

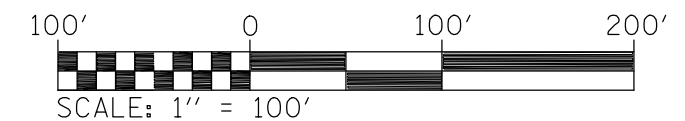
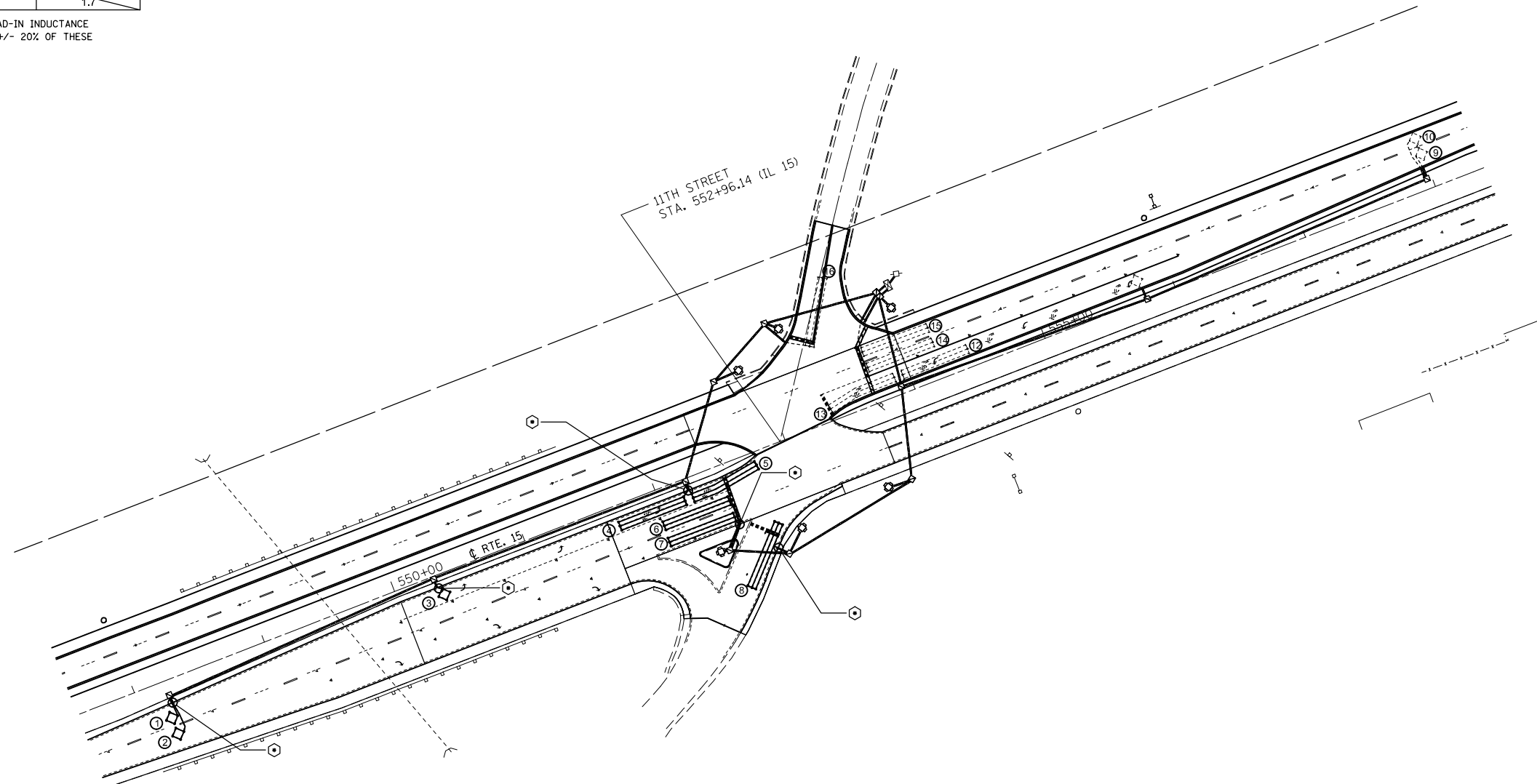
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 015 AND 11TH ST.

LOOP#	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
1. EB CCO A	6	6 x 6	7	523	4.0
2. EB CCO B	6	6 x 6	7	517	3.9
3. EB CCO C	6	6 x 6	7	469	2.8
4. EB LT CD A	1	6 x 50-Q	3-6-3	474	2.3
5. EB LT CD B	1	6 x 50-Q	3-6-3	473	2.3
6. EB THRU CD A	6	6 x 50-Q	3-6-3	500	2.9
7. EB THRU CD B	6	6 x 50-Q	3-6-3	497	2.9
8. NB THRU-LT CD	4	6 x 50-Q	3-6-3	480	2.5
9. WB CCO A	2	6 x 6	7	482	3.1
10. WB CCO B	2	6 x 6	7	487	3.2
11. WB CCO C	2	6 x 6	7	433	1.9
12. WB LT CD A	5	6 x 50-Q	3-6-3	442	1.6
13. WB LT CD B	5	6 x 50-Q	3-6-3	442	1.6
14. WB THRU CD A	2	6 x 50-Q	3-6-3	435	1.4
15. WB THRU CD B	2	6 x 50-Q	3-6-3	431	1.4
16. SB THRU-LT CD	3	6 x 50-Q	3-6-3	447	1.7

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



FILE NAME =	USER NAME = conoverpj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT PLAN IL015 AND S. 11TH ST.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
et:\pw\work\p1dot\conoverpj\d0340733\d076g37-sht-T9plan.dgn		DRAWN -	REVISED -			103	(29-1,28-1,28-2,26-1)RS-1	ST. CLAIR	96	91
PLOT SCALE = 100.0000' / 1in.		CHECKED -	REVISED -			CONTRACT NO. 76G37				
PLOT DATE = 10/18/2013		DATE -	REVISED -			FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SCALE: SHEET NO. 6 OF 7 SHEETS STA. TO STA.