LEFT TURN LANES WITH MEDIANS LEFT TURN LANES WITHOUT MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) VOLUME DENSITY ("FAR OUT" DETECTION) LOOPS NEXT TO SHOULDERS ON SAME APPROACH ON SAME APPROACH (PROTECTED / PERMITTED LEFT TURN PHASING) HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS, HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD BI4001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN. (PROTECTED / PERMITTED LEFT TURN PHASING) PAVED OR NON-PAVED SHOULDER TRENCHED 1" (25 mm) UNIT DUCT (3) ** * = (600 mm) STRAIGHT SAW CUTS PERPENDICULAR TO MEDIAN (TYP.) 8 1 (1.5 m) (1.8 m) (1.5 m) 1" (25 mm) UNIT DUCT-TRENCHED TO E/P ... (900 00 (3_{*}0 m) STRAIGHT SAW CUT TO HEAVY DUTY HANDHOLE (TYP.) PLACE HEAVY DUTY HANDHOLE BETWEEN FIRST AND SECOND LOOP AS SHOWN. ** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS # = (600 mm) BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS. NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO * * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS PLAN SHEET FOR DETECTOR LOOP REPLACEMENT BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS. ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION) CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION). CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION) ARTERIAL OFFSET LOOPS BY --1' (300mm) FOR STRAIGHT SAW CUTS DO NOT INSTALL CALLING LOOP II THIS DIMENSION MAY BE ADJUSTED FOR DRIVEWAY OR OTHER OBSTRUCTIONS. WHEN ADJUSTMENT IS REQUIRED, DETECTORS WILL NORMALLY BE MOVED CLOSER TO THE INTERSECTION. * = (1.8m) ** = (1.5m) CROSS STREET -CROSS STREET (3.3m) 9-6 A 619 61 -10'(3.0m) PREFERRED 15'(4.5m) MAXIMUM 6. 3. 6. 3. 6.

[TYP.-12' (3.6m) LANES] 2' 12' 12' 12' 6m) (3.6m) (3.6m) (3.6m)

Nicolar .

CHECKED - DEM

- 5/26/09

DATE

250'(75m) LTYP -ALL LEGS-VOLUME DENSITY ("FAR OUT" DETECTION)

DRIVEWAY

OFF SET LOOPS BY

REVISED -

REVISED

K

LOOPS ARE SAW-CUT

DUCT IS RUN BETWEEN
EDGE OF PAVEMENT
AND HANDHOLE.
(TYP. FOR LOOPS

STRAIGHT SAW CUTS TO HEAVY-

DUTY HANDHOLE IN PAVEMENT

TO THE EDGE OF PAVEMENT, 1" (25 mm) UNIT

THAT TERMINATE

PLOT SCALE = N.T.S

PLOT DATE = 7/8/09

IN HANDHOLES OUTSIDE PAVEMENT)

= (600 mm)

UNIT DUCT

+ 6 12′ ♣ 500mm)31 (3.6m)

RIVEWAY

- IF "FAR OUT" LOOPS
ARE LOCATED IN
TAPER OF A RIGHT
TURN LANE, DIMENSION
THIS LOOP TO COVER

SCALE: NONE

|3'(900mm

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE
- * 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 SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET
- * 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 (l.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.

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 DEMENSIONS 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.

SHEET NO. 13 OF 13 SHEETS STA.

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.

TO STA.

CONTRACT NO. 63231

		, . <u>D</u>	ETAIL 1 N.T.S.		DETAIL 2 N.T.S.	TAPER AREA. DO NOT COVER THE LEFT TURN LANE OR LEFT TURN LANE TAPER.									
FILE NAME =		NAME = gaglianobt	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 - DETECTOR LOOP INSTALLATION					F.A. S	SECTION	COUNTY	TOTAL SHEE SHEETS NO.	ET O.
W:\diststd\22x34\tsØ7.dgn			DRAWN -	REVISED -						TS-07					
	PLOT :	SCALE = 50.0000 '/ IN.	CHECKED R.K.F.	REVISED -		DETAILS FOR ROADWAY RESURFACING						CONTRACT NO.		-	
<u> </u>	PLOT I	DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF	1 SHEETS	STA.	TO STA.	FED, ROAD DIST, NO.	. 1 ILLINOIS FED. AI	ID PROJECT		
IAME =	USER NAME =	D	ESIGNED - LXM	REVISED - LXM 6/30/09							F.A.U.	SECTIO	ON	COUNTY	TOTA
-000_Dundee.dwg			RAWN - LXM	REVISED - LXM 7/8/09	DUNDEE AVENUE	DETAILS					2555	09-00085-0		COOK	SHEE
	DIOT COALE N		OUEOVEO DEM	P. C. L. W. C.	DECLIDEA OINO DECODAM						2000	09-00085-	UU-R3 CU	COOK	13

RESURFACING PROGRAM

+ - THESE DIMENSIONS WILL BE VARIABLE

A - THESE DIMENSIONS

[6' (1.8m) MINIMUM; 25' (7.6 m) MAXIMUM]

SHALL BE 5' (1.5m) FOR 10' (3.0m) LANE WIDTHS