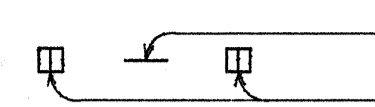
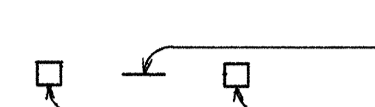
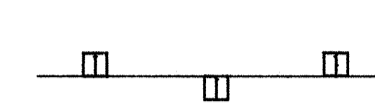
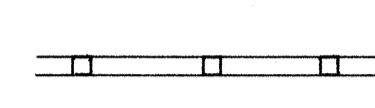



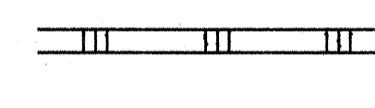

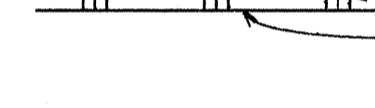


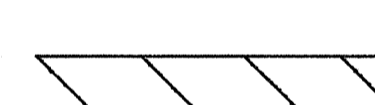

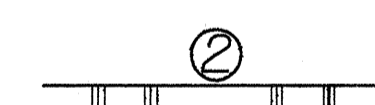






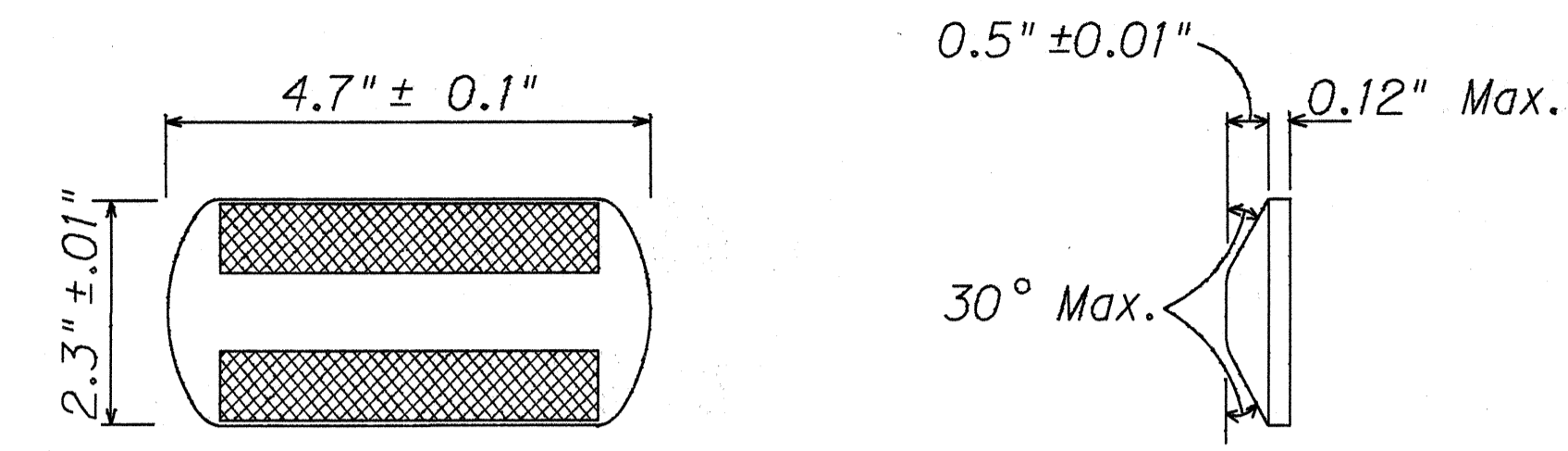
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99D-01-89	1990	6	16

LEGEND

-  4 each Type A Raised Pavement Markers
Type CL Raised Pavement Markers @ 40' - 0" o.c.
-  4 each Type J Raised Pavement Markers
Type DL Raised Pavement Markers @ 40' - 0" o.c.
-  8" White Stripe with Type CL Raised Pavement Markers @ 20'-0"o.c. (Tape, Type I or Thermoplastic Extrusion)
-  4" Double Solid Yellow with Type DL Raised Pavement Markers @ 20' - 0" o.c. (Tape, Type I or Thermoplastic Extrusion)
-  4" Double Solid Yellow Stripes with Type HL Raised Pavement Markers @ 20" - 0" o.c. (Tape, Type II or Thermoplastic Extrusion)
-  4" Yellow Edge Stripe with Type HL Raised Pavement Markers @ 40' - 0" o.c. (Tape, Type II or Thermoplastic Extrusion)
-  4" Double Solid White Stripes with Type CL Raised Pavement Markers @ 20" - 0" o.c. (Tape, Type I or Thermoplastic Extrusion)
-  Lane Change Restriction Marking
4 each Type A Raised Pavement Markers
Type CL Raised Pavement Markers @ 20' - 0" o.c.
4" White Stripe (Tape, Type I or Thermoplastic Extrusion)
-  4" White Edge Stripe with Type CL Raised Pavement Markers at 40'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)
-  4" White Guide Lines (Thermoplastic Extrusion)
-  Transverse Median Marking (Tape, Type II or Thermoplastic Extrusion)
-  Transverse Shoulder Marking (Tape, Type II or Thermoplastic Extrusion)
-  Channelizing Island or Deceleration Lane Gore (Tape, Type II or Thermoplastic Extrusion)
-  Crosswalk and Stop Line. All Stop Lines shall be 10' - 0" from Crosswalk unless otherwise noted. The circled number indicates the number of lanes for payment. (Thermoplastic Extrusion)
-  Pavement Arrow (Tape, Type I or Thermoplastic Extrusion)
-  Pavement Word (Tape, Type I or Thermoplastic Extrusion)
-  4 Each Type J Raised Pavement Markers
Type DL Raised Pavement Markers @ 40'-0" o.c.
Type HL Raised Pavement Markers (Reflective Surface facing no-passing direction)
-  4" Single Solid Yellow Stripe (Tape, Type I or Thermoplastic Extrusion)
-  Extension of Edge Line, 4" Wide x 2'-0" Long White Stripe @ 10'-0" o.c. w/Type CL Markers @ 40'-0" o.c. (Thermoplastic Extrusion)

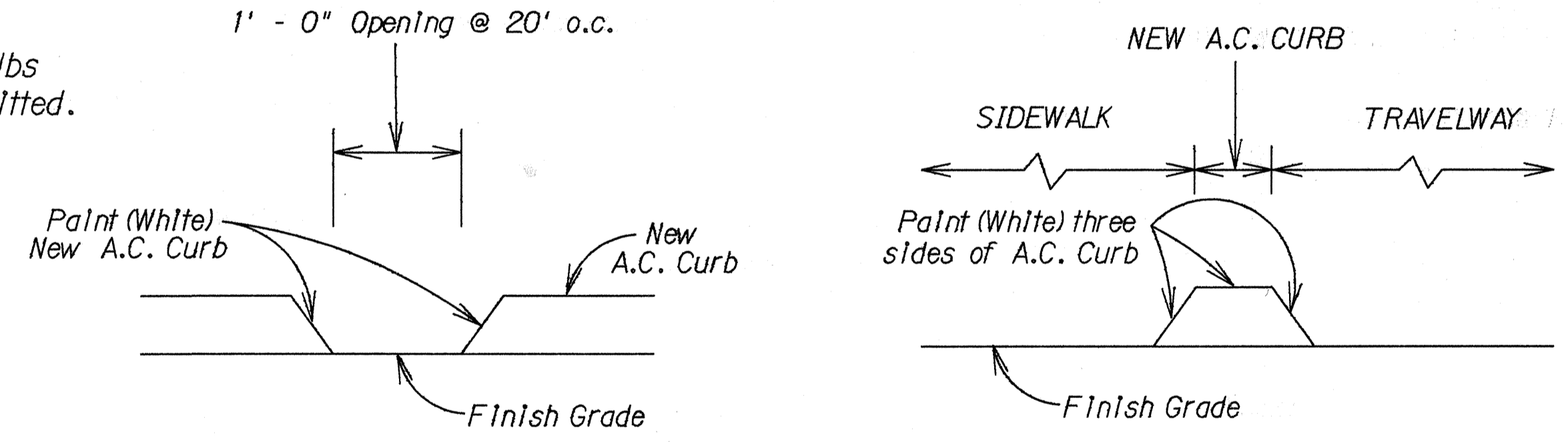
NOTES

1. Layout of pavement markings and striping shall be done by the Contractor and approved by the Engineer prior to any installation work.
2. Existing pavement markings not incorporated in the final traffic pattern shall be removed as directed by the Engineer. Costs shall be incidental to the various pavement marking items.
3. Raised pavement markers shall not be installed within crosswalks.
4. Details of Type C, Type D and Type H Markers on Standard Plan Nos. TE-30, TE-31 and TE-32 shall be deleted and replaced with details of Type CL, Type DL and Type HL Markers as shown on this sheet. All references to Type C, Type D, and Type H Markers in the plans shall mean Type CL, Type DL and Type HL Markers.
5. Final locations of all signs shall be approved by the Engineer prior to any installation work.
6. Existing signs not shown on these plans shall remain as posted unless otherwise directed by the Engineer. Removal and disposal of existing signs and/or posts as designated on these plans shall be incidental to the various signing items.
7. Final locations of all Stop Lines shall be approved by the Engineer prior to installation.
8. All pavement striping shall be as noted on the Legend or plans.
9. All preformed pavement marking tapes over existing pavement shall be applied with an approved primer as recommended by the tape manufacturer and as approved by the Engineer. The primer shall be allowed to dry to the tacky stage prior to tape application.
10. Contractor shall verify dimensions of existing bridge structure before fabricating sign support.
11. Contractor shall use non-pneumatic drill for drilling anchor bolt holes.
12. Adhesive anchors shall have a minimum ultimate shear strength of 10,000 lbs and shall be approved by the Engineer. Mechanical anchors will not be permitted.



TYPE CL
Red-Clear Reflective Marker
or
TYPE DL
Two-Way Yellow Reflective Marker
or
TYPE HL
One-Way Yellow Reflective Marker

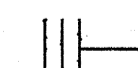
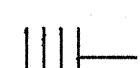
Not to Scale



PAINTING OF NEW A.C. CURB

Not to Scale

LEGEND

-  Type 3, Reflector Marker (RM-3)
-  Type 4, Reflector Marker (RM-4L or RM-4R)

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	
No.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

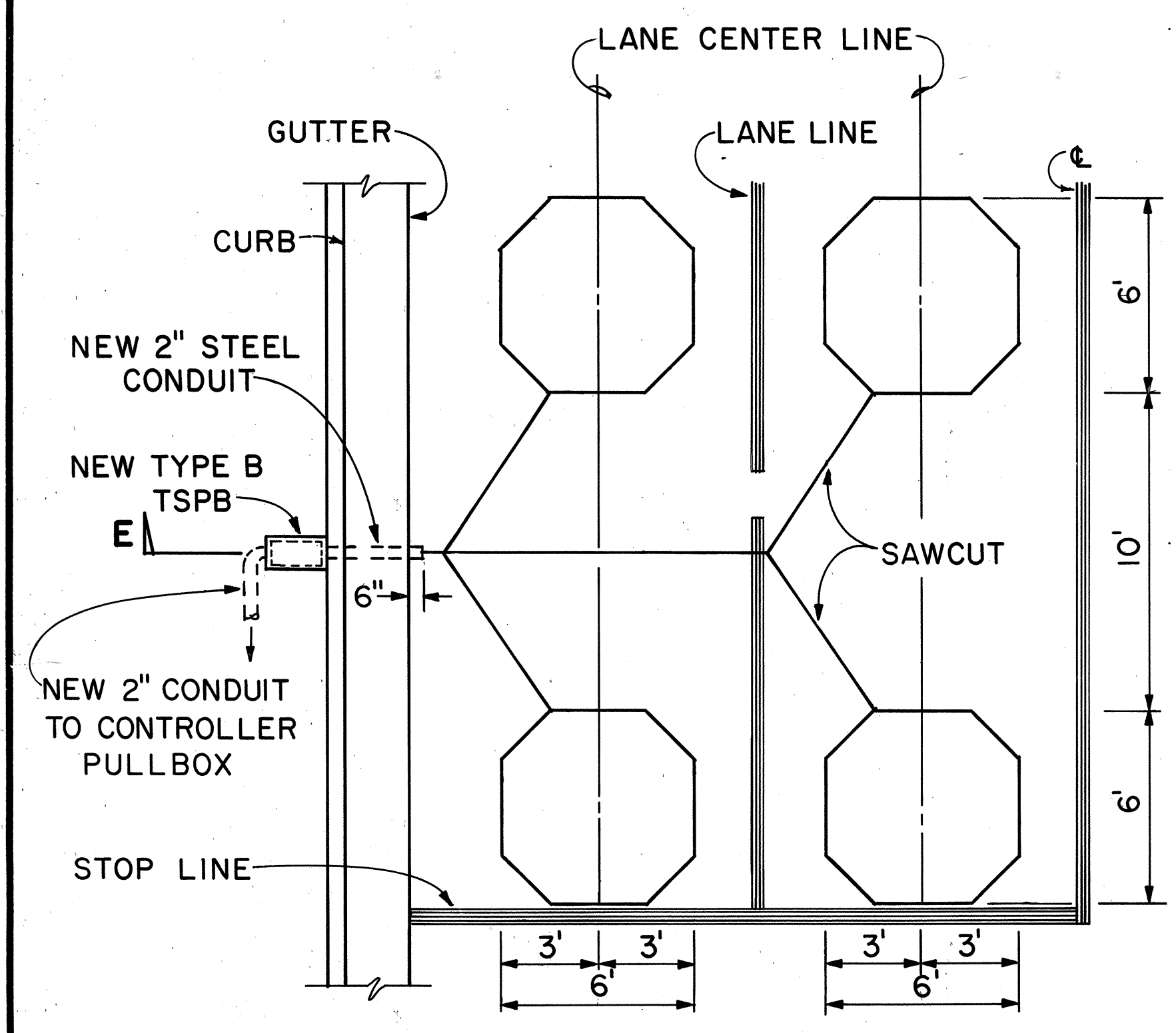
PAVEMENT MARKING
LEGEND, DETAILS & NOTES

WAIAWA DRIVE
ADDITION OF RIGHT TURN LANE
INTO FARRINGTON HIGHWAY
PROJ. NO. 99D-01-89

Date: March 1990

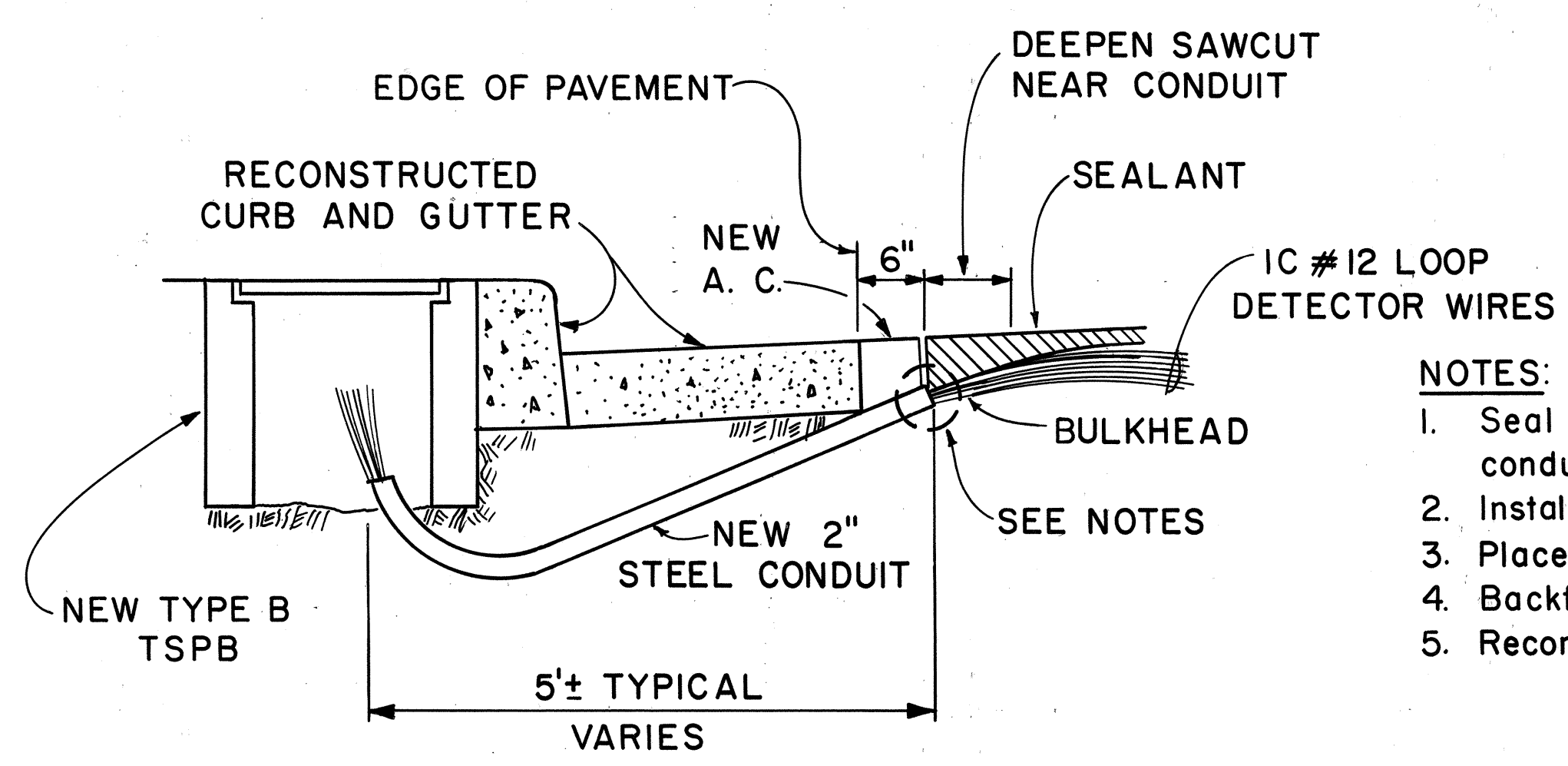
SHEET No. 71 OF 4 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	00D-01-80	1990	9	16



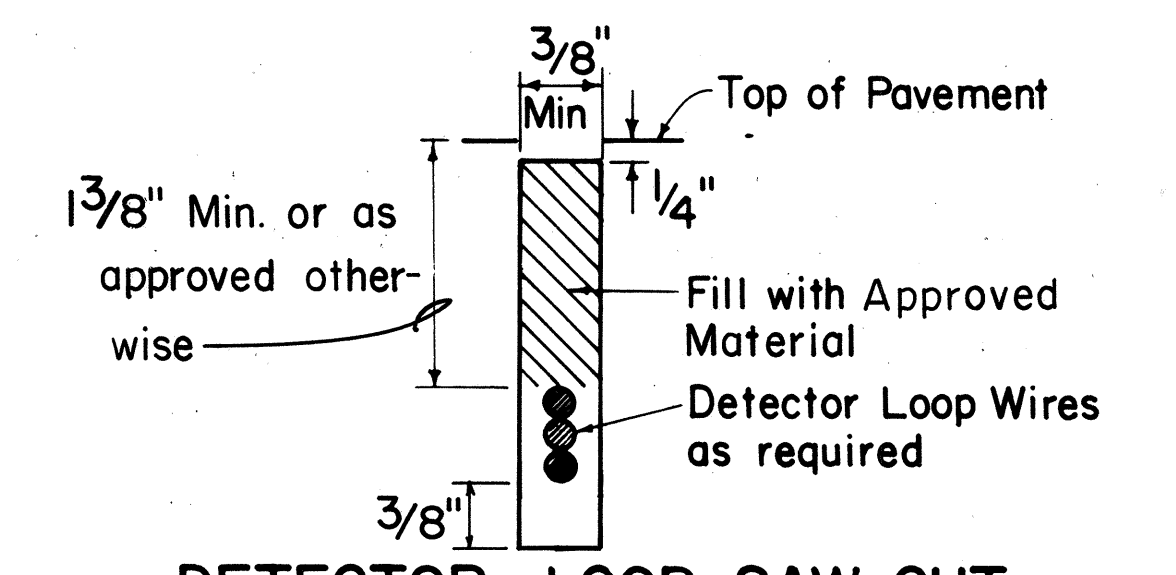
NOTE: Add one pair of loops for each additional lane

TYPICAL LAYOUT AT STOPLINES

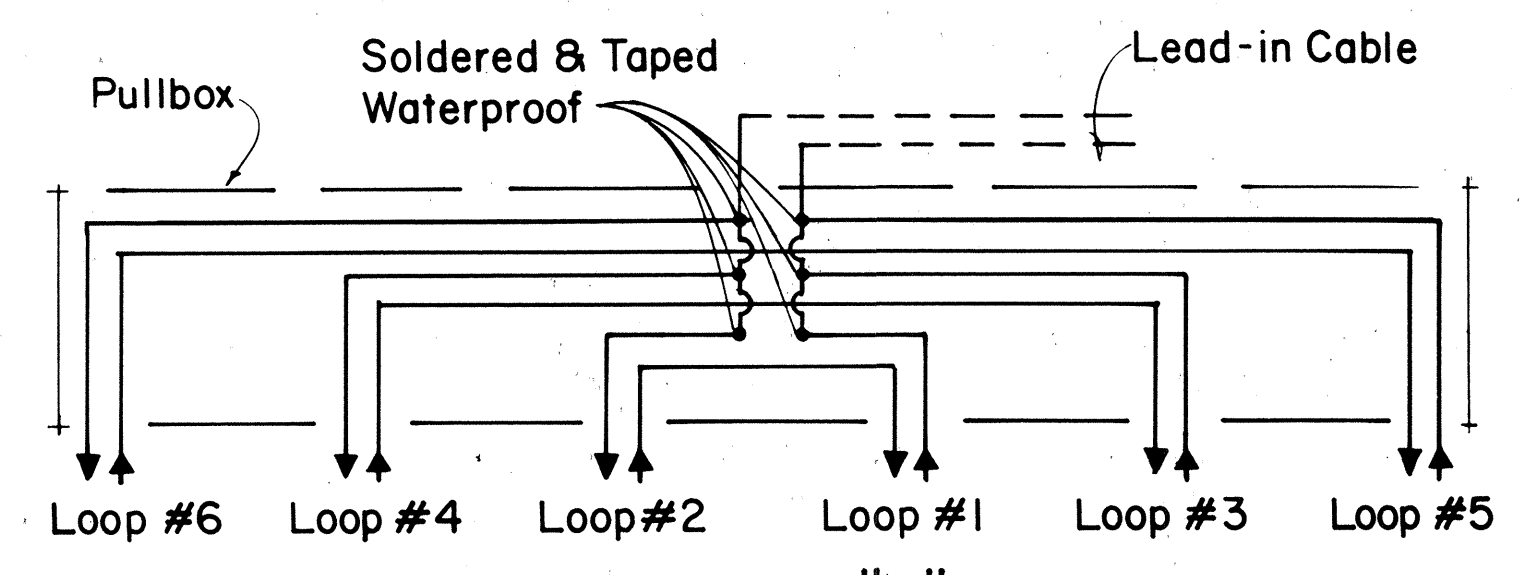


- NOTES:**
1. Seal roadway end of conduit after installation of conductors
 2. Install bulkhead across conduit trench
 3. Place approved sealant in sawcut
 4. Backfill over conduit with new A.C.
 5. Reconstruct curb and gutter as required

SECTION E

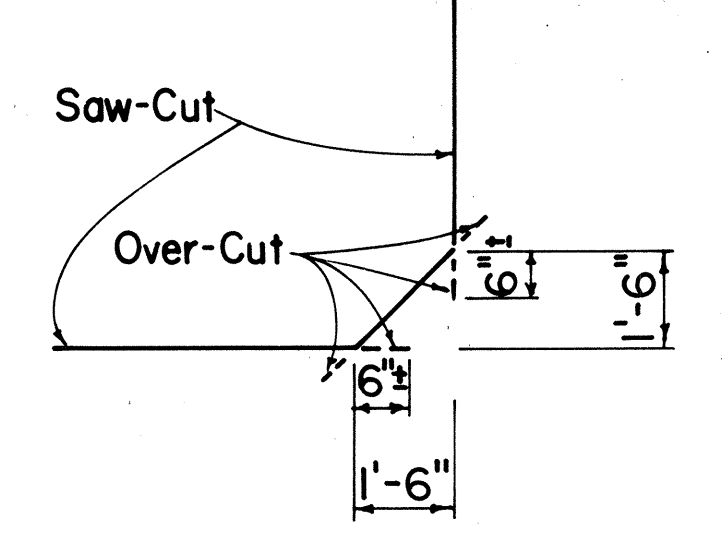


DETECTOR LOOP SAW-CUT SECTION A (TYPICAL)

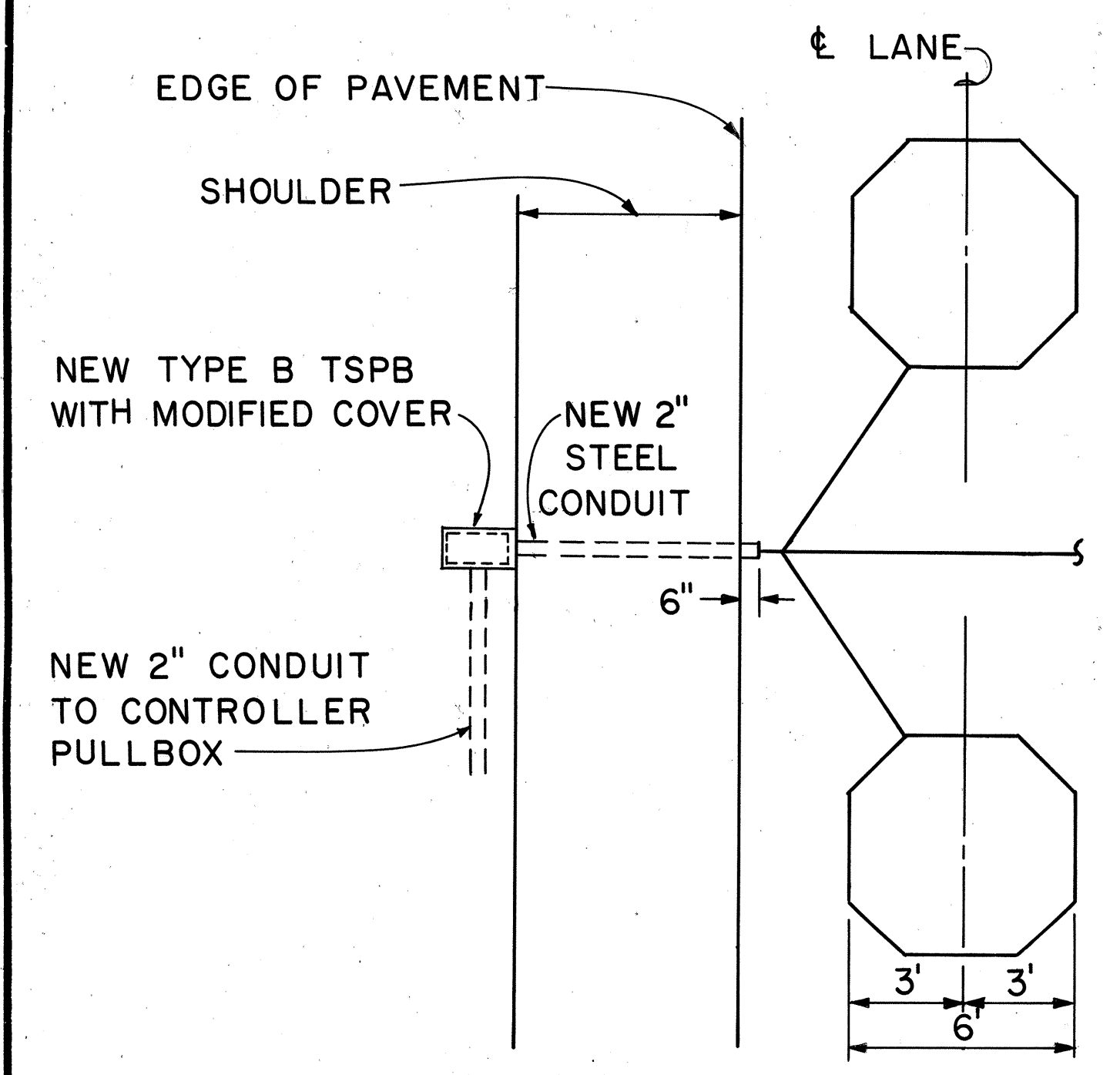


TYPICAL SERIES-PARALLEL LOOP CONNECTION

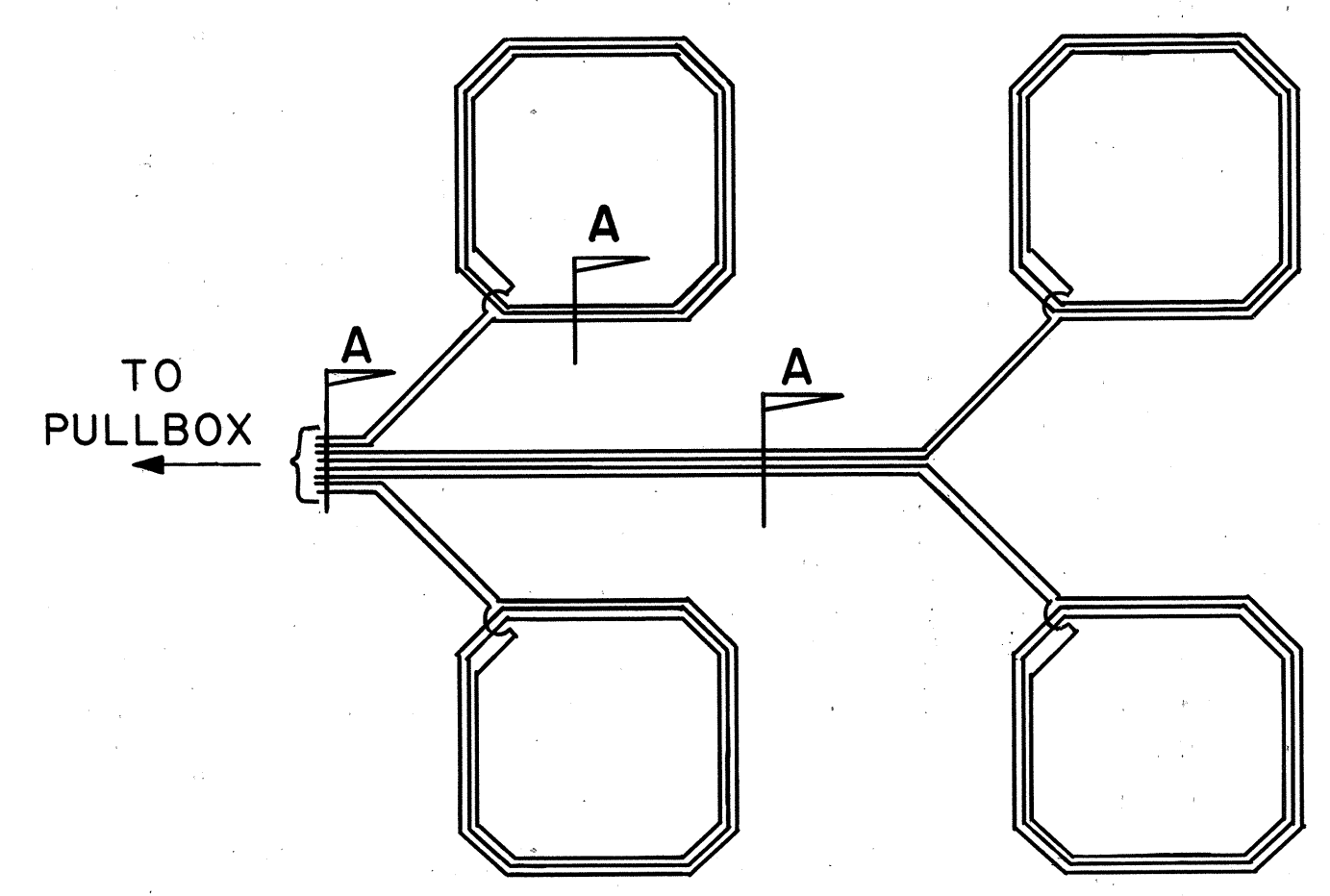
Note: Back-Fill Over-Cuts with Approved Material



DETAIL "B" SAW-CUT AT CORNERS

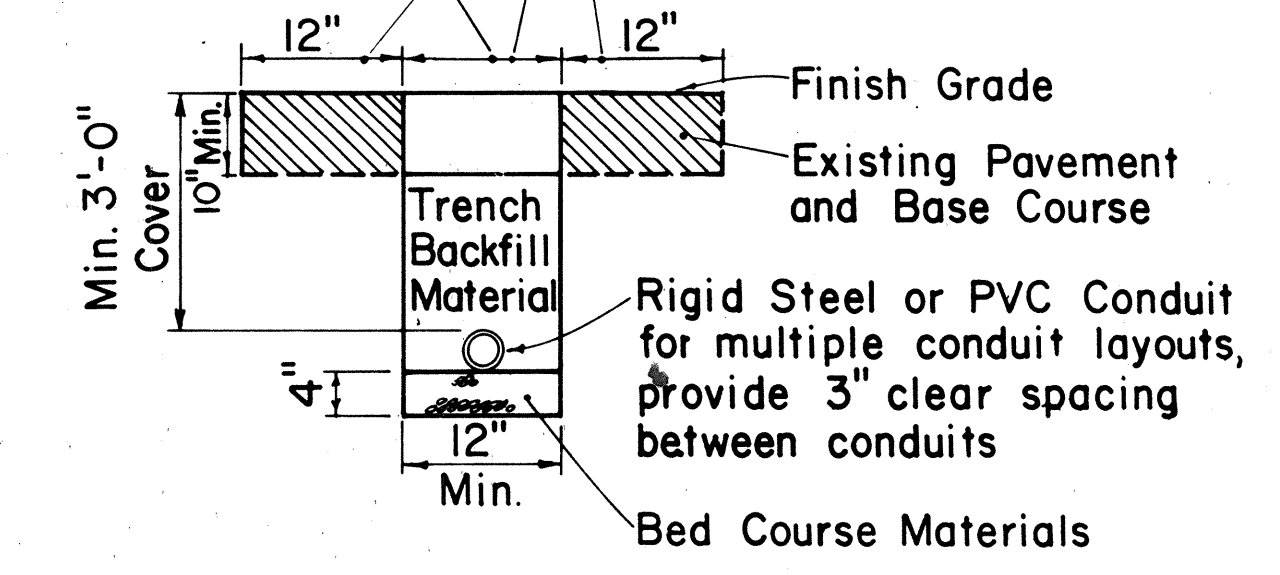


TYPICAL LAYOUT AT SHOULDER AREAS



WIRING DIAGRAM

If grassed area, provide 6" thick top soil & sod
 If paved area, reconstruct Pavement or Sidewalk. Saw-cut existing paved areas prior to excavation.



TYPICAL TRENCH SECTION FOR CONDUIT

- NOTE:**
1. All conduits under roadways shall be steel or PVC schedule 80.

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
DESIGNED BY	_____
CHECKED BY	_____
NO. _____	_____

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
LOOP DETECTOR DETAILS

*KAIAWA DRIVE
 ADDITION OF RIGHT-TURN LANE
 INTO FARRINGTON HIGHWAY
 PROJECT No. 00D-01-80*

Scale: Not to Scale Date: Mar, 1990
 SHEET No. 74 OF 4 SHEETS