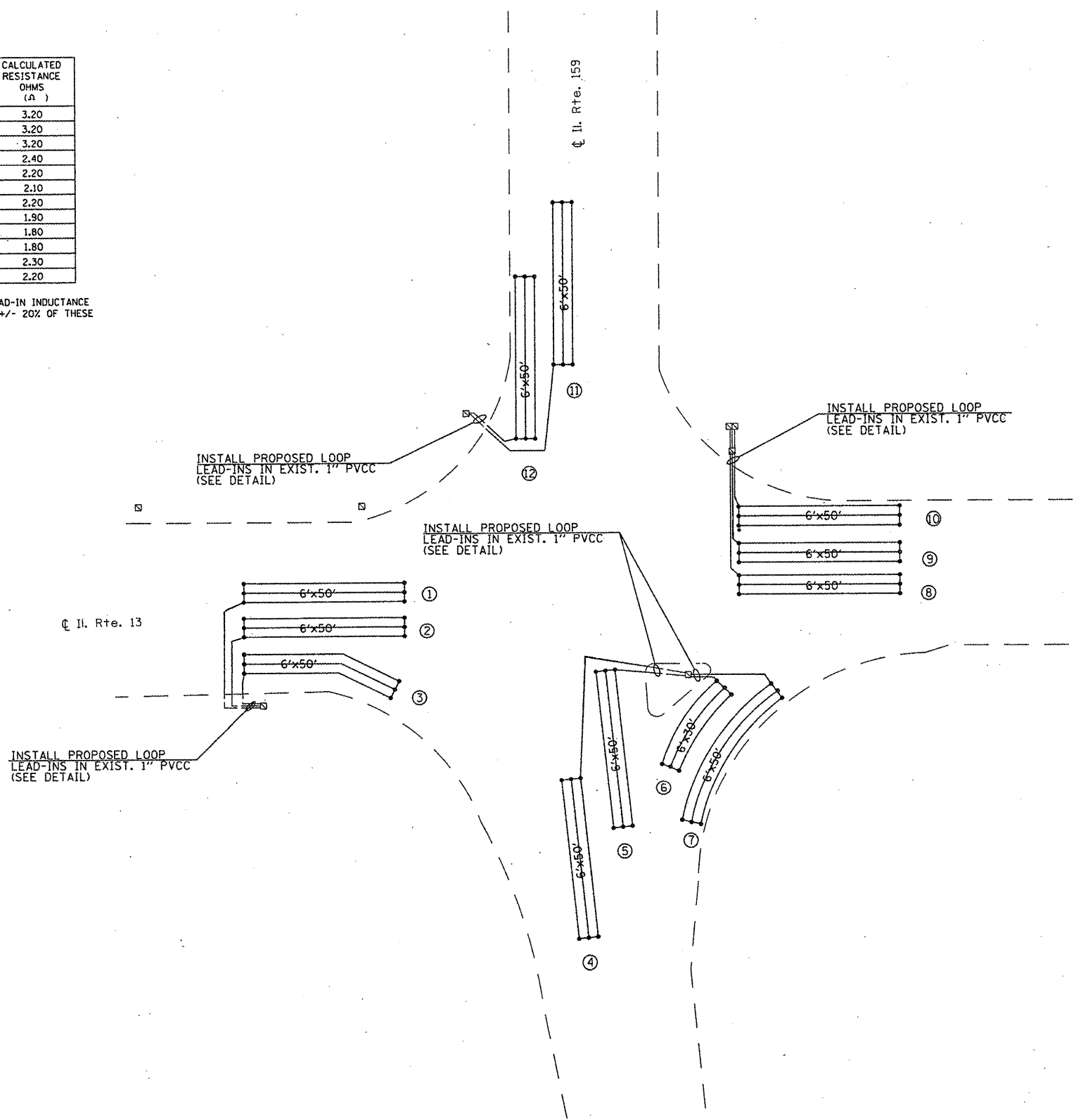


DETECTOR LOOP REQUIREMENTS AND CALCULATIONS  
FOR IL 13 AND IL 159

LOOP	LOOP SIZE(FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
① EB LEFT TURN LN	6 X 50	3-6-3	844.4	3.20
② EB THRU LN	6 X 50	3-6-3	846.9	3.20
③ EB RIGHT TURN LN	6 X 50	3-6-3	845.4	3.20
④ NB LEFT TURN LN	6 X 50	3-6-3	810.0	2.40
⑤ NB THRU LN	6 X 50	3-6-3	800.0	2.20
⑥ NB RIGHT TURN A	6 X 30	3-6-3	797.6	2.10
⑦ NB LEFT TURN B	6 X 50	3-6-3	800.7	2.20
⑧ WB LEFT TURN LN	6 X 50	3-6-3	787.7	1.90
⑨ WB THRU LN	6 X 50	3-6-3	784.5	1.80
⑩ WB RIGHT TURN LN	6 X 50	3-6-3	782.3	1.80
⑪ SB LEFT TURN LN	6 X 50	3-6-3	807.9	2.30
⑫ SB THRU LN	6 X 50	3-6-3	800.0	2.20

THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.



NOT TO SCALE

FILE NAME =	USER NAME = karlesol	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DECTOR LOOPS @ IL 13158 AND IL 159</b>		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\PWIDOT\KARLASAL\0155566\d087644-sh-t-TS.dgn		DRAWN -	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	9251	26-1RS-3	ST. CLAIR	37	36
PLOT SCALE = 42.9268 / IN.		CHECKED -	REVISED -								CONTRACT NO. 76D44	
PLOT DATE = 3/3/2010		DATE -	REVISED -								FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT	