

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	1
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

**F.A.U. ROUTE 363 (FABYAN PARKWAY)
WESTERN AVENUE TO KIRK ROAD
C.M.A.Q. IMPROVEMENT**

**SECTION 06-00339-00-TL
PROJECT NO. CMM-8003(615)**

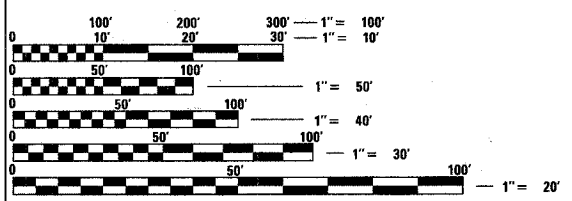
**TRAFFIC SIGNAL MODERNIZATION AND INTERCONNECT
KANE COUNTY
C-91-289-06**

P8E



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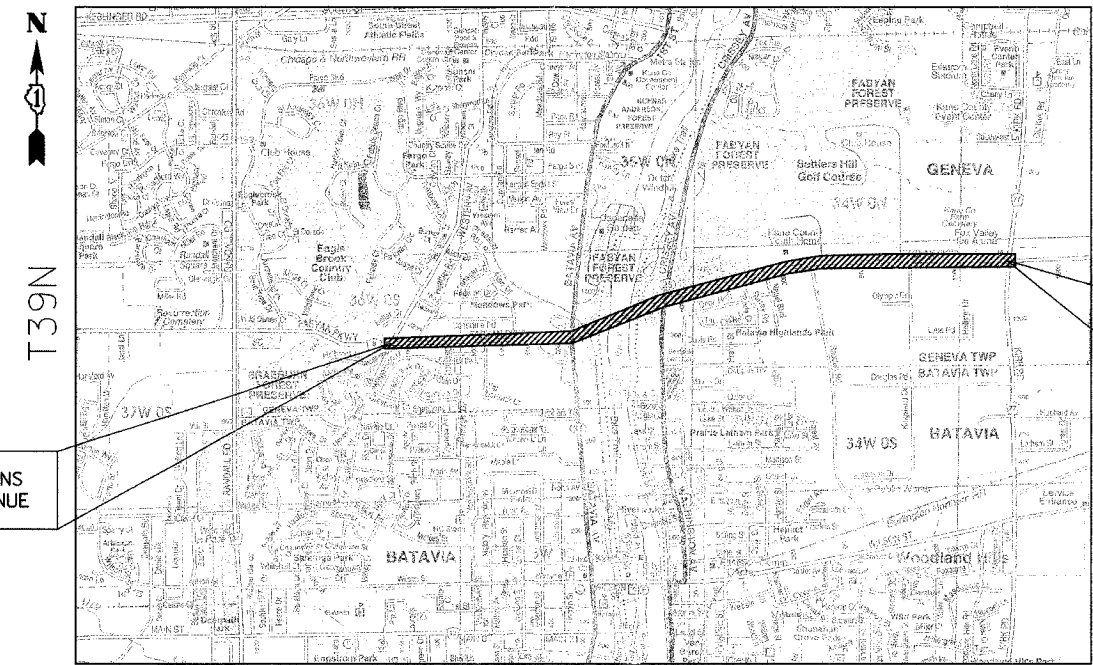
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

CONTRACT NO. 83987

PROJECT LENGTH:
13,600 FT. (2.576 MILES) (GROSS)
13,600 FT. (2.576 MILES) (NET)

POSTED SPEEDS:
WESTERN AVENUE TO ILL. RTE. 25 - 40 MPH
ILL. RTE. 25 TO KIRK ROAD - 45 MPH



PROJECT BEGINS WESTERN AVENUE

PROJECT ENDS KIRK ROAD

LOCATION MAP
NOT TO SCALE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED DECEMBER 13 2007
[Signature]
COUNTY ENGINEER, KANE COUNTY

PASSED DECEMBER 18 2007
[Signature] CHRISTOPHER HOLT
DISTRICT ONE ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW December 19 2007
[Signature] Diane O'Keefe / CO
DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER



[Signature] 11/30/09

REGISTERED P.E., STATE OF ILLINOIS
PLANS PREPARED BY: EXPIRES



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

FEDERAL AID ENGINEER: PHIL MARCYN 847-705-4189 SCHALMBURG, IL
CONSULTANT ENGINEER: JOSEPH EMRY, P.E. CIVILTECH ENGINEERING, INC.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	2
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SUMMARY OF QUANTITIES

CODE NO.	PAY ITEM	FUNDING BREAKDOWN		WESTERN AVENUE	ILL. RTE. 31 (BATAVIA AVENUE)	ILL. RTE. 25 (WASHINGTON/CRISSEY AVENUE)	RADDANT ROAD	KIRK ROAD	FABYAN PARKWAY
		LOCATION OF WORK	TOTAL						
		UNIT	TOTAL	TRAFFIC SIGNALS Y031-1F	TRAFFIC SIGNALS Y031-1F	TRAFFIC SIGNALS Y031-1F	TRAFFIC SIGNALS Y031-1F	TRAFFIC SIGNALS Y031-1F	INTERCONNECT Y031-1F
67100100	MOBILIZATION	L SUM	1						
70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1						
81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	9708			65			9643
81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	229		57	101		71	
81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	22					22	
81001000	CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	103		26	77			
81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	1288			90			1198
81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	181			181			
81100600	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	1310						1310
81300720	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 16" X 12" X 8"	EACH	3						3
81306500	REMOVE EXISTING JUNCTION BOX	EACH	4			4			
81400100	HANDHOLE	EACH	19						19
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	10042		83	223		93	9643
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	3	1			1	1	
85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	4	1	1	1	1		
86400100	TRANSCEIVER - FIBER OPTIC	EACH	4	1	1	1	1		
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	637		220			417	
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2249	98	699	425	199	828	
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	5852		2128	2132		1592	
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	4351		1741	1742		868	
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	8706	868	2497	2602	811	1928	
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	222		48	174			
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT.	EACH	8		4	4			
87700230	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1		1				
87702900	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1			1			
87702910	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	2		1	1			
87702920	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	2		1	1			
87702930	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	2					2	
87702960	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	2					2	
87702970	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1			1			
87704090	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 32 FT. (SPECIAL)	EACH	1		1				
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	4			4			
87800410	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	15		15				
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	165		45	60		60	
87900200	DRILL EXISTING HANDHOLE	EACH	29		4	11		4	10
88030020	SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	20		6	6		8	
88030110	SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	8		4	4			
88030240	SIGNAL HEAD, L.E.D., 2-FACE, 1-3 SECTION, BRACKET MOUNTED	EACH	8		4	4			
88102710	PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED	EACH	4		2			2	
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	32		10	10		12	
88500100	INDUCTIVE LOOP DETECTOR	EACH	24	4	6	6		8	
88800100	PEDESTRIAN PUSH-BUTTON	EACH	4		2			2	
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	2		1	1			
89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	4					4	
89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	6		2	2		2	
89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	4	1	1	1	1		
89502200	MODIFY EXISTING CONTROLLER	EACH	1					1	
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	19072	1031	6882	6509	1404	3246	
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	5	1	1	1	1	1	
89502380	REMOVE EXISTING HANDHOLE	EACH	7	1	1	4	1		
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	13		4	5		4	
X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	14533						14533
X0324007	OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1						1
X8620020	UNINTERRUPTIBLE POWER SUPPLY	EACH	5	1	1	1	1	1	
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	596		160	436			
X8730250	ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	1037		385	342		310	
XX001252	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 16 3/C	FOOT	4580	1026	900	958	861	835	
XX003660	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM24F SM12F	FOOT	14629						14629
XX003661	ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	5240	1124	1090	1041	1060	925	
XX003662	ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 3C	FOOT	565	98	95	83	199	90	
XX005723	VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	5	1	1	1	1	1	
X0325737	TEMPORARY TRAFFIC SIGNAL TIMINGS	EACH	2		1	1			
XX007251	INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	4	1	1	1	1		
XX007250	RELOCATE EXISTING PTZ CAMERA	EACH	1					1	

Δ DENOTES ITEMS REQUIRING SPECIAL PROVISIONS
 * DENOTES SPECIALTY ITEMS

GENERAL NOTES

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES AND GOVERNMENT AGENCIES.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN CONSENT FROM THE DEPARTMENT.
- ALL DIMENSIONS, INCLUDING RADII, ARE GIVEN TO THE CENTERLINE UNLESS OTHERWISE NOTED.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH TYPE I OR II BARRICADE USED, ONE (1) SAND BAG ACROSS EACH BOTTOM RAIL. TYPE III BARRICADES SHALL HAVE FOUR (4) WEIGHTED SAND BAGS.
- PAY ITEMS IN THE SUMMARY OF QUANTITIES HAVE BEEN ESTIMATED. IF, IN THE ENGINEER'S OPINION, THE WORK IS NOT REQUIRED, THE ITEM WILL BE DEDUCTED FROM THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ALL EXISTING LANDSCAPING DISTURBED BY THE CONSTRUCTION OPERATIONS SHALL BE RESTORED, AS DIRECTED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

STATE STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701011-01	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701101-01	OFF-ROAD OPERATIONS, MULTILANE, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701606-05	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-05	URBAN LANE CLOSURE, MULTILANE, INTERSECTION
701901	TRAFFIC CONTROL DEVICES
814001-01	HANDHOLES
857001	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001	UNINTERRUPTIBLE POWER SUPPLY (UPS)
877001-03	STEEL MAST ARM ASSEMBLY AND POLE
877011-03	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
878001-06	CONCRETE FOUNDATION DETAILS
880001	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006	TRAFFIC SIGNAL MOUNTING DETAILS

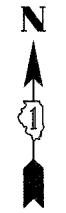
THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED JANUARY 1, 2007 BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, SHALL GOVERN THIS WORK.

RESTORATION OF WORK AREA.
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE:
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

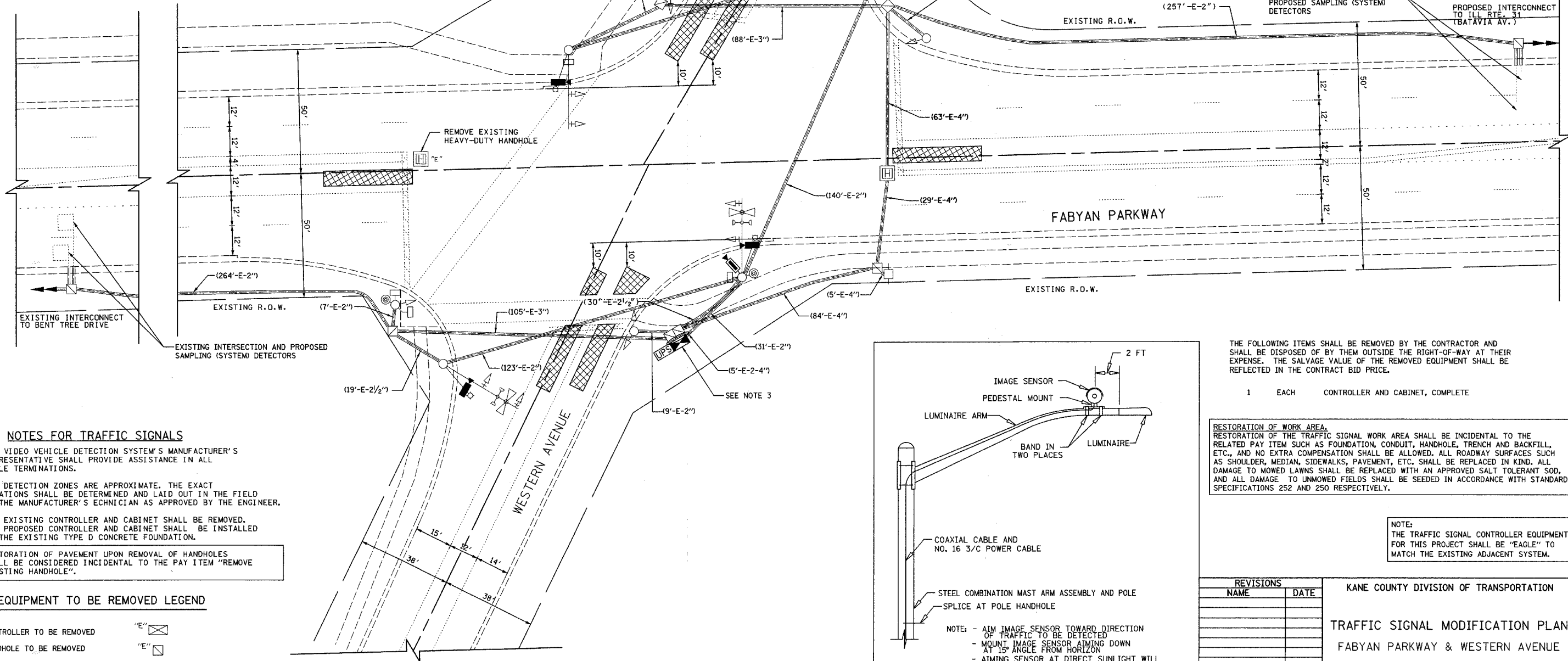
REVISIONS		KANE COUNTY DIVISION OF TRANSPORTATION SUMMARY OF QUANTITIES AND GENERAL NOTES FABYAN PARKWAY WESTERN AVENUE TO KIRK ROAD SCALE: NOT TO SCALE DATE: 12/14/2007
NAME	DATE	
		DRAWN BY: CEC DESIGNED BY: BRD/JSH CHECKED BY: JJE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	3
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		



TRAFFIC SIGNAL LEGEND

EXISTING		PROPOSED		EXISTING		PROPOSED	
CONTROLLER			EMERGENCY VEHICLE SYSTEM DETECTOR			CONFIRMATION BEACON	
SERVICE INSTALLATION			SIGNAL HEAD PROGRAMMED			CONDUIT SPLICE	
SIGNAL HEAD			WOOD POLE			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	
SIGNAL HEAD WITH BACKPLATE			VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE			RAILROAD CONTROLLER	
SIGNAL HEAD, PEDESTRIAN			ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"			ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"	
SIGNAL POST			TELEPHONE CONNECTION			UNINTERRUPTIBLE POWER SUPPLY	
MAST ARM ASSEMBLY AND POLE, STEEL			VIDEO DETECTION CAMERA			PTZ CAMERA	
MAST ARM ASSEMBLY AND POLE, ALUMINUM			PROPOSED DETECTION ZONE			EXISTING EQUIPMENT TO BE RELOCATED	
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL							
COMMON TRENCH							
UNIT DUCT							
HANDHOLE							
HEAVY-DUTY HANDHOLE							
DOUBLE HANDHOLE							
G.S. CONDUIT IN TRENCH OR PUSHED							
PEDESTRIAN PUSH-BUTTON DETECTOR							
DETECTOR LOOP							
CAST IRON JUNCTION BOX							

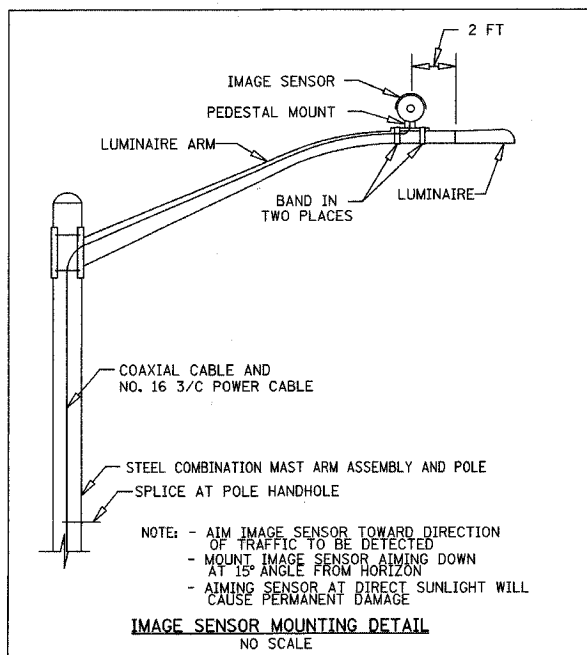


NOTES FOR TRAFFIC SIGNALS

1. THE VIDEO VEHICLE DETECTION SYSTEM'S MANUFACTURER'S REPRESENTATIVE SHALL PROVIDE ASSISTANCE IN ALL CABLE TERMINATIONS.
2. ALL DETECTION ZONES ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED AND LAID OUT IN THE FIELD BY THE MANUFACTURER'S ECHNICIAN AS APPROVED BY THE ENGINEER.
3. THE EXISTING CONTROLLER AND CABINET SHALL BE REMOVED. THE PROPOSED CONTROLLER AND CABINET SHALL BE INSTALLED ON THE EXISTING TYPE D CONCRETE FOUNDATION.
4. RESTORATION OF PAVEMENT UPON REMOVAL OF HANDHOLES SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "REMOVE EXISTING HANDHOLE".

EXISTING EQUIPMENT TO BE REMOVED LEGEND

EXISTING CONTROLLER TO BE REMOVED	
EXISTING HANDHOLE TO BE REMOVED	
EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED	



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 CONTROLLER AND CABINET, COMPLETE

RESTORATION OF WORK AREA.
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

REVISIONS		NAME	DATE
NO.	DESCRIPTION		

KANE COUNTY DIVISION OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN

FABYAN PARKWAY & WESTERN AVENUE

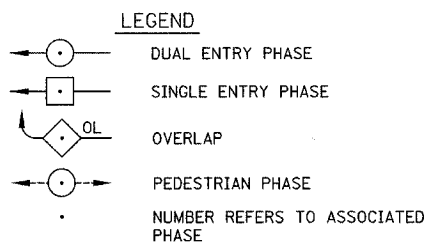
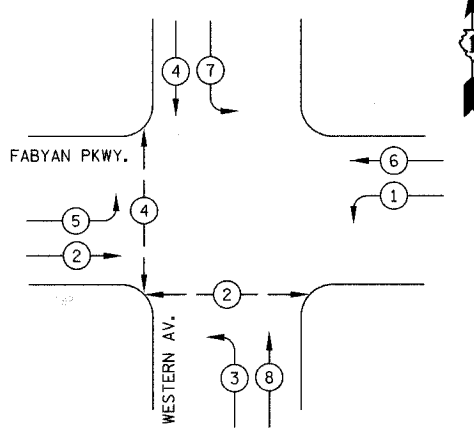
SCALE: 1" = 20'

DATE: 12/14/2007

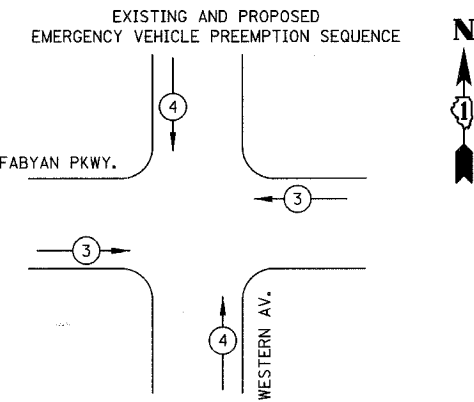
DRAWN BY: CEC
DESIGNED BY: BRD/JSH
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363	06-00339-00-TL	KANE	33	4
STA.		TO STA.		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

EXISTING AND PROPOSED CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

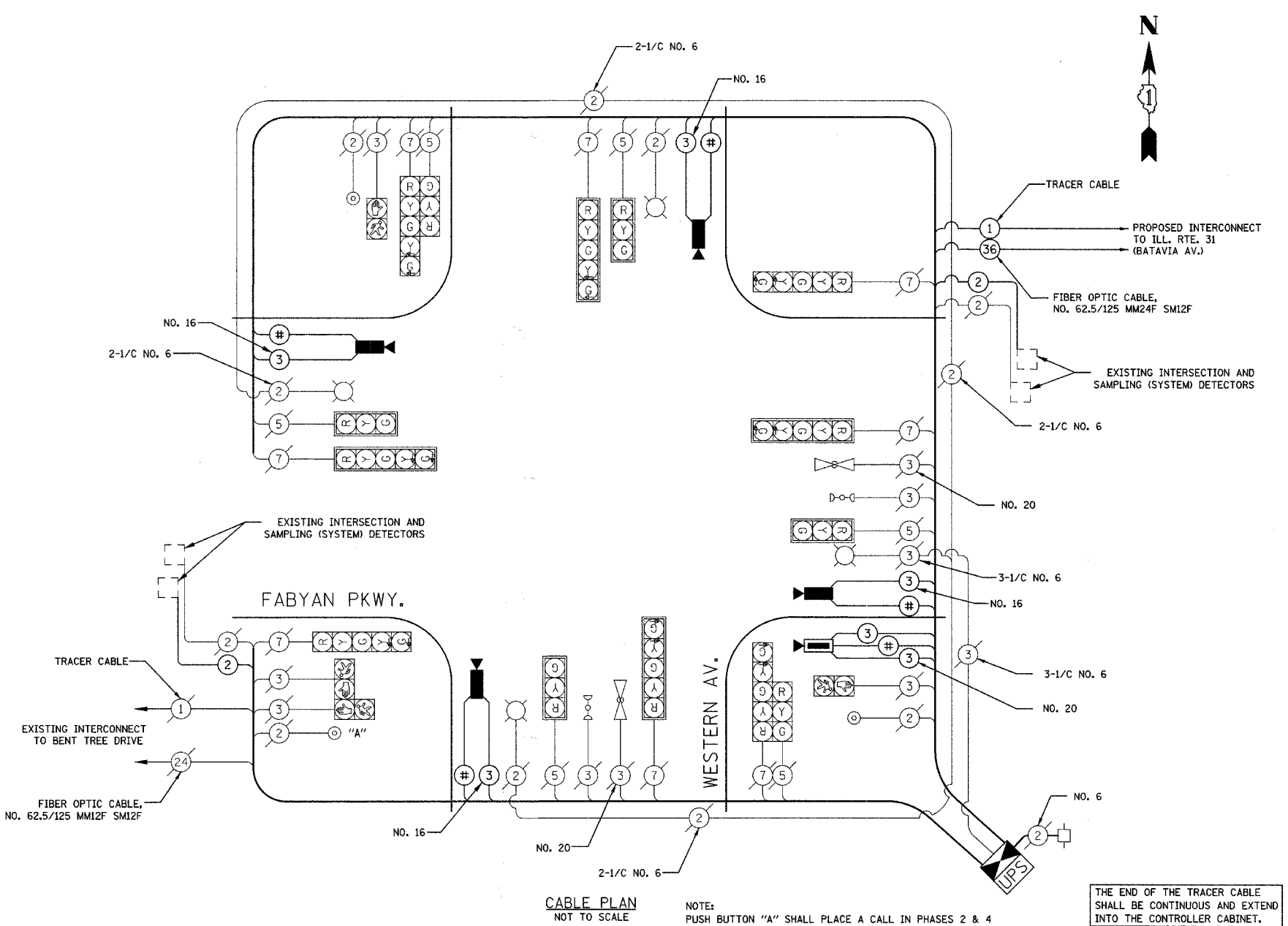


PROPOSED EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↑

CABLE PLAN LEGEND

- | | | |
|----------|----------|---|
| EXISTING | PROPOSED | |
| | | 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 |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | | MICROWAVE VEHICLE SENSOR |
| | | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD |
| | | 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 |
| | | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F |
| | | COAXIAL CABLE |
| | | IMAGE SENSOR |
| | | STREET LIGHT LUMINAIRE |
| | | DOMED PAN/TILT/ZOOM (PTZ) CAMERA |
| | | UNINTERRUPTIBLE POWER SUPPLY |
| | | "R" RELOCATED SIGNAL EQUIPMENT |



CABLE PLAN NOT TO SCALE

NOTE: PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 & 4

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

SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	98
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	868
INDUCTIVE LOOP DETECTOR	EACH	4
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM.	EACH	1
PHASING UNIT		
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1031
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 16 3/C	FOOT	1026
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	1124
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 3C	FOOT	98
VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1

NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

REVISIONS

NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION
 CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
 FABYAN PARKWAY & WESTERN AVENUE
 SCALE: NOT TO SCALE
 DATE: 12/14/2007
 DRAWN BY: CEC
 DESIGNED BY: BRD/JSH
 CHECKED BY: JJE

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

TYPE	NO. LAMPS	WATTAGE INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14		17	0.50	119
(YELLOW)	14		25	0.25	88
(GREEN)	14		15	0.25	53
ARROW	16		12	0.10	20
PED. SIGNAL	4		25	1.00	100
CONTROLLER	1		100	1.00	100
VIDEO SYSTEMS	1		150	1.00	150
LUMINAIRE	4	310		0.50	620
FLASHER				0.50	
TOTAL =					1250

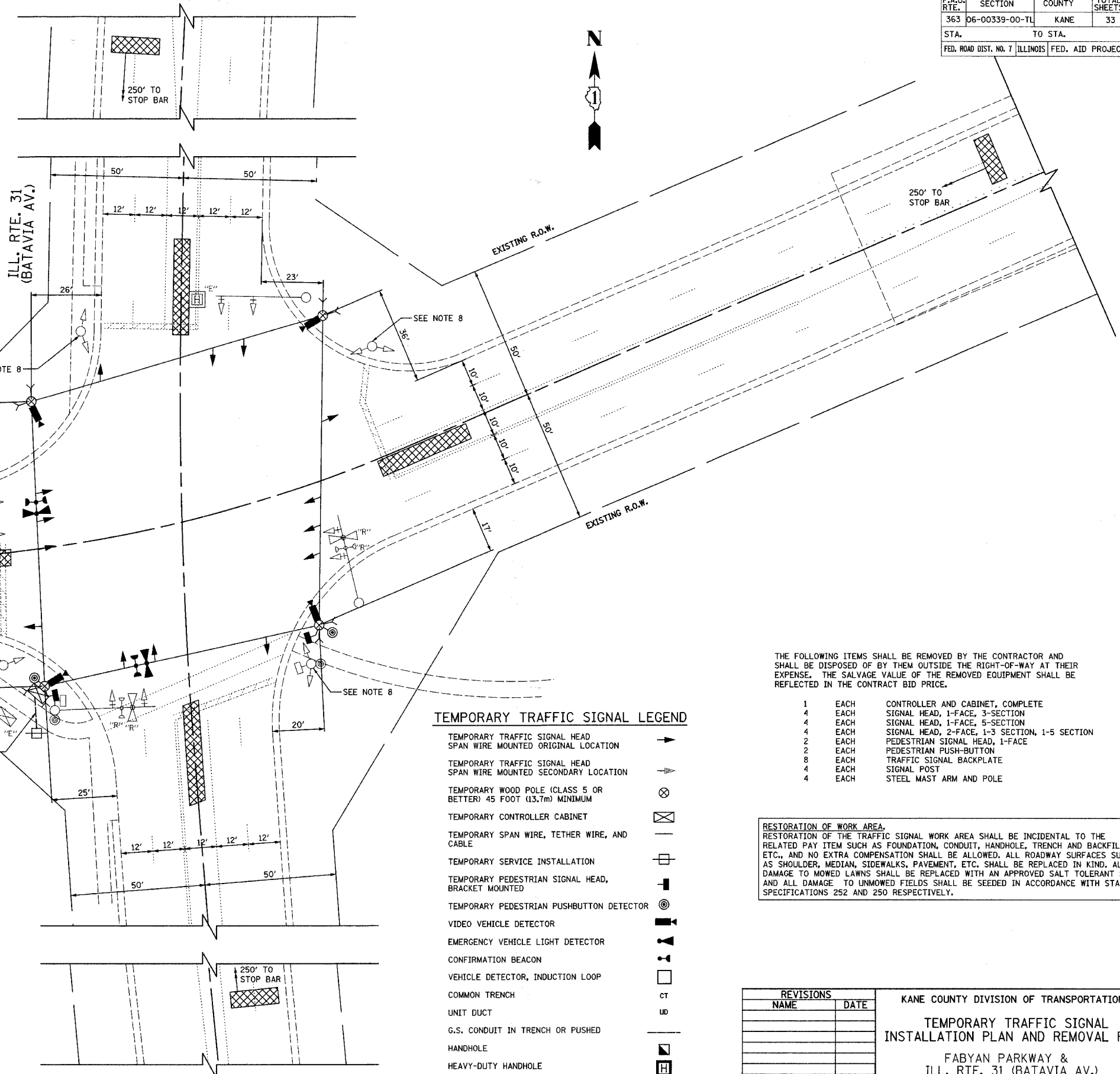
ENERGY COSTS TO: CITY OF BATAVIA
 100 N. ISLAND AVENUE
 BATAVIA, IL 60510
 ENERGY SUPPLY: CONTACT: STEVE LUSTED
 PHONE: (630) 879-1424
 COMPANY: CITY OF BATAVIA

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 (2.0)
D- CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'H-2= (6m+L-0.6m)=
E- 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)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	5
STA. _____		TO STA. _____		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				

NOTES FOR TEMPORARY TRAFFIC SIGNALS

- ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
- ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
- A 2" DIAMETER GALVANIZED STEEL CONDUIT SHALL BE INSTALLED FROM THE TEMPORARY TRAFFIC SIGNAL CONTROLLER TO THE EXISTING SERVICE INSTALLATION, AND THE FOUNDATION OF THE SERVICE INSTALLATION SHALL BE DRILLED. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION." PRIOR TO BEGINNING THIS WORK, THE CONTRACTOR SHALL CONTACT THE CITY OF BATAVIA TO VERIFY THE LOCATION OF THE SERVICE INSTALLATION. THE EXISTING SERVICE INSTALLATION SHALL NOT BE REMOVED.
- THE EXISTING TRAFFIC SIGNAL POSTS SHALL BE REMOVED, THE EXISTING TYPE A CONCRETE FOUNDATIONS SHALL REMAIN FOR USE BY THE PROPOSED TRAFFIC SIGNAL POSTS.
- THE EXISTING TRAFFIC SIGNAL CONTROLLER AND CABINET SHALL BE REMOVED. THE EXISTING TYPE D FOUNDATIONS SHALL REMAIN.
- THE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACONS SHALL BE RELOCATED TO THE PROPOSED MAST ARMS. THE EXISTING LIGHT DETECTOR AMPLIFIER SHALL BE RELOCATED TO THE PROPOSED CONTROLLER CABINET.
- RESTORATION OF PAVEMENT UPON REMOVAL OF HANDHOLES SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "REMOVE EXISTING HANDHOLE."
- ALL DETECTION ZONES ARE APPROXIMATE. THE EXACT LOCATION SHALL BE DETERMINED AND LAID OUT IN THE FIELD BY THE MANUFACTURER'S TECHNICIAN AS APPROVED BY THE ENGINEER.



EXISTING EQUIPMENT TO BE REMOVED LEGEND

- EXISTING SIGNAL HEAD TO BE REMOVED
- EXISTING SERVICE INSTALLATION TO BE REMOVED
- EXISTING SIGNAL POST TO BE REMOVED
- EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- EXISTING CONTROLLER TO BE REMOVED
- EXISTING HANDHOLE TO BE REMOVED
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- EXISTING PEDESTRIAN PUSH BUTTON TO BE REMOVED
- EMERGENCY VEHICLE LIGHT DETECTOR TO BE RELOCATED
- CONFIRMATION BEACON TO BE RELOCATED
- EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED
- EXISTING ILLUMINATED SIGN TO BE RELOCATED

TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- TEMPORARY PEDESTRIAN PUSHBUTTON DETECTOR
- VIDEO VEHICLE DETECTOR
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- COMMON TRENCH
- UNIT DUCT
- G.S. CONDUIT IN TRENCH OR PUSHED
- HANDHOLE
- HEAVY-DUTY HANDHOLE
- TEMPORARY DETECTION ZONE

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 CONTROLLER AND CABINET, COMPLETE
- 4 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 4 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON
- 8 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH SIGNAL POST
- 4 EACH STEEL MAST ARM AND POLE

RESTORATION OF WORK AREA.
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

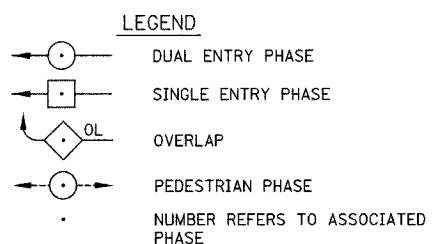
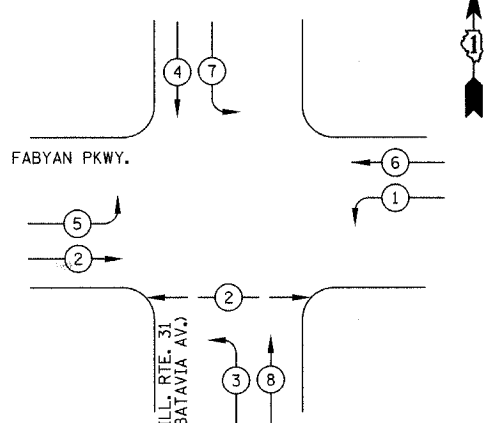
REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION
**TEMPORARY TRAFFIC SIGNAL
INSTALLATION PLAN AND REMOVAL PLAN**
FABYAN PARKWAY &
ILL. RTE. 31 (BATAVIA AV.)

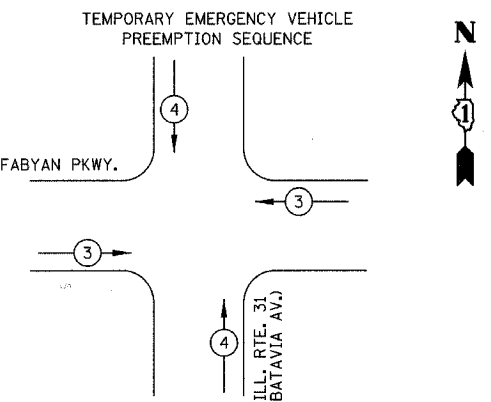
SCALE: 1" = 20'
DATE: 12/14/2007
DRAWN BY: CEC
DESIGNED BY: BRD/JSH
CHECKED BY: JJE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	6
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

TEMPORARY CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

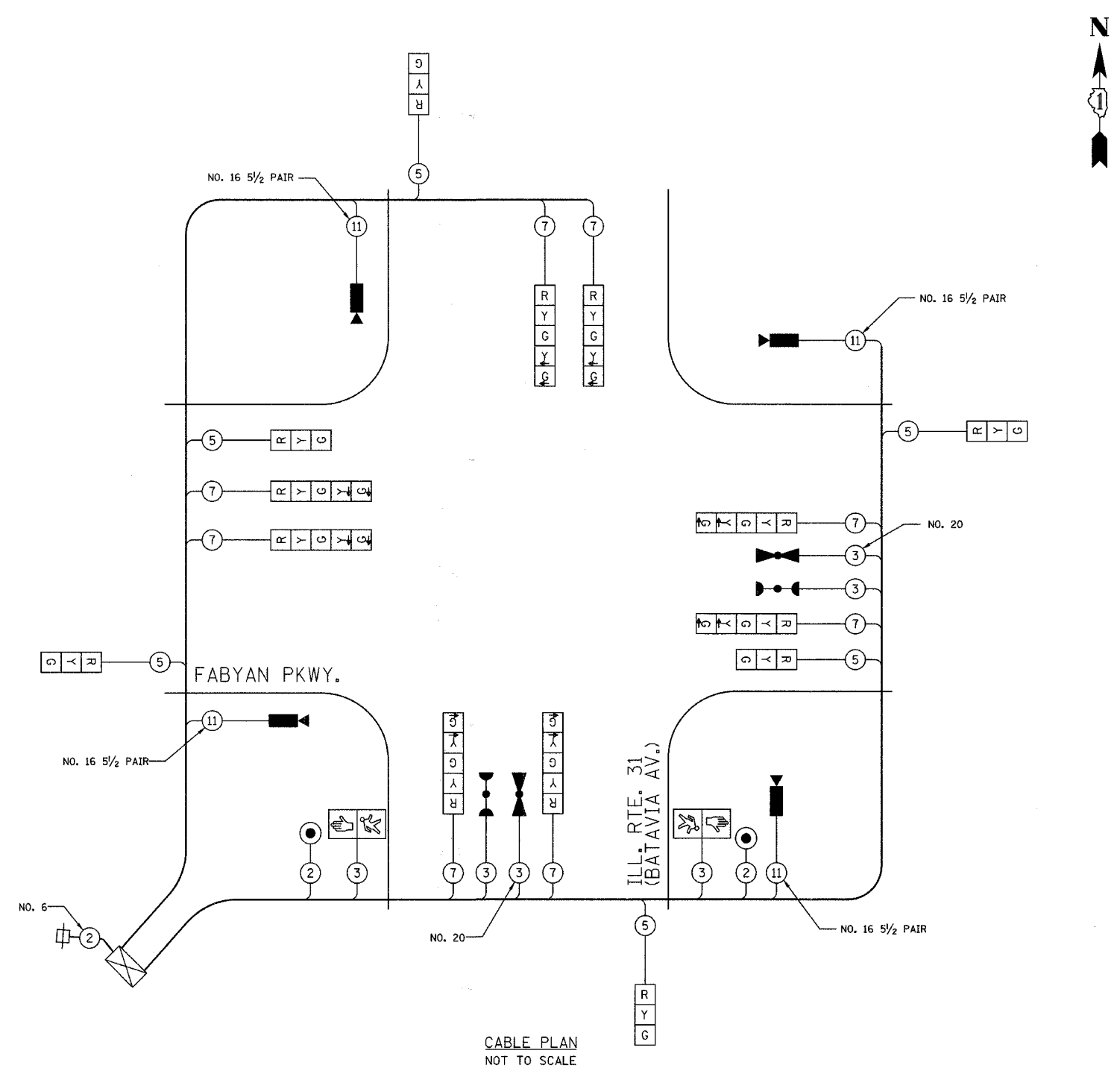


PROPOSED EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

TEMPORARY CABLE DIAGRAM LEGEND

- TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300 mm)
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SERVICE INSTALLATION
- INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- PEDESTRIAN PUSHBUTTON DETECTOR
- VEHICLE DETECTOR, INDUCTION LOOP
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- VIDEO VEHICLE DETECTOR



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

TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	16		12	0.10	20
PED. SIGNAL	2		25	1.00	50
CONTROLLER	1		100	1.00	100
VIDEO SYSTEMS	1		150	1.00	150
FLASHER				0.50	
TOTAL =					542

ENERGY COSTS TO: CITY OF BATAVIA
100 N. ISLAND AVENUE
BATAVIA, IL 60510
ENERGY SUPPLY: CONTACT: STEVE LUSTED
PHONE: (630) 879-1424
COMPANY: CITY OF BATAVIA

REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION
TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

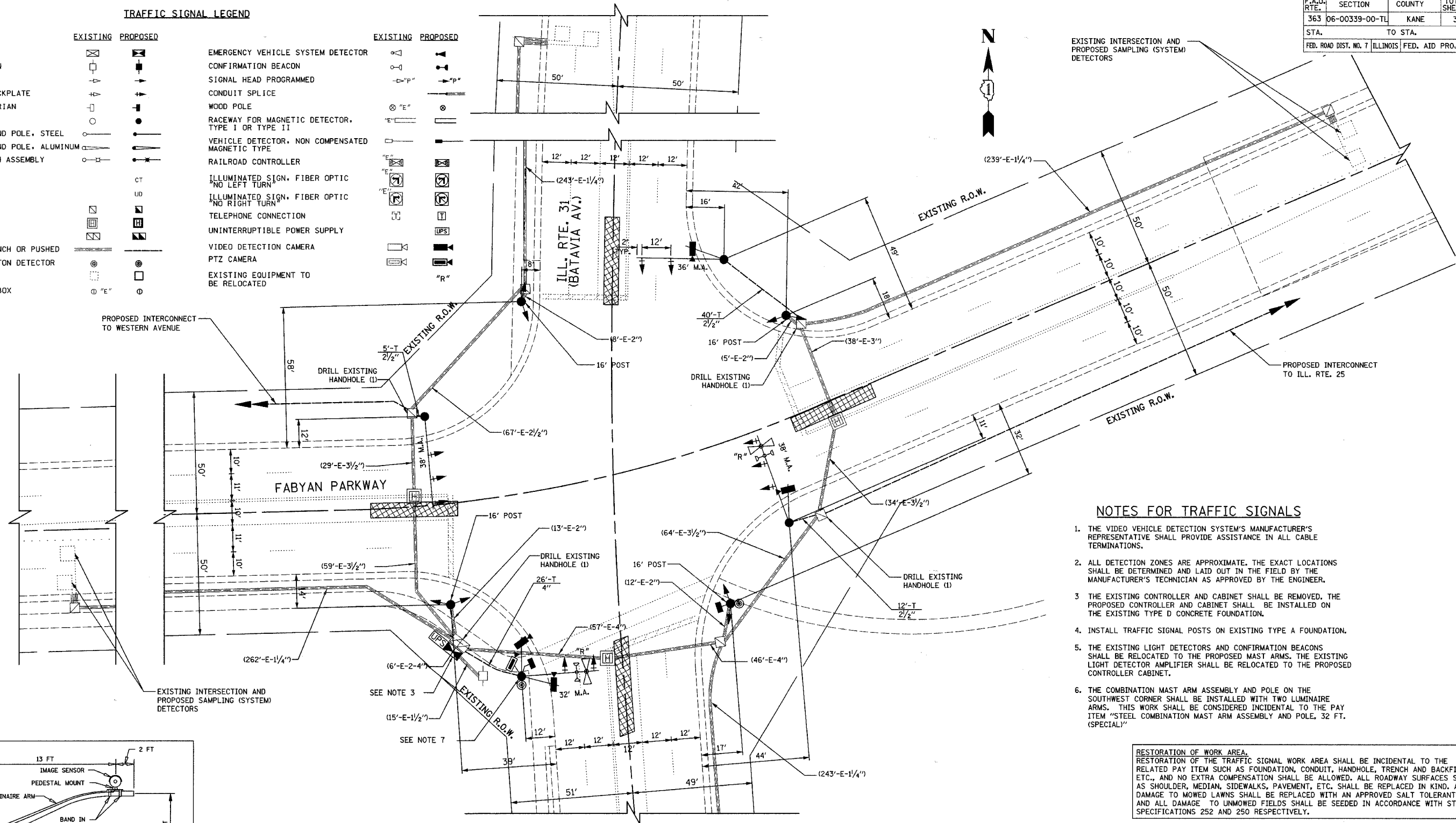
FABYAN PARKWAY & ILL. RTE. 31 (BATAVIA AV.)
SCALE: NOT TO SCALE
DATE: 12/14/2007

DRAWN BY: CEC
DESIGNED BY: BRD/JSH
CHECKED BY: JJE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	7
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

TRAFFIC SIGNAL LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED
CONTROLLER		EMERGENCY VEHICLE SYSTEM DETECTOR	
SERVICE INSTALLATION		CONFIRMATION BEACON	
SIGNAL HEAD		SIGNAL HEAD 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 CONTROLLER	
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL		ILLUMINATED SIGN, FIBER OPTIC NO LEFT TURN	
COMMON TRENCH		ILLUMINATED SIGN, FIBER OPTIC NO RIGHT TURN	
UNIT DUCT		TELEPHONE CONNECTION	
HANDHOLE		UNINTERRUPTIBLE POWER SUPPLY	
HEAVY-DUTY HANDHOLE		VIDEO DETECTION CAMERA	
DOUBLE HANDHOLE		PTZ CAMERA	
G.S. CONDUIT IN TRENCH OR PUSHED		EXISTING EQUIPMENT TO BE RELOCATED	
PEDESTRIAN PUSH-BUTTON DETECTOR			
DETECTOR LOOP			
CAST IRON JUNCTION BOX			

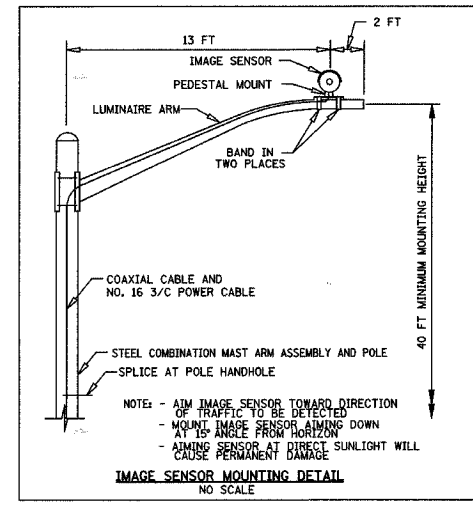


NOTES FOR TRAFFIC SIGNALS

1. THE VIDEO VEHICLE DETECTION SYSTEM'S MANUFACTURER'S REPRESENTATIVE SHALL PROVIDE ASSISTANCE IN ALL CABLE TERMINATIONS.
2. ALL DETECTION ZONES ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED AND LAID OUT IN THE FIELD BY THE MANUFACTURER'S TECHNICIAN AS APPROVED BY THE ENGINEER.
3. THE EXISTING CONTROLLER AND CABINET SHALL BE REMOVED. THE PROPOSED CONTROLLER AND CABINET SHALL BE INSTALLED ON THE EXISTING TYPE D CONCRETE FOUNDATION.
4. INSTALL TRAFFIC SIGNAL POSTS ON EXISTING TYPE A FOUNDATION.
5. THE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACONS SHALL BE RELOCATED TO THE PROPOSED MAST ARMS. THE EXISTING LIGHT DETECTOR AMPLIFIER SHALL BE RELOCATED TO THE PROPOSED CONTROLLER CABINET.
6. THE COMBINATION MAST ARM ASSEMBLY AND POLE ON THE SOUTHWEST CORNER SHALL BE INSTALLED WITH TWO LUMINAIRE ARMS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 32 FT. (SPECIAL)"

RESTORATION OF WORK AREA.
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE:
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.



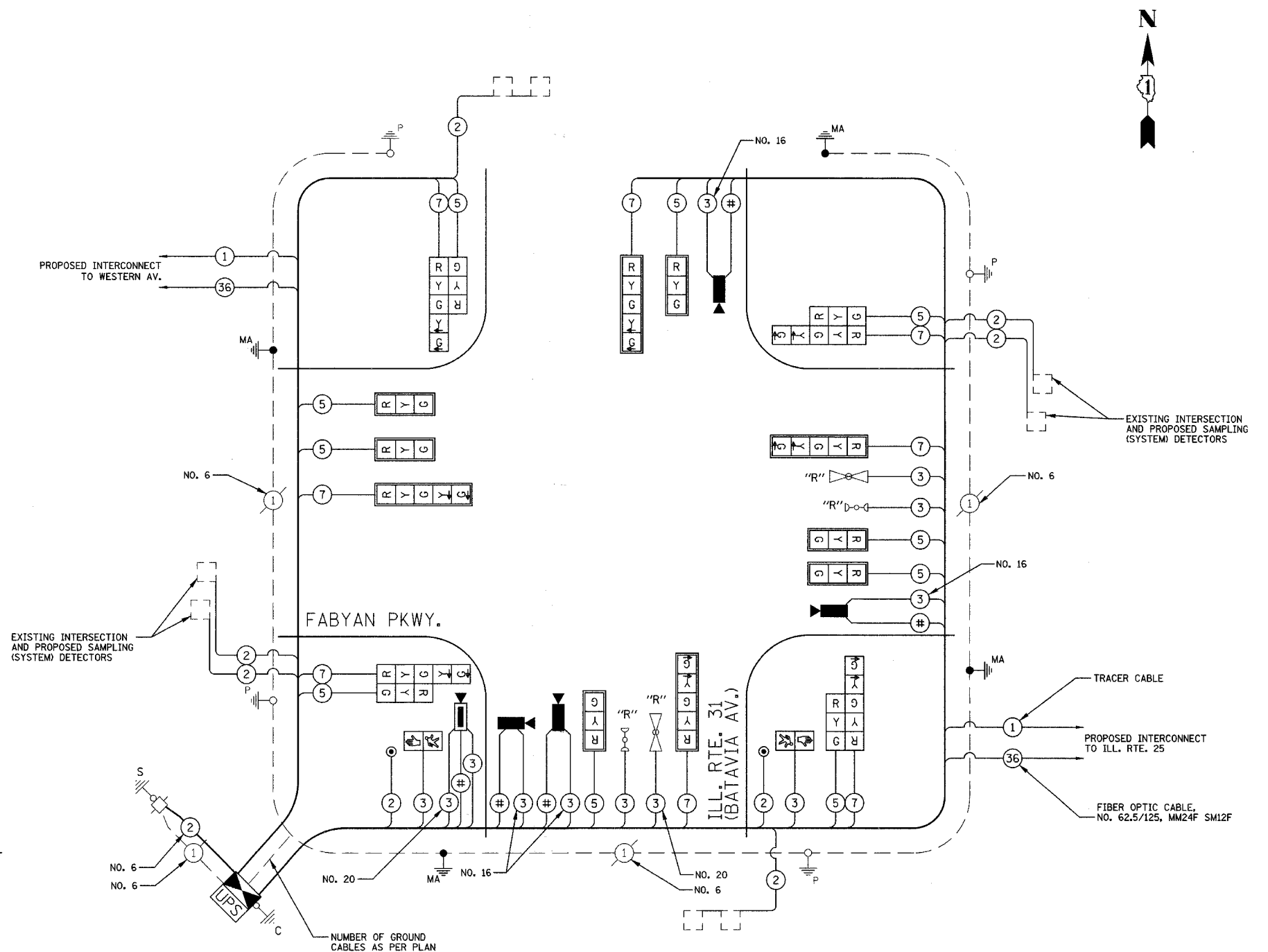
REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION
TRAFFIC SIGNAL MODIFICATION PLAN
 FABYAN PARKWAY &
 ILL. RTE. 31 (BATAVIA AV.)
 SCALE: 1" = 20'
 DATE: 12/14/2007
 DRAWN BY: CEC
 DESIGNED BY: BRD/JSH
 CHECKED BY: JJE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	8
STA.		TO STA.		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT		

CABLE PLAN LEGEND

- EXISTING PROPOSED
- 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
 - MAGNETIC DETECTOR
 - EMERGENCY VEHICLE LIGHT DETECTOR
 - CONFIRMATION BEACON
 - PUSHBUTTON DETECTOR
 - VEHICLE DETECTOR, INDUCTION LOOP
 - MICROWAVE VEHICLE SENSOR
 - SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD
 - 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
 - GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
 - FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
 - COAXIAL CABLE
 - IMAGE SENSOR
 - STREET LIGHT LUMINAIRE
 - DOME PAN/TILT/ZOOM (PTZ) CAMERA
 - UNINTERRUPTIBLE POWER SUPPLY
 - "R" RELOCATED SIGNAL EQUIPMENT



CABLE PLAN NOT TO SCALE

NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	18	17	0.50	153	
(YELLOW)	18	25	0.25	113	
(GREEN)	18	15	0.25	68	
ARROW	16	12	0.10	20	
PED. SIGNAL	2	25	1.00	50	
CONTROLLER	1	100	1.00	100	
VIDEO SYSTEMS	1	150	1.00	150	
FLASHER				0.50	
TOTAL =				654	

ENERGY COSTS TO: CITY OF BATAVIA
100 N. ISLAND AVENUE
BATAVIA, IL 60510
CONTACT: STEVE LUSTED
PHONE: (630) 879-1424
COMPANY: CITY OF BATAVIA

ENERGY SUPPLY:

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 (2.0)
D- CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
E- M. ARM POLE		SIGNAL POST	2 (1.0)	6m+L-0.6m=	
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)
36" (900mm)	15 (4.6)	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)

REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION

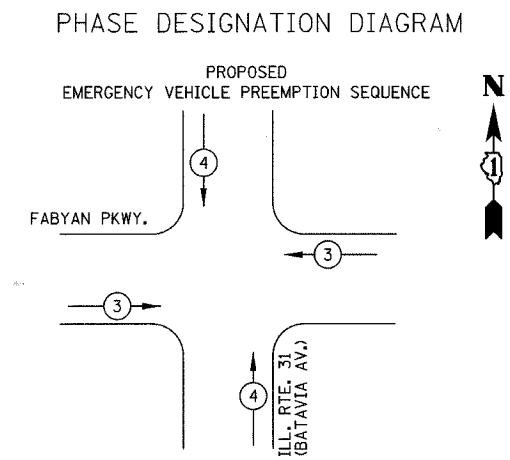
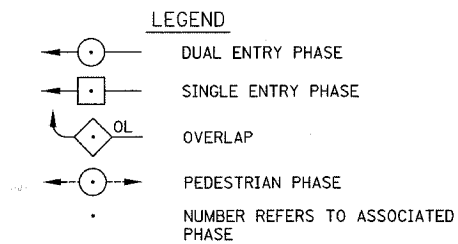
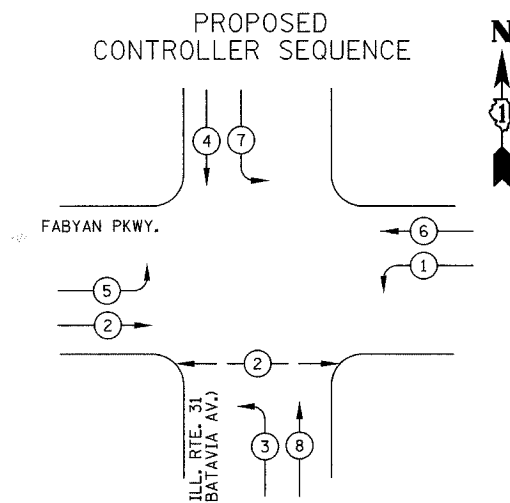
CABLE PLAN

FABYAN PARKWAY & ILL. RTE. 31 (BATAVIA AV.)

SCALE: NOT TO SCALE
DATE: 12/14/2007

DRAWN BY: CEC
DESIGNED BY: BRD/JSH
CHECKED BY: JJE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	9
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		



EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

PAY ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	57
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	26
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	83
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	220
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	699
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2128
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1741
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2497
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	48
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 32 FT. (SPECIAL)	EACH	1
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	15
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	6
PEDESTRIAN PUSH-BUTTON	EACH	2
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	6882
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	160
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	385
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 16 3/C	FOOT	900
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	1090
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 3C	FOOT	95
VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMINGS	EACH	1
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

REVISIONS		KANE COUNTY DIVISION OF TRANSPORTATION PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES FABYAN PARKWAY & ILL. RTE. 31 (BATAVIA AV.)
NAME	DATE	















SCALE: NOT TO SCALE
DATE: 12/14/2007

DRAWN BY: CEC
DESIGNED BY: BRD/JSH
CHECKED BY: JJE


















F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	10
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		



EXISTING EQUIPMENT TO BE REMOVED LEGEND

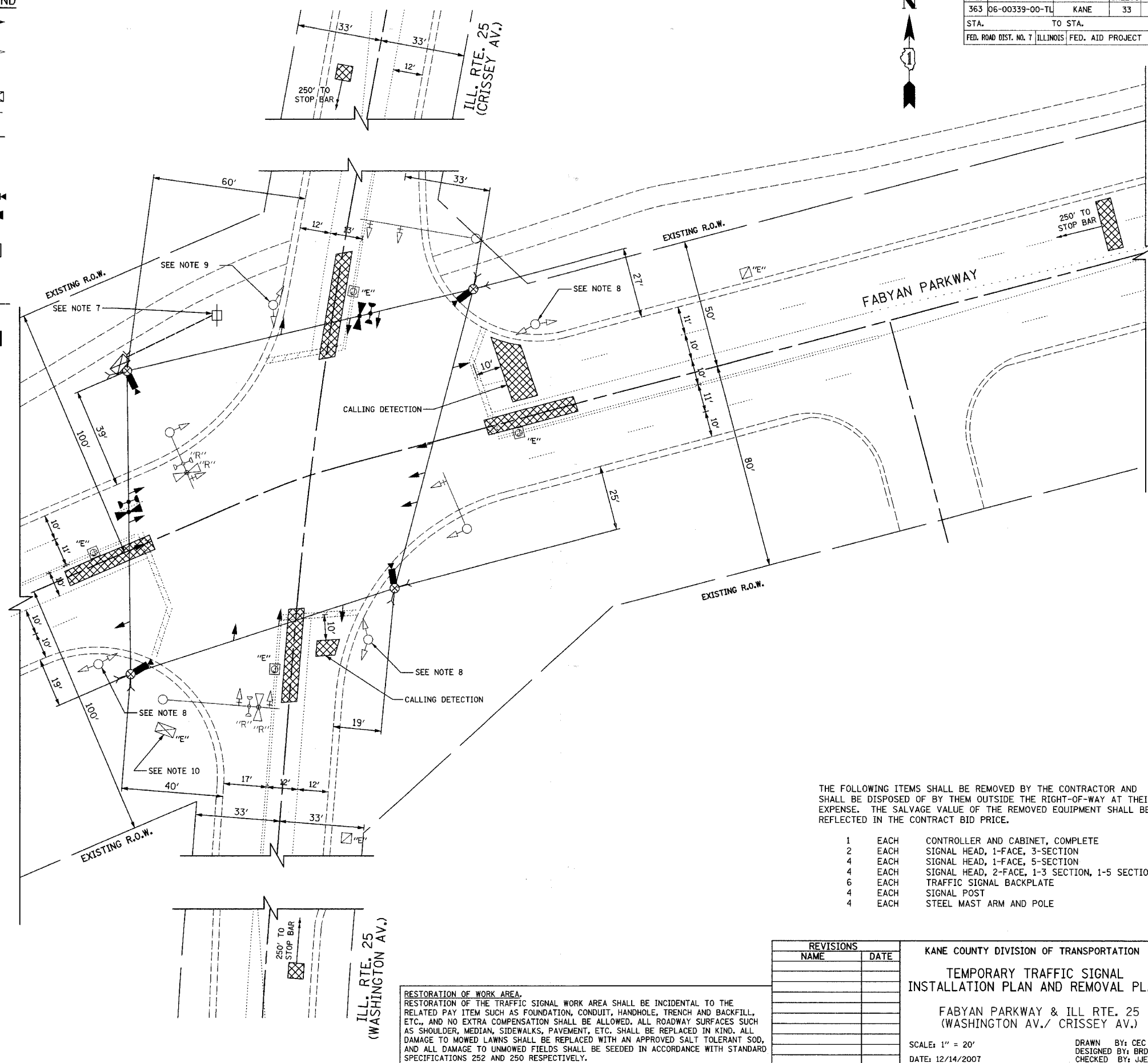
- EXISTING SIGNAL HEAD TO BE REMOVED 
- EXISTING SERVICE INSTALLATION TO BE REMOVED 
- EXISTING SIGNAL POST TO BE REMOVED 
- EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED 
- EXISTING CONTROLLER TO BE REMOVED 
- EXISTING HANDHOLE TO BE REMOVED 
- EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED 
- EXISTING PEDESTRIAN PUSH BUTTON TO BE REMOVED 
- EMERGENCY VEHICLE LIGHT DETECTOR TO BE RELOCATED 
- CONFIRMATION BEACON TO BE RELOCATED 
- EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED 
- EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED 
- EXISTING JUNCTION BOX TO BE REMOVED 
- EXISTING EQUIPMENT TO BE RELOCATED 

TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION 
- TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION 
- TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM 
- TEMPORARY CONTROLLER CABINET 
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE 
- TEMPORARY SERVICE INSTALLATION 
- TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED 
- TEMPORARY PEDESTRIAN PUSHBUTTON DETECTOR 
- VIDEO VEHICLE DETECTOR 
- EMERGENCY VEHICLE LIGHT DETECTOR 
- CONFIRMATION BEACON 
- VEHICLE DETECTOR, INDUCTION LOOP 
- COMMON TRENCH 
- UNIT DUCT 
- G.S. CONDUIT IN TRENCH OR PUSHED 
- HANDHOLE 
- HEAVY-DUTY HANDHOLE 

NOTES FOR TEMPORARY TRAFFIC SIGNALS

1. ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
2. ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
3. ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12". HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
4. ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
5. ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
6. THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.
7. A 2" DIAMETER GALVANIZED STEEL CONDUIT SHALL BE INSTALLED FROM THE TEMPORARY TRAFFIC SIGNAL CONTROLLER TO THE EXISTING SERVICE INSTALLATION, AND THE FOUNDATION OF THE SERVICE INSTALLATION SHALL BE DRILLED. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "TEMPORARY TRAFFIC SIGNAL INSTALLATION." PRIOR TO BEGINNING THIS WORK, THE CONTRACTOR SHALL CONTACT THE CITY OF GENEVA TO VERIFY THE LOCATION OF THE SERVICE INSTALLATION. FOLLOWING THE REMOVAL OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION, THE EXISTING SERVICE INSTALLATION SHALL BE REMOVED.
8. THIS EXISTING TRAFFIC SIGNAL POST SHALL BE REMOVED. THE EXISTING TYPE A CONCRETE FOUNDATION SHALL REMAIN FOR USE BY THE PROPOSED TRAFFIC SIGNAL POST.
9. THE EXISTING TRAFFIC SIGNAL POST AND TYPE A CONCRETE FOUNDATION ON THE NORTHWEST CORNER SHALL BE REMOVED.
10. THE EXISTING TRAFFIC SIGNAL CONTROLLER AND CABINET SHALL BE REMOVED. THE EXISTING TYPE D FOUNDATION SHALL REMAIN.
11. THE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACONS, SHALL BE RELOCATED TO THE PROPOSED MAST ARMS. THE EXISTING LIGHT DETECTOR AMPLIFIER SHALL BE RELOCATED TO THE PROPOSED CONTROLLER CABINET.
12. RESTORATION OF PAVEMENT UPON REMOVAL OF HANDHOLES SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "REMOVE EXISTING HANDHOLE".
13. ALL DETECTION ZONES ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED AND LAID OUT IN THE FIELD BY THE MANUFACTURER'S TECHNICIAN AS APPROVED BY THE ENGINEER.



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.

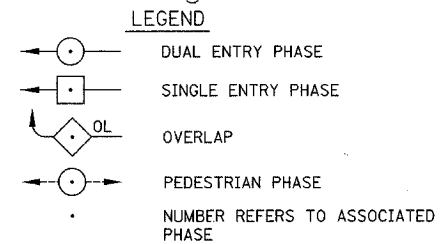
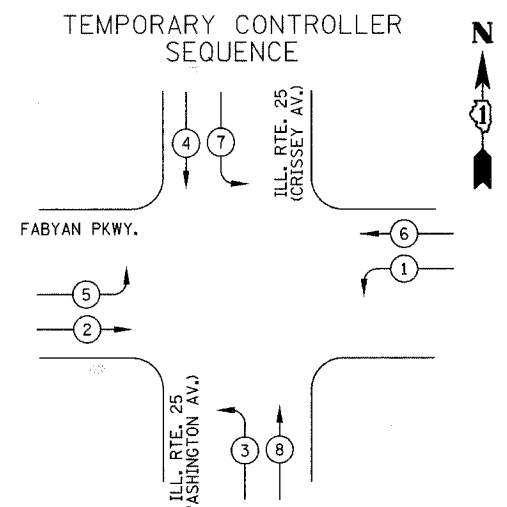
1	EACH	CONTROLLER AND CABINET, COMPLETE
2	EACH	SIGNAL HEAD, 1-FACE, 3-SECTION
4	EACH	SIGNAL HEAD, 1-FACE, 5-SECTION
4	EACH	SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
6	EACH	TRAFFIC SIGNAL BACKPLATE
4	EACH	SIGNAL POST
4	EACH	STEEL MAST ARM AND POLE

REVISIONS	
NAME	DATE

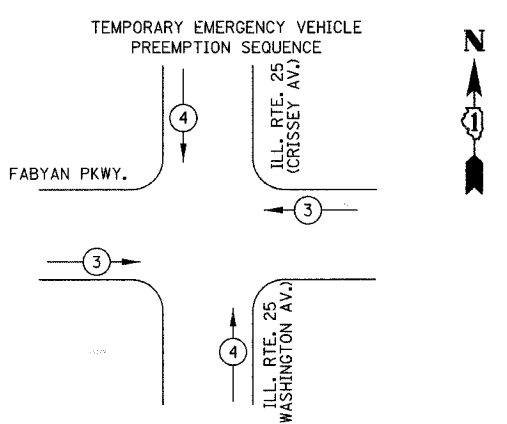
KANE COUNTY DIVISION OF TRANSPORTATION
**TEMPORARY TRAFFIC SIGNAL
 INSTALLATION PLAN AND REMOVAL PLAN**
 FABYAN PARKWAY & ILL RTE. 25
 (WASHINGTON AV./ CRISSEY AV.)
 SCALE: 1" = 20'
 DATE: 12/14/2007
 DRAWN BY: CEC
 DESIGNED BY: BRD/JSH
 CHECKED BY: JJE

RESTORATION OF WORK AREA.
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	11
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		



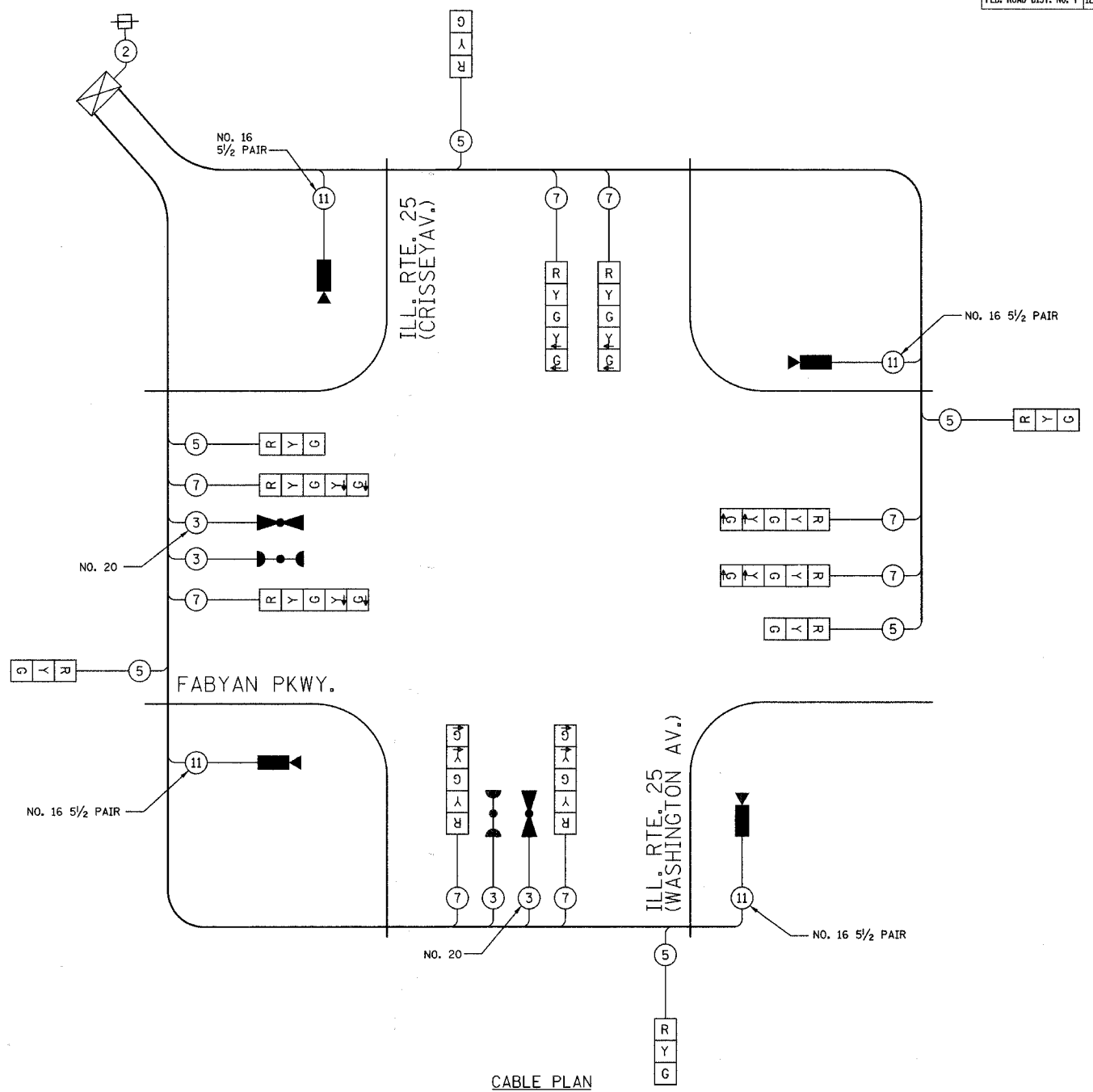
PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	↔	↕

TEMPORARY CABLE DIAGRAM LEGEND

- TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300 mm)
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SERVICE INSTALLATION
- INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
- EMERGENCY VEHICLE LIGHT DETECTOR
- CONFIRMATION BEACON
- PEDESTRIAN PUSHBUTTON DETECTOR
- VEHICLE DETECTOR, INDUCTION LOOP
- 12" (300mm) PEDESTRIAN SIGNAL SECTION
- VIDEO VEHICLE DETECTOR



TYPE	NO. LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	12		17	0.50	102
(YELLOW)	12		25	0.25	75
(GREEN)	12		15	0.25	45
ARROW	16		12	0.10	20
CONTROLLER	1		100	1.00	100
VIDEO SYSTEMS	1		150	1.00	150
FLASHER				0.50	
TOTAL =					492

ENERGY COSTS TO: CITY OF GENEVA
22. S. FIRST STREET
GENEVA, IL 60134

ENERGY SUPPLY: CONTACT: JENNIFER HILKEMANN
PHONE: (630)232-1503
COMPANY: CITY OF GENEVA

REVISIONS		NAME	DATE
NO.	DESCRIPTION		

KANE COUNTY DIVISION OF TRANSPORTATION

TEMPORARY CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE

FABYAN PARKWAY & ILL. RTE. 25 (WASHINGTON AV./CRISSEY AV.)

SCALE: NOT TO SCALE

DATE: 12/14/2007

DRAWN BY: CEC
DESIGNED BY: BRD/JSH
CHECKED BY: JJE

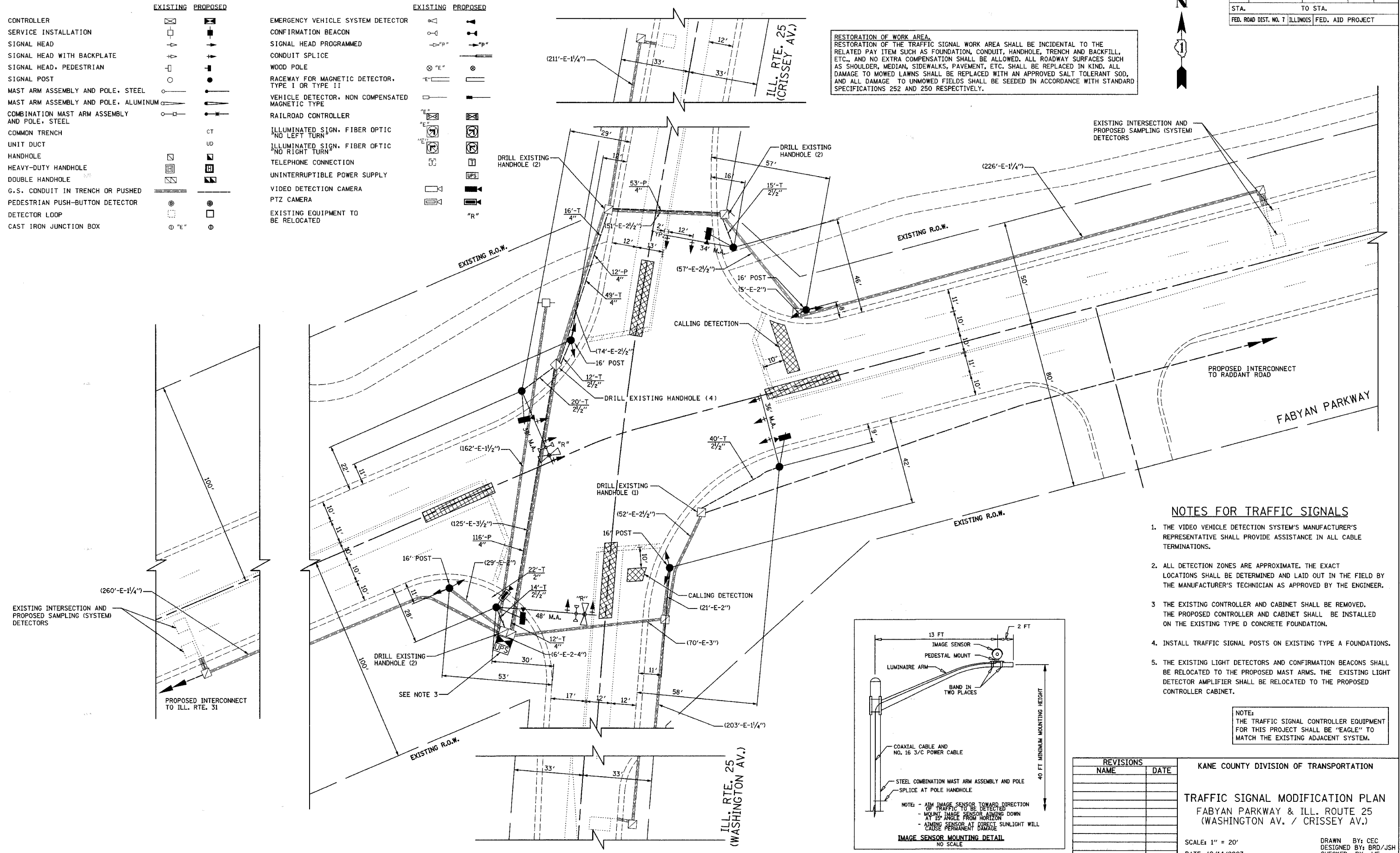
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	12
STA.		TO STA.		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				



TRAFFIC SIGNAL LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED
CONTROLLER		EMERGENCY VEHICLE SYSTEM DETECTOR	
SERVICE INSTALLATION		CONFIRMATION BEACON	
SIGNAL HEAD		SIGNAL HEAD 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 CONTROLLER	
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL		ILLUMINATED SIGN, FIBER OPTIC NO LEFT TURN	
COMMON TRENCH		ILLUMINATED SIGN, FIBER OPTIC NO RIGHT TURN	
UNIT DUCT		TELEPHONE CONNECTION	
HANDHOLE		UNINTERRUPTIBLE POWER SUPPLY	
HEAVY-DUTY HANDHOLE		VIDEO DETECTION CAMERA	
DOUBLE HANDHOLE		PTZ CAMERA	
G.S. CONDUIT IN TRENCH OR PUSHED		EXISTING EQUIPMENT TO BE RELOCATED	
PEDESTRIAN PUSH-BUTTON DETECTOR			
DETECTOR LOOP			
CAST IRON JUNCTION BOX			

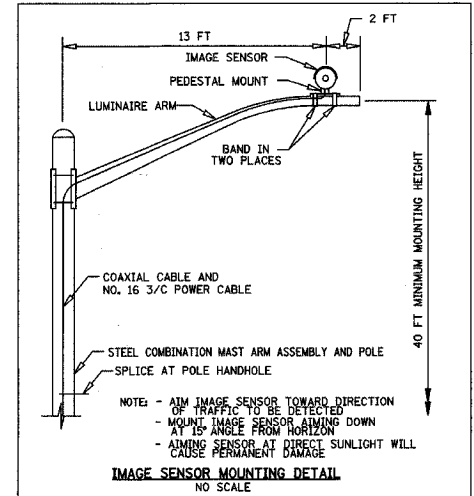
RESTORATION OF WORK AREA.
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



NOTES FOR TRAFFIC SIGNALS

1. THE VIDEO VEHICLE DETECTION SYSTEM'S MANUFACTURER'S REPRESENTATIVE SHALL PROVIDE ASSISTANCE IN ALL CABLE TERMINATIONS.
2. ALL DETECTION ZONES ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED AND LAID OUT IN THE FIELD BY THE MANUFACTURER'S TECHNICIAN AS APPROVED BY THE ENGINEER.
3. THE EXISTING CONTROLLER AND CABINET SHALL BE REMOVED. THE PROPOSED CONTROLLER AND CABINET SHALL BE INSTALLED ON THE EXISTING TYPE D CONCRETE FOUNDATION.
4. INSTALL TRAFFIC SIGNAL POSTS ON EXISTING TYPE A FOUNDATIONS.
5. THE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACONS SHALL BE RELOCATED TO THE PROPOSED MAST ARMS. THE EXISTING LIGHT DETECTOR AMPLIFIER SHALL BE RELOCATED TO THE PROPOSED CONTROLLER CABINET.

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.



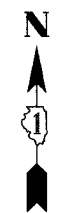
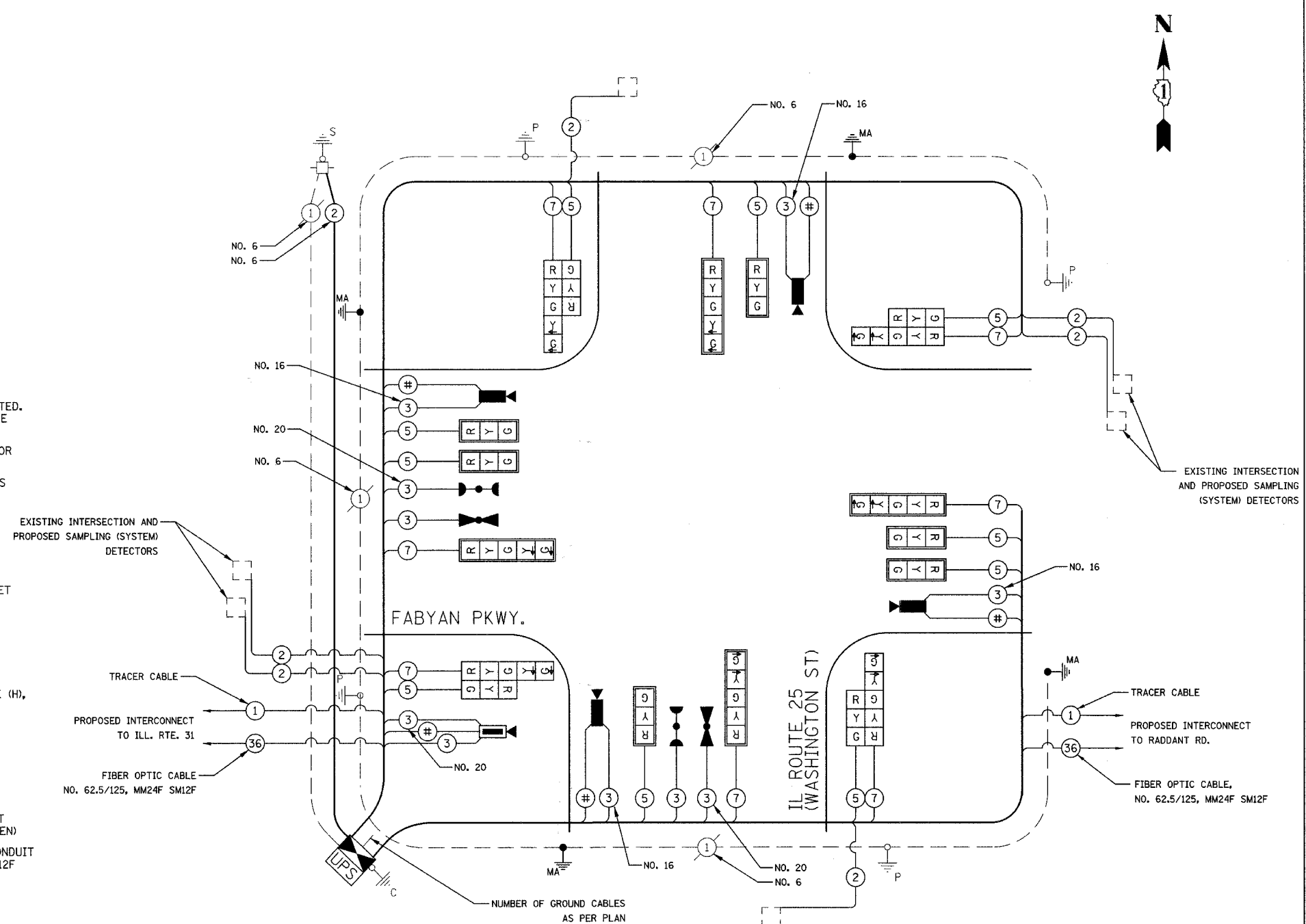
REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION
TRAFFIC SIGNAL MODIFICATION PLAN
FABYAN PARKWAY & ILL. ROUTE 25
(WASHINGTON AV. / CRISSEY AV.)
SCALE: 1" = 20'
DATE: 12/14/2007
DRAWN BY: CEC
DESIGNED BY: BRD/JSH
CHECKED BY: JJE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	13
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

CABLE PLAN LEGEND

- | | | |
|--|--|---|
| | | |
| | | 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 |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | | MICROWAVE VEHICLE SENSOR |
| | | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD |
| | | 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 |
| | | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F |
| | | COAXIAL CABLE |
| | | IMAGE SENSOR |
| | | STREET LIGHT LUMINAIRE |
| | | DOME PAN/TILT/ZOOM (PTZ) CAMERA |
| | | UNINTERRUPTIBLE POWER SUPPLY |
| | | "R" RELOCATED SIGNAL EQUIPMENT |



CABLE PLAN NOT TO SCALE

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

NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE	% OPERATION		
SIGNAL (RED)	16	INCAND. 17	0.50	136	
(YELLOW)	16	LED 25	0.25	100	
(GREEN)	16	LED 15	0.25	60	
ARROW	16	LED 12	0.10	20	
PED. SIGNAL		LED 25	1.00		
CONTROLLER	1	100	1.00	100	
VIDEO SYSTEMS	1	150	1.00	150	
			0.50		
TOTAL =				566	

ENERGY COSTS TO: CITY OF GENEVA
22. S. FIRST STREET
GENEVA, IL 60134

ENERGY SUPPLY: CONTACT: JENNIFER HILKEMANN
PHONE: (630)232-1503
COMPANY: CITY OF GENEVA

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 (2.0)
D- CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' H-2= (6m+L-0.6m)=
E- 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)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION

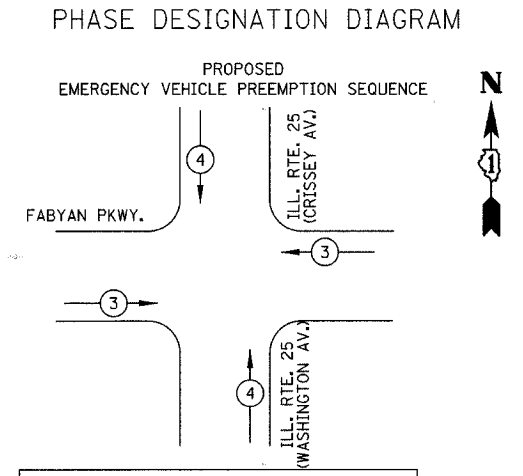
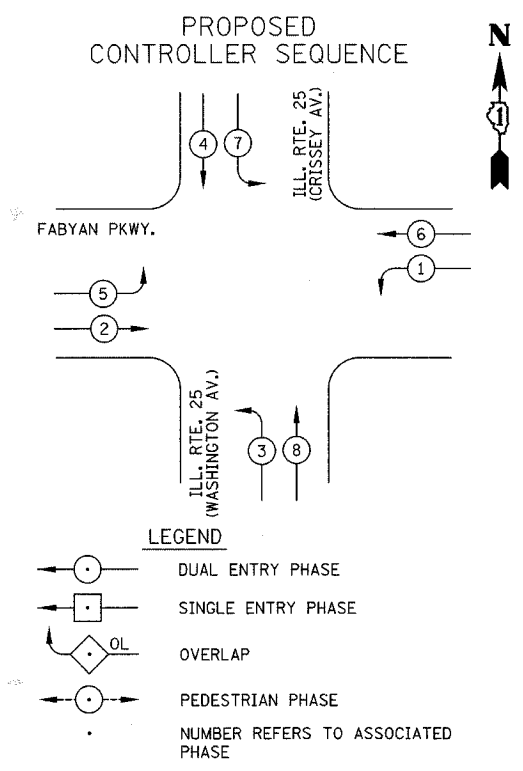
CABLE PLAN

FABYAN PARKWAY & ILL. RTE. 25 (WASHINGTON AV./CRISSEY AV.)

SCALE: NOT TO SCALE
DATE: 12/14/2007

DRAWN BY: CEC
DESIGNED BY: BRD/JSH
CHECKED BY: JJE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	14
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

SCHEDULE OF QUANTITIES		
PAY ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	65
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	101
CONDUIT IN TRENCH, 4" DIA., GALVANIZED STEEL	FOOT	77
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	90
CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	181
REMOVE EXISTING JUNCTION BOX	EACH	4
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	223
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	425
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2132
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1742
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2602
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	174
TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT.	EACH	4
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
DRILL EXISTING HANDHOLE	EACH	11
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	6
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	6
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	6509
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	4
REMOVE EXISTING CONCRETE FOUNDATION	EACH	5
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	436
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	342
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 16 3/C	FOOT	958
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	1041
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 3C	FOOT	83
VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMINGS	EACH	1
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

REVISIONS		KANE COUNTY DIVISION OF TRANSPORTATION PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES FABYAN PARKWAY & ILL. RTE 25 (WASHINGTON AV./CRISSEY AV.)
NAME	DATE	

SCALE: NOT TO SCALE
DATE: 12/14/2007

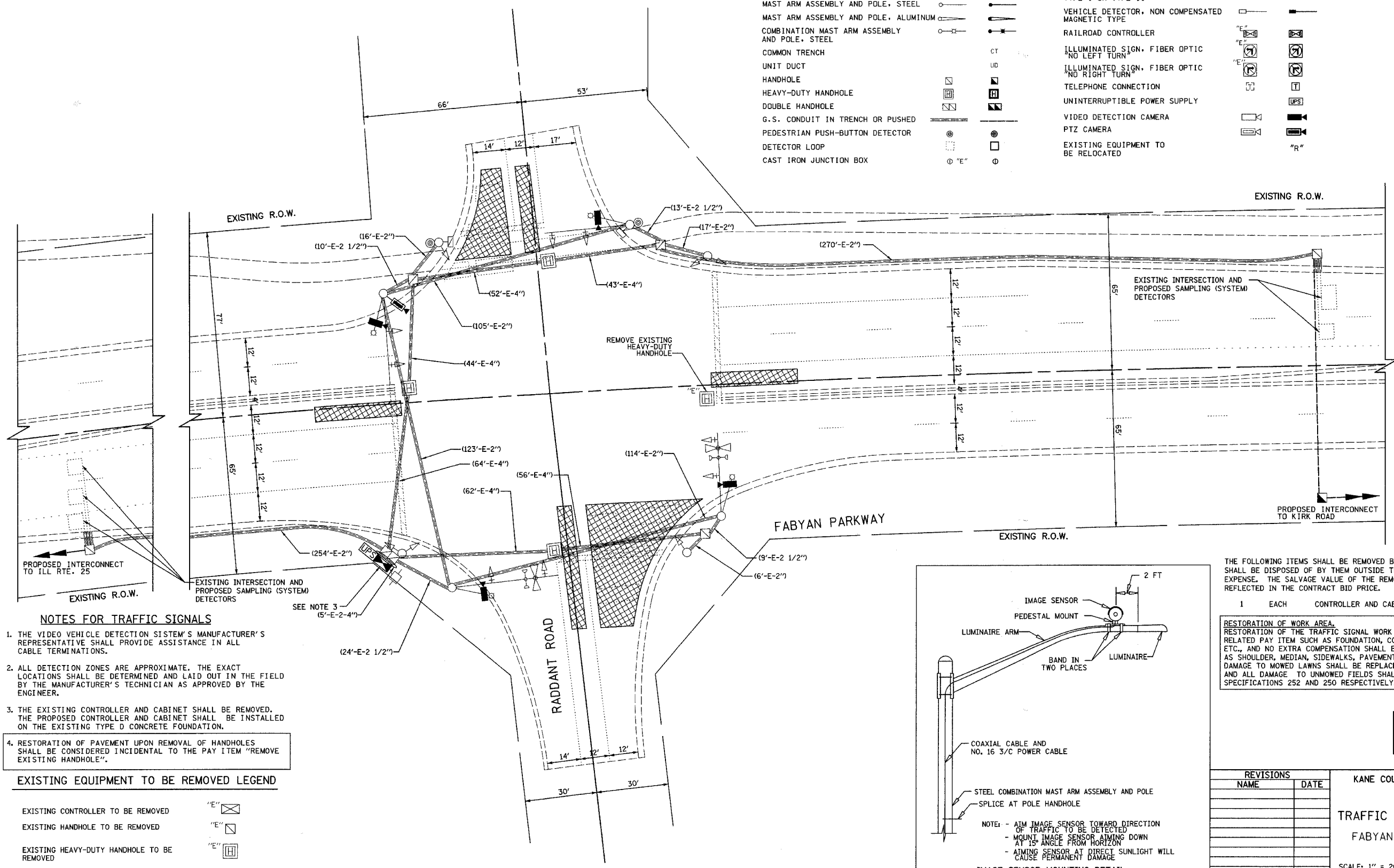
DRAWN BY: CEC
DESIGNED BY: BRD/JSH
CHECKED BY: JJE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	15
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

TRAFFIC SIGNAL LEGEND

	EXISTING	PROPOSED		EXISTING	PROPOSED
CONTROLLER			EMERGENCY VEHICLE SYSTEM DETECTOR		
SERVICE INSTALLATION			CONFIRMATION BEACON		
SIGNAL HEAD			SIGNAL HEAD 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 CONTROLLER		
COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL			ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"		
COMMON TRENCH			ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"		
UNIT DUCT			TELEPHONE CONNECTION		
HANDHOLE			UNINTERRUPTIBLE POWER SUPPLY		
HEAVY-DUTY HANDHOLE			VIDEO DETECTION CAMERA		
DOUBLE HANDHOLE			PTZ CAMERA		
G.S. CONDUIT IN TRENCH OR PUSHED			EXISTING EQUIPMENT TO BE RELOCATED		
PEDESTRIAN PUSH-BUTTON DETECTOR					
DETECTOR LOOP					
CAST IRON JUNCTION BOX					

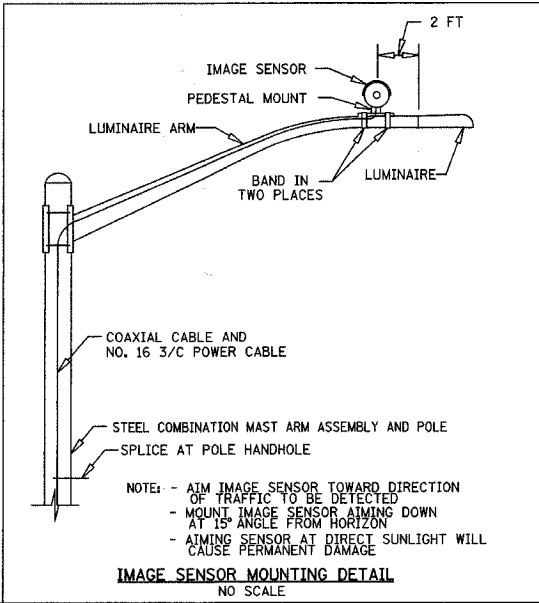
KANE COUNTY SHERIFF'S OFFICE



- NOTES FOR TRAFFIC SIGNALS**
1. THE VIDEO VEHICLE DETECTION SYSTEM'S MANUFACTURER'S REPRESENTATIVE SHALL PROVIDE ASSISTANCE IN ALL CABLE TERMINATIONS.
 2. ALL DETECTION ZONES ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED AND LAID OUT IN THE FIELD BY THE MANUFACTURER'S TECHNICIAN AS APPROVED BY THE ENGINEER.
 3. THE EXISTING CONTROLLER AND CABINET SHALL BE REMOVED. THE PROPOSED CONTROLLER AND CABINET SHALL BE INSTALLED ON THE EXISTING TYPE D CONCRETE FOUNDATION.
 4. RESTORATION OF PAVEMENT UPON REMOVAL OF HANDHOLES SHALL BE CONSIDERED INCIDENTAL TO THE PAY ITEM "REMOVE EXISTING HANDHOLE".

EXISTING EQUIPMENT TO BE REMOVED LEGEND

EXISTING CONTROLLER TO BE REMOVED	
EXISTING HANDHOLE TO BE REMOVED	
EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED	



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 CONTROLLER AND CABINET, COMPLETE

RESTORATION OF WORK AREA.
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE:
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

REVISIONS		NAME	DATE
NO.	DESCRIPTION		

KANE COUNTY DIVISION OF TRANSPORTATION

TRAFFIC SIGNAL MODIFICATION PLAN

FABYAN PARKWAY & RADDANT ROAD

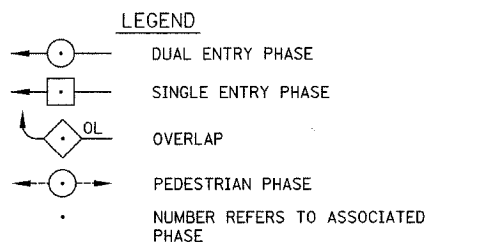
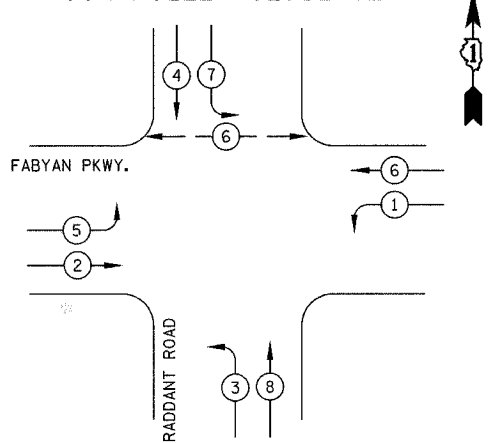
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DATE: 12/14/2007

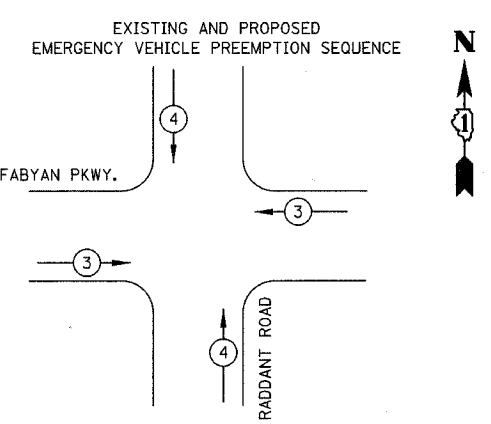
DRAWN BY: CEC
 DESIGNED BY: BRD/JSH
 CHECKED BY: JJE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	16
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

EXISTING AND PROPOSED CONTROLLER SEQUENCE



PHASE DESIGNATION DIAGRAM

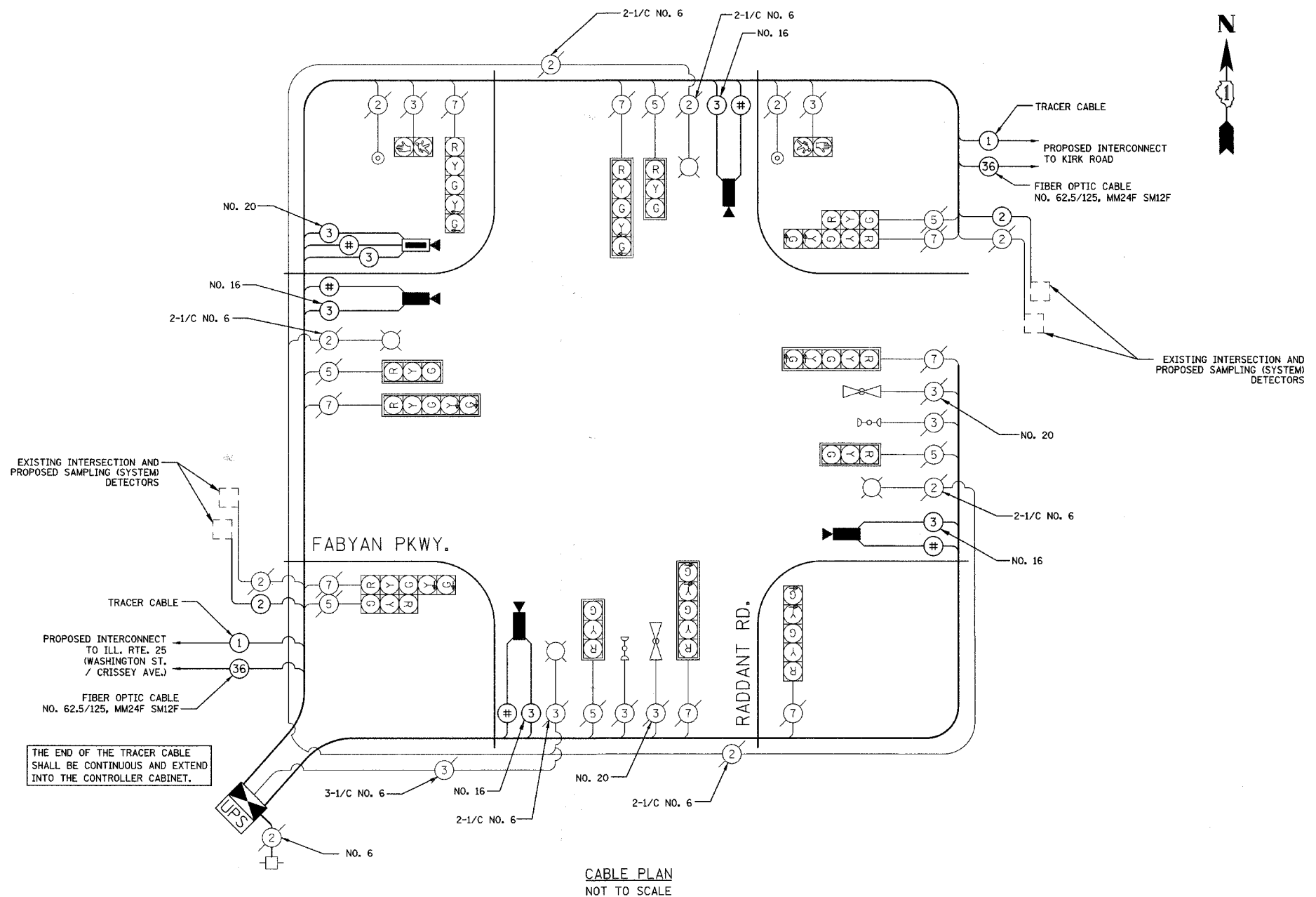


PROPOSED EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←	↑

CABLE PLAN LEGEND

- | | | |
|----------|----------|---|
| EXISTING | PROPOSED | |
| | | 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 |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | MICROWAVE VEHICLE SENSOR |
| | | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD |
| | | 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 |
| | | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F |
| | | COAXIAL CABLE |
| | | IMAGE SENSOR |
| | | STREET LIGHT LUMINAIRE |
| | | PTZ CAMERA |
| | | UNINTERRUPTIBLE POWER SUPPLY |
| | | "R" RELOCATED SIGNAL EQUIPMENT |



CABLE PLAN NOT TO SCALE

SCHEDULE OF QUANTITIES

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	199
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	811
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM,	EACH	1
PHASING UNIT		
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1404
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 16 3/C	FOOT	861
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	1060
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 3C	FOOT	199
VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1

NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

REVISIONS

NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION
 CABLE PLAN, PHASE DESIGNATION DIAGRAM, EMERGENCY VEHICLE PREEMPTION SEQUENCE AND SCHEDULE OF QUANTITIES
 FABYAN PARKWAY & RADDANT ROAD
 SCALE: NOT TO SCALE
 DATE: 12/14/2007
 DRAWN BY: GEC
 DESIGNED BY: BRD/JSH
 CHECKED BY: JJE

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

TYPE	NO. LAMPS	WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	17	0.50	119
(YELLOW)	14	25	0.25	88
(GREEN)	14	15	0.25	53
ARROW	16	12	0.10	20
PED. SIGNAL	2	25	1.00	50
CONTROLLER	1	100	1.00	100
VIDEO SYSTEMS	1	150	1.00	150
LUMINAIRE	4	310	0.50	620
FLASHER			0.50	
TOTAL =				1200

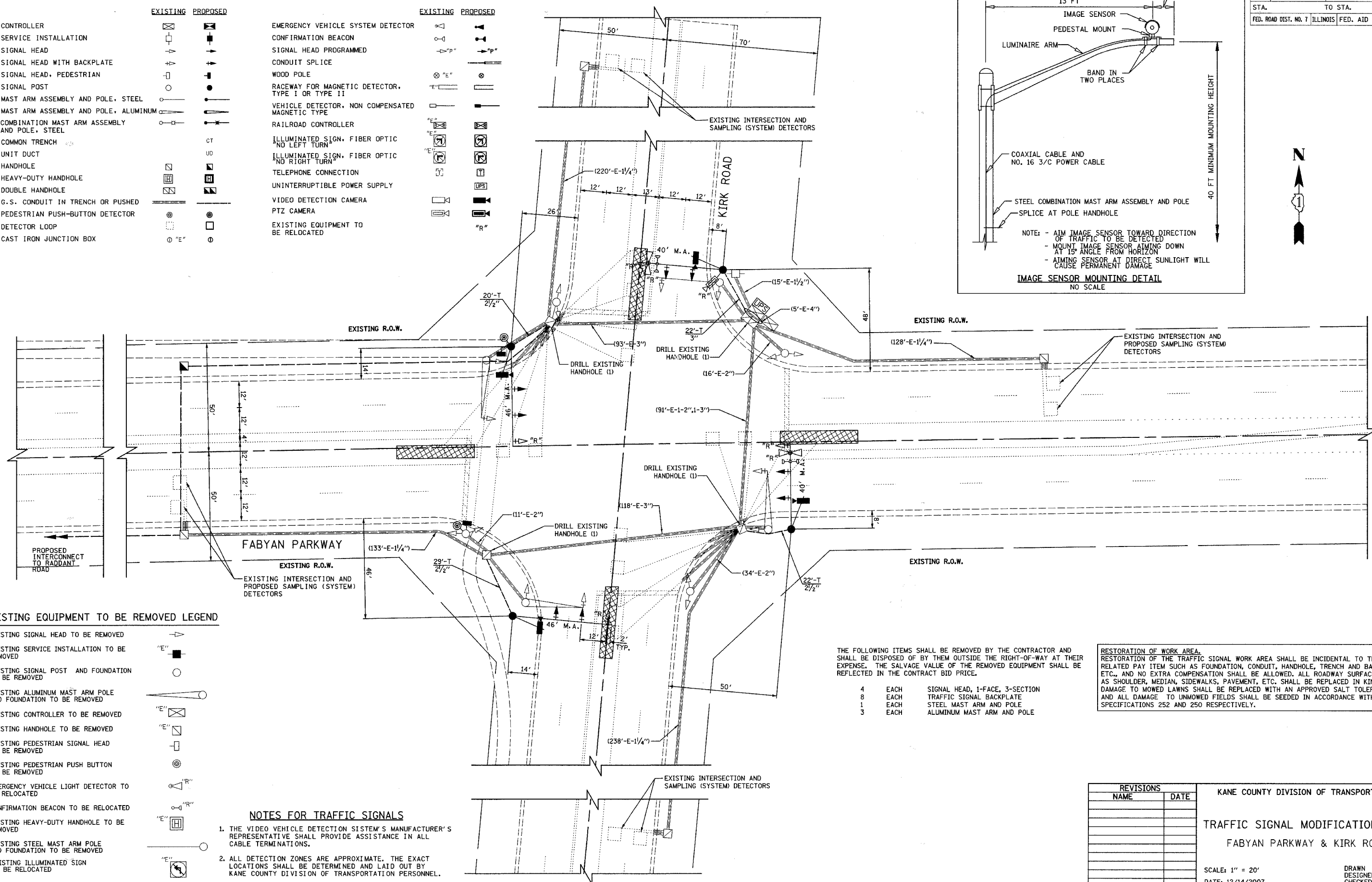
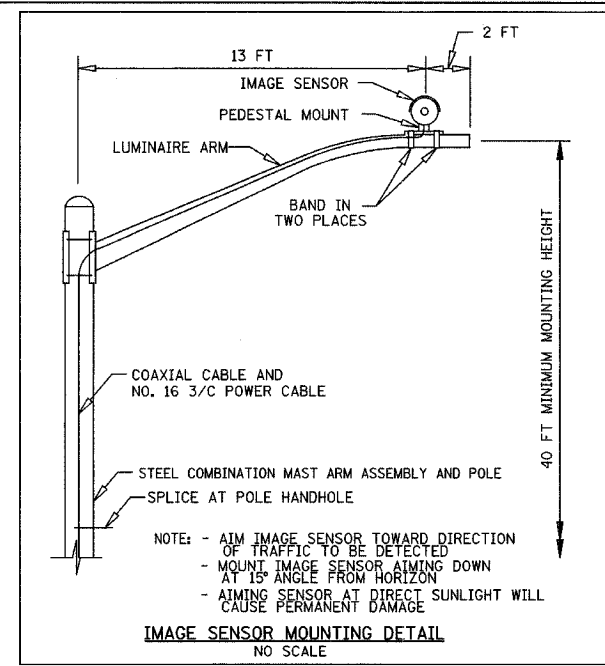
ENERGY COSTS TO: CITY OF BATAVIA
 100 N. ISLAND AVENUE
 BATAVIA, IL 60510
 CONTACT: STEVE LUSTED
 PHONE: (630) 879-1424
 COMPANY: CITY OF BATAVIA

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 (2.0)
D- CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'±L-2'±6m±L-0.6m±
E- 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)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	17
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

TRAFFIC SIGNAL LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED



EXISTING EQUIPMENT TO BE REMOVED LEGEND

NOTES FOR TRAFFIC SIGNALS

1. THE VIDEO VEHICLE DETECTION SYSTEM'S MANUFACTURER'S REPRESENTATIVE SHALL PROVIDE ASSISTANCE IN ALL CABLE TERMINATIONS.
2. ALL DETECTION ZONES ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED AND LAID OUT BY KANE COUNTY DIVISION OF TRANSPORTATION PERSONNEL.

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	SIGNAL HEAD, 1-FACE, 3-SECTION
8	EACH	TRAFFIC SIGNAL BACKPLATE
1	EACH	STEEL MAST ARM AND POLE
3	EACH	ALUMINUM MAST ARM AND POLE

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION
TRAFFIC SIGNAL MODIFICATION PLAN
 FABYAN PARKWAY & KIRK ROAD

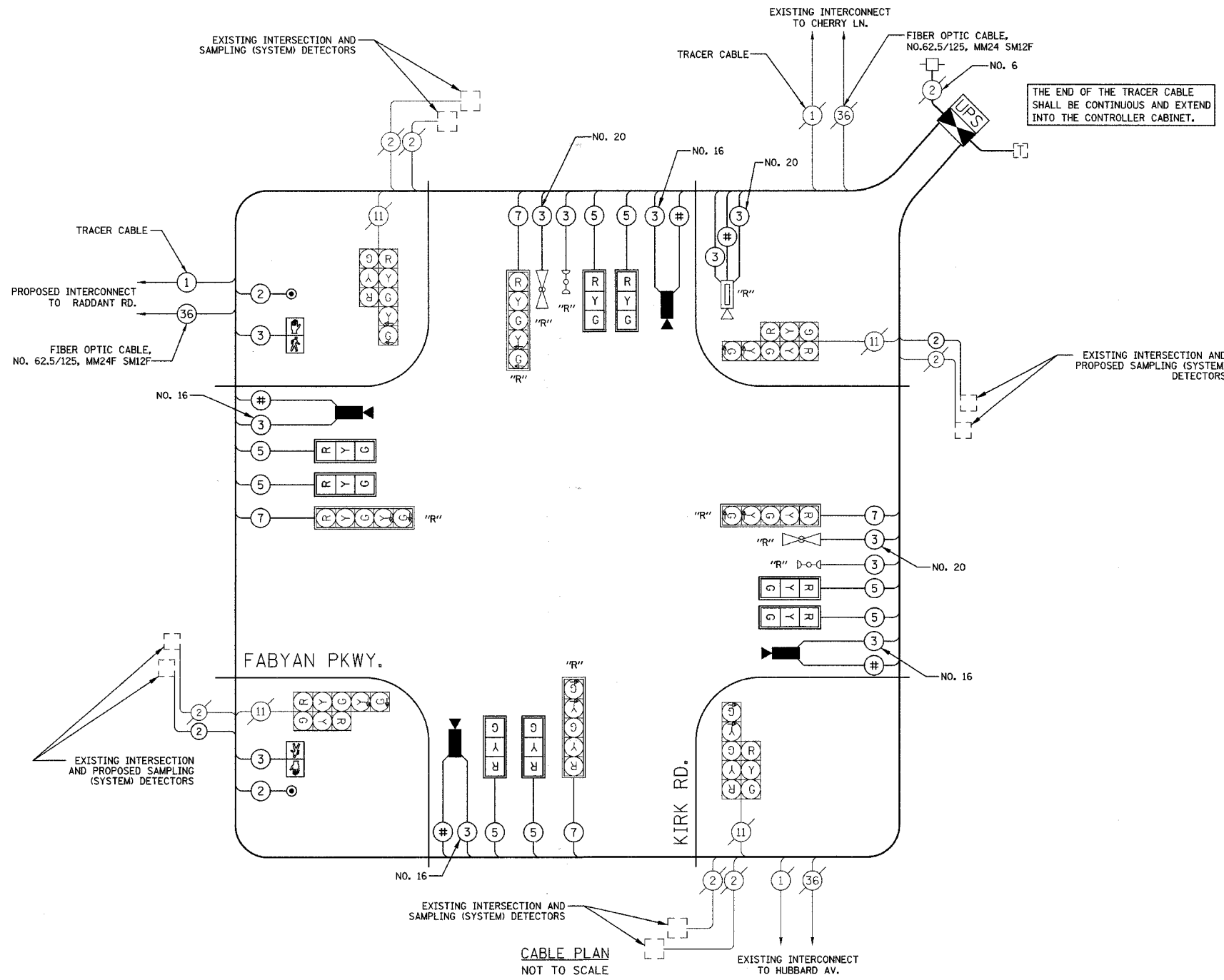
SCALE: 1" = 20'
 DATE: 12/14/2007

DRAWN BY: CEC
 DESIGNED BY: BRD/JSH
 CHECKED BY: JJE

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	18
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

CABLE PLAN LEGEND

- | | | |
|----------|----------|---|
| EXISTING | PROPOSED | |
| | | 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 |
| | | MAGNETIC DETECTOR |
| | | EMERGENCY VEHICLE LIGHT DETECTOR |
| | | CONFIRMATION BEACON |
| | | PUSHBUTTON DETECTOR |
| | | VEHICLE DETECTOR, INDUCTION LOOP |
| | | DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
| | | MICROWAVE VEHICLE SENSOR |
| | | SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD |
| | | 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 |
| | | GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN) |
| | | FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F |
| | | COAXIAL CABLE |
| | | IMAGE SENSOR |
| | | STREET LIGHT LUMINAIRE |
| | | DOMED PAN/TILT/ZOOM (PTZ) CAMERA |
| | | UNINTERRUPTIBLE POWER SUPPLY |
| | | "R" RELOCATED SIGNAL EQUIPMENT |



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

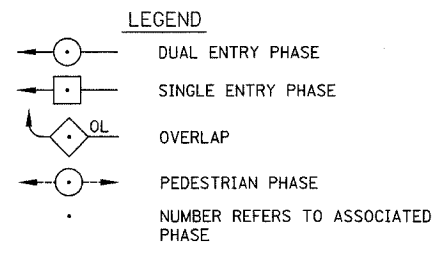
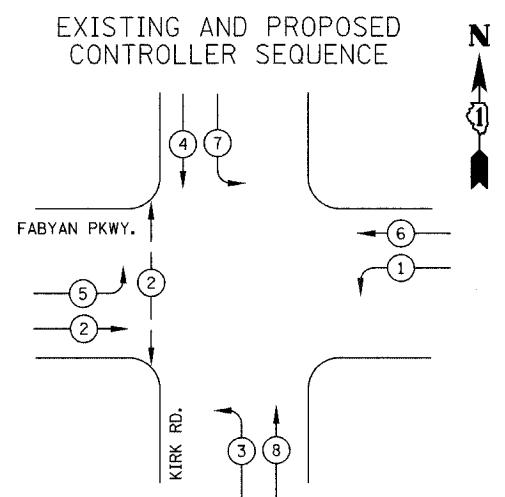
CABLE PLAN NOT TO SCALE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	16		17	0.50	136
(YELLOW)	16		25	0.25	100
(GREEN)	16		15	0.25	60
ARROW	16		12	0.10	20
PED. SIGNAL	2		25	1.00	50
CONTROLLER	1		100	1.00	100
VIDEO SYSTEMS	1		150	1.00	150
				0.50	
FLASHER					
				TOTAL =	616

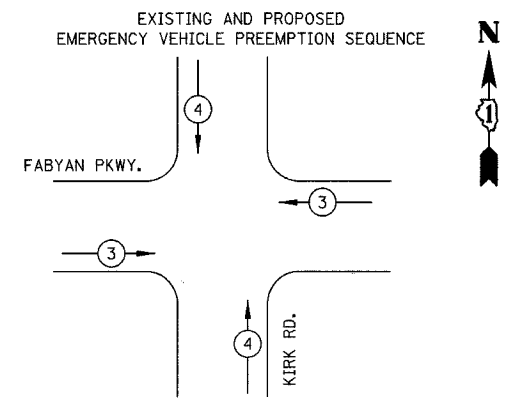
FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (2.0)
D- CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'HL-2=
E- M. ARM POLE		SIGNAL POST	2 (1.0)	6m+L-0.6m)=	
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	15 (4.6)	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)

REVISIONS		KANE COUNTY DIVISION OF TRANSPORTATION
NAME	DATE	
		<p align="center">CABLE PLAN</p> <p align="center">FABYAN PARKWAY & KIRK ROAD</p> <p>SCALE: NOT TO SCALE DATE: 12/14/2007</p> <p>DRAWN BY: CEC DESIGNED BY: BRD/JSH CHECKED BY: JJE</p>

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	19
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		



PHASE DESIGNATION DIAGRAM



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT		

SCHEDULE OF QUANTITIES		
PAY ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	71
CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	22
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	93
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	417
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	828
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1592
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	868
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1928
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	2
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	2
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	60
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12
INDUCTIVE LOOP DETECTOR	EACH	8
PEDESTRIAN PUSH-BUTTON	EACH	2
RELOCATE EXISTING SIGNAL HEAD	EACH	4
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3246
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	310
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 16 3/C	FOOT	835
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	925
ELECTRIC CABLE IN CONDUIT, VIDEO, NO. 20 3C	FOOT	90
VIDEO DETECTION SYSTEM COMPLETE INTERSECTION	EACH	1
RELOCATE EXISTING PTZ CAMERA	EACH	1

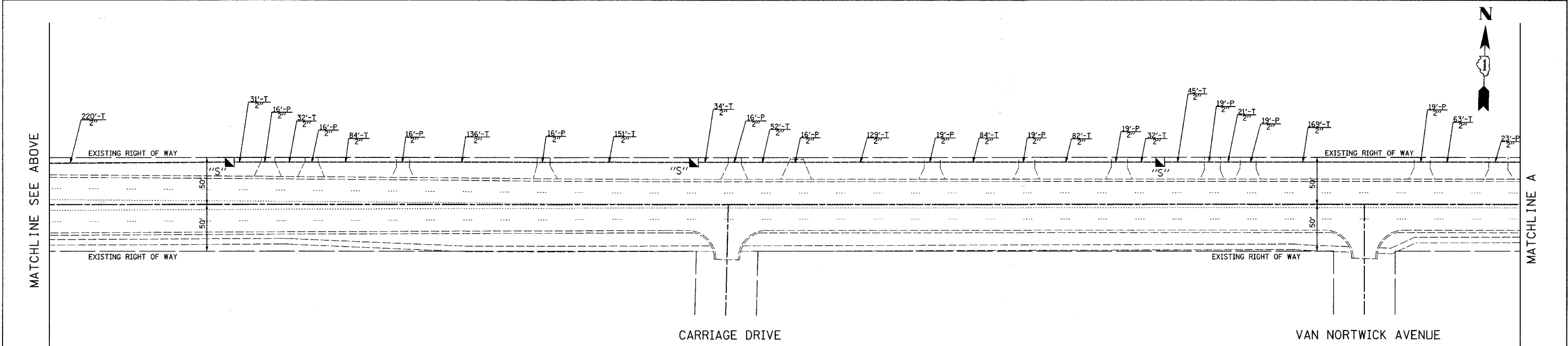
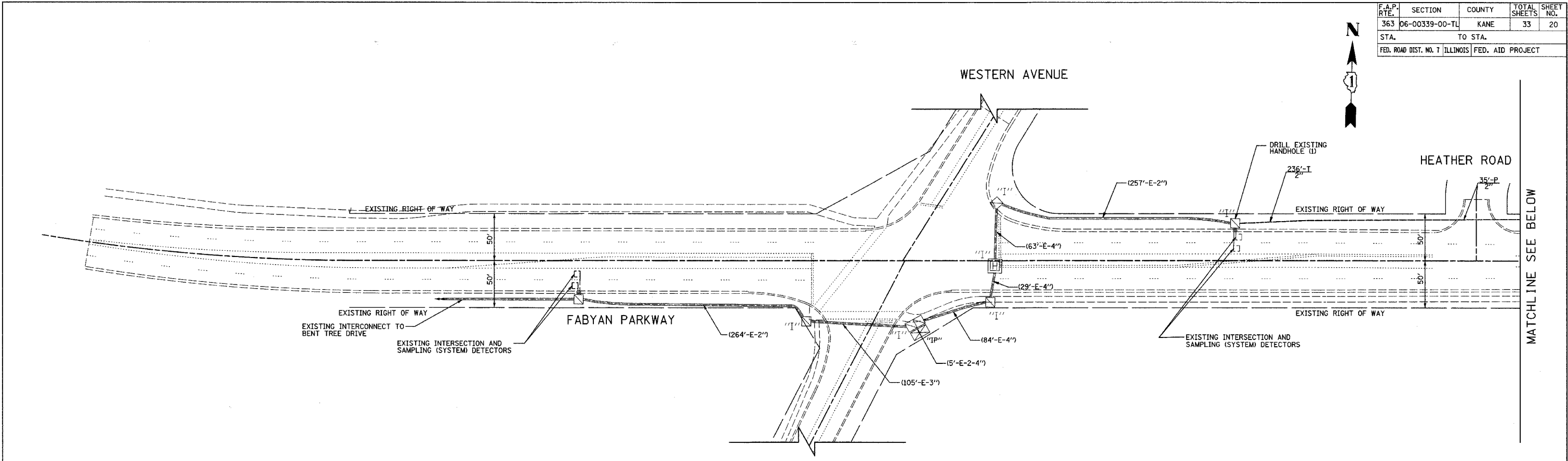
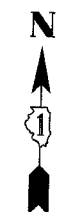
REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION
 PHASE DESIGNATION DIAGRAM,
 EMERGENCY VEHICLE PREEMPTION SEQUENCE
 AND SCHEDULE OF QUANTITIES
 FABYAN PARKWAY & KIRK ROAD

SCALE: NOT TO SCALE
 DATE: 12/14/2007

DRAWN BY: CEC
 DESIGNED BY: BRD/JSH
 CHECKED BY: JJE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	20
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		



INTERCONNECT PLAN LEGEND

	EXISTING	PROPOSED
CONTROLLER		
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP SYSTEM		
INTERSECTION		
UNIT DUCT		
COMMON TRENCH		

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA.
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION

INTERCONNECT PLAN

FABYAN PARKWAY
WESTERN AVENUE TO KRIK ROAD
SHEET 1 OF 5

SCALE: 1" = 50'
DATE: 12/14/2007

DRAWN BY: GEC
DESIGNED BY: BRD/JSH
CHECKED BY: JJE

MATCHLINE SEE ABOVE

MATCHLINE A

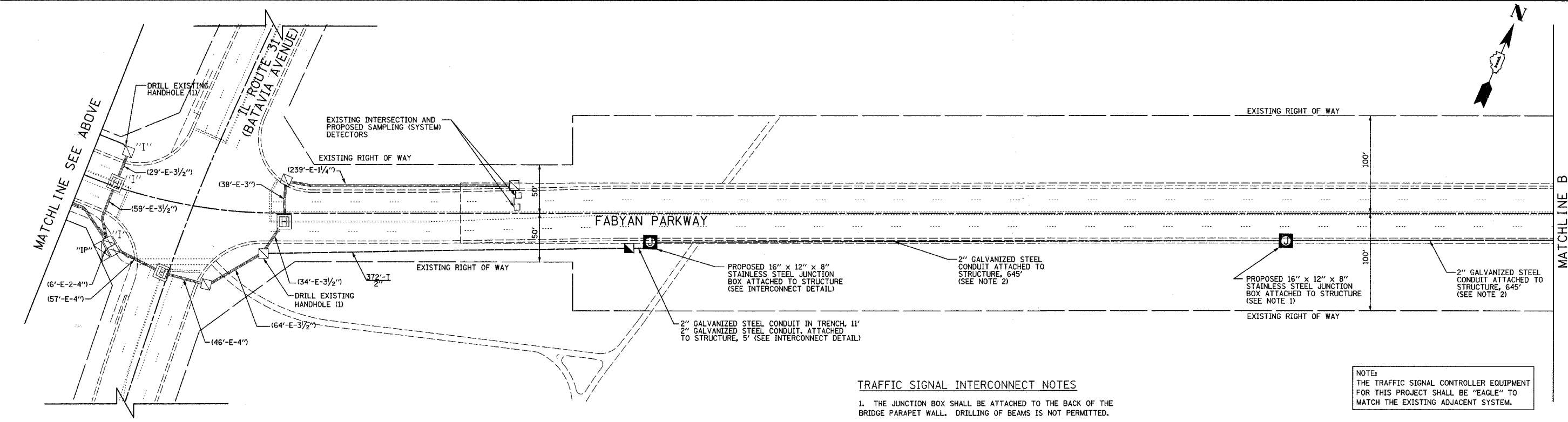
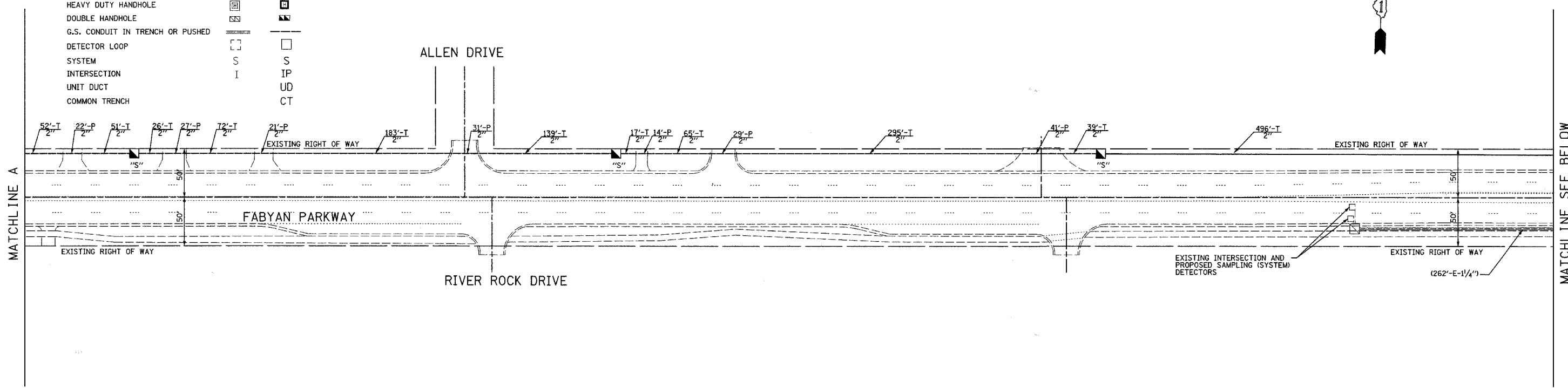
MATCHLINE SEE BELOW

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	21
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		



INTERCONNECT PLAN LEGEND

	EXISTING	PROPOSED
CONTROLLER HANDHOLE	☒	☒
HEAVY DUTY HANDHOLE	☒	☒
DOUBLE HANDHOLE	☒	☒
G.S. CONDUIT IN TRENCH OR PUSHED	—	—
DETECTOR LOOP SYSTEM	S	S
INTERSECTION UNIT DUCT	I	IP
COMMON TRENCH	CT	CT



TRAFFIC SIGNAL INTERCONNECT NOTES

1. THE JUNCTION BOX SHALL BE ATTACHED TO THE BACK OF THE BRIDGE PARAPET WALL. DRILLING OF BEAMS IS NOT PERMITTED.
2. THE CONDUIT SHALL BE ATTACHED TO THE BRIDGE PARAPET WALL. DRILLING OF BEAMS IS NOT PERMITTED.

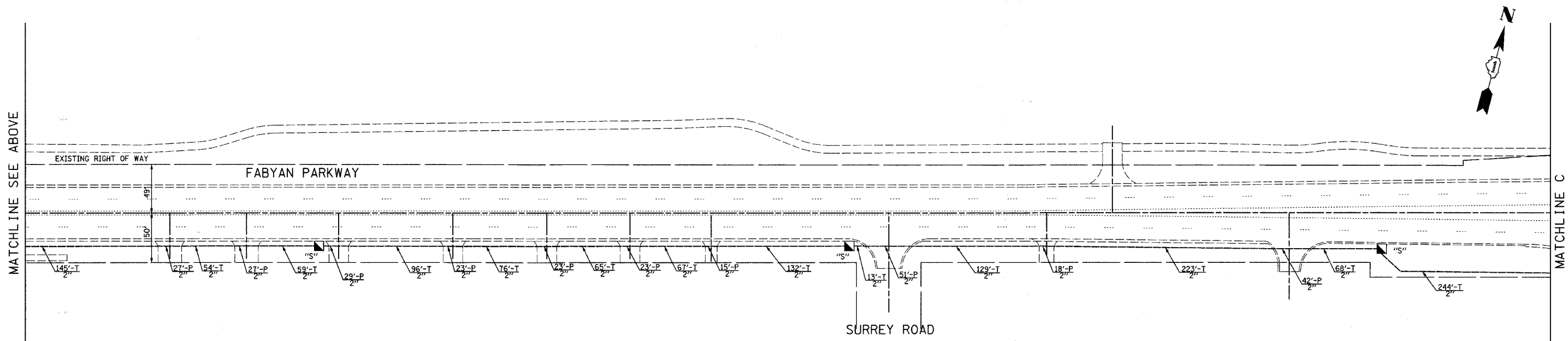
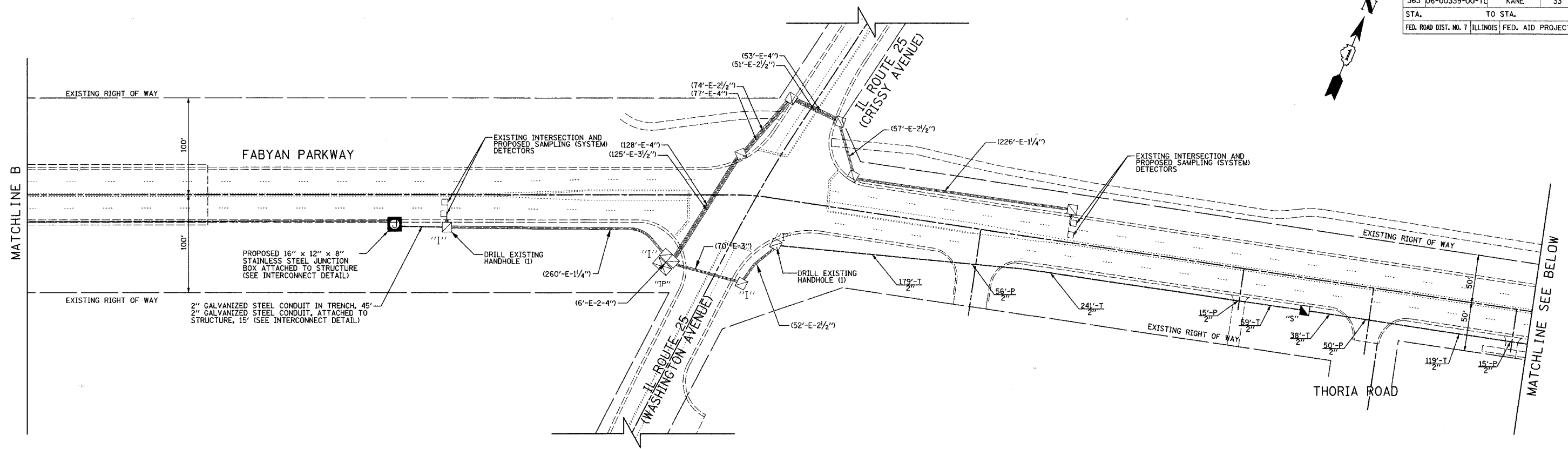
RESTORATION OF WORK AREA.
 RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE:
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION
INTERCONNECT PLAN
 FABYAN PARKWAY
 WESTERN AVENUE TO KIRK ROAD
 SHEET 2 OF 5
 SCALE: 1" = 50'
 DATE: 12/14/2007
 DRAWN BY: CEC
 DESIGNED BY: BRD/JSH
 CHECKED BY: JJE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	22
STA. TO STA.		FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT		



INTERCONNECT PLAN LEGEND

	EXISTING	PROPOSED
CONTROLLER		
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP		
SYSTEM	S	S
INTERSECTION	I	IP
UNIT DUCT		UD
COMMON TRENCH		CT

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA.
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

REVISIONS	
NAME	DATE

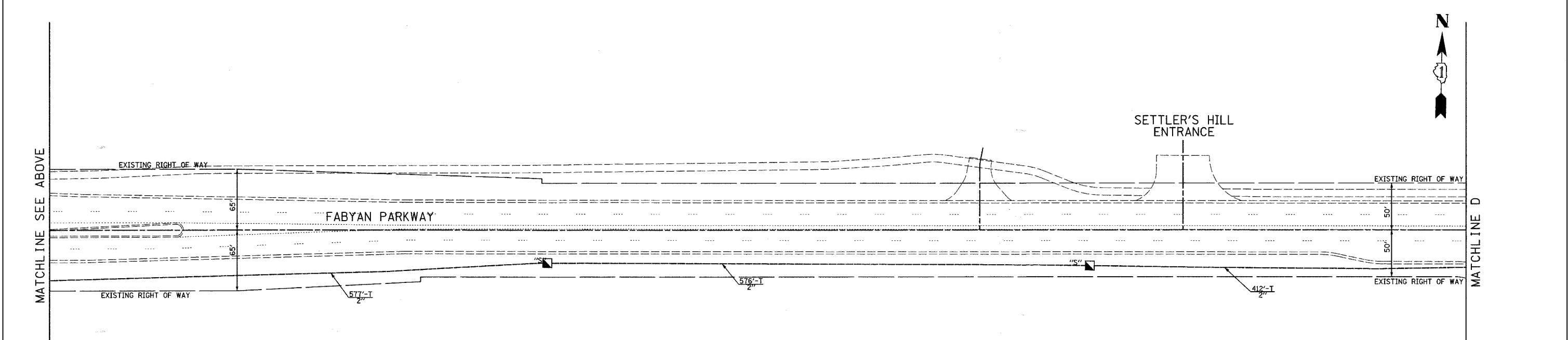
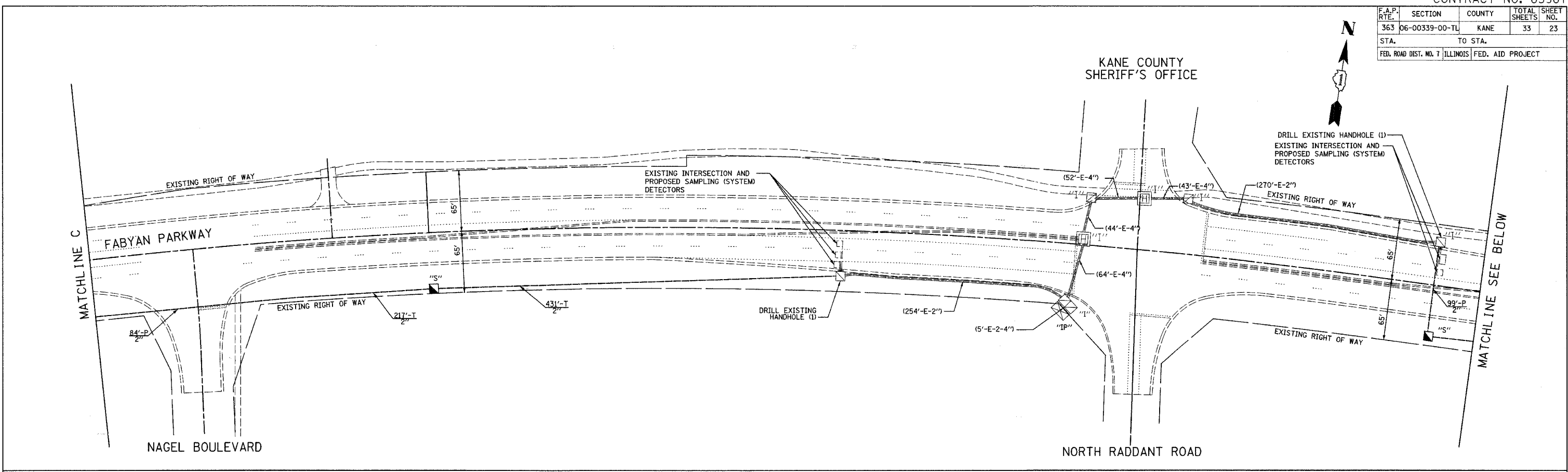
KANE COUNTY DIVISION OF TRANSPORTATION

INTERCONNECT PLAN
FABYAN PARKWAY
WESTERN AVENUE TO KIRK ROAD
SHEET 3 OF 5

SCALE: 1" = 50'
DATE: 12/14/2007

DRAWN BY: CEC
DESIGNED BY: BRD/JSH
CHECKED BY: JJE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	23
STA.	TO STA.			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



INTERCONNECT PLAN LEGEND

	EXISTING	PROPOSED
CONTROLLER	☒	☒
HANDHOLE	⊠	⊠
HEAVY DUTY HANDHOLE	⊞	⊞
DOUBLE HANDHOLE	⊞	⊞
G.S. CONDUIT IN TRENCH OR PUSHED	—	—
DETECTOR LOOP	□	□
SYSTEM	S	S
INTERSECTION	I	IP
UNIT DUCT		UD
COMMON TRENCH		CT

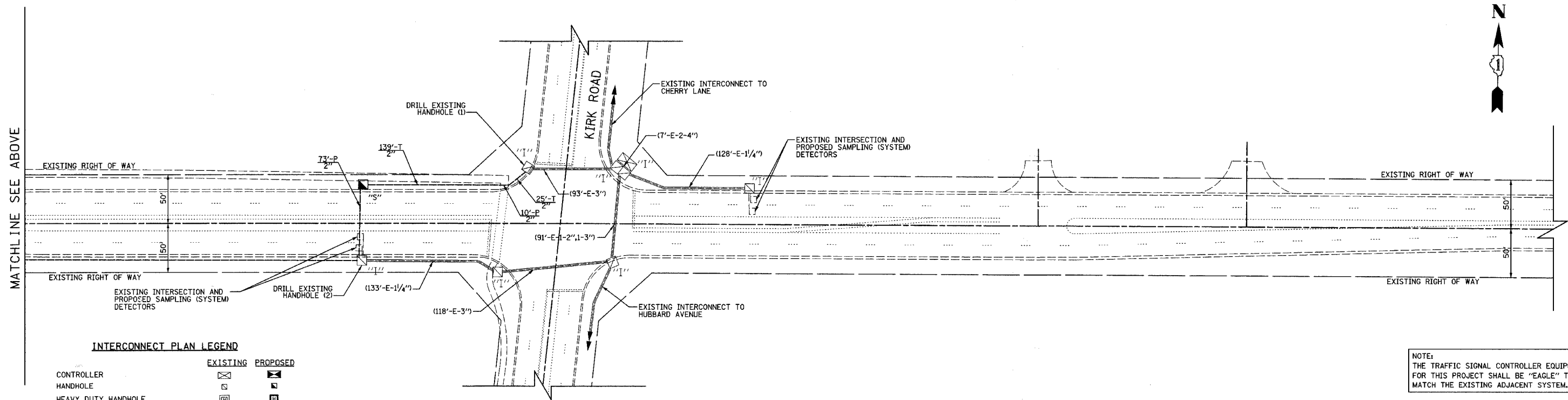
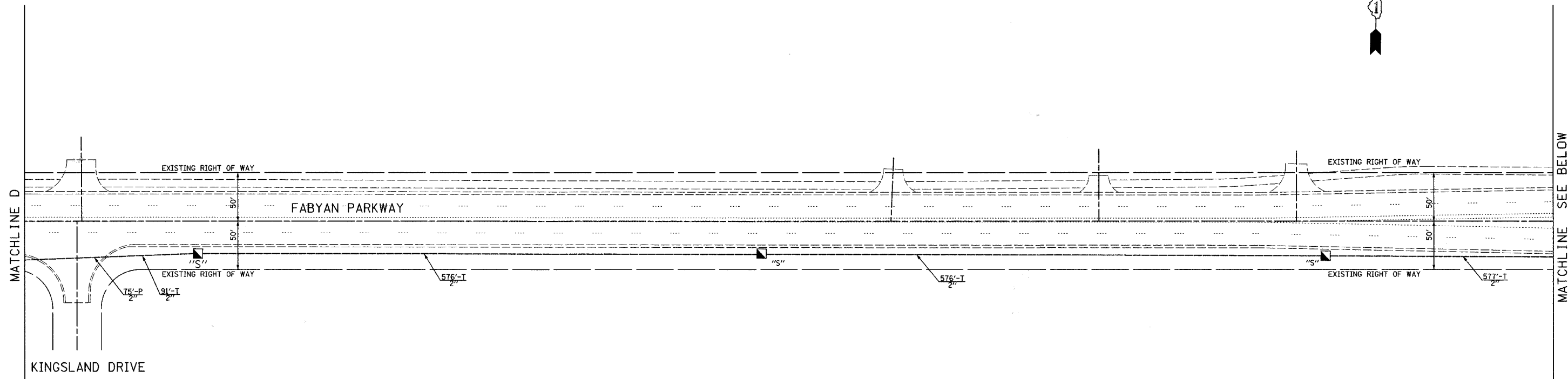
NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

RESTORATION OF WORK AREA.
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION
INTERCONNECT PLAN
FABYAN PARKWAY
WESTERN AVENUE TO KIRK ROAD
SHEET 4 OF 5
SCALE: 1" = 50'
DATE: 12/14/2007
DRAWN BY: CEC
DESIGNED BY: BRD/JSH
CHECKED BY: JJE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	24
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		



INTERCONNECT PLAN LEGEND

	EXISTING	PROPOSED
CONTROLLER		
HANDHOLE		
HEAVY DUTY HANDHOLE		
DOUBLE HANDHOLE		
G.S. CONDUIT IN TRENCH OR PUSHED		
DETECTOR LOOP		
SYSTEM	S	S
INTERSECTION	I	IP
UNIT DUCT		UD
COMMON TRENCH		CT

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

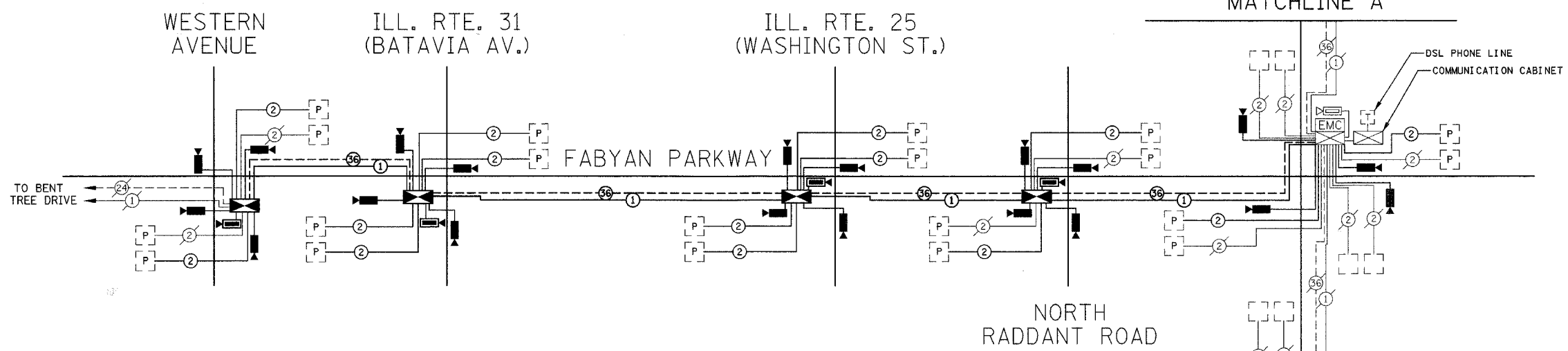
RESTORATION OF WORK AREA.
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDER, MEDIAN, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SALT TOLERANT SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION
INTERCONNECT PLAN
FABYAN PARKWAY
WESTERN AVENUE TO KIRK ROAD
SHEET 5 OF 5
SCALE: 1" = 50'
DATE: 12/14/2007
DRAWN BY: CEC
DESIGNED BY: BRD/JSH
CHECKED BY: JJE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	25
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

MATCHLINE A

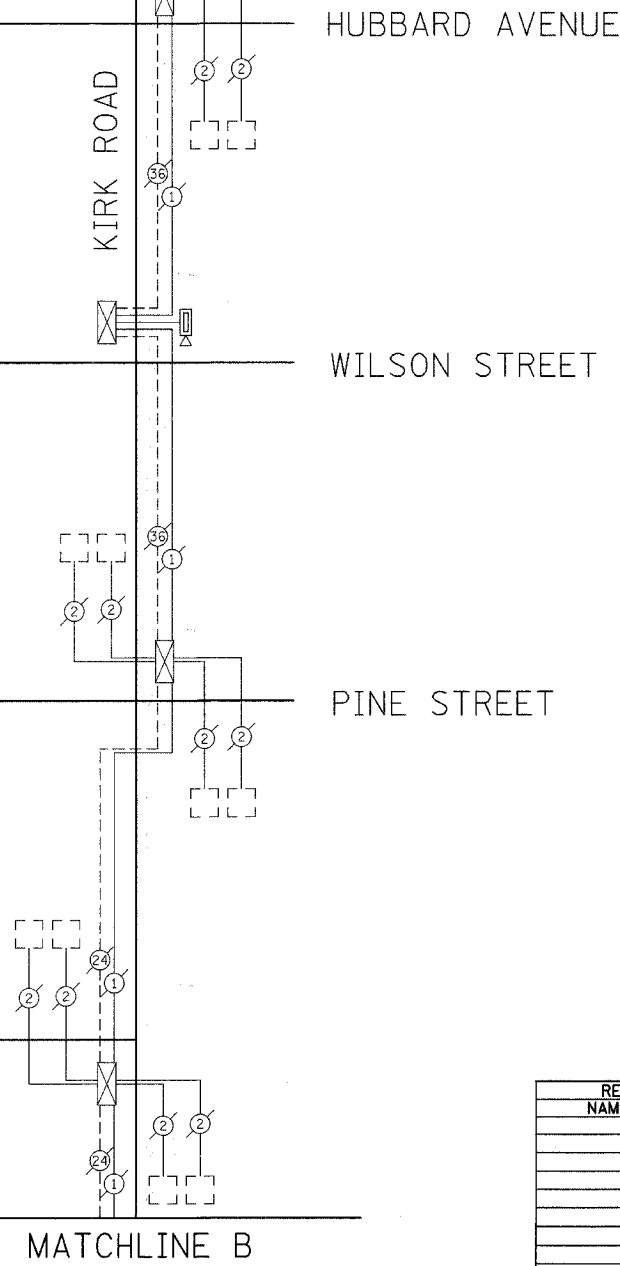


PAY ITEM	UNIT	QUANTITY
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	9643
CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	1198
CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	1310
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 16" X 12" X 8"	EACH	3
HANDHOLE	EACH	19
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	9643
DRILL EXISTING HANDHOLE	EACH	10
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	14533
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM24F SM12F	FOOT	14629

INTERCONNECT SCHEMATIC LEGEND

EXISTING INTERSECTION CONTROLLER		EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM24F SM12F	
PROPOSED INTERSECTION CONTROLLER		PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM24F SM12F	
EXISTING MASTER CONTROLLER		EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	
PROPOSED MASTER CONTROLLER		PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	
MASTER MASTER CONTROLLER		EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS		PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS		EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
EXISTING INTERSECTION LOOP DETECTORS		PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
PROPOSED SAMPLING (SYSTEM) DETECTORS		EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED)	
EXISTING SAMPLING (SYSTEM) DETECTORS		PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED)	
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS.		EXISTING TELEPHONE CONNECTION	
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS.		PROPOSED TELEPHONE CONNECTION	
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED PERFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS		EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM24F SM12F	
PROPOSED PERFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS		PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM24F SM12F	
EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS		EXISTING VIDEO DETECTION CAMERA	
PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS		PROPOSED VIDEO DETECTION CAMERA	
		EXISTING PTZ CAMERA	
		PROPOSED PTZ CAMERA	

WIND ENERGY PASS



MATCHLINE B

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

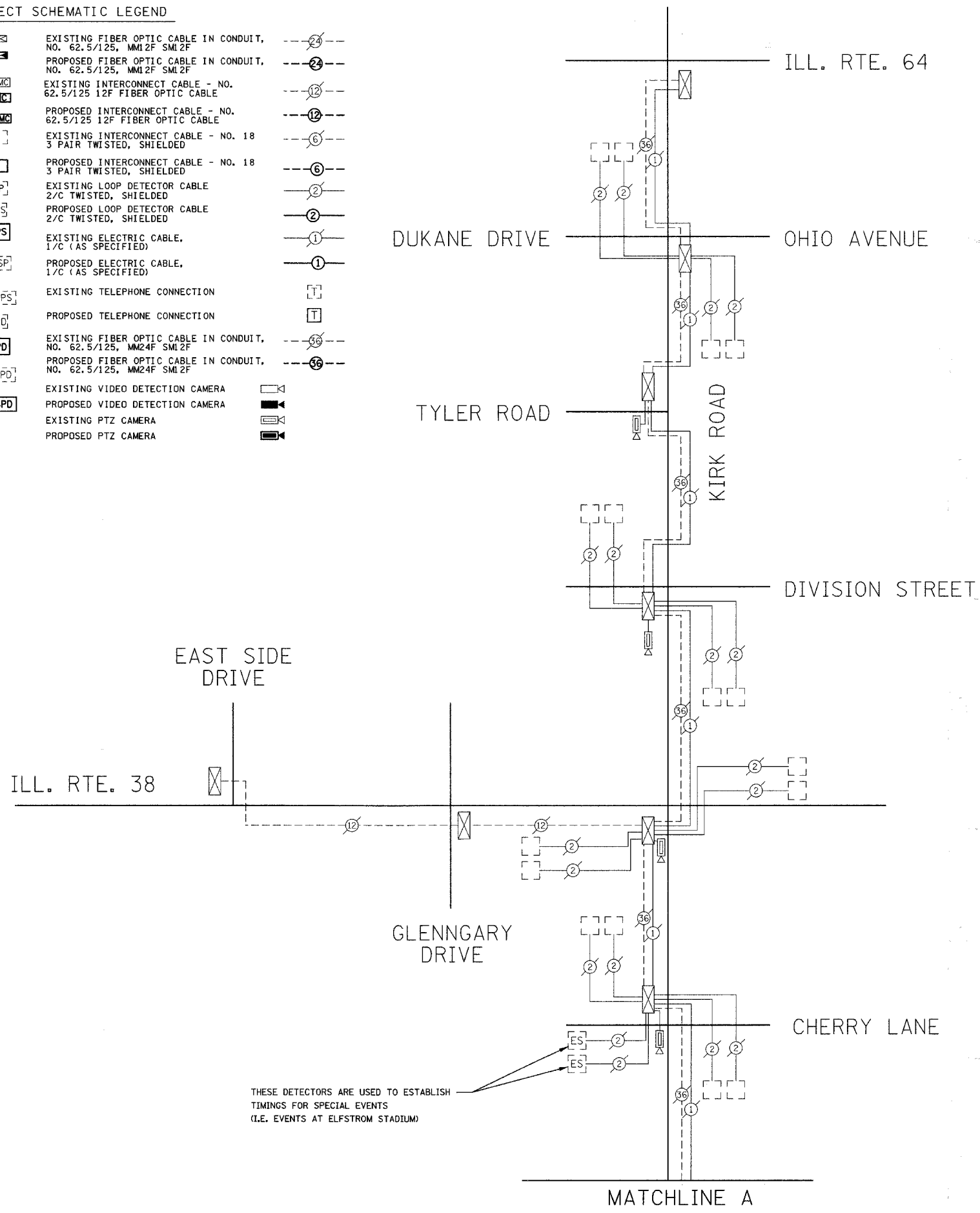
REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION
INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES
 FABYAN PARKWAY
 WESTERN AVENUE TO KIRK ROAD
 (SHEET 1 OF 3)
 SCALE: NOT TO SCALE
 DATE: 12/14/2007
 DRAWN BY: CEC
 DESIGNED BY: BRD/JSH
 CHECKED BY: JJE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	26
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

INTERCONNECT SCHEMATIC LEGEND

EXISTING INTERSECTION CONTROLLER		EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	
PROPOSED INTERSECTION CONTROLLER		PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	
EXISTING MASTER CONTROLLER		EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	
PROPOSED MASTER CONTROLLER		PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	
MASTER MASTER CONTROLLER		EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS		PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS		EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
EXISTING INTERSECTION LOOP DETECTORS		PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
PROPOSED SAMPLING (SYSTEM) DETECTORS		EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED)	
EXISTING SAMPLING (SYSTEM) DETECTORS		PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED)	
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS.		EXISTING TELEPHONE CONNECTION	
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS.		PROPOSED TELEPHONE CONNECTION	
EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS		EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM24F SM12F	
PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS		PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM24F SM12F	
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS.		EXISTING VIDEO DETECTION CAMERA	
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS.		PROPOSED VIDEO DETECTION CAMERA	
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS.		EXISTING PTZ CAMERA	
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS.		PROPOSED PTZ CAMERA	



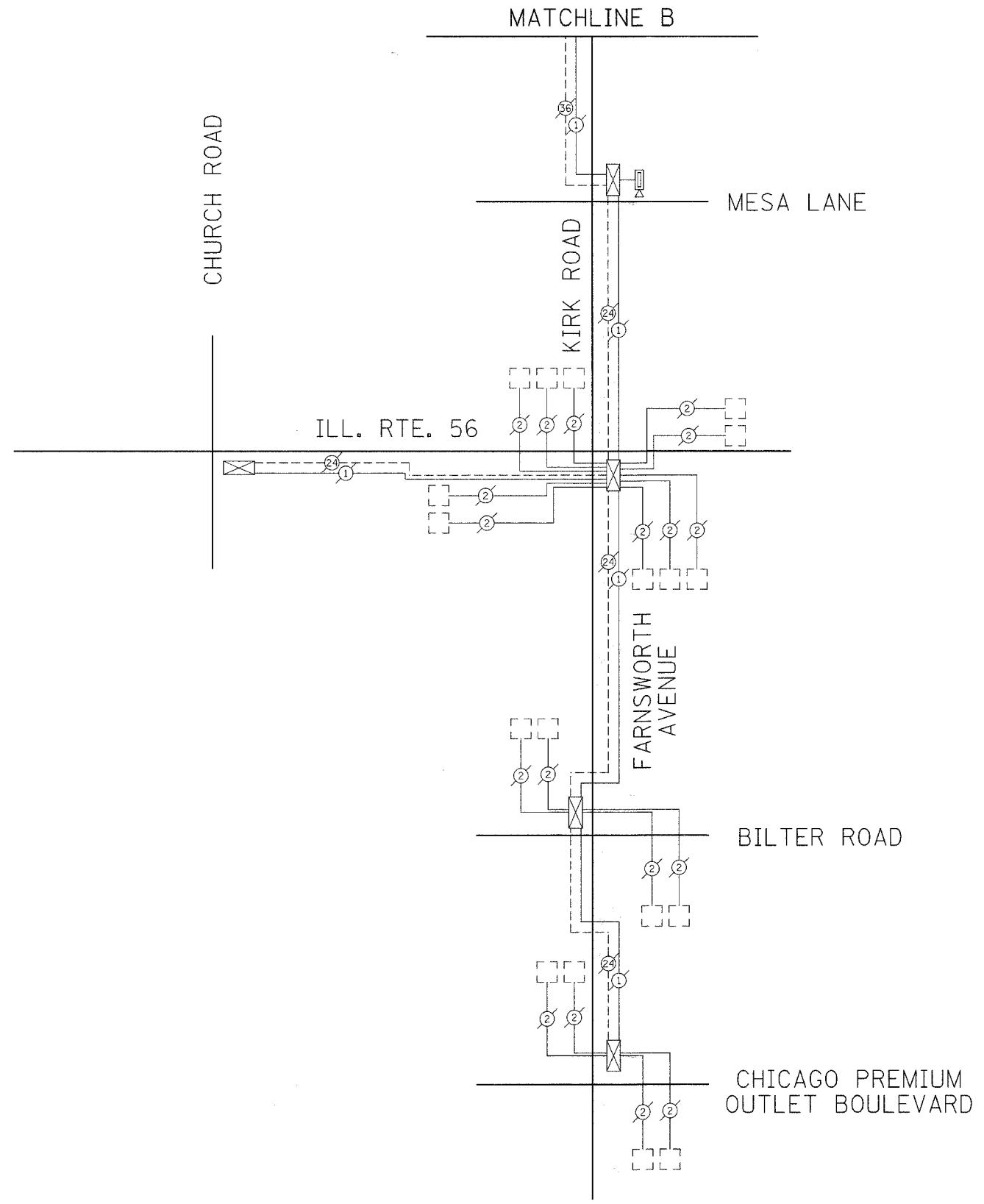
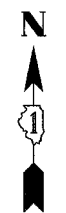
THESE DETECTORS ARE USED TO ESTABLISH TIMINGS FOR SPECIAL EVENTS (I.E. EVENTS AT ELFSTROM STADIUM)

NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION
 INTERCONNECT SCHEMATIC
 FABYAN PARKWAY
 WESTERN AVENUE TO KIRK ROAD
 (SHEET 2 OF 3)
 SCALE: NOT TO SCALE
 DATE: 12/14/2007
 DRAWN BY: CEC
 DESIGNED BY: BRD/JSH
 CHECKED BY: JJE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	27
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		



INTERCONNECT SCHEMATIC LEGEND

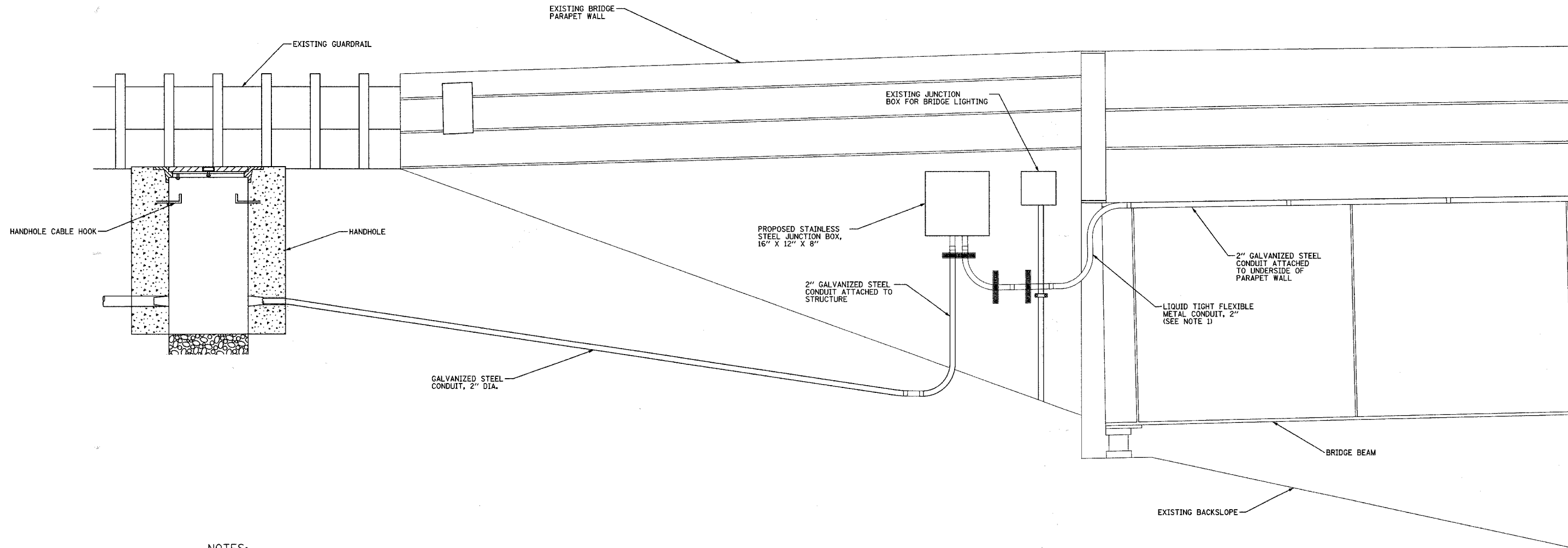
EXISTING INTERSECTION CONTROLLER		EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	
PROPOSED INTERSECTION CONTROLLER		PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	
EXISTING MASTER CONTROLLER		EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	
PROPOSED MASTER CONTROLLER		PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	
MASTER MASTER CONTROLLER		EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS		PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	
PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS		EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
EXISTING INTERSECTION LOOP DETECTORS		PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	
PROPOSED SAMPLING (SYSTEM) DETECTORS		EXISTING ELECTRIC CABLE, 1/C (AS SPECIFIED)	
EXISTING SAMPLING (SYSTEM) DETECTORS		PROPOSED ELECTRIC CABLE, 1/C (AS SPECIFIED)	
PROPOSED SAMPLING (SYSTEM) DETECTORS		EXISTING TELEPHONE CONNECTION	
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS, EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS		PROPOSED TELEPHONE CONNECTION	
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS, EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS		EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM24F SM12F	
EXISTING SAMPLING (SYSTEM) DETECTORS, PROPOSED SAMPLING (SYSTEM) DETECTORS		PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM24F SM12F	
EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS		EXISTING VIDEO DETECTION CAMERA	
PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS		PROPOSED VIDEO DETECTION CAMERA	
		EXISTING PTZ CAMERA	
		PROPOSED PTZ CAMERA	

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION
INTERCONNECT SCHEMATIC
 FABYAN PARKWAY
 WESTERN AVENUE TO KIRK ROAD
 (SHEET 3 OF 3)
 SCALE: NOT TO SCALE
 DATE: 12/14/2007
 DRAWN BY: CEC
 DESIGNED BY: BRD/JSH
 CHECKED BY: JJE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	28
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		



NOTES:

1. THE LIQUID TIGHT FLEXIBLE METAL CONDUIT SHALL BE INCIDENTAL TO THE PAY ITEM "2" GALVANIZED STEEL CONDUIT ATTACHED TO STRUCTURE".
2. NO HOLES SHALL BE DRILLED IN BRIDGE BEAMS FOR INSTALLATION OF CONDUIT OR JUNCTION BOXES.

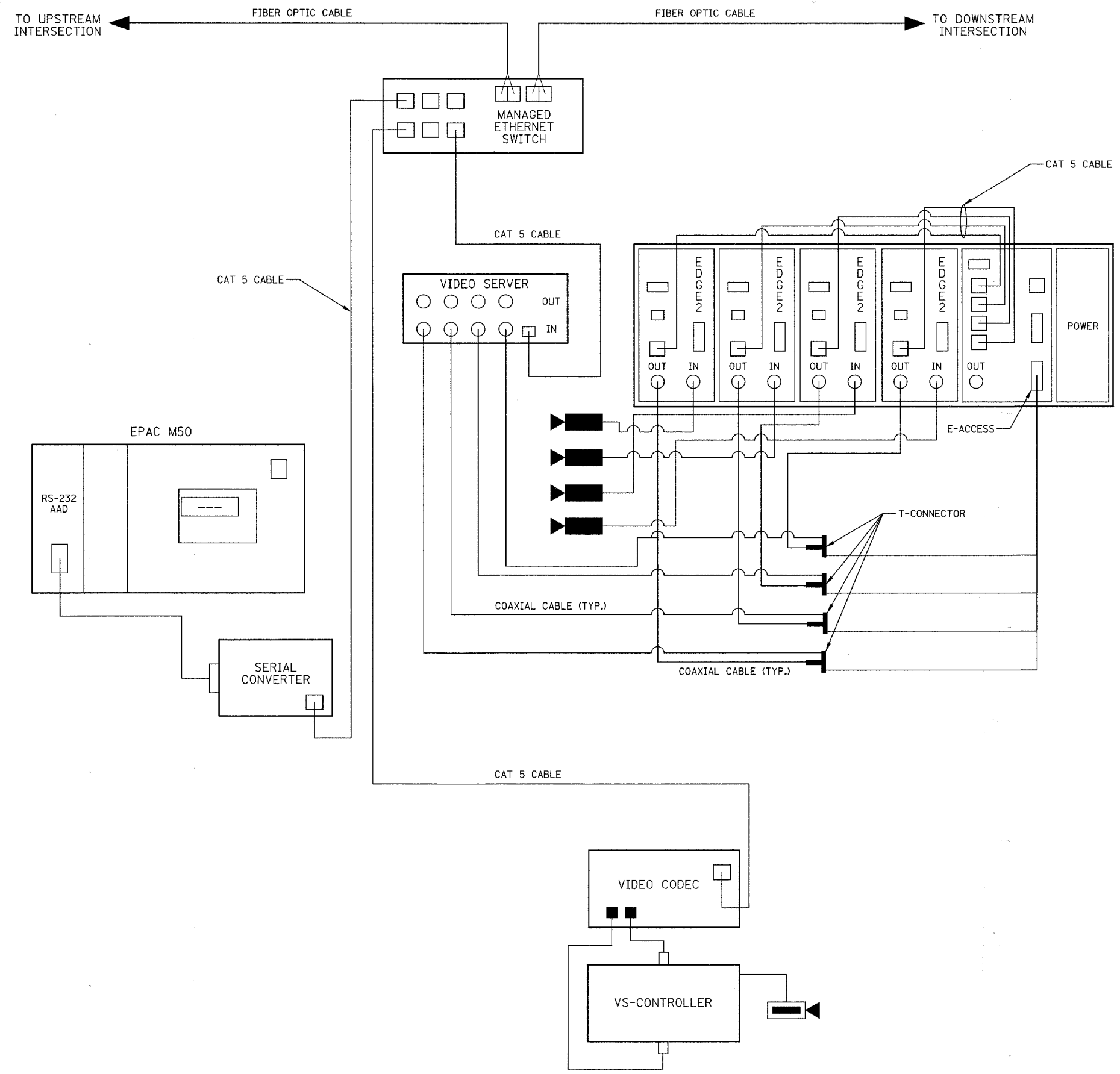
INTERCONNECT DETAIL
 JUNCTION BOX AND CONDUIT INSTALLATION - FOX RIVER BRIDGE

(NOT TO SCALE)

REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION
INTERCONNECT DETAIL
 FABYAN PARKWAY
 FOX RIVER BRIDGE
 SCALE: NONE
 DATE: 12/14/2007
 DRAWN BY: CEC
 DESIGNED BY: BRD/JSH
 CHECKED BY: JJE

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	29
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		



VIDEO TRANSMISSION SYSTEM
TYPICAL INSTALLATION
(NOT TO SCALE)

REVISIONS		KANE COUNTY DIVISION OF TRANSPORTATION
NAME	DATE	
		VIDEO TRANSMISSION SYSTEM SCHEMATIC FABYAN PARKWAY SYSTEM

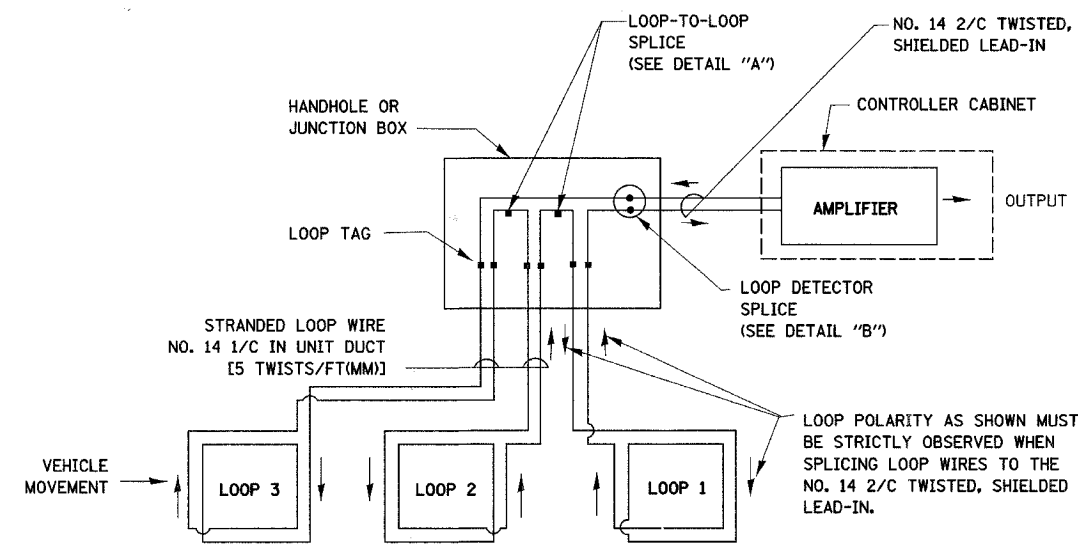
SCALE: NOT TO SCALE
DATE: 12/14/2007

DRAWN BY: CEC
DESIGNED BY: BRD/JSH
CHECKED BY: JJE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	30
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

LOOP DETECTOR NOTES

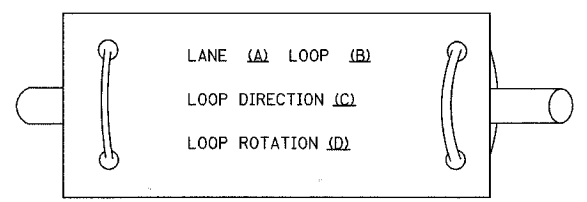
1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED 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.
3. 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.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. 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.
6. 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.
7. PREFORMED 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.



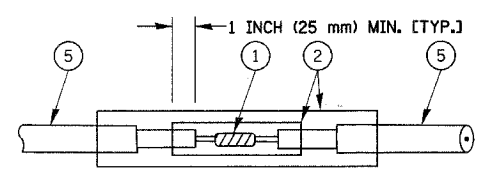
DETECTOR LOOP WIRING SCHEMATIC

- 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.

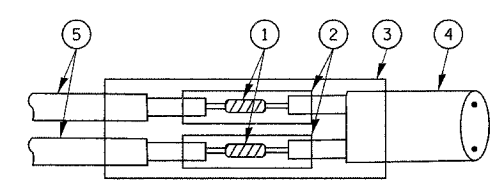
LOOP LEAD-IN CABLE TAG



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



**DETAIL "A"
LOOP-TO-LOOP SPLICE**



**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

LOOP DETECTOR SPLICE

- ① WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- ② WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- ③ WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- ④ NO. 14 2/C TWISTED, SHIELDED CABLE.
- ⑤ LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION
 DISTRICT ONE
 STANDARD TRAFFIC SIGNAL
 DESIGN DETAILS

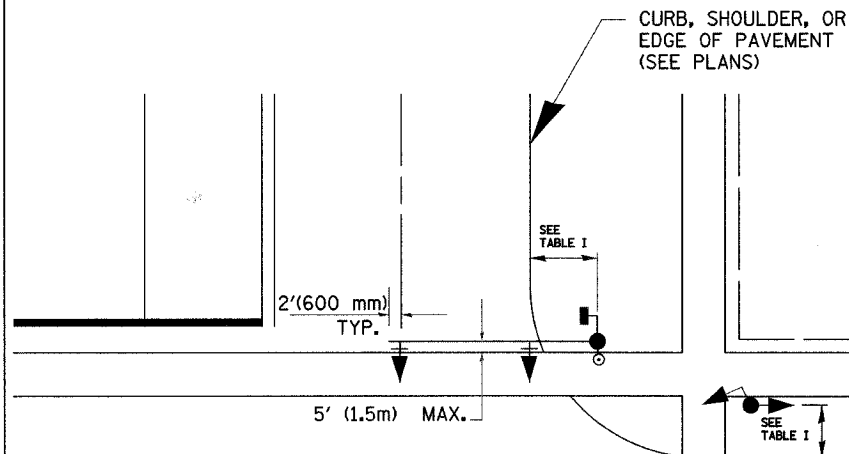
NOT TO SCALE
 DATE 1-01-02

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

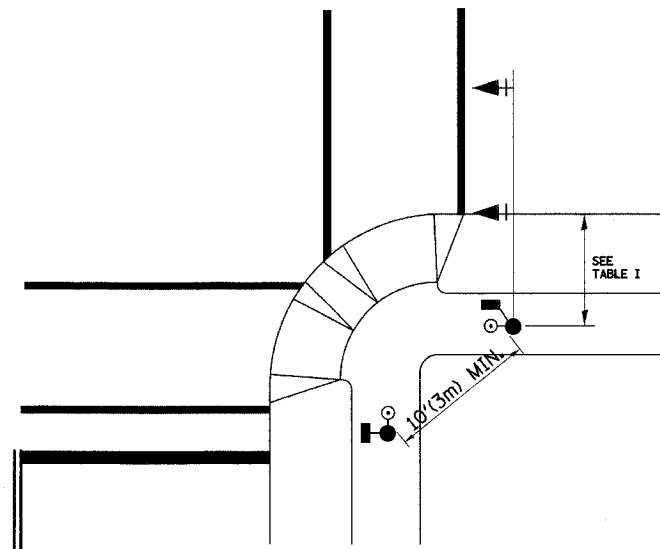
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	31
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		

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

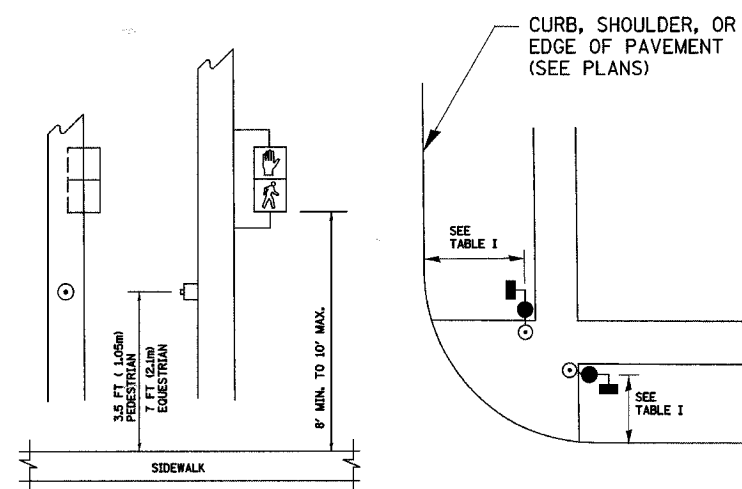


TABLE I

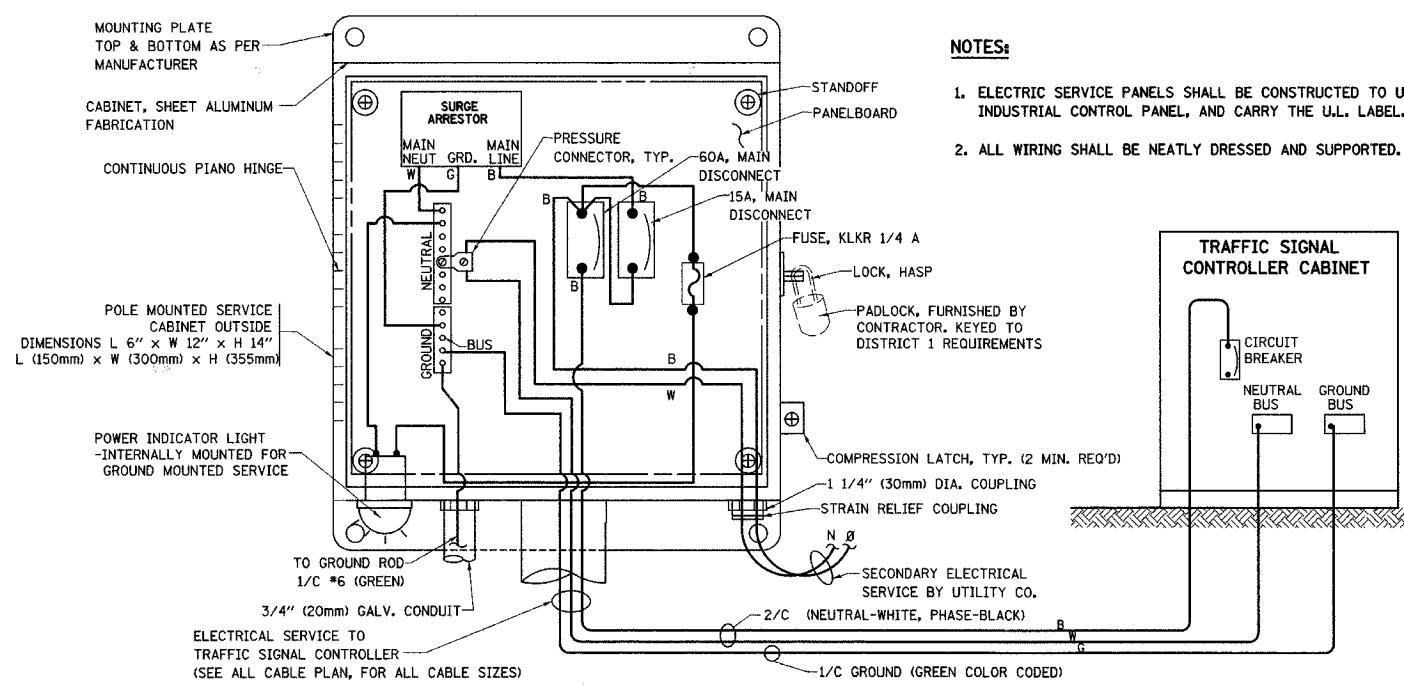
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), 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		KANE COUNTY DIVISION OF TRANSPORTATION
NAME	DATE	
		DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS

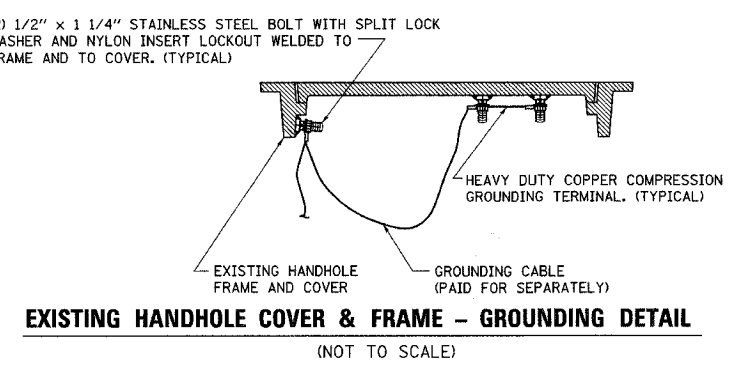
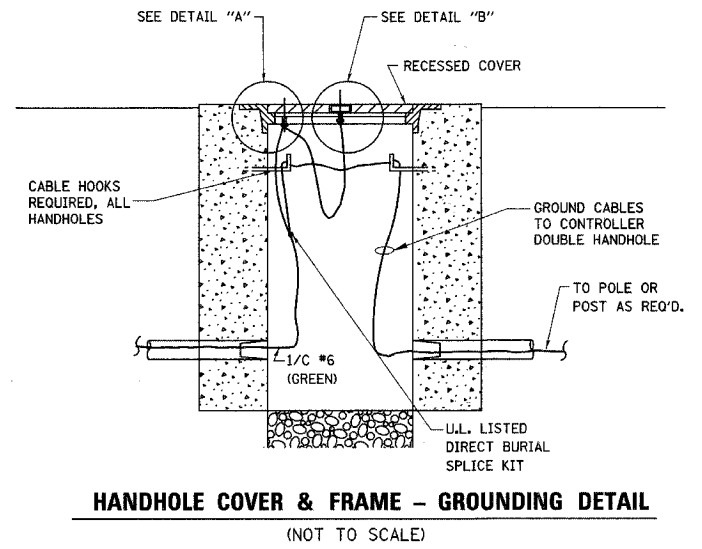
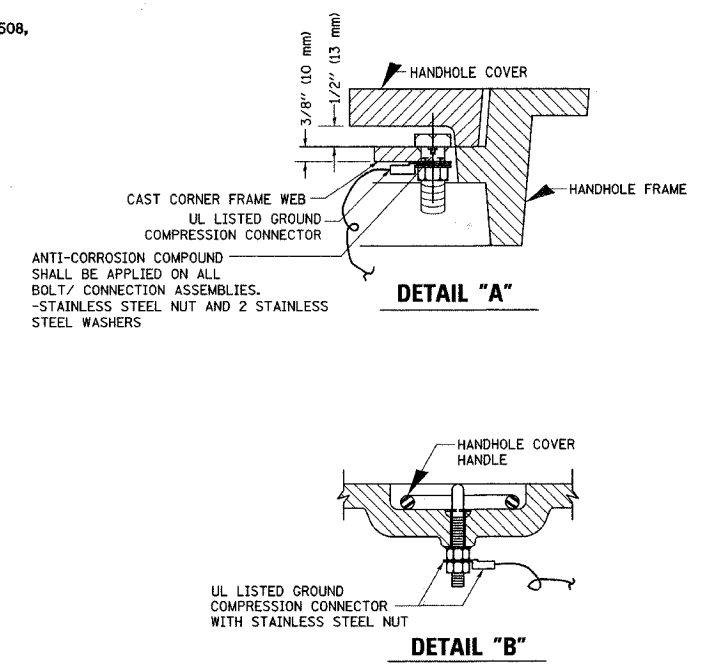
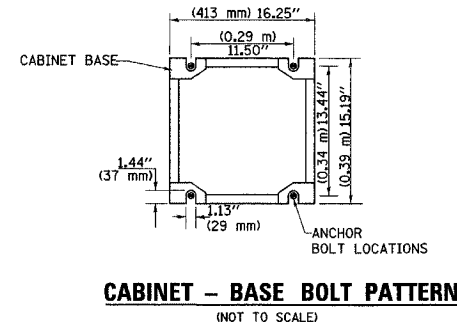
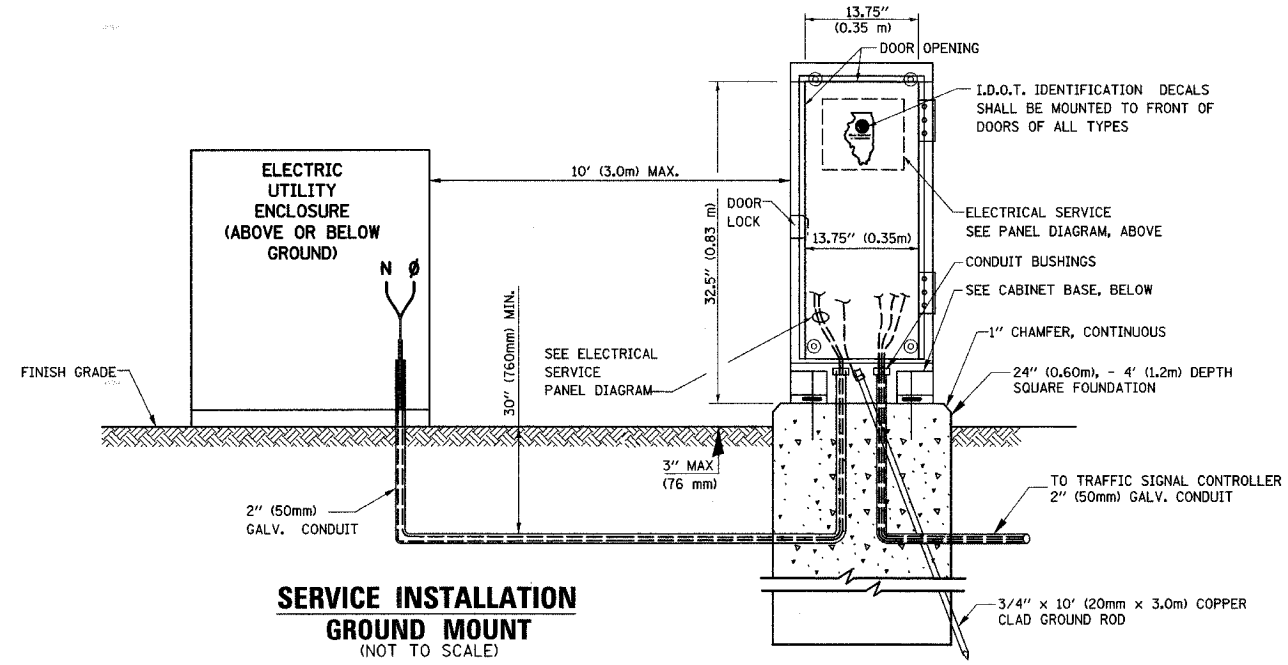
DATE 1-01-02

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

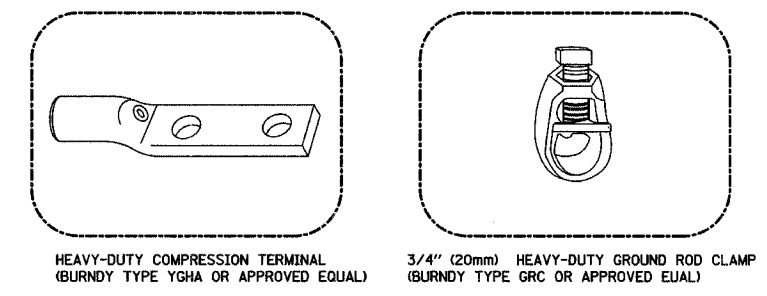
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	32
STA.		TO STA.		
FED. ROAD DIST. NO. 7		ILLINOIS FED. AID PROJECT		



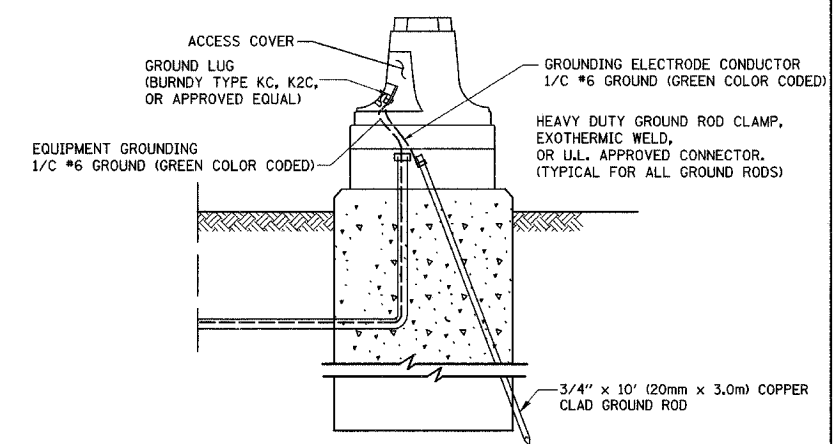
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



- 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.



- 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.

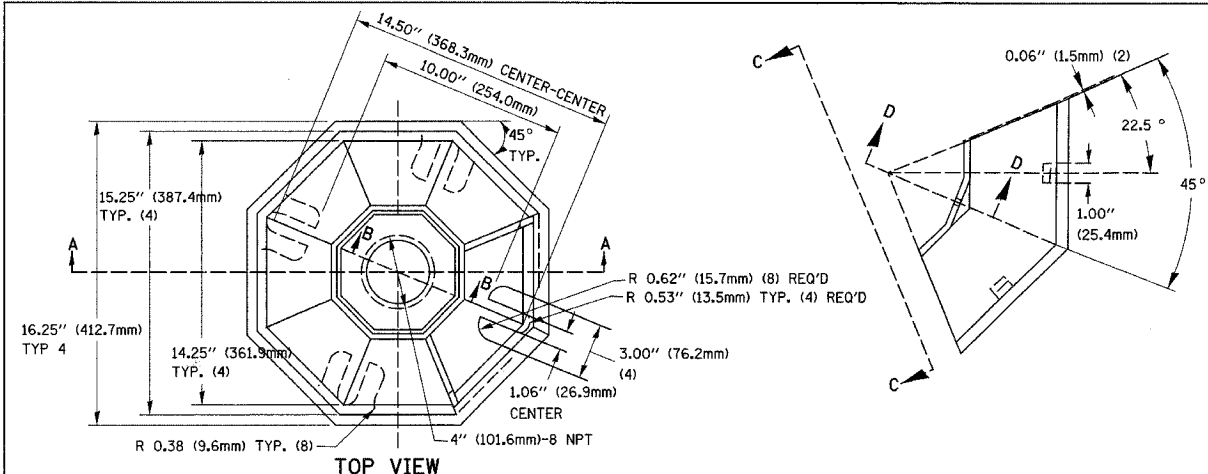


REVISIONS	
NAME	DATE

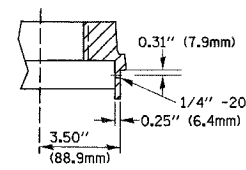
KANE COUNTY DIVISION OF TRANSPORTATION
 DISTRICT 1
 STANDARD TRAFFIC SIGNAL
 DESIGN DETAILS

NOT TO SCALE
 DATE 1-01-02
 DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 3 OF 4

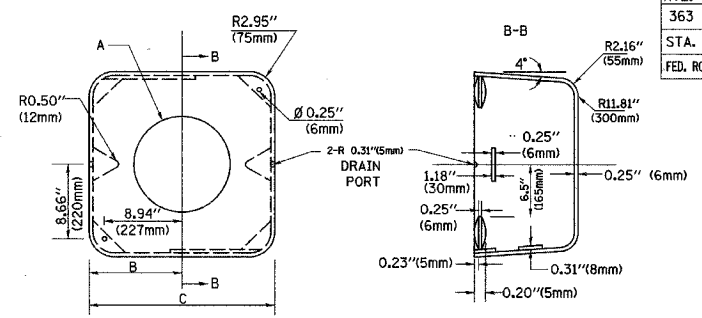
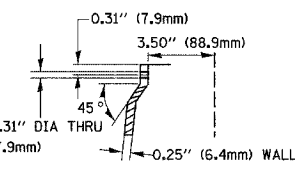
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
363	06-00339-00-TL	KANE	33	33
STA.	TO STA.			
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				



SECTION B-B



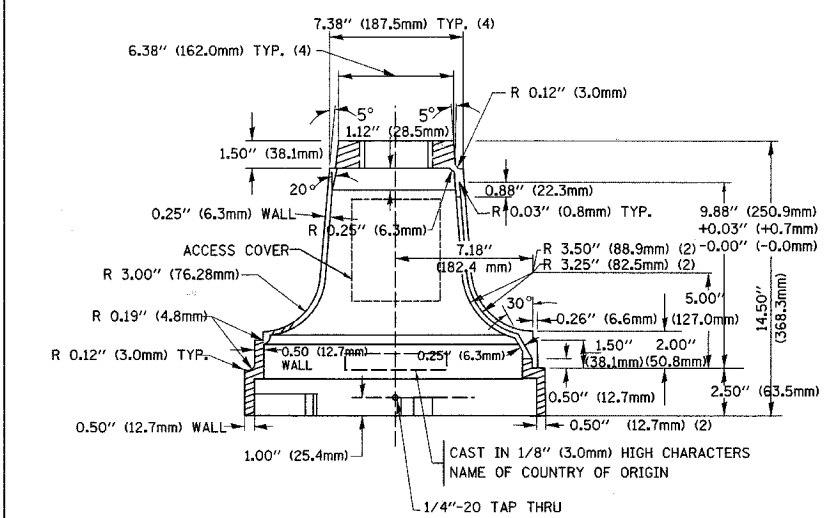
SECTION D-D



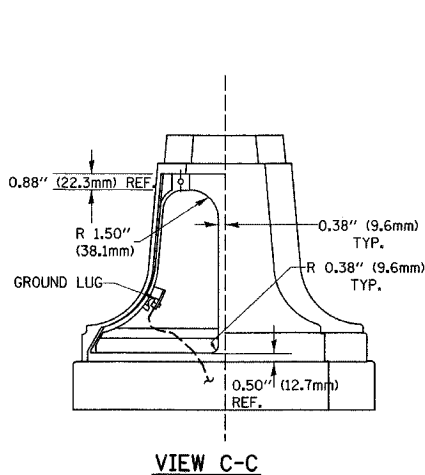
TYPE	A	B	C	HEIGHT	WEIGHT
I	∅ 10.125"(257mm)	9.5"(241mm)	19"(483mm)	12" (300mm)	24kg
II	∅ 11.125"(283mm)	10.75"(273mm)	21.5"(546mm)	12" (300mm)	26kg

SHROUD DETAIL

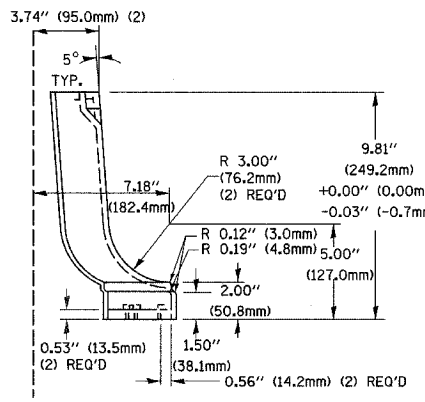
MATERIAL:
- ASTM A48 CLASS 30 GREY IRON
- ASTM A123 HOT DIPPED GALVANIZED



SECTION A-A

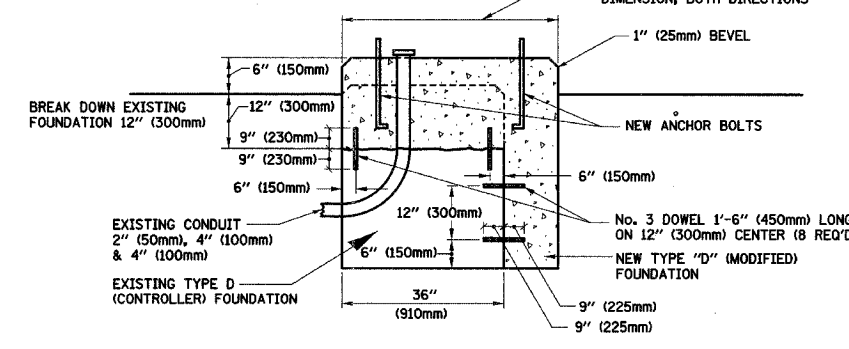


VIEW C-C



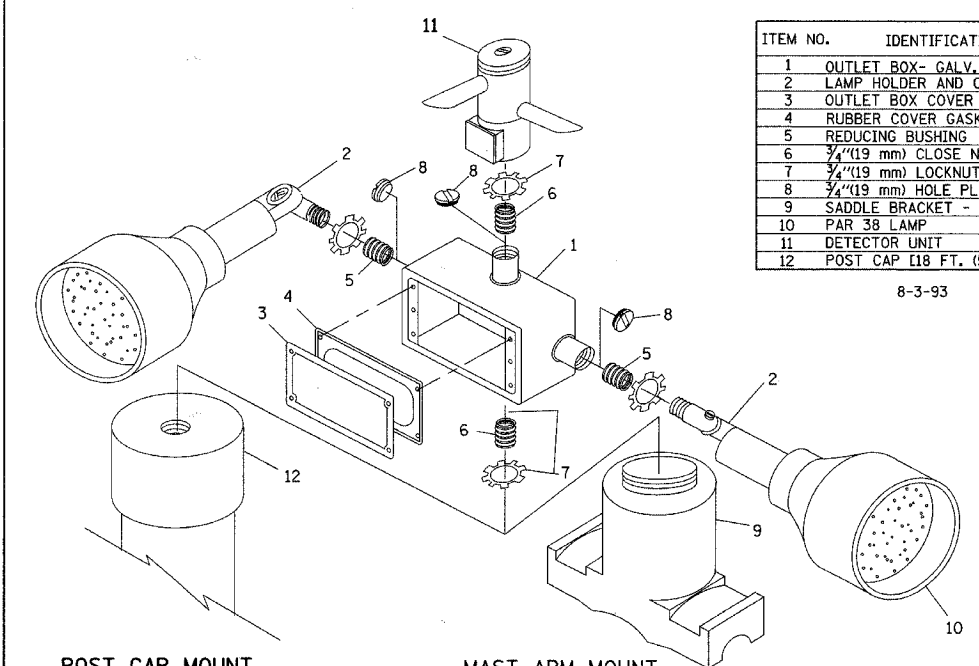
TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

NOTE:
SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION

(NOT TO SCALE)

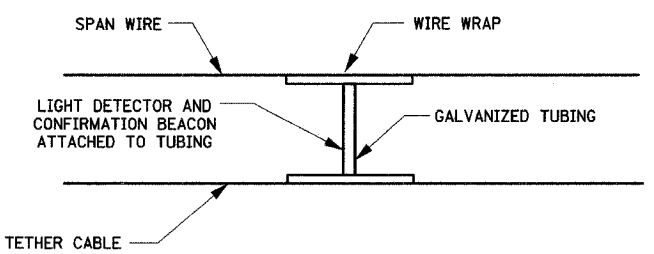


ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.00344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	PAR 38 LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

8-3-93

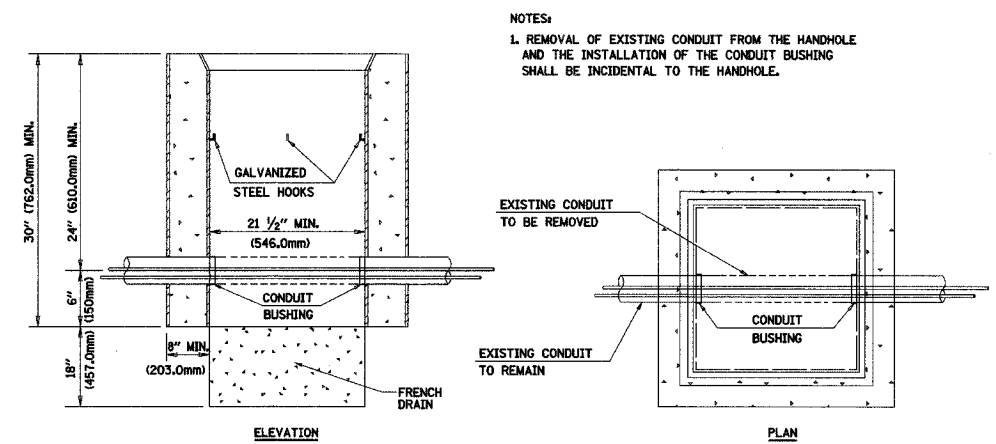
NOTES:

- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



LIGHT DETECTOR AND CONFIRMATION BEACON MOUNTING FOR TEMPORARY TRAFFIC SIGNALS

(NOT TO SCALE)



NOTES:

- REMOVAL OF EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHING SHALL BE INCIDENTAL TO THE HANDHOLE.

DETAIL HANDHOLE TO INTERCEPT EXISTING CONDUIT N.T.S.

REVISIONS	
NAME	DATE

KANE COUNTY DIVISION OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: NOT TO SCALE
DATE 1-01-02

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