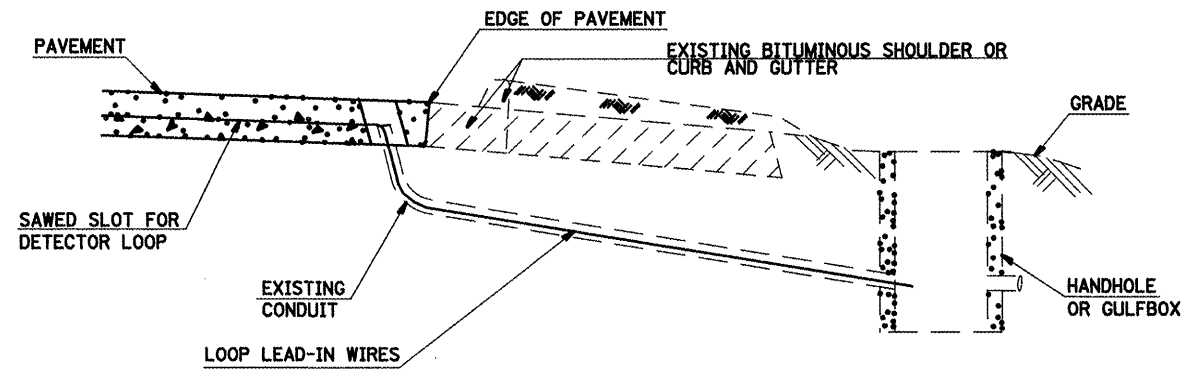
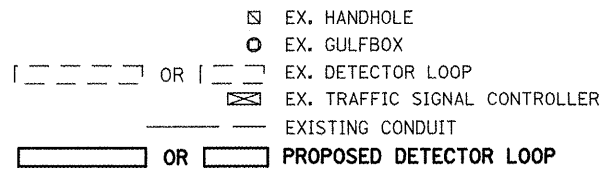


NOTES:

SEE TABLE "DETECTOR LOOP REQUIREMENTS AND CALCULATIONS" FOR LOOP SIZE AND CALCULATED NUMBER OF TURNS.
SEE "ELECTRICAL DETAIL" FOR INSTALLING DETECTOR LOOP WIRES IN EXISTING CONDUITS.

TRAFFIC SIGNALS LEGEND



DETECTOR LOOP REQUIREMENTS AND CALCULATIONS FOR IL 37 AND MAIN STREET

| LOOP | PHASE (Ø) | LOOP SIZE (FT X FT) | REQUIRED # OF TURNS | CALCULATED INDUCTANCE MICROHENRIES (µH) | CALCULATED RESISTANCE OHMS (Ω) |
|-------------------|-----------|---------------------|---------------------|---|--------------------------------|
| 1. NB LT CD | 3 | 6 X 40 | 3 | 251.1 | 1.5 |
| 2A. NB THRU CD | 8 | 6 X 20 | 3 | 157.0 | 1.2 |
| 2B. NB THRU-RT CD | 8 | 6 X 20 | 3 | 157.0 | 1.2 |
| 3. WB LT CD | NA | NA | NA | NA | NA |
| 4A. WB THRU CD | NA | NA | NA | NA | NA |
| 4B. WB THRU CD | NA | NA | NA | NA | NA |
| 5A. WB THRU-RT CD | NA | NA | NA | NA | NA |
| 5B. WB THRU-RT CD | NA | NA | NA | NA | NA |
| 6. SB LT CD | 7 | 6 X 40 | 3 | 248.4 | 1.4 |
| 7A. SB THRU CD | 4 | 6 X 20 | 3 | 150.9 | 1.0 |
| 7B. SB THRU-RT CD | 4 | 6 X 20 | 3 | 150.9 | 1.0 |
| 8. EB LT CD | NA | NA | NA | NA | NA |
| 9A. EB THRU CD | NA | NA | NA | NA | NA |
| 9B. NB THRU-RT CD | NA | NA | NA | NA | NA |

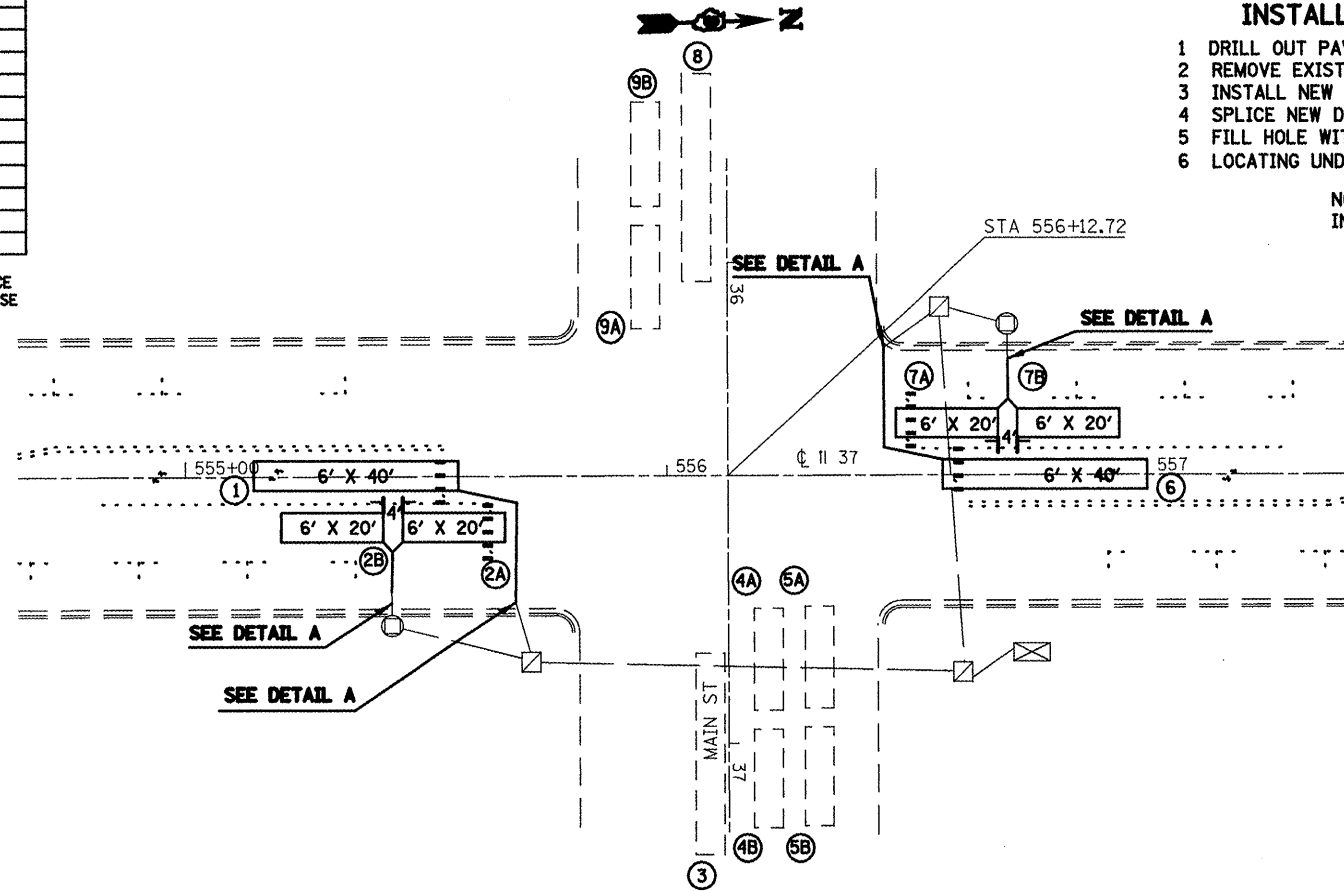
THE ABOVE VALUES ARE CALCULATED OF COMBINED LOOP AND LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN +/- 20% OF THESE VALUES.

Q=QUADRAPOLE

DETAIL A
(NO SCALE)
INSTALLING DETECTOR LOOP WIRES IN EXISTING CONDUIT

- 1 DRILL OUT PAVEMENT SEALANT AND CLEAN EXISTING CONDUIT.
- 2 REMOVE EXISTING DETECTOR LOOP WIRES TO HANDHOLE OR GULFBOX.
- 3 INSTALL NEW LOOP LEAD-IN WIRES IN EXISTING CONDUIT.
- 4 SPLICE NEW DETECTOR LOOP WIRES TO EXISTING LOOP LEAD-IN CABLE IN HANDHOLE OR GULFBOX.
- 5 FILL HOLE WITH APPROVED SEALER. PREVENT SEALER FROM ENTERING INTO CONDUIT.
- 6 LOCATING UNDERGROUND CABLE WILL BE PAID FOR SEPARATELY.

NOT A PAY ITEM. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "DETECTOR LOOP REPLACEMENT"



| SCHEDULE OF QUANTITIES | | | TOTAL QUANTITIES |
|------------------------|----------------------------|------|------------------|
| CODE NO | ITEM | UNIT | |
| 80500100 | LOCATING UNDERGROUND CABLE | FOOT | 25 |
| 88600600 | DETECTOR LOOP REPLACEMENT | FOOT | 510 |

