

FOR INDEX OF SHEETS
SEE SHEET 2

04-27-12 LETTING ITEM 157

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

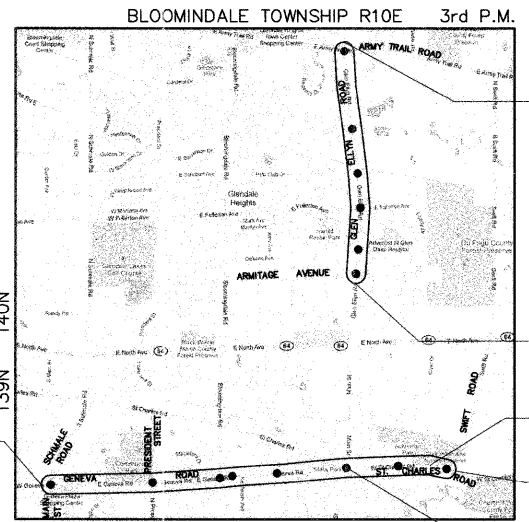
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

DISTRICT 1
CONGESTION MITIGATION AIR QUALITY
SIGNAL INTERCONNECT
F.A.U. NO: 2581 (GLEN ELLYN ROAD)
ARMITAGE AVENUE TO ARMY TRAIL ROAD
AND
F.A.U. NO: 1397 (GENEVA ROAD/ST. CHARLES ROAD)
SCHMALE ROAD/MAIN STREET TO SWIFT ROAD
FEDERAL PROJECT NO: CMM-9003(563)
SECTION NO: 09-00206-08-TL
DuPAGE COUNTY
C-91-330-10

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2581 & 1397	09-00206-08-TL	DuPAGE	53	1
ILLINOIS FED. AID PROJECT			CONTRACT #: 63625	



LOCATION MAP
(NOT TO SCALE)



BEGIN PROJECT
STA. 77+75

END PROJECT
STA. 102+25

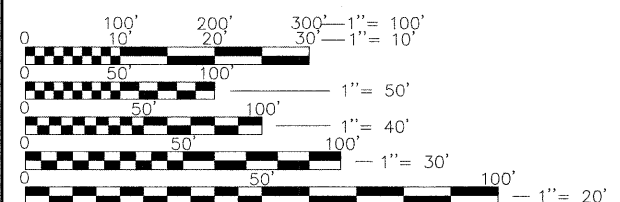
BEGIN PROJECT
STA. 7+25

SN 022.0068
ST CHARLES ROAD OVER
EAST BRANCH OF DuPAGE RIVER

END PROJECT
STA. 239+75

END GENEVA RD.
BEGIN ST. CHARLES RD.
STA. 196+50

NET & GROSS PROJECT LENGTHS:
GLEN ELLYN ROAD = 8,900 FEET (1.7 MILES)
GENEVA ROAD/ST. CHARLES ROAD = 16,200 FEET (3.1 MILES)



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

JULIE
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION CALL 811
Know what's below. Call before you dig.

CONTRACTOR IS RESPONSIBLE FOR CONTACTING J.U.L.I.E. AT 1-800-892-0123 AND MUST ACQUIRE A DIG NUMBER A MINIMUM OF 72 HOURS PRIOR TO ANY WORK BEING DONE.

CONTRACT NO. 63625

TRAFFIC DATA:	GLEN ELLYN ROAD	GENEVA ROAD/ST. CHARLES ROAD
POSTED SPEED:	40 MPH	35-40 MPH
DESIGN SPEED:	45 MPH	40-45 MPH
ADT:	15,100-17,300	15,200-18,300
FUNCTIONAL CLASSIFICATION:	MINOR ARTERIAL	MINOR ARTERIAL

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED: December 15 2011
Charles F. Tokumaki
DuPAGE COUNTY DIVISION OF TRANSPORTATION,
DIRECTOR OF TRANSPORTATION/COUNTY ENGINEER

PASSED: JANUARY 5 2012
CHET CHRISTOPHER HUNT
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED REVIEW
JANUARY 10 2012
Diana M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER



SIGNED: Kevin L. Belgrave
Kevin L. Belgrave
DATE: 12/15/11

EXPIRES: 11/30/2013

GHA GEWALT HAMILTON
ASSOCIATES, INC.
850 Forest Edge Drive • Vernon Hills, IL 60061
Consulting Engineers & Surveyors
847-478-9700
FAX: 847-478-9701

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OF THE STATE OF ILLINOIS

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

SUMMARY OF QUANTITIES		LOCATION OF WORK	CONSTRUCTION CODES																
			GENEVA ROAD AT SCHMALE ROAD/ MAIN STREET	GENEVA ROAD AT PRESIDENT STREET	GENEVA ROAD AT BLOOMINGDALE ROAD	GENEVA ROAD AT KENILWORTH AVENUE/ CHURCHILL SCHOOL	GENEVA ROAD AT WESTERN AVENUE	GENEVA RD / ST. CHARLES RD AT MAIN STREET/ GLEN ELLYN ROAD	ST. CHARLES ROAD AT RIFORD ROAD/ ACKERMAN PARK	ST. CHARLES ROAD AT SWIFT ROAD	GLEN ELLYN ROAD AT ARMITAGE AVENUE	GLEN ELLYN ROAD AT MID-BLOCK CROSSING	GLEN ELLYN ROAD AT FULLERTON AVENUE	GLEN ELLYN ROAD AT WINDY POINT DRIVE	GLEN ELLYN ROAD AT GREGORY AVENUE	GLEN ELLYN ROAD AT ARMY TRAIL ROAD	GENEVA RD & ST. CHARLES RD INTERCONNECT - FROM SCHMALE RD/MAIN ST TO SWIFT RD	GLEN ELLYN RD INTERCONNECT - FROM ARMITAGE AVE TO ARMY TRAIL RD	
CODE NO.	ITEM	UNIT	TOTAL	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	
* 20200100	EARTH EXCAVATION	CU YD	39		3	2	4	12					12				2	4	
* 42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	3,475		895	195	745	960					305					375	
* 42400800	DETECTABLE WARNINGS	SQ FT	468		96	36	104	112					24				44	52	
* 44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	265		135								50				15	65	
* 44000600	SIDEWALK REMOVAL	SQ FT	2,835		840	150	640	645									275	285	
* 60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	245		115								50				15	65	
* 60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	20		20														
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	6																
* 66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1.00																
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	1																
67100100	MOBILIZATION	L SUM	1.00																
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1.00																
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1.00																
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1.00																
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1.00																
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	305		150								155						
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	240														240		
80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	9		1	1	1	1					1	1	1		1	1	
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	20,158											150				12,569	7,439
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	25					5						5				15	
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	85											85					
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	181											181					
81100600	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL	FOOT	105															105	
81400100	HANDHOLE	EACH	27															18	9
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
85700050	FULL-ACTUATED CONTROLLER AND TYPE II CABINET	EACH	1											1					
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	3					1					1				1		
85700300	FULL-ACTUATED CONTROLLER AND TYPE V CABINET	EACH	1										1						
86000100	MASTER CONTROLLER	EACH	1										1						
86400100	TRANSCEMER - FIBER OPTIC	EACH	10		1			1	1	1	1	1	1	1	1	1	1	1	
87100020	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F	FOOT	24,068															15,873	8,195
87300010	GROUNDING EXISTING HANDHOLE FRAME AND COVER	EACH	4											4					
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	24,068															15,873	8,195
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,448					109					411	567				361	
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,962					236					429	900				397	
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	811											811					
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	651										266	385					
87301295	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 20 3C	FOOT	297											297					

* SPECIALTY ITEM
 ** CONSTRUCTION CODE OF 0042

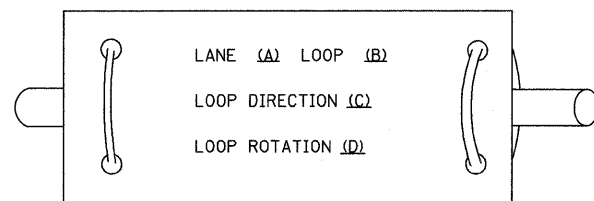
SUMMARY OF QUANTITIES		LOCATION OF WORK		GENEVA ROAD AT SCHMALE ROAD/MAIN STREET	GENEVA ROAD AT PRESIDENT STREET	GENEVA ROAD AT BLOOMINGDALE ROAD	GENEVA ROAD AT KENILWORTH AVENUE/CHURCHILL SCHOOL	GENEVA ROAD AT WESTERN AVENUE	GENEVA RD / ST. CHARLES RD AT MAIN STREET/ GLEN ELLYN ROAD	ST. CHARLES ROAD AT RIFORD ROAD/ ACKERMAN PARK	ST. CHARLES ROAD AT SWIFT ROAD	GLEN ELLYN ROAD AT ARMITAGE AVENUE	GLEN ELLYN ROAD AT MID-BLOCK CROSSING	GLEN ELLYN ROAD AT FULLERTON AVENUE	GLEN ELLYN ROAD AT WINDY POINT DRIVE	GLEN ELLYN ROAD AT GREGORY AVENUE	GLEN ELLYN ROAD AT ARMY TRAIL ROAD	GENEVA RD & ST. CHARLES RD INTERCONNECT - FROM SCHMALE RD/MAIN ST TO SWIFT RD	GLEN ELLYN RD INTERCONNECT - FROM ARMITAGE AVE TO ARMY TRAIL RD	
				0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021	0021
CODE NO.	ITEM	UNIT	TOTAL	CONSTRUCTION CODES																
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	322									322								
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	912		18				19			47	686	41				101		
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	4						1				1					2		
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	9				1						3	2				3		
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	5		2	2												1		
87700170	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1										1							
87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	2										2							
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	16						4				4					8		
87800205	MODIFY EXISTING TYPE "D" FOUNDATION	EACH	1										1							
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30										30							
87900200	DRILL EXISTING HANDHOLE	EACH	41						1				17					2	10	11
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	18		2				4			3	4	2				3		
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	10		1				2			1	2					4		
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1									1								
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	8		4							1	2					1		
88030210	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED	EACH	8						4				2	2						
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	8		4							2	1					1		
88030330	SIGNAL HEAD, LED, 3-FACE, 2-3 SECTION, 1-5 SECTION BRACKET MOUNTED	EACH	1										1							
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	14						2			2		2		4		4		
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	11		4				3				4							
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	26		6				4			4	6	2				4		
88500100	INDUCTIVE LOOP DETECTOR	EACH	21						4			5	7					5		
88600100	DETECTOR LOOP, TYPE I	FOOT	340										340							
88700200	LIGHT DETECTOR	EACH	2										2							
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1										1							
88800100	PEDESTRIAN PUSH-BUTTON	EACH	28		4				4			2	8	2		4		4		
89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	4				4													
89500120	REMOVE EXISTING SERVICE INSTALLATION	EACH	9		1	1	1	1	1			1	1	1		1		1		
89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	4						1			1		1				1		
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1,434						393			238	803							
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	10		1	1	1	1	1			1	1	1		1		1		
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	4										4							
X8570015	CONTROLLER (SPECIAL)	EACH	1							1										
X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	3	1						1								1		
XX003665	REBUILD EXISTING HANDHOLE TO DOUBLE HANDHOLE	EACH	1										1							
Z0033046	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	13															8		5
* * Z0076600	TRAINEES	HOUR	500																	

* SPECIALTY ITEM
 * * CONSTRUCTION CODE OF 0042

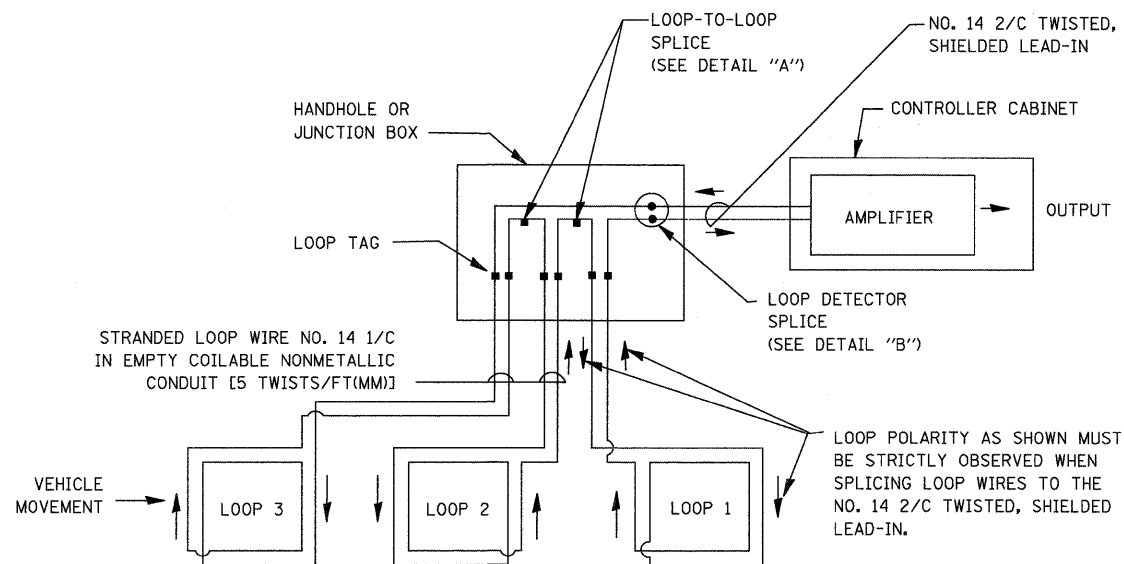
LOOP DETECTOR NOTES

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 DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

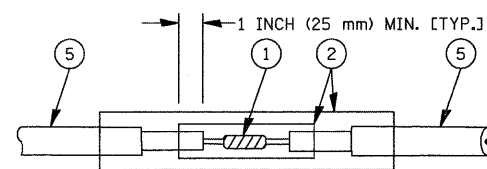


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

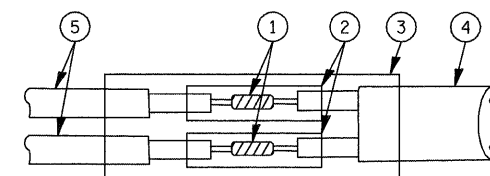


DETECTOR LOOP WIRING SCHEMATIC

- 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.

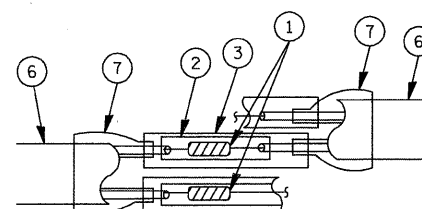


DETAIL "A" LOOP-TO-LOOP SPLICE

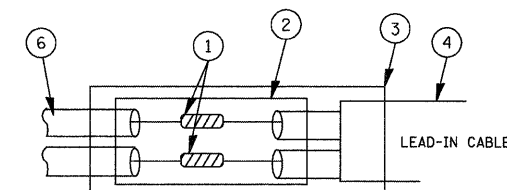


DETAIL "B" LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A" LOOP-TO-LOOP SPLICE



DETAIL "B" LOOP-TO-CONTROLLER SPLICE

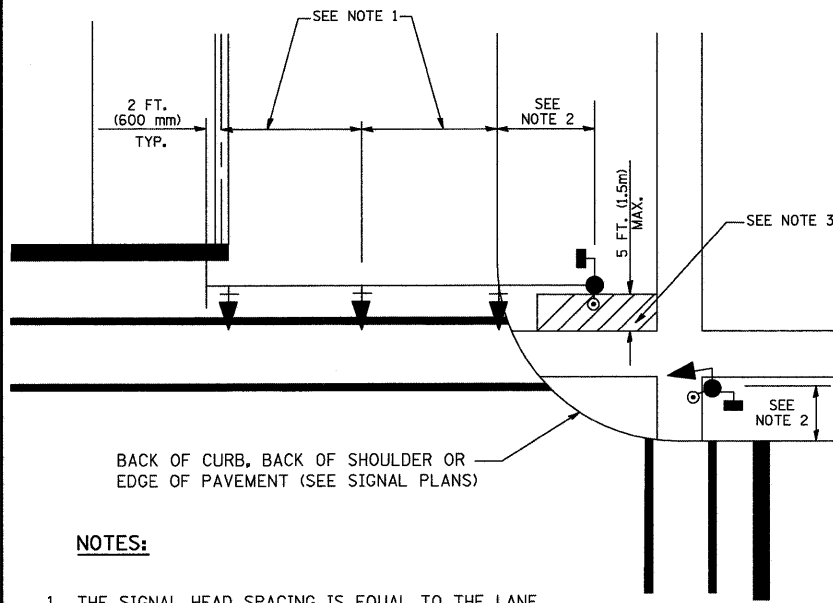
LOOP DETECTOR SPLICE

- 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 = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - DAD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	FAU. RTE. 2581 & 1397	SECTION 09-00206-08-TL TS-05	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 5	GHA #4281.800 CONTRACT # 63625 ILLINOIS FED. AID PROJECT
PLOT SCALE = 1" = .0833'	CHECKED - DAD	REVISOR -	SCALE NONE			SHEET NO. 1 OF 6 SHEETS	STA. TO STA.				
PLOT DATE = 12/16/2011	DATE - 10-28-09	REVISOR -									

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

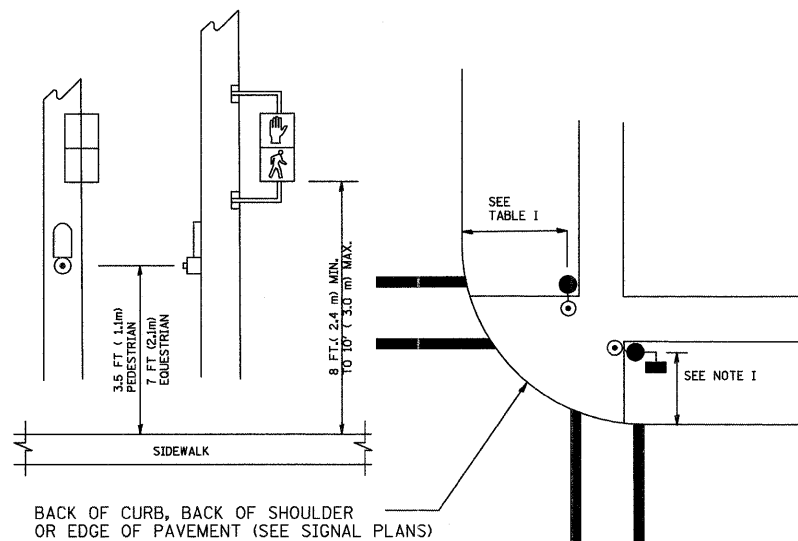
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



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."

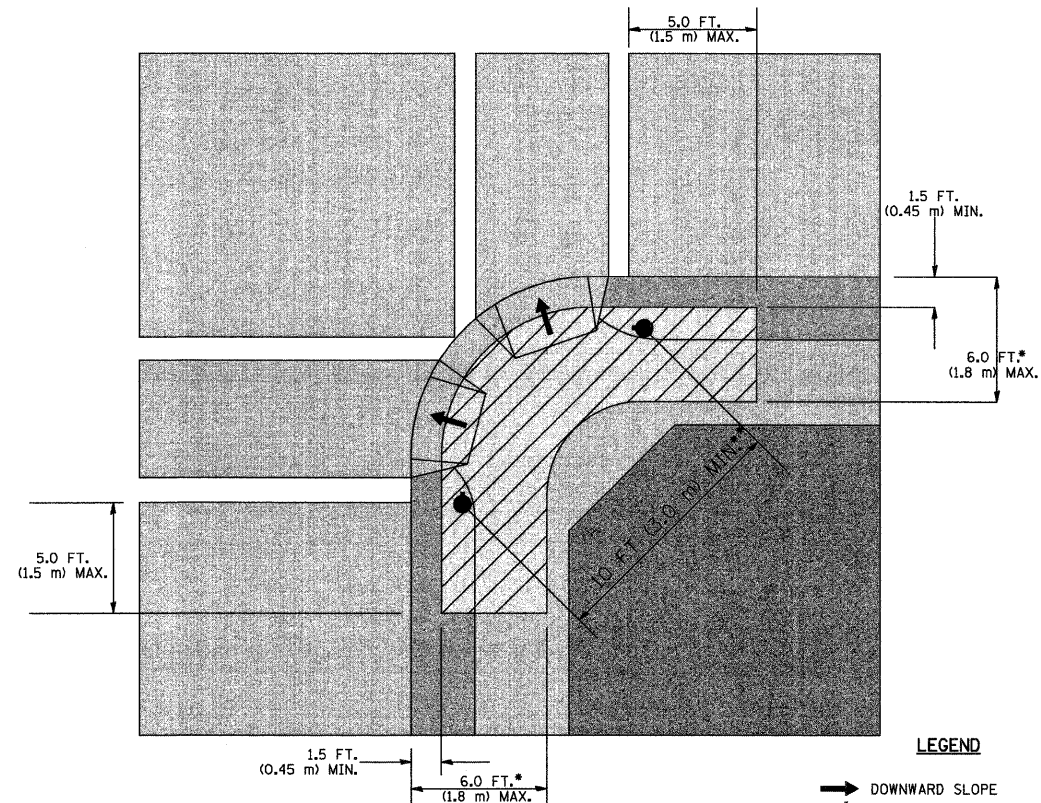
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



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



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ 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:

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.

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.

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.

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.

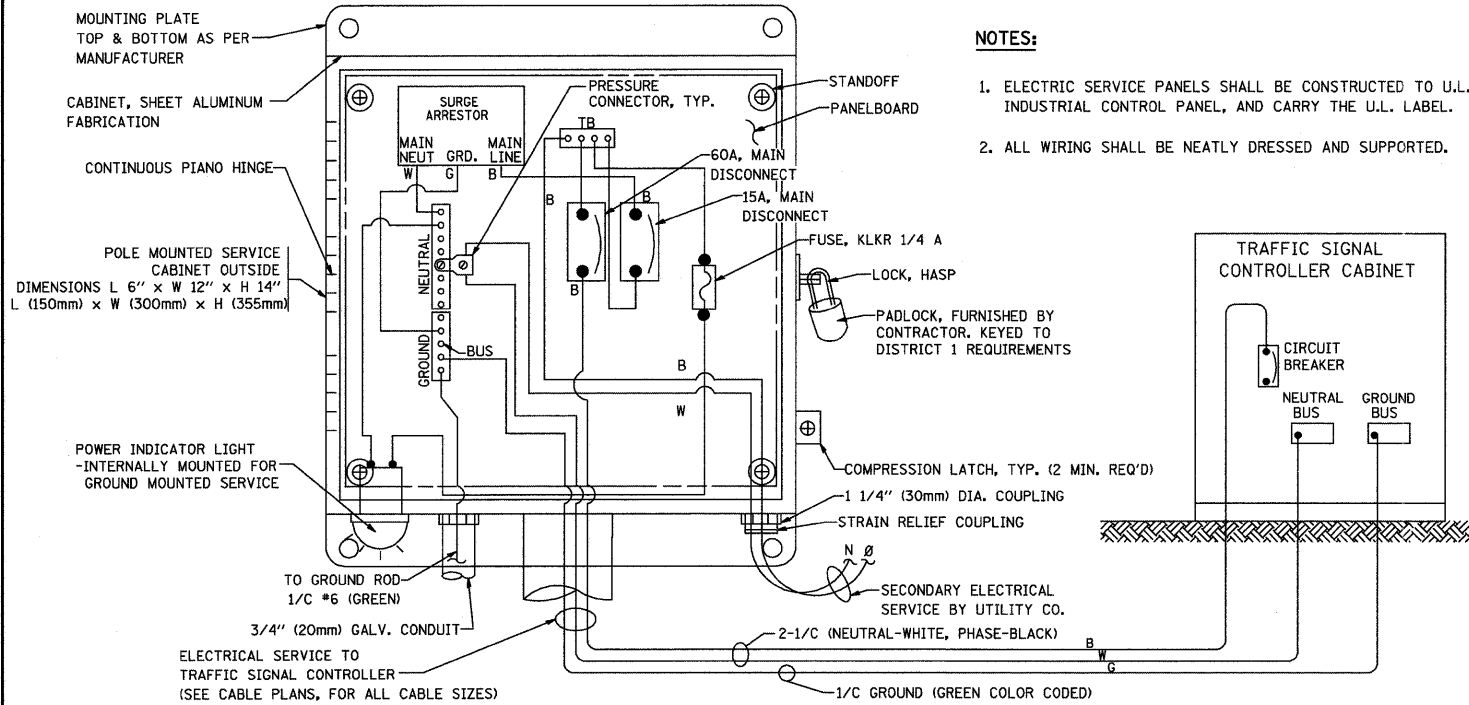
THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

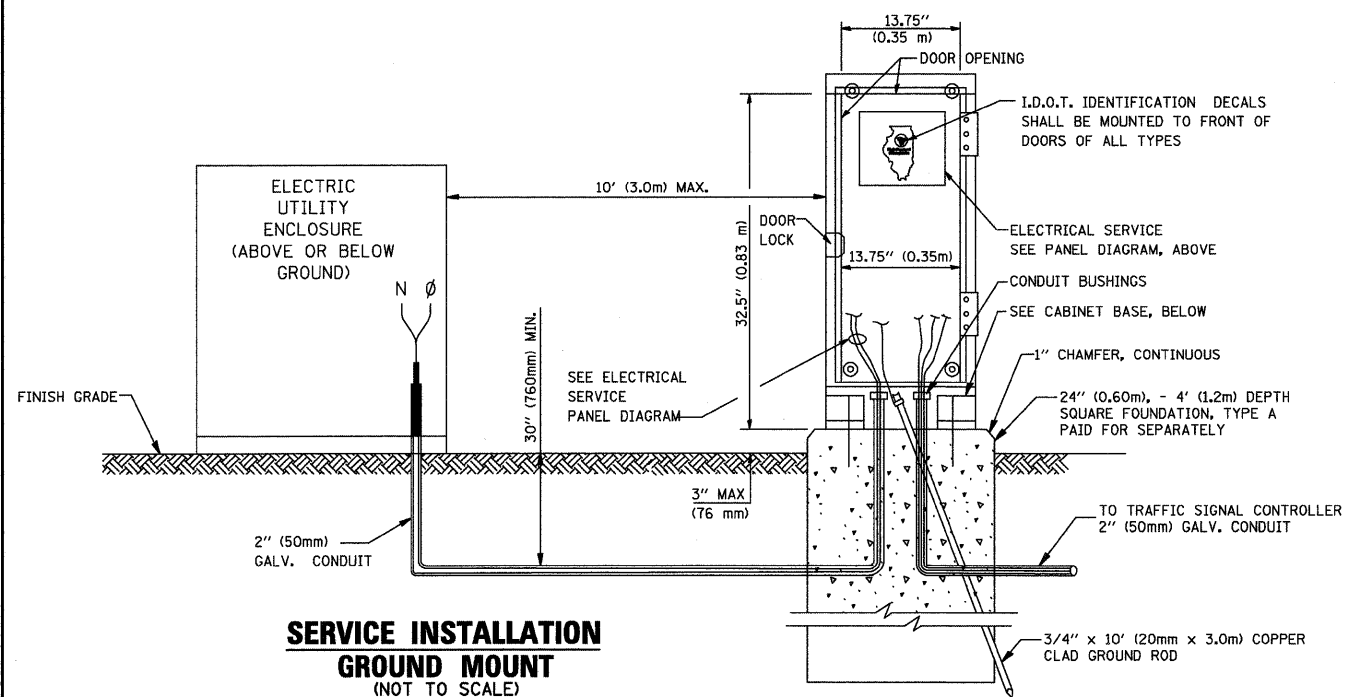
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 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.

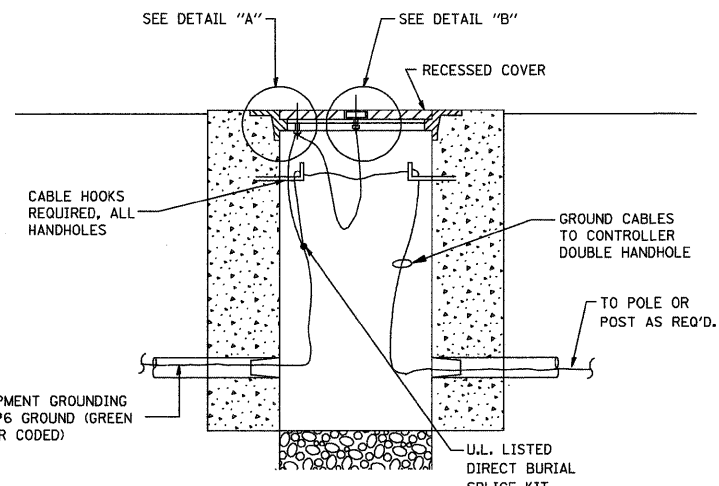
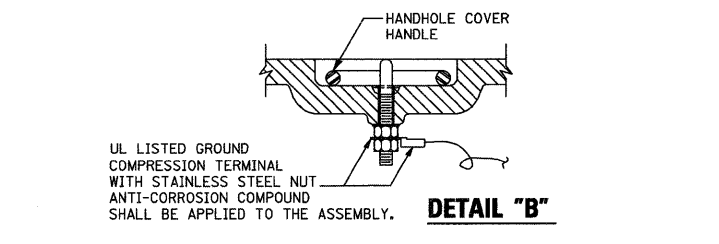
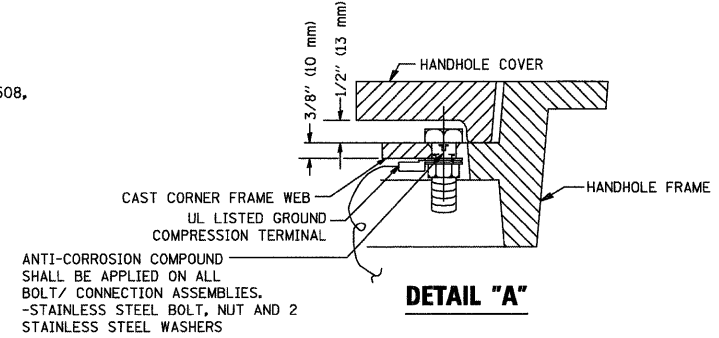
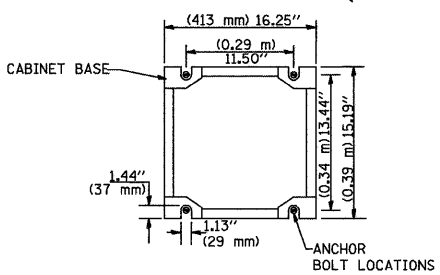


**ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)**

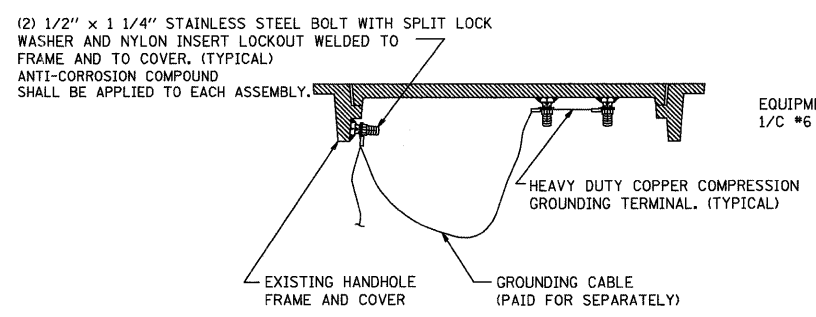


SERVICE INSTALLATION GROUND MOUNT (NOT TO SCALE)

CABINET - BASE BOLT PATTERN (NOT TO SCALE)



HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)

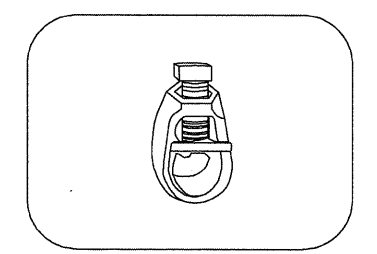
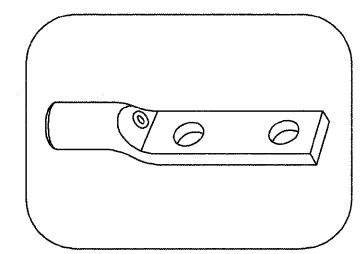


EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL (NOT TO SCALE)

NOTES:

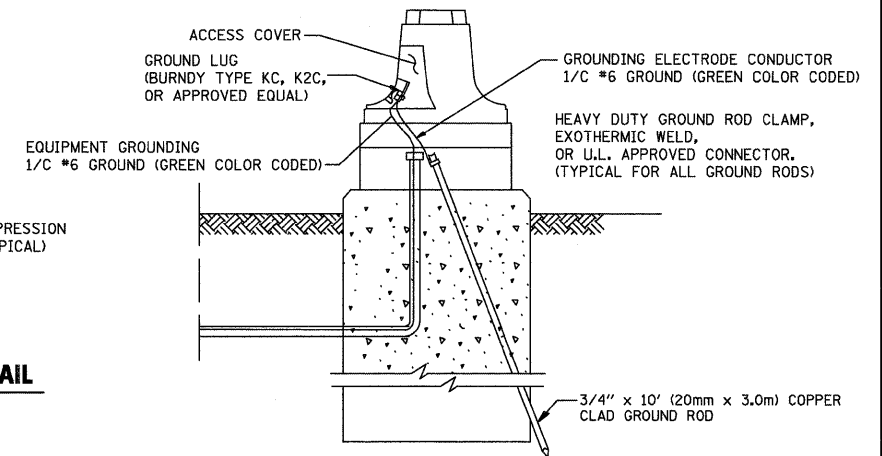
GROUNDING SYSTEM

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



NOTES:

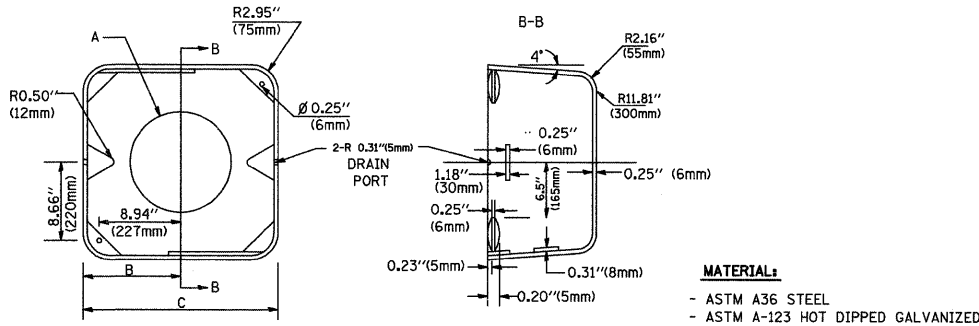
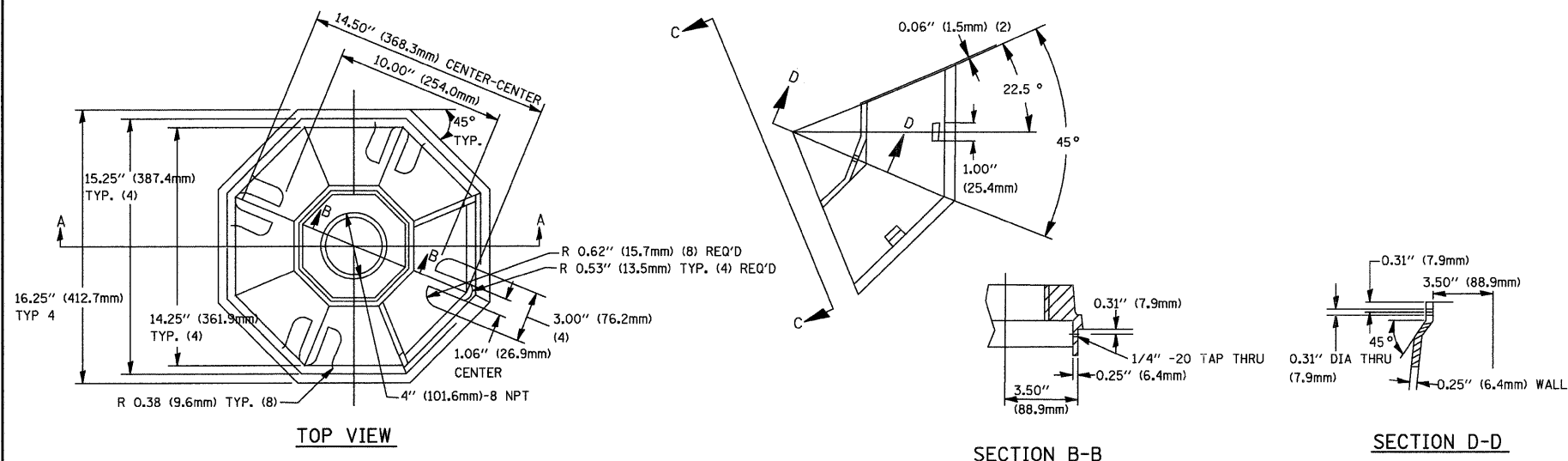
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
- GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



MAST ARM POLE / POST-GROUNDING DETAIL (NOT TO SCALE)

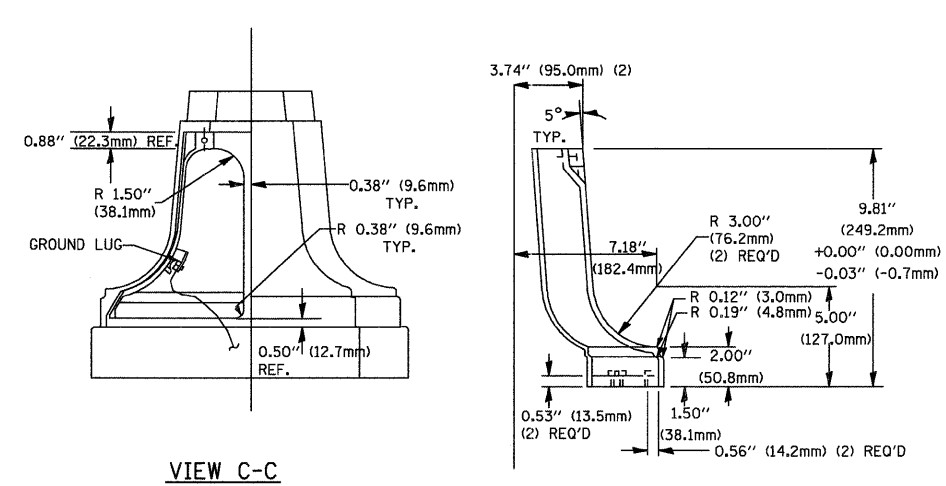
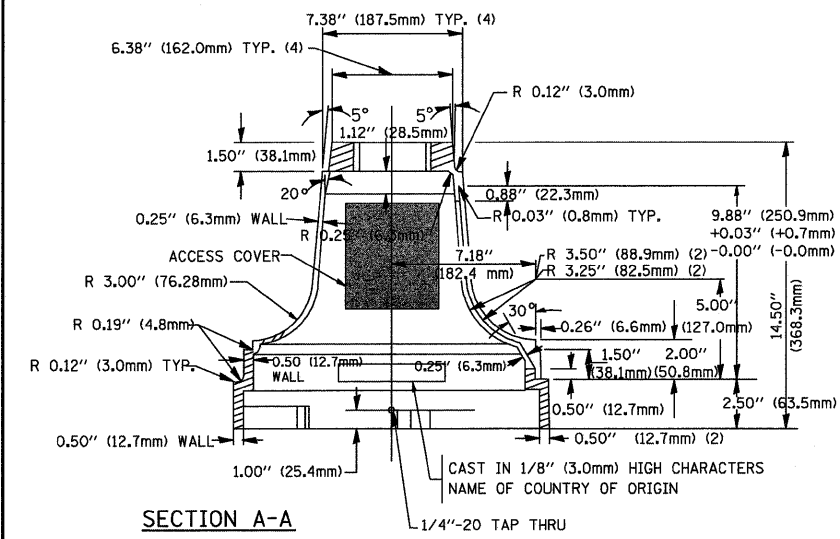
FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - DAD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	FAU. RTE. 2581 & 1397	SECTION 09-00206-08-TL TS-05	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 7	
PLOT SCALE = 1" = .0833'	CHECKED - DAD	REVISIONS	SCALE NONE			SHEET NO. 3 OF 6 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	CONTRACT # 63625		
PLOT DATE = 12/18/2011	DATE - 10-28-09	REVISIONS									

GHA #4281.800

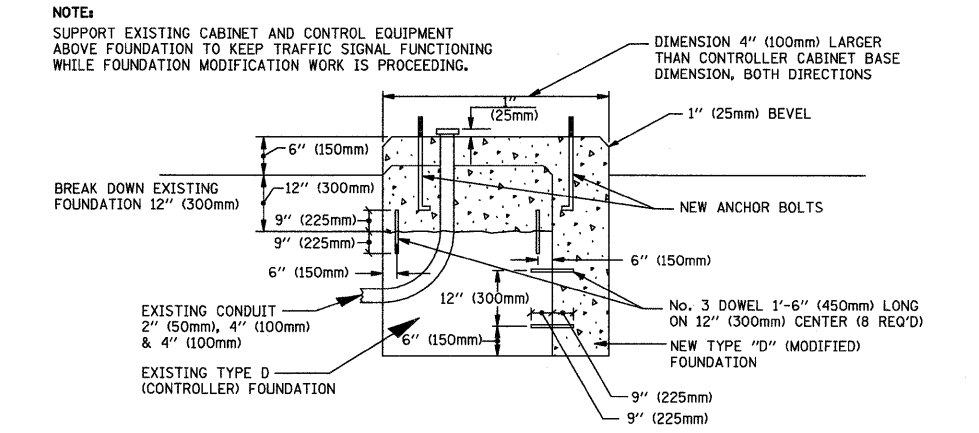


A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5\"(241mm)	19\"(483mm)	7\"(178mm) - 12\"(300mm)	53 lbs (24kg)
VARIABLES	10.75\"(273mm)	21.5\"(546mm)	7\"(178mm) - 12\"(300mm)	68 lbs (31 kg)
VARIABLES	13.0\"(330mm)	26\"(660mm)	7\"(178mm) - 12\"(300mm)	81 lbs (37 kg)
VARIABLES	18.5\"(470mm)	37\"(940mm)	7\"(178mm) - 12\"(300mm)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

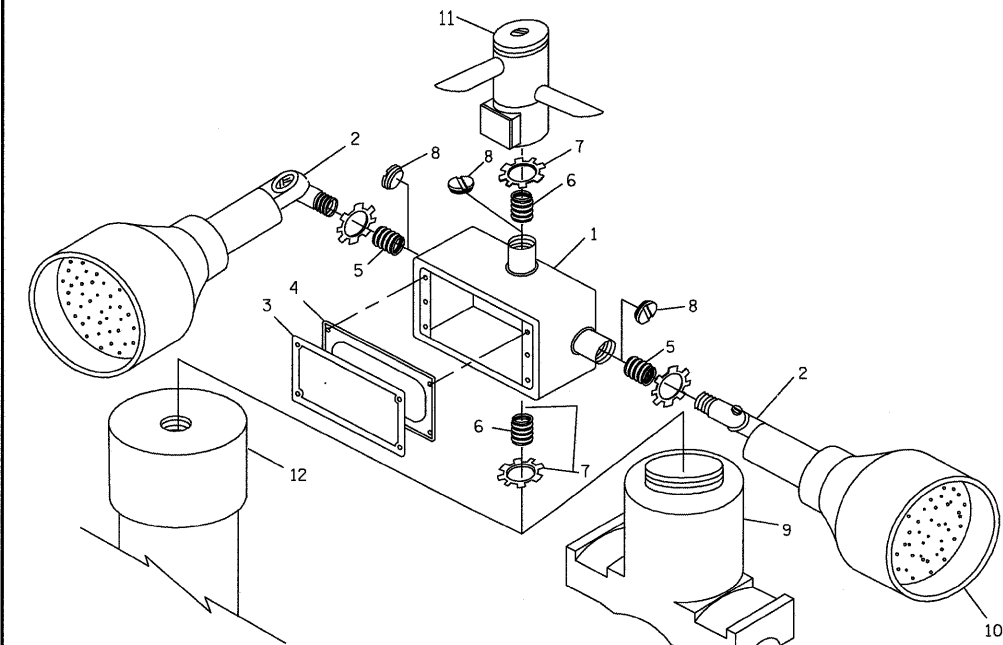
- NOTES:**
- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
 - THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
 - THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST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



TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A

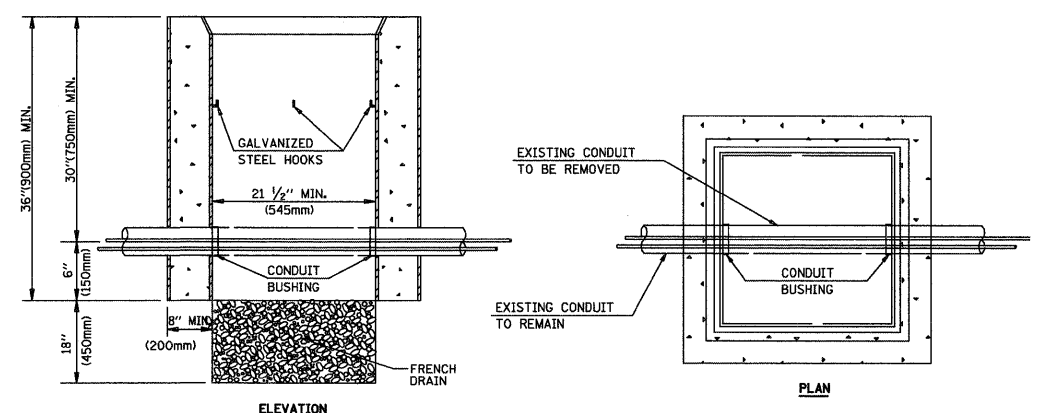


MODIFY EXISTING TYPE "D" FOUNDATION



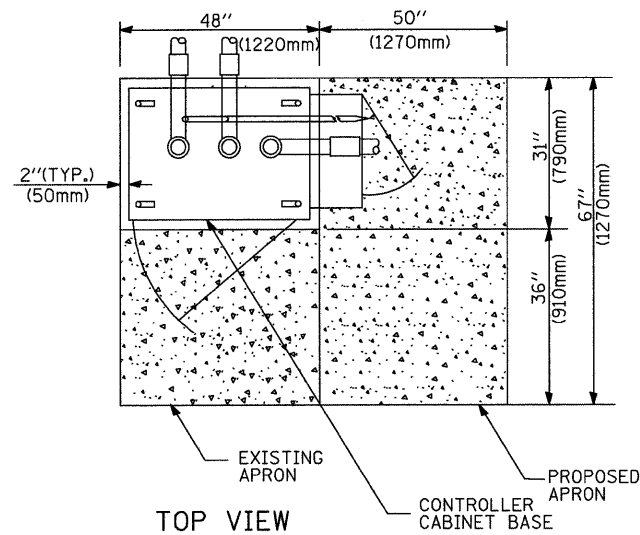
ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\"(19 mm) CLOSE NIPPLE
7	3/4\"(19 mm) LOCKNUT
8	3/4\"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
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.

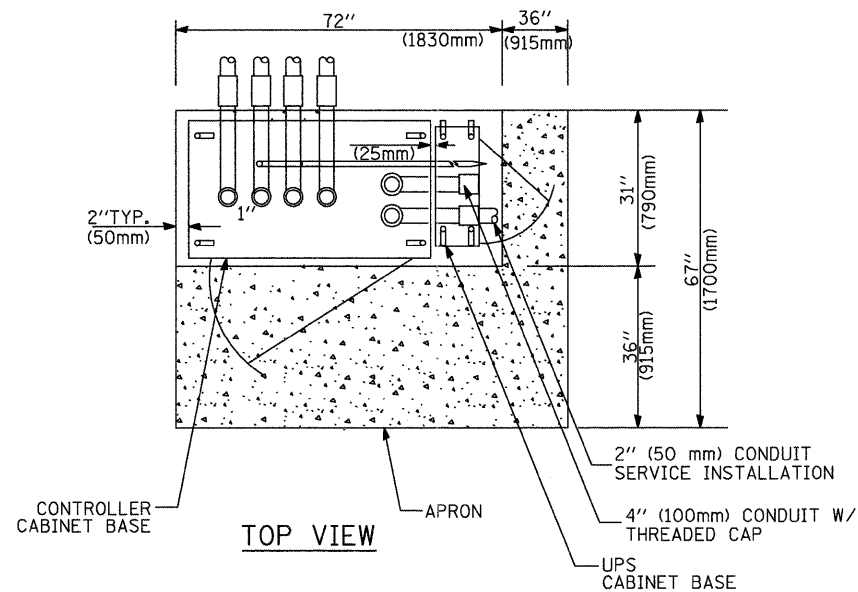


- NOTES:**
- HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
 - REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

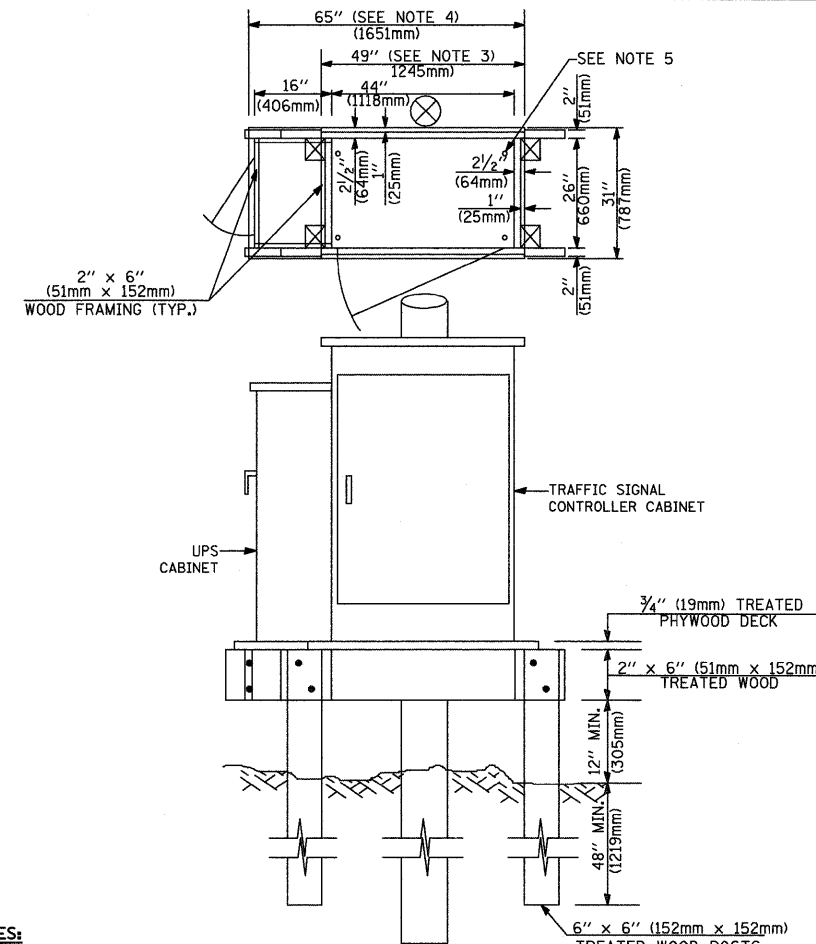
HANDHOLE TO INTERCEPT EXISTING CONDUIT



TOP VIEW



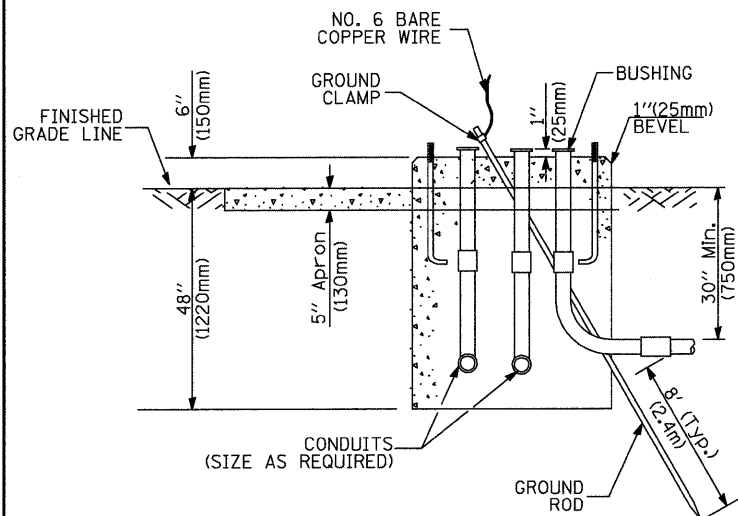
TOP VIEW



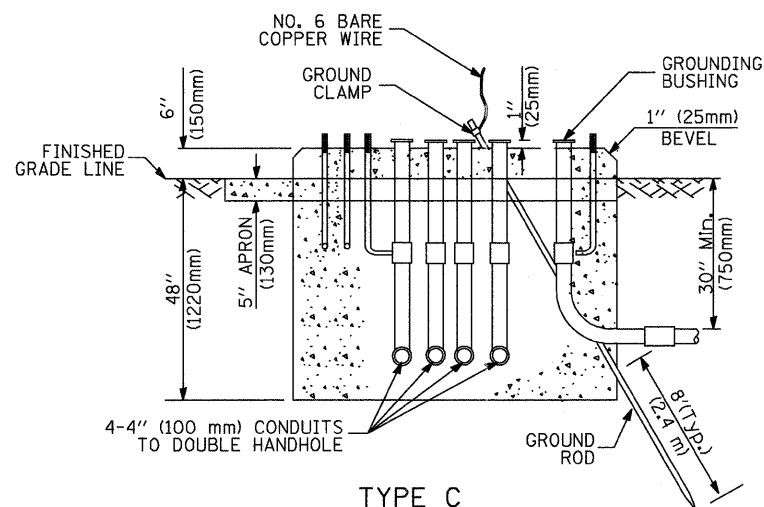
NOTES:

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



TYPE D FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET



TYPE C FOR GROUND MOUNTED CONTROLLER CABINET AND UPS BATTERY CABINET

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)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	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.

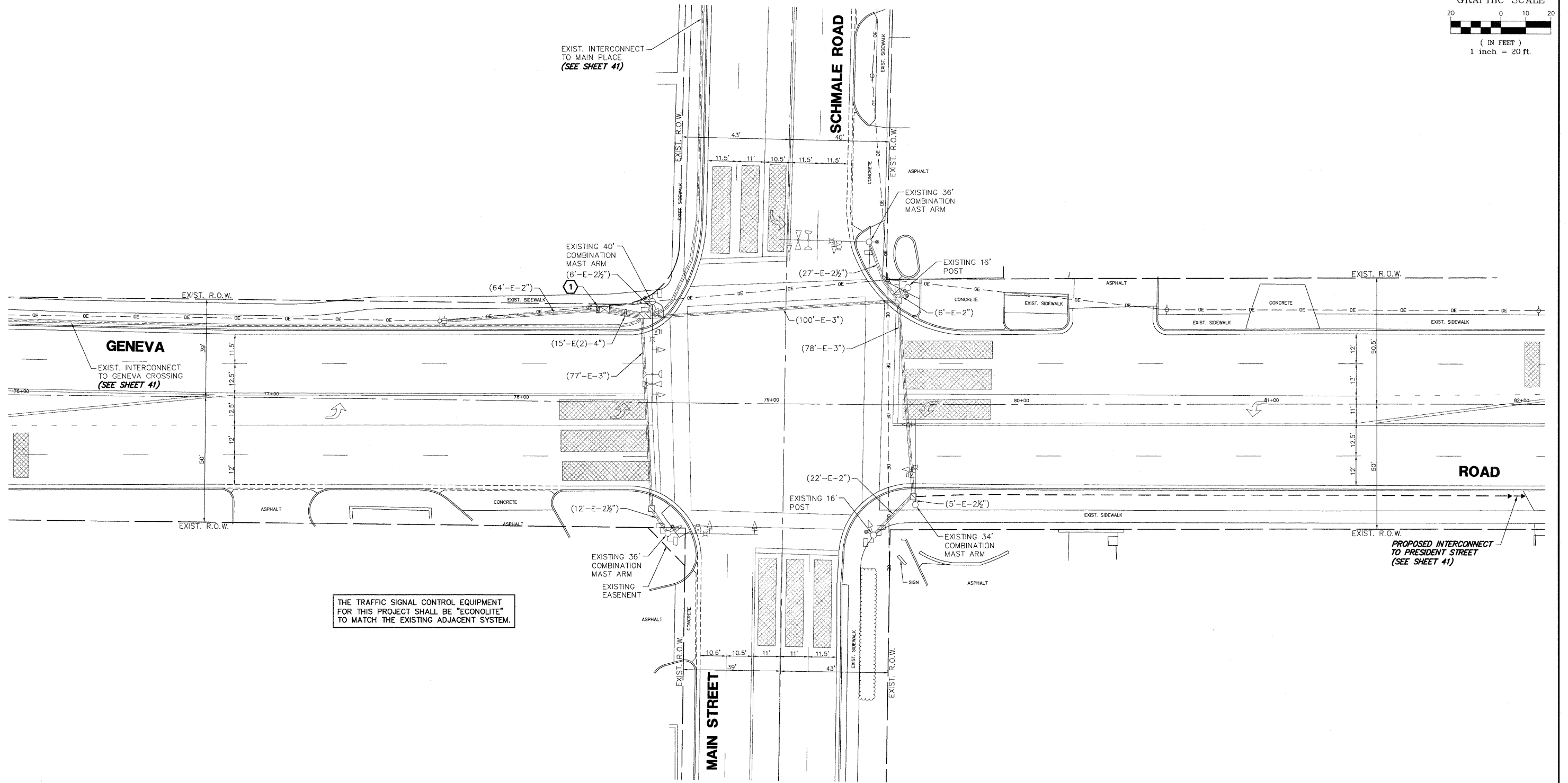
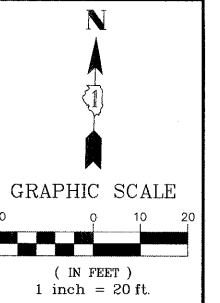
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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 SM12F			
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				RAILROAD SYMBOLS			
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID				RAILROAD CONTROL CABINET			
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER				RAILROAD CANTILEVER MAST ARM			
ILLUMINATED SIGN "NO LEFT TURN"				RADIO INTERCONNECT				FLASHING SIGNAL			
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO REPEATER				CROSSING GATE			
DETECTOR LOOP, TYPE I				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED				CROSSBUCK			
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											

CONSTRUCTION NOTES:

① INSTALL UNINTERRUPTIBLE POWER SUPPLY UNIT.



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = 4281.800-TR1.dwg

USER NAME = ZACH WALLSTEN
 PLOT SCALE = 1" = .0833'
 PLOT DATE = 12/16/2011

DESIGNED - JRD
 DRAWN - ZCW
 CHECKED - KLB
 DATE - 12/16/2011

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODERNIZATION PLAN
 GENEVA ROAD AT SCHMALE ROAD/MAIN STREET**

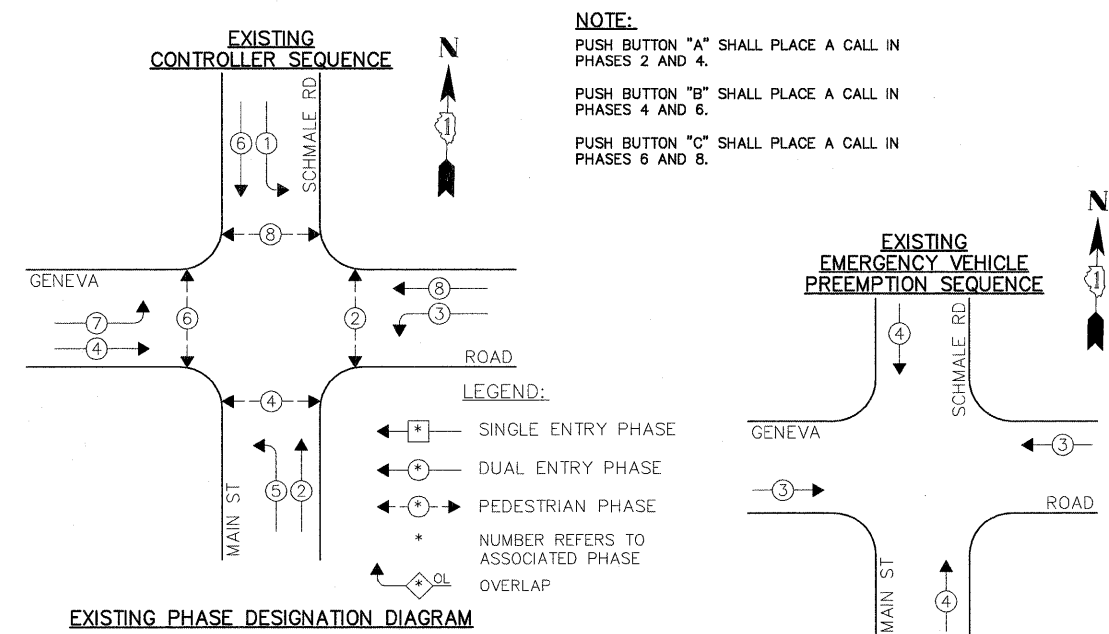
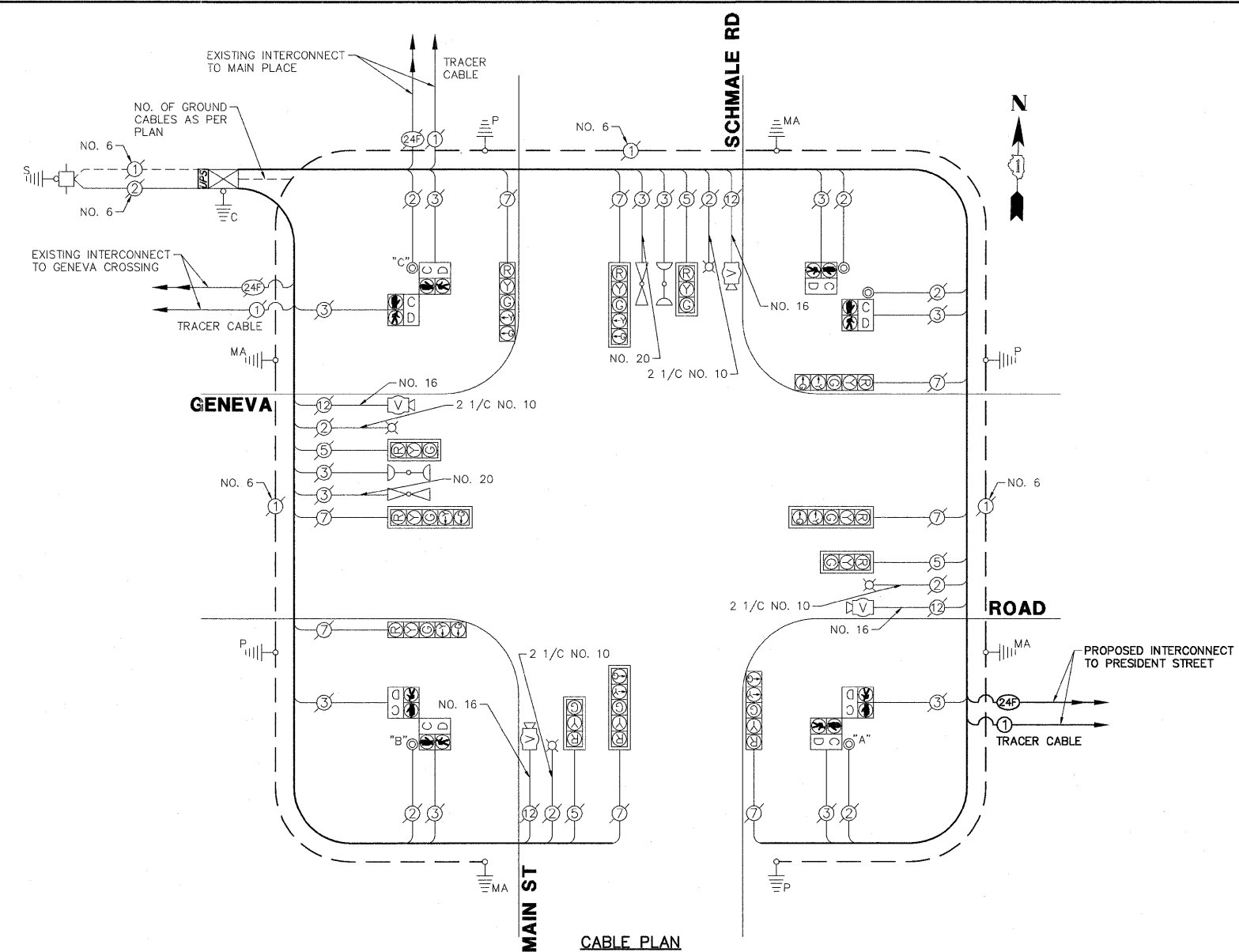
SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	09-00206-08-TL	DuPAGE	53	11
CONTRACT #:			63625	
ILLINOIS FED. AID PROJECT				

GHA #4281.800

SCHEDULE OF QUANTITIES
GENEVA ROAD AT SCHMALE ROAD/MAIN STREET

NO.	QUANT.	UNIT
1.	1	EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH UNINTERRUPTABLE POWER SUPPLY, SPECIAL



NOTE:
PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	% OPERATION	
SIGNAL (RED)	12	135	17	0.50	102.0
SIGNAL (YELLOW)	12	135	25	0.25	75.0
SIGNAL (GREEN)	12	135	15	0.25	45.0
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	4	250	-	0.50	500.0
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	1	-	150	1.00	150.0
BATTERY BACKUP	-	-	25	1.00	-
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					1,191.2

ENERGY COSTS - BILLED TO: CITY OF WHEATON
(ADDRESS) 303 WEST WESLEY STREET
(ADDRESS) WHEATON, IL 60187
ENERGY SUPPLY - CONTACT: MS. DEB RANKIN
PHONE: (630) 691-4379
COMPANY: COM-ED

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -
PLOT SCALE = 1" = .0833'	CHECKED - KLB	DRAWN - ZCW	REVISED -
PLOT DATE = 12/16/2011	DATE - 12/16/2011		REVISED -

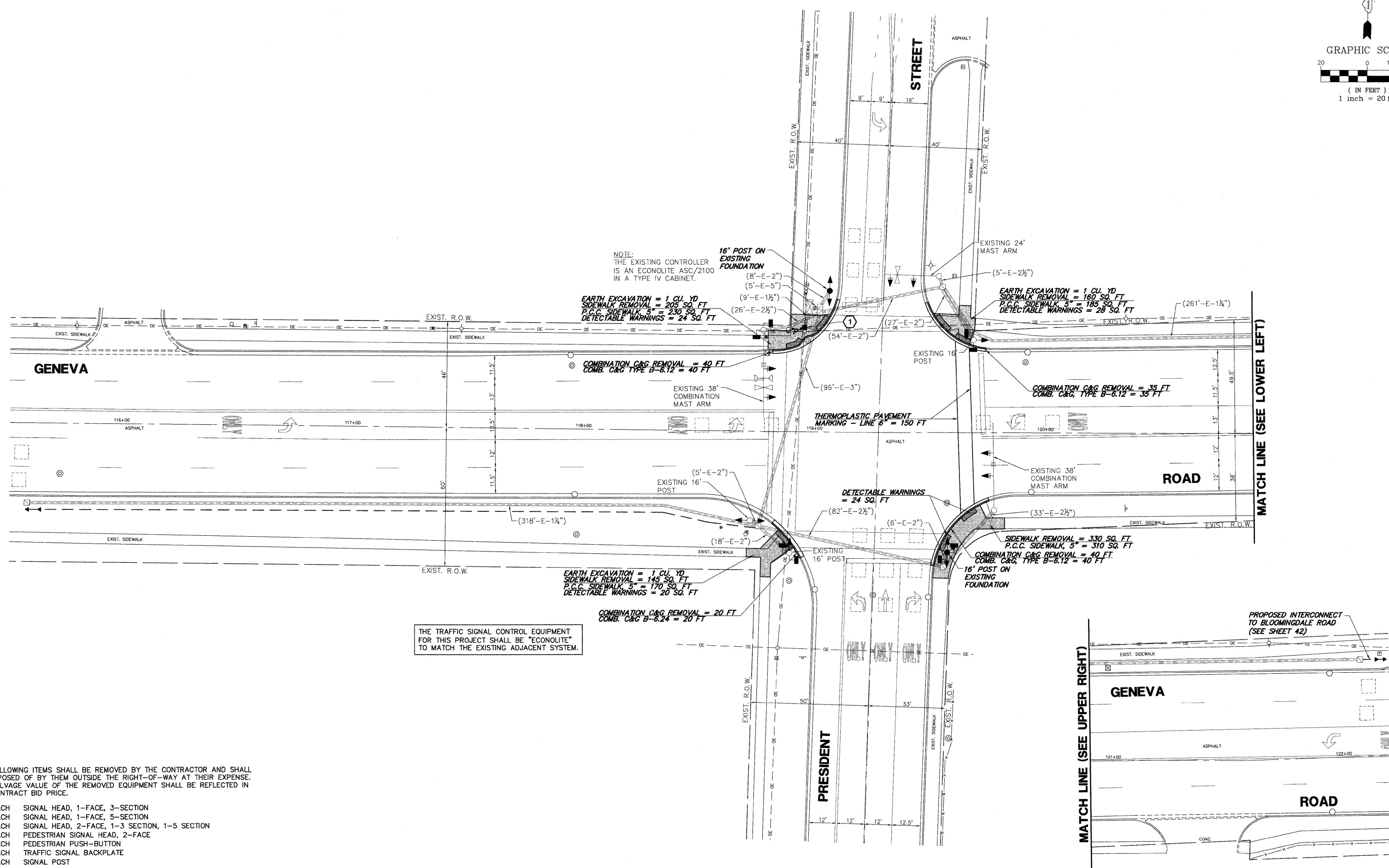
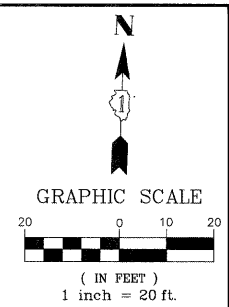
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
GENEVA ROAD AT SCHMALE ROAD/MAIN STREET

FAU. RTE. 1397	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 12
CONTRACT # 63625			GHA #4281.800	
ILLINOIS FED. AID PROJECT				

CONSTRUCTION NOTES:

- ① REMOVE EXISTING SERVICE INSTALLATION AND INSTALL NEW SERVICE INSTALLATION AND GROUND CABLE.



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

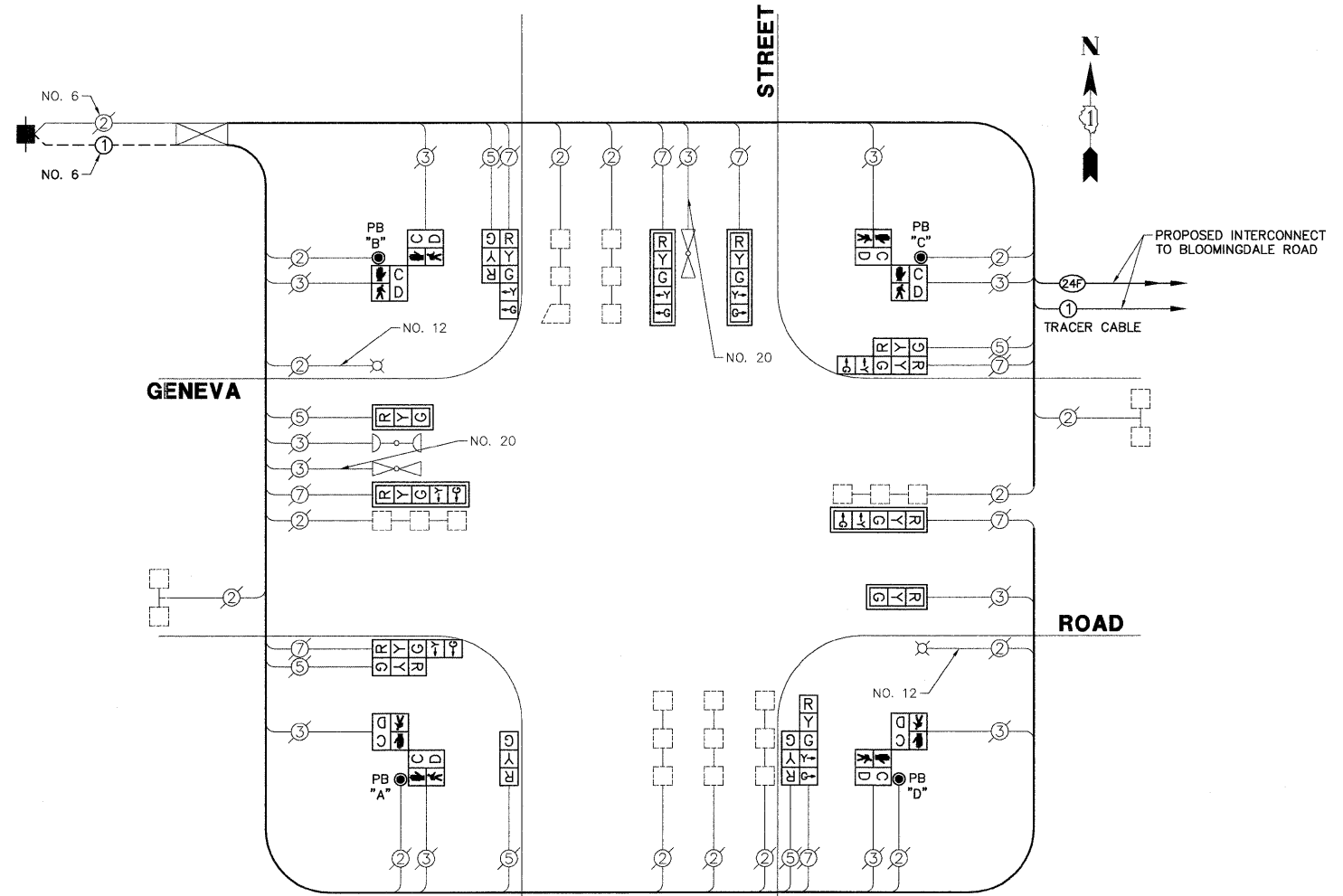
- 3 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 4 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 4 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON
- 6 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH SIGNAL POST
- 1 EACH SERVICE INSTALLATION

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN GENEVA ROAD AT PRESIDENT STREET	FAU. RTE. 1397	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 13	CONTRACT #: 63625	
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	SCALE 1"=20'			SHEET NO. OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT				
PLOT DATE = 12/16/2011	DATE - 12/16/2011	REVISED -										

GHA #4281.800

SCHEDULE OF QUANTITIES
GENEVA ROAD AT PRESIDENT STREET

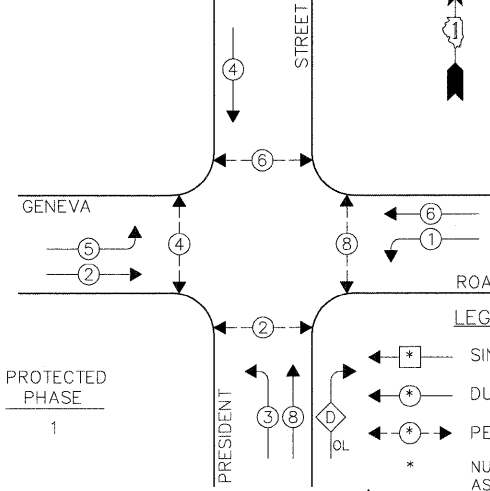
NO.	QUANT.	UNIT	DESCRIPTION
1.	3	CU YD	EARTH EXCAVATION
2.	895	SQ FT	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
3.	96	SQ FT	DETECTABLE WARNINGS
4.	135	FOOT	COMBINATION CURB AND GUTTER REMOVAL
5.	840	SQ FT	SIDEWALK REMOVAL
6.	115	FOOT	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
7.	20	FOOT	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
8.	150	FOOT	THERMOPLASTIC PAVEMENT MARKING - LINE 6"
9.	1	EACH	SERVICE INSTALLATION - POLE MOUNTED
10.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
11.	1	EACH	TRANSCENER - FIBER OPTIC
12.	18	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1/2
13.	2	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
14.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
15.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
16.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
17.	4	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
18.	4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
19.	6	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
20.	4	EACH	PEDESTRIAN PUSH-BUTTON
21.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
22.	1	EACH	REMOVE EXISTING SERVICE INSTALLATION



CABLE PLAN

NOTE:
 PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
 PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
 PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
 PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

EXISTING CONTROLLER SEQUENCE

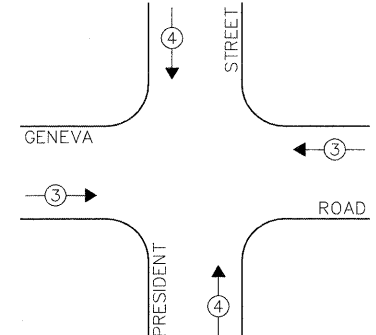


EXISTING PHASE DESIGNATION DIAGRAM

OVERLAP LETTER PERMISSIVE PHASE PROTECTED PHASE
 D = 8 + 1

LEGEND:
 ◀ * ▶ SINGLE ENTRY PHASE
 ◀ * DUAL ENTRY PHASE
 ◀ * ▶ PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE
 ◀ * ▶ OVERLAP

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	L.E.D.	% OPERATION	
SIGNAL (RED)	15	135	17	0.50	127.5
SIGNAL (YELLOW)	15	135	25	0.25	93.75
SIGNAL (GREEN)	15	135	15	0.25	56.25
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	2	250	-	0.50	250.0
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	-	-	25	1.00	-
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					846.7

ENERGY COSTS - BILLED TO: CITY OF WHEATON
 (ADDRESS) 303 WEST WESLEY ST.
 (ADDRESS) WHEATON, IL 60187
 ENERGY SUPPLY - CONTACT: MS. DEB RANKIN
 PHONE: (630) 691-4379
 COMPANY: COM-ED

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = 4281.800-TR1.dwg
 USER NAME = ZACH WALLSTEN
 PLOT SCALE = 1" = .0833'
 PLOT DATE = 12/16/2011

DESIGNED - JRD
 DRAWN - ZCW
 CHECKED - KLB
 DATE - 12/16/2011

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

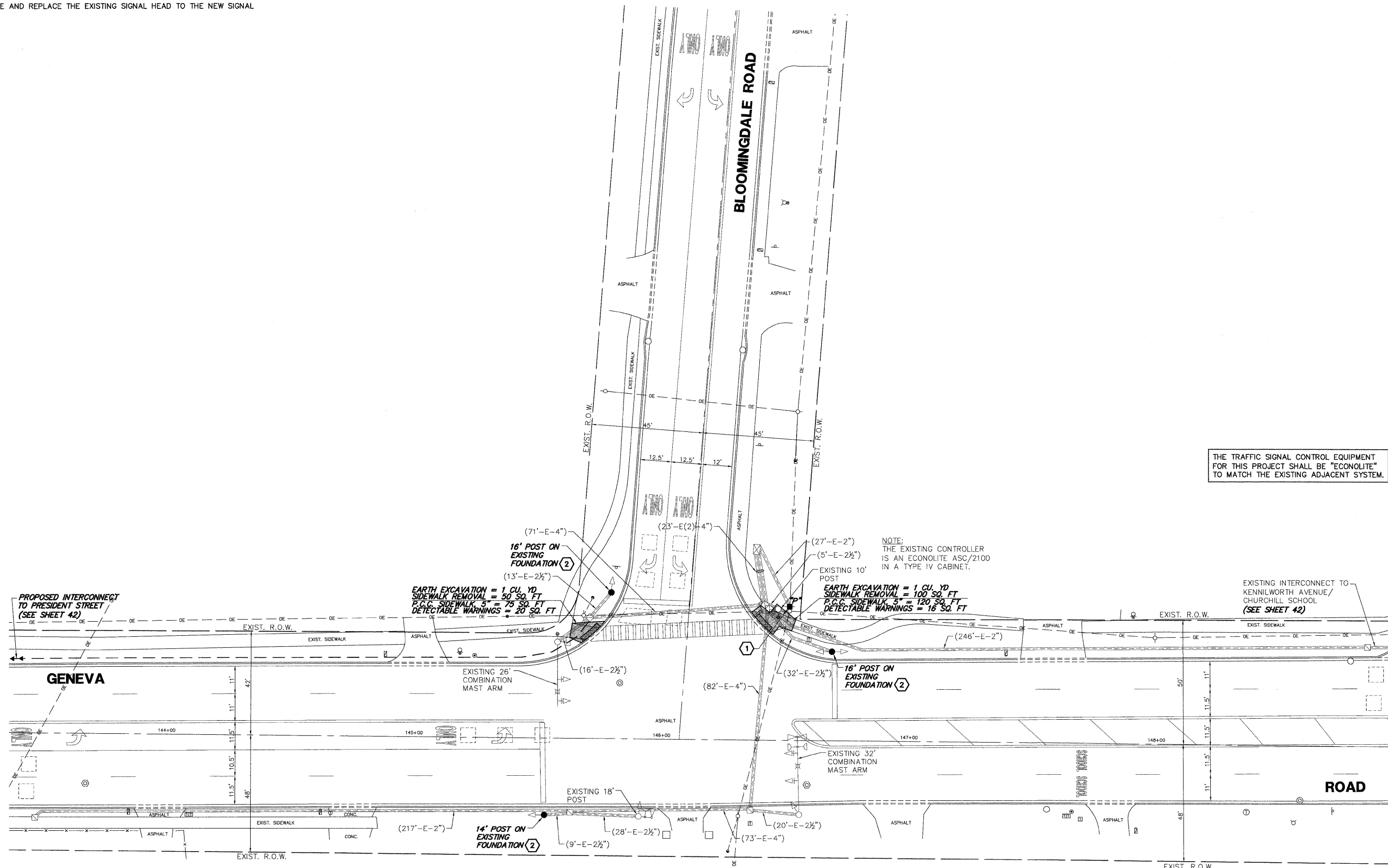
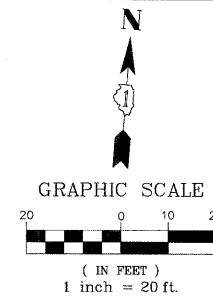
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
GENEVA ROAD AT PRESIDENT STREET

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

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	09-00206-08-TL	DuPAGE	53	14
CONTRACT #:			63625	
GHA #4281.800				
ILLINOIS FED. AID PROJECT				

CONSTRUCTION NOTES:

- ① REMOVE EXISTING SERVICE INSTALLATION AND INSTALL NEW SERVICE INSTALLATION, POLE MOUNTED.
- ② REMOVE AND REPLACE THE EXISTING SIGNAL HEAD TO THE NEW SIGNAL POST.



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

NOTE:
THE EXISTING CONTROLLER IS AN ECONOLITE ASC/2100 IN A TYPE IV CABINET.

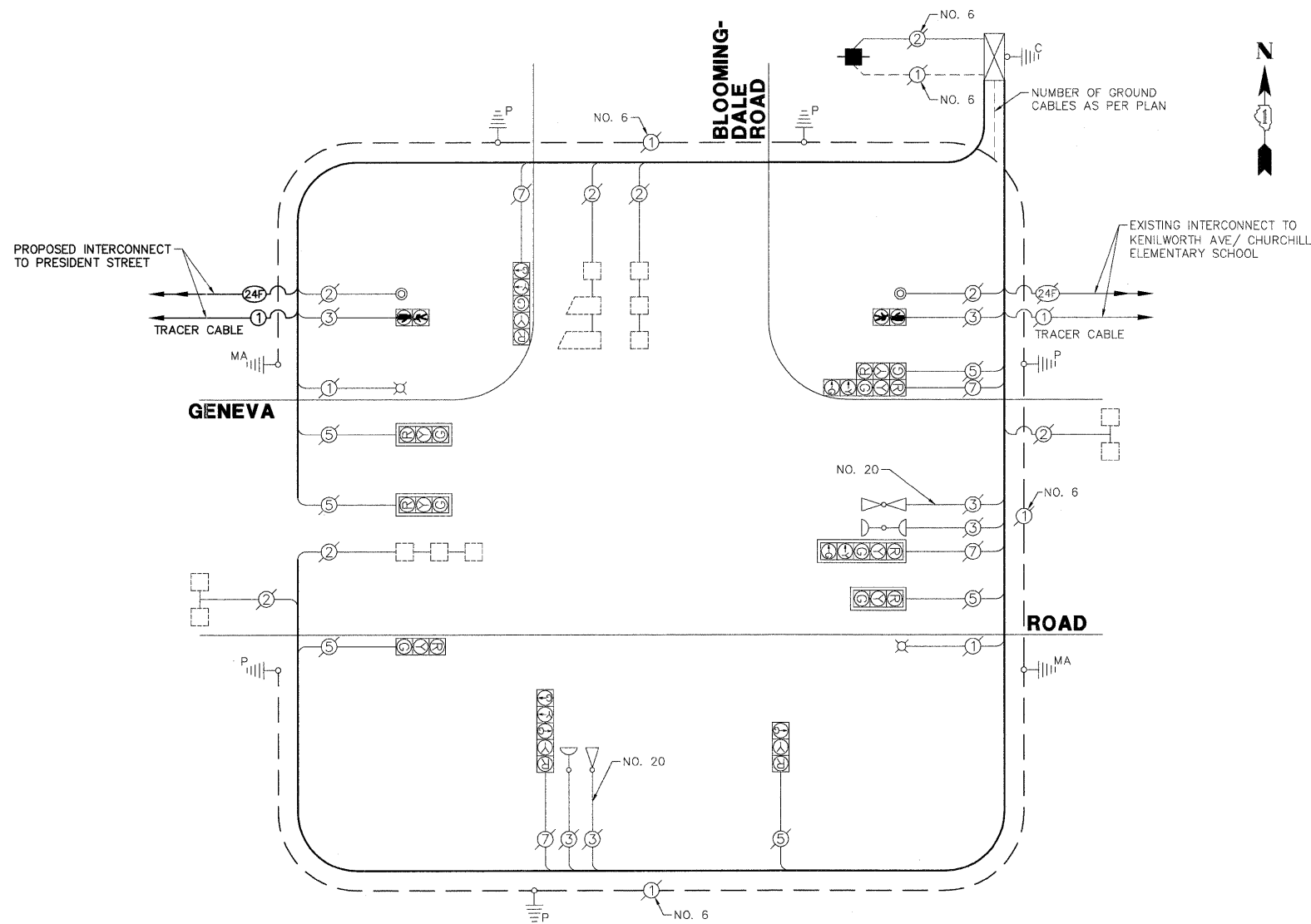
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 3 EACH SIGNAL POST
- 1 EACH SERVICE INSTALLATION

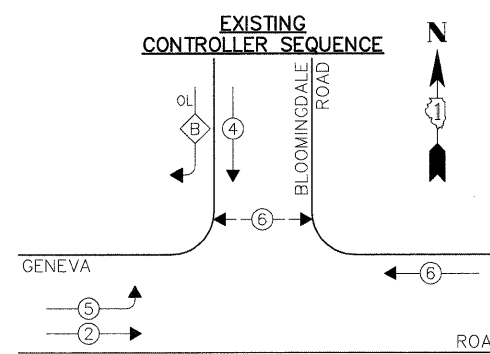
FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN GENEVA ROAD AT BLOOMINGDALE ROAD	FAU. RTE 1397	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 15	GHA #4281.800 CONTRACT # 63625 ILLINOIS FED. AID PROJECT
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	SCALE 1"=20'			SHEET NO. OF SHEETS	STA. TO STA.				
PLOT DATE = 12/16/2011	DATE - 12/16/2011	REVISED -									

SCHEDULE OF QUANTITIES
GENEVA ROAD AT BLOOMINGDALE ROAD

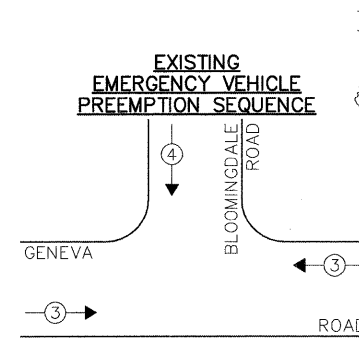
NO.	QUANT.	UNIT
1.	2	CU YD EARTH EXCAVATION
2.	195	SQ FT PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
3.	36	SQ FT DETECTABLE WARNINGS
4.	150	SQ FT SIDEWALK REMOVAL
5.	1	EACH SERVICE INSTALLATION - POLE MOUNTED
6.	1	EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
7.	1	EACH TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
8.	2	EACH TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
9.	4	EACH RELOCATE EXISTING SIGNAL HEAD
10.	1	EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
11.	1	EACH REMOVE EXISTING SERVICE INSTALLATION



CABLE PLAN



EXISTING PHASE DESIGNATION DIAGRAM



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	% OPERATION	
SIGNAL (RED)	10	135	17	0.50	85.0
SIGNAL (YELLOW)	10	135	25	0.25	62.5
SIGNAL (GREEN)	10	135	15	0.25	37.5
ARROW	9	135	12	0.10	10.8
PED. SIGNAL	2	90	25	1.00	50.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	2	250	-	0.50	250.0
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	-	-	25	1.00	-
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					595.8

ENERGY COSTS - BILLED TO: VILLAGE OF GLEN ELLYN
(ADDRESS) 20 S. LAMBERT ROAD
(ADDRESS) GLEN ELLYN, IL 60137
ENERGY SUPPLY - CONTACT: MS. DEB RANKIN
PHONE: (630) 691-4379
COMPANY: COM-ED

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -
	PLOT SCALE = 1" = .0833'	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/16/2011	CHECKED - KLB	REVISED -
		DATE - 12/16/2011	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
GENEVA ROAD AT BLOOMINGDALE ROAD**

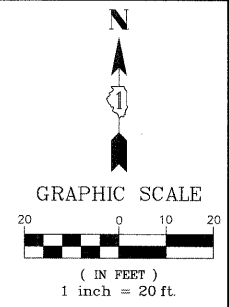
SCALE: N.A.	SHEET NO. OF SHEETS	STA. TO STA.
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FAU. RTE. 1397	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 16
ILLINOIS FED. AID PROJECT			CONTRACT #: 63625	

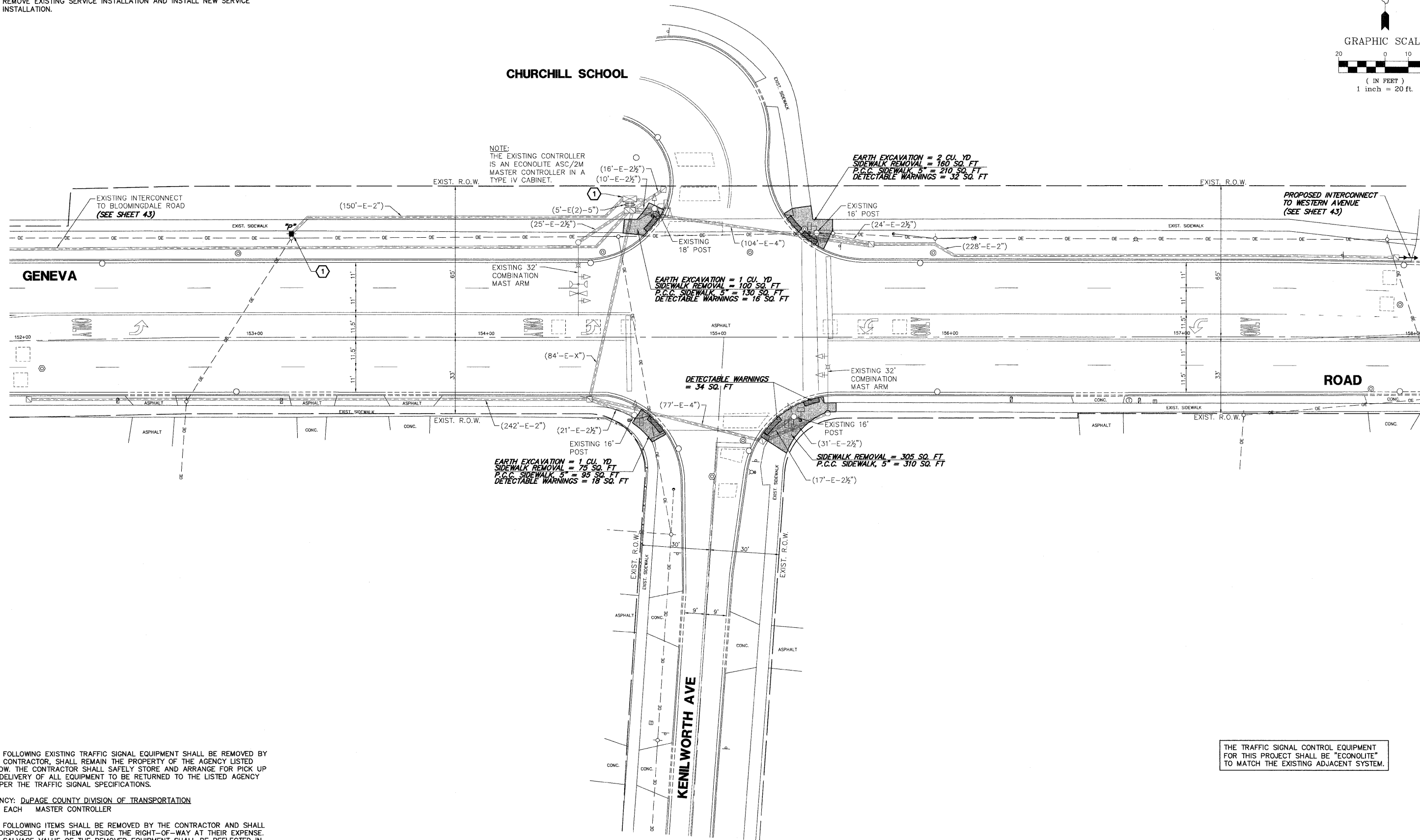
GHA #4281.800

CONSTRUCTION NOTES:

- ① REMOVE EXISTING MASTER CONTROLLER AND DELIVER TO DuPAGE COUNTY DIVISION OF TRANSPORTATION.
- ② REMOVE EXISTING SERVICE INSTALLATION AND INSTALL NEW SERVICE INSTALLATION.



CHURCHILL SCHOOL



THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OR DELIVERY OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DuPAGE COUNTY DIVISION OF TRANSPORTATION
 1 EACH MASTER CONTROLLER

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

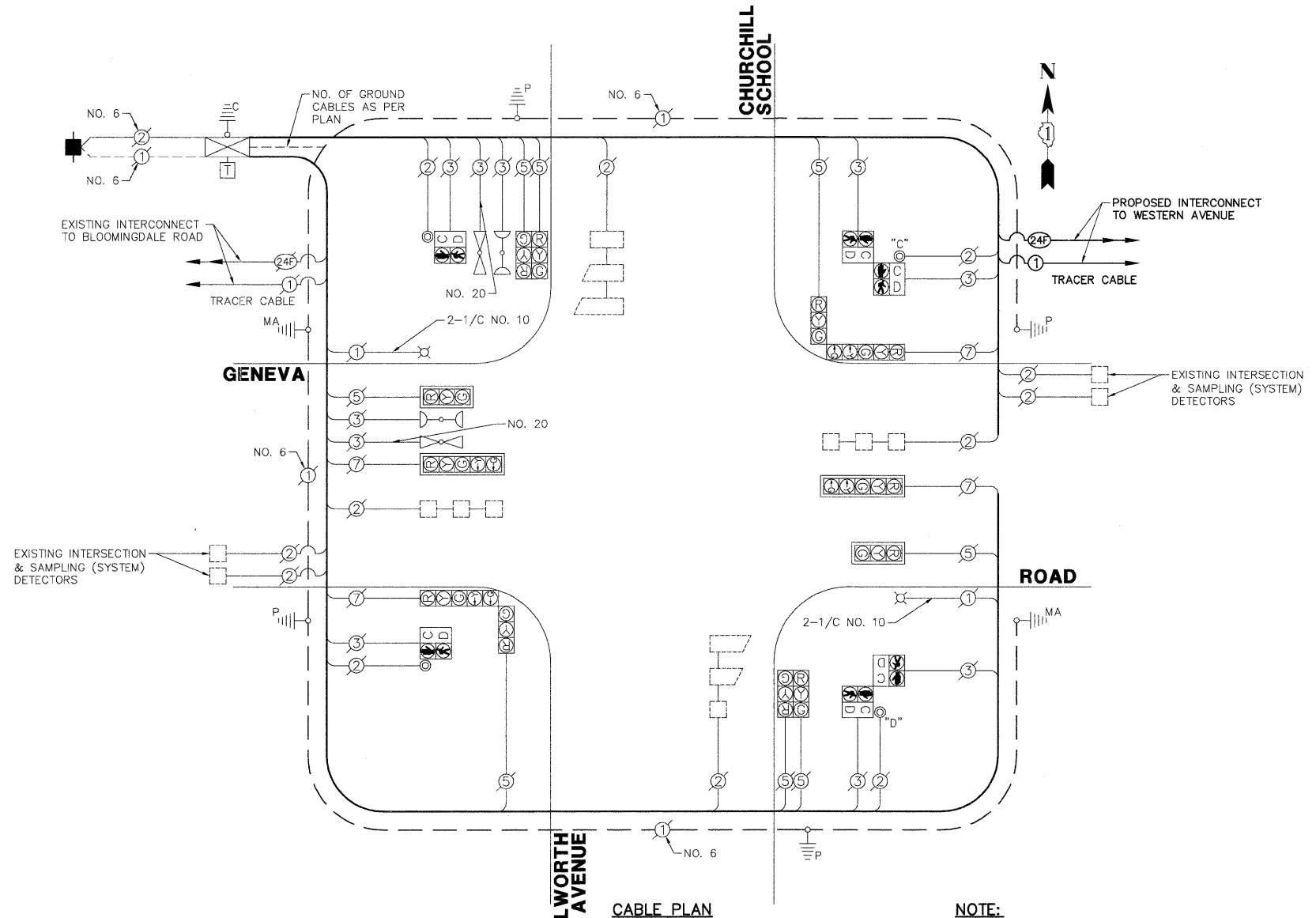
1 EACH SERVICE INSTALLATION

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN GENEVA RD AT KENILWORTH AVE/CHURCHILL SCHOOL			FAU. RTE 1397	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 17
	PLOT SCALE = 1" = .0833'	DRAWN - ZCW	REVISED -		SCALE 1"=20'	SHEET NO.	OF SHEETS	STA.	TO STA.	CONTRACT #: 63625		
	PLOT DATE = 12/16/2011	CHECKED - KLB	REVISED -							ILLINOIS FED. AID PROJECT		
		DATE - 12/16/2011	REVISED -							GHA #4281.800		

SCHEDULE OF QUANTITIES
GENEVA ROAD AT KENILWORTH AVENUE / CHURCHILL SCHOOL

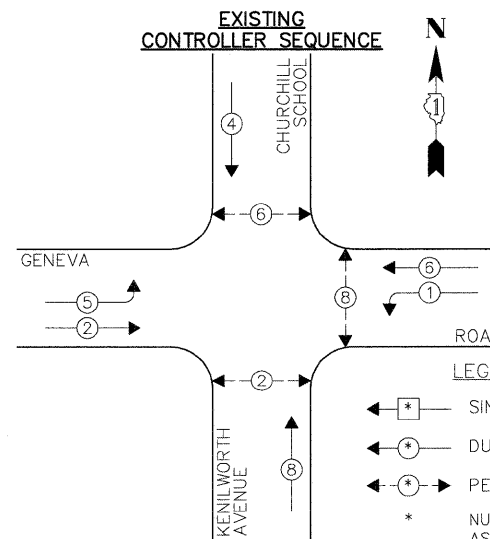
NO.	QUANT.	UNIT
1.	4	CU YD EARTH EXCAVATION
2.	745	SQ FT PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
3.	104	SQ FT DETECTABLE WARNINGS
4.	640	SQ FT SIDEWALK REMOVAL
5.	1	EACH SERVICE INSTALLATION - POLE MOUNTED
6.	1	EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
7.	1	EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
8.	1	EACH REMOVE EXISTING SERVICE INSTALLATION



CABLE PLAN

NOTE:
PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 8 AND 2.

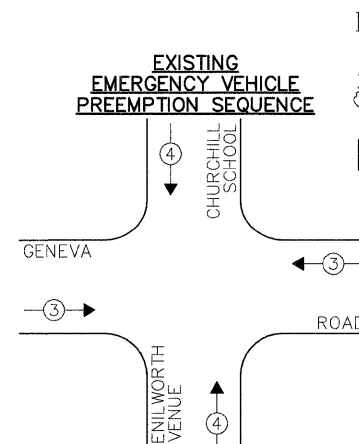
EXISTING CONTROLLER SEQUENCE



LEGEND:
 ◀ * ▶ SINGLE ENTRY PHASE
 ◀ * ▶ DUAL ENTRY PHASE
 ◀ * ▶ PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE
 ◀ * ▶ OVERLAP

EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	←	→	↑

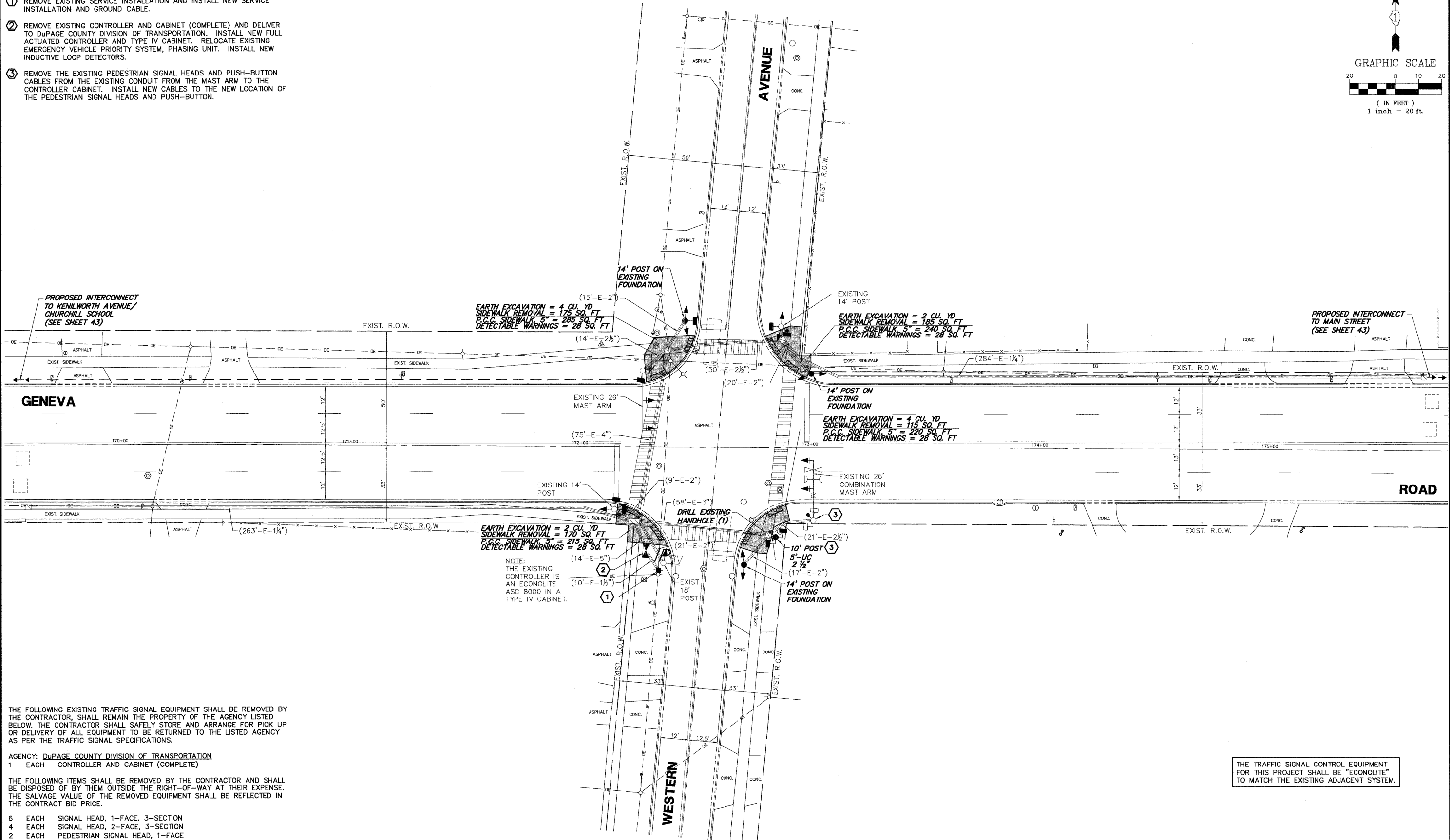
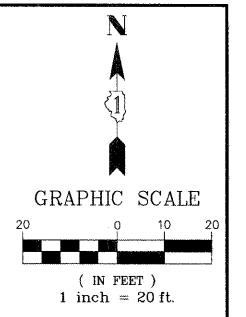
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE	% OPERATION		
SIGNAL (RED)	12	135	17	0.50	102.0
SIGNAL (YELLOW)	12	135	25	0.25	75.0
SIGNAL (GREEN)	12	135	15	0.25	45.0
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	6	90	25	1.00	150.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	2	250	-	0.50	250.0
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	-	-	25	1.00	-
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					731.6

ENERGY COSTS - BILLED TO: VILLAGE OF GLEN ELLYN
 (ADDRESS) 20 S. LAMBERT ROAD
 (ADDRESS) GLEN ELLYN, IL 60137
 ENERGY SUPPLY - CONTACT: MS. DEB RANKIN
 PHONE: (630) 691-4379
 COMPANY: COM-ED

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

CONSTRUCTION NOTES:

- ① REMOVE EXISTING SERVICE INSTALLATION AND INSTALL NEW SERVICE INSTALLATION AND GROUND CABLE.
- ② REMOVE EXISTING CONTROLLER AND CABINET (COMPLETE) AND DELIVER TO DUPAGE COUNTY DIVISION OF TRANSPORTATION. INSTALL NEW FULL ACTUATED CONTROLLER AND TYPE IV CABINET. RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT. INSTALL NEW INDUCTIVE LOOP DETECTORS.
- ③ REMOVE THE EXISTING PEDESTRIAN SIGNAL HEADS AND PUSH-BUTTON CABLES FROM THE EXISTING CONDUIT FROM THE MAST ARM TO THE CONTROLLER CABINET. INSTALL NEW CABLES TO THE NEW LOCATION OF THE PEDESTRIAN SIGNAL HEADS AND PUSH-BUTTON.



THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OR DELIVERY OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION
 1 EACH CONTROLLER AND CABINET (COMPLETE)

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

- 6 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 4 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 3 EACH PEDESTRIAN SIGNAL HEAD, 2-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 3 EACH SIGNAL POST
- 1 EACH SERVICE INSTALLATION

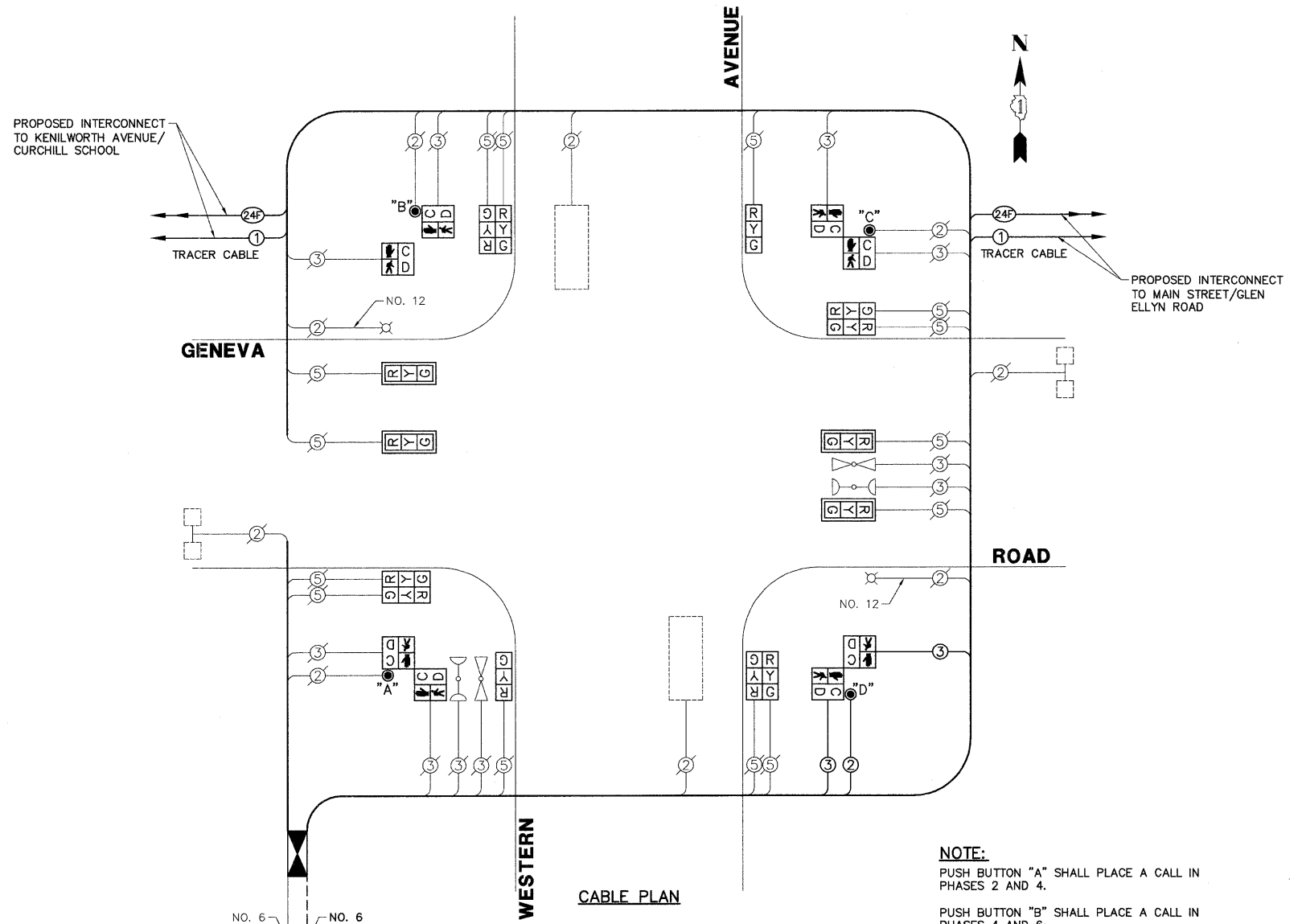
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME - 4281.800-TR1.dwg	USER NAME - ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN GENEVA ROAD AT WESTERN AVENUE	FAU. RTE. 1397	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 19		
PLOT SCALE = 1" = .0833'	CHECKED - KLB	DATE - 12/16/2011	REVISED -			SCALE 1"=20'	SHEET NO. OF SHEETS	STA.	TO STA.	CONTRACT #: 63625		
PLOT DATE = 12/16/2011	DATE - 12/16/2011	REVISED -	REVISED -			ILLINOIS FED. AID PROJECT						

CHA #4281.800

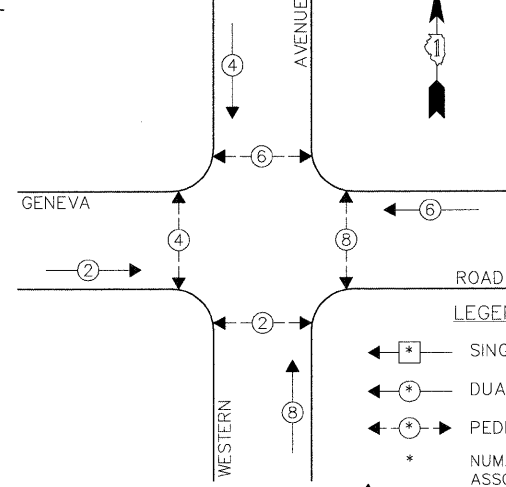
SCHEDULE OF QUANTITIES
GENEVA ROAD AT WESTERN AVENUE

NO.	QUANT.	UNIT	DESCRIPTION
1.	12	CU YD	EARTH EXCAVATION
2.	960	SQ FT	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
3.	112	SQ FT	DETECTABLE WARNINGS
4.	645	SQ FT	SIDEWALK REMOVAL
5.	1	EACH	SERVICE INSTALLATION - POLE MOUNTED
6.	5	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.
7.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
8.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
9.	1	EACH	TRANSCIVER - FIBER OPTIC
10.	109	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
11.	236	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
12.	19	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
13.	1	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.
14.	4	FOOT	CONCRETE FOUNDATION, TYPE A
15.	1	EACH	DRILL EXISTING HANDHOLE
16.	4	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
17.	2	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
18.	4	EACH	SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
19.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
20.	3	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
21.	4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
22.	4	EACH	INDUCTIVE LOOP DETECTOR
23.	4	EACH	PEDESTRIAN PUSH-BUTTON
24.	1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
25.	393	FOOT	REMOVE ELECTRIC CABLE FROM CONDUIT
26.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
27.	1	EACH	REMOVE EXISTING SERVICE INSTALLATION

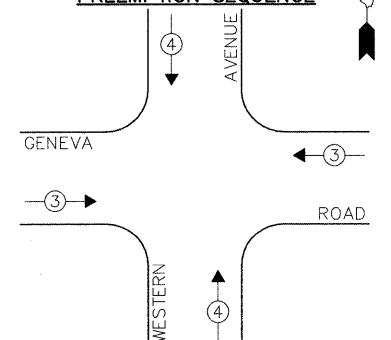


NOTE:
 PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
 PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
 PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
 PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 8 AND 2.

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	←	→	↑

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	% OPERATION	
SIGNAL (RED)	14	135	17	0.50	119.0
SIGNAL (YELLOW)	14	135	25	0.25	87.5
SIGNAL (GREEN)	14	135	15	0.25	52.5
ARROW	-	135	12	0.10	-
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	2	-	250	0.50	250.0
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	-	-	25	1.00	-
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					809.0

ENERGY COSTS - BILLED TO: VILLAGE OF GLEN ELLYN
 (ADDRESS) 20 S. LAMBERT ROAD
 (ADDRESS) GLEN ELLYN, IL 60137
 ENERGY SUPPLY - CONTACT: MS. DEB RANKIN
 PHONE: (630) 691-4379
 COMPANY: COM-ED

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -
PLOT SCALE = 1" = .0833'	CHECKED - KLB	DRAWN - ZCW	REVISED -
PLOT DATE = 12/16/2011	DATE - 12/16/2011		

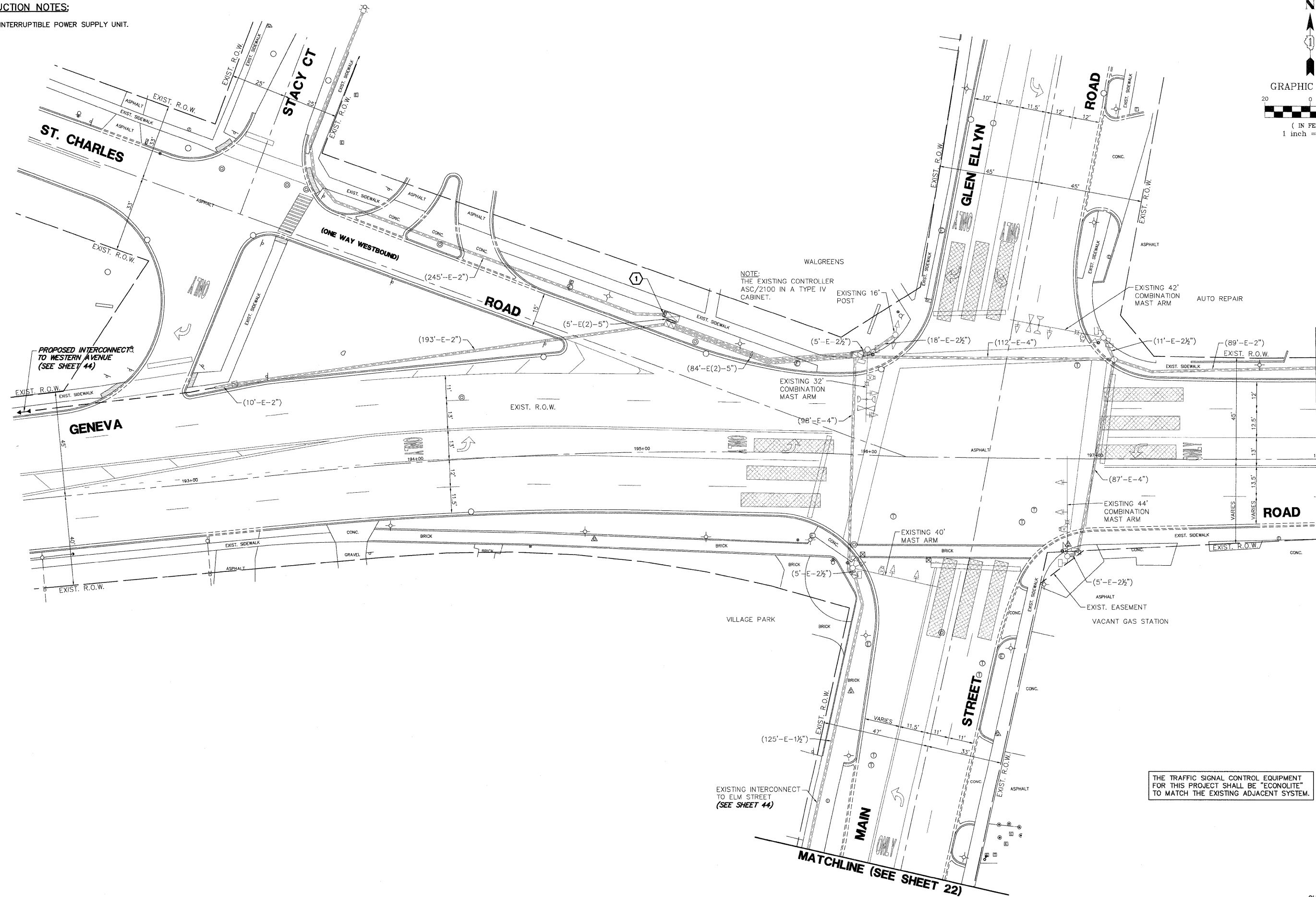
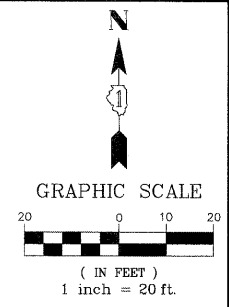
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
GENEVA ROAD AT WESTERN AVENUE

FAU. RTE. 1397	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 20
CONTRACT # 63625			GHA #4281.800	
ILLINOIS FED. AID PROJECT				

CONSTRUCTION NOTES:

- ① INSTALL UNINTERRUPTIBLE POWER SUPPLY UNIT.



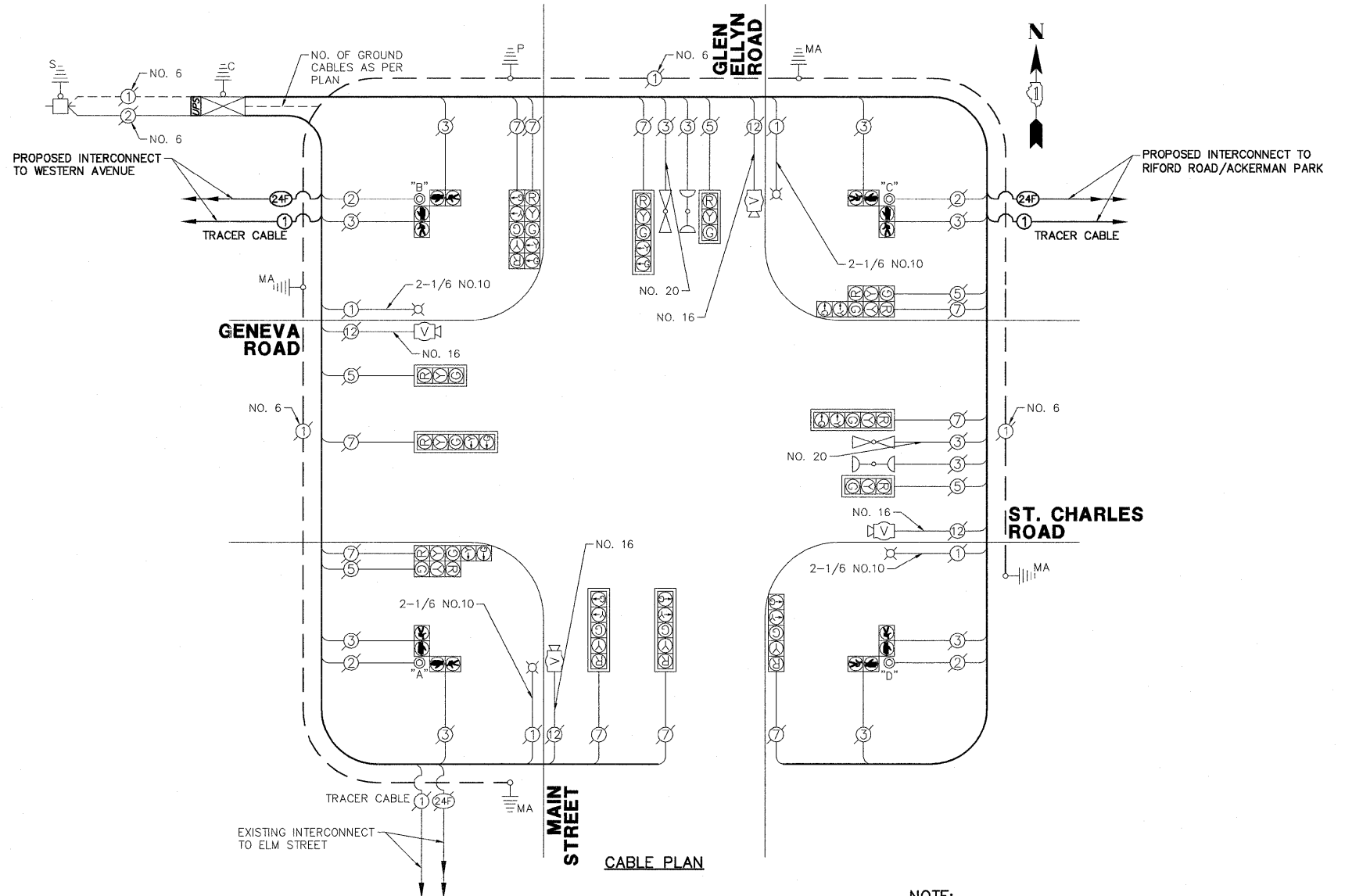
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN GENEVA RD/ST. CHARLES RD AT MAIN ST/GLEN ELLYN RD	FAUJ. RTE. 1397	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 21	GHA #4281.800 CONTRACT # 63625 ILLINOIS FED. AID PROJECT
PLOT SCALE = 1" = .0833'	CHECKED - KLB	DATE - 12/16/2011	REVISED -			SCALE 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.			
PLOT DATE = 12/16/2011	DATE - 12/16/2011	REVISED -	REVISED -								

SCHEDULE OF QUANTITIES

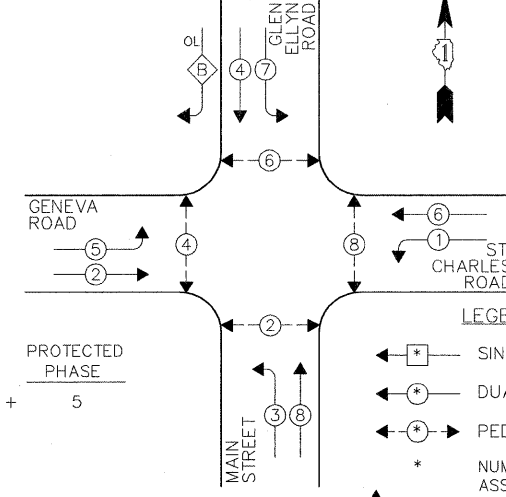
GENEVA ROAD / ST. CHARLES ROAD AT MAIN STREET / GLEN ELLYN ROAD

NO.	QUANT.	UNIT
1.	1	EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH TRANSCEIVER - FIBER OPTIC
3.	1	EACH UNINTERRUPTABLE POWER SUPPLY, SPECIAL

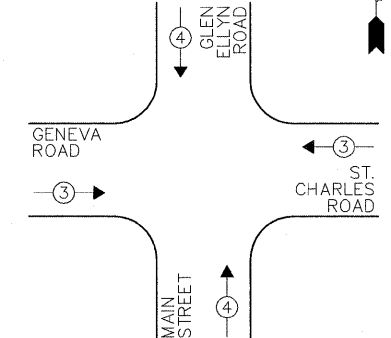


NOTE:
 PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
 PUSH BUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6
 PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8
 PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 8 AND 2

EXISTING CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	
MOVEMENT	←	→	↑

EXISTING PHASE DESIGNATION DIAGRAM

OVERLAP LETTER PERMISSIVE PHASE PROTECTED PHASE
 B = 4 + 5

- LEGEND:**
- ← * → SINGLE ENTRY PHASE
 - ← * DUAL ENTRY PHASE
 - ← * → PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE
 - ← * OL OVERLAP

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	% OPERATION	
SIGNAL (RED)	15	135	17	0.50	1,012.5
SIGNAL (YELLOW)	15	135	25	0.25	506.25
SIGNAL (GREEN)	15	135	15	0.25	506.25
ARROW	20	135	12	0.10	270.0
PED. SIGNAL	8	90	25	1.00	720.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	4	250	-	0.50	500.0
L.F.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	1	-	150	1.00	150.0
BATTERY BACKUP	-	-	25	1.00	-
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					3,765.0

ENERGY COSTS - BILLED TO: VILLAGE OF GLEN ELLYN
 (ADDRESS) 20 S. LAMBERT ROAD
 (ADDRESS) GLEN ELLYN, IL 60137
 ENERGY SUPPLY - CONTACT: MS. DEB RANKIN
 PHONE: (630) 691-4379
 COMPANY: COM-ED

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -
		DRAWN - ZCW	REVISED -
		CHECKED - KLB	REVISED -
		DATE - 12/16/2011	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

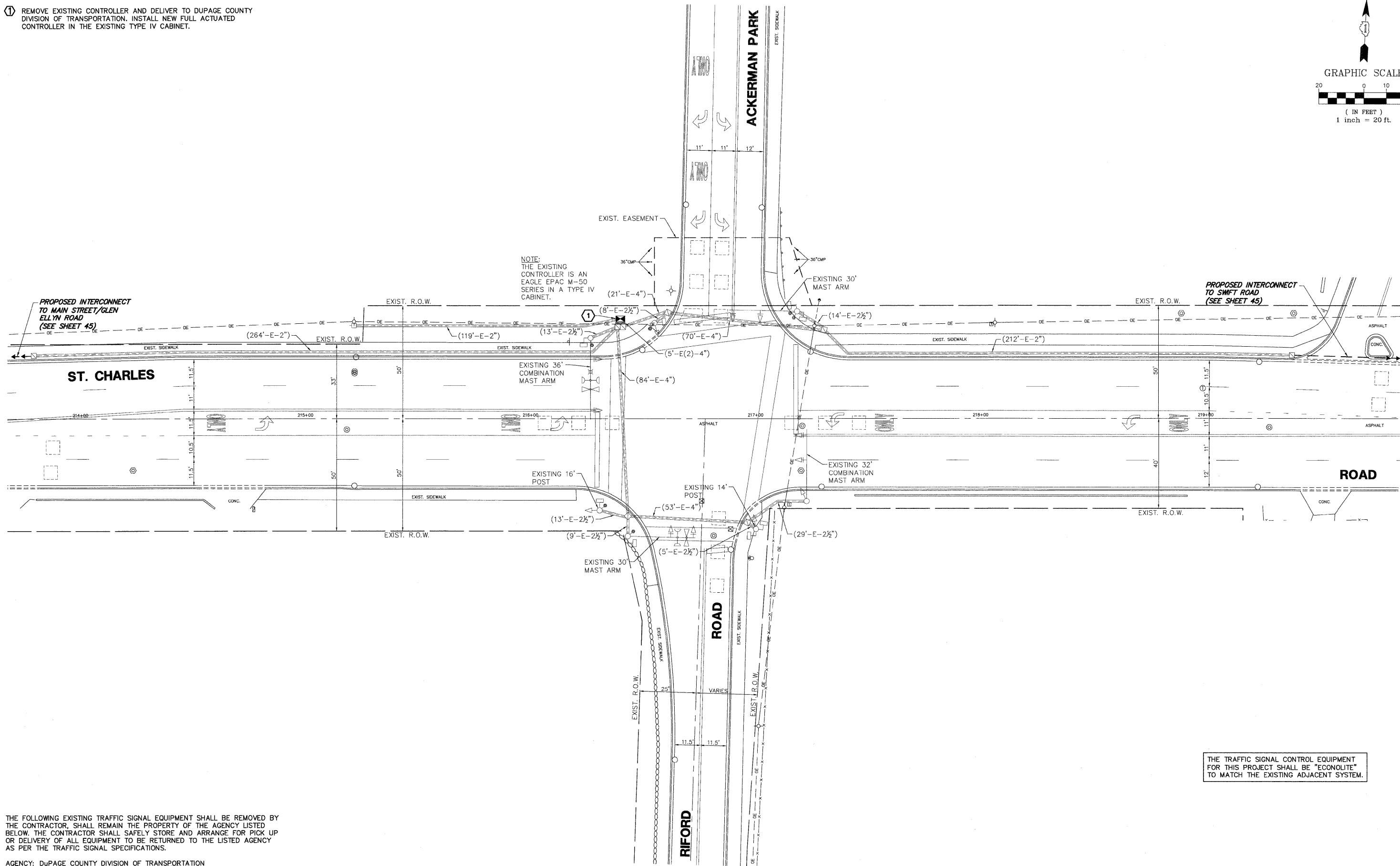
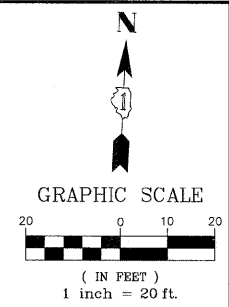
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
 GENEVA RD/ST. CHARLES RD AT MAIN ST/GLEN ELLYN RD
 SCALE: N.A. SHEET NO. OF SHEETS STA. TO STA.

FAU. RTE. 1397	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 23
CONTRACT # 63625				ILLINOIS FED. AID PROJECT

GHA #4281.800

CONSTRUCTION NOTES:

- ① REMOVE EXISTING CONTROLLER AND DELIVER TO DUPAGE COUNTY DIVISION OF TRANSPORTATION. INSTALL NEW FULL ACTUATED CONTROLLER IN THE EXISTING TYPE IV CABINET.



PROPOSED INTERCONNECT
TO SWIFT ROAD
(SEE SHEET 45)

PROPOSED INTERCONNECT
TO MAIN STREET/GLEN
ELLYN ROAD
(SEE SHEET 45)

THE TRAFFIC SIGNAL CONTROL EQUIPMENT
FOR THIS PROJECT SHALL BE "ECONOLITE"
TO MATCH THE EXISTING ADJACENT SYSTEM.

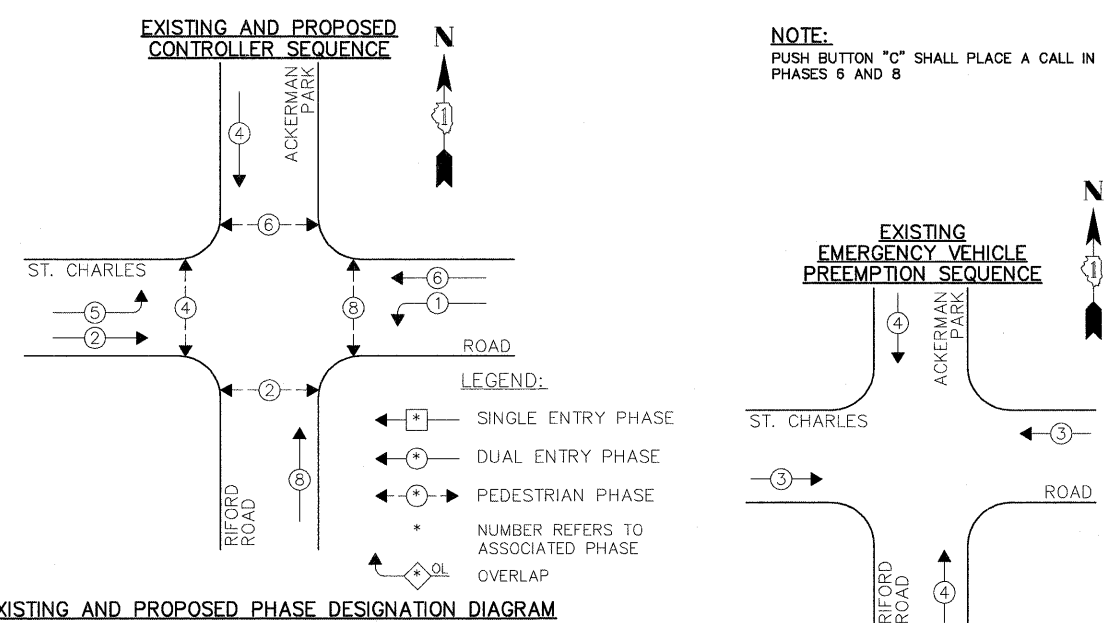
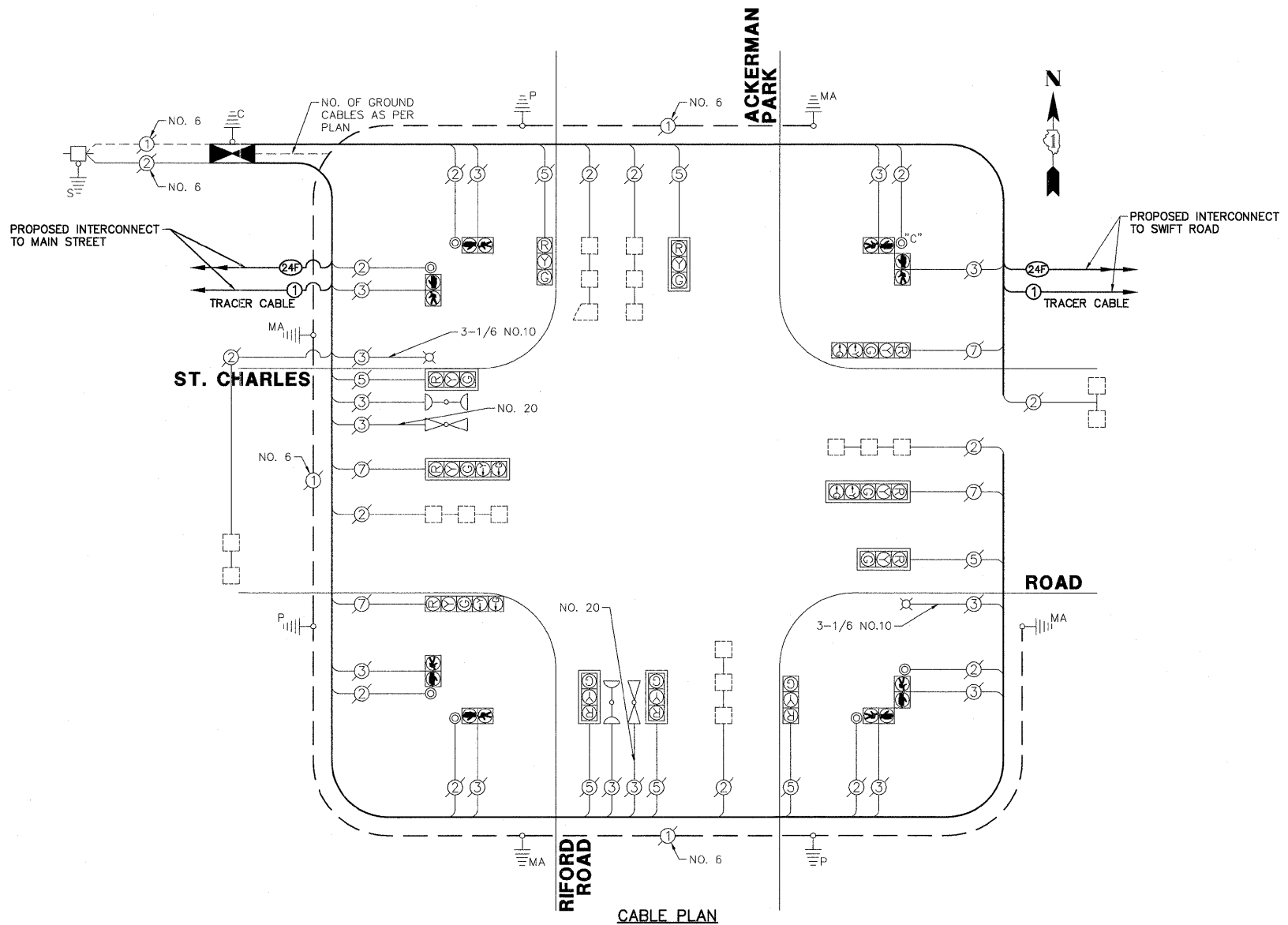
THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OR DELIVERY OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DUPAGE COUNTY DIVISION OF TRANSPORTATION
1 EACH CONTROLLER AND CABINET (COMPLETE)

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN ST. CHARLES ROAD AT RIFORD ROAD/ACKERMAN PARK	FAU. RTE. 1397	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 24	CONTRACT #: 63625	GH# 4281.800	
PLOT SCALE = 1" = .0833'	PLOT DATE = 12/16/2011	DRAWN - ZCW	REVISED -			SCALE 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT				
CHECKED - KLB	DATE - 12/16/2011	REVISOR -	REVISED -										

SCHEDULE OF QUANTITIES
ST. CHARLES ROAD AT RIFORD ROAD/ACKERMAN PARK

NO.	QUANT.	UNIT
1.	1 EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1 EACH	TRANSCIVER - FIBER OPTIC
3.	1 EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
4.	1 EACH	CONTROLLER (SPECIAL)



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	% OPERATION	
SIGNAL (RED)	11	135	17	0.50	94.0
SIGNAL (YELLOW)	11	135	25	0.25	69.0
SIGNAL (GREEN)	11	135	15	0.25	42.0
ARROW	8	135	12	0.10	10.0
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	2	250	-	0.50	250.0
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	-	-	25	1.00	-
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					765.0

ENERGY COSTS - BILLED TO: VILLAGE OF GLEN ELLYN
(ADDRESS) 20 S. LAMBERT ROAD
(ADDRESS) GLEN ELLYN, IL 60137
ENERGY SUPPLY - CONTACT: MS. DEB. RANKIN
PHONE: (630) 691-4379
COMPANY: COM-ED

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -
PLOT SCALE = 1" = .0833'	CHECKED - KLB	DRAWN - ZCW	REVISED -
PLOT DATE = 12/16/2011	DATE - 12/16/2011		REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

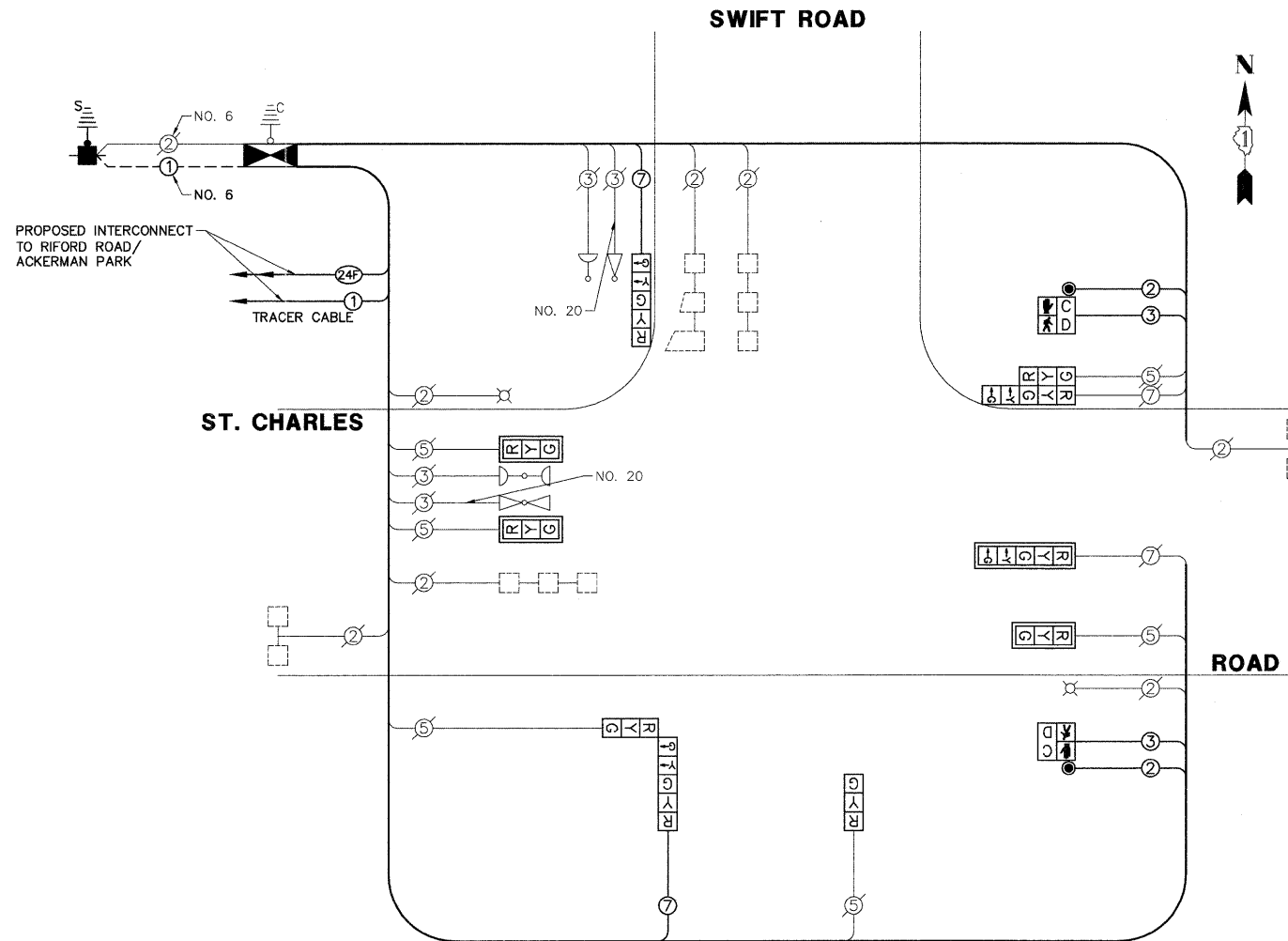
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
ST. CHARLES ROAD AT RIFORD ROAD/ACKERMAN PARK

FAU. RTE. 1397	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 25
CONTRACT # 63625				ILLINOIS FED. AID PROJECT

GHA #4281.800

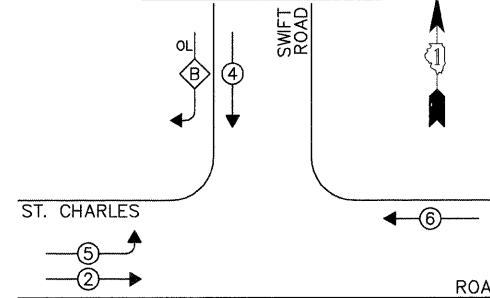
SCHEDULE OF QUANTITIES
ST. CHARLES ROAD AT SWIFT ROAD

NO.	QUANT.	UNIT	DESCRIPTION
1.	12	CU YD	EARTH EXCAVATION
2.	305	SQ FT	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
3.	24	SQ FT	DETECTABLE WARNINGS
4.	50	FOOT	COMBINATION CURB AND GUTTER REMOVAL
5.	50	FOOT	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
6.	155	FOOT	THERMOPLASTIC PAVEMENT MARKING - LINE 6"
7.	1	EACH	SERVICE INSTALLATION - POLE MOUNTED
8.	1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
9.	1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
10.	1	EACH	TRANSCIVER - FIBER OPTIC
11.	411	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
12.	429	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
13.	266	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
14.	47	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
15.	3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
16.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
17.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
18.	1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
19.	2	EACH	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
20.	2	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
21.	4	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
22.	5	EACH	INDUCTIVE LOOP DETECTOR
23.	2	EACH	PEDESTRIAN PUSH-BUTTON
24.	1	EACH	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
25.	238	FOOT	REMOVE ELECTRIC CABLE FROM CONDUIT
26.	1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
27.	1	EACH	REMOVE EXISTING SERVICE INSTALLATION

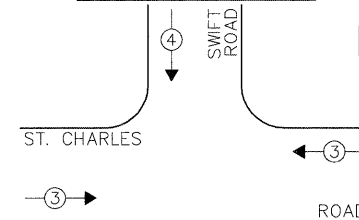


CABLE PLAN

EXISTING AND PROPOSED CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



LEGEND:

- ◀ * → SINGLE ENTRY PHASE
- ◀ * → DUAL ENTRY PHASE
- ◀ * → PEDESTRIAN PHASE
- * NUMBER REFERS TO ASSOCIATED PHASE
- ◀ * OL → OVERLAP

EXISTING AND PROPOSED PHASE DESIGNATION DIAGRAM

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

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	% OPERATION	
SIGNAL (RED)	10	135	17	0.50	85.0
SIGNAL (YELLOW)	10	135	25	0.25	62.5
SIGNAL (GREEN)	10	135	15	0.25	37.5
ARROW	8	135	12	0.10	9.6
PED. SIGNAL	2	90	25	1.00	50.0
CONTROLLER	1	—	100	1.00	100.0
LUMINAIRE	2	250	—	0.50	250.0
L.E.D. ST. NAME SIGN	—	—	64	0.50	—
VIDEO SYSTEM	—	—	150	1.00	—
BATTERY BACKUP	—	—	25	1.00	—
ILLUMINATED SIGN	—	—	25	0.05	—
TOTAL =					594.6

ENERGY COSTS - BILLED TO: VILLAGE OF GLEN ELLYN
(ADDRESS) 20 S. LAMBERT ROAD
(ADDRESS) GLEN ELLYN, IL 60137
ENERGY SUPPLY - CONTACT: MS. DEB RANKIN
PHONE: (630) 691-4379
COMPANY: COM-ED

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -
	PLOT SCALE = 1" = .0833'	DRAWN - ZCW	REVISED -
	PLOT DATE = 12/16/2011	CHECKED - KLB	REVISED -
		DATE - 12/16/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

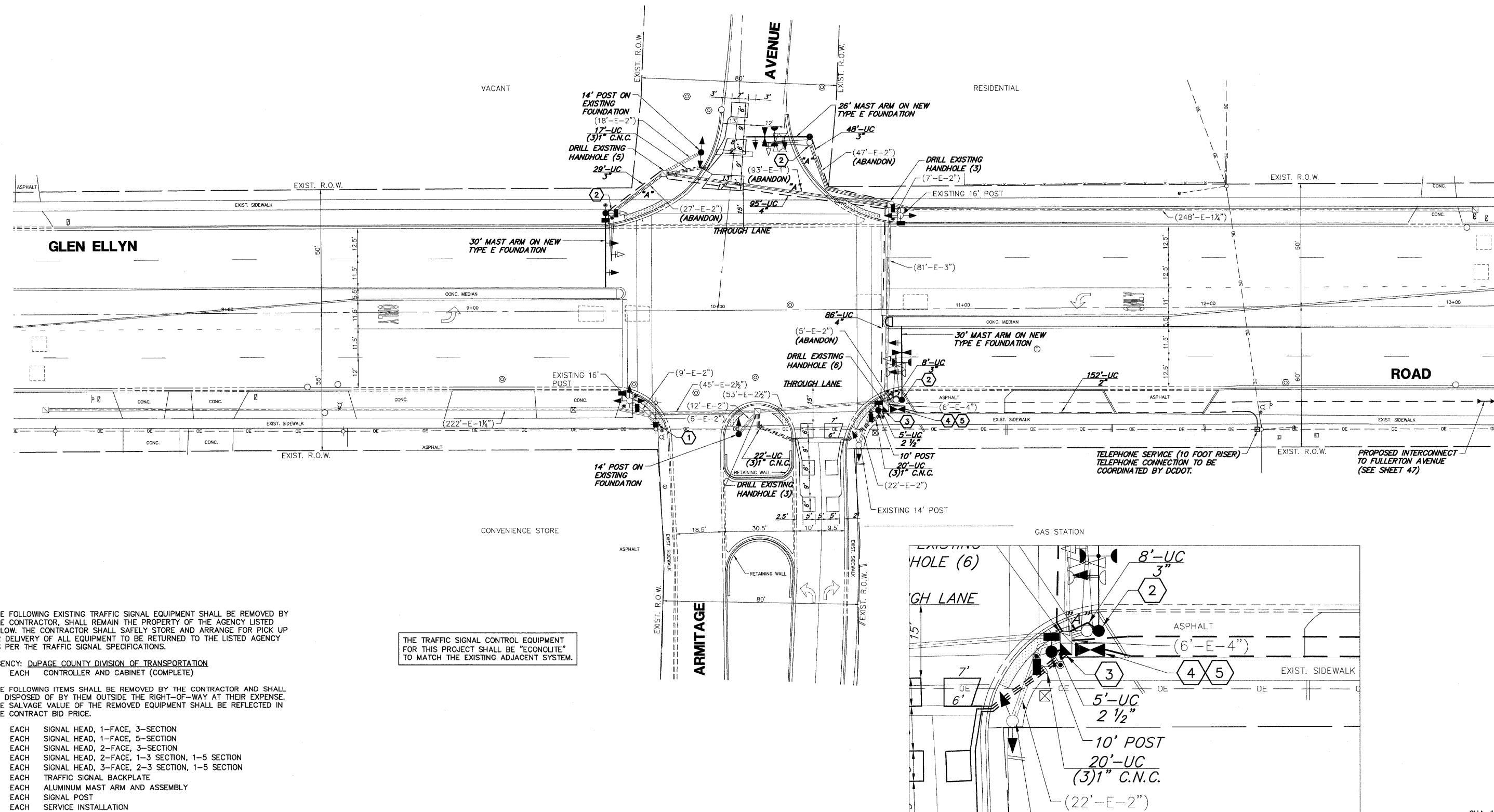
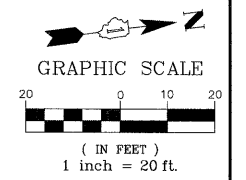
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE			
ST. CHARLES ROAD AT SWIFT ROAD			
SCALE: N.A.	SHEET NO. OF SHEETS	STA. TO STA.	

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	09-00206-08-TL	DuPAGE	53	27
CONTRACT #:			63625	
ILLINOIS FED. AID PROJECT				

GHA #4281.800

CONSTRUCTION NOTES:

- ① REMOVE EXISTING SERVICE INSTALLATION AND INSTALL A NEW SERVICE INSTALLATION AND GROUND CABLE.
- ② REMOVE EXISTING ALUMINUM MAST ARM ASSEMBLY, FOUNDATION, ALL CABLES BACK TO THE CONTROLLER CABINET, AND ABANDON ALL CONDUIT IN PLACE.
- ③ REBUILD EXISTING HANDHOLE TO DOUBLE HANDHOLE.
- ④ MODIFY EXISTING CONTROLLER FOUNDATION TO ACCOMMODATE NEW CONDUITS.
- ⑤ REMOVE EXISTING CONTROLLER AND CABINET (COMPLETE) AND INSTALL NEW FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL, MASTER CONTROLLER, SPECIAL, AND TRANSCEIVER-FIBER OPTIC.



THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR. THE CONTRACTOR SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OR DELIVERY OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DuPAGE COUNTY DIVISION OF TRANSPORTATION
 1 EACH CONTROLLER AND CABINET (COMPLETE)

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

- 5 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 1 EACH SIGNAL HEAD, 3-FACE, 2-3 SECTION, 1-5 SECTION
- 3 EACH TRAFFIC SIGNAL BACKPLATE
- 3 EACH ALUMINUM MAST ARM AND ASSEMBLY
- 3 EACH SIGNAL POST
- 1 EACH SERVICE INSTALLATION

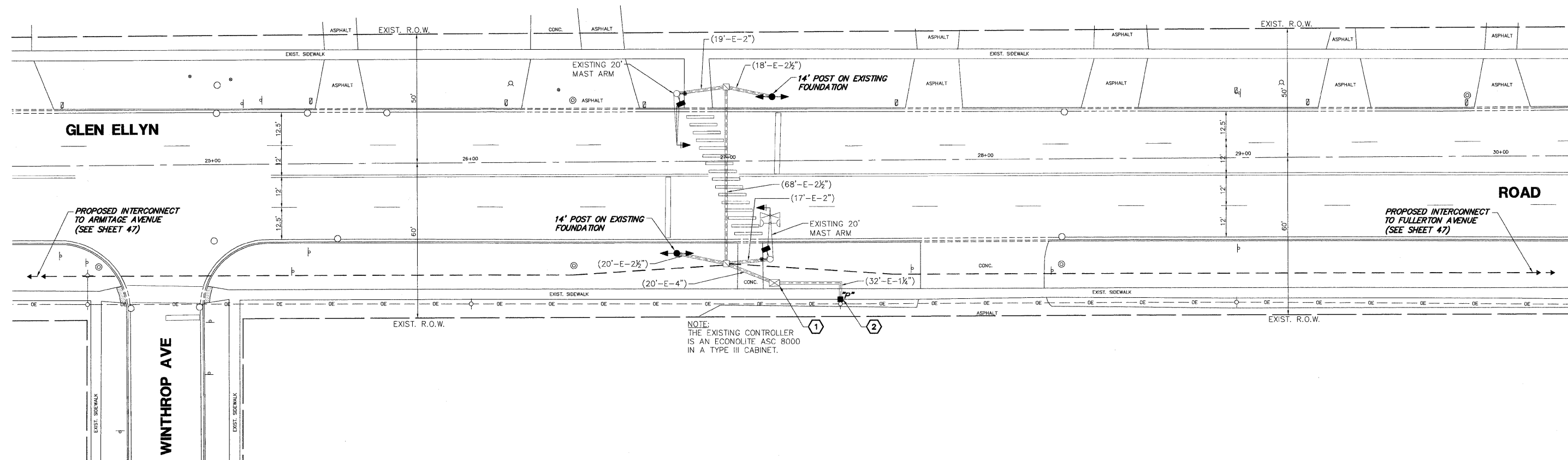
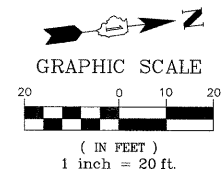
THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN GLEN ELLYN ROAD AT ARMITAGE ROAD	SCALE 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	FAUJ. RTE. 2581	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 28	CONTRACT # 63625	ILLINOIS FED. AID PROJECT
PLOT SCALE = 1" = .0833'		CHECKED - KLB	REVISED -												
PLOT DATE = 12/16/2011		DATE - 12/16/2011	REVISED -												

GHA #4281.800

CONSTRUCTION NOTES:

- ① REMOVE EXISTING CONTROLLER AND CABINET (COMPLETE) AND DELIVER TO DuPAGE COUNTY DIVISION OF TRANSPORTATION. INSTALL NEW FULL-ACTUATED CONTROLLER AND TYPE II CABINET (POST-TOP MOUNTED).
- ② REMOVE EXISTING SERVICE INSTALLATION AND INSTALL NEW SERVICE INSTALLATION AND GROUND CABLE.



THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR. THE EQUIPMENT SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OR DELIVERY OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DuPAGE COUNTY DIVISION OF TRANSPORTATION
 1 EACH CONTROLLER AND CABINET, (COMPLETE)

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

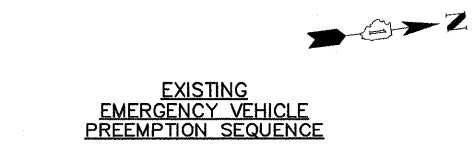
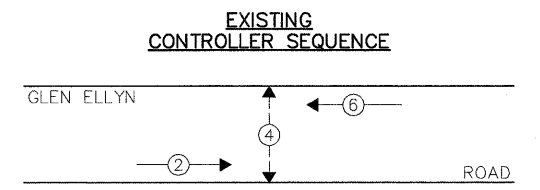
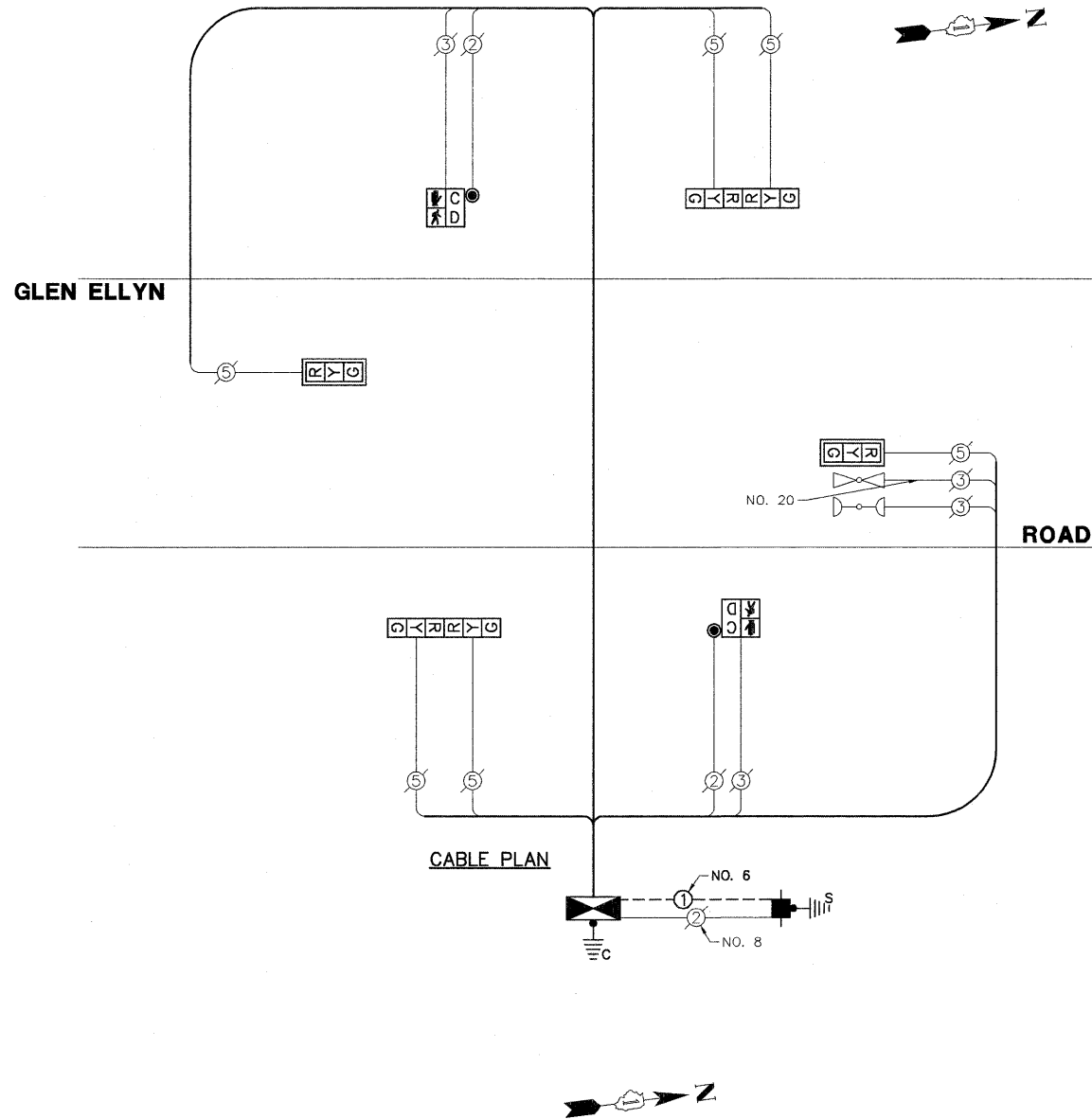
- 2 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 3-SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH PEDESTRIAN PUSH-BUTTON
- 2 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH SIGNAL POST
- 1 EACH SERVICE INSTALLATION

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MID-BLOCK CROSSING GLEN ELLYN ROAD AT MID-BLOCK CROSSING	FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 1" = .0833'	DRAWN - ZCW	REVISED -			2581	09-00206-08-TL	DuPAGE	53	30	
	PLOT DATE = 12/16/2011	CHECKED - KLB	REVISED -			CONTRACT #:		63625		GHA #4281.800	
				SCALE 1"=20'		SHEET NO. OF SHEETS		STA. TO STA.		ILLINOIS FED. AID PROJECT	

SCHEDULE OF QUANTITIES
GLEN ELLYN ROAD AT MID-BLOCK CROSSING

NO.	QUANT.	UNIT
1.	1	EACH SERVICE INSTALLATION - POLE MOUNTED
2.	1	EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
3.	1	EACH FULL-ACTUATED CONTROLLER AND TYPE II CABINET
4.	1	EACH TRANSCEIVER - FIBER OPTIC
5.	41	FOOT ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
6.	2	EACH TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
7.	2	EACH SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
8.	2	EACH SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED
9.	2	EACH PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
10.	2	EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
11.	2	EACH PEDESTRIAN PUSH-BUTTON
12.	1	EACH REMOVE EXISTING SERVICE INSTALLATION
13.	1	EACH RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
14.	1	EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT



- LEGEND:**
- ◀ * ▶ SINGLE ENTRY PHASE
 - ◀ * DUAL ENTRY PHASE
 - ◀ * ▶ PEDESTRIAN PHASE
 - * NUMBER REFERS TO ASSOCIATED PHASE
 - OL OVERLAP

EXISTING EMERGENCY VEHICLE PREEMPTORS	
EMERGENCY VEHICLE PREEMPTOR	3
MOVEMENT	→

EXISTING PHASE DESIGNATION DIAGRAM

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND. L.E.D. % OPERATION		
SIGNAL (RED)	6	135 17 0.50	51.0	
SIGNAL (YELLOW)	6	135 25 0.25	37.5	
SIGNAL (GREEN)	6	135 15 0.25	22.5	
ARROW	-	135 12 0.10	-	
PED. SIGNAL	2	90 25 1.00	50	
CONTROLLER	1	- 100 1.00	100.0	
LUMINAIRE	-	- 250 0.50	-	
L.E.D. ST. NAME SIGN	-	- 64 0.50	-	
VIDEO SYSTEM	-	- 150 1.00	-	
BATTERY BACKUP	-	- 25 1.00	-	
ILLUMINATED SIGN	-	- 25 0.05	-	
TOTAL =				261.0

ENERGY COSTS - BILLED TO: VILLAGE OF GLEN ELLYN
(ADDRESS) 20 S. LAMBERT ROAD
(ADDRESS) GLEN ELLYN, IL 60137
ENERGY SUPPLY - CONTACT: MS. DEB. RANKIN
PHONE: (630) 691-4379
COMPANY: CQM-ED

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -
PLOT SCALE = 1" = .0833'	DATE = 12/16/2011	DRAWN - ZCW	REVISED -
		CHECKED - KLB	REVISED -
			REVISED -

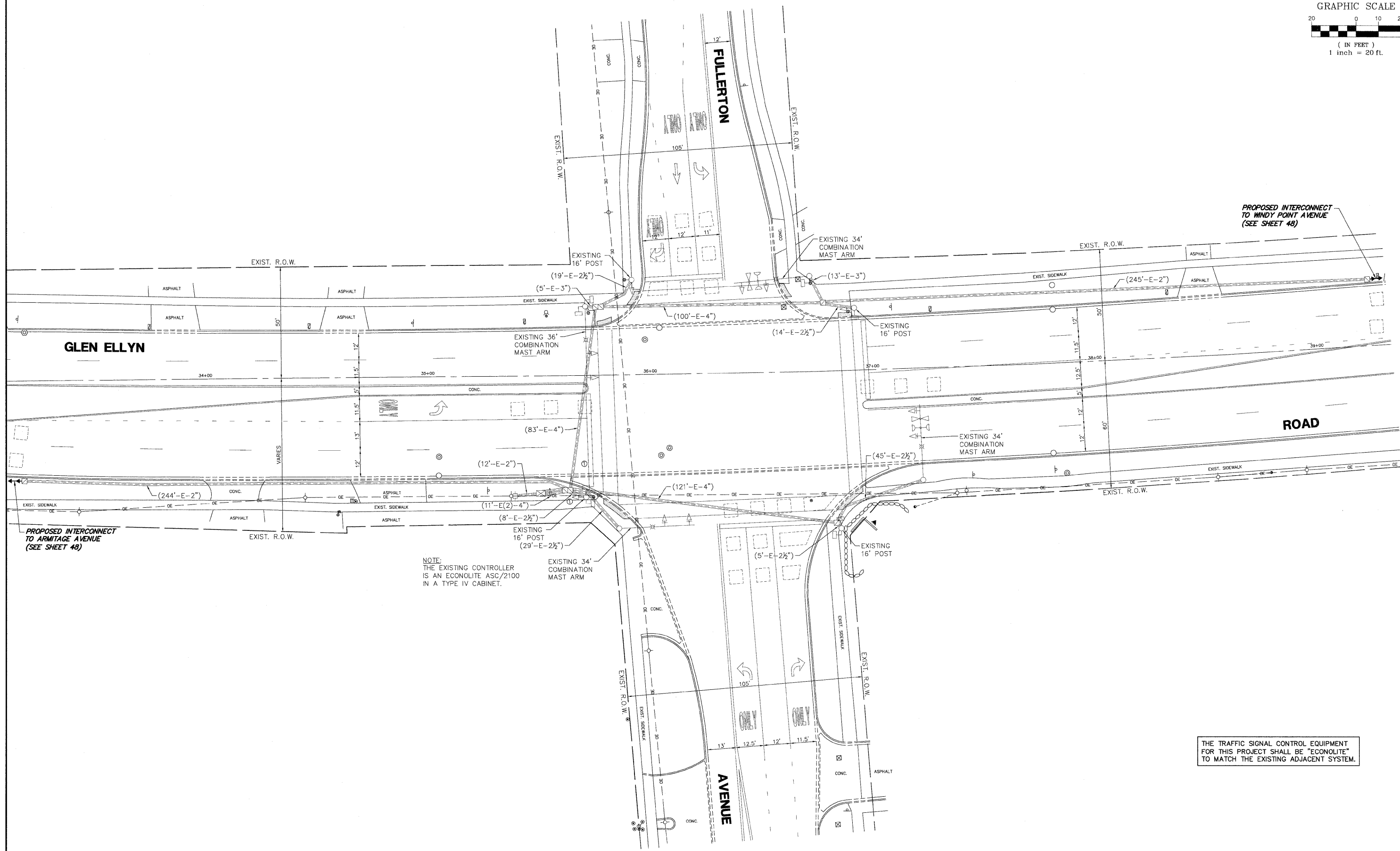
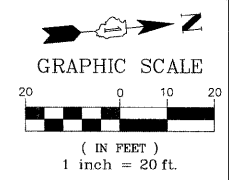
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
GLEN ELLYN ROAD AT MID-BLOCK CROSSING

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

FAU. RTE. 2581	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 31
ILLINOIS FED. AID PROJECT			CONTRACT #: 63625	

GHA #4281.800



PROPOSED INTERCONNECT TO ARMITAGE AVENUE (SEE SHEET 48)

PROPOSED INTERCONNECT TO WINDY POINT AVENUE (SEE SHEET 48)

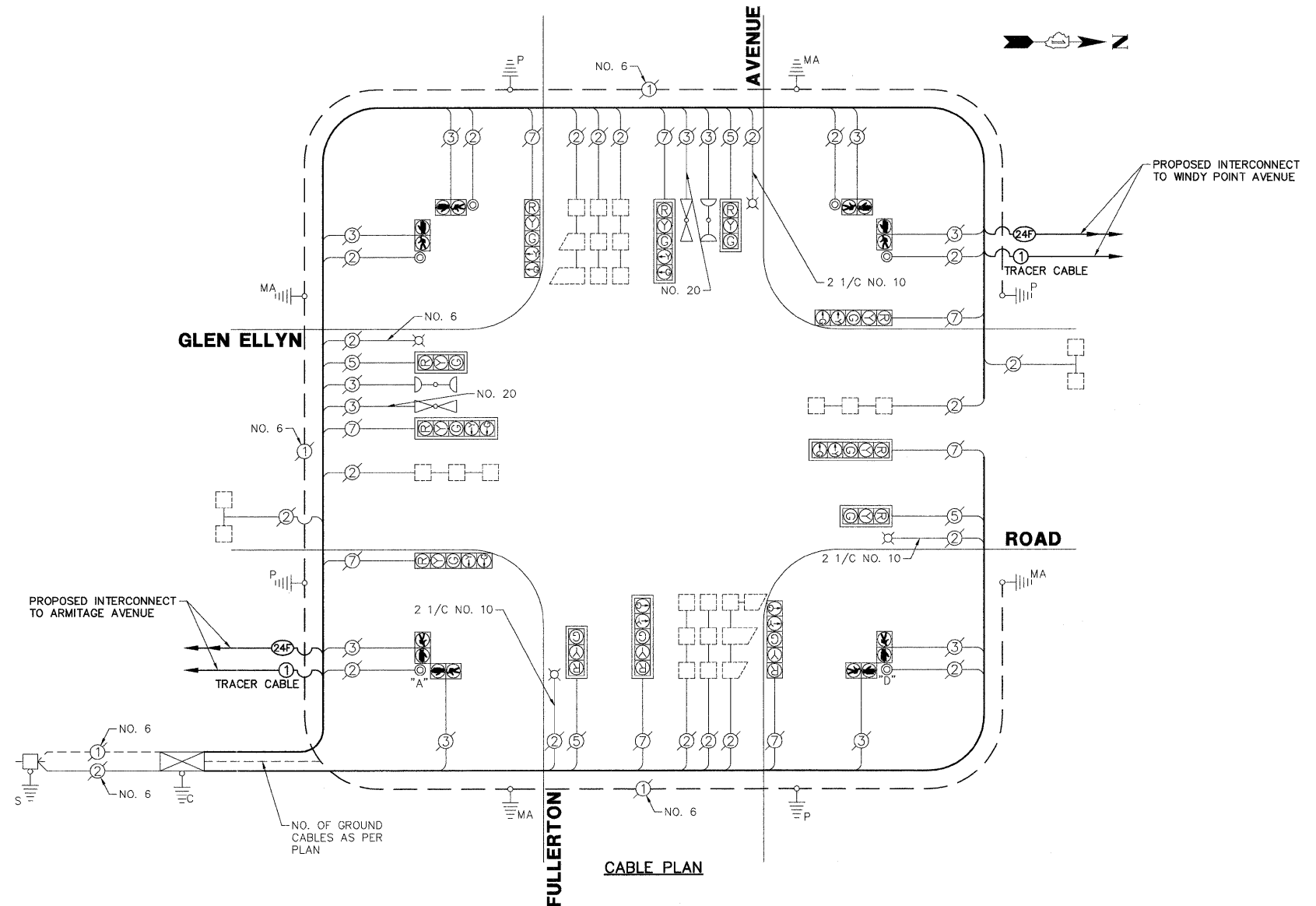
NOTE: THE EXISTING CONTROLLER IS AN ECONOLITE ASC/2100 IN A TYPE IV CABINET.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

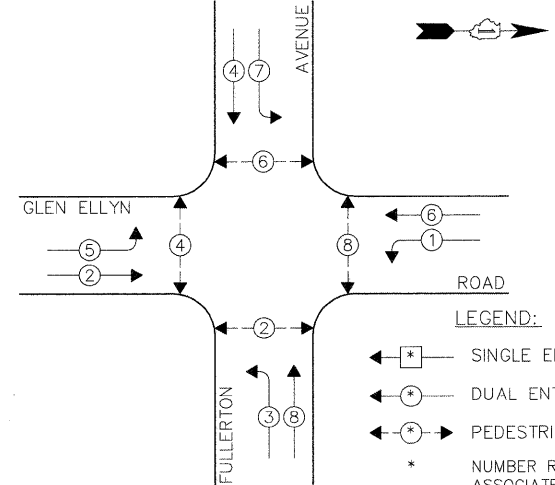
FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN GLEN ELLYN ROAD AT FULLERTON AVENUE	FAJ. RTE. 2581	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 32	GHA #4281.800 CONTRACT # 63625 ILLINOIS FED. AID PROJECT	
	PLOT SCALE = 1" = .0833'	DRAWN - ZCW	REVISED -			SCALE 1"=20'	SHEET NO. OF SHEETS	STA.	TO STA.			
	PLOT DATE = 12/16/2011	CHECKED - KLB	REVISED -									
		DATE - 12/16/2011	REVISED -									

SCHEDULE OF QUANTITIES
GLEN ELLYN ROAD AT FULLERTON AVENUE

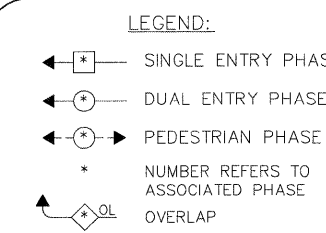
NO.	QUANT.	UNIT
1.	1	EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH TRANSCEIVER - FIBER OPTIC



EXISTING CONTROLLER SEQUENCE

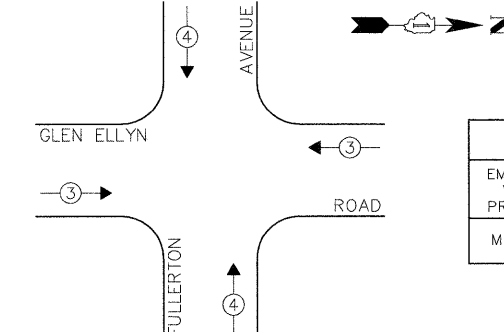


EXISTING PHASE DESIGNATION DIAGRAM



NOTE:
PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE	INCAND. L.E.D. % OPERATION		
SIGNAL (RED)	12	135	17	0.50	102.0
SIGNAL (YELLOW)	12	135	25	0.25	75.0
SIGNAL (GREEN)	12	135	15	0.25	45.0
ARROW	16	135	12	0.10	19.2
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	4	250	-	0.50	500.0
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	-	-	25	1.00	-
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					1041.2

ENERGY COSTS - BILLED TO: VILLAGE OF GLEN ELLYN
(ADDRESS) 20 S. LAMBERT ROAD
(ADDRESS) GLEN ELLYN, IL 60137
ENERGY SUPPLY - CONTACT: MS. DEB RANKIN
PHONE: (630) 691-4379
COMPANY: COM-ED

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

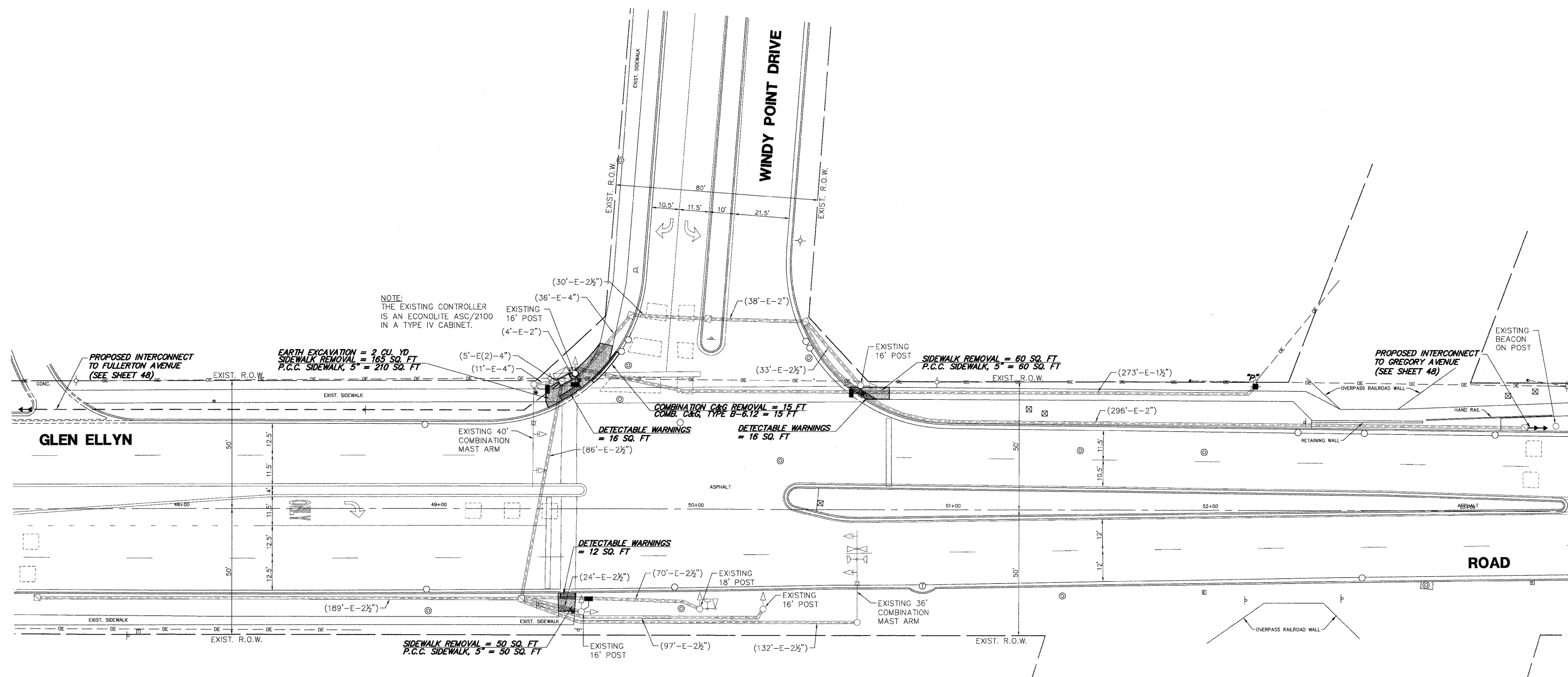
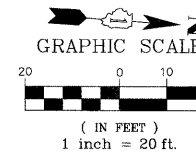
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION
DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
GLEN ELLYN ROAD AT FULLERTON AVENUE**

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -
PLOT SCALE = 1" = .0833'	CHECKED - KLB	DRAWN - ZCW	REVISED -
PLOT DATE = 12/16/2011	DATE - 12/16/2011		REVISED -

SCALE N.A.	SHEET NO. OF SHEETS	STA. TO STA.
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FAU. RTE. 2581	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 33
CONTRACT # 63625			GHA #4281.800	
ILLINOIS FED. AID PROJECT				



NOTE:
THE EXISTING CONTROLLER
IS AN ECONOLITE ASC/2100
IN A TYPE IV CABINET.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT
FOR THIS PROJECT SHALL BE "ECONOLITE"
TO MATCH THE EXISTING ADJACENT SYSTEM.

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

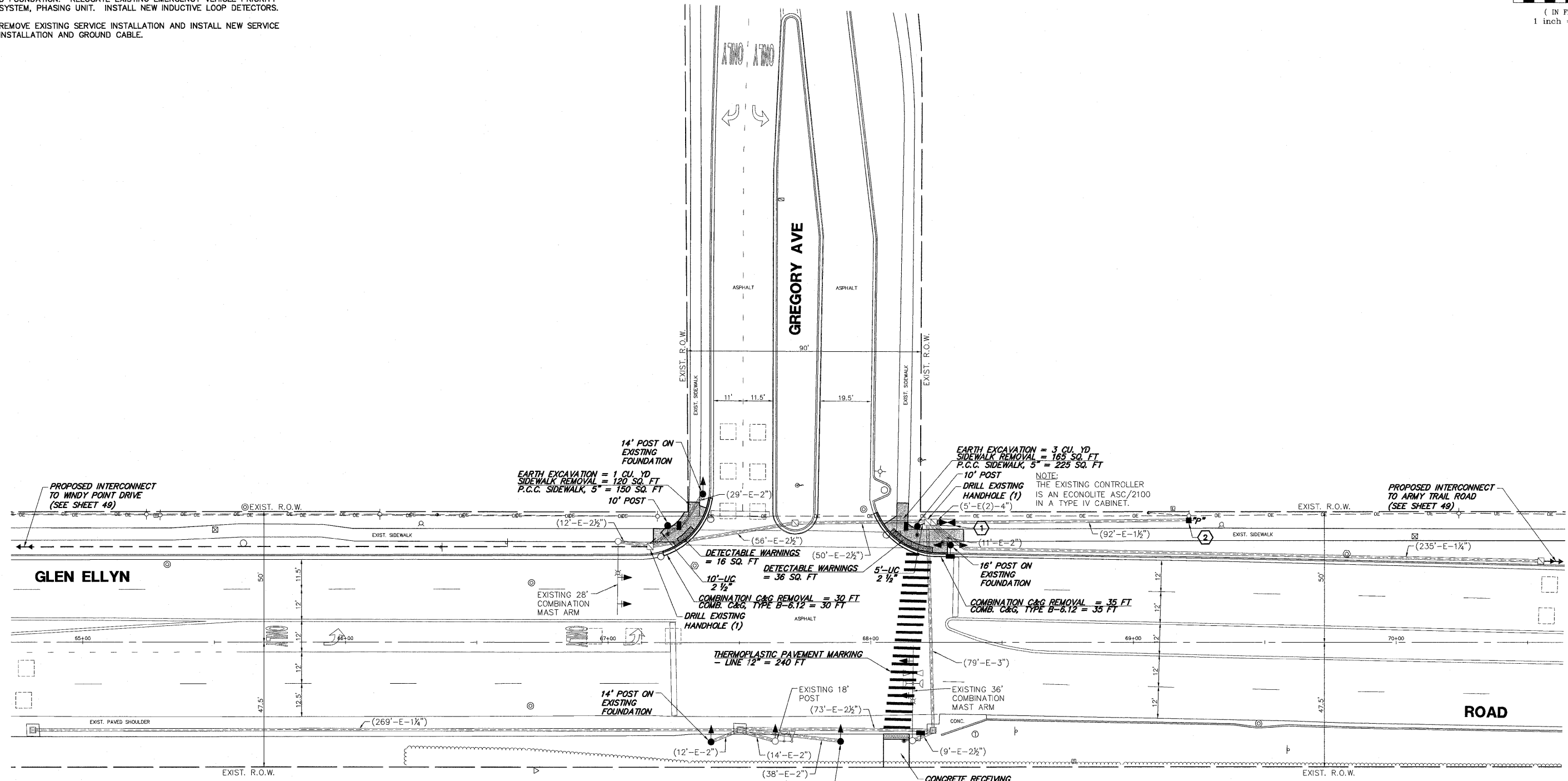
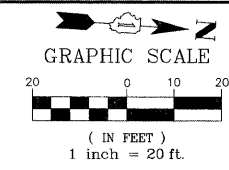
- 5 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 1 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 4 EACH PEDESTRIAN PUSH-BUTTON
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 1 EACH SERVICE INSTALLATION

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN GLEN ELLYN ROAD AT WINDY POINT DRIVE			FAJ. RTE 2581	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 34
	PLOT SCALE = 1" = .0833'	DRAWN - ZCW	REVISED -		SCALE 1"=20'	SHEET NO.	OF	SHEETS	STA.	TO STA.	CONTRACT #:	63625
	PLOT DATE = 12/16/2011	CHECKED - KLB	REVISED -								ILLINOIS FED. AID PROJECT	
		DATE - 12/16/2011	REVISED -									

GHA #4281.800

CONSTRUCTION NOTES:

- ① REMOVE EXISTING CONTROLLER AND CABINET (COMPLETE) AND DELIVER TO DuPAGE COUNTY DIVISION OF TRANSPORTATION. INSTALL NEW FULL-ACTUATED CONTROLLER AND TYPE IV CABINET ON EXISTING TYPE D FOUNDATION. RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT. INSTALL NEW INDUCTIVE LOOP DETECTORS.
- ② REMOVE EXISTING SERVICE INSTALLATION AND INSTALL NEW SERVICE INSTALLATION AND GROUND CABLE.



THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL REMAIN THE PROPERTY OF THE AGENCY LISTED BELOW. THE CONTRACTOR SHALL SAFELY STORE AND ARRANGE FOR PICK UP OR DELIVERY OF ALL EQUIPMENT TO BE RETURNED TO THE LISTED AGENCY AS PER THE TRAFFIC SIGNAL SPECIFICATIONS.

AGENCY: DuPAGE COUNTY DIVISION OF TRANSPORTATION
 1 EACH CONTROLLER AND CABINET, (COMPLETE)

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

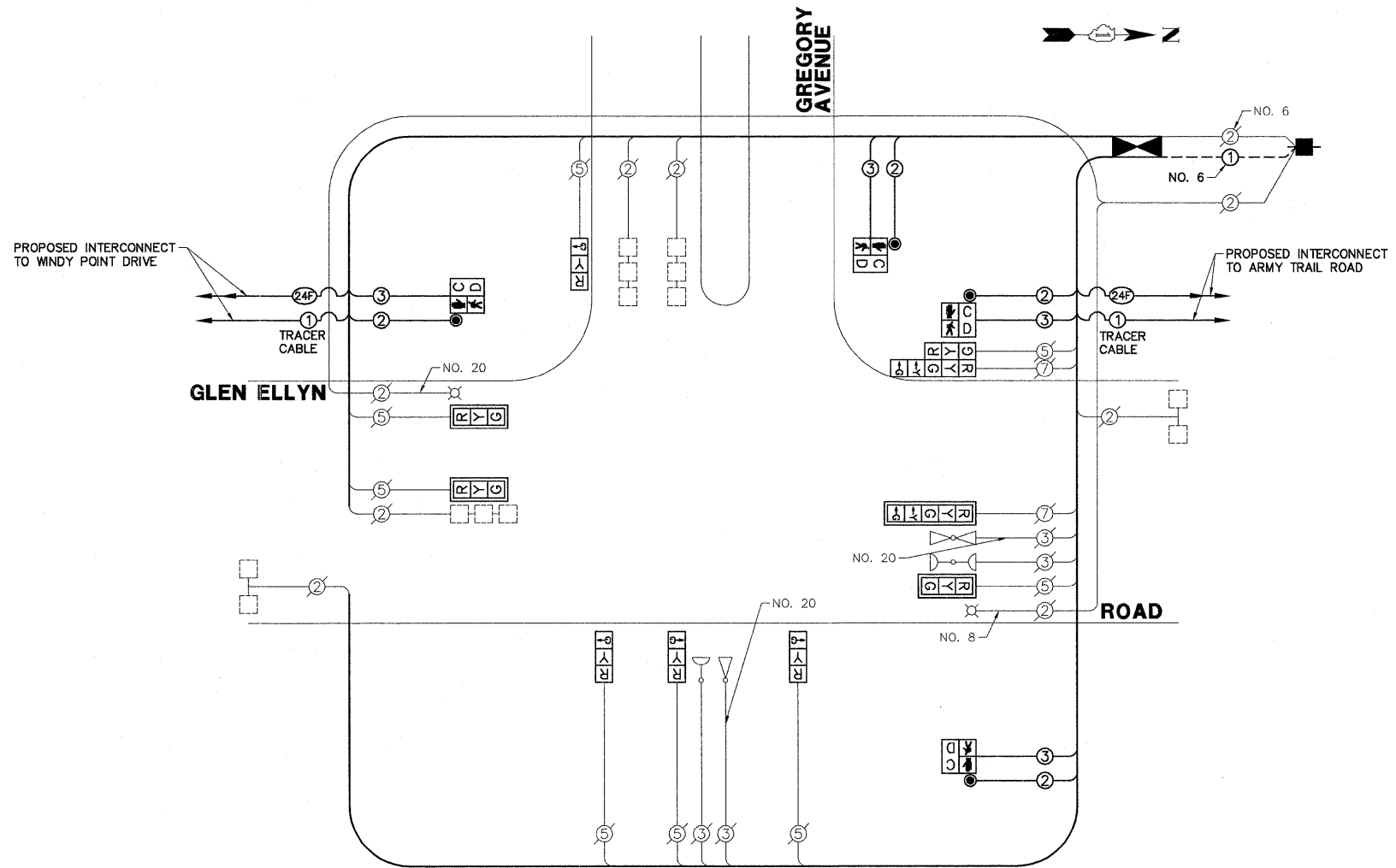
- 7 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 1 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 4 EACH SIGNAL POST
- 1 EACH SERVICE INSTALLATION

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN GLEN ELLYN ROAD AT GREGORY AVENUE	F.A.U. RTE. 2581	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 36	GHA #4281.800
PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -	SCALE: 1"=20'			SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT #: 63625		ILLINOIS FED. AID PROJECT	
PLOT DATE = 12/16/2011	DATE - 12/16/2011	REVISED -									

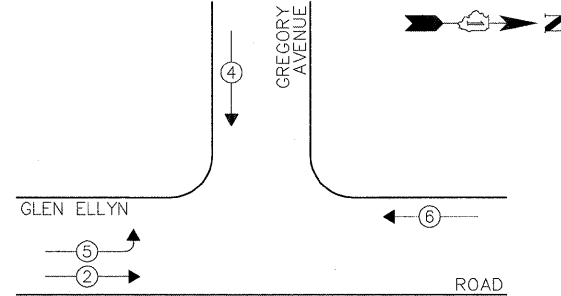
SCHEDULE OF QUANTITIES
GLEN ELLYN ROAD AT GREGORY AVENUE

NO.	QUANT.	UNIT
1.	4	CU YD EARTH EXCAVATION
2.	375	SQ FT PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
3.	52	SQ FT DETECTABLE WARNINGS
4.	65	FOOT COMBINATION CURB AND GUTTER REMOVAL
5.	285	SQ FT SIDEWALK REMOVAL
6.	65	FOOT COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
7.	240	FOOT THERMOPLASTIC PAVEMENT MARKING - LINE 12"
8.	1	EACH SERVICE INSTALLATION - POLE MOUNTED
9.	15	FOOT UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.
10.	1	EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
11.	1	EACH FULL-ACTUATED CONTROLLER AND TYPE IV CABINET
12.	1	EACH TRANSCEIVER - FIBER OPTIC
13.	361	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
14.	397	FOOT ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
15.	101	FOOT ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
16.	2	EACH TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.
17.	3	EACH TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
18.	1	EACH TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.
19.	8	FOOT CONCRETE FOUNDATION, TYPE A
20.	2	EACH DRILL EXISTING HANDHOLE
21.	3	EACH SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED
22.	4	EACH SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
23.	1	EACH SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED
24.	1	EACH SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
25.	4	EACH PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER
26.	4	EACH TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
27.	5	EACH INDUCTIVE LOOP DETECTOR
28.	4	EACH PEDESTRIAN PUSH-BUTTON
29.	1	EACH REMOVE EXISTING SERVICE INSTALLATION
30.	1	EACH RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT
31.	1	EACH REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

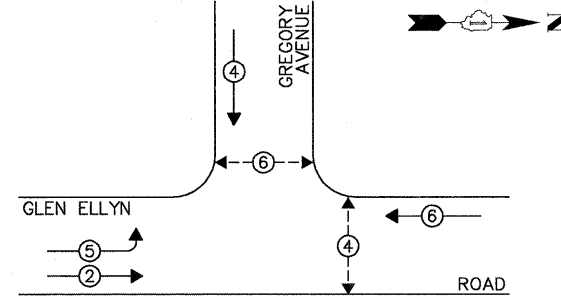


CABLE PLAN

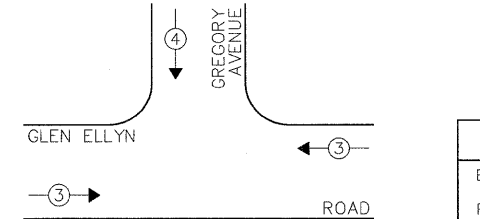
EXISTING CONTROLLER SEQUENCE



PROPOSED CONTROLLER SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

PROPOSED PHASE DESIGNATION DIAGRAM

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

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	WATTAGE L.E.D.	% OPERATION	
SIGNAL (RED)	10	135	17	0.50	85.0
SIGNAL (YELLOW)	10	135	25	0.25	62.5
SIGNAL (GREEN)	10	135	15	0.25	37.5
ARROW	4	135	12	0.10	4.8
PED. SIGNAL	4	90	25	1.00	100.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	2	250	-	0.50	250.0
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	-	-	150	1.00	-
BATTERY BACKUP	-	-	25	1.00	-
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					639.8

ENERGY COSTS - BILLED TO: VILLAGE OF GLENDALE HEIGHTS (ADDRESS) 300 CIVIL CENTER PLAZA (ADDRESS) GLENDALE HEIGHTS, IL 60139
ENERGY SUPPLY - CONTACT: MS. DEB RANKIN (PHONE: (630) 691-4379) COMPANY: COM-ED

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -
		DRAWN - ZCW	REVISED -
		CHECKED - KLB	REVISED -
		DATE - 12/16/2011	REVISED -

DESIGNED - JRD	REVISED -
DRAWN - ZCW	REVISED -
CHECKED - KLB	REVISED -
DATE - 12/16/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

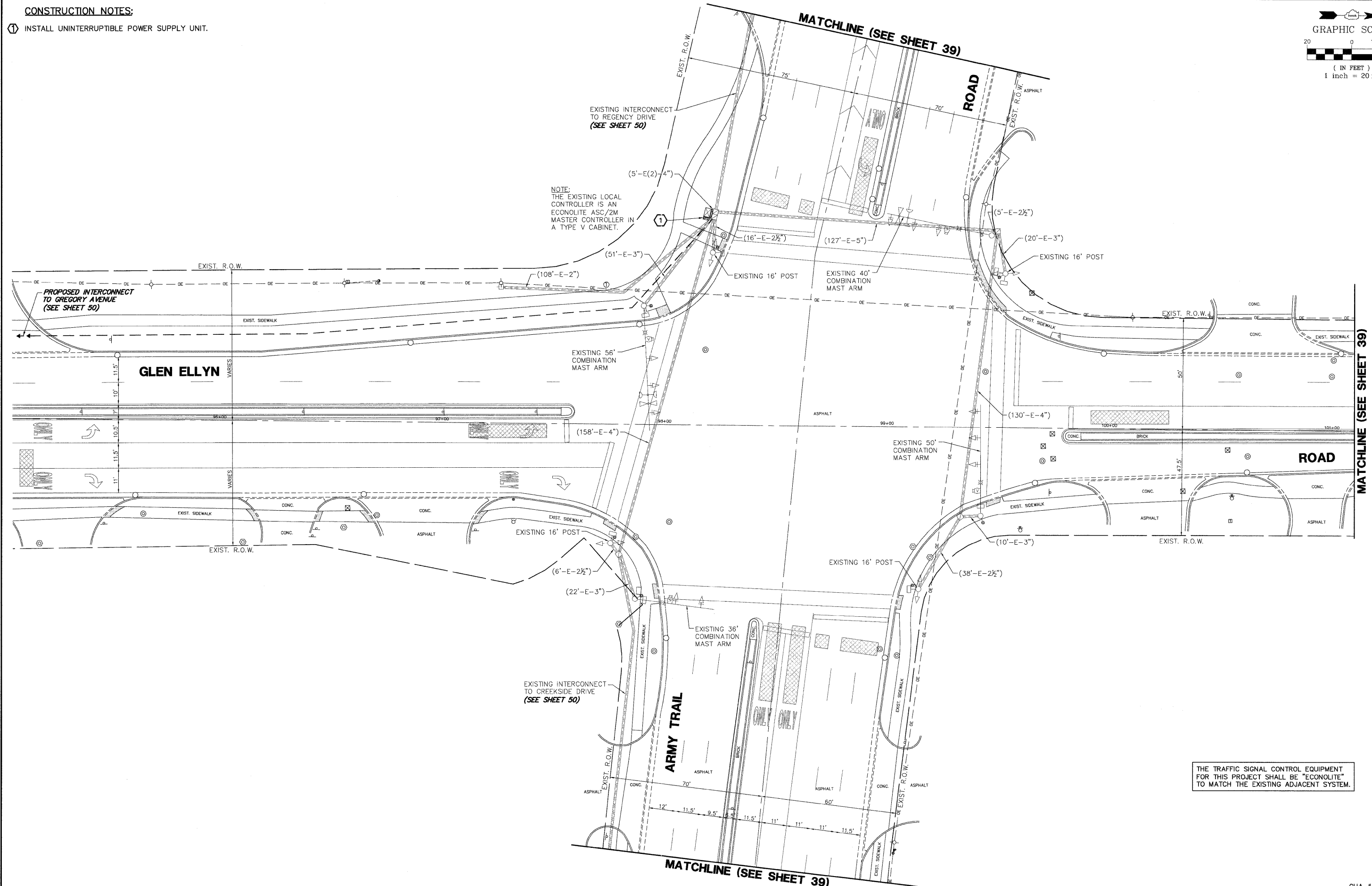
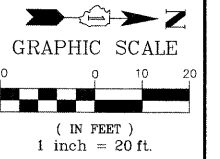
SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE			
GLEN ELLYN ROAD AT GREGORY AVENUE			
SCALE: N.A.	SHEET NO.	OF SHEETS	STA. TO STA.

FILE NO. 2581	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 37
CONTRACT # 63625			ILLINOIS FED. AID PROJECT	

GHA #4281.800

CONSTRUCTION NOTES:

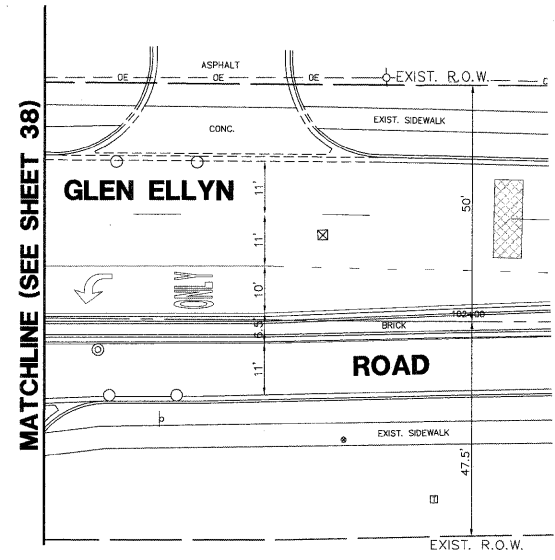
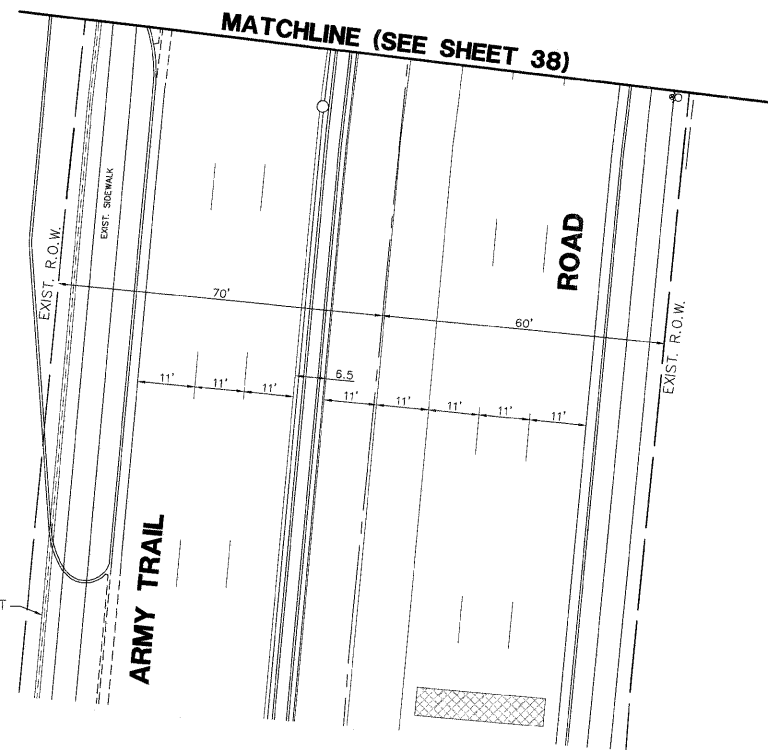
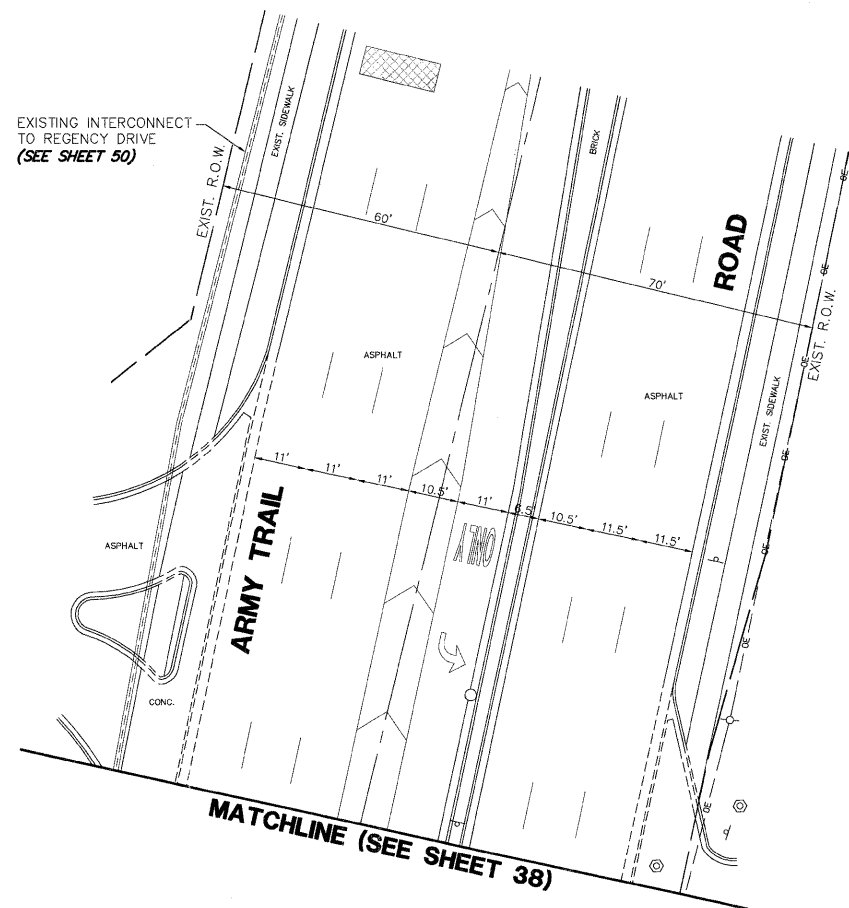
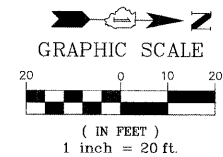
① INSTALL UNINTERRUPTIBLE POWER SUPPLY UNIT.



THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN GLEN ELLYN ROAD AT ARMY TRAIL ROAD	SCALE 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	FAJ. RTE. 2581	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 38	CONTRACT # 63625	GHA #4281.800	
	PLOT SCALE = 1" = .0833'	DRAWN - ZCW	REVISED -													
	PLOT DATE = 12/16/2011	CHECKED - KLB	REVISED -													
		DATE - 12/16/2011	REVISED -													

ILLINOIS FED. AID PROJECT

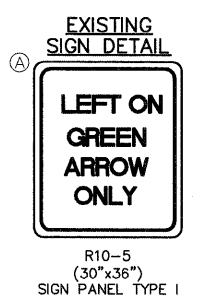
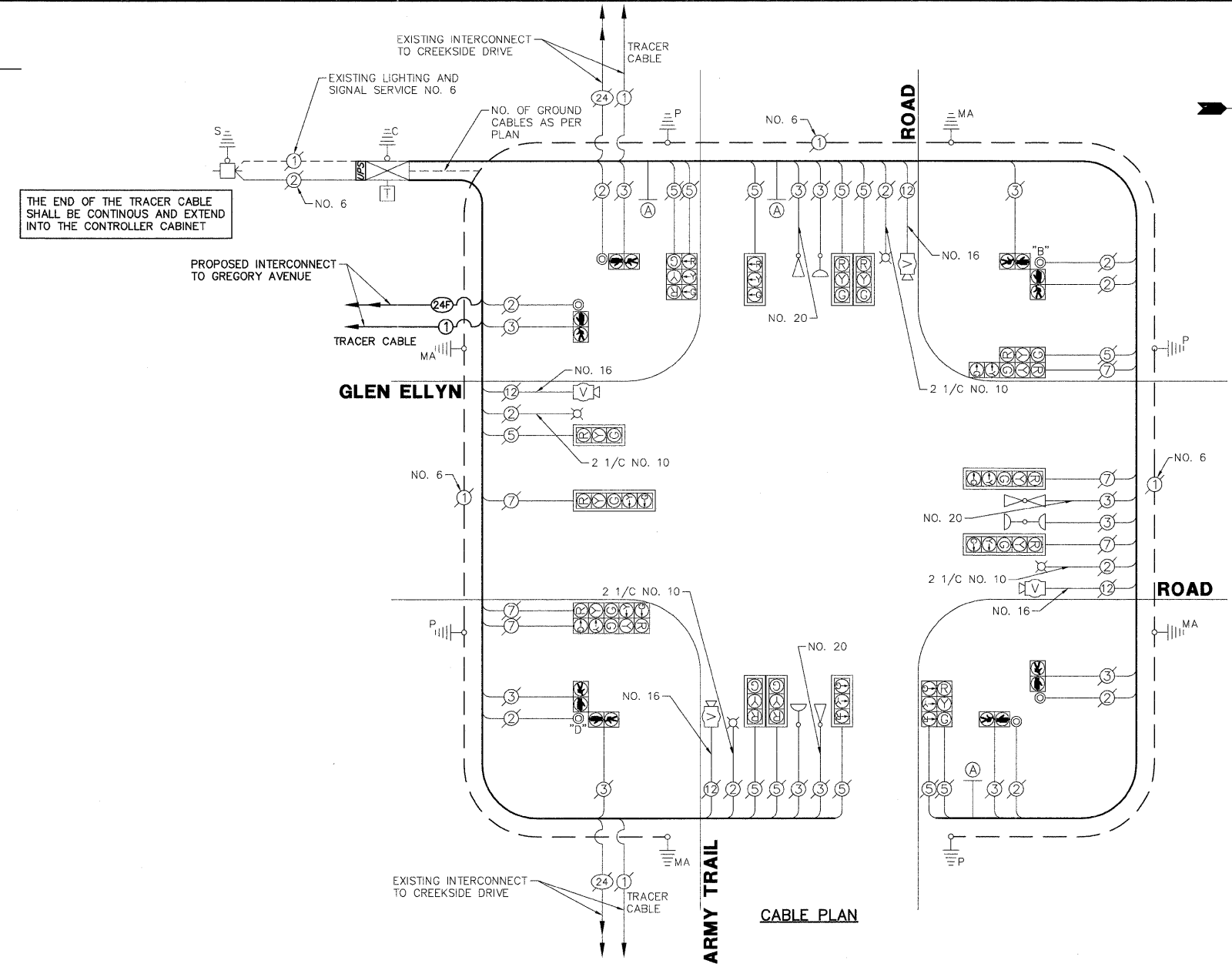


THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

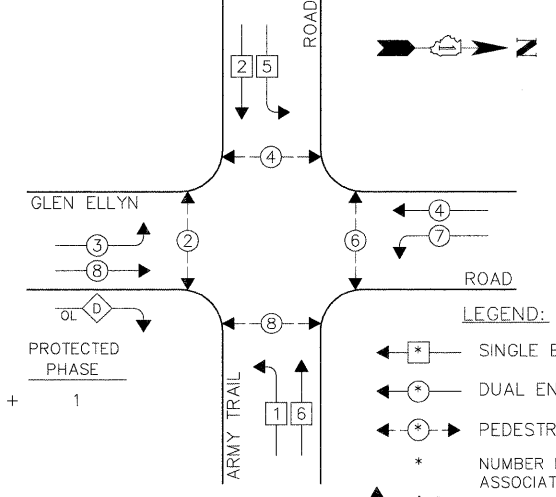
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	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -			SCALE 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT		
PLOT DATE = 12/16/2011	DATE - 12/16/2011	REVISED -	REVISED -								

SCHEDULE OF QUANTITIES
GLEN ELLYN ROAD AT ARMY TRAIL ROAD

NO.	QUANT.	UNIT
1.	1	EACH MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
2.	1	EACH UNINTERRUPTIBLE POWER SUPPLY, STANDARD

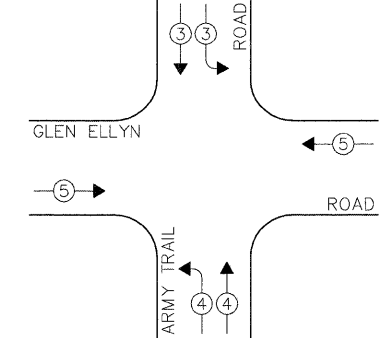


EXISTING CONTROLLER SEQUENCE



NOTE:
PUSH BUTTON "B" SHALL PLACE A CALL TO PHASES 4 AND 6
PUSH BUTTON "D" SHALL PLACE A CALL TO PHASES 2 AND 8

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	1	7	1

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	INCAND.	L.E.D.	% OPERATION	
SIGNAL (RED)	18	135	17	0.50	153.0
SIGNAL (YELLOW)	18	135	25	0.25	112.5
SIGNAL (GREEN)	18	135	15	0.25	67.5
ARROW	12	135	12	0.10	14.4
PED. SIGNAL	8	90	25	1.00	200.0
CONTROLLER	1	-	100	1.00	100.0
LUMINAIRE	4	250	-	0.50	500.0
L.E.D. ST. NAME SIGN	-	-	64	0.50	-
VIDEO SYSTEM	1	-	150	1.00	150.0
BATTERY BACKUP	-	-	25	1.00	-
ILLUMINATED SIGN	-	-	25	0.05	-
TOTAL =					1297.4

ENERGY COSTS - BILLED TO: VILLAGE OF GLENDALE HEIGHTS
(ADDRESS) 300 CIVIL CENTER PLAZA
(ADDRESS) GLENDALE HEIGHTS, IL 60139
ENERGY SUPPLY - CONTACT: MS. DEB RANKIN
PHONE: (630) 691-4379
COMPANY: COM-ED

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

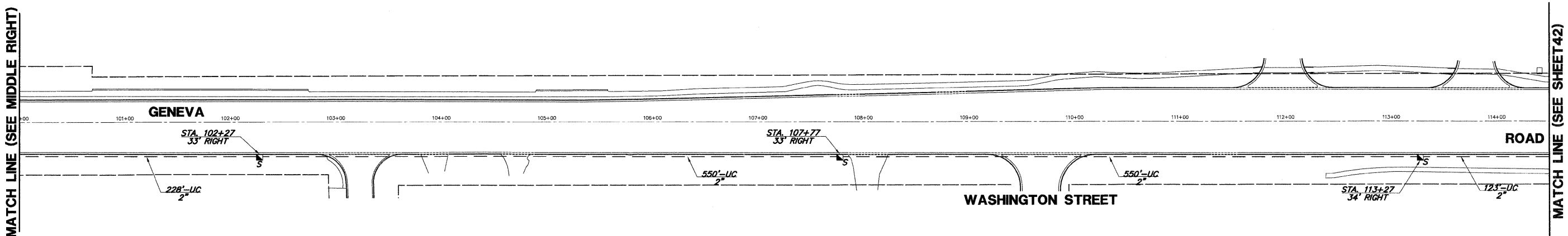
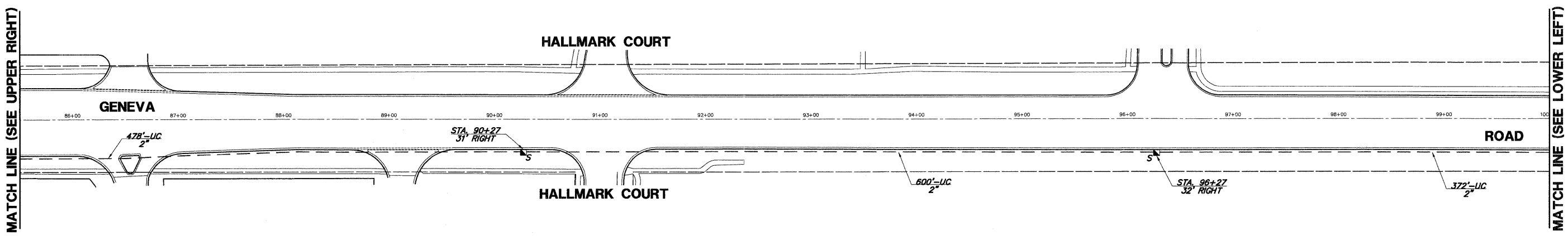
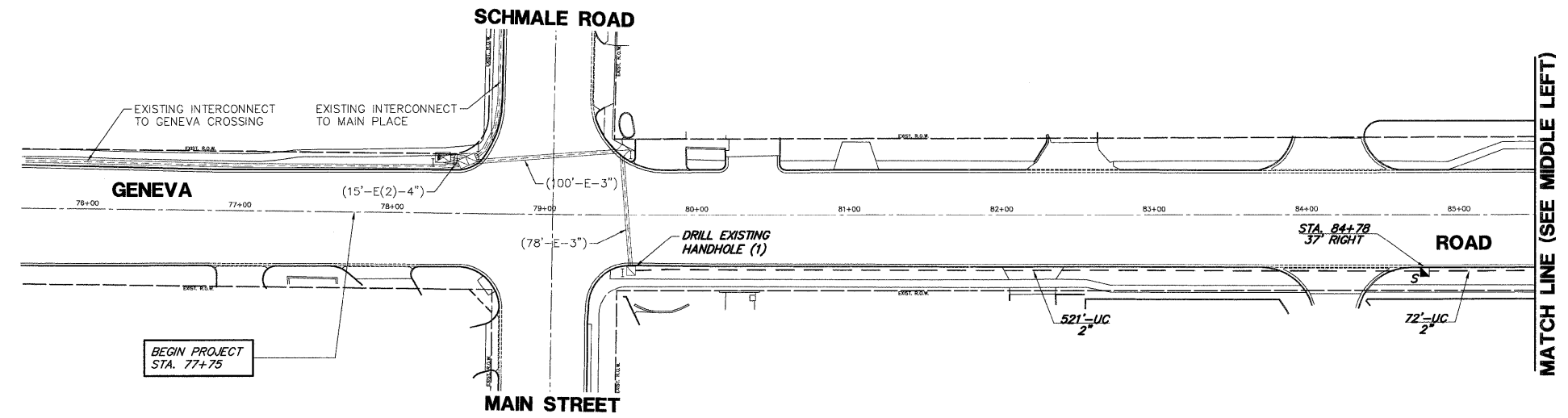
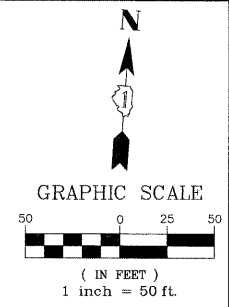
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PLOT SCALE = 1" = .0833'		DRAWN - ZCW	REVISED -
PLOT DATE = 12/16/2011		CHECKED - KLB	REVISED -
		DATE - 12/16/2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM, & EMERGENCY VEHICLE PREEMPTION SEQUENCE
GLEN ELLYN ROAD AT ARMY TRAIL ROAD

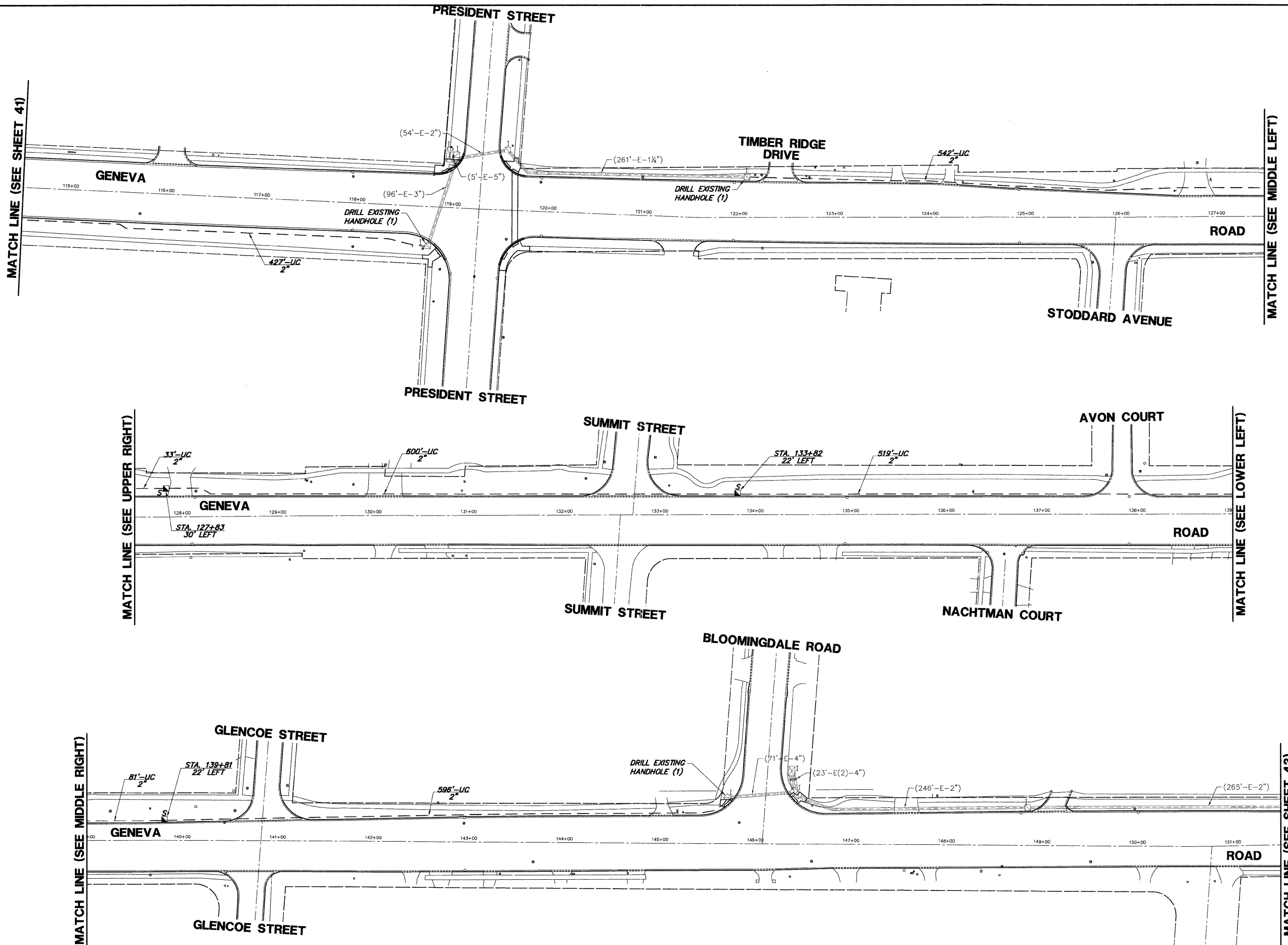
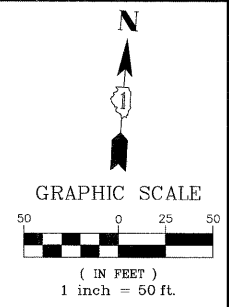
FAU. RTE. 2581	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 40
SCALE N.A.			CONTRACT # 63625	
SHEET NO. OF SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT		

GHA #4281.800

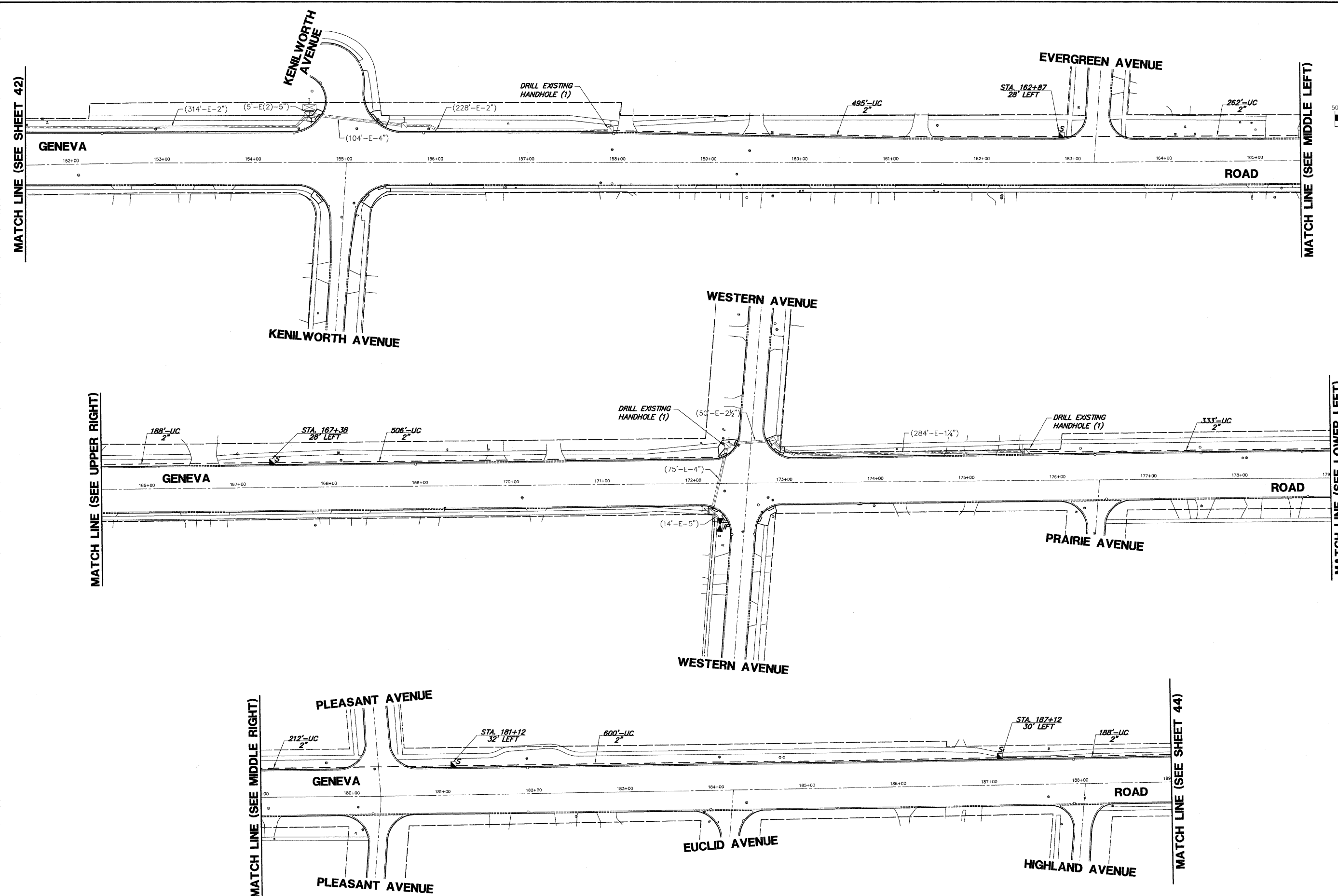
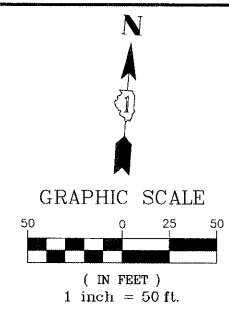


FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN (SHEET 1 OF 5) - GENEVA RD/ST. CHARLES RD FROM SCHMALE RD/MAIN ST TO SWIFT RD			FAU. RTE 1397	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 41
	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -					SCALE 1"=50'	SHEET NO. OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	
PLOT DATE = 12/16/2011	DATE - 12/16/2011	REVISED -	REVISED -									

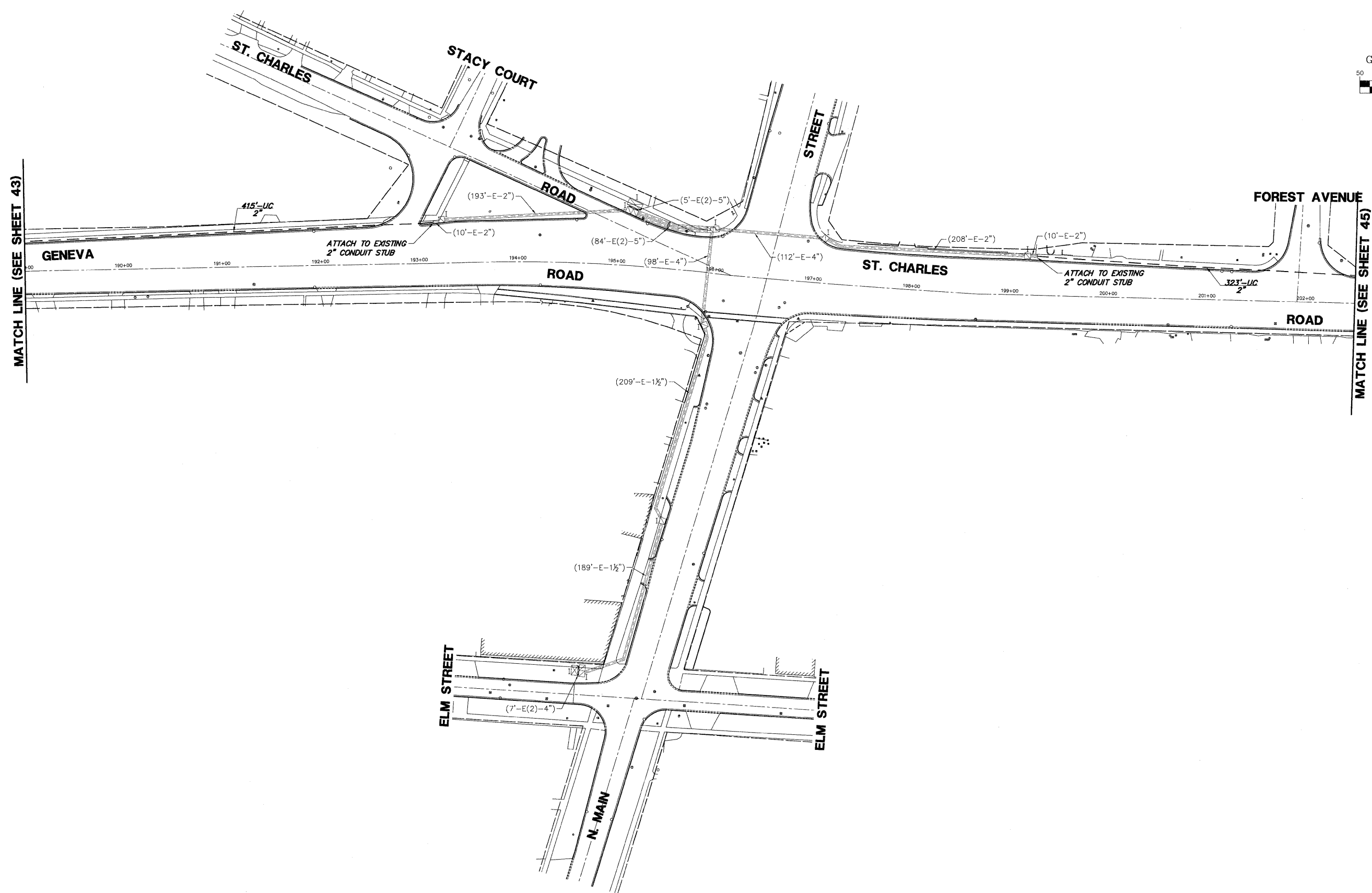
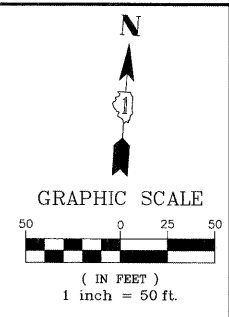
GHA #4281.800



FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN (SHEET 2 OF 5) - GENEVA RD/ST. CHARLES RD FROM SCHMALE RD/MAIN ST TO SWIFT RD	FAU. RTE 1397	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 42	GHA #4281.800
	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -			SCALE 1"=50'	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT #:	63625	
PLOT DATE = 12/16/2011	DATE - 12/16/2011	REVISED -	REVISED -								

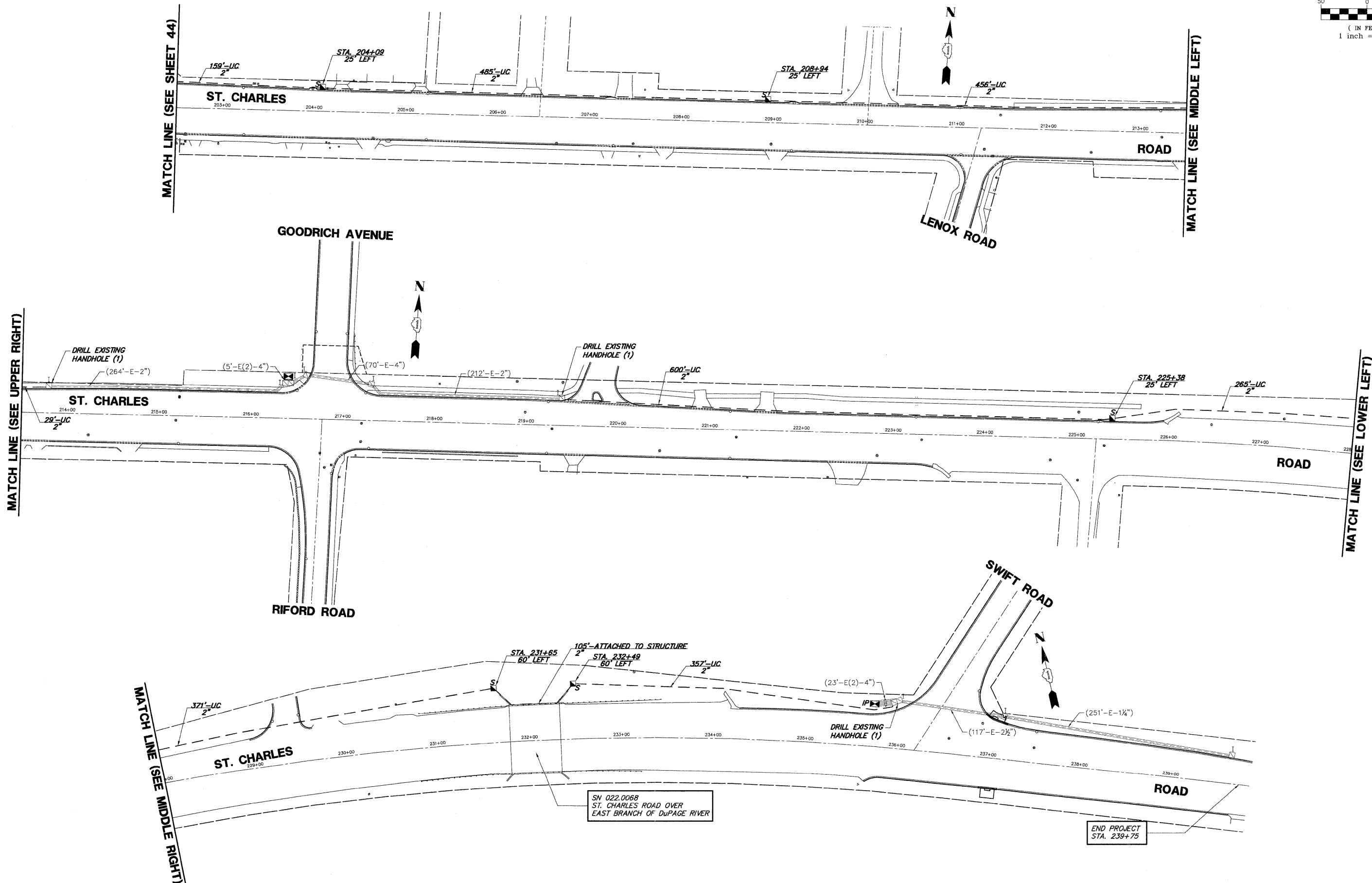
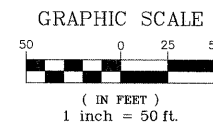


FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN (SHEET 3 OF 5) - GENEVA RD/ST. CHARLES RD FROM SCHMALE RD/MAIN ST TO SWIFT RD			FAU. RTE. 1397	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 43	
PLOT SCALE = 1" = .0833'								SCALE 1"=50'			SHEET NO.	OF SHEETS	STA.
PLOT DATE = 12/16/2011					DATE - 12/16/2011			ILLINOIS FED. AID PROJECT					
								GHA #4281.800					



FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN (SHEET 4 OF 5) - GENEVA RD/ST. CHARLES RD FROM SCHMALE RD/MAIN ST TO SWIFT RD	FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 1" = .0833'	CHECKED - KLB	REVISED -			1397	09-00206-08-TL	DuPAGE	53	44
PLOT DATE = 12/16/2011	DATE - 12/16/2011	REVISED -	SCALE: 1"=50'	SHEET NO.	OF SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT CONTRACT #: 63625		

GHA #4281.800



FILE NAME = 4281.800-TR1.dwg

USER NAME = ZACH WALLSTEN
 PLOT SCALE = 1" = .0833'
 PLOT DATE = 12/16/2011

DESIGNED - JRD
 DRAWN - ZCW
 CHECKED - KLB
 DATE - 12/16/2011

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT PLAN (SHEET 5 OF 5) - GENEVA RD/ST.
 CHARLES RD FROM SCHMALE RD/MAIN ST TO SWIFT RD**

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

FAU RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1397	09-00206-08-TL	DuPAGE	53	45
CONTRACT #:			63625	
ILLINOIS FED. AID PROJECT				

GHA #4281.800

SCHEDULE OF QUANTITIES

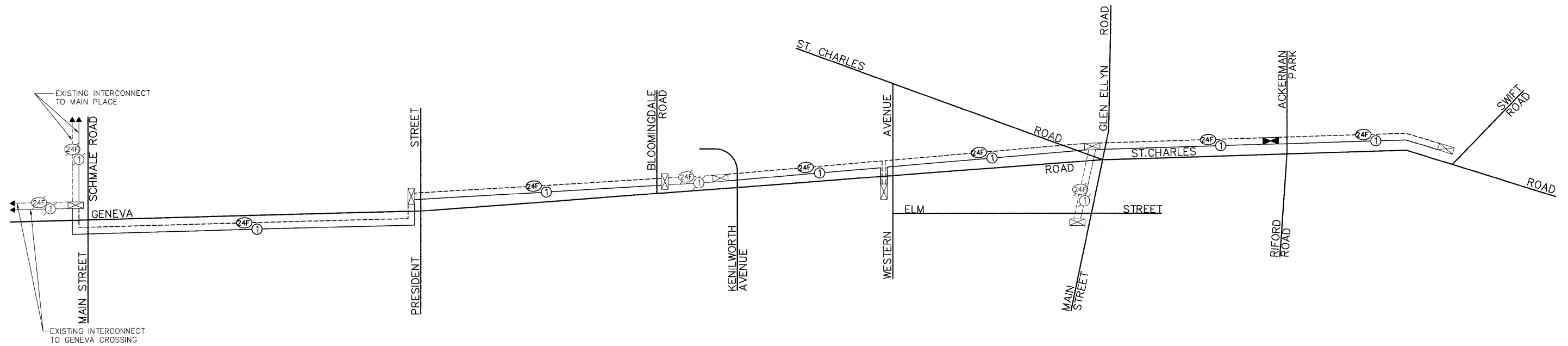
GENEVA ROAD AND ST. CHARLES ROAD INTERCONNECT FROM SCHMALE ROAD/MAIN STREET TO SWIFT ROAD

NO.	QUANT.	UNIT	DESCRIPTION
1.	12,569	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
2.	105	FOOT	CONDUIT ATTACHED TO STRUCTURE, 2" DIA., GALVANIZED STEEL
3.	18	EACH	HANDHOLE
4.	15,873	FOOT	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C
5.	10	EACH	DRILL EXISTING HANDHOLE
6.	15,873	FOOT	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F
7.	8	EACH	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2



CONSTRUCTION NOTES:

- ① THE FOLLOWING TRAFFIC SIGNALS SHALL BE RE-OPTIMIZED UNDER THIS PAY ITEM:
 GENEVA ROAD AT SCHMALE ROAD/MAIN STREET
 GENEVA ROAD AT PRESIDENT STREET
 GENEVA ROAD AT BLOOMINGDALE ROAD
 GENEVA ROAD AT KENILWORTH AVENUE
 GENEVA ROAD AT WESTERN AVENUE
 GENEVA ROAD/ST. CHARLES ROAD AT MAIN STREET/GLEN ELLYN ROAD
 ST. CHARLES ROAD AT RIFORD ROAD/ACKERMEN PARK
 ST. CHARLES ROAD AT SWIFT ROAD



FILE NAME = 4281.800-TR1.dwg

USER NAME = ZACH WALLSTEN
 PLOT SCALE = 1" = .0833'
 PLOT DATE = 12/16/2011

DESIGNED - JRD
 DRAWN - ZCW
 CHECKED - KLB
 DATE - 12/16/2011

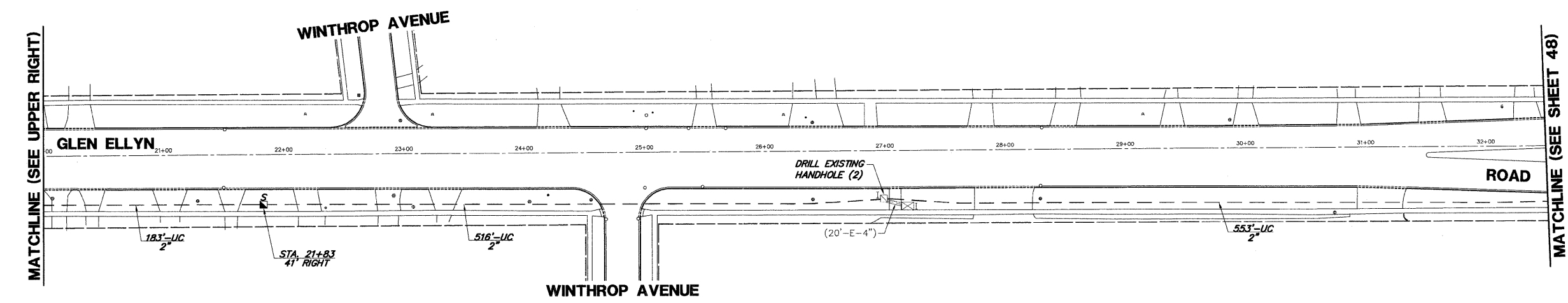
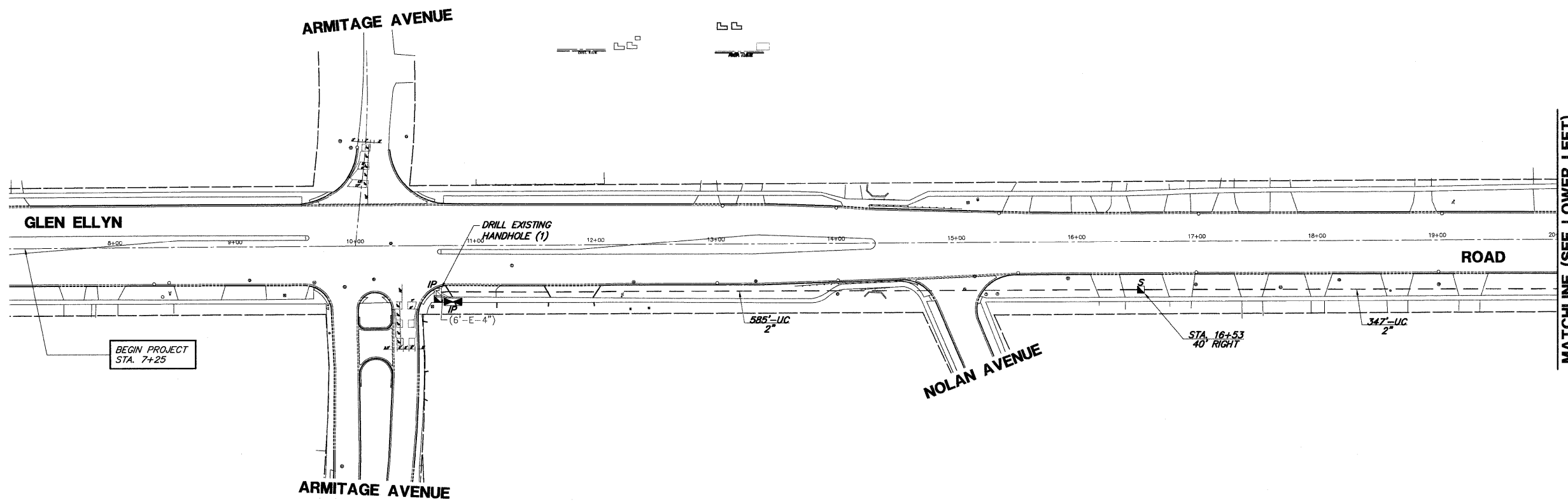
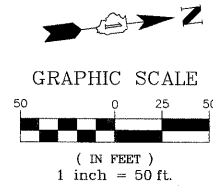
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT SCHEMATIC
 GENEVA RD - FROM PRESIDENT ST TO SWIFT RD**

FAU RTE. 1397	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 46
ILLINOIS FED. AID PROJECT			CONTRACT # 63625	

GHA #4281.800



FILE NAME = 4281.800-TR1.dwg

USER NAME = ZACH WALLSTEN
 PLOT SCALE = 1" = .0833'
 PLOT DATE = 12/16/2011

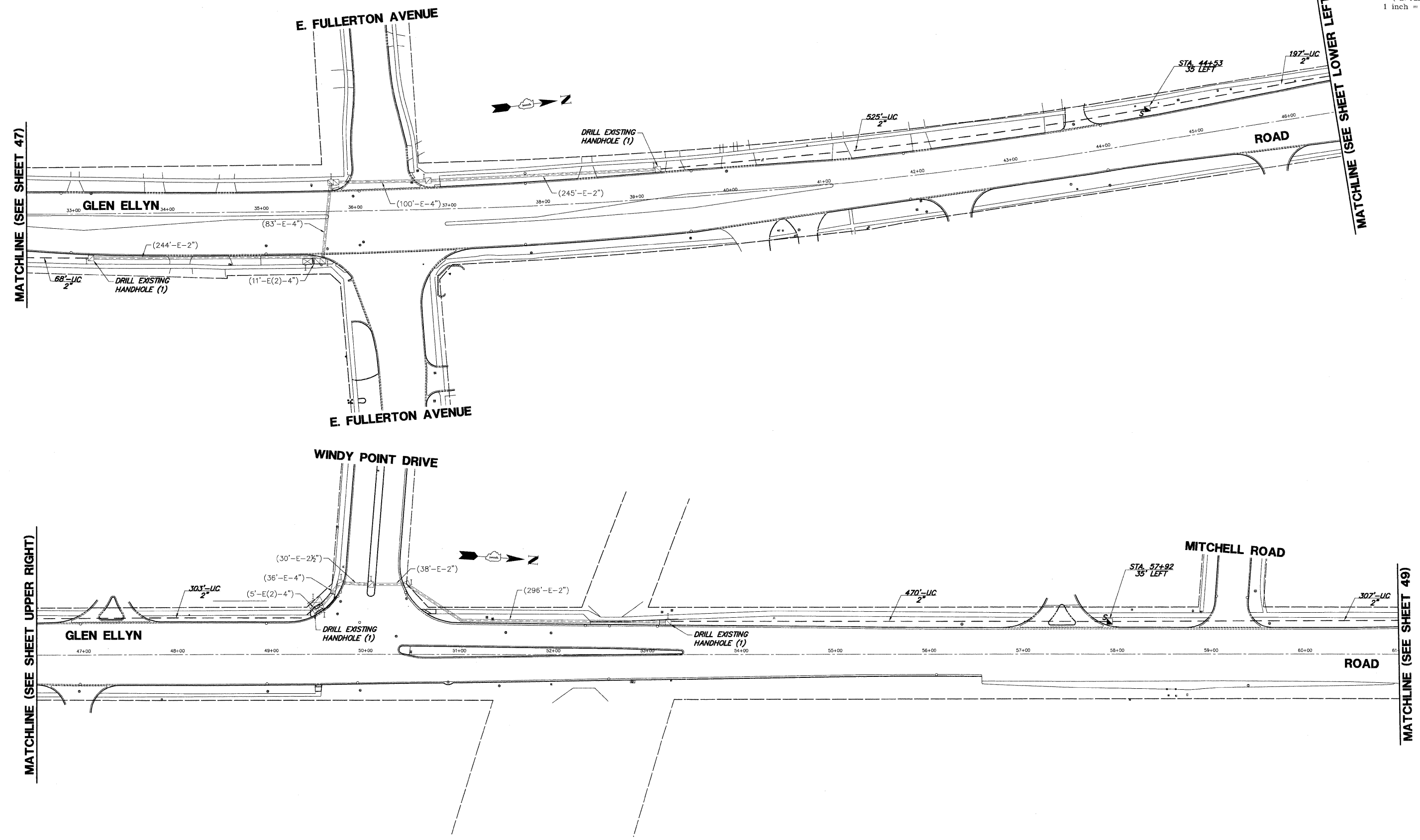
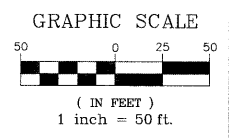
DESIGNED - JRD
 DRAWN - ZCW
 CHECKED - KLB
 DATE - 12/16/2011

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

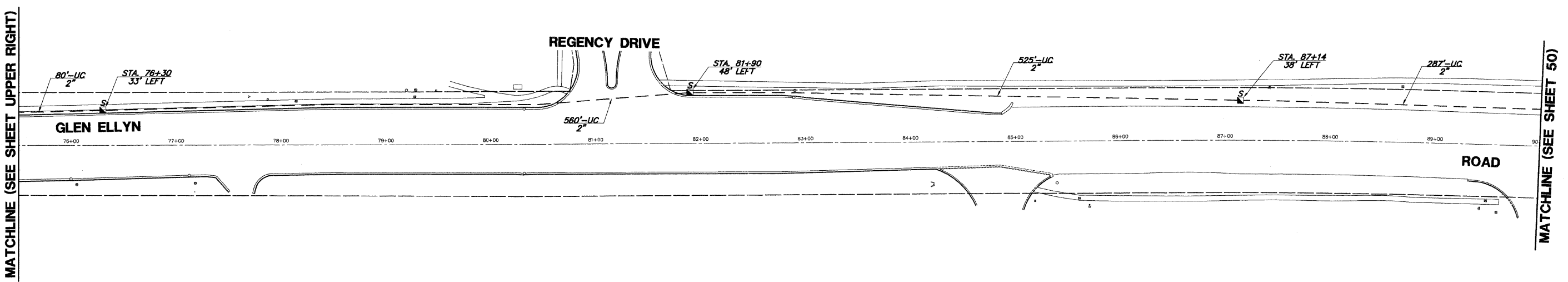
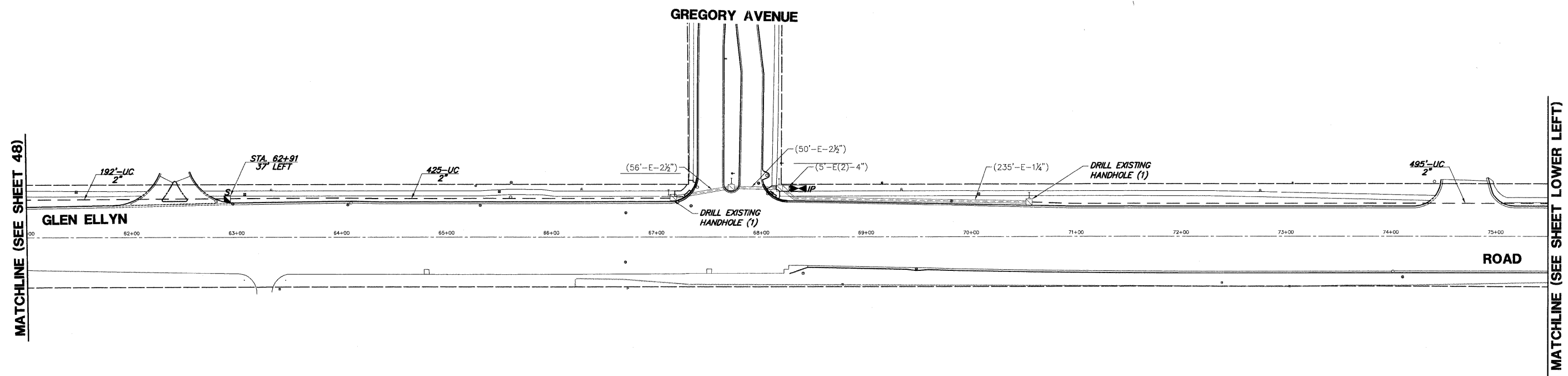
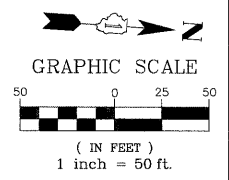
**INTERCONNECT PLAN (SHEET 1 OF 4) - GLEN ELLYN RD
 FROM ARMITAGE AVENUE TO ARMY TRAIL ROAD**

FAU. RTE. 2581	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 47
SCALE: 1"=50'			CONTRACT #: 63625	
SHEET NO. OF SHEETS		STA. TO STA.		
GHA #4281.800				
ILLINOIS FED. AID PROJECT				



FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN (SHEET 2 OF 4) - GLEN ELLYN RD FROM ARMITAGE AVENUE TO ARMY TRAIL ROAD	FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN - ZCW	REVISED -			2581	09-00206-08-TL	DuPAGE	53	48	
		CHECKED - KLB	REVISED -			CONTRACT # 63625					
		DATE - 12/16/2011	REVISED -			ILLINOIS FED. AID PROJECT					
				SCALE 1"=50'		SHEET NO. OF SHEETS		STA. TO STA.			

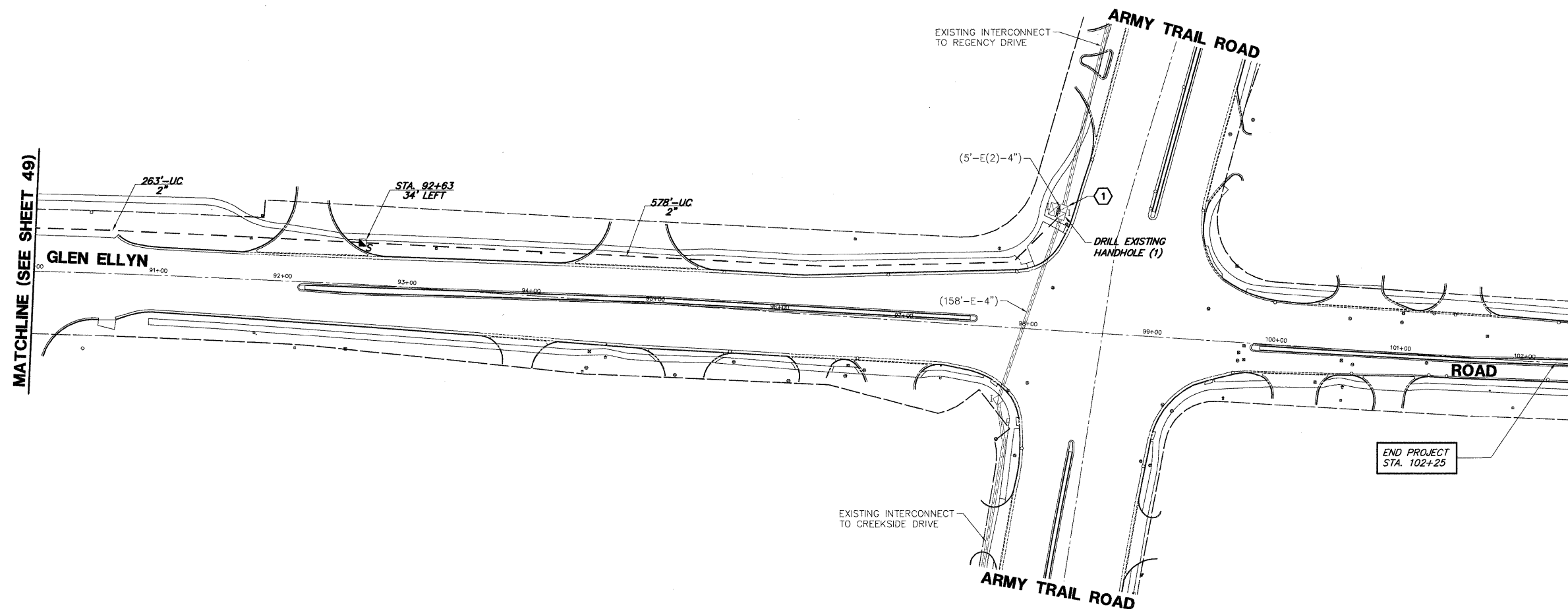
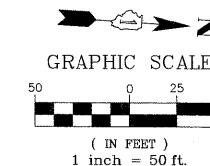
GHA #4281.800



FILE NAME = 4281.800-TR1.dwg	USER NAME = ZACH WALLSTEN	DESIGNED - JRD	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN (SHEET 3 OF 4) - GLEN ELLYN RD FROM ARMITAGE AVENUE TO ARMY TRAIL ROAD			FAU. RTE. 2581	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 49	GHA #4281.800 CONTRACT # 63625
								SCALE 1"=50'	SHEET NO.	OF SHEETS	STA.	TO STA.	
PLOT SCALE = 1" = .0833'		CHECKED - KLB	REVISED -										
PLOT DATE = 12/16/2011		DATE - 12/16/2011	REVISED -										

CONSTRUCTION NOTES:

① THE CONTRACTOR SHALL DRILL THE EXISTING DOUBLE HANDHOLE, INSTALL THE 2" DIA., GALVANIZED STEEL CONDUIT, PULL THE NEW FIBER OPTIC AND TRACER CABLES INTO THE EXISTING CONTROLLER CABINET AND NOT TERMINATE THE NEW FIBER OPTIC CABLE, BUT COIL 10 FEET OF ADDITIONAL SLACK ON THE CABINET FLOOR.



FILE NAME = 4281.800-TR1.dwg

USER NAME = ZACH WALLSTEN
 PLOT SCALE = 1" = .0833'
 PLOT DATE = 12/16/2011

DESIGNED - JRD
 DRAWN - ZCW
 CHECKED - KLB
 DATE - 12/16/2011

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT PLAN (SHEET 4 OF 4) - GLEN ELLYN RD
 FROM ARMITAGE AVENUE TO ARMY TRAIL ROAD**

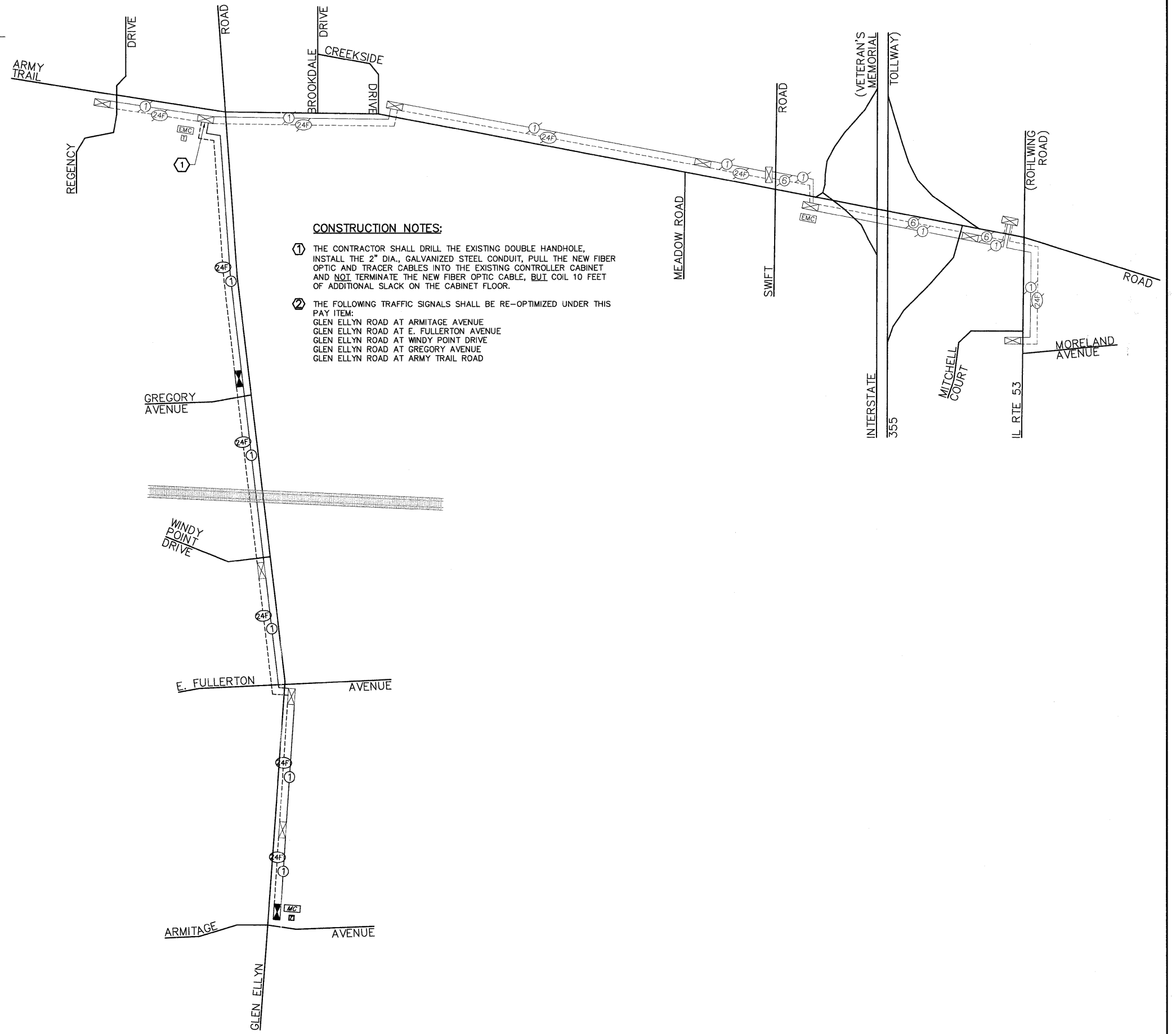
SCALE: 1"=50' SHEET NO. OF SHEETS STA. TO STA.

FAU. RTE. 2581	SECTION 09-00206-08-TL	COUNTY DuPAGE	TOTAL SHEETS 53	SHEET NO. 50
CONTRACT #:			63625	
GHA #4281.800				
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES

GLEN ELLYN ROAD INTERCONNECT FROM ARMITAGE AVENUE TO ARMY TRAIL ROAD

NO.	QUANT.	UNIT
1.	7,439	FOOT UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
2.	9	EACH HANDHOLE
3.	8,195	FOOT ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C
4.	11	EACH DRILL EXISTING HANDHOLE
5.	8,195	FOOT FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM12F
6.	5	EACH RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2



CONSTRUCTION NOTES:

① THE CONTRACTOR SHALL DRILL THE EXISTING DOUBLE HANDHOLE, INSTALL THE 2" DIA., GALVANIZED STEEL CONDUIT, PULL THE NEW FIBER OPTIC AND TRACER CABLES INTO THE EXISTING CONTROLLER CABINET AND NOT TERMINATE THE NEW FIBER OPTIC CABLE, BUT COIL 10 FEET OF ADDITIONAL SLACK ON THE CABINET FLOOR.

② THE FOLLOWING TRAFFIC SIGNALS SHALL BE RE-OPTIMIZED UNDER THIS PAY ITEM:
 GLEN ELLYN ROAD AT ARMITAGE AVENUE
 GLEN ELLYN ROAD AT E. FULLERTON AVENUE
 GLEN ELLYN ROAD AT WINDY POINT DRIVE
 GLEN ELLYN ROAD AT GREGORY AVENUE
 GLEN ELLYN ROAD AT ARMY TRAIL ROAD

FILE NAME = 4281.800-TR1.dwg

USER NAME = ZACH WALLSTEN
 PLOT SCALE = 1" = .0833'
 PLOT DATE = 12/16/2011

DESIGNED - JRD
 DRAWN - ZCW
 CHECKED - KLB
 DATE - 12/16/2011

REVISED -
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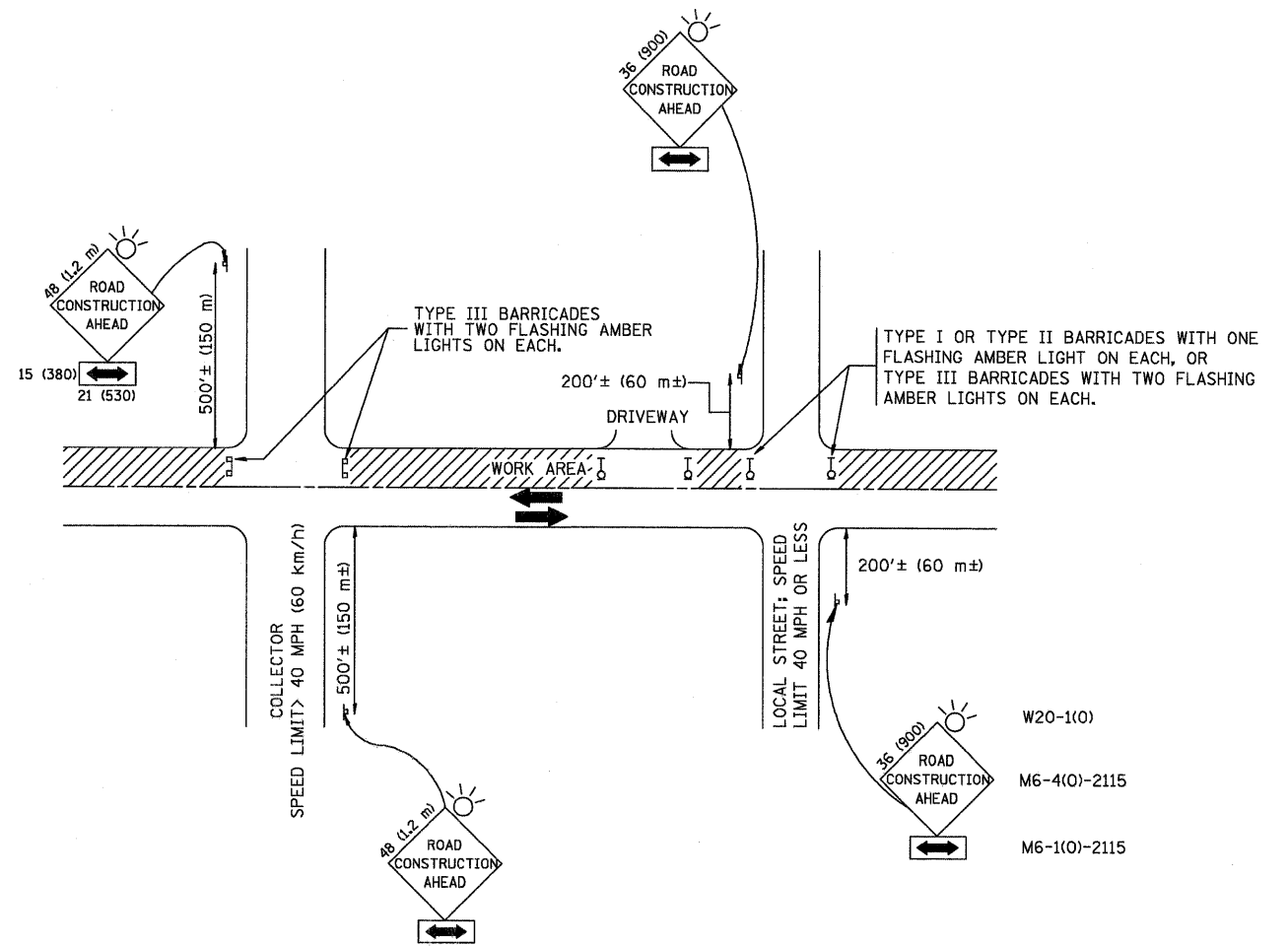
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT SCHEMATIC
 GLEN ELLYN RD - FROM ARMITAGE AVE TO ARMY TRAIL RD**

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

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2581	09-00206-08-TL	DuPAGE	53	51
CONTRACT #:			63625	
ILLINOIS FED. AID PROJECT				

GHA #4281.800



NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE **ROAD CONSTRUCTION AHEAD** SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (Inches) unless otherwise shown.

FILE NAME = 4281.800-TRI.dwg	USER NAME = GEORGE WHITTEN	DESIGNED - LHA	REVISD - J. OBERLE 10-18-95
		DRAWN -	REVISD - A. HOUSEH 03-06-96
	PLOT SCALE = 1" = .0833'	CHECKED -	REVISD - A. HOUSEH 10-15-96
	PLOT DATE = 12/16/2011	DATE - 06-89	REVISD - T. RAMMACHER 01-06-00

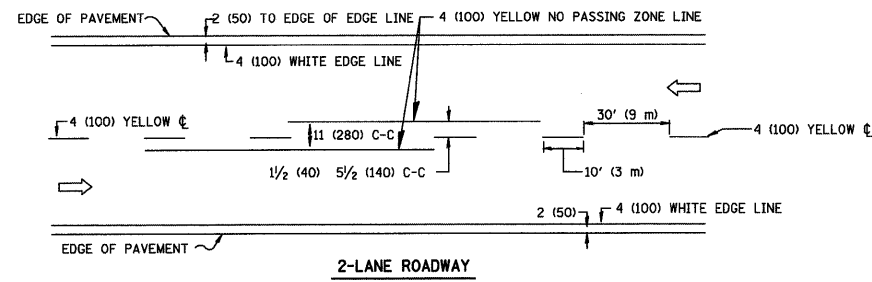
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

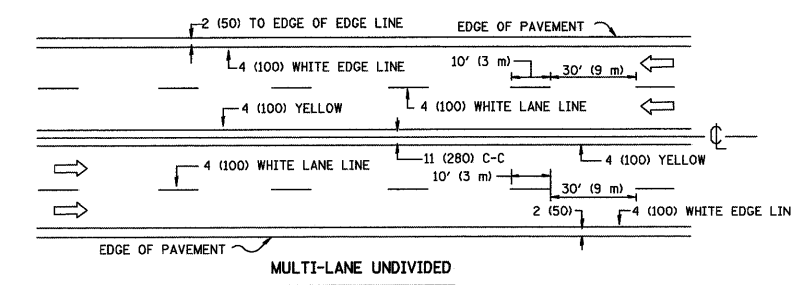
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

FAU. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2581 & 1397	09-00206-08-TL	DUPAGE	53	52
TC-10			CONTRACT #: 63625	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

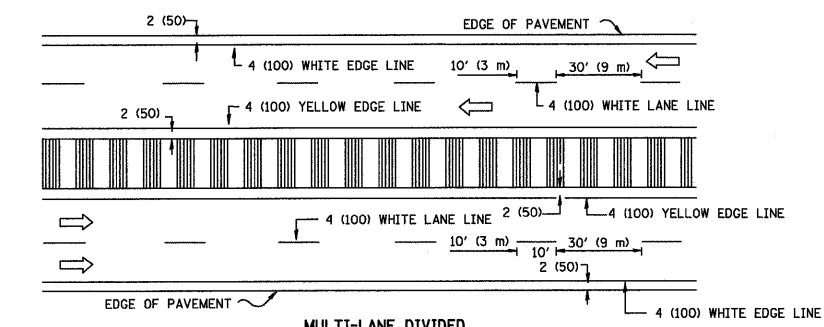
GHA #4281.800



2-LANE ROADWAY



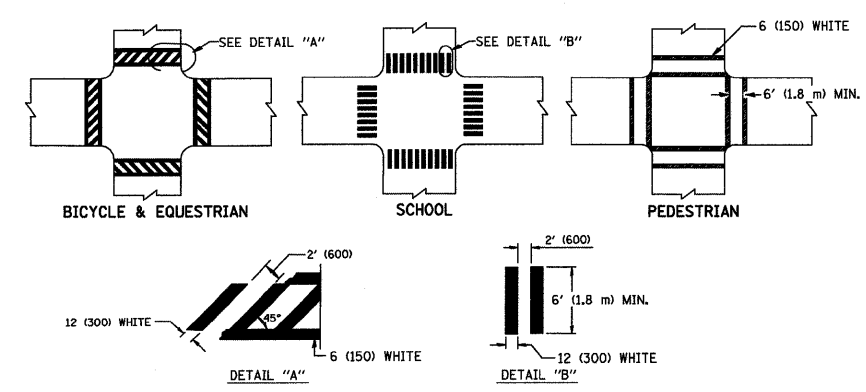
MULTI-LANE UNDIVIDED



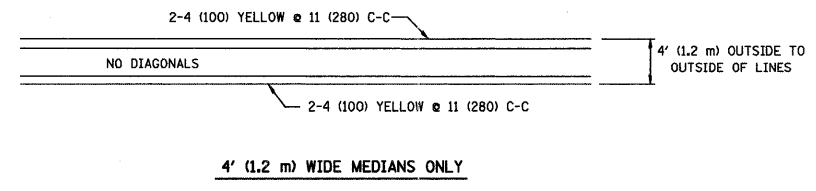
MULTI-LANE DIVIDED WITH MOUNTABLE MEDIAN

NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

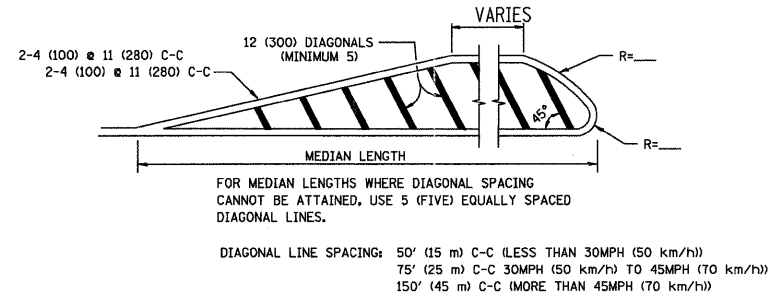
TYPICAL LANE AND EDGE LINE MARKING



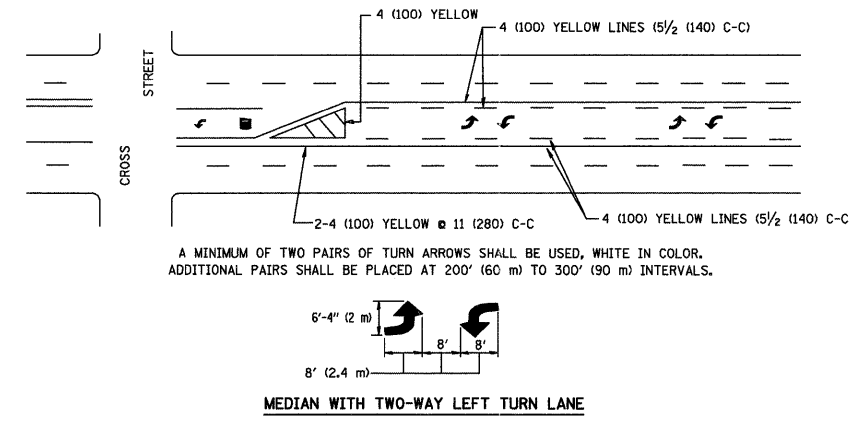
TYPICAL CROSSWALK MARKING



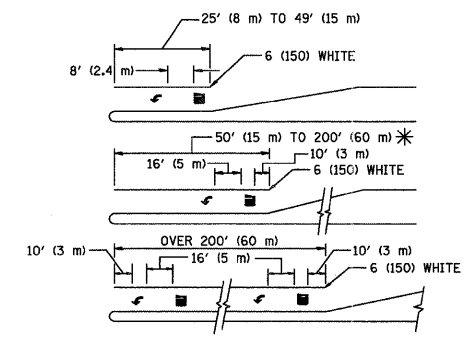
4' (1.2 m) WIDE MEDIANS ONLY



MEDIANS OVER 4' (1.2 m) WIDE



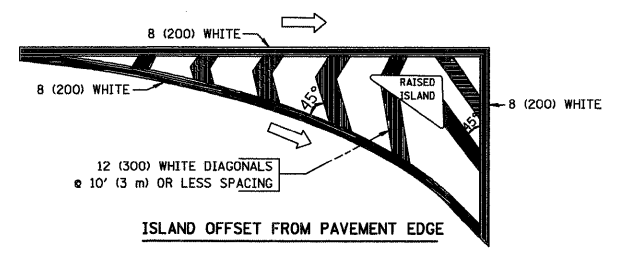
TYPICAL PAINTED MEDIAN MARKING



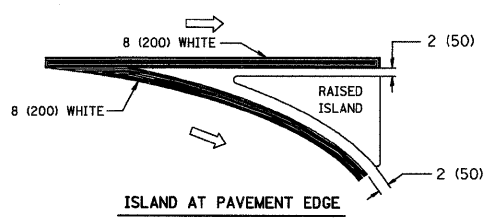
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
 * TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in inches (millimeters) unless otherwise shown.

TYPICAL PAVEMENT MARKINGS

GHA #4281.800