

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 ROAD OR STREET

ADT:

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

DESIGN SPEED:

MCCOY DRIVE = 35 MPH  
CHESHIRE DRIVE = 30 MPH

POSTED SPEED:

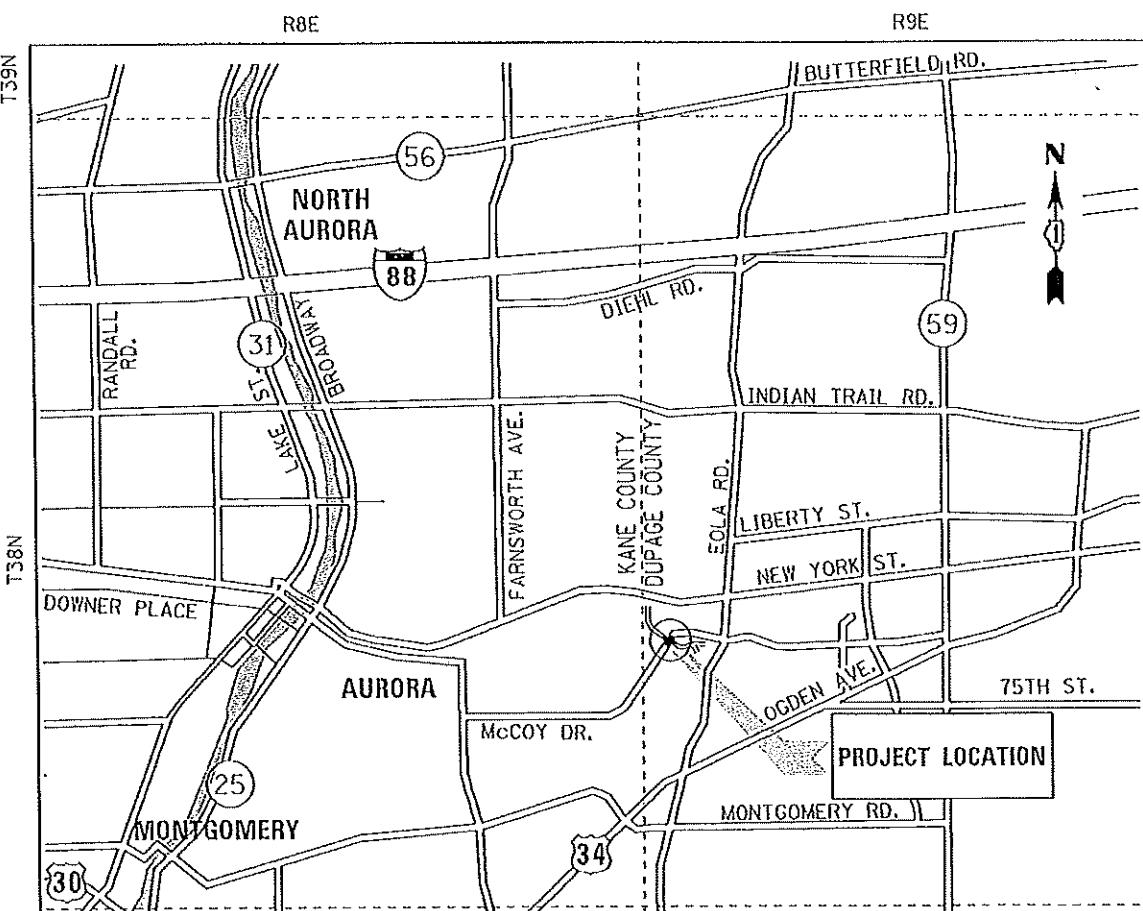
MCCOY DRIVE = 35 MPH  
CHESHIRE DRIVE = 25 MPH

CITY OF AURORA

# PROPOSED PLANS FOR MFT PROJECT

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

### SECTION 23-00361-00-TL



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

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

F.A.U. RTE.	SECTION NO.	COUNTY	TOTAL SHEETS	HEET NO.
1531	23-00361-00-TL	DUPAGE	24	1



**HR**  
HRGreen

2363 SEQUOIA DRIVE, SUITE 101 | AURORA, IL, 60506  
Phone: 630.553.7660 | Toll Free: 800.287.605 | Fax: 630.553.7646 | HRGreen.com  
ILLINOIS PROFESSIONAL DESIGN FIRM #104-001322

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	
APPROVED	3-20 2024
Engineering Coordinator City of Aurora	
PASSED	20
District One Engineer of Local Roads and Streets	
Releasing for bid based on limited review 20	
Regional Engineer	

COLBY W. WEDWICK  
062.074381

3/20/2024

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

DATE  
SEAL

## INDEX OF SHEETS

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2	INDEX OF SHEETS / LIST OF HIGHWAY STANDARDS / GENERAL NOTES
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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-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

## 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.
3. 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, AND GRADING.
4. 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.
5. 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.
6. 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.
7. 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.
8. 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.
9. 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

1. THE CONTRACTOR SHALL COOPERATE WITH THE CITY OF AURORA IF ANY UTILITY IMPROVEMENTS ARE REQUIRED BY THE CITY WITHIN THE DURATION OF THE CONTRACT.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL UTILITIES 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.
3. 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.
4. 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.

### EROSION CONTROL

1. 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 DISTURBED 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

1. 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

1. 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.

CITY OF AURORA

### INDEX OF SHEETS, LIST OF HIGHWAY STANDARDS AND GENERAL NOTES

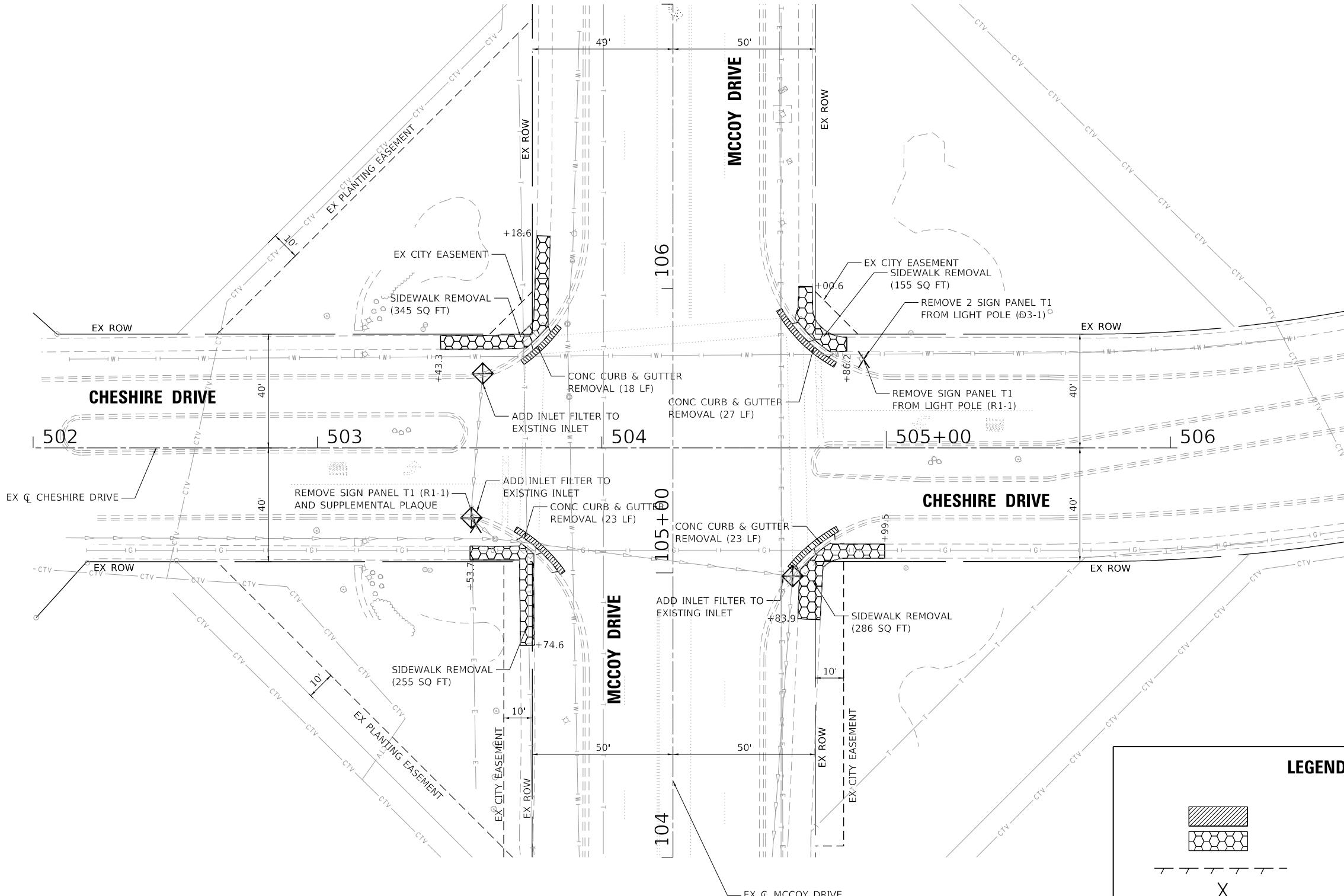
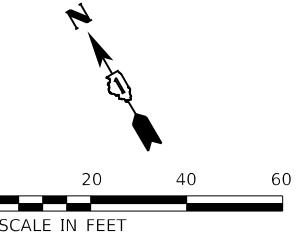
SCALE:	1	OF	1	SHEETS	STA.	TO STA.	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
							1531	23-00361-00-TL	DUPAGE	24	2
											CONTRACT NO.



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

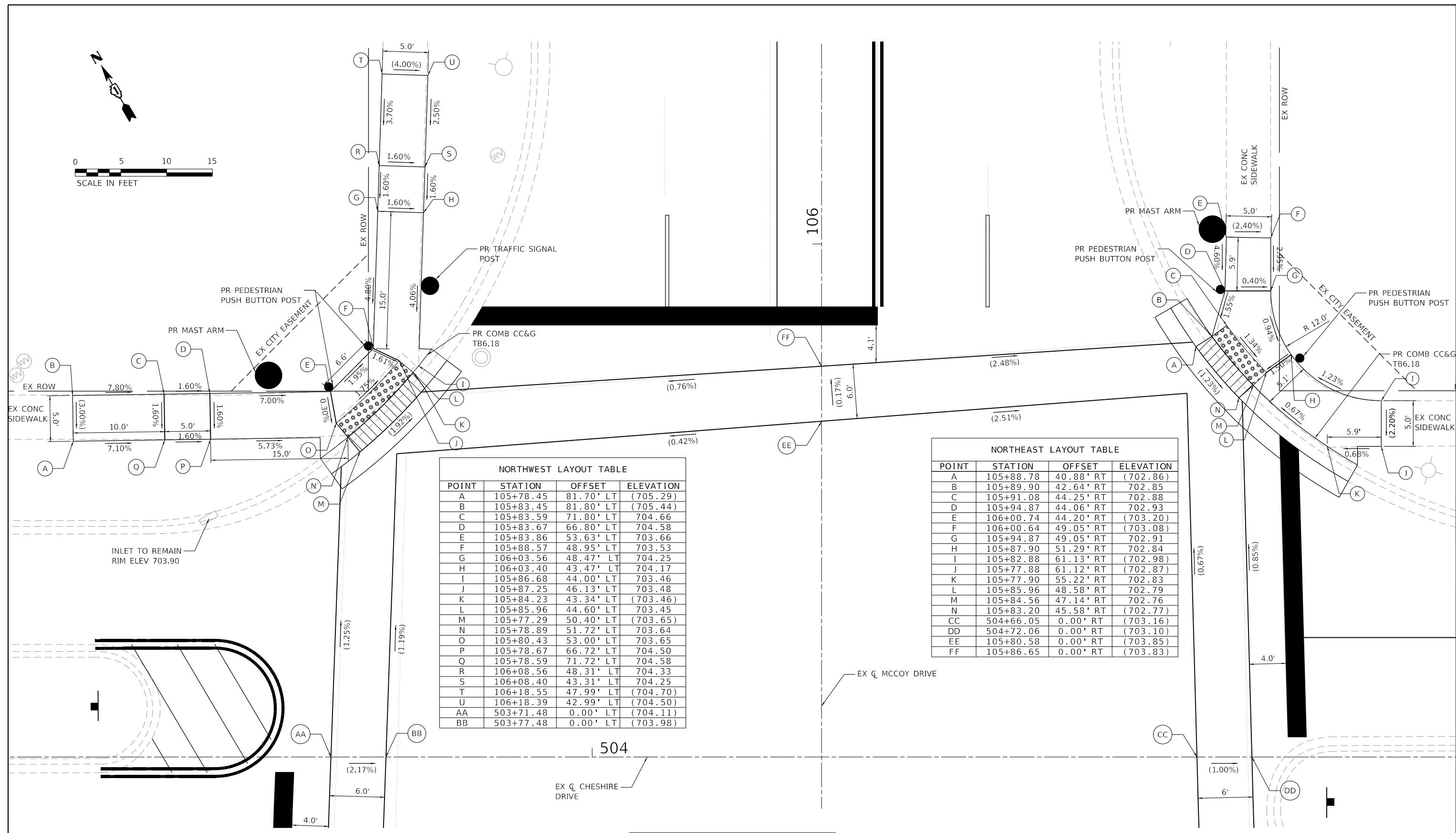
CODE	DESCRIPTION	UNIT	QUANTITY
38	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1645
39	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	2540
40	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2340
41	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1917
42	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 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

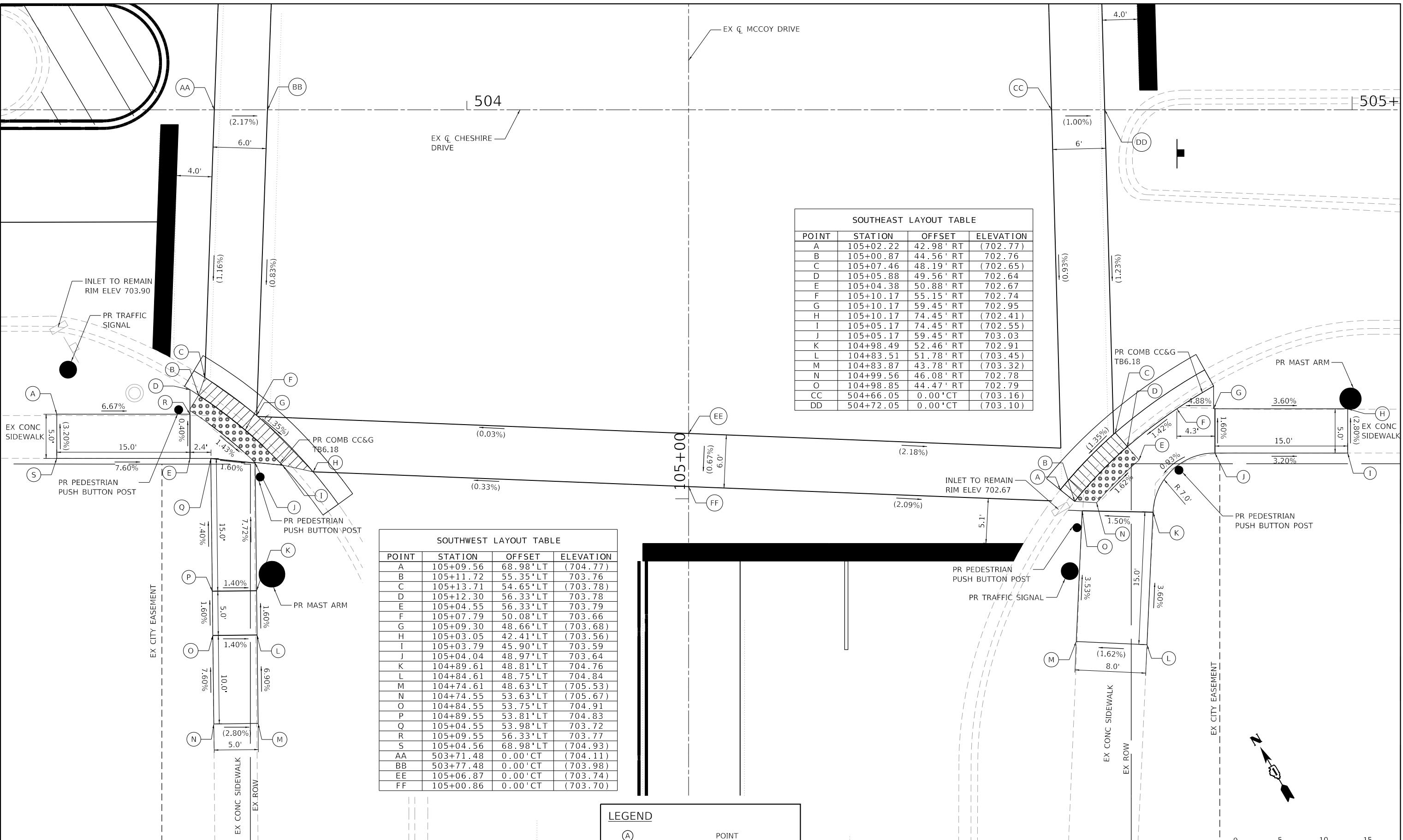
\* SEE SPECIAL PROVISIONS  
\*\*\* INDICATES SPECIALITY ITEMS



### LEGEND

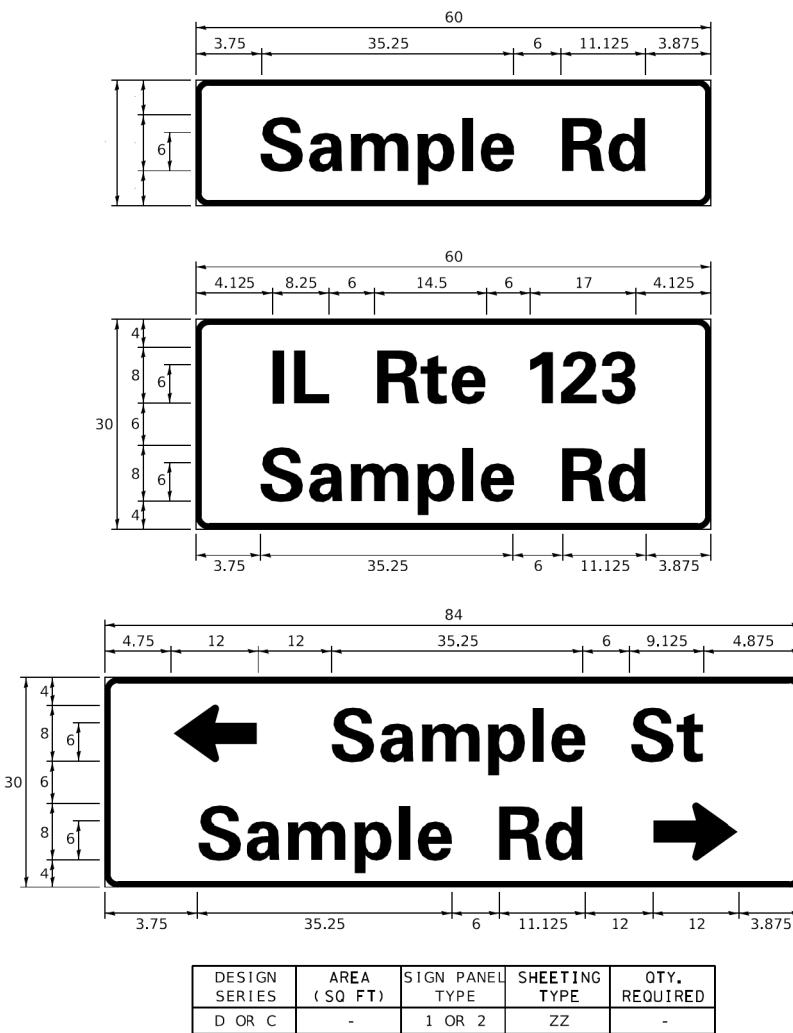
- PAVEMENT REMOVAL
- SIDEWALK REMOVAL
- CURB & GUTTER REMOVAL
- ITEM / TREE REMOVAL
- EXISTING RIGHT OF WAY
- EXISTING EASEMENT







## SIGN PANEL - TYPE 1 OR TYPE 2



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

## COMMON STREET NAME ABBREVIATIONS AND WIDTHS

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

## GENERAL NOTES

- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ SHEETING).
- THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-0". ALL BORDERS IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-0" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8'-0" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-0" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
- LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLS MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.
- SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS.

### LOCAL SUPPLIERS:

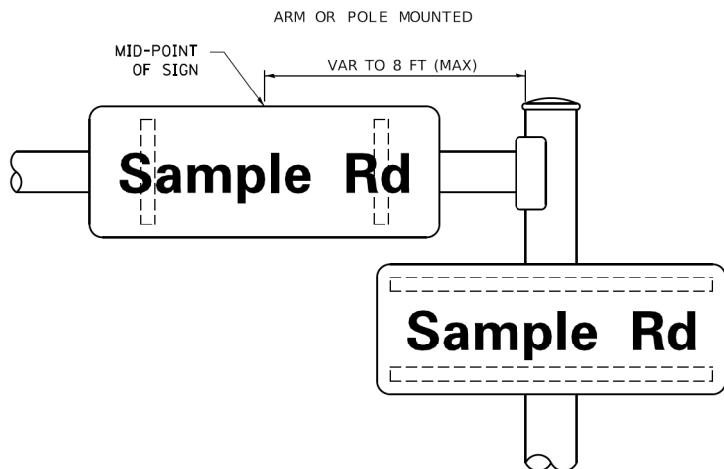
- J.O. HERBERT COMPANY, INC  
MIDLOTHIAN, VA
- WESTERN REMAC, INC.  
WOODRIDGE, IL

### PARTS LISTING:

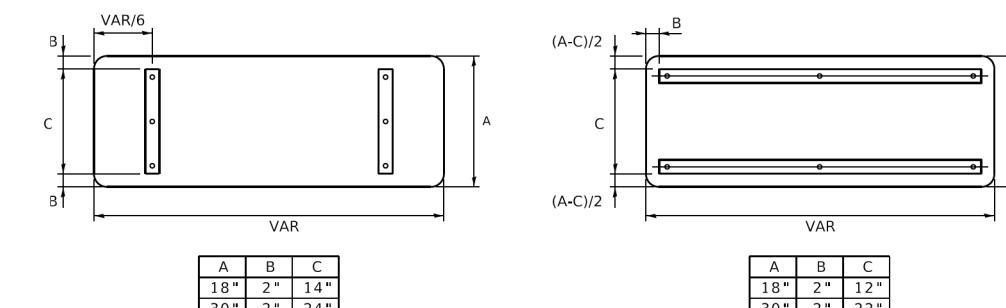
SIGN CHANNEL	PART #HPN053 (MED. CHANNEL)
SIGN SCREWS	1/4" x 14 x 1" H.W.H. #3
BRACKETS	SELF TAPPING WITH NEOPRENE WASHER
	PART #HPN034 (UNIVERSAL)
	CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

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

## MOUNTING LOCATION



## SUPPORTING CHANNELS



A	B	C
18"	2"	14"
30"	2"	24"

A	B	C
18"	2"	12"
30"	2"	22"

## STANDARD ALPHABETS SPACING CHART

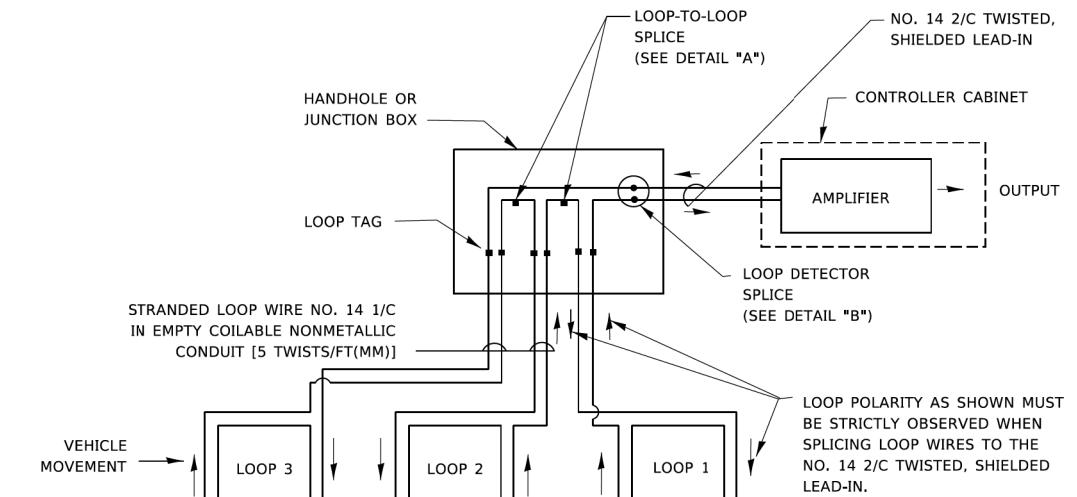
(8") UPPER CASE AND (6") LOWER CASE

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



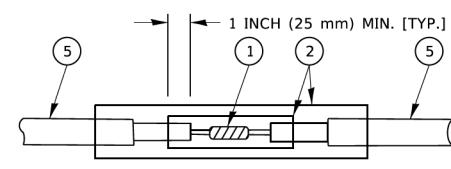
### LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANHOLE. 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 HANHOLE. 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 HANHOLE 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.

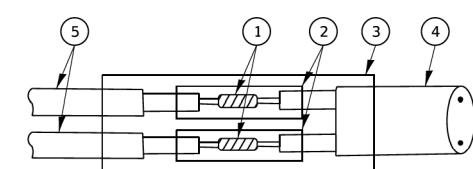


### DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES. SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE,
- THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

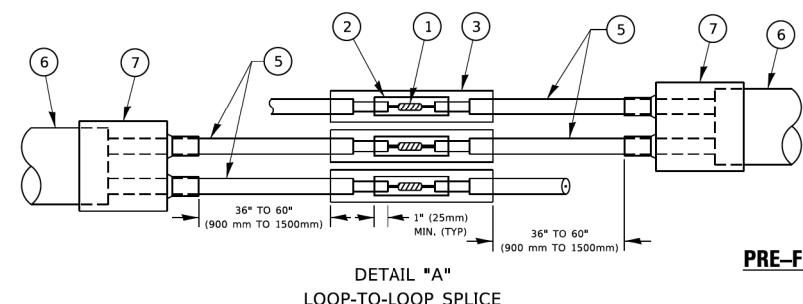


DETAIL "A"  
LOOP-TO-LOOP SPLICE

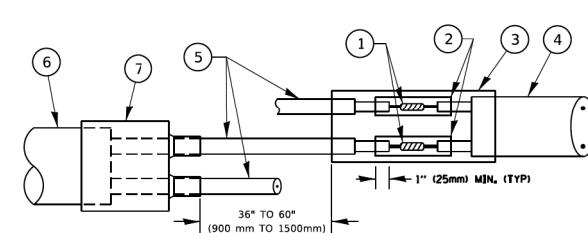


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

### LOOP DETECTOR SPLICE

- ① WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- ② WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- ③ WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- ④ NO. 14 2/C TWISTED, SHIELDED CABLE.

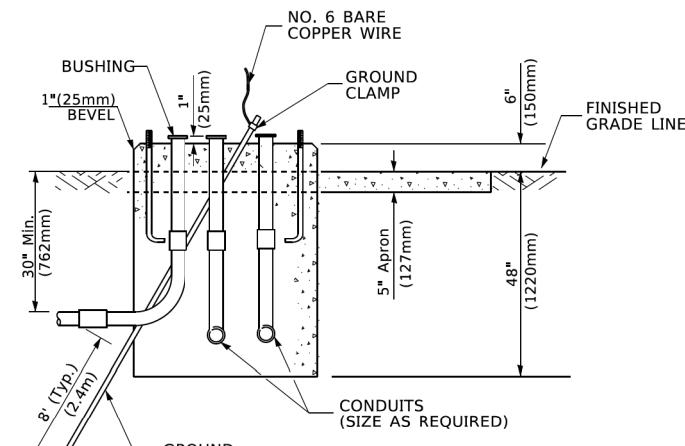
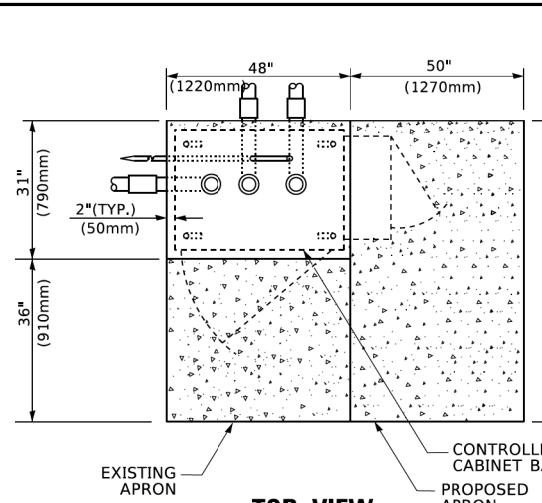
- ⑤ LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE, PRE-FORMED LOOP
- ⑥ XL POLYOLEFIN 2 CONDUCTOR
- ⑦ BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

				STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
												TS-05				
SCALE: NONE	SHEET 2	OF 7	SHEETS	STA.	TO STA.							ILLINOIS	FED. AID PROJECT			

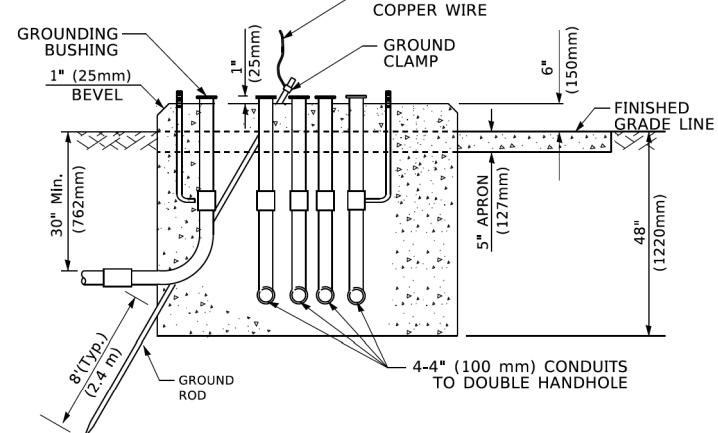
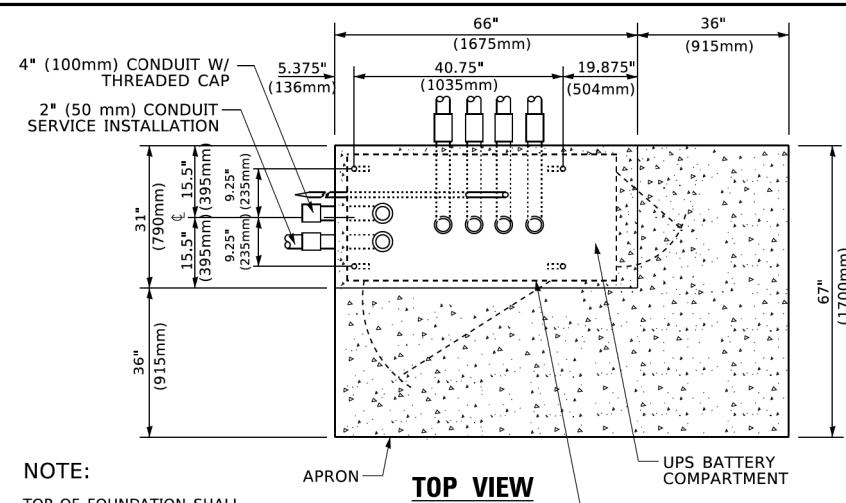
				CITY OF AURORA				STANDARD TRAFFIC SIGNAL DESIGN DETAILS				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
												1531	23-00361-00-TL	DUPAGE	24	10
SCALE:	SHEET 3	OF 8	SHEETS	STA.	TO STA.							ILLINOIS	FED. AID PROJECT			



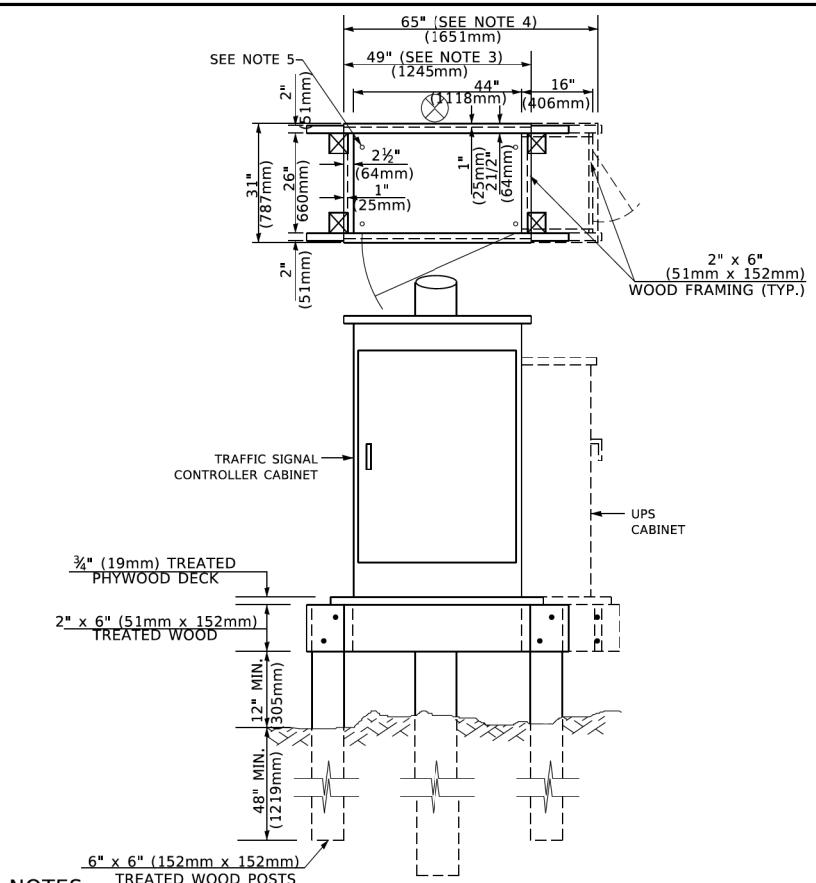




**TYPE D**  
**FOR GROUND MOUNTED**  
**CONTROLLER CABINET**  
**AND UPS BATTERY CABINET**



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



NOTES:

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

**TEMPORARY SIGNAL CONTROLLER**  
**WOOD SUPPORT PLATFORM**

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

**CABLE SLACK**

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

**VERTICAL CABLE LENGTH**

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 55' (16.8 m) and up to 56' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

**NOTES:**

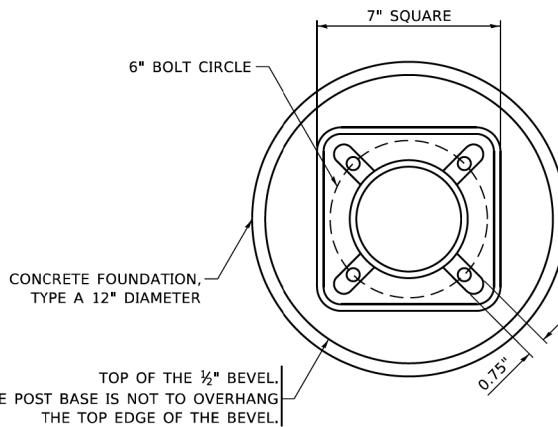
1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength ( $\sigma_u$ ) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by 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 87800..

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

Model: Default  
File Name: D:\IL0084\FEB\INTC\ILLI\0084\W\W0001\Documents\DOF\Offices\District 1\Projects\DOF\22-341\CAD\Data\Sheet05.dwg

USER NAME = footerj	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE			F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN -	REVISED -	STANDARD TRAFFIC SIGNAL DESIGN DETAILS			TS-05	CONTRACT NO.					
PLOT SCALE = 50,000' / in.	CHECKED -	REVISED -		STA.	TO STA.						
PLOT DATE = 3/4/2019	DATE -	REVISED -									
HRG PROJECT NO: 222862											
FILE NAME: 222862_details.06.dwg											
PLOT DRIVER: L:\plot\fw\plotable.tbd											

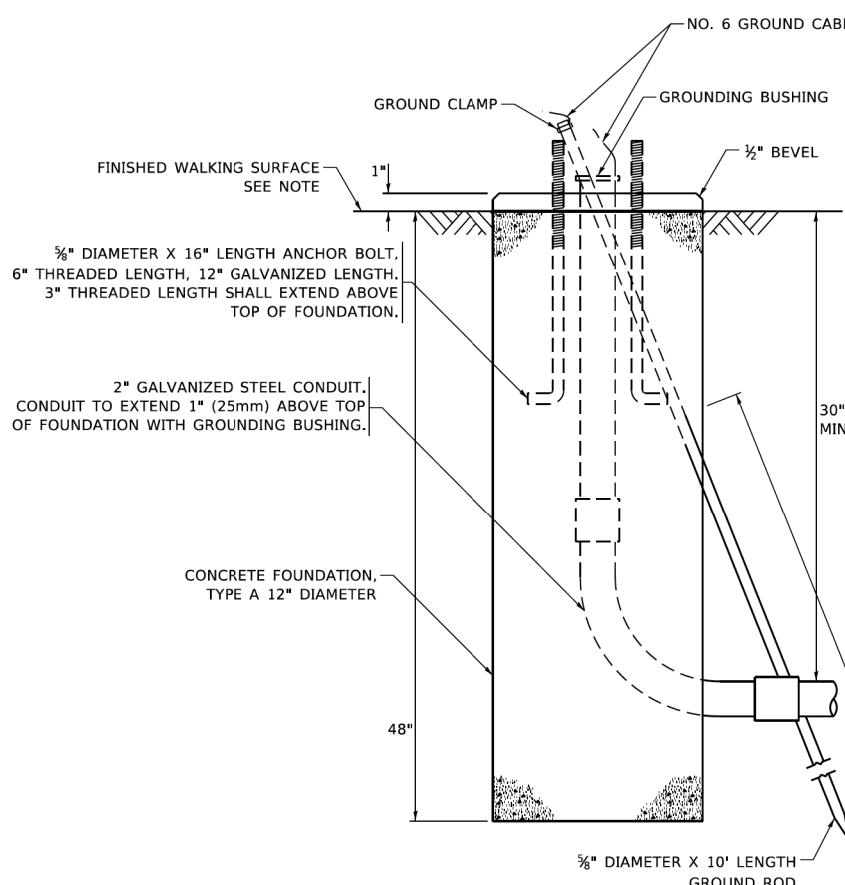




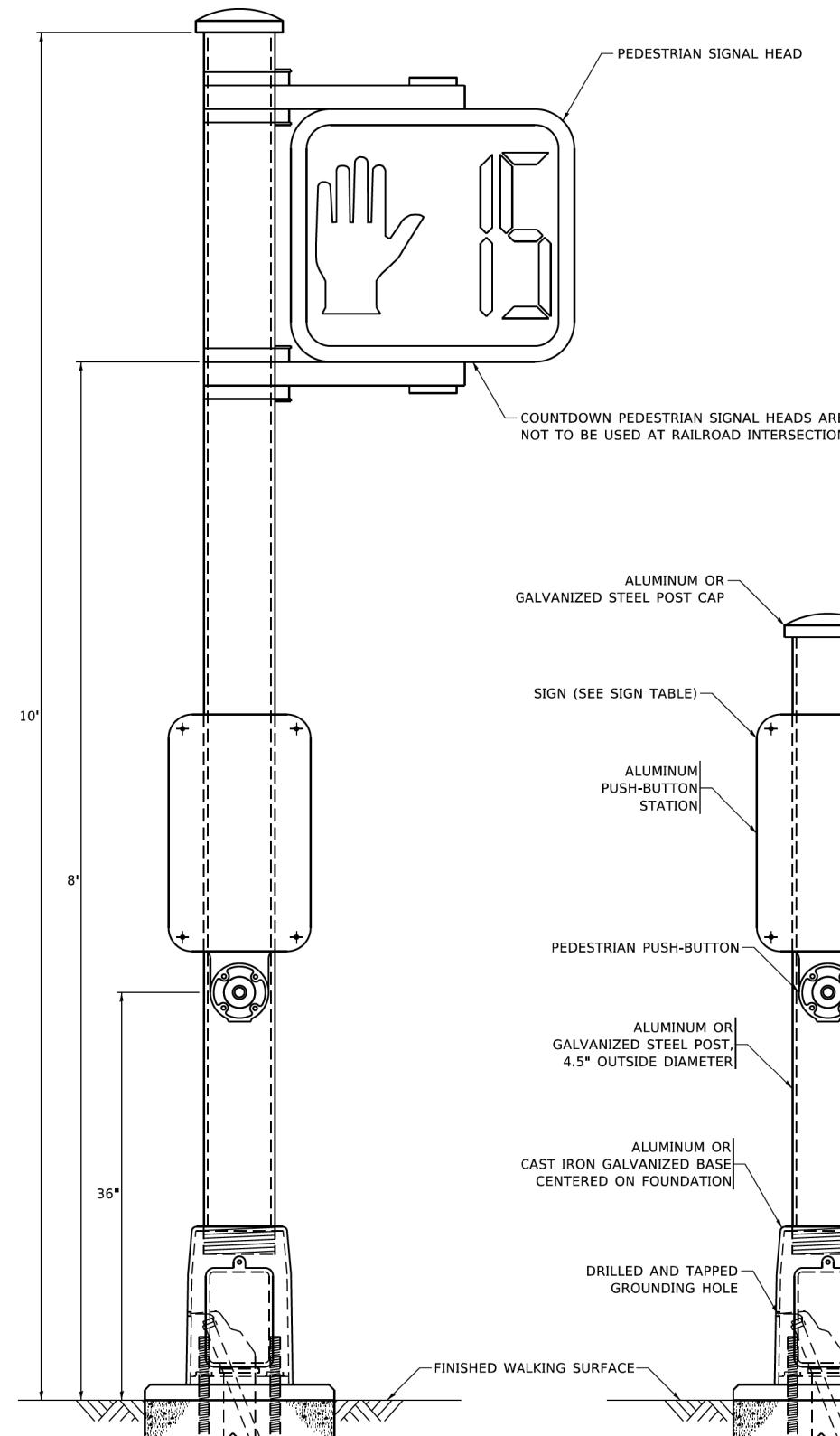
## **BOLT PATTERN**

**NOTE:**

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



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



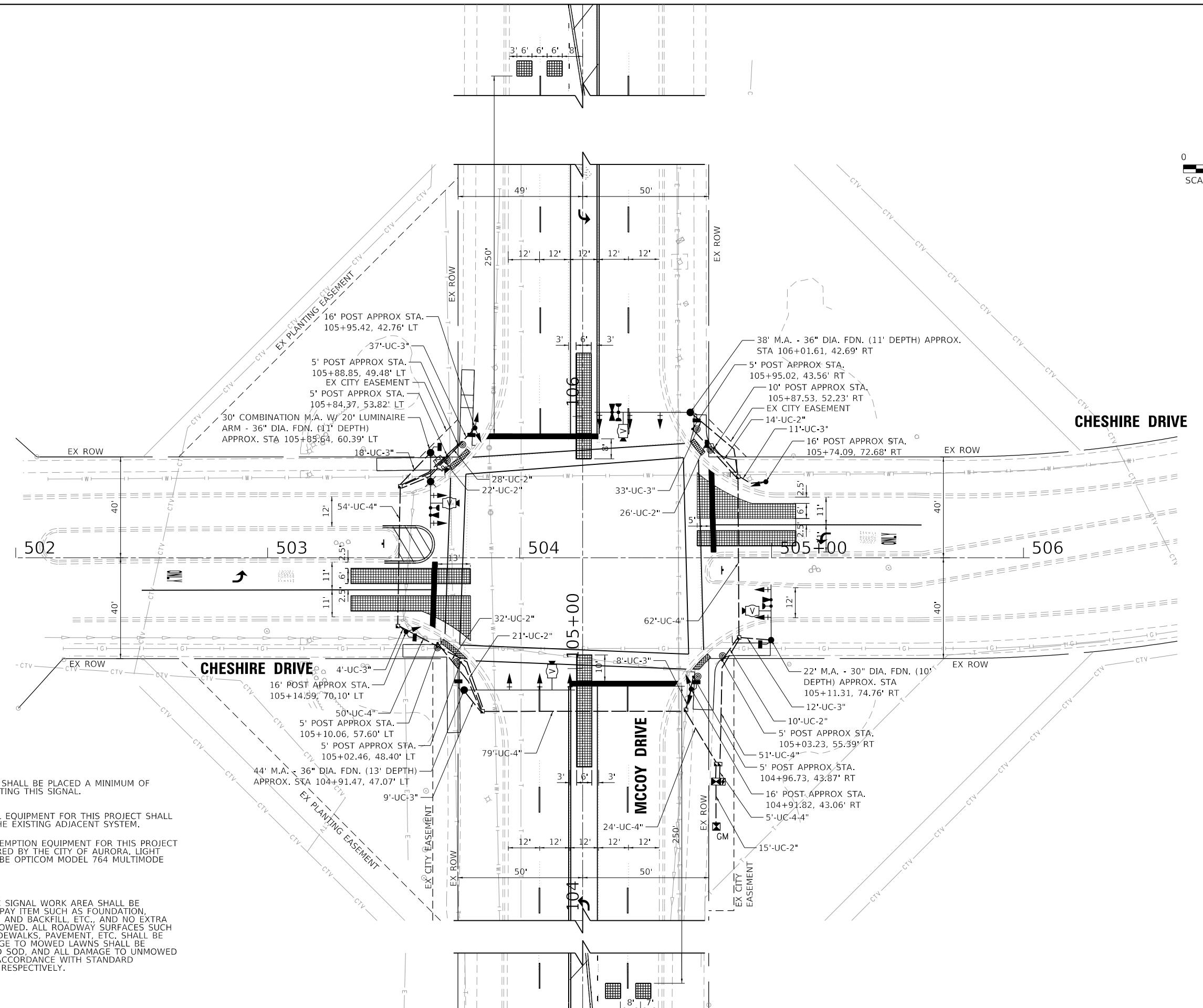
## **PEDESTRIAN SIGNAL POST, 10 FT.**

## **PEDESTRIAN SIGNAL POST, 5 FT.**



## STANDARD TRAFFIC SIGNAL DESIGN DETAILS

 <b>HRGreen.com</b> Illinois Professional Design Firm #184-001322	USER NAME	= cwedwick	DESIGNED	-	CWW	REVISED	-	<b>CITY OF AURORA</b>	<b>STANDARD TRAFFIC SIGNAL DESIGN DETAILS</b>						F.A.U. RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
			DRAWN	-	CWW	REVISED	-								1531	23-00361-00-TL		DUPAGE	24	15
	PLOT SCALE	= 2,0000 ' / in.	CHECKED	-	JRS	REVISED	-								CONTRACT NO.					
	PLOT DATE	= 2/29/2024	DATE	-	2/20/2024	REVISED	-		SCALE:	8	OF	8	SHEETS	STA.	TO	STA.		ILLINOIS	FED. AID PROJECT	



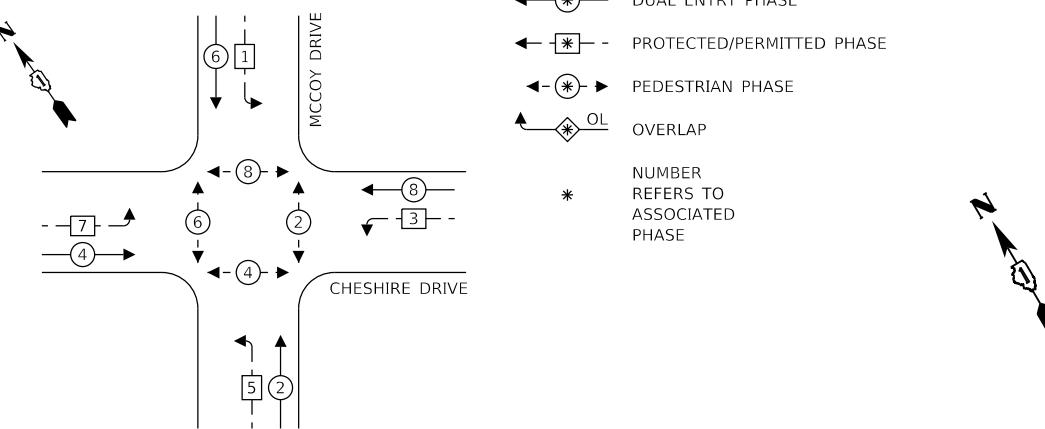
CHANGEABLE MESSAGE SIGNS SHALL BE PLACED A MINIMUM OF TWO WEEKS PRIOR TO ACTIVATING THIS SIGNAL.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE OPTICOM AS REQUIRED BY THE CITY OF AURORA. LIGHT DETECTOR AMPLIFIERS SHALL BE OPTICOM MODEL 764 MULTIMODE PHASE SELECTORS.

**RESTORATION OF WORK AREA:**  
RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC., SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOVED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

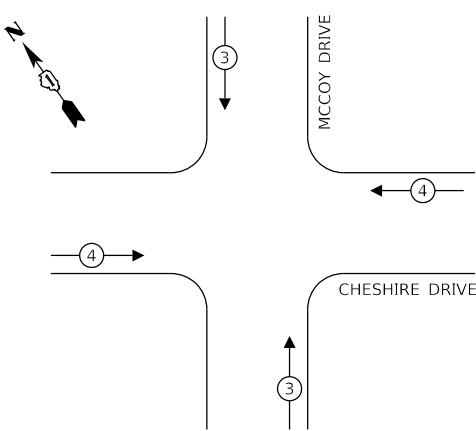
## PROPOSED CONTROLLER SEQUENCE



## LEGEND:

- ← (\*) DUAL ENTRY PHASE
- ← (\*) - PROTECTED/PERMITTED PHASE
- ← (\*) → PEDESTRIAN PHASE
- ↑ (\*) OL OVERLAP
- \* NUMBER REFERS TO ASSOCIATED PHASE

## PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



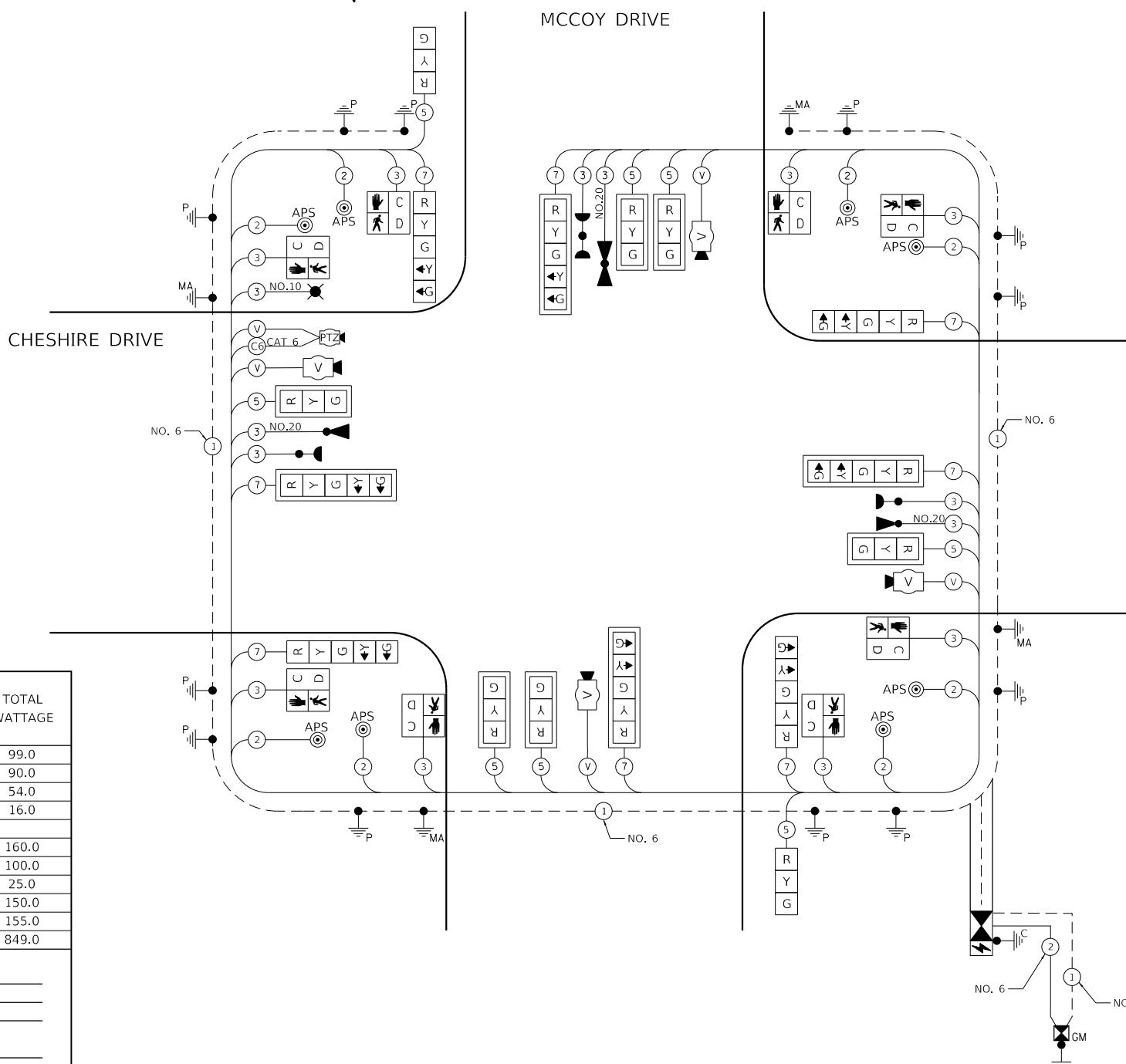
I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE	% OPERATION	
		INCAND. LED		
SIGNAL (RED)	18	11	50	99.0
(YELLOW)	18	20	25	90.0
(GREEN)	18	12	25	54.0
ARROW	16	10	10	16.0
PED. SIGNAL	8	20	100	160.0
CONTROLLER	1	100	100	100.0
UPS	1	25	100	25.0
VIDEO SYSTEM	1	150	100	150.0
LUMINAIRE	1	240	50	155.0
TOTAL =				849.0

ENERGY COSTS TO: CITY OF AURORA  
44 E. DOWNER PLACE  
AURORA, ILLINOIS 60507-2067

ENERGY SUPPLY CONTACT: MARK SCHERIBEL  
PHONE: (630) 723-2128  
COMPANY: COMMONWEALTH EDISON

## 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

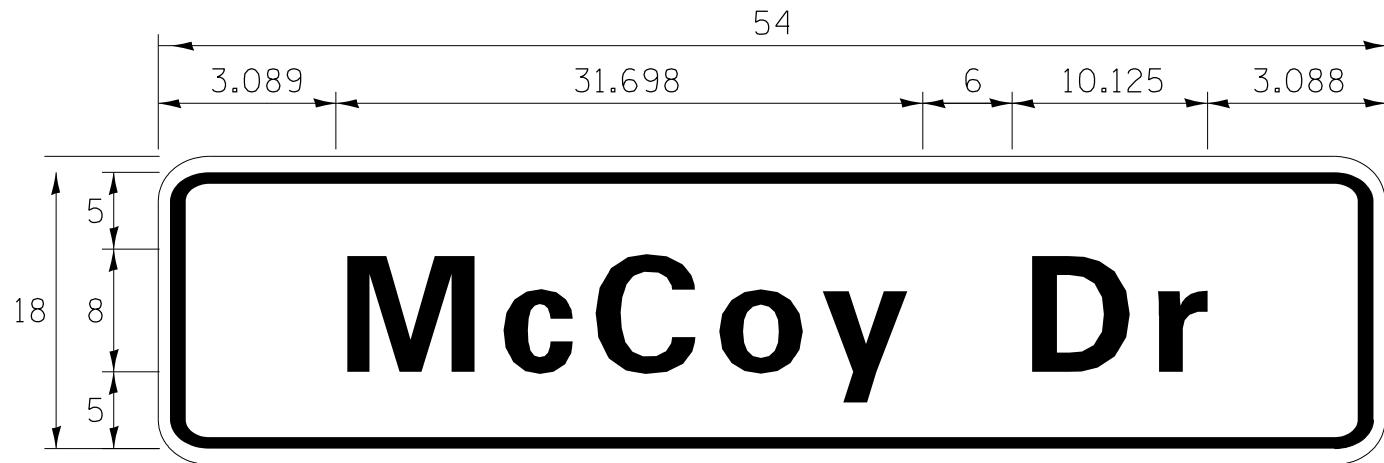


CITY OF AURORA

## CABLE PLAN AND PHASE DESIGNATION DIAGRAM MCCOY DRIVE AND CHESHIRE DRIVE

SCALE: N.T.S. SHEET 2 OF 3 SHEETS STA. TO STA.

ILLINOIS FED. AID PROJECT



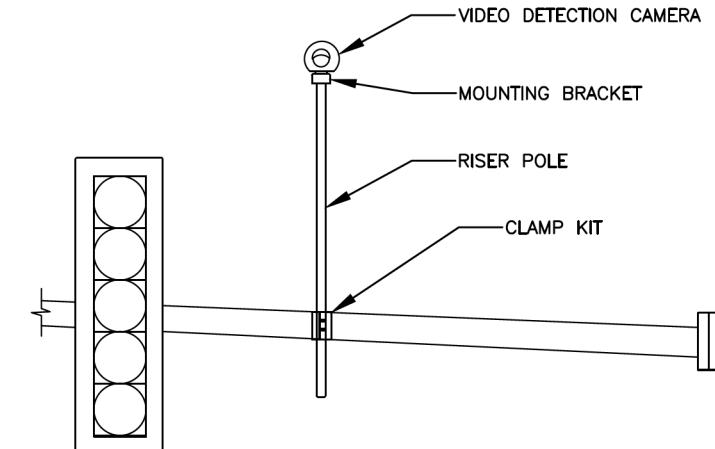
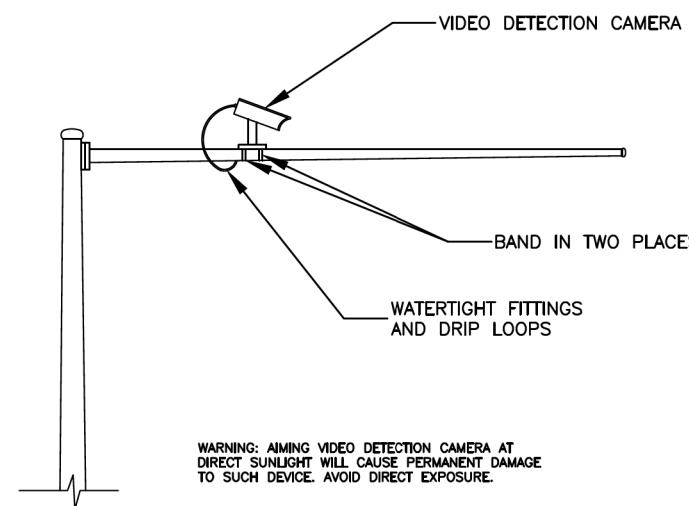
DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	6.75	1	ZZ	2

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



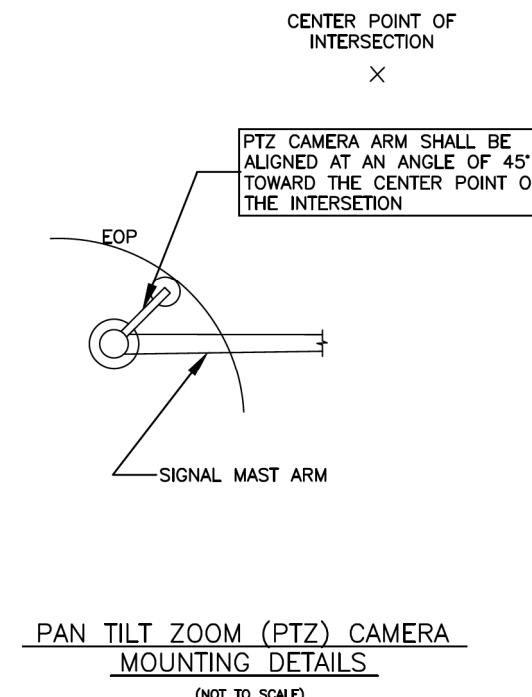
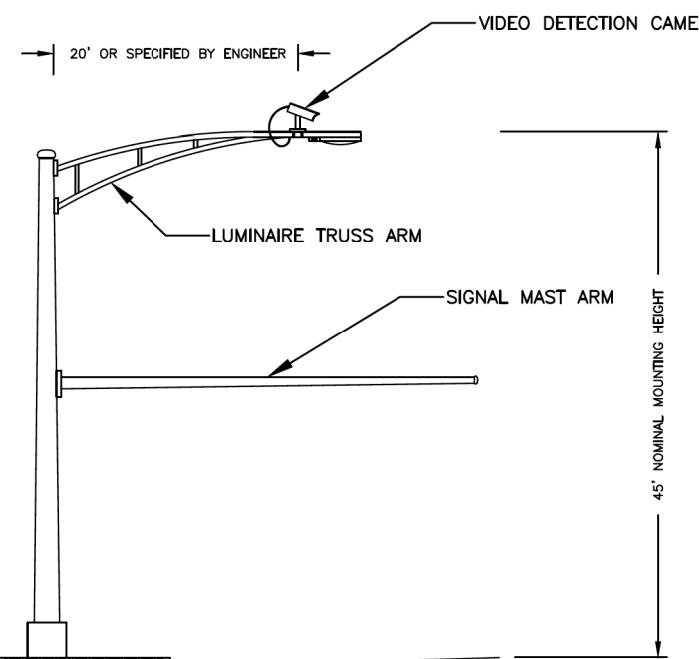
DESIGN SERIES	AREA (SQ FT)	SIGN PANEL TYPE	SHEETING TYPE	QTY. REQUIRED
D	8.25	1	ZZ	2

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



**NOTE:**  
THIS DRAWING HAS BEEN CREATED BY  
THE ENGINEERING DIVISION AT THE  
CITY OF AURORA USING SIMILAR DETAILS  
AS A BASIS OF DESIGN.

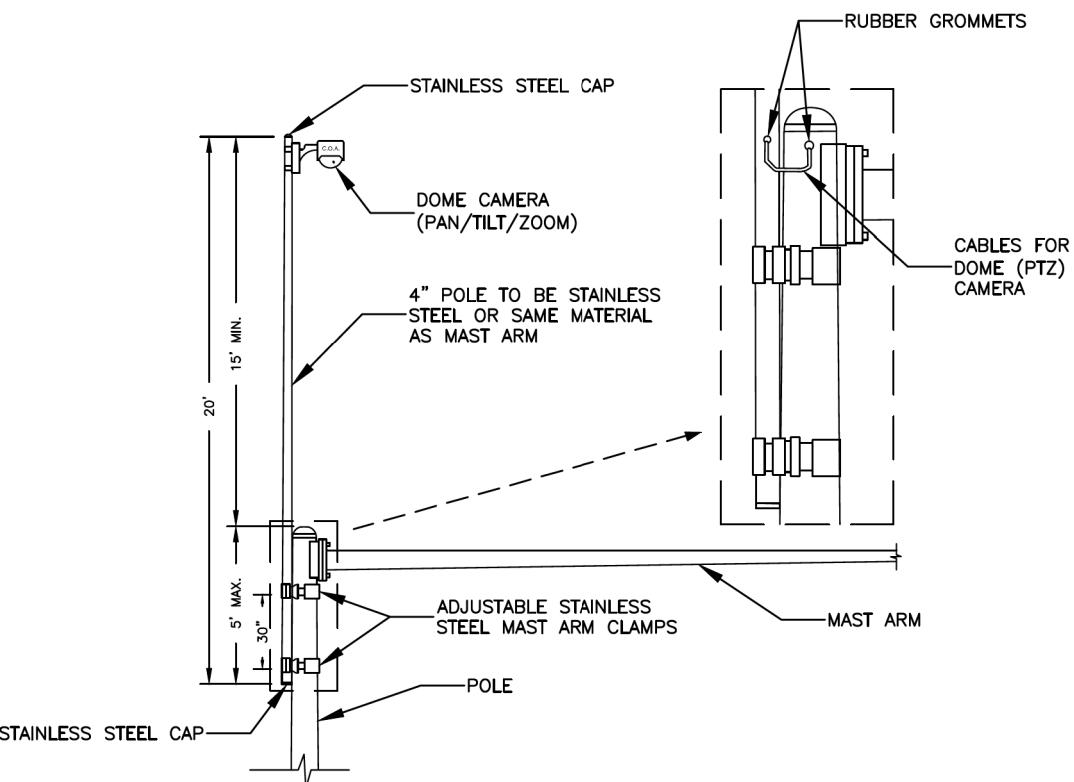
VIDEO DETECTION CAMERA  
MOUNTING DETAIL  
(NOT TO SCALE)



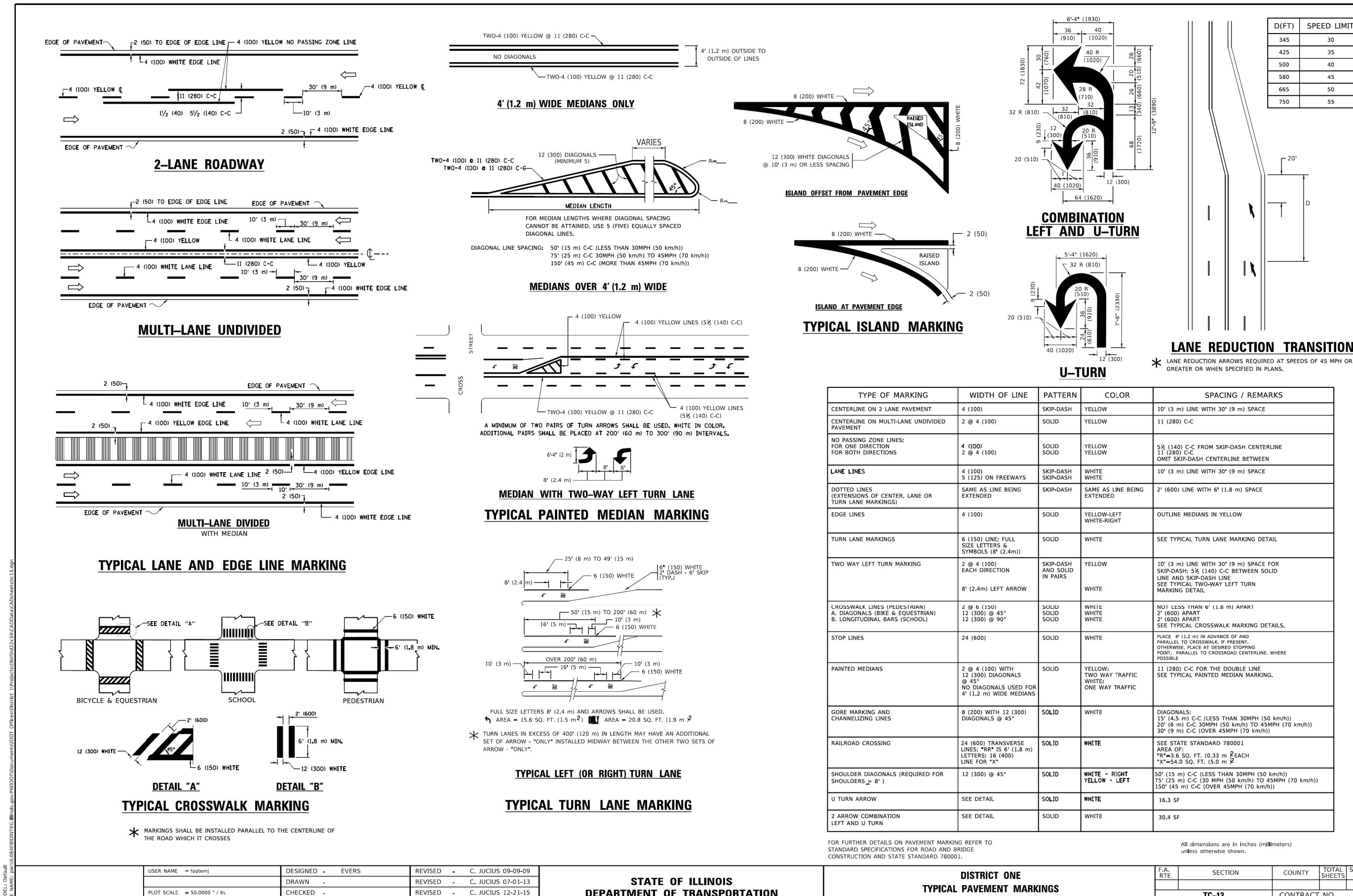
COMBINATION MAST ARM ASSEMBLY  
AND POLE DIMENSIONS  
(NOT TO SCALE)

COA - 2 VIDEO DETECTION CAMERA / PTZ MOUNTING DETAILS  
(NOT TO SCALE)

DESIGNED: GIL	DATE: 12/14/18	REVISED:	REVISED:
DRAWN: GIL		REVISED:	REVISED:



PTZ CAMERA MOUNTING ASSEMBLY DETAIL  
(NOT TO SCALE)



				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION				DISTRICT ONE TYPICAL PAVEMENT MARKINGS				TC-13
SCALE: NONE				SCALE: 1 OF 2 SHEETS	STA.	TO STA.	ILLINOIS	FED. AID PROJECT

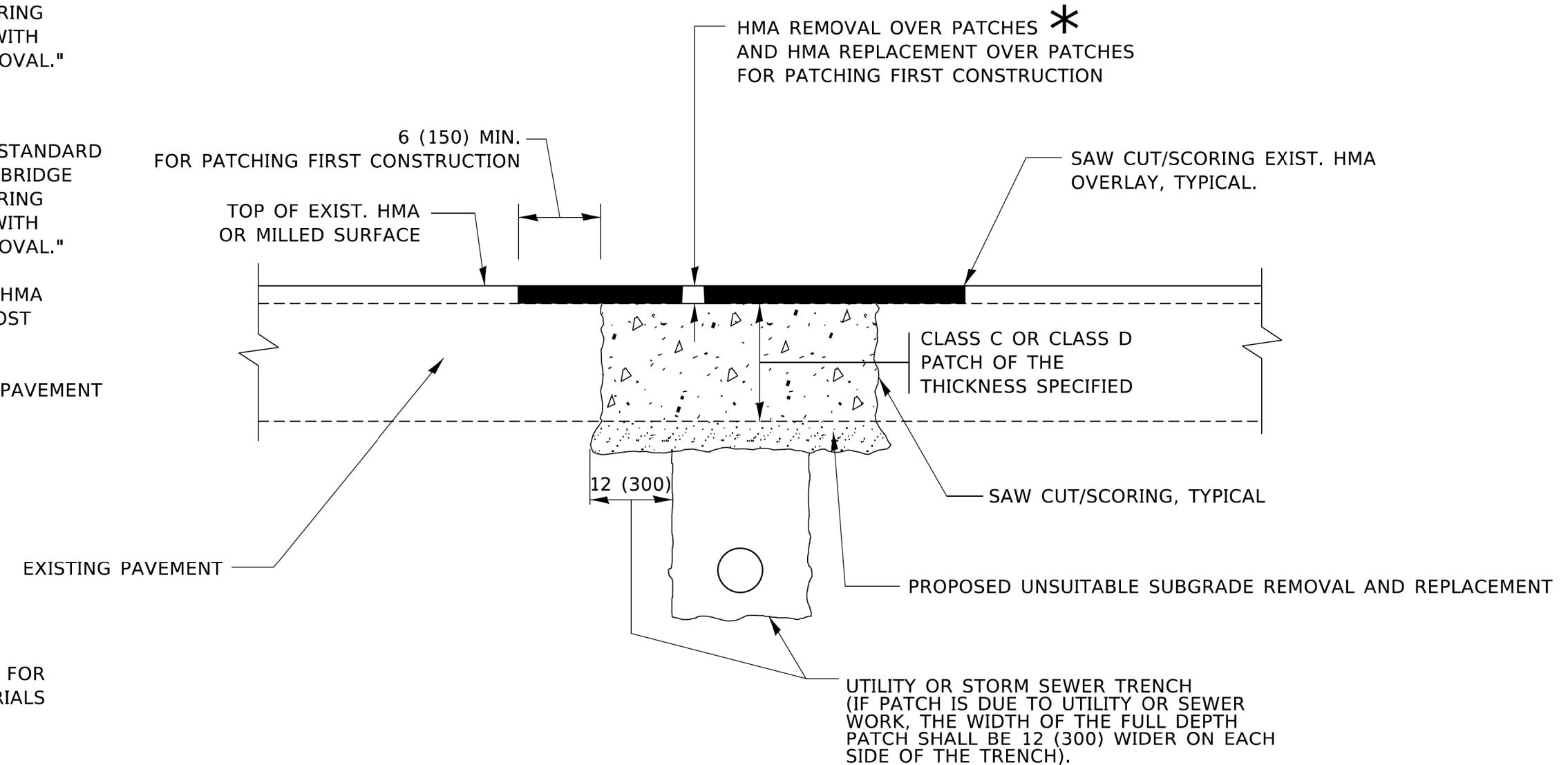
				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CITY OF AURORA				DISTRICT ONE DETAILS				
SCALE: 1 OF 1 SHEETS				SCALE:	STA.	TO STA.	ILLINOIS	FED. AID PROJECT

## 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."
2. 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.



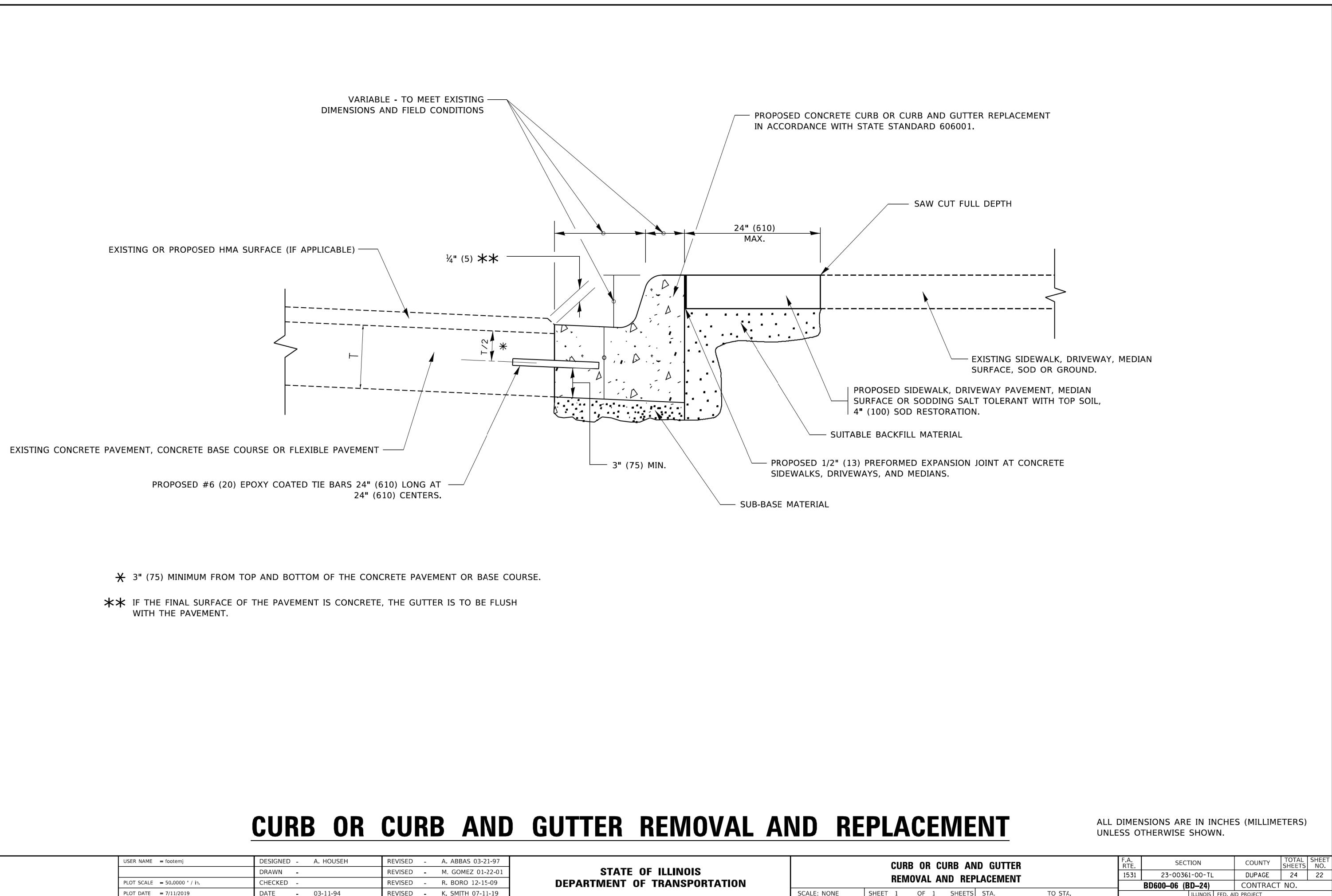
## SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
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 4½ 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.

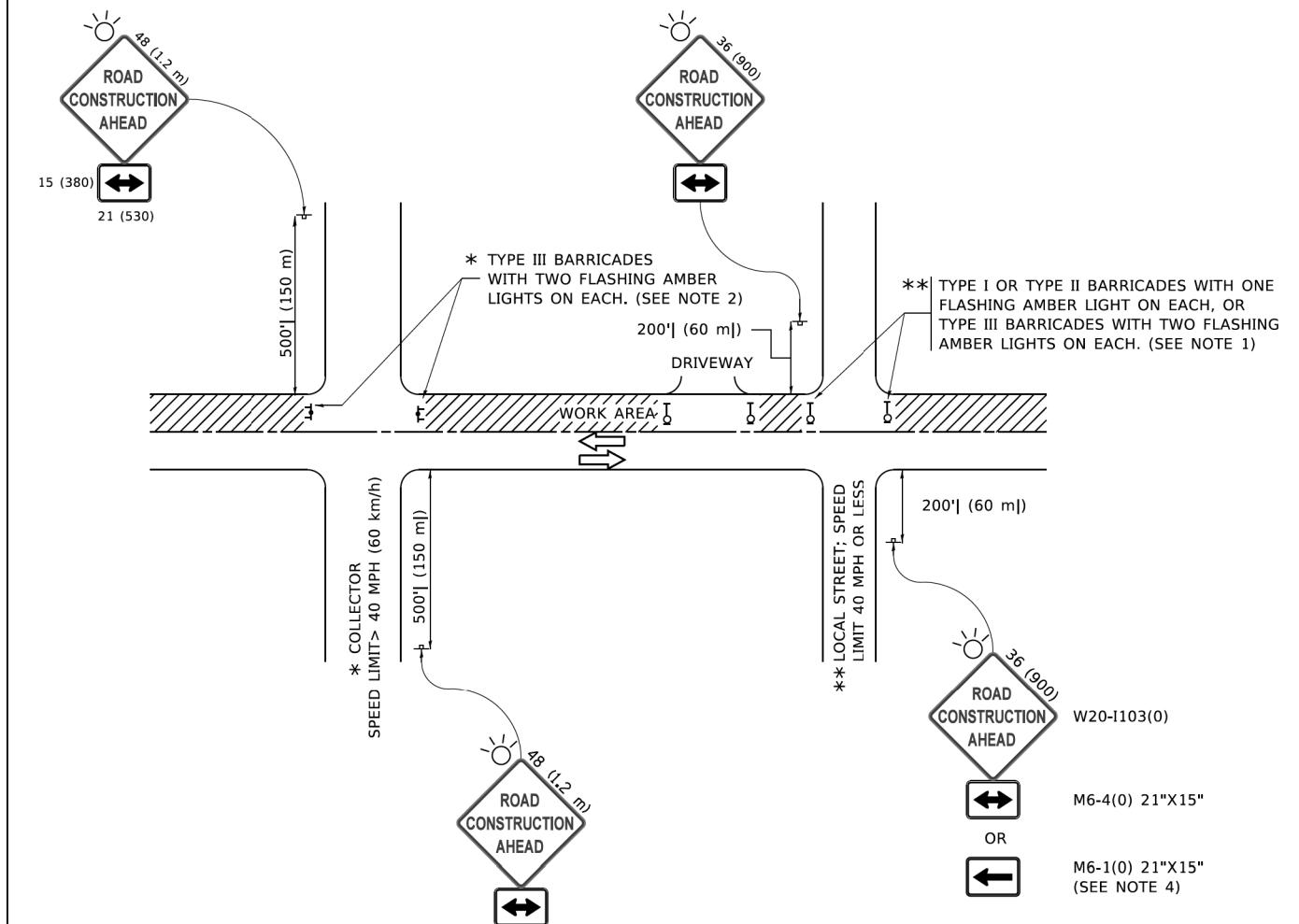
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.



## **CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT**

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

FILE NAME: pwspl	USER NAME = footemj	DESIGNED - A. HOUSEH	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - M. GOMEZ 01-22-01		1531	23-00361-00-TL	DUPAGE	24	22				
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	REVISED - R. BORO 12-15-09		BD600-06 (BD-24)				CONTRACT NO.				
	PLOT DATE = 7/11/2019	DATE - 03-11-94	REVISED - K. SMITH 07-11-19		SCALE: NONE	1	OF	1	SHEETS	STA.	TO STA.	ILLINOIS	FED. AID. PROJECT



## NOTES:

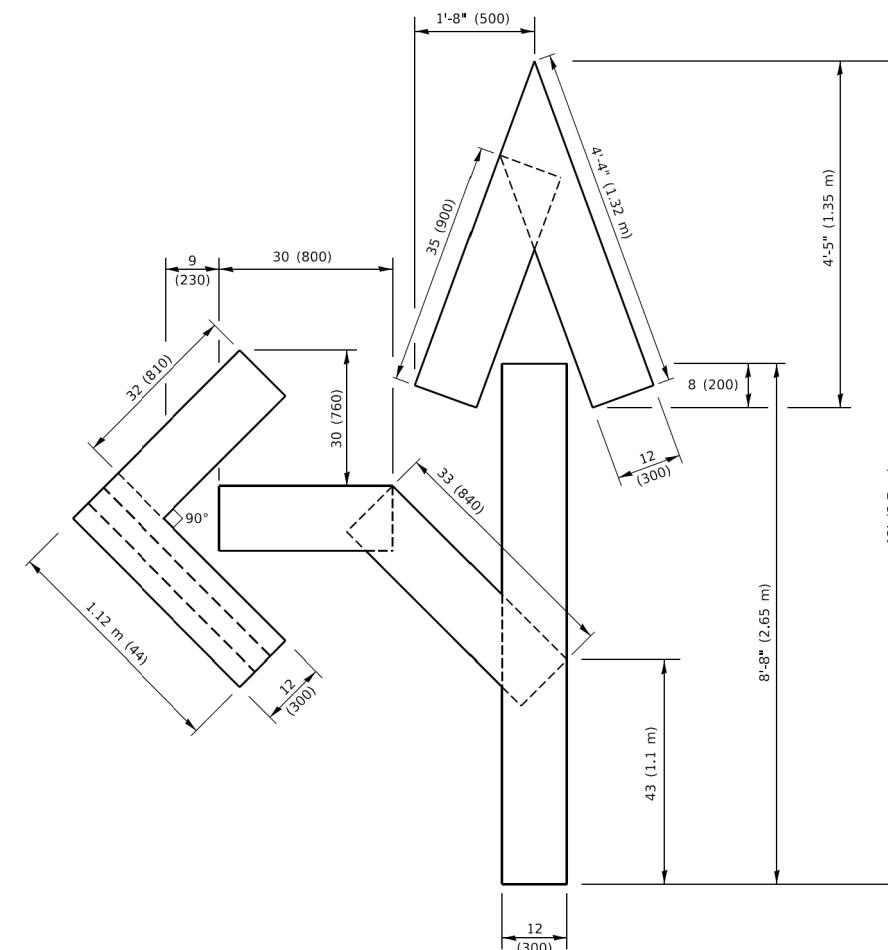
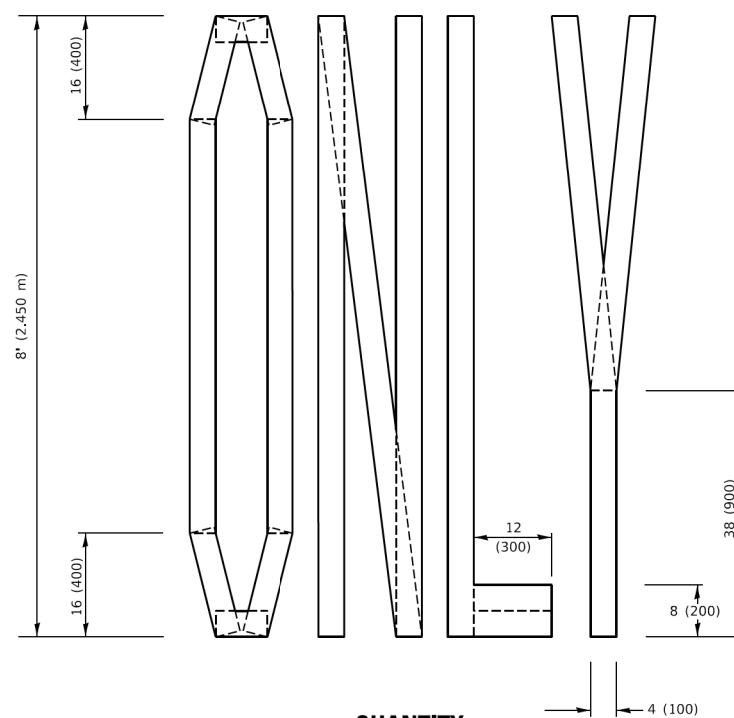
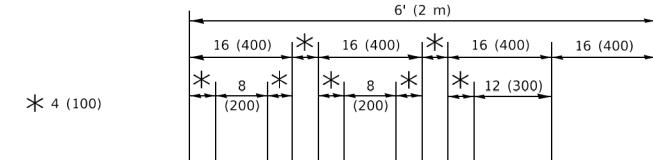
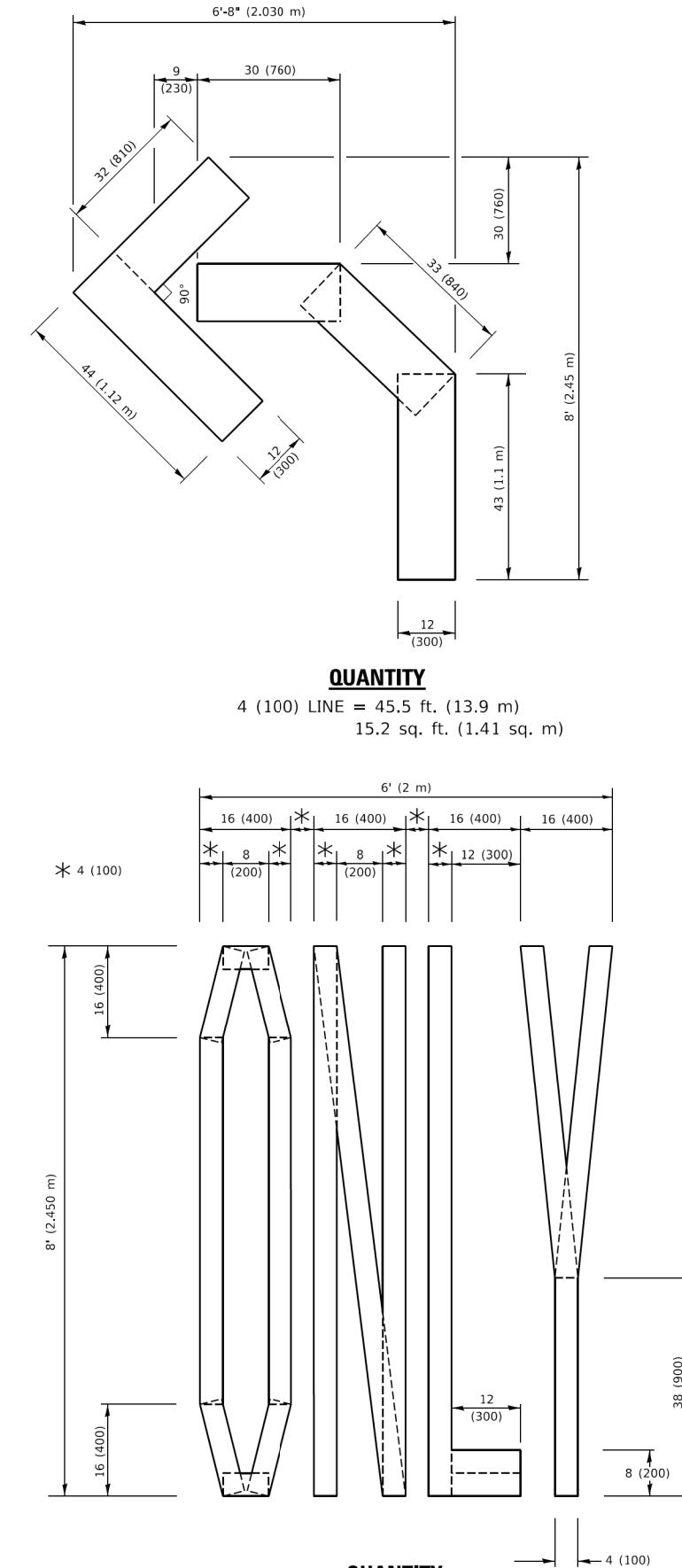
1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE 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) IN HEIGHT.
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).
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.

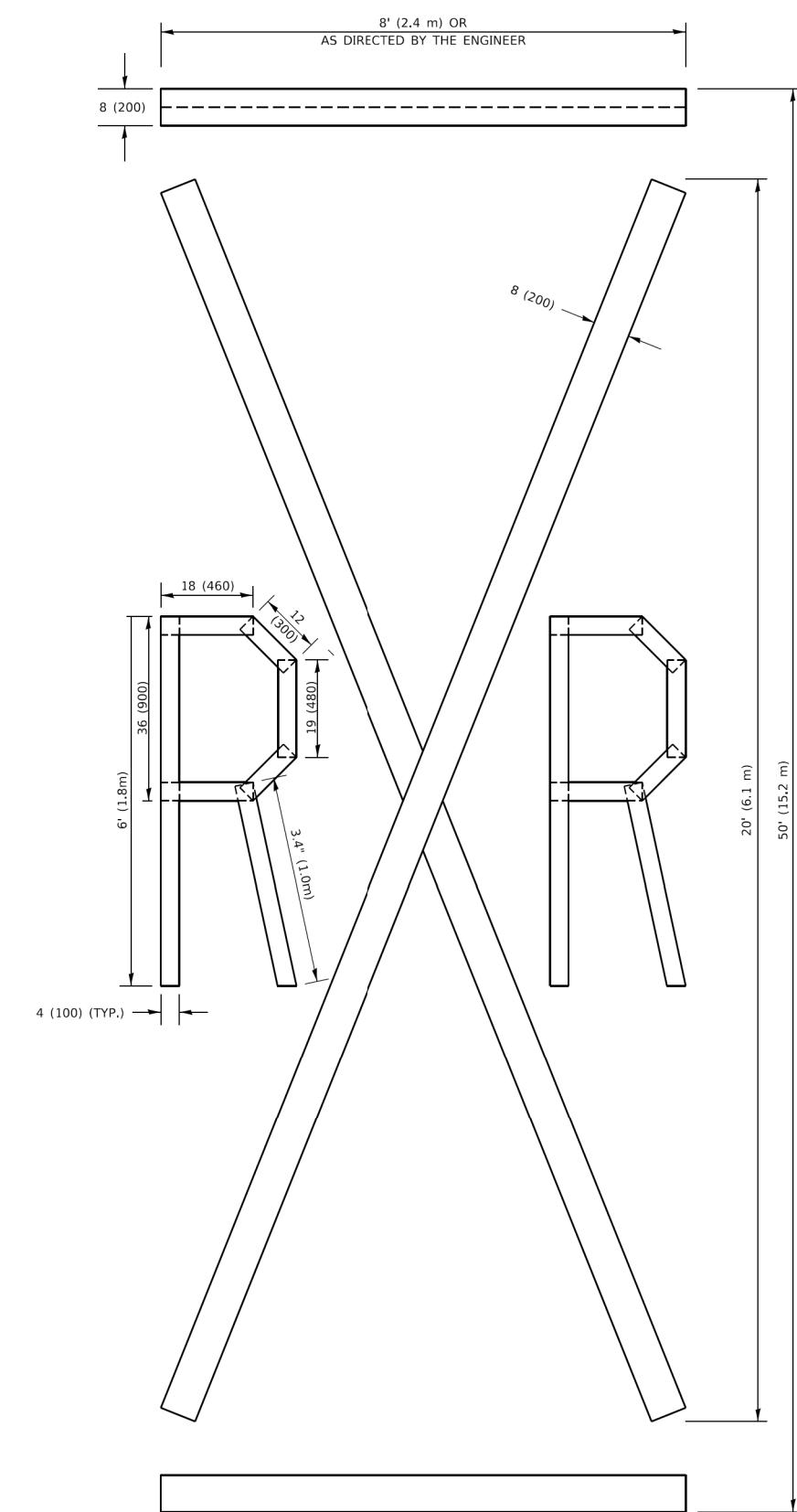
All dimensions are in inches (millimeters) unless otherwise shown.

USER NAME = footemj	DESIGNED - L.H.A.	REVISED - A. HOUSE 10-15-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>		<b>TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS</b>		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
DRAWN -	REVISED -	T. RAMMACHER 01-06-00					1531	23-00361-00-TL	DUPAGE	24	23
PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13					<b>TC-10</b>		CONTRACT NO.		
PLAT DATE - 04/20/00	DATE - 06-00	REVISED - A. SCHUETZE 09-15-16					SCHEM. NONE	SHEET 1 OF 25	SHEETS	STA	TO STA



**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.



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

USER NAME = footemj	DESIGNED -	REVISED - T. RAMMACHER 03-02-98
	DRAWN -	REVISED - E. GOMEZ 08-28-00
PLOT SCALE = 50.0068 ' / in.	CHECKED -	REVISED - E. GOMEZ 08-28-00
PLOT DATE = 3/4/2019	DATE - 09-18-94	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. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1531	23-00361-00-TL	DUPAGE	24	24
<b>TC-16</b>		CONTRACT NO.		

ILLINOIS FED. AID PROJECT