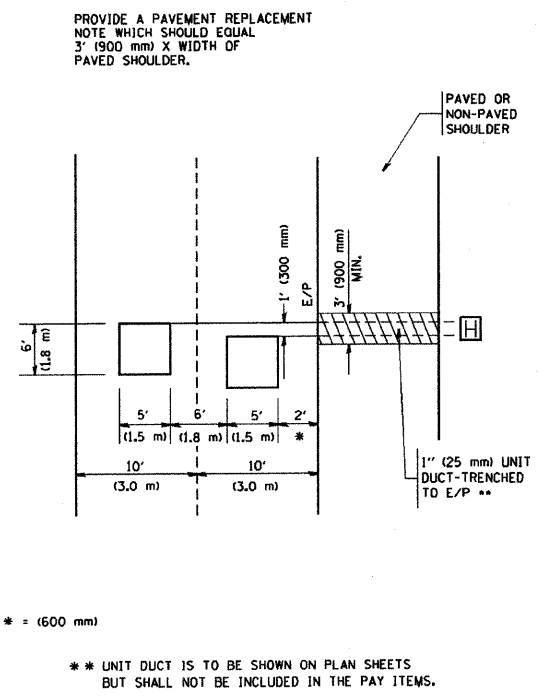
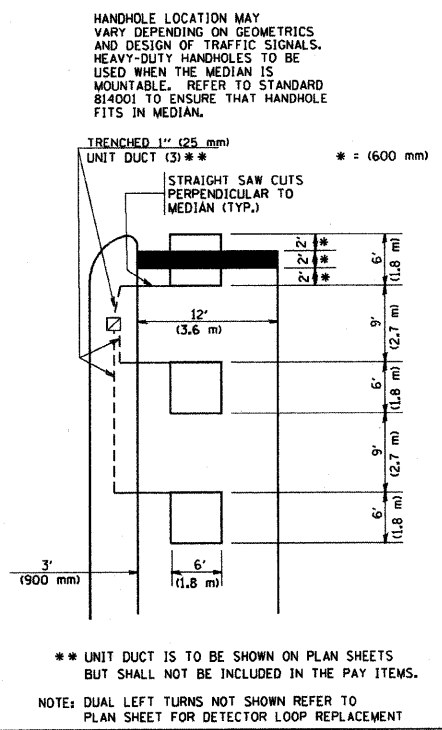


FAU RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 2779	08-00165-00-RS	COOK	15	15
F.H.W.A. REG.	ILLINOIS	PROJECT	ARA-9003(176)	
CONTRACT NO. 63203				

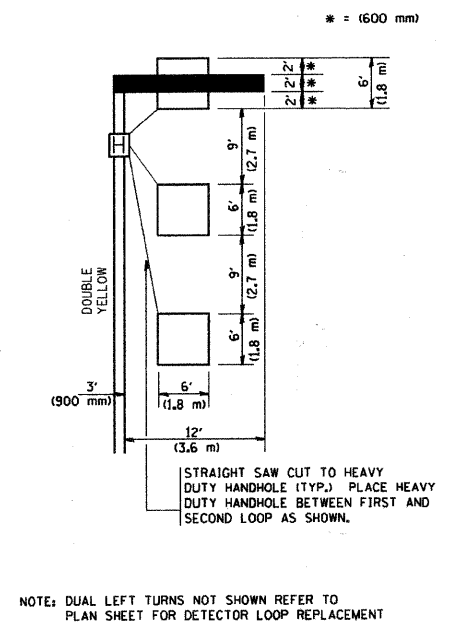
LOOPS NEXT TO SHOULDERS



**LEFT TURN LANES WITH MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)**

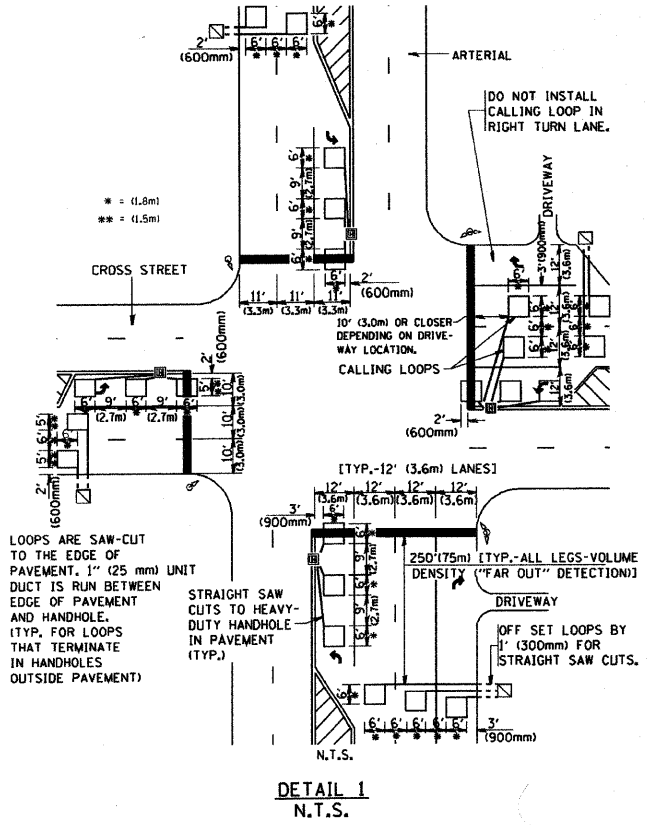


**LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH
(PROTECTED / PERMITTED LEFT TURN PHASING)**

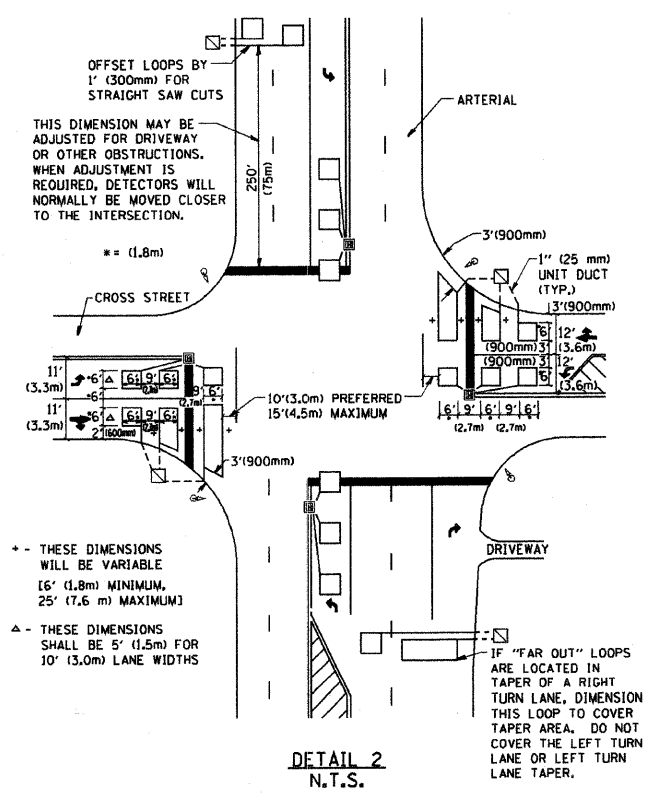


- NOTES:**
- VEHICLES LOOP DETECTORS**
- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
 - * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
 - * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATELY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
 - * ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
 - * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
 - * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
 - * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)**



**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)**



PLACEMENT OF DETECTORS

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DIMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

NOTE:
ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT 1 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING
NAME	DATE	
		DESIGNED BY DRAWN BY CADD CHECKED BY R.K.F. TS07

PLOT DATE = 3/7/2007
FILE NAME = K:\projects\080707\080707.dgn
PLOT SCALE = 1/8"=1'-0"
USER NAME = bauer01

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Civil Engineers / Municipal Consultants
825 Midway Drive • Willowbrook, IL • 60527 • Telephone: (630) 887-8640 • Fax: (630) 887-0132
Illinois Professional Design Firm No. 184-000928

PROJECT
**CITY OF BERWYN, ILLINOIS
EAST AVENUE LAPP RESURFACING
MFT SECTION NO. 08-00165-00-RS**

REVISIONS			
NO.	BY	DATE	DESCRIPTION

**DISTRICT 1
DETECTOR LOOP
INSTALLATION DETAILS
FOR ROADWAY RESURFACING**

PROJECT NO. 06077	SCALE NONE	SHEET 15 OF 15 SHEETS
DRAWN/DESIGNED JEP/AMS	DATE APRIL, 2009	
CHECKED/APPROVED JFP/JEF	FIELD BOOK NO. FILE	