

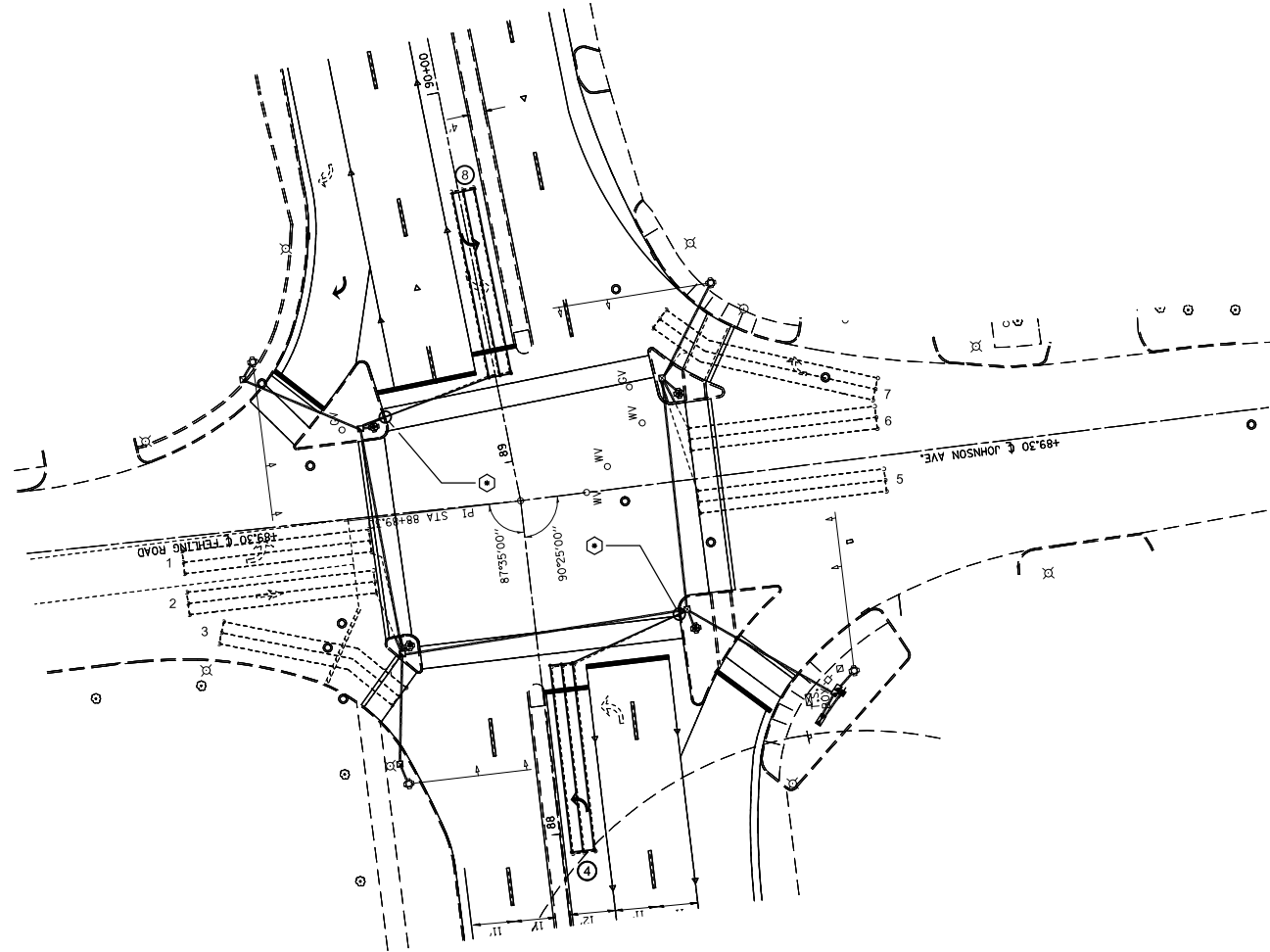
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS  
FOR IL 203 & FEHLING RD.

LOOP#	PHASE#	LOOP SIZE (FT. X FT.)	REQUIRED# OF TURNS	CALCULATED INDUCTANCE MICROHENRIES	CALCULATED RESISTANCE OHMS
1. EB LT CD	3	6 X 50-Q	3-6-3	826.5	2.5
2. EB THRU CD	3	6 X 50-Q	3-6-3	824.1	2.5
3. EB RT CD	3	6 X 60-Q	3-6-3	971.6	2.7
4. NB THRU-LT CD	1 & 6	6 X 50-Q	3-6-3	809.5	2.1
5. WB LT CD	4	6 X 50-Q	3-6-3	823.6	2.4
6. WB THRU CD	4	6 X 50-Q	3-6-3	820.1	2.4
7. WB RT CD	4	6 X 50-Q	3-6-3	819.0	2.3
8. SB THRU-LT CD	2 & 5	6 X 50-Q	3-6-3	824.8	2.9

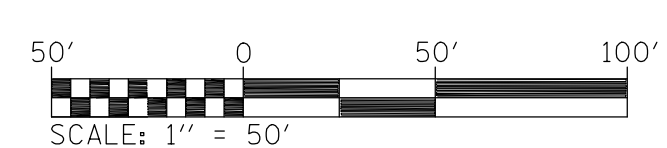
THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.

Q=QUADRAPOLE

⊙ =SEE DETAIL A



IL 203 & FEHLING RD.



FILE NAME =	USER NAME = prestonme	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>DETECTOR LOOP REPLACEMENT PLAN 3 OF 5</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p\dot\prestonme\d0332003\d876g24-sht-TS.dgn		DRAWN -	REVISED -		594	(X-3,X-2)RS-1	MADISON	52	48			
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED -		CONTRACT NO. 76G24							
	PLOT DATE = 5/7/2014	DATE -	REVISED -		SCALE:	SHEET NO. 2 OF 7 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			