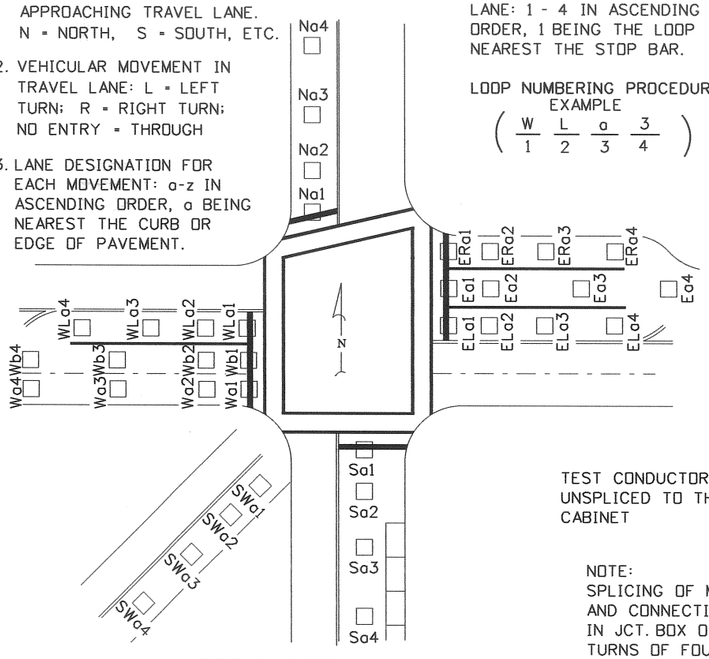
POSITION

1. MAGNETIC ORIENTATION OF APPROACHING TRAVEL LANE. N = NORTH, S = SOUTH, ETC.
2. VEHICULAR MOVEMENT IN TRAVEL LANE: L = LEFT TURN; R = RIGHT TURN; NO ENTRY = THROUGH
3. LANE DESIGNATION FOR EACH MOVEMENT: a-z IN ASCENDING ORDER, a BEING NEAREST THE CURB OR EDGE OF PAVEMENT.
4. LOOP NUMBER IN EACH TRAVEL LANE: 1 - 4 IN ASCENDING ORDER, 1 BEING THE LOOP NEAREST THE STOP BAR.

LOOP NUMBERING PROCEDURE EXAMPLE

$\left(\frac{W}{1}\ \frac{L}{2}\ \frac{a}{3}\ \frac{3}{4}\right)$



LOOP NUMBERING SYSTEM

LOOP PLAN

10FT/SEC^2 DECELERATION RATE

APPROACH SIDE OF STOP BAR

10'

"A" (STOP CONDITION)

"B" (25 M.P.H.)

"C" (35 M.P.H.)

"D" (50 M.P.H.)

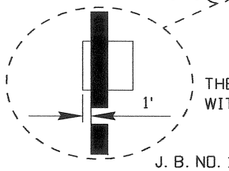
22' 76' 104'

60' 90' 184'

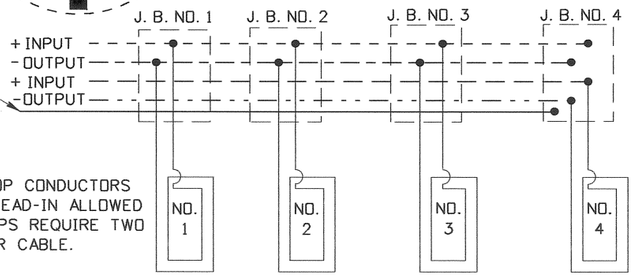
120' 190' 344'

NOTE: ALL LOOPS ARE 6' X 6' SQUARE AND CENTERED IN THE TRAVEL LANE UNLESS OTHERWISE SPECIFIED.

DETECTOR LOOP SPACING PLAN



THE 1' DIMENSION SHALL BE USED WITH/WITHOUT A CROSSWALK.



TEST CONDUCTOR: UNSPLICED TO THE CABINET

WHITE, BLACK, RED, GREEN — 4 CONDUCTOR LEAD IN CABLE: INSULATE AND SEAL END OF EACH UNUSED CONDUCTOR IN LAST JUNCTION BOX.

DIRECTION OF TRAVEL

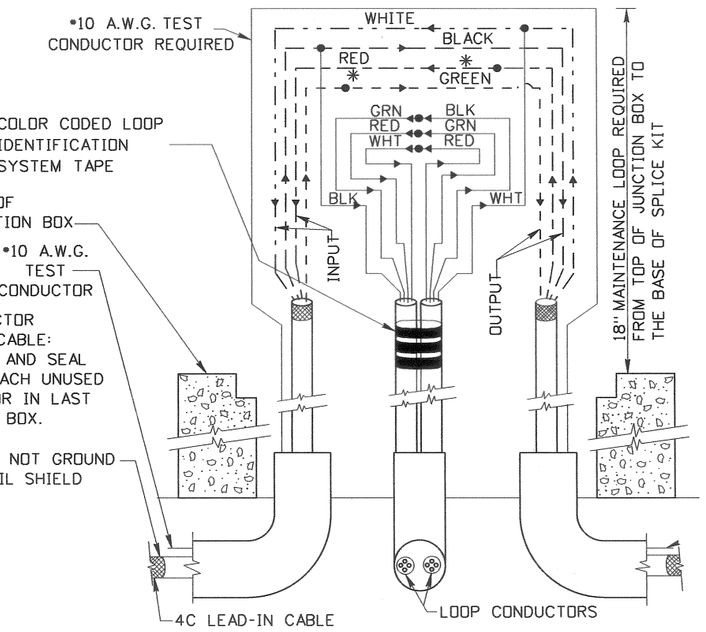
DUAL PURPOSE LOOP SHALL BE LAST LOOP IN SYSTEM

NOTE:
SPLICING OF MULTIPLE LOOP CONDUCTORS AND CONNECTION TO THE LEAD-IN ALLOWED IN JCT. BOX ONLY. ALL LOOPS REQUIRE TWO TURNS OF FOUR CONDUCTOR CABLE.

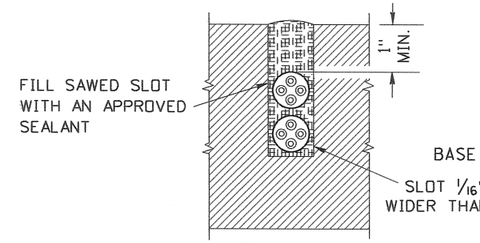
THE LOOPS IN EACH LANE SHALL BE WOUND IN THE SAME DIRECTION.

LOOP SYSTEM AND JUNCTION BOX WIRING DIAGRAM

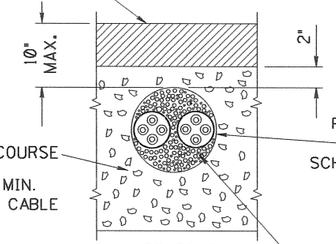
NOTES:
1. ALL CONDUCTOR SPLICES SHALL BE SOLDERED AND WATERPROOFED WITH AN APPROVED SPLICE KIT.
2. THE FOIL SHIELD SHALL BE INSULATED TO PREVENT GROUNDING AT THE JUNCTION BOX.
3. * SPLICE DUAL PURPOSE LOOPS TO THE RED AND GREEN CONDUCTORS.



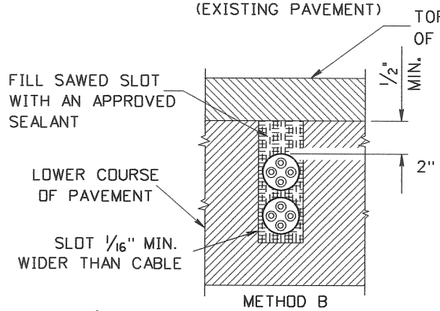
LOOP SPLICE DETAIL AT JUNCTION BOX



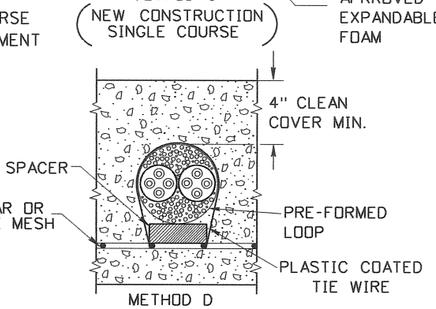
METHOD A (EXISTING PAVEMENT)



METHOD C (NEW CONSTRUCTION SINGLE COURSE)



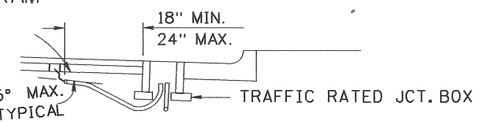
METHOD B (NEW CONSTRUCTION MULTIPLE COURSES OR OVERLAY EXISTING SINGLE COURSE)



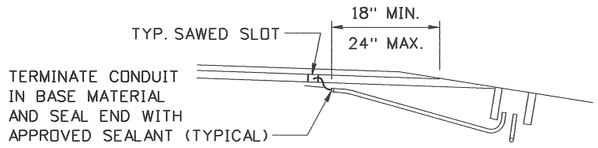
METHOD D (CONCRETE CONSTRUCTION)

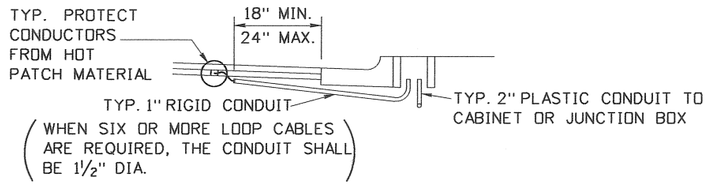
LOOP CONDUCTOR INSTALLATION

NOTES:
1. METHOD "C" MAY BE USED ONLY WITH PRE-FORMED LOOPS.
2. HYDRO CLEAN AND AIR DRY SLOTS AFTER CUTTING AND PRIOR TO CABLE INSTALLATION.
3. BED LOOP CONDUCTORS IN SEALANT FOR TOTAL ENCAPSULATION.
4. SEAT LOOP CONDUCTORS IN SLOT WITH A BLUNT INSTRUMENT.



USE ONLY WHEN PLACEMENT BEHIND THE CURB IS NOT POSSIBLE





(WHEN SIX OR MORE LOOP CABLES ARE REQUIRED, THE CONDUIT SHALL BE 1 1/2" DIA.)

JUNCTION BOX AND CONDUIT LOCATION

LANE NO.	TAPE COLOR
1	BLACK
2	WHITE
3	RED
4	GREEN
5	ORANGE
6	BLUE

IN ASCENDING ORDER - BLACK SHALL BE USED FOR THE LANE NEAREST THE CURB OR EDGE OF PAVEMENT.

EXAMPLE:
CONDUCTORS FOR LOOP 1 LANE 1 REQUIRE 1 BAND OF BLACK TAPE.

CONDUCTORS FOR LOOP 3 LANE 4 REQUIRE 3 BANDS OF GREEN TAPE.

COLOR CODED LOOP IDENTIFICATION SYSTEM

REVISIONS

NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
1	12-93	HEB	6	08-08	NQB			
2	12-94	HEB	7	07-10	HEB			
3	03-96	HEB						
4	07-03	HEB						
5	08-06	HEB						

SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY

CADD FILE NAME: i5__0710.std

DRAWING DATE: DECEMBER, 1994

IDAHO TRANSPORTATION DEPARTMENT

BOISE IDAHO

ASSISTANT CHIEF ENGINEER (DEVELOPMENT)

CHIEF ENGINEER

STANDARD DRAWING

LOOP DETECTORS

10FT/SEC^2 DECELERATION RATE

English

STANDARD DRAWING NO.

I-5

SHEET 1 OF 1

PROFESSIONAL ENGINEER REGISTERED CARL D. MAIN 6260 7/12/10 STATE OF IDAHO