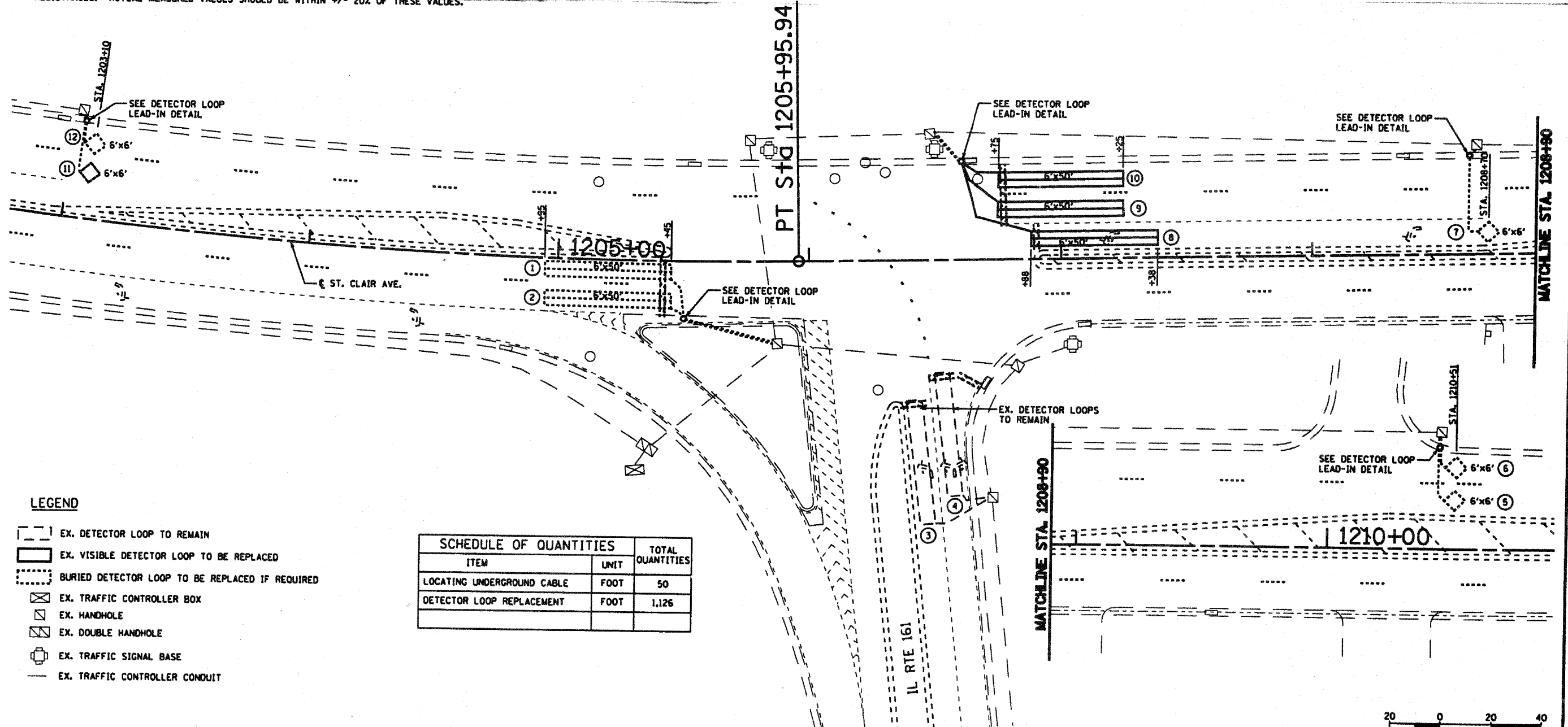


DETECTOR LOOP REQUIREMENTS AND CALCULATIONS FOR ST. CLAIRE AVE AND IL RTE 161

ST. CLAIR & IL 161					
LOOP	PHASE #	FT. X FT.	CALCULATED INDUCTANCE MICROHENRIES (μ H)	CALCULATED RESISTANCE OHMS (Ω)	REQUIRED # OF TURNS
1. EB THRU A CD	6	6 X 500	368.4	2.9	3-6-3
2. EB THRU B CD	6	6 X 500	364.4	2.9	3-6-3
3. WB LT CD	4	N/A	N/A	N/A	N/A
4. WB THRU CD	4	N/A	N/A	N/A	N/A
5. WB 1A CCO	2	6 X 6	841.9	2.9	6
6. WB 1B CCO	2	6 X 6	841.9	2.9	6
7. WB LT CCO	2	6 X 6	816.4	2.3	6
8. WB LT CD	5	6 X 500	795.7	1.8	3-6-3
9. WB THRU A CD	2	6 X 500	795.7	1.8	3-6-4
10. WB THRU B CD	2	6 X 500	795.7	1.8	3-6-5
11. WB 2A CCO	2	6 X 6	371.7	3.0	6
12. WB 2B CCO	2	6 X 6	367.7	2.9	6

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	50
DETECTOR LOOP REPLACEMENT	FOOT	1,126

FILE NAME * #FILE# Johnson, Durr & Gutschalk CONSULTING ENGINEERS Springfield, Illinois	USER NAME * USER#	DESIGNED - CMV	REVISIONS -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETECTOR LOOP REPLACEMENT ST. CLAIR AVE. & IL RTE 161		P.A.L. RTE 9166	SECTION 34-1RS-3	COUNTY ST. CLAIR	TOTAL SHEETS 87	SHEET NO. 76
	PLOT SCALE * #SCALE#	CHECKED - CMV	DATE - 10/21/2010		REVISIONS -	SCALE:	SHEET NO. OF SHEETS STA. TO STA.	CONTRACT NO. 78096		ILLINOIS FED. AID PROJECT	

