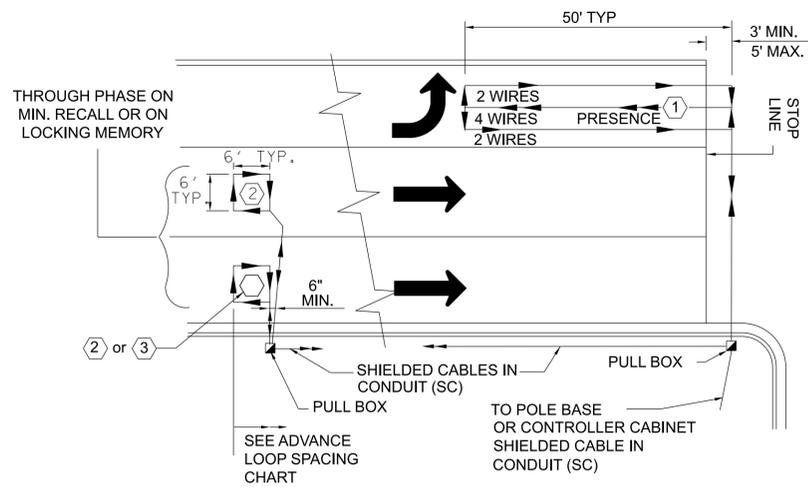
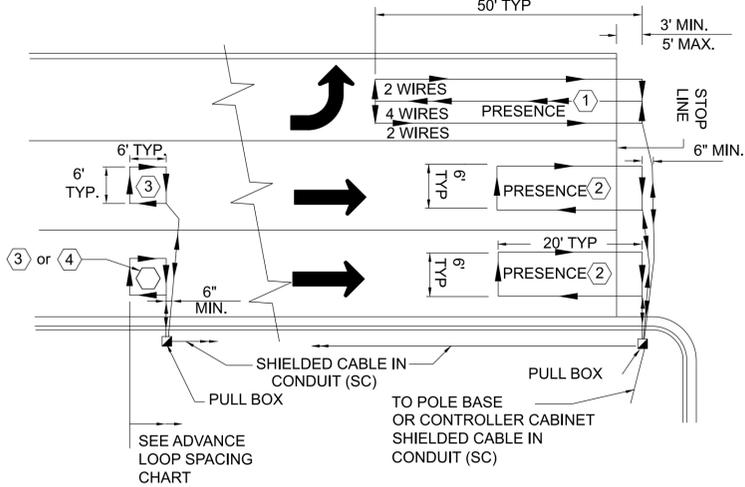


TYPICAL LOOP DETECTOR INSTALLATION LAYOUT

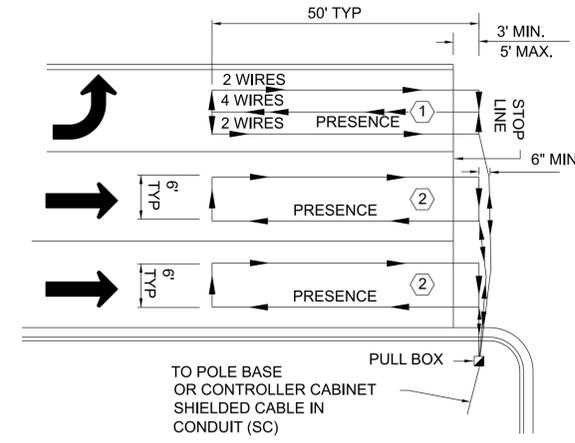
*** REFER TO T-SG-2 FOR PULL BOX CONDUIT DETAILS



TYPICAL HIGH SPEED APPROACH*
* REQUIRES PHASE RECALL OR PHASE DETECTOR UNIT SETTING LOCKED

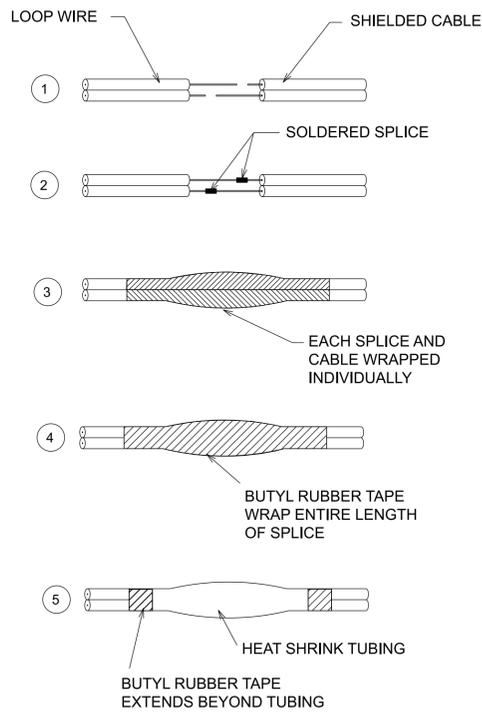


ALTERNATE HIGH SPEED APPROACH**
** FOR USE WHEN PRESENCE DETECTION IS REQUIRED



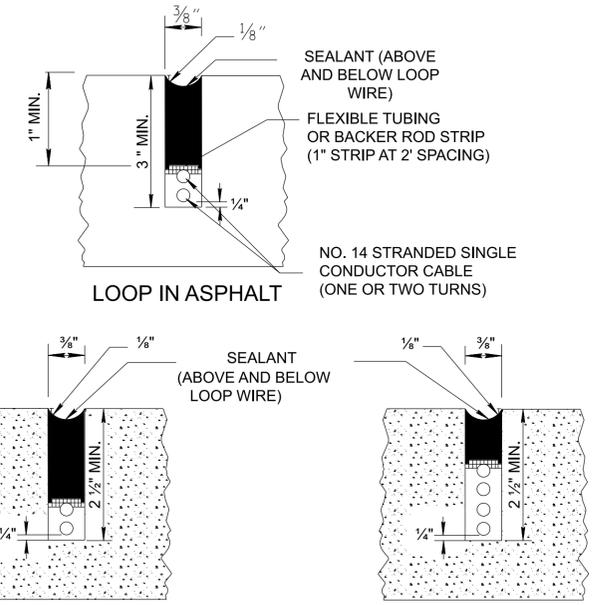
30 MPH OR LESS

(2) = DETECTOR NO. (LOOPS WITH SAME NUMBER INDICATES WIRED IN SERIES) ALL LOOPS TO BE CENTERED IN TRAVEL LANE ALL DISTANCES ARE FROM THE STOP LINE



SPLICE DETAILS

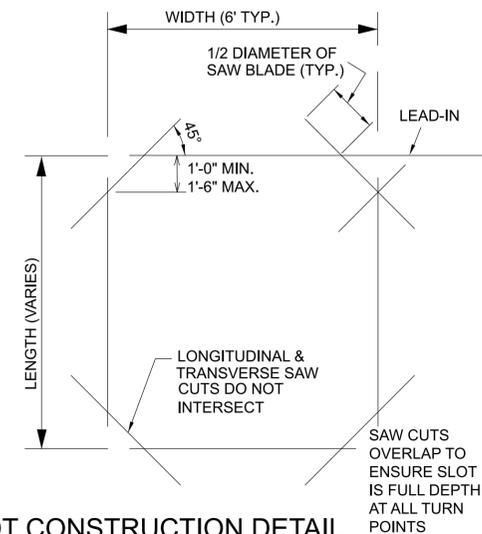
NOTE: FINISHED SPLICE MUST BE WATERPROOF.



LOOP IN ASPHALT

LOOP IN CONCRETE

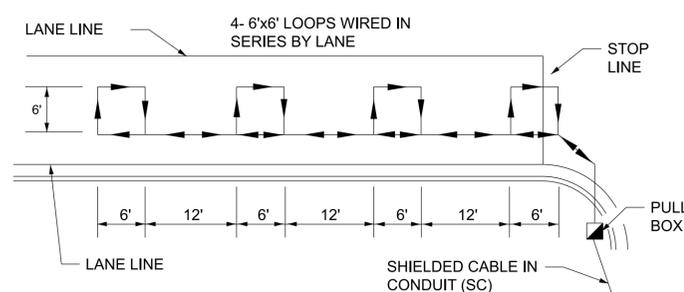
TYPICAL SAW SLOT & LOOP WIRE DETAIL



SAW SLOT CONSTRUCTION DETAIL

ADVANCE DETECTION ZONES	
APPROACH VEHICULAR SPEED (MPH)	SETBACK DETECTION PLACEMENT DISTANCE FROM STOP LINE (FEET)
35	285
40	325
45	365
50	405
55	445
60	485

LOOP TURNS		
LOOP LENGTH	NO. TURNS IN ASPHALT	NO. TURNS IN CONCRETE
6-24	3	4
24-50	2	3
QUADRAPOLE	2-4-2	3-6-3



ALT. LAYOUT OF LOOP DETECTORS
(FOR PRESENCE DETECTION)

- REV. 7-1-72: CHANGED DEPARTMENT NAME.
- REV. 4-17-75: RELOCATED STOP LINE ON TYPICAL LAYOUT OF DETECTION LOOPS.
- REV. 11-4-75: CHANGED SAW SLOT DEPTH ON TYPICAL DETAIL FOR ASPHALT. REMOVED NOTE CONCERNING A STABLE ENVIRONMENT FOR THE LOOP.
- REV. 1-1-76: CHANGED DWG. NO. FROM TR-S-3 TO T-SG-3.
- REV. 4-4-77: CHANGED DEPTH OF CUT FOR LOOP WIRE IN ASPHALT FROM 4" TO 2".
- REV. 9-27-77: CORRECTED DEPTH OF CUT FROM 4" TO 2" IN GENERAL NOTE NO. (B).
- REV. 4-12-85: GENERAL REVISIONS TO NOTES AND DETAILS.
- REV. 8-3-87: CHANGED LOOP LEAD-INS ON LAYOUT OF DETECTOR LOOPS DETAIL. ADDED DETAILS FOR #14 GAUGE CABLE IN LOOP AND SPLICING. ADDED NOTE FOR 1/2" SAW SLOT FOR LEAD-INS AND DIMENSIONED DIAGONAL CUTS FOR LOOPS. ADDED NOTE NO. (N). CHANGED NOTE NOS. (C) & (H) TO DELETE "OR EQUIVALENT" AND ADDED "BACKER ROD". CHANGED DIMENSIONS ON SAW SLOT DETAIL.
- REV. 10-27-89: DELETED ALL REFERENCES OF 1/2" SAW SLOT. ADDED QUADRUPOLE LOOP DIAGRAM. DELETED NOTE NO. (N).
- REV. 8-22-91: CHANGED NOTES (B), (C) AND (H). INCREASED DEPTH OF SAW CUT TO 3" FOR ASPHALT AND TO 2 1/2" FOR CONCRETE. CHANGED SAWCUT CORNER DETAIL.
- REV. 4-15-96: REDREW SHEET, REORGANIZED SHEET, AND UPDATED TO 1996 STANDARDS.
- REV. 12-16-13: REVISED LOOP LAYOUTS, REMOVED BACKER RODS FROM BOTTOM OF SAW SLOT. ADDED SAW SLOT DETAIL. ADDED DETAIL FOR LOOPS AT JOINTS. REVISED NOTES, ADDED DETAIL FOR ALT. LAYOUT OF PRESENCE LOOPS.
- REV. 7-29-04: REDREW, RENAMED AND REDESIGNED SHEET.
- REV. 11-11-04: ADDED PATTERN TO SEALANT FOR LOOP IN ASPHALT DETAILS.
- REV. 6-27-16: ADDED SEALANT DIMENSION TO LOOP IN CONCRETE DETAIL. CORRECTED SPELLING ERROR IN INDUCTION DETECTION LOOP NOTES.
- REV. 7-11-17: ADDED BEGIN AND END OF INDECISION ZONE COLUMNS TO THE ADVANCE LOOP SPACING TABLE AND UPDATED VALUES.
- REV. 12-18-25: UPDATED TO CONFORM TO MUTCD 11TH EDITION.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

INDUCTIVE LOOP DETECTION DETAILS

SEE LOOP NOTES ON DETAIL T-SG-3A

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NOT TO SCALE