

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2009-008-TS	COOK	41	1
FED. ROAD DIST. NO.		ILLINOIS CONTRACT NO. 60G04		

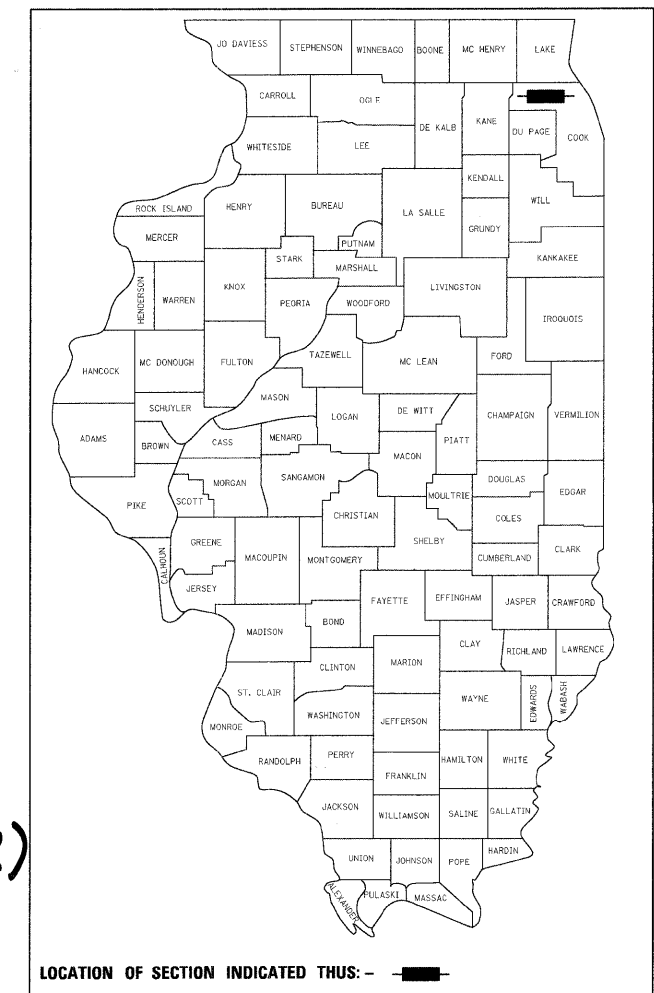
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

FOR INDEX OF SHEETS, SEE SHEET NO. 2

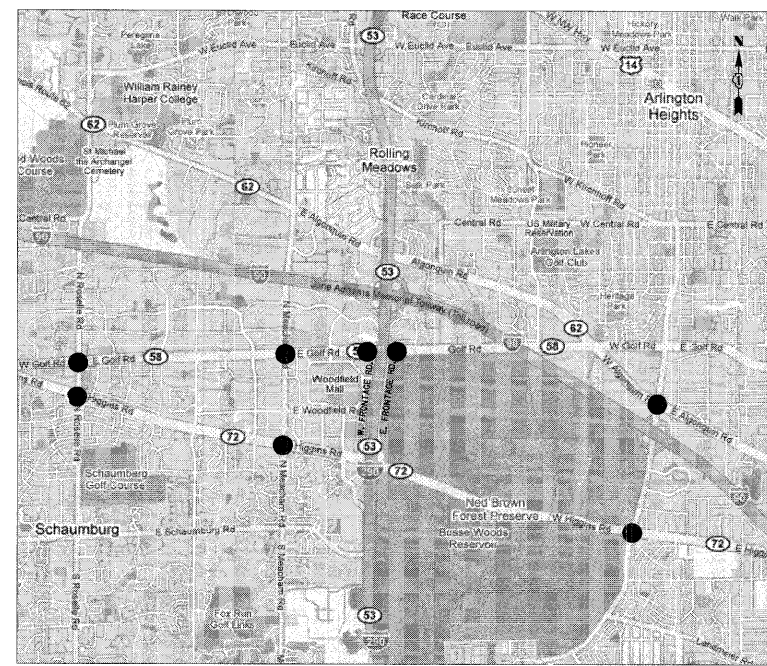
PLANS FOR PROPOSED FEDERAL AID HIGHWAY

DISTRICT 1 HIGHWAY SAFETY IMPROVEMENT PROJECT TRAFFIC SIGNAL MODERNIZATION VARIOUS ROUTES AT (8) VARIOUS SIGNALIZED INTERSECTIONS IN NORTH COOK COUNTY, ILLINOIS

F.A.P. ROUTES 559, 339 & 341 (IL 58, IL 62 & IL 72)
SECTION 2009-008 TS
PROJECT NO. C-91-318-09
COOK COUNTY PROJECT: HSIP-000S(665)



STD. No.	DESCRIPTION
000001-05	STANDARD SYMBOLS, ABBREVIATION AND PATTERNS
001006	DECIMAL OF AN INCH AND A FOOT
424001-05	CURB RAMPS FOR SIDEWALKS
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	P.C. CONCRETE ISLANDS AND MEDIANS
701006-03	OFF-RD OPERATIONS, 2L, 2W, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701011-02	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701101-02	OFF-RD OPERATIONS, MULTILANE, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701501-05	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701601-06	URBAN LANE CLOSURE, MULTILANE 1W OR 2W NON-TRAVERSABLE MEDIAN
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04	LANE CLOSURE, MULTILANE, 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-01	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
814001-02	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARDS PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-04	STEEL MAST ARM ASSEMBLY AND POLE
878001-07	CONCRETE FOUNDATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS



George M. Ziegler
 ENGINEER
 ILLINOIS REGISTRATION No. 062-045853
 EXPIRATION DATE: 11-30-2009
 PROFESSIONAL DESIGN FIRM No.: 184-001742
 EXPIRATION DATE: 04-30-2009

PREPARED BY: Steve Travia Jan 30, 2009
 TRAFFIC ENGINEER DATE

J.U.L.I.E.
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
 1-800-892-0123
 OR 811

CONTRACT NO. 60G04

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Jan 30 2009

Dennis M. O'Keefe
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

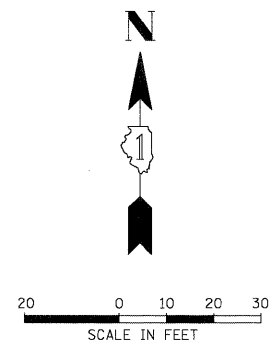
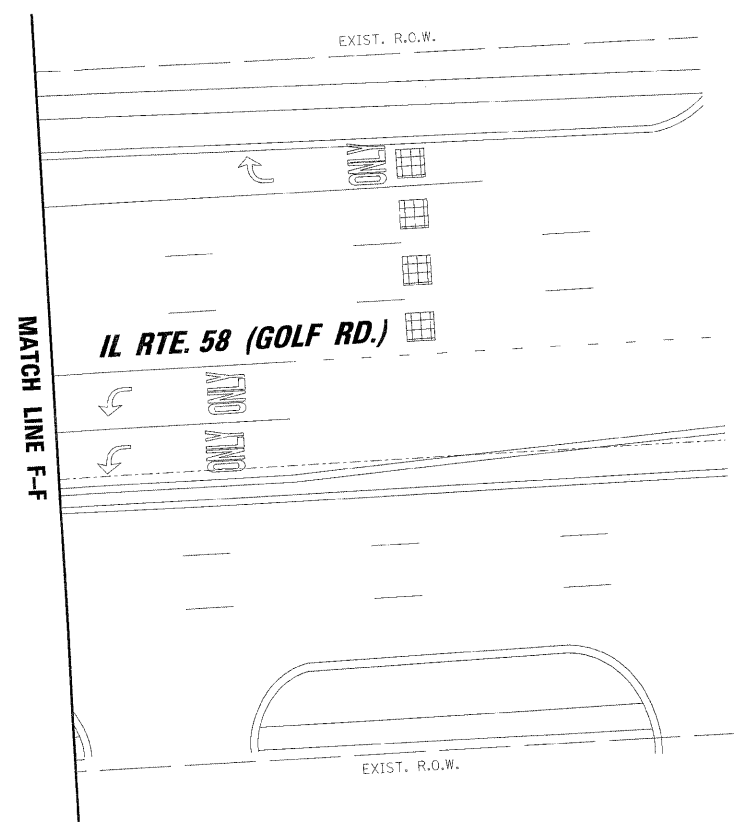
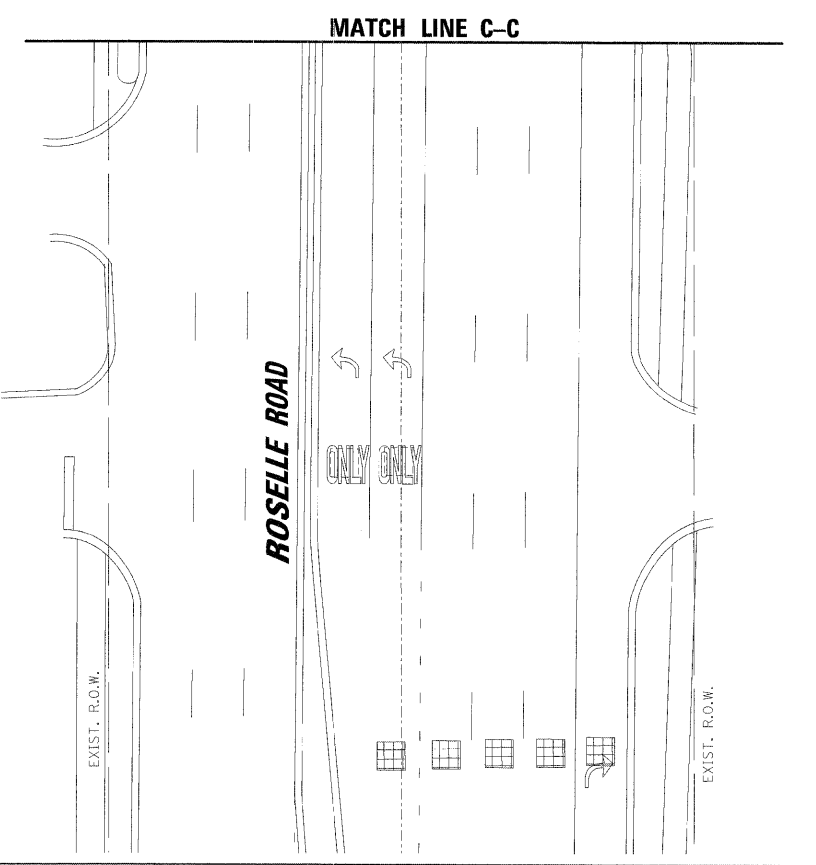
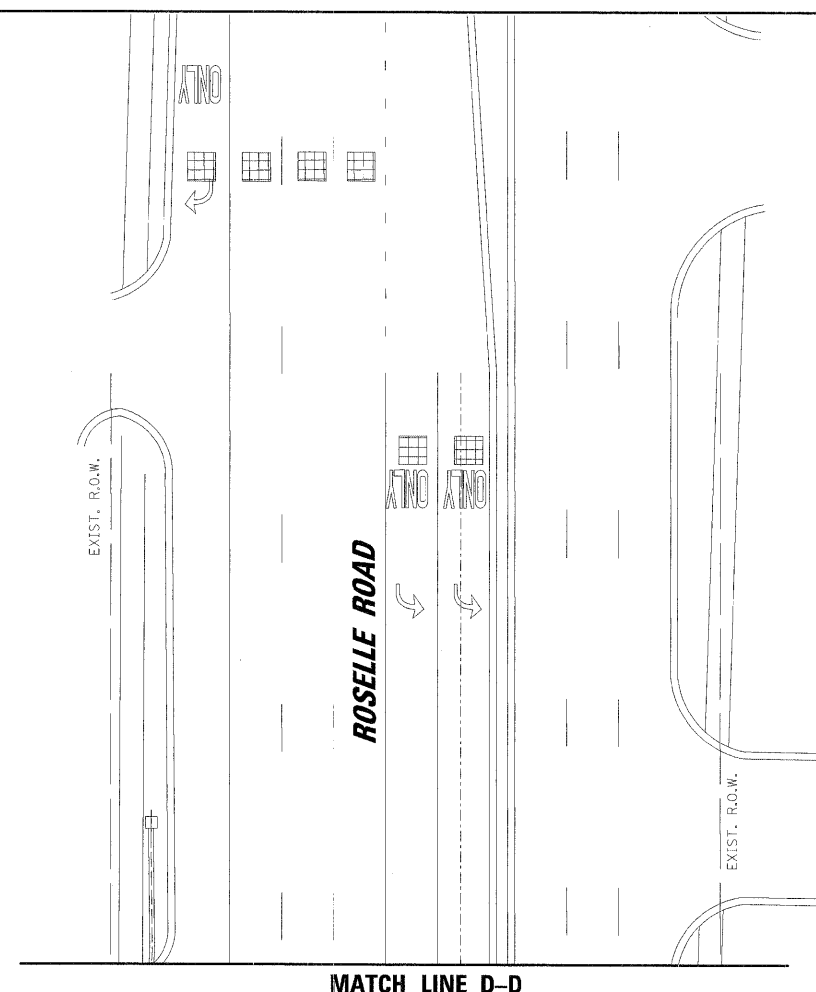
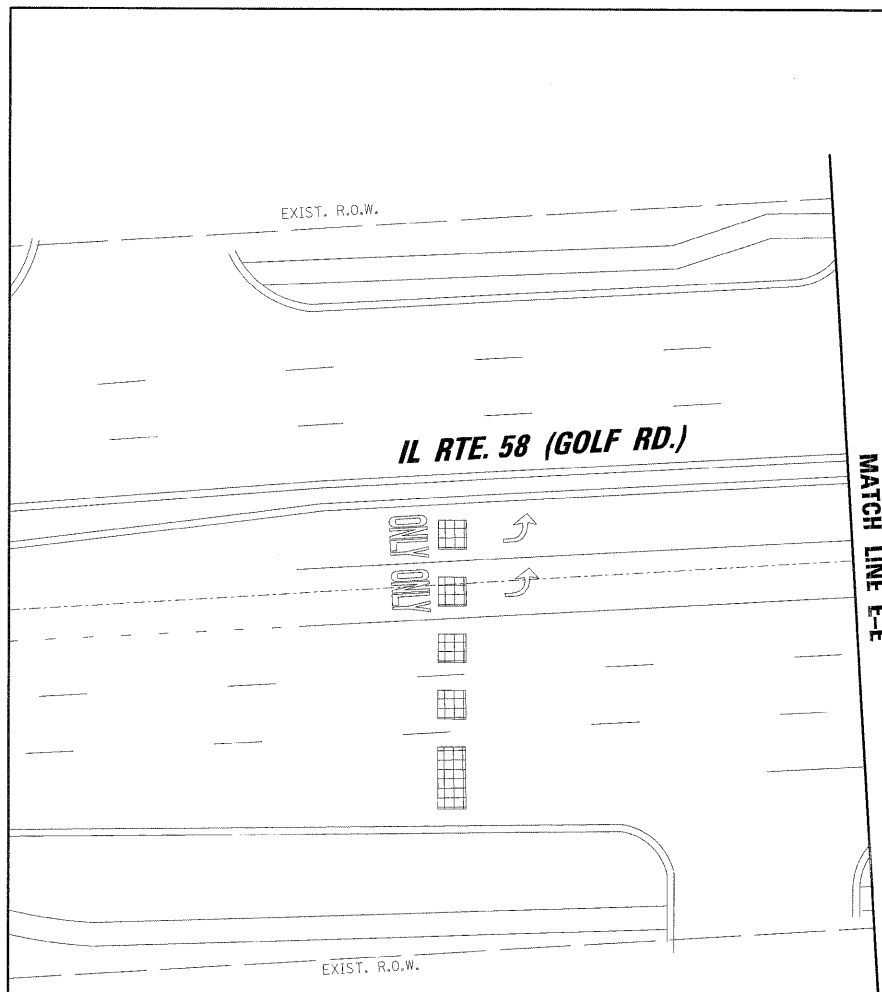
March 27, 2009
Charles G. Ingersoll
 ENGINEER OF DESIGN AND ENVIRONMENT

March 27, 2009
Christine M. Reed
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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DISTRICT 1 - BUREAU OF TRAFFIC: STEVE TRAVIA / DARYLE DREW (847) 705-4420

PROFILE SURVEYED BY DATE
 CHECKED BY DATE
 NOTE BOOK NO. DATE
 STRUCTURE NOTATIONS CHD
 N:\idat\9800040\Task S- EE Northwest Cook Safety\Task X - IL58 @ Roselle\Task X - IL58 @ Roselle.dgn
 CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (630) 823-0500
 CBB



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

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

FILE NAME =	USER NAME = FPAICONE
... \M002_IL58 @ Roselle.dgn	

DESIGNED - ABR	REVISOR -
DRAWN - FPB / FCP	REVISOR -
CHECKED - MJT	REVISOR -
DATE -	REVISOR -

PLOT SCALE = 20'	DATE = 1/26/2009
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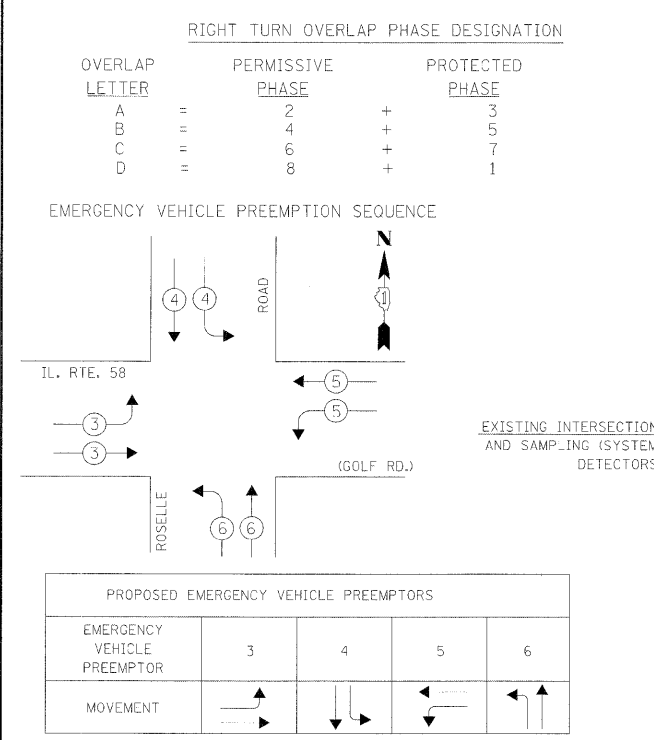
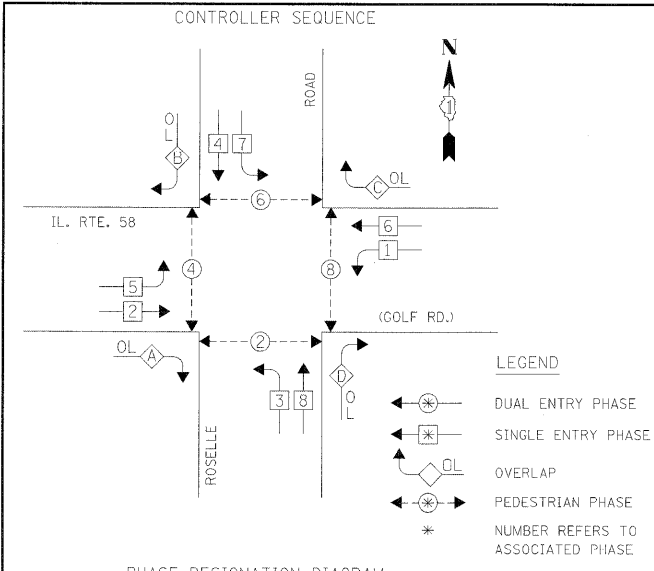
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN IL. ROUTE 58 (GOLF ROAD) AND ROSELLE ROAD			
SCALE: 1"= 20'	SHEET NO.	OF SHEETS	STA. TO STA.

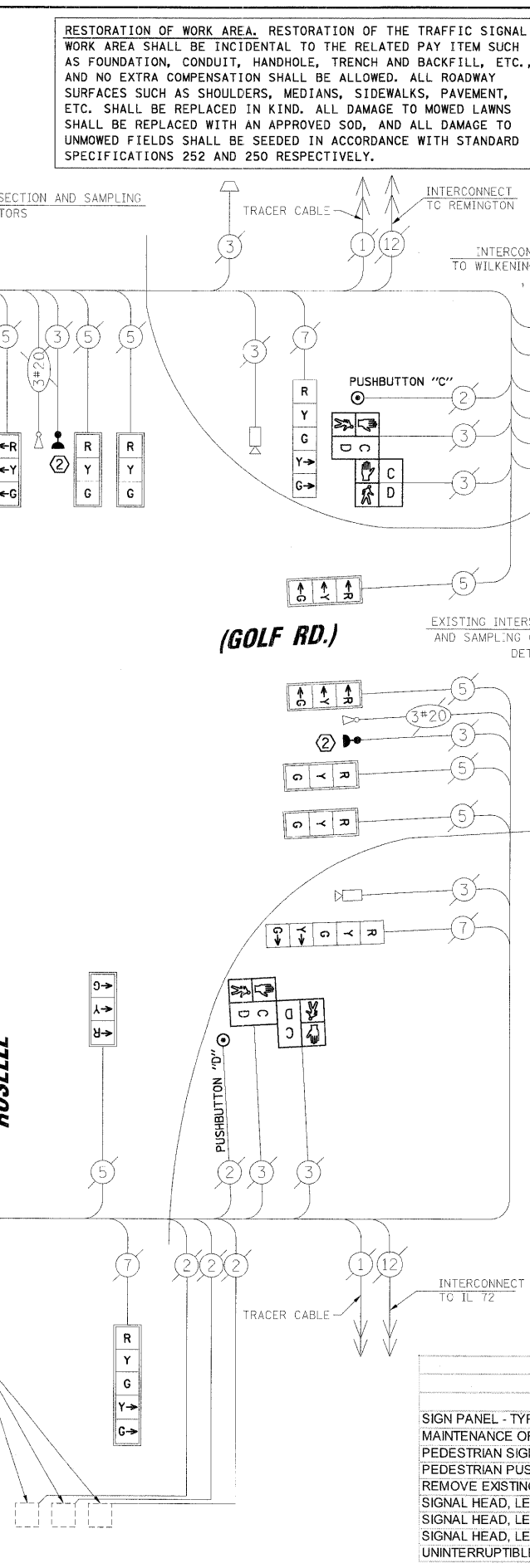
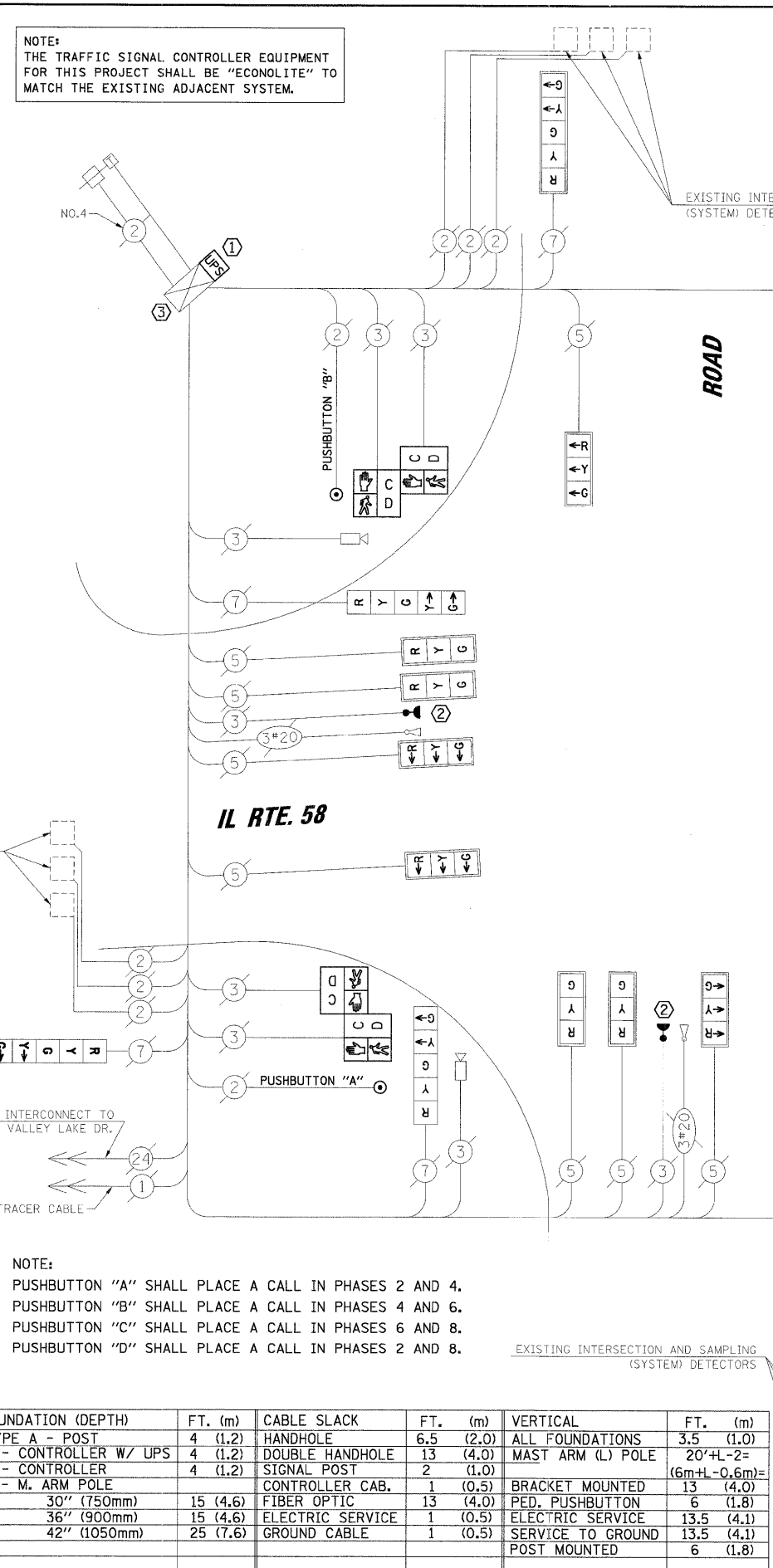
F.A.P. RTE. VAR	SECTION 2009-008-TS	COUNTY COOK	TOTAL SHEETS 41	SHEET NO. 5
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 60G04

SURVEYED BY: DATE: _____
 PLOTTED BY: DATE: _____
 CHECKED BY: DATE: _____
 NOTE BOOK NO.: _____
 PAID FILE NAME: _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500
 C.B. BURKE
 PROJECT FILE: _____
 SURVEYED BY: DATE: _____
 PLOTTED BY: DATE: _____
 CHECKED BY: DATE: _____
 NOTE BOOK NO.: _____
 PAID FILE NAME: _____
 M:\Info\N980040\Task 5- EE Non-Threat Cook Software\Task X - IL58 @ Roselle.dgn



ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: MARK GLOECK
 PHONE: (630) 691-4529
 COMPANY: COMED



FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'±L-2'±
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (0.6)	(6m±L-0.6m)±	
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

SCHEDULE OF QUANTITIES		UNIT	TOTAL
SIGN PANEL - TYPE 1		SQ FT	40
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION		EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER		EACH	4
PEDESTRIAN PUSH-BUTTON		EACH	4
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT		EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED, RETROFIT		EACH	16
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT		EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED, RETROFIT		EACH	2
UNINTERRUPTIBLE POWER SUPPLY		EACH	1

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 PEDESTRIAN SIGNAL SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN SIGNAL SIGNAL HEAD, 3-FACE
- 8 EACH PEDESTRIAN PUSH-BUTTON

DATE	BY	DATE	BY
DATE	BY	DATE	BY

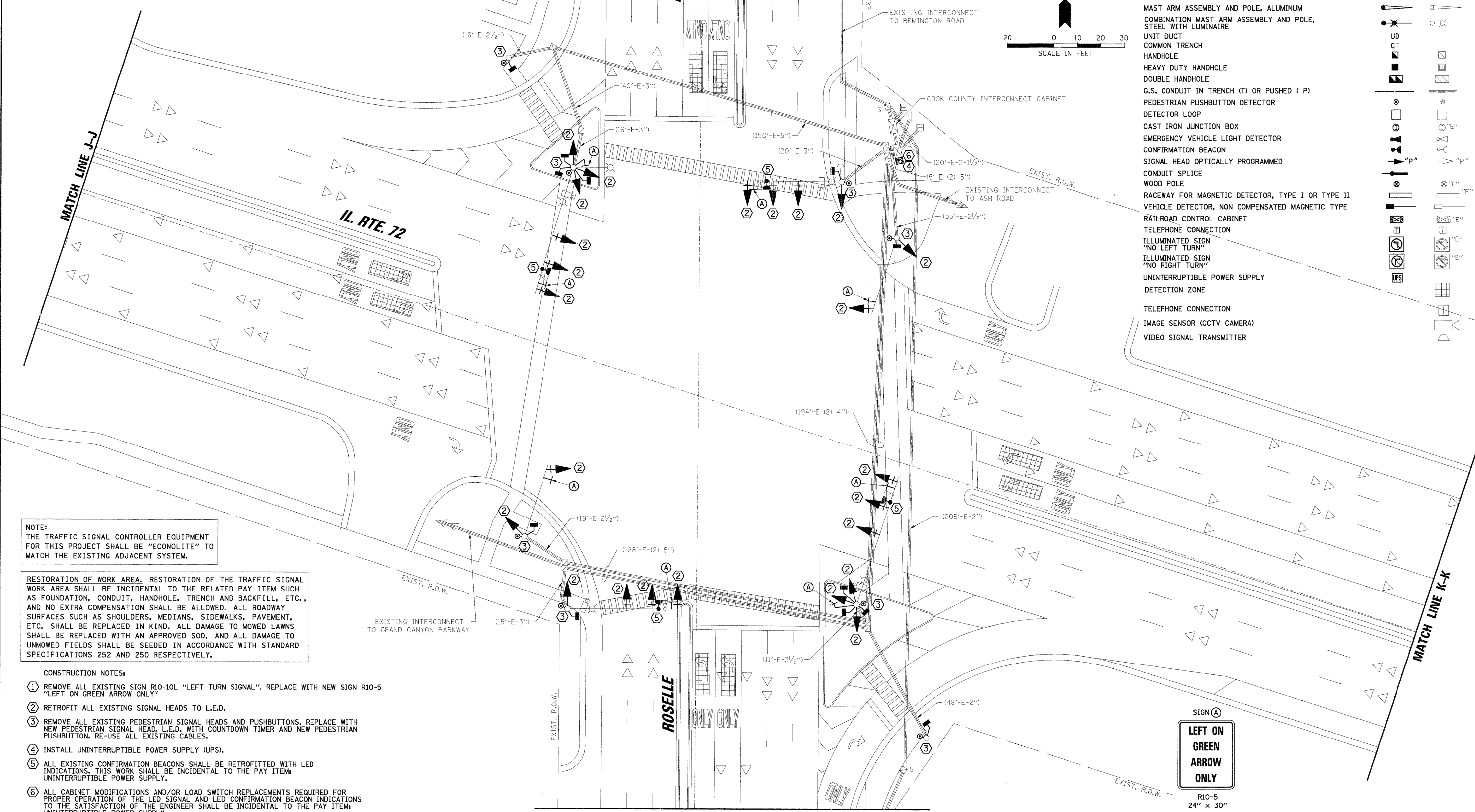
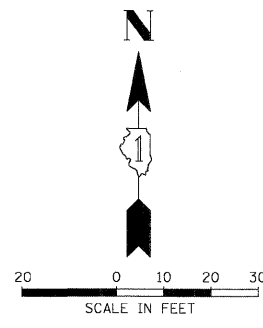
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 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

PROFILL
 SURVEYED
 CHECKED
 DATE
 BY

MATCH LINE H-H

TRAFFIC SIGNAL LEGEND

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



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

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

- CONSTRUCTION NOTES:
- 1 REMOVE ALL EXISTING SIGN R10-10L "LEFT TURN SIGNAL". REPLACE WITH NEW SIGN R10-5 "LEFT ON GREEN ARROW ONLY"
 - 2 RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.
 - 3 REMOVE ALL EXISTING PEDESTRIAN SIGNAL HEADS AND PUSHBUTTONS. REPLACE WITH NEW PEDESTRIAN SIGNAL HEAD, L.E.D. WITH COUNTDOWN TIMER AND NEW PEDESTRIAN PUSHBUTTON. RE-USE ALL EXISTING CABLES.
 - 4 INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
 - 5 ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATORS. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
 - 6 ALL CABINET MODIFICATIONS AND/OR LOAD SWITCH REPLACEMENTS REQUIRED FOR PROPER OPERATION OF THE LED SIGNAL AND LED CONFIRMATION BEACON INDICATORS TO THE SATISFACTION OF THE ENGINEER SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.



STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

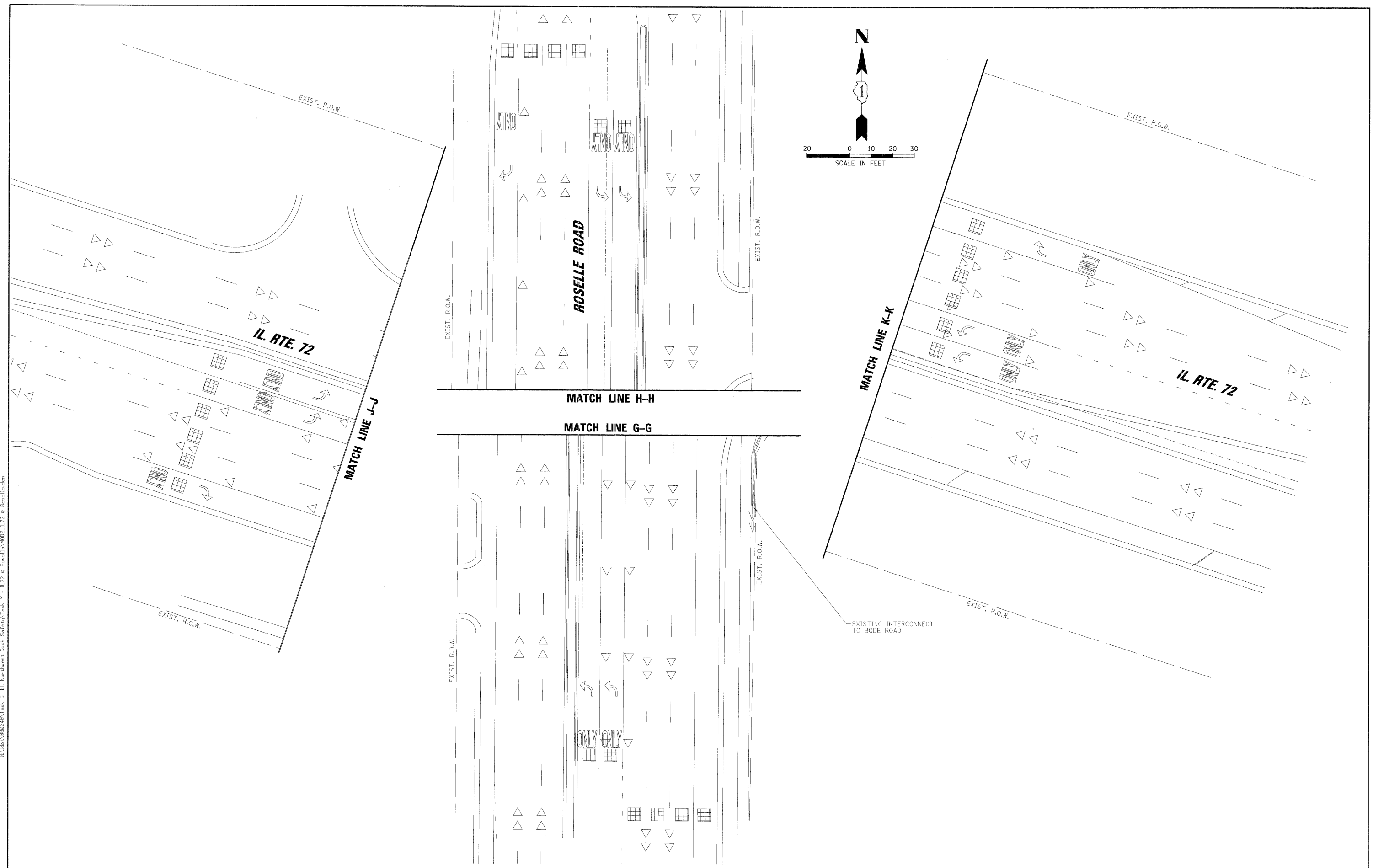
TRAFFIC SIGNAL MODERNIZATION PLAN
 IL. ROUTE 72 AND ROSELLE ROAD

FILE NAME = ...M001.IL72 & Roselle.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -	SCALE: 1"=20'	SHEET NO. OF SHEETS STA. TO STA.	F.A.P. RTE. VAR	SECTION 2009-008-TS	COUNTY COOK	TOTAL SHEETS 41	SHEET NO. 7	CONTRACT NO. 60G04	ILLINOIS FED. AID PROJECT
PLOT SCALE = 20'	CHECKED - MJT	REVISED -										
PLOT DATE = 1/26/2009	DATE -	REVISED -										

PROFILE SURVEYED BY DATE
 PLOTTED BY DATE
 B.M. NOTED BY DATE
 STRUCTURE NOTATIONS OK'D BY DATE
 NO. DATE
 PLAN SURVEYED BY DATE
 PLOTTED BY DATE
 NOTE BOOK NO. DATE
 RTI OF WAY CHECKED BY DATE
 CAD FILE NAME

CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

N:\Vidoc\980948\Task 5 - EE Northwest Cook Safety\Task 5 - IL72 & Roselle\MOD2_IL72 & Roselle.dgn



FILE NAME = ...MOD2_IL72 & Roselle.dgn
 USER NAME = FPACIONE
 PLOT SCALE = 20'
 PLOT DATE = 1/25/2009

DESIGNED - ABR	REVISED -
DRAWN - FPB / FCP	REVISED -
CHECKED - MJT	REVISED -
DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

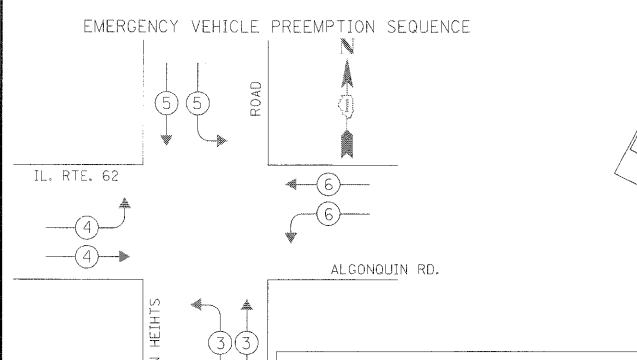
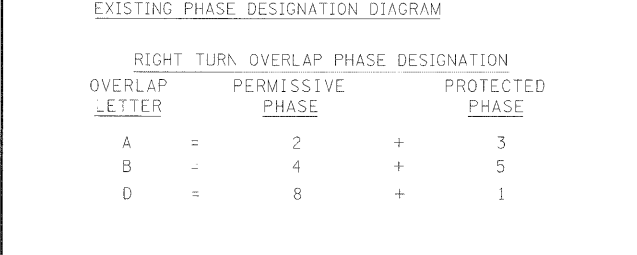
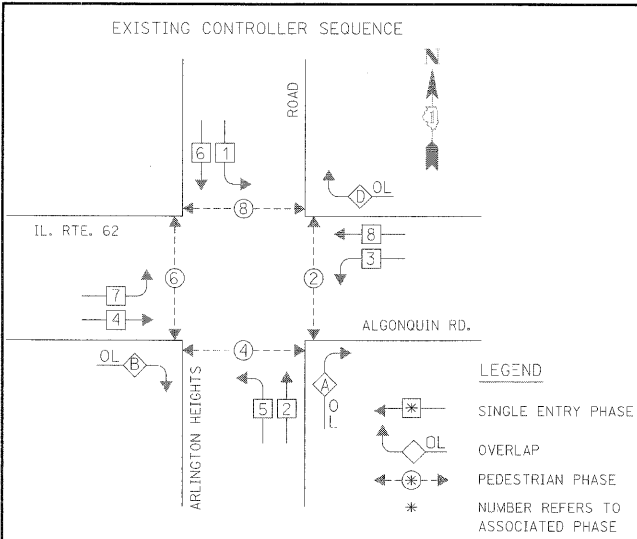
TRAFFIC SIGNAL MODERNIZATION PLAN
IL. ROUTE 72 AND ROSELLE ROAD
 SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2009-008-TS	COOK	41	8
CONTRACT NO. 60G04				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

SURVEYED BY: DATE: _____
 PLOTTED BY: DATE: _____
 CHECKED BY: DATE: _____
 NOTE BOOK NO.: _____
 FILE NAME: ...VCAB.IL62 @ Arlington.dgn

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 Rosemont, Illinois 60018
 (847) 823-0500

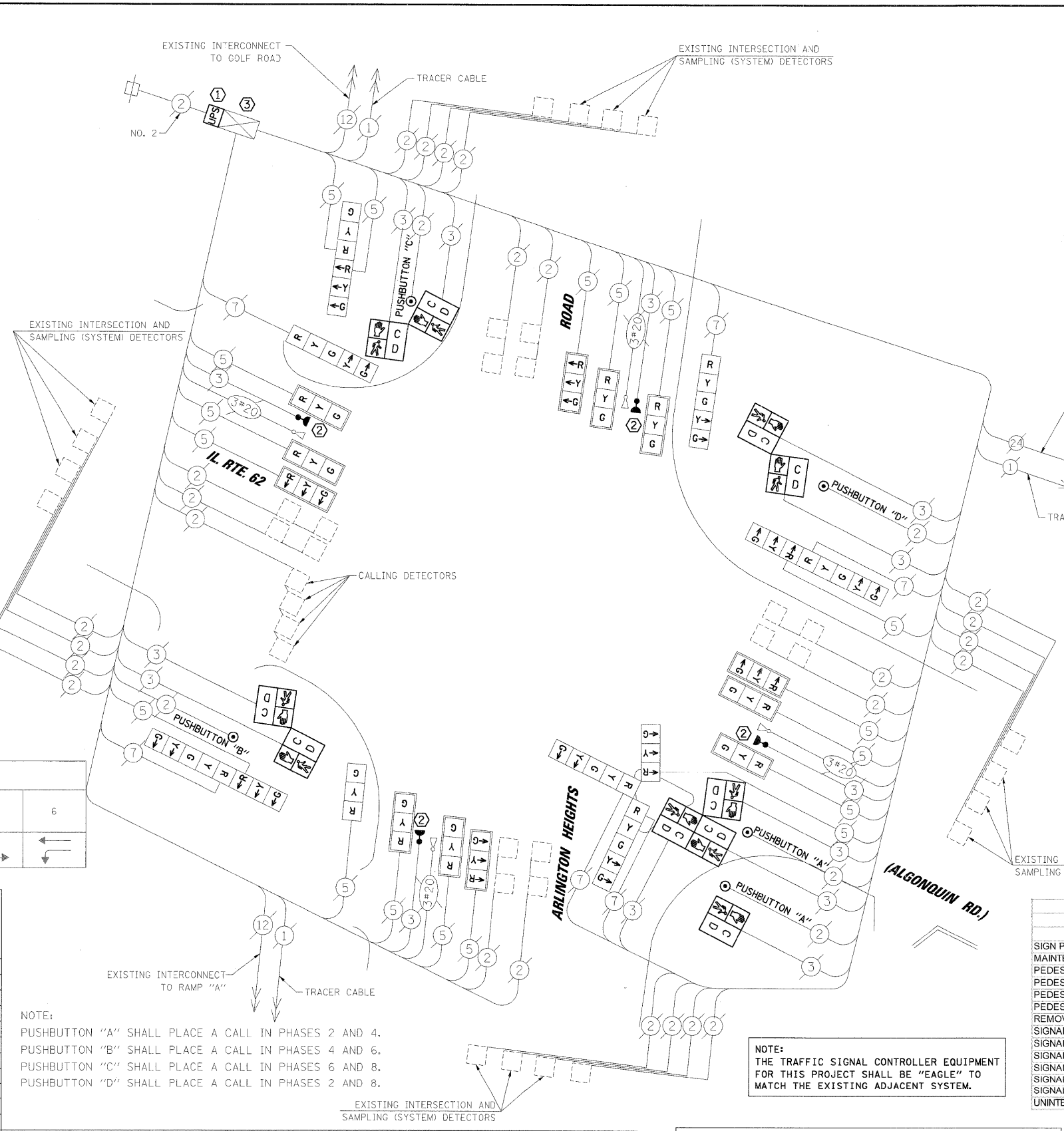
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 PLOTTED BY: DATE: _____
 CHECKED BY: DATE: _____
 NOTE BOOK NO.: _____
 FILE NAME: ...VCAB.IL62 @ Arlington.dgn



EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	←	→	←	→

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	24	17	0.50		204.00
(YELLOW)	24	25	0.25		150.00
(GREEN)	24	15	0.25		90.00
ARROW	12	12	0.10		14.40
PED. SIGNAL	10	25	1.00		250.00
CONTROLLER	1	100	1.00		100.00
ILLUM. SIGN	-	252	0.05		-
VIDEO SYSTEM	-	150	1.00		-
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	808.40

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: MARK GLOECK
 PHONE: (630) 691-4529
 COMPANY: COMED

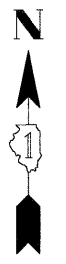


NOTE:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.
 PUSHBUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
 PUSHBUTTON "D" SHALL PLACE A CALL IN PHASES 2 AND 8.

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

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'±L-2'±
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)		(6m±L-0.6m)±
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND POST MOUNTED	13.5 (4.1)
					6 (1.8)

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



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

- CONSTRUCTION NOTES:
- INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
 - ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
 - ALL CABINET MODIFICATIONS AND/OR LOAD SWITCH REPLACEMENTS REQUIRED FOR PROPER OPERATION OF THE LED SIGNAL AND LED CONFIRMATION BEACON INDICATIONS TO THE SATISFACTION OF THE ENGINEER SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.

SCHEDULE OF QUANTITIES		
ITEM	UNIT	TOTAL
SIGN PANEL - TYPE 1	SQ FT	40
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	5
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED, RETROFIT	EACH	12
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION BRACKET MOUNTED, RETROFIT	EACH	2
SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 2-5 SECTION BRACKET MOUNTED, RETROFIT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1

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

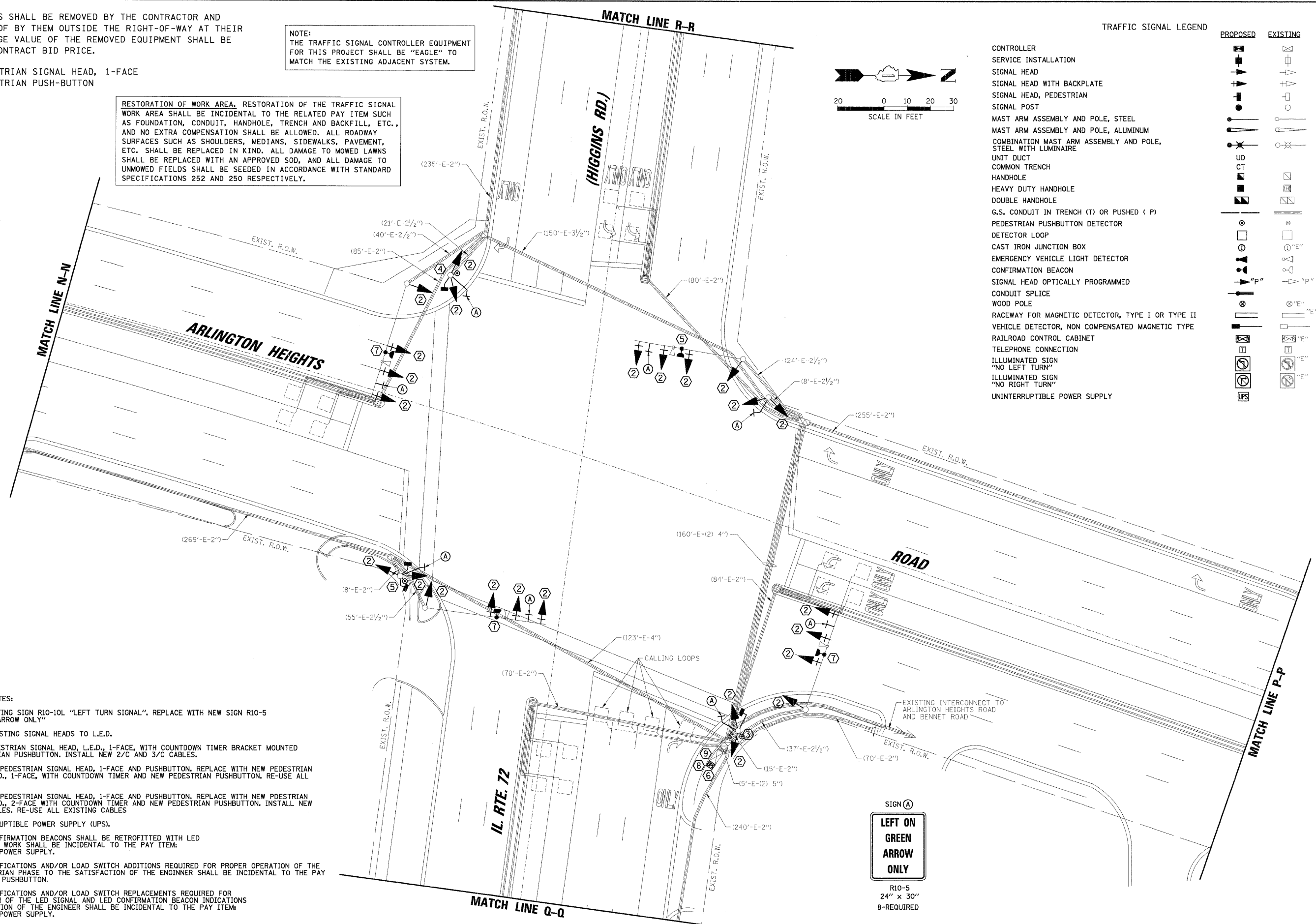
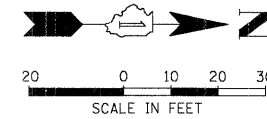
- 2 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 2 EACH PEDESTRIAN PUSH-BUTTON

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

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

TRAFFIC SIGNAL LEGEND

PROPOSED	EXISTING



CONSTRUCTION NOTES:

- 1 REMOVE ALL EXISTING SIGN R10-10L "LEFT TURN SIGNAL". REPLACE WITH NEW SIGN R10-5 "LEFT ON GREEN ARROW ONLY"
- 2 RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.
- 3 INSTALL NEW PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, WITH COUNTDOWN TIMER BRACKET MOUNTED AND NEW PEDESTRIAN PUSHBUTTON. INSTALL NEW 2/C AND 3/C CABLES.
- 4 REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 1-FACE AND PUSHBUTTON. REPLACE WITH NEW PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, WITH COUNTDOWN TIMER AND NEW PEDESTRIAN PUSHBUTTON. RE-USE ALL EXISTING CABLES.
- 5 REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 1-FACE AND PUSHBUTTON. REPLACE WITH NEW PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE WITH COUNTDOWN TIMER AND NEW PEDESTRIAN PUSHBUTTON. INSTALL NEW 2/C AND 3/C CABLES. RE-USE ALL EXISTING CABLES
- 6 INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
- 7 ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- 8 ALL CABINET MODIFICATIONS AND/OR LOAD SWITCH ADDITIONS REQUIRED FOR PROPER OPERATION OF THE PROPOSED PEDESTRIAN PHASE TO THE SATISFACTION OF THE ENGINEER SHALL BE INCIDENTAL TO THE PAY ITEM: PEDESTRIAN PUSHBUTTON.
- 9 ALL CABINET MODIFICATIONS AND/OR LOAD SWITCH REPLACEMENTS REQUIRED FOR PROPER OPERATION OF THE LED SIGNAL AND LED CONFIRMATION BEACON INDICATIONS TO THE SATISFACTION OF THE ENGINEER SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.



DATE	BY	DATE	BY
DATE	BY	DATE	BY

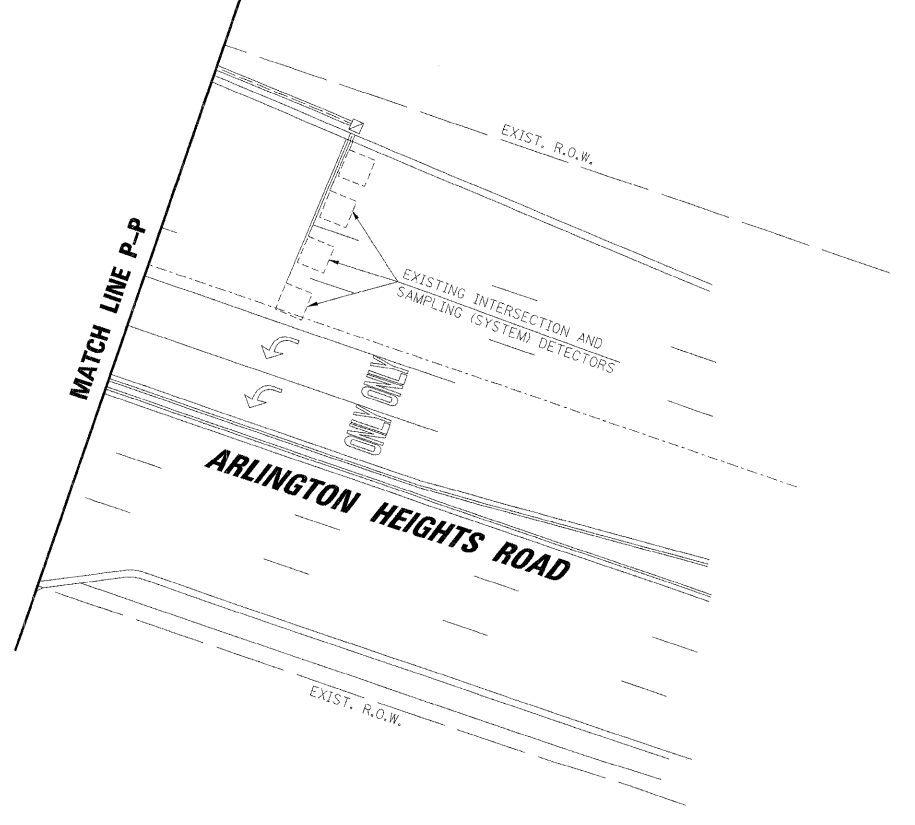
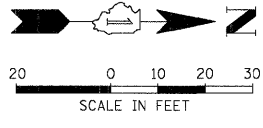
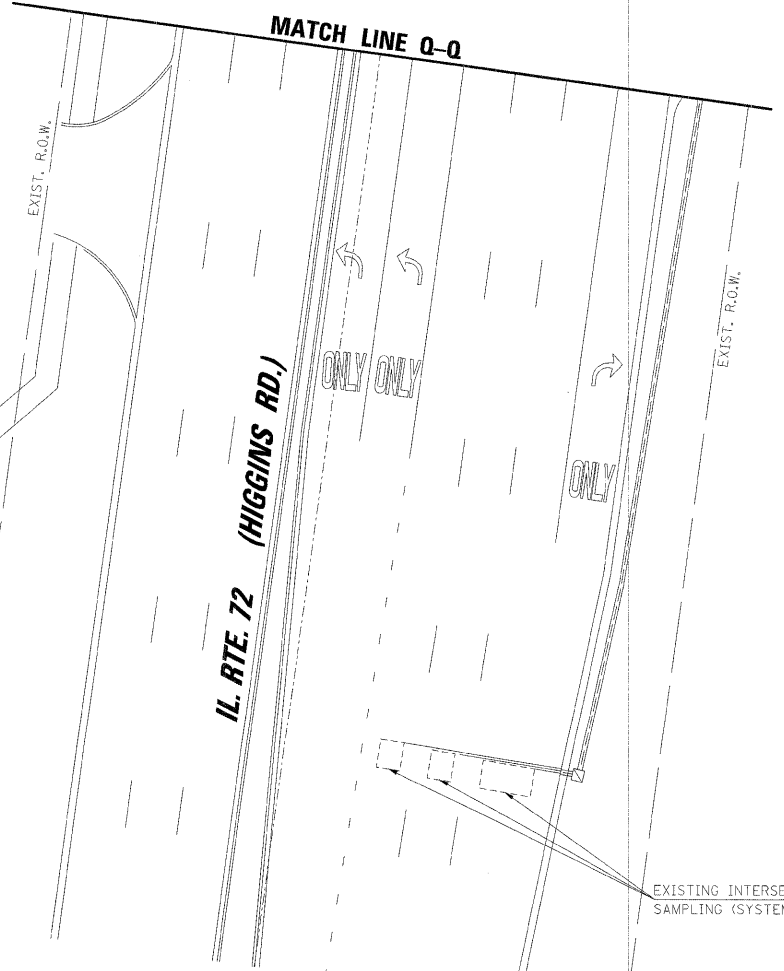
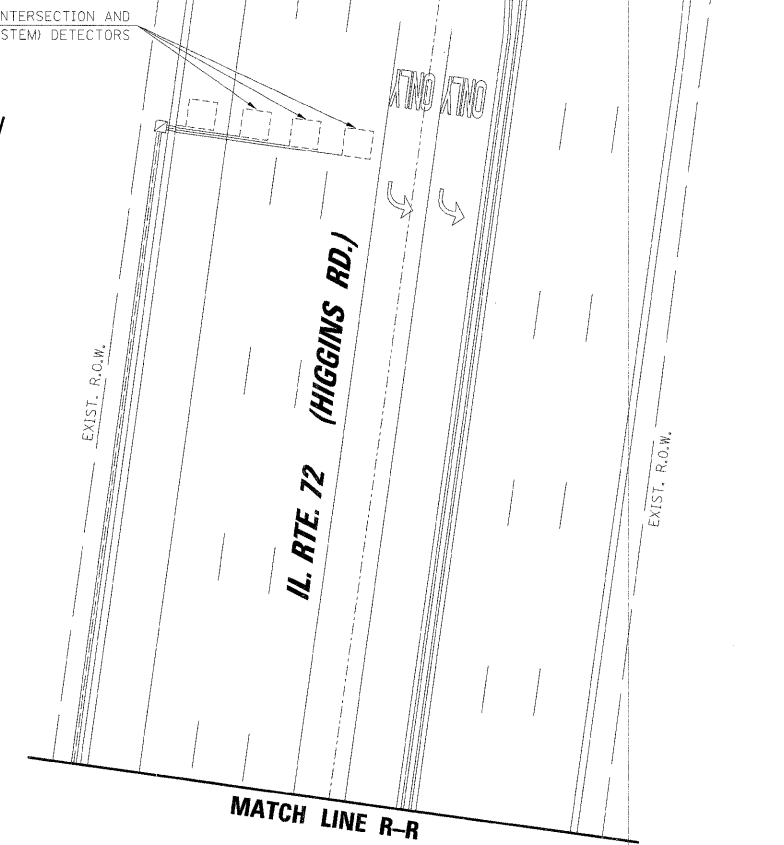
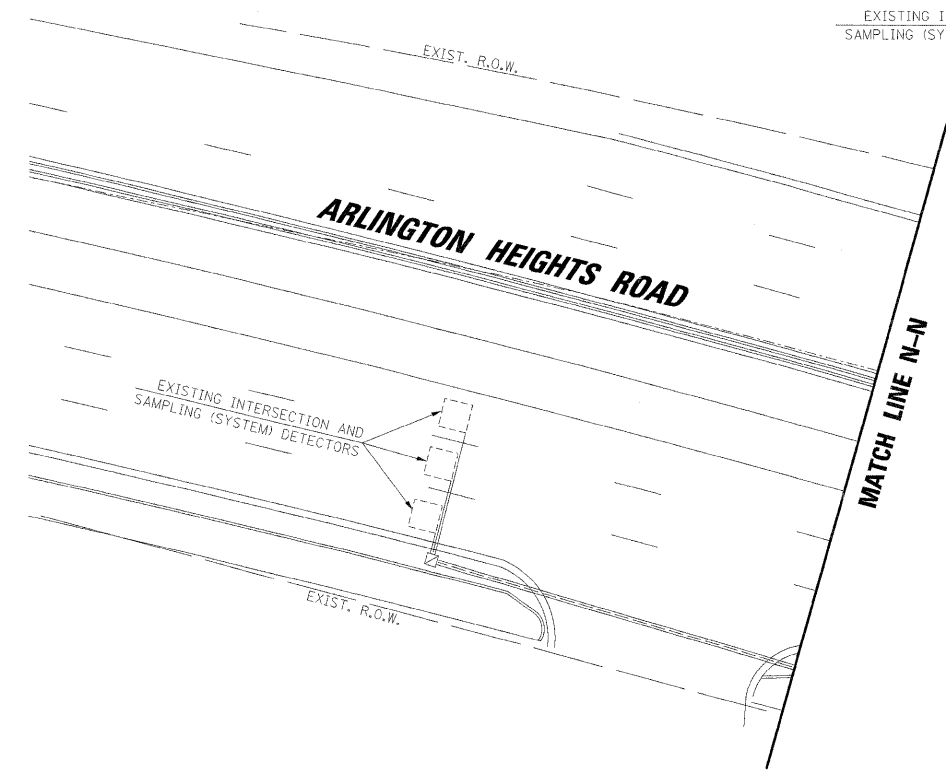
CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-9500

FILE NAME = ...M001_IL72 @ Arlington.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN IL. RTE. 72 (HIGGINS RD.) AND ARLINGTON HEIGHTS ROAD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 20'	CHECKED - MJT	REVISED -	VAR			2009-008-TS	COOK	41	13	
PLOT DATE = 1/26/2009	DATE -	REVISED -	SCALE: 1"=20'			SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 60G04		
								FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	

PROFILE SURVEYED BY DATE
 CHECKED BY DATE
 B.M. NOTED BY DATE
 STRUCTURE NOTATIONS CHND
 PLAN SURVEYED BY DATE
 PLOTTED BY DATE
 NOTE BOOK NO. BY DATE
 RT. OF WAY CHECKED BY DATE
 PADD FILE NAME

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 Rosemont, Illinois 60018
 (847) 823-0500
 CB

N:\data\080804\Task S-EE Northwest Cook Safety\Task AA - IL72 @ Arlington.dgn
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NOTE:
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

TRAFFIC SIGNAL LEGEND

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

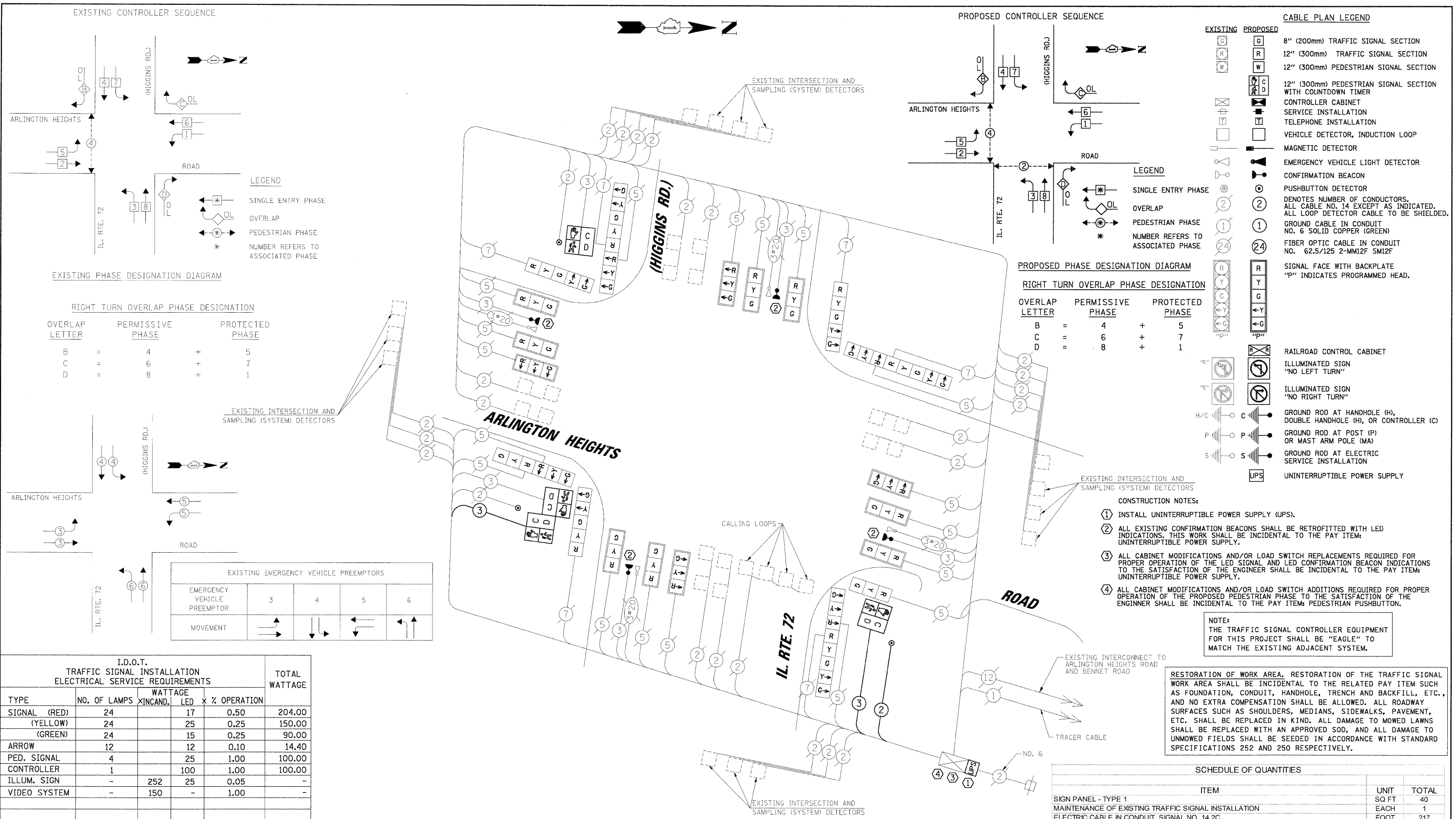
FILE NAME = ...M002_IL72 @ Arlington.dgn	USER NAME = FFRACIONE	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN IL RTE. 72 (HIGGINS RD.) AND ARLINGTON HEIGHTS ROAD	F.A.P. RTE. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 20'	CHECKED - MJT	REVISED -	VAR 2009-008-TS			COOK	41	14	
PLOT DATE = 1/26/2009	DATE -	REVISED -	CONTRACT NO. 60G04						
						FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			
SCALE: 1"= 20'						SHEET NO. OF SHEETS STA. TO STA.			

PROFILE SURVEYED BY DATE
 PLOTTED BY DATE
 CHECKED BY DATE
 NOTE BOOK NO. OF MAY CHECKED
 FILE NAME
 FILE NO.

PLAN SURVEYED BY DATE
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 NOTE BOOK NO. OF MAY CHECKED
 FILE NAME
 FILE NO.

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 Rosemont, Illinois 60018
 (847) 823-0500

PROJECT: .../Task S-EE Northwest Cook Safety/Task AA - IL 72 @ Arlington.dgn
 DATE: 1/26/2009



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

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
B	4	5
C	6	7
D	8	1

EXISTING EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	→	↓	←	↑

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

TYPE	NO. OF LAMPS	XINCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	24		17	0.50	204.00
(YELLOW)	24		25	0.25	150.00
(GREEN)	24		15	0.25	90.00
ARROW	12		12	0.10	14.40
PED. SIGNAL	4		25	1.00	100.00
CONTROLLER	1	100	100	1.00	100.00
ILLUM. SIGN	-	252	25	0.05	-
VIDEO SYSTEM	-	150	-	1.00	-
FLASHER				0.50	

ENERGY COSTS TO: TOTAL = 658.40
ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: MARK GLOECK
 PHONE: (630) 691-4529
 COMPANY: COMED

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2=
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)		(6m+L-0.6m)=
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

- CONSTRUCTION NOTES:**
- INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
 - ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
 - ALL CABINET MODIFICATIONS AND/OR LOAD SWITCH REPLACEMENTS REQUIRED FOR PROPER OPERATION OF THE LED SIGNAL AND LED CONFIRMATION BEACON INDICATIONS TO THE SATISFACTION OF THE ENGINEER SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
 - ALL CABINET MODIFICATIONS AND/OR LOAD SWITCH ADDITIONS REQUIRED FOR PROPER OPERATION OF THE PROPOSED PEDESTRIAN PHASE TO THE SATISFACTION OF THE ENGINEER SHALL BE INCIDENTAL TO THE PAY ITEM: PEDESTRIAN PUSHBUTTON.

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

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
SIGN PANEL - TYPE 1	SQ FT	40
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	217
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	231
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	3
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED, RETROFIT	EACH	12
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED, RETROFIT	EACH	3
SIGNAL HEAD, LED, 2-FACE, 3-SECTION, BRACKET MOUNTED, RETROFIT	EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION BRACKET MOUNTED, RETROFIT	EACH	3
UNINTERRUPTIBLE POWER SUPPLY	EACH	1

DATE: _____ BY: _____
 SURVEYED: _____
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 FILE NAME: _____

PLAN
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 DATE: _____
 BY: _____
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 DATE: _____
 FILE NAME: _____

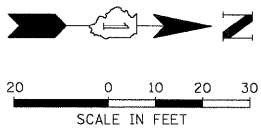
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 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

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MATCH LINE W-W

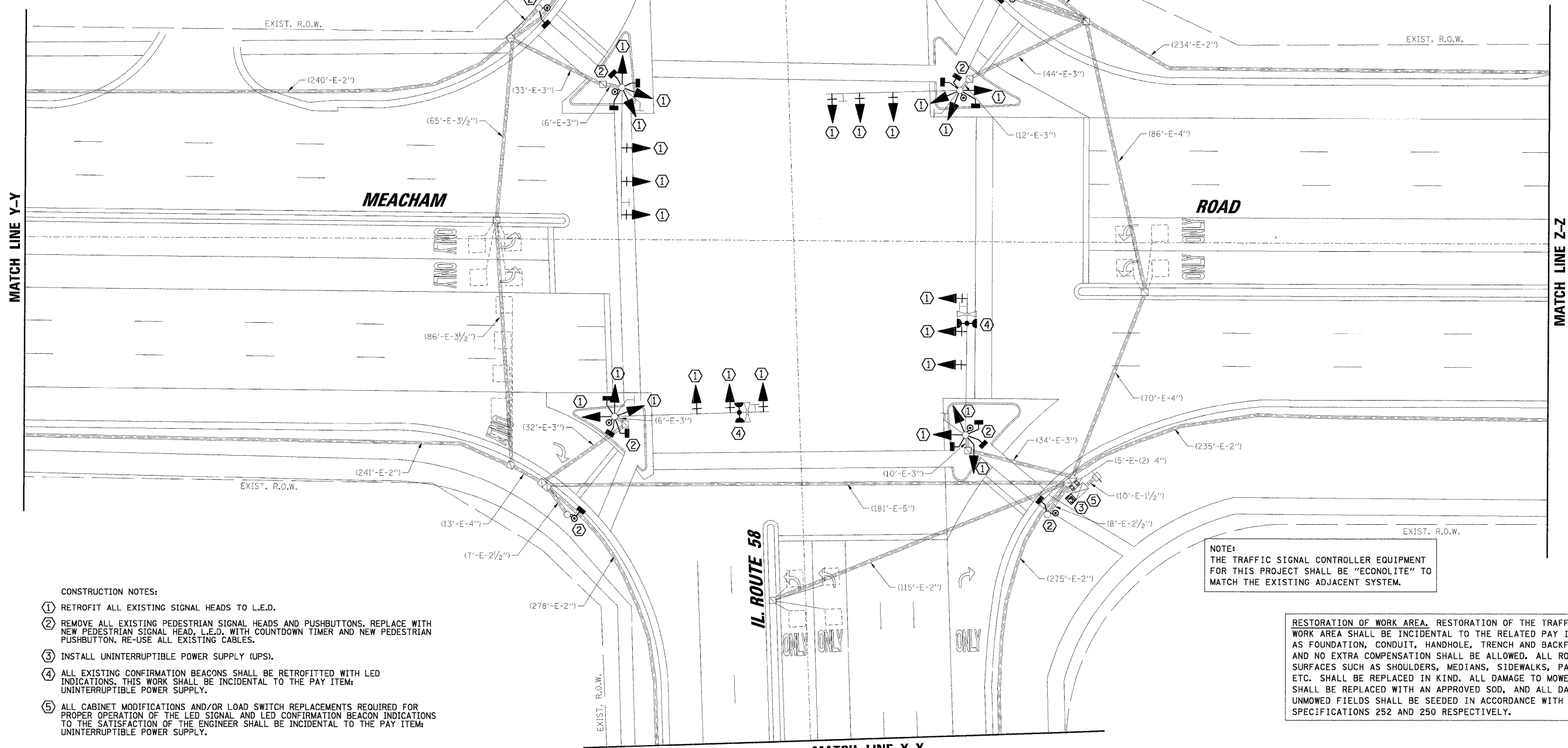
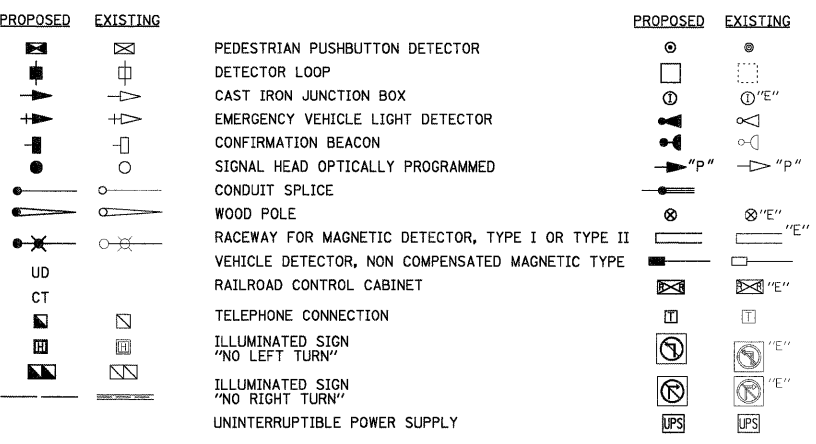
TRAFFIC SIGNAL LEGEND



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

- 4 EACH PEDESTRIAN SIGNAL SIGNAL HEAD, 1-FACE
- 4 EACH PEDESTRIAN SIGNAL HEAD, 3-SECTION
- 8 EACH PEDESTRIAN PUSH-BUTTON

- CONTROLLER
 SERVICE INSTALLATION
 SIGNAL HEAD
 SIGNAL HEAD WITH BACKPLATE
 SIGNAL HEAD, PEDESTRIAN
 SIGNAL POST
 MAST ARM ASSEMBLY AND POLE, STEEL
 MAST ARM ASSEMBLY AND POLE, ALUMINUM
 COMBINATION MAST ARM ASSEMBLY AND POLE, STEEL WITH LUMINAIRE
 UNIT DUCT
 COMMON TRENCH
 HANDHOLE
 HEAVY DUTY HANDHOLE
 DOUBLE HANDHOLE
 G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)



CONSTRUCTION NOTES:

- 1 RETROFIT ALL EXISTING SIGNAL HEADS TO L.E.D.
- 2 REMOVE ALL EXISTING PEDESTRIAN SIGNAL HEADS AND PUSHBUTTONS. REPLACE WITH NEW PEDESTRIAN SIGNAL HEAD, L.E.D. WITH COUNTDOWN TIMER AND NEW PEDESTRIAN PUSHBUTTON. RE-USE ALL EXISTING CABLES.
- 3 INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
- 4 ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- 5 ALL CABINET MODIFICATIONS AND/OR LOAD SWITCH REPLACEMENTS REQUIRED FOR PROPER OPERATION OF THE LED SIGNAL AND LED CONFIRMATION BEACON INDICATIONS TO THE SATISFACTION OF THE ENGINEER SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.

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

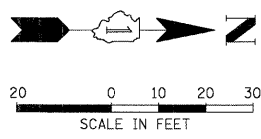
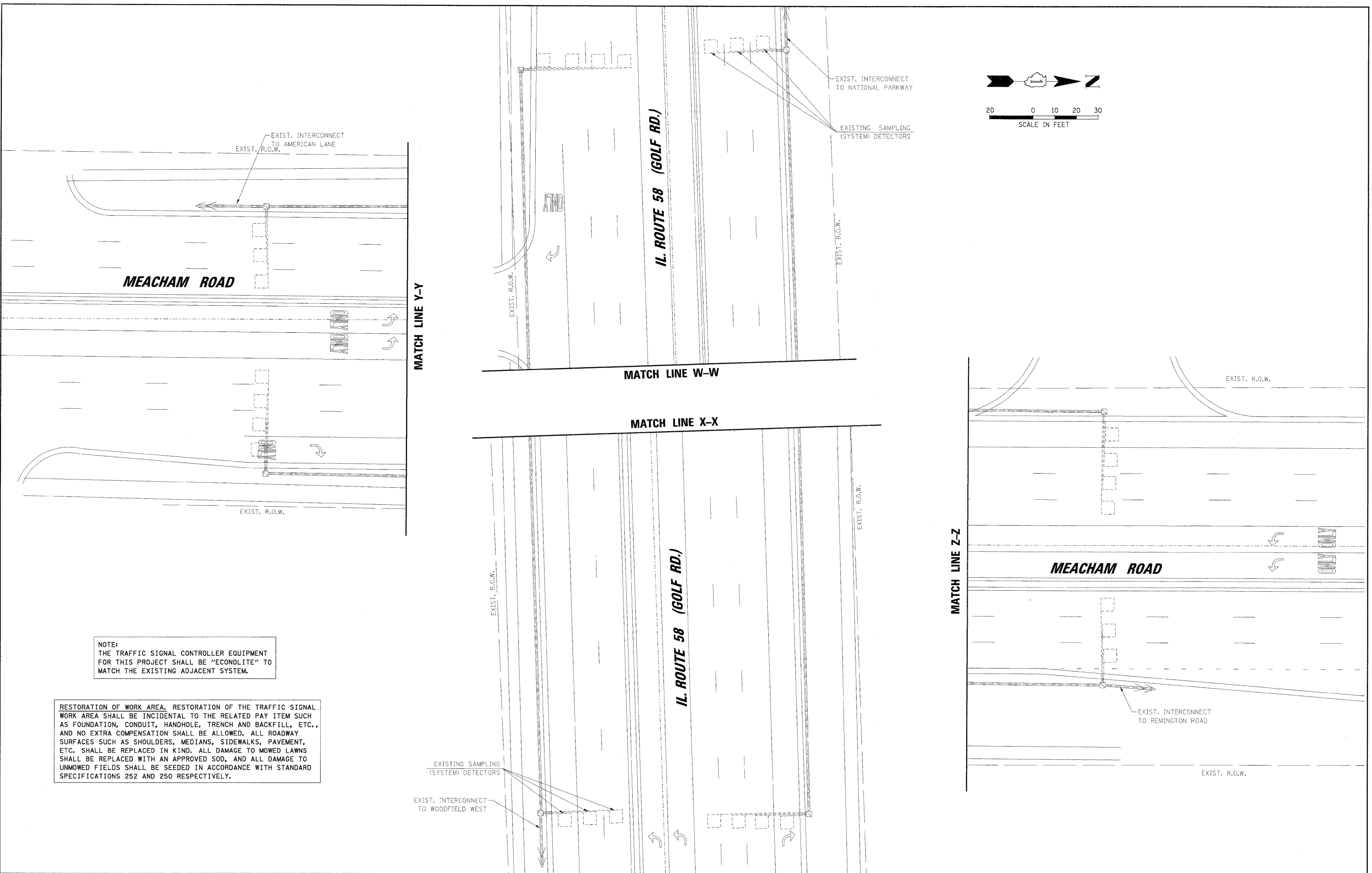
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FILE NAME = ...\\M001.IL58 @ Meacham.dgn	USER NAME = FPAICONE	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN IL ROUTE 58 (GOLF ROAD) AND MEACHAM ROAD			F.A.P. RTE. VAR	SECTION 2009-008-TS	COUNTY COOK	TOTAL SHEETS 41	SHEET NO. 16
PLOT SCALE = 20'	CHECKED - MJT	REVISED -	REVISED -		SCALE: 1"=20'	SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 60G04				
PLOT DATE = 1/26/2009	DATE -	REVISED -	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							

SURVEYED _____ DATE _____
 PLOTTED _____ BY _____
 CHECKED _____
 B.M. NOTED _____
 STRUCTURE NOTATION CRD _____
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 FILE NAME: \\Northwest Cook Streets\Task 88 - IL58 @ Meacham\002_IL58 @ Meacham.dgn

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 Rosemont, Illinois 60018
 (847) 823-0500

PLAN _____
 SURVEYED _____
 PLOTTED _____
 CHECKED _____
 B.M. NOTED _____
 STRUCTURE NOTATION CRD _____
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 FILE NAME:



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

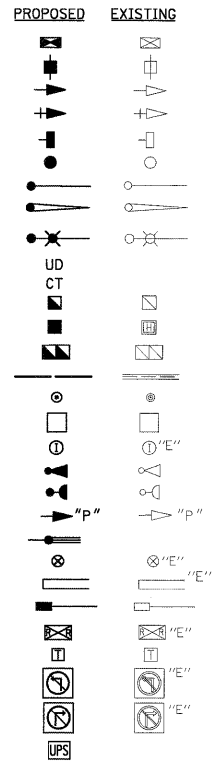
FILE NAME = ...M002_IL58 @ Meacham.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN IL ROUTE 58 (GOLF ROAD) AND MEACHAM ROAD				F.A.P. RTE. VAR	SECTION 2009-008-TS	COUNTY COOK	TOTAL SHEETS 41	SHEET NO. 17
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PLOT DATE = 1/26/2009	DATE -	REVISED -	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT								

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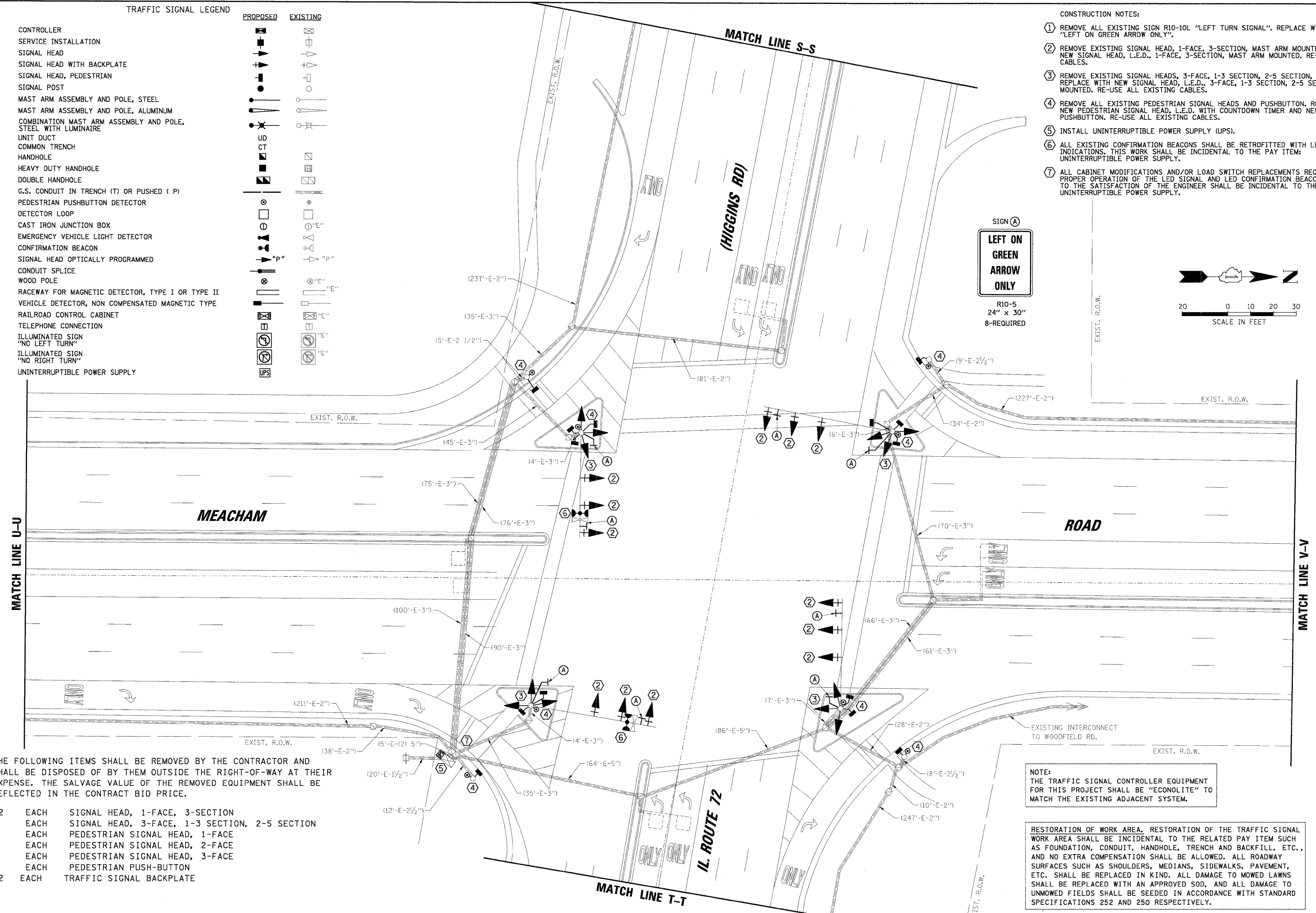
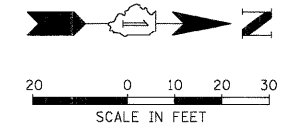
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TRAFFIC SIGNAL LEGEND

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



- CONSTRUCTION NOTES:**
- ① REMOVE ALL EXISTING SIGN R10-10L "LEFT TURN SIGNAL". REPLACE WITH NEW SIGN R10-5 "LEFT ON GREEN ARROW ONLY".
 - ② REMOVE EXISTING SIGNAL HEAD, 1-FACE, 3-SECTION, MAST ARM MOUNTED. REPLACE WITH NEW SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED. RE-USE ALL EXISTING CABLES.
 - ③ REMOVE EXISTING SIGNAL HEADS, 3-FACE, 1-3 SECTION, 2-5 SECTION, BRACKET MOUNTED. REPLACE WITH NEW SIGNAL HEAD, L.E.D., 3-FACE, 1-3 SECTION, 2-5 SECTION, BRACKET MOUNTED. RE-USE ALL EXISTING CABLES.
 - ④ REMOVE ALL EXISTING PEDESTRIAN SIGNAL HEADS AND PUSHBUTTON. REPLACE WITH NEW PEDESTRIAN SIGNAL HEAD, L.E.D. WITH COUNTDOWN TIMER AND NEW PEDESTRIAN PUSHBUTTON. RE-USE ALL EXISTING CABLES.
 - ⑤ INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
 - ⑥ ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
 - ⑦ ALL CABINET MODIFICATIONS AND/OR LOAD SWITCH REPLACEMENTS REQUIRED FOR PROPER OPERATION OF THE LED SIGNAL AND LED CONFIRMATION BEACON INDICATIONS TO THE SATISFACTION OF THE ENGINEER SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.



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.

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

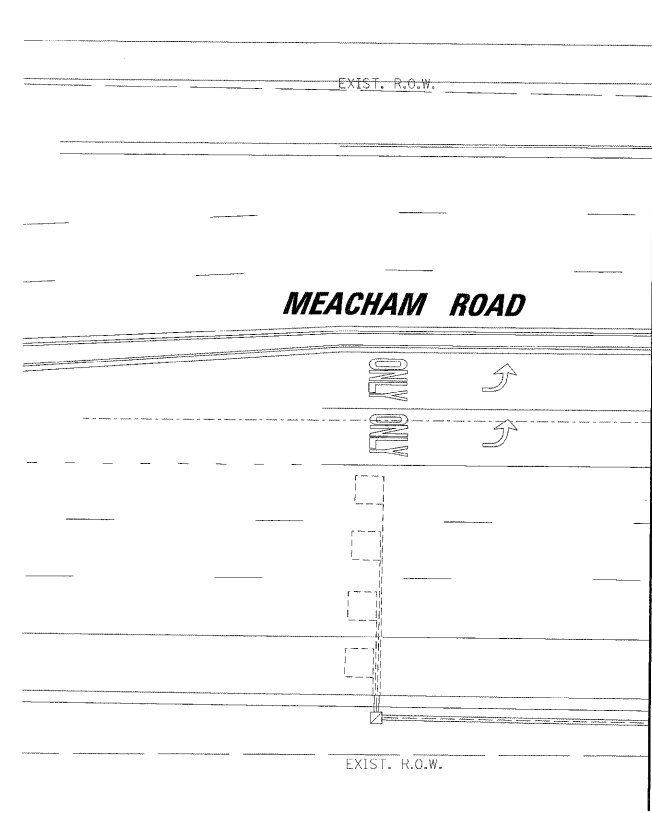
NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

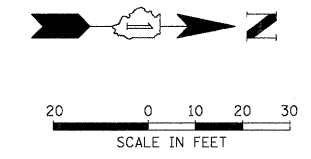
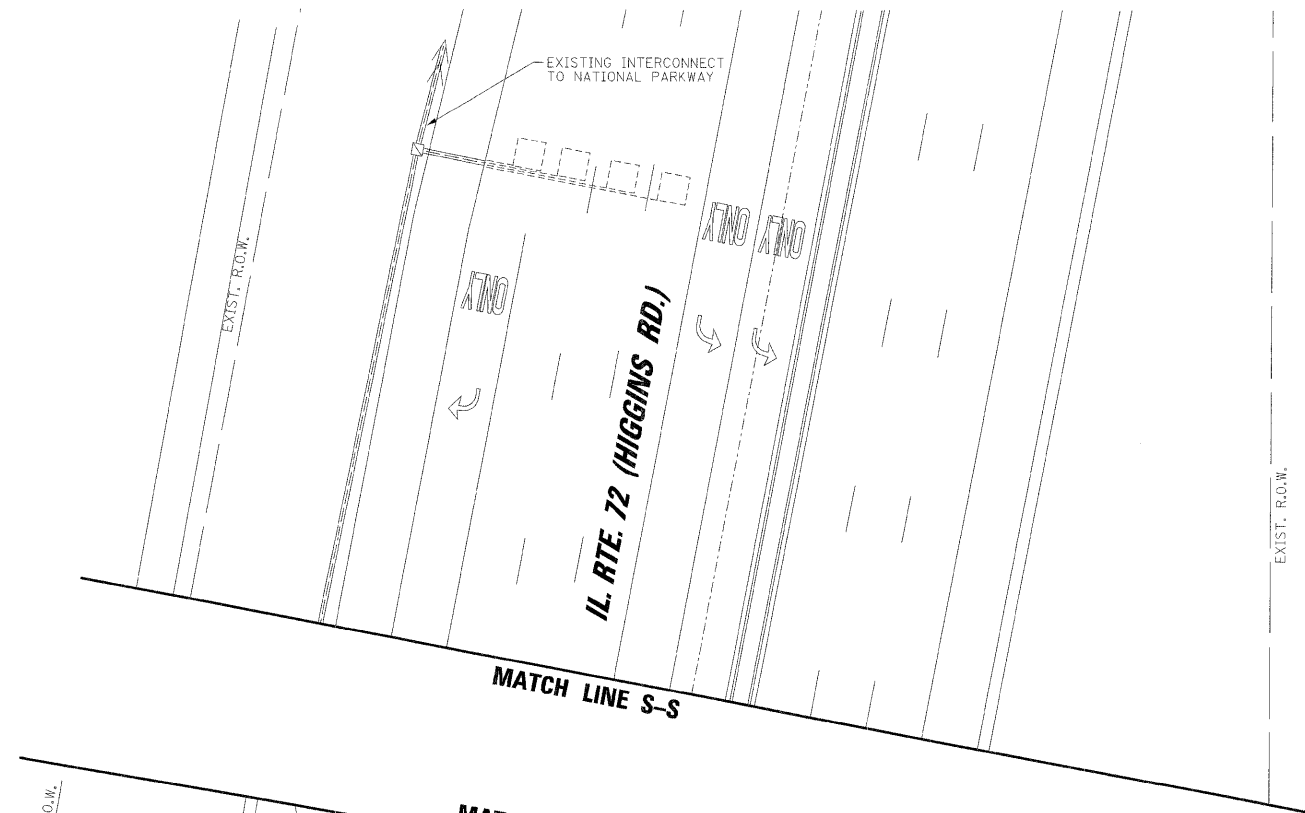
PROF ILL SURVEYED _____ DATE _____
 DRAWN _____ BY _____
 CHECKED _____
 B.M. NOTED _____
 STRUCTURE NOTATIONS DTRD _____
 NO. _____
 PLAN SURVEYED _____ DATE _____
 PLOTTED _____ BY _____
 RT. OF WAY CHECKED _____
 NO. _____ CADD FILE NAME _____

CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

\s\dot\1\B88\48\Task S-EE Northeast Cook Safety\Task CC - IL72 @ Meacham\002.IL72 @ Meacham.dgn

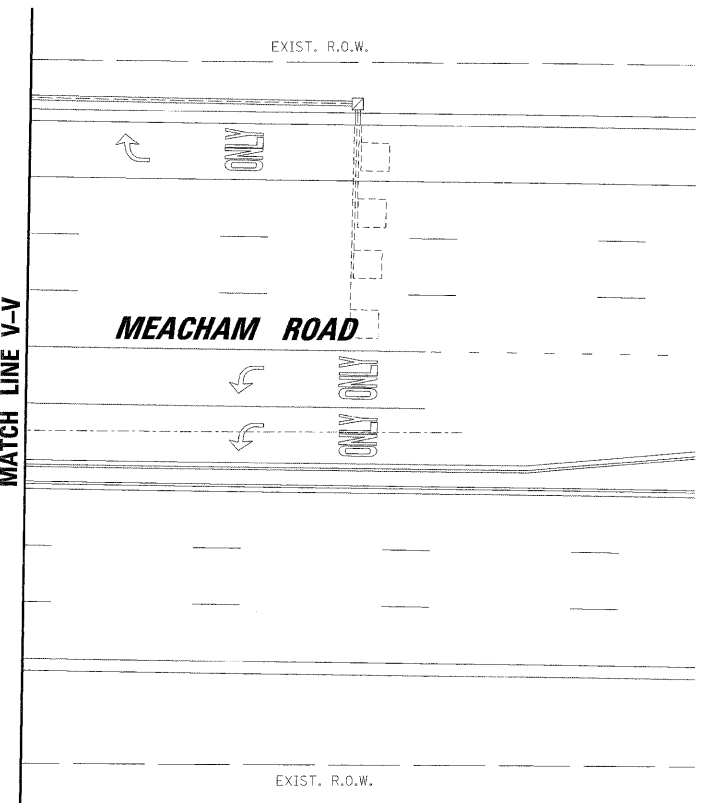


MATCH LINE U-U



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

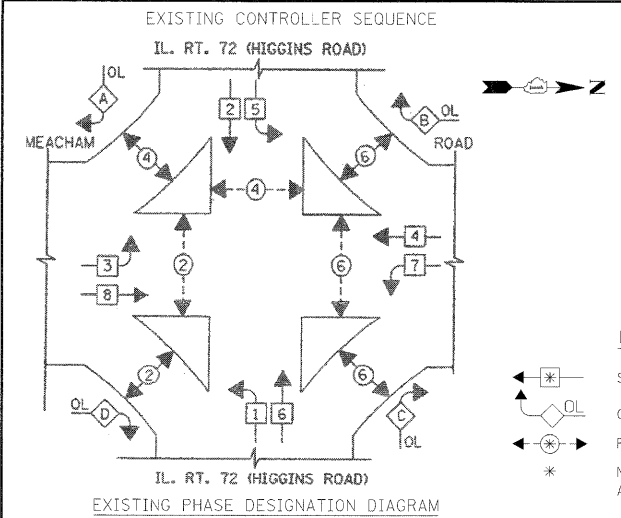
RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL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



MATCH LINE V-V

FILE NAME = ...M002.IL72 @ Meacham.dgn	USER NAME = FPACIONE	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN IL ROUTE 72 (HIGGINS ROAD) AND MEACHAM ROAD			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
PLOT SCALE = 20'	CHECKED - MJT	DRAWN - FPB / FCP	REVISED -		SCALE: 1"= 20'	SHEET NO.	OF	SHEETS	STA.	TO STA.	VAR.	2009-008-TS	COOK	41	20
PLOT DATE = 1/26/2009	DATE -	CHECKED - MJT	REVISED -								CONTRACT NO. 60G04				
		DATE -	REVISED -								ILLINOIS FED. AID PROJECT				

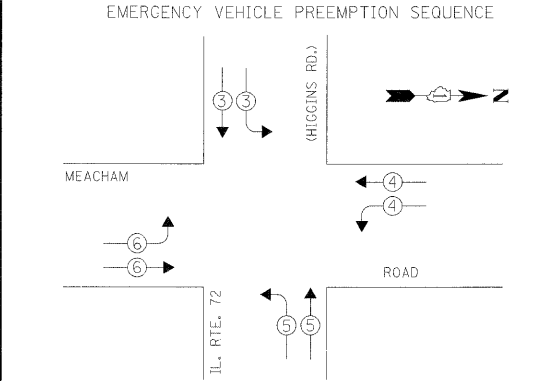
DATE: _____ BY: _____
 SURVIVED _____ PLOTTED _____
 CHECKED _____ DATE: _____
 NOTE BOOK _____
 NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500
 DATE: _____ BY: _____
 SURVIVED _____ PLOTTED _____
 CHECKED _____ DATE: _____
 NOTE BOOK _____
 NO. _____
 FILE NAME: N:\Jobs\1988040\Task 5 - EE Northwest Cook Safesha\Task DC - IL72 @ Meacham\CAB_IL72 @ Meacham.dgn



LEGEND
 * SINGLE ENTRY PHASE
 O OVERLAP
 P PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3
B	= 4	+ 5
C	= 6	+ 7
D	= 8	+ 1



EXISTING EMERGENCY VEHICLE PREEMPTORS

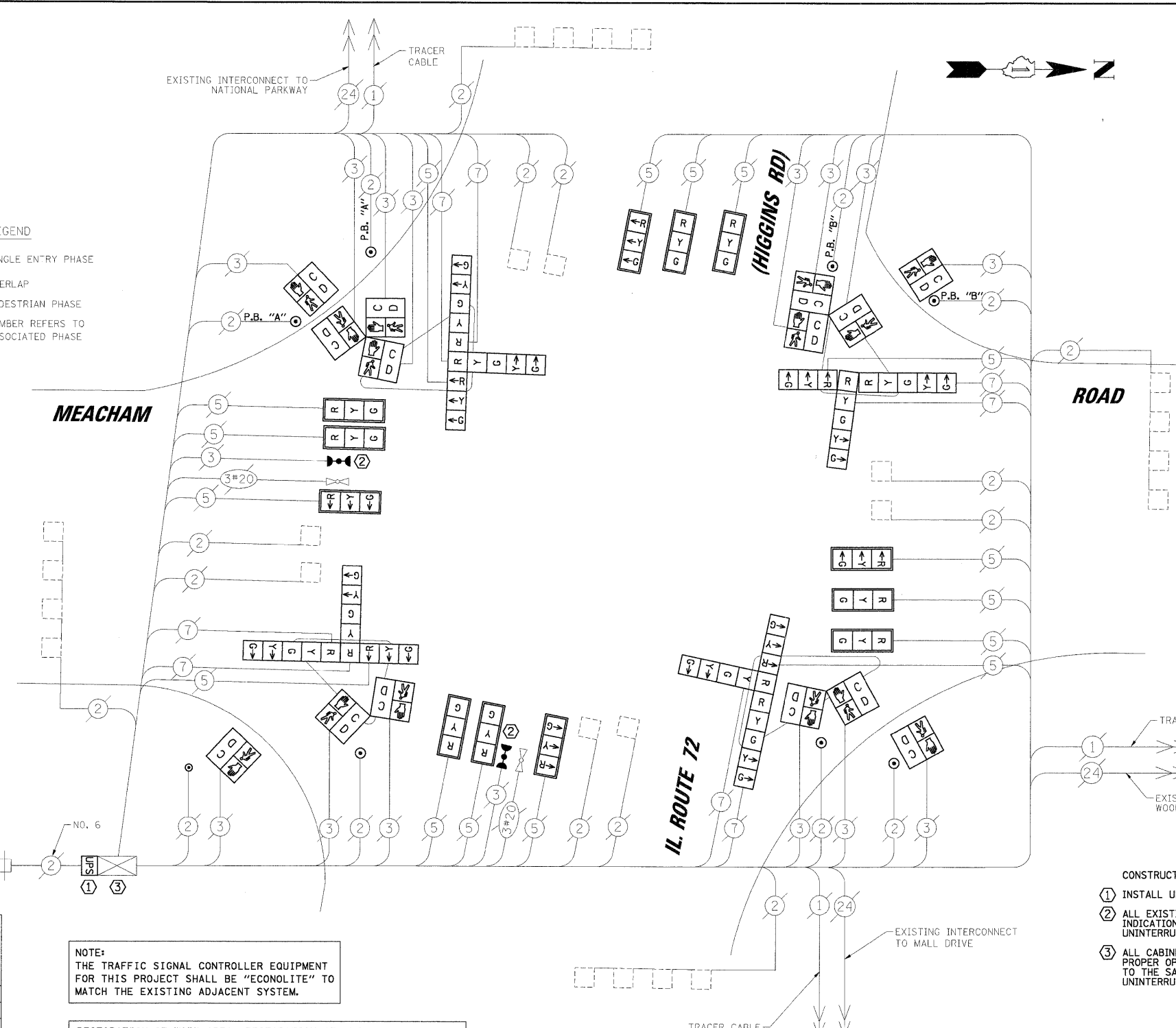
EMERGENCY VEHICLE PREEMPTOR	3	4	5	6
MOVEMENT	↓	←	↑	→

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

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	24	17	0.50	204.00
(YELLOW)	24	25	0.25	150.00
(GREEN)	24	15	0.25	90.00
ARROW	16	12	0.10	19.20
PED. SIGNAL	14	25	1.00	350.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN	-	252	0.05	-
VIDEO SYSTEM	-	150	1.00	-
FLASHER	-	-	0.50	-

ENERGY COSTS TO: TOTAL = 913.20

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: MARK GLOECK
 PHONE: (630) 691-4529
 COMPANY: COMED



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

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

NOTE:
 PUSHBUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4.
 PUSHBUTTON "B" SHALL PLACE A CALL IN PHASES 4 AND 6.

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'+L-2' (6m+L-0.6m)=
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (0.6)	BRACKET MOUNTED	13 (4.0)
E - M. ARM POLE	-	CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	6 (1.8)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
(G)	(G)	8" (200mm) TRAFFIC SIGNAL SECTION
(R)	(R)	12" (300mm) TRAFFIC SIGNAL SECTION
(W)	(W)	12" (300mm) PEDESTRIAN SIGNAL SECTION
(P)	(P)	12" (300mm) PEDESTRIAN SIGNAL SECTION WITH COUNTDOWN TIMER
(C)	(C)	CONTROLLER CABINET
(S)	(S)	SERVICE INSTALLATION
(T)	(T)	TELEPHONE INSTALLATION
(V)	(V)	VEHICLE DETECTOR, INDUCTION LOOP
(M)	(M)	MAGNETIC DETECTOR
(E)	(E)	EMERGENCY VEHICLE LIGHT DETECTOR
(B)	(B)	CONFIRMATION BEACON
(D)	(D)	PUSHBUTTON DETECTOR
(2)	(2)	DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
(1)	(1)	GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)
(24)	(24)	FIBER OPTIC CABLE IN CONDUIT NO. 62.5/125 2-MM12F SM12F
(R)	(R)	SIGNAL FACE WITH BACKPLATE
(P)	(P)	"P" INDICATES PROGRAMMED HEAD.
(R)	(R)	RAILROAD CONTROL CABINET
(L)	(L)	ILLUMINATED SIGN "NO LEFT TURN"
(R)	(R)	ILLUMINATED SIGN "NO RIGHT TURN"
(H)	(H)	GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
(P)	(P)	GROUND ROD AT POST (P) OR MAST ARM POLE (MA)
(S)	(S)	GROUND ROD AT ELECTRIC SERVICE INSTALLATION
(UPS)	(UPS)	UNINTERRUPTIBLE POWER SUPPLY

- CONSTRUCTION NOTES:
- INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
 - ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
 - ALL CABINET MODIFICATIONS AND/OR LOAD SWITCH REPLACEMENTS REQUIRED FOR PROPER OPERATION OF THE LED SIGNAL AND LED CONFIRMATION BEACON INDICATIONS TO THE SATISFACTION OF THE ENGINEER SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
SIGN PANEL - TYPE 1	SQ FT	40
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	12
SIGNAL HEAD, LED, 3-FACE, 1-3 SECTION, 2-5 SECTION BRACKET MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
PEDESTRIAN SIGNAL HEAD, LED, 3-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12
PEDESTRIAN PUSH-BUTTON	EACH	8
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1

NOTES FOR TEMPORARY TRAFFIC SIGNALS

- ALL CONTROL EQUIPMENT INCLUDING EMERGENCY PRE-EMPTION AND COMMUNICATION DEVICES FOR THE TEMPORARY TRAFFIC SIGNAL(S) SHALL BE FURNISHED BY THE CONTRACTOR.
- ONLY CONTROLLERS SUPPLIED BY ONE OF THE DISTRICT APPROVED CLOSED LOOP EQUIPMENT MANUFACTURERS WILL BE APPROVED FOR USE AT TEMPORARY SIGNAL LOCATIONS. ALL CONTROLLERS USED FOR TEMPORARY TRAFFIC SIGNALS SHALL BE FULLY ACTUATED NEMA MICROPROCESSOR BASED WITH RS232 DATA ENTRY PORTS COMPATIBLE WITH EXISTING MONITORING SOFTWARE APPROVED BY IDOT DISTRICT 1, INSTALLED IN A NEMA TS1 OR TS2 CABINET. ONLY ONE BRAND OF CONTROLLER WILL BE ACCEPTED FOR ANY ONE CONTRACT.
- ALL TRAFFIC SIGNAL SECTIONS AND PEDESTRIAN SIGNAL SECTIONS SHALL BE 12" (300mm). HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY TRAFFIC SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE HEADS TO ANY POSITION ON THE SPAN WIRE OR AT LOCATIONS ILLUSTRATED ON THE PLANS FOR CONSTRUCTION STAGING. THE TEMPORARY TRAFFIC SIGNAL SHALL REMAIN IN OPERATION DURING ALL SIGNAL HEAD RELOCATIONS. EACH TEMPORARY TRAFFIC SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
- ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES, RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- ANY TEMPORARY SIGNAL WITHIN AN EXISTING CLOSED LOOP TRAFFIC SIGNAL SYSTEM SHALL BE INTERCONNECTED TO THAT SYSTEM USING SIMILAR BRAND CONTROL EQUIPMENT.
- THE TEMPORARY TRAFFIC SIGNAL SHALL HAVE THE SIGNAL HEAD DISPLAYS, SIGNAL HEAD PLACEMENTS AND CONTROLLER PHASING MATCH THE EXISTING TRAFFIC SIGNAL, AT THE TIME OF THE TURN ON, IF NO TRAFFIC STAGING IS IN PLACE OR WILL NOT BE STAGED ON THE DAY OF THE TURN ON.

EXISTING EQUIPMENT TO BE REMOVED LEGEND

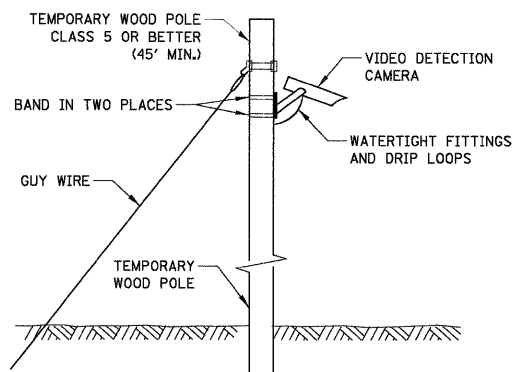
- "E" ◁ EXISTING SIGNAL HEAD TO BE REMOVED
- "E" ■ EXISTING SERVICE INSTALLATION TO BE REMOVED
- "E" ○ EXISTING SIGNAL POST AND FOUNDATION TO BE REMOVED
- "E" ◁ EXISTING ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED
- "E" □ EXISTING CONTROLLER AND FOUNDATION TO BE REMOVED
- "E" □ EXISTING HANDHOLE TO BE REMOVED
- "E" □ EXISTING PEDESTRIAN SIGNAL HEAD TO BE REMOVED
- "E" ⊗ EXISTING PEDESTRIAN PUSHBUTTON TO BE REMOVED
- "E" ⊗ EXISTING EMERGENCY VEHICLE LIGHT DETECTOR TO BE REMOVED
- "E" ⊗ EXISTING CONFIRMATION BEACON TO BE REMOVED
- "E" ⊗ EXISTING HEAVY-DUTY HANDHOLE TO BE REMOVED
- "E" ⊗ EXISTING STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED

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

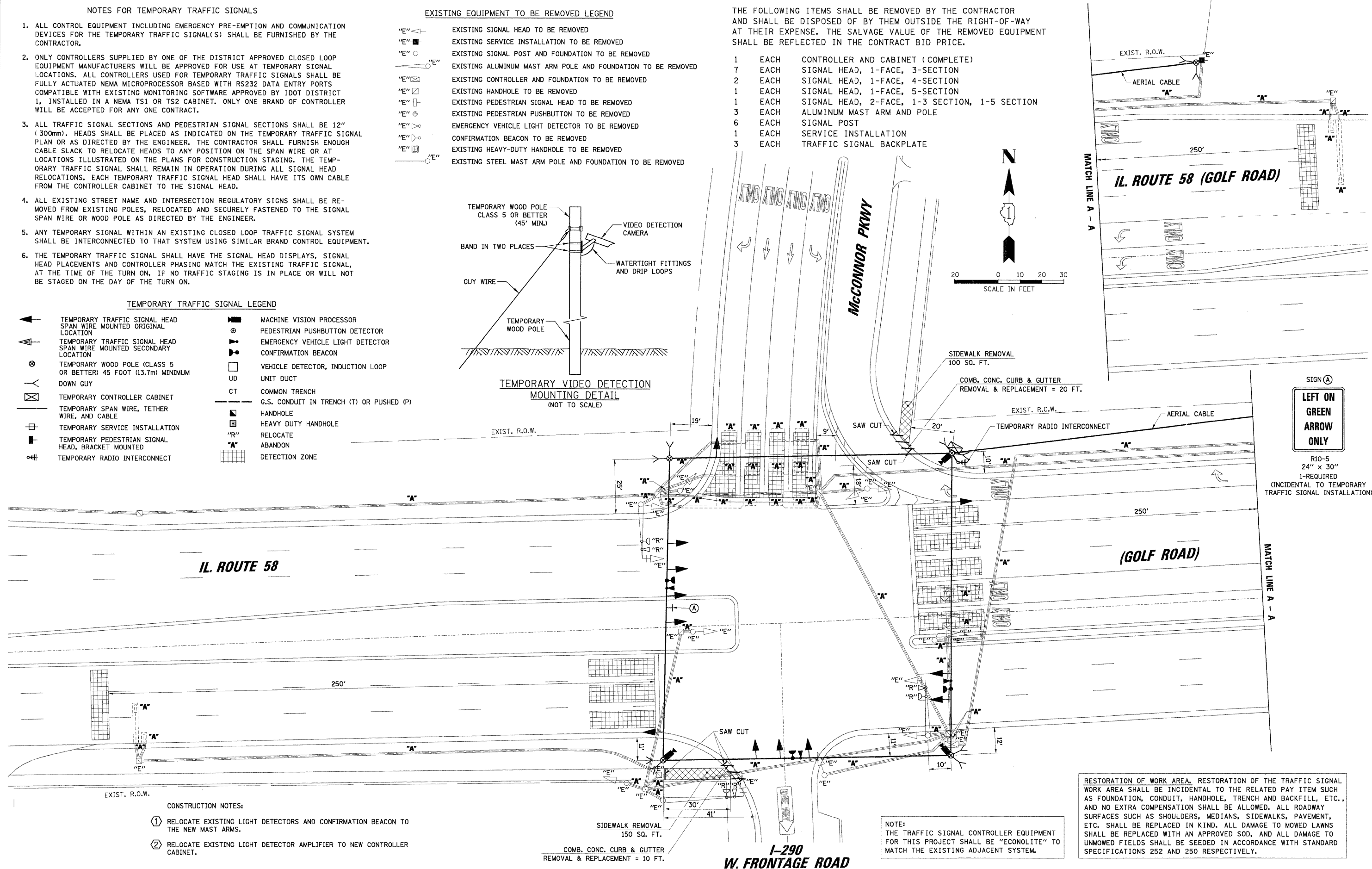
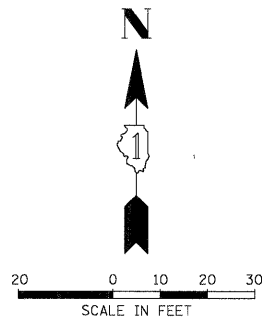
- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 7 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 2 EACH SIGNAL HEAD, 1-FACE, 4-SECTION
- 1 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 1 EACH SIGNAL HEAD, 2-FACE, 1-3 SECTION, 1-5 SECTION
- 3 EACH ALUMINUM MAST ARM AND POLE
- 6 EACH SIGNAL POST
- 1 EACH SERVICE INSTALLATION
- 3 EACH TRAFFIC SIGNAL BACKPLATE

TEMPORARY TRAFFIC SIGNAL LEGEND

- ▲ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED ORIGINAL LOCATION
- ▲ TEMPORARY TRAFFIC SIGNAL HEAD SPAN WIRE MOUNTED SECONDARY LOCATION
- ⊗ TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM DOWN GUY
- TEMPORARY CONTROLLER CABINET
- TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE
- ⊕ TEMPORARY SERVICE INSTALLATION
- ⊕ TEMPORARY PEDESTRIAN SIGNAL HEAD, BRACKET MOUNTED
- ⊕ TEMPORARY RADIO INTERCONNECT
- MACHINE VISION PROCESSOR
- ⊗ PEDESTRIAN PUSHBUTTON DETECTOR
- ⊕ EMERGENCY VEHICLE LIGHT DETECTOR
- ⊕ CONFIRMATION BEACON
- VEHICLE DETECTOR, INDUCTION LOOP
- UD UNIT DUCT
- CT COMMON TRENCH
- G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)
- HANDHOLE
- ⊕ HEAVY DUTY HANDHOLE
- "R" RELOCATE
- "A" ABANDON
- DETECTION ZONE



TEMPORARY VIDEO DETECTION MOUNTING DETAIL (NOT TO SCALE)



CONSTRUCTION NOTES:

- RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACON TO THE NEW MAST ARMS.
- RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.

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

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

DATE: _____ BY: _____
 SURVEYED: _____
 PLANNED: _____
 CHECKED: _____
 RT. OF WAY CHECKED: _____
 NO. _____
 FILE NAME: _____
 DATE: _____ BY: _____
 SURVEYED: _____
 PLANNED: _____
 CHECKED: _____
 RT. OF WAY CHECKED: _____
 NO. _____
 FILE NAME: _____

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 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

DATE: _____ BY: _____
 SURVEYED: _____
 PLANNED: _____
 CHECKED: _____
 RT. OF WAY CHECKED: _____
 NO. _____
 FILE NAME: _____

FILE NAME: ...\\TMP_IL58 @ 1-290\\dgn

USER NAME: FPAIONE
 DESIGNED: ABR
 DRAWN: FPB / FCP
 CHECKED: MJT
 DATE: 1/26/2009

REVISED: _____
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 REVISED: _____
 REVISED: _____

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

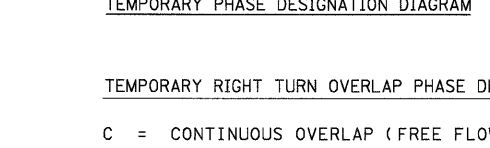
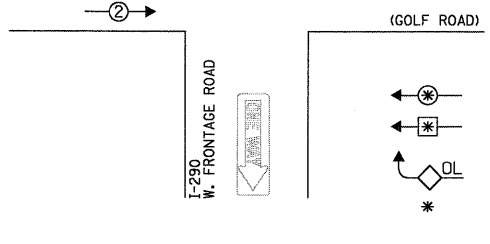
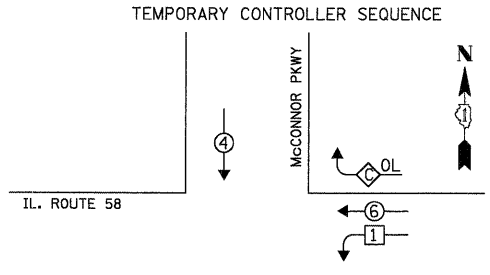
TEMPORARY TRAFFIC SIGNAL INSTALLATION AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
 IL ROUTE 58 (GOLF ROAD) AND I-290 W. FRONTAGE ROAD / McCONNOR PKWY
 SCALE: 1"=20' SHEET NO. OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2009-008-TS	COOK	41	22
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 60G04	

PROFILE SURVEYED BY DATE
 GRADES CHECKED BY DATE
 B.M. NOTED BY DATE
 STRUCTURE NOTATIONS CRD NO.
 PLAN SURVEYED BY DATE
 PLOTTED AT CHECKED BY DATE
 NOTE BOOK NO. RT. OF WAY CHECKED BY DATE
 CAD FILE NAME

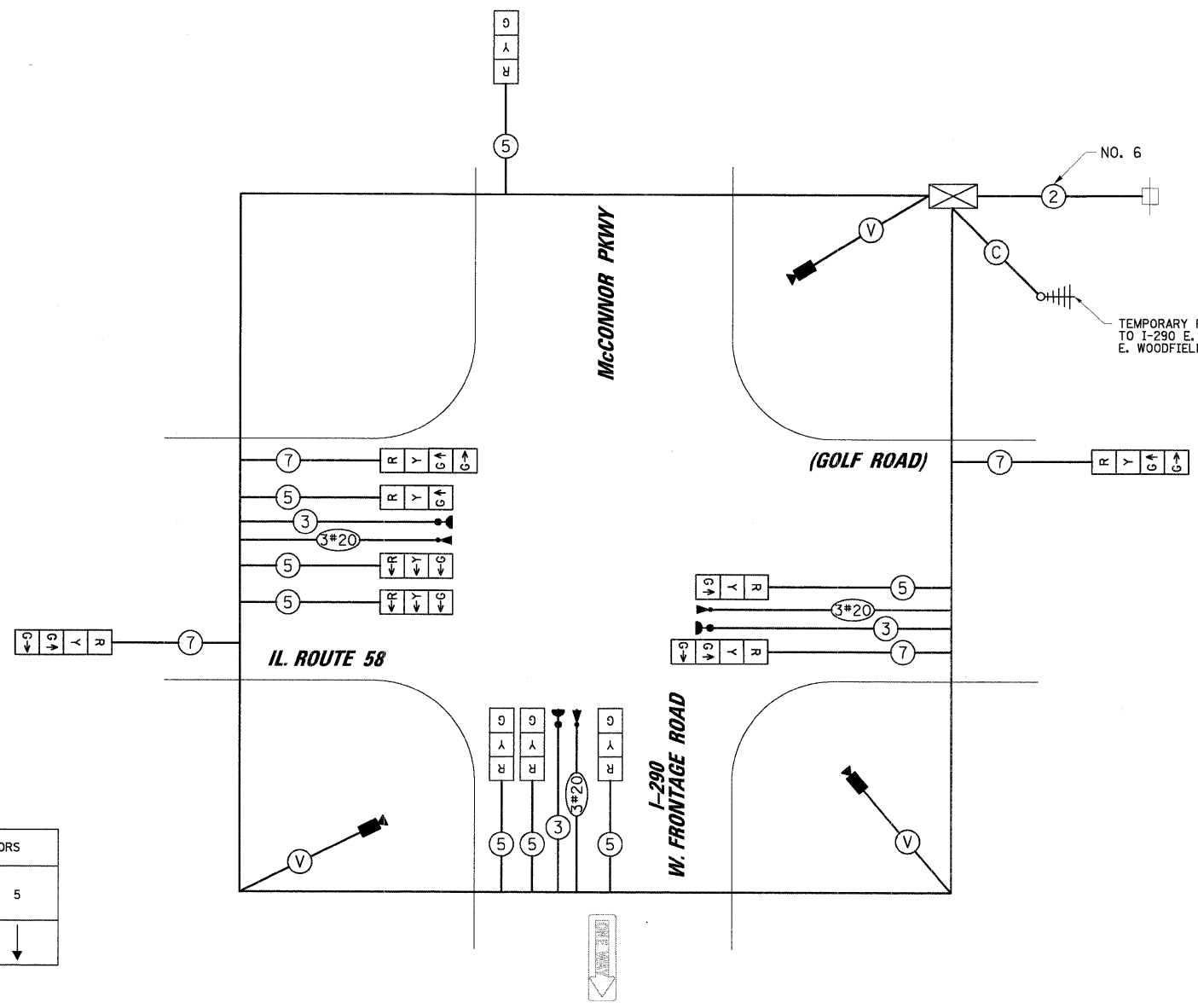
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 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500
CB

NA\ds1\080040\Task 5-EE North-west Cook Safety\Task V - IL08 @ I-290 W Frontage\TCB IL FR @ I-290W.dgn



TEMPORARY EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	→	↔	↓

LEGEND
 ⊕ DUAL ENTRY PHASE
 ⊗ SINGLE ENTRY PHASE
 ⊕ OL OVERLAP
 * NUMBER REFERS TO ASSOCIATED PHASE



- TEMPORARY CABLE DIAGRAM LEGEND**
- ⊕ TEMPORARY TRAFFIC SIGNAL SECTION OR PEDESTRIAN SIGNAL SECTION 12" (300mm)
 - ⊗ TEMPORARY CONTROLLER CABINET
 - ⊕ TEMPORARY SERVICE INSTALLATION
 - ⑤ INDICATES NUMBER OF CONDUCTORS IN CABLE. ALL CONDUCTORS TO BE NUMBER 14 AWG WIRE UNLESS OTHERWISE NOTED.
 - ▶ EMERGENCY VEHICLE LIGHT DETECTOR
 - ▶ CONFIRMATION BEACON
 - VEHICLE DETECTOR, INDUCTION LOOP
 - ⊙ PEDESTRIAN PUSHBUTTON DETECTOR
 - ⊕ 12" (300mm) PEDESTRIAN SIGNAL SECTION
 - ▶ VIDEO DETECTION CAMERA
 - ⊕ VENDOR CABLE
 - ⊕ TEMPORARY RADIO INTERCONNECT
 - ⊕ COAXIAL CABLE

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	14		15	0.25	52.50
ARROW	2		12	1.00	24.00
PED. SIGNAL	-		25	1.00	-
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN	-		25	0.05	-
VIDEO SYSTEM	1	150	-	1.00	150.00
FLASHER	-			0.50	-
ENERGY COSTS TO:				TOTAL =	503.50

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: MARK GLOECK
 PHONE: (630) 691-4529
 COMPANY: COMED

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'-H-2" (6m+L-0.6m)=
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)	BRACKET MOUNTED	13 (4.0)
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	PED. PUSHBUTTON	6 (1.8)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	ELECTRIC SERVICE	13.5 (4.1)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	POST MOUNTED	6 (1.8)

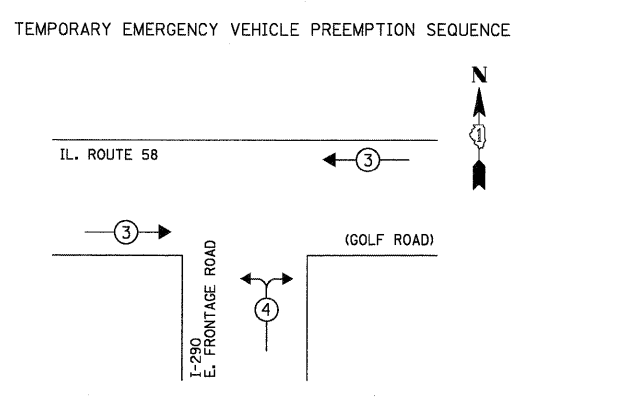
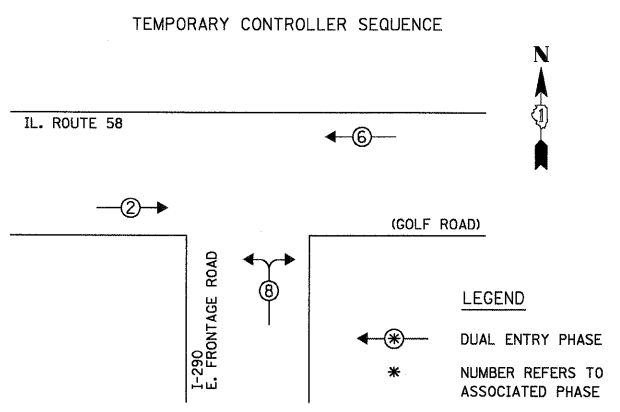
NOTE:
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

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

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 G.M. NOTED: _____ RT. OF WAY CHECKED: _____
 STRUCTURE NOTATIONS: _____ CAD FILE NAME: _____
PROFILE
 DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 G.M. NOTED: _____ RT. OF WAY CHECKED: _____
 STRUCTURE NOTATIONS: _____ CAD FILE NAME: _____
PLAN
 NO. _____
 DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 G.M. NOTED: _____ RT. OF WAY CHECKED: _____
 STRUCTURE NOTATIONS: _____ CAD FILE NAME: _____
NOTE BOOK
 NO. _____
 DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 G.M. NOTED: _____ RT. OF WAY CHECKED: _____
 STRUCTURE NOTATIONS: _____ CAD FILE NAME: _____
NO. _____
 DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 G.M. NOTED: _____ RT. OF WAY CHECKED: _____
 STRUCTURE NOTATIONS: _____ CAD FILE NAME: _____
NO. _____

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 Rosemont, Illinois 60018
 (847) 823-0500

\\N:\dot\080048\Task 5-EE Northwest Cook Safety\Task W - IL58 @ I-290 E Frontage\TCB_IL58 @ I-290E.dgn

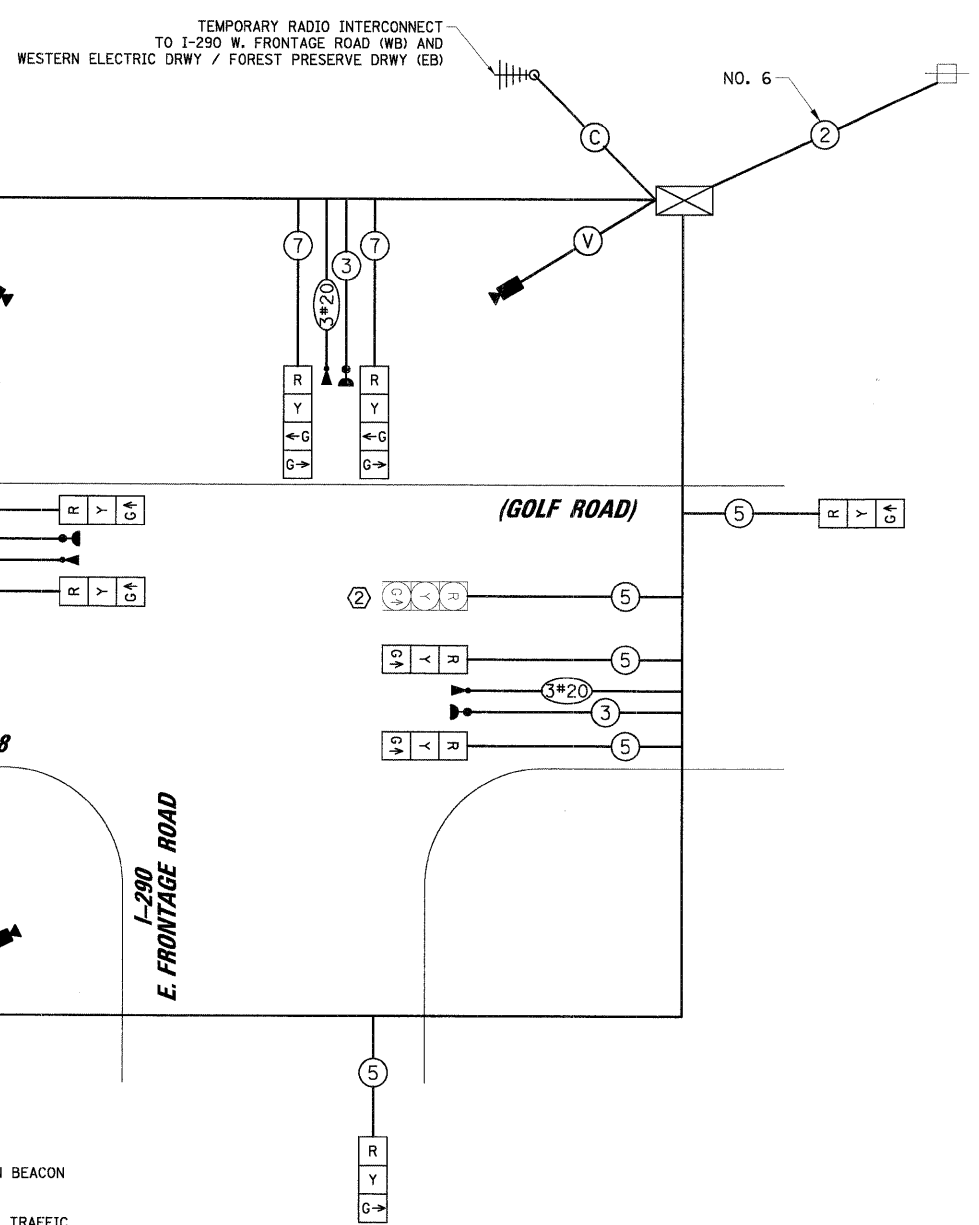


TEMPORARY EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↔

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					
TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	TOTAL WATTAGE
		INCAND.	LED		
SIGNAL (RED)	10	17	0.50	85.00	
(YELLOW)	10	25	0.25	62.50	
(GREEN)	12	15	0.25	45.00	
ARROW	2	12	0.10	2.40	
PED. SIGNAL	-	25	1.00	-	
CONTROLLER	1	100	1.00	100.00	
ILLUM. SIGN	-	25	0.05	-	
VIDEO SYSTEM	1	150	1.00	150.00	
FLASHER	-	-	0.50	-	

ENERGY COSTS TO: TOTAL = 444.90
ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: MARK GLOECK
 PHONE: (630) 691-4529
 COMPANY: COMED

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C - CONTROLLER W/ UPS	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20'±L-2=
D - CONTROLLER	4 (1.2)	SIGNAL POST	2 (1.0)	(6m±L-0.6m)=	
E - M. ARM POLE		CONTROLLER CAB.	1 (0.5)	BRACKET MOUNTED	13 (4.0)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	6 (1.8)
36" (900mm)	15 (4.6)	ELECTRIC SERVICE	1 (0.5)	ELECTRIC SERVICE	13.5 (4.1)
42" (1050mm)	25 (7.6)	GROUND CABLE	1 (0.5)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)



- CONSTRUCTION NOTES:
- UTILIZE EXISTING ADVANCED DETECTOR AND CONFIRMATION BEACON WITH TEMPORARY TRAFFIC SIGNAL INSTALLATION.
 - UTILIZED EXISTING TRAFFIC SIGNAL HEAD FOR TEMPORARY TRAFFIC SIGNAL INSTALLATION.

TEMPORARY CABLE PLAN

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

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

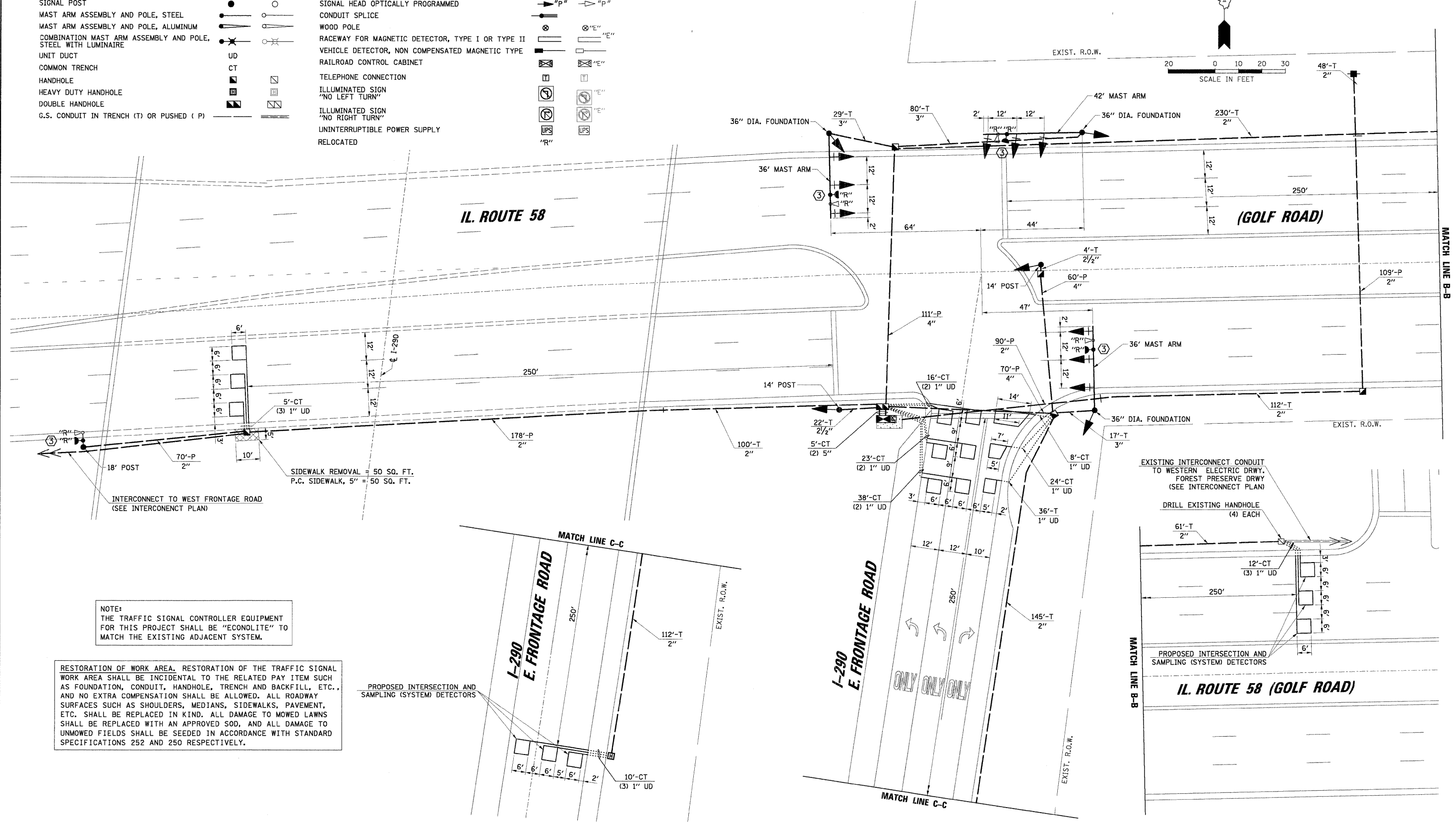
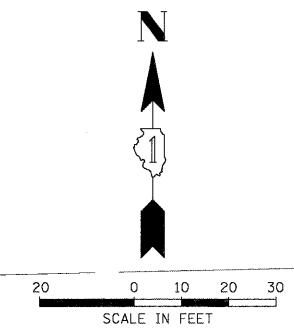
TEMPORARY CABLE DIAGRAM LEGEND

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

TRAFFIC SIGNAL LEGEND

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

- CONSTRUCTION NOTES:**
- RELOCATE EXISTING LIGHT DETECTORS AND CONFIRMATION BEACONS TO THE NEW MAST ARMS AND POST.
 - RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
 - ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCIDENTAL TO THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.



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

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

PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS

DATE	BY	DATE	BY
DATE	BY	DATE	BY

SURVIVED _____
 PLANNED _____
 CHECKED _____
 BY: _____
 DATE: _____
 NO. _____
 STRUCTURE NOTATION: _____
 FILE NAME: _____

FILE NAME	USER NAME	DESIGNED	REVISED
... \TSD_IL58.dgn	FPACIONE	ABR	
		DRAWN	REVISED
		FPB / FCP	
		CHECKED	REVISED
		MJT	
		DATE	REVISED
		1/26/2009	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

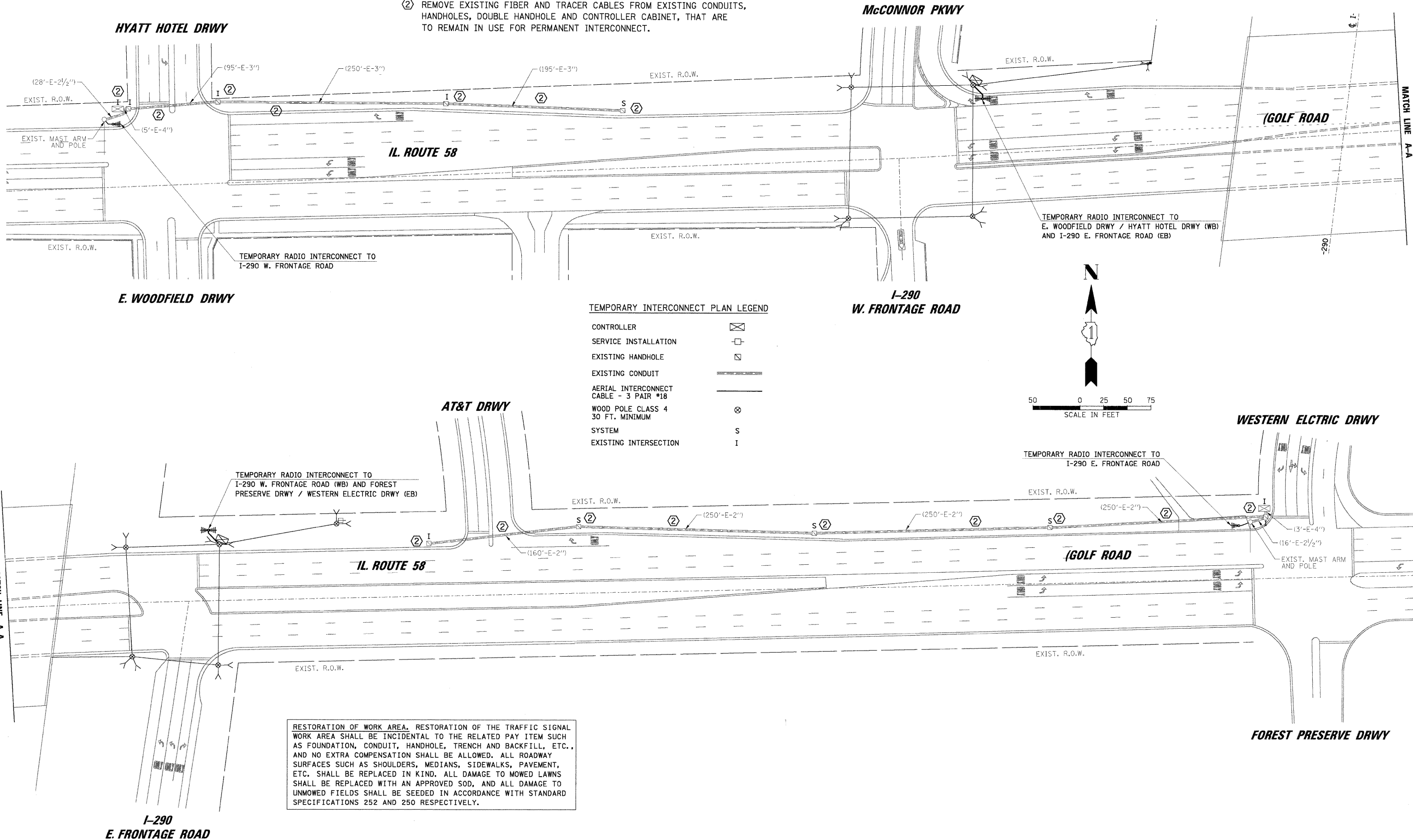
**TRAFFIC SIGNAL MODERNIZATION PLAN
IL. ROUTE 58 (GOLF ROAD) AND I-290 E. FRONTAGE ROAD**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2009-008-TS	COOK	41	29
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 60G04		

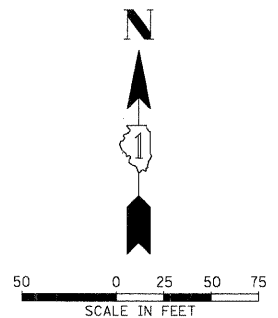
CONSTRUCTION NOTES:

- ① EXISTING INTERCONNECT CONDUIT AND SYSTEM HANDHOLES SHOWN ARE TO BE UTILIZED FOR PERMANENT INTERCONNECT.
- ② REMOVE EXISTING FIBER AND TRACER CABLES FROM EXISTING CONDUITS, HANDHOLES, DOUBLE HANDHOLE AND CONTROLLER CABINET, THAT ARE TO REMAIN IN USE FOR PERMANENT INTERCONNECT.



TEMPORARY INTERCONNECT PLAN LEGEND

- CONTROLLER
- SERVICE INSTALLATION
- EXISTING HANDHOLE
- EXISTING CONDUIT
- AERIAL INTERCONNECT CABLE - 3 PAIR #18
- WOOD POLE CLASS 4 30 FT. MINIMUM
- SYSTEM
- EXISTING INTERSECTION



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

DATE	BY	SURVEYED	PLANNED
DATE	BY	NOTED	NOTED
DATE	BY	NOTED	NOTED
DATE	BY	NOTED	NOTED

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 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 923-0500

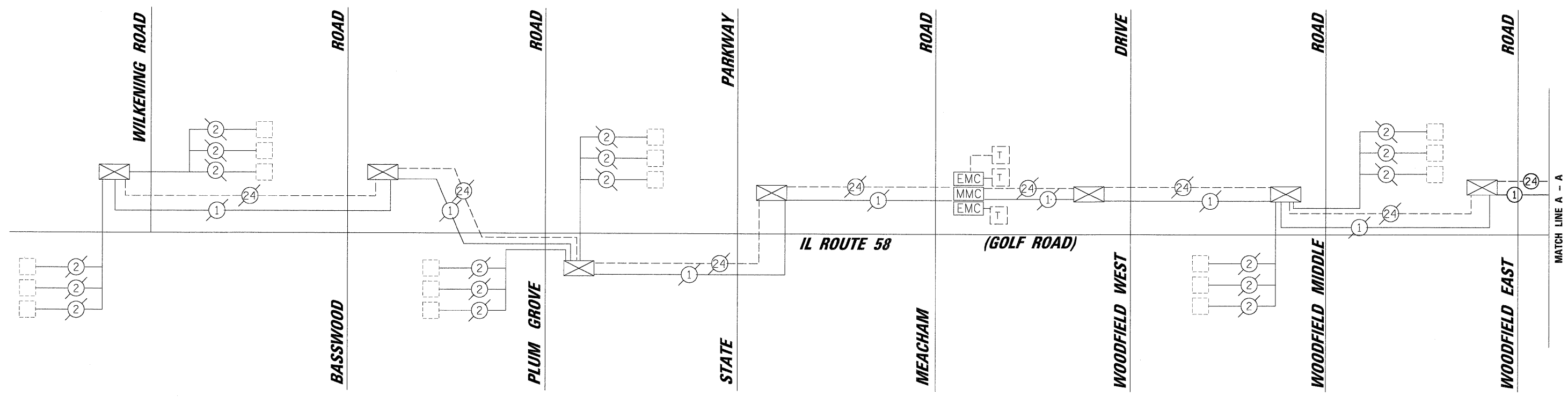
FILE NAME: ...\\Traffic\INT-Tmp\ILEB.dgn

FILE NAME: ...\\Traffic\INT-Tmp\ILEB.dgn	USER NAME = FPAICONE	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY INTERCONNECT PLAN IL ROUTE 58 (GOLF ROAD) FROM E WOODFIELD DRWY / HYATT HOTEL DRWY TO FOREST PRESERVE DRWY / WESTERN ELECTRIC DRWY	F.A.P. RTE. VAR	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 5/8"	DRAWN - FPB / FCP	REVISIED -	2009-008-TS			COOK	41	31		
PLOT DATE = 1/26/2009	CHECKED - MJT	REVISIED -	CONTRACT NO. 60G04							
DATE -	REVISIED -	ILLINOIS FED. AID PROJECT								

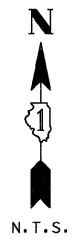
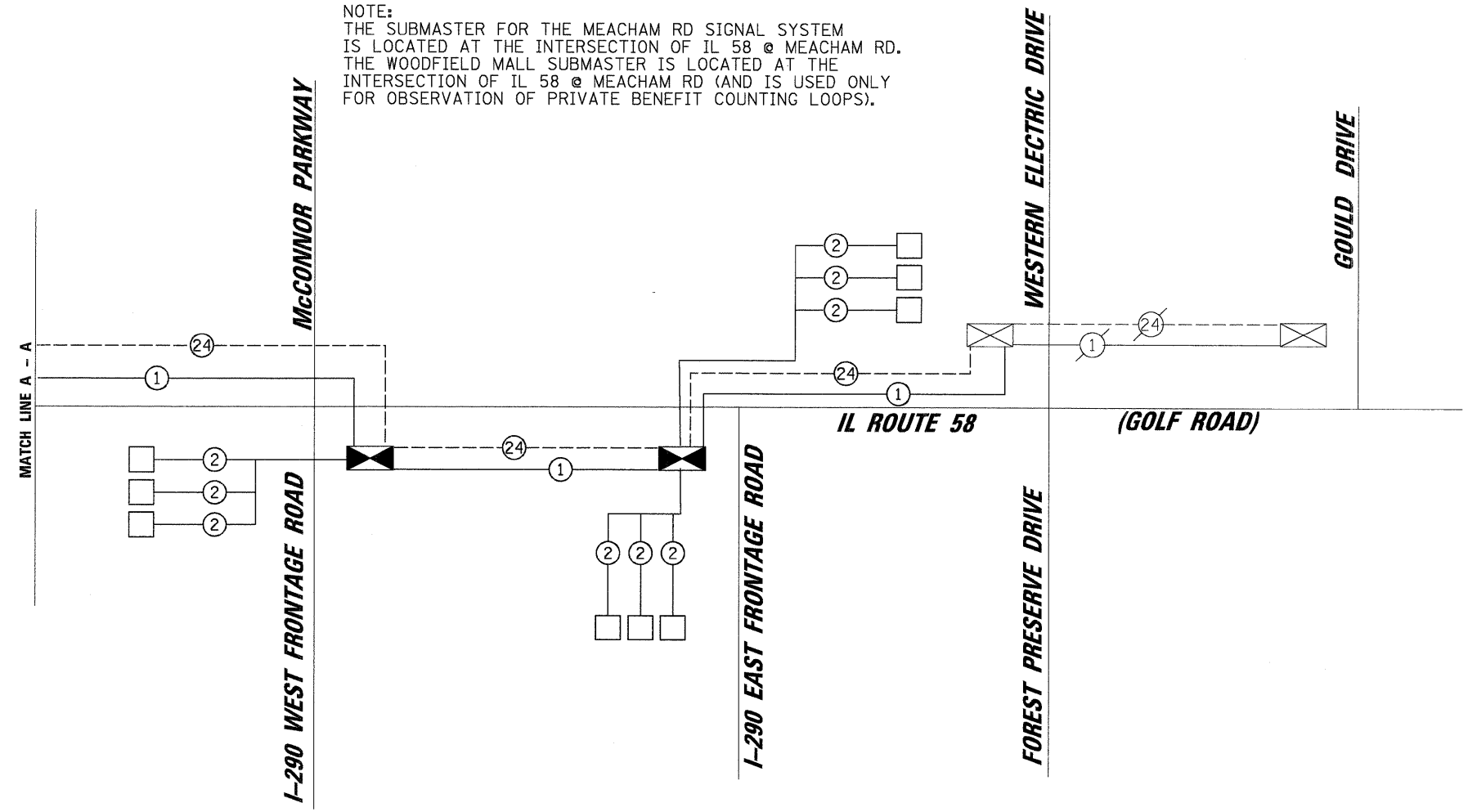
PROFILE SURVEYED BY DATE
 GRADES CHECKED
 B.M. NOTED
 STRUCTURE NOTATIONS OK'D
 N:\001\0800048\Task 5-EE Northwest Cook Street\Traffic\SCH_IL58.dgn

PLAN SURVEYED BY DATE
 ALIGNED CHECKED
 RT. OF WAY CHECKED
 CAD FILE NAME

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 8575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500



NOTE:
 THE SUBMASTER FOR THE MEACHAM RD SIGNAL SYSTEM IS LOCATED AT THE INTERSECTION OF IL 58 @ MEACHAM RD. THE WOODFIELD MALL SUBMASTER IS LOCATED AT THE INTERSECTION OF IL 58 @ MEACHAM RD (AND IS USED ONLY FOR OBSERVATION OF PRIVATE BENEFIT COUNTING LOOPS).

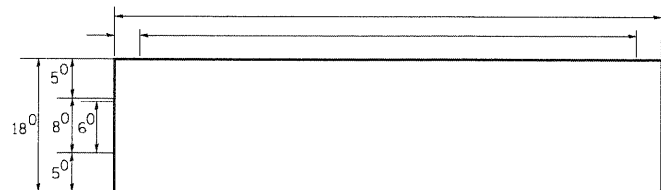


INTERCONNECT SCHEMATIC LEGEND

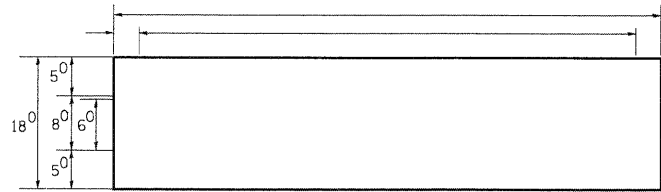
EXISTING INTERSECTION CONTROLLER	
PROPOSED INTERSECTION CONTROLLER	
EXISTING MASTER CONTROLLER	
PROPOSED MASTER CONTROLLER	
MASTER MASTER CONTROLLER	
EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS	
PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	
EXISTING INTERSECTION LOOP DETECTORS	
PROPOSED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

FILE NAME = ...Traffic\SCH_IL58.dgn	USER NAME = FPAICONE	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT SCHEMATIC IL ROUTE 58 (GOLF ROAD) FROM WILKENING ROAD TO GOULD DRIVE SCHAUMBURG, ILLINOIS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = N.T.S.	CHECKED - MJT	REVISED -	VAR			2009-008-TS	COOK	41	34		
PLOT DATE = 1/26/2009	DATE -	REVISED -	SCALE: N.T.S.			SHEET NO. OF SHEETS	STA. TO STA.	CONTRACT NO. 60G04			
								FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		

PANEL SIGN DESIGN TYPE 1



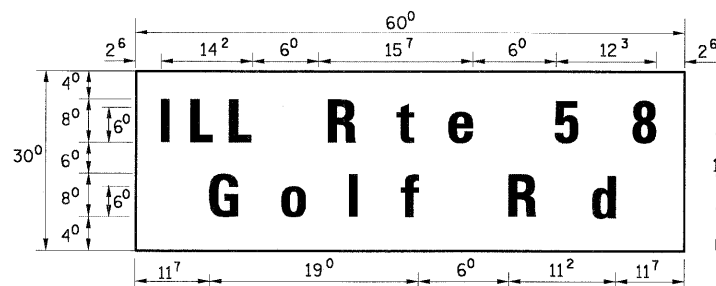
— Sq. M. each
— Sq. Ft. each
— Required
Design Series —



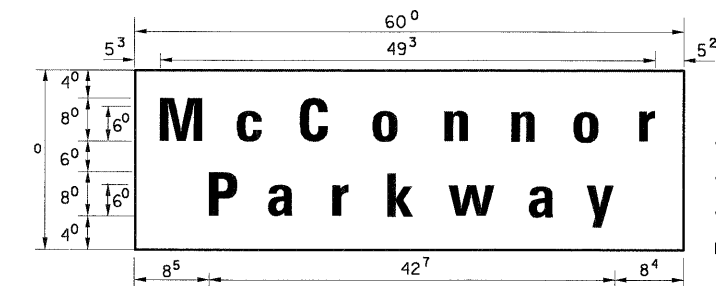
— Sq. M. each
— Sq. Ft. each
— Required
Design Series —

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

PANEL SIGN DESIGN TYPE 2



— Sq. M. each
12.5 Sq. Ft. each
2 Required
Design Series D



— Sq. M. each
12.5 Sq. Ft. each
2 Required
Design Series D

GENERAL NOTES

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 834001, 834006 AND 834011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 6'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
- THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 6'-0".
- ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:

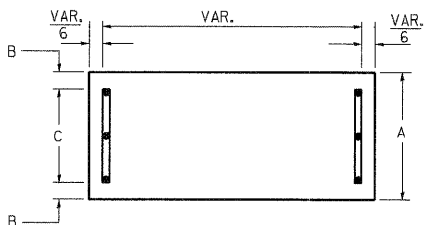
- * A.K.T. CORPORATION SCHAUMBURG, IL
- * TUCKER COMPANY, INC. WAUWATOSA, WI
- * AMERICAN FABRICATION CO. CHICAGO HEIGHTS, IL
- * WESTERN TRAFFIC CONTROL INC. CICERO, IL

PARTS LISTING

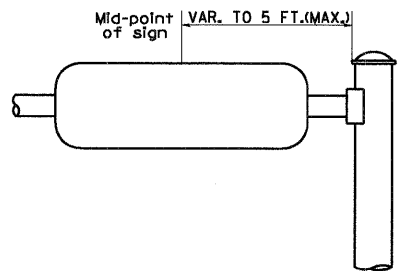
- SIGN CHANNEL PART *HPN053 (MED. CHANNEL)
SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3
BRACKETS PART *HPN034 (UNIVERSAL)
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

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

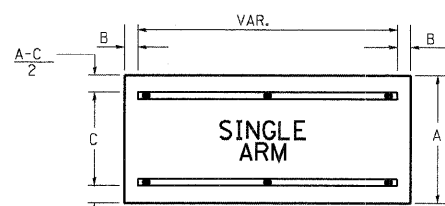
SUPPORTING CHANNELS



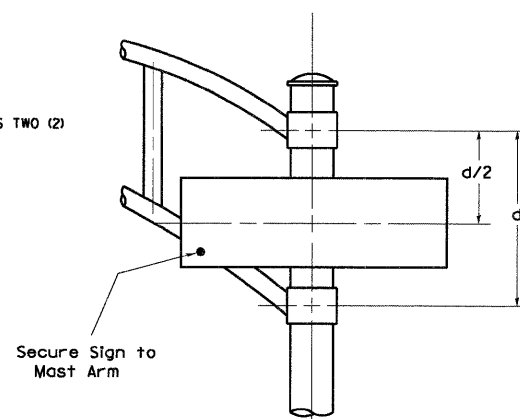
A	B	C
18"	2"	14"



SUPPORTING CHANNELS



A	B	C
30"	2"	22"



DUAL ARM

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

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

EXAMPLE, 2³ DENOTES 3/8"

SERIES	SECOND LETTER																	
	acde		goq		bhikl		mnprru		f w		j		s t		v y		x z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	12	14	14	15	12	14	06	10	11	14	06	10	11	12	12	14	12	14
B	14	15	20	21	14	15	11	12	14	15	12	14	12	14	16	17	12	14
C E G	14	15	20	21	12	14	06	10	12	14	12	14	14	15	14	15	14	15
D O Q R	14	15	20	21	14	15	06	10	12	14	12	14	14	15	14	15	14	15
F	05	06	14	15	06	10	05	06	06	10	06	10	06	10	11	12	11	12
H I M N	20	21	22	24	20	21	14	15	16	17	16	17	20	21	20	21	20	21
J U	20	21	20	21	16	17	14	15	16	17	16	17	16	17	20	21	20	21
K L	11	12	16	17	11	12	05	06	11	12	11	12	11	12	12	14	12	14
P	12	14	14	15	12	14	05	06	11	12	11	12	12	14	12	14	12	14
S	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14	12	14
T	11	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14	12	14
V	06	10	14	15	11	12	06	10	12	14	12	14	12	14	12	14	12	14
Y	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12	11	12
Z	16	17	22	24	16	17	12	14	16	17	16	17	16	17	20	21	20	21

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

SERIES	SECOND LETTER																	
	acde		goq		bhikl		mnprru		f w		j		s t		v y		x z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
adhgi	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17	16	17
lmnqu	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17	16	17
bfkops	12	14	16	17	11	12	05	06	11	12	11	12	12	14	12	14	12	14
ce	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14	12	14
r	06	10	12	14	06	10	03	03	05	06	05	06	06	10	06	10	06	10
t z	12	14	16	17	12	14	06	10	11	12	11	12	12	14	12	14	12	14
v y	11	12	14	15	11	12	05	06	06	10	06	10	11	12	11	12	11	12
w	11	12	14	15	11	12	05	06	11	12	11	12	11	12	12	14	12	14
x	12	14	16	17	11	12	05	06	11	12	11	12	11	12	12	14	12	14

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

SERIES	SECOND NUMBER																			
	0		1		2		3		4		5		6		7		8		9	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	16	17	16	17	14	15	12	14	14	15	14	15	16	17	12	14	16	17	16	17
1	20	21	20	21	20	21	16	17	14	15	20	21	20	21	14	15	20	21	20	21
2 3 4	14	15	14	15	14	15	12	14	12	14	14	15	14	15	11	12	16	17	14	15
5	14	15	14	15	14	15	11	12	11	12	14	15	14	15	11	12	14	15	14	15
6	16	17	14	15	14	15	12	14	14	15	14	15	14	15	11	12	14	15	14	15
7	12	14	12	14	14	15	12	15	05	06	12	14	14	15	11	12	14	15	12	14
8	16	17	16	17	14	15	12	15	12	14	14	15	16	17	12	14	16	17	14	15

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

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

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USER NAME = gaglienob

DESIGNED -

DRAWN - T.J.R.

CHECKED - R.F.K.

DATE - 02-79

REVISED - DAZ/DAG 11-90

REVISED - 06-98

REVISED - 10-01-00

REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
MAST ARM MOUNTED STREET NAME SIGNS

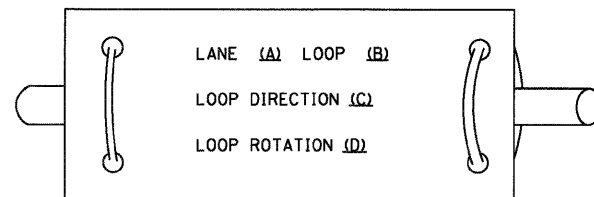
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F.A.R. SECTION COUNTY TOTAL SHEETS SHEET NO.
RTE. 2009-008-TS COOK 41 35
TS-02 CONTRACT NO. 60G04
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

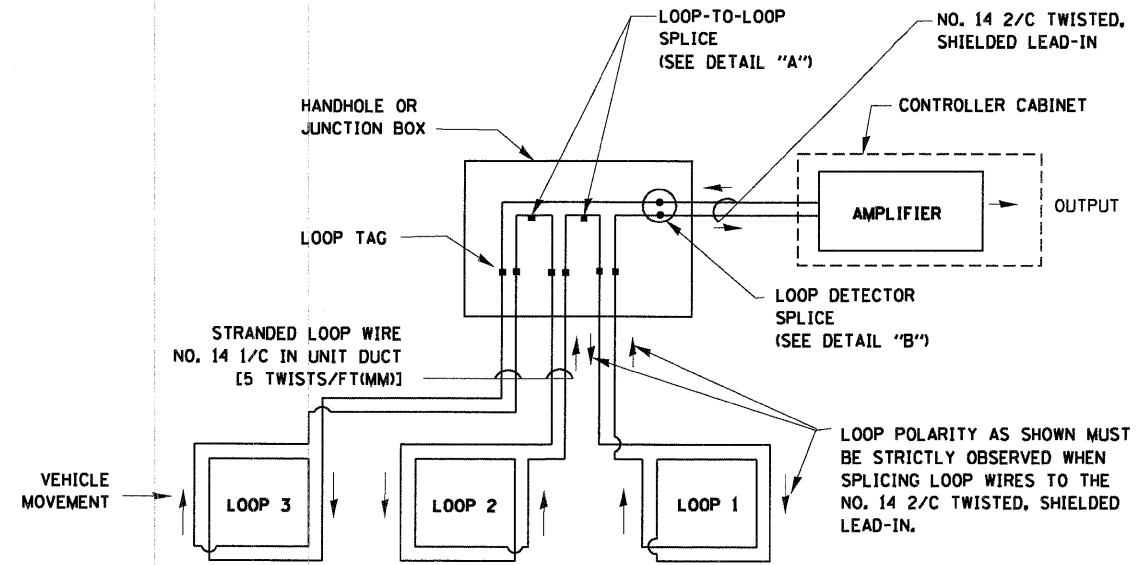
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

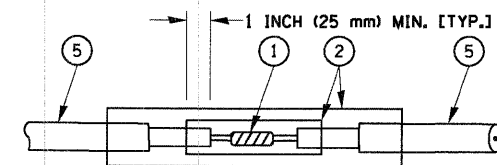


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

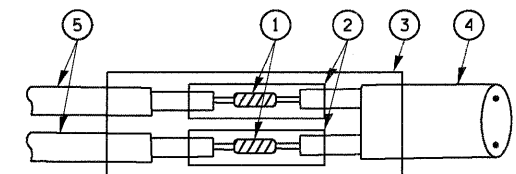


DETECTOR LOOP WIRING SCHEMATIC

- 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

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.

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		DATE - 05-30-00	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

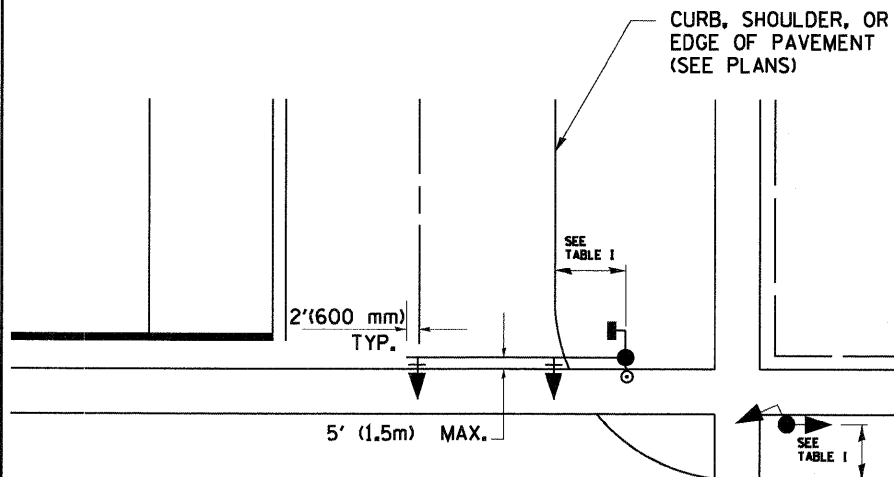
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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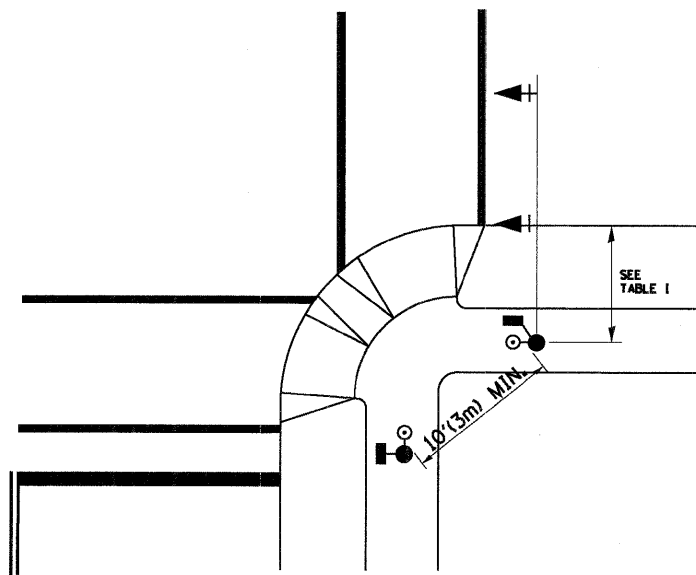
F.A.R. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2009-008-TS	COOK	41	36
TS-05		CONTRACT NO. 60G04		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL MAST ARM AND POST

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



PEDESTRIAN SIGNAL PUSHBUTTON



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

NOTES:

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.

AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.

PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:
 A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
 B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
 C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
 D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
 E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

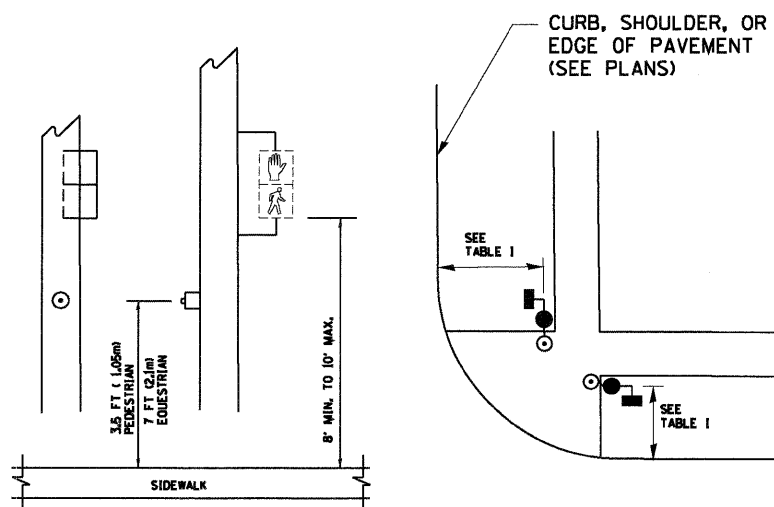


TABLE I

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

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USER NAME = gegl1anobt

DESIGNED - D.A.D.

REVISED - BUR. TRAFFIC 01-01-02

DRAWN - R.W.P.

REVISED -

PLOT SCALE = 5/8" = 1' / IN.

CHECKED - D.A.Z.

REVISED -

PLOT DATE = 1/4/2008

DATE -

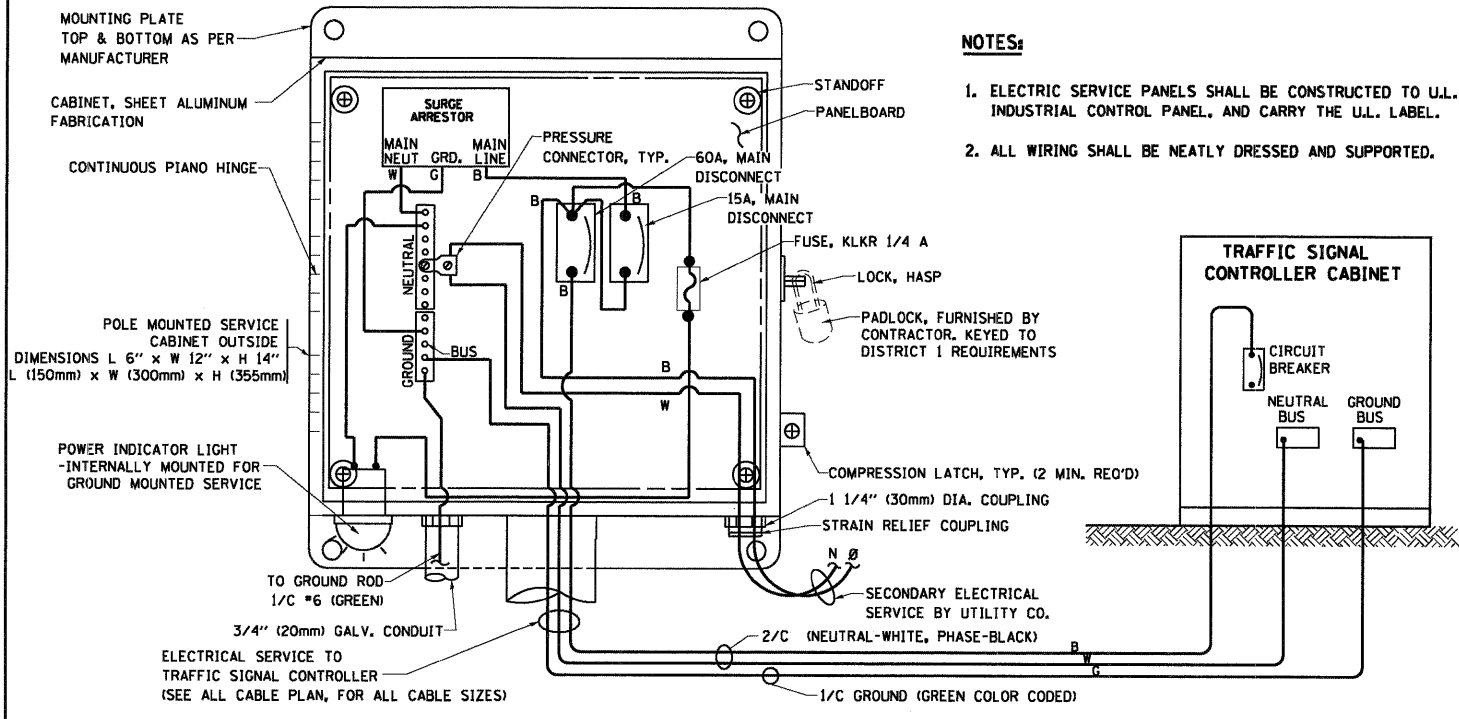
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

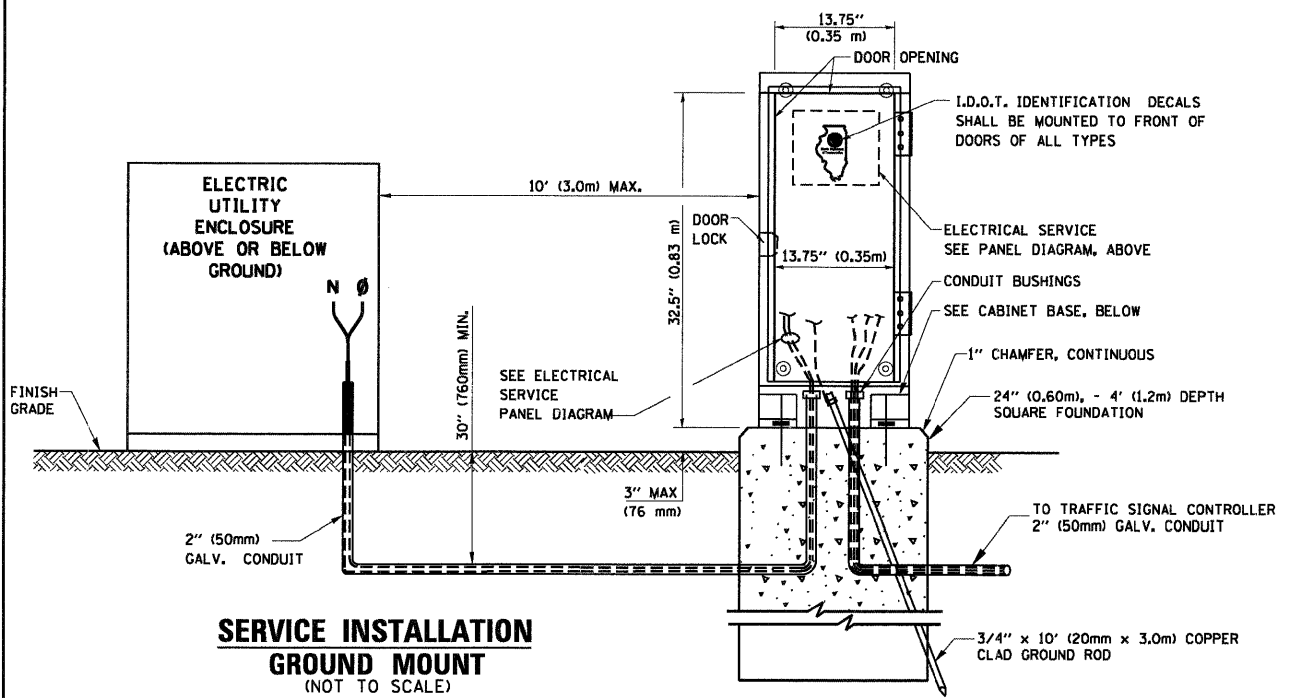
DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

SCALE: NONE SHEET NO. 2 OF 4 SHEETS STA. TO STA.

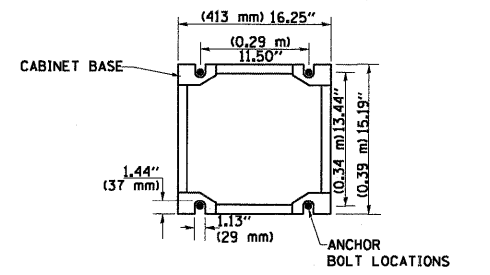
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TS-05		CONTRACT NO. 60G04		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



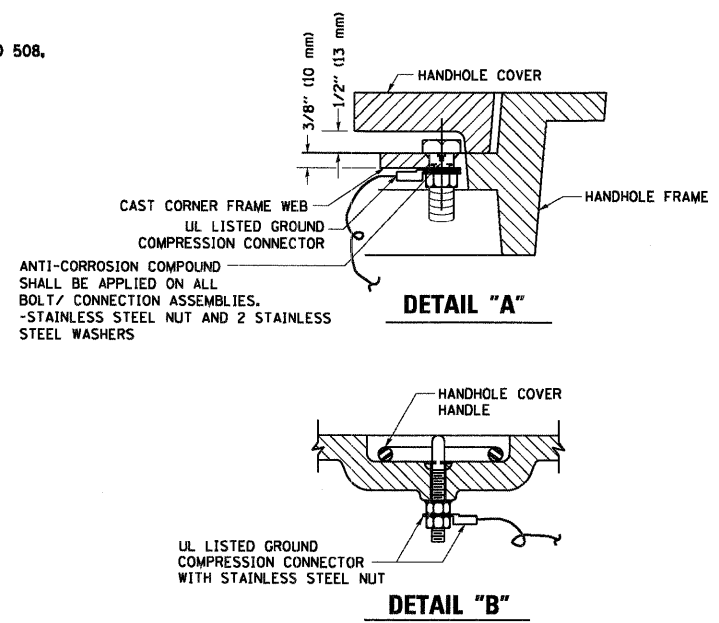
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



SERVICE INSTALLATION GROUND MOUNT
 (NOT TO SCALE)



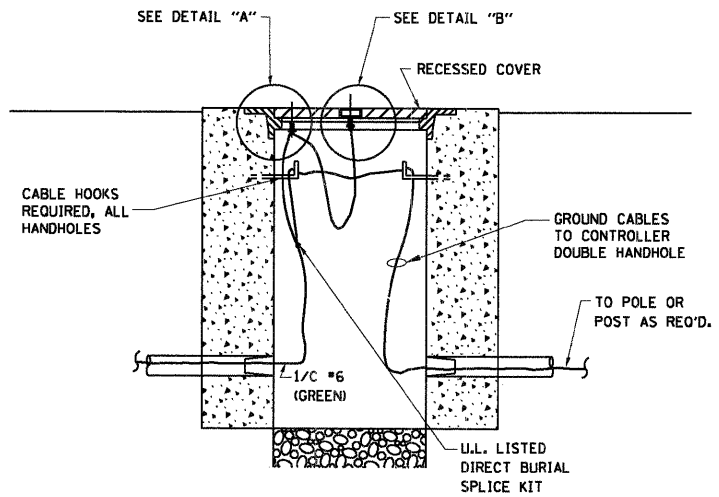
CABINET - BASE BOLT PATTERN
 (NOT TO SCALE)



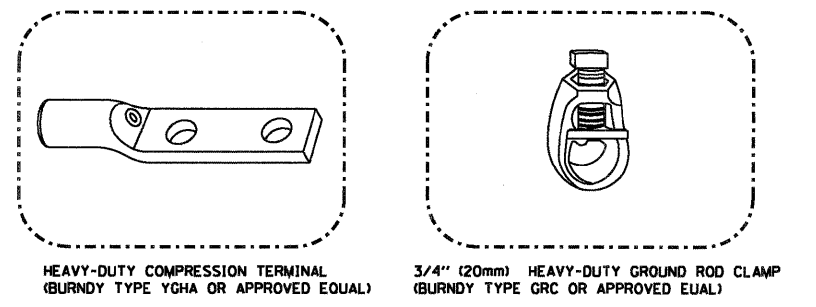
NOTES:

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.

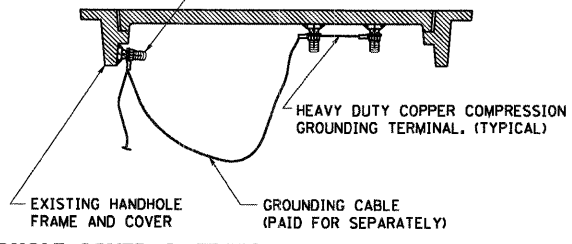


HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)

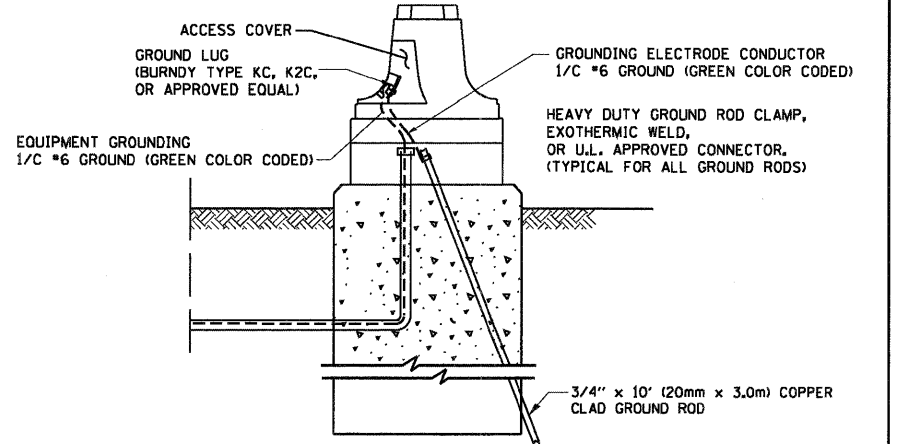


- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.

(2) 1/2" x 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO FRAME AND TO COVER. (TYPICAL)

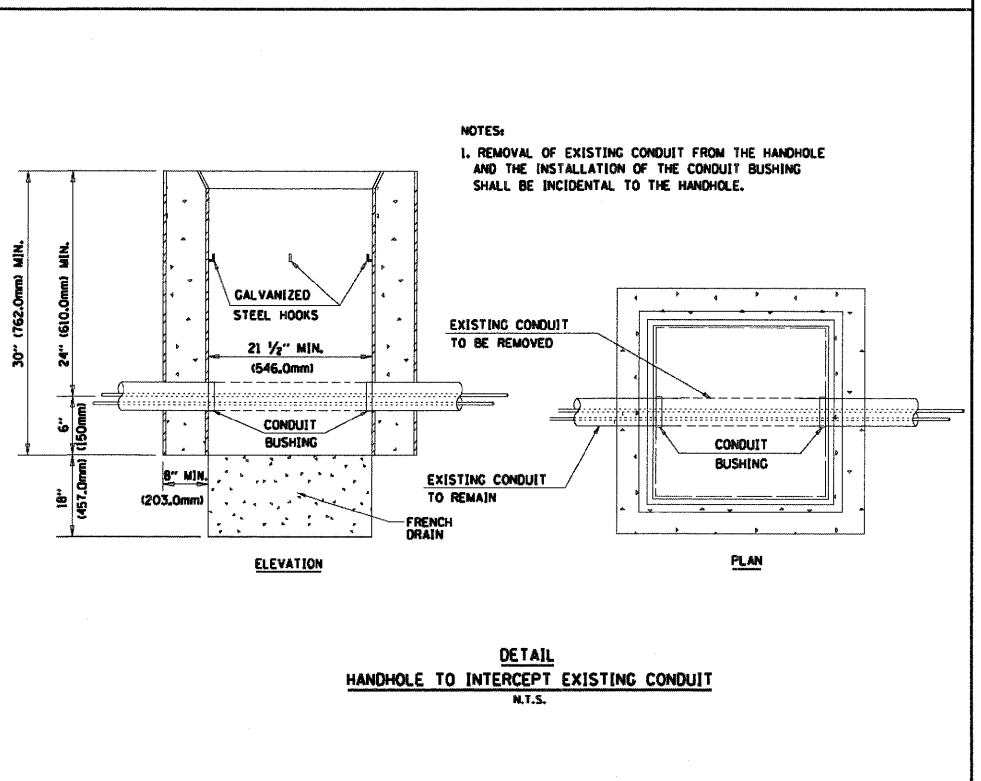
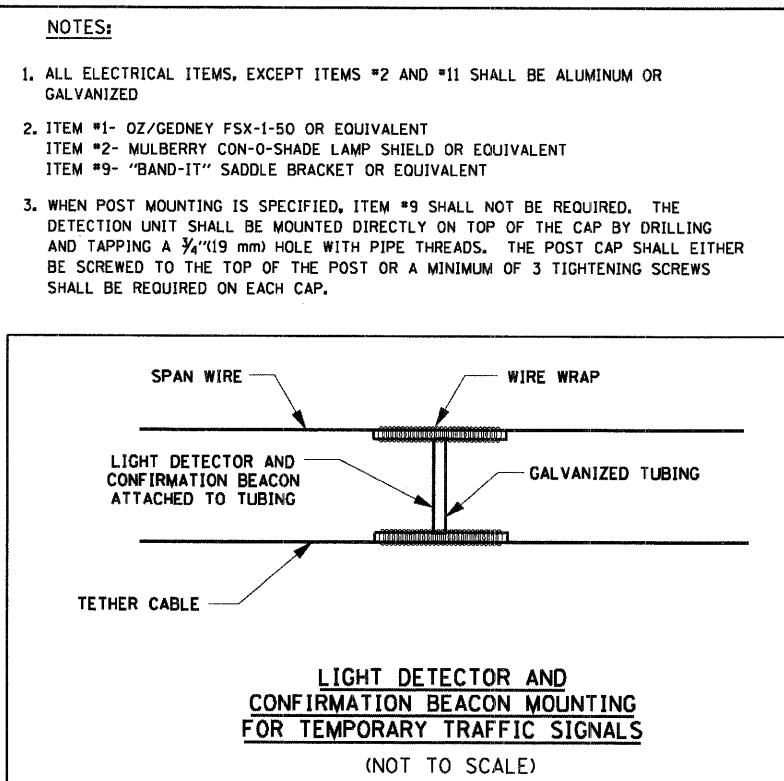
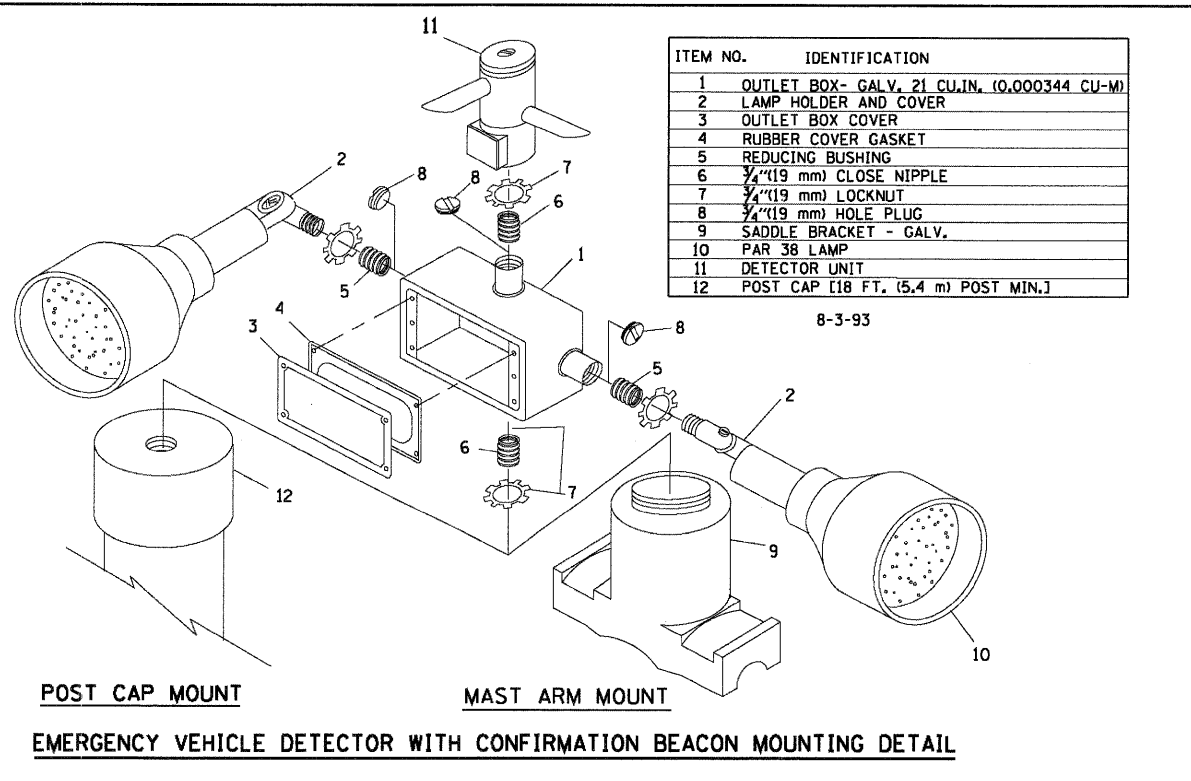
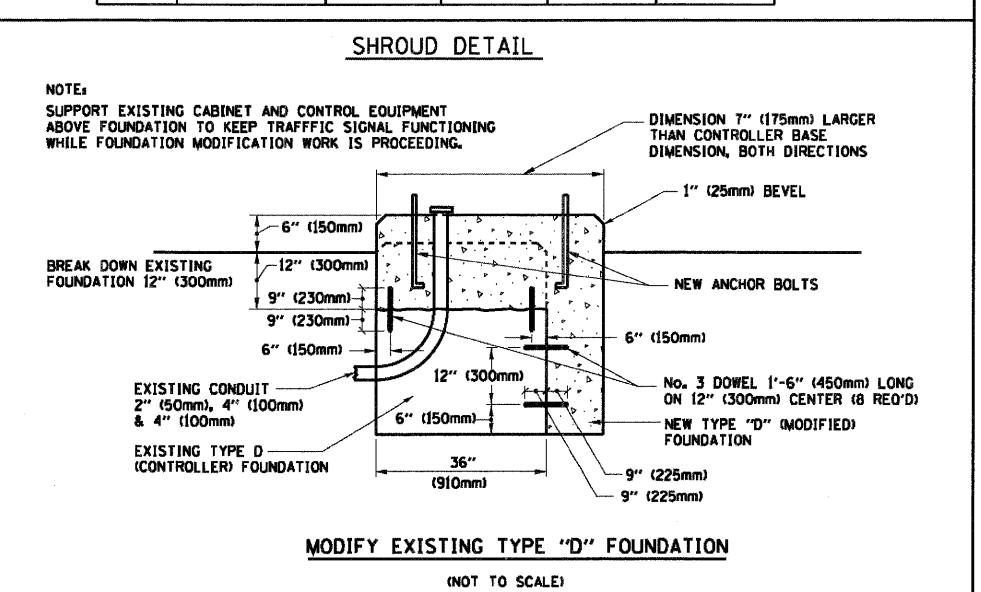
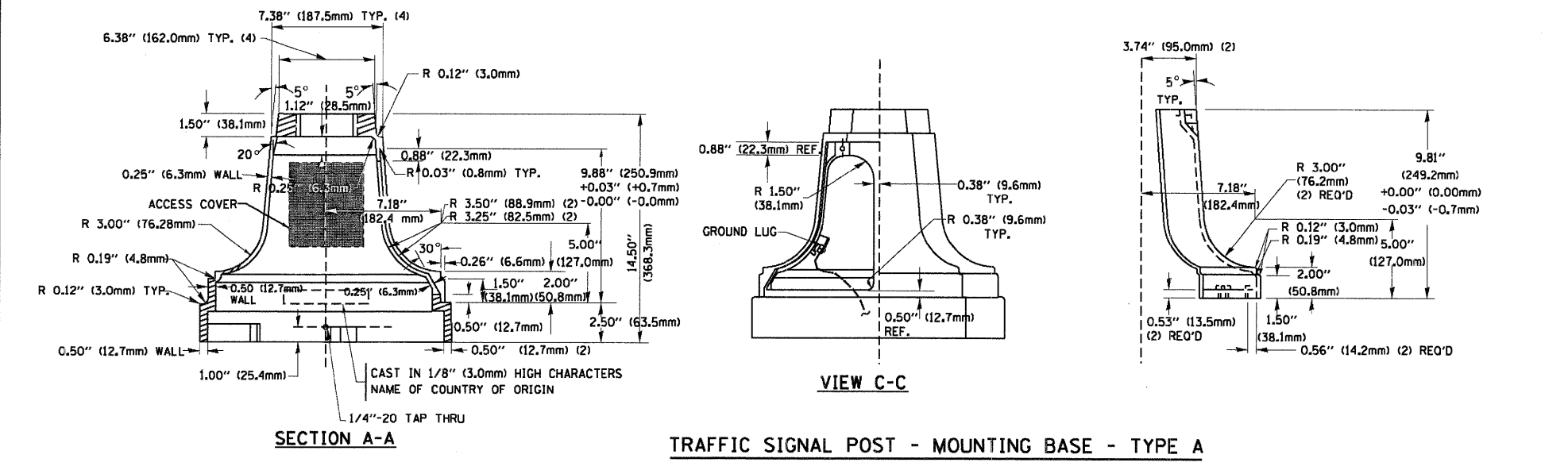
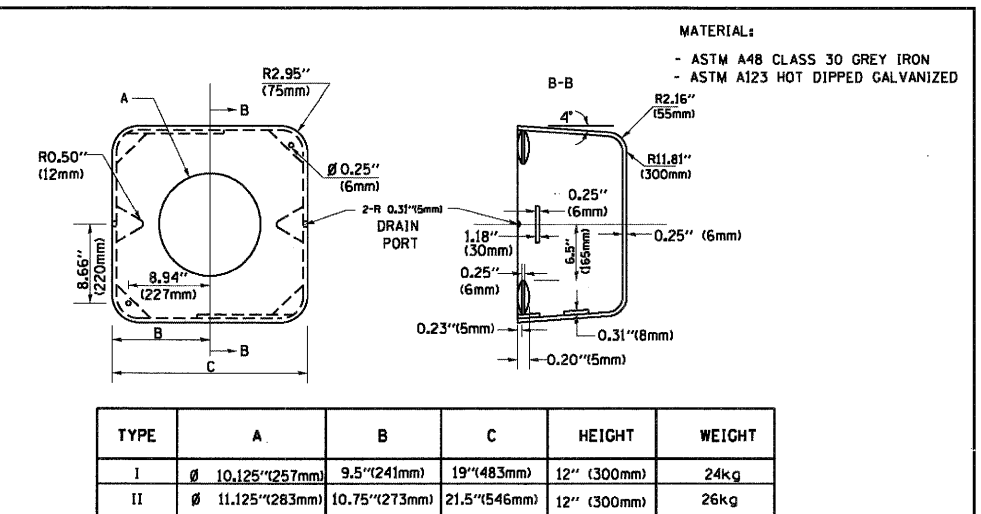
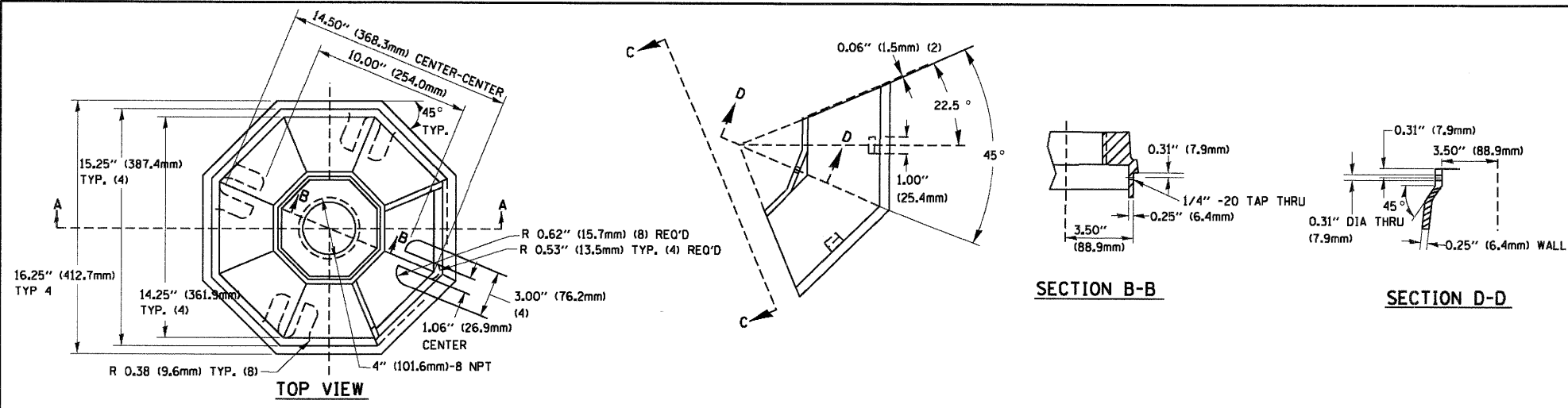


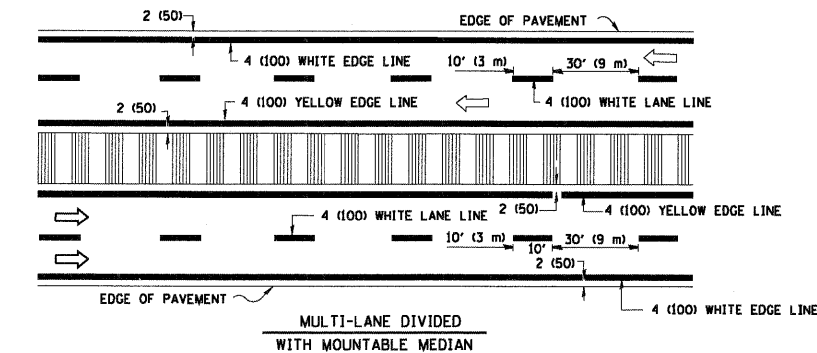
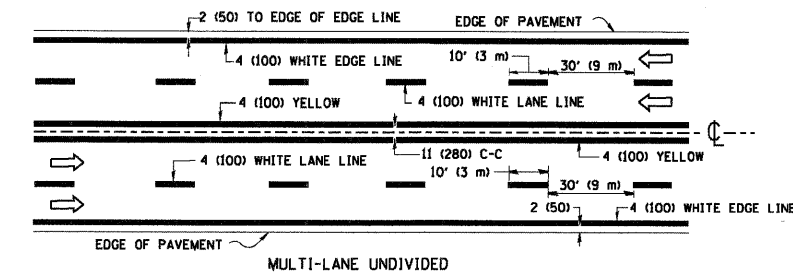
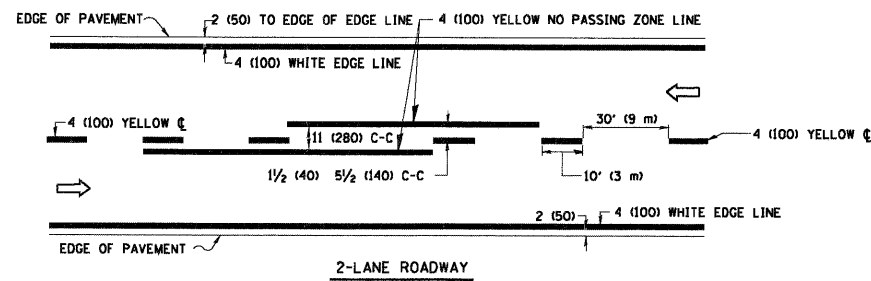
EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)



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

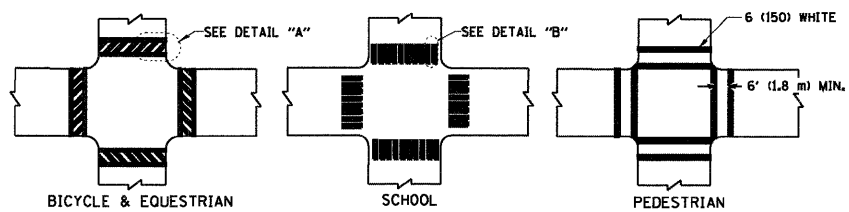
FILE NAME = W:\diststd\22x34\ts05.dgn	USER NAME = gaglanobt	DESIGNED - D.A.D.	REVISED - 03-15-01	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			F.A.P. R.T.E. VAR	SECTION 2009-008-TS	COUNTY COOK	TOTAL SHEETS 41	SHEET NO. 38
PLOT SCALE = 5/8"=1'-0"	CHECKED - D.A.Z.	REVISOR - BUR. TRAFFIC 01-01-02	DATE - 05-30-00		SCALE: NONE	SHEET NO. 3 OF 4 SHEETS	STA.	TO STA.	TS-05		CONTRACT NO. 60004	
PLOT DATE = 1/4/2008	DATE - 05-30-00				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							



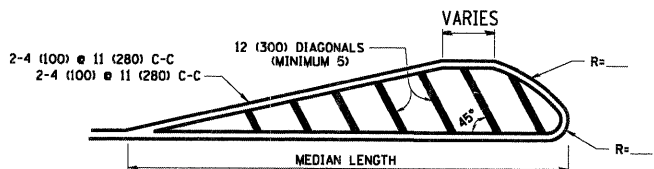
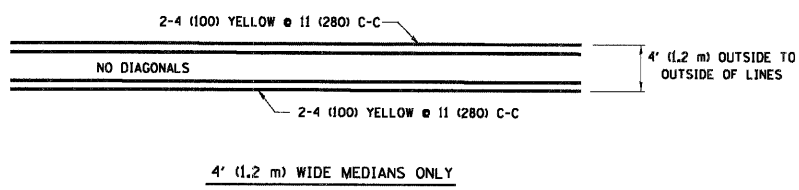


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

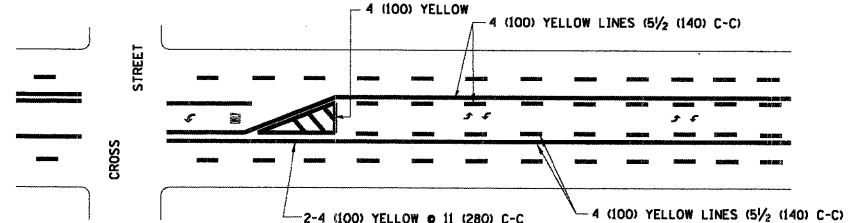


TYPICAL CROSSWALK MARKING



FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.
 DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

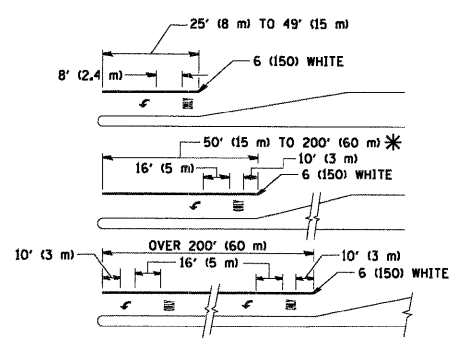


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

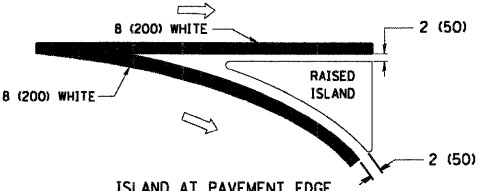
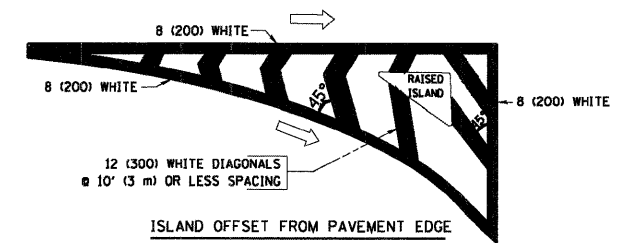


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

* 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

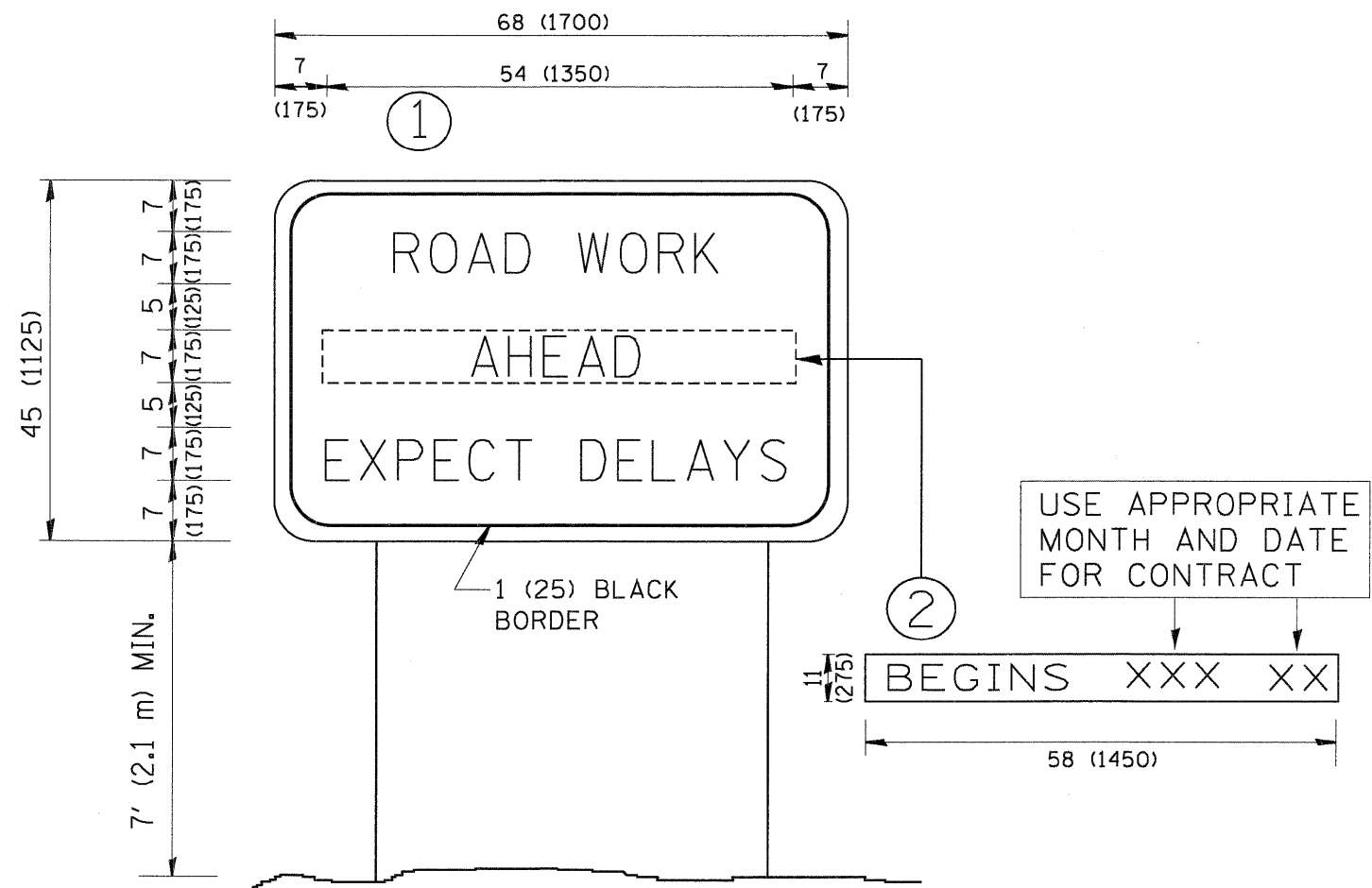


TYPICAL ISLAND MARKING

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 1/2 (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 1/2 (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 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.



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\diststd\22x34\to22.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50,000' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2006	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2009-008-TS	COOK	41	41
TC-22			CONTRACT NO. 60G04	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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