

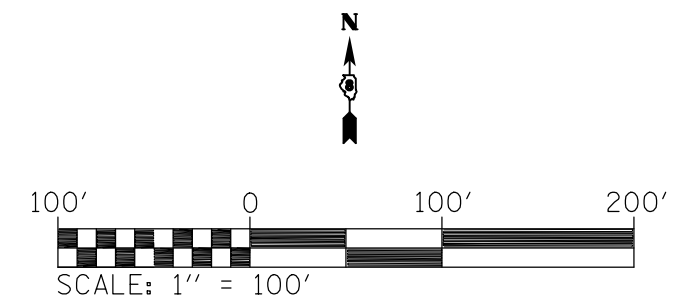
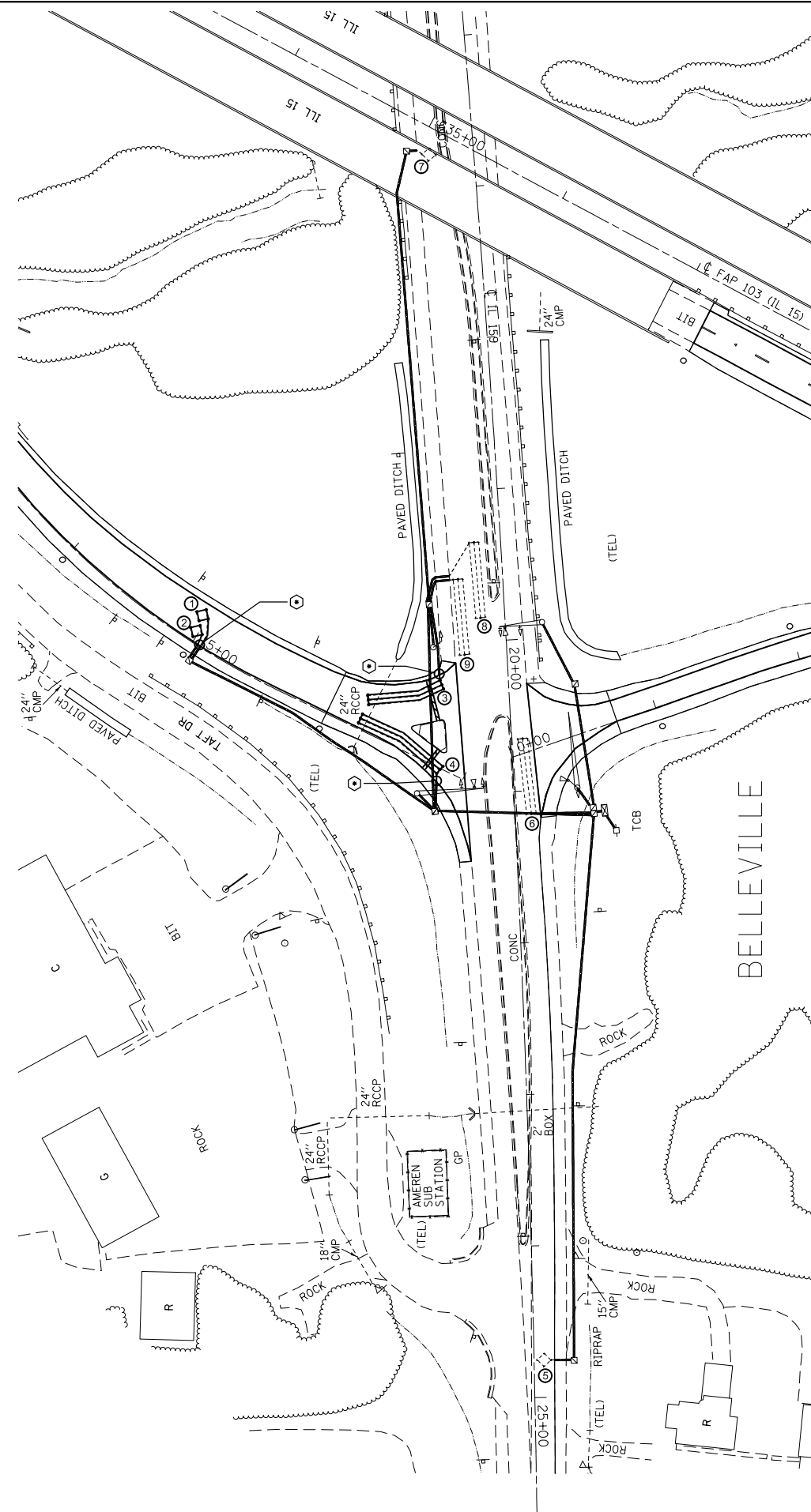
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 015 AND IL 159 EB RAMP

LOOP#	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
1. EB CCO A	8	6 x 6	7	444	2.2
2. EB CCO B	8	6 x 6	7	440	2.1
3. EB LT CD	8	6 x 50-Q	3-6-3	855	3.2
4. EB RT CD	8	6 x 50-Q	3-6-3	818	2.3
5. NB CCO	2	6 x 6	7	453	2.4
6. NB THRU CD	2	6 x 50-Q	3-6-3	798	1.9
7. SB CCO	6	6 x 6	7	493	3.3
8. SB LT CD	1	6 x 50-Q	3-6-3	856	3.2
9. SB THRU CD	6	6 x 50-Q	3-6-3	849	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



FILE NAME =	USER NAME = conoverpj	DESIGNED -	REVISED -
et:\pw\work\p\dot\conoverpj\d0340733\d076g37-sht-T9plan.dgn		DRAWN -	REVISED -
	PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -
	PLOT DATE = 10/18/2013	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT PLAN
IL015 AND IL 159 EB RAMP

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
103	(29-1,28-1,28-2,26-1)RS-1	ST. CLAIR	96	92
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 76G37	