

NOTES:

- 1. HORIZONTAL AND VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWERS SHALL COMPLY WITH CITY OF BATAVIA DESIGN MANUAL OR IEPA STANDARDS, WHICHEVER IS MORE STRINGENT.
- 2. CONTRACTOR MAY BEND WATER MAIN PIPE UNIFORMLY UNDER SEWERS WITHOUT USING FITTINGS PROVIDED THAT JOINT DEFLECTION DOES NOT EXCEED 5 DEGREES PER JOINT FOR PIPE UNDER 14" IN DIAMETER AND 3 DEGREES PER JOINT FOR PIPE 14" AND OVER IN DIAMETER. IF FITTINGS ARE USED, CONTINOUS STRAPPING WITH RODS, STRAPS, NUTS AND BOLTS BELOW NORMAL WATERMAIN DEPTH ARE REQUIRED, OR RETAINER GLANDS MAY BE USED IN LIEU OF STRAPPING. RETAINER GLANDS TO BE "MEGALUG" RESTRAINT, SERIES 1100 OR APPROVED EQUAL WITH "COR-TEN" BOLTS.
- 3. ALL SANITARY SEWER (INCLUDING SERVICE) CROSSINGS WHERE THE WATER MAINS OR WATER SERVICES ARE LESS THAN 18" VERTICALLY ABOVE THE SEWER SHALL BE POLYVINYL CHLORIDE PRESSURE PIPE (SDR 26 MINIMUM) AND SHALL CONFORM WITH THE LATEST REVISION OF ASTM D-2241 OR AWWA C900/905. JOINTS SHALL CONFORM TO ASTM D-3139 AND ELASTOMERIC GASKETS SHALL CONFORM TO ASTM F-477. THE SAME PIPE AND JOINT MATERIALS SHALL BE USED WHENEVER WATER MAIN CROSSES BELOW THE SEWER.
- 4. ALL STORM SEWER (INCLUDING SERVICE) CROSSINGS WHERE THE WATER MAINS ARE LESS THAN 18" VERTICALLY ABOVE THE SEWER SHALL BE REINFORCED CONCRETE PIPE, ASTM C-361, CLASS D-25, WITH BELL AND SPIGOT JOINTS AND RUBBER GASKETS, OR PVC SDR 26 AS SPECIFIED IN NOTE 3 ABOVE. THE SAME PIPE AND JOINT MATERIAL SHALL BE USED WHENEVER WATER MAIN CROSSES BELOW THE SEWER.
- 5. FOR NEW SEWER INSTALLATIONS CROSSING OVER WATER MAINS, THE ENTIRE RUN OF NEW SEWER SHALL BE WATER MAIN QUALITY PIPE, EXTENDING FROM STRUCTURE TO STRUCTURE ON EACH SIDE OF THE CROSSING.
- 6. ALL JOINTS WITHIN "L" LENGTH OF FITTING MUST BE RESTRAINED. REFER TO CITY OF BATAVIA "WATER MAIN RESTRAINT" TYPICAL DETAIL FOR MINIMUM RESTRAINED LENGTHS. NOT TO SCALE



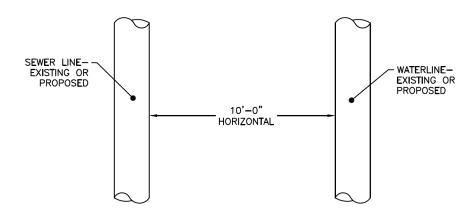
CITY OF BATAVIA PUBLIC WORKS DEPARTMENT

WATER MAIN CROSSING

SHEET: 1 OF 1 **DATE: 1/1/16**

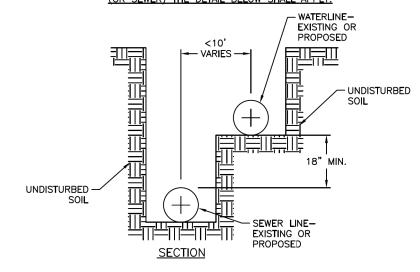
STANDARD NO. 6.06

WHEN PROPOSED SEWER (OR WATER) IS LOCATED TEN (10) FEET OR MORE FROM EXISTING WATER (OR SEWER), NO SPECIAL CONSTRUCTION REQUIRED.



PLAN VIEW

WHEN PROPOSED SEWER (OR WATER) IS LOCATED LESS THAN TEN (10) FEET FROM EXISTING WATER (OR SEWER) THE DETAIL BELOW SHALL APPLY.



NOTES:

- 1. FOR FURTHER INFORMATION REGARDING THE WATER AND SEWER SEPARATION REQUIREMENTS SEE THE LATEST EDITION OF THE "ILLINOIS STANDARDS SPECFICATION FOR SEWER AND WATER CONSTRUCTION IN ILLINOIS."
- 2. REFER TO THE CITY OF BATAVIA "WATER MAIN CROSSING" DETAIL FOR DETAILED REQUIREMENTS FOR PROPOSED WATER MAIN CROSSING UNDER A SEWER.

NOT TO SCALE



SCALE:

CITY OF BATAVIA PUBLIC WORKS DEPARTMENT

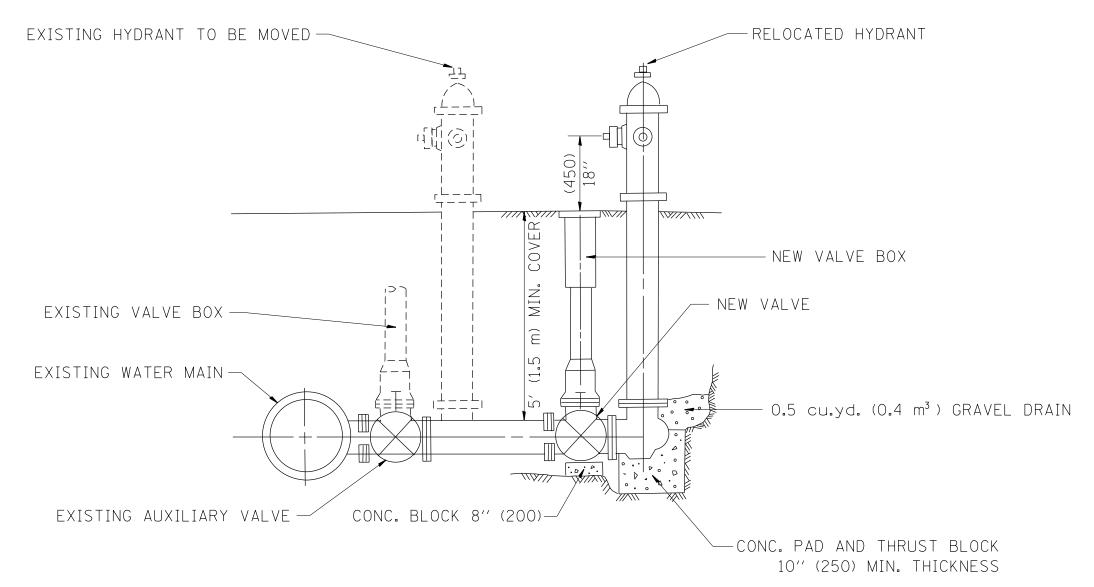
SHEET: 1 OF 1 DATE: 01/01/2016 **WATER AND SEWER SEPARATION**

STANDARD NO. 6.05

FILE NAME = D1M4003-sht-utilities-det01.dgn	DESIGNED - CPD	REVISED -	
MODEL NAME = Default	DRAWN - CPD	REVISED -	STATE OF II
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PLOT DATE = 9/6/2018 - 12:59:35 PM	DATE - 9/7/2018	REVISED -	

WATER	•			LS - CITY WATER A	•	TAVIA EWER SEPARATION
	SHEET 1	OF	2	SHEETS	STA.	TO STA.

A.P.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
524	14-00448-00-CH		KANE	183	104
			CONTRACT	NO.	61E67
	ILLINOIS	FED. A	D PROJECT		



SEQUENCE OF CONSTRUCTION

- 1. CALL THE CITY OF BATAVIA TO SHUT OFF 20" WATERMAIN.
- 2. REMOVE EXISTING AUXILIARY VALVE.
- 3. REMOVE EXISTING HYDRANT.
- 4. INSTALL NEW VALVE.
- 5. RELOCATE EXISTING HYDRANT.
- 6. BACKFILL/ADD THRUST BLOCKS.
- 7. CALL THE CITY OF BATAVIA TO TURN ON 20" WATERMAIN.
- 8. FLUSH FOR CHLORIDE RESIDUAL AND PROVIDE TEST.

FIRE HYDRANT TO BE MOVED

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



	FILE NAME = D1M4003-sht-utilities-det02.dgn	DESIGNED - BRF	REVISED -
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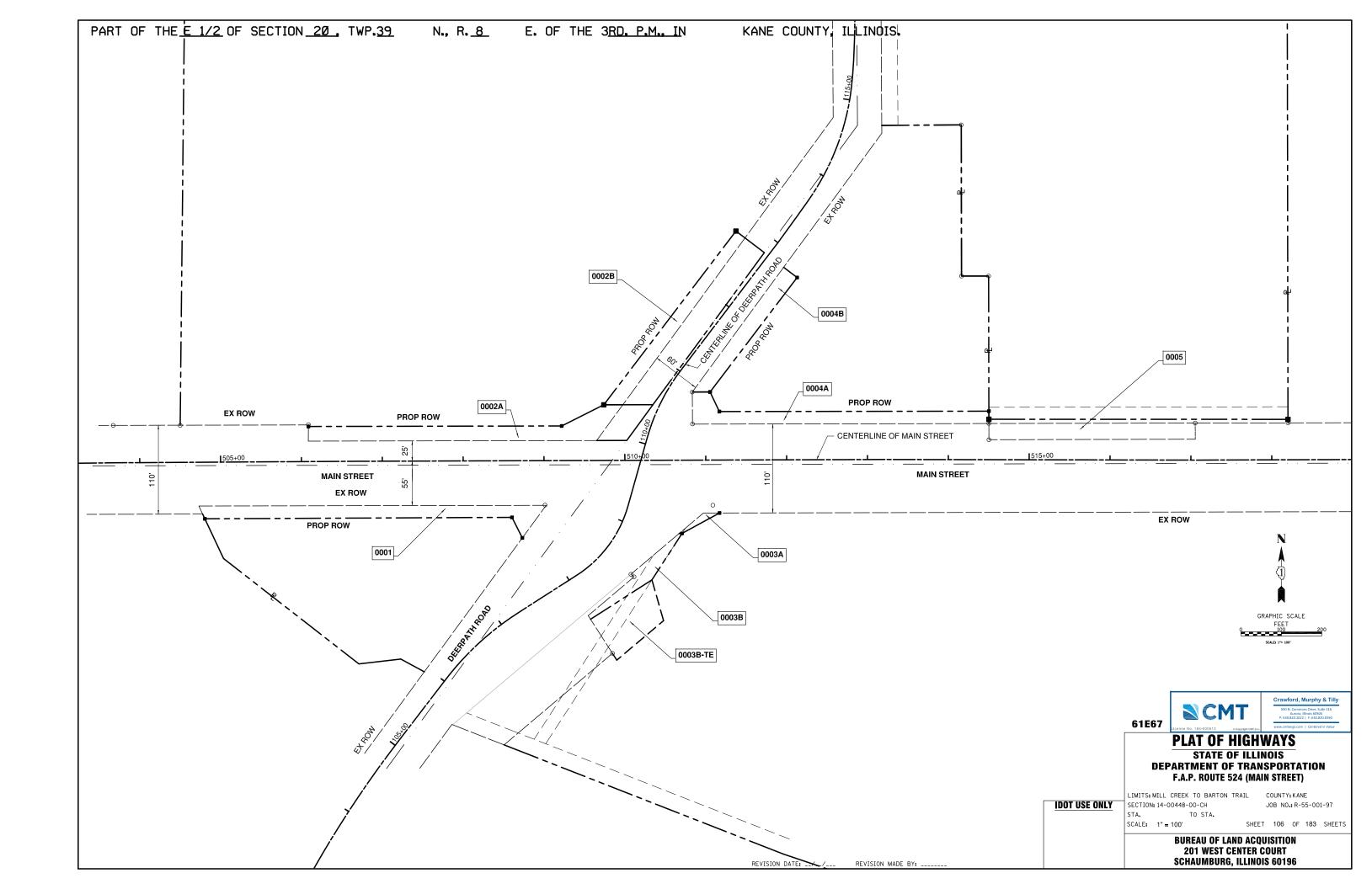
ALL WORK TO BE DONE IN ACCORDANCE WITH ARTICLE

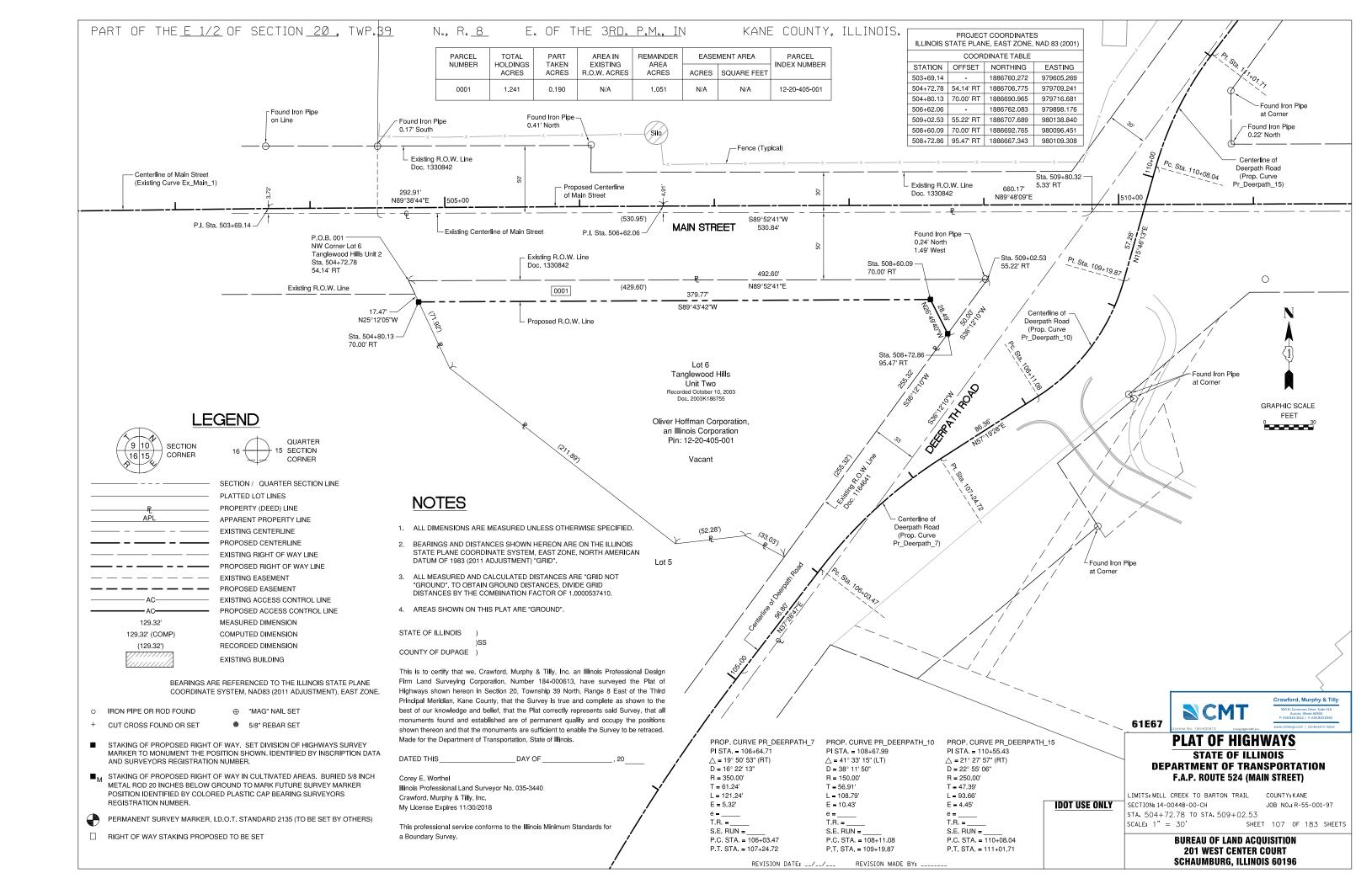
AND BOX SHALL BE SAME MAKE AND MODEL AS EXISTING.

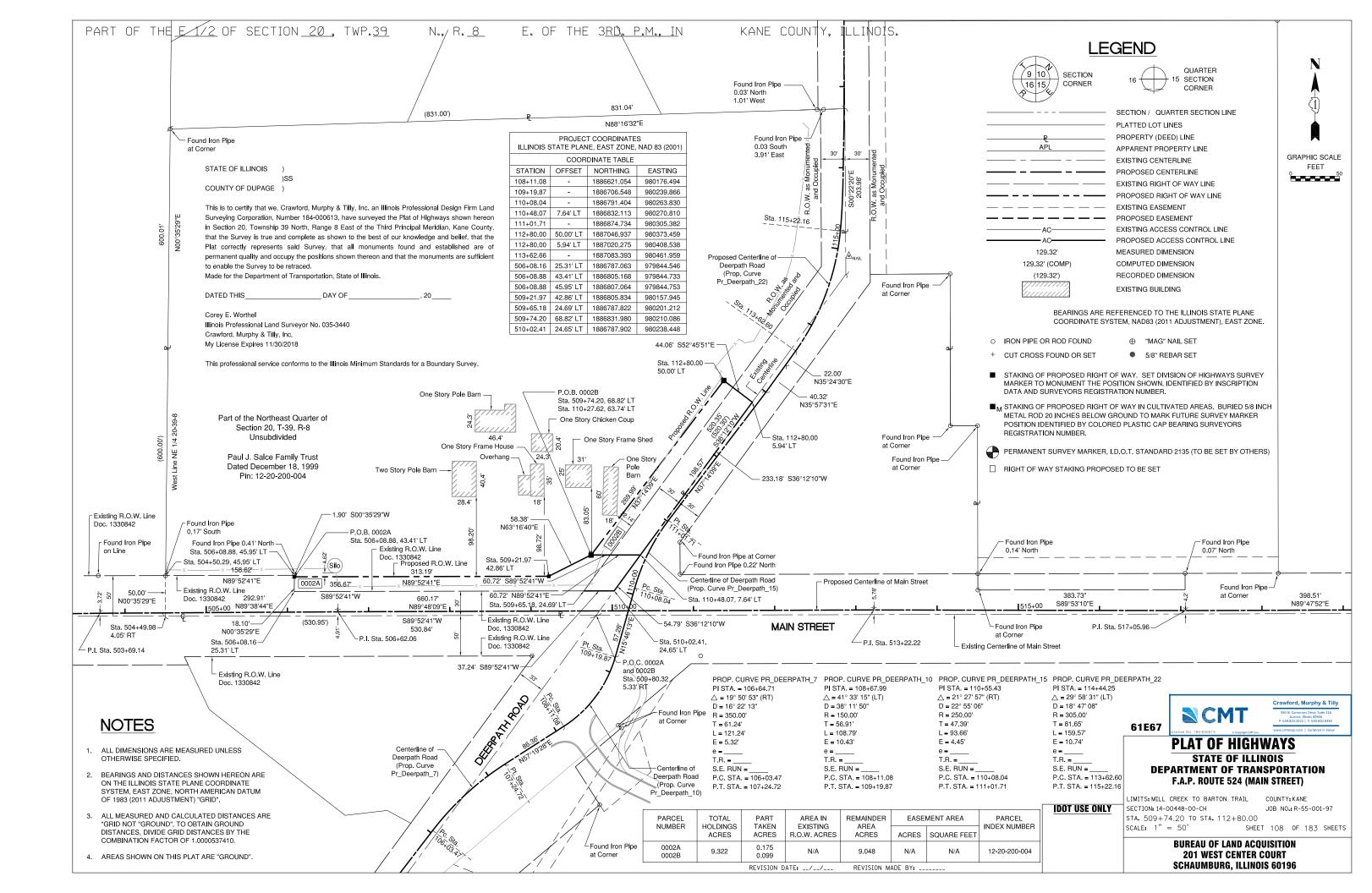
564 OF THE STANDARD SPECIFICATIONS. NEW VALVE

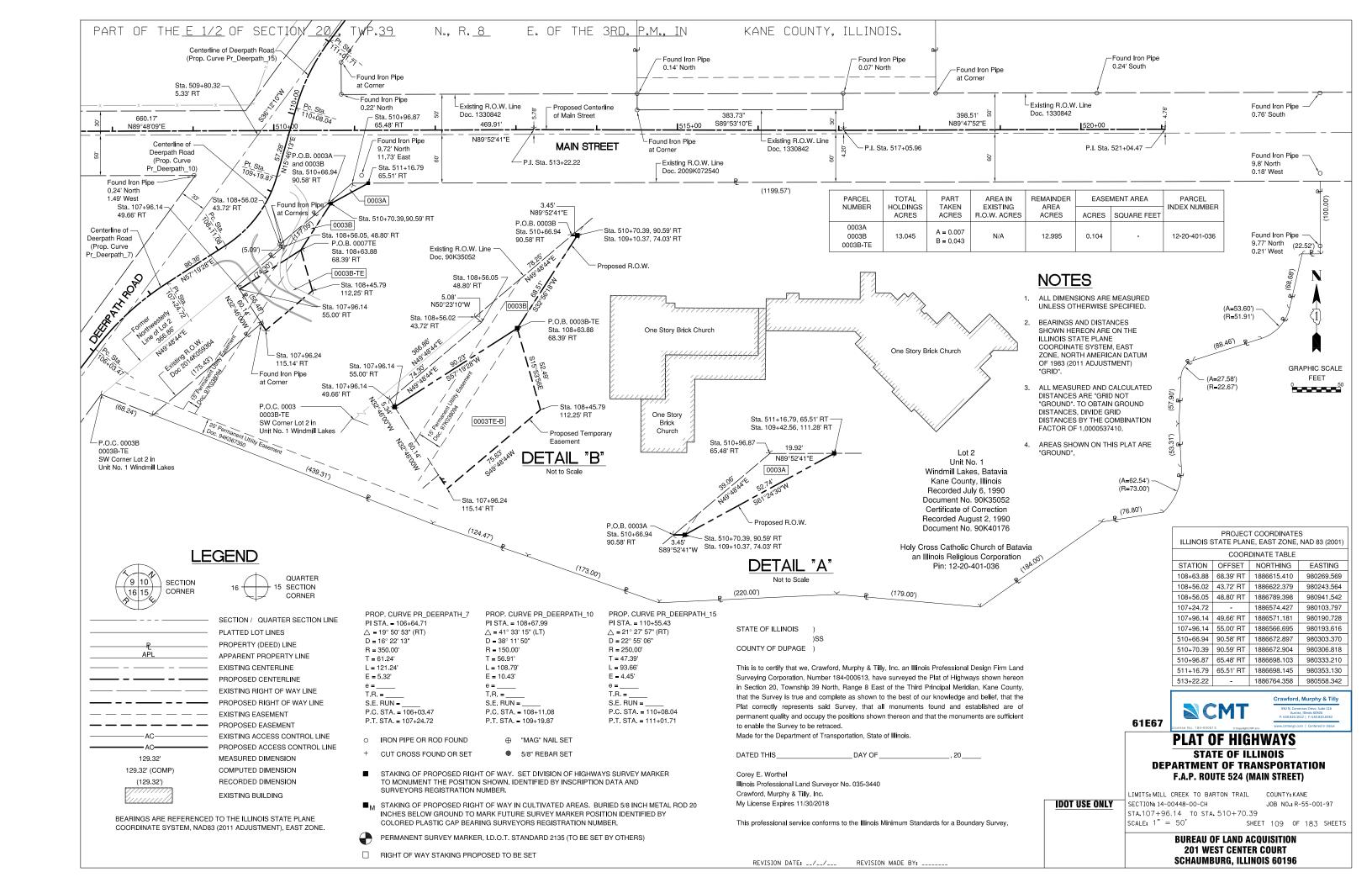
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

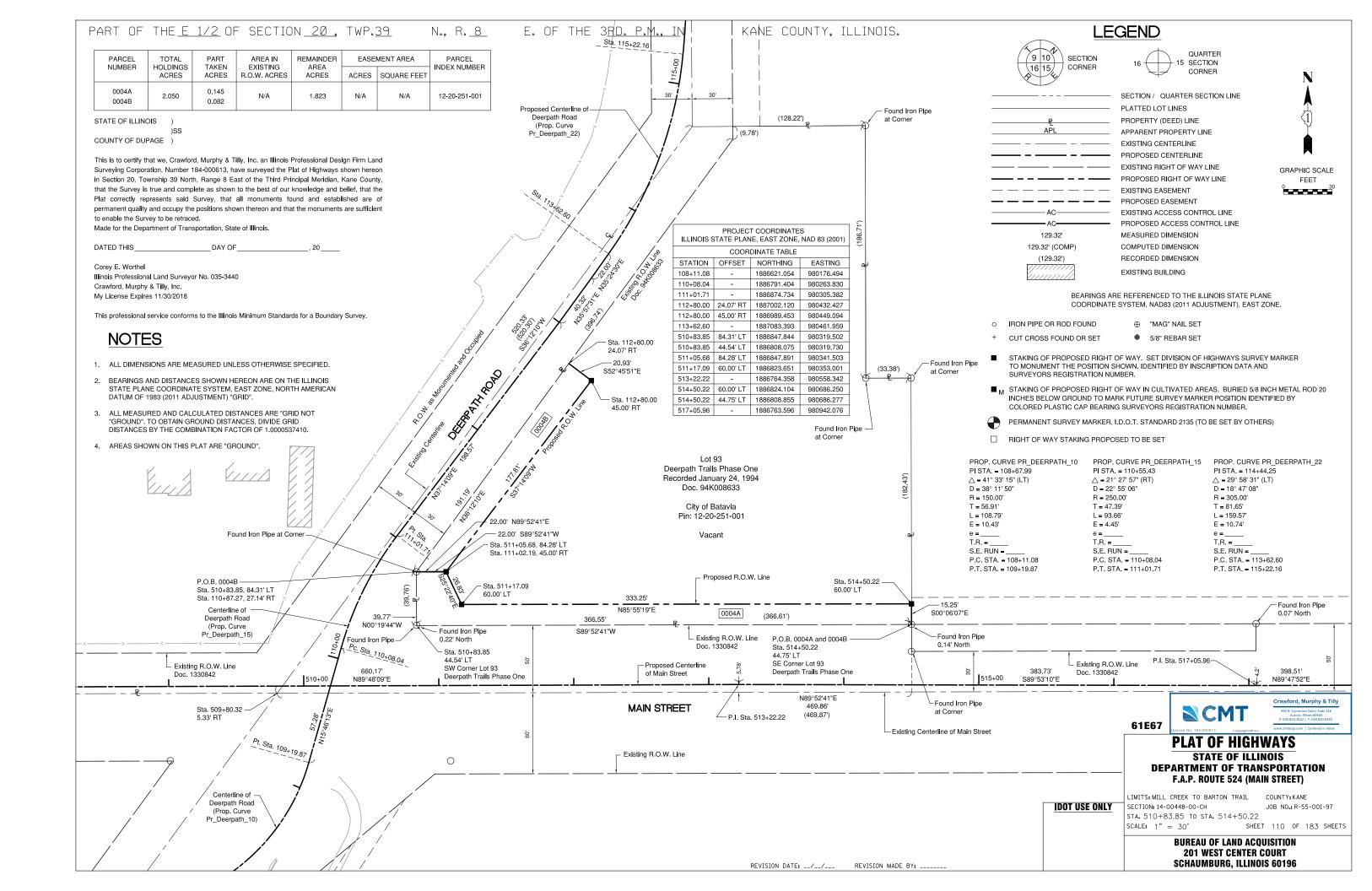
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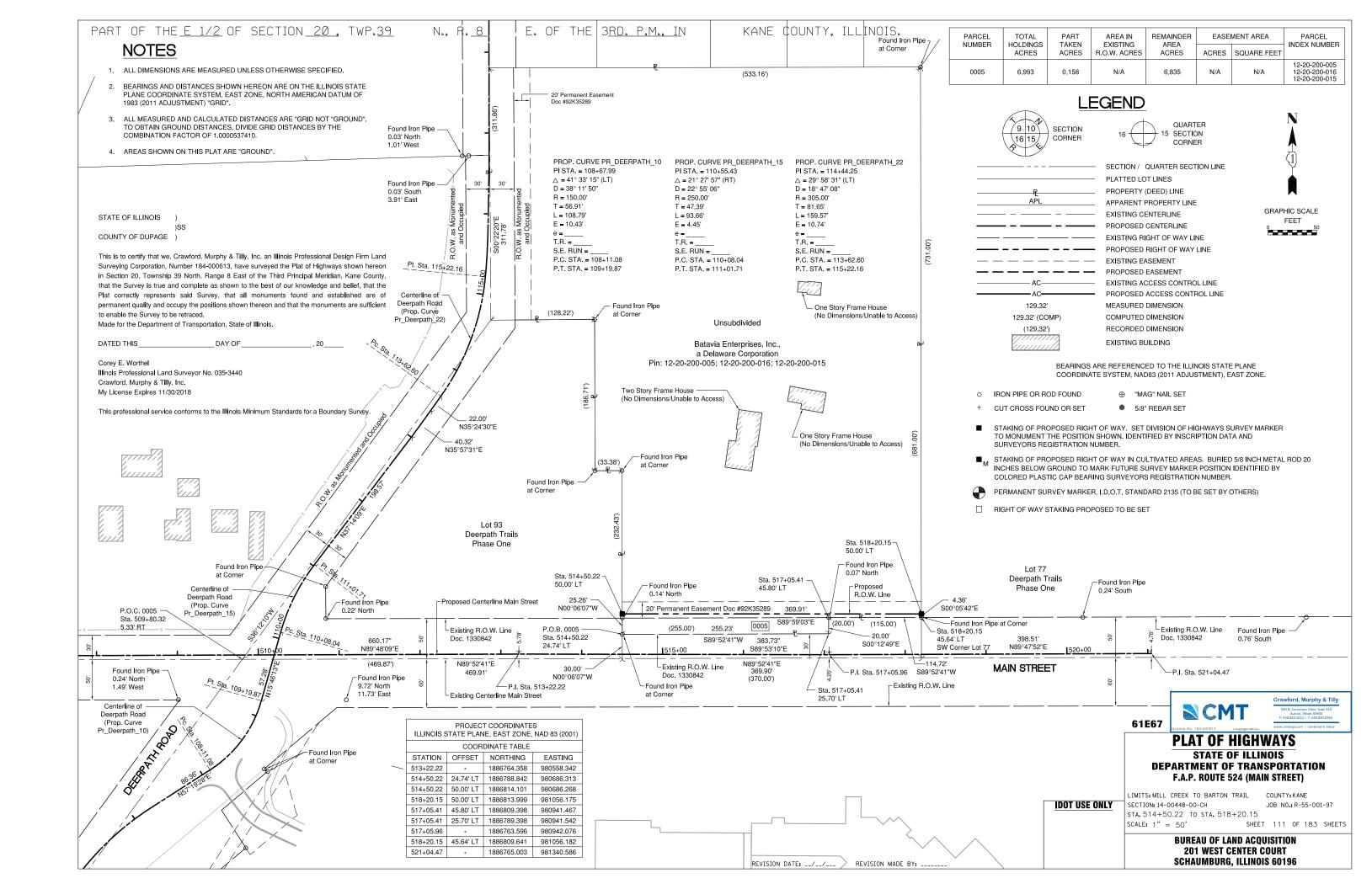


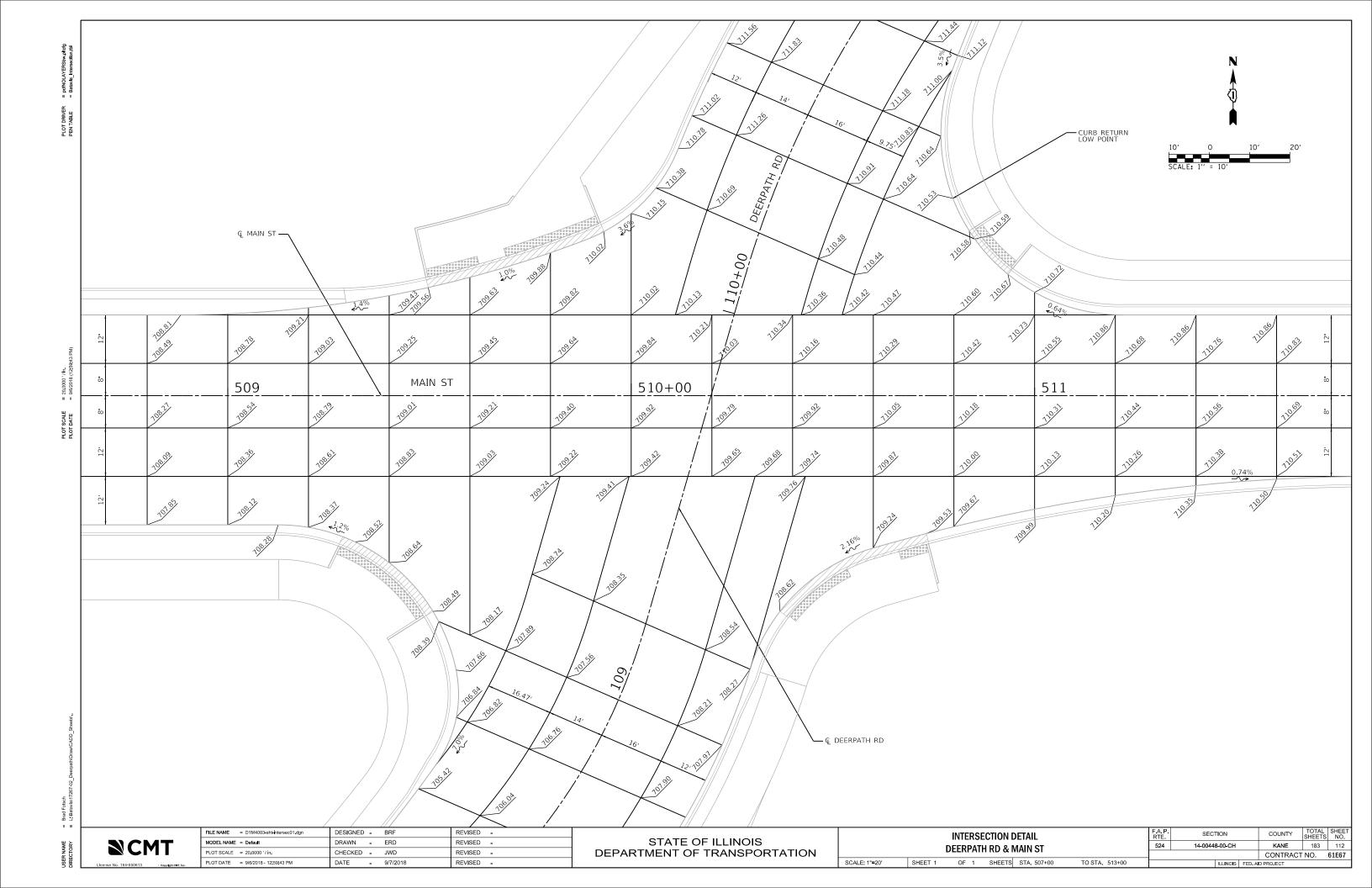


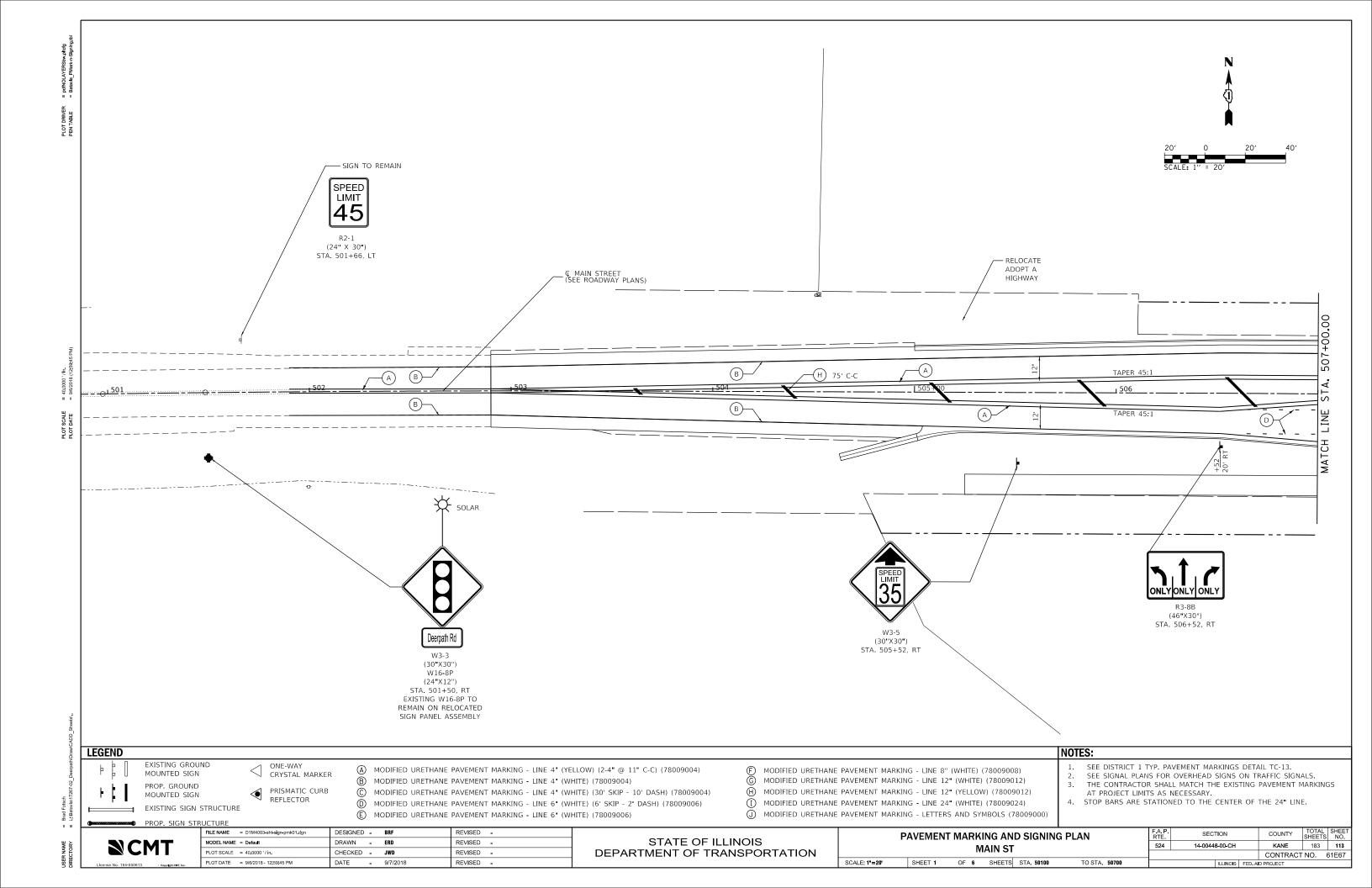


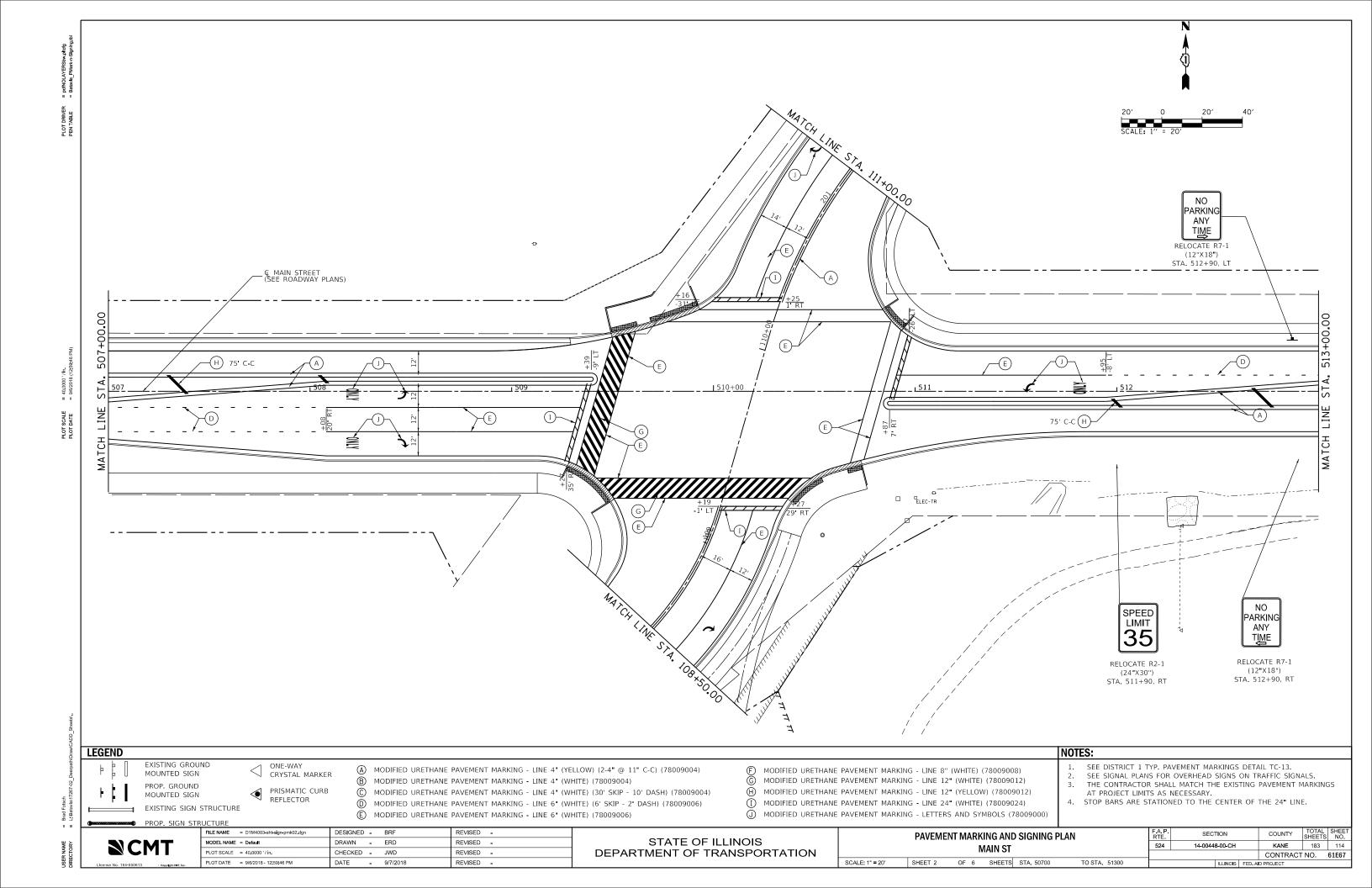


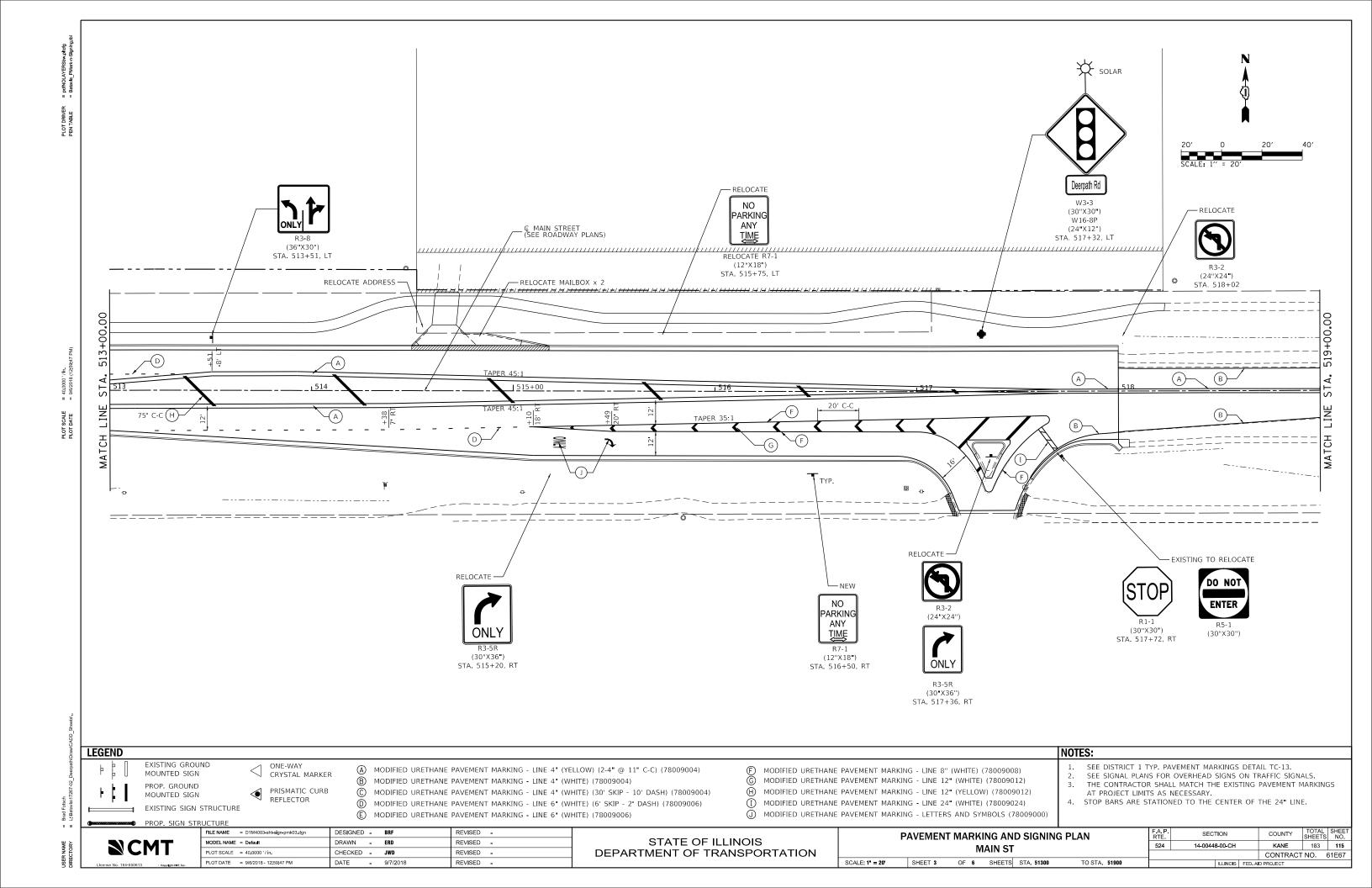


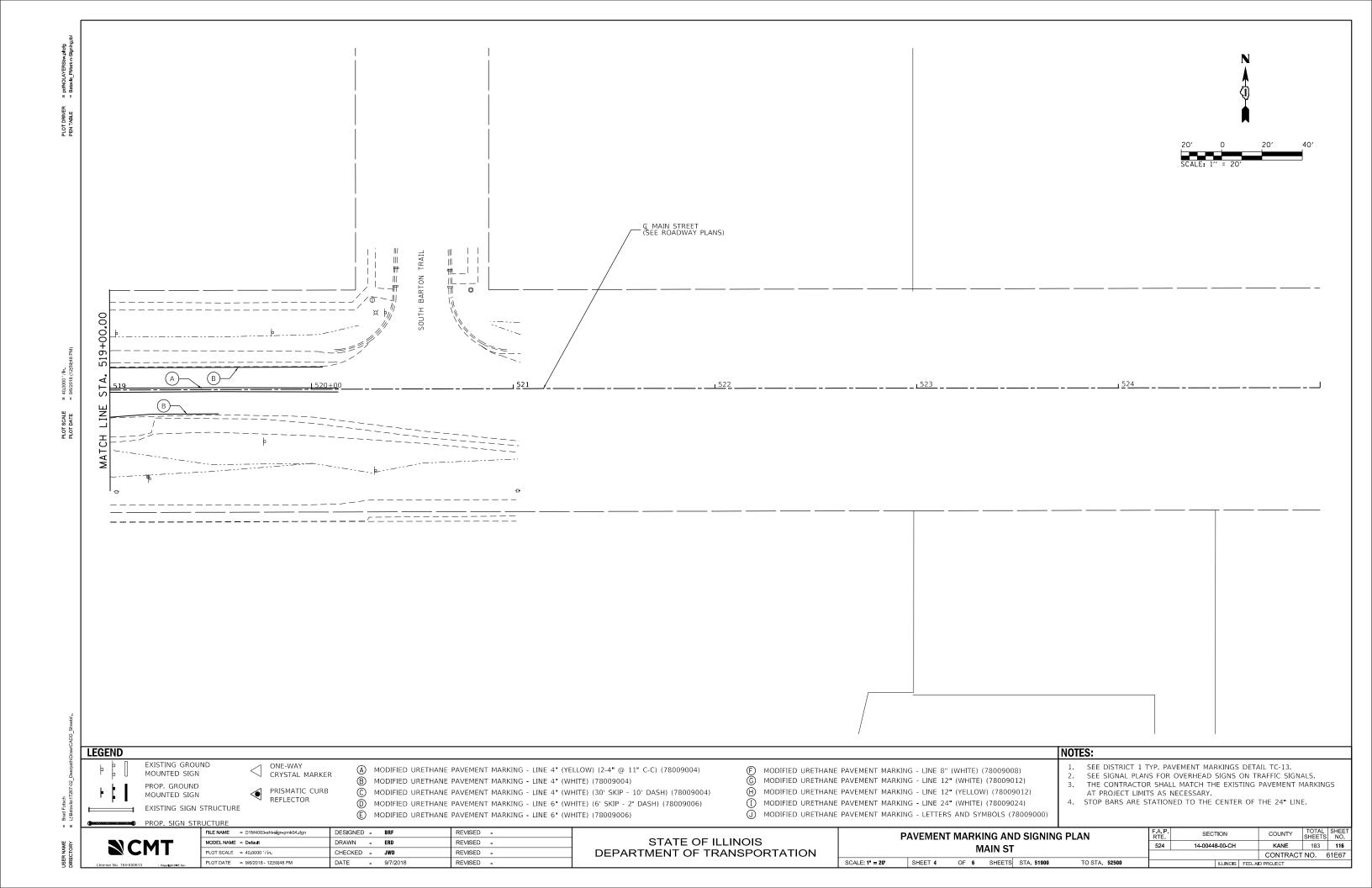


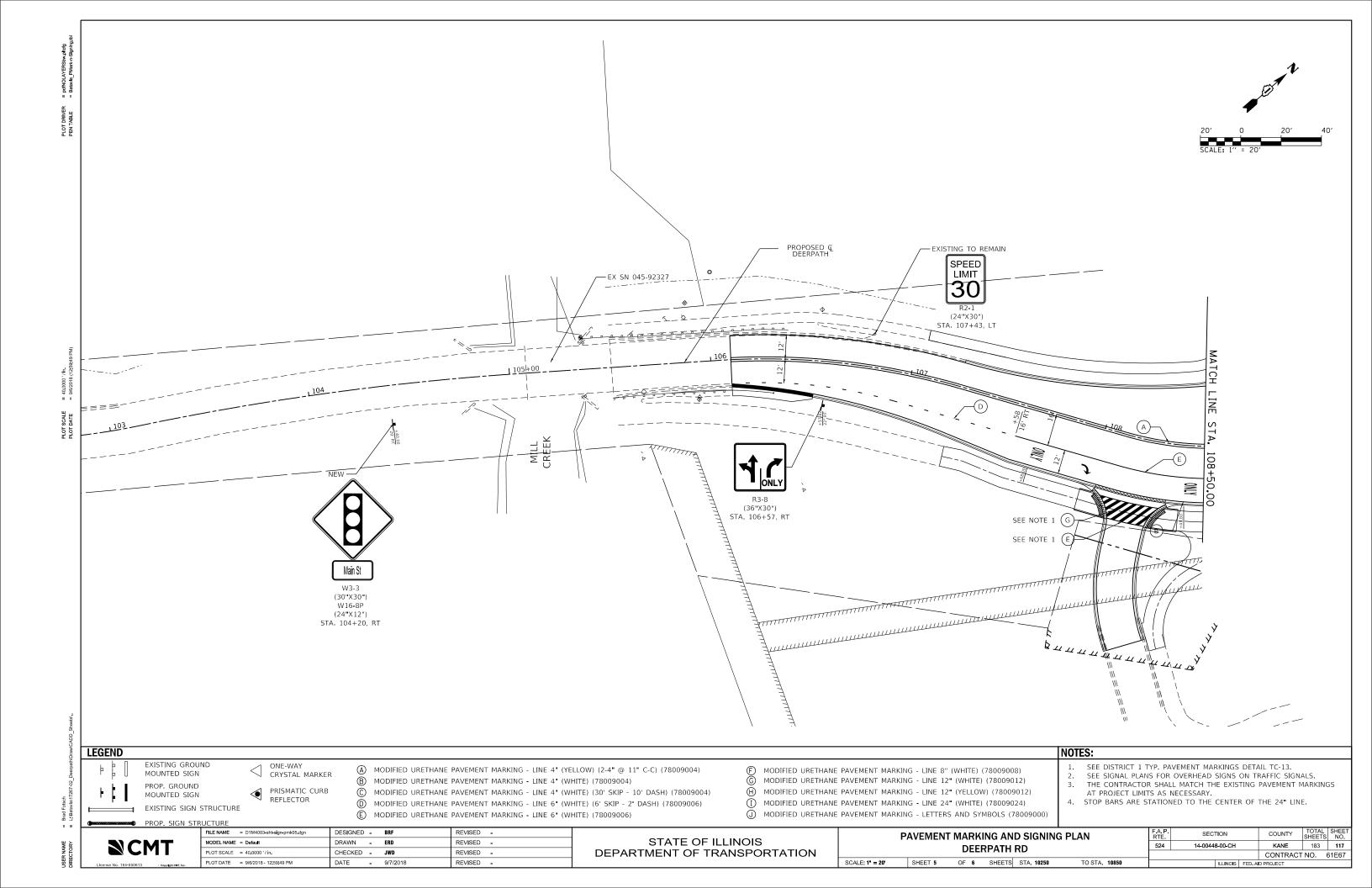


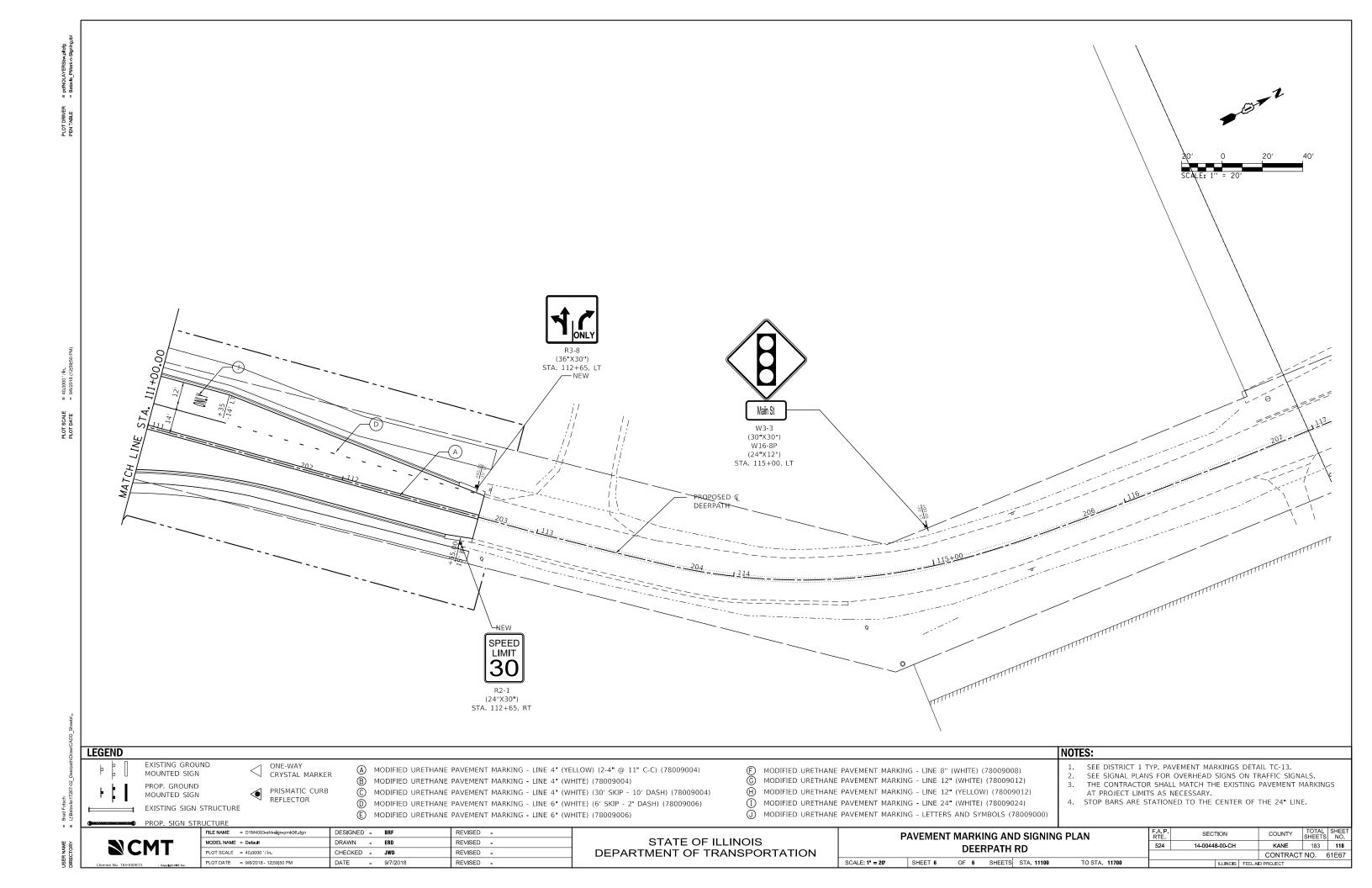


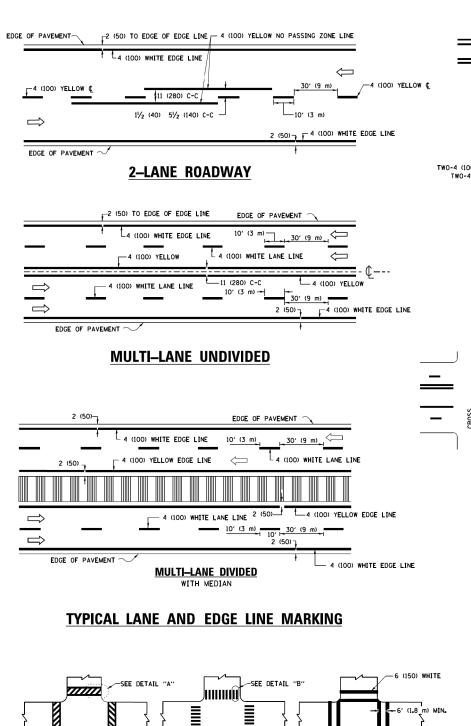


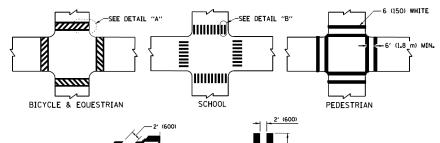










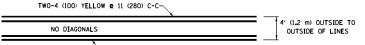


DETAIL "A"

- 6 (150) WHITE

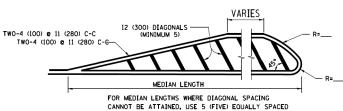
TYPICAL CROSSWALK MARKING

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



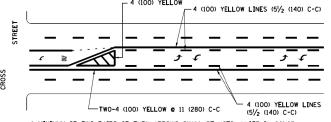
4' (1.2 m) WIDE MEDIANS ONLY

DIAGONAL LINES.

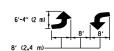


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

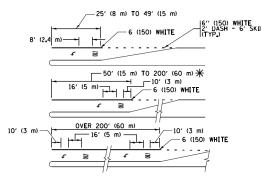


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR, ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

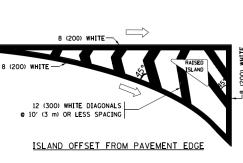


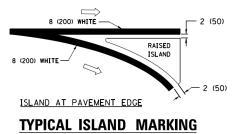
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \P AREA = 15.6 SO. FT. (1.5 m²)

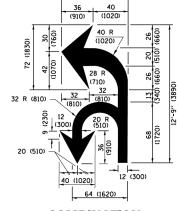
* TURN LANES IN EXCESS OF 400" (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

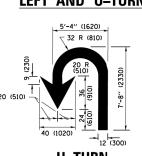
TYPICAL TURN LANE MARKING







COMBINATION LEFT AND U-TURN



LANE REDUCTION TRANSITION

SPEED LIMIT

30

665

750

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

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON Z LANE PAVEMENT CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 e 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½; (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 e 6 (150) 12 (300) e 45° 12 (300) e 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART 5EE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"*3.6 SO. FT. (0.33 m²) EACH "X"*54.0 SO. FT. (5.0 m²)
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS > 8')	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h) 150' (45 m) C-C (0VER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

SCALE: NONE

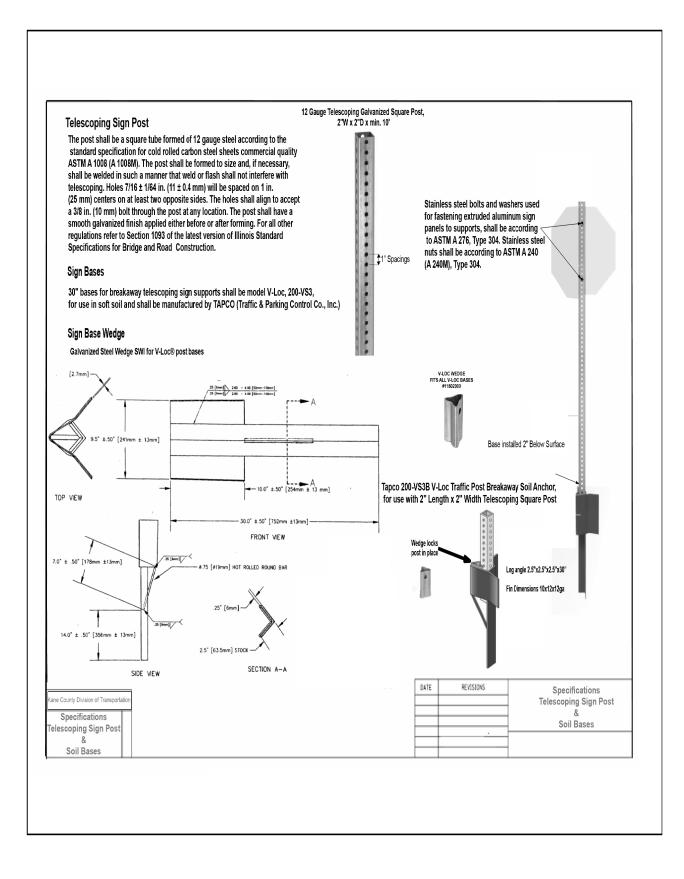
All dimensions are in inches (millimeters unless otherwise shown.

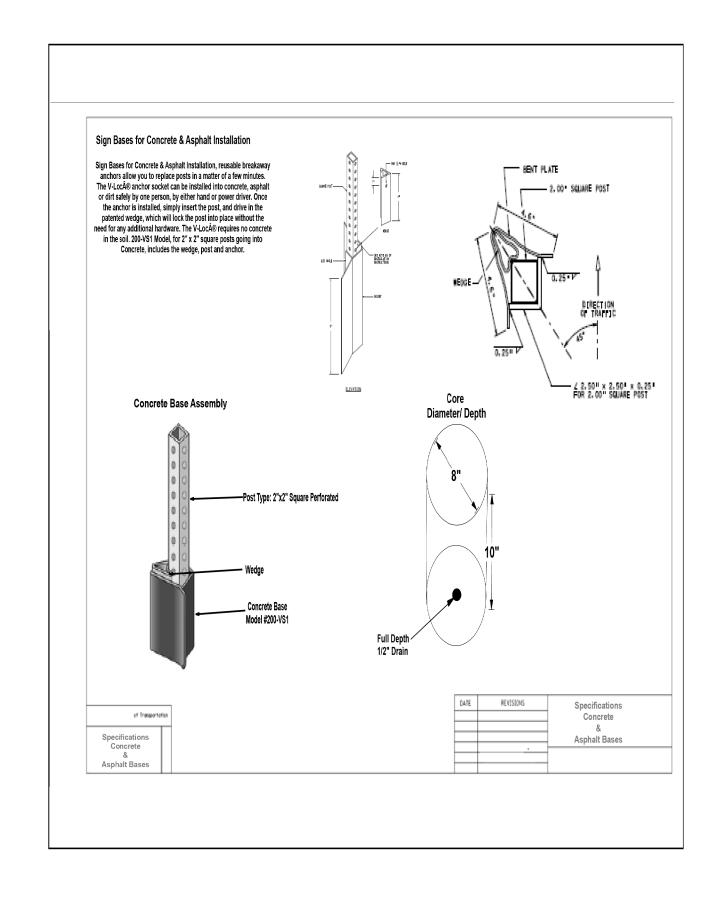
-12 (300) WHITE

DETAIL "B"

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

USER NAME = Brad Fotsch

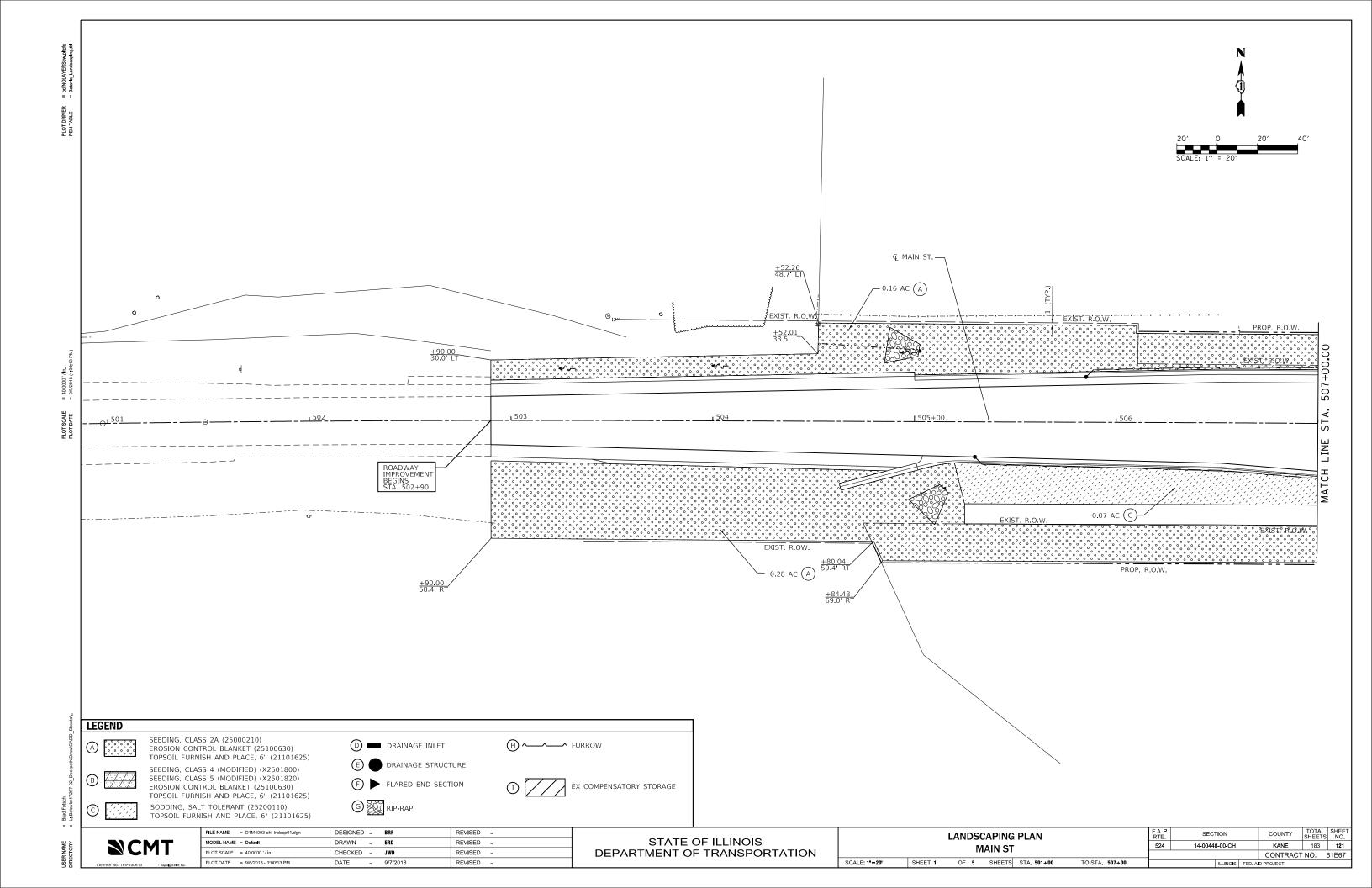


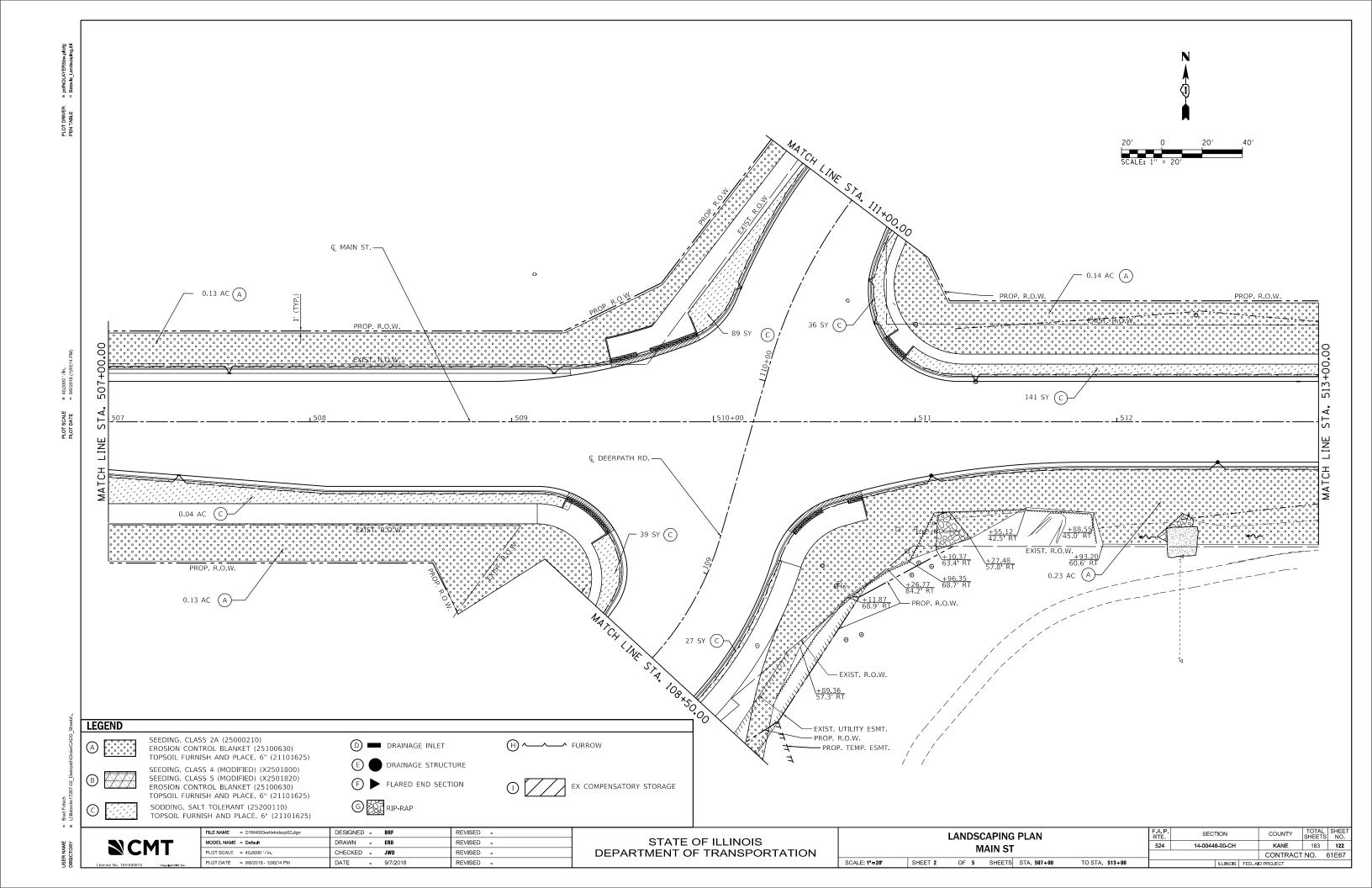


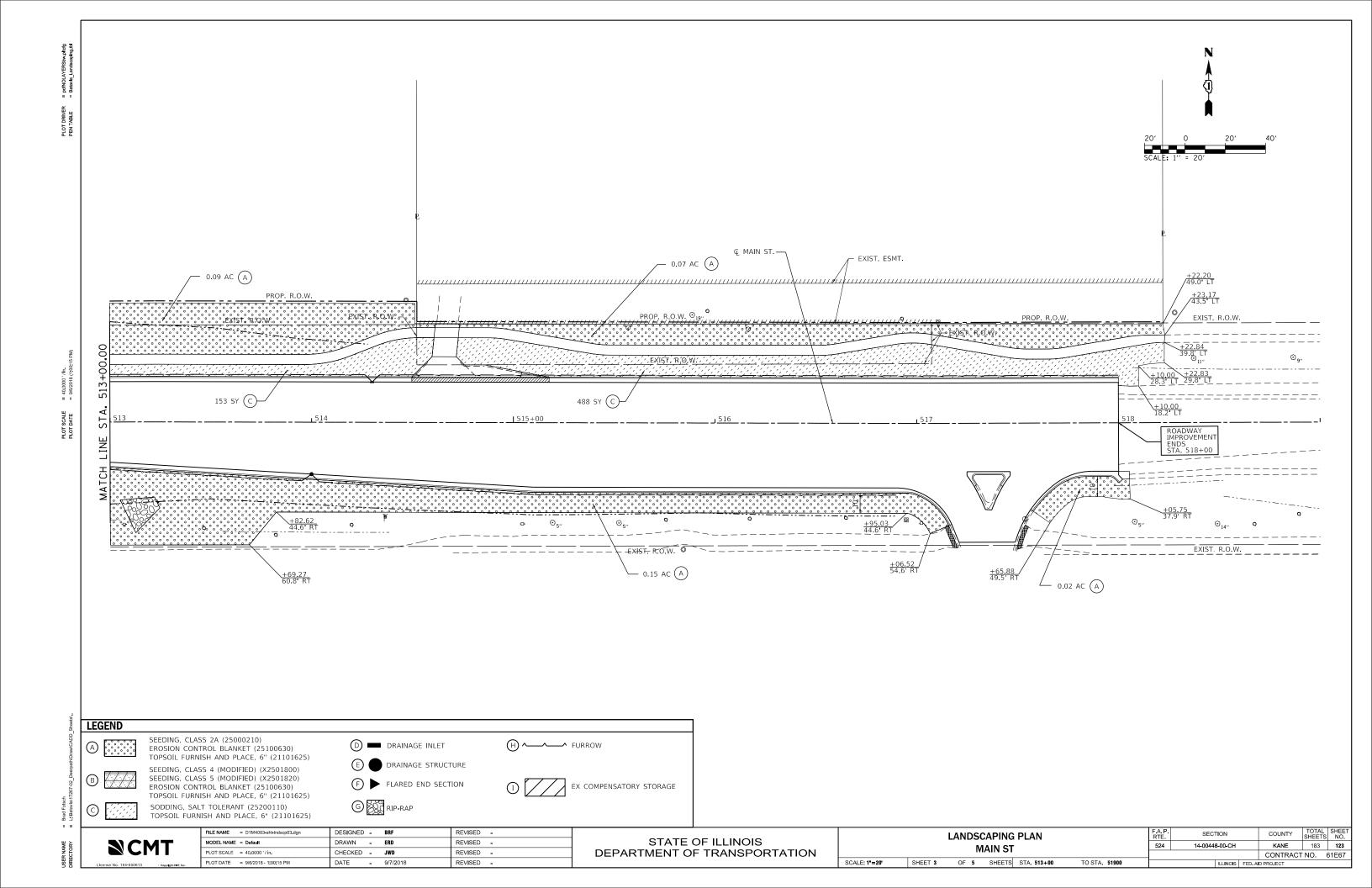
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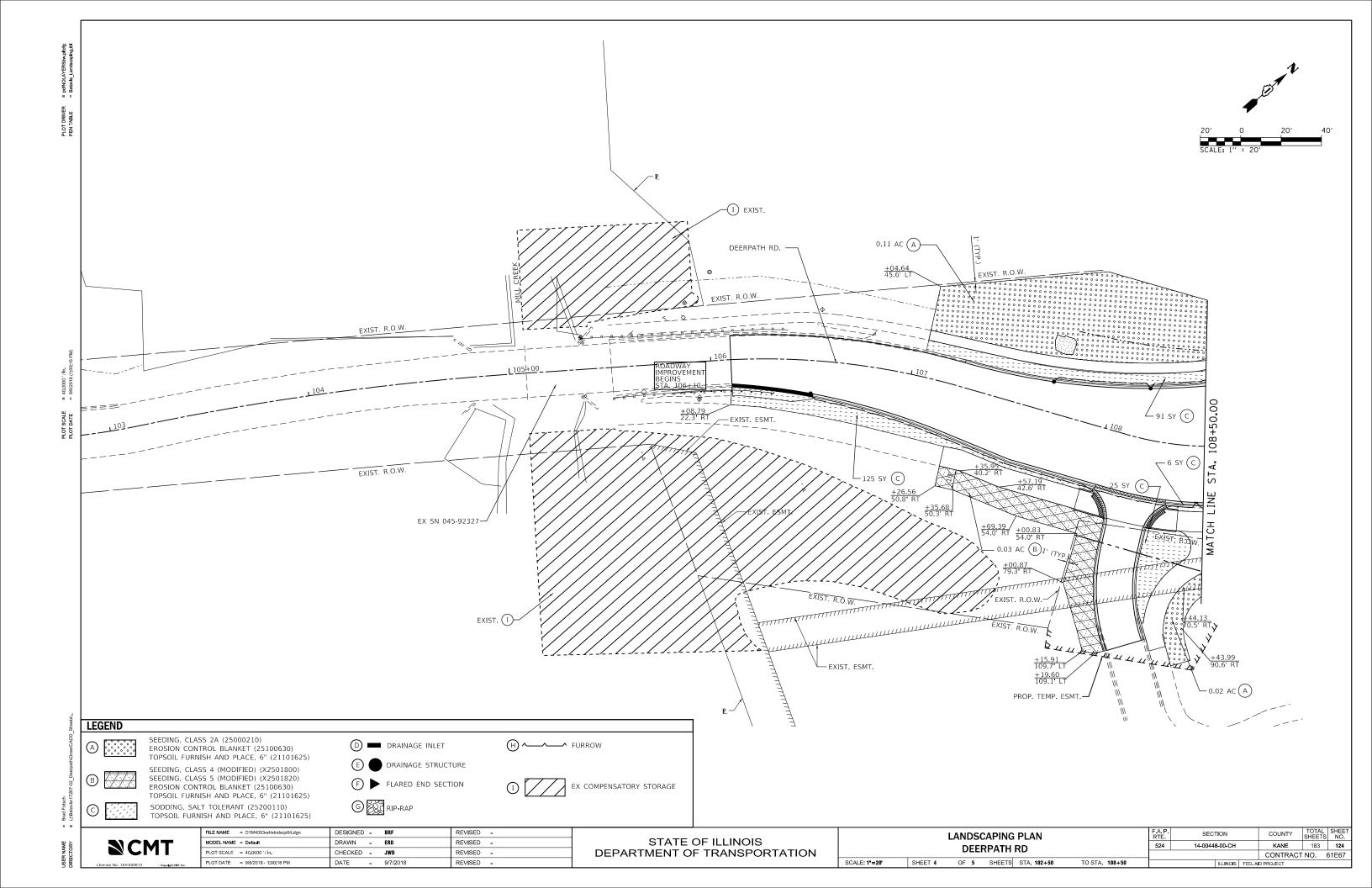
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

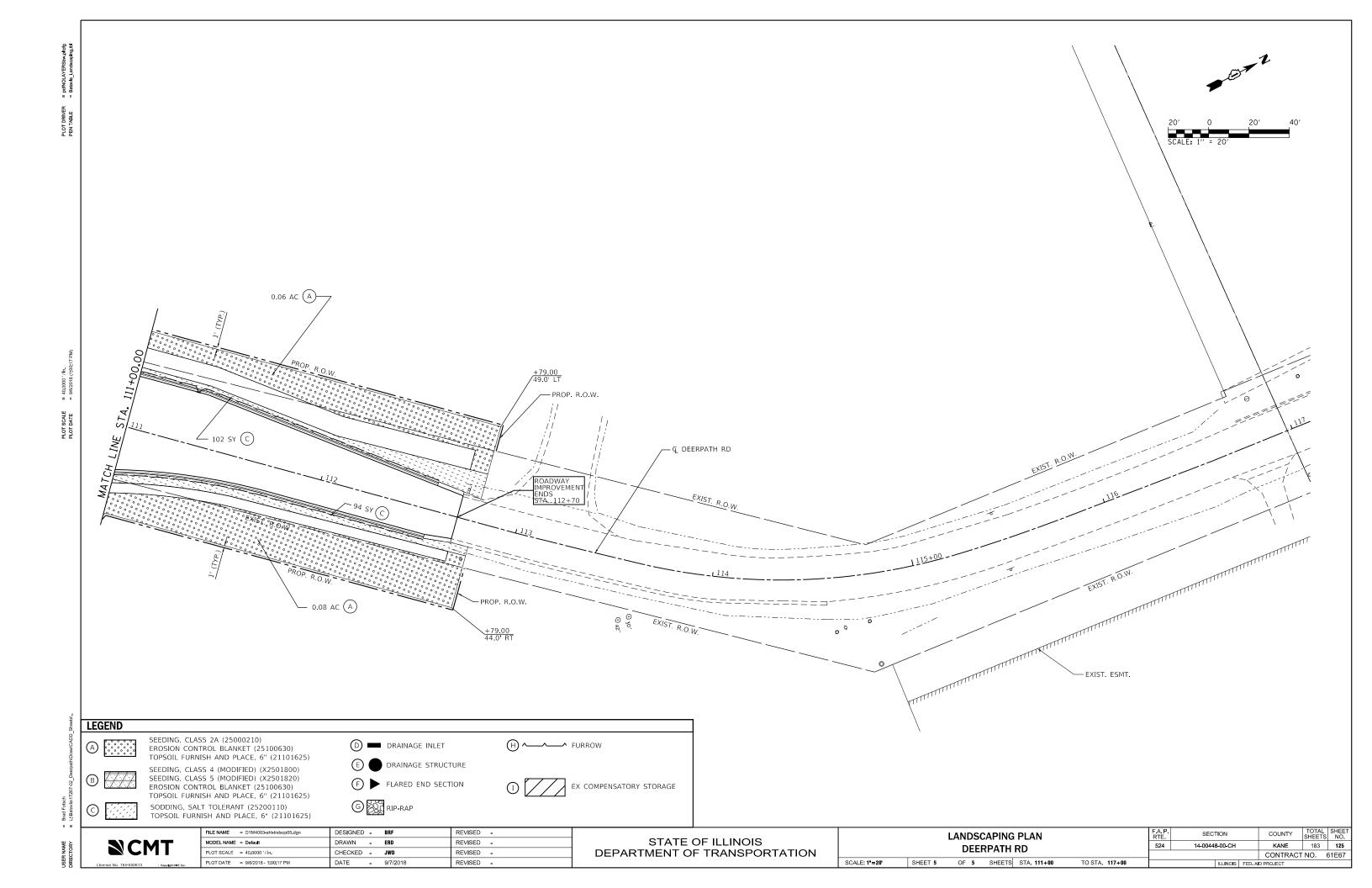
SIGNING DETAILS - KDOT SPECIFICATIONS TELESCOPING SIGN POST		F.A.P. RTE	SECTIO			
SPECIFIC	ΔΤΙΩΝς Τ	FLESCO	DING SIG	N POST	524	14-00448-0
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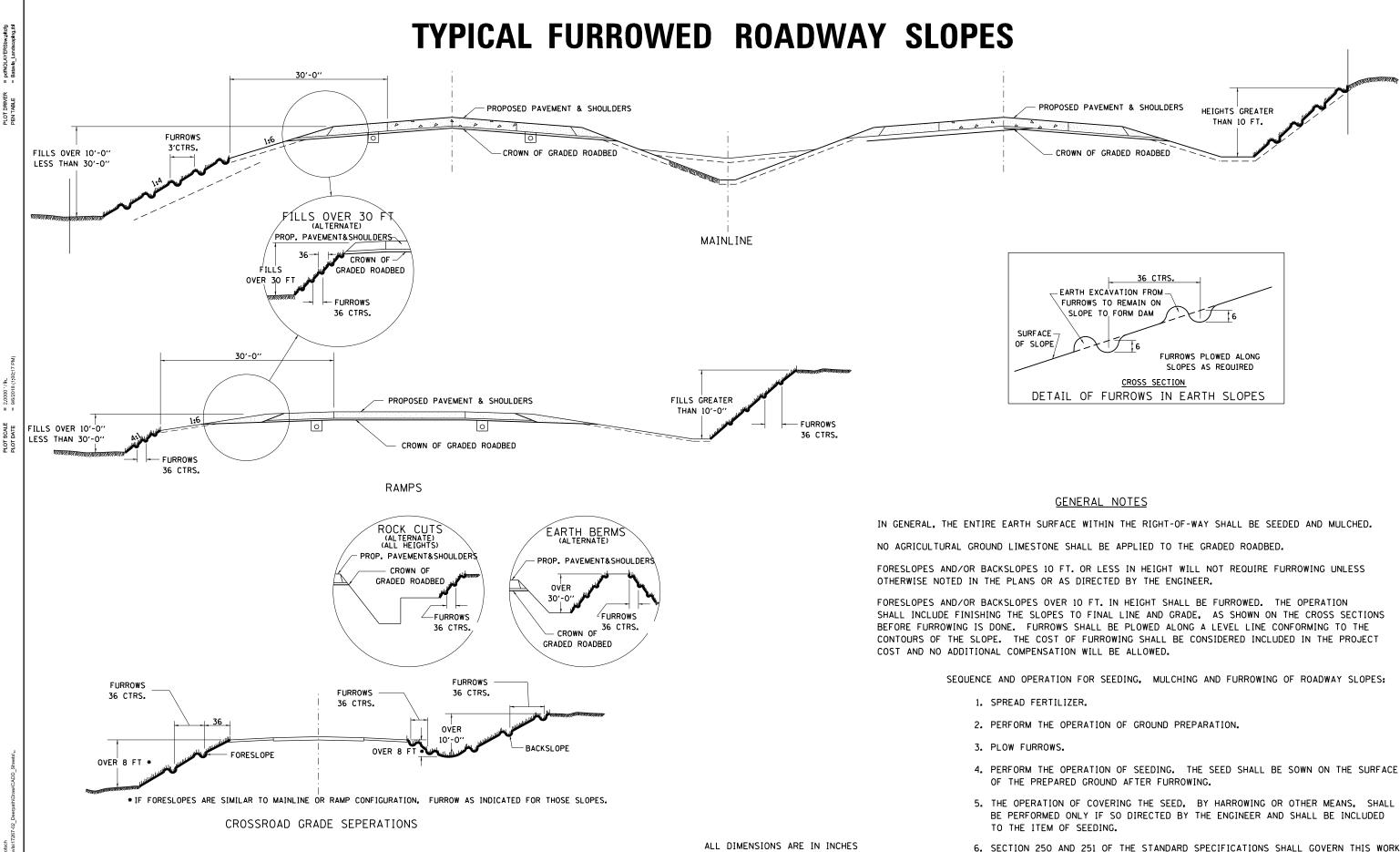












UNLESS OTHERWISE NOTED.

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

EXCEPT AS NOTED HEREIN.

LANDSCAPING DETAIL

TYPICAL FURROWED ROADWAY SLOPES (LS-1.1)

OF 2 SHEETS STA.

SECTION

14-00448-00-CH

524

COUNTY

KANE

183 126

CONTRACT NO. 61E67

USER NAME = Brad Fotsch
DIRECTORY = L:\Batavla\t1

NCMT

DESIGNED - BRF

DRAWN - ERD

DATE

REVISED -

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REVISED -

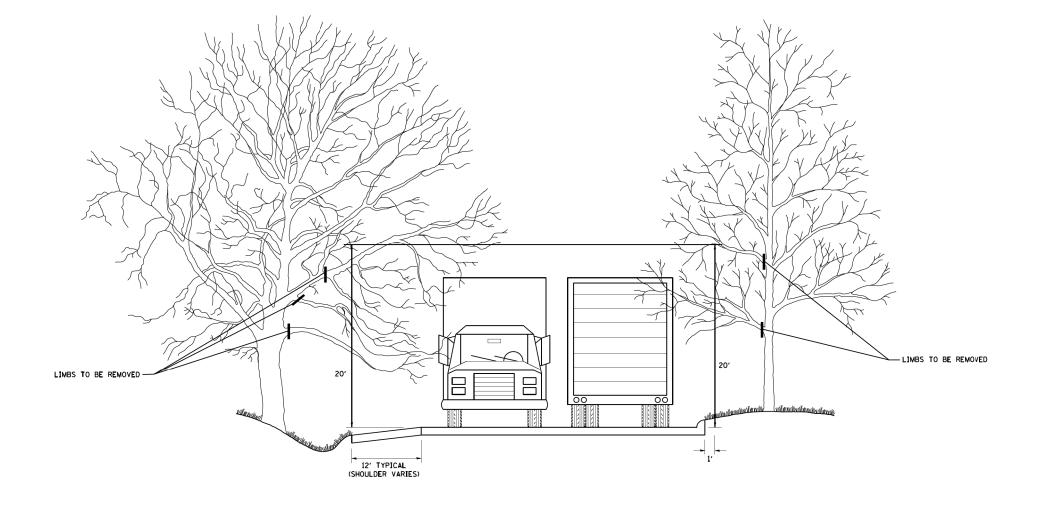
REVISED -

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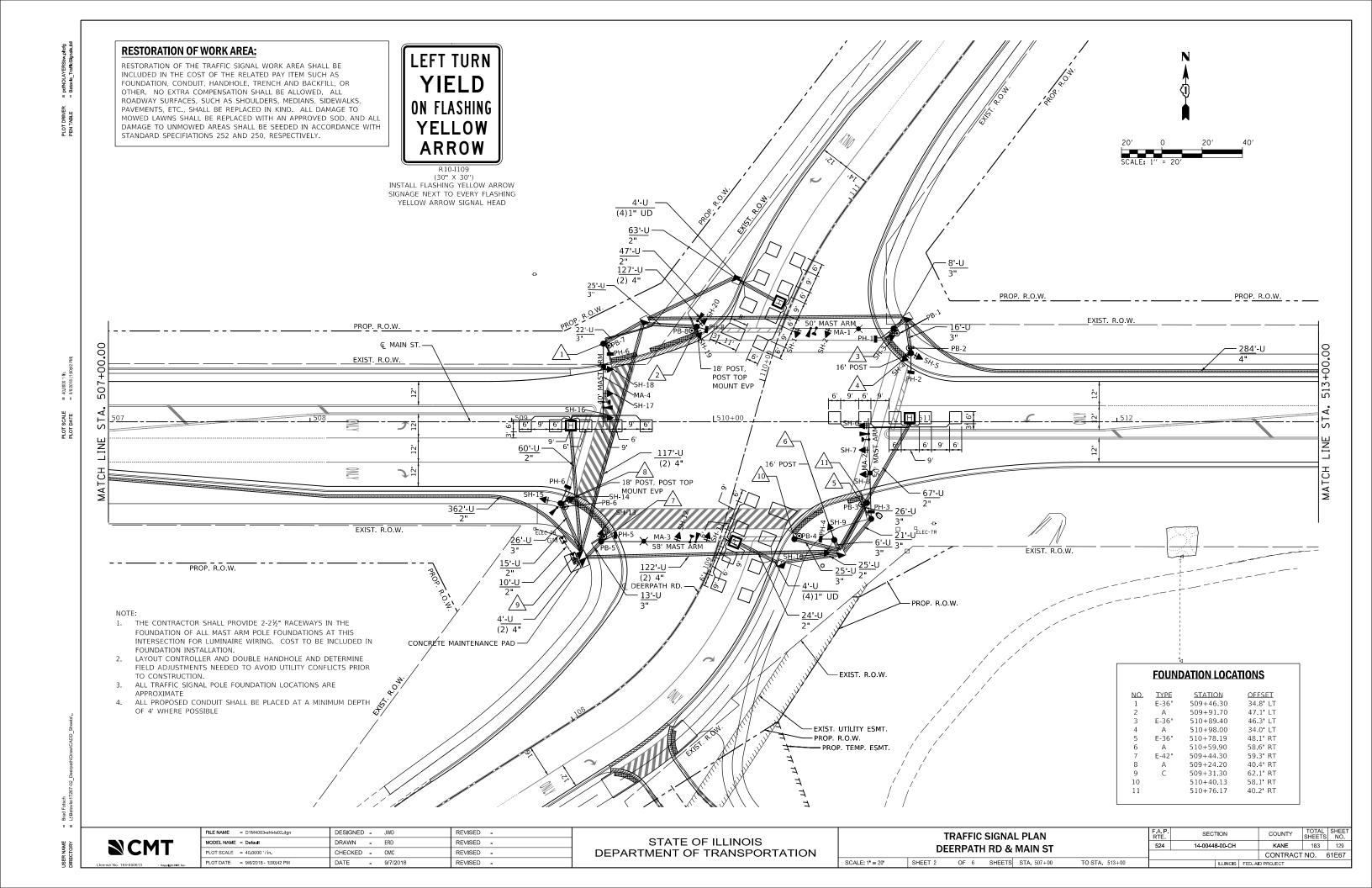


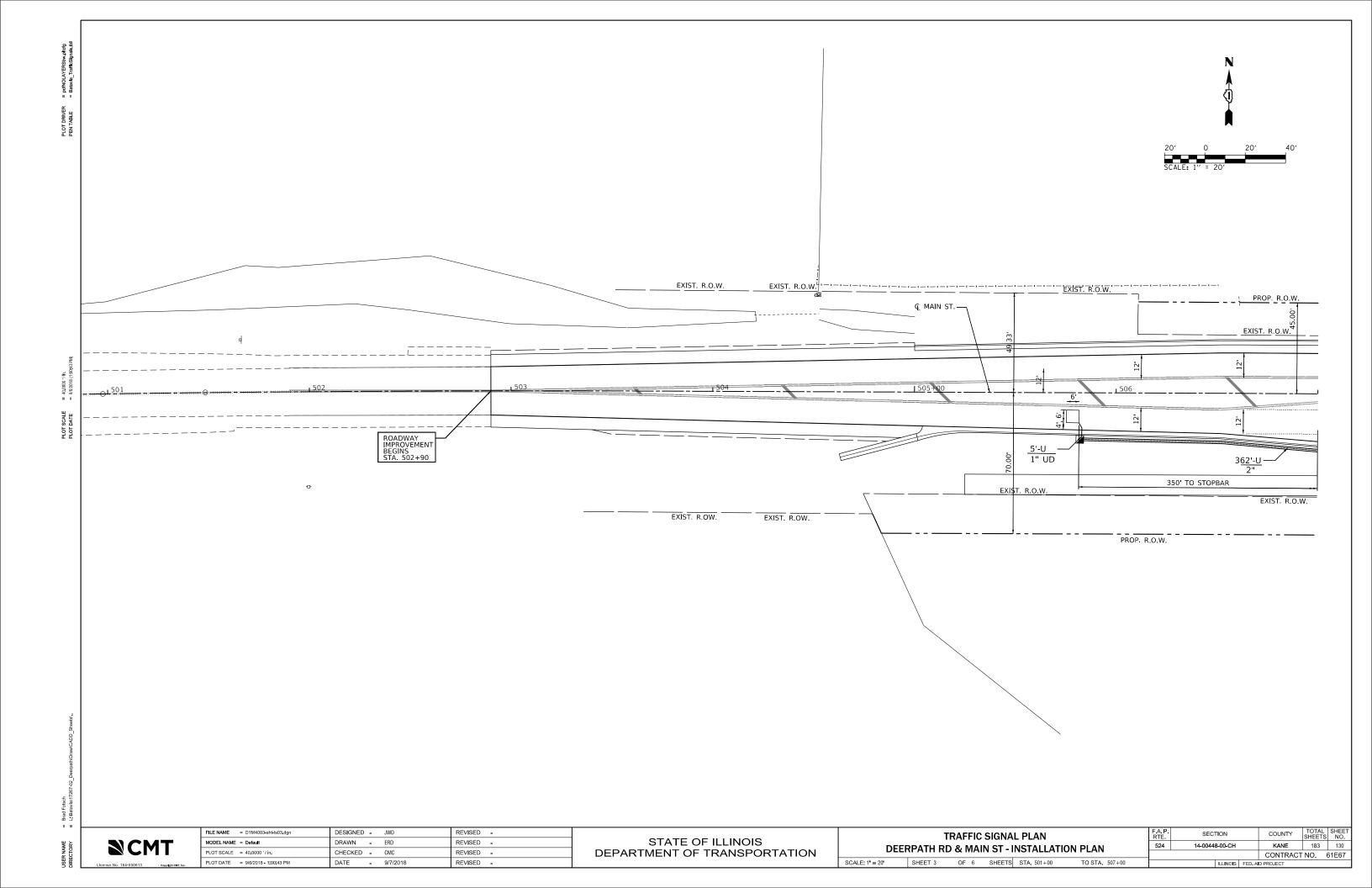
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PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE	SHEET NO. 2 OF 2 SHEETS STA. TO STA.	FED. ROA	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PRO			

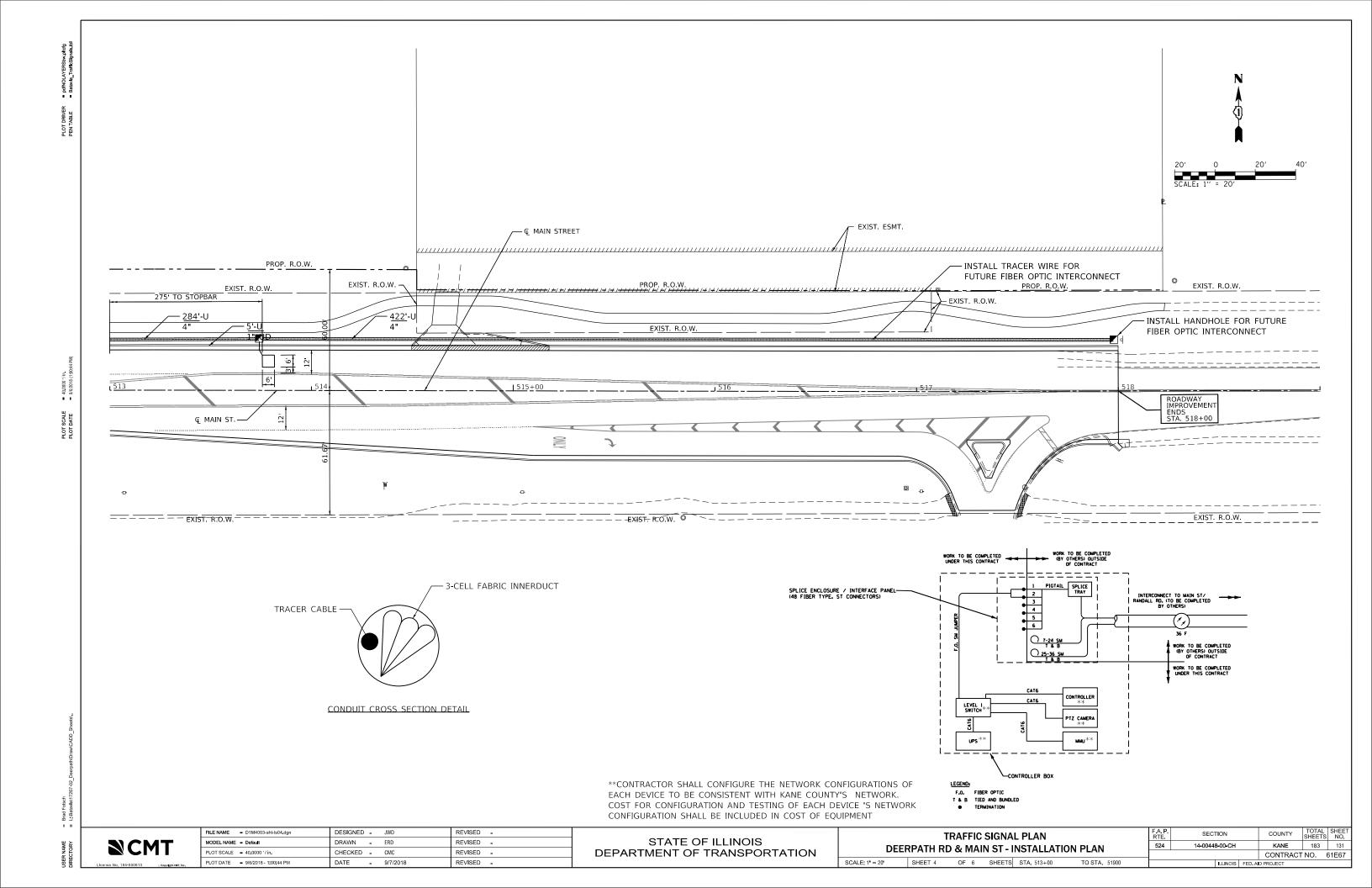
TRAFFIC SIGNAL LEGEND

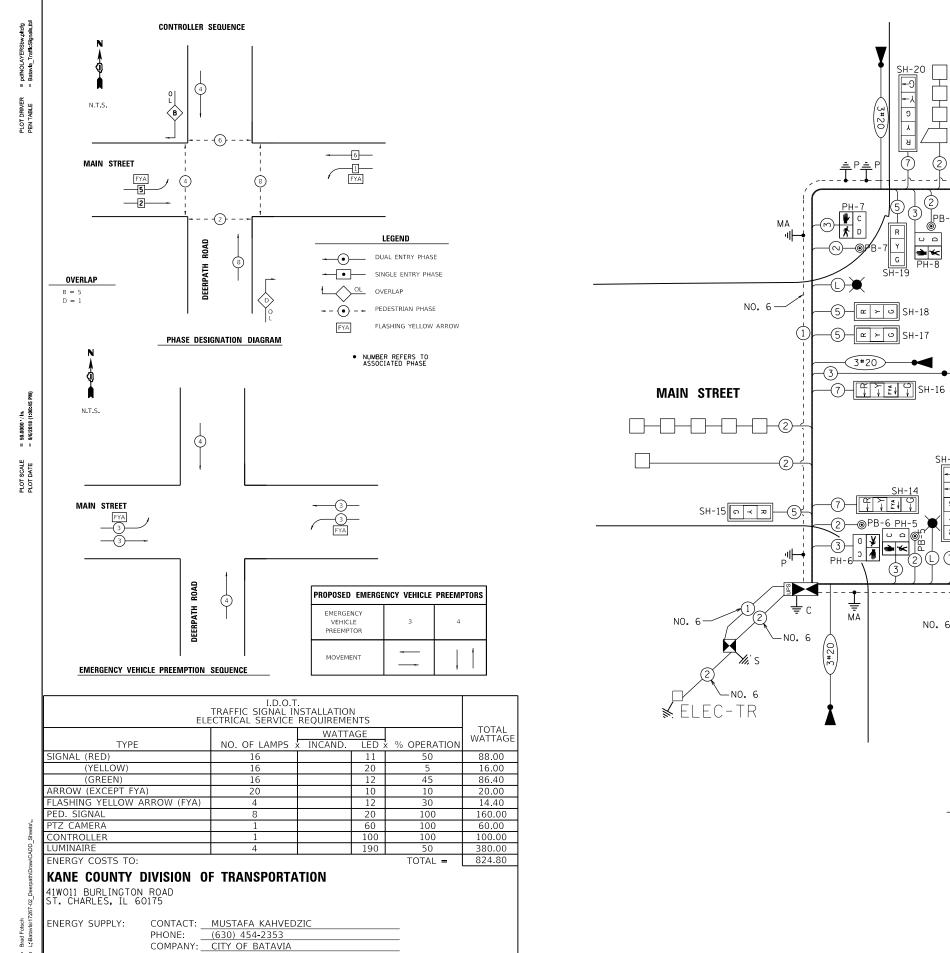
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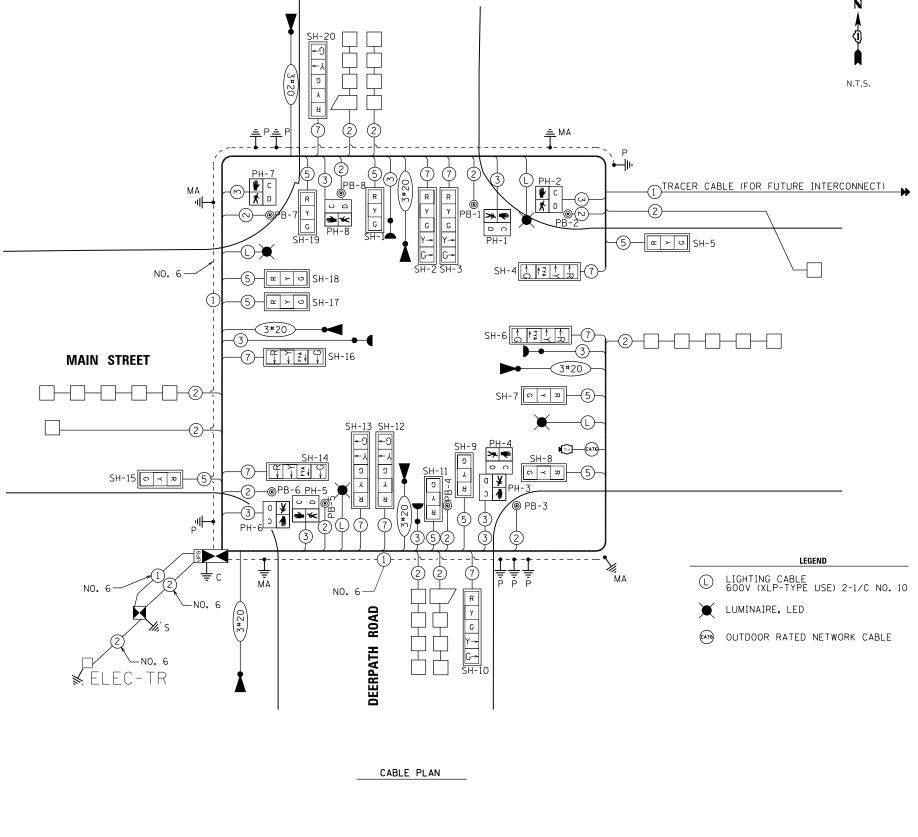
atavla_Traff	ITEM	EXISTING	<u>PROPOSE</u> D	ITEM	EXISTING	<u>PROPOSED</u>	ITEM	EXISTING	PROPOSED
. щ	CONTROLLER CABINET		M	HANDHOLE -SQUARE -ROUND			SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD	R Y Y	R R Y
EN TABI	COMMUNICATION CABINET	ECC	СС	HEAVY DUTY HANDHOLE					Y Y G G G 4Y 4Y 4G 4G P
	MASTER CONTROLLER	EMC	MC	-SQUARE -ROUND		⊞ 18		€ € P	4 G 4 G P
	MASTER MASTER CONTROLLER	Еммс	ммс	DOUBLE HANDHOLE			SIGNAL HEAD WITH BACKPLATE	(F) (F) (F)	
	UNINTERRUPTABLE POWER SUPPLY	4	2	JUNCTION BOX		0	-(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE		
	SERVICE INSTALLATION -(P) POLE MOUNTED	-D-P	- P	RAILROAD CANTILEVER MAST ARM	$X \longrightarrow X$	X eX X			G G G G G G G G G G G G G G G G G G G
	SERVICE INSTALLATION	0 04	0 04	RAILROAD FLASHING SIGNAL	$\overline{X} \ominus \overline{X}$	X+X		P RB	P RB
	-(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	$\boxtimes^G \boxtimes^{GM}$	⊠ ^G ⊠ ^{GM}	RAILROAD CROSSING GATE RAILROAD CROSSBUCK	\S\S > 26	*	PEDESTRIAN SIGNAL HEAD	()	₽
	TELEPHONE CONNECTION	ET	T				AT RAILROAD INTERSECTIONS		
	STEEL MAST ARM ASSEMBLY AND POLE	O	•——	RAILROAD CONTROLLER CABINET UNDERGROUND CONDUIT (UC),		≯ ∢	PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	C A D	₽ C
	ALUMINUM MAST ARM ASSEMBLY AND POLE	0		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"		
- PM	SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY	0	● • BM	SYSTEM ITEM	S	SP	NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		
8 (1 00 31	WOOD POLE	\otimes	Θ	INTERSECTION ITEM	I	IP	GROUND CABLE IN CONDUIT,	,	
9/6/201	GUY WIRE	>-	>-	REMOVE ITEM RELOCATE ITEM		RL	NO. 6 SOLID COPPER (GREEN)	(1#6)	(1 * 6)
# E	SIGNAL HEAD	>	→	ABANDON ITEM		A	ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		- 1-
PLOT DA	SIGNAL HEAD WITH BACKPLATE	#>	+►	CONTROLLER CABINET AND		RCF	COAXIAL CABLE	<u> </u>	<u> </u>
	SIGNAL HEAD OPTICALLY PROGRAMMED	> ^P +-> ^P	→ ^P +→ ^P	FOUNDATION TO BE REMOVED MAST ARM POLE AND			VENDOR CABLE		
	FLASHER INSTALLATION -(FS) SOLAR POWERED	ot> ot> FS	•► ^F •► ^{FS}	FOUNDATION TO BE REMOVED		RMF	COPPER INTERCONNECT CABLE.	·	
		or≻ or≻ ^{FS}	■→ ^F ■→ ^{FS}	SIGNAL POST AND FOUNDATION TO BE REMOVED		RPF	NO. 18, 3 PAIR TWISTED, SHIELDED		<u></u>
	PEDESTRIAN SIGNAL HEAD	-0	-1	DETECTOR LOOP, TYPE I			FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F	12F	——————————————————————————————————————
	PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			PREFORMED DETECTOR LOOP	[P] (P)	P P	-NO. 62.5/125, MM12F SM24F		
	RADAR DETECTION SENSOR	R 1	R.■	SAMPLING (SYSTEM) DETECTOR	$[\underline{s}]$ (\widehat{s})	s s			—36F
	VIDEO DETECTION CAMERA	TV II	V ■	INTERSECTION AND SAMPLING (SYSTEM) DETECTOR	$\overline{[is]}$ (\widehat{is})	IS (IS)	GROUND ROD	C M P S	C M P S
	RADAR/VIDEO DETECTION ZONE		III	QUEUE AND SAMPLING (SYSTEM) DETECTOR	[<u>0</u> 5] (<u>0</u> \$)	os os	-(C) CONTROLLER -(M) MAST ARM	±C ±M ±P ±S	† † † †
	PAN, TILT, ZOOM (PTZ) CAMERA	PTZ	₽ŦZ¶	WIRELESS DETECTOR SENSOR	(1)	®	-(P) POST -(S) SERVICE		
	EMERGENCY VEHICLE LIGHT DETECTOR	\bowtie	◄	WIRELESS ACCESS POINT					
	CONFIMATION BEACON	○ —(]	⊷						
	WIRELESS INTERCONNECT	○+ + 	•+ 						
	WIRELESS INTERCONNECT RADIO REPEATER	ERR	RR						
= brau ruskui = L:Batavia\17267-02_DeerpathiDraw(CADD_Sheets).	FILE NAME = USER NAME = D4944603-sht-is	s01.dgn DESIGNED -	- IP REVISED -					[F ₄ A ₁ P ₂] CFCVVO	COUNTY TOTAL SHEET
	USER NAME = USER NAME = 105ER N	DRAWN -	- IP REVISED -		TATE OF ILLINOIS ENT OF TRANSPORTATION	STAI	DISTRICT ONE NDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A. P. SECTION 524 14-00448-00	CH KANE 183 128
DIREC	Default PLOT DATE = 9/29/2016		- 9/29/2016 REVISED -	DEPARTM	ENI UF INANSPUNTATION		EET 1 OF 6 SHEETS STA. TO STA.	TS-05	CONTRACT NO. 61E67 NOIS FED. AID PROJECT











NCMT

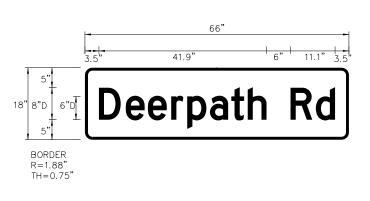
DESIGNED - JWD REVISED -DRAWN - ERD REVISED -MODEL NAME = Default REVISED -REVISED -PLOT DATE = 9/6/2018 - 1:00:45 PM DATE - 9/7/2018

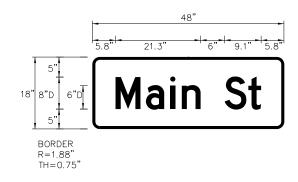
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

TRAFFIC SIGNAL CABLE PLAN **DEERPATH RD & MAIN ST** SHEET 5 OF 6 SHEETS STA. TO STA.

SECTION COUNTY 524 14-00448-00-CH KANE 183 **132** CONTRACT NO. 61E67

≥CMT



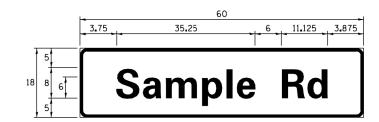


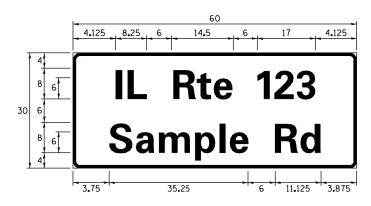
S.P.	CODE NO.	PAY ITEM DESCRIPTION	UNIT	QUANTITY
	80500010	SERVICE INSTALLATION - GROUND MOUNTED	EACH	
	81028750	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 2" DIA.	FOOT	673
	81028770	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 3" DIA.	FOOT	168
	81028790	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 4" DIA.	FOOT	1,446
	81400700	HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	8
	81400710	HEAVY-DUTY HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	
	81400720	DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	
	87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1,02
	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1,39
	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1,44
	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,36
	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,91
	87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1,96
	87301805	ELECTRIC CABLE IN CONDUIT. SERVICE. NO. 6 2 C	FOOT	3
	87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	1,95
	87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	
	87502520	TRAFFIC SIGNAL POST, GALVANIZED STEEL 18 FT.	EACH	
	87700290	STEEL MAST ARM ASSEMBLY AND POLE, 50 FT.	EACH	
	87700340	STEEL MAST ARM ASSEMBLY AND POLE 58 FT.	EACH	
	87702930	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT.	EACH	
	87702980	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	
	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	2
	87800150	CONCRETE FOUNDATION, TYPE C	FOOT	
	87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	4
	87800419	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	2
	88040070	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	
	88040070	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	
	88040030	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	
	88040110	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 4-SECTION, MAST ARM MOUNTED	EACH	
	88040150		EACH	
	88040160	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	
	88102825		EACH	
	_	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED WITH COUNT DOWN TIMER	EACH	
	88200410 88500100	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	
		INDUCTIVE LOOP DETECTOR		
	88600100	DETECTOR LOOP, TYPE I	FOOT	1,14
	88700200	LIGHT DETECTOR		
	88700300	LIGHT DETECTOR AMPLIFIER	EACH	
*	88800100	PEDESTRIAN PUSH-BUTTON	EACH	0.0
*	X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	90
*	X0325839	SIGNAL TIMING	L SUM	1.0
*	X1400102	OUTDOOR RATED NETWORK CABLE	FOOT	16
*	X1400107	FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET	EACH	
	X8620200	UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	
*	X8760055	PEDESTRIAN PUSH-BUTTON POST, TYPE A	EACH	
*	XX007251	INTERSECTION VIDEO TRAFFIC MONITORING SYSTEM WITH PTZ CAMERA	EACH	
*	XX008453	ETHERNET SWITCH, TYPE 1	EACH	
*	XX008963	THREE CELL FABRIC INNERDUCT	FOOT	96

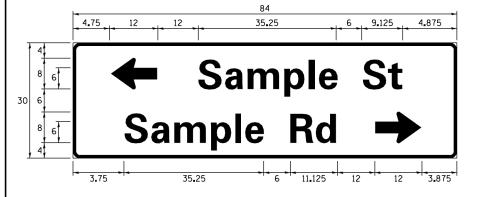
FILE NAME = D1M4003-sht-ts06.dgn	DESIGNED - JWD	REVISED -	
MODEL NAME = Default	DRAWN - ERD	REVISED -	STATE OF ILLINOIS
PLOT SCALE = 2.0000 '/in.	CHECKED - CMC	REVISED -	DEPARTMENT OF TRANSPORTATION
PLOT DATE = 9/6/2018 - 1:00:46 PM	DATE - 9/7/2018	REVISED -	

TR	RAFFIC SI	GNAL SO	CHEDULE	E	F.A.P. SECTION				COUNTY	TOTAL SHEETS	SHEE NO.
MAST ARM MOUNTED SIGN DETAILS		TAII S	524 14-00448-00-CH				KANE	183	133		
IVIAST ARM MOUNTED SIGN DETAILS				IAILO					CONTRAC	ΓNO.	61E67
HEET 6	OF 6	SHEETS	STA.	TO STA.			ILLINOIS	FED A	D PROJECT		

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	

ALL DIMENSIONS ARE IN INCHES EXCEPT NOTED OTHERWISE

COMMON STREET NAME ABBREVIATIONS AND WIDTHS

NAME	ABBREVATION	WIDTH (INCH)				
NAME	ADDREVALION	SERIES "C"	SERIES "D"			
AVENUE	Ave	15.000	18.250			
BOULEVARD	Blvd	17.125	20.000			
CIRCLE	Cir	11.125	13.000			
COURT	C†	8. 250	9.625			
DRIVE	Dr	8.625	10.125			
HIGHWAY	Hwy	18.375	22.000			
ILLINOIS	ΙL	7. 000	8. 250			
LANE	Ln	9.125	10.750			
PARKWAY	Pkwy	23.375	27.375			
PLACE	PI	7. 125	7. 750			
ROAD	Rd	9.625	11.125			
ROUTE	R†e	12.625	14.500			
STREET	S†	8. 000	9.125			
TERRACE	Ter	12.625	14.625			
TRAIL	Tr	7. 750	9.125			
UNITED STATES	US	10.375	12.250			

GENERAL NOTES

- 1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" × 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
- 2. ALL SIGNS SHALL CONSIST OF A WHITE LEGEND AND BORDER (TYPE ZZ SHEETING) ON A GREEN BACKGROUND (TYPE ZZ
- 3. THE SIGN LENGTH SHALL BE IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHALL NOT EXCEED 8'-O". ALL BORDERS SHALL BE ¾" WIDE. CORNER RADIUS SHALL BE 1-7/8". THE SPACING BETWEEN THE WORDS SHOULD BE 6". IF POSSIBLE, BUT MAY BE REDUCED TO 5" WHEN SPACING IS CRITICAL. A MINIMUM OF 2-1/2" SHALL BE INCLUDED BETWEEN THE WORD AND THE RIGHT AND LEFT EDGES OF THE SIGN.
- 4. A PREFERRED METHOD FOR THE SIGN DESIGN IS TO USE SERIES "D" LETTER ON A ONE-LINE SIGN 18" IN HEIGHT AND A MAXIMUM OF 8'-O" IN WIDTH. IF SERIES "D" DOES NOT FIT ON A 8"-O" SIGN, THEN SERIES "C" SHOULD BE TRIED. IF SERIES "C" DOES NOT FIT ON A 8'-O" SIGN, A 30" HIGH TWO-LINE SIGN CAN BE USED. THE CROSSROAD DESIGNATION AS TO STREET, AVENUE, ETC. SHOULD BE SPELLED OUT ON THE SECOND LINE, IF THE ABBREVIATION CANNOT FIT ON THE FIRST LINE.
- 5. LED ILLUMINATED STREET NAME SIGNS CAN BE USED IN PLACE OF REGULAR SIGN PANELS BUT ANY SPECIAL WORDING AND SYMBOLOGY MUST BE APPROVED BY THE DEPARTMENT. GENERAL DESIGN REQUIREMENT AS LISTED ABOVE (COLOR, FONT, SIZE, ETC.) MUST BE FOLLOWED.

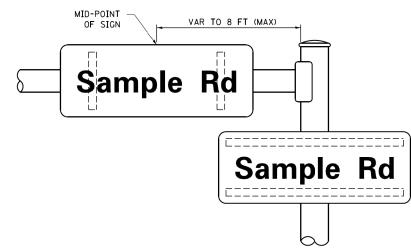
-6. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND

LOCAL SUPPLIERS:	PARTS LISTING:	
- J.O. HERBERT COMPANY, INC	SIGN CHANNEL SIGN SCREWS	PART *HPN053 (MED. CHANNEL) 1/4" x 14 x 1" H.W.H. *3
- WESTERN REMAC, INC WOODRIDGE, IL	BRACKETS	SELF TAPPING WITH NEOPRENE WASHER PART *HPNO34 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

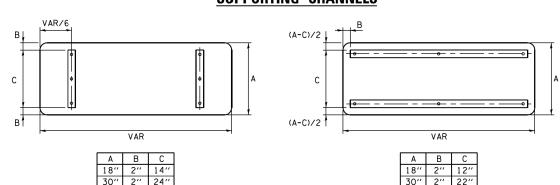
OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

MOUNTING LOCATION

ARM OR POLE MOUNTED



SUPPORTING CHANNELS



SCALE.

STANDARD ALPHABETS SPACING CHART

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

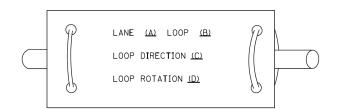
A B C D E E F G H I J J K L M N O P P O R R S T T U V W X Y Y Z D D C C	LEFT SPACING (INCH) 0. 240 0. 880 0. 720 0. 880 0. 720 0. 880 0. 720 0. 880 0. 720 0. 880 0. 240 0. 880 0. 240 0. 880 0. 720 0. 880 0. 720 0. 880 0. 720 0. 880 0. 720 0. 880 0. 720 0. 880 0. 720 0. 880 0. 720 0. 880 0. 240 0. 240 0. 240 0. 240 0. 240 0. 240 0. 240 0. 240 0. 480	WIDTH (INCH) 5.122 4.482 4.482 4.082 4.082 4.482 4.082 4.482 4.082 4.482 4.082 4.482 4.722 4.482 4.722 4.482 4.722 4.482 4.722 6.084 4.722	RIGHT SPACING (INCH) 0. 240 0. 480 0. 720 0. 720 0. 480 0. 720 0. 880 0. 880 0. 880 0. 240 0. 880 0. 720 0. 720 0. 720 0. 880 0. 480 0. 720	CHARACTER A B C D E F G H I J K L M N O P O R S T U	(INCH) 0. 240 0. 960 0. 800 0. 960	WIDTH (INCH) 6.804 5.446 5.446 5.446 4.962 4.962 5.446 1.280 5.122 5.604 4.962 6.244 5.446 5.684 5.446 5.684 5.446	RIGHT SPACIN (INCH) 0. 240 0. 400 0. 800 0. 800 0. 960 0. 800 0. 800 0. 800 0. 800 0. 800 0. 800 0. 960 0.
A B C D E E F G H I J J K L M N O P P O R R S T T U V W X X Y Z G D C C C C C C C C C C C C C C C C C C	(INCH) 0. 240 0. 880 0. 720 0. 880 0. 880 0. 720 0. 880 0. 720 0. 880 0. 240 0. 880 0. 240 0. 880 0. 720 0. 880 0. 720 0. 880 0. 880 0. 880 0. 720 0. 880 0.	5. 122 4. 482 4. 482 4. 082 4. 082 4. 482 1. 120 4. 082 4. 482 4. 082 4. 482 4. 722 4. 482 4. 722 4. 482 4. 722 4. 482 4. 082 6. 084 4. 722	(INCH) 0. 240 0. 480 0. 720 0. 480 0. 720 0. 480 0. 240 0. 720 0. 880 0. 880 0. 880 0. 240 0. 720 0. 720 0. 480 0. 720	A B C D E F G H I J K L M N O P Q R S T	(INCH) 0. 240 0. 960 0. 800 0. 960	6. 804 5. 446 5. 446 5. 446 4. 962 4. 962 5. 446 1. 280 5. 122 5. 604 4. 962 6. 244 5. 446 5. 684 5. 446	(INCH) 0. 240 0. 400 0. 800 0. 800 0. 400 0. 240 0. 960 0. 960 0. 960 0. 960 0. 960 0. 960 0. 240 0. 960 0. 800 0. 240 0. 800 0. 240 0. 800 0. 400
B C D E E F G H I J J K L M N O P P O R R S T T U V W X X Y Z G D C C	0. 240 0. 880 0. 720 0. 880 0. 880 0. 720 0. 880 0. 240 0. 880 0. 240 0. 880 0. 720 0. 720	4. 482 4. 482 4. 082 4. 082 4. 482 4. 482 1. 120 4. 082 4. 482 4. 082 5. 284 4. 482 4. 722 4. 482 4. 482 4. 482 4. 482 4. 482 4. 482 4. 482 4. 482 4. 482 4. 682 4. 682 6. 684 4. 722	0. 240 0. 480 0. 720 0. 720 0. 480 0. 240 0. 720 0. 880 0. 880 0. 480 0. 240 0. 720 0. 720 0. 880 0. 480 0. 720	B C D E F G H I J K L M N O P P O G R S T T	0. 240 0. 960 0. 800 0. 960	5. 446 5. 446 5. 446 4. 962 4. 962 5. 446 5. 446 1. 280 5. 122 5. 604 4. 962 6. 244 5. 446 5. 684 5. 684 5. 684 5. 684	0. 240 0. 400 0. 800 0. 800 0. 400 0. 240 0. 960 0. 960 0. 400 0. 240 0. 960 0. 960 0. 800 0. 240 0. 800 0. 240
B C D E F G H I J J K L L M M N O P P Q R R S T T U V W X X Y Z Z G D C C	0. 880 0. 720 0. 880 0. 880 0. 720 0. 880 0. 240 0. 880 0. 880 0. 880 0. 880 0. 720 0. 720	4. 482 4. 482 4. 082 4. 082 4. 482 4. 482 1. 120 4. 082 4. 482 4. 082 5. 284 4. 482 4. 722 4. 482 4. 482 4. 482 4. 482 4. 482 4. 482 4. 482 4. 482 4. 482 4. 682 4. 682 6. 684 4. 722	0. 480 0. 720 0. 720 0. 480 0. 240 0. 720 0. 880 0. 880 0. 240 0. 880 0. 720 0. 720	B C D E F G H I J K L M N O P P O G R S T T	0. 960 0. 800 0. 960 0. 960 0. 960 0. 960 0. 960 0. 240 0. 960 0. 960 0. 960 0. 960 0. 960 0. 800 0. 960 0. 800 0. 960 0. 400	5. 446 5. 446 5. 446 4. 962 4. 962 5. 446 5. 446 1. 280 5. 122 5. 604 4. 962 6. 244 5. 446 5. 684 5. 684 5. 684 5. 684	0. 400 0. 800 0. 400 0. 240 0. 960 0. 960 0. 960 0. 400 0. 240 0. 960 0. 800 0. 240 0. 800 0. 400
C D E F G H I J J K L M N O O P O C R S T U V W X X Y Z C C C C C C C C C C C C C C C C C C	0. 720 0. 880 0. 880 0. 720 0. 880 0. 240 0. 880 0. 240 0. 880 0. 720 0. 720	4. 482 4. 082 4. 082 4. 482 4. 482 1. 120 4. 082 4. 482 4. 082 5. 284 4. 482 4. 722 4. 482 4. 482 4. 482 4. 482 4. 482 4. 682 4.	0. 720 0. 480 0. 240 0. 880 0. 880 0. 880 0. 880 0. 720 0. 880 0. 720 0. 720 0. 720 0. 720 0. 720 0. 720 0. 720 0. 720 0. 720 0. 720 0. 720 0. 780	C D E F G H I J K L M N O P G R S T	0.800 0.960 0.960 0.960 0.960 0.960 0.960 0.960 0.960 0.960 0.960 0.960 0.960 0.960 0.960 0.960 0.960 0.960	5. 446 5. 446 4. 962 4. 962 5. 446 5. 446 1. 280 5. 122 5. 604 4. 962 6. 244 5. 446 5. 684 5. 684 5. 684 5. 446	0.800 0.800 0.400 0.240 0.960 0.960 0.960 0.240 0.960 0.960 0.240 0.960 0.
D E F G H I J K L M N N O P O C R S T U V W X X Y Z C C C C C C C C C C C C C C C C C C	0.880 0.880 0.720 0.880 0.240 0.880 0.240 0.880 0.880 0.720 0.880 0.720 0.880 0.720 0.880 0.720 0.880 0.240 0.240 0.240 0.240 0.240 0.240 0.240 0.240	4. 482 4. 082 4. 482 4. 482 1. 120 4. 082 4. 482 4. 082 5. 284 4. 482 4. 722 4. 482 4. 722 4. 482 4. 482 4. 682 4.	0. 720 0. 480 0. 240 0. 720 0. 880 0. 880 0. 480 0. 240 0. 720 0. 720 0. 720 0. 720 0. 720 0. 720 0. 720 0. 720 0. 720 0. 720 0. 480 0. 240 0. 880 0. 240	D E F G H I J K L M N O P P O R R S T T	0. 960 0. 960	5. 446 4. 962 4. 962 5. 446 5. 446 1. 280 5. 122 5. 604 4. 962 6. 244 5. 446 5. 684 5. 684 5. 446	0.800 0.400 0.240 0.800 0.960 0.960 0.400 0.240 0.960 0.960 0.960 0.800 0.240 0.800 0.400
E F G H I J K L M N N O O P O O R R S T U V W X X Y Z C O C C C C C C C C C C C C C C C C C	0.880 0.880 0.720 0.880 0.240 0.880 0.880 0.880 0.720 0.880 0.720 0.880 0.720 0.880 0.720 0.880 0.240 0.240 0.240 0.240 0.240 0.240 0.240	4. 082 4. 082 4. 482 1. 120 4. 082 4. 482 4. 082 5. 284 4. 482 4. 722 4. 482 4. 722 4. 482 4. 082 4. 082 6. 084 4. 722	0. 480 0. 240 0. 720 0. 880 0. 880 0. 480 0. 240 0. 720 0. 720 0. 720 0. 720 0. 480 0. 480 0. 240 0. 880 0. 240 0. 240 0. 240	E F G H I J K L M N O P P G R S T T	0. 960 0. 960 0. 800 0. 960 0. 960 0. 960 0. 960 0. 960 0. 960 0. 800 0. 960 0. 800 0. 960	4. 962 4. 962 5. 446 5. 446 1. 280 5. 122 5. 604 4. 962 6. 244 5. 446 5. 684 5. 684 5. 446	0. 400 0. 240 0. 800 0. 960 0. 960 0. 400 0. 240 0. 960 0. 960 0. 960 0. 800 0. 240 0. 800 0. 400
F G H I J J K L M N O P P O C R R S T U V W X X Y Z C C C C C C C C C C C C C C C C C C	0. 880 0. 720 0. 880 0. 240 0. 880 0. 880 0. 880 0. 720 0. 880 0. 720 0. 880 0. 720 0. 880 0. 240 0. 240 0. 240 0. 240 0. 240 0. 240	4. 082 4. 482 4. 482 1. 120 4. 082 4. 482 5. 284 4. 482 4. 722 4. 482 4. 682 4. 682 4. 962 6. 084 4. 722	0. 240 0. 720 0. 880 0. 880 0. 480 0. 240 0. 880 0. 720 0. 720 0. 720 0. 720 0. 480 0. 480 0. 240 0. 880 0. 240	F G H I J K L M N O P P G R S T T	0. 960 0. 800 0. 960 0. 960 0. 240 0. 960 0. 960 0. 960 0. 800 0. 960 0. 800 0. 960 0. 960 0. 400	4. 962 5. 446 5. 446 1. 280 5. 122 5. 604 4. 962 6. 244 5. 446 5. 684 5. 684 5. 446	0. 240 0. 800 0. 960 0. 960 0. 400 0. 240 0. 960 0. 800 0. 240 0. 800 0. 400
G H I J J K L M N O O P O O C R R S T U V W X X Y Z C O C C C C C C C C C C C C C C C C C	0. 720 0. 880 0. 240 0. 880 0. 880 0. 880 0. 880 0. 720 0. 880 0. 720 0. 720 0. 720 0. 880 0. 240 0. 240 0. 240 0. 240 0. 240 0. 240 0. 240	4. 482 4. 482 1. 120 4. 082 4. 082 5. 284 4. 482 4. 722 4. 482 4. 722 4. 482 4. 082 4. 482 4. 962 6. 084 4. 722	0. 720 0. 880 0. 880 0. 880 0. 480 0. 240 0. 880 0. 720 0. 720 0. 720 0. 480 0. 480 0. 240 0. 880 0. 240	G H I J K L M N O P Q R S T	0. 800 0. 960 0. 960 0. 240 0. 960 0. 960 0. 960 0. 800 0. 960 0. 800 0. 960 0. 400	5. 446 5. 446 1. 280 5. 122 5. 604 4. 962 6. 244 5. 446 5. 684 5. 684 5. 684	0.800 0.960 0.960 0.400 0.240 0.960 0.800 0.240 0.800 0.400
H I J K L M N O P O R S T U V W X Y Z G b C	0. 880 0. 880 0. 240 0. 880 0. 880 0. 880 0. 720 0. 880 0. 720 0. 880 0. 720 0. 880 0. 240 0. 240 0. 240 0. 240 0. 240 0. 240 0. 240	4. 482 1. 120 4. 082 4. 482 4. 082 5. 284 4. 482 4. 722 4. 482 4. 482 4. 082 4. 482 4. 482 4. 962 6. 084 4. 722	0.880 0.880 0.880 0.480 0.240 0.880 0.720 0.720 0.720 0.480 0.480 0.240 0.880 0.240	H I J K L M N O P O R S T	0. 960 0. 960 0. 240 0. 960 0. 960 0. 960 0. 960 0. 800 0. 800 0. 960 0. 400	5. 446 1. 280 5. 122 5. 604 4. 962 6. 244 5. 446 5. 684 5. 684 5. 684 5. 446	0. 960 0. 960 0. 400 0. 240 0. 960 0. 960 0. 800 0. 240 0. 800 0. 400
I	0. 880 0. 240 0. 880 0. 880 0. 880 0. 720 0. 880 0. 720 0. 880 0. 720 0. 880 0. 240 0. 240 0. 240 0. 240 0. 240	1.120 4.082 4.482 4.082 5.284 4.482 4.722 4.482 4.722 4.482 4.482 4.082 4.482 4.962 6.084	0.880 0.880 0.480 0.240 0.880 0.720 0.720 0.720 0.480 0.480 0.240 0.880 0.240	I J K L M N O P O R S T	0. 960 0. 240 0. 960 0. 960 0. 960 0. 960 0. 800 0. 960 0. 800 0. 960	1. 280 5. 122 5. 604 4. 962 6. 244 5. 446 5. 684 5. 684 5. 446	0. 960 0. 400 0. 240 0. 960 0. 960 0. 800 0. 240 0. 400
J K L M N O P O R S T U V W X Y Z D D C	0. 240 0. 880 0. 880 0. 880 0. 720 0. 880 0. 720 0. 880 0. 420 0. 240 0. 240 0. 240 0. 240 0. 240 0. 240	4.082 4.482 4.082 5.284 4.482 4.722 4.482 4.722 4.482 4.482 4.082 4.482 4.962 6.084 4.722	0.880 0.480 0.240 0.880 0.720 0.720 0.720 0.480 0.480 0.240	J K L M N O P O R	0, 240 0, 960 0, 960 0, 960 0, 960 0, 800 0, 960 0, 800 0, 960 0, 400	5. 122 5. 604 4. 962 6. 244 5. 446 5. 684 5. 684 5. 446	0. 960 0. 400 0. 240 0. 960 0. 960 0. 800 0. 240 0. 400
K L M N O O P O O R S T U U V W X Y Y Z O O C C C C C C C C C C C C C C C C C	0.880 0.880 0.880 0.720 0.880 0.720 0.880 0.720 0.880 0.240 0.240 0.240 0.240 0.240 0.240	4. 482 4. 082 5. 284 4. 482 4. 722 4. 482 4. 722 4. 482 4. 082 4. 482 4. 962 6. 084 4. 722	0. 480 0. 240 0. 880 0. 880 0. 720 0. 720 0. 720 0. 480 0. 480 0. 240 0. 880 0. 240	K L M N O P O R S	0. 960 0. 960 0. 960 0. 960 0. 800 0. 960 0. 800 0. 960 0. 400	5. 604 4. 962 6. 244 5. 446 5. 684 5. 684 5. 684 5. 446	0. 400 0. 240 0. 960 0. 960 0. 800 0. 240 0. 400
L M N O P O R R S T U V W X X Y Z G D C C	0.880 0.880 0.720 0.880 0.720 0.880 0.480 0.240 0.880 0.240 0.240 0.240 0.240	4. 082 5. 284 4. 482 4. 722 4. 482 4. 722 4. 482 4. 082 4. 482 4. 962 6. 084 4. 722	0. 240 0. 880 0. 880 0. 720 0. 720 0. 720 0. 480 0. 480 0. 240 0. 880 0. 240	L M N O P Q R S	0. 960 0. 960 0. 960 0. 800 0. 960 0. 800 0. 960 0. 400	4. 962 6. 244 5. 446 5. 684 5. 684 5. 446	0. 240 0. 960 0. 960 0. 800 0. 240 0. 800 0. 400
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0 P O R S T U V W X Y Y Z G b C C	0. 880 0. 720 0. 880 0. 720 0. 880 0. 240 0. 240 0. 240 0. 240 0. 240 0. 240	4. 482 4. 722 4. 482 4. 722 4. 482 4. 482 4. 082 4. 482 4. 962 6. 084 4. 722	0.880 0.720 0.720 0.720 0.480 0.480 0.240 0.880 0.240	0 P 0 R S	0. 960 0. 800 0. 960 0. 800 0. 960 0. 400	5. 446 5. 684 5. 684 5. 684 5. 446	0. 960 0. 800 0. 240 0. 800 0. 400
P 0 R S T U V W X Y Y Z a b c c	0. 880 0. 720 0. 880 0. 480 0. 240 0. 880 0. 240 0. 240 0. 240 0. 240	4. 482 4. 722 4. 482 4. 482 4. 082 4. 482 4. 962 6. 084 4. 722	0.720 0.720 0.480 0.480 0.240 0.880 0.240	P Q R S	0. 960 0. 800 0. 960 0. 400	5. 446 5. 684 5. 446	0.240 0.800 0.400
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R S T U V W X Y Z a b c	0. 720 0. 880 0. 480 0. 240 0. 880 0. 240 0. 240 0. 240 0. 240	4.722 4.482 4.482 4.082 4.482 4.962 6.084 4.722	0.720 0.480 0.480 0.240 0.880 0.240	Q R S T	0.800 0.960 0.400	5.684 5.446	0.800 0.400
S T U V W X Y Y Z a b c c	0.880 0.480 0.240 0.880 0.240 0.240 0.240 0.240	4. 482 4. 482 4. 082 4. 482 4. 962 6. 084 4. 722	0.480 0.480 0.240 0.880 0.240	S T	0.960 0.400	5.446	0.400
T U V W X Y Z a b C C	0.240 0.880 0.240 0.240 0.240 0.240	4. 082 4. 482 4. 962 6. 084 4. 722	0. 240 0. 880 0. 240	T		5.446	0.400
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V W X Y Z G D C	0.240 0.240 0.240 0.240	4. 962 6. 084 4. 722	0.240	U	0.240	4.962	0.240
W X Y Z a b c	0.240 0.240 0.240	6.084 4.722			0.960	5.446	0.960
X Y Z G b	0.240 0.240	4.722		٧	0.240	6.084	0.240
Y Z a b c	0.240		0.240	W	0.240	7.124	0.240
Z a b			0.240	X	0.400	5.446	0.400
а b с	0.480	5.122	0.240	Y	0.240	6.884	0.240
b C		4.482	0.480	Z	0.400	5.446	0.400
С	0.320	3.842	0.640	a	0.400	4.562	0.720
	0.720	4.082	0.480	Ь	0.800	4.802	0.480
	0.480	4.002	0.240	С	0.480	4.722	0.240
d	0.480	4.082	0.720	d	0.480	4.802	0.800
е	0.480	4.082	0.320	е	0.480	4.722	0.320
f	0.320	2.480	0.160	f	0.320	2.882	0.160
g	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 4. 322	0.720 0.160	j	0.000	2.642 5.122	0.800
k I	0.720 0.720	1.120	0. 720	k I	0.800 0.800	1. 280	0.160
m	0. 720	6. 724	0.120	m	0.800	7. 926	0.720
n	0.720	4.082	0.640	n	0.800	4. 722	0.720
0	0. 120	4.082	0.480	0	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
+	0.080	2.882	0.080	†	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	٧	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	×	0.000	6. 244	0.000
У	0.160	4.962	0.160	У	0.160	6.004	0.160
Z	0.240	3.362	0.240	Z	0.240	4.002	0.240
1	0.720	1.680	0.880	1	0.800	2.000	0.960
2	0.480	4.482	0.480	2	0.800	5.446	0.800
3	0.480	4.482	0.480	3	1.440	5. 446	0.800
4	0.240	4.962	0.720	4	0.160	6.004	0.960
5	0.480	4.482	0.480	5	0.800	5.446	0.800
6	0.720	4.482	0.720	6	0.800	5.446	0.800
7	0.240	4.482	0.720	7	0.560	5.446	0.560
8	0.480	4.482	0.480	8	0.800	5.446	0.800
9	0.480	4.482	0.480	9	0.800	5.446	0.800
0	0.720	4.722	0.720	0	0.800	5.684	0.800
-	0.240	2.802	0.240	-	0.240	2.802	0.240

REVISED - LP 07/01/2015 DESIGNED - LP/IP FILE NAME = USER NAME = DAMAGO shirts det01.dgn NILØ84EBIDINTEG.illin ents\IDOT Offices\District 1\Projects\| ORAWN\CADData\C4DSheets\ts02.dgn REVISED PLOT SCALE = 50.0000 '/ 10. REVISED CHECKED - IP PLOT DATE = 7/31/2015 DATE 10/01/2014 REVISED

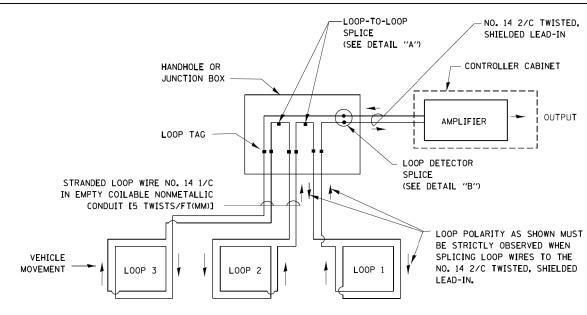
LOOP DETECTOR NOTES

- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- 2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- 3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- 4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- 5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- 6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- 7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

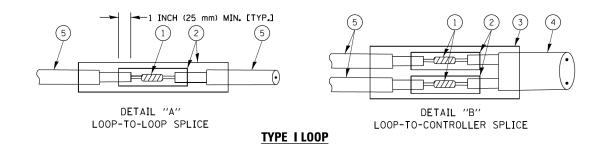


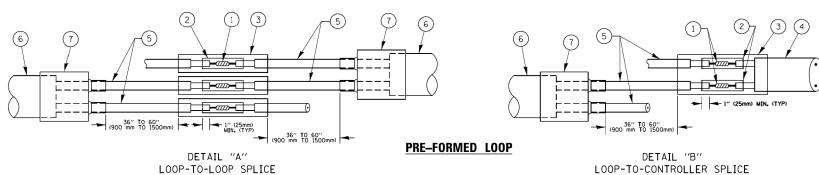
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP *1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



DETECTOR LOOP WIRING SCHEMATIC

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





LOOP DETECTOR SPLICE

- (1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- (2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- (3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

SCALE: NONE

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

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

SHEETS

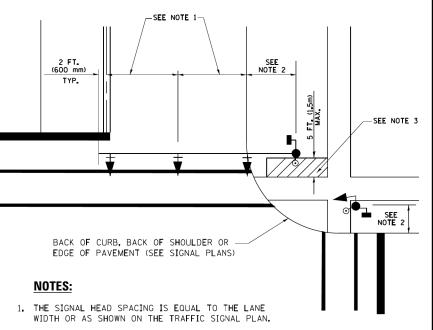
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	PLOT SCALE = 50.0000 '/ in.	CHECKED -	-	DAD	REVISED	-		
	PLOT DATE = 1/13/2014	DATE -	-	10-28-09	REVISED	-		

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

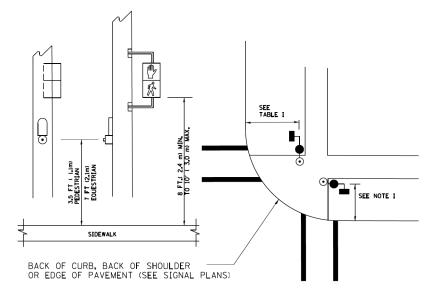
COUNTY DISTRICT ONE 14-00448-00-CH KANE STANDARD TRAFFIC SIGNAL DESIGN DETAILS TS-05 CONTRACT NO. 61E67 SHEET NO. 2 OF 10 SHEETS STA.

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



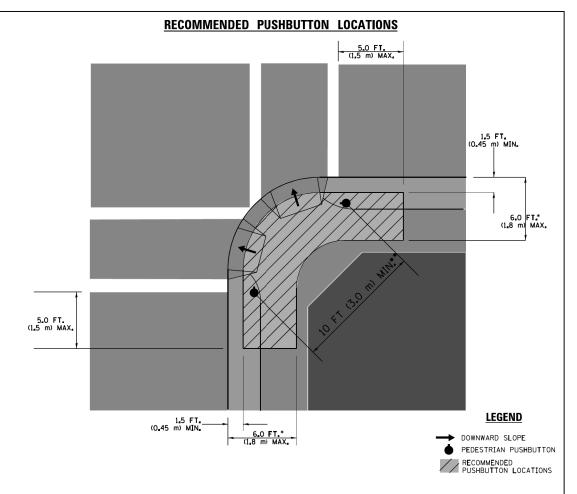
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- 3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO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

PEDESTRIAN SIGNAL POST PEDESTRIAN PUSH BUTTON POST



NOTES:

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



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

NOTES:

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

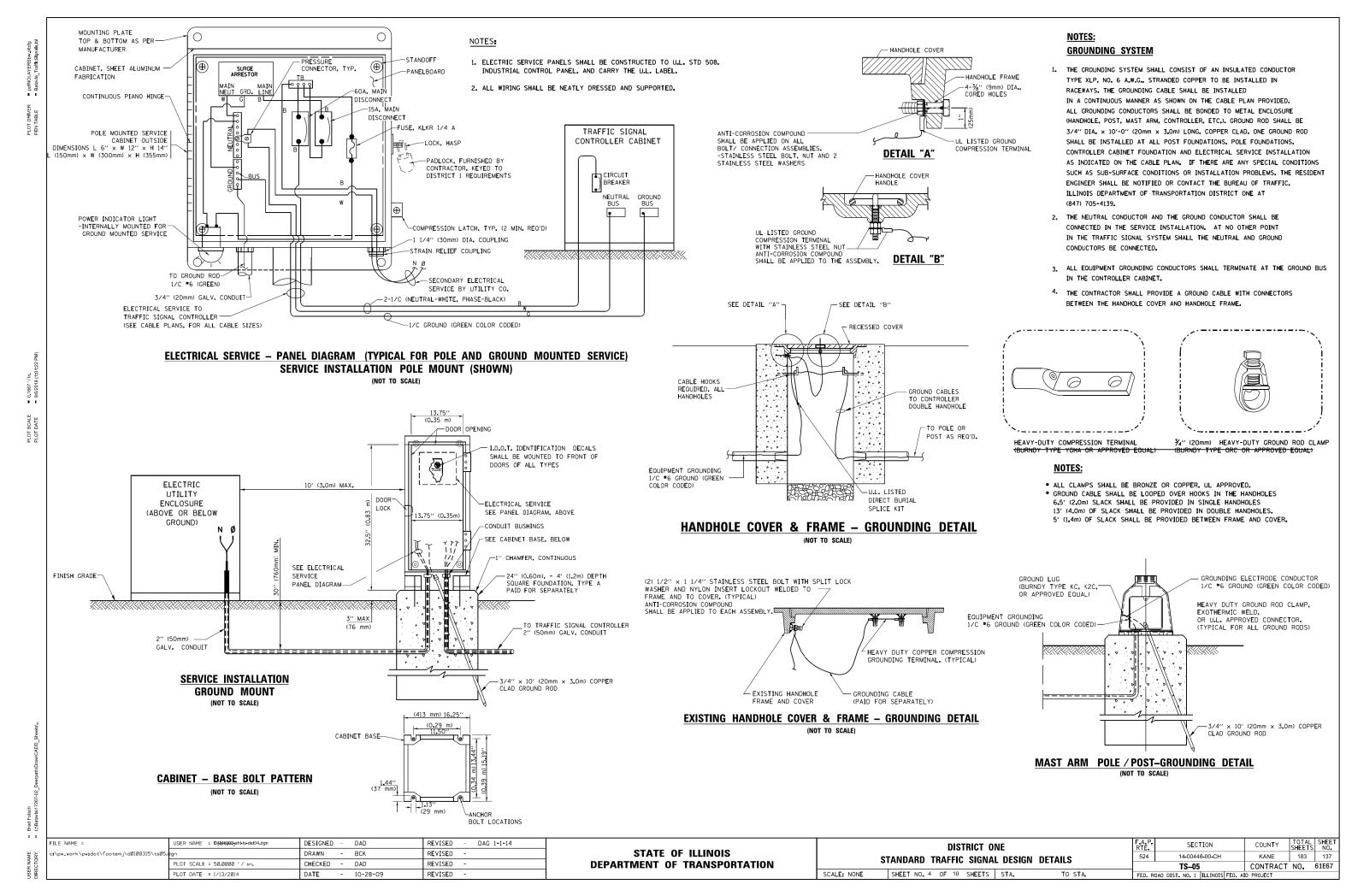
TRAFFIC SIGNAL EQUIPMENT OFFSET

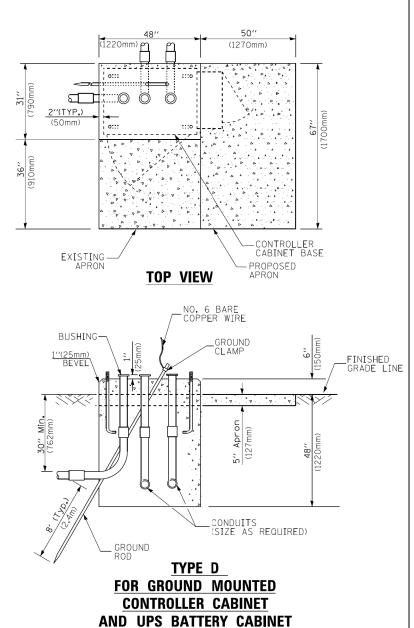
TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10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

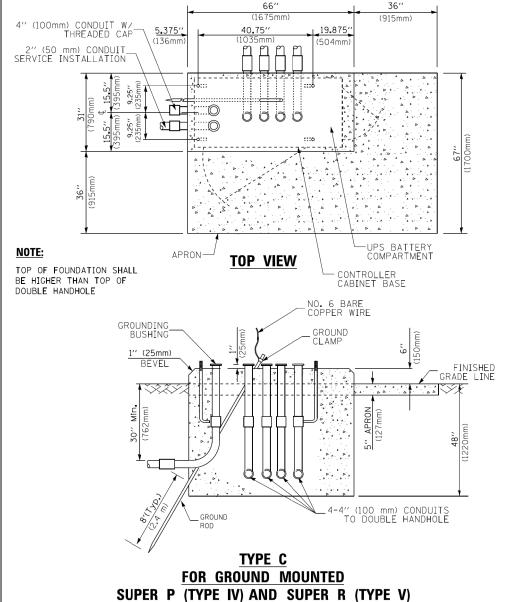
NOTES:

- 1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
- 2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
- 3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TOTHE ROADWAY SIDE OF THE FOUNDATION.
- 4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

FILE NAME =	USER NAME = D&M4002jsht-ts-det03.dgn	DESIGNED -	DAD	REVISED - DAG 1-1-14			DISTRICT (NF		F.A.P.	SECTION	COUNTY	TOTAL SHEETS	SHEET
c:\pw_work\pw1dot\footemj\d0108315\ts05.	dgn	DRAWN -	BCK	REVISED -	STATE OF ILLINOIS				DETAILO	524	14-00448-00-CH	KANE	183	136
	PLOT SCALE = 50.0000 ' / in.	CHECKED -	DAD	REVISED -	DEPARTMENT OF TRANSPORTATION	STANDARD TRAFFIC SIGNAL DESIGN DETAILS			DE I AILS		TS-05	CONTRACT	NO.	61E67
	PLOT DATE = 1/13/2014	DATE -	10-28-09	REVISED -		SCALE: NONE	SHEET NO. 3 OF 10 SHEETS	STA.	TO STA.	FED. ROAI		AID PROJECT		







CONTROLLER CABINETS

TRAFFIC SIGNAL-CONTROLLER CABINET CABINET 3/4" (19mm) TREATED PHYWOOD DECK 6" x 6" (152mm x 152mm TREATED WOOD POSTS 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

65" (SEE NOTE 4) (1651mm)

SEE NOTE 5-

- 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

FEET	METER
20.0+L	6.0+L
13.0	4.0
6.0	2.0
13.5	4.1
13.5	4.1
6.0	2.0
3.0	1.0
	20.0+L 13.0 6.0 13.5 13.5

VERTICAL CABLE LENGTH

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

DEPT	TH OF	FOUND	NOITAC

FOUNDATION

TYPE A - Signal Post

TYPE C - CONTROLLER W/ UPS

TYPE D - CONTROLLER

SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30′ (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to	13'-6" (4 . 1 m)	30" (750mm)	24" (600mm)	8	6(19)
30' (9.1 m) and less than 40' (12.2 m)	11'-0" (3.4 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0'' (4.6 m)	36'' (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7 . 6 m)	42" (1060mm)	36" (900mm)	16	8(25)

DEPTH

4'-0'' (1**.**2m) 4'-0" (1.2m)

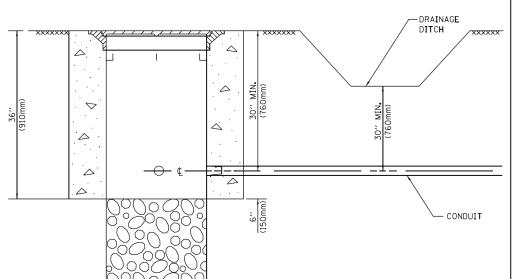
4'-0" (1.2m)

4'-0'' (1.2m)

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

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

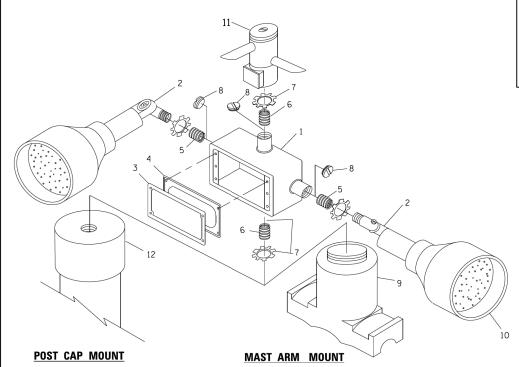
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S K		PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 5 OF 10 SHEETS	STA. TO STA.	FED. ROA		ID PROJECT		



NOTES:

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

HANDHOLE WITH MINIMUM CONDUIT DEPTH



EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

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

(1675mm) (915mm) 40.75" 19.875" (136mm) (1035mm) (504mm) PROPOSED -APRON -CONTROLLER CABINET BASE **TOP VIEW** (NOT TO SCALE) NO. 6 BARE COPPER WIRE _ NO. 3 DOWEL 18" (450mm) LONG (8 REQ.) BUSHING -_GROUND CLAMP / ANCHOR BOLTS BEVEL -EXISTING CONDUITS EXISTING GROUND ROD MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION

(NOT TO SCALE)

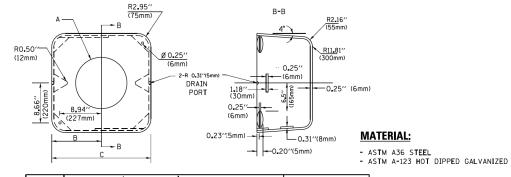
IDENTIFICATION 1 OUTLET BOX- GALV, 21 CU,IN, (0,000344 CU-M) 2 LAMP HOLDER AND COVER 3 OUTLET BOX COVER RUBBER COVER GASKET $\frac{3}{4}$ "(19 mm) CLOSE NIPPLE (19 mm) LOCKNUT 34"(19 mm) HOLE PLUG SADDLE BRACKET - GALV. 6 WATT PAR 38 LED FLOOD LAMP 11 DETECTOR UNIT 12 POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

- 1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR
- ITEM *2 MULBERRY CON O SHADE LAMP SHIELD 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

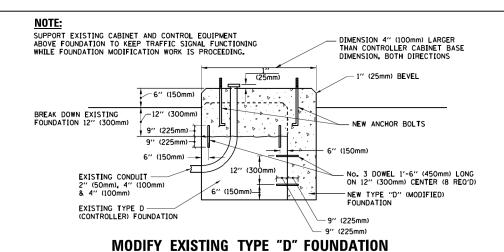
DEPARTMENT OF TRANSPORTATION

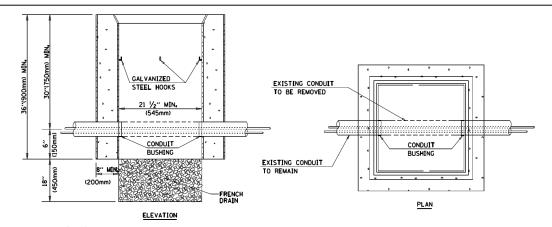


Α	В	С	HEIGHT	WEIGHT
VARIES	9 . 5′′(241mm)	19''(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13 . 0''(330mm)	26''(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5''(470mm)	37''(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

SHROUD

- 1. 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.



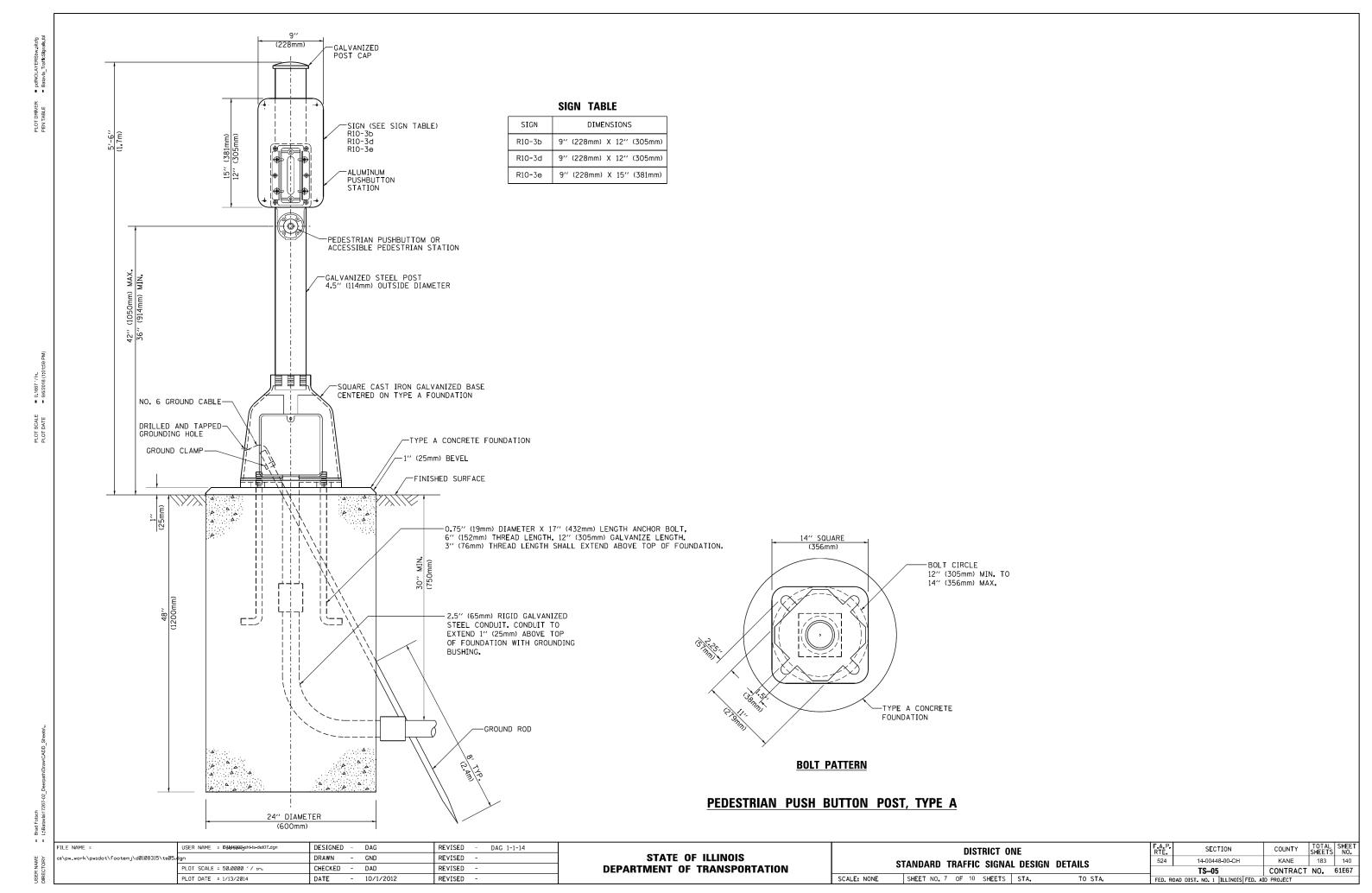


SCALE: NONE

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

HANDHOLE TO INTERCEPT EXISTING CONDUIT

DISTRICT ONE	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD TRAFFIC SIGNAL DESIGN DETAILS	524	14-00448-00-CH	KANE	183	139
STANDARD TRAFFIC SIGNAL DESIGN DETAILS		TS-05	CONTRACT	NO.	61E67
SHEET NO. 6 OF 10 SHEETS STA. TO STA.	FFD. RO	DAD DIST. NO. 1 THE INDIS FED. AT	D PROJECT		



SIGNAL HEAD, 1-FACE, 1-SECTION -THE BOTTOM OF THE HOUSING SHALL

> 4" (102 mm) X 6" (152 mm) WOOD POST AND SIGN

> > 7' (2.134m) MIN. URBAN

5' (1.524m) MIN. RURAL

EDGE OF PAVEMENT

BE NOT LESS THAN 12" (305mm) NOR

MORE THAN 24" (610mm) ABOVE THE TOP OF THE SIGN.



STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE FLASHING BEACON INSTALLATION DETAILS SHEET 8 OF 10 SHEETS STA.

COUNTY TOTAL SHEETS NO.

KANE 183 141 SECTION 14-00448-00-CH TS-04 CONTRACT NO. 61E67

POST MOUNTED FLASHING BEACON WITH PRECIPITATION DETECTOR

EDGE OF PAVEMENT 30' MIN. SIDE VIEW FRONT VIEW

12" MINIMUM

DPD-12A PRECIPITATION DETECTOR

4"X6" WOOD POST

AND SIGN EXISTING

SCALE: NTS

METAL BRACKET

FLEXIBLE

WEATHER-PROOF CONDUIT SIZE AS REQUIRED FLASHER (NEMA) -CONTROLLER CABINET

7' MIN. URBAN 5' MIN RURAL

-¾"X3" LAG BOLTS

-1-1/2" G.S. CONDUIT. 4 EVENLY SPACED CONDUIT CLAMPS SHALL BE USED TO ATTACH CONDUIT TO POST

SIGNAL HEAD, 1-FACE, 1-SECTION

THE BOTTOM OF THE HOUSING

SHALL BE NOT LESS THAN 12" NOR MORE THAN 24" ABOVE THE TOP OF THE SIGN.

> -2/C CABLE AND 11/2" G.S. CONDUIT IN TRENCH TO CONTROLLER AND SERVICE INSTALLATION

12" MINIMUM

24" MAXIMUM

W8-5 SIGN

CONTROLLER

AND CABINET

-CONDUIT CLAMP

- FLASHER CONTROLLER

AND CABINET

 $1\frac{1}{2}$ " (38mm) G.S. CONDUIT. FIVE EVENLY SPACED CONDUIT CLAMPS SHALL BE USED TO

 $-1^{1}\!/_{2}$ " (38mm) DRILLED HOLE CENTERED AT 18" (457mm) FROM GROUND LEVEL

 $1^{\prime}/_{2}$ " (38mm) DRILLED HOLE CENTERED AT 4" (102mm) FROM GROUND LEVEL

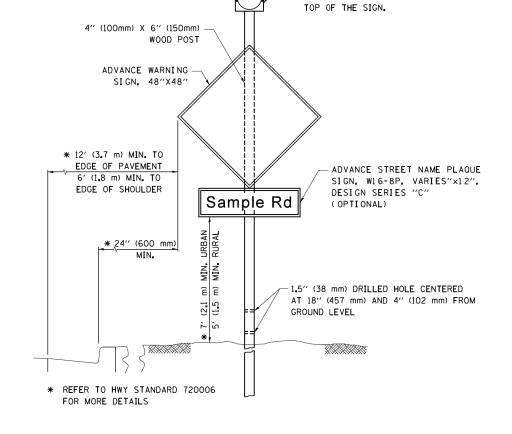
30" (76mm) MIN.

ATTACH CONDUIT TO POST

POST MOUNTED FLASHING BEACON WITH CONTROLLER AND CABINET

SIGNAL HEAD, 1-FACE, 1-SECTION-THE BOTTOM OF THE HOUSING SHALL BE NOT LESS THAN 12" (305mm) NOR MORE THAN 24" (610mm) ABOVE THE TOP OF THE SIGN. 4" (102 mm) X 6" (152 mm)-WOOD POST AND SIGN -CONDUIT CLAMP $1\frac{1}{2}$ " (38mm) G.S. CONDUIT. FIVE EVENLY SPACED CONDUIT 7' (2.134m) MIN. URBAN 5' (1.524m) MIN. RURAL CLAMPS SHALL BE USED TO ATTACH CONDUIT TO POST 11/2" (38mm) DRILLED HOLE CENTERED AT 18" (457mm) FROM GROUND LEVEL 11/2" (38mm) DRILLED HOLE CENTERED EDGE OF PAVEMENT AT 4" (102mm) FROM GROUND LEVEL 30" (76mm) MIN.

POST MOUNTED FLASHING BEACON



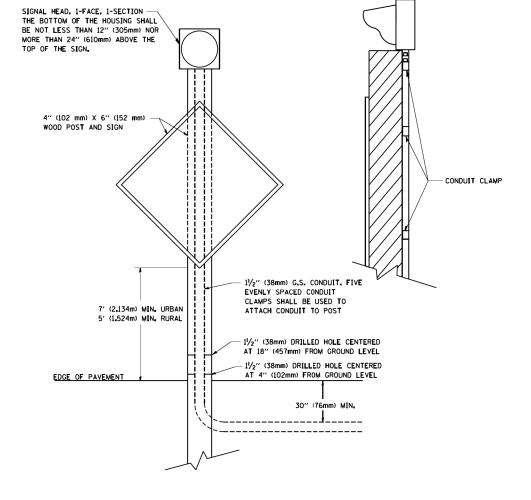
SIGNAL HEAD, 1-FACE, 1 SECTION WITH FLASHER. THE BOTTOM OF THE HOUSING SHALL BE NOT LESS THAN 12" (300 mm) NOR MORE THAN 24" (600 mm) ABOVE THE

SOLAR FLASHING BEACON, BATTERY AND **ELECTRONICS**

SOLAR POWERED FLASHING BEACON

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Default	PLOT DATE = 7/31/2015	DATE -	REVISED -

SCALE: NTS



POST MOUNTED FLASHING BEACON

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: NONE

| Fraction | Fraction

GENERAL NOTES

- PRIOR TO THE INSTALLATION OF THE NEW CABLES, UNDERGROUND CONDUITS, CONCRETE ENCASED CONDUITS, UNIT DUCTS, HANDHOLES, JUNCTION BOXES, LIGHT POLE FOUNDATIONS, CONTROLLER FOUNDATIONS, AND APPURTENANCES. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EXISTING CONDUITS, CABLES, AND UNDERGROUND UTILITIES. THE CONTRACTOR SHALL CALL J.U.L.I.E. TO AID IN THIS TASK.
- 2. THE CONTRACTOR SHALL VERIFY ALL OF THE DATA SHOWN ON THE CONTRACT PLANS AND REFERENCE DRAWINGS. WHICH WOULD AFFECT THEIR WORK UNDER THIS CONTRACT.
- 3. ALL NEW CABLES, CONDUITS, HANDHOLES, JUNCTION BOXES, AND APPURTENANCES ARE ILLUSTRATED DIAGRAMMATICALLY, PROPOSED ROUTING OF THE UNDERGROUND CONDUITS, AS SHOWN IN THE PLANS, IS FOR INFORMATION ONLY. CONTRACTOR SHALL VERIFY THE ACTUAL ROUTING LOCATION IN THE FIELD WITH THE APPROVAL OF THE ENGINEER.
- 4. ALL SPLICES SHALL BE HEAT SHRINK AND WATERPROOF AND INSTALLED INSIDE LIGHT POLE BASES OR JUNCTION BOXES. NO DIRECT BURIED SPLICES SHALL BE ALLOWED.
- 5. LUMINAIRES MUST BE INSTALLED ON LIGHT STANDARDS WITHIN A MAXIMUM OF 48 HOURS AFTER LIGHT STANDARD IS ERECTED.
- 6. THE ELECTRICAL MATERIAL SHALL BE NEW AND OF THE TYPE AND KINDS APPROVED BY THE FOLLOWING ORGANIZATIONS:

-NATIONAL ELECTRICAL MANUFACTURES ASSOCIATION -INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS -ILLUMINATION ENGINEERING SOCIETY OF NORTH AMERICA -AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS -U.S. DEPARTMENT OF TRANSPORTATION -UNDERWRITERS LABORATORIES -AMERICAN STANDARD INSTITUTE -INSULATED POWER CABLE ENGINEERS ASSOCIATION

- 7. UNDERGROUND CONDUITS AND CABLE DUCTS SHALL BE POSITIONED IN THE FIELD TO AVOID CONFLICTS WITH UNDERDRAINS AND OTHER UTILITIES.
- 8. WHERE MULTIPLE CABLE DUCTS OR UNDERGROUND CONDUITS ADJACENT TO EACH OTHER ARE INSTALLED IN A COMMON TRENCH, TRENCH AND BACKFILL SHALL BE CONTINUOUS BETWEEN EACH CABLE DUCT OR UNDERGROUND CONDUIT FOR THE LENGTH OF THE COMMON TRENCH.
- 9. ANY UTILITY POLES NEEDED FOR NEW ELECTRIC SERVICE SHALL BE INSTALLED BY THE ELECTRIC UTILITY COMPANY. CONTRACTOR SHALL INSTALL UNDERGROUND CONDUITS, GROUNDING, DISCONNECT SWITCH, AND ANY SECONDARY CONDUCTORS TO THE UTILITY POLE. COORDINATE ALL WORK WITH THE ELECTRIC UTILITY COMPANY REFER TO COMBINATION LIGHTING CONTROLLER DETAILS.
- 10. THE CONTRACTOR SHALL PREPARE A SCHEDULE WHEN THE PROJECT COMMENCES, WHICH ESTABLISHES THE DATE WHEN ELECTRICAL SERVICES ARE REQUIRED. THIS SCHEDULE SHALL BE FORWARDED IN WRITING TO THE ELECTRIC UTILITY COMPANY. SUBSEQUENT UPDATING TO THE SCHEDULE SHALL ALSO BE FORWARDED TO THE ELECTRIC UTILITY COMPANY AS CHANGES OCCUR A MINIMUM OF FIVE (5) DAYS BEFORE ELECTRICAL SERVICES ARE REQUIRED. THE CONTRACTOR SHALL NOTIFY THE ELECTRIC UTILITY COMPANY BY PHONE AND IN WRITING TO CONFIRM THE REQUIREMENT.
- 11. CONTRACTOR SHALL TAKE OVER EXISTING ROADWAY LIGHTING CONTROLLER ALONG DEERPATH ROAD AT STATION 105+80 LT. COST SHALL BE PAID UNDER PAY ITEM X0326784 - MAINTAIN EXISTING LIGHTING CONTROLLER.
- 12. RELOCATED LIGHT POLES WHEN RE-INSTALLED SHALL HAVE A SET BACK OF THREE (3) FEET MINIMUM, FROM THE FACE OF CURB TO THE CENTER OF THE LIGHT POLE FOUNDATION.
- 13. TEMPORARY LIGHTING TO BE INSTALLED SHALL USE A 60-FOOT (CLASS 4) WOOD POLE, WITH A 15-FOOT MAST ARM PLACEMENT TO MEET A MOUNTING HEIGHT OF FIFTY (50) FEET, FROM THE BOTTOM OF THE LUMINAIRE TO THE TOP OF THE ROADWAY PAVEMENT.
- 14. THE ELECTRIC UTILITY COMPANY FOR ELECTRIC SERVICE COORDINATION IS THE CITY OF

SUMMARY OF QUANTITIES

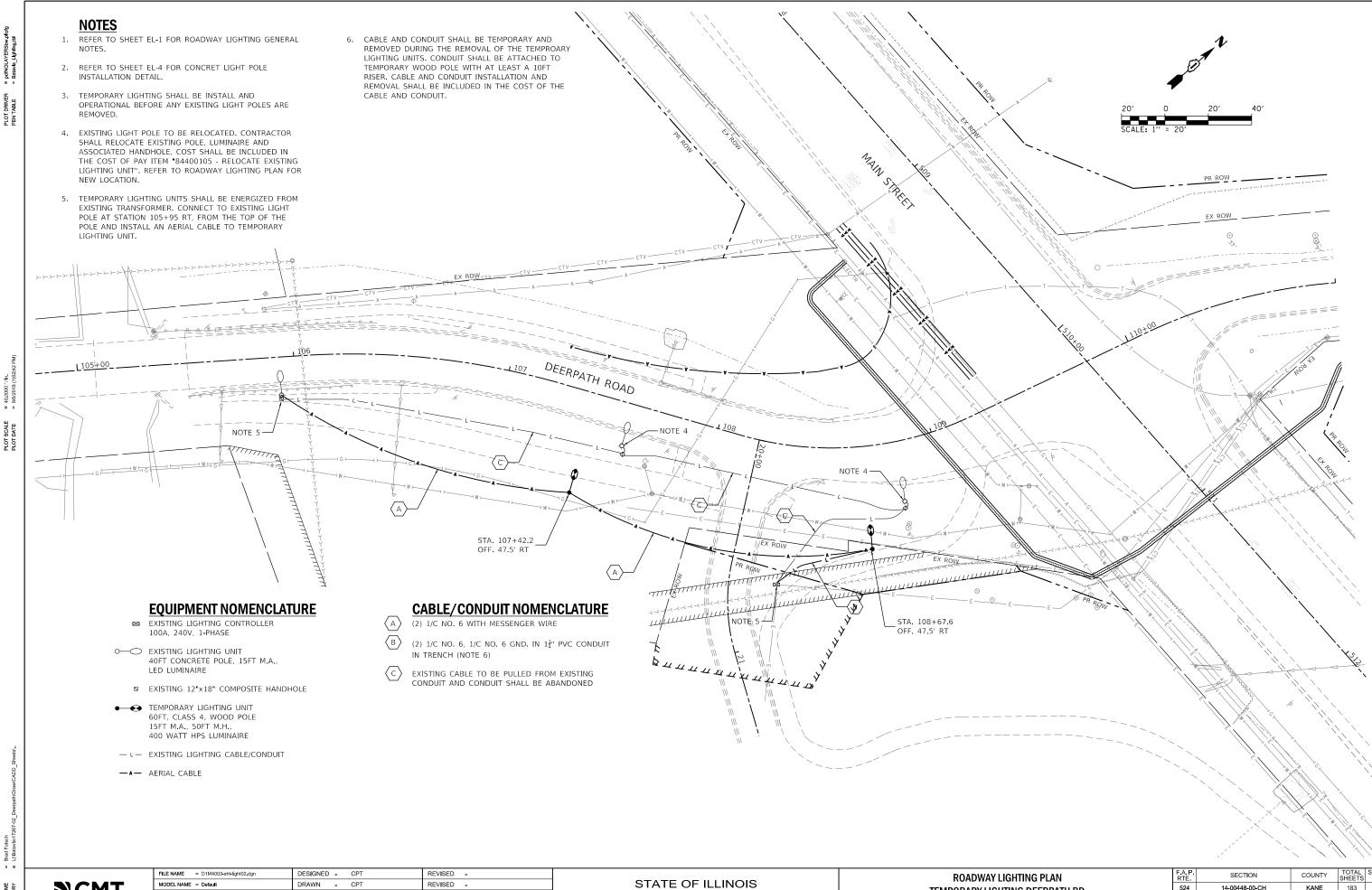
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ITEM NUMBER	SP	PAY ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY
1		80400100	ELECTRIC SERVICE INSTALLATION	EACH	1
2		81028370	UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	385
3		81028720	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1" DIA.	FOOT	440
4		81028730	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1½" DIA.	FOOT	565
5		81028810	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 6" DIA.	FOOT	400
6		81702110	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	1,700
7		81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	1,800
8		81800330	AERIAL CABLE, 2-1/C NO. 6 WITH MESSENGER WIRE	FOOT	285
9		83057355	LIGHT POLE, WOOD, 60 FOOT, CLASS 4, WITH 15FT MAST ARM	EACH	2
10		84400105	RELOCATE EXISTING LIGHTING UNIT	EACH	2
1.1	<u> </u>	V140000F	LUMBIADE LED HODIZONTAL MOUNT LUCH WATTACE	FACIL	4
11	*	X1400095	LUMINAIRE, LED, HORIZONTAL MOUNT, HIGH WATTAGE	EACH	4
12	*	X8210040	TEMPORARY LUMINAIRE, HIGH PRESSURE SODIUM VAPOR, HORIZONTAL MOUNT, 400W	EACH	2
12	+	A0210040	TEMPONANT LOMINAINE, MICH PRESSURE SOUTOM VAPOR, MONIZONTAL MOUNT, 400W	EACH	
13	*	X8250091	COMBINATION LIGHTING CONTROLLER	EACH	1
1.5	+ "	7.0230091	COMBINATION CONTINUEDIX	LACIT	•
14	*	70033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	6
14	*	Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	6

^{*} INDICATES SPECIAL PROVISION

NC	MT
Hoense No. 184-000613	Convelote CMT for

FILE NAME = D1M4003-sht-light01.dgn	DESIGNED - CPT	REVISED -
MODEL NAME = Default	DRAWN - CPT	REVISED -
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PLOT DATE = 9/6/2018 - 1:02:40 PM	DATE - 9/7/2018	REVISED -

		ROAD	NΑ	Y LIGHTIN	NG PLA	N	EIA.IP. RTE	SEC ⁻	ΓΙΟΝ		COUNTY	TOTAL SHEETS	
G	RENERAL NOTES AND SUMMARY OF QUANTITIES				524	14-0044	8-00-CH		KANE	183	144		
ч	LINLINALIN	IOIL37	7111	JOIVIIVI	AITI OI	QUANTITIES	EL-1				CONTRACT	NO.	61E67
	SHEET 1	OF	3	SHEETS	STA.	TO STA.			ILLINOIS	FED. A	ID PROJECT		



NCMT

DRAWN - CPT CHECKED - AB REVISED -PLOT DATE = 9/6/2018 - 1:02:42 PM REVISED -DATE - 9/7/2018

DEPARTMENT OF TRANSPORTATION

SCALE: 1"=20'

524 14-00448-00-CH KANE 183 145 TEMPORARY LIGHTING DEERPATH RD CONTRACT NO. 61E67 SHEET 2 OF 3 SHEETS STA. 105+00 TO STA. 111+00



EQUIPMENT NOMENCLATURE

- RELOCATED 12"x18" COMPOSITE HANDHOLE FOR ASSOCIATED LIGHT POLE NEW COMBINATION LIGHTING UNIT
 - 50FT M.H., 15FT M.A., LED LUMINAIRE ■ NEW COMBINATION LIGHTING CONTROLLER
 - 240V, 100A, 1-PHASE
 - -E- NEW ELECTRIC SERVICE CABLE/CONDUIT
 - L NEW LIGHTING CABLE/CONDUIT
 - L- EXISTING LIGHTING CABLE/CONDUIT
 - ----- NEW CABLE/CONDUIT IN PROTECTIVE CONDUIT SLEEVE
 - NEW JUNCTION BOX

;	3)	CM		Г
		200040		

	FILE NAME = D1M4003-sht-light03.dgn	DESIGNED - CPT	REVISED -
	MODEL NAME = Default	DRAWN - CPT	REVISED -
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CMT, Inc.	PLOT DATE = 9/6/2018 - 1:02:43 PM	DATE - 9/7/2018	REVISED -

	ROADWAY LIGHTING PLAN										
DEERPATH RD & MAIN ST						-3					
	SHEET 3	OF	3	SHEETS	STA. 105+00	TO STA.	111+00				

SCALE: 1"=20'

ILLINOIS FED. AID PROJECT						
	1			CONTRACT	NO.	61E67
524	14-0044	14-00448-00-CH		KANE	183	146
RTE.	SEC	SECTION			SHEETS	SHEE NO.

STA. 111+30

OFF. 37.0' RT

ELECTRIC UTILITY SERVICE CONNECTION

CABLE/CONDUIT NOMENCLATURE (2) 1/C NO. 6, (1) 1/C NO. 6 GND. (600V, XLP-TYPE USE) IN $\frac{1}{1111111}$ $1\frac{1}{4}$ " 13.5 HDPE CONDUIT

ŜTA. 107+42.2

OFF 47.5 RT

(4) 1/C NO. 10, (1) 1/C NO. 10 GND. (600V, XLP-TYPE USE) IN 1" 13.5 HDPE CONDUIT

(2) 1/C NO. 10, (1) 1/C NO. 10 GND. (600V, XLP-TYPE USE) IN 1" 13.5 HDPE CONDUIT

(1) 3" PVC SCHEDULE 80 CONDUIT SLEEVE WITH (4) 1/C NO. 10, (1) 1/C NO. 10 GND. (600V, XLP-TYPE USE) IN 1" 13.5 HDPE CONDUIT

(1) 3" PVC SCHEDULE 80 CONDUIT SLEEVE WITH (2) 1/C NO. 6, (1) 1/C NO. 6 GND. (600V, XLP-TYPE USE) IN $1\frac{1}{4}$ " 13.5

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

EXISTING ELECTRIC UTILITY COMPANY TRANSFORMER

STA. 107+42.

(1) 3" PVC SCHEDULE 80 CONDUIT SLEEVE WITH (2) 1/C NO. 10, (1) 1/C NO. 10 GND. (600V, XLP-TYPE USE) IN 1" 13.5 HDPE CONDUIT (3) 1/C NO. 4 (600V, XLP-TYPE USE) IN $1\frac{1}{4}$ RGS CONDUIT

HDPE CONDUIT

UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT,

PLOT DRIVER = polNOLAVERSWa, place | PENTABLE = Balane_Lighthg.th

PLOT SCALE PLOT DATE EXISTING DIRECT BURIAL CONCRETE
OCTAGONAL LIGHT POLE.

2" x 8" HANDHOLE
W/ ALUMINUM COVER

FINISHED GRADE
CABLE ENTRANCE
EXOTHERMIC WELDED
CONNECTION
3/4" DIA. x 10' LONG COPPER
CLAD GROUND ROD. MIN BURY 12"
IN UNDISTURBED EARTH

9 1/4"
CRUSHED LIMESTONE CA-6
(WATERED & COMPACTED IN
4" LIFTS)

UNDISTURBED EARTH

ELEVATION VIEW

SCALE:

- EXISTING STEEL TENON

RELOCATED DIRECT BURIED CONCRETE LIGHT POLE DETAIL

NOT TO SCALE

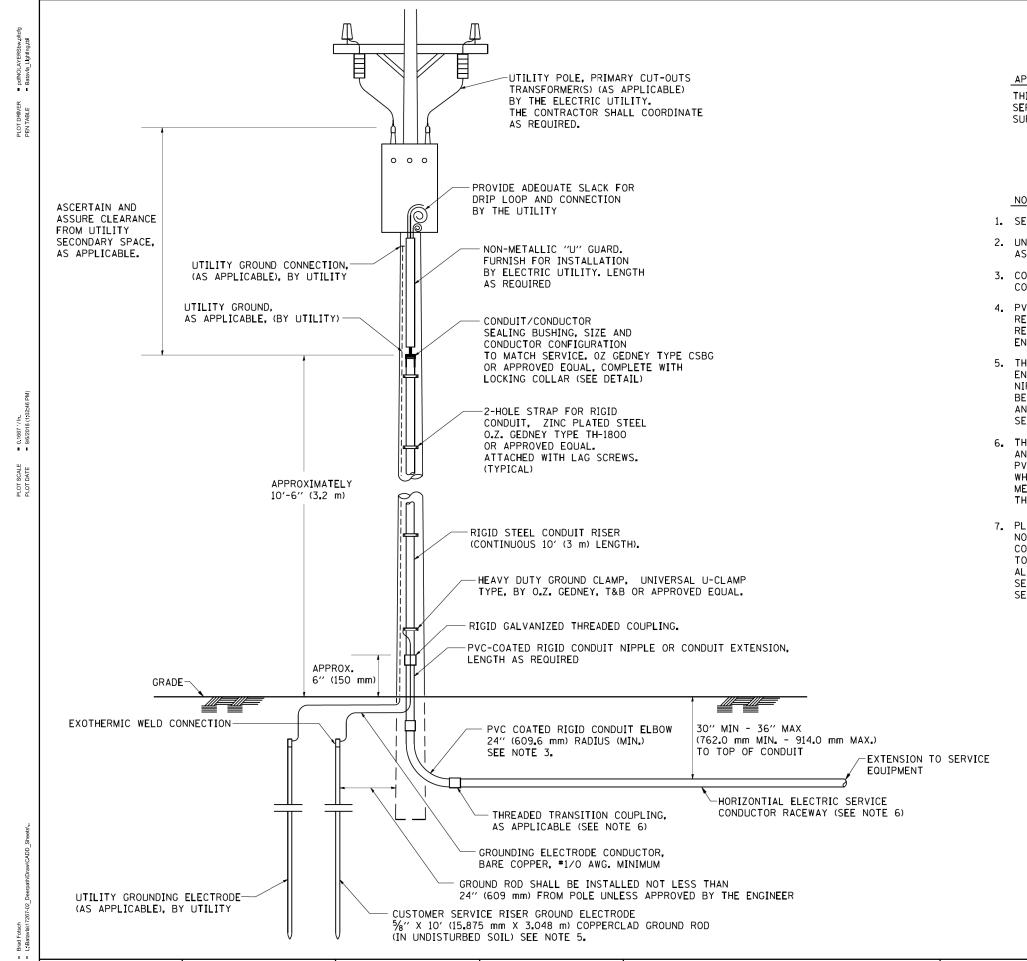
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License No. 184-000613	□ Copyright CMT, I

FILE NAME = D1M4003-sht-light-det01.dgn	DESIGNED -	CPT	REVISED -
MODEL NAME = Default	DRAWN -	CPT	REVISED -
PLOT SCALE = 40.0000 ' / in.	CHECKED -	AB	REVISED -
PLOT DATE = 9/6/2018 - 1:02:44 PM	DATE -	9/7/2018	REVISED -

STATE OF ILLINOIS
STATE OF IEEHNOIS
DEPARTMENT OF TRANSPORTATION

DOADWAY LIGHTING DETAILS					F.A.P. RTE	SEC	TION		COUNTY	TOTAL SHEETS	SHEET NO.
ROADWAY LIGHTING DETAILS				524	14-0044	14-00448-00-CH		KANE	183	147	
					EL-4				CONTRACT	NO.	61E67
SHEET 1	OF 8	SHEETS	STA.	TO STA.			ILLINOIS	FED. A	ND PROJECT		

PLAN VIEW

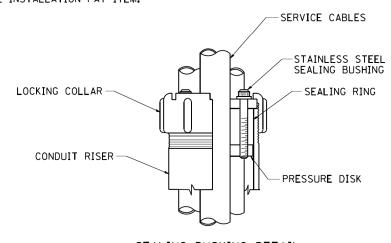


APPLICATION

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

NOTES

- 1. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
- 2. UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
- 3. CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
- 4. PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
- 5. THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
- 6. THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
- 7. PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY. FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



SEALING BUSHING DETAIL

DESIGNED REVISED 03-03-06 USER NAME = PAME 003.sht light det02.dgr REVISED \diststd\22x34\be220.dgr PLOT SCALE = 50.0000 '/ IN CHECKED REVISED MEA DATE REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

ELECTRIC SERVICE INSTALLATION AERIAL, REMOTE DISCONNECT SHEET NO. 2 OF 8 SHEETS STA. TO STA.

SCALE: NONE

COUNTY 14-00448-00-CH KANE BE-220 CONTRACT NO. 61E67

6" DECAL ON FRONT COVER



¾" 3-PIECE CONDUIT COUPLING (THREADED)

2-HOLE GALVANIZED CONDUIT STRAPS W/GALV. ROOFING NAILS (TYP.)

POLE-MOUNTED ELECTRIC SERVICE ENTRANCE

GENERAL LAYOUT DIAGRAM



SECTION **COMBINATION LIGHTING & TRAFFIC POLE** 524 14-00448-00-CH MOUNTED ELECTRICAL SERVICE BOX DETAIL BE-230 SHEET NO. 3 OF 8 SHEETS STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

- 1. ELECTRIC SERVICE SHALL BE OF THE VOLTAGE INDICATED OR DESIGNATED BY THE ENGINEER, AND SERVICE DROP CABLE SHALL BE COMPATIBLE WITH THE SERVICE ACCORDINGLY, SOME INSTALLATIONS MAY CALL FOR SERVICE ENTRANCE EQUIPMENT SULTABLE FOR 3-WIRE SERVICE EVEN THOUGH INITIALLY WIRED FOR 2-WIRE SERVICE.
- 2. THE POLE-MOUNTED ELECTRIC SERVICE BOX DETAIL DEPICTS
 THE BASIC CONSTRUCTION OF THE EQUIPMENT. SLIGHT
 MODIFICATIONS APPLY FOR DIFFERING SERVICES AND
 APPLICATIONS AS FOLLOWS:
 - TYPE A FULLY EQUIPPED FOR 240/120V. 3W SERVICE, COMPLETE WITH LIGHTING MAIN BREAKER
 - TYPE A1 FULLY EQUIPPED FOR 240/120V, 3W SERVICE, BLANK COVER IN LIEU OF LIGHTING MAIN BREAKER
 - TYPE B EQUIPPED FOR 120V. SERVICE, COMPLETE WITH 1P, 60A, TRAFFIC SIGNALS MAIN BREAKER
- TYPE B1 EQUIPPED FOR 120V. SERVICE, COMPLETE WITH IP, 40A. TRAFFIC SURVEILLANCE MAIN BREAKER
 3. THE ELECTRIC SERVICE EQUIPMENT ASSEMBLY SHALL BE UL LISTED AS SUITABLE FOR USE AS SERVICE ENTRANCE EQUIPMENT.
- 4. THE ELECTRIC SERVICE EQUIPMENT ENCLOSURE SHALL BE
 NEMA 4X STAINLESS STEEL, NOMINALLY 12"W X 16"H X 8"D, WITH
 A PIANO-HINGED DOOR, STEEL BACK PANEL, FAST-ACTING
 STAINLESS STEEL ENCLOSURE CLAMPS, PADLOCK PROVISIONS
 AND DOOR STOP, HOFFMAN CATALOG NO, A-16H1208SS6LP/A-16
 P12/A-DSTOPK/C-PMK12, OR APPROVED EQUAL.
- 5. CIRCUIT BREAKERS SHALL BE THERMAL MAGNETIC BOLT-ON TYPE WITH A MINIMUM INTERRUPTING CAPACITY OF 25,000 SYMMETRICAL AMPERES AT 240 VOLTS. THEY SHALL BE LOCKABLE IN THE "OFF" POSITION FOR COMPLIANCE WITH OSHA LOCK-OUT/ TAG-OUT REQUIREMENTS. HANDLES SHALL BE TRIP FREE.
- 6, THE SURGE PROTECTOR SHALL BE SUITABLE FOR 240/120 VOLT SINGLE PHASE 60HZ AC ELECTRICAL SERVICE, WITH A SURGE ENERGY CAPABILITY OF 2160 JOULES OR BETTER AT 8/20 MICROSECONDS, RATED -40 TO 60 DEGREES C., WITH LED OPERATING INDICATORS, AND SHALL BE U. LISTED PER UL 1449, CUTLER-HAMMER CMOV230L065XST OR APPROVED EQUAL.
- 7. BUS BARS, CONNECTORS, AND LUGS SHALL BE COPPER, INSULATED AND ISOLATED, AND CONFIGURED TO PREVENT SHORTED CONDITIONS FROM TIGHTENING TERMINATIONS, ETC. THE OVERALL BUS SECTION SHALL BE CONFIGURED BEHIND AN INSULATING BARRIER SHIELD WHICH IS REMOVABLE FOR ACCESS TO CONNECTIONS, OR THE ASSEMBLY SHALL BE A MANUFACTURED SPECIALTY PANELBOARD, CUTLER-HAMMER PRIZA OR APPROVED EQUAL.
- 8. THE COMBINATION GROUND AND NEUTRAL BAR SHALL BE CONFIGURED WITH SEPARATE GROUND AND NEUTRAL SECTIONS AND SPARE TERMINALS AS INDICATED. THE HEADS OF GROUND SCREWS SHALL BE PAINTED GREEN. THE HEADS OF NEUTRAL SCREWS SHALL BE FAINTED WHITE. THE SERVICE NEUTRAL AND SERVICE GROUNDING ELECTRODE CONDUCTOR SHALL BE TERMINATED ADJACENT TO EACH OTHER AT THE DIVIDE BETWEEN THE SECTIONS AND WIRING SHALL BE TERMINATED ONLY UPON THE APPROPRIATE SECTION.
- THE WIRING TERMINALS, INCLUDING THE GROUND/NEUTRAL BAR SHALL BE ARRANGED TO PROVIDE ADEQUATE ROOM FOR PERFORMING FIELD TERMINATIONS.
- 10. A PLASTIC LAMINATED LAYOUT AND CIRCUIT DIAGRAM SHALL BE MECHANICALLY SECURED TO THE INTERIOR SIDE OF THE ENCLOSURE DOOR.
- A 2-COLOR ENGRAVED PLASTIC NAMEPLATE, ATTACHED WITH SCREWS, AND ENGRAVED AS INDICATED, SHALL BE PROVIDED FOR EACH MAIN BREAKER.
- 12. LUGS AND CONNECTORS SHALL BE RATED FOR $75^{\circ}\,\text{C}$ CONDUCTOR.
- 13. THE EXACT MOUNTING HEIGHT OF THE BOX SHALL BE FIELD DETERMINED TO AVOID DESTRUCTIONS AND PUBLIC ACCESS. TYPICAL HEIGHT SHALL BE APPROXIMATELY 10 FEET ABOVE GRADE.

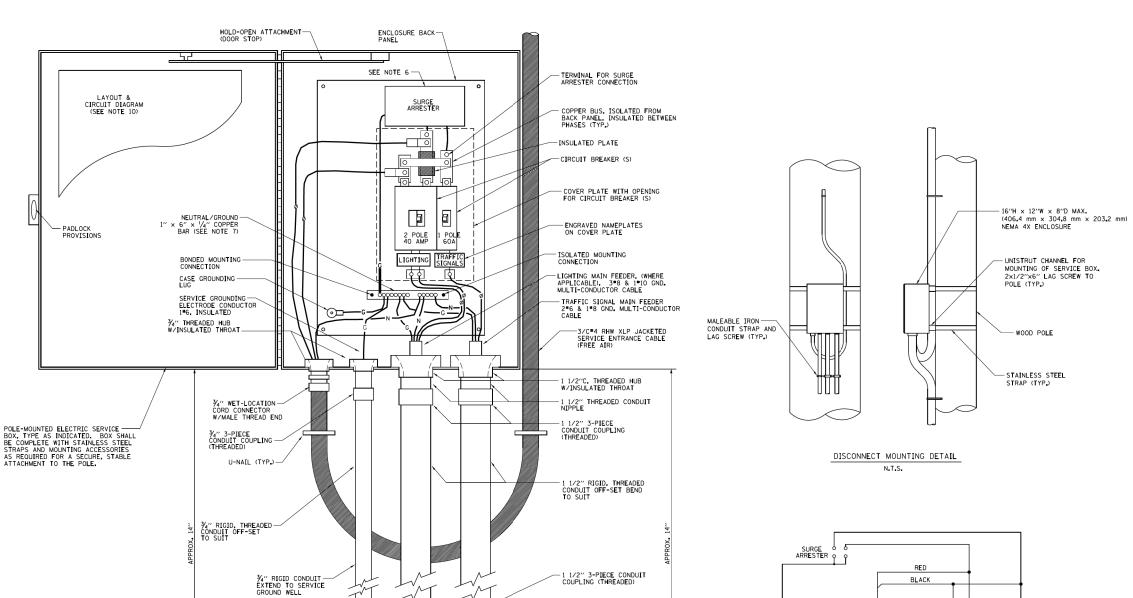
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183

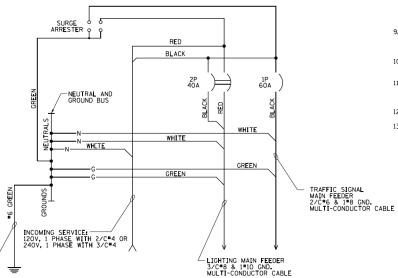
CONTRACT NO. 61E67

COUNTY

KANE



1 1/2" RGS CONDUIT TO TRAFFIC SIGNAL CONTROL CABINET



SCHEMATIC DIAGRAM

SCALE: NONE

SERVICE GROUND WELL —
ACHIEVE 10 OHMS OR LESS

2-1/C =10 AWG. 600 V TYPE RHW SOLID COLOR CODED CABLES

SPLICE GROUND WIRE AND PIGTAIL SAME SIZE —
EXTENSION TO POLE GROUNDING LUG

600V 3-1/C NO. 8 AND 1/C NO. 10 GND IN RGS CONDUIT

FROM DISCONECTCABINET

(SEE NOTES 10 AND 11)

INSULATED GROUND WIRE, 600 V TYPE RHW.

SOLID COLOR GREEN, SIZE AS SPECIFIED

UNIT DUCT (TYP)

GROUNDING LUG -

TYPICAL LIGHTING LAYOUT

STANDARD-TYPE SMALL DIMENSION DOUBLE POLE FUSEHOLDER WITH INSULATED BOOTS, FUSING AND

(SEE SPECS)

- CABLE SPLICE (TYP.)

HASE CONDUCTORS, 600 V TYPE RHW,

SOLID COLOR, SIZE AS SPECIFIED (TYP.)

COMBINATION POLE WIRING DETAIL

(NOT TO SCALE)

IDOT TRAFFIC SIGNAL/LIGHTING CONTROL CABINET

- GROUND JUMPER

SHALL BE BONDED TO

CABINET ENCLOSURE

COMBINATION LIGHTING CONTROLLER

WIRING DIAGRAM

(NOT TO SCALE)

(NOT TO SCALE)

PANEL EQUIPMENT

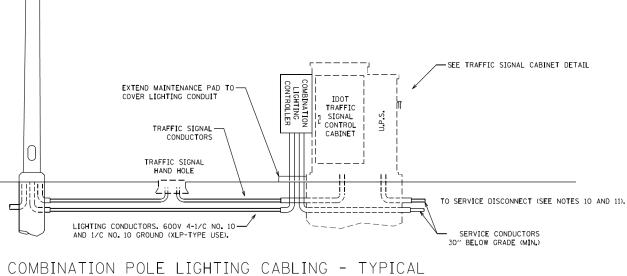
	BILL OF MATERIALS									
ITEM	ITEM QUANTITY DESCRIPTION									
А	1	CIRCUIT BREAKER, THERMAL MAGNETIC MOLDED CASE, 2 POLE, 240 VOLT 100 AMP FRAME, 30 AMP TRIP, INTERRUPTING RATING 22K RMS SYMETRICALL AMP								
В	1	REMOTE CONTROL SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, SINGLE THROW, 30 AMP., 600 VOLTS CONTROL CIRCUIT 120 VOLT.								
С	2	CIRCUIT BREAKERS, 2 POLE, 100 AMP. FRAME 20 AMP. NON-INTERCHANGABLE TRIP INTERUPTING RATING NEMA 10,000 AMP AT 240 V.								
D	1	CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 100 AMP FRAME, 15 AMP NON-INTERCHANGABLE TRIP, INTERRUPTING RATING 22K RMS SYMETRICAL AMP AT 240V.								
E	1	ASTRONOMIC MICROPROCESSOR-BASED 2-CHANNEL CONTROLLER [TIME SWITCH]								
F	1	H-O-A SWITCH								
G	1	COPPER GROUND BUS 1/4" (6.35) X 1" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND 4 SPARE LUGS								
н	1	COPPER NEUTRAL BUS 1/4" (6.35) X 1" (25.4) X 12" (304.8 mm) LONG MOUNTED ON PANEL WITH LUGS AND 4 SPARE LUGS								
I	1	RELAY, 2 POLE, SINGLE THROW, 120 VOLT COIL, CURRENT RATING TO BE COORDINATED WITH CONTACTOR								

NOTES:

- 1. ALL WIRING RELATED TO THE LIGHTING CONTROLS SHALL BE #10 AWG, 600V, TYPE SWITCH BOARD WIRE, STRANDED COPPER.
- 2. PROVIDE SEALING GROMMETS FOR ALL OPEN WIRING EXTENDED FROM DEVICES IN BOXES OR CABINETS WITHIN THE ENCLOSURE.
- 3. ALL WIRING SHALL BE NEATLY DRESSED, IDENTIFIED BY TAGS, AND SUPPORTED.
- 4. ALL SPLICES AND CONNECTIONS FOR ROADWAY LIGHTING SHALL BE AT POLE BASE ONLY, UNDERGROUND SPLICING OF LIGHTING CONDUCTORS IS NOT PERMITTED.
- 5. THE COMBINATION POLE LIGHTING CABLING DETAIL IS INTENDED TO SHOW CONNECTIONS ONLY. FOR FURTHER INFORMATION ON THE COMBINATION LIGHT POLE, THE TRAFFIC SIGNAL CONTROL CABINET, AND THE SERVICE DISCONNECT BOX OR CABINET REFER TO THE RESPECTIVE DETAIL DRAWINGS.
- 6. COMBINATION LIGHTING SHALL BE TIMED TO ENERGIZE 20 MINUTES PRIOR TO DUSK AND DE-ENERGIZE 20 MINUTES AFTER DAWN.
- 7. COMBINATION LIGHTING CONTROLLER AND ALL COMBINATION POLES SHALL HAVE IDOT DESIGNATIONS AND LABELS. LIGHTING CONTROLER DESIGNATIONS SHALL BE COORDINATED WITH THE BUREAU OF TRAFFIC LIGHTING SECTION.
- 8. ENCLOSURE SHALL BE UNPAINTED, NATURAL ALUMINUM FINISH. SHALL BE U.L. LISTED NEMA TYPE 3R AND SHALL BE 26" X 17" X 15"
- 9. 12" x 16" STAINLESS STEEL EXTERIOR NAMEPLATE SHALL BE ENGRAVED TO "STATE OF ILLINOIS LIGHTING CONTROLS" UNLESS OTHERWISE SPECIFIED.
- 10. ELECTRIC SERVICE SHALL BE 120V/240V SERVICE AND SHALL BE A SHARED SERVICE FOR COMBINATION LIGHTING AND TRAFFIC SIGNALS.
- 11. CONDUIT SIZES TO THE SERVICE DISCONNECT SHALL BE COORDINATED WITH THE SERVICE DISCONNECT DETAILS. REFER TO THE FOLLOWING DETAIL DRAWINGS FOR FOR THE SERVICE DISCONNECT.

FOR POLE MOUNTED ELECTRIC SERVICE USE "COMBINATION LIGHTING AND TRAFFIC POLE MOUNTED ELECTRIC SERVICE BOX" (BE-230).

FOR GROUND MOUNTED ELECTRIC SERVICE USE "STANDARD COMBINATION LIGHTING DISCONNECT" CONTAINED IN THE TRAFFIC SIGNAL DETAILS.



(NOT TO SCALE)

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₩ K	c:\pw_work\pw1dot\bauerd1\d0108315\be235	dgn	DRAWN - MP	REVISED - MAP 10/25/12	STATE OF ILLINOIS	1	COMBINATION LIGHTING CONTROLLER	524	14-00448-00-CH	KANE	183	150
R NA		PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION				B E- 235	CONTRACT	NO. 61	1E67
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DETAIL DRAWINGS COMBINATION LIGHTING TRAFFIC SIGNAL POLE

LIGHTING CONDUCTORS OUT TO

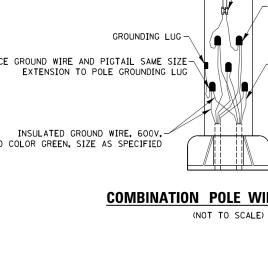
NEXT IDOT COMBINATION POLE

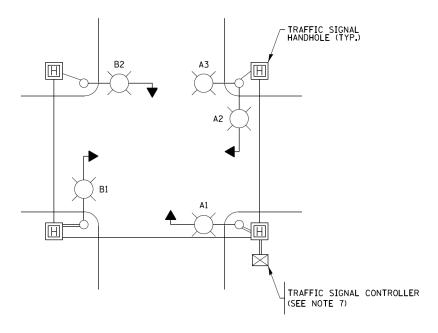
-600V 4-1/C NO. 10 AND 1/C

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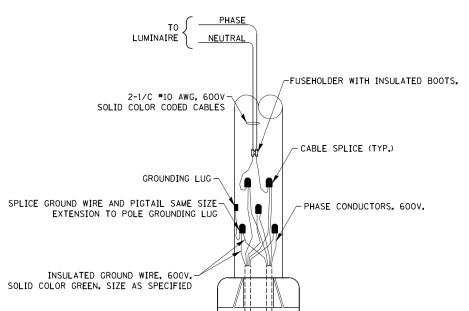
NO. 10 GROUND, (XLP-TYPE USE).
TO COMBINATION LIGHT POLES



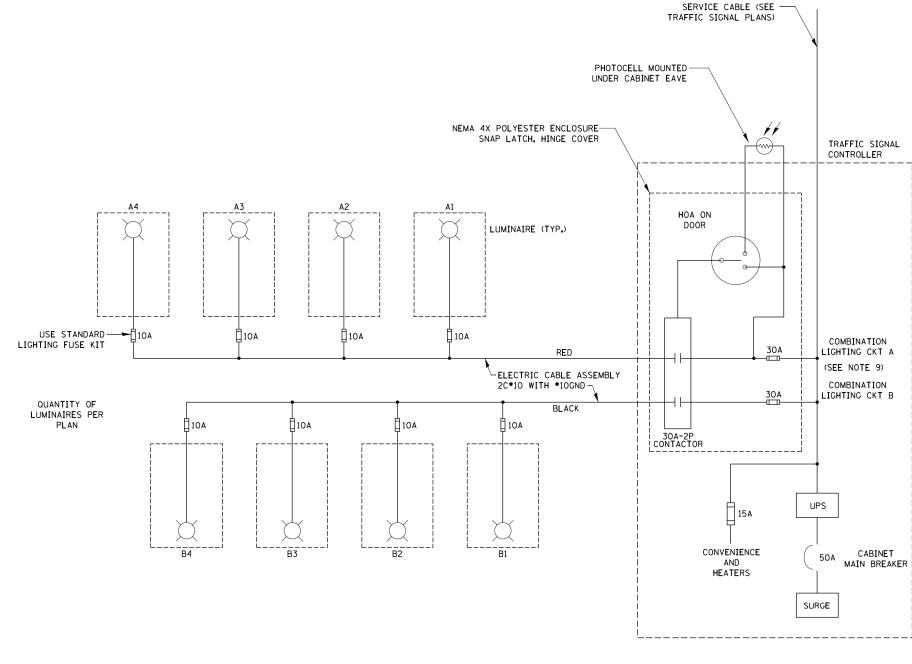


TYPICAL LIGHTING CIRCUIT

(NOT TO SCALE)



COMBINATION POLE WIRING DETAIL

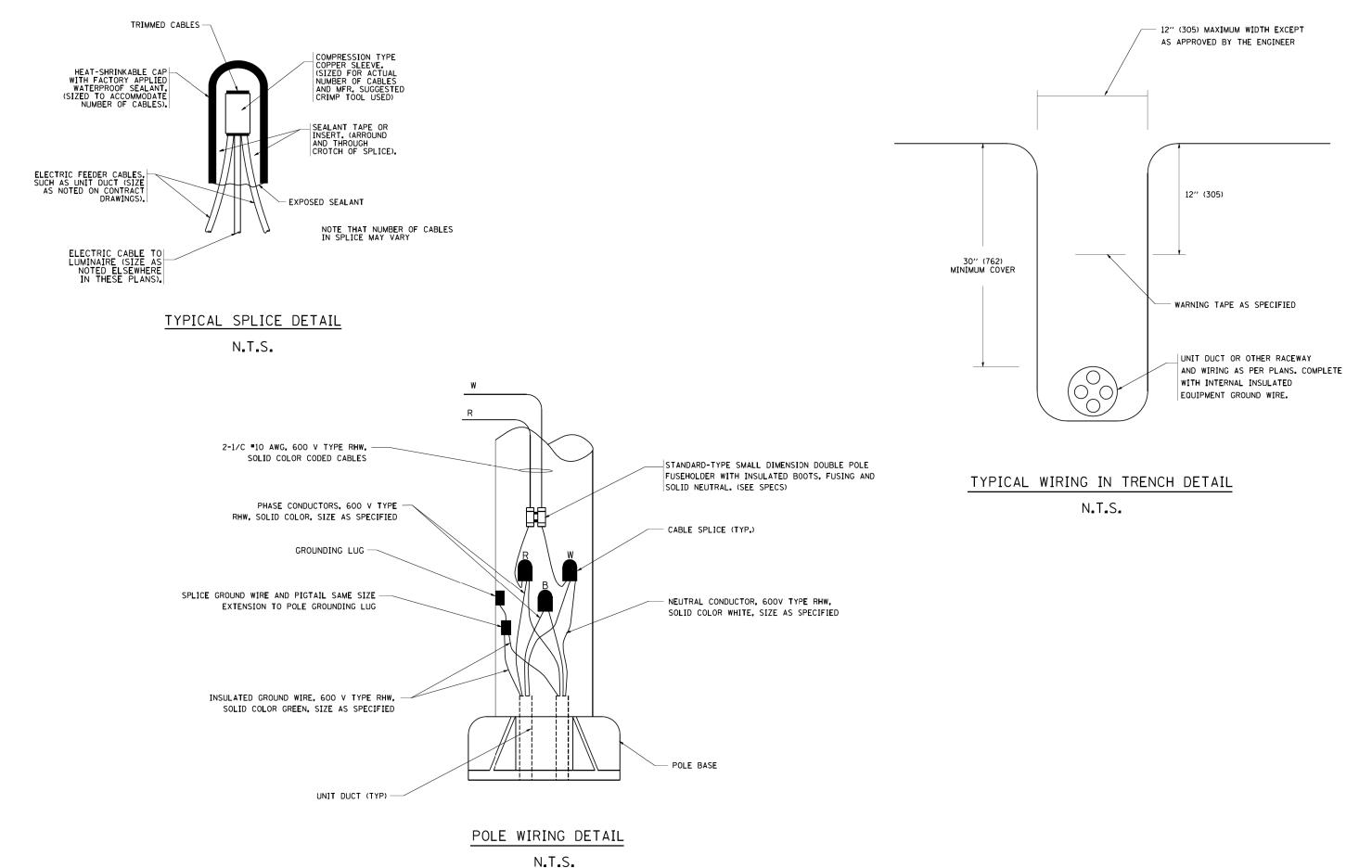


NOTES:

- 1. 4 LUMINAIRES PER CIRCUIT, MAXIMUM.
- 2. MULTI-CONDUCTOR CABLE ASSEMBLY FOR LIGHTING CIRCUITS.
- 3. ROUTE LIGHTING CIRCUITS IN TRAFFIC SIGNAL CONDUIT SYSTEM.
- 4. ALL SPLICES AND CONNECTIONS FOR ROADWAY LIGHTING SHALL BE AT POLE BASE ONLY.
- 5. ALL CONTROLLERS TO HAVE TWO FUSED LIGHTING BRANCH CIRCUITS.
- 6. ALL WIRING SHALL BE NEATLY DRESSED, IDENTIFIED BY TAGS, AND SUPPORTED. (UNDERGROUND SPLICING OF LIGHTING CONDUCTORS IS NOT PERMITTED).
- 7. RECORD DRAWING SHALL INCLUDE:
 - TRAFFIC SIGNAL PLAN SHEET(S)
 TRAFFIC SIGNAL CABLE PLAN SHEET(S)
 - LIGHTING PLANS
 - THIS DETAIL
- 8. THE H.O.A. SWITCH SHALL BE LABELED AS "LIGHTING CONTROL" WITH THE POSITIONS "AUTO", "OFF" AND "TEST" WITH ENGRAVED NAME PLATES.
- 9. LIGHTING CONNECTED TO UPS BYPASS CIRCUIT

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<u>لا</u>	be240 . dgn		DRAWN -	REVISED - 10/13/2015	STATE OF ILLINOIS	COM	BINATION	LIGHTING, '	TRAFFIC SIGNAL	. SCHEMATIC	524	14-00448-00-CH	KANE	183	151
CTC		PLOT SCALE = 50.0000 ' / in.	CHECKED - RT	REVISED - T.G. 4/12/2017	DEPARTMENT OF TRANSPORTATION							RF-240	CONTRACT	NO.	61E67
al c	Defau l t	PLOT DATE = 4/13/2017	DATE - 08/18/2014	REVISED -		SCALE: NTS	SHEET 5	OF 8	SHEETS STA.	TO STA.		ILLINOIS FED.	AID PROJECT		





STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

COUNTY TOTAL SHEET NO.

CONTRACT NO. 61E67

183

KANE

SECTION

14-00448-00-CH

BE-702

524

TO STA.

MISC. ELECTRICAL DETAILS

SHEET A

SHEET NO. 6 OF 8 SHEETS STA.

SCALE: NONE

FILE NAME =

/:\diststd\22x34\be702.dgn

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DATE

JSER NAME = P&M/1098-sht light-det06.dgn

PLOT SCALE = 50.000 '/ IN.

PLOT DATE = 1/4/2008

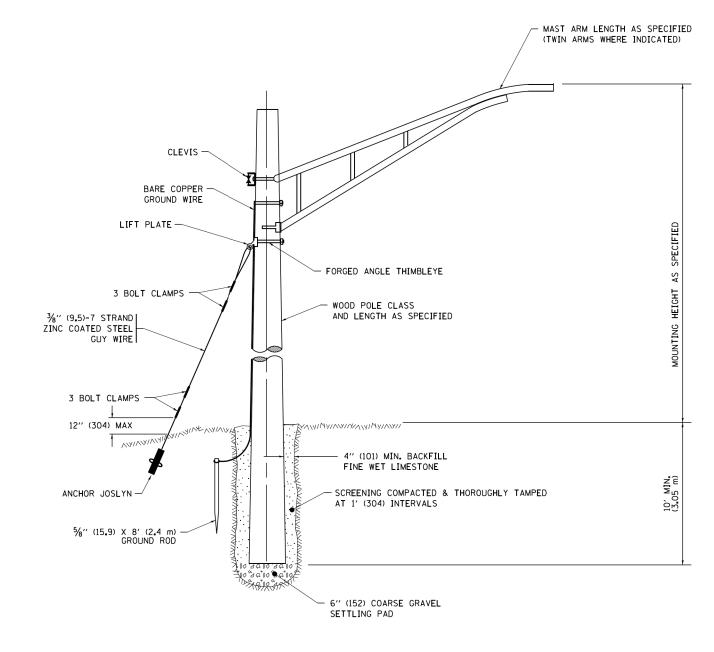
REVISED

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REVISED

REVISED

08-08-03



TEMPORARY LIGHT POLE DETAIL

TEMPORARY LIGHT POLE ATTACHMENT DETAIL

WOOD POLE -

GROUND CLAMP

AWG BARE COPPER

WATERPROOF INSULATION -PIERCING TAP CONNECTOR

GROUND WIRE

MESSENGER TIED TO INSULATOR — WITH FACTORY FORMED CABLE TIE

HEAVY DUTY INSULATED

- BARE COPPER GROUND WIRE EVERY THIRD POLE

PULLEY CLEVIS

TO LUMINAIRE

─ NEUTRAL CONDUCTOR

- PHASE CONDUCTOR

WATERPROOF FUSEHOLDER AND SOLID NEUTRAL SLUG

WATERPROOF FUSEHOLDER & FUSE

- 1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
- 2. MAST ARM SHALL BE RATED FOR THE SPECIFIED MOUNTING HEIGHT.

	FILE NAME =	USER NAME = D&M40002jsht-∎ght-det07.dgn	DESIGNED -	REVISED - 08-08-03					F.A.P.	SECTION	COUNTY	TOTAL SH	EET
Ž	pw:\\ILØ84EBIDINTEG.:ll1no1s.gov:PWIDOT\Do	ouments\IDOT Offices\District 1\Projects\Dist	St DR&WM \CADD o ta\CADsheets\be800.dgn	REVISED - R.T. 07-26-16	STATE OF ILLINOIS		TEMPORARY LIGHTPOLE DETAILS		524	14-00448-00-CH	KANE	183 1	53
2		PLOT SCALE = 50.000 '/ in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION					BE-800	CONTRACT	NO. 61E	<u>:</u> 67
-	Default	PLOT DATE = 9/1/2016	DATE -	REVISED -		SCALE: NONE S	SHEET 7 OF 8 SHEETS STA.	TO STA.		ILLINOIS FED. AI	D PROJECT		$\overline{}$

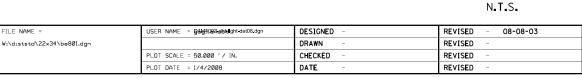
WOOD POLE

WATERPROOF SPLICE -

GROUND CONDUCTOR

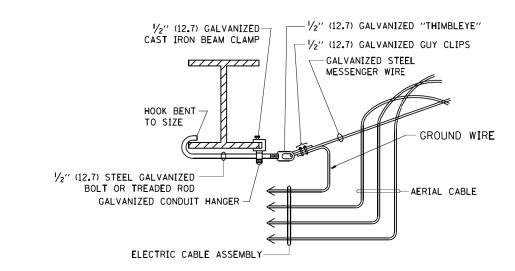
CABLE SUPPORT (WOVEN GRIP OR APPROVED EQUAL)

(TYP.)

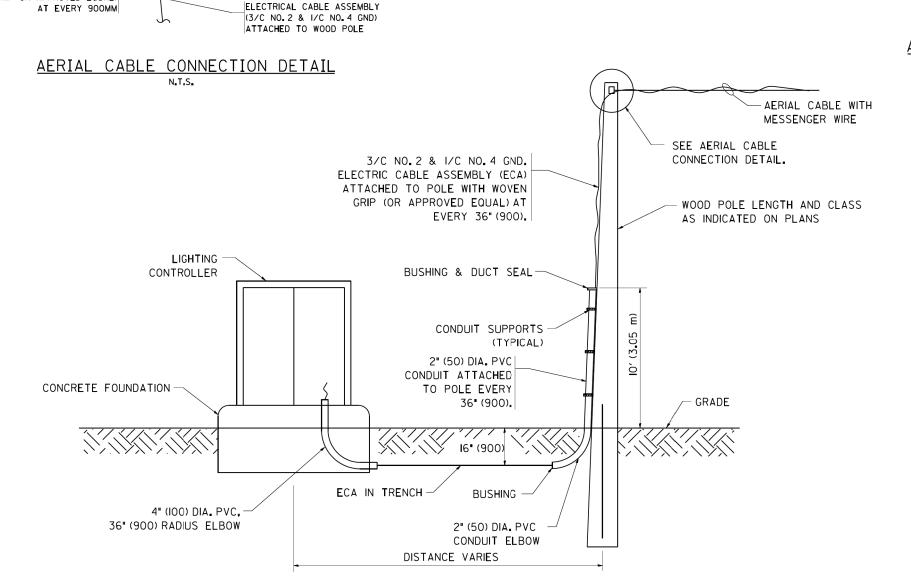


STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SECTION TEMPORARY AERIAL CABLE INSTALLATION 14-00448-00-CH BE-801 SCALE: NONE SHEET NO. 8 OF 8 SHEETS STA.



AERIAL CABLE ATTACHED TO STRUCTURE NOT TO SCALE



WOOD POLE TO LIGHTING CONTROLLER WIRING CONNECTION DETAIL

FORK BOLT

PHASE CONDUCTORS

& NEUTRAL CONDUCTOR

GROUND CLAMP

MESSENGER TIED TO

INSULATOR WITH FACTORY FORMED CABLE TIE

NOTES:

- 1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED.
- 2. SEE PROPOSED LIGHTING PLAN FOR CONDUIT, CABLE AND ROUTING.
- 3. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.

COUNTY

CONTRACT NO. 61E67

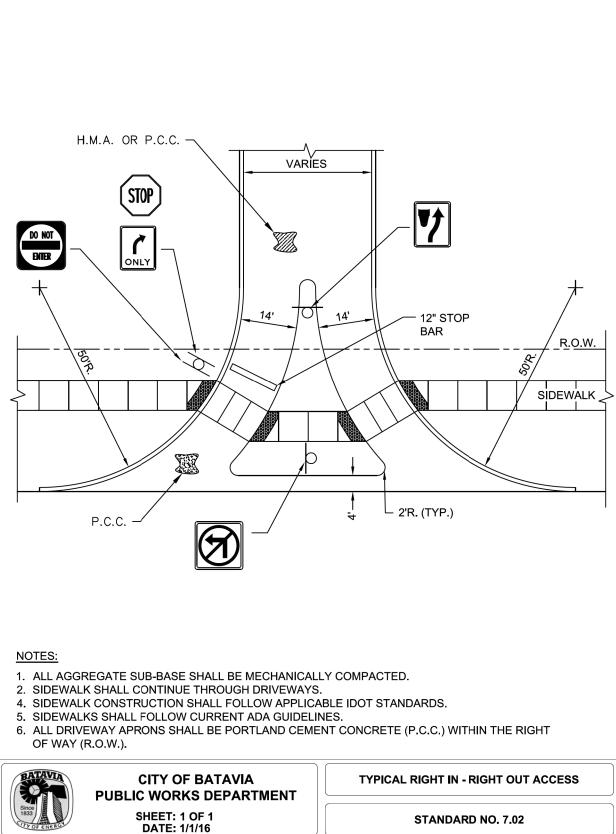
KANE

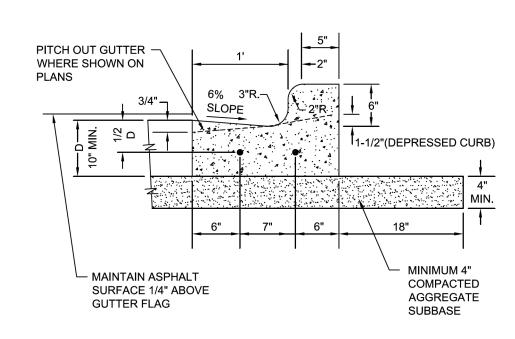
4. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.

FILE NAME

MODEL NAME

PLOT DATE





NOTES:

- 1. 3/4" PREFORMED BITUMINOUS EXPANSION JOINT WITH TWO (2) NUMBER 6 COATED SMOOTH DOWEL BARS (3/4" DIA. X 18") WITH GREASE CAPS SHALL BE PLACED EVERY 150', 5' EITHER SIDE OF DRAINAGE STRUCTURES, P.C.'S, RADIUS POINTS AND BACK OF CUL-DE-SACS. WHEN EXPANSION JOINTS ARE CONSTRUCTED ADJACENT TO EXISTING CURB & GUTTER THE EXISTING CURB SHALL BE DRILLED AND TWO (2) NUMBER 6 EPOXY COATED SMOOTH DOWEL BARS (3/4" X 18") GROUTED IN PLACE. GREASE CAPS SHALL BE PLACED ON THE SIDE OF THE NEW CURB AND GUTTER SHALL HAVE A PINCHED STOP THAT WILL PROVIDE A MINIMUM 1" EXPANSION.
- 2. TOOLED CONTROL JOINTS OR SAWCUTS SHALL BE MADE EVERY 15'.
- 3. SAWCUTS SHALL BE MADE WITHIN TWENTY-FOUR (24) HOURS AND SEALED WITH A CITY APPROVED JOINT SEALANT. JOINTS SHALL BE CLEAN AND DRY PRIOR TO APPLICATION OF SEALANT.
- 4. FOR CURB AND GUTTER CONSTRUCTED OVER UTILITY TRENCHES, TWO (2) EPOXY COATED REINFORCING BARS (NO. 5) SHALL BE PLACED IN THE CURB AND GUTTER, CENTERED OVER THE TRENCH.



CITY OF BATAVIA PUBLIC WORKS

SHEET: 1 OF 1 DATE: 1/1/16

B6.12 BARRIER CURB & GUTTER

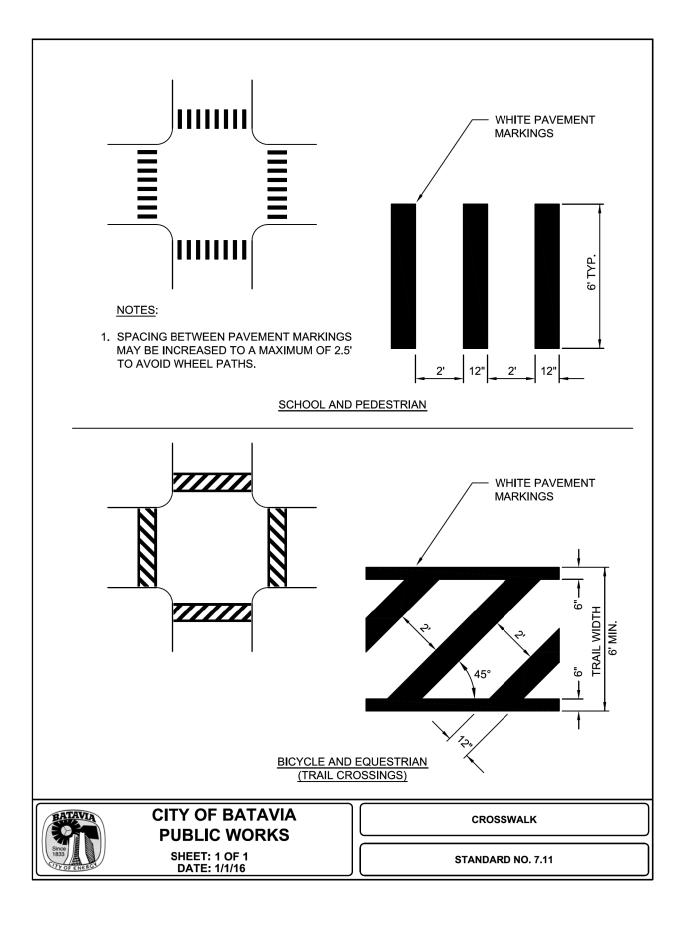
STANDARD NO. 7.04

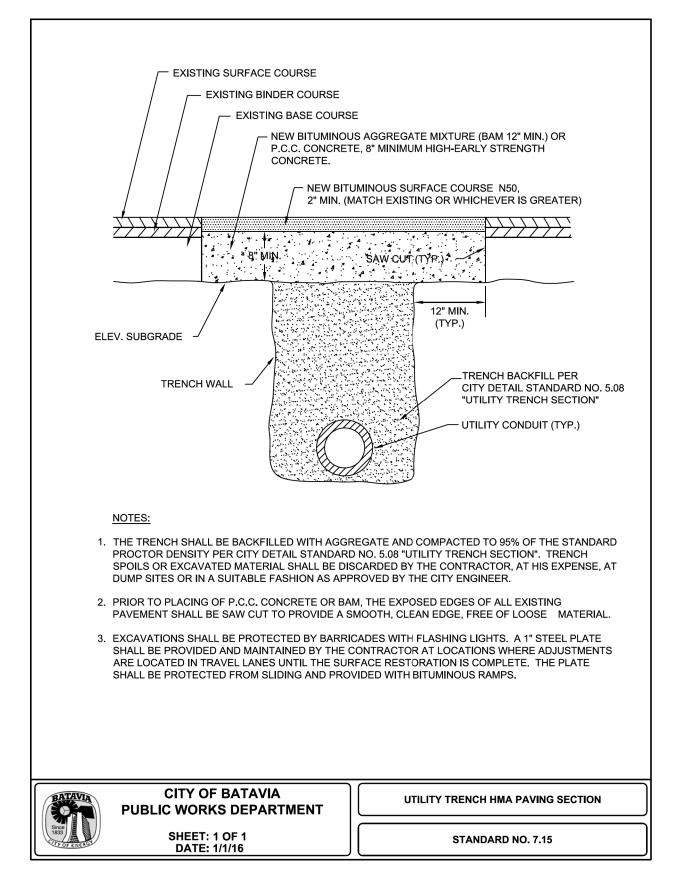
NO. 7.02		

= D1M4003-sht-roadway-det04.dgn	DESIGNED - BRF	REVISED -	
ME = Default	DRAWN - ERD	REVISED -	STATE OF ILLINOIS
E = 2.0000 ' / in.	CHECKED - JWD	REVISED -	DEPARTMENT OF TRANSPORTATION
- 0/6/2019 1:04:02 DM	DATE 0/7/0040	DEVICED	1

YPICAL RIGH		WAY DETA OUT ACC			ATAVIA ARRIER CURB & GUTTER	F
LE:	SHEET 1	OF 6	SHEETS	STA.	TO STA.	╁









FILE NAME = D1M4003-sht-roadway-det05.dgn	DESIGNED - BRF	REVISED -
MODEL NAME = Default	DRAWN - ERD	REVISED -
PLOT SCALE = 2.0000 '/ in.	CHECKED - JWD	REVISED -
PLOT DATE = 9/6/2018 - 1:04:11 PM	DATE - 9/7/2018	REVISED -

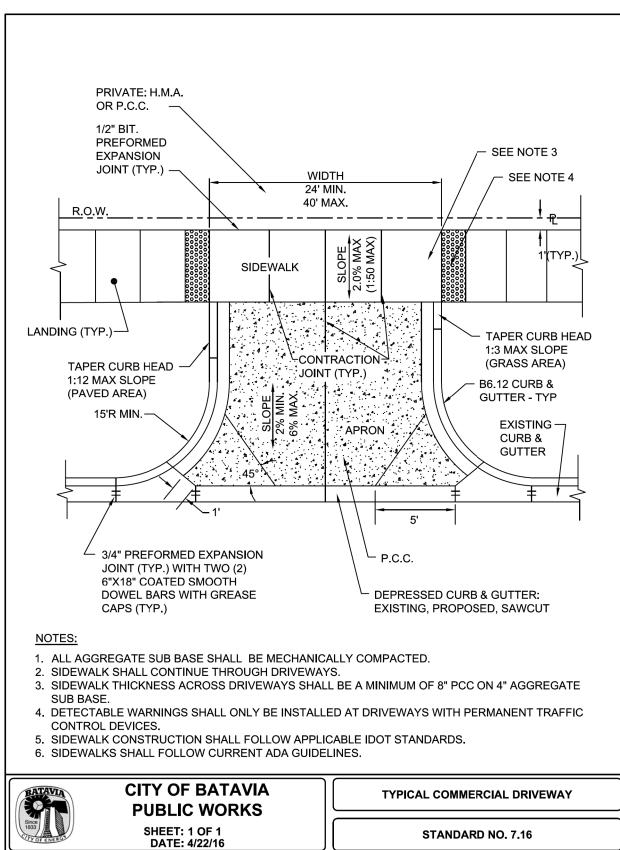
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

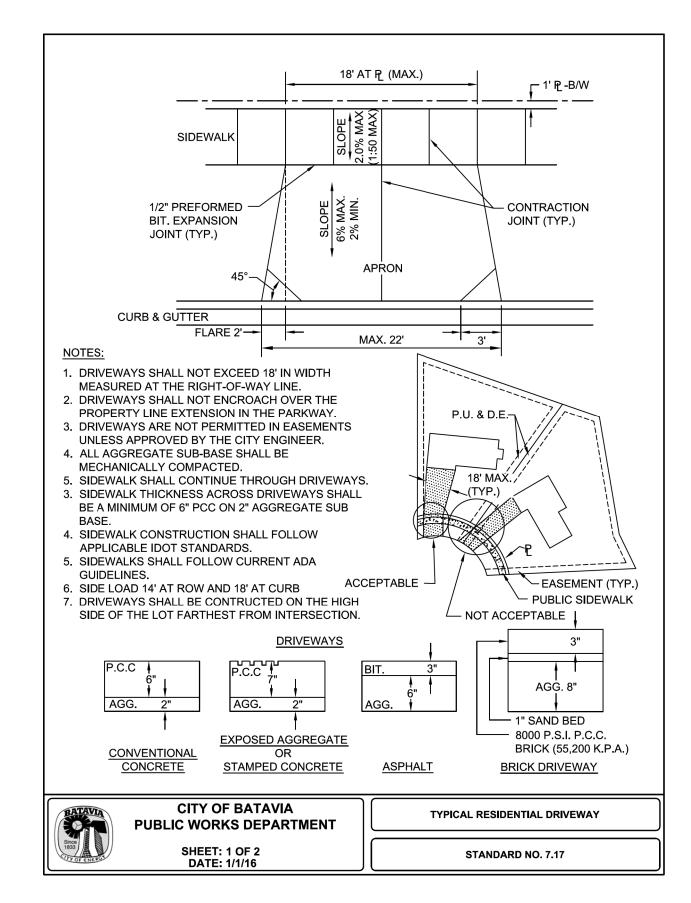
CRO		VAY DETA Utility t		-	ATAVIA AVING SECTION
	SHEET 2	OF 6	SHEETS	STA	TO STA

SCALE:

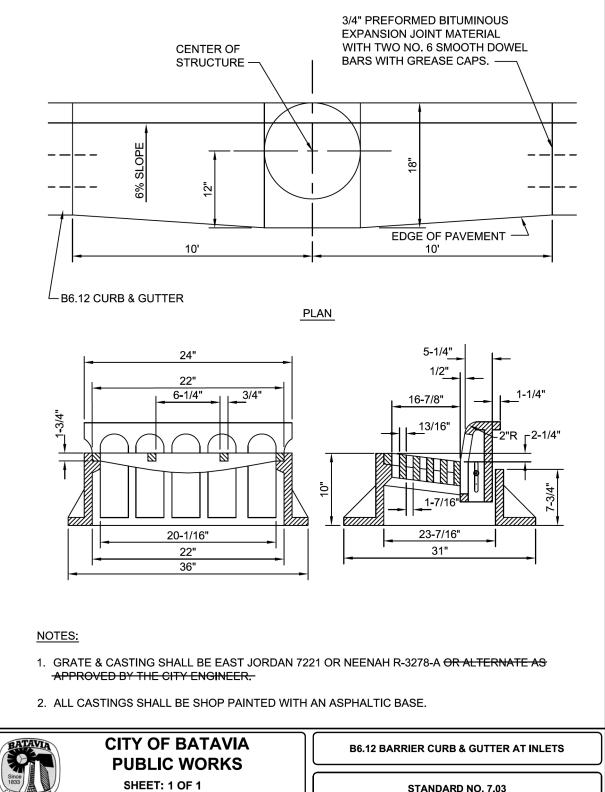
A.P. TE	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
524	14-00448-00-CH		KANE	183	156
			CONTRACT	NO.	61E67
	ILLINOIS	FED. Al	D PROJECT		

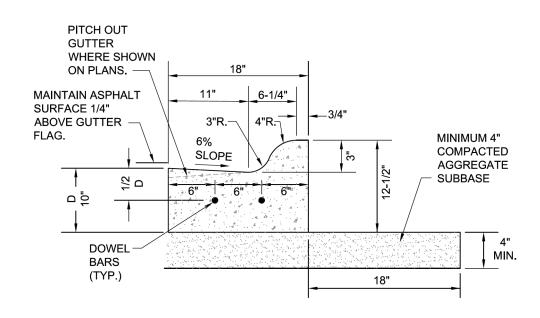






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PLOT SCALE = 2.0000 '/in.	CHECKED - JWD	REVISED -
PLOT DATE = 9/6/2018 - 1:04:19 PM	DATE - 9/7/2018	REVISED -





NOTES:

- 1. 3/4" PREFORMED BITUMINOUS EXPANSION JOINT WITH TWO (2) NUMBER 6 COATED SMOOTH DOWEL BARS (3/4" DIA. X 18") WITH GREASE CAPS SHALL BE PLACED EVERY 150', 10' EITHER SIDE OF DRAINAGE STRUCTURES, P.C.'S, RADIUS POINTS AND BACK OF CUL-DE-SACS. WHEN EXPANSION JOINTS ARE CONSTRUCTED ADJACENT TO EXISTING CURB & GUTTER THE EXISTING CURB SHALL BE DRILLED AND TWO (2) NUMBER 6 COATED SMOOTH DOWEL BARS (3/4" X 18") GROUTED IN PLACE. GREASE CAPS SHALL BE PLACED ON THE SIDE OF THE NEW CURB AND GUTTER SHALL HAVE A PINCHED STOP THAT WILL PROVIDE A MINIMUM 1" EXPANSION.
- 2. TOOLED CONTROL JOINTS OR SAWCUTS SHALL BE MADE EVERY 15'.
- 3. SAWCUTS SHALL BE MADE WITHIN TWENTY-FOUR (24) HOURS AND SEALED WITH A CITY APPROVED JOINT SEALANT. JOINTS SHALL BE CLEAN AND DRY PRIOR TO APPLICATION OF SEALANT.
- 4. FOR CURB AND GUTTER CONSTRUCTED OVER UTILITY TRENCHES, TWO (2) EPOXY COATED REINFORCING BARS (NO. 4) SHALL BE PLACED IN THE CURB AND GUTTER, CENTERED OVER THE TRENCH.



CITY OF BATAVIA PUBLIC WORKS DEPARTMENT

SHEET: 1 OF 1 DATE: 1/1/16 M3.12 MOUNTABLE CURB & GUTTER

STANDARD NO. 7.05

STANDARD NO. 7.03

DATE: 1/1/16

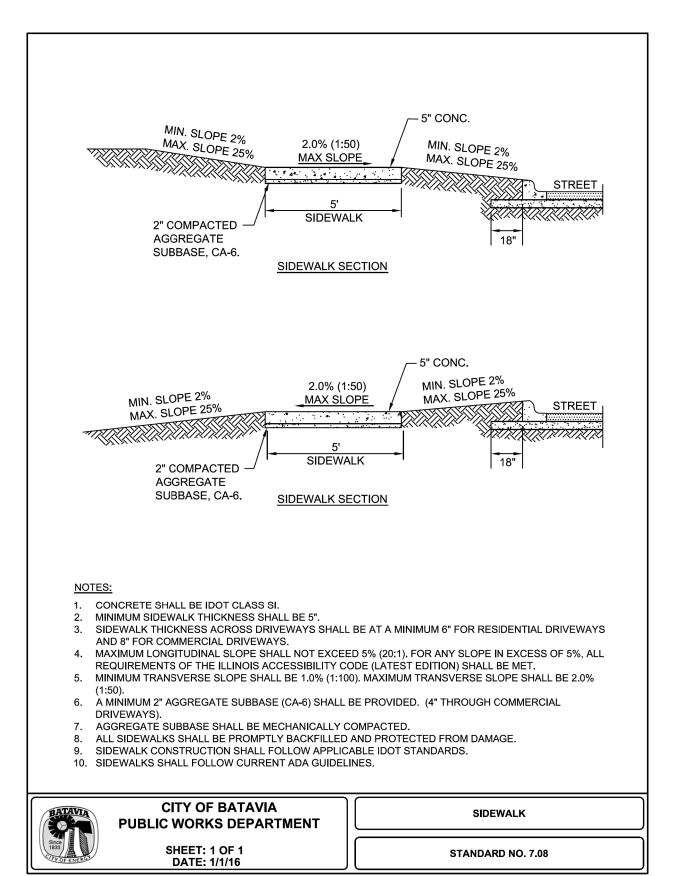
≥CMT

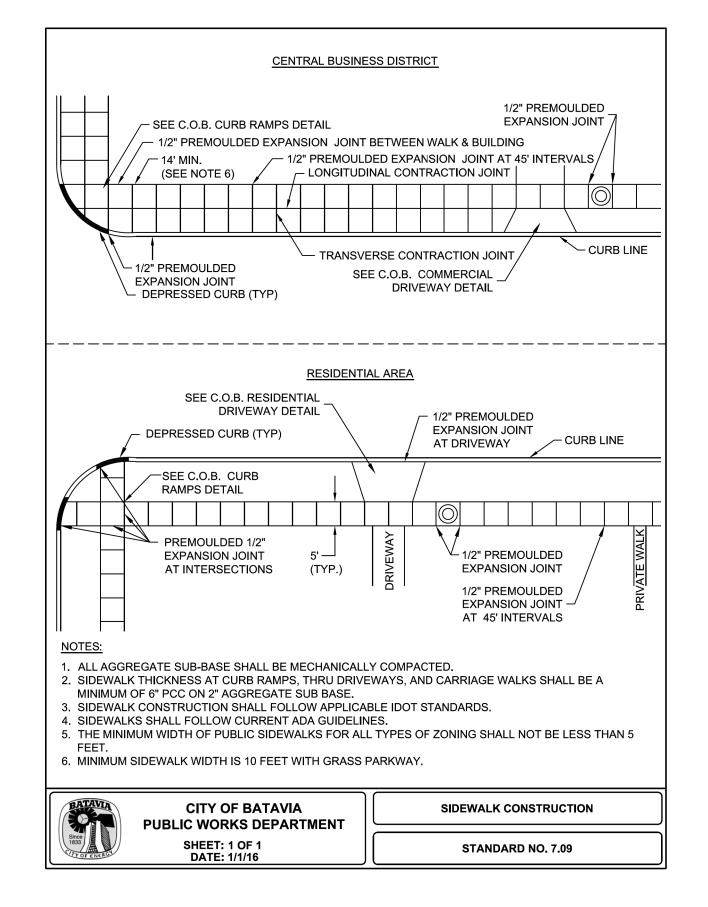
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	MODEL NAME = Default	DRAWN - ERD	REVISED -
	PLOT SCALE = 2.0000 '/in.	CHECKED - JWD	REVISED -
Inc.	PLOT DATE = 9/6/2018 - 1:04:27 PM	DATE - 9/7/2018	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	ROAD\	NAY DETA	AILS - CIT	Y OF B	ATAVIA	F.A. RTE
R6 12 BARRIFE	CHRR & G	HITTER (C	:&G) ΔT I	NI FTS	/ M3.12 MOUNTABLE C&G	52
DO:12 DAIMILL	CONDAC	ionien (c	au, Ai i	IVELIO	/ WIS.12 WIGOINTABLE COO	
SCALE:	SHEET 4	OF 6	SHEETS	STA.	TO STA.	



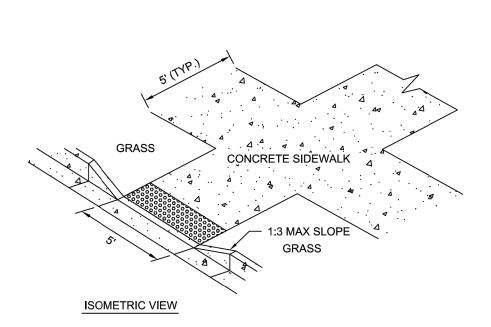






STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**





NOTES:

- 1. ALL AGGREGATE SUB-BASE SHALL BE MECHANICALLY COMPACTED.
- 2. SIDEWALK THICKNESS AT CURB RAMPS SHALL BE A MINIMUM OF 6" PCC ON 2" AGGREGATE SUB BASE.
- 3. SIDEWALK CONSTRUCTION SHALL FOLLOW APPLICABLE IDOT STANDARDS.
- 4. SIDEWALKS SHALL FOLLOW CURRENT ADA GUIDELINES.

APPLICABLE IDOT STANDARD DETAILS:

PERPENDICULAR CURB RAMPS FOR SIDEWALKS
DIAGONAL CURB RAMPS FOR SIDEWALKS
CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
MID-BLOCK CURB RAMPS FOR SIDEWALKS
DEPRESSED CORNER FOR SIDEWALKS
ENTRANCE/ALLEY PEDESTRIAN CROSSINGS
MEDIAN PEDESTRIAN CROSSINGS
CONCRETE CURB TYPE B AND COMB CONCRETE CURB AND GUTTER

APPROVED ADA DETECTABLE WARNING TILES:

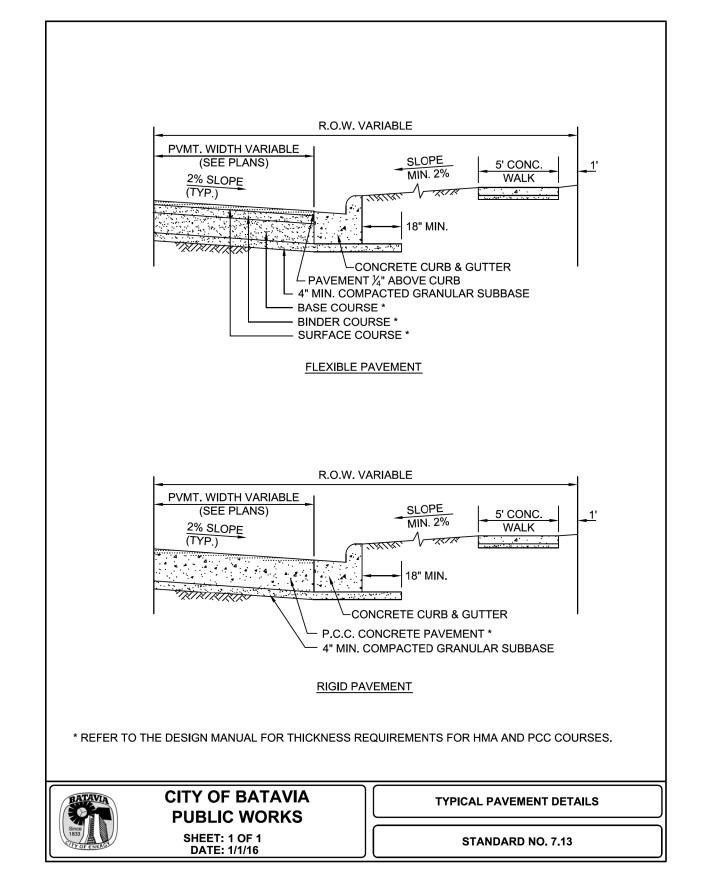
- 1. ADA SOLUTIONS CAST IN PLACE REPLACEABLE
- 2. ARMOR TILE CAST IN PLACE
- 3. DETECTILE SLIMTEK II



CITY OF BATAVIA PUBLIC WORKS

SHEET: 1 OF 1 **DATE: 1/1/16**

CURB RAMPS



STANDA	ARD NO). 7.1	10

FILE NAME = D1M4003-sht-roadway-det09.dgn	DESIGNED - BRF	REVISED -
MODEL NAME = Default	DRAWN - ERD	REVISED -
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PLOT DATE = 9/6/2018 - 1:04:42 PM	DATE - 9/7/2018	REVISED -

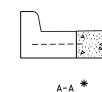
<u>F-F</u>

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

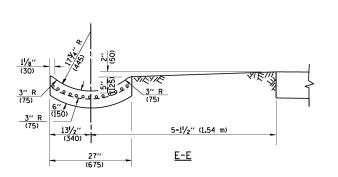
OUTLET FOR CONCRETE CURB AND GUTTER SHEET NO. 1 OF 7 SHEETS STA.

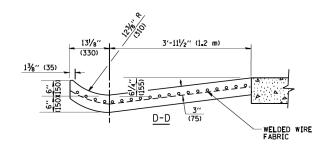
SECTION COUNTY 14-00448-00-CH KANE 183 BD600-01 (BD-03) CONTRA
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT CONTRACT NO. 61E67

18' (5₄ m) EDGE OF PAVEMENT NO. 6 TIE BARS @ 24" (600) CENTERS EDGE OF OUTLET TO CONFORM TO THE SLOPE OF SHOULDER — WELDED WIRE FABRIC (WEIGHING NOT LESS THAN 58 LBS./100 SO. FT. (2.83 kg/m²) - EDGE OF SHOULDER TO BEGIN HERE.

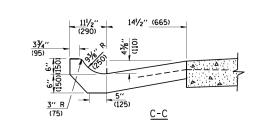


* DIMENSIONS OF THE CURB & GUTTER AT SECTION A-A ARE SHOWN ON STATE STANDARD 606001. FOR DETAILS OF OUTLET FOR CONCRETE CURB & GUTTER, TYPE B-6.24 (B-15.60) SEE STATE STANDARD 606006.

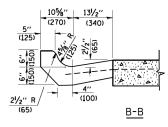




<u>G-G</u>



SCALE: NONE



GENERAL NOTES

GUTTER OUTLET SHALL BE TIED TO THE PAVEMENT IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINT SHOWN ON STANDARD 420001.

TIE BARS SHALL BE NO. 20 (NO.6) AT 24" (600) CENTERS

IF THE AVERAGE GRADE OF PAVEMENT FOR THE DISTANCE FROM SECTION A-A TO D-D EXCEEDS 2%, THIS DISTANCE SHALL BE INCREASED 6' (1.8 m) FOR EACH 1% INCREASE IN GRADE.

QUANTITIES

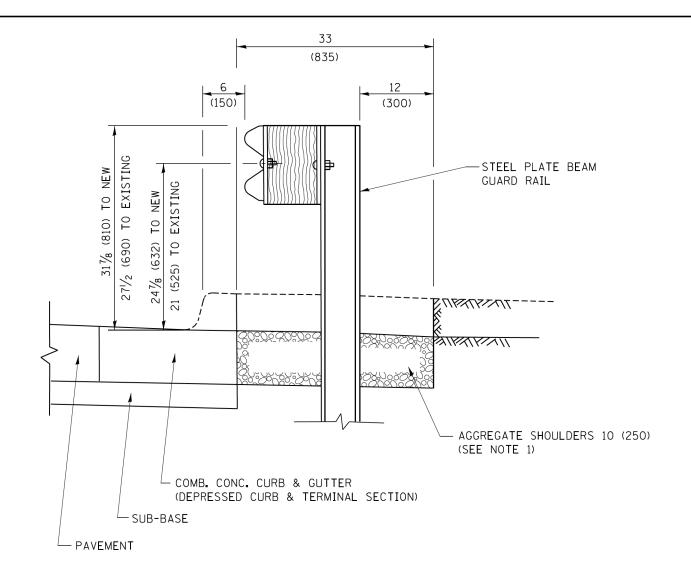
TO STA.

FOR SECTION A-A TO E-E AND CURTAIN WALL=
1.25 CU, YDS, (0.96 m³) CLASS SI CONCRETE (OUTLET) FOR 9" (225) PAV'T.
1.27 CU, YDS, (0.96 m³) CLASS SI CONCRETE (OUTLET) FOR 10" (250) PAV'T. FOR SECTION F-F=
0.045 CU. YDS. (0.03 m3) CLASS SI CONCRETE PER ft. (m).

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

ILE NAME =	USER NAME = ଜୁଣ୍ଡୁଖୁଅ <mark>ପର shtu</mark> roadway det10.dgn	DESIGNED	-	M. DE YONG	REVISED	-	R. SHAH 09-09-94	Γ
:\diststd\22x34\bdØ3.dgn		DRAWN	-		REVISED	-	R. SHAH 10-25-94	l
	PLOT SCALE = 50.0000 '/ IN.	CHECKED	-		REVISED	-	E. GOMEZ 12-21-00	l
	PLOT DATE = 1/4/2008	DATE	-	08-04-86	REVISED			

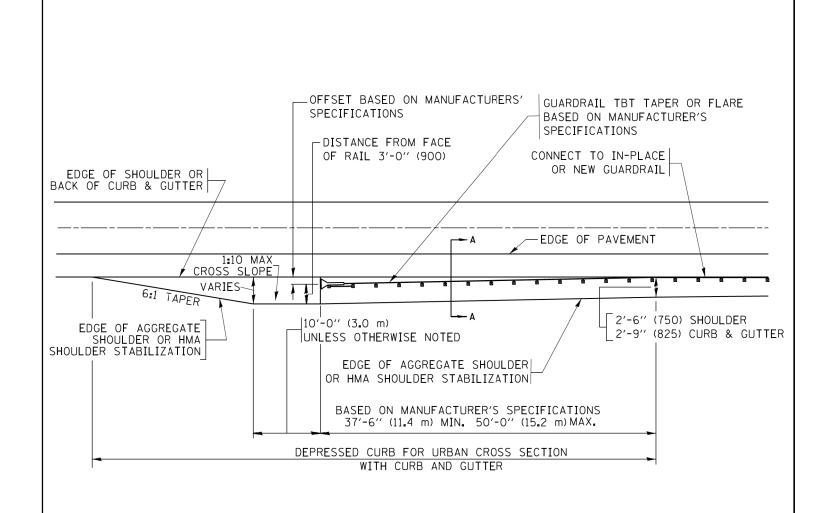




SECTION A-A

- NOTES: 1. THE AGGREGATE SHOULDER, 10 (250) OR HMA SHOULDER, 6 (150) (IF REQUIRED) SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL.
 - 2. "EXISTING" GUARDRAIL REFERS TO CONNECTING TERMINAL SECTION TO GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
 - 3. THE CONTRACTOR SHALL VERIFY THE TYPE/HEIGHT OF GUARDRAIL IN-PLACE BEFORE ORDERING THE NEW TERMINAL SECTION. COST INCLUDED WITH THE COST OF THE TERMINAL. THE TERMINAL SECTION HEIGHT TO BE PLACED MUST MATCH THE HEIGHT OF THE IN-PLACE GUARDRAIL.

DETAILS FOR STEEL PLATE BEAM GUARD RAIL ADJACENT TO CURB AND GUTTER [FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]



DEPRESSED CURB AND GUTTER AND SHOULDER TREATMENT AT TBT TY. 1 SPL.

AGGREGATE SHOULDER, 10 (250) WILL BE PAID ACCORDING TO SECTION 481.

HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE PAID ACCORDING TO SECTION 482.

COMB. CONC. C&G, STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

> TBT = TRAFFIC BARRIER TERMINAL ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

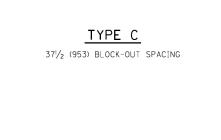
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pw:\\ILØ84EBIDINTEG.:ll:no:s.gov:PWIDOT\Do	cuments\IDOT Offices\District 1\Projects\Dist	t ∂RAWM \CADD o ta\CADsheets\bd34 . dgn	REVISED -	R. BORO 09-14-2009
	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED -	R. BORO 08-06-2012
Default	PLOT DATE = 12/21/2015	DATE - 09-22-90	REVISED -	R. BORO 05-08-2015

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	DETAILS FOR	DEPRESSED CURB 8	GUTTER AND
	SHOULDER	TREATMENT AT TB	Γ TY. 1 SPL.
SCALE: NONE	SHEET 2	OF 7 SHEETS STA.	TO STA

RTE.	S E C1	ION		COUNTY	SHEETS	NO.
524	14-00448-00-CH			KANE	183	162
BD600-10 (BD 34)				CONTRACT	NO.	61E67
		ILLINOIS	FED. A	ID PROJECT		





ATTACHMENTS.

RAIL ELEMENT SPLICE — (SEE DETAIL) /

TYPE A

6'-3" (1.905 M) TYPICAL POST SPACING

END OF STRUCTURE

AFTER THIS POST HAS BEEN LOCATED, DRILL HOLES IN CONCRETE FOR BLOCK-OUT

6′-3′′ (1.905 M)

6′-3′′ (1.905 M)

STEEL PLATE BEAM GUARDRAIL

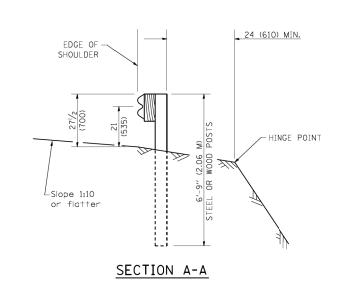
ELEVATION

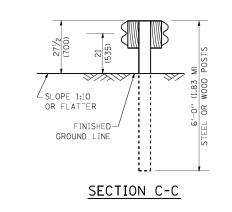
- END OF STRUCTURE

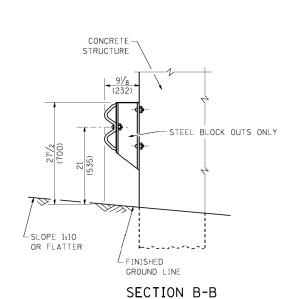
PLATE A

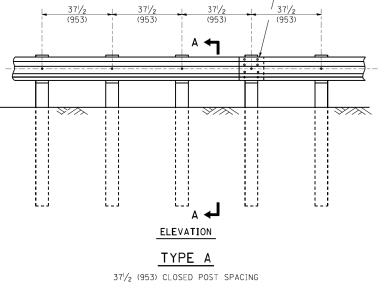
2 - 2 UNIT EXPANSION ANCHORS
FOR 5%" (M16) BOLTS WITH
STANDARD WASHERS. (STAGGERED)

BEGIN PAY LIMITS
FOR OTHER TYPES
OR USE END SECTION



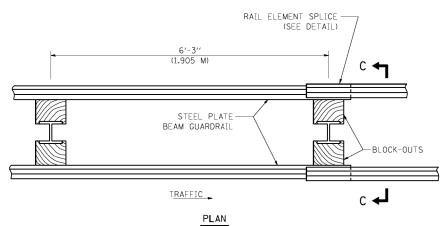






RAIL ELEMENT SPLICE -

(SEE DETAIL)



TYPE D

DOUBLE STEEL PLATE BEAM GUARDRAIL
6'-3" (1.905 M) TYPICAL POST SPACING

GENERAL NOTES

SCALE: NONE

ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

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

THE EXISTING STEEL POSTS MAY BE DRILLED TO MATCH THE BOLT PATTERN SHOWN HEREIN FOR THE WOOD BLOCK-OUT, OR A NEW STEEL POST SHALL BE PROVIDED.

THIS DETAIL IS APPLICABLE TO THE GUARDRAIL SYSTEM USED PRIOR TO JANUARY 1, 2007. FOR DETAILS ON THE MIDWEST GUARDRAIL SYSTEM, SEE STANDARD 630001.

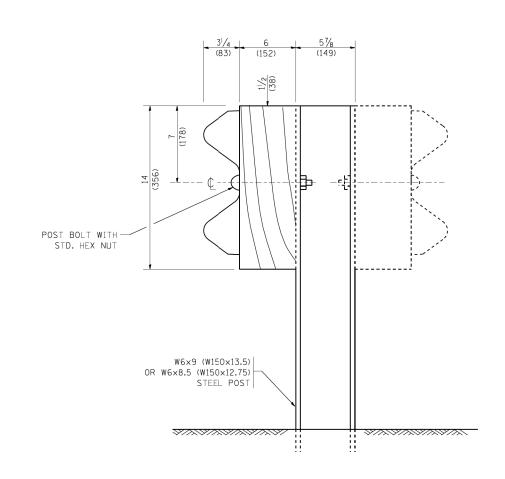
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W:\diststd\22x34\bm21.dgn		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -
	PLOT DATE = 1/4/2008	DATE -	REVISED -

STATE	E OI	FILLINOIS
DEPARTMENT	OF	TRANSPORTATION

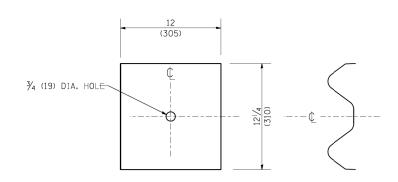
	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
					524	14-00448-00-CH	KANE	183	163
					BM-21	CONTRACT	NO.	61E67	
	SHEET NO. 3 OF 7	SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				







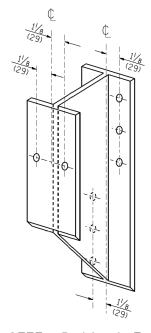
STEEL POST CONSTRUCTION



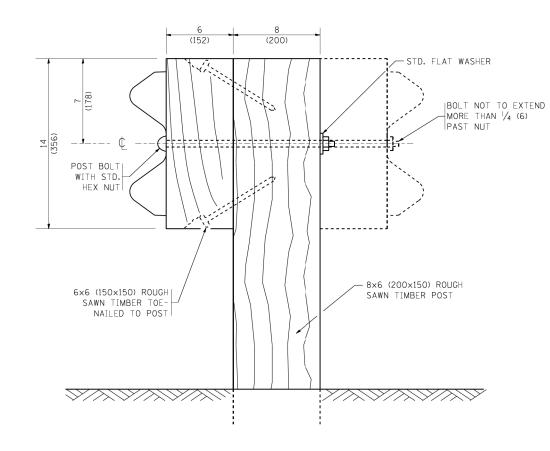
NOTE:

PLATE A SHALL BE PLACED BETWEEN RAIL ELEMENT AND BLOCK-OUT AT NON-SPLICE MOUNTING POINTS ONLY WHEN STEEL BLOCK-OUTS ARE USED.

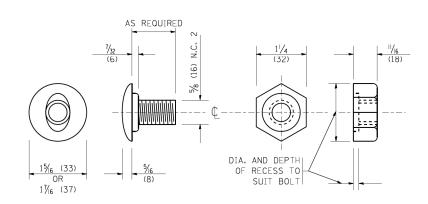
PLATE A



STEEL BLOCK-OUT DETAIL

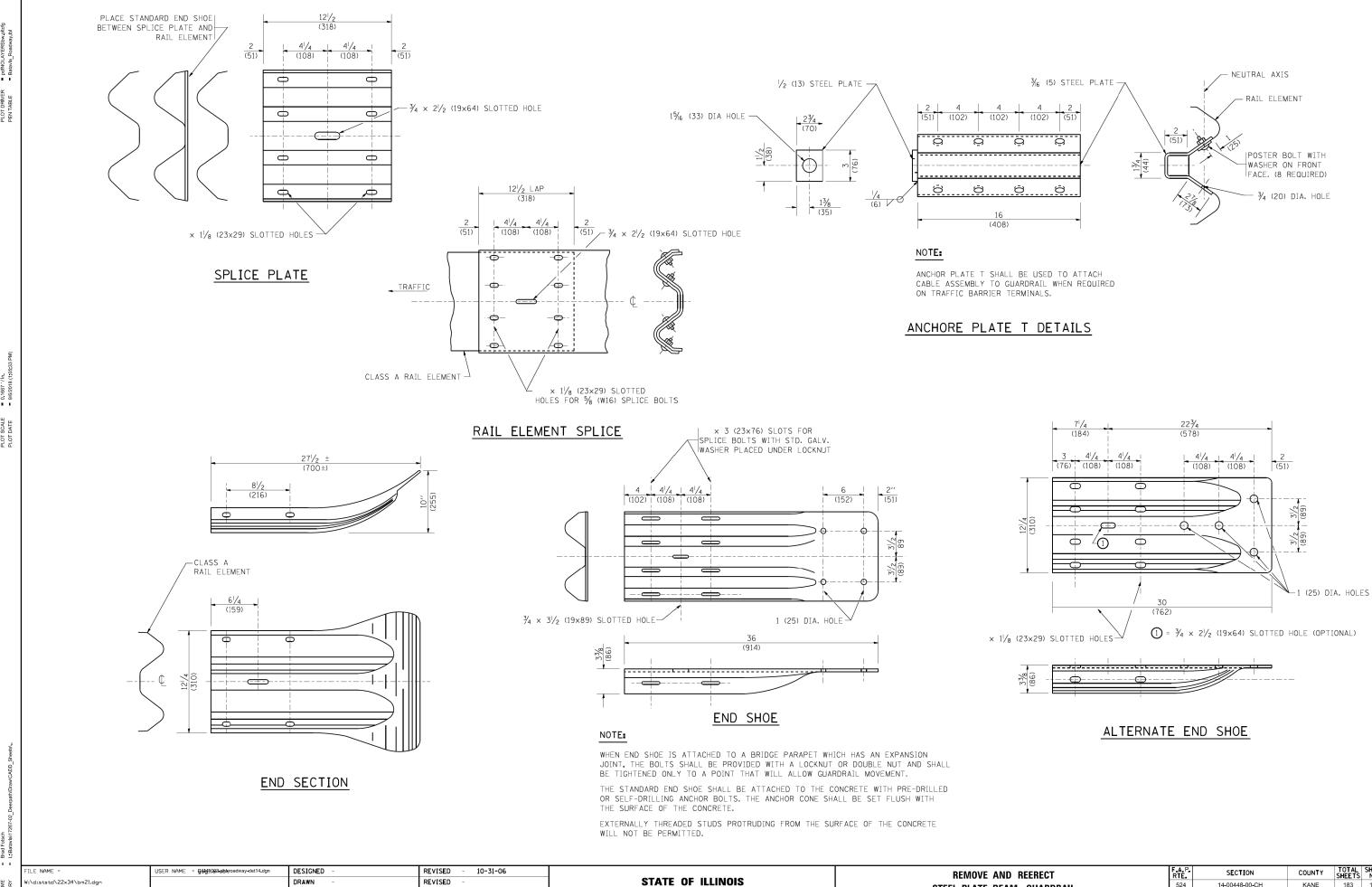


WOOD POST CONSTRUCTION



POST OR SPLICE BOLT & NUT

ı	FILE NAME =	USER NAME = ଜୁଣ୍ଡଖୁଖୁଉଜ୍ଞରଖ୍ୟ roadway-det13.dgn	DESIGNED -	REVISED - 10-31-06			REMOVE AND REERECT	F.A.P.	SECTION	COUNTY	TOTAL S	HEET
	W:\diststd\22x34\bm21.dgn		DRAWN -	REVISED -	STATE OF ILLINOIS			524	14-00448-00-CH	KANE	183	164
í		PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	STEEL PLATE BEAM GUARDRAIL		<u> </u>	BM-21	CONTRACT	NO. 6	.E67
		PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE	SHEET NO. 4 OF 7 SHEETS STA. TO STA.	FED. ROAD D	IST. NO. 1 ILLINOIS FED. A	AID PROJECT		



DEPARTMENT OF TRANSPORTATION

STEEL PLATE BEAM GUARDRAIL

TO STA.

SHEET NO. 5 OF 7 SHEETS STA.

SCALE: NONE

BM-21

CONTRACT NO. 61E67

PLOT SCALE = 50.0000 '/ IN.

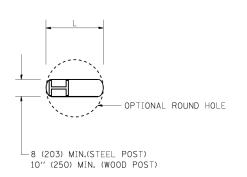
PLOT DATE = 1/4/2008

CHECKED

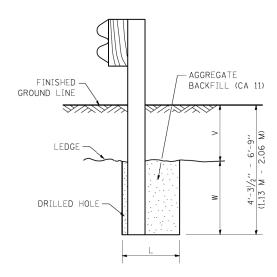
DATE

REVISED

REVISED



PLAN

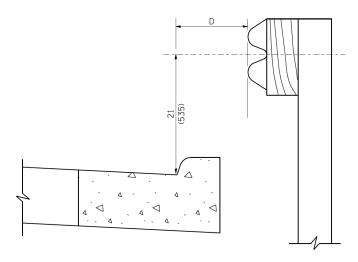


NOTE:

LEDGE LINE IS TOP OF ROCK LEDGE OR HARD SLAG FILL.

ELEVATION

FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED



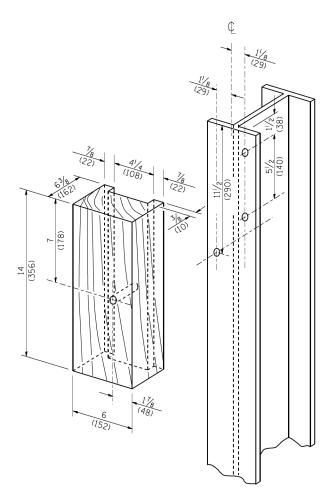
NOTE:

IF IT IS NECESSARY FOR D TO BE MORE THAN 12 (300) AND LESS THAN 10'-0" (3.0 M) TYPE M-2 (M-5) CURB AND GUTTER (STD. 606001) SHALL BE USED IN FRONT OF AND IN ADVANCE OF THE GUARDRAIL.

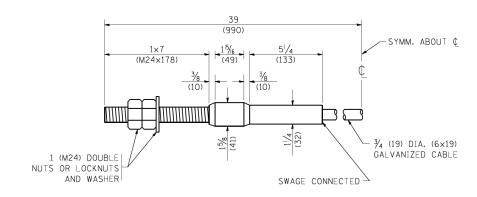
GUARDRAIL PLACED BEHIND CURB

(D = O DESIRABLE TO 12 (300) MAXIMUM)

V	w	L		
V	W	STEEL POST	WOOD POST	
0 - 18	24	21	23	
(0 - 460)	(610)	(530)	(580)	
>18 - 41.5	12	8	10	
(> 460 - 825)	(305)	(203)	(250)	
>41.5 - 53.5	12 - 0	8	10	
(> 825 - 1.13 M)	(350 - 0)	(203)	(250)	



WOOD BLOCK-OUT AND STEEL POST DETAILS



CABLE ASSEMBLY

(40,000 LBS (18,100 KG) MIN. BREAKING STRENGTH)
TIGHTEN TO TAUT TENSION

FILE NAME =	USER NAME = ଜୁଣ୍ଡୁଖୁଉଡ଼ିୟ shturoadway det15 dgn	DESIGNED -	REVISED - 10-31-06	Ī
W:\d:ststd\22x34\bm21.dgn		DRAWN -	REVISED -	
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -	
	PLOT DATE = 1/4/2008	DATE -	REVISED -	

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SCALE: NONE

REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		524	14-00448-00-CH	KANE	183	166	
			BM-21	CONTRACT	NO.	61E67	
SHEET NO. 6 OF 7 SHEETS STA.	TO STA.	EED B	FED. ROAD DIST. NO. 1 THEINOIS FED. AID PROJECT				

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SECTION **BENCHING DETAIL** 14-00448-00-CH FOR EMBANKMENT WIDENING BD-51 SHEET NO. 7 OF 7 SHEETS STA. TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT

GUARDRAIL OR PROP. EMBANKMENT CONCRETE BARRIER WIDENING (VARIES) 2'-0" (600) MAXIMUM 8'-0" (2.4 m MIN.) PROPOSED FORESLOPE 2:1 MAXIMUM MERGER POINT (3.6 m MAX.)

TYPICAL BENCHING DETAIL FOR EMBANKMENT

NOTES:

SCALE: NONE

- CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS.
- BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- 4 TRIM TO FINAL SLOPE.
- EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL, NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- SLOPES SHALL BE BENCHED ACCORDING TO THIS DETAIL WHEN THE SLOPE IS STEEPER THAN 4:1 AND THE HEIGHT IS GREATER THAN 5' (1.5 m).

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

COUNTY

KANE

CONTRACT NO. 61E67

