

**PRE-FORMED DETECTION LOOPS
ROADWAY INSTALLATION PROCEDURES**

A. FOR INSTALLATION OF THE PRE-FORMED LOOP SYSTEM AND CONDUIT SWEEPS UNDER THE CURB AND GUTTER - TO THE ADJACENT CONCRETE JCT. BOX, COORDINATION SHALL BE REQUIRED BETWEEN THE ELECTRICAL, CONCRETE AND ROADWAY BASE - PAVEMENT CONTRACTORS.

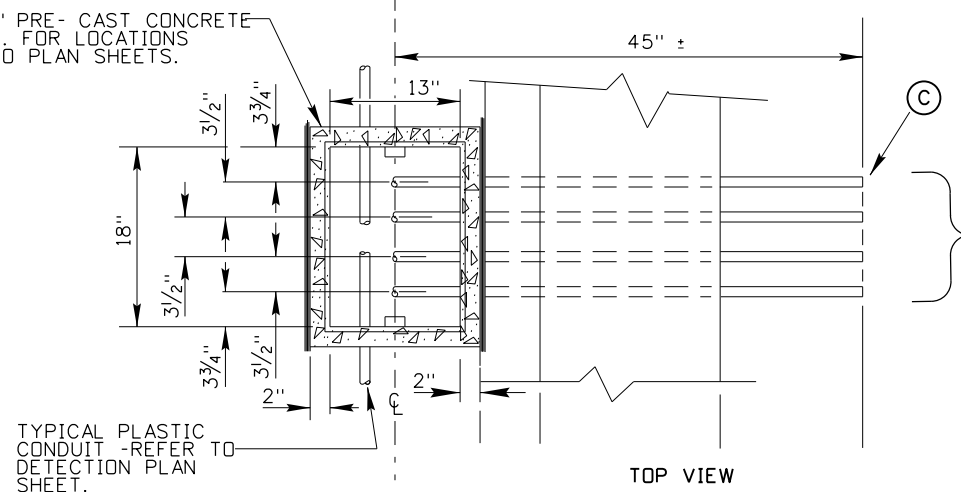
WITH REFERENCE TO DETECTION LOOP PLACEMENT PLAN SHEETS AND REQUIREMENTS NOTED UNDER STANDARD SPECIFICATION 656, LOCATE AND INSTALL SIZE "C" CONCRETE JCT. BOXES AND THE REQUIRED NUMBER OF CONDUIT SWEEPS UNDER THE CURB AND GUTTER, AS NOTED.

AFTER THE ROADWAY BASE HAS BEEN ESTABLISHED AND BEFORE PAVING: COMMENCE THE INSTALLATION OF PRE-FORMED LOOPS, PRE-DRILLED CONDUIT SECTIONS AND CABLE SEQUENCE. THE SYSTEM UNIT SHALL BE PLACED INTO THE ROADWAY BASE AT A DEPTH OF 3 INCHES AND ATTACHED TO THE CONDUIT SWEEPS, PREVIOUSLY INSTALLED UNDER THE GUTTER. (REFER TO B)

B. AFTER LOOP IS TESTED AND MEETS THE REQUIREMENTS STANDARD SPECIFICATION 656.25, THE CONDUIT SECTIONS FROM THE 6' X 6' LOOP TO JCT. BOXES SHALL BE INJECTED WITH POLYURETHANE FOAM, AS NOTED. EXCESS LOOP CABLE SHALL BE COILED NEATLY WITH THE CABLE END SEALED AND PLACED IN THE COVERED JUNCTION BOXES UNTIL THE REMAINDER OF THE SYSTEM IS INSTALLED AND SPLICES ARE MADE, AS NOTED.

NOTES:
ALL CONDUCTOR SPLICES SHALL BE SOLDERED AND WATERPROOFED WITH AN APPROVED SPLICE KIT.
THE LEAD-IN SHIELD SPLICE SHALL BE SOLDERED AND INSULATED TO PREVENT GROUNDING AT THE JCT. BOX.

SIZE "C" PRE- CAST CONCRETE JCT. BOX. FOR LOCATIONS REFER TO PLAN SHEETS.



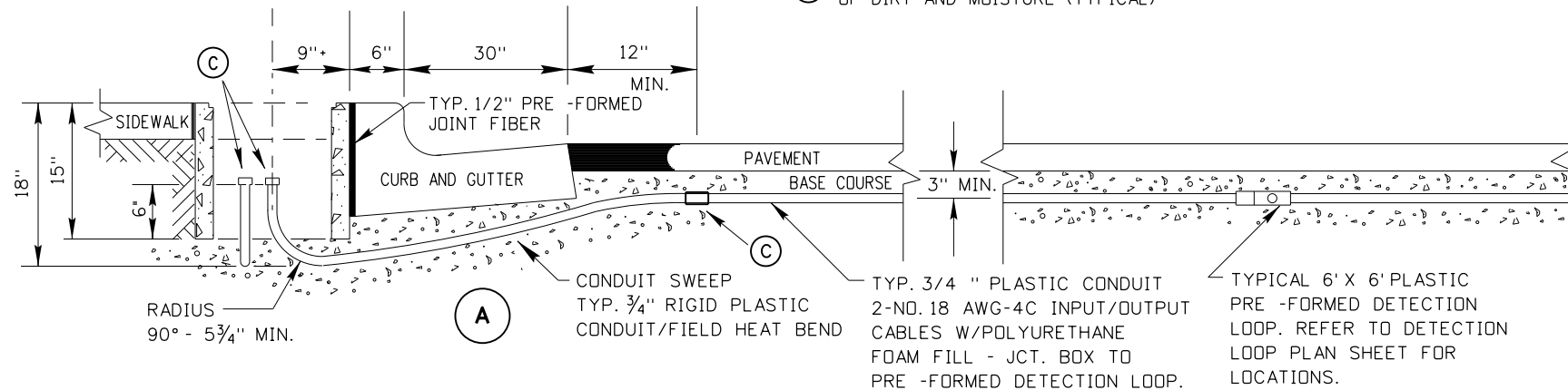
TYPICAL PLASTIC CONDUIT -REFER TO DETECTION PLAN SHEET.

MAXIMUM TYPICAL NUMBER OF LOOP CABLE ENTRANCE CONDUITS REQUIRED TO ACCOMMODATE 4 IN LANE PRE -FORMED DETECTION LOOPS.

COORDINATION REQUIRED BETWEEN CONTRACTORS. INSTALL BEFORE OR DURING CURB AND GUTTER FORMING.

FOR LOCATION AND QUANTITIES OF CONDUIT REQUIRED FOR EACH JUNCTION BOX, REFER TO DETECTION LOOP PLAN SHEETS.

(C) TEMPORARILY CAP TO PREVENT THE ENTRY OF DIRT AND MOISTURE (TYPICAL)



**TYPICAL SECTION
JUNCTION BOX PRE-FORMED DETECTION LOOP CONDUIT
ROADWAY INSTALLATION**

GENERAL NOTES CONTINUED

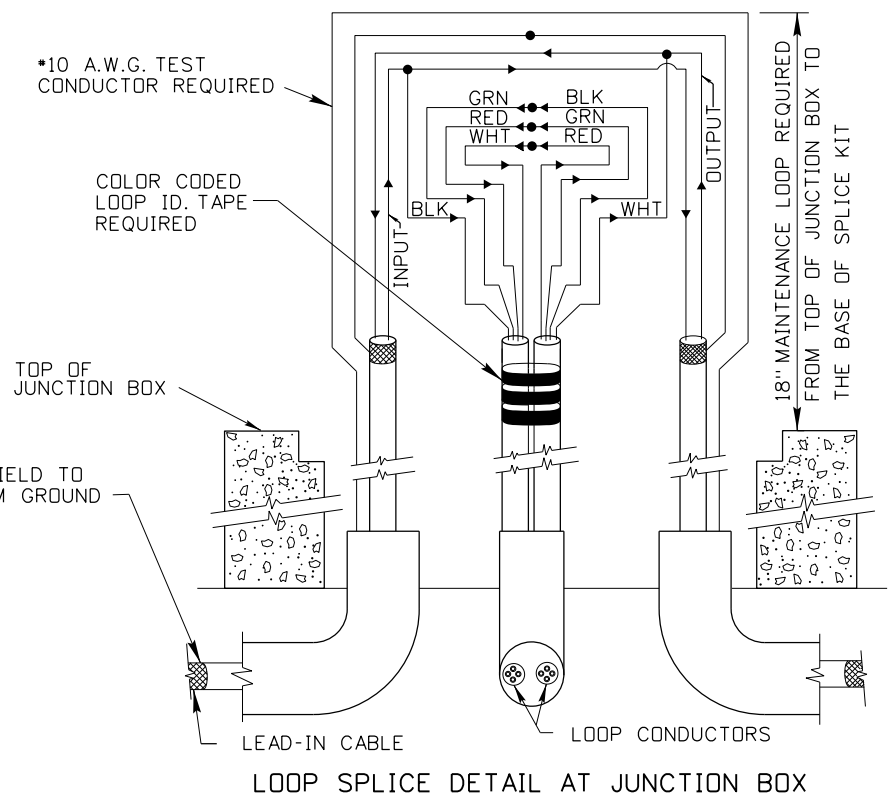
5. THE BASIC CONCEPT OF THE PRE-FORMED DETECTION LOOP OFFERS THERMAL CHARACTERISTICS FOR PHYSICAL AND ELECTRICAL REASONS. ENCAPSULATED ENCASEMENT SEALS LOOP CABLES FROM WATER AND MOISTURE ENCROACHMENT. DUE TO THIS CONCEPT, CLIMATIC RESTRAINTS SHALL BE REQUIRED DURING FIELD INSTALLATION OF THE PRE-FORMED DETECTION LOOP SYSTEM.

FABRICATED DETECTION LOOPS, CONDUIT, LOOP CABLE AND FOAM MAY BW STORED AT THE JOB SITE. THESE ITEMS SHALL BE PROTECTED FROM ELEMENTS SUCH AS RAIN, FROST, MORNING DEW, HEAVY FOG AND EXCESSIVE SUNLIGHT.

INSTALLATIONS SHALL NOT BE ALLOWED DURING INCLEMENT WEATHER. POLYURETHANE FOAM WILL NOT ADHERE TO WET OR FROSTY SURFACES. THE TEMPERATURES OF THE ATMOSPHERE, CONDUIT CAVITY AND THE POLYURETHANE COMPONENTS A AND B ALL HAVE AN EFFECT ON CURING TIME, FOAM DENSITY, AND RATE OF REACTION. THE BEST RESULTS ARE OBTAINED WHEN ALL TEMPERATURES ARE AT 75°F (24°C).

TO ACHIEVE PROPER USE AND PROPORTIONING OF A AND B URETHANE CHEMICALS, PROPER REACTION, CURE AND OPTIMUM YIELDS, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CONSISTENTLY USE APPLICATION PROCEDURES AS SPECIFIED BY THE POLYURETHANE FOAM MANUFACTURER.

6. WHEN THE INSTALLATION OF ANY PARTICULAR LOOP SYSTEM RUN BEGINS, THE ENTIRE UNIT FROM THE 6' X 6' PRE-FORMED LOOP TO THE JUNCTION BOX ASSEMBLY SHALL BE FORMED AND COMPLETED (AS PER NOTED INSTALLATION PROCEDURE) BEFORE THE CONTRACTOR/INSTALLER LEAVES THE JOB SITE FOR THE DAY.



2- CONDUCTOR CABLE

REVISIONS			
NO.	DATE	BY	DESCRIPTION

DESIGNED	SCALES SHOWN ARE FOR 11" X 17" PRINTS ONLY
DESIGN CHECKED	
DETAILED	CADD FILE NAME s22td36b_0507.dgn
DRAWING CHECKED	DRAWING DATE: FEBRUARY, 2000

**IDAHO
TRANSPORTATION
DEPARTMENT**



DISTRICT NINE TRAFFIC

PROJECT NO. _____

td-36b
**PRE-FORMED DETECTION
LOOP DETAILS
ROADWAY INSTALLATION**

English
COUNTY _____
KEY NUMBER _____
SHEET 1 OF 2

NOT APPROVED
PRELIMINARY
FOR CONSTRUCTION

**PRE-FORMED DETECTION LOOPS
ROADWAY INSTALLATION PROCEDURES**

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WITH REFERENCE TO DETECTION LOOP PLACEMENT PLAN SHEETS AND REQUIREMENTS NOTED UNDER STANDARD SPECIFICATION 656, LOCATE AND INSTALL SIZE "C" CONCRETE JCT. BOXES AND THE REQUIRED NUMBER OF CONDUIT SWEEPS UNDER THE CURB AND GUTTER, AS NOTED.

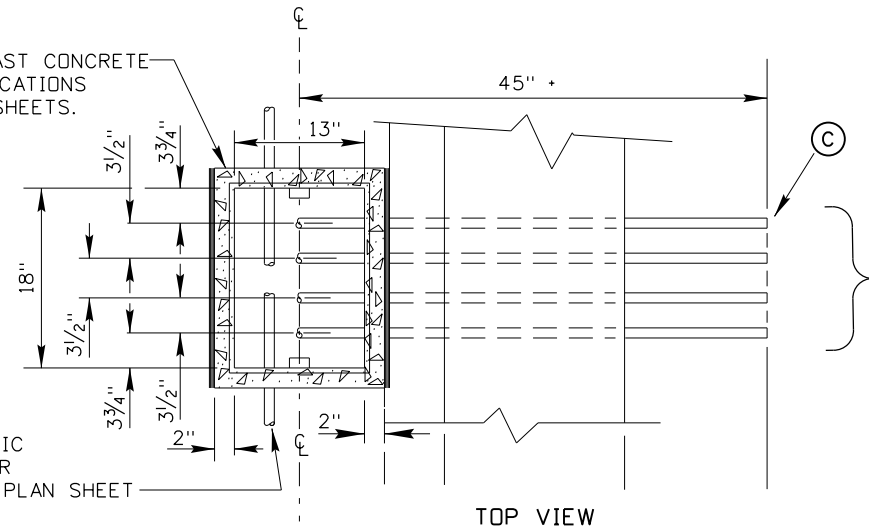
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NOTES:

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.

SIZE "C" PRE- CAST CONCRETE JCT. BOX. FOR LOCATIONS REFER TO PLAN SHEETS.



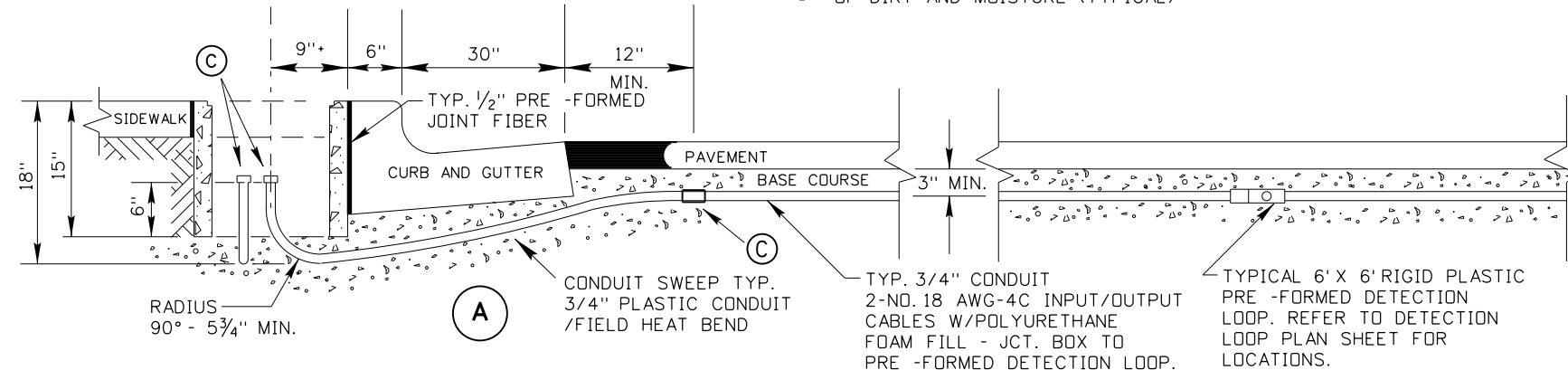
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JUNCTION BOX PRE-FORMED DETECTION LOOP CONDUIT
ROADWAY INSTALLATION**

GENERAL NOTES CONTINUED

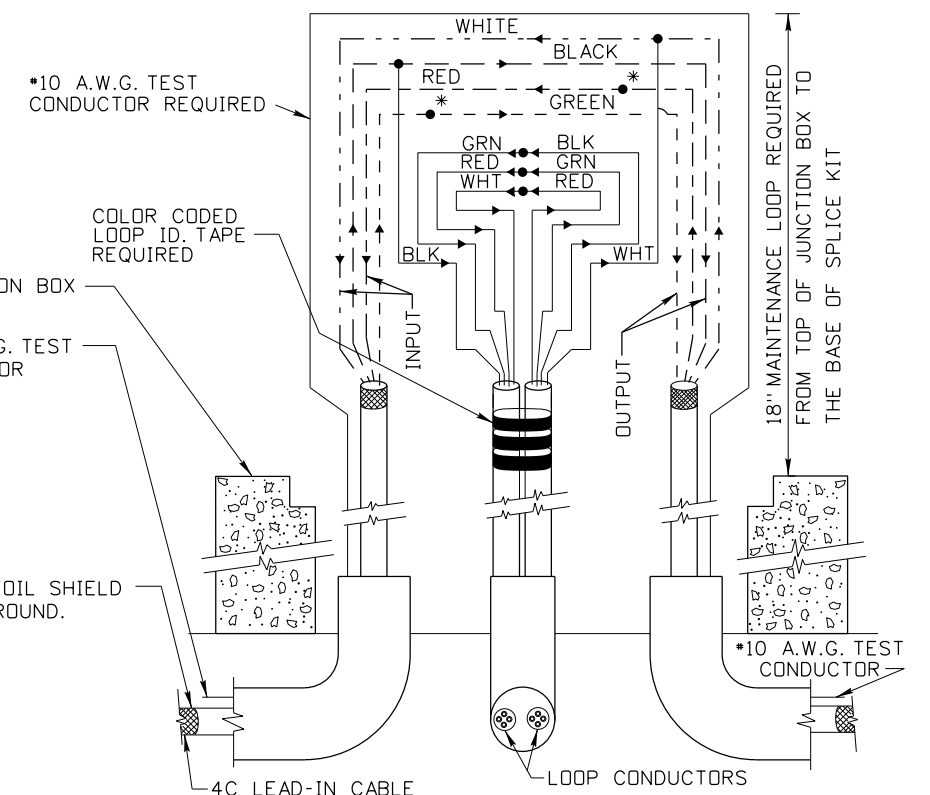
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LOOP SPLICE DETAIL AT JUNCTION BOX

4 - CONDUCTOR CABLE

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DESIGN CHECKED	CADD FILE NAME td36b_0507.dgn
DETAILED	DRAWING DATE: FEBRUARY, 2000
DRAWING CHECKED	

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td-36b
**PRE-FORMED DETECTION
LOOP DETAILS
ROADWAY INSTALLATION**

English
COUNTY _____
KEY NUMBER _____
SHEET 2 OF 2

NOT APPROVED
PRELIMINARY
FOR CONSTRUCTION