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29, 30, 31, 32, 33, 34 & 35	INTERCONNECT PLAN IL RTE 171 (CUMBERLAND AVENUE) FROM FULLERTON AVENUE TO FOSTER AVENUE
36.	INTERCONNECT SCHEMATIC IL RTE 171 (CUMBERLAND AVENUE) FROM FULLERTON AVENUE TO FOSTER AVENUE

STANDARD DRAWINGS

701006-02	701011-01	701101-01	701301-02	702001-06
424001-04	720001	813001-01	814001-01	814006
857001	877001-02	877006-02	877011-02	878001-05
880001	880006	886001	805001	
701201-02	701316-03	701321-08	701406-04	701501-03
701502-01	701606-04	701601-04	701701-04	701801-03

NOTE: STANDARD DRAWINGS REQUIRED (CIRCLED).

CONTRACT NO. 60C01

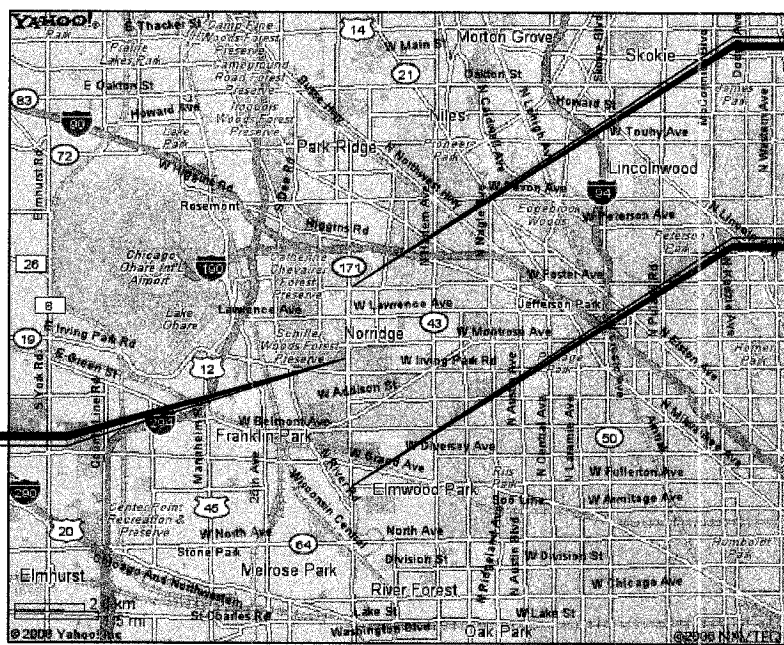
PREPARED BY: Steve Rowan DATE: Oct 21, 2006
TRAFFIC ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

SCALES { PLAN 1" = 20' AND 1" = 50'
PROFILE HORIZ. N.A.
PROFILE VERT. N.A.
CROSS SECTION N.A.

DISTRICT 1
CONGESTION MITIGATION AIR QUALITY
FIBER OPTIC COMMUNICATIONS NETWORK
ILLINOIS ROUTE 171 (CUMBERLAND AVENUE)
FROM FULLERTON AVENUE TO FOSTER AVENUE
F.A.P. ROUTE 372
SECTION 2006-039TS
C-91-079-07
COOK COUNTY
PROJECT: CMF-0372(004)



PROJECT LOCATION

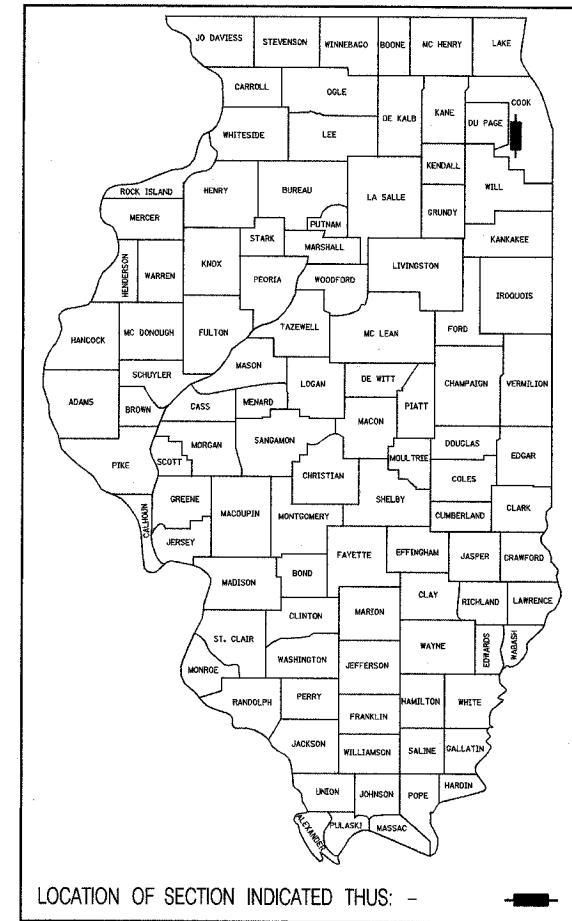
END OF PROJECT

BEGINNING OF PROJECT



DATED THIS 23rd DAY OF OCTOBER, 2006.
MY LICENSE EXPIRES ON NOVEMBER 30, 2007
CIVIL ENGINEER

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	1
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
D-91-079-07				

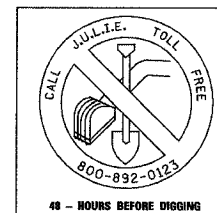


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Oct 24, 2006
Deane M. O'Keefe, P.E.
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

December 8, 2006
Eric S. Harvill, P.E.
INTERIM ENGINEER OF DESIGN AND ENVIRONMENT

December 8, 2006
Milton R. Sees, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER



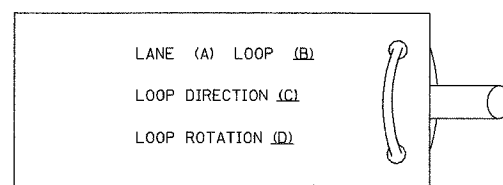
PRINTED BY AUTHORITY OF
THE STATE OF ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	3
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				

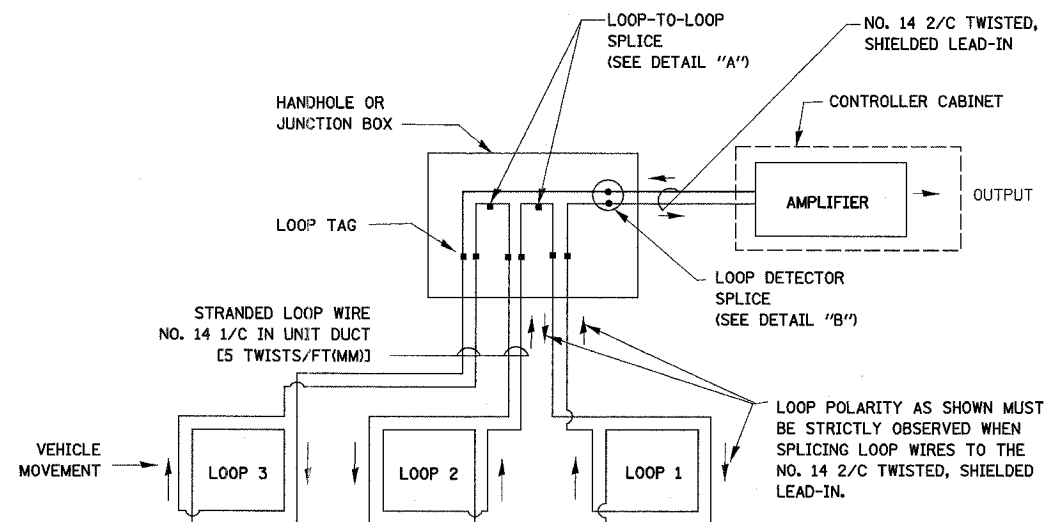
LOOP DETECTOR NOTES

- EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- PERFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

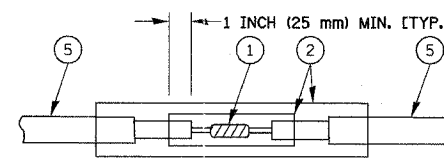


- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

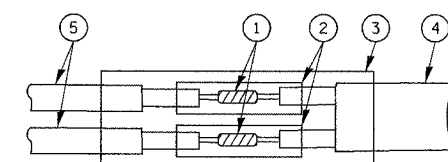


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- NO. 14 2/C TWISTED, SHIELDED CABLE.
- LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

SETON ENGINEERING
SERVICE CORPORATION
CIVIL ENGINEERS
19 S. BOTHWELL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

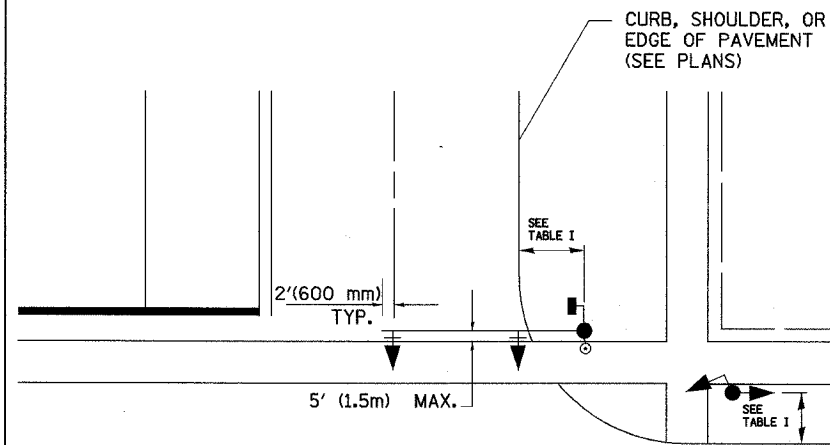
SCALE: N.T.S.
DATE: 10-23-06

DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 1 OF 4

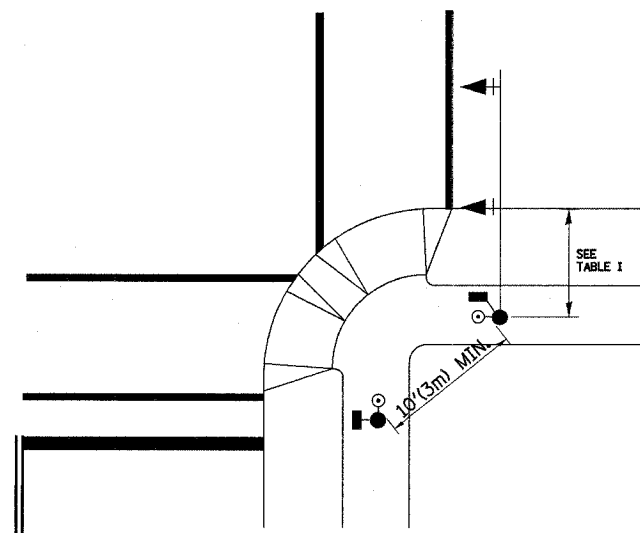
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	4
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 60C01				

TRAFFIC SIGNAL MAST ARM AND POST

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



PEDESTRIAN SIGNAL PUSHBUTTON



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

NOTES:

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.
 AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.
 PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:
 A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
 B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
 C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
 D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
 E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

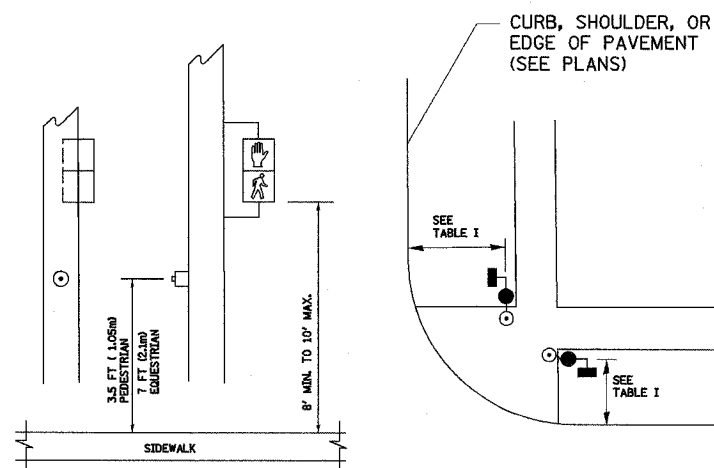


TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

REVISIONS	
NAME	DATE

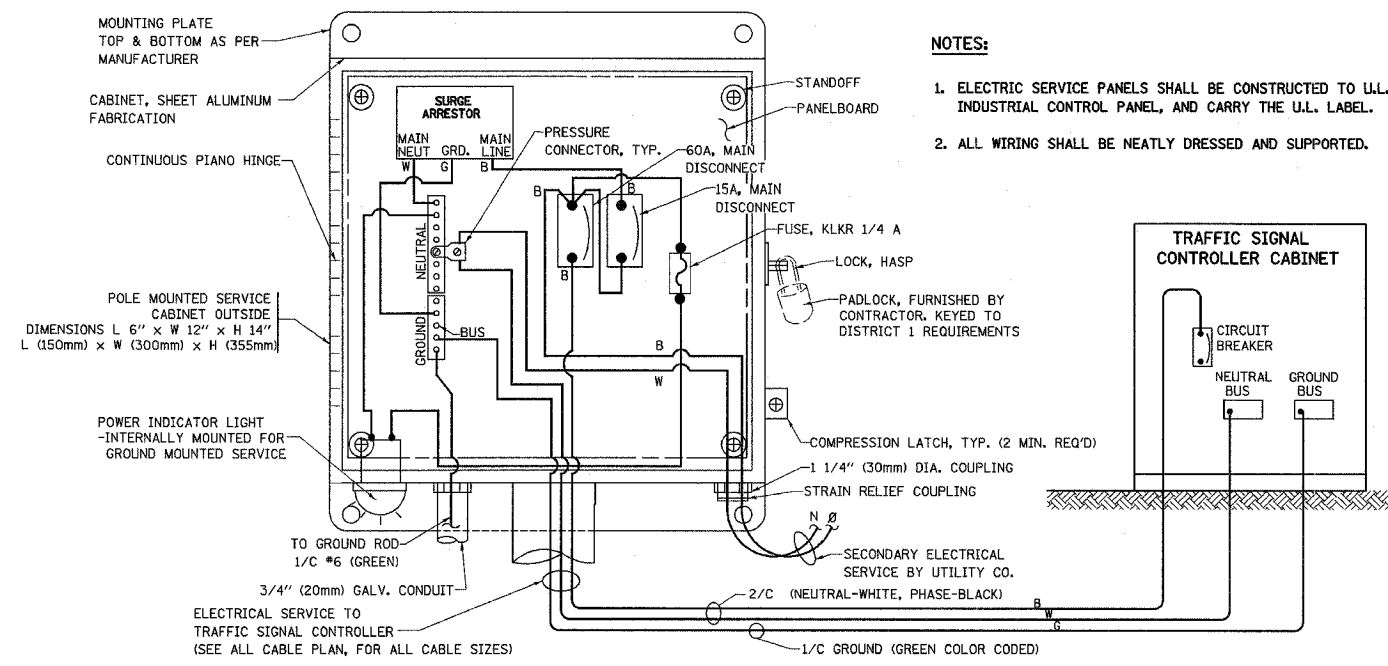
SETON ENGINEERING
 SERVICE CORPORATION
 CIVIL ENGINEERS
 19 S. BOTHWELL STREET
 PALATINE, ILLINOIS 60067
 VOICE: 847-776-7200 FAX: 847-776-7239

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT ONE
 STANDARD TRAFFIC SIGNAL
 DESIGN DETAILS

SCALE: N.T.S.
 DATE: 10-23-06

DRAWN BY RWP
 DESIGNED BY DAD
 CHECKED BY DAZ
 SHEET 2 OF 4

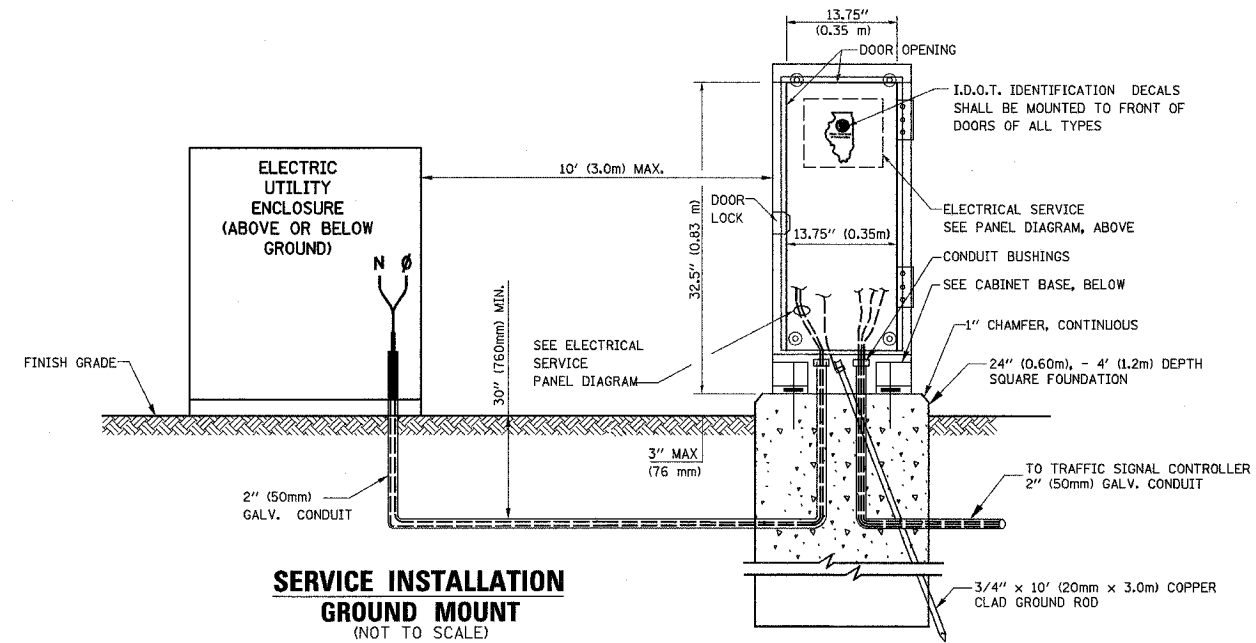
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-0397S	COOK	36	5
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60001				



ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)

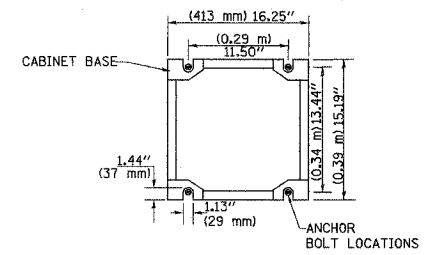
SERVICE INSTALLATION POLE MOUNT (SHOWN)

(NOT TO SCALE)



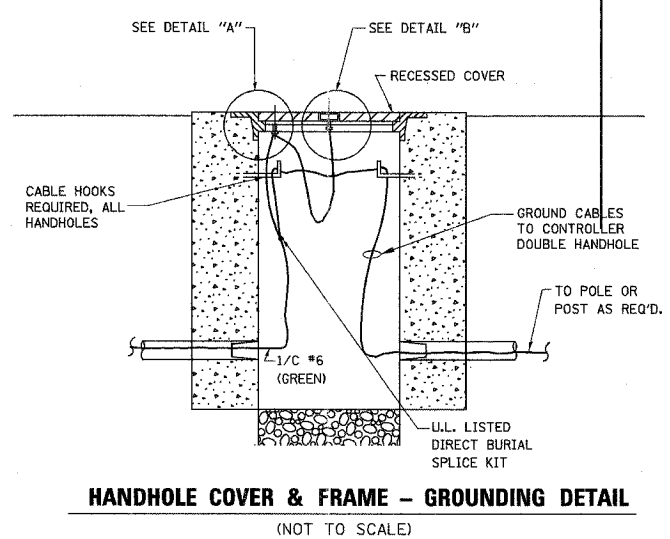
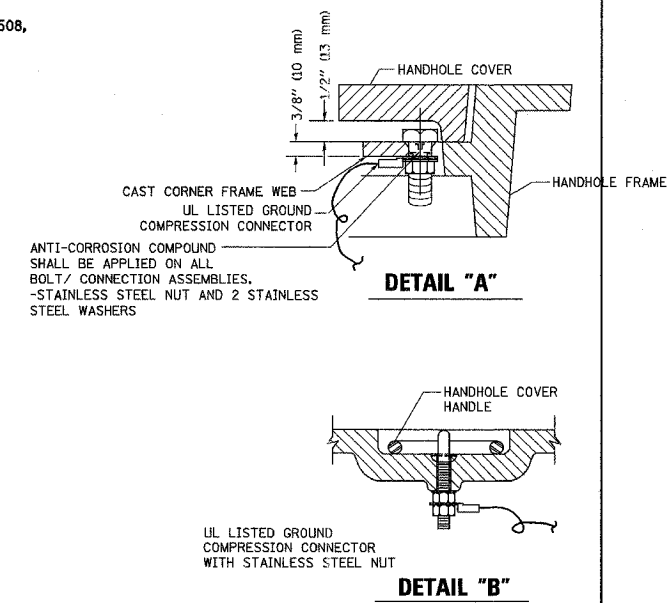
SERVICE INSTALLATION GROUND MOUNT

(NOT TO SCALE)



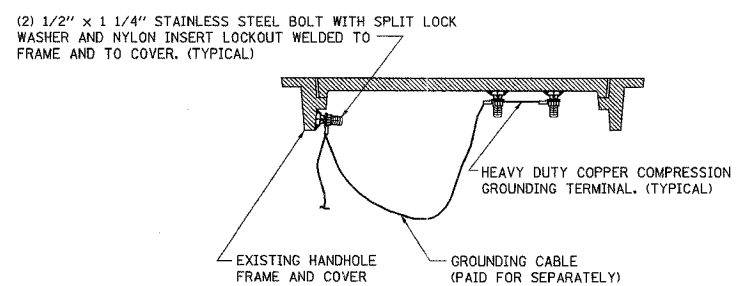
CABINET - BASE BOLT PATTERN

(NOT TO SCALE)



HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)



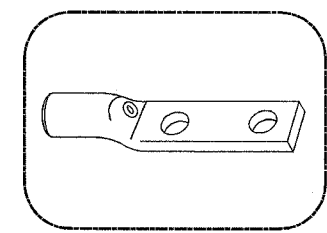
EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

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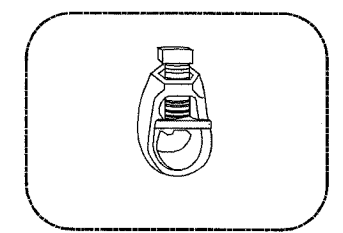
NOTES:

GROUNDING SYSTEM

- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.



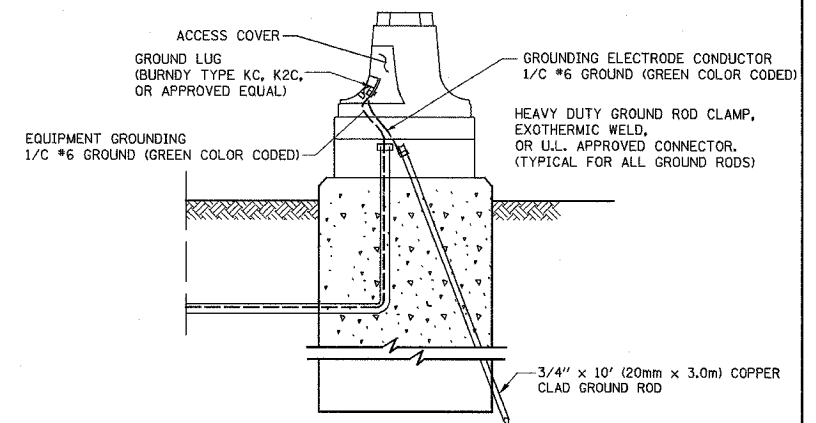
HEAVY-DUTY COMPRESSION TERMINAL
(BURNDY TYPE YGHA OR APPROVED EQUAL)



3/4" (20mm) HEAVY-DUTY GROUND ROD CLAMP
(BURNDY TYPE GRC OR APPROVED EQUAL)

NOTES:

- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



MAST ARM POLE / POST-GROUNDING DETAIL

(NOT TO SCALE)

SETON ENGINEERING
SERVICE CORPORATION
CIVIL ENGINEERS

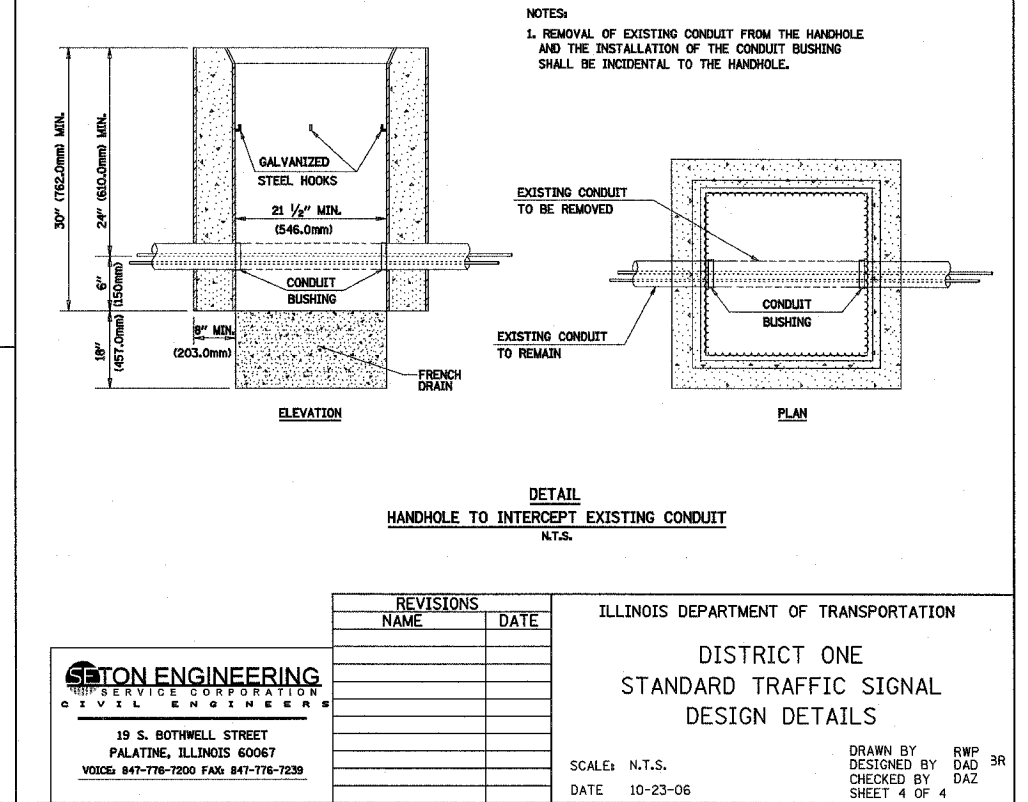
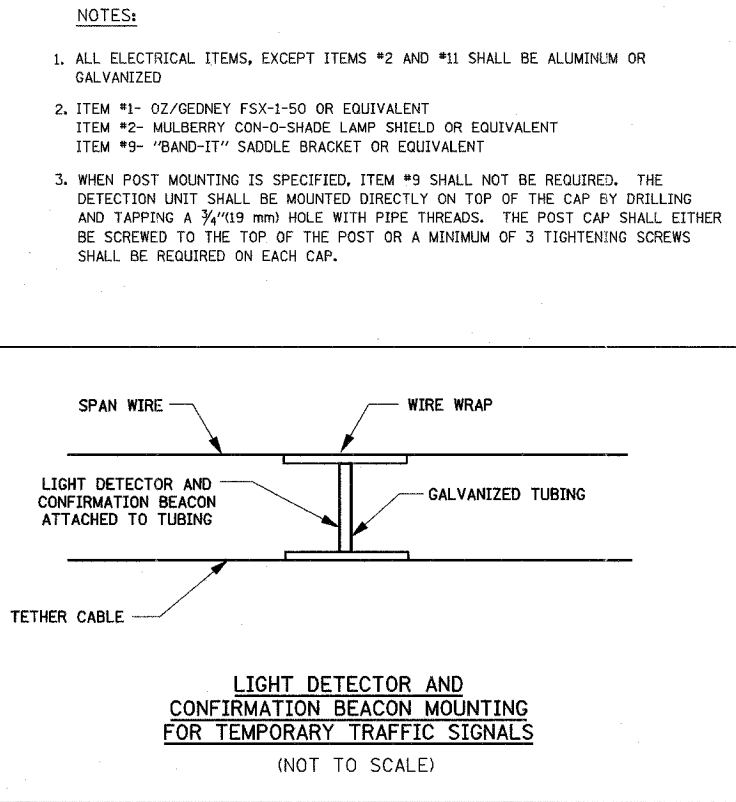
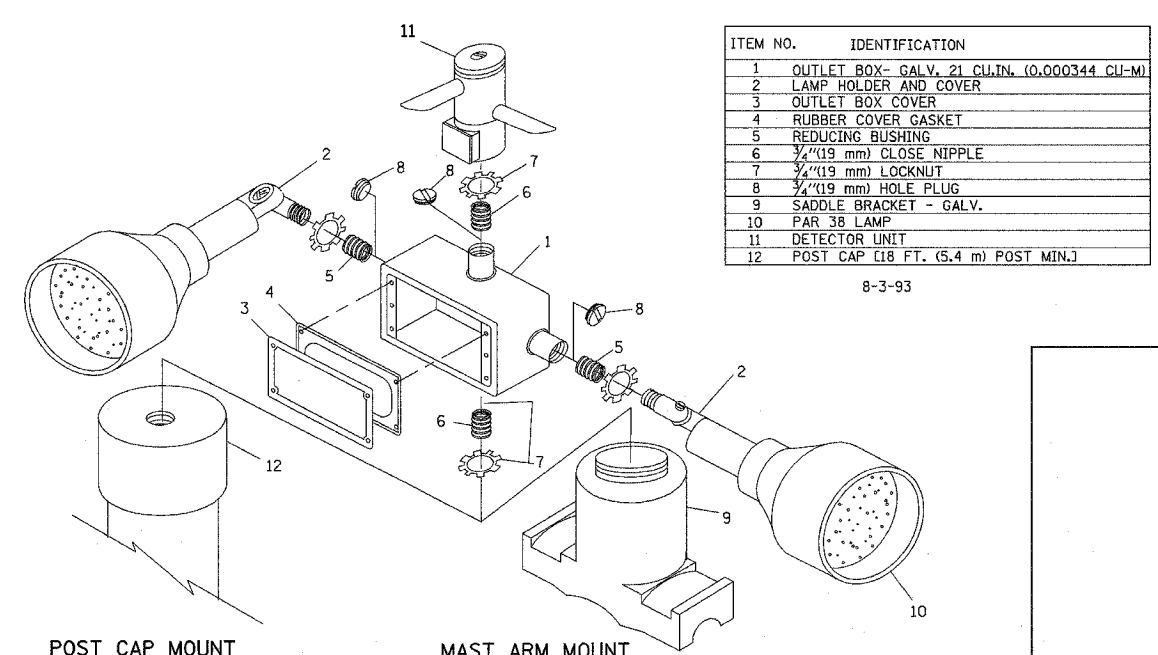
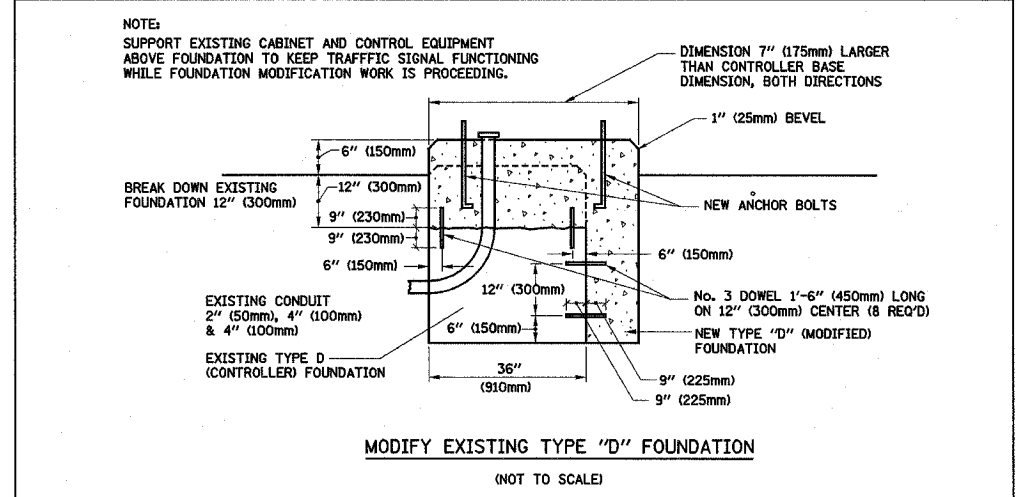
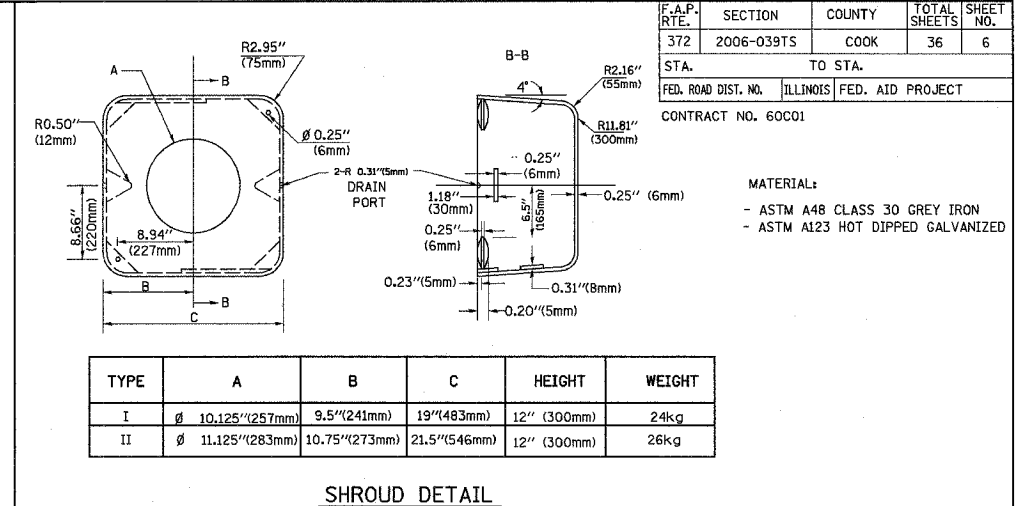
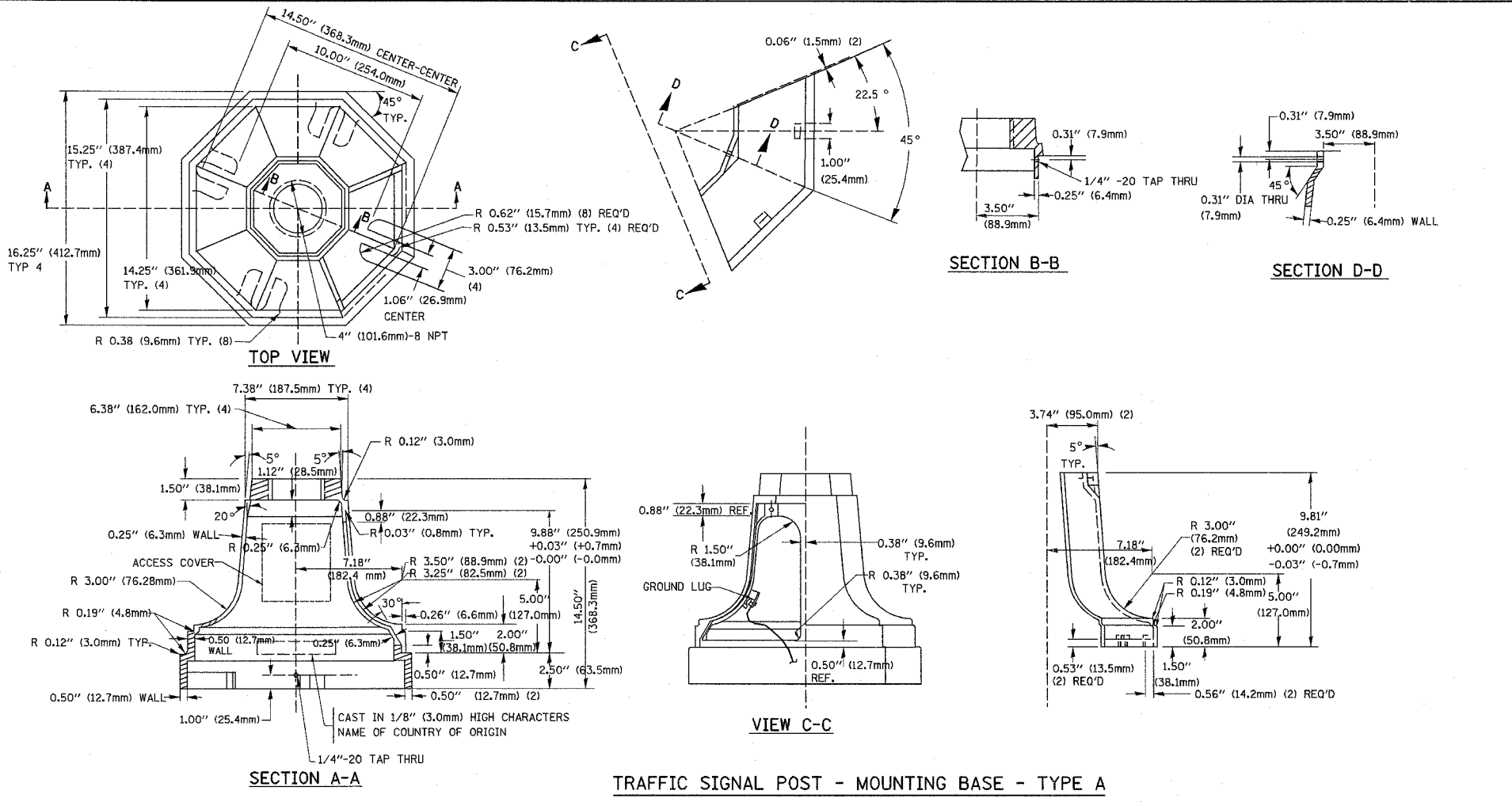
19 S. BOTHWELL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

REVISIONS	
NAME	DATE

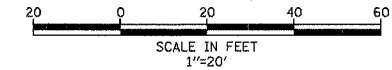
ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: N.T.S.
DATE: 10-23-06

DRAWN BY RWP
DESIGNED BY DAD
CHECKED BY DAZ
SHEET 3 OF 4



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	7
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60C01				



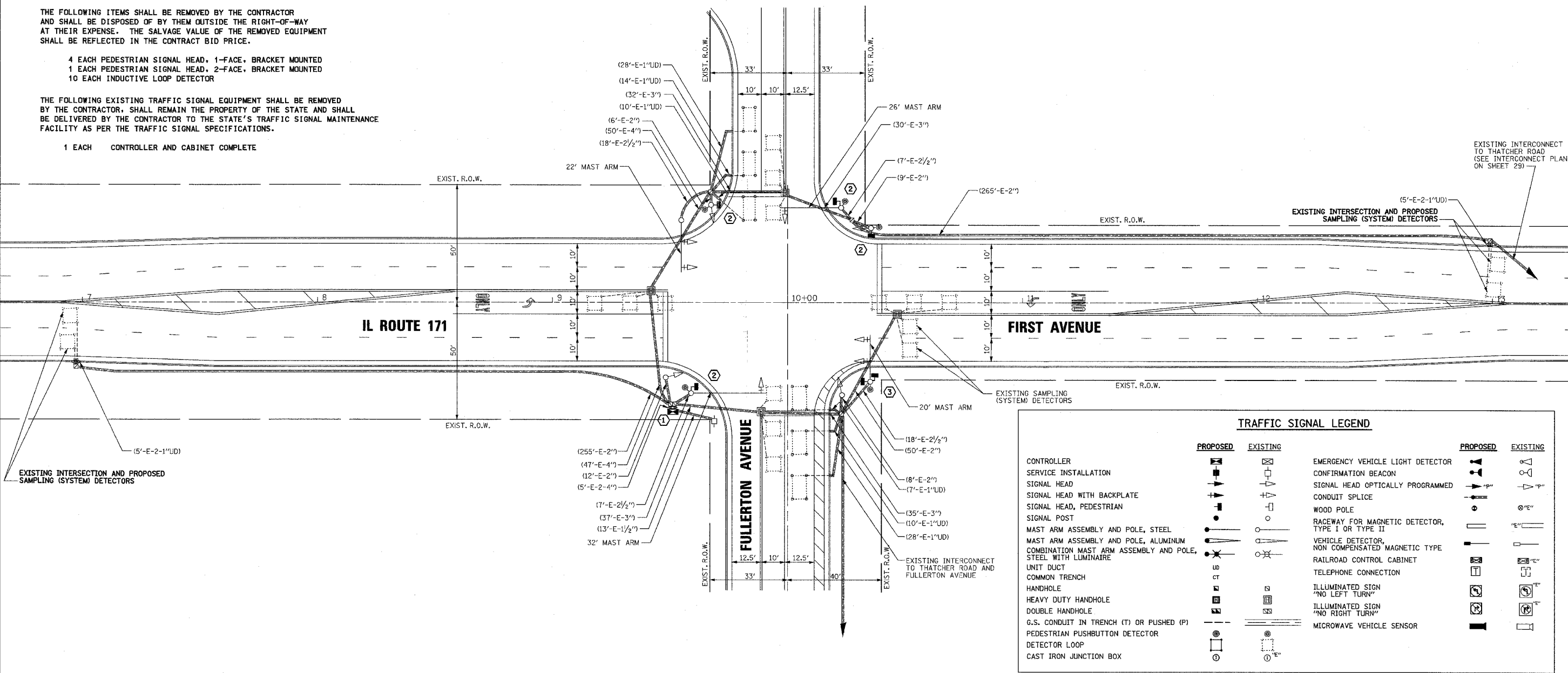
- CONSTRUCTION NOTES:**
- REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
 - REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED, INSTALL NEW PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET-MOUNTED.
 - REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED, INSTALL NEW PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET-MOUNTED.
 - THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED
- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED
- 10 EACH INDUCTIVE LOOP DETECTOR

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR. SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH CONTROLLER AND CABINET COMPLETE



TRAFFIC SIGNAL LEGEND			
	PROPOSED	EXISTING	
CONTROLLER	[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR
SERVICE INSTALLATION	[Symbol]	[Symbol]	CONFIRMATION BEACON
SIGNAL HEAD	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	CONDUIT SPLICE
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]	WOOD POLE
SIGNAL POST	[Symbol]	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	RAILROAD CONTROL CABINET
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	[Symbol]	[Symbol]	TELEPHONE CONNECTION
UNIT DUCT	[Symbol]	[Symbol]	ILLUMINATED SIGN 'NO LEFT TURN'
COMMON TRENCH	[Symbol]	[Symbol]	ILLUMINATED SIGN 'NO RIGHT TURN'
HANDHOLE	[Symbol]	[Symbol]	MICROWAVE VEHICLE SENSOR
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]	
DOUBLE HANDHOLE	[Symbol]	[Symbol]	
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]	
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]	
DETECTOR LOOP	[Symbol]	[Symbol]	
CAST IRON JUNCTION BOX	[Symbol]	[Symbol]	

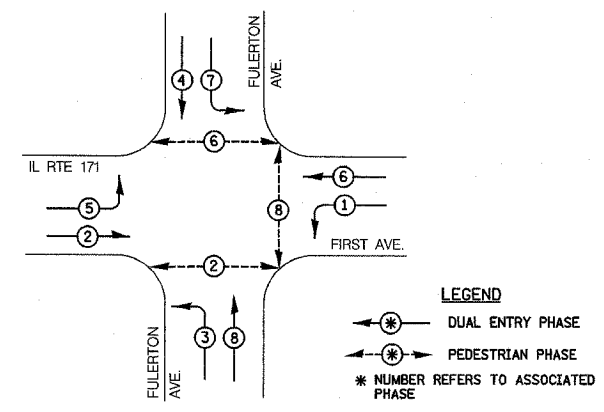
NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

SETON ENGINEERING
A SERVICE CORPORATION
CIVIL ENGINEERS
19 S. BOTHWELL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

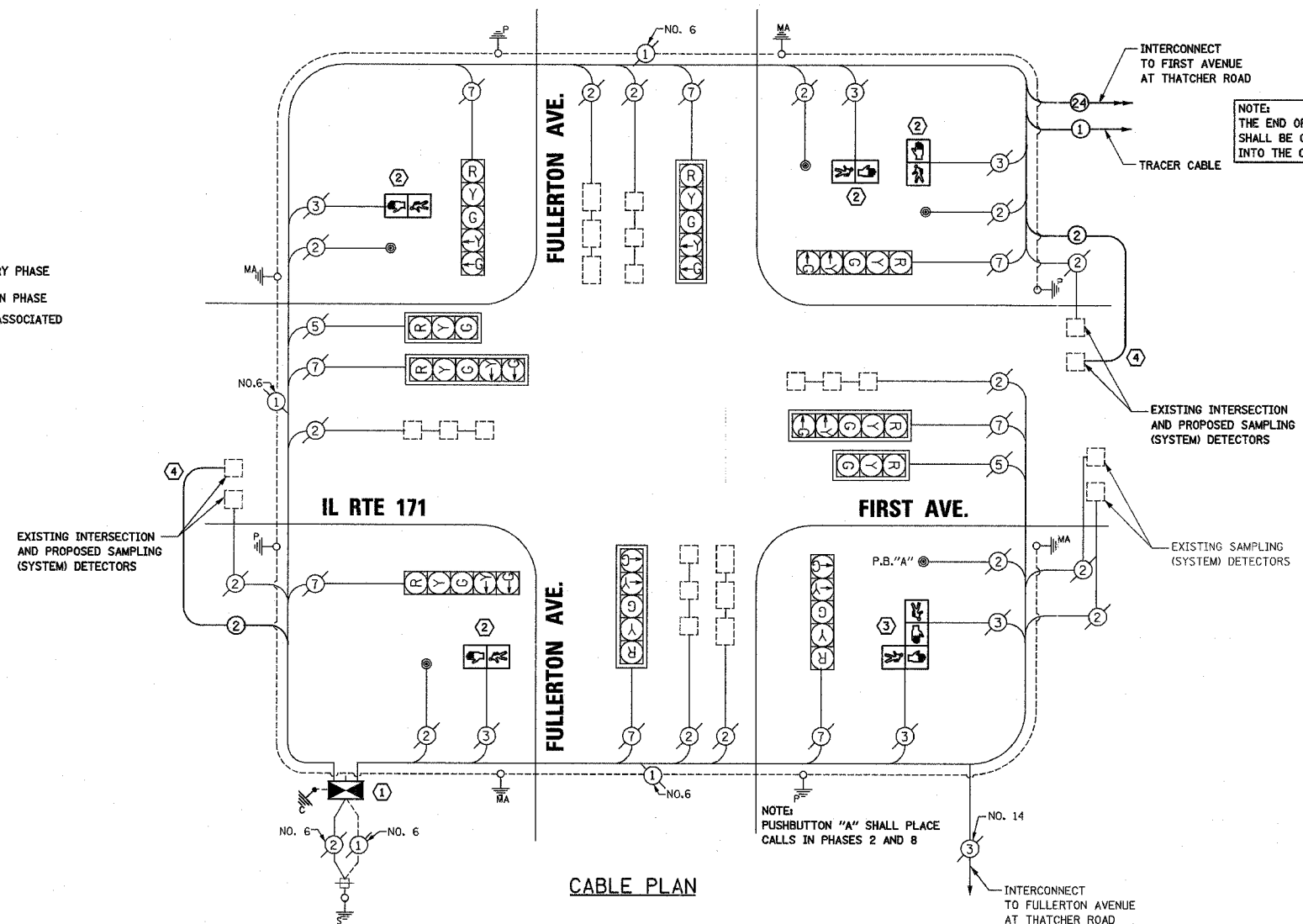
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL MODIFICATION AND REMOVAL PLAN
IL RTE 171 (1ST AVENUE)
AT FULLERTON AVENUE
RIVER GROVE, ILLINOIS
SCALE: 1"=20'
DATE: 10-23-06
DRAWN BY: CWC, BR
DESIGNED BY: VO
CHECKED BY: TJM

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



NOTE:
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET

- CONSTRUCTION NOTES:**
- REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
 - REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED, INSTALL NEW PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET-MOUNTED.
 - REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED, INSTALL NEW PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET-MOUNTED.
 - INSTALL NEW ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO.14, 1 PAIR.
 - THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
⊗	⊗	8" (200mm) TRAFFIC SIGNAL SECTION
⊗	⊗	12" (300mm) TRAFFIC SIGNAL SECTION
⊗	⊗	12" (300mm) PEDESTRIAN SIGNAL SECTION
⊗	⊗	12" (300mm) PEDESTRIAN SIGNAL SECTION
⊗	⊗	CONTROLLER CABINET
⊗	⊗	SERVICE INSTALLATION
⊗	⊗	TELEPHONE CONNECTION
⊗	⊗	VEHICLE DETECTOR, INDUCTION LOOP
⊗	⊗	MAGNETIC DETECTOR
⊗	⊗	EMERGENCY VEHICLE LIGHT DETECTOR
⊗	⊗	CONFIRMATION BEACON
⊗	⊗	PUSHBUTTON DETECTOR
⊗	⊗	2 DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
⊗	⊗	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
⊗	⊗	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SM12F
⊗	⊗	SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
⊗	⊗	SIGNAL FACE WITH BACKPLATE, "L" INDICATES LOUVRE
⊗	⊗	RAILROAD CONTROL CABINET
⊗	⊗	ILLUMINATED SIGN "NO LEFT TURN"
⊗	⊗	ILLUMINATED SIGN "NO RIGHT TURN"
⊗	⊗	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
⊗	⊗	GROUND ROD AT POST (P), OR MAST ARM POLE (MA)
⊗	⊗	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
⊗	⊗	MICROWAVE VEHICLE SENSOR

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL TRANSCEIVER, FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	756
PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	12
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND. LED)	X % OPERATION	
SIGNAL (RED)	10	135	0.50	675
(YELLOW)	10	135	0.25	337.5
(GREEN)	10	135	0.25	337.5
ARROW	16	135	0.10	216
PED. SIGNAL	6	90	1.00	540
CONTROLLER	1	100	1.00	100
TOTAL =				2206

FOUNDATION (DEPTH)	(FT.) (m)	CABLE SLACK	(FT.) (m)	VERTICAL	(FT.) (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - FOUNDATION	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L - 2 = (6m+L-0.6m)=
C - M. ARM POLE		SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

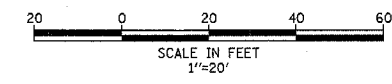
NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

STON ENGINEERING
SERVICE CORPORATION
CIVIL ENGINEERS
19 S. BOTHWELL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN
PHASE DESIGNATION DIAGRAM
AND SCHEDULE OF QUANTITIES
IL RTE 171 (1ST AVENUE) AT FULLERTON AVENUE
RIVER GROVE, ILLINOIS
SCALE: N.T.S. DRAWN BY CWC, BR
DATE 10-23-06 DESIGNED BY VO
CHECKED BY TJM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	9
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				



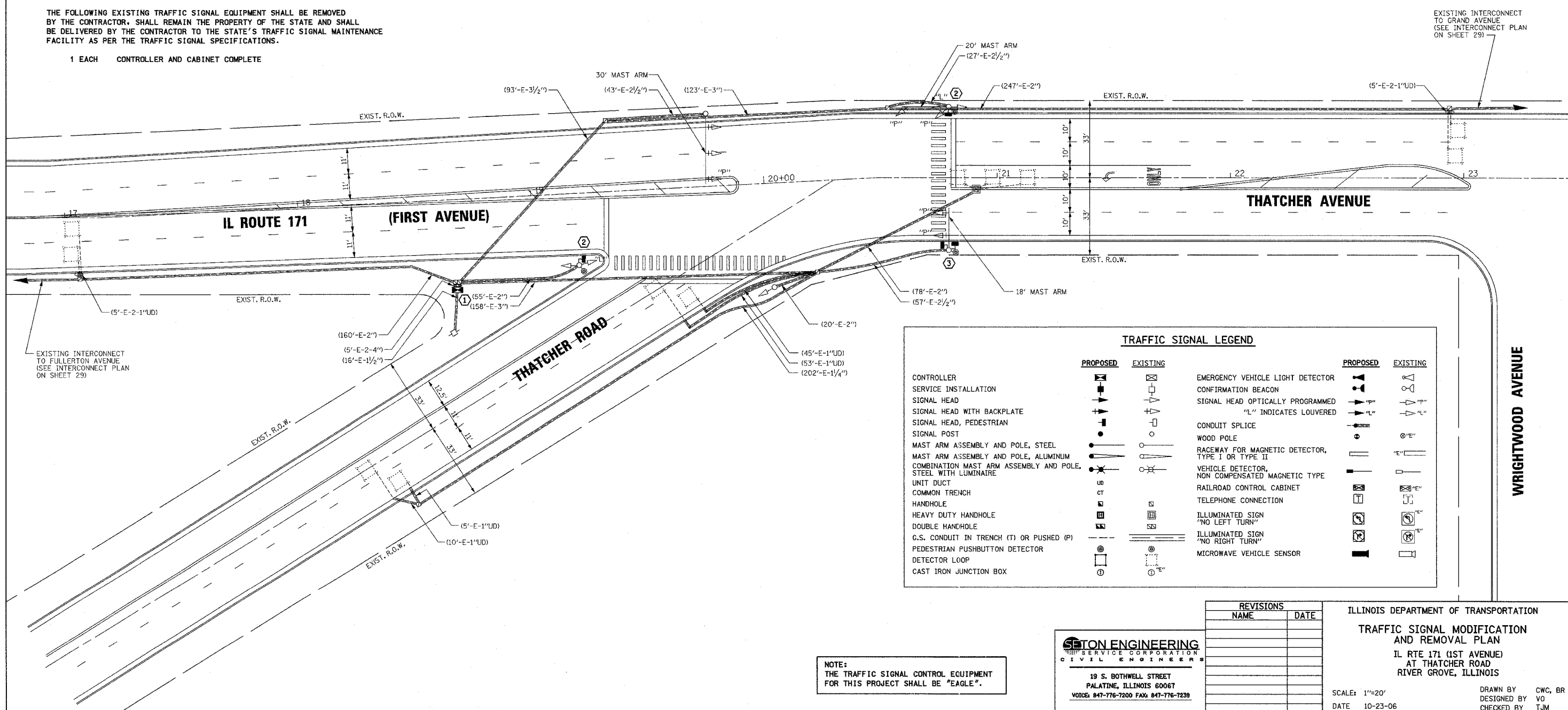
- CONSTRUCTION NOTES:**
- 1 REMOVE EXISTING CONTROLLER AND CABINET, INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
 - 2 REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED, INSTALL NEW PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET-MOUNTED.
 - 3 REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED, INSTALL NEW PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET-MOUNTED.
 - 4 THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED
- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED
- 5 EACH INDUCTIVE LOOP DETECTOR

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH CONTROLLER AND CABINET COMPLETE



	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]	CONFIRMATION BEACON	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	"L" INDICATES LOUVERED	[Symbol]	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]	CONDUIT SPLICE	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]	WOOD POLE	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	[Symbol]	[Symbol]	RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
UNIT DUCT	[Symbol]	[Symbol]	TELEPHONE CONNECTION	[Symbol]	[Symbol]
COMMON TRENCH	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]	MICROWAVE VEHICLE SENSOR	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]			
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]			
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]			
DETECTOR LOOP	[Symbol]	[Symbol]			
CAST IRON JUNCTION BOX	[Symbol]	[Symbol]			

NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

SETON ENGINEERING
CONSULTING ENGINEERS
 19 S. BOTHWELL STREET
 PALATINE, ILLINOIS 60067
 VOICE: 847-776-7200 FAX: 847-776-7239

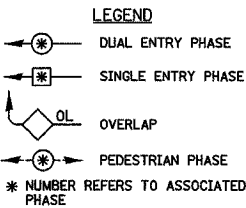
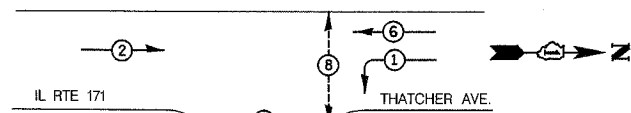
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL MODIFICATION AND REMOVAL PLAN
 IL RTE 171 (1ST AVENUE)
 AT THATCHER ROAD
 RIVER GROVE, ILLINOIS

SCALE: 1"=20'
 DATE: 10-23-06

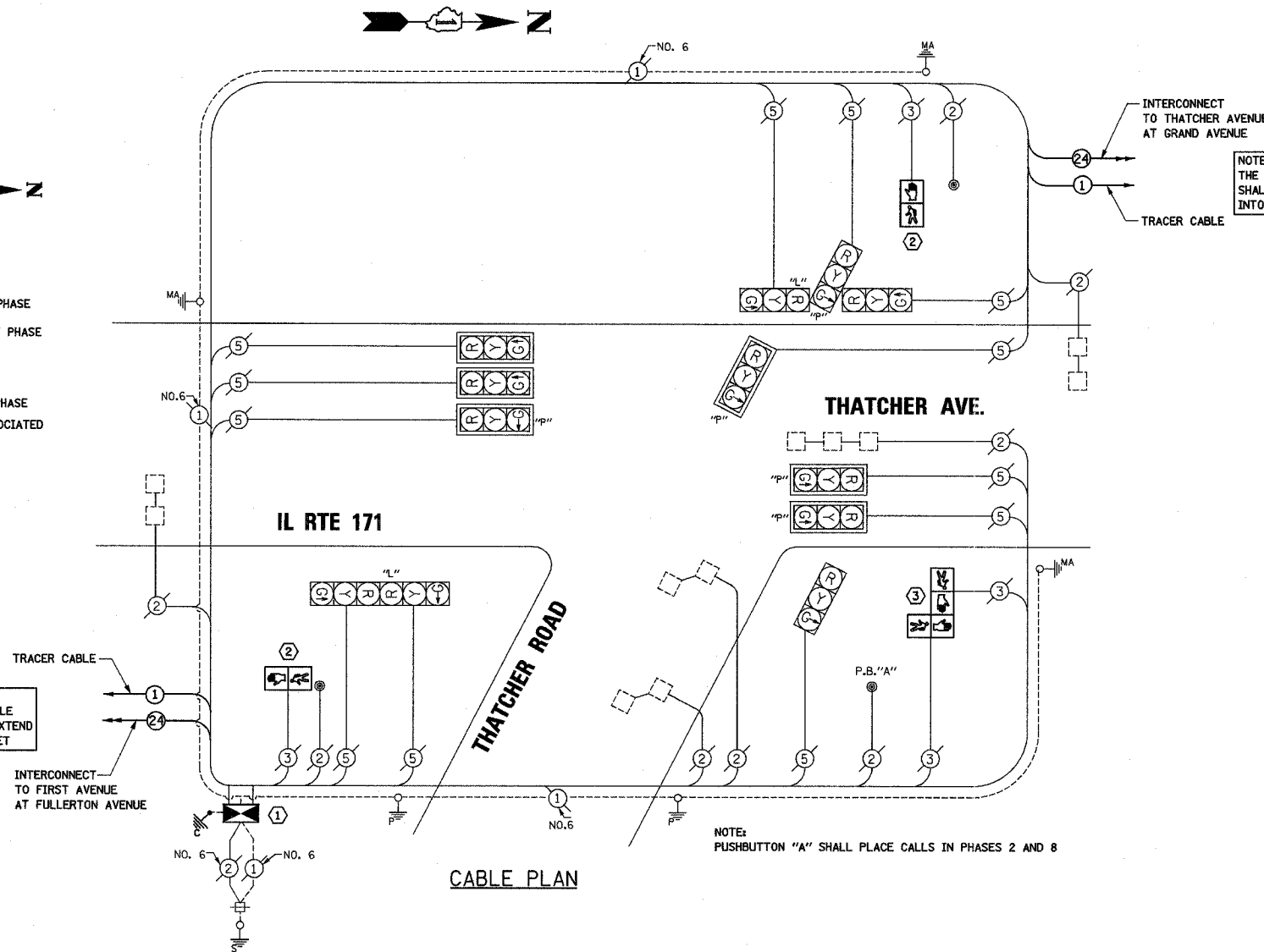
DRAWN BY: CWC, BR
 DESIGNED BY: VO
 CHECKED BY: TJM

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

NOTE: THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET



NOTE: THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET

CONSTRUCTION NOTES:

- REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
- REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED, INSTALL NEW PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET-MOUNTED.
- REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED, INSTALL NEW PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET-MOUNTED.
- THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

CABLE PLAN

NOTE: PUSHBUTTON "A" SHALL PLACE CALLS IN PHASES 2 AND 8

CABLE PLAN LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL TRANSCIVER, FIBER OPTIC	EACH	1
PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED	EACH	2
INDUCTIVE LOOP DETECTOR	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	5
	EACH	1

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE	X % OPERATION		
SIGNAL (RED)	12	135	0.50		810
(YELLOW)	12	135	0.25		405
(GREEN)	12	135	0.25		405
ARROW	-	135	0.10		-
PED. SIGNAL	4	90	1.00		360
CONTROLLER	1	100	1.00		100
TOTAL =					2080

FOUNDATION (DEPTH)	(FT.) (m)	CABLE SLACK	(FT.) (m)	VERTICAL	(FT.) (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - FOUNDATION	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L - 2 = (6m+L-0.6m)
C - M. ARM POLE		SIGNAL POST	2 (0.6)		
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

ENERGY COSTS - BILLED TO: _____ (ADDRESS) _____

ENERGY SUPPLY - CONTACT: LARRY KESLIDKE (708) 410-5314 COMPANY: COM ED

NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

SETON ENGINEERING
SERVICE CORPORATION
CIVIL ENGINEER

19 S. BOTHWELL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

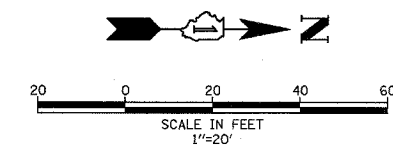
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

CABLE PLAN
PHASE DESIGNATION DIAGRAM
AND SCHEDULE OF QUANTITIES
IL RTE 171 (1ST AVENUE)
AT THATCHER ROAD
RIVER GROVE, ILLINOIS

SCALE: N.T.S. DRAWN BY CWC, BR
DATE 10-23-06 DESIGNED BY VO
CHECKED BY TJM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-03915	COOK	36	11
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				



- CONSTRUCTION NOTES:**
- REMOVE EXISTING LOCAL CONTROLLER, MASTER CONTROLLER, AND CABINET. INSTALL NEW MASTER CONTROLLER, NEW LOCAL CONTROLLER, AND TYPE V CABINET, RE-USE EXISTING FOUNDATION.
 - REMOVE EXISTING SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED. INSTALL NEW SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED.
 - REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED. INSTALL NEW PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED.
 - THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

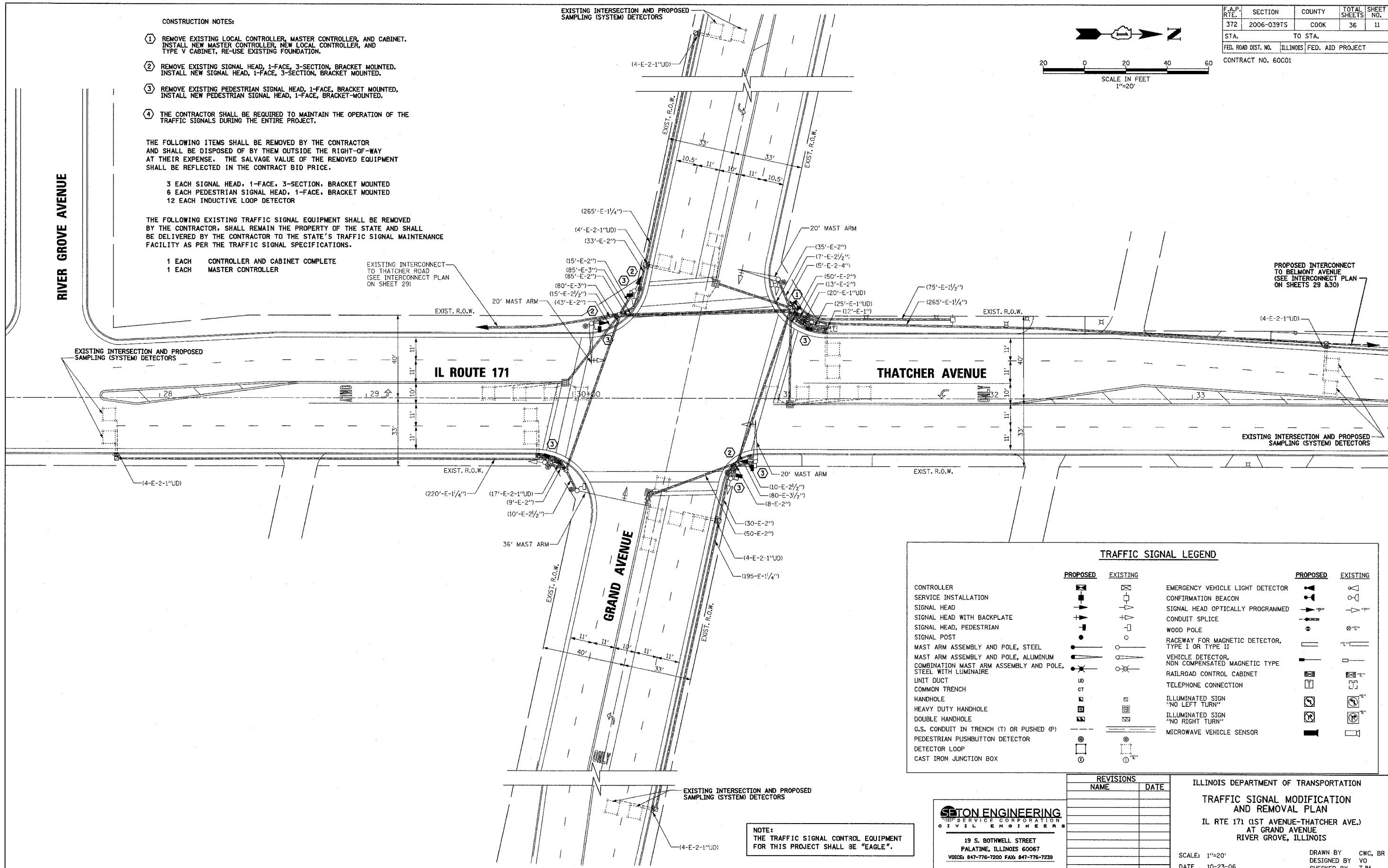
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 3 EACH SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED
- 6 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED
- 12 EACH INDUCTIVE LOOP DETECTOR

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR. SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH CONTROLLER AND CABINET COMPLETE
- 1 EACH MASTER CONTROLLER

EXISTING INTERCONNECT TO THATCHER ROAD (SEE INTERCONNECT PLAN ON SHEET 29)



TRAFFIC SIGNAL LEGEND			
	PROPOSED	EXISTING	
CONTROLLER	[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR
SERVICE INSTALLATION	[Symbol]	[Symbol]	CONFIRMATION BEACON
SIGNAL HEAD	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	CONDUIT SPLICE
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]	WOOD POLE
SIGNAL POST	[Symbol]	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	RAILROAD CONTROL CABINET
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	[Symbol]	[Symbol]	TELEPHONE CONNECTION
UNIT DUCT	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"
COMMON TRENCH	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"
HANDHOLE	[Symbol]	[Symbol]	MICROWAVE VEHICLE SENSOR
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]	
DOUBLE HANDHOLE	[Symbol]	[Symbol]	
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]	
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]	
DETECTOR LOOP	[Symbol]	[Symbol]	
CAST IRON JUNCTION BOX	[Symbol]	[Symbol]	

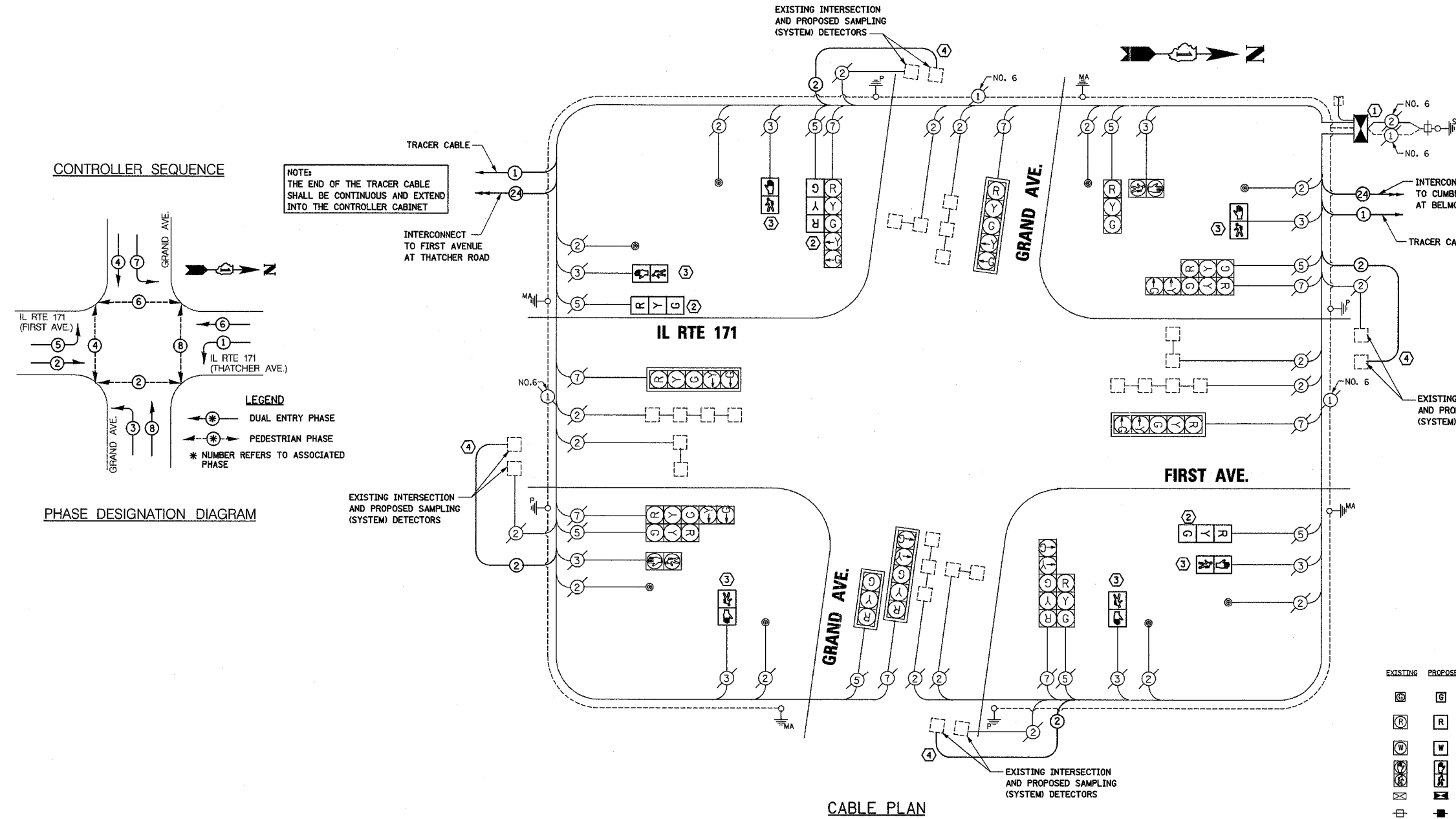
NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

SETON ENGINEERING
SERVICE CORPORATION
CIVIL ENGINEERS
19 S. BOTHWELL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

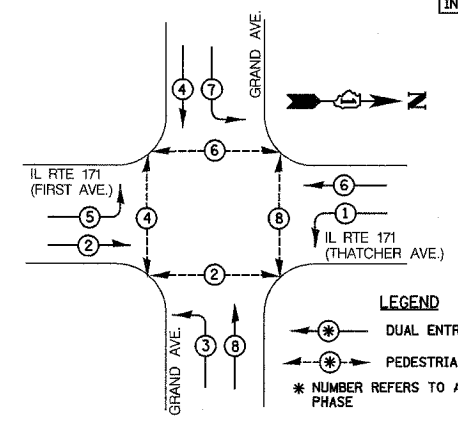
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL MODIFICATION AND REMOVAL PLAN
IL RTE 171 (1ST AVENUE-THATCHER AVE.)
AT GRAND AVENUE
RIVER GROVE, ILLINOIS
SCALE: 1"=20'
DATE: 10-23-06
DRAWN BY: CWC, BR
DESIGNED BY: VO
CHECKED BY: TJM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-0397S	COOK	36	12
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				



CONTROLLER SEQUENCE



LEGEND
 * DUAL ENTRY PHASE
 * PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

NOTE:
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET

NOTE:
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET

CONSTRUCTION NOTES:

- REMOVE EXISTING LOCAL CONTROLLER, MASTER CONTROLLER, AND CABINET. INSTALL NEW MASTER CONTROLLER, NEW LOCAL CONTROLLER, AND TYPE V CABINET, RE-USE EXISTING FOUNDATION.
- REMOVE EXISTING SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED. INSTALL NEW SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED.
- REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED. INSTALL NEW PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED.
- INSTALL NEW ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO.14, 1 PAIR.
- THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

CABLE PLAN LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED	DESCRIPTION
[Symbol]	[Symbol]	[Symbol]	[Symbol]	8" (200mm) TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	[Symbol]	[Symbol]	12" (300mm) TRAFFIC SIGNAL SECTION
[Symbol]	[Symbol]	[Symbol]	[Symbol]	12" (300mm) PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	[Symbol]	[Symbol]	12" (300mm) PEDESTRIAN SIGNAL SECTION
[Symbol]	[Symbol]	[Symbol]	[Symbol]	CONTROLLER CABINET
[Symbol]	[Symbol]	[Symbol]	[Symbol]	SERVICE INSTALLATION
[Symbol]	[Symbol]	[Symbol]	[Symbol]	TELEPHONE CONNECTION
[Symbol]	[Symbol]	[Symbol]	[Symbol]	VEHICLE DETECTOR, INDUCTION LOOP
[Symbol]	[Symbol]	[Symbol]	[Symbol]	MAGNETIC DETECTOR
[Symbol]	[Symbol]	[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR
[Symbol]	[Symbol]	[Symbol]	[Symbol]	CONFIRMATION BEACON
[Symbol]	[Symbol]	[Symbol]	[Symbol]	PUSHBUTTON DETECTOR
[Symbol]	[Symbol]	[Symbol]	[Symbol]	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
[Symbol]	[Symbol]	[Symbol]	[Symbol]	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 MM12F SML2F
[Symbol]	[Symbol]	[Symbol]	[Symbol]	SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
[Symbol]	[Symbol]	[Symbol]	[Symbol]	RAILROAD CONTROL CABINET
[Symbol]	[Symbol]	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"
[Symbol]	[Symbol]	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"
[Symbol]	[Symbol]	[Symbol]	[Symbol]	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C).
[Symbol]	[Symbol]	[Symbol]	[Symbol]	GROUND ROD AT POST (P), OR MAST ARM POLE (MA).
[Symbol]	[Symbol]	[Symbol]	[Symbol]	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
[Symbol]	[Symbol]	[Symbol]	[Symbol]	MICROWAVE VEHICLE SENSOR

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. LED	X% OPERATION	
SIGNAL (RED)	16	135	0.50	1080
(YELLOW)	16	135	0.25	540
(GREEN)	16	135	0.25	540
ARROW	16	135	0.10	216
PED. SIGNAL	8	90	1.00	720
CONTROLLER	1	100	1.00	100
MASTER CONTROLLER	1	100	1.00	100
TOTAL =				3296

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	265
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL MASTER CONTROLLER (SPECIAL)	EACH	1
TRANSCEIVER, FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1479
SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED	EACH	6
DRILL EXISTING HANDHOLE	EACH	2
INDUCTIVE LOOP DETECTOR	EACH	16
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

FOUNDATION (DEPTH)	(FT.) (m)	CABLE SLACK	(FT.) (m)	VERTICAL	(FT.) (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - FOUNDATION	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L - 2' = (6m + L - 0.6m) =
C - M. ARM POLE		SIGNAL POST	2 (0.6)		
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

SETON ENGINEERING
 SERVICE CORPORATION
 CIVIL ENGINEERS
 19 S. BOTHWELL STREET
 PALATINE, ILLINOIS 60067
 VOICE: 847-776-7200 FAX: 847-776-7239

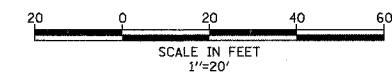
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN
PHASE DESIGNATION DIAGRAM
AND SCHEDULE OF QUANTITIES
 IL RTE 171 (1ST AVENUE-THATCHER AVE.)
 AT GRAND AVENUE RIVER GROVE, ILLINOIS

SCALE: N.T.S.
 DATE: 10-23-06

DRAWN BY: CWC, BR
 DESIGNED BY: VO
 CHECKED BY: TJM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	13
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				



CONSTRUCTION NOTES:

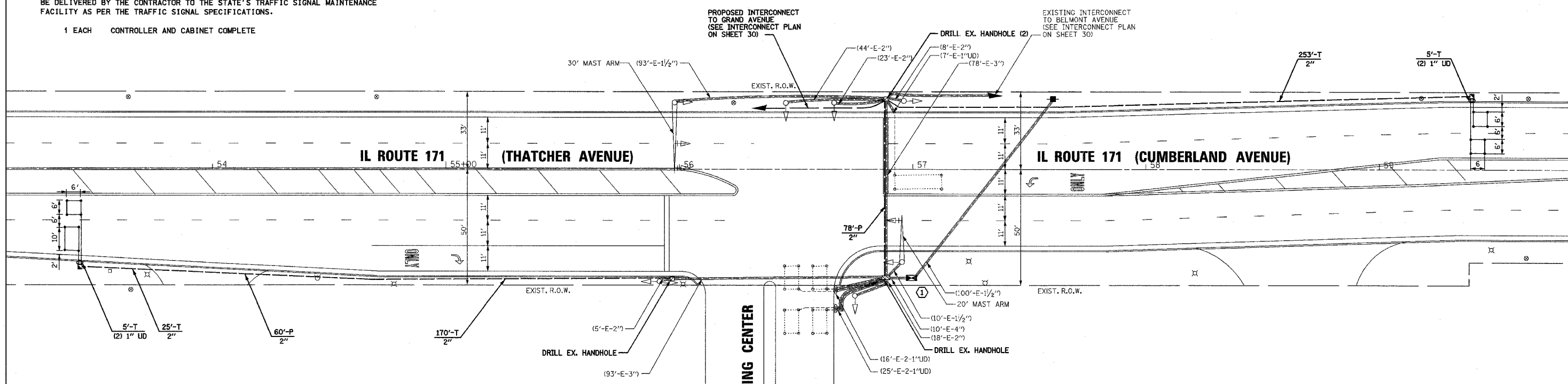
- 1 REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
- 2 THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 3 EACH INDUCTIVE LOOP DETECTOR
- 1 EACH SERVICE INSTALLATION

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH CONTROLLER AND CABINET COMPLETE



TRAFFIC SIGNAL LEGEND			
	PROPOSED	EXISTING	
CONTROLLER	[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR
SERVICE INSTALLATION	[Symbol]	[Symbol]	CONFIRMATION BEACON
SIGNAL HEAD	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	CONDUIT SPLICE
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]	WOOD POLE
SIGNAL POST	[Symbol]	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	RAILROAD CONTROL CABINET
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	[Symbol]	[Symbol]	TELEPHONE CONNECTION
UNIT DUCT	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"
COMMON TRENCH	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"
HANDHOLE	[Symbol]	[Symbol]	MICROWAVE VEHICLE SENSOR
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]	
DOUBLE HANDHOLE	[Symbol]	[Symbol]	
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]	
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]	
DETECTOR LOOP	[Symbol]	[Symbol]	
CAST IRON JUNCTION BOX	[Symbol]	[Symbol]	

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

SETON ENGINEERING
CONSULTING ENGINEERS
 19 S. BOTHWELL STREET
 PALATINE, ILLINOIS 60067
 VOICE: 847-776-7200 FAX: 847-776-7239

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL MODIFICATION AND REMOVAL PLAN
 IL RTE 171 (THATCHER AVENUE)
 AT THATCHER WOODS SHOPPING CENTER
 RIVER GROVE, ILLINOIS

SCALE: 1"=20'
 DATE: 10-23-06

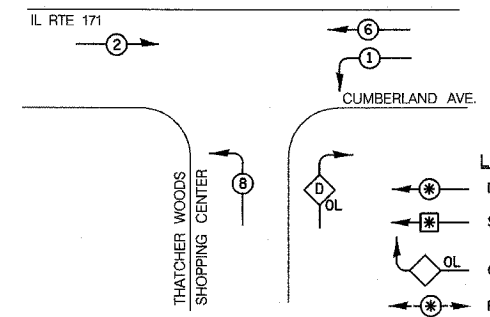
DRAWN BY: CWC, BR
 DESIGNED BY: VO
 CHECKED BY: TJM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	14
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60001				



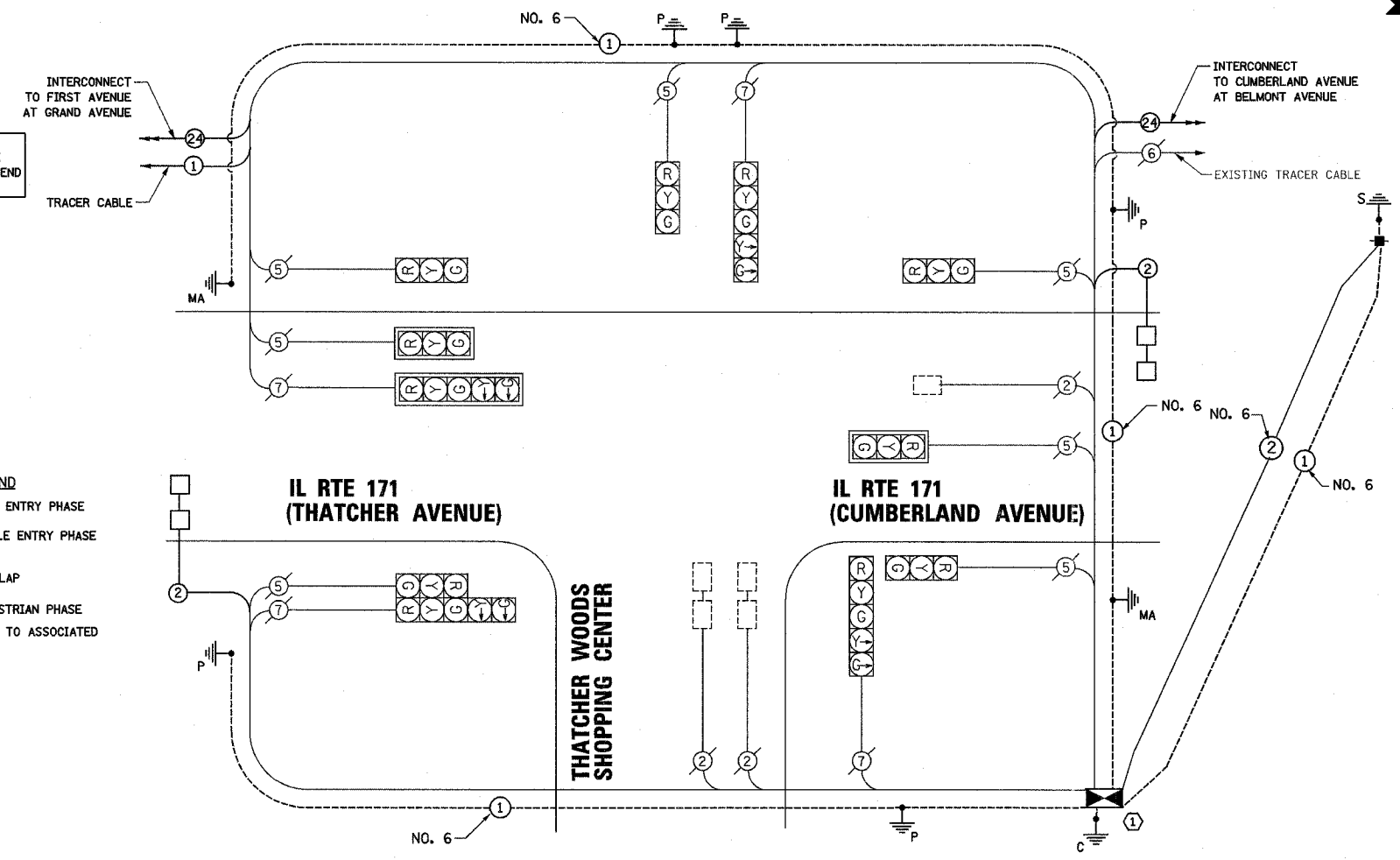
NOTE:
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET

CONTROLLER SEQUENCE



- LEGEND**
- DUAL ENTRY PHASE
 - SINGLE ENTRY PHASE
 - OVERLAP
 - PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM



CABLE PLAN

- CONSTRUCTION NOTES:**
- 1 REMOVE EXISTING CONTROLLER AND CABINET, INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
 - 2 THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

CABLE PLAN LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED	DESCRIPTION
				8" (200mm) TRAFFIC SIGNAL SECTION
				12" (300mm) TRAFFIC SIGNAL SECTION
				12" (300mm) PEDESTRIAN SIGNAL SECTION
				12" (300mm) PEDESTRIAN SIGNAL SECTION
				CONTROLLER CABINET
				SERVICE INSTALLATION
				TELEPHONE CONNECTION
				VEHICLE DETECTOR, INDUCTION LOOP
				MAGNETIC DETECTOR
				EMERGENCY VEHICLE LIGHT DETECTOR
				CONFIRMATION BEACON
				PUSHBUTTON DETECTOR
				2 DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
				MICROWAVE VEHICLE SENSOR

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	448
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	138
HANDHOLE	EACH	2
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	4
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL TRANSCEIVER, FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	101
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	627
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	753
DRILL EXISTING HANDHOLE	EACH	4
DETECTOR LOOP, TYPE 1	FOOT	141
INDUCTIVE LOOP DETECTOR	EACH	4
SERVICE INSTALLATION, POLE MOUNTED	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	
SIGNAL (RED)	11	135		0.50	1080
(YELLOW)	11	135		0.25	540
(GREEN)	11	135		0.25	540
ARROW	8	135		0.10	216
PED. SIGNAL	-	90		1.00	-
CONTROLLER	1	100		1.00	100
TOTAL =					3296

FOUNDATION (DEPTH)	(FT.) (m)	CABLE SLACK	(FT.) (m)	VERTICAL	(FT.) (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - FOUNDATION	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L - 2 = (6m+L-0.6m)=
C - M. ARM POLE		SIGNAL POST	2 (0.6)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

STON ENGINEERING
SERVICE CORPORATION
CIVIL ENGINEER

19 S. BOTHWELL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

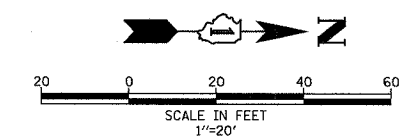
CABLE PLAN
PHASE DESIGNATION DIAGRAM
AND SCHEDULE OF QUANTITIES

IL RTE 171 (THATCHER AVENUE) AT THATCHER WOODS SHOPPING CENTER RIVER GROVE, ILLINOIS

SCALE: N.T.S.
DATE: 10-23-06

DRAWN BY: CWC, BR
DESIGNED BY: VO
CHECKED BY: TJM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	15
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				



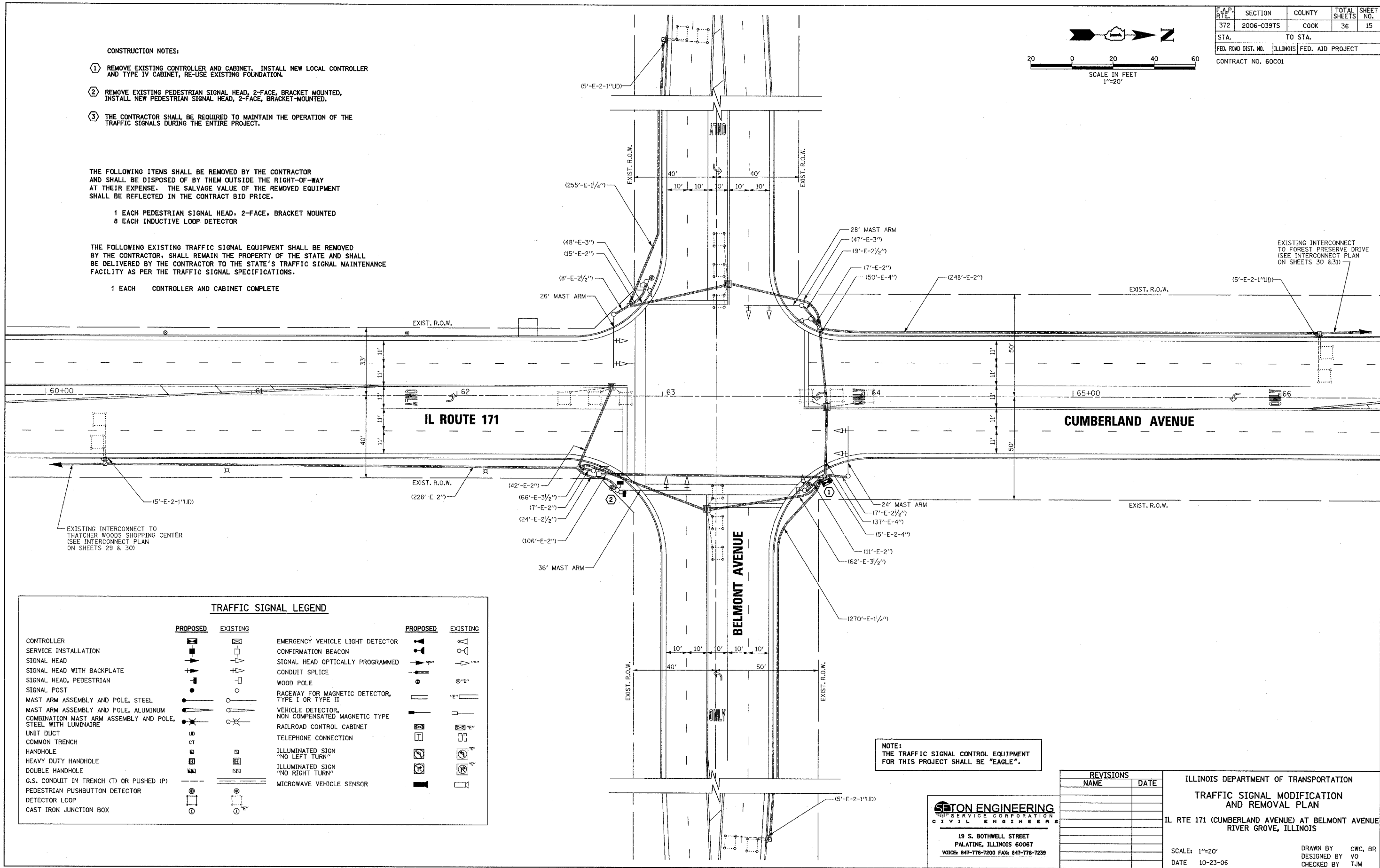
- CONSTRUCTION NOTES:**
- 1 REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
 - 2 REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED, INSTALL NEW PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET-MOUNTED.
 - 3 THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 1 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED
- 8 EACH INDUCTIVE LOOP DETECTOR

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH CONTROLLER AND CABINET COMPLETE



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]	CONFIRMATION BEACON	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	CONDUIT SPLICE	[Symbol]	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]	WOOD POLE	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	[Symbol]	[Symbol]	TELEPHONE CONNECTION	[Symbol]	[Symbol]
UNIT DUCT	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"	[Symbol]	[Symbol]
COMMON TRENCH	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]	MICROWAVE VEHICLE SENSOR	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]			
DOUBLE HANDHOLE	[Symbol]	[Symbol]			
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]			
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]			
DETECTOR LOOP	[Symbol]	[Symbol]			
CAST IRON JUNCTION BOX	[Symbol]	[Symbol]			

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

SETON ENGINEERING
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19 S. BOTHWELL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

REVISIONS	
NAME	DATE

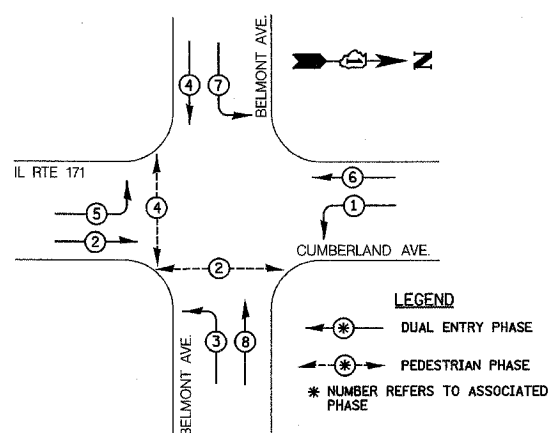
ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL MODIFICATION AND REMOVAL PLAN
IL RTE 171 (CUMBERLAND AVENUE) AT BELMONT AVENUE
RIVER GROVE, ILLINOIS

SCALE: 1"=20'
DATE: 10-23-06

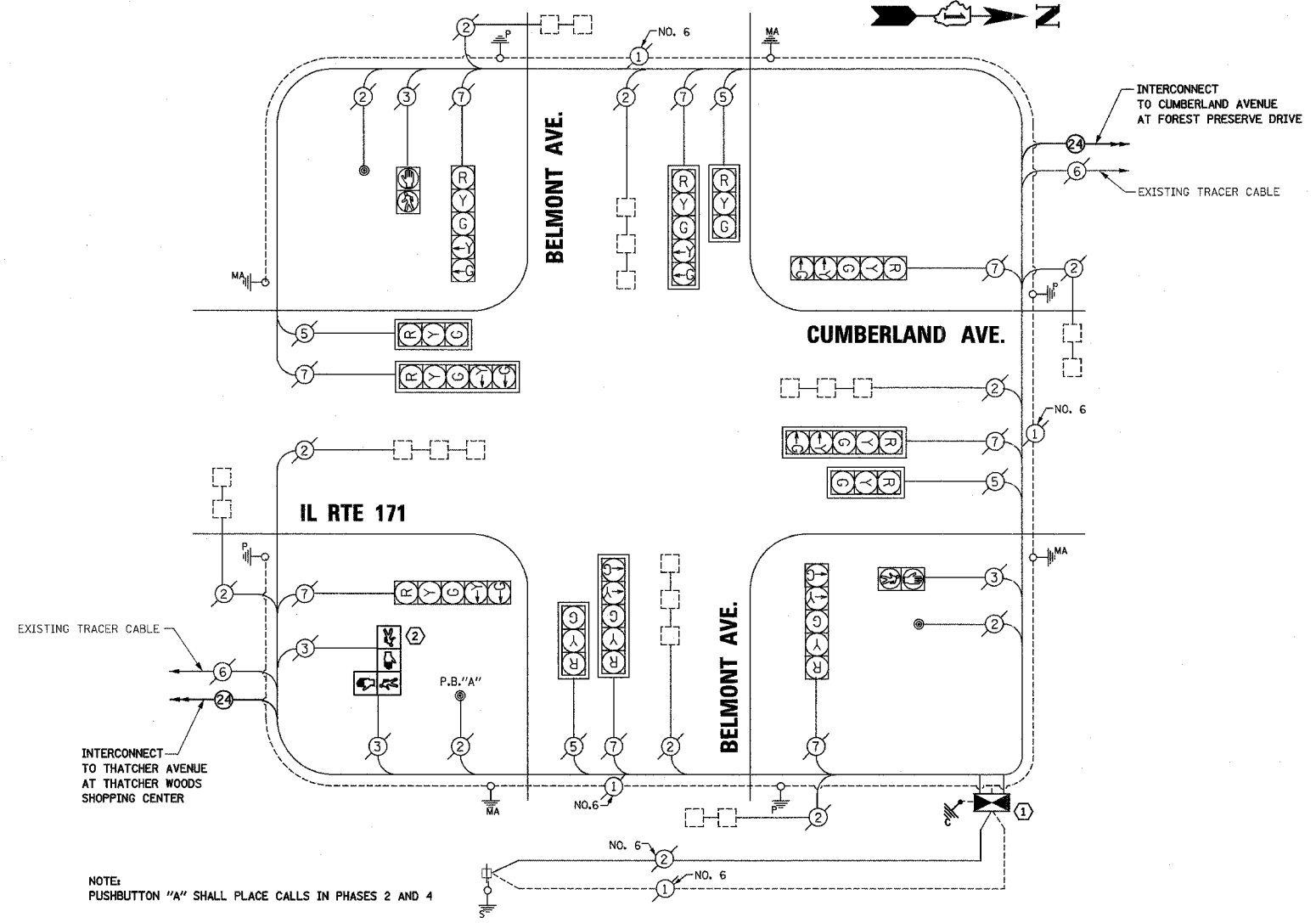
DRAWN BY: CWC, BR
DESIGNED BY: VO
CHECKED BY: TJM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	16
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



NOTE: PUSHBUTTON "A" SHALL PLACE CALLS IN PHASES 2 AND 4

- CONSTRUCTION NOTES:**
- REMOVE EXISTING CONTROLLER AND CABINET, INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
 - REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED, INSTALL NEW PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET-MOUNTED.
 - THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

CABLE PLAN

CABLE PLAN LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL TRANSCIVER, FIBER OPTIC	EACH	1
PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	8
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE	X% OPERATION	
		INCAND.	LED	
SIGNAL (RED)	12	135	0.50	810
(YELLOW)	12	135	0.25	405
(GREEN)	12	135	0.25	405
ARROW	16	135	0.10	216
PED. SIGNAL	4	90	1.00	360
CONTROLLER	1	100	1.00	100
TOTAL =				2296

FOUNDATION (DEPTH)	(FT.) (m)	CABLE SLACK	(FT.) (m)	VERTICAL	(FT.) (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - FOUNDATION	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L - 2' = (6m + L - 0.6m) =
C - M. ARM POLE		SIGNAL POST	2 (0.5)	BRACKET MOUNTED	13 (4.0)
		CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
		FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

SETON ENGINEERING
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 CIVIL ENGINEER
 19 S. BOTHWELL STREET
 PALATINE, ILLINOIS 60067
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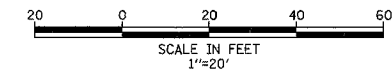
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN
PHASE DESIGNATION DIAGRAM
AND SCHEDULE OF QUANTITIES
 IL RTE 171 (CUMBERLAND AVENUE) AT BELMONT AVENUE
 RIVER GROVE, ILLINOIS

SCALE: N.T.S.
 DATE: 10-23-06

DRAWN BY: CWC, BR
 DESIGNED BY: VO
 CHECKED BY: TJM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	17
STA.	TO STA.			
FED. RMD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				

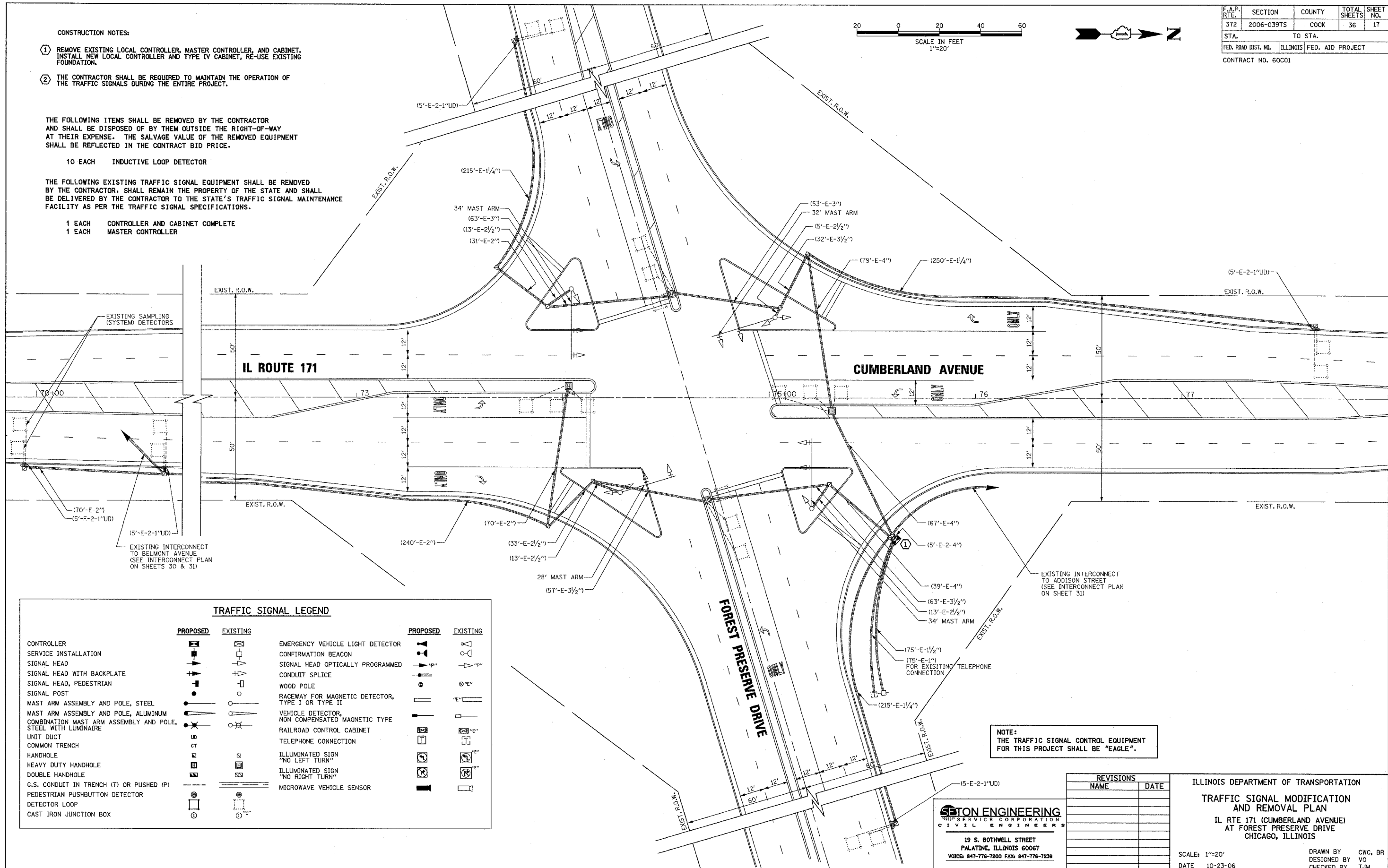


- CONSTRUCTION NOTES:**
- REMOVE EXISTING LOCAL CONTROLLER, MASTER CONTROLLER, AND CABINET. INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
 - THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 10 EACH INDUCTIVE LOOP DETECTOR
- 1 EACH CONTROLLER AND CABINET COMPLETE
- 1 EACH MASTER CONTROLLER

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]	CONFIRMATION BEACON	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	CONDUIT SPLICE	[Symbol]	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]	WOOD POLE	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	[Symbol]	[Symbol]	TELEPHONE CONNECTION	[Symbol]	[Symbol]
UNIT DUCT	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"	[Symbol]	[Symbol]
COMMON TRENCH	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]	MICROWAVE VEHICLE SENSOR	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]			
DOUBLE HANDHOLE	[Symbol]	[Symbol]			
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]			
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]			
DETECTOR LOOP	[Symbol]	[Symbol]			
CAST IRON JUNCTION BOX	[Symbol]	[Symbol]			

NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

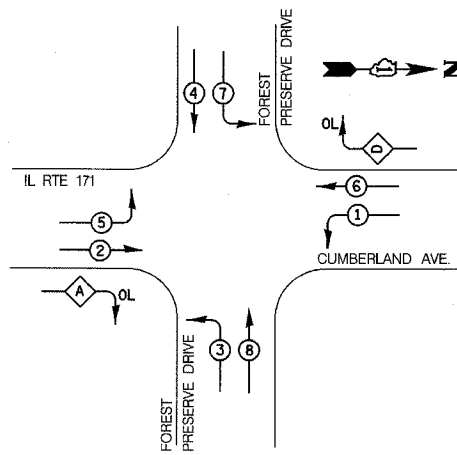
REVISIONS	
NAME	DATE

STON ENGINEERING
 SERVICE CORPORATION
 CIVIL ENGINEERS
 19 S. BOTHWELL STREET
 PALATINE, ILLINOIS 60067
 VOICE: 847-776-7200 FAX: 847-776-7239

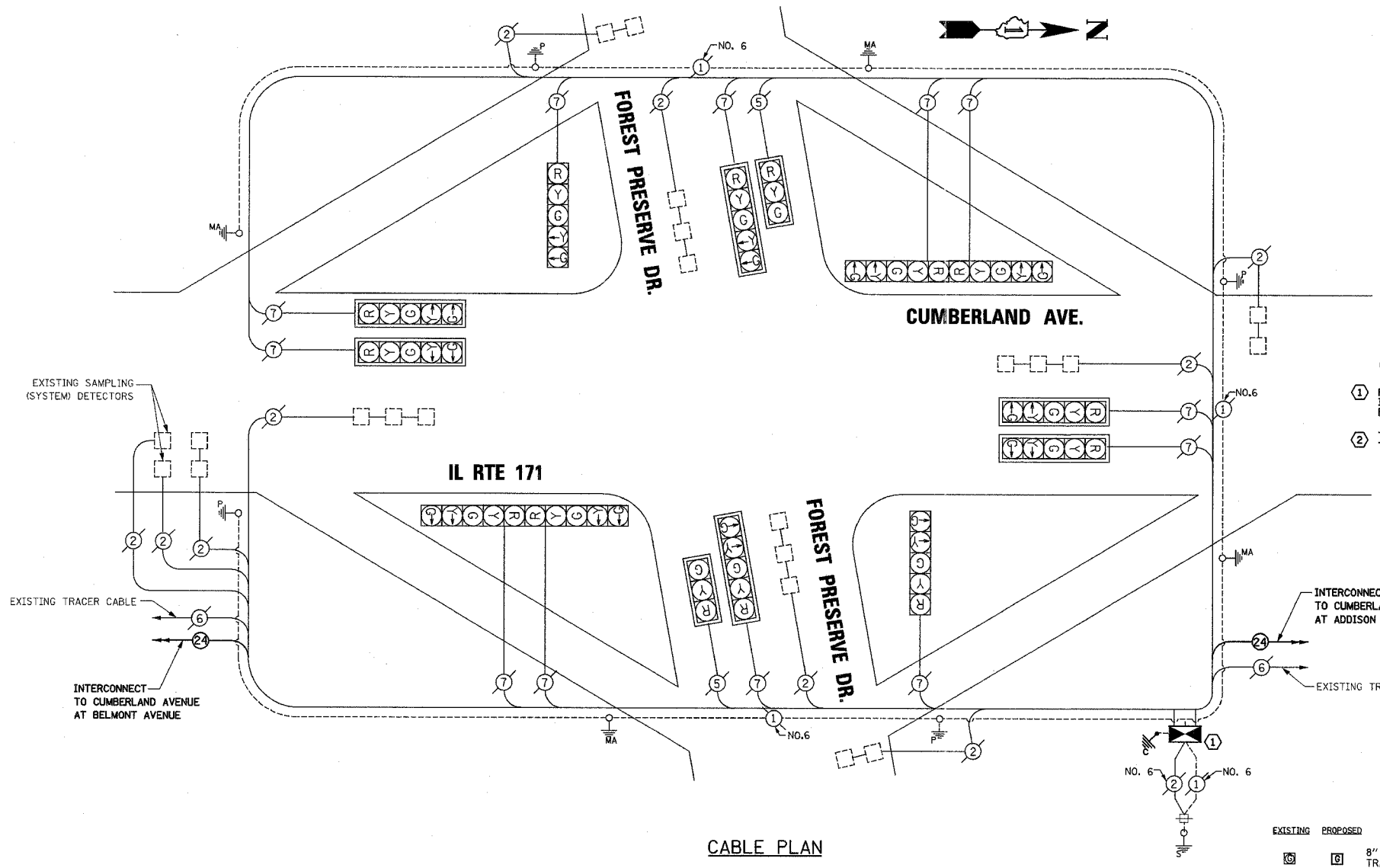
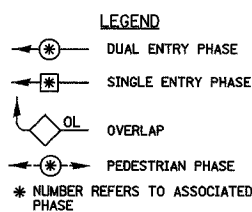
ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL MODIFICATION AND REMOVAL PLAN
 IL RTE 171 (CUMBERLAND AVENUE)
 AT FOREST PRESERVE DRIVE
 CHICAGO, ILLINOIS
 SCALE: 1"=20'
 DATE: 10-23-06
 DRAWN BY: CWC, BR
 DESIGNED BY: VO
 CHECKED BY: TJM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	18
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60C01				

CONTROLLER SEQUENCE

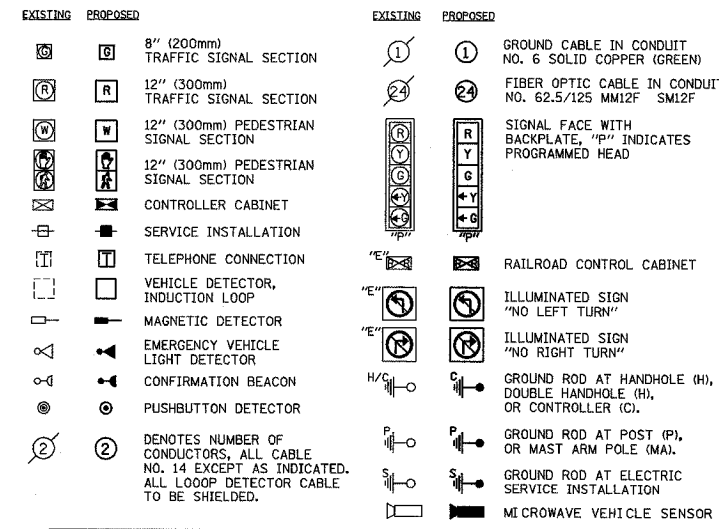


PHASE DESIGNATION DIAGRAM



- CONSTRUCTION NOTES:**
- REMOVE EXISTING LOCAL CONTROLLER, MASTER CONTROLLER, AND CABINET. INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
 - THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

CABLE PLAN LEGEND



SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL TRANSCEIVER, FIBER OPTIC	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	10
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND. LED)	X% OPERATION	
SIGNAL (RED)	14	135	0.50	945
(YELLOW)	14	135	0.25	472.5
(GREEN)	14	135	0.25	472.5
ARROW	24	135	0.10	324
PED. SIGNAL	-	90	1.00	-
CONTROLLER	1	100	1.00	100
TOTAL =				2314

ENERGY COSTS - BILLED TO: CITY OF CHICAGO (ADDRESS) 121 N. LASALLE STREET CHICAGO, IL 60602

ENERGY SUPPLY - CONTACT: LARRY KESLINKE (PHONE: (708) 410-5314) COMPANY: COM ED

FOUNDATION (DEPTH)	(FT.) (m)	CABLE SLACK	(FT.) (m)	VERTICAL	(FT.) (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - FOUNDATION	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L - 2 = (6m+L-0.6m)=
C - M. ARM POLE	2 (1.0)	SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

SETON ENGINEERING
SERVICE CORPORATION
CIVIL ENGINEERS

19 S. BOTHWELL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

REVISIONS

NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN
PHASE DESIGNATION DIAGRAM
AND SCHEDULE OF QUANTITIES
IL RTE 171 (CUMBERLAND AVENUE)
AT FOREST PRESERVE DRIVE
CHICAGO, ILLINOIS

SCALE: N.T.S. DRAWN BY: CWC, BR
DATE: 10-23-06 DESIGNED BY: VO
CHECKED BY: TJM

CONSTRUCTION NOTES:

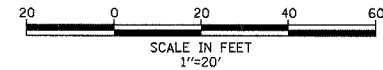
- ① REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
- ② THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

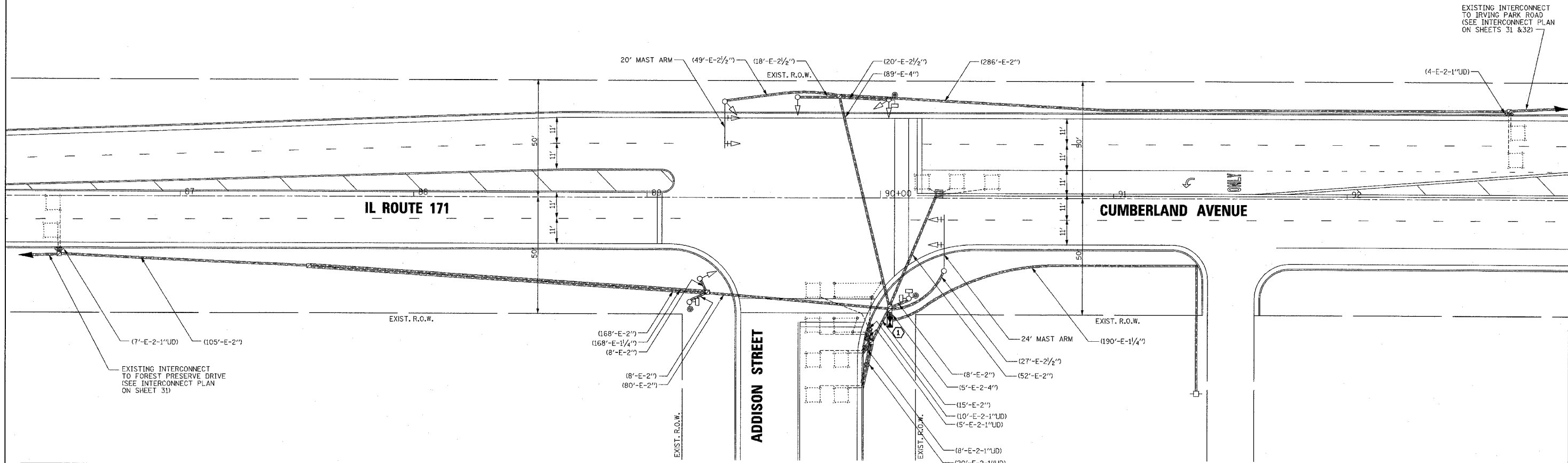
5 EACH INDUCTIVE LOOP DETECTOR

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

1 EACH CONTROLLER AND CABINET COMPLETE



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	19
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]	CONFIRMATION BEACON	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	CONDUIT SPLICE	[Symbol]	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]	WOOD POLE	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	[Symbol]	[Symbol]	TELEPHONE CONNECTION	[Symbol]	[Symbol]
UNIT DUCT	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"	[Symbol]	[Symbol]
COMMON TRENCH	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]	MICROWAVE VEHICLE SENSOR	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]			
DOUBLE HANDHOLE	[Symbol]	[Symbol]			
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]			
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]			
DETECTOR LOOP	[Symbol]	[Symbol]			
CAST IRON JUNCTION BOX	[Symbol]	[Symbol]			

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

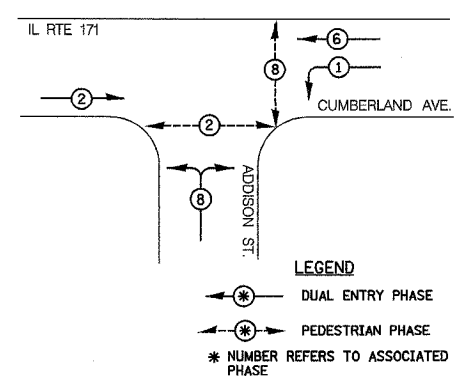
SETON ENGINEERING
SERVICE CORPORATION
CIVIL ENGINEERS
19 S. BOTHWELL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL MODIFICATION AND REMOVAL PLAN
IL RTE 171 (CUMBERLAND AVENUE) AT ADDISON STREET CHICAGO, ILLINOIS
SCALE: 1"=20'
DATE: 10-23-06
DRAWN BY: CWC, BR
DESIGNED BY: VO
CHECKED BY: TJM

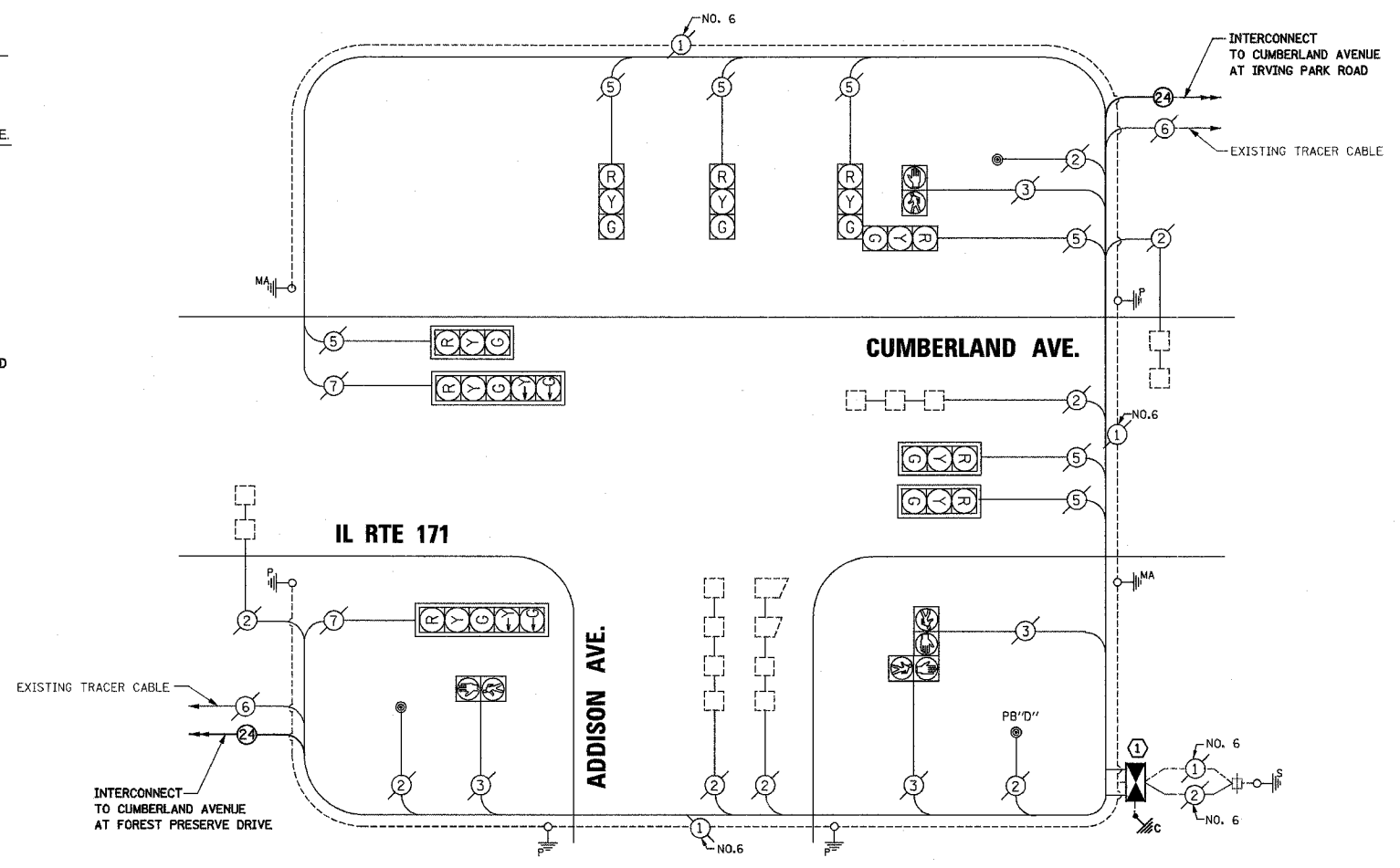
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	20
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				

CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

DUAL ENTRY
PROJECTED / PERMITTED LEFT TURN PHASING



CABLE PLAN

- CONSTRUCTION NOTES:**
- REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
 - THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

CABLE PLAN LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE (INCAND. LED)	% OPERATION		
SIGNAL (RED)	9	135	0.50	607.5	
(YELLOW)	9	135	0.25	303.75	
(GREEN)	9	135	0.25	303.75	
ARROW	4	135	0.10	54	
PED. SIGNAL	4	90	1.00	360	
CONTROLLER	1	100	1.00	100	
TOTAL =				1729	

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	80
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL TRANSCEIVER, FIBER OPTIC	EACH	1
DRILL EXISTING HANDHOLE	EACH	2
INDUCTIVE LOOP DETECTOR	EACH	5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

FOUNDATION (DEPTH)	(FT.) (m)	CABLE SLACK	(FT.) (m)	VERTICAL	(FT.) (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - FOUNDATION	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L - 2' = (6m + L - 0.6m)
C - M. ARM POLE		SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

SETON ENGINEERING
SERVICE CORPORATION
CIVIL ENGINEER

19 S. BOTHWELL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
**CABLE PLAN
PHASE DESIGNATION DIAGRAM
AND SCHEDULE OF QUANTITIES**
IL RTE 171 (CUMBERLAND AVENUE) AT ADDISON STREET
CHICAGO, ILLINOIS

SCALE: N.T.S.
DATE 10-23-06

DRAWN BY CWC, BR
DESIGNED BY VO
CHECKED BY TJM

ENERGY COSTS - BILLED TO: CITY OF CHICAGO
(ADDRESS) 121 N. LASALLE STREET
CHICAGO, IL 60602

ENERGY SUPPLY - CONTACT: LARRY KESLINKE
PHONE: (708) 410-5314
COMPANY: COM ED

CONSTRUCTION NOTES:

- ① REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
- ② REMOVE EXISTING SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED. INSTALL NEW SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED.
- ③ REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED. INSTALL NEW PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED.
- ④ REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED. INSTALL NEW PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED.
- ⑤ THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

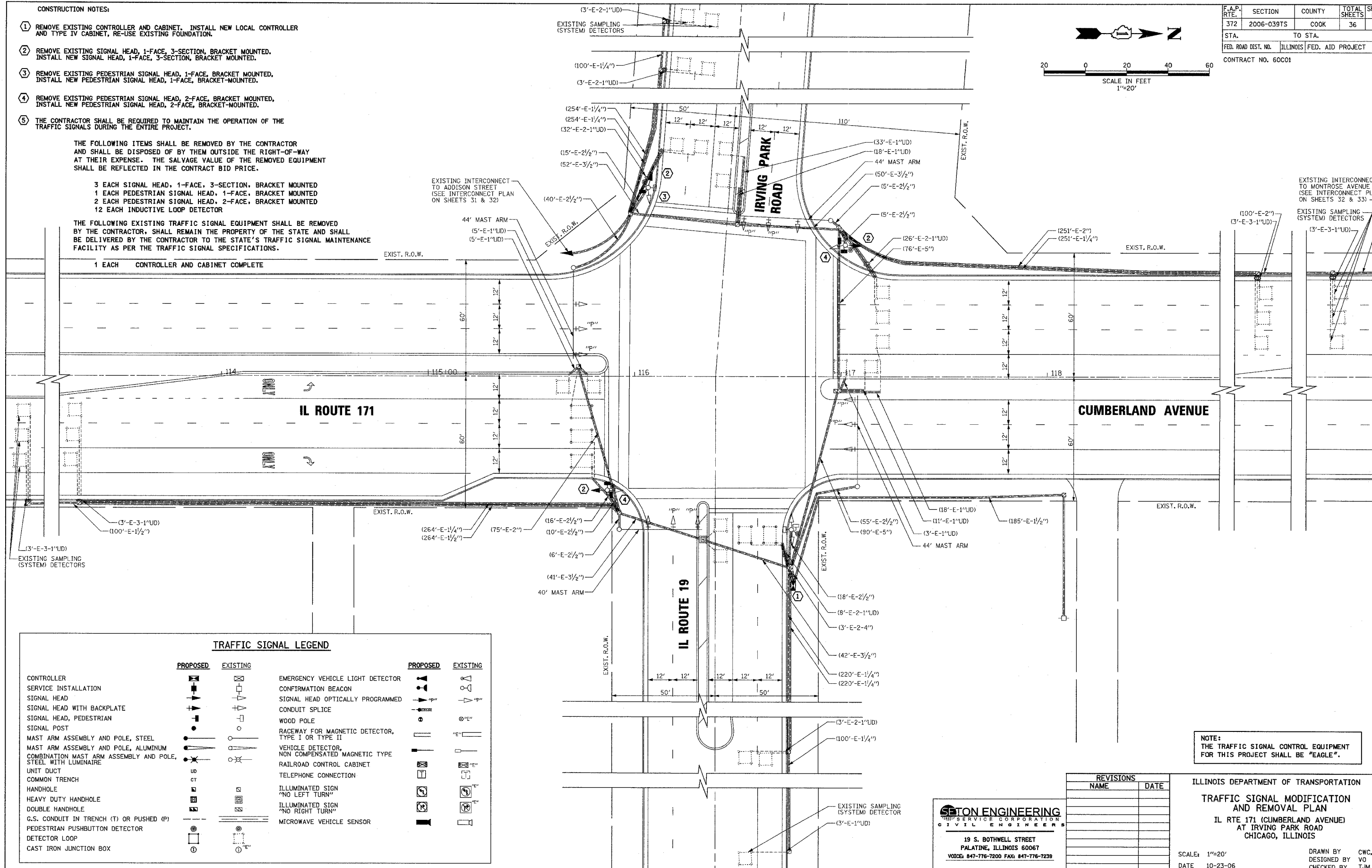
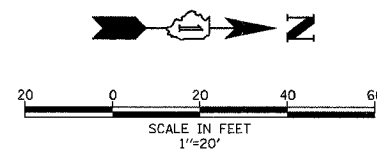
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 3 EACH SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED
- 1 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED
- 2 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED
- 12 EACH INDUCTIVE LOOP DETECTOR

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH CONTROLLER AND CABINET COMPLETE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-0397S	COOK	36	21
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS		FED. AID PROJECT	
CONTRACT NO. 60C01				



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]	CONFIRMATION BEACON	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	CONDUIT SPLICE	[Symbol]	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]	WOOD POLE	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	[Symbol]	[Symbol]	TELEPHONE CONNECTION	[Symbol]	[Symbol]
UNIT DUCT	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"	[Symbol]	[Symbol]
COMMON TRENCH	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]	MICROWAVE VEHICLE SENSOR	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]			
DOUBLE HANDHOLE	[Symbol]	[Symbol]			
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]			
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]			
DETECTOR LOOP	[Symbol]	[Symbol]			
CAST IRON JUNCTION BOX	[Symbol]	[Symbol]			

NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

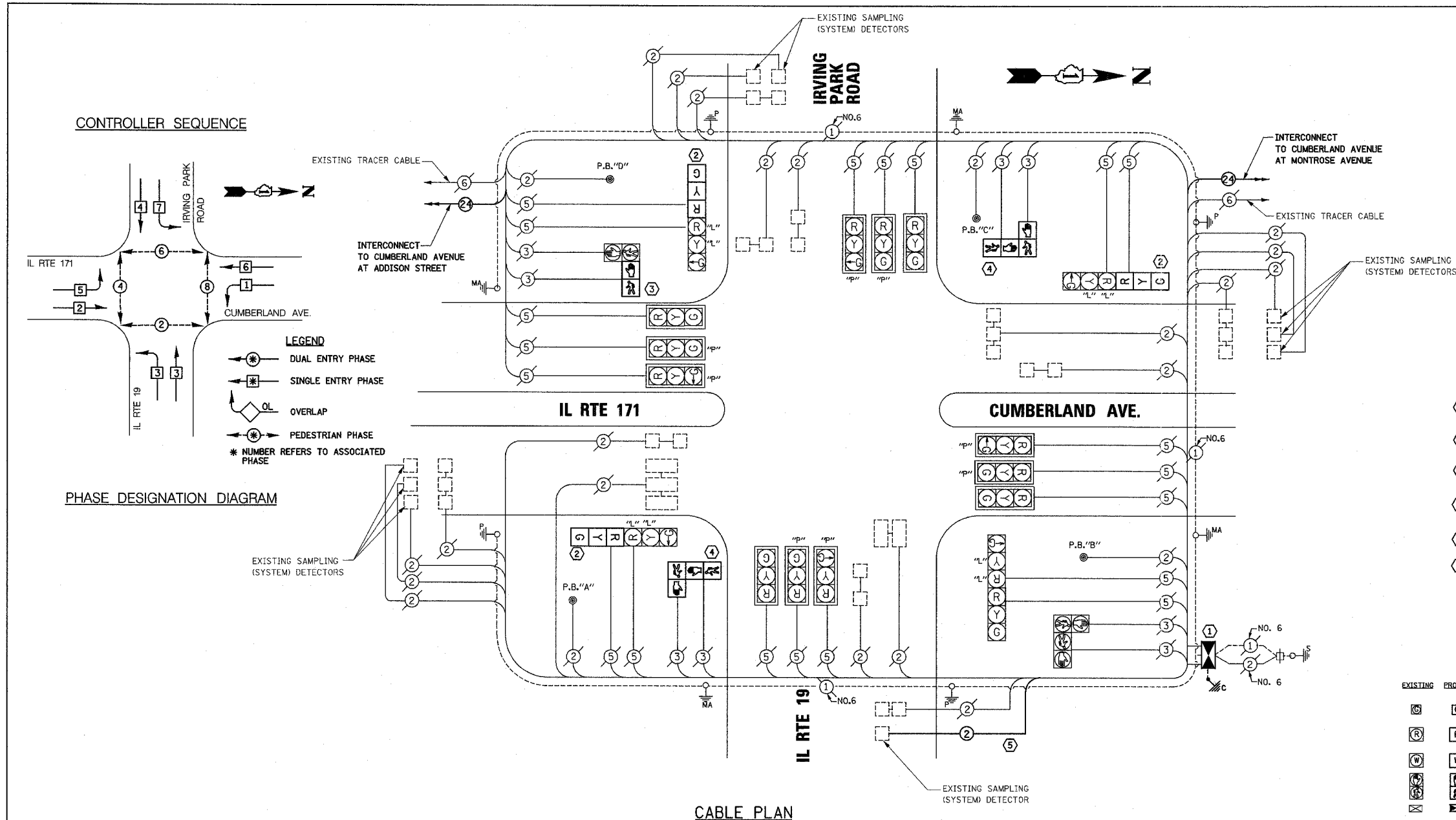
REVISIONS	
NAME	DATE

SETON ENGINEERING
CONSULTING ENGINEERS
 19 S. BOTHWELL STREET
 PALATINE, ILLINOIS 60067
 VOICE: 847-776-7200 FAX: 847-776-7239

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL MODIFICATION AND REMOVAL PLAN
 IL RTE 171 (CUMBERLAND AVENUE) AT IRVING PARK ROAD
 CHICAGO, ILLINOIS

SCALE: 1"=20'
 DATE 10-23-06
 DRAWN BY CWC, BR
 DESIGNED BY VO
 CHECKED BY TJM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-0397S	COOK	36	22
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				



- CONSTRUCTION NOTES:**
- REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
 - REMOVE EXISTING SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED. INSTALL NEW SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED.
 - REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED. INSTALL NEW PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET-MOUNTED.
 - REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED. INSTALL NEW PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET-MOUNTED.
 - INSTALL NEW ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO.14, 1 PAIR.
 - THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

CABLE PLAN LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED

NOTE:
 PUSHBUTTON "A" SHALL PLACE CALLS TO PHASES 2 AND 4
 PUSHBUTTON "B" SHALL PLACE CALLS TO PHASES 2 AND 8
 PUSHBUTTON "C" SHALL PLACE CALLS TO PHASES 6 AND 8
 PUSHBUTTON "D" SHALL PLACE CALLS TO PHASES 4 AND 6

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL TRANSCEIVER, FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	350
SIGNAL HEAD, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, 2-FACE, BRACKET MOUNTED	EACH	2
INDUCTIVE LOOP DETECTOR	EACH	21
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE	
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	X% OPERATION	
SIGNAL (RED)	20	135		0.50	1350
(YELLOW)	20	135		0.25	675
(GREEN)	20	135		0.25	675
ARROW	-	135		0.10	-
PED. SIGNAL	8	90		1.00	720
CONTROLLER	1	100		1.00	100
TOTAL =				3520	

ENERGY COSTS - BILLED TO: CITY OF CHICAGO (ADDRESS) 121 N. LASALLE STREET CHICAGO, IL 60602

ENERGY SUPPLY - CONTACT: LARRY KESLINKE (708) 410-5314 COMPANY: COM ED

FOUNDATION (DEPTH)	(FT.) (m)	CABLE SLACK	(FT.) (m)	VERTICAL	(FT.) (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - FOUNDATION	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L - 2 = (6mH-0.6m)=
C - M. ARM POLE		SIGNAL POST	2 (0.6)		
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.3)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
		ELECTRIC SERVICE	1 (0.3)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.3)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

NOTE:
 THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

STON ENGINEERING
 SERVICE CORPORATION
 CIVIL ENGINEER

19 S. BOTHWELL STREET
 PALATINE, ILLINOIS 60067
 VOICES 847-776-7200 FAX 847-776-7239

REVISIONS

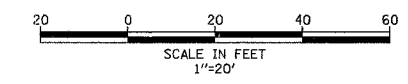
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 CABLE PLAN
 PHASE DESIGNATION DIAGRAM
 AND SCHEDULE OF QUANTITIES
 IL RTE 171 (CUMBERLAND AVENUE)
 AT IRVING PARK ROAD
 CHICAGO, ILLINOIS

SCALE: N.T.S.
 DATE: 10-23-06

DRAWN BY: CWC, BR
 DESIGNED BY: VO
 CHECKED BY: TJM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-0397S	COOK	36	23
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				



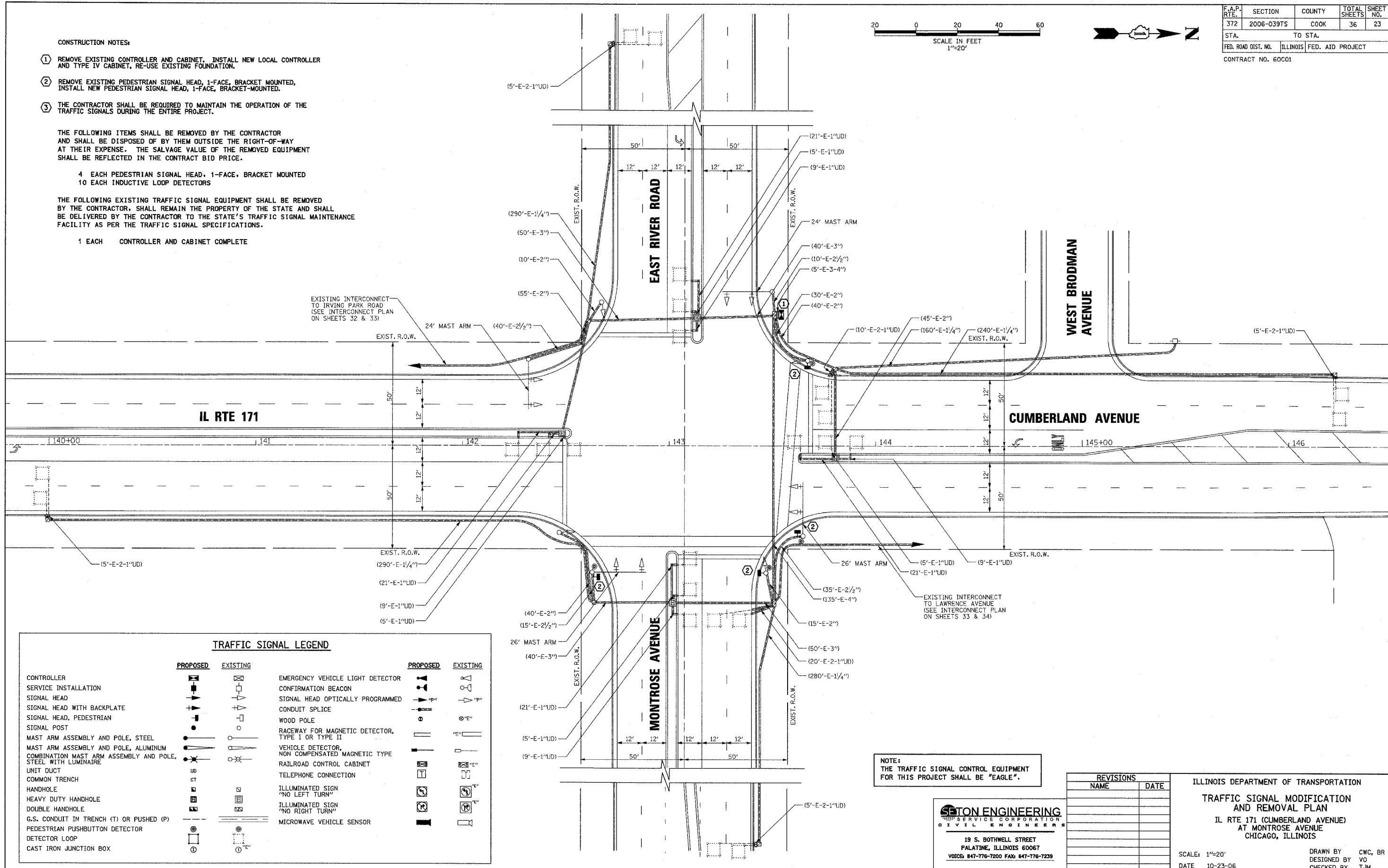
- CONSTRUCTION NOTES:**
- REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
 - REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED, INSTALL NEW PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET-MOUNTED.
 - THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 4 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED
- 10 EACH INDUCTIVE LOOP DETECTORS

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH CONTROLLER AND CABINET COMPLETE



TRAFFIC SIGNAL LEGEND

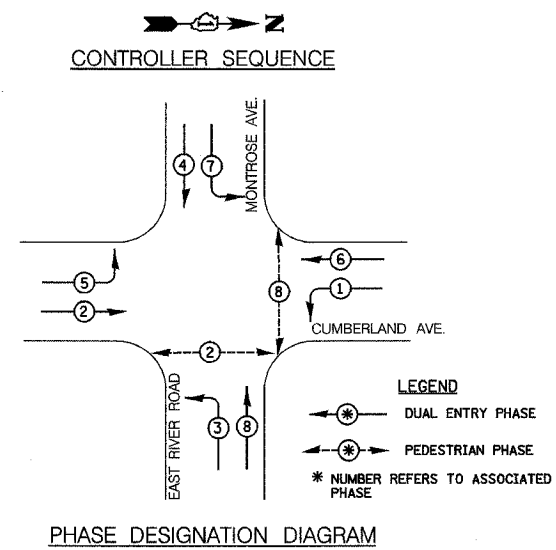
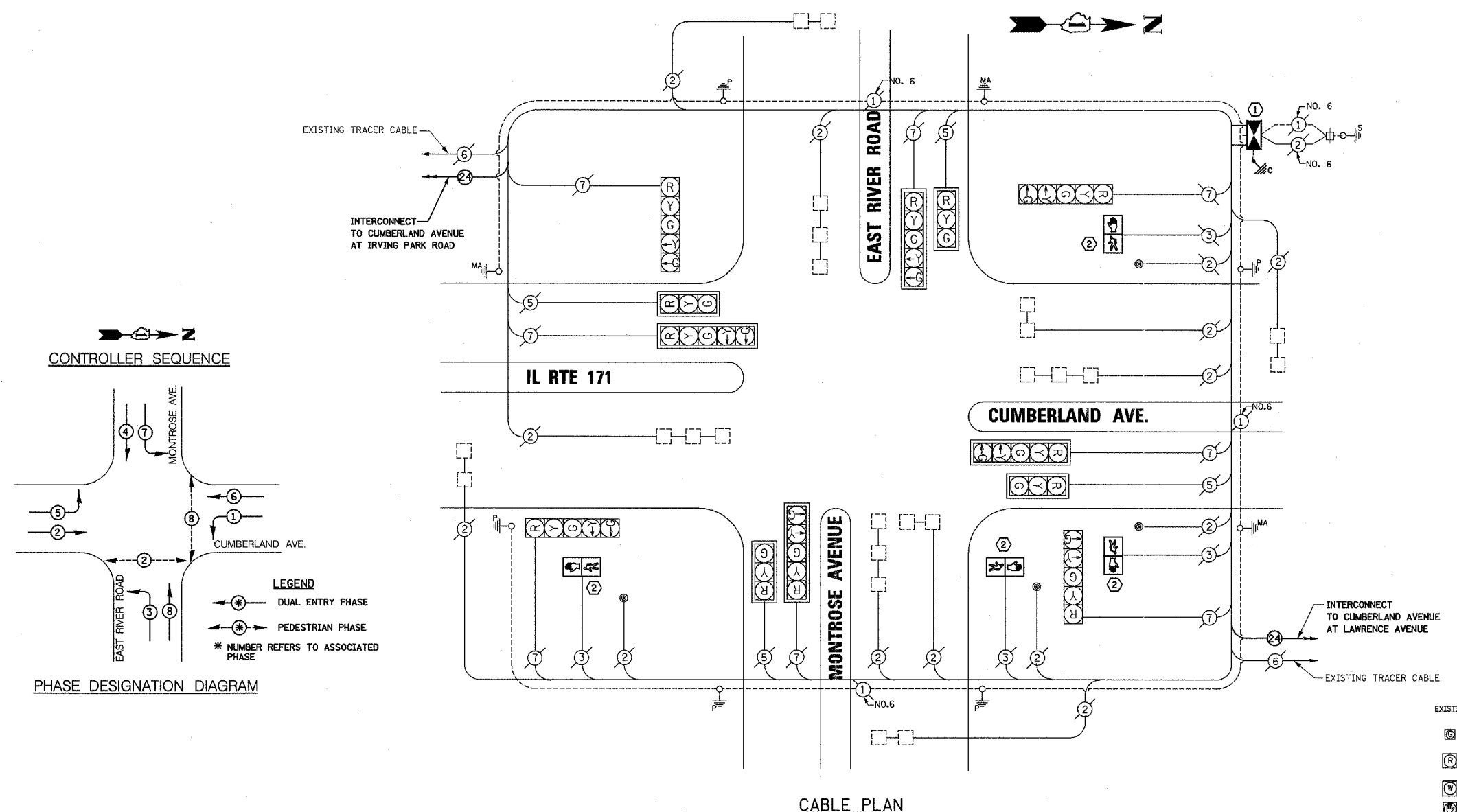
	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]	CONFIRMATION BEACON	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	CONDUIT SPLICE	[Symbol]	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]	WOOD POLE	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	[Symbol]	[Symbol]	TELEPHONE CONNECTION	[Symbol]	[Symbol]
UNIT DUCT	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"	[Symbol]	[Symbol]
COMMON TRENCH	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]	MICROWAVE VEHICLE SENSOR	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]			
DOUBLE HANDHOLE	[Symbol]	[Symbol]			
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]			
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]			
DETECTOR LOOP	[Symbol]	[Symbol]			
CAST IRON JUNCTION BOX	[Symbol]	[Symbol]			

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

SETON ENGINEERING
SERVICE CORPORATION
CIVIL ENGINEERS
19 S. BOTHWELL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL MODIFICATION AND REMOVAL PLAN
IL RTE 171 (CUMBERLAND AVENUE) AT MONTROSE AVENUE CHICAGO, ILLINOIS
SCALE: 1"=20'
DATE: 10-23-06
DRAWN BY: CWC, BR
DESIGNED BY: VO
CHECKED BY: TJM



- CONSTRUCTION NOTES:**
- REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
 - REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED, INSTALL NEW PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET-MOUNTED.
 - THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

CABLE PLAN LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED

② DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE (INCAND.)	LED	X% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135		0.50	1620
(YELLOW)	12	135		0.25	810
(GREEN)	12	135		0.25	810
ARROW	16	135		0.10	216
PED. SIGNAL	4	90		1.00	720
CONTROLLER	1	100		1.00	100
TOTAL =					4276

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL TRANSCIVER, FIBER OPTIC	EACH	1
PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	4
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	10
	EACH	1

FOUNDATION (DEPTH)	(FT.) (m)	CABLE SLACK	(FT.) (m)	VERTICAL	(FT.) (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - FOUNDATION	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L - 2' = (6m + L - 0.6m) =
C - M. ARM POLE		SIGNAL POST	2 (0.6)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

ENERGY COSTS - BILLED TO: 25% VILLAGE OF NORRIDGE (ADDRESS) 4000 OLCOTT AVENUE NORRIDGE, IL 60706

BILLED TO: 75% CITY OF CHICAGO (ADDRESS) 121 N. LASALLE STREET CHICAGO, IL 60602

ENERGY SUPPLY - CONTACT: LARRY KESLINKE (708) 410-5314 COMPANY: COM ED

NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

SETON ENGINEERING
SERVICE CORPORATION
CIVIL ENGINEERS
19 S. BOTHWELL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

REVISIONS

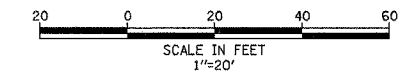
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN
PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES
IL RTE 171 (CUMBERLAND AVENUE) AT MONTROSE AVENUE CHICAGO, ILLINOIS

SCALE: N.T.S.
DATE: 10-23-06

DRAWN BY: CWC, BR
DESIGNED BY: VO
CHECKED BY: TJM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	25
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				



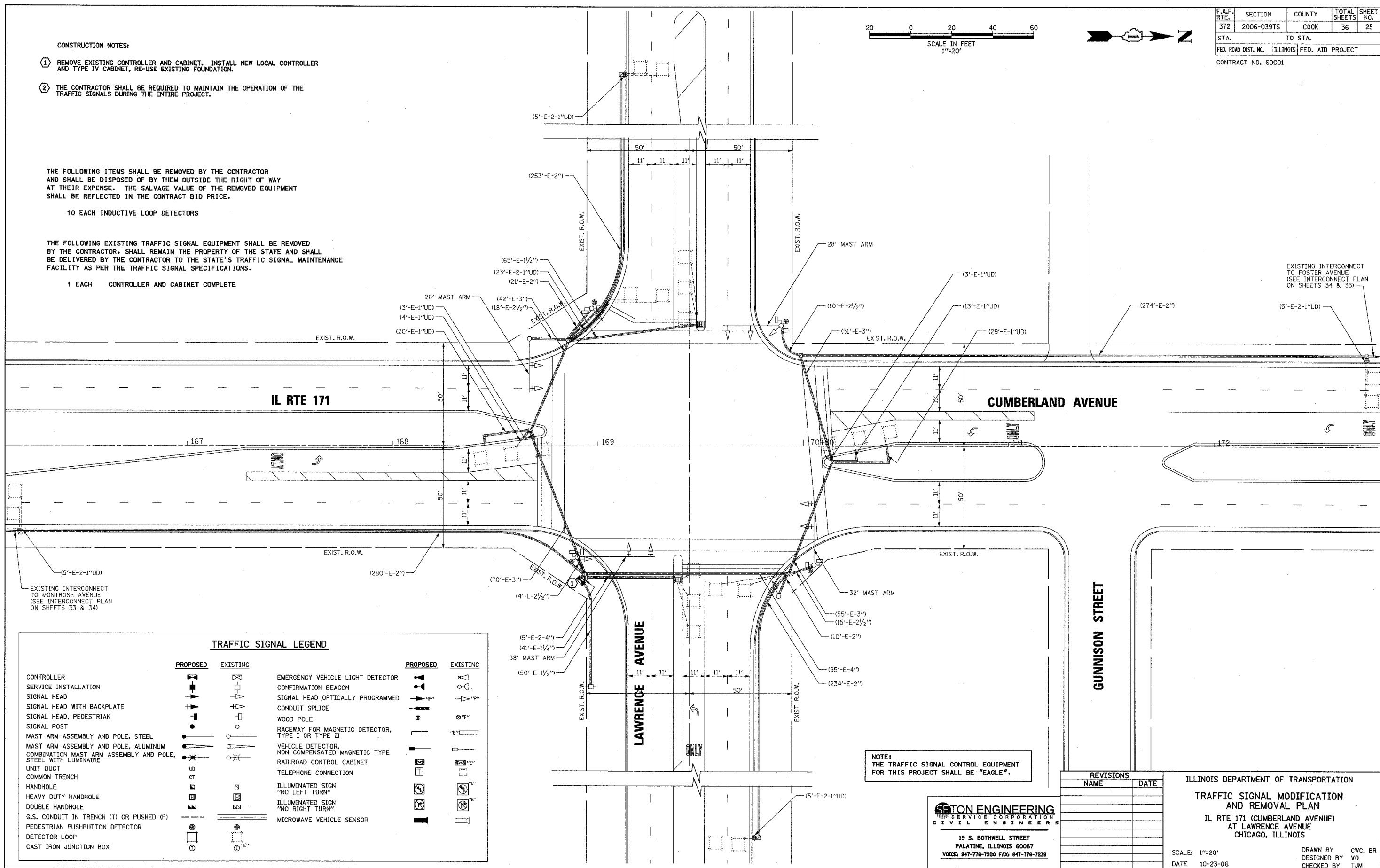
- CONSTRUCTION NOTES:**
- REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
 - THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

10 EACH INDUCTIVE LOOP DETECTORS

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR. SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

1 EACH CONTROLLER AND CABINET COMPLETE



EXISTING INTERCONNECT TO MONTROSE AVENUE (SEE INTERCONNECT PLAN ON SHEETS 33 & 34)

EXISTING INTERCONNECT TO FOSTER AVENUE (SEE INTERCONNECT PLAN ON SHEETS 34 & 35)

TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER			EMERGENCY VEHICLE LIGHT DETECTOR		
SERVICE INSTALLATION			CONFIRMATION BEACON		
SIGNAL HEAD			SIGNAL HEAD OPTICALLY PROGRAMMED		
SIGNAL HEAD WITH BACKPLATE			CONDUIT SPLICE		
SIGNAL HEAD, PEDESTRIAN			WOOD POLE		
SIGNAL POST			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
MAST ARM ASSEMBLY AND POLE, STEEL			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE		
MAST ARM ASSEMBLY AND POLE, ALUMINUM			RAILROAD CONTROL CABINET		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE			TELEPHONE CONNECTION		
UNIT DUCT			ILLUMINATED SIGN "NO LEFT TURN"		
COMMON TRENCH			ILLUMINATED SIGN "NO RIGHT TURN"		
HANDHOLE			MICROWAVE VEHICLE SENSOR		
HEAVY DUTY HANDHOLE					
DOUBLE HANDHOLE					
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)					
PEDESTRIAN PUSHBUTTON DETECTOR					
DETECTOR LOOP					
CAST IRON JUNCTION BOX					

NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

SETON ENGINEERING
 SERVICE CORPORATION
 CIVIL ENGINEERS
 19 S. BOTHWELL STREET
 PALATINE, ILLINOIS 60067
 VOICES: 847-776-7200 FAX: 847-776-7239

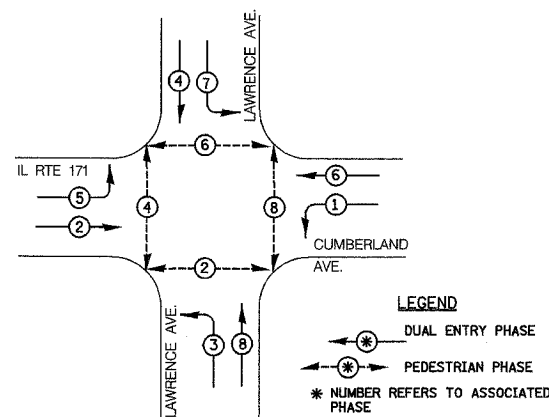
REVISIONS	NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL MODIFICATION AND REMOVAL PLAN
 IL RTE 171 (CUMBERLAND AVENUE) AT LAWRENCE AVENUE
 CHICAGO, ILLINOIS

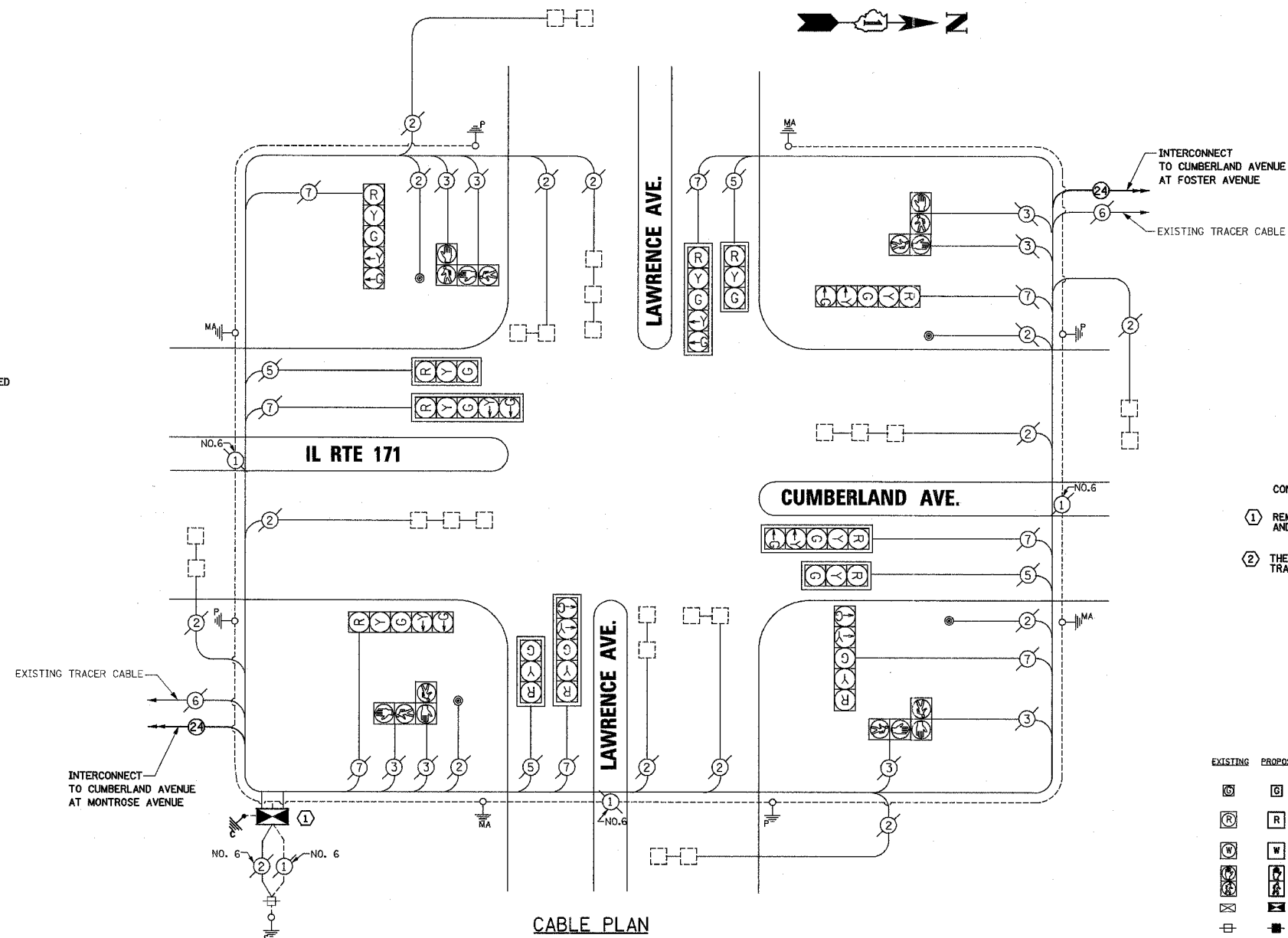
SCALE: 1"=20'
 DATE: 10-23-06

DRAWN BY: CWC, BR
 DESIGNED BY: VO
 CHECKED BY: TJM

CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM



- CONSTRUCTION NOTES:**
- REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
 - THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

CABLE PLAN LEGEND

- | | | | | | | | | | | | | | | | | | | | | | |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | | | | | | | | | | | | | | | | | | | | | |
| EXISTING | PROPOSED | EXISTING | PROPOSED | EXISTING | PROPOSED | EXISTING | PROPOSED | EXISTING | PROPOSED | EXISTING | PROPOSED | EXISTING | PROPOSED | EXISTING | PROPOSED | EXISTING | PROPOSED | EXISTING | PROPOSED | EXISTING | PROPOSED |

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL TRANSCEIVER, FIBER OPTIC	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	10
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. LAMPS	WATTAGE (INCAND.)	WATTAGE (LED)	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12	135		0.50	1620
(YELLOW)	12	135		0.25	810
(GREEN)	12	135		0.25	810
ARROW	16	135		0.10	216
PED. SIGNAL	8	90		1.00	720
CONTROLLER	1	100		1.00	100
TOTAL =					4276

FOUNDATION (DEPTH)	(FT.) (m)	CABLE SLACK	(FT.) (m)	VERTICAL	(FT.) (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - FOUNDATION	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L - 2 = (6m+L-0.6m)
C - M. ARM POLE		SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

SETON ENGINEERING
 SERVICE CORPORATION
 CIVIL ENGINEER
 19 S. BOTHWELL STREET
 PALATINE, ILLINOIS 60067
 VOICES: 847-776-7200 FAX: 847-776-7239

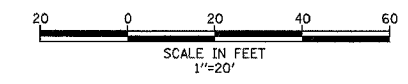
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
CABLE PLAN
PHASE DESIGNATION DIAGRAM
AND SCHEDULE OF QUANTITIES
 IL RTE 171 (CUMBERLAND AVENUE)
 AT LAWRENCE AVENUE
 CHICAGO, ILLINOIS

SCALE: N.T.S.
 DATE: 10-23-06

DRAWN BY: CWC, BR
 DESIGNED BY: VO
 CHECKED BY: TJM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	27
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				



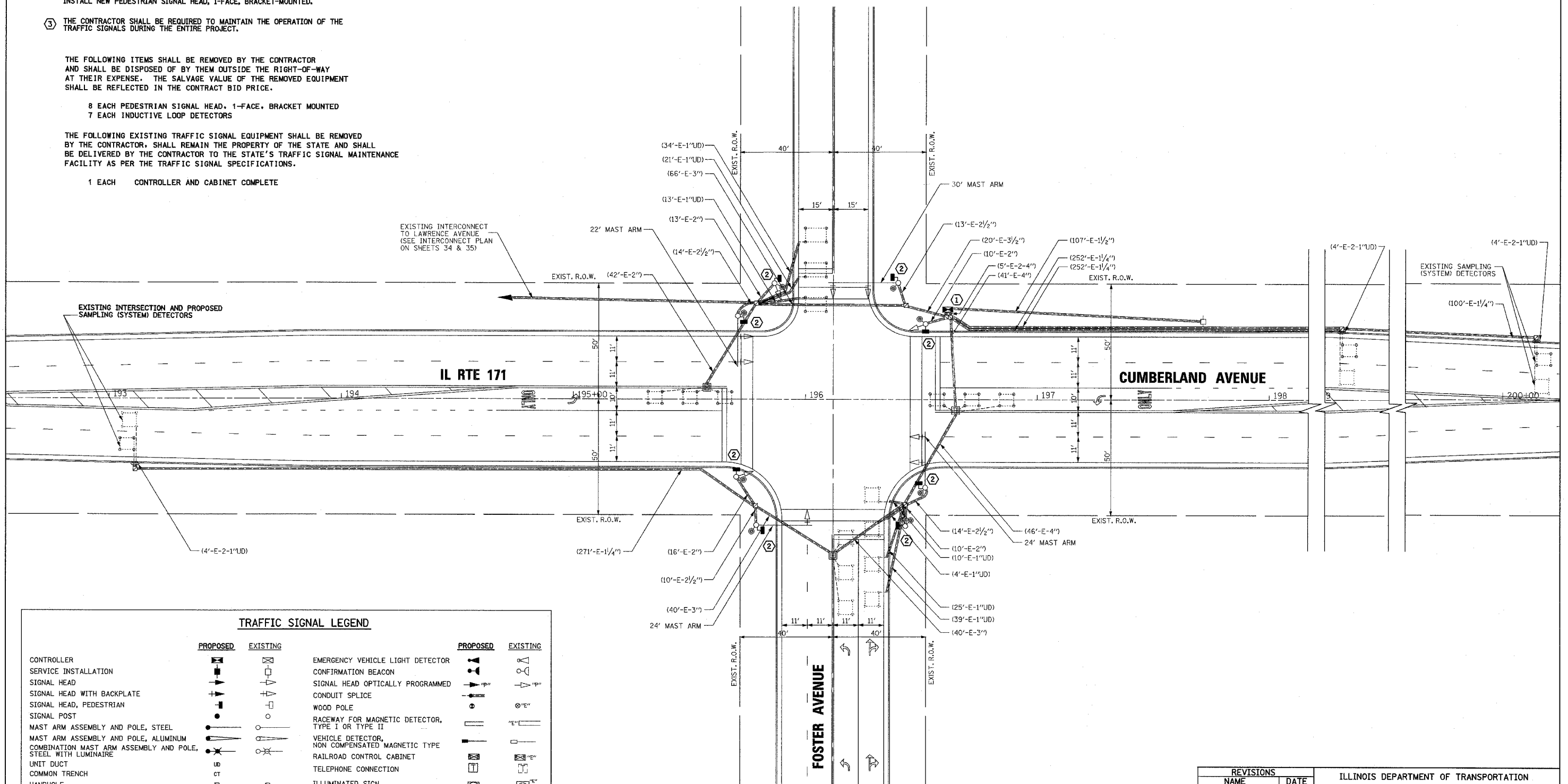
- CONSTRUCTION NOTES:**
- REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
 - REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED. INSTALL NEW PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET-MOUNTED.
 - THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 8 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED
- 7 EACH INDUCTIVE LOOP DETECTORS

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE STATE AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE STATE'S TRAFFIC SIGNAL MAINTENANCE FACILITY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

- 1 EACH CONTROLLER AND CABINET COMPLETE



TRAFFIC SIGNAL LEGEND

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]	EMERGENCY VEHICLE LIGHT DETECTOR	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]	CONFIRMATION BEACON	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	CONDUIT SPLICE	[Symbol]	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]	WOOD POLE	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]	RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	RAILROAD CONTROL CABINET	[Symbol]	[Symbol]
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE	[Symbol]	[Symbol]	TELEPHONE CONNECTION	[Symbol]	[Symbol]
UNIT DUCT	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO LEFT TURN"	[Symbol]	[Symbol]
COMMON TRENCH	[Symbol]	[Symbol]	ILLUMINATED SIGN "NO RIGHT TURN"	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]	MICROWAVE VEHICLE SENSOR	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]			
DOUBLE HANDHOLE	[Symbol]	[Symbol]			
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]			
PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]			
DETECTOR LOOP	[Symbol]	[Symbol]			
CAST IRON JUNCTION BOX	[Symbol]	[Symbol]			

NOTE:
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

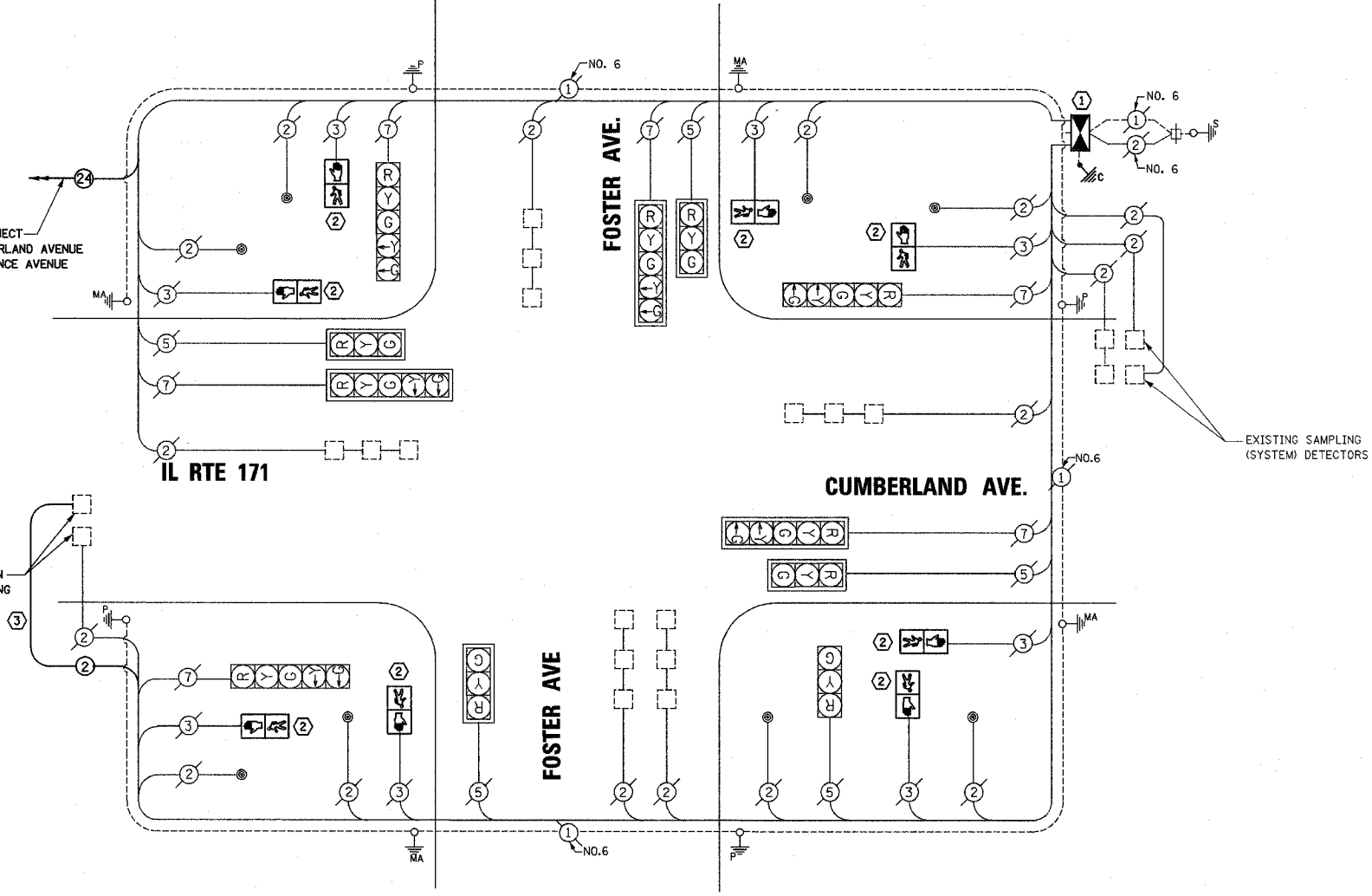
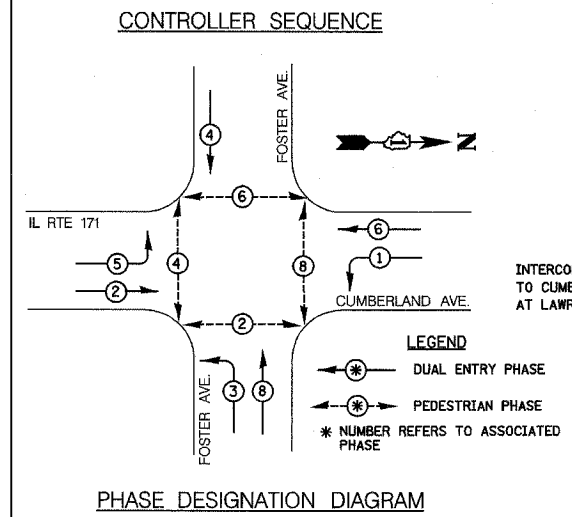
SETON ENGINEERING
SERVICE CORPORATION
CIVIL ENGINEERS
19 S. BOTHWELL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL MODIFICATION AND REMOVAL PLAN
IL RTE 171 (CUMBERLAND AVENUE)
AT FOSTER AVENUE
CHICAGO, ILLINOIS

SCALE: 1"=20'
DATE: 10-23-06

DRAWN BY: CWC, BR
DESIGNED BY: VO
CHECKED BY: TJM



- CONSTRUCTION NOTES:**
- REMOVE EXISTING CONTROLLER AND CABINET. INSTALL NEW LOCAL CONTROLLER AND TYPE IV CABINET, RE-USE EXISTING FOUNDATION.
 - REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED, INSTALL NEW PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED.
 - INSTALL NEW ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO.14, 1 PAIR.
 - THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN THE OPERATION OF THE TRAFFIC SIGNALS DURING THE ENTIRE PROJECT.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	X% OPERATION	
SIGNAL (RED)	11	135		0.50	742.5
(YELLOW)	11	135		0.25	371.25
(GREEN)	11	135		0.25	371.25
ARROW	12	135		0.10	162
PED. SIGNAL	8	90		1.00	720
CONTROLLER	1	100		1.00	100
TOTAL =					2467

ENERGY COSTS - BILLED TO: VILLAGE OF NORRIDGE (ADDRESS) 4000 OLCOTT AVENUE NORRIDGE, IL 60706

ENERGY SUPPLY - CONTACT: LARRY KESLINKE (708) 410-5314 COMPANY: COM ED

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL TRANSCIVER, FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	490
PEDESTRIAN SIGNAL HEAD, 1-FACE, BRACKET MOUNTED	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	10
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1

FOUNDATION (DEPTH)	(FT.) (m)	CABLE SLACK	(FT.) (m)	VERTICAL	(FT.) (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
D - FOUNDATION	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' + L - 2 = (6m+L-0.6m)
C - M. ARM POLE		SIGNAL POST	2 (0.5)	BRACKET MOUNTED	13 (4.0)
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

NOTE: THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE".

SETON ENGINEERING
SERVICE CORPORATION
CIVIL ENGINEERS

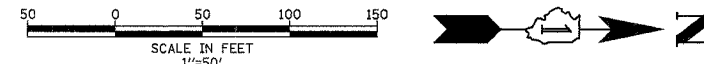
19 S. BOTHWELL STREET
PALATINE, ILLINOIS 60067
VOICE: 847-776-7200 FAX: 847-776-7239

REVISIONS	
NAME	DATE

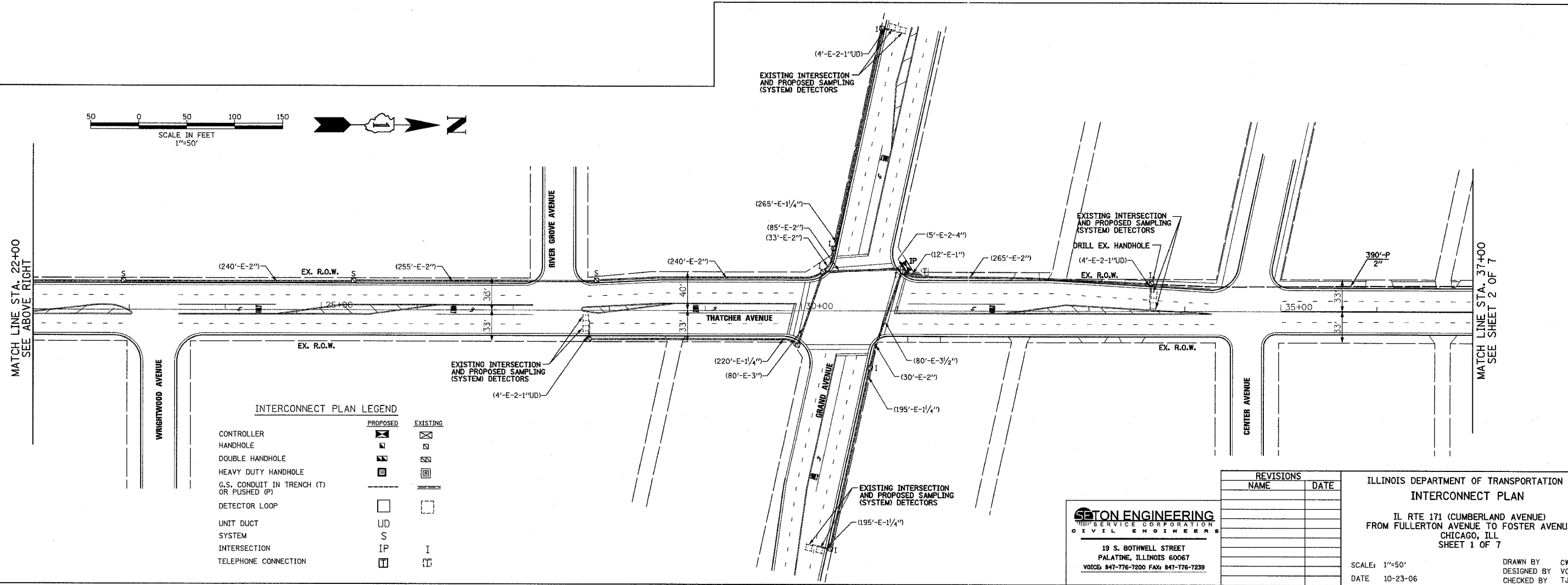
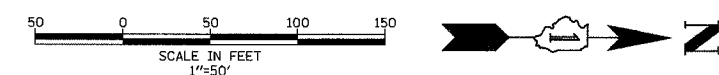
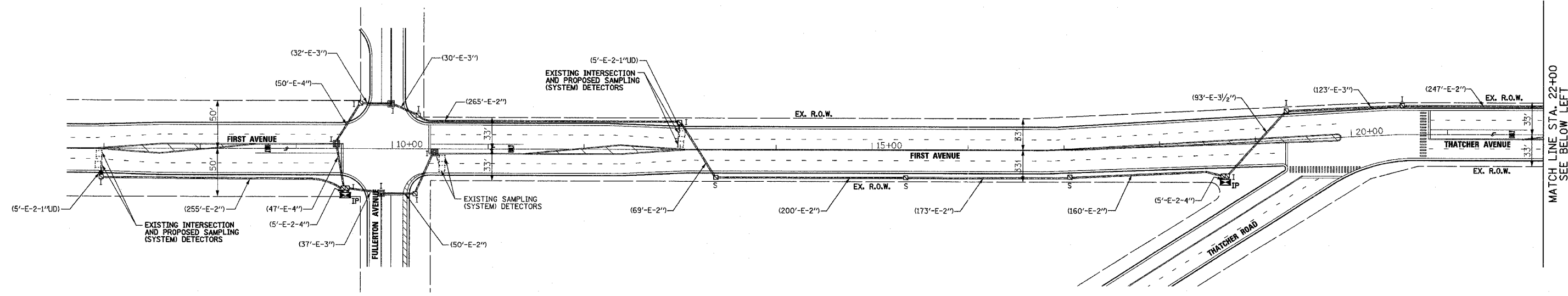
ILLINOIS DEPARTMENT OF TRANSPORTATION
**CABLE PLAN
PHASE DESIGNATION DIAGRAM
AND SCHEDULE OF QUANTITIES**
IL RTE 171 (CUMBERLAND AVENUE)
AT FOSTER AVENUE
CHICAGO, ILLINOIS

SCALE: N.T.S.
DATE 10-23-06

DRAWN BY CWC, BR
DESIGNED BY VO
CHECKED BY TJM



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	29
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 60001				



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER		
HANDHOLE		
DOUBLE HANDHOLE		
HEAVY DUTY HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
DETECTOR LOOP		
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I
TELEPHONE CONNECTION		

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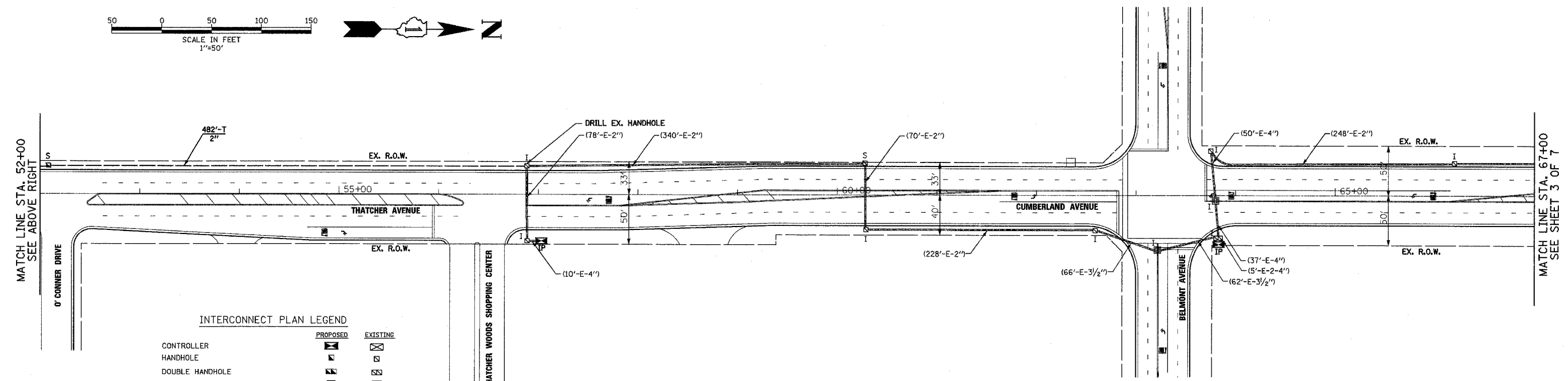
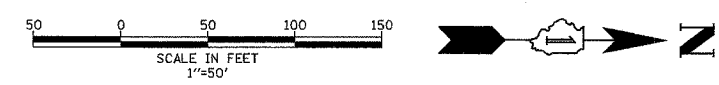
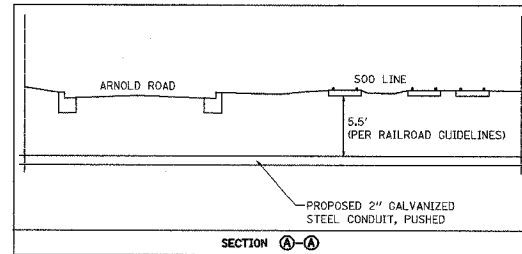
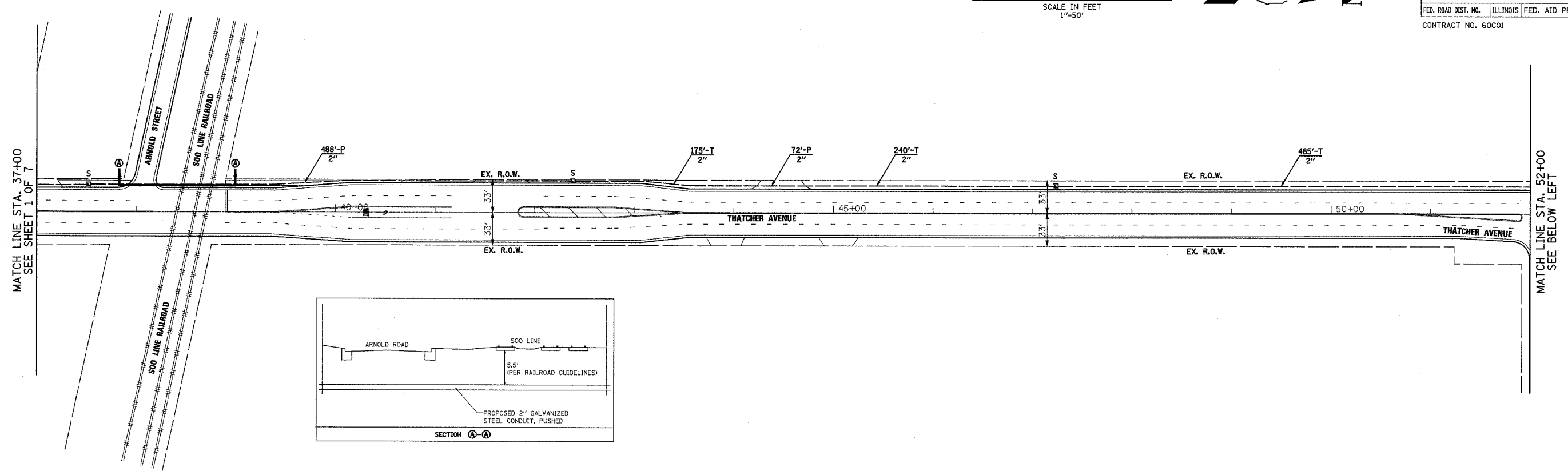
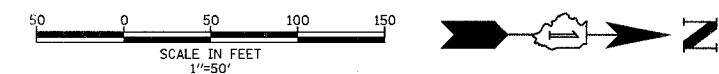
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
INTERCONNECT PLAN
 IL RTE 171 (CUMBERLAND AVENUE)
 FROM FULLERTON AVENUE TO FOSTER AVENUE
 CHICAGO, ILL
 SHEET 1 OF 7

SCALE: 1"=50'
 DATE: 10-23-06

DRAWN BY: CWC, BR
 DESIGNED BY: VO
 CHECKED BY: TJM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	30
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]
DETECTOR LOOP	[Symbol]	[Symbol]
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I
TELEPHONE CONNECTION	[Symbol]	[Symbol]

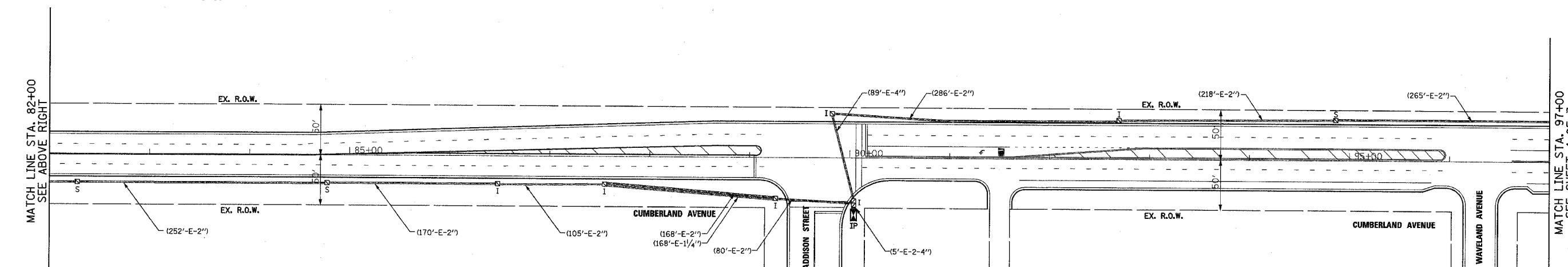
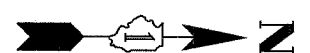
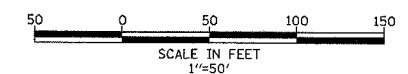
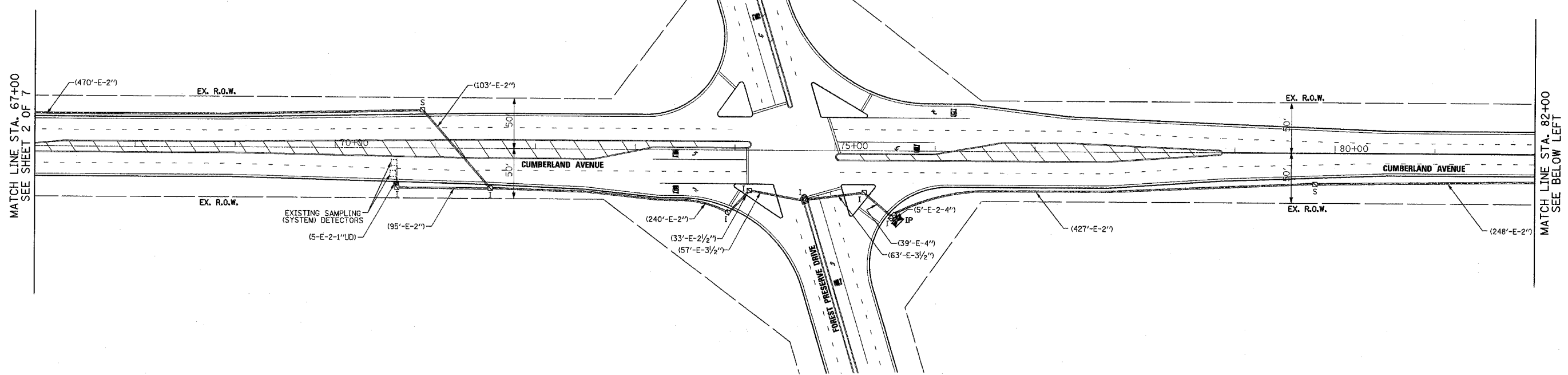
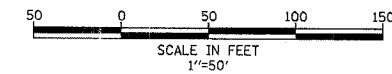
REVISIONS	
NAME	DATE

STON ENGINEERING
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 PALATINE, ILLINOIS 60067
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ILLINOIS DEPARTMENT OF TRANSPORTATION
INTERCONNECT PLAN
 IL RTE 171 (CUMBERLAND AVENUE)
 FROM FULLERTON AVENUE TO FOSTER AVENUE
 CHICAGO, ILL
 SHEET 2 OF 7

SCALE: 1"=50'
 DATE: 10-23-06
 DRAWN BY: CWC, BR
 DESIGNED BY: VO
 CHECKED BY: TJM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	31
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				



INTERCONNECT PLAN LEGEND

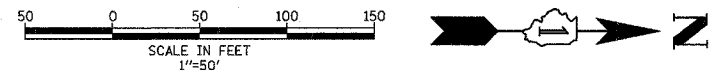
	PROPOSED	EXISTING
CONTROLLER		
HANDHOLE		
DOUBLE HANDHOLE		
HEAVY DUTY HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
DETECTOR LOOP		
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I
TELEPHONE CONNECTION		

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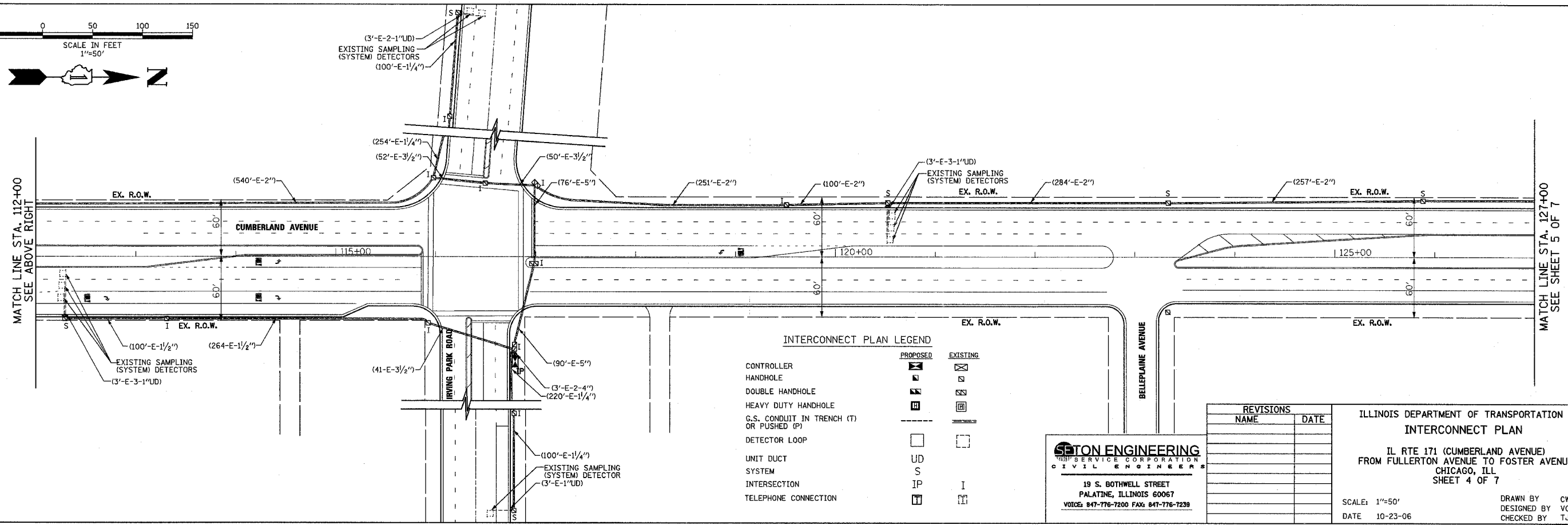
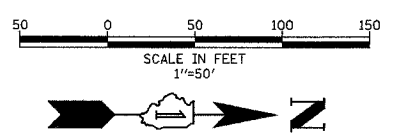
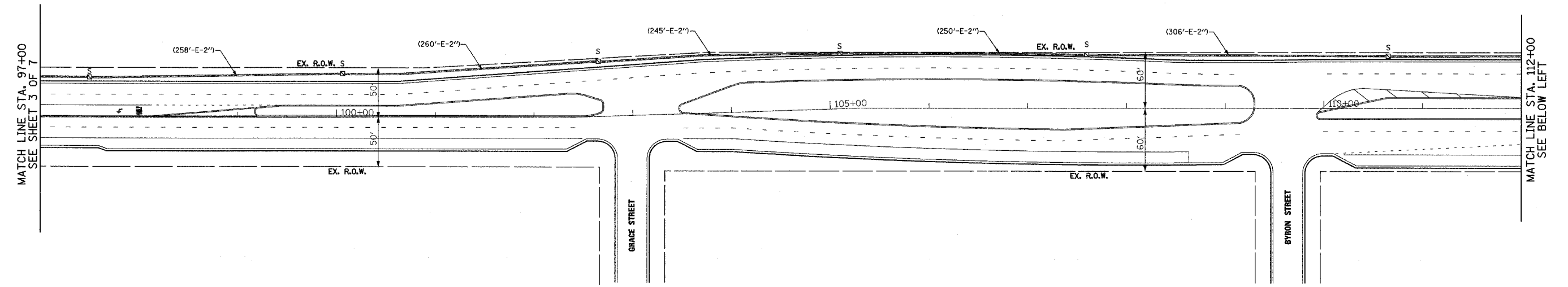
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
INTERCONNECT PLAN
 IL RTE 171 (CUMBERLAND AVENUE)
 FROM FULLERTON AVENUE TO FOSTER AVENUE
 CHICAGO, ILL
 SHEET 3 OF 7

SCALE: 1"=50'
 DATE 10-23-06
 DRAWN BY CWC, BR
 DESIGNED BY VO
 CHECKED BY TJM



F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	32
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 60C01				



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]
DETECTOR LOOP	[Symbol]	[Symbol]
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	
TELEPHONE CONNECTION	[Symbol]	[Symbol]

SETON ENGINEERING
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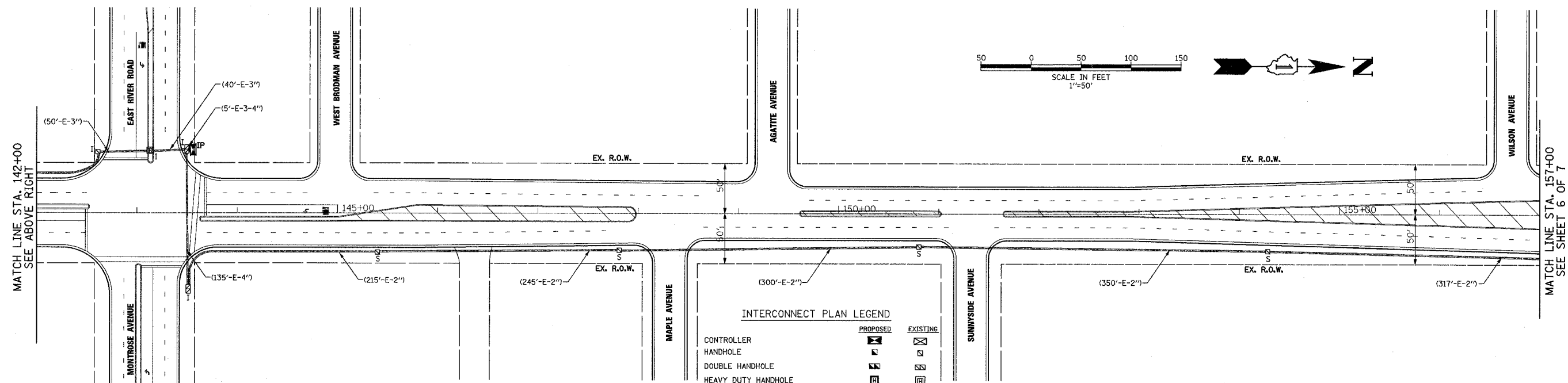
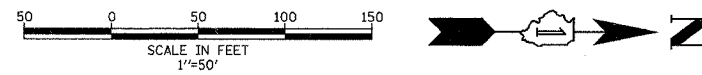
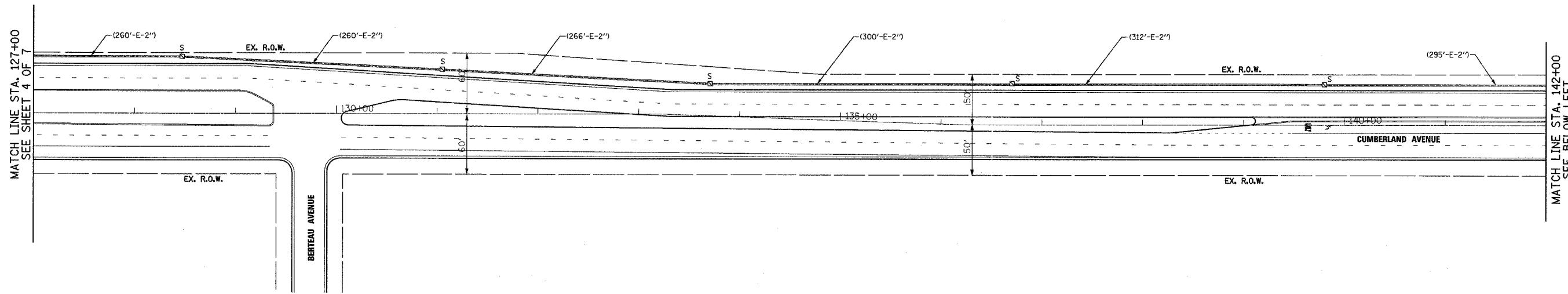
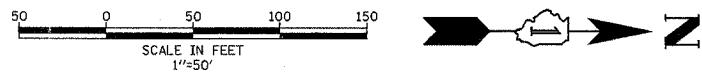
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
INTERCONNECT PLAN
 IL RTE 171 (CUMBERLAND AVENUE)
 FROM FULLERTON AVENUE TO FOSTER AVENUE
 CHICAGO, ILL
 SHEET 4 OF 7

SCALE: 1"=50'
 DATE: 10-23-06

DRAWN BY: CWC, BR
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	33
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				



INTERCONNECT PLAN LEGEND

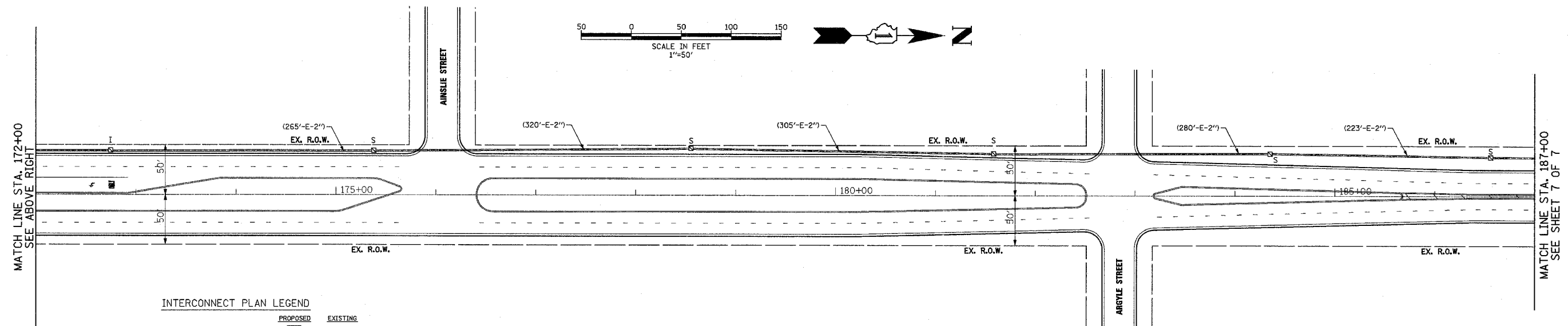
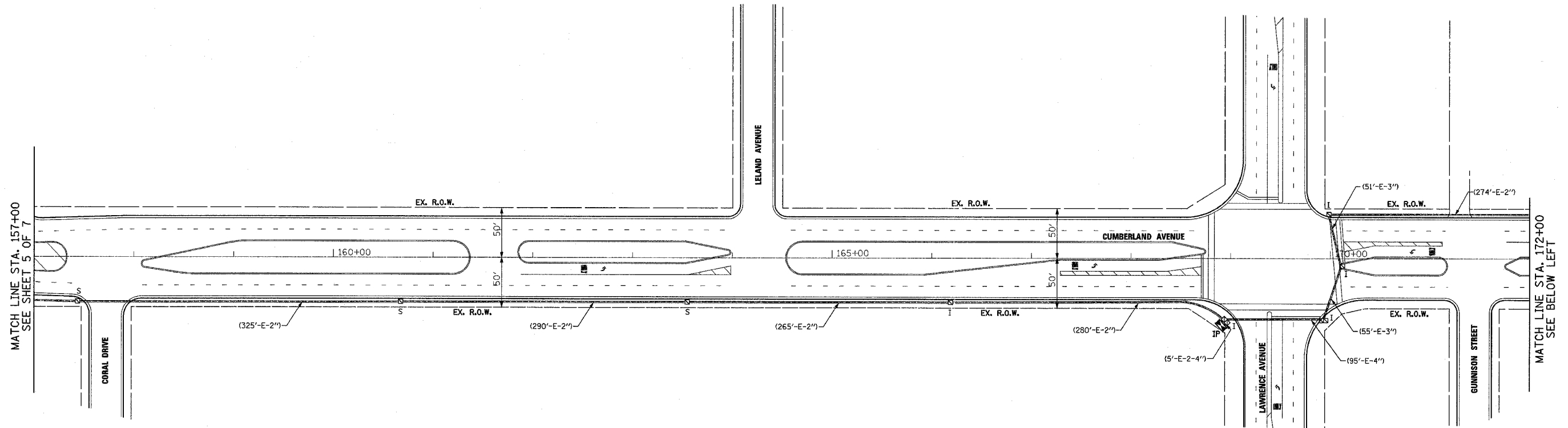
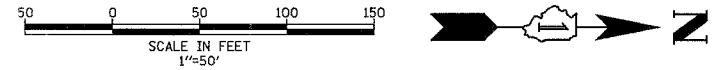
	PROPOSED	EXISTING
CONTROLLER	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]
HEAVY DUTY HANDHOLE	[Symbol]	[Symbol]
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)	[Symbol]	[Symbol]
DETECTOR LOOP	[Symbol]	[Symbol]
UNIT DUCT SYSTEM	UD	S
INTERSECTION	IP	I
TELEPHONE CONNECTION	[Symbol]	[Symbol]

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
INTERCONNECT PLAN
 IL RTE 171 (CUMBERLAND AVENUE)
 FROM FULLERTON AVENUE TO FOSTER AVENUE
 CHICAGO, ILL.
 SHEET 5 OF 7
 SCALE: 1"=50'
 DATE 10-23-06
 DRAWN BY CWC, BR
 DESIGNED BY VO
 CHECKED BY TJM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	34
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				



INTERCONNECT PLAN LEGEND

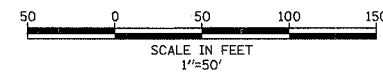
	PROPOSED	EXISTING
CONTROLLER		
HANDHOLE		
DOUBLE HANDHOLE		
HEAVY DUTY HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
DETECTOR LOOP		
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I
TELEPHONE CONNECTION		

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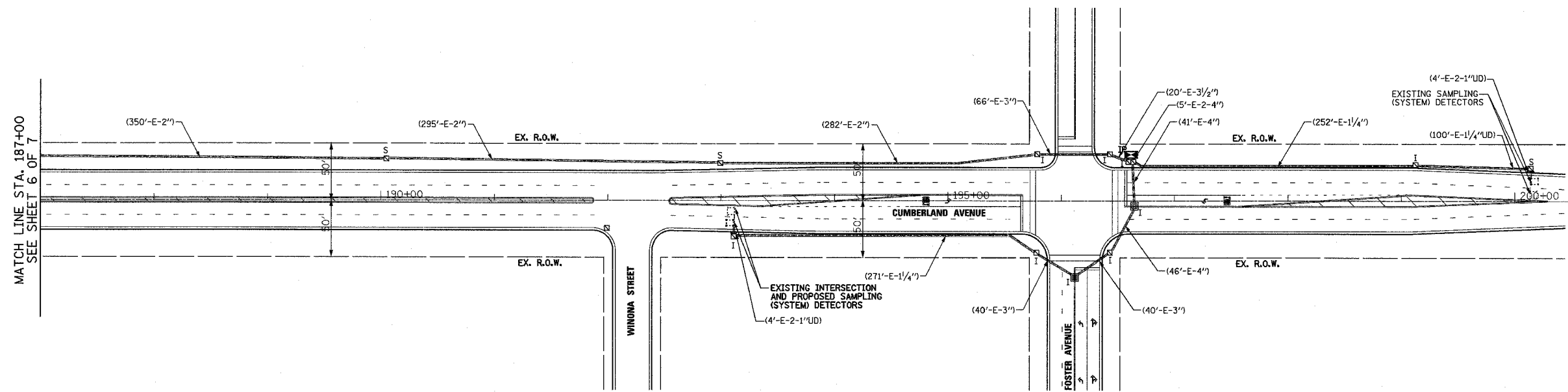
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 INTERCONNECT PLAN
 IL RTE 171 (CUMBERLAND AVENUE)
 FROM FULLERTON AVENUE TO FOSTER AVENUE
 CHICAGO, ILL.
 SHEET 6 OF 7

SCALE: 1"=50'
 DATE: 10-23-06
 DRAWN BY: CWC, BR
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	35
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
CONTRACT NO. 60C01				



INTERCONNECT PLAN LEGEND

	PROPOSED	EXISTING
CONTROLLER		
HANDHOLE		
DOUBLE HANDHOLE		
HEAVY DUTY HANDHOLE		
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)		
DETECTOR LOOP		
UNIT DUCT	UD	
SYSTEM	S	
INTERSECTION	IP	I
TELEPHONE CONNECTION		

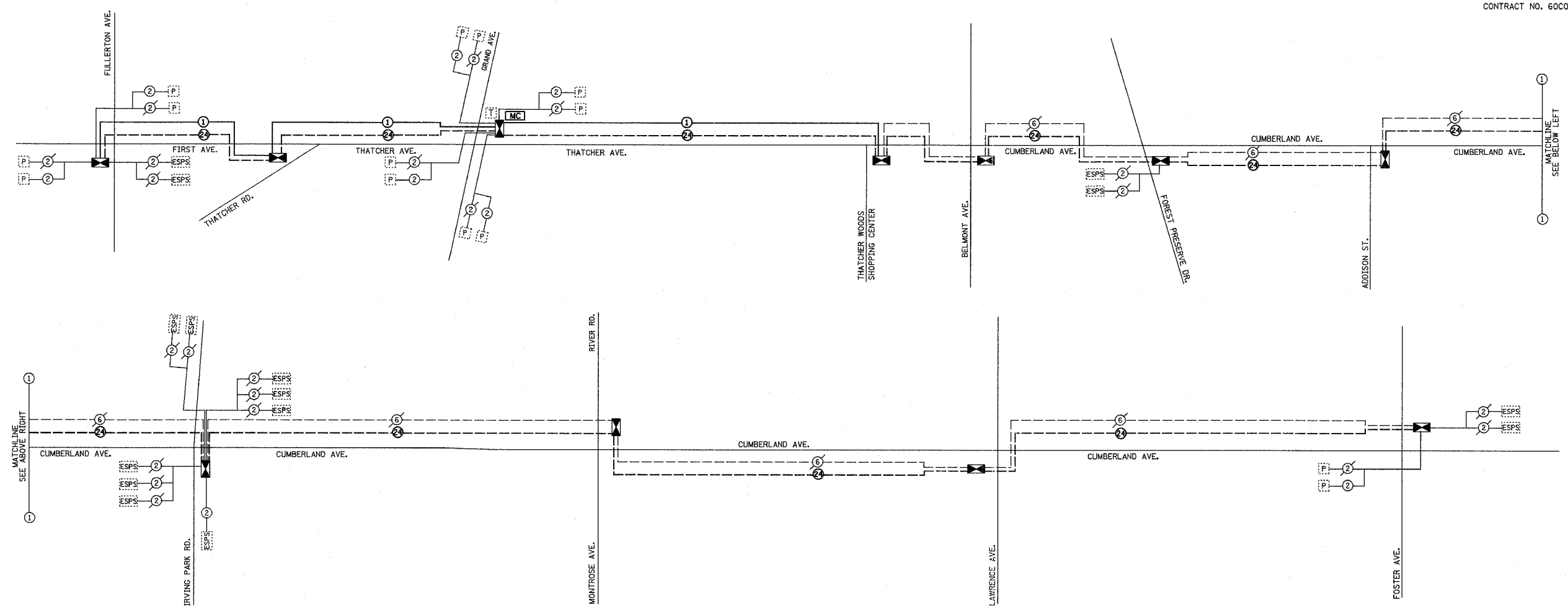
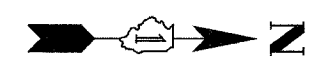
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 19 S. BOTHWELL STREET
 PALATINE, ILLINOIS 60067
 VOICE: 847-776-7200 FAX: 847-776-7239

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 INTERCONNECT PLAN
 IL RTE 171 (CUMBERLAND AVENUE)
 FROM FULLERTON AVENUE TO FOSTER AVENUE
 CHICAGO, ILL
 SHEET 7 OF 7

SCALE: 1"=50'
 DATE: 10-23-06
 DRAWN BY: CWC, BR
 DESIGNED BY: VO
 CHECKED BY: TJM

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
372	2006-039TS	COOK	36	36
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 60C01				



INTERCONNECT SCHEMATIC LEGEND

EXISTING INTERSECTION CONTROLLER		PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS	
PROPOSED INTERSECTION CONTROLLER		EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	
EXISTING MASTER CONTROLLER		PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	
PROPOSED MASTER CONTROLLER		EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	
MASTER MASTER CONTROLLER		PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	
EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS		EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS		PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
EXISTING INTERSECTION LOOP DETECTORS		EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
PROPOSED SAMPLING (SYSTEM) DETECTORS		PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
EXISTING SAMPLING (SYSTEM) DETECTORS		EXISTING ELECTRIC CABLE, 1/C NO. 10	
PROPOSED SAMPLING (SYSTEM) DETECTORS		PROPOSED ELECTRIC CABLE, 1/C NO. 14	
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS, PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS.		EXISTING TELEPHONE CONNECTION	
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS.		PROPOSED TELEPHONE CONNECTION	
EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS			
PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS			
EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS			

CONSTRUCTION NOTE:
 THE CONTRACTOR SHALL INSTALL NEW TRACER CABLE BETWEEN FULLERTON AVENUE AND THATCHER WOODS SHOPPING CENTER, AND SHALL RE-USE THE EXISTING INTERCONNECT CABLE AS TRACER CABLE BETWEEN THATCHER WOODS SHOPPING CENTER AND FOSTER AVENUE.

SCHEDULE OF QUANTITIES

ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	1382
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	950
HANDHOLE	EACH	4
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1382
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	5227
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125 MM 12F & SM12F	FOOT	21137
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2748
DRILL EXISTING HANDHOLE	EACH	2
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM	L	1
RAILROAD PROTECTIVE LIABILITY INSURANCE	L	1
SUM		

SETON ENGINEERING
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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
INTERCONNECT SCHEMATIC
 IL RTE 171 (CUMBERLAND AVENUE)
 FROM FULLERTON AVENUE TO FOSTER AVENUE
 CHICAGO, ILL

SCALE: N.T.S.
 DATE 10-23-06

DRAWN BY CWC, BR
 DESIGNED BY VO
 CHECKED BY TJM