



TECHNICAL BULLETIN

Ministry of Transportation
and Highways

ENGINEERING BRANCH
TRAFFIC & ELECTRICAL ENG. SECTION
BULLETIN NUMBER: **TE-2000-12**

Subject: Preformed Detector Loops	
Date: November 30, 2000	Author: Ross Casey, Senior Electrical Standards Technologist
Bulletin Number: TE-2000-12 Bulletin Type: CHANGE TO STANDARD	Action Required: Effective Date: Immediately
Distribution	Standards Affected
Ministry Electrical Trades Supervisors and Managers All holders of the Electrical and Traffic Engineering Manual.	Electrical and Traffic Engineering Manual Standard Specifications for Highway Construction

BACKGROUND:

Preformed detector loops are becoming more prevalent in Ministry installations, due to their longevity. They are cost effective, provided they are installed correctly; their location will be known; it is not anticipated that they will be dug up by utilities and, in cases of new construction, the exact location of lane lines and stop bars can be determined accurately, prior to loop installations.

POLICY:

Preformed loops shall be used at signalized intersections, at the discretion of the Ministry Regional Manager responsible for the installation or revision of the traffic signal. Preformed loops shall be installed as per the most appropriate method specified in the **attached** Specification *Drawings No. SP635-2.8.15, 16 and 17*. The preformed loops used shall only be supplied from pre-approved suppliers.

The pre-approved supplier list is available from the Electrical Materials Manager, Delta (604-951-2111).

PROCEDURE:

1. Design

Preformed loops shall be designated on designs, if requested, by the Ministry Regional Manager (or the Regional Manager's designate) responsible for the installation or revision of the traffic signal.

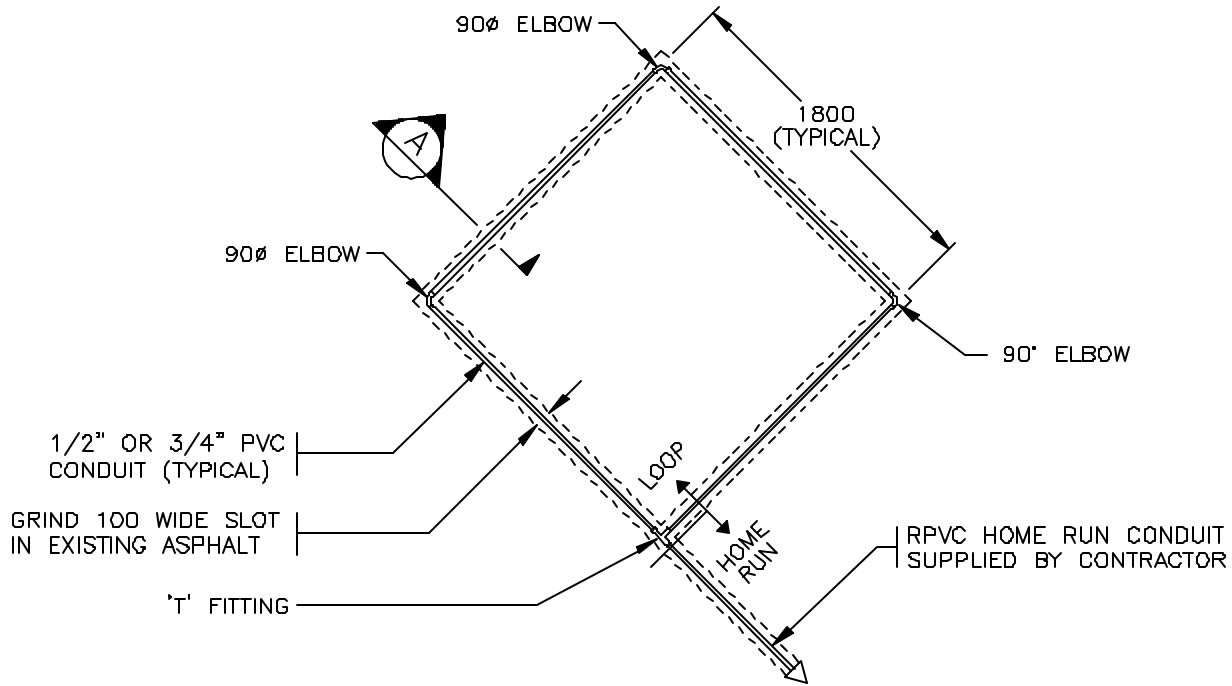
2. Construction

Preformed loops shall be installed in accordance with Specification *Drawings no. SP635-2.8.15, 16 and 17*.

CONTACT:

Ross Casey, Senior Electrical Standards Technologist
Traffic/Electrical Engineering Section
Engineering Branch

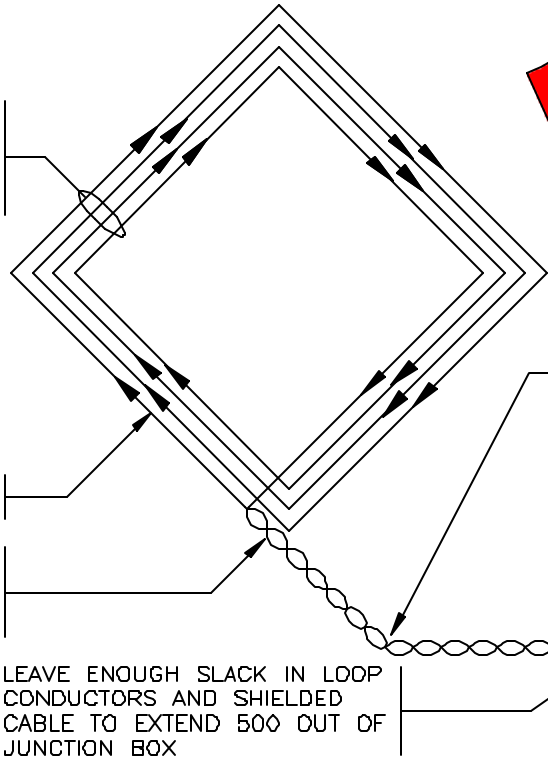
Phone: (250) 387-7688



PREFORMED LOOP LAYOUT

DRAFT

4 TURN LOOP SHOWN.
NUMBER OF TURNS MAY VARY
AS NOTED ON THE PLANS OR
AS DIRECTED BY THE MINISTRY
REPRESENTATIVE



LOOPS SUPPLIED WITH 25m OF TWISTED PAIR TAIL.

SHIELDED CABLE TO LOOP HOME RUN CONDUCTOR SPLICES IN JUNCTION BOX (SEE DRAWING SP635.2.8.7 FOR DETAILS)

CONDUIT LAYOUT IN PREFORMED LOOP

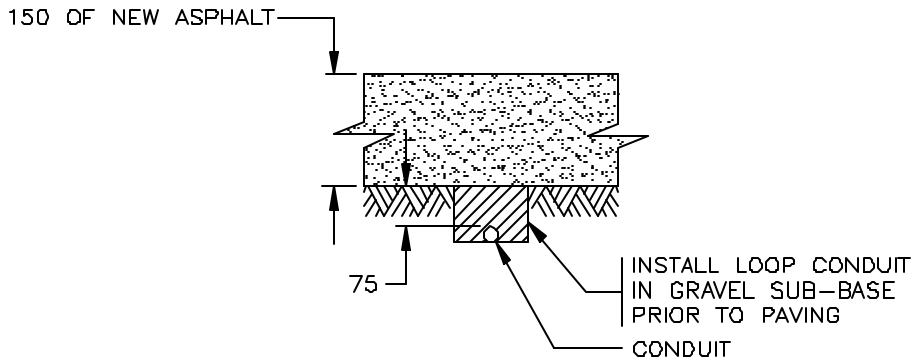
SEE DRAWING SP635-2.8.16 FOR NOTES

SEE DRAWING SP635-2.8.2 FOR LOOP INDUCTANCE TABLE



NOT TO SCALE

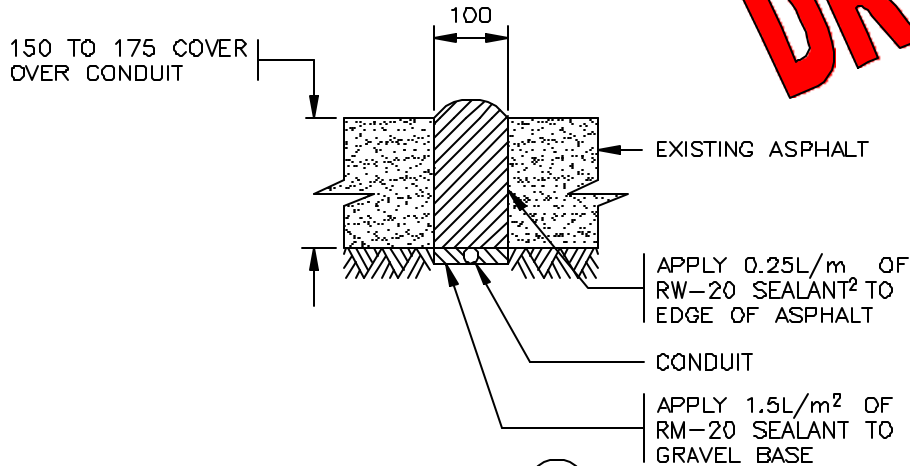
No.	Revision	Date	PRE-FORMED DIAMOND DETECTOR LOOP INSTALLATION DETAILS	
F			Date	Approved
E				
D				
C				
B				
A			Chief Highway Engineer	SPECIFICATION DRAWING No. SP635-2.8.15



SECTION (A)

NEW ROAD CONSTRUCTION

DRAFT



SECTION (A)

EXISTING ROAD SURFACE

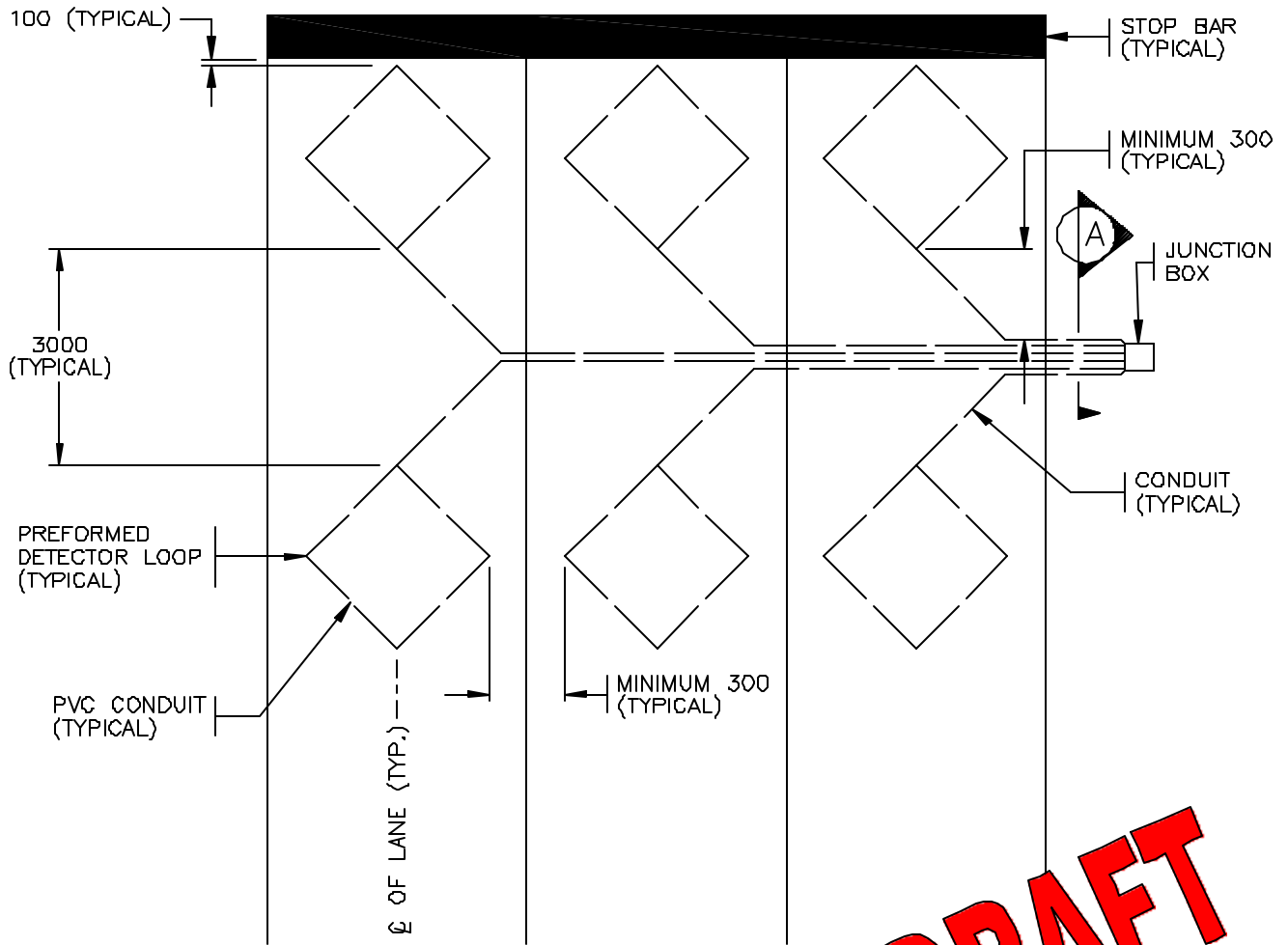
NOTES

1. SEE STANDARD SPECIFICATIONS & SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE NOTED.
3. WHERE INSTALLING PREFORMED LOOPS IN EXISTING ASPHALT GRIND OUT SLOT AND INSTALL PREFORMED LOOP. BACKFILL SLOT WITH HOT MIXED ASPHALT PAVEMENT. COMPACT ASPHALT WITH VIBRATING MECHANICAL COMPACTOR WITH 75mm SQUARE PLATE. WHERE INSTALLING PREFORMED LOOPS IN NEW ROAD CONSTRUCTION, PLACE CONDUIT IN GRAVEL SUB-BASE JUST BELOW ASPHALT. LAYOUT STOP BARS, CURB RETURNS, ISLANDS, MEDIANS, LANE LINES AND LOOPS AND VERIFY WITH MINISTRY REPRESENTATIVE PRIOR TO CONSTRUCTION. FAILURE TO CORRECTLY LOCATE THE LOOPS IN THEIR REQUIRED LOCATIONS WILL RESULT IN REINSTALLATION OF THE LOOPS AT THE CONTRACTORS EXPENSE
4. PREFORMED LOOPS SHALL MEET THE APPROVAL OF THE MINISTRY REPRESENTATIVE PRIOR TO INSTALLATION.
5. CONTRACTOR SHALL VERIFY LOOPS LOCATIONS (CUT INTO OVERLAYED OR NEW PAVED ROADWAYS) WITH THE MINISTRY REPRESENTATIVE AFTER INSTALLATION.
6. PRE-APPROVED LOOPS ARE NOTED ON THE MINISTRY "PRE-APPROVED PRODUCT LIST". PRE-FORMED LOOPS OR EITHER RIGID OR FLEXIBLE PVC TYPE AND COME COMPLETE WITH 25m HOME RUN OF CONDUCTOR. AS THE HOME RUN LENGTHS WILL VARY, THE CONTRACTOR SHALL SUPPLY PVC CONDUIT FOR HOME RUNS. TYPE OF LOOPS (FLEXIBLE OR RIGID) SHALL BE APPROVED BY THE MINISTRY ELECTRICAL TRADE SUPERVISOR.

NOT TO SCALE



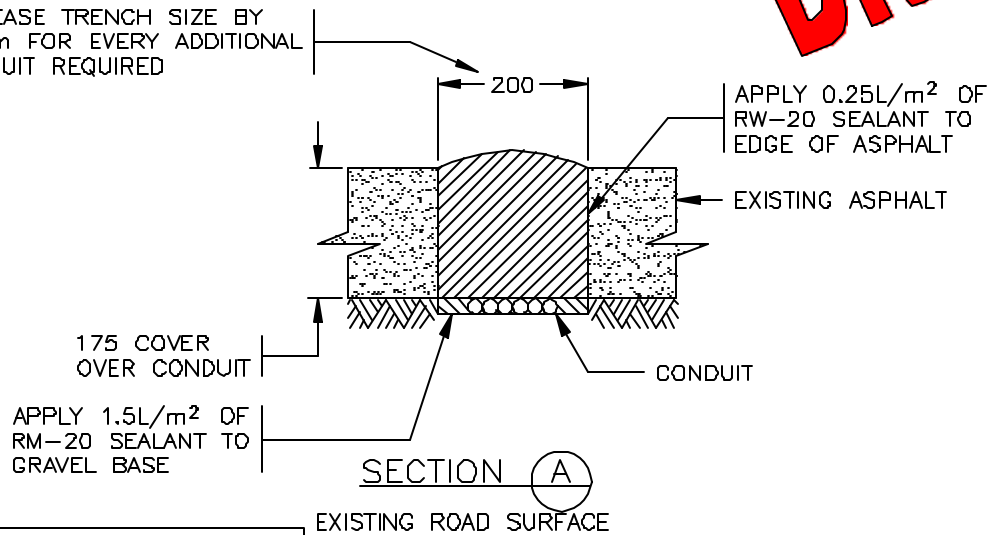
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F				
E				
D			Date	Approved
C				
B				
A			<div style="display: flex; justify-content: space-between;"> _____ Chief Highway Engineer </div>	
			SPECIFICATION DRAWING No. SP635-2.8.16	



TYPICAL PREFORMED LOOP LAYOUT

DRAFT

INCREASE TRENCH SIZE BY 20mm FOR EVERY ADDITIONAL CONDUIT REQUIRED



SECTION A

SEE DRAWING SP635-2.8.16 FOR NOTES

SEE DRAWING SP635-2.8.2 FOR LOOP INDUCTANCE TABLE

NOT TO SCALE



No.	Revision	Date	LAYOUT FOR PRE-FORMED TRAFFIC SIGNAL DETECTOR LOOPS		SPECIFICATION DRAWING No. SP635-2.8.17
F			Date	Approved	
E					
D					
C					
B					
A				Chief Highway Engineer	