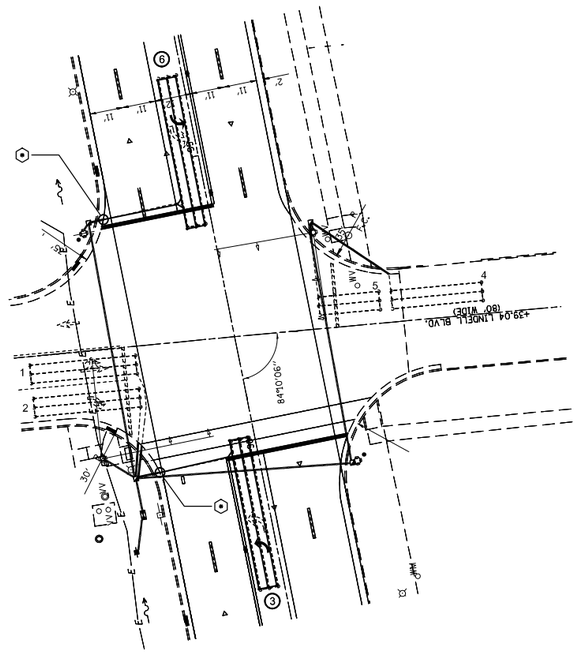
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 203 & LINDELL AVE.

| LOOP# | PHASE # | LOOP SIZE (FT. X FT.) | REQUIRED # OF TURNS | CALCULATED INDUCTANCE MICROHENRIES | CALCULATED RESISTANCE OHMS |
|---|---|---|---|---|---|
| 1. EB LT CD | 4 | 6 X 35-Q | 3-6-3 | 573.5 | 1.4 |
| 2. EB THRU CD | 4 | 6 X 35-Q | 3-6-3 | 570.9 | 1.4 |
| 3. NB THRU CD | 1 & 6 | 6 X 50-Q | 3-6-3 | 797.7 | 1.9 |
| 4. EB THRU CD A | 3 | 6 X 30-Q | 3-6-3 | 534.4 | 2.1 |
| 5. EB THRU CD B | 3 | 6 X 20-Q | 3-6-3 | 381.8 | 1.7 |
| 6. SB THRU CD | 2 & 5 | 6 X 50-Q | 3-6-3 | 817.9 | 2.3 |

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 203 & LINDELL AVE.**

50′ 0 50′ 100′

SCALE: 1″ = 50′

N

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FILE NAME = c:\pw_work\pwidot\prestonme\d0332003\d876g24-sht-TS.dgn | USER NAME = prestonme | DESIGNED - | REVISED - | **STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** | **DETECTOR LOOP REPLACEMENT PLAN 4 OF 5** | | |
| | DRAWN - | REVISED - | | | | | |
| | PLOT SCALE = 50.0000 ' / in. | CHECKED - | REVISED - | | | | |
| | PLOT DATE = 5/7/2014 | DATE - | REVISED - | | SCALE: | SHEET NO. 2 OF 7 SHEETS | STA. TO STA. |

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 594 | (X-3,X-2)RS-1 | MADISON | 52 | 49 |
| | | CONTRACT NO. 76G24 | | |
| | ILLINOIS | FED. AID PROJECT | | |