

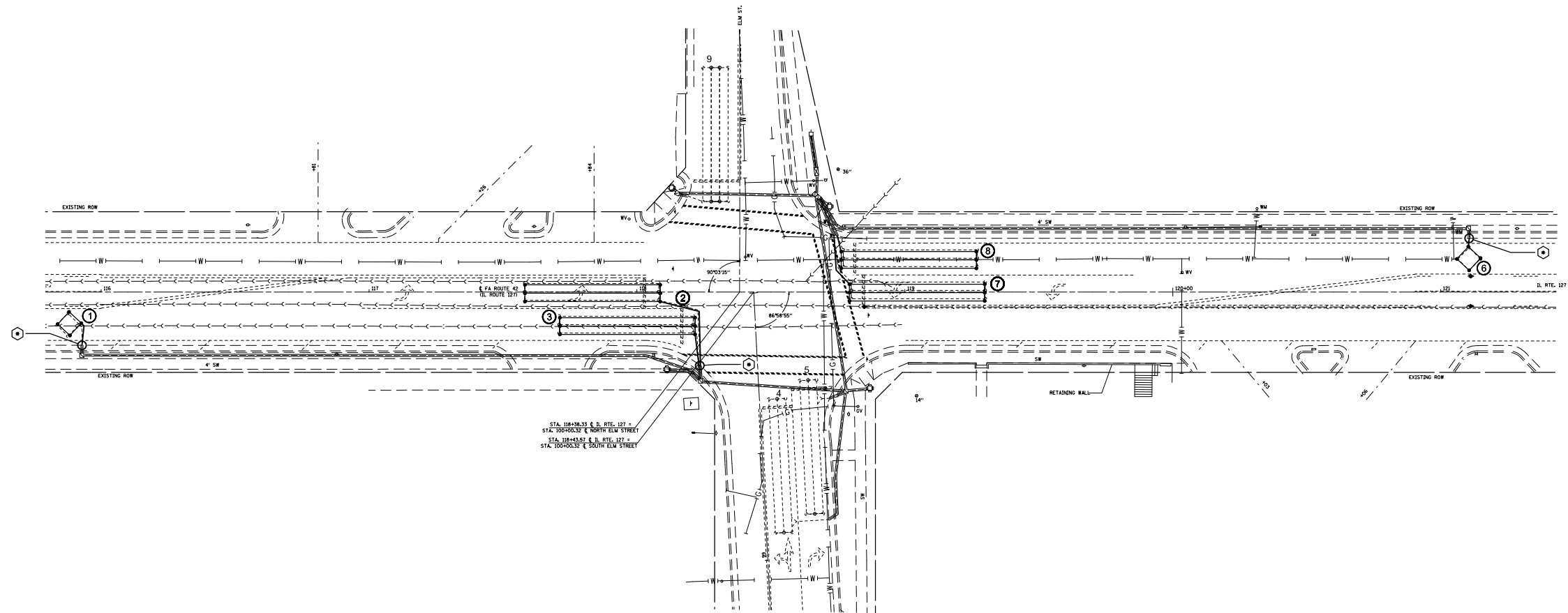
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS  
FOR IL 127 & ELM ST.

LOOP#	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES	CALCULATED RESISTANCE OHMS
1. EB CCO	6	6 X 6	6	345.5	2.4
2. EB LT CD	1	6 X 50-Q	3-6-3	830.9	2.6
3. EB THRU CD	6	6 X 50-Q	3-6-3	826.0	2.5
4. NB LT CD	4	6 X 50-Q	3-6-3	887.9	3.9
5. NB THRU CD	4	6 X 50-Q	3-6-3	877.3	3.7
6. WB CCO	2	6 X 6	6	317.8	1.8
7. WB LT CD	5	6 X 50-Q	3-6-3	799.2	1.9
8. WB THRU CD	2	6 X 50-Q	3-6-3	796.1	1.6
9. SB THRU CD	3	9 X 50	2-4-2	441.2	3.0

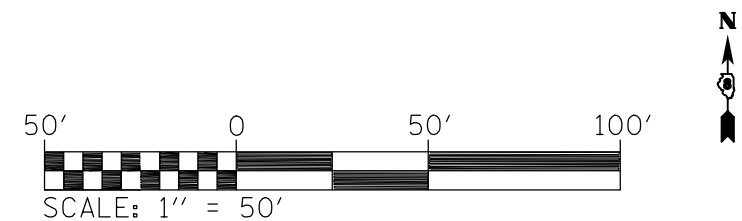
THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.

Q=QUADRAPOLE

⊙=SEE DETAIL A



IL 127 & ELM ST.



FILE NAME =	USER NAME = prestonme	DESIGNED -	REVISED -
et:\pw\work\p\idot\prestonme\d0355915\d876g79-sh-t-TSpln.dgn		DRAWN -	REVISED -
PLOT SCALE = 50.0000' / in.		CHECKED -	REVISED -
PLOT DATE = 6/12/2014		DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT PLAN

SCALE: SHEET NO. 2 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	(139-1,36-1,110-1)RS-1	BOND	68	61
CONTRACT NO. 76G79				
ILLINOIS FED. AID PROJECT				