FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR INDEX OF HIGHWAY STANDARDS, SEE SHEET NO. 2

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PROPOSED HIGHWAY PLANS

VARIOUS LOCATIONS IN DISTRICT 1
SECTION 2023-942-N,TS
PROJECT HSIP - ZVSZ(220)
TROMBONE MAST ARM REPLACEMENT
COOK COUNTY
C-91-178-24



0

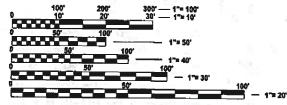
0

IL. LICENSED PROFESSIONAL
LICENSE EXPIRES ON 11/30/2025
APPLIES TO THE FOLLOWING SHEETS:

PREPARED BY:



245 W. ROOSEVELT ROAD, SUITE 87
WEST CHICAGO, ILLINOIS 60185
(630) 228-1231 (P)
PROJECT MANAGER:
JAMEEL AHMED, P.E.
www.quiggengineering.com



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

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

CONTRACT NO. 62W58

PROJECT ENGINEER: ANDREA VARGAS (847) 705-4419
PROJECT MANAGER: NICHOLAS BUTLER (847) 705-4420

R 13 E

R 14 E

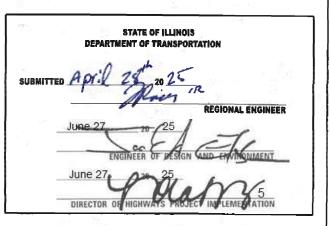
R 15 E

LOCATION MAP

GROSS LENGTH = N/A = N/A MILE
VARIOUS TOWNSHIP

D-91-124-24





PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

REV-SEP

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30-33	TS 21795	WESTERN AVE AT JOE ORR RD/COUNTRY CLUB DR
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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, MULITLANE, 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
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
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

TS. NO.	INTERSECTION NAME	<u>MUNICIPALITY</u>
45	I-80 EB RAMP AT DIXIE HWY	HAZEL CREST
10860	175TH ST AT GOVERNORS HWY	HAZEL CREST
5710	RIEGEL RD AT HOLBROOK RD	CHICAGO HEIGHTS
21795	WESTERN AVE AT JOE ORR RD/COUNTRY CLUB RD	OLYMPIA FIELDS
5195	GOVERNORS HWY AT POPLAR AVE	RICHTON PARK

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 HOURS NOTIFICATION IS REQUIRED.
- THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT KALPANA.KANNAN-HOSADURGA@ILLINOIS.GOV, 72 HOURS IN ADVANCE OF BEGINNING WORK.
- 3. 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.
- 4. ALL EXISTING ROW SHOWN IS APPROXIMATE AND MAY NEED TO BE VERIFIED IN THE FIELD. ANY ROW CONFLICTS SHALL BE COORDINATED WITH THE RESIDENT ENGINEER.
- 5. THE EXACT LOCATION OF ALL UTILITIES SHALL BE 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 "J.U.L.I.E." 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).
- 6. 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 FACILITITES DAMAGED DURING CONSTRUCTION AT THEIR EXPENSE.
- 7. 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.
- 8. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, LOCAL GOVERNMENT AGENCIES AND IDOT
- 9. 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 ARTICLES 252 AND 250 OF THE STANDARD SPECIFICATIONS, RESPECTIVELY.
- 10. PARTIAL PAYMENT AS DESCRIBED IN ARTICLE 109.07(b) OF THE STANDARD SPECIFICATIONS WILL NOT BE ALLOWED FOR ITEMS INCLUDED IN THIS CONTRACT.
- 11. 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.
- 12. 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.
- 13. 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.
- 14. THE CONTRACTOR SHALL MAINTAIN A MINIMUM CLEARANCE OF 1.5' HORIZONTALLY AND 1' VERTICALLY FROM EXISTING NICOR UTILITIES.

OHIGG ENGINEERING	ıĸ

USER NAME = afarooqi	DESIGNED	-	AAF	REVISED -
	DRAWN	-	AAF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED	-	JA	REVISED -
PLOT DATE = 4/2/2025	DATE	-	12/20/2024	REVISED -

SCALE: NONE

				CONSTRUCTION TYPE CODE									
				I-80/294 AT 175T ST AT RIGEL RD AT WESTERN AVE AT DIXIE HWY GOVERNORS HWY HOLBROOK RD JOE ORR/COUNTRY CL						N AVE AT NTRY CLUB RD	GOVERNORS HWY AT POPLAR AVE		
				90% FED 10% STATE	100% EAST HAZEL CREST EVP	90% FED 10% STATE	100% HAZEL CREST EVP	90% FED 10% STATE	100% HOMEWOOD EVP	90% FED 10% STATE	100% OLYMPIA FIELDS EVP	90% FED 6.7% STATE 3.3% VILLAGE	100% RICHTON PARK EVP
				SA	FETY	SAF	ETY	SAFI	ETY	SAF	ETY	SAI	ETY
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0	021	00	021	002	21	00)21	00	021
				UF	RBAN	UR	BAN	URB	BAN	UR	BAN	UR	BAN
25200110	SODDING, SALT TOLERANT	SQYD	325									325	
28000510	INLET FILTERS	EACH	2									2	
31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	108									108	
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	959.0									959.0	
42400800	DETECTABLE WARNINGS	SQ FT	55									55	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	45									45	
44000600	SIDEWALK REMOVAL	SQ FT	932									932	
60260100	INLETS TO BE ADJUSTED	EACH	1									1	
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	44.0									44.0	
66900200	NON-SPECIAL WASTE DISPOSAL	CUYD	240	48		48		48		48		48	
66900530	SOIL DISPOSAL ANALYSIS	EACH	5	1		1		1		1		1	
66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	0.2		0.2		0.2		0.2		0.2	
66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	0.2		0.2		0.2		0.2		0.2	

OUIGG ENGINEERING IN

USER NAME = afarooqi	DESIGNED	-	AAF	REVISED	-
	DRAWN	-	AAF	REVISED	-
PLOT SCALE = \$SCALE\$	CHECKED	-	JA	REVISED	-
PLOT DATE = 2/13/2025	DATE	-	12/24/2024	REVISED	-

	SI	JMMARY	F.A.P RTE.				COUNTY	SHEETS	NO.			
						VAR	2023-94	12 - N,TS		COOK	42	3
										CONTRACT	NO. 62	N58
SCALE: NONE	SHEET 1	OF 7	SHEETS	STA.	TO STA.			ILLINOIS	FED. AII	D PROJECT		

									CONSTRUCTION	ON TYPE CODE				
					I-80/2 DIXIE	294 AT E HWY	175T GOVERN	ST AT IORS HWY	RIGEL HOLBR	RD AT OOK RD	WESTERI JOE ORR/COU	N AVE AT NTRY CLUB RD	GOVERNO POPL	RS HWY AT AR AVE
					90% FED 10% STATE	100% EAST HAZEL CREST EVP	90% FED 10% STATE	100% HAZEL CREST EVP	90% FED 10% STATE	100% HOMEWOOD EVP	90% FED 10% STATE	100% OLYMPIA FIELDS EVP	90% FED 6.7% STATE 3.3% VILLAGE	100% RICHTON PARK EVP
					SAI	FETY	SAI	FETY	SAF	ETY	SAF	ETY	SAF	ETY
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0	021	0	021	00	021	00	21	00	21
					UR	BAN	UR	BAN	UR	BAN	URE	BAN	URI	BAN
*	66901006	REGULATED SUBSTANCES MONITORING	CAL DA	10	2		2		2		2		2	
	67100100	MOBILIZATION	L SUM	1	0.2		0.2		0.2		0.2		0.2	
	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	0.2		0.2		0.2		0.2		0.2	
	70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	0.2		0.2		0.2		0.2		0.2	
	70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	0.2		0.2		0.2		0.2		0.2	
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0.2		0.2		0.2		0.2		0.2	
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.2		0.2		0.2		0.2		0.2	
*	72000100	SIGN PANEL - TYPE 1	SQ FT	81.0	7.5		6.0		16.5		34.5		16.5	
*	72000200	SIGN PANEL - TYPE 2	SQ FT	91.5			21.0		37.5		22.5		10.5	
*	72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	25	25									
٠,	73100100	BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	2	2									
1	70100100	B. CET GIVIELLOGGI ING GILLE GIGIN GGIT GIVI	LACIT		2									
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	90									90	
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	26	26									
	* SPE	ECIALTY ITEM	1											

QUIGG ENGINEERING INC

USER NAME = afarooqi	DESIGNED	-	AAF	REVISED	-
	DRAWN	-	AAF	REVISED	-
PLOT SCALE = \$SCALE\$	CHECKED	-	JA	REVISED	-
PLOT DATE = 2/13/2025	DATE	-	12/24/2024	REVISED	-

	9	UMMARY	OF QUA	F.A. P . RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
				VAR	2023-942-N,TS	соок	42	4		
								CONTRAC	T NO. 62	W58
SCALE: NONE	SHEET 2	OF 7		ILLINOIS FE	O. AID PROJECT					

			CONSTRUCTION TYPE CODE										
				I-80/ DIXI	294 AT E HWY	175T GOVERN	ST AT ORS HWY	RIGEL RD HOLBROOM	AT WESTE K RD JOE ORR/CO	RN AVE AT UNTRY CLUB RD	GOVERNO POPL	RS HWY AT AR AVE	
				90% FED 10% STATE	100% EAST HAZEL CREST EVP	90% FED 10% STATE	100% HAZEL CREST EVP	90% FED 10% STATE	100% DMEWOOD 90% FED 10% STATE	100% OLYMPIA FIELDS EVP	90% FED 6.7% STATE 3.3% VILLAGE	100% RICHTON PARK EVP	
				SA	FETY	SAF	ETY	SAFETY	Y S	FETY	SAF	ETY	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0	0021		0021			0021	00	021	
				UF	RBAN	UR	URBAN		l U	URBAN		BAN 	
78006110	PREFORMED THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	44								44		
78006180	PREFORMED THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	9								9		
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQFT	65	55							10		
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	926	128		295		212	76		215		
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	719	89		90		167	320		53		
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	1,551	221		385		224	513		208		
81400100	HANDHOLE	EACH	3			1					2		
81400200	HEAVY-DUTY HANDHOLE	EACH	5					4	1				
81400300	DOUBLE HANDHOLE	EACH	1	1									
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	5	1		1		1	1		1		
85700200	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	4			1		1	1		1		
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	691								691		
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	3,091	105		877		288	668		1,153		

OUIGG ENGINEERING INC	

	USER NAME = afarooqi	DESIGNED	-	AAF	REVISED	-
		DRAWN	-	AAF	REVISED	-
	PLOT SCALE = \$SCALE\$	CHECKED	-	JA	REVISED	-
1C	PLOT DATE = 2/13/2025	DATE	-	12/24/2024	REVISED	-

	S	UMMARY	F.A. P RTE	SEC	TION		COUNTY	TOTAL SHEETS	SHEET NO.			
	VAR	2023-94	42 - N,TS		COOK	42	5					
										CONTRACT	NO. 62	W58
SCALE: NONE SHEET 3 OF 7 SHEETS STA. TO STA.			TO STA.			ILLINOIS	FED. AII	D PROJECT				

								CONSTRUCT	ION TYPE CODE				
				I-80/ DIXI	/294 AT E HWY	175T GOVERN	ST AT IORS HWY	RIGE HOLBI	L RD AT ROOK RD	WESTER JOE ORR/COU	N AVE AT NTRY CLUB RD	GOVERNO POPL	RS HWY AT AR AVE
				90% FED 10% STATE	100% EAST HAZEL CREST EVP	90% FED 10% STATE	100% HAZEL CREST EVP	90% FED 10% STATE	100% HOMEWOOD EVP	90% FED 10% STATE	100% OLYMPIA FIELDS EVP	90% FED 6.7% STATE 3.3% VILLAGE	100% RICHTON PARK EVP
				SA	FETY	SAI	FETY	SA	FETY	SAF	ETY	SAI	ETY
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	C	0021	00	021	ď	0021	00	021	0	021
				UF	RBAN	UR	BAN	UF	RBAN	UR	BAN	UR	BAN
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	13,590	1,612		2,591		1,295		5,945		2,147	
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	3,488			1,262		1,344		431		451	
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	11,127	1,534		2,049		2,070		3,736		1,738	
07301303	ELECTRIC CABLE IN CONDOTT, ELAD-IN, NO. 14 TI AIN	1001	11,121	1,554		2,049		2,070		3,730		1,730	
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	456	150		87		74		71		74	
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	6,650	746		1,250		1,557		1,930		1,167	
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	11	1		3		3		3		1	
87700160	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	2			1				1			
	·												
07700400	CTEEL MACT ADM ACCEMBLY AND DOLE 20 FT	FACIL	6	4				1		4			
87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	0	1				1		4			
87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1	1									
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	2					2					
87700230	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1									1	
87700240	STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1					1					
87700270	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	4			2				1		1	
01/002/0	SIEEL IVIASI ARIVI ASSENIDLI AND PULE, 40 FT.	EACH	4			2				1		1	

QUIGG ENGINEERING INC

USER NAME = afarooqi	DESIGNED	-	AAF	REVISED	-
	DRAWN	-	AAF	REVISED	-
PLOT SCALE = \$SCALE\$	CHECKED	-	JA	REVISED	-
PLOT DATE = 2/13/2025	DATE	-	12/24/2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY	SUMMARY OF QUANTITIES									SHEET NO.
	VAR	2023-94	12-N,TS		COOK	42	6			
								CONTRACT	NO. 62	W58
SCALE: NONE SHEET 4 OF 7	SHEETS	STA.	TO STA.			ILLINOIS	FED. AII	PROJECT		

				CONSTRUCTION TYPE CODE									
				I-80/ DIXI	294 AT E HWY	175T GOVERN	ST AT IORS HWY	RIGEI HOLBR	RD AT ROOK RD	WESTER JOE ORR/COU	N AVE AT NTRY CLUB RD	GOVERNO POPL	RS HWY AT AR AVE
				90% FED 10% STATE	100% EAST HAZEL CREST EVP	90% FED 10% STATE	100% HAZEL CREST EVP	90% FED 10% STATE	100% HOMEWOOD EVP	90% FED 10% STATE	100% OLYMPIA FIELDS EVP	90% FED 6.7% STATE 3.3% VILLAGE	100% RICHTON PARK EVP
				SA	FETY	SAI	FETY	SAI	FETY	SAF	ETY	SAI	ETY
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0	021	00	021	0	021	00)21	0	021
				UF	RBAN	UR	BAN	UR	BAN	UR	BAN	UR	BAN
87700280	STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	2	1								1	
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	60.0	4.0		16.0		16.0		16.0		8.0	
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	114.5	27		10		13.5		64			
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	124	13		26		35		13		37	
87900100	DRILL EXISTING FOUNDATION	EACH	1									1	
87900200	DRILL EXISTING HANDHOLE	EACH	52			14		12		20		6	
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	28	6		5		4		7		6	
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	27	5		6		4		7		5	
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	10			4		4		1		1	
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	9			3		4		1		1	
00030110	SIGNAL FIEAD, LED, 14 ACE, 3-SECTION, MAST-ANNIMOUNTED	LACIT	9			3		"		'		'	
88055150	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4							4			
88055160	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4							4			
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4									4	



	USER NAME = afarooqi	DESIGNED	-	AAF	REVISED	-
		DRAWN	-	AAF	REVISED	-
	PLOT SCALE = \$SCALE\$	CHECKED	-	JA	REVISED	-
INC	PLOT DATE = 2/13/2025	DATE	-	12/24/2024	REVISED	-

	SUMMARY OF QUANTITIES									COUNTY	TOTAL SHEETS	SHEET NO.
	VAR	2023-9	42-N,TS		COOK	42	7					
										CONTRACT	NO. 62	W58
SCALE: NONE	SHEET 5	OF 7	SHEETS	STA.	TO STA.			ILLINOIS	FED. AID	PROJECT		

				CONSTRUCTION TYPE CODE									
				I-80/ DIXI	294 AT E HWY	175T GOVERN	ST AT ORS HWY	RIGEL HOLBR	RD AT ROOK RD	WESTER JOE ORR/COU	NAVEAT NTRY CLUB RD	GOVERNO POPL	RS HWY AT AR AVE
				90% FED 10% STATE	100% EAST HAZEL CREST EVP	90% FED 10% STATE	100% HAZEL CREST EVP	90% FED 10% STATE	100% HOMEWOOD EVP	90% FED 10% STATE	100% OLYMPIA FIELDS EVP	90% FED 6.7% STATE 3.3% VILLAGE	100% RICHTON PARK EVP
				SA	FETY	SAF	ETY	SAI	ETY	SAF	ETY	SAI	ETY
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0	021	00	021	0	021	00)21	00	021
				UR	RBAN	UR	BAN	UR	BAN	UR	BAN	UR	BAN
88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	41	6		8		8		12		7	
88500100	INDUCTIVE LOOP DETECTOR	EACH	39	6		8		8		10		7	
88600100	DETECTOR LOOP, TYPE I	FOOT	1,899	177		79		524		401		718	
													_
89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	10		1		3		2		2		2
89501410	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	8		1		3		2		2		
89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	23,388	1,979		4,978		4,640		7,818		3,973	
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	5	1		1		1		1		1	
89502378	REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	12	3				5		2		2	
89502380	REMOVE EXISTING HANDHOLE	EACH	4	2								2	
89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	31	4		6		7		10		4	
X7200061	TEMPORARY INFORMATION SIGNING	SQ FT	490	103		78		103		103		103	
Z0033044	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1									1	
			· .										
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	2,193		101		864		281		677		270
10027000	LINE COLITS : VEHICLE I MONTH OF CHEMICINE CHOCK CADEL, NO. 20 GO	1001	2,100	1	1 '0'	1	557			I	"'		2,0



USER NAME = afarooqi	DESIGNED -	AAF	REVISED -
	DRAWN -	AAF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	JA	REVISED -
PLOT DATE = 2/13/2025	DATE -	12/24/2024	REVISED -

	SUMMARY OF QUANTITIES FA							SEC	TION		COUNTY	TOTAL SHEETS	SHEET NO.
								2023-94	12-N,TS		COOK	42	8
											CONTRACT	NO. 62	N58
	SCALE: NONE	SHEET 6	OF 7	SHEETS	STA.	TO STA.			ILLINOIS	FED. AID	PROJECT		

								CONSTRUCTION	ON TYPE CODE				
				I-80/ DIXI	294 AT E HWY	175T GOVERN	ST AT ORS HWY	RIGEL HOLBR	. RD AT OOK RD	WESTER JOE ORR/COU	N AVE AT NTRY CLUB RD	GOVERNO POPL	RS HWY AT AR AVE
				90% FED 10% STATE	100% EAST HAZEL CREST EVP	90% FED 10% STATE	100% HAZEL CREST EVP	90% FED 10% STATE	100% HOMEWOOD EVP	90% FED 10% STATE	100% OLYMPIA FIELDS EVP	90% FED 6.7% STATE 3.3% VILLAGE	100% RICHTON PARK EVP
				SA	FETY	SAF	ETY	SAF	ETY	SAF	ETY	SAI	ETY
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0	021	00)21	00	021	00)21	0	021
				UF	RBAN	UR	BAN	UR	BAN	UR	BAN	UR	BAN
X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	3,175	596		435		873		707		564	
X1400150	SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	5	1		1		1		1		1	
X1400378	PEDESTRIAN SIGNAL POST, 5 FT.	EACH	3									3	
X2010516	SELECTIVE CLEARING	UNIT	0.75					0.75					
7.2010010		Sittle Si						311.0					
X2100002	PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE	UNIT	3.00			1		1		1			
X6700407	ENGINEER'S FIELD OFFICE, TYPE A (D1)	CAL MO	6	1.2		1.2		1.2		1.2		1.2	
X7200075	REMOVE AND REINSTALL SIGN PANEL	SQ FT	151.75	36.00		18.75		19.00		48.00		30.00	
X8620250	UNINTERRUPTABLE POWER SUPPLY AND CABINET (SPECIAL)	EACH	2			1						1	
X8620310	REMOVE AND REPLACE BATTERIES FOR UNINTERUPTABLE POWER SUPPLY, EXTENDED	EACH	2					1		1			
X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	3									3	
X8780012	CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	12									12	
A078UU12	CONCRETE FOUNDATION, TTPE A 12-INOR DIAMETER	FOOT	12									12	
X8809005	LED SIGNAL FACE, LENS COVER	EACH	82	11		18		16		24		13	
X8870300	EMERGENCY VEHICLE PRIORITY SYSTEM	EACH	1								1		

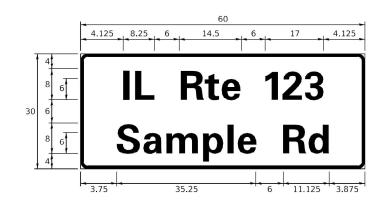
OLUGG ENGINEERING INC

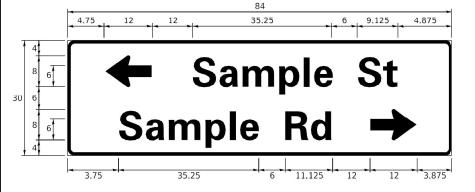
l.	USER NAME = afarooqi	DESIGNED -	AAF	REVISED -
		DRAWN -	AAF	REVISED -
	PLOT SCALE = \$SCALE\$	CHECKED -	JA	REVISED -
NG INC	PLOT DATE = 2/13/2025	DATE -	12/24/2024	REVISED -

	S	UMMARY	OF QU	ANTITIES		F.A.P RTE	SEC	TION		COUNTY	TOTAL SHEETS	SHEET NO.
						VAR	2023-94	12-N,TS		COOK	42	9
										CONTRACT	T NO. 62	W58
SCALE: NONE	SHEET 7	OF 7	SHEETS	STA.	TO STA.			ILLINOIS	FED. AII	O PROJECT		

SIGN PANEL – TYPE 1 OR TYPE 2

Sample Rd





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

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVATION	WIDTH	(INCH)	
NAME	ADDICEVALION	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	ΙL	7.000	8. 250	
LANE	Ln	9.125	10.750	
PARKWAY	Pkwy	23. 375	27. 375	
PLACE	PΙ	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

- 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 (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.
- 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 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.
- 4. 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.
- 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 REQUIREMENT 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: PARTS LISTING:

- J.O. HERBERT COMPANY, INC SIGN CHANNEL PART #HPN053 (MED. CHANNEL) MIDLOTHIAN, VA SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3

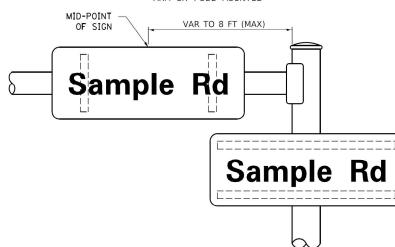
SELF TAPPING WITH NEOPRENE WASHER
- WESTERN REMAC, INC. BRACKETS PART #HPN034 (UNIVERSAL)

WOODRIDGE, IL CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

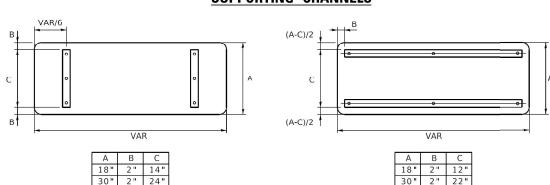
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

MOUNTING LOCATION





SUPPORTING CHANNELS



SCALE: 1"=10'

STANDARD ALPHABETS SPACING CHART

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

	FHWA SEF	(125 C			FHWA SEF		
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACINO (INCH)
Α	0.240	5.122	0.240	Α	0.240	6.804	0.240
В	0.880	4.482	0.480	В	0.960	5.446	0.400
C	0.720	4.482	0.720	С	0.800	5.446	0.800
D E	0.880 0.880	4.482 4.082	0.720 0.480	D E	0.960 0.960	5.446 4.962	0.800 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
Н	0.880	4.482	0.880	Н	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 L	0.880	4.482	0.480	K	0.960 0.960	5. 604 4. 962	0.400
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
0	0.720	4.722	0.720	0	0.800	5.684	0.800
Р	0.880	4.482	0.720	Р	0.960	5.446	0.240
0	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 T	0.480 0.240	4.482	0.480 0.240	S T	0.400 0.240	5. 446 4. 962	0.400 0.240
U	0.880	4. 482	0.880	Ü	0.960	5. 446	0.960
٧	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	Х	0.400	5.446	0.400
Y	0.240	5.122	0.240	Y	0. 240	6.884	0.240
Z	0.480 0.320	4.482 3.842	0.480 0.640	Z a	0.400 0.400	5. 446 4. 562	0.400 0.720
b	0. 720	4.082	0. 480	b	0. 400	4. 802	0. 120
С	0.480	4.002	0. 240	С	0.480	4. 722	0. 240
d	0.480	4.082	0.720	d	0.480	4.802	0.800
е	0.480	4.082	0.320	е	0.480	4.722	0.320
f	0.320	2.480	0.160	f	0.320	2.882	0.160
g h	0.480 0.720	4.082 4.082	0.720 0.640	g h	0.480	4. 802 4. 722	0.800 0.720
i	0.720	1.120	0.720	i	0.800 0.800	1. 280	0.800
i	0.000	2. 320	0.720	i	0.000	2.642	0.800
k	0.720	4.322	0.160	k	0.800	5.122	0.160
I	0.720	1.120	0.720	1	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 4. 882	0.720
0 P	0.480 0.720	4.082	0.480	р	0.480 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 5. 684	0.800
w	0.160 0.160	4. 722 7. 524	0.160 0.160	v w	0.160 0.160	9. 046	0.160 0.160
×	0.000	5. 202	0. 000	X	0.000	6. 244	0.000
У	0.160	4.962	0.160	у	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
5	0.240 0.480	4. 962 4. 482	0.720 0.480	5	0.160 0.800	6.004 5.446	0.960 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 2. 802	0.720 0.240	0	0.800 0.240	5.684 2.802	0.800
-	0.240	Z. 0UZ	· U. /40	-	U- /4U	Z. 8UZ	ı U. /40

MODEL: Detail1 [Sheet] Ell F NAMF: S:\2024\24ll 001 - PTB 240-13 D1 - SE

USER NAME = afarooqi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = 2/13/2025	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

		DIS	F.A. P . RTE.	SEC ⁻	TION	COUNTY				
ı	MAST ARM MOUNTED STREET NAME SIGNS						VAR 2023-942-N,TS			
	MAU I AIN	IVI IVIOUIT		TS-0	2		CONTRA			
	SHEET	OF	SHEETS	STA.	TO STA.			ILLINOIS	FED. AII	D PROJECT

42

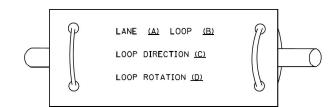
TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

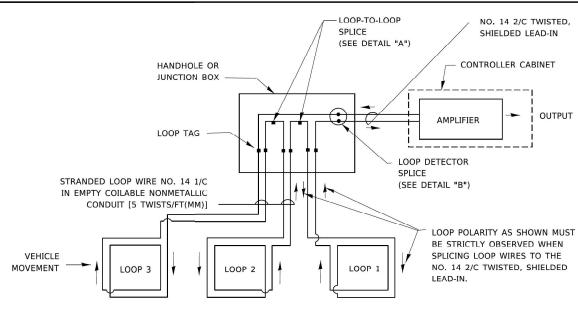
ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET			HANDHOLE -SQUARE			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	R (Y)	R R Y
COMMUNICATION CABINET	ECC	CC	-ROUND HEAVY DUTY HANDHOLE				<u> </u>	G G
MASTER CONTROLLER	EMC	MC	-SQUARE -ROUND	H ®	H 0			4 Y 4 Y 4 G P
MASTER MASTER CONTROLLER	ЕММС	ммс	DOUBLE HANDHOLE			SIGNAL HEAD WITH BACKPLATE		
JNINTERRUPTABLE POWER SUPPLY	4	9	JUNCTION BOX		•	-(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		R R R Y G G
ERVICE INSTALLATION (P) POLE MOUNTED	P	- - P	RAILROAD CANTILEVER MAST ARM	X OX X	X OX X			4 Y 4 Y 4 G 4 G
ERVICE INSTALLATION			RAILROAD FLASHING SIGNAL	XOX	X⊕X		P KB	P RB
(G) GROUND MOUNTED (GM) GROUND MOUNTED METERED	$\bowtie^{G} \bowtie^{GM}$	⊠ ^G ⊠ ^{GM}	RAILROAD CROSSING GATE	202 >	X•X-	PEDESTRIAN SIGNAL HEAD		•
ELEPHONE CONNECTION	ET	Т	RAILROAD CROSSBUCK	否	*	AT RAILROAD INTERSECTIONS		*
TEEL MAST ARM ASSEMBLY AND POLE	0	•	RAILROAD CONTROLLER CABINET		▶ ∢	PEDESTRIAN SIGNAL HEAD	© C	₽ C ★ D
LUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			WITH COUNTDOWN TIMER		
TEEL COMBINATION MAST ARM SSEMBLY AND POLE WITH LUMINAIRE	0-¤—	•*	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
IGNAL POST	0	 ● BM 	SYSTEM ITEM	S	SP	NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE.		
BM) BARREL MOUNTED - TEMPORARY			INTERSECTION ITEM	I	IP	ALL DETECTOR LOOP CABLE TO BE SHIELDED		9
OOD POLE	\otimes	•	REMOVE ITEM		R	GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)	1#6	
UY WIRE	>	>-	RELOCATE ITEM		RL	ELECTRIC CABLE IN CONDUIT, TRACER		
GNAL HEAD		→	ABANDON ITEM		Α	NO. 14 1/C		
GNAL HEAD WITH BACKPLATE	+t> u	 ▶ p p	CONTROLLER CABINET AND FOUNDATION TO BE REMOVED		RCF	COAXIAL CABLE	— <u>c</u>	<u> </u>
GNAL HEAD OPTICALLY PROGRAMMED	-> ^P +> ^P	- ▶ P	MAST ARM POLE AND		RMF	VENDOR CABLE		
ASHER INSTALLATION FS) SOLAR POWERED	op F op FS	•► FS FS FS	FOUNDATION TO BE REMOVED SIGNAL POST AND		RPF	COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED	6#18	(6#18)
EDESTRIAN SIGNAL HEAD	-0	-1	FOUNDATION TO BE REMOVED DETECTOR LOOP, TYPE I	ПО	П	FIBER OPTIC CABLE	—	—(12F)—
EDESTRIAN PUSH BUTTON		_ ⊚ ⊚ APS	PREFORMED DETECTOR LOOP	P P	P P	-NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F	(24F)	—(24F)—
APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON ADAR DETECTION SENSOR	RJ	R ■	SAMPLING (SYSTEM) DETECTOR	S S	5 5		—(36F)—	—(36F)—
IDEO DETECTION CAMERA			INTERSECTION AND SAMPLING	IS (IS)	IS (IS)		301)	301
ADAR/VIDEO DETECTION ZONE	=	<u> </u>	(SYSTEM) DETECTOR QUEUE AND SAMPLING			GROUND ROD -(C) CONTROLLER	_C _M _P _S _T _T _T _T	$\stackrel{\underline{\dot{=}}}{\bar{\uparrow}}^{C} \stackrel{\underline{\dot{=}}}{\bar{\uparrow}}^{M} \stackrel{\underline{\dot{=}}}{\bar{\uparrow}}^{P} \stackrel{\underline{\dot{=}}}{\bar{\uparrow}}^{S}$
			(SYSTEM) DETECTOR	QS QS	QS QS	-(M) MAST ARM -(P) POST	0 0 0 0	• • • •
AN, TILT, ZOOM (PTZ) CAMERA	PTZ 1	PTZ■	WIRELESS DETECTOR SENSOR	(1)	0	-(S) SERVICE		
MERGENCY VEHICLE LIGHT DETECTOR	\bowtie	◄	WIRELESS ACCESS POINT					
ONFIMATION BEACON	o-()	⊷ (
VIRELESS INTERCONNECT	o +1 ∰	•+ 						
VIRELESS INTERCONNECT RADIO REPEATER	ERR	RR						
USER NAME = afarooqi	DESIGNED -	REVISED -		TATE OF ILLINOIS		DISTRICT ONE	F.A.P. SECTIO	OFFET
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -		ENT OF TRANSPORTATION	ST	ANDARD TRAFFIC SIGNAL DESIGN DETAILS	VAR 2023-942-1 TS-05	

- 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

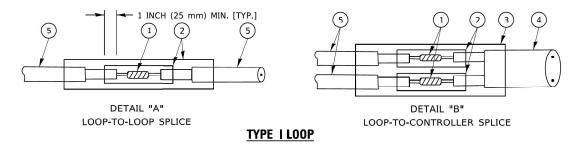


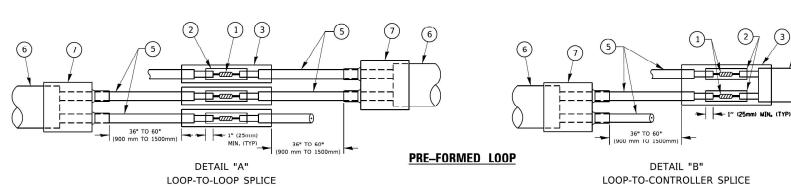
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



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.





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 LENGHT 6" (150 mm), UNDERWATER GRADE.

SCALE: 1"=10'

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE. PRE-FORMED LOOP
- (6) XL POLYOLEFIN 2 CONDUCTOR
- (7) BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

USER NAME = afarooqi	DESIGNED -	REVISED -
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

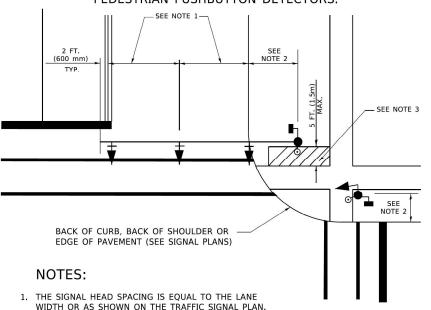
DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS OF SHEETS STA.

SECTION COUNTY VAR 2023-942-N TS COOK 42 TS-05 CONTRACT NO. 62W58

TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

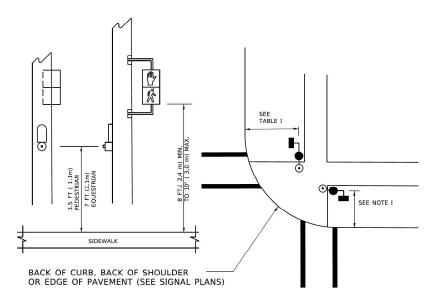
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND

PEDESTRIAN PUSHBUTTON DETECTORS.



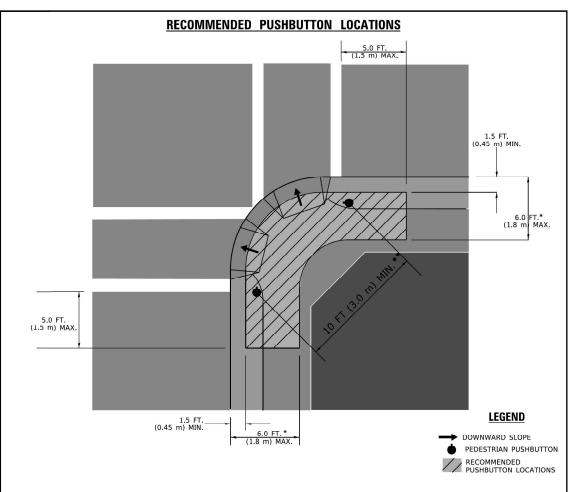
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO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

PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

- 1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
- 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



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

NOTES:

- PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
- THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
- 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.
- 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

	And the state of t	
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 TOTHE 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.

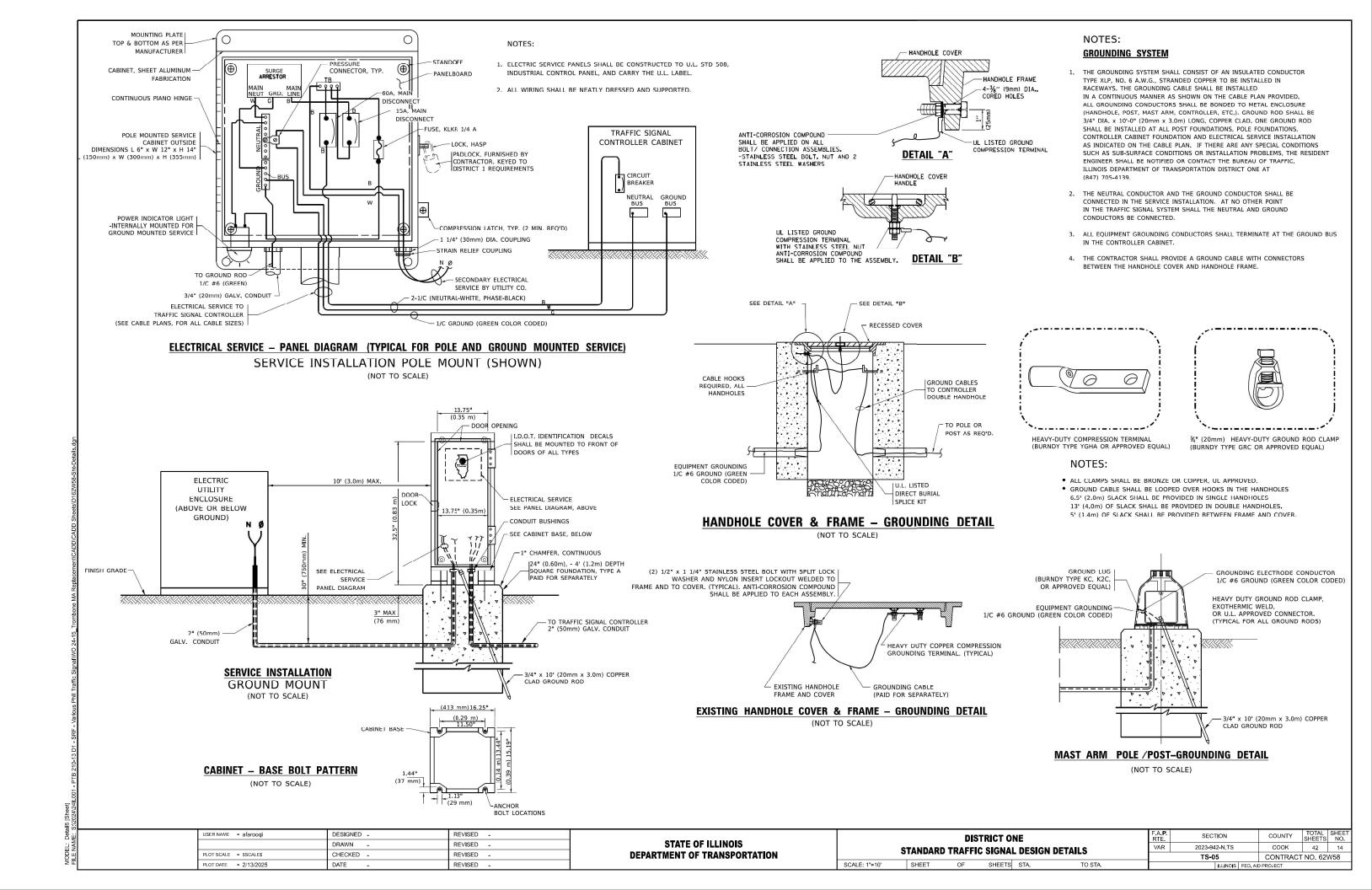
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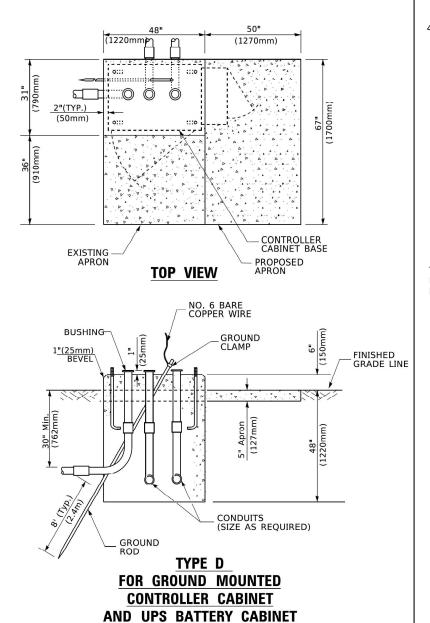
USER NAME = afarooqi	DESIGNED -	REVISED -
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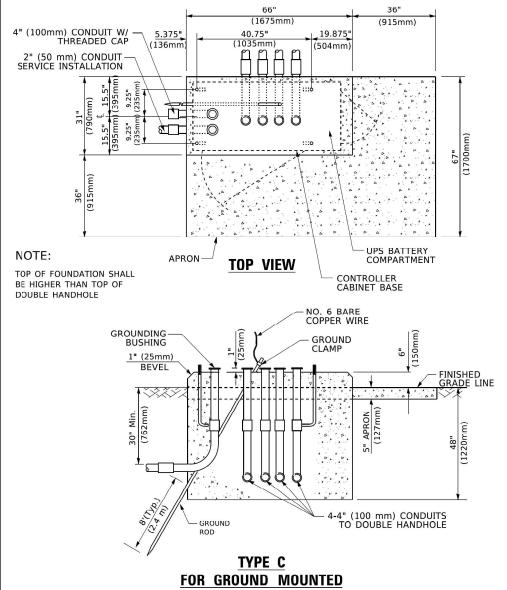
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

						F.A.P. SECTION COUNTY		COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS					VAR	2023-942-N,TS	соок	42	13	
						TS-05	CONTRACT	NO. 62\	N58	
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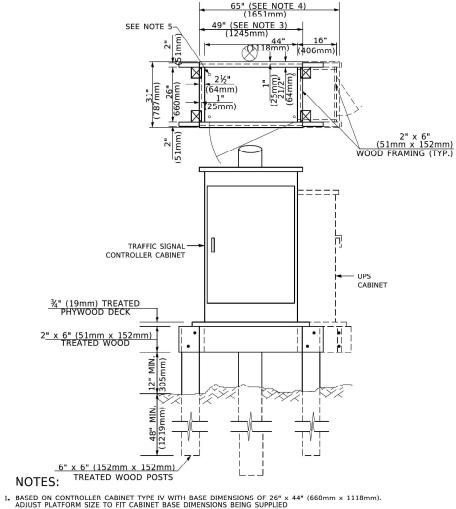






SUPER P (TYPE IV) AND SUPER R (TYPE V)

CONTROLLER CABINETS



- 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.
- $\ensuremath{\mathfrak{Z}_{\bullet}}$ platform size for controller cabinet type iv.
- $\mathbf{4}_{ullet}$ 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

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

CABLE SLACK

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

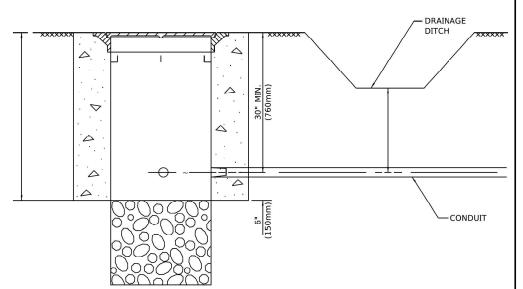
Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3 _• 0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4 ₋ 1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0'' (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0'' (4 . 0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4 . 6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0'' (6 _* 4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7 . 6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

- 1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Ou) > 1.0 fst (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 confacted 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 most arm assemblies with dual arms refer to state standard 878001..

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

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	DRAWN -	REVISED -	STATE OF ILLINOIS	_	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			VAR	2023-942-N.TS	COOK	SHEETS	NO.		
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	S	TANDARD	TRAFFI	C SIGNAL	L DESIGN DE	TAILS	v/ u \		CONTRAC	T NO. 62V	W58
PLOT DATE = 2/13/2025	DATE -	REVISED -		SCALE: 1"=10'	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		



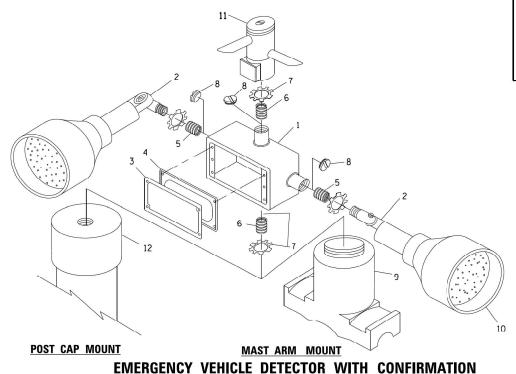
NOTES:

- 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.

JSER NAME = afaroogi

PLOT DATE = 2/13/2025

HANDHOLE WITH MINIMUM CONDUIT DEPTH (NOT TO SCALE)



BEACON MOUNTING DETAIL

DESIGNED .

CHECKED

DRAWN

DATE

REVISED

REVISED

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REVISED

CONTROLLER CABINET BASE PROPOSED-**TOP VIEW** APRON NO. 3 DOWEL 18" (450mm LONG (8 REQ.) BUSHING-_GROUND CLAMP EXISTING-ANCHOR BOLTS GRADE LINE BEVEL (300mm)(300mm) (225mm) (225mm) -EXISTING CONDUITS EXISTING GROUND ROD MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION (NOT TO SCALE)

(1675mm)

40.75"

(1035mm)

(136mm)

....O 0 (915mm)

19.875"

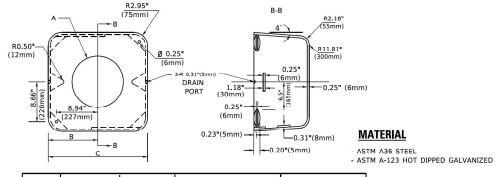
(504mm)

IDENTIFICATION 1 OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M) 2 LAMP HOLDER AND COVER 3 OUTLET BOX COVER RUBBER COVER GASKET REDUCING BUSHING 3/4"(19 mm) CLOSE NIPPL ¾"(19 mm) LOCKNUT 8 ¾"(19 mm) HOLE PLUG 9 SADDLE BRACKET - GAL

- 1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR
- 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

10 6 WATT PAR 38 LED FLOOD LAMP 12 POST CAP [18 FT. (5.4 m) POST MIN.]

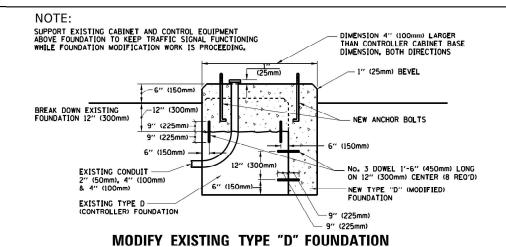
DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

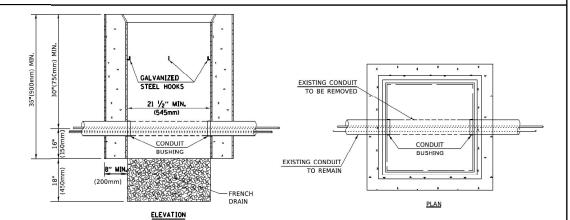


А	В	С	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57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

SHROUD

- . 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 VERIFIED 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.





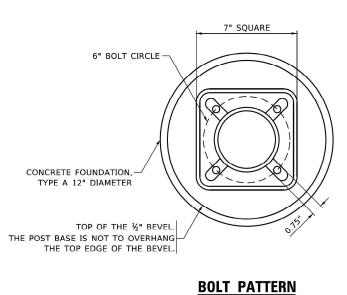
- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

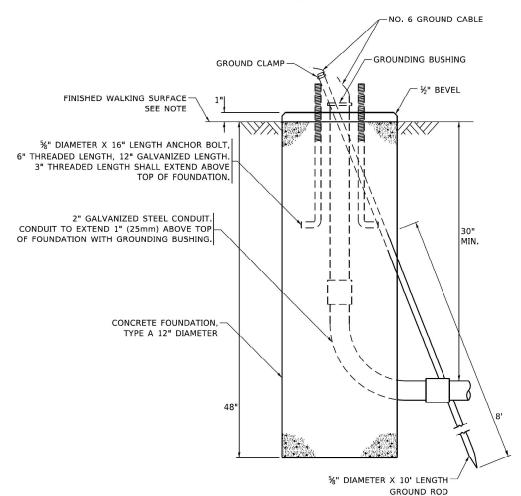
DISTRICT ONE STATE OF ILLINOIS STANDARD TRAFFIC SIGNAL DESIGN DETAILS **DEPARTMENT OF TRANSPORTATION** SHEETS STA.

SECTION COUNTY 2023-942-N TS COOK 42 CONTRACT NO. 62W58 TS-05

3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE

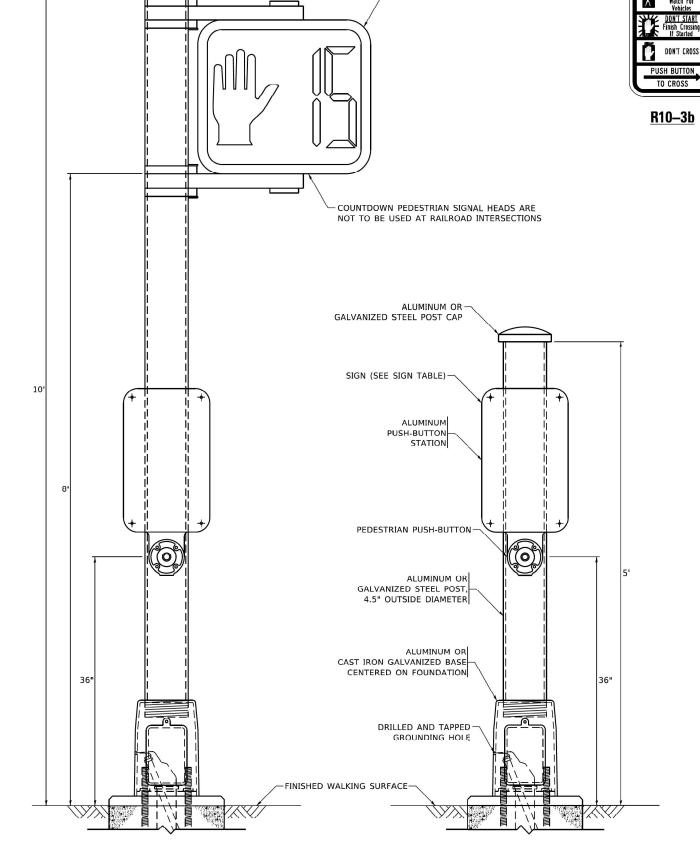


1. IF THE PEDESTRIAN SIGNAL POST FOUNDATION IS INSTALLED WITHIN OR BEHIND A BARRIER CURB, THE TOP OF THE FOUNDATION SHALL BE INSTALLED FLUSH WITH THE TOP OF THE BARRIER CURB.



PEDESTRIAN SIGNAL POST, 10 FT.

PEDESTRIAN SIGNAL POST, 5 FT.



PEDESTRIAN SIGNAL HEAD

DON'T CROSS PUSH BUTTON

R10-3d

R10-3e

TIME REMAINING DON'T CROSS

TO CROSS

SIGN TABLE

SIGN	DIMENSION
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.

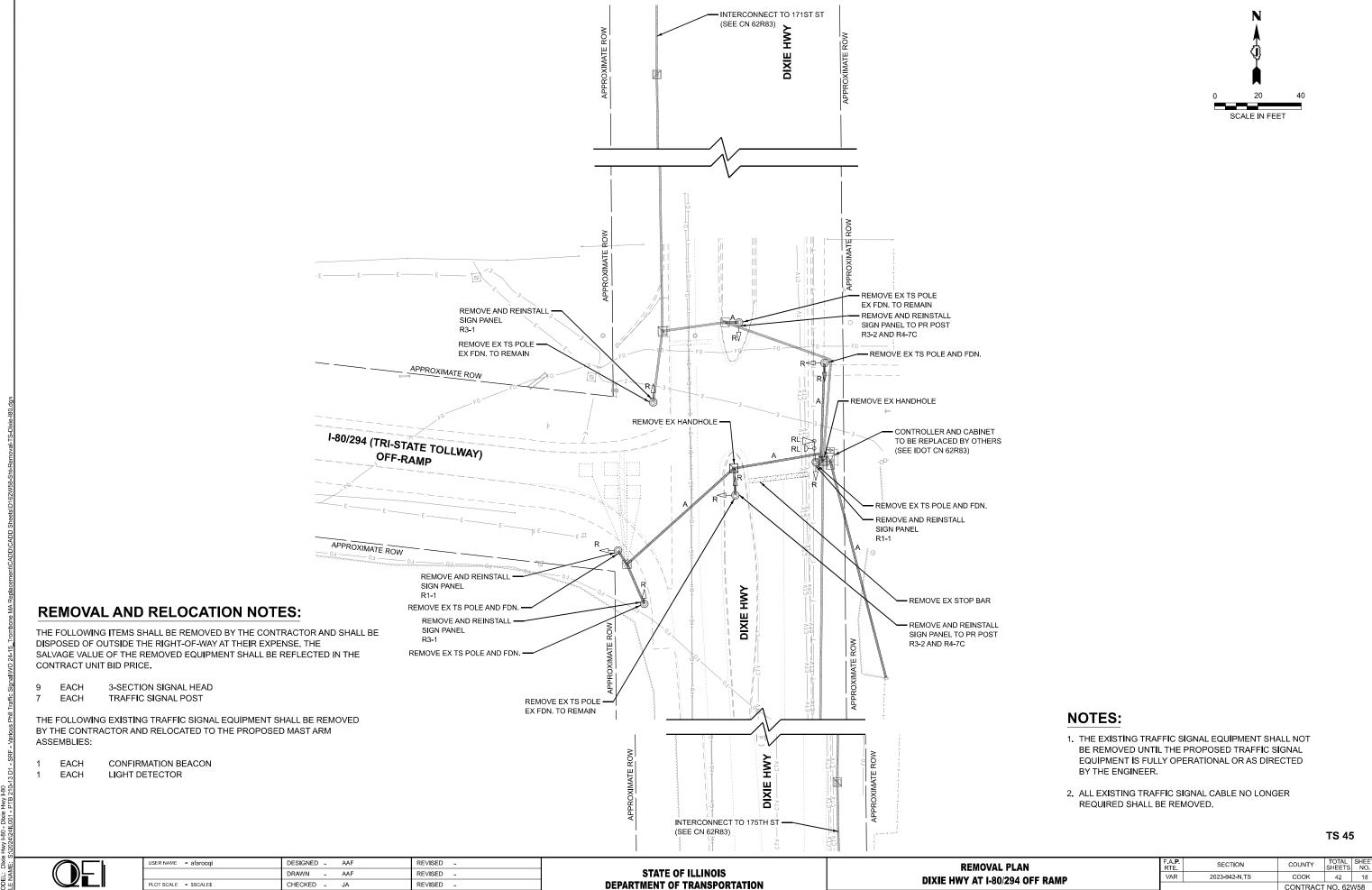
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER

> **STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS SCALE: 1"=10' OF SHEETS STA.

SECTION 2023-942-N.TS COOK 42 TS-05 CONTRACT NO. 62W58

JSER NAME = afaroogi DESIGNED -REVISED DRAWN REVISED CHECKED -REVISED PLOT DATE = 2/13/2025 REVISED DATE



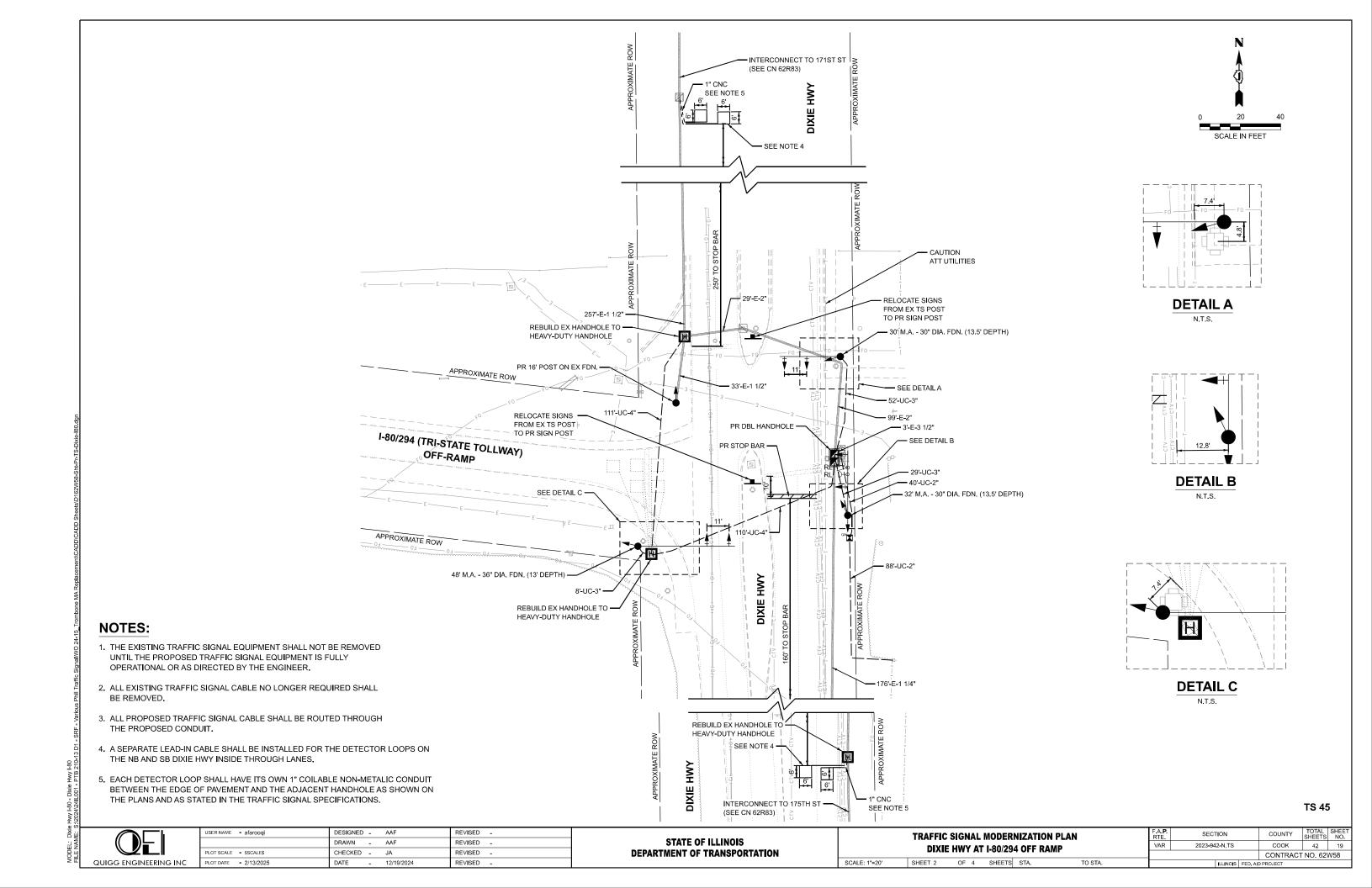
SCALE: 1"=20'

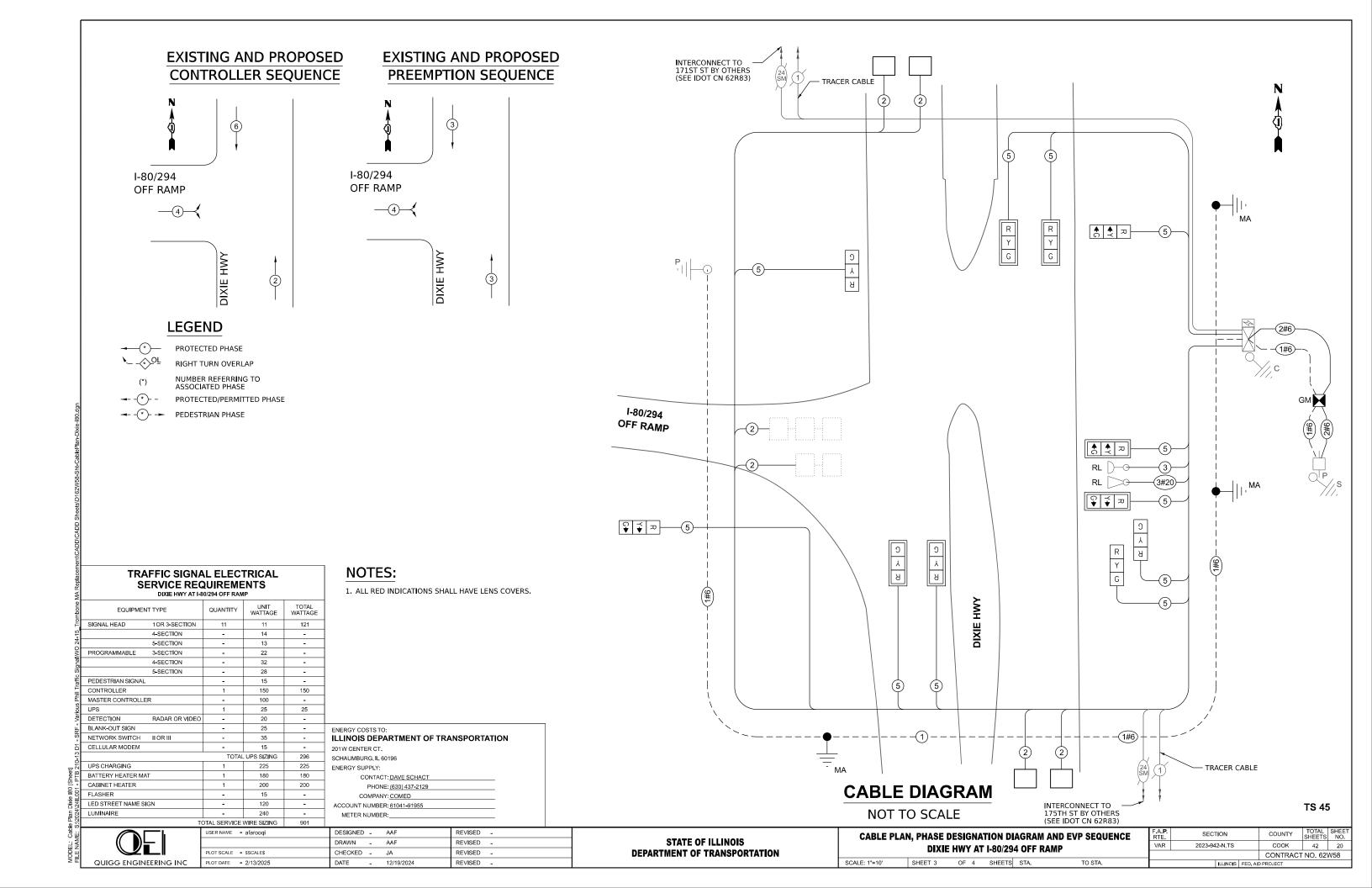
SHEET 1 OF 4 SHEETS STA.

CONTRACT NO. 62W58

QUIGG ENGINEERING INC

PLOT DATE = 2/13/2025





	DESIGN	AREA	SIGN PANEL SHEETI		QTY.
	SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D		7.5	1	ZZ	1

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL (TS-02)

SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	QUANTIT
SIGN PANEL - TYPE 1	SQ FT	7.5
TELESCOPING STEEL SIGN SUPPORT	FOOT	25
BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	2
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	26
PAVEMENT MARKING REMOVAL - WATER BLASTING	SQFT	55
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	128
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	89
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	221
DOUBLE HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	105
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1612
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1534
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	150
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	746
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	4.0
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	27.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13.0
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	5
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	6
INDUCTIVE LOOP DETECTOR	EACH	6
DETECTOR LOOP, TYPE I	FOOT	177
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	1979
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	3
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
TEMPORARY INFORMATION SIGNING	SQ FT	103
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	101
ROD AND CLEAN EXISTING CONDUIT	FOOT	596
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
REMOVE AND REINSTALL SIGN PANEL	SQ FT	36
LED SIGNAL FACE, LENS COVER	EACH	11

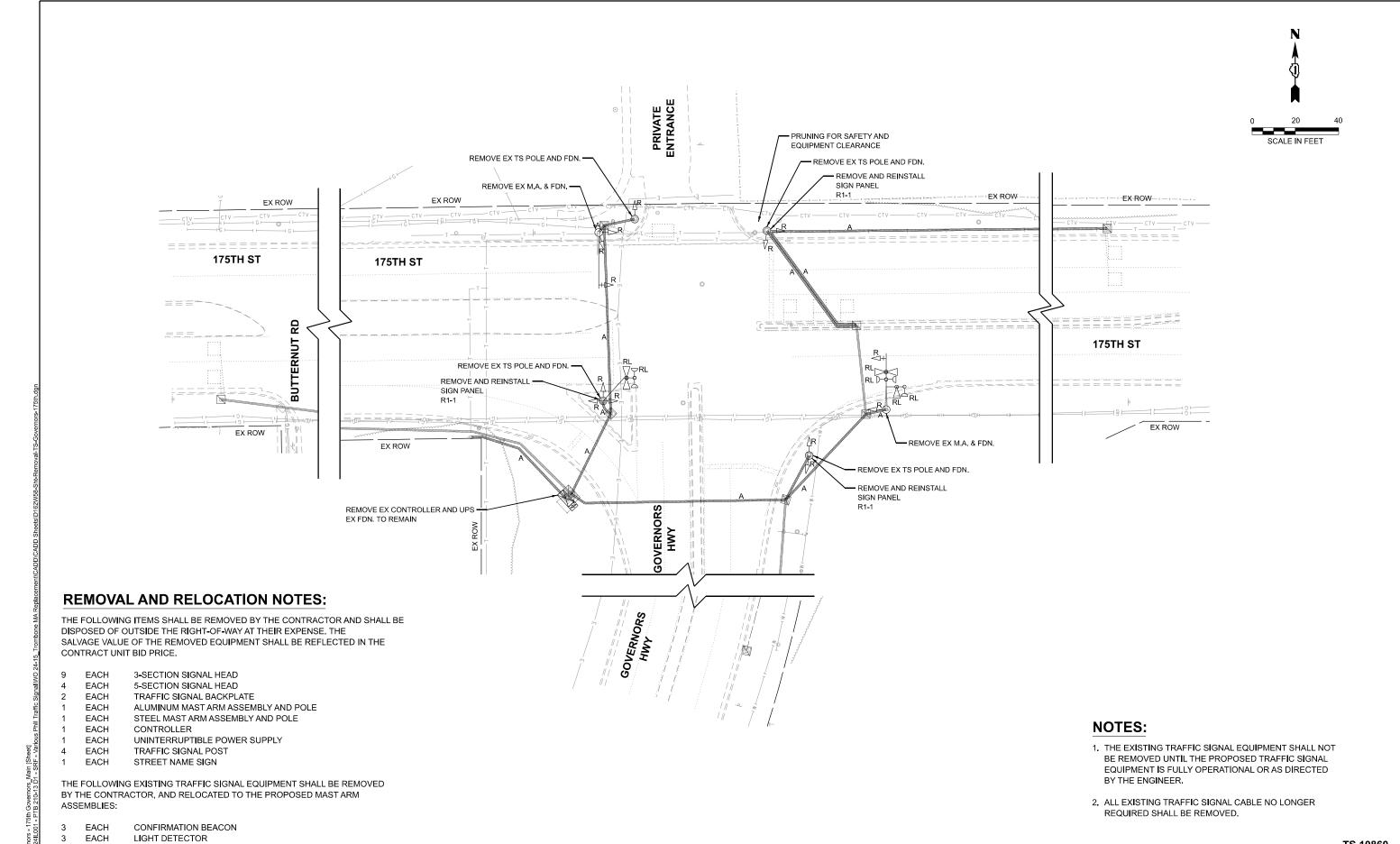
★ 100% COSTS TO THE VILLAGE OF HAZEL CREST

QUIGG ENGINEERING INC

USER NAME = afarooqi	DESIGNED	-	AAF	REVISED	-
	DRAWN	-	AAF	REVISED	-
PLOT SCALE = \$SCALE\$	CHECKED	-	JA	REVISED	-
PLOT DATE = 2/13/2025	DATE	-	12/19/2024	REVISED	-

				UANTITII T I-80/29		D DETAILS RAMP
SCALE: 1"=10'	SHEET 4	OF	4	SHEETS	STA.	TO STA.

F.A. P . RTE	SECTION			COUNTY	TOTAL SHEETS	
VAR	2023-94	2-N,TS	соок	42	Ī	
				CONTRACT	NO. 62\	1
		ILLINOIS	FED, AII) PROJECT		



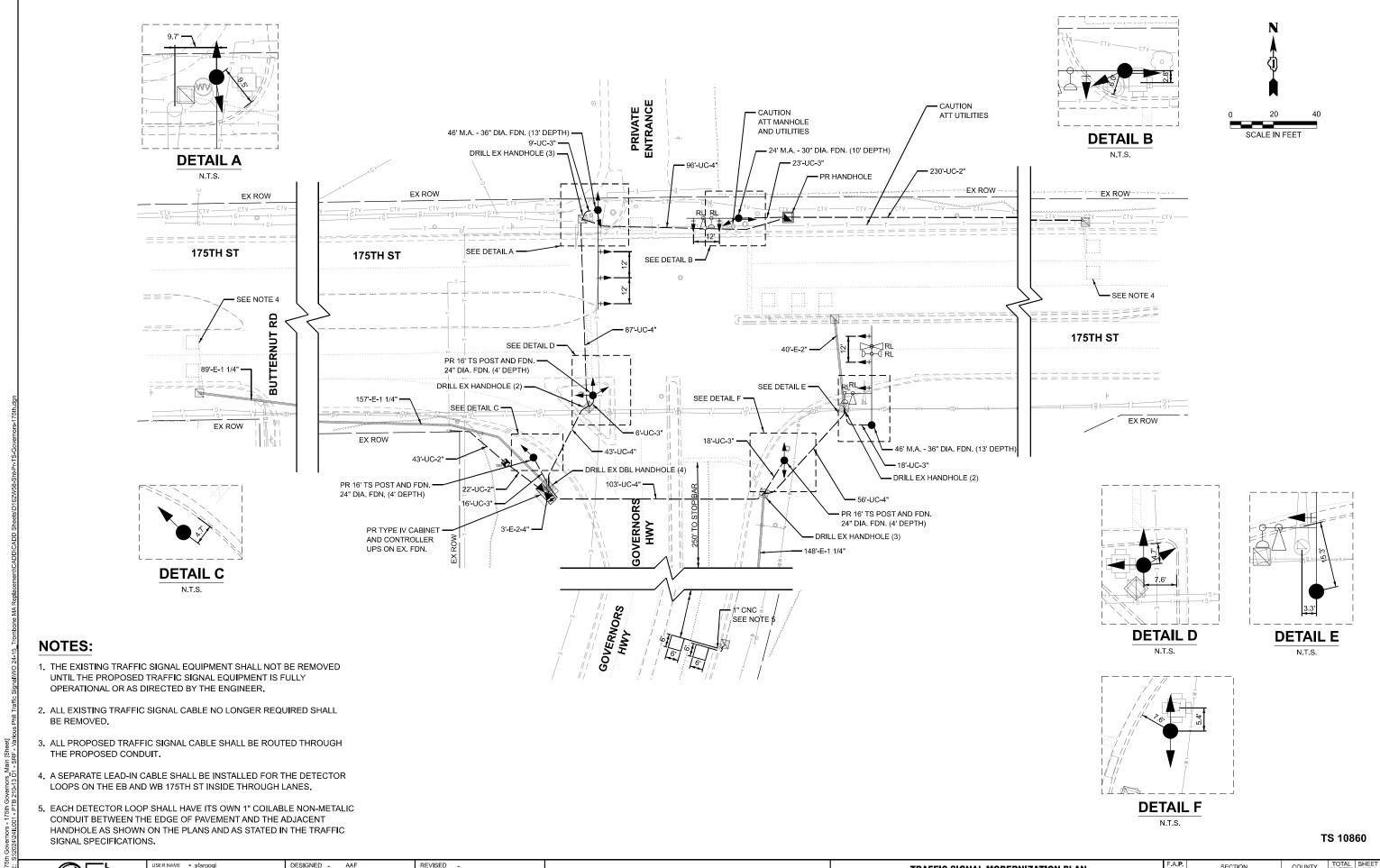
TS 10860



USER NAME = afarooqi	DESIGNED - AAF	REVISED -
	DRAWN - AAF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JA	REVISED -
PLOT DATE = 2/13/2025	DATE - 12/19/2024	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	REMOVAL PLAN						F.A. P . RTE.	SEC	TION		COUNTY	TOTAL SHEETS	SHEET NO.
GOVERNORS HWY AT 175TH ST							VAR	2023-9	42 - N,TS		соок	42	22
	GOVERNORS HIVE AT 1731H 31										CONTRACT	Γ NO. 62'	W58
SCALE: 1"=20' SHEET 1 OF 4 SHEETS STA. TO STA.						ILLINOIS	FED, AII	D PROJECT					



REVISED

REVISED

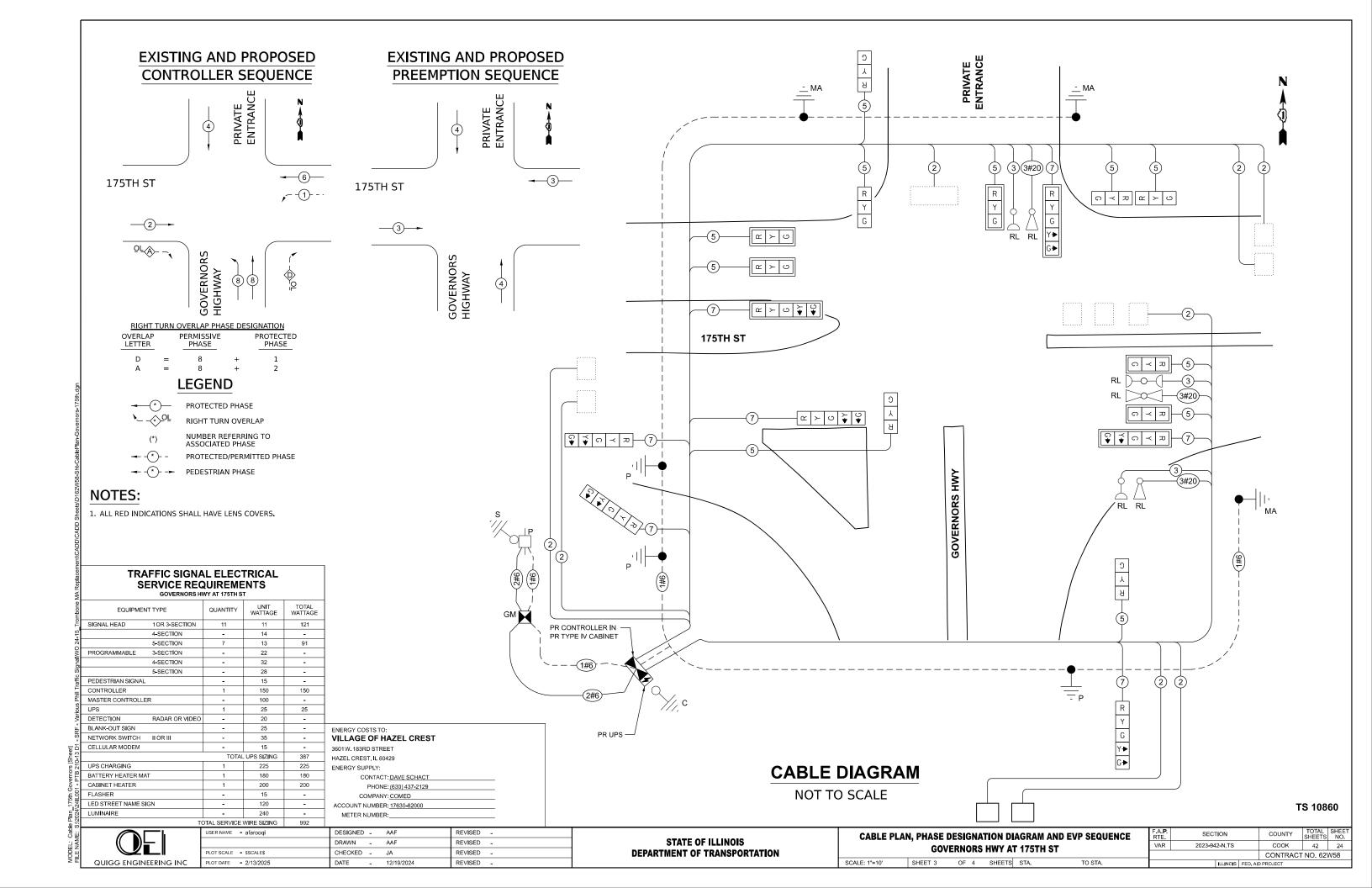
REVISED .

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

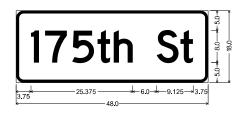
TRAFFIC SIGNAL MODERNIZATION PLAN
GOVERNORS HWY AT 175TH ST

| SHEET 2 OF 4 SHEETS STA. TO STA.

SCALE: 1"=20'



DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	10.5	2	77	2



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

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.

NOTE:
FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL (TS-02)

SCHEDULE OF QUANTITIES

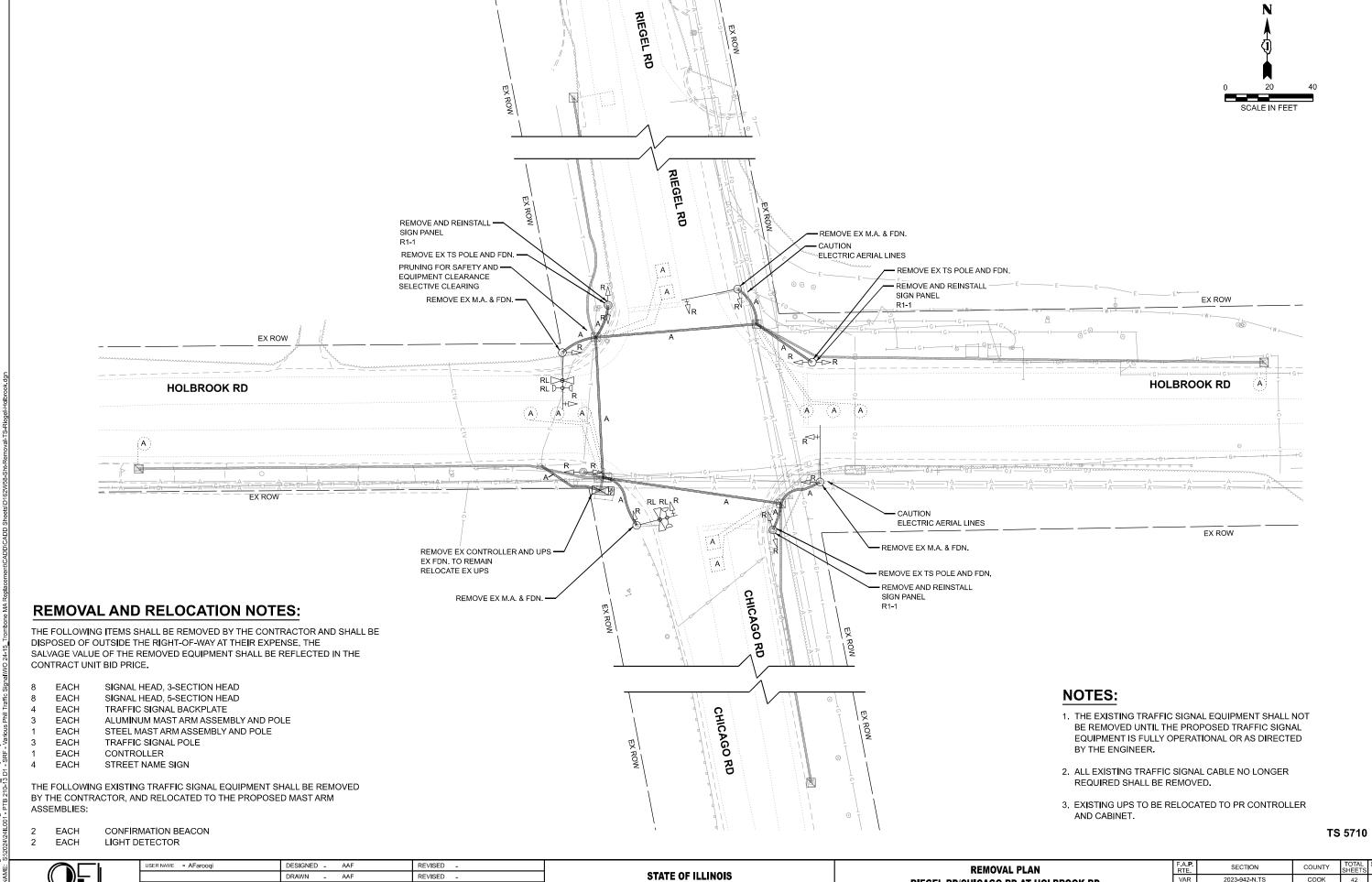
PAY ITEM DESCRIPTION	UNIT	QUANTITY
SIGN PANEL - TYPE 1	SQ FT	6
SIGN PANEL - TYPE 2	SQ FT	21
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	295
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	90
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	385
HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	877
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2591
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1262
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1PAIR	FOOT	2049
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	87
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1250
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	2
CONCRETE FOUNDATION, TYPE A	FOOT	16.0
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	26.0
DRILL EXISTING HANDHOLE	EACH	14
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP, TYPE I	FOOT	79
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	3
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	3
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4978
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	6
TEMPORARY INFORMATION SIGNING	SQ FT	78
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	864
ROD AND CLEAN EXISTING CONDUIT	FOOT	435
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE	UNIT	1
REMOVE AND REINSTALL SIGN PANEL	SQ FT	18.75
UNINTERRUPTABLE POWER SUPPLY AND CABINET (SPECIAL)	EACH	1
LED SIGNAL FACE, LENS COVER	EACH	18

* 100% COSTS TO THE VILLAGE OF HAZEL CREST

TS 10860



JSER NAME = afarooqi	DESIGNED - AAF	REVISED -
	DRAWN - AAF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JA	REVISED -
PLOT DATE = 2/13/2025	DATE - 12/19/2024	REVISED -



DEPARTMENT OF TRANSPORTATION

COOK 42 26

CONTRACT NO. 62W58

2023-942-N,TS

RIEGEL RD/CHICAGO RD AT HOLBROOK RD

SHEET 1 OF 4 SHEETS STA.

QUIGG ENGINEERING INC

PLOT DATE = 4/15/2025

DRAWN

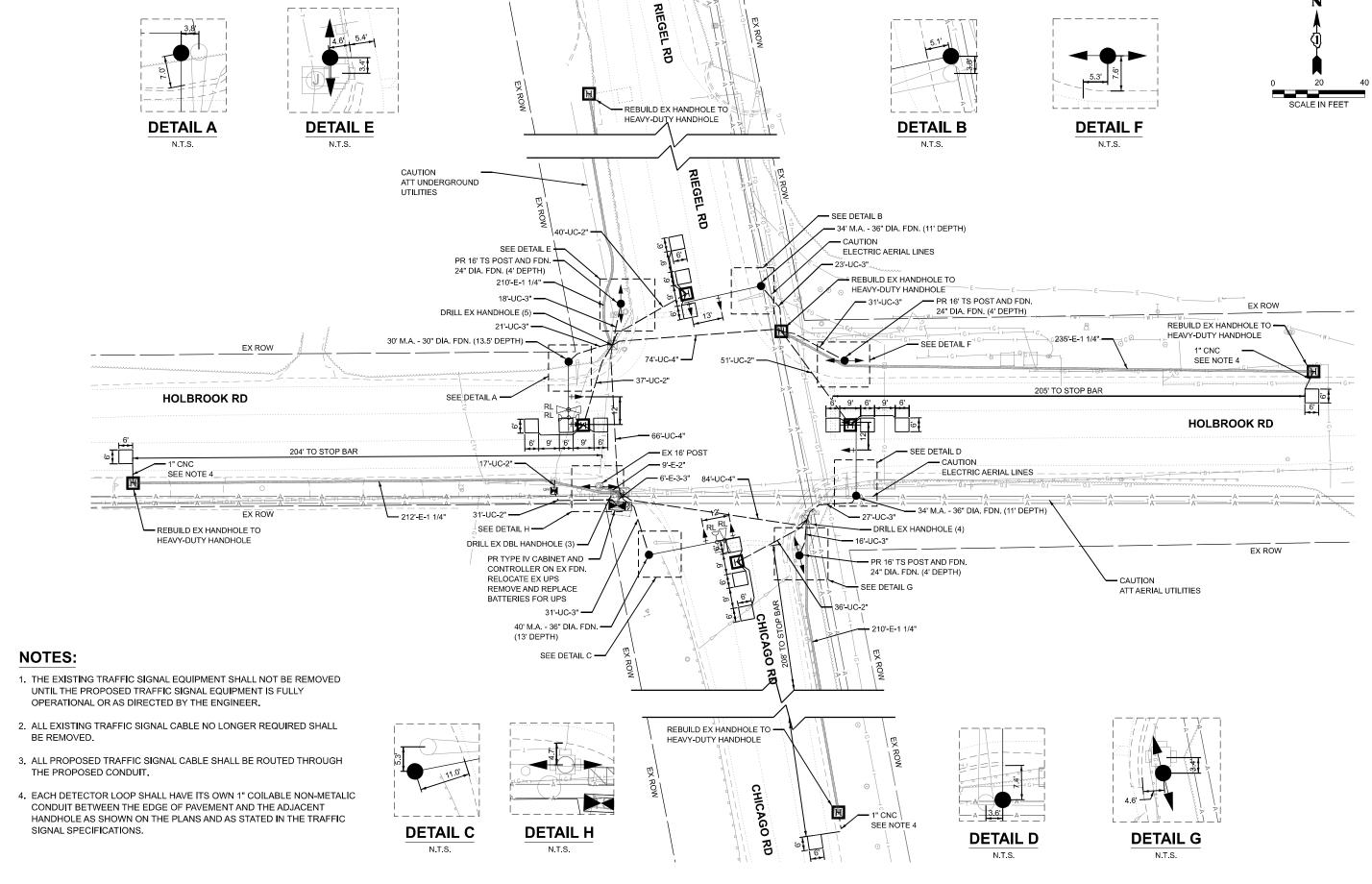
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12/19/2024

REVISED

REVISED

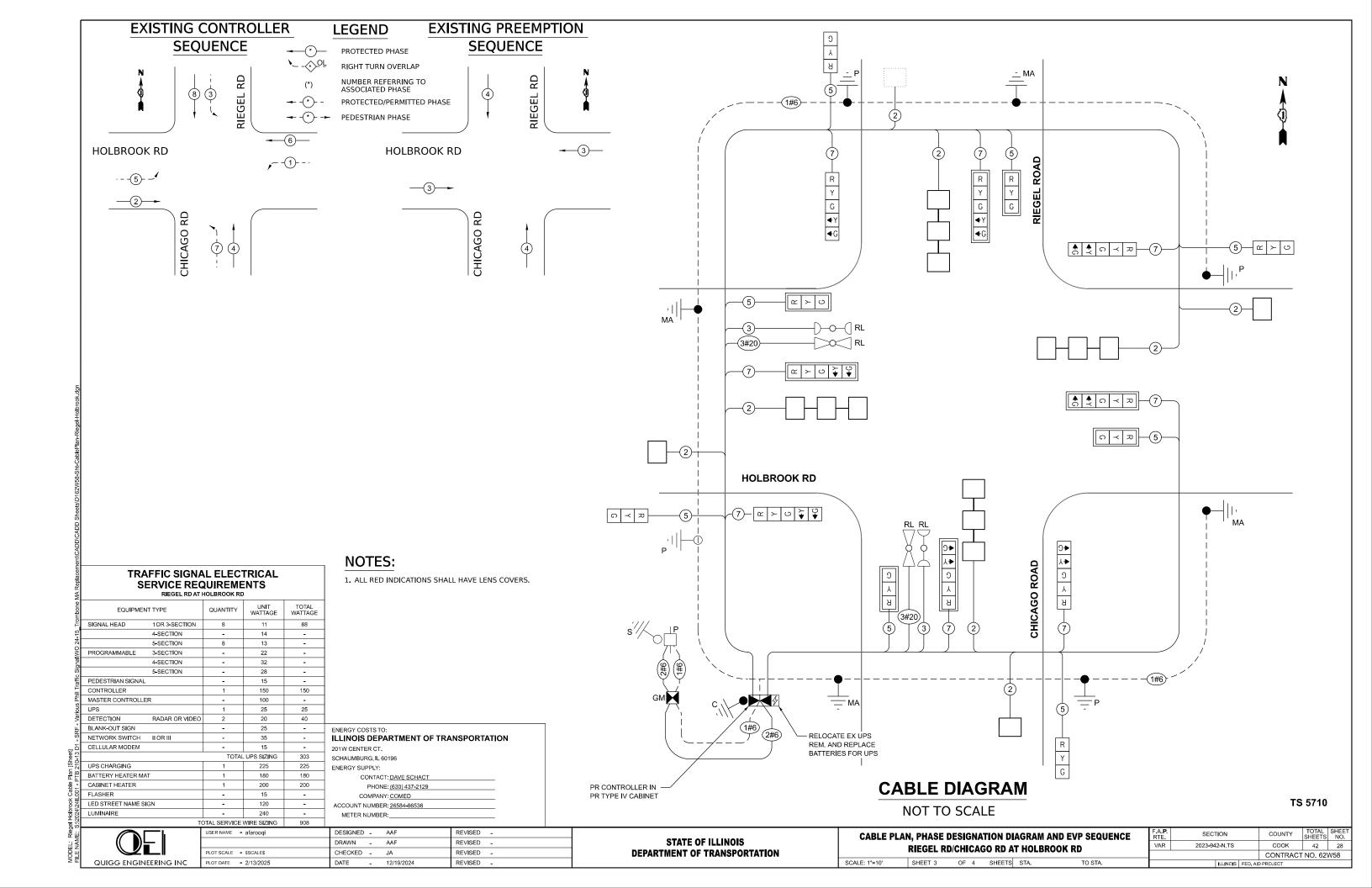
REVISED -

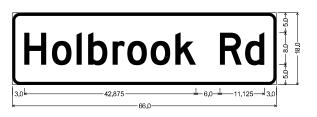


TRAFFIC SIGNAL MODERNIZATION PLAN
RIEGEL RD/CHICAGO RD AT HOLBROOK RD

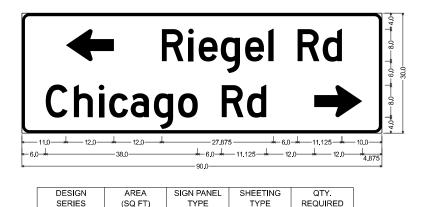
SHEET 2 OF 4 SHEETS STA. TO ST

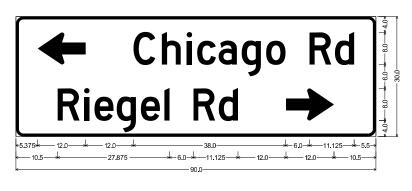
TS 5710





DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	8.25	1	ZZ	2





DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	18.75	2	ZZ	1

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.

NOTE:

FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL (TS-02)

SCHEDULE OF QUANTITIES

PAY ITEM DESCRIPTION	UNIT	QUANTIT
SIGN PANEL - TYPE 1	SQ FT	16.5
SIGN PANEL - TYPE 2	SQ FT	37.5
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	212
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	167
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	224
HEAVY-DUTY HANDHOLE	EACH	4
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	288
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1295
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1344
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	2070
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	74
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1557
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE, 40 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	16.0
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	13.5
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	35.0
DRILL EXISTING HANDHOLE	EACH	12
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP, TYPE I	FOOT	524
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	2
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	4640
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	5
REMOVE EXISTING CONCRETE FOUNDATION	EACH	7
TEMPORARY INFORMATION SIGNING	SQ FT	103
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	281
ROD AND CLEAN EXISTING CONDUIT	FOOT	873
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
SELECTIVE CLEARING	UNIT	0.75
PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE	UNIT	1
REMOVE AND REINSTALL SIGN PANEL	SQFT	19
REMOVE AND REPLACE BATTERIES FOR UNINTERUPTABLE POWER SUPPLY, EXTENDED	EACH	1
LED SIGNAL FACE, LENS COVER	EACH	16

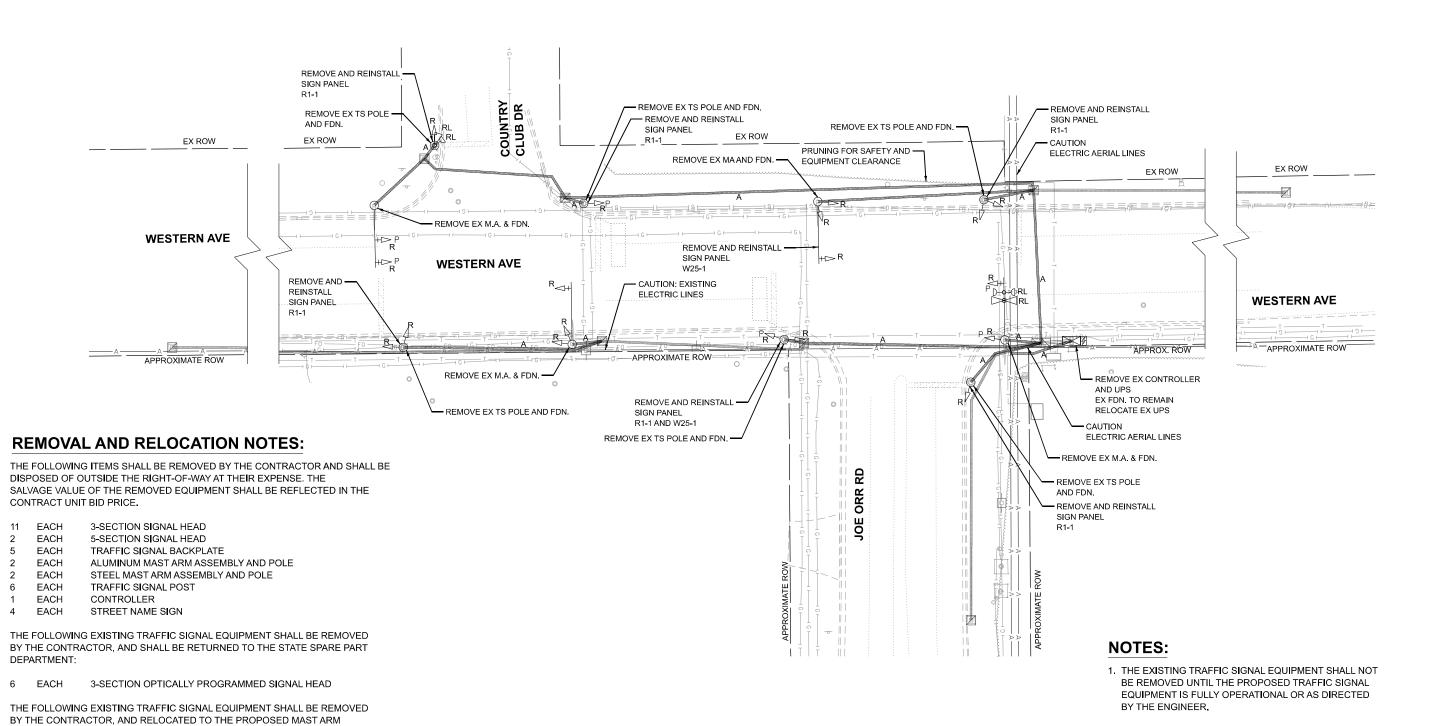
* 100% COSTS TO THE VILLAGE OF CHICAGO HEIGHTS

SCALE: 1"=10'

TS 5710



JSER NAME = afarooqi	DESIGNED - AAF	REVISED -
	DRAWN - AAF	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - JA	REVISED -
PLOT DATE = 2/13/2025	DATE - 12/19/2024	REVISED -



QUIGG ENGINEERING INC

ASSEMBLIES:

EACH

CONFIRMATION BEACON

LIGHT DETECTOR

USER NAME = AFaroogi DESIGNED - AAF REVISED DRAWN -AAF REVISED REVISED PLOT DATE = 4/24/2025 12/19/2024 REVISED .

REMOVAL PLAN WESTERN AVE AT JOE ORR RD/COUNTRY CLUB DR SCALE: 1"=20' SHEET 1 OF 4 SHEETS STA.

COUNTY COOK

TS 21795

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

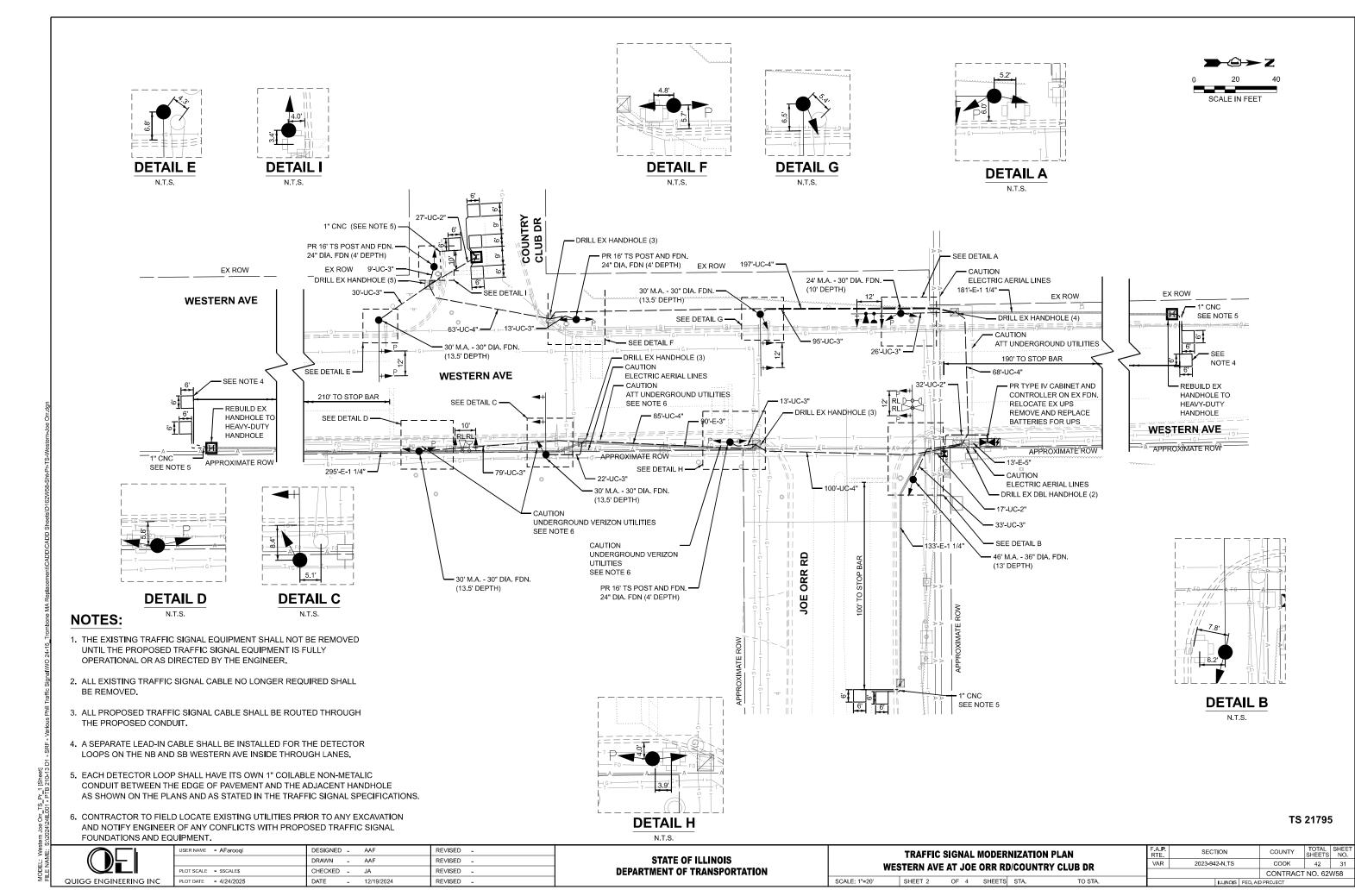
SECTION VAR 2023-942-N.TS 42 CONTRACT NO. 62W58

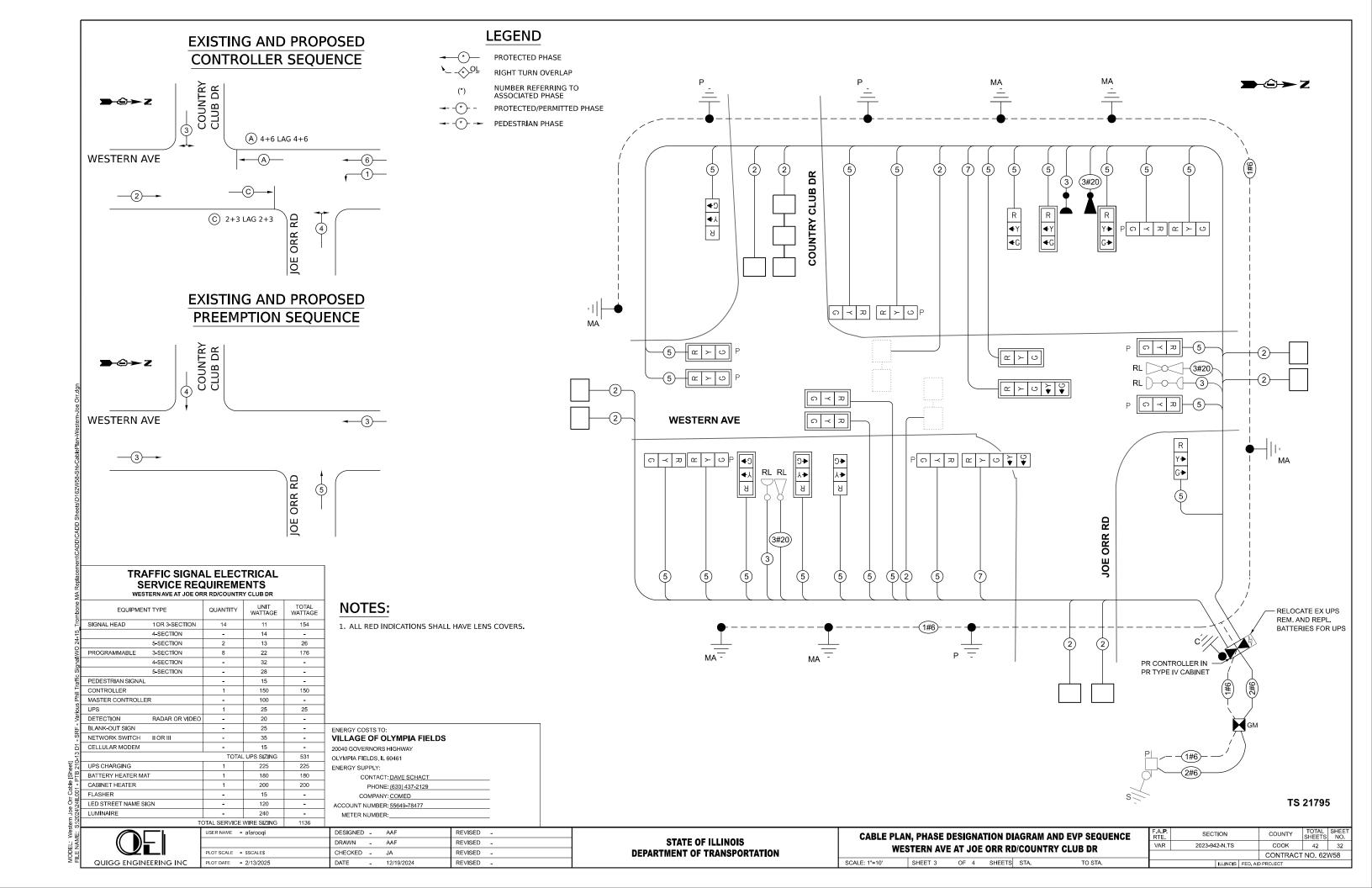
2. ALL EXISTING TRAFFIC SIGNAL CABLE NO LONGER

3. EXISTING UPS TO BE RELOCATED TO PR CONTROLLER

REQUIRED SHALL BE REMOVED.

AND CABINET.





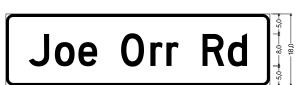


DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	9	1	ZZ	2

Country Club Dr



11.25



ZZ

5.75-	17.125	 —— 14.25 —	 −11.125-∔ -5.7	5→
Ļ		66.0		_,

DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	8.25	1	ZZ	2

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.

FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL (TS-02)

SCHEDULE OF QUANTITIES

_			
\vdash	SIGN PANEL - TYPE 1	SQ FT	34.5
	SIGN PANEL - TYPE 2	SQ FT	22.5
Г	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA-	FOOT	76
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	320
	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	513
	HEAVY-DUTY HANDHOLE	EACH	1
	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	668
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	5945
	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	431
	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1PAIR	FOOT	3736
-	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	71
\vdash	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1930
⊢	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
-	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
_	STEEL MAST ARM ASSEMBLY AND POLE. 30 FT.	EACH	4
⊢	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
-	CONCRETE FOUNDATION, TYPE A	FOOT	16.0
-	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	64.0
_	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	13.0
_	DRILL EXISTING HANDHOLE	EACH	20
_	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7
-	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	7
-	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
_	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1
-	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
_	OPTICALLY PROGRAMMED SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
_	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	12
_	INDUCTIVE LOOP DETECTOR	EACH	10
_	DETECTOR LOOP, TYPE I	FOOT	401
\vdash	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
_	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, PHASING UNIT	EACH	2
\vdash	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	7818
\vdash	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
_	REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	2
_	REMOVE EXISTING CONCRETE FOUNDATION	EACH	10
\vdash	TEMPORARY INFORMATION SIGNING	SQFT	103
\vdash	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	677
-	ROD AND CLEAN EXISTING CONDUIT	FOOT	707
_	SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
_	PRUNING FOR SAFETY AND EQUIPMENT CLEARANCE	UNIT	1
_	REMOVE AND REINSTALL SIGN PANEL	SQ FT	48
\vdash			1
-	REMOVE AND REPLACE BATTERIES FOR UNINTERUPTABLE POWER SUPPLY, EXTENDED	EACH	24
-	LED SIGNAL FACE, LENS COVER EMERGENCY VEHICLE PRIORITY SYSTEM	EACH EACH	1

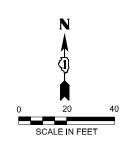
* 100% COSTS TO THE VILLAGE OF OLYMPIA FIELDS

SCALE: 1"=10'

TS 21795



USER NAME = afarooqi	DESIGNED .	-	AAF	REVISED	-
	DRAWN .	-	AAF	REVISED	-
PLOT SCALE = \$SCALE\$	CHECKED .	-	JA	REVISED	-
PLOT DATE = 2/13/2025	DATE .	_	12/19/2024	REVISED	-



REMOVAL AND RELOCATION NOTES:

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

11 EACH SIGNAL HEAD, 3-SECTION SIGNAL HEAD
3 EACH PEDESTRIAN PUSH-BUTTON
3 EACH PEDESTRIAN SIGNAL HEAD
6 EACH TRAFFIC SIGNAL BACKPLATE

3 EACH ALUMINUM MAST ARM ASSEMBLY AND POLE

1 EACH CONTROLLER

1 EACH UNINTERRUPTIBLE POWER SUPPLY

1 EACH TRAFFIC SIGNAL POST 2 EACH STREET NAME SIGN

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

2 EACH LIGHT DETECTOR

NOTES:

- 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 5195

QUIGG ENGINEERING INC

REMOVE EX M.A. & FDN. -

EX ROW

REMOVE AND REINSTALL -

REMOVE EX STOP BAR

REMOVE EX M.A. & FDN. -

REMOVE AND REINSTALL

SIGN PANEL R3-2

SIGN PANEL

REMOVE AND REINSTALL -

W11-1 AND W16-7PL

SIGN PANEL

 USER NAME
 = afarooqi
 DESIGNED
 AAF
 REVISED

 DRAWN
 AAF
 REVISED

 PLOT SCALE
 = SSCALE\$
 CHECKED
 JA
 REVISED

 PLOT DATE
 = 2/13/2025
 DATE
 12/19/2024
 REVISED

GOVERNORS HWY

REMOVE EX HANDHOLE

REMOVE EX. HANDHOLE

REMOVE EX M.A. & FDN.

SIGN PANEL

- REMOVE AND REINSTALL

W11-2, W16-7P AND R6-1

APPROX, ROW

REMOVE EX CONTROLLER AND UPS

REMOVE AND REINSTALL

EX FDN. TO REMAIN

R3-2 AND R6-1

POPLAR AVE

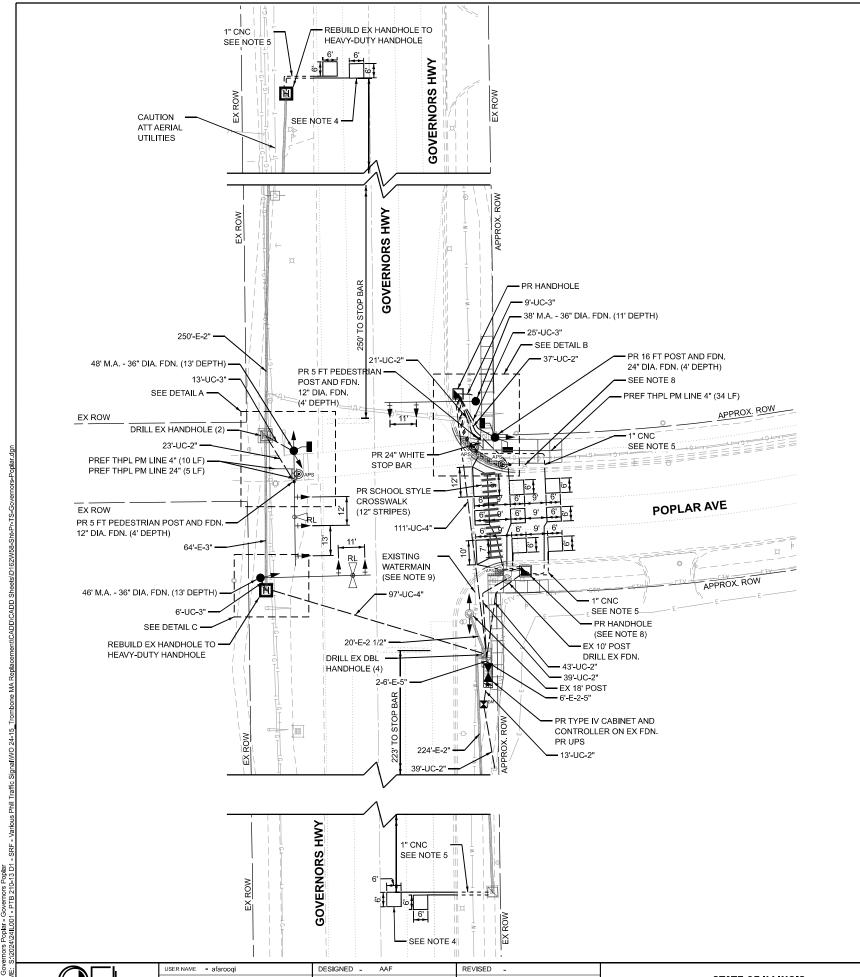
REMOVE EX TS POST & FDN.

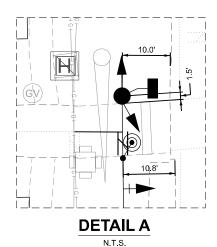
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

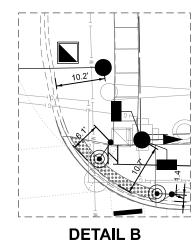
REMOVAL PLAN
GOVERNORS HWY AT POPLAR AVE

SHEET 1 OF 4 SHEETS STA. T

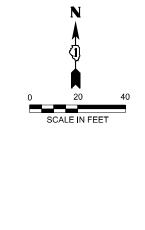
SCALE: 1"=20'

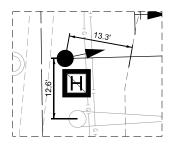






N.T.S.





DETAIL C

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 GOVERNORS HWY INSIDE THROUGH LANES.
- 5. 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.
- 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 PEDESTRIAN POSTS THAT HAVE PEDESTRIAN EQUIPMENT WILL HAVE TO BE APPROVED BY THE ENGINEER TO INSURE ADA COMPLIANCE.
- 8. CONTRACTOR TO POTHOLE THE EXISTING STREET LIGHT CONDUIT PRIOR TO EXCAVATOIN FOR THE PROPOSED TRAFFIC SIGNAL IMPROVEMENTS. REPAIRS CAUSED BY DAMAGE TO THE STREETLIGHT CONDUIT OR WIRING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 9. CONTRACTOR TO POTHOLE THE EXISTING WATERMAIN PRIOR TO EXCAVATION FOR THE PROPOSED TRAFFIC SIGNAL IMPROVEMENTS. REPAIRS CAUSED BY DAMAGE TO THE WATERMAIN SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

TS 5195

DRAWN - AAF REVISED REVISED QUIGG ENGINEERING INC PLOT DATE = 4/2/2025 DATE - 12/19/2024 REVISED .

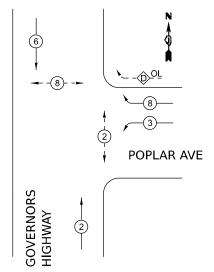
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TRAFFIC SIGNAL MODERNIZATION PLAN **GOVERNORS HWY AT POPLAR AVE** SHEET 2 OF 4 SHEETS STA. TO STA.

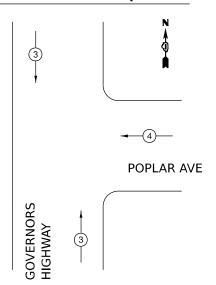
SECTION COUNTY 2023-942-N.TS COOK 42 CONTRACT NO. 62W58

SCALE: 1"=20'





EXISTING AND PROPOSED PREEMPTION SEQUENCE



LEGEND

PROTECTED PHASE RIGHT TURN OVERLAP

NUMBER REFERRING TO ASSOCIATED PHASE

PROTECTED/PERMITTED PHASE

PEDESTRIAN PHASE

TRAFFIC SIGNAL ELECTRICAL

SERVICE REQUIREMENTS

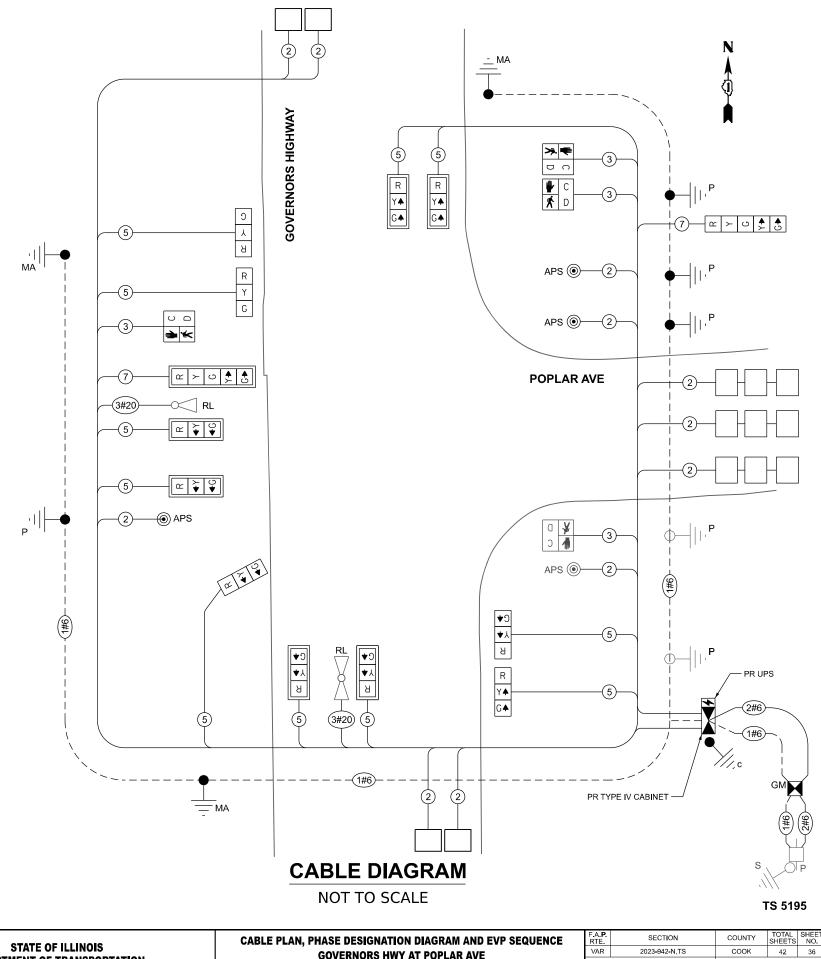
	GOVERNORS HWY AT POPLAR AVE							
	EQUIPMENT TYPE		QUANTITY	UNIT WATTAGE	TOTAL WATTAGE			
	SIGNAL HEAD	1 OR 3-SECTION	11	11	121			
1		4-SECTION	-	14	-			
		5-SECTION	2	13	26			
	PROGRAMMABLE	3-SECTION	-	22	-			
		4-SECTION	-	32	-			
		5-SECTION	-	28	-			
	PEDESTRIAN SIGNAL		4	15	60			
	CONTROLLER		1	150	150			
	MASTER CONTROLLE	R	-	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	402			
	UPS CHARGING		1	225	225			
	BATTERY HEATER MA	·Τ	1	180	180			
	CABINET HEATER		1	200	200			
	FLASHER		-	15	-			
1	LED STREET NAME SI	GN	-	120				

240

1. ALL RED INDICATIONS SHALL HAVE LENS COVERS.

ENERGY COSTS TO: VILLAGE OF RICHTON PARK 4455 SAUK TRAIL RICHTON PARK, IL 60471 ENERGY SUPPLY: CONTACT: DAVE SCHACT PHONE: (630) 437-2129 COMPANY: COMED ACCOUNT NUMBER: 62017-96500 METER NUMBER:

NOTES:



LUMINAIRE

QUIGG ENGINEERING INC

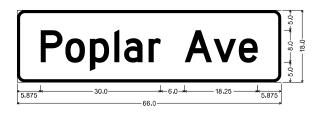
DESIGNED - AAF REVISED REVISED REVISED PLOT DATE = 2/13/2025 DATE - 12/19/2024 REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SECTION CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EVP SEQUENCE 2023-942-N,TS **GOVERNORS HWY AT POPLAR AVE** SHEET 3 OF 4 SHEETS STA.

CONTRACT NO. 62W58

DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	10.5	2	77	1



DESIGN	AREA	SIGN PANEL	SHEETING	QTY.
SERIES	(SQ FT)	TYPE	TYPE	REQUIRED
D	8.25	1	ZZ	2

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE.

NOTE: FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION PLEASE SEE DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGN DETAIL (TS-02)

SCHEDULE OF QUANTITIES

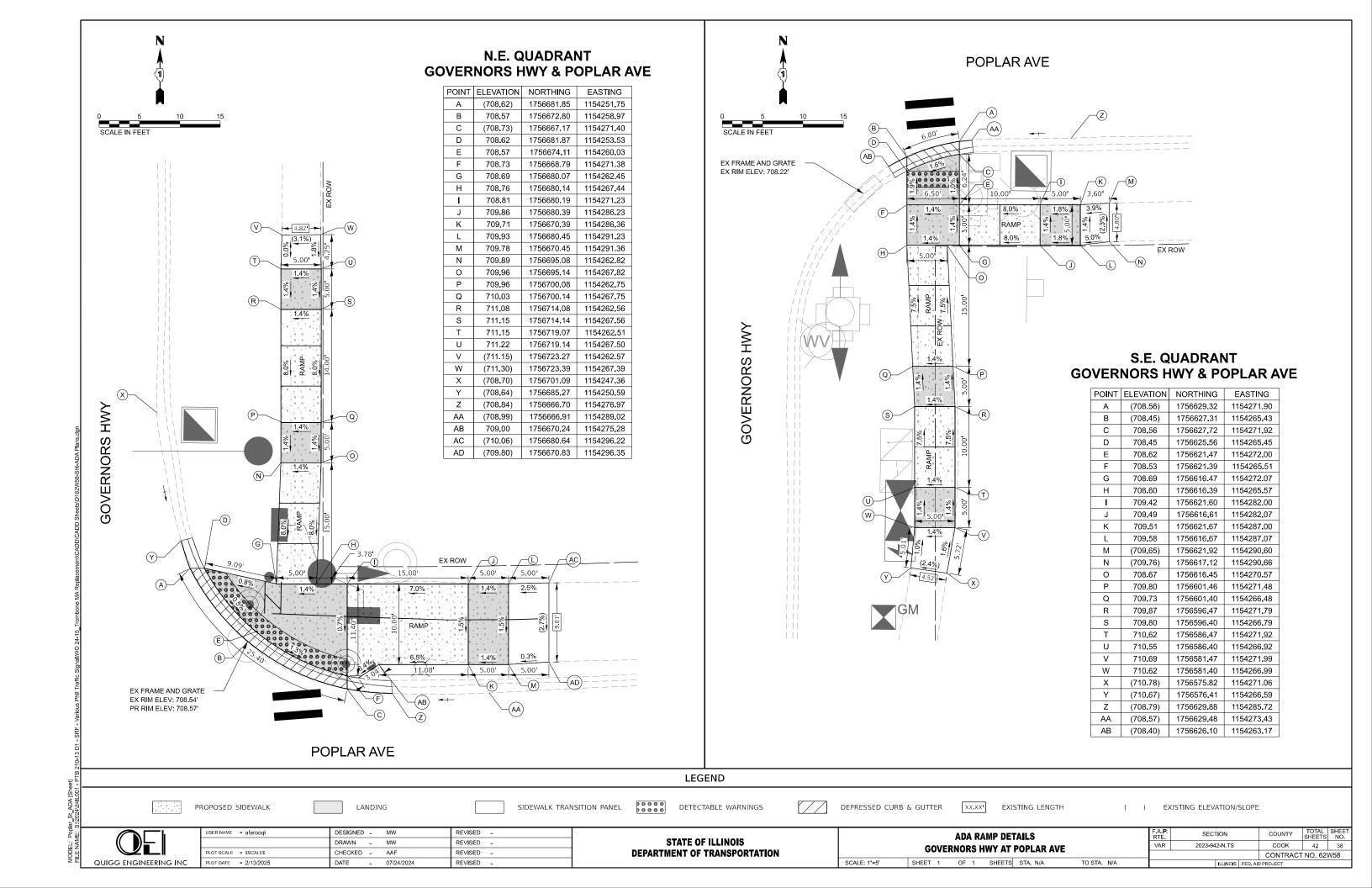
PAY ITEM DESCRIPTION	UNIT	QUANTIT
SIGN PANEL - TYPE 1	SQ FT	16.5
SIGN PANEL - TYPE 2	SQ FT	10.5
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	90
PREFORMED THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	44
PREFORMED THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	9
PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	10
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	215
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	53
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	208
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	691
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1153
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2147
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	451
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 1PAIR	FOOT	1738
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	74
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	_	
	FOOT	1167
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	_	1
STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 48 FT.	EACH	1.0
CONCRETE FOUNDATION, TYPE A	FOOT	8.0
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	37
DRILL EXISTING FOUNDATION	EACH	1
DRILL EXISTING HANDHOLE	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
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	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	7
INDUCTIVE LOOP DETECTOR	EACH	7
DETECTOR LOOP, TYPE I	FOOT	718
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	2
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3973
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REBUILD EXISTING HANDHOLE TO HEAVY-DUTY HANDHOLE	EACH	2
REMOVE EXISTING HANDHOLE	EACH	2
REMOVE EXISTING CONCRETE FOUNDATION	EACH	4
TEMPORARY INFORMATION SIGNING	SQ FT	103
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 1	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	270
ROD AND CLEAN EXISTING CONDUIT	FOOT	564
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
PEDESTRIAN SIGNAL POST, 5 FT.	EACH	3
REMOVE AND REINSTALL SIGN PANEL	_	30
	SQ FT	-
UNINTERRUPTABLE POWER SUPPLY AND CABINET (SPECIAL)	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	3
CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	12
LED SIGNAL FACE, LENS COVER	EACH	13

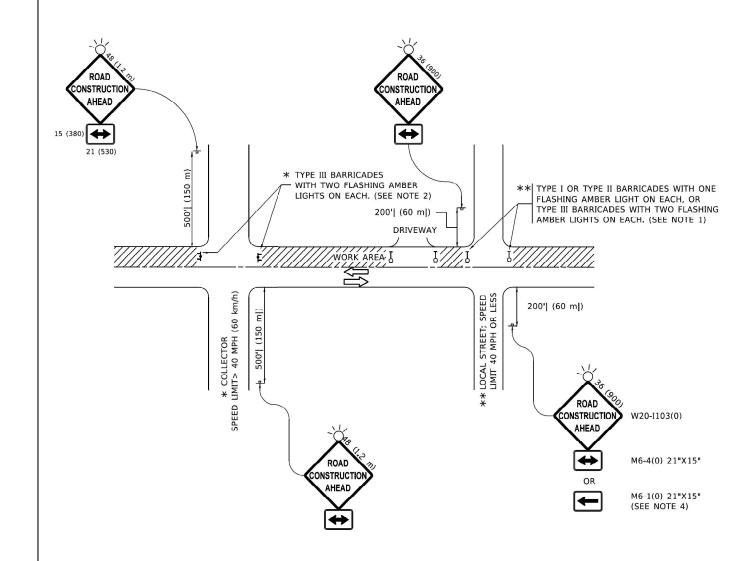
* 100% COSTS TO THE VILLAGE OF RICHTON PARK

TS 5195



user name = afarooqi	DESIGNED - AAF	REVISED -	
	DRAWN - AAF	REVISED -	
PLOT SCALE = \$SCALE\$	CHECKED - JA	REVISED -	
PLOT DATE = 2/13/2025	DATE - 12/19/2024	REVISED -	





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.
- 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.
- THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY
 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)
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE
 4. SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL
 BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

SCALE: 1"=10'

- 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
- 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
 = afarooqi
 DESIGNED
 REVISED

 DRAWN
 REVISED

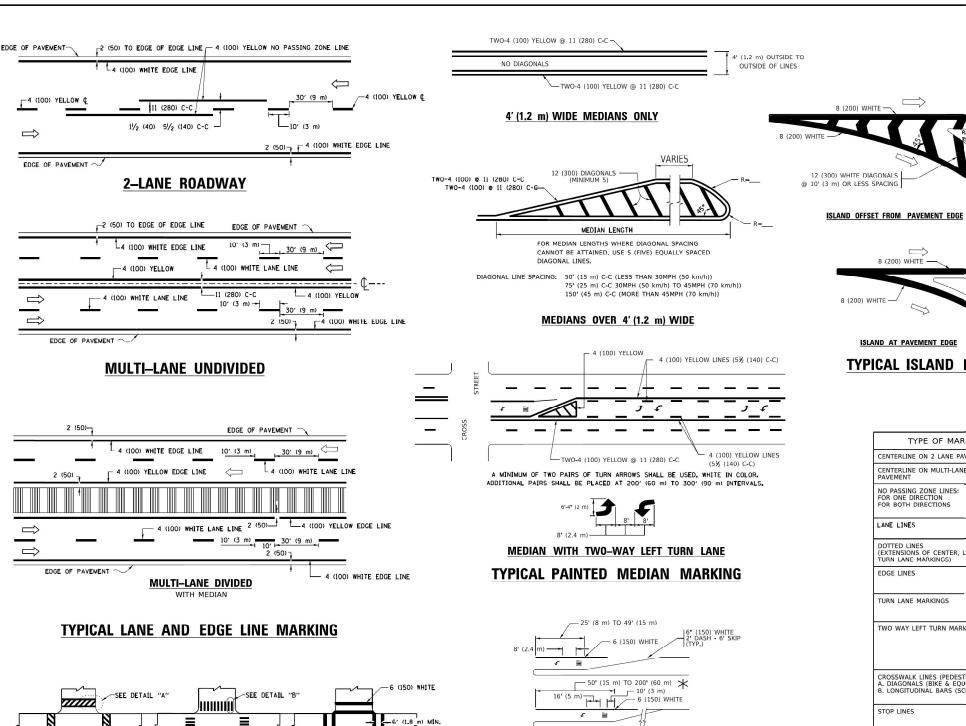
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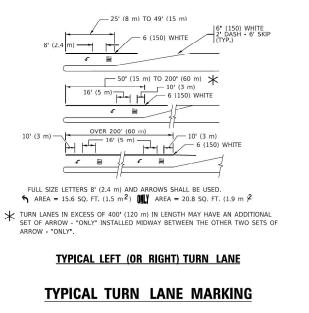
 PLOT DATE
 = 2/13/2025
 DATE
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

SHEET OF SHEETS STA. TO STA





D(FT) SPEED LIMIT 345 30 665 50 **COMBINATION** LEFT AND U-TURN 5'-4" (1620) √ 32 R (810)

> LANE REDUCTION TRANSITION * LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS		
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE		
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C		
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN		
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE		
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE		
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW		
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL		
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL		
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.		
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE		
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.		
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))		
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6 (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ, FT. (0.33 m)FEACH "X"=54.0 SQ, FT. (5.0 m)2		
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS > 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))		
U TURN ARROW	SEE DETAIL	SOL I D	WHITE	16.3 SF		
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF		

U-TURN

2 (50)

RAISED

8 (200) WHITE -

ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

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

SHEET

SCALE: NONE

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

USER NAME = afarooqi	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = 2/13/2025	DATE -	REVISED -

PEDESTRIAN

6 (150) WHITE

TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

DETAIL "A"

2' (600)

DETAIL "B"

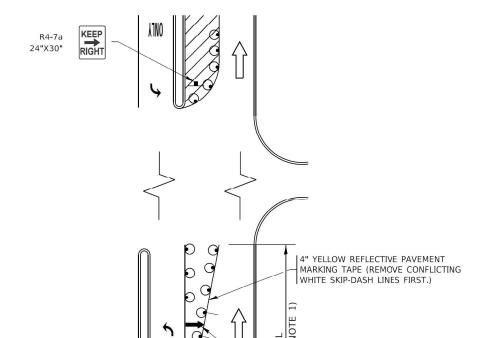
-12 (300) WHITE

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE		F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
TYPICAL PAVEMENT MARKINGS			VAR	2023-942-N,TS	COOK	42	40		
				TC-13 CONTRACT NO.					
	0.5	OLICETO	OTA	TO OTA					

/////// BICYCLE & EQUESTRIAN

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

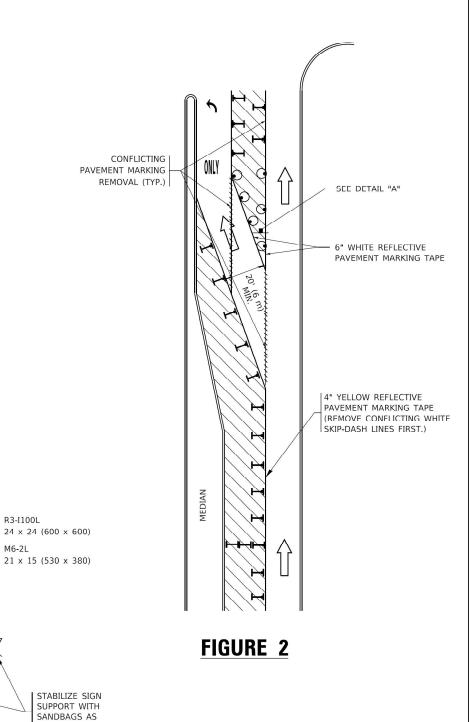


LEGEND WORK AREA LANE OPEN TO TRAFFIC ARROW BOARD TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT O DRUM WITH STEADY BURN LIGHT SIGN ASSEMBLY TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

NOTES:

- 1. A) WHEN "L" IS \leq THE STORAGE LENGTH OF THE TURN LANE (AS SHOWN IN FIG. 1), USE FIGURE 1.
 - B) WHEN "L" IS > THE STORAGE LENGTH OF THE TURN LANE OR THE TURN LANE IS WITHIN THE LANE CLOSURE, USE FIGURE 2.
- 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.
- LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS SHALL BE MONODIRECTIONAL.
- 4. REFLECTIVE TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED THROUGHOUT THE BARRICADED AREAS OF EACH TURN BAY AS SHOWN WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN (14) DAYS.
- 5. THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-I100R 24 x 24 (600 x 600) AND M6-2R 21 x 15 (530 x 380) SHALL BE USED.
- THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
- THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
- TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

TURN BAY ENTRANCE WITHIN A LANE CLOSURE



DETAIL A

TURN

LANE

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

USER NAME = atarooqi	DESIGNED -	KEVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = 2/13/2025	DATE -	REVISED -

FIGURE 1

ARROW BOARD

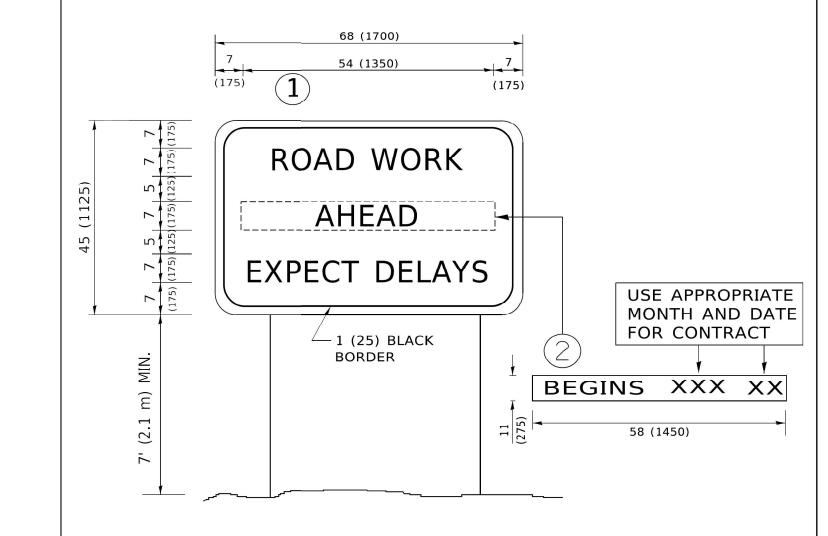
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

210-13 D1 - SRF - Various PhII Traffic Signal/WO 24-15_Trombone MA Replacement/C/

ODEL: Details-12 [Sheet]

SEE DETAIL "A"

STA' Departmen'



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.

USER NAME = afarooqi	DESIGNED -	REVISED -			ARTERIAL ROAD			F.A.P. RTF	SECTION	COUNTY	TOTAL	SHEET NO.
	DRAWN -	REVISED -	STATE OF ILLINOIS		INFORMATION SIGN			VAR	2023-942-N,TS	соок	42	42
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		INFORMATION SIGN				TC-22	CONTRAC	CT NO. 62V	N58
PLOT DATE = 2/13/2025	DATE -	REVISED -		SCALE: NONE SHEET OF SHEETS STA. TO STA.			TO STA.	ILLINOIS FED.		D PROJECT		