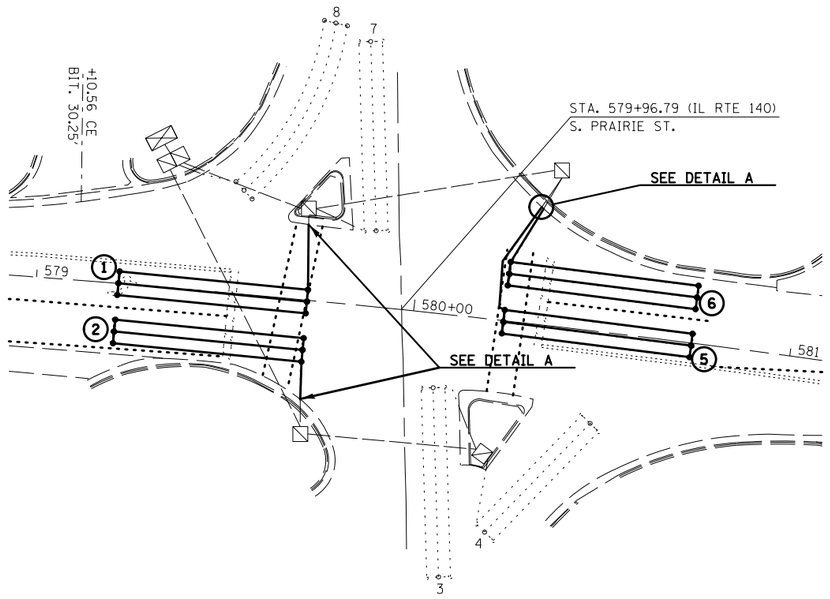
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 140. AND S. PRAIRIE ST.

LOOP*	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
1. EB LT CD	1	6 X 50-Q	3-6-3	803.1	2.0
2. EB THRU CD	6	6 X 50-Q	3-6-3	812.1	2.2
3. NB THRU CD	4	6 X 50-Q	3-6-3	NA	NA
4. NB RT CD	4	6 X 40-Q	3-6-3	NA	NA
5. WB LT CD	5	6 X 50-Q	3-6-3	818.7	2.3
6. WB THRU CD	2	6 X 50-Q	3-6-3	815.6	2.3
7. SB THRU CD	3	6 X 50-Q	3-6-3	NA	NA
8. SB RT CD	3	6 X 50-Q	3-6-3	NA	NA

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

Q=QUADRAPOLE



N

20' 0 20' 40'
SCALE: 1" = 20'

FILE NAME = c:\pw_work\pwidot\childsl\d0251881\d876e85-sht-TS.dgn	USER NAME = childsl	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT PLAN S. PRAIRIE ST.
	PLOT SCALE = 40.0000 ' / in.	DRAWN -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.
	PLOT DATE = 3/30/2012	CHECKED -	REVISED -		
		DATE -	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
•	133 RS -6	MADISON	54	52
		CONTRACT NO. 76E85		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

•=782/582