4-23-10 LETTING ITEM 203

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	D9 CM TRAFFIC SIGNAL FY10-1	WHITE	8	1
	ILLINOIS	CONTRACT NO. 78123		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

IL 1 /IL 14 (FAP 332)
SECTION D9 CM TRAFFIC SIGNAL FY10-1
TRAFFIC SIGNAL MODERNIZATION
WHITE COUNTY
C-99-048-09

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3

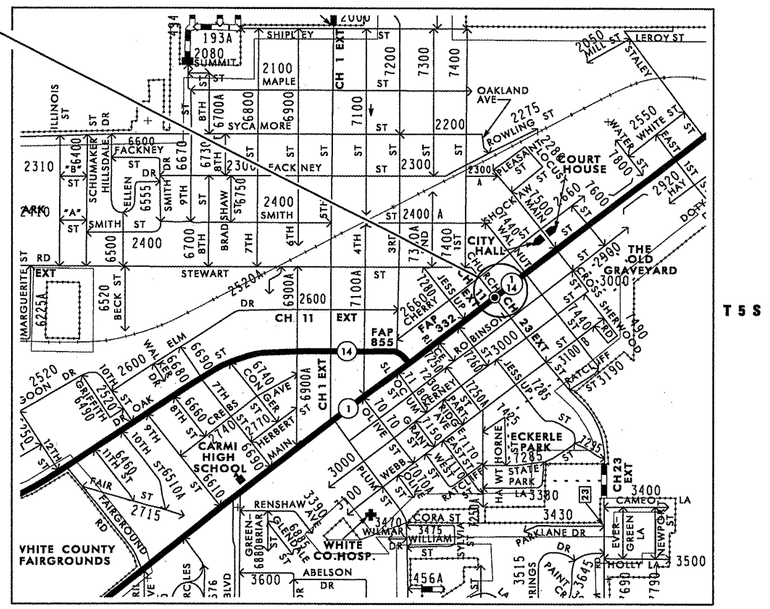
TRAFFIC DATA

IL 1/14 (FAP 332) EAST OF CHURCH ST - 7000 (2009) 6% TRUCKS
CHURCH ST (FAU 8784) SOUTH OF IL 1/14 - 1900 (2009) 9% TRUCKS
IL 1/14 (FAP 332) WEST OF CHURCH ST - 9200 (2009) 7% TRUCKS
CHURCH ST (FAU 8784) NORTH OF IL 1/14 - 1300 (2009) 9% TRUCKS

D-99-030-09

LOCATION OF SECTION INDICATED THUS: -

PROJECT LOCATION
IL 1/IL 14 AND S CHURCH ST



GROSS LENGTH = 78 FT
NET LENGTH = 78 FT

0 10' 20' 30' — 1"= 20'- PLAN

0 50' 100' — 1"= 40'- PLAN

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER SUSAN POE
PROJECT MANAGER SUSAN POE

CONTRACT NO. 78123

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Feb 8 20 10
Mary C Lamie
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
March 19 20 10
Scott E. Stitt P.E. /bc
ACTING ENGINEER OF DESIGN AND ENVIRONMENT
March 19 20 10
Christine M. Reed /bc
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS & PATTERNS
001006	DECIMAL OF AN INCH AND OF A FOOT
424001-05	CURB RAMPS FOR SIDEWALKS
606001-04	CONCRETE CURB TYPE B AND COMBINATION CURB AND GUTTTER
701001-02	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
701006-03	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' TO 24" FROM PAVEMENT EDGE
701101-02	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04	LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEROAD CLOSURE
701901-01	TRAFFIC CONTROL DEVICES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
878001-08	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUT FOR DETECTOR LOOPS

GENERAL NOTES

ALL NON-ESSENTIAL ELECTRIC CABLE SHALL BE REMOVED FROM EXISTING CONDUIT THAT IS TO BE REUSED FOR INSTALLATION OF PROPOSED ELECTRIC CABLE. THIS WORK WILL BE CONSIDERED INCLUDED IN THE PROPOSED ELECTRIC CABLE PAY ITEM.

ALL PEDESTRIAN PUSH-BUTTON POSTS SHALL BE EQUIPPED WITH TWO DIRECTIONAL SIGNS (R10-4A).

ALL ELECTRIC CABLE AND CONDUIT QUANTITIES ARE ROUNDED UP TO THE NEAREST 5 FEET.

THE FURNISHING AND INSTALLATION OF THE 1¼ INCH CONDUIT WITH ITS TRENCHING AND BACKFILL FROM THE LOOP SAWCUT TO THE SPLICE POINT SHALL BE INCLUDED IN THE LOOP INSTALLATION UNLESS SHOWN OTHERWISE ON THE PLANS.

THE INDUCTION LOOP WIRE AND LEAD-IN WIRE SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.

SHIELDED CABLE TO LOOP LEADS SHALL BE GROUNDED AT THE CONTROLLER TERMINAL ONLY.

ALL DETECTOR LOOP CORNERS SHALL BE CORE DRILLED 2 INCHES MINIMUM DIAMETER EXCEPT THOSE PLACED UNDER RESURFACING. THE DETECTOR LOOP CORNERS PLACED UNDER RESURFACING SHALL BE DIAGONALLY SAWCUT.

CABLE QUANTITIES ARE MEASURED IN PLAN VIEW.

SAWED SLOTS FOR TWISTED PAIR ELECTRIC CABLES SHALL BE LARGER THAN SINGLE CONDUCTOR LOOP SLOTS.

ALL PROPOSED TRAFFIC SIGNAL POSTS WILL BE LOCATED NO CLOSER THAN 4½ FEET FROM FACE OF CURB TO CENTER OF POST (UNLESS APPROVED BY TRAFFIC OPERATIONS).

THE FINAL LOCATION OF THE DETECTOR LOOPS AND TRAFFIC SIGNAL FOUNDATIONS AS SHOWN ON THE PLANS MAY BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER OF TRAFFIC OPERATIONS.

COMMITMENTS

NONE

Prepared By: _____ DISTRICT STUDIES & PLANS ENGINEER

Examined By: _____ DISTRICT LAND ACQUISITION ENGINEER

Examined By: _____ DISTRICT PROGRAM DEVELOPMENT ENGINEER

Examined By: _____ DISTRICT OPERATIONS ENGINEER

Examined By: _____ DISTRICT CONSTRUCTION ENGINEER

Examined By: _____ DISTRICT MATERIALS ENGINEER

Examined By: _____ DISTRICT PROJECT IMPLEMENTATION ENGINEER

Examined By: _____ ASSISTANT REGIONAL ENGINEER

Approved By: _____ DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER

Feb 8 2010
DATE

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS AND STANDARDS

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	D9 CM TRAFFIC SIGNAL FY10-I	WHITE	8	2
		CONTRACT NO. 78123		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES

FAP 332 (IL 14/1)

CODE NUMBER	ITEM	CONSTRUCTION TYPE CODE	TOTAL QUANTITIES
			Y031-1F
		ITEM	TRAFFIC SIGNALS 100% STATE
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	915
42400800	DETECTABLE WARNINGS	SQ FT	64
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	66
44000600	SIDEWALK REMOVAL	SQ FT	915
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	66
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2
67100100	MOBILIZATION	L SUM	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	3
80300100	LOCATING UNDERGROUND CABLE	FOOT	200
81012500	CONDUIT IN TRENCH, 1 1/2" DIA., PVC	FOOT	6
81012600	CONDUIT IN TRENCH, 2" DIA., PVC	FOOT	35
81012700	CONDUIT IN TRENCH, 2 1/2" DIA., PVC	FOOT	33
81013000	CONDUIT IN TRENCH, 4" DIA., PVC	FOOT	4
81021550	CONDUIT, AUGERED 2" DIA., PVC	FOOT	77
81021560	CONDUIT, AUGERED 2 1/2" DIA., PVC	FOOT	51
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	78
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	392
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	794
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	424
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	286
87501200	TRAFFIC SIGNAL POST, 16 FT.	EACH	2
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	6
87600100	PEDESTRIAN PUSH-BUTTON POST, TYPE I	EACH	2
87900100	DRILL EXISTING FOUNDATION	EACH	3
87900200	DRILL EXISTING HANDHOLE	EACH	12
88040070	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
88040090	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
88102740	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	4
88200100	TRAFFIC SIGNAL BACKPLATE	EACH	4
88600100	DETECTOR LOOP, TYPE I	FOOT	272
88800100	PEDESTRIAN PUSH-BUTTON	EACH	4
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	1
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

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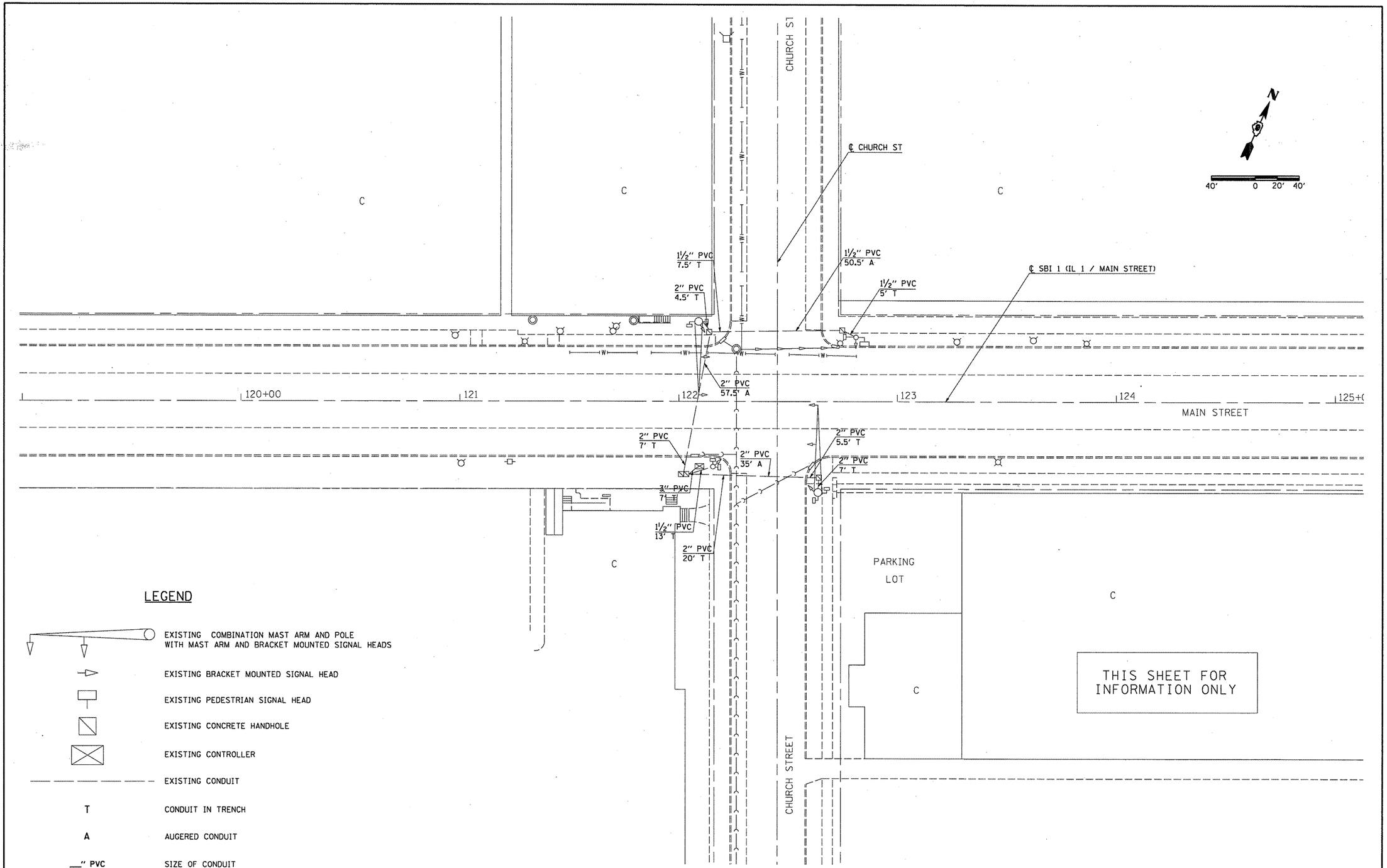
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	D9 CM TRAFFIC SIGNAL FY10-1	WHITE	8	3
		CONTRACT NO. 78123		
		ILLINOIS FED. AID PROJECT		



LEGEND

- EXISTING COMBINATION MAST ARM AND POLE WITH MAST ARM AND BRACKET MOUNTED SIGNAL HEADS
- EXISTING BRACKET MOUNTED SIGNAL HEAD
- EXISTING PEDESTRIAN SIGNAL HEAD
- EXISTING CONCRETE HANDHOLE
- EXISTING CONTROLLER
- EXISTING CONDUIT
- T — CONDUIT IN TRENCH
- A — AUGERED CONDUIT
- __" PVC — SIZE OF CONDUIT

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

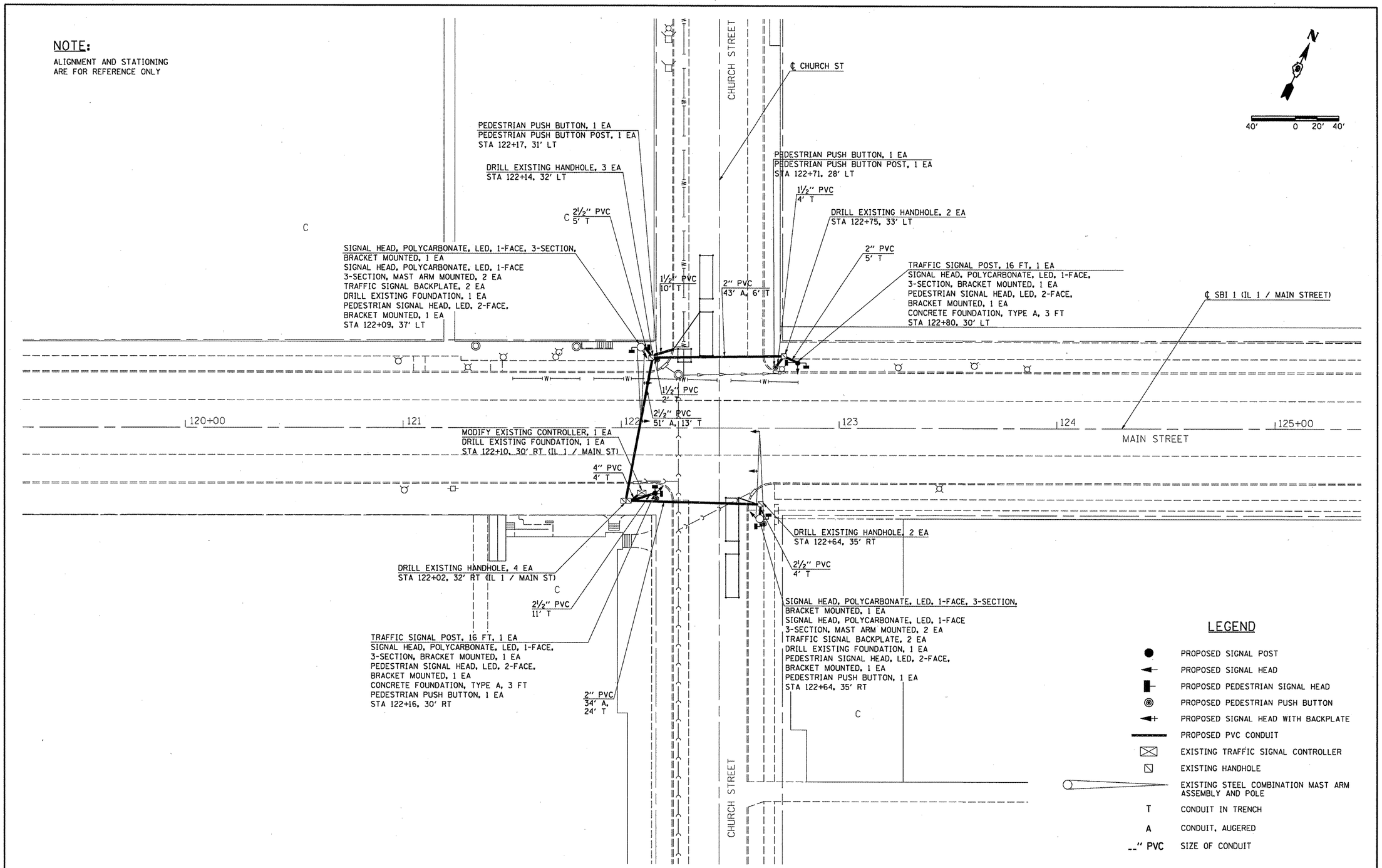
EXISTING TRAFFIC SIGNALS
IL 1 /14 AND CHURCH ST

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	D9 CM TRAFFIC SIGNAL FY10-1	WHITE	8	4
	ILLINOIS	CONTRACT NO. 78123		
	ILLINOIS	FED. AID PROJECT		

NOTE:

ALIGNMENT AND STATIONING
ARE FOR REFERENCE ONLY



LEGEND

●	PROPOSED SIGNAL POST
◄	PROPOSED SIGNAL HEAD
▌	PROPOSED PEDESTRIAN SIGNAL HEAD
◉	PROPOSED PEDESTRIAN PUSH BUTTON
◄+	PROPOSED SIGNAL HEAD WITH BACKPLATE
———	PROPOSED PVC CONDUIT
⊠	EXISTING TRAFFIC SIGNAL CONTROLLER
▨	EXISTING HANDHOLE
———	EXISTING STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
T	CONDUIT IN TRENCH
A	CONDUIT, AUGERED
__" PVC	SIZE OF CONDUIT

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

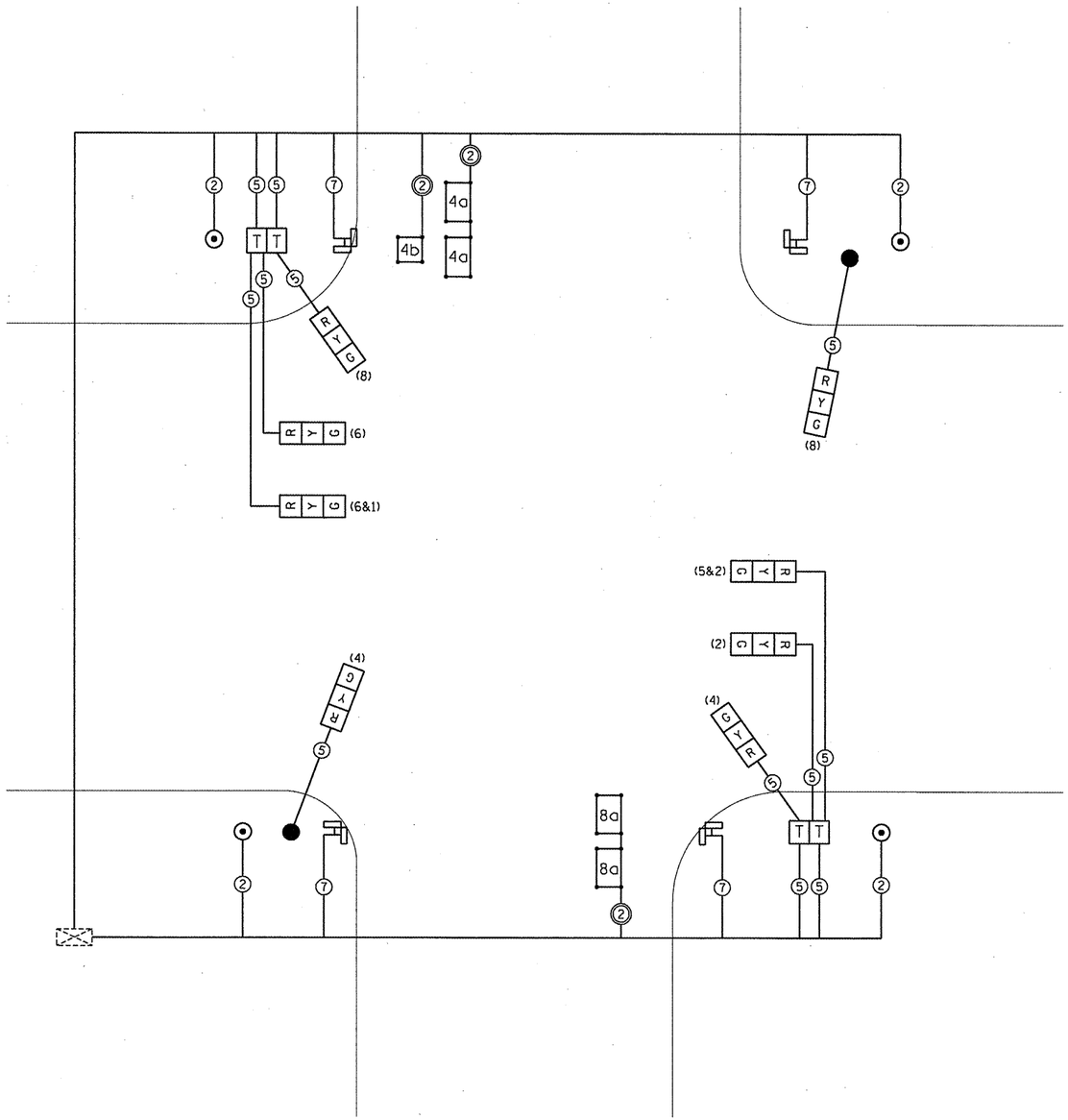
PROPOSED TRAFFIC SIGNALS
IL 1 /14 AND CHURCH ST

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	D9 CM TRAFFIC SIGNAL FY10-1	WHITE	8	5
	ILLINOIS	CONTRACT NO. 78123		
	ILLINOIS	FED. AID PROJECT		

NOTE:

ALL CABLES SHALL BE A.W.G.
#14 UNLESS OTHERWISE NOTED.



LEGEND

- EXISTING TRAFFIC SIGNAL CONTROLLER CABINET
- T — INDICATES PROPOSED TERMINAL BLOCK ON EXISTING MAST ARM POLE
- PROPOSED PEDESTRIAN SIGNAL HEADS
- PROPOSED PEDESTRIAN PUSH BUTTON
- R — PROPOSED TRAFFIC SIGNAL HEAD
- (2) — NUMBER IN CIRCLE INDICATES NUMBER OF CONDUCTORS IN THAT CABLE
- (1,2) — NUMBERS IN PARENTHESIS INDICATES PHASE
- (2) — INDICATES 2/C TWISTED, SHIELDED CABLE IN CONDUIT
- 1a — NUMBER INDICATES PHASE; LETTER OR LETTERS IDENTIFY AMPLIFIER
- 4b — 6' X 6' DETECTOR LOOP WITH 2" CORE DRILLED CORNERS. NUMBER INDICATES PHASE, LOWER CASE LETTER INDICATES AMPLIFIER.
- 4a — 6' X 20' DETECTOR LOOP WITH 2" CORE DRILLED CORNERS. NUMBER INDICATES PHASE, LOWER CASE LETTER INDICATES AMPLIFIER.

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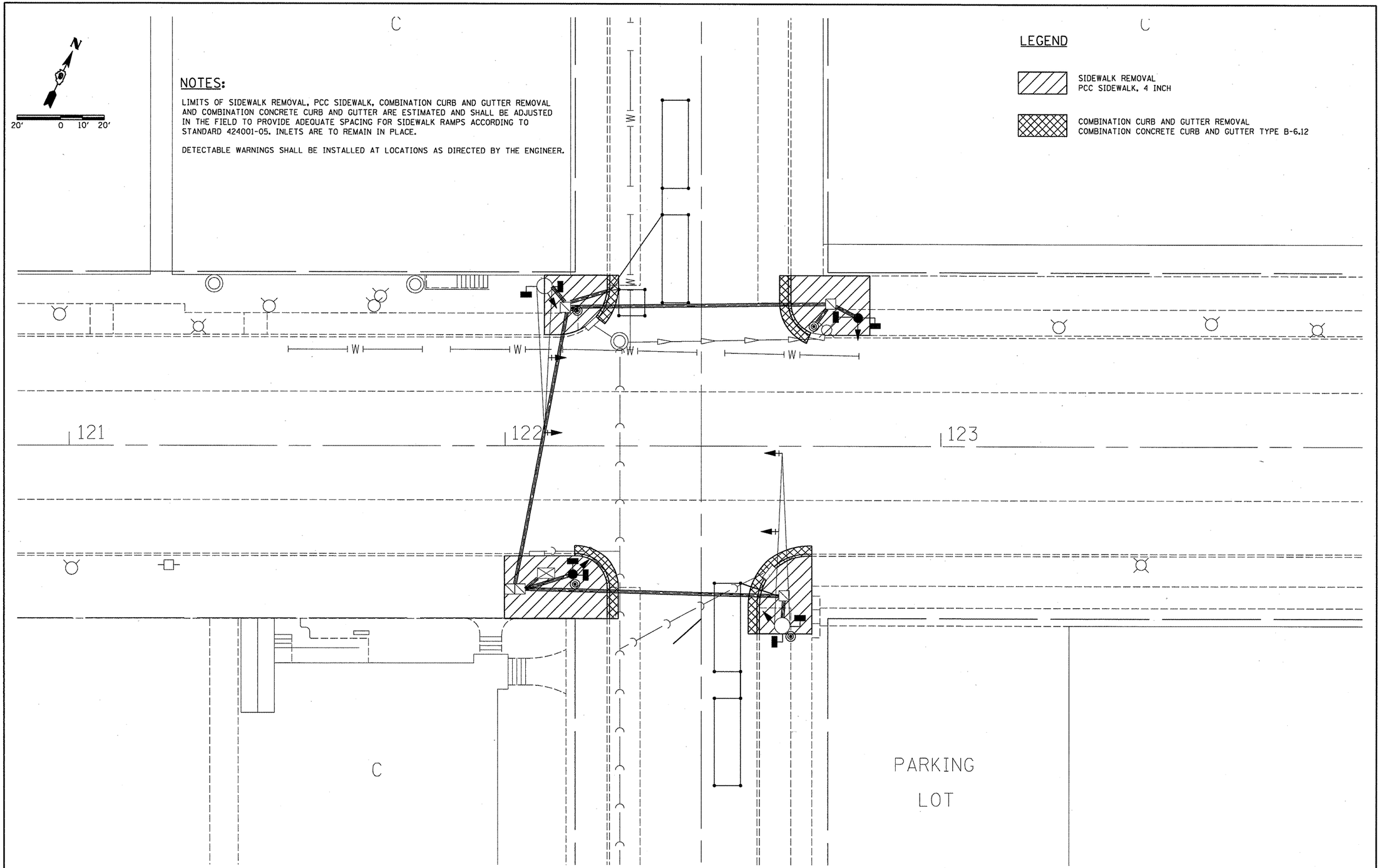
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL DIAGRAM
IL 1 /14 AND CHURCH ST

SCALE: | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	09 CM TRAFFIC SIGNAL FY10-1	WHITE	8	6
	ILLINOIS	CONTRACT NO. 78123		
	ILLINOIS FED. AID PROJECT			



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK DETAIL
IL 1 /14 AND CHURCH ST

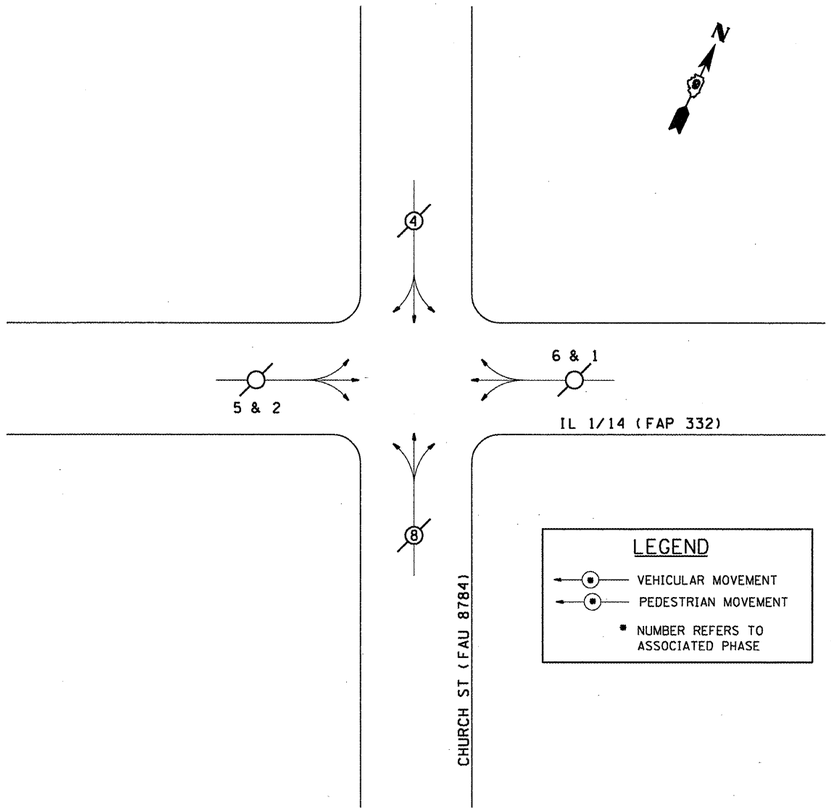
SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	D9 CM TRAFFIC SIGNAL FY10-1	WHITE	8	7
	ILLINOIS	CONTRACT NO. 78123		
	ILLINOIS FED. AID PROJECT			

PHASE DESIGNATION DIAGRAM

IL 1/14 (FAP 332) AND CHURCH ST (FAU 8784)
CONTROLLER SPECIFIED

REFERRING TO STANDARD 857001, THE VEHICULAR AND PEDESTRIAN PHASES USED ARE DESIGNATED AS SHOWN.



REVISIONS

DRAWN	1-31-90
REVISED	5-30-90
REVISED	12-18-01
REVISED	3-27-08

STD. 9-66

DETAIL OF DETECTOR LOOPS

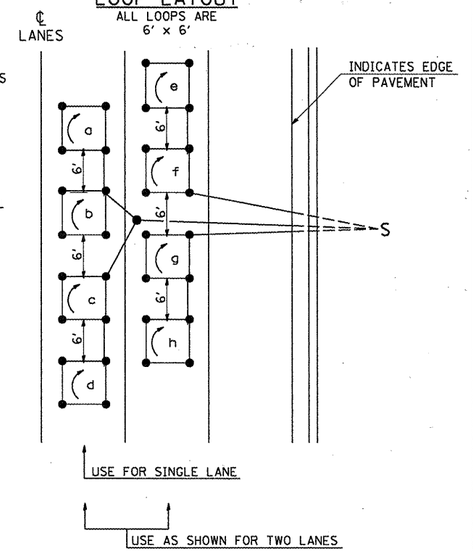
NOTES

(APPLIES TO 6' x 6' LOOPS ONLY)

1. THE DETECTOR LOOPS SHALL BE TYPE I. EACH DETECTOR LOOP SHALL HAVE 3 TURNS OF LOOP WIRE AND BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 886 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.
2. BEGINNING LEAD WIRES SHALL BE CONNECTED TO THE BLACK LEAD AND THE ENDING LEAD WIRES SHALL BE CONNECTED TO THE WHITE LEAD OF THE TWIN TWISTED FEED CABLES AT THE SPLICE POINT.
3. WHERE THE LOOPS ARE INSTALLED PRIOR TO RESURFACING, THE LOOP CORNERS SHALL BE DIAGONALLY CUT.

LOOP LAYOUT

ALL LOOPS ARE 6' x 6'



LOOP LEGEND

(CLOCKWISE ROTATION FOR LOOP WIRES

S INDICATES SPLICE POINT FOR DETECTOR LOOP LEAD

● INDICATES 2" CORE-DRILL

DETAIL 6' x 6' DETECTOR LOOPS

REVISIONS

REDRAWN	5-13-02
REVISED	10-27-05
REVISED	3-26-08
REVISED	

STD. 9-92

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETECTOR LOOP DETAIL, PHASE DESIGNATION DIAGRAM

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	D9 CM TRAFFIC SIGNAL FY10-1	WHITE	8	8
		CONTRACT NO. 78123		
	ILLINOIS FED. AID PROJECT			