

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

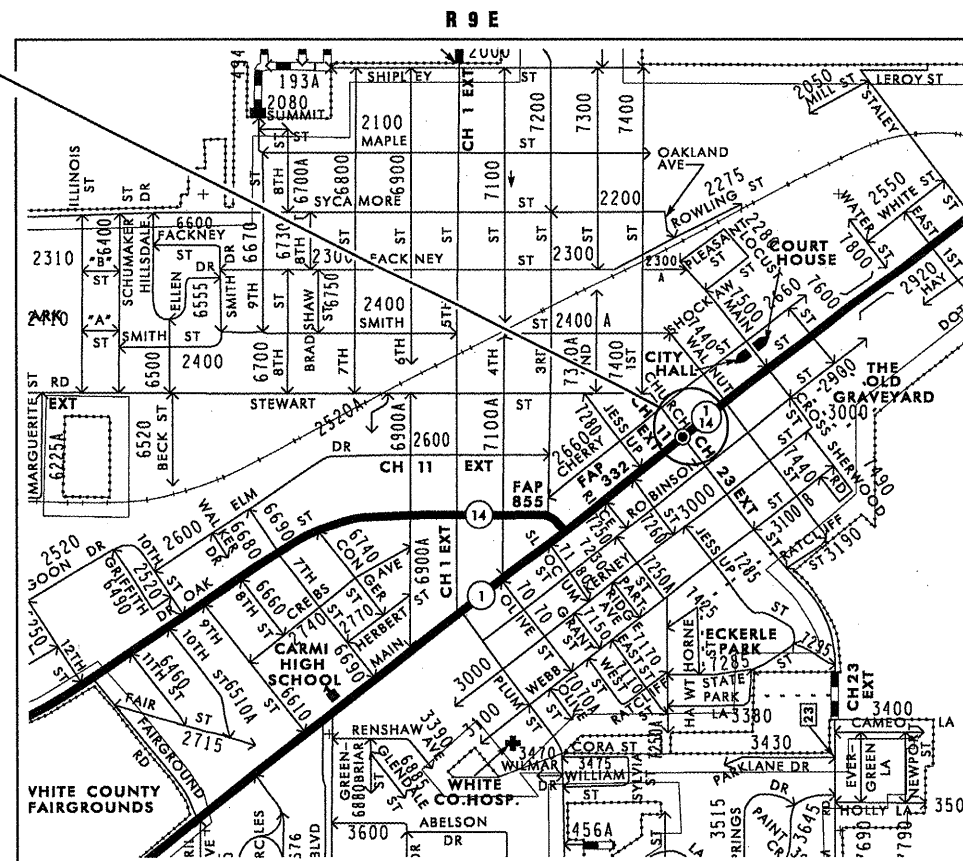
TRAFFIC DATA

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

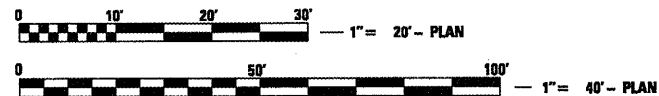
D-99-030-09



PROJECT LOCATION
 IL 1/IL 14 AND S CHURCH ST



T 5 S



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

GROSS LENGTH = 78 FT
 NET LENGTH = 78 FT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Feb 8 20 10
Mary C Lamm
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

March 19 20 10
Scott E. Stitt P.E.
 ACTING ENGINEER OF DESIGN AND ENVIRONMENT

March 19 20 10
Christine M. Reed
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

- 1 COVER SHEET
- 2 GENERAL NOTES, INDEX OF SHEETS, STANDARDS
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- 5 PROPOSED TRAFFIC SIGNAL PLAN
- 6 PROPOSED TRAFFIC SIGNAL DIAGRAM
- 7 SIDEWALK DETAIL SHEET
- 8 DETAILS - PHASE DESIGNATION DIAGRAM, DETECTOR LOOP DETAIL

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 1/4 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 4 1/2 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.

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 GUTTER
- 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

COMMITMENTS

NONE

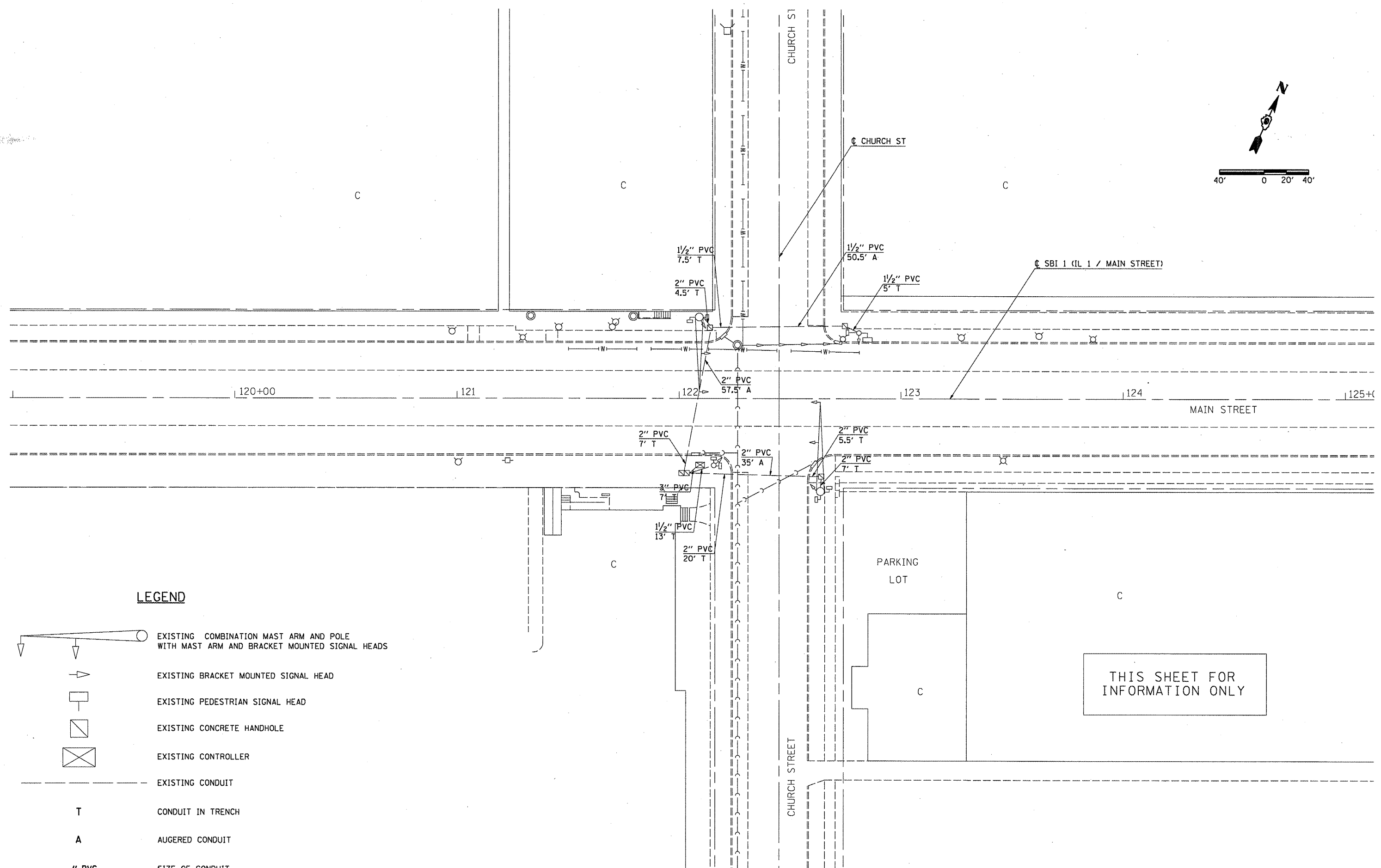
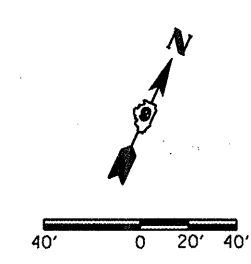
Prepared By:	<i>Joe Zdaniewicz</i> DISTRICT STUDIES & PLANS ENGINEER
Examined By:	<i>James Lewis Emery</i> DISTRICT LAND ACQUISITION ENGINEER
Examined By:	<i>Camie Nelson</i> DISTRICT PROGRAM DEVELOPMENT ENGINEER
Examined By:	<i>Lee Willy</i> DISTRICT OPERATIONS ENGINEER
Examined By:	<i>Jim Amthor</i> DISTRICT CONSTRUCTION ENGINEER
Examined By:	<i>Bruno Pablo</i> DISTRICT MATERIALS ENGINEER
Examined By:	<i>Jim Amthor</i> DISTRICT PROJECT IMPLEMENTATION ENGINEER
Examined By:	<i>Danny Ooster</i> ASSISTANT REGIONAL ENGINEER
Approved By:	<i>Mary C Lami</i> DEPUTY DIRECTOR OF HIGHWAYS, REGION 5 ENGINEER
	Feb 8 2010 DATE

FILE NAME =	USER NAME = poe1	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES, INDEX OF SHEETS AND STANDARDS				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 2/2/2010	DATE -	REVISED -	ILLINOIS FED. AID PROJECT										

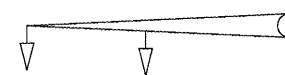





SUMMARY OF QUANTITIES

FAP 332 (IL14/1)

CODE NUMBER	ITEM	CONSTRUCTION TYPE CODE	TOTAL QUANTITIES
		ITEM	Y031-IF 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	ENGINEERS 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



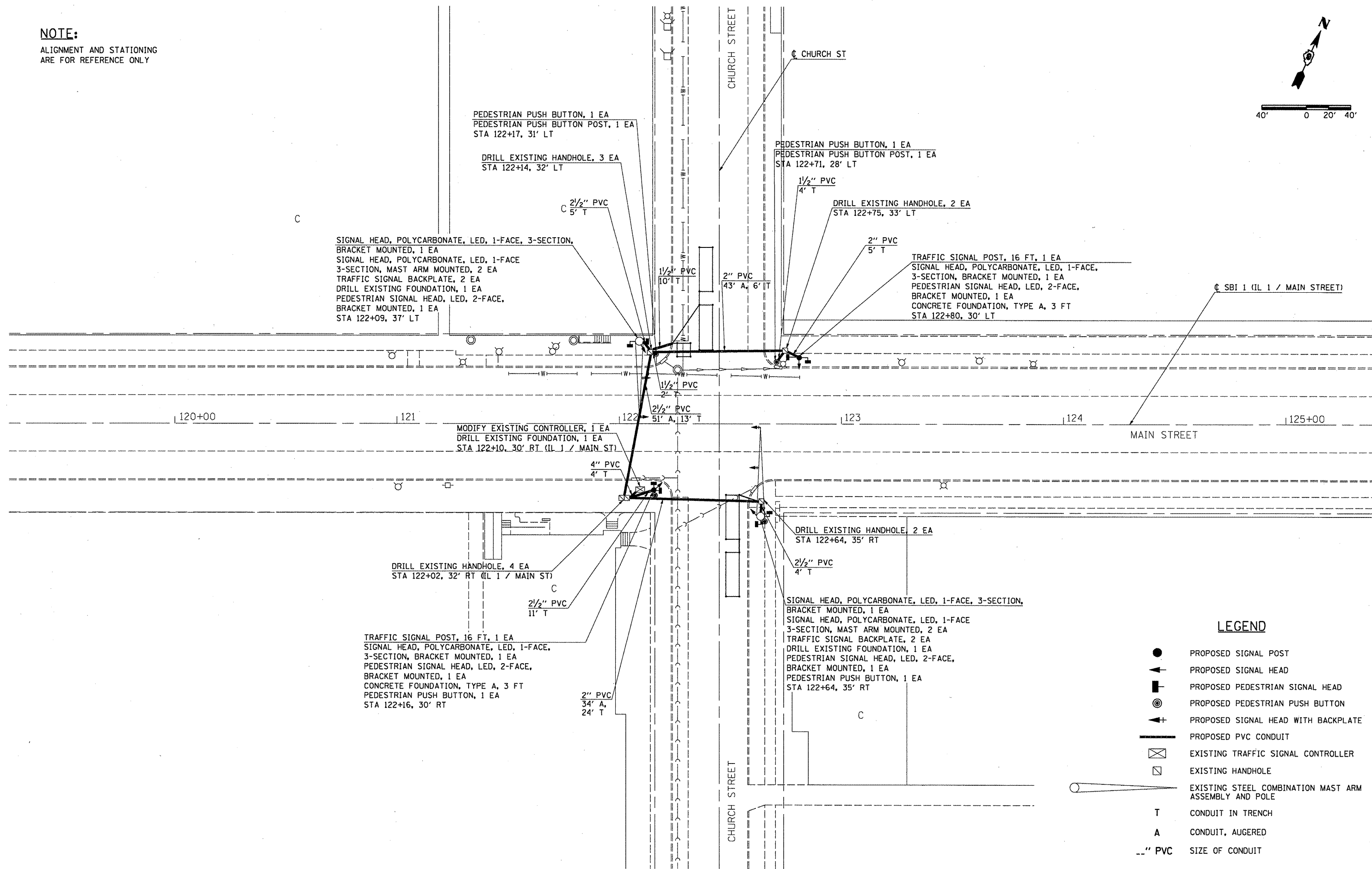
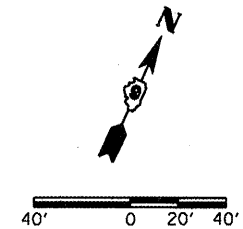
LEGEND

-  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

THIS SHEET FOR INFORMATION ONLY

FILE NAME =	USER NAME = pcesl	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING TRAFFIC SIGNALS IL 1/14 AND CHURCH ST			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
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	PLOT DATE = 2/2/2010	DATE -	REVISED -								ILLINOIS FED. AID PROJECT				

NOTE:
ALIGNMENT AND STATIONING
ARE FOR REFERENCE ONLY



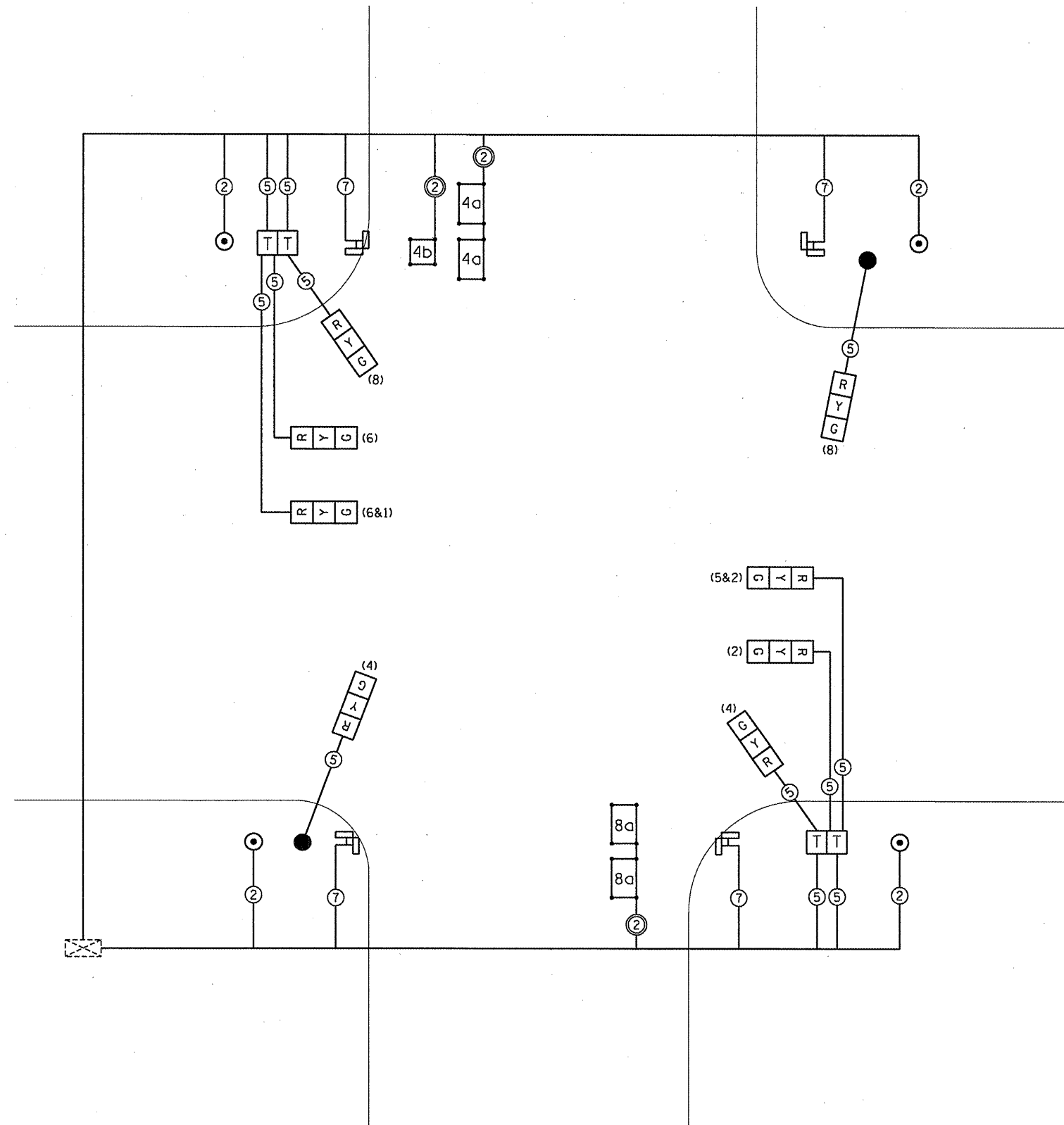
LEGEND

- 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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		CHECKED -	REVISED -									ILLINOIS	CONTRACT NO. 78123		
		DATE -	REVISED -									ILLINOIS	FED. AID PROJECT		

NOTE:

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



LEGEND

-  EXISTING TRAFFIC SIGNAL CONTROLLER CABINET
-  INDICATES PROPOSED TERMINAL BLOCK ON EXISTING MAST ARM POLE
-  PROPOSED PEDESTRIAN SIGNAL HEADS
-  PROPOSED PEDESTRIAN PUSH BUTTON
-  PROPOSED TRAFFIC SIGNAL HEAD
-  NUMBER IN CIRCLE INDICATES NUMBER OF CONDUCTORS IN THAT CABLE
-  NUMBERS IN PARENTHESIS INDICATES PHASE
-  INDICATES 2/C TWISTED, SHIELDED CABLE IN CONDUIT
-  NUMBER INDICATES PHASE; LETTER OR LETTERS IDENTIFY AMPLIFIER
-  6' X 6' DETECTOR LOOP WITH 2" CORE DRILLED CORNERS. NUMBER INDICATES PHASE, LOWER CASE LETTER INDICATES AMPLIFIER.
-  6' X 20' DETECTOR LOOP WITH 2" CORE DRILLED CORNERS. NUMBER INDICATES PHASE, LOWER CASE LETTER INDICATES AMPLIFIER.

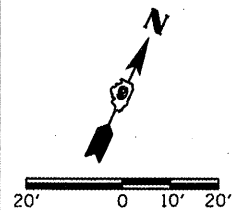
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**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	D9 CM TRAFFIC SIGNAL FY10-1	WHITE	8	6
ILLINOIS			CONTRACT NO. 78123	
ILLINOIS FED. AID PROJECT				

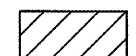


NOTES:

LIMITS OF SIDEWALK REMOVAL, PCC SIDEWALK, COMBINATION CURB AND GUTTER REMOVAL AND COMBINATION CONCRETE CURB AND GUTTER ARE ESTIMATED AND SHALL BE ADJUSTED IN THE FIELD TO PROVIDE ADEQUATE SPACING FOR SIDEWALK RAMPS ACCORDING TO STANDARD 424001-05. INLETS ARE TO REMAIN IN PLACE.

DETECTABLE WARNINGS SHALL BE INSTALLED AT LOCATIONS AS DIRECTED BY THE ENGINEER.

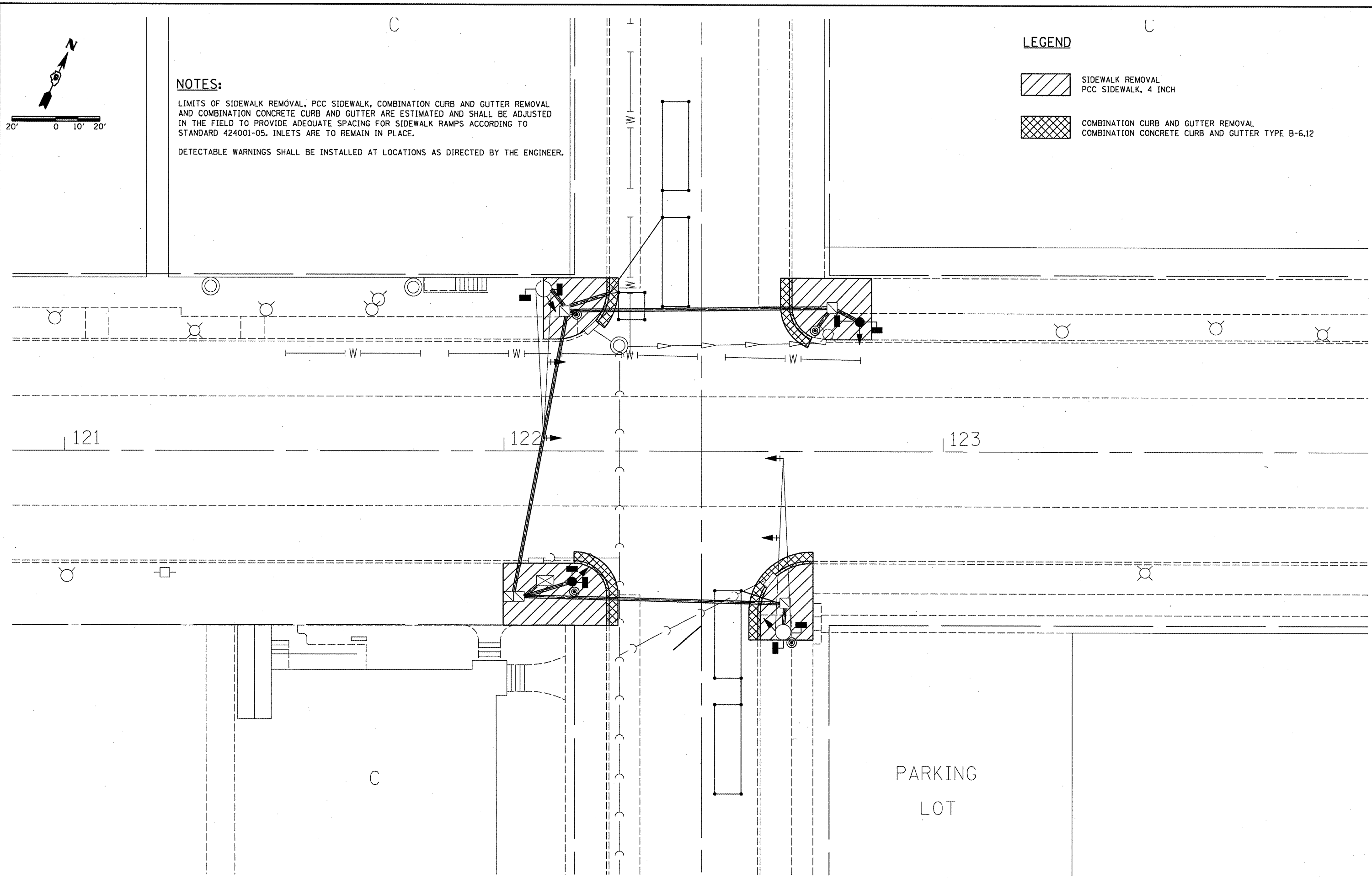
LEGEND



SIDEWALK REMOVAL
PCC SIDEWALK, 4 INCH



COMBINATION CURB AND GUTTER REMOVAL
COMBINATION CONCRETE CURB AND GUTTER TYPE B-6.12



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PLOT DATE = 2/2/2010

DESIGNED -
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SIDEWALK DETAIL
IL 1/14 AND CHURCH ST**

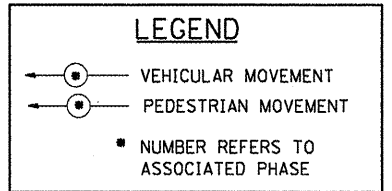
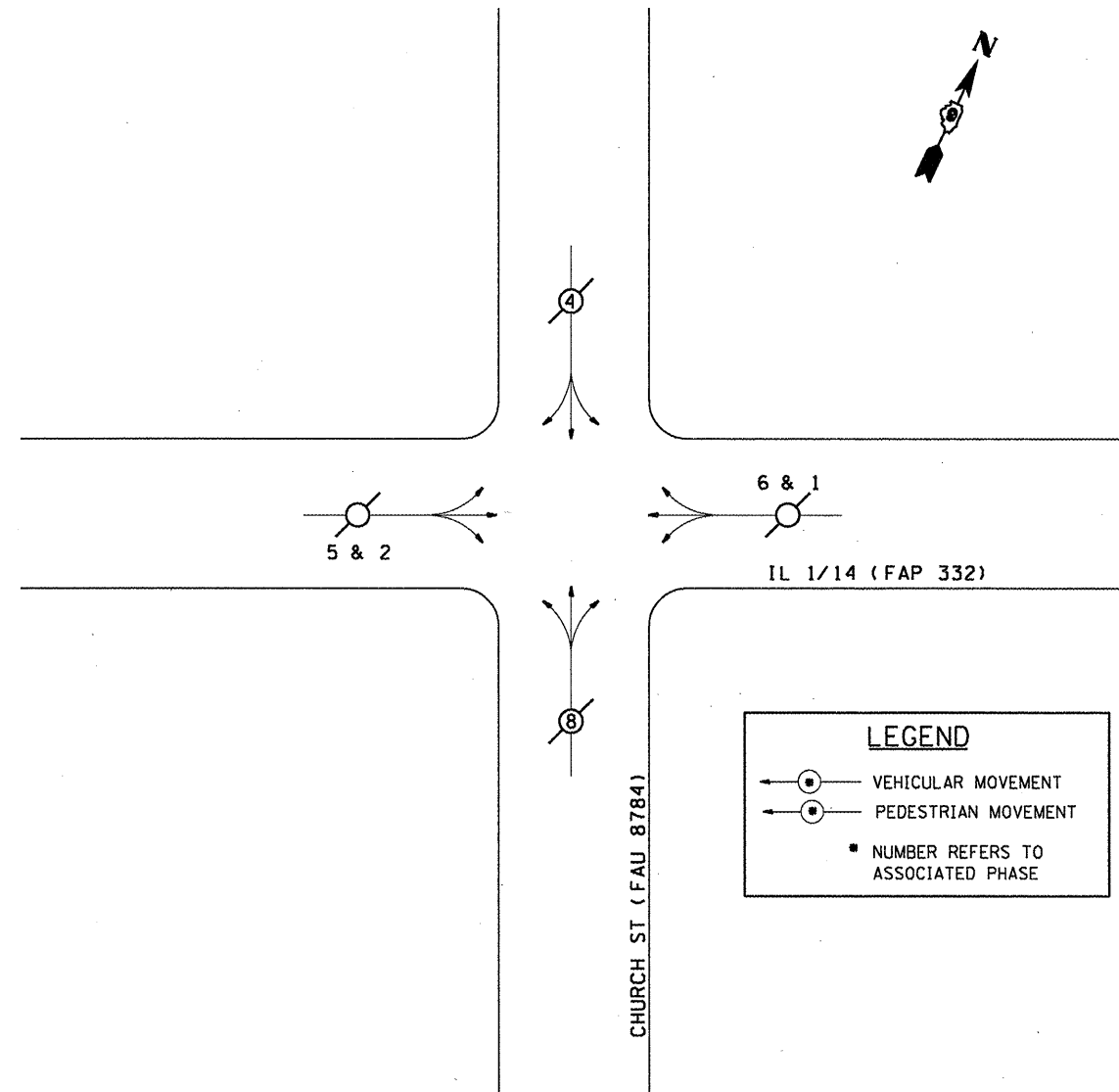
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332	D9 CM TRAFFIC SIGNAL FY10-1	WHITE	8	7
ILLINOIS CONTRACT NO. 78123			ILLINOIS FED. AID PROJECT	

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL OF DETECTOR LOOPS

NOTES

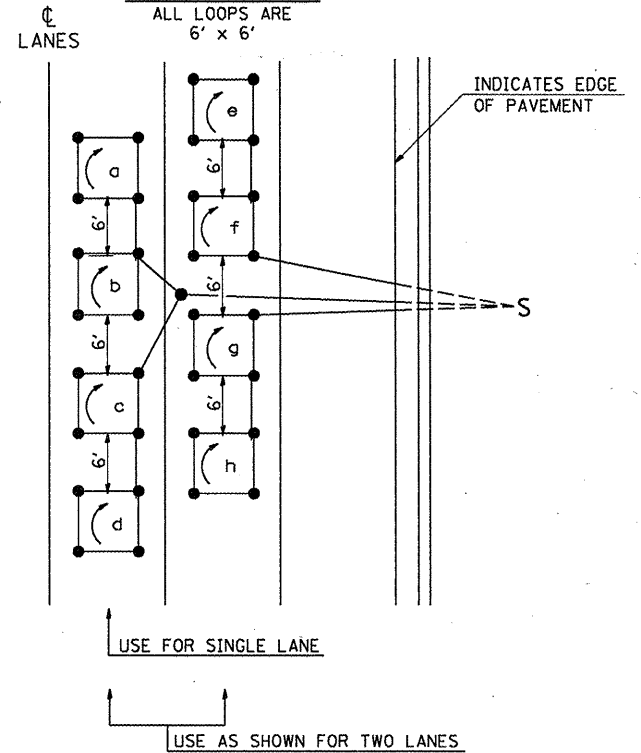
(APPLIES TO 6' x 6' LOOPS ONLY)

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 LEGEND

- CLOCKWISE ROTATION FOR LOOP WIRES
- INDICATES SPLICE POINT FOR DETECTOR LOOP LEAD
- INDICATES 2" CORE-DRILL

LOOP LAYOUT



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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		DATE -	REVISED -

DETECTOR LOOP DETAIL, PHASE DESIGNATION DIAGRAM			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

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