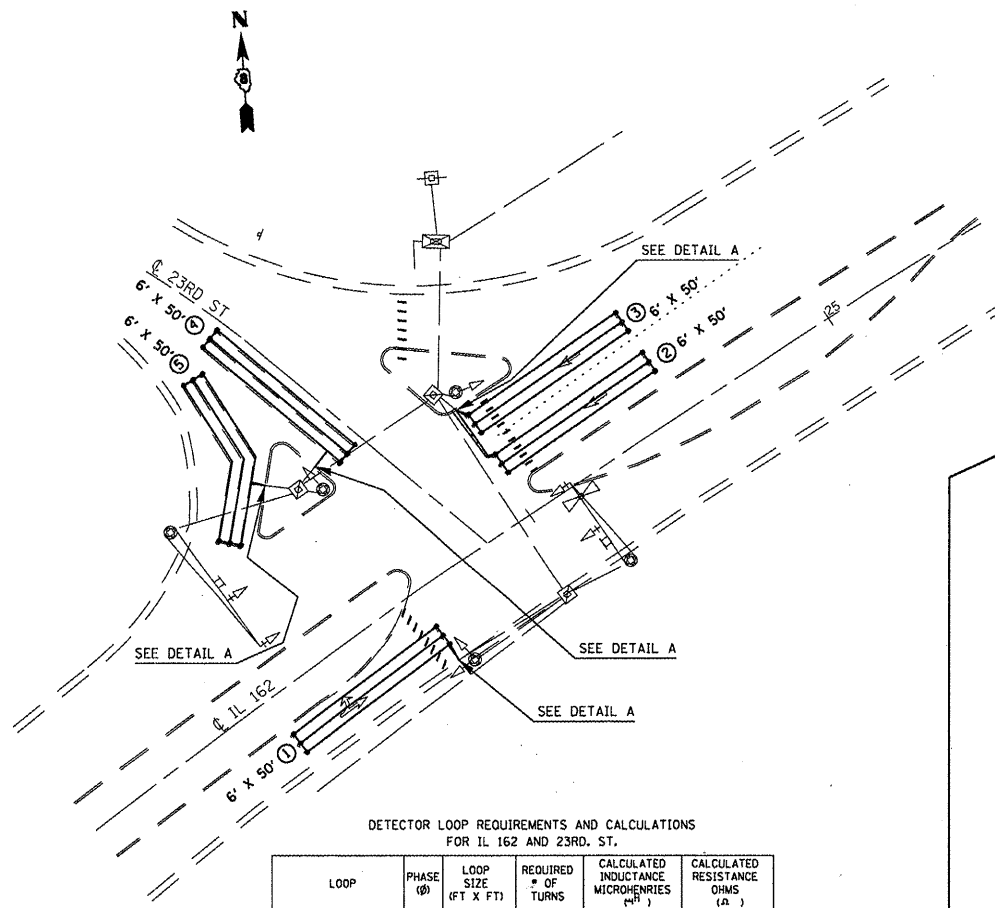
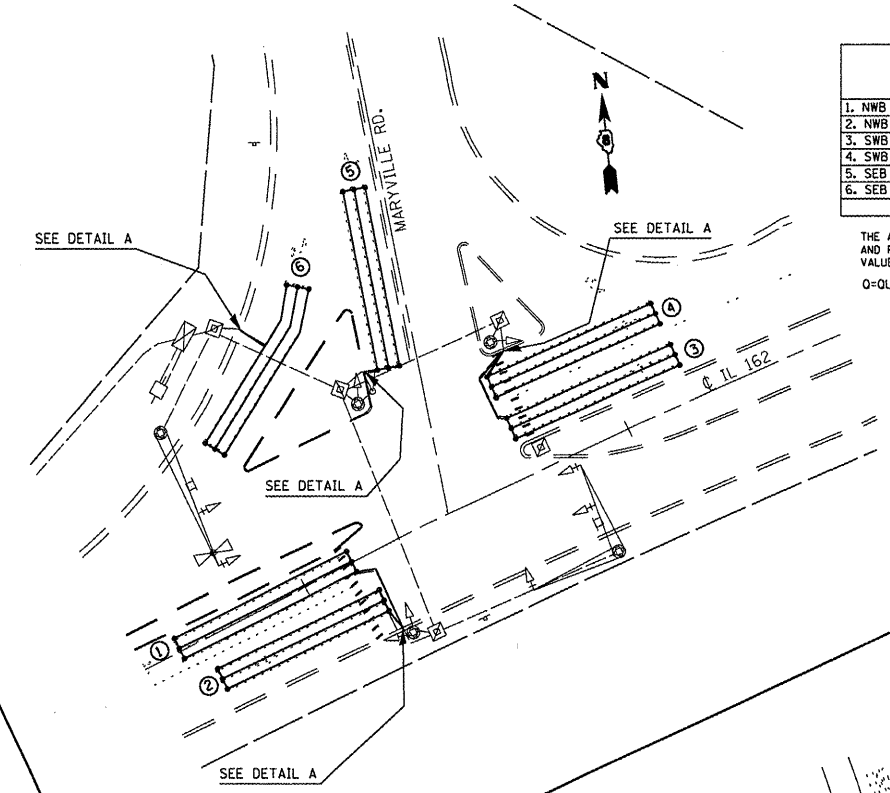


DETECTOR LOOP REQUIREMENTS AND CALCULATIONS FOR IL 162 AND MARYVILLE RD.

LOOP	PHASE (Ø)	LOOP SIZE (FT X FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (µH)	CALCULATED RESISTANCE OHMS (Ω)
1. NWB LT CD	1	6 X 50-0	3-6-3	821.0	2.4
2. NWB THRU CD	6	6 X 50-0	3-6-3	817.2	2.3
3. SWB THRU CD A	2	6 X 50-0	3-6-3	815.5	2.3
4. SWB THRU CD B	2	6 X 50-0	3-6-3	811.7	2.2
5. SEB LT CD	4	6 X 50-0	3-6-3	799.4	1.9
6. SEB RT CD	4	6 X 50-0	3-6-3	792.8	1.7

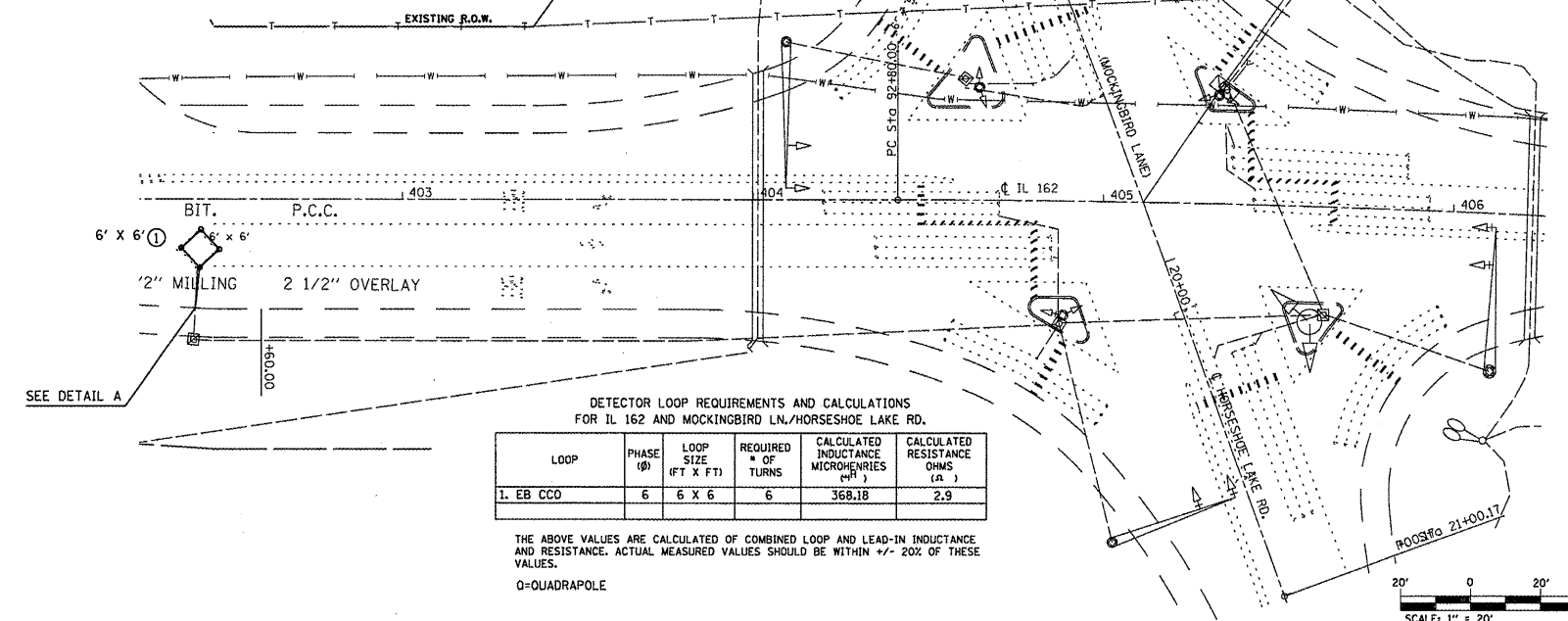
THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.  
Ø=QUADRAPOLE



DETECTOR LOOP REQUIREMENTS AND CALCULATIONS FOR IL 162 AND 23RD. ST.

LOOP	PHASE (Ø)	LOOP SIZE (FT X FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (µH)	CALCULATED RESISTANCE OHMS (Ω)
1. NWB THRU CD	6	6 X 50-0	3-6-3	820.1	2.4
2. SWB THRU CD A	2	6 X 50-0	3-6-3	801.2	1.9
3. SWB THRU CD B	2	6 X 50-0	3-6-3	798.1	1.9
4. SEB LT CD	4	6 X 50-0	3-6-3	807.8	2.1
5. SEB RT CD	4	6 X 50-0	3-6-3	807.6	2.1

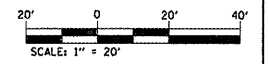
THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.  
Ø=QUADRAPOLE



DETECTOR LOOP REQUIREMENTS AND CALCULATIONS FOR IL 162 AND MOCKINGBIRD LN./HORSESHOE LAKE RD.

LOOP	PHASE (Ø)	LOOP SIZE (FT X FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (µH)	CALCULATED RESISTANCE OHMS (Ω)
1. EB CCO	6	6 X 6	6	368.18	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.  
Ø=QUADRAPOLE



FILE NAME =	USER NAME = millerj	DESIGNED -	REVISIONS -
es:\pwwork\pwwork\millerrj\d0212671\d097e49-aht-TS.dgn		DRAWN -	REVISED -
	PLOT SCALE = 53.6885' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/31/2011	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETECTOR LOOP REPLACEMENT PLAN**

SCALE: \_\_\_\_\_ SHEET NO. \_\_\_\_ OF \_\_\_\_ SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A.P. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
586	57RS-4, 157-1, 51RS-3	MADISON	33	29
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			CONTRACT NO. 76E49	