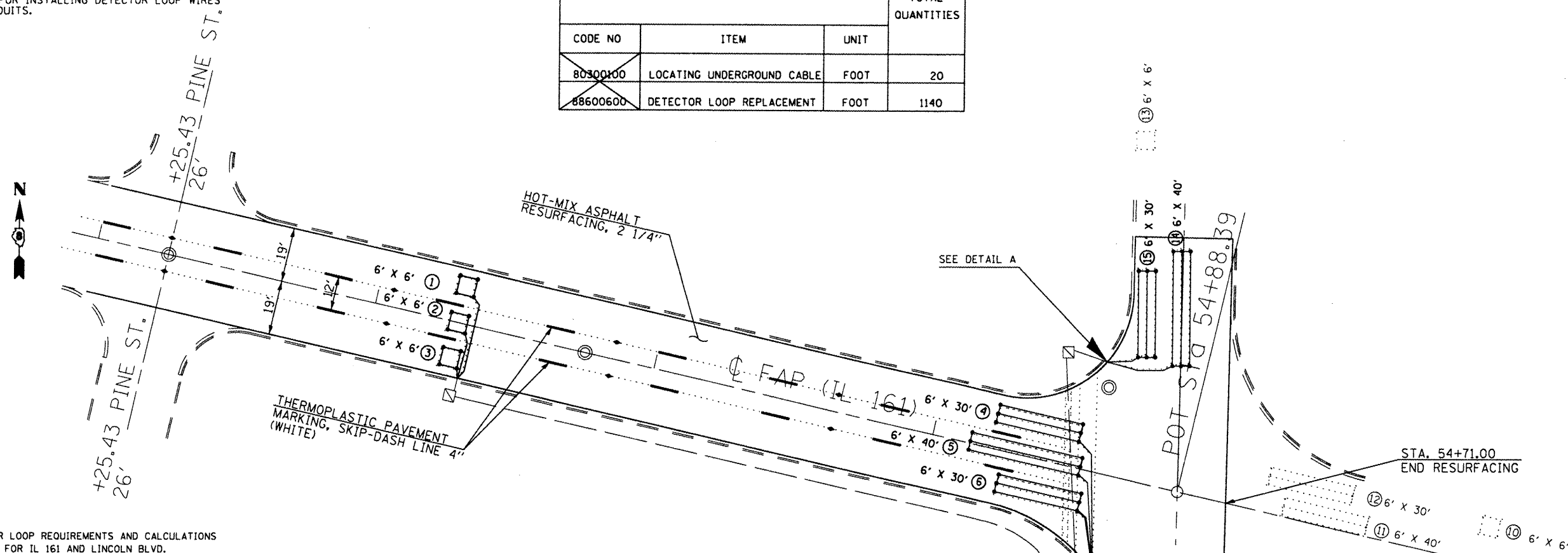


NOTES:

SEE TABLE "DETECTOR LOOP REQUIREMENTS AND CALCULATIONS" FOR LOOP SIZE AND CALCULATED NUMBER OF TURNS.

SEE "DETAIL A" FOR INSTALLING DETECTOR LOOP WIRES IN EXISTING CONDUITS.

SCHEDULE OF QUANTITIES			TOTAL QUANTITIES
CODE NO	ITEM	UNIT	
80300100	LOCATING UNDERGROUND CABLE	FOOT	20
88600600	DETECTOR LOOP REPLACEMENT	FOOT	1140

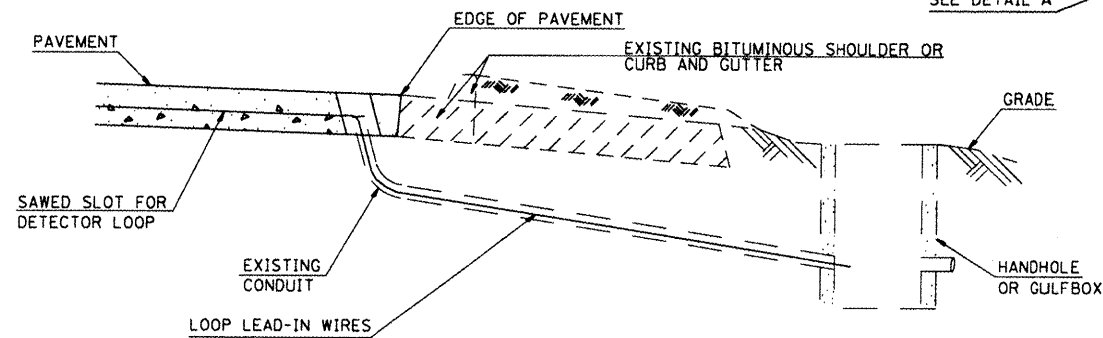


DETECTOR LOOP REQUIREMENTS AND CALCULATIONS FOR IL 161 AND LINCOLN BLVD.

LOOP#	PHASE #	LOOP SIZE (FT. X FT.)	REQUIRED # OF TURNS	CALCULATED INDUCTANCE MICROHENRIES (μH)	CALCULATED RESISTANCE OHMS (Ω)
1.SEB A CCO	6	6 X 6	5	351.3	2.2
2.SEB B CCO	6	6 X 6	5	248.2	2.1
3.SEB C CCO	6	6 X 6	5	245.3	2.0
4.SEB LT	1	6 X 30-0	3-6-3	520.3	1.8
5.SEB A THRU	6	6 X 40-0	3-6-3	667.5	2.0
6.SEB B THRU	6	6 X 30-0	3-6-3	514.6	1.6
7.NB CCO	4	NA	NA	NA	NA
8.NB THRU	4	NA	NA	NA	NA
9.NB RT	4	NA	NA	NA	NA
10.NWB CCO	2	NA	NA	NA	NA
11.NWB LT	5	NA	NA	NA	NA
12.NWB RT	2	NA	NA	NA	NA
13.SB CCO	8	NA	NA	NA	NA
14.SB LT	3	6 X 40-0	3-6-3	740.1	3.7
15.SB THRU	8	6 X 30-0	3-6-3	587.2	3.3

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"

TRAFFIC SIGNALS LEGEND

- EX. HANDHOLE
- EX. DETECTOR LOOP
- ⊗ EX. TRAFFIC SIGNAL CONTROLLER
- EXISTING CONDUIT
- ▭ PROPOSED DETECTOR LOOP

FILE NAME : #FILE#	USER NAME : #USER#	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE : #SCALE#	CHECKED -	REVISED -
	PLOT DATE : #DATE#	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP REPLACEMENT PLAN (PRELIMINARY)

SCALE: _____ SHEET NO. ___ OF ___ SHEETS STA. _____ TO STA. _____

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
805	(17-2,82-2)RS-1	*	21	20
CONTRACT NO. 76E51			ILLINOIS FED. AID PROJECT	

*CLINTON/MARION