

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR		COOK	35	1
		ILLINOIS	CONTRACT NO. 12X15	

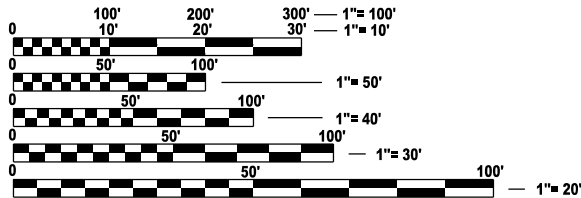
D-91-123-45



FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROPOSED  
HIGHWAY PLANS  
VARIOUS LOCATIONS IN DISTRICT 1  
SECTION: \_\_\_\_\_  
PROJECT: \_\_\_\_\_  
TRAFFIC SIGNAL MODERNIZATION  
COOK COUNTY  
C-91-123-45

FOR LOCATION MAP  
SEE SHEET NO. 3



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

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

PROJECT ENGINEER: IOVAN PLASCENCIA  
PROJECT MANAGER: NICHOLAS BUTLER

CONTRACT NO. 12X15

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED \_\_\_\_\_ 20 \_\_\_\_\_  
\_\_\_\_\_  
REGIONAL ENGINEER  
\_\_\_\_\_  
20 \_\_\_\_\_  
ENGINEER OF DESIGN AND ENVIRONMENT  
\_\_\_\_\_  
20 \_\_\_\_\_  
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	LOCATION MAP
4-9	SUMMARY OF QUANTITIES
10-16	DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS (TS-01)
17	DISTRICT 1 MAST ARM MOUNTED STREET NAME SIGNS (TS-02)

SHT NO.	TS NO.	INTERSECTION NAME
18-21	4080	SOUTH PARK AVE / DR MARTIN LUTHER KING DR AT 154TH ST
22-25	265	US RTE 6 (159TH ST) AT PARK AVE
26-29	280	US RTE 6 (159TH ST) AT RING RD
30-33	4495	IL RTE 83 (TORRENCE AVE) AT PULASKI RD / 154TH ST

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

HIGHWAY STANDARDS

STD. NO.	TITLE
000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
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
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-10	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAIL
814001-03	HANDHOLES
814006-03	DOUBLE HANDHOLES
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-08	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
878001-11	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS

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 KALPANA KANNAN-HOSADURGA, THE DISCTRICK ONE TRAFFIC CONTROL SUPERVISOR, AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV A MINIMUM OF 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.

THE EXACT LOCATION OF ALL UTILITES 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, MEDIAN, SIDEWALKS, PAVEMENT ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE 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 PROWAG/MUTCD 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 ENSURE COMPLIANCE.

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.

	USER NAME = Ivan,Ascenda	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, HIGHWAY STANDARDS & GENERAL NOTES			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - IP	REVISED -					VAR		COOK	35	2
		CHECKED - NB	REVISED -					CONTRACT NO. 12X15				
	PLOT DATE =	DATE - 10/15/2025	REVISED -		SCALE:	SHEET 1	OF 1 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		



				CONSTRUCTION CODE				
				90% FED, 6.6% STATE 1.7% DOLTON, 1.7% SOUTH HOLLAND S PARK AVE/ DR MLK DR @ 154TH ST	90% FED, 5% STATE 5% CALUMET CITY US 6 @ PARK AVE & IL 83 @ PULASKI RD	90% FED, 6.7% STATE 3.3% CALUMET CITY US 6 @ RING RD	100% SOUTH HOLLAND EVP	100% CALUMET CITY EVP
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS				
				0021				
				URBAN				
20101700	SUPPLEMENTAL WATERING	UNIT	1		1			
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	4		4			
25200110	SODDING, SALT TOLERANT	SQ YD	4		4			
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	23.5		23.5			
44000600	SIDEWALK REMOVAL	SQ FT	44		44			
66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	100	18	62	20		
66900530	SOIL DISPOSAL ANALYSIS	EACH	4	1	2	1		
66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	0.25	0.5	0.25		
66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	0.25	0.5	0.25		
66901006	REGULATED SUBSTANCES MONITORING	CAL DA	16	4	8	4		
67100100	MOBILIZATION	L SUM	1	0.25	0.5	0.25		
70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	0.25	0.5	0.25		
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	0.25	0.5	0.25		
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	0.25	0.5	0.25		

	USER NAME	= Ivan, J. Ascenda	DESIGNED	-	IP	REVISED	-	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES (SHEET 1 OF 6)				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			DRAWN	-	IP	REVISED	-						VAR		COOK	35	4
			CHECKED	-	NB	REVISED	-		CONTRACT NO. 12X15								
	PLOT DATE	=	DATE	-	10/15/2025	REVISED	-		SCALE:	SHEET 1	OF 6	SHEETS	STA.	TO STA.	ILLINOIS   FED. AID PROJECT		

				CONSTRUCTION CODE				
				90% FED, 6.6% STATE 1.7% DOLTON, 1.7% SOUTH HOLLAND S PARK AVE/ DR MLK DR @ 154TH ST	90% FED, 5% STATE 5% CALUMET CITY US 6 @ PARK AVE & IL 83 @ PULASKI RD	90% FED, 6.7% STATE 3.3% CALUMET CITY US 6 @ RING RD	100% SOUTH HOLLAND EVP	100% CALUMET CITY EVP
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS				
				0021				
				URBAN				
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.25	0.5	0.25		
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.25	0.5	0.25		
72000100	SIGN PANEL - TYPE 1	SQ FT	37.5	12	13.5	12		
72000200	SIGN PANEL - TYPE 2	SQ FT	108.75	20	77.5	11.25		
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	527	28	453	46		
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	411	99	197	115		
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	868	63	633	172		
81400100	HANDHOLE	EACH	2		2			
81400200	HEAVY-DUTY HANDHOLE	EACH	1			1		
81400300	DOUBLE HANDHOLE	EACH	2		2			
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	4	1	2	1		
86400100	TRANSCEIVER - FIBER OPTIC	EACH	2		1	1		
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,350	440	911			
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	3,090	456	931		462	1,239

	USER NAME = Ivan,Ascenda	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES (SHEET 2 OF 6)			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - IP	REVISED -					VAR		COOK	35	5
		CHECKED - NB	REVISED -					CONTRACT NO. 12X15				
	PLOT DATE =	DATE - 10/15/2025	REVISED -		SCALE:	SHEET 2	OF 6	SHEETS	STA.	TO STA.	ILLINOIS FED.AID PROJECT	

				CONSTRUCTION CODE				
				90% FED, 6.6% STATE 1.7% DOLTON, 1.7% SOUTH HOLLAND S PARK AVE/ DR MLK DR @ 154TH ST	90% FED, 5% STATE 5% CALUMET CITY US 6 @ PARK AVE & IL 83 @ PULASKI RD	90% FED, 6.7% STATE 3.3% CALUMET CITY US 6 @ RING RD	100% SOUTH HOLLAND EVP	100% CALUMET CITY EVP
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS				
				0021				
				URBAN				
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	8,230	1,826	4,762	1,636		
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	2,410	228	1,393	783		
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	4,500	708	2,749	1,039		
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,585	260	995	330		
87501200	TRAFFIC SIGNAL POST, 16 FT.	EACH	8	3	4	1		
87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	2	1	1			
87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1		1			
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1	1				
87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	3	1	1	1		
87700250	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	2		1	1		
87700260	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1		1			
87700280	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	2		2			
87700290	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	2		1	1		
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	24	8	16			

	USER NAME	= Ivan,Ascendis	DESIGNED	- IP	REVISED	-	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES (SHEET 3 OF 6)				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			DRAWN	- IP	REVISED	-						VAR		COOK	35	6
			CHECKED	- NB	REVISED	-						CONTRACT NO. 12X15				
	PLOT DATE	=	DATE	- 10/15/2025	REVISED	-										
						SCALE:						SHEET 3	OF 6	SHEETS	STA.	TO STA.

				CONSTRUCTION CODE				
				90% FED, 6.6% STATE 1.7% DOLTON, 1.7% SOUTH HOLLAND S PARK AVE/ DR MLK DR @ 154TH ST	90% FED, 5% STATE 5% CALUMET CITY US 6 @ PARK AVE & IL 83 @ PULASKI RD	90% FED, 6.7% STATE 3.3% CALUMET CITY US 6 @ RING RD	100% SOUTH HOLLAND EVP	100% CALUMET CITY EVP
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS				
				0021				
				URBAN				
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	87.5	37	37	13.5		
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	95		67	28		
87900200	DRILL EXISTING HANDHOLE	EACH	31	9	14	8		
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	27	5	16	6		
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	21	5	12	4		
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	8	1	4	3		
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	7	1	4	2		
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6	6				
88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	34	6	20	8		
88500100	INDUCTIVE LOOP DETECTOR	EACH	18	2	8	8		
88600100	DETECTOR LOOP, TYPE I	FOOT	246		150	96		
89500200	RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	4		4			
89500400	RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	4		4			
89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	8				2	6

	USER NAME	= Ivan, Jascenda	DESIGNED	-	IP	REVISED	-	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES (SHEET 4 OF 6)				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			DRAWN	-	IP	REVISED	-						VAR		COOK	35	7
			CHECKED	-	NB	REVISED	-		CONTRACT NO. 12X15								
	PLOT DATE	=	DATE	-	10/15/2025	REVISED	-		SCALE:	SHEET 4	OF 6	SHEETS	STA.	TO STA.	ILLINOIS   FED. AID PROJECT		

				CONSTRUCTION CODE				
				90% FED, 6.6% STATE 1.7% DOLTON, 1.7% SOUTH HOLLAND S PARK AVE/ DR MLK DR @ 154TH ST	90% FED, 5% STATE 5% CALUMET CITY US 6 @ PARK AVE & IL 83 @ PULASKI RD	90% FED, 6.7% STATE 3.3% CALUMET CITY US 6 @ RING RD	100% SOUTH HOLLAND EVP	100% CALUMET CITY EVP
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	TRAFFIC SIGNALS				
				0021				
				URBAN				
89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	2					2
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	7,730	2,080	3,330	2,320		
89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	470		240	230		
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	4	1	2	1		
89502376	REBUILD EXISTING HANDHOLE	EACH	2	2				
89502380	REMOVE EXISTING HANDHOLE	EACH	10		7	3		
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	28	7	16	5		
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	1,705				462	1,239
X1400367	PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2	2				
X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	12					
X7200061	TEMPORARY INFORMATION SIGNING	SQ FT	205.6	51.4	102.8	51.4		
X8570227	FULL-ACTUATED CONTROLLER AND TYPE IV STRETCHED CABINET (SPECIAL)	EACH	2		1	1		
X8620250	UNINTERRUPTABLE POWER SUPPLY AND CABINET (SPECIAL)	EACH	2		1	1		
X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	6	6				

	USER NAME = Ivan,Ascenda	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES (SHEET 5 OF 6)			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - IP	REVISED -					VAR			35	8
		CHECKED - NB	REVISED -					CONTRACT NO. 12X15				
	PLOT DATE =	DATE - 10/15/2025	REVISED -		SCALE:	SHEET 5	OF 6 SHEETS	STA.	TO STA.	ILLINOIS FED.AID PROJECT		



[illegible]

USER NAME = Iovan,plascencia	DESIGNED - IP	REVISED -
	DRAWN - IP	REVISED -
	CHECKED - NB	REVISED -
PLOT DATE =	DATE - 10/15/2025	REVISED -

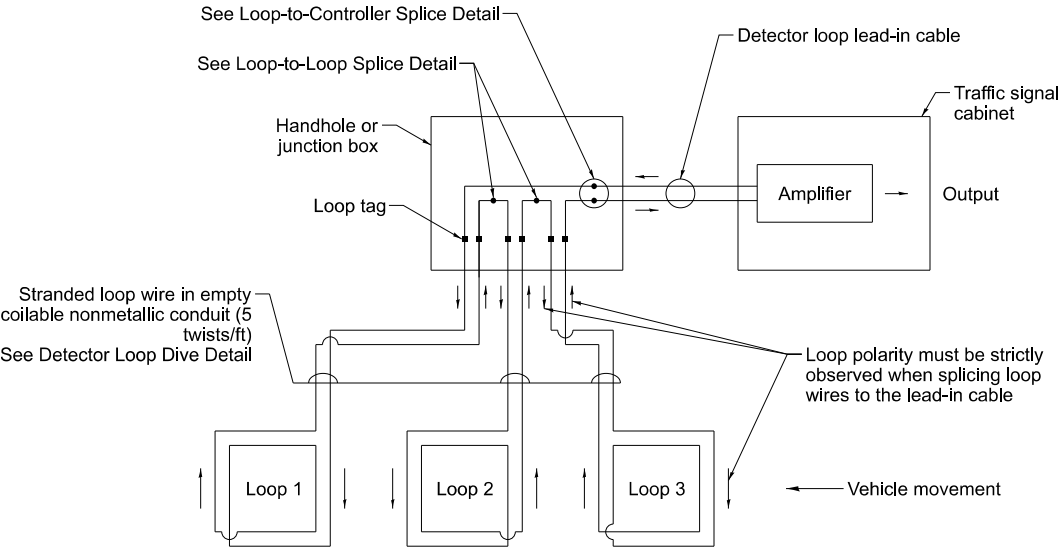
TRAFFIC SIGNAL LEGEND

ITEM				ITEM				ITEM			
		EXISTING	PROPOSED			EXISTING	PROPOSED			EXISTING	PROPOSED
Traffic Signal Cabinet				Handhole				Signal Head			
Uninterruptable Power Supply				Double Handhole				Signal Head with Backplate			
Communication Cabinet				Heavy Duty Handhole				Pedestrian Signal Head with Countdown Timer			
Master Controller				Junction Box				Illuminated LED Sign "NO LEFT TURN"/"NO RIGHT TURN"			
Master Master Controller				Railroad Cantilever Mast Arm				Electric Cable, Signal, No. 14 - 2/C, 3/C, 5/C, 7/C			
Service Installation - (P) Pole Mounted				Railroad Flashing Signal				Electric Cable, Lead-In, No. 14, 1 Pair			
Service Installation - (G) Ground Mounted - (GM) Ground Mounted Metered				Railroad Crossing Gate				Service Cable, 2/C - No. 2, No. 4, No. 6			
Cellular Modem				Railroad Crossbuck				Ground Cable No. 6 Solid Copper (Green), 1/C			
Telephone Connection				Railroad Controller Bungalow				Electric Cable, Tracer, No. 14, 1/C			
Steel Mast Arm Assembly and Pole				Underground Conduit (UC), Galvanized Steel				Electric Cable, Railroad, No. 14, 3/C			
Aluminum Mast Arm Assembly and Pole				Temporary Span Wire, Tether Wire, and Cable				Electric Cable, Street Name Sign No. 14, 3/C, Type SOOW			
Steel Combination Mast Arm Assembly and Pole with Luminaire				System Item				Vendor Cable			
Signal Post - (BM) Barrel Mounted - Temporary				Intersection Item				Emergency Vehicle Priority Line Sensor Cable, No. 20, 3/C			
Wood Pole				Removal Item				Outdoor Rated Network Cable			
Guy Wire				Relocate Item				Fiber Optic Cable - 12F: 12 Multimode - 24F: 12 Multimode / 12 Single Mode - 36F: 12 Multimode / 24 Single Mode - 24SM: 24 Single Mode - 48SM: 48 Single Mode			
Signal Head				Abandon Item				Ground Rod - (C) Controller - (M) Mast Arm - (P) Post - (S) Service			
Signal Head with Backplate				Controller Cabinet and Foundation to be Removed							
Signal Head - Programmable				Mast Arm Pole and Foundation to be Removed							
Flasher Installation - (FS) Solar Powered				Signal Post and Foundation to be Removed							
Pedestrian Signal Head				Detector Loop, Type I							
Pedestrian Push Button - (APS) Accessible Pedestrian Push Button				Preformed Detector Loop							
Radar Detection Sensor				Wireless Detector Sensor							
Video Detection Camera											
Radar/Video Detection Zone											
Pan, Tilt, Zoom (PTZ) Camera											
Emergency Vehicle Light Detector											
Confirmation Beacon											
Wireless Interconnect											
Wireless Interconnect Radio Repeater											
Wireless Access Point											

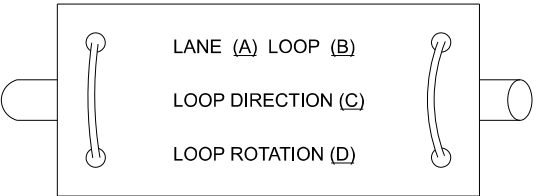
	USER NAME = Ivan, Ascenda	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - IP	REVISED -					VAR		COOK	35	10
		CHECKED - NB/KK	REVISED -		SCALE: NTS			SHEET 1 OF 7 SHEETS				
	PLOT DATE =	DATE - 10/15/2025	REVISED -		STA. TO STA.			ILLINOIS FED. AID PROJECT				

DETECTOR LOOP NOTES:

1. LOOPS SHALL BE SPLICED IN SERIES.
2. SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" AT A DEPTH OF 3". IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
3. LOOP CORNERS SHALL BE DRILLED WITH A 2" DIAMETER CORE.
4. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NON-METALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6". EMPTY COILABLE NON-METALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE DETECTOR LOOP PAY ITEM.
5. 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.
6. EACH LEAD-IN CABLE SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP NUMBER, LOOP DIRECTION (IN OR OUT), AND LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE) IN WATER PROOF INK. SEE DETECTOR LOOP LEAD-IN CABLE TAG DETAIL. THE CONTRACTOR SHALL MARK THE LOOP LOCATIONS ON THE RECORD DRAWINGS AND PRESENT THEM TO THE ENGINEER AFTER THE FINAL INSPECTION.
7. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
8. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND THE DIVE HOLES 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" APART.
9. 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.
10. PREFORMED DETECTOR LOOPS SHALL BE USED 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.

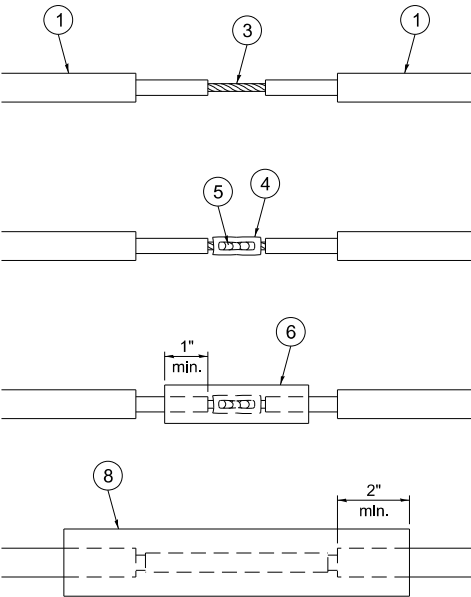


DETECTOR LOOP WIRING SCHEMATIC



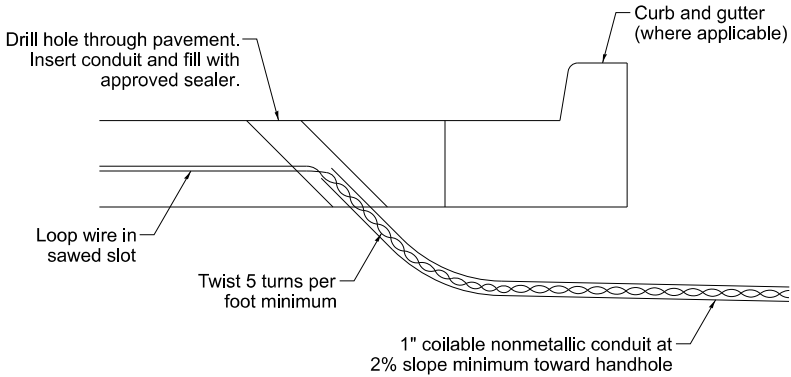
- A. Lane 1 is the lane closest to the centerline of the roadway.
- B. Loop #1 is the loop closest to the intersection.
- C. Label loop cable "in" or loop cable "out".
- D. Label loop cable clockwise or loop cable counterclockwise.

DETECTOR LOOP LEAD-IN CABLE TAG

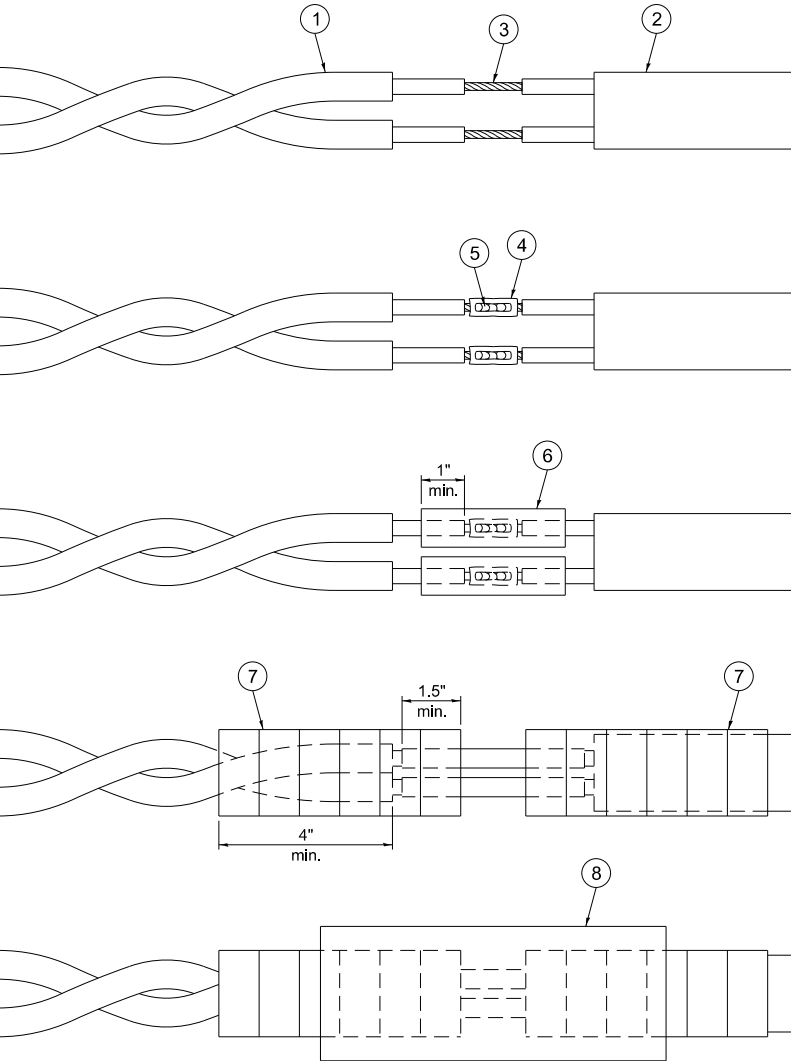


LOOP-TO-LOOP SPLICE DETAIL

- 1 Detector loop cable.
- 2 Detector loop lead-in cable
- 3 Bare conductors twisted together.
- 4 Butt splice crimp connector.
- 5 Splice soldered with rosin core flux. All exposed surfaces of the solder shall be smooth. The splices shall be staggered.
- 6 WCSMW 30/100 heat shrink tube, 3" minimum length, underwater grade.
- 7 Self-infused, silicone electrical tape tightly wrapped around cables.
- 8 WCS 200/750 heat shrink tube, 8" minimum length, underwater grade.



DETECTOR LOOP DIVE DETAIL



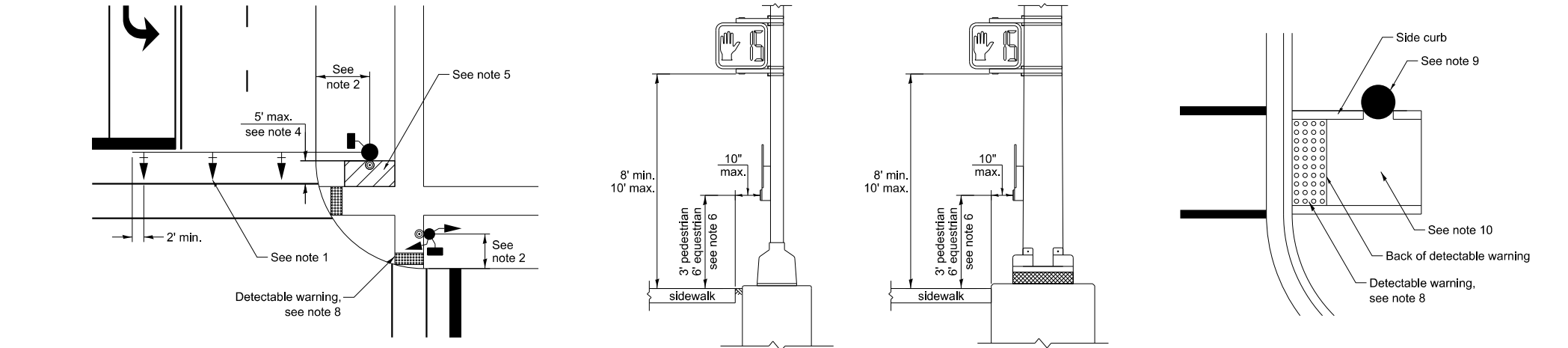
LOOP-TO-CONTROLLER SPLICE DETAIL

	USER NAME = Ivan, Ascenda		DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			DRAWN - IP	REVISED -						VAR		COOK	35	11
			CHECKED - NB/KK	REVISED -						TS-01		CONTRACT NO. 12X15		
	PLOT DATE =		DATE - 10/15/2025	REVISED -		SCALE: NTS	SHEET 2	OF 7	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		

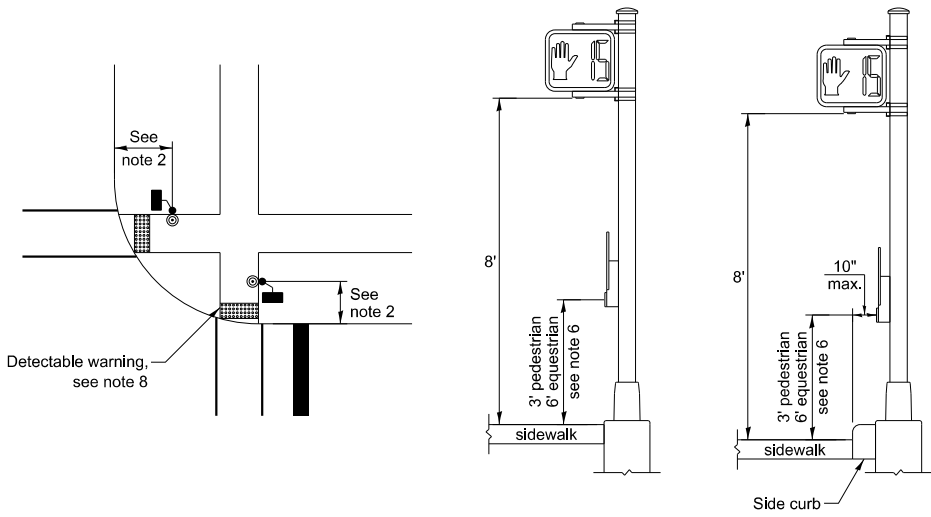
NOTES:

1. THE MAST ARM MOUNTED SIGNAL HEADS SHALL BE CENTERED ON THE LANES OR AS SHOWN ON THE TRAFFIC SIGNAL PLANS.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET MINIMUMS TABLE.
3. A 4' MINIMUM UNOBSTRUCTED PEDESTRIAN ACCESS ROUTE SHALL BE MAINTAINED.
4. THE PUSH-BUTTON SHALL BE LOCATED 5' OR LESS FROM THE OUTSIDE EDGE OF THE MARKED CROSSWALK FARTEST FROM THE INTERSECTION FOR THE CROSSWALK THAT THE PUSH-BUTTON CONTROLS.
5. IF THE MAST ARM POLE OR SIGNAL POST WHERE THE PUSH-BUTTON IS TO BE INSTALLED IS NOT IMMEDIATELY ADJACENT TO THE SIDEWALK, PROVIDE A FIRM, STABLE, AND SLIP RESISTANT SURFACE UP TO THE MAST ARM POLE OR SIGNAL POST. THE MINIMUM PAVED AREA IN FRONT OF THE PUSH-BUTTON SHALL BE 2.5' X 4'. IF THIS DOES NOT MEET THE REQUIREMENT STATED IN NOTE 3, A SEPARATE PEDESTRIAN SIGNAL POST SHALL BE INSTALLED TO PLACE THE PUSH-BUTTON ADJACENT TO THE SIDEWALK SURFACE.
6. THE HEIGHT OF THE PEDESTRIAN PUSH-BUTTON SHALL BE 36". IF APPROVED BY THE AREA TRAFFIC SIGNAL ENGINEER, THE PUSH-BUTTON MAY BE LOCATED AT A HEIGHT BETWEEN 30" AND 42". THE HEIGHT OF THE EQUESTRIAN PUSH-BUTTON SHAL BE 72" OR AS DIRECTED BY THE ENGINEER.
7. THE FACE OF THE PUSH-BUTTON SHALL BE PARALLEL TO THE CROSSWALK IT CONTROLS.
8. THE PUSH-BUTTON SHALL BE LOCATED BEHIND THE DETECTABLE WARNING.
9. WHERE A PUSH-BUTTON IS BEING INSTALLED ON A MAST ARM POLE OR SIGNAL POST ADJACENT TO THE PEDESTRIAN ACCESS ROUTE, THE PROPOSED FOUNDATION SHALL BE INSTALLED WITHIN THE SIDE CURB IN ORDER TO MEET THE 10" REACH REQUIREMENT.
10. THE SIDEWALK PANEL IN FRONT OF THE PUSH-BUTTON SHALL HAVE A SLOPE LESS THAN 5%.
11. WHERE TWO PEDESTRIAN PUSH-BUTTONS ARE PROVIDED ON THE SAME CORNER, THEY SHALL BE 10' OR MORE APART. EXCEPTION: IN ALTERATIONS WHERE TECHNICALLY INFEASIBLE TO PROVIDE 10' SEPARATION BETWEEN PUSH-BUTTONS ON THE SAME CORNER.
12. CORRESPONDING PEDESTRIAN EQUIPMENT (SIGNAL HEAD AND PUSH-BUTTON) SHALL BE INSTALLED ON THE SAME POST CLOSEST TO THE CROSSWALK IT CONTROLS.
13. PEDESTRIAN SIGNAL HEADS INSTALLED ON MAST ARM POLES OR SIGNAL POSTS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) NOT LESS THAN 8' OR MORE THAN 10' ABOVE SIDEWALK LEVEL. PEDESTRIAN SIGNAL HEADS INSTALLED ON PEDESTRIAN SIGNAL POSTS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) NOT LESS THAN 8' ABOVE SIDEWALK LEVEL. THE PEDESTRIAN SIGNAL HEADS SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
14. THE LOCATIONS OF THE PEDESTRIAN PUSH-BUTTONS AND PEDESTRIAN SIGNAL HEADS SHALL MEET THE REQUIREMENTS OF THE MUTCD, PROWAG, AND THE REQUIREMENTS ON THIS DETAIL SHEET.

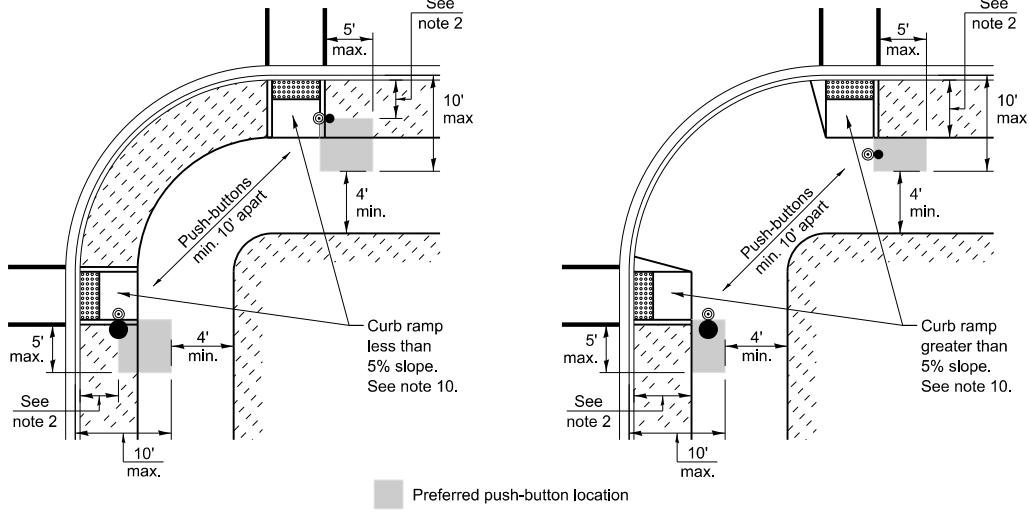
TRAFFIC SIGNAL MAST ARM AND SIGNAL POST



PEDESTRIAN SIGNAL POST



PUSH-BUTTON LOCATIONS



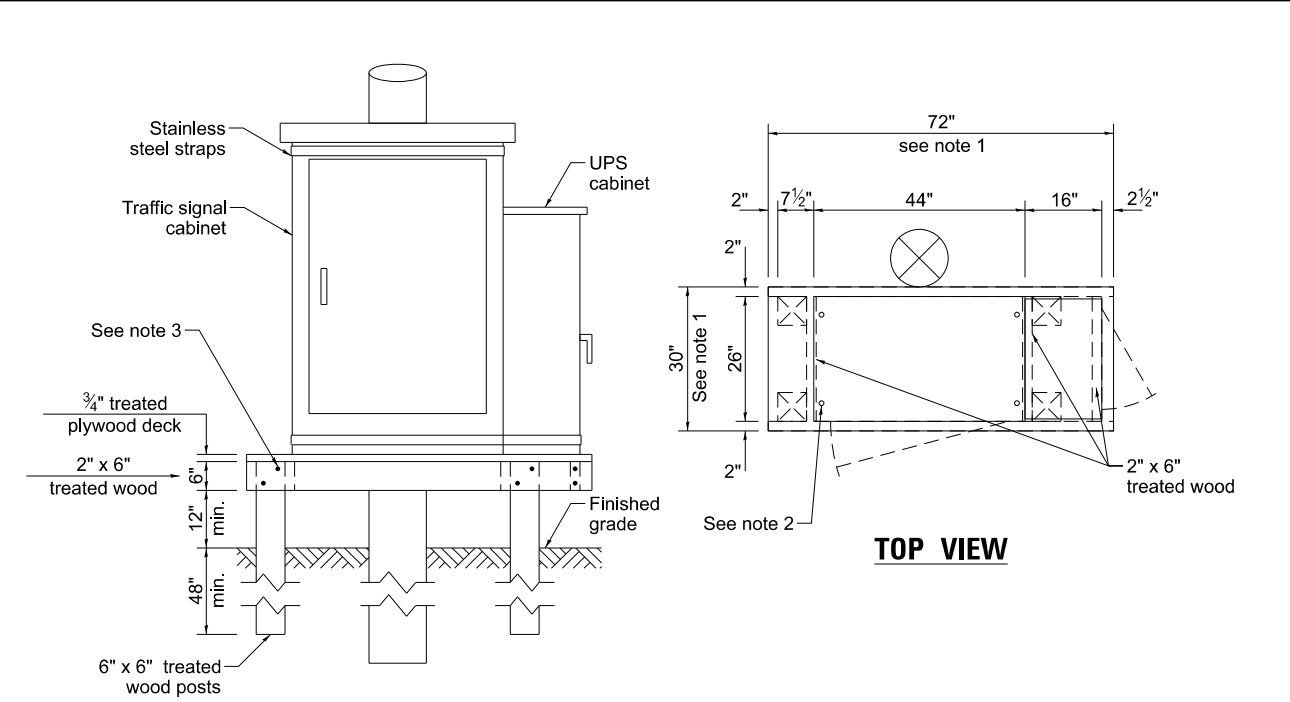
TRAFFIC SIGNAL EQUIPMENT	BARRIER CURB (MINIMUM DISTANCE FROM THE BACK OF CURB TO THE CENTER OF THE FOUNDATION)	SHOULDER / NON-BARRIER CURB (MINIMUM DISTANCE FROM THE EDGE LINE OF THE RIGHT-MOST LANE TO THE CENTER OF THE FOUNDATION)
Mast arm assembly and pole	6'	Shoulder width + 2', minimum 10'
Signal post	4'	Shoulder width + 2', minimum 10'
Pedestrian signal post	4'	4' - See note 2
Temporary wood pole	6'	Shoulder width + 2', minimum 10'
Traffic signal cabinet	6' - See Note 3	Shoulder width + 6', minimum 16' - See note 3
Service cabinet	6' - See Note 3	Shoulder width + 6', minimum 16' - See note 3

TRAFFIC SIGNAL EQUIPMENT OFFSET MINIMUMS

NOTES:

1. CONTACT THE AREA TRAFFIC SIGNAL ENGINEER FOR ASSISTANCE LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS AND THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF THE DETECTABLE WARNING.
3. MINIMUM DISTANCE 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" TABLE AND THE TRAFFIC SIGNAL PLAN COULD AFFECT THE PLACEMENT OF THE TRAFFIC SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS, AND THE PEDESTRIAN PUSH-BUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THESE REQUIREMENTS. THE LOCATIONS OF THE PEDESTRIAN PUSH-BUTTONS AND PEDESTRIAN SIGNAL HEADS SHALL MEET THE REQUIREMENTS OF THE MUTCD, PROWAG, AND THE REQUIREMENTS ON THIS DETAIL SHEET.





**NOTES:**

1. THE PLATFORM SIZE IS BASED ON A TRAFFIC SIGNAL CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" AND UNINTERRUPTABLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25". ADJUST THE PLATFORM SIZE TO FIT THE BASE DIMENSIONS OF THE CABINET SUPPLIED.
2. DRILLED HOLES THROUGH THE PLATFORM ARE TO MATCH THE TRAFFIC SIGNAL CABINET BOLT TEMPLATE. THE CABINET SHALL BE FASTENED TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS, AND NUTS.
3. ALL WOOD SUPPORT FRAMING SHALL BE FASTENED TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

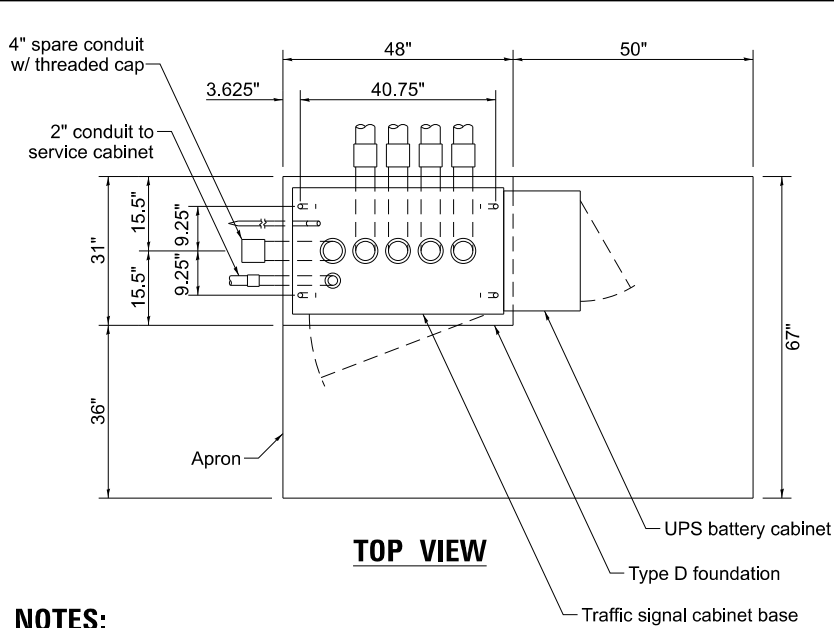
**TEMPORARY TRAFFIC SIGNAL  
CABINET WOOD SUPPORT PLATFORM**

MAST ARM LENGTH	Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30'	10'	30"	24"	8	#6
Greater than or equal to 30' and less than 40'	13.5'	30"	24"	8	#6
	11'	36"	30"	12	#7
Greater than or equal to 40' and less than 50'	13'	36"	30"	12	#7
Greater than or equal to 50' and up to 55'	15'	36"	30"	12	#7
Greater than or equal to 56' and less than 65'	21'	42"	36"	16	#8
Greater than or equal to 65' and up to 75'	25'	42"	36"	16	#8

**DEPTH OF MAST ARM FOUNDATIONS, TYPE E**

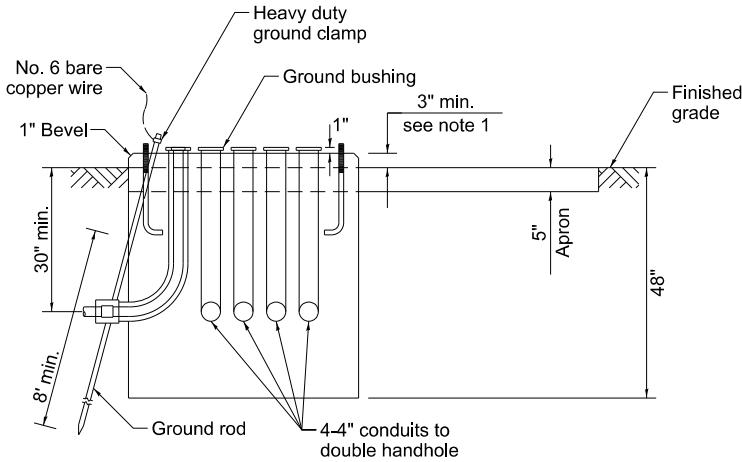
**TYPE E FOUNDATION NOTES:**

1. FOR STANDARD AND COMBINATION MAST ARM ASSEMBLIES. FOUNDATION DEPTHS FOR STANDARD DUAL MAST ARMS WITH THE LONGEST ARM LENGTH UP TO AND INCLUDING 55' SHALL BE INCREASE BY 1' OF THAT SHOWN IN THE TABLE, BASED ON THE LONGER OF THE TWO ARMS.
2. SEE STATE STANDARD 878001 CONCRETE FOUNDATION DETAILS FOR MORE INFORMATION.

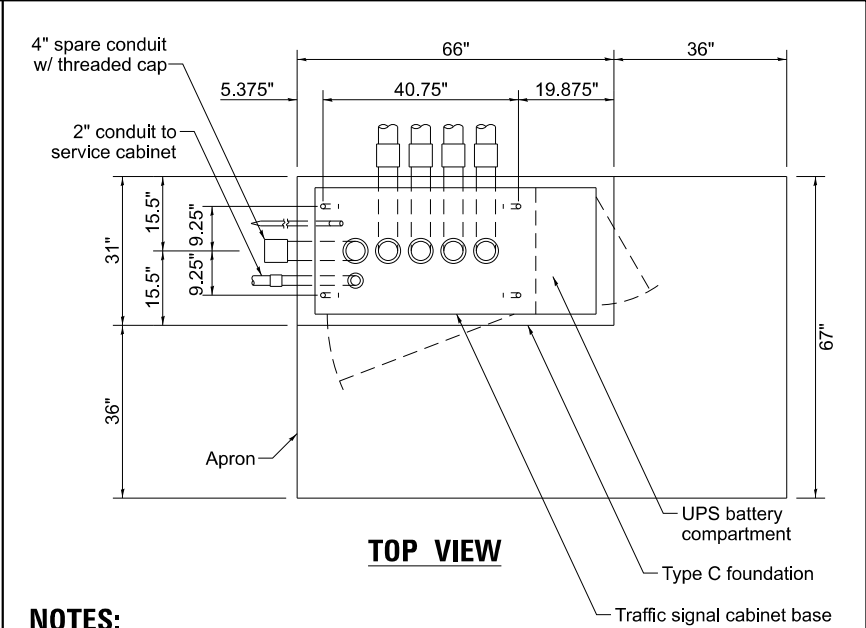


**NOTES:**

1. THE TOP OF THE FOUNDATION SHALL BE HIGHER THAN THE TOP OF THE DOUBLE HANDHOLE.

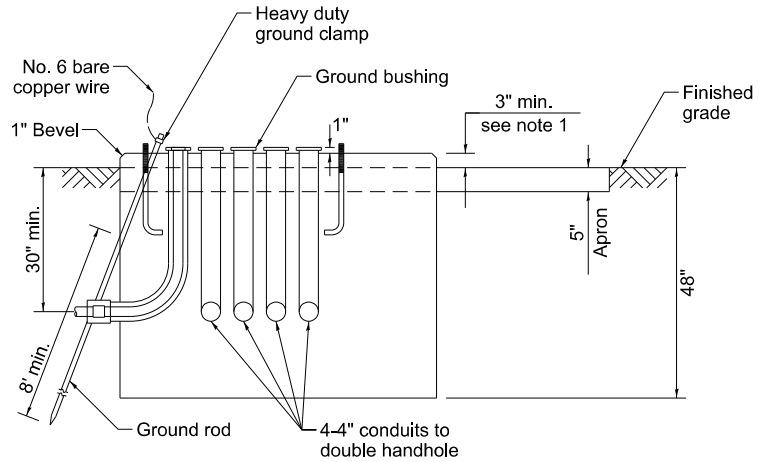


**TYPE D FOUNDATION  
TYPE IV AND TYPE V TRAFFIC SIGNAL CABINET  
AND UPS BATTERY CABINET**



**NOTES:**

1. THE TOP OF THE FOUNDATION SHALL BE HIGHER THAN THE TOP OF THE DOUBLE HANDHOLE.



**TYPE C FOUNDATION  
SUPER P AND SUPER R  
TRAFFIC SIGNAL CABINETS**

FOUNDATION	DEPTH
Type A - Signal post, service cabinet	4'
Type C - Traffic signal cabinet with UPS	4'
Type D - Traffic signal cabinet	4'

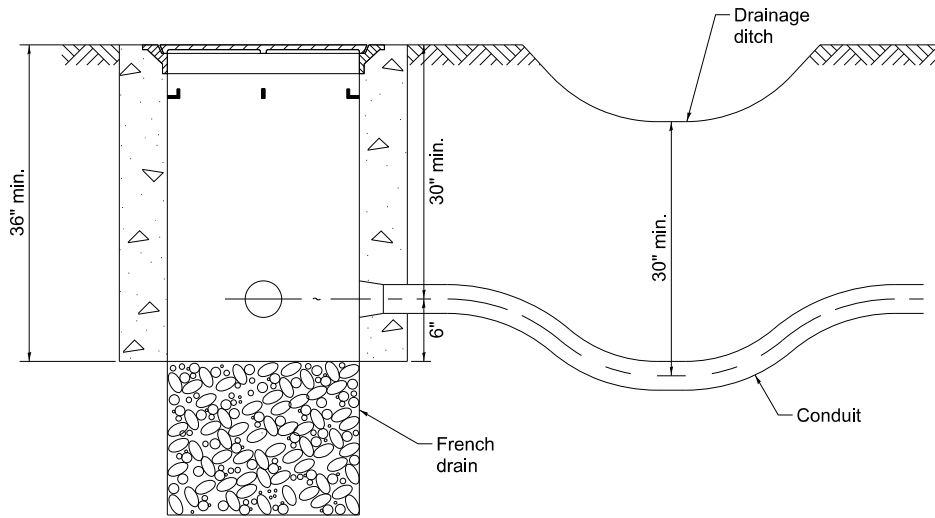
**DEPTH OF FOUNDATIONS  
TYPES A, C & D**

VERTICAL CABLE	LENGTH
Mast arm mounted signal head (L = mast arm length - distance to signal head from end of arm)	20'+L
Bracket mounted signal head (mast arm pole or signal pole)	13'
Pedestrian signal head	10'
Pedestrian push button	6'
Service installation pole mount to service drop	13.5'
Service installation pole mount to ground	13.5'
Service installation ground mount	6'
Foundation (signal post, mast arm, traffic signal cabinet, service cabinet)	3'

**VERTICAL CABLE LENGTH**

CABLE SLACK	LENGTH
Handhole	6.5'
Double handhole	13'
Signal post	2'
Mast arm	2'
Traffic signal cabinet or service cabinet	1.5'
Fiber optic cable at traffic signal cabinet	13'
Ground cable at signal post, mast arm, or cabinet	1.5'
Ground cable at handhole or double handhole	6.5'
Ground cable between handhole frame and cover	5'

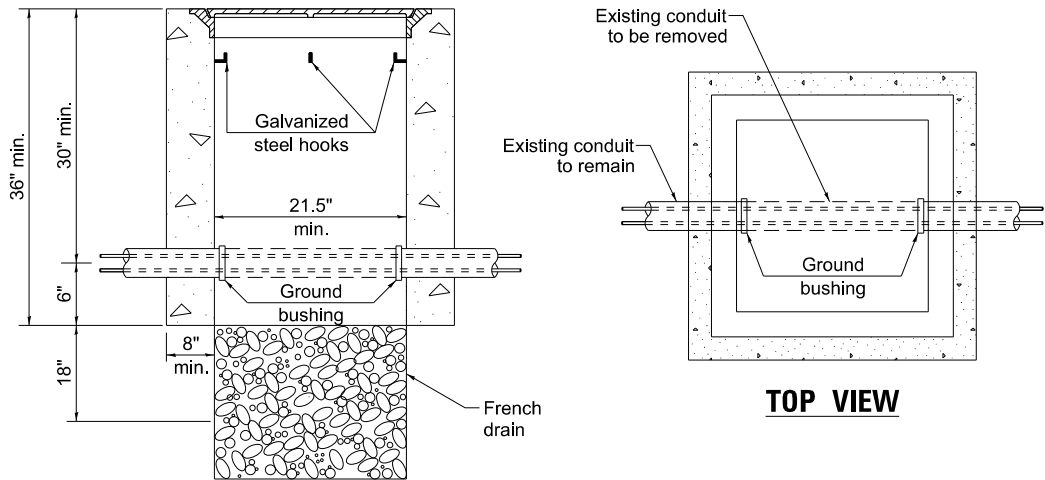
**CABLE SLACK LENGTH**



**NOTES:**

1. THE CONDUIT DEPTH SHALL BE A MINIMUM OF 30" 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.

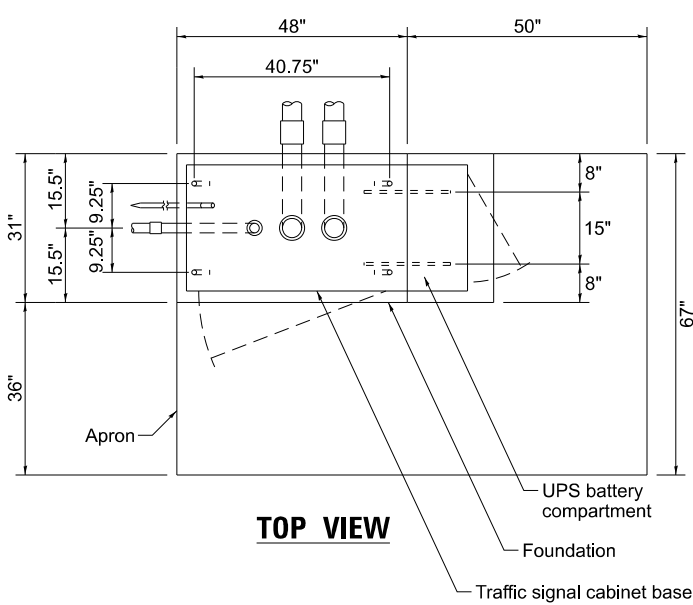
**HANDHOLE WITH MINIMUM CONDUIT DEPTH**



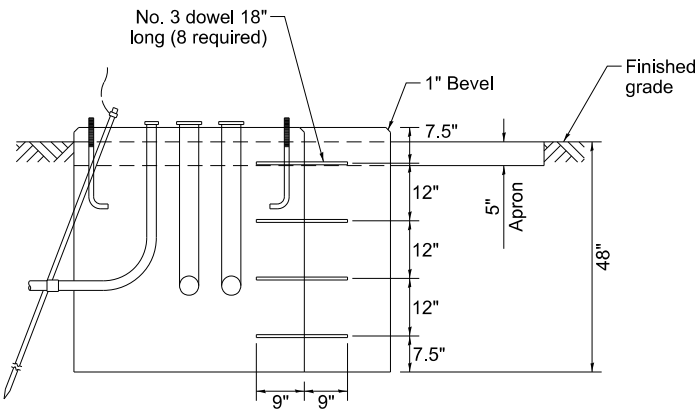
**NOTES:**

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.

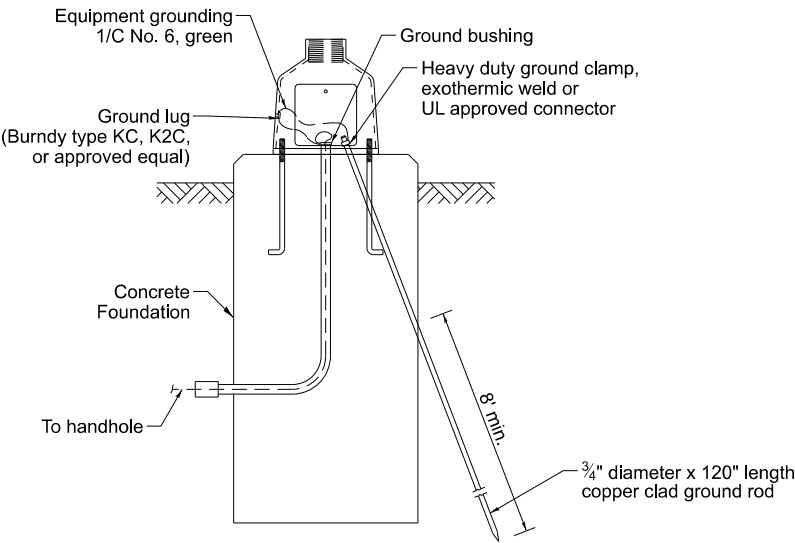
**HANDHOLE TO INTERCEPT EXISTING CONDUIT**



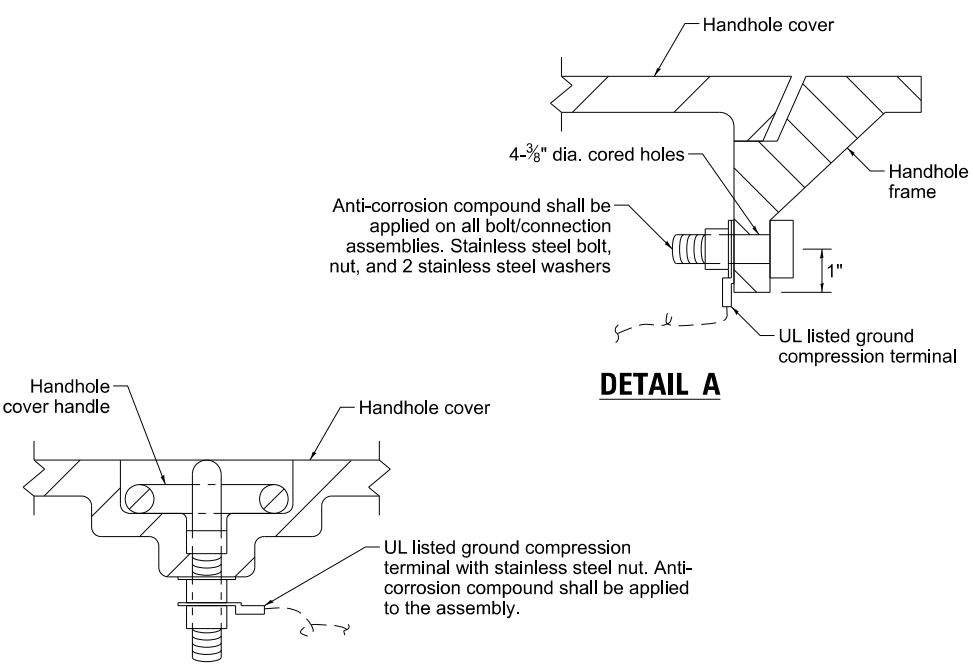
**TOP VIEW**



**MODIFY EXISTING TYPE "D" FOUNDATION  
TO TYPE "C" FOUNDATION**

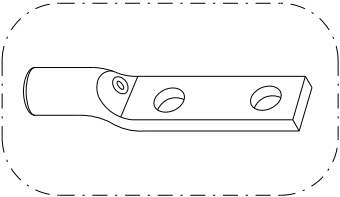


**MAST ARM / POST GROUNDING DETAIL**

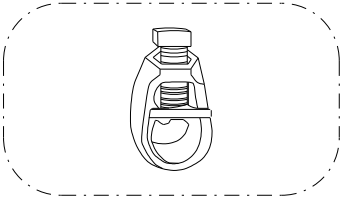


**DETAIL A**

**DETAIL B**



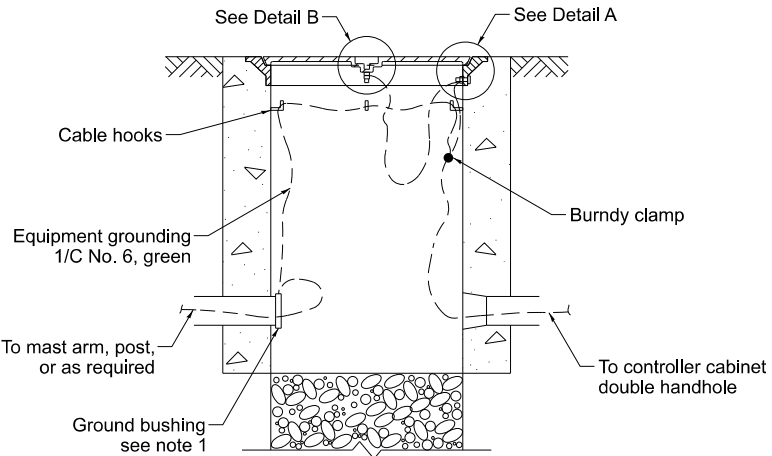
Heavy-Duty Compression Terminal  
(Burndy Type YGHA or approved equal)



3/4" Heavy-Duty Ground Rod Clamp  
Bronze or Copper, UL Approved  
(Burndy Type GRC or approved equal)

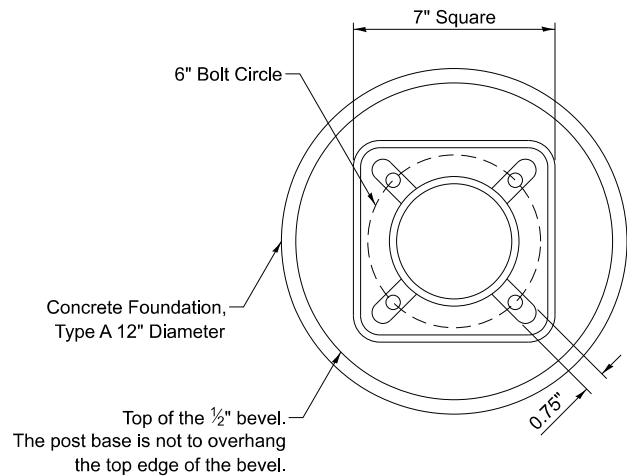
**NOTES:**

1. CONDUIT THAT HAS BEEN DRILLED INTO AN EXISTING HANDHOLE WILL REQUIRE A GROUND BUSHING FOR THE CONDUIT TO BE PROPERLY GROUNDING.
2. GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' OF SLACK SHALL BE PROVIDED IN SINGLE AND DOUBLE HANDHOLES. 5' OF SLACK SHALL BE PROVIDED BETWEEN THE FRAME AND COVER.



**HANDHOLE GROUNDING DETAIL**

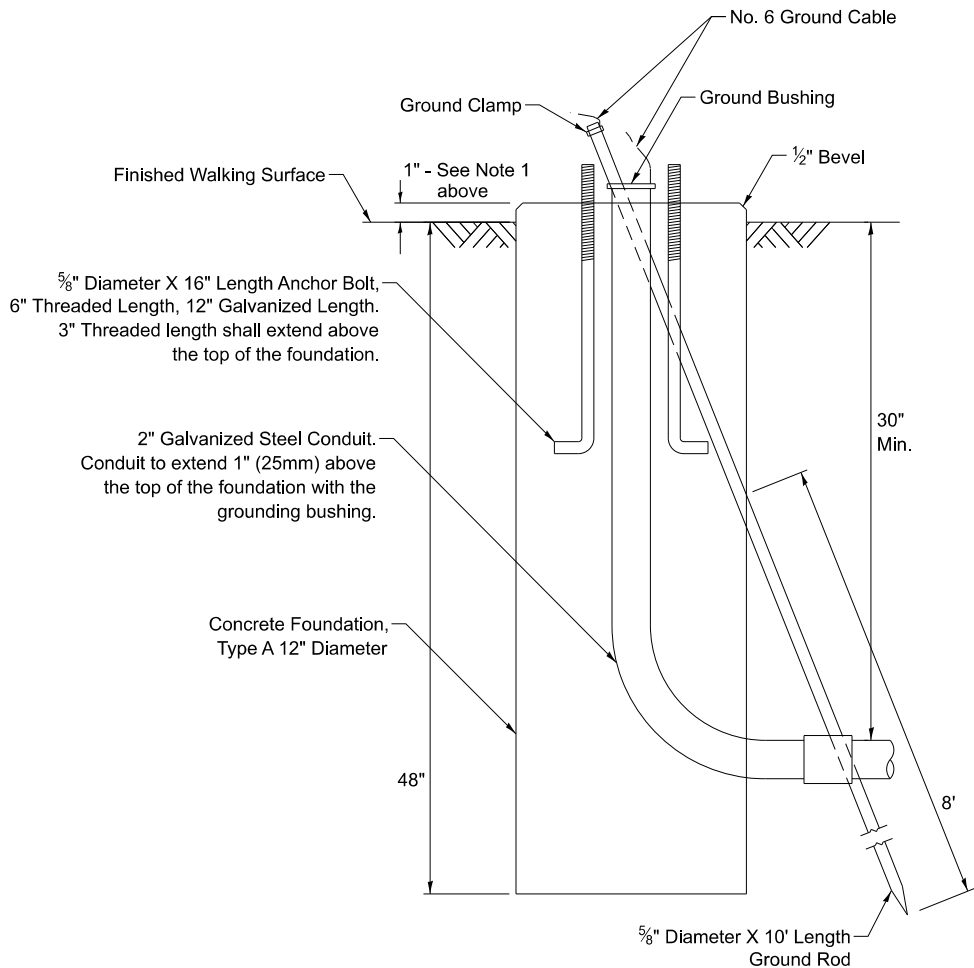
	USER NAME = Ivan, Ascenda		DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			DRAWN - IP	REVISED -				VAR		COOK	35	15
			CHECKED - NB/KK	REVISED -				TS-01		CONTRACT NO. 12X15		
	PLOT DATE =		DATE - 10/15/2025	REVISED -		SCALE: NTS	SHEET 6 OF 7 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		



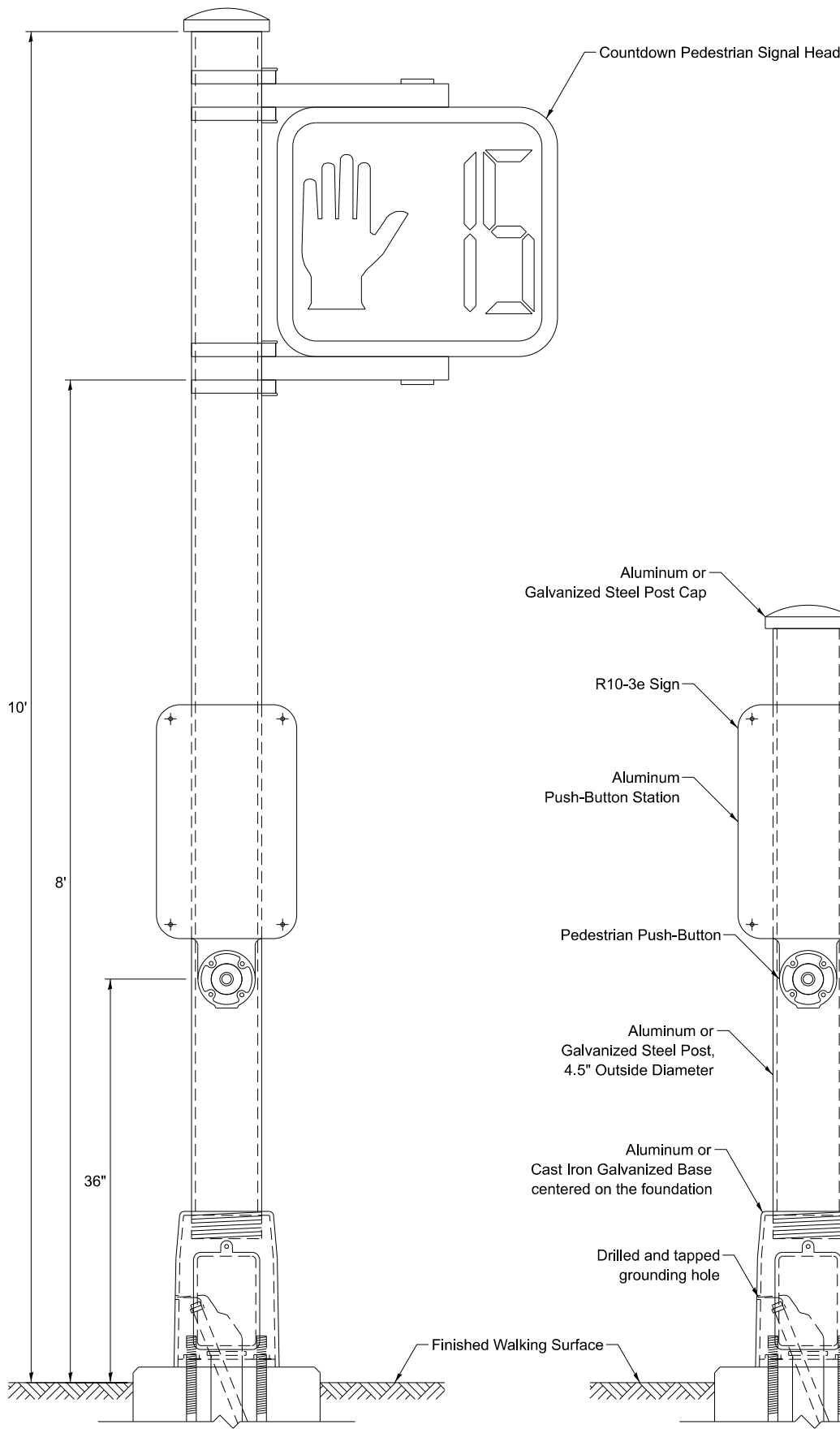
**BOLT PATTERN**

**NOTES:**

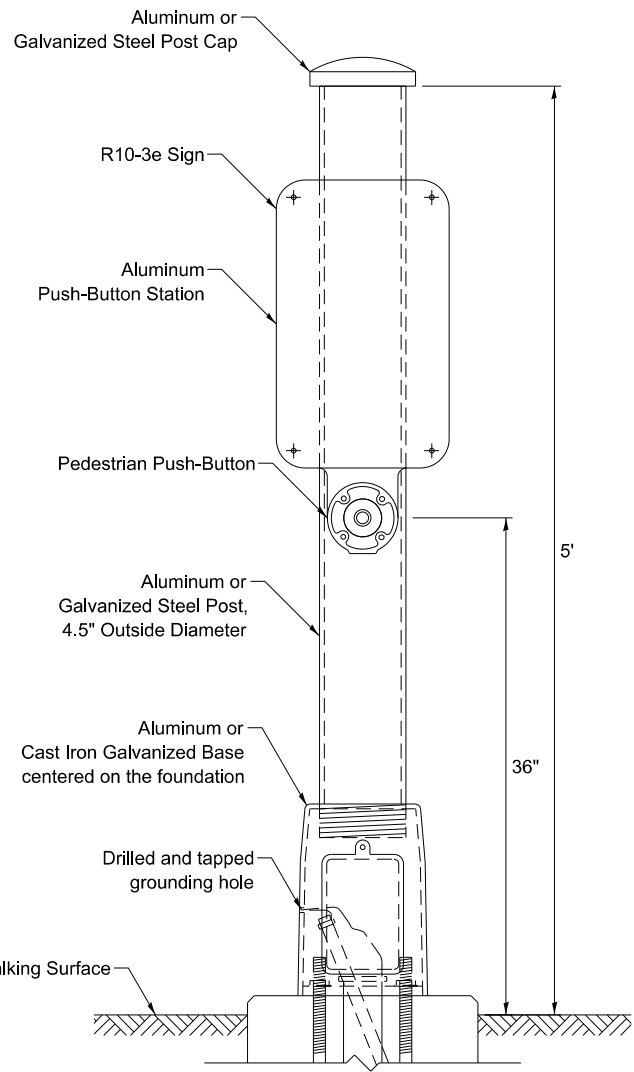
1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN A SIDEWALK CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE SIDEWALK CURB.



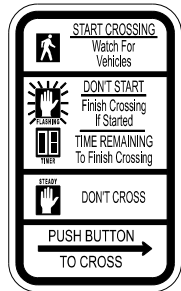
**CONCRETE FOUNDATION,  
TYPE A 12-INCH DIAMETER**



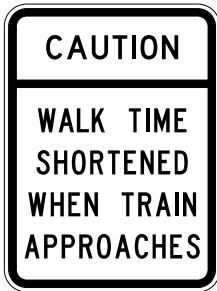
**PEDESTRIAN SIGNAL POST, 10 FT.**



**PEDESTRIAN SIGNAL POST, 5 FT.**



R10-3e  
9" X 15"



W10-1101  
18" X 24"

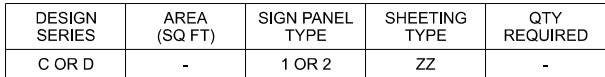
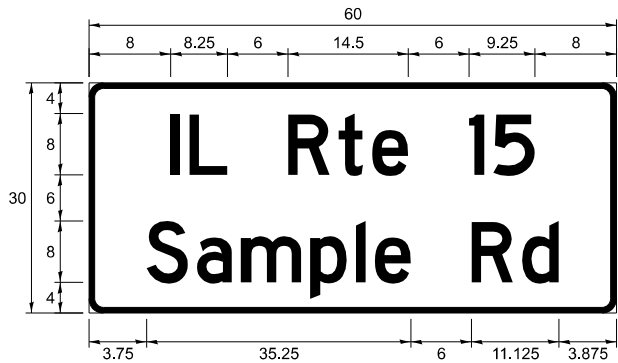
**SIGN NOTES:**

1. THE SIGN PANELS SHALL BE TYPE AP SHEETING.
2. WHEN SIGN R10-3e IS INSTALLED AT MEDIANS WHERE ONLY ONE PUSH-BUTTON IS BEING USED FOR BOTH DIRECTIONS, THE ARROW SHALL BE BI-DIRECTIONAL.
3. SIGN W10-1101 IS REQUIRED FOR EACH PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS.

	USER NAME = Ivan, Ascencia	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - IP	REVISED -						VAR		COOK	35	16
		CHECKED - NB/KK	REVISED -		TS-01		CONTRACT NO. 12X15						
	PLOT DATE =	DATE - 10/15/2025	REVISED -		ILLINOIS FED. AID PROJECT								
					SCALE: NTS	SHEET 7	OF 7	SHEETS	STA.	TO STA.			



ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



NAME	ABBREVIATION	LENGTH (INCH)	
		SERIES "C"	SERIES "D"
Avenue	Ave	15	18.25
Boulevard	Bldv	17.125	20
Circle	Cir	11.125	13
Court	Ct	8.25	9.625
Drive	Dr	8.625	10.125
Highway	Hwy	18.375	22
Illinois	IL	7	8.25
Lane	Ln	9.125	10.75
Parkway	Pkwy	23.375	27.375
Place	Pl	7.125	7.75
Road	Rd	9.625	11.125
Route	Rte	12.625	14.5
Street	St	8	9.125
Terrace	Ter	12.625	14.625
Trail	Tr	7.75	9.125
United States	US	10.375	12.25

1. 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 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.

2. ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING)

3. 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", BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. THE SPACING BETWEEN THE LEFT OR RIGHT ARROW AND THE ADJACENT WORD SHOULD BE 8", BUT MAY BE REDUCED TO 6" 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.

4. THE PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE THE SERIES "D" ALPHABET ON A ONE-LINE SIGN THAT IS 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 ONE-LINE 8'-0" SIGN, A 30" HEIGHT TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION (I.E. STREET, AVENUE, ETC.) SHALL BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.

5. LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENTS AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.

6. 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:

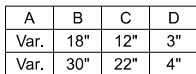
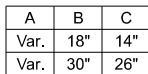
-SIGN CHANNEL      PART #HPN053 (MED. CHANNEL)

-SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3  
SELF TAPPING WITH NEOPRENE WASHER

-BRACKETS      PART #HPN034 (UNIVERSAL)  
CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

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

## ARM OR POLE MOUNTED



## MEASUREMENTS BASED ON 8" UPPER CASE LETTER HEIGHT

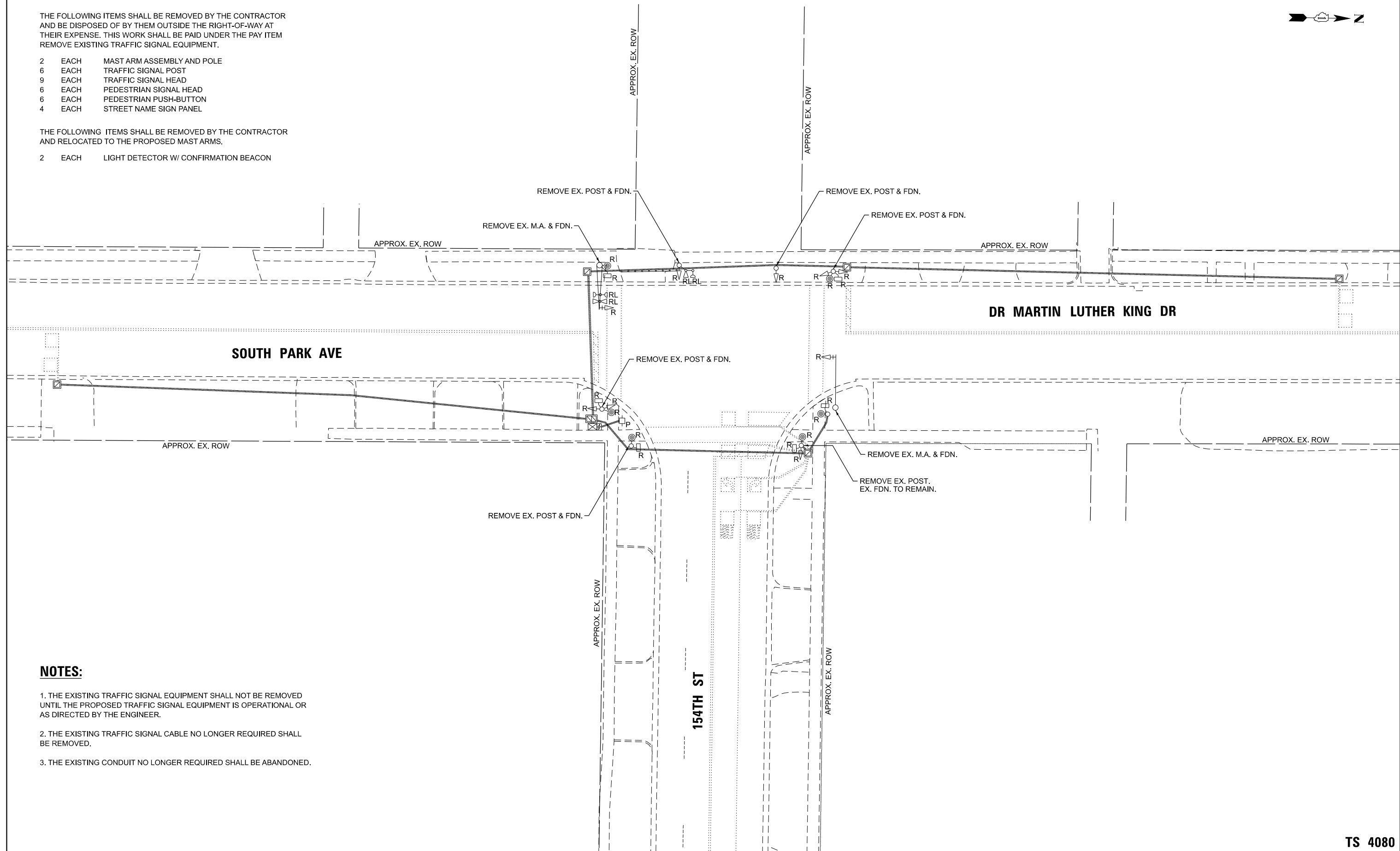
FHWA SERIES "C"				FHWA SERIES "D"			
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)
A	0.240	5.122	0.240	A	0.240	6.804	0.240
B	0.880	4.482	0.480	B	0.960	5.446	0.400
C	0.720	4.482	0.720	C	0.800	5.446	0.800
D	0.880	4.482	0.720	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

	USER NAME = Iovan,plascenda	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT 1 MAST ARM MOUNTED STREET NAME SIGNS				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - IP	REVISED -						VAR		COOK	35	17
		CHECKED - NB	REVISED -		TS-02		CONTRACT NO. 12X15						
	PLOT DATE =	DATE - 10/15/2025	REVISED -										
						SCALE: NTS	SHEET 1 OF 1 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT			

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THIS WORK SHALL BE PAID UNDER THE PAY ITEM REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

- THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR  
AND RELOCATED TO THE PROPOSED MAST ARMS.

- 



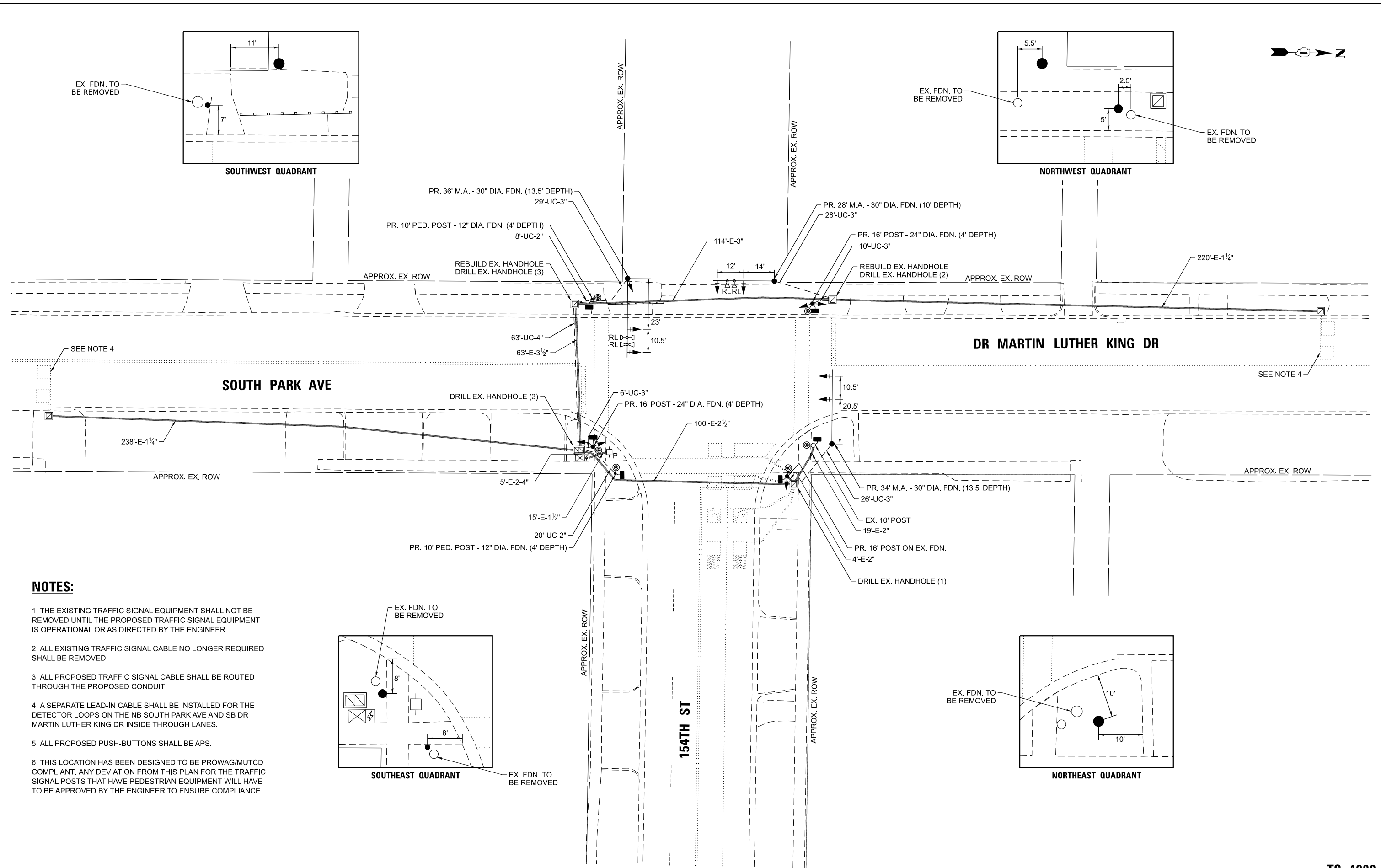
1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
2. THE EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.
3. THE EXISTING CONDUIT NO LONGER REQUIRED SHALL BE ABANDONED.

USER NAME =	lovan,plascencia	DESIGNED =	JP	REVISED =	
		DRAWN =	JP	REVISED =	
		CHECKED =	NB	REVISED =	
PLOT DATE =		DATE =	10/15/2025	REVISED =	

**TRAFFIC SIGNAL REMOVAL PLAN**  
**SOUTH PARK AVE / DR MARTIN LUTHER KING DR AT 154TH ST**

SCALE:	SHEET 1	OF 4	SHEETS	STA.	TO STA.
--------	---------	------	--------	------	---------

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR		COOK	35	18
		CONTRACT NO. 12X15		
		ILLINOIS	FED. AID PROJECT	



**NOTES:**

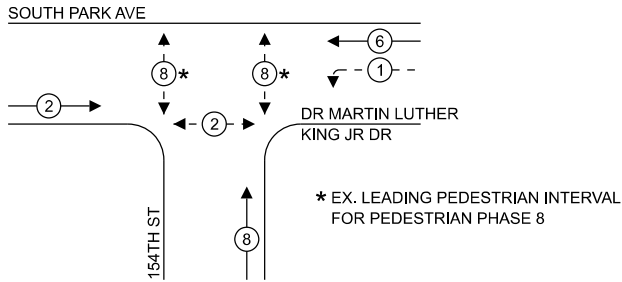
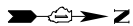
1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
2. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.
3. ALL PROPOSED TRAFFIC SIGNAL CABLE SHALL BE ROUTED THROUGH THE PROPOSED CONDUIT.
4. A SEPARATE LEAD-IN CABLE SHALL BE INSTALLED FOR THE DETECTOR LOOPS ON THE NB SOUTH PARK AVE AND SB DR MARTIN LUTHER KING DR INSIDE THROUGH LANES.
5. ALL PROPOSED PUSH-BUTTONS SHALL BE APS.
6. THIS LOCATION HAS BEEN DESIGNED TO BE PROWAG/MUTCD COMPLIANT. ANY DEVIATION FROM THIS PLAN FOR THE TRAFFIC SIGNAL POSTS THAT HAVE PEDESTRIAN EQUIPMENT WILL HAVE TO BE APPROVED BY THE ENGINEER TO ENSURE COMPLIANCE.

TS 4080

	USER NAME = Ivan,plascencia	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN SOUTH PARK AVE / DR MARTIN LUTHER KING DR AT 154TH ST			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - IP	REVISED -					VAR		COOK	35	19
		CHECKED - NB	REVISED -					CONTRACT NO. 12X15				
	PLOT DATE =	DATE - 10/15/2025	REVISED -					ILLINOIS FED. AID PROJECT				
SCALE:		SHEET 2 OF 4 SHEETS		STA.		TO STA.						



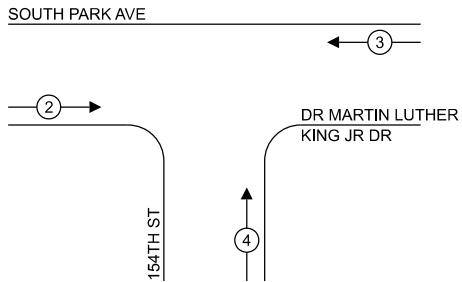
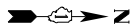
EXISTING CONTROLLER  
PHASE DIAGRAM



LEGEND:

- PROTECTED PHASE
- PROTECTED/PERMISSIVE PHASE
- PEDESTRIAN PHASE

EXISTING EMERGENCY VEHICLE  
PREEMPTION PHASE DIAGRAM



NOTES:

- 1. ALL RED SIGNAL INDICATIONS SHALL HAVE A LENS COVER.

TRAFFIC SIGNAL  
ELECTRIC SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	10	11	110
4-SECTION	-	14	-
5-SECTION	2	13	26
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	6	15	90
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
PTZ CAMERA	-	75	-
TOTAL UPS SIZING			401
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			1,006

ENERGY COSTS TO:

VILLAGE OF SOUTH HOLLAND  
16226 WAUSAU AVE  
SOUTH HOLLAND, IL 60473

ENERGY SUPPLY:

CONTACT: ---

PHONE: ---

COMPANY: COMED

ACCOUNT NUMBER: ---

METER NUMBER: ---

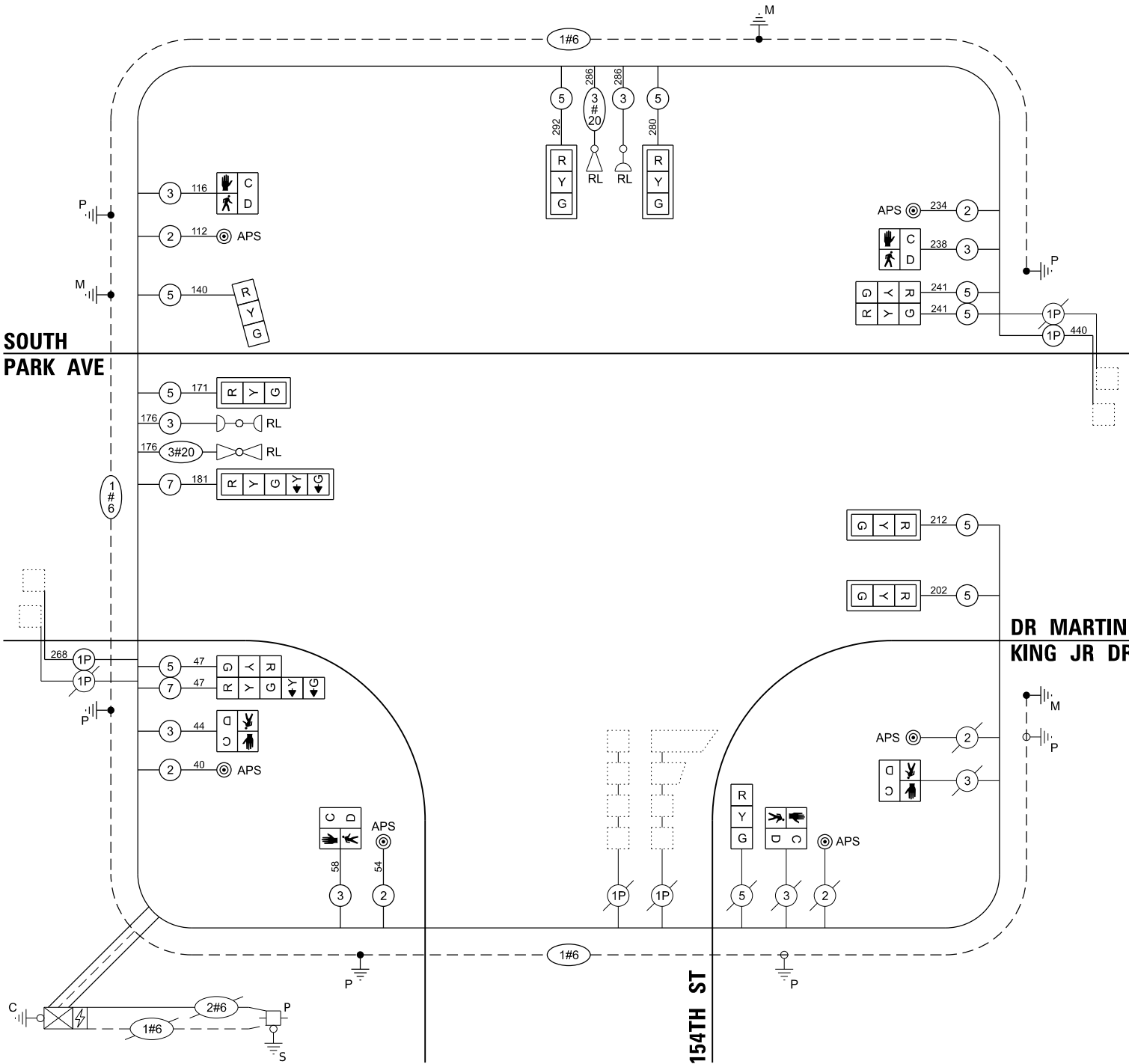
SOUTH  
PARK AVE

1  
#  
6

DR MARTIN LUTHER  
KING JR DR

154TH ST

CABLE PLAN



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, CONTROLLER PHASE DIAGRAM, AND  
EMERGENCY VEHICLE PREEMPTION PHASE DIAGRAM  
SOUTH PARK AVE / DR MARTIN LUTHER KING DR AT 154TH ST

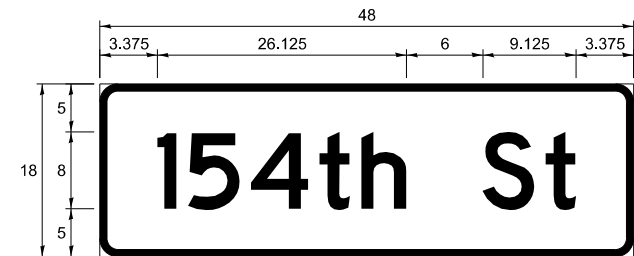
SCALE: SHEET 3 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR		COOK	35	20
CONTRACT NO. 12X15				
ILLINOIS FED. AID PROJECT				

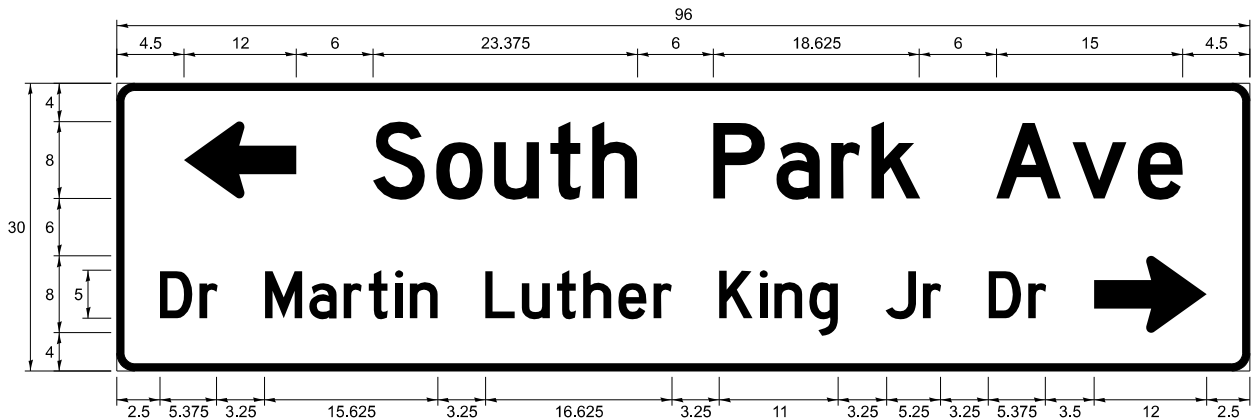
TS 4080

SIGN PANEL – TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES UNLESS 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
C	20	2	ZZ	1

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION SEE DISTRICT STANDARD TS-02 - MAST ARM MOUNTED STREET NAME SIGNS.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
SIGN PANEL - TYPE 1	SQ FT	12
SIGN PANEL - TYPE 2	SQ FT	20
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	28
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	99
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	63
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	440
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	918
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,826
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	228
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	708
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	260
TRAFFIC SIGNAL POST, 16 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	37
DRILL EXISTING HANDHOLE	EACH	9
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	6
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	6
INDUCTIVE LOOP DETECTOR	EACH	2
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2,080
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	462
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	2
TEMPORARY INFORMATION SIGNING	SQ FT	51.4
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	6
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	8
LED SIGNAL FACE, LENS COVER	EACH	12
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

\* 100% COST TO THE VILLAGE OF SOUTH HOLLAND

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THIS WORK SHALL BE PAID UNDER THE PAY ITEM REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

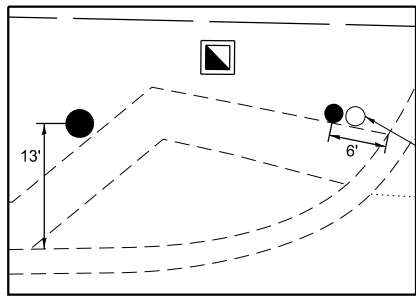
- THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED MAST ARMS, PROPOSED POST, AND PROPOSED TRAFFIC SIGNAL CABINET.

- 
- REMOVE EXISTING SIDEWALK (34 SF)  
REPLACE WITH SOD
- SAW CUT EXISTING SIDEWALK
- NORTHWEST QUADRANT**

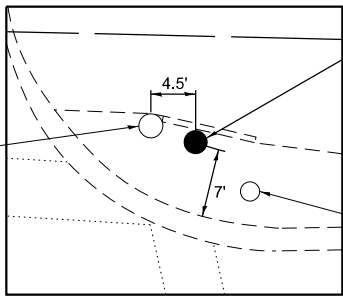


1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS OPERATIONAL OR AS DIRECTED BY THE ENGINEER.
2. THE EXISTING TRAFFIC SIGNAL CABLE NO LONGER REQUIRED SHALL BE REMOVED.
3. THE EXISTING CONDUIT NO LONGER REQUIRED SHALL BE ABANDONED.
4. THE EXISTING FIBER (TO VAN DAM RD) AND TRACER CABLE SHALL BE DISCONNECTED FROM THE CONTROLLER CABINET AND PULLED BACK TO THE EXISTING HANDHOLE ON THE SOUTHWEST QUADRANT. IT SHALL THEN BE REINSTALLED THROUGH THE PROPOSED CONDUIT AND BACK TO THE CONTROLLER CABINET. THIS SHALL BE DONE AFTER THE PROPOSED EQUIPMENT IS INSTALLED TO REDUCE DOWN TIME. ALL OTHERS CABLES SHALL BE REPLACED AS SHOWN IN THE CABLE PLAN.

	USER NAME = llovan.plascencia	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL REMOVAL PLAN US RTE 6 (159TH ST) AT PARK AVE				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN - IP	REVISED -		VAR							COOK	35	22
		CHECKED - NB	REVISED -		CONTRACT NO. 12X15									
PLOT DATE =	DATE - 10/15/2025	REVISED -			SCALE:	SHEET 1	OF 4 SHEETS	STA.	TO STA.					
					ILLINOIS FED. AID PROJECT									



NORTHWEST QUADRANT

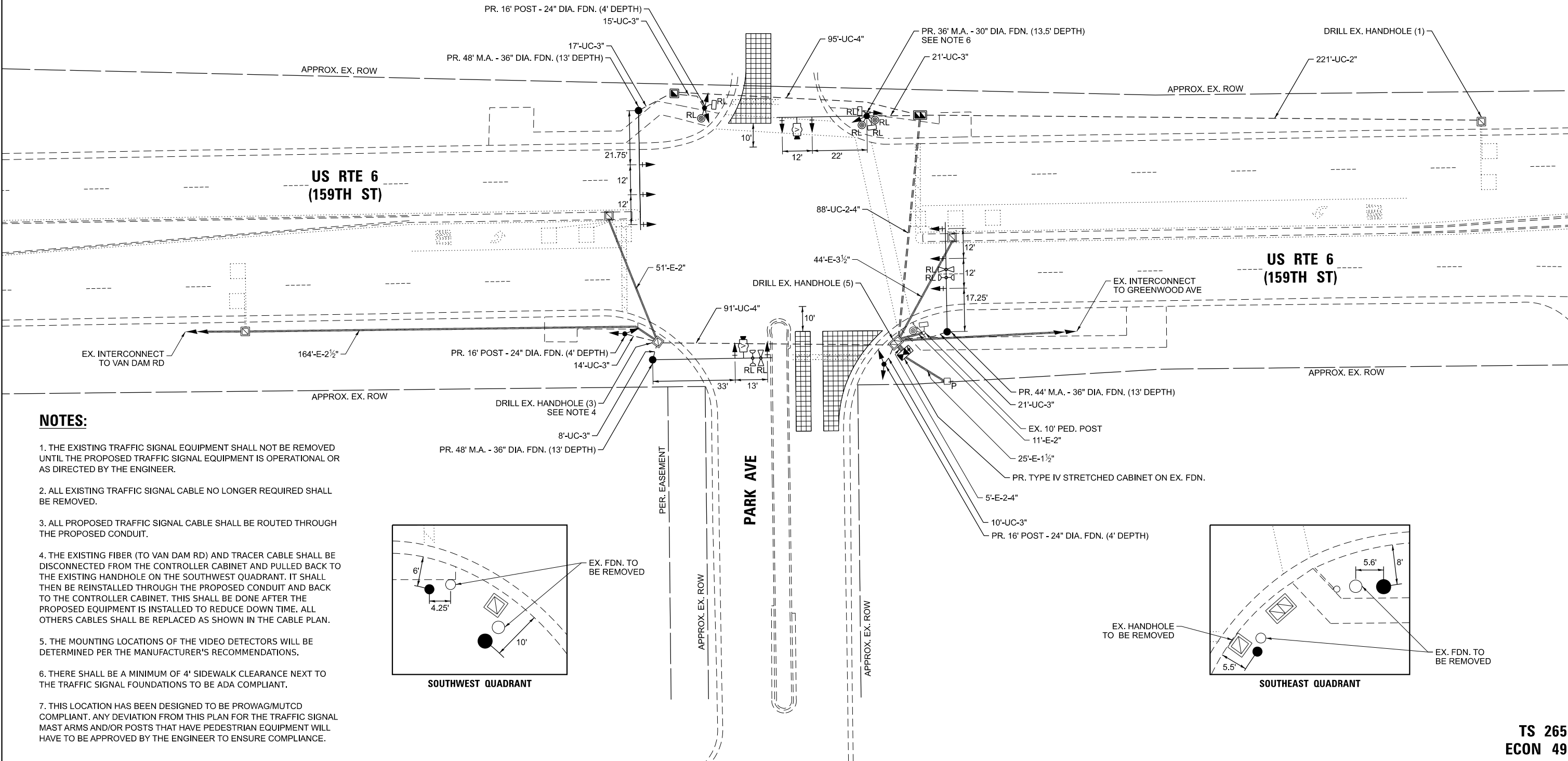


NORTHEAST QUADRANT

FOUNDATION TO BE INSTALLED  
ENTIRELY WITHIN SIDEWALK  
SEE NOTE 6

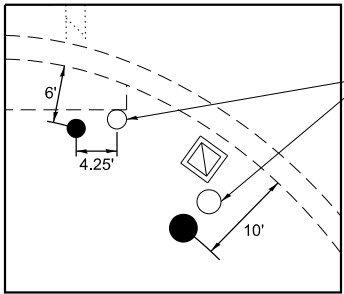
EX. FDN. TO  
BE REMOVED

EX. FDN. TO  
BE REMOVED

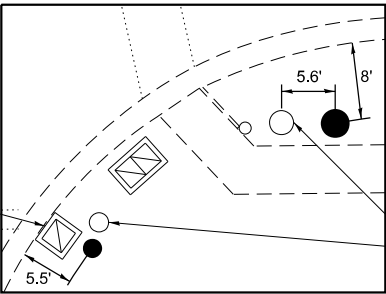


**NOTES:**

1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS 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. THE EXISTING FIBER (TO VAN DAM RD) AND TRACER CABLE SHALL BE DISCONNECTED FROM THE CONTROLLER CABINET AND PULLED BACK TO THE EXISTING HANDHOLE ON THE SOUTHWEST QUADRANT. IT SHALL THEN BE REINSTALLED THROUGH THE PROPOSED CONDUIT AND BACK TO THE CONTROLLER CABINET. THIS SHALL BE DONE AFTER THE PROPOSED EQUIPMENT IS INSTALLED TO REDUCE DOWN TIME. ALL OTHERS CABLES SHALL BE REPLACED AS SHOWN IN THE CABLE PLAN.
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 NEXT TO THE TRAFFIC SIGNAL FOUNDATIONS TO BE ADA COMPLIANT.
7. THIS LOCATION HAS BEEN DESIGNED TO BE PROWAG/MUTCD COMPLIANT. ANY DEVIATION FROM THIS PLAN FOR THE TRAFFIC SIGNAL MAST ARMS AND/OR POSTS THAT HAVE PEDESTRIAN EQUIPMENT WILL HAVE TO BE APPROVED BY THE ENGINEER TO ENSURE COMPLIANCE.



SOUTHWEST QUADRANT



SOUTHEAST QUADRANT

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL MODERNIZATION PLAN  
US RTE 6 (159TH ST) AT PARK AVE

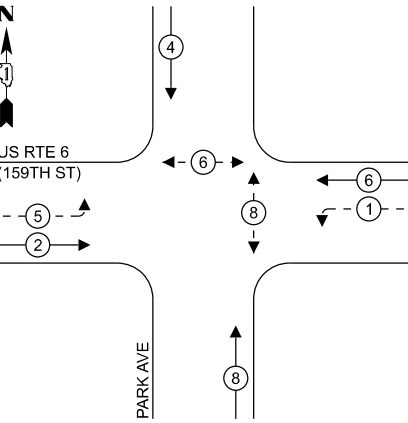
TS 265  
ECON 49

PLOT DATE =	USER NAME = lbovan_plascencia	DESIGNED - IP	REVISED -
		DRAWN - IP	REVISED -
		CHECKED - NB	REVISED -
	DATE - 10/15/2025	REVISED -	

SCALE: SHEET 2 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR		COOK	35	23
CONTRACT NO. 12X15				
ILLINOIS FED. AID PROJECT				

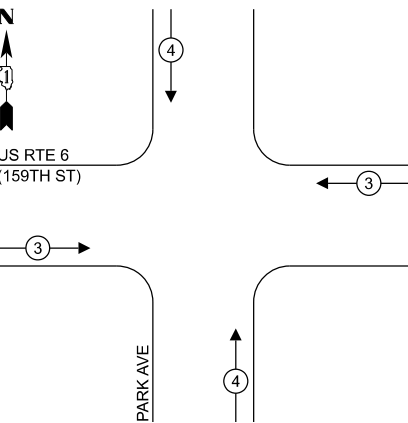
EXISTING AND PROPOSED  
CONTROLLER PHASE DIAGRAM



LEGEND:

- ← (⊙) → PROTECTED PHASE
- ← - (⊙) - PROTECTED/PERMISSIVE PHASE
- ← (⊙) → PEDESTRIAN PHASE

EXISTING AND PROPOSED EMERGENCY  
VEHICLE PREEMPTION PHASE DIAGRAM



NOTES:

- ALL RED SIGNAL INDICATIONS SHALL HAVE A LENS COVER.
- THE EXISTING PUSH-BUTTONS ARE APS.

TRAFFIC SIGNAL  
ELECTRIC SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	14	11	154
4-SECTION	-	14	-
5-SECTION	4	13	52
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION VIDEO	2	20	40
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
PTZ CAMERA	-	75	-
TOTAL UPS SIZING			481
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			1,086

ENERGY COSTS TO:

CALUMET CITY  
204 PULASKI RD  
CALUMET CITY, IL 60409

ENERGY SUPPLY:

CONTACT: ---

PHONE: ---

COMPANY: COMED

ACCOUNT NUMBER: ---

METER NUMBER: ---

US RTE 6  
(159TH ST)

EX. TRACER CABLE

EX. INTERCONNECT  
TO VAN DAM RD

PARK AVE

CABLE PLAN

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, CONTROLLER PHASE DIAGRAM, AND  
EMERGENCY VEHICLE PREEMPTION PHASE DIAGRAM  
US RTE 6 (159TH ST) AT PARK AVE

SCALE: SHEET 3 OF 4 SHEETS STA. TO STA.

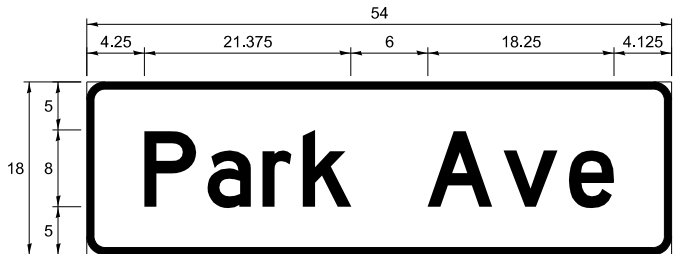
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR		COOK	35	24
CONTRACT NO. 12X15				
ILLINOIS FED. AID PROJECT				

TS 265  
ECON 49

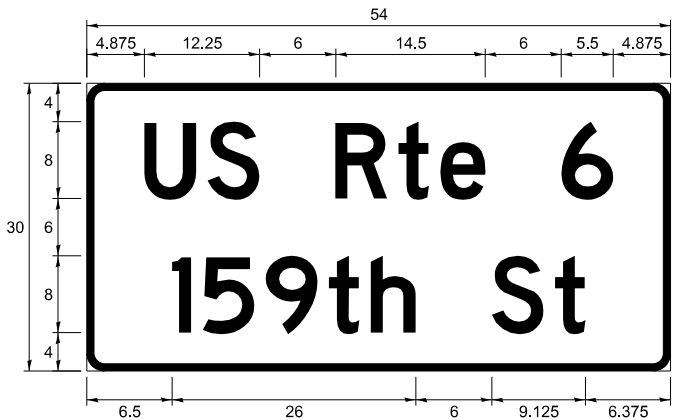


SIGN PANEL – TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



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



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

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION SEE DISTRICT STANDARD TS-02 - MAST ARM MOUNTED STREET NAME SIGNS.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
SUPPLEMENTAL WATERING	UNIT	1
TOPSOIL FURNISH AND PLACE, 4"	SQ YD	4
SODDING, SALT TOLERANT	SQ YD	4
SIDEWALK REMOVAL	SQ FT	34
SIGN PANEL - TYPE 1	SQ FT	13.5
SIGN PANEL - TYPE 2	SQ FT	22.5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	221
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	106
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	362
HANDHOLE	EACH	1
DOUBLE HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCIEVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	564
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	865
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2,497
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	741
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,464
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	545
TRAFFIC SIGNAL POST, 16 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	13.5
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	39
DRILL EXISTING HANDHOLE	EACH	9
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	6
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	3
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	3
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1,885
REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	240
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	5
REMOVE EXISTING CONCRETE FOUNDATION	EACH	9
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	289
TEMPORARY INFORMATION SIGNING	SQ FT	51.4
FULL-ACTUATED CONTROLLER AND TYPE IV STRETCHED CABINET (SPECIAL)	EACH	1
UNINTERRUPTABLE POWER SUPPLY AND CABINET (SPECIAL)	EACH	1
LED SIGNAL FACE, LENS COVER	EACH	18
VIDEO VEHICLE DETECTION SYSTEM, SINGLE APPROACH	EACH	2
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

\* 100% COST TO CALUMET CITY

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THIS WORK SHALL BE PAID UNDER THE PAY ITEM REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

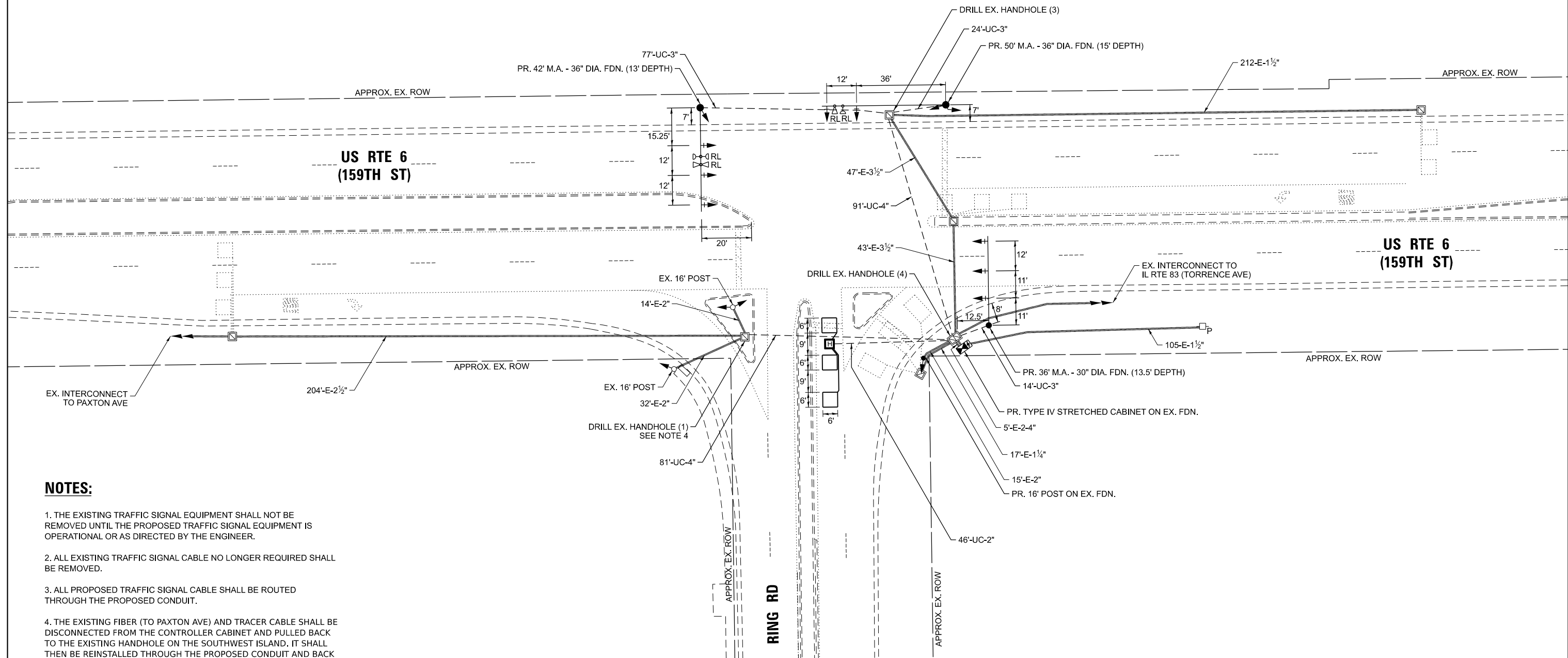
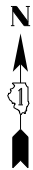
- THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED MAST ARMS AND PROPOSED TRAFFIC SIGNAL CABINET.

- 



- TS 280
- 
- ECON 49

	USER NAME = lloven.piascenda	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL REMOVAL PLAN US RTE 6 (159TH ST) AT RING RD				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN - IP	REVISED -		VAR							COOK	35	26
		CHECKED - NB	REVISED -		CONTRACT NO. 12X15									
PLOT DATE =	DATE - 10/15/2025	REVISED -			SCALE:	SHEET 1	OF 4 SHEETS	STA.	TO STA.					



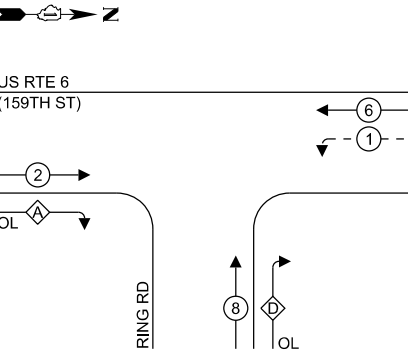
**NOTES:**

1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS 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. THE EXISTING FIBER (TO PAXTON AVE) AND TRACER CABLE SHALL BE DISCONNECTED FROM THE CONTROLLER CABINET AND PULLED BACK TO THE EXISTING HANDHOLE ON THE SOUTHWEST ISLAND. IT SHALL THEN BE REINSTALLED THROUGH THE PROPOSED CONDUIT AND BACK TO THE CONTROLLER CABINET. THIS SHALL BE DONE AFTER THE PROPOSED EQUIPMENT IS INSTALLED TO REDUCE DOWN TIME. ALL OTHERS CABLES SHALL BE REPLACED AS SHOWN IN THE CABLE PLAN.

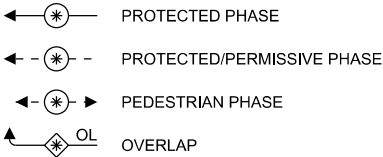
**TS 280  
ECON 49**

	USER NAME = Iovan,plascencia	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN US RTE 6 (159TH ST) AT RING RD				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN - IP	REVISED -						VAR		COOK	35	27	
		CHECKED - NB	REVISED -						CONTRACT NO. 12X15					
	PLOT DATE =	DATE - 10/15/2025	REVISED -		SCALE:				SHEET 2	OF 4 SHEETS	STA.	TO STA.	ILLINOIS FED.AID PROJECT	

EXISTING AND PROPOSED  
CONTROLLER PHASE DIAGRAM



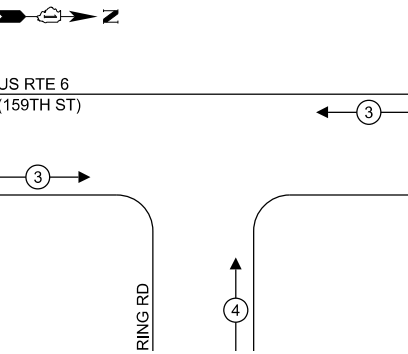
LEGEND:



RIGHT TURN OVERLAP  
PHASE DESIGNATION:

OVERLAP LETTER		PERMISSIVE PHASE		PROTECTED PHASE
A	=	2	+	8
D	=	8	+	1

EXISTING AND PROPOSED EMERGENCY  
VEHICLE PREEMPTION PHASE DIAGRAM



NOTES:

1. ALL RED SIGNAL INDICATIONS SHALL HAVE A LENS COVER.

TRAFFIC SIGNAL  
ELECTRIC SERVICE REQUIREMENTS

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	10	11	110
4-SECTION	-	14	-
5-SECTION	5	13	65
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL CONTROLLER	-	15	-
MASTER CONTROLLER	1	150	150
UPS	-	100	-
DETECTION VIDEO	1	25	25
BLANK-OUT SIGN	-	20	-
NETWORK SWITCH II OR III	-	25	-
CELLULAR MODEM	-	35	-
PTZ CAMERA	-	15	-
	-	75	-
TOTAL UPS SIZING			350
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			955

ENERGY COSTS TO:

CALUMET CITY  
204 PULASKI RD  
CALUMET CITY, IL 60409

ENERGY SUPPLY:

CONTACT: ---

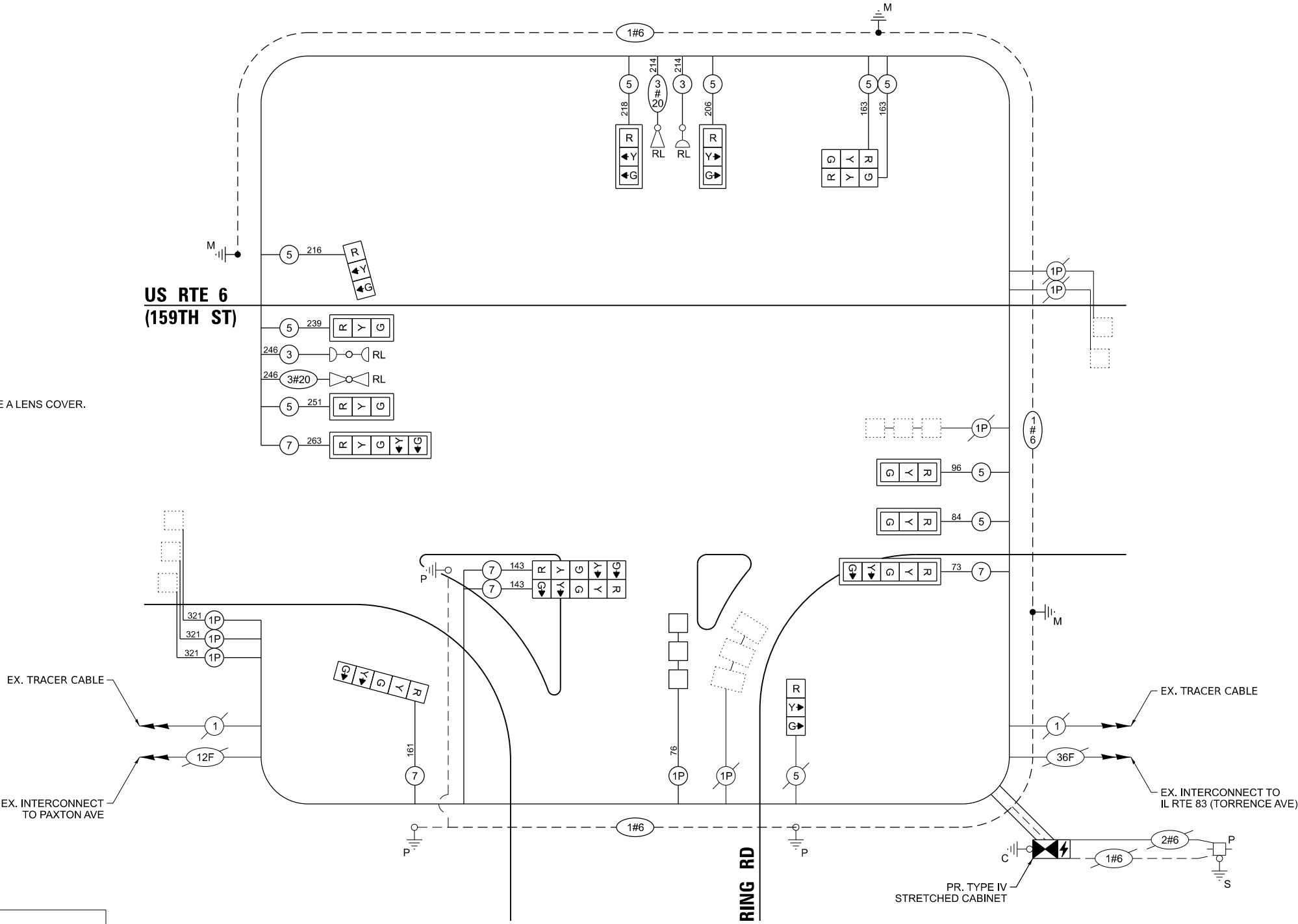
PHONE: ---

COMPANY: COMED

ACCOUNT NUMBER: ---

METER NUMBER: ---

US RTE 6  
(159TH ST)



CABLE PLAN

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, CONTROLLER PHASE DIAGRAM, AND  
EMERGENCY VEHICLE PREEMPTION PHASE DIAGRAM  
US RTE 6 (159TH ST) AT RING RD

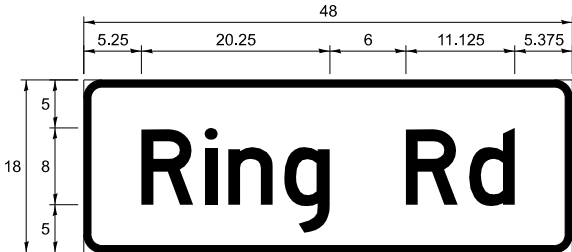
SCALE: SHEET 3 OF 4 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR		COOK	35	28
CONTRACT NO. 12X15				
ILLINOIS FED. AID PROJECT				

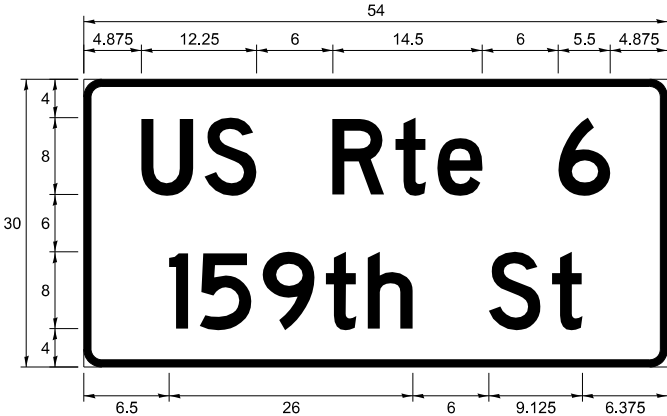
TS 280  
ECON 49

SIGN PANEL – TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES UNLESS 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	11.25	2	ZZ	1

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION SEE DISTRICT STANDARD TS-02 - MAST ARM MOUNTED STREET NAME SIGNS.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
SIGN PANEL - TYPE 1	SQ FT	12
SIGN PANEL - TYPE 2	SQ FT	11.25
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	46
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	115
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	172
HEAVY-DUTY HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
* ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	460
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,636
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	783
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,039
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	330
TRAFFIC SIGNAL POST, 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	13.5
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	28
DRILL EXISTING HANDHOLE	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP, TYPE I	FOOT	96
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	2,320
REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	230
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	3
REMOVE EXISTING CONCRETE FOUNDATION	EACH	5
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	460
TEMPORARY INFORMATION SIGNING	SQ FT	51.4
FULL-ACTUATED CONTROLLER AND TYPE IV STRETCHED CABINET (SPECIAL)	EACH	1
UNINTERRUPTABLE POWER SUPPLY AND CABINET (SPECIAL)	EACH	1
LED SIGNAL FACE, LENS COVER	EACH	15
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

\* 100% COST TO CALUMET CITY

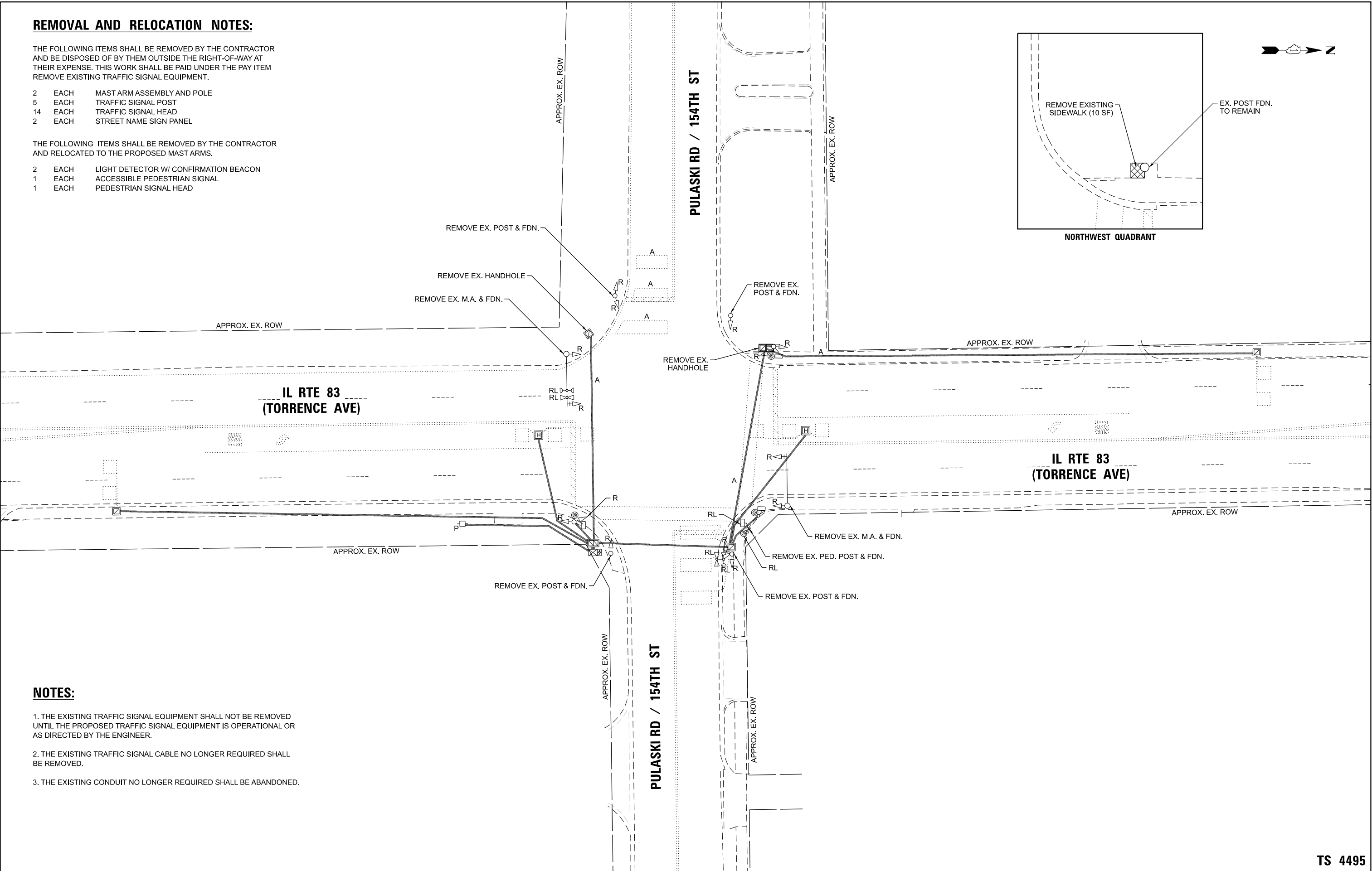
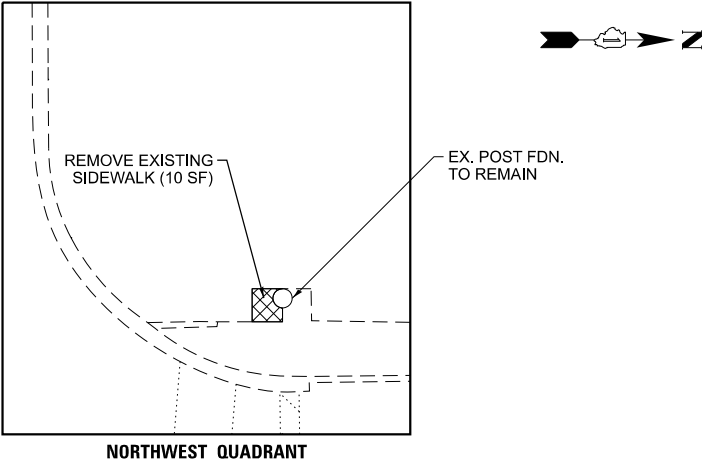
REMOVAL AND RELOCATION NOTES:

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THIS WORK SHALL BE PAID UNDER THE PAY ITEM REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT.

- 2 EACH MAST ARM ASSEMBLY AND POLE
- 5 EACH TRAFFIC SIGNAL POST
- 14 EACH TRAFFIC SIGNAL HEAD
- 2 EACH STREET NAME SIGN PANEL

THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND RELOCATED TO THE PROPOSED MAST ARMS.

- 2 EACH LIGHT DETECTOR W/ CONFIRMATION BEACON
- 1 EACH ACCESSIBLE PEDESTRIAN SIGNAL
- 1 EACH PEDESTRIAN SIGNAL HEAD

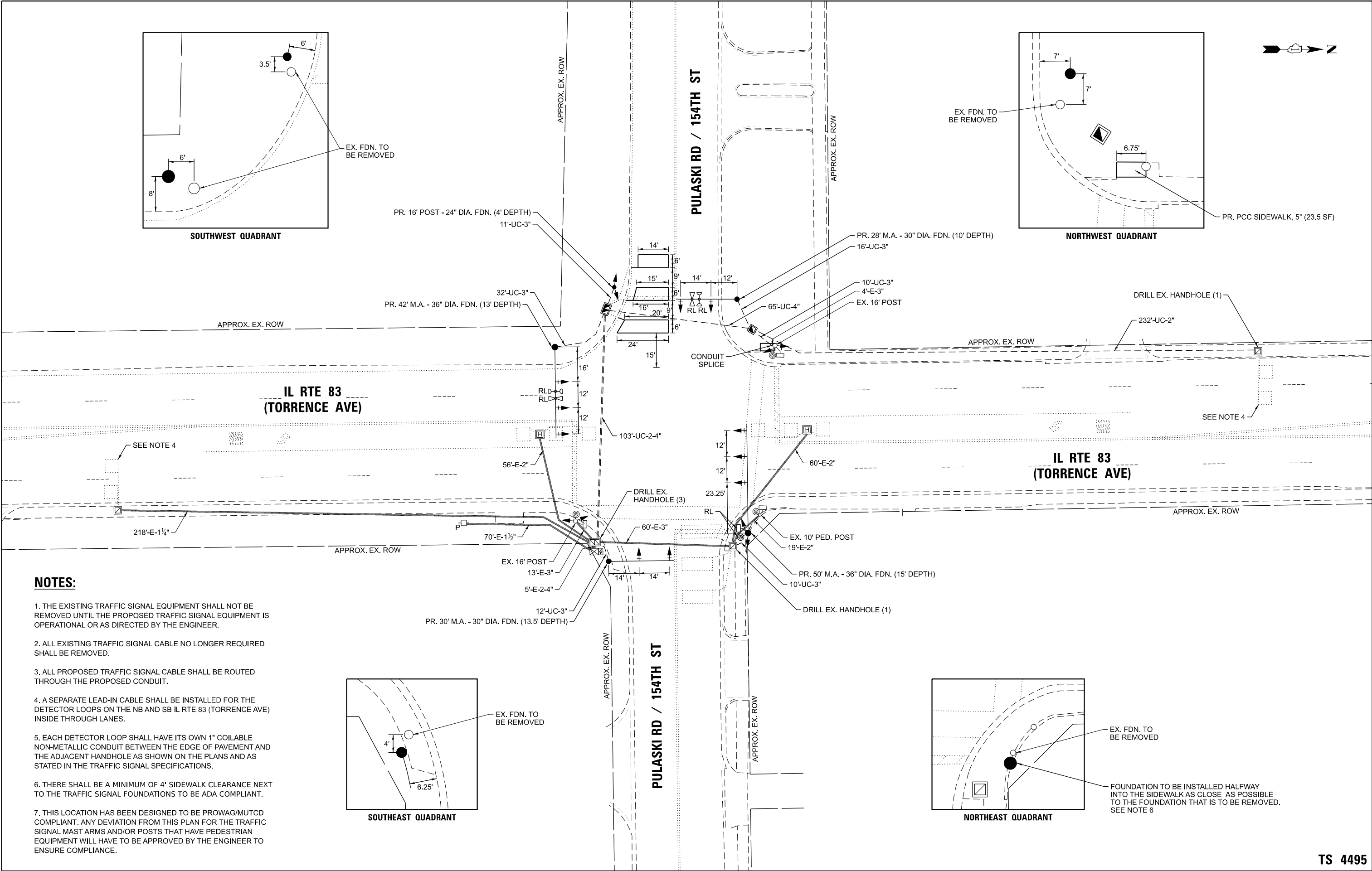


NOTES:

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

TS 4495

	USER NAME = Ivan,plascencia	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL REMOVAL PLAN IL RTE 83 (TORRENCE AVE) AT PULASKI RD / 154TH ST		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - IP	REVISED -				VAR		COOK	35	30
		CHECKED - NB	REVISED -				CONTRACT NO. 12X15				
	PLOT DATE =	DATE - 10/15/2025	REVISED -				ILLINOIS FED. AID PROJECT				
SCALE:		SHEET 1	OF 4	SHEETS	STA.	TO STA.					

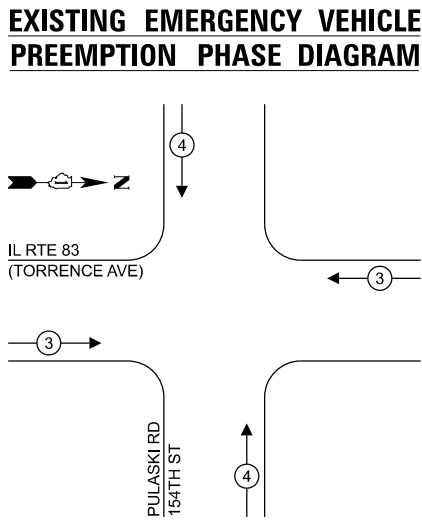
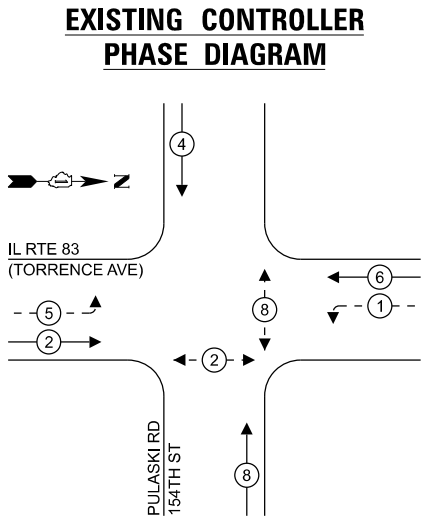


**NOTES:**

1. THE EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL NOT BE REMOVED UNTIL THE PROPOSED TRAFFIC SIGNAL EQUIPMENT IS 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 83 (TORRENCE AVE) INSIDE THROUGH LANES.
5. EACH DETECTOR LOOP SHALL HAVE ITS OWN 1" COILABLE NON-METALLIC CONDUIT BETWEEN THE EDGE OF PAVEMENT AND THE ADJACENT HANDHOLE AS SHOWN ON THE PLANS AND AS STATED IN THE TRAFFIC SIGNAL SPECIFICATIONS.
6. THERE SHALL BE A MINIMUM OF 4' SIDEWALK CLEARANCE NEXT TO THE TRAFFIC SIGNAL FOUNDATIONS TO BE ADA COMPLIANT.
7. THIS LOCATION HAS BEEN DESIGNED TO BE PROWAG/MUTCD COMPLIANT. ANY DEVIATION FROM THIS PLAN FOR THE TRAFFIC SIGNAL MAST ARMS AND/OR POSTS THAT HAVE PEDESTRIAN EQUIPMENT WILL HAVE TO BE APPROVED BY THE ENGINEER TO ENSURE COMPLIANCE.

TS 4495

	USER NAME = Ivan,plascencia	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC SIGNAL MODERNIZATION PLAN IL RTE 83 (TORRENCE AVE) AT PULASKI RD / 154TH ST			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - IP	REVISED -					VAR		COOK	35	31
		CHECKED - NB	REVISED -					CONTRACT NO. 12X15				
	PLOT DATE =	DATE - 10/15/2025	REVISED -		SCALE:	SHEET 2 OF 4 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT				



**LEGEND:**

- ← (⊙) → PROTECTED PHASE
- ← - (⊙) - PROTECTED/PERMISSIVE PHASE
- ← (⊙) → PEDESTRIAN PHASE

**NOTES:**

- ALL RED SIGNAL INDICATIONS SHALL HAVE A LENS COVER.
- THE EXISTING PUSH-BUTTONS ARE APS.

**TRAFFIC SIGNAL  
ELECTRIC SERVICE REQUIREMENTS**

EQUIPMENT TYPE	QUANTITY	UNIT WATTAGE	TOTAL WATTAGE
SIGNAL HEAD 1 OR 3-SECTION	14	11	154
4-SECTION	-	14	-
5-SECTION	4	13	52
PROGRAMMABLE 3-SECTION	-	22	-
4-SECTION	-	32	-
5-SECTION	-	28	-
PEDESTRIAN SIGNAL	4	15	60
CONTROLLER	1	150	150
MASTER CONTROLLER	-	100	-
UPS	1	25	25
DETECTION VIDEO	-	20	-
BLANK-OUT SIGN	-	25	-
NETWORK SWITCH II OR III	-	35	-
CELLULAR MODEM	-	15	-
PTZ CAMERA	-	75	-
TOTAL UPS SIZING			441
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			1,046

**ENERGY COSTS TO:**

CALUMET CITY  
204 PULASKI RD  
CALUMET CITY, IL 60409

**ENERGY SUPPLY:**

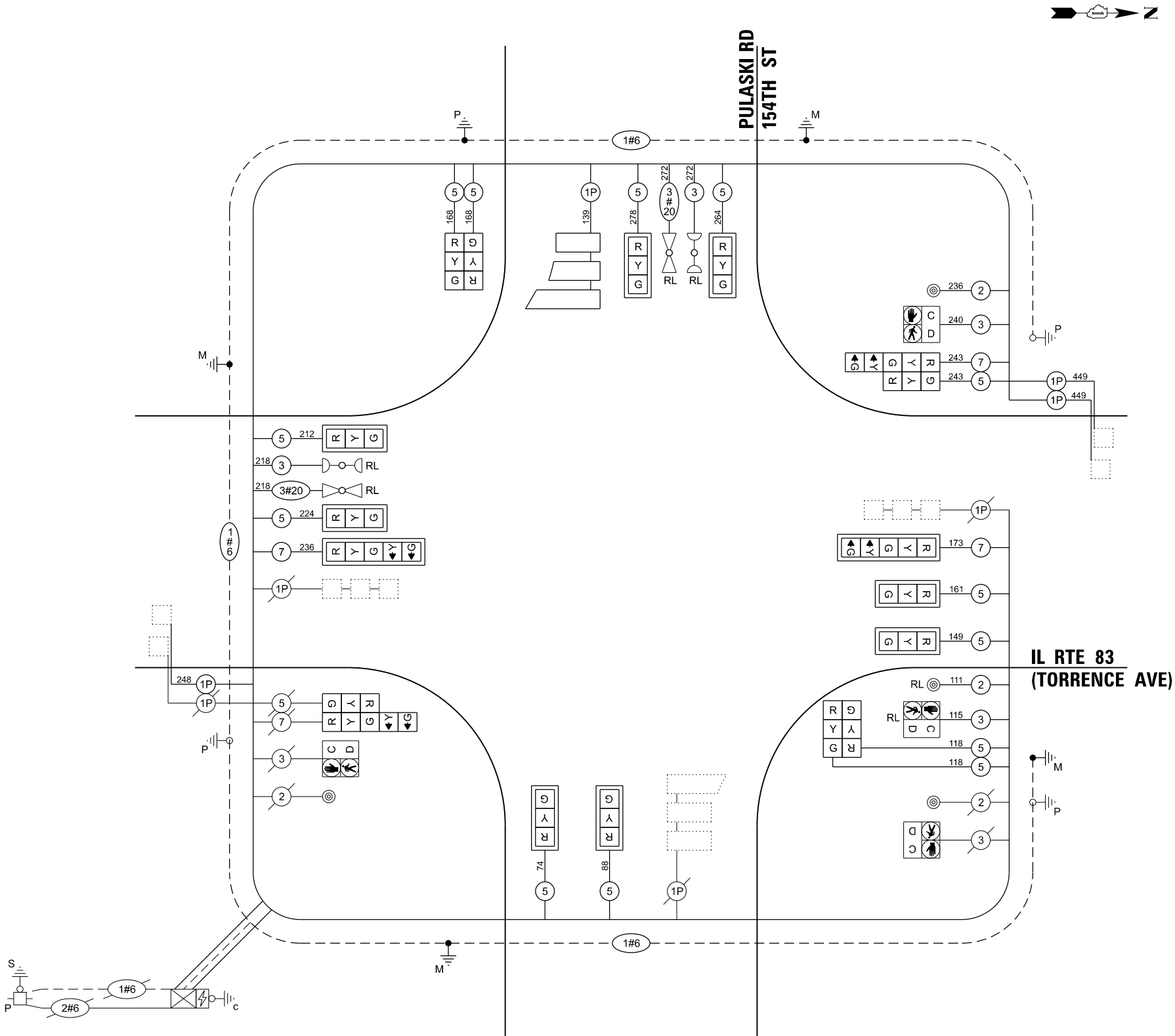
CONTACT: ---

PHONE: ---

COMPANY: COMED

ACCOUNT NUMBER: ---

METER NUMBER: ---



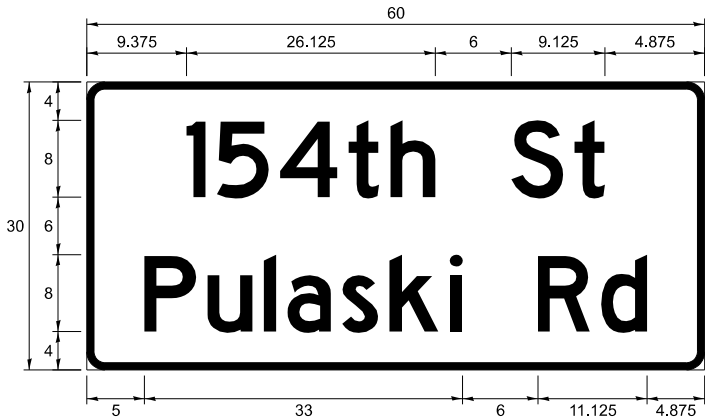
**TS 4495**

	USER NAME = lvan,plascenda	DESIGNED - IP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABLE PLAN, CONTROLLER PHASE DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION PHASE DIAGRAM IL RTE 83 (TORRENCE AVE) AT PULASKI RD / 154TH ST	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
		DRAWN - IP	REVISED -			VAR		COOK	35	32		
		CHECKED - NB	REVISED -			CONTRACT NO. 12X15						
	PLOT DATE =	DATE - 10/15/2025	REVISED -			SCALE:	SHEET 3 OF 4 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT		



SIGN PANEL – TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	12.5	2	ZZ	2



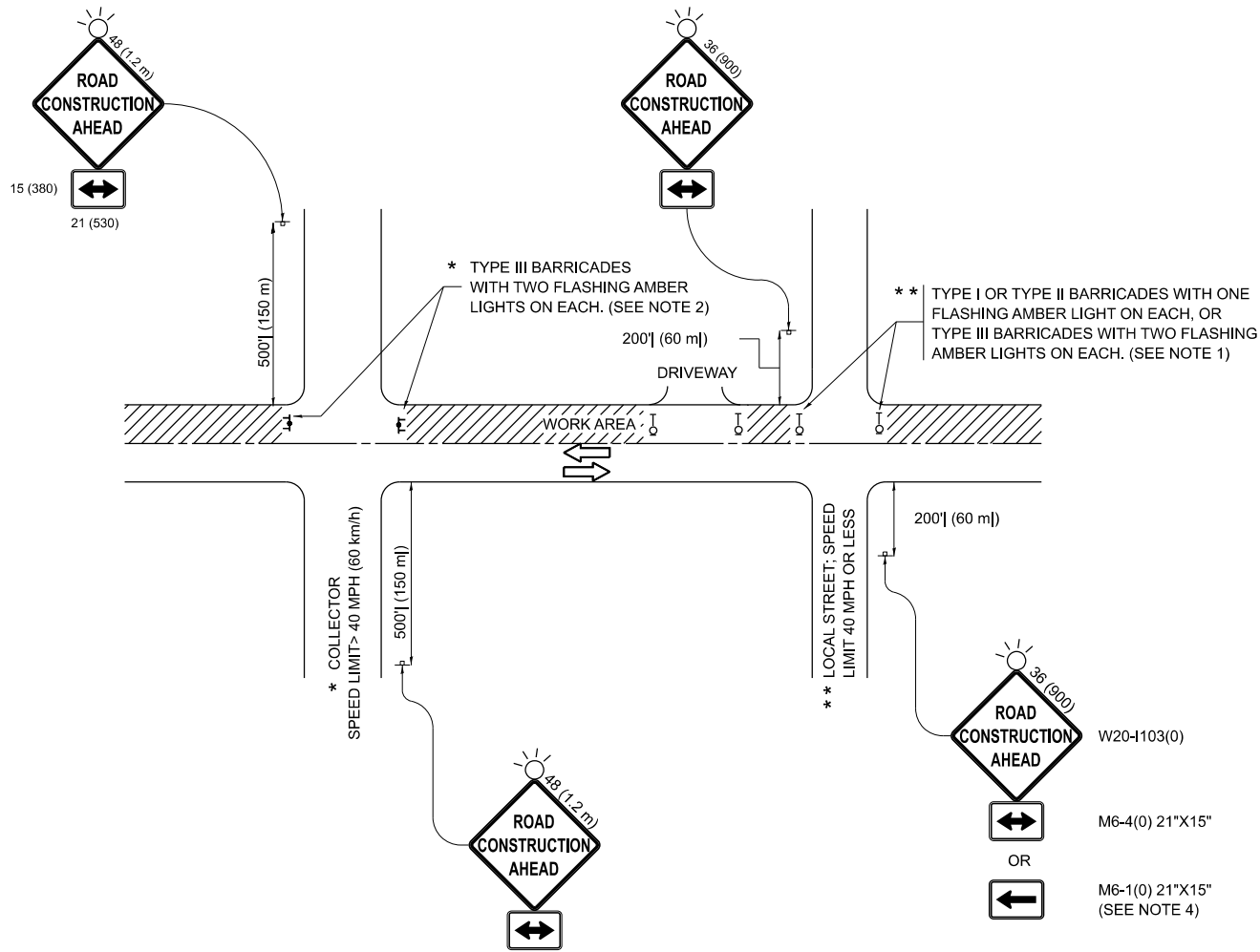
DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY REQUIRED
D	15	2	ZZ	2

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION SEE DISTRICT STANDARD TS-02 - MAST ARM MOUNTED STREET NAME SIGNS.

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY
PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	23.5
SIDEWALK REMOVAL	SQ FT	10
SIGN PANEL - TYPE 2	SQ FT	55
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	232
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	91
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	271
HANDHOLE	EACH	1
DOUBLE HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	347
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	845
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2,265
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	652
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,285
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	450
TRAFFIC SIGNAL POST, 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	23.5
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	28
DRILL EXISTING HANDHOLE	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	8
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	10
INDUCTIVE LOOP DETECTOR	EACH	2
DETECTOR LOOP, TYPE I	FOOT	150
RELOCATE EXISTING PEDESTRIAN SIGNAL HEAD	EACH	1
RELOCATE EXISTING PEDESTRIAN PUSH-BUTTON	EACH	1
* RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1,445
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
* EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	490
TEMPORARY INFORMATION SIGNING	SQ FT	51.4
LED SIGNAL FACE, LENS COVER	EACH	18
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1

\* 100% COST TO CALUMET CITY



NOTES:

- 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:
  - 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.
  - 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.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - 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.
  - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 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.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- 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.
- ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- 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.

	USER NAME =	DESIGNED - L.H.A.	REVISED - T. RAMMACHER 01-06-00	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - A. SCHUETZE 07-01-13			VAR		COOK	35	34
		CHECKED -	REVISED - A. SCHUETZE 09-15-06			TC-10		CONTRACT NO. 12X15		
	PLOT DATE =	DATE - 06-89	REVISED - D. SENDERAK 05-03-25			SCALE:	SHEET 1 OF 1 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT

