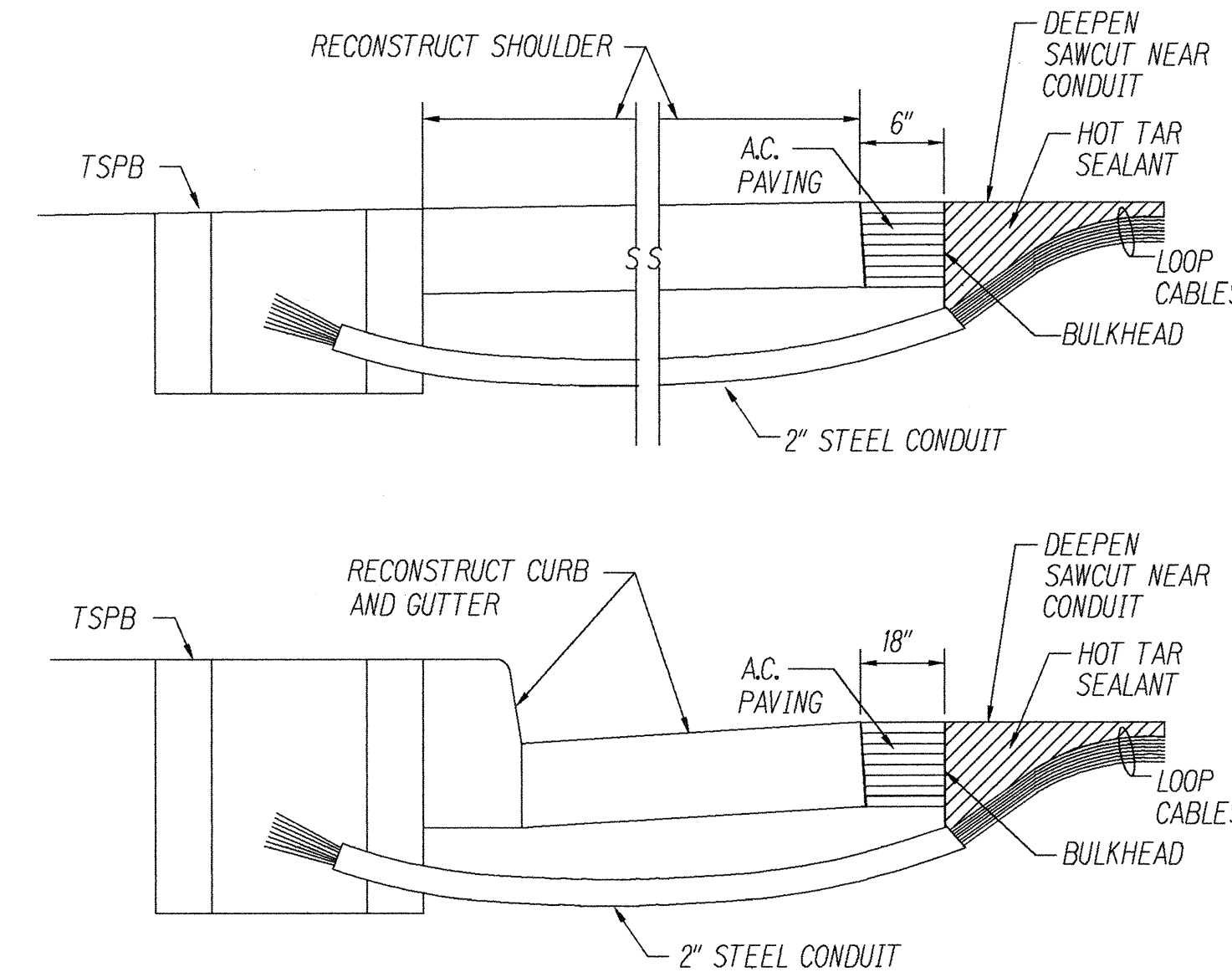


POST TOP TP-EVP MOUNTING
NOT TO SCALE



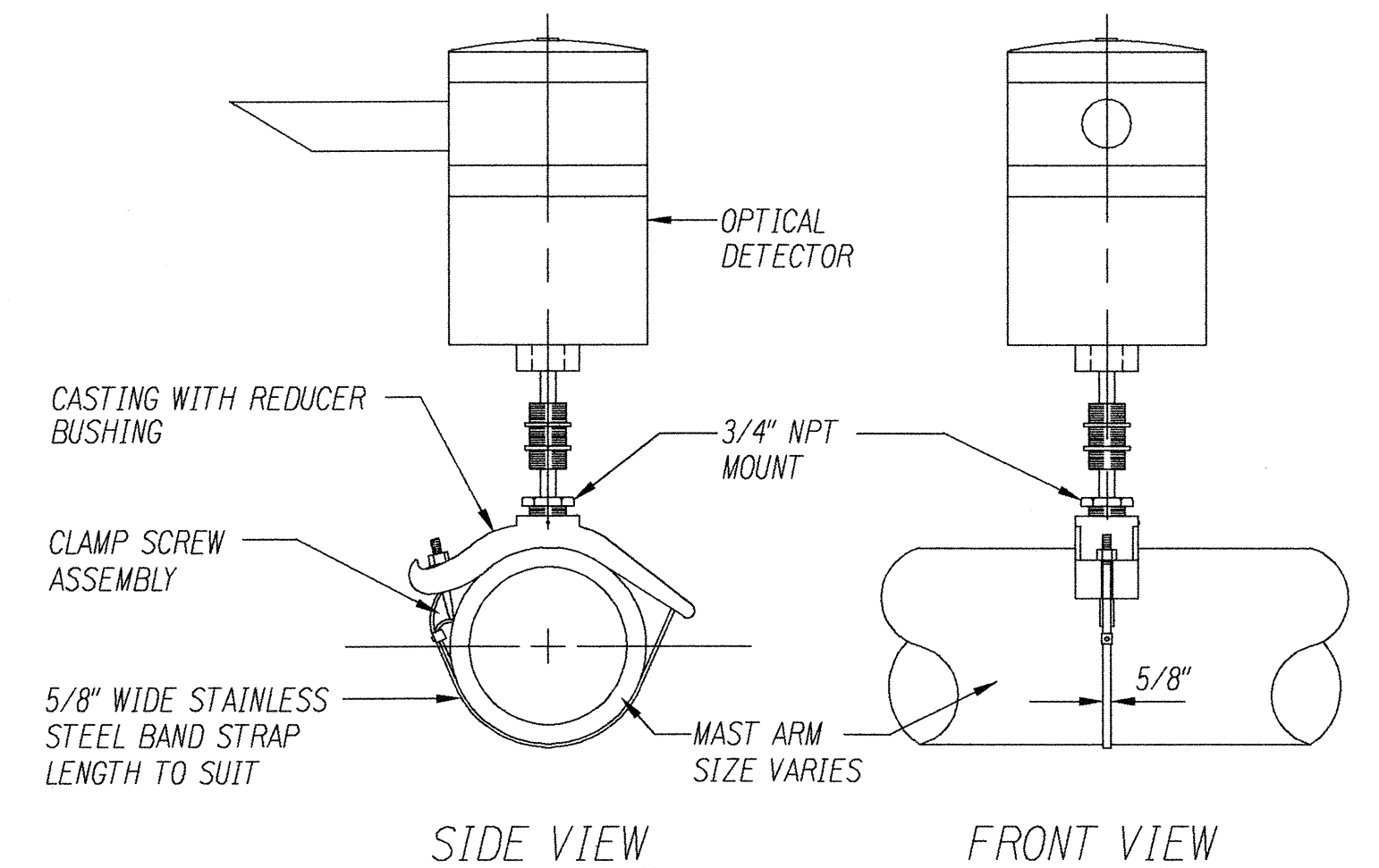
- NOTES:
1. DETAIL FOR MULTIPLE CONDUIT TRENCHES SHALL BE SIMILAR. PROVIDE 1 1/2\"

TYPICAL TRENCH DETAIL
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 AC.
 5. RECONSTRUCT CURB AND GUTTER AS REQUIRED.

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



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

OPTICAL DETECTOR FOR MAST ARM MOUNTING
NOT TO SCALE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS DETAILS

KAPULE HIGHWAY,
INTERSECTION IMPROVEMENTS
AT HAOA STREET
Federal Aid Proj. No. STP-051-1(9)

Scale: None Date: Nov. 1998

SHEET No. 1 OF 1 SHEETS

Springer 3/4/99
County Engineer, (For Work within the County R/W Only)
Dept. of Public Works, County of Kauai

| | | | | | |
|-------------|-------------|-------------|-------------|-------------|-------------|
| DATE | DATE | DATE | DATE | DATE | DATE |
| DESIGNED BY | DESIGNED BY | DESIGNED BY | DESIGNED BY | DESIGNED BY | DESIGNED BY |
| CHECKED BY | CHECKED BY | CHECKED BY | CHECKED BY | CHECKED BY | CHECKED BY |
| NOTED BY | NOTED BY | NOTED BY | NOTED BY | NOTED BY | NOTED BY |