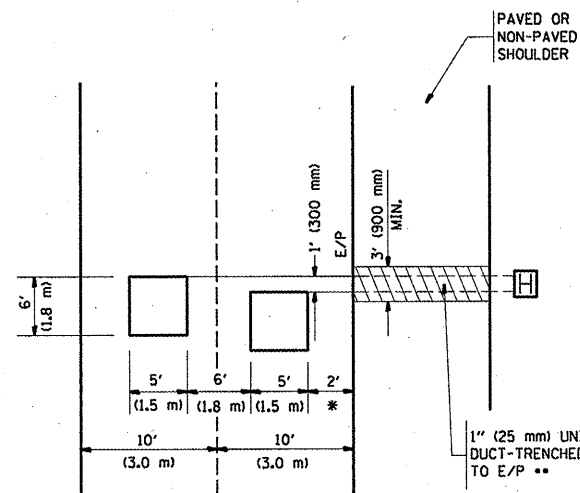


PROVIDE A PAVEMENT REPLACEMENT
NOTE WHICH SHOULD EQUAL
3' (900 mm) X WIDTH OF
PAVED SHOULDER.

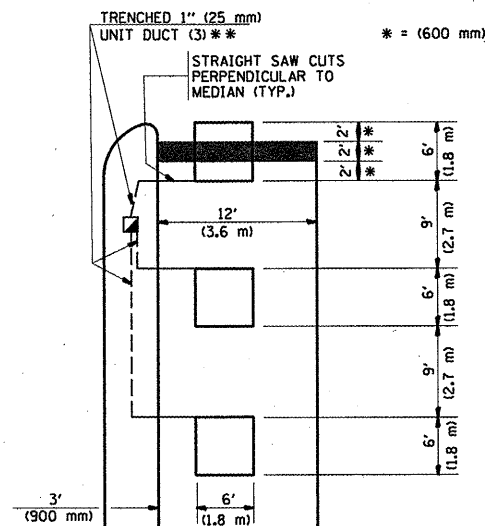


* = (600 mm)

* * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS
BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

(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 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.

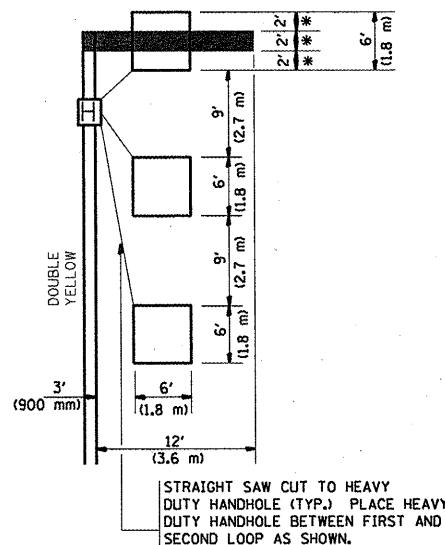


**** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS
BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.**

NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

(PROTECTED / PERMITTED LEFT TURN PHASING)

* = (600 mm)



NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO
PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

Diagram illustrating various street layout configurations for saw-cut curb and gutter systems, showing dimensions and labels.

Legend:

- * = (1.8m)
- ** = (1.5m)

Labels and Dimensions:

- ARTERIAL** (Top Right)
- CROSS STREET** (Middle Left)
- DRIVEWAY** (Middle Right)
- DO NOT INSTALL CALLING LOOP IN RIGHT TURN LANE.** (Top Right)
- CALLING LOOPS** (Middle Right)
- STRAIGHT SAW CUTS TO HEAVY-DUTY HANDHOLE IN PAVEMENT (TYP.)** (Bottom Left)
- [TYP.-12' (3.6m) LANES]** (Bottom Middle)
- 250'(75m) [TYP.-ALL LEGS-VOI DENSITY ("FAR OUT") DETECTO** (Bottom Right)
- OFF SET LOOPS 1' (300mm) FOR STRAIGHT SAW C** (Bottom Right)

Dimensions (in feet and inches, and millimeters):

- 2' (600mm)
- 6' (1.8m)
- 9' (2.7m)
- 10' (3.0m)
- 11' (3.3m)
- 12' (3.6m)
- 15' (4.5m)
- 16' (4.8m)
- 18' (5.4m)
- 20' (6.0m)
- 24' (7.2m)
- 30' (9.0m)
- 36' (10.8m)
- 48' (14.4m)
- 60' (18.0m)
- 72' (21.6m)
- 90' (27.0m)
- 108' (32.4m)
- 126' (38.1m)
- 144' (43.8m)
- 162' (49.4m)
- 180' (54.9m)
- 216' (65.8m)
- 252' (76.8m)
- 288' (87.7m)
- 324' (98.7m)
- 360' (109.7m)
- 432' (131.1m)
- 504' (153.9m)
- 576' (175.3m)
- 648' (196.7m)
- 720' (218.1m)
- 792' (239.5m)
- 864' (260.9m)
- 936' (282.3m)
- 1008' (303.7m)
- 1080' (325.1m)
- 1152' (346.5m)
- 1224' (367.9m)
- 1296' (389.3m)
- 1368' (410.7m)
- 1440' (432.1m)
- 1512' (453.5m)
- 1584' (474.9m)
- 1656' (496.3m)
- 1728' (517.7m)
- 1800' (539.1m)
- 1872' (560.5m)
- 1944' (581.9m)
- 2016' (603.3m)
- 2088' (624.7m)
- 2160' (646.1m)
- 2232' (667.5m)
- 2304' (688.9m)
- 2376' (710.3m)
- 2448' (731.7m)
- 2520' (753.1m)
- 2592' (774.5m)
- 2664' (795.9m)
- 2736' (817.3m)
- 2808' (838.7m)
- 2880' (860.1m)
- 2952' (881.5m)
- 3024' (902.9m)
- 3096' (924.3m)
- 3168' (945.7m)
- 3240' (967.1m)
- 3312' (988.5m)
- 3384' (1009.9m)
- 3456' (1031.3m)
- 3528' (1052.7m)
- 3600' (1074.1m)
- 3672' (1095.5m)
- 3744' (1116.9m)
- 3816' (1138.3m)
- 3888' (1159.7m)
- 3960' (1181.1m)
- 4032' (1202.5m)
- 4104' (1223.9m)
- 4176' (1245.3m)
- 4248' (1266.7m)
- 4320' (1288.1m)
- 4392' (1309.5m)
- 4464' (1330.9m)
- 4536' (1352.3m)
- 4608' (1373.7m)
- 4680' (1395.1m)
- 4752' (1416.5m)
- 4824' (1437.9m)
- 4896' (1459.3m)
- 4968' (1480.7m)
- 5040' (1502.1m)
- 5112' (1523.5m)
- 5184' (1544.9m)
- 5256' (1566.3m)
- 5328' (1587.7m)
- 5400' (1609.1m)
- 5472' (1630.5m)
- 5544' (1651.9m)
- 5616' (1673.3m)
- 5688' (1694.7m)
- 5760' (1716.1m)
- 5832' (1737.5m)
- 5904' (1758.9m)
- 5976' (1780.3m)
- 6048' (1801.7m)
- 6120' (1823.1m)
- 6192' (1844.5m)
- 6264' (1865.9m)
- 6336' (1887.3m)
- 6408' (1908.7m)
- 6480' (1930.1m)
- 6552' (1951.5m)
- 6624' (1972.9m)
- 6696' (1994.3m)
- 6768' (2015.7m)
- 6840' (2037.1m)
- 6912' (2058.5m)
- 6984' (2079.9m)
- 7056' (2101.3m)
- 7128' (2122.7m)
- 7200' (2144.1m)
- 7272' (2165.5m)
- 7344' (2186.9m)
- 7416' (2208.3m)
- 7488' (2229.7m)
- 7560' (2251.1m)
- 7632' (2272.5m)
- 7704' (2293.9m)
- 7776' (2315.3m)
- 7848' (2336.7m)
- 7920' (2358.1m)
- 7992' (2379.5m)
- 8064' (2400.9m)
- 8136' (2422.3m)
- 8208' (2443.7m)
- 8280' (2465.1m)
- 8352' (2486.5m)
- 8424' (2507.9m)
- 8496' (2529.3m)
- 8568' (2550.7m)
- 8640' (2572.1m)
- 8712' (2593.5m)
- 8784' (2614.9m)
- 8856' (2636.3m)
- 8928' (2657.7m)
- 9000' (2679.1m)
- 9072' (2700.5m)
- 9144' (2721.9m)
- 9216' (2743.3m)
- 9288' (2764.7m)
- 9360' (2786.1m)
- 9432' (2807.5m)
- 9504' (2828.9m)
- 9576' (2850.3m)
- 9648' (2871.7m)
- 9720' (2893.1m)
- 9792' (2914.5m)
- 9864' (2935.9m)
- 9936' (2957.3m)
- 10008' (2978.7m)
- 10080' (2999.1m)
- 10152' (3020.5m)
- 10224' (3041.9m)
- 10296' (3063.3m)
- 10368' (3084.7m)
- 10440' (3106.1m)
- 10512' (3127.5m)
- 10584' (3148.9m)
- 10656' (3170.3m)
- 10728' (3191.7m)
- 10800' (3213.1m)
- 10872' (3234.5m)
- 10944' (3255.9m)
- 11016' (3277.3m)
- 11088' (3298.7m)
- 11160' (3320.1m)
- 11232' (3341.5m)
- 11304' (3362.9m)
- 11376' (3384.3m)
- 11448' (3405.7m)
- 11520' (3427.1m)
- 11592' (3448.5m)
- 11664' (3469.9m)
- 11736' (3491.3m)
- 11808' (3512.7m)
- 11880' (3534.1m)
- 11952' (3555.5m)
- 12024' (3576.9m)
- 12096' (3598.3m)
- 12168' (3619.7m)
- 12240' (3641.1m)
- 12312' (3662.5m)
- 12384' (3683.9m)
- 12456' (3705.3m)
- 12528' (

DETAIL 1
N.T.S.

Diagram illustrating the preferred dimensions for a "Far Out" loop in a right turn lane, showing various dimensions and labels for offset loops, cross street, arterial, and driveway.

Labels and Dimensions:

- OFFSET LOOPS BY 1' (300mm) FOR STRAIGHT SAW CUTS
- 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)
- CROSS STREET
- ARTERIAL
- 3' (900mm)
- 1" (25 mm) UNIT DUCT (TYP.)
- 3' (900mm)
- 12' (3.6m)
- 12' (3.6m)
- 10' (3.0m) PREFERRED 15' (4.5m) MAXIMUM
- 3' (900mm)
- 6' (1.8m) MINIMUM, 25' (7.6 m) MAXIMUM
- THESE DIMENSIONS SHALL BE 5' (1.5m) FOR 10' (3.0m) LANE WIDTHS
- IF "FAR OUT" LOOPS ARE LOCATED IN TAPER OF A RIGHT TURN LANE, DIMENSION THIS LOOP TO COVER
- DRIVEWAY

DETAIL 2
N.T.S.

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 SEPARATLY. 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.

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.

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.

FILE NAME =	USER NAME = VelichkovVV	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 – DETECTOR LOOP INSTALLATION					F.A. - RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr\pw_work\p\wdot\velichkovvv\d0260103\0	stdStd.dgn	DRAWN -	REVISED -		DETAILS FOR ROADWAY RESURFACING					VAR.	2011-010-RS	DUPAGE	37	37
	PLOT SCALE = 100.0000' / IN.	CHECKED - R.K.F.	REVISED -							TS-07		CONTRACT NO. 60N98		
	PLOT DATE = 4/13/2011	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS				