

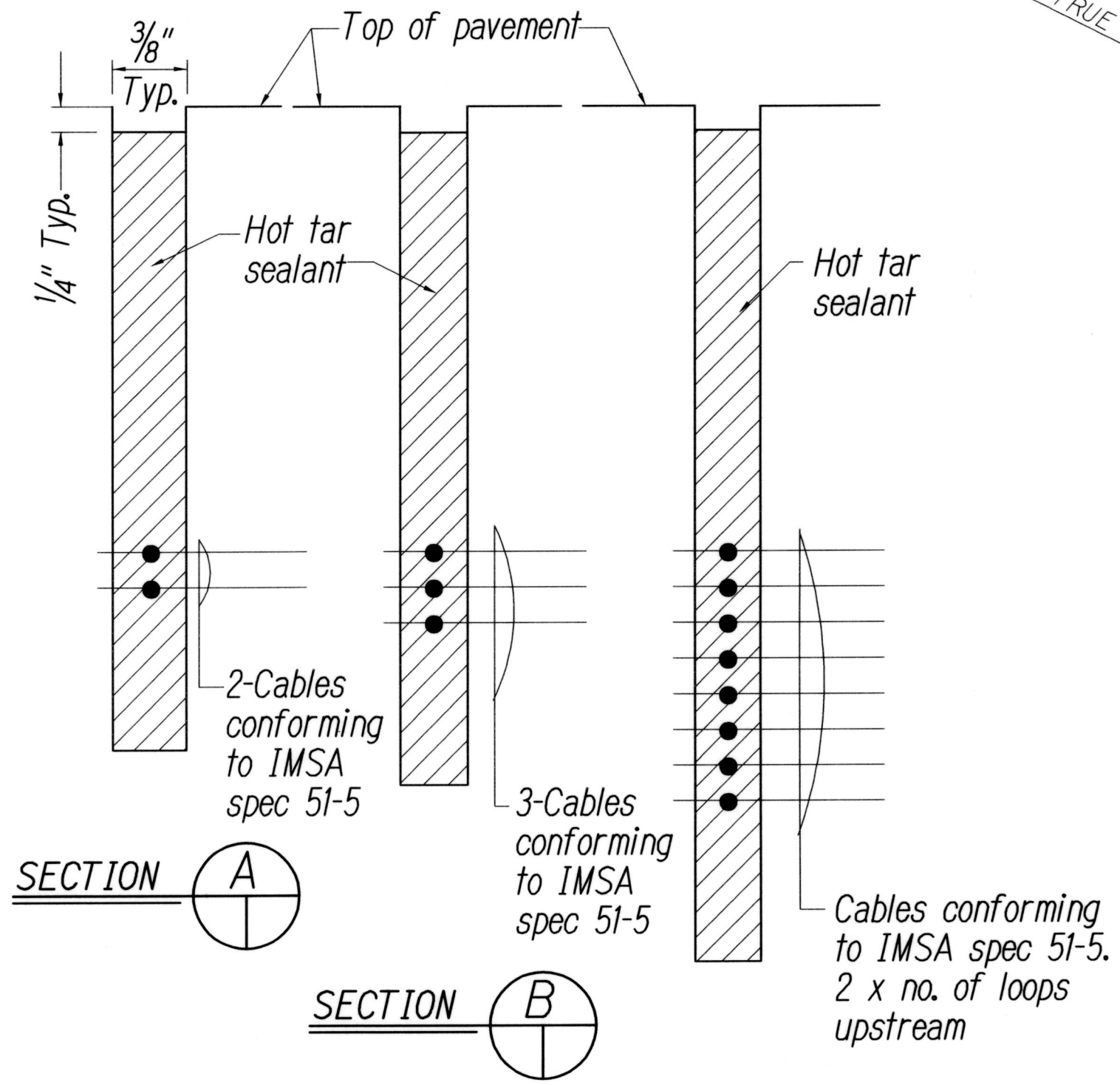
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	310A-01-13M	2013	21	30

GENERAL NOTES:

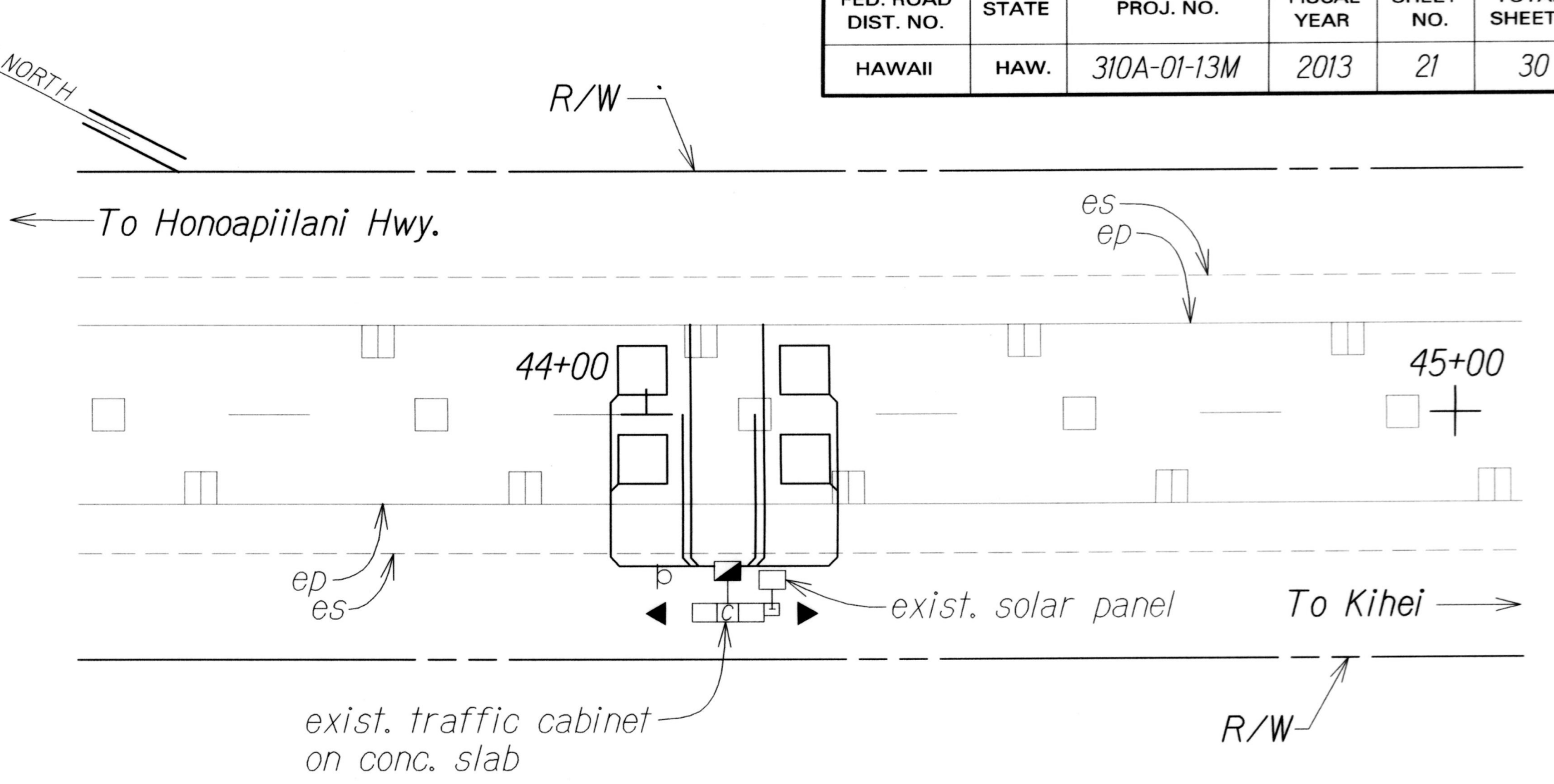
1. The location of new inductance loops, shall be staked out in the field by the Contractor and approved by the Engineer prior to installation.
2. The Contractor shall inform the Engineer the Planning Branch @ 808 587-1838 at least three days prior to saw-cutting pavement and installing inductance loops.
3. Continuity of inductance loops and liad-in wires shall be tested and warranted for one year from date of acceptance by the Contractor.
4. Upon completion of sleeve, pull in in-bound lanes loop detector's cable and class 1 BL sensor cables, cables shall be tested for acceptance before and after installation into sleeve.
5. The Contractor shall restore all affected areas to their original condition. This item of work shall not be paid for separately , but shall be considered incidental of work of other paid items.
6. The Contractor shall be held liable for any damages incurred to the existing utilities and underground structures as a result of his operations. All damaged portions shall be replaced in accordance with the standards and specifications of the affected utility company at no cost to the State.

LOOP LAYOUT NOTES:

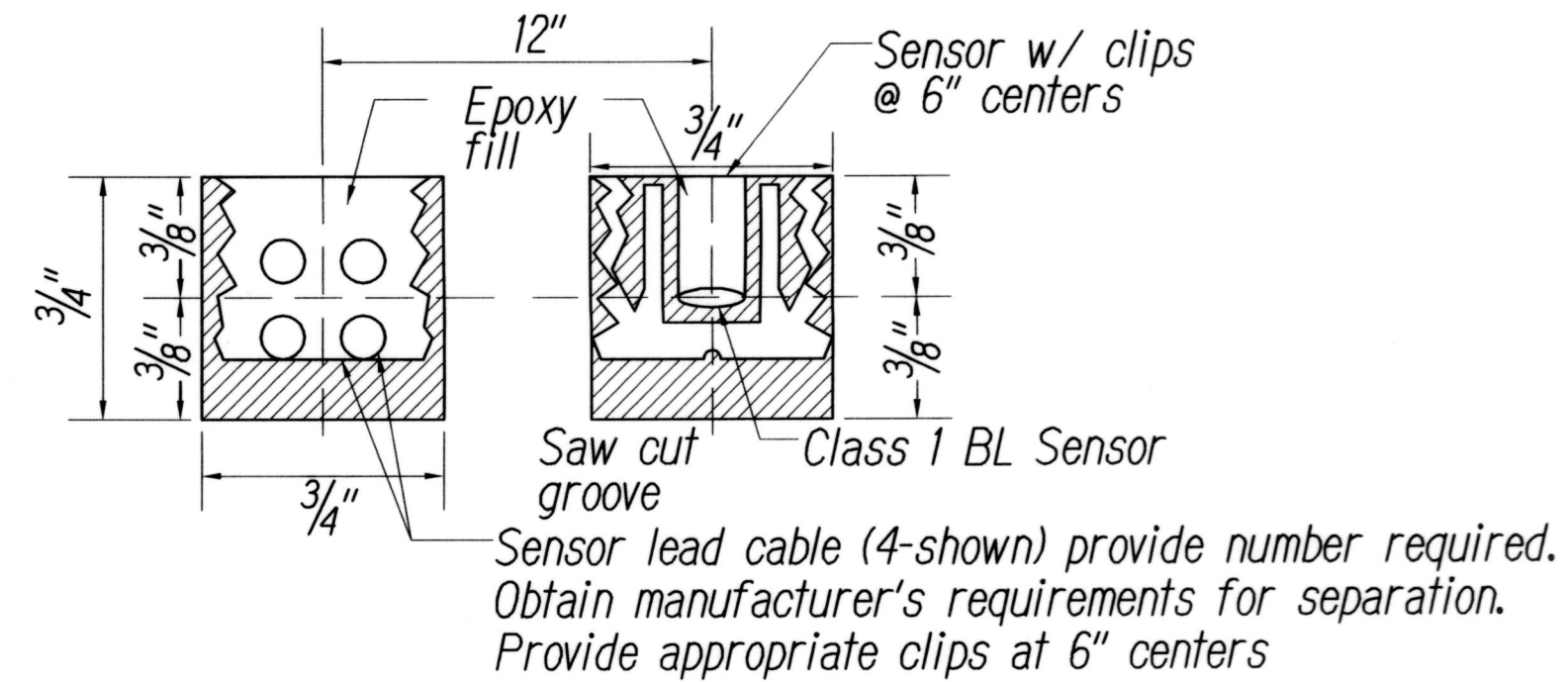
1. Detector loop shall consist of four turns of 1c#12 cable meeting IMSA spec 51-5 or equivalent embedded in a 3/8" minimum sawcut, except as noted.
2. Loop and lead-in to the first pullbox shall be one continuous wire. Lead -in wires from the same loop shall be twisted in pairs, two turns per foot. Do not twist on loop-pair with another loop-pair.
3. All lead-in wires shall be crimped with open end lugs that will fit into the terminal board slots snugly.
4. Stagger traffic loops on roadway less than 12 foot lane width.
5. The Contractor shall connect the inductance wires on each terminal slot.
6. The left lane in the direction of traffic flow is designated as lane 1, and the lane next to its right as lane 2 and so on as indicated on plans.
7. Vacuum and clean sawcut thoroughly before installing sensors and/or cables and filling with hot tar or epoxy sealant.
8. All loop lead-in wires in all enclosures including pullboxes shall be identified and labeled by direction of traffic flow and lane number as shown on plans.
9. All cables and wires terminated within an enclosure shall have a minimum 12" additional slack.



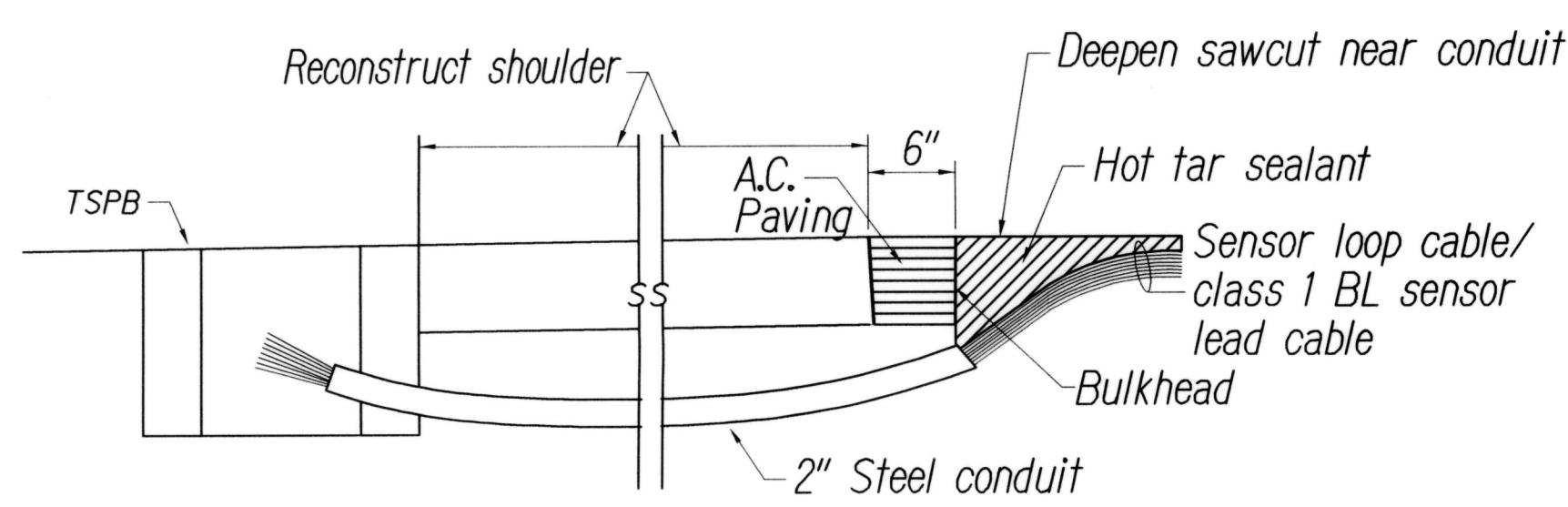
TYPICAL SECTION THROUGH SENSOR LOOP
Not to Scale



NORTH KIEHI ROAD (STA. 44+10)
ROUTE 310, M.P. 0.859
Not To Scale

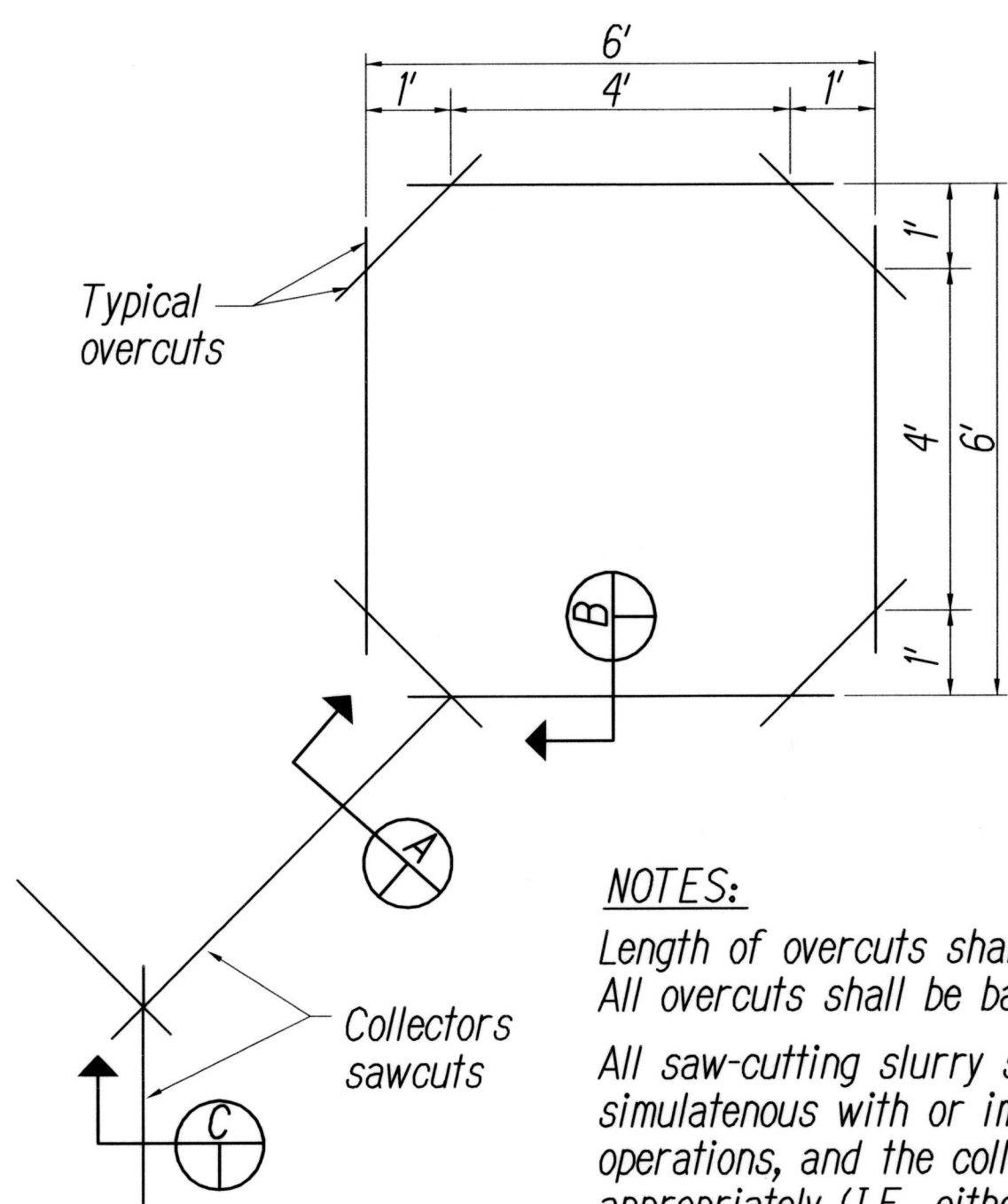


CLASS 1 BL SENSOR AND
LEAD INSTALLATION DETAIL
Not to Scale



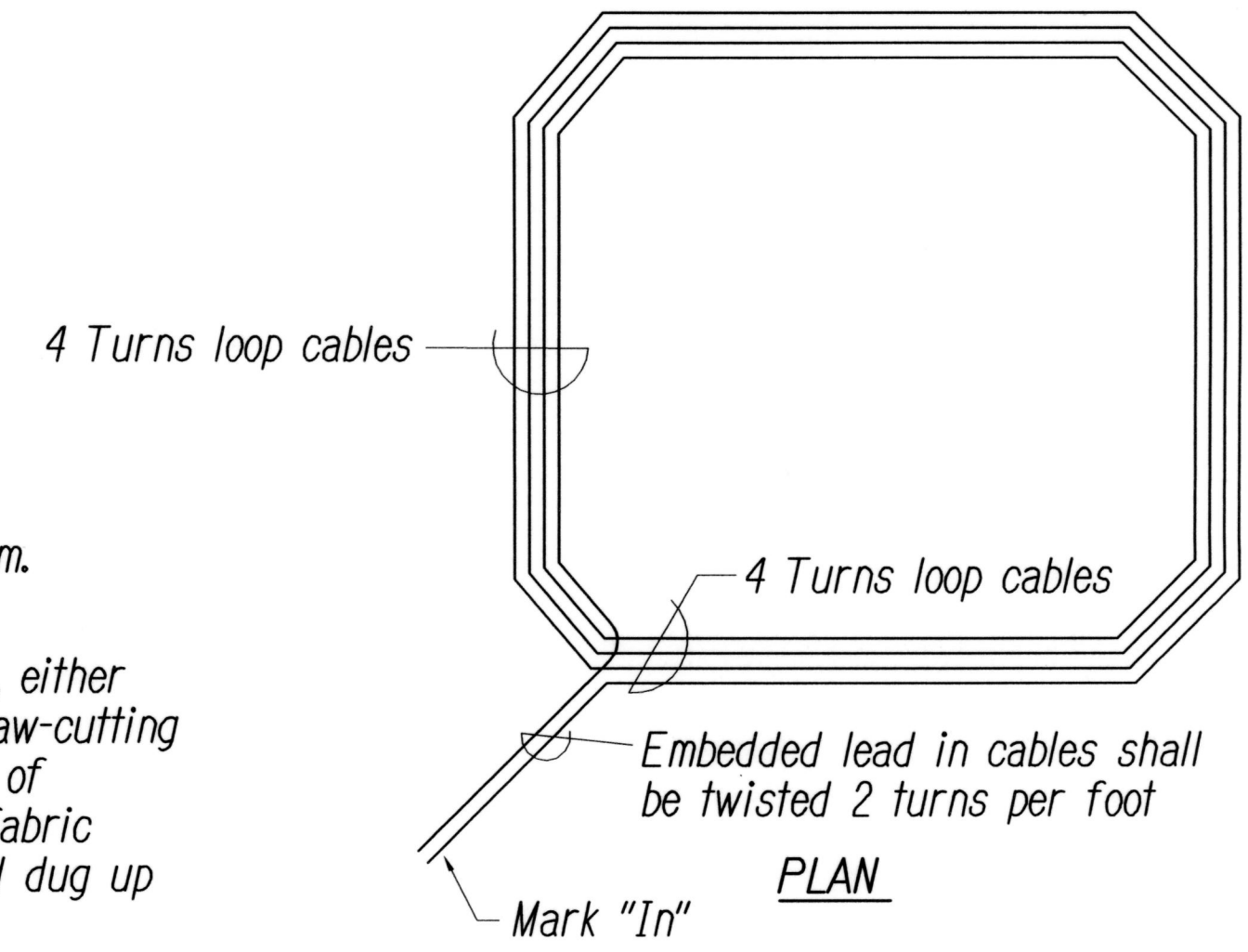
- NOTES ON CONSTRUCTION AT END OF SAWCUT
1. Seal roadway end of conduit after installation of conductors
 2. Install bulkhead across conduit trench.
 3. Place hot tar in sawcut.
 4. Backfill over conduit with new A.C.
 5. Reconstruct curb and gutter as required.

DETAIL OF SENSOR LOOP/ CLASS 1
BL SENSOR AT EDGE OF ROADWAY
Not to Scale



- NOTES:
- Length of overcuts shall be kept to a minimum. All overcuts shall be backfilled with hot tar.
- All saw-cutting slurry shall be wet vacuumed, either simultaneous with or immediately after the saw-cutting operations, and the collected slurry disposed of appropriately (I.E., either, placed in a filter fabric lined filtration box or in a filter fabric lined dug up retention/percolation basin, and after filtration/percolation, the filter fabric and the retained sediments, disposed of appropriately).

TYPICAL SENSOR LOOP SAWCUT DETAIL
Not to Scale



TYPICAL SENSOR LOOP
WIRING DIAGRAM
Not to Scale

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

**TRAFFIC COUNTING
STATION DETAILS**

NORTH KIEHI ROAD RESURFACING
Honoapiilani Highway to Piilani Highway
Project No. 310A-01-13M

Scale: As Shown Date: November, 2012

SHEET No. 1 OF 1 SHEETS

DATE	_____
SURVEY PLOTTED BY	_____
ORIGINAL PLAN	_____
DESIGNED BY	_____
NOTED BY	_____
CHECKED BY	_____
NO.	_____