

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
592	28BR-2,3	ST. CLAIR	51	8
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

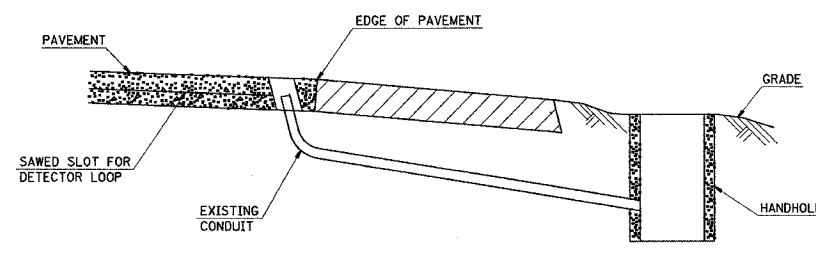
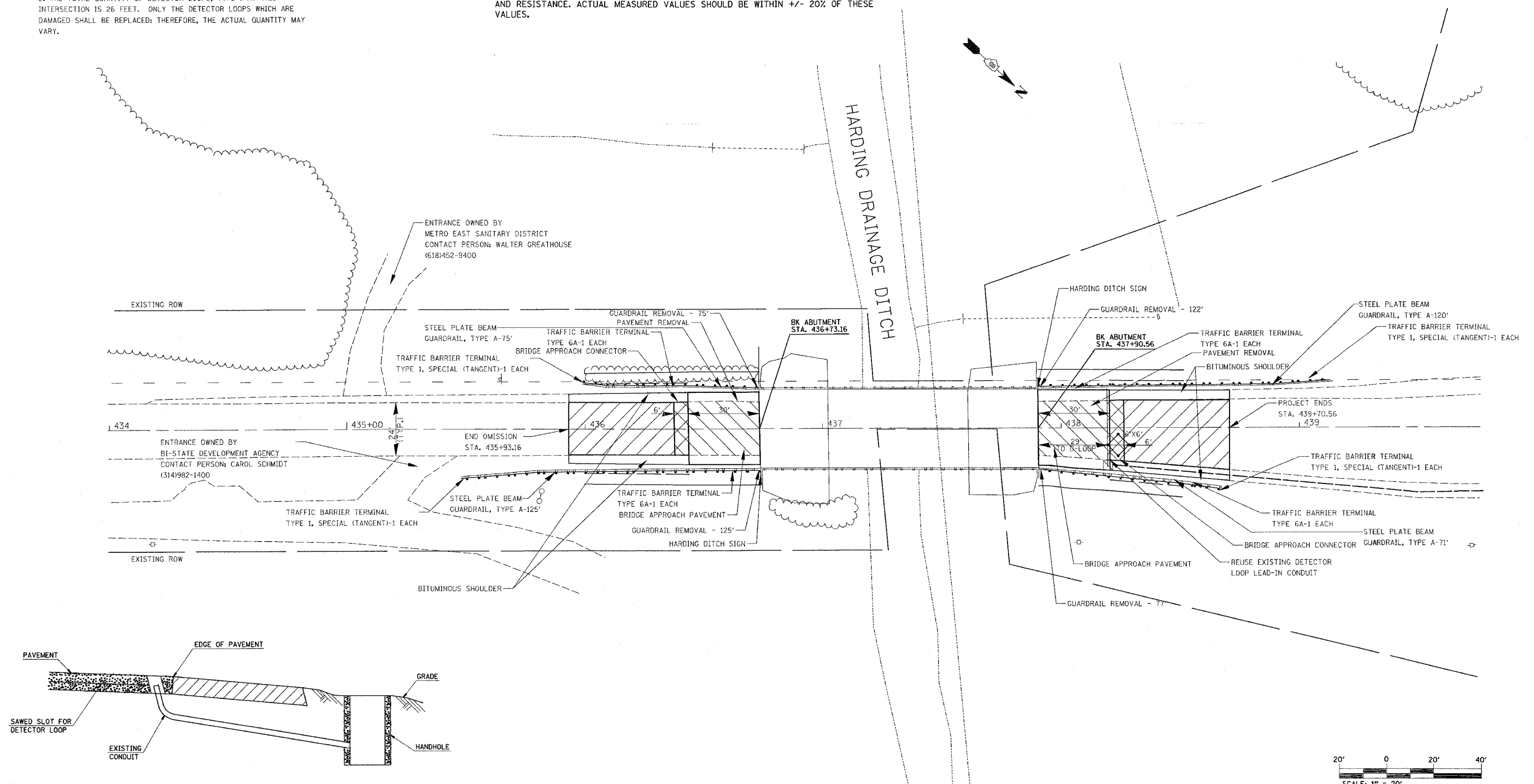
DETECTOR LOOP REQUIREMENTS AND CALCULATIONS

LOOP	PHASE (Ø)	LOOP SIZE(FT)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (µH)	CALCULATED RESISTANCE OHMS (Ω)
WB THRU L-1	2	6' X 6'	6	633.82	3.99

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

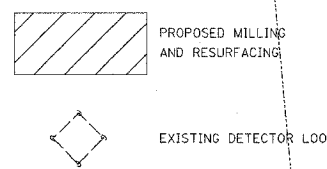
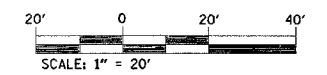
NOTES:

1. THE EXISTING HANDHOLES AND CONDUITS SHALL BE REUSED. IF THEY HAVE BEEN DAMAGED, THEY SHALL BE REPLACED AT THE COST OF THE CONTRACTOR WITH NO ADDITIONAL COMPENSATION AND TO THE SATISFACTION OF THE ENGINEER.
2. THE TOTAL QUANTITY OF DETECTOR LOOPS, TYPE 1 AT THIS INTERSECTION IS 26 FEET. ONLY THE DETECTOR LOOPS WHICH ARE DAMAGED SHALL BE REPLACED; THEREFORE, THE ACTUAL QUANTITY MAY VARY.



**DETAIL**  
(NO SCALE)  
**RE-USE EXISTING DETECTOR LOOP LEAD-IN CONDUIT**

- 1 DRILL OUT PAVEMENT SEALANT AND CLEAN EXISTING CONDUIT.
  - 2 REMOVE EXISTING CABLE TO HANDHOLE.
  - 3 INSTALL LOOP LEAD-IN CONDUCTORS IN CONDUIT.
  - 4 SPLICE NEW DETECTOR LOOP LEAD-IN CONDUCTORS TO EXISTING LEAD-IN CABLE IN HANDHOLE.
  - 5 FILL HOLE WITH APPROVED SEALER. PREVENT SEALER FROM ENTERING INTO CONDUIT.
- NOT A PAY ITEM. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "DETECTOR LOOP, TYPE 1"



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**PLAN VIEW**  
FAP ROUTE 592 (IL13/157)  
SECTION 28BR-2,3  
ST. CLAIR COUNTY

Rev. Sheet 2-26-07

DATE = 2/21/2007  
FILE NAME = c:\p\projects\284405\plan\p1\04405a.dgn  
PLOT SCALE = 28.0000 / 1  
USER NAME = chalfont@sk