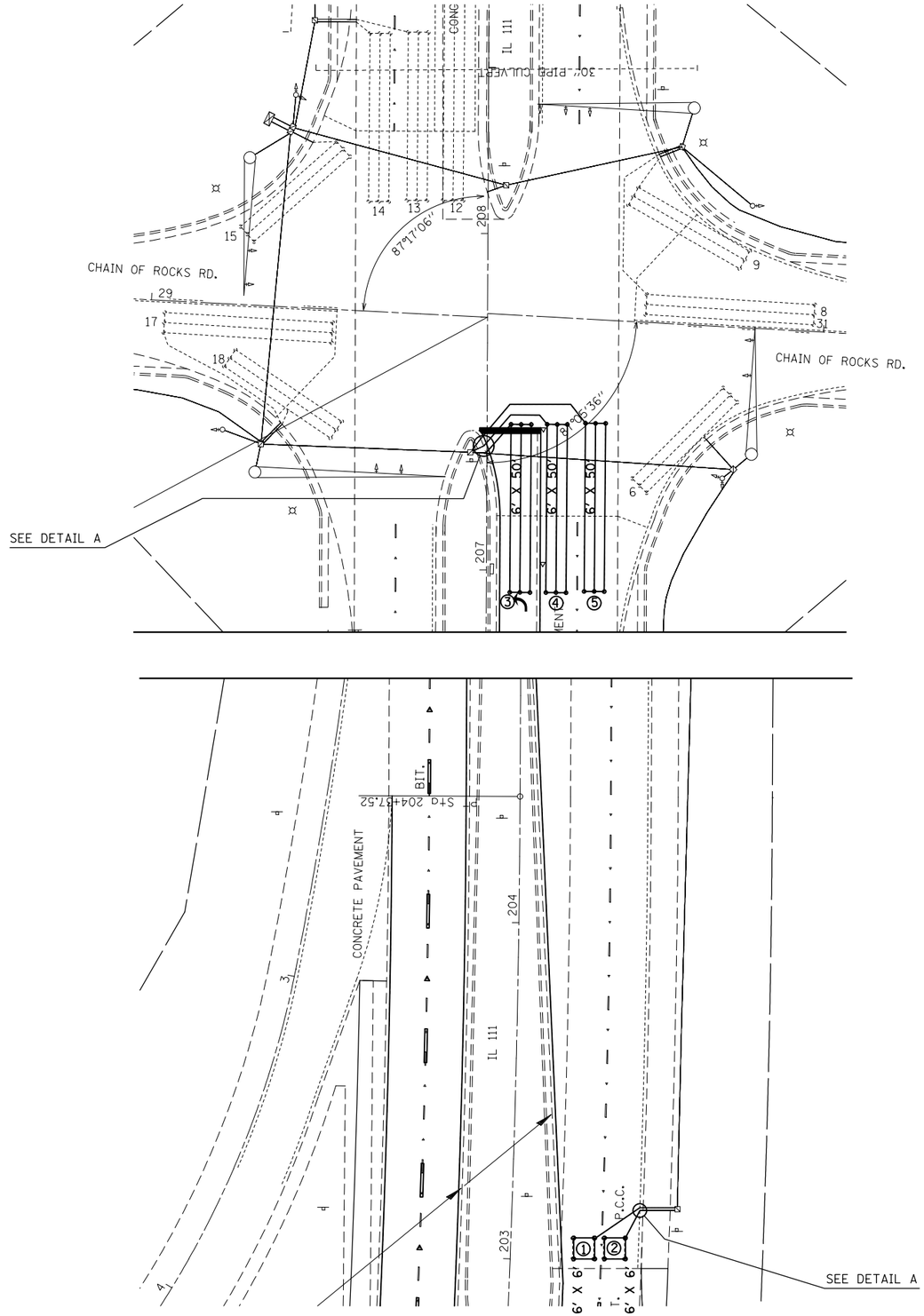

DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 111 AND CHAIN OF ROCKS RD.

LOOP*	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
1.NB CCO A	6	6 X 6	7	525.3	4.0
2.NB CCO B	6	6 X 6	7	523.8	4
3.NB LT CD	1	6 X 50-Q	3-6-3	836.6	2.7
4.NB THRU CD A	6	6 X 50-Q	3-6-3	839.5	2.8
5.NB THRU CD B	6	6 X 50-Q	3-6-3	842.8	2.9
6.NB RT CD	6	6 X 30-Q	3-6-3	NA	NA
7.WB CCO	4	6 X 6	5	NA	NA
8.WB THRU CD	4	6 X 50-Q	3-6-3	NA	NA
9.WB RT CD	4	6 X 30-Q	3-6-3	NA	NA
10.SB CCO A	2	6 X 6	7	NA	NA
11.SB CCO B	2	6 X 6	7	NA	NA
12.SB LT CD	5	6 X 50-Q	3-6-3	NA	NA
13.SB THRU CD A	2	6 X 50-Q	3-6-3	NA	NA
14.SB THRU CD B	2	6 X 50-Q	3-6-3	NA	NA
15.SB RT CD	2	6 X 30-Q	3-6-3	NA	NA
16.EB CCO	3	6 X 6	7	NA	NA
17.EB THRU CD	3	6 X 50-Q	3-6-3	NA	NA
18.EB RT CD	3	6 X 30-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\millerraj\d0260814\d876e96-sht-plan.dgn	USER NAME = millerraj	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 12/16/2011	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT PLAN
IL 111 & CHAIN OF ROCKS RD.

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
582	(6-3, 6-1)RS-3	MADISON	66	65
		CONTRACT NO. 76E96		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		