#### FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR LIST OF HIGHWAY STANDARDS, SEE SHEET NO. 2

#### TRAFFIC DATA

DESIGN DESIGNATIONS:

MCCOY DRIVE = MAJOR COLLECTOR
CHESHIRE DRIVE = LOCAL BOAD OR STREET

ADT:

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MCCOY DRIVE = 16,100 (2022) CHESHIRE DRIVE = 2,300 (2022)

DESIGN SPEED:

MCCOY DRIVE = 35 MPH CHESHIRE DRIVE = 30 MPH

POSTED SPEED:

MCCOY DRIVE = 35 MPH CHESHIRE DRIVE = 25 MPH

100' 200' 300' -- 1"= 160' 10' 20' 30' -- 1"= 10' 50' 100' -- 1"= 40' 100' -- 1"= 30' 50' 100' -- 1"= 20

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.V.L.

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

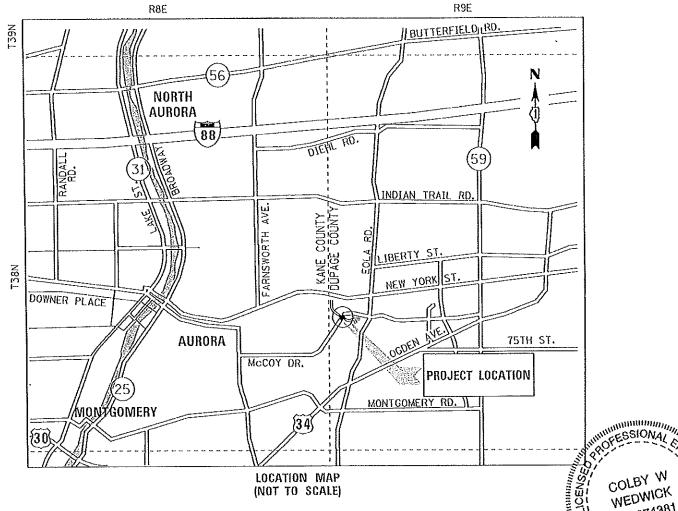
OR 811

### CITY OF AURORA

# PROPOSED PLANS FOR WIFT PROJECT

MCCOY DRIVE (FAU 1531) AT CHESHIRE DRIVE TRAFFIC SIGNAL INSTALLATION DUPAGE COUNTY

SECTION 23-00361-00-TL



Cup Wakine 3/20/2019 Manny

COLBY W. WEDWICK, P.E. EXPINES: 11/30/2025

ATE

SEAL





2363 SEQUOIA DRIVE, SUITE 101 | AURORA, ILLINOIS 60506 Phone: 630.553,7660 | Toll Free: 800.728,7605 | Fax: 630.553,7646 | HRGreen.com ILLINOIS PROFESSIONAL DESIGN FIRM #164-001322

	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
APPROVED_	3-20 20 24
	ENGINEERING COORDINATOR CITY OF AUROBA
PASSED_	20
•	DISTRICT ONE ENGINEER OF LOCAL ROADS AND STREETS
ELEASING FOR BI ASED ON LIMITE	D REVIEW20
	REGIONAL ENGINEER

#### **INDEX OF SHEETS**

1			COVER SHEET
2			INDEX OF SHEETS / LIST OF HIGHWAY STANDARDS / GENERAL NOTES
3			SUMMARY OF QUANTITIES
4			REMOVAL PLANS
5	-	6	ADA RAMP DETAILS
7			PAVEMENT MARKING AND SIGNING PLAN
8	-	15	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS
16			TRAFFIC SIGNAL INSTALLATION PLAN
17			CABLE PLAN AND PHASE DESIGNATION DIAGRAM
18			MAST ARM MOUNTED STREET NAME SIGNS
19			MISCELLANEOUS DETAILS
20	-	24	DISTRICT ONE DETAILS

#### DISTRICT ONE DETAILS

STANDARD NO.	LIST OF DESCRIPTION	
BD <b>-</b> 22	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT	
BD-24	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT	
TC-10	TRAFFIC CONTROL AND PROTECTION FOR	
	SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS	
TC-16	SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS	
TC-22	ARTERIAL ROAD INFORMATION SIGN	
TS-02	DISTRICT ONE MAST ARM MOUNTED STREET NAME SIGNS	
TS-05	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS	

#### LIST OF IDOT HIGHWAY STANDARDS

000001-08	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
424011-04	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424021-06	DEPRESSED CORNER FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
606001-08	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701101-05	OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-09	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
780001-05	TYPICAL PAVEMENT MARKINGS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-03	HANDHOLES
814006-03	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
876001-04	PEDESTRIAN PUSH BUTTON POST
877001-08	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
877001-08	STEEL COMB. MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
878001-11	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS

#### **GENERAL NOTES**

#### **EROSION CONTROL**

- SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS, AND THE USE OF TEMPORARY AND/OR PERMANENT MEASURES
- 2. SOD SHALL BE APPLIED ON ALL DISTURVED AREAS IN ACCORDANCE WITH SECTION 252 OF THE STANDARD SPECIFICATIONS, LOCATIONS TO BE SODDED SHALL BE DETERMINED BY THE ENGINEER.
- 3. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED AS DIRECTED BY THE ENGINEER.
- 4. ANY SEDIMENT OR SOIL REACHING AN IMPROVED PUBLIC RIGHT-OF-WAY, STREET, ALLEY, OR PARKING AREA SHALL BE REMOVED BY SCRAPING OR STREET CLEANING AS ACCUMULATIONS WARRANT OR AS DIRECTED BY THE ENGINEER AND TRANSPORTED TO A CONTROLLED SEDIMENT DISPOSAL AREA.
- 5. THE EROSION CONTROL MEASURES INDICATED IN THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.

#### STAKING

- OFFSET LOCATIONS GIVEN IN THE PLANS FOR STRUCTURES, EDGE OF PAVEMENT, ETC. ARE FROM THE ROADWAY CENTERLINE DEPICTED IN THE PLANS.
- 2. ALL ELEVATIONS ARE ON THE NAVD 88 DATUM.

#### **SEWER AND WATER MAINS**

ANY LOOSE MATERIAL DEPOSITED IN THE FLOWLINE OF DRAINAGE STRUCTURES, WHICH OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.

#### **GENERAL NOTES**

#### **MISCELLANEOUS**

- 1. THE CONTRACTOR SHALL NOT SCALE FROM THE PLANS FOR CONSTRUCTION PURPOSES. SCALES ARE SHOWN FOR INFORMATION ONLY.
- 2. ALL REFERENCES TO "ENGINEER" SHALL BE INTERPRETED TO MEAN THE RESIDENT ENGINEER.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN EXISTING FIELD CONDITIONS PRIOR TO BIDDING. THE CONTRACTOR SHALL NOTE ANY CHANGES FROM THESE ENGINEERING PLANS AND SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY EXISTING CONDITIONS THAT DEVIATE FROM THE INTENT OF THE ENGINEERING PLANS SUCH AS, BUT NOT LIMITED TO, DRAINAGE, GEOMETRICS,
- THE CONTRACTOR SHALL MAINTAIN THE SITE IN A CLEAN AND ORDERLY MANNER. DEBRIS AND SURPLUS MATERIALS SHALL BE REMOVED FROM THE SITE ON A REGULAR BASIS AND DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS, RESTORATION SHALL BE INITIATED AS WORK PROGRESSES TO THE EXTENT CONSIDERED PRACTICAL.
- ANY REFERENCE TO A STANDARD THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED TO MEAN THE LATEST EDITION OF THAT STANDARD AS PUBLISHED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION
- THE CONTRACTOR WILL BE REQUIRED TO COMPLY WITH ALL STATE REGULATIONS REGARDING AIR, WATER, AND NOISE POLLUTION. THE CONTRACTOR IS PROHIBITED FROM BURNING ANY MATERIAL WITHIN OR ADJACENT TO THE IMPROVEMENT.
- TYPE I AND TYPE II BARRICADES SHALL BE WEIGHTED DOWN WITH TWO SANDBAGS EACH. TYPE III BARRICADES SHALL BE WEIGHTED DOWN WITH FOUR SANDBAGS EACH.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON CITY PROPERTY WITHOUT WRITTEN CONSENT FROM THE CITY OF AURORA.
- SAW CUTTING WILL BE REQUIRED FOR ALL REMOVAL ITEMS LISTED IN SECTION 440 OF THE STANDARD SPECIFICATIONS, SHOWN IN THE PLANS, AND AS DIRECTED BY THE ENGINEER. THE COST OF SAW CUTTING SHALL BE INCLUDED IN CONTRACT UNIT BID PRICES FOR THE ITEMS BEING REMOVED.

#### **UTILITY NOTES**

- THE CONTRACTOR SHALL COOPERATE WITH THE CITY OF AURORA IF ANY UTILITY IMPROVEMENTS ARE REQUIRED BY THE CITY WITHIN THE DURATION OF THE CONTRACT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL LITHITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL UTILITY EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IS NECESSARY.
- THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE AND THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR. THIS WORK SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED. INCLUDING CLAIMS BY THE CONTRACTOR FOR TIME LOST (LABOR AND EQUIPMENT) DUE TO UTILITIES LOCATIONS OR RELOCATING UTILITIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITIES EVEN THOUGH THEY MIGHT NOT BE SHOWN ON THE PLANS. ANY UTILITY PROPERTY DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.

TO STA.

USER NAME = cwedwick	DESIGNED -	CWW	REVISED -
	DRAWN -	CWW	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	JRS	REVISED -
PLOT DATE = 2/29/2024	DATE -	2/20/2024	REVISED -

CODE	DESCRIPTION	UNIT	QUANTITY
1	EARTH EXCAVATION	CU YD	44
2	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	25
3	TOPSOIL FURNISH AND PLACE, 4"	[SQ YD	40
4	SODDING, SALT TOLERANT	SQ YD	45
5	SUPPLEMENTAL WATERING	UNIT	10
6	INLET FILTERS	EACH	3
7	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	115
8	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1001
9	DETECTABLE WARNINGS	SQ FT	71
10	COMBINATION CURB AND GUTTER REMOVAL	FOOT	91
11	SIDEWALK REMOVAL	SQ FT	1041
12	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18 (ABUTTING EXISTING PAVEMENT	FOOT	91
13	MOBILIZATION	L SUM	1
14	TRAFFIC CONTROL AND PROTECTION, STANDARD 701101	EACH	1
15	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	EACH	1
16	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	EACH	1
17	TRAFFIC CONTROL AND PROTECTION, STANDARD 701901	EACH	1
18	SIGN PANEL - TYPE 1	SQ FT	58
19	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	4
20	REMOVE SIGN PANEL - TYPE 1	SQ FT	36
21	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	1
22	TELESCOPING STEEL SIGN SUPPORT	FOOT	60
23	BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	4
24	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	146
25	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	1832
26	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1156
27	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	57
28	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	146
29	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	1538
30	SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
31	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	168
32	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	132
33	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	306
34	HANDHOLE	EACH	6
35	DOUBLE HANDHOLE	EACH	1
36	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	500
37	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	1
			I

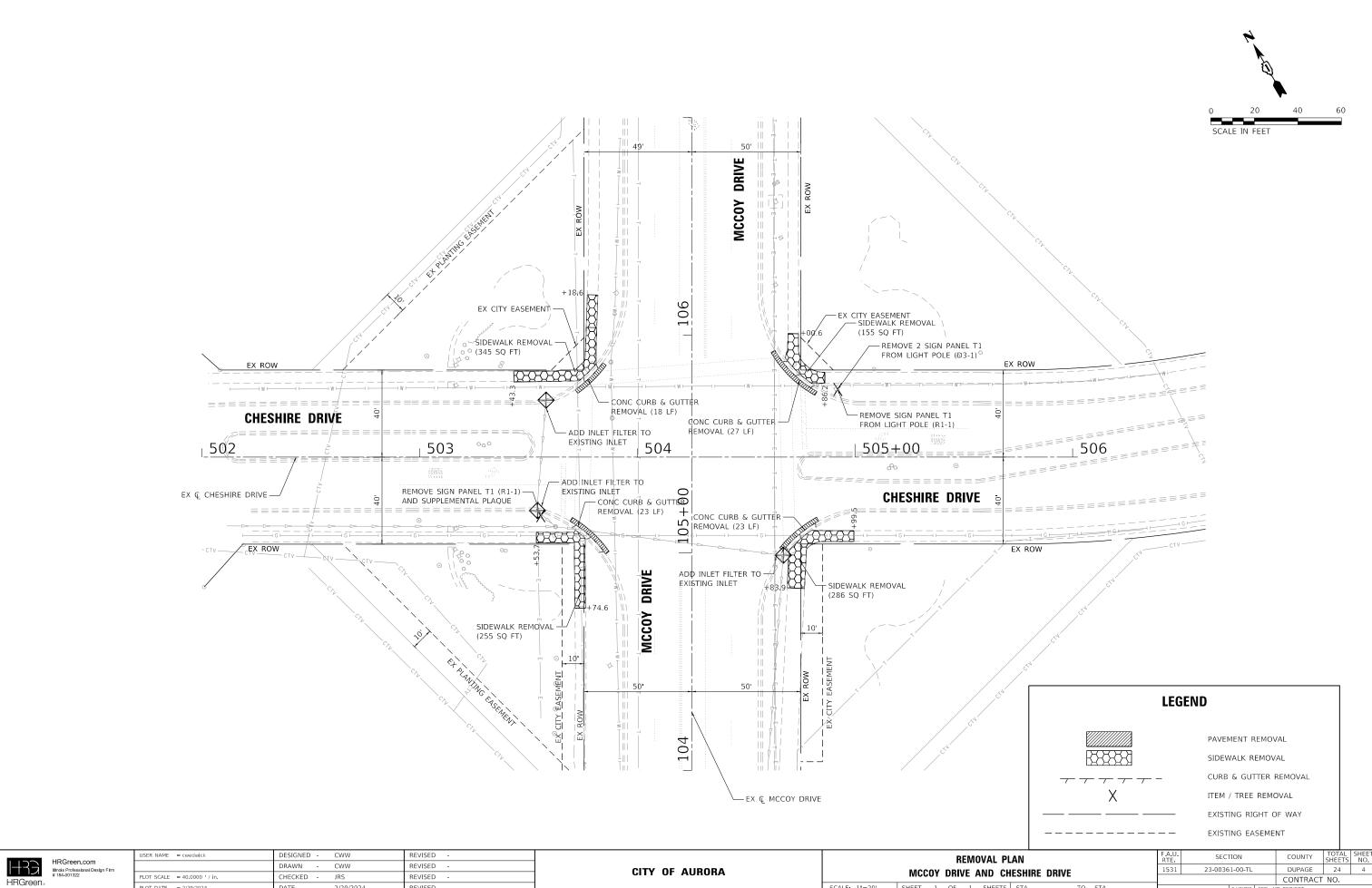
CODE	DESCRIPTION	UNIT	QUANTITY
38	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1645
39	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2540
40	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2340
41	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1917
42	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	100
43	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	500
44	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
45	STEEL MAST ARM ASSEMBLY AND POLE, 22 FT.	EACH	1
46	STEEL MAST ARM ASSEMBLY AND POLE, 38 FT.	EACH	1
47	STEEL MAST ARM ASSEMBLY AND POLE, 44 FT.	EACH	1
48	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	1
49	CONCRETE FOUNDATION, TYPE A	FOOT	48
50	CONCRETE FOUNDATION, TYPE C	FOOT	4
51	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
52	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	35
53	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
54	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
55	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
56	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
57	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
58	TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	10
59	LIGHT DETECTOR	EACH	4
60	LIGHT DETECTOR AMPLIFIER	EACH	1
61	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	980
62	FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
63	CAT. 6 ETHERNET CABLE	FOOT	380
64	PEDESTRIAN SIGNAL POST, 10 FT.	EACH	1
65	PEDESTRIAN SIGNAL POST, 5 FT.	EACH	7
66	VIDEO DETECTION SYSTEM COMPLETE	EACH	1
67	CHANGEABLE MESSAGE SIGN (SPECIAL)	CAL MO	4
68	UNINTERRUPTABLE POWER SUPPLY (SPECIAL)	EACH	1
69	ETHERNET SWITCH	EACH	1
70	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
71	CONSTRUCTION LAYOUT	L SUM	1
72	INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
73	CENTRALIZED SYSTEM FIELD INTEGRATION/SETUP	EACH	1
74	ITEMS ORDERED BY ENGINEER	ALLOWANCE	1

<sup>\*</sup> SEE SPECIAL PROVISIONS \*\*\* INDICATES SPECIALITY ITEMS

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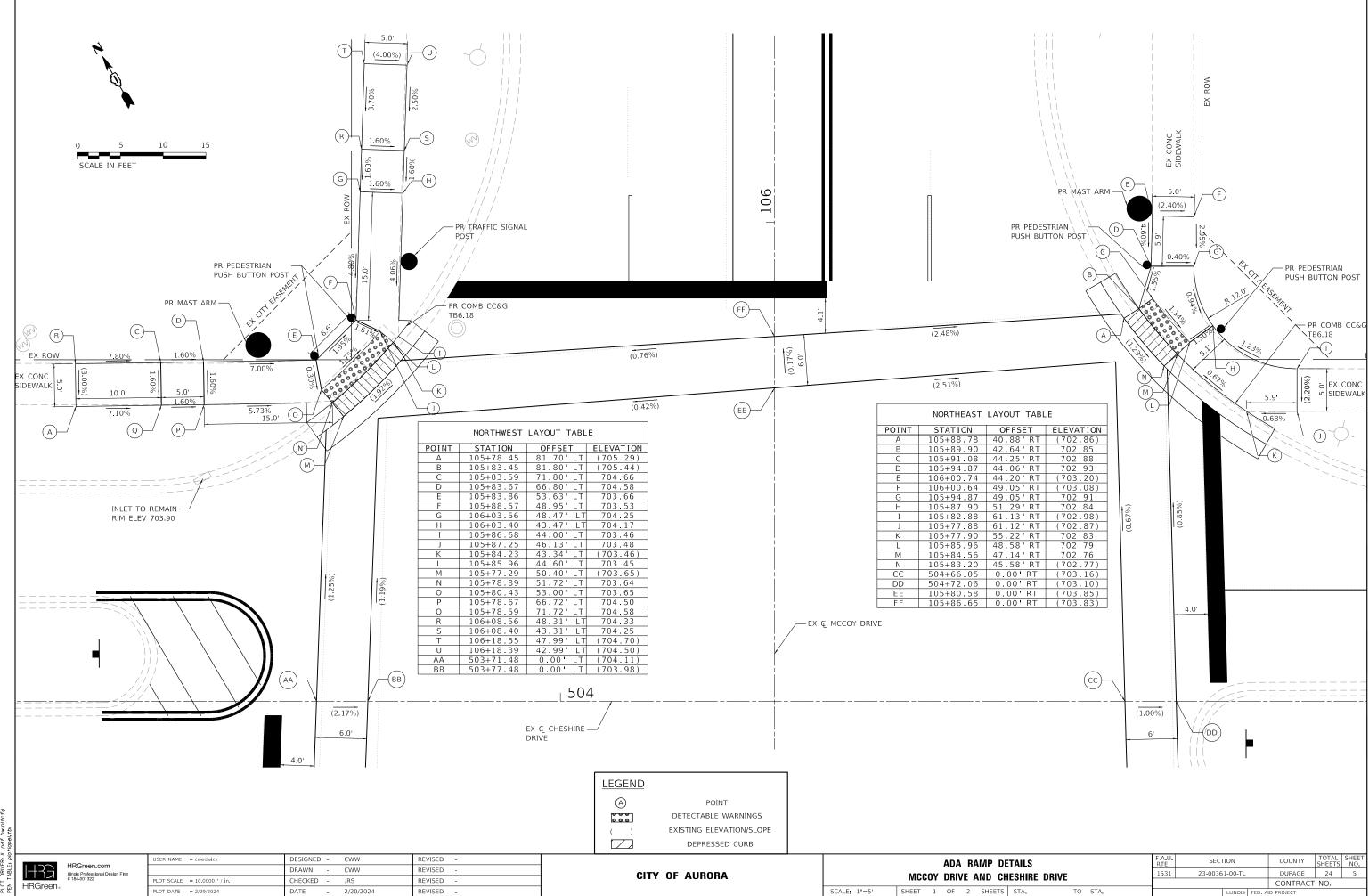
USER NAME = cwedwick	DESIGNED -	CWW	REVISED -	
	DRAWN -	CWW	REVISED -	
PLOT SCALE = 40.0000 ' / in.	CHECKED -	JRS	REVISED -	
PLOT DATE = 3/20/2024	DATE -	2/20/2024	REVISED -	

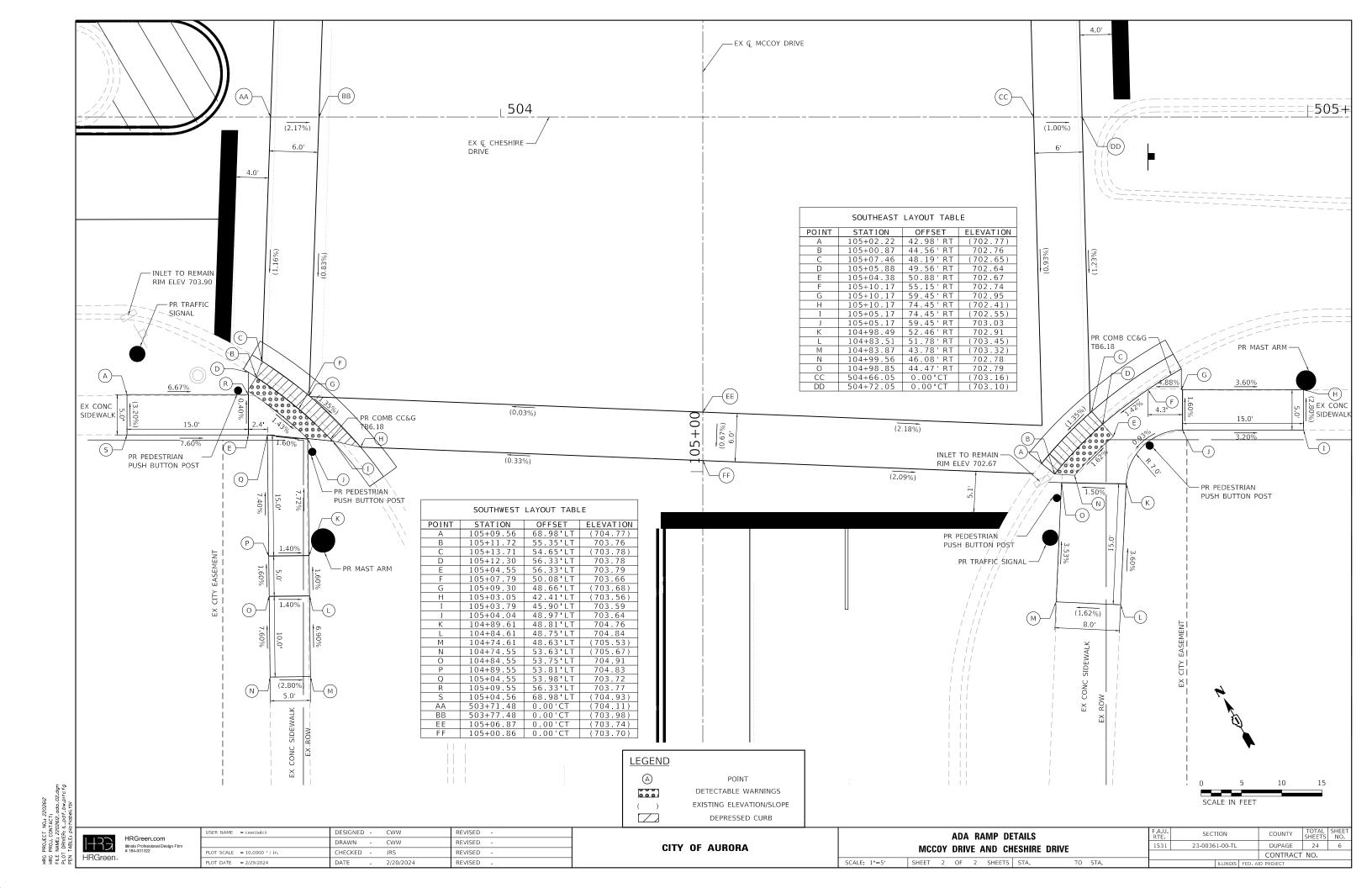
SUMMARY OF QUANTITIES						F.A.U. RTE	SECTION			COUNTY	TOTAL SHEETS	SHEE NO.				
MCCOY DRIVE AND CHESHIRE DRIVE					1531	23-0036	51-00-TL		DUPAGE	24	3					
	IVICO	<u> </u>	Dilli	, L ,	AIND CI	LOIIIIL	. DINIVL							CONTRACT	NO.	
	SHEET	1	OF	1	SHEETS	STA.	TO	STA.				ILLINOIS	FED. A	ID PROJECT		

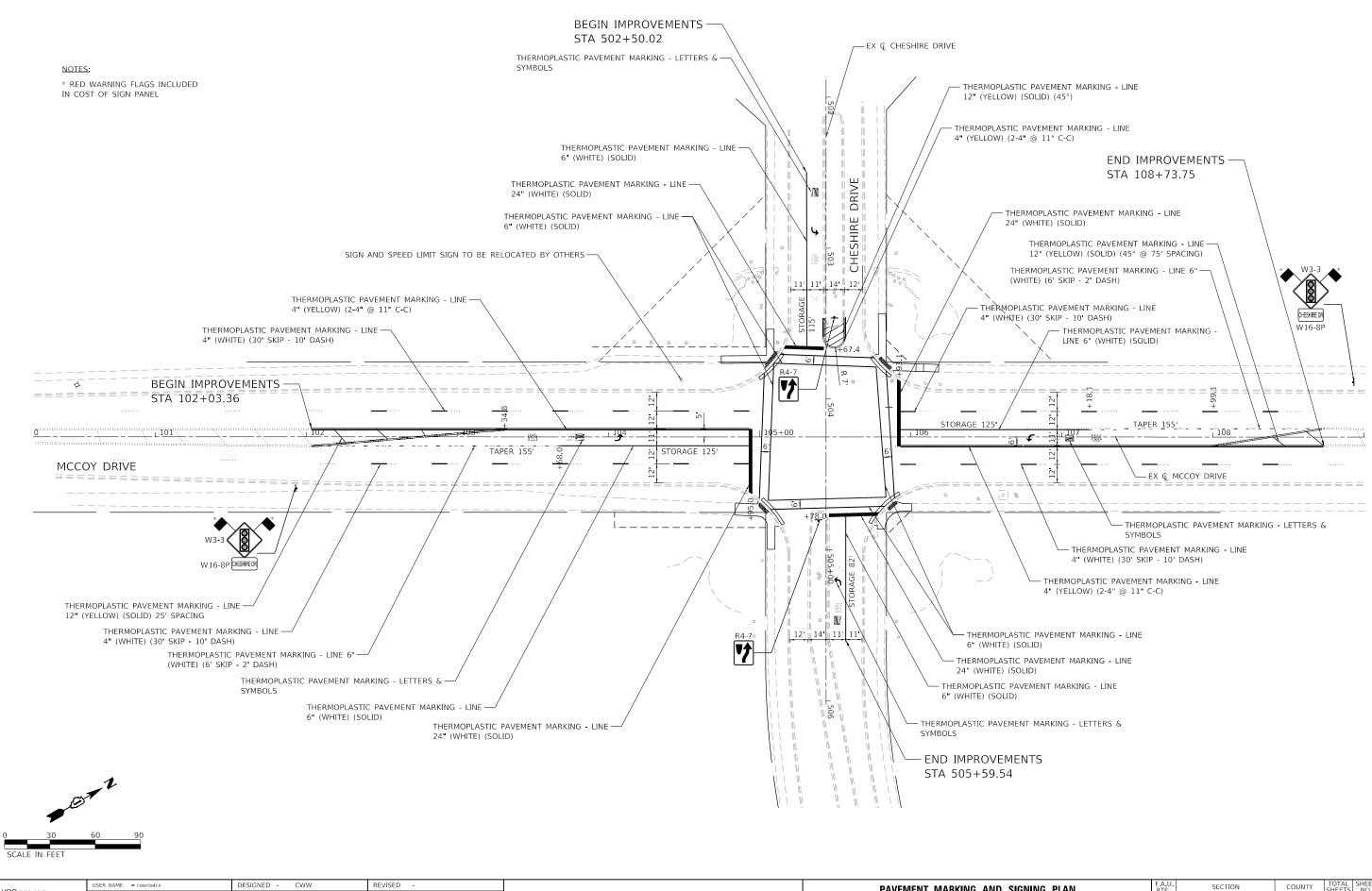


LOT SCALE = 40.0000 / in. REVISED PLOT DATE = 2/29/2024

SCALE: 1"=20" SHEET 1 OF 1 SHEETS STA.







HRG PROJECT NO., 22026/2 HRG PROJ, CONTACT: FILE NAME, 22026/2\_pmk\_0/dgn PLOT DRIVER: #L\_pdf\_bw\_plfcff PEN TABLE: p/o+iobel,tb/

**HRGreen** 

HRGreen.com
Illinots Professional Design Firm
# 184-001322

CITY OF AURORA

SCALE: 1"=30"

PAVEMENT MARKING AND SIGNING PLAN

MCCOY DRIVE AND CHESHIRE DRIVE

SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE. SECTION COUNTY SHEETS NO.

1531 23-00361-00-TL DUPAGE 24 7

CONTRACT NO.

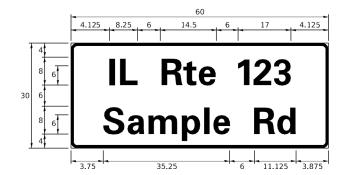
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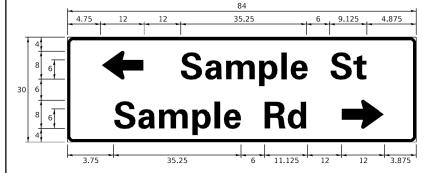
1531 23-00361-00-TL DUPAGE 74 7

CONTRACT NO.

#### SIGN PANEL - TYPE 1 OR TYPE 2







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	ADDREVATION	SERIES "C"	SERIES "D"
AVENUE	Ave	15.000	18.250
BOULEVARD	Blvd	17.125	20.000
CIRCLE	Cir	11.125	13.000
COURT	Ct	8. 250	9.625
DRIVE	Dr	8.625	10.125
HIGHWAY	Hwy	18.375	22.000
ILLINOIS	IL	7. 000	8. 250
LANE	Ln	9.125	10.750
PARKWAY	Pkwy	23. 375	27.375
PLACE	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.
- 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

- WESTERN REMAC, INC. WOODRIDGE, IL SIGN CHANNEL PART #HPN053 (MED. CHANNEL)
SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3
SELF TAPPING WITH NEOPRENE WASHER

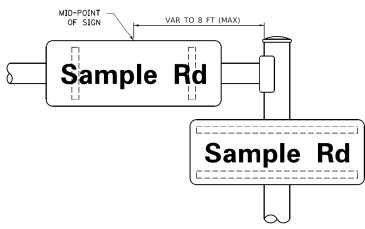
SELF TAPPING WITH NEOPRENE WASHER PART #HPN034 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

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

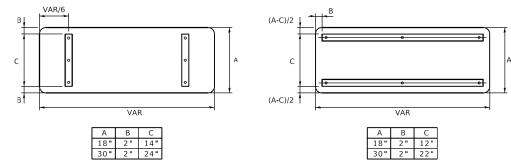
BRACKETS

#### **MOUNTING LOCATION**

ARM OR POLE MOUNTED



#### SUPPORTING CHANNELS



#### STANDARD ALPHABETS SPACING CHART

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

	FHWA SEI	RIES "C"	T	FHWA SERIES "D"						
CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (INCH)	CHARACTER	LEFT SPACING (INCH)	WIDTH (INCH)	RIGHT SPACING (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	C	0.800	5.446	0.800			
D	0.880	4. 482	0.720	D	0.960	5.446	0.800			
Е	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	0.240	4.082	0.880	J	0.240	5.122	0.960			
K	0.880	4.482	0.480	K	0.960	5.604	0.400			
L	0.880	4.082	0.240	L	0.960	4.962	0.240			
М	0.880	5.284	0.880	М	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	0.480	4.482	0.480	S	0.400	5.446	0.400			
T U	0.240	4.082	0. 240	T U	0.240	4.962	0.240			
	0.880	4. 482	0.880		0.960	5.446	0.960			
V	0.240	4.962	0. 240	V W	0.240	6.084	0.240			
W	0.240 0.240	6.084	0.240 0.240	X	0.240	7.124 5.446	0.240			
X Y	0.240	4. 722 5. 122	0. 240	Y	0.400 0.240	6.884	0.400			
Z	0.480	4. 482	0. 480	Z	0. 400	5.446	0.400			
<u> </u>	0.320	3. 842	0. 480	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			
d	0.480	4. 082	0.720	d	0.480	4.802	0.800			
e	0.480	4. 082	0.320	e	0.480	4. 722	0.320			
f	0.320	2.480	0.160	f	0.320	2.882	0.160			
g	0.480	4. 082	0. 720	g	0.480	4.802	0.800			
h	0.720	4.082	0.640	h	0.800	4.722	0.720			
i	0.720	1.120	0. 720	i	0.800	1.280	0.800			
j	0.000	2.320	0. 720	j	0.000	2.642	0.800			
k	0.720	4. 322	0.160	k	0.800	5.122	0.160			
_	0.720	1.120	0.720	I	0.800	1.280	0.800			
Э	0.720	6.724	0.640	m	0.800	7.926	0.720			
J	0.720	4.082	0.640	n	0.800	4.722	0.720			
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			
r	0.720	2.642	0.160	r	0.800	3.042	0.160			
s	0.320	3. 362	0.240	S .	0.320	3. 762	0.240			
t	0.080	2.882	0.080	t	0.080	3. 202	0.080			
U	0.640	4.082	0. 720	u	0.720	4.722	0.800			
٧	0.160	4. 722	0.160	V	0.160	5.684	0.160			
W	0.160	7.524	0.160	W	0.160	9.046	0.160			
×	0.000	5. 202	0.000	X	0.000	6. 244	0.000			
у 7	0.160	4.962	0.160 0.240	y	0.160	6.004	0.160			
<u>z</u>	0. 240 0. 720	3. 362 1. 680	0. 240	2 1	0. 240 0. 800	4.002 2.000	0.240 0.960			
2	0. 120	4. 482	0. 880	2	0.800	5.446	0. 960			
3	0.480	4. 482	0.480	3	1.440	5.446	0.800			
4	0.480	4. 962	0. 720	4	0.160	6.004	0.960			
5	0. 480	4. 482	0. 120	5	0.180	5. 446	0. 800			
6	0.720	4. 482	0.720	6	0.800	5.446	0.800			
7	0. 240	4. 482	0. 720	7	0.560	5.446	0.560			
8	0.480	4. 482	0.480	8	0.800	5.446	0.800			
9	0.480	4. 482	0. 480	9	0.800	5.446	0.800			
0	0.720	4. 722	0. 720	0	0.800	5. 684	0.800			
-	0.240	2.802	0.240	-	0. 240	2.802	0.240			
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE									SE	CTION		COUNTY	SHEETS	NO.
	MAST ARM MOUNTED STREET NAME SIGNS								TS-0	2		CONTRACT	NO.	
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ı		DRAWN -	CWW	REVISED -
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	PLOT DATE = 2/29/2024	DATE -	2/20/2024	REVISED -

	F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS	1531	23-00361-00-TL	DUPAGE	8	
			CONTRACT	NO.	
CHEET 1 OF 0 CHEETC CTA TO CTA					

# TRAFFIC SIGNAL LEGEND (NOT TO SCALE)

	<u>EXISTING</u>	<u>PROPOSED</u>	ITEM	EXISTING	<u>PROPOSED</u>	<u>ITEM</u>	<u>EXISTING</u>	PROPOSED
CONTROLLER CABINET		×	HANDHOLE -SQUARE -ROUND			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	R Y Y	R R Y
COMMUNICATION CABINET	ECC	СС	HEAVY DUTY HANDHOLE					G G 4Y 4Y 4G
MASTER CONTROLLER	EMC	MC	-SQUARE -ROUND	⊞ ®	⊞ 19		F	<b>4</b> G <b>4</b> G <b>P</b>
MASTER MASTER CONTROLLER	EMMC	ммс	DOUBLE HANDHOLE			SIGNAL HEAD WITH BACKPLATE	6 6 6 6	
UNINTERRUPTABLE POWER SUPPLY	<b>4</b>	<b>7</b>	JUNCTION BOX		0	-(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		Y Y Y
SERVICE INSTALLATION -(P) POLE MOUNTED	-D- <sup>P</sup>	- <b>■</b> -P	RAILROAD CANTILEVER MAST ARM	X <del>OX X</del> X	X <del>eX X</del>			G G G 4Y 4Y 4G 4G
SERVICE INSTALLATION			RAILROAD FLASHING SIGNAL	<del>∑⊙</del> ∑	X⊕X		P RB	P RB
-(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	$\boxtimes^{G}\boxtimes^{GM}$	<b>⊠</b> <sup>G</sup> <b>⊠</b> <sup>GM</sup>	RAILROAD CROSSING GATE	<del>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</del>	X•X-	PEDESTRIAN SIGNAL HEAD	<b>(</b> )	<b>₽</b>
TELEPHONE CONNECTION	ET	Т	RAILROAD CROSSBUCK	¥	*	AT RAILROAD INTERSECTIONS		
STEEL MAST ARM ASSEMBLY AND POLE	O	•——	RAILROAD CONTROLLER CABINET		<b>≯</b> ∢	PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	<b>(</b>	<b>₽</b> C <b>₹</b> D
ALUMINUM MAST ARM ASSEMBLY AND POLE	0		UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			ILLUMINATED SIGN		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE	o-¤—	•**	TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			"NO LEFT TURN"/"NO RIGHT TURN"		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY	0	• • BM	SYSTEM ITEM	S	SP	NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE.	(5)	(5)
WOOD POLE	⊗	•	INTERSECTION ITEM	I	IP	ALL DETECTOR LOOP CABLE TO BE SHIELDED  GROUND CABLE IN CONDUIT,	70	
GUY WIRE	<i>→</i>	<i>→</i>	REMOVE ITEM		R	NO. 6 SOLID COPPER (GREEN)	1#6	
SIGNAL HEAD		-	RELOCATE ITEM ABANDON ITEM		RL A	ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
SIGNAL HEAD WITH BACKPLATE	#>	+	CONTROLLER CABINET AND		RCF	COAXIAL CABLE	— <u>C</u>	—c)—
SIGNAL HEAD OPTICALLY PROGRAMMED	> P +-> P	→ P + → P	FOUNDATION TO BE REMOVED		NCI*	VENDOR CARLE	,	
FLASHER INSTALLATION -(FS) SOLAR POWERED	of of FS	•► FS	MAST ARM POLE AND FOUNDATION TO BE REMOVED		RMF	VENDOR CABLE		(v)
(13) 33EAR TOWERED	ь⊳ вы>FS	<b>₽</b> ► <b>P</b> ► FS	SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF	COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED	<u></u>	<u>—(6#18)</u>
PEDESTRIAN SIGNAL HEAD	-0	-1	DETECTOR LOOP, TYPE I			FIBER OPTIC CABLE -NO. 62.5/125, MM12F	12F	12F
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON	⊚	⊚ ⊗ APS	PREFORMED DETECTOR LOOP	PP	P P	-NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F	24F	
RADAR DETECTION SENSOR	R	R	SAMPLING (SYSTEM) DETECTOR	S S	s s		—36F	—(36F)—
VIDEO DETECTION CAMERA	[V]  ☐	<b>V</b> ■	INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	IS (IS)	IS (IS)			
RADAR/VIDEO DETECTION ZONE	<b>=</b>	<b>III</b>	QUEUE AND SAMPLING	QS (QS)	os (os	GROUND ROD -(C) CONTROLLER	<u> </u>	<u>÷</u> C
PAN, TILT, ZOOM (PTZ) CAMERA	PTZ]	₽TZ¶	(SYSTEM) DETECTOR WIRELESS DETECTOR SENSOR	(ii)	<b>®</b>	-(M) MAST ARM -(P) POST -(S) SERVICE		
EMERGENCY VEHICLE LIGHT DETECTOR	≪	- <b>≪</b>	WIRELESS DETECTOR SENSOR WIRELESS ACCESS POINT		_	(5, 5252		
CONFIMATION BEACON	<b>○</b> —(]	•-1	TINEEESS AGGESS I ONL	<u> </u>	_			
NIRELESS INTERCONNECT	<b>⊶+</b>   -	<u>•++  </u>						
	ERR	RR						

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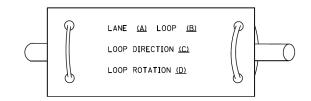
CITY	OF	AURORA

STANDARD TRACEIC SIGNAL DESIGN DETAILS							F.A.U. RTE	SECT				TOTAL SHEETS	SHEET NO.		
STANDARD TRAFFIC SIGNAL DESIGN DETAILS						1531	23-0036	23-00361-00-TL			24	9			
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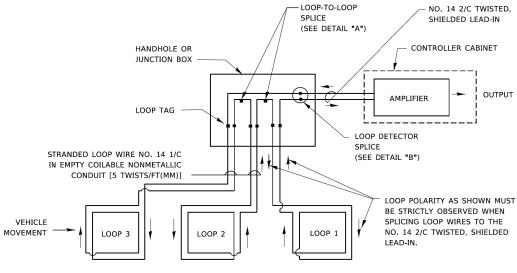
#### LOOP DETECTOR NOTES

- 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.
- 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

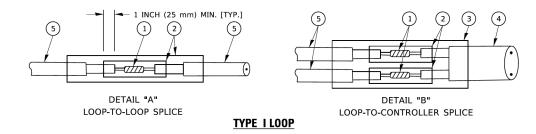


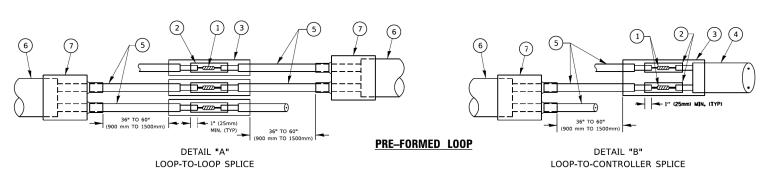
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



#### **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:

(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

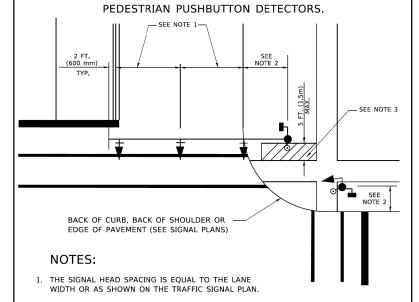
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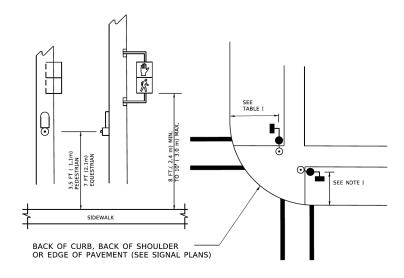
#### TRAFFIC SIGNAL MAST ARM AND SIGNAL POST

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



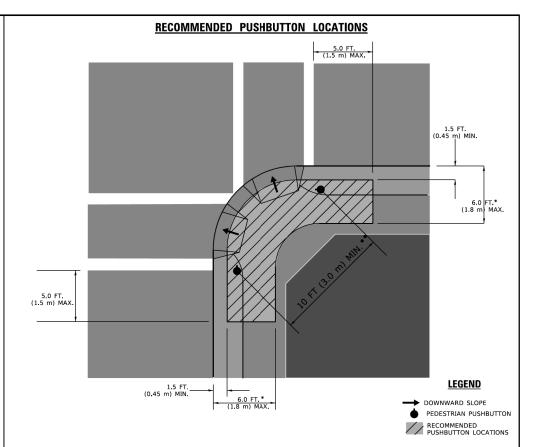
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE 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 FACILITIES."

# PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



#### NOTES:

- 1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 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.
- 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

	TRAITIC SIGNAL EQUI MENT OTTSET												
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.

SCALE:

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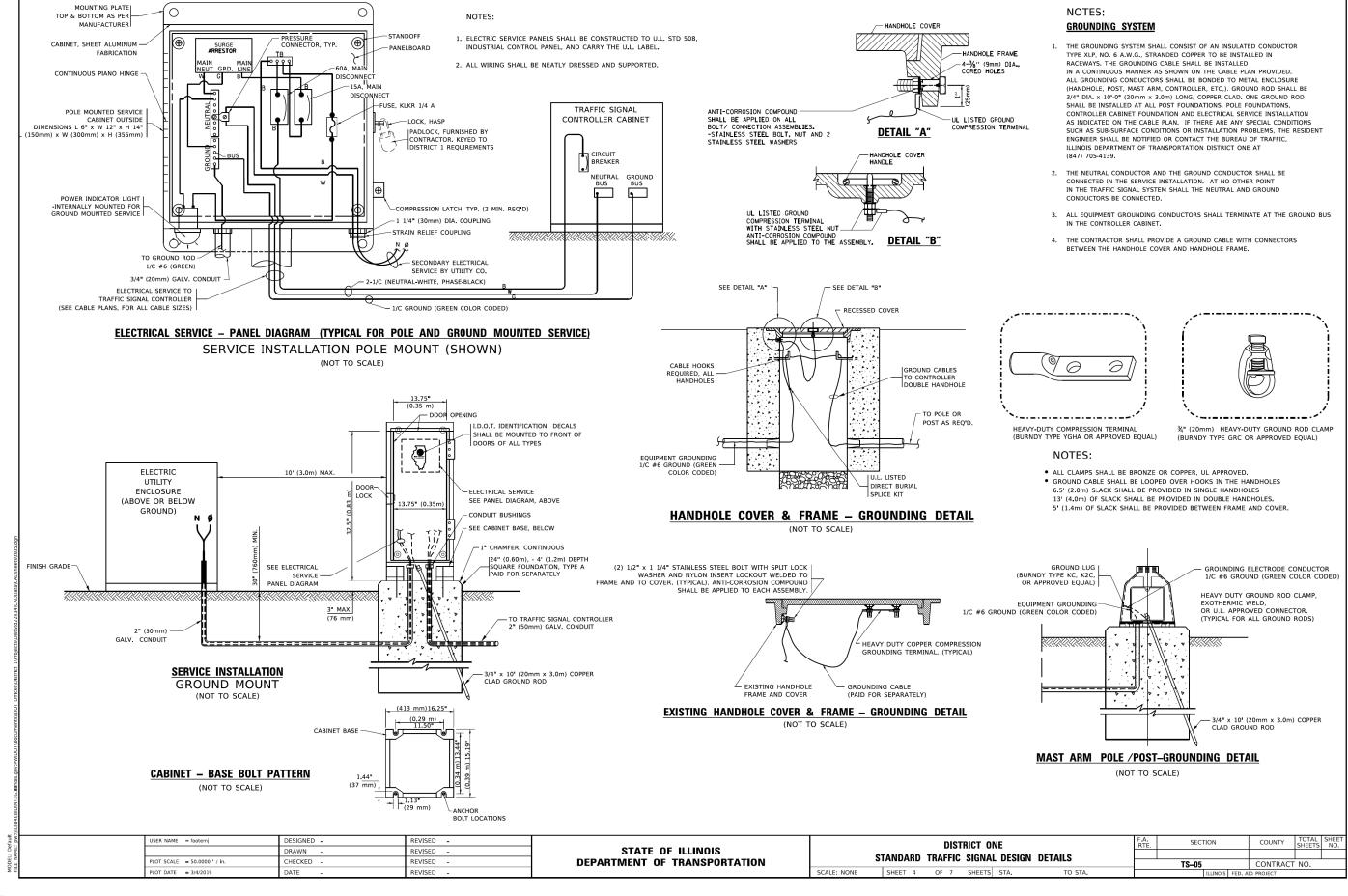
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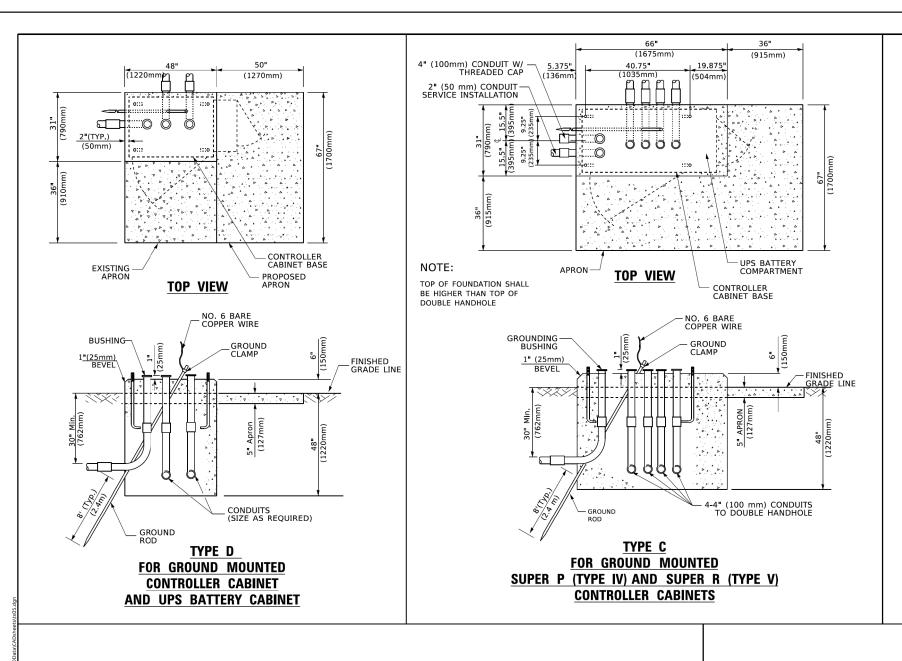
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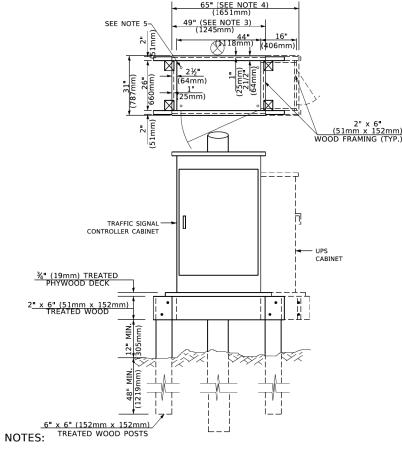
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CITY OF AURORA

						F.A.U. RTE	SECT	ΠΟN		COUNTY	TOTAL SHEETS	SHEET NO.			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS					1531	1531 23-00361-00-TL		DUPAGE	24	12					
									CONTRACT	NO.					
	SHEET	5	OF	8	SHEETS	STA.	TO	STA.			ILLINOIS	FED. Al	ID PROJECT		





- 1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED
- 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
(BETWEEN FRAME AND COVER)		

**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**

SCALE:

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 <sub>4</sub> 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 <sub>•</sub> 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 <sub>4</sub> 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)

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

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

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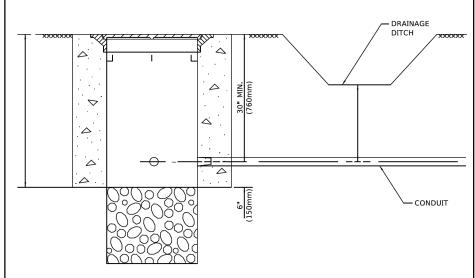
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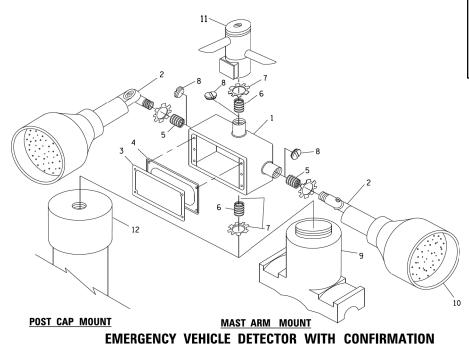
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#### NOTES:

- 1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30  $\!\!^{\rm w}$  (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



(1675mm (915mm) 5.375**"** (136mm 40.75" 19.875" A ...:©  $\odot$ CONTROLLER CABINET BASE PROPOSED-**TOP VIEW** APRON —NO. 3 DOWEL 18" (450mm NO. 6 BARE COPPER WIRE LONG (8 REQ.) BUSHING-GROUND EXISTING-ANCHOR BOLTS CLAMP FINISHED GRADE LINE BEVEL 12" (300mm) 12" (300mm) (225mm) (225mm) -EXISTING CONDUITS EXISTING GROUND ROD

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

(NOT TO SCALE)

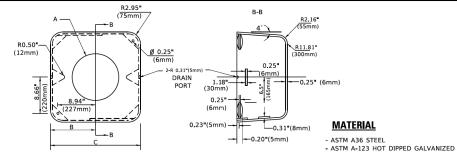
# ITEM NO. IDENTIFICATION 1 OUTLET BOX- GALV, 21 CU,IN. (0.000344 CU-M) 2 LAMP HOLDER AND COVER 3 OUTLET BOX COVER 4 RUBBER COVER GASKET 5 REDUCING BUSHING 6 ¾"(19 mm) CLOSE NIPPLE 7 ¾"(19 mm) LOCKNUT 8 ¾"(19 mm) HOLE PLUG 9 SADDLE BRACKET - GALV. 10 6 WATT PAR 38 LED FLOOD LAMP 11 DETECTOR UNIT 12 POST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

#### NOTES:

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

STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

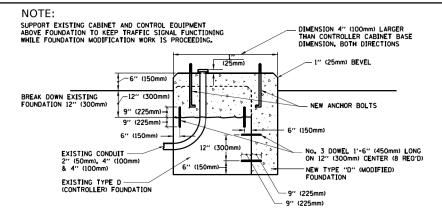


Α	В	С	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57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



#### MODIFY EXISTING TYPE "D" FOUNDATION

# CALVANIZED STEEL HOOKS 21 1/2" MIN. G45mm) CONDUIT BUSHING BY MIN. (200mm) FRENCH DRAIN PLAN ELEVATION

#### NOTES:

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

#### HANDHOLE TO INTERCEPT EXISTING CONDUIT

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**BEACON MOUNTING DETAIL** 

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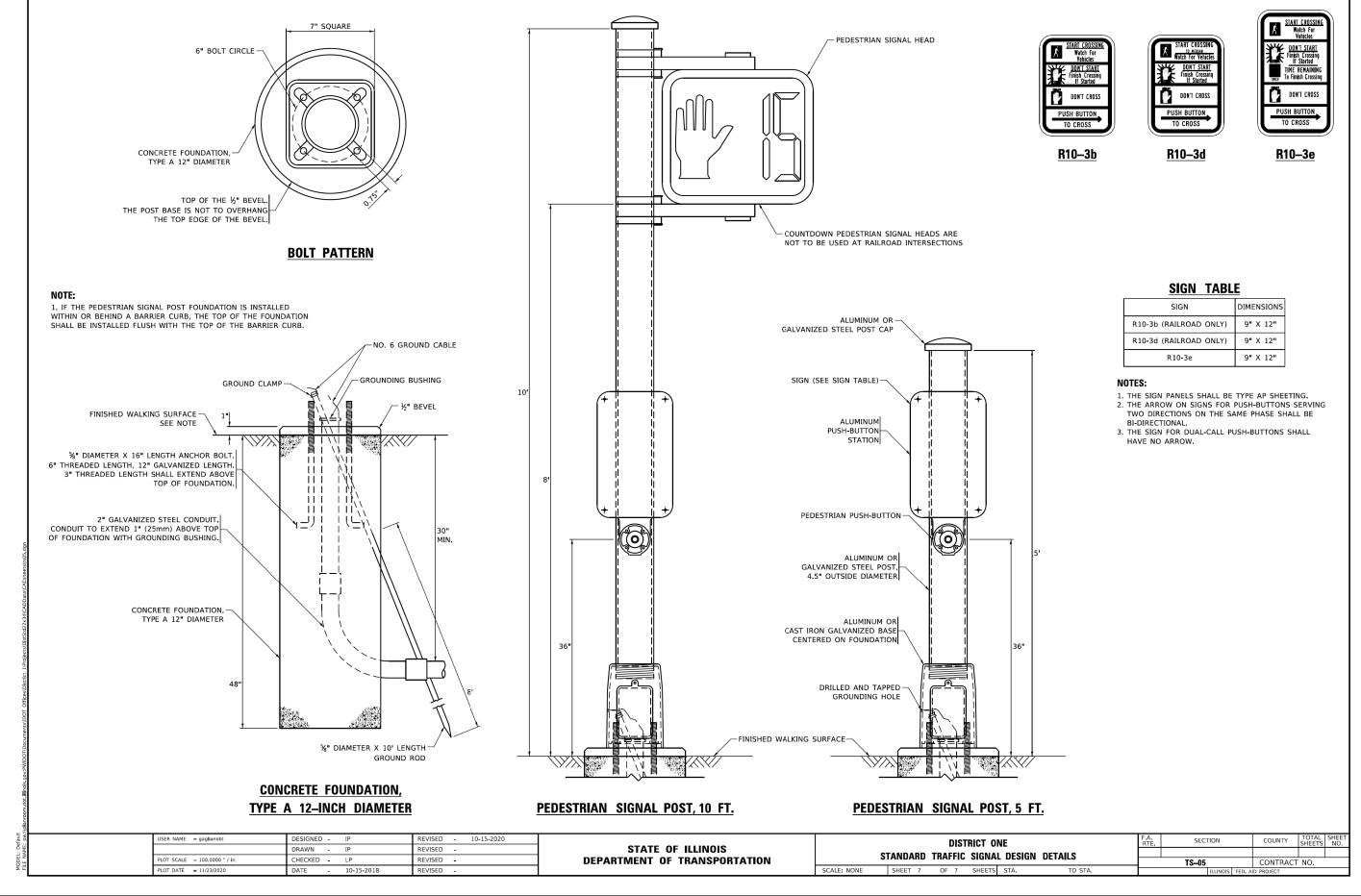
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CITY OF AURORA

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			CONTRACT	NO.	
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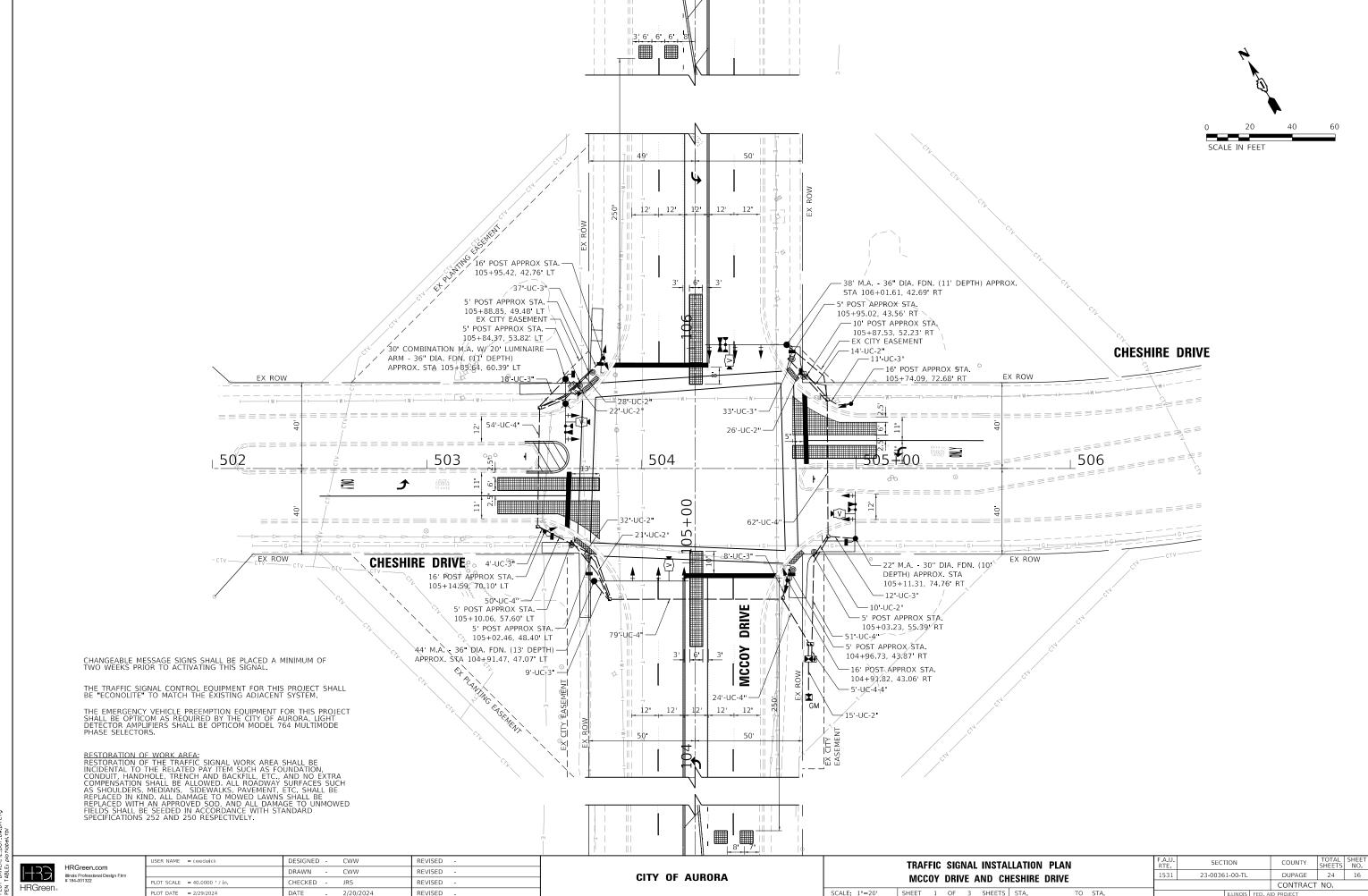
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## PROPOSED CONTROLLER SEQUENCE **LEGEND**: ← + - PROTECTED/PERMITTED PHASE 61 **◄-**(\*)→ PEDESTRIAN PHASE OL OVERLAP **√ 4**-8)- **>** NUMBER REFERS TO ASSOCIATED **√** -3 - -PHASE CHESHIRE DRIVE MCCOY DRIVE 52 PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE \$ \$ a ≺ ₽ —7 CHESHIRE DRIVE 4-4-4 CHESHIRE DRIVE <u></u>\$ 2 0 ≺ 20 -~ (7) - (12) × (13) × (13) NO.20(3) (S) K I.D.O.T TRAFFIC SIGNAL INSTALLATION APS (2)~ R Y G

#### **SCHEDULE OF QUANTITIES**

PAY ITEM DESCRIPTION	UNIT	QUANTITY
SERVICE INSTALLATION - GROUND MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	168
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	132
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	306
HANDHOLE	EACH	6
DOUBLE HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	500
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1645
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2540
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2340
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1917
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2C	FOOT	100
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	500
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	4
STEEL MAST ARM ASSEMBLY AND POLE 22 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 38 FT.	EACH	1
STEEL MAST ARM ASSEMBLY AND POLE 44 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	48
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	35
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	6
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, RETROREFLECTIVE	EACH	10
LIGHT DETECTOR	EACH	4
LIGHT DETECTOR AMPLIFIER	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	980
FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)	EACH	1
CAT. 6 ETHERNET CABLE	FOOT	380
PEDESTRIAN SIGNAL POST, 10 FT.	EACH	1
PEDESTRIAN SIGNAL POST, 5 FT.	EACH	7
VIDEO DETECTION SYSTEM COMPLETE	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
ETHERNET SWITCH	EACH	1
ACCESSIBLE PEDESTRIAN SIGNALS	EACH	8
INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	1
CENTRALIZED SYSTEM FIELD INTEGRATION/SETUP	EACH	1

ELECT	TOTAL							
TYPE	NO. LAMPS	WAT	TAGE	% OPERATION	WATTAGE			
		INCAND.	LED					
SIGNAL (RED)	18		11	50	99.0			
(YELLOW)	18		20	25	90.0			
(GREEN)	18		12	25	54.0			
ARROW	16		10	10	16.0			
PED. SIGNAL	8		20	100	160.0			
CONTROLLER	1		100	100	100.0			
UPS	1		25	100	25.0			
VIDEO SYSTEM	1		150	100	150.0			
LUMINAIRE	1		240	50	155.0			
	TOTAL =							
[								

ENERGY COSTS TO: CITY OF AURORA

44 E. DOWNER PLACE AURORA, ILLINOIS 60507-2067

ENERGY SUPPLY CONTACT:

MARK SCHERIBEL

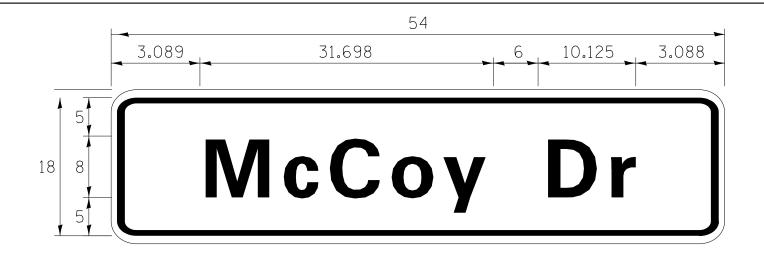
PHONE: (630) 723-2128

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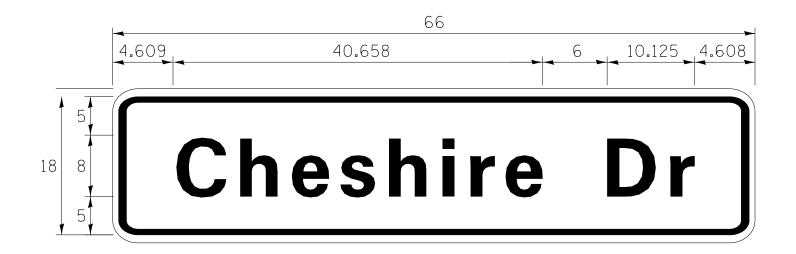
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1531	23-0036	1-00-TL		DUPAGE	24	17
				CONTRACT	NO.	
		ILLINOIS	FED. A	ID PROJECT		

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

SHALL BE MOUNTED ON THE MAST ARMS IN THE NORTHWEST AND SOUTHEAST CORNERS.



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

SHALL BE MOUNTED ON THE MAST ARMS IN THE SOUTHWEST AND NORTHEAST CORNERS.

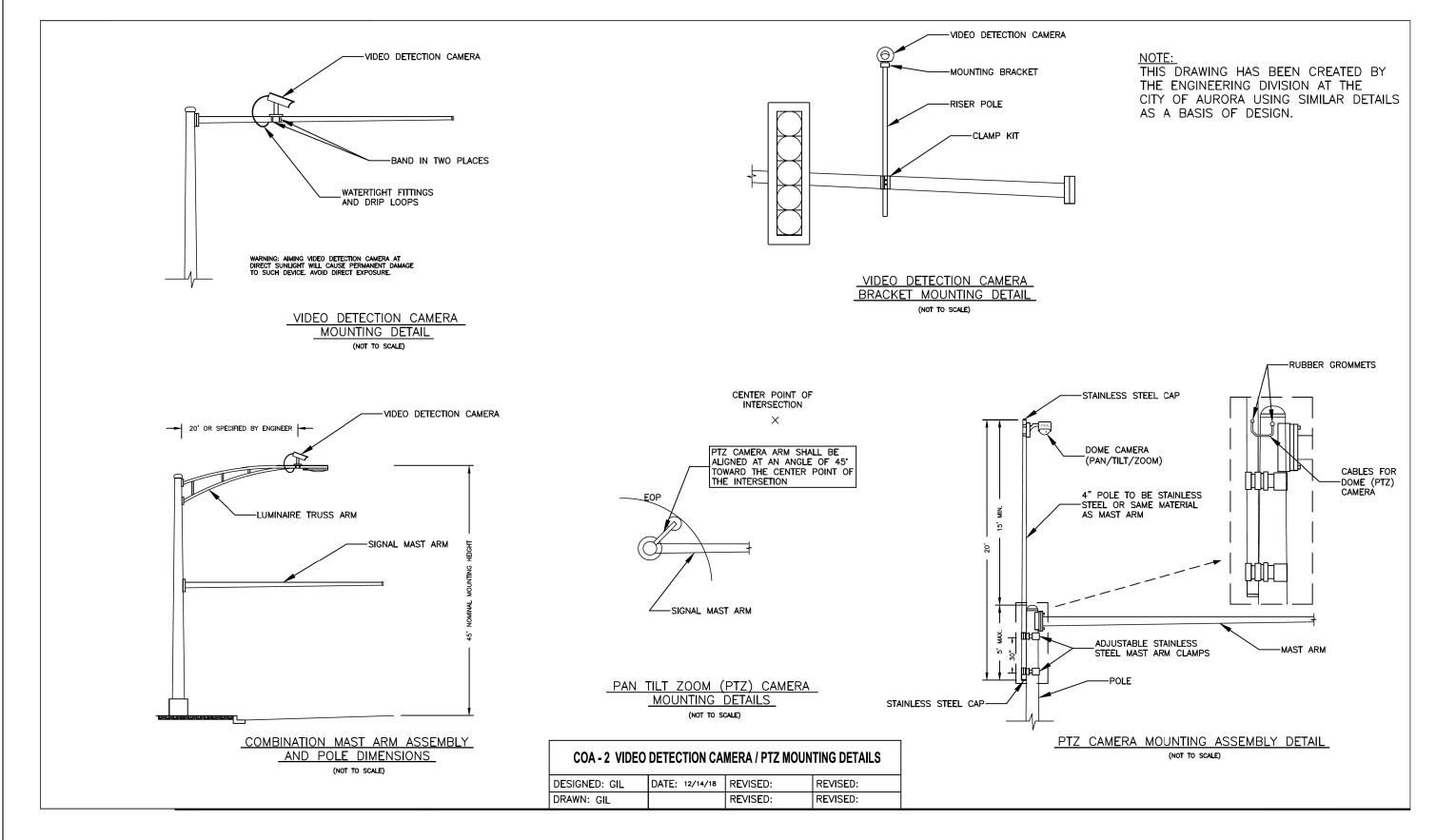
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WAST ARM MOUNTED STREET NAME SIGNS							F.A.U. SECTION COUNT		COUNTY	TOTAL SHEETS	SHEET NO.		
	MCCOY DRIVE AND CHESHIRE DRIVE						1531 23-00361-00-TL			DUPAGE	24	18	
	MICCUT DRIVE AND CHESHIKE DRIVE										CONTRACT	NO.	
SHEET 3 OF 3 SHEETS STA. TO STA.								ILLINOIS	FED. AI	D PROJECT			



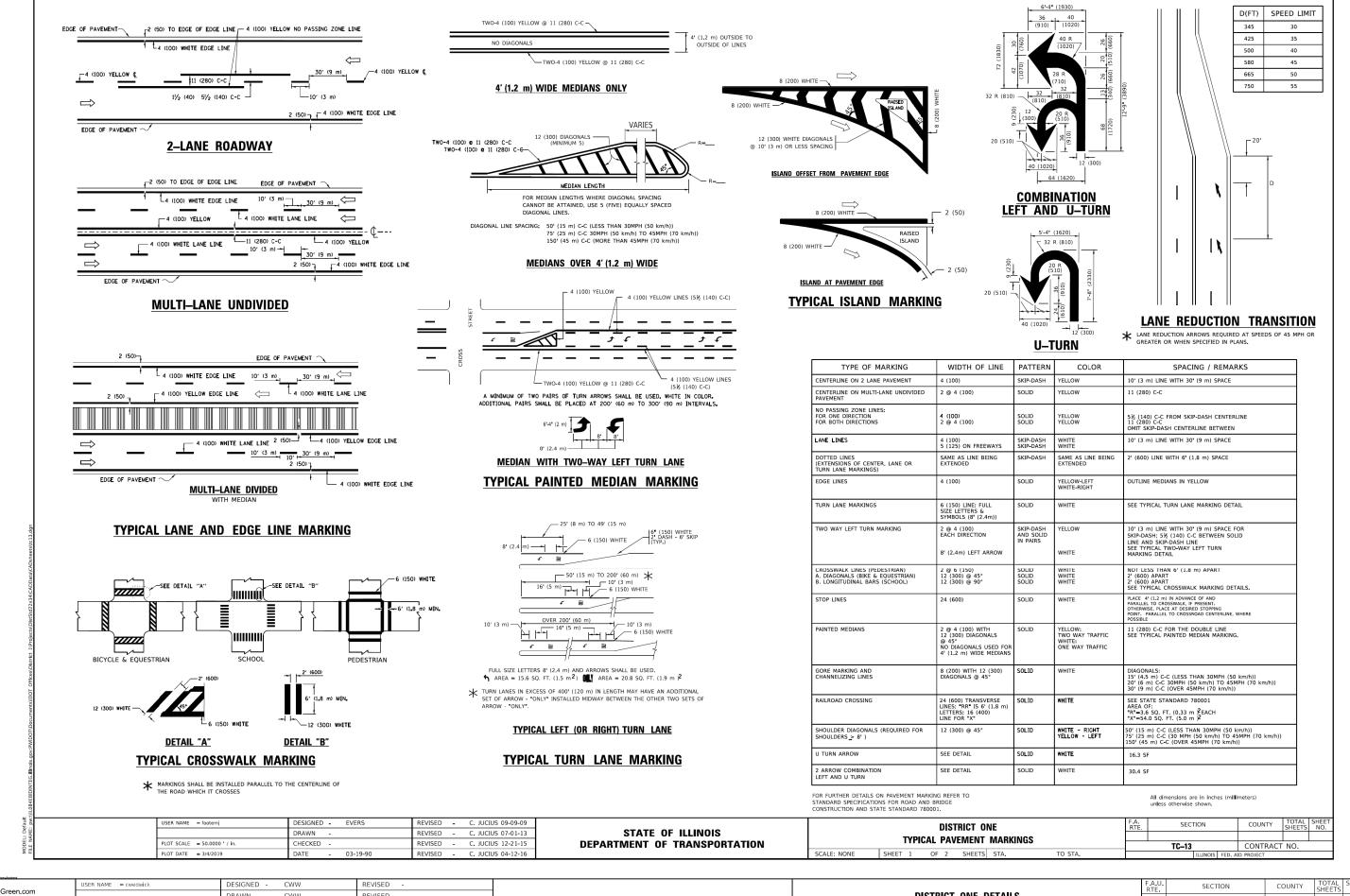
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	MISCELLANEOUS DETAILS							1531	1531 23-00361-00-TL DU			DUPAGE	24	19
												CONTRACT	NO.	
SHEET	1 OF 1 SHEETS STA. TO STA.								ILLINOIS	FED. AI	D PROJECT			



**HRGreen** 

HRGreen.com
Illinois Professional Design Firm
# 184-001322

| DESIGNED - CWW REVISED - | DRAWN - CWW REVISED - | DRAWN - CWW REVISED - | DATE - 2/20/2024 REVISED - | DATE - 2/20/

CITY OF AURORA

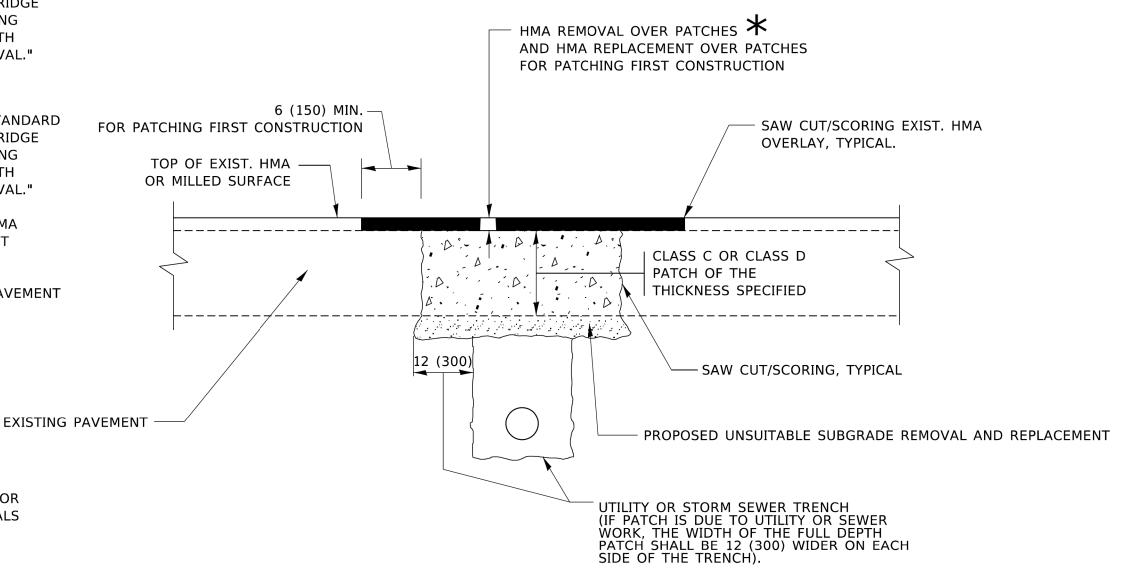
SCALE:

#### **METHOD OF MEASUREMENT**

REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."

#### **BASIS OF PAYMENT**

- 1. REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."
- SAW CUT/SCORING OF EXISTING HMA OVERLAY IS INCLUDED IN THE COST OF PAVEMENT PATCHING.
- 3. SAW CUT/SCORING OF EXISTING PAVEMENT IS INCLUDED IN THE COST OF PAVEMENT PATCHING.



## SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEE TYPICAL SECTIONS FOR

THICKNESS AND MATERIALS

- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

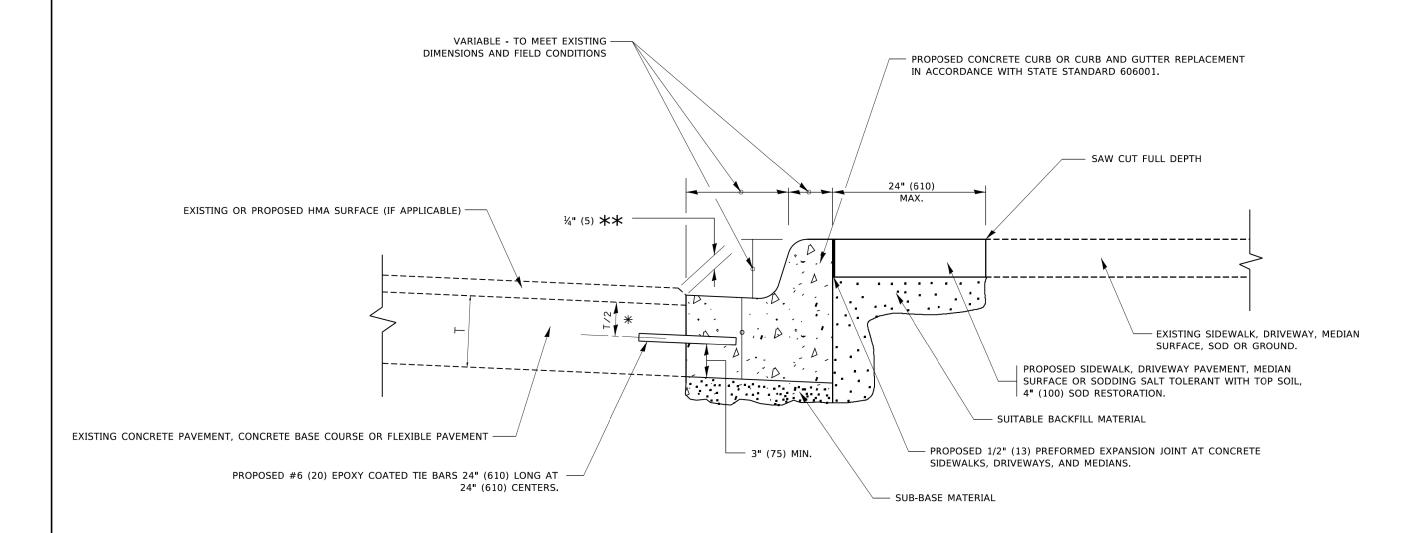
#### **SEQUENCE OF CONSTRUCTION (MILLING FIRST)**

- 1. MILL HMA FIRST IF THERE IS AT LEAST  $4\frac{1}{2}$  INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

	USER NAME = demanchelt	DESIGNED - R. SHAH	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR			SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - R. BORO 09-04-07		HMA SURFACED PAVEMENT		1531	23-00361-00-TL	DUPAGE	24	21
	PLOT SCALE = 100,0000 ' / in.	CHECKED -	REVISED - K. ENG 10-27-08				BD400-04 (BD-22)		CONTRACT NO.		
	PLOT DATE = 2/2/2022	DATE - 10-25-94	REVISED - K. SMITH 02-01-22		SCALE: NONE	SHEET 1 OF 1 SHEETS STA. TO STA.		ILLINOIS FED. AI	D PROJECT		

FILE NAME: W:\diststd\22x34\bd22.dg



- X 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.
- $\star\star$  if the final surface of the pavement is concrete, the gutter is to be flush WITH THE PAVEMENT.

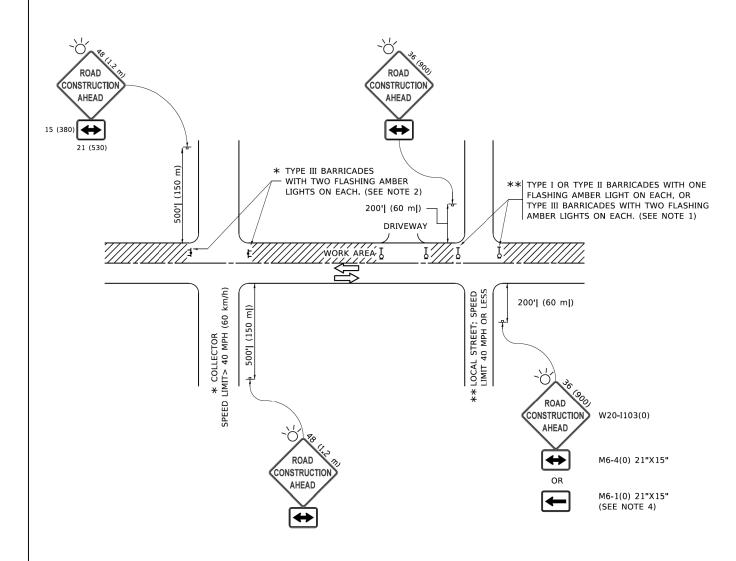
# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

COUNTY TOTAL SHEETS NO.

DUPAGE 24 22

PI	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - R. BORO 12-15-09	DEPARTMENT OF TRANSPORTATION	SCALE: NONE	REMOVAL AND REPLACEMENT			BD600-06 (BD-24)	CONTRACT	NO.
PI	PLOT DATE = 7/11/2019	DATE - 03-11-94	REVISED - K. SMITH 07-11-19		SCALE: NONE	SHEET 1 OF 1 SHEETS STA.	TO STA.		ILLINOIS FED. A	NID 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.
- 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: 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
- 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.

COUNTY TOTAL SHEET'S NO.

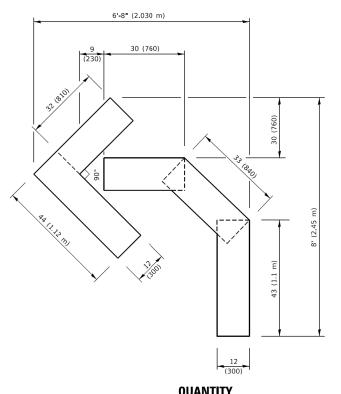
DUPAGE 24 23

COUNTY CONTRACT NO.

USER NAME = footemj	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
	DRAWN -	REVISED - T. RAMMACHER 01-06-00
PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
PLOT DATE = 3/4/2019	DATE - 06-89	REVISED _ A. SCHUETZE 09-15-16

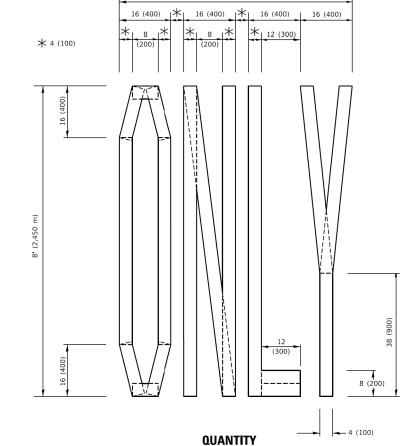
STATE OF	ILLINOIS
DEPARTMENT OF	TRANSPORTATION

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS							F.A. RTE.	A. SECTION		
							1531	1531 23-00361-0		
SIDE NOADS, INTERSECTIONS, AND DRIVEVVATS									TC-10	
	SHEET	1	OF	1	SHEETS	STA.	TO STA.			ILLING



#### QUANTITY

4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.41 sq. m)



4 (100) LINE = 64.1 ft. (19.5 m) 21.4 sq. ft. (1.99 sq. m)

DRAWN

DATE

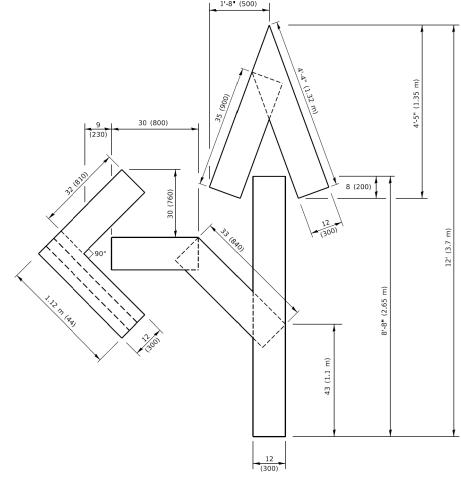
DESIGNED -

CHECKED -

- 09-18-94

USER NAME = footemj

PLOT DATE = 3/4/2019

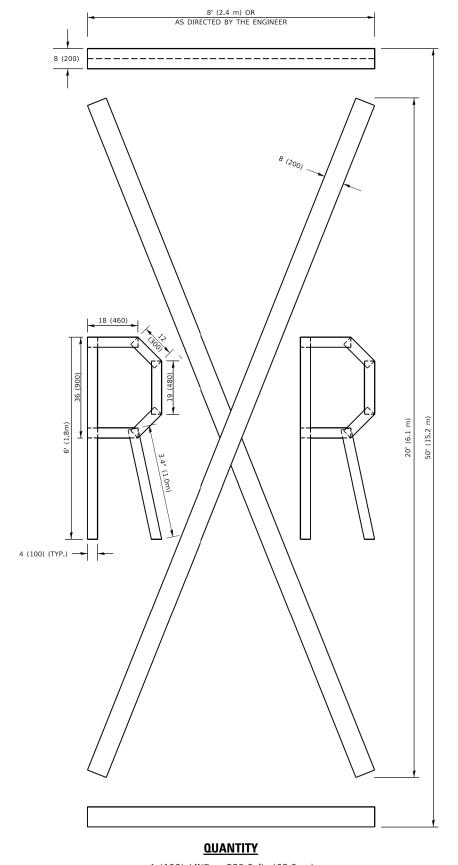


#### QUANTITY

4 (100) LINE = 82.5 ft. (25.1 m) 27.5 sq. ft. (2.53 sq. m)

#### NOTE:

ALL QUANTITIES OF PLACEMENT ARE REPRESENTED IN LINEAR FEET OF 4" LINES TO MATCH THE 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



4 (100) LINE = 225.9 ft. (68.9 m) 75.3 sq. ft. (6.99 sq. m)

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

REVISED - T. RAMMACHER 03-02-98 REVISED - E. GOMEZ 08-28-00 REVISED - E. GOMEZ 08-28-00 REVISED - A. SCHUETZE 09-15-16

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS SCALE: NONE SHEET 1 OF 1 SHEETS STA.

SECTION COUNTY SHEETS NO.

DUPAGE 24 24 23-00361-00-TL 1531 TC-16 CONTRACT NO.