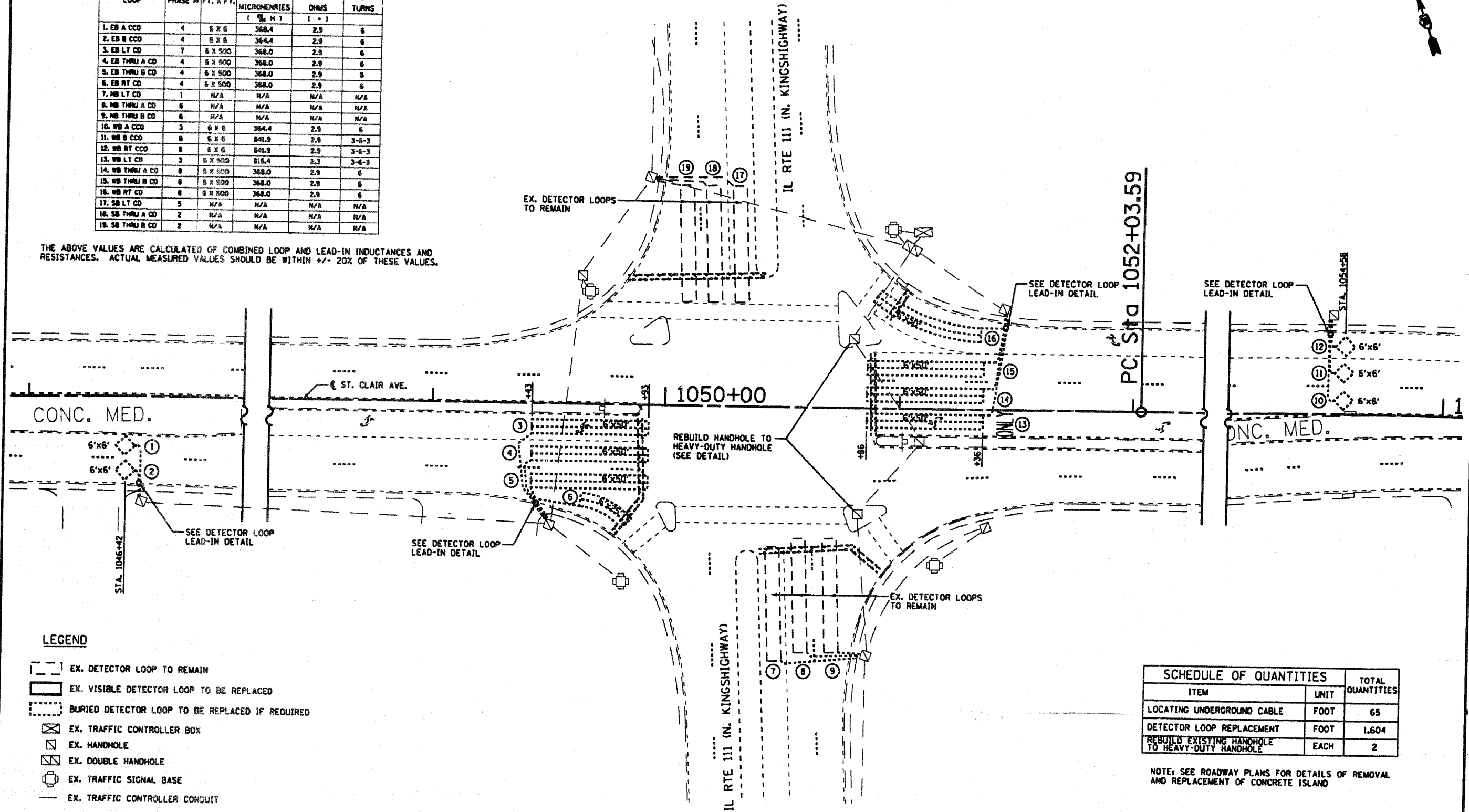


DETECTOR LOOP REQUIREMENTS AND CALCULATIONS FOR ST. CLAIR AVE AND IL RTE 111 (KINGSHIGHWAY)

LOOP	PHASE #	FT. X FT.	ST. CLAIR & IL 111	CALCULATED RESISTANCE OHMS (Ω)	REQUIRED # OF TURNS
			CALCULATED INDUCTANCE MICROHENRIES (μH)		
1. EB A CCO	4	6 X 6	368.4	2.9	6
2. EB B CCO	4	6 X 6	364.4	2.9	6
3. EB LT CD	7	6 X 500	368.0	2.9	6
4. EB THRU A CD	4	6 X 500	368.0	2.9	6
5. EB THRU B CD	4	6 X 500	368.0	2.9	6
6. EB RT CD	4	6 X 500	368.0	2.9	6
7. NB LT CD	1	N/A	N/A	N/A	N/A
8. NB THRU A CD	6	N/A	N/A	N/A	N/A
9. NB THRU B CD	6	N/A	N/A	N/A	N/A
10. WB A CCO	3	6 X 6	364.4	2.9	6
11. WB B CCO	8	6 X 6	841.9	2.9	3-6-3
12. WB RT CCO	8	6 X 6	841.9	2.9	3-6-3
13. WB LT CD	3	6 X 500	816.4	2.3	3-6-3
14. WB THRU A CD	8	6 X 500	368.0	2.9	6
15. WB THRU B CD	8	6 X 500	368.0	2.9	6
16. WB RT CD	8	6 X 500	368.0	2.9	6
17. SB LT CD	5	N/A	N/A	N/A	N/A
18. SB THRU A CD	2	N/A	N/A	N/A	N/A
19. SB THRU B CD	2	N/A	N/A	N/A	N/A

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

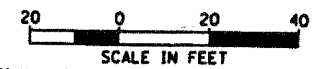


LEGEND

- EX. DETECTOR LOOP TO REMAIN
- EX. VISIBLE DETECTOR LOOP TO BE REPLACED
- BURIED DETECTOR LOOP TO BE REPLACED IF REQUIRED
- EX. TRAFFIC CONTROLLER BOX
- EX. HANDHOLE
- EX. DOUBLE HANDHOLE
- EX. TRAFFIC SIGNAL BASE
- EX. TRAFFIC CONTROLLER CONDUIT

SCHEDULE OF QUANTITIES		
ITEM	UNIT	TOTAL QUANTITIES
LOCATING UNDERGROUND CABLE	FOOT	65
DETECTOR LOOP REPLACEMENT	FOOT	1,604
REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	2

NOTE: SEE ROADWAY PLANS FOR DETAILS OF REMOVAL AND REPLACEMENT OF CONCRETE ISLAND



FILE NAME	USER NAME	DESIGNED	REVISED
9166	MBURG	CMV	-
		DRAWN	REVISED
		SJS	-
		CHECKED	REVISED
		CMV	-
		DATE	REVISED
		10/21/2010	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT
ST. CLAIR AVE. & IL RTE 111 (N. KINGSHIGHWAY)

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9166	34-1RS-3	ST. CLAIR	87	71
CONTRACT NO. 76096				
ILLINOIS FED. AID PROJECT				