

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	1

DESIGN DESIGNATION 1-20-2012 LETTING ITEM 128

TRAFFIC VOLUME =
 ADT 31500 ON KIRK AND IL 56
 ADT 23700 ON KIRK AND IL 64
 ADT 13600 ON DUNHAM AND IL 25
 POSTED SPEED LIMIT =
 45 MPH ON KIRK AND IL 56
 40 MPH ON DUNHAM AND IL 25

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

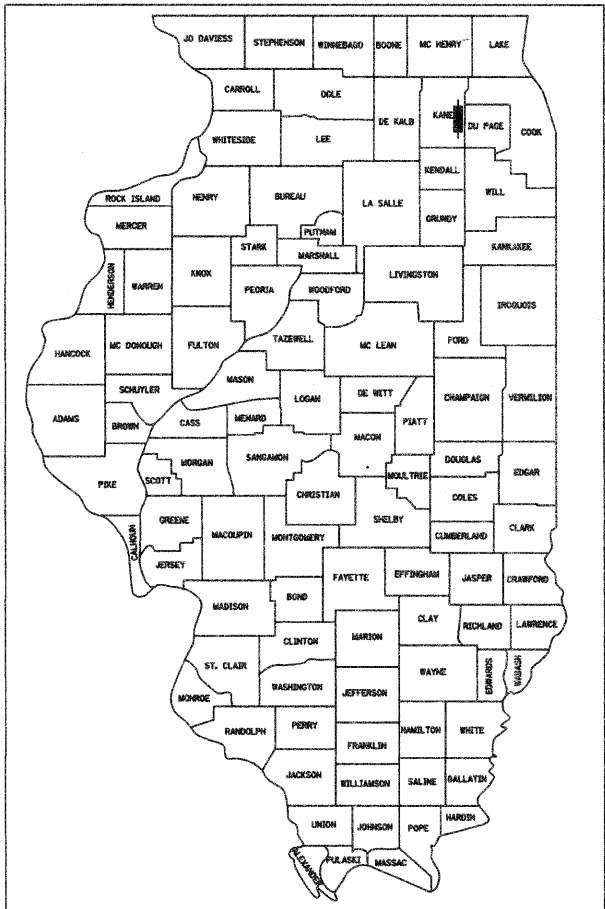
F.A.P. 360 (KIRK ROAD) (CH 77) AND DUNHAM ROAD (CH 17)
 IL RTE 56 (BUTTERFIELD RD.) TO IL RTE 25 (STEARNS RD.)

TRAFFIC SIGNAL INTERCONNECT
 SECTION 10-00403-00-TL
 PROJECT NO.: CMM-9003 (634)
 KANE COUNTY

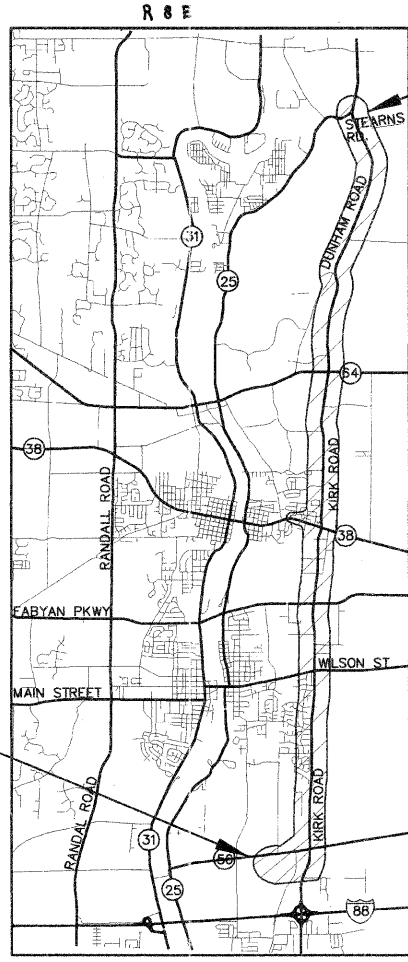
C-91-506-10

HIGHWAY STANDARDS

STD. No.	DESCRIPTION
000001-06	STANDARD SYMBOLS ABBREVIATION AND PATTERNS
701006-03	OFF-RD OPERATIONS, 2L, 2W, 4.5m (15') TO 600mm (24") FROM PAVEMENT EDGE
701011-02	OFF-RD OPERATIONS, 2L, 2W, DAY ONLY
701101-02	OFF-RD OPERATIONS, MULTILANE, 4.5m (15') TO 600mm (24") FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701601-07	URBAN LANE, CLOSURE, MULTILANE 1W OR 2W NON-TRAVERSABLE MEDIAN
701606-08	URBAN LANE CLOSURE, MULTILANE MOUNTABLE MEDIAN
701701-08	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-05	LANE CLOSURES MULTILANE, 1W OR 2W
701901-02	CROSSWALK OR SIDEWALK CLOSURE
814001-02	TRAFFIC CONTROL DEVICES
814001-02	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARDS PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTIBLE POWER SUPPLY (UPS)
878001-09	CONCRETE FOUNDATION DETAILS

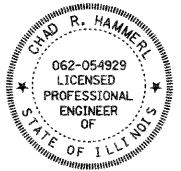


LOCATION OF SECTION INDICATED THUS: - [black box] -

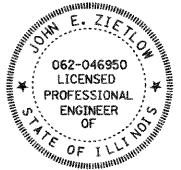


END PROJECT

BEGIN PROJECT



SIGNED *Chad R. Hammett*
 DATE October 17, 2011
 EXPIRES November 30, 2013
 FOR DRAWINGS 1 TO 64



SIGNED *John E. Zietlow*
 DATE October 17, 2011
 EXPIRES November 30, 2013
 FOR DRAWINGS 65 TO 72

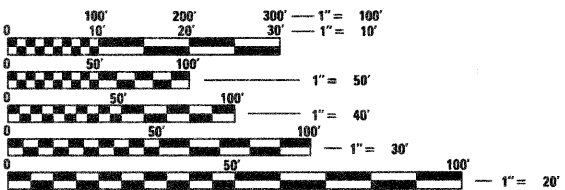
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

APPROVED October 18, 2011
 [Signature]
 KDOT-DIRECTOR OF TRANSPORTATION, COUNTY ENGINEER

PASSED November 8, 2011
 [Signature]
 ENGINEER OF DESIGN AND ENVIRONMENT

RELEASING FOR BID BASED ON LIMITED REVIEW November 8, 2011
 [Signature]
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS



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.

CALL J.U.I.E.
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
 1-800-893-0123
 OR 811

CONTRACT NO. 63648

GROSS & NET LENGTH = 66,760 FEET (12.6 MILES)

LOCATION MAP

NOT TO SCALE

JACOBS
 1 NORTH FRANKLIN, SUITE 500
 CHICAGO, IL 60606

PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. (847)705-4406 SCHAUMBURG, IL

INDEX OF SHEETS

	COVER SHEET
2	INDEX OF SHEETS/GENERAL NOTES
3 - 4	SUMMARY OF QUANTITIES
5 - 6	KIRK ROAD AND IL RTE 56 (BUTTERFIELD)
	- TRAFFIC SIGNAL PLAN
	- CABLE PLAN
7 - 8	KIRK ROAD AND WIND ENERGY PASS
	- TRAFFIC SIGNAL PLAN
	- CABLE PLAN
9 - 10	KIRK ROAD AND WILSON STREET
	- TRAFFIC SIGNAL PLAN
	- CABLE PLAN
11 - 12	KIRK ROAD AND HUBBARD AVENUE
	- TRAFFIC SIGNAL PLAN
	- CABLE PLAN
13 - 14	KIRK ROAD AND FABYAN PARKWAY
	- TRAFFIC SIGNAL PLAN
	- CABLE PLAN
15 - 16	KIRK ROAD AND CHERRY LANE
	- TRAFFIC SIGNAL PLAN
	- CABLE PLAN
17 - 18	KIRK ROAD AND IL RTE 38 (E. STATE STREET)
	- TRAFFIC SIGNAL PLAN
	- CABLE PLAN
19 - 20	KIRK ROAD AND DIVISION STREET
	- TRAFFIC SIGNAL PLAN
	- CABLE PLAN
21 - 22	KIRK ROAD AND TYLER ROAD
	- TRAFFIC SIGNAL PLAN
	- CABLE PLAN
23 - 24	KIRK ROAD AND OHIO AVENUE/DUKANE DRIVE
	- TRAFFIC SIGNAL PLAN
	- CABLE PLAN
25 - 26	KIRK AND IL RTE 64 (MAIN STREET)
	- TRAFFIC SIGNAL PLAN
	- CABLE PLAN
27 - 28	KIRK ROAD AND FOXFIELD DRIVE
	- TRAFFIC SIGNAL PLAN
	- CABLE PLAN
29 - 30	KIRK ROAD AND FOX CHASE DRIVE
	- TRAFFIC SIGNAL PLAN
	- CABLE PLAN
31 - 32	DUNHAM ROAD AND ARMY TRAIL ROAD
	- TRAFFIC SIGNAL PLAN
	- CABLE PLAN
33 - 46	INTERCONNECT PLAN - KIRK ROAD
47 - 52	INTERCONNECT PLAN - DUNHAM ROAD
54 - 53	INTERCONNECT PLAN - IL RTE 38 (E. STATE STREET)
55 - 57	INTERCONNECT SCHEMATIC
58 - 64	STANDARD TRAFFIC SIGNAL DESIGN DETAILS
65	FIBER OPTIC NETWORK
66 - 71	CABINET DETAILS AND FIBER OPTIC SPLICING DIAGRAM
72	FIBER OPTIC CABLE SCHEMATIC

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE DETAILS, PLANS, AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS, AND THE LATEST EDITION OF THE FOLLOWING STATE OF ILLINOIS SPECIFICATIONS: "THE STANDARD SPECIFICATIONS FOR THE ROAD AND BRIDGE CONSTRUCTION" (REFERRED TO AS THE STANDARD SPECIFICATIONS), THE SUPPLEMENTAL STANDARD SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS, THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR TRAFFIC CONTROL ITEMS.
- THE LOCATIONS OF UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THE ENGINEER DOES NOT GUARANTEE THEIR ACCURACY. THE CONTRACTOR SHALL HAVE THE RESPECTIVE UTILITY COMPANIES FIELD LOCATE ALL THEIR FACILITIES PRIOR TO BEGINNING OF CONSTRUCTION. THE CONTRACTOR SHALL ALSO VERIFY THE DEPTHS OF THE EXISTING UTILITIES IF NECESSARY USING TEST HOLES. ALL RELOCATION OR LOWERING OF THE UTILITIES SHALL BE COORDINATED BY THE CONTRACTOR. TEST HOLES WILL INCLUDED IN THE COST OF MOBILIZATION.
- THE CONTRACTOR SHALL CONTACT J.U.L.I.E. AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE IN THE AREA.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITIES INCLUDING THOSE THAT MAY NOT BE SHOWN ON THE PLANS. ALL UTILITIES THAT ARE DAMAGED DURING THE CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL INSURE POSITIVE SITE DRAINAGE AT THE CONCLUSION OF EACH DAY. ANY LOOSE MATERIAL DEPOSITED ON THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURE, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF THE WATER IS OBSTRUCTED, SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY BY THE RESPONSIBLE PARTY. AT THE CONCLUSION OF CONSTRUCTION OPERATIONS, ALL DRAINAGE STRUCTURE AND FLOW LINES SHALL BE FREE FROM DIRT AND DEBRIS. THIS WORK SHALL BE INCLUDED IN THE COST OF CONDUIT IN TRENCH, CONDUIT PUSHED OR CONCRETE FOUNDATION.
- SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATION TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.
- ONLY THOSE TREES DESIGNATED BY THE ENGINEER OR SHOWN ON THE PLANS SHALL BE REMOVED. ANY DAMAGE TO EXISTING TREES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- TEMPORARY ROADWAY AND SIDEWALK CLOSURES WILL BE PERMITTED ONLY WITH THE ENGINEER'S APPROVAL. REQUESTS FOR CLOSURES MUST BE SUBMITTED TO THE ENGINEER AT LEAST 7 DAYS BEFORE THE CLOSURE. TRAFFIC AND PEDESTRIAN CONTROL SHALL BE IN ACCORDANCE WITH IDOT STANDARDS.
- THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL SAFETY REGULATIONS AS WELL AS THOSE SPECIFIED IN THE CONTRACT PLANS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL COMPLETE CLEAN UP AND RESTORATION OF THE ENTIRE PROJECT AREA WITHIN 7 DAYS OF CONTRACT COMPLETION DATE.
- EXISTING CONDITIONS WERE OBTAINED FROM THE BEST AVAILABLE INFORMATION. INFORMATION SHOWN IS NOT GUARANTEED ALL-INCLUSIVE OR CORRECT. THE CONTRACTOR IS TO VERIFY THE EXISTING CONDITIONS PRIOR TO CONSTRUCTION.
- UPON COMPLETION OF THE PROJECT AND ACCEPTANCE BY THE ENGINEER, THE CONTRACTOR WILL SUBMIT ONE FULL SIZED SET OF RECORD DRAWINGS MARKED IN RED TO THE ENGINEER. RECORD DRAWINGS ARE INCLUDED IN THE COST OF MOBILIZATION.
- THE REMOVAL OF ALL EXISTING TRAFFIC SIGNS DESIGNATED ON THE PLANS AS WELL AS THE INSTALLATION OF ALL PROPOSED SIGNS SHALL BE PERFORMED BY KCDOT. THE CONTRACTOR SHALL CONTACT THE ENGINEER AND KDOT RAY JOHNSON (630) 406-7356 A MINIMUM OF 48 HOURS PRIOR TO THE DESIRED DATE FOR THE REMOVAL AND/OR INSTALLATION OF ALL SIGNS.
- ALL EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AS DESIGNATED ON THE PLANS. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE CREDITED THROUGH THE CONTRACTOR'S BID OF THE CONTRACT UNIT PRICES.
- THE CONTRACTOR SHALL ENSURE THAT MAILBOXES ALONG THE ROUTE ARE NOT DAMAGED DUE TO CONSTRUCTION ACTIVITIES. MAILBOXES THAT ARE DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE AS SOON AS DAMAGED TO ALLOW MAIL DELIVERY.
- IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COORDINATE WITH THE CANADIAN NATIONAL AND UNION PACIFIC RAILROADS WHENEVER CONSTRUCTION ACTIVITY IS WITHIN 25 FEET OF THE OF THE RAILROAD ROW. THE CONTRACTOR SHALL RETAIN FLAGMEN EMPLOYED AND DESIGNATED BY THE CANADIAN NATIONAL AND UNION PACIFIC RAILROADS TO MONITOR ON-COMING TRAIN TRAFFIC, AND ADVISE CONTRACTOR PERSONNEL WHEN ACTIVITY ON OR NEAR THE RAILROAD RIGHT-OF-WAY MAY PROCEED. THIS ITEM WILL BE PAID FOR ACCORDING TO ARTICLE 107.12 AND WILL BE REIMBURSED ACCORDING TO ARTICLE 109.05.
- THE SPECIAL PROVISIONS REFERENCE KCDOT CENTRAL FACILITY:

KANE COUNTY DIVISION OF TRANSPORTATION
41W011 BURLINGTON ROAD
ST. CHARLES, IL 60175

MR. THOMAS SZABO IS THE TRAFFIC MANAGER FOR KCDOT (630) 208-3139
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION LAYOUT. WORK SHALL BE CONSIDERED INCIDENTAL UNDER MOBILIZATION.
- ALL TRAVEL LANES ARE ANTICIPATED TO BE OPEN THROUGHOUT CONSTRUCTION. SHORT TERM LANE CLOSURES AND ALL USE OF FLAGGING OPERATION MUST OCCUR BETWEEN THE HOURS OF 9:00 A.M. AND 3:00 P.M. AND BE APPROVED BY THE ENGINEER.

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	2
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63648	

SUMMARY OF QUANTITIES

CODE OR ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	CHURCH ROAD & IL 56	IL RTE 56 (BUTTERFIELD ROAD)	MESA LANE	WIND ENERGY PASS	PINE STREET	WILSON STREET	HUBBARD AVENUE	FABYAN PARKWAY	CHERRY LANE	ROAD WEATHER INFORMATION SYSTEM	IL RTE 38 (STATE STREET)	IL RTE 38 @ GLENGARRY DR.	IL RTE 38 @ EAST SIDE DR.	EVERILL ROAD/EVERILL CIRCLE	DIVISION STREET	LEGACY BOULEVARD	TYLER ROAD	DUKANE DRIVE/OHIO AVENUE	IL RTE 64 (MAIN STREET)	FOXFIELD ROAD/FOXFIELD DRIVE	FOX CHASE/ ORANGE & BLACK DRIVE	DUNHAM ROAD & ARMY TRAIL ROAD	DUNHAM ROAD & STERNS ROAD	INTERCONNECT KIRK ROAD	INTERCONNECT DUNHAM ROAD	INTERCONNECT IL RTE 38			
				0021																												
20200100	EARTH EXCAVATION	CU YD	26	2			2		2			2		2	2	2		2			2	2		2	2	2						
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	302	23.2			23.2		23.2			23.2		23.2	23.2	23.2		23.2			23.2	23.2		23.2	23.2	23.2						
67100100	MOBILIZATION	L SUM	1																													
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1																													
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1																													
△ 70102665	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606, SPECIAL	L SUM	1																													
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1																													
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1																													
80500010	SERVICE INSTALLATION - GROUND MOUNTED	EACH	7												1			1			1	1		1	1	1						
80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	3						1	1		1																				
* 81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	17,652												10						10	10		10	10	10		5176	12416			
81100600	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	275																												275	
81300945	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 24" X 24" X 8"	EACH	2																												2	
81400100	HANDHOLE	EACH	33																												8	25
81400300	DOUBLE HANDHOLE	EACH	1																												1	
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	22	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	7				1								1			1			1	1		1	1							
85700500	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1										1																			
86200200	UNINTERRUPTABLE POWER SUPPLY, STANDARD	EACH	14	1			1	1	1	1		1		1	1			1			1	1		1	1	1						
87300010	GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	40				4		4	4		6						4			3	4		4	4	3						
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	484				113		82	94		42						28		25	25		25	25	25							
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	3,728				393		352	431		372						431		255	410		443	400	241							
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	24												4					4	4		4	4	4							
87800205	MODIFY EXISTING TYPE "D" FOUNDATION	EACH	1							1																						
87900200	DRILL EXISTING HANDHOLE	EACH	13												1					1	1		1	1				3	2	3		
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1				1																									
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	5				5																									
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1				1																									

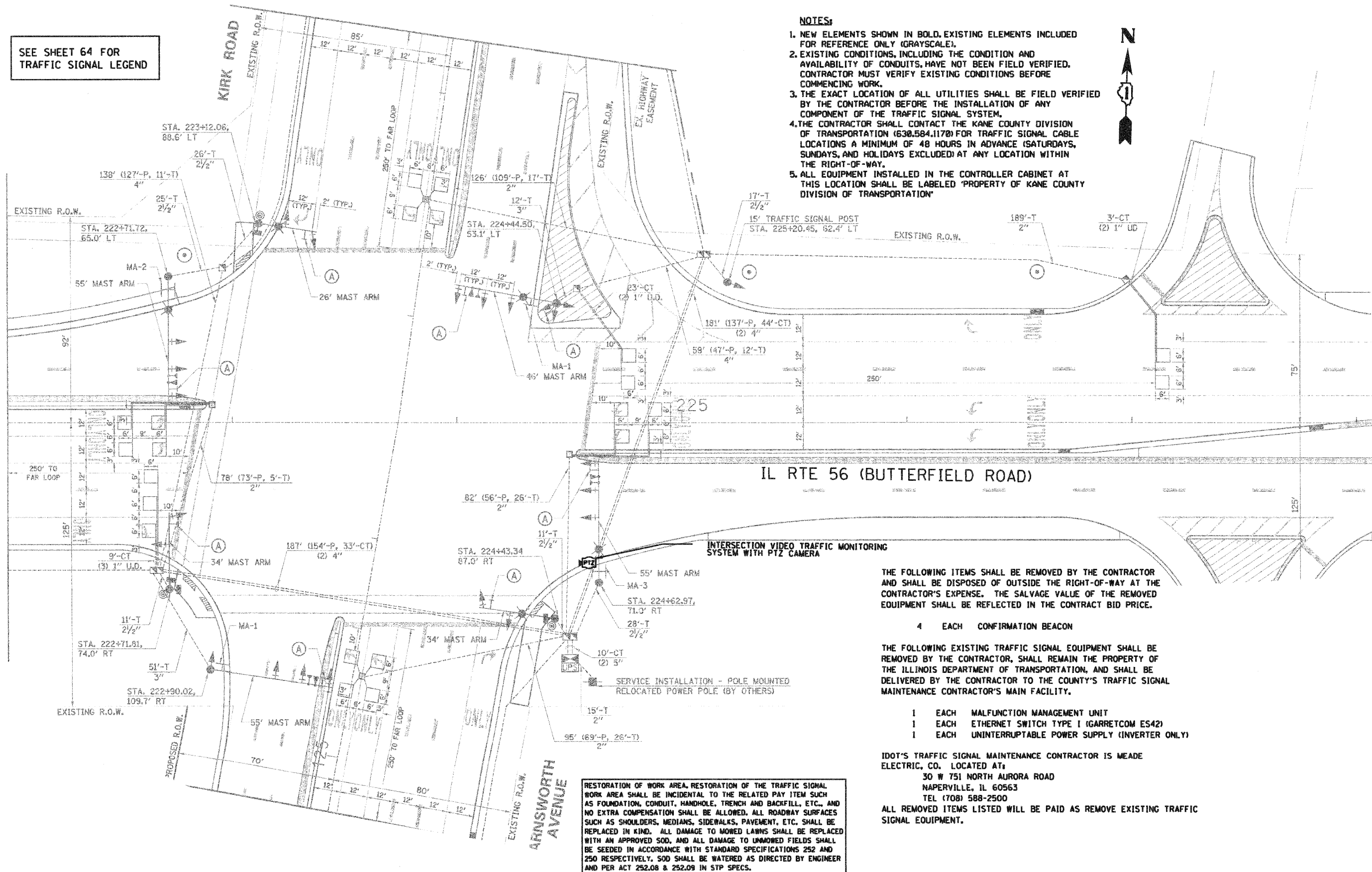
△ DENOTES ITEMS REQUIRING SPECIAL PROVISIONS
 * UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. INCLUDES THE FOLLOWING ITEMS REFERENCED IN THE PLAN SHEET SCHEDULE OF QUANTITIES:
 -CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL
 -CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL
 -TRENCH AND BACKFILL FOR ELECTRICAL WORK
 NO ADDITIONAL COMPENSATION WILL BE MADE FOR THESE ITEMS.

12/6/2011
 P:\2011\09\09\0700\700 CAD & GIS Files\702 - Civil\Sheet\03 Summary of Quantities.dgn

JACOBS ONE NORTH FRANKLIN CHICAGO IL, 60606 312-251-3000	USER NAME =	DESIGNED - CH	REVISED -	KANE COUNTY DIVISION OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 3
	PLOT SCALE =	DRAWN - MO, DI	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT NO. 63648		
PLOT DATE = 12/6/2011	CHECKED - KG	REVISED -			FED. ROAD DIST. NO.								ILLINOIS FED. AID PROJECT
	DATE - #DATE	REVISED -											

11/7/2011
P:\2011\962\001\001\001\CADD & GIS Files\782 Cvt\Sheet\SR_Signal_Kirk and IL 96-1.dgn

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND



- NOTES:**
1. NEW ELEMENTS SHOWN IN BOLD, EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
 2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
 3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
 4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.
 5. ALL EQUIPMENT INSTALLED IN THE CONTROLLER CABINET AT THIS LOCATION SHALL BE LABELED 'PROPERTY OF KANE COUNTY DIVISION OF TRANSPORTATION'



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

4 EACH CONFIRMATION BEACON

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

- 1 EACH MALFUNCTION MANAGEMENT UNIT
- 1 EACH ETHERNET SWITCH TYPE I (GARRETCOM ES42)
- 1 EACH UNINTERRUPTABLE POWER SUPPLY (INVERTER ONLY)

IDOT'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:
30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500
ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =
PLOT SCALE =
PLOT DATE = 11/7/2011

DESIGNED -	CH	REVISED -	
DRAWN -	MO, DI	REVISED -	
CHECKED -	KG	REVISED -	
DATE -	#DATE	REVISED -	

KANE COUNTY
DIVISION OF TRANSPORTATION

TRAFFIC SIGNAL PLAN
KIRK ROAD AND IL ROUTE 56

SCALE: SHEET NO. 5 OF 72 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	5
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63648	

CONSTRUCTION NOTE:

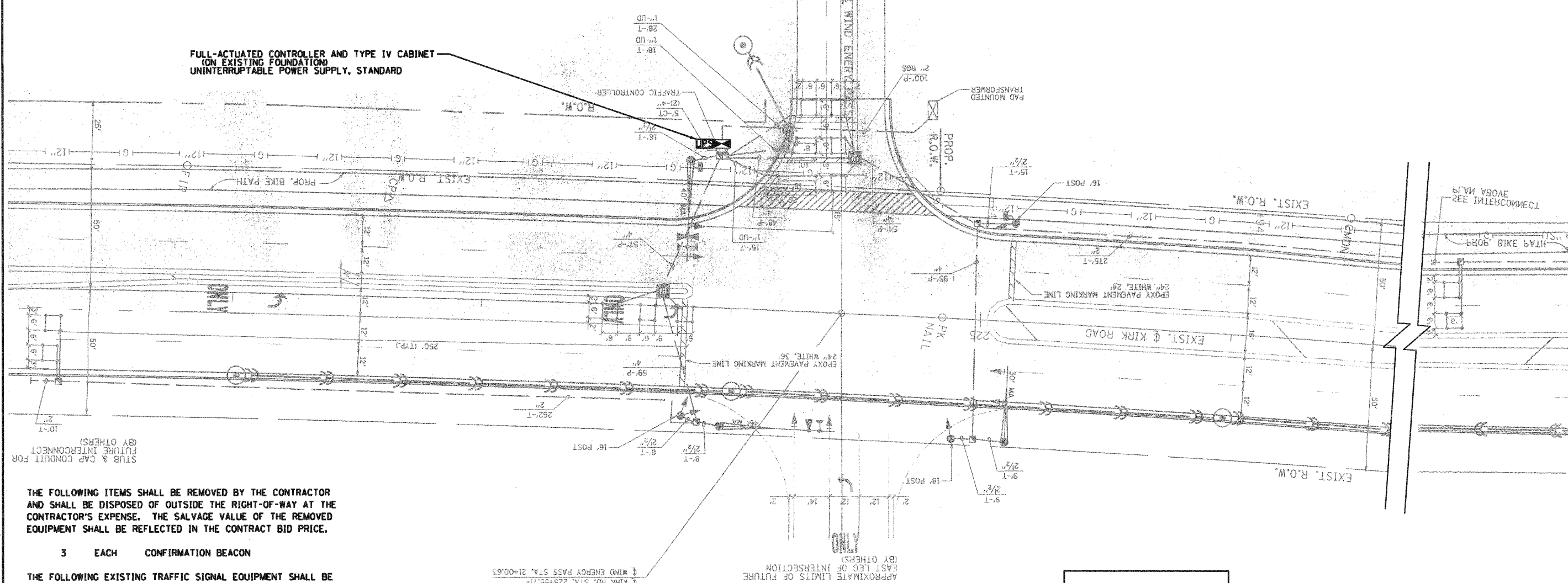
1. CONTROLLER FOUNDATION SHALL BE MODIFIED TO A 'TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET'
2. CONCRETE SERVICE APRON SHALL BE INSTALLED PER DISTRICT 1 STANDARD TRAFFIC SIGNAL DETAILS OR AS DIRECTED BY THE ENGINEER.

PAID FOR AS:

- EARTH EXCAVATION
- PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.



**FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
(ON EXISTING FOUNDATION)
UNINTERRUPTIBLE POWER SUPPLY, STANDARD**

STUB & CAP CONDUIT FOR FUTURE INTERCONNECT (BY OTHERS)

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

- 3 EACH CONFIRMATION BEACON

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE KANE COUNTY, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

- 1 EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
- 1 EACH ETHERNET SWITCH TYPE 1 (GARRETCOM ES42)
- 1 EACH MALFUNCTION MANAGEMENT UNIT

THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO (MOWED) LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

NOTE: IMAGE ROTATED 180° TO MAINTAIN CONSISTENT ORIENTATION (NORTH TO RIGHT)

P:\2011\596708\708_CADD & GIS Files\702_Civil\Sheet\07_Signal_Kirk and Wind Energy Pass.dgn

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

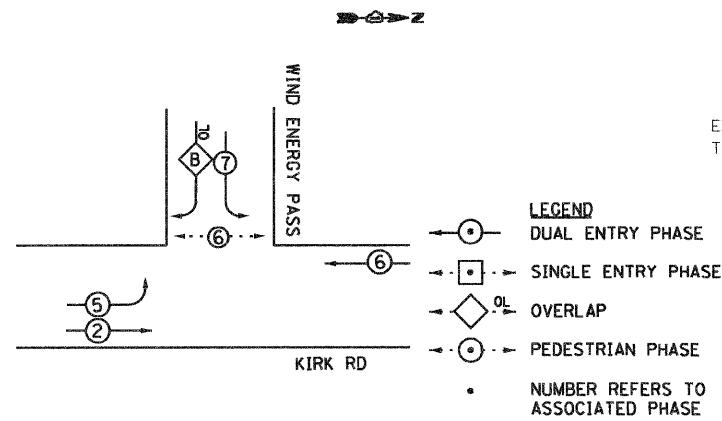
USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

**KANE COUNTY
DIVISION OF TRANSPORTATION**

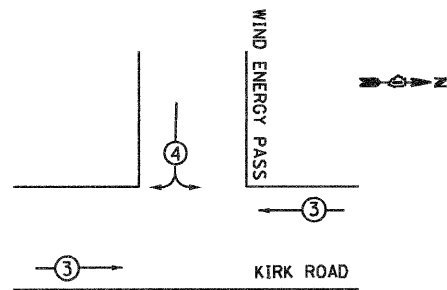
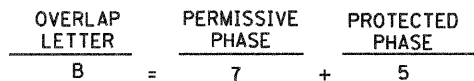
TRAFFIC SIGNAL PLAN KIRK AND WIND ENERGY PASS	
SCALE:	SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 7
CONTRACT NO. 63648				
FED. ROAD DIST. NO. (ILLINOIS) FED. AID PROJECT				

CONTROLLER SEQUENCE



RIGHT TURN OVERLAP PHASE DIAGRAM



PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	←→	↕

EMERGENCY VEHICLE PREEMPTION SEQUENCE NOTES FOR DUAL ENTRY OPERATION - ALL LEGS

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				
TYPE	NO. OF LAMPS	WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	17	0.50	85
(YELLOW)	6	25	0.25	37.5
(GREEN)	6	15	0.25	22.5
YELLOW ARROW	4	12	0.25	12
GREEN ARROW	4	12	0.25	12
GN/YW LT ARROW	4	12	0.10	4.8
PED. SIGNAL	2	25	1.0	50
CONTROLLER	1	100	1.0	100
ILLUM. SIGN	0	25	1.0	0
FLASHER	0	-	-	0
TOTAL =				323.8

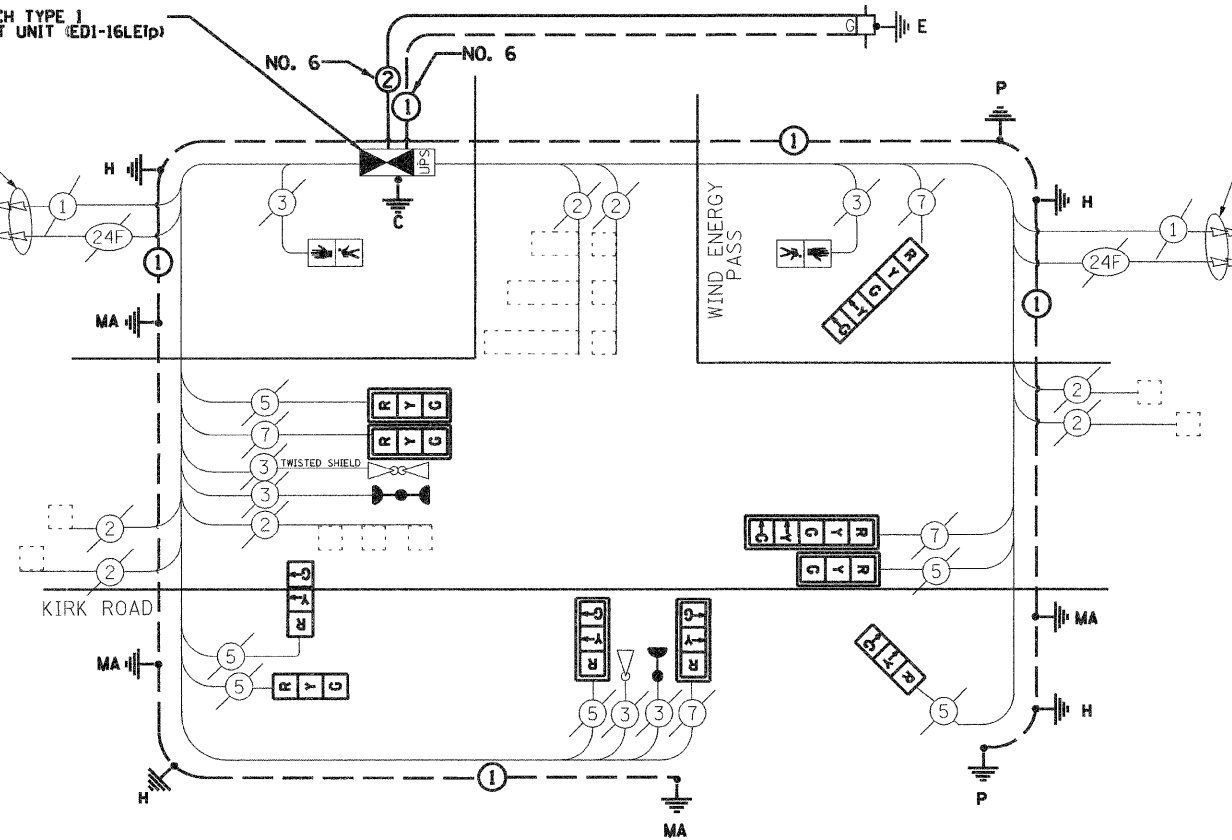
ENERGY COST TO : KANE COUNTY DIVISION OF TRANSPORTATION
41 W011 BURLINGTON ROAD
ST. CHARLES, ILLINOIS 60175

ENERGY SUPPLY CONTACT: COMED
PHONE: 1-800-EDISON1
COMPANY: COMED

FOUNDATION (DEPTH)	(FT.)	CABLE SLACK	(FT.)	VERTICAL	(FT.)
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5
C - CONTROLLER W/LPS	4	DOUBLE HANDHOLE	13	MAST ARM (L) POLE	20'-4"-2"
D - CONTROLLER	4	SIGNAL POST	2	BRACKET MOUNTED	13
E - MAST ARM POLE		CONTROLLER CAB.	1	PED. PUSHBUTTON	6
	30"	FIBER OPTIC	13	ELECTRIC SERVICE	13.5
	36"	ELECTRIC SERVICE	1	SERVICE TO GROUND	13.5
	42"	GROUND CABLE	1	POST MOUNTED	6

ETHERNET MANAGED SWITCH TYPE 1
MALFUNCTION MANAGEMENT UNIT (ED1-16LE1p)
(SEE NOTE 2)

EXISTING INTERCONNECT TO MESA LANE



EXISTING INTERCONNECT TO PINE

- NOTES:
- 24F 15 FIBER OPTIC CABLE No. 62.5/125 MM 12F, SM12F
 - MALFUNCTION MANAGEMENT UNIT TO BE PAID FOR UNDER FULL-ACTUATED CONTROLLER AND TYPE IV CABINET

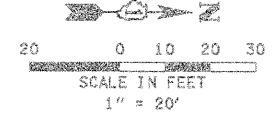
SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

SCHEDULE OF QUANTITIES - KIRK ROAD AND WIND ENERGY PASS

PAY ITEM	UNIT	QUANTITY
EARTH EXCAVATION	CU YD	2
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	23.2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	EACH	113
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	6
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
GROUNDING EXISTING HANDHOLE FRAME AND COVER	FOOT	4
UNINTERRUPTIBLE POWER SUPPLY, STANDARD	EACH	1
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	393
ETHERNET MANAGED SWITCH TYPE 1	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
CONFIRMATION BEACON	EACH	3

11/7/2011

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.



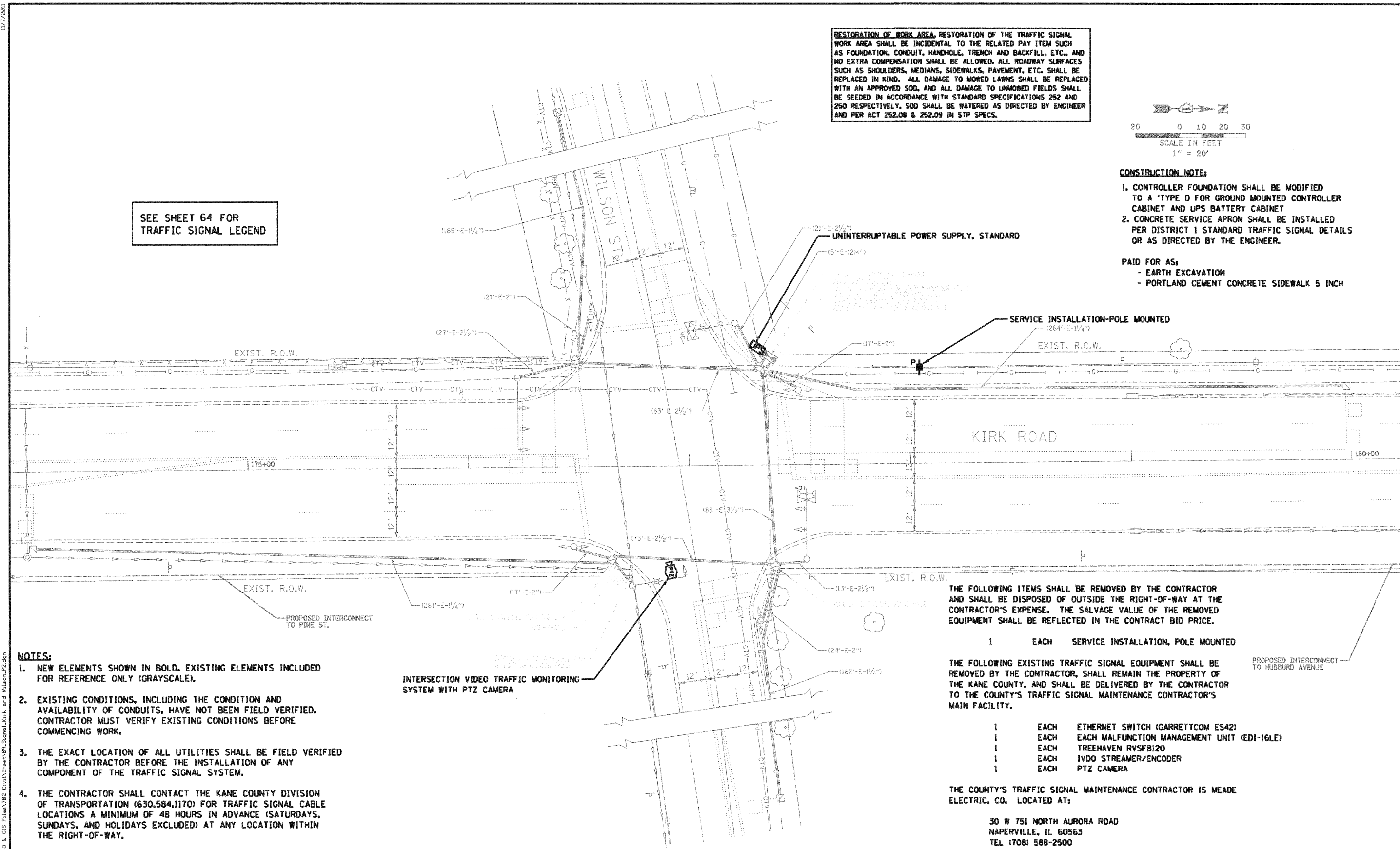
SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

CONSTRUCTION NOTE:

1. CONTROLLER FOUNDATION SHALL BE MODIFIED TO A 'TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET
2. CONCRETE SERVICE APRON SHALL BE INSTALLED PER DISTRICT 1 STANDARD TRAFFIC SIGNAL DETAILS OR AS DIRECTED BY THE ENGINEER.

PAID FOR AS:

- EARTH EXCAVATION
- PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH



NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.

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

- 1 EACH SERVICE INSTALLATION, POLE MOUNTED

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE KANE COUNTY, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

- 1 EACH ETHERNET SWITCH (GARRETTCOM ES42)
- 1 EACH EACH MALFUNCTION MANAGEMENT UNIT (EDI-16LE)
- 1 EACH TREEHAVEN RVSFB120
- 1 EACH IVDO STREAMER/ENCODER
- 1 EACH PTZ CAMERA

THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

P:\11-2011\9096700\700_CADD & GIS Files\11782_Civil\Sheet\909_Signal_Kirk and Wilson_P2.dgn

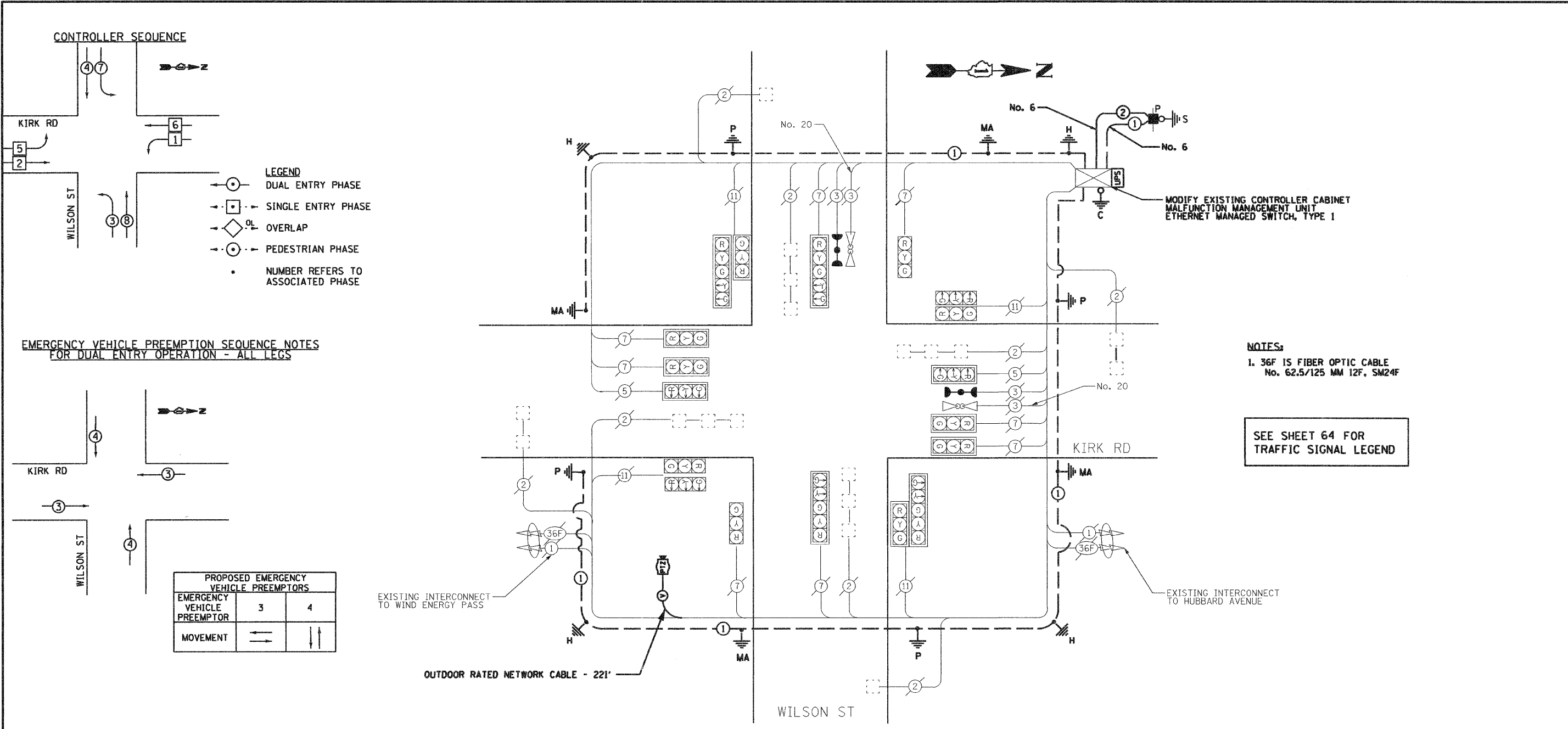
JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - 8DATE	REVISED -

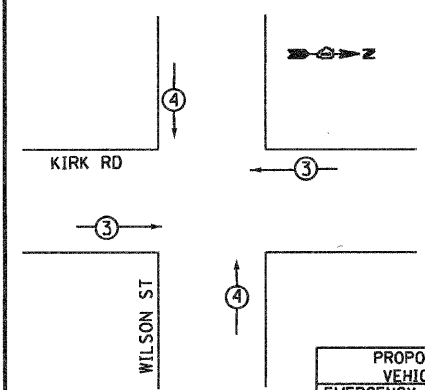
**KANE COUNTY
DIVISION OF TRANSPORTATION**

TRAFFIC SIGNAL PLAN KIRK ROAD AND WILSON STREET			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	9
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63648	



EMERGENCY VEHICLE PREEMPTION SEQUENCE NOTES FOR DUAL ENTRY OPERATION - ALL LEGS



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

NOTES:
 1. 36F IS FIBER OPTIC CABLE
 No. 62.5/125 MM 12F, SM24F

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

SCHEDULE OF QUANTITIES - KIRK RD. AND WILSON ST.

PAY ITEM	UNIT	QUANTITY
EARTH EXCAVATION	CU YD	2
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	23.2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	82
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION-POLE MOUNTED	EACH	1
GROUNDING EXISTING HANDHOLE-FRAME AND COVER	EACH	4
UNINTERRUPTABLE POWER SUPPLY, STANDARD	EACH	1
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	352
MALFUNCTION MANAGEMENT UNIT	EACH	1
ETHERNET MANAGED SWITCH, TYPE 1	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
CONFIRMATION BEACON	EACH	4
OUTDOOR RATED NETWORK CABLE	FOOT	221
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	x WATTAGE INCAND.	x % OPERATION LED		
SIGNAL (RED)	10	17	0.50		85
(YELLOW)	10	25	0.25		62.5
(GREEN)	10	15	0.25		62.5
ARROW	10	12	0.10		12
PED. SIGNAL	2	25	1.0		50
CONTROLLER	0	100	1.0		0
ILLUM. SIGN	0	25	1.0		0
FLASHER	0				0
TOTAL =					272

ENERGY COST TO : KANE COUNTY DIVISION OF TRANSPORTATION
 41 W011 BURLINGTON ROAD
 ST. CHARLES, ILLINOIS 60175

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

FOUNDATION (DEPTH)	(FT.)	CABLE SLACK	(FT.)	VERTICAL	(FT.)
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5
C - CONTROLLER W/UPS	4	DOUBLE HANDHOLE	13	MAST ARM (LI) POLE	20'H-2'
D - CONTROLLER	4	SIGNAL POST	2	BRACKET MOUNTED	13
E - MAST ARM POLE		CONTROLLER CAB.	1	PED. PUSHBUTTON	6
	30"	FIBER OPTIC	13	ELECTRIC SERVICE	13.5
	36"	ELECTRIC SERVICE	1	SERVICE TO GROUND	13.5
	42"	GROUND CABLE	1	POST MOUNTED	6

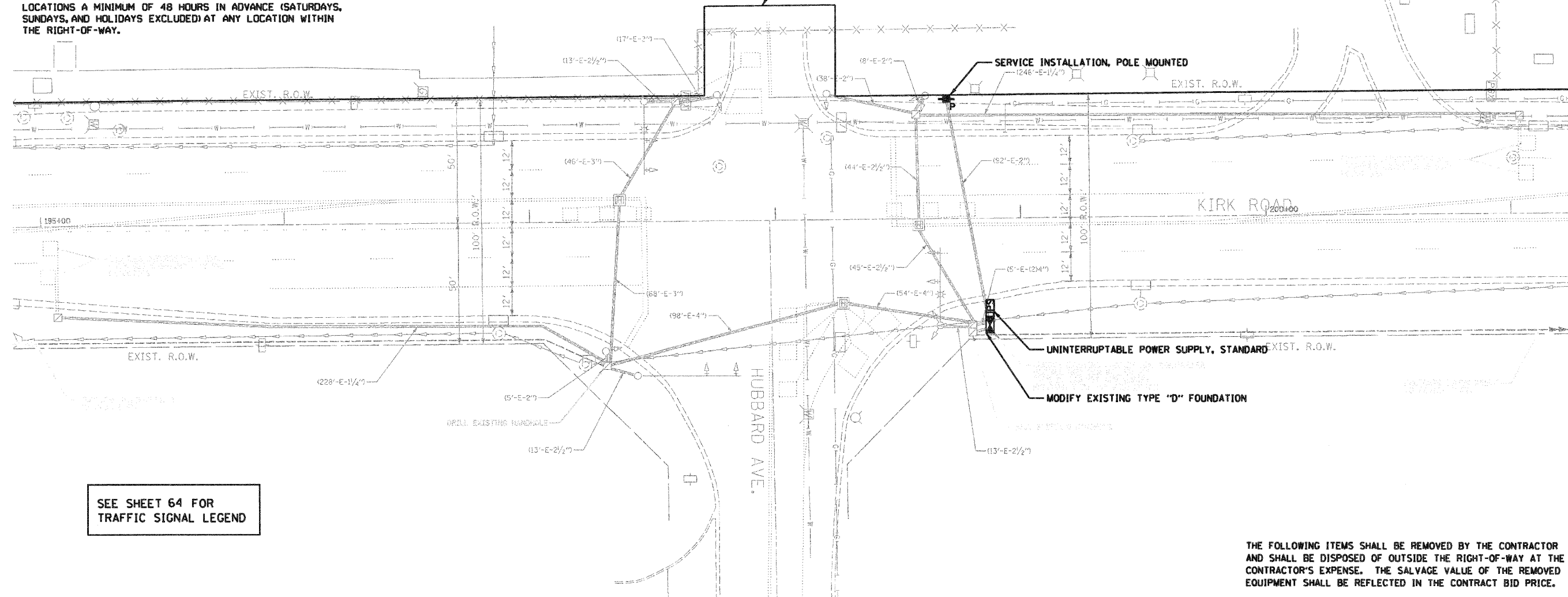
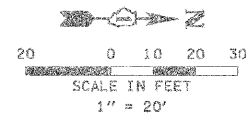
JACOBS ONE NORTH FRANKLIN CHICAGO IL, 60606 312-251-3000	USER NAME =	DESIGNED - CH	REVISED -	KANE COUNTY DIVISION OF TRANSPORTATION	CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES KIRK ROAD AND WILSON STREET	F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 10
	PLOT SCALE =	DRAWN - MO, DI	REVISED -			CONTRACT NO. 63648				
	PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -			FED. ROAD DIST. NO. (ILLINOIS) FED. AID PROJECT				

11/7/2011

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	11
STA.	TO STA.		CONTRACT NO. 63648	
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT NO. 83808	



SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

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

- 1 EACH SERVICE INSTALLATION - POLE MOUNTED
- THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE KANE COUNTY, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.
- 1 EACH MALFUNCTION MANAGEMENT UNIT
 - 1 EACH ETHERNET SWITCH TYPE I (GARRETCOM ES42)

THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

P:\1-2811\596728\780 CADD & GIS Files\782 Civil\Sheet\CAs_Signal_Kirk_and_Hubbard_P2.dgn

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

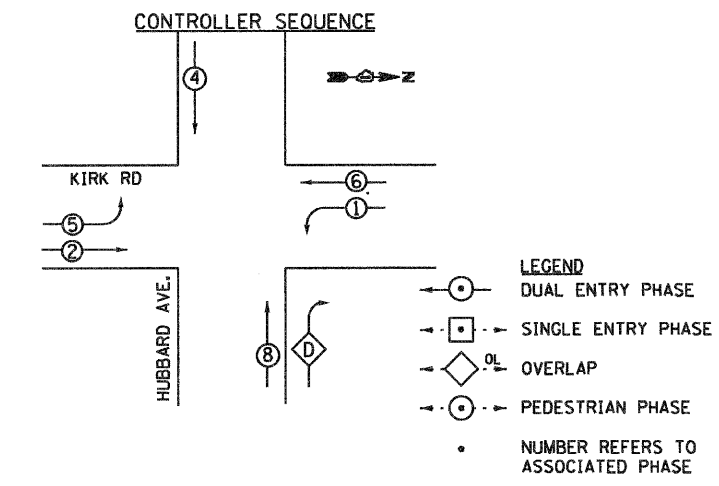
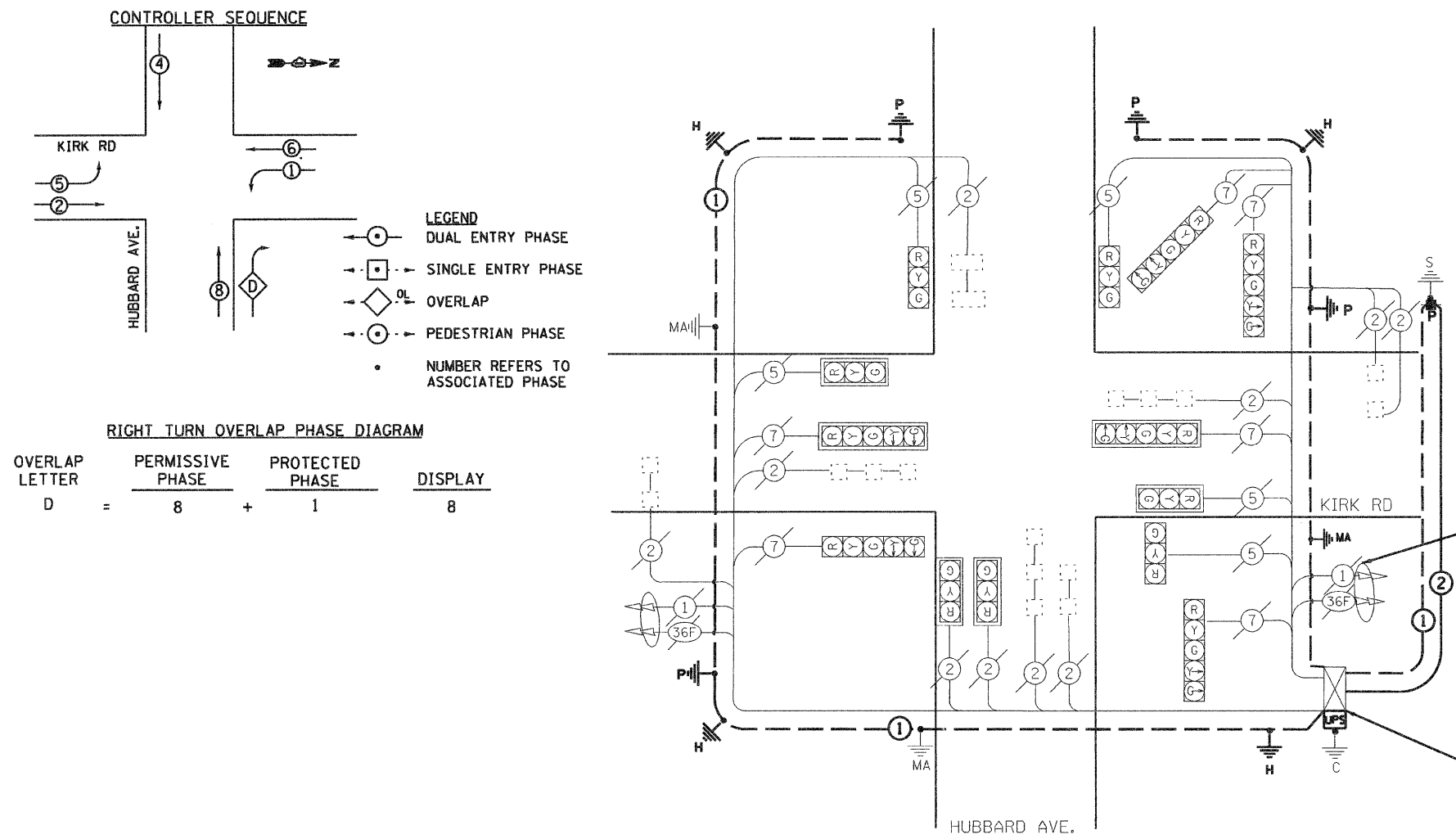
USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

TRAFFIC SIGNAL PLAN
KIRK ROAD AND HUBBARD AVENUE

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	11
CONTRACT NO. 63648			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	



RIGHT TURN OVERLAP PHASE DIAGRAM

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE	DISPLAY
D	8	1	8

- NOTES:**
- 36F IS FIBER OPTIC CABLE No. 62.5/125 MM 12F, SM24F
 - NEW ELEMENTS SHOWN IN BOLD, EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GREY SCALE)

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

CABLE PLAN
NOT TO SCALE

EXISTING INTERCONNECT TO FABIAN PKWY.

MODIFY EXISTING CONTROLLER CABINET MALFUNCTION MANAGEMENT UNIT (EDI-16LE1P) ETHERNET MANAGED SWITCH TYPE 1

SCHEDULE OF QUANTITIES - KIRK ROAD AND HUBBARD AVENUE

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	94
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION-POLE MOUNTED	EACH	1
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	4
UNINTERRUPTABLE POWER SUPPLY, STANDARD	EACH	1
MODIFY EXISTING TYPE "D" FOUNDATION	EACH	1
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	431
MALFUNCTION MANAGEMENT UNIT	EACH	1
ETHERNET MANAGED SWITCH TYPE 1	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1

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

TYPE	NO. OF LAMPS	WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	17	0.50	85
(YELLOW)	10	25	0.25	62.5
(GREEN)	10	15	0.25	62.5
ARROW	10	12	0.10	12
PED. SIGNAL	2	25	1.0	50
CONTROLLER	0	100	1.0	0
ILLUM. SIGN	0	25	1.0	0
FLASHER	0	-	-	0
TOTAL				272

ENERGY COST TO : **KANE COUNTY DIVISION OF TRANSPORTATION**
41 W011 BURLINGTON ROAD
ST. CHARLES, ILLINOIS 60175

ENERGY SUPPLY CONTACT: **COMED**
PHONE: 1-800-EDISON1
COMPANY: COMED

FOUNDATION (DEPTH)	(FT.)	CABLE SLACK	(FT.)	VERTICAL	(FT.)
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5
C - CONTROLLER #/UPS	4	DOUBLE HANDHOLE	13	MAST ARM (L) POLE	20'xL-2 =
D - CONTROLLER	4	SIGNAL POST	2	BRACKET MOUNTED	13
E - MAST ARM POLE		CONTROLLER CAB.	1	PED. PUSHBUTTON	6
	30"	FIBER OPTIC	13	ELECTRIC SERVICE	13.5
	36"	ELECTRIC SERVICE	1	SERVICE TO GROUND	13.5
	42"	GROUND CABLE	1	POST MOUNTED	6

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #09TE	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

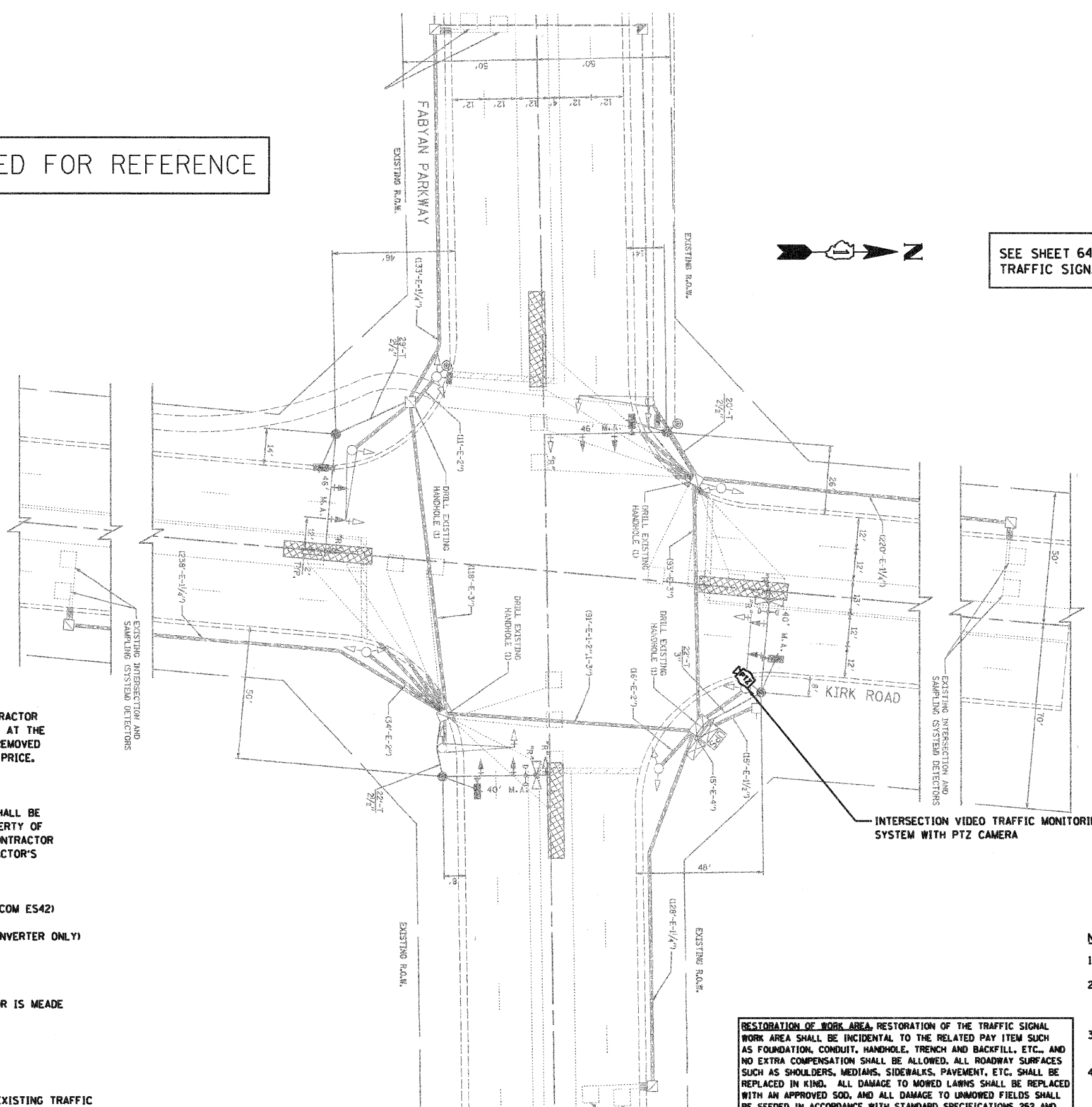
CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES
KIRK ROAD AND HUBBARD AVENUE

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	12

CONTRACT NO. 63648
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

PLAN INCLUDED FOR REFERENCE



SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

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

- 4 EACH CONFIRMATION BEACON

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE KANE COUNTY, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

- 1 EACH MASTER CONTROLLER
- 1 EACH ETHERNET SWITCH TYPE I (GARRETCOM ES42)
- 1 EACH MALFUNCTION MANAGEMENT UNIT
- 1 EACH UNINTERRUPTABLE POWER SUPPLY (INVERTER ONLY)
- 1 EACH TREEHAVEN RVSFB120
- 1 EACH IVDO STREAMER/ENCODER
- 1 EACH PTZ CAMERA

THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.5265) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.

P:\11-2811\9867280\700 CAD & GIS Files\702 Civil\Sheet\CEa_Signal\Kirk and Fabyan_T2.dgn

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KC	REVISED -
	DATE - #DATE	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

TRAFFIC SIGNAL PLAN
KIRK ROAD AND FABYAN PARKWAY

F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 13
FED. ROAD DIST. NO. (ILLINOIS) FED. AID PROJECT			CONTRACT NO. 63648	

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

- NOTES:**
1. NEW ELEMENTS SHOWN IN BOLD.
 - EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GREY SCALE)
 2. EXISTING SIGNAL EQUIPMENT SHOWN DOES NOT REFLECT EXISTING CONDITIONS. THROUGH A FIELD INSPECTION, VERIFIED THAT TRAFFIC SIGNAL GROUNDING AND SIGNAL HEADS HAVE BEEN BROUGHT UP TO CURRENT STANDARDS

SCHEDULE OF QUANTITIES - KIRK ROAD AND FABYAN PARKWAY

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
MODIFY EXISTING CONTROLLER CABINET, SPECIAL	EACH	1
MALFUNCTION MANAGEMENT UNIT	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	86
ETHERNET MANAGED SWITCH, TYPE 2	EACH	1
CONFIRMATION BEACON	EACH	4
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1

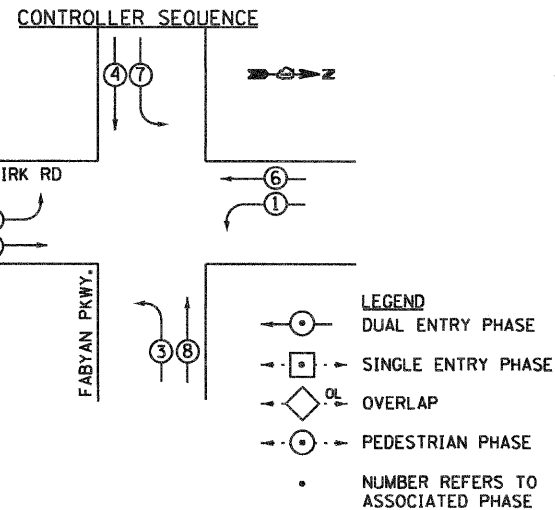
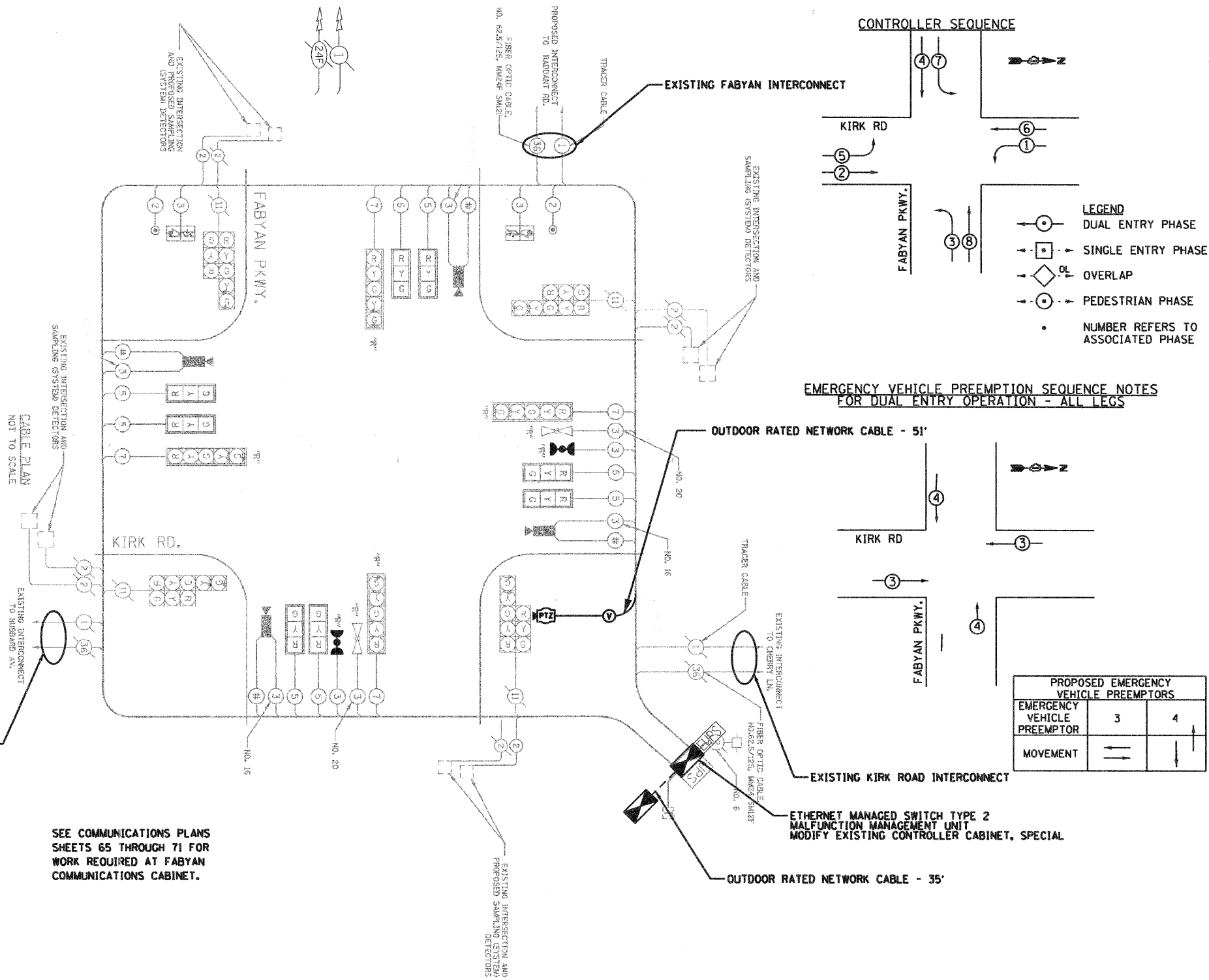
SCHEDULE OF QUANTITIES - FABYAN PARKWAY AND WESTERN AVENUE (NOT SHOWN)

PAY ITEM	UNIT	QUANTITY
ETHERNET MANAGED SWITCH, TYPE 2	EACH	1

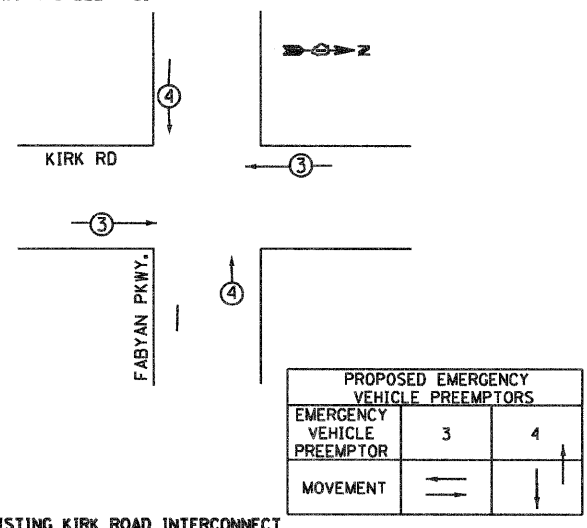
SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

EXISTING KIRK ROAD INTERCONNECT

SEE COMMUNICATIONS PLANS SHEETS 65 THROUGH 71 FOR WORK REQUIRED AT FABYAN COMMUNICATIONS CABINET.



EMERGENCY VEHICLE PREEMPTION SEQUENCE NOTES FOR DUAL ENTRY OPERATION - ALL LEGS



P:\1261\9596788\788 CAD & GIS Files\782 Civil\Sheet\Cable_Kirk_and_Fabyan_P2.dgn

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

ENERGY COSTS TO: CITY OF GENEVA
22 S. FIRST STREET
GENEVA, IL 60134
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	20'4L-2"=
E- M. ARM POLE		SIGNAL POST	2 (1.0)		3m+L-0.6m)=
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.5)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36" (900mm)	15 (4.5)	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)

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

**KANE COUNTY
DIVISION OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND SCHEDULE OF QUANTITIES
KIRK ROAD AND FABYAN PARKWAY**

F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 14
FED. ROAD DIST. NO. (ILLINOIS) FED. AID PROJECT			CONTRACT NO. 63648	

11/7/2011
P:\2011\9867\861780.CADD & GIS Files\782 Civil\Sheet\66a.Signal\Kirk and Cherry.P2.dgn

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

- 4 EACH CONFIRMATION BEACON
- 1 EACH SERVICE INSTALLATION - POLE MOUNTED

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE KANE COUNTY, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

- 1 EACH MALFUNCTION MANAGEMENT UNIT
- 1 EACH ETHERNET SWITCH TYPE I (GARRETCOM ES42)
- 1 EACH TREEHAVEN RVSFB120
- 1 EACH IVDO STREAMER/ENCODER
- 1 EACH PTZ CAMERA

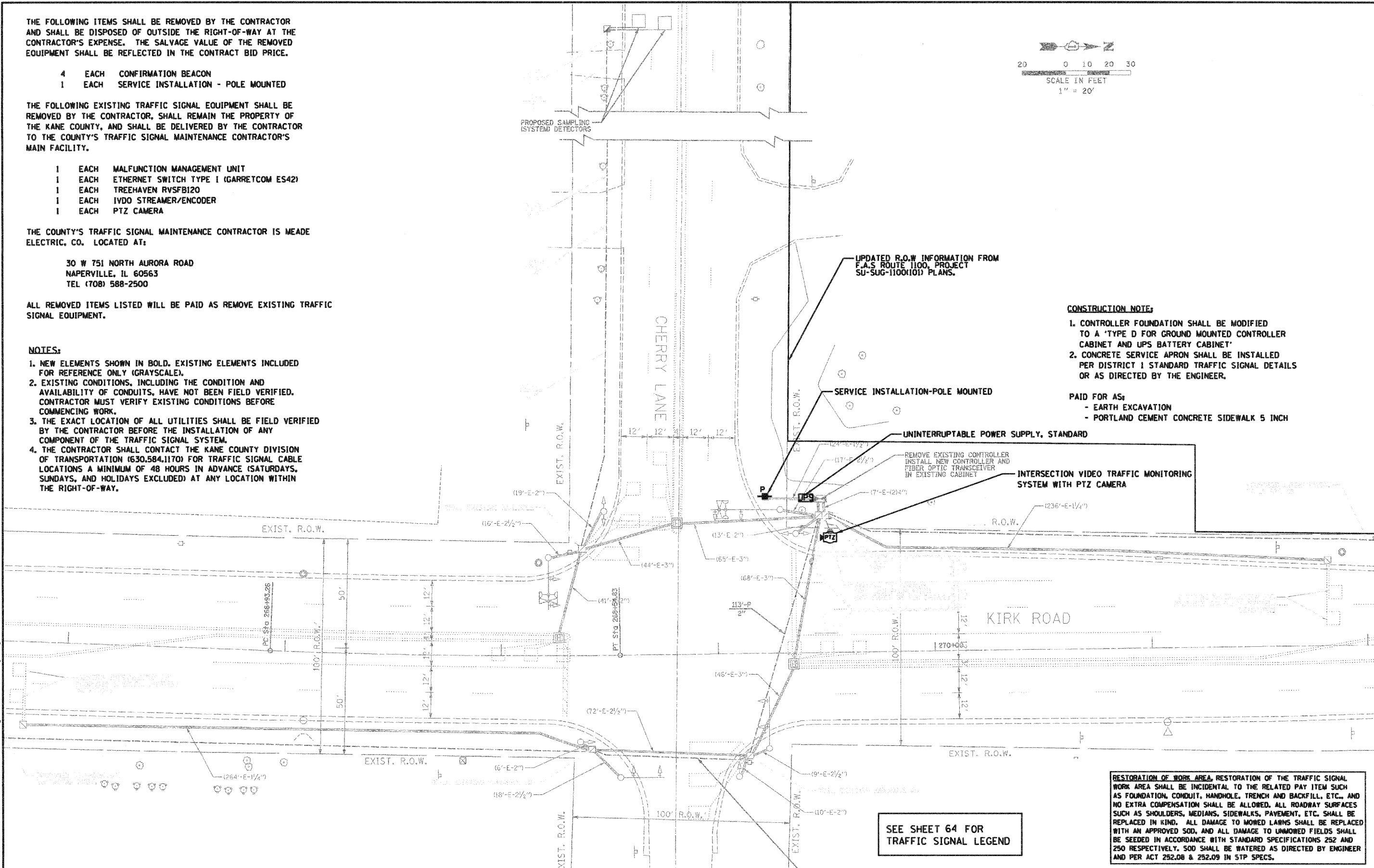
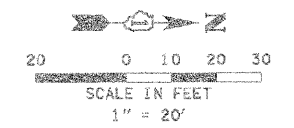
THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.



CONSTRUCTION NOTE:

1. CONTROLLER FOUNDATION SHALL BE MODIFIED TO A 'TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET'
2. CONCRETE SERVICE APRON SHALL BE INSTALLED PER DISTRICT 1 STANDARD TRAFFIC SIGNAL DETAILS OR AS DIRECTED BY THE ENGINEER.

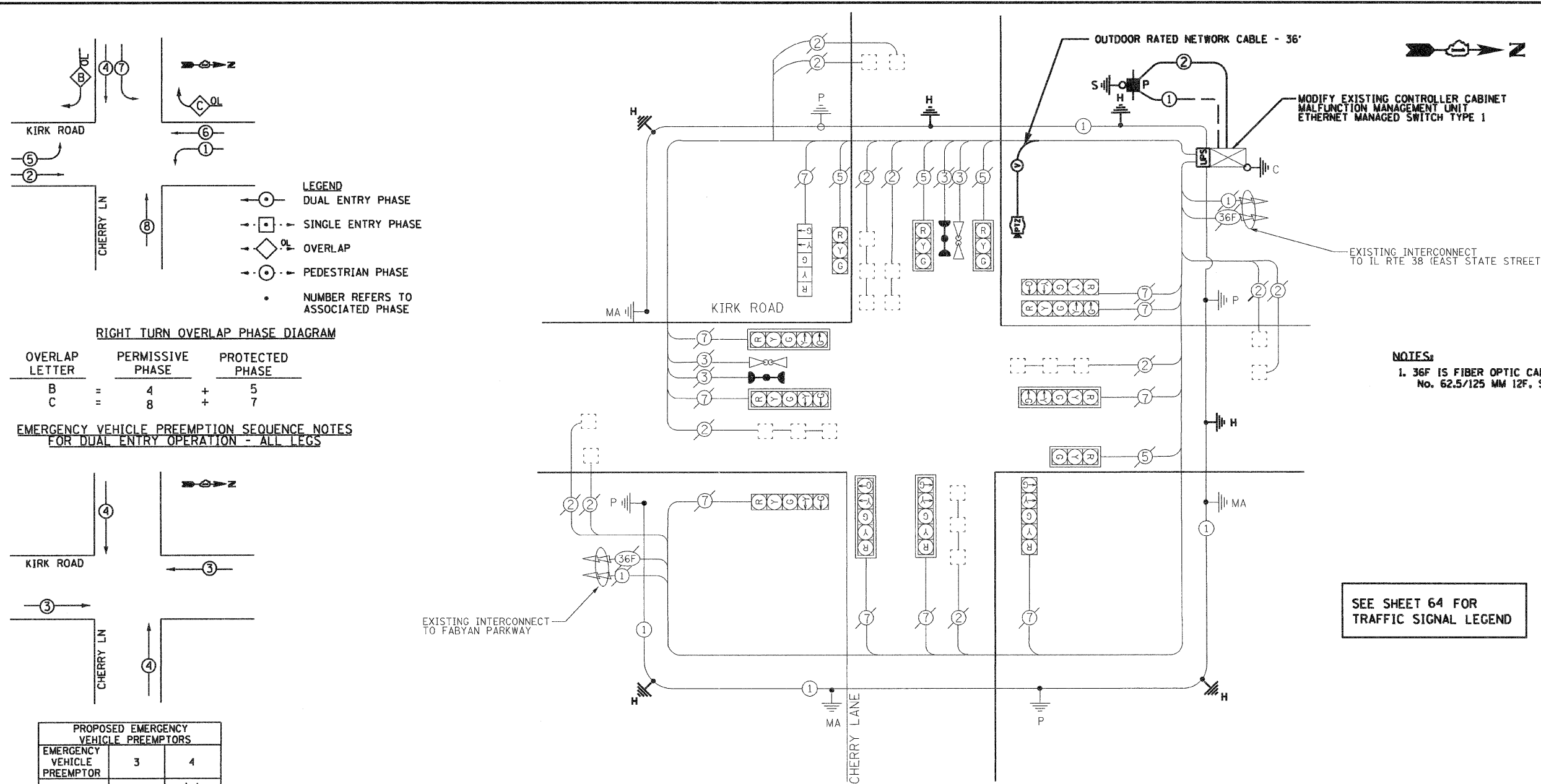
PAID FOR AS:

- EARTH EXCAVATION
- PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

JACOBS ONE NORTH FRANKLIN CHICAGO IL, 60606 312-251-3000	USER NAME =	DESIGNED - CH	REVISED -	KANE COUNTY DIVISION OF TRANSPORTATION	TRAFFIC SIGNAL PLAN KIRK ROAD AND CHERRY LANE			F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 15	
	PLOT SCALE =	DRAWN - MO, DI	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 63648					
	PLOT DATE = 11/7/2011	CHECKED - KC	REVISED -			FED. ROAD DIST. NO. (ILLINOIS) FED. AID PROJECT							
		DATE - #DATE	REVISED -										

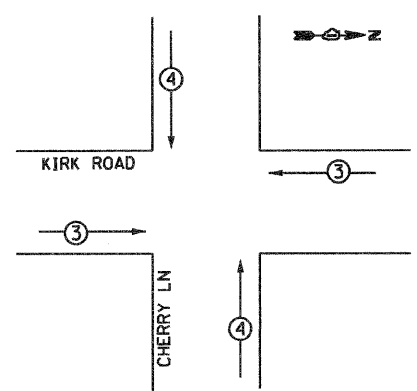


LEGEND
 ○ DUAL ENTRY PHASE
 □ SINGLE ENTRY PHASE
 ◇ OVERLAP
 ○ PEDESTRIAN PHASE
 • NUMBER REFERS TO ASSOCIATED PHASE

RIGHT TURN OVERLAP PHASE DIAGRAM

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	4	5
C	8	7

EMERGENCY VEHICLE PREEMPTION SEQUENCE NOTES FOR DUAL ENTRY OPERATION - ALL LEGS



PROPOSED EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

NOTES:
 1. 36F IS FIBER OPTIC CABLE No. 62.5/125 MM 12F, SM24F

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

SCHEDULE OF QUANTITIES - KIRK ROAD AND CHERRY ROAD

PAY ITEM	UNIT	QUANTITY
EARTH EXCAVATION	CU YD	2
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	23.2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	42
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION-POLE MOUNTED	EACH	1
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	6
UNINTERRUPTABLE POWER SUPPLY, STANDARD	EACH	1
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	372
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
MALFUNCTION MANAGEMENT UNIT	EACH	1
CONFIRMATION BEACON	EACH	4
ETHERNET MANAGED SWITCH, TYPE 1	EACH	1
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	36
MODIFY EXISTING CONTROLLER CABINET	EACH	1

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

TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	10	17	0.50	85	
(YELLOW)	10	25	0.25	62.5	
(GREEN)	10	15	0.25	62.5	
ARROW	10	12	0.10	12	
PED. SIGNAL	2	25	1.0	50	
CONTROLLER	0	100	1.0	0	
ILLUM. SIGN	0	25	1.0	0	
FLASHER	0	-	-	0	
TOTAL =					272

ENERGY COST TO : KANE COUNTY DIVISION OF TRANSPORTATION
 41 WOLL BURLINGTON ROAD
 ST. CHARLES, ILLINOIS 60175

ENERGY SUPPLY CONTACT: COMED
 PHONE: 1-800-EDISONI
 COMPANY: COMED

FOUNDATION (DEPTH)	(FT.)	CABLE SLACK	(FT.)	VERTICAL	(FT.)
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5
C - CONTROLLER #/UPS	4	DOUBLE HANDHOLE	13	MAST ARM (L) POLE	20'-L-2
D - CONTROLLER	4	SIGNAL POST	2	BRACKET MOUNTED	13
E - MAST ARM POLE		CONTROLLER CAB.	1	PED. PUSHBUTTON	6
	30"	FIBER OPTIC	13	ELECTRIC SERVICE	13.5
	36"	ELECTRIC SERVICE	1	SERVICE TO GROUND	13.5
	42"	GROUND CABLE	1	POST MOUNTED	6

JACOBS
 ONE NORTH FRANKLIN
 CHICAGO IL, 60606
 312-251-3000

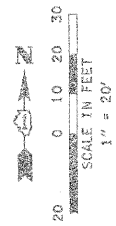
USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

KANE COUNTY DIVISION OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND SCHEDULE OF QUANTITIES KIRK ROAD AND CHERRY LANE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	16
FED. ROAD DIST. NO. (ILLINOIS) FED. AID PROJECT			CONTRACT NO. 63648	

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND



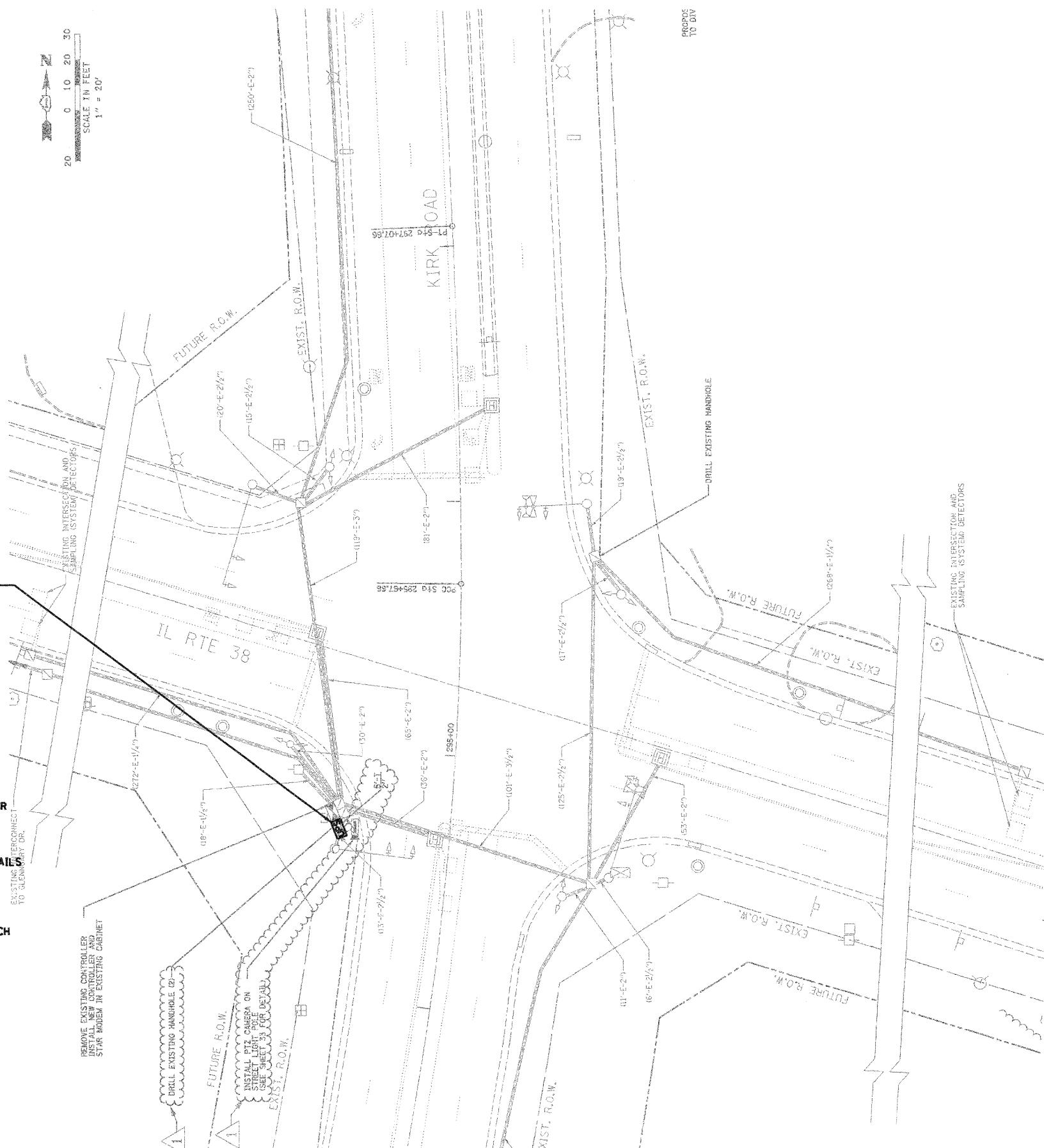
UNINTERRUPTABLE POWER SUPPLY, STANDARD

CONSTRUCTION NOTE:

1. CONTROLLER FOUNDATION SHALL BE MODIFIED TO A 'TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET'
2. CONCRETE SERVICE APRON SHALL BE INSTALLED PER DISTRICT 1 STANDARD TRAFFIC SIGNAL DETAILS OR AS DIRECTED BY THE ENGINEER.

PAID FOR AS:

- EARTH EXCAVATION
- PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
- SAND CUSHION, VARIABLE DEPTH



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

- 4 EACH CONFIRMATION BEACON

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

- 1 EACH MALFUNCTION MANAGEMENT UNIT
- 1 EACH ETHERNET SWITCH TYPE I (GARRETCOM ES42)

IDOT'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

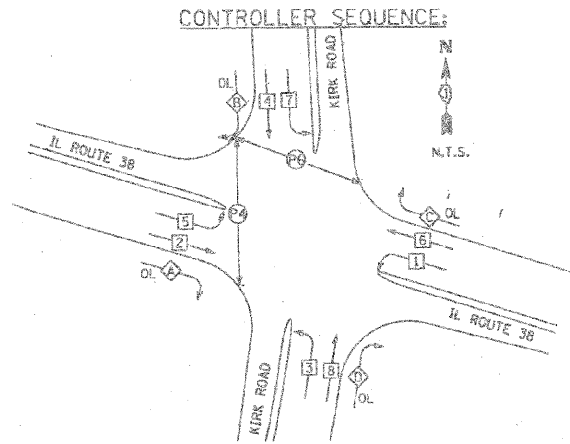
NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.
5. INTERSECTION IS UNDER THE JURISDICTION AND MAINTAINED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

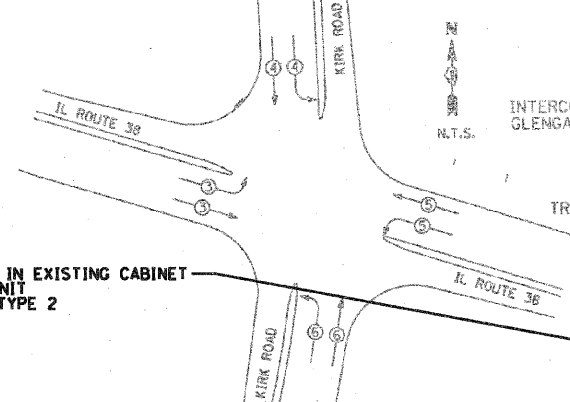
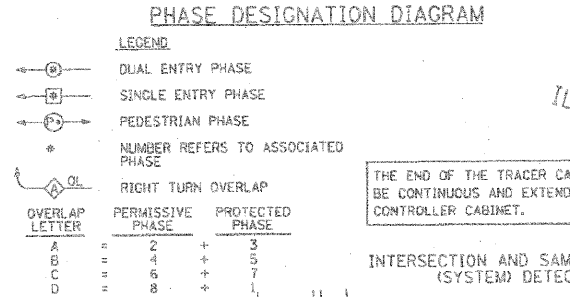
RESTORATION OF WORK AREA: RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	17
CONTRACT NO. 63648				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



NOTE:
PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6



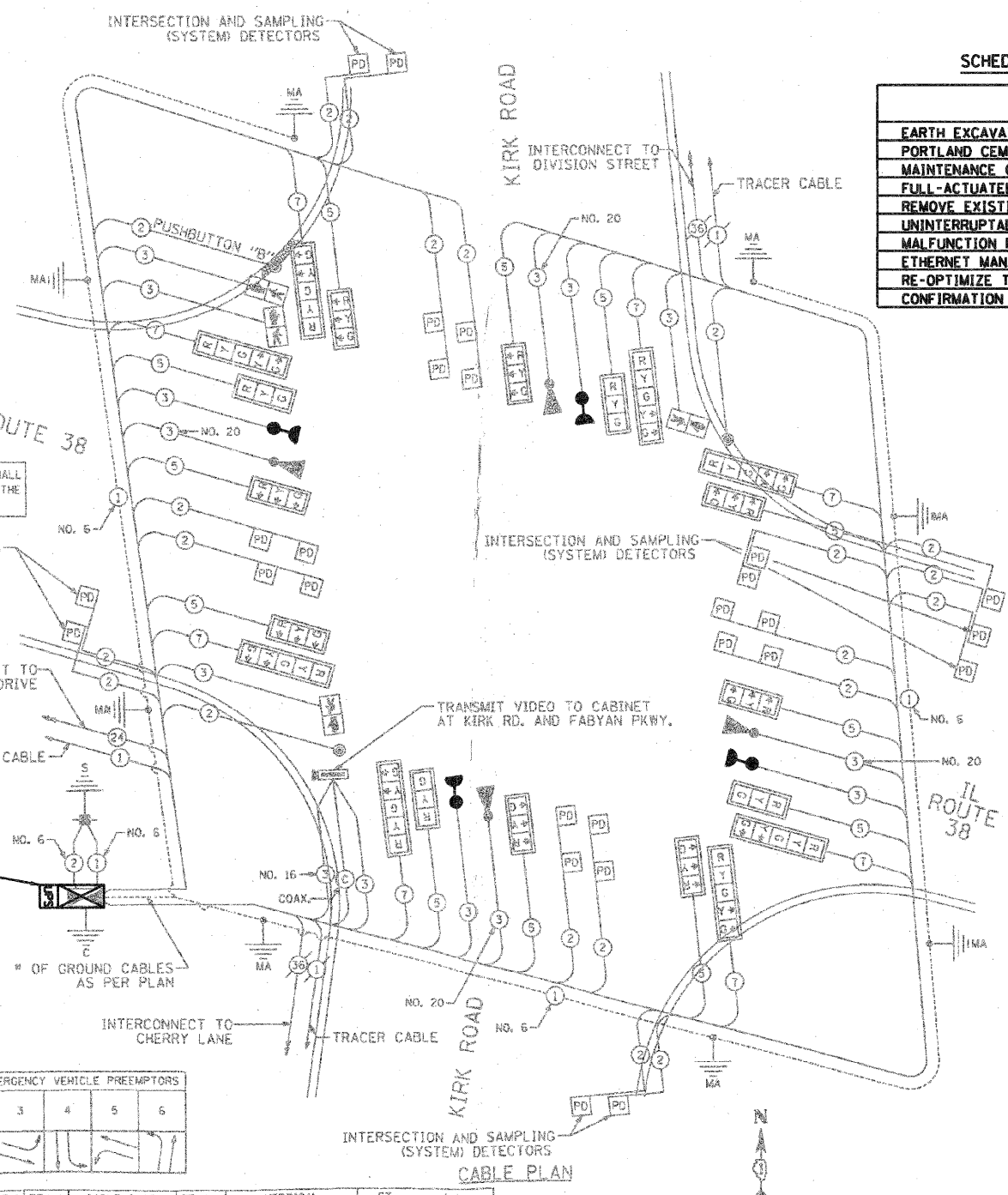
FULL-ACTUATED CONTROLLER IN EXISTING CABINET
MALFUNCTION MANAGEMENT UNIT
ETHERNET MANAGED SWITCH TYPE 2

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE	OPERATION		
SIGNAL (RED)	20	135	17	0.50	170.0
(YELLOW)	20	135	25	0.25	125.0
(GREEN)	20	135	15	0.25	75.0
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER	1	100	100	1.00	100.0
ILLUM. SIGN	0	84	35	0.05	0
FLASHER	0		25	0.50	0
ENERGY COST TO:				TOTAL =	589.2

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/DISTRICT 1
201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
ENERGY SUPPLY: CONTACT: JENNIFER HILKEMANN
PHONE: (630) 232-1503
COMPANY: CITY OF GENEVA

PROPOSED EMERGENCY VEHICLE PREEMPTORS				
EMERGENCY VEHICLE PREEMPTORS	3	4	5	6
MOVEMENT				

FOUNDATION (DEPTH)	FT (m)	CABLE SLACK	FT (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
TYPE B - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	WAST ARM 1.7 POLE	20' H - 2" (5m) H - 0.6m
30", TYPE E	15 (4.6)	SIGNAL POST	2 (1.0)	BRACKET MOUNTED	15 (4.6)
36", TYPE E	19 (4.8)	CONTROLLER CAB.	1 (0.5)	RED. PUSHBUTTON	4 (1.2)
		FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
		ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
		GROUND CABLE	1 (0.5)	POST MOUNTED	5 (1.5)



SCHEDULE OF QUANTITIES - KIRK ROAD AND IL RTE 38 (E STATE STREET)

PAY ITEM	UNIT	QUANTITY
EARTH EXCAVATION	CY YD	2
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	23.2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL CONTROLLER	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, STANDARD	EACH	1
MALFUNCTION MANAGEMENT UNIT	EACH	1
ETHERNET MANAGED SWITCH, TYPE 2	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
CONFIRMATION BEACON	EACH	4

NOTES:
1. NEW ELEMENTS SHOWN IN BOLD, EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GREY SCALE)

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

NOTE:
THE TRAFFIC SIGNAL CONTROL EC SHALL BE "EAGLE" TO MATCH TH

P:\2011\956720\780_CADD & GIS Files\956720\Sheet\CE-Cable-Kirk-IL38-F2.dwg

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND SCHEDULE OF QUANTITIES			
KIRK ROAD AND IL RTE 38			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	18
CONTRACT NO. 63648				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

11/7/2011

CONSTRUCTION NOTE:

1. CONTROLLER FOUNDATION SHALL BE MODIFIED TO A 'TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET'
2. CONCRETE SERVICE APRON SHALL BE INSTALLED PER DISTRICT 1 STANDARD TRAFFIC SIGNAL DETAILS OR AS DIRECTED BY THE ENGINEER.

PAID FOR AS:

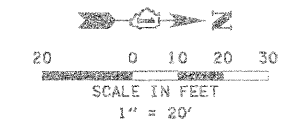
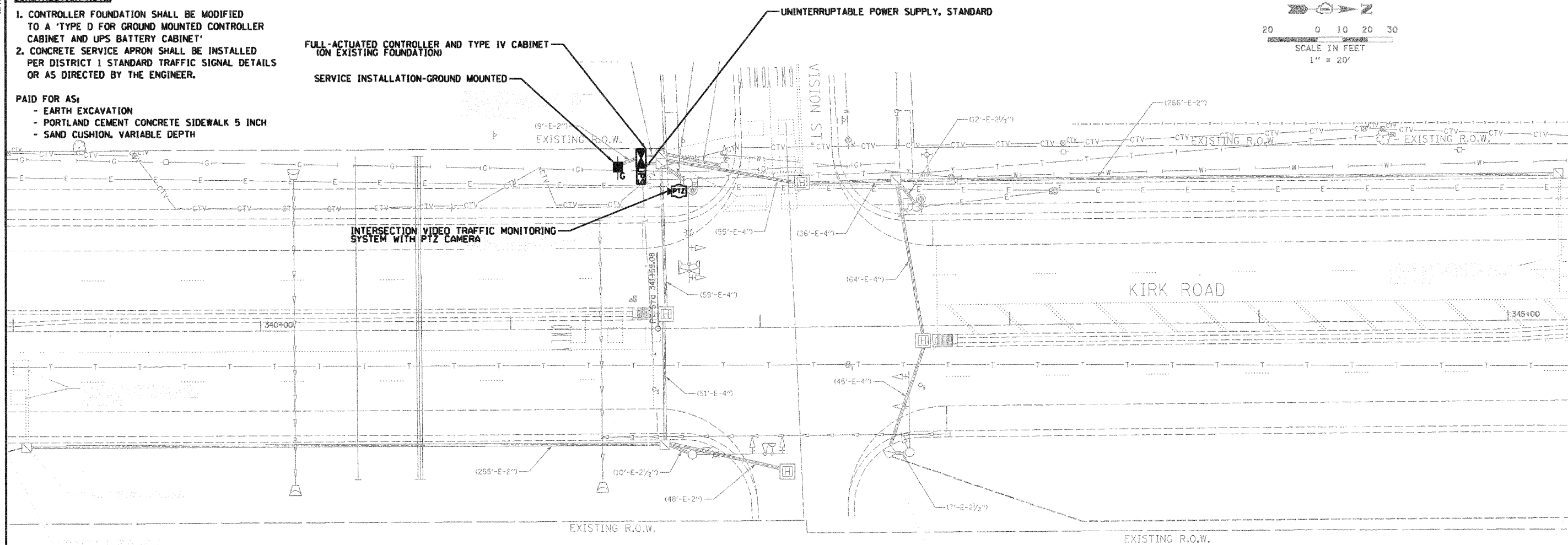
- EARTH EXCAVATION
- PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
- SAND CUSHION, VARIABLE DEPTH

FULL-ACTUATED CONTROLLER AND TYPE IV CABINET ON EXISTING FOUNDATION

SERVICE INSTALLATION-GROUND MOUNTED

UNINTERRUPTIBLE POWER SUPPLY, STANDARD

INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA



SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.5265) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.
5. ELECTRICAL SERVICE METER WILL NEED TO BE RELOCATED BY OTHERS

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

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

- 1 EACH SERVICE INSTALLATION - GROUND MOUNTED
- 3 EACH CONFIRMATION BEACON

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE KANE COUNTY, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

- 1 EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
- 1 EACH MALFUNCTION MANAGEMENT UNIT
- 1 EACH ETHERNET SWITCH TYPE I (GARRETCOM ES42)
- 1 EACH TREEHAVEN RV5FB120
- 1 EACH IVDD STREAMER/ENCODER
- 1 EACH PTZ CAMERA

THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

P:\2211\906788\100_CADD & GIS Files\702_Civil\Sheet\702_Signal\Kirk and Division_P2.dgn

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KC	REVISED -
	DATE - #DATE	REVISED -

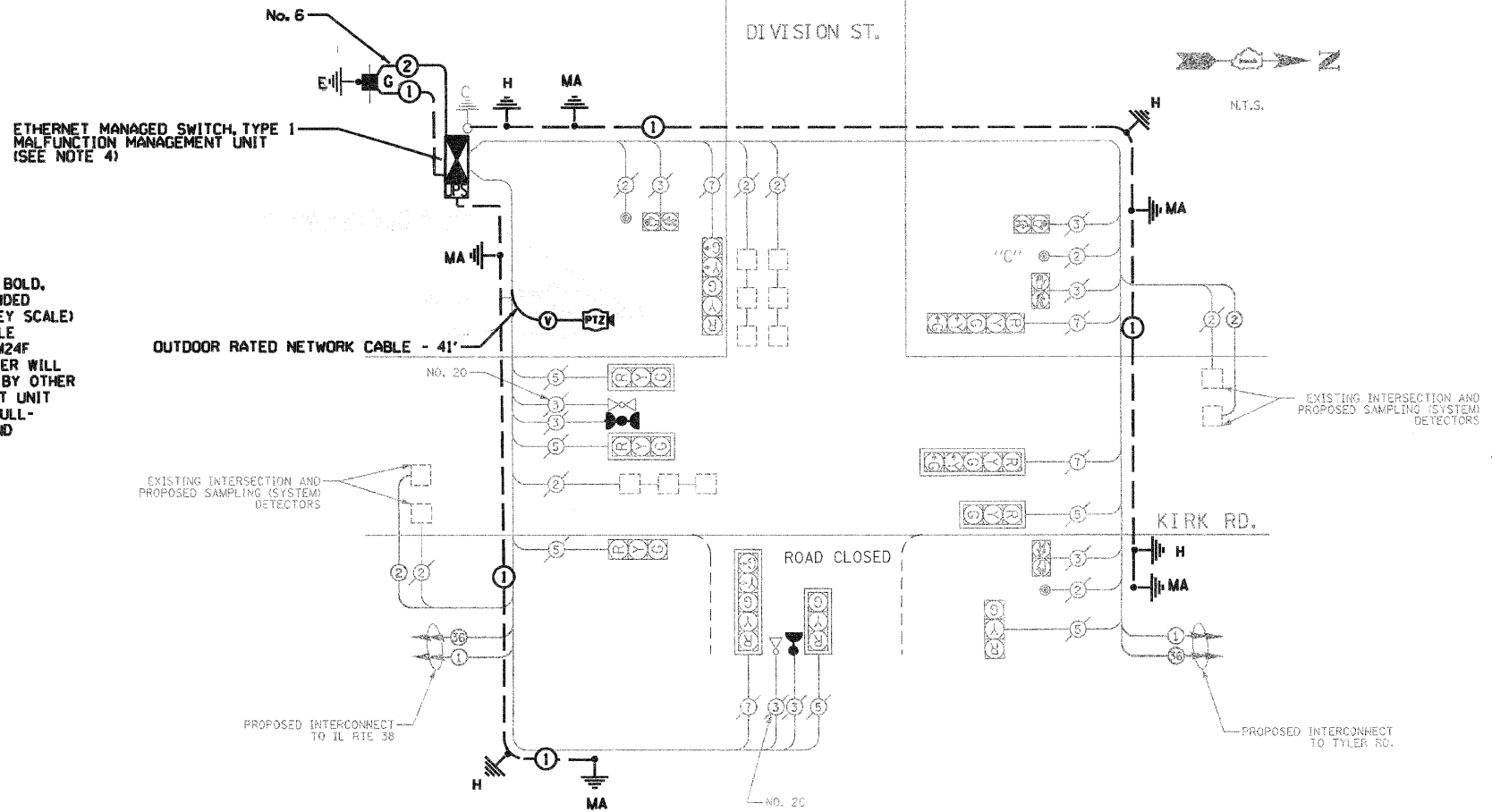
**KANE COUNTY
DIVISION OF TRANSPORTATION**

**TRAFFIC SIGNAL PLAN
KIRK ROAD AND DIVISION STREET**

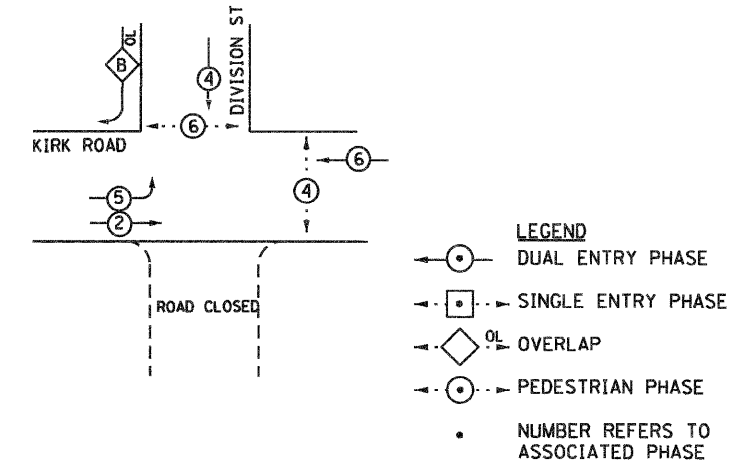
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	19
FED. ROAD DIST. NO. (ILLINOIS) FED. AID PROJECT			CONTRACT NO. 63648	

CABLE PLAN

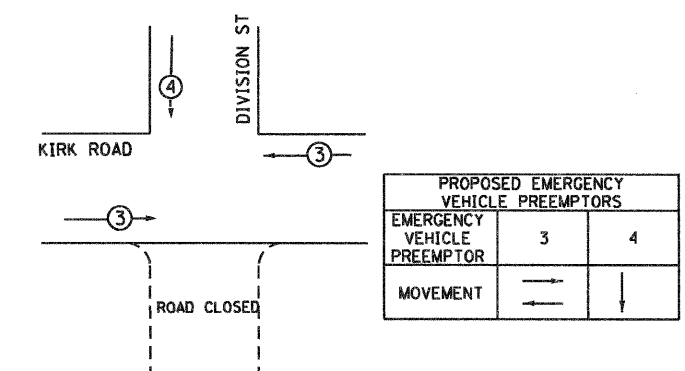


- NOTES:**
1. NEW ELEMENTS SHOWN IN BOLD, EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GREY SCALE)
 2. 36F IS FIBER OPTIC CABLE No. 62.5/125 MM 12F, SM24F
 3. ELECTRICAL SERVICE METER WILL NEED TO BE RELOCATED BY OTHER
 4. MALFUNCTION MANAGEMENT UNIT TO BE PAID FOR UNDER FULL-ACTUATED CONTROLLER AND TYPE IV CABINET



RIGHT TURN OVERLAP PHASE DIAGRAM

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	4	5



PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 4

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

TYPE	NO. OF LAMPS	WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	10	17	0.50	85
(YELLOW)	10	25	0.25	62.5
(GREEN)	10	15	0.25	62.5
ARROW	10	12	0.10	12
PED. SIGNAL	2	25	1.0	50
CONTROLLER	0	100	1.0	0
ILLUM. SIGN	0	25	1.0	0
FLASHER	0	-	-	0
TOTAL =				272

ENERGY COST TO : KANE COUNTY DIVISION OF TRANSPORTATION
41 W011 BURLINGTON ROAD
ST. CHARLES, ILLINOIS 60175

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

FOUNDATION (DEPTH)	(FT.)	CABLE SLACK	(FT.)	VERTICAL	(FT.)
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5
C - CONTROLLER W/UPS	4	DOUBLE HANDHOLE	13	MAST ARM (L) POLE	20'xL-2"
D - CONTROLLER	4	SIGNAL POST	2	BRACKET MOUNTED	13
E - MAST ARM POLE		CONTROLLER CAB.	1	PED. PUSHBUTTON	6
	30"	FIBER OPTIC	13	ELECTRIC SERVICE	13.5
	36"	ELECTRIC SERVICE	1	SERVICE TO GROUND	13.5
	42"	GROUND CABLE	1	POST MOUNTED	6

SCHEDULE OF QUANTITIES - KIRK RD. AND DIVISION ST.

PAY ITEM	UNIT	QUANTITY
EARTH EXCAVATION	CU YD	2
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	23.2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	28
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION, GROUND MOUNTED	EACH	1
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	4
UNINTERRUPTABLE POWER SUPPLY, STANDARD	EACH	1
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	431
ETHERNET MANAGED SWITCH, TYPE 1	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
CONFIRMATION BEACON	EACH	3
OUTDOOR RATED NETWORK CABLE	FOOT	41
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1

<p>JACOBS ONE NORTH FRANKLIN CHICAGO IL, 60606 512-251-3000</p>	USER NAME =	DESIGNED - CH	REVISED -	<p>KANE COUNTY DIVISION OF TRANSPORTATION</p>	<p>CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND SCHEDULE OF QUANTITIES KIRK ROAD AND DIVISION STREET</p>	F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 20
	PLOT SCALE =	DRAWN - MO, DI	REVISED -			CONTRACT NO. 63648				
	PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -			FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				
	DATE - #DATE	DATE - #DATE	REVISED -			SCALE: SHEET NO. OF SHEETS STA. TO STA.				

11/7/2011

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

4 EACH CONFIRMATION BEACON

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE KANE COUNTY, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

- 1 EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
- 1 EACH MALFUNCTION MANAGEMENT UNIT
- 1 EACH ETHERNET SWITCH TYPE I (GARRETCOM ES42)

THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC CO. LOCATED AT:

30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

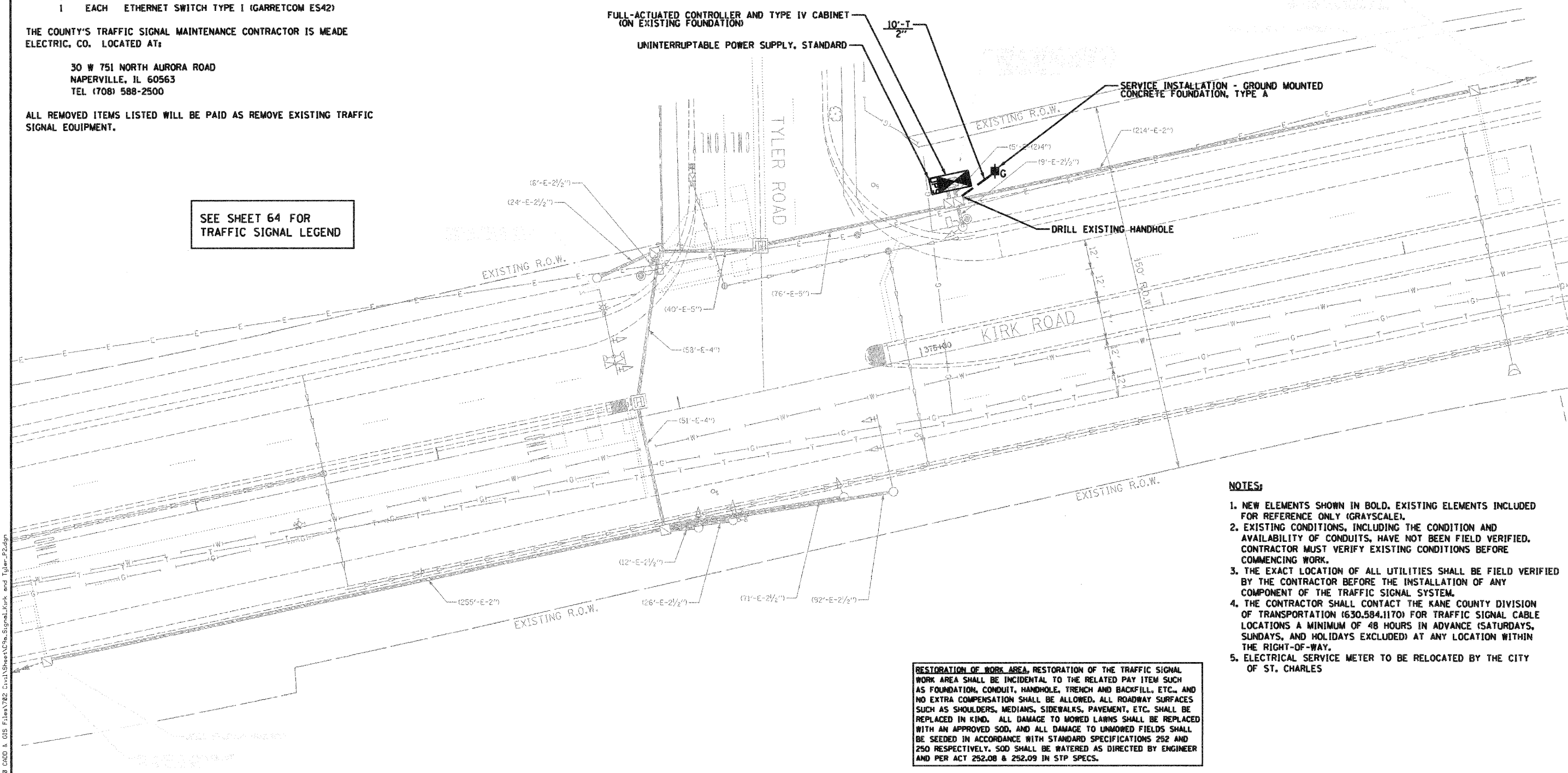
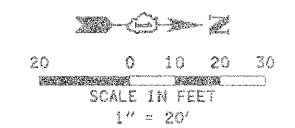
SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

CONSTRUCTION NOTE:

1. CONTROLLER FOUNDATION SHALL BE MODIFIED TO A 'TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET'
2. CONCRETE SERVICE APRON SHALL BE INSTALLED PER DISTRICT 1 STANDARD TRAFFIC SIGNAL DETAILS OR AS DIRECTED BY THE ENGINEER.

PAID FOR AS:

- EARTH EXCAVATION
- PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH



NOTES:

1. NEW ELEMENTS SHOWN IN BOLD, EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.
5. ELECTRICAL SERVICE METER TO BE RELOCATED BY THE CITY OF ST. CHARLES

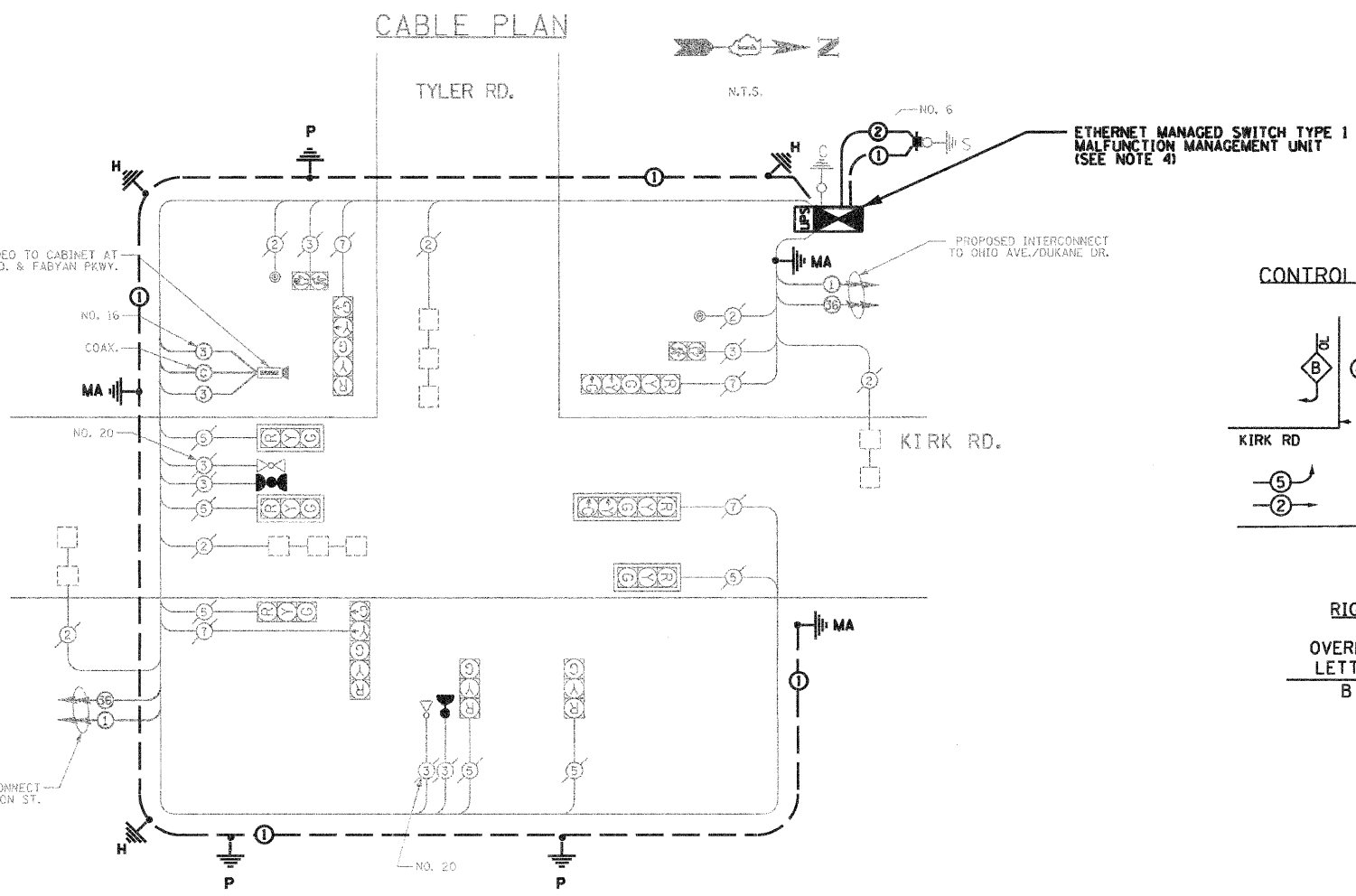
RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

P:\11-2011\986700\700 CAD & GIS Files\11702 Civil\Sheet\CS\Signal_Kirk_and_Tyler_P2.dgn

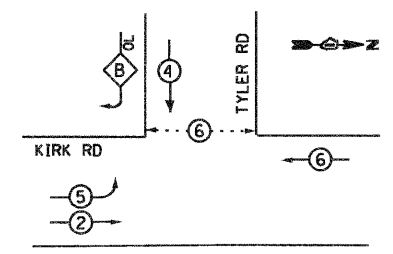
JACOBS ONE NORTH FRANKLIN CHICAGO IL, 60606 312-251-3000	USER NAME =	DESIGNED - CH	REVISED -	KANE COUNTY DIVISION OF TRANSPORTATION	TRAFFIC SIGNAL PLAN KIRK ROAD AND TYLER ROAD			F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 21
	PLOT SCALE =	DRAWN - MO, DI	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 63648				
	PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -		DATE - #DATE	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT						

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD, EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GREY SCALE)
2. 36F IS FIBER OPTIC CABLE No. 62.5/125 MM 12F, SM24F
3. ELECTRICAL SERVICE METER WILL NEED TO BE RELOCATED BY OTHERS
4. MALFUNCTION MANAGEMENT UNIT TO BE PAID FOR UNDER FULL-ACTUATED CONTROLLER AND TYPE IV CABINET



CONTROLLER SEQUENCE



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

RIGHT TURN OVERLAP PHASE DIAGRAM

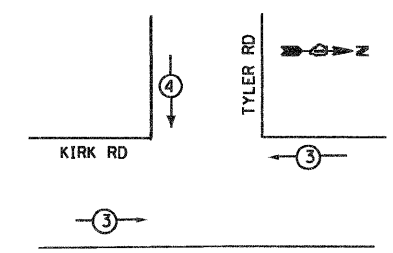
OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	= 4	+ 5

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

SCHEDULE OF QUANTITIES - KIRK ROAD AND TYLER ROAD

PAY ITEM	UNIT	QUANTITY
EARTH EXCAVATION	CU YD	2
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	50 FT	23.2
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	10
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	10
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	25
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION-GROUND MOUNTED	EACH	1
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	3
UNINTERRUPTABLE POWER SUPPLY, STANDARD	EACH	1
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	255
ETHERNET MANAGED SWITCH TYPE 1	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
CONFIRMATION BEACON	EACH	3

EMERGENCY VEHICLE PREEMPTION SEQUENCE NOTES FOR DUAL ENTRY OPERATION - ALL LEGS



EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3 4
MOVEMENT	→ ↓

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	x WATTAGE (INCAND.)	x % OPERATION	LED	
SIGNAL (RED)	10	17	0.50		85
(YELLOW)	10	25	0.25		62.5
(GREEN)	10	15	0.25		62.5
ARROW	10	12	0.10		12
PED. SIGNAL	2	25	1.0		50
CONTROLLER	0	100	1.0		0
ILLUM. SIGN	0	25	1.0		0
FLASHER	0				0
TOTAL =					272

ENERGY COST TO : KANE COUNTY DIVISION OF TRANSPORTATION
41 W011 BURLINGTON ROAD
ST. CHARLES, ILLINOIS 60175

ENERGY SUPPLY CONTACT: GLYNN AMBURLY
PHONE: (630) 377-7009
COMPANY: CITY OF ST. CHARLES

FOUNDATION (DEPTH)	(FT.)	CABLE SLACK	(FT.)	VERTICAL	(FT.)
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5
C - CONTROLLER W/UPS	4	DOUBLE HANDHOLE	13	MAST ARM (L) POLE	20'x1'-2"
D - CONTROLLER	4	SIGNAL POST	2	BRACKET MOUNTED	13
E - MAST ARM POLE		CONTROLLER CAB.	1	PED. PUSHBUTTON	6
	30"	FIBER OPTIC	13	ELECTRIC SERVICE	13.5
	36"	ELECTRIC SERVICE	1	SERVICE TO GROUND	13.5
	42"	GROUND CABLE	1	POST MOUNTED	6

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

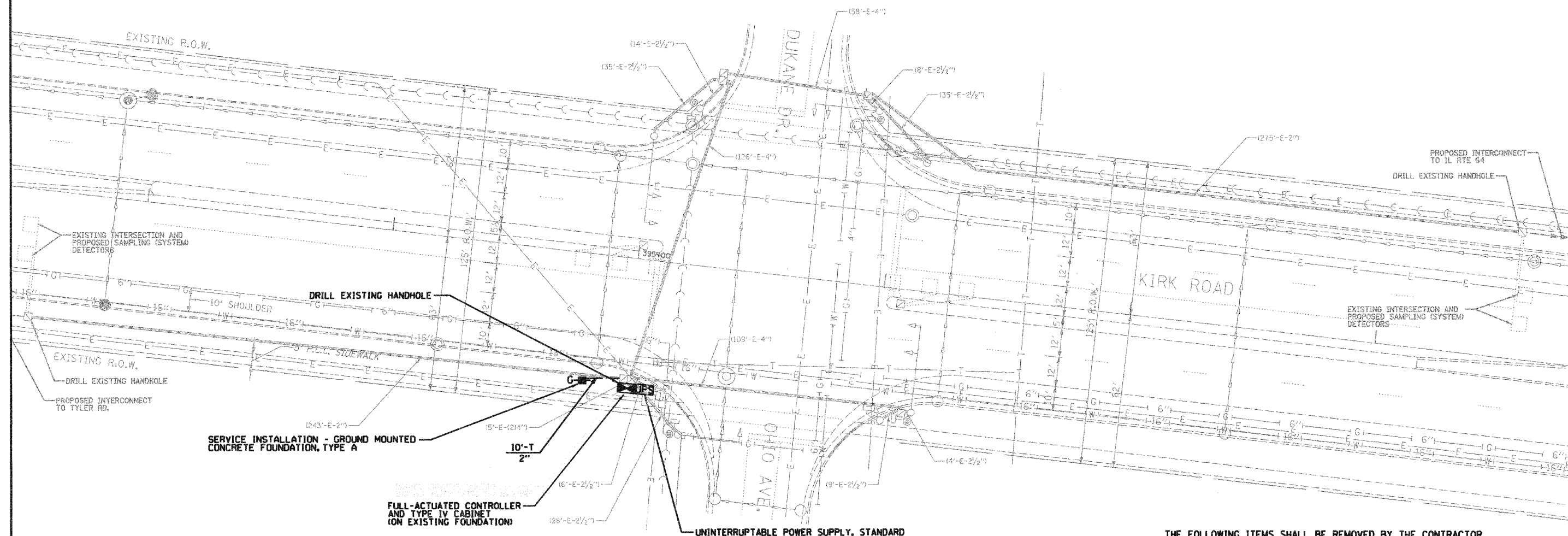
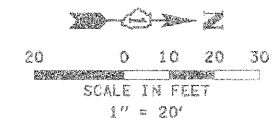
KANE COUNTY
DIVISION OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND SCHEDULE OF QUANTITIES
KIRK ROAD AND TYLER ROAD

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	22
FED. ROAD DIST. NO. (ILLINOIS) FED. AID PROJECT			CONTRACT NO. 63648	

11/7/2011



- CONSTRUCTION NOTE:**
1. CONTROLLER FOUNDATION SHALL BE MODIFIED TO A 'TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET'
 2. CONCRETE SERVICE APRON SHALL BE INSTALLED PER DISTRICT 1 STANDARD TRAFFIC SIGNAL DETAILS OR AS DIRECTED BY THE ENGINEER.
- PAID FOR AS:
- EARTH EXCAVATION
 - PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

- NOTES:**
1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
 2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
 3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
 4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.5265) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.
 5. ELECTRICAL SERVICE METER TO BE RELOCATED BY THE CITY OF ST. CHARLES

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

- 4 EACH CONFIRMATION BEACON
- 1 EACH SERVICE INSTALLATION - GROUND MOUNTED

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE KANE COUNTY, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

- 1 EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
- 1 EACH ETHERNET SWITCH (GARRETTCOM ES42)
- 1 EACH CONFLICT MONITOR UNIT (ED1-12LE)

THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - \$DATE	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

TRAFFIC SIGNAL PLAN
KIRK ROAD AND OHIO AVENUE /DUKANE DRIVE

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

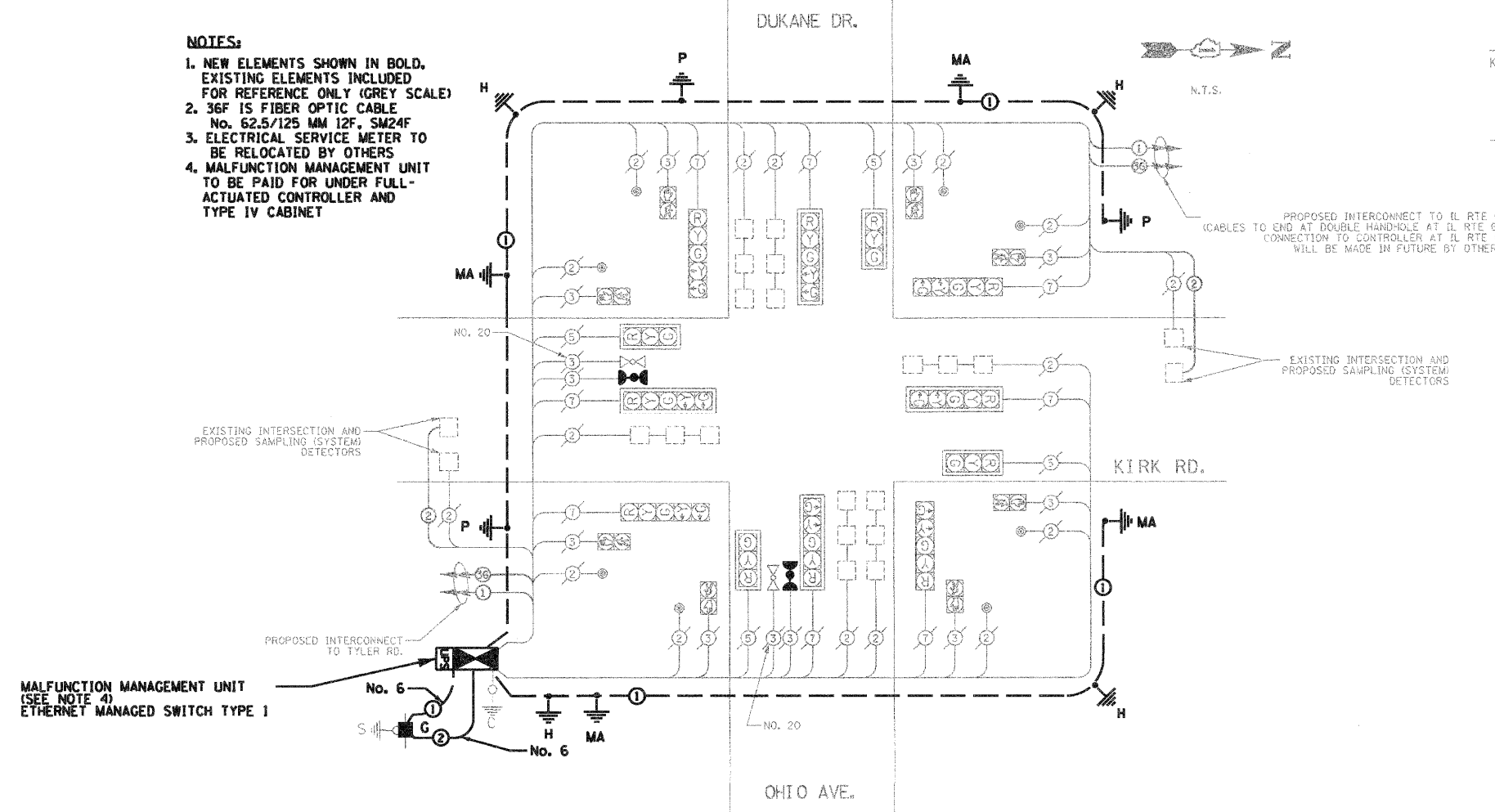
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	23
CONTRACT NO. 63648				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

P:\A_2011\CRK96700\700 CAD & GIS Files\782 Civil\Sheet\01a.Signal.Kirk and Ohio.Dukane.P2.dgn

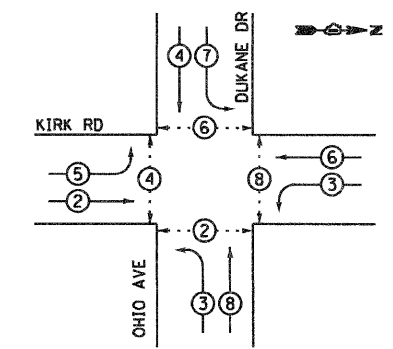
CABLE PLAN

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD, EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GREY SCALE)
2. 36F IS FIBER OPTIC CABLE No. 62.5/125 MM 12F, SM24F
3. ELECTRICAL SERVICE METER TO BE RELOCATED BY OTHERS
4. MALFUNCTION MANAGEMENT UNIT TO BE PAID FOR UNDER FULL-ACTUATED CONTROLLER AND TYPE IV CABINET

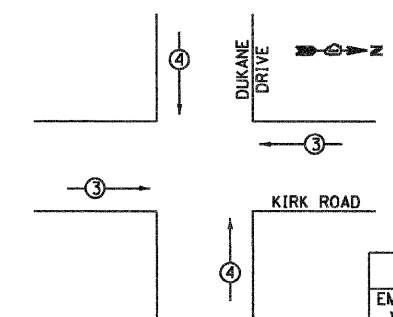


CONTROLLER SEQUENCE



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

PHASE DESIGNATION DIAGRAM EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

SCHEDULE OF QUANTITIES - KIRK ROAD AND OHIO/DUKANE

PAY ITEM	UNIT	QUANTITY
EARTH EXCAVATION	CU YD	2
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	23.2
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	10
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	10
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRICAL CABLE IN CONDUIT, SERVICE, No. 6 2C	FOOT	25
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	4
UNINTERRUPTABLE POWER SUPPLY, STANDARD	FOOT	1
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	EACH	410
ETHERNET MANAGED SWITCH TYPE 1	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
CONFIRMATION BEACON	EACH	4

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	10	17		0.50	85
(YELLOW)	10	25		0.25	62.5
(GREEN)	10	15		0.25	62.5
ARROW	10	12		0.10	12
PED. SIGNAL	2	25		1.0	50
CONTROLLER	0	100		1.0	0
ILLUM. SIGN	0	25		1.0	0
FLASHER	0				0
TOTAL =					272

ENERGY COST TO : KANE COUNTY DIVISION OF TRANSPORTATION
41 W011 BURLINGTON ROAD
ST. CHARLES, ILLINOIS 60175

ENERGY SUPPLY CONTACT: COMED
PHONE: 1-800-EDISON
COMPANY: COMED

FOUNDATION (DEPTH)	(FT.)	CABLE SLACK	(FT.)	VERTICAL	(FT.)
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5
C - CONTROLLER W/UPS	4	DOUBLE HANDHOLE	13	MAST ARM (L) POLE	20" H-2 "
D - CONTROLLER	4	SIGNAL POST	2	BRACKET MOUNTED	13
E - MAST ARM POLE		CONTROLLER CAB.	1	PED. PUSHBUTTON	6
30"	15	FIBER OPTIC	13	ELECTRIC SERVICE	13.5
36"	15	ELECTRIC SERVICE	1	SERVICE TO GROUND	13.5
42"	25	GROUND CABLE	1	POST MOUNTED	6

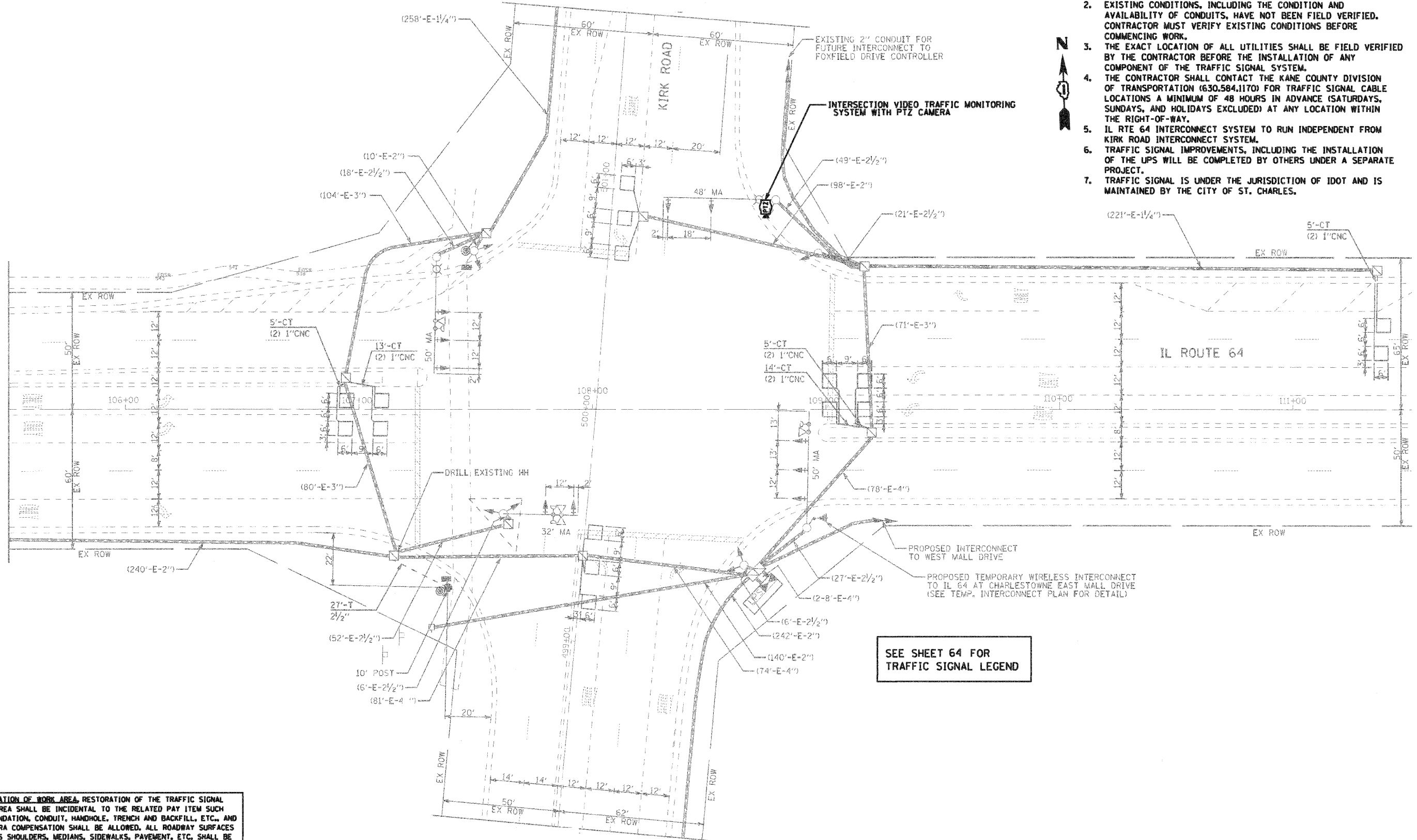
JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND SCHEDULE OF QUANTITIES
KIRK ROAD AND OHIO AVENUE /DUKANE DRIVE

F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 24
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63648	

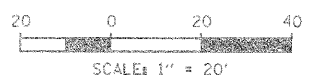


- NOTES:**
1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
 2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
 3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
 4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.
 5. IL RTE 64 INTERCONNECT SYSTEM TO RUN INDEPENDENT FROM KIRK ROAD INTERCONNECT SYSTEM.
 6. TRAFFIC SIGNAL IMPROVEMENTS, INCLUDING THE INSTALLATION OF THE UPS WILL BE COMPLETED BY OTHERS UNDER A SEPARATE PROJECT.
 7. TRAFFIC SIGNAL IS UNDER THE JURISDICTION OF IDOT AND IS MAINTAINED BY THE CITY OF ST. CHARLES.



SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.



JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =
PLOT SCALE =
PLOT DATE = 11/7/2011

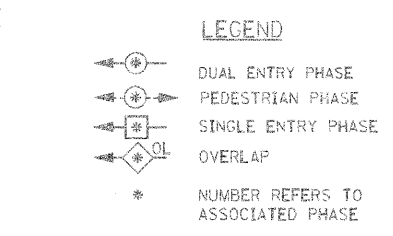
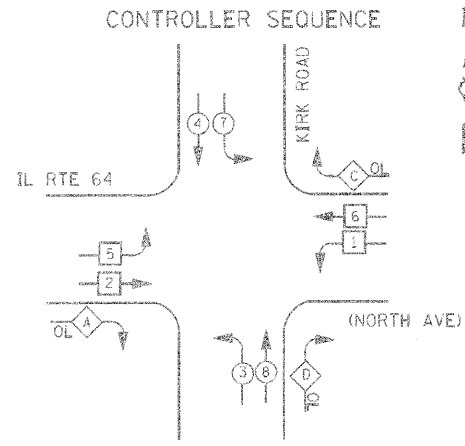
DESIGNED - CH	REVISED -
DRAWN - MQ, DI	REVISED -
CHECKED - KG	REVISED -
DATE - #DATE	REVISED -

**KANE COUNTY
DIVISION OF TRANSPORTATION**

**TRAFFIC SIGNAL PLAN
KIRK ROAD AND IL RTE 64**

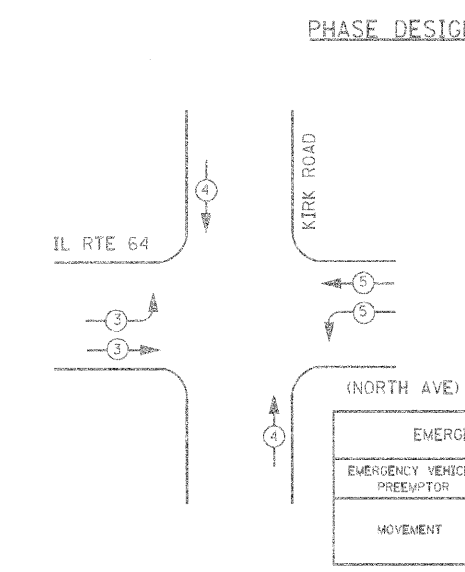
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	25
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63648	



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	2	3
C	6	7
D	8	1



EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	[Diagram: Right turn arrow]	[Diagram: Through arrow]	[Diagram: Left turn arrow]

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

TYPE	NO. LAMPS	WATTAGE		% OPERATIONS	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	19		17	0.50	161.5
(YELLOW)	19		25	0.25	118.75
(GREEN)	19		15	0.25	71.25
ARROW	28		12	0.10	28.8
PED. SIGNAL	2		25	1.00	50
CONTROLLER	1		100	1.00	100
ILLUM. SIGN			25	0.05	
VIDEO SYSTEM				1.00	
FLASHER LED					
TOTAL =					530.3

ENERGY COSTS- BILLED TO: IDOT DISTRICT 1
 201 WEST CENTER COURT
 SCHAMBURG, IL 60196-1096

ENERGY SUPPLY - CONTACT: TOM BRUHL
 PHONE: 630-377-4401
 COMPANY: CITY OF ST. CHARLES

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

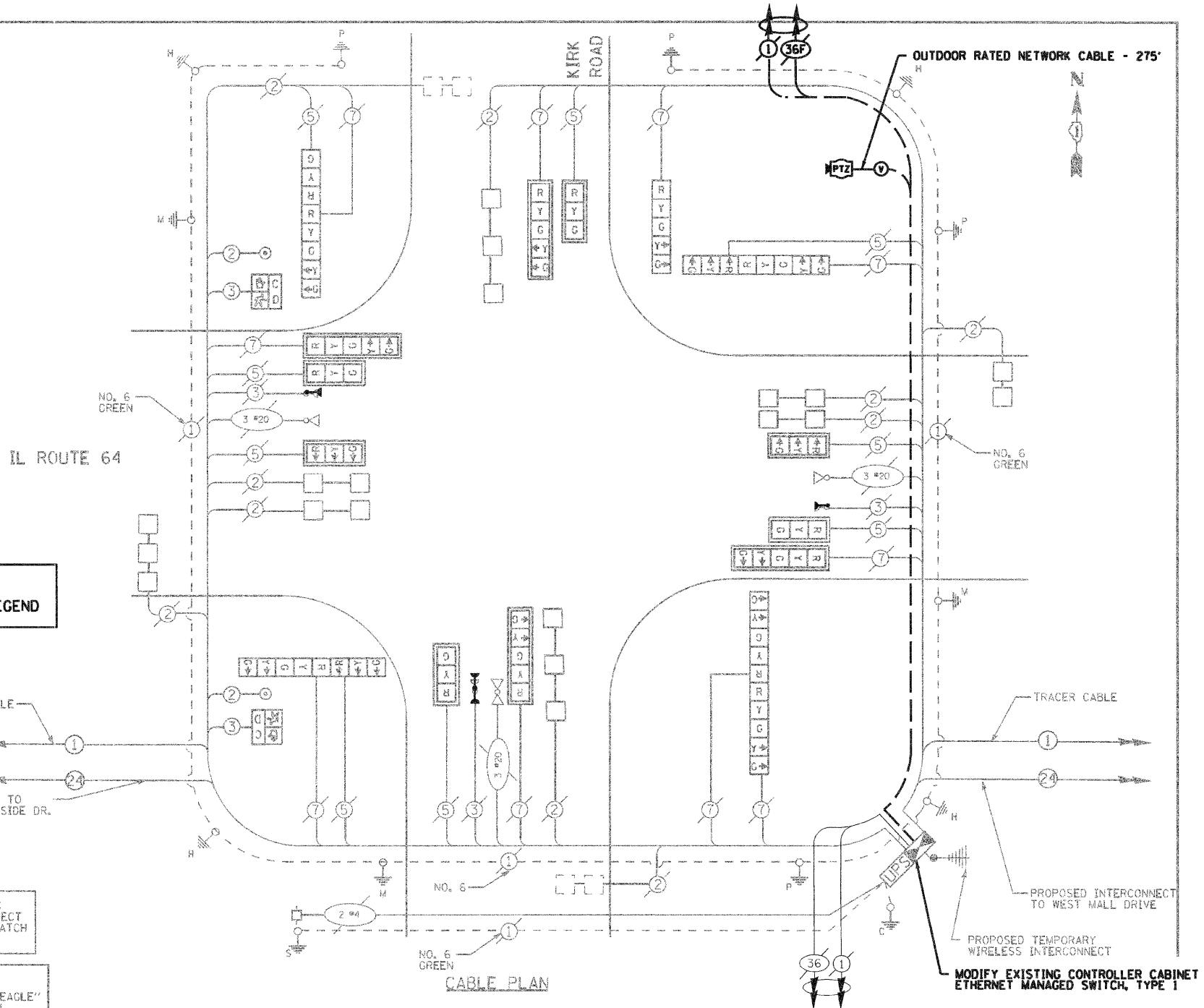
THE END OF THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

DURING TEMPORARY OPERATION THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE THE EXISTING 'ECONOLITE' TO MATCH THE EXISTING ADJACENT SYSTEM

THE PERMANENT TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE 'EAGLE' TO MATCH THE EXISTING ADJACENT SYSTEM

AT LOCATIONS WHERE UPS IS INSTALLED AND EMERGENCY VEHICLE PRIORITY SYSTEM IS IN USE, ANY EXISTING INCANDESCENT CONFIRMATION BEACONS SHALL BE REPLACED WITH LED LAMPS IN ACCORDANCE WITH THE DISTRICT ONE EMERGENCY VEHICLE PRIORITY SYSTEM SPECIFICATION AT NO ADDITIONAL COST TO THE CONTRACT.

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN 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 SHOULDERS, MEDIAN, SIDEWALKS, PAVEMENT ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



- NOTES:
- NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GREY SCALE)
 - IL RTE 64 INTERCONNECT SYSTEM TO RUN INDEPENDENT FROM THE KIRK ROAD SYSTEM.
 - 36F SOUTH OF IL RTE 64 IS FIBER OPTIC CABLE NO. 62.5/125 MM 12F, SM24F. 36F NORTH OF IL RTE 64 IS FIBER OPTIC CABLE NO. SM 36F

SCHEDULE OF QUANTITIES - KIRK RD. AND IL RTE 64 (EAST MAIN STREET)

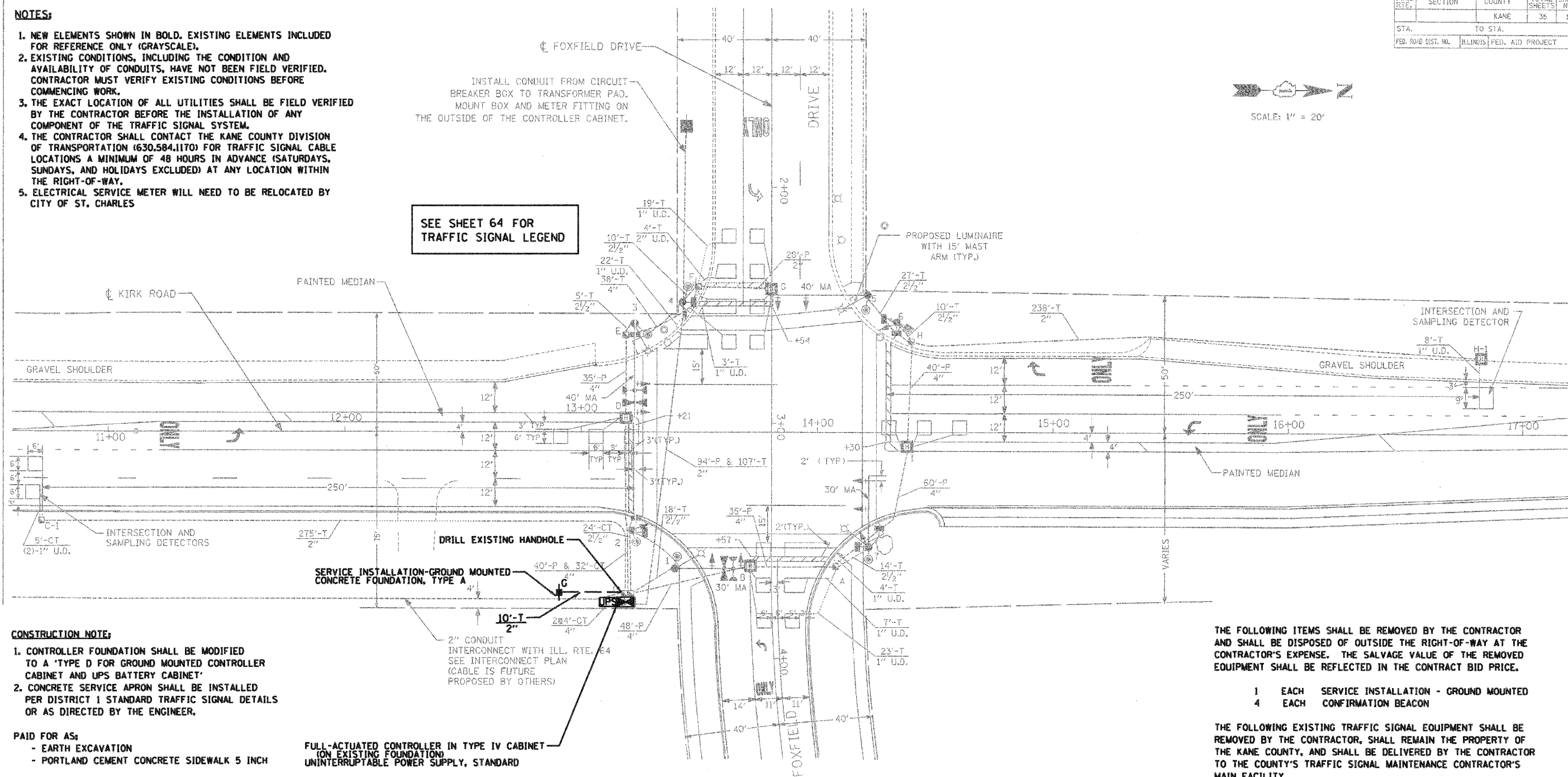
PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	275
ETHERNET MANAGED SWITCH, TYPE 1	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1

11/7/2011

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.
5. ELECTRICAL SERVICE METER WILL NEED TO BE RELOCATED BY CITY OF ST. CHARLES

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND



CONSTRUCTION NOTE:

1. CONTROLLER FOUNDATION SHALL BE MODIFIED TO A 'TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET'
2. CONCRETE SERVICE APRON SHALL BE INSTALLED PER DISTRICT 1 STANDARD TRAFFIC SIGNAL DETAILS OR AS DIRECTED BY THE ENGINEER.

PAID FOR AS:

- EARTH EXCAVATION
- PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH

FULL-ACTUATED CONTROLLER IN TYPE IV CABINET ON EXISTING FOUNDATION UNINTERRUPTABLE POWER SUPPLY, STANDARD

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

- 1 EACH SERVICE INSTALLATION - GROUND MOUNTED
- 4 EACH CONFIRMATION BEACON

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR. SHALL REMAIN THE PROPERTY OF THE KANE COUNTY, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

- 1 EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
- 1 EACH MALFUNCTION MANAGEMENT UNIT

THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

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 SHOULDERS, MEDIANS, SIDEWALKS, PAYEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD. AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

P:\2011\98708\708 CAD & GIS Files\702 Civil\Sheet\03a.Signal.Kirk and Foxfield.dgn

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

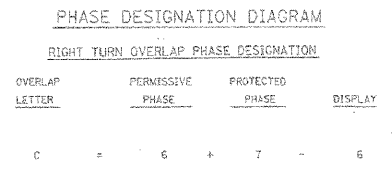
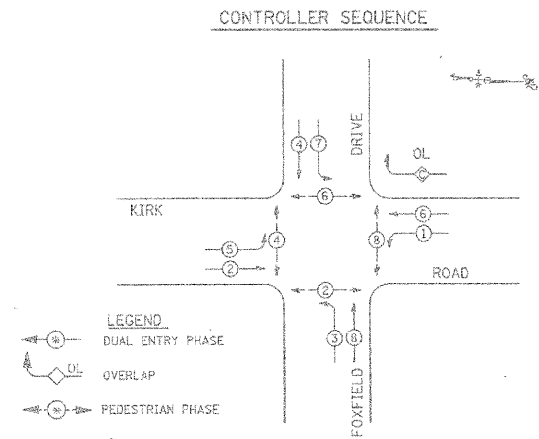
USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

TRAFFIC SIGNAL PLAN
KIRK ROAD AND FOXFIELD DRIVE

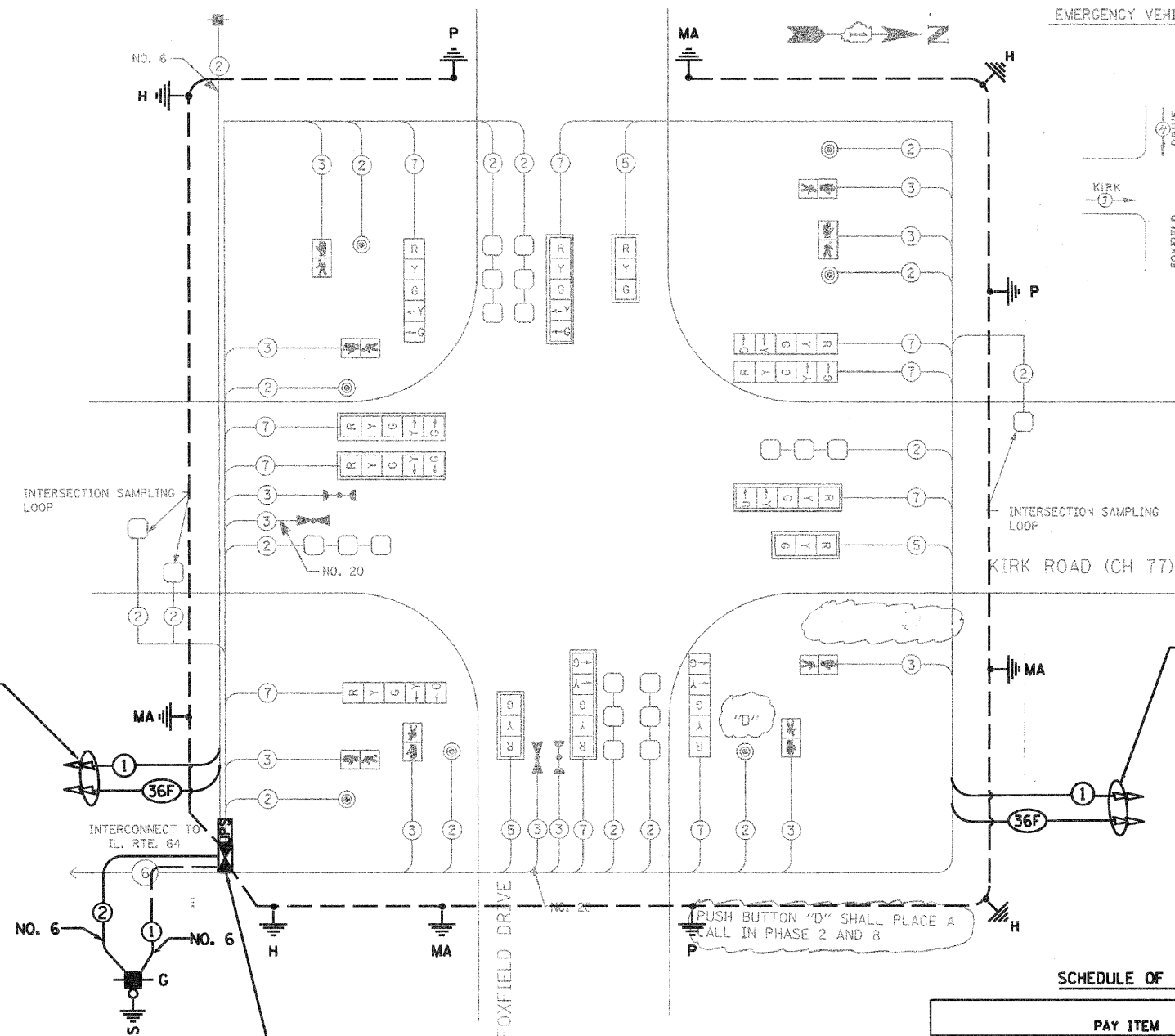
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 27
CONTRACT NO. 63648			FED. ROAD DIST. NO. (ILLINOIS) FED. AID PROJECT	

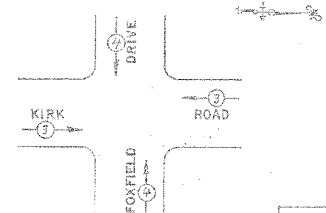


SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

- NOTES:**
1. NEW ELEMENTS SHOWN IN BOLD, EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GREY SCALE)
 2. 36F IS FIBER OPTIC CABLE SM36F
 3. ELECTRICAL SERVICE METER WILL NEED TO BE RELOCATED BY OTHERS
 4. MALFUNCTION MANAGEMENT UNIT TO BE PAID FOR UNDER FULL-ACTUATED CONTROLLER AND TYPE IV CABINET



EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTIONS		
EMERGENCY VEHICLE PREEMPTION	3	4
MOVEMENT	←	→

PROPOSED INTERCONNECT TO IL RTE 64

INTERCONNECT TO IL RTE. 64

ETHERNET MANAGED SWITCH TYPE 1 MALFUNCTION MANAGEMENT UNIT (SEE NOTE 4)

PROPOSED INTERCONNECT TO FOX CHASE DRIVE

SCHEDULE OF QUANTITIES - KIRK RD. AND FOXFIELD DRIVE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	x WATTAGE INCAND.	x % OPERATION LED		
SIGNAL (RED)	10	17	0.50		85
(YELLOW)	10	25	0.25		62.5
(GREEN)	10	15	0.25		62.5
ARROW	10	12	0.10		12
PED. SIGNAL	2	25	1.0		50
CONTROLLER	0	100	1.0		0
ILLUM. SIGN	0	25	1.0		0
FLASHER	0				0
TOTAL =					272

ENERGY COST TO : KANE COUNTY DIVISION OF TRANSPORTATION
41 W011 BURLINGTON ROAD
ST. CHARLES, ILLINOIS 60175

ENERGY SUPPLY CONTACT: COMED
PHONE: 1-800-EDISON
COMPANY: COMED

FOUNDATION (DEPTH)	(FT.)	CABLE SLACK	(FT.)	VERTICAL	(FT.)
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5
C - CONTROLLER W/UPS	4	DOUBLE HANDHOLE	13	MAST ARM (L) POLE	20'xL-2"
D - CONTROLLER	4	SIGNAL POST	2	BRACKET MOUNTED	13
E - MAST ARM POLE		CONTROLLER CAB.	1	PED. PUSHBUTTON	6
	30"	FIBER OPTIC	13	ELECTRIC SERVICE	13.5
	36"	ELECTRIC SERVICE	1	SERVICE TO GROUND	13.5
	42"	GROUND CABLE	1	POST MOUNTED	6

PAY ITEM	UNIT	QUANTITY
EARTH EXCAVATION	CU YD	2
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	23.2
CONDUIT IN TRENCH, 2" DIA. GALVANIZED STEEL	FOOT	10
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	10
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2	FOOT	25
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION-GROUND MOUNTED	EACH	1
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	4
UNINTERRUPTIBLE POWER SUPPLY, STANDARD	EACH	1
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	443
ETHERNET MANAGED SWITCH, TYPE 1	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
CONFIRMATION BEACON	EACH	4

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - 4DATE	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND SCHEDULE OF QUANTITIES
KIRK ROAD AND FOXFIELD DRIVE

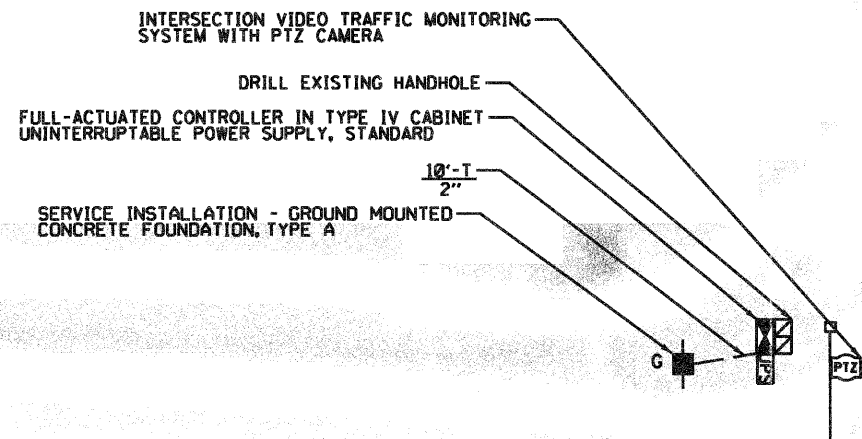
F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 28
CONTRACT NO. 63648			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

CONSTRUCTION NOTE:

1. CONTROLLER FOUNDATION SHALL BE MODIFIED TO A 'TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET'
2. CONCRETE SERVICE APRON SHALL BE INSTALLED PER DISTRICT 1 STANDARD TRAFFIC SIGNAL DETAILS OR AS DIRECTED BY THE ENGINEER.

PAID FOR AS:

- EARTH EXCAVATION
- PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH



NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.

KIRK ROAD

FOX CHASE DRIVE

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

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

- 1 EACH SERVICE INSTALLATION - GROUND MOUNTED
- 4 EACH CONFIRMATION BEACON

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE KANE COUNTY, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

- 1 EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
- 1 EACH MALFUNCTION MANAGEMENT UNIT

THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	29
CONTRACT NO. 63648				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

UNINTERRUPTIBLE POWER SUPPLY
ETHERNET MANAGED SWITCH, TYPE I
MALFUNCTION MANAGEMENT UNIT
(SEE NOTE 4)

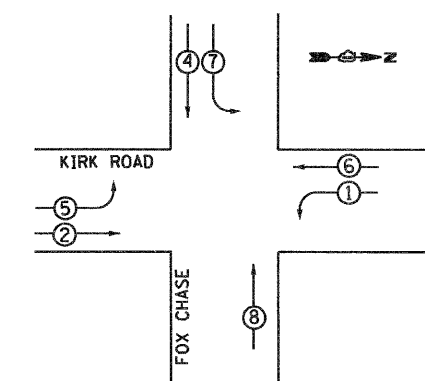
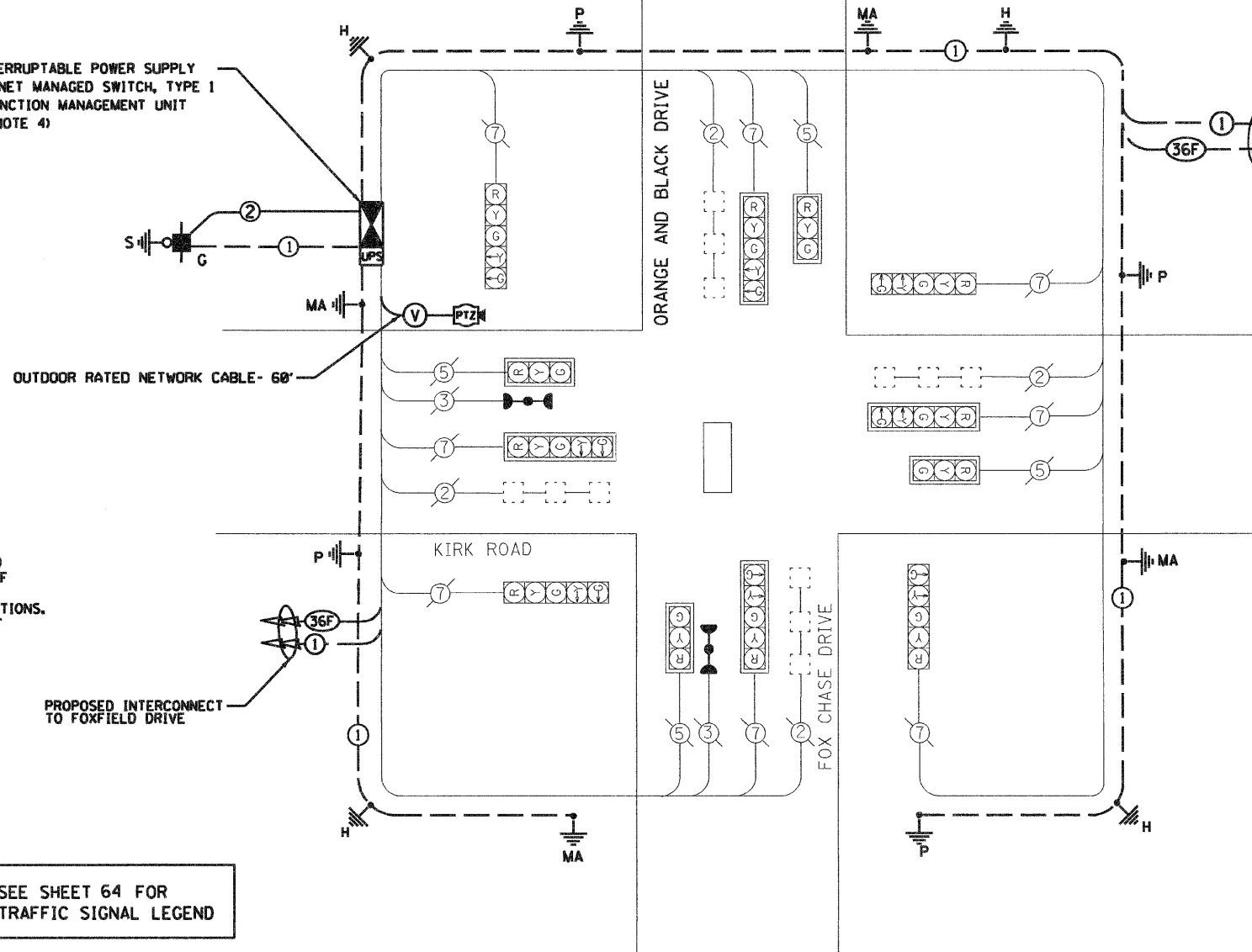
OUTDOOR RATED NETWORK CABLE - 60'

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD.
2. 36F IS FIBER OPTIC CABLE SM 36F
3. CABLE PLAN IS AN APPROXIMATE REPRESENTATION OF ACTUAL CONDITIONS. CONTRACTOR MUST VERIFY CONDUIT LOCATION AND CONDITION.
4. MALFUNCTION MANAGEMENT UNIT TO BE PAID FOR UNDER FULL-ACTUATED CONTROLLER AND TYPE IV CABINET

PROPOSED INTERCONNECT TO FOXFIELD DRIVE

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

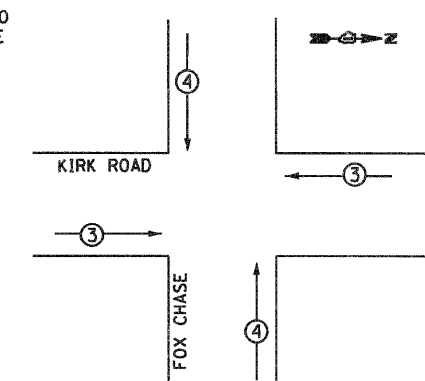


RIGHT TURN OVERLAP PHASE DIAGRAM

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	4	5
C	8	7

EMERGENCY VEHICLE PREEMPTION SEQUENCE NOTES FOR DUAL ENTRY OPERATION - ALL LEGS

LEGEND:
 - (O) - DUAL ENTRY PHASE
 - (S) - SINGLE ENTRY PHASE
 - (OL) - OVERLAP
 - (P) - PEDESTRIAN PHASE
 - (N) - NUMBER REFERS TO ASSOCIATED PHASE



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

SCHEDULE OF QUANTITIES - KIRK RD. AND FOX CHASE DRIVE

PAY ITEM	UNIT	QUANTITY
EARTH EXCAVATION	CU YD	2
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	23.2
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	10
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	10
MAINTAIN EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	25
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION-GROUND MOUNTED	EACH	1
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	4
UNINTERRUPTIBLE POWER SUPPLY, STANDARD	EACH	1
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	400
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	60
ETHERNET MANAGED SWITCH, TYPE I	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
CONFIRMATION BEACON	EACH	4

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	x WATTAGE INCAND.	x WATTAGE LED	x % OPERATION	
SIGNAL (RED)	10	17	0.50		85
(YELLOW)	10	25	0.25		62.5
(GREEN)	10	15	0.25		62.5
ARROW	10	12	0.10		12
PED. SIGNAL	2	25	1.0		50
CONTROLLER	0	100	1.0		0
ILLUM. SIGN	0	25	1.0		0
FLASHER	0	-	-		0
TOTAL =					272

ENERGY COST TO : KANE COUNTY DIVISION OF TRANSPORTATION
41 W011 BURLINGTON ROAD
ST. CHARLES, ILLINOIS 60175

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

FOUNDATION (DEPTH)	(FT.)	CABLE SLACK	(FT.)	VERTICAL	(FT.)
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5
C - CONTROLLER W/LUPS	4	DOUBLE HANDHOLE	13	MAST ARM (L) POLE	20'-H-2 =
D - CONTROLLER	4	SIGNAL POST	2	BRACKET MOUNTED	13
E - MAST ARM POLE		CONTROLLER CAB.	1	PED. PUSHBUTTON	6
30"	15	FIBER OPTIC	13	ELECTRIC SERVICE	13.5
36"	15	ELECTRIC SERVICE	1	SERVICE TO GROUND	13.5
42"	25	GROUND CABLE	1	POST MOUNTED	6

JACOBS ONE NORTH FRANKLIN CHICAGO IL, 60606 312-251-3000	USER NAME =	DESIGNED - CH	REVISED -	KANE COUNTY DIVISION OF TRANSPORTATION	CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND SCHEDULE OF QUANTITIES KIRK ROAD AND FOX CHASE DRIVE		F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 30
	PLOT SCALE =	CHECKED - MO, DI	REVISED -		SCALE:	SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. (ILLINOIS) FED. AID PROJECT	CONTRACT NO. 63648			
	PLOT DATE = 11/7/2011	DATE - #DATE	REVISED -								

11/7/2011

P:\A\2011\956700\700\700\GIS Files\702 Civil\Sheet\05a.Signal.Dunham and Army Trail Road.dgn

CONSTRUCTION NOTE:

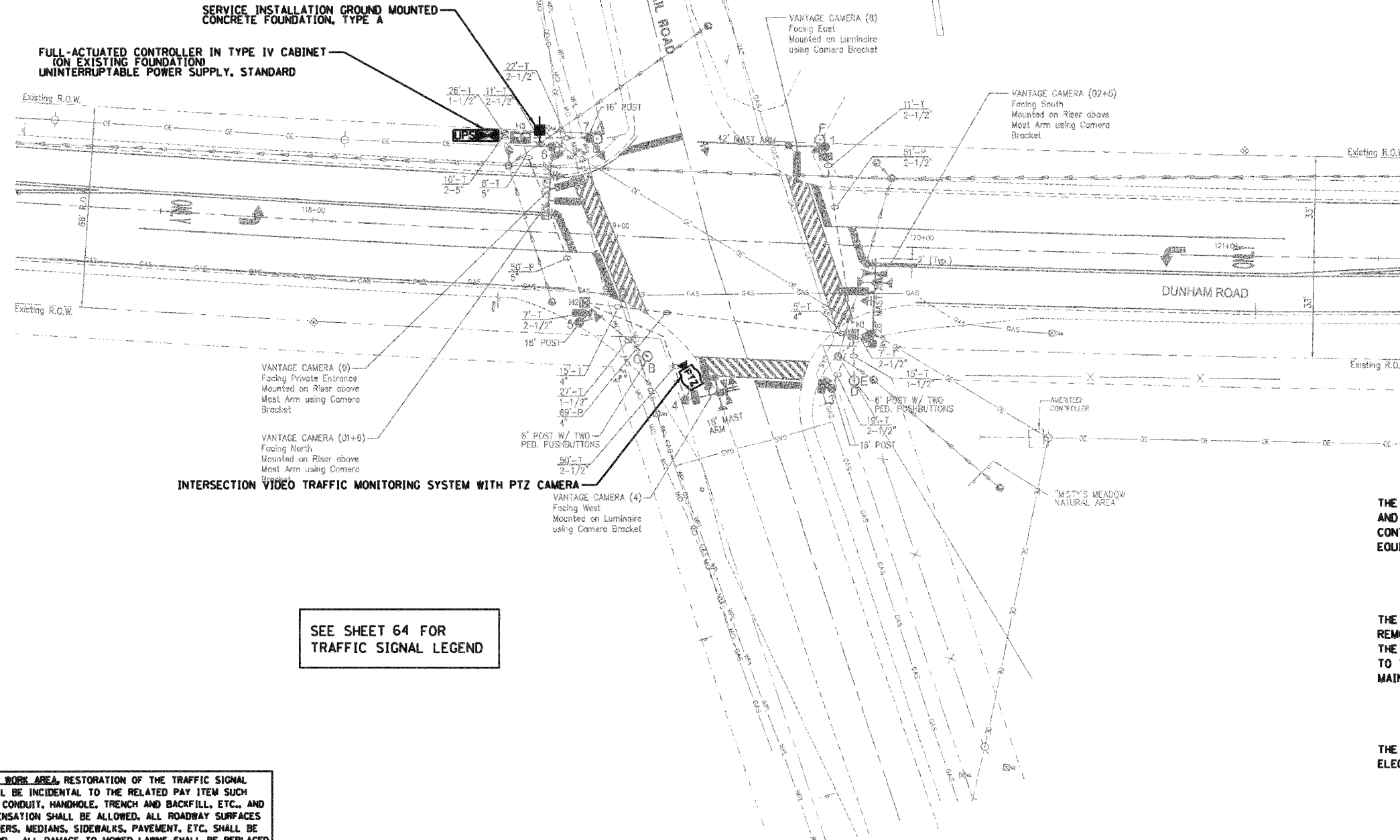
1. CONTROLLER FOUNDATION SHALL BE MODIFIED TO A 'TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET'
2. CONCRETE SERVICE APRON SHALL BE INSTALLED PER DISTRICT 1 STANDARD TRAFFIC SIGNAL DETAILS OR AS DIRECTED BY THE ENGINEER.

PAID FOR AS:

- EARTH EXCAVATION
- PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYS CALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.5265) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.



SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

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

- 1 EACH SERVICE INSTALLATION - GROUND MOUNTED
- 4 EACH CONFIRMATION BEACONS

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE KANE COUNTY, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

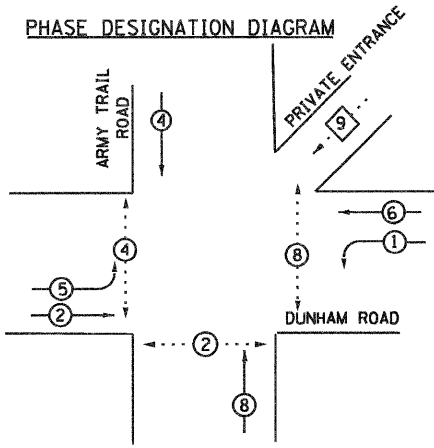
- 1 EACH FULL-ACTUATED CONTROLLER IN EXISTING CABINET
- 1 EACH MALFUNCTION MANAGEMENT UNIT

THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

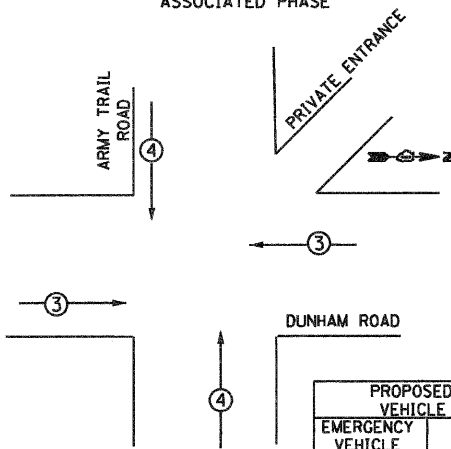
30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

JACOBS ONE NORTH FRANKLIN CHICAGO IL, 60606 312-251-3000	USER NAME =	DESIGNED - CH	REVISED -	KANE COUNTY DIVISION OF TRANSPORTATION	TRAFFIC SIGNAL PLAN DUNHAM AND ARMY TRAIL ROAD				F.A.P. RTE. =	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	DRAWN - MO, DI	REVISED -		360	10-00403-00-TL	KANE	72	31				
	PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.				CONTRACT NO. 63648				
		DATE - #DATE	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT								



- LEGEND**
- (with 2 dots) DUAL ENTRY PHASE
 - (with 1 dot) SINGLE ENTRY PHASE
 - ◇ (with 1 dot) OVERLAP
 - (with 1 dot) PEDESTRIAN PHASE
 - NUMBER REFERS TO ASSOCIATED PHASE



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

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

VIDEO SYSTEM DETECTOR PROCESSOR
ETHERNET MANAGED SWITCH TYPE I
MALFUNCTION MANAGEMENT UNIT
(SEE NOTE 2)

PROPOSED INTERCONNECT TO FOX CHASE DRIVE

OUTDOOR RATED NETWORK CABLE

CABLE PLAN
NOT TO SCALE

NOTES:

1. 36F IS FIBER OPTIC CABLE SM36F
2. MALFUNCTION MANAGEMENT UNIT TO BE PAID FOR UNDER FULL-ACTUATED CONTROLLER AND TYPE IV CABINET

- PUSH BUTTON "A" SHALL PLACE A CALL IN PHASE 4
- PUSH BUTTON "B" SHALL PLACE A CALL IN PHASE 4
- PUSH BUTTON "C" SHALL PLACE A CALL IN PHASE 2
- PUSH BUTTON "D" SHALL PLACE A CALL IN PHASE 2
- PUSH BUTTON "E" SHALL PLACE A CALL IN PHASE 8
- PUSH BUTTON "F" SHALL PLACE A CALL IN PHASE 8

SCHEDULE OF QUANTITIES - DUNHAM ROAD AND ARMY TRAIL ROAD

PAY ITEM	UNIT	QUANTITY
EARTH EXCAVATION	CU YD	2
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	23.2
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	10
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	10
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND CABINET, TYPE IV, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	25
CONCRETE FOUNDATION, TYPE A	FOOT	4
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
VIDEO SYSTEM DETECTION PROCESSOR	EACH	1
SERVICE INSTALLATION-GROUND MOUNTED	EACH	1
GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	3
UNINTERRUPTABLE POWER SUPPLY, STANDARD	EACH	1
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	241
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	173
ETHERNET MANAGED SWITCH TYPE I	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
CONFIRMATION BEACON	EACH	4

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	10	17		0.50	85
(YELLOW)	10	25		0.25	62.5
(GREEN)	10	15		0.25	62.5
ARROW	10	12		0.10	12
PED. SIGNAL	2	25		1.0	50
CONTROLLER	0	100		1.0	0
ILLUM. SIGN	0	25		1.0	0
FLASHER	0				0
TOTAL =					272

ENERGY COST TO : ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS / DISTRICT 1
201 WEST CENTER COURT / SCHAUMBURG, IL 60196-1096

ENERGY SUPPLY CONTACT: TOM PERKINS
PHONE: 1-847-894-7968
COMPANY: COMED

FOUNDATION (DEPTH)	(FT.)	CABLE SLACK	(FT.)	VERTICAL	(FT.)
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS	3.5
C - CONTROLLER W/UPS	4	DOUBLE HANDHOLE	13	MAST ARM (L) POLE	20"HL-2 =
D - CONTROLLER	4	SIGNAL POST	2	BRACKET MOUNTED	13
E - MAST ARM POLE		CONTROLLER CAB.	1	PED. PUSHBUTTON	6
	30"	FIBER OPTIC	13	ELECTRIC SERVICE	13.5
	36"	ELECTRIC SERVICE	1	SERVICE TO GROUND	13.5
	42"	GROUND CABLE	1	POST MOUNTED	6

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

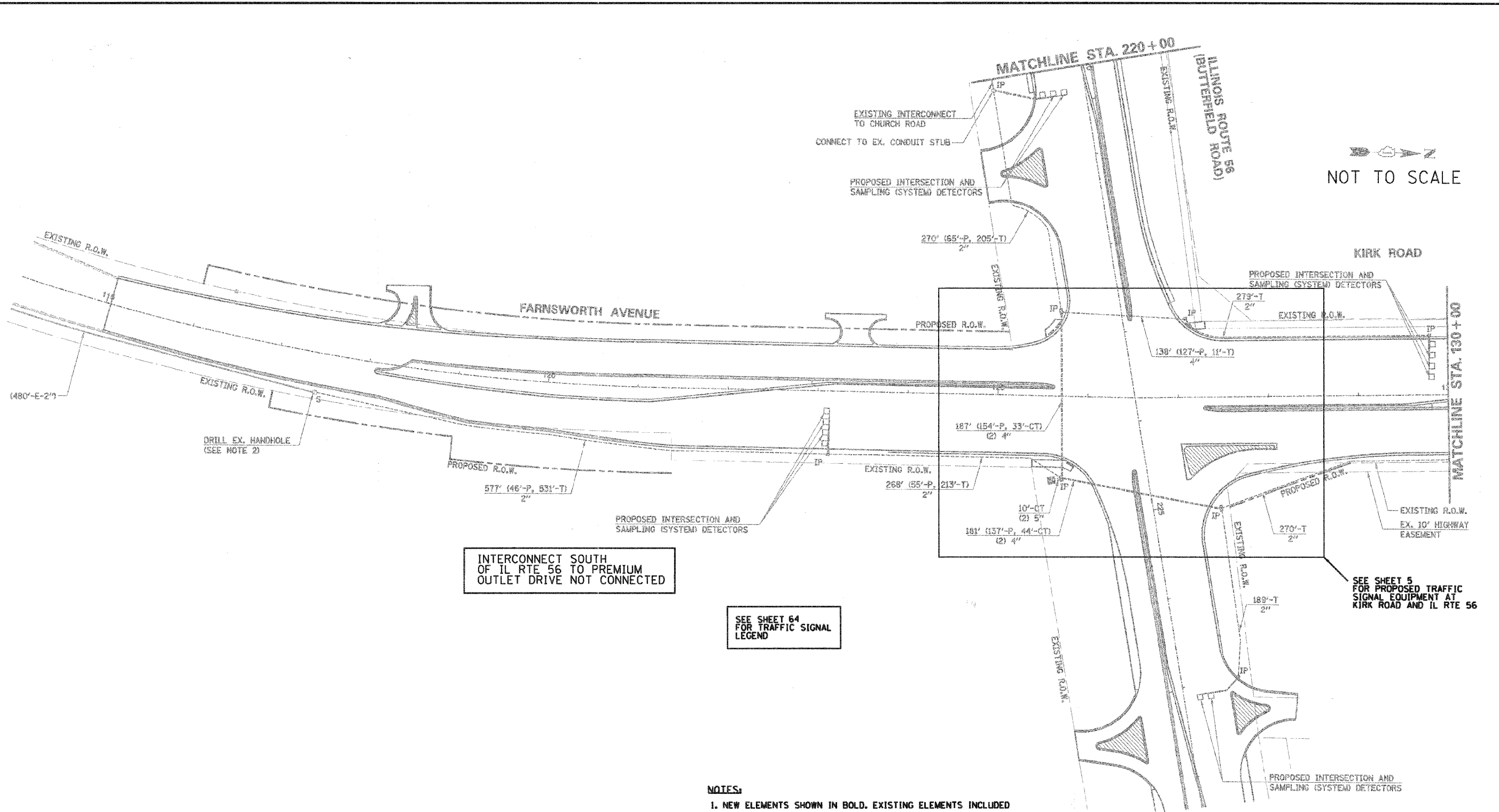
USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KC	REVISED -
	DATE - #DATE	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND SCHEDULE OF QUANTITIES
DUNHAM ROAD AND ARMY TRAIL ROAD

SCALE: N.T.S. SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	32
FED. ROAD DIST. NO. (ILLINOIS) FED. AID PROJECT			CONTRACT NO. 63648	



INTERCONNECT SOUTH OF IL RTE 56 TO PREMIUM OUTLET DRIVE NOT CONNECTED

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

SEE SHEET 5 FOR PROPOSED TRAFFIC SIGNAL EQUIPMENT AT KIRK ROAD AND IL RTE 56

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - *DATE	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

INTERCONNECT PLAN
KIRK ROAD (SHEET 1 OF 22)

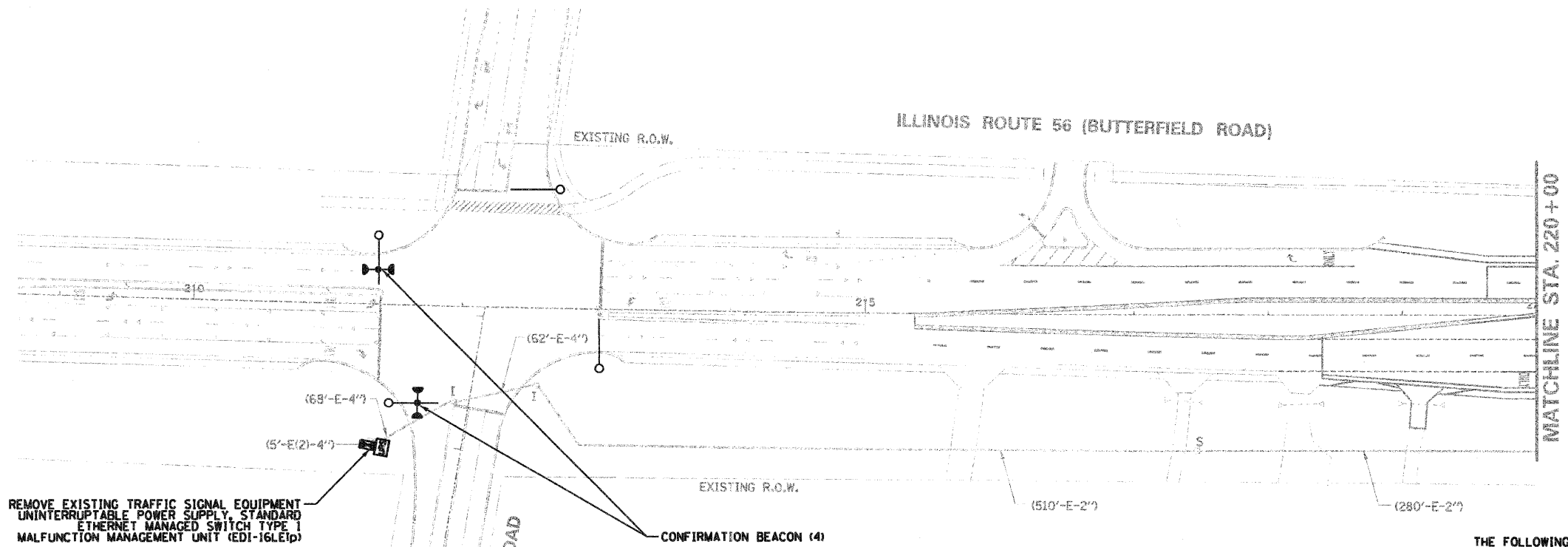
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	33
CONTRACT NO. 63648				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

11/7/2011

SCHEDULE OF QUANTITIES - IL RTE 56 AND CHURCH ROAD

PAY ITEM	UNIT	QUANTITY
EARTH EXCAVATION	CU YD	2
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	23.2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY, STANDARD	EACH	1
MALFUNCTION MANAGEMENT UNIT	EACH	1
ETHERNET MANAGED SWITCH, TYPE 1	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
CONFIRMATION BEACON	EACH	4



REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
UNINTERRUPTABLE POWER SUPPLY, STANDARD
ETHERNET MANAGED SWITCH TYPE 1
MALFUNCTION MANAGEMENT UNIT (EDI-16LE1p)

CONFIRMATION BEACON (4)

CONSTRUCTION NOTE:

1. CONTROLLER FOUNDATION SHALL BE MODIFIED TO A 'TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET'
2. CONCRETE SERVICE APRON SHALL BE INSTALLED PER DISTRICT 1 STANDARD TRAFFIC SIGNAL DETAILS OR AS DIRECTED BY THE ENGINEER.

PAID FOR AS:

- EARTH EXCAVATION
- PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.
5. ALL EQUIPMENT INSTALLED IN THE CONTROLLER CABINET AT THIS LOCATION SHALL BE LABELED "PROPERTY OF KANE COUNTY DIVISION OF TRANSPORTATION"

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

4 EACH CONFIRMATION BEACON

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR. SHALL REMAIN THE PROPERTY OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

1 EACH MALFUNCTION MANAGEMENT UNIT
1 EACH ETHERNET SWITCH TYPE 1 (GARRETCOM ES42)

IDOT'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

P:\2011\96788\788 CADD & GIS Files\782 Civil\Sheet\02 Interconnect.kirk and IL56-2.dgn

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

INTERCONNECT PLAN	
KIRK ROAD (SHEET 2 OF 22)	
SCALE:	SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	34
FED. ROAD DIST. NO. (ILLINOIS) FED. AID PROJECT			CONTRACT NO. 63648	

11/7/2011

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

4 EACH CONFIRMATION BEACON

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE KANE COUNTY, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

- 1 EACH MALFUNCTION MANAGEMENT UNIT
- 1 EACH ETHERNET SWITCH TYPE I (GARRETCOM ES42)
- 1 EACH TREEHAVEN RVSFB120
- 1 EACH IVDO STREAMER/ENCODER
- 1 EACH PTZ CAMERA
- 1 EACH VIDEO MONITOR

THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

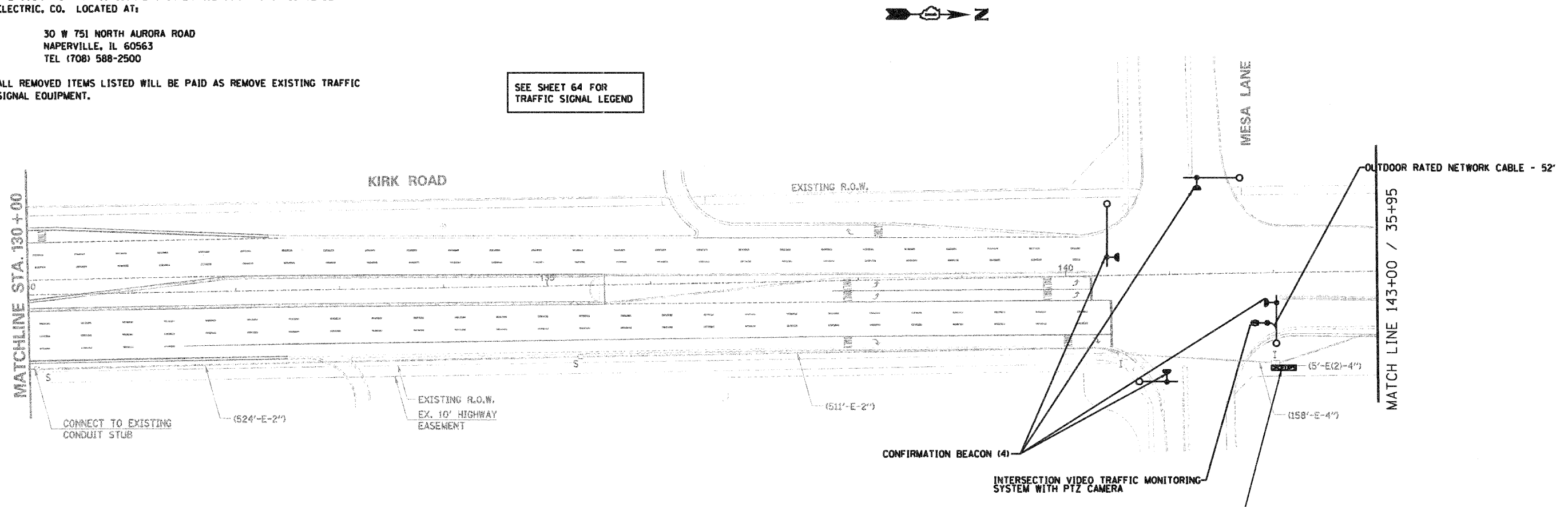
30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.



SCHEDULE OF QUANTITIES - KIRK ROAD AND MESA LANE

PAY ITEM	UNIT	QUANTITY
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
VIDEO SYSTEM DETECTION PROCESSOR	EACH	1
MODIFY EXISTING CONTROLLER CABINET, SPECIAL	EACH	1
MALFUNCTION MANAGEMENT UNIT	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
CONFIRMATION BEACON	EACH	4
ETHERNET MANAGED SWITCH, TYPE I	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	52

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
VIDEO DETECTOR PROCESSOR (EDGECONNECT QUAD-VIEW ONLY)
MODIFY EXISTING CONTROLLER CABINET, SPECIAL
ETHERNET MANAGED SWITCH TYPE I
MALFUNCTION MANAGEMENT UNIT (EDI-16LE1p)
REMOVE EXISTING CCTV/VIDEO EQUIPMENT

P:\A_2011\09\06\700\700 CAD & GIS Files\702 Civil\Sheet\103_Interconnect Kirk and IL56-3.dgn

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

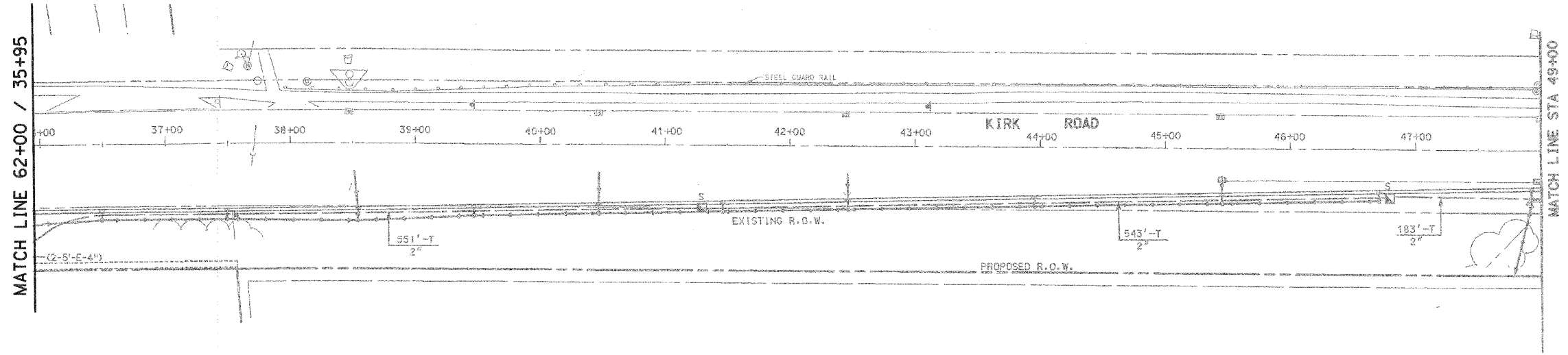
USER NAME =
DESIGNED - CH
DRAWN - MO, DI
CHECKED - KG
DATE - #DATE
PLOT SCALE =
PLOT DATE = 11/7/2011

DESIGNED - CH
DRAWN - MO, DI
CHECKED - KG
DATE - #DATE
REVISED -
REVISED -
REVISED -
REVISED -

**KANE COUNTY
DIVISION OF TRANSPORTATION**

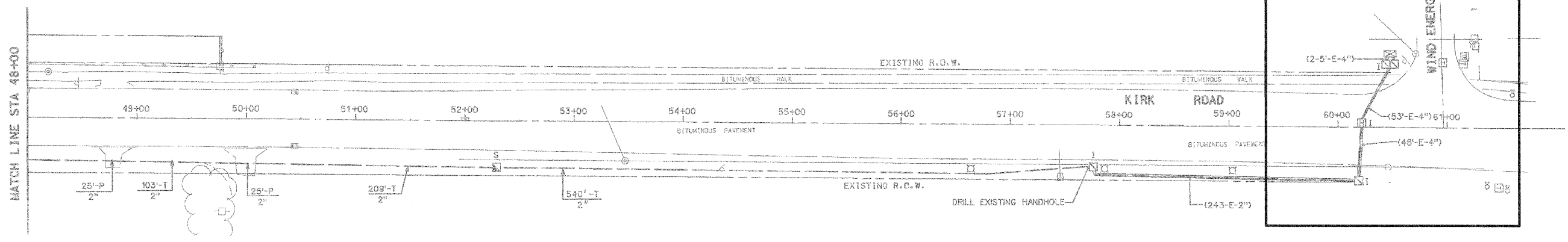
**INTERCONNECT PLAN
KIRK ROAD (SHEET 3 OF 22)**
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 35
CONTRACT NO. 63648			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	



PLAN INCLUDED FOR REFERENCE

SEE SHEET NO. 7 FOR PROPOSED TRAFFIC SIGNAL EQUIPMENT AT WIND ENERGY PASS



SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

NOTES:

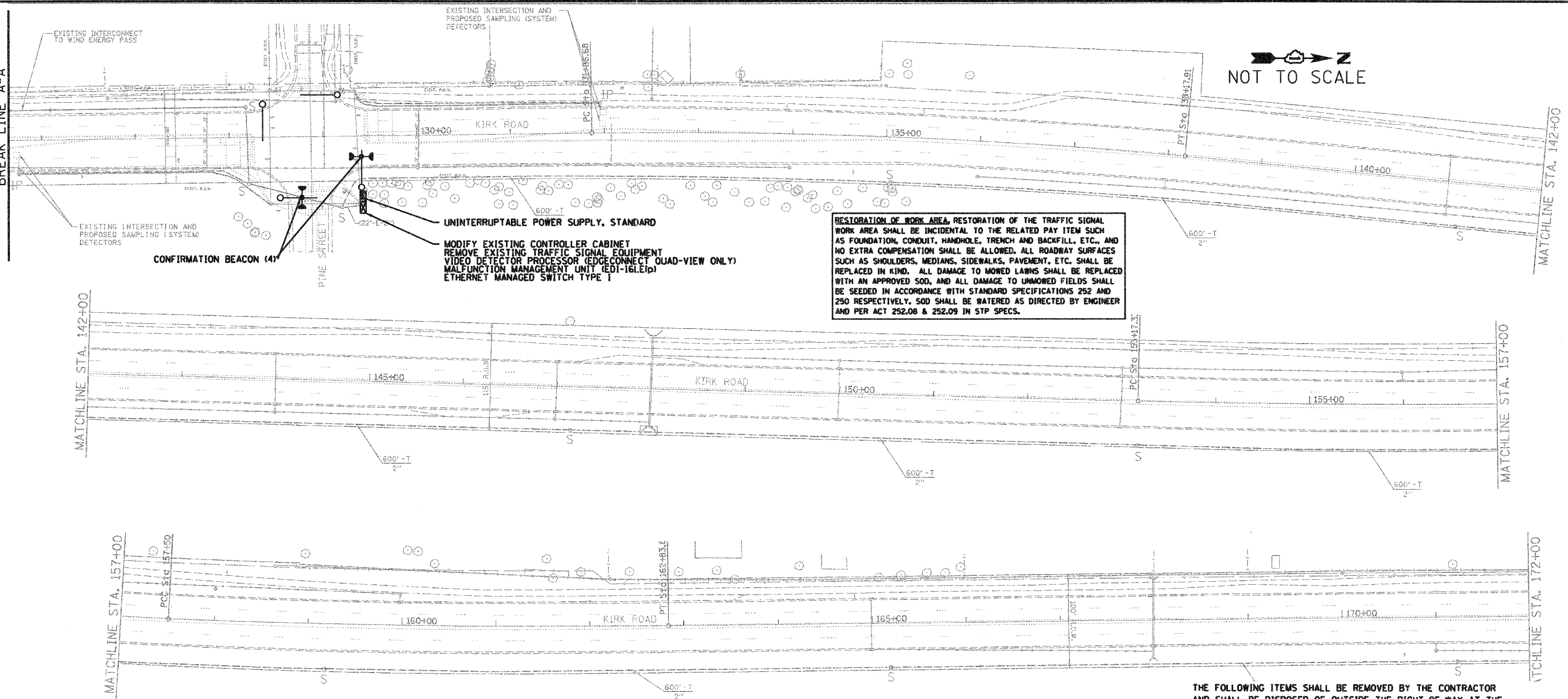
1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

JACOBS ONE NORTH FRANKLIN CHICAGO IL, 60606 312-251-3000	USER NAME =	DESIGNED - CH	REVISED -	KANE COUNTY DIVISION OF TRANSPORTATION	INTERCONNECT PLAN KIRK ROAD (SHEET 4 OF 22)			F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 36	
	PLOT SCALE =	DRAWN - MO, DI	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 63648					
	PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -			FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT							
		DATE - #DATE	REVISED -										

11/7/2011

BREAK LINE A-A



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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

MATCHLINE STA. 142+00

MATCHLINE STA. 157+00

MATCHLINE STA. 157+00

MATCHLINE STA. 172+00

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

4 EACH CONFIRMATION BEACON

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE KANE COUNTY, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

1 EACH UNINTERRUPTABLE POWER SUPPLY, STANDARD
 1 EACH MALFUNCTION MANAGEMENT UNIT
 1 EACH ETHERNET SWITCH TYPE I (GARRETCOM ES42)

THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

30 W 751 NORTH AURORA ROAD
 NAPERVILLE, IL 60563
 TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

SCHEDULE OF QUANTITIES - KIRK ROAD AND PINE STREET

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
VIDEO SYSTEM DETECTION PROCESSOR	EACH	1
UNINTERRUPTABLE POWER SUPPLY, STANDARD	EACH	1
MALFUNCTION MANAGEMENT UNIT	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
CONFIRMATION BEACON	EACH	4
ETHERNET MANAGED SWITCH, TYPE I	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

NOTES:

- NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
- EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
- THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
- THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.

P:\2011\94972\00700 CADD & GIS Files\2782 Eval\Sheets\08_Interconnect.dgn

JACOBS
 ONE NORTH FRANKLIN
 CHICAGO IL, 60606
 312-251-3000

USER NAME =
 PLOT SCALE =
 PLOT DATE = 11/7/2011

DESIGNED - CH
 DRAWN - MO, DI
 CHECKED - KG
 DATE - #DATE

REVISED -
 REVISED -
 REVISED -
 REVISED -

KANE COUNTY
 DIVISION OF TRANSPORTATION

INTERCONNECT PLAN
 KIRK ROAD (SHEET 5 OF 22)

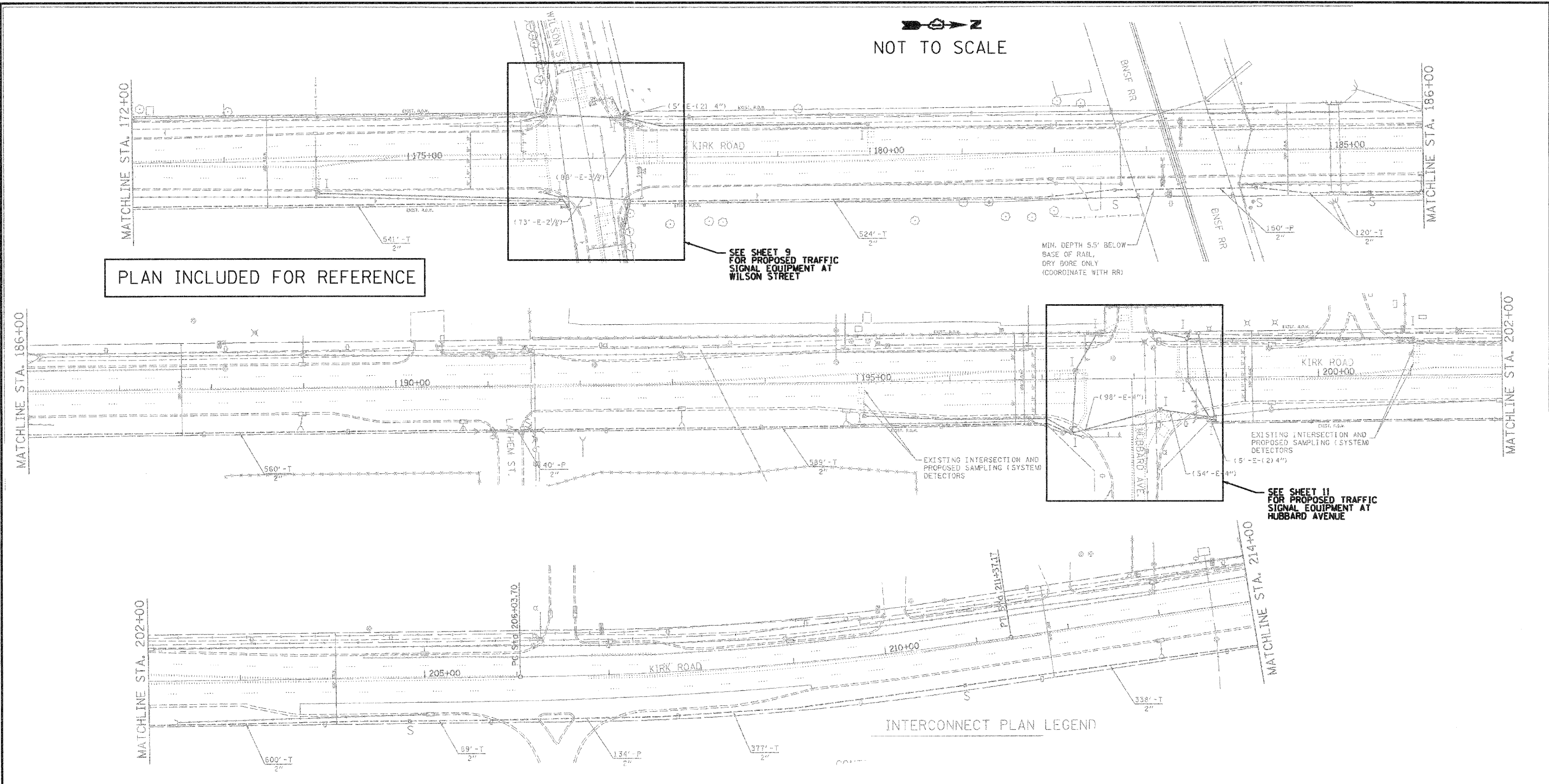
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	37

CONTRACT NO. 63648
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

11/7/2011

P:\2011\936700\700 CADD & GIS Files\702 Civil\Sheet\106 Interconnect2.dgn



PLAN INCLUDED FOR REFERENCE

SEE SHEET 9 FOR PROPOSED TRAFFIC SIGNAL EQUIPMENT AT WILSON STREET

SEE SHEET 11 FOR PROPOSED TRAFFIC SIGNAL EQUIPMENT AT HUBBARD AVENUE

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.

INTERCONNECT PLAN LEGEND

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - \$DATE	REVISED -

**KANE COUNTY
DIVISION OF TRANSPORTATION**

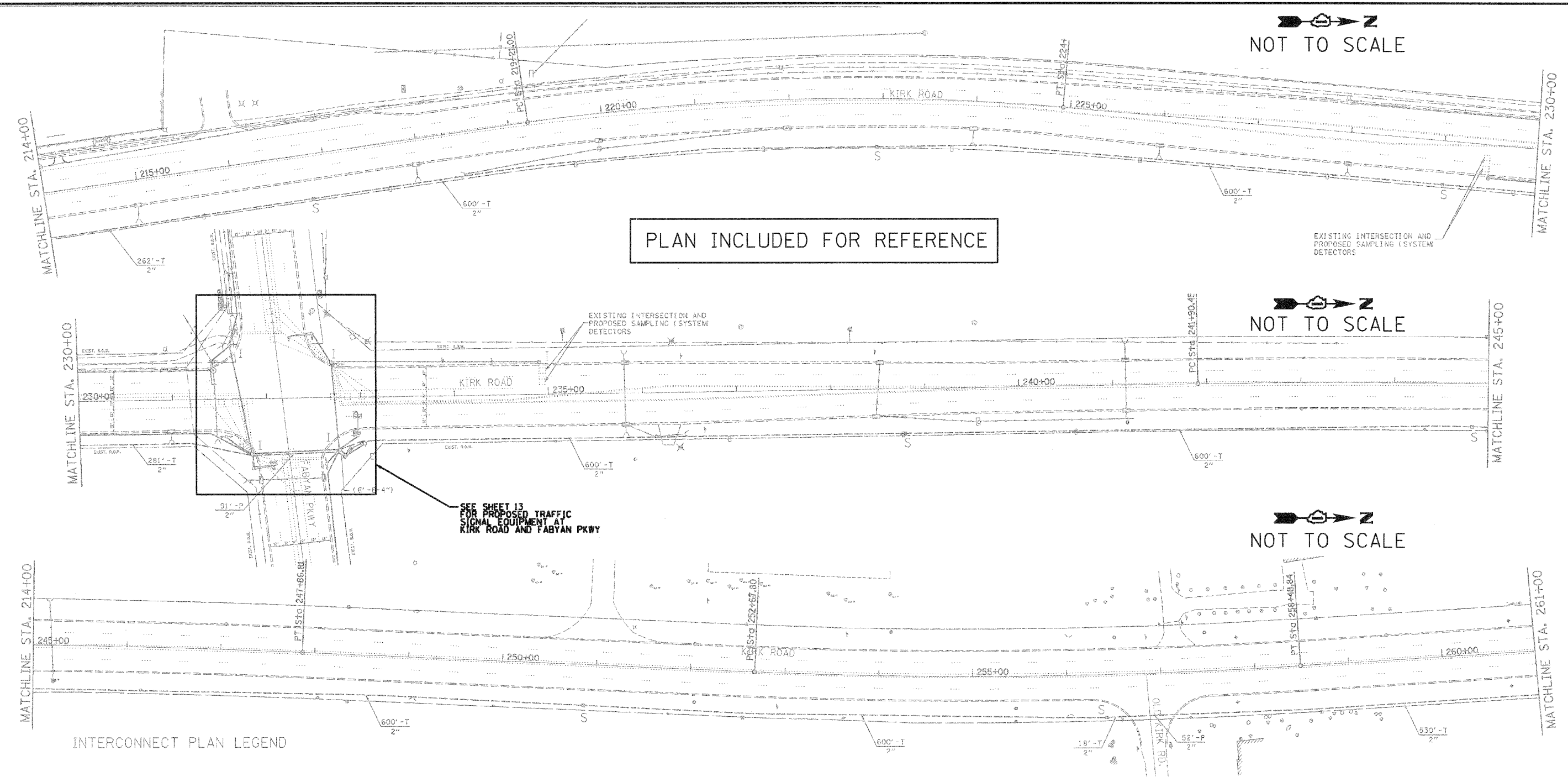
**INTERCONNECT PLAN
KIRK ROAD (SHEET 6 OF 22)**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	38
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63648	

11/7/2011

P:\2011\966728\780 CAD & GIS Files\782 Civil\Sheet\07_Interconnect3.dgn



INTERCONNECT PLAN LEGEND

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.

JACOBS
 ONE NORTH FRANKLIN
 CHICAGO IL, 60606
 312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLDT SCALE =	DRAWN - MO, DI	REVISED -
PLDT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

KANE COUNTY
 DIVISION OF TRANSPORTATION

INTERCONNECT PLAN
 KIRK ROAD (SHEET 7 OF 22)

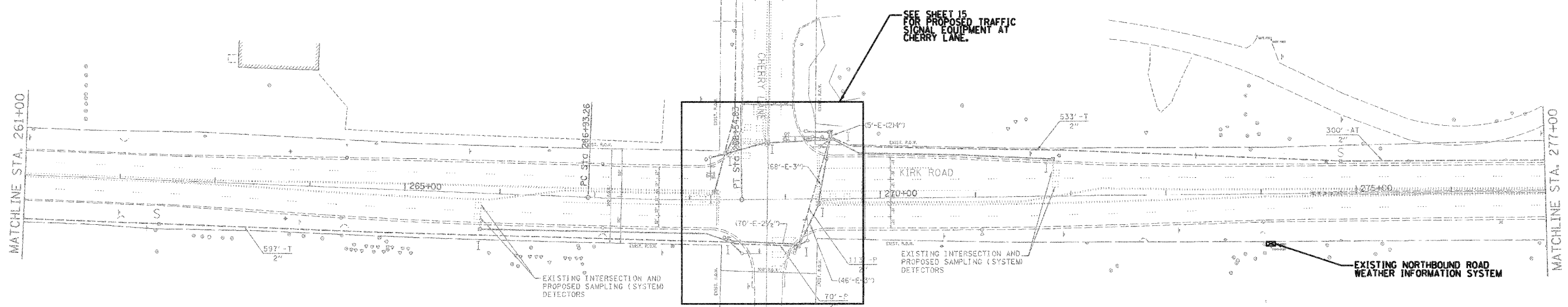
SCALE:	SHEET NO.	OF	SHEETS	STA.	TO STA.
--------	-----------	----	--------	------	---------

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	39
CONTRACT NO. 63648			FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT	

11/7/2011

PLAN INCLUDED FOR REFERENCE

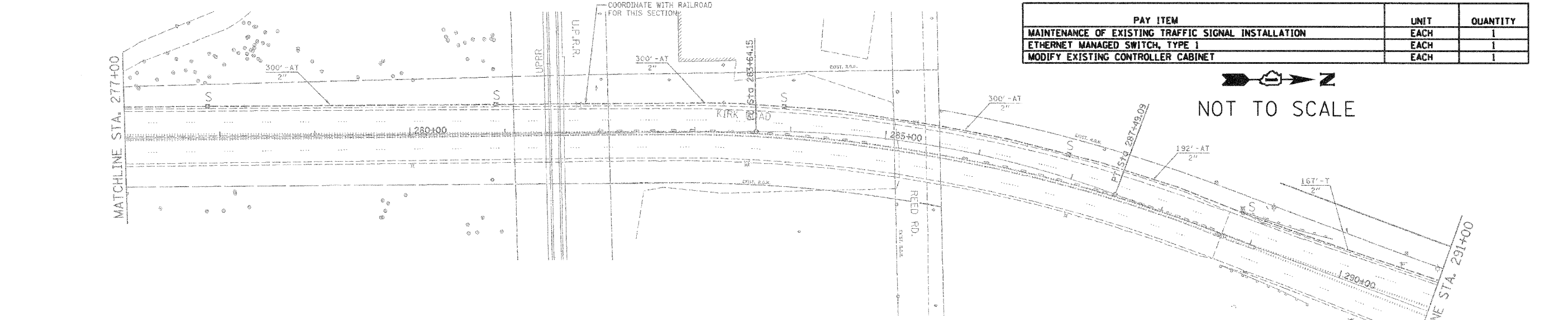
NOT TO SCALE



SCHEDULE OF QUANTITIES - ROAD WEATHER INFORMATION STATION (NOT SHOWN)

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ETHERNET MANAGED SWITCH, TYPE 1	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1

NOT TO SCALE



SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.
5. ROAD WEATHER INFORMATION SYSTEM (RWIS) WILL BE INSTALLED BY OTHERS PRIOR TO KIRK ROAD PROJECT. CONTRACTOR WILL CONNECT RWIS TO KIRK ROAD NETWORK.

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOO, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOO SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 292.08 & 292.09 IN STP SPECS.

P:\1-2611\986708\708 CAD & GIS Files\702 Civil\Sheet\08 Interconnect.dgn

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

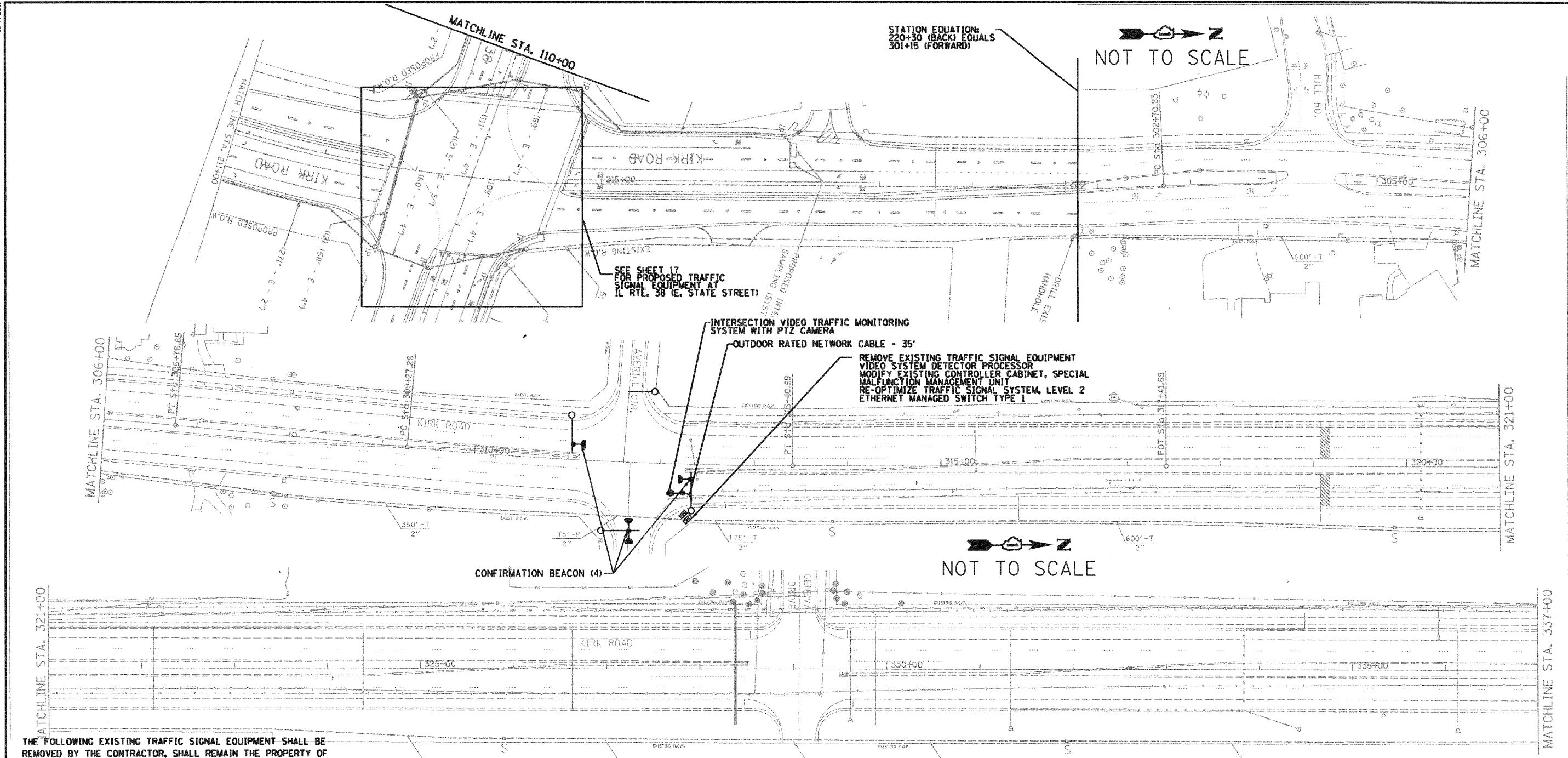
INTERCONNECT PLAN
KIRK ROAD (SHEET 8 OF 22)

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

F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 40
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63648	

11/7/2011

P:\2011\949780\700 CAD & GIS Files\782 Civil\Sheet\09_Interconnect.dwg



THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE KANE COUNTY, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

- 1 EACH MALFUNCTION MANAGEMENT UNIT
- 1 EACH ETHERNET MANAGED SWITCH TYPE I (GARRETCOM ES42)
- 1 EACH TREEHAVEN RVSFB120
- 1 EACH IVDO STREAMER/ENCODER
- 1 EACH PTZ CAMERA
- 1 EACH VIDEO MONITOR

THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF 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 CONFIRMATION BEACON

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

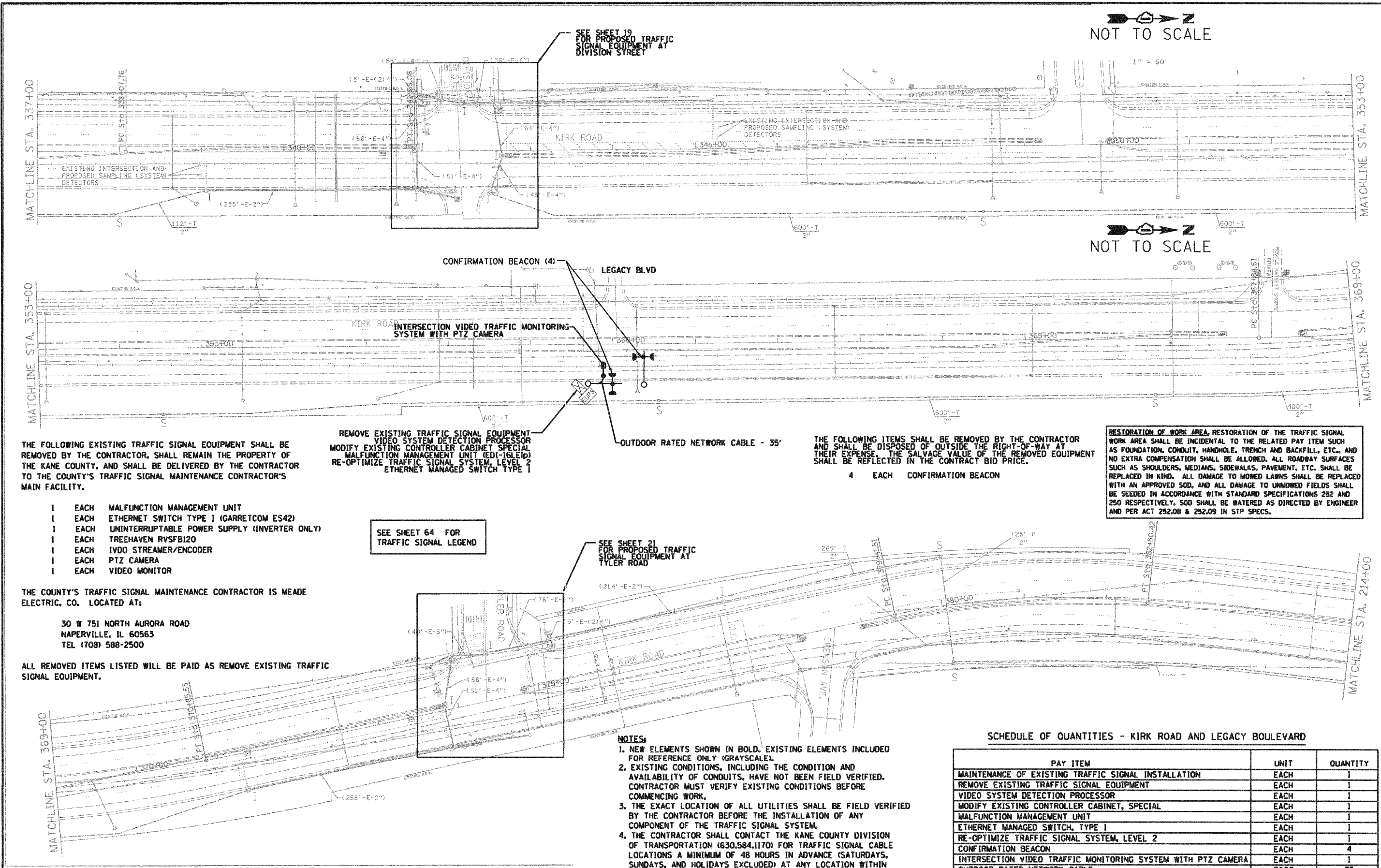
SCHEDULE OF QUANTITIES - KIRK ROAD AND AVERILL ROAD

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
VIDEO SYSTEM DETECTION PROCESSOR	EACH	1
MODIFY EXISTING CONTROLLER CABINET, SPECIAL MALFUNCTION MANAGEMENT UNIT	EACH	1
ETHERNET MANAGED SWITCH, TYPE 1	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
CONFIRMATION BEACON	EACH	4
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	35

<p>JACOBS ONE NORTH FRANKLIN CHICAGO IL, 60606 312-251-3000</p>	USER NAME =	DESIGNED - CH	REVISED -	<p>KANE COUNTY DIVISION OF TRANSPORTATION</p>	<p>INTERCONNECT PLAN KIRK ROAD (SHEET 9 OF 22)</p>	F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 41
	PLOT SCALE =	CHECKED - KG	REVISED -			SCALE: 1" = 40'	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 63648 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	
	PLOT DATE = 11/7/2011	DATE - #DATE	REVISED -							

11/7/2011

P:\2011\9067007\007\000\CADD & GIS Files\782 Civil\Sheet\10B_Interconnect.dgn



THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE KANE COUNTY, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

- 1 EACH MALFUNCTION MANAGEMENT UNIT
- 1 EACH ETHERNET SWITCH TYPE I (GARRETCOM ES42)
- 1 EACH UNINTERRUPTIBLE POWER SUPPLY (INVERTER ONLY)
- 1 EACH TREEHAVEN RV5FB120
- 1 EACH IVDO STREAMER/ENCODER
- 1 EACH PTZ CAMERA
- 1 EACH VIDEO MONITOR

THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

30 W 751 NORTH AURORA ROAD
 NAPERVILLE, IL 60563
 TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
 VIDEO SYSTEM DETECTION PROCESSOR
 MODIFY EXISTING CONTROLLER CABINET SPECIAL
 MALFUNCTION MANAGEMENT UNIT (EDI-16LE16)
 RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2
 ETHERNET MANAGED SWITCH TYPE 1

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

SEE SHEET 19 FOR PROPOSED TRAFFIC SIGNAL EQUIPMENT AT DIVISION STREET

SEE SHEET 21 FOR PROPOSED TRAFFIC SIGNAL EQUIPMENT AT TYLER ROAD

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF 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 CONFIRMATION BEACON

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD, EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.

SCHEDULE OF QUANTITIES - KIRK ROAD AND LEGACY BOULEVARD

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
VIDEO SYSTEM DETECTION PROCESSOR	EACH	1
MODIFY EXISTING CONTROLLER CABINET, SPECIAL MALFUNCTION MANAGEMENT UNIT	EACH	1
ETHERNET MANAGED SWITCH, TYPE 1	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
CONFIRMATION BEACON	EACH	4
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
OUTDOOR RATED NETWORK CABLE	FOOT	35

JACOBS
 ONE NORTH FRANKLIN
 CHICAGO IL, 60606
 312-251-3000

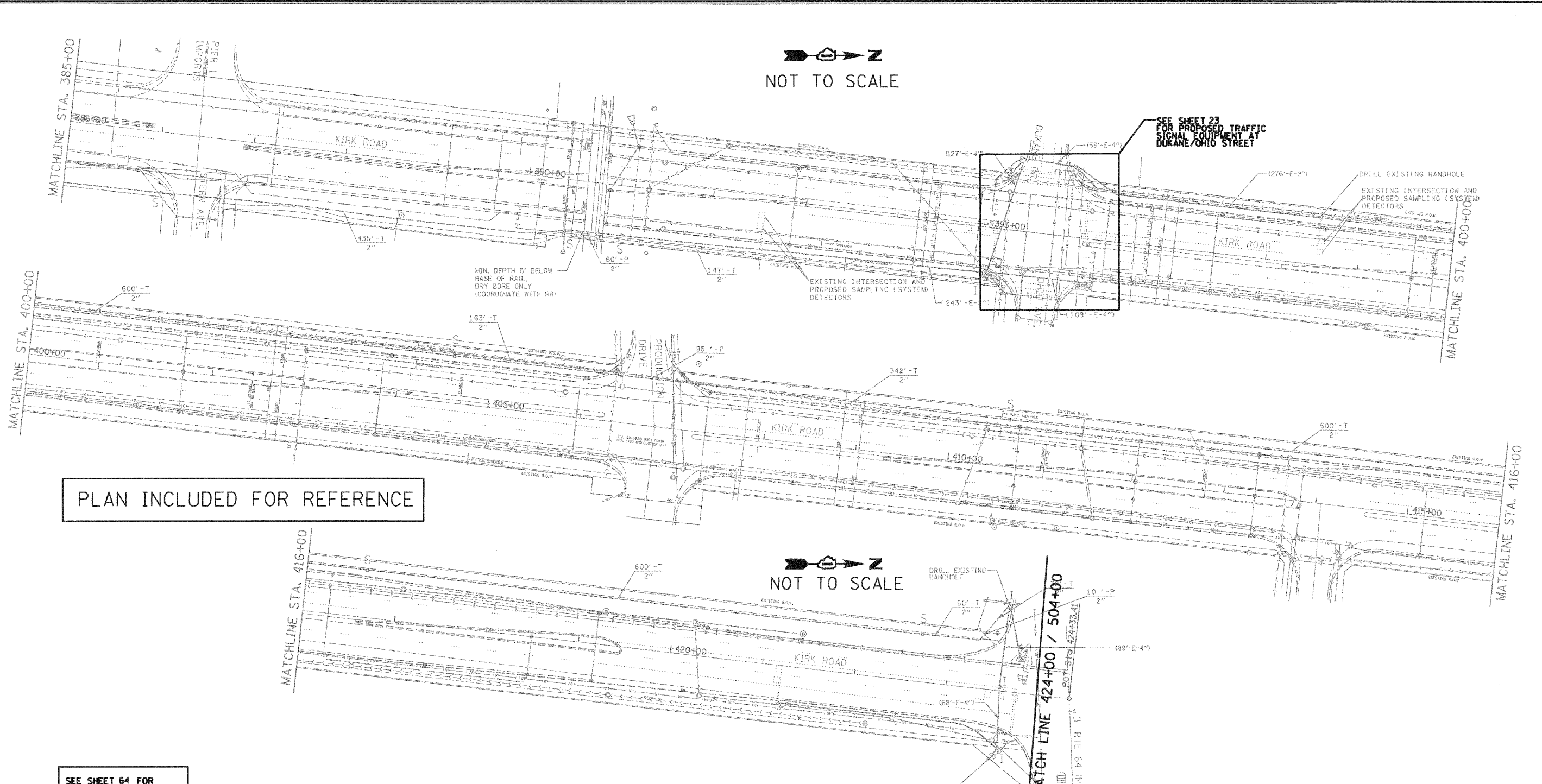
USER NAME =	DESIGNED - CH	REVISED -
PLDT SCALE =	DRAWN - MO, DI	REVISED -
PLDT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

KANE COUNTY
 DIVISION OF TRANSPORTATION

INTERCONNECT PLAN
 KIRK ROAD (SHEET 10 OF 22)

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

F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 42
FED. ROAD DIST. NO. (ILLINOIS)		FED. AID PROJECT		
		CONTRACT NO. 63648		



PLAN INCLUDED FOR REFERENCE

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.

PROPOSED INTERCONNECT FIBER AND TRACER CABLE SHALL BE INSTALLED UP TO THIS CONTROLLER CABINET TO PROTECT THE ENDS OF CABLES. CONNECTION TO CONTROLLER AT IL RTE 64 SHALL BE MADE IN FUTURE BY OTHERS

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

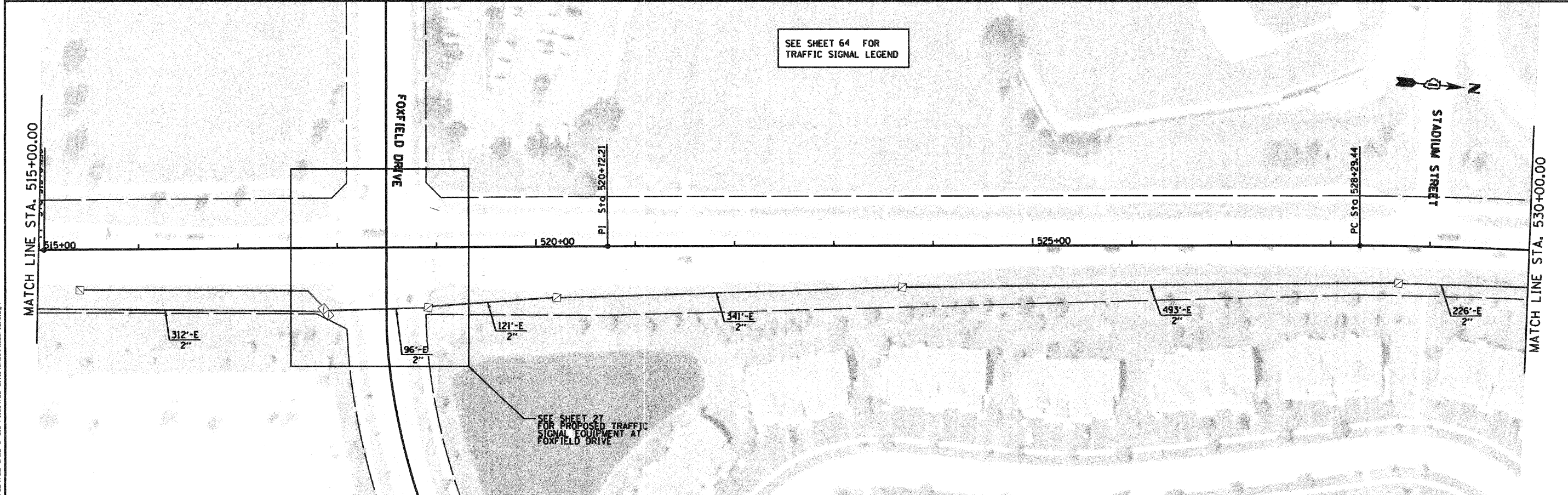
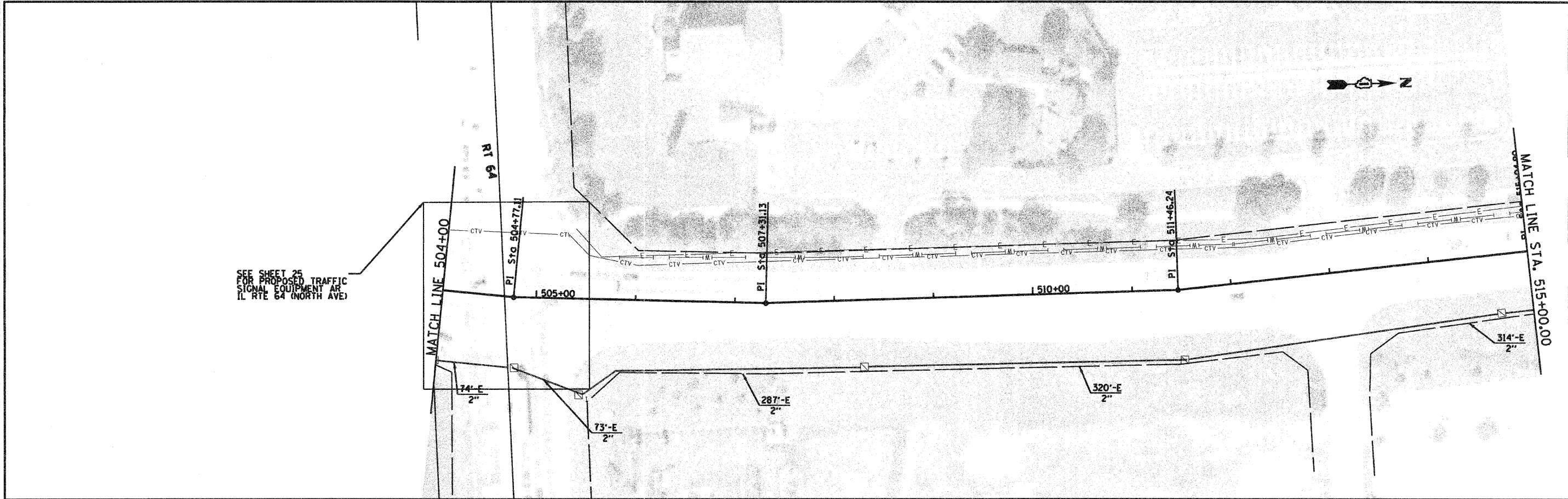
USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

INTERCONNECT PLAN			
KIRK ROAD (SHEET 11 OF 22)			
SCALE:	SHEET NO.	OF SHEETS	STA. TO STA.

F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 43
FED. ROAD DIST. NO. ILLINOIS/FED. AID PROJECT			CONTRACT NO. 63648	

10/24/2011

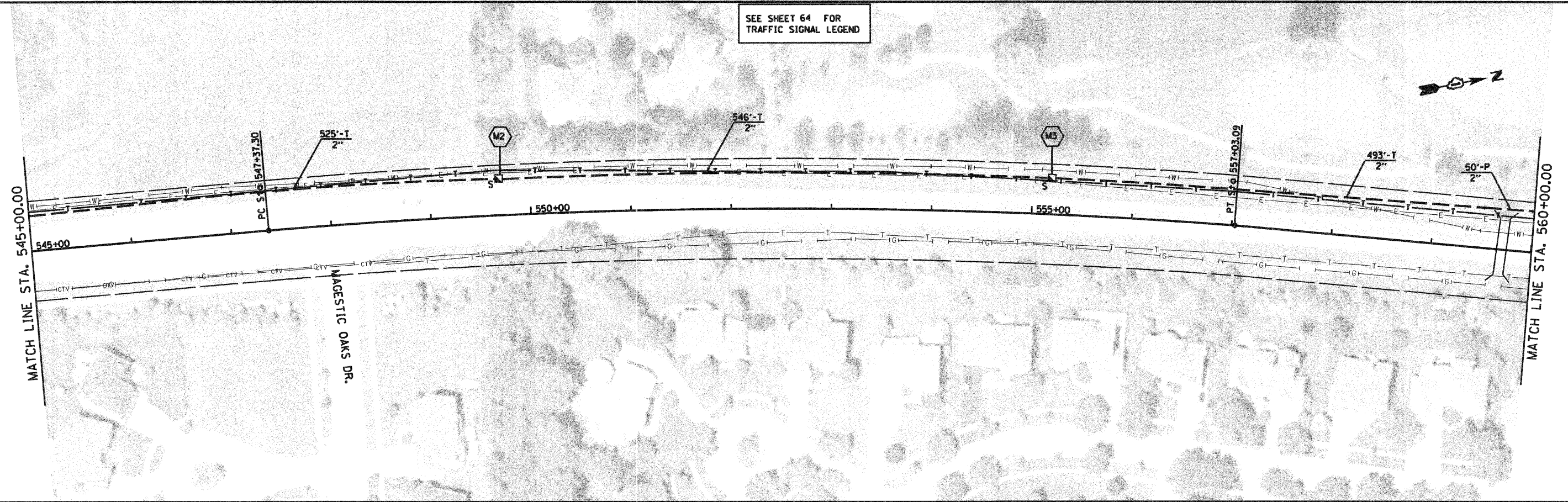
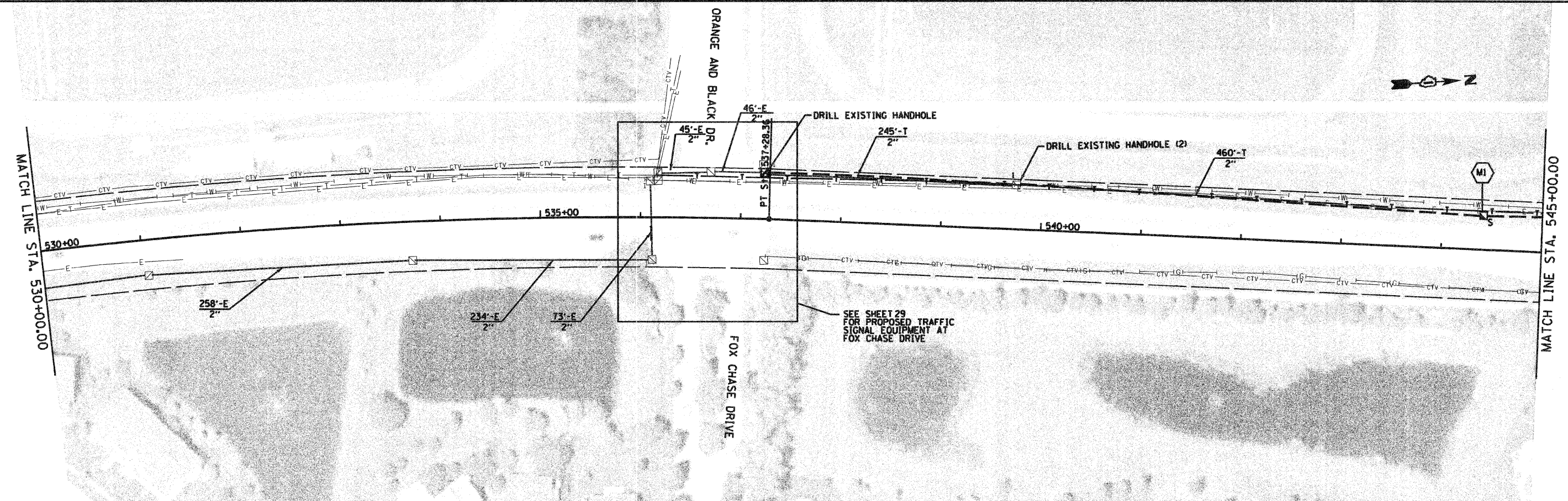
P:\2011\906728\780 CADD & GIS Files\782 Civil\Sheet\12_Plan1.dgn



JACOBS ONE NORTH FRANKLIN CHICAGO IL, 60606 312-251-3000	USER NAME =	DESIGNED - CH	REVISED -	KANE COUNTY DIVISION OF TRANSPORTATION	INTERCONNECT PLAN KIRK ROAD (SHEET 12 OF 22)		F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 44	
	PLOT SCALE =	DRAWN - MO, DI	REVISED -		SCALE: 1"=50'	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 63648		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		
	PLOT DATE = 10/24/2011	CHECKED - KG	REVISED -									
		DATE - @DATE	REVISED -									

10/24/2011

P:\2011\09\06\706\706 CADD & GIS Files\702 Civil\Sheet\13.Plot2.dgn



SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

JACOBS
 ONE NORTH FRANKLIN
 CHICAGO IL, 60606
 312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 10/24/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

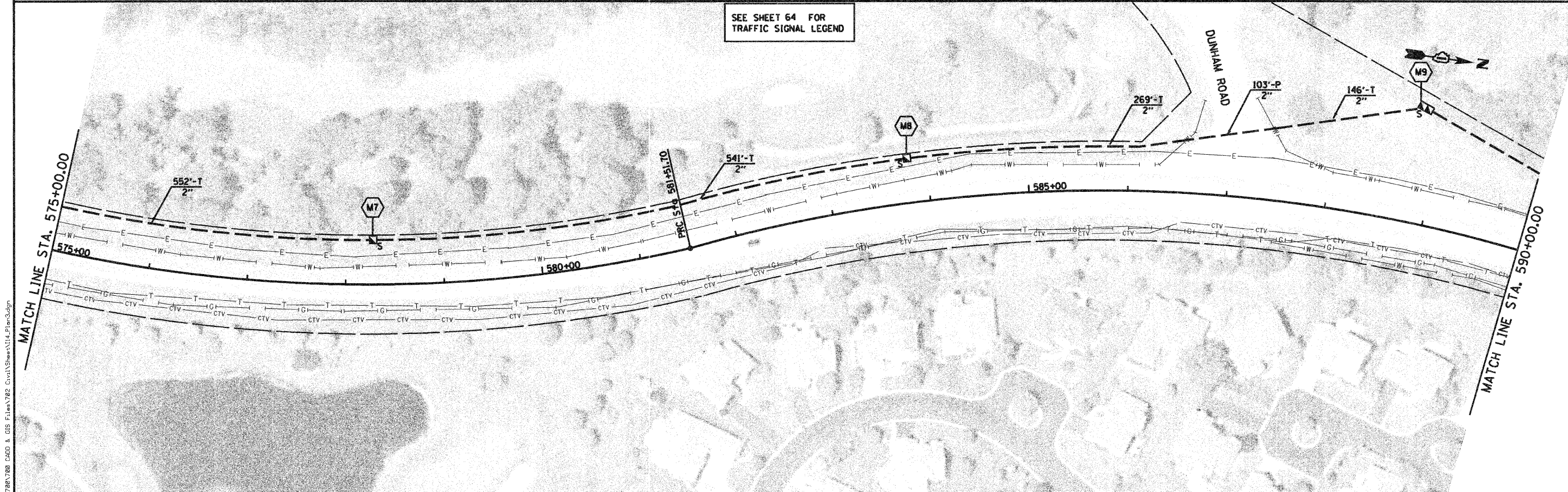
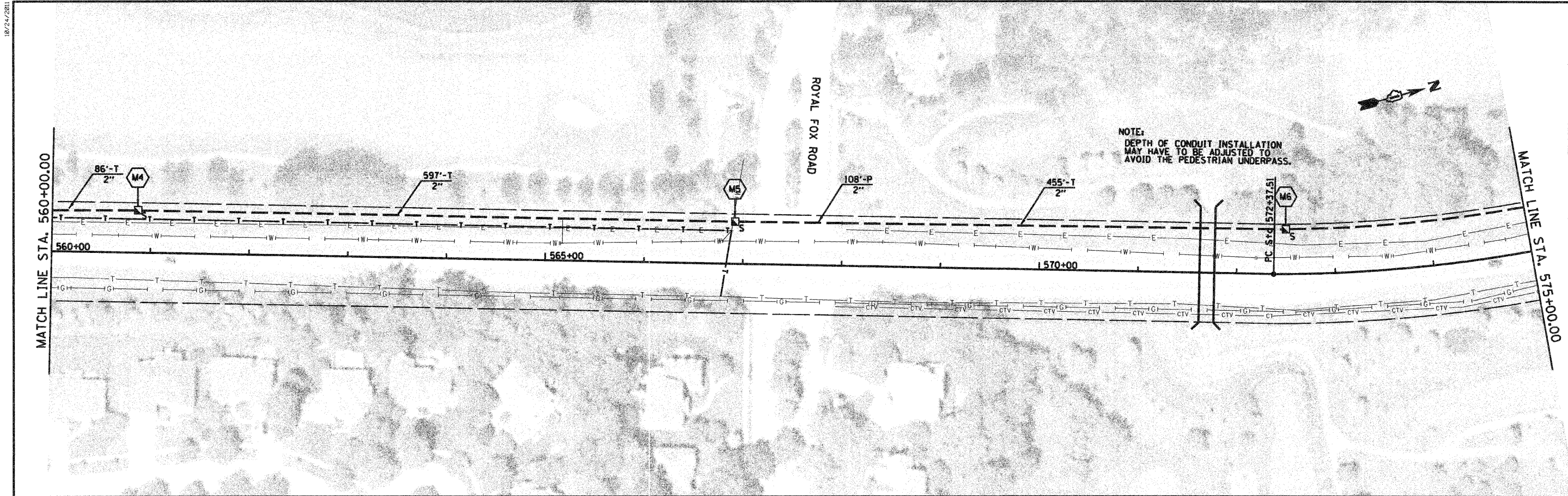
**KANE COUNTY
 DIVISION OF TRANSPORTATION**

**INTERCONNECT PLAN
 KIRK ROAD (SHEET 13 OF 22)**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS NO.	SHEET NO.
360	10-00403-00-TL	KANE	72	45
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		CONTRACT NO. 63648

10/24/2011



SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

JACOBS
 ONE NORTH FRANKLIN
 CHICAGO IL, 60606
 312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 10/24/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

INTERCONNECT PLAN
KIRK ROAD (SHEET 14 OF 22)

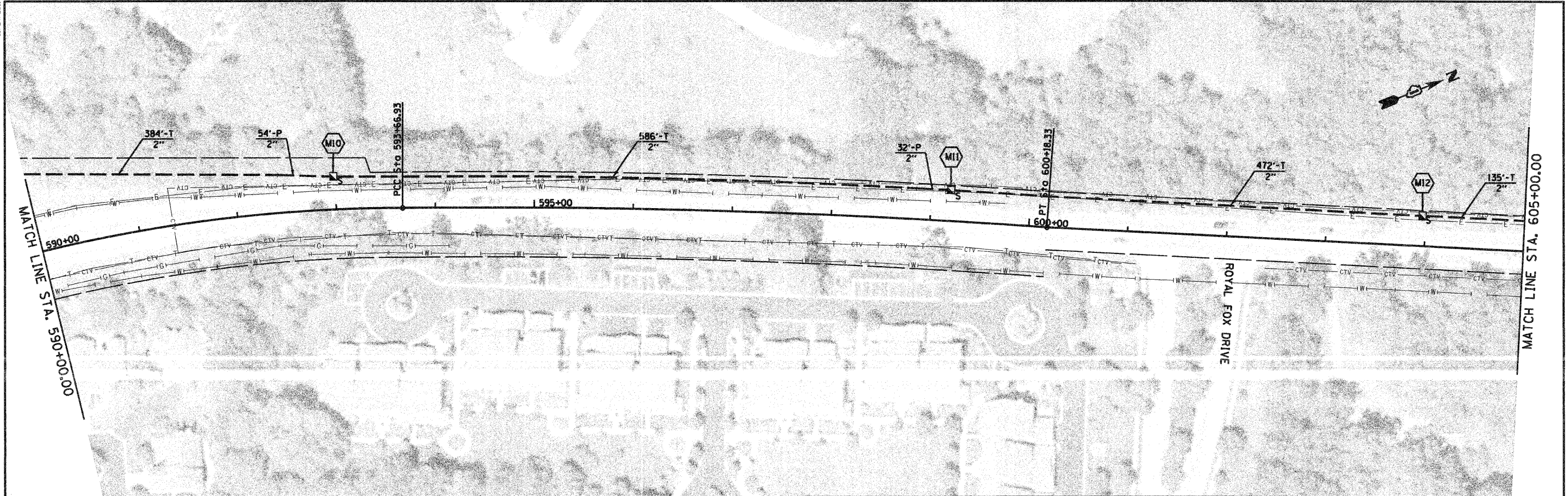
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	46
CONTRACT NO. 63648				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

P:\N\9096786\780 CAD & GIS Files\782 Civil\Sheet\14.Plot3.dgn

10/24/2011

PA-20110906700A700 CAD & GIS Files\702 Civil\Sheet\15.Plot.dgn



USER NAME =
 PLOT SCALE =
 PLOT DATE = 10/24/2011

DESIGNED -	CH	REVISED -	
DRAWN -	MO, DI	REVISED -	
CHECKED -	KG	REVISED -	
DATE -	#DATE	REVISED -	

**KANE COUNTY
 DIVISION OF TRANSPORTATION**

**INTERCONNECT PLAN
 DUNHAM ROAD (SHEET 15 OF 22)**

SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 47
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	CONTRACT NO. 63648	

10/24/2011

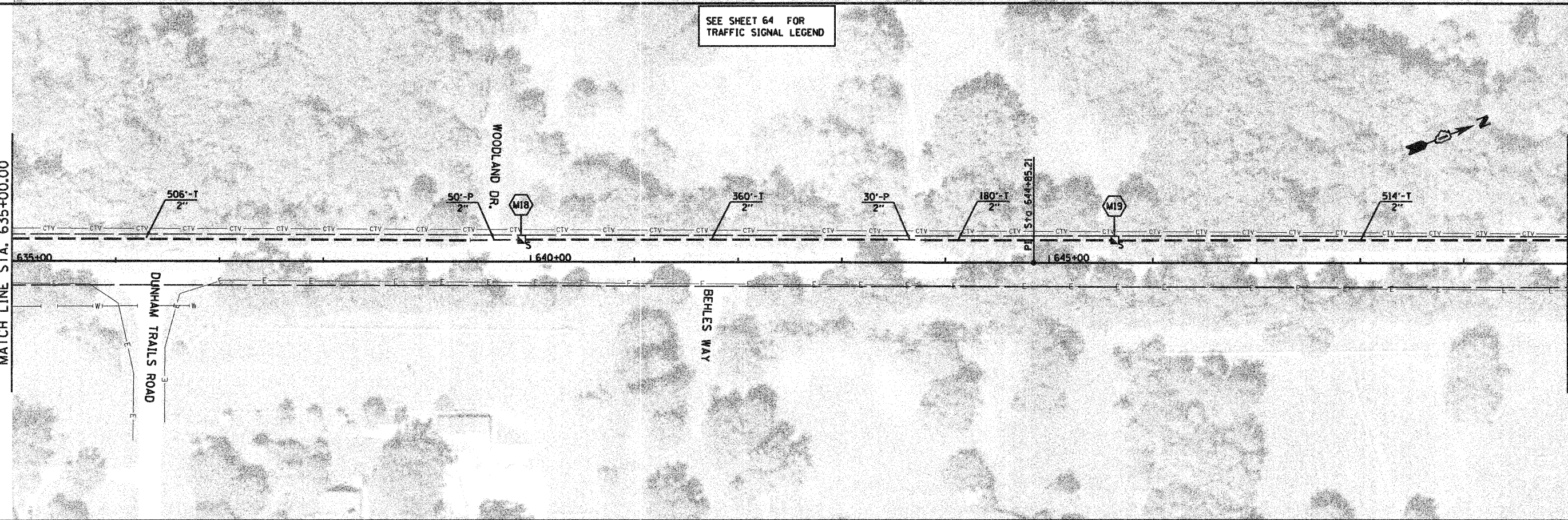
P:\2011\9596700\700 CAD & GIS Files\702 Civil\Sheet\16.Plot5.dgn

MATCH LINE STA. 620+00.00

MATCH LINE STA. 635+00.00

MATCH LINE STA. 635+00.00

MATCH LINE STA. 650+00.00



JACOBS
 ONE NORTH FRANKLIN
 CHICAGO IL, 60606
 312-251-3000

USER NAME =
 PLOT SCALE =
 PLOT DATE = 10/24/2011

DESIGNED -	CH	REVISED -	
DRAWN -	MO, DI	REVISED -	
CHECKED -	KC	REVISED -	
DATE -	DATE	REVISED -	

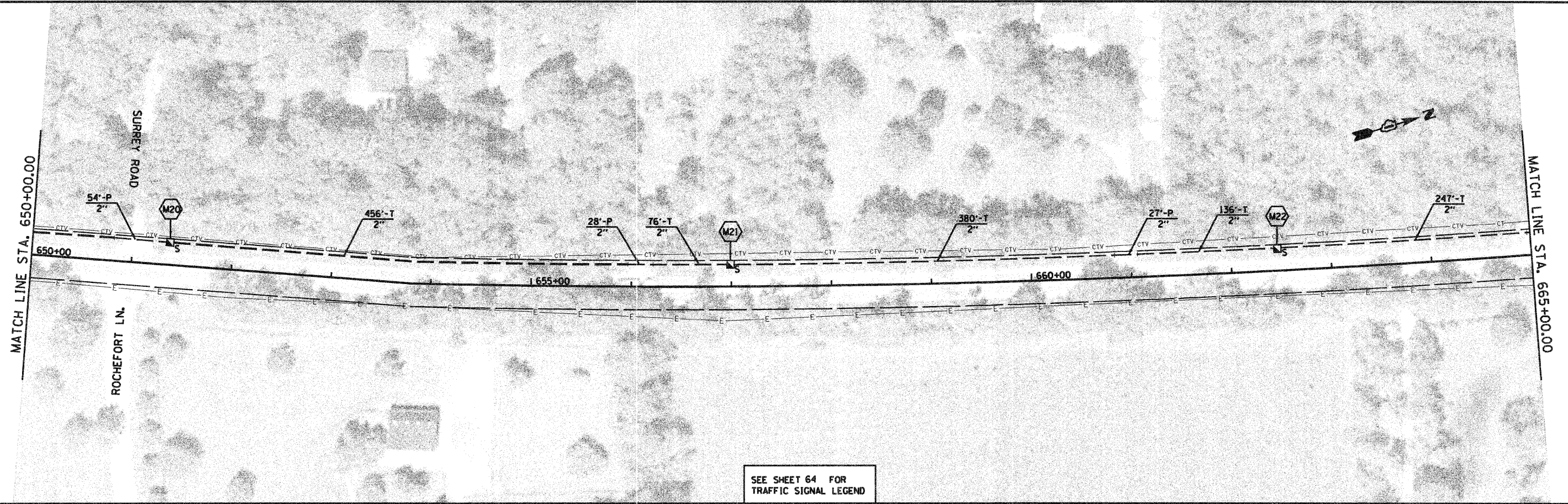
KANE COUNTY
DIVISION OF TRANSPORTATION

INTERCONNECT PLAN
DUNHAM ROAD (SHEET 16 OF 22)

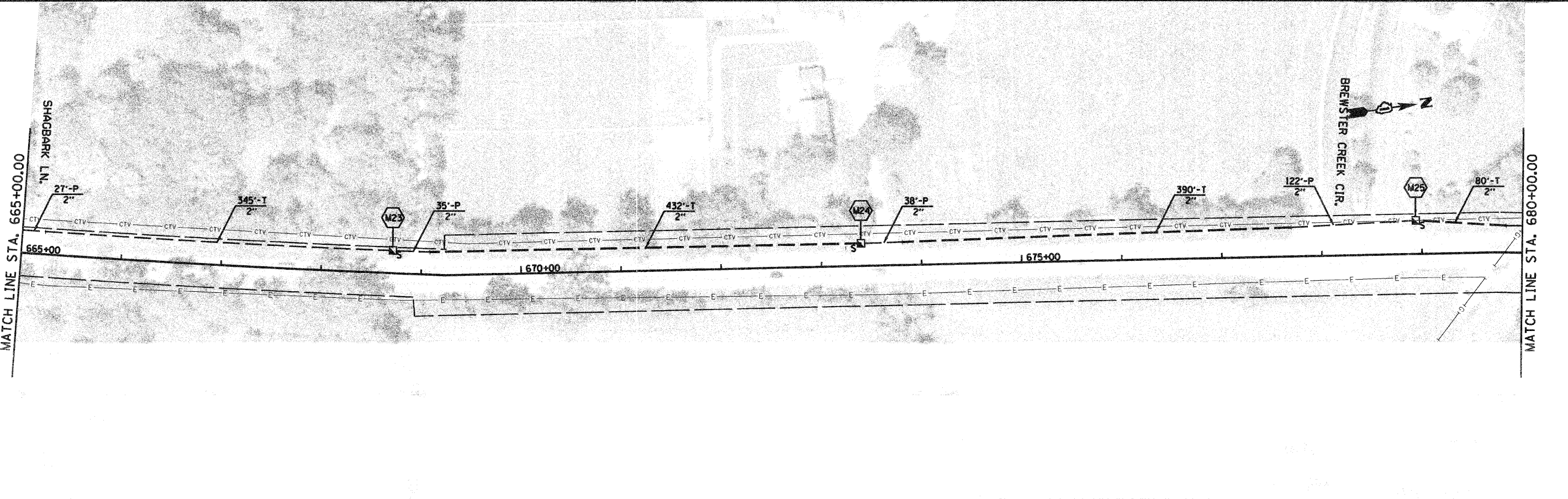
SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	48
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63648	

10/24/2011



SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND



P:\2011\9506700A\700 CAD & GIS F1\11\782 Civil\Sheet\17_Plan.dgn

JACOBS
 ONE NORTH FRANKLIN
 CHICAGO IL, 60606
 312-251-3000

USER NAME =
 PLOT SCALE =
 PLOT DATE = 10/24/2011

DESIGNED -	CH	REVISED -	
DRAWN -	MO, DI	REVISED -	
CHECKED -	KC	REVISED -	
DATE -	*DATE	REVISED -	

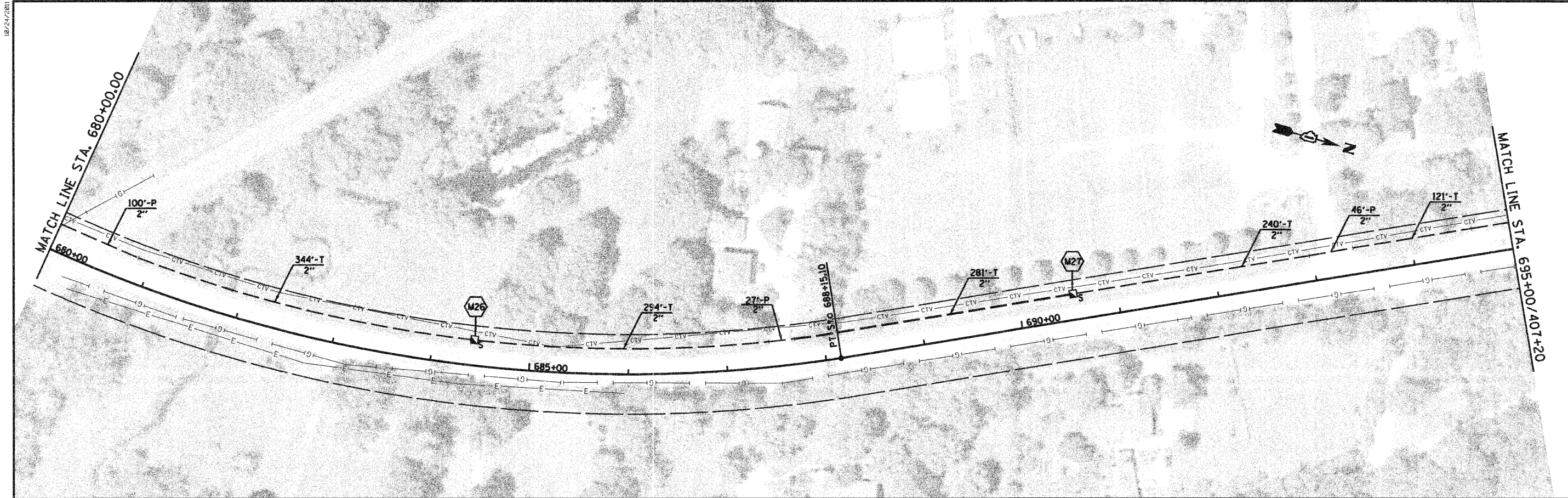
KANE COUNTY
DIVISION OF TRANSPORTATION

INTERCONNECT PLAN
DUNHAM ROAD (SHEET 17 OF 22)

SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	49
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63648	

10/24/2011



SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

P:\2011\9596708\700 CAD & GIS Files\702 Civil\Sheet\18_Plan7.dwg

JACOBS
 ONE NORTH FRANKLIN
 CHICAGO IL, 60606
 312-251-3000

USER NAME =
 PLOT SCALE =
 PLOT DATE = 10/24/2011

DESIGNED - CH
 DRAWN - MO, DI
 CHECKED - KG
 DATE - \$DATE

REVISED -
 REVISED -
 REVISED -
 REVISED -

**KANE COUNTY
 DIVISION OF TRANSPORTATION**

**INTERCONNECT PLAN
 DUNHAM ROAD (SHEET 18 OF 22)**
 SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.

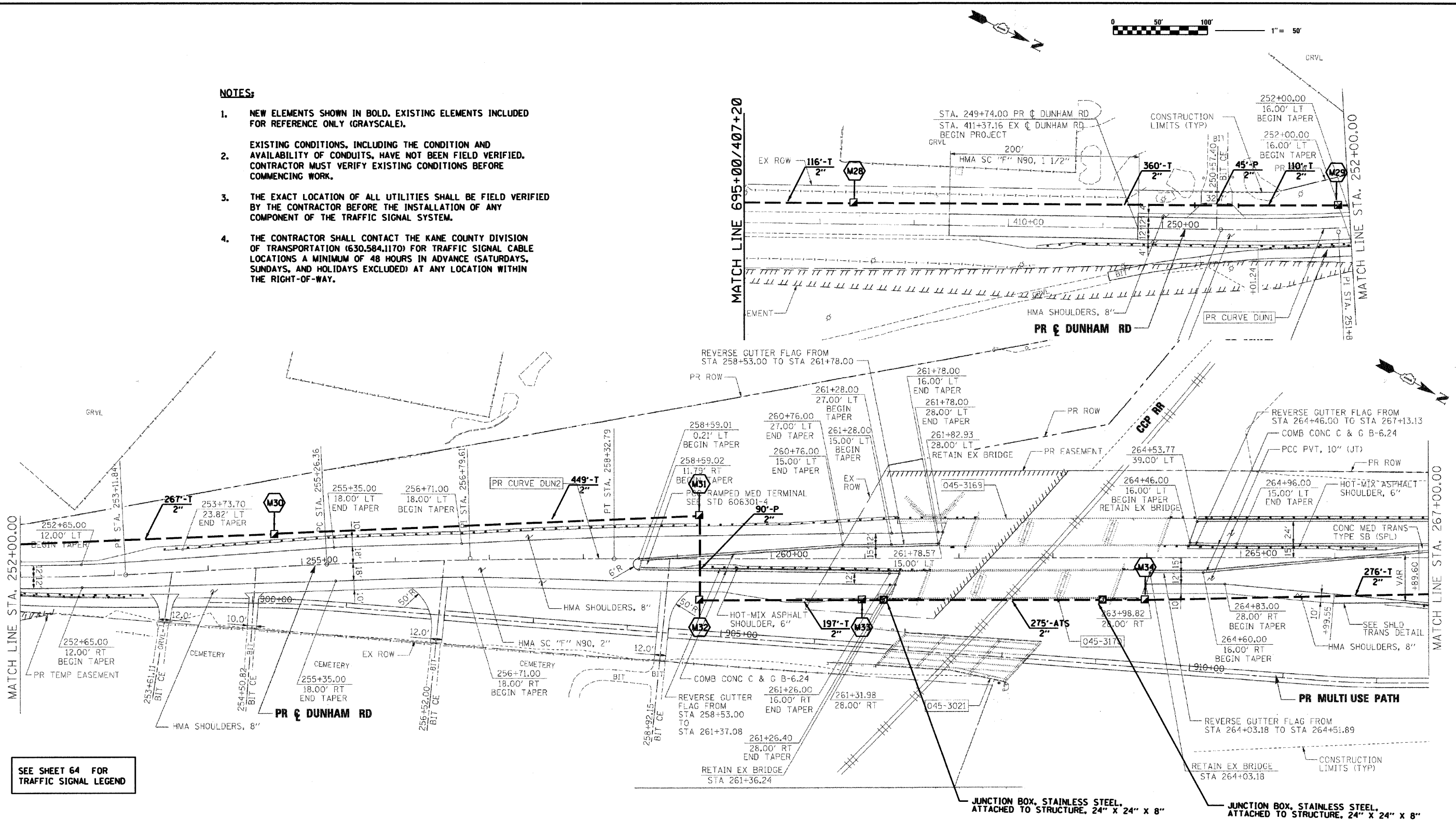
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	50
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63648	

10/21/2011

P:\2011\9596700\700 CAD & GIS Files\702 Civil\Sheet\19 Interconnect Dunham end IL 25-1.dgn

NOTES:

1. NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
2. EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
3. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
4. THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.



SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STIP SPECS.

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

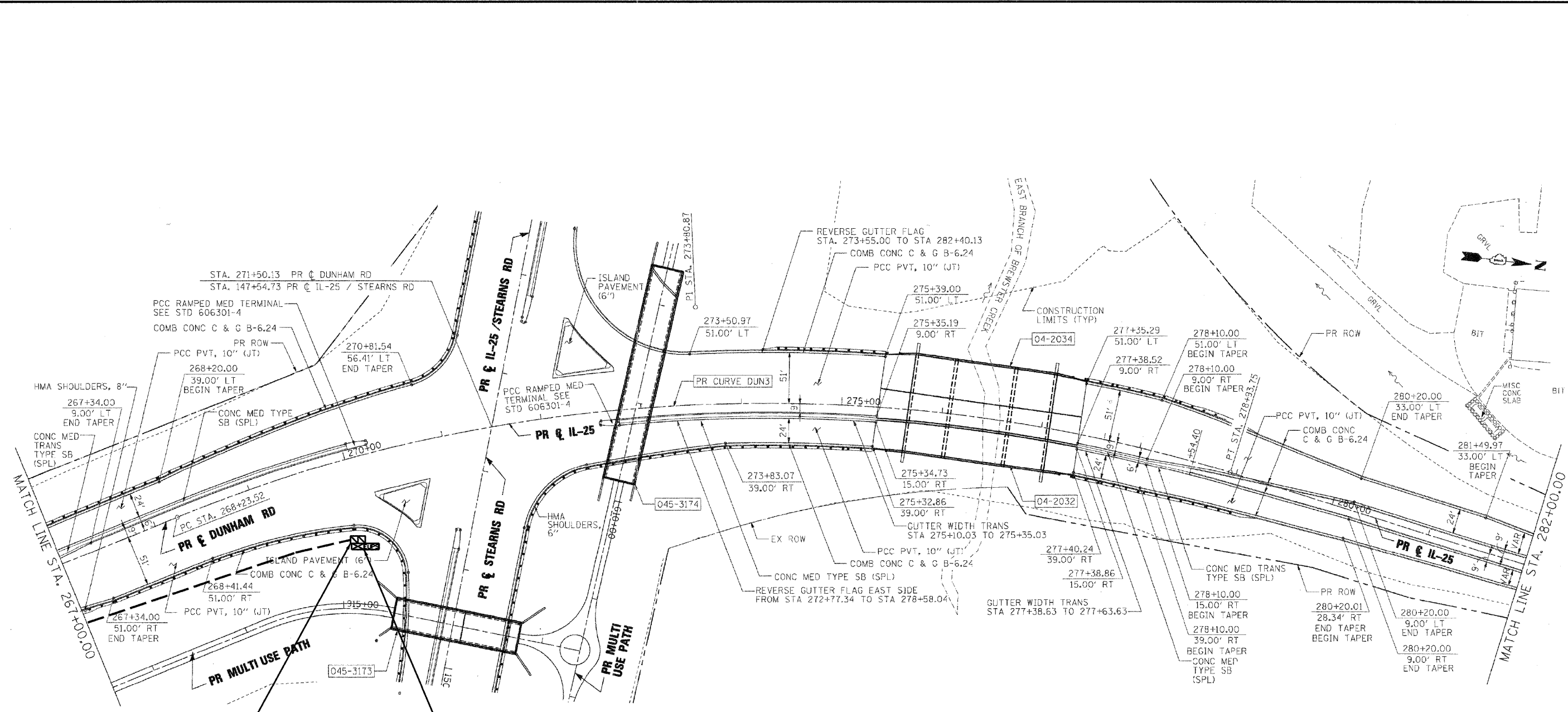
USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 10/21/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

**KANE COUNTY
DIVISION OF TRANSPORTATION**

**INTERCONNECT PLANS
DUNHAM ROAD (SHEET 19 OF 22)**

SCALE: 1" = 50' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS NO.	SHEET NO.
360	10-00403-00-TL	KANE	72	51
FED. ROAD DIST. NO. (ILLINOIS) FED. AID PROJECT			CONTRACT NO. 63648	



DRILL EXISTING HANDHOLE
ETHERNET MANAGED SWITCH, TYPE 2

SCHEDULE OF QUANTITIES - DUNHAM ROAD AND STEARNS ROAD

PAY ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ETHERNET MANAGED SWITCH, TYPE 2	EACH	1

DRILL EXISTING HANDHOLE QUANTIFIED UNDER INTERCONNECT - DUNHAM ROAD

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

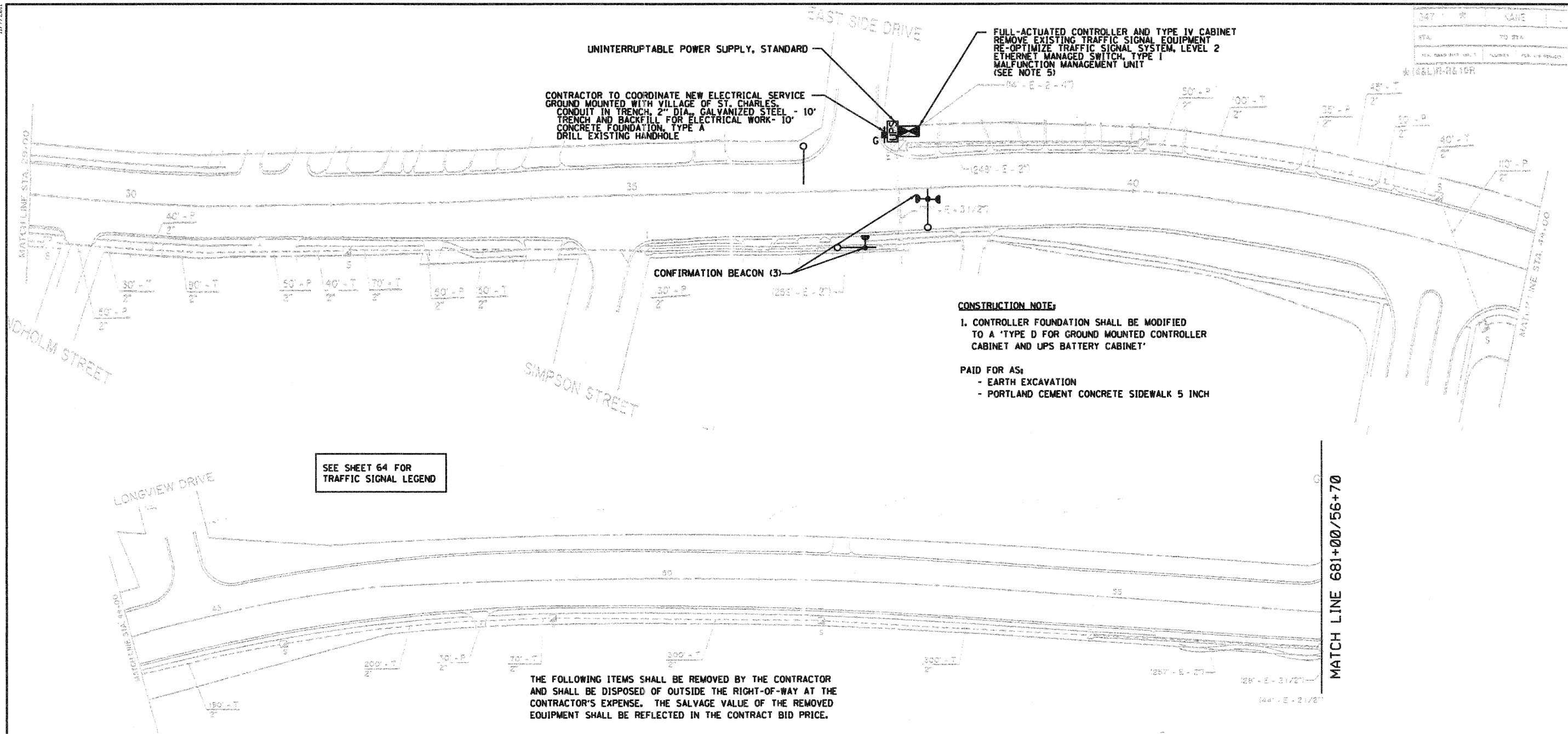
NOTES:

- NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
- EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
- THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
- THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.
- THIS INTERSECTION IS UNDER THE JURISDICTION OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.
- ALL EQUIPMENT INSTALLED IN THE CONTROLLER CABINET AT THIS LOCATION SHALL BE LABELED "PROPERTY OF KANE COUNTY DIVISION OF TRANSPORTATION"

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

11/7/2011

PA_20110908200708_CADD & GIS Files\782 Civil\Sheet\22_Interconnect_IL RTE_38.dgn



SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

CONSTRUCTION NOTE:

- 1. CONTROLLER FOUNDATION SHALL BE MODIFIED TO A 'TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET'
- PAID FOR AS:
- EARTH EXCAVATION
 - PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH

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

- 3 EACH CONFIRMATION BEACON
- 1 EACH SERVICE INSTALLATION, GROUND MOUNTED

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

- 1 EACH FULL-ACTUATED CONTROLLER AND CABINET
- 1 EACH MALFUNCTION MANAGEMENT UNIT
- 1 EACH ETHERNET SWITCH TYPE I (GARRETCOM ES42)

IDOT'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

NOTES:

- NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
- EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
- THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
- THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.
- MALFUNCTION MANAGEMENT UNIT TO BE PAID FOR UNDER FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
- IL ROUTE 38 AND EAST SIDE DRIVE IS UNDER THE JURISDICTION OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION



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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

SCHEDULE OF QUANTITIES - IL RTE 38 AND EAST SIDE DRIVE

PAY ITEM	UNIT	QUANTITY
EARTH EXCAVATION	CU YD	2
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	23.2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	10
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	10
FULL -ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
UNINTERRUPTABLE POWER SUPPLY, STANDARD	EACH	1
ETHERNET MANAGED SWITCH, TYPE I	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
CONFIRMATION BEACON	EACH	3

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

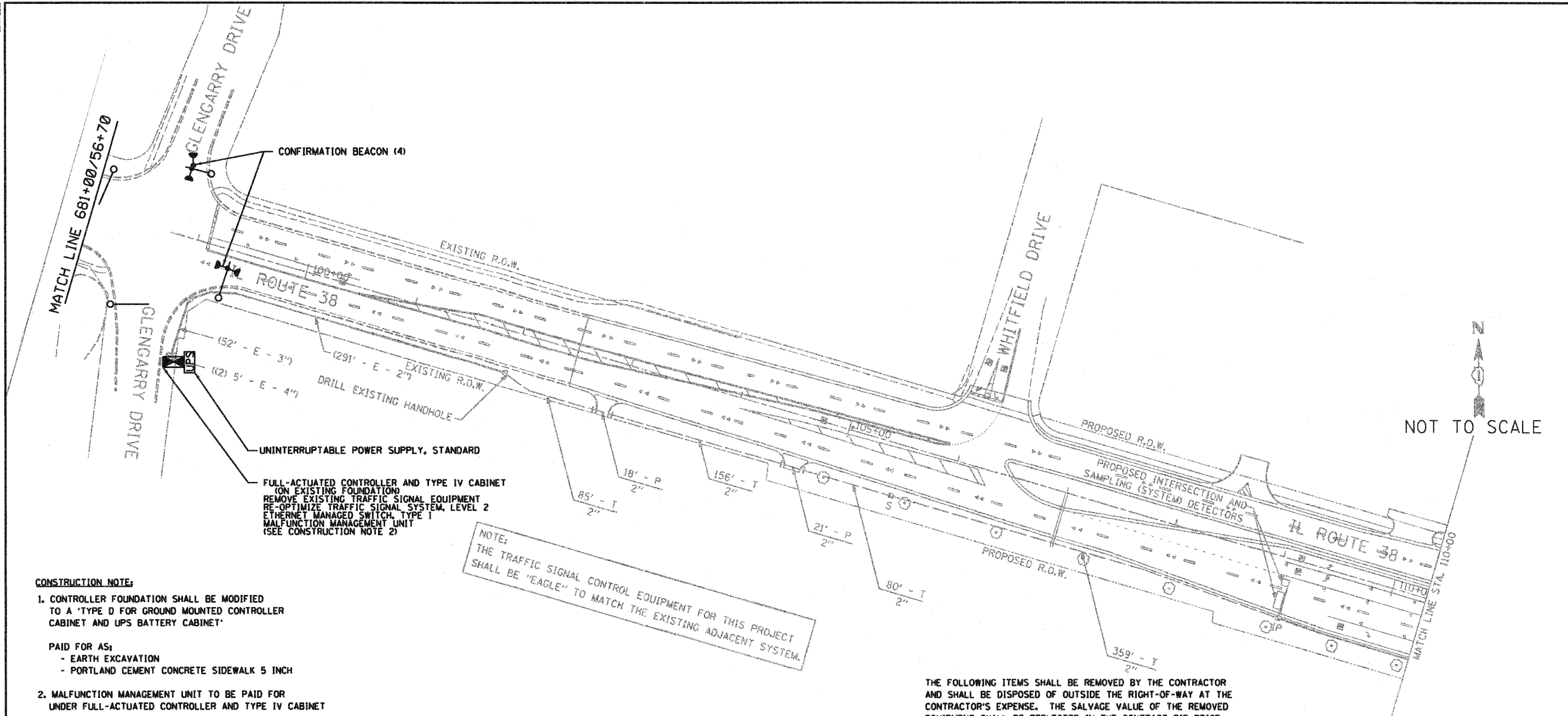
USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

KANE COUNTY
DIVISION OF TRANSPORTATION

INTERCONNECT PLANS
IL ROUTE 38 /E. STATE STREET (SHEET 21 OF 22)

SCALE: 1" = 50'

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	53
CONTRACT NO. 63648				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				



CONSTRUCTION NOTE:

- CONTROLLER FOUNDATION SHALL BE MODIFIED TO A 'TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET'
- PAID FOR AS:
- EARTH EXCAVATION
 - PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
- MALFUNCTION MANAGEMENT UNIT TO BE PAID FOR UNDER FULL-ACTUATED CONTROLLER AND TYPE IV CABINET

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

SCHEDULE OF QUANTITIES - IL RTE 38 AND GLENGARRY DRIVE

PAY ITEM	UNIT	QUANTITY
EARTH EXCAVATION	CU YD	2
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SO FT	23.2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND CABINET, TYPE IV, SPECIAL	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY, STANDARD	EACH	1
ETHERNET MANAGED SWITCH, TYPE I	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2	EACH	1
CONFIRMATION BEACON	EACH	4

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

NOTES:

- NEW ELEMENTS SHOWN IN BOLD. EXISTING ELEMENTS INCLUDED FOR REFERENCE ONLY (GRAYSCALE).
- EXISTING CONDITIONS, INCLUDING THE CONDITION AND AVAILABILITY OF CONDUITS, HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR MUST VERIFY EXISTING CONDITIONS BEFORE COMMENCING WORK.
- THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENT OF THE TRAFFIC SIGNAL SYSTEM.
- THE CONTRACTOR SHALL CONTACT THE KANE COUNTY DIVISION OF TRANSPORTATION (630.584.1170) FOR TRAFFIC SIGNAL CABLE LOCATIONS A MINIMUM OF 48 HOURS IN ADVANCE (SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED) AT ANY LOCATION WITHIN THE RIGHT-OF-WAY.
- IL ROUTE 38 AND EAST SIDE DRIVE IS UNDER THE JURISDICTION OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION
- EXISTING INCANDESCENT SIGNAL HEADS ARE SCHEDULED TO BE REPLACED IN ADVANCE OF THIS PROJECT.

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

- 4 EACH CONFIRMATION BEACON
- 1 EACH SERVICE INSTALLATION, GROUND MOUNTED

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION, AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE COUNTY'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR'S MAIN FACILITY.

- 1 EACH FULL-ACTUATED CONTROLLER AND CABINET
- 1 EACH MALFUNCTION MANAGEMENT UNIT

IDOT'S TRAFFIC SIGNAL MAINTENANCE CONTRACTOR IS MEADE ELECTRIC, CO. LOCATED AT:

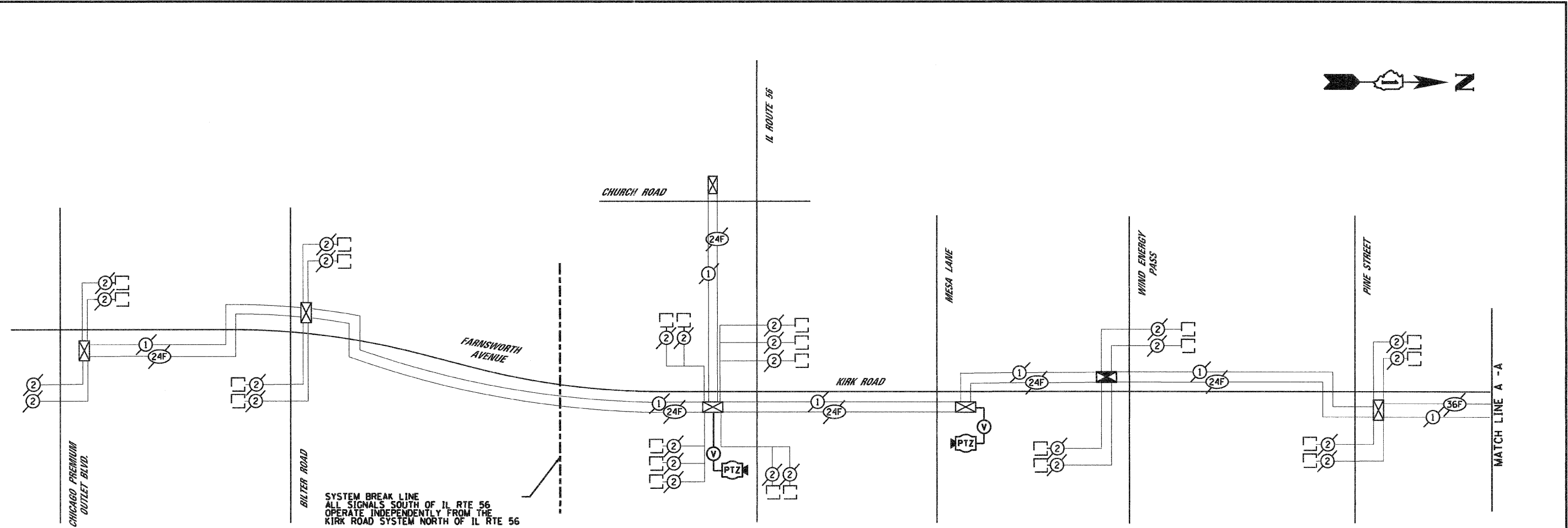
30 W 751 NORTH AURORA ROAD
NAPERVILLE, IL 60563
TEL (708) 588-2500

ALL REMOVED ITEMS LISTED WILL BE PAID AS REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

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 SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY. SOD SHALL BE WATERED AS DIRECTED BY ENGINEER AND PER ACT 252.08 & 252.09 IN STP SPECS.

USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 11/7/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 54
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	CONTRACT NO. 63648	



SYSTEM BREAK LINE
ALL SIGNALS SOUTH OF IL RTE 56
OPERATE INDEPENDENTLY FROM THE
KIRK ROAD SYSTEM NORTH OF IL RTE 56

SEE SHEET 64 FOR
TRAFFIC SIGNAL LEGEND

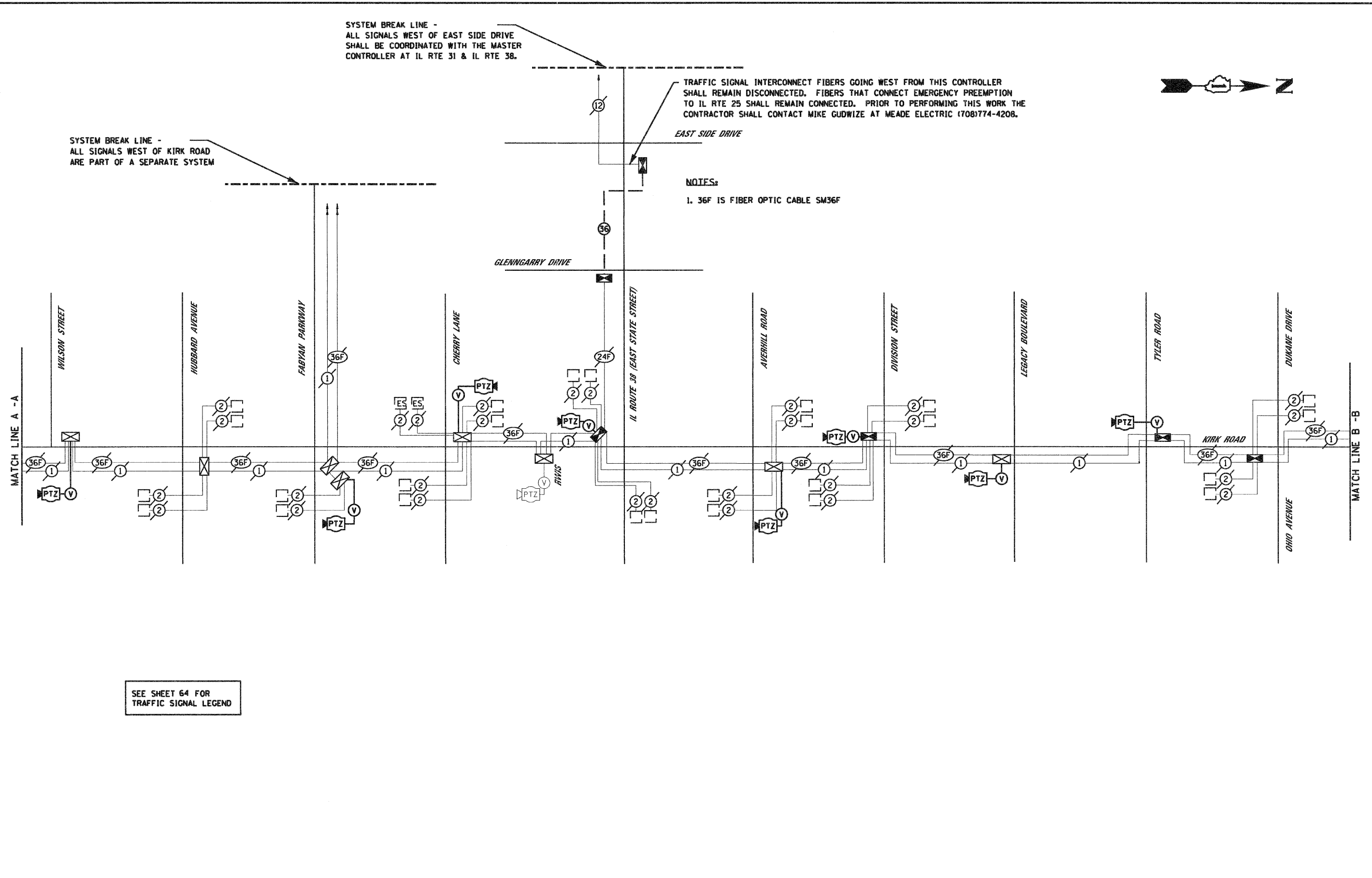
SCHEDULE OF QUANTITIES - INTERCONNECT

PAY ITEM	UNIT	KIRK	DUNHAM	IL 38
CONDUIT IN TRENCH, 2" GALVANIZED STEEL	FOOT	4915	11474	
CONDUIT PUSHED, 2" GALVANIZED STEEL	FOOT	261	942	
CLEAN EXISTING CONDUIT	FOOT	3295		2219
CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT		275	
JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 24" X 24" X 8"	EACH		2	
HANDHOLE	EACH	8	25	
DOUBLE HANDHOLE	EACH	1		
TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	4915	11474	
DRILL EXISTING HANDHOLE	EACH	3	2	3
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C	FOOT	8992	13306	2343
REMOVE FIBER OPTIC CABLE FROM CONDUIT	FOOT			3026
FIBER OPTIC CABLE 36 FIBERS, SINGLE MODE	FOOT	10777	14967	3064
NETWORK CONFIGURATION	L SUM	.34	.33	.33
FIBER OPTIC TERMINATIONS, 6 FIBER	EACH	14	2	1
FIBER OPTIC TERMINATIONS, 48 FIBER	EACH	6	1	1

ETHERNET MANAGED SWITCH TYPE 1 AND TYPE 2
ARE ITEMIZED PER EACH INTERSECTION

KIRK ROAD		DUNHAM ROAD		DUNHAM ROAD	
STATION/OFFSET	DESCRIPTION	STATION/OFFSET	DESCRIPTION	STATION/OFFSET	DESCRIPTION
M1 544+45 / 30' RT	STANDARD HANDHOLE	M10 593+00 / 25' RT	STANDARD HANDHOLE	M23 662+50 / 25' RT	STANDARD HANDHOLE
M2 549+70 / 30' RT	STANDARD HANDHOLE	M11 599+15 / 25' RT	STANDARD HANDHOLE	M24 668+75 / 25' RT	STANDARD HANDHOLE
M3 555+05 / 30' RT	STANDARD HANDHOLE	M12 604+95 / 25' RT	STANDARD HANDHOLE	M25 673+35 / 25' RT	STANDARD HANDHOLE
M4 555+95 / 30' RT	STANDARD HANDHOLE	M13 609+80 / 25' RT	STANDARD HANDHOLE	M26 679+95 / 25' RT	STANDARD HANDHOLE
M5 566+90 / 30' RT	STANDARD HANDHOLE	M14 618+95 / 25' RT	STANDARD HANDHOLE	M27 684+30 / 25' RT	STANDARD HANDHOLE
M6 572+50 / 30' RT	STANDARD HANDHOLE	M15 623+80 / 25' RT	STANDARD HANDHOLE	M28 408+35 / 25' RT	STANDARD HANDHOLE
M7 578+15 / 30' RT	STANDARD HANDHOLE	M16 628+70 / 25' RT	STANDARD HANDHOLE	M29 251+80 / 25' RT	STANDARD HANDHOLE
M8 583+90 / 30' RT	STANDARD HANDHOLE	M17 633+90 / 25' RT	STANDARD HANDHOLE	M30 254+70 / 25' RT	STANDARD HANDHOLE
M9 588+70 / 70' RT	DOUBLE HANDHOLE	M18 638+90 / 25' RT	STANDARD HANDHOLE	M31 259+20 / 30' RT	STANDARD HANDHOLE
		M19 644+85 / 25' RT	STANDARD HANDHOLE	M32 259+20 / 30' LT	STANDARD HANDHOLE
		M20 649+90 / 25' RT	STANDARD HANDHOLE	M33 264+00 / 30' LT	STANDARD HANDHOLE
		M21 651+30 / 25' RT	STANDARD HANDHOLE	M34 264+25 / 30' LT	STANDARD HANDHOLE
		M22 657+00 / 25' RT	STANDARD HANDHOLE		

NOTE:
OFFSETS ARE APPROXIMATED BASED ON
FIELD OBSERVATIONS OF EXISTING
UTILITIES. ACTUAL LOCATIONS TO BE
SET IN FIELD WITH THE ENGINEER.



SYSTEM BREAK LINE - ALL SIGNALS WEST OF EAST SIDE DRIVE SHALL BE COORDINATED WITH THE MASTER CONTROLLER AT IL RTE 31 & IL RTE 38.

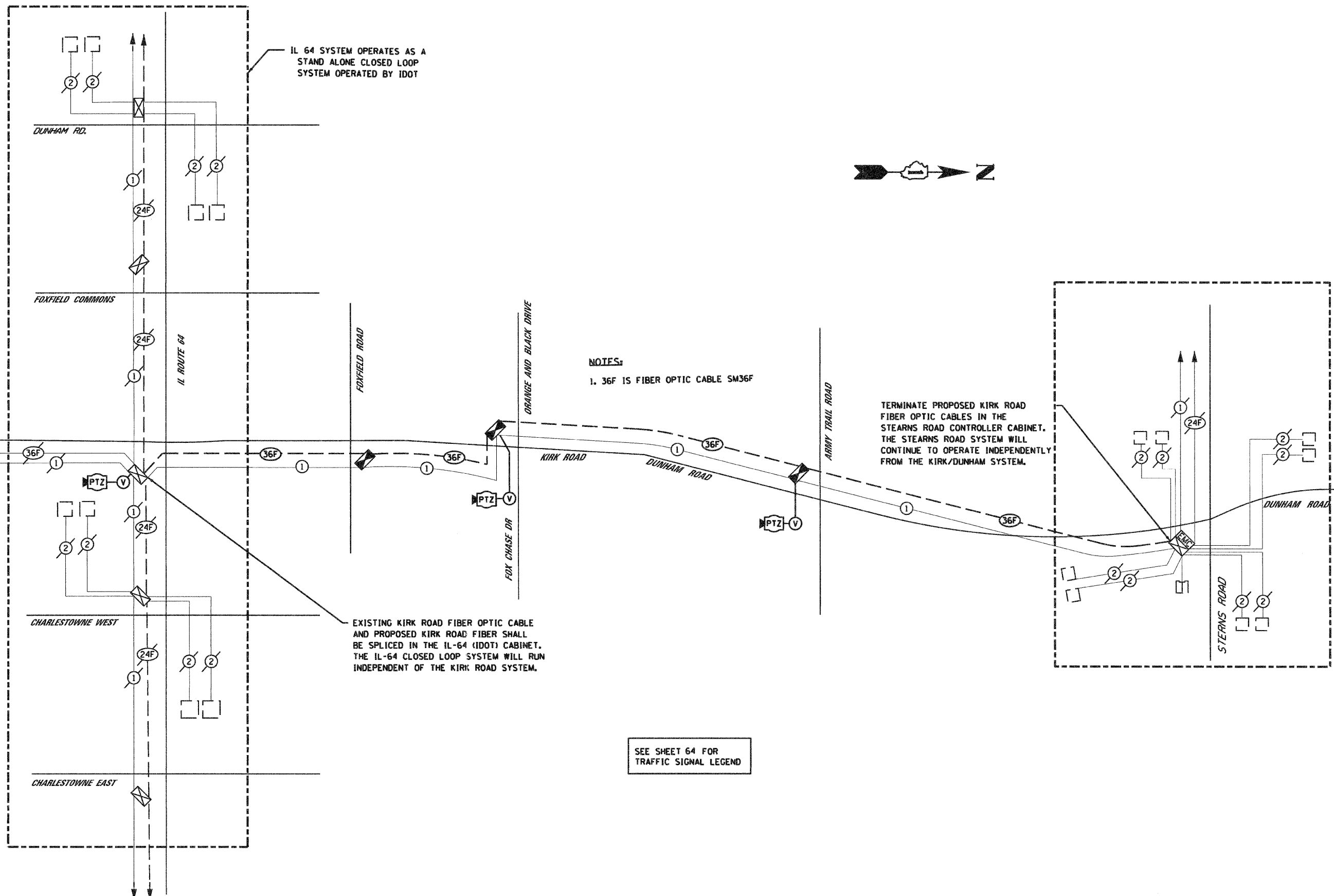
SYSTEM BREAK LINE - ALL SIGNALS WEST OF KIRK ROAD ARE PART OF A SEPARATE SYSTEM

TRAFFIC SIGNAL INTERCONNECT FIBERS GOING WEST FROM THIS CONTROLLER SHALL REMAIN DISCONNECTED. FIBERS THAT CONNECT EMERGENCY PREEMPTION TO IL RTE 25 SHALL REMAIN CONNECTED. PRIOR TO PERFORMING THIS WORK THE CONTRACTOR SHALL CONTACT MIKE GUDWIZE AT MEADE ELECTRIC (708)774-4208.

NOTES:
1. 36F IS FIBER OPTIC CABLE SM36F

SEE SHEET 64 FOR TRAFFIC SIGNAL LEGEND

JACOBS ONE NORTH FRANKLIN CHICAGO IL, 60606 312-251-3000	USER NAME =	DESIGNED - CH	REVISED -	KANE COUNTY DIVISION OF TRANSPORTATION	INTERCONNECT SCHEMATIC		F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 56
	PLOT SCALE =	CHECKED - KC	REVISED -				CONTRACT NO. 63648				
	PLOT DATE = 11/4/2011	DATE - \$DATE	REVISED -				FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				
	SCALE: SHEET NO. OF SHEETS STA. TO STA.										



JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =	DESIGNED - CH	REVISED -
PLDT SCALE =	DRAWN - MO, DI	REVISED -
PLDT DATE = 10/24/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

**KANE COUNTY
DIVISION OF TRANSPORTATION**

INTERCONNECT SCHEMATIC

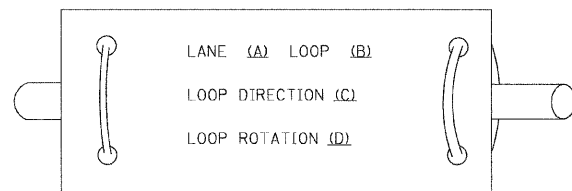
SCALE: SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	57
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63648	

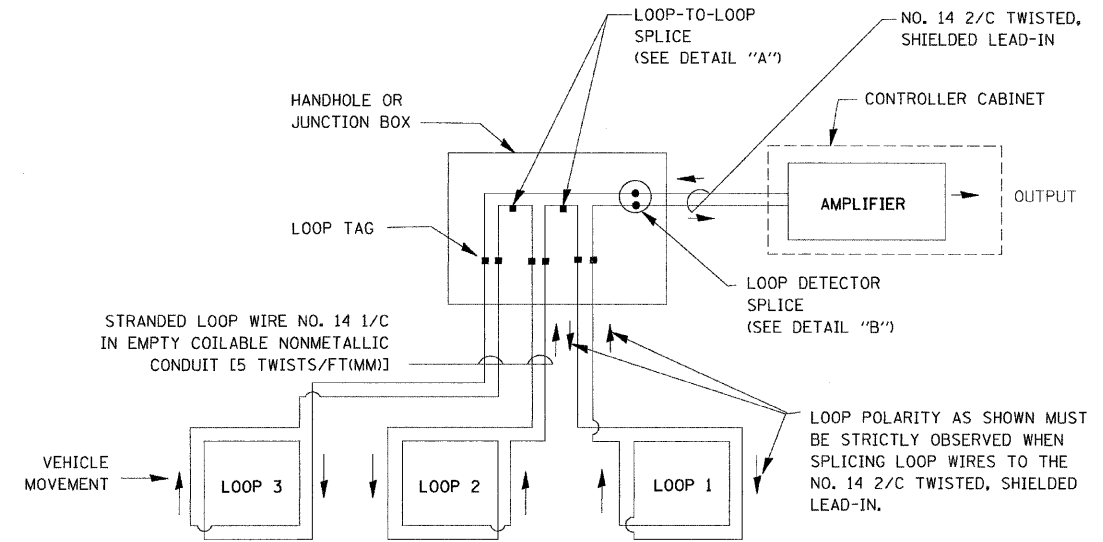
LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT 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 DIVESHOLES 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.

LOOP LEAD-IN CABLE TAG

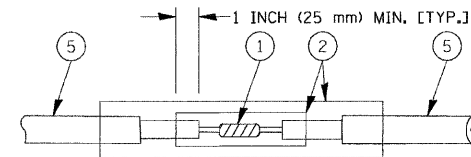


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

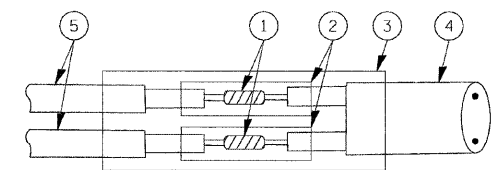


DETECTOR LOOP WIRING SCHEMATIC

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

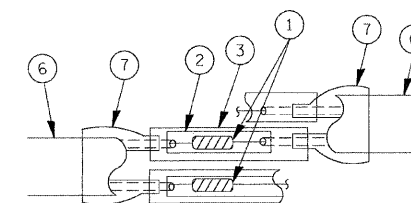


**DETAIL "A"
LOOP-TO-LOOP SPLICE**

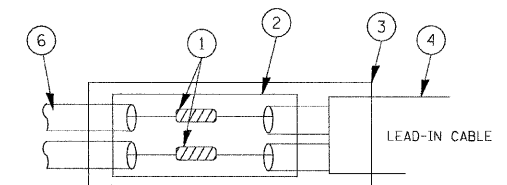


**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

TYPE I LOOP



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



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

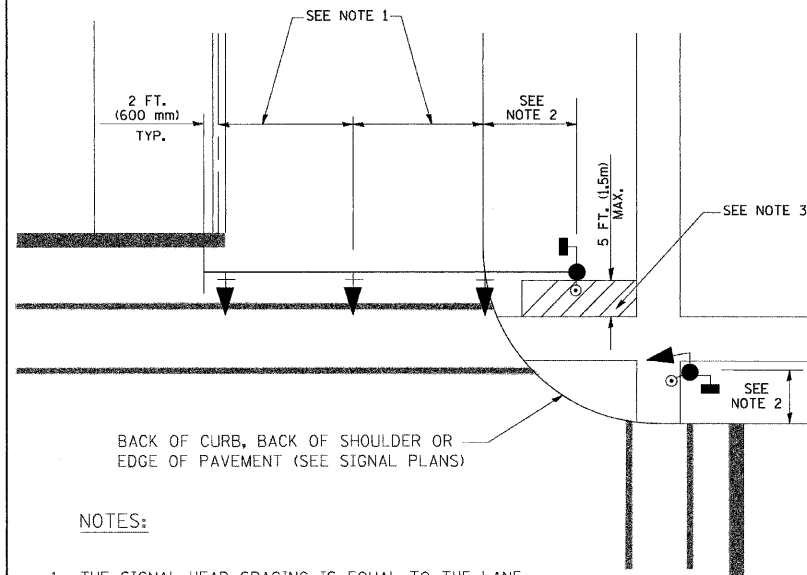
LOOP DETECTOR SPLICE

- 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.
- 6 PRE-FORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =	USER NAME = kanthapixybc	DESIGNED - DAD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
es:\pwork\PHIDOT\KANTHAPIXYBC\d01126	tr\affis.legend.v7.dgn	DRAWN - BCK	REVISED -			10-00403-00-TL	KANE	72	58	
	PLOT SCALE = 20,0000 / IN.	CHECKED - DAD	REVISED -			CONTRACT NO. 63648				
	PLOT DATE = 12/6/2009	DATE - 10/28/09	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
				SCALE:	SHEET NO. 1 OF 6 SHEETS	STA.	TO STA.			

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

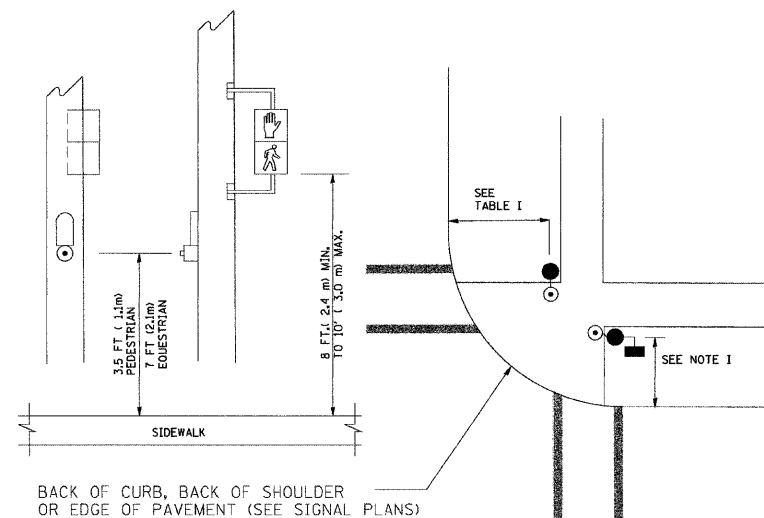
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

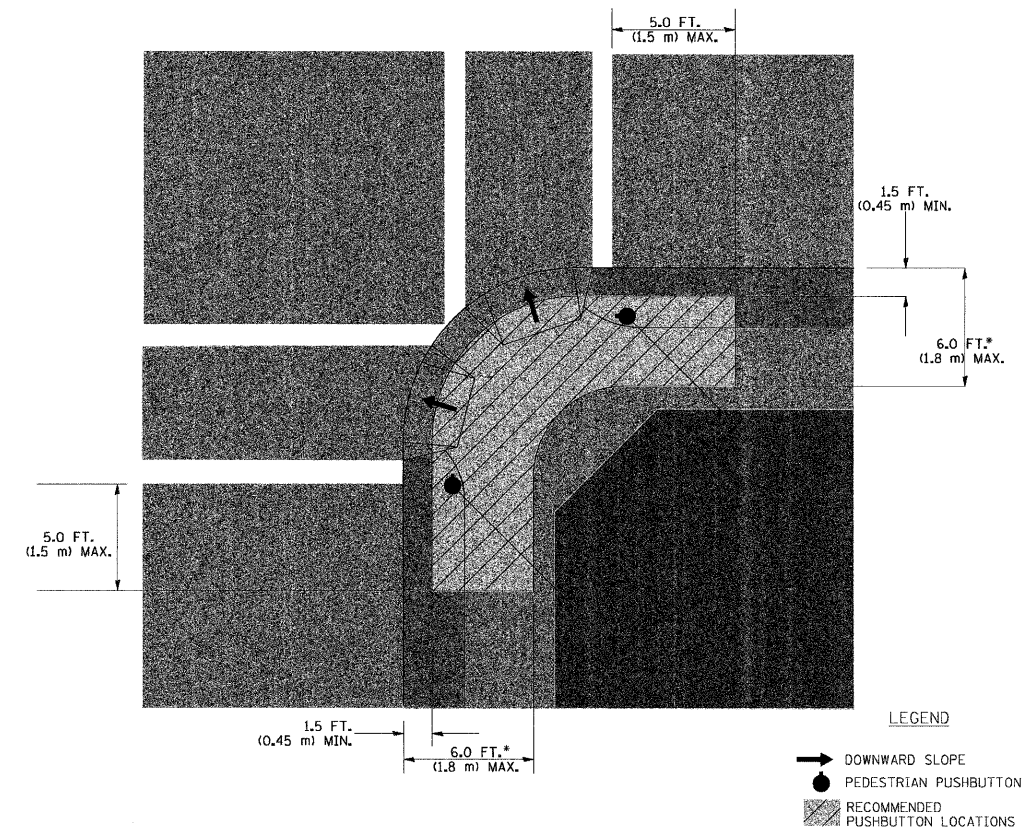
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



- * WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- ** WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

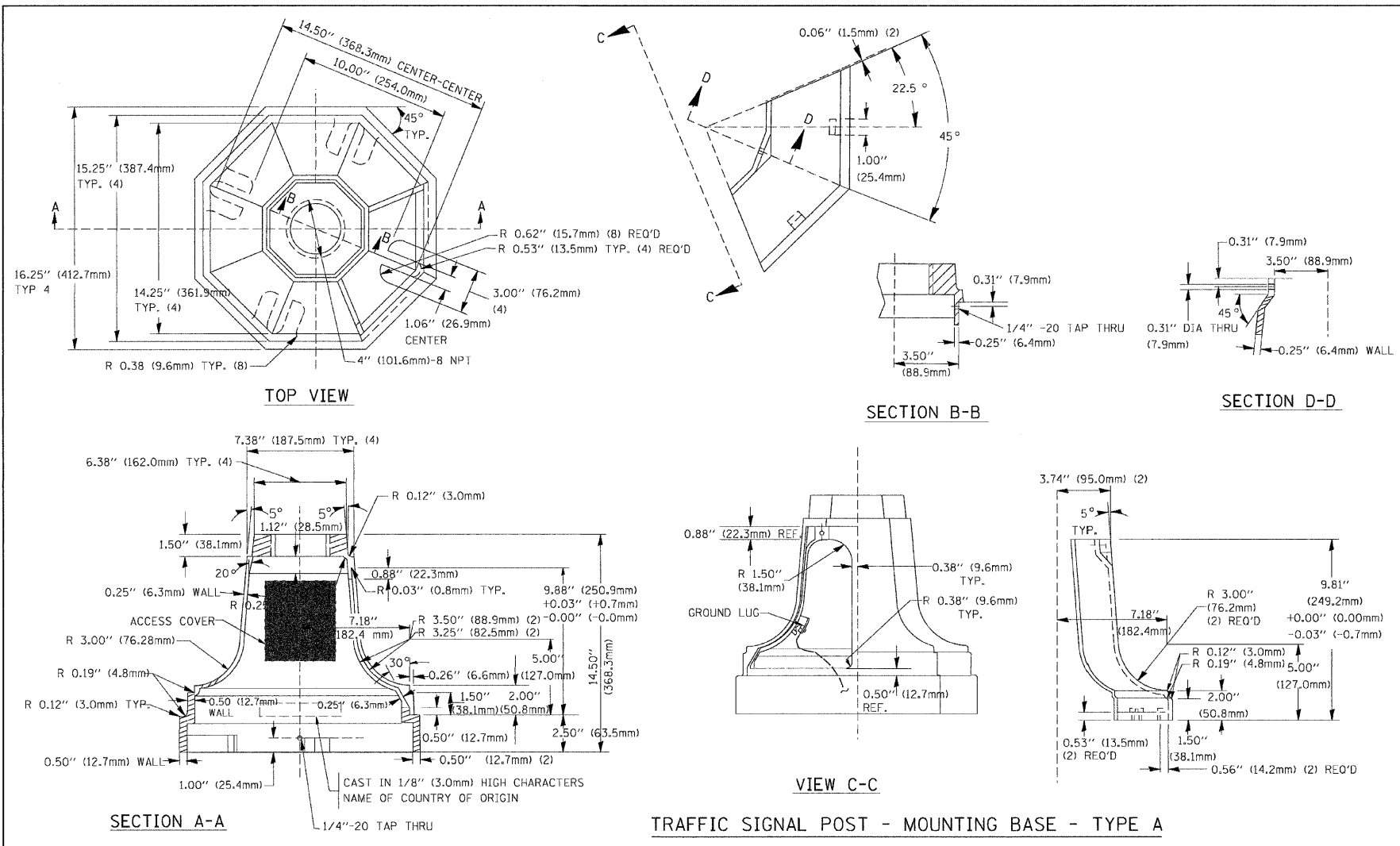
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

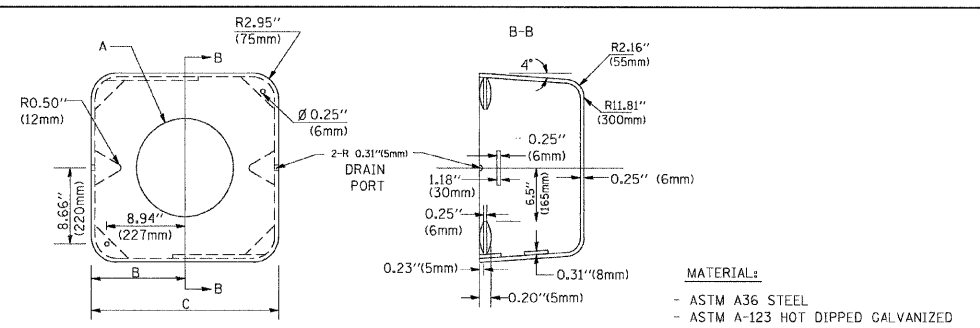
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.



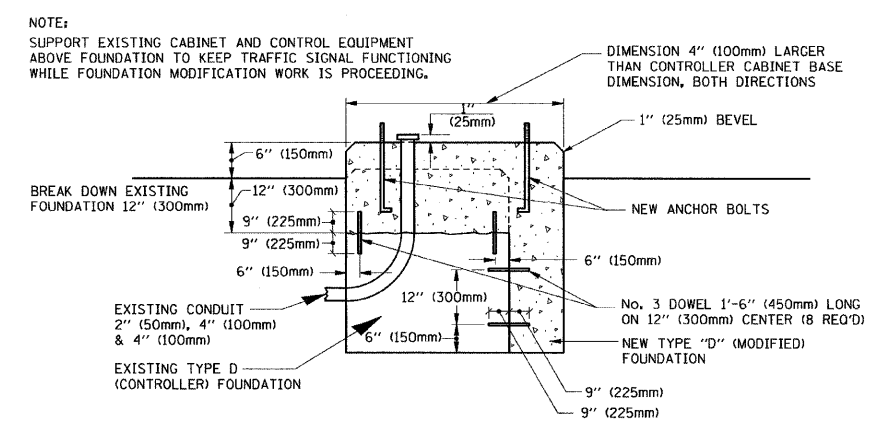
TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



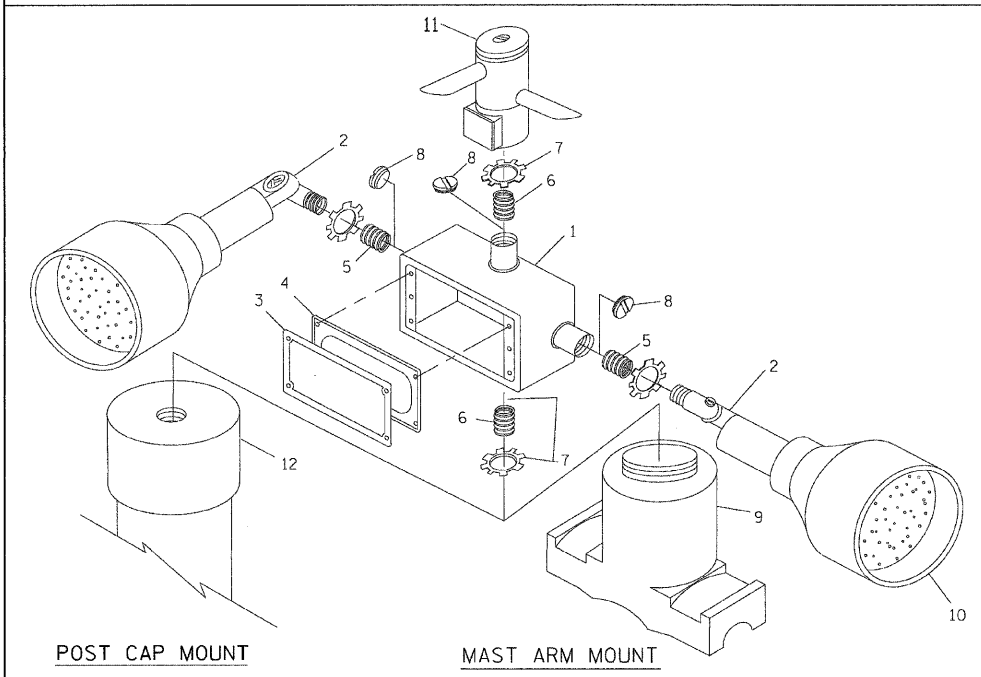
A	B	C	HEIGHT	WEIGHT
VARIES	9.5\" (241mm)	19\" (483mm)	7\" (178mm) - 12\" (300mm)	53 lbs (24kg)
VARIES	10.75\" (273mm)	21.5\" (546mm)	7\" (178mm) - 12\" (300mm)	68 lbs (31 kg)
VARIES	13.0\" (330mm)	26\" (660mm)	7\" (178mm) - 12\" (300mm)	81 lbs (37 kg)
VARIES	18.5\" (470mm)	37\" (940mm)	7\" (178mm) - 12\" (300mm)	126 lbs (57 kg)

SHROUD

- NOTES:
- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
 - THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
 - THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.



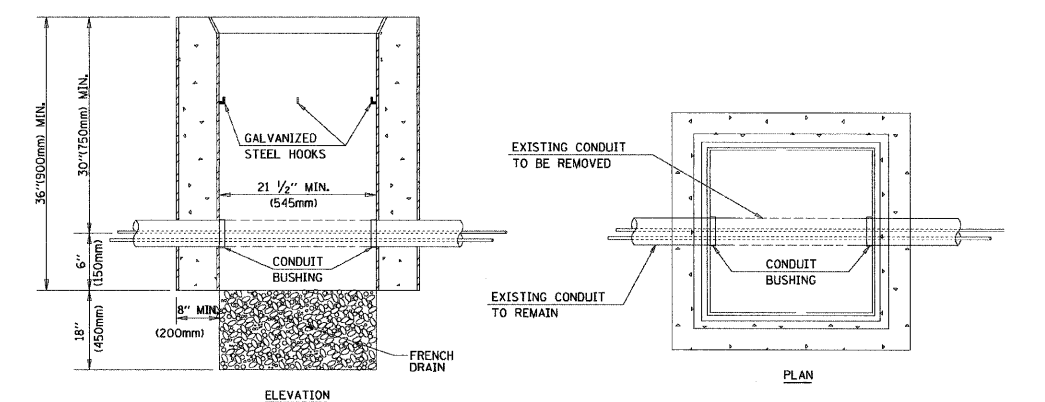
MODIFY EXISTING TYPE "D" FOUNDATION



POST CAP MOUNT MAST ARM MOUNT
EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

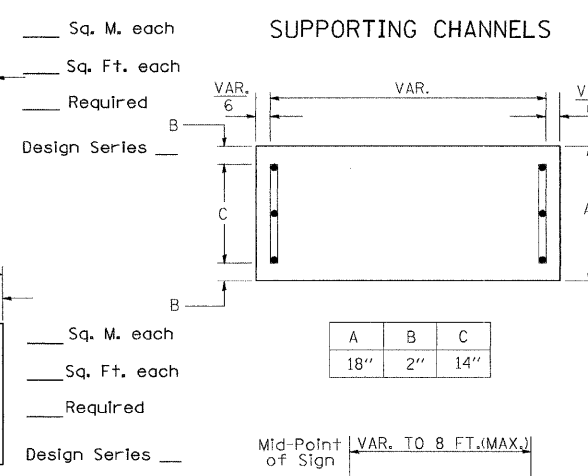
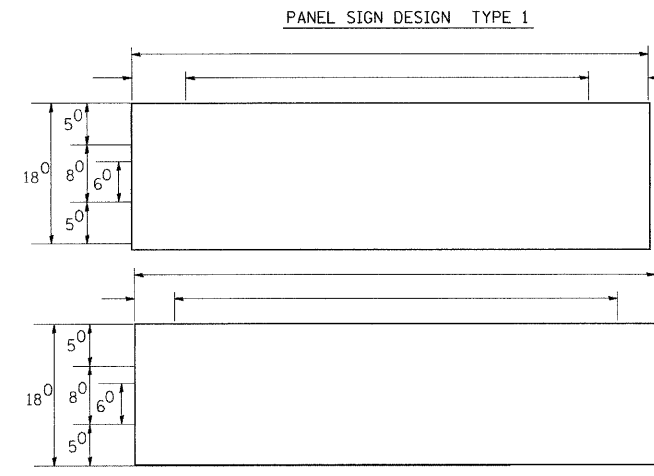
ITEM NO.	IDENTIFICATION
1	OUTLET BOX - GALV. 2 1/2 CU. IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\" (19 mm) CLOSE NIPPLE
7	3/4\" (19 mm) LOCKNUT
8	3/4\" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

- 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.

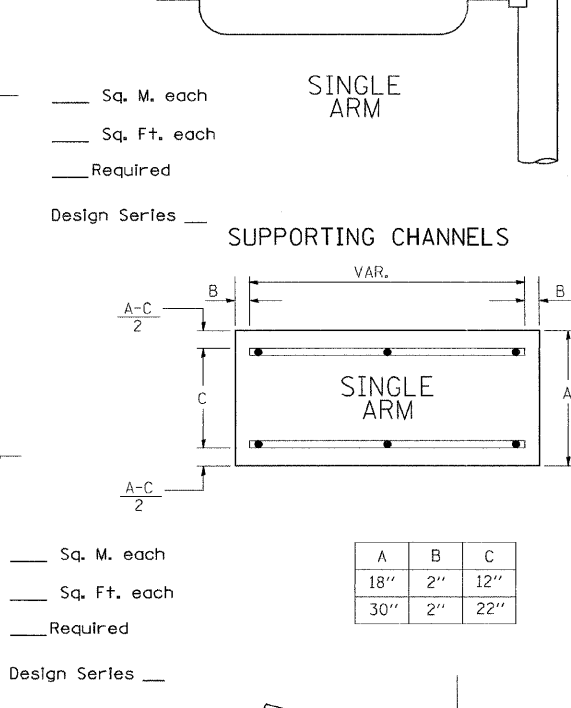
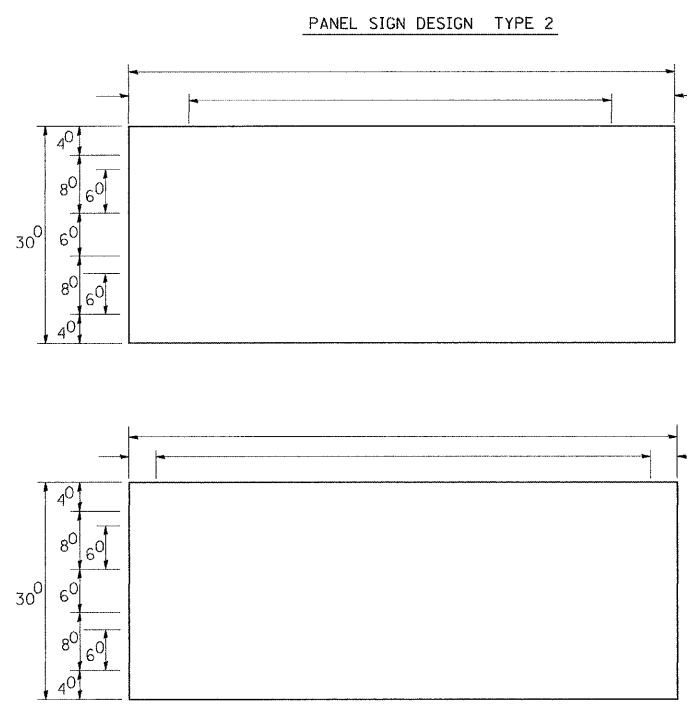


- NOTES:
- HANDHOLE CONSTRUCTED PER STATE STANDARD B14001.
 - REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT



NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS



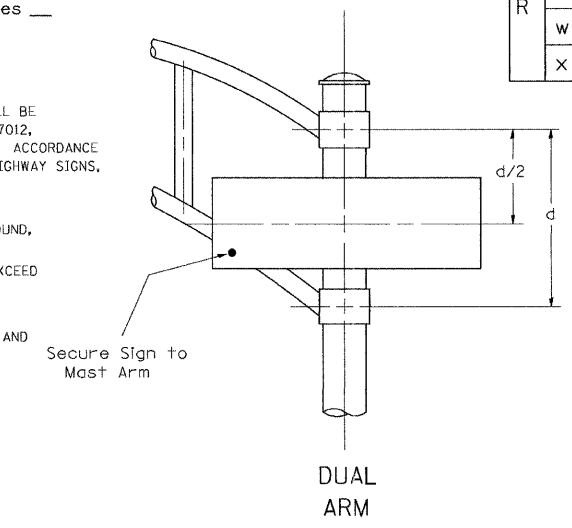
GENERAL NOTES

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
- THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 8'-0".
- ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:

* J.O. HERBERT CO. MIDLOTHIAN, VA. * WESTERN REMAC INC. WOODRIDGE, IL.

PARTS LISTING:
SIGN CHANNEL PART #HPN053 (MED. CHANNEL)
SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3
SELF TAPPING WITH NEOPRENE WASHER
BRACKETS PART #HPN034 (UNIVERSAL)
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BACKET OF THE ABOVE PRODUCT.



SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM shall be used. See Note #5.

Upper Case To Lower Case Spacing Chart 8-6 Inch Series "C & D"

FIRST LETTER	SECOND LETTER															
	acde		bhikl		f w		j		s t		v y		x		z	
	goq	mnpru														
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ²	1 ²	1 ⁴
B	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁶	1 ⁷
C E G	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵
D O Q R	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ⁴	1 ⁵	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵
F	0 ⁵	0 ⁶	1 ⁴	1 ⁵	0 ⁶	1 ⁰	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²
H I M N	2 ⁰	2 ¹	2 ²	2 ⁴	2 ⁰	2 ¹	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹	2 ⁰	2 ¹
J U	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹
K L	1 ¹	1 ²	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
P	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁴	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴
S	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴
T	1 ¹	1 ²	1 ⁶	1 ⁷	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
V	0 ⁶	1 ⁰	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴
Y	0 ⁵	0 ⁶	1 ⁴	1 ⁵	0 ⁶	1 ⁰	0 ⁵	0 ⁶	0 ⁵	0 ⁷	0 ⁵	0 ⁶	0 ⁶	1 ⁰	1 ¹	1 ²
Z	1 ⁶	1 ⁷	2 ²	2 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹

Lower Case To Lower Case Spacing Chart 6 Inch Series "C & D"

FIRST LETTER	SECOND LETTER															
	acde		bhikl		f w		j		s t		v y		x		z	
	goq	mnpru														
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
adhgi j	1 ⁶	1 ⁷	2 ²	2 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷
l m n q u																
b f k o p s	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴
c e	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴	1 ²	1 ⁴
r	0 ⁶	1 ⁰	1 ²	1 ⁴	0 ⁶	1 ⁰	0 ³	0 ³	0 ⁵	0 ⁶	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰
t z	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴
v y	1 ¹	1 ²	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²
w	1 ¹	1 ²	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
x	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴

Number To Number Spacing Chart 8 Inch Series "C & D"

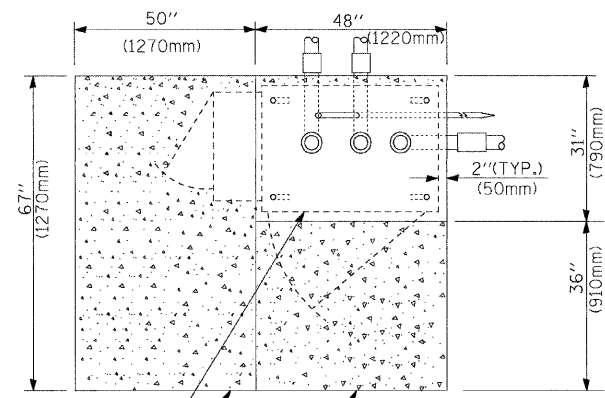
FIRST NUMBER	SECOND NUMBER																			
	0		1		2		3		4		5		6		7		8		9	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁶	1 ⁷
1	2 ⁰	2 ¹	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁶	1 ⁷	1 ⁴	1 ⁵	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁴	1 ⁵	2 ⁰	2 ¹	2 ⁰	2 ¹
2 3 4	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁶	1 ⁷	1 ⁴	1 ⁵
5	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵
6	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵
7	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁵	0 ⁵	0 ⁶	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ²	1 ⁴
8	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ²	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁴	1 ⁵

EXAMPLE, 2⁽³⁾ DENOTES 3/8"

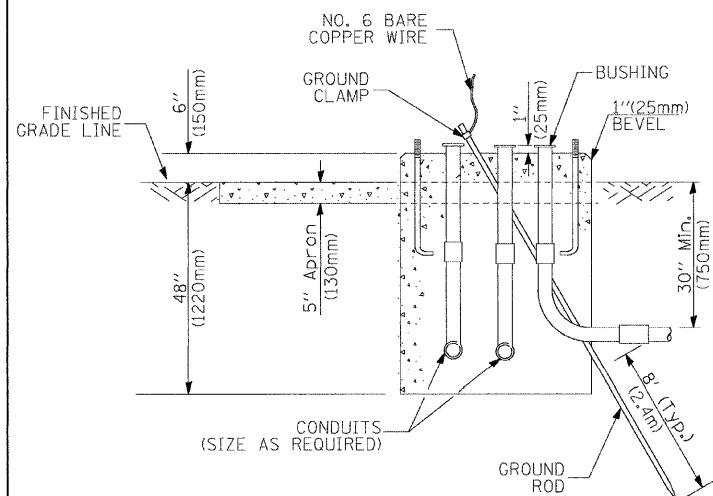
UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS				8 INCH UPPER CASE LETTERS				LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES		SERIES		SERIES			C	D
	C	D	C	D	C	D	C	D			
A	3 ⁶	5 ⁰	5 ⁰	6 ⁵	a	3 ⁵	4 ²				
B	3 ²	4 ⁰	4 ³	5 ³	b	3 ⁵	4 ²				
C	3 ²	4 ⁰	4 ³	5 ³	c	3 ⁵	4 ¹				
D	3 ²	4 ⁰	4 ³	5 ³	d	3 ⁵	4 ²				
E	3 ⁰	3 ⁵	4 ⁰	4 ⁷	e	3 ⁵	4 ²				
F	3 ⁰	3 ⁵	4 ⁰	4 ⁷	f	2 ³	2 ⁶				
G	3 ²	4 ⁰	4 ³	5 ³	g	3 ⁵	4 ²				
H	3 ²	4 ⁰	4 ³	5 ³	h	3 ⁵	4 ²				
I	0 ⁷	0 ⁷	1 ¹	1 ²	i	1 ¹	1 ¹				
J	3 ⁰	3 ⁶	4 ⁰	5 ⁰	j	2 ⁰	2 ²				
K	3 ²	4 ¹	4 ³	5 ⁴	k	3 ⁵	4 ²				
L	3 ⁰	3 ⁵	4 ⁰	4 ⁷	l	1 ¹	1 ¹				
M	3 ⁷	4 ⁵	5 ¹	6 ¹	m	6 ⁰	7 ⁰				
N	3 ²	4 ⁰	4 ³	5 ³	n	3 ⁵	4 ²				
O	3 ⁴	4 ²	4 ⁵	5 ⁵	o	3 ⁶	4 ³				
P	3 ²	4 ⁰	4 ³	5 ³	p	3 ⁵	4 ²				
Q	3 ⁴	4 ²	4 ⁵	5 ⁵	q	3 ⁵	4 ²				
R	3 ²	4 ⁰	4 ³	5 ³	r	2 ⁶	3 ²				
S	3 ²	4 ⁰	4 ³	5 ³	s	3 ⁶	4 ²				
T	3 ⁰	3 ⁵	4 ⁰	4 ⁷	t	2 ⁷	3 ²				
U	3 ²	4 ⁰	4 ³	5 ³	u	3 ⁵	4 ²				
V	3 ⁵	4 ⁴	4 ⁷	6 ⁰	v	4 ²	4 ⁷				
W	4 ⁴	5 ²	6 ⁰	7 ⁰	w	5 ⁵	6 ⁴				
X	3 ⁴	4 ⁰	4 ⁵	5 ³	x	4 ⁴	5 ¹				
Y	3 ⁶	5 ⁰	5 ⁰	6 ⁶	y	4 ⁶	5 ³				
Z	3 ²	4 ⁰	4 ³	5 ³	z	3 ⁶	4 ³				

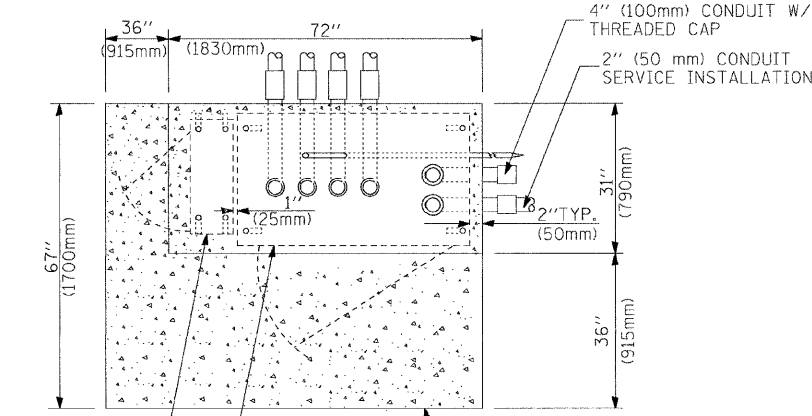
NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	1 ²	1 ⁴	1 ⁵	2 ⁰
2	3 ²	4 ⁰	4 ³	5 ³
3	3 ²	4 ⁰	4 ³	5 ³
4	3 ⁵	4 ³	4 ⁷	5 ⁷
5	3 ²	4 ⁰	4 ³	5 ³
6	3 ²	4 ⁰	4 ³	5 ³
7	3 ²	4 ⁰	4 ³	5 ³
8	3 ²	4 ⁰	4 ³	5 ³
9	3 ²	4 ⁰	4 ³	5 ³
0	3 ⁴	4 ² </		



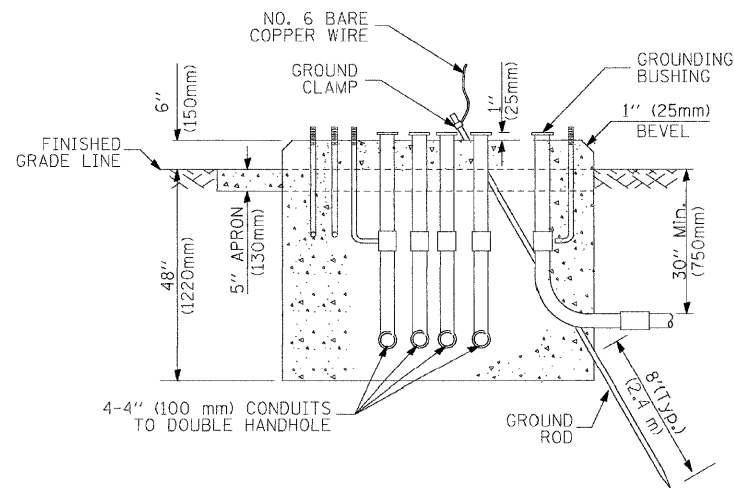
TOP VIEW



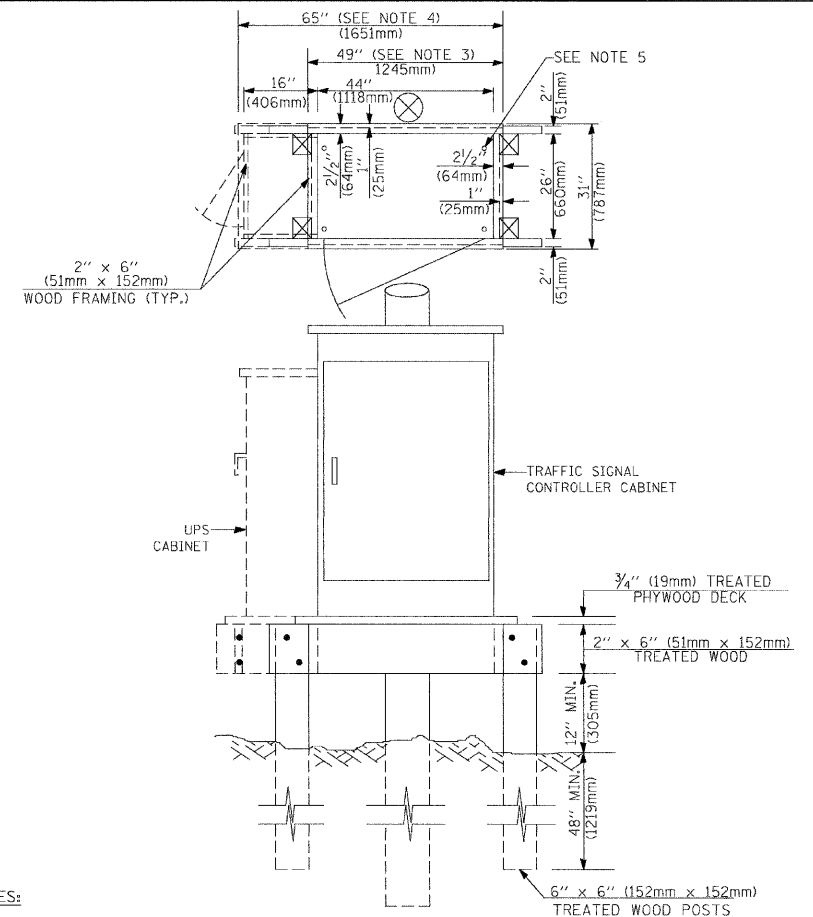
TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



TOP VIEW



TYPE C
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average unconfined compressive strength (qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001.

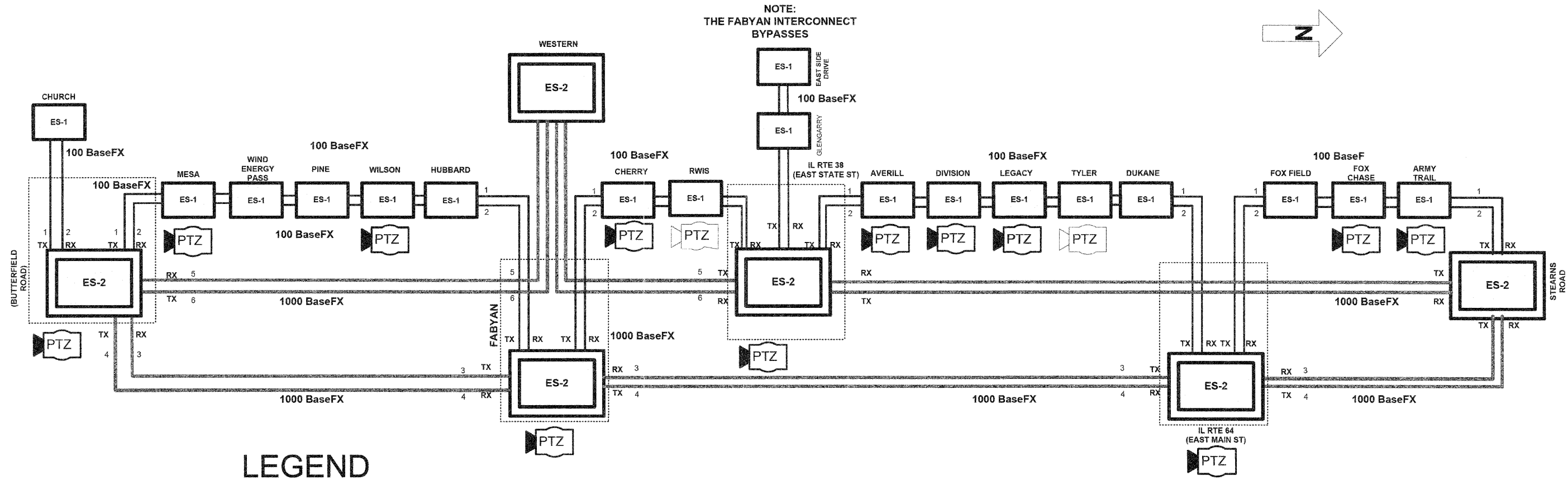
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE			
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE			
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA			
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED			
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F			
UNINTERRUPTIBLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F			
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)				FIBER OPTIC CABLE NO. 62.5/125, MM12F 5M12F			
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)			
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE			
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM		S	S	STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED			
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM		I	IP	ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED			
SIGNAL POST				REMOVE ITEM	R			STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED			
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM	RL			SIGNAL POST AND FOUNDATION TO BE REMOVED			
GUY WIRE				ABANDON ITEM	A			INTERSECTION & SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE, "P" INDICATES PROGRAMMED HEAD				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR			
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				PREFORMED SAMPLING (SYSTEM) DETECTOR			
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED							
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID							
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER							
ILLUMINATED SIGN "NO LEFT TURN"				RADIO INTERCONNECT							
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO REPEATER							
DETECTOR LOOP, TYPE I				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED							
PREFORMED DETECTOR LOOP				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)							
MICROWAVE VEHICLE SENSOR											
VIDEO DETECTION CAMERA											
VIDEO DETECTION ZONE											
PAN, TILT, ZOOM CAMERA											
WIRELESS DETECTOR SENSOR											
WIRELESS ACCESS POINT											

RAILROAD SYMBOLS

	EXISTING	PROPOSED
RAILROAD CONTROL CABINET		
RAILROAD CANTILEVER MAST ARM		
FLASHING SIGNAL		
CROSSING GATE		
CROSSBUCK		



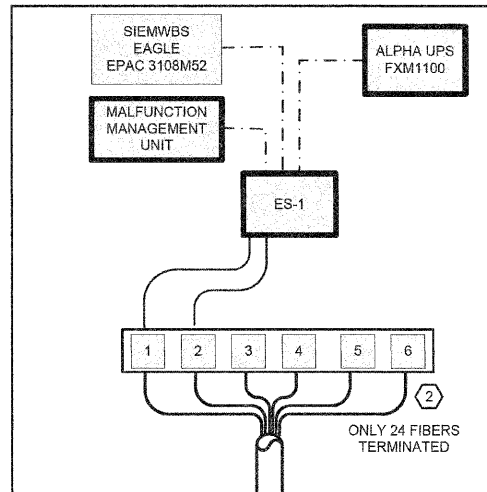
LEGEND

- EXISTING
- PROPOSED
- ETHERNET SWITCH - TYPE 2
- ETHERNET SWITCH - TYPE 1
- PAN/TILT/ZOOM CCTV CAMERA
(SEE CABINET DETAIL AND FIBER OPTIC SPLICING DIAGRAMS FOR DETAILS)
- FIBER OPTIC CONNECTION
- CAT 6 CONNECTION
- CONTROL CABINET
- 3 FIBER NUMBER
- RX RECEIVE (CONNECTION ON GBIC MODULE)
- TX TRANSMIT (CONNECTION ON GBIC MODULE)

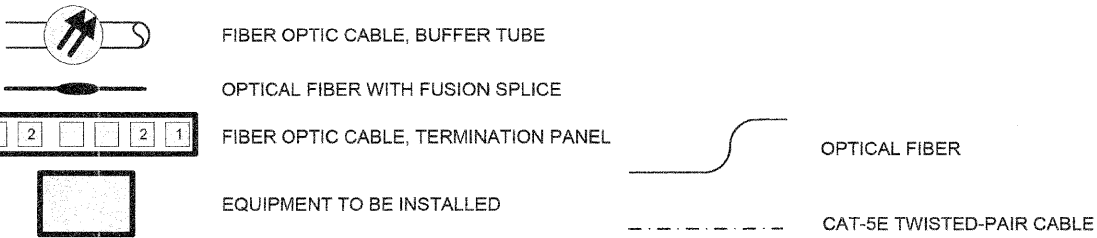
NOTES

1. THE CONTRACTOR SHALL PROVIDE SOFTWARE ON A LAPTOP COMPUTER TO EMULATE THE OPERATIONS AT THE TRAFFIC MANAGEMENT CENTER. USING THE LAPTOP, THE CONTRACTOR WILL DEVELOP AND EXECUTE A TEST PLAN THAT DEMONSTRATES THAT ALL DEVICES, INSTALLED AS PART OF THIS PROJECT CAN BE CONTROLLED AT WESTERN USING THE NEW COMMUNICATIONS NETWORK..
2. THE TEST PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL A MINIMUM OF 30 DAYS PRIOR TO ANY TESTING.

KIRK ROAD & CHURCH ROAD

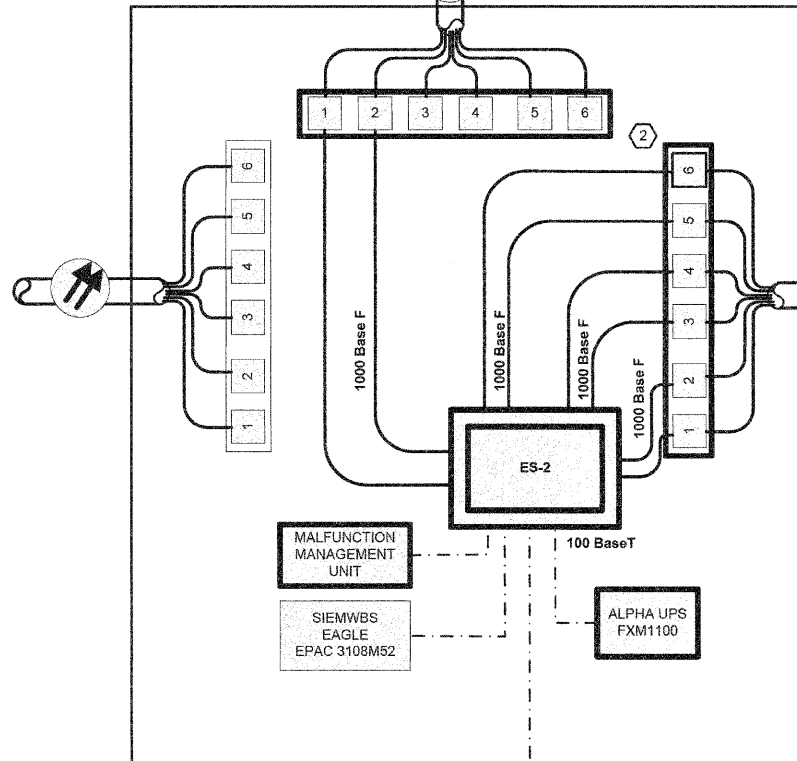


LEGEND



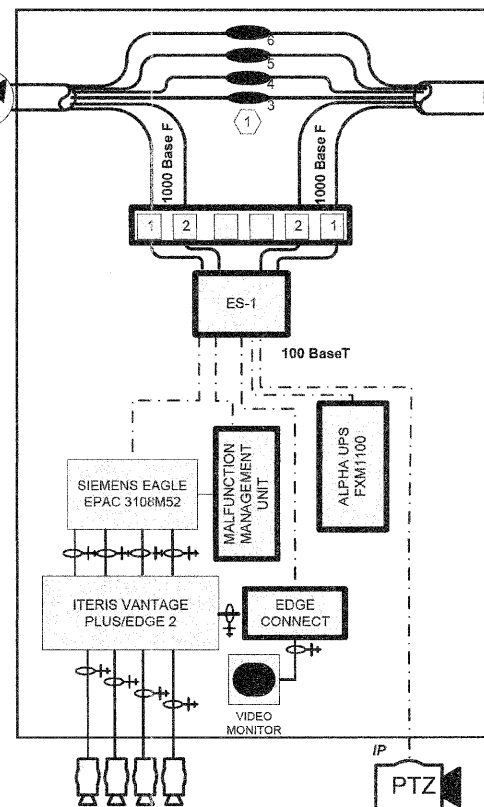
NOTES:

- ① SPLICE THROUGH SM FIBERS 7-24. DROP AND CAP MM FIBERS 1-12 (FIBER TERMINATION, 6 FIBERS)
- ② TERMINATE ALL SM FIBERS. DROP AND CAP MM FIBERS (FIBER TERMINATION, 48 FIBERS)
- ③ ALL FIBERS, 1-6, ARE IN THE BLUE BUFFER TUBE

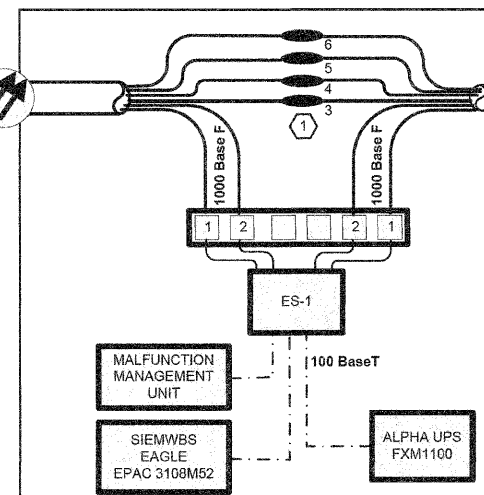


KIRK ROAD & IL ROUTE 56 (BUTTERFIELD ROAD)

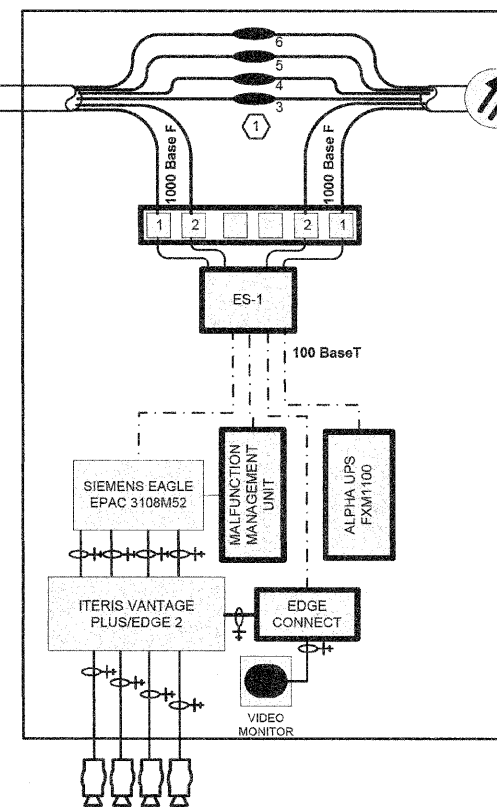
KIRK ROAD & MESA LANE



KIRK ROAD & WIND ENERGY PASS



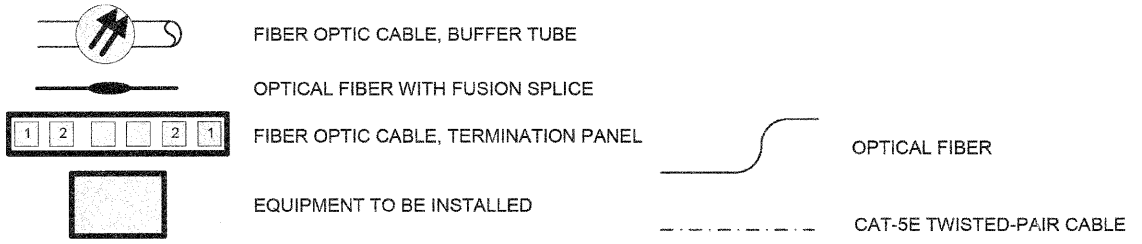
KIRK ROAD & PINE STREET



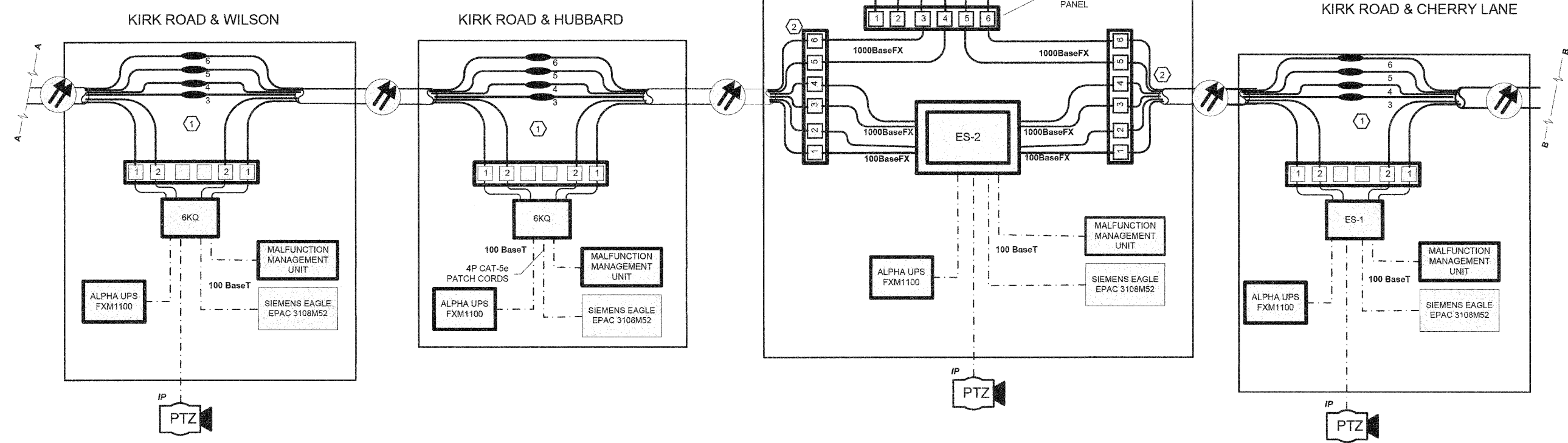
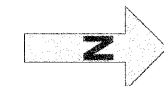
USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 10/24/2011	CHECKED - KC	REVISED -
	DATE - #DATE	REVISED -

F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 66
CONTRACT NO. 63648				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

LEGEND



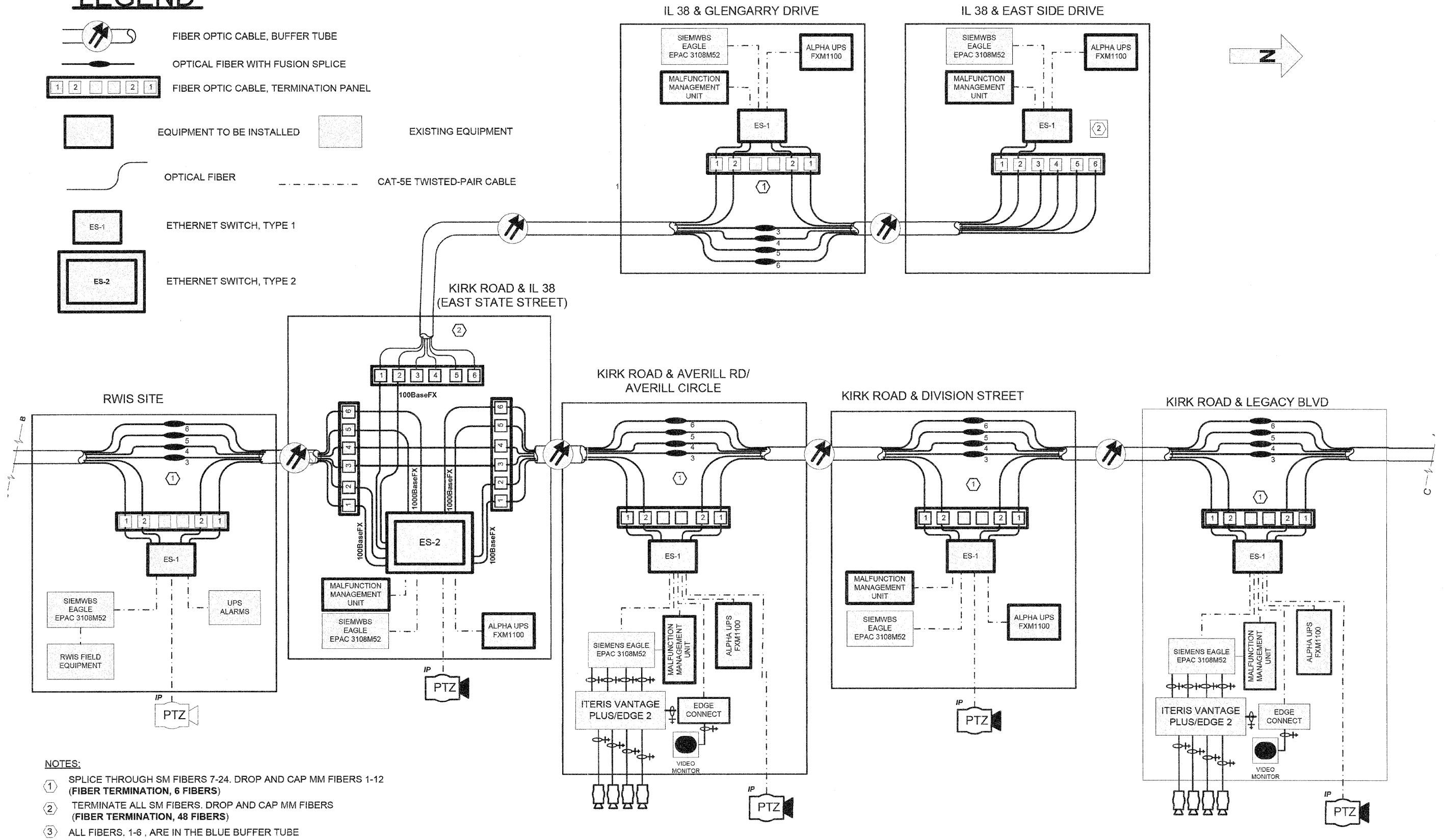
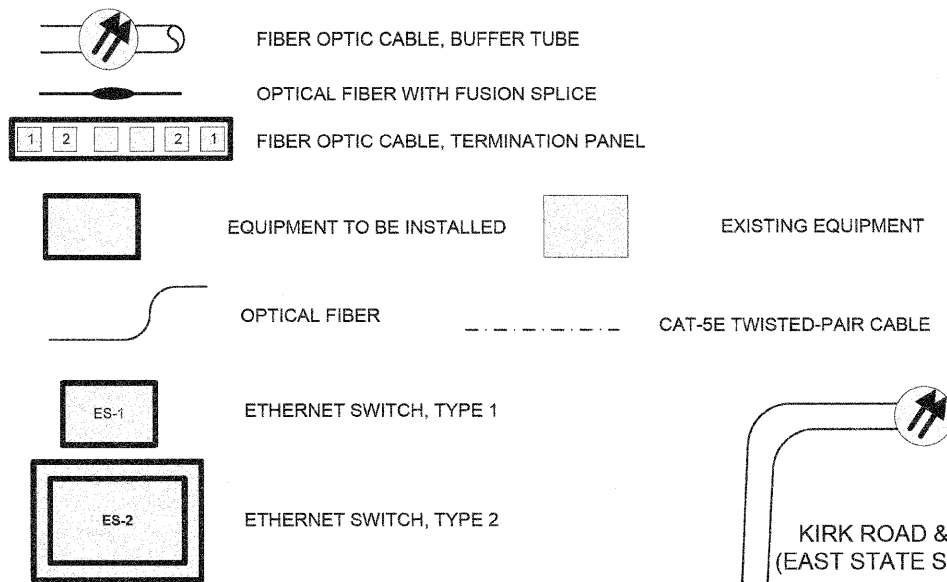
- NOTES:**
- SPLICE THROUGH SM FIBERS 7-24. DROP AND CAP MM FIBERS 1-12 (FIBER TERMINATION, 6 FIBERS)
 - TERMINATE ALL SM FIBERS. DROP AND CAP MM FIBERS (FIBER TERMINATION, 48 FIBERS)
 - ALL FIBERS, 1-6, ARE IN THE BLUE BUFFER TUBE



P:\2011\09\06\0708\708_CADD & GIS Files\702_Civil\Sheet\773_CABINET_FIBER_SPLICING_DIAGRAM.DGN

JACOBS ONE NORTH FRANKLIN CHICAGO IL, 60606 312-251-3000	USER NAME =	DESIGNED - CH	REVISED -	KANE COUNTY DIVISION OF TRANSPORTATION	CABINET DETAIL AND FIBER OPTIC SPLICING DIAGRAM			F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 67
	PLOT SCALE =	DRAWN - MO, DI	REVISED -		SCALE:	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT NO. 63648		
	PLOT DATE = 10/24/2011	CHECKED - KG	REVISED -							FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		
		DATE - #DATE	REVISED -									

LEGEND



NOTES:

- ① SPLICE THROUGH SM FIBERS 7-24. DROP AND CAP MM FIBERS 1-12 (FIBER TERMINATION, 6 FIBERS)
- ② TERMINATE ALL SM FIBERS. DROP AND CAP MM FIBERS (FIBER TERMINATION, 48 FIBERS)
- ③ ALL FIBERS. 1-6, ARE IN THE BLUE BUFFER TUBE

P:\2011\956728\720 CAD & GIS Files\720 Ev\1\Sheet\74_CABINET_FIBER_SPLICING_DIAGRAM.DWG

JACOBS
ONE NORTH FRANKLIN
CHICAGO IL, 60606
312-251-3000

USER NAME =
PLOT SCALE =
PLOT DATE = 11/3/2011

DESIGNED - CH	REVISD -
DRAWN - MO, DI	REVISD -
CHECKED - KG	REVISD -
DATE - #DATE	REVISD -

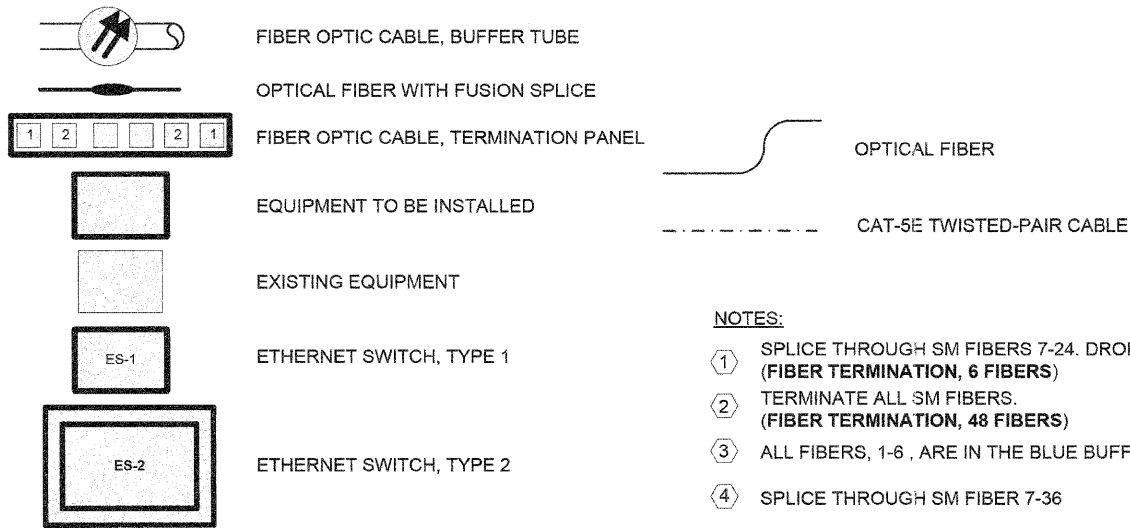
**KANE COUNTY
DIVISION OF TRANSPORTATION**

**CABINET DETAIL AND
FIBER OPTIC SPLICING DIAGRAM**

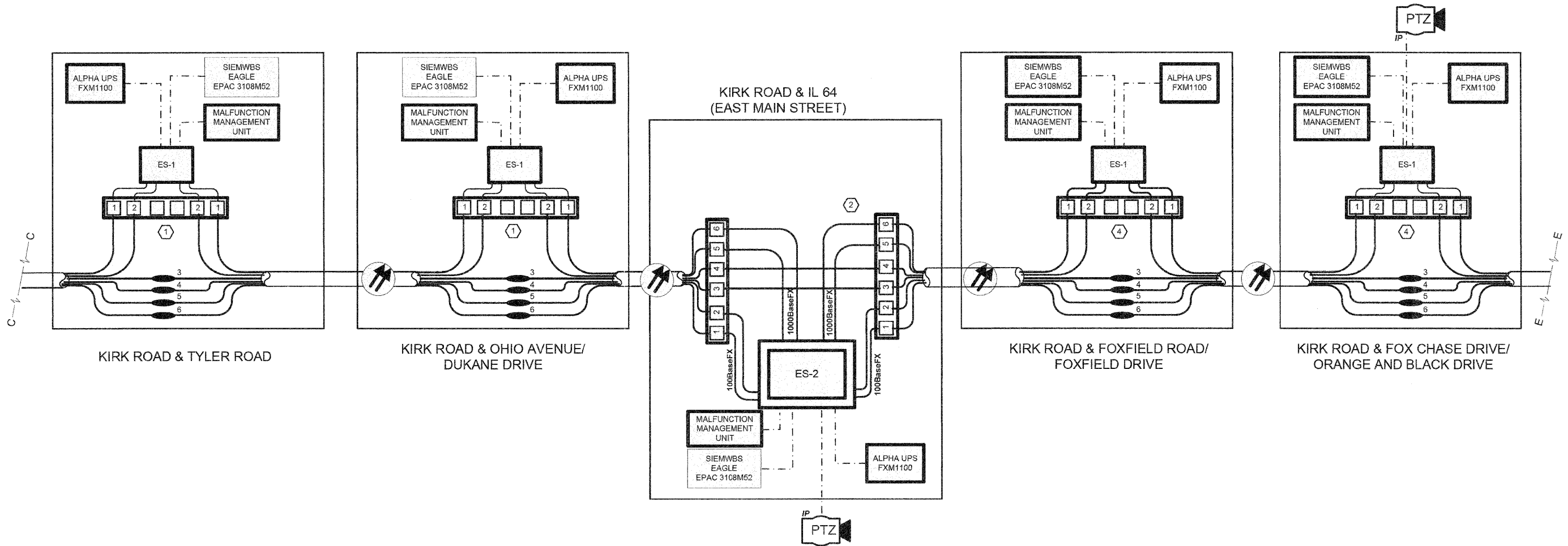
SCALE: SHEET NO. OF SHEETS STA. TO STA.

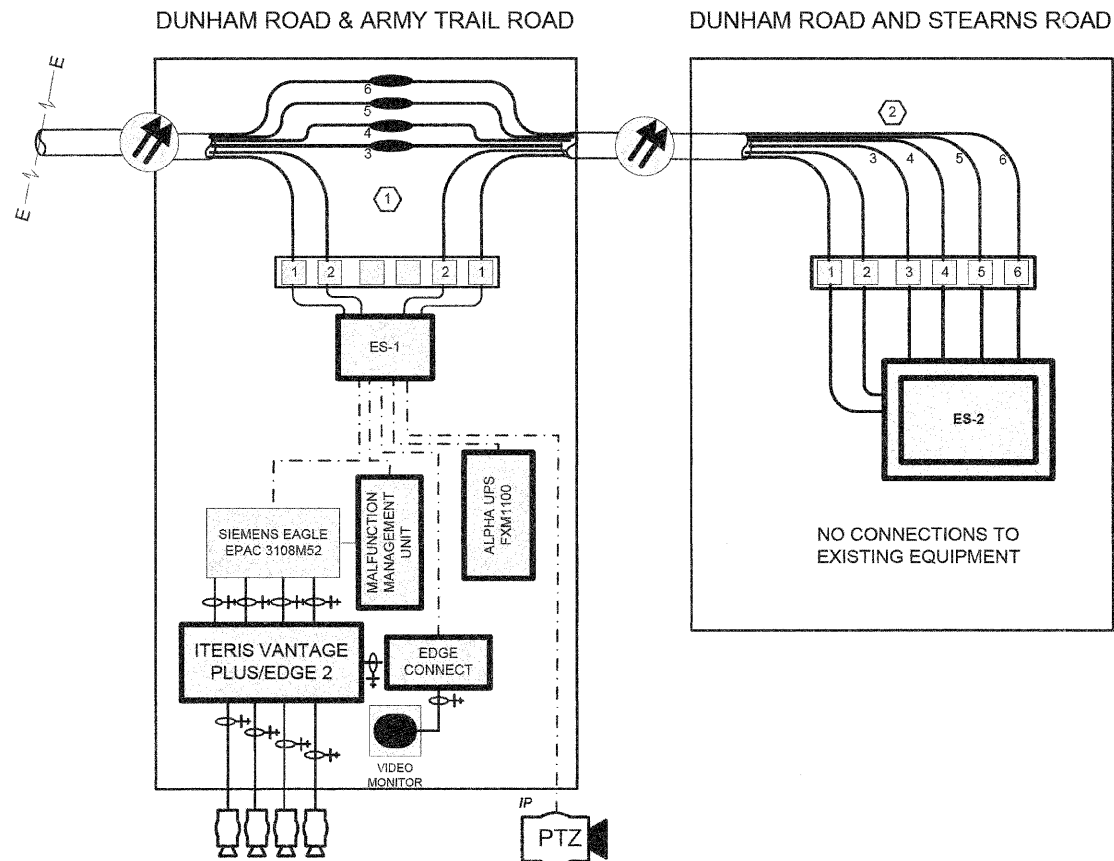
F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 68
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 63648	

LEGEND



- NOTES:**
- ① SPLICE THROUGH SM FIBERS 7-24. DROP AND CAP MM FIBERS 1-12 (FIBER TERMINATION, 6 FIBERS)
 - ② TERMINATE ALL SM FIBERS. (FIBER TERMINATION, 48 FIBERS)
 - ③ ALL FIBERS, 1-6, ARE IN THE BLUE BUFFER TUBE
 - ④ SPLICE THROUGH SM FIBER 7-36





LEGEND

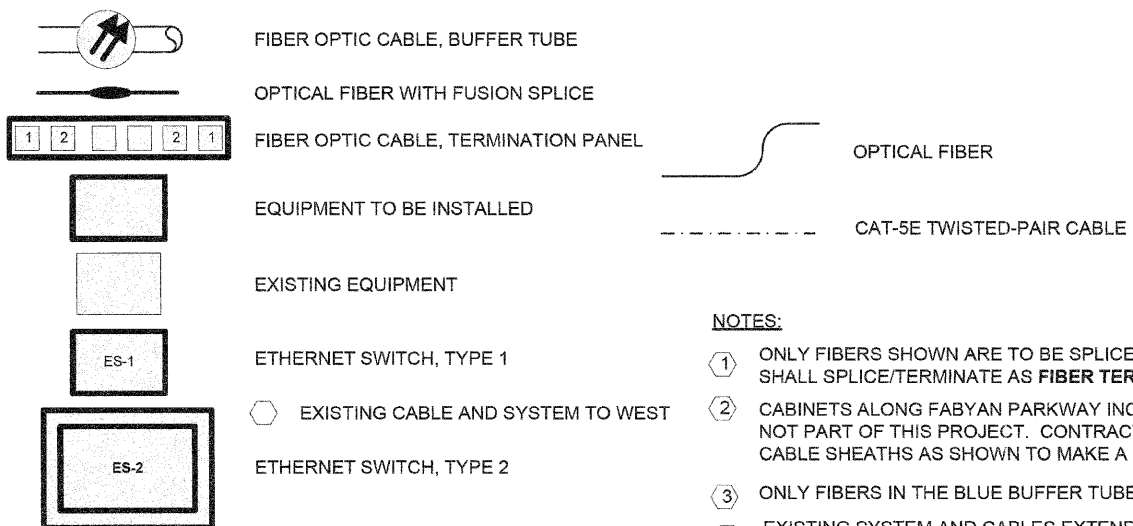
- FIBER OPTIC CABLE, BUFFER TUBE
- OPTICAL FIBER WITH FUSION SPLICE
- FIBER OPTIC CABLE, TERMINATION PANEL
- OPTICAL FIBER
- EQUIPMENT TO BE INSTALLED
- EXISTING EQUIPMENT
- ES-1
- ES-2
- CAT-5E TWISTED-PAIR CABLE

- NOTES:**
- ① SPLICE THROUGH SM FIBERS 7-36. (FIBER TERMINATION, 6 FIBERS)
 - ② TERMINATE ALL SM FIBERS. (FIBER TERMINATION, 48 FIBERS)
 - ③ ALL FIBERS, 1-6, ARE IN THE BLUE BUFFER TUBE

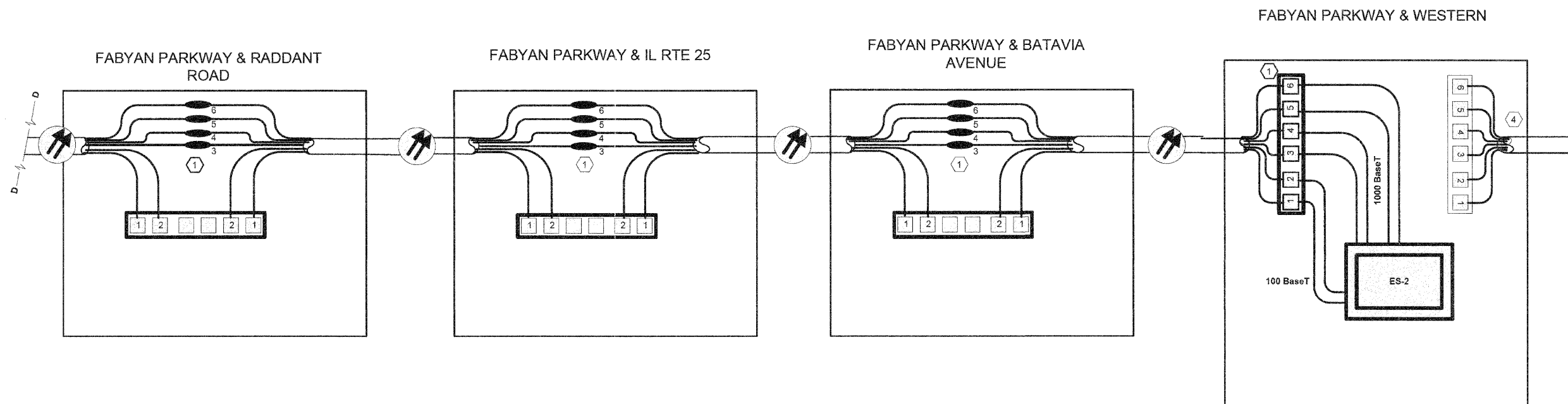
P:\2011\201106\700\700 CAD & GIS Files\702 Cvt\10-24-11\702 CABINET_FIBER_SPLICING DIAGRAM.DWG

JACOBS ONE NORTH FRANKLIN CHICAGO IL, 60606 312-251-3000	USER NAME =	DESIGNED - CH	REVISED -	KANE COUNTY DIVISION OF TRANSPORTATION	CABINET DETAIL AND FIBER OPTIC SPLICING DIAGRAM				F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 70
	PLLOT SCALE =	DRAWN - MO, DI	REVISED -		SCALE: _____	SHEET NO. _____	OF _____	SHEETS _____	STA. _____	TO STA. _____	CONTRACT NO. 63648		
	PLLOT DATE = 10/24/2011	CHECKED - KG	REVISED -						FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
		DATE - #DATE	REVISED -										

LEGEND



- NOTES:**
- ① ONLY FIBERS SHOWN ARE TO BE SPLICED OR TERMINATED. CONTRACTOR SHALL SPLICE/TERMINATE AS **FIBER TERMINATION, 6 FIBERS**
 - ② CABINETS ALONG FABYAN PARKWAY INCLUDE EXISTING EQUIPMENT THAT IS NOT PART OF THIS PROJECT. CONTRACTOR WILL CONCATENATE EXISTING CABLE SHEATHS AS SHOWN TO MAKE A CONTINUOUS OPTICAL LINK.
 - ③ ONLY FIBERS IN THE BLUE BUFFER TUBE ARE SHOWN
 - ④ EXISTING SYSTEM AND CABLES EXTEND TO THE WEST. ANY CONNECTIONS TO THIS PROJECT WILL BE MADE BY OTHERS.



CONTRACTOR MUST VERIFY FIBER ASSIGNMENTS IN USE. COORDINATE WITH ENGINEER FOR FINAL ASSIGNMENTS.

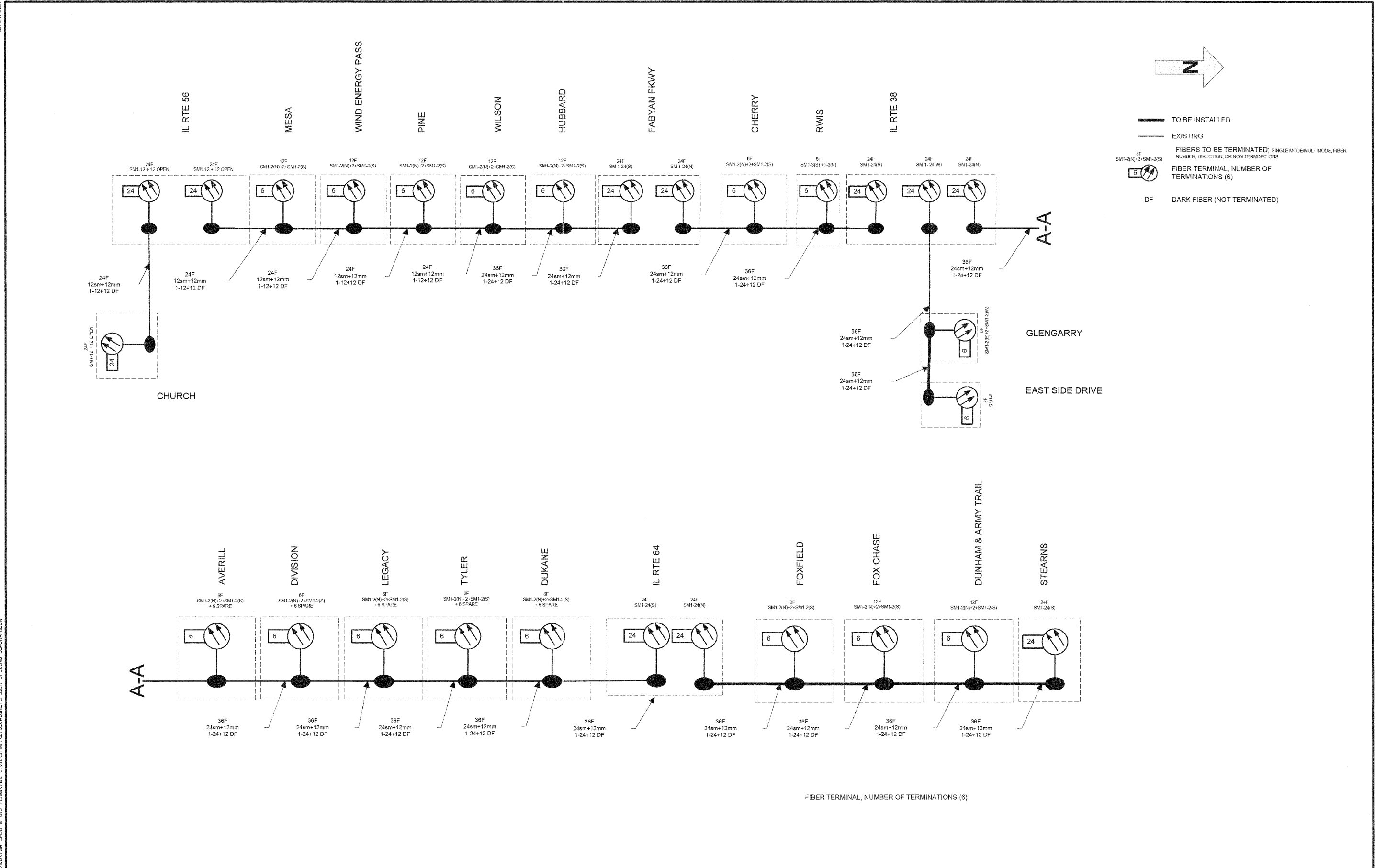
USER NAME =	DESIGNED - CH	REVISED -
PLOT SCALE =	DRAWN - MO, DI	REVISED -
PLOT DATE = 18/24/2011	CHECKED - KG	REVISED -
	DATE - #DATE	REVISED -

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	10-00403-00-TL	KANE	72	71
FED. ROAD DIST. NO. (ILLINOIS) FED. AID PROJECT			CONTRACT NO. 63648	

10/24/2011

P:\2011\986720\7800_CADD & GIS\F1\as\782_Cabinet\Sheet\Z78_CABINET_FIBER_SPLITTING_DIAGRAM.DWG



FIBER TERMINAL, NUMBER OF TERMINATIONS (6)

JACOBS ONE NORTH FRANKLIN CHICAGO IL, 60606 312-251-3000	USER NAME =	DESIGNED - CH	REVISED -	KANE COUNTY DIVISION OF TRANSPORTATION	CABINET DETAIL AND FIBER OPTIC CABLE SCHEMATIC			F.A.P. RTE. 360	SECTION 10-00403-00-TL	COUNTY KANE	TOTAL SHEETS 72	SHEET NO. 72	
	PLOT SCALE =	DRAWN - MO, DI	REVISED -					SCALE: SHEET NO. OF SHEETS STA. TO STA.			CONTRACT NO. 63648		
	PLOT DATE = 10/24/2011	CHECKED - KG	REVISED -										
		DATE - #DATE	REVISED -										
							FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT						