

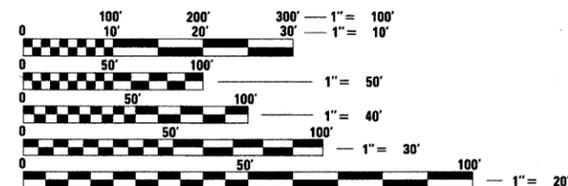
FOR INDEX OF SHEETS, SEE SHEET NO. 2

IDOT STANDARDS

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
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
701606-06	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE 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
878001-08	CONCRETE FOUNDATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND BEACON INSTALLATION
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATION

TRAFFIC DATA

ROUTE SEGMENT	SPEED (MPH)	ADT	CLASSIFICATION
GREEN BAY RD FROM LAKE-COOK RD TO BOB-O-LINK RD	35	14,400	MINOR ARTERIAL
GREEN BAY RD FROM BOB-O-LINK RD TO VINE AVE	30	15,100	MINOR ARTERIAL
DEERFIELD RD/CENTRAL AVE FROM RIDGE RD TO SUNSET RD	35	22,700	MINOR ARTERIAL
DEERFIELD RD/CENTRAL AVE FROM SUNSET RD TO GREEN BAY RD	25	16,300	MINOR ARTERIAL
LAKE-COOK ROAD	35	12,600	MINOR ARTERIAL
LAUREL AVENUE	25	11,800	MINOR ARTERIAL
PARK AVENUE WEST	35	12,200	MINOR ARTERIAL
US 41	50	61,100	OTHER PRINCIPAL ARTERIAL



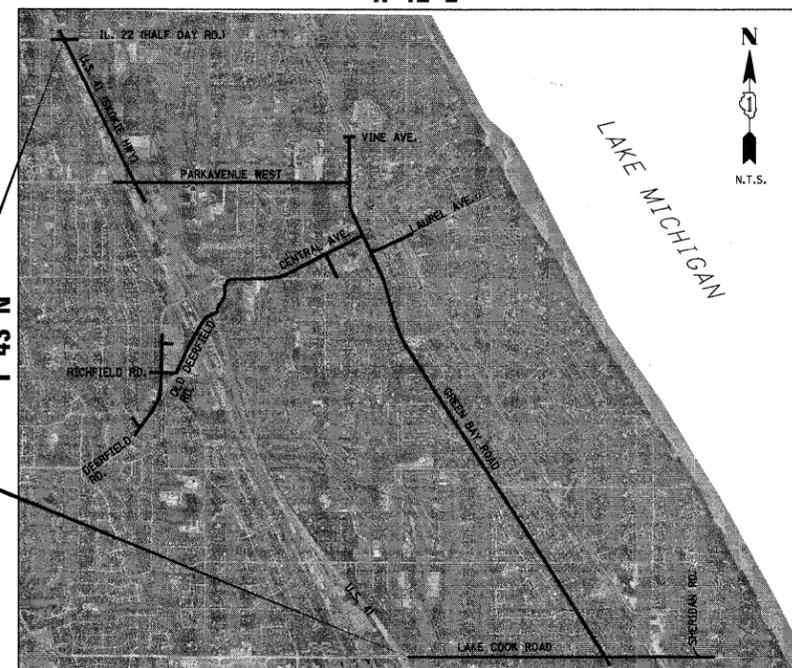
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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

CONTRACT NO. 63485

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
TRAFFIC SIGNAL INTERCONNECT
AND MODERNIZATION**
CONGESTION MITIGATION AIR QUALITY
LAKE COUNTY PASSAGE
VARIOUS LOCATIONS
IN
HIGHLAND PARK
FEDERAL PROJECT NO.: CMM-9003 (217)
SECTION 06-00924-00-TL
LAKE COUNTY
JOB NO.: C-91-275-09

R 12 E



PROJECT ENDS
U.S. RTE. 41 (SKOKIE HWY)
AT IL. RTE 22 (HALF DAY RD.)

PROJECT BEGINS
U.S. RTE. 41 (SKOKIE HWY)
AT LAKE COOK ROAD

GROSS LENGTH = 32,736 FT. = 6.2 MILES

NET LENGTH = 32,736 FT. = 6.2 MILES

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	1
		ILLINOIS	CONTRACT NO. 63485	



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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED April 30, 2010
Mark H. Bausher
LAKE COUNTY DIVISION OF TRANSPORTATION, COUNTY ENGINEER

PASSED MAY 27, 2010
Chris Chausse
DISTRICT 1 ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID
BASED ON LIMITED REVIEW MAY 27, 2010
Diane M. O'Keefe
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

George M. Ziegler 4/21/2010
ENGINEER DATE

GEORGE M. ZIEGLER
ILLINOIS REGISTRATION No. 062-045853
EXPIRATION DATE: 11-30-2011
PROFESSIONAL DESIGN FIRM No.: 184-001742
EXPIRATION DATE: 04-30-2011

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

FEDERAL AID DESIGN ENGINEER: ALEX HOUSEH
(847) 705-4410

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35	SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE LAUREL AVENUE AND ST. JOHNS AVENUE		

CHRISTOPHER B. BURKE ENGINEERING LTD. 9575 West Higgins Road, Suite 600 Rosemont, Illinois 60018 (847) 823-0500	SURVEYED _____ PLOTTED _____ CHECKED _____ BY _____ DATE _____
PLAN NO. _____	SURVEYED _____ PLOTTED _____ CHECKED _____ BY _____ DATE _____

SUMMARY OF QUANTITIES

CONSTRUCTION TYPE CODE Y031 - 1F

CODE NO.	ITEM	UNIT	TOTAL	LAKE-COOK ROAD @ US 41 NB RAMP	LAKE-COOK ROAD @ TURNBULL WOODS	LAKE-COOK ROAD @ GREEN BAY ROAD	LAKE-COOK ROAD @ SHERIDAN ROAD	GREEN BAY ROAD @ CLAYVE ROAD	GREEN BAY ROAD @ ROGER WILLIAMS AVENUE	GREEN BAY ROAD @ EDGEWOOD ROAD	GREEN BAY ROAD @ BOB-O-LINK ROAD	GREEN BAY ROAD @ DEERFIELD ROAD	GREEN BAY ROAD @ LAUREL AVENUE	GREEN BAY ROAD @ CENTRAL AVENUE	GREEN BAY ROAD @ RENAISSANCE GARAGE	GREEN BAY ROAD @ ELM PLACE
*42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	466				25				441					
*42400800	DETECTABLE WARNINGS	SQ FT	128								128					
*44000600	SIDEWALK REMOVAL	SQ FT	441								441					
*44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	113								113					
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	10													
67100100	MOBILIZATION	L SUM	1													
70102620	TRAFFIC CONTROL AND PROTECTION STANDARD 701501	L SUM	1													
70102635	TRAFFIC CONTROL AND PROTECTION STANDARD 701701	L SUM	1													
70102640	TRAFFIC CONTROL AND PROTECTION STANDARD 701801	L SUM	1													
*72000100	SIGN PANEL - TYPE 1	SQ FT	9								9					
*72000200	SIGN PANEL - TYPE 2	SQ FT	26.25								26.25					
*78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	84								84					
*78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	15								15					
*780008200	POLYUREA PAVEMENT MARKING TYPE 1 - LETTERS AND SYMBOLS	SQ FT	36.4								36.4					
*780008230	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 6"	FOOT	93								93					
*780008250	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 12"	FOOT	306								306					
*780008270	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 24"	FOOT	65								65					
78300100	PAVEMENT MARKING REMOVAL	SQ FT	487								487					
81000600	CONDUIT IN TRENCH, 2" DIA, GALVANIZED STEEL	FOOT	24447								546					
81000700	CONDUIT IN TRENCH, 2 1/2" DIA, GALVANIZED STEEL	FOOT	95								95					
81000800	CONDUIT IN TRENCH, 3" DIA, GALVANIZED STEEL	FOOT	19								19					
81001000	CONDUIT IN TRENCH, 4" DIA, GALVANIZED STEEL	FOOT	61								61					
81018500	CONDUIT PUSHED, 2" DIA, GALVANIZED STEEL	FOOT	7922								102					
81018900	CONDUIT PUSHED, 4" DIA, GALVANIZED STEEL	FOOT	160								160					
81100600	CONDUIT ATTACHED TO STRUCTURE, 2" DIA, GALVANIZED STEEL	FOOT	275													
81300945	JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 24" X 24" X 8"	EACH	6													
81400100	HANDHOLE	EACH	53								4					
81400200	HEAVY-DUTY HANDHOLE	EACH	4								1					
81400300	DOUBLE HANDHOLE	EACH	2								2					
81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	24726								825					
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	28	1	1	1	1	1	1	1		1	1	1	1	1
85700205	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	12		1	1					1					
85700505	FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	12				1			1		1	1	1	1	1
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	773								773					
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	4397			198					2010		200	104		182
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	779								779					
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1235								1235					
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1195								1195					
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	25								25					
87301815	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3 C	FOOT	30									30				
87701180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT., (SPECIAL)	EACH	1								1					
X8770220	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS 22 FT. AND 24 FT., (SPECIAL)	EACH	1								1					
87704070	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 28 FT., (SPECIAL)	EACH	1								1					
87900100	CONCRETE FOUNDATION, TYPE A	FOOT	12								8		4			
87900150	CONCRETE FOUNDATION, TYPE C	FOOT	4								4					
87900400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	20								20					
87900415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15								15					
87900200	DRILL EXISTING HANDHOLE	EACH	32	1	2	3	1			2		2	4	2		
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4								4					
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1								1					
88030080	SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	3								3					
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1								1					
88030210	SIGNAL HEAD, LED, 2-FACE, 4-SECTION, BRACKET MOUNTED	EACH	1								1					
88030240	SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED	EACH	1								1					
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8			4	2				2					
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4				1				3					
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8								8					
88500100	INDUCTIVE LOOP DETECTOR	EACH	74		7	13		5	5		6					
88600100	DETECTOR LOOP, TYPE 1	FOOT	328								328					
88700200	LIGHT DETECTOR	EACH	3								3					
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1								1					
88800100	PEDESTRIAN PUSH-BUTTON	EACH	4				4									
89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1								1					
89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM PHASING UNIT	EACH	11		1	1		1	1							
89502210	MODIFY EXISTING CONTROLLER CABINET	EACH	13							1		1	1	1	1	1
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	24		1	1	1	1	1	1	1	1	1	1	1	1
89502380	REMOVE EXISTING HANDHOLE	EACH	8								8					
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	8								8					
X0322925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	45296													
X0324245	CAMERA MOUNTING ASSEMBLY	EACH	1													
X0325462	CONCRETE FOUNDATION, SURVEILLANCE CABINET MODEL 334	EACH	1										1			
X0325462	MEDIA CONVERTER	EACH	9										7			
X0325705	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	25													
X0326275	RAILROAD RIGHT-OF-WAY ENTRY PERMIT	EACH	2													
X0326856	RADIO ACTIVATED SOLAR ADVANCE FLASHING BEACON SYSTEM (COMPLETE)	EACH	1								1					
X8050010	SERVICE INSTALLATION - GROUND MOUNTED	EACH	1										1			
X8050015	SERVICE INSTALLATION - POLE MOUNTED	EACH	15										1			
X8620020	UNINTERRUPTIBLE POWER SUPPLY	EACH	25		1	1	1	1	1	1	1	1	1	1	1	1
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	1302		40	45		32	25		421	30	150			
X8730320	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 20 3/C, TWISTED, SHIELDED	FOOT	652								652					
X8780110	MODIFY EXISTING TYPE "D" FOUNDATION	EACH	2					1	1							
X8808118	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2				2									
X8808120	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2				2									
X8809045	COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3SECTION OPTICALLY PROGRAMMED, 1-3 SECTION BRACKET MOUNTED	EACH	1				1									
X0003661	ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	2595								208		290	104		182
X0003665	REBUILD EXISTING HANDHOLE TO DOUBLE HANDHOLE	EACH	2					1	1							
X0005931	PEDESTRIAN PUSH-BUTTON, SPECIAL	EACH	9				4				5					
X0005931	TRAFFIC SIGNAL POST, 16 FOOT, (SPECIAL)	EACH	1								1					
X0005932	TRAFFIC SIGNAL POST, 18 FOOT, (SPECIAL)	EACH	1								1					
X0005940	REMOTE-CONTROLLED VIDEO SYSTEM	EACH	15			1					1		1	1	1	1
X0006855	LAYER II (DATALINK) SWITCH	EACH	24					1	1		1		1	1	1	1
X0007017	TERMINATE FIBER IN CABINET	EACH	92		1	1	1	1	1	1	1		1	6	12	12
X0007018	LAYER II (NETWORK) SWITCH	EACH	1										1			
X0008246	FIBER OPTIC CABLE IN CONDUIT, 24 SINGLE MODE	FOOT	49064													
X0008251	SPURCE FIBER IN CABINET															

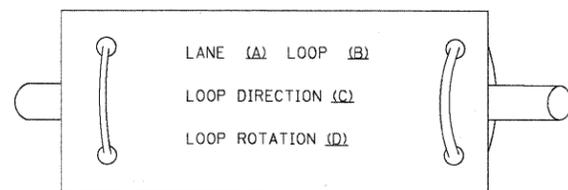
TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED																		
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE																					
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE																					
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA																					
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED																					
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F																					
UNINTERRUPTIBLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F																					
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				GALVANIZED STEEL CONDUIT IN TRENCH (T) OR PUSHED (P)				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F																					
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, (NUMBER OF FIBERS & TYPE TO BE NOTED ON PLANS)																					
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE																					
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED																					
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM		S	S	STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED																					
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM		I	IP	ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED																					
SIGNAL POST				REMOVE ITEM	R			STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED																					
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM	RL			SIGNAL POST AND FOUNDATION TO BE REMOVED																					
GUY WIRE				ABANDON ITEM	A			INTERSECTION & SAMPLING (SYSTEM) DETECTOR																					
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR																					
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				EXISTING INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR																					
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				EXISTING PREFORMED INTERSECTION LOOP DETECTOR PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR																					
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR																					
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				PREFORMED SAMPLING (SYSTEM) DETECTOR																					
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED				<h2 style="margin: 0;">RAILROAD SYMBOLS</h2> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th> <th style="width: 25%;">EXISTING</th> <th style="width: 25%;">PROPOSED</th> </tr> </thead> <tbody> <tr> <td>RAILROAD CONTROL CABINET</td> <td></td> <td></td> </tr> <tr> <td>RAILROAD CANTILEVER MAST ARM</td> <td></td> <td></td> </tr> <tr> <td>FLASHING SIGNAL</td> <td></td> <td></td> </tr> <tr> <td>CROSSING GATE</td> <td></td> <td></td> </tr> <tr> <td>CROSSBUCK</td> <td></td> <td></td> </tr> </tbody> </table>					EXISTING	PROPOSED	RAILROAD CONTROL CABINET			RAILROAD CANTILEVER MAST ARM			FLASHING SIGNAL			CROSSING GATE			CROSSBUCK		
	EXISTING	PROPOSED																											
RAILROAD CONTROL CABINET																													
RAILROAD CANTILEVER MAST ARM																													
FLASHING SIGNAL																													
CROSSING GATE																													
CROSSBUCK																													
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID																									
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER																									
ILLUMINATED SIGN "NO LEFT TURN"				RADIO INTERCONNECT																									
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO REPEATER																									
DETECTOR LOOP, TYPE I				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED																									
PREFORMED DETECTOR LOOP				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)																									
MICROWAVE VEHICLE SENSOR																													
VIDEO DETECTION CAMERA																													
VIDEO DETECTION ZONE																													
PAN, TILT, ZOOM CAMERA																													
WIRELESS DETECTOR SENSOR																													
WIRELESS ACCESS POINT																													

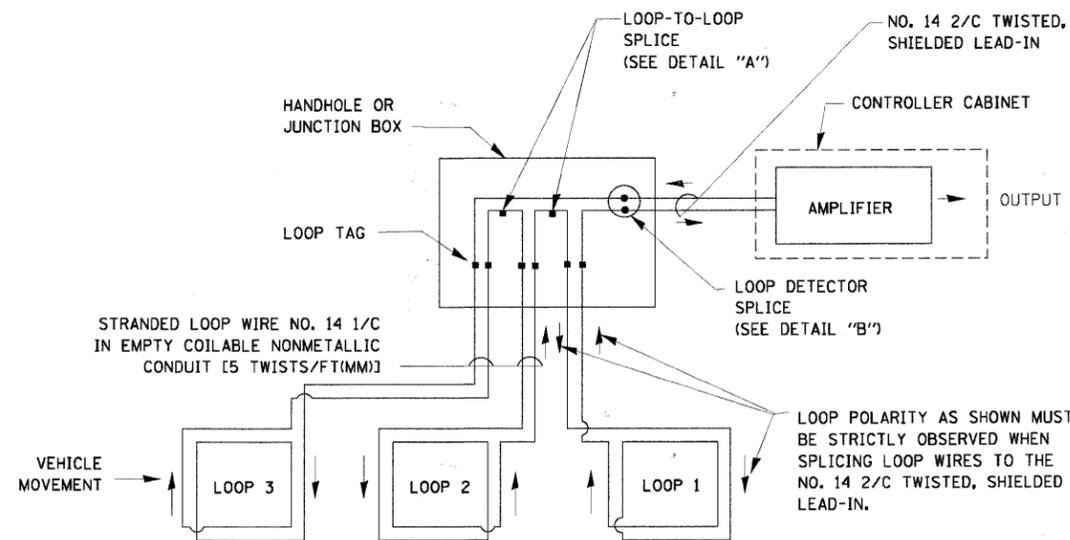
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

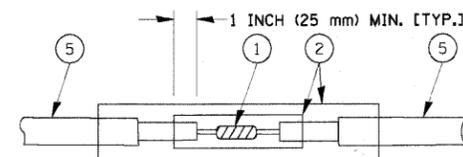


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

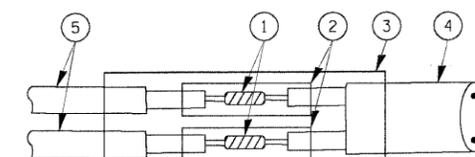


DETECTOR LOOP WIRING SCHEMATIC

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

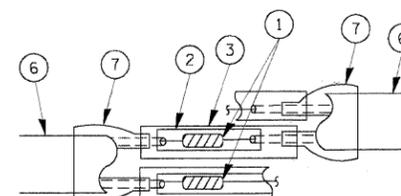


DETAIL "A" LOOP-TO-LOOP SPLICE

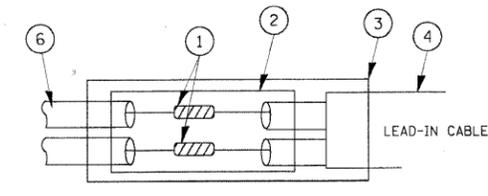


DETAIL "B" LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A" LOOP-TO-LOOP SPLICE



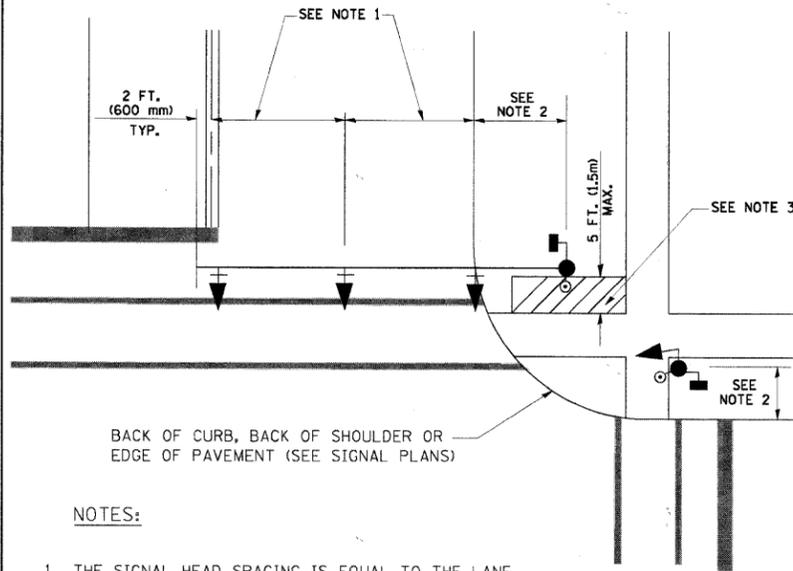
DETAIL "B" LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

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

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

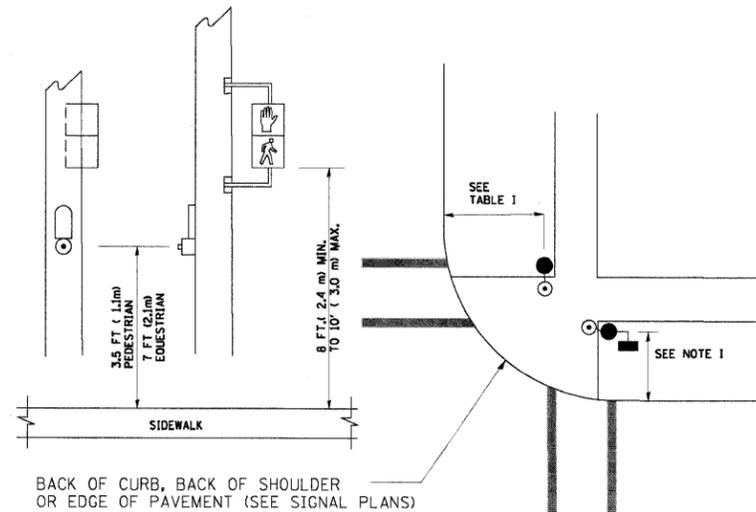
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



NOTES:

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

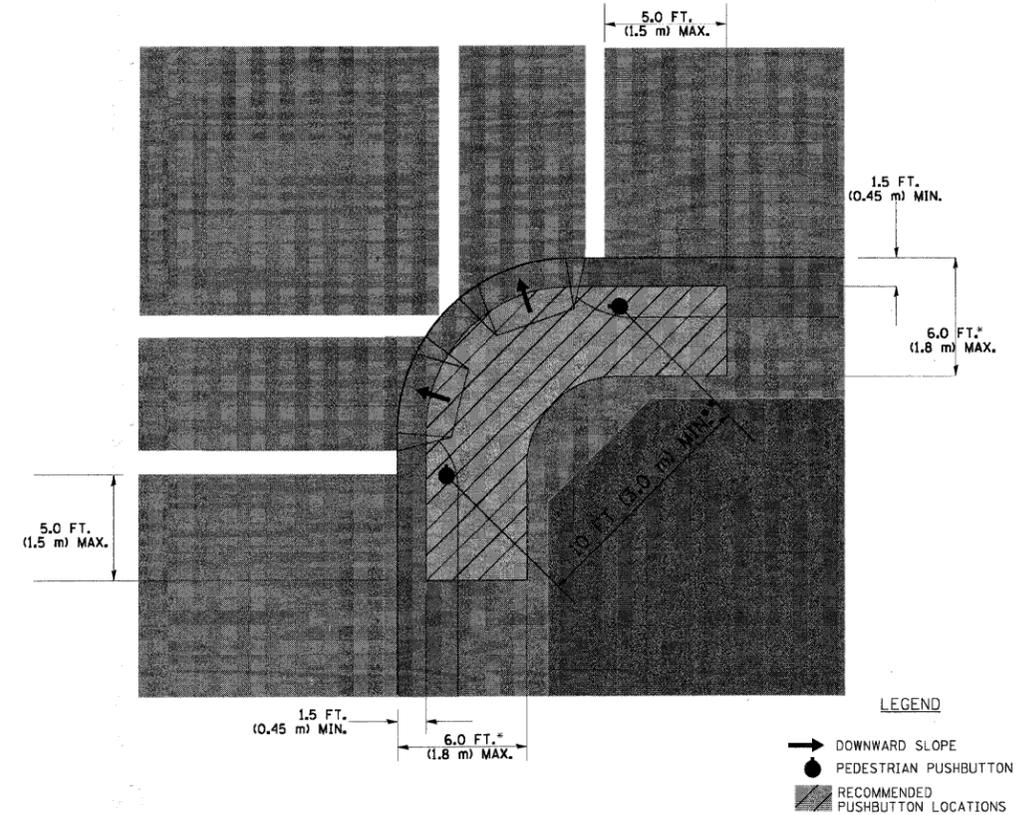
PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



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

NOTES:

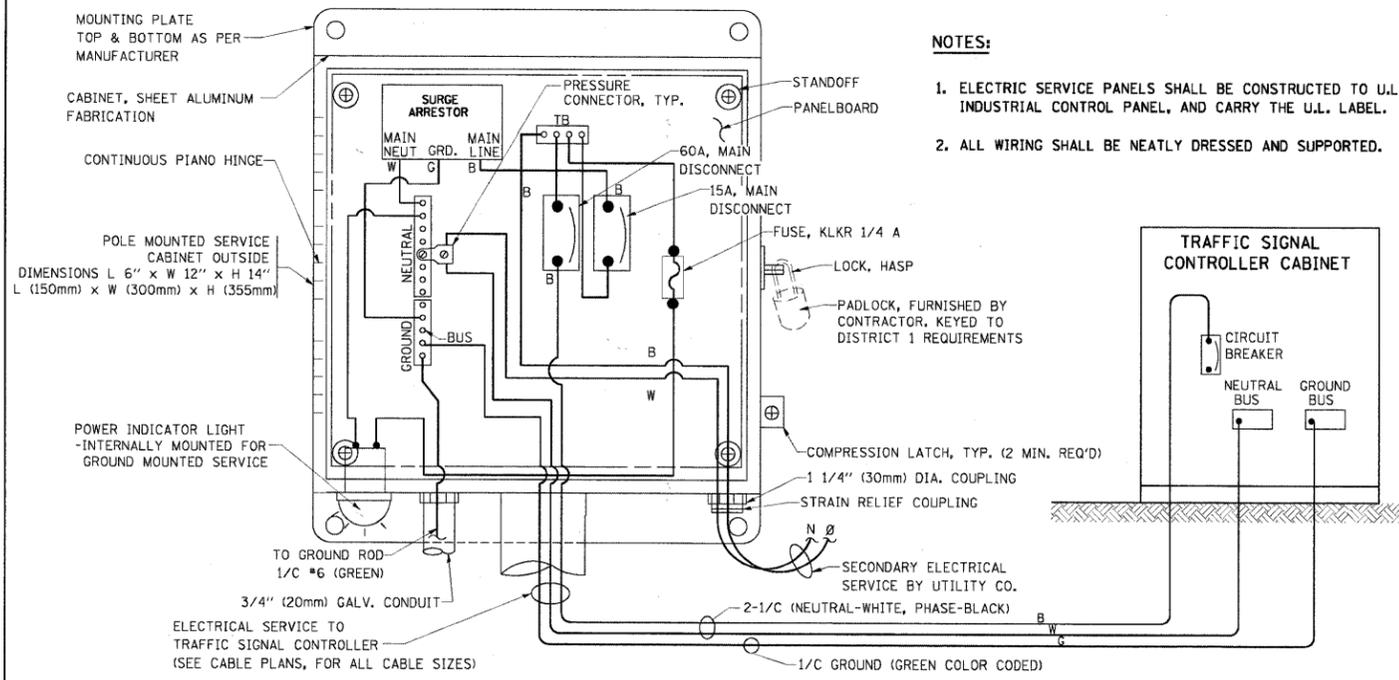
1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM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

TRAFFIC SIGNAL EQUIPMENT OFFSET

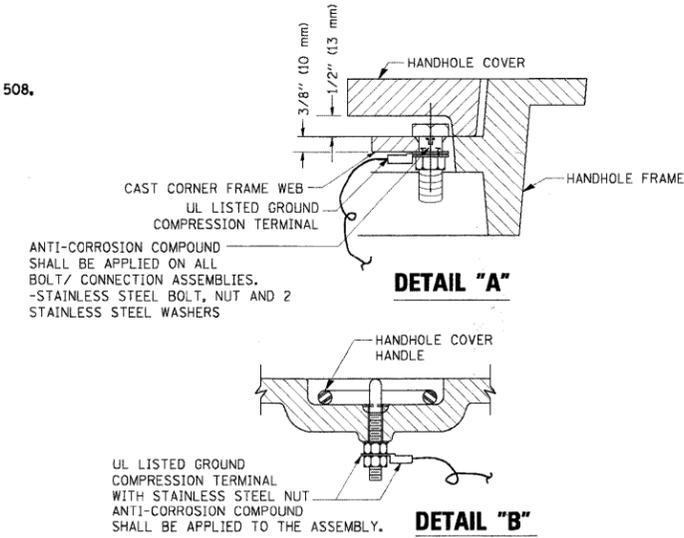
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10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

NOTES:

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

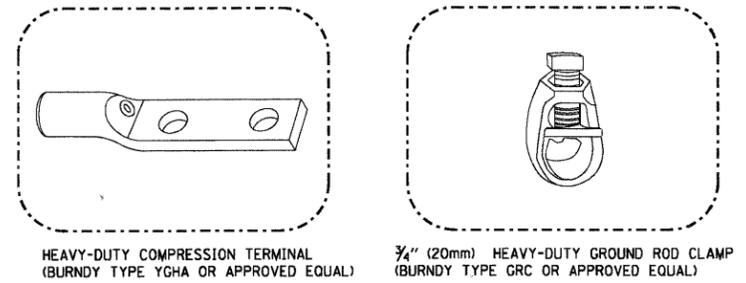
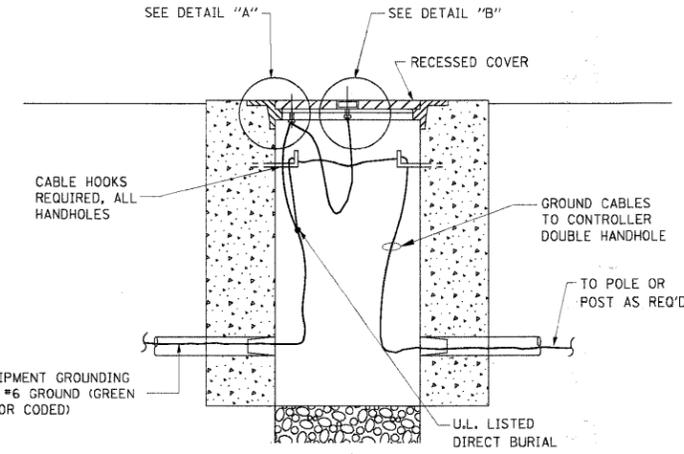


- NOTES:**
1. ELECTRIC SERVICE PANELS SHALL BE CONSTRUCTED TO U.L. STD 508, INDUSTRIAL CONTROL PANEL, AND CARRY THE U.L. LABEL.
 2. ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.



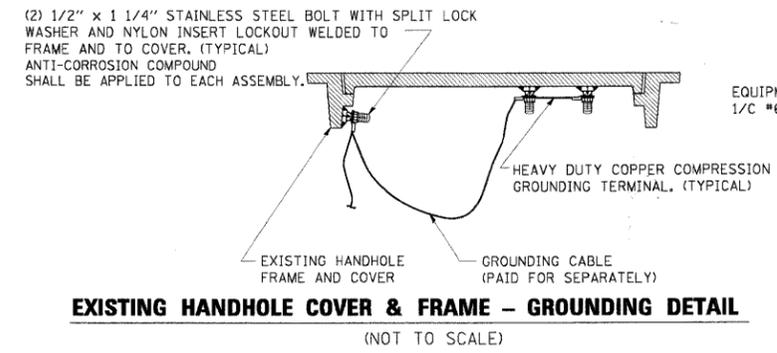
- NOTES:**
- GROUNDING SYSTEM**
1. THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED 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.

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

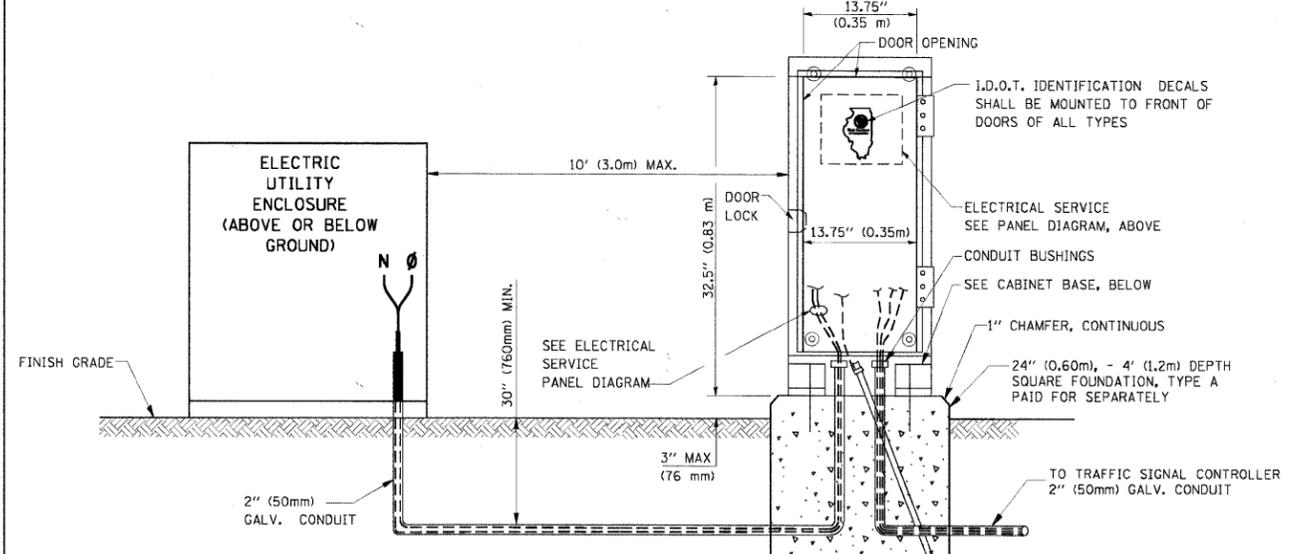


- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES
 - 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES
 - 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES.
 - 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND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

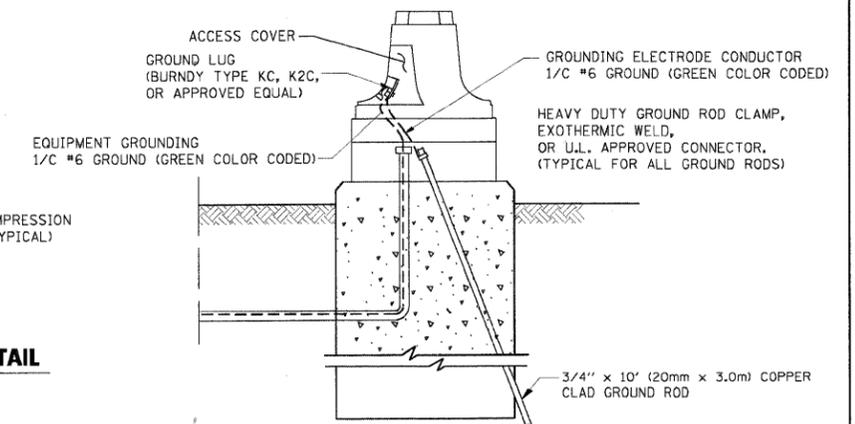
HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)



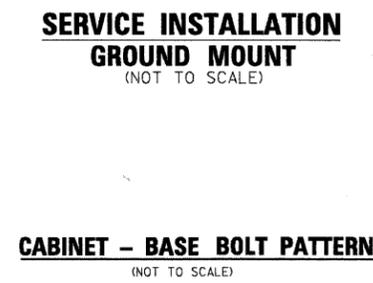
EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL
 (NOT TO SCALE)



SERVICE INSTALLATION GROUND MOUNT
 (NOT TO SCALE)



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



CABINET - BASE BOLT PATTERN
 (NOT TO SCALE)

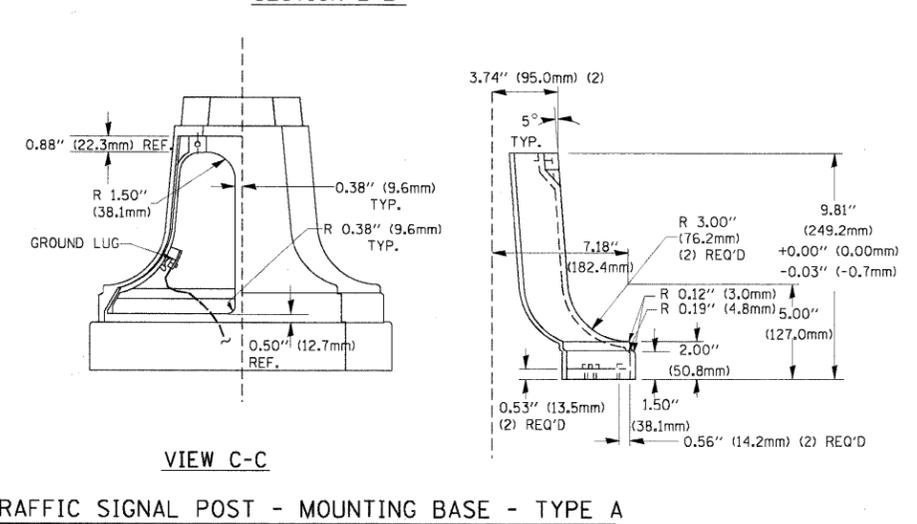
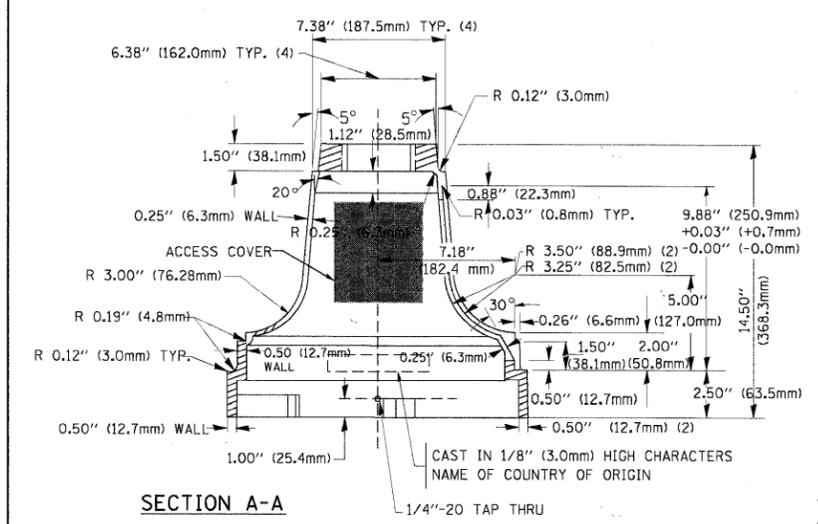
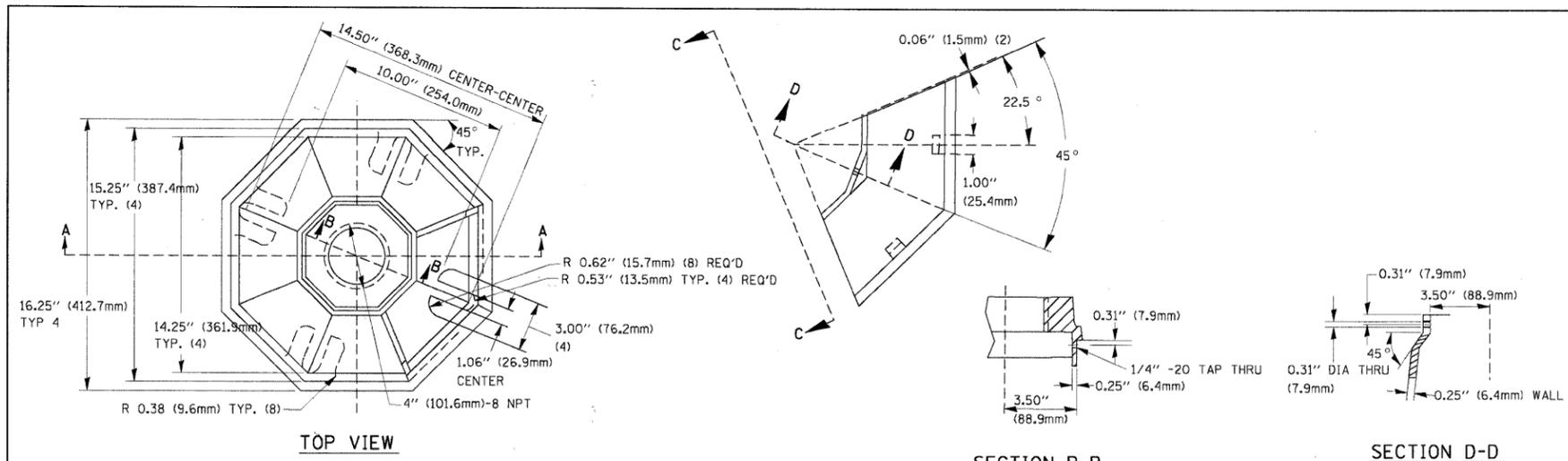
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

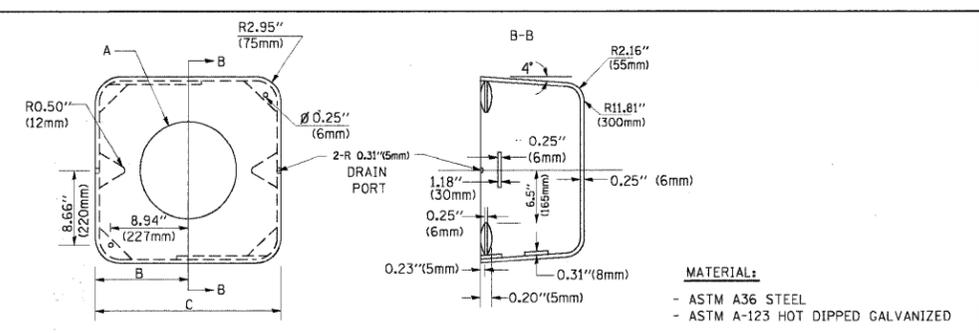
**DISTRICT 1
 STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	8
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 63485	

SCALE: SHEET NO. 3 OF 6 SHEETS STA. TO STA.



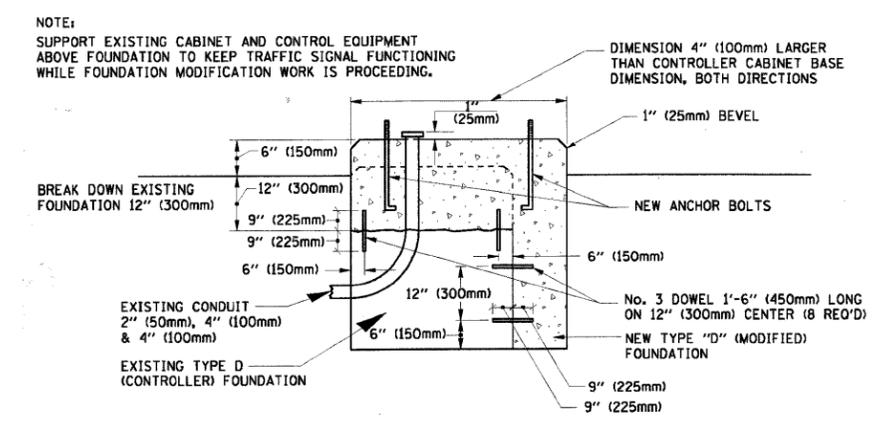
TRAFFIC SIGNAL POST - MOUNTING BASE - TYPE A



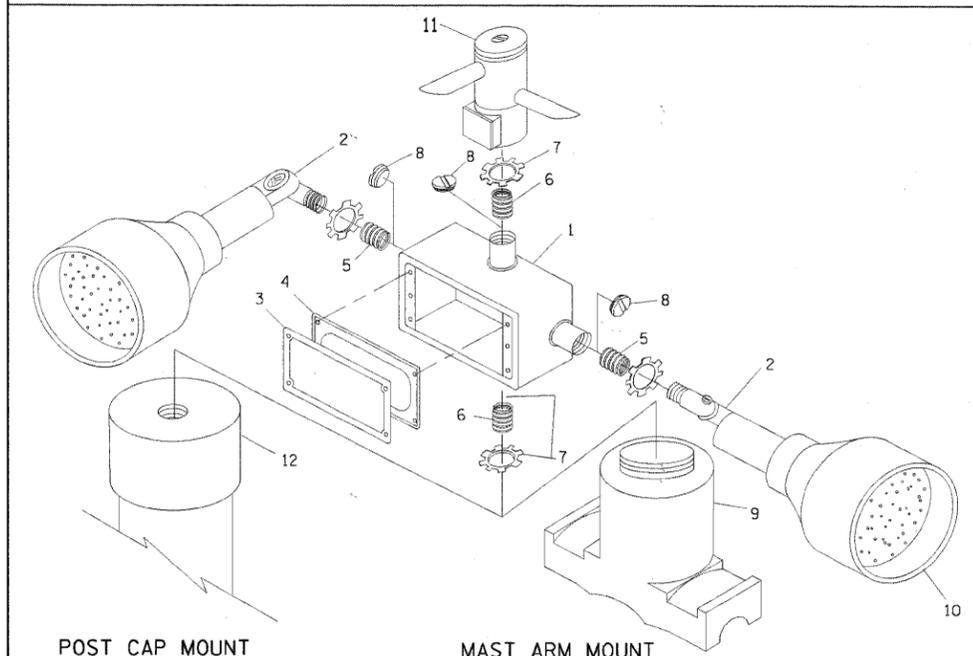
A	B	C	HEIGHT	WEIGHT
VARIABLES	9.5\"(241mm)	19\"(483mm)	7\"(178mm) - 12\"(300mm)	53 lbs (24kg)
VARIABLES	10.75\"(273mm)	21.5\"(546mm)	7\"(178mm) - 12\"(300mm)	68 lbs (31 kg)
VARIABLES	13.0\"(330mm)	26\"(660mm)	7\"(178mm) - 12\"(300mm)	81 lbs (37 kg)
VARIABLES	18.5\"(470mm)	37\"(940mm)	7\"(178mm) - 12\"(300mm)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

SHROUD

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



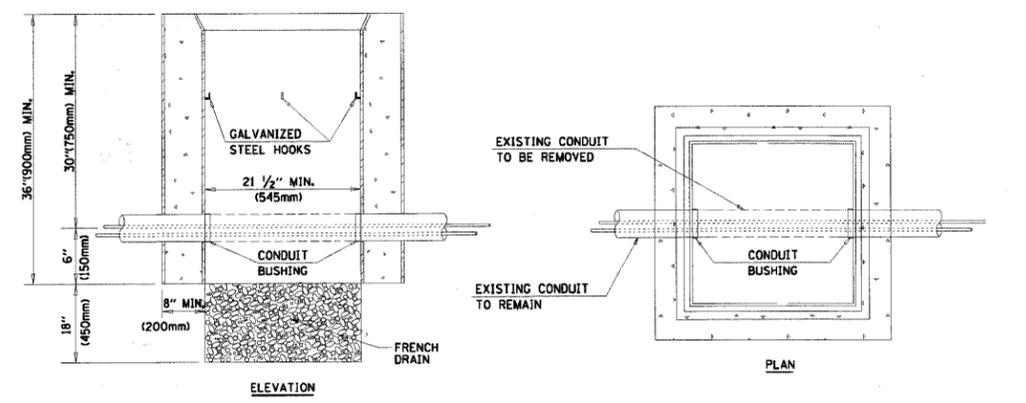
MODIFY EXISTING TYPE "D" FOUNDATION



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

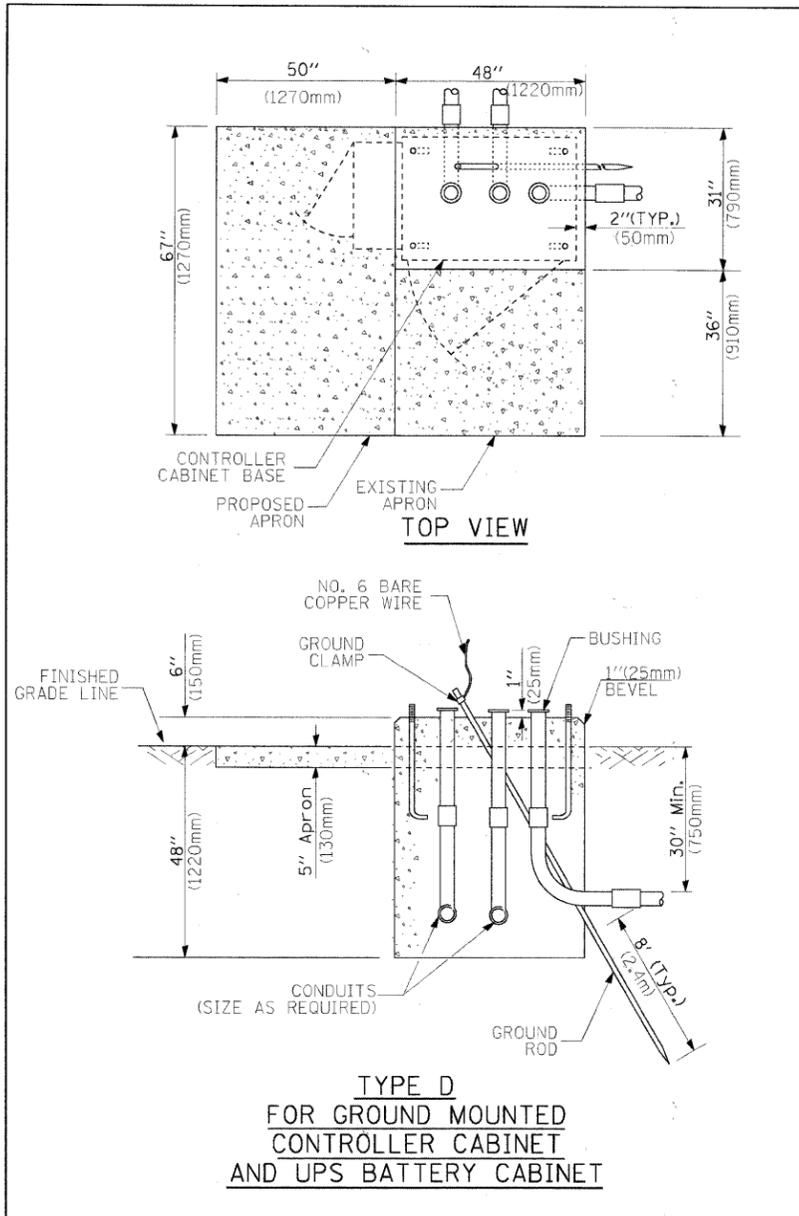
ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.00344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4\"(19 mm) CLOSE NIPPLE
7	3/4\"(19 mm) LOCKNUT
8	3/4\"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT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

- NOTES:
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
 - ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-0-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
 - WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4\"(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

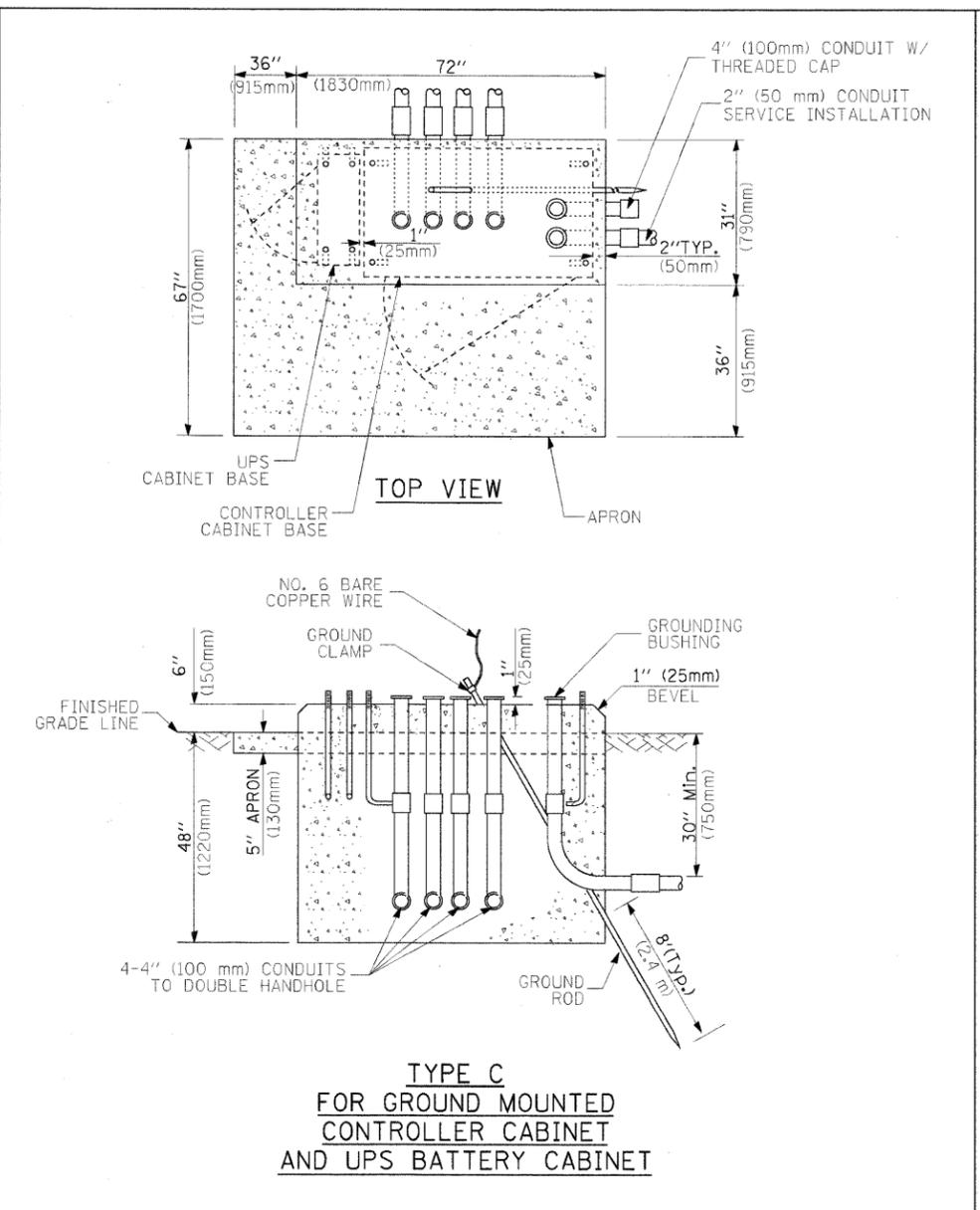


- NOTES:
- HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
 - REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCIDENTAL TO THE HANDHOLE.

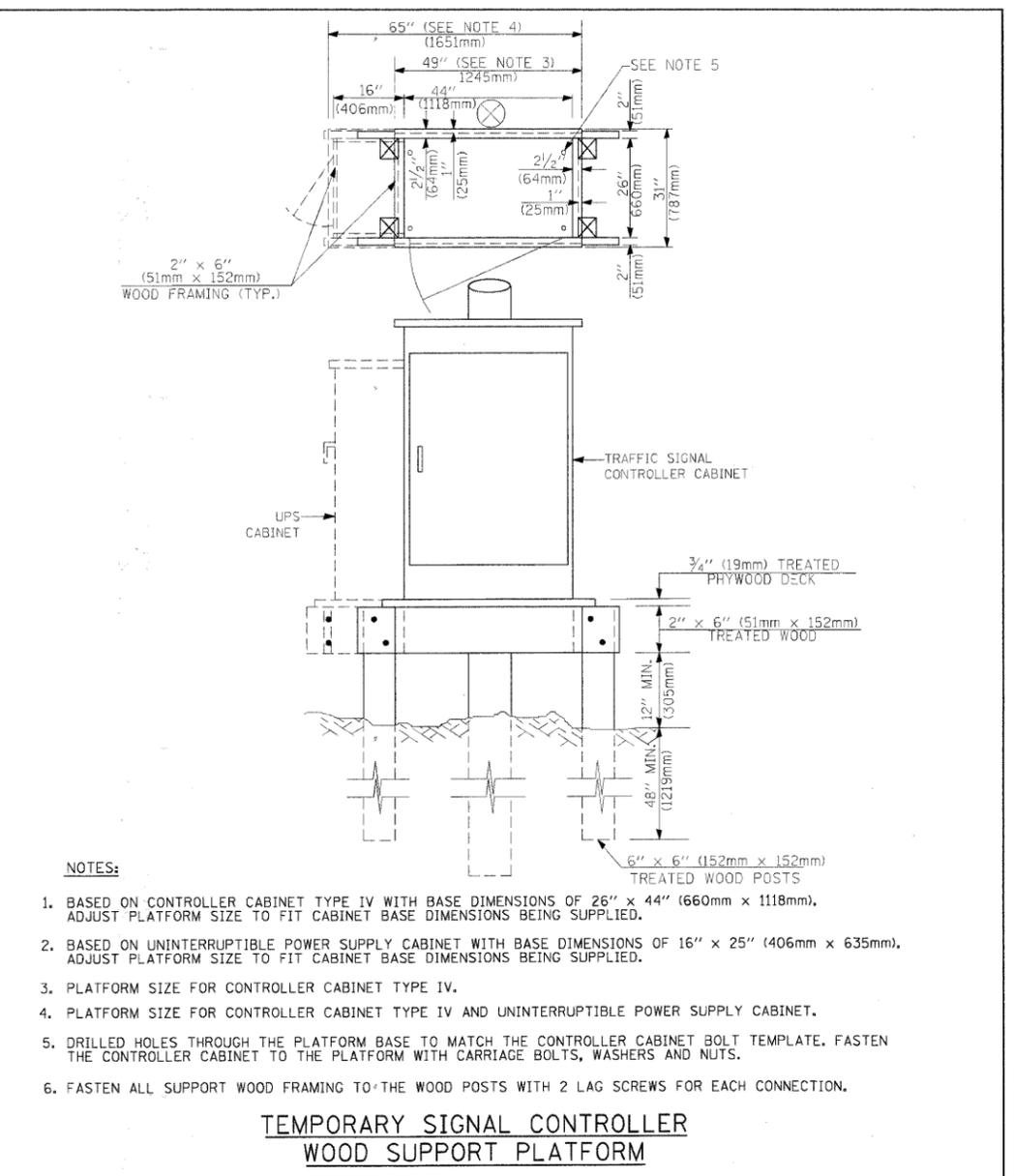
HANDHOLE TO INTERCEPT EXISTING CONDUIT



**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



**TYPE C
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



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

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

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

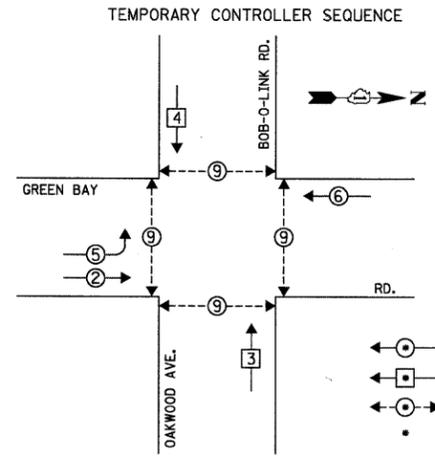
DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and up to 65' (19.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 65' (19.8 m) and less than 75' (22.9 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 75' (22.9 m) and up to 85' (25.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

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

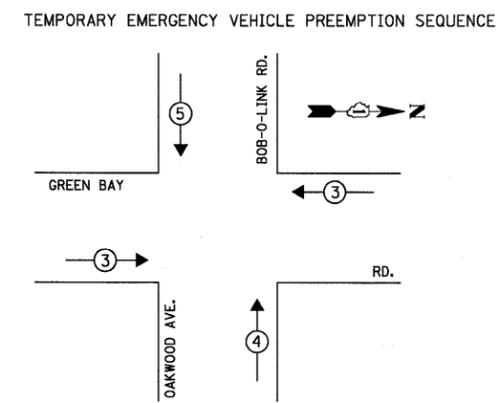
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____ CHECKED: _____
 PLAN: _____ NOTE BOOK NO.: _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500
 DATE: _____ BY: _____
 PROFILE: _____ SURVEYED: _____ PLOTTED: _____ CHECKED: _____
 NOTE BOOK NO.: _____
 STRUCTURE NOTATION: _____

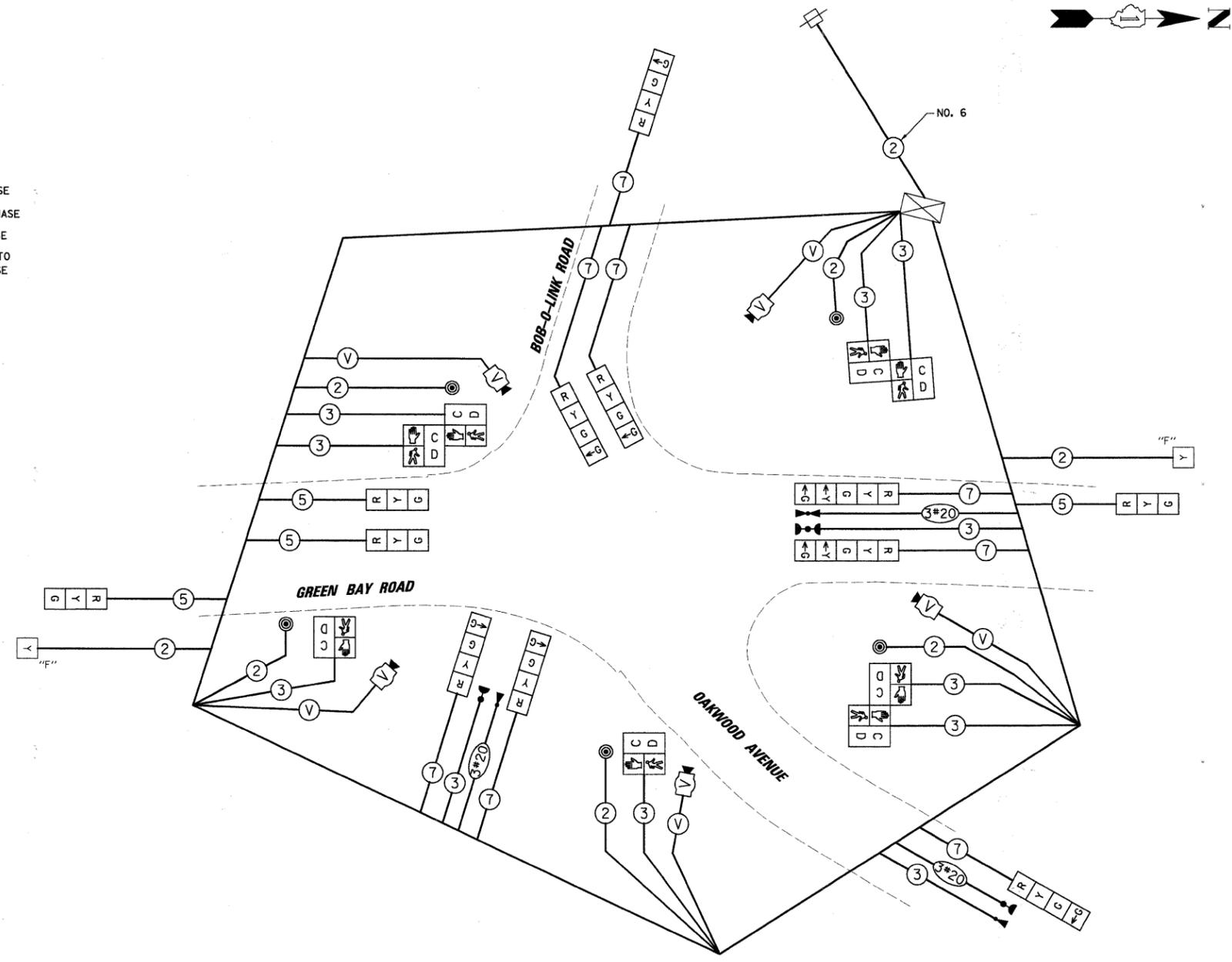


LEGEND
 ◀ ⊙ ▶ DUAL ENTRY PHASE
 ◀ □ ▶ SINGLE ENTRY PHASE
 ◀ ⊙ ▶ PEDESTRIAN PHASE
 • NUMBER REFERS TO ASSOCIATED PHASE

NOTE:
 PHASE 9 IS EXCLUSIVE PEDESTRIAN PHASE
TEMPORARY PHASE DESIGNATION DIAGRAM



TEMPORARY EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	←	↑	↓



CABLE PLAN

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST FOR 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.

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE		% OPERATION	
SIGNAL (RED)	12	XINCAND.	10	0.50	60.0
(YELLOW)	12		19	0.10	22.8
(GREEN)	12		11	0.40	52.8
ARROW	10		9	0.10	9.0
PED. SIGNAL	8		9	1.00	72.0
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	-		250	0.50	-
L.E.D. ST. NAME SIGN	-		64	0.50	-
VIDEO SYSTEM	1		150	1.00	150.0
BATTERY BACKUP	-		25	1.00	-

ENERGY COSTS TO: TOTAL = 466.6
CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED

FILE NAME = N:\L.CDOT\090407\Traffic\1CB_06RD-BobOLink.dgn	USER NAME = FBARISO	DESIGNED - ABR	REVISED -
		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = NOT TO SCALE	CHECKED - MJT	REVISED -
	PLOT DATE = 5/3/2010	DATE - APRIL 30, 2010	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

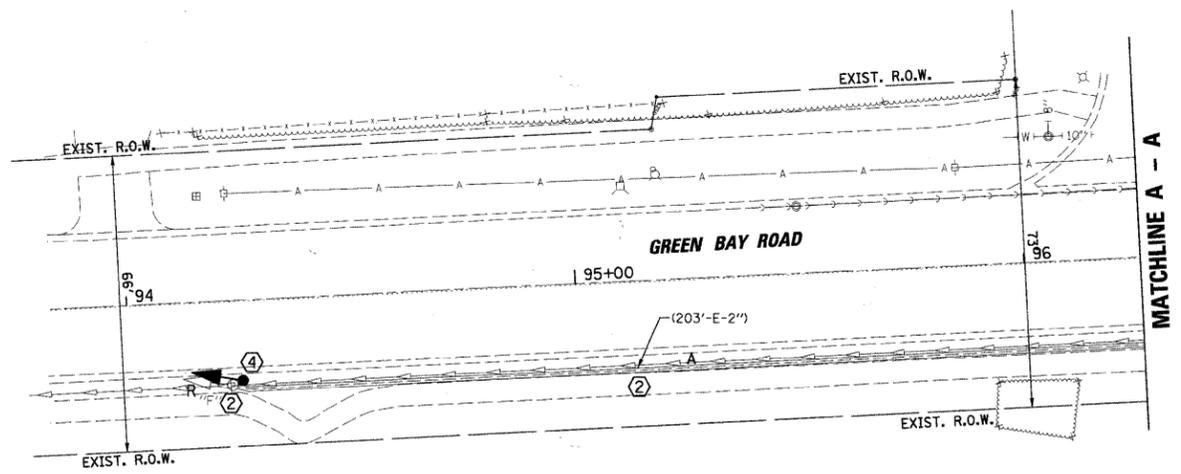
TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE GREEN BAY ROAD AND BOB-O-LINK RD./OAKWOOD AVE.
 SCALE: NOT TO SCALE SHEET NO. 1 OF 1 SHEETS STA. -- TO STA. --

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	12
CONTRACT NO. 63485			ILLINOIS FED. AID PROJECT	

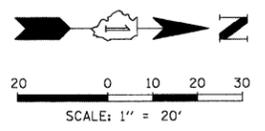
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 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ BY: _____
 NOTE BOOK NO. _____
 STRUCTURE NOTATION'S CIRCD NO. _____

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ BY: _____
 NOTE BOOK NO. _____
 STRUCTURE NOTATION'S CIRCD NO. _____

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 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
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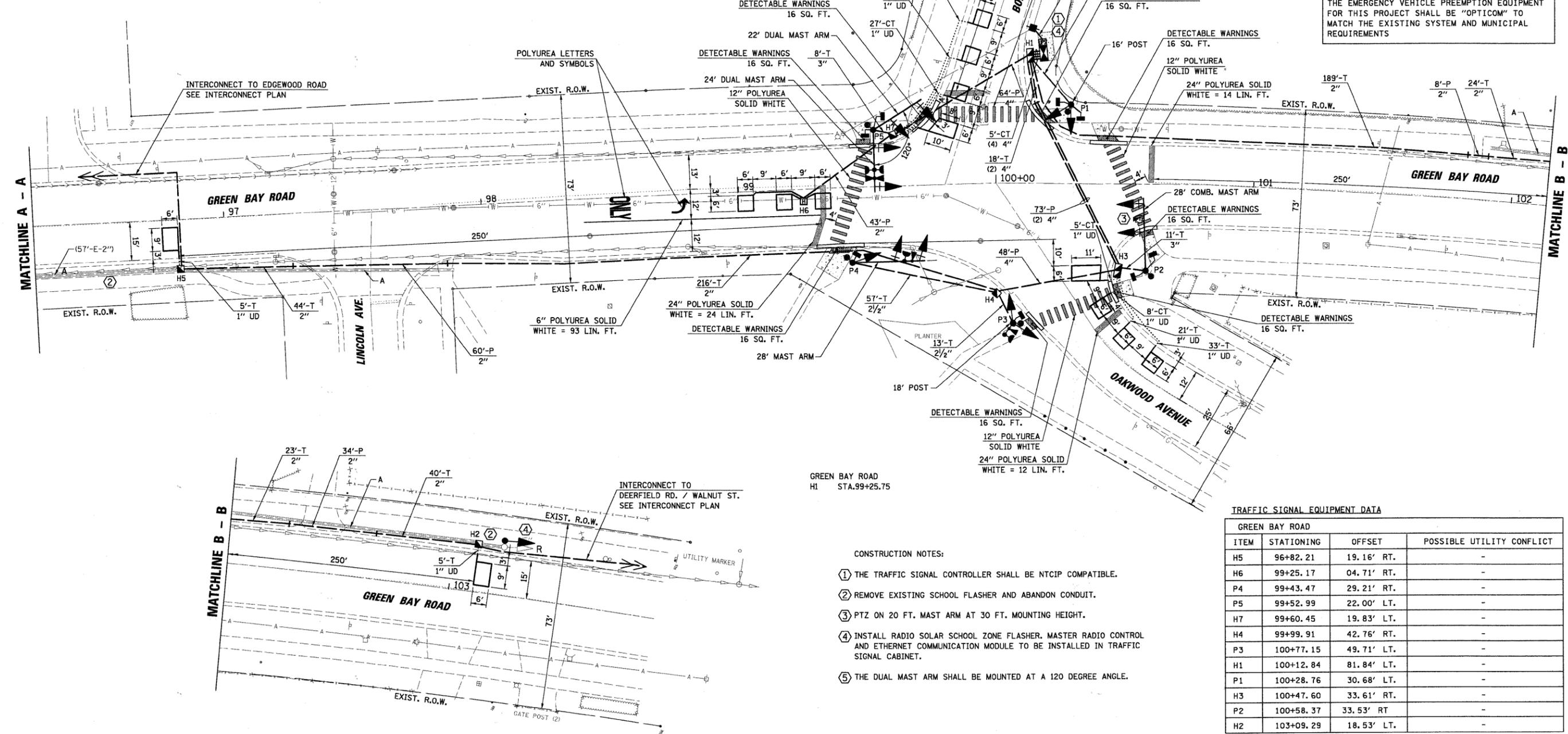


RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST FOR THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, 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.



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

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE "OPTICOM" TO MATCH THE EXISTING SYSTEM AND MUNICIPAL REQUIREMENTS



GREEN BAY ROAD
 H1 STA. 99+25.75

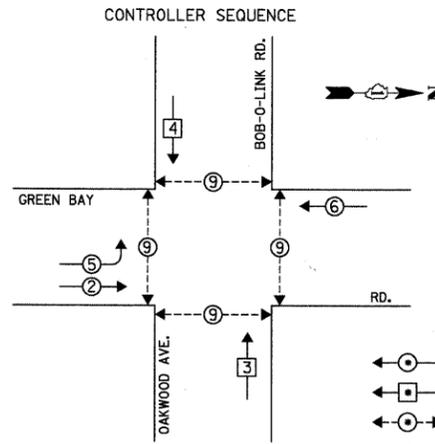
- CONSTRUCTION NOTES:
- THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
 - REMOVE EXISTING SCHOOL FLASHER AND ABANDON CONDUIT.
 - PTZ ON 20 FT. MAST ARM AT 30 FT. MOUNTING HEIGHT.
 - INSTALL RADIO SOLAR SCHOOL ZONE FLASHER, MASTER RADIO CONTROL AND ETHERNET COMMUNICATION MODULE TO BE INSTALLED IN TRAFFIC SIGNAL CABINET.
 - THE DUAL MAST ARM SHALL BE MOUNTED AT A 120 DEGREE ANGLE.

TRAFFIC SIGNAL EQUIPMENT DATA

GREEN BAY ROAD			
ITEM	STATIONING	OFFSET	POSSIBLE UTILITY CONFLICT
H5	96+82.21	19.16' RT.	-
H6	99+25.17	04.71' RT.	-
P4	99+43.47	29.21' RT.	-
P5	99+52.99	22.00' LT.	-
H7	99+60.45	19.83' LT.	-
H4	99+99.91	42.76' RT.	-
P3	100+77.15	49.71' LT.	-
H1	100+12.84	81.84' LT.	-
P1	100+28.76	30.68' LT.	-
H3	100+47.60	33.61' RT.	-
P2	100+58.37	33.53' RT.	-
H2	103+09.29	18.53' LT.	-

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ DATE: _____
 STRUCTURE NOTATIONS: _____

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

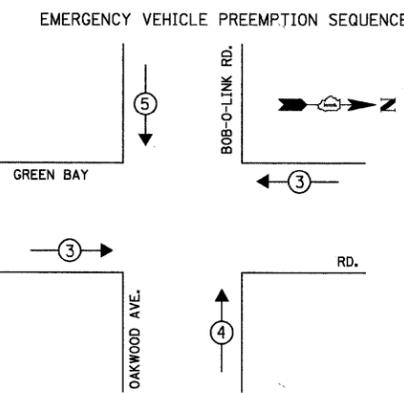


LEGEND

- → DUAL ENTRY PHASE
- → SINGLE ENTRY PHASE
- → PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE

NOTE:
 PHASE 9 IS EXCLUSIVE PEDESTRIAN PHASE

PHASE DESIGNATION DIAGRAM



EMERGENCY VEHICLE PREEMPTORS			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	←	↑	↓

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	13		10	0.50	65.0
(YELLOW)	13		19	0.10	24.7
(GREEN)	13		11	0.40	57.2
ARROW	9		9	0.10	8.1
PED. SIGNAL	8		9	1.00	72.0
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	-		250	0.50	-
L.E.D. ST. NAME SIGN	4		64	0.50	128.0
VIDEO SYSTEM	1		150	1.00	150.0
BATTERY BACKUP	1		25	1.00	25.0

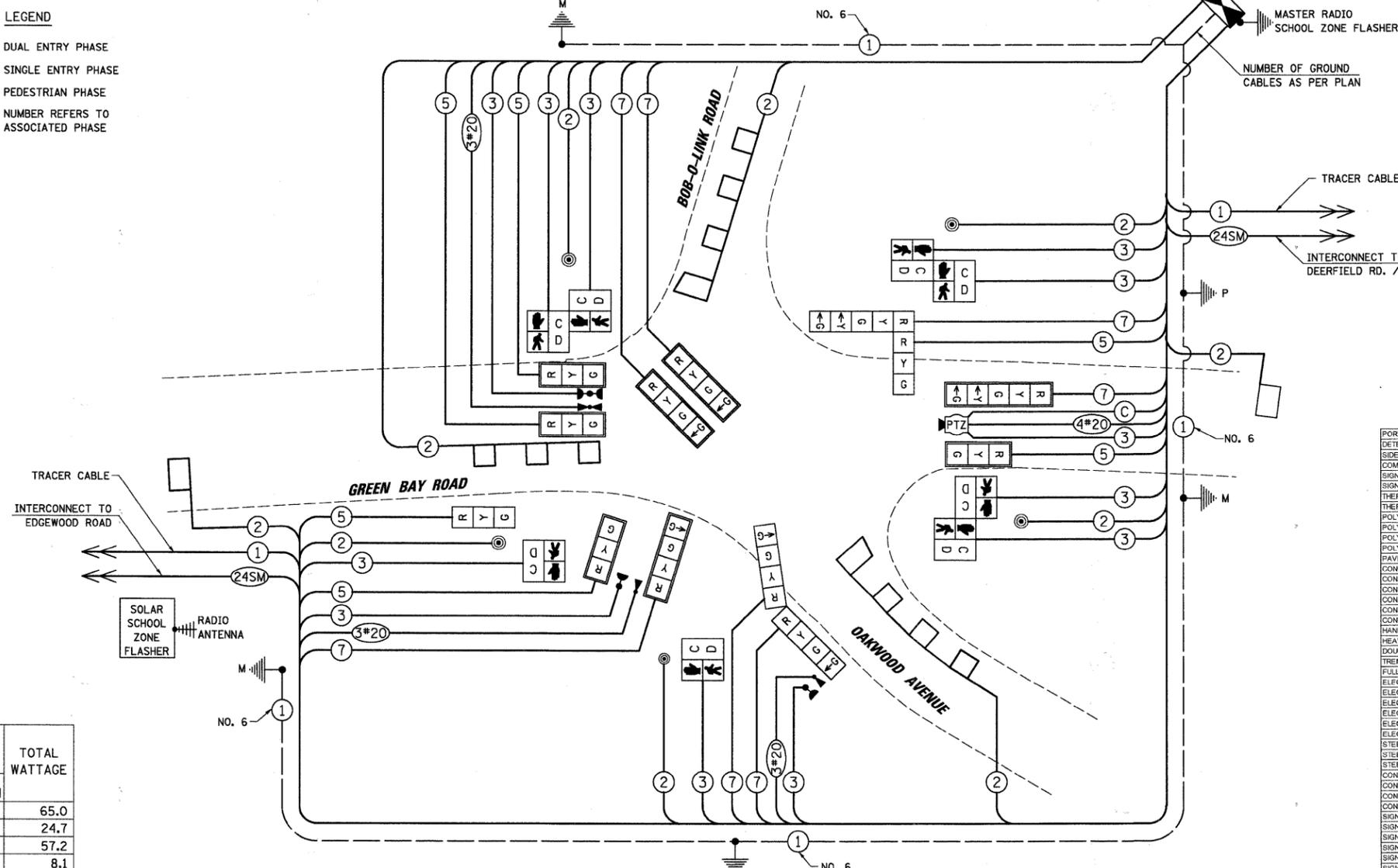
ENERGY COSTS TO: TOTAL = 630.0

CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST FOR 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.

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

NOTE:
 THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE "OPTICOM" TO MATCH THE EXISTING SYSTEM.



CABLE PLAN

- CONSTRUCTION NOTES:**
- THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
 - REMOVE EXISTING SCHOOL FLASHER AND ABANDON CONDUIT.
 - PTZ ON 20 FT. MAST ARM AT 30 FT. MOUNTING HEIGHT.
 - INSTALL RADIO SOLAR SCHOOL ZONE FLASHER, MASTER RADIO CONTROL AND ETHERNET COMMUNICATION MODULE TO BE INSTALLED IN TRAFFIC SIGNAL CABINET.
 - THE DUAL MAST ARM SHALL BE MOUNTED AT A 120 DEGREE ANGLE.

SCHEDULE OF QUANTITIES		UNIT	TOTAL
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH		SQ FT	441
DETECTABLE WARNINGS		SQ FT	128
SIDEWALK REMOVAL		SQ FT	441
COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT		FOOT	113
SIGN PANEL - TYPE 1		SQ FT	9
SIGN PANEL - TYPE 2		SQ FT	26.25
THERMOPLASTIC PAVEMENT MARKING - LINE 1/2"		FOOT	84
THERMOPLASTIC PAVEMENT MARKING - LINE 2 1/2"		FOOT	15
POLYUREA PAVEMENT MARKING TYPE 1 - LETTERS AND SYMBOLS		SQ FT	36.4
POLYUREA PAVEMENT MARKING TYPE 1 - LINE 1/2"		FOOT	83
POLYUREA PAVEMENT MARKING TYPE 1 - LINE 1/2"		FOOT	306
POLYUREA PAVEMENT MARKING TYPE 1 - LINE 2 1/2"		FOOT	65
PAVEMENT MARKING REMOVAL		SQ FT	487
CONDUIT IN TRENCH 2" DIA. GALVANIZED STEEL		FOOT	548
CONDUIT IN TRENCH 2 1/2" DIA. GALVANIZED STEEL		FOOT	95
CONDUIT IN TRENCH 3" DIA. GALVANIZED STEEL		FOOT	19
CONDUIT IN TRENCH 4" DIA. GALVANIZED STEEL		FOOT	61
CONDUIT PUSHED 2" DIA. GALVANIZED STEEL		FOOT	102
CONDUIT PUSHED 4" DIA. GALVANIZED STEEL		FOOT	160
HANDHOLE		EACH	4
HEAVY-DUTY HANDHOLE		EACH	1
DOUBLE HANDHOLE		EACH	2
TRENCH AND BACKFILL FOR ELECTRICAL WORK		FOOT	825
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL		EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2C		FOOT	773
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C		FOOT	2010
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5C		FOOT	779
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 7C		FOOT	1235
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR		FOOT	1195
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C		FOOT	25
5" STEEL MAST ARM ASSEMBLY AND POLE, 28 FT. (SPECIAL)		EACH	1
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 22 FT. AND 24 FT. (SPECIAL)		EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 28 FT. (SPECIAL)		EACH	1
CONCRETE FOUNDATION, TYPE A		FOOT	8
CONCRETE FOUNDATION, TYPE C		FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER		FOOT	20
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER		FOOT	15
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED		EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED		EACH	1
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST-ARM MOUNTED		EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED		EACH	1
SIGNAL HEAD, LED, 2-FACE, 4-SECTION, BRACKET MOUNTED		EACH	1
SIGNAL HEAD, LED, 2-FACE, 1-3 SECTION, 1-3 SECTION BRACKET MOUNTED		EACH	1
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	3
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM		EACH	8
INDUCTIVE LOOP DETECTOR		EACH	5
DETECTOR LOOP, TYPE 1		FOOT	328
LIGHT DETECTOR		EACH	3
LIGHT DETECTOR AMPLIFIER		EACH	1
PEDESTRIAN PUSH-BUTTON		EACH	0
TEMPORARY TRAFFIC SIGNAL INSTALLATION		EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT		EACH	1
REMOVE EXISTING HANDHOLE		EACH	8
REMOVE EXISTING CONCRETE FOUNDATION		EACH	8
RADIO ACTIVATED SOLAR ADVANCE FLASHING BEACON SYSTEM (COMPLETE)		EACH	1
SERVICE INSTALLATION - POLE MOUNTED		EACH	1
UNINTERRUPTIBLE POWER SUPPLY		EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C		FOOT	421
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 20 3C, TWISTED SHIELDED		FOOT	652
ELECTRIC CABLE IN CONDUIT, COAXIAL		FOOT	208
PEDESTRIAN PUSH-BUTTON, SPECIAL		EACH	5
TRAFFIC SIGNAL POST, 18 FOOT, (SPECIAL)		EACH	1
TRAFFIC SIGNAL POST, 18 FOOT, (SPECIAL)		EACH	1
REMOTE-CONTROLLED VIDEO SYSTEM		EACH	1
LAYER II (DATALINK) SWITCH		EACH	1
VIDEO ENCODER		EACH	1
ELECTRIC CABLE IN CONDUIT, 4/C # 20, VIDEO		FOOT	208

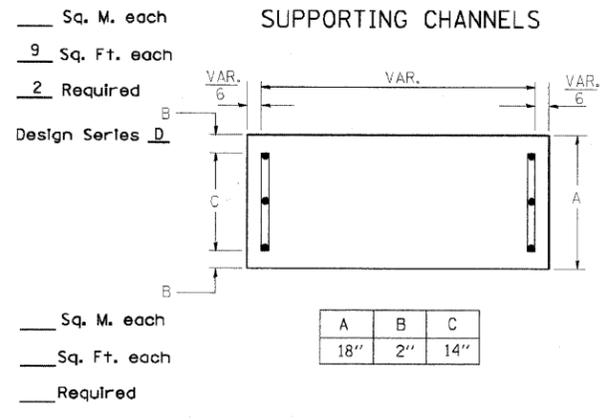
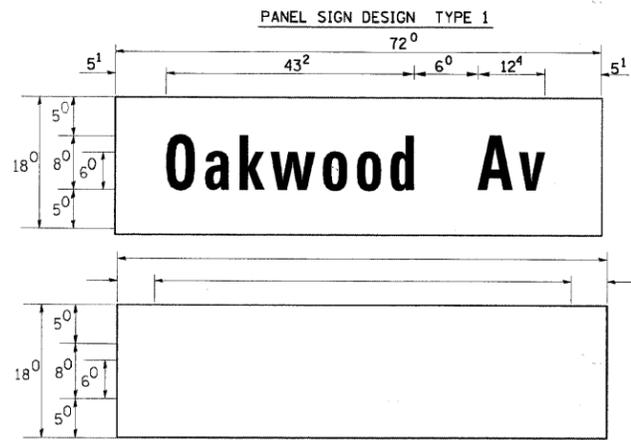
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		CHECKED - MJT	REVISED -
		DATE - APRIL 30, 2010	REVISED -

DESIGNED - ABR	REVISED -
DRAWN - FPB / FCP	REVISED -
CHECKED - MJT	REVISED -
DATE - APRIL 30, 2010	REVISED -

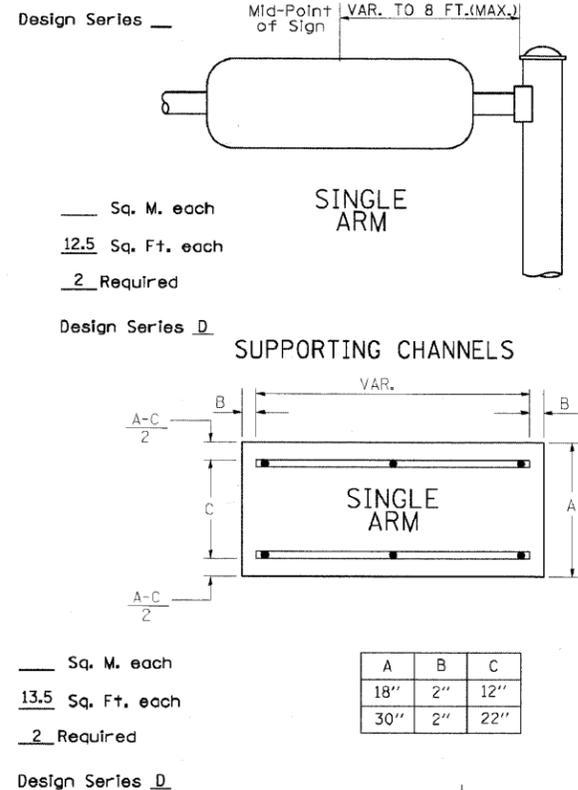
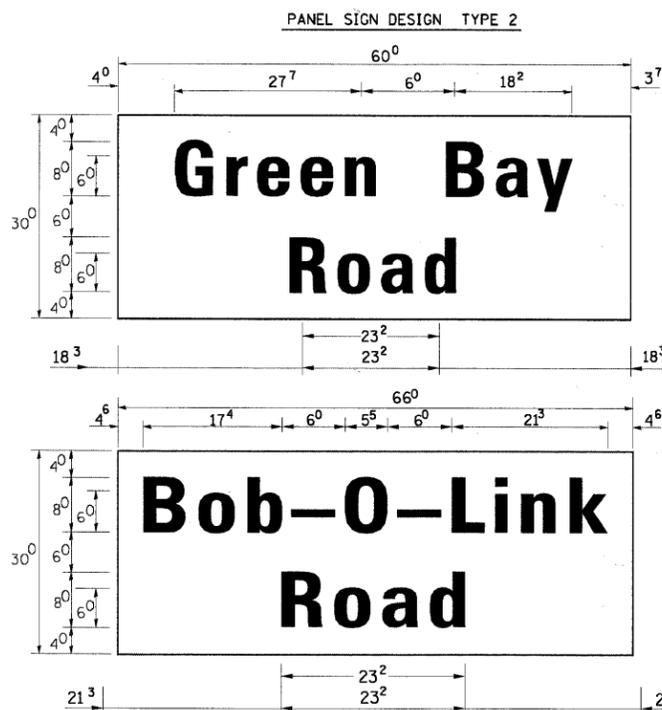
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
GREEN BAY ROAD AND BOB-O-LINK RD./OAKWOOD AVE.
 SCALE: NOT TO SCALE SHEET NO. 1 OF 1 SHEETS STA. -- TO STA. --

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	14
CONTRACT NO. 63485			ILLINOIS FED. AID PROJECT	



NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS



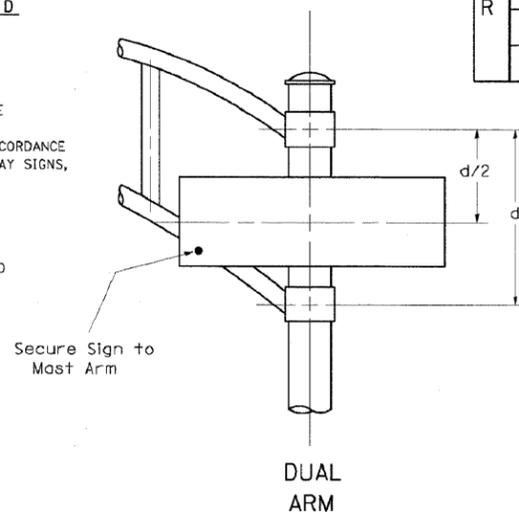
GENERAL NOTES

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

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

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

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



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

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

SERIES	SECOND LETTER															
	acde		bhikl		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
A W X	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ²	1 ²	1 ⁴
B	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁶	1 ⁷
C E G	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵
D O Q R	1 ⁴	1 ⁵	2 ⁰	2 ¹	1 ⁴	1 ⁵	0 ⁶	1 ⁰	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵
F	0 ⁵	0 ⁶	1 ⁴	1 ⁵	0 ⁶	1 ⁰	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²
H I M N	2 ⁰	2 ¹	2 ²	2 ⁴	2 ⁰	2 ¹	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹	2 ⁰	2 ¹
J U	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹
K L	1 ¹	1 ²	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
P	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁴	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴
S	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴						
T	1 ¹	1 ²	1 ⁶	1 ⁷	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
V	0 ⁶	1 ⁰	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁶	1 ⁰	1 ²	1 ⁴						
Y	0 ⁵	0 ⁶	1 ⁴	1 ⁵	0 ⁶	1 ⁰	0 ⁵	0 ⁶	0 ⁵	0 ⁷	0 ⁵	0 ⁶	0 ⁶	1 ⁰	1 ¹	1 ²
Z	1 ⁶	1 ⁷	2 ²	2 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁶	1 ⁷	2 ⁰	2 ¹

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

SERIES	SECOND LETTER															
	acde		bhikl		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
ad h g i j	1 ⁶	1 ⁷	2 ²	2 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷
l m n q u	1 ⁶	1 ⁷	2 ²	2 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ⁶	1 ⁷
b f k o p s	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴
c e	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ²	1 ⁴						
r	0 ⁶	1 ⁰	1 ²	1 ⁴	0 ⁶	1 ⁰	0 ³	0 ³	0 ⁵	0 ⁶	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰
t z	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ²	1 ⁴	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴	1 ²	1 ⁴
v y	1 ¹	1 ²	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁵	0 ⁶	0 ⁶	1 ⁰	0 ⁶	1 ⁰	1 ¹	1 ²	1 ¹	1 ²
w	1 ¹	1 ²	1 ⁴	1 ⁵	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴
x	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ¹	1 ²	0 ⁵	0 ⁶	1 ¹	1 ²	1 ¹	1 ²	1 ¹	1 ²	1 ²	1 ⁴

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

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						
0 9	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷		
1	2 ⁰	2 ¹	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁶	1 ⁷	1 ⁴	1 ⁵	2 ⁰	2 ¹	2 ⁰	2 ¹	1 ⁴	1 ⁵	2 ⁰	2 ¹		
2 3 4	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁶	1 ⁷	1 ⁴	1 ⁵
5	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵
6	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ²	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ⁴	1 ⁵
7	1 ²	1 ⁴	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ²	1 ⁵	0 ⁵	0 ⁶	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ¹	1 ²	1 ⁴	1 ⁵	1 ²	1 ⁴
8	1 ⁶	1 ⁷	1 ⁶	1 ⁷	1 ⁴	1 ⁵	1 ²	1 ⁵	1 ²	1 ⁴	1 ⁴	1 ⁵	1 ⁶	1 ⁷	1 ²	1 ⁴	1 ⁶	1 ⁷	1 ⁴	1 ⁵

EXAMPLE, 2³ DENOTES 3/8"

UPPER AND LOWER CASE
LETTER WIDTHS

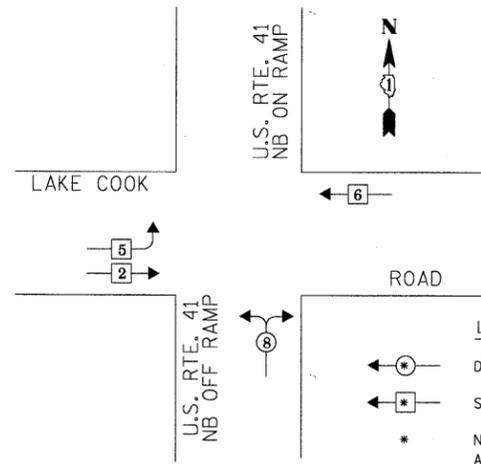
LETTERS	6 INCH UPPER CASE LETTERS				8 INCH UPPER CASE LETTERS				LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES		SERIES		SERIES			C	D
	C	D	C	D	C	D	C	D			
A	3 ⁶	5 ⁰	5 ⁰	6 ⁵	a	3 ⁵	4 ²				
B	3 ²	4 ⁰	4 ³	5 ³	b	3 ⁵	4 ²				
C	3 ²	4 ⁰	4 ³	5 ³	c	3 ⁵	4 ¹				
D	3 ²	4 ⁰	4 ³	5 ³	d	3 ⁵	4 ²				
E	3 ⁰	3 ⁵	4 ⁰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

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

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ BY: _____
 DATE: _____ FILE NO.: _____
 PROJECT: _____
 FILE NAME: _____

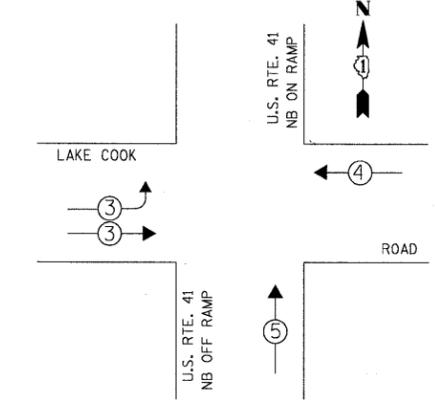
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



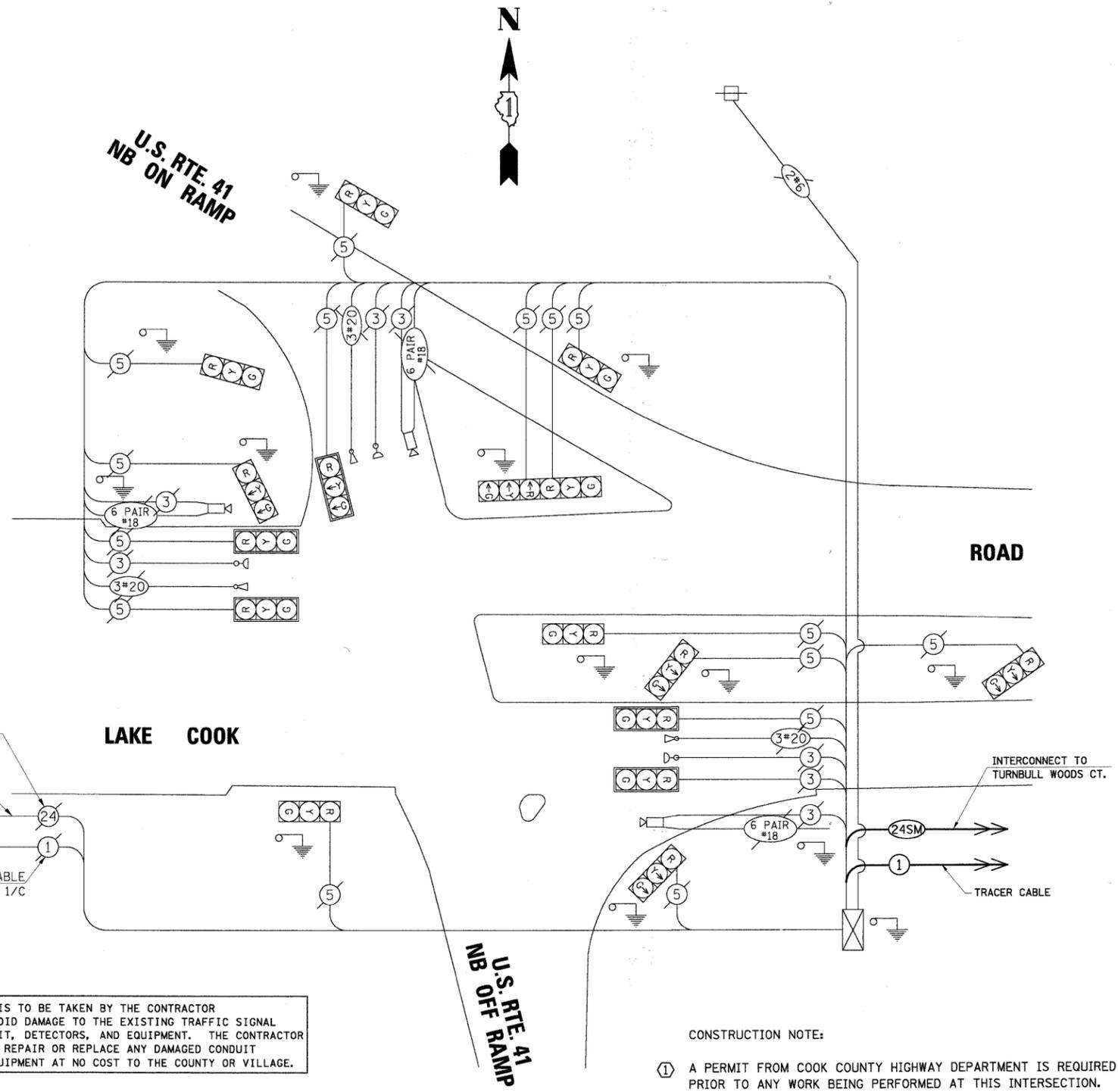
EXISTING EMERGENCY VEHICLE PREEMPTOR			
EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	↔	←	↑

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	16		10	0.50	80.0
(YELLOW)	16		19	0.25	76.0
(GREEN)	16		11	0.25	44.0
ARROW	-		9	0.10	-
PED. SIGNAL	-		9	1.00	-
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	-		250	0.50	-
L.E.D. ST. NAME SIGN	-		64	0.50	-
VIDEO SYSTEM	1		150	1.00	150.0
BATTERY BACKUP	-		25	1.00	-
FLASHER	-				-
ENERGY COSTS TO:					TOTAL = 450.0

COOK COUNTY HIGHWAY DEPARTMENT
 69 W WASHINGTON STREET RM. 2141
 CHICAGO, ILLINOIS 60602
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED

No. 62.5/125 24F FIBER OPTIC CABLE
 EXISTING INTERCONNECT TO U.S. RTE. 41 SB RAMPS
 TRACER CABLE NO. 14 1/C

CARE IS TO BE TAKEN BY THE CONTRACTOR TO AVOID DAMAGE TO THE EXISTING TRAFFIC SIGNAL CONDUIT, DETECTORS, AND EQUIPMENT. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGED CONDUIT OR EQUIPMENT AT NO COST TO THE COUNTY OR VILLAGE.



CABLE PLAN

CONSTRUCTION NOTE:
 ① A PERMIT FROM COOK COUNTY HIGHWAY DEPARTMENT IS REQUIRED PRIOR TO ANY WORK BEING PERFORMED AT THIS INTERSECTION.

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
DRILL EXISTING HANDHOLE	EACH	1
SPLICE FIBER IN CABINET	EACH	12

FILE NAME = N:\LCCDOT\092407\Trns\Fic\CAB_LCRD-US41.dgn	USER NAME = FBARISD	DESIGNED - ABR	REVISED -
PLOT SCALE = NOT TO SCALE	CHECKED - MJT	DRAWN - FPB / FCP	REVISED -
PLOT DATE = 5/3/2010	DATE - APRIL 30, 2010		REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE LAKE COOK ROAD AND U.S. ROUTE 41 NB ON RAMP / NB OFF RAMP
 SCALE: NOT TO SCALE SHEET NO. -- OF -- SHEETS STA. -- TO STA. --

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	17
CONTRACT NO. 63485			ILLINOIS FED. AID PROJECT	

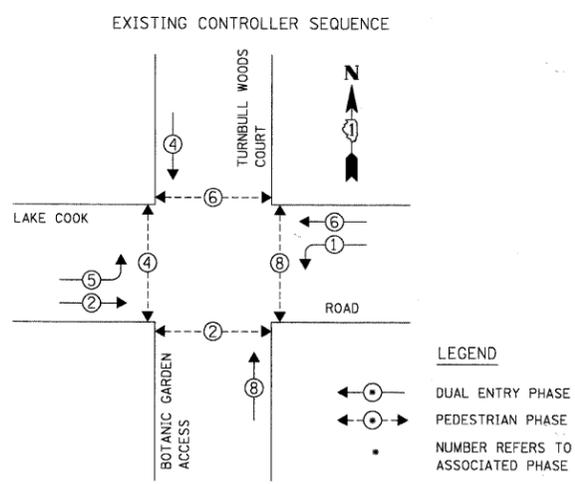
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 NO. _____ CAD FILE NAME: _____

PLAN: _____
 NO. _____

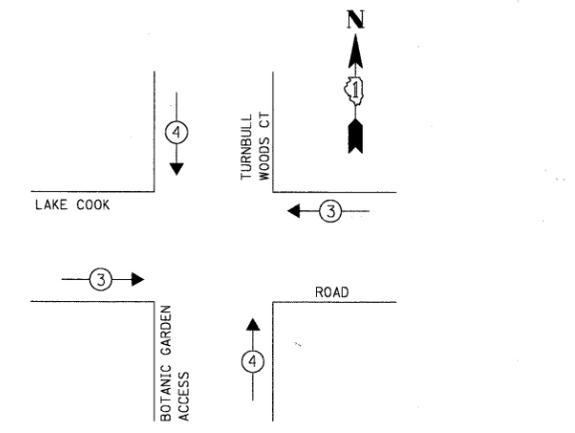
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PROFILE: _____
 NO. _____

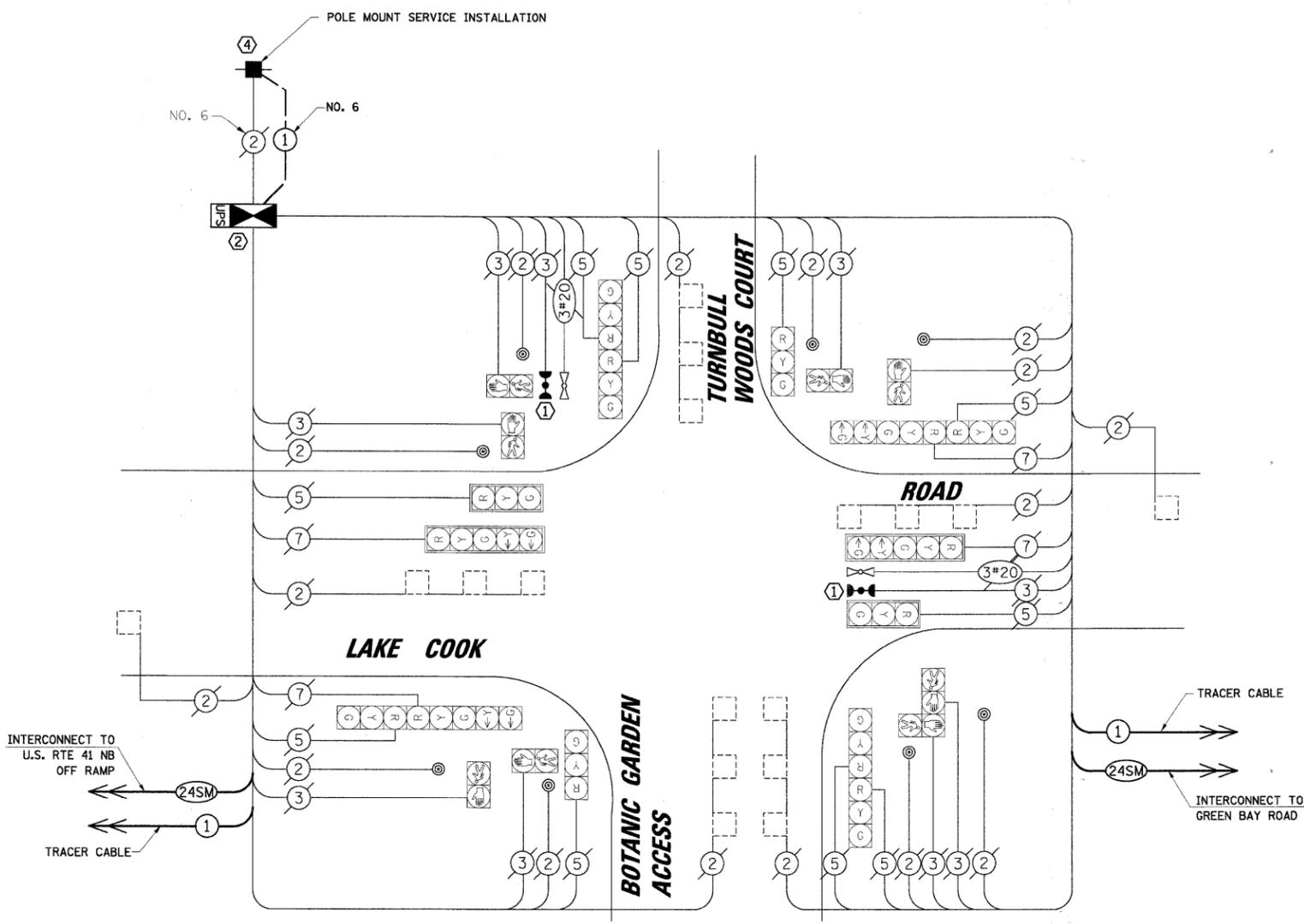
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500



LEGEND
 ← ● → DUAL ENTRY PHASE
 ← ● → PEDESTRIAN PHASE
 ● NUMBER REFERS TO ASSOCIATED PHASE



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



CABLE PLAN

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)
- 1 EACH SERVICE INSTALLATION

CONSTRUCTION NOTES:

- ① ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ② RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
- ③ THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
- ④ INSTALL NEW POLE MOUNT SERVICE INSTALLATION. INSTALL SERVICE GROUND CABLE IN EXISTING CONDUIT.
- ⑤ A MANUAL PHASE ADVANCE SWITCH SHALL BE PROVIDED. THIS SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: FULL ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL.

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
DRILL EXISTING HANDHOLE	EACH	2
INDUCTIVE LOOP DETECTOR	EACH	7
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	40

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

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED X % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	10	0.50	70.0
(YELLOW)	14	19	0.10	26.6
(GREEN)	14	11	0.40	61.6
ARROW	8	9	0.10	7.20
PED. SIGNAL	8	9	1.00	72.0
CONTROLLER	1	100	1.00	100.0
LUMINAIRE	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	64	0.50	-
VIDEO SYSTEM	-	150	1.00	-
BATTERY BACKUP	1	25	1.00	25.0

ENERGY COSTS TO: TOTAL = 362.40

CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED

FILE NAME =	USER NAME = FBARISO	DESIGNED - ABR	REVISED -
N:\L\CDOT\890487\Traffic\CAB.L\CRD-Turnbull.dgn		DRAWN - FPB / FCP	REVISED -
		CHECKED - MJT	REVISED -
		DATE - APRIL 30, 2010	REVISED -

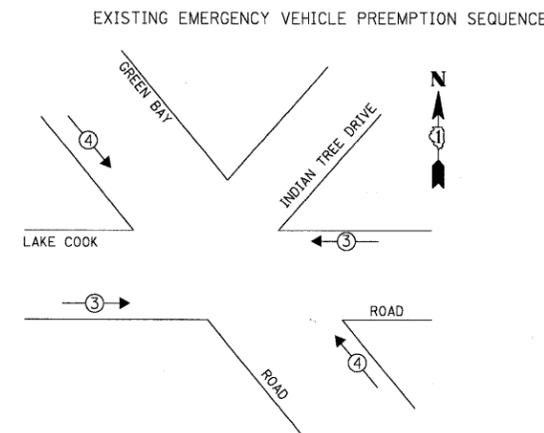
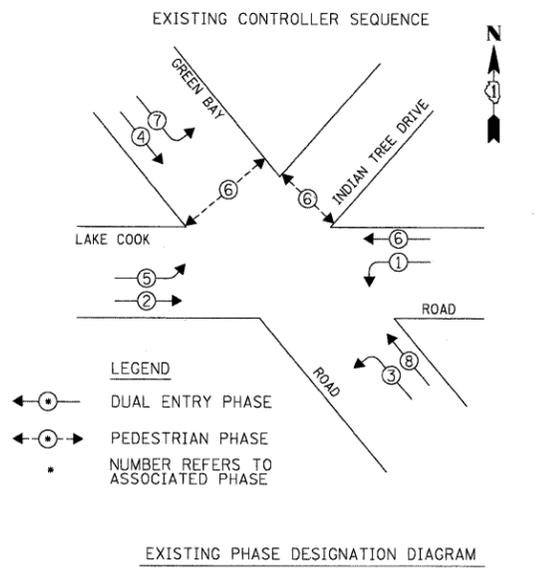
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 LAKE COOK ROAD AND TURNBULL WOODS COURT**

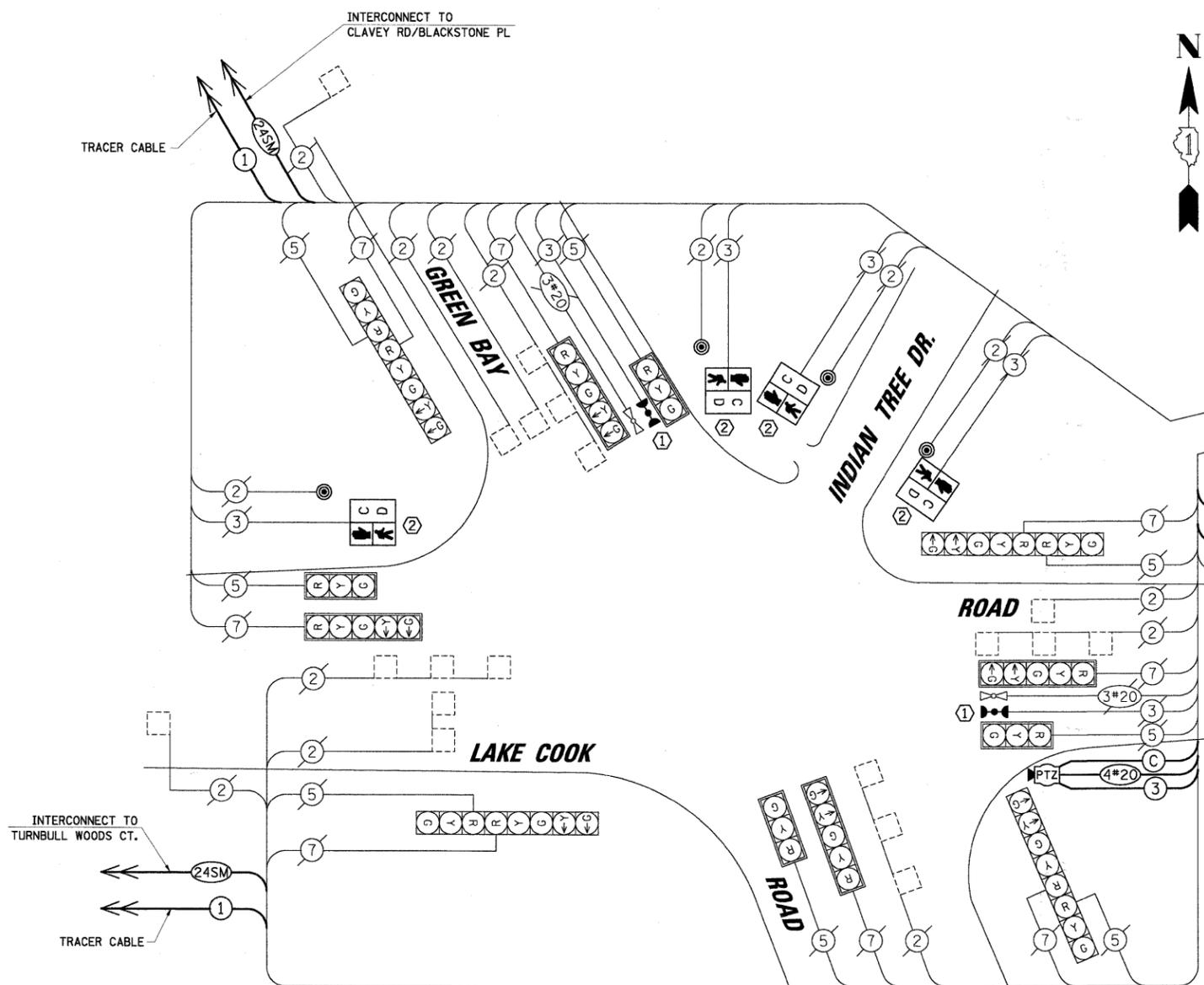
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	18
CONTRACT NO. 63485			ILLINOIS FED. AID PROJECT	

SCALE: NOT TO SCALE SHEET NO. -- OF -- SHEETS STA. -- TO STA. --

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 PLAN: _____ NOTE BOOK: _____
 NO. _____ NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 3575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500
 DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 PLAN: _____ NOTE BOOK: _____
 NO. _____ NO. _____



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



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

CONSTRUCTION NOTES:

- ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH L.E.D. INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 1-FACE AND PUSHBUTTONS. REPLACE WITH NEW PEDESTRIAN HEAD, L.E.D., 1-FACE WITH COUNTDOWN TIMER AND NEW PEDESTRIAN PUSHBUTTON, SPECIAL. RE-USE ALL EXISTING CABLES.
- RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
- THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
- POWDER COAT CAMERA MOUNTING ASSEMBLY TO MATCH EXISTING MAST ARM. POWDER COATING SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: CAMERA MOUNTING ASSEMBLY, SPECIAL.
- INSTALL NEW POLE MOUNT SERVICE INSTALLATION. INSTALL SERVICE GROUND CABLE IN EXISTING CONDUIT.
- INSTALL NEW PTZ CAMERA TO NEW CAMERA MOUNTING ASSEMBLY, SPECIAL ON EXISTING SIGNAL MAST ARM.

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	16		10	0.50	80.0
(YELLOW)	16		19	0.10	30.4
(GREEN)	16		11	0.40	70.4
ARROW	16		9	0.10	14.4
PED. SIGNAL	4		9	1.00	36.0
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	-		250	0.50	-
L.E.D. ST. NAME SIGN	-		64	0.50	-
VIDEO SYSTEM	1		150	1.00	150.0
BATTERY BACKUP	1		25	1.00	25.0

ENERGY COSTS TO: TOTAL = 506.2

CITY OF HIGHLAND PARK

1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593

ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED

SCHEDULE OF QUANTITIES

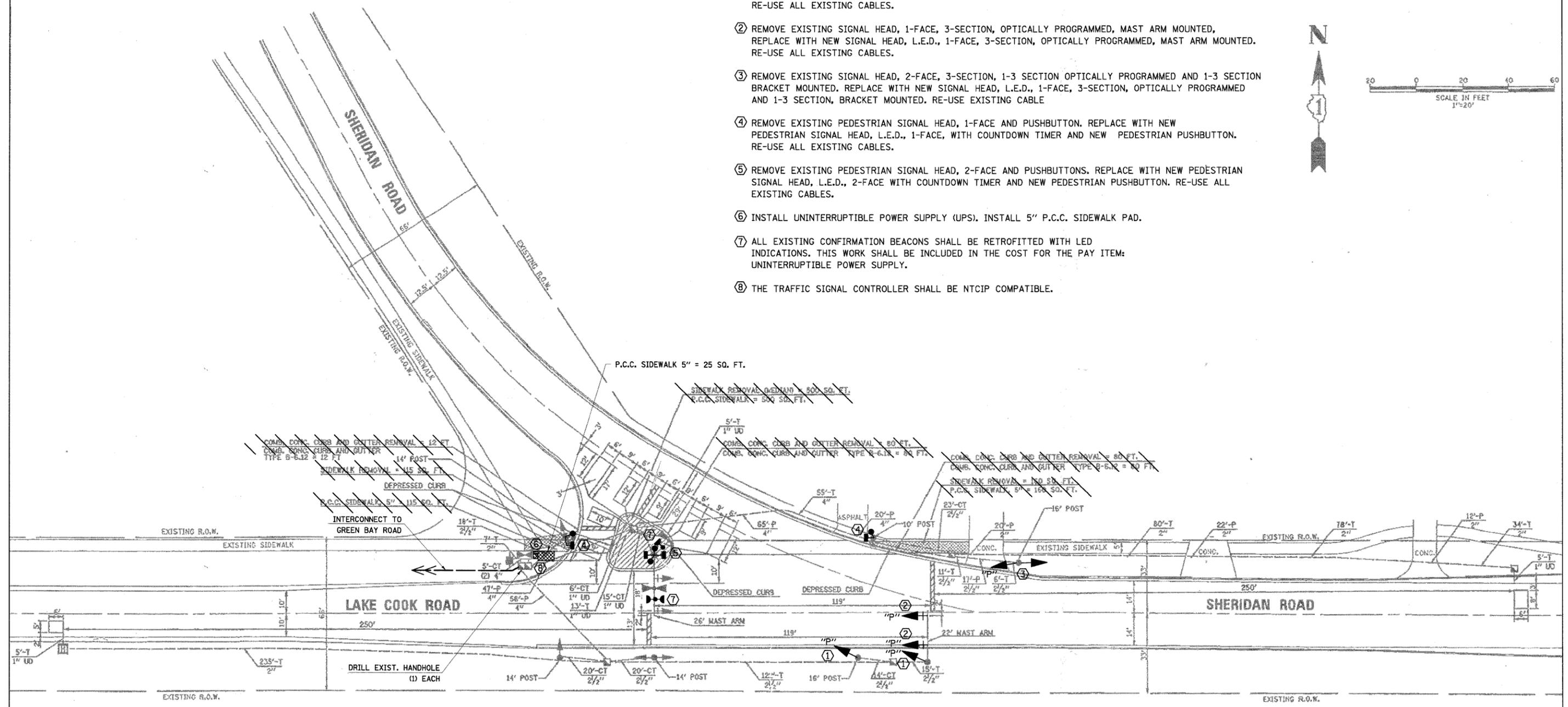
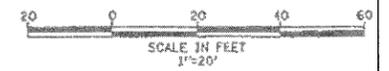
ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
CAMERA MOUNTING ASSEMBLY, SPECIAL	EACH	1
DRILL EXISTING HANDHOLE	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN PUSH-BUTTON, SPECIAL	EACH	4
INDUCTIVE LOOP DETECTOR	EACH	13
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	45
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	198
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	198
ELECTRIC CABLE IN CONDUIT, 4/C # 20, VIDEO	FOOT	198

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ BY: _____
 NOTE BOOK NO.: _____ FILE NAME: _____
 PLAN NO.: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ BY: _____
 NOTE BOOK NO.: _____ FILE NAME: _____
 PROFILE NO.: _____

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

CONSTRUCTION NOTES:

- ① REMOVE EXISTING SIGNAL HEAD, 1-FACE, 3-SECTION, OPTICALLY PROGRAMMED, BRACKET MOUNTED. REPLACE WITH NEW SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, OPTICALLY PROGRAMMED, BRACKET MOUNTED. RE-USE ALL EXISTING CABLES.
- ② REMOVE EXISTING SIGNAL HEAD, 1-FACE, 3-SECTION, OPTICALLY PROGRAMMED, MAST ARM MOUNTED. REPLACE WITH NEW SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, OPTICALLY PROGRAMMED, MAST ARM MOUNTED. RE-USE ALL EXISTING CABLES.
- ③ REMOVE EXISTING SIGNAL HEAD, 2-FACE, 3-SECTION, 1-3 SECTION OPTICALLY PROGRAMMED AND 1-3 SECTION BRACKET MOUNTED. REPLACE WITH NEW SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, OPTICALLY PROGRAMMED AND 1-3 SECTION, BRACKET MOUNTED. RE-USE EXISTING CABLE
- 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, 2-FACE AND PUSHBUTTONS. REPLACE WITH NEW PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE WITH COUNTDOWN TIMER AND NEW PEDESTRIAN PUSHBUTTON. RE-USE ALL EXISTING CABLES.
- ⑥ INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS). INSTALL 5" P.C.C. SIDEWALK PAD.
- ⑦ ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ⑧ THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.



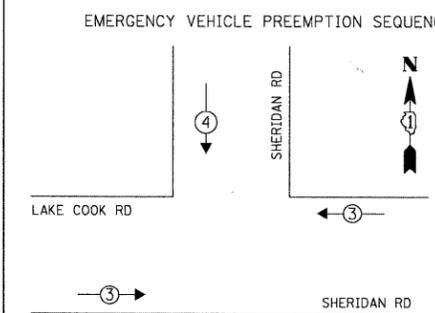
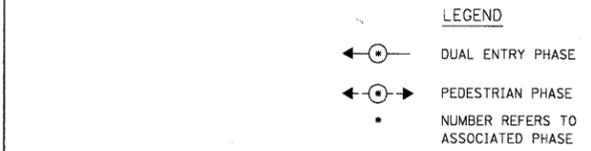
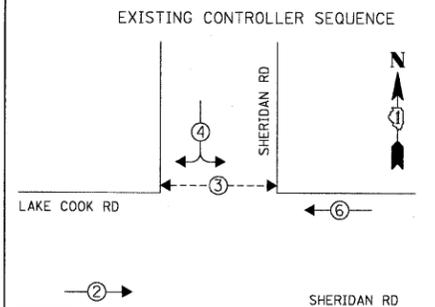
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- | | | |
|---|------|------------------------------------------------------|
| 5 | EACH | SIGNAL HEAD, 1-FACE, 3-SECTION, OPTICALLY PROGRAMMED |
| 1 | EACH | SIGNAL HEAD, 2-FACE, 3-SECTION |
| 2 | EACH | PEDESTRIAN SIGNAL HEAD, 1-FACE |
| 1 | EACH | PEDESTRIAN SIGNAL HEAD, 2-FACE |
| 4 | EACH | PEDESTRIAN PUSH-BUTTON |
| 1 | EACH | CONTROLLER |

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

FILE NAME =	USER NAME = FBARISO	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN LAKE COOK ROAD AND SHERIDAN ROAD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
N:\LCD01\090407\Traffic\150.LCRD-Sheridan.dgn		DRAWN - FPB / FCP	REVISED -					06-00924-00-TL	LAKE	76	21
PLOT SCALE = NOT TO SCALE		CHECKED - MJT	REVISED -			SCALE: NOT TO SCALE SHEET NO. OF SHEETS STA. -- TO STA. --		CONTRACT NO. 63485		ILLINOIS FED. AID PROJECT	
PLOT DATE = 5/3/2010		DATE - APRIL 30, 2010	REVISED -								

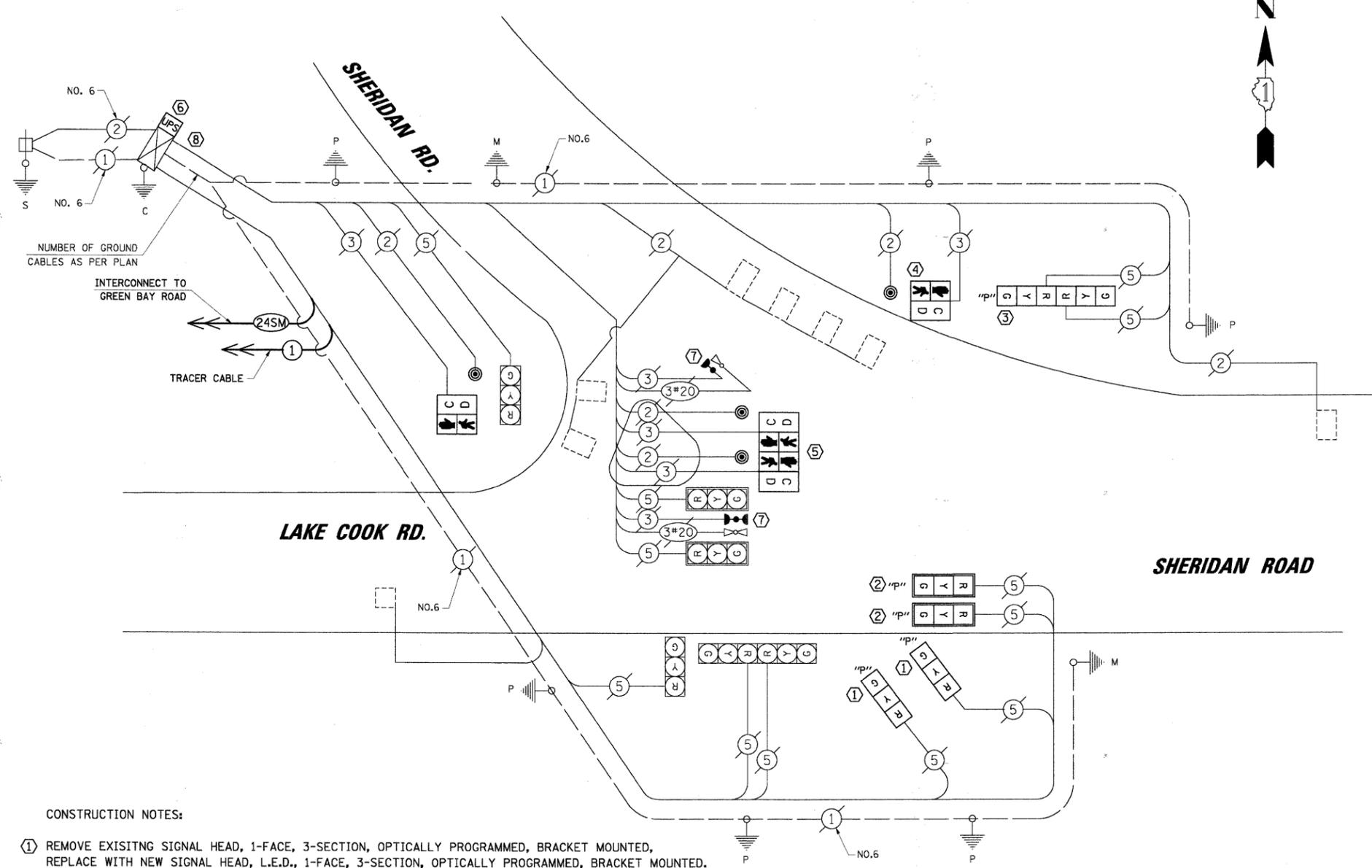
DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 PLAN: _____ NOTE BOOK: _____
 NO. _____ NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500
 PROFILE: SURVEYED: _____ PLOTTED: _____
 NOTE BOOK: _____ NO. _____
 STRUCTURE NOTATIONS: CHRD



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

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED X % OPERATION		
SIGNAL (RED)	12	17	0.50	120.00	
(YELLOW)	12	25	0.25	75.00	
(GREEN)	12	15	0.25	45.00	
ARROW	-	12	0.10	-	
PED. SIGNAL	4	25	1.00	100.00	
CONTROLLER	1	100	1.00	100.00	
L.E.D. ST. NAME SIGN	-	64	0.50	-	
VIDEO SYSTEM	-	150	1.00	-	
BATTERY BACKUP SYSTEM	1	25	1.00	25.0	
FLASHER	-	-	0.50	-	
ENERGY COSTS TO:				TOTAL =	447.00

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAY/DISTRICT 1
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED



- CONSTRUCTION NOTES:**
- REMOVE EXISTING SIGNAL HEAD, 1-FACE, 3-SECTION, OPTICALLY PROGRAMMED, BRACKET MOUNTED, REPLACE WITH NEW SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, OPTICALLY PROGRAMMED, BRACKET MOUNTED. RE-USE ALL EXISTING CABLES.
 - REMOVE EXISTING SIGNAL HEAD, 1-FACE, 3-SECTION, OPTICALLY PROGRAMMED, MAST ARM MOUNTED, REPLACE WITH NEW SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, OPTICALLY PROGRAMMED, MAST ARM MOUNTED. RE-USE ALL EXISTING CABLES.
 - REMOVE EXISTING SIGNAL HEAD, 2-FACE, 3-SECTION, 1-3 SECTION OPTICALLY PROGRAMMED AND 1-3 SECTION BRACKET MOUNTED. REPLACE WITH NEW SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, OPTICALLY PROGRAMMED AND 1-3 SECTION, BRACKET MOUNTED. RE-USE EXISTING CABLE
 - 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.
 - REMOVE EXISTING PEDESTRIAN SIGNAL HEAD, 2-FACE AND PUSHBUTTONS. REPLACE WITH NEW PEDESTRIAN SIGNAL HEAD, L.E.D., 2-FACE WITH COUNTDOWN TIMER AND NEW PEDESTRIAN PUSHBUTTON. RE-USE ALL EXISTING CABLES.
 - INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
 - ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
 - THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.

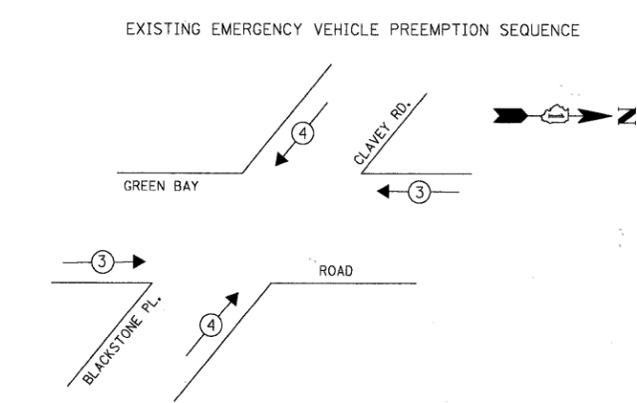
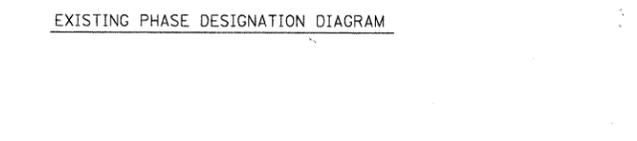
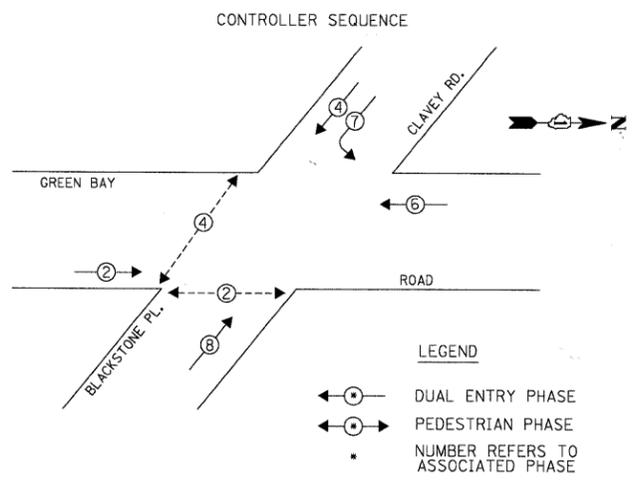
CABLE PLAN

SCHEDULE OF QUANTITIES		
ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	1
DRILL EXISTING HANDHOLE	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
COMBINATION SIGNAL HEAD, LED, 2-FACE, 1-3SECTION OPTICALLY PROGRAMMED, 1-3 SECTION BRACKET MOUNTED	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	2
PEDESTRIAN PUSH-BUTTON	EACH	4
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	25

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

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 PROFILE: _____ PLANNED: _____
 NO. E. BOOK: _____ NO. E. BOOK: _____
 STRUCTURE: _____ NOTATIONS: _____

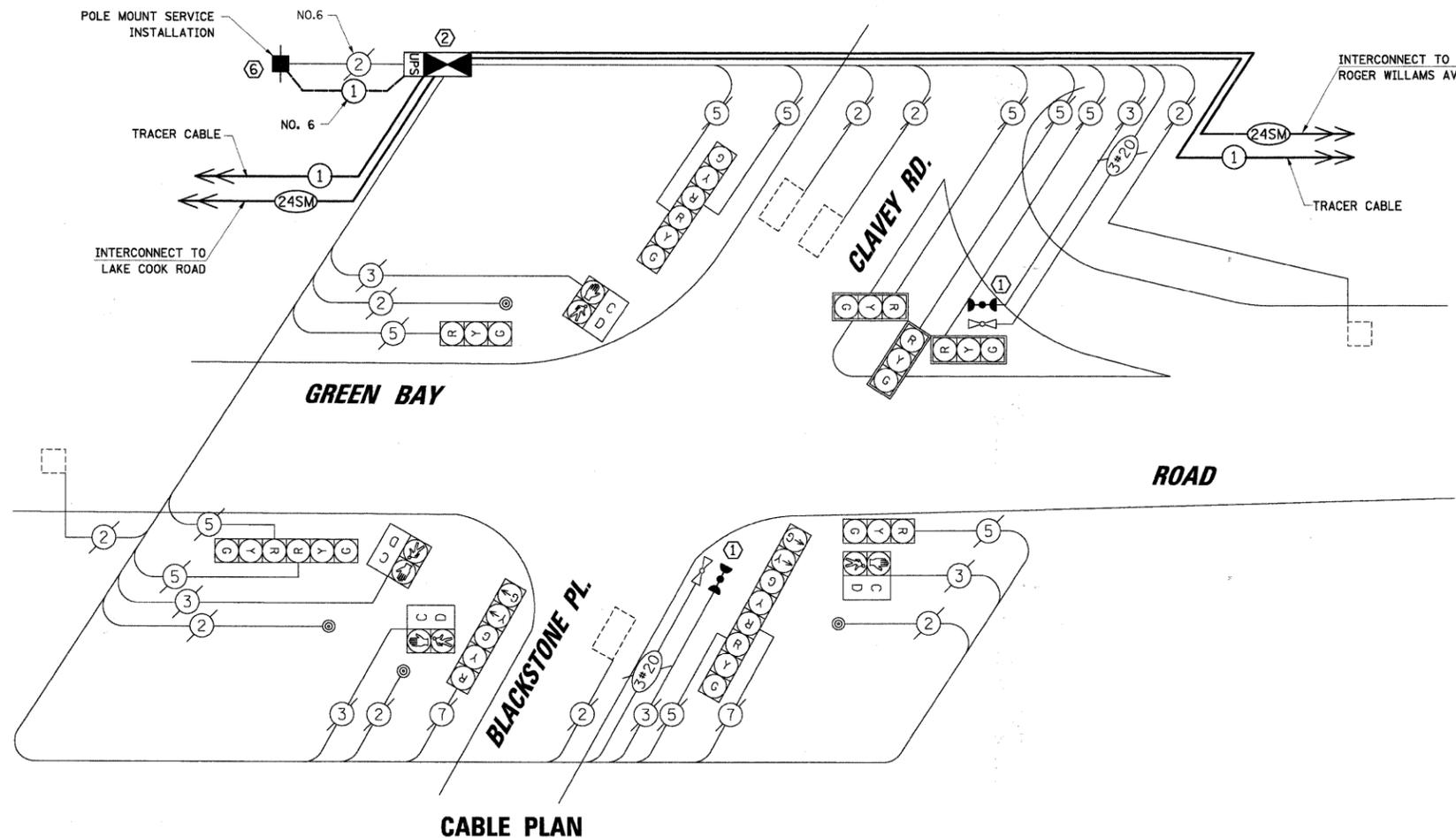
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500



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

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		10	0.50	60.0
(YELLOW)	12		19	0.10	22.8
(GREEN)	12		11	0.40	52.8
ARROW	4		9	0.10	3.6
PED. SIGNAL	4		9	1.00	36.0
CONTROLLER	1	100	1.00	100.0	100.0
LUMINAIRE	-	250	0.50	-	-
L.E.D. ST. NAME SIGN	-	64	0.50	-	-
VIDEO SYSTEM	-	150	1.00	-	-
BATTERY BACKUP	1	25	1.00	25.0	25.0

ENERGY COSTS TO: TOTAL = 300.2
CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED



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)
- 1 EACH SERVICE INSTALLATION

CONSTRUCTION NOTES:

- ① ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ② RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
- ③ THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
- ④ MODIFY EXISTING CONTROLLER FOUNDATION.
- ⑤ REBUILD EXISTING HANDHOLE TO DOUBLE HANDHOLE. SEE INTERCONNECT PLAN.
- ⑥ INSTALL NEW POLE MOUNT SERVICE INSTALLATION. INSTALL SERVICE GROUND CABLE IN EXISTING CONDUIT.

SCHEDULE OF QUANTITIES		
ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
MODIFY EXISTING TYPE "D" FOUNDATION	EACH	1
REBUILD EXISTING HANDHOLE TO DOUBLE HANDHOLE	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	5
ELECTRIC CABLE IN CONDUIT, GROUND NO. 6 1C	FOOT	32

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

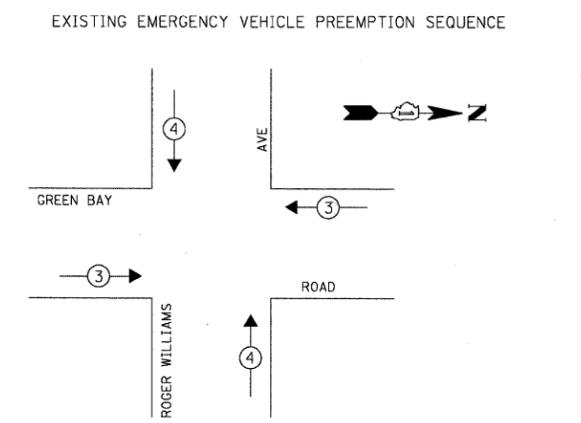
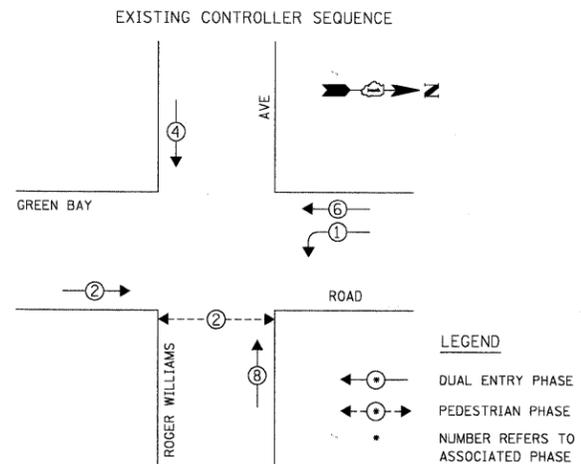
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		DRAWN - FPB / FCP	REVISED -
		CHECKED - MJT	REVISED -
		DATE - APRIL 30, 2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
GREEN BAY ROAD AND CLAVEY ROAD / BLACKSTONE PLACE
 SCALE: NOT TO SCALE SHEET NO. -- OF -- SHEETS STA. -- TO STA. --

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	23
CONTRACT NO. 63485			ILLINOIS FED. AID PROJECT	

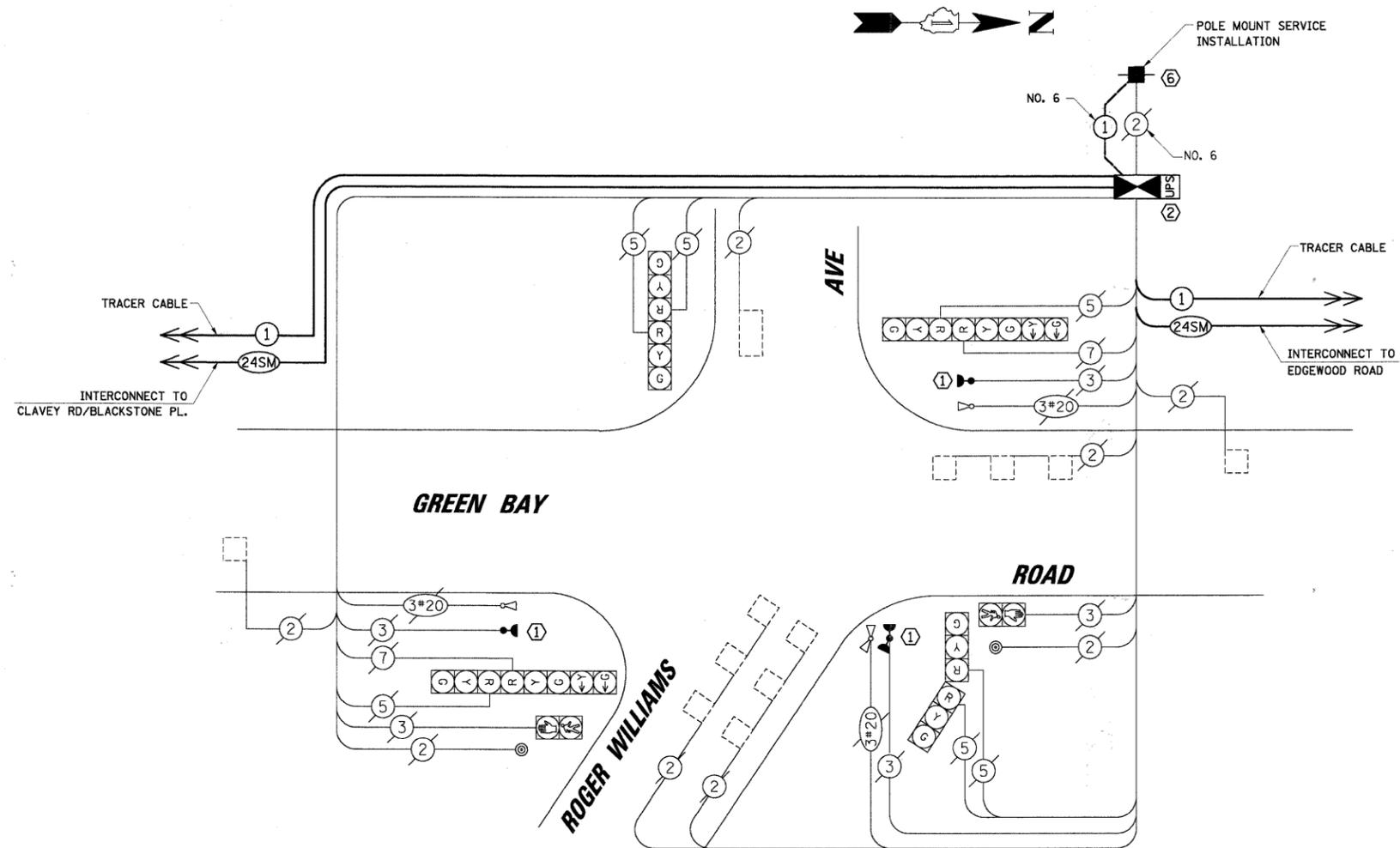
DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____
 NOTE BOOK NO.: _____
 STRUCTURE NOTATIONS CHKD: _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500



EXISTING EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↓ ↑

LEGEND
 ← → DUAL ENTRY PHASE
 ← → PEDESTRIAN PHASE
 • NUMBER REFERS TO ASSOCIATED PHASE



CABLE PLAN

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)
- 1 EACH SERVICE INSTALLATION

CONSTRUCTION NOTES:

- ① ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ② RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
- ③ THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
- ④ MODIFY EXISTING CONTROLLER FOUNDATION. SEE INTERCONNECT PLAN.
- ⑤ REBUILD EXISTING TO DOUBLE HANDHOLE. SEE INTERCONNECT PLAN.
- ⑥ INSTALL NEW POLE MOUNT SERVICE INSTALLATION. INSTALL SERVICE GROUND CABLE IN EXISTING CONDUIT.
- ⑦ A MANUAL PHASE ADVANCE SWITCH SHALL BE PROVIDED. THIS SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: FULL ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL.

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
MODIFY EXISTING TYPE "D" FOUNDATION	EACH	1
REBUILD EXISTING HANDHOLE TO DOUBLE HANDHOLE	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	5
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	25

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

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE XINCAND. LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	8	10	0.50	40.0
(YELLOW)	8	19	0.10	15.2
(GREEN)	8	11	0.40	35.2
ARROW	4	9	0.10	3.6
PED. SIGNAL	2	9	1.00	18.0
CONTROLLER	1	100	1.00	100.0
LUMINAIRE	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	64	0.50	-
VIDEO SYSTEM	-	150	1.00	-
BATTERY BACKUP	1	25	1.00	25.0

ENERGY COSTS TO: TOTAL = 237.0

CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED

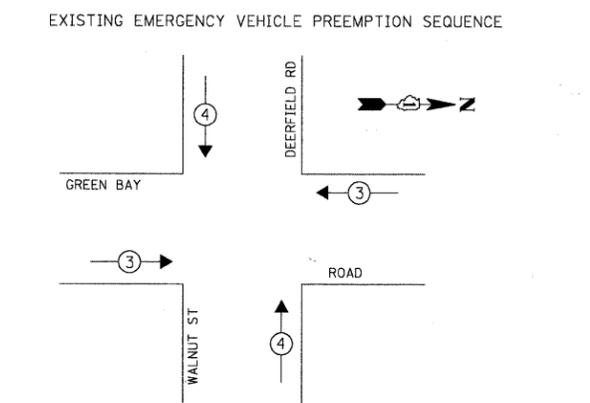
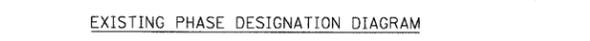
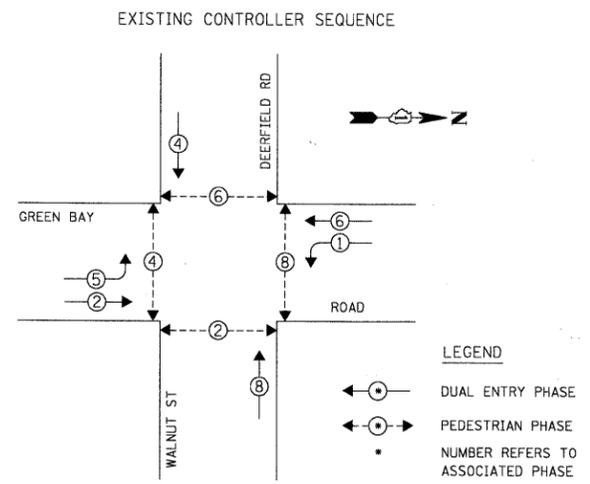
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		DRAWN - FPB / FCP	REVISED -
		CHECKED - MJT	REVISED -
		DATE - APRIL 30, 2010	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 GREEN BAY ROAD AND ROGER WILLIAMS**
 SCALE: NOT TO SCALE SHEET NO. -- OF -- SHEETS STA. -- TO STA. --

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	24
CONTRACT NO. 63485			ILLINOIS FED. AID PROJECT	

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ DATE: _____
 PLAN: _____ NO. _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ DATE: _____
 PLAN: _____ NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500
C.B.
 DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ DATE: _____
 PLAN: _____ NO. _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ DATE: _____
 PLAN: _____ NO. _____



EXISTING EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

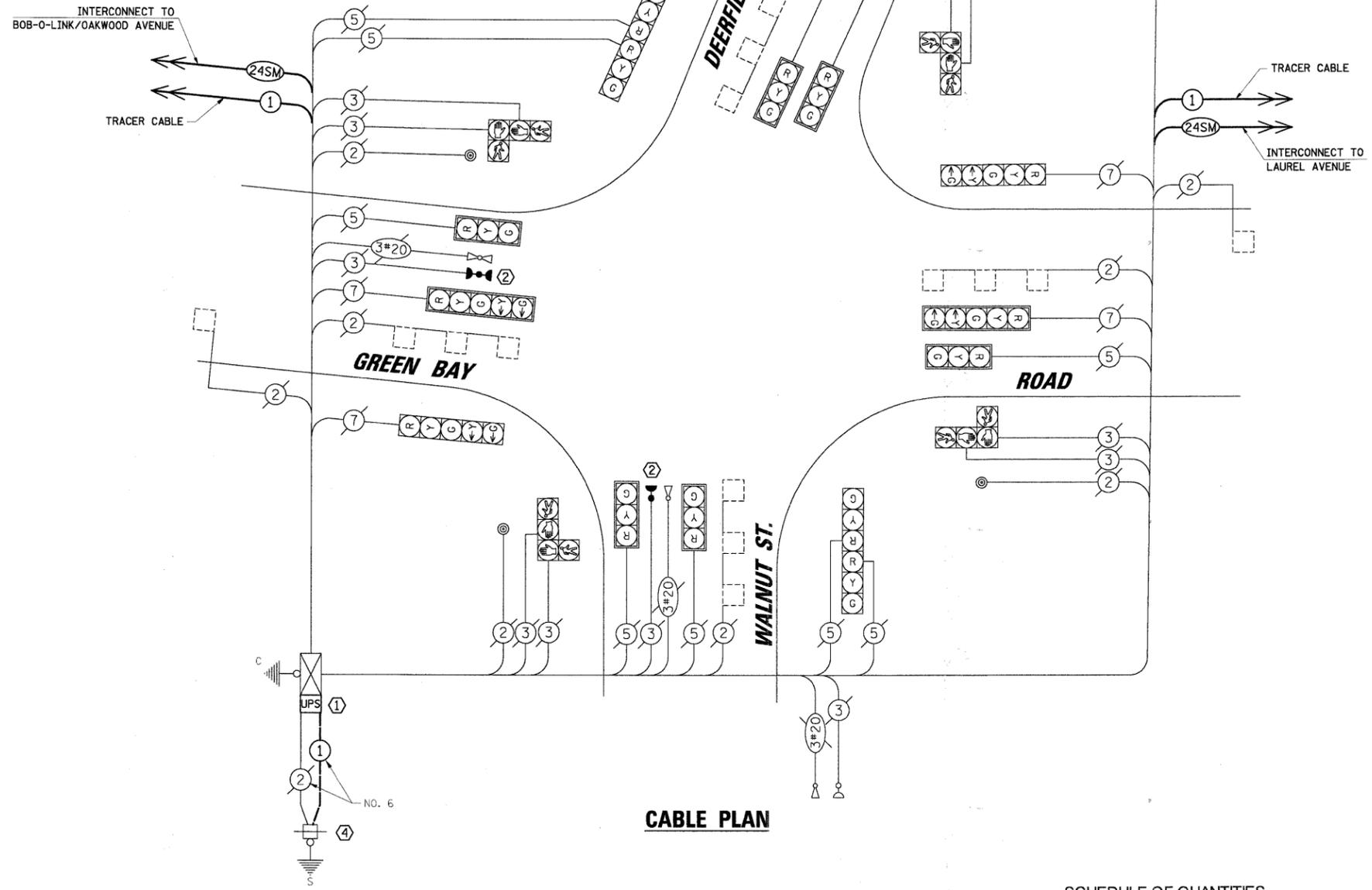
L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE X INCAND. LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	10	0.50	70.0
(YELLOW)	14	19	0.10	26.6
(GREEN)	14	11	0.40	61.6
ARROW	8	9	0.10	7.20
PED. SIGNAL	8	9	1.00	72.0
CONTROLLER	1	100	1.00	100.0
LUMINAIRE	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	64	0.50	-
VIDEO SYSTEM	-	150	1.00	-
BATTERY BACKUP	1	25	1.00	25.0

ENERGY COSTS TO: TOTAL = 362.4

CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593

ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED



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

CONSTRUCTION NOTES:

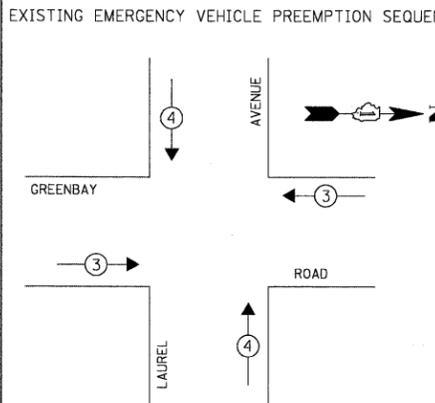
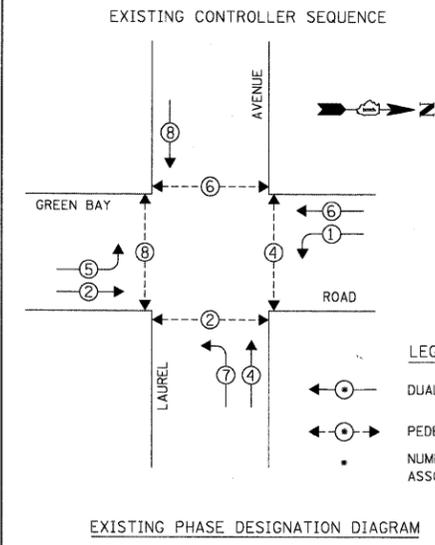
- ① INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
- ② ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ③ THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
- ④ INSTALL SERVICE GROUND CABLE IN EXISTING CONDUIT.

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
DRILL EXISTING HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, GROUND NO. 6 1C	FOOT	30

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

BY: DATE: SURVIVED: PLOTTED: CHECKED: BY: DATE: PLAN: NOTE BOOK NO. NO. DATE FILE NAME: CHRISTOPHER B. BURKE ENGINEERING LTD. 9575 West Higgins Road, Suite 600 Rosemont, Illinois 60018 (847) 823-0500



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

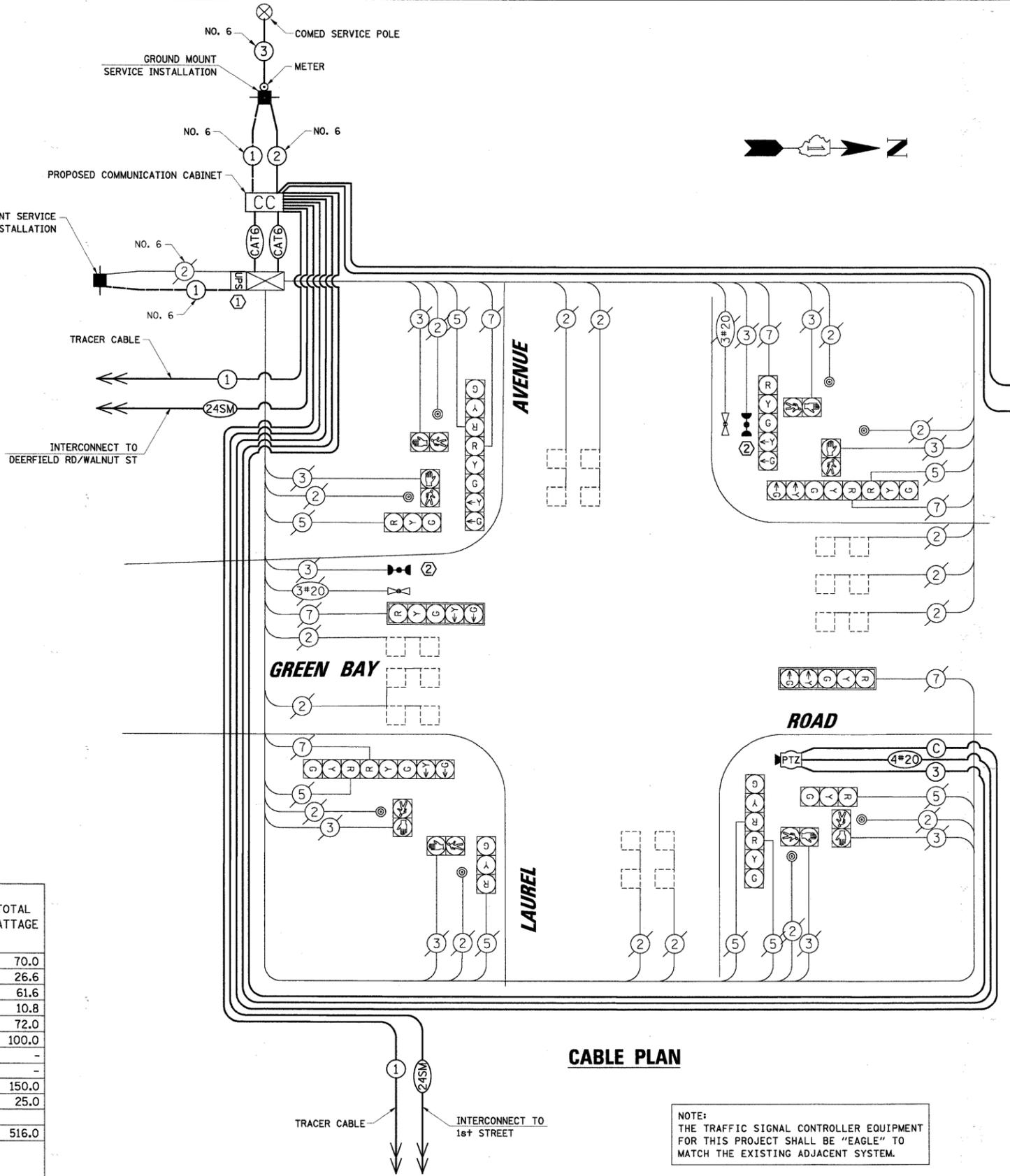
L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED % OPERATION		
SIGNAL (RED)	14		10	0.50	70.0
(YELLOW)	14		19	0.10	26.6
(GREEN)	14		11	0.40	61.6
ARROW	12		9	0.10	10.8
PED. SIGNAL	8		9	1.00	72.0
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	-		250	0.50	-
L.E.D. ST. NAME SIGN	-		64	0.50	-
VIDEO SYSTEM	1		150	1.00	150.0
BATTERY BACKUP	1		25	1.00	25.0

ENERGY COSTS TO: TOTAL = 516.0

CITY OF HIGHLAND PARK

1707 ST. JOHNS AVENUE
HIGHLAND PARK, IL 60035-3593

ENERGY SUPPLY: CONTACT: JEAN WILL
PHONE: (847) 816-5459
COMPANY: COMED



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

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

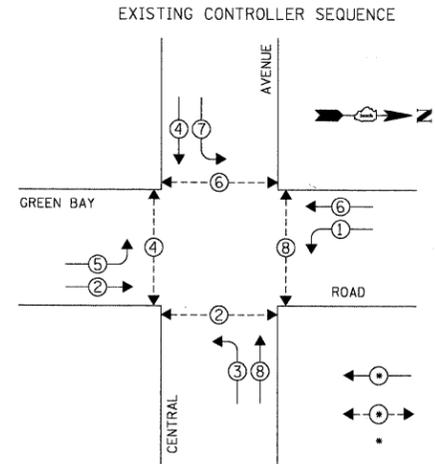
- 1 EACH CONTROLLER
- 1 EACH SERVICE INSTALLATION

- CONSTRUCTION NOTES:**
- ① INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
 - ② ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
 - ③ THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
 - ④ INSTALL NEW POLE MOUNT SERVICE INSTALLATION. INSTALL SERVICE GROUND CABLE IN EXISTING CONDUIT.
 - ⑤ INSTALL NEW PTZ CAMERA ON EXISTING COMBINATION MAST ARM.
 - ⑥ ALL CABLES FROM PTZ SHALL GO DIRECTLY TO COMMUNICATION CABINET.
 - ⑦ CAT 6 CABLE GOES FROM NEW TRAFFIC SIGNAL CONTROLLER TO LAYER III SWITCH IN COMMUNICATION CABINET.
 - ⑧ VIDEO ENCODER SHALL BE MOUNTED IN THE COMMUNICATION CABINET.

SCHEDULE OF QUANTITIES		
ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CONCRETE FOUNDATION, SURVEILLANCE CABINET MODEL 334	EACH	1
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
LAYER III (NETWORK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
VIDEO COMMUNICATIONS CABINET	EACH	1
LAYER III FIBER OPTIC TRANSCIVER MODULE, SFP TYPE, LONG DISTANCE	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	4
DRILL EXISTING HANDHOLE	EACH	4
MEDIA CONVERTER	EACH	7
ELECTRIC CABLE IN CONDUIT, SERVICE NO. 6 3C	FOOT	30
OUTDOOR RATED NETWORK CABLE	FOOT	100
ELECTRIC CABLE IN CONDUIT, GROUND NO. 6 1C	FOOT	150
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	290
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	290
ELECTRIC CABLE IN CONDUIT, 4/C #20, VIDEO	FOOT	290

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ DATE: _____
 PLAN NO.: _____ NOTE BOOK NO.: _____
 DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ DATE: _____
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 CHECKED: _____ DATE: _____

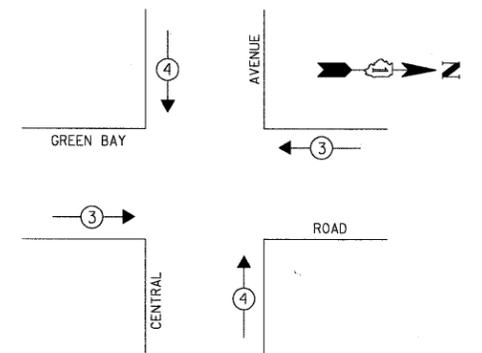
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500



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

EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



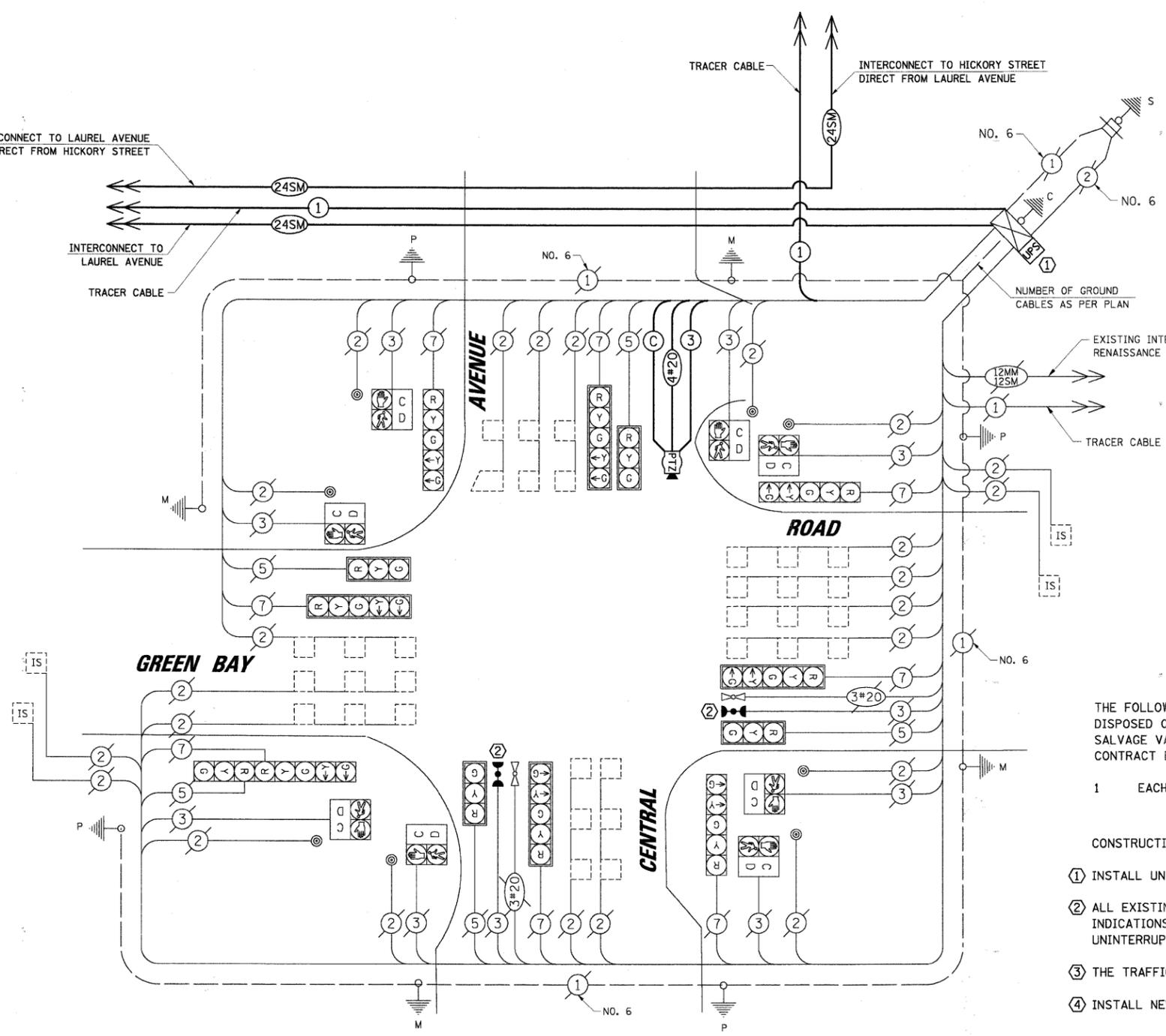
EXISTING EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	13		10	0.50	65.0
(YELLOW)	13		19	0.10	24.7
(GREEN)	13		11	0.40	57.2
ARROW	16		9	0.10	14.4
PED. SIGNAL	8		9	1.00	72.0
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	-		250	0.50	-
L.E.D. ST. NAME SIGN	-		64	0.50	-
VIDEO SYSTEM	1		150	1.00	150.0
BATTERY BACKUP	1		25	1.00	25.0

ENERGY COSTS TO: TOTAL = 508.30
CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED



CABLE PLAN

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

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

- 1 EACH CONTROLLER

CONSTRUCTION NOTES:

- ① INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
- ② ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ③ THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
- ④ INSTALL NEW PTZ CAMERA ON EXISTING COMBINATION MAST ARM.

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
DRILL EXISTING HANDHOLE	EACH	2
TERMINATE FIBER IN CABINET	EACH	6
SPLICE FIBER IN CABINET	EACH	6
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	104
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	104
ELECTRIC CABLE IN CONDUIT, 4/C # 20, VIDEO	FOOT	104

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		CHECKED - MJT	REVISED -
		DATE - APRIL 30, 2010	REVISED -

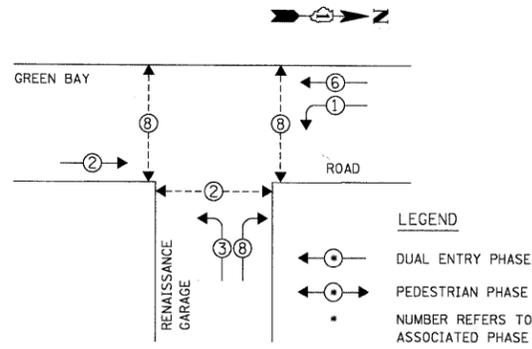
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
GREEN BAY ROAD AND CENTRAL AVENUE
 SCALE: NOT TO SCALE | SHEET NO. -- OF -- SHEETS | STA. -- TO STA. --

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	28
CONTRACT NO. 63485			ILLINOIS FED. AID PROJECT	

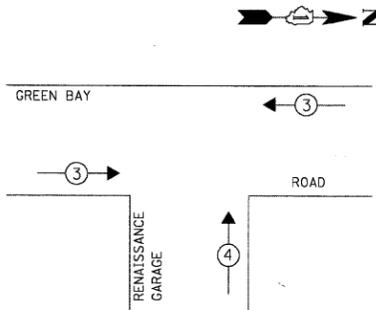
DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 PLAN: _____ NOTE BOOK: _____
 NO. _____ NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500
 PROFILE SURVEYED: _____ PLOTTED: _____
 NOTE BOOK: _____
 NO. _____ NO. _____
 STRUCTURE NOTATIONS CHRD

EXISTING CONTROLLER SEQUENCE

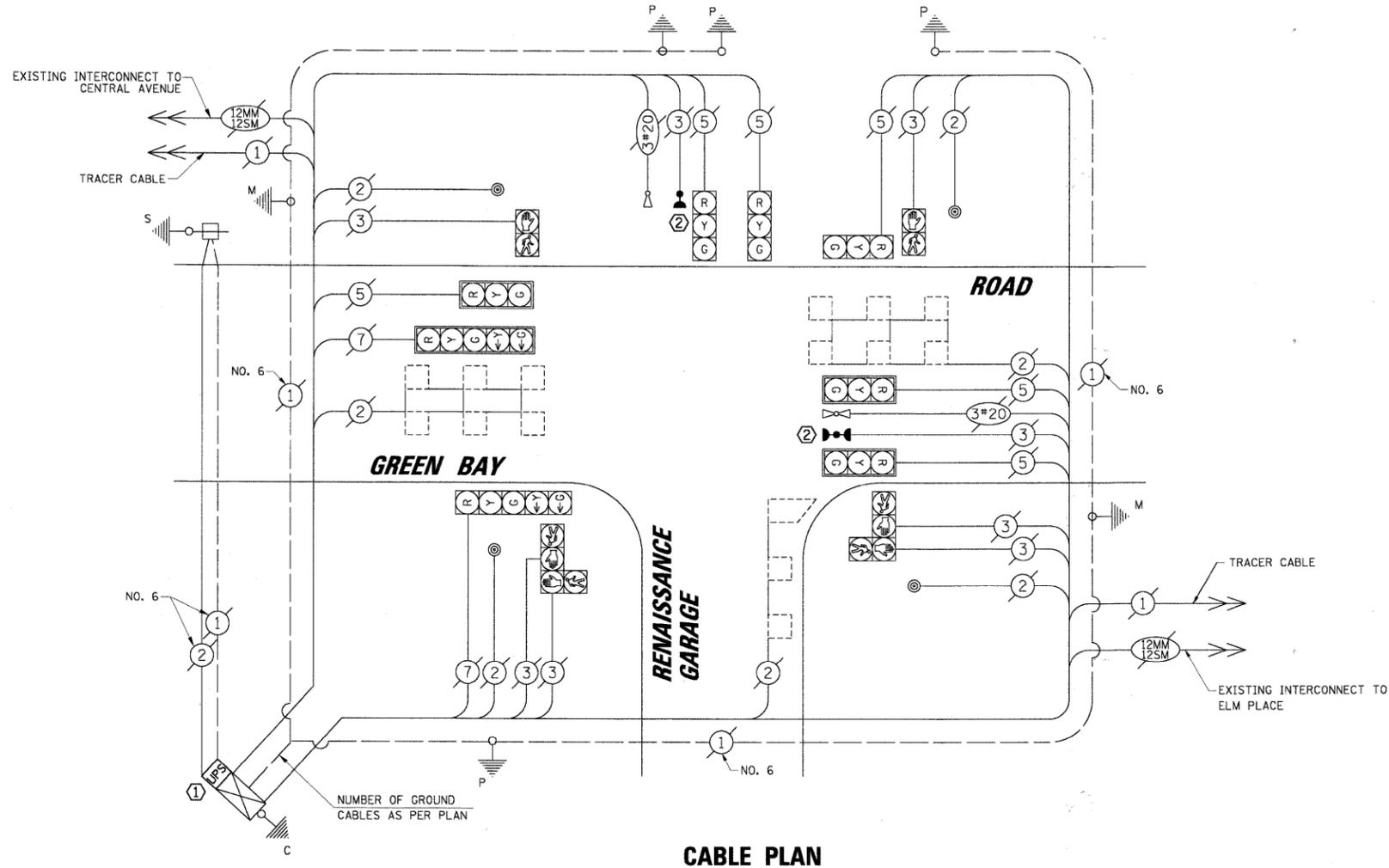


EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
SPLICE FIBER IN CABINET	EACH	6
TERMINATE FIBER IN CABINET	EACH	12

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

CONSTRUCTION NOTES:

- ① INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
- ② ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ③ THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.

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

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	8		10	0.50	40.0
(YELLOW)	8		19	0.10	15.2
(GREEN)	8		11	0.40	35.2
ARROW	4		9	0.10	3.6
PED. SIGNAL	6		9	1.00	54.0
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	-		250	0.50	-
L.E.D. ST. NAME SIGN	-		64	0.50	-
VIDEO SYSTEM	-		150	1.00	-
BATTERY BACKUP	1		25	1.00	25.0

ENERGY COSTS TO: TOTAL = 273.0

CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED

FILE NAME =	USER NAME = FBARISO	DESIGNED - ABR	REVISED -
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		CHECKED - MJT	REVISED -
		DATE - APRIL 30, 2010	REVISED -

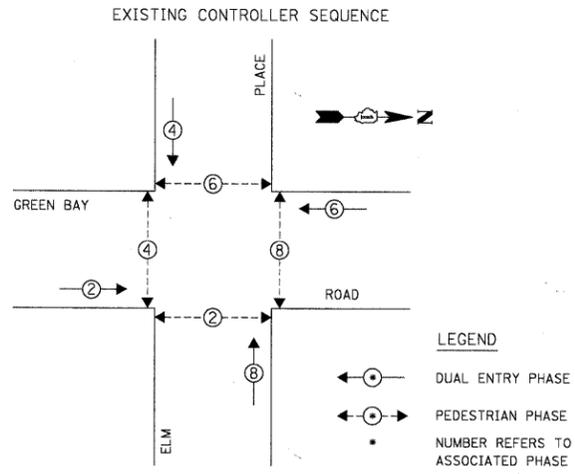
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 GREEN BAY ROAD AND RENAISSANCE GARAGE
 SCALE: NOT TO SCALE SHEET NO. -- OF -- SHEETS STA. -- TO STA. --

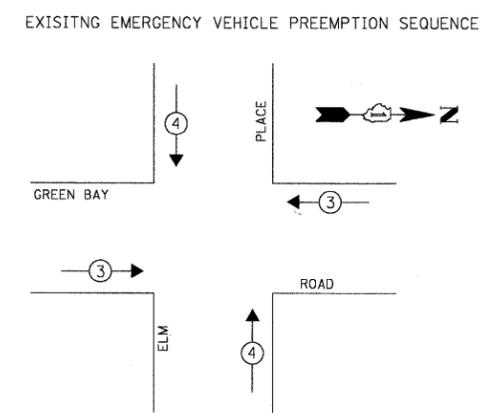
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	29
CONTRACT NO. 63485			ILLINOIS FED. AID PROJECT	

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 REVISIONS: _____
 FILE NAME: _____
 PROJECT: _____
 CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED

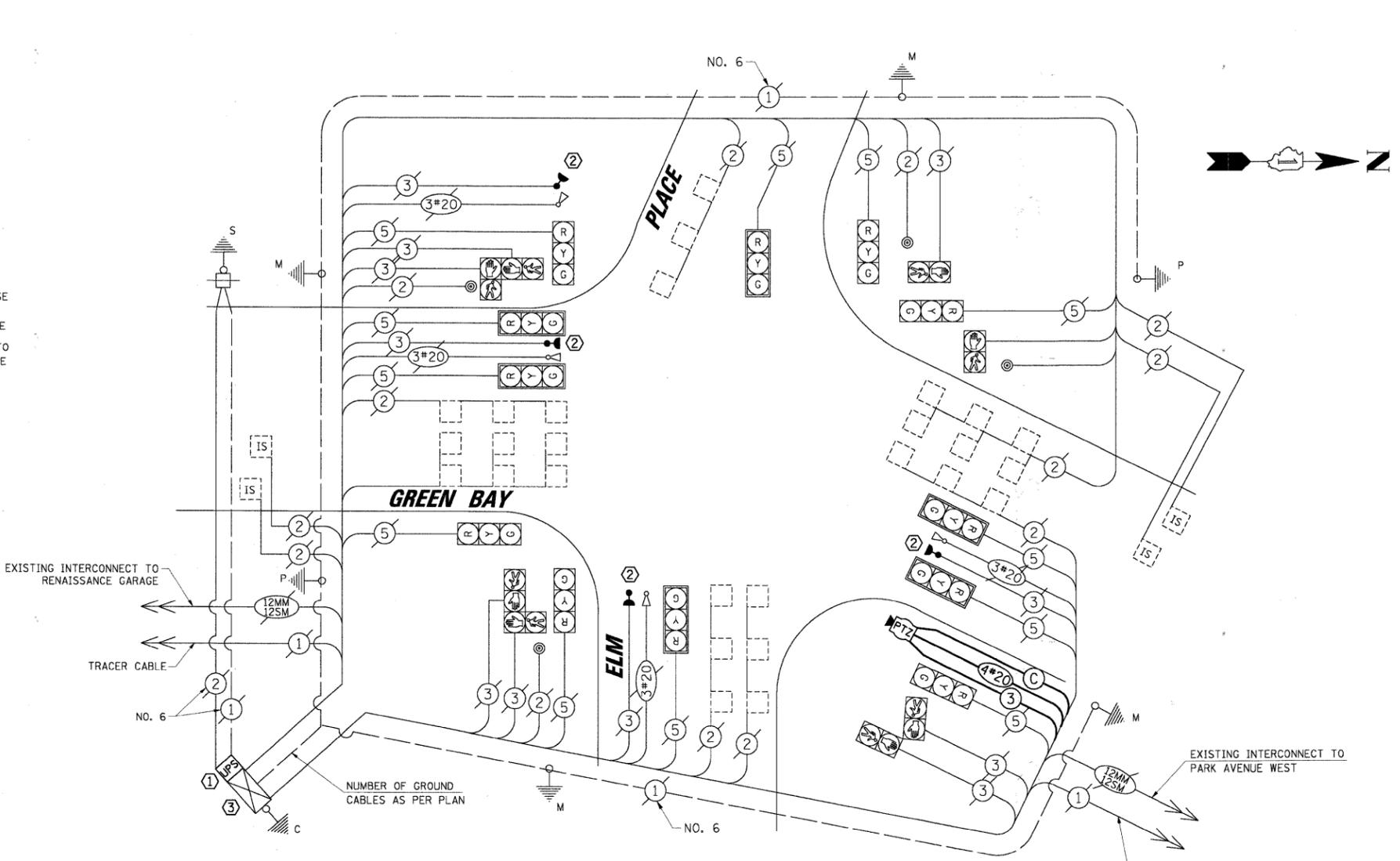
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 SURVEYED: _____ PLOTTED: _____
 REVISIONS: _____
 FILE NAME: _____
 PROJECT: _____
 CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED



EXISTING CONTROLLER SEQUENCE



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



CABLE PLAN

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12	10	0.50		60.0
(YELLOW)	12	19	0.10		22.8
(GREEN)	12	11	0.40		52.8
ARROW	-	9	0.10		-
PED. SIGNAL	8	9	1.00		72.0
CONTROLLER	1	100	1.00		100.0
LUMINAIRE	-	250	0.50		-
L.E.D. ST. NAME SIGN	-	64	0.50		-
VIDEO SYSTEM	1	150	1.00		150.0
BATTERY BACKUP	1	25	1.00		25.0

ENERGY COSTS TO: TOTAL = 482.6
CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED

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
- 1 EACH MASTER CONTROLLER

CONSTRUCTION NOTES:

- ① INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
- ② ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ③ THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
- ④ INSTALL NEW PTZ CAMERA ON EXISTING COMBINATION MAST ARM.

SCHEDULE OF QUANTITIES		
ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
SPLICE FIBER IN CABINET	EACH	6
TERMINATE FIBER IN CABINET	EACH	12
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	182
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	182
ELECTRIC CABLE IN CONDUIT, 4/C # 20, VIDEO	FOOT	182

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

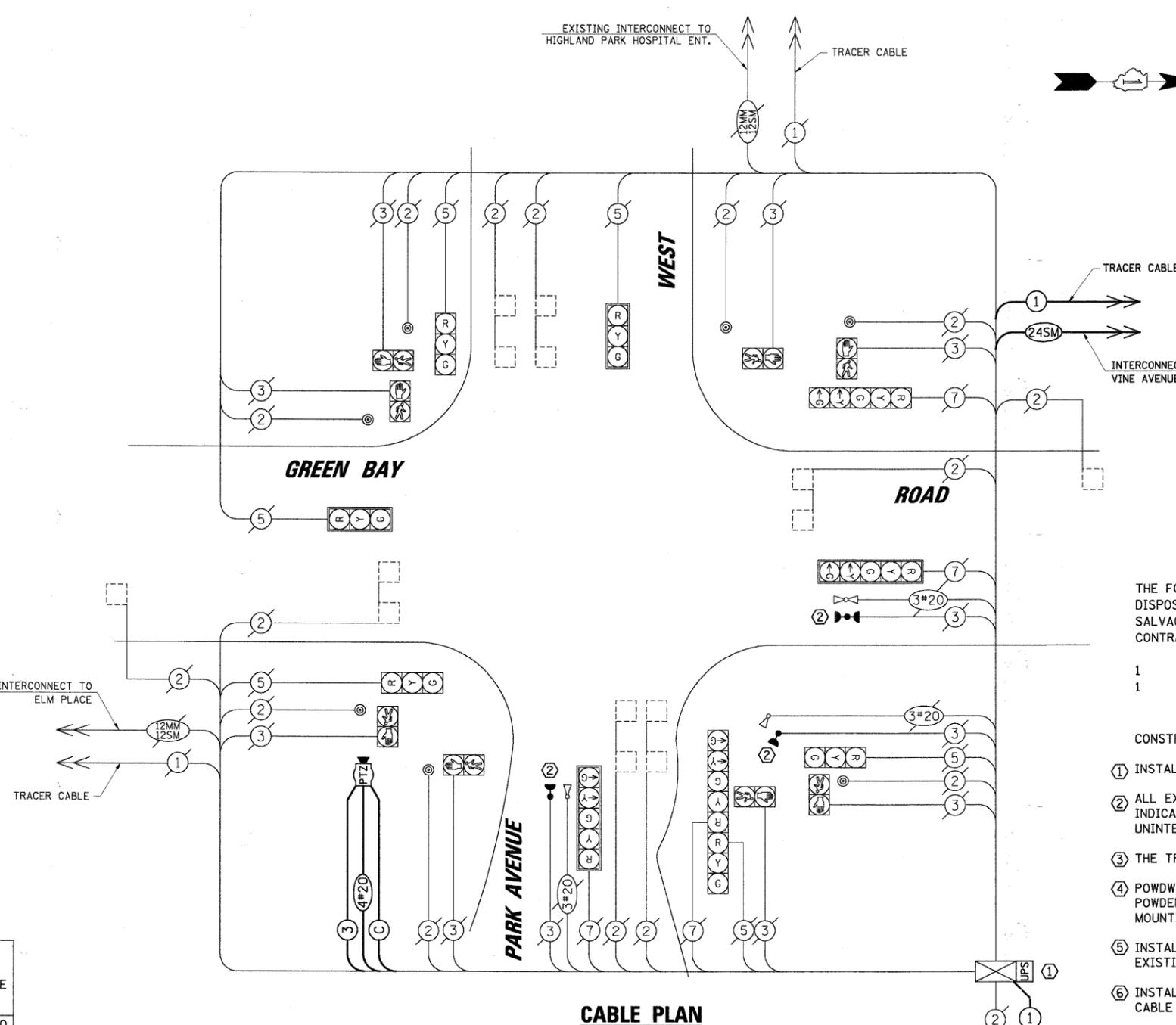
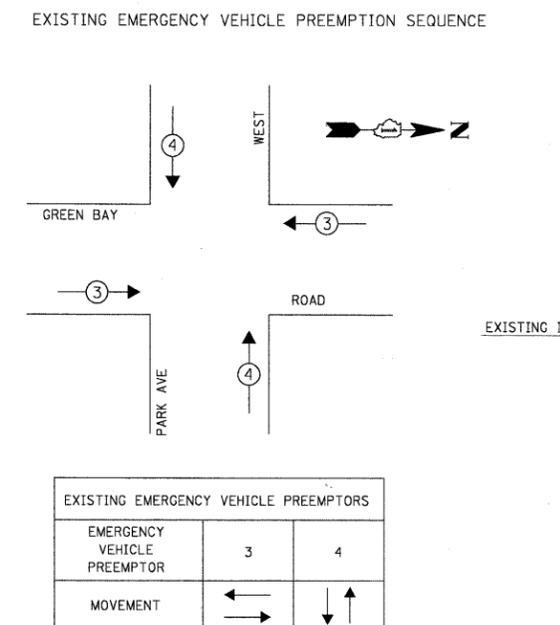
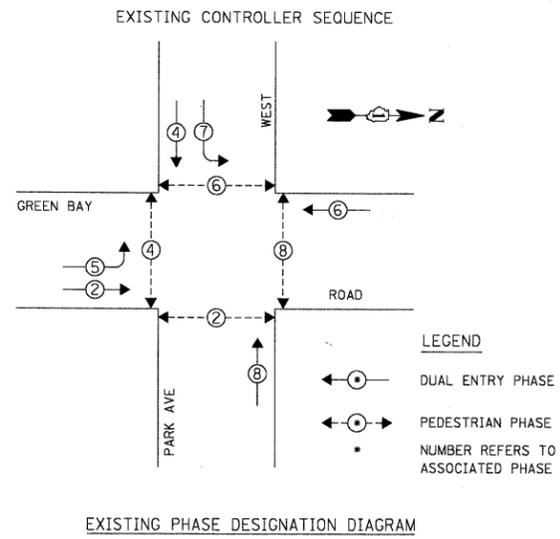
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		CHECKED - MJT	REVISED -
		DATE - APRIL 30, 2010	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 GREEN BAY ROAD AND ELM PLACE
 SCALE: NOT TO SCALE SHEET NO. -- OF -- SHEETS STA. -- TO STA. --

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	30
CONTRACT NO. 63485			ILLINOIS FED. AID PROJECT	

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 PLAN: _____ NOTE BOOK: _____
 NO. _____ NO. _____
 STRUCTURE: _____ NOTATION: _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 923-0500



- 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
 - 1 EACH SERVICE INSTALLATION

- CONSTRUCTION NOTES:
- ① INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
 - ② ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
 - ③ THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
 - ④ POWDER COAT CAMERA MOUNTING ASSEMBLY TO MATCH EXISTING MAST ARM. POWDER COATING SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: CAMERA MOUNTING ASSEMBLY, SPECIAL.
 - ⑤ INSTALL NEW PTZ CAMERA TO NEW CAMERA MOUNTING ASSEMBLY, SPECIAL ON EXISTING SIGNAL MAST ARM.
 - ⑥ INSTALL NEW POLE MOUNT SERVICE INSTALLATION. INSTALL SERVICE GROUND CABLE ON EXISTING CONDUIT.

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	10	10	0.50		50.0
(YELLOW)	10	19	0.10		19.0
(GREEN)	10	11	0.40		44.0
ARROW	8	9	0.10		7.2
PED. SIGNAL	8	9	1.00		72.0
CONTROLLER	1	100	1.00		-
LUMINAIRE	-	250	0.50		-
L.E.D. ST. NAME SIGN	-	64	0.50		-
VIDEO SYSTEM	1	150	1.00		150.0
BATTERY BACKUP	1	25	1.00		25.0

ENERGY COSTS TO: TOTAL = 367.20

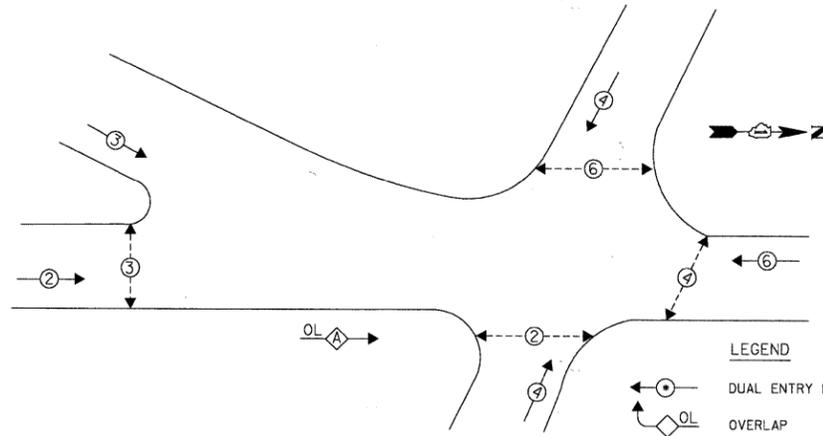
CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED

SCHEDULE OF QUANTITIES	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
CAMERA MOUNTING ASSEMBLY, SPECIAL	EACH	1
DRILL EXISTING HANDHOLE	EACH	1
SPLICE FIBER IN CABINET	EACH	6
TERMINATE FIBER IN CABINET	EACH	12
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	35
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	175
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	175
ELECTRIC CABLE IN CONDUIT, 4/C # 20, VIDEO	FOOT	175

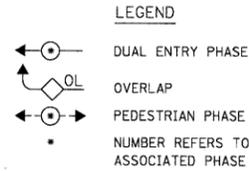
NOTE:
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ DATE: _____
 NOTE BOOK: _____ RT. OF WAY CHECKED: _____
 NO. _____ CAD FILE NAME: _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500
 C.B. ENGINEERING
 DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ DATE: _____
 NOTE BOOK: _____ RT. OF WAY CHECKED: _____
 NO. _____ CAD FILE NAME: _____

EXISTING CONTROLLER SEQUENCE



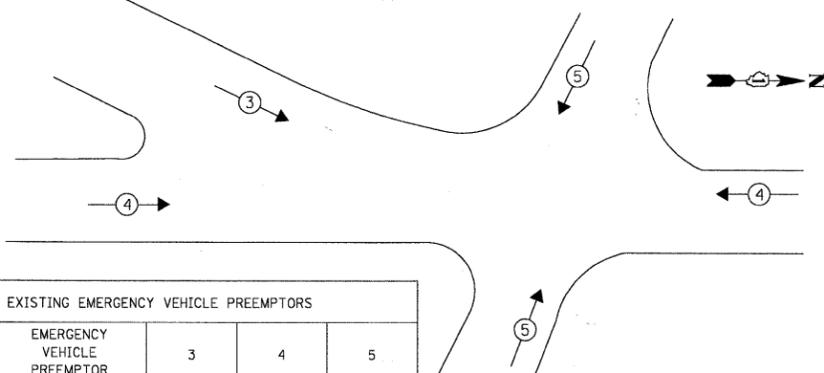
EXISTING PHASE DESIGNATION DIAGRAM



EXISTING RIGHT TURN OVERLAP PHASE DESIGNATION

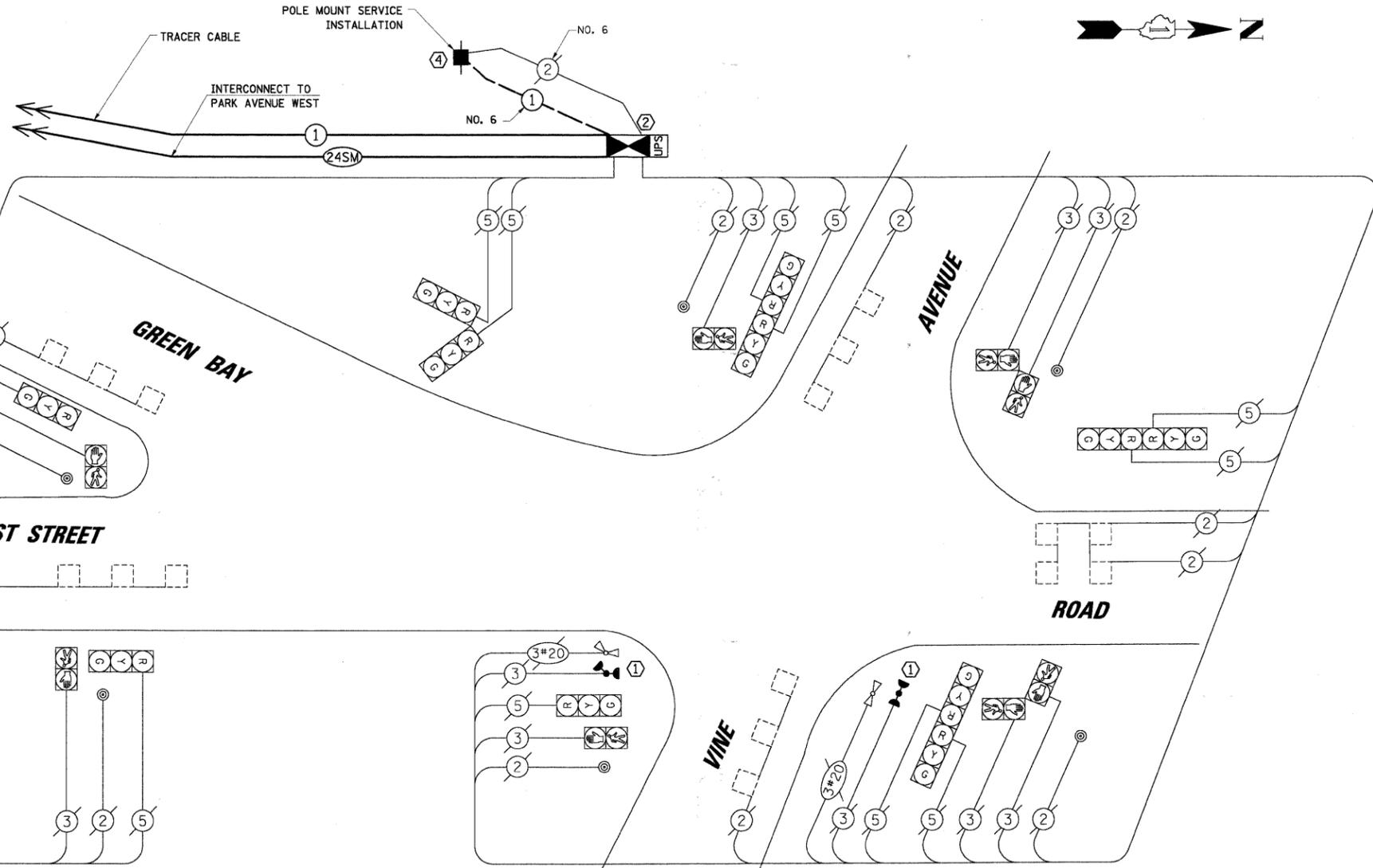
OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
A	= 2	+ 3

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4	5
MOVEMENT	→	↔	↕



CABLE PLAN

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
DRILL EXISTING HANDHOLE	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	6
ELECTRIC CABLE IN CONDUIT, GROUND NO. 6 1C	FOOT	40

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

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

- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 1 EACH SERVICE INSTALLATION.

CONSTRUCTION NOTES:

- ① ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ② RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
- ③ THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
- ④ INSTALL NEW POLE MOUNT SERVICE INSTALLTION. INSTALL SERVICE GROUND CABLE IN EXISTING COUNDUIT.

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED X % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	11	10	0.50	55.0
(YELLOW)	11	19	0.10	29.9
(GREEN)	11	11	0.40	48.4
ARROW	-	9	0.10	-
PED. SIGNAL	8	9	1.00	72.0
CONTROLLER	1	100	1.00	100.0
LUMINAIRE	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	64	0.50	-
VIDEO SYSTEM	-	150	1.00	-
BATTERY BACKUP	1	25	1.00	25.0

ENERGY COSTS TO: TOTAL = 330.3

CITY OF HIGHLAND PARK

1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593

ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED

FILE NAME = N:\L\DOT\898487\Traffic\CABL\GBRD-Vine.dgn	USER NAME = FBARISO	DESIGNED - ABR	REVISED -
		DRAWN - FPB / FCP	REVISED -
		CHECKED - MJT	REVISED -
		DATE - APRIL 30, 2010	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
 GREEN BAY ROAD AND VINE AVENUE

SCALE: NOT TO SCALE SHEET NO. -- OF -- SHEETS STA. -- TO STA. --

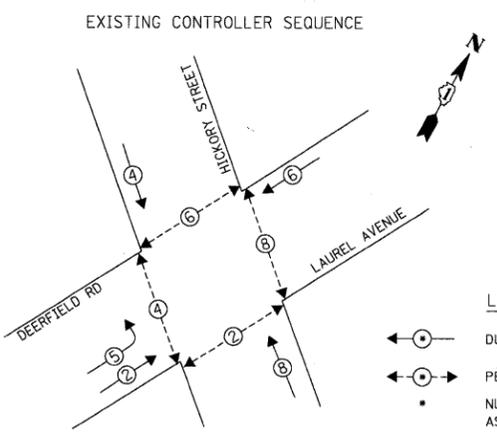
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	32
CONTRACT NO. 63485			ILLINOIS FED. AID PROJECT	

DATE: _____ BY: _____
 DATE: _____ BY: _____
 DATE: _____ BY: _____
 DATE: _____ BY: _____

PROFILE SURVEYED _____
 PLOTTED _____
 NOTE BOOK _____
 NO. _____
 STRUCTURE NOTATIONS CRKD _____

PLAN SURVEYED _____
 PLOTTED _____
 NOTE BOOK _____
 NO. _____
 CAD FILE NAME _____

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



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

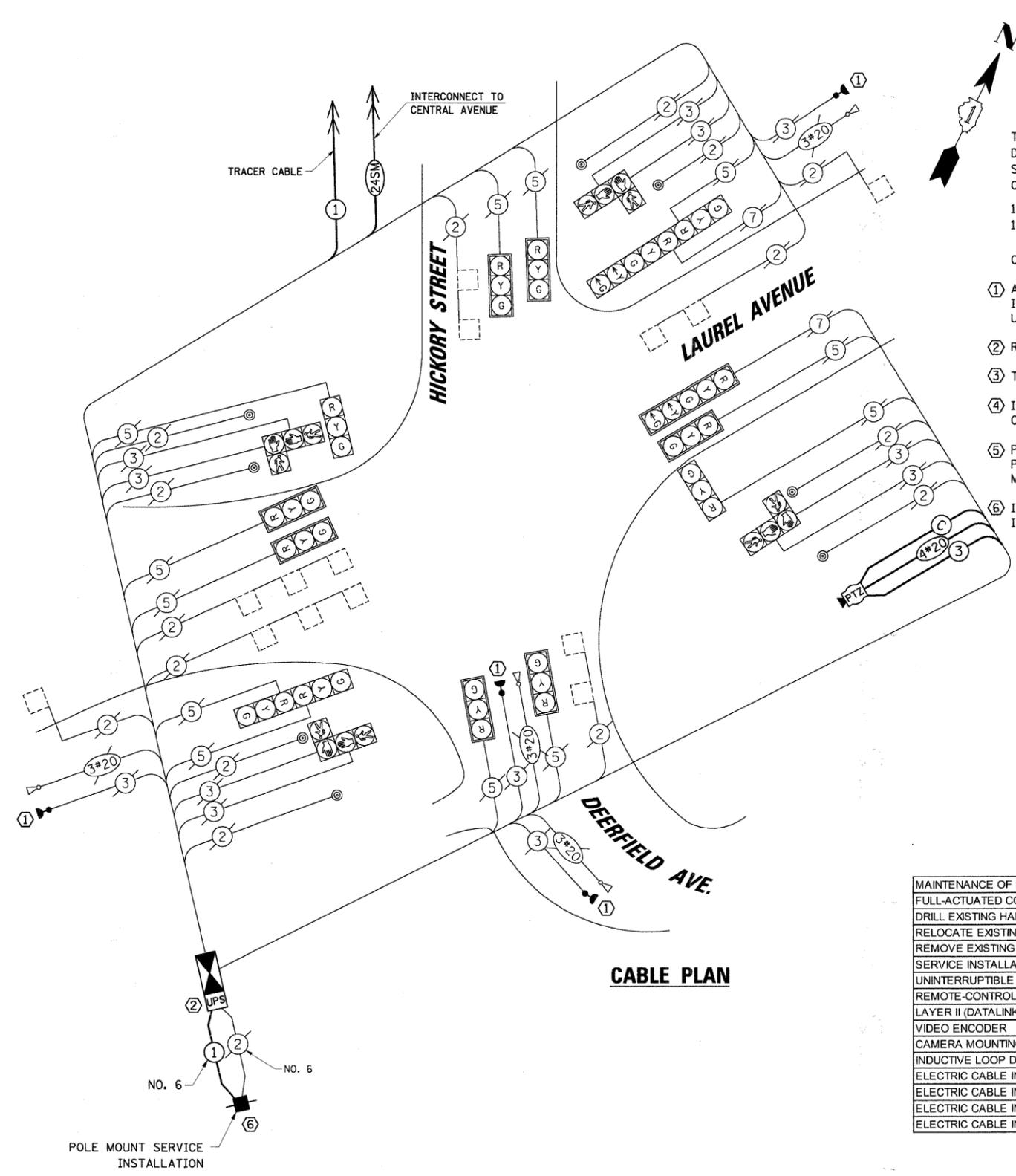
L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED X % OPERATION		
SIGNAL (RED)	14	10	0.50		70.0
(YELLOW)	14	19	0.10		26.6
(GREEN)	14	11	0.40		61.6
ARROW	4	9	0.10		3.6
PED. SIGNAL	8	9	1.00		72.0
CONTROLLER	1	100	1.00		100.0
LUMINAIRE	-	250	0.50		-
L.E.D. ST. NAME SIGN	-	64	0.50		-
VIDEO SYSTEM	1	150	1.00		150.0
BATTERY BACKUP	1	25	1.00		25.0

ENERGY COSTS TO: TOTAL = 408.8

CITY OF HIGHLAND PARK

1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593

ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED



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.

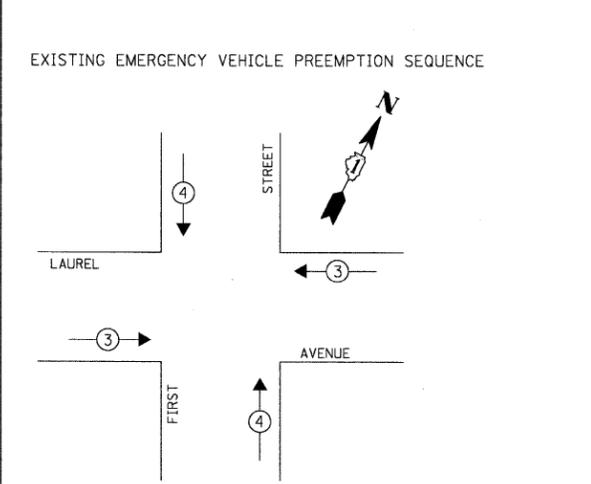
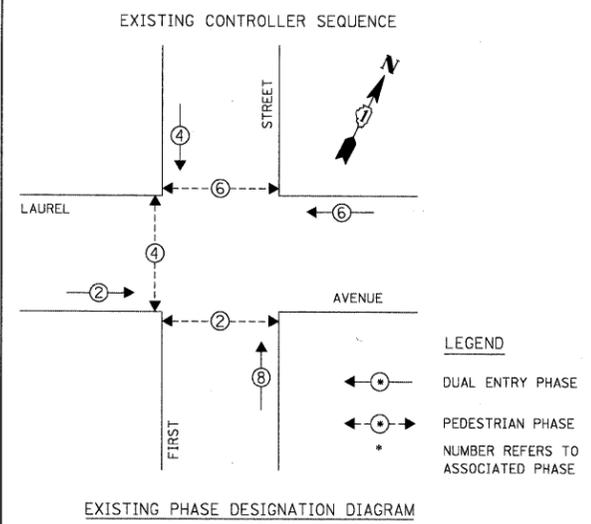
1 EACH CONTROLLER AND CABINET (COMPLETE)
 1 EACH SERVICE INSTALLATION

- CONSTRUCTION NOTES:**
- ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
 - RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
 - THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
 - INSTALL NEW PTZ CAMERA TO NEW CAMERA MOUNTING ASSEMBLY, SPECIAL ON EXISTING SIGNAL MAST ARM.
 - POWDER COAT CAMERA MOUNTING ASSEMBLY TO MATCH EXISTING MAST ARM. POWDER COATING SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: CAMERA MOUNTING ASSEMBLY, SPECIAL.
 - INSTALL NEW POLE MOUNT SERVICE INSTALLATION. INSTALL SERVICE GROUND CABLE ON EXISTING CONDUIT.

SCHEDULE OF QUANTITIES		
ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
DRILL EXISTING HANDHOLE	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
CAMERA MOUNTING ASSEMBLY, SPECIAL	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	7
ELECTRIC CABLE IN CONDUIT, GROUND NO. 6 1C	FOOT	83
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	190
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	190
ELECTRIC CABLE IN CONDUIT, 4/C # 20, VIDEO	FOOT	190

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

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____ CHECKED: _____
 PLAN: _____ NOTE BOOK: _____ NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500
 PROFILE: _____ DATE: _____
 PLOTTED: _____ CHECKED: _____
 NOTE BOOK: _____ NO. _____
 STRUCTURE NOTATIONS: _____



EXISTING EMERGENCY VEHICLE PREEMPTORS

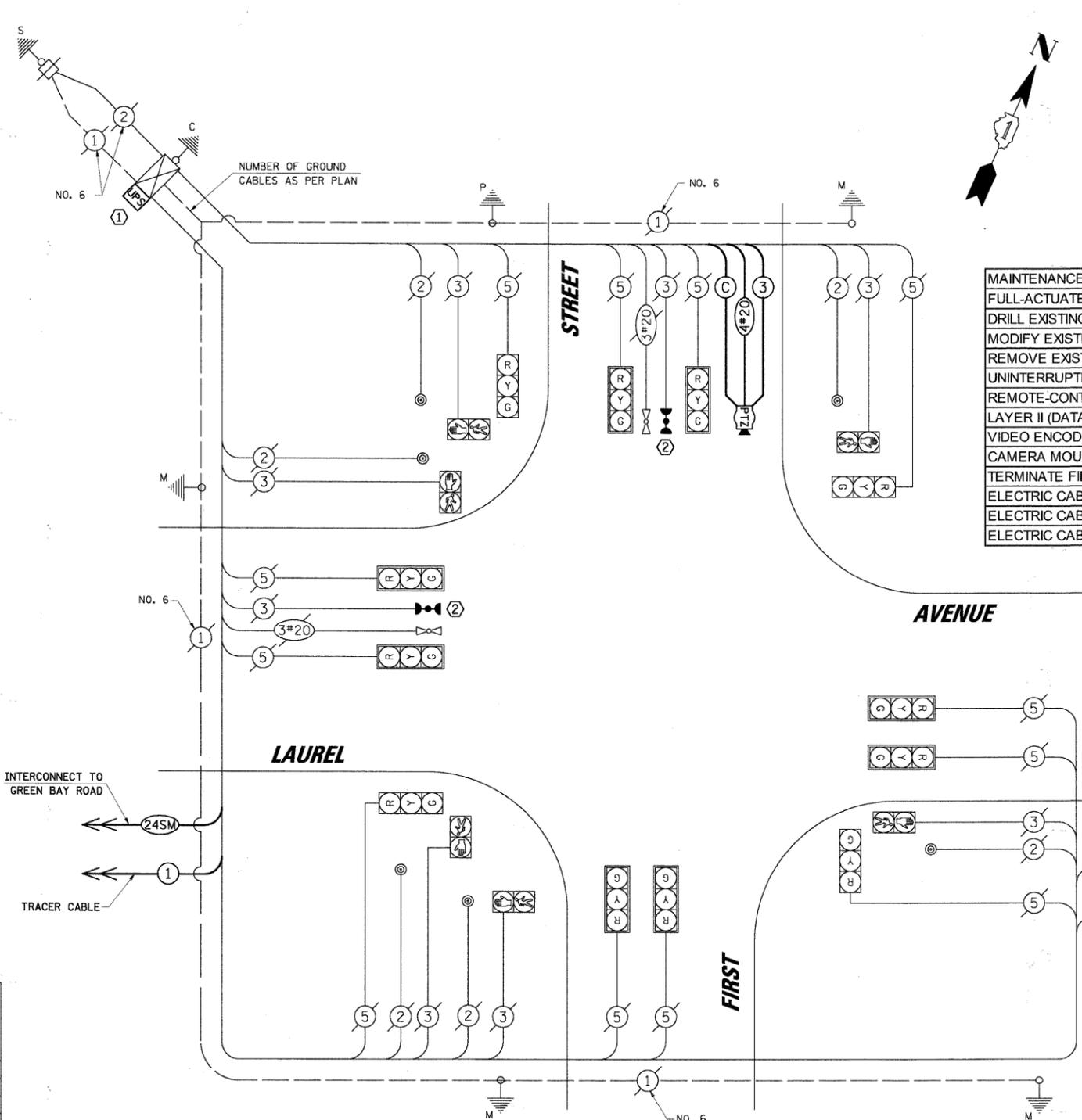
EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12		10	0.50	60.00
(YELLOW)	12		19	0.10	22.80
(GREEN)	12		11	0.40	52.80
ARROW	-		9	0.10	-
PED. SIGNAL	6		9	1.00	54.0
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	-		250	0.50	-
L.E.D. ST. NAME SIGN	-		64	0.50	-
VIDEO SYSTEM	1		150	1.00	150.0
BATTERY BACKUP	1		25	1.00	25.0

ENERGY COSTS TO: TOTAL = 464.60

CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED



CABLE PLAN

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
- 1 EACH MASTER CONTROLLER

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	1
DRILL EXISTING HANDHOLE	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
CAMERA MOUNTING ASSEMBLY, SPECIAL	EACH	1
TERMINATE FIBER IN CABINET	EACH	6
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	162
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	162
ELECTRIC CABLE IN CONDUIT, 4/C #20, VIDEO	FOOT	162

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

CONSTRUCTION NOTES:

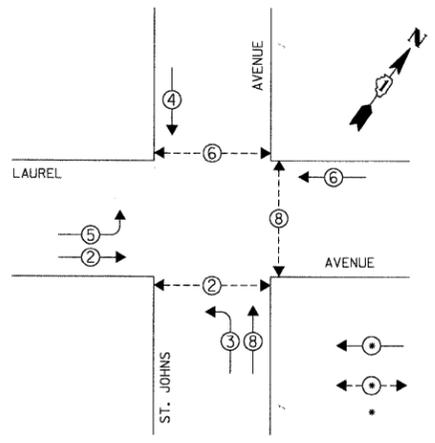
- ① INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS)
- ② ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ③ POWDER COAT CAMERA MOUNTING ASSEMBLY TO MATCH EXISTING MAST ARM. POWDER COATING SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: CAMERA MOUNTING ASSEMBLY, SPECIAL.
- ④ THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
- ⑤ INSTALL NEW PTZ CAMERA TO NEW CAMERA MOUNTING ASSEMBLY, SPECIAL ON EXISTING SIGNAL MAST ARM.

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ BY: _____
 NOTE BOOK NO.: _____
 PLAN NO.: _____
 PROJECT: _____
 STRUCTURE NOTATION: _____

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

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ BY: _____
 NOTE BOOK NO.: _____
 PLAN NO.: _____
 PROJECT: _____
 STRUCTURE NOTATION: _____

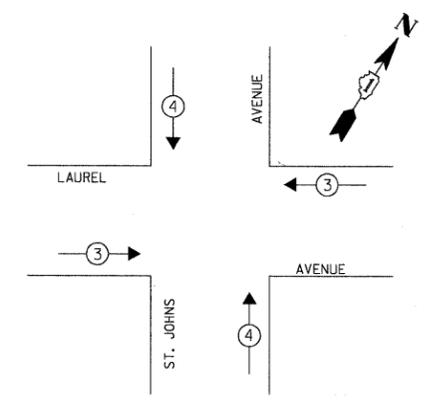
EXISTING CONTROLLER SEQUENCE



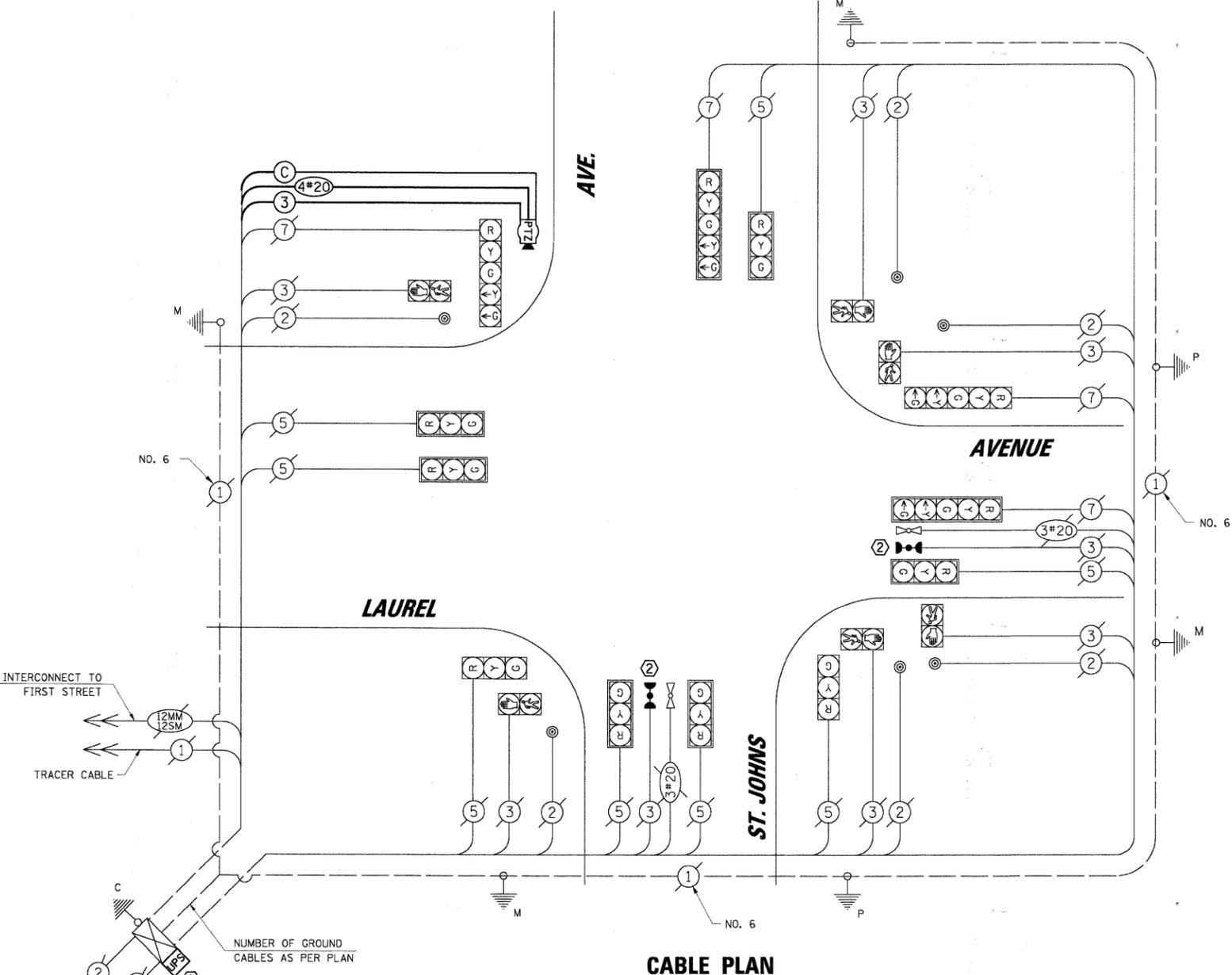
LEGEND
 ○ → ○ DUAL ENTRY PHASE
 ○ → ○ PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



CABLE PLAN

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

CONSTRUCTION NOTES:

- ① INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS)
- ② ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ③ POWDER COAT CAMERA MOUNTING ASSEMBLY TO MATCH EXISTING MAST ARM. POWDER COATING SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: CAMERA MOUNTING ASSEMBLY, SPECIAL.
- ④ THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
- ⑤ INSTALL NEW PTZ CAMERA TO NEW CAMERA MOUNTING ASSEMBLY, SPECIAL ON EXISTING SIGNAL MAST ARM.

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
CAMERA MOUNTING ASSEMBLY, SPECIAL	EACH	1
TERMINATE FIBER IN CABINET	EACH	6
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	145
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	145
ELECTRIC CABLE IN CONDUIT, 4/C # 20, VIDEO	FOOT	145

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

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND. LED	% OPERATION		
SIGNAL (RED)	12	10	0.50		60.00
(YELLOW)	12	19	0.10		22.80
(GREEN)	12	11	0.40		52.80
ARROW	8	9	0.10		7.20
PED. SIGNAL	6	9	1.00		54.00
CONTROLLER	1	100	1.00		100.0
LUMINAIRE	-	250	0.50		-
L.E.D. ST. NAME SIGN	-	64	0.50		-
VIDEO SYSTEM	1	150	1.00		150.0
BATTERY BACKUP	1	25	1.00		25.0
ENERGY COSTS TO:				TOTAL =	471.80

CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED

FILE NAME = N:\L\CDOT\092487\Traffic\CAB-Laurel-StJohns.dwg	USER NAME = FBARISSO	DESIGNED - ABR	REVISED -
		DRAWN - FPB / FCP	REVISED -
		CHECKED - MJT	REVISED -
		DATE - APRIL 30, 2010	REVISED -

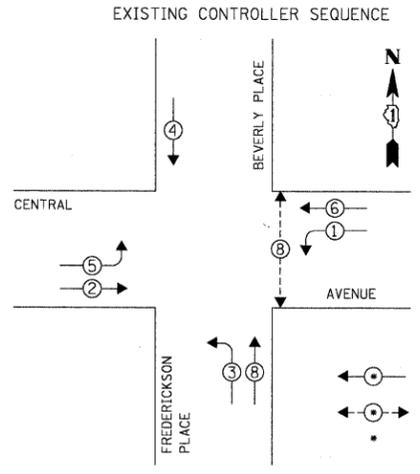
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE LAUREL AVENUE AND ST. JOHNS AVENUE

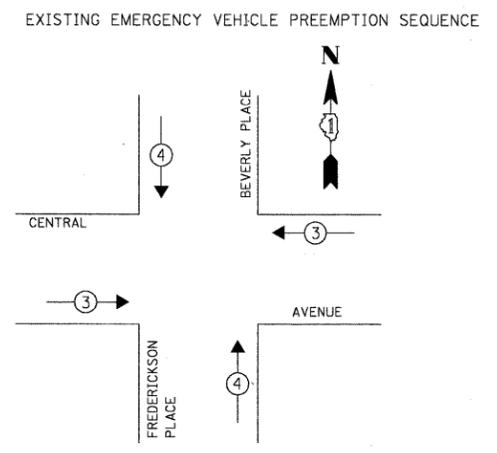
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	35
CONTRACT NO. 63485				
ILLINOIS FED. AID PROJECT				

SCALE: NOT TO SCALE SHEET NO. -- OF -- SHEETS STA. -- TO STA. --

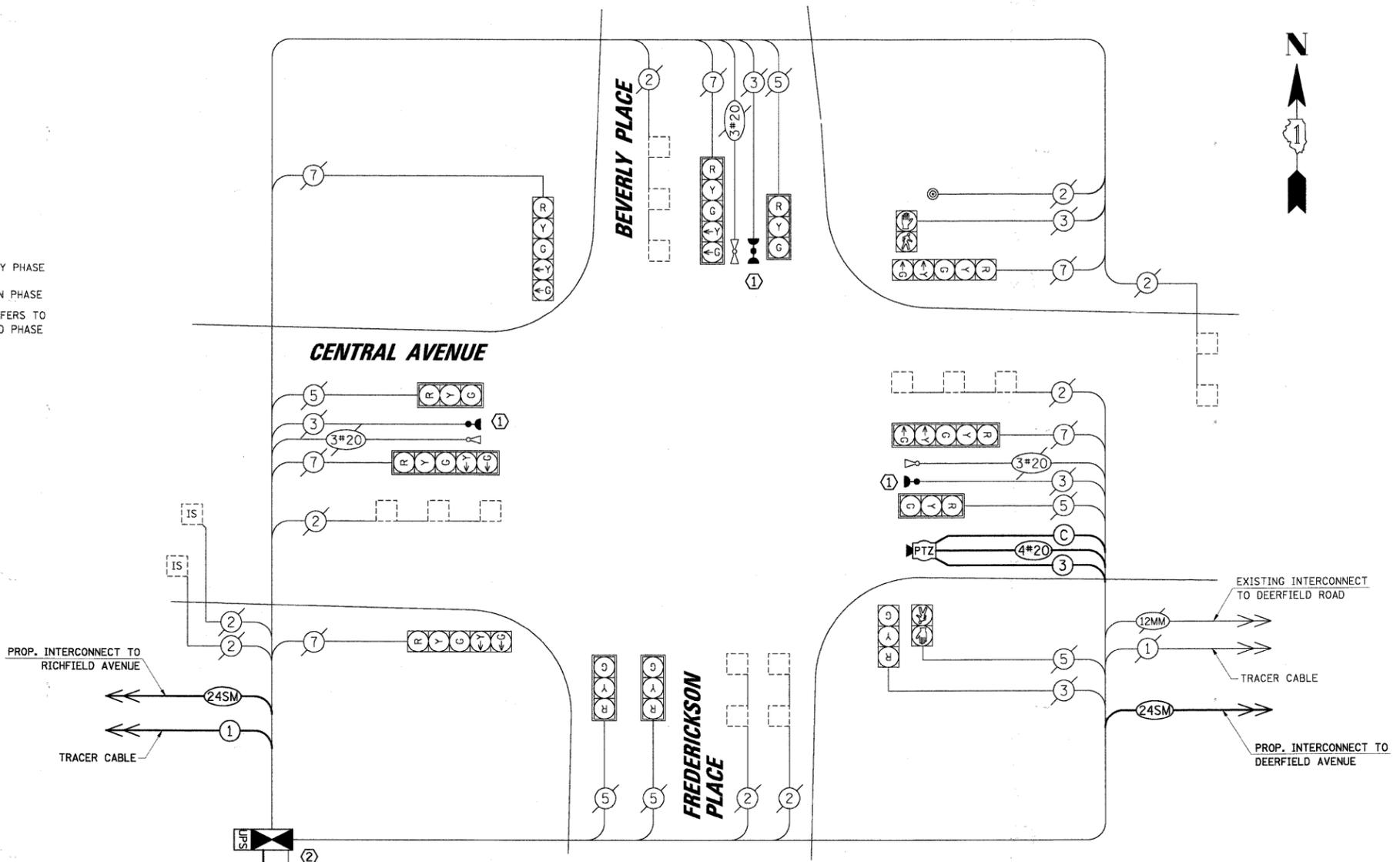
DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____ CHECKED: _____
 PLAN: _____ NOTE BOOK: _____
 NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500
 PROFILE: _____ SURVEYED: _____ PLOTTED: _____ CHECKED: _____
 NOTE BOOK: _____
 NO. _____
 STRUCTURE NOTATIONS: CPKFO



EXISTING PHASE DESIGNATION DIAGRAM



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



CABLE PLAN

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12	10	0.50	60.0	
(YELLOW)	12	19	0.10	22.8	
(GREEN)	12	11	0.40	52.8	
ARROW	12	9	0.10	10.8	
PED. SIGNAL	2	9	1.00	18.0	
CONTROLLER	1	100	1.00	100.0	
LUMINAIRE	-	250	0.50	-	
L.E.D. ST. NAME SIGN	-	64	0.50	-	
VIDEO SYSTEM	1	150	1.00	150.0	
BATTERY BACKUP	1	25	1.00	25.0	
TOTAL =					439.40

ENERGY COSTS TO: TOTAL = 439.40
CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED



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 MASTER CONTROLLER
- 1 EACH CONTROLLER AND CABINET (COMPLETE)
- 1 EACH SERVICE INSTALLATION

CONSTRUCTION NOTES:

- ① ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ② RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
- ③ THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
- ④ INSTALL NEW POLE MOUNT SERVICE INSTALLATION. INSTALL SERVICE GROUND CABLE IN EXISTING CONDUIT.
- ⑤ INSTALL NEW PTZ CAMERA TO NEW CAMERA MOUNTING ASSEMBLY ON EXISTING SIGNAL MAST ARM.

SCHEDULE OF QUANTITIES		
ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
DRILL EXISTING HANDHOLE	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
CAMERA MOUNTING ASSEMBLY	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	8
ELECTRIC CABLE IN CONDUIT, GROUND NO. 6 1C	FOOT	38
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	184
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	184
ELECTRIC CABLE IN CONDUIT, 4/C # 20, VIDEO	FOOT	184

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

FILE NAME =	USER NAME = FBARISO	DESIGNED - ABR	REVISED -
M:\LCDOT\18984871\Traffic\CAB\Central-Beverly\		DRAWN - FPB / FCP	REVISED -
	PLOT SCALE = NOT TO SCALE	CHECKED - MJT	REVISED -
	PLOT DATE = 5/3/2010	DATE - APRIL 30, 2010	REVISED -

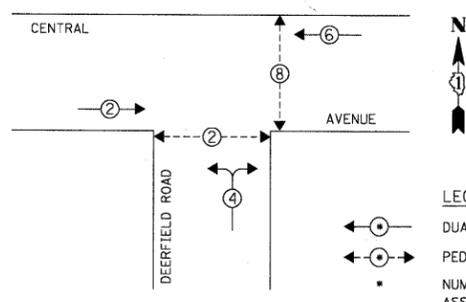
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 CENTRAL AVENUE AND BEVERLY PLACE / FREDERICKSON PLACE
 SCALE: NOT TO SCALE SHEET NO. -- OF -- SHEETS STA. -- TO STA. --

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	36
CONTRACT NO. 63485			ILLINOIS FED. AID PROJECT	

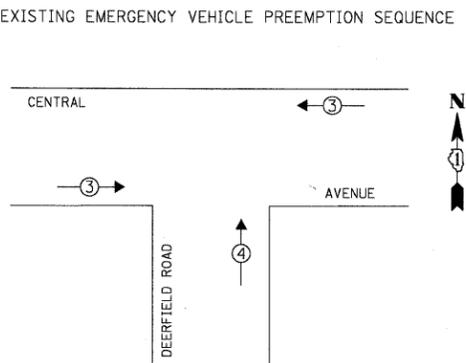
DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 PLAN: _____ CHECKED: _____
 NOTE BOOK: _____ RT. OF WAY CHECKED: _____
 NO.: _____ CAD FILE NAME: _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500
CBE
 DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 PROFILE: _____ CHECKED: _____
 NOTE BOOK: _____ RT. OF WAY CHECKED: _____
 NO.: _____ CAD FILE NAME: _____

CONTROLLER SEQUENCE

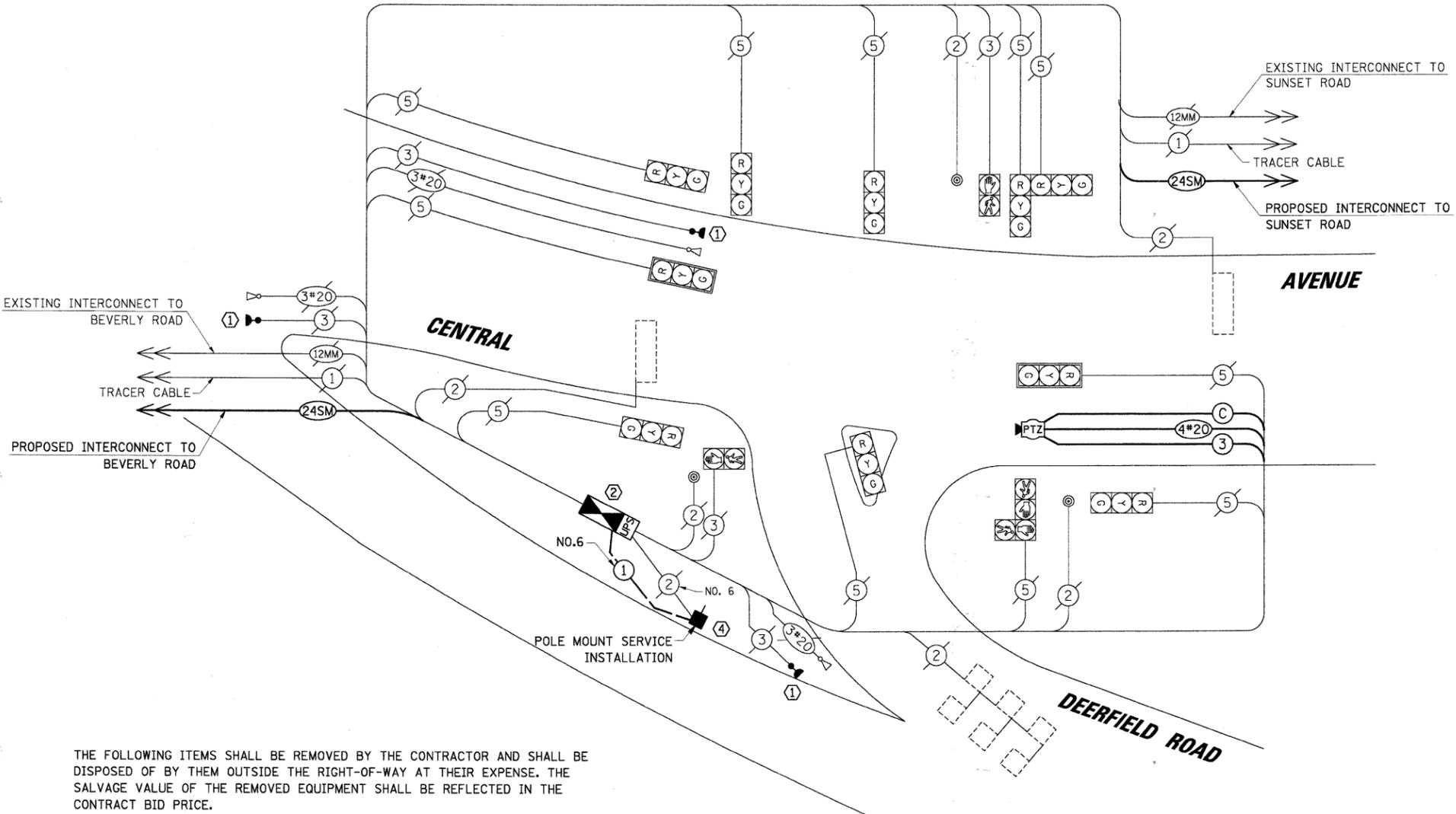


LEGEND
 ← ● → DUAL ENTRY PHASE
 ← ● → PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

EXISTING PHASE DESIGNATION DIAGRAM



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



CABLE PLAN

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)
- 1 EACH SERVICE INSTALLATION

CONSTRUCTION NOTES:

- ① ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ② RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
- ③ THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
- ④ INSTALL NEW POLE MOUNT SERVICE INSTALLATION. INSTALL SERVICE GROUND CABLE IN EXISTING CONDUIT.
- ⑤ INSTALL NEW PTZ CAMERA ON EXISTING COMBINATION MAST ARM.

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	3
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	42
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	195
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	195
ELECTRIC CABLE IN CONDUIT, 4/C # 20, VIDEO	FOOT	195

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	10		10	0.50	50.0
(YELLOW)	10		19	0.10	19.0
(GREEN)	10		11	0.40	44.0
ARROW	-		9	0.10	-
PED. SIGNAL	4		9	1.00	36.0
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	-		250	0.50	-
L.E.D. ST. NAME SIGN	-		64	0.50	-
VIDEO SYSTEM	1		150	1.00	150.0
BATTERY BACKUP	1		25	1.00	25.0

ENERGY COSTS TO: TOTAL = 424.0

CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED

FILE NAME =	USER NAME = FBARISO	DESIGNED - ABR	REVISED -
Na:\CDD\1\298487\Traffic\CAB_Central-Deerfield.dgn		DRAWN - FPB / FCP	REVISED -
		CHECKED - MJT	REVISED -
		DATE - APRIL 30, 2010	REVISED -

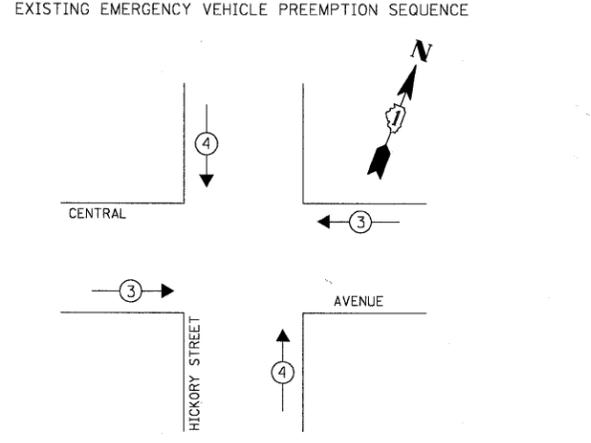
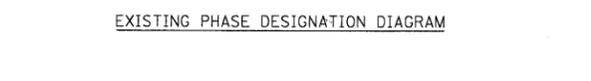
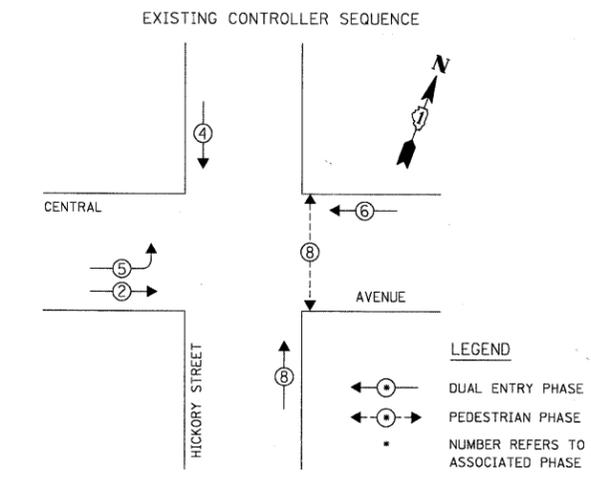
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
 CENTRAL AVENUE AND DEERFIELD ROAD**

SCALE: NOT TO SCALE SHEET NO. -- OF -- SHEETS STA. -- TO STA. --

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	37
CONTRACT NO. 63485			ILLINOIS FED. AID PROJECT	

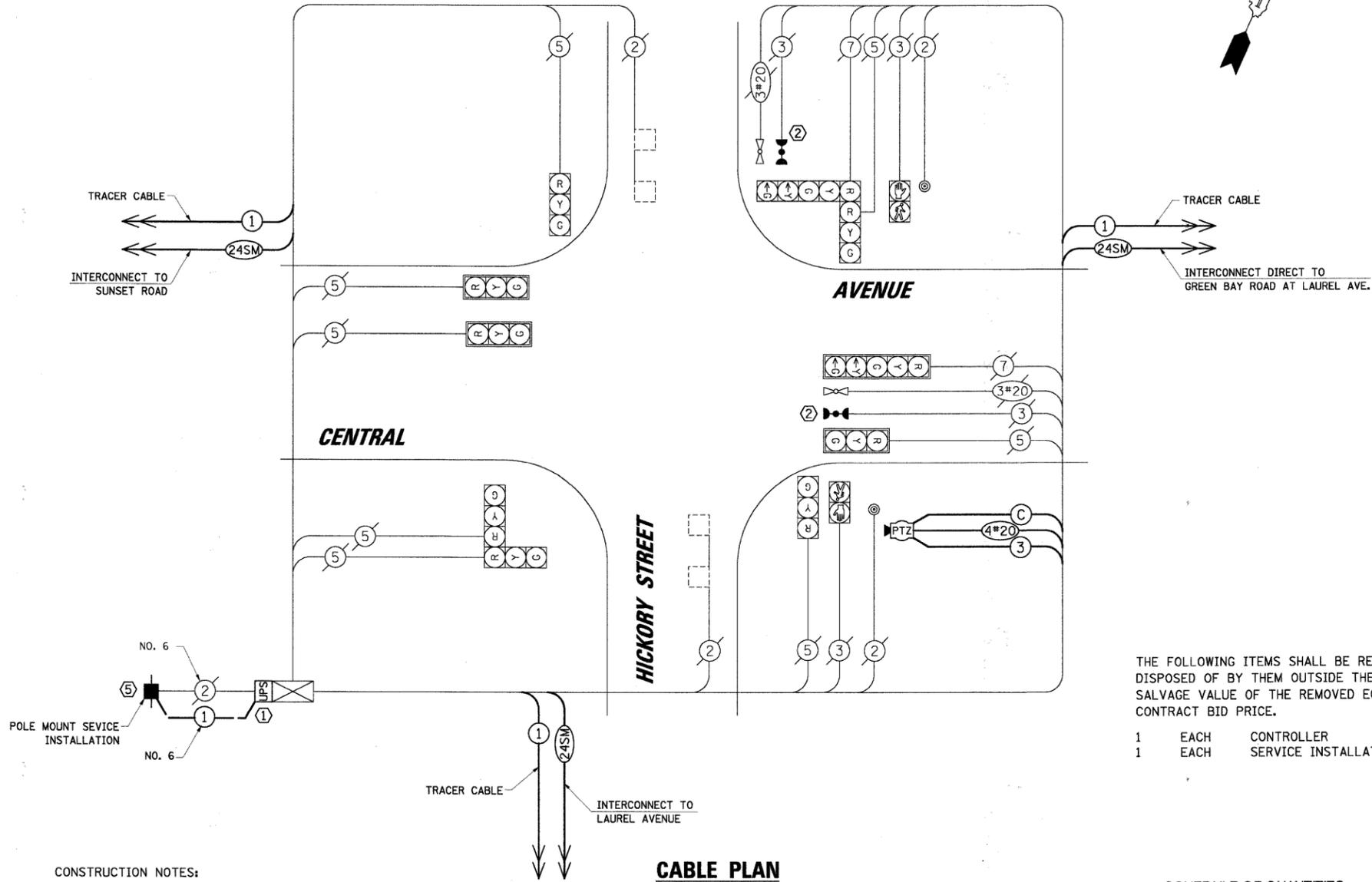
DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____
 PLAN: _____ NOTE BOOK NO. _____
 FILE NAME: _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Hickory Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500
 PROFILE: _____ SURVEYED: _____ PLOTTED: _____
 CHECKED: _____
 FILE NAME: _____



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

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	10		10	0.50	50.0
(YELLOW)	10		19	0.10	19.0
(GREEN)	10		11	0.40	44.0
ARROW	4		9	0.10	3.6
PED. SIGNAL	2		9	1.00	18.0
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	-		250	0.50	-
L.E.D. ST. NAME SIGN	-		64	0.50	-
VIDEO SYSTEM	1		150	1.00	150.0
BATTERY BACKUP	1		25	1.00	25.0

ENERGY COSTS TO: TOTAL = 409.6
CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED



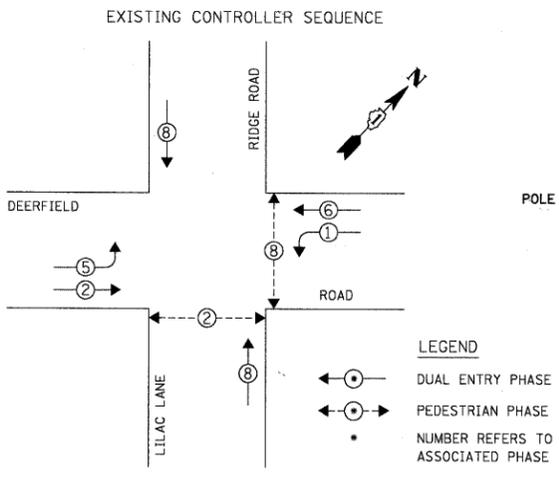
- CONSTRUCTION NOTES:
- INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS)
 - ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
 - POWDER COAT CAMERA MOUNTING ASSEMBLY TO MATCH EXISTING MAST ARM. POWDER COATING SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: CAMERA MOUNTING ASSEMBLY, SPECIAL.
 - THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
 - INSTALL NEW POLE MOUNT SERVICE INSTALLTION. INSTALL SERVICE GROUND CABLE IN EXISTING CONDUIT.
 - INSTALL NEW PTZ CAMERA TO NEW CAMERA MOUNTING ASSEMBLY, SPECIAL ON EXISTING SIGNAL MAST ARM.

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

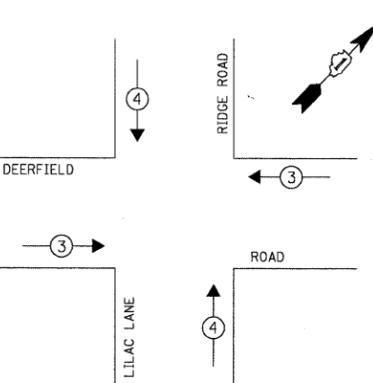
- THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.
- | | | |
|---|------|----------------------|
| 1 | EACH | CONTROLLER |
| 1 | EACH | SERVICE INSTALLATION |

SCHEDULE OF QUANTITIES		
ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	1
DRILL EXISTING HANDHOLE	EACH	3
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
CAMERA MOUNTING ASSEMBLY, SPECIAL	EACH	1
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	110
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	158
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	158
ELECTRIC CABLE IN CONDUIT, 4/C # 20, VIDEO	FOOT	158

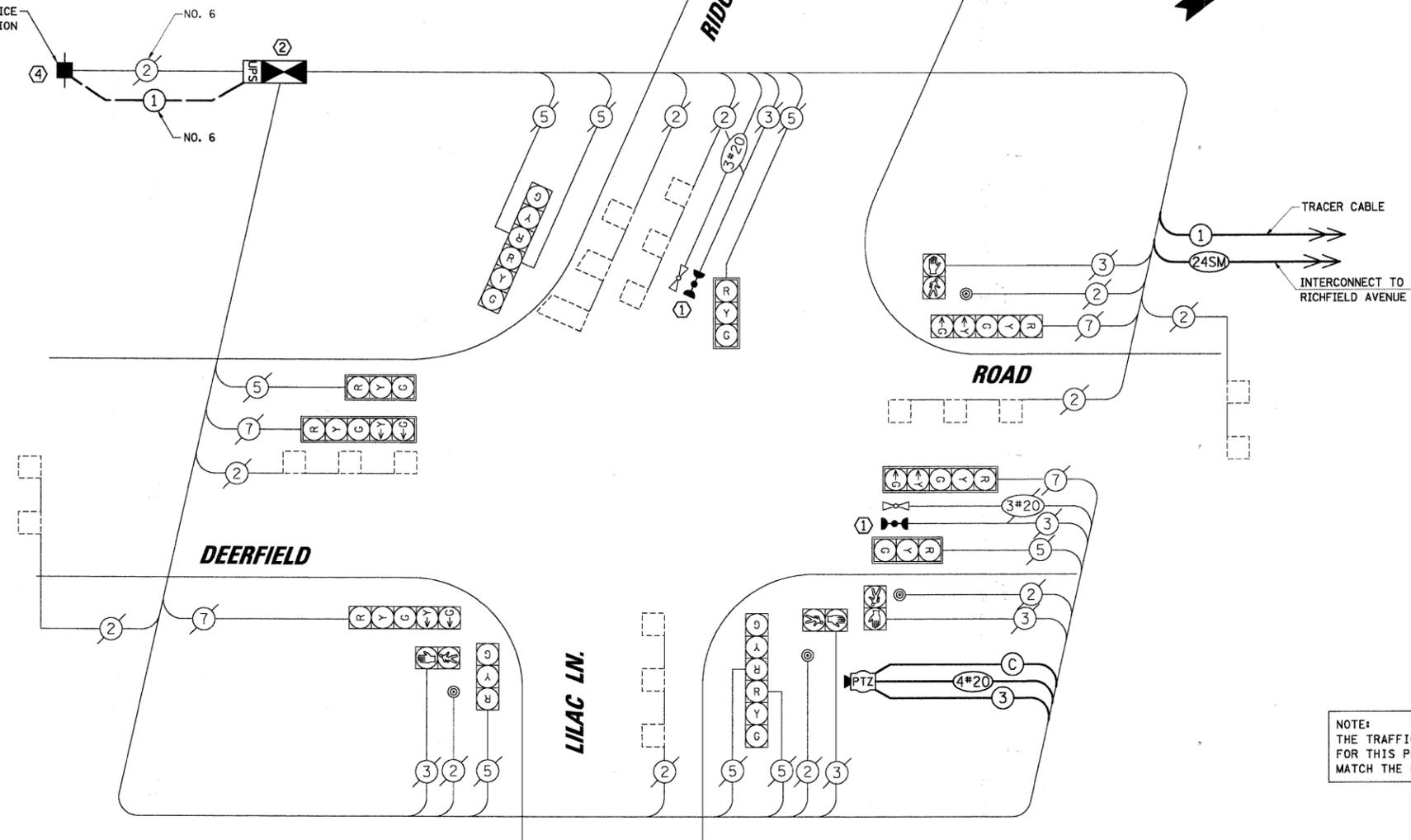
DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 PLAN NO.: _____ NOTE BOOK NO.: _____
 FILE NAME: _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500
 CB
 DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 PLAN NO.: _____ NOTE BOOK NO.: _____
 FILE NAME: _____



LEGEND
 ← ● → DUAL ENTRY PHASE
 ← ● → PEDESTRIAN PHASE
 ● NUMBER REFERS TO ASSOCIATED PHASE



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



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

CABLE PLAN

SCHEDULE OF QUANTITIES

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)
- 1 EACH SERVICE INSTALLATION

CONSTRUCTION NOTES:

- ① ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ② RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
- ③ THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
- ④ INSTALL NEW POLE MOUNT SERVICE INSTALLATION. INSTALL SERVICE GROUND CABLE IN EXISTING CONDUIT.
- ⑤ INSTALL NEW PTZ CAMERA TO EXISTING SIGNAL MAST ARM SHAFT. NO CAMERA MOUNTING ASSEMBLY REQUIRED.

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
DRILL EXISTING HANDHOLE	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	7
ELECTRIC CABLE IN CONDUIT, GROUNDING NO. 6 1C	FOOT	185
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	252
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	252
ELECTRIC CABLE IN CONDUIT, 4/C # 20, VIDEO	FOOT	252

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	11	10	0.50	55.0
(YELLOW)	11	19	0.10	20.9
(GREEN)	11	11	0.40	48.4
ARROW	8	9	0.10	7.2
PED. SIGNAL	4	9	1.00	36.0
CONTROLLER	1	100	1.00	100.0
LUMINAIRE	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	64	0.50	-
VIDEO SYSTEM	1	150	1.00	150.0
BATTERY BACKUP	1	25	1.00	25.0

ENERGY COSTS TO: TOTAL = 442.50
CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED

FILE NAME = Na\CDOT\990487\Traffic\CAB_Deerfield-Ridge.dgn	USER NAME = FBARISO	DESIGNED - ABR	REVISED -
		DRAWN - FPB / FCP	REVISED -
		CHECKED - MJT	REVISED -
		DATE - APRIL 30, 2010	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND DEERFIELD ROAD AND RIDGE ROAD / LILAC ROAD
 SCALE: NOT TO SCALE | SHEET NO. -- OF -- SHEETS | STA. -- TO STA. --

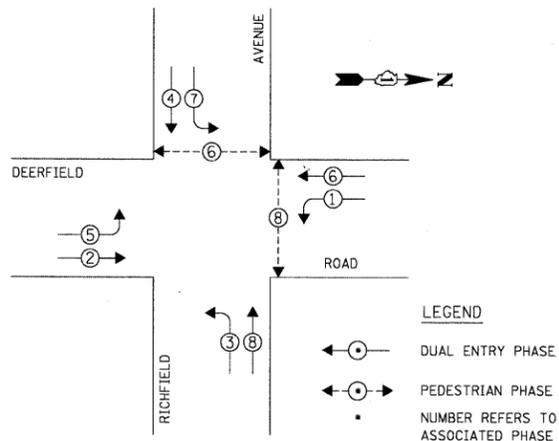
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	40
CONTRACT NO. 63485			ILLINOIS FED. AID PROJECT	

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____ CHECKED: _____
 PLAN: _____ NOTE BOOK: _____
 NO. _____ CAD FILE NAME: _____

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

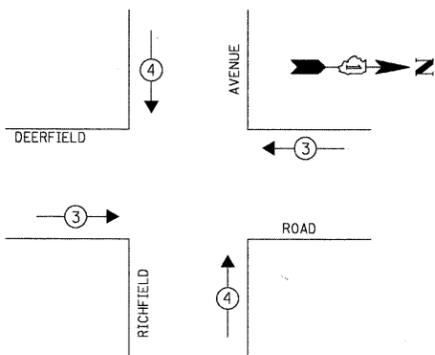
DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____ CHECKED: _____
 PROF. FILE: _____ NOTE BOOK: _____
 NO. _____ STRUCTURE NOTATION: CPWD

EXISTING CONTROLLER SEQUENCE



EXISTING PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



EXISTING EMERGENCY VEHICLE PREEMPTORS

EMERGENCY VEHICLE PREEMPTOR	3	4
MOVEMENT	← →	↑ ↓

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	12		10	0.50	60.0
(YELLOW)	12		19	0.10	22.8
(GREEN)	12		11	0.40	52.8
ARROW	16		9	0.10	14.4
PED. SIGNAL	4		9	1.00	36.0
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	-		250	0.50	-
L.E.D. ST. NAME SIGN	-		64	0.50	-
VIDEO SYSTEM	1		150	1.00	150.0
BATTERY BACKUP	1		25	1.00	25.0

ENERGY COSTS TO: TOTAL = 461.0

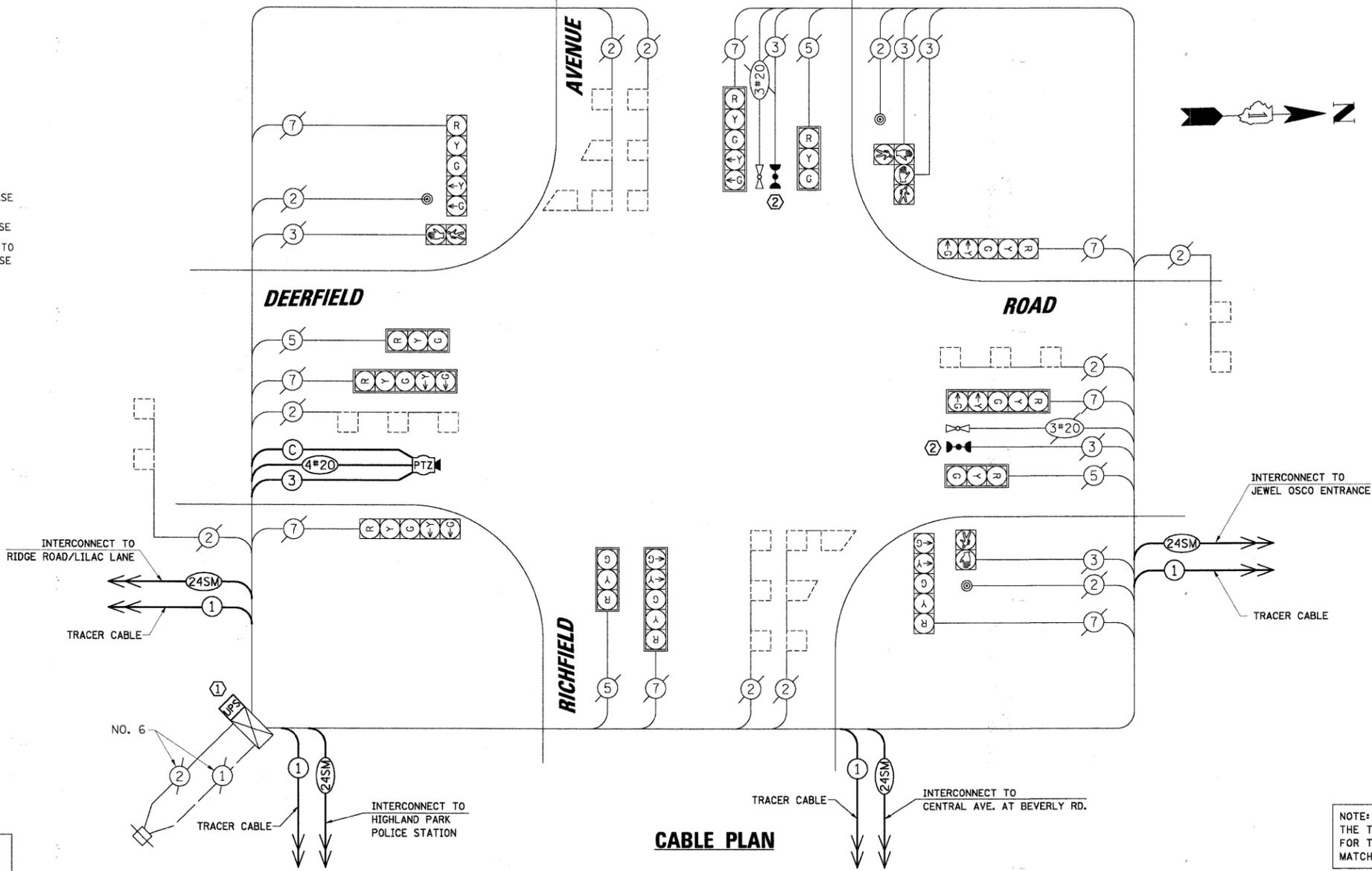
CITY OF HIGHLAND PARK

1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593

ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED

DEERFIELD

ROAD



CABLE PLAN

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

CONSTRUCTION NOTES:

- INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
- ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- POWDER COAT CAMERA MOUNTING ASSEMBLY TO MATCH EXISTING MAST ARM. POWDER COATING SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: CAMERA MOUNTING ASSEMBLY, SPECIAL.
- THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE, SPECIAL.
- INSTALL NEW PTZ CAMERA TO NEW CAMERA MOUNTING ASSEMBLY, SPECIAL ON EXISTING SIGNAL MAST ARM.

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

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER IN EXISTING CABINET, SPECIAL	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
CAMERA MOUNTING ASSEMBLY, SPECIAL	EACH	1
DRILL EXISTING HANDHOLE	EACH	3
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	80
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	80
ELECTRIC CABLE IN CONDUIT, 4/C # 20, VIDEO	FOOT	80

FILE NAME = USER NAME = FBARISSO
 N:\LCD01\2984871\Traffic\CAB_Deerfield-Richfield.dgn
 PLOT SCALE = NOT TO SCALE
 PLOT DATE = 5/3/2010

DESIGNED - ABR
 DRAWN - FPB / FCP
 CHECKED - MJT
 DATE - APRIL 30, 2010

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE DEERFIELD ROAD AND RICHFIELD AVENUE
 SCALE: NOT TO SCALE SHEET NO. -- OF -- SHEETS STA. -- TO STA. --

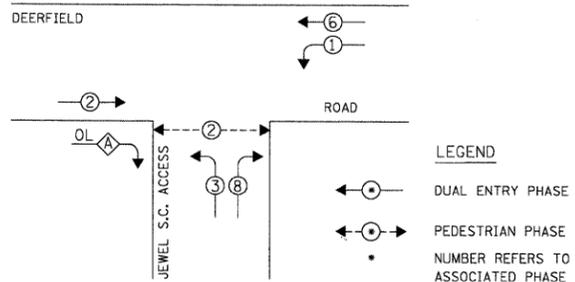
F.A.P. SECTION COUNTY TOTAL SHEETS SHEET NO.
 RTE. 06-00924-00-TL LAKE 76 41
 CONTRACT NO. 63485
 ILLINOIS FED. AID PROJECT

DATE: _____ BY: _____
 SURVEYED: _____
 PLOTTED: _____
 CHECKED: _____
 RT. OF WAY CHECKED: _____
 NOTE BOOK NO.: _____
 FILE NAME: _____

DATE: _____ BY: _____
 SURVEYED: _____
 PLOTTED: _____
 CHECKED: _____
 RT. OF WAY CHECKED: _____
 NOTE BOOK NO.: _____
 FILE NAME: _____

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

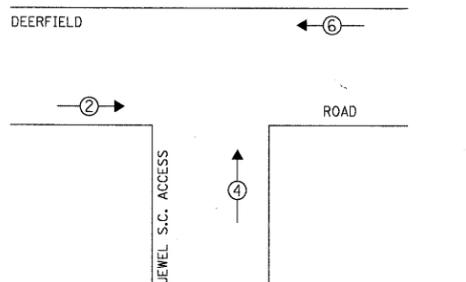
EXISTING CONTROLLER SEQUENCE



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

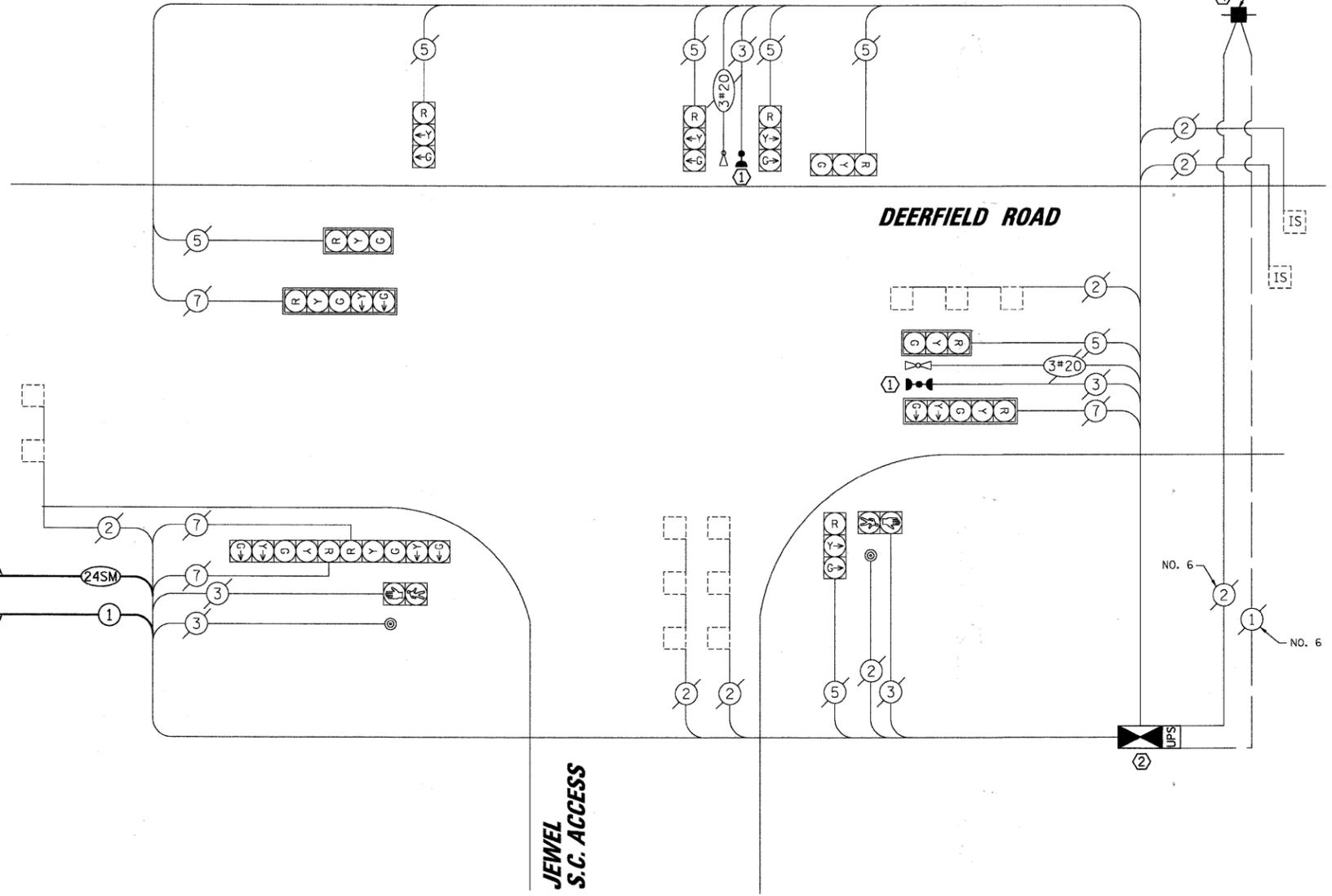
EXISTING PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE



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

INTERCONNECT TO RICHFIELD AVENUE
 24SM
 TRACER CABLE



CABLE PLAN

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
INDUCTIVE LOOP DETECTOR	EACH	6

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)
- 1 EACH SERVICE INSTALLATION

CONSTRUCTION NOTES:

- ① ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
- ② RELOCATE EXISTING LIGHT DETECTOR AMPLIFIER TO NEW CONTROLLER CABINET.
- ③ THE TRAFFIC SIGNAL CONTROLLER SHALL BE NTCIP COMPATIBLE.
- ④ INSTALL NEW POLE MOUNT SERVICE INSTALLATION.

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

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED X % OPERATION	TOTAL WATTAGE
SIGNAL (RED)	11	10	0.50	55.0
(YELLOW)	11	19	0.10	20.9
(GREEN)	11	11	0.40	48.4
ARROW	8	9	0.10	7.2
PED. SIGNAL	2	9	1.00	18.0
CONTROLLER	1	100	1.00	100.0
LUMINAIRE	-	250	0.50	-
L.E.D. ST. NAME SIGN	-	64	0.50	-
VIDEO SYSTEM	-	150	1.00	-
BATTERY BACKUP	1	25	1.00	25.0

ENERGY COSTS TO: TOTAL = 274.5

CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED

FILE NAME =	USER NAME = FBARI50	DESIGNED - ABR	REVISED -
N:\L\CDOT\892487\Traffic\CAB_Deerfield-Jewel.dgn		DRAWN - FPB / FCP	REVISED -
		CHECKED - MJT	REVISED -
		DATE - APRIL 30, 2010	REVISED -

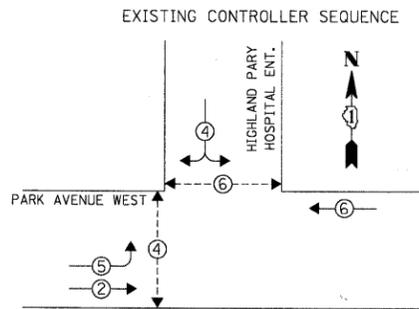
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TEMPORARY CABLE PLAN, TEMPORARY PHASE DESIGNATION DIAGRAM AND TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE
 DEERFIELD ROAD AND JEWEL S.C. ACCESS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	42
CONTRACT NO. 63485			ILLINOIS FED. AID PROJECT	

SCALE: NOT TO SCALE SHEET NO. -- OF -- SHEETS STA. -- TO STA. --

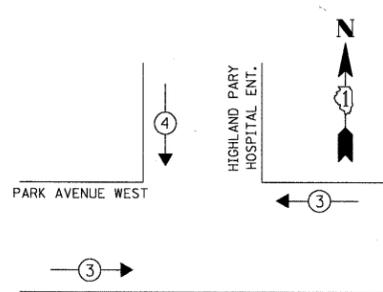
DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 NOTE BOOK: _____ CHECKED: _____
 NO.: _____ E.M. NOTED: _____
 STRUCTURE: _____ NOTATYS: _____
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 Rosemont, Illinois 60018
 (847) 823-0500



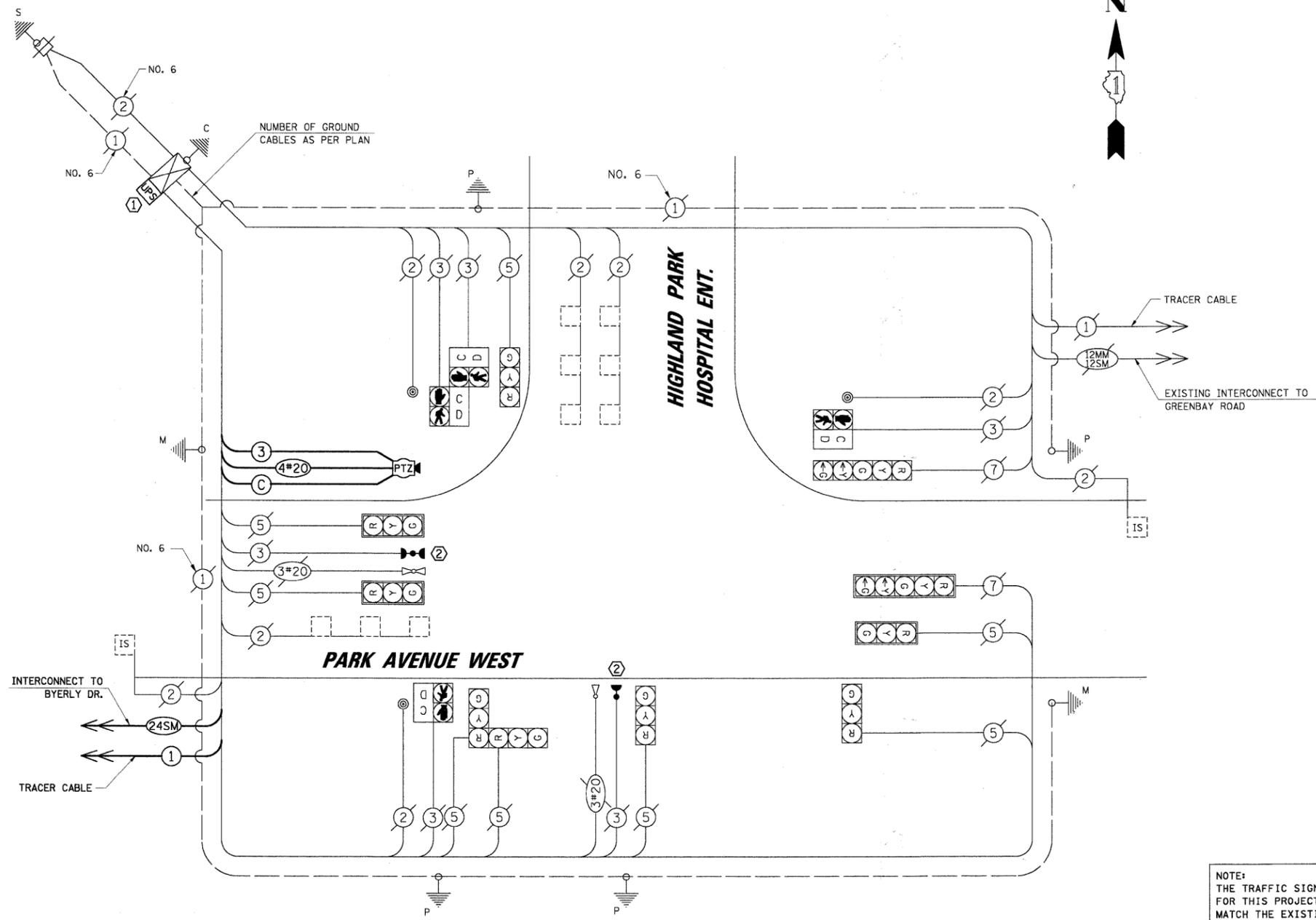
LEGEND
 ○ → ○ DUAL ENTRY PHASE
 ○ → ○ PEDESTRIAN PHASE
 * NUMBER REFERS TO ASSOCIATED PHASE

EXISTING PHASE DESIGNATION DIAGRAM

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



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



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

CABLE PLAN

- CONSTRUCTION NOTES:
- INSTALL UNINTERRUPTIBLE POWER SUPPLY (UPS).
 - ALL EXISTING CONFIRMATION BEACONS SHALL BE RETROFITTED WITH LED INDICATIONS. THIS WORK SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: UNINTERRUPTIBLE POWER SUPPLY.
 - PAINT CAMERA MOUNTING ASSEMBLY TO MATCH EXISTING MAST ARM. PAINTING SHALL BE INCLUDED IN THE COST FOR THE PAY ITEM: CAMERA MOUNTING ASSEMBLY, SPECIAL.
 - THE EXISTING CONTROLLER SOFTWARE SHALL BE UPGRADED TO NTCIP.
 - INSTALL NEW PTZ CAMERA TO NEW MOUNTING ASSEMBLY, SPECIAL ON EXISTING SIGNAL MAST ARM.

SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
UNINTERRUPTIBLE POWER SUPPLY	EACH	1
REMOTE-CONTROLLED VIDEO SYSTEM	EACH	1
LAYER II (DATALINK) SWITCH	EACH	1
VIDEO ENCODER	EACH	1
UPGRADE EXISTING CONTROLLER TO NTCIP (SPECIAL)	EACH	1
CAMERA MOUNTING ASSEMBLY, SPECIAL	EACH	1
TERMINATE FIBER IN CABINET	EACH	6
SPLICE FIBER IN CABINET	EACH	6
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	72
ELECTRIC CABLE IN CONDUIT, COAXIAL	FOOT	72
ELECTRIC CABLE IN CONDUIT, 4/C # 20, VIDEO	FOOT	72

L.C.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE INCAND.	LED	% OPERATION	
SIGNAL (RED)	10		10	0.50	50.0
(YELLOW)	10		19	0.10	19.0
(GREEN)	10		11	0.40	44.0
ARROW	4		9	0.10	3.6
PED. SIGNAL	4		9	1.00	36.0
CONTROLLER	1		100	1.00	100.0
LUMINAIRE	-		250	0.50	-
L.E.D. ST. NAME SIGN	-		64	0.50	-
VIDEO SYSTEM	1		150	1.00	150.0
BATTERY BACKUP	1		25	1.00	25.0

ENERGY COSTS TO: TOTAL = 427.6
CITY OF HIGHLAND PARK
 1707 ST. JOHNS AVENUE
 HIGHLAND PARK, IL 60035-3593
 ENERGY SUPPLY: CONTACT: JEAN WILL
 PHONE: (847) 816-5459
 COMPANY: COMED

FILE NAME =	USER NAME = FBARTSD	DESIGNED - ABR	REVISED -
Na:\CDDT\0924077\Traffic\CAB_ParkAve-Hospital		DRAWN - FPB / FCP	REVISED -
		CHECKED - MJT	REVISED -
		DATE - APRIL 30, 2010	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM
 AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
 PARK AVENUE WEST AND HIGHLAND PARK HOSPITAL ENT.**

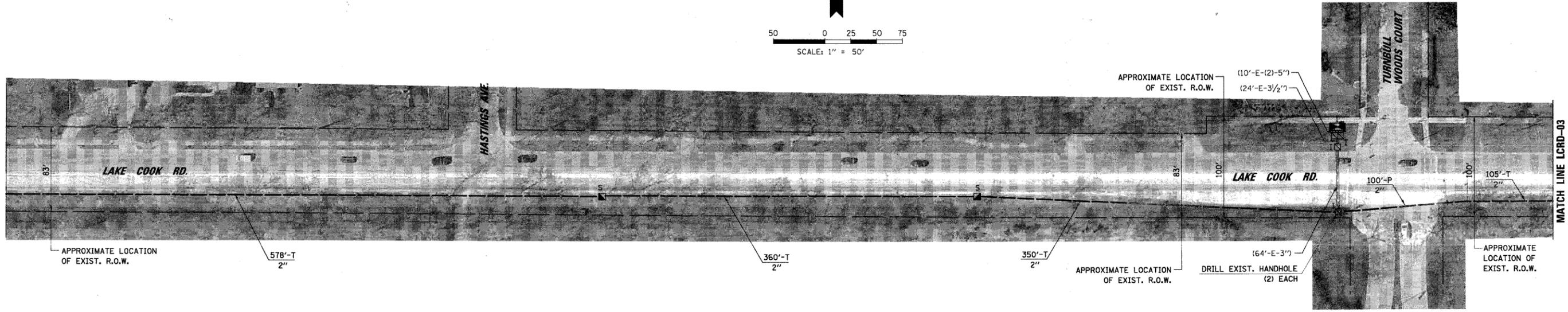
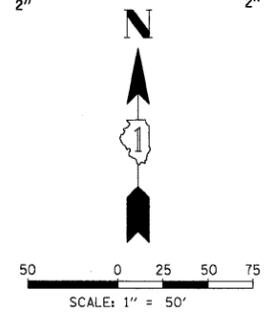
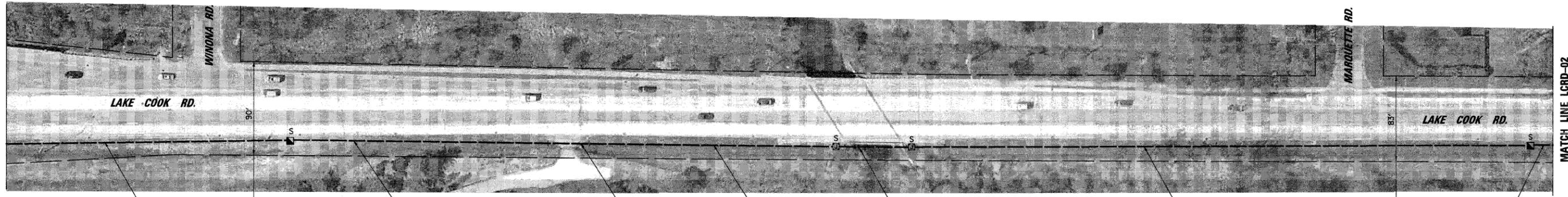
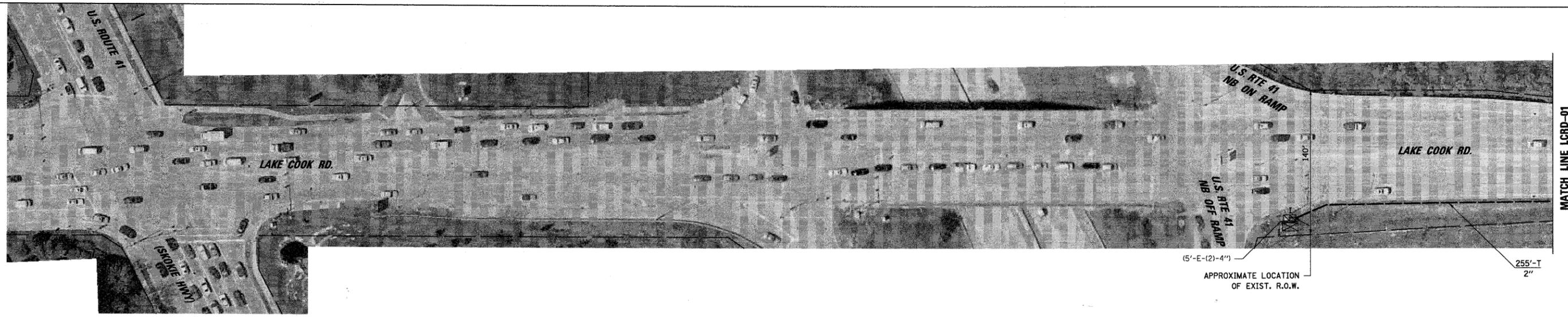
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	43
CONTRACT NO. 63485			ILLINOIS FED. AID PROJECT	

DATE	
BY	
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
FIELD FILE NAME	
NO.	

PLAN
 NO. _____

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 Rosemont, Illinois 60018
 (847) 823-0500

DATE	
BY	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS OK'D	
NO.	



FILE NAME =	USER NAME = FB4R150	DESIGNED - ABR	REVISED -
N:\LCD01\090407\Treff\0\INT-01\LakeCook.dgn		DRAWN - FPB / FCP	REVISED -
		CHECKED - MJT	REVISED -
		DATE - APRIL 30, 2010	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**INTERCONNECT PLAN
 LAKE COOK ROAD
 FROM U.S. ROUTE 41 (SKOKIE HWY) NB OFF-RAMP TO SHERIDAN ROAD**

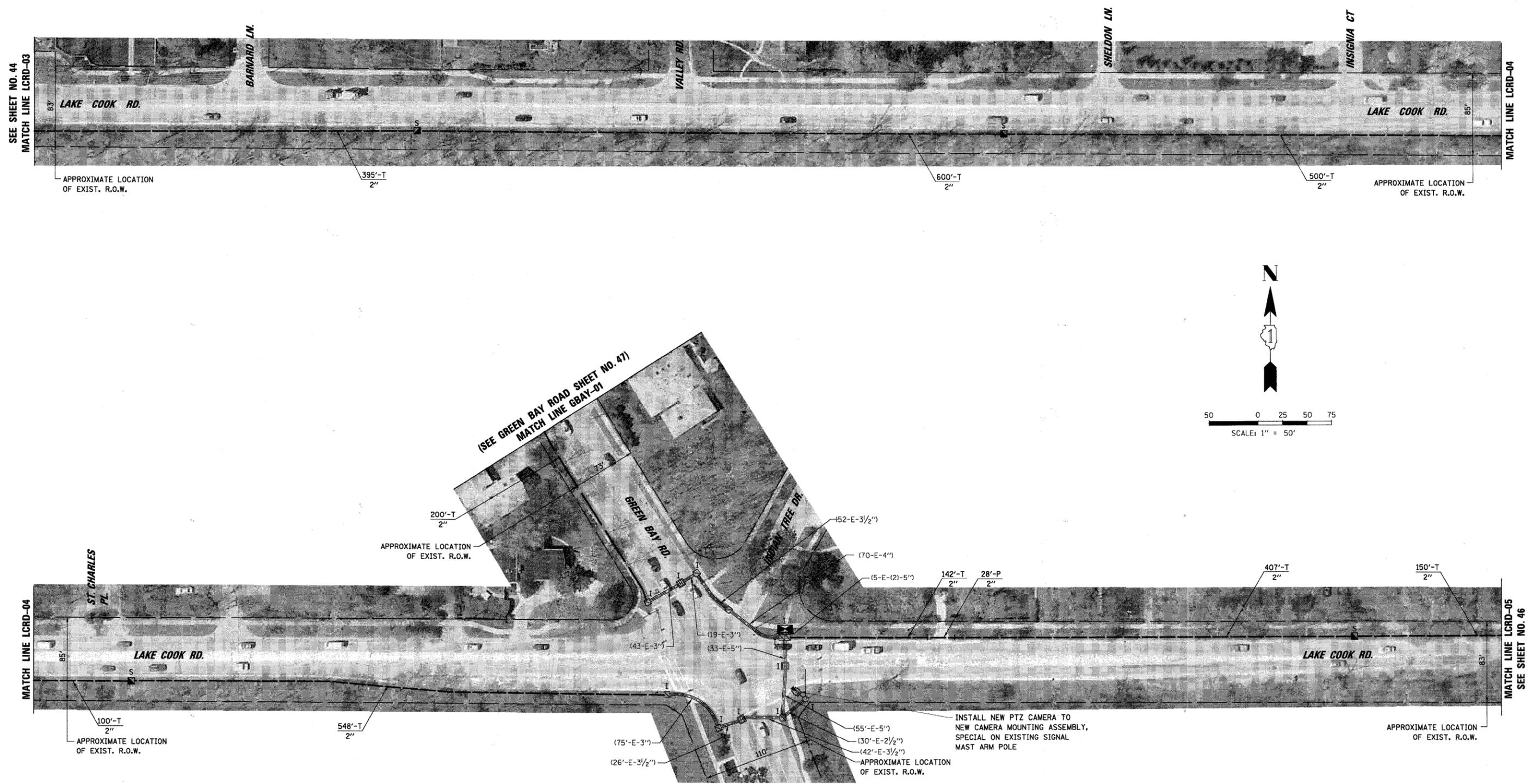
SCALE: 1" = 50' SHEET NO. 1 OF 3 SHEETS STA. -- TO STA. --

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	06-00924-00-TL	LAKE	76	44
				CONTRACT NO. 63485
				ILLINOIS FED. AID PROJECT

DATE	BY
SURVEYED	PLANNED
PLOTTED	NOTED
BY	BY
BT	BT
OF WAY	OF WAY
CHECKED	CHECKED
FILE NAME	FILE NAME

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 Rosemont, Illinois 60018
 (847) 823-0500

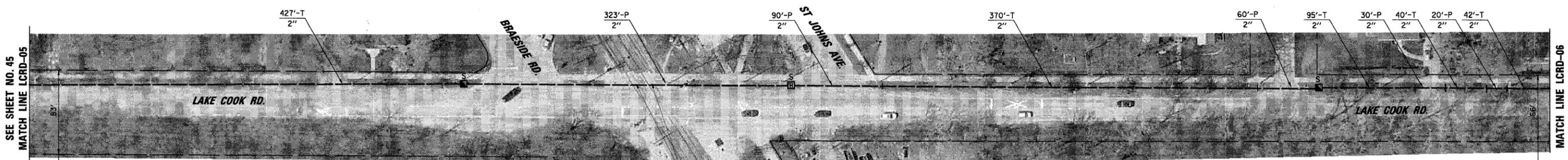
DATE	BY
SURVEYED	PLANNED
PLOTTED	NOTED
BY	BY
BT	BT
OF WAY	OF WAY
CHECKED	CHECKED
FILE NAME	FILE NAME



FILE NAME = N:\L\001\290487\Traffic\INT-02.LakeCook.dgn	USER NAME = FBARISO	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN LAKE COOK ROAD FROM U.S. ROUTE 41 (SKOKIE HWY) NB OFF-RAMP TO SHERIDAN ROAD			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = 50'	DATE = APRIL 30, 2010	DRAWN - FPB / FCP	REVISED -		SCALE: 1" = 50'	SHEET NO. 2 OF 3 SHEETS	STA. --	TO STA. --	06-00924-00-TL	LAKE	76	45	
		CHECKED - MJT	REVISED -										
		DATE = APRIL 30, 2010	REVISED -										
								CONTRACT NO. 63485					
ILLINOIS FED. AID PROJECT													

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

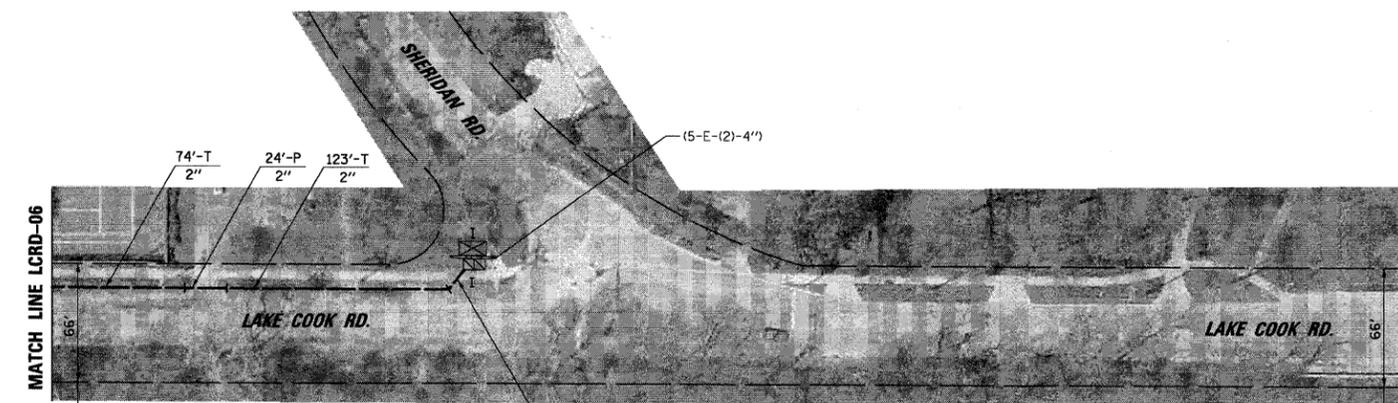
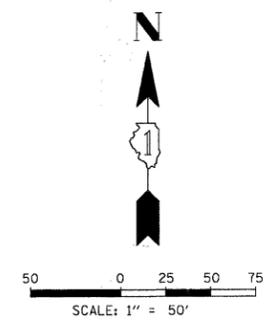
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 Rosemont, Illinois 60018
 (847) 823-0500



APPROXIMATE LOCATION OF EXIST. R.O.W.

2" GALVANIZED STEEL CONDUIT SHALL BE INSTALLED AT A DEPTH OF 15 FT. FROM TOP OF CONDUIT TO TOP OF TIE OF THE MAIN TRACK, PER UNION PACIFIC R.R.

APPROXIMATE LOCATION OF EXIST. R.O.W.



APPROXIMATE LOCATION OF EXIST. R.O.W.

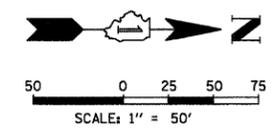
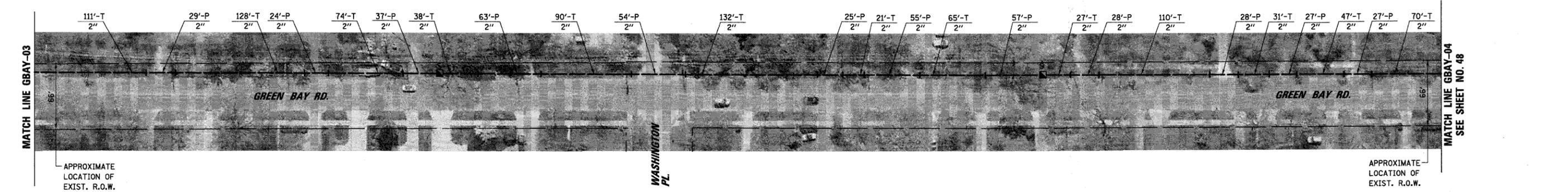
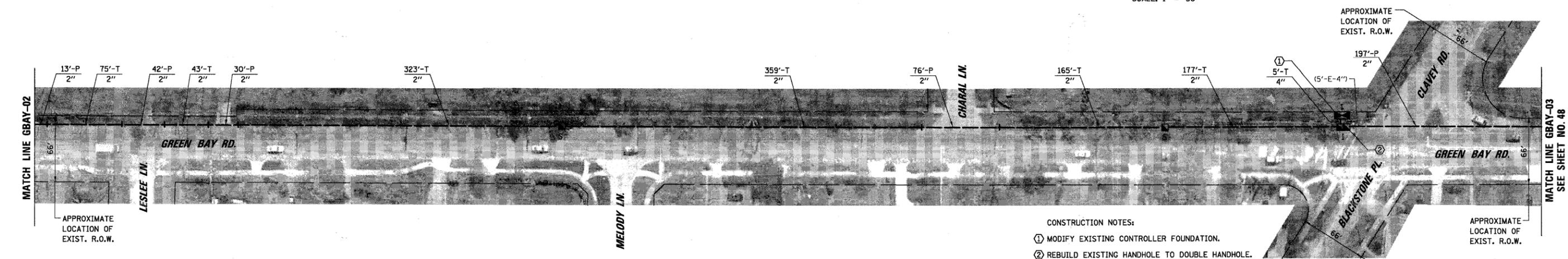
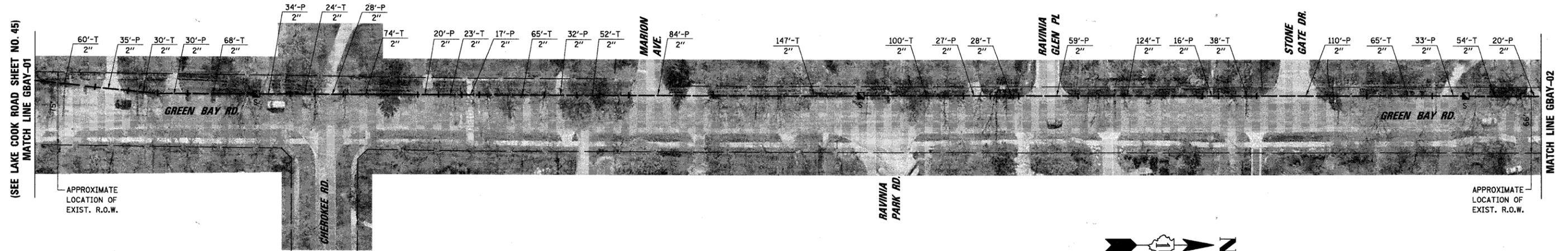
APPROXIMATE LOCATION OF EXIST. R.O.W.

FILE NAME = N:\LCD01\898487\Traffic\INT-03.LakeCook.dgn	USER NAME = FBARISO	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN LAKE COOK ROAD			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN - FPB / FCP	REVISED -		FROM U.S. ROUTE 41 (SKOKIE HWY) NB OFF-RAMP TO SHERIDAN ROAD				06-00924-00-TL	LAKE	76	46	
		CHECKED - MJT	REVISED -		SCALE: 1" = 50' SHEET NO. 3 OF 3 SHEETS STA. -- TO STA. --								CONTRACT NO. 63485
		DATE - APRIL 30, 2010	REVISED -										ILLINOIS FED. AID PROJECT

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ BY: _____
 NOTE BOOK NO. _____
 PLAN NO. _____
 CAD FILE NAME: _____

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 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

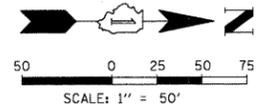
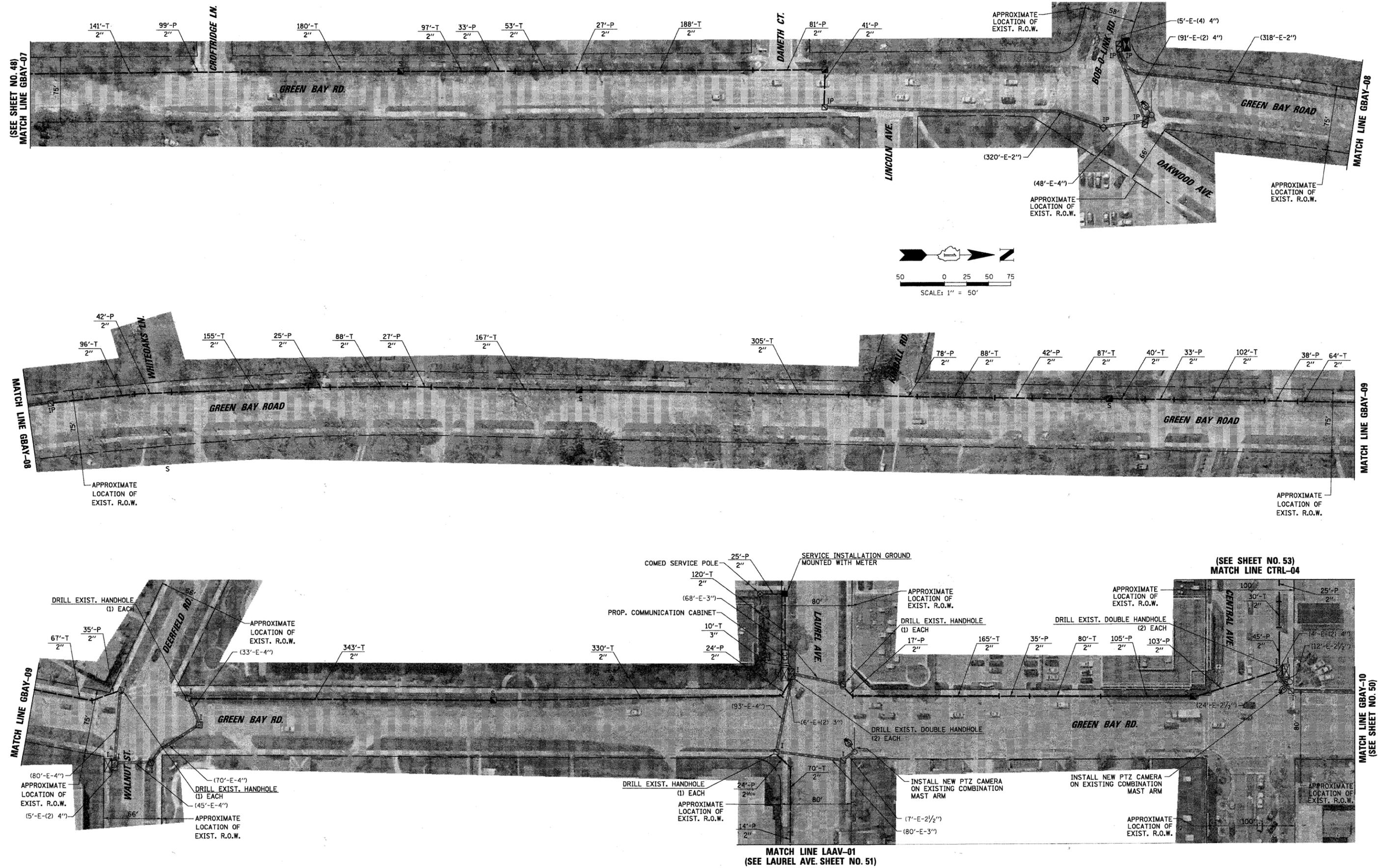
DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ BY: _____
 NOTE BOOK NO. _____
 PLAN NO. _____
 CAD FILE NAME: _____



- CONSTRUCTION NOTES:
- ① MODIFY EXISTING CONTROLLER FOUNDATION.
 - ② REBUILD EXISTING HANDHOLE TO DOUBLE HANDHOLE.

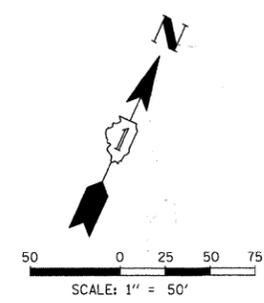
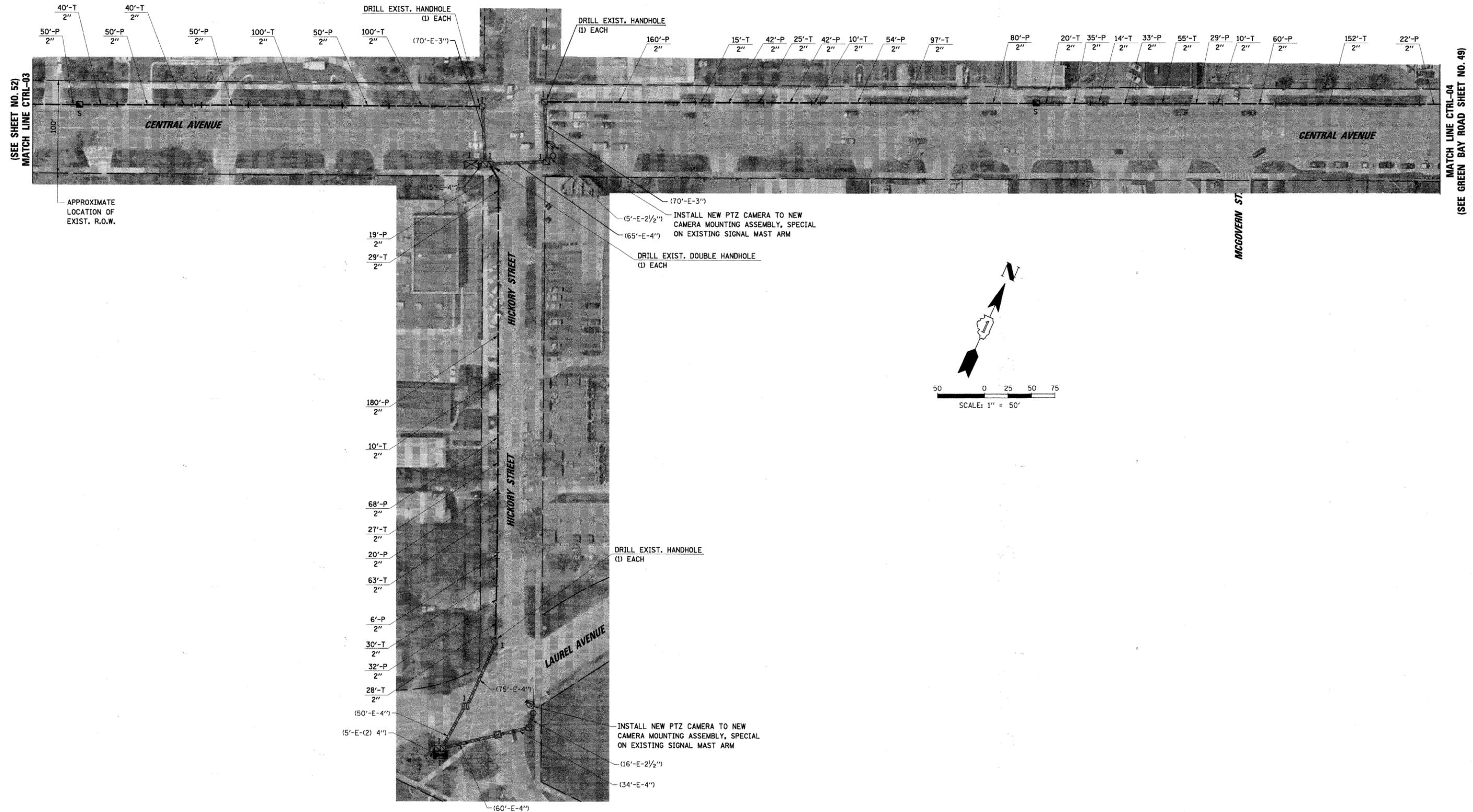
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		DRAWN - FPB / FCP	REVISED -		SCALE: 1" = 50'	SHEET NO. 1 OF 4 SHEETS	STA. --	TO STA. --	CONTRACT NO. 63485		ILLINOIS FED. AID PROJECT
		CHECKED - MJT	REVISED -								
		DATE - APRIL 30, 2010	REVISED -								

DATE: _____ BY: _____
 SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ RT. OF WAY CHECKED: _____
 NOTE BOOK NO. _____ CAD FILE NAME: _____
 PLAN NO. _____
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500
 PROFILE SURVEYED: _____ PLOTTED: _____
 CHECKED: _____ B.M. NOTED: _____
 STRUCTURE NOTATIONS: CHFD



FILE NAME = N:\C00T\092407\Traffic\INT-26.GreenBay.dgn	USER NAME = FBARISD	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN GREEN BAY ROAD FROM LAKE COOK ROAD TO VINE AVENUE		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = 50'	PLOT DATE = 5/3/2010	DRAWN - FPB / FCP	REVISED -		SCALE: 1" = 50'	SHEET NO. 3 OF 4 SHEETS	STA. --	TO STA. --	06-00924-00-TL	LAKE	76	49
CHECKED - MJT	DATE - APRIL 30, 2010	REVISOR -	REVISED -						CONTRACT NO. 63485			
					ILLINOIS FED. AID PROJECT							

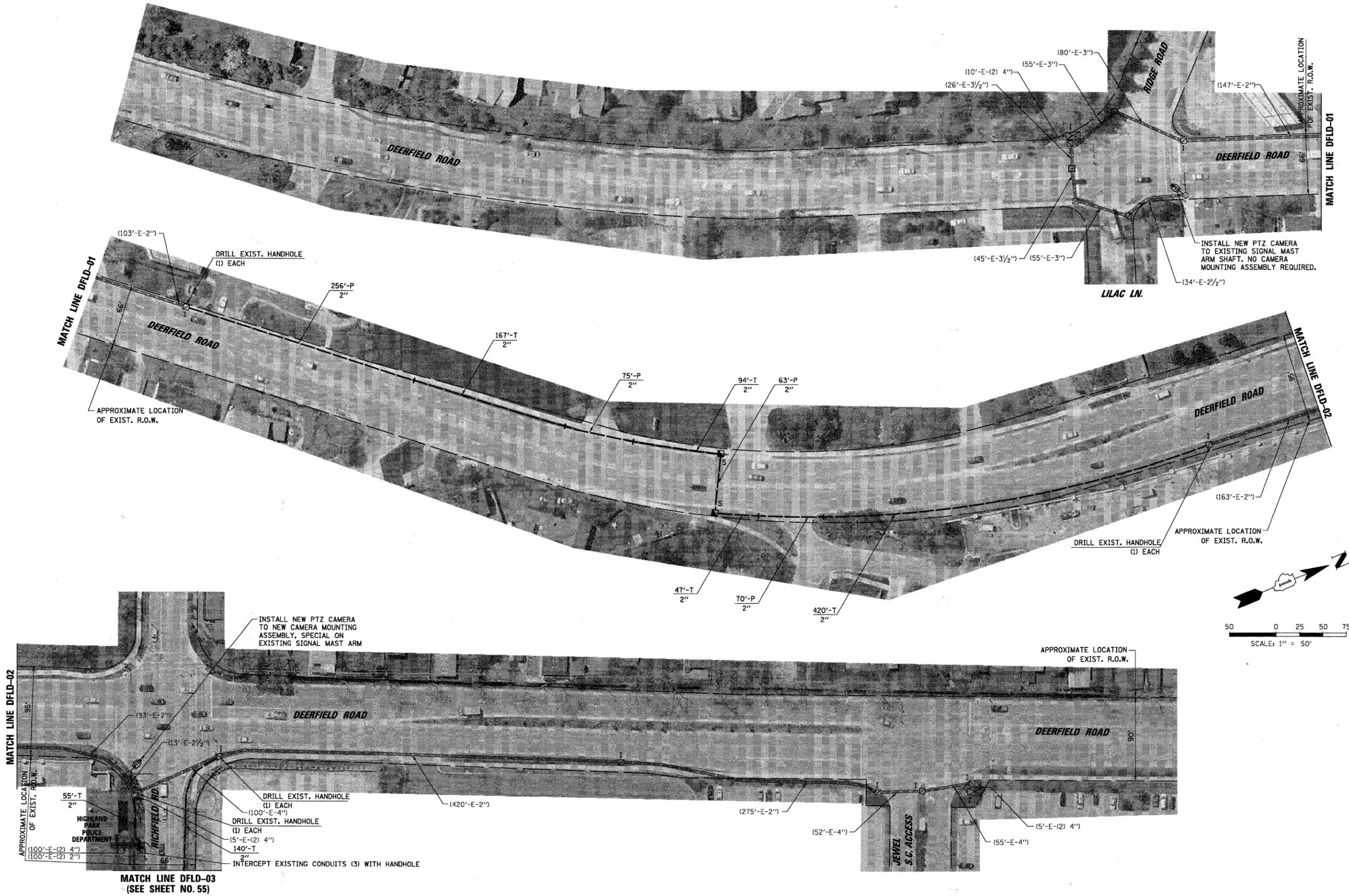
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 PLAN SURVEYED PLOTTED CHECKED BY DATE
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CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500



FILE NAME = N:\LDC01\2904077\Traffic\INT-1B-Central.dgn	USER NAME = FBARISO	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN CENTRAL AVENUE - FROM U.S. ROUTE 41 (SKOKIE HWY) NB OFF-RAMP EAST CENTRAL AVENUE TO GREEN BAY ROAD		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = 50'	PLOT DATE = 5/3/2010	DRAWN - FPB / FCP	REVISED -		SCALE: 1" = 50'	SHEET NO. 2 OF 2 SHEETS	STA. --	TO STA. --	06-00924-00-TL	LAKE	76	53
CHECKED - MJT	DATE - APRIL 30, 2010	REVISIONS	REVISED -						CONTRACT NO. 63485		ILLINOIS FED. AID PROJECT	

SURVEYED BY: _____ DATE: _____
 PLOTTED BY: _____
 CHECKED BY: _____
 FILE NAME: _____
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 NOTE BOOK NO.: _____
 SURVEYED BY: _____ DATE: _____
 PLOTTED BY: _____
 CHECKED BY: _____
 FILE NAME: _____
 PROFILE NO.: _____
 NOTE BOOK NO.: _____
 STRUCTURE NOTATION: _____

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 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0800

MATCH LINE DFLD-02

MATCH LINE DFLD-03
(SEE SHEET NO. 55)

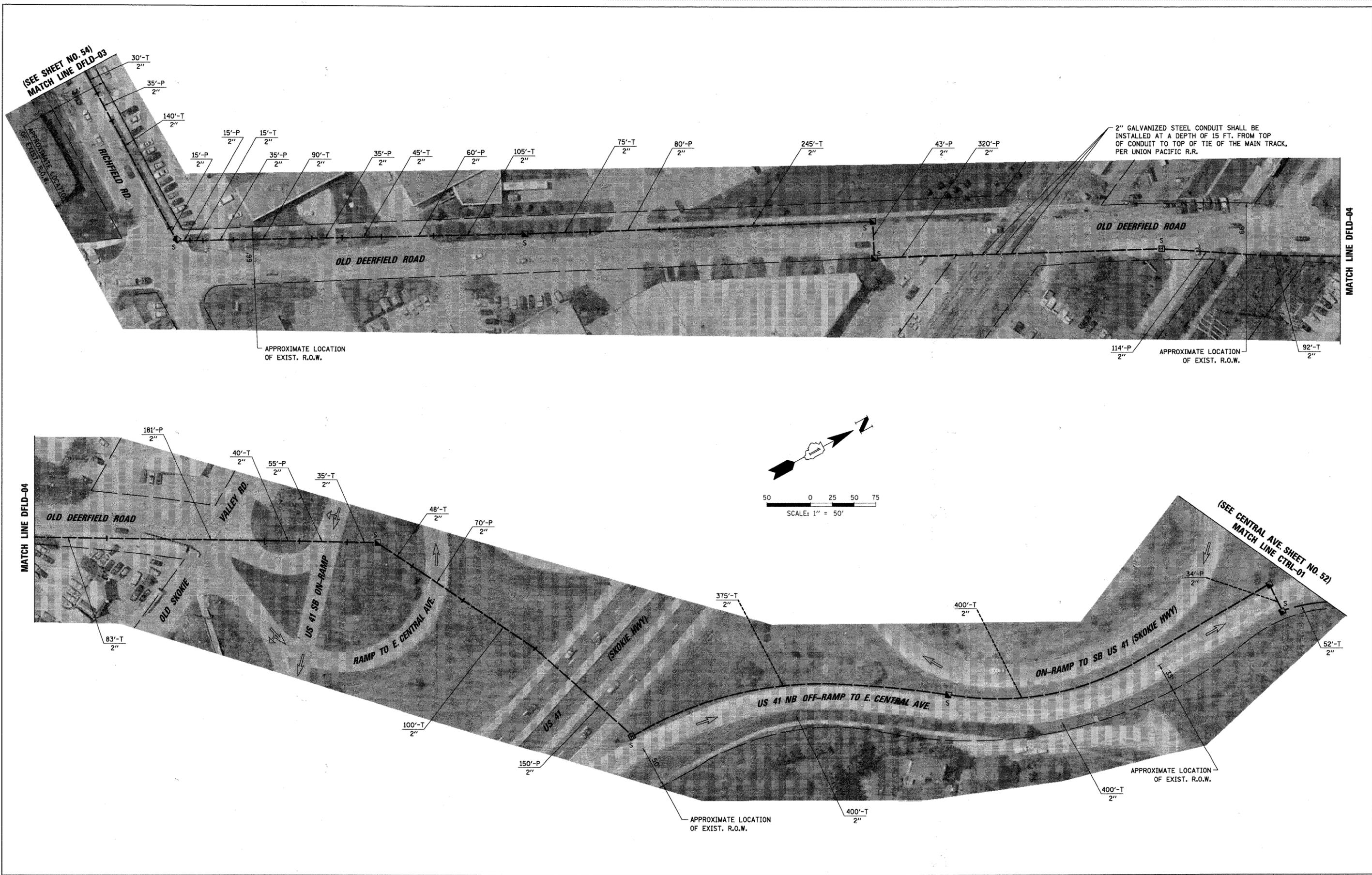
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PLOT SCALE = 50'	CHECKED - MJT	DATE - APRIL 30, 2010	REVISED -		SCALE: 1" = 50'	SHEET NO. 1 OF 1 SHEETS	STA. --	TO STA. --	06-00924-00-TL	LAKE	76	54
PLOT DATE = 5/3/2010	DATE - APRIL 30, 2010	REVISED -	REVISED -		CONTRACT NO. 63485		ILLINOIS FED. AID PROJECT					

PROFILE SURVEYED GRADES CHECKED *
 NOTE BOOK B.M. NOTED
 NO. STRUCTURE NOTATIONS CTRD

PLAN SURVEYED ALIGNMENT CHECKED *
 NOTE BOOK RT. OF WAY CHECKED
 NO. C&G FILE NAME

BY DATE
 BY DATE

CHRISTOPHER B. BURKE ENGINEERING LTD.
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 Rosemont, Illinois 60018
 (847) 823-0500

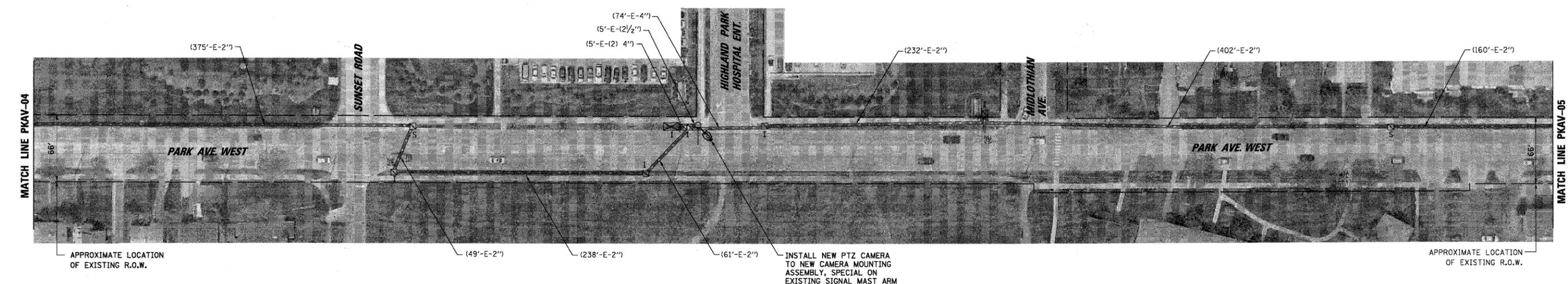
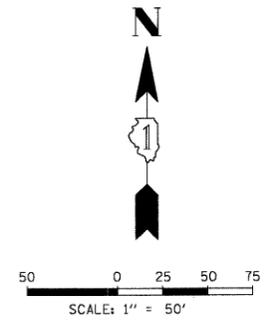
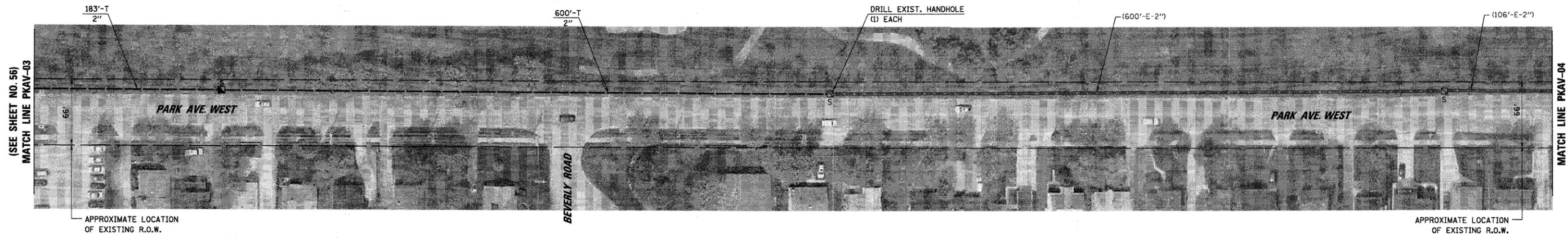


FILE NAME = N:\LCD07\090407\Traffic\INT-12_Deerfield.dgn	USER NAME = FBARISSO	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN OLD DEERFIELD ROAD FROM RICHFIELD ROAD TO U.S. ROUTE 41 NB OFF-RAMP TO E. CENTRAL AVENUE				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 50'	DRAWN - FPB / FCP	REVISED -		SCALE: 1" = 50'	SHEET NO. 1 OF 1 SHEETS	STA. --	TO STA. --	06-00924-00-TL	LAKE	76	55		
	PLOT DATE = 5/3/2010	CHECKED - MJT	REVISED -											
		DATE - APRIL 30, 2010	REVISED -											CONTRACT NO. 63485
												ILLINOIS FED. AID PROJECT		

DATE _____
 BY _____
 SURVEYED _____
 ALIGNED _____
 RT. OF WAY CHECKED _____
 PLAN NO. _____
 NOTE BOOK NO. _____
 DATE FILED _____

CHRISTOPHER B. BURKE ENGINEERING LTD.
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 Rosemont, Illinois 60018
 (847) 823-0500

DATE _____
 BY _____
 SURVEYED _____
 PROPOSED CHECKED _____
 B.M. NOTED _____
 PROFILE NO. _____
 STRUCTURE NOTATION CH'KD _____

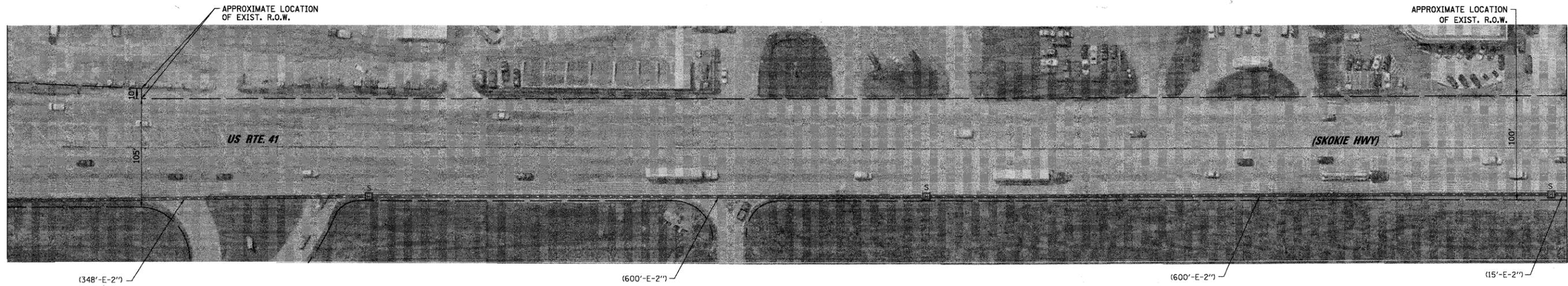
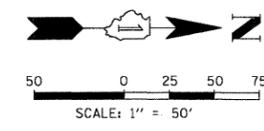
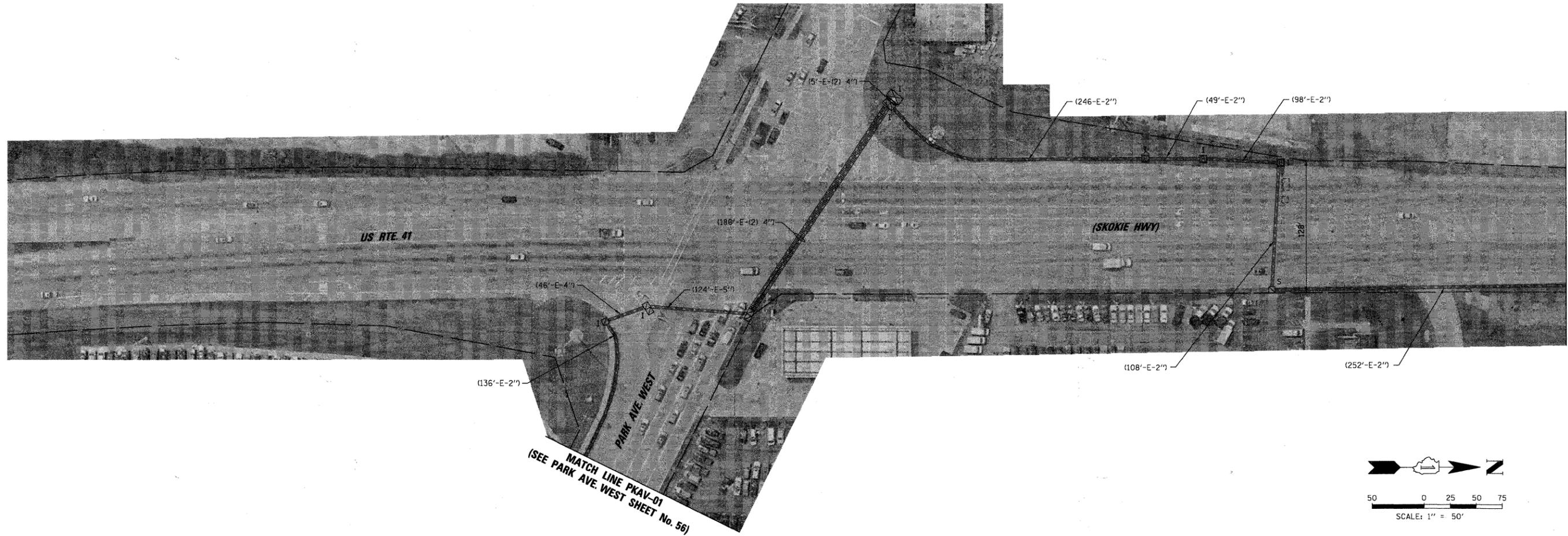


FILE NAME = N:\LCD01\090407\T-r\offic\INT-14_ParkAve.dgn	USER NAME = FBARISO	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN PARK AVENUE WEST FROM U.S. ROUTE 41 (SKOKIE HWY) TO GREEN BAY ROAD			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50'	DRAWN - FPB / FCP	REVISED -		SCALE: 1" = 50'	SHEET NO. 2 OF 2 SHEETS	STA. --	TO STA. --	06-00924-00-TL	LAKE	76	57
	PLOT DATE = 5/3/2010	CHECKED - MJT	REVISED -					CONTRACT NO. 63485				
		DATE - APRIL 30, 2010	REVISED -					ILLINOIS FED. AID PROJECT				

FILE NO. _____ DATE _____
 SURVEYED BY _____
 PLAN NO. _____
 SURVEYED ALIGNED CHECKED
 NOTE BOOK RT. OF WAY CHECKED
 NO. CAD FILE NAME

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

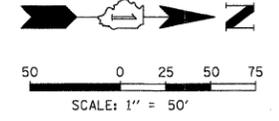
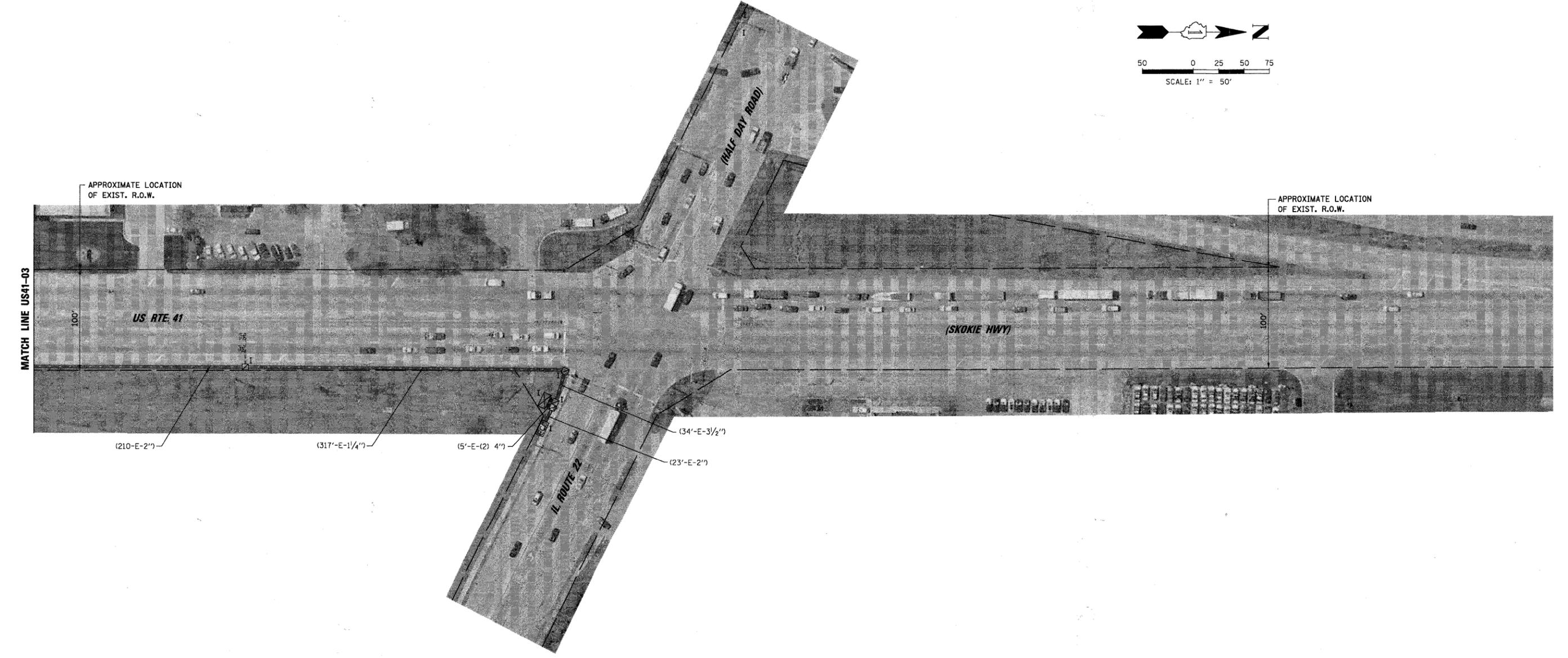
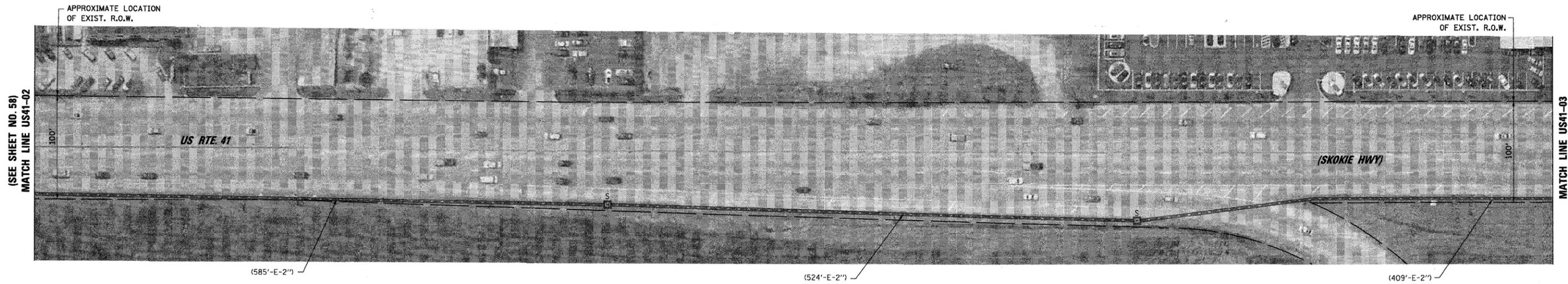
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 DRAWN BY _____
 CHECKED BY _____
 B.M. NOTED _____
 NO. STRUCTURE NOTATIONS CITY/ID



FILE NAME = N:\LCD01\092407\TrasFile\INT-15.US41.dgn	USER NAME = FBARI50	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN U.S. ROUTE 41 (SKOKIE HWY) FROM PARK AVENUE WEST TO IL. ROUTE 22 (HALF DAY ROAD)		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = 50'	DRAWN - FPB / FCP	REVISED -		SCALE: 1" = 50'	SHEET NO. 1 OF 2 SHEETS	STA. --	TO STA. --	06-00924-00-TL	LAKE	76	58
	PLOT DATE = 5/3/2010	CHECKED - MJT	REVISED -									
		DATE - APRIL 30, 2010	REVISED -									
								CONTRACT NO. 63485		ILLINOIS FED. AID PROJECT		

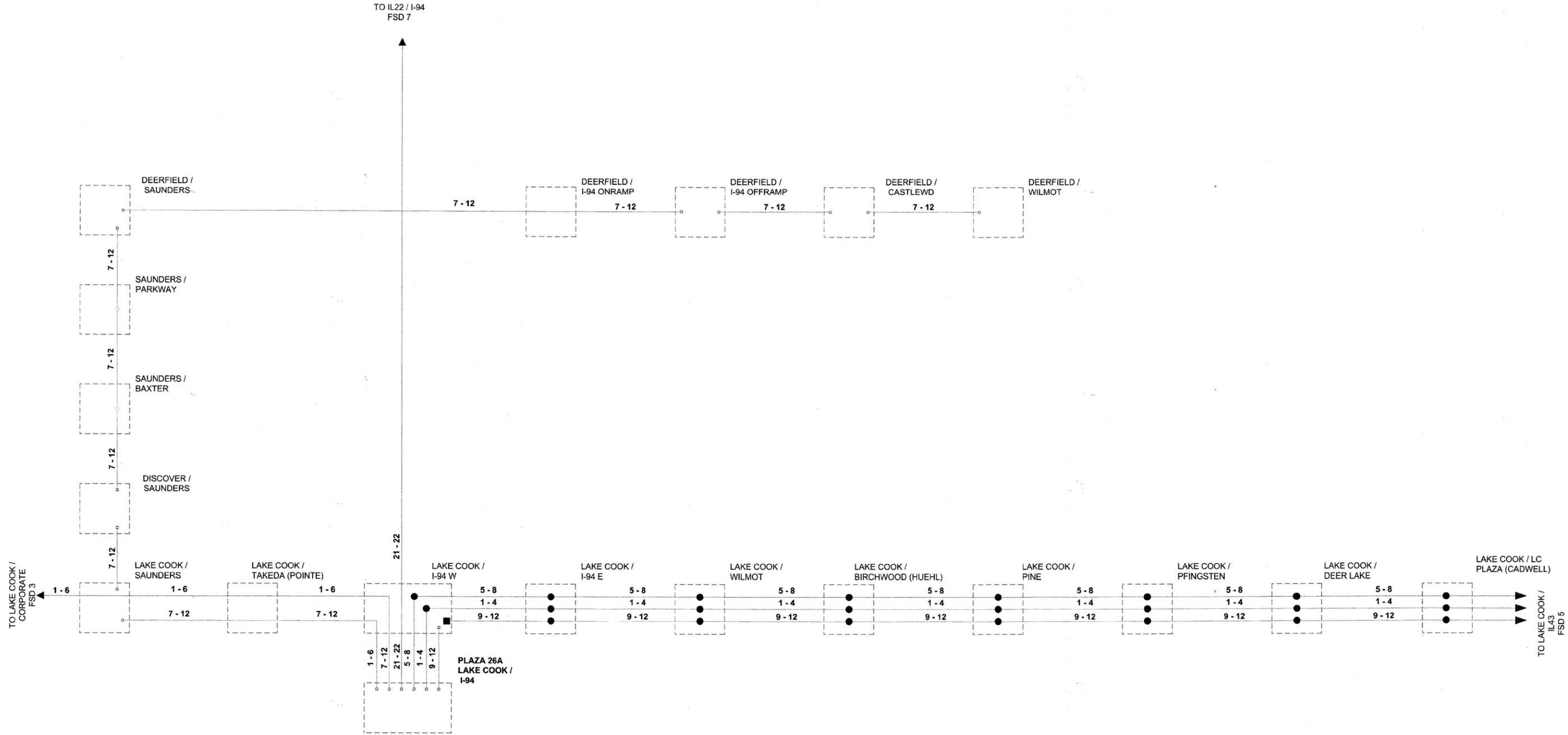
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 DRAWN: _____
 CHECKED: _____
 B.M. NOTED: _____
 STRUCTURE NOTATIONS: CHFD
 NO. _____
 PLAN SURVEYED: _____ DATE: _____
 ALIGNED: _____
 RT. OF WAY CHECKED: _____
 NOTE BOOK NO. _____
 CADD FILE NAME: _____

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FILE NAME = N:\L\DOT\190407\Traffic\INT-16.US41.dgn	USER NAME = FBARISO	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INTERCONNECT PLAN U.S. ROUTE 41 (SKOKIE HWY) FROM PARK AVENUE WEST TO IL ROUTE 22 (HALF DAY ROAD)				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 50'	PLOT DATE = 5/3/2010	DRAWN - FPB / FCP	REVISED -		SCALE: 1" = 50'	SHEET NO. 2 OF 2 SHEETS	STA. --	TO STA. --	06-00924-00-TL	LAKE	76	59	
CHECKED - MJT	DATE - APRIL 30, 2010	REVISOR -	REVISOR -		CONTRACT NO. 63485								
ILLINOIS FED. AID PROJECT													

PROFILE SURVEYED BY DATE
 9575 West Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-9500
 SURVEYED BY DATE
 PLAN NOTE BOOK NO.
 SERVICED BY DATE
 ALIGNED CHECKED
 RT. OF WAY CHECKED
 ADD FILE NAME



- EXISTING CONNECTOR / EXISTING FIBER
- NEW CONNECTOR / EXISTING FIBER
- EXISTING FUSION SPLICE / EXISTING FIBER
- NEW FUSION SPLICE / EXISTING FIBER
- NEW CONNECTOR / NEW FIBER
- NEW FUSION SPLICE / NEW FIBER



FIBER SPlicing DIAGRAM - 4
LAKE COOK / I-94

FILE NAME =	USER NAME = FBARISO	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FIBER SPlicing DIAGRAM LAKE COOK ROAD / I-94		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE =		CHECKED - MJT	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. --	TO STA. --	ILLINOIS FED. AID PROJECT		
PLOT DATE = 5/3/2010		DATE - APRIL 30, 2010	REVISED -						CONTRACT NO. 63485		

DATE	BY	DATE	BY
DATE	BY	DATE	BY

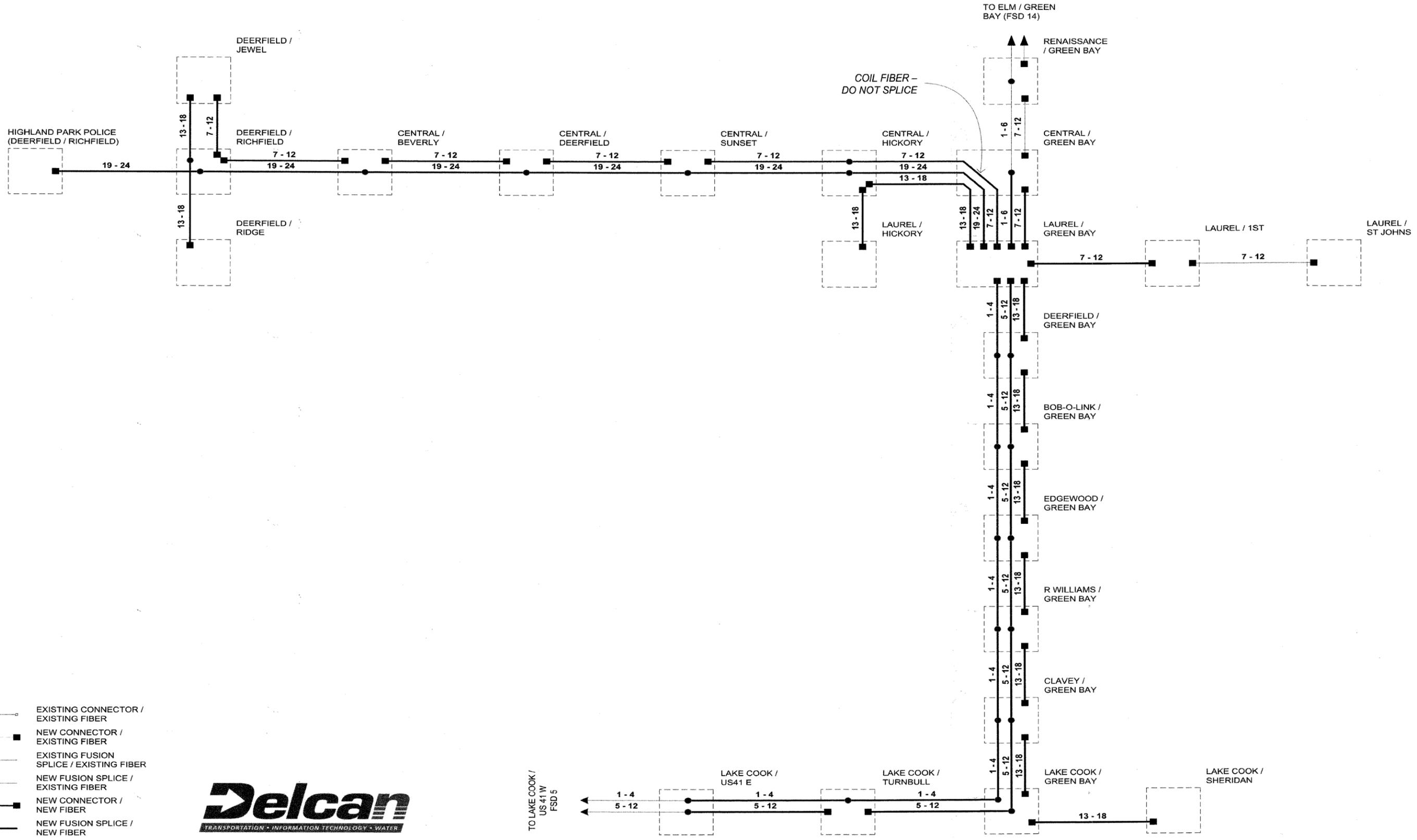
DATE	BY	DATE	BY

DATE	BY	DATE	BY

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 Rosemont, Illinois 60018
 (847) 823-0500

PROFILE
 DATE
 BY
 DATE
 BY

- EXISTING CONNECTOR / EXISTING FIBER
- NEW CONNECTOR / EXISTING FIBER
- EXISTING FUSION SPLICE / EXISTING FIBER
- NEW FUSION SPLICE / EXISTING FIBER
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- NEW FUSION SPLICE / NEW FIBER

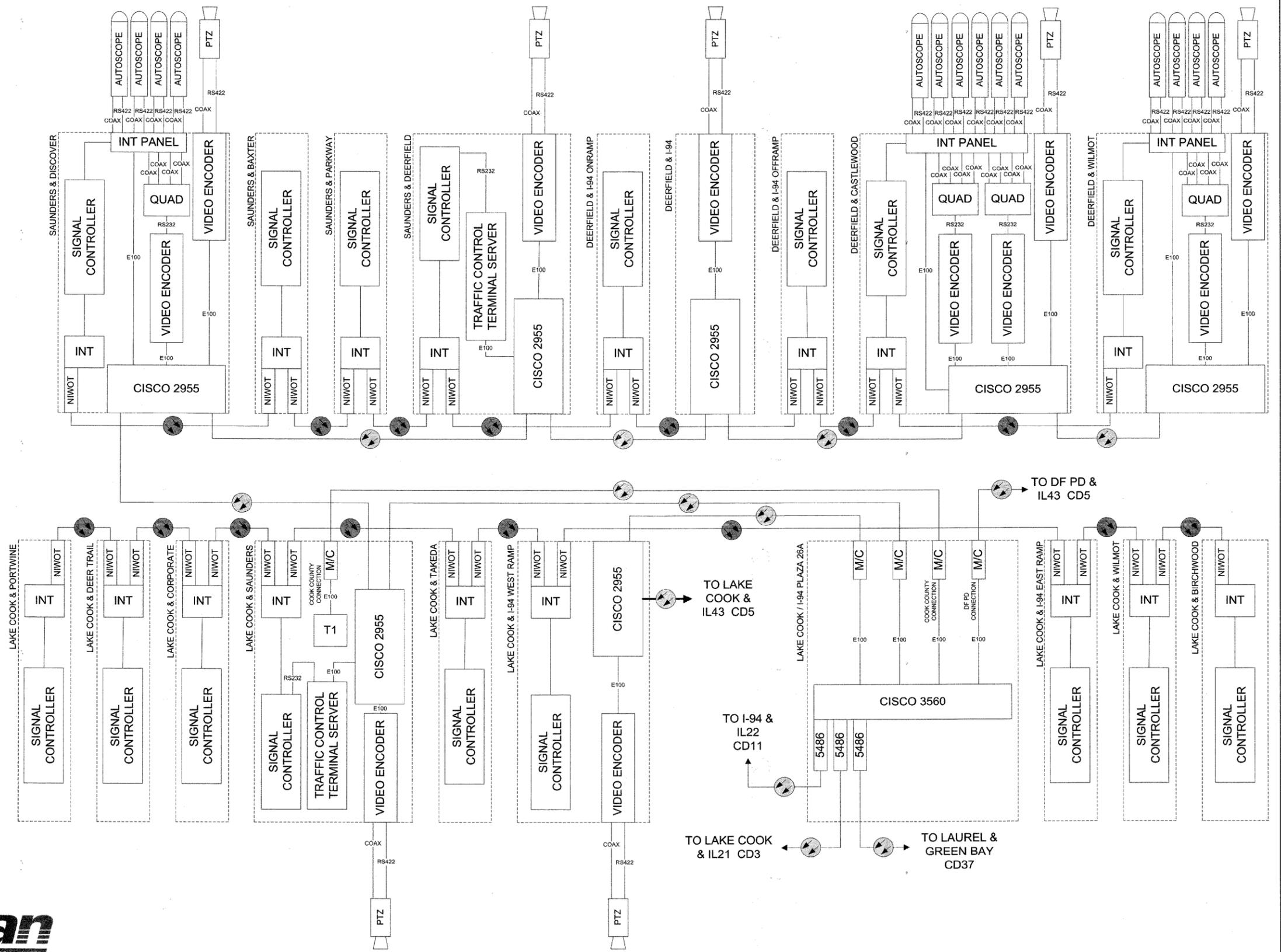
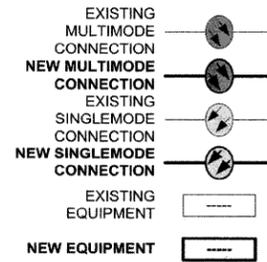


**FSD 24
 HIGHLAND PARK**

FILE NAME = N:\LCDOT\090407\Trafico\DET.04_Fiber Spic Dwg.dgn	USER NAME = FBARISO	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FIBER SPlicing DIAGRAM HIGHLAND PARK			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE =	DATE = APRIL 30, 2010	DRAWN - FPB / FCP	REVISED -		06-00924-00-TL	LAKE	76	64				
PLOT DATE = 5/3/2010	CHECKED - MJT	DATE = APRIL 30, 2010	REVISED -		CONTRACT NO. 63485							
					ILLINOIS FED. AID PROJECT							

PROFILE SURVEYED _____ DATE _____
 NOTE BOOK _____
 NO. _____
 PLAN SURVEYED _____ DATE _____
 NOTE BOOK _____
 NO. _____
 CHECKED _____
 STRUCTURE NOTATION DPKD _____
 PROFILE SURVEYED _____ DATE _____
 NOTE BOOK _____
 NO. _____
 PLAN SURVEYED _____ DATE _____
 NOTE BOOK _____
 NO. _____
 CHECKED _____
 STRUCTURE NOTATION DPKD _____

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CABINET DETAIL 4
I-94 & LAKE COOK

FILE NAME = N:\CDOT\090407\Traffic\DET_05.Cabinet Detail.dgn	USER NAME = FBARISO	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABINET DETAIL I-94 / LAKE COOK	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE =	CHECKED - MJT	REVISED -	06-00924-00-TL			LAKE	76	65		
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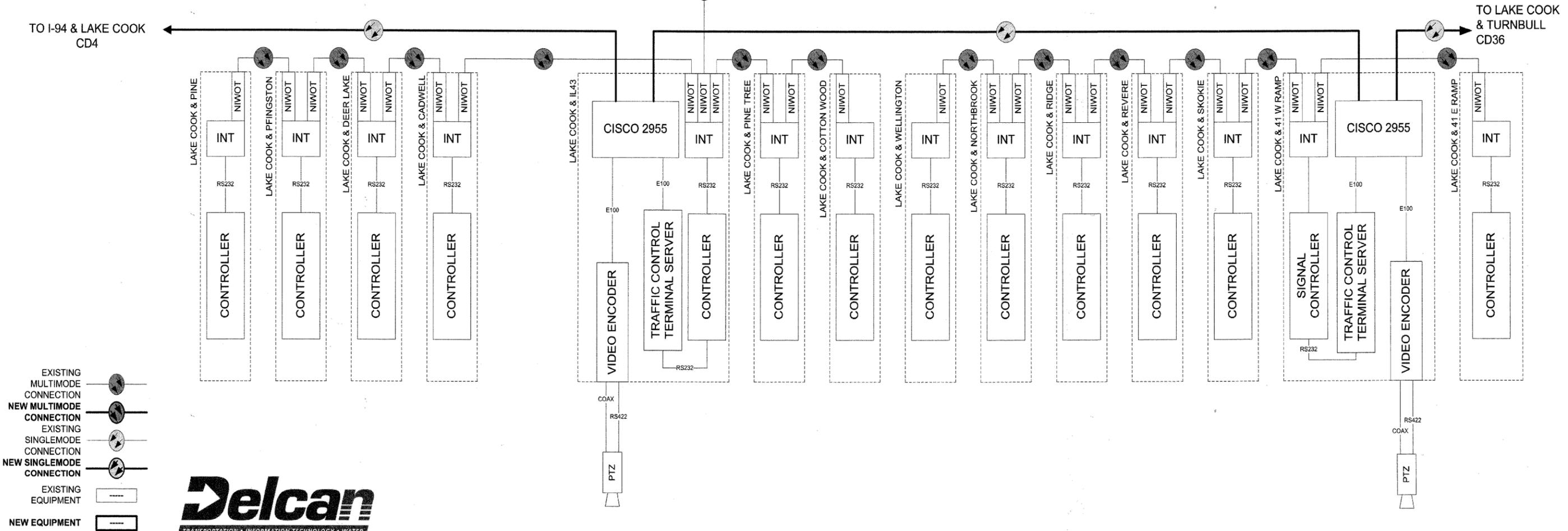
SCALE: SHEET NO. OF SHEETS STA. -- TO STA. --

ILLINOIS FED. AID PROJECT

PROFILE	DATE	BY	DATE
SUBMITTED			
PLANNED			
NOTED			
NO.			

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 Rosemont, Illinois 60018
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PROFILE	DATE	BY	DATE
SUBMITTED			
PLANNED			
NOTED			
NO.			

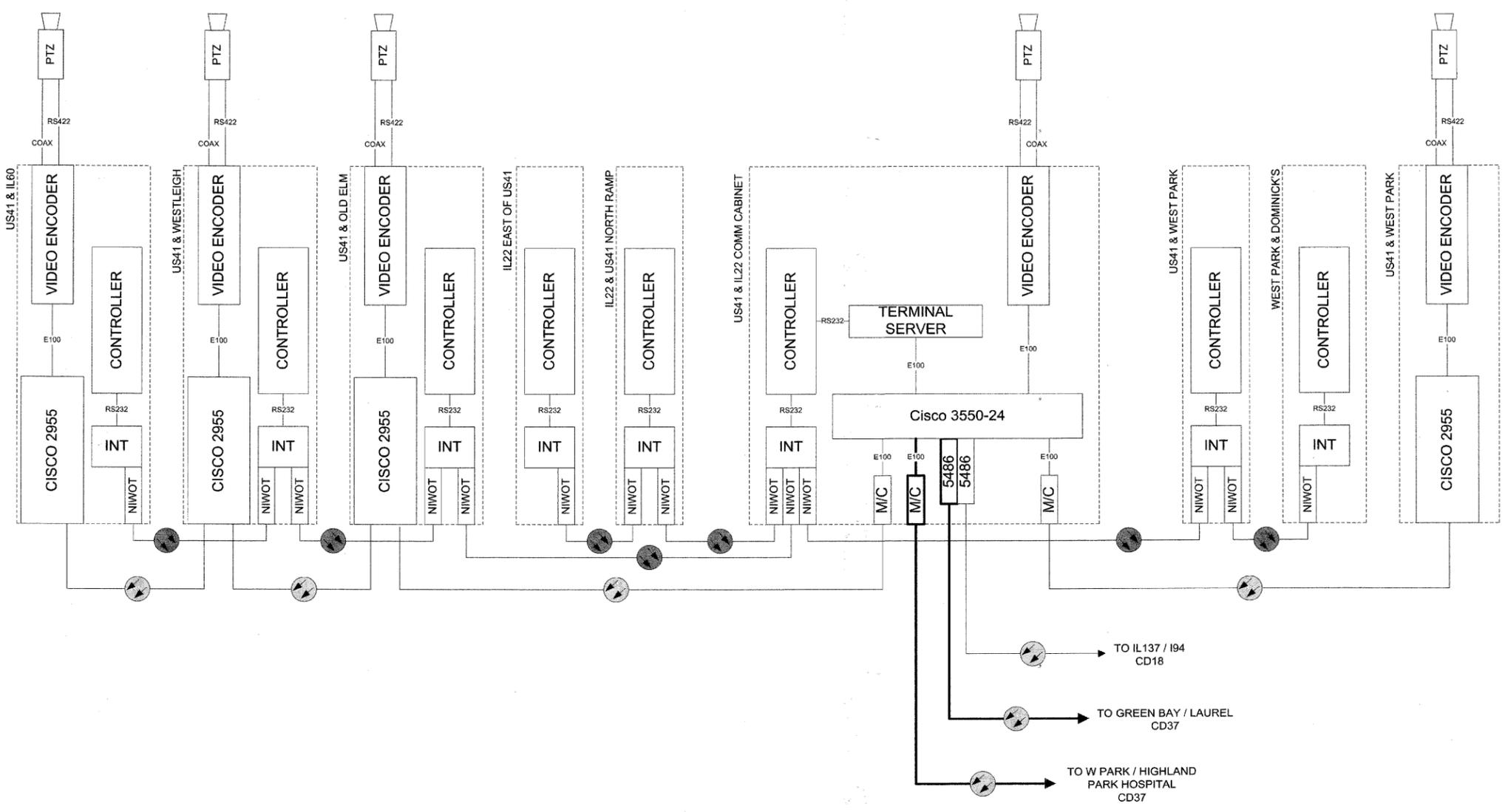
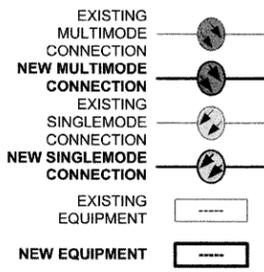


CABINET DETAIL 5
 IL43 & LAKE COOK

FILE NAME =	USER NAME = P201109	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABINET DETAIL I-94 /LAKE COOK ROAD				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\CDOT\290407\Tranf\DET_05.Cabinet Detail.dgn		DRAWN - FPB / FCP	REVISED -			06-00924-00-TL	LAKE	76	66				
PLOT SCALE =		CHECKED - MJT	REVISED -		SCALE:	SHEET NO.	OF	SHEETS	STA. --	TO STA. --	CONTRACT NO. 63485		
PLOT DATE = 3/31/2010		DATE - APRIL 30, 2010	REVISED -		ILLINOIS FED. AID PROJECT								

PROFILE: SUBMITTER: DATE: BY: DATE:
 NOTE BOOK: NO.
 CHECKED: GRADES CHECKED:
 STRUCTURE: NOTATIONS: ECHD:
 CHANGES: PLOTTED:
 ALIGNMENT: CHECKED:
 ROAD FILE NAME:
 NO.

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 605 West Higgins Road, Suite 600
 Chicago, Illinois 60608
 (847) 822-0500



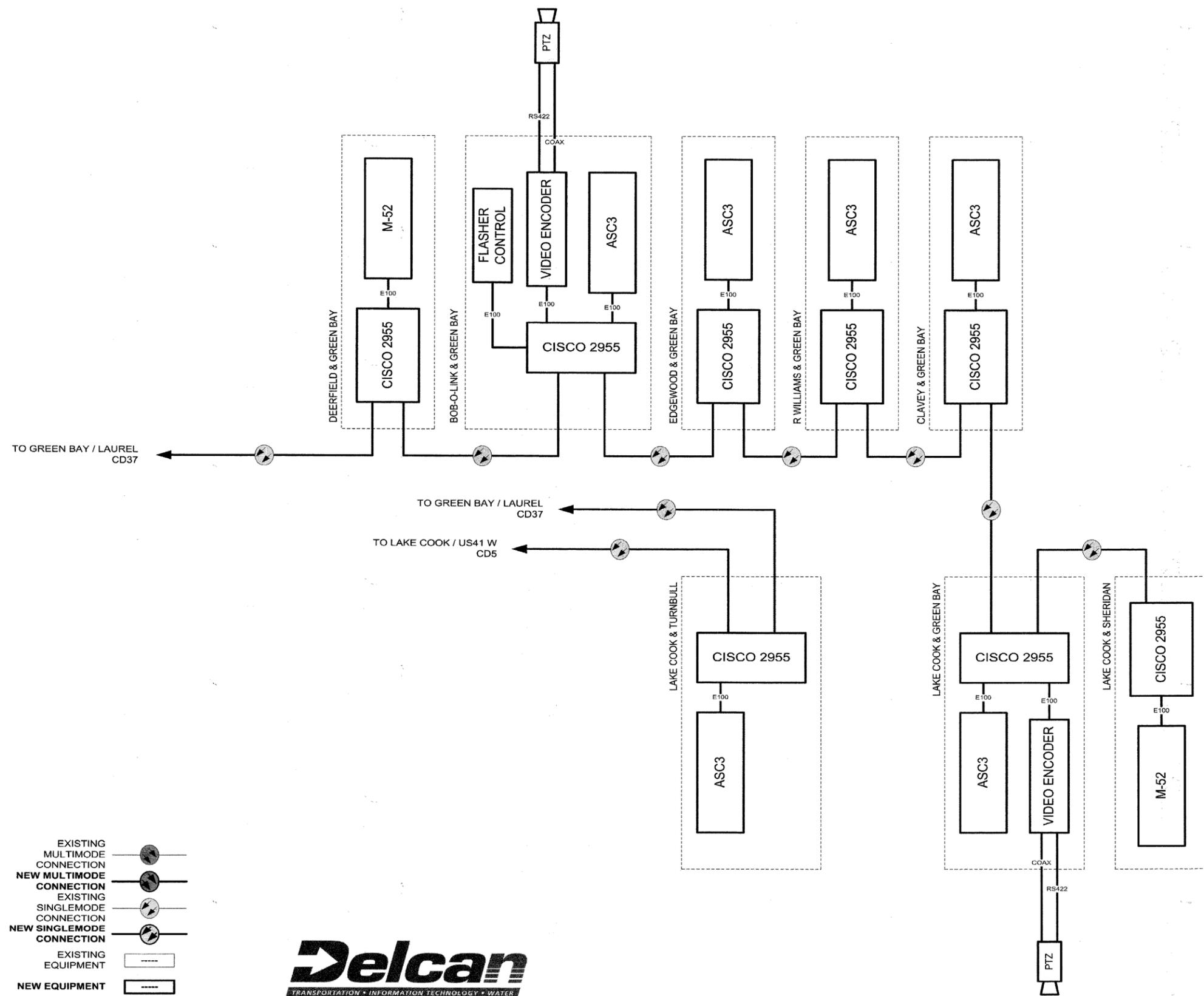
CABINET DETAIL 12
US41 & IL22

FILE NAME =	USER NAME = FBARISO	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABINET DETAIL IL 43 / LAKE COOK ROAD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
N:\LCDOT\090407\Traffic\DET_07_Cabinet Detail.dgn		DRAWN - FPB / FCP	REVISED -			06-00924-00-TL	LAKE	76	67	
PLOT SCALE =		CHECKED - MJT	REVISED -			CONTRACT NO. 63485				
PLOT DATE = 5/3/2010		DATE - APRIL 30, 2010	REVISED -			ILLINOIS FED. AID PROJECT				
SCALE:						SHEET NO. OF SHEETS	STA. -- TO STA. --			

PROFILE	DESIGNED	DATE
NOTE BOOK	PLOTTED	BY
NO.	ALIGNED	
	CAD FILE NAME	

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PROFILE	DESIGNED	DATE
NOTE BOOK	PLOTTED	BY
NO.	ALIGNED	
	CAD FILE NAME	



- EXISTING MULTIMODE CONNECTION
- NEW MULTIMODE CONNECTION
- EXISTING SINGLEMODE CONNECTION
- NEW SINGLEMODE CONNECTION
- EXISTING EQUIPMENT
- NEW EQUIPMENT



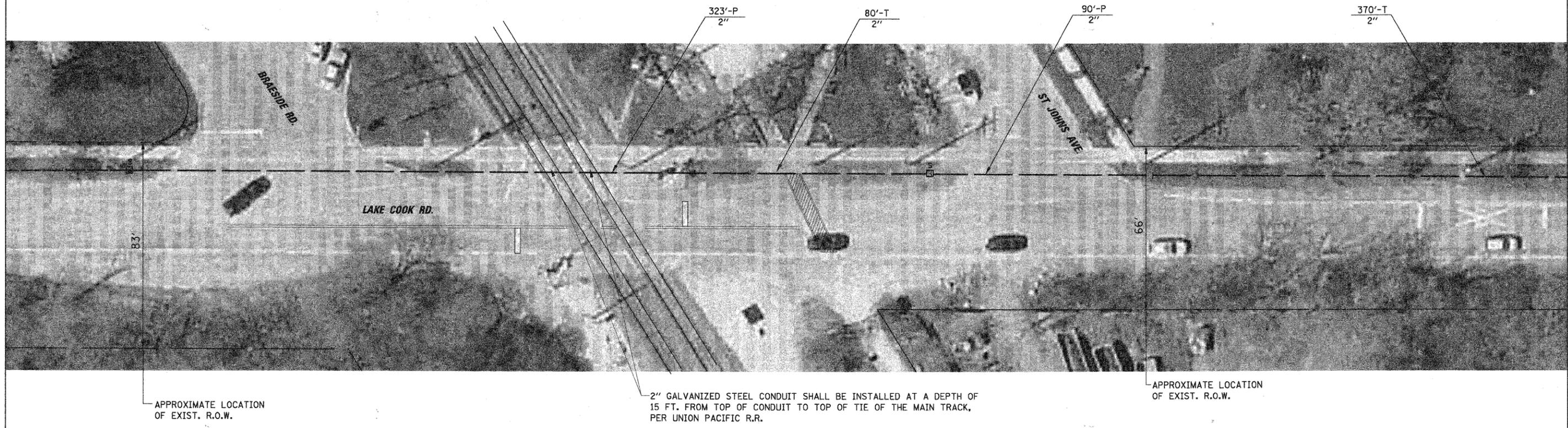
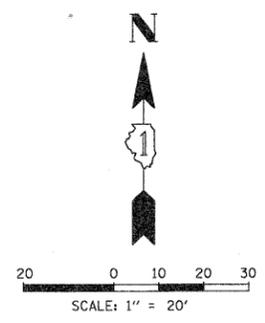
CABINET DETAIL 36
 GREEN BAY & LAKE COOK

FILE NAME = N:\LCD01\090407\Traffic\DET_08.Cabinet Detail.dgn	USER NAME = FBARISO	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABINET DETAIL US 41 /IL 22	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 5/3/2010	DATE - APRIL 30, 2010	REVISIONS	REVISIONS			CONTRACT NO. 63485		ILLINOIS FED. AID PROJECT		
SCALE: SHEET NO. OF SHEETS STA. -- TO STA. --										

PROFILE
 DATE: _____ BY: _____
 SURVEYED: _____
 GRADES CHECKED: _____
 STATIONING: _____
 NOTATING: _____
 NO. _____

PLAN
 DATE: _____ BY: _____
 SURVEYED: _____
 ALIGNMENT CHECKED: _____
 P.L.O.F.M. CHECKED: _____
 NO. _____

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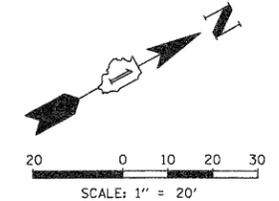


APPROXIMATE LOCATION OF EXIST. R.O.W.

2" GALVANIZED STEEL CONDUIT SHALL BE INSTALLED AT A DEPTH OF 15 FT. FROM TOP OF CONDUIT TO TOP OF TIE OF THE MAIN TRACK, PER UNION PACIFIC R.R.

APPROXIMATE LOCATION OF EXIST. R.O.W.

FILE NAME = N:\CDDOT\0904071\Traffic\INT-RR_LakeCook.dgn	USER NAME = FBARISO	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	COMMUNICATION INTERCONNECT - UP RAILROAD LAKE COOK ROAD DETAILS				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - FPB / FCP	REVISED -		SCALE: 1" = 20'	SHEET NO.	OF	SHEETS	STA. --	TO STA. --	LAKE	76	70
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		DATE - APRIL 30, 2010	REVISED -		ILLINOIS FED. AID PROJECT								

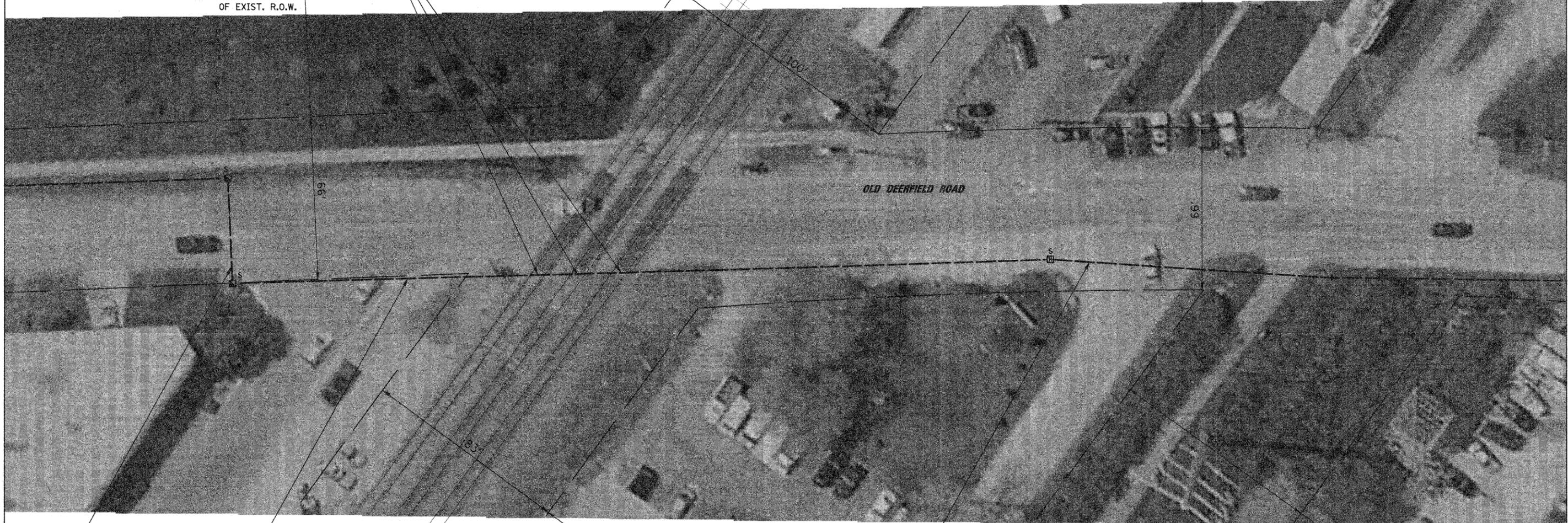


2" GALVANIZED STEEL CONDUIT SHALL BE INSTALLED AT A DEPTH OF 15 FT. FROM TOP OF CONDUIT TO TOP OF TIE OF THE MAIN TRACK, PER UNION PACIFIC R.R.

APPROXIMATE LOCATION OF EXIST. R.O.W.

APPROXIMATE LOCATION OF EXIST. R.O.W.

APPROXIMATE LOCATION OF EXIST. R.O.W.



43'-P
2"

330'-P
2"

114'-P
2"

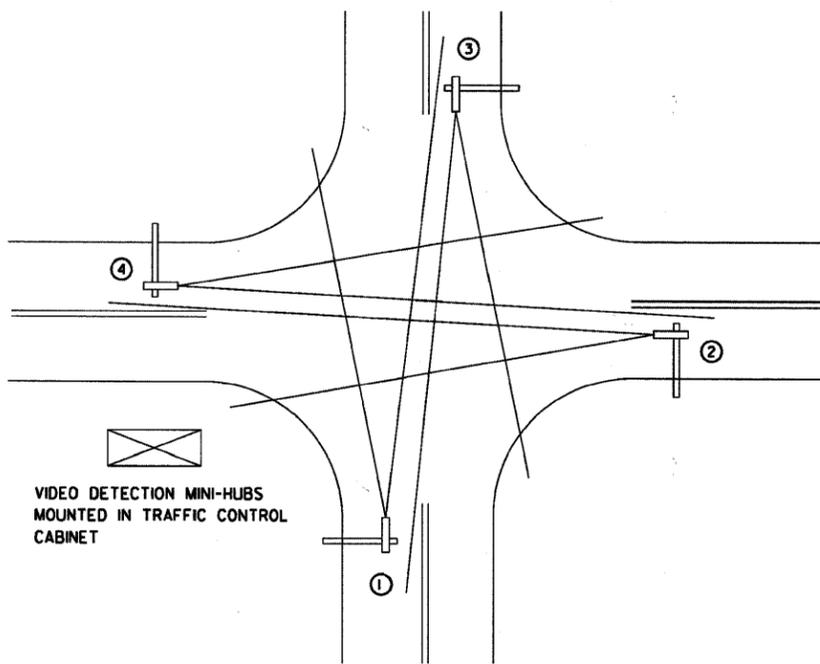
APPROXIMATE LOCATION OF EXIST. R.O.W.

APPROXIMATE LOCATION OF EXIST. R.O.W.

DATE	BY	REVISIONS	PLANNED	CHECKED
		GRADES CHECKED	ALIGNED	NOTED
		STRUCTURE	FILED	FILED
		NOTATION	FILED	FILED
		NO.	NO.	NO.

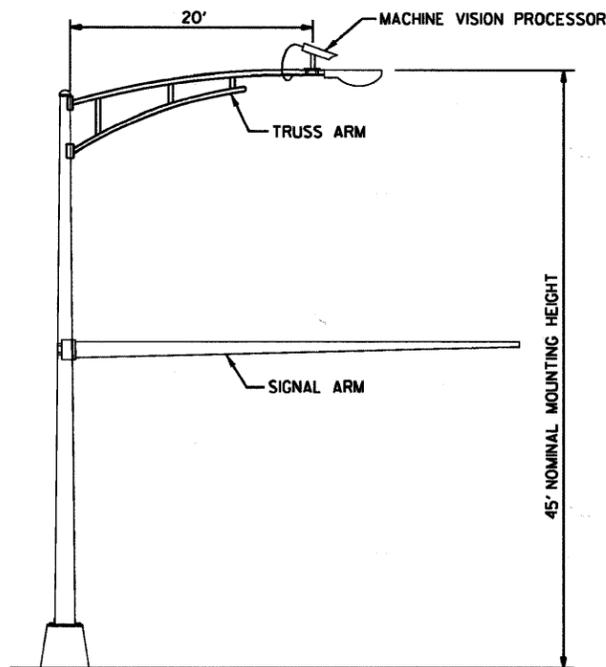
CHRISTOPHER B. BURKE ENGINEERING LTD.
 6511 N. Cicero Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500

FILE NAME = N:\CDDT\0904071\Traffic\INT-RR_01\Deerfield.dwg	USER NAME = FBARISO	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	COMMUNICATION INTERCONNECT - UP RAILROAD OLD DEERFIELD ROAD DETAILS				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PLOT SCALE = 20'	PLANTING	DRAWN - FPB / FCP	REVISED -		SCALE: 1" = 20'	SHEET NO.	OF	SHEETS	STA. --	TO STA. --	LAKE	76	71
PLOT DATE = 5/3/2010	NO.	CHECKED - MJT	REVISED -		CONTRACT NO. 63485								
		DATE - APRIL 30, 2010	REVISED -		ILLINOIS FED. AID PROJECT								



TYPICAL VIDEO VEHICLE DETECTION SYSTEM
(NOT TO SCALE)

(4) MACHINE VISION PROCESSOR ASSEMBLIES AND BRACKETS ① ② ③ ④
POWER CABLE TO EACH MACHINE VISION PROCESSOR (24 VAC)



COMBINATION MAST ARM ASSEMBLY AND POLE DIMENSIONS
(NOT TO SCALE)

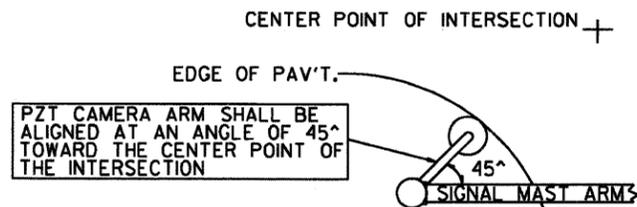
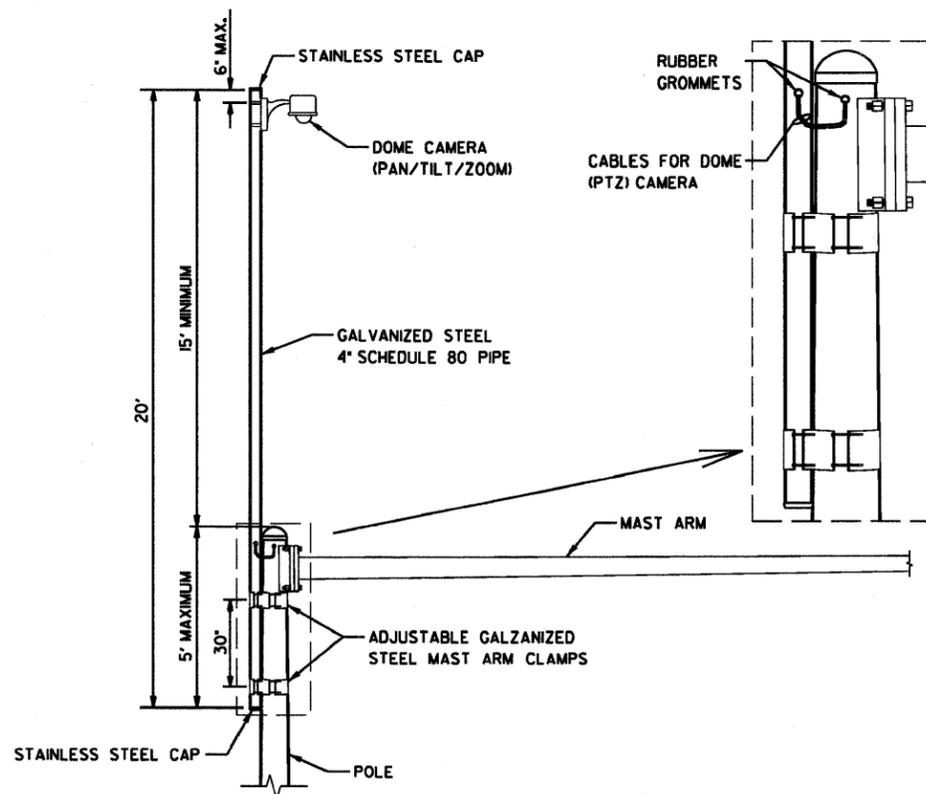


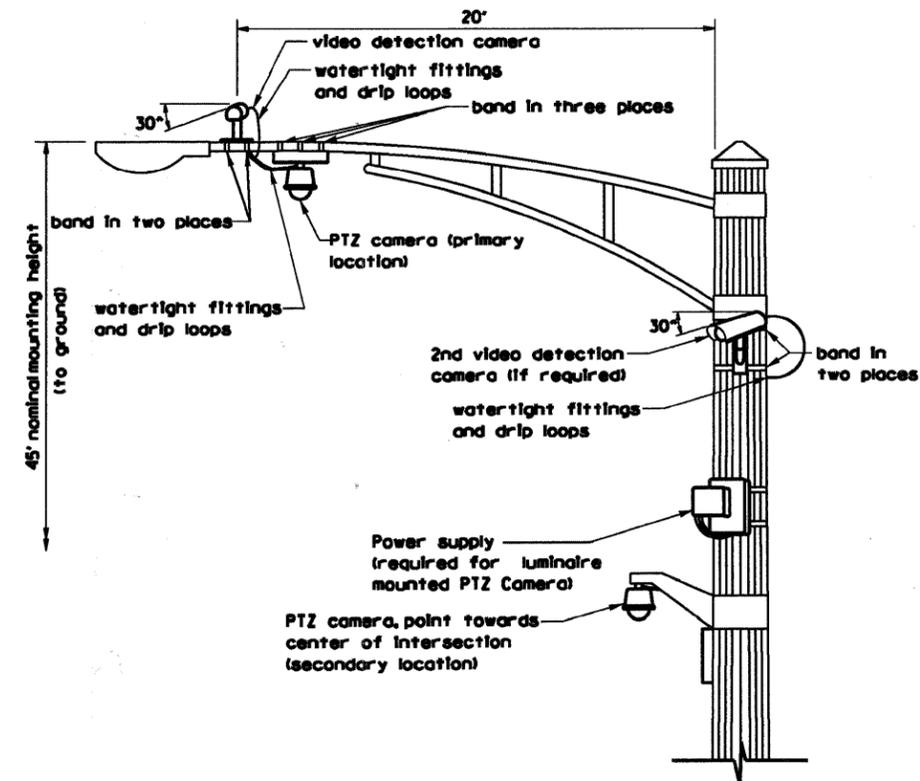
IMAGE SENSOR MOUNTING DETAILS

(NO SCALE)



CAMERA MOUNTING ASSEMBLY DETAIL

(NOT TO SCALE)



VIDEO DETECTION CAMERA(S) AND DOME (PTZ) CAMERA MOUNTING DETAIL

(NOT TO SCALE)

- NOTES FOR SINGLE, DUAL AND MULTIPLE MVP MOUNTING:
- MOUNT LUMINAIRE MOUNTING BRACKET AS HIGH AS POSSIBLE.
 - AIM BRACKET TOWARD DIRECTION OF TRAFFIC TO BE DETECTED.
 - MOUNT MACHINE VISION PROCESSOR AIMING DOWN AT 30 DEGREE ANGLE.

REVISIONS	DATE	APPROVED BY: A. KHAWAJA
Mounting Details Revised	5/1/08	DATE: APRIL 1, 2007
2nd Camera Locst. added	1/14/09	



VIDEO DETECTION DETAILS

LC8900

NO.	DESCRIPTION	DATE	BY	SURVEYOR

FILE NAME: U:\DOT\To ITS\LC8900.dgn

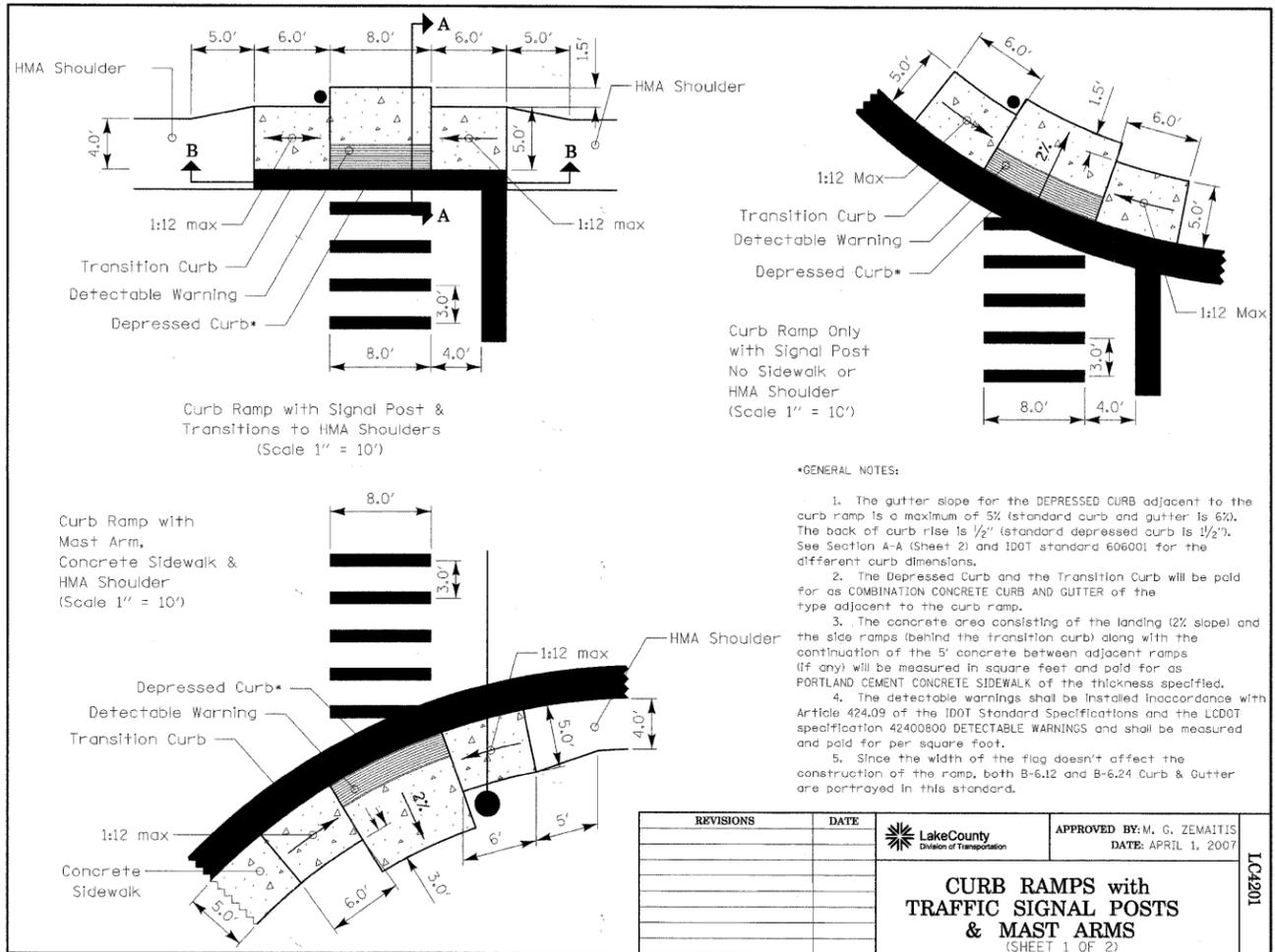


VIDEO DETECTION DETAILS

ROUTE	SECTION	SECTION NUMBER	SHEET	SHEETS
CH		06-00924-00-TL	76	72

PROFILE
 CHECKED BY: _____
 DATE: _____
 NOTE BOOK NO.: _____
 PLANNED BY: _____
 DATE: _____
 CHECKED BY: _____
 DATE: _____
 ALIGNED BY: _____
 DATE: _____
 PLOTTED BY: _____
 DATE: _____
 FILED BY: _____
 DATE: _____

CHRISTOPHER B. BURKE ENGINEERING LTD.
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 Chicago, Illinois 60608
 (847) 823-0500

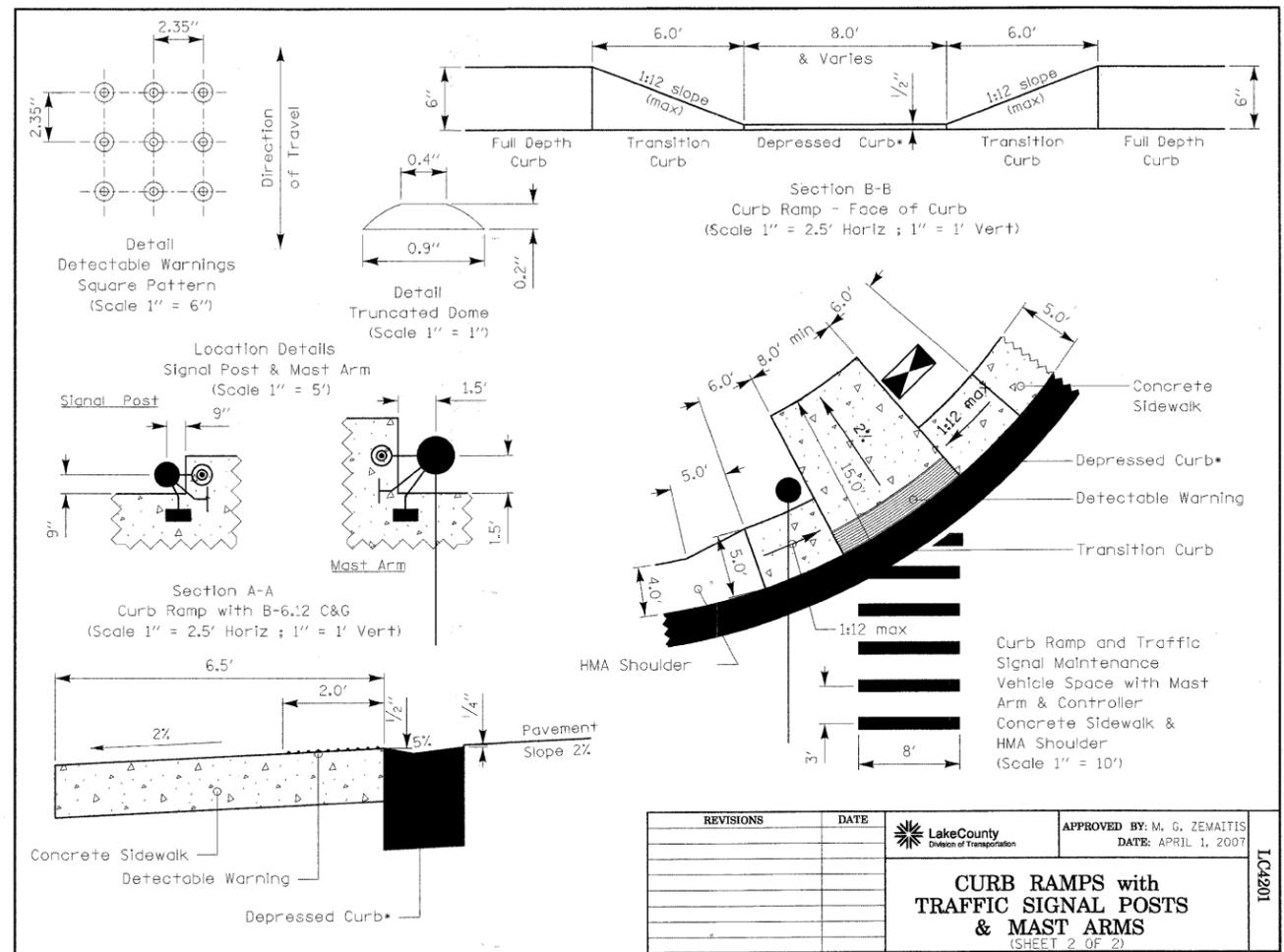


REVISIONS	DATE	APPROVED BY: M. G. ZEMAITIS DATE: APRIL 1, 2007

LakeCounty
 Division of Transportation

CURB RAMPS with TRAFFIC SIGNAL POSTS & MAST ARMS
 (SHEET 1 OF 2)

LC4201



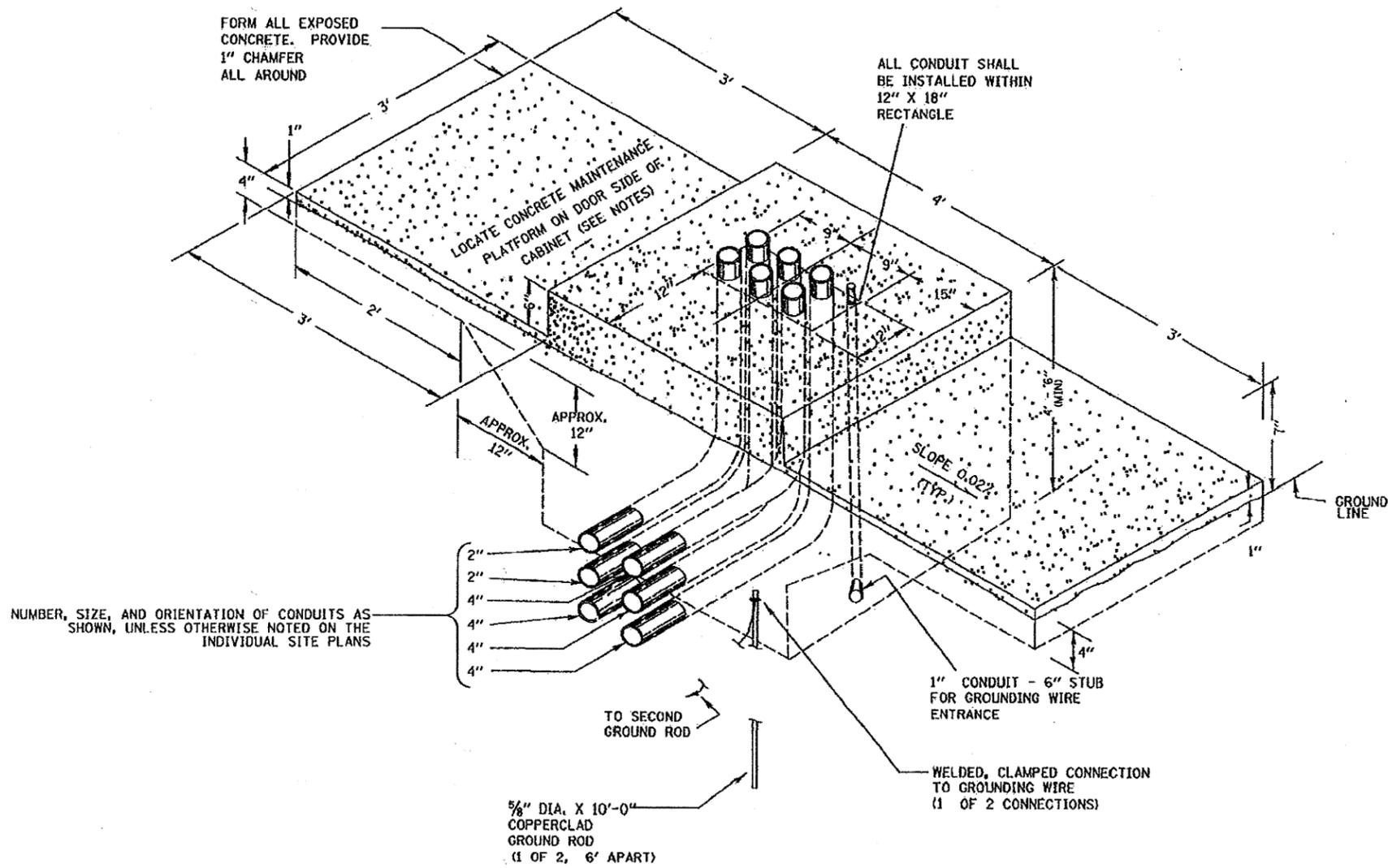
REVISIONS	DATE	APPROVED BY: M. G. ZEMAITIS DATE: APRIL 1, 2007

LakeCounty
 Division of Transportation

CURB RAMPS with TRAFFIC SIGNAL POSTS & MAST ARMS
 (SHEET 2 OF 2)

LC4201

PROFILE SURVEYED GRADES CHECKED BY: DATE:
 NOTE BOOK NO.
 STRUCTURE NOTATIONS CHKD
 BY: DATE:
 PLAN SURVEYED ALIGNMENT CHECKED BY: DATE:
 NOTE BOOK NO.
 ROAD FILE NAME:
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 500
 Chicago, Illinois 60618
 (847) 823-0800
C B E



TYPICAL DETAIL
CONCRETE BASE, CONTROLLER CABINET

NOTES

1. INSTALL FOUR 3/4 INCH DIAMETER X 12 INCH MINIMUM LENGTH APPROVED J-BOLTS TO ANCHOR THE CABINET BASES. THE ANCHOR BOLTS SHALL BE GALVANIZED STEEL AND LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.
2. CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED AND LEVEL, PRIOR TO CABINET INSTALLATION. LEVELING OF TOP SURFACES AFTER CONCRETE BASE HAS CURED SHALL ONLY BE ACCOMPLISHED BY GRINDING.
3. MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.
4. CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.
5. CONCRETE MAINTENANCE PLATFORM AND CABINET FOUNDATION FOR CABINET SHALL BE A MONOLITHIC POUR.
6. WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.
7. CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 3 INCH.
8. MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.
9. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.
10. CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.
11. PLUG ALL BELOW GRADE NONMETALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.
12. ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.
13. ALL METALLIC CONDUIT ENDS AT TOP OF CONCRETE BASES SHALL HAVE BUSHINGS AND ALL NON METALLIC CONDUIT ENDS AT TOP OF CONCRETE BASES SHALL HAVE END BELLS.

FILE NAME =	USER NAME = FBARISD	DESIGNED - ABR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CONCRETE FOUNDATION DETAIL (FOR CABINET, MODEL 334)		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
NALCDOT\090407\Traffic\DET_Cone_Found.dgn		DRAWN - FPB / FCP	REVISED -		06-00924-00-TL	LAKE	76	74			
PLOT SCALE =	CHECKED - MJT	REVISIONS	REVISED -		CONTRACT NO. 63485		ILLINOIS FED. AID PROJECT				
PLOT DATE = 5/3/2010	DATE - APRIL 30, 2010	REVISED -	REVISED -		SCALE:	SHEET NO. OF SHEETS	STA. -- TO STA. --				

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.

SEE STATE STANDARD 606001
EXISTING OR PROPOSED HMA SURFACE (IF APPLICABLE)

18" (450) MAX.

1/4" (5) **

EXISTING SIDEWALK, DRIVEWAY, MEDIAN SURFACE OR GROUND.

PROPOSED SIDEWALK, DRIVEWAY PAVEMENT, MEDIAN SURFACE OR SALT TOLERANT SOD AND TOP SOIL, 4" (100) SOD RESTORATION (SEE NOTE ①).

EXISTING CONCRETE PAVEMENT, CONCRETE BASE COURSE OR FLEXIBLE PAVEMENT

3" (75) MIN.

SUITABLE BACKFILL MATERIAL (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT)

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SALT TOLERANT SOD AND TOP SOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

④ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑤ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑦ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USUABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

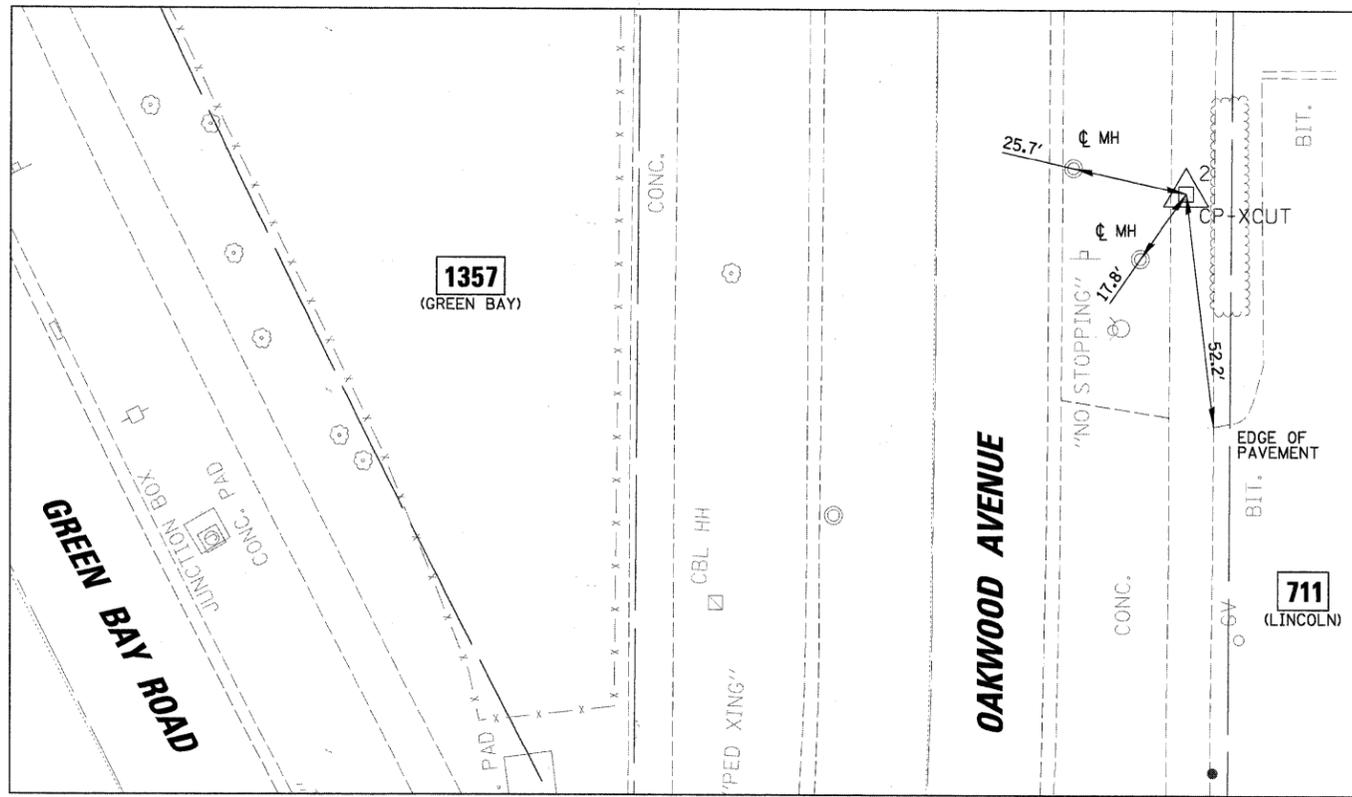
CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

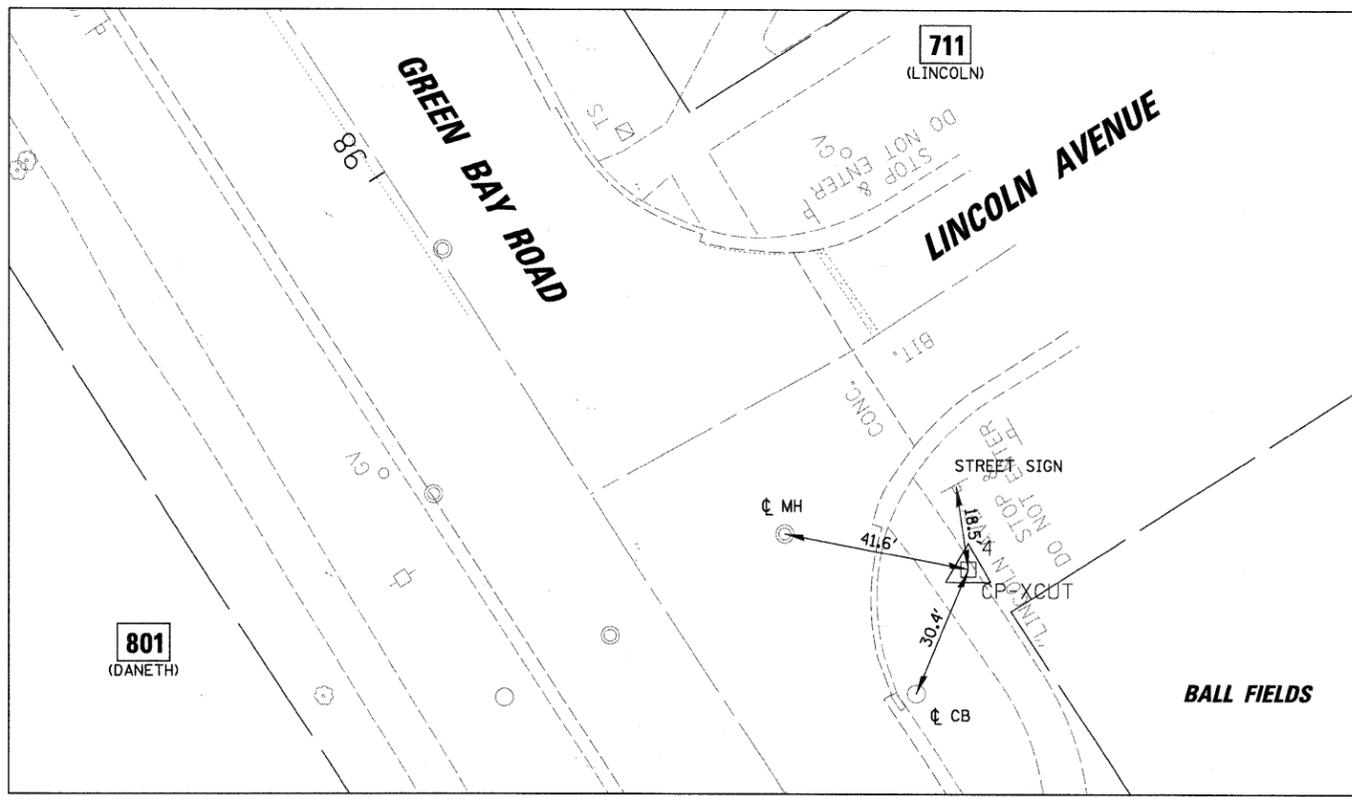
FILE NAME = W:\dsetatd\22x34\bd24.dgn	USER NAME = geglennobt	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - A. ABBAS 03-21-97			06-00924-00-TL	LAKE	76	75	
		PLOT SCALE = 50.000' / IN.	REVISED - M. GOMEZ 01-22-01			BD600-06 (BD-24)				CONTRACT NO. 63485
		PLOT DATE = 1/4/2008	REVISED - R. BORO 01-01-07			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 (ILLINOIS) FED. AID PROJECT

PROFILE SURVEYED BY DATE
 NOTE BOOK NO. GRADES CHECKED
 E.M. NOTED
 PROSPECTIVE NOTATIONS CHECKED
 PLAN SURVEYED BY DATE
 NOTE BOOK NO. ALIGNMENT CHECKED
 P.T. OF WAY CHECKED
 C&G FILE NAME

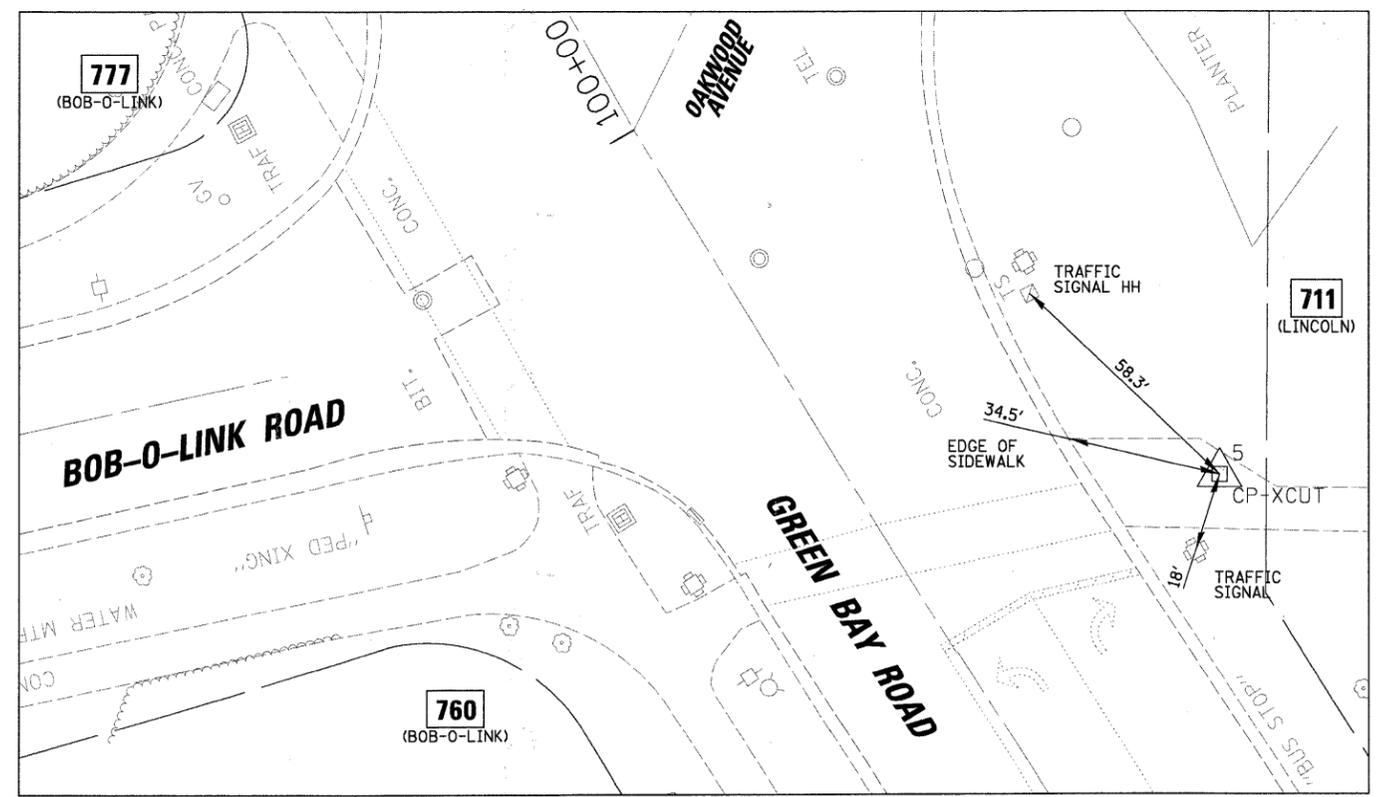
CHRISTOPHER B. BURKE ENGINEERING LTD.
 9575 West Higgins Road, Suite 600
 Chicago, Illinois 60638
 (815) 823-0500



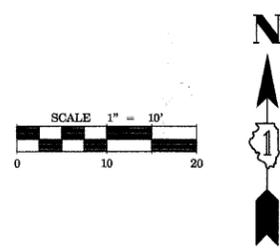
CONTROL POINT 2



CONTROL POINT 4



CONTROL POINT 5



ELEVATION BENCHMARKS		
DATUM: NGVD 1929		
NO.	DESCRIPTION	ELEV.
0006	FROM SHERIDAN ROAD AND CENTRAL AVE IN HIGHLAND PARK: GO SE ON SHERIDAN ROAD 0.4 MILES± TO MULBERRY PL; THENCE WEST 200'± TO MARKER	688.78
OSBM09-50	SQUARE CUT ON N.E. CORNER BASE ELECTRIC BOX ON N.W. CORNER OF OAKWOOD AVE & GREEN BAY RD.	701.12

HORIZONTAL CONTROL POINTS					
	NORTHING	EASTING	DESCRIPTION	STATION	OFFSET
2	N 2,007,604.74	E 1,129,449.55	SET X-CUT	101+15.19	R 135.6'
4	N 2,007,229.56	E 1,129,554.95	SET X-CUT	97+27.75	R 30.9'
5	N 2,007,404.35	E 1,129,448.27	SET X-CUT	99+33.26	R 35.3'

