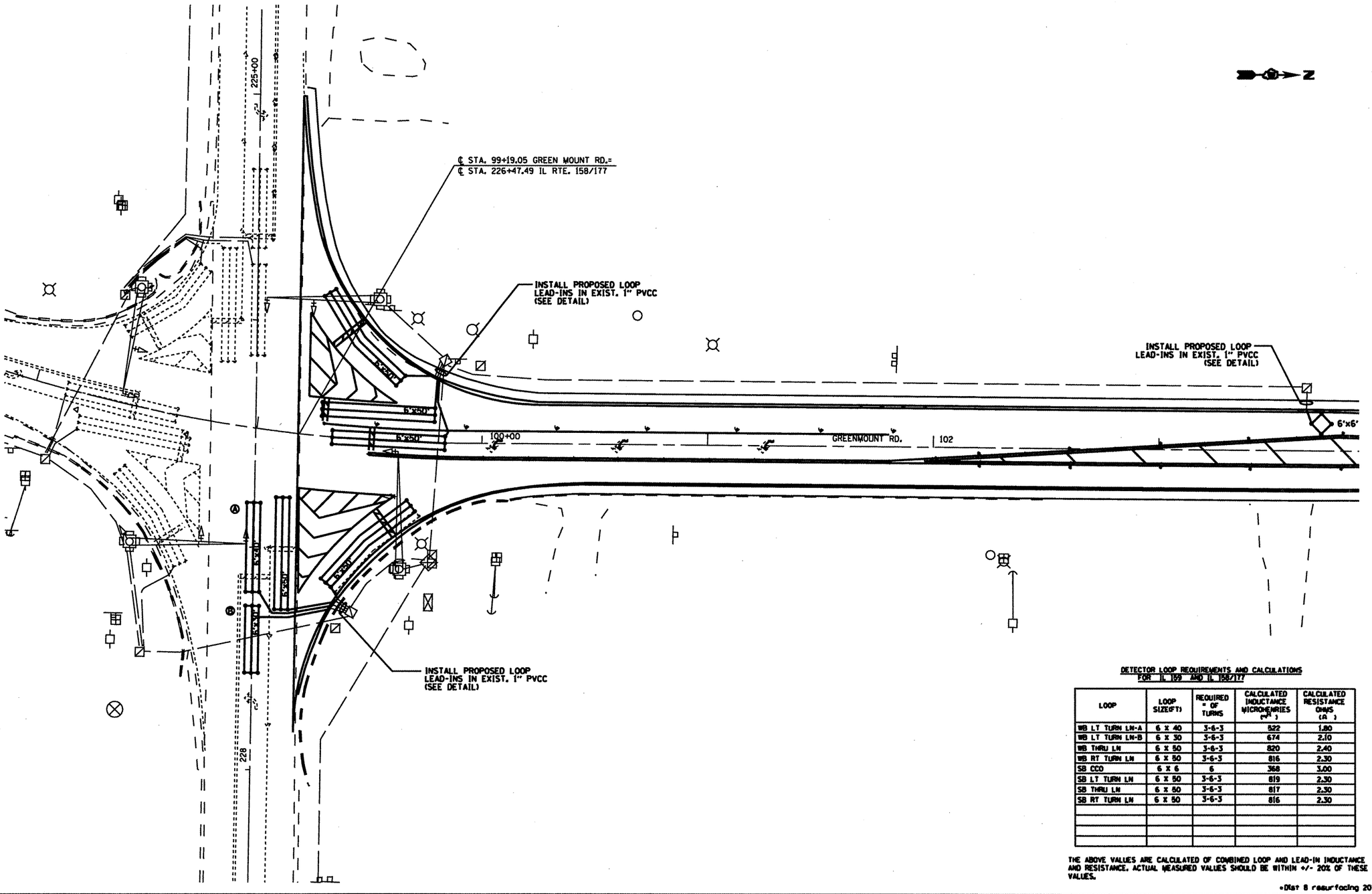

DETECTOR LOOP REQUIREMENTS AND CALCULATIONS
FOR IL 159 AND IL 158/177

LOOP	LOOP SIZE(FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
WB LT TURN LN-A	6 X 40	3-6-3	522	1.80
WB LT TURN LN-B	6 X 30	3-6-3	674	2.10
WB THRU LN	6 X 50	3-6-3	820	2.40
WB RT TURN LN	6 X 50	3-6-3	816	2.30
SB CCO	6 X 6	6	368	3.00
SB LT TURN LN	6 X 50	3-6-3	819	2.30
SB THRU LN	6 X 50	3-6-3	817	2.30
SB RT TURN LN	6 X 50	3-6-3	816	2.30

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

•Dist 8 resurfacing 2010-4

FILE NAME = a:\pe.work\pe:dot\freytr\d8175162\d876d66-sht-TS.dgn	USER NAME = freytr	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 48.1826 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 3/16/2010	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT

SCALE: 1" = 20' | SHEET NO. 1 OF 4 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Various	•	ST CLAIR	49	45
		CONTRACT NO. 76D86		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		