

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	1
		ILLINOIS	CONTRACT NO. 62U32	

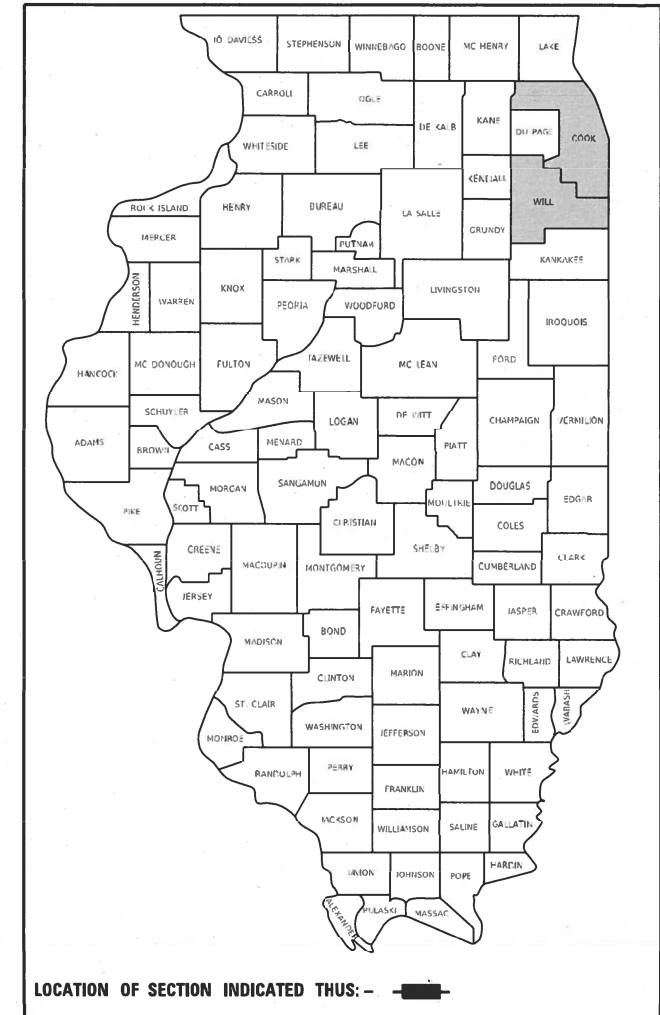
D-91-026-23

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

VARIOUS LOCATIONS IN DISTRICT 1
CONTRACT NO. 8
SECTION: 2023 TRAFFIC MAST
PROJECT: HSIP – N5JL(608)
TROMBONE MAST ARM REPLACEMENT
COOK AND WILL COUNTIES

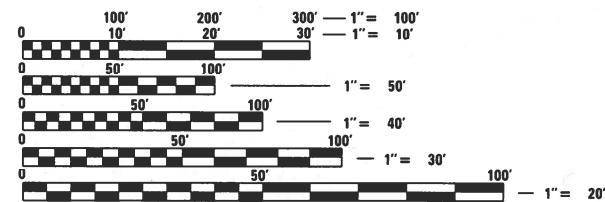
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FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR LOCATION MAPS
SEE SHEETS NO. 3-4

VARIOUS TOWNSHIPS



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 EXCAVATORS
1-800-892-0123
OR 811

PROJECT ENGINEER: IOVAN PLASCENCIA (847) 705-4504
PROJECT MANAGER: NICHOLAS BUTLER (847) 705-4420

CONTRACT NO. 62U32

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED June 27 20 23
Joe P. [Signature] REGIONAL ENGINEER

August 18, 2023 [Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

August 18, 2023 [Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

SHT NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS, HIGHWAY STANDARDS, AND GENERAL NOTES
3-4	LOCATION MAPS
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11-17	DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-05)
18	DISTRICT 1 MAST ARM MOUNTED STREET NAME SIGNS (TS-02)

SHT NO.	TS NO.	INTERSECTION NAME
19-23	4295	IL RTE 7 (LARKIN AVE) AT IL RTE 7 (THEODORE ST)
24-28	295	US RTE 6 (162ND ST) AT STATE ST
29-32	9140	IL RTE 1 (HALSTED ST) AT 144TH ST
33-37	1795	IL RTE 1 (HALSTED ST) AT 138TH ST
38-41	9135	IL RTE 1 (HALSTED ST) AT 134TH ST
42-45	4005	127TH ST AT THROOP ST

SHT NO.	DESCRIPTION
46	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS (TC-10)
47	ARTERIAL ROAD INFORMATION SIGN (TC-22)

HIGHWAY STANDARDS

STD. NO.	TITLE
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
701001-02	OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-ROAD OPERATIONS 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701101-05	OFF-ROAD OPERATIONS MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIUM
701701-10	URBAN LANE CLOSURE MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAIL
814001-03	HANDHOLES
814006-03	DOUBLE HANDHOLES
862001-01	UNINTERRUPTABLE POWER SUPPLY
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-08	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
877002-04	STEEL MAST ARM ASSEMBLY AND POLE 56' THROUGH 75'
878001-11	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS

RED LIGHT RUNNING NOTES

DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA FOR THE LOCATIONS LISTED BELOW, THE CONTRACTOR SHALL NOTIFY THE VILLAGE AND RLR CAMERA COMPANY PRIOR TO THE START OF CONSTRUCTION. THE VILLAGE OR THE RLR CAMERA COMPANY SHALL MAKE THE CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

RLR CAMERA LOCATIONS:

US RTE 6 (162ND ST) AT STATE ST

VILLAGE OF SOUTH HOLLAND 16226 WASAU AVE SOUTH HOLLAND, IL 60473 (708) 210-2910	REDFLEX TRAFFIC SYSTEMS 15020 N 74TH ST SCOTTSDALE, AZ 85260 (480) 607-0705
--	--

IL RTE 1 (HALSTED ST) AT 144TH ST
IL RTE 1 (HALSTED ST) AT 138TH ST

VILLAGE OF RIVERDALE 157 W 144TH ST RIVERDALE, IL 60827 (708) 841-2200	REDSPEED, ILLINOIS, LLC. 400 EISENHOWER LANE LOMBARD, IL 60148 (630) 317-5700
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GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS. 48 HOUR NOTIFICATION IS REQUIRED.

THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV, 72 HOURS IN ADVANCE OF BEGINNING WORK.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARM LENGTHS.

ALL EXISTING R.O.W. SHOWN IS APPROXIMATE AND MAY NEED TO BE VERIFIED IN THE FIELD. ANY R.O.W. CONFLICTS SHALL BE COORDINATED WITH THE RESIDENT ENGINEER.

THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES, CONTACT THE LOCAL COUNTIES, MUNICIPALITIES AND IDOT FOR LOCATES. THE CONTRACTOR SHALL CALL "JULIE" AT (800) 892-0123 OR 811, IN THE CITY OF CHICAGO CONTACT DIGGER AT (312) 744-7000 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION REQUIRED).

IF THIS CONTRACT REQUIRES THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS/HER OWN EXPENSE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES PRIOR TO PERFORMING ANY WORK. IF THIS CONTRACT DOES NOT REQUIRE THE SERVICES OF AN ELECTRICAL CONTRACTOR, THE CONTRACTOR MAY REQUEST ONE FREE LOCATE FOR EXISTING IDOT ELECTRICAL FACILITIES FROM THE DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR PRIOR TO THE START OF ANY WORK. ADDITIONAL REQUESTS MAY BE AT THE EXPENSE OF THE CONTRACTOR. THE LOCATION OF UNDERGROUND TRAFFIC FACILITIES DOES NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO REPAIR ANY FACILITIES DAMAGED DURING CONSTRUCTION AT THEIR EXPENSE.

THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR UNDERGROUND AND OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL NOTIFY THE AREA ENGINEER, THE RESIDENT ENGINEER AND ANY IMPACTED UTILITY COMPANY OF THE CONFLICT, AND SHALL COORDINATE AND RESOLVE THE ISSUE PRIOR TO ORDERING MATERIALS, AND PRIOR TO POURING FOUNDATIONS.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT.

RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIUM, 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.

PARTIAL PAYMENT AS DESCRIBED IN ARTICLE 109.07(b) OF THE STANDARD SPECIFICATIONS WILL NOT BE ALLOWED FOR ITEMS INCLUDED IN THIS CONTRACT.

LOCATIONS WITH PEDESTRIAN EQUIPMENT HAVE BEEN DESIGNED TO BE ADA COMPLIANT. ANY DEVIATION FROM THE PLANS FOR TRAFFIC SIGNAL MAST ARM/POSTS THAT HAVE PEDESTRIAN EQUIPMENT WILL HAVE TO BE APPROVED BY THE ENGINEER TO INSURE ADA COMPLIANCE.

DIMENSIONED OFFSETS FOR THE TRAFFIC SIGNAL MAST ARMS AND POSTS ARE MEASURED FROM THE BACK OF CURB TO THE CENTER OF THE FOUNDATION WHERE CURB IS PRESENT. IF NO CURB IS PRESENT, OFFSETS ARE MEASURED FROM THE EDGE OF PAVEMENT TO THE CENTER OF THE FOUNDATION.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE ANY EXISTING SIGNS FROM THE MAST ARM ASSEMBLIES AND POSTS THAT ARE TO BE REMOVED AND TRANSFER THEM TO THE PROPOSED MAST ARM ASSEMBLIES AND POSTS PER THE STANDARD SPECIFICATIONS.

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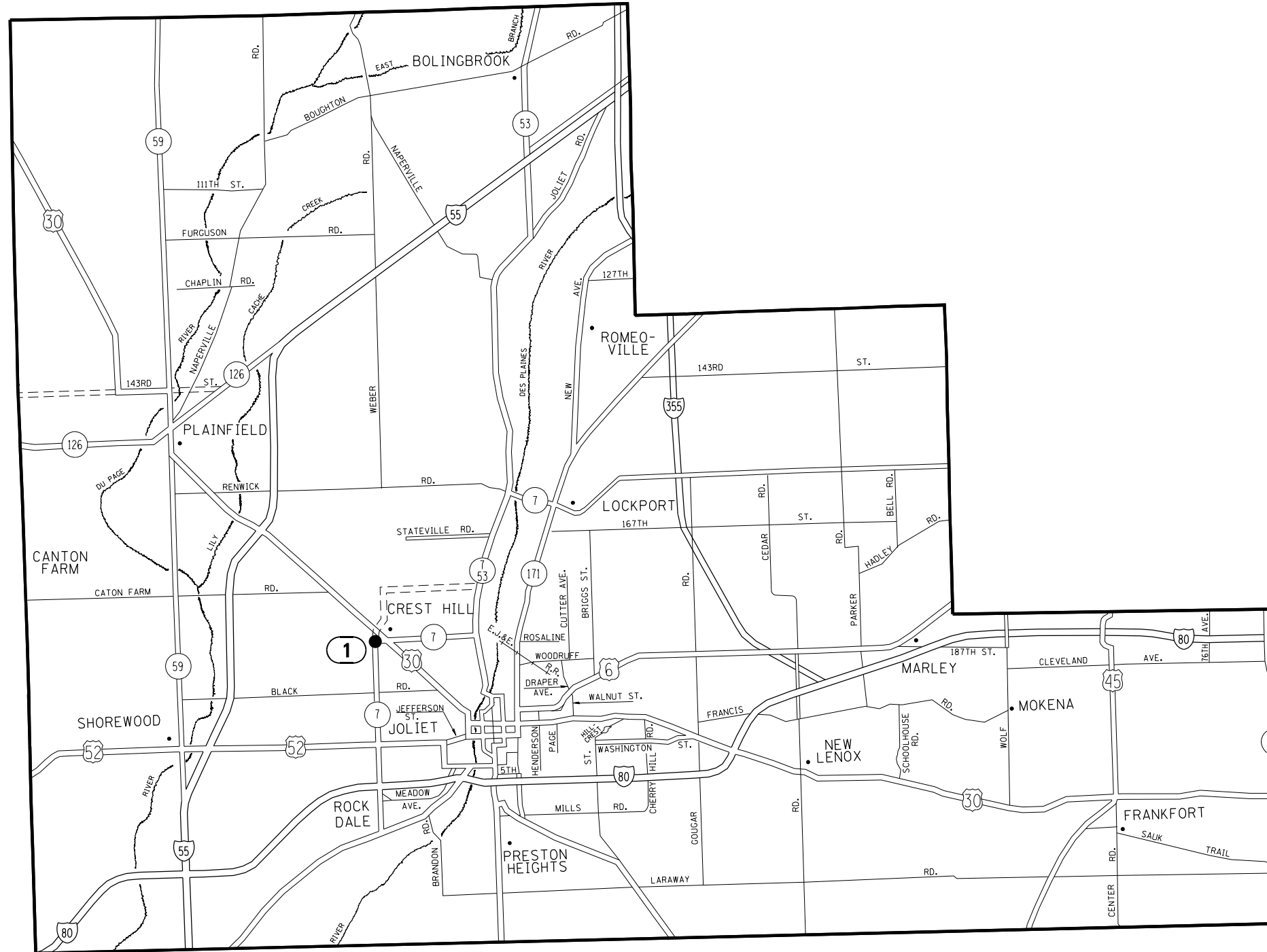
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, HIGHWAY STANDARDS & GENERAL NOTES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	2
			CONTRACT NO. 62U32	
		ILLINOIS	FED. AID PROJECT	



LOCATION NO.	TS NO.	INTERSECTION NAME	MUNICIPALITY	COUNTY
1	4295	IL RTE 7 (LARKIN AVE) AT IL RTE 7 (THEODORE ST)	CREST HILL	WILL

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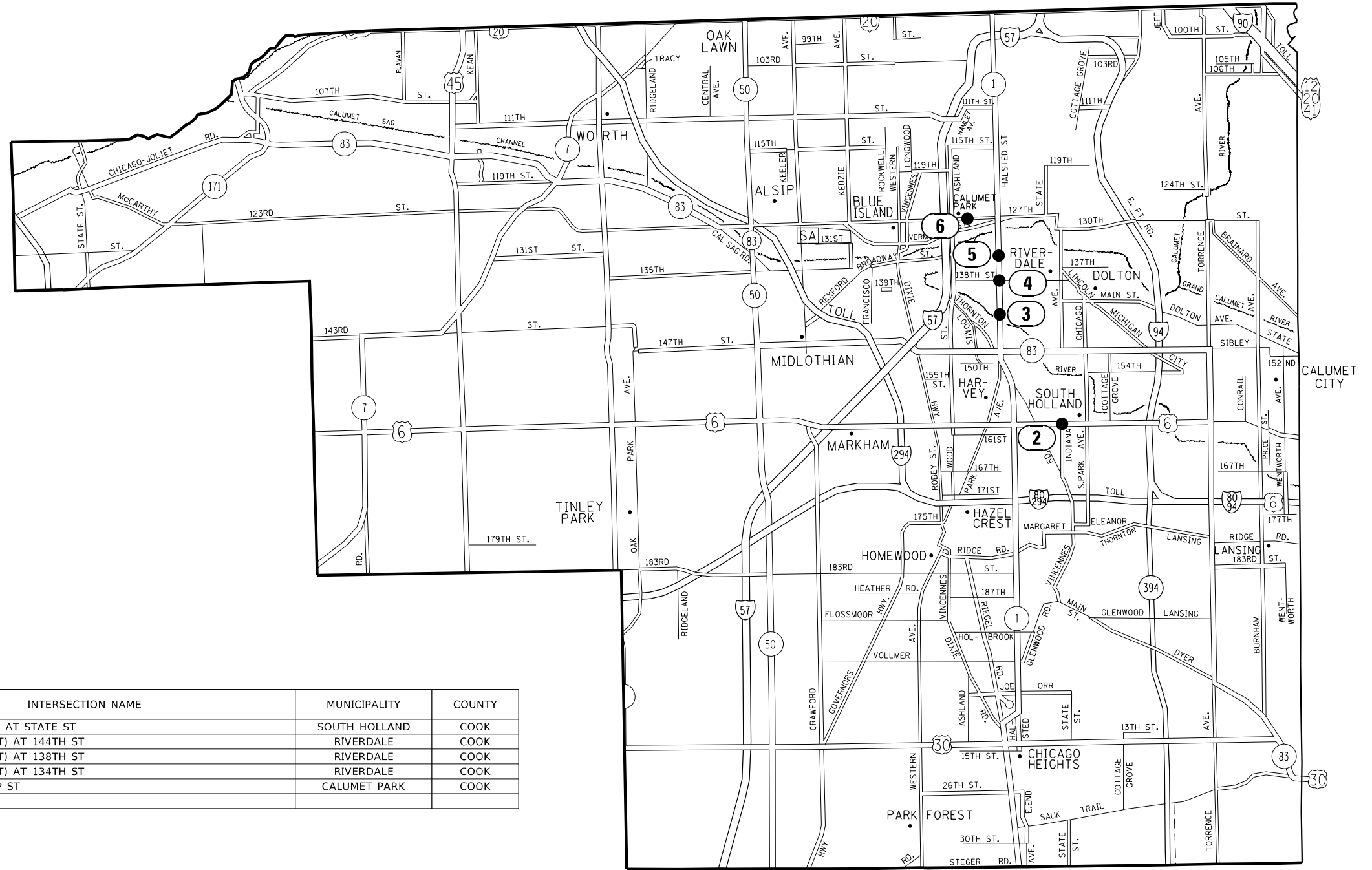
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LOCATION MAP (SHEET 1 OF 2)
NORTH WILL COUNTY

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	3
			CONTRACT NO. 62U32	
ILLINOIS FED. AID PROJECT				



LOCATION NO.	TS NO.	INTERSECTION NAME	MUNICIPALITY	COUNTY
2	295	US RTE 6 (162ND ST) AT STATE ST	SOUTH HOLLAND	COOK
3	9140	IL RTE 1 (HALSTED ST) AT 144TH ST	RIVERDALE	COOK
4	1795	IL RTE 1 (HALSTED ST) AT 138TH ST	RIVERDALE	COOK
5	9135	IL RTE 1 (HALSTED ST) AT 134TH ST	RIVERDALE	COOK
6	4005	127TH ST AT THROOP ST	CALUMET PARK	COOK

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**LOCATION MAP (SHEET 2 OF 2)
SOUTH COOK COUNTY**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	4
			CONTRACT NO. 62U32	
ILLINOIS FED. AID PROJECT				

CONSTRUCTION CODE					
90% FED 10% STATE WILL COUNTY	90% FED 10% STATE COOK COUNTY				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS						
				0021						
				URBAN						
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	60	20	40					
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	2	1	1					
* 66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	0.20	0.80					
* 66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	0.20	0.80					
* 66901006	REGULATED SUBSTANCES MONITORING	CAL DA	18	3	15					
67100100	MOBILIZATION	L SUM	1	0.20	0.80					
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	0.20	0.80					
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	0.20	0.80					
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.20	0.80					
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.20	0.80					
72000100	SIGN PANEL - TYPE 1	SQ FT	93	31.5	61.5					
72000200	SIGN PANEL - TYPE 2	SQ FT	108.75	52.5	56.25					
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	732	233	499					
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	408	62	346					

* SPECIALTY ITEM

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES (SHEET 1 OF 6)			
SCALE:	SHEET	OF	SHEETS
	STA.		TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	5
			CONTRACT NO. 62U32	
ILLINOIS FED. AID PROJECT				

CONSTRUCTION CODE					
90% FED 10% STATE WILL COUNTY	90% FED 10% STATE COOK COUNTY				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS					
				0021					
				URBAN					
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	1,628	332	1,296				
81400100	HANDHOLE	EACH	1	1					
81400200	HEAVY-DUTY HANDHOLE	EACH	4		4				
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	6	1	5				
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1		1				
86400100	TRANSCEIVER - FIBER OPTIC	EACH	1	1					
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,410		1,410				
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2,340	315	2,025				
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	10,470	1,830	8,640				
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	6,745	2,060	4,685				
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	6,895	1,995	4,900				
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	2,530	470	2,060				
87502440	TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1		1				
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	9	1	8				

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES (SHEET 2 OF 6)			
SCALE:	SHEET	OF	SHEETS
	STA.		TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	6
			CONTRACT NO. 62U32	
ILLINOIS FED. AID PROJECT				

CONSTRUCTION CODE					
90% FED 10% STATE WILL COUNTY	90% FED 10% STATE COOK COUNTY				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS						
				0021						
				URBAN						
87700160	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	3		3					
87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1		1					
87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1		1					
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	2		2					
87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	2	1	1					
87700230	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	8		8					
87700260	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	4	2	2					
87700280	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1		1					
87700414	STEEL MAST ARM ASSEMBLY AND POLE, 66 FT.	EACH	1	1						
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	20	4	16					
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	215.5	13.5	202					
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	65	26	39					
87800420	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	28	28						
87900200	DRILL EXISTING HANDHOLE	EACH	74	12	62					

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES (SHEET 3 OF 6)				
SCALE:	SHEET	OF	SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	7
			CONTRACT NO. 62U32	
ILLINOIS FED. AID PROJECT				

CONSTRUCTION CODE					
90% FED 10% STATE WILL COUNTY	90% FED 10% STATE COOK COUNTY				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS						
				0021						
				URBAN						
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	40	7	33					
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	30	3	27					
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	20	5	15					
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	20	5	15					
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	22		22					
88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	60	12	48					
88500100	INDUCTIVE LOOP DETECTOR	EACH	21	13	8					
88600100	DETECTOR LOOP, TYPE I	FOOT	482	66	416					
89501250	RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	5	1	4					
89502200	MODIFY EXISTING CONTROLLER	EACH	1		1					
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	13,605	3,170	10,435					
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	6	1	5					
89502376	REBUILD EXISTING HANDHOLE	EACH	2		2					
89502380	REMOVE EXISTING HANDHOLE	EACH	14	1	13					

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES (SHEET 4 OF 6)			
SCALE:	SHEET	OF	SHEETS

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CONSTRUCTION CODE					
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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS						
				0021						
				URBAN						
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	27	5	22					
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1,155	315	840					
X1400102	OUTDOOR RATED NETWORK CABLE	FOOT	90		90					
X1400367	PEDESTRIAN SIGNAL POST, 10 FT.	EACH	3		3					
X1400378	PEDESTRIAN SIGNAL POST, 5 FT.	EACH	2		2					
X1400388	VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	6		6					
X1400424	ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW	FOOT	785		785					
X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	6	1	5					
X8570215	FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	2		2					
X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET (SPECIAL)	EACH	1	1						
X8620250	UNINTERRUPTABLE POWER SUPPLY AND CABINET (SPECIAL)	EACH	2	1	1					
X8620310	REMOVE AND REPLACE BATTERIES FOR UNINTERUPTABLE POWER SUPPLY, EXTENDED	EACH	4		4					
X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	22		22					
X8780012	CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	20		20					

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES (SHEET 5 OF 6)				
SCALE:	SHEET	OF	SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	9
			CONTRACT NO. 62U32	
ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET			HANDHOLE -SQUARE -ROUND			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD		
COMMUNICATION CABINET			HEAVY DUTY HANDHOLE -SQUARE -ROUND			SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
MASTER CONTROLLER			DOUBLE HANDHOLE			PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
MASTER MASTER CONTROLLER			JUNCTION BOX			PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER		
UNINTERRUPTABLE POWER SUPPLY			RAILROAD CANTILEVER MAST ARM			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SERVICE INSTALLATION -(P) POLE MOUNTED			RAILROAD FLASHING SIGNAL			NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED			RAILROAD CROSSING GATE			GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)		
TELEPHONE CONNECTION			RAILROAD CROSSBUCK			ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
STEEL MAST ARM ASSEMBLY AND POLE			RAILROAD CONTROLLER CABINET			COAXIAL CABLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			VENDOR CABLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY			SYSTEM ITEM			FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F		
WOOD POLE			INTERSECTION ITEM			GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE		
GUY WIRE			REMOVE ITEM					
SIGNAL HEAD			RELOCATE ITEM					
SIGNAL HEAD WITH BACKPLATE			ABANDON ITEM					
SIGNAL HEAD OPTICALLY PROGRAMMED			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED					
FLASHER INSTALLATION -(FS) SOLAR POWERED			MAST ARM POLE AND FOUNDATION TO BE REMOVED					
PEDESTRIAN SIGNAL HEAD			SIGNAL POST AND FOUNDATION TO BE REMOVED					
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			DETECTOR LOOP, TYPE I					
RADAR DETECTION SENSOR			PREFORMED DETECTOR LOOP					
VIDEO DETECTION CAMERA			SAMPLING (SYSTEM) DETECTOR					
RADAR/VIDEO DETECTION ZONE			INTERSECTION AND SAMPLING (SYSTEM) DETECTOR					
PAN, TILT, ZOOM (PTZ) CAMERA			QUEUE AND SAMPLING (SYSTEM) DETECTOR					
EMERGENCY VEHICLE LIGHT DETECTOR			WIRELESS DETECTOR SENSOR					
CONFIRMATION BEACON			WIRELESS ACCESS POINT					
WIRELESS INTERCONNECT								
WIRELESS INTERCONNECT RADIO REPEATER								

MODEL: Defaul
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

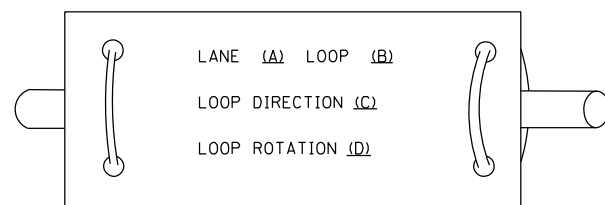
DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET 1	OF 7 SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	11
TS-05		CONTRACT NO. 62U32		
ILLINOIS FED. AID PROJECT				

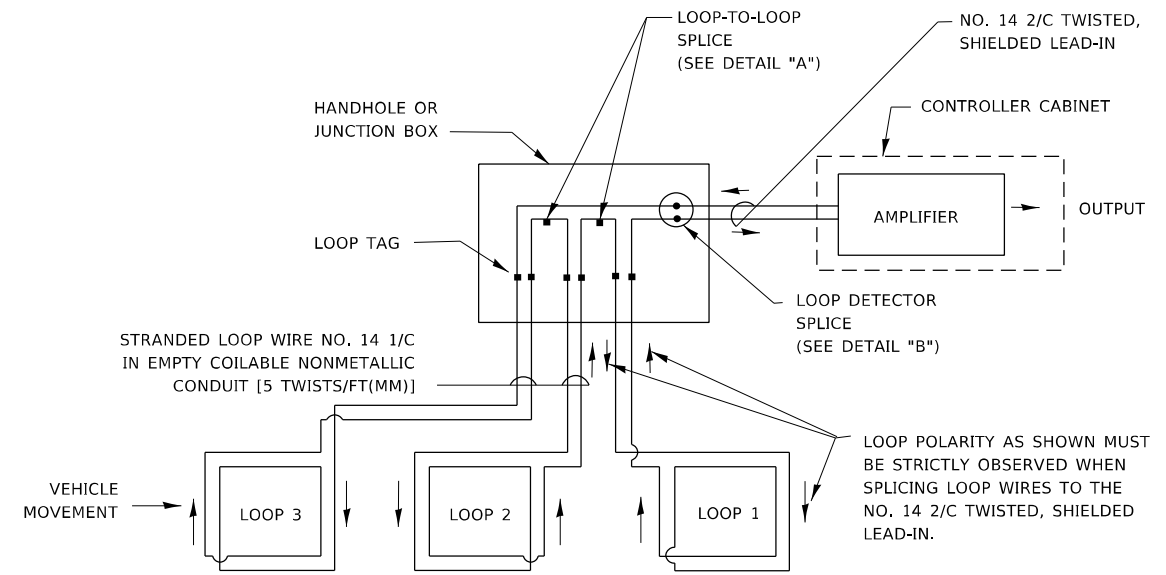
LOOP DETECTOR NOTES

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

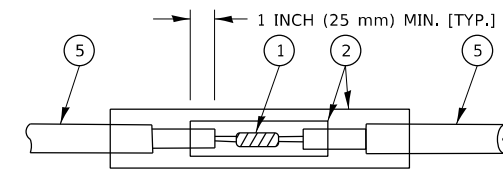


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

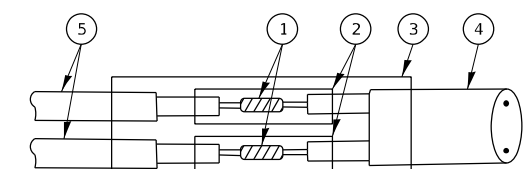


DETECTOR LOOP WIRING SCHEMATIC

- 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.

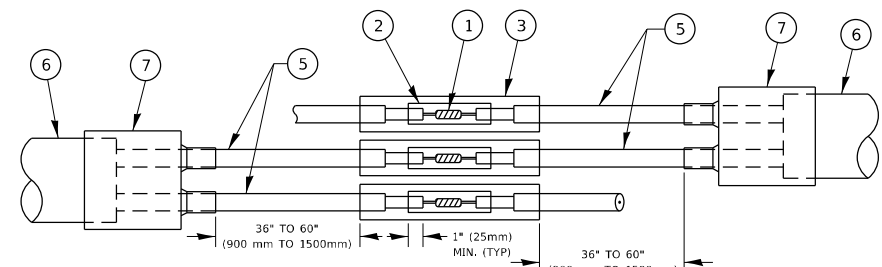


DETAIL "A"
LOOP-TO-LOOP SPLICE

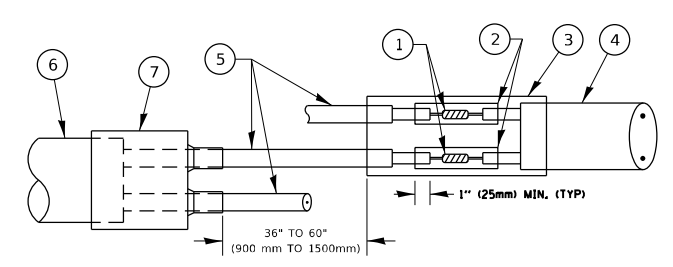


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PREFORMED LOOP

LOOP DETECTOR SPLICE

- ① WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- 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. PREFORMED LOOP
- ⑥ XL POLYOLEFIN 2 CONDUCTOR
- ⑦ BREAKOUT SEALS, TYCO CBR-2 OR APPROVED EQUAL

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September 2023

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

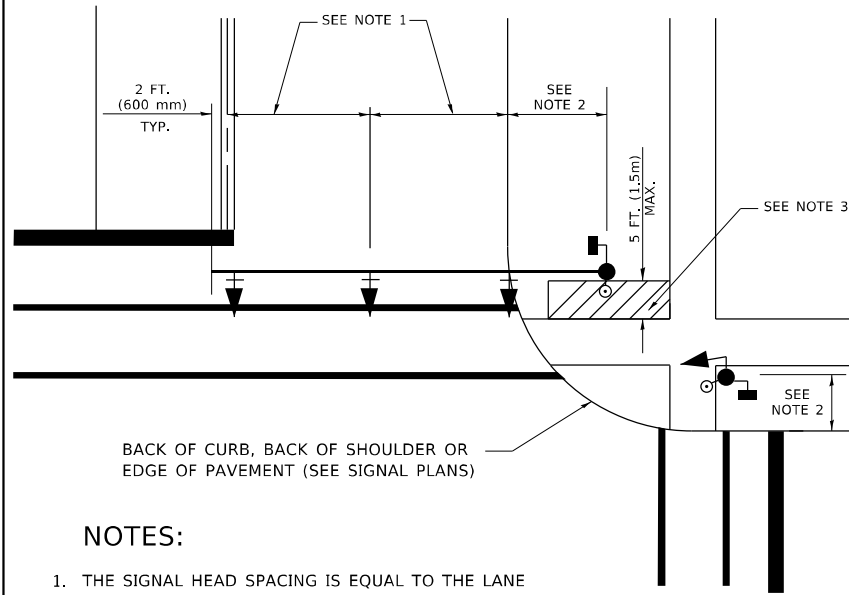
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET 2 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	12
TS-05			CONTRACT NO. 62U32	
ILLINOIS		FED. AID PROJECT		

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.

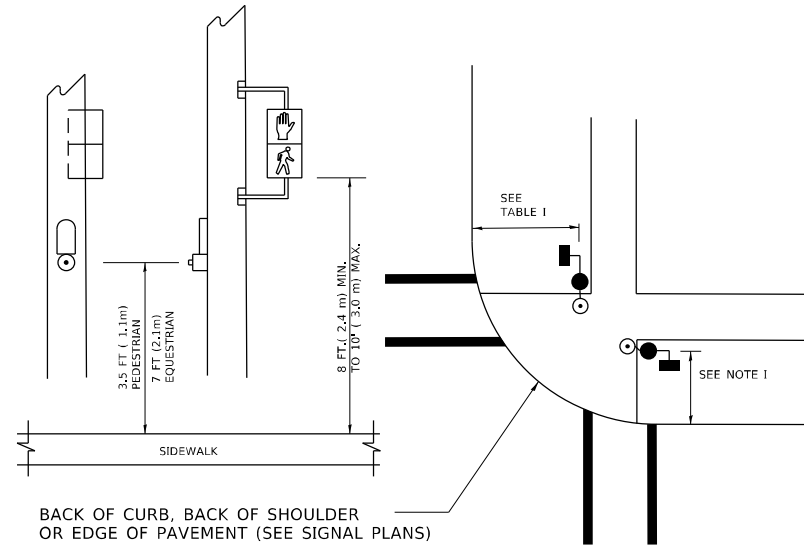


BACK OF CURB, BACK OF SHOULDER OR EDGE OF PAVEMENT (SEE SIGNAL PLANS)

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

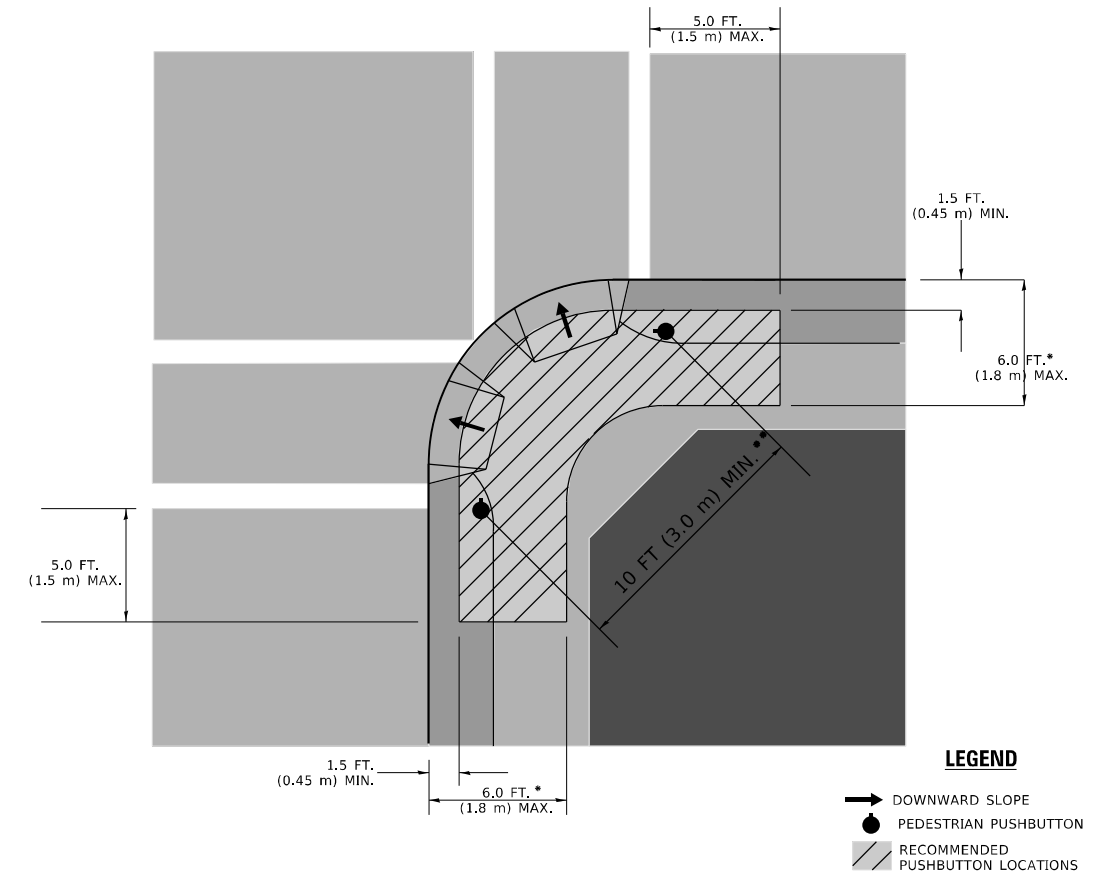


BACK OF CURB, BACK OF SHOULDER OR EDGE OF PAVEMENT (SEE SIGNAL PLANS)

NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ RECOMMENDED PUSHBUTTON LOCATIONS

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

NOTES:

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.

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September 2023

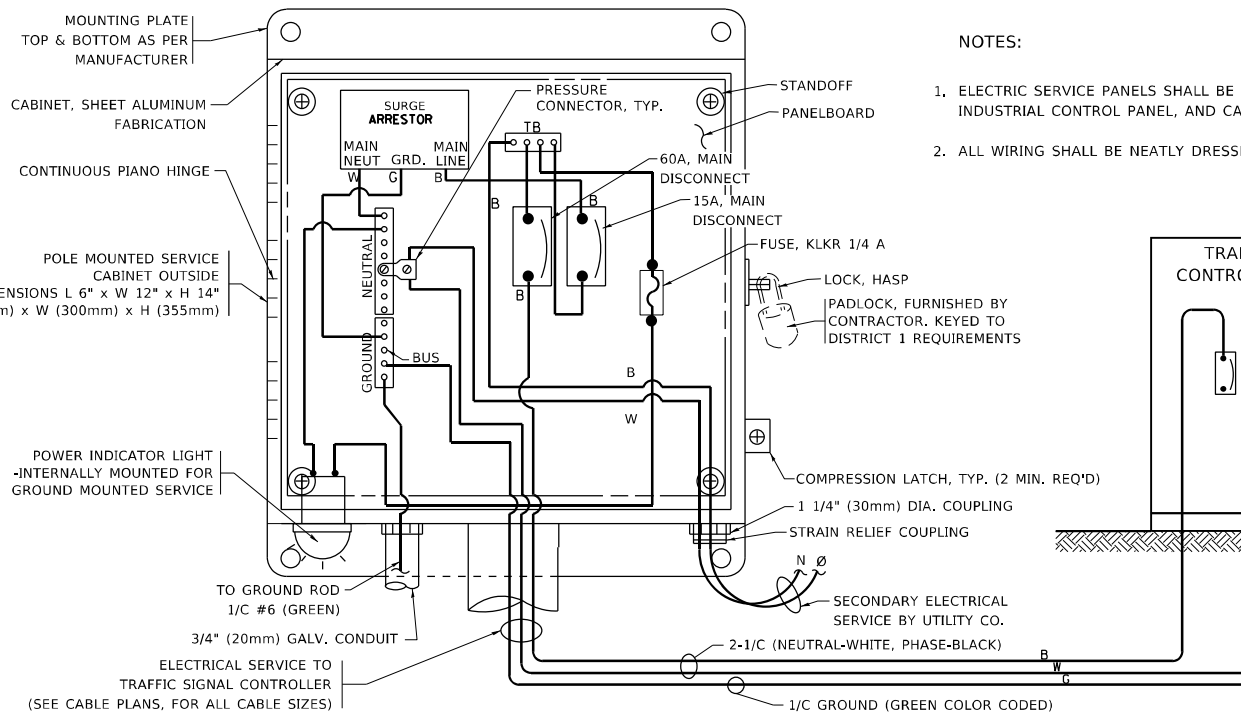
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

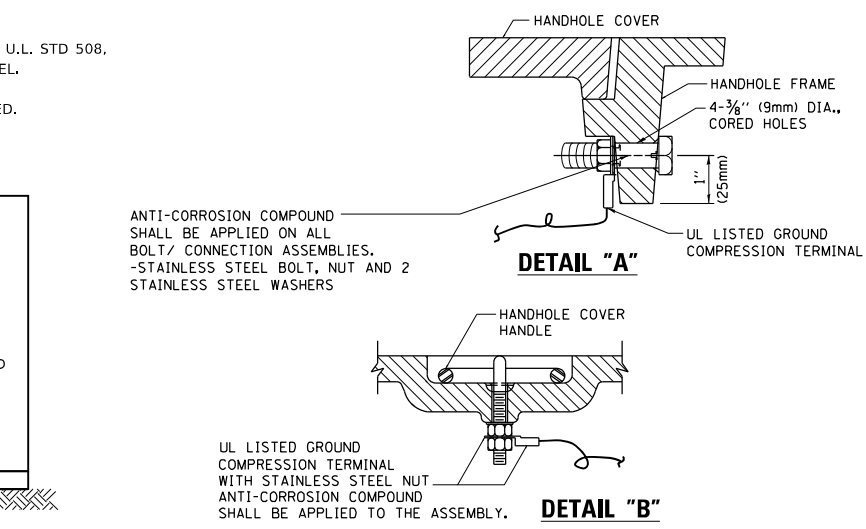
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET 3 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TS-05			CONTRACT NO. 62U32	
ILLINOIS FED. AID PROJECT				

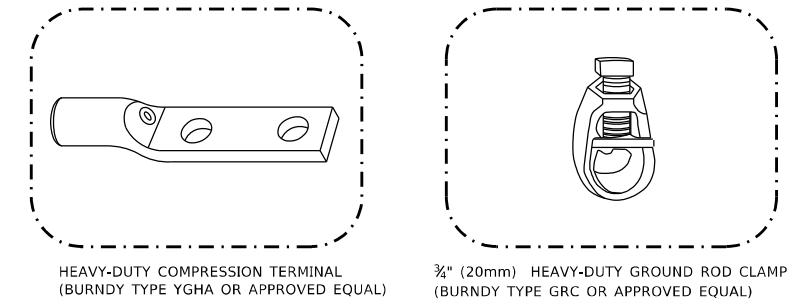


ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



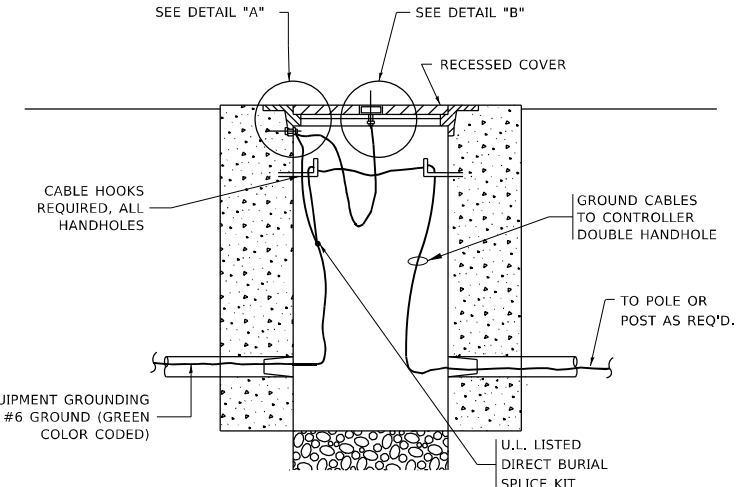
NOTES:
GROUNDING SYSTEM

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

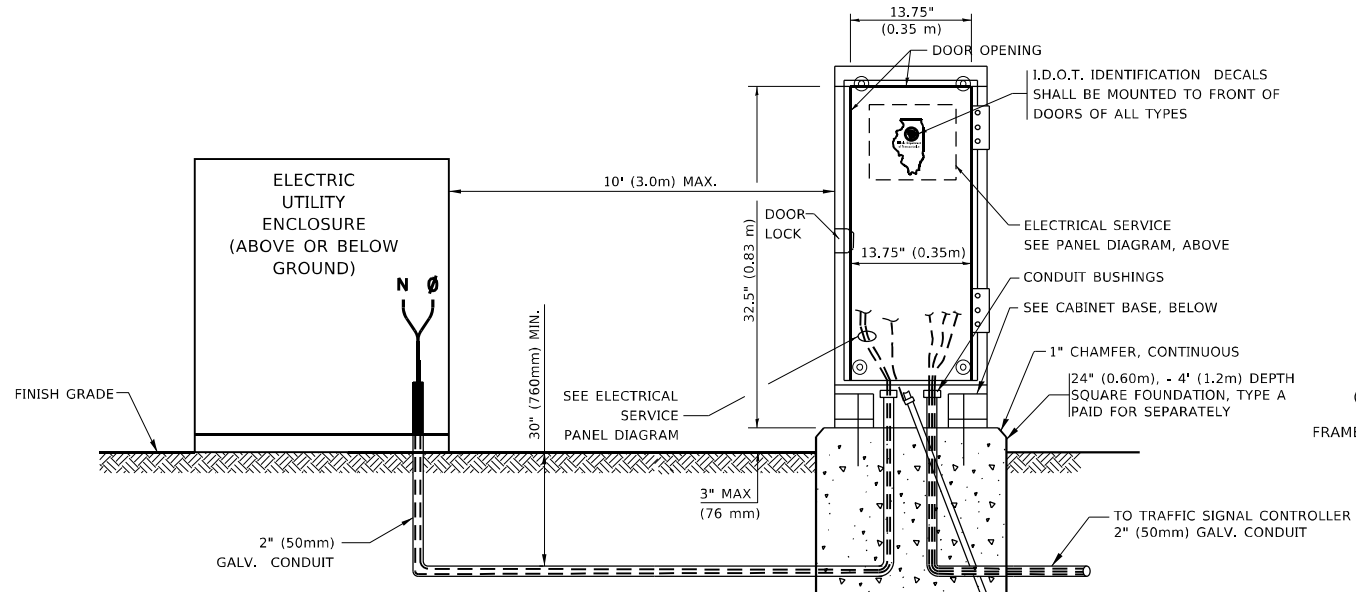
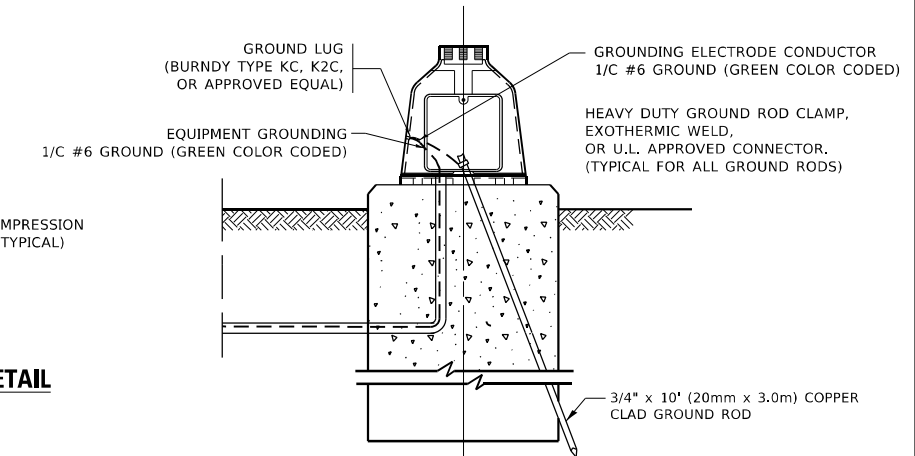
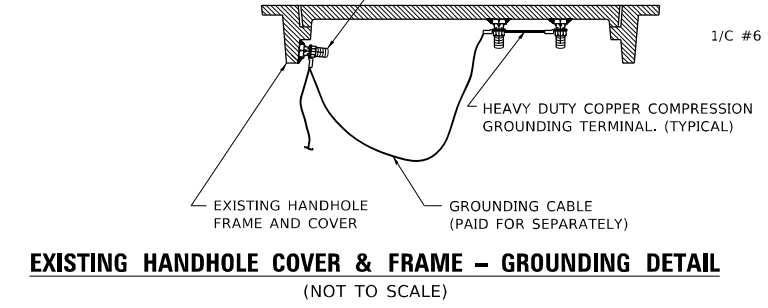


NOTES:

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

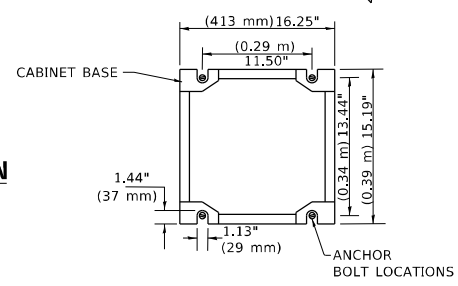


(2) 1/2" x 1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO FRAME AND TO COVER. (TYPICAL). ANTI-CORROSION COMPOUND SHALL BE APPLIED TO EACH ASSEMBLY.



SERVICE INSTALLATION GROUND MOUNT
 (NOT TO SCALE)

CABINET – BASE BOLT PATTERN
 (NOT TO SCALE)



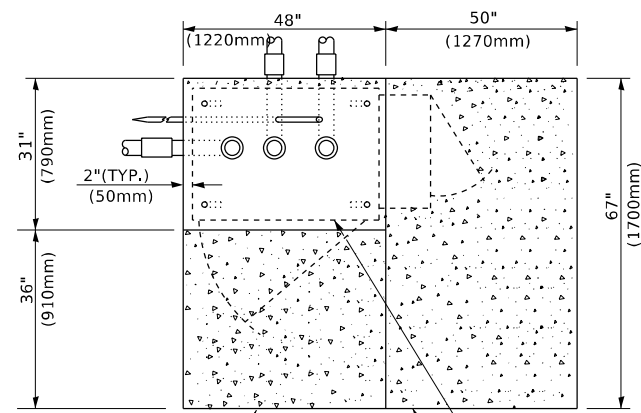
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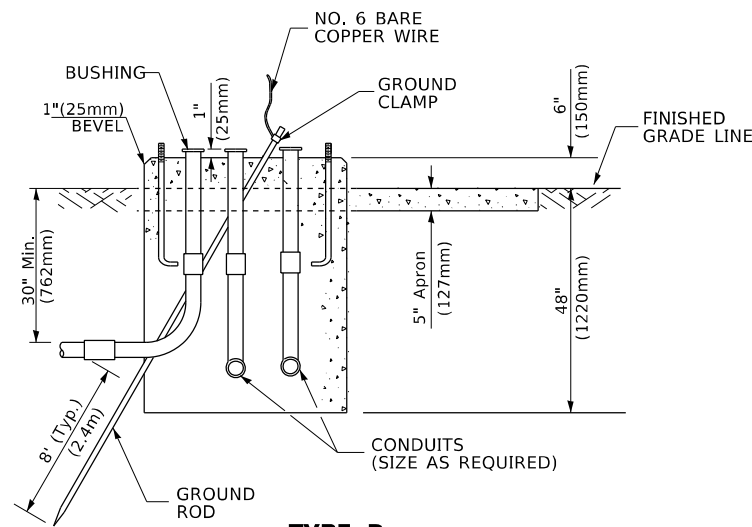
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET 4	OF 7 SHEETS	STA. TO STA.

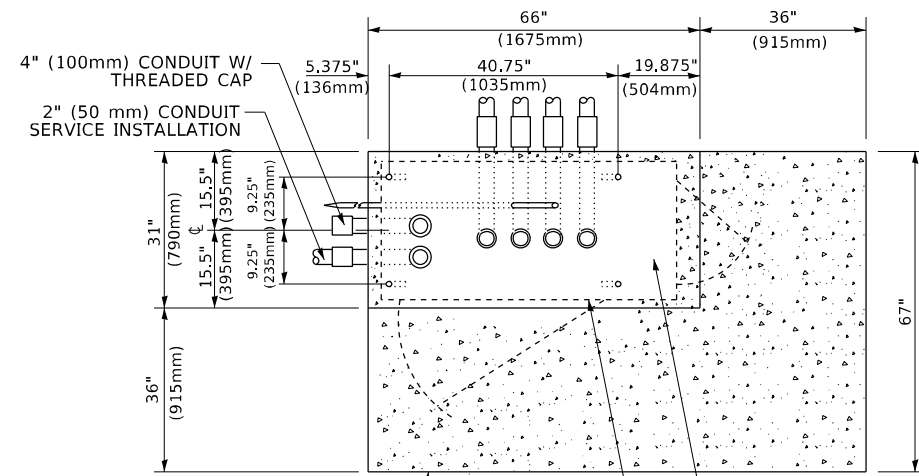
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	14
TS-05		CONTRACT NO. 62U32		
		ILLINOIS FED. AID PROJECT		



TOP VIEW



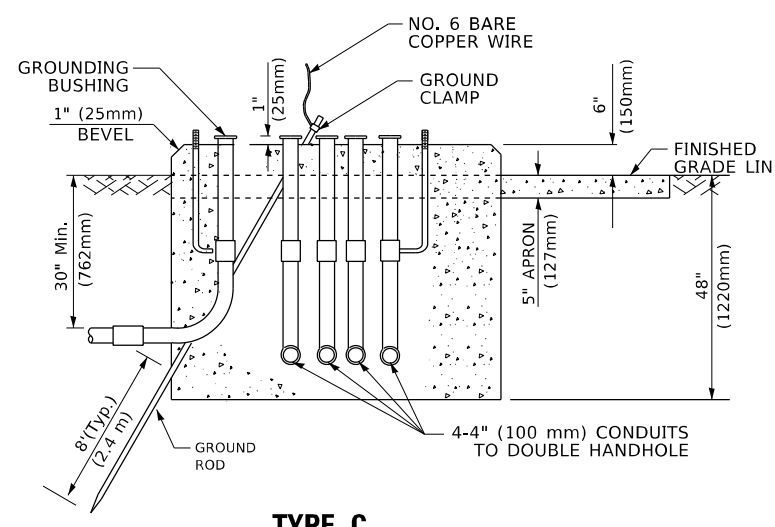
**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**



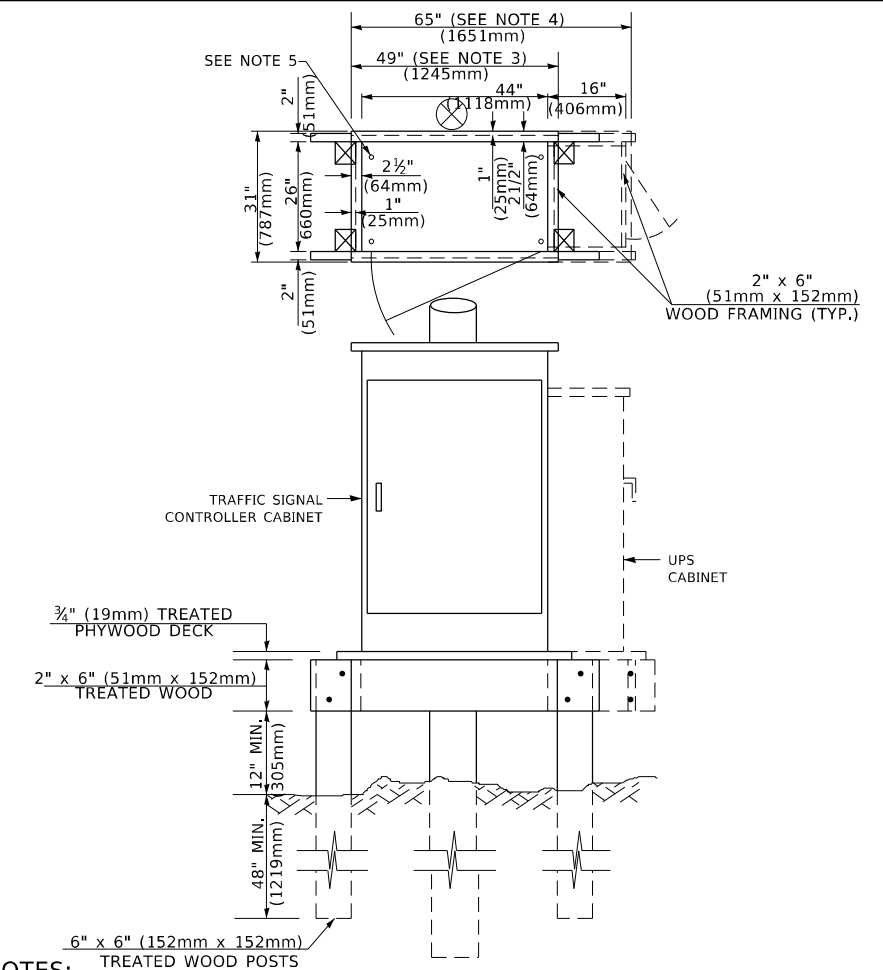
TOP VIEW

NOTE:

TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



**TYPE C
FOR GROUND MOUNTED
SUPER P (TYPE IV) AND SUPER R (TYPE V)
CONTROLLER CABINETS**



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 less than 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 up to 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

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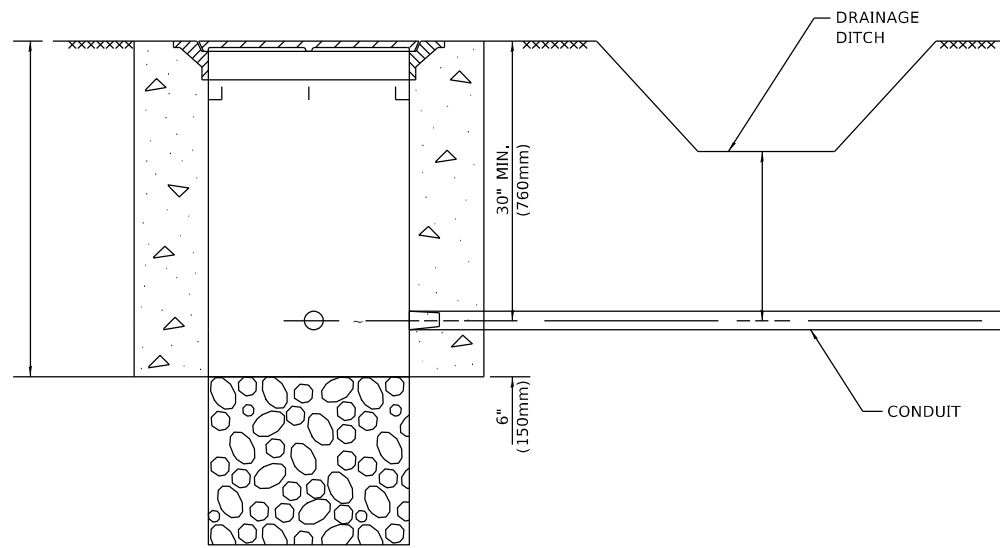
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	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 6/29/2023	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET 5 OF 7 SHEETS STA. TO STA.

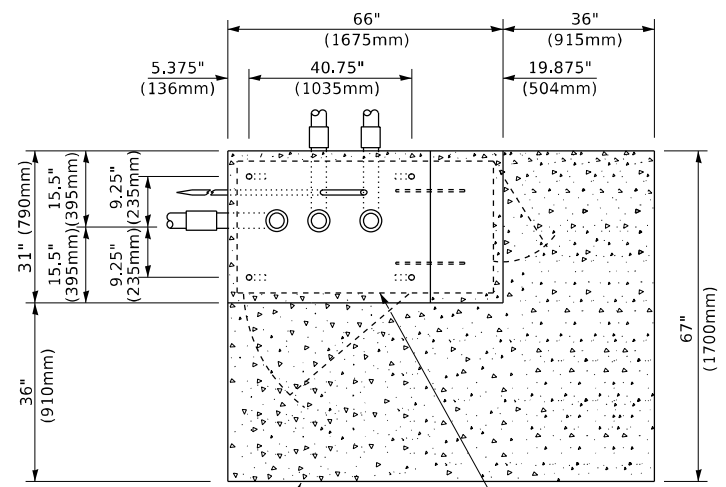
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VAR	2023 TRAFFIC MAST	VARIOUS	47	15
TS-05			CONTRACT NO. 62U32	
ILLINOIS FED. AID PROJECT				



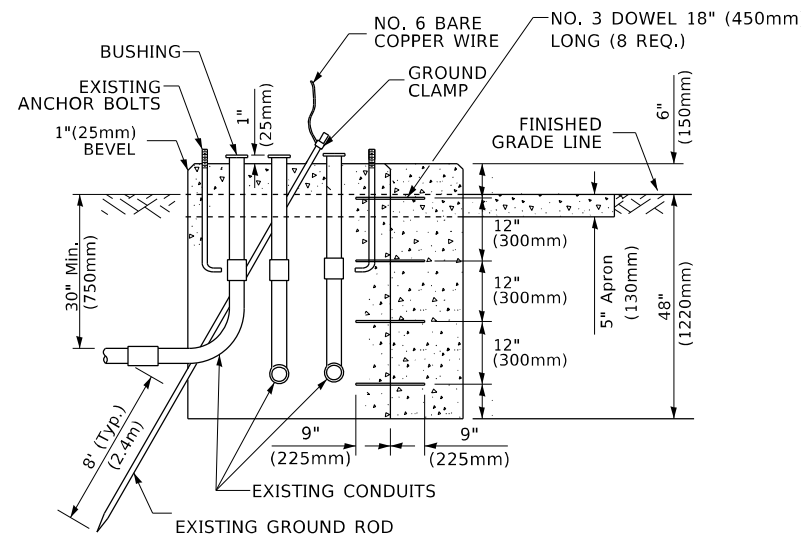
NOTES:

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

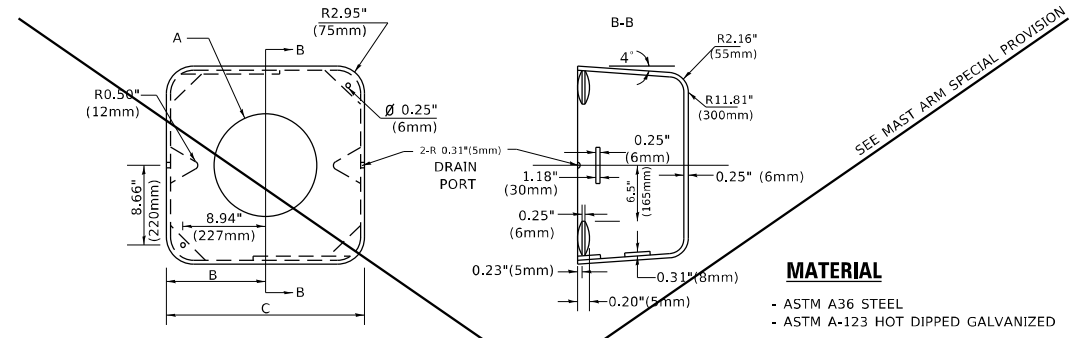
HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



TOP VIEW
(NOT TO SCALE)



MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION
(NOT TO SCALE)



SHROUD

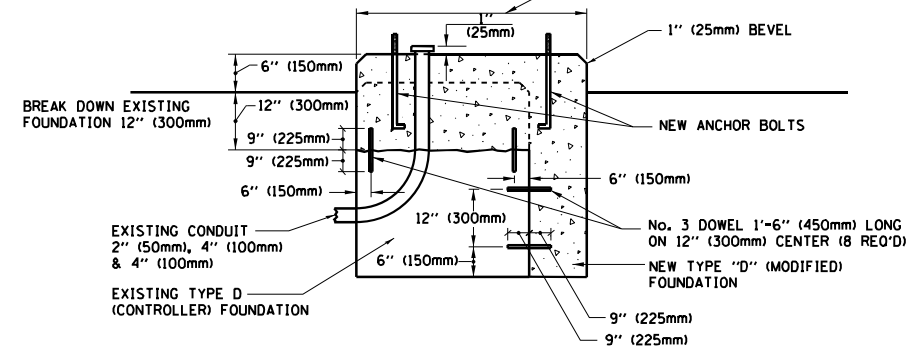
A	B	C	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57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

NOTES:

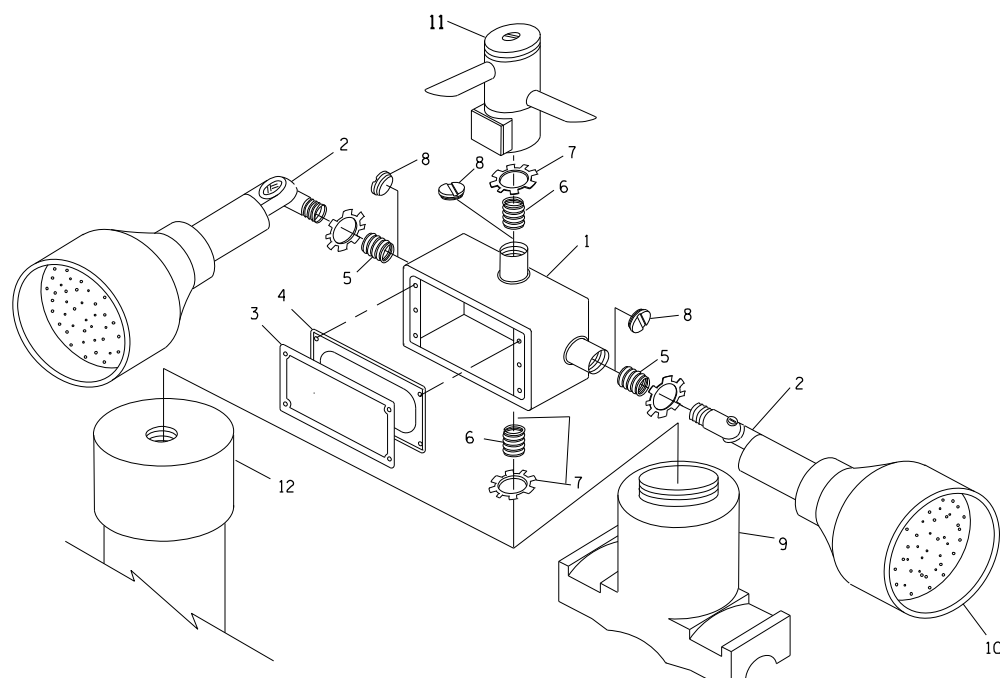
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

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



MODIFY EXISTING TYPE "D" FOUNDATION

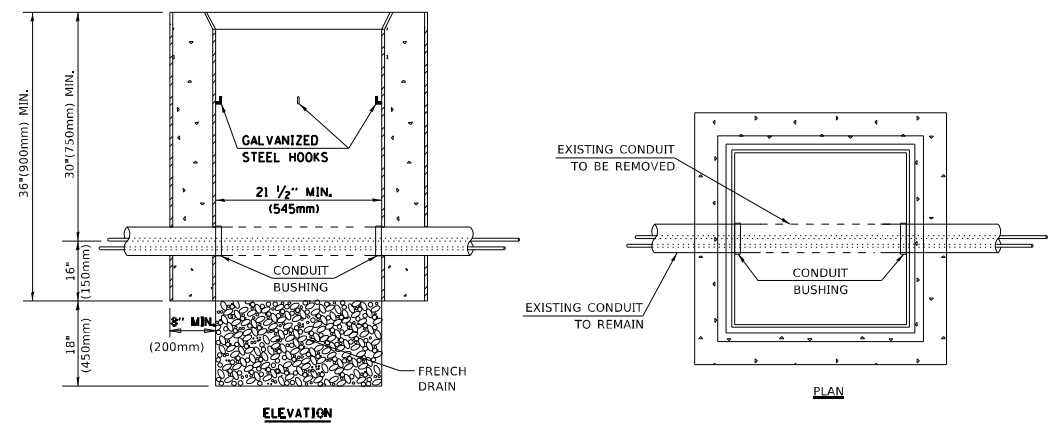


EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0,000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4"(19 mm) CLOSE NIPPLE
7	3/4"(19 mm) LOCKNUT
8	3/4"(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. 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:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

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September 2023

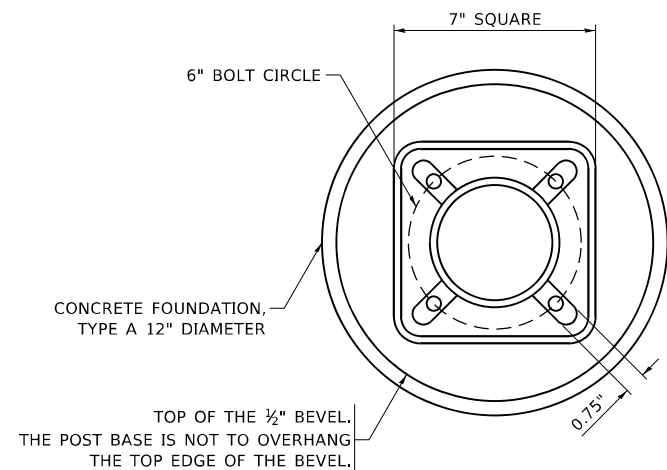
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PLOT DATE = 6/29/2023	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET 6 OF 7 SHEETS STA. TO STA.

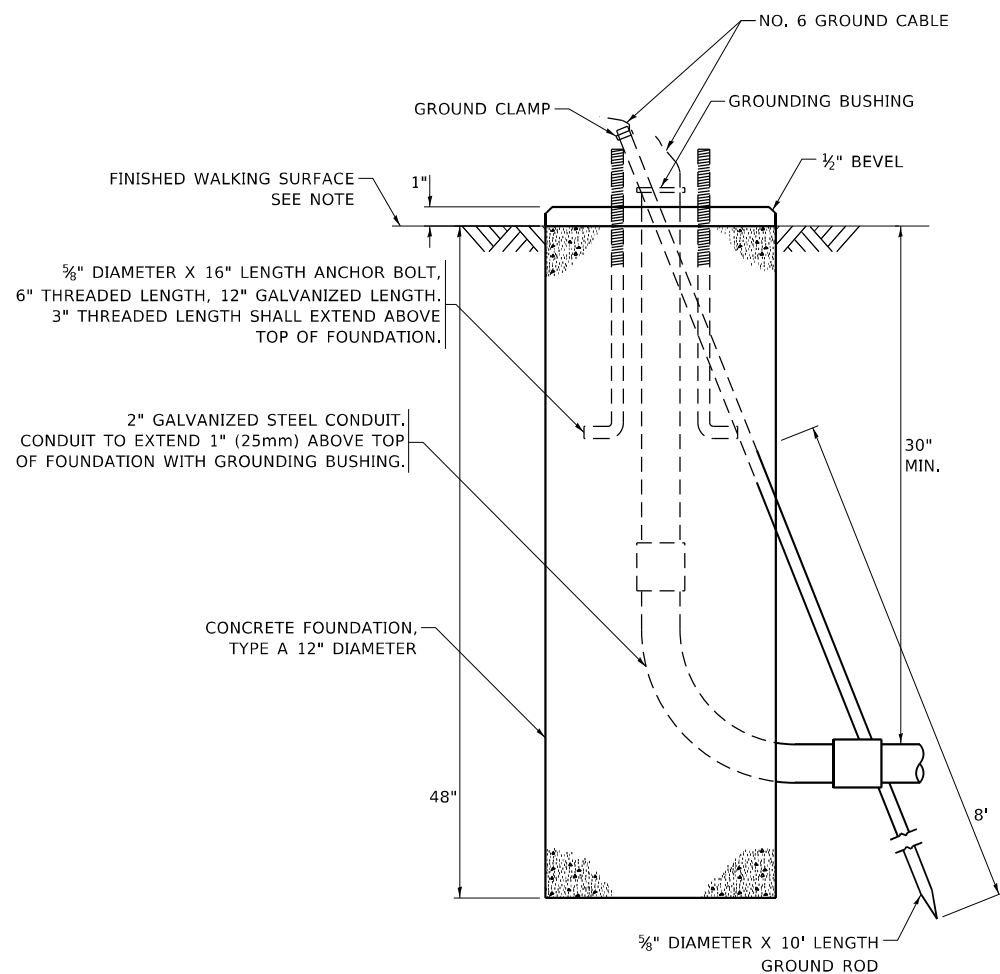
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	16
TS-05		CONTRACT NO. 62U32		
ILLINOIS FED. AID PROJECT				



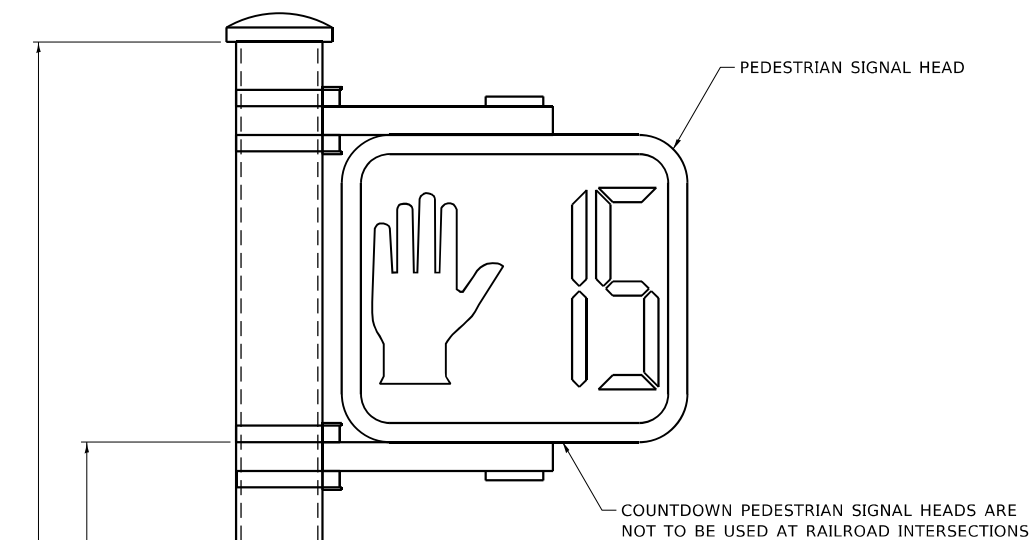
BOLT PATTERN

NOTE:

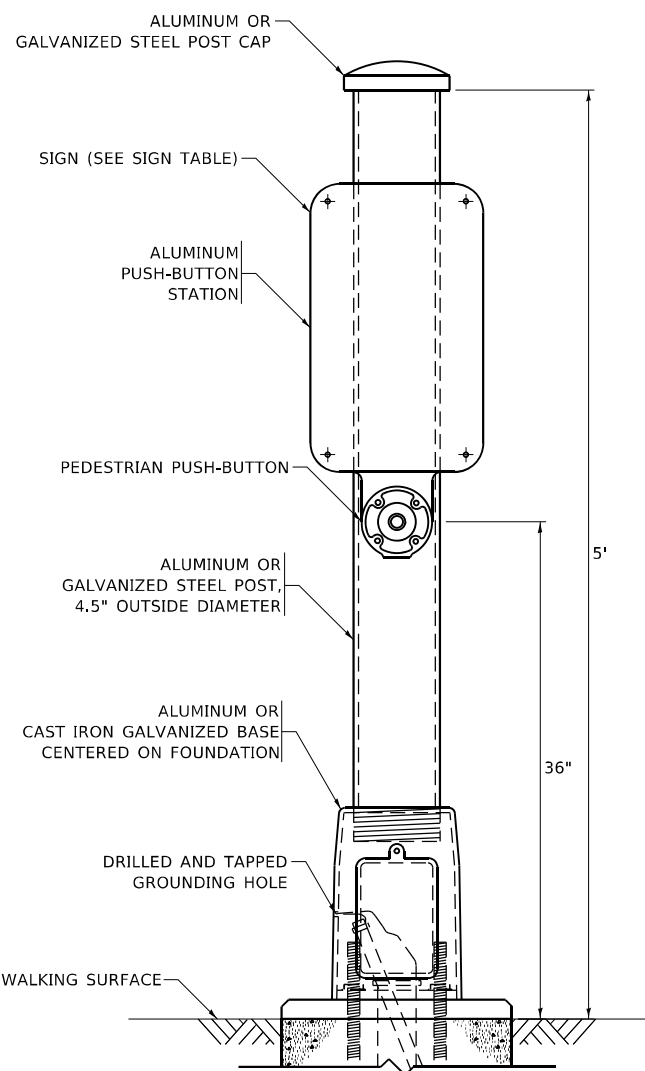
1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.



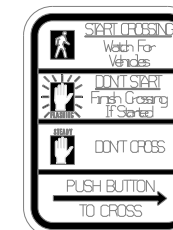
**CONCRETE FOUNDATION,
TYPE A 12-INCH DIAMETER**



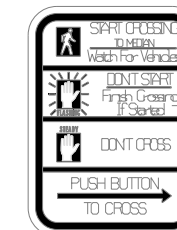
PEDESTRIAN SIGNAL POST, 10 FT.



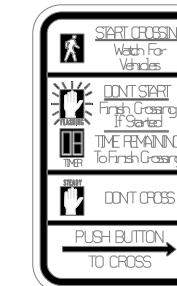
PEDESTRIAN SIGNAL POST, 5 FT.



R10-3b



R10-3d



R10-3e

SIGN TABLE

SIGN	DIMENSIONS
R10-3b (RAILROAD ONLY)	9" X 12"
R10-3d (RAILROAD ONLY)	9" X 12"
R10-3e	9" X 12"

NOTES:

1. THE SIGN PANELS SHALL BE TYPE AP SHEETING.
2. THE ARROW ON SIGNS FOR PUSH-BUTTONS SERVING TWO DIRECTIONS ON THE SAME PHASE SHALL BE BI-DIRECTIONAL.
3. THE SIGN FOR DUAL-CALL PUSH-BUTTONS SHALL HAVE NO ARROW.

MODEL: Default
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USER NAME = Ivanan,Plascencia	DESIGNED - IP	REVISED - 10-15-2020
PLOT SCALE = 100,0000' / in.	DRAWN - IP	REVISED -
PLOT DATE = 6/29/2023	CHECKED - LP	REVISED -
	DATE - 10-15-2018	REVISED -

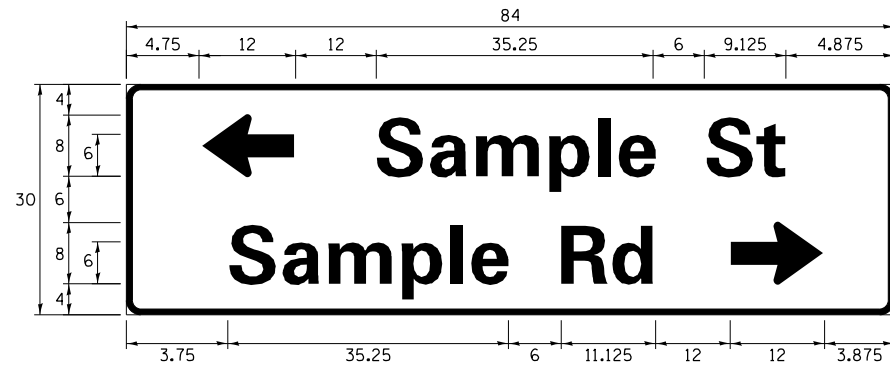
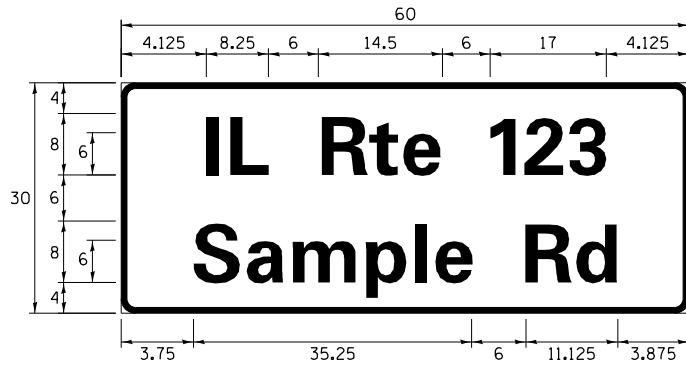
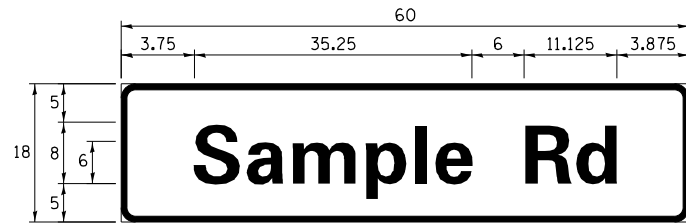
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET 7 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	17
TS-05		CONTRACT NO. 62U32		
ILLINOIS FED. AID PROJECT				

SIGN PANEL – TYPE 1 OR TYPE 2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D OR C	-	1 OR 2	ZZ	-

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVIATION	WIDTH (INCH)	
		SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Blvd	17.125	20.000
CIRCLE	Cir	11.125	13.000
COURT	Ct	8.250	9.625
DRIVE	Dr	8.625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLINOIS	IL	7.000	8.250
LANE	Ln	9.125	10.750
PARKWAY	Pkwy	23.375	27.375
PLACE	Pl	7.125	7.750
ROAD	Rd	9.625	11.125
ROUTE	Rte	12.625	14.500
STREET	St	8.000	9.125
TERRACE	Ter	12.625	14.625
TRAIL	Tr	7.750	9.125
UNITED STATES	US	10.375	12.250

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 CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)
- THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS SHALL BE 3/4" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8'-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
- LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

LOCAL SUPPLIERS:

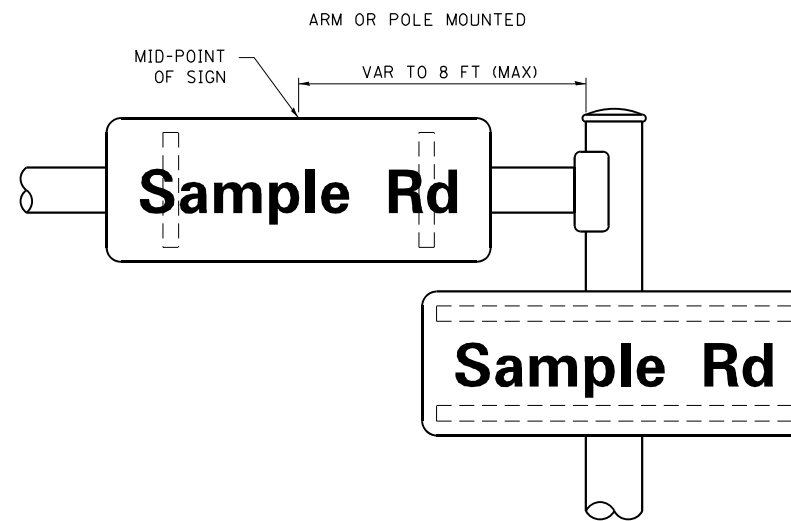
- J.O. HERBERT COMPANY, INC
MIDLOTHIAN, VA
- WESTERN REMAC, INC.
WOODRIDGE, IL

PARTS LISTING:

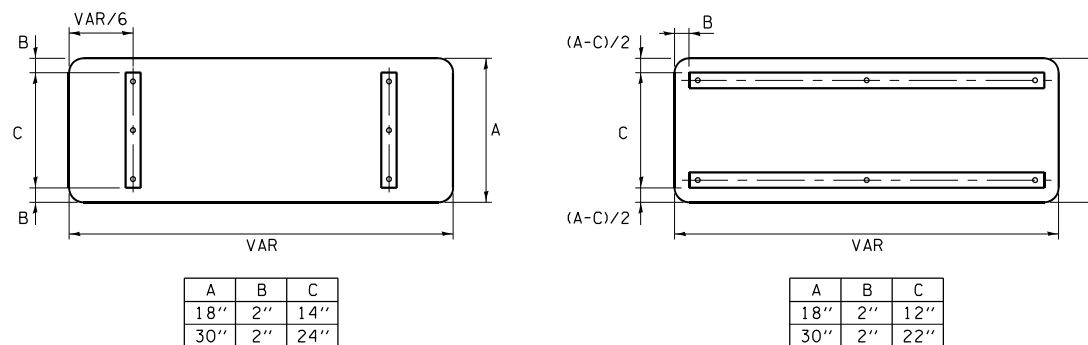
- SIGN CHANNEL PART #HPN053 (MED. CHANNEL)
1/4" x 14 x 1" H.W.H. #3
SELF TAPPING WITH NEOPRENE WASHER
- SIGN SCREWS PART #HPN034 (UNIVERSAL)
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING
- BRACKETS

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

MOUNTING LOCATION



SUPPORTING CHANNELS



STANDARD ALPHABETS SPACING CHART

(8") UPPER CASE AND (6") LOWER CASE

CHARACTER	FHWA SERIES "C"			CHARACTER	FHWA SERIES "D"		
	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)		LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)
A	0.240	5.122	0.240	A	0.240	6.804	0.240
B	0.880	4.482	0.480	B	0.960	5.446	0.400
C	0.720	4.482	0.720	C	0.800	5.446	0.800
D	0.880	4.482	0.720	D	0.960	5.446	0.800
E	0.880	4.082	0.480	E	0.960	4.962	0.400
F	0.880	4.082	0.240	F	0.960	4.962	0.240
G	0.720	4.482	0.720	G	0.800	5.446	0.800
H	0.880	4.482	0.880	H	0.960	5.446	0.960
I	0.880	1.120	0.880	I	0.960	1.280	0.960
J	0.240	4.082	0.880	J	0.240	5.122	0.960
K	0.880	4.482	0.480	K	0.960	5.604	0.400
L	0.880	4.082	0.240	L	0.960	4.962	0.240
M	0.880	5.284	0.880	M	0.960	6.244	0.960
N	0.880	4.482	0.880	N	0.960	5.446	0.960
O	0.720	4.722	0.720	O	0.800	5.684	0.800
P	0.880	4.482	0.720	P	0.960	5.446	0.240
Q	0.720	4.722	0.720	Q	0.800	5.684	0.800
R	0.880	4.482	0.480	R	0.960	5.446	0.400
S	0.480	4.482	0.480	S	0.400	5.446	0.400
T	0.240	4.082	0.240	T	0.240	4.962	0.240
U	0.880	4.482	0.880	U	0.960	5.446	0.960
V	0.240	4.962	0.240	V	0.240	6.084	0.240
W	0.240	6.084	0.240	W	0.240	7.124	0.240
X	0.240	4.722	0.240	X	0.400	5.446	0.400
Y	0.240	5.122	0.240	Y	0.240	6.884	0.240
Z	0.480	4.482	0.480	Z	0.400	5.446	0.400
a	0.320	3.842	0.640	a	0.400	4.562	0.720
b	0.720	4.082	0.480	b	0.800	4.802	0.480
c	0.480	4.002	0.240	c	0.480	4.722	0.240
d	0.480	4.082	0.720	d	0.480	4.802	0.800
e	0.480	4.082	0.320	e	0.480	4.722	0.320
f	0.320	2.480	0.160	f	0.320	2.882	0.160
g	0.480	4.082	0.720	g	0.480	4.802	0.800
h	0.720	4.082	0.640	h	0.800	4.722	0.720
i	0.720	1.120	0.720	i	0.800	1.280	0.800
j	0.000	2.320	0.720	j	0.000	2.642	0.800
k	0.720	4.322	0.160	k	0.800	5.122	0.160
l	0.720	1.120	0.720	l	0.800	1.280	0.800
m	0.720	6.724	0.640	m	0.800	7.926	0.720
n	0.720	4.082	0.640	n	0.800	4.722	0.720
o	0.480	4.082	0.480	o	0.480	4.882	0.480
p	0.720	4.082	0.480	p	0.800	4.802	0.480
q	0.480	4.082	0.720	q	0.480	4.802	0.800
r	0.720	2.642	0.160	r	0.800	3.042	0.160
s	0.320	3.362	0.240	s	0.320	3.762	0.240
t	0.080	2.882	0.080	t	0.080	3.202	0.080
u	0.640	4.082	0.720	u	0.720	4.722	0.800
v	0.160	4.722	0.160	v	0.160	5.684	0.160
w	0.160	7.524	0.160	w	0.160	9.046	0.160
x	0.000	5.202	0.000	x	0.000	6.244	0.000
y	0.160	4.962	0.160	y	0.160	6.004	0.160
z	0.240	3.362	0.240	z	0.240	4.002	0.240
1	0.720	1.680	0.880	1	0.800	2.000	0.960
2	0.480	4.482	0.480	2	0.800	5.446	0.800
3	0.480	4.482	0.480	3	1.440	5.446	0.800
4	0.240	4.962	0.720	4	0.160	6.004	0.960
5	0.480	4.482	0.480	5	0.800	5.446	0.800
6	0.720	4.482	0.720	6	0.800	5.446	0.800
7	0.240	4.482	0.720	7	0.560	5.446	0.560
8	0.480	4.482	0.480	8	0.800	5.446	0.800
9	0.480	4.482	0.480	9	0.800	5.446	0.800
0	0.720	4.722	0.720	0	0.800	5.684	0.800
-	0.240	2.802	0.240	-	0.240	2.802	0.240

MODEL: Default
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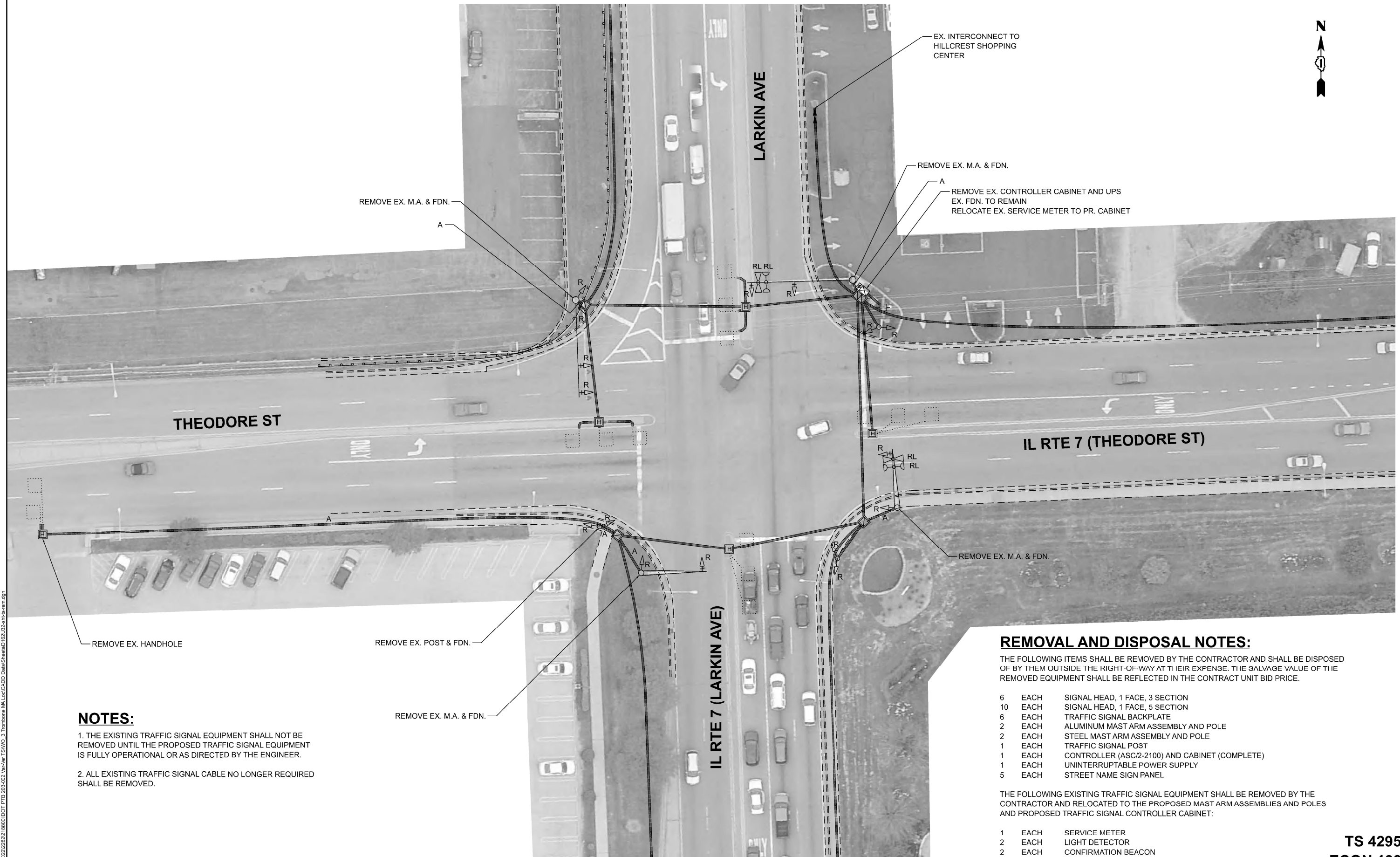
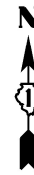
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PLOT DATE = 6/29/2023	CHECKED - LP	REVISED -
	DATE - 10/15/2018	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
MAST ARM MOUNTED STREET NAME SIGNS**

SCALE: NTS SHEET NO. 7 OF 7 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	18
TS-02		CONTRACT NO. 62U32		
ILLINOIS		FED. AID PROJECT		



NOTES:

1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
2. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.

REMOVAL AND DISPOSAL NOTES:

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 UNIT BID PRICE.

- | | | |
|----|------|--|
| 6 | EACH | SIGNAL HEAD, 1 FACE, 3 SECTION |
| 10 | EACH | SIGNAL HEAD, 1 FACE, 5 SECTION |
| 6 | EACH | TRAFFIC SIGNAL BACKPLATE |
| 2 | EACH | ALUMINUM MAST ARM ASSEMBLY AND POLE |
| 2 | EACH | STEEL MAST ARM ASSEMBLY AND POLE |
| 1 | EACH | TRAFFIC SIGNAL POST |
| 1 | EACH | CONTROLLER (ASC/2-2100) AND CABINET (COMPLETE) |
| 1 | EACH | UNINTERRUPTIBLE POWER SUPPLY |
| 5 | EACH | STREET NAME SIGN PANEL |

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED MAST ARM ASSEMBLIES AND POLES AND PROPOSED TRAFFIC SIGNAL CONTROLLER CABINET:

- | | | |
|---|------|--------------------------|
| 1 | EACH | SERVICE METER |
| 2 | EACH | LIGHT DETECTOR |
| 2 | EACH | CONFIRMATION BEACON |
| 1 | EACH | LIGHT DETECTOR AMPLIFIER |

**TS 4295
ECON 138**

MODEL: Larklin - 1 - TS 4295
FILE NAME: X:\projects\2023\20230222\20230222\18800\DOT_PTB_203\2023_Van-Int_TSI\WD_3_Tomborn_ML_Coc\CADD\DrawSheets\18800\2023-eh-ts-vrem.dgn



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DRAWN - RG	REVISIONS -	
PLOT SCALE = 40,000' = 1"	CHECKED - DW	REVISED -
PLOT DATE = 6/29/2023	DATE - 6/30/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

REMOVAL PLAN			
IL RTE 7 (LARKIN AVE) AND IL RTE 7 (THEODORE ST)			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

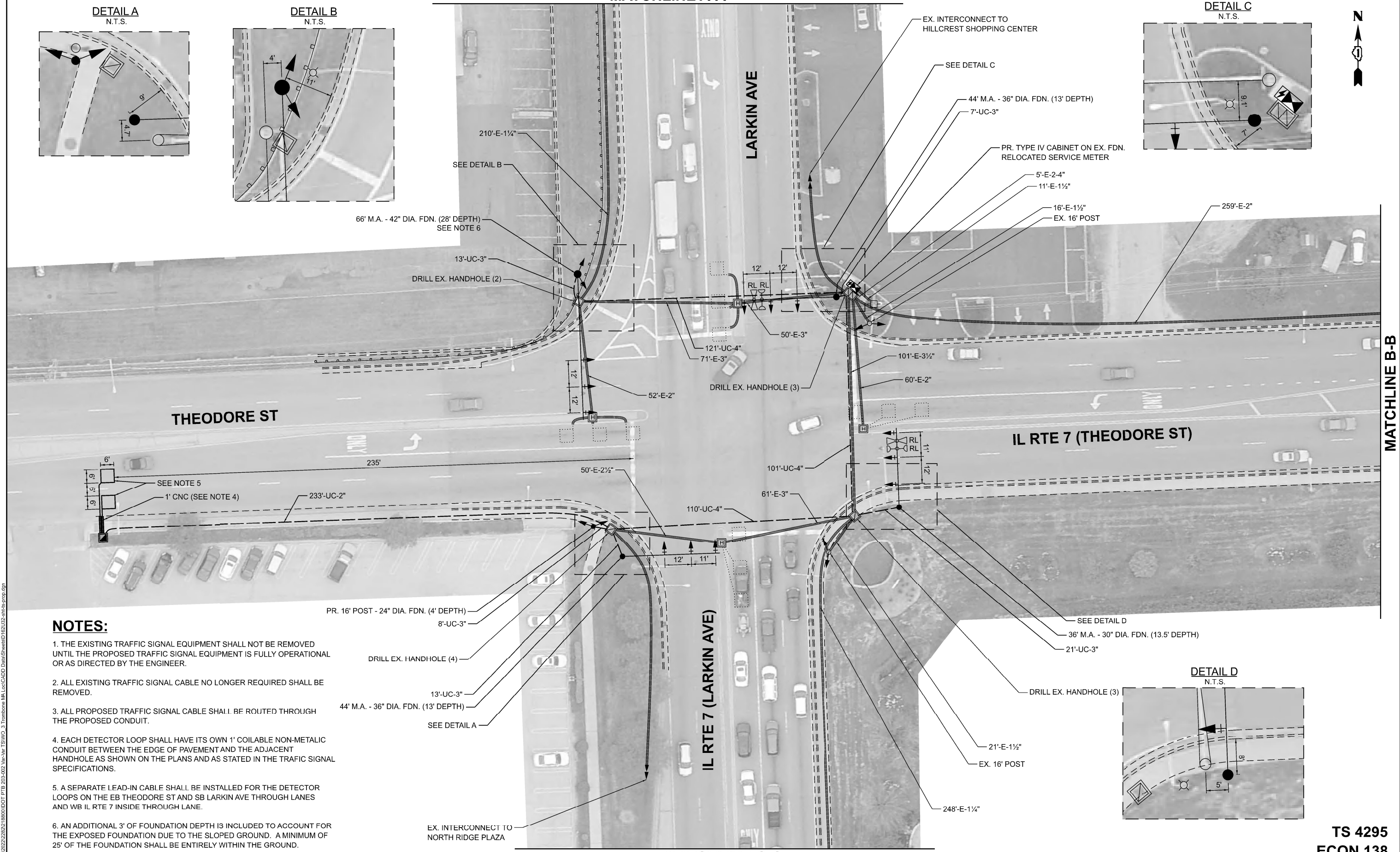
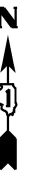
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	19
CONTRACT NO. 62U32				
		ILLINOIS	FED. AID PROJECT	
Long Section Number				

MATCHLINE A-A

DETAIL C
N.T.S.

DETAIL A
N.T.S.

DETAIL B
N.T.S.



NOTES:

1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
2. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.
3. ALL PROPOSED TRAFFIC SIGNAL CABLE SHALL BE ROUTED THROUGH THE PROPOSED CONDUIT.
4. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1' COILABLE NON-METALIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
5. A SEPARATE LEAD-IN CABLE SHALL BE INSTALLED FOR THE DETECTOR LOOPS ON THE EB THEODORE ST AND SB LARKIN AVE THROUGH LANES AND WB IL RTE 7 INSIDE THROUGH LANE.
6. AN ADDITIONAL 3' OF FOUNDATION DEPTH IS INCLUDED TO ACCOUNT FOR THE EXPOSED FOUNDATION DUE TO THE SLOPED GROUND. A MINIMUM OF 25' OF THE FOUNDATION SHALL BE ENTIRELY WITHIN THE GROUND.

DETAIL D
N.T.S.

TS 4295
ECON 138

MODEL: Larklin - TS 4295
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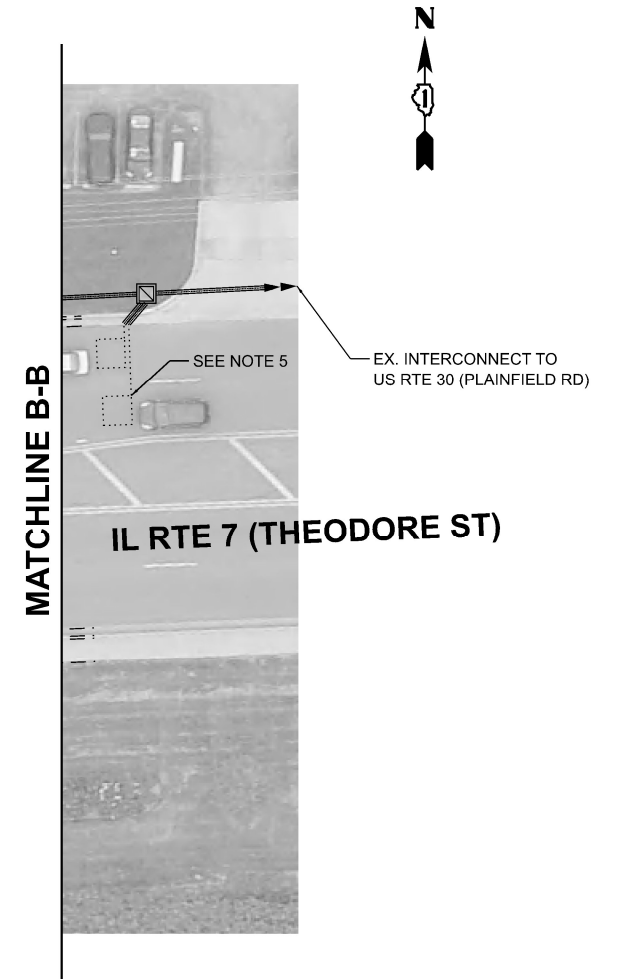
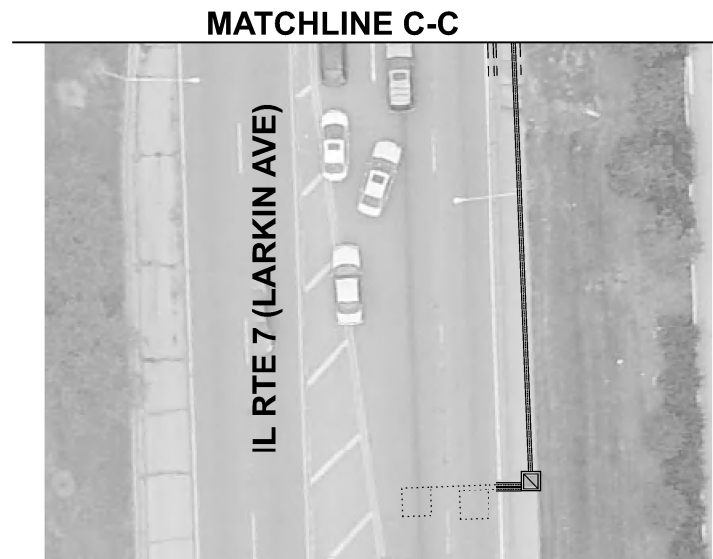
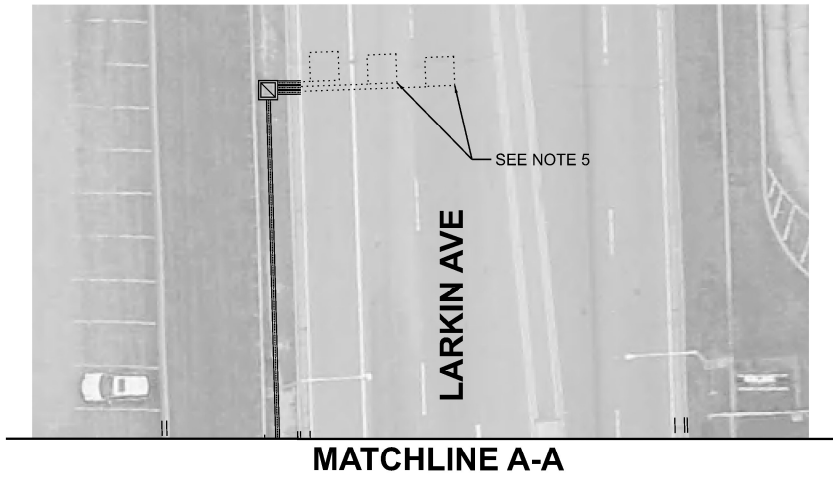
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	DATE - 6/30/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN (SHEET 1 OF 2)
IL RTE 7 (LARKIN AVE) AND IL RTE 7 (THEODORE ST)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	20
			CONTRACT NO. 62U32	
Long Section Number		ILLINOIS FED. AID PROJECT		



MODEL: Larklin - TS 4295
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	DRAWN - RG	REVISED -
PLOT SCALE = 40,000' / in.	CHECKED - DW	REVISED -
PLOT DATE = 6/29/2023	DATE - 6/30/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN (SHEET 2 OF 2)
IL RTE 7 (LARKIN AVE) AND IL RTE 7 (THEODORE ST)

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	21
			CONTRACT NO. 62U32	
Long Section Number		ILLINOIS	FED. AID PROJECT	

TS 4295
ECON 138

REMOVAL AND RELOCATION NOTES:

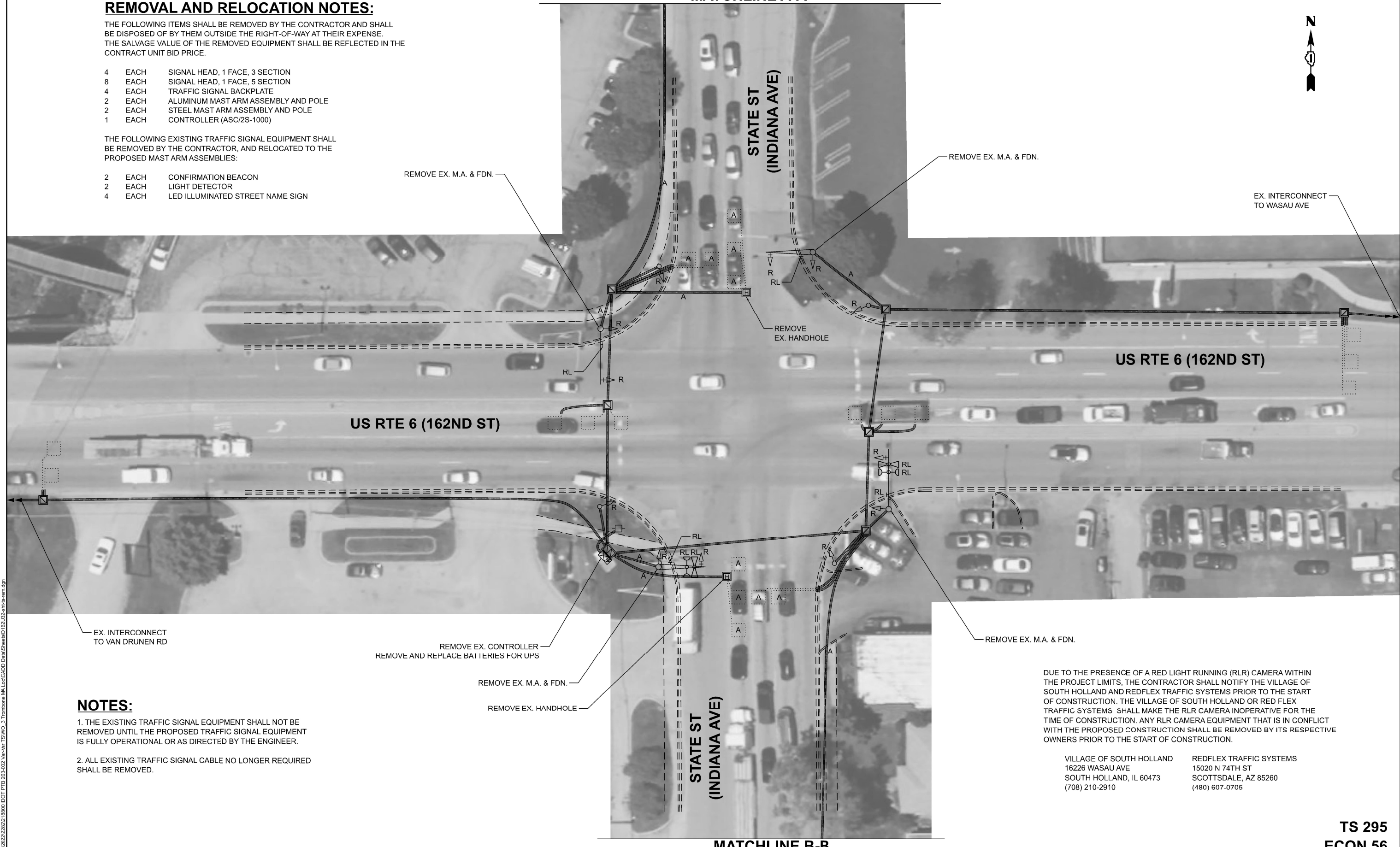
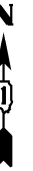
THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT UNIT BID PRICE.

- 4 EACH SIGNAL HEAD, 1 FACE, 3 SECTION
- 8 EACH SIGNAL HEAD, 1 FACE, 5 SECTION
- 4 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH ALUMINUM MAST ARM ASSEMBLY AND POLE
- 2 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 1 EACH CONTROLLER (ASC/2S-1000)

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, AND RELOCATED TO THE PROPOSED MAST ARM ASSEMBLIES:

- 2 EACH CONFIRMATION BEACON
- 2 EACH LIGHT DETECTOR
- 4 EACH LED ILLUMINATED STREET NAME SIGN

MATCHLINE A-A



NOTES:

1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
2. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.

DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, THE CONTRACTOR SHALL NOTIFY THE VILLAGE OF SOUTH HOLLAND AND REDFLEX TRAFFIC SYSTEMS PRIOR TO THE START OF CONSTRUCTION. THE VILLAGE OF SOUTH HOLLAND OR RED FLEX TRAFFIC SYSTEMS SHALL MAKE THE RLR CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

VILLAGE OF SOUTH HOLLAND 16226 WASAU AVE SOUTH HOLLAND, IL 60473 (708) 210-2910	REDFLEX TRAFFIC SYSTEMS 15020 N 74TH ST SCOTTSDALE, AZ 85260 (480) 607-0705
--	--

MODEL: L:\e\ts 295 TS 295
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN (SHEET 1 OF 2)
US RTE 6 (162ND ST) AND STATE ST

TS 295
ECON 56



USER NAME = Dwiktorzak	DESIGNED - ZH	REVISED -
	DRAWN - RG	REVISED -
PLOT SCALE = 40,000' / in.	CHECKED - DW	REVISED -
PLOT DATE = 6/29/2023	DATE - 6/30/2023	REVISED -

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
--------	-------	----	--------	------	----	------

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	24
CONTRACT NO. 62U32				
ILLINOIS FED. AID PROJECT				

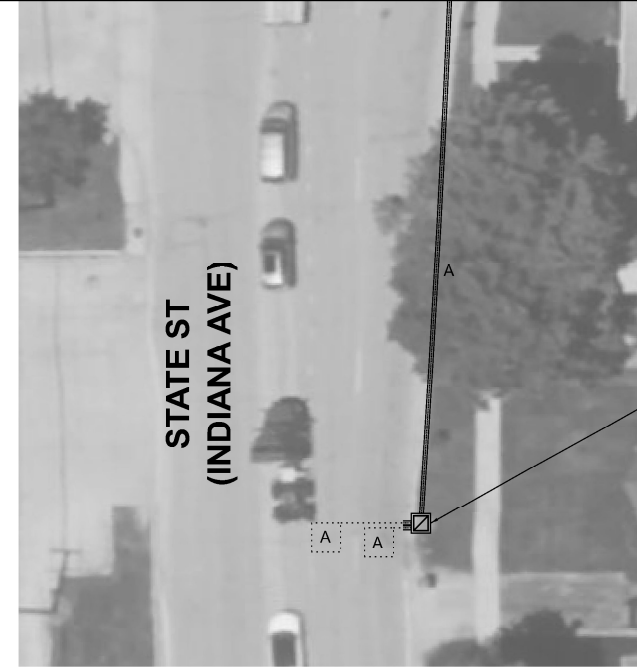
REMOVE EX. HANDHOLE



MATCHLINE A-A



MATCHLINE B-B



REMOVE EX. HANDHOLE



NOTES:

1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
2. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.

**TS 295
ECON 56**

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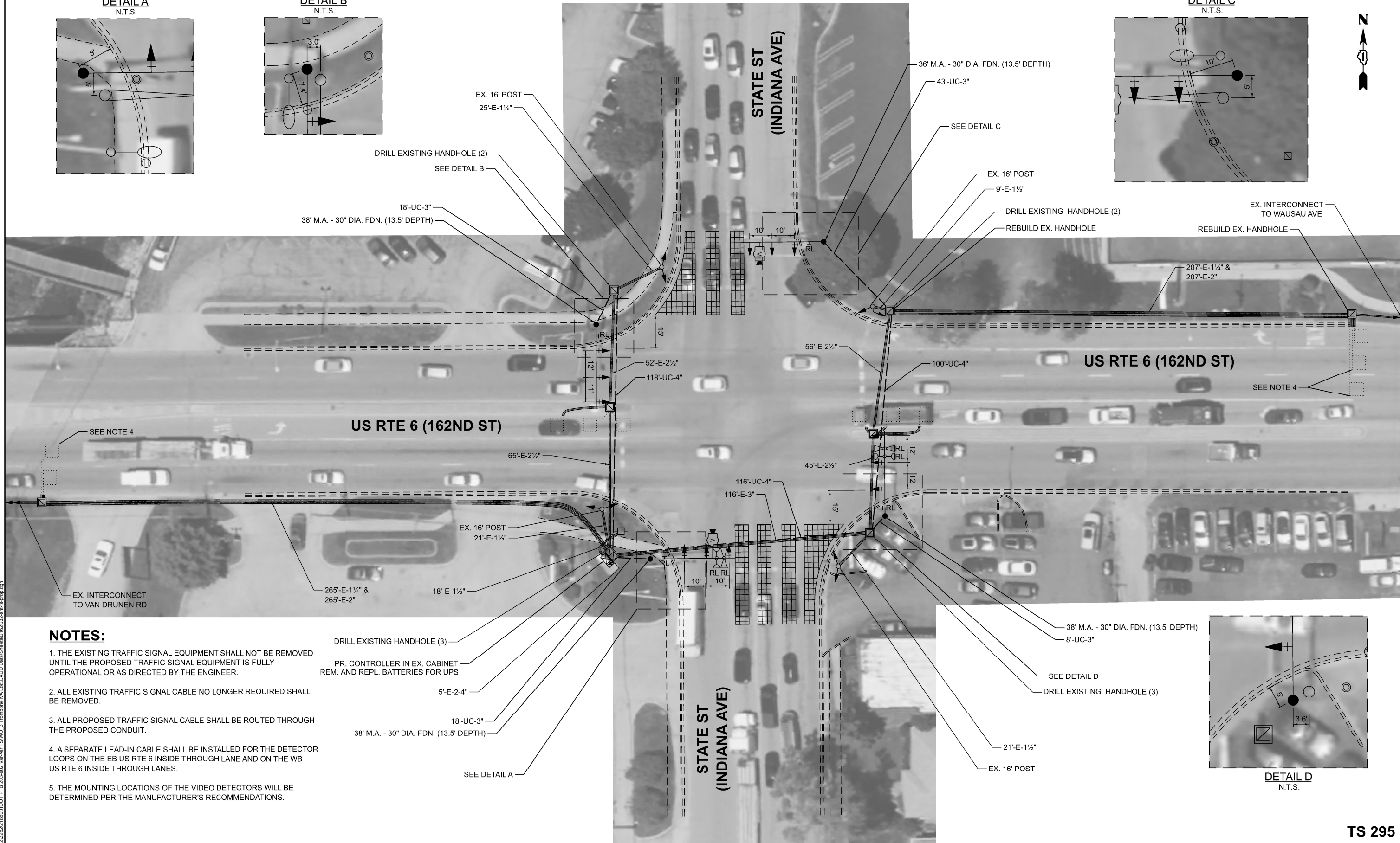
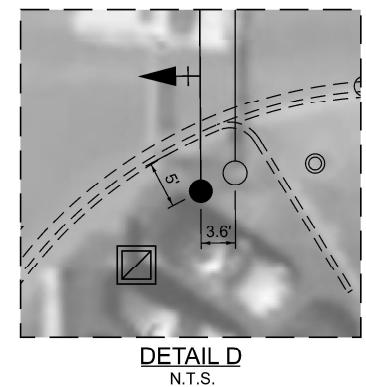
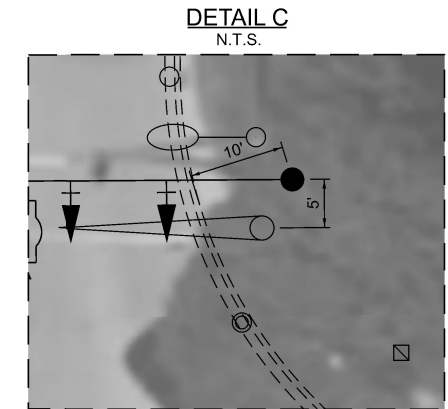
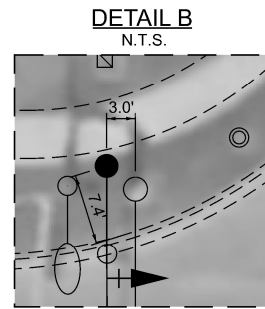
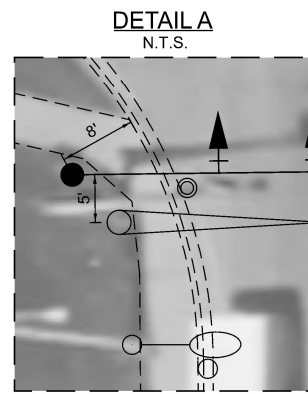
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**REMOVAL PLAN (SHEET 2 OF 2)
US RTE 6 (162ND ST) AND STATE ST**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	25
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62U32	

Long Section Number



NOTES:

1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
2. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.
3. ALL PROPOSED TRAFFIC SIGNAL CABLE SHALL BE ROUTED THROUGH THE PROPOSED CONDUIT.
4. A SEPARATE FAD-IN CABINET SHALL BE INSTALLED FOR THE DETECTOR LOOPS ON THE EB US RTE 6 INSIDE THROUGH LANE AND ON THE WB US RTE 6 INSIDE THROUGH LANES.
5. THE MOUNTING LOCATIONS OF THE VIDEO DETECTORS WILL BE DETERMINED PER THE MANUFACTURER'S RECOMMENDATIONS.

- DRILL EXISTING HANDHOLE (3)
- PR. CONTROLLER IN EX. CABINET
REM. AND REPL. BATTERIES FOR UPS
- 5'-E-2.4"
- 18'-UC-3"
- 38' M.A. - 30" DIA. FDN. (13.5' DEPTH)
- SEE DETAIL A

- 38' M.A. - 30" DIA. FDN. (13.5' DEPTH)
- 8'-UC-3"
- SEE DETAIL D
- DRILL EXISTING HANDHOLE (3)
- 21'-E-1 1/2"
- EX. 16' POST

MODEL: L:\e\ts 295 TS 295
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PROJECT: MA Loc/CADD Data/Sheet/20230222_2023022218800.dwg



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PLOT DATE = 6/29/2023	CHECKED - DW	REVISED -
	DATE - 6/30/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODERNIZATION PLAN
US RTE 6 (162ND ST) AND STATE ST**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	26
CONTRACT NO. 62U32				
ILLINOIS FED. AID PROJECT				

**TS 295
ECON 56**

EXISTING CONTROLLER SEQUENCE

PROPOSED CONTROLLER SEQUENCE

LEGEND

- ← ⊙ ← PROTECTED PHASE
- ← ⊙ - PROTECTED/PERMITTED PHASE
- ← ⊙ → PEDESTRIAN PHASE
- ← ⊙ OL OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
C	= 6 + 7	
D	= 8 + 1	

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	8	11	88
4-SECTION	-	14	-
5-SECTION	12	13	156
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	1	20	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING			439
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	4	120	480
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1,524

ENERGY COSTS TO:
VILLAGE OF SOUTH HOLLAND

16226 WAUSAU AVE
SOUTH HOLLAND, IL 60473

ENERGY SUPPLY:

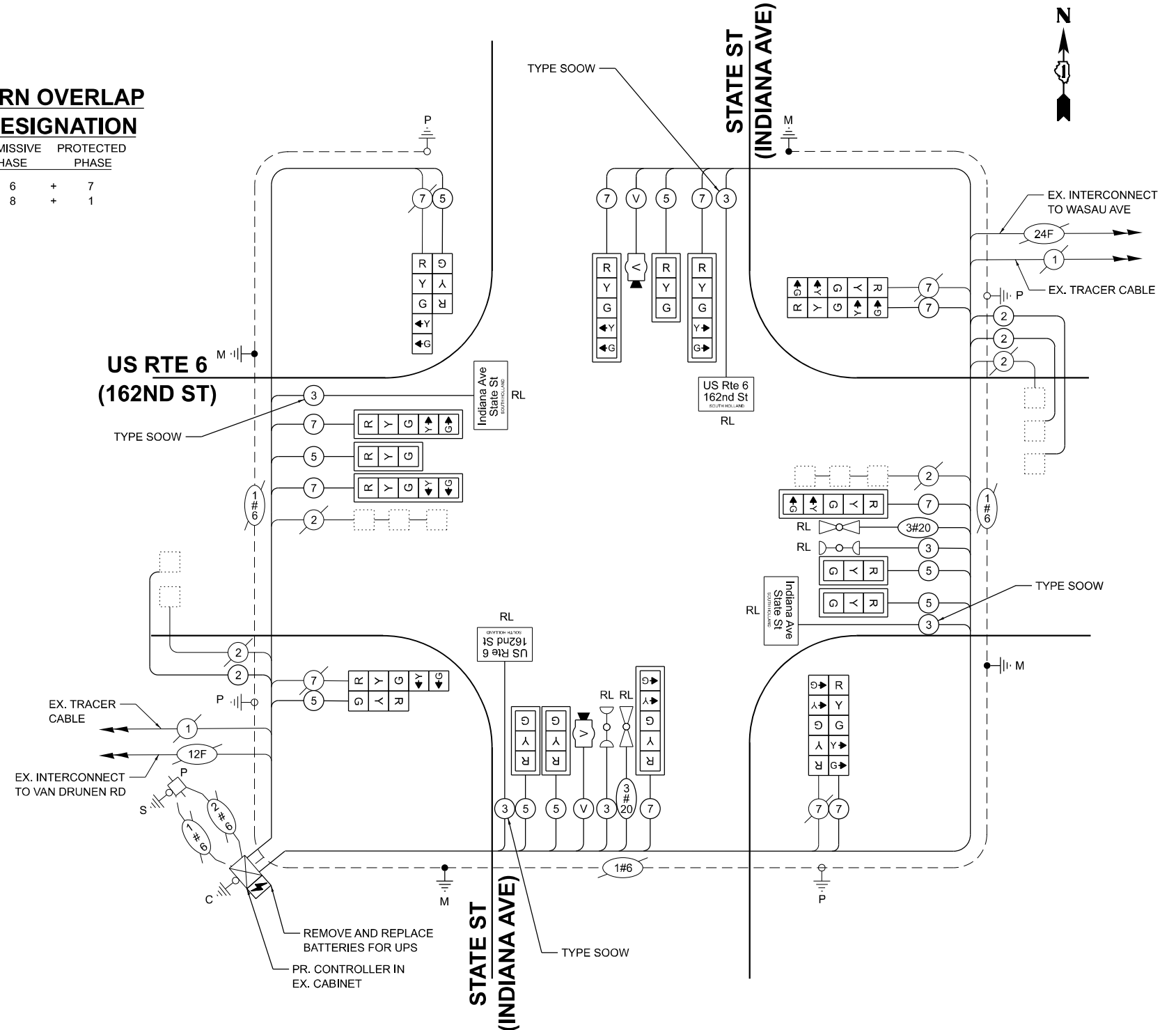
CONTACT: ILYAS MOHIUDDIN

PHONE: (708)-235-2692

COMPANY: COMED

ACCOUNT NUMBER:

METER NUMBER:



CABLE PLAN
(NOT TO SCALE)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND
EMERGENCY VEHICLE PREEMPTION SEQUENCE
US RTE 6 (162ND ST) AND STATE ST

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	27

CONTRACT NO. 62U32

TS 295
ECON 56

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PLOT SCALE = 40,000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 6/29/2023	CHECKED - DW	REVISED -
	DATE - 6/30/2023	REVISED -

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	87
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	334
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	320
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1385
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1900
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1225
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	535
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	3
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	54
DRILL EXISTING HANDHOLE	EACH	10
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	6
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	12
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2900
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	2
REMOVE EXISTING HANDHOLE	EACH	4
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	320
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW	FOOT	785
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
TEMPORARY INFORMATION SIGNING	SQ FT	102.8
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

**TS 295
ECON 56**

MODEL: I...
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USER NAME = Dwlklorzak	DESIGNED - ZH	REVISED -
PLOT SCALE = 40,000' = 1 in.	DRAWN - RG	REVISED -
PLOT DATE = 6/29/2023	CHECKED - DW	REVISED -
	DATE - 6/30/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES
US RTE 6 (162ND ST) AND STATE ST**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	28
			CONTRACT NO. 62U32	
		ILLINOIS FED. AID PROJECT		

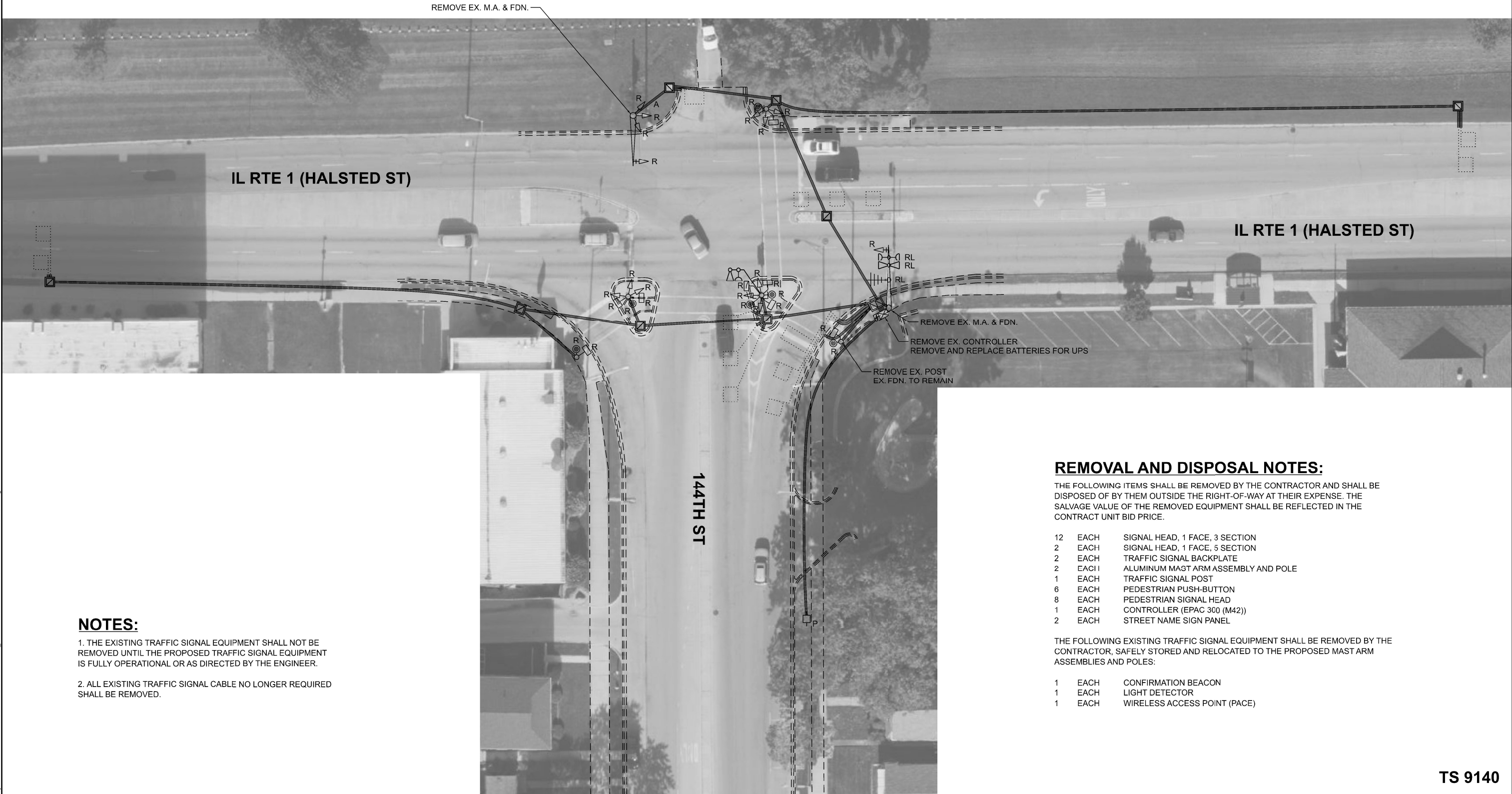
Long Section Number

DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, THE CONTRACTOR SHALL NOTIFY THE VILLAGE OF RIVERDALE AND REDFLEX TRAFFIC SYSTEMS PRIOR TO THE START OF CONSTRUCTION. THE VILLAGE OF RIVERDALE OR REDFLEX TRAFFIC SYSTEMS SHALL MAKE THE RLR CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.



VILLAGE OF RIVERDALE
157 W 144TH ST
RIVERDALE, IL 60827
(708) 841-2200

REDSPEED, ILLINOIS, LLC
400 EISENHOWER LANE NORTH
LOMBARD, IL 60148
(630) 317-5700



NOTES:

1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
2. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.

REMOVAL AND DISPOSAL NOTES:

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 UNIT BID PRICE.

- 12 EACH SIGNAL HEAD, 1 FACE, 3 SECTION
- 2 EACH SIGNAL HEAD, 1 FACE, 5 SECTION
- 2 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH ALUMINUM MAST ARM ASSEMBLY AND POLE
- 1 EACH TRAFFIC SIGNAL POST
- 6 EACH PEDESTRIAN PUSH-BUTTON
- 8 EACH PEDESTRIAN SIGNAL HEAD
- 1 EACH CONTROLLER (EPAC 300 (M42))
- 2 EACH STREET NAME SIGN PANEL

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARM ASSEMBLIES AND POLES:

- 1 EACH CONFIRMATION BEACON
- 1 EACH LIGHT DETECTOR
- 1 EACH WIRELESS ACCESS POINT (PACE)

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USER NAME = Dwiktorzak	DESIGNED - ZH	REVISED -
DRAWN - RG	REVISED -	
PLOT SCALE = 40,000' / in.	CHECKED - DW	REVISED -
PLOT DATE = 6/29/2023	DATE - 6/30/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN
IL RTE 1 (HALSTED ST) AND 144TH ST

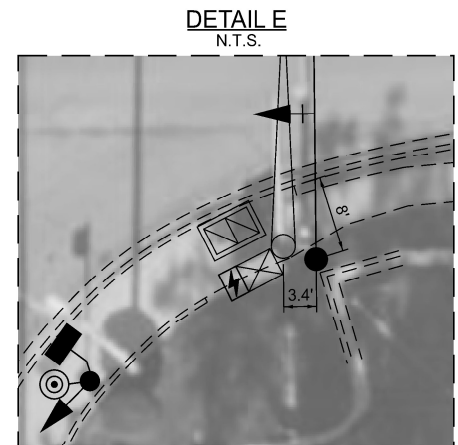
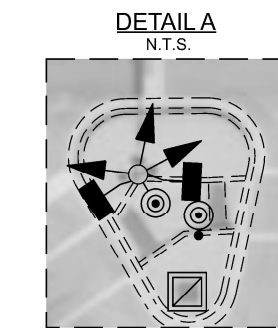
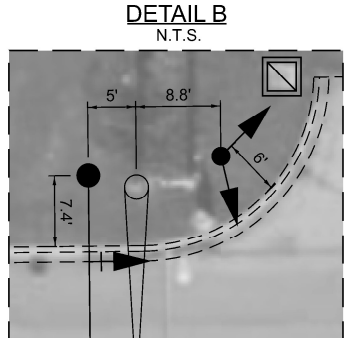
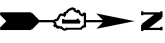
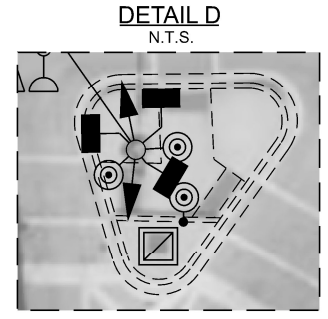
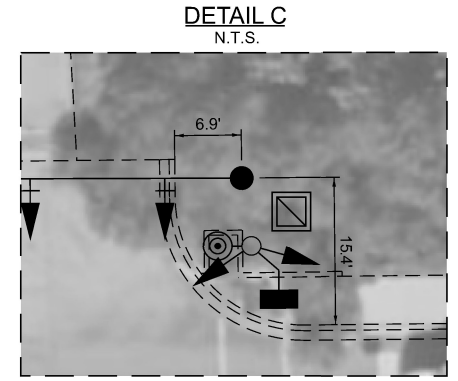
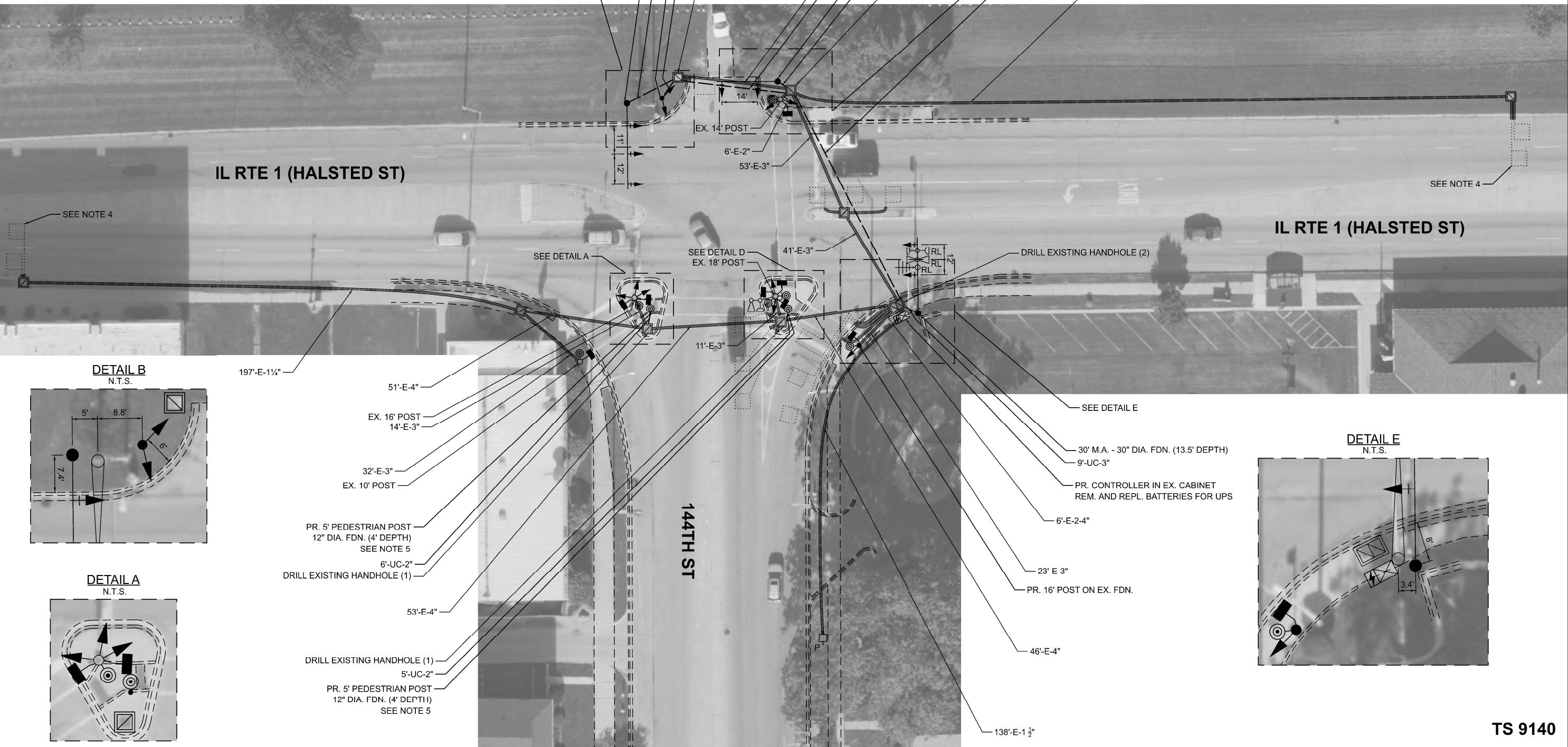
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	29
CONTRACT NO. 62U32				
Long Section Number				

TS 9140

NOTES:

1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
2. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.
3. ALL PROPOSED TRAFFIC SIGNAL CABLE SHALL BE ROUTED THROUGH THE PROPOSED CONDUIT.
4. A SEPARATE LEAD-IN CABLE SHALL BE INSTALLED FOR THE DETECTOR LOOPS ON THE NB AND SB IL RTE 1 INSIDE THROUGH LANES.
5. THE SIDEWALK CURB ON THE NORTHEAST AND SOUTHEAST QUADRANT ISLANDS SHALL BE CUT SO THAT THE POST FOUNDATION IS FLUSH WITH THE EDGE OF THE SIDEWALK.
6. ALL PROPOSED PUSH-BUTTONS SHALL BE APS.
7. THIS LOCATION HAS BEEN DESIGNED TO BE ADA COMPLIANT. ANY DEVIATION FROM THIS PLAN FOR THE POSTS THAT HAVE PEDESTRIAN EQUIPMENT WILL HAVE TO BE APPROVED BY THE ENGINEER TO ENSURE ADA COMPLIANCE.



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USER NAME = Dwiktorzak	DESIGNED - ZH	REVISED -
PLOT SCALE = 40,000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 6/29/2023	CHECKED - DW	REVISED -
	DATE - 6/30/2023	REVISED -

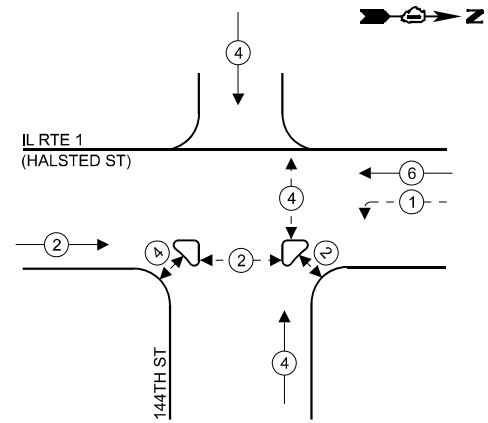
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN	
IL RTE 1 (HALSTED ST) AND 144TH ST	
SCALE:	SHEET OF SHEETS STA. TO STA.

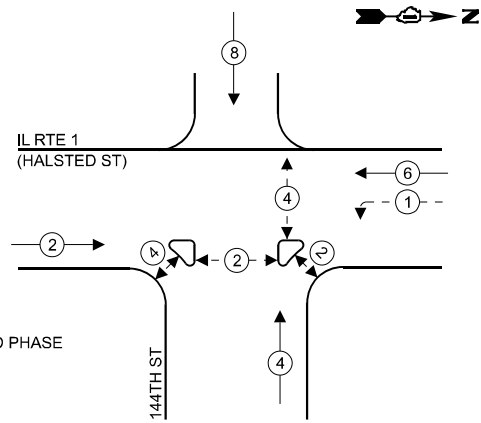
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	30
CONTRACT NO. 62U32				
ILLINOIS FED. AID PROJECT				

TS 9140

EXISTING CONTROLLER SEQUENCE



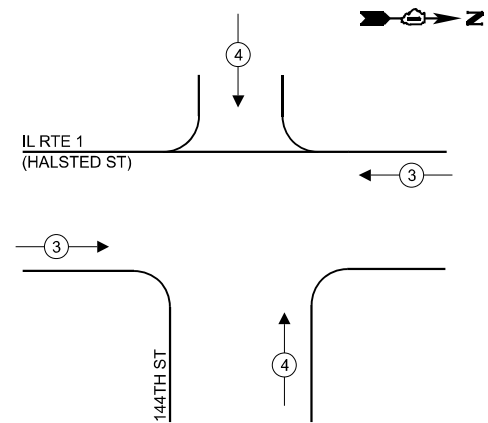
PROPOSED CONTROLLER SEQUENCE



LEGEND

- ← * → PROTECTED PHASE
- ← * - - PROTECTED/PERMITTED PHASE
- ← * → PEDESTRIAN PHASE
- ← * → OL OVERLAP

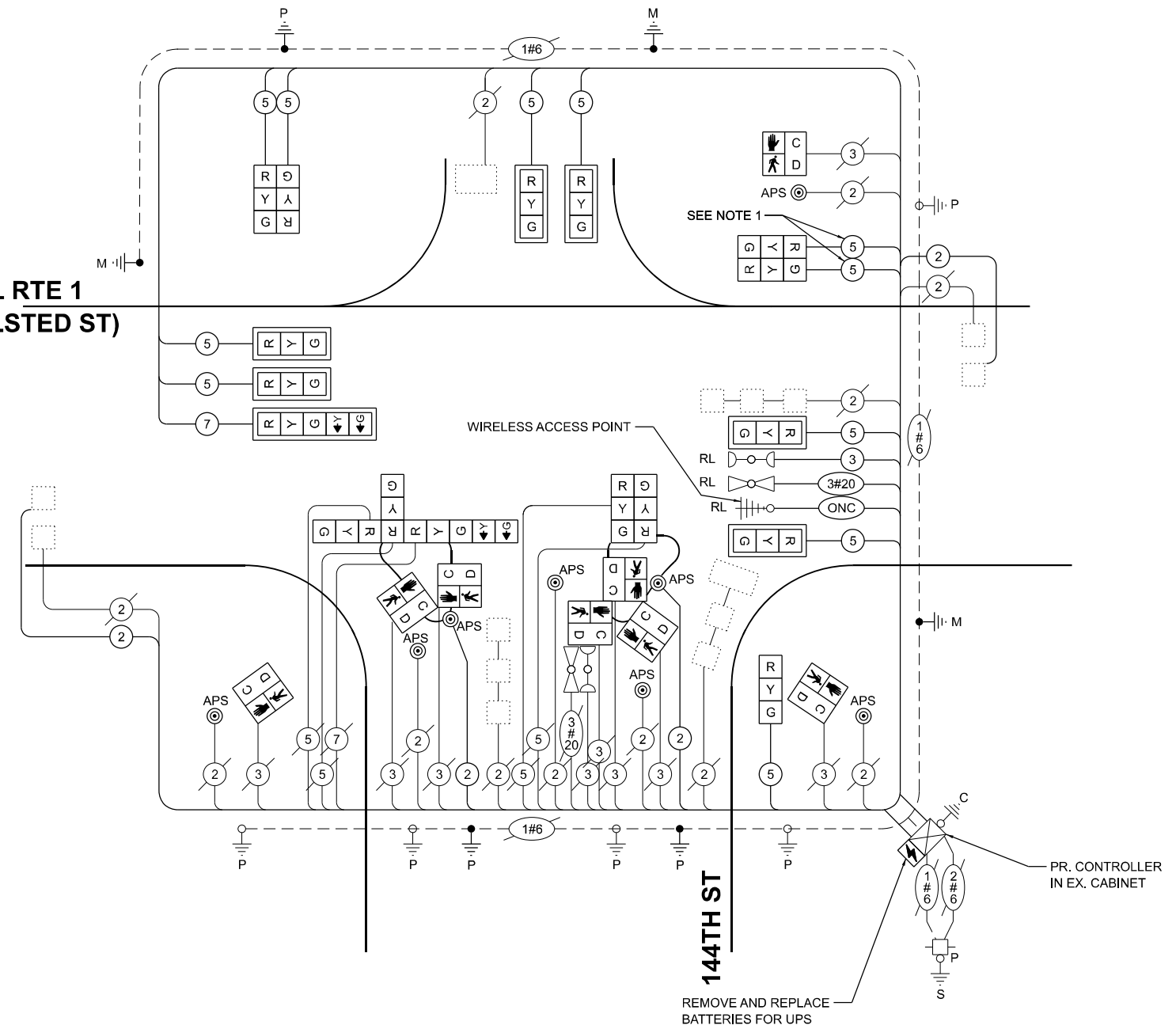
EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



NOTES:

1. REMOVE EXISTING SHARED MULTI-CONDUCTOR CABLE AND REPLACE WITH SEPERATE 5C CABLES AS SHOWN.

IL RTE 1 (HALSTED ST)



CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD	1 OR 3-SECTION	15	165
	4-SECTION	-	-
	5-SECTION	2	26
PROGRAMMABLE	3-SECTION	-	-
	4-SECTION	-	-
	5-SECTION	-	-
PEDESTRIAN SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING			486
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1,091

ENERGY COSTS TO:
VILLAGE OF RIVERDALE

157 WEST 144TH ST
RIVERDALE, IL 60827

ENERGY SUPPLY:

CONTACT: ILYAS MOHIUDDIN

PHONE: (708)-235-2692

COMPANY: COMED

ACCOUNT NUMBER:

METER NUMBER:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL RTE 1 (HALSTED ST) AND 144TH ST

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	31
			CONTRACT NO. 62U32	

TS 9140

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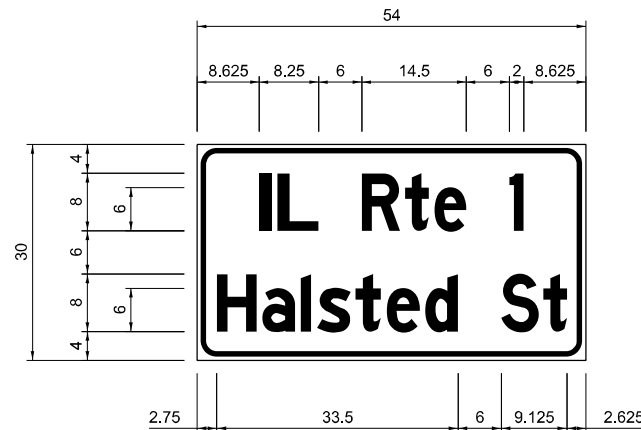


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PLOT DATE = 6/29/2023	CHECKED - DW	REVISED -
	DATE - 6/30/2023	REVISED -

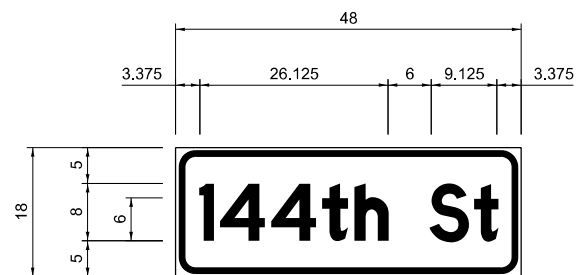
Long Section Number

SIGN PANEL - TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	11.25	2	ZZ	1



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	6	1	ZZ	2

NOTE:
FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
SIGN PANEL - TYPE 1	SQ FT	12
SIGN PANEL - TYPE 2	SQ FT	11.25
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	11
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	49
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	140
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	245
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	90
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1755
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	260
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1PAIR	FOOT	815
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	270
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	37
DRILL EXISTING HANDHOLE	EACH	10
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	9
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	7
INDUCTIVE LOOP DETECTOR	EACH	2
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	715
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	2
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	90
OUTDOOR RATED NETWORK CABLE	FOOT	90
PEDESTRIAN SIGNAL POST, 5 FT.	EACH	2
FULL-ACTUATED CONTROLLER IN EXISTING CABINET	EACH	1
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	8
TEMPORARY INFORMATION SIGNING	SQ FT	51.4

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PLOT SCALE = 40,000' / 1 in.	DRAWN - RG	REVISED -
PLOT DATE = 6/29/2023	CHECKED - DW	REVISED -
	DATE - 6/30/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAST ARM MOUNTED STREET NAME SIGNS
AND SCHEDULE OF QUANTITIES
IL RTE 1 (HALSTED ST) AND 144TH ST

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	32
CONTRACT NO. 62U32				
ILLINOIS FED. AID PROJECT				

Long Section Number

TS 9140

MATCHLINE A-A

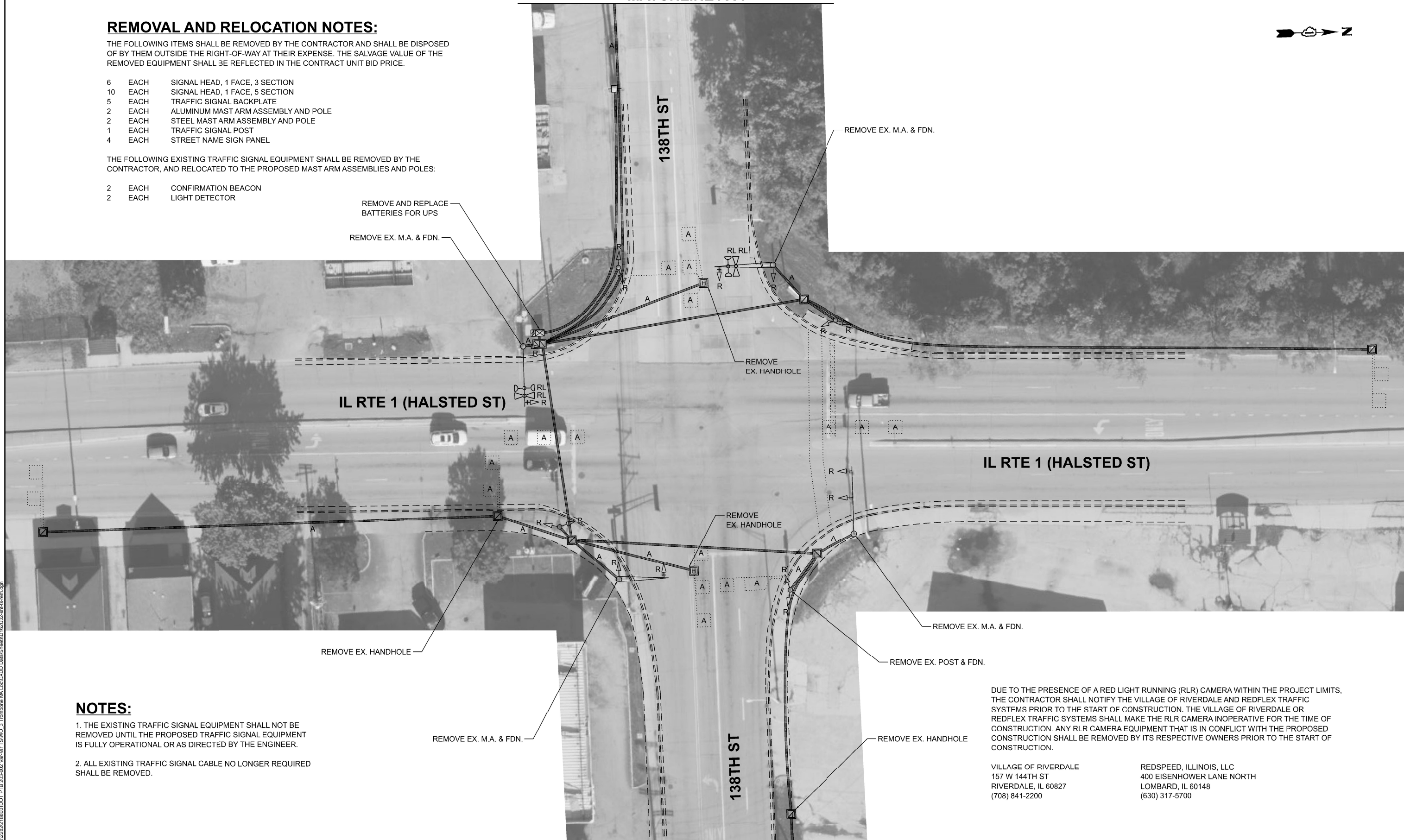
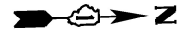
REMOVAL AND RELOCATION NOTES:

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 UNIT BID PRICE.

- 6 EACH SIGNAL HEAD, 1 FACE, 3 SECTION
- 10 EACH SIGNAL HEAD, 1 FACE, 5 SECTION
- 5 EACH TRAFFIC SIGNAL BACKPLATE
- 2 EACH ALUMINUM MAST ARM ASSEMBLY AND POLE
- 2 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 1 EACH TRAFFIC SIGNAL POST
- 4 EACH STREET NAME SIGN PANEL

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, AND RELOCATED TO THE PROPOSED MAST ARM ASSEMBLIES AND POLES:

- 2 EACH CONFIRMATION BEACON
- 2 EACH LIGHT DETECTOR



NOTES:

1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
2. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.

DUE TO THE PRESENCE OF A RED LIGHT RUNNING (RLR) CAMERA WITHIN THE PROJECT LIMITS, THE CONTRACTOR SHALL NOTIFY THE VILLAGE OF RIVERDALE AND REDFLEX TRAFFIC SYSTEMS PRIOR TO THE START OF CONSTRUCTION. THE VILLAGE OF RIVERDALE OR REDFLEX TRAFFIC SYSTEMS SHALL MAKE THE RLR CAMERA INOPERATIVE FOR THE TIME OF CONSTRUCTION. ANY RLR CAMERA EQUIPMENT THAT IS IN CONFLICT WITH THE PROPOSED CONSTRUCTION SHALL BE REMOVED BY ITS RESPECTIVE OWNERS PRIOR TO THE START OF CONSTRUCTION.

VILLAGE OF RIVERDALE
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RIVERDALE, IL 60827
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REDSPEED, ILLINOIS, LLC
400 EISENHOWER LANE NORTH
LOMBARD, IL 60148
(630) 317-5700

MATCHLINE B-B

TS 1795

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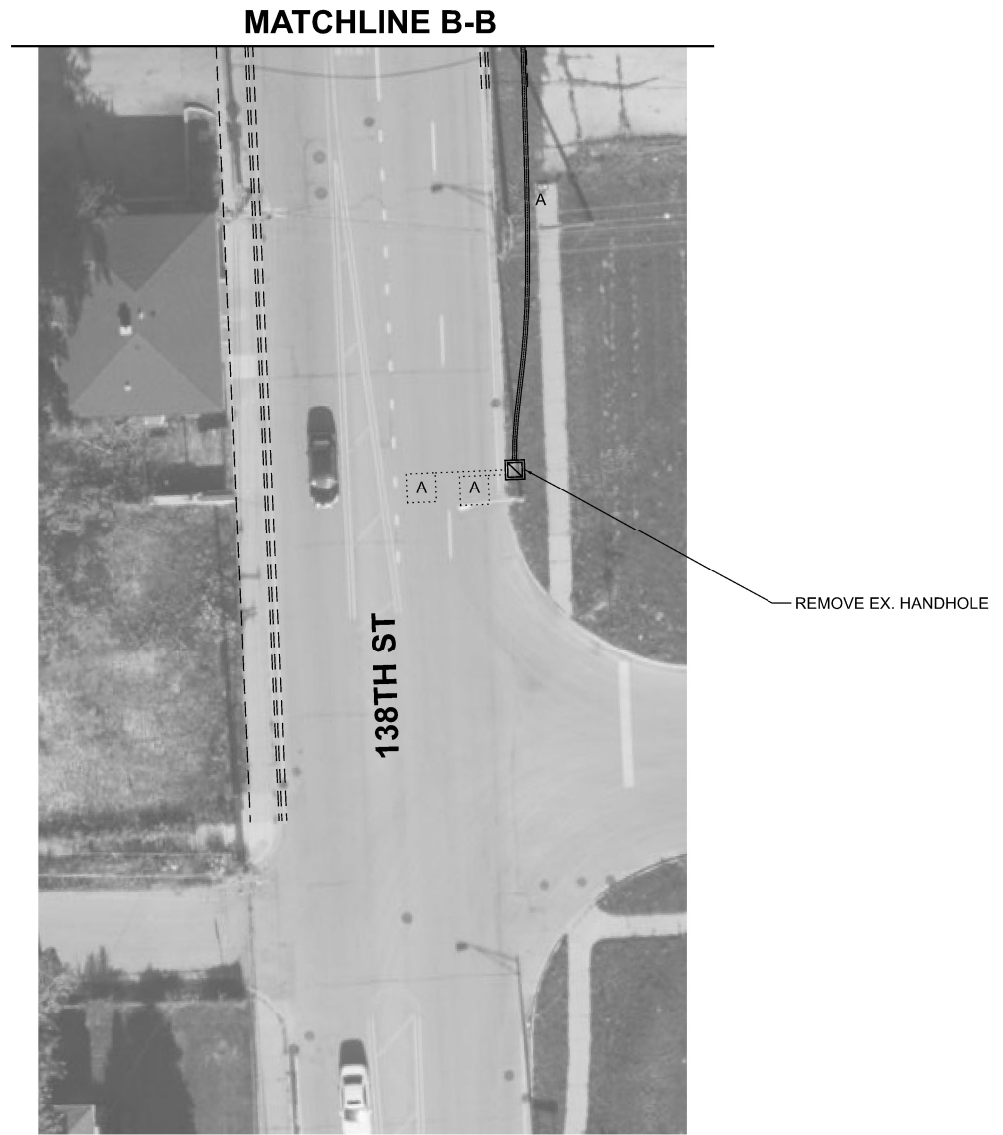
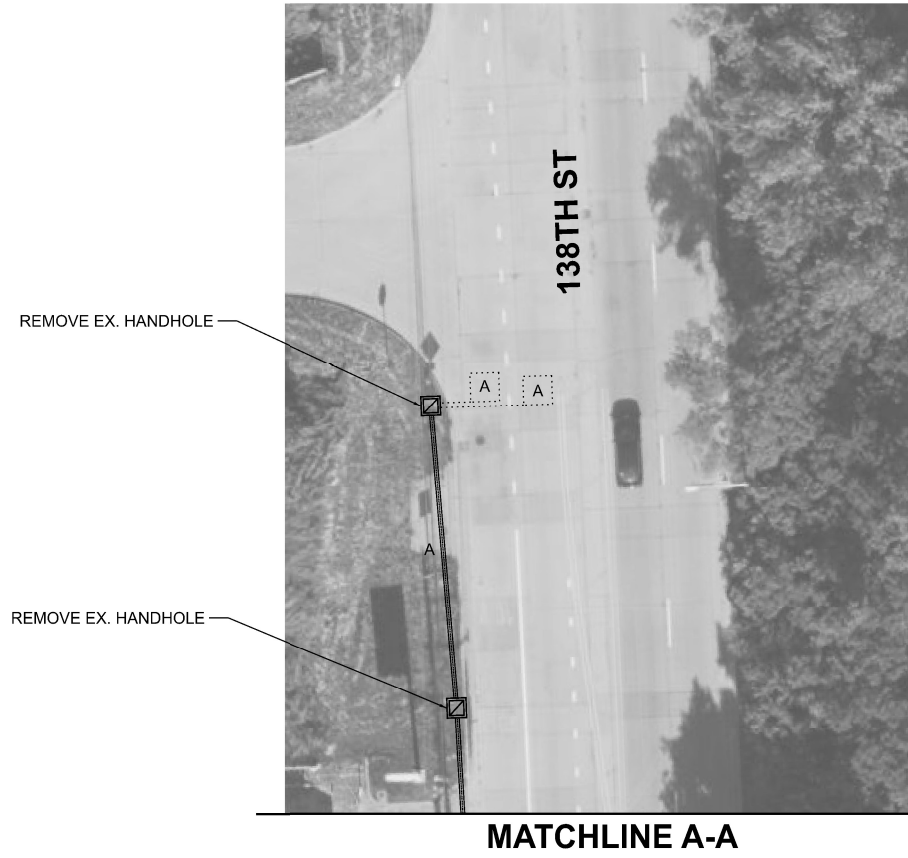


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PLOT DATE = 6/29/2023	DATE - 6/30/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN (SHEET 1 OF 2)			
IL RTE 1 (HALSTED ST) AND 138TH ST			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	33
CONTRACT NO. 62U32				
Long Section Number				



NOTES:

1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
2. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.

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PLOT DATE = 6/29/2023	DATE - 6/30/2023	REVISED -

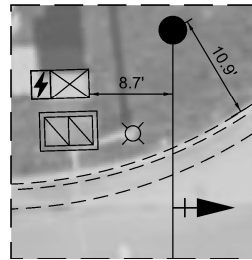
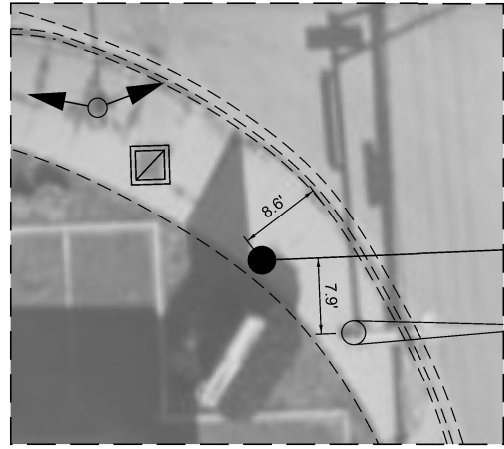
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

REMOVAL PLAN (SHEET 2 OF 2)			
IL RTE 1 (HALSTED ST) AND 138TH ST			
SCALE:	SHEET	OF	SHEETS
	STA.		TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	34
			CONTRACT NO. 62U32	
Long Section Number				

TS 1795

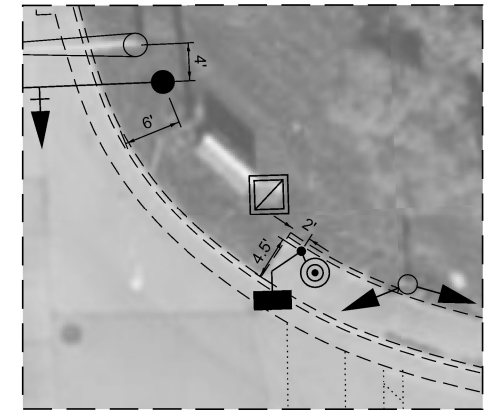
DETAIL A
N.T.S.



DETAIL B
N.T.S.

44' M.A. - 36" DIA. FDN. (13' DEPTH)
14'-UC-3"
REM. AND REPL. BATTERIES FOR UPS
5'-E-2-4"
DRILL EXISTING HANDHOLE (4)

SEE DETAIL B
43'-UC-2"



DETAIL C
N.T.S.

38' M.A. - 30" DIA. FDN. (13.5' DEPTH)
16'-UC-3"
SEE DETAIL C
DRILL EXISTING HANDHOLE (4)
8'-UC-2"
PR. 10' PEDESTRIAN POST
12" DIA. FDN. (4' DEPTH)
SEE NOTE 6
17'-E-2"
EX. 16' POST

IL RTE 1 (HALSTED ST)

IL RTE 1 (HALSTED ST)

138TH ST

138TH ST

NOTES:

1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
2. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.
3. ALL PROPOSED TRAFFIC SIGNAL CABLE SHALL BE ROUTED THROUGH THE PROPOSED CONDUIT.
4. A SEPARATE LEAD-IN CABLE SHALL BE INSTALLED FOR THE DETECTOR LOOPS ON THE NB IL RTE 1 THROUGH LANES AND ON THE SB IL RTE 1 INSIDE THROUGH LANE.
5. THE MOUNTING LOCATIONS OF THE VIDEO DETECTORS WILL BE DETERMINED PER THE MANUFACTURER'S RECOMMENDATIONS.
6. THERE SHALL BE A MINIMUM OF 4' SIDEWALK CLEARANCE IN FRONT/BEHIND OF THE TRAFFIC SIGNAL FOUNDATIONS TO BE ADA COMPLIANT.
7. ALL PROPOSED PUSH-BUTTONS SHALL BE APS.
8. THIS LOCATION HAS BEEN DESIGNED TO BE ADA COMPLIANT. ANY DEVIATION FROM THIS PLAN FOR THE POSTS THAT HAVE PEDESTRIAN EQUIPMENT WILL HAVE TO BE APPROVED BY THE ENGINEER TO ENSURE ADA COMPLIANCE.

EX. 16' POST
8'-E-2"
DRILL EXISTING HANDHOLE (4)

15'-UC-3"
44' M.A. - 36" DIA. FDN. (13' DEPTH)
SEE NOTE 6

SEE DETAIL A

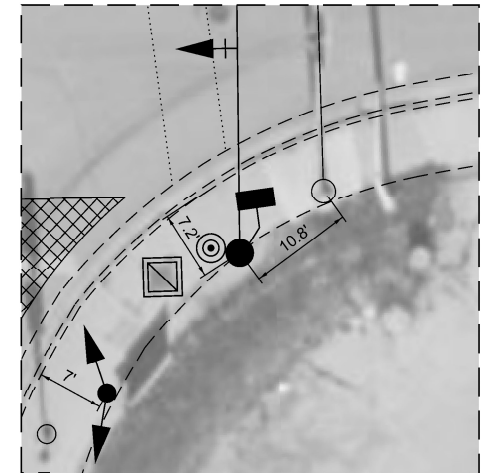
SEE DETAIL D

48' M.A. - 36" DIA. FDN. (13' DEPTH)
SEE NOTE 6
9'-UC-3"

DRILL EXISTING HANDHOLE (3)

14'-UC-3"
PR. 16' POST - 24" DIA. FDN. (4' DEPTH)
SEE NOTE 6

DETAIL D
N.T.S.



TS 1795

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USER NAME = Dwiktorzak	DESIGNED - ZH	REVISED -
PLOT SCALE = 40,000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 6/29/2023	CHECKED - DW	REVISED -
	DATE - 6/30/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL MODERNIZATION PLAN
IL RTE 1 (HALSTED ST) AND 138TH ST**

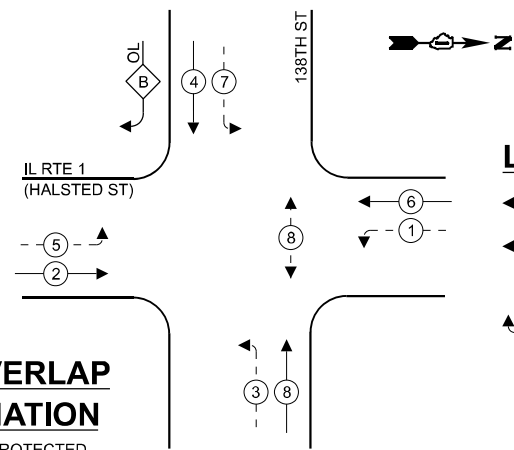
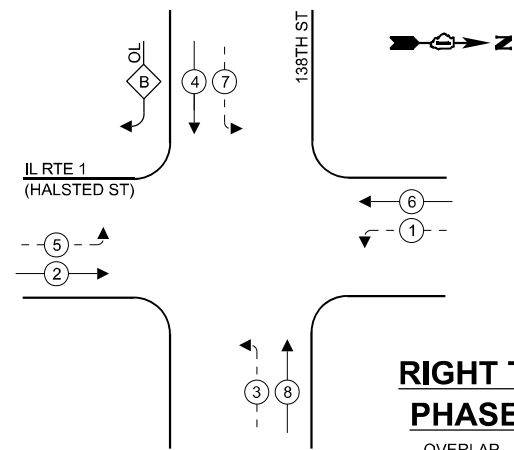
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	35
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62U32	

Long Section Number

EXISTING CONTROLLER SEQUENCE

PROPOSED CONTROLLER SEQUENCE



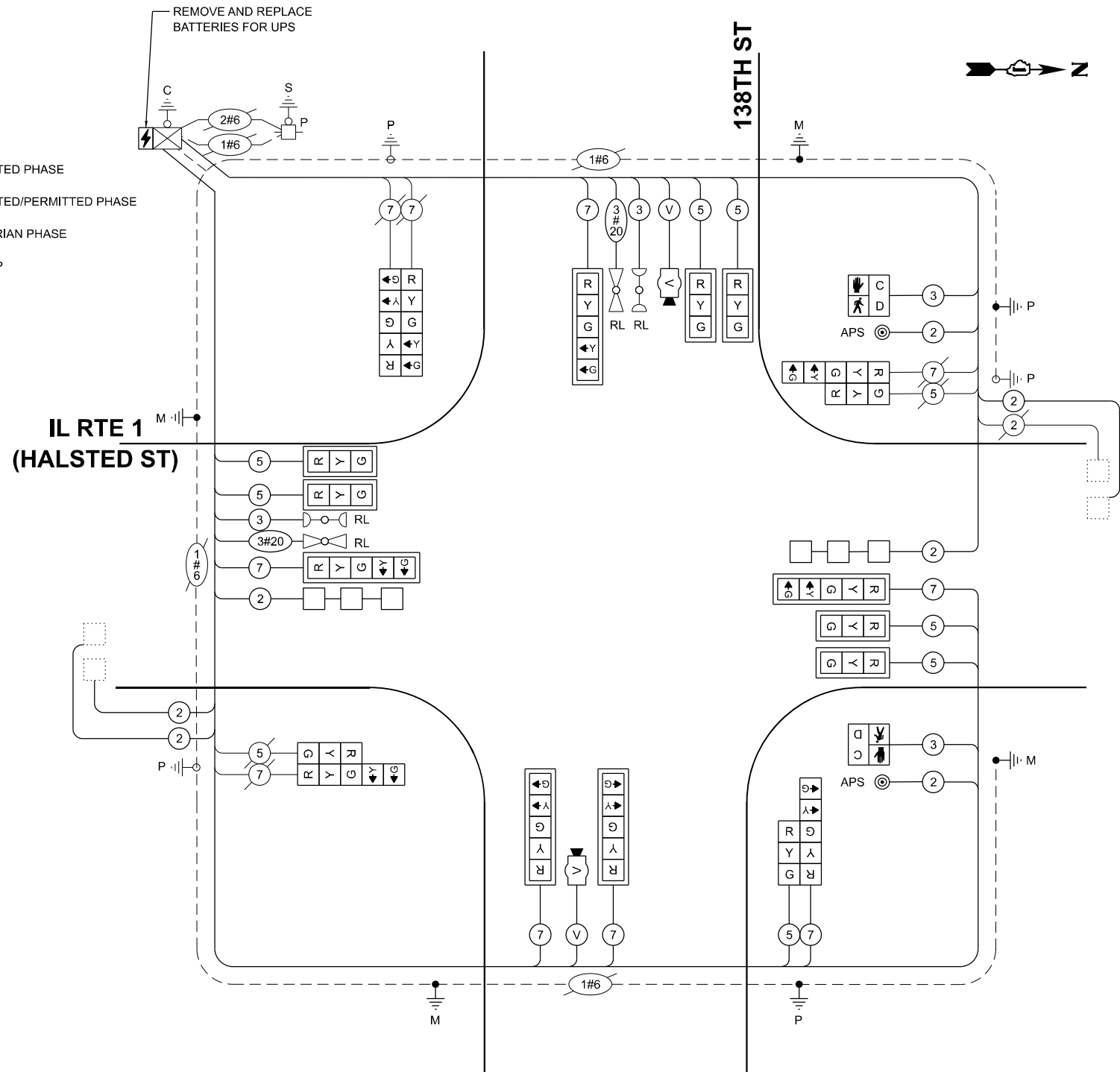
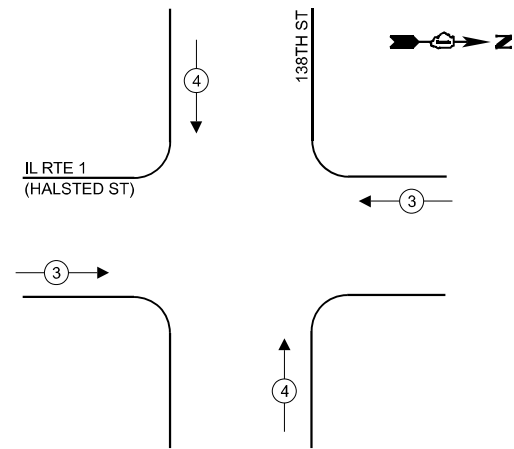
RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP PERMISSIVE PROTECTED
LETTER PHASE PHASE
B = 4 + 5

LEGEND

- ← * → PROTECTED PHASE
- ← * - - → PROTECTED/PERMITTED PHASE
- ← * → PEDESTRIAN PHASE
- ← * OL → OVERLAP

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



CABLE PLAN
(NOT TO SCALE)

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	9	11	99
4-SECTION	-	14	-
5-SECTION	10	13	130
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	2	15	30
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	1	20	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING			454
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1,059

ENERGY COSTS TO:
VILLAGE OF RIVERDALE

157 W. 144TH ST
RIVERDALE, IL 60827

ENERGY SUPPLY:

CONTACT: ILYAS MOHIUDDIN
PHONE: (708)-235-2692

COMPANY: COMED

ACCOUNT NUMBER:

METER NUMBER:

TS 1795

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USER: rg
PLOT DATE: 6/29/2023



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PLOT SCALE = 40,000' = 1"	DRAWN - RG	REVISED -
PLOT DATE = 6/29/2023	CHECKED - DW	REVISED -
	DATE - 6/30/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CABLE PLAN, PHASE DESIGNATION DIAGRAM AND
EMERGENCY VEHICLE PREEMPTION SEQUENCE
IL RTE 1 (HALSTED ST) AND 138TH ST**

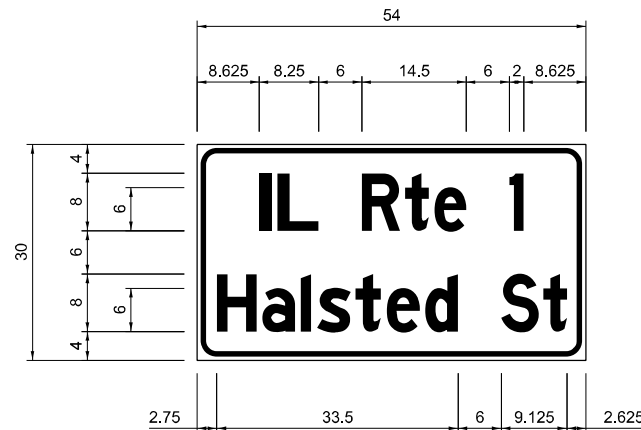
SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	36
CONTRACT NO. 62U32				
ILLINOIS FED. AID PROJECT				

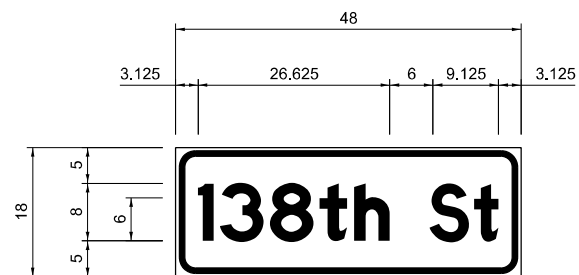
Long Section Number

SIGN PANEL - TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	11.25	2	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	6	1	ZZ	2

NOTE:
FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
SIGN PANEL - TYPE 1	SQ FT	12
SIGN PANEL - TYPE 2	SQ FT	22.5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	351
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	68
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	318
HEAVY-DUTY HANDHOLE	EACH	2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	425
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	765
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1440
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1275
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1420
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	460
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	13.5
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	39
DRILL EXISTING HANDHOLE	EACH	16
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	5
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	11
DETECTOR LOOP, TYPE I	FOOT	204
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
MODIFY EXISTING CONTROLLER	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2965
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	7
REMOVE EXISTING CONCRETE FOUNDATION	EACH	5
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	335
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	1
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	2
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	4
TEMPORARY INFORMATION SIGNING	SQ FT	51.4

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USER NAME = Dwlklorzak	DESIGNED - ZH	REVISED -
PLOT SCALE = 40,000' / 1 in.	DRAWN - RG	REVISED -
PLOT DATE = 6/29/2023	CHECKED - DW	REVISED -
	DATE - 6/30/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

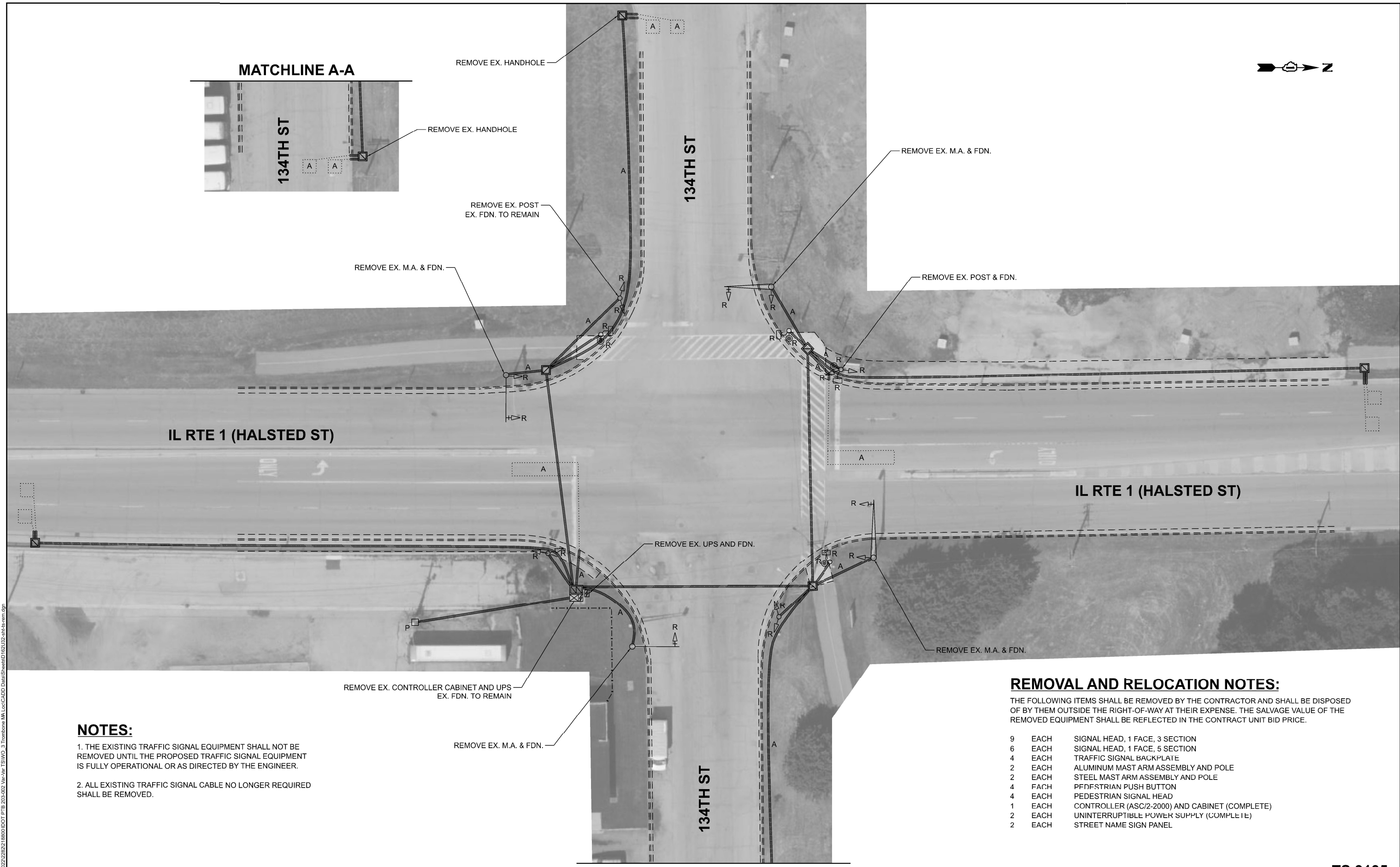
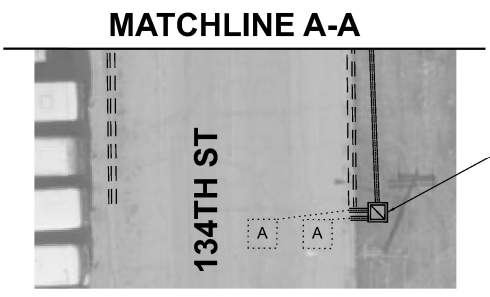
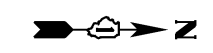
MAST ARM MOUNTED STREET NAME SIGNS
AND SCHEDULE OF QUANTITIES
IL RTE 1 (HALSTED ST) AND 138TH ST

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	37
CONTRACT NO. 62U32				
ILLINOIS FED. AID PROJECT				

Long Section Number

TS 1795



NOTES:

1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
2. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.

REMOVAL AND RELOCATION NOTES:

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 UNIT BID PRICE.

9	EACH	SIGNAL HEAD, 1 FACE, 3 SECTION
6	EACH	SIGNAL HEAD, 1 FACE, 5 SECTION
4	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	ALUMINUM MAST ARM ASSEMBLY AND POLE
2	EACH	STEEL MAST ARM ASSEMBLY AND POLE
4	FACH	PEDESTRIAN PUSH BUTTON
4	EACH	PEDESTRIAN SIGNAL HEAD
1	EACH	CONTROLLER (ASC/2-2000) AND CABINET (COMPLETE)
2	EACH	UNINTERRUPTIBLE POWER SUPPLY (COMPLETE)
2	EACH	STREET NAME SIGN PANEL

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		DRAWN -	RG	REVISED -	
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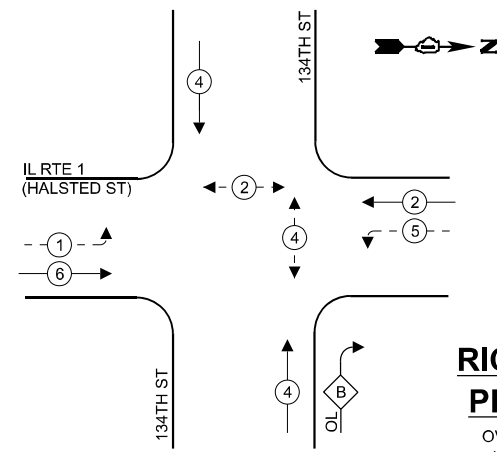
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN	
IL RTE 1 (HALSTED ST) AND 134TH ST	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	38
CONTRACT NO. 62U32				
ILLINOIS FED. AID PROJECT				

TS 9135

EXISTING CONTROLLER SEQUENCE



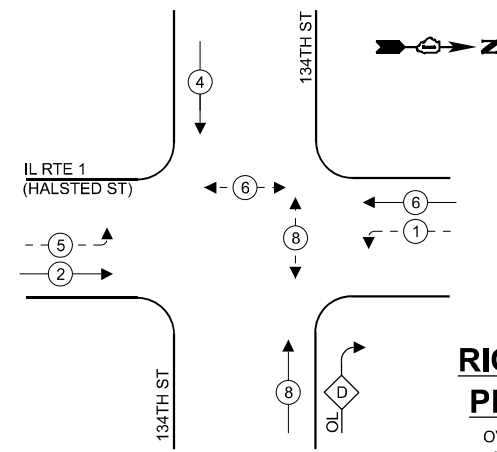
LEGEND

- ← ⊛ → PROTECTED PHASE
- ← ⊛ - PROTECTED/PERMITTED PHASE
- ← ⊛ → PEDESTRIAN PHASE
- ⊛ OL OVERLAP

RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP PERMISSIVE PROTECTED
LETTER PHASE PHASE
B = 4 + 5

PROPOSED CONTROLLER SEQUENCE



RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP PERMISSIVE PROTECTED
LETTER PHASE PHASE
D = 8 + 1

TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	12	11	132
4-SECTION	-	14	-
5-SECTION	6	13	78
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	4	15	60
MASTER CONTROLLER	1	150	150
UPS	1	25	25
DETECTION RADAR OR VIDEO	1	20	20
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING			465
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1,070

ENERGY COSTS TO:
VILLAGE OF RIVERDALE

157 W. 144TH ST
RIVERDALE, IL 60827

ENERGY SUPPLY:

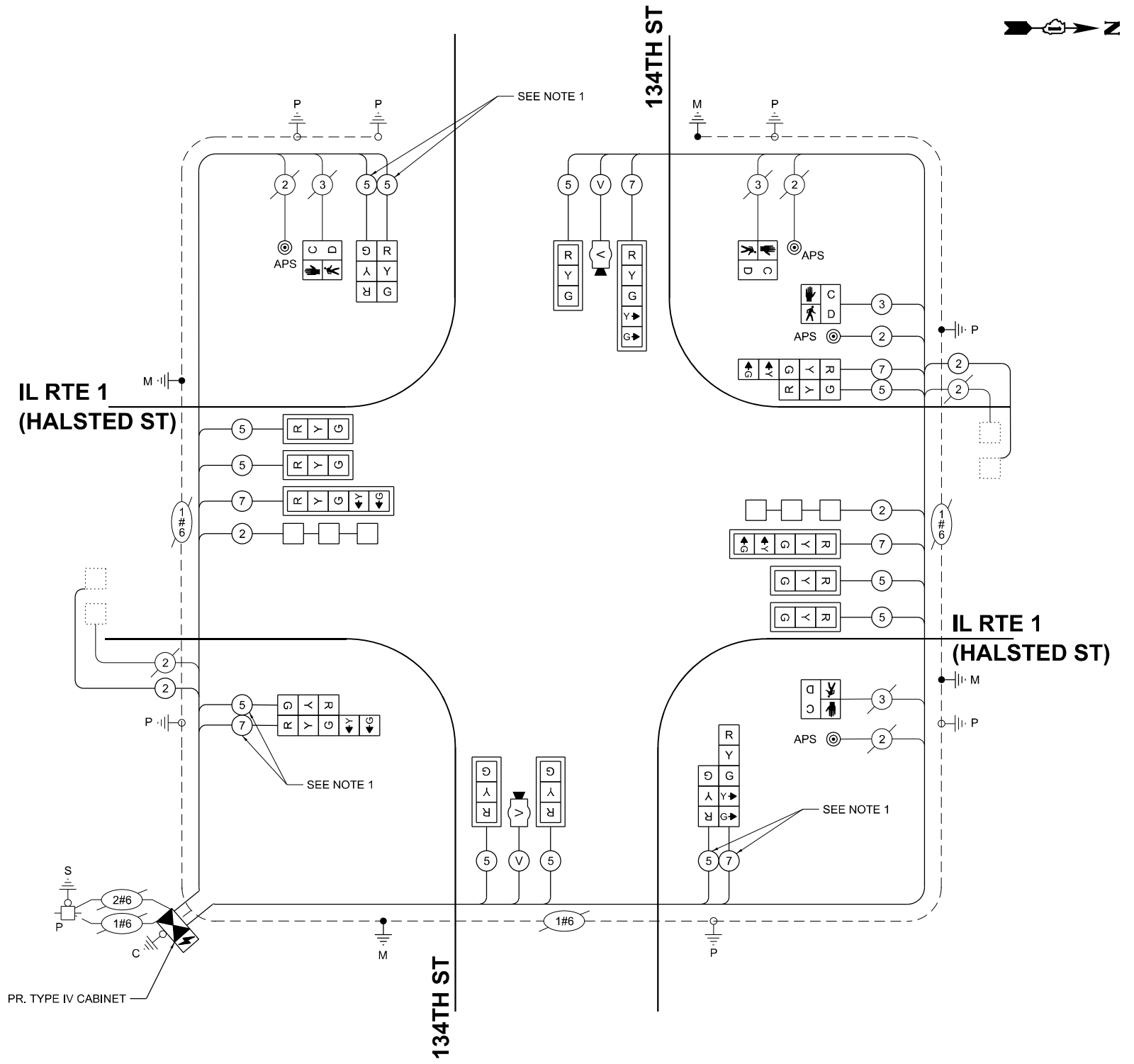
CONTACT: ILYAS MOHIUDDIN

PHONE: (708)-235-2692

COMPANY: COMED

ACCOUNT NUMBER:

METER NUMBER:



CABLE PLAN
(NOT TO SCALE)

NOTES:

- REMOVE EXISTING SHARED MULTI-CONDUCTOR CABLE AND REPLACE WITH SEPERATE 5C AND 7C CABLE AS SHOWN.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN AND PHASE DESIGNATION DIAGRAM
IL RTE 1 (HALSTED ST) AND 134TH ST

SCALE: SHEET OF SHEETS STA. TO STA.

TS 9135

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	40
CONTRACT NO. 62U32				
ILLINOIS FED. AID PROJECT				

Long Section Number

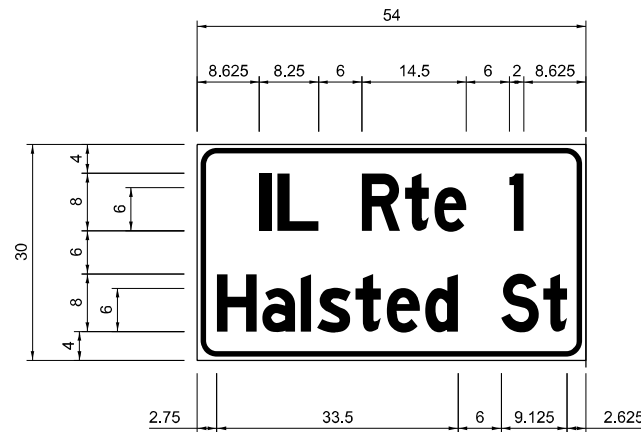
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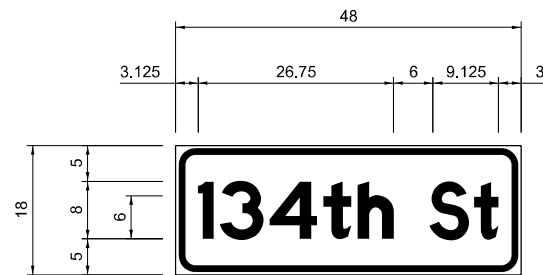
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PLOT SCALE = 40,000' / IN.	DRAWN - RG	REVISED -
PLOT DATE = 6/29/2023	CHECKED - DW	REVISED -
	DATE - 6/30/2023	REVISED -

SIGN PANEL - TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	11.25	2	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	6	1	ZZ	2

NOTE:
FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
SIGN PANEL - TYPE 1	SQ FT	12
SIGN PANEL - TYPE 2	SQ FT	22.5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	120
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	76
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	313
HEAVY-DUTY HANDHOLE	EACH	2
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	275
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	275
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2180
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1250
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1090
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	450
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	4
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	54
DRILL EXISTING HANDHOLE	EACH	13
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE I	FOOT	212
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2505
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	6
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
UNINTERRUPTABLE POWER SUPPLY AND CABINET (SPECIAL)	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	4
TEMPORARY INFORMATION SIGNING	SQ FT	51.4

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USER NAME = Dwlklorzak	DESIGNED - ZH	REVISED -
PLOT SCALE = 40,000' / 1 in.	DRAWN - RG	REVISED -
PLOT DATE = 6/29/2023	CHECKED - DW	REVISED -
	DATE - 6/30/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

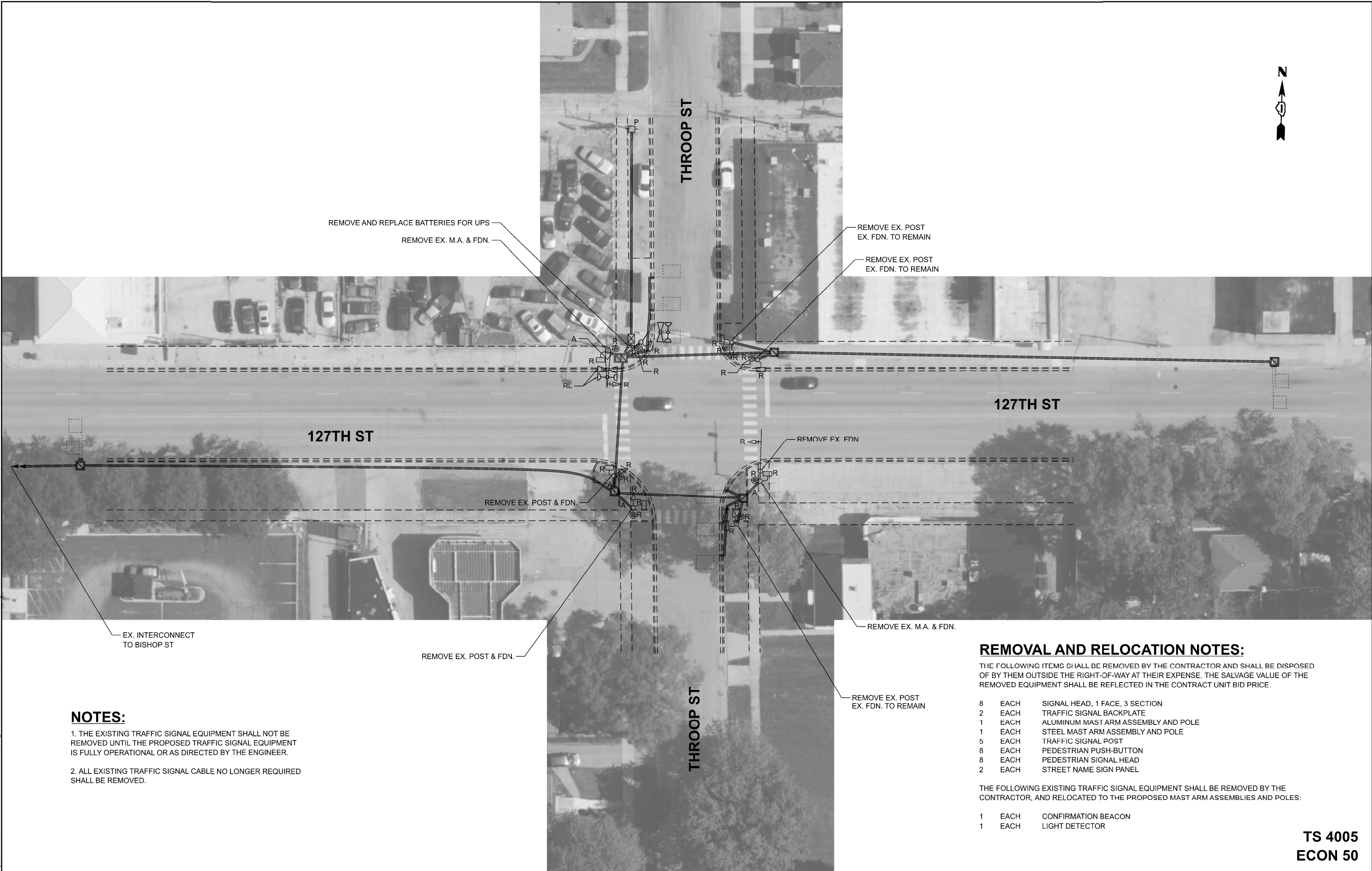
**MAST ARM MOUNTED STREET NAME SIGNS
AND SCHEDULE OF QUANTITIES
IL RTE 1 (HALSTED ST) AND 134TH ST**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	41
CONTRACT NO. 62U32				
ILLINOIS FED. AID PROJECT				

Long Section Number

TS 9135



NOTES:

1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
2. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.

REMOVAL AND RELOCATION NOTES:

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 UNIT BID PRICE.

- 8 EACH SIGNAL HEAD, 1 FACE, 3 SECTION
- 2 EACH TRAFFIC SIGNAL BACKPLATE
- 1 EACH ALUMINUM MAST ARM ASSEMBLY AND POLE
- 1 EACH STEEL MAST ARM ASSEMBLY AND POLE
- 5 EACH TRAFFIC SIGNAL POST
- 8 EACH PEDESTRIAN PUSH-BUTTON
- 8 EACH PEDESTRIAN SIGNAL HEAD
- 2 EACH STREET NAME SIGN PANEL

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, AND RELOCATED TO THE PROPOSED MAST ARM ASSEMBLIES AND POLES:

- 1 EACH CONFIRMATION BEACON
- 1 EACH LIGHT DETECTOR

**TS 4005
ECON 50**

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DRAWN - RG	REVISIONS -	
PLOT SCALE = 40,000' = 1"	CHECKED - DW	REVISED -
PLOT DATE = 6/30/2023	DATE - 6/30/2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

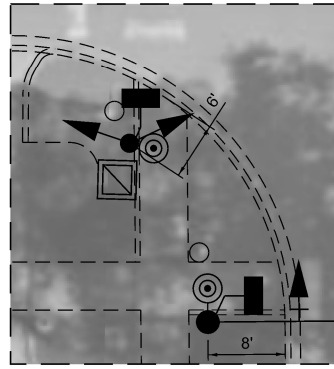
**REMOVAL PLAN
127TH ST AND THROOP ST**

SCALE: SHEET OF SHEETS STA. TO STA.

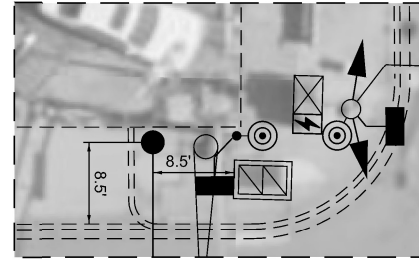
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	42
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62U32	

Long Section Number

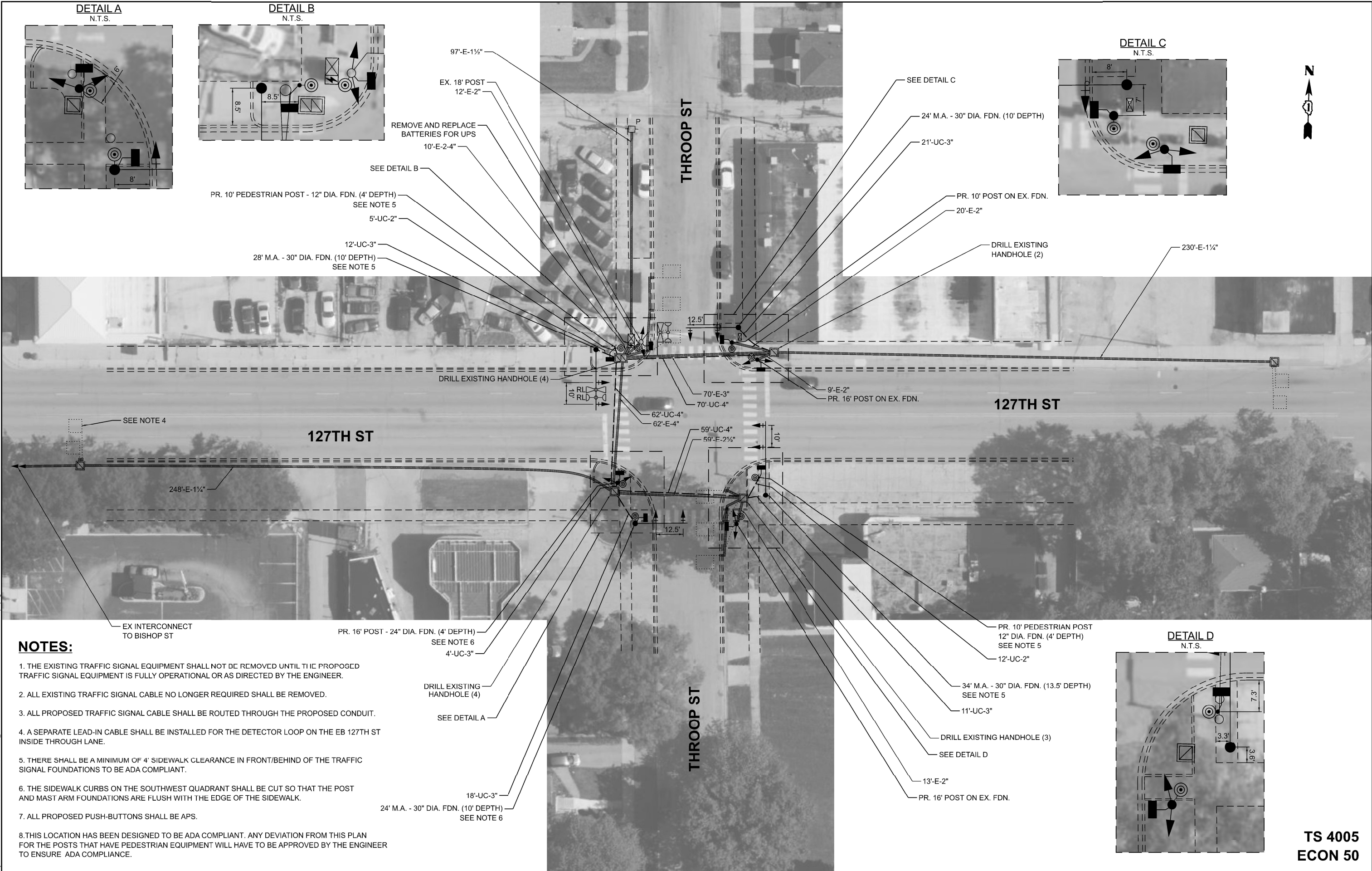
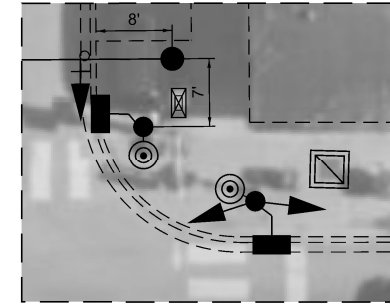
DETAIL A
N.T.S.



DETAIL B
N.T.S.



DETAIL C
N.T.S.



NOTES:

1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS FULLY OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
2. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.
3. ALL PROPOSED TRAFFIC SIGNAL CABLE SHALL BE ROUTED THROUGH THE PROPOSED CONDUIT.
4. A SEPARATE LEAD-IN CABLE SHALL BE INSTALLED FOR THE DETECTOR LOOP ON THE EB 127TH ST INSIDE THROUGH LANE.
5. THERE SHALL BE A MINIMUM OF 4' SIDEWALK CLEARANCE IN FRONT/BEHIND OF THE TRAFFIC SIGNAL FOUNDATIONS TO BE ADA COMPLIANT.
6. THE SIDEWALK CURBS ON THE SOUTHWEST QUADRANT SHALL BE CUT SO THAT THE POST AND MAST ARM FOUNDATIONS ARE FLUSH WITH THE EDGE OF THE SIDEWALK.
7. ALL PROPOSED PUSH-BUTTONS SHALL BE APS.
8. THIS LOCATION HAS BEEN DESIGNED TO BE ADA COMPLIANT. ANY DEVIATION FROM THIS PLAN FOR THE POSTS THAT HAVE PEDESTRIAN EQUIPMENT WILL HAVE TO BE APPROVED BY THE ENGINEER TO ENSURE ADA COMPLIANCE.

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USER NAME = zhoerbert	DESIGNED - ZH	REVISED -
PLOT SCALE = 40,000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 6/30/2023	CHECKED - DW	REVISED -
	DATE - 6/30/2023	REVISED -

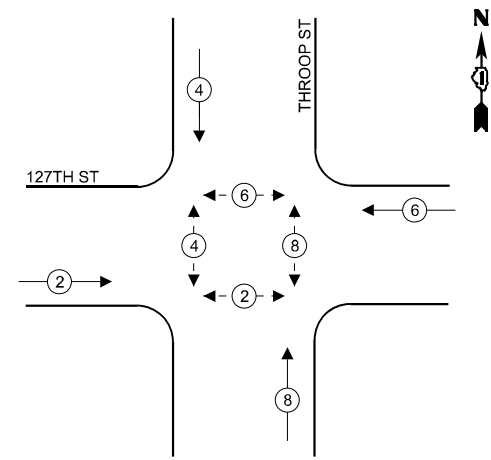
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN			
127TH ST AND THROOP ST			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	43
CONTRACT NO. 62U32				
ILLINOIS FED. AID PROJECT				

TS 4005
ECON 50

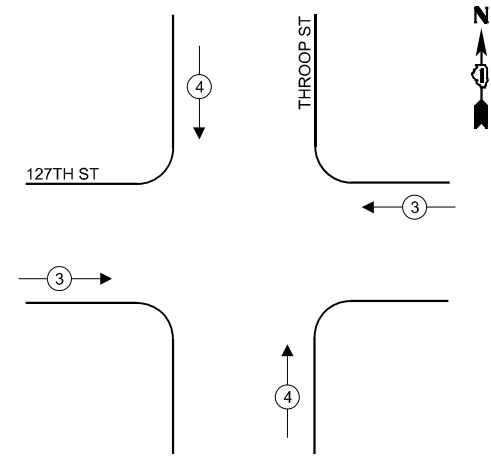
EXISTING CONTROLLER SEQUENCE



LEGEND

- ← (⊙) ← PROTECTED PHASE
- ← (⊙) ← PROTECTED/PERMITTED PHASE
- ← (⊙) → PEDESTRIAN PHASE
- ← (⊙) ← OL OVERLAP

EXISTING EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

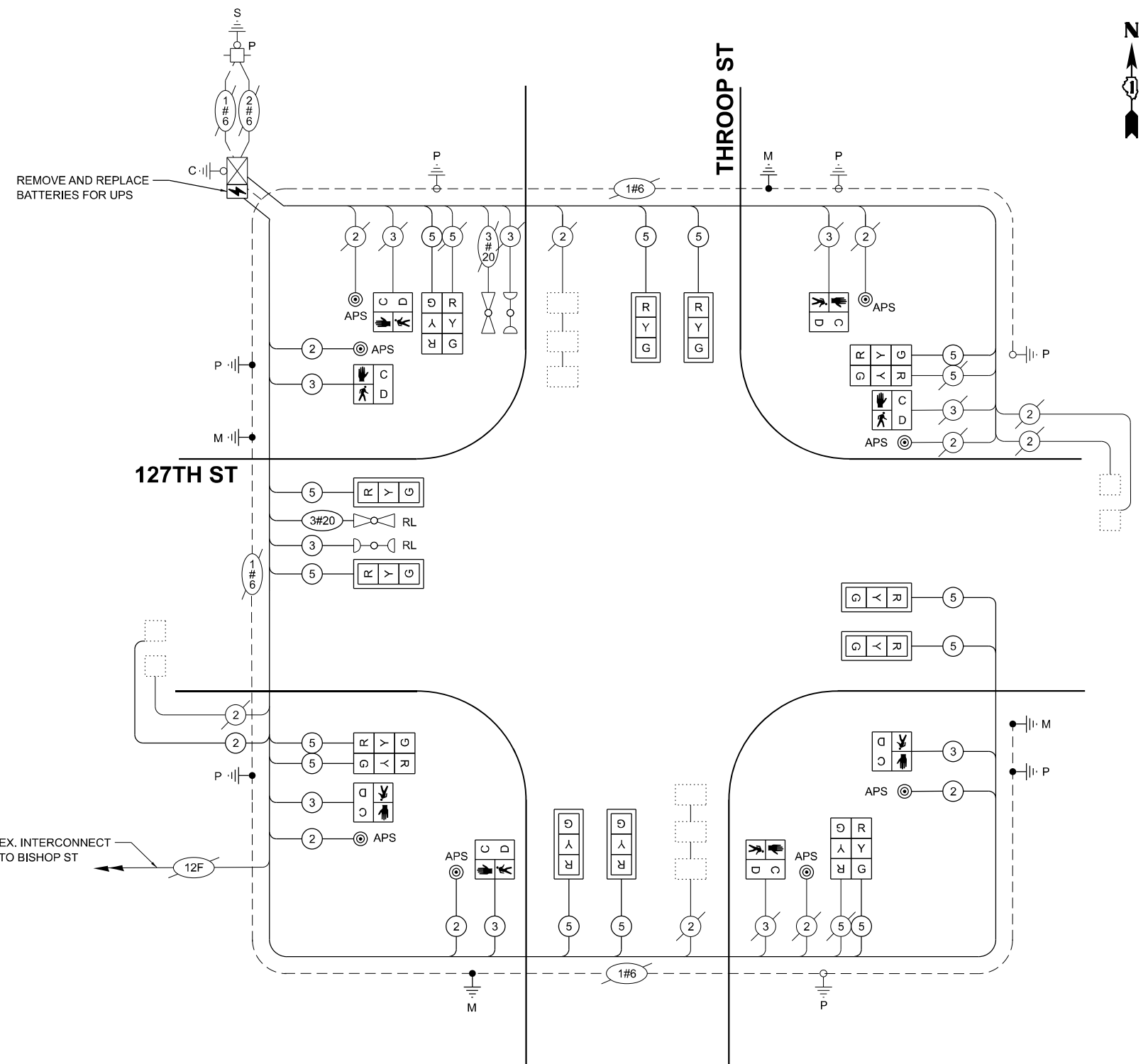
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EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	16	11	176
4-SECTION	-	14	-
5-SECTION	-	13	-
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	8	15	120
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION RADAR OR VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
TOTAL UPS SIZING			471
UPS CHARGING	1	225	225
BATTERY HEATER MAT	1	180	180
CABINET HEATER	1	200	200
FLASHER	-	15	-
LED STREET NAME SIGN	-	120	-
LUMINAIRE	-	240	-
TOTAL SERVICE WIRE SIZING			1076

ENERGY COSTS TO:
VILLAGE OF CALUMET PARK
 12409 S. THROOP ST.
 CALUMET PARK, IL 60827

ENERGY SUPPLY:
 CONTACT: ILYAS MOHIUDDIN
 PHONE: (708)-235-2692
 COMPANY: COMED

ACCOUNT NUMBER:
 METER NUMBER:



CABLE PLAN
(NOT TO SCALE)



USER NAME = zhoerbert	DESIGNED - ZH	REVISED -
PLOT SCALE = 40,000' / in.	DRAWN - RG	REVISED -
PLOT DATE = 6/30/2023	CHECKED - DW	REVISED -
	DATE - 6/30/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
127TH ST AND THROOP ST

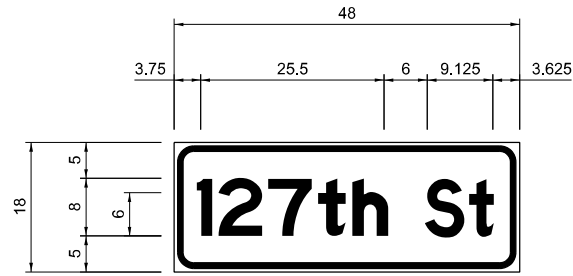
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	44
			CONTRACT NO. 62U32	
SCALE:		SHEET OF SHEETS	STA.	TO STA.
ILLINOIS FED. AID PROJECT				

TS 4005
ECON 50

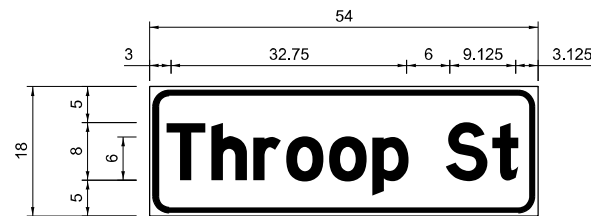
Long Section Number

SIGN PANEL - TYPE 1

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	6	1	ZZ	2



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	6.75	1	ZZ	2

NOTE:
FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNIT	TOTAL QUANTITY
SIGN PANEL - TYPE 1	SQ FT	25,5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	17
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	66
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	191
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	465
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	575
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1880
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	350
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	345
TRAFFIC SIGNAL POST, GALVANIZED STEEL 10 FT.	EACH	1
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	43,5
DRILL EXISTING HANDHOLE	EACH	13
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	8
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1350
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	5
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	95
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2
REMOVE AND REPLACE BATTERIES FOR UNINTERRUPTABLE POWER SUPPLY, EXTENDED	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	8
TEMPORARY INFORMATION SIGNING	SQ FT	51,4

MODEL: I:\p\dlz\2022\2822\1880\DOT\PTB_202402\plan\47_TSI\WO_3\Tombora\MA\Loc\CADD\Draws\Sheets\182U32\ts4005econ50.dgn



USER NAME = Dwlklorzak	DESIGNED - ZH	REVISED -
PLOT SCALE = 40,000' / 1 in.	DRAWN - RG	REVISED -
PLOT DATE = 6/29/2023	CHECKED - DW	REVISED -
	DATE - 6/30/2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

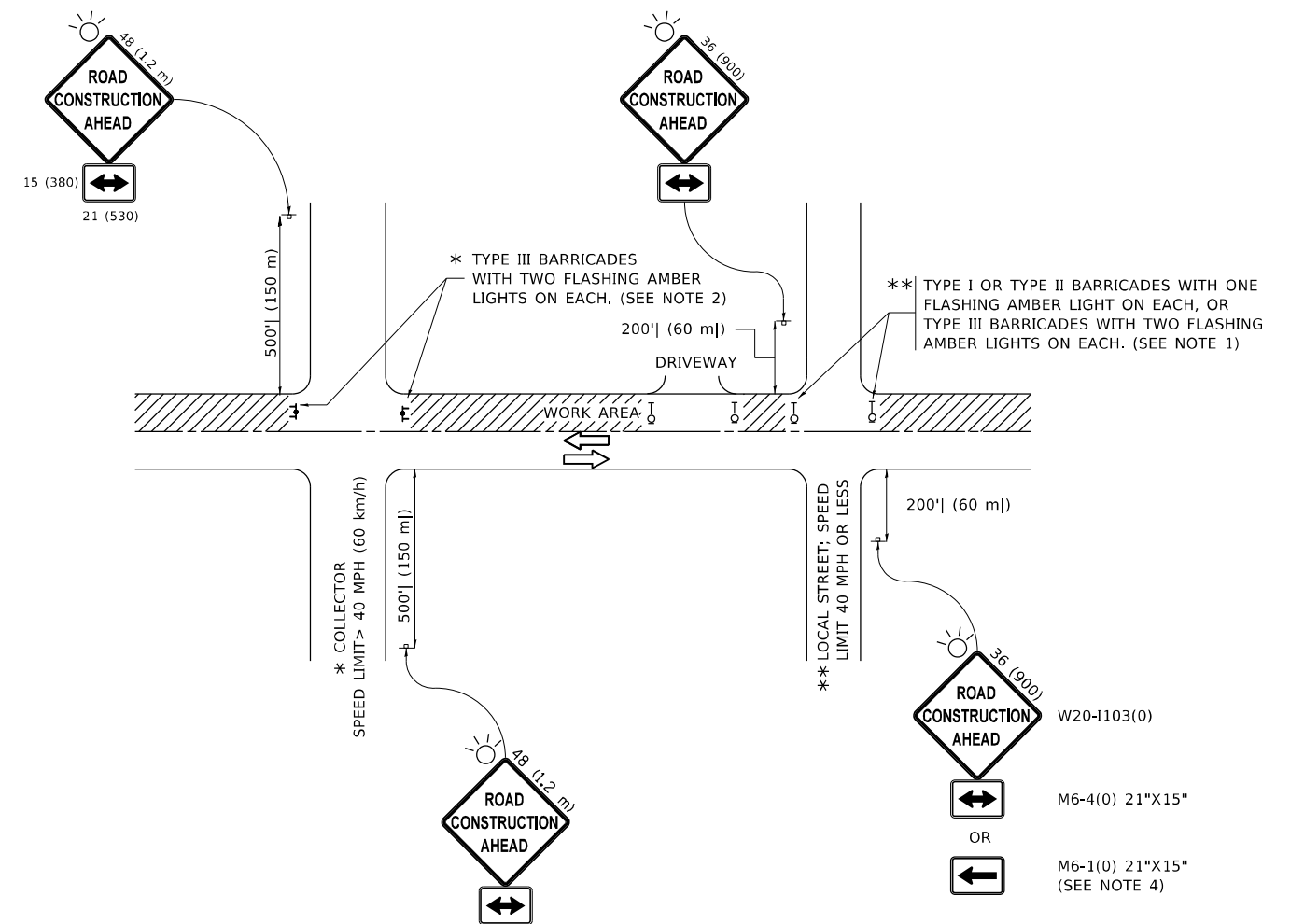
MAST ARM MOUNTED STREET NAME SIGNS
AND SCHEDULE OF QUANTITIES
127TH ST AND THROOP ST

SCALE: SHEET OF SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	45
CONTRACT NO. 62U32				
ILLINOIS		FED. AID PROJECT		

Long Section Number

TS 4005
ECON 50



NOTES:

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

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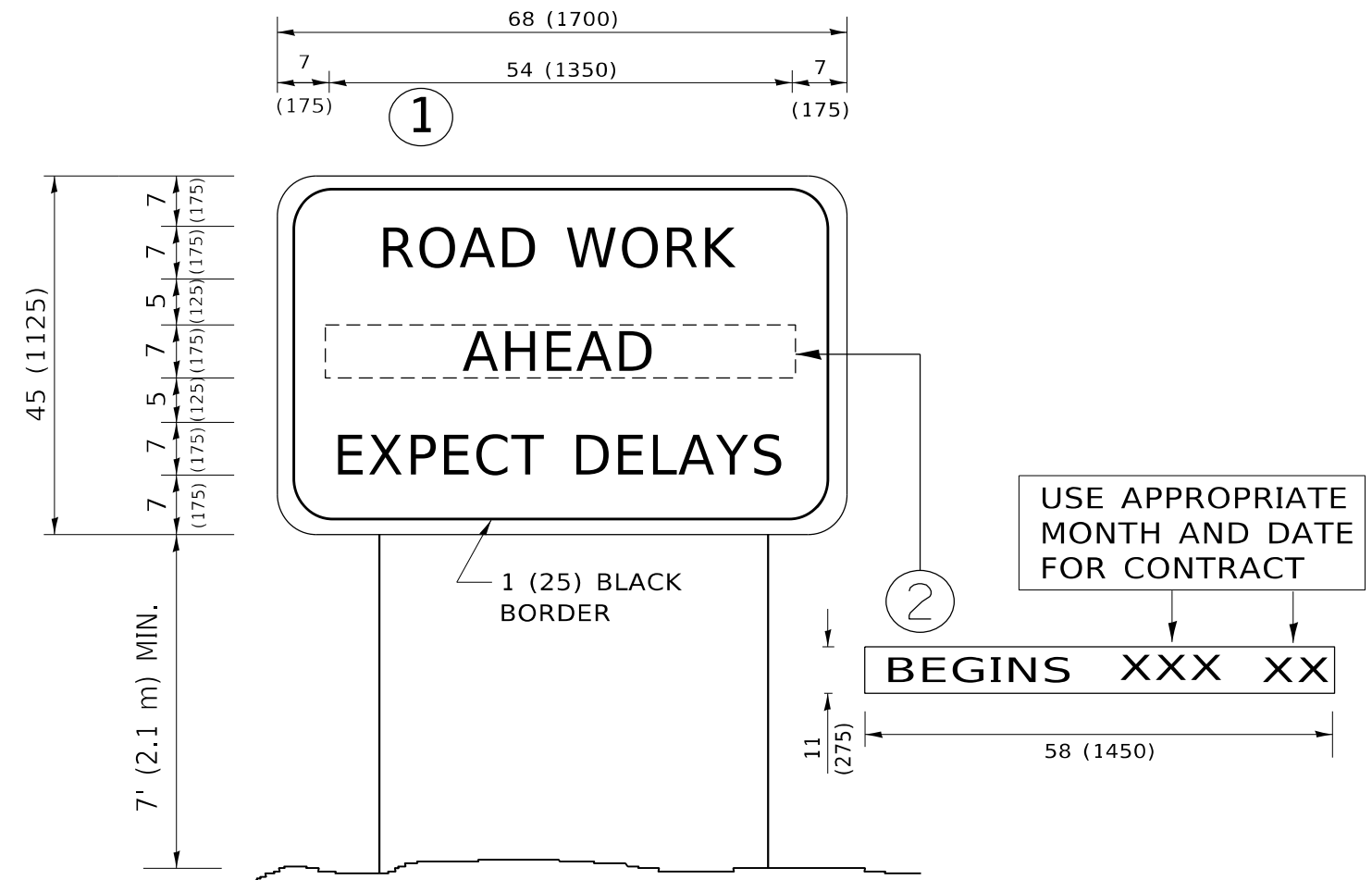
USER NAME = Iovan.Plascencia	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED - T. RAMMACHER 01-06-00
PLOT DATE = 6/29/2023	DATE - 06-89	REVISED - A. SCHUETZE 07-01-13
		REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	46
TC-10			CONTRACT NO. 62U32	
ILLINOIS FED. AID PROJECT				



NOTES:

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

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

MODEL: D:\p\h... FILE NAME: S:\V\Design\Ivanan08_Master\Contract\08_62U32 - September 2023\CADD\082U32-std-general.dgn

USER NAME = Iovan,Plascencia	DESIGNED -	REVISED - R. MIRS 09-15-97
	DRAWN -	REVISED - R. MIRS 12-11-97
PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
PLOT DATE = 6/29/2023	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD
INFORMATION SIGN**

SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR	2023 TRAFFIC MAST	VARIOUS	47	47
TC-22			CONTRACT NO. 62U32	
ILLINOIS FED. AID PROJECT				