STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

D-91-548-20



2020-185-SW&TS

соок 25 1

CONTRACT NO. 62M23

LOCATION OF SECTION INDICATED THUS: -

STATE OF ILLINOIS

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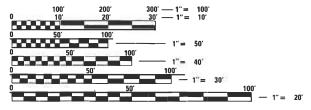
FOR INDEX OF SHEETS, SEE SHEET NO. 2

PROJECT LOCATED IN THE CITY OF ELGIN

IL RTE 58 (SUMMIT ST) MINOR ARTERIAL **AADT: 13,700** SPEED LIMIT: 40 MPH

0

SHADY OAKS DR **MINOR ARTERIAL AADT: 5,400** SPEED LIMIT: 25 MPH



ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS 1-800-892-0123 OR 811

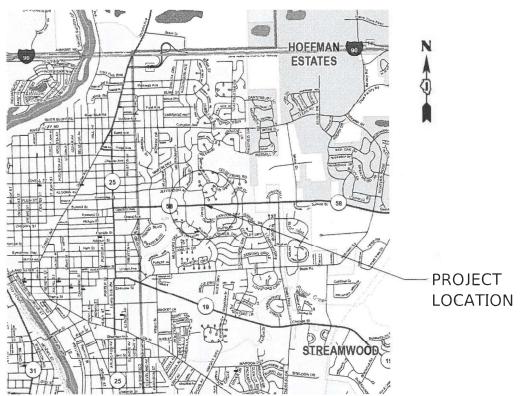
PROJECT ENGINEER: ANDREA VARGAS (847) 705-4419 PROJECT MANAGER: LUKASZ POCIECHA (847) 705-4420

CONTRACT NO. 62M23

PROPOSED HIGHWAY PLANS

FAU ROUTE 1320: IL RTE 58 (SUMMIT ST) AT SHADY OAKS DR **SECTION: 2020–185–SW&TS** PROJECT: STP-G206(950) TRAFFIC **SIGNAL MODERNIZATION COOK COUNTY**

C-91-346-20



LOCATION MAP - CITY OF ELGIN NOT TO SCALE

INDEX OF SHEETS

- 1 TITLE SHEET
- 2 INDEX OF SHEETS, STATE STANDARDS LIST, AND GENERAL NOTES
- 3-6 SUMMARY OF QUANTITIES
- 7-8 ADA SHEETS

878001-10

880006-01

886001-01

- 9-16 TRAFFIC SIGNAL STANDARD AND DETAILS
- 17-21 TRAFFIC SIGNAL
- 22-25 IDOT DISTRICT 1 DETAILS

IDOT DISTRICT 1 DETAILS

- TC-10 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
- TC-13 DISTRICT ONE TYPICAL PAVEMENT MARKINGS
- TC-14 TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)
- C-22 ARTERIAL ROAD INFORMATION SIGN
- TS-05 STANDARD TRAFFIC SIGNAL DESIGN DETAILS
- TS-02 MAST ARM MOUNTED STREET NAME SIGNS

IDOT HIGHWAY STANDARDS

424001-11	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424006-04	DIAGONAL CURB RAMPS FOR SIDEWALKS
424011-04	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424031-02	MEDIAN PEDESTRIAN CROSSINGS
701101-05	OFF-RD OPERATIONS, MULITLANE, 15' TO 24" FROM PAVEMENT EDGE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
805001-01	ELECTRIC SERVICE INSTALLATION DETAILS
814001-03	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING AND BONDING
877001-08	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

TYPICAL LAYOUTS FOR DETECTION LOOPS

CONCRETE FOUNDATION DETAILS

TRAFFIC SIGNAL MOUNTING DETAILS DETECTOR LOOP INSTALLATIONS

MIXTURE TYPE	AIR VOIDS @ NODES	QMP
DOADWAY RECUREACING		
ROADWAY RESURFACING		
HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70; 1 1/2"	4% @ 70 GYR	QA/QC

NOTES: THE UNIT WEIGHT USED TO CALCULATE HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SQYD/IN.

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND THE "AC TYPE" FOR NON-POLYMERIZED HMA MIXES SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS

FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS

QUALITY MANAGEMENT PROGRAM (QMP) IDENTIFIED THE PARTICULAR QUALITY CONTROL SPECIFICATION THAT APPLIES TO THE HMA MIXTURE.

GENERAL NOTES

- 1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT (800)-892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED UTILITIES (48 HOURS NOTIFICATION IS REQUIRED).
- 2. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (574) 705-4470 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 BEGGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARM LENGTH.
- 4. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, LOCALLY OWNED EQUIPMENT, LEASED ENFORCEMENT CAMERA SYSTEM FACILITIES AND IDOT UNDERGROUND FACILITIES CONTACT THE LOCAL COUNTIES, MUNICIPALIES AND IDOT FOR LOCATES. THE CONTRACTOR SAHLL 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 HRS NOTIFICATION REQUIRED).
- 5. 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.
- 6. 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 THE FOUNDATIONS.
- 7. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPNAIES, LOCAL GOVERNMENT AGENCIES AND IDOT.
- 8. 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 FIELD SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.
- 9. PARTIAL PAYMENT AS DESCRIBED IN ARTICLE 109.07(b) OF THE STANDARD SPECIFICATIONS WILL NOT BE ALLOWED FOR ITEMS INCLUDED IN THIS CONTRACT
- 10. 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.
- 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.

Com		
Sam Schwartz	223 W. JACKSON SUITE 1101 CHICAGO, IL 60606 TEL: (773) 305-0800	

1	USER NAME = esalutz	DESIGNED -	ECS	REVISED -
		DRAWN -	KEM	REVISED -
٦	PLOT SCALE = 40.0000 ' / in.	CHECKED -	PAW	REVISED -
	PLOT DATE = 9/24/2020	DATE -	09/22/2020	REVISED -

INDEX OF	SHEETS, H	IIGHWAY	STANDA	ARDS, A	ND GENERAL NOTES	F.A.U. RTE	SEC ⁻	ΓΙΟΝ		COUNTY	TOTAL SHEETS	SHEET NO.
	11 6	TF 50 A	T SHADY	, UVKC	NR .	1320	2020-185	5-SW&TS	,	COOK	25	2
		IIL JU A	יו אוועטו	UAKS						CONTRAC	T NO. 67	2M23
SCALE: NTS	SHEET	OF	SHEETS	STA.	TO STA.			ILLINOIS	FED. A	ID PROJECT		

			90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	100% ELGIN
	UNIT	TOTAL QUANT I TY URBAN	ROADWAY 0005	TRAFFIC SIGNAL 0021 TS 3201	INTERCONNECT 0021 E 5D	EVP 0021
AVATION	CU YD	8	8			
URNISH AND PLACE, 4"	SQ YD	3	3			
SALT TOLERANT	SQ YD	3	3			
S MATERIALS (TACK COAT)	POUND	180	180			
SPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	3	3			
CEMENT CONCRETE PAVEMENT 8"	SQ YD	32	32			
E WARNINGS	SQ FT	68	68			
SPHALT SURFACE REMOVAL, 1-1/2"	SQ YD	269	269			
ON CURB AND GUTTER REMOVAL	FOOT	93	93			
REMOVAL	SQ FT	240	240			
TO BE ADJUSTED	EACH	1	1			
CURB, TYPE B	FOOT	36	36			
ON CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	93	93			
AL WASTE DISPOSAL	CU YD	55	55			
OSAL ANALYSIS	EACH	2	2			
SUBSTANCES PRE-CONSTRUCTION PLAN	LSUM	1	1			
SUBSTANCES FINAL CONSTRUCTION REPORT	LSUM	1	1			
SUBSTANCES MONITORING	CAL DA	4	4			
S FIELD OFFICE, TYPE A	CAL MO	6	6			
S FIELD	OFFICE, TYPE A					

Sam

223 W. JACKSON
SCHWARTZ CHICAGO
SCHWARTZ ELECTOR 095-0800
PLOT SCALE = 40.0000 '/ in.

 USER NAME
 = esalutz
 DESIGNED
 ECS
 REVISED

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 REVISED

 PLOT SCALE
 = 40.0000 ° / in.
 CHECKED
 PAW
 REVISED

 PLOT DATE
 = 8/14/2020
 DATE
 08/14/2020
 REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

IL	RTE 58	AT SHADY	OAKS	DRIVE		
SHEET	OF	SHEETS	STA.		TO STA.	

SCALE:

			REV	-SEP
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1320	2020-185-SW&TS	соок	25	3
		CONTRACT	NO. 62	2M23
	ILLINOIS FED. A	AID PROJECT		

				90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	100% ELGIN
CODE NO .	ITEM	UNIT	TOTAL QUANT I TY URBAN	ROADWAY 0005	TRAFFIC SIGNAL 0021 TS 3201	INTERCONNECT 0021 E 5D	EVP 0021
67100100	MOBILIZATION	L SUM	1	1			
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1			
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1			
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	60	60			
72000200	SIGN PANEL - TYPE 2	SQ FT	46		46		
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	243	243			
78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	294	294			
31028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1264		685	579	
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	80		80		
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	260		260		
81400100	HANDHOLE	EACH	4		3	1	
81400200	HEAVY-DUTY HANDHOLE	EACH	4		4		
81400300	DOUBLE HANDHOLE	EACH	2		2		
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1			1	
36400100	TRANSCEIVER - FIBER OPTIC	EACH	1			1	
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	925			925	
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	597		597		
 87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	866		625		241

Sam
Schwartz CHICAGO, 105-6066

USER NAME = esalutz	DESIGNED	-	ECS	REVISED	-
	DRAWN	-	KEM	REVISED	-
PLOT SCALE = 40.0000 ' / in.	CHECKED	-	PAW	REVISED	-
PLOT DATE = 8/13/2020	DATE	-	08/11/2020	REVISED	-

SCALE:

SECTION

				90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	100% ELGIN
CODE NO.	ITEM	UNIT	TOTAL QUANT I TY	ROADWAY 0005	TRAFFIC SIGNAL 0021 TS 3201	INTERCONNECT 0021 E 5D	EVP 0021
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1383		1383		
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1073		1073		
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1312		1312		
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	111		111		
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	483		483		
87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4		4		
87700160	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1		1		
87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1		1		
87700210	STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1		1		
87700220	STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1		1		
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	20		20		
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4		4		
87800400	CONCRETE FOUNDATION, TYPE E, 30-INCH DIAMETER	FOOT	51		51		
87900200	DRILL EXISTING HANDHOLE	EACH	1			1	
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	5		5		
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3		3		
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4		4		
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	3		3		



	USER NAME = esalutz	DESIGNED -	ECS	REVISED -
		DRAWN -	KEM	REVISED -
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	PLOT DATE = 8/13/2020	DATE -	08/11/2020	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE:

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				90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	90% FEDERAL 10% STATE	100% ELGIN
CODE NO .	ITEM	UNIT	TOTAL QUANT I TY	ROADWAY 0005	TRAFFIC SIGNAL 0021 TS 3201	INTERCONNECT 0021 E 5D	EVP 0021
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4		4		
88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8		8		
88500100	INDUCTIVE LOOP DETECTOR	EACH	5		5		
88600100	DETECTOR LOOP, TYPE I	FOOT	332		332		
88700200	LIGHT DETECTOR	EACH	2				2
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1				1
88800100	PEDESTRIAN PUSH-BUTTON	EACH	4		4		
X0320050	CONSTRUCTION LAYOUT (SPECIAL)	LSUM	1	1			
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	241				241
X1400081	FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1		1		
X1400150	SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1		1		
X1400201	RADAR VEHICLE DETECTION SYSTEM, SINGLE APPROACH, STOP BAR	EACH	2		2		
X8620200	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1		1		
X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM 24F	FOOT	951			951	
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	51.4	51.4			
Z0033046	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM-LEVEL 2	EACH	1			1	
Z0076600	TRAINEES	HOURS	500	500			
Z0076604	TRAINEES - TRAINING PROGRAM GRADUATE	HOURS	500	500			

Sam
Schwartz
Schickop IL 505050

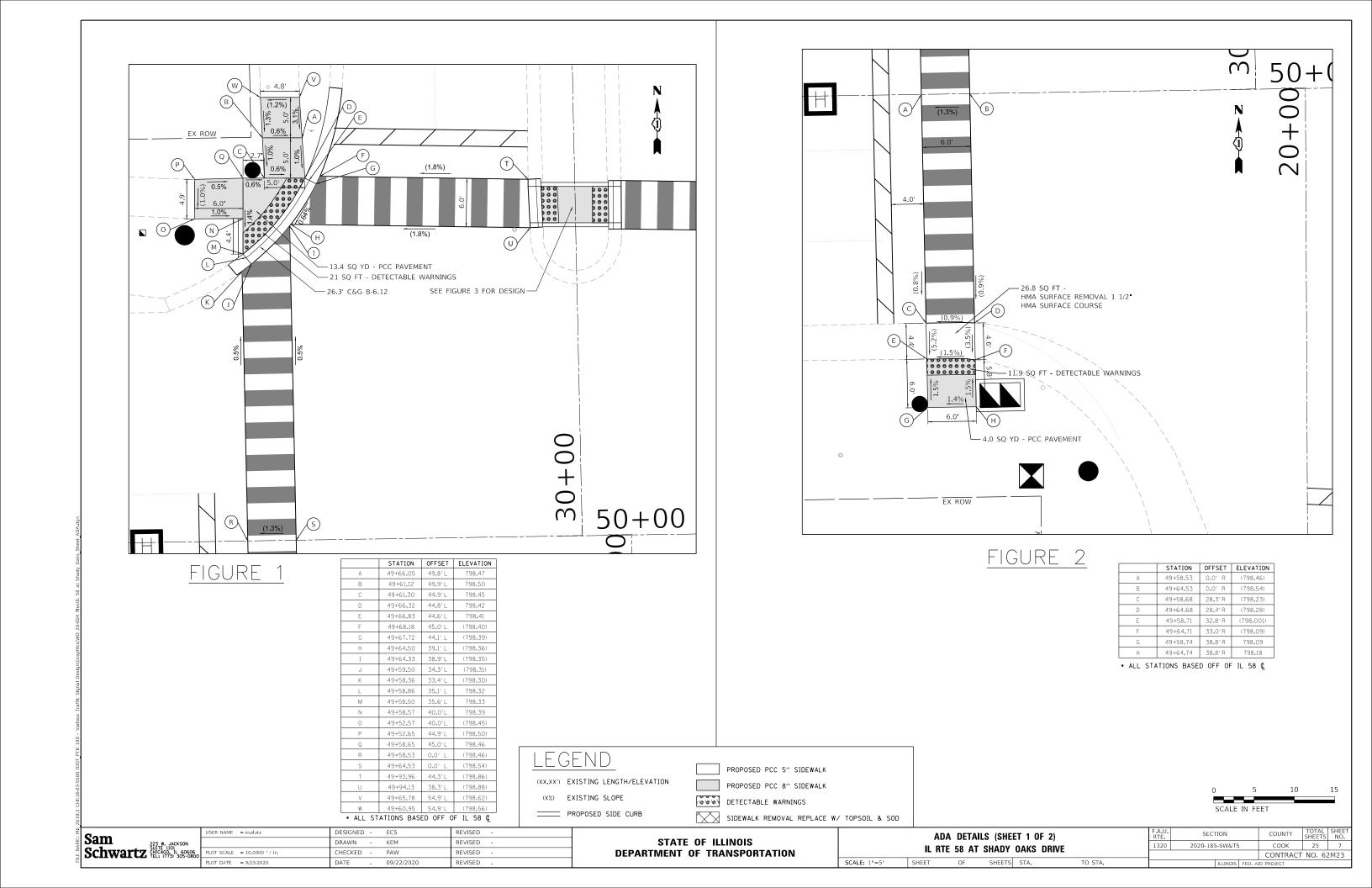
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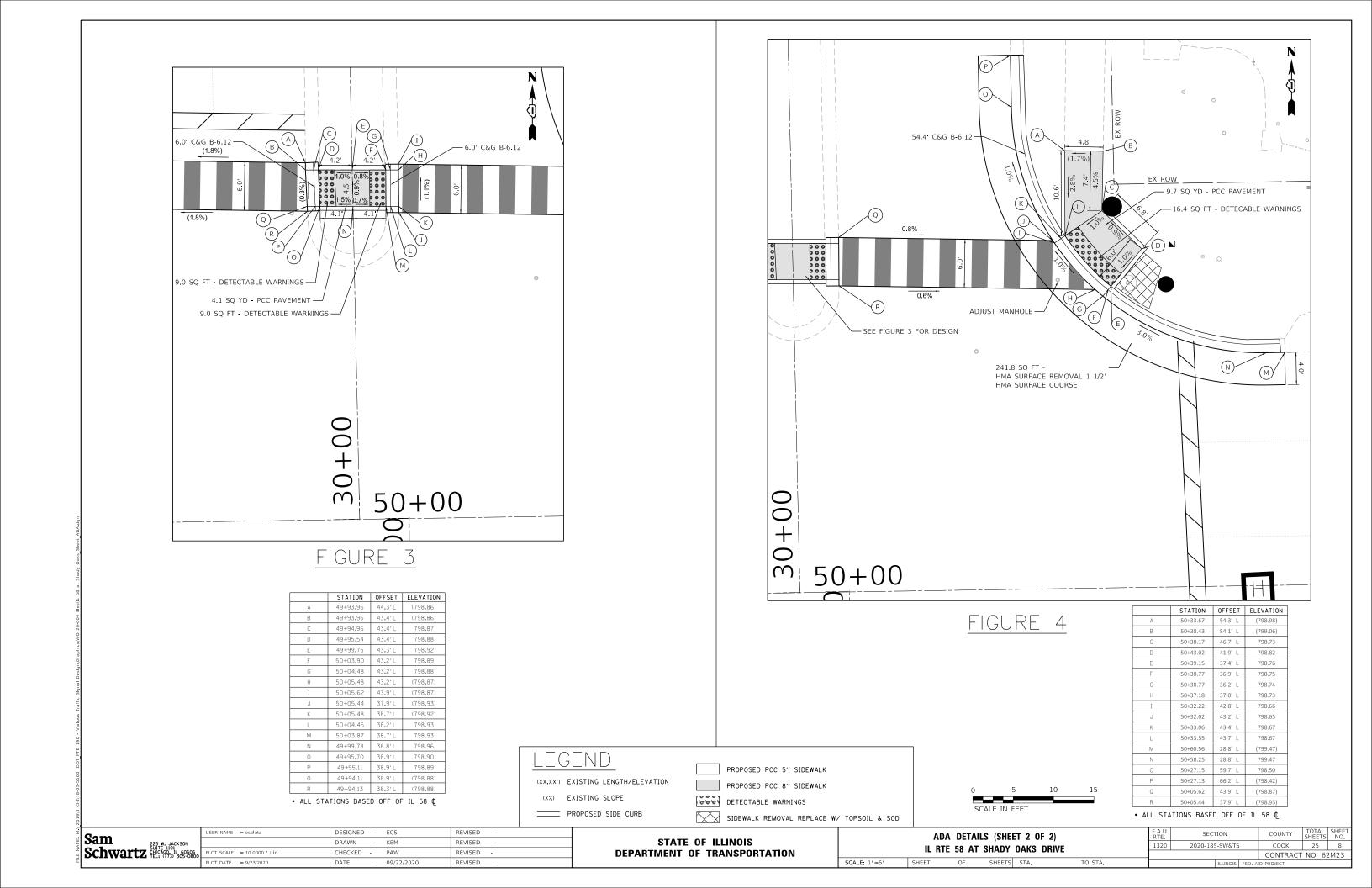
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES IL RTE 58 AT SHADY OAKS DRIVE								
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SCALE:

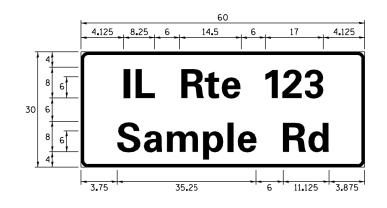
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F.A.U. RTE. SECTION COUNTY TOTAL SHEET NO.										
1320	2020-185	5-SW&TS	соок	25	6					
CONTRACT NO. 62M23										
ILLINOIS FED. AID PROJECT										

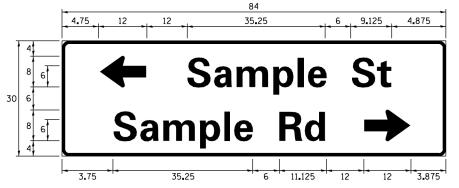




SIGN PANEL - TYPE 1 OR TYPE 2

3.75 35.25 6 11.125 3.875 Sample Rd





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

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVATION	WIDTH	(INCH)
NAME	ADDREVATION	SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Blvd	17.125	20.000
CIRCLE	Cir	11.125	13.000
COURT	C†	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	PI	7.125	7. 750
ROAD	Rd	9.625	11.125
ROUTE	R†e	12.625	14.500
STREET	S†	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" × 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'-O". ALL BORDERS SHALL BE ¾" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6", IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- 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:

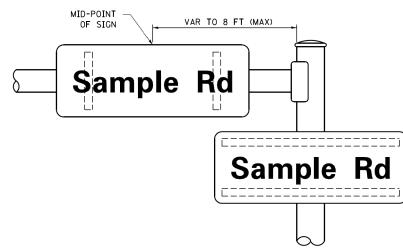
- J.O. HERBERT COMPANY, INC
MIDLOTHIAN, VA
SIGN SCREWS
1/4" x 14 x 1" H.W.H. #3
SELF TAPPING WITH NEOPRENE WASHER

- WESTERN REMAC, INC. BRACKETS PART *HPN034 (UNIVERSAL)
WOODRIDGE, IL CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

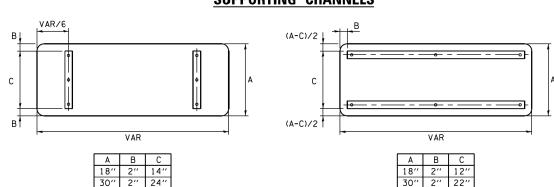
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

MOUNTING LOCATION

ARM OR POLE MOUNTED



SUPPORTING CHANNELS



SCALE.

STANDARD ALPHABETS SPACING CHART

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

	FHWA SEF	RIES "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	Α	0. 240	6. 804	0. 240		
В	0.240	4.482	0.480	В	0.240	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	Е	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		
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 K	0.240 0.880	4.082 4.482	0.880 0.480	J K	0.240 0.960	5.122 5.604	0.960		
L	0.880	4. 082	0.480	L	0.960	4. 962	0.240		
М	0.880	5. 284	0.880	M	0.960	6. 244	0.960		
N	0.880	4.482	0.880	N 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		
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 V	0.880	4.482	0.880	V	0.960	5.446	0.960		
W	0.240 0.240	4.962 6.084	0.240	W	0.240 0.240	6.084 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		
Ь	0.720	4.082	0.480	b	0.800	4.802	0.480		
С	0.480	4.002	0.240	С	0.480	4.722	0.240		
Ф	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	0.480	4.082	0.720	g	0.480	4.802	0.800		
h i	0.720	4.082	0.640	h i	0.800	4.722	0.720		
j	0.720 0.000	1.120 2.320	0.720 0.720	i	0.800	1. 280 2. 642	0.800		
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0	0.480	4.082	0.480	0	0.480	4.882	0.480		
Р	0.720	4.082	0.480	р	0.800	4.802	0.480		
q	0.480	4.082	0.720	q	0.480	4.802	0.800		
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* ************************************	0.320	3. 362	0.240	s +	0.320	3. 762	0.240		
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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		
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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		
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE

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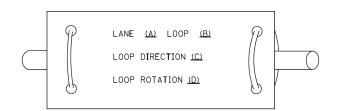
TRAFFIC SIGNAL LEGEND (NOT TO SCALE)

Comparing content	ITEM	<u>EXISTING</u>	<u>PROPOSE</u> D	ITEM	EXISTING	PROPOS E D	ITEM	EXISTING	<u>PROPOSED</u>
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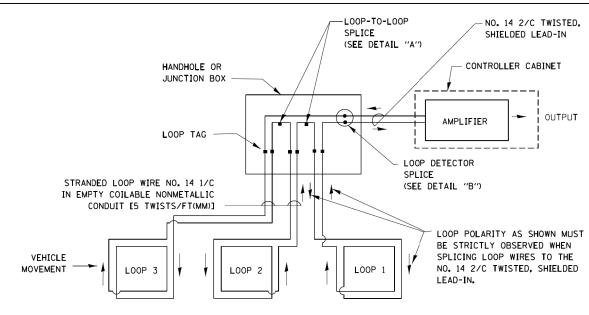
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- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC 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

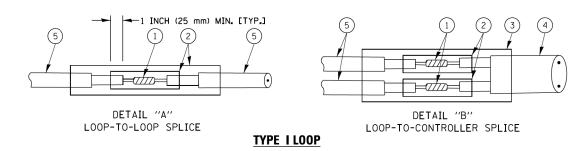


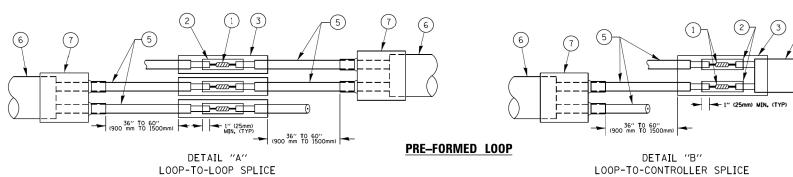
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP *1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



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

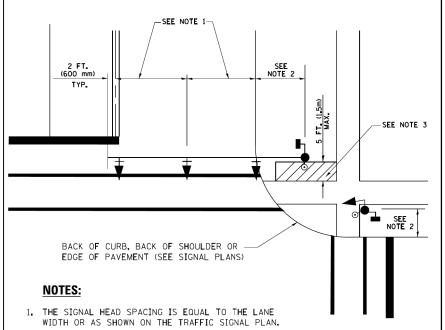
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PRE-FORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

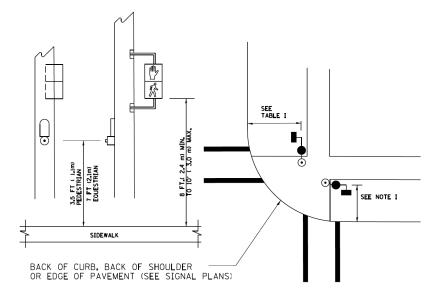
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TRAFFIC SIGNAL MAST ARM AND SIGNAL POST MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR FUTURE SIDEWALKBICYCLE PATH AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.



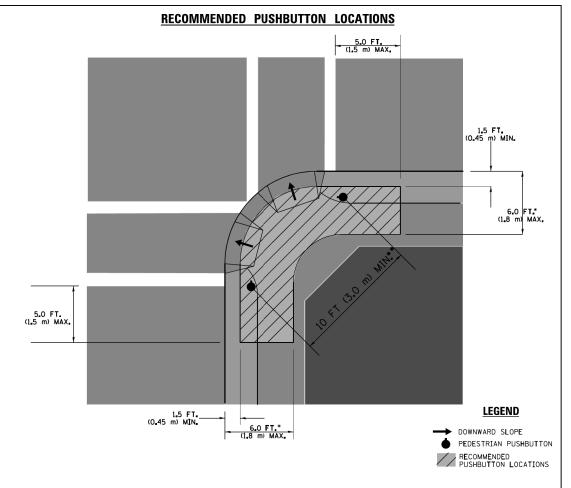
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO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

PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

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



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

NOTES:

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

TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)							
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)							
TRAFFIC SIGNAL POST	4 FT (1 _• 2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)							
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)							
PEDESTRIAN PUSHBUTTON POST	4 FT (1•2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)							
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)							
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.							
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.							

NOTES:

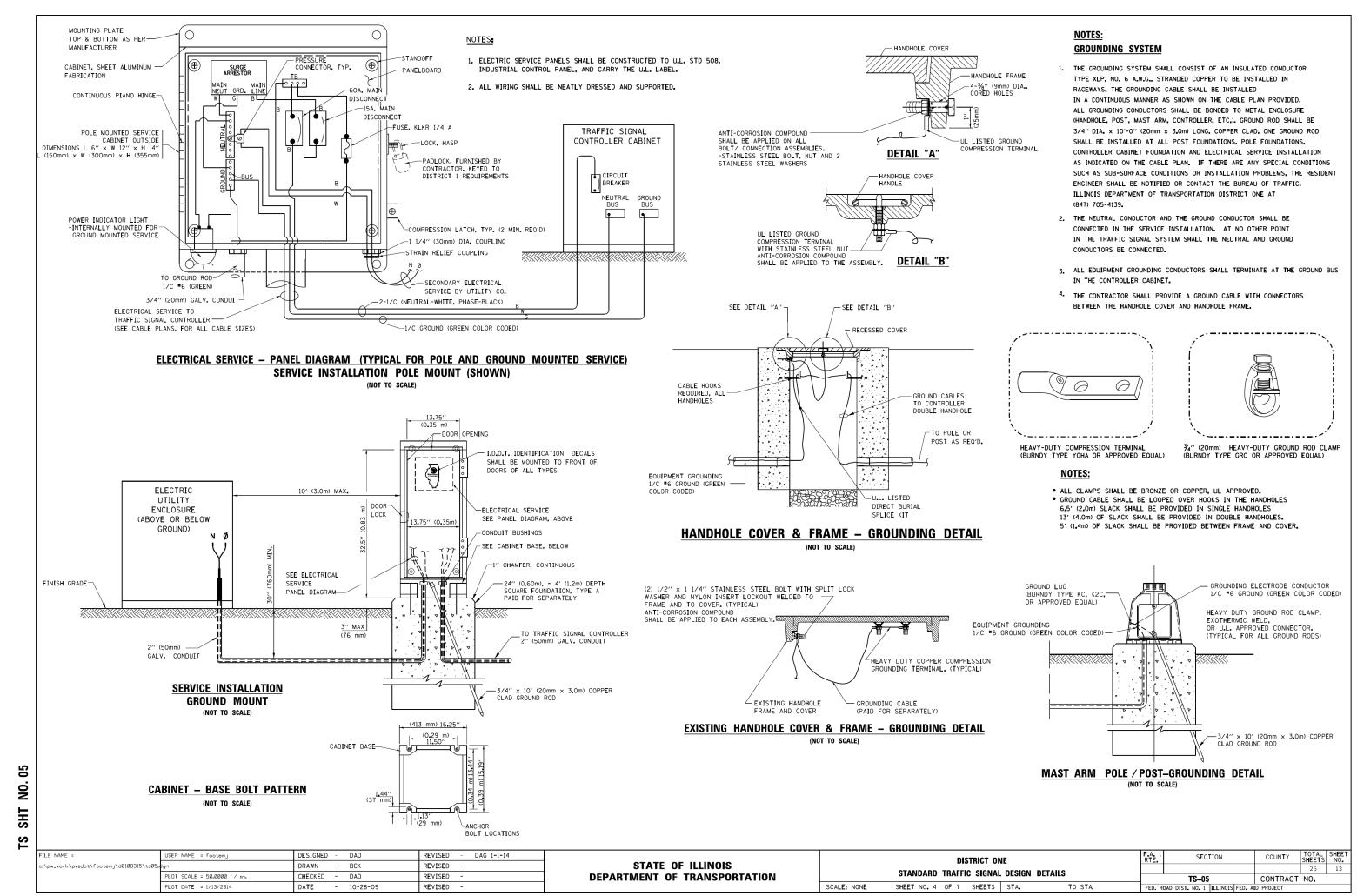
- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT 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.

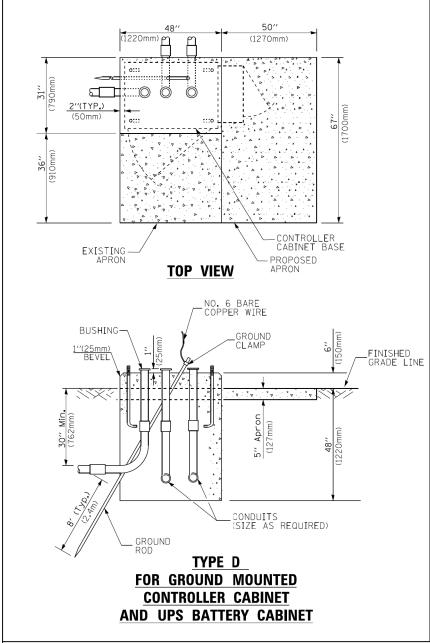
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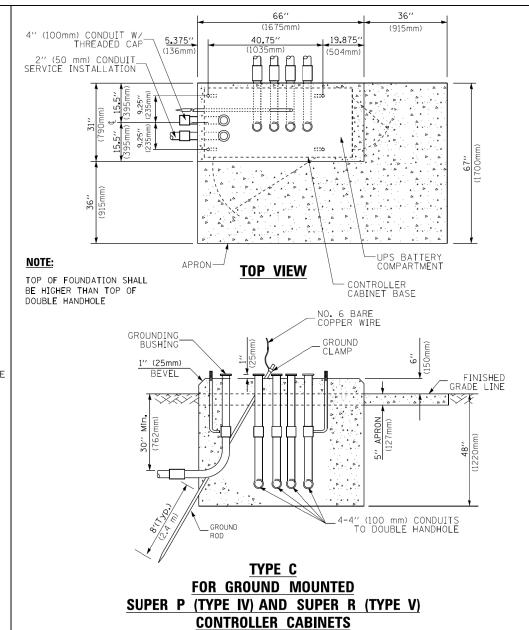
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	PLOT DATE = 1/13/2014	DATE -	10-28-09	REVISED -

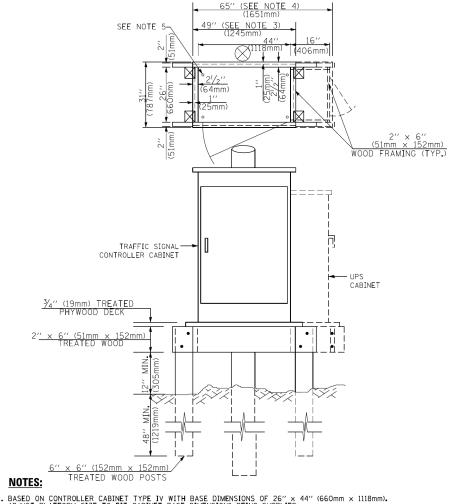
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS					F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
								25	12			
	STANDARD TRAFFIC SIGNAL DESIGN DETAILS							TS-05 CONTRACT NO.				
Ν E	SHEET NO. 3	OF 7	SHEETS	STA.	TO	STA.	FED. R	OAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT			









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

TEMPORARY SIGNAL CONTROLLER **WOOD SUPPORT PLATFORM**

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

CABLE SLACK

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

VERTICAL	CABLE	LENGTH
----------	-------	--------

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0'' (1 . 2m)

DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30′ (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	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)

- 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 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
- 2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
- 3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations
- 4. For mast arm assemblies with dual arms refer to state standard 878001..

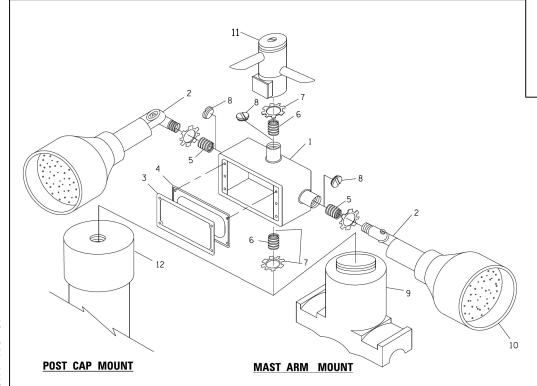
DEPTH OF MAST ARM FOUNDATIONS, TYPE E

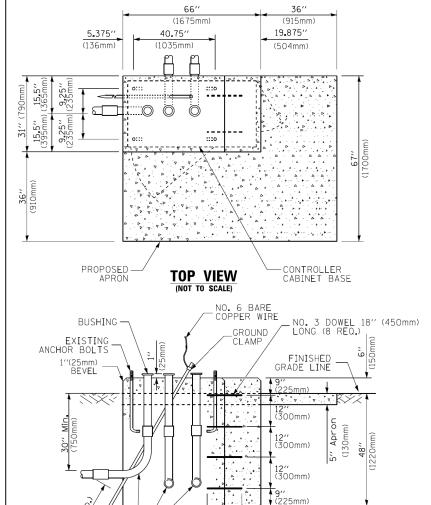
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FILE NAME =	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14			DISTRICT ONE	F.A	SECTION	COUNTY	TOTAL SHEETS	SHEET
c:\pw_work\pwidot\footemj\d0108315\	\ts05.dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS			1112		+	25	14
	PLOT SCALE = 50.0000 ' / in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION	STANDARD TRAFFIC SIGNAL DESIGN DETAILS			TS-05	CONTRACT		
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 5 OF 7 SHEETS STA. TO STA.	FED.				

NOTES:

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

HANDHOLE WITH MINIMUM CONDUIT DEPTH





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

-EXISTING CONDUITS

EXISTING GROUND ROD

(NOT TO SCALE)

ITEM	NO. IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	¾′′(19 mm) CLOSE NIPPLE
7	$\frac{3}{4}$ "(19 mm) LOCKNUT
8	¾′′(19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

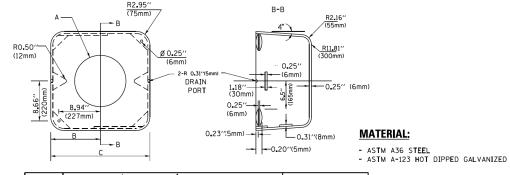
- ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
- 2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
 ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
 ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
- POST CAP MOUNT

 MAST ARM MOUNT

 MOUNT

 MAST ARM MOUNT

 MOUNTING BEACON MOUNTING IS SPECIFIED, ITEM 99 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4 "(19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.

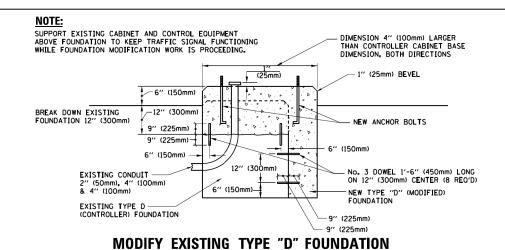


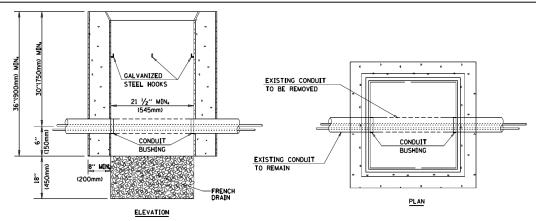
Α	В	С	HEIGHT	WEIGHT
VARIES	9 . 5′′(241mm)	19''(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26''(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18 . 5''(470mm)	37''(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

SHROUD

NOTES-

- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD.
 THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- 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.





NOTES:

SCALE: NONE

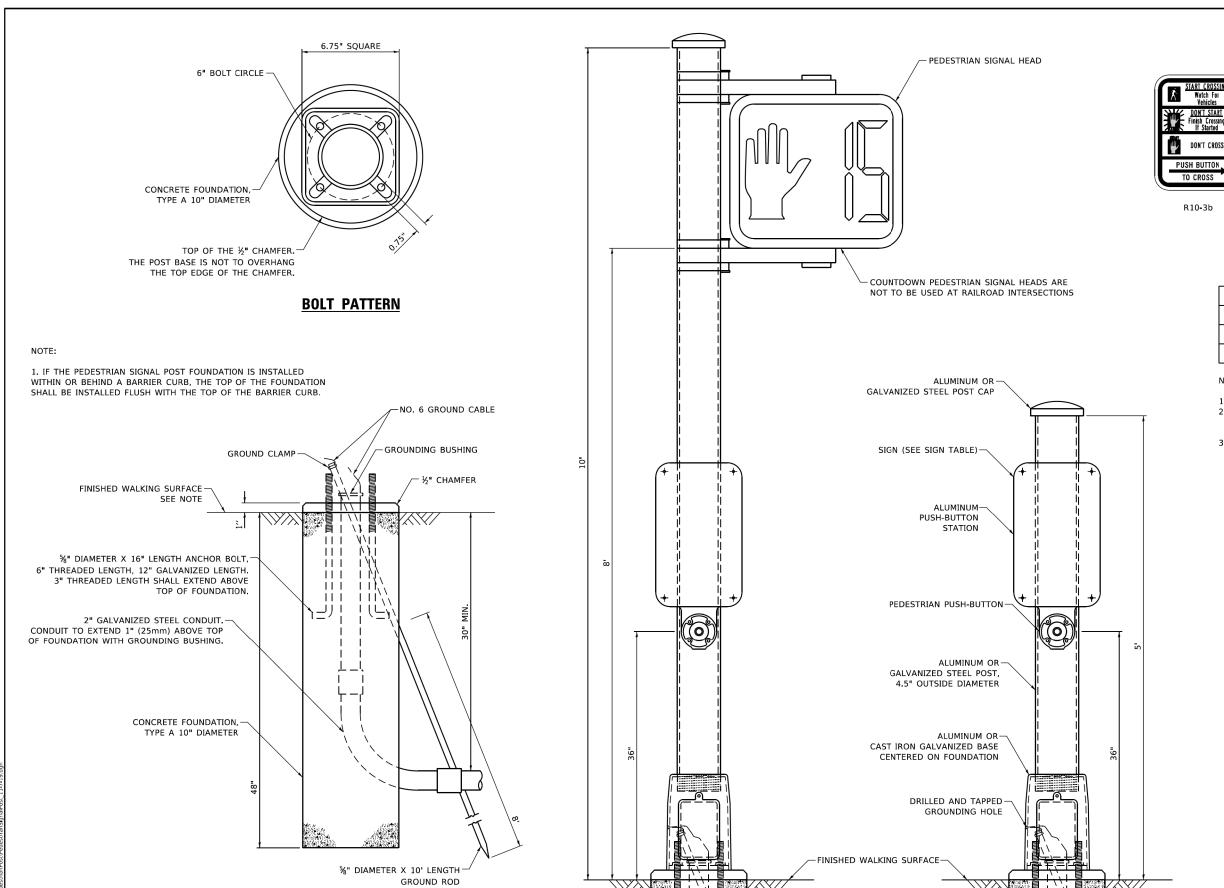
- 1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
- 2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

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	PLOT DATE = 1/13/2014	DATE -		10-28-09	REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

		DI	STRICT ON	IE .		F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS							25	15		
STANDARD TRAFFIC SIGNAL DESIGN DETAILS				TS-05	CONTRACT NO.					
	SHEET NO. 6	OF 7	SHEETS	STA.	TO STA.	FED. R	OAD DIST. NO. 1 ILLINOIS FED. A	ID PROJECT		



SIGN TABLE

DON'T CROSS

TO CROSS

R10-3d

DON'T START
Finish Crossing
If Started TIME REMAINING To Finish Crossing

DON'T CROSS

PUSH BUTTON

TO CROSS

R10-3e

SIGN	DIMENSIONS
R10-3b (RAILROAD ONLY)	9" X 12"
R10-3d (RAILROAD ONLY)	9" X 12"
R10-3e	9" X 15"

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.

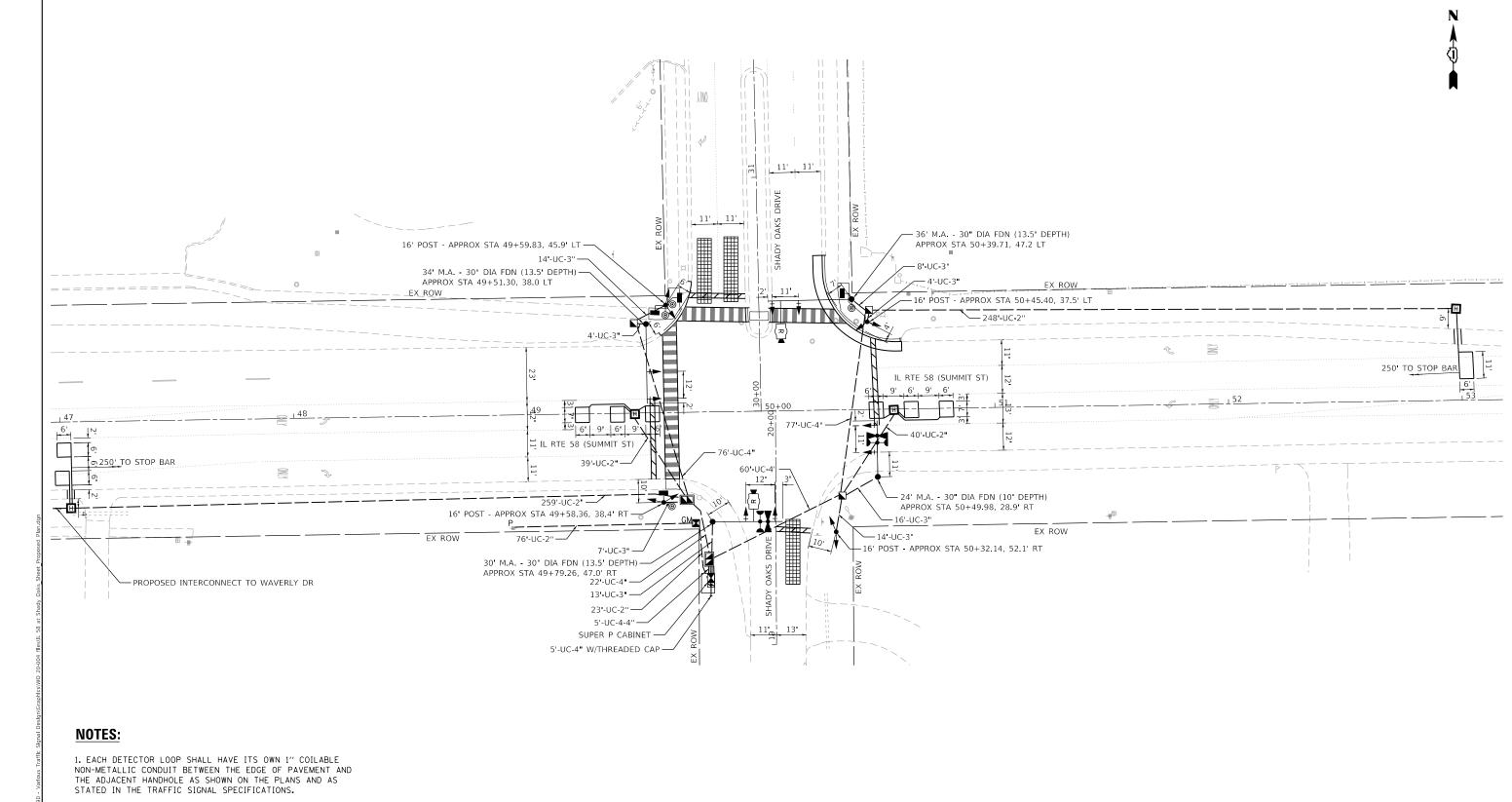
CONCRETE FOUNDATION, TYPE A 10-INCH DIAMETER

PEDESTRIAN SIGNAL POST, 10 FT.

PEDESTRIAN SIGNAL POST, 5 FT.

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	DRAWN - IP	REVISED -							1112.		25	5 16		
PLOT SCALE = 100,0000 ' / in.	CHECKED - LP	REVISED -		STANDARD TRAFFIC SIGNAL DESIGN DETAILS					TS-05	CONTRACT NO.	. —			
PLOT DATE = 1/9/2020	DATE - 10/15/2018	REVISED -		SCALE: NONE	SHEET 7	OF	7	SHEETS	STA.	TO STA.		ILLINOIS FED. A	AID PROJECT	

2 SHT



SHT NO. 09

2. THE MOUNTING LOCATIONS OF THE RADAR DETECTORS WILL BE DETERMINED PER THE MANUFACTURER'S RECOMMENDATIONS.

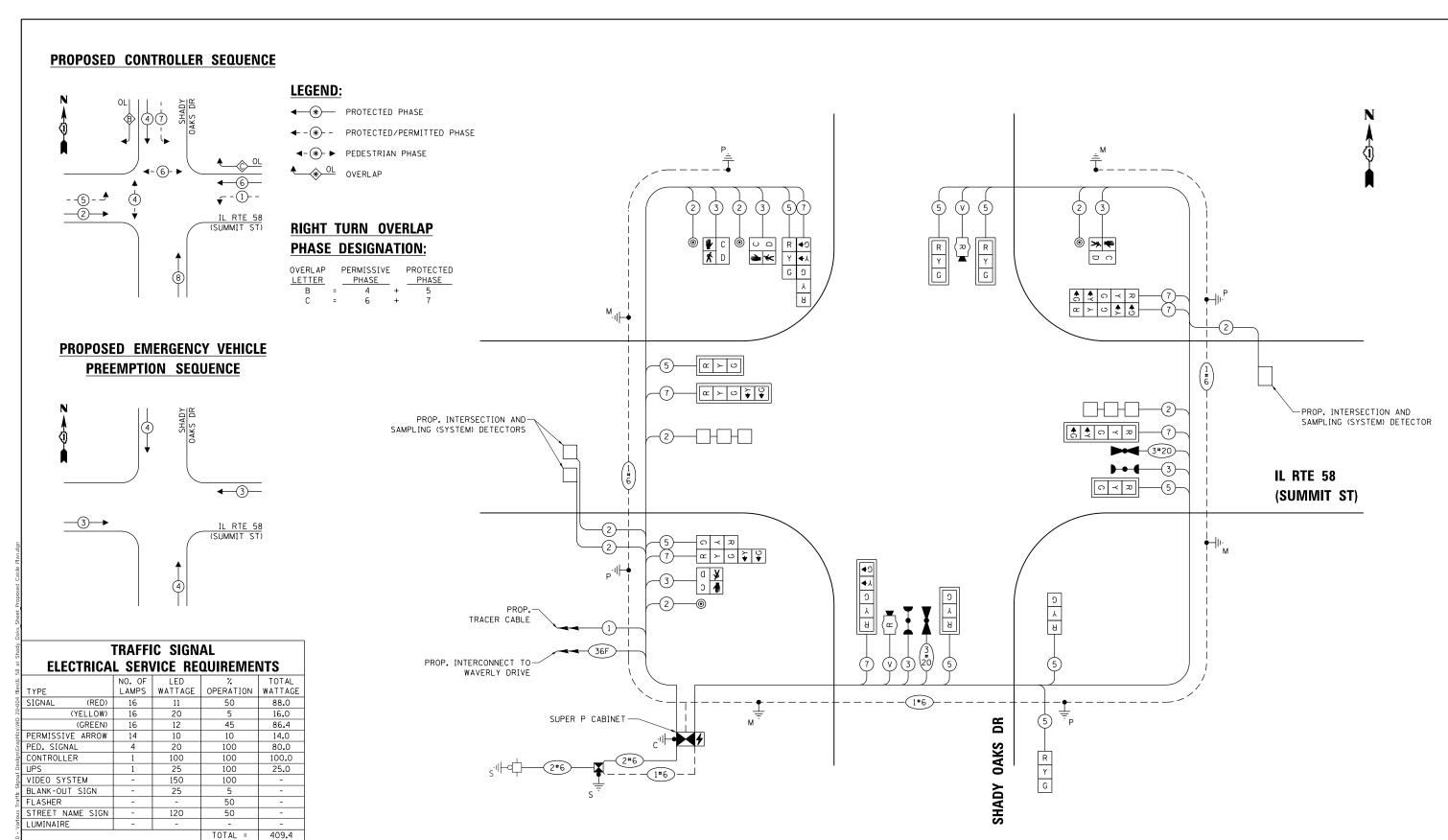
3. TWO CHANGEABLE MESSAGE SIGNS ON IL RTE 58 WILL NEED TO BE IN PLACE TWO WEEKS PRIOR AND TWO WEEKS AFTER

THE TRAFFIC SIGNAL IS TURNED-ON. THIS IS REQUIRED FOR A NEW STOP CONDITION.

TS 3201 EAGLE 5D

JSER NAME = esalutz DESIGNED -ECS REVISED SECTION COUNTY TRAFFIC SIGNAL PLANS COUNTY SHEETS NO.

COOK 25 17 STATE OF ILLINOIS Schwartz 223 w. JACKSON SUITE 1101 GOGOG TEL: (773) 305-0800 DRAWN KEM REVISED 2020-185-SW&TS IL RTE 58 (SUMMIT ST) AT SHADY OAKS DR REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 62M23 OF SHEETS STA.



ENERGY COSTS TO: CITY OF ELGIN

<u>S</u>

150 DEXTER COURT
ELGIN, IL 60120
ENERGY SUPPLY: CONTACT: JOE

ENERGY SUPPLY: CONTACT: <u>JOE STACHO</u>
PHONE: (630) 424-5704

COMPANY: COMMONWEALTH EDISON

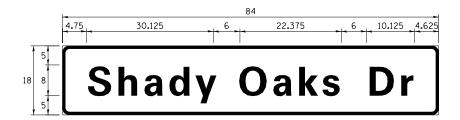
CABLE PLAN
(NOT TO SCALE)

TS 3201 EAGLE 5D

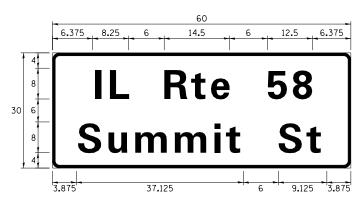
~	ACCOUNT NUMBER: -														
Σ	Com	USER NAME = esalutz	DESIGNED - ECS	REVISED -						N DIAGRAM,	F.A.U. RTF	SECTION	COUNTY	TOTAL S	SHEET
	Sam		DRAWN - KEM	REVISED -	STATE OF ILLINOIS					TION SEQUENCE	1320	2020-185-SW&TS	соок	25	18
N H	Schwartz CHICAGO, IL 60606 TEL: (773) 305-0800	PLOT SCALE = 40,0000 ' / in.	CHECKED - PAW	REVISED -	DEPARTMENT OF TRANSPORTATION SCA	IL RTE 58 (SUMMIT ST) AT SHADY OAKS DRIVE				OAKS DRIVE			CONTRAC	T NO. 621	M23
Ē		PLOT DATE = 8/13/2020	DATE - 08/11/2020	REVISED -		SCALE: N.T.S. S	SHEET	OF SHEE	ETS STA.	TO STA.		ILLINOIS FED.	AID PROJECT		
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SIGN PANEL – TYPE 1 OR TYPE 2

ALL DIMENSIONS ARE IN INCHES UNLESS NOTED OTHERWISE



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



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

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

SCHEDULE OF QUANTITIES

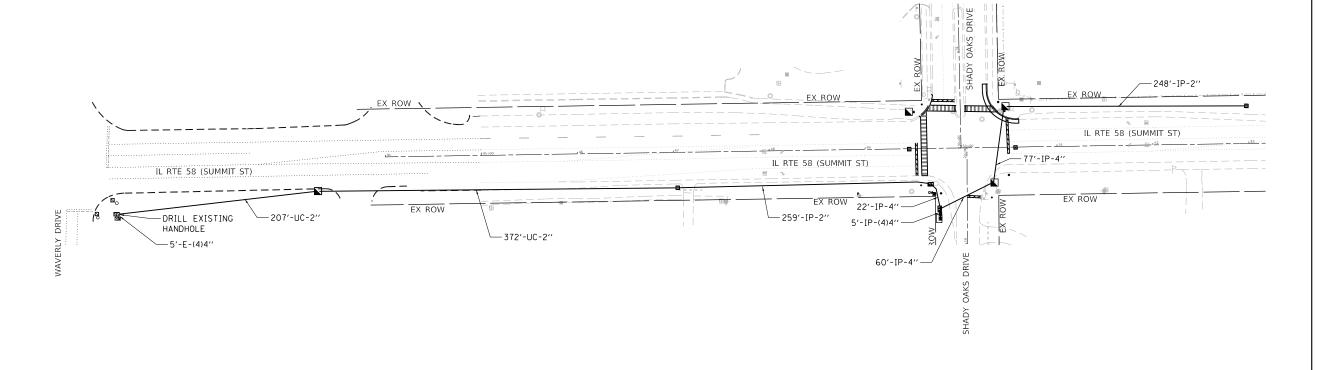
ITEM DESCRIPTION	UNITS	TOTAL QTY.
SIGN PANEL - TYPE 2	SQ FT	46
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	685
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	80
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	260
HANDHOLE	EACH	3
HEAVY-DUTY HANDHOLE	EACH	4
DOUBLE HANDHOLE	EACH	2
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	597
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	866
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1383
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1073
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1312
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	111
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	483
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 34 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE, 36 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	20
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E, 30-INCH DIAMETER	FOOT	51
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	5
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	3
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	8
INDUCTIVE LOOP DETECTOR	EACH	5
DETECTOR LOOP, TYPE I	FOOT	332
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	4
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	241
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	1
RADAR VEHICLE DETECTION SYSTEM, SINGLE APPROACH, STOP BAR	EACH	2
UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1

* 100% COST TO THE CITY OF ELGIN

TS 3201 EAGLE 5D

	USER NAME = esalutz	DESIGNED -	ECS	REVISED -
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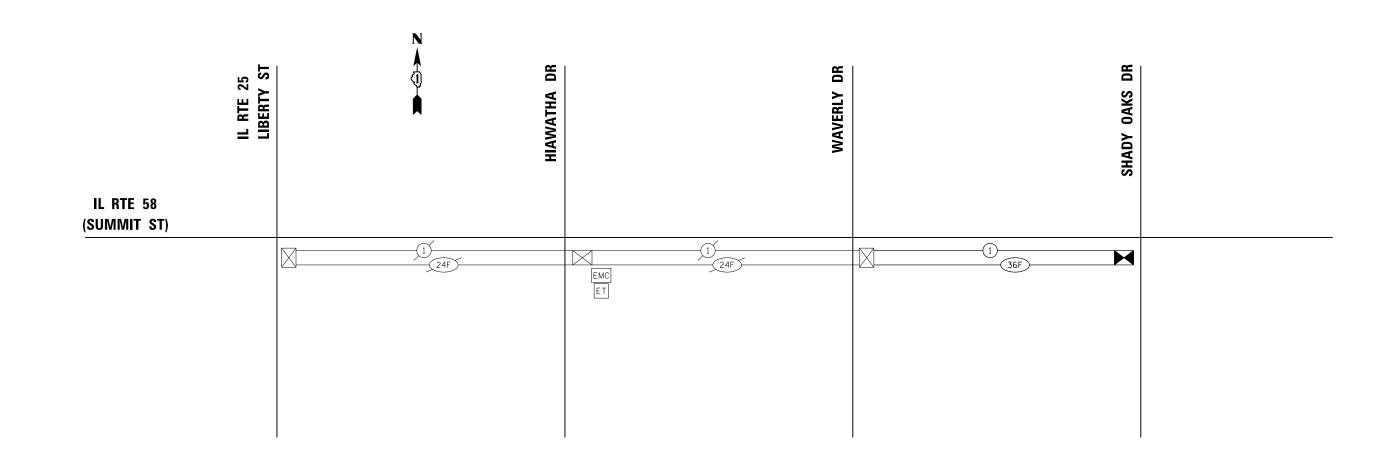
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EAGLE 5D

Sam 223 W. JACKSON DRAWN - KEM REVISED - STATE OF ILLINOIS PROPOSED INTERCONNECT PLAN RTE. SECTION RTE. SECTION RTE. SECTION REVISED - STATE OF ILLINOIS	SITELIS	.13 140.
SIA I A SHITE HOLD IN DIE 20 HI DIE	185-SW&TS COOK 25	20
Schwartz	CONTRACT NO. 62	62M23

SCHEDULE OF QUANTITIES

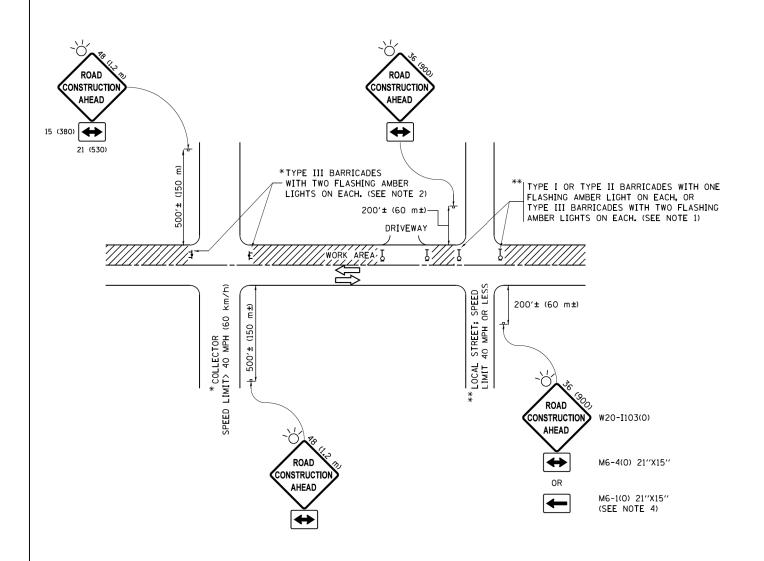
ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	579
HANDHOLE	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	925
DRILL EXISTING HANDHOLE	EACH	1
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	951
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1



TS SHT NO. 13

EAGLE 5D

2																
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	Sam		DRAWN -	KEM	REVISED -	STATE OF ILLINOIS	PHOPOSED II						1320	2020-185-SW&TS	соок	25 21
Z H	Schwartz SUITE 1101 Schwartz CHICAGO, IL 60606 TEL: (773) 305-0800	PLOT SCALE = 100.0000 ' / in.	CHECKED -	PAW	REVISED -	DEPARTMENT OF TRANSPORTATION	IL RTE 85 (SUMMIT ST) AT SHADY OAKS DR						CONTRACT NO. 62			
Ξ		PLOT DATE = 8/13/2020	DATE -	08/11/2020	REVISED -		SCALE: N.T.S.	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT	



NOTES:

- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200" (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500" (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) 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.
- 3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710)
- 4. 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).

SCALE: NONE

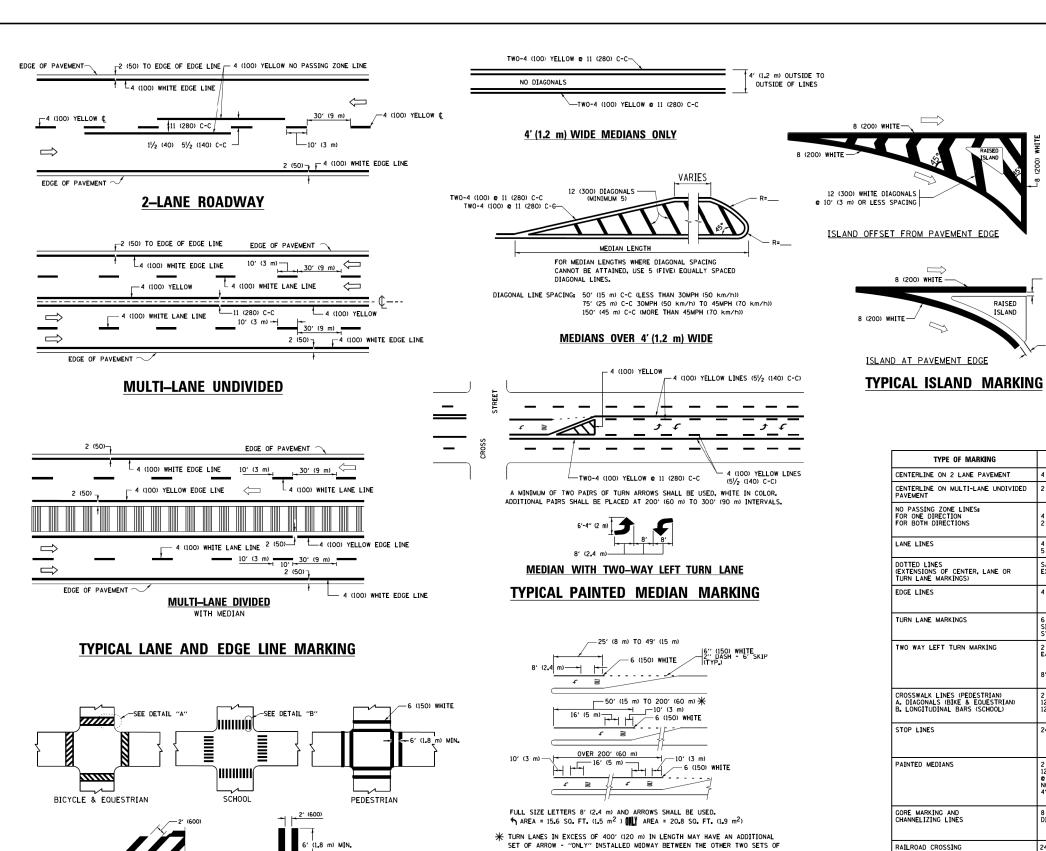
- 5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- 6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER
- 7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

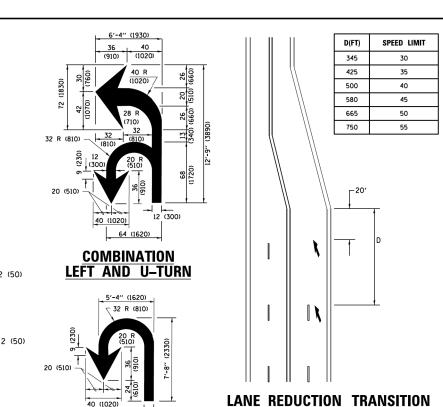
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	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED	- A. SCHUETZE 07-01-13
Default	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED	- A. SCHUETZE 09-15-16

STATI	E OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR	F.A. RTE.	SECTION
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	1320	2020-185-SW
SIDE HOADS, HATCHISECTIONS, AND DINVENTATS		TC-10
SHEET 1 OF 1 SHEETS STA. TO STA.		TLLIN



TYPICAL LEFT (OR RIGHT) TURN LANE TYPICAL TURN LANE MARKING



U-TURN CREATER 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. DIACONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 e 6 (150) 12 (300) e 45° 12 (300) e 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1,8 m) 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) T0 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 OFI "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)					
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 (0VER 45MPH (70 km/h))					
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF					
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF					

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

SCALE: NONE

8 (200) WHITE -

RAISED

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

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

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	PLOT SCALE = 50.000 ' / in.	CHECKED -	REVISED -	C. JUCIUS 12-21-15
Default	PLOT DATE = 4/13/2016	DATE - 03-19-90	REVISED -	C. JUCIUS 04-12-16

TYPICAL CROSSWALK MARKING

 $oldsymbol{st}$ markings shall be installed parallel to the centerline of the road which it crosses

-12 (300) WHITE

DETAIL "B"

- 6 (150) WHITE

DETAIL "A"

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
TYPICAL PAVEMENT MARKINGS		1320	2020-185-SW&TS	соок	25	23					
						TC-13	CONTRACT	CT NO. 62M23			
E	SHEET 1	OF 1	SHEETS	STA.	TO STA.		ILLINOIS FED. AID PROJECT				

TURN BAY ENTRANCE AT START OF LANE CLOSURE TAPER

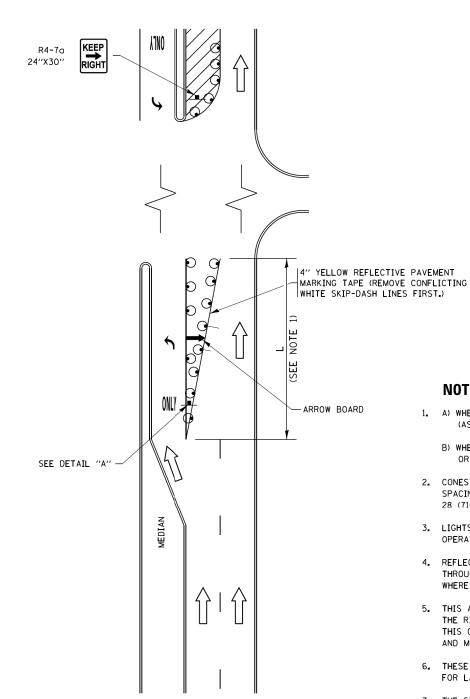


FIGURE 1

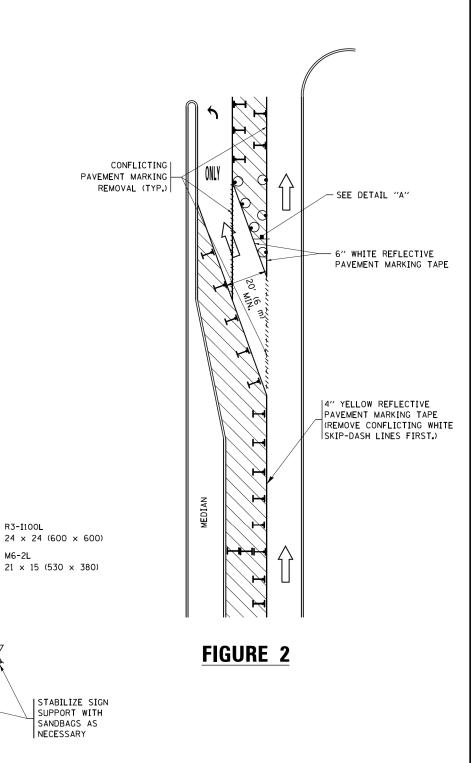
LEGEND WORK AREA LANE OPEN TO TRAFFIC ARROW BOARD TYPE I OR II BARRICADE OR DRUM WITH STEADY BURN LIGHT DRUM WITH STEADY BURN LIGHT

TYPE I OR II CHECK BARRICADE WITH FLASHING LIGHT

NOTES:

- 1. A) WHEN "L" IS ≤ 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.
- 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.
- 3. 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.
- 6. THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES.
- 7. THE SIGNS SHALL BE MOUNTED ABOVE THE BARRICADES/DRUMS ON SEPARATE SIGN SUPPORTS THAT MEET NCHRP 350 OR MASH PREQUIREMENTS.
- 8. 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

LANE

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

COUNTY

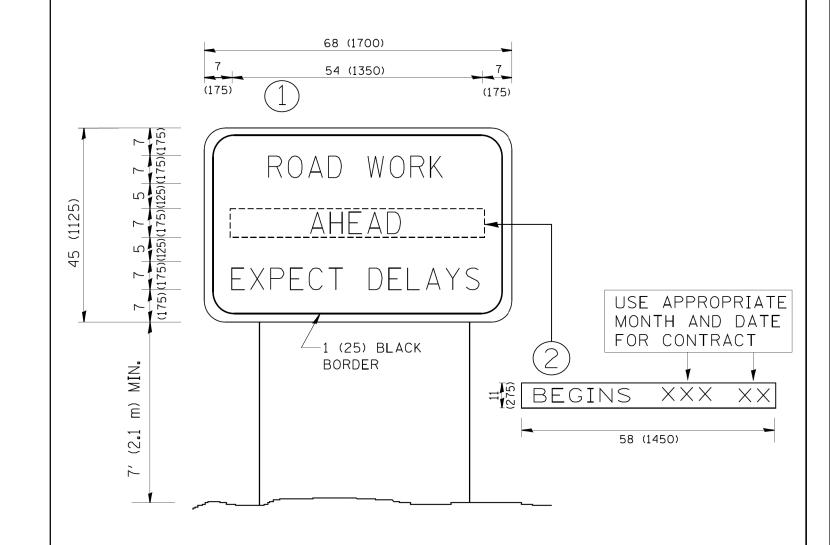
CONTRACT NO. 62M23

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	PLOT SCALE = 50.0000 '/ in.	REVISED	-	A. HOUSEH 10-12-96	REVISED	- A.	SCHUETZE 09-15-16	DE
Default	PLOT DATE = 9/15/2016	REVISED	-T.	RAMMACHER 01-06-00	REVISED	-		

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS							SECTION
(TO REMAIN OPEN TO TRAFFIC)						1320	2020-185-SW&TS
		TC-14					
SCALE: NONE	SHEET 1	OF 1	SHEETS	STA.	TO STA.		ILLINOIS FED.



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 () 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.

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	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99		INFORMATION SIGN		TC-22	CONTRACT	NO. 62M2	.3
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIS	ST. NO. 1 ILLINOIS FED. A	ID PROJECT	-	\neg