

NOTE:

- TRAFFIC SIGNALS AT ROOSEVELT ROAD ARE TO BE REMOVED IN THIS CONTRACT, COMPLETE.
- 2. PRIOR TO INSTALLATION OF THE TEMPORARY "WIRELESS" RADIO INTERCONNECT, THE CONTRACTOR SHALL TEST BETWEEN THE INTERSECTIONS SHOWN ON THE PLANS FOR WIRELESS COMMUNICATIONS AND BE FOUND TO BE ACCEPTABLE BEFORE DECIDING ON THE TYPE OF INTERCONNECT TO BE USED.

NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM

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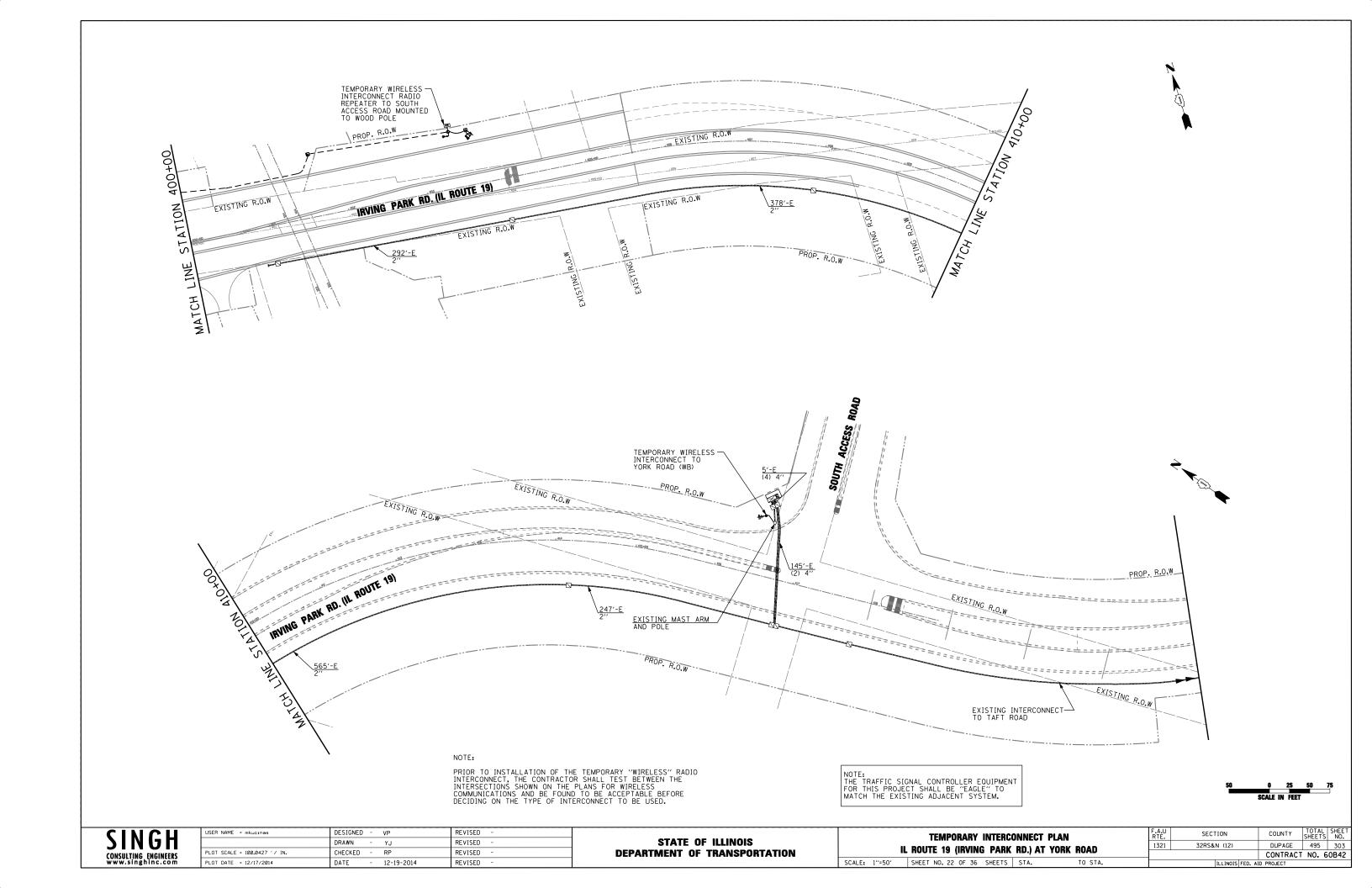
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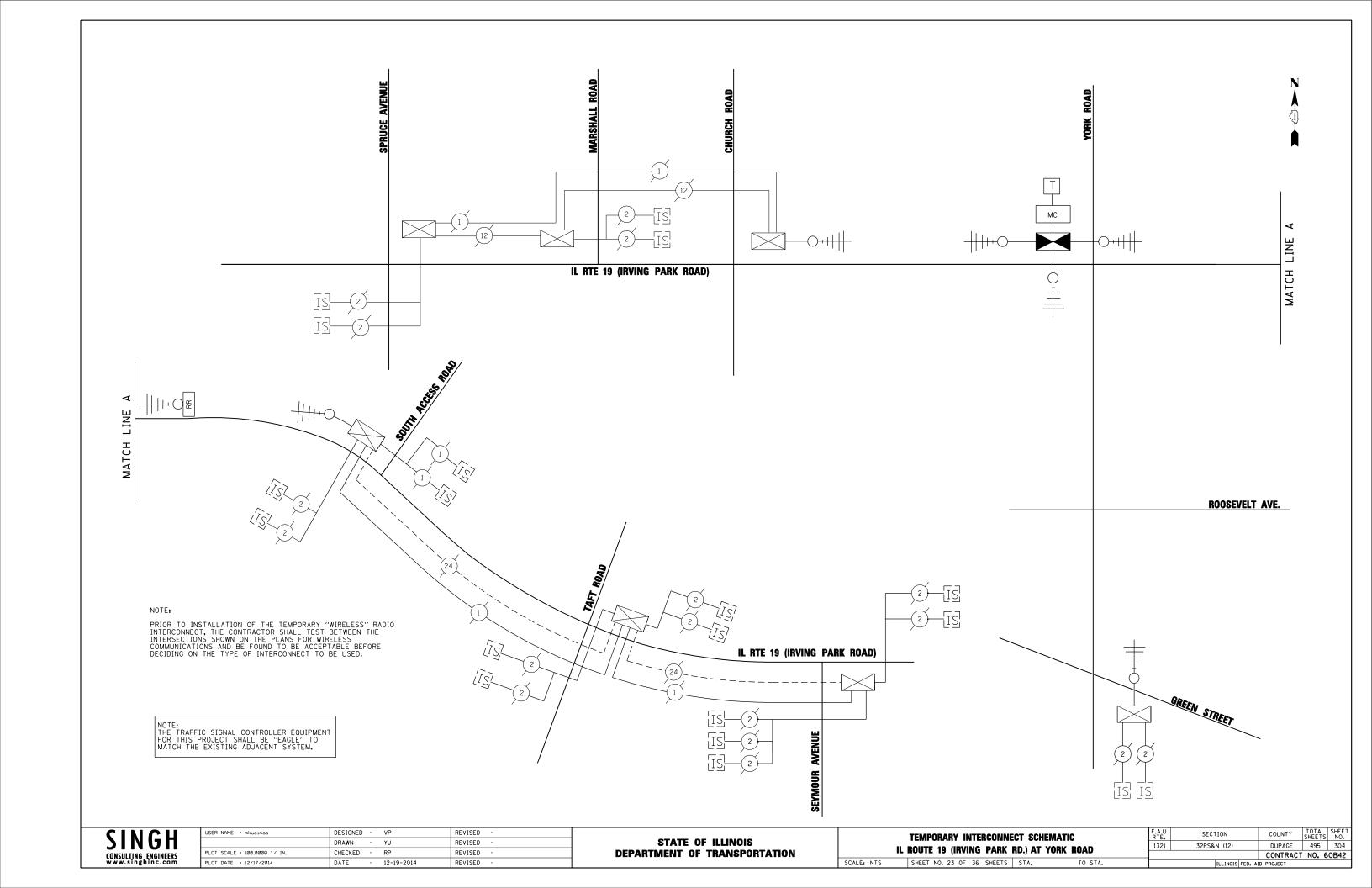
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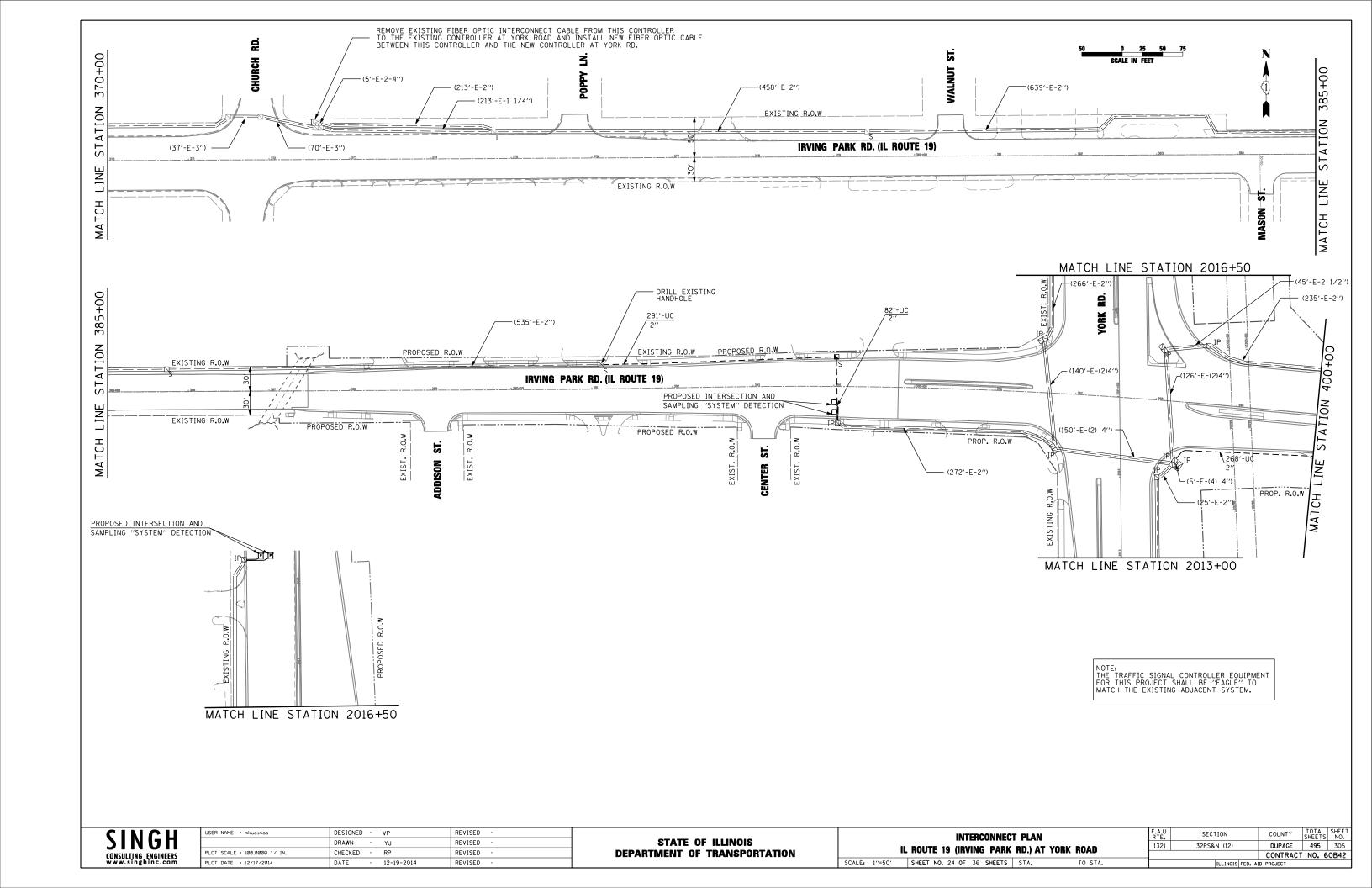
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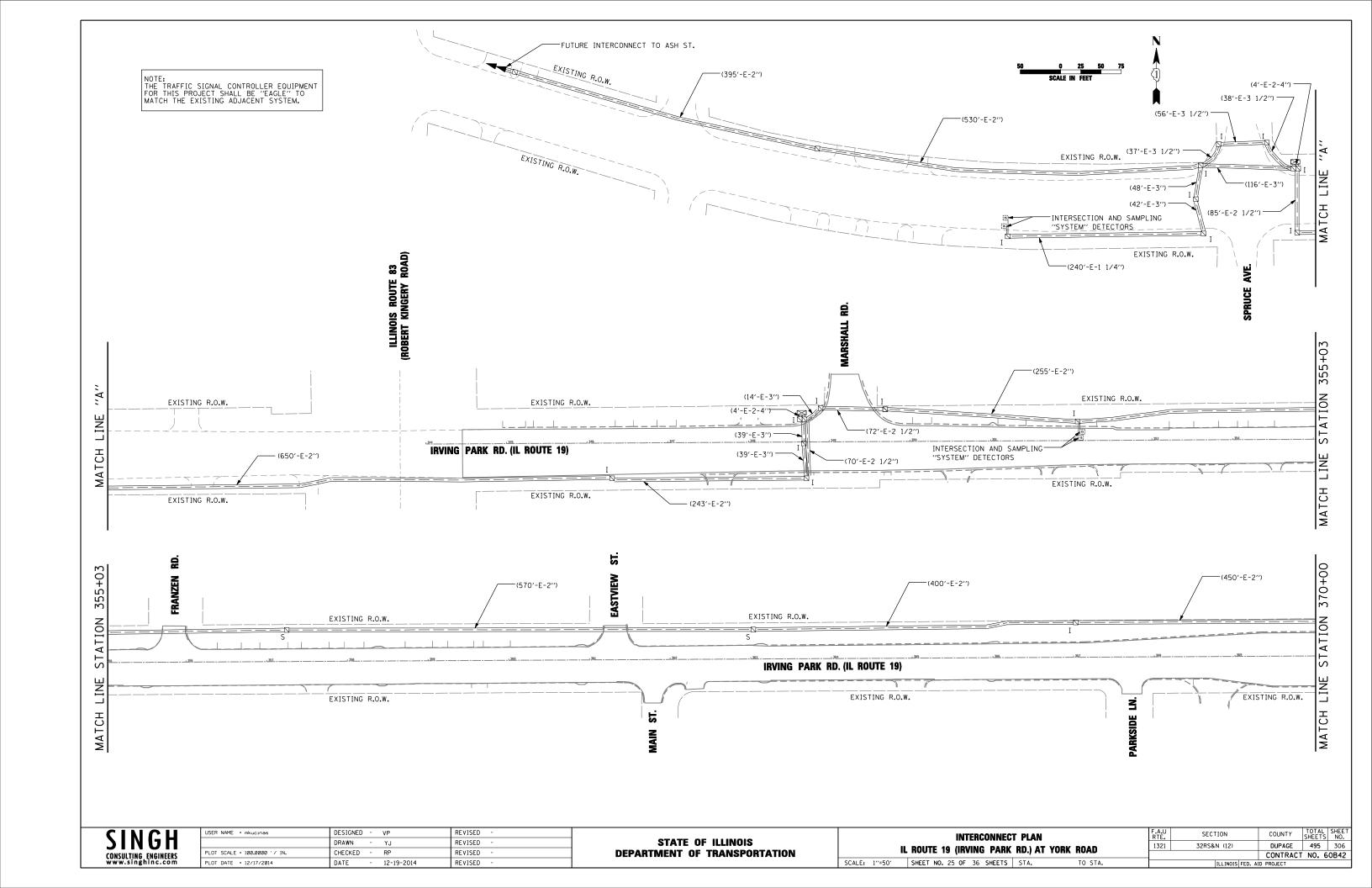
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TEMPORARY INTERCONNECT PLAN IL ROUTE 19 (IRVING PARK RD.) AT YORK ROAD		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		32RS&N (12)	DUPAGE	495	302
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SHEET NO. 21 OF 36 SHEETS STA TO STA	-	lu unare esa u			-

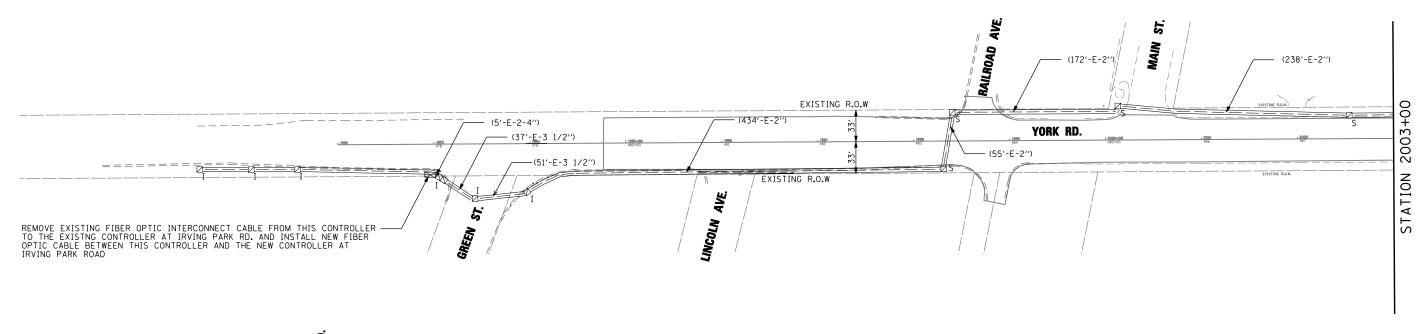












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NOTE: THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM

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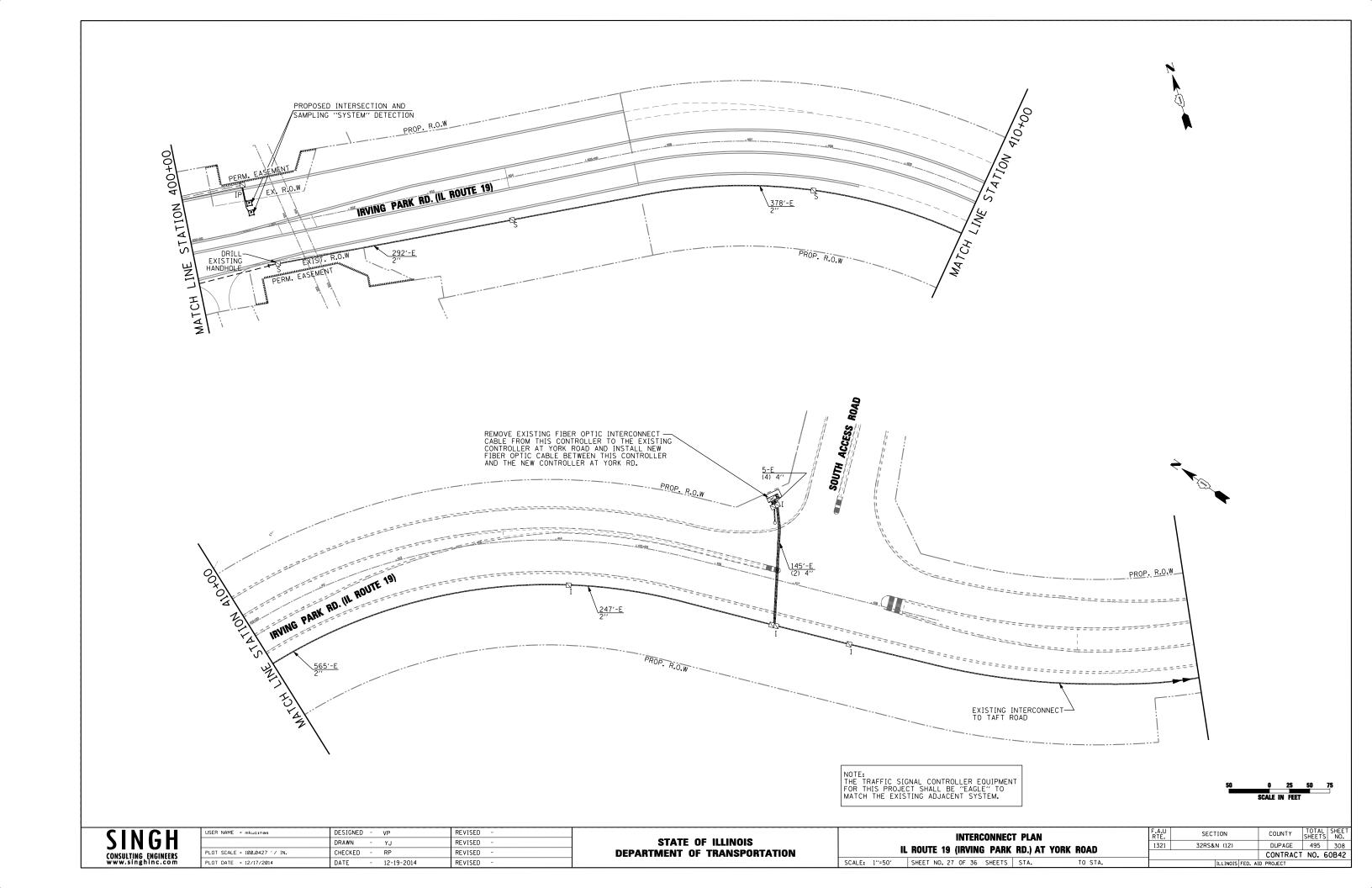
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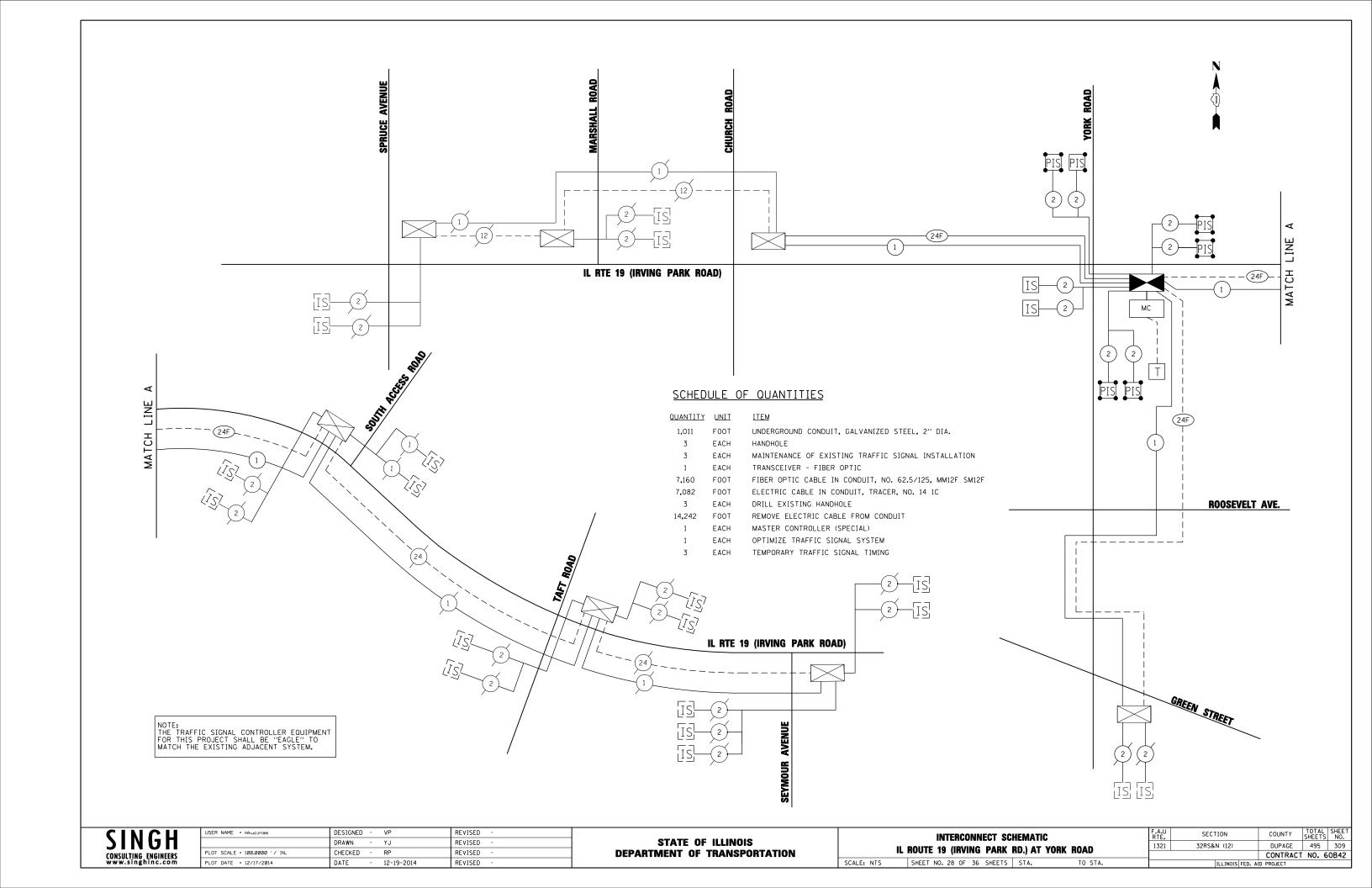
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SCALE:

INTERCONNECT PLAN	F.A.U RTE.	SECTION	
IL ROUTE 19 (IRVING PARK RD.) AT YORK ROAD	1321	32RS&N (12)	
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SHEET NO. 26 OF 36 SHEETS STA. TO STA.		ILLINOIS FED. AI	D

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
32RS&N (12)	DUPAGE	495	307
	CONTRACT	NO. 6	OB42
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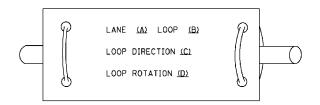




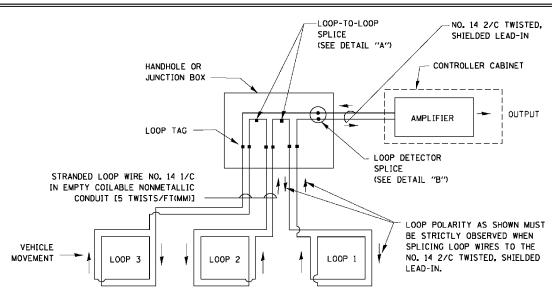
LOOP DETECTOR NOTES

- 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

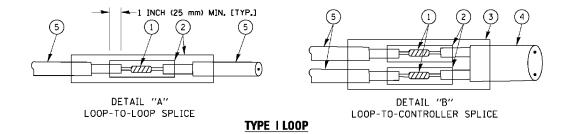


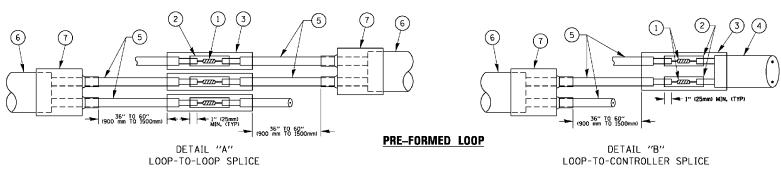
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



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

- $\stackrel{\textstyle \frown}{}_{\scriptstyle 1}$ 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:

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

DUPAGE 495 310

CONTRACT NO. 60B42

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

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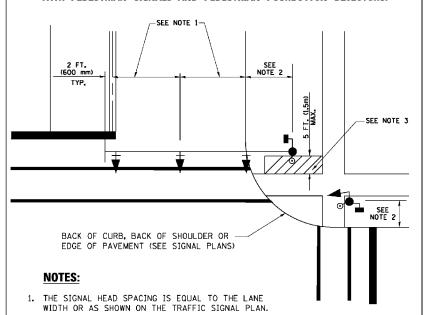


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STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

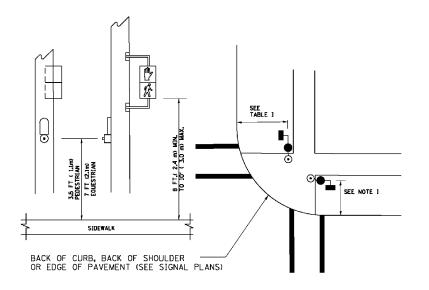
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STANDARD TRAFFIC SIGNAL DESIGN DETAILS	F.A.U RTE.	SECTION	COUNTY
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SHEET NO. 29 OF 36 SHEETS STA. TO STA.		ILLINOIS FED.	AID PROJECT

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



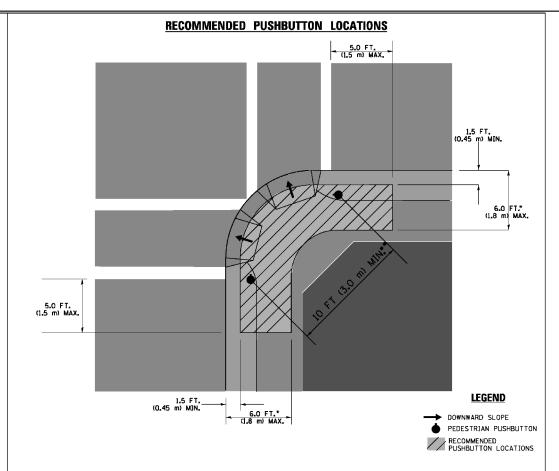
- 2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
- PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
- 4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE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

PEDESTRIAN SIGNAL POST AND PEDESTRIAN PUSH BUTTON POST



NOTES:

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

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

TRAFFIC SIGNAL FOUIPMENT OFFSET

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

NOTES

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

SCALE:

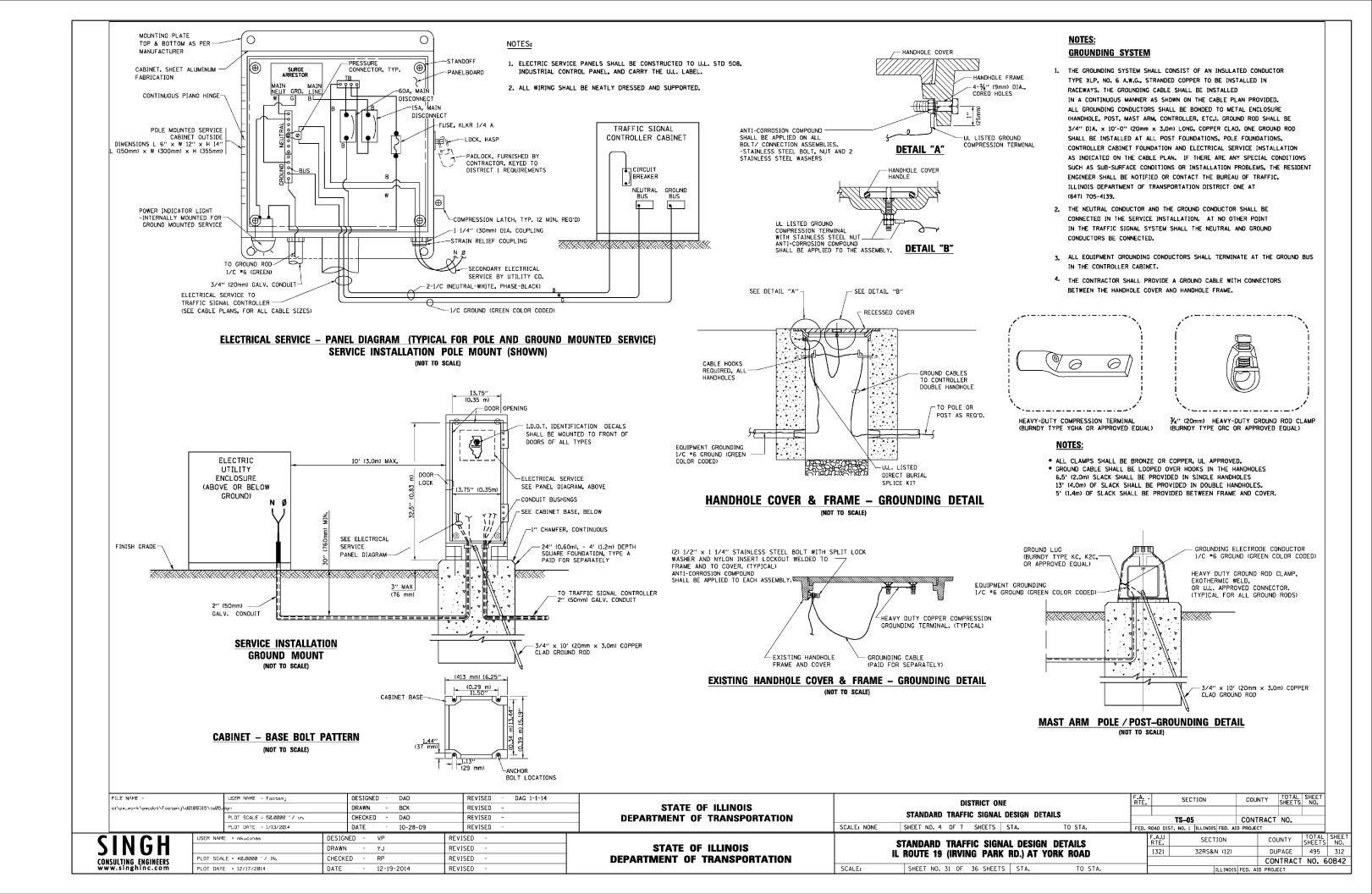
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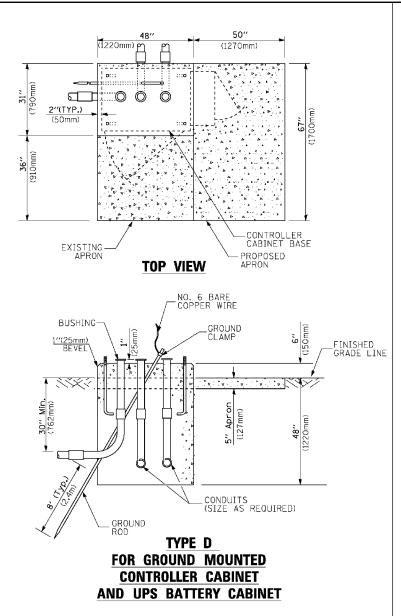
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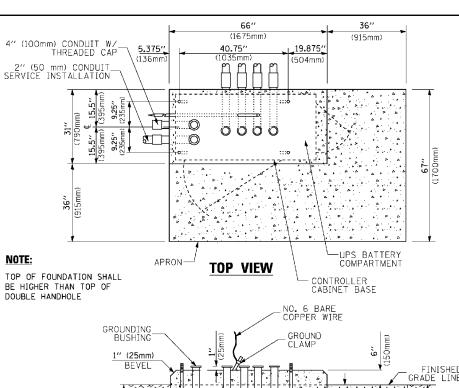
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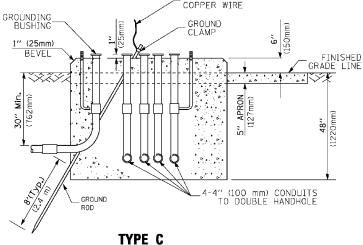
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

STANDARD TRAFFIC SIGNAL DESIGN DETAILS		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IL ROUTE 19 (IRVING PARK RD.) AT YORK ROAD	1321	32RS&N (12)	DUPAGE	495	311
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SHEET NO. 30 OF 36 SHEETS STA. TO STA.		ILLINOIS FED. AI	D PROJECT		





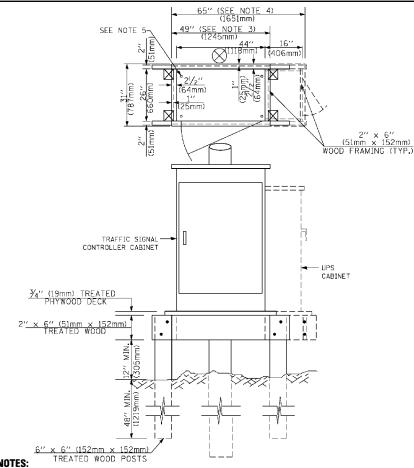




FOR GROUND MOUNTED

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

CONTROLLER CABINETS



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

2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.

3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.

4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.

5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.

6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

TEMPORARY SIGNAL CONTROLLER WOOD SUPPORT PLATFORM

FEET	METER
6.5	2.0
13.0	4.0
2.0	0.6
2.0	0.6
1.5	0.5
13.0	4.0
1.5	0.5
1.5	0.5
5.0	1.6
	6.5 13.0 2.0 2.0 1.5 13.0 1.5

CABLE SLACK

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

VERTICAL CABLE LENGTH

DEPTH OF FOUNDATION

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)
NOTEC.					

NOTES:

4'-0" (1.2m) 4'-0" (1.2m)

4'-0" (1.2m) 4'-0" (1.2m)

SCALE:

- 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 (Qu) > 1.01 stf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureou of Bridges & structures should be contacted for a revised design if other conditions are encountered.
- 2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
- 3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations
- 4. For most arm assemblies with dual arms refer to state standard 878001.

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

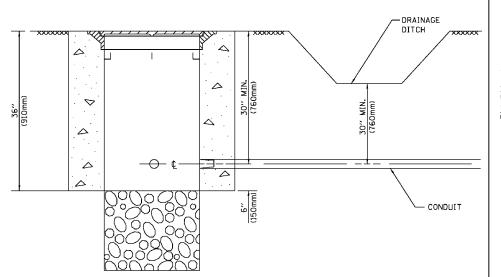
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c:\pw_work\pwidot\footemj\dØlØ83	5\tsØ5.dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS			NIE.			SHELTS NO.	
	PLOT SCALE = 50.00000 '/ in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION				TS-05	CONTRACT	NO.	
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -				TO STA.	FED. ROAD DIST	. NO. 1 ILLINOIS FED. A		
					1						TOTAL

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STANDARD TRAFFIC SIGNAL DESIGN DETAILS
IL ROUTE 19 (IRVING PARK RD.) AT YORK ROAD

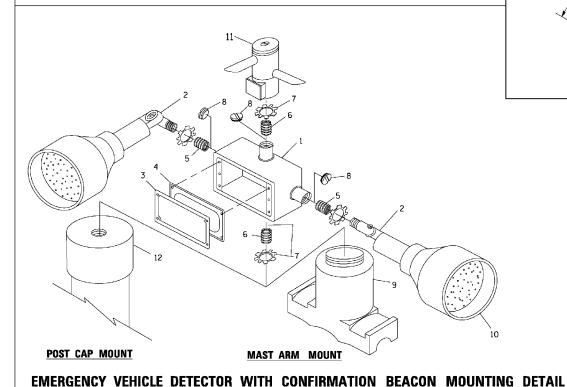
SHEET NO. 32 OF 36 SHEETS STA. TO STA.

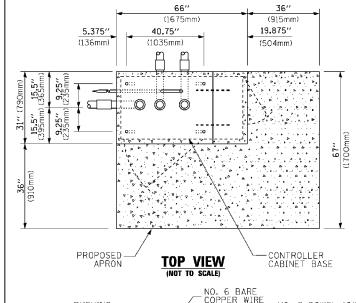


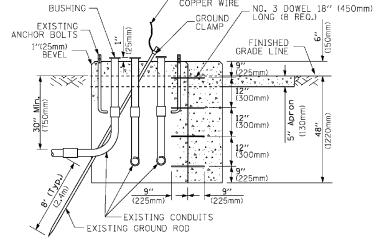
<u>NOTES</u>

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

HANDHOLE WITH MINIMUM CONDUIT DEPTH







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

(NOT TO SCALE)

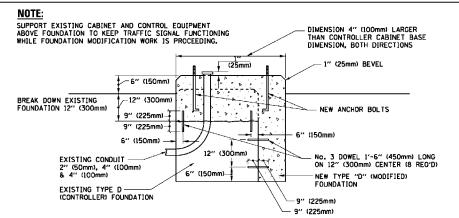
R2.95" (75mm) R0.50" (12mm) R11.81" (300mm) R11.81" (300mm) R2.16" (55mm) R11.81" (300mm) R11.81" (300mm) R12.81" (300mm) R13.81" (300

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

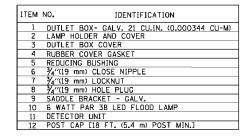
SHROUD

NOTES

- DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD.
 THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
- 2. THE SUPPLIER SHALL VERIFIED THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
- 3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

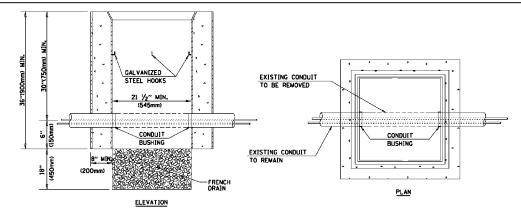


MODIFY EXISTING TYPE "D" FOUNDATION



NOTES

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



NOTES:

SCALE:

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

HANDHOLE TO INTERCEPT EXISTING CONDUIT

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		PLOT SCALE = 50.0000 '/ in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION		STANDARD TRAFFIC SIGNAL DESIGN DETAILS	TS-05	CONTRACT NO.
		PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SCALE: NON	NE SHEET NO. 6 OF 7 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED.	AID PROJECT
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STANDARD TRAFFIC SIGNAL DESIGN DETAILS
IL ROUTE 19 (IRVING PARK RD.) AT YORK ROAD

SHEET NO. 33 OF 36 SHEETS STA. TO STA.

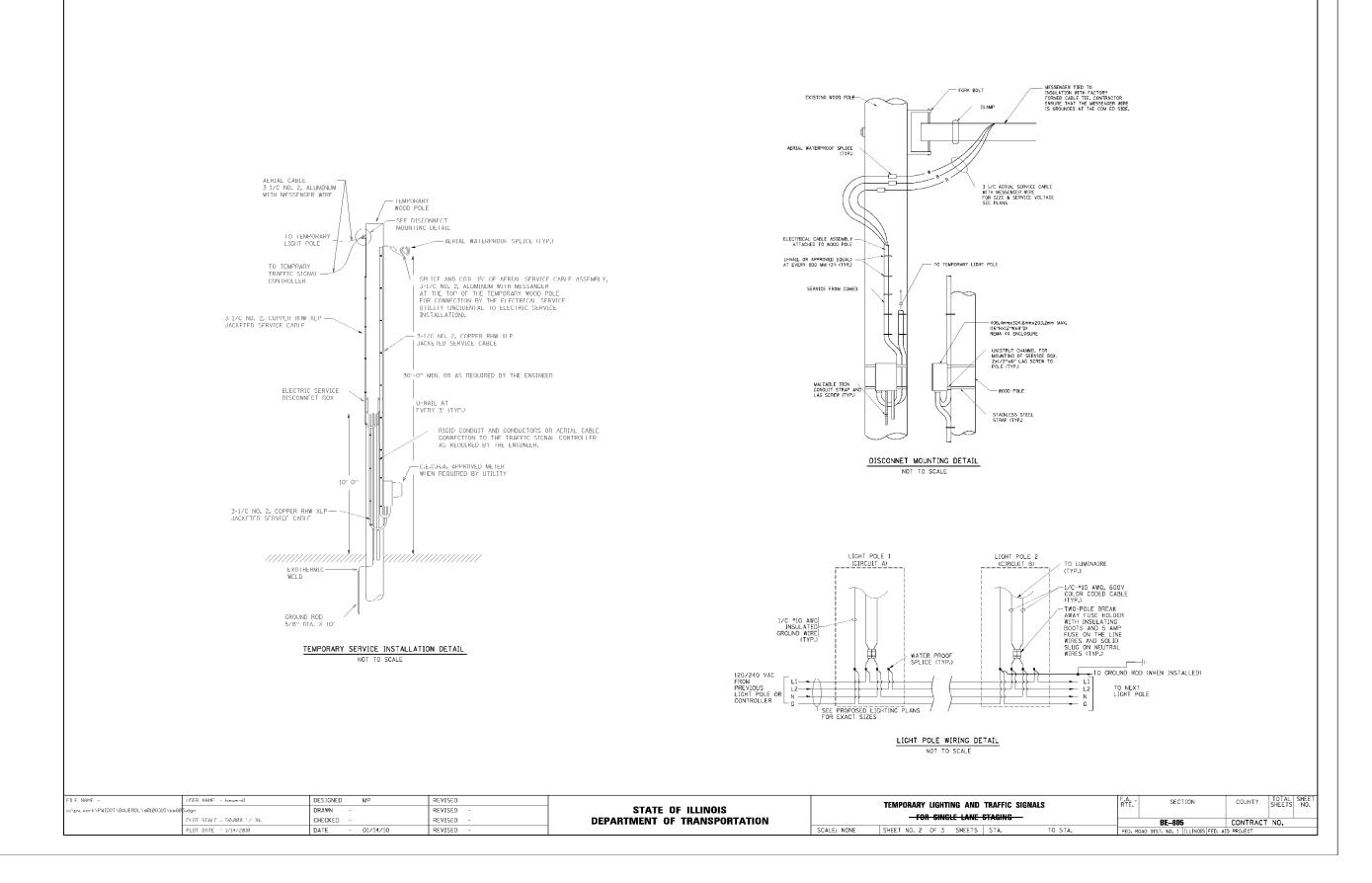
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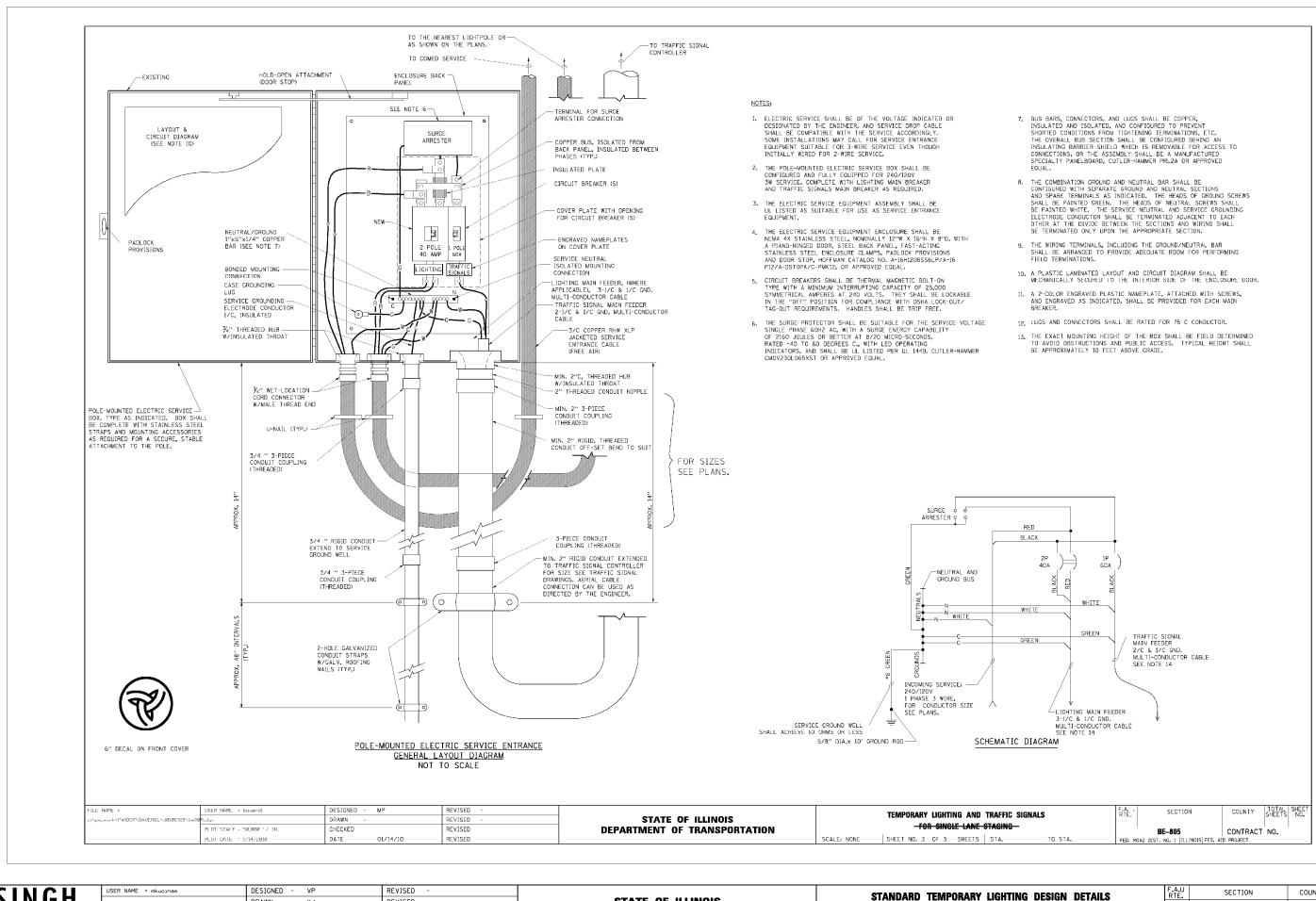
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PLOT DATE = 12/17/2014	DATE	-	12-19-2014	REVISED -	

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

								DESIGN		
IL I	ROUTE	19	(II	₹VII	NG	PARK	RD.)	AT YORK	ROAD	
	SHEET	NO.	34	0F	36	SHEETS	STA	١.	TO STA.	

SCALE:



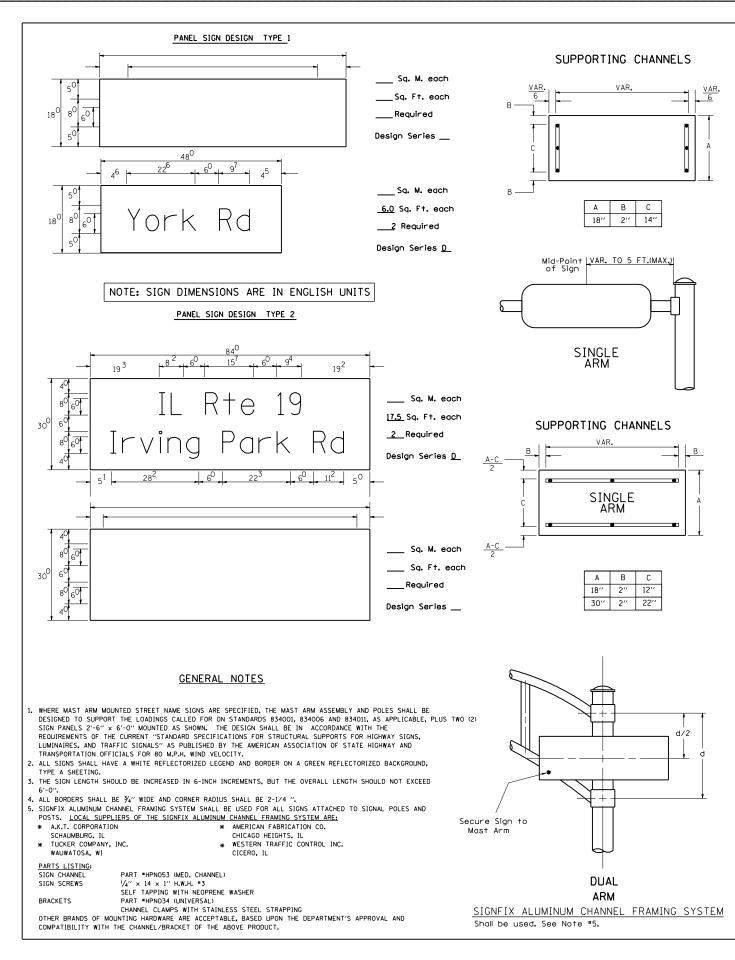


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SCALE:

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	ROUTE 19 (IRVING PARK			1321	32RS&N (12)	DUPAGE	495	316
	IOOTE IS (IIITHIE I AIII	110.j AT 1011K	ПОЛЬ			CONTRACT	NO. 6	OB42
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UPPER AND LOWER CASE LETTER WIDTHS

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H	3 ²	40	43	53	h	3 ⁵	42
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REVISIONS	
NAME	DATE
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CADD	10/00

Illinois Department of Transportation DISTRICT 1

MAST ARM MOUNTED STREET NAME SIGNS

SCALE: NONE DATE: \$\$DATE\$\$ DRAWN BY: RDB DESIGNED BY: JHE CHECKED BY: DAD

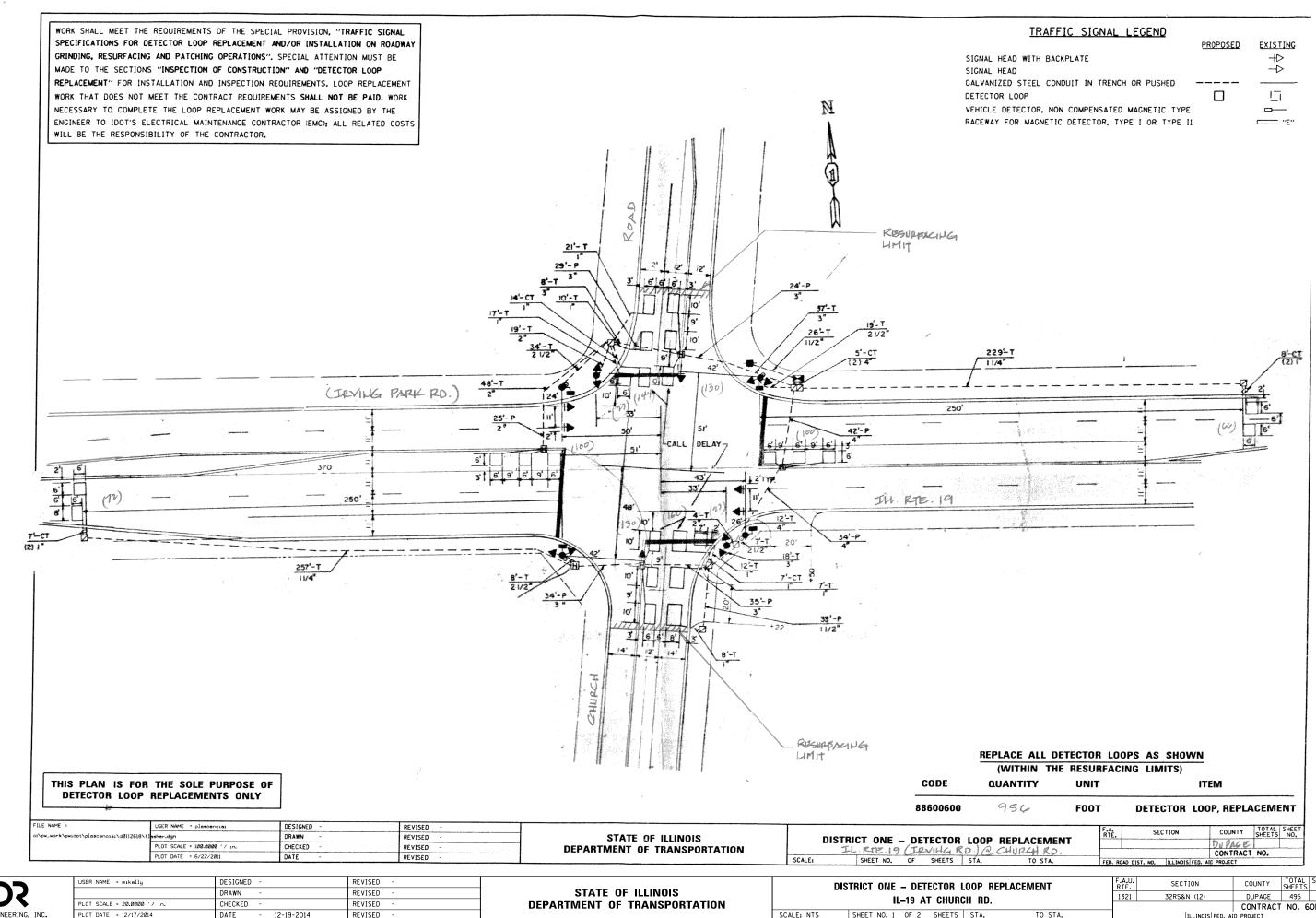
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAST	ΓARM		STRICT		NAME SIGNS
SCALE: N.T.S.	SHEET NO.	36 OF 36	SHEETS	STA.	TO STA.

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1321	32RS&N (12)	DUPAGE	495	317
		CONTRACT	NO. 6	OB42
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HDR ENGINEERING, INC.

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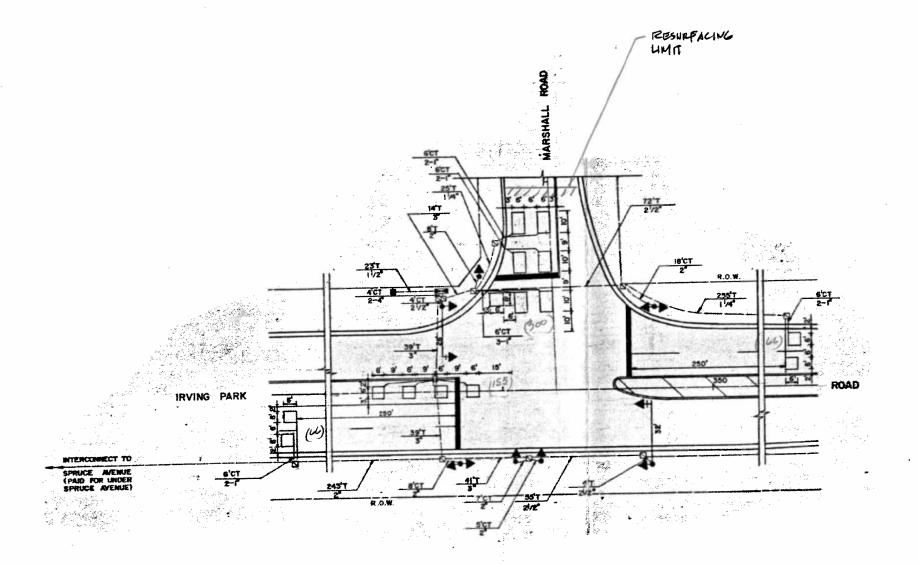
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE - DETECTOR LOOP REPLACEMENT	F.A.U. RTE.	SECTI
IL-19 AT CHURCH RD.	1321	32RS&N
IL-13 AT OHOHOH HD.		
SHEET NO. 1 OF 2 SHEETS STA. TO STA.		TI

DUPAGE 495 318 CONTRACT NO. 60B42

WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "TRAFFIC SIGNAL SPECIFICATIONS FOR DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION ON ROADWAY GRINDING, RESURFACING AND PATCHING OPERATIONS". SPECIAL ATTENTION MUST BE MADE TO THE SECTIONS "INSPECTION OF CONSTRUCTION" AND "DETECTOR LOOP REPLACEMENT" FOR INSTALLATION AND INSPECTION REQUIREMENTS. LOOP REPLACEMENT WORK THAT DOES NOT MEET THE CONTRACT REQUIREMENTS SHALL NOT BE PAID. WORK NECESSARY TO COMPLETE THE LOOP REPLACEMENT WORK MAY BE ASSIGNED BY THE ENGINEER TO IDOT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC): ALL RELATED COSTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

TRAFFIC SIGNAL LEGEND PROPOSED EXISTING SIGNAL HEAD WITH BACKPLATE 4 SIGNAL HEAD \rightarrow GALVANIZED STEEL CONDUIT IN TRENCH OR PUSHED DETECTOR LOOP VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE ___ RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II <u>~~~</u> ′ε"



THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENTS ONLY

REPLACE ALL DETECTOR LOOPS AS SHOWN

FOOT

(WITHIN THE RESURFACING LIMITS)

CODE QUANTITY 587

DETECTOR LOOP, REPLACEMENT

DESIGNED -REVISED . DRAWN ~ REVISED -PLOT SCALE . 188.8888 '/ IN CHECKED -REVISED -PLOT DATE . 6/22/2811 REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** DISTRICT ONE - DETECTOR LOOP REPLACEMENT

THE REIG TRYING PK. @ MARSHILL RD.

SHEET NO. OF SHEETS STA. TO STA.

88600600

ITEM

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HDR ENGINEERING, INC.	PLOT DATE = 12/17/2014	DATE - 12-19-2014	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** DISTRICT ONE - DETECTOR LOOP REPLACEMENT IL-19 AT MARSHALL RD. SHEET NO. 2 OF 2 SHEETS STA.

SECTION COUNTY 1321 32RS&N (12) DUPAGE 495 319 CONTRACT NO. 60B42 ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE DETAILS IN THE PLANS, THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS, AND THE LATEST EDITION OF THE FOLLOWING STATE OF ILLINOIS SPECIFICATIONS: "THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (REFERRED TO AS THE "STANDARD SPECIFICATIONS"), THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", THE "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS", THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", THE "MANUAL OF TEST PROCEDURES FOR MATERIALS" AND THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS".

UTILITY LOCATIONS HAVE NOT BEEN SHOWN ON THESE PLANS. THE CONTRACTOR SHALL HAVE THE RESPECTIVE UTILITY COMPANIES FIELD LOCATE ALL THEIR FACILITIES PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL ALSO VERIFY THE DEPTHS OF THE EXISTING UTILITIES IF NECESSARY. ANY RELOCATION OR LOWERING OF UTILITIES SHALL BE COORDINATED BY THE

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER OR VILLAGE.

THE CONTRACTOR SHALL NOTIFY THE VILLAGE PUBLIC WORKS ADMINISTRATOR AT LEAST 48 HOURS IN ADVANCE OF BEGINNING WORK TO OBTAIN VILLAGE UTILITY LOCATIONS AND SHALL COORDINATE ALL CONSTRUCTION OPERATIONS WITH THE ENGINEER.

MATERIALS RESULTING FROM THE REMOVAL OF PAVEMENT, DRIVEWAYS, CURB AND GUTTER, HOT-MIX ASPHALT SURFACES, ETC. SHALL BE REMOVED AT THE END OF EACH DAY TO AN APPROVED SITE. IN THE JUDGMENT OF THE VILLAGE, SHOULD IT BE NECESSARY TO REMOVE SUCH MATERIALS, THE VILLAGE WILL HAVE THE MATERIAL REMOVED AND THE CONTRACTOR WILL BE BILLED (CHARGED)

IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY RESIDENTS AND THE VILLAGE WHEN ACCESS TO THEIR DRIVEWAYS WILL BE TEMPORARILY CLOSED. THE CONTRACTOR SHALL DISTRIBUTE NOTICES PROVIDED BY THE VILLAGE TO RESIDENTS. EVERY EFFORT SHALL BE MADE TO ACCOMMODATE ACCESS TO THESE PROPERTIES INCLUDING KNOCKING ON DOORS WHEN DRIVEWAYS ARE ABOUT TO BE CLOSED.

THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS OR PROPERTY OR REFERENCE MARKERS UNTIL THE OWNERS, HIS AGENT OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.

ACCESS TO PRIVATE DRIVEWAYS SHALL BE PROVIDED AT ALL TIMES EXCEPT DURING ACTUAL CONSTRUCTION ADJACENT THERE TO. TEMPORARY RAMPS SHALL BE CONSTRUCTED AS NEEDED TO PROVIDE SUCH ACCESS, UTILIZING CRUSHED STONE OR CRUSHED GRAVEL.

EXISTING STREET LIGHTING UNITS (NOTED IN PLANS) TO REMAIN IN OPERATION AND TO BE MAINTAINED BY THE CONTRACTOR UNTIL NEW STREET LIGHTS ARE OPERATIONAL AND ACCEPTED BY THE VILLAGE.

CARE IS TO BE TAKEN AS NOT TO DAMAGE ANY OF THE EXISTING TRAFFIC SIGNAL CONDUITS, DETECTORS AND EQUIPMENT. IF ANY OF THE TRAFFIC SIGNAL CONDUIT AND/OR EQUIPMENT IS DAMAGED THE CONTRACTOR SHALL REPAIR AND/OR REPLACE THE CONDUIT AND/OR EQUIPMENT AT NO COST TO THE COUNTY OR THE VILLAGE.

THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENT FOR BURIED WARNING TAPE, SPECIFIED AS PART OF "TRENCH AND BACKFILL FOR ELECTRICAL WORK". THE INSTALLATION OF THE TAPE SHALL BE INSPECTED AND APPROVED BY THE RESIDENT ENGINEER PRIOR TO BACKFILLING OR DURING PLOWING OPERATIONS, AS APPLICABLE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF FINISHED GRADE. THE RESIDENT ENGINEER MAY ASSIST THE CONTRACTOR, AS APPLICALBE, BUT THE RESPONSIBILITY FOR COORDINATING THE FINISHED GRADE ELEVATION WITH THE TOP OF FOUNDATION HEIGHTS AND THE LIGHT SHALL REMAIN WITH THE CONTRACTOR.

THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR WIRE MARKERS AND SHALL TAG ALL WIRE ACCORDINGLY.

EQUIPMENT GROUND CONDUCTORS SHALL BE SPLICED AND/OR BONDED AT EACH LIGHT POLE OR OTHER PIECE OF EQUIPMENT.

CONDUIT AND UNIT DUCT MUST BE POSITIONED IN THE FIELD TO AVOID CONFLICT WITH TREES, BUSHES, DRAINS AND OTHER UTILITIES AND LANDSCAPING.

ALL DISTURBED AREAS WHERE RESTORATION IS NOT COVERED BY APPLICABLE SECTIONS OF THE SPECIAL PROVISIONS MUST BE RESTORED TO THE SATISFACTION OF THE ENGINEER. THE WORK MUST BE CONSIDERED INCIDENTAL TO THE CONTRACT. SEPARATE PAYMENT WILL NOT BE MADE.

THE EXACT LOCATIONS OF ALL UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY COMPONENTS OF THE LIGHTING SYSTEM. FOR THE LOCATIONS OF THE UTILITIES, CALL JULIE TOLL FREE AT 1-800-892-0123. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE EXISTING TRAFFIC SIGNAL CABLES AND CONDUITS.

ELECTRIC HANDHOLES ARE FOR THE PURPOSE OF PULLING CABLES ONLY. NO UNDERGROUND SPLICES OR SPLICES IN HANDHOLES ARE PERMITTED.

LIGHTING UNIT SETBACKS ARE FROM FACE OF CURB TO FACE OF POLE AS CALLED OUT ON DRAWINGS.

CONSTRUCTION SEQUENCING NOTES

CONTRACTOR IS RESPONSIBLE FOR COORDINATING ELECTRICAL/LIGHTING WORK WITH OTHER TRADES AND ANY CHANGES IN CONSTRUCTION STAGING SEQUENCING.

- A. PRE-STAGE:

 1. INSTALL TEMPORARY LIGHTING
 A. NORTHWEST CORNER OF THE INTERSECTION OF IRVING PARK ROAD
 (IL19) AND YORK ROAD.

 CONTRIBUTE CORNER OF THE INTERSECTION OF IRVING PARK ROAD
 - B. SOUTHWEST CORNER OF THE INTERSECTION OF IRVING PARK ROAD
 (IL19) AND YORK ROAD.
 C. IRVING PARK ROAD (IL19) STATION 394+10.
 REMOVE EXISTING LIGHTING IN AFFECTED AREA NOTED FOR REMOVAL
 ON LIGHTING PLANS.

B. STAGE 1: 1. NO CHANGE.

- 1. INSTALL LIGHTING CONDUITS, FOUNDATIONS AND HANDHOLES ON EAST SIDE OF YORK ROAD,
- 1. INSTALL LIGHTING CONDUITS, FOUNDATIONS AND HANDHOLES ON EAST SIDE OF TORK ROAD NORTH OF IRVING PARK ROAD (IL19).

 2. PUSH CONDUITS UNDER IRVING PARK ROAD (IL19), EAST SIDE OF INTERSECTION OF IRVING PARK ROAD (IL19) AND YORK ROAD, NORTH SIDE OF INTERSECTION OF IRVING PARK ROAD (IL19) AND YORK ROAD.

- D. STAGE 2:

 1. INSTALL TEMPORARY LIGHTING ON EAST SIDE OF YORK ROAD, SOUTH OF THE INTERSECTION OF IRVING PARK ROAD (IL19) AND YORK ROAD.

 2. REMOVE DESIGNATED EXISTING LIGHTING ON EAST SIDE OF YORK ROAD, SOUTH OF THE INTERSECTION OF IRVING PARK ROAD (IL19) AND YORK ROAD.

 3. INSTALL PERMANENT LIGHTING CONTROLLER, CONDUITS AND FOUNDATIONS ON EAST SIDE OF YORK ROAD, SOUTH OF THE INTERSECTION OF IRVING PARK ROAD (IL19) AND YORK ROAD, SOUTH OF THE. INTERSECTION OF IRVING PARK ROAD (IL19) AND YORK ROAD, SOUTH OF THE. INTERSECTION OF IRVING PARK ROAD (IL19) AND YORK ROAD. ENERGIZE INSTALLED PERMANENT LIGHTING.
- E. STAGE 3; 1. NO CHANGE.

F. STAGE 4:

1. INSTALL/ENERGIZE PERMANENT LIGHTING ALONG IRVING PARK ROAD (IL19) AND ON WEST SIDE OF YORK ROAD, SOUTH OF THE INTERSECTION OF IRVING PARK ROAD (IL19) AND YORK

ROAD. TOUR ADDRESS A LIGHTING**

2. REMOVE TEMPORARY LIGHTING.

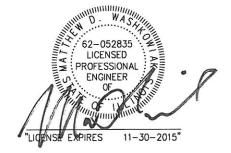
G. STAGE 5: 1. NO CHANGE.

H. STAGE 6:
1. INSTALL/ENERGIZE PERMANENT LIGHTING ON WEST SIDE OF YORK ROAD, NORTH OF THE INTERSECTION OF IRVING PARK ROAD (IL19) AND YORK ROAD.

SCALE:

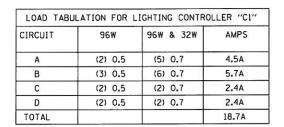
SUMMARY OF QUANTITES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
80400100	ELECTRIC SERVICE INSTALLATION	EACH	1
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	275
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	702
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	645
81400730	HANDHOLE, COMPOSITE CONCRETE	EACH	7
81603158	UNIT DUCT, 600V, 5-1C NO.8, 1/C NO.8 GROUND, (XLP-TYPE USE),		
	1 1/4" DIA. POLYETHYLENE	FOOT	5320
82102400	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 400 WATT	EACH	6
83600300	LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	225
84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	33
84200804	REMOVAL OF POLE FOUNDATION	EACH	33
X8250505	LIGHTING CONTROLLER, SPECIAL	EACH	1
X8410102	TEMPORARY LIGHTING SYSTEM	LSUM	1
X8410103	REMOVE TEMPORARY LIGHTING SYSTEM	L SUM	1
XX008367	DECORATIVE LIGHTING UNIT, TYPE "D1"	EACH	9
XX008368	DECORATIVE LIGHTING UNIT, TYPE "D2"	EACH	16
Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	24





DESIGNED	-	MWH	REVISED -
DRAWN	-	BCD	REVISED -
CHECKED	-	GSW	REVISED -
DATE	_	06 /10 /11	FILE - 100943-CEN NOTES eb+



LEGEND

-D- EXISTING COM ED POWER POLE

2 1/2"C.P-8" -UD 1 1/4" UNIT DUCT 5*8 & 1*8 GROUND OR AS INDICATED
W/1 1/4" UD -PC- 2" CONDUIT, PUSHED 8' LONG WITH 1 1/4" UNIT DUCT OR AS INDICATED

2" CONDUIT, TRENCHED 4' LONG WITH 1 1/4" UD OR AS INDICATED

2"C.T-4'
W/1 1/4"UD

PROPOSED COBRAHEAD STREET LIGHT 40' MOUNTING HEIGHT, 400 WATT HPS,
W/8' ARM, 120 VOLTS, MOUNT ON COMBO POLE

PROPOSED DECORATIVE LIGHTING UNIT, TYPE "D1", 40' MOUNTING HEIGHT, 160 WATT LED, W/15' ARM, 240 VOLTS

PROPOSED DECORATIVE LIGHTING UNIT TYPE "D2".
40' MOUNTING HEIGHT, 160 WATT LED, W/15' ARM, 240 VOLTS AND 20' MOUNTING HEIGHT, 32 WATT LED, W/2' ARM, 240 VOLTS

EX - - EXISTING STREET LIGHTING WIRING TO REMAIN

PROPOSED ELECTRIC HANDHOLE

EXISTING LIGHTING UNIT TO REMAIN

MEX EXISTING LIGHTING UNIT, REMOVE AND SALVAGE

EXISTING LIGHTING CONTROLLER

PROPOSED LIGHTING CONTROLLER

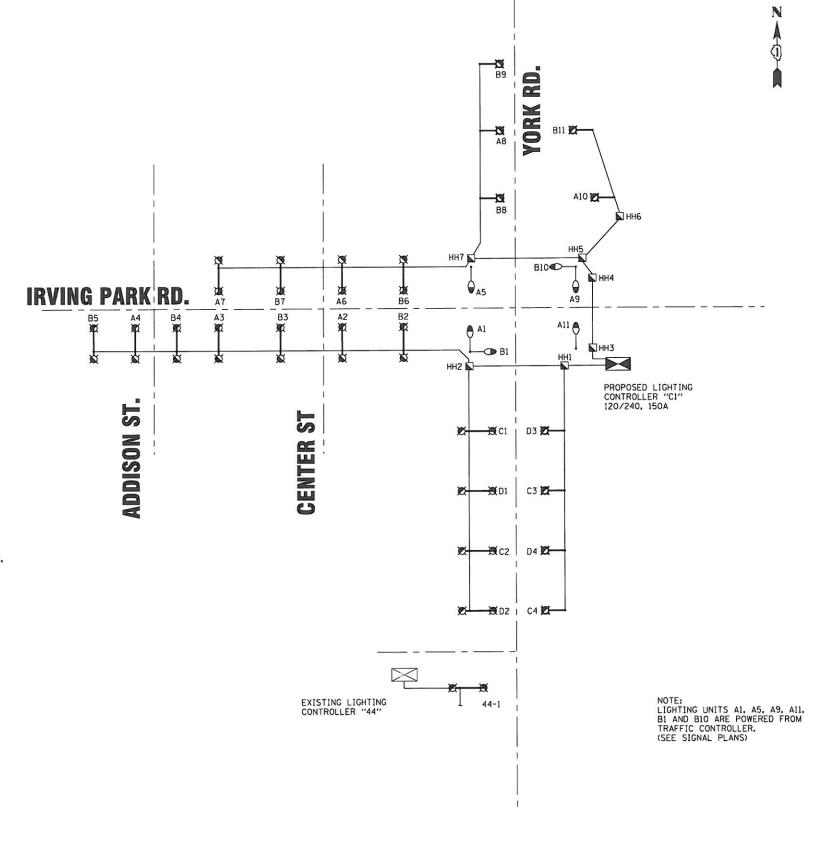
TEMPORARY WOOD POLE

TEMPORARY LIGHTING UNIT

--- TEMPORARY AERIAL CABLE

- STORM SEWER

---- PROPOSED R.O.W.



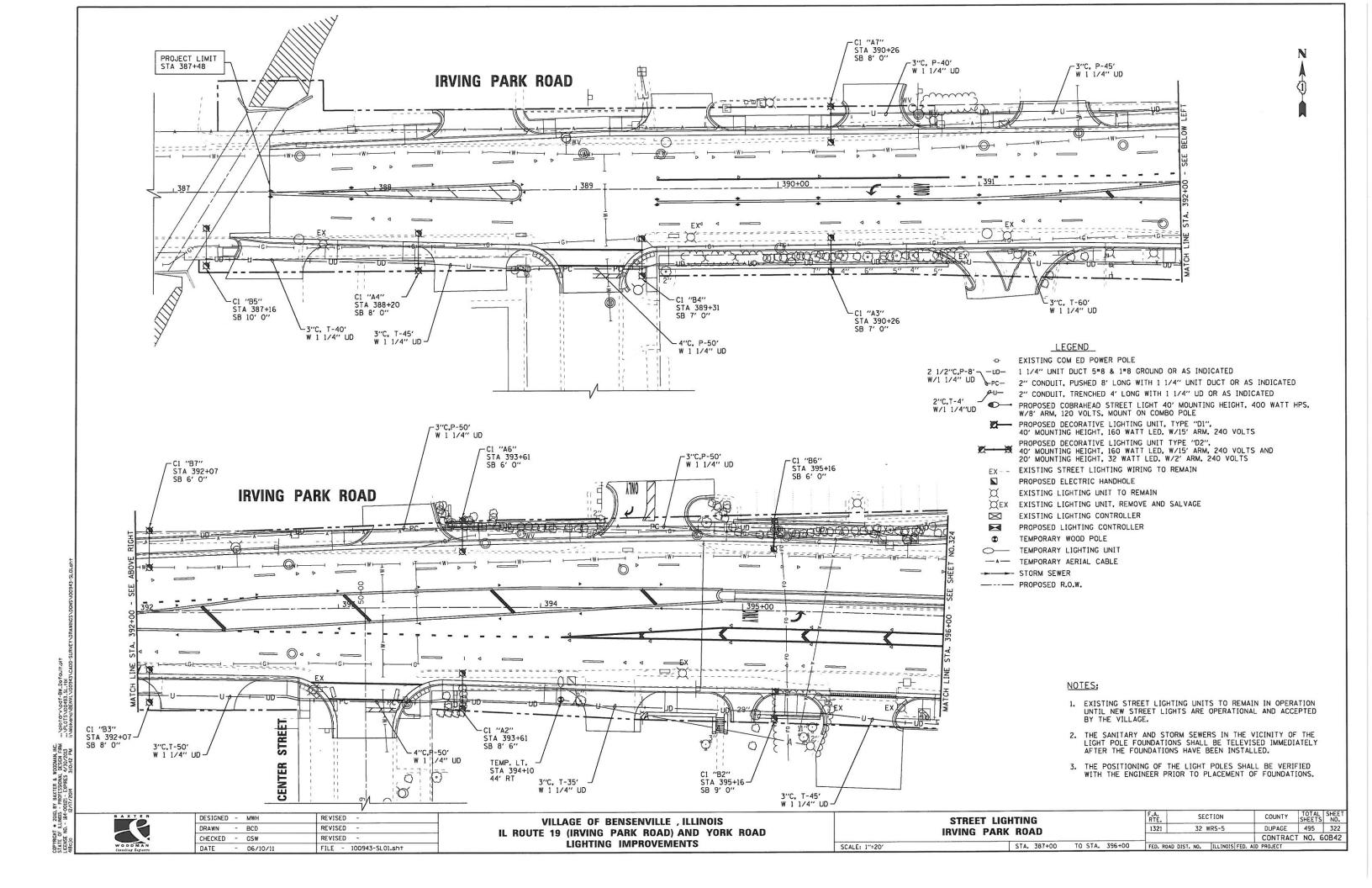
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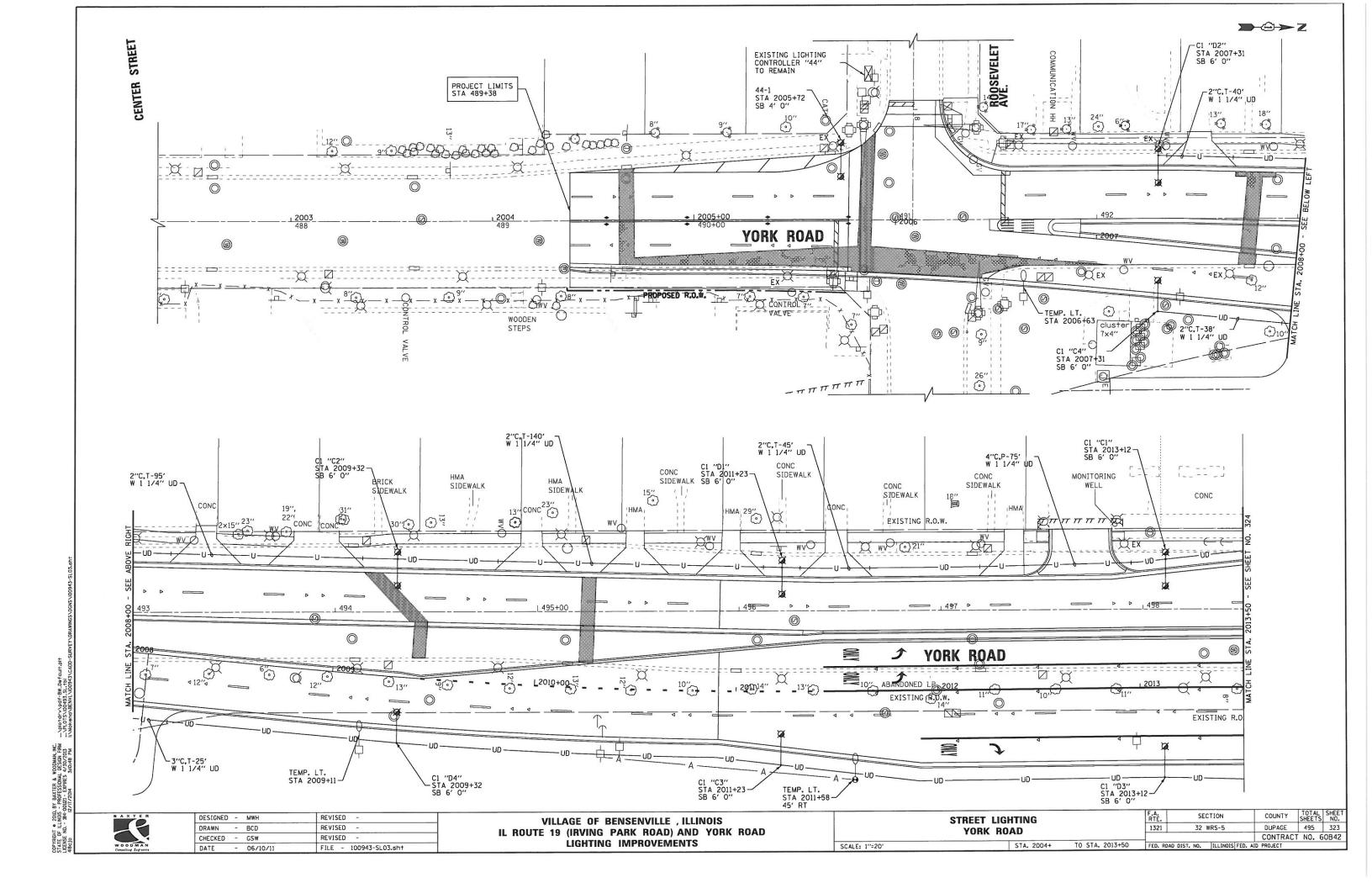
DESIGNED	-	MWH	REVISED -
DRAWN	-	BCD	REVISED -
CHECKED	-	GSW	REVISED -
DATE	-	06/10/11	FILE - 100943-SLD.sht

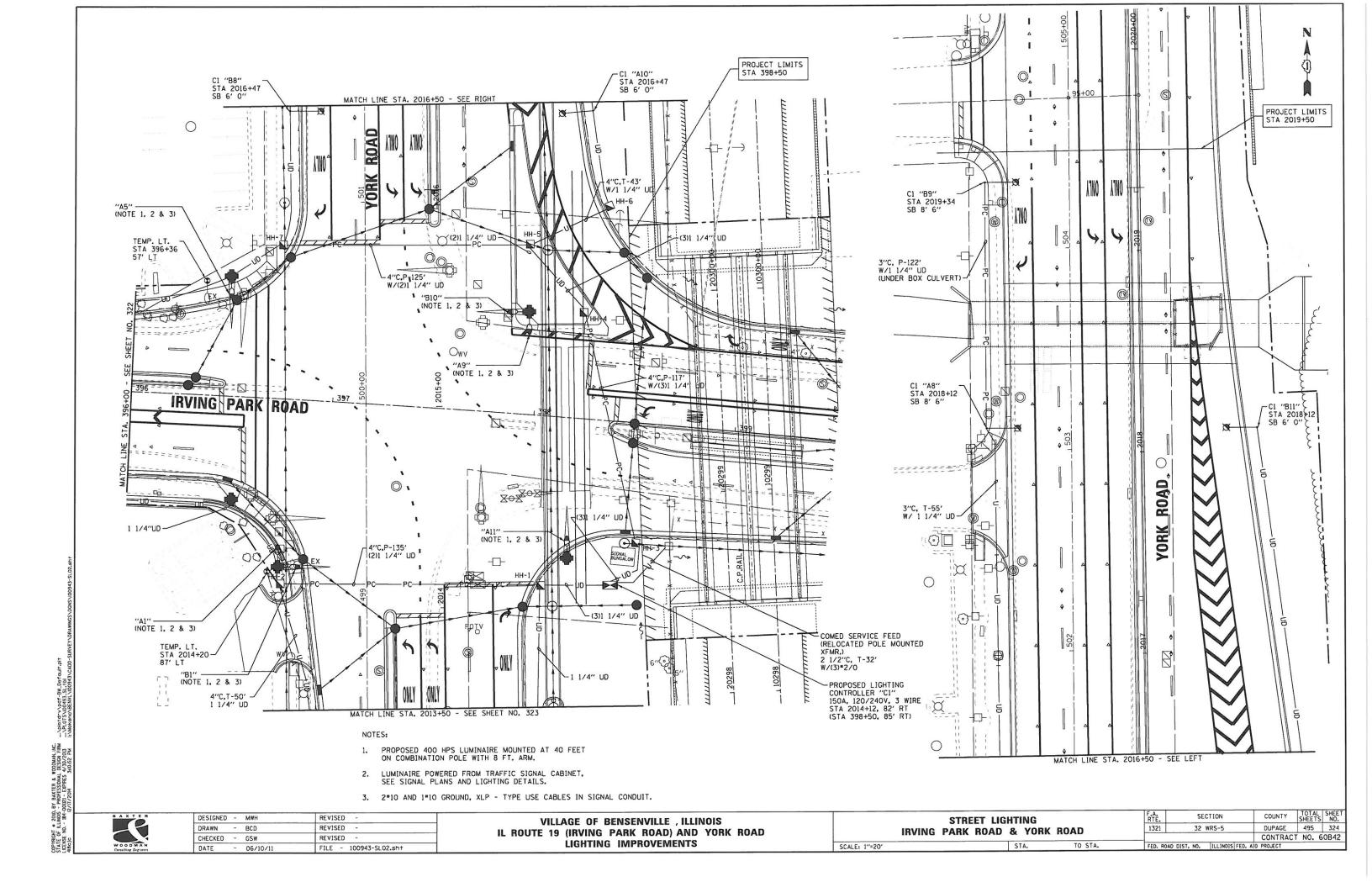
VILLAGE OF BENSENVILLE, ILLINOIS IL ROUTE 19 (IRVING PARK ROAD) AND YORK ROAD LIGHTING IMPROVEMENTS

	LIGHTING PLAN		F.A. RTÉ.	SECTION	COUNTY	TOTAL	SHEET S NO.
0101			1321	32 WRS-5	DUPAGE	495	321
SIN	GLE LINE DIAGRAM			W	CONTRAC	NO.	60B42
SCALE: NONE	STA.	TO STA.	FED. ROAD [DIST. NO. ILLINOIS FED.	AID PROJECT		

COPYRICHT © 2000, BY BAXTER & WOODWAN, INC.
STATE OF THE LENGE PROFESSION FOR A "ADDITOTY-NOOT-BY LENGE NO. 184-00121 EXPRES 4/30/2018 "...NAC/15/NOO493.51.Tb Junchin Z/17/204 3/09/45 PM INVOKENCYBENYL VIOO943/CADD-

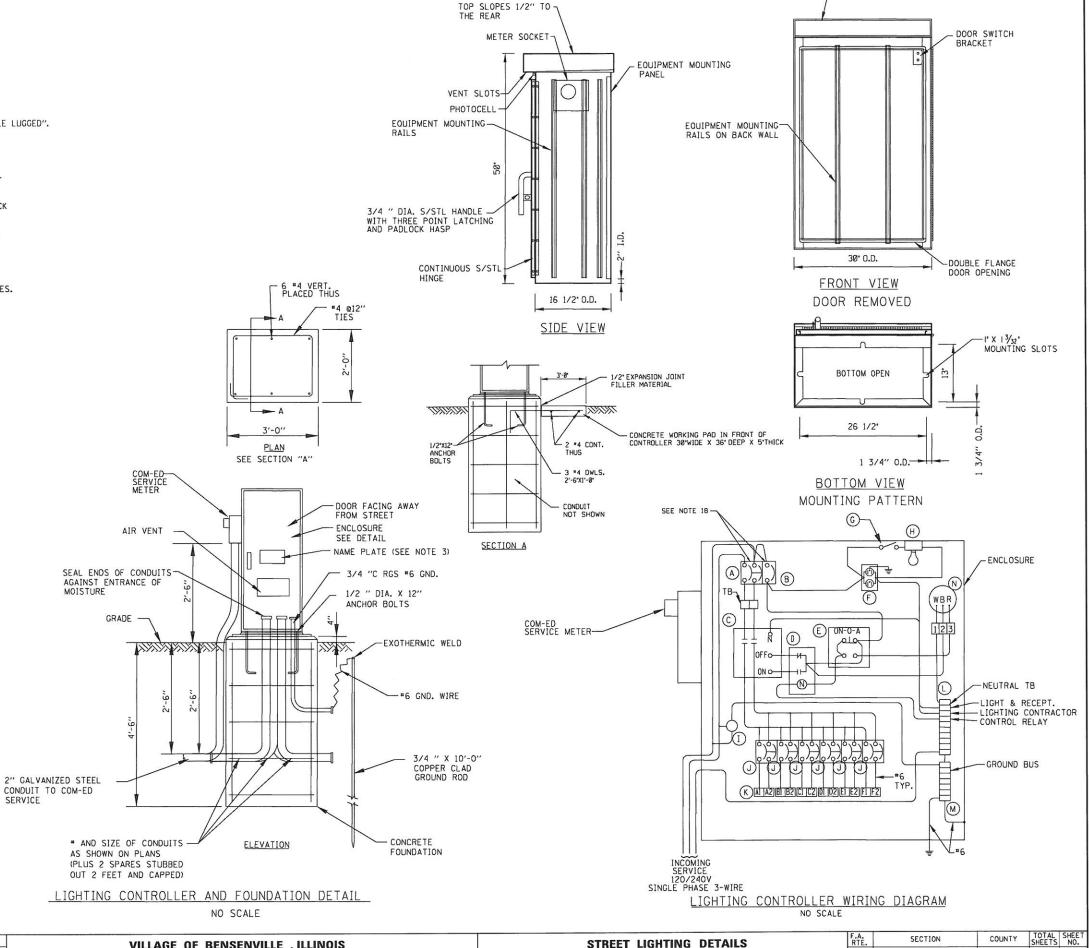






- CABINET SHALL BE FABRICATED FROM 0,125-INCH SHEET ALUMINUM #3003H14, FORMED AND ARC WELDED ASSEMBLY WITH NEMA 3R RATING.
- ALL SCREWS AND HARDWARE SHALL BE PLATED, GALVANIZED, OR MADE OF BRASS, ALUMINUM OR STAINLESS STEEL.
- NAME PLATE SHALL HAVE ENGRAVED 0.75-INCH HIGH LETTERS FILLED IN BLACK: "VILLAGE OF BENSENVILLE STREET LIGHTING".
- 4. CONNECTION OF SURGE ARRESTOR TO LINE SIDE OF MAIN CIRCUIT SHALL NOT BE "DOUBLE LUGGED".
- ELECTRIC UTILITY METER BOX SHALL BE MOUNTED ON THE SIDE OF CONTROL CABINET AS SHOWN ON THE PANEL LAYOUT DIAGRAM.
- THE COMPLETED CONTROLLER SHALL BE U.L. LISTED AS AN INDUSTRIAL CONTROL PANEL UNDER UL508, AND SHOULD BE SERVICE ENTRANCE RATED.
- METAL MOUNTING PANEL SHALL BE #10 GAUGE GALVANIZED SHEET STEEL FLANGED BACK 0.75-INCHES I.D. ON 4 SIDES.
- 8. CIRCUIT BREAKERS AND CONTACTORS AND OTHER COMPONENTS SHALL BE MOUNTED ON 0.125-INCH THICK GLASTIC INSULATION BACK PANEL.
- 9. ALL DEVICES SHALL BE FRONT REMOVABLE.
- 10. BUS BAR SHALL HAVE 22 LUG TERMINALS SIZED TO ACCOMMODATE REQUIRED WIRE SIZES. NEUTRAL BUS SHALL BE PAINTED WHITE. GROUND BUS SHALL BE PAINTED GREEN.
- 11. ALL LUGS SHALL BE COPPER SCREWS AND CONNECTORS, SPRING HELD.
- 12. ALL WIRING TERMINATIONS SHALL BE RATED NOT LESS THAN 75 DEGREE CENTIGRADE.
- 13. ALL CONTROL WIRING SHALL BE 600V MACHINE TOOL WIRE TYPE MTW.
- 14. ALL POWER WIRING SHALL BE 600V TYPE RHH/RHW.
- 15. A LAMINATED COPY OF THE CIRCUIT SCHEMATIC DIAGRAM SHALL BE ATTACHED TO THE INSIDE OF THE CONTROLLER.
- 16. ALL 120 VOLT SYSTEM AND ALL CONTROL WIRING SHALL BE *12 AWG STRANDED UNLESS OTHERWISE INDICATED.
- ALL WIRING SHALL BE IDENTIFIED BY MANUFACTURER COLOR CODED INSULATION, NEATLY DRESSED AND SUPPORTED.
- 18. INCLUDE SAFETY LABELS ON BREAKER, "WARNING-THIS DISCONNECT DOES NOT REMOVE ALL POWER FROM THIS PANEL".

ITEM	OTY.	DESCRIPTION
А	1	MAIN CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 2-POLE, 240 V. SINGLE-PHASE, 150A., BOLT-ON TYPE,TRIP INTERRUPTING RATING OF 22,000 RMS SYMMETRICAL AMPERES AT 240 V.
В	1	BRANCH CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 1-POLE, 120V, 20A, BOLT-ON TYPE, TRIP INTERRUPTING RATING OF 22,000 RMS SYMMETRICAL AMPERES AT 120V.
С	1	LIGHTING CONTACTOR MECHANICALLY HELD, CUTLER HAMMER A202K3B*M 150A. 2-POLE, 600 V. WITH 120V COIL.
D	1	CONTROL RELAY CUTLER HAMMER D3PR2 RATED 12 A. AT 120 VAC
E	1	ON-OFF-AUTO 3-POSITION SELECTOR SWITCH GE CRIO4P HEAVY DUTY SWITCH, RATED FOR 10 A. AT 600 VAC.
F	1	GFCI RECEPTACLE, 120 V., 20 A. SPEC. GRADE, NEMA CONFIG. 5-20R.
G	1	SPDT MOMENTARY NORMALLY OPEN, NORMALLY CLOSED PUSH BUTTON SWITCH CUTLER HAMMER 84F1063 RATED 15 A. AT 120 V.
н	1	60 WATT LIGHT FIXTURE, VAPOR TIGHT, WITH GLOBE, GUARD AND MOUNTING BOX.
I	1	SECONDARY SURGE ARRESTER SOUARE D SDSA1175, 175 VAC PHASE-TO-GROUND MAXIMUM.
J	6	BRANCH CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC. 2-POLE, 240 V. SINGLE-PHASE, 40A. TRIP INTERRUPTING RATING 22,000 RMS SYMMETRICAL AMPERES AT 240 V.
K	12	TERMINAL BLOCK RATED 600 V., 85 A.
L	1	COPPER NEUTRAL BUS.
М	1	COPPER GROUND BUS.
N	1	PHOTOCELL-120V BUTTON STYLE, DELAY TYPE, SPST

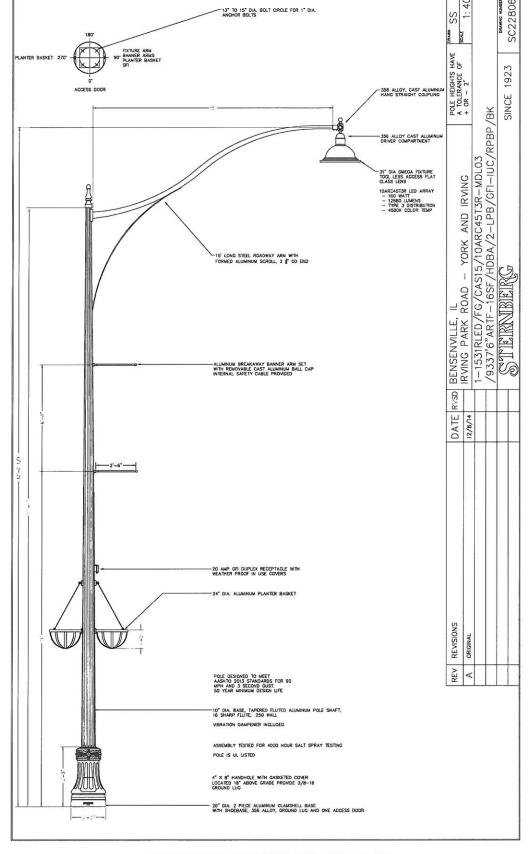




VILLAGE OF BENSENVILLE , ILLINOIS
IL ROUTE 19 (IRVING PARK ROAD) AND YORK ROAD
LIGHTING IMPROVEMENTS

		STREET LIGHTING	DETAI	LS	RTE.	SECTION	COUNTY	SHEETS	SHEET
		LIGHTING CON			1321	32 WRS-5	DUPAGE	495	325
		LIGHTING CON	INOLLLI				CONTRAC	T NO. 1	60B42
CALE:	NONE		STA.	TO STA.	FED. ROAD	DIST. NO. ILLINOIS FED	. AID PROJECT		

_CABINET CONSTRUCTED FROM 1/8" SHEET ALUMINUM



DECORATIVE LIGHTING UNIT, TYPE "D1"

DECORATIVE LIGHTING UNIT, TYPE "D2"

MS805ALED/480DPM 356 ALLOY, CAST ALUMINUM CAGE AND ROOF IRND45T3-MDL03 LED SOURCE
- 2330 LUMENS
- 32 WATT
- TYPE 3 DISTRIBUTION
- 4500K COLOR TEMP

20 AMP CFI DUPLEX RECEPTACLE WITH WEATHER PROOF IN USE COVERS

-10° DIA. BASE, TAPERED FLUTED ALUMINUM POLE SHAFT, 16 SHARP FLUTE, .250 WALL

26° DIA. 2 PIECE ALUMINUM CLAMSHELL BASE WITH SHOEBASE, 356 ALLOY, GROUND LUG AND ONE ACCESS DOOR

-13" TO 15" DIA. BOLT CIRCLE FOR 1" DIA. ANCHOR BOLTS

POLE HEIGHTS HAN TOLERANCE OF A TOLERANCE OF A TOLEARNCE OF A TOLE

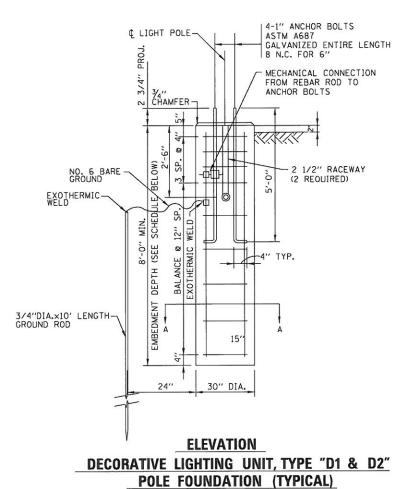
10ARC45T3R LED ARRAY - 160 WATT - 12880 LUMENS - TYPE 3 DISTRIBUTION - 4500K COLOR TEMP



	DESIGNED	-	мwн	REVISED -
	DRAWN	-	BCD	REVISED -
	CHECKED	-	GSW	REVISED -
İ	DATE	-	06/10/11	FILE - 100943-SL-DET3.sht

VILLAGE OF BENSENVILLE, ILLINOIS IL ROUTE 19 (IRVING PARK ROAD) AND YORK ROAD LIGHTING IMPROVEMENTS

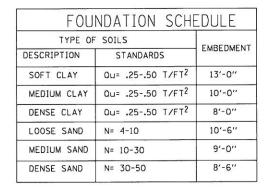
			RTE.	SECTION	COUNTY	SHEETS	NO.
DET	AILS		1321	32 WRS-5	DUPAGE	495	326
		<u> </u>			CONTRAC	T NO. E	0B42
SCALE: NONE	STA.	TO STA.	FED. ROAD	DIST. NO. ILLINOIS FED.	AID PROJECT		

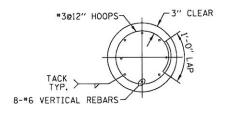


NOTE:

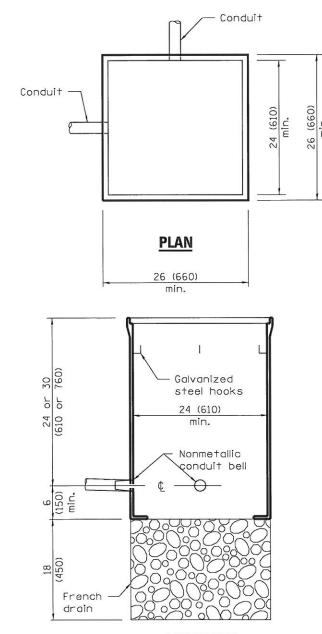
- 1. CONCRETE SHALL BE 3500 PSI AT 14 DAYS. (CLASS SI) 2. REINFORCING BARS SHALL BE OF NEW BILLET STEEL AND DEFORMED
- ASTM M42M (M42).

 3. HOLE FOR THE FOUNDATION SHALL BE AUGERED.
- 4. CONTRACTOR MUST VERIFY BOLT CIRCLE AND ANCHOR ROD DIMENSIONS FOR MATERIAL ORDERED BEFORE SETTING FOUNDATION.





SECTION A-A



ELEVATION

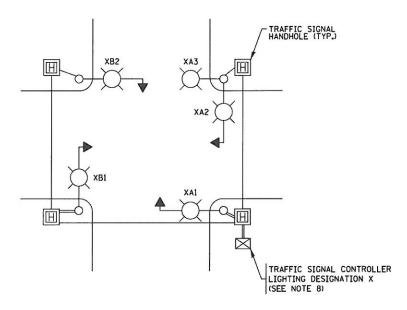
COMPOSITE CONCRETE

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

В	<u>A</u>	×		E	F
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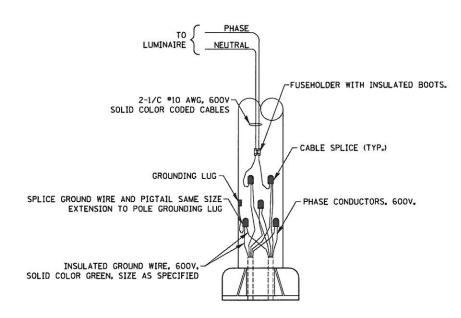
DESIGNED	100	MWH	REVISED -
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CHECKED	-	GSW	REVISED -
DATE	-	06/10/11	FILE - 100943-SL-Det2.sht

		ar noos	OTTION WIDO BIT	O W1 11			
		F.A. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.	
STREE	1321	32 WRS-5	DUPAGE	495	327		
	AND THE PROPERTY OF THE PROPER				CONTRAC	T NO.	60B42
SCALE: NONE	STA.	TO STA.	FED. ROAD I	DIST. NO. ILLINOIS FED.	AlD PROJECT		



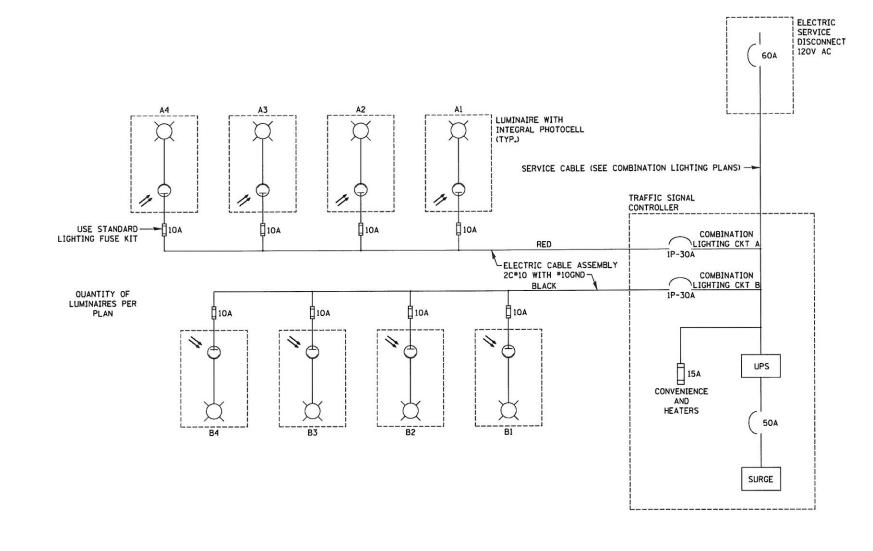
TYPICAL LIGHTING CIRCUIT DESIGNATIONS

(NOT TO SCALE)



COMBINATION POLE WIRING DETAIL

(NOT TO SCALE)



- 1. 4 LUMINAIRES PER CIRCUIT, MAXIMUM.
- 2. EACH LUMINAIRE IS PHOTOCELL CONTROLLED.
- 3. MULTI-CONDUCTOR CABLE ASSEMBLY FOR LIGHTING CIRCUITS.
- 4. ROUTE LIGHTING CIRCUITS IN TRAFFIC SIGNAL CONDUIT SYSTEM.
 5. ALL SPLICES AND CONNECTIONS FOR ROADWAY LIGHTING SHALL BE AT POLE BASE ONLY.
- 6. ALL CONTROLLERS TO HAVE TWO LIGHTING BRANCH BREAKERS.
- 7. ALL WIRING SHALL BE NEATLY DRESSED, IDENTIFIED BY TAGS, AND SUPPORTED. (UNDERGROUND SPLICING OF LIGHTING CONDUCTORS IS NOT PERMITTED).
- 8. LIGHTING CONTROLLER DESIGNATION SHALL BE CONFIRMED
- WITH THE ENGINEER. 9. RECORD DRAWING SHALL INCLUDE:
 - . TRAFFIC SIGNAL PLAN SHEET(S)
 - . TRAFFIC SIGNAL CABLE PLAN SHEET(S)
 - LIGHTING PLANS
 - . THIS DETAIL

FILE NAME =	USER NAME = gaglianobt	DESIGNED - RT	REVISED -			RTE. SECTION	COUNTY TOTAL SHEETS NO.
be240.dgn		DRAWN -	REVISED -	STATE OF ILLINOIS COMBINATION LIGHTING, TRAFFIC SIGNAL SCHEMATIC			
	PLOT SCALE = 50.0000 '/ in.	CHECKED - RT	REVISED -	DEPARTMENT OF TRANSPORTATION		BE-240	CONTRACT NO.
Default	PLOT DATE = 8/27/2014	DATE - 08/18/2014	REVISED -		SCALE NTS SHEET 1 OF 1 SHEETS STA. TO STA.	ILLINOIS	FED. AID PROJECT

DESIGNED - MWH REVISED REVISED REVISED CHECKED - GSW FILE - DISTRICT ONE DETAILS - BE.dgn DATE - 06/10/11

VILLAGE OF BENSENVILLE, ILLINOIS IL ROUTE 19 (IRVING PARK ROAD) AND YORK ROAD LIGHTING IMPROVEMENTS

COMBINATION LIGHTING, TRAFFIC SIGNAL SCHEMATIC SCALE: STA. TO STA.

COUNTY TOTAL SHEET NO.

DUPAGE \$TOT 328 SECTION CONTRACT NO. 60B42 FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT

-11

P.T. Sta. 2008+70.00 Elev. 665.55 LVC = 250' LVC = 240'

> PROFILE GRADE (along Prop. York Rd)

+1.19% -2.00% +0.30% +0.14% 388+ 399+05 663.48 Sta. Elev. LVC = 120' LVC = 250' LVC = 200' LVC = 120'

PROFILE GRADE

(along Prop. Irving Park Rd)

GENERAL NOTES

- 1. Pay limits of Concrete Structures for concrete facing shall be as shown for facing cast with voids between sheet pile cells. The Contractor is allowed the option to cast the facing as solid sections, but the additional concrete shall not be measured for payment.
- 2. The Contractor shall choose a sheet pile section that has an effective section modulus of at least 3.5 in³. The section chosen must also satisfy all geometric constraints.
- 3. PZ 22 is shown in the plans for detailing purposes only. If a different section is chosen by the Contractor, the location of the front face shall be maintained for walls IP-RW-1, IP-RW-2a, IP-RW-2b and IP-RW-3, and the position of the back face shall be maintained for walls IP-RW-4 and IP-RW-5. At walls with adjacent sidewalks, a minimum 7'-0" sidewalk width must be maintained.
- 4. Quantities dependent on the sheet pile section, such as Concrete Structures and Stud Shear Connectors, may vary slightly depending on the actual sheet pile section chosen. Such variations shall not be cause for additional compensation for a change in scope of work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- 5. Concrete Sealer shall be applied to all exposed surfaces of the concrete facing at each retaining wall.
- 6. Incidental excavation required to install the concrete facing that is not otherwise included in the cost of Earth Excavation shall be included in the cost of Concrete Structures.

Range 11E - 3rd PM

DESIGN SPECIFICATIONS

FIELD UNITS

fy = 50,000 psi (sheet pile) fy = 60,000 psi (reinforcement)

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Permanent Steel Sheet Piling	Sq. Ft.	3,093
Concrete Structures	Cu. Yd.	46.6
Stud Shear Connectors	Each	1,145
Reinforcement Bars, Epoxy Coated	Pound	2,620
Pipe Handrail	Foot	245.0
Concrete Sealer	Sq. Ft.	2,019

LOADING HS20-44

<u>SEISMIC DATA</u>

Seismic Performance Zone (SPZ) = 1 Design Spectral Acceleration at 1.0 sec. $(S_{D1}) = 0.089g$ Design Spectral Acceleration at 0.2 sec. (S_{DS}) = 0.152g Soil Site Class = D

LOCATION SKETCH

GENERAL PLAN IRVING PARK RD RETAINING WALLS F.A.P. 345A - SEC. 32-WRS-5 DU PAGE COUNTY STATION 389+40.74 TO 390+84.09 STATION 394+50.32 TO 395+35.00 STATION 395+98.44 TO 396+80.92 STATION 394+94.60 TO 395+59.26 STATION 393+54.28 TO 394+31.20

HDR ENGINEERING, INC.

USER NAME = jbabushr	DESIGNED - JAR	REVISED -
FILE NAME = WYYY-60B42-001-GPE.DGN	CHECKED - VEVS	REVISED -
PLOT SCALE = NONE	DRAWN - JAR	REVISED -
PLOT DATE = 12-19-2014	CHECKED - VEVS	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SECTION COUNTY **GENERAL PLAN** 1321 32-WRS-5 DU PAGE 495 329 IRVING PARK RD RETAINING WALLS CONTRACT NO. 60B42 SHEET NO. 1 OF 13 SHEETS ILLINOIS FED. AID PROJECT

INDEX OF SHEETS

Typical Sections

Handrail Details

Soil Boring Logs

Soil Boring Logs

12.

Developed Elevations

IP-RW-1 Plan and Elevation

IP-RW-4 Plan and Elevation

IP-RW-5 Plan and Elevation

IP-RW-2a & IP-RW-2b Details IP-RW-3 Plan and Elevation

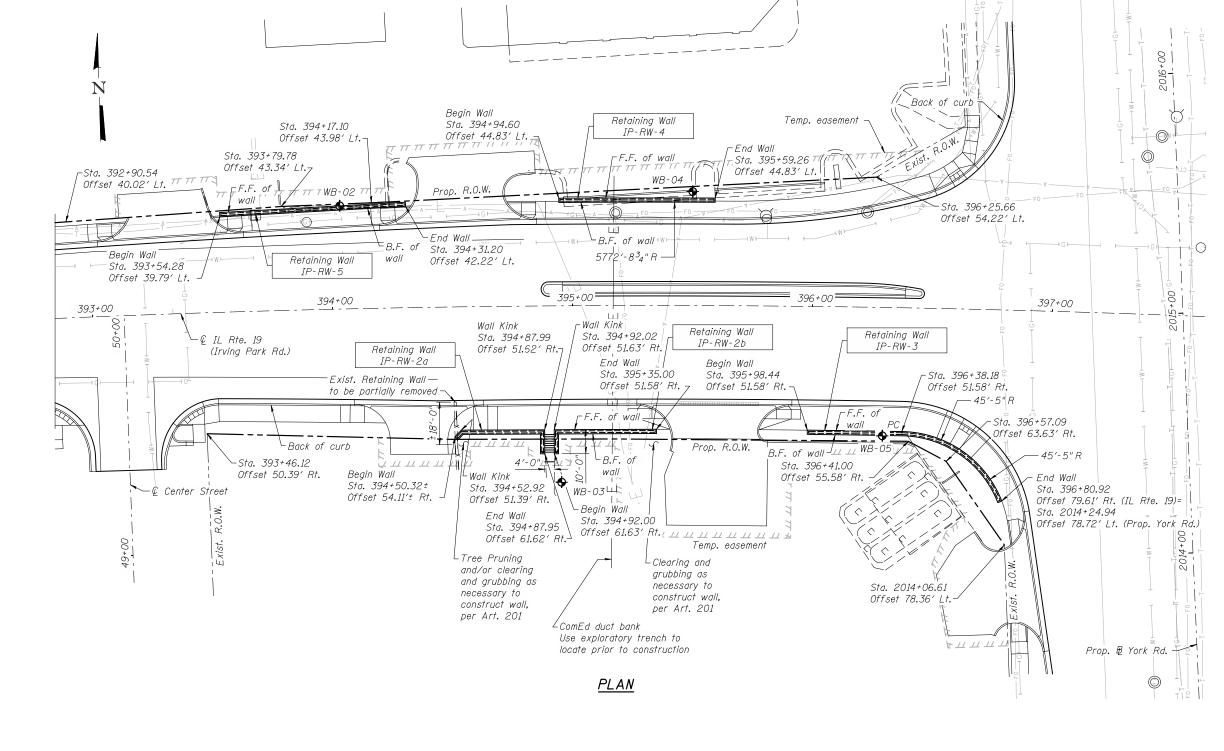
IP-RW-2a & IP-RW-2b Plan and Elevation

General Plan

General Plan

2002 AASHTO Standard Specification for Highway Bridges DESIGN STRESSES

f'c = 3,500 psi



GENERAL PLAN IRVING PARK RD RETAINING WALLS F.A.P. 345A - SEC. 32-WRS-5 DU PAGE COUNTY STATION 389+40.74 TO 390+84.09 STATION 394+50.32 TO 395+35.00 STATION 395+98.44 TO 396+80.92 STATION 394+94.60 TO 395+59.26 STATION 393+54.28 TO 394+31.20

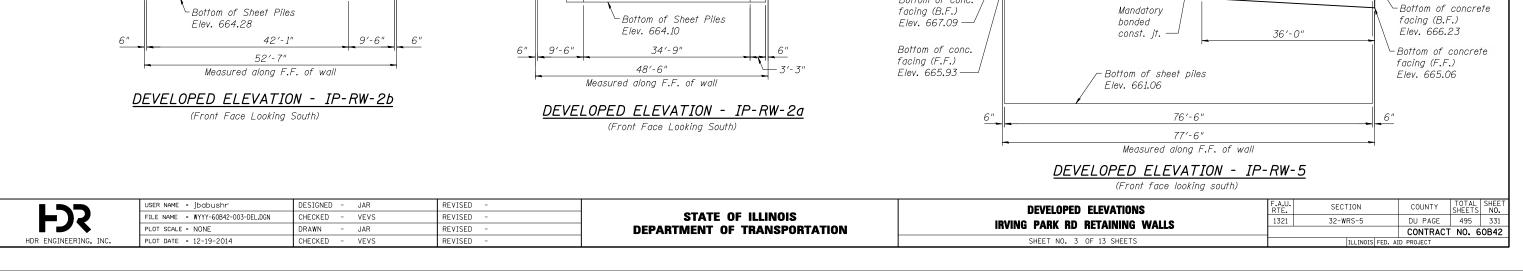
HDR ENGINEERING, INC.

USER NAME = jbabushr	DESIGNED - JAR	REVISED -
FILE NAME = WYYY-60B42-001-GPE.DGN	CHECKED - VEVS	REVISED -
PLOT SCALE = NONE	DRAWN - JAR	REVISED -
PLOT DATE = 12-19-2014	CHECKED - VEVS	REVISED -
		•

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

GENERAL PLAN		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IRVING PARK RD RETAINING WALLS	1321	32-WRS-5	DU PAGE	495	330
INVING PARK OF BEIMINING ANTES			CONTRACT	NO. 6	0B42
SHEET NO. 2 OF 13 SHEETS		ILLINOIS FED. A	D PROJECT		





End Wall

r-Begin Wall

Sta. 389+40.73

Elev. 666.92

Sta. 2014+24.94

Finish Grade (B.F.)

Bottom of Concrete

Facing (F.F.)

Elev. 668.00

End wall

Bottom of conc.

facing (B.F.)

Elev. 668.44 —

Bottom of conc.

facing (F.F.)

Elev. 666.94 -

Sta. 395+59.26

Elev. 669.44

(Prop. York Rd.)

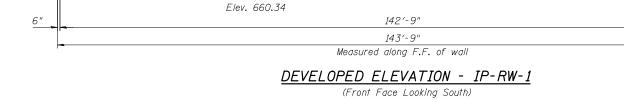
Elev. 671.25

47'-11"

Finish Grade

(F.F.)

Top of Sheet Piles



Bottom of Concrete

Facing (F.F.)

Elev. 664.34

-Bottom of Sheet Piles

47'-11"

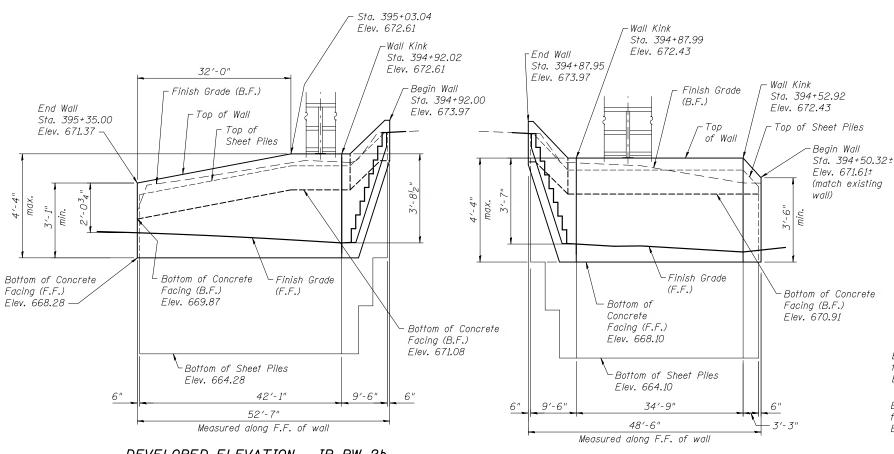
Mandatory bonded

const. jt. spacing

Sta. 390+84.09

Elev. 666.92-

End Wall



47'-11"

_ Top of Wall

Bottom of Concrete

Facing (B.F.) Elev. 665.67

Finish Grade

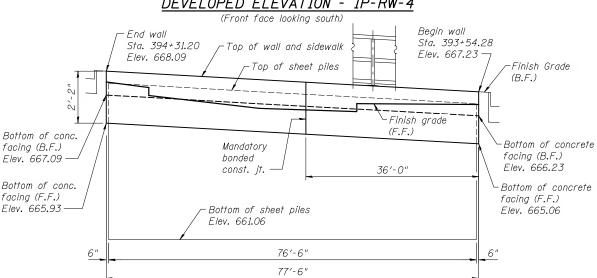
(B,F,.)

DEVELOPED ELEVATION - IP-RW-4 (Front face looking south)

64'-2"

65′-2"

Measured along F.F. of wall



-Mandatory bonded

39'-0"

Begin wall

30'-0"

Sta. 394+94.60

Elev. 668.94 -

const. jt.

- PC

-Top of Sheet Piles

Finish Grade

93′-2"

Measured along F.F. of wall

(Front Face Looking South)

Top of sheet piles

DEVELOPED ELEVATION - IP-RW-3

(F.F.)

Bottom of Sheet Piles Elev. 664.00

-Top of wall and sidewalk

Mandatory

const. jt.

Elev. 662.44

Bottom of sheet piles

bonded

53'-2" (radial)

Begin Wall

Sta. 395+98.44

Bottom of Concrete

Facing (B.F.)

Elev. 669.17

Finish grade

-Finish grade

facing (B.F.)

Elev. 667.94

facing (F.F.)

Elev. 666.44

-Bottom of concrete

-Bottom of concrete

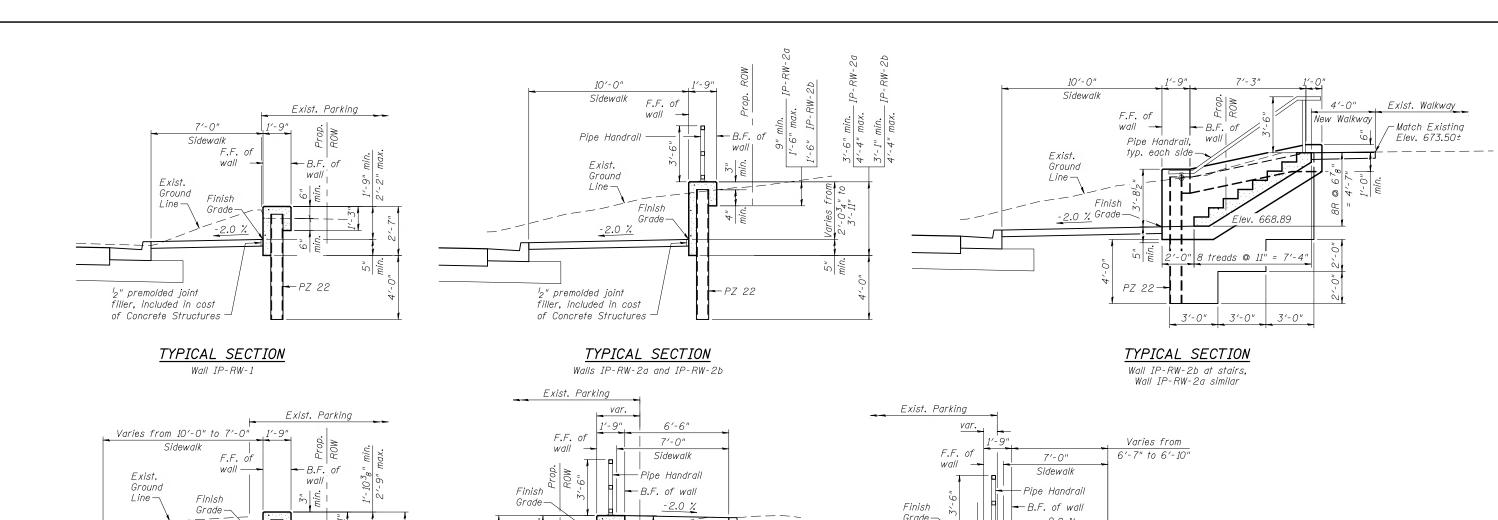
(B.F.)

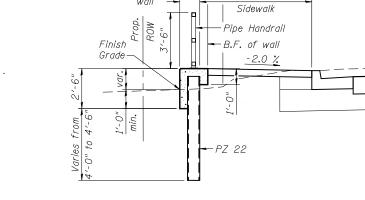
(F.F.)

Elev. 671.25 -



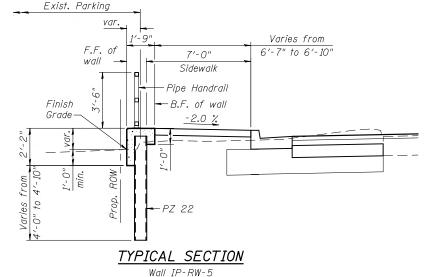






TYPICAL SECTION

Wall IP-RW-4



NOTES:

1. For handrail details, see Sheet 11.

USER NAME = jbabushr	DESIGNED - JAR	REVISED -
FILE NAME = WYYY-60B42-004-TYP.DGN	CHECKED - VEVS	REVISED -
PLOT SCALE = NONE	DRAWN - JAR	REVISED -
PLOT DATE = 12-19-2014	CHECKED - VEVS	REVISED -

-2.0 %

TYPICAL SECTION

Wall IP-RW-3

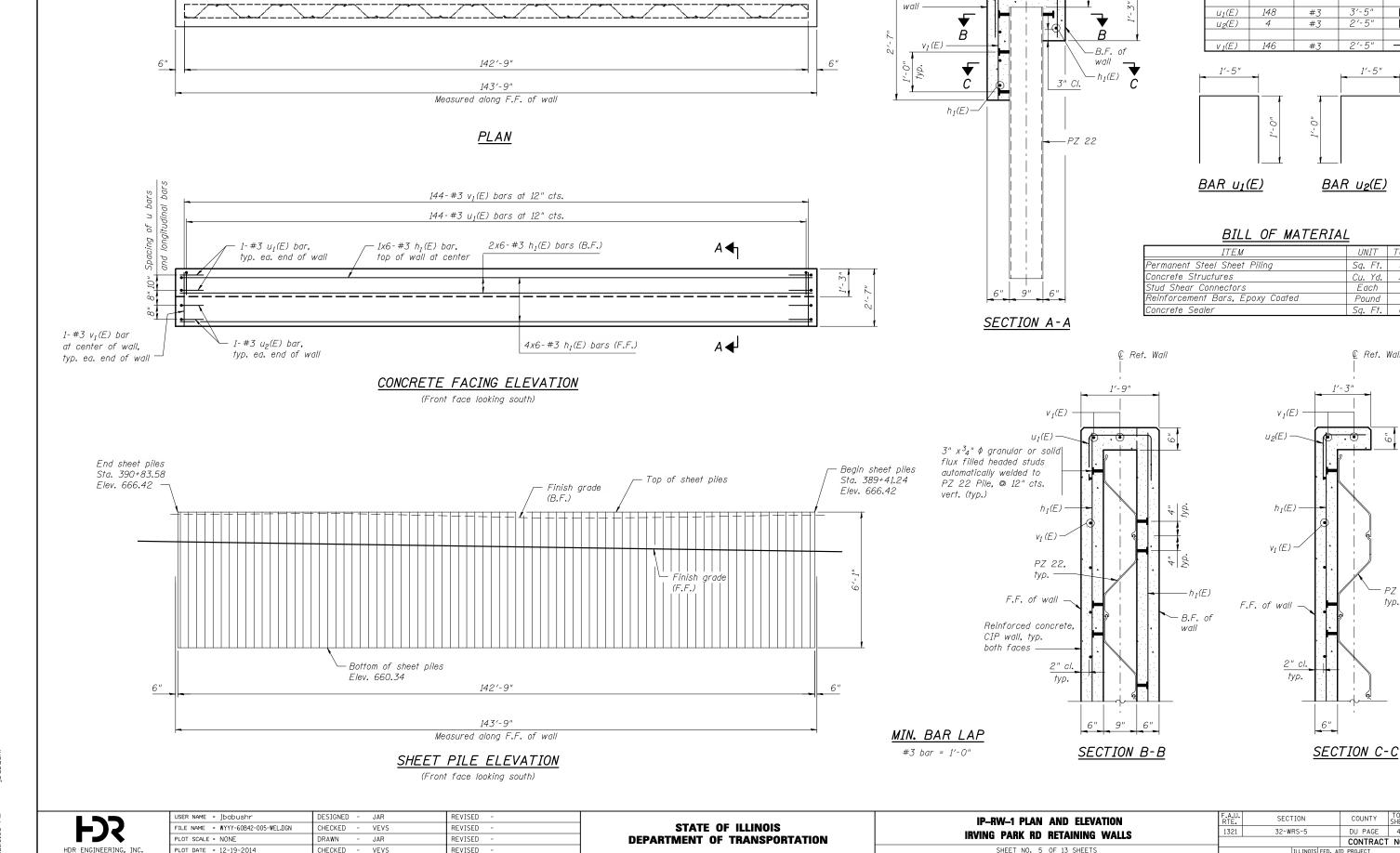
^l₂" premolded joint filler, included in cost

of Concrete Structures

-−*PZ 22*

STATE	0F	ILLINOIS
DEPARTMENT O)F 1	RANSPORTATION

TYPICAL SECTIONS		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IRVING PARK RD RETAINING WALLS	1321	32-WRS-5	DU PAGE	495	332
INVING PARK ND NEIAINING WALLS			CONTRACT	NO. 6	0B42
SHEET NO. 4 OF 13 SHEETS		ILLINOIS FED. AI	D PROJECT		



€ Ret. Wall

h₁(E)-

F.F. of $U_1(E)$

BILL OF BARS

#3

No. 42

 $h_1(E)$

Size Length Shape

24'-9"

BAR u2(E)

UNIT TOTAL

Sq. Ft. 869 Cu. Yd. 12.3 Each 312

Pound 720

Sa. Ft. 644

€ Ret. Wall

PZ 22,

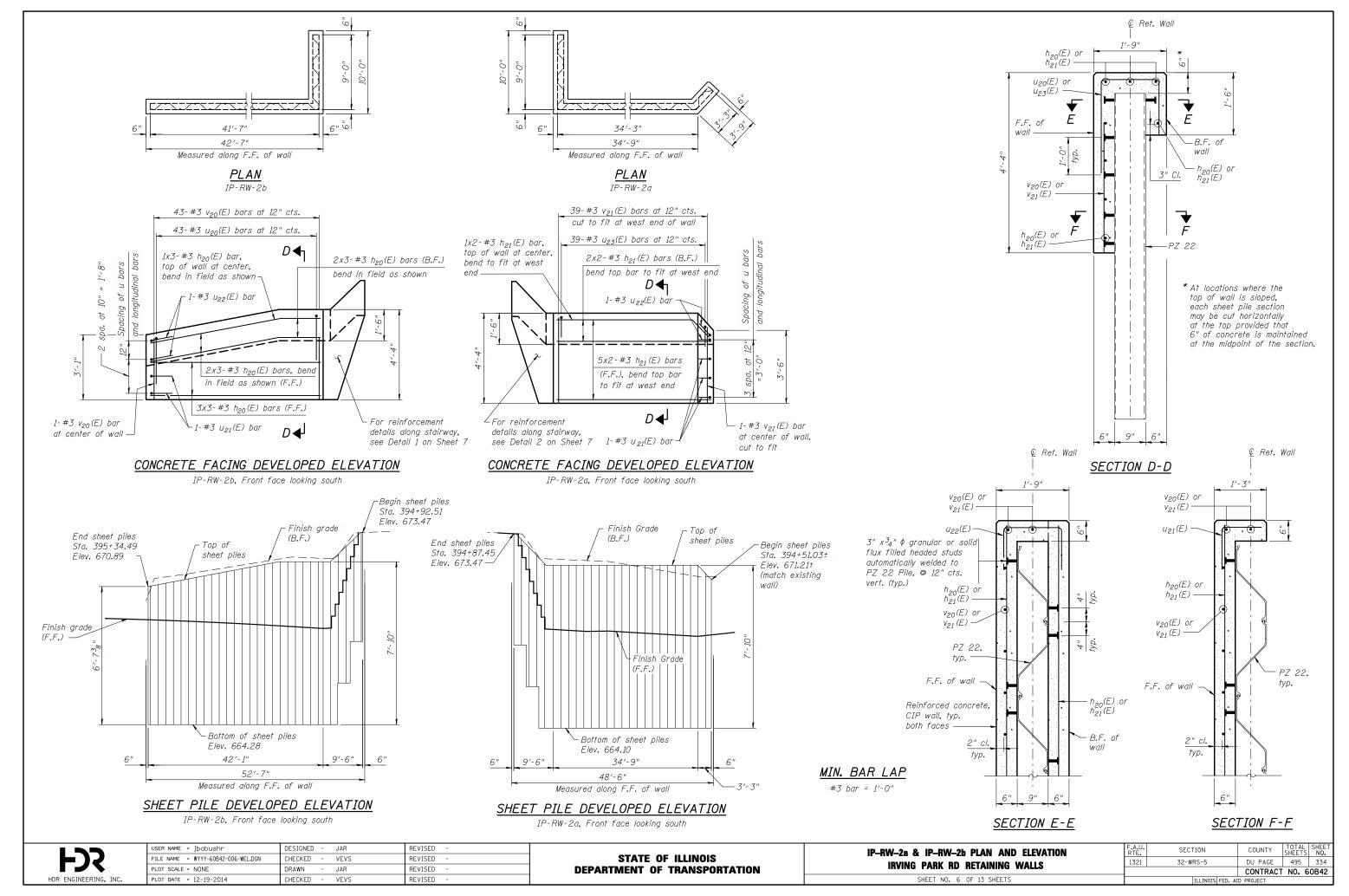
typ.

COUNTY

DU PAGE 495 333
CONTRACT NO. 60B42







Sidewalk extension

DETAIL 1

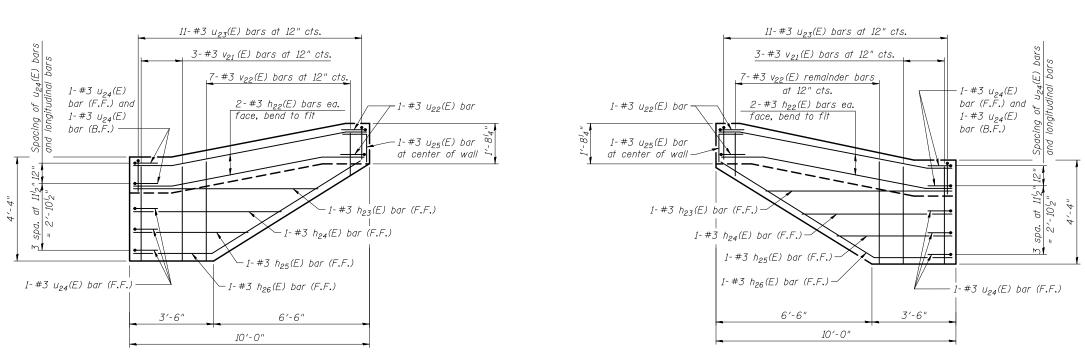
IP-RW-2b, along stairway

l₂" preformed joint filler, included in cost of Concrete Structures -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

IP-RW-2a & IP-RW-2b DETAILS **IRVING PARK RD RETAINING WALLS** SHEET NO. 7 OF 13 SHEETS

TOTAL SHEE NO. SECTION COUNTY DU PAGE 495 335 CONTRACT NO. 60B42 1321 32-WRS-5



^l₂" preformed joint filler, included in cost of Concrete Structures —

DETAIL 3

New concrete at stairway (paid for as Concrete Structures)

4'-0" Concrete walkway

5-#3 h₂₇(E) bar at 11"(-) cts. at bottom face of steps

-#3 h₂₈(E) nosing bar, typ. at $\overline{8}$ treads

8 treads @ 11" = 7'-4"

∟Bend in field

DETAIL 2 IP-RW-2a, along stairway

BILL OF MATERIAL UNIT TOTAL Permanent Steel Sheet Piling Sq. Ft. 733 Cu. Yd. 12.9 Each 317 Pound 670 oncrete Structures Stud Shear Connectors Reinforcement Bars, Epoxy Coated Pound Foot 102.5 Sq. Ft. 534 Pipe Handrail ncrete Sealer

BILL OF BARS

#3

#3

#3

#3

#3 #3

#3

#3

#3

#3

#3

#3

#3 #3

Bar

h₂₀(E)

h₂₁(E)

h₂₂(E,

h₂₃(E) h₂₄(E)

h₂₅(E) h₂₆(E)

h₂₇(E)

h₂₈(E)

U₂₀(E)

u₂₁(E)

u₂₂(E)

U23(E)

U24(E)

u₂₅(E)

v₂₀(E)

v₂₁(E)

No. 24

14

44

Size Length Shape

14′-9"

7′-9"

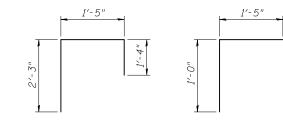
4'-9"

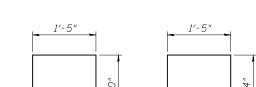
10′-9"

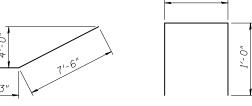
8′-1"

4'-1"

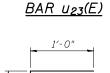
2'-4"



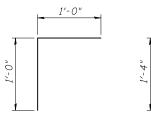




BAR U22(E)



BAR U21(E)



BAR U20(E)

BAR U24(E)

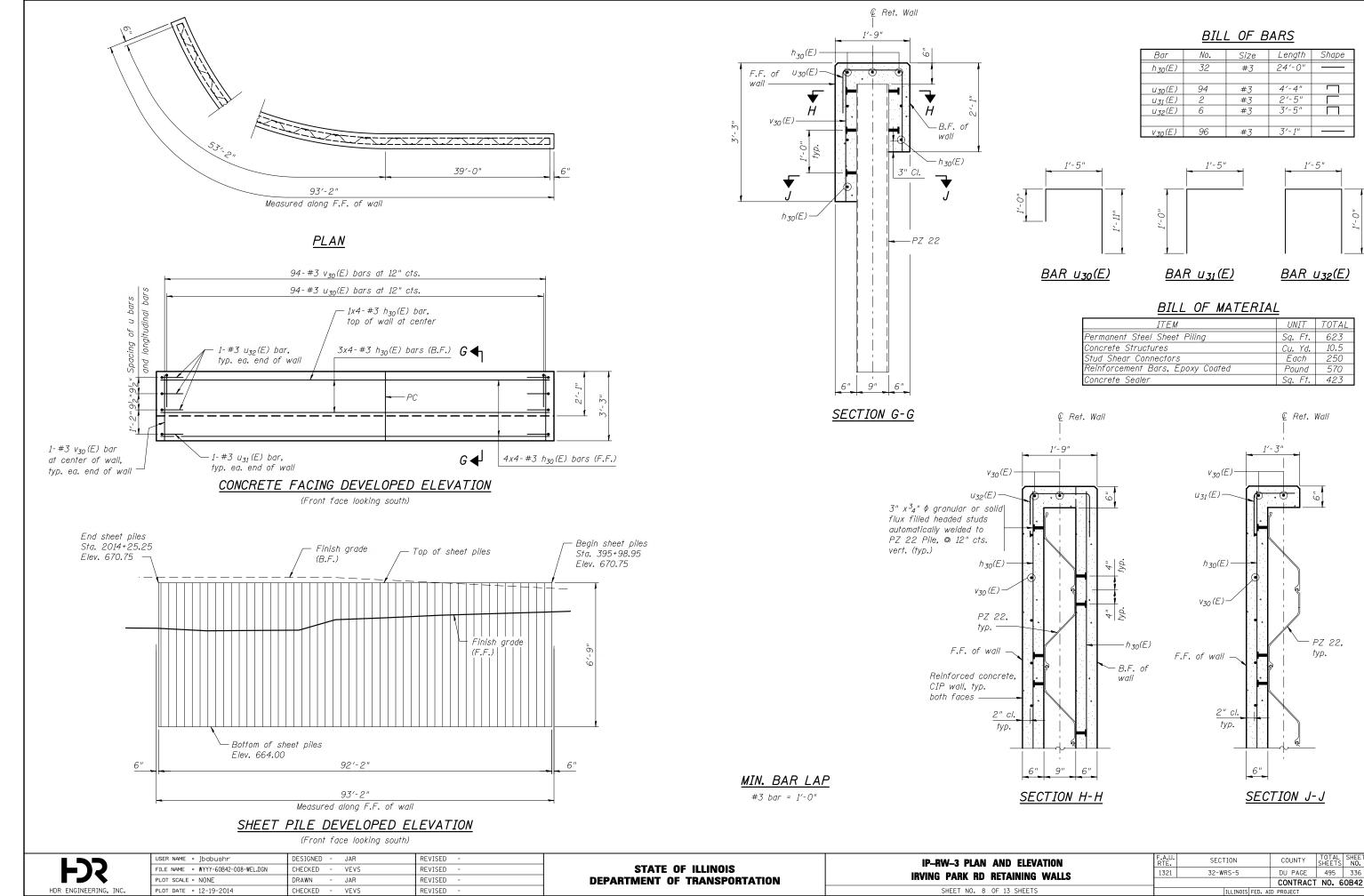
BAR U25(E)

BAR V22(E)

7 bars

BAR h26(E)









FILE NAME = WYYY-60B42-009-WFL.DGN

LOT SCALE = NONE

PLOT DATE = 12-19-2014

CHECKED -

CHECKED -

ORAWN

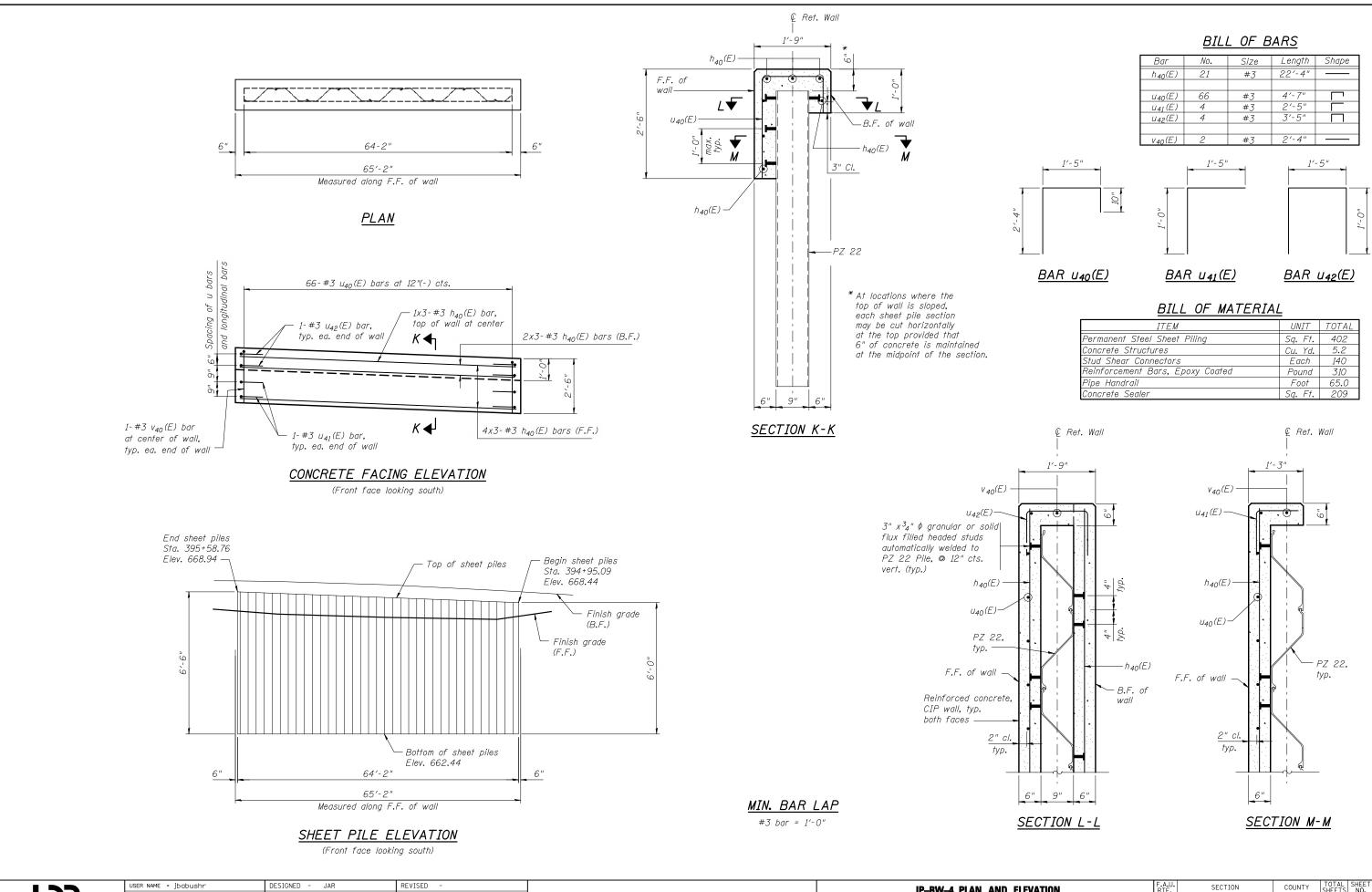
VEVS

VEVS

REVISED

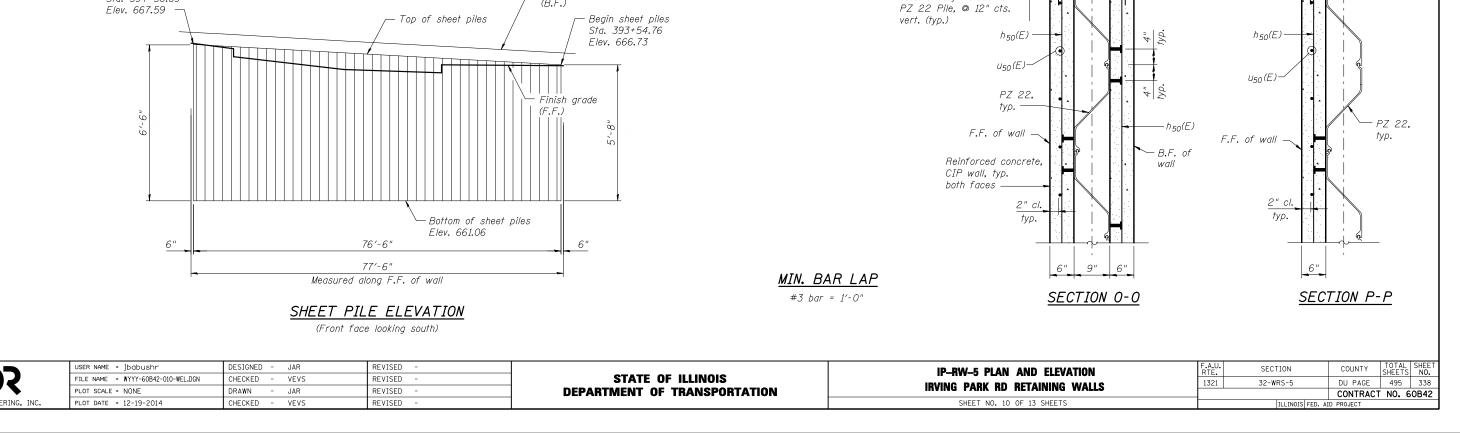
REVISED

REVISED









Ret. Wall

-PZ 22

SECTION N-N

* At locations where the

top of wall is sloped,

each sheet pile section

may be cut horizontally

at the top provided that

6" of concrete is maintained

automatically welded to

at the midpoint of the section.

v 50(E)

u₅₂(E)

h₅₀(E)-

0▼

h₅₀(E) -

F.F. of wall

 $u_{50}(E)$

BILL OF BARS

#3

#3

#3

#.3

No.

BAR u₅₁(E)

ITEM

Reinforcement Bars, Epoxy Coated

Permanent Steel Sheet Piling

oncrete Structures

Stud Shear Connectors

Pipe Handrail

Ret. Wall

oncrete Sealer

BILL OF MATERIAL

u₅₁(E) -

h₅₀(E)

u₅₀(E) u₅₁ (E)

u₅₂(E) v₅₀(E)

BAR U50(E)

Size Length Shape

1'-5"

BAR U52(E)

UNIT TOTAL

Sq. Ft. 466

Foot 77.5

5.7

126 350

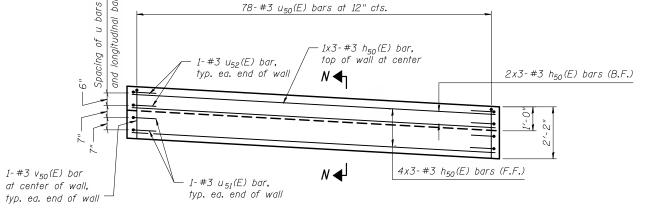
209

Cu. Yd. Each

Pound

Sq. Ft.

€ Ret. Wall



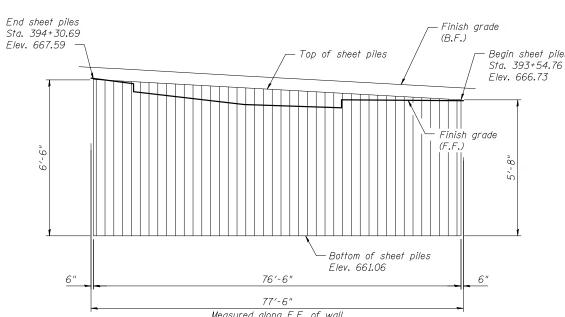
76′-6"

77′-6" Measured along F.F. of wall

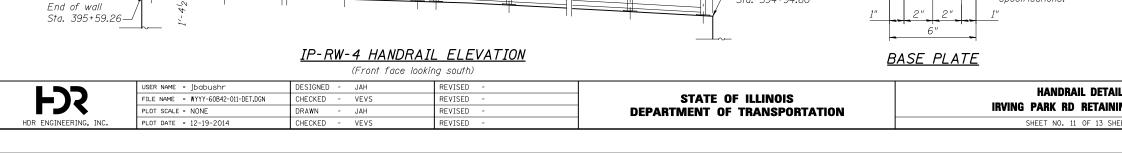
<u>PLAN</u>

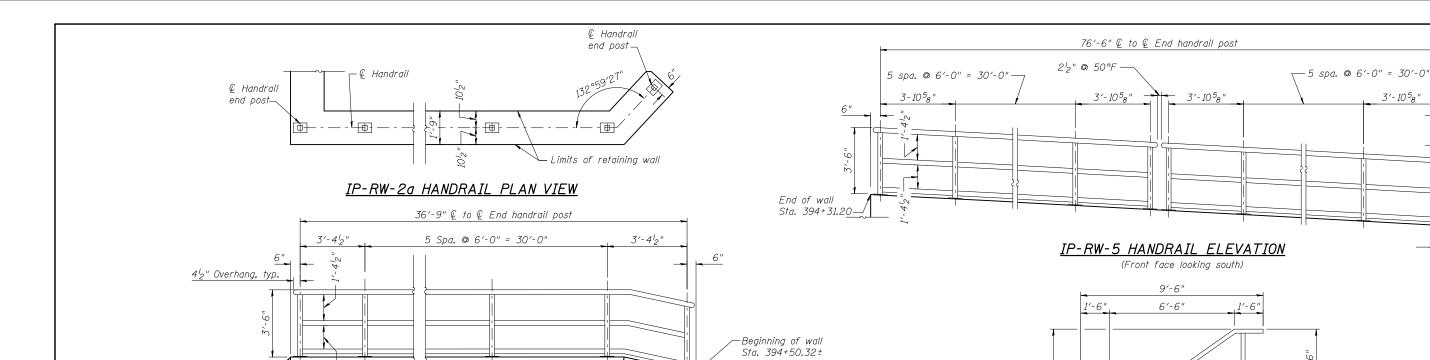
CONCRETE FACING ELEVATION

(Front face looking south)









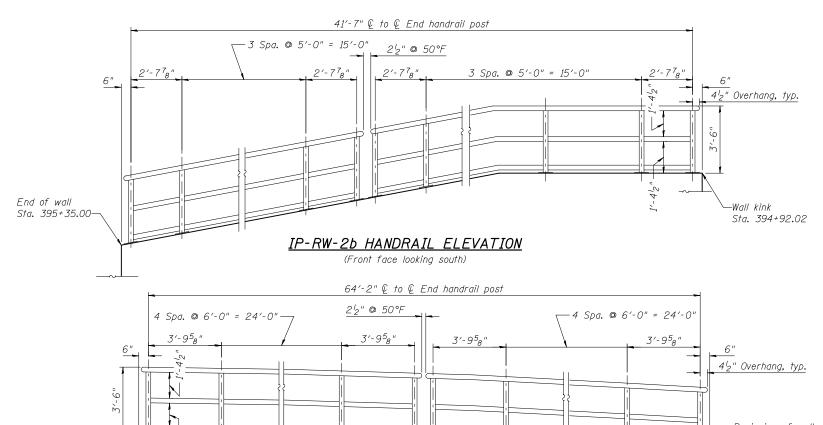
IP-RW-2a HANDRAIL DEVELOPED ELEVATION

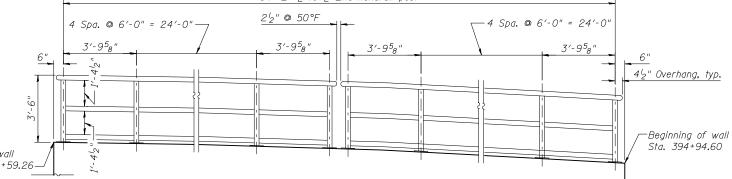
Wall kink Sta. 394+52.92-

Wall kink

Sta. 394+87.99

(Front face looking south) Note: Horizontal dimensions are along centerline of handrail





HANDRAIL DETAILS IRVING PARK RD RETAINING WALLS SHEET NO. 11 OF 13 SHEETS

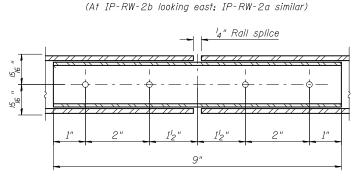
SECTION COUNTY 32-WRS-5 DU PAGE 495 339 CONTRACT NO. 60B42

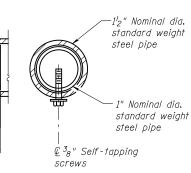
HANDRAIL ELEVATION AT STAIRS

Tod

of Wal

Bottom of Concrete Facing (F.F.)





4½" Overhang, typ.

-Beginning of wall

Sta. 393+54.28

RAIL SPLICE

1₂" Plate 1½" Nominal dia. extra strong steel pipe handrail post -1"x1^l2" Slotted holes for drilling and setting ⁵8" diameter anchor rods with hex nut and washer according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

NOTES:

- 1. Railings shall be I_2^l " dia. standard (Schedule 40) pipe and the posts shall be 1^{l}_{2} " dia, extra strong (Schedule 80) pipe. See Article 509 of the Standard Specifications for additional information regarding Pipe Handrail.
- 2. All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
- 3. Handrail shall be centered on wall. If wall width differs from plan dimension due to sheet pile section selected by the Contractor, the handrail position shall be adjusted to maintain the sidewalk width shown.

						F	PAGE _1	<u> </u>	of _	1	
Geo Services Inc. Geotechnical, Environmental & divil Engineering 805 Antheris Court, 19916 204 Napeville, Jillings 160555 (630) 3551-2838	S	OII	L E	3OF	RING LOG		DATE <u>5/4</u>				
805 Arbberst Court Sgite 204 Naperville, Jihrlois 60565 (630) 355+2838							LOGGED BY				
	ECODID.	TO 1		- 5-			GSI JOB No				-
ROUTE II. RTE 19 D									91-	332-0	Jb
SECTION 32 WRS-5											
COUNTY <u>DuPage</u> D	RILLING	MEI	HOD I	10110			C TYPE CA	ME AUT	omo	tic	
STRUCT. NO	DE	B	ñ	M	Surface Water Elev. Stream Bed Elev.	$\frac{n/a}{n/a}$		DE	В	ñ	M C
BORING NO. WB-01	P	0	c s	i.	Groundwater Elevation	n:		P	ō	c s	Ιī
Station: 390+22	H	W S	Qu	S T	First Encounter	655.4		H	W S	Qu	S
Offset: <u>39,0' Right</u> Ground Surface Elev. <u>666.4</u>	(ft)	(/6°)	(tsf)	(%)	Upon Completion After Hrs.	652.1	$\overline{\nabla}$	(ft)	/6°)	(tsf)	/%
		,,,,	(101)	(,,,	Aiter nrs.			10.9	,,,,,	(101)	\ <u>`</u>
3.0" ASPHALT, 9.0" CRUSHED STONE 668	5.4	1						\exists			
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CLAY LOAM-dark gray-loose (Fill)		4	l _	13				\dashv			
66:	3.4	Г						\exists			Г
	_	3						\dashv			
TOPSOIL-black	_	3		Н				\exists			Н
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660	0.9	ł						\dashv			
	_	2						\exists			
		3	3.25P	,,				-			
CLAY-brown & gray-	_	1	3.23P	26				\exists			Н
stiff to very stiff (A-6) Wet	_										
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▼658	0.4	4						-			
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7	7	17	_	114				\dashv			L
CLAY-gray-very stiff to hard (A-6)	-15	11 15	3.7B	18				-35			
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		5		111				\dashv			
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		14	3.7B	18				\neg			L
		1						\dashv			
End Of Boring @ −20.0'		6		100				\Box			L
Hollow Stem Augers		9	7.5					4			
The Unconfined Compressive Strength (UCS) Failure	<u>3.4 −20</u>	1 10	1 3.1B	19	an C Chart D Donatromato	c) CT Chal	hy Tube Same	-40	Vane	Shear	Tec

						PAGE 1		of _	1	_
Geo Services Inc.	S	OI	L E	BOF	RING LOG	DATE _5/11	/2010)		
Geotechnical, Environmental & Givil Engineering 805 Amberst Court Spite 204						LOGGED BY	DR			
Geo Services Inc. Geotechnical, Environmental & GMI Engineering 805 Amberts - Caurt - Hoghe 224 Naperville, Jillings 60565 (630) 3551-2838						GSI JOB No				_
ROUTE II. RTE 19 DE	SCRIP	TION	Irvin	n Pn	rk Rd. York Rd. CNRR Gr					— 16
SECTION 32 WRS-5 LC										~
						AMMER TYPE CN		toma	tic	_
STRUCT. NO		I	I	I		/α	T Au	l	LIC	一
Station	D	B	U	M		/a	DE	B	U	М
BORING NO. WB-02	P	0	š	1	Groundwater Elevation:		P	0	Š	i i
Station: _394+06	H	W S	Qu	S T	First Encounter <u>6</u>	48.1 T	H	w s	Qu	S T
Offset: <u>43.0' Left</u> Ground Surface Elev. <u>666.6</u>	(ft)	(/6")	(tsf)	(%)	Upon Completion <u>6</u> After <u> </u>	51.6 ▼	(#)	(/6")	(tsf)	(%)
		, .	1	(,	Alter 1113		14.7	-	(/	H
4.0" ASPHALT, 8.0" CRUSHED STONE 665	.6	1						1		
	_	3	-				_	Н		Н
TOPSOIL-black	_	1	1.25P	31			_			
663	.6	П								
	_	3					_			
		4						П		П
CLAY-brown & gray-hard (A-6)	5	5	4.5+P	20			25			Н
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		6 9	5.4B	19			_			
658	.6	ľ	3.40	13				П		П
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	_	5		112				Н		Н
	-10		3.6B	18			-30			Ш
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01.43		5		109				Ш		Ш
CLAY-gray-stiff to very stiff (A-6)		6								
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	_	3	\vdash					Н		Н
~	7 <u>-15</u>	1	1.75P	21			35			Ш
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		4					_	П		П
	_	5	1.6B	22			_	Н	-	\vdash
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End Of Boring @ -20.0'		4	\vdash	105				Н		$\vdash\vdash$
Hollow Stem Augers	.6 –20	4	1.3B	21			-40			

STRUCT. NO. — Station — D			٠			2010 100	PAGE <u>1</u>				_
CSI JOB No. Og9165	Geo Services Inc.	,	SOI	LE	SOF	RING LOG	DATE _5	/4/2010)		_
CSI JOB No. Og9165	805 Amberst Court Sorte 204 Nape ville, Illingis 60565						LOGGED	BY <u>DR</u>			_
SECTION 32 WRS-5 LOCATION Addison Township T40 N, R11 E, NW 1/4 Section 13	(630)-355+2838						GSI JOB	No. <u>09</u>	9165		_
Dampage DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic	ROUTE II. RTE 19	_ DESCRIF	РПОП	Irvin	q Pa	rk Rd, York Rd, CNRR	Grade Separation	Prj. D-	-91-3	32-0)6
STRUCT. No. — Station — D B U N Surface Water Elev. Stream Bed Elev. Strea	SECTION 32 WRS-5	_ LOCATIO	ON _A	ddisor	Тоу	vnship T40 N, R11 E, N	W 1/4 Section 1	3			
Station —	COUNTY <u>DuPage</u>	_ DRILLIN	G ME	THOD !	Hollo	w Stem Auger	HAMMER TYPE _	CME Au	tomat	ic	
BORING NO. WB—03 Station: 394+95 Offset: 73.5' Right Cround Surface Elev. 673.3 Station: 394+95 Offset: 73.5' Right Cround Surface Elev. 673.3 (ft) 1/6" (tsf) (%) After Hrs. First Encounter Upon Completion 662.3	STRUCT. NO	- [T _R	Ι	М				B		١,
Station: 394+95		– IF	L	С	0	Stream Bed Elev.	<u>n/a</u>	l E	L	С	ľ
Offset: 73.5' Right Ground Surface Elev. 673.3 (ft) (6") (tsf) (%) After Hrs. (ft) (6") (tsf) (%) After Hrs. (ft) (6") (tsf) (75") (tsf) (BORING NO. WB-03	— т	W		S			T	l w l		١,
Ground Surface Elev. 673.9 (ft) /6" (tsf) (%) After Hrs.	Offset: 73.5' Right	_ H	s	Qu	Т			H	S	Qu	ľ
3.0* TOPSOIL with Stone 673.0 As - 7 5 -5 -7 4.5+P 20 CLAY-brown & gray-hard (A-6) -5 -7 4.5+P 18 -25 -8 4.5+P 18 -25 -8 107 -12 -15 9.98 19 665.3 SILTY LOAM-brown-medium dense (A-4) -6 -8 -8 -10 -10 -10 -10 -10 -10 -10 -10 -10 -10		<u>3</u> (ft)	(/6"	(tsf)	(%)			(ft)	(/6")	(tsf)	C
CLAY-brown & gray-hard (A-6) 5 7 4.5+P 20	3.0" TOPSOIL with Stone	673.0	AS	_	7				⇈		Γ
CLAY-brown & gray-hard (A-6) 5 7 4.5+P 20		_	4					_	1		
CLAY-brown & gray-hard (A-6) 7 4.5+P 20		-			\vdash			_	\vdash	_	H
CLAY-brown & gray-hard (A-6) -5 -7 -3 & 4.5+P 18 -25 -8 -9 -9 -12 -15 9.9B 19 -665.3 SILTY LOAM-brown- medium dense (A-4) -10 NP 12 -660.3 SANDY CLAY LOAM-brown- medium dense (A-2) -15 11 NP 11 -35 -35 -35 -35 -35 -35 -35 -35 -35 -35		_	_	4.5+P	20			_	1 1		
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SILTY LOAM-brown- medium dense (A-4) -10 8 - 14 -30 -4 -6 -8 -10 NP 12 -660.3 -4 SANDY CLAY LOAM-brown- medium dense (A-2) -15 11 NP 11 -35 -2 CLAY-gray-medium stiff (A-6) 3		∇	┧ 5					_	1		ı
SANDY CLAY LOAM-brown- medium dense (A-2) SANDY CLAY LOAM-brown- medium dense (A-2) -15 11 NP 11 -35 CLAY-gray-medium stiff (A-6) 3		· —	7						П		Γ
6 8 10 NP 12 660.3 SANDY CLAY LOAM-brown- 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	SILTY LOAM-brown-	1	0 8	-	14			30	1-1	_	H
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Medium dense (A-2)			1						1		
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657.8	medium dense (A-2)	_1		ND	 ,,			_35			ı
CLAY-gray-medium stiff (A-6) 3 -		_] "	INF	Γ"			<u>-J:</u>	1		Γ
CLAY-gray-medium stiff (A-6)			1	1				_	1		
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End Of Boring © -20.0'	End Of Boring @ -20.0'		1 4	\vdash	106			_	↤	\dashv	H
Hollow Stelli Augers -	Hollow Stem Augers CME Automatic Hammer	653.3 – 2	0 4	0.8B	22						L



	USER NAME = user	DESIGNED - RR	REVISED -
ring	FILE NAME = WYYY-60B42-012-SBL.DGN	CHECKED - DP	REVISED -
	PLOT SCALE = NONE	DRAWN - RR	REVISED -
	PLOT DATE = 12-19-2014	CHECKED - DP	REVISED -

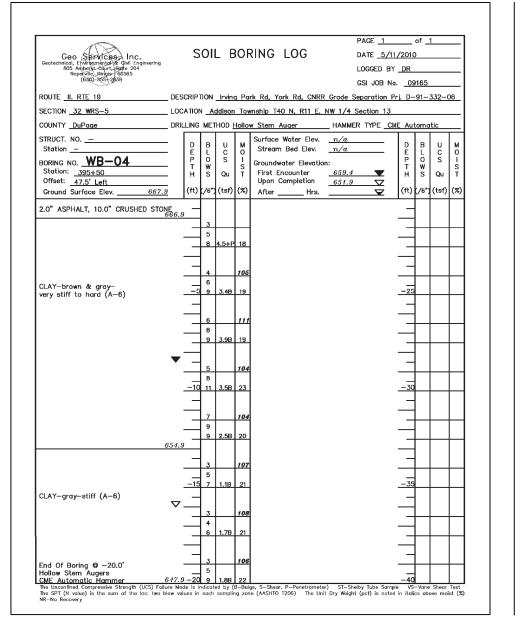
STATE OF ILLINOIS	S
DEPARTMENT OF TRANSPORTATION	IRVING PA
DEFAITIVE OF THANSFORTATION	CHEE

SOIL BORING LOGS		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
IRVING PARK RD RETAINING WALLS	1321	32-WRS-5	DU PAGE	495	340
INVING FARE RD RETAINING WALLS			CONTRACT	NO. 6	OB42
SHEET NO. 12 OF 13 SHEETS		ILLINOIS FED. AI	D PROJECT		

• 062-052031	02-05201 UCENSED DROINERS DIAL DROINERS DAL DROINERS DAL
Geo Services Inc.	USER NAME = user
chnical Environmental & Civil Engineering	FILE NAME = WYYY-60B42-013-SBL.DGN

PLOT SCALE = NONE

PLOT DATE = 12-19-2014



DESIGNED - RR

CHECKED - DP

CHECKED - DP

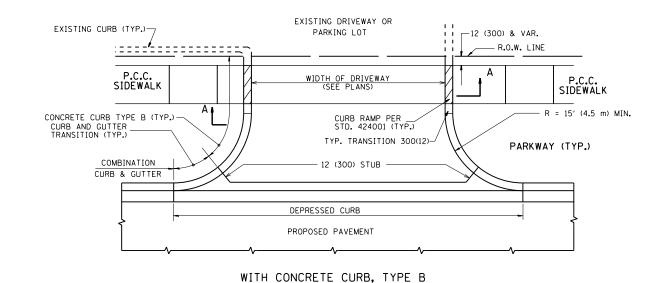
RR

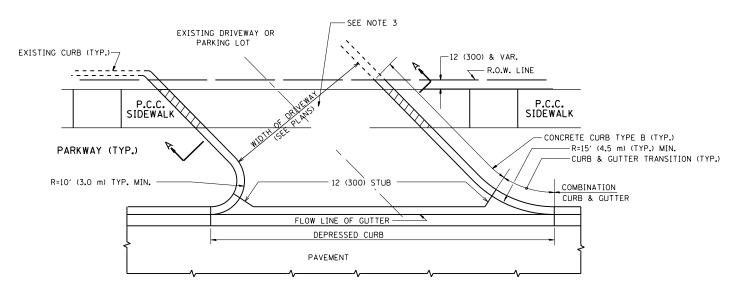
DRAWN

						PAGE 1		of _	1	
Geo Services Inc.	S	10	L E	3OF	RING LOG	DATE <u>5/3</u>	/2010			
Geo Services Inc. Geotechnical, Environmental & Givil Engineering 805 Amherst Court State 204 Napoville, Ulmpis 60065						LOGGED BY	DR			_
(630) 355+2638						GSI JOB No	o. <u>09</u>	165		_
ROUTE II. RTE 19	ESCRIP	TION	Irvin	g Pa	rk Rd, York Rd, CNRR Grade	Separation P	rj. D-	91-	332-0	06_
SECTION 32 WRS-5	OCATIO	N _A	ddisor	Tov	vnship T40 N, R11 E, NW 1/4	Section 13				_
COUNTY <u>DuPage</u>	RILLING	MET	HOD !	Hollo	w Stern Auger HAMM	ER TYPE <u>CN</u>	IE Au	tomo	ıtic	_
STRUCT. NO			T	Ι	Surface Water Elev. <u>n/a</u>		Τ_		l	
Station	D E	B L	U	M O	Stream Bed Elev. $\underline{n/a}$		D E	B L	C	M 0
вогінд но. <u>WB-05</u>	P	o W	S	S	Groundwater Elevation:		P	O W	S	S
Station: <u>396+30</u> Offset: <u>53.5' Right</u>	H	s	Qu	Т	First Encounter $\underline{657.1}$ Upon Completion $\underline{p_{ry}}$		Н	s	Qu	Т
Ground Surface Elev. 670.6	(ft)	(/6")	(tsf)	(%)	After Hrs	¥	(ft)	(/6")	(tsf)	(%)
TOPSOIL—dark brown to black							_			П
66	9.6	10	-	22			_			
SILTY CLAY-dark brown, gray & black		2					_			Н
stiff (A-6) Fill		2	1.75P	15			_	<u> </u>	<u> </u>	\vdash
66	7.6	1						1		
		3						<u> </u>		$oxed{oxed}$
	_	3	2.25P	19			-25			
		1	Z.Z3F	19						Н
CLAY-brown & gray-	_]					_			
very stiff to hard (A-6)	_	7	-	110			_			H
		8	4.2B	19						$oxed{oxed}$
		1					_	l		
	_	5		109			_	1		
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	_	4	_	108			_	_		\vdash
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		5								Н
	<u>-15</u>	6	4.0P	18			35	_	<u> </u>	\vdash
CLAY argument stiff to bard (A.S.)	_	1					-	1		
CLAY-gray-very stiff to hard (A-6)	_	3		107				<u> </u>		Ш
	_	5		0.0			_			
	_	8	2.4B	20				\vdash	\vdash	\vdash
		1								
End Of Boring @ −20.0'	_	3 6	\vdash	108			_	\vdash	\vdash	\vdash
Hollow Stem Augers CME Automatic Hammer 65	0.6 -20	7	2.5B	20	ge, S-Sheor, P-Penetrometer) ST-S le (AASHTO T206) The Unit Dry Weig		-40			

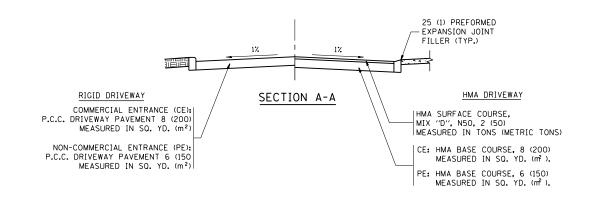
STATE OF ILLINOIS	;
DEPARTMENT OF TRANSPO	RTATION

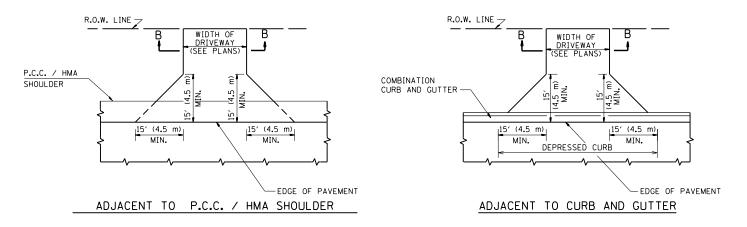
SOIL BORING LOGS		SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
IRVING PARK RD RETAINING WALLS	1321	32-WRS-5	DU PAGE	495	341
IIIVING LAIR IID IILIAINING WALLS			CONTRACT	NO.	50B42
SHEET NO. 13 OF 13 SHEETS		ILLINOIS FED. A	ID PROJECT		

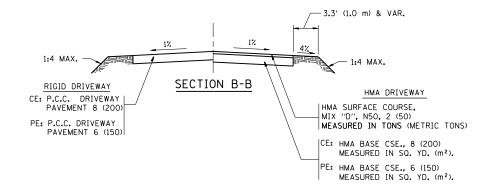




WITH CONCRETE CURB, TYPE B







RURAL FIELD ENTRANCE (FE)

HMA SURFACE COURSE, MIX "D", N50, 2 (50) MEASURED IN TONS (METRIC TONS)

AGGREGATE BASE CSE., TYPE B, 8 (200) MEASURED IN SQ. YD. (m^2) .

GENERAL NOTES:

DRIVEWAY SLOPES, LOCATIONS, & GEOMETRIC LAYOUT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE "HANDBOOK FOR POLICY ON PERMITS FOR ACCESS DRIVEWAYS TO STATE HIGHWAYS". FOR FURTHER LAYOUT REQUIREMENTS, REFER TO ILLUSTRATIONS IN THE PERMIT HANDBOOK. DRIVEWAYS SHALL BE REPLACED IN KIND, UNLESS OTHERWISE NOTED ON THE PLANS.

COMMERCIAL DRIVEWAYS SHALL BE CONSTRUCTED WITH CONCRETE CURB, TYPE B RETURNS EXCEPT WHEN THE SIDEWALK EDGE IS 4 FEET (1.2 METERS) OR LESS FROM THE BACK OF CURB, CONSTRUCT A FLARE DRIVEWAY WITHOUT CURB.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC PERMIT OFFICE AT 847/ 705-4131 FOR ANY OUESTIONS ON DRIVEWAYS SHOWN IN THE PLANS; SPECIFICALLY IN REFERENCE TO ADDITIONAL AND/OR RELOCATION/REMOVAL OF A DRIVEWAY.

COMBINATION CONCRETE CURB & GUTTER SHALL BE MEASURED STRAIGHT ACROSS THE DRIVEWAY. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CURB & GUTTER TRANSITION.

1 (25) PREFORMED EXPANSION JOINT FILLER WILL NOT BE PAID SEPARATELY, BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE P.C.C. DRIVEWAY PAVEMENT OR P.C.C. SIDEWALK.

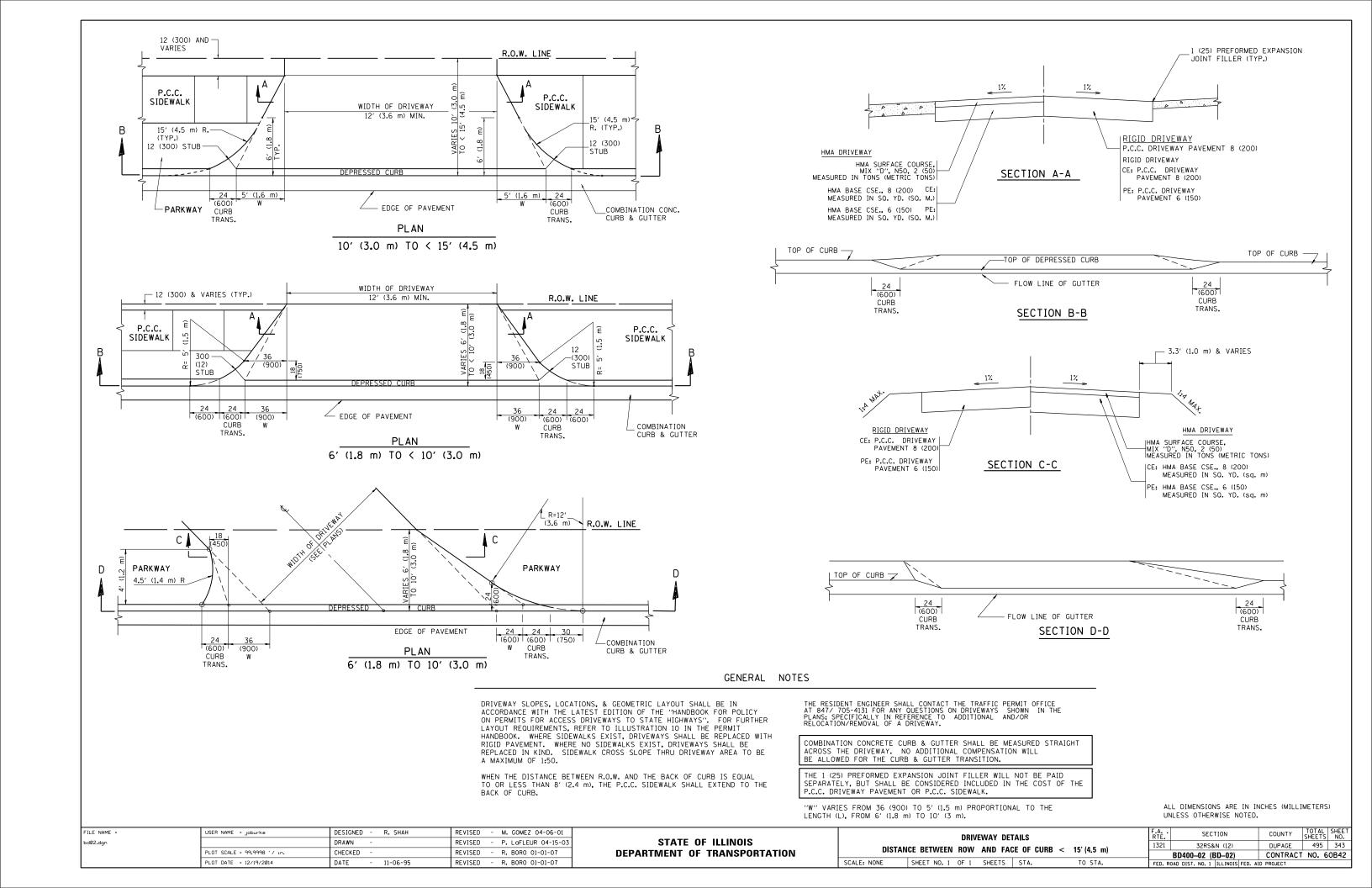
WHEN THE P.C.C. SIDEWALK EXTENDS THROUGH THE DRIVEWAY, THE THICKNESS OF THE SIDEWALK IN THE DRIVEWAY AREA SHALL BE THE SAME AS THE DRIVEWAY THICKNESS. SIDEWALK WILL BE PAID FOR AS P.C.C. SIDEWALK OF THE THICKNESS SPECIFIED. SIDEWALK CROSS SLOPE THRU DRIVEWALY AREA TO BE A MAXIMUM OF 1:50.

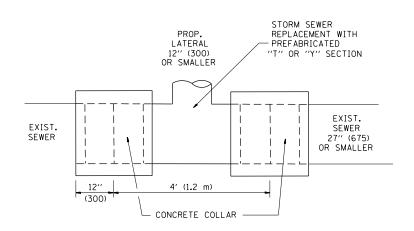
SCALE: NONE

FILE NAME =	USER NAME = joburke	DESIGNED - R. SHAH	REVISED - P. LaFLUER 04-15-03
bd0l.dgn		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 99.9998 '/ in.	CHECKED -	REVISED - R. BORO 06-11-08
	PLOT DATE = 12/19/2014	DATE - 11-04-95	REVISED - R. BORO 09-06-11

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

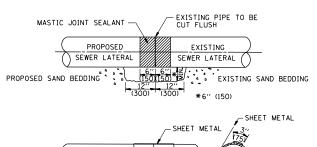
DR	DRIVEWAY DETAILS — DISTANCE BETWEEN R.O.W. AND FACE OF CURB & EDGE OF SHOULDER $>$ = 15 $^{\prime}$ (4.5 m)				F.A SECTION		TOTAL SHEETS	SHEET NO.
AND I					32RS&N (12)	DUPAGE	495	342
AND					BD0156-07 (BD-01)	CONTRACT	NO. 6	OB42
E	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. AI	D PROJECT		

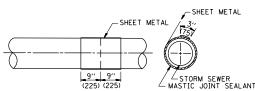


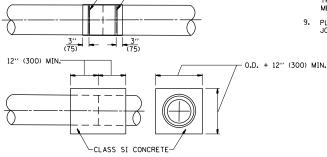


DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER
OF 27" (675) OR SMALLER







METAL BINDING

<u>DETAIL "B"</u> CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

- CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
- 2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
- 3. BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' × 6' (300 × 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
- 4. CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERANCE OF THE PIPE PLUS 3" (75) LONG.
- . WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
- 6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
- 7. PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
- 8. WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
- 9. PLACE CLASS SI CONCRETE AROUND THE JOINT.

PROPOSED LATERAL
12" (300) OR LESS)

MORTAR

OTHERWISE SHOWN.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS

DETAIL "C"

EXIST. SEWER-

PROPOSED LATERAL
CONNECTION TO EXISTING SEWER
OF 30" (750) OR LARGER

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

- I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:

 A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE
 - B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REOUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

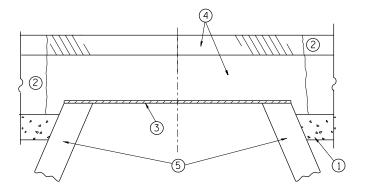
TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

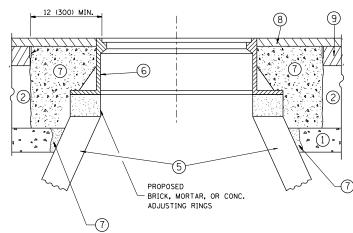
SCALE: NONE

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER
WILL NOT BE PAID PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED
STORM SEWER

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	DETAIL O	F STORM	SEWER		F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CONNECTION TO EXISTING SEWER				1321	32RS&N (12)	DUPAGE	495	344
						BD500-01 (BD-7)	CONTRACT NO. 60B42		
	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED R	DAD DIST NO 1 THE INDIS FED AT	D PROJECT		





NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

CONSTRUCTION PROCEDURES

STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.

 D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 11/2 (40)
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 11/2 (40 THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.
- * UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE FINGINEFR."

LEGEND

- 1 SUB-BASE GRANULAR MATERIAL
- (6) FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT

(5) EXISTING STRUCTURE

- (7) CLASS PP-1* CONCRETE
- 3 36 (900) DIAMETER METAL PLATE
- (8) PROPOSED HMA SURFACE COURSE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 9) PROPOSED HMA BINDER COURSE

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAYEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

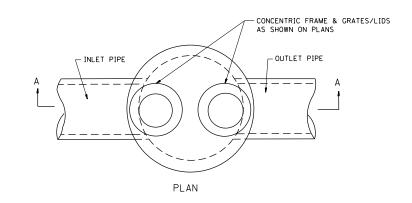
NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

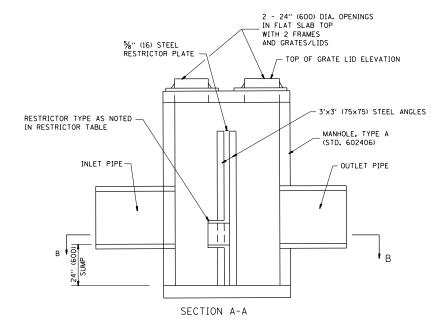
DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

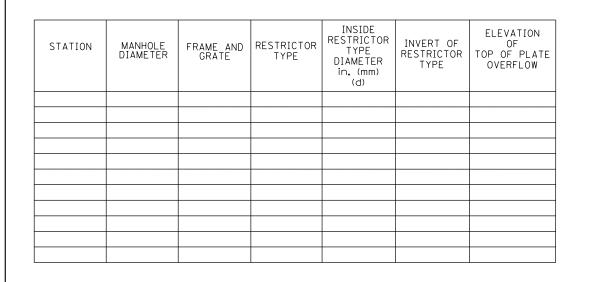
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

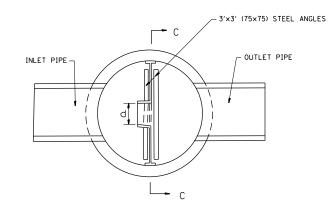
FILE NAME =	USER NAME = joburke	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
bd08.dgn		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 99.9998 '/ in.	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 12/19/2014	DATE - 10-25-94	REVISED - R. BORO 12-06-11

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

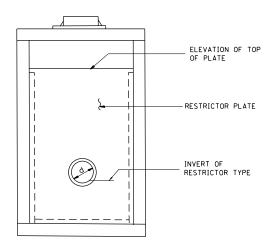




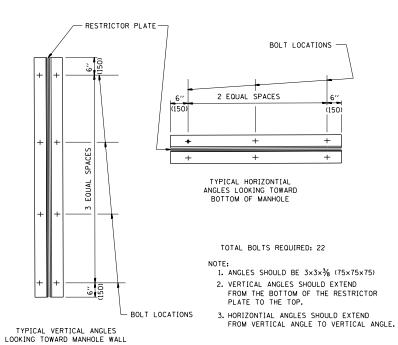


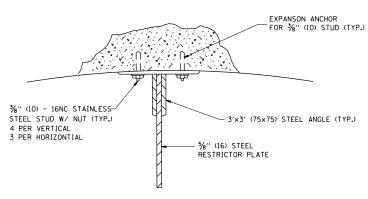


SECTION B-B



SECTION C-C

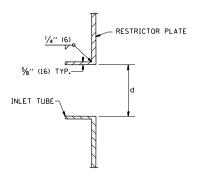




ANGLE FASTENER DETAIL

NOTES:

- ALL STEEL ANGLES AND PLATES TO BE GALVANIZED AFTER FABRICATION.
- 2. ALL RESTRICTOR PLATES, ANGLES AND HARDWARE TO BE INCLUDED IN THE COST OF THE MANHOLE.
- 3. BASIS OF PAYMENT: "MANHOLES TYPE A, 6 FT. (1.8 m)-DIAMETER, TYPE 1 FRAME, CLOSED LID, RESTRICTOR PLATE" EACH



INLET TUBE DETAIL

	RESTRICTOR TYPE										
1	2	3	4	5	6						
RE-ENTRANT TUBE	SHARP EDGED	SQUARE EDGED	RE-ENTRANT TUBE	SQUARE EDGED	ROUNDED						
LENGTH: 1/2 TO 1 DIA.		STREAM CLEARS SIDES	LENGTH: 2-1/2 DIA.	LENGTH: 2-1/2 DIA.							
C=.52	C=.61	C=.61	C=.73	C=.82	C=.98						

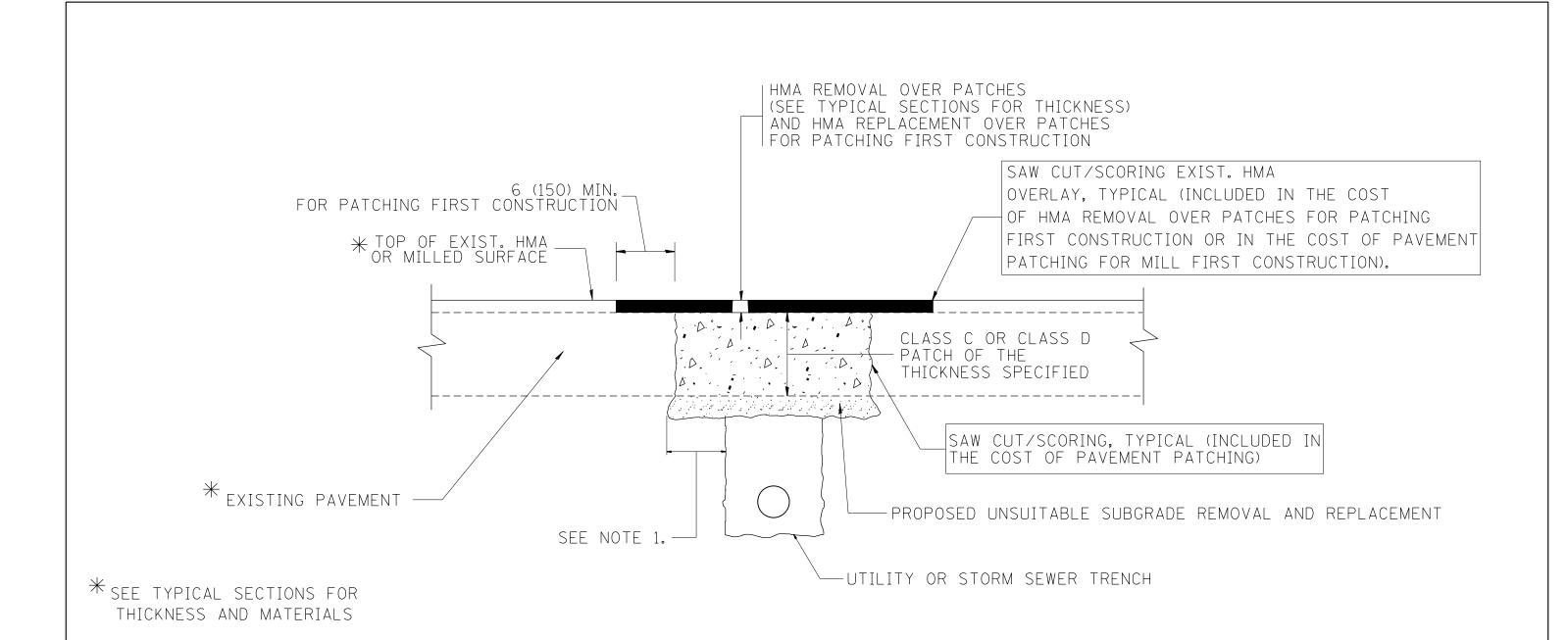
VALUES OF "C" FOR CIRCULAR AND SQUARE ORIFICES

STEEL ANGLE BOLTING DETAILS

FILE NAME =	USER NAME = joburke	DESIGNED - R. SHAH	REVISED -	R. SHAH 10-25-94
bdl2.dgn		DRAWN -	REVISED -	E. GOMEZ 08-28-00
	PLOT SCALE = 100.000 '/ in.	CHECKED -	REVISED -	M. GOMEZ 01-08-01
	PLOT DATE = 12/19/2014	DATE - 09-09-94	REVISED -	

STATE C	F ILLINOIS
DEPARTMENT OF	TRANSPORTATION

	MANHOLE WITH				F.A RTE.	SEC.	ION	COUNTY	TOTAL SHEETS	SHEET NO.	
					1321	32RS&	N (12)	DUPAGE	495	346	
						BD600-04 (BD-12)			CONTRACT NO. 60B42		
	SCALE: NONE	SHEET NO. 1 OF 1 SHEET	S STA.	TO STA.	EED P	OAD DIST NO 1	TILINOIS EED A	IN PROJECT			



NOTES:

- 1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
- 2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

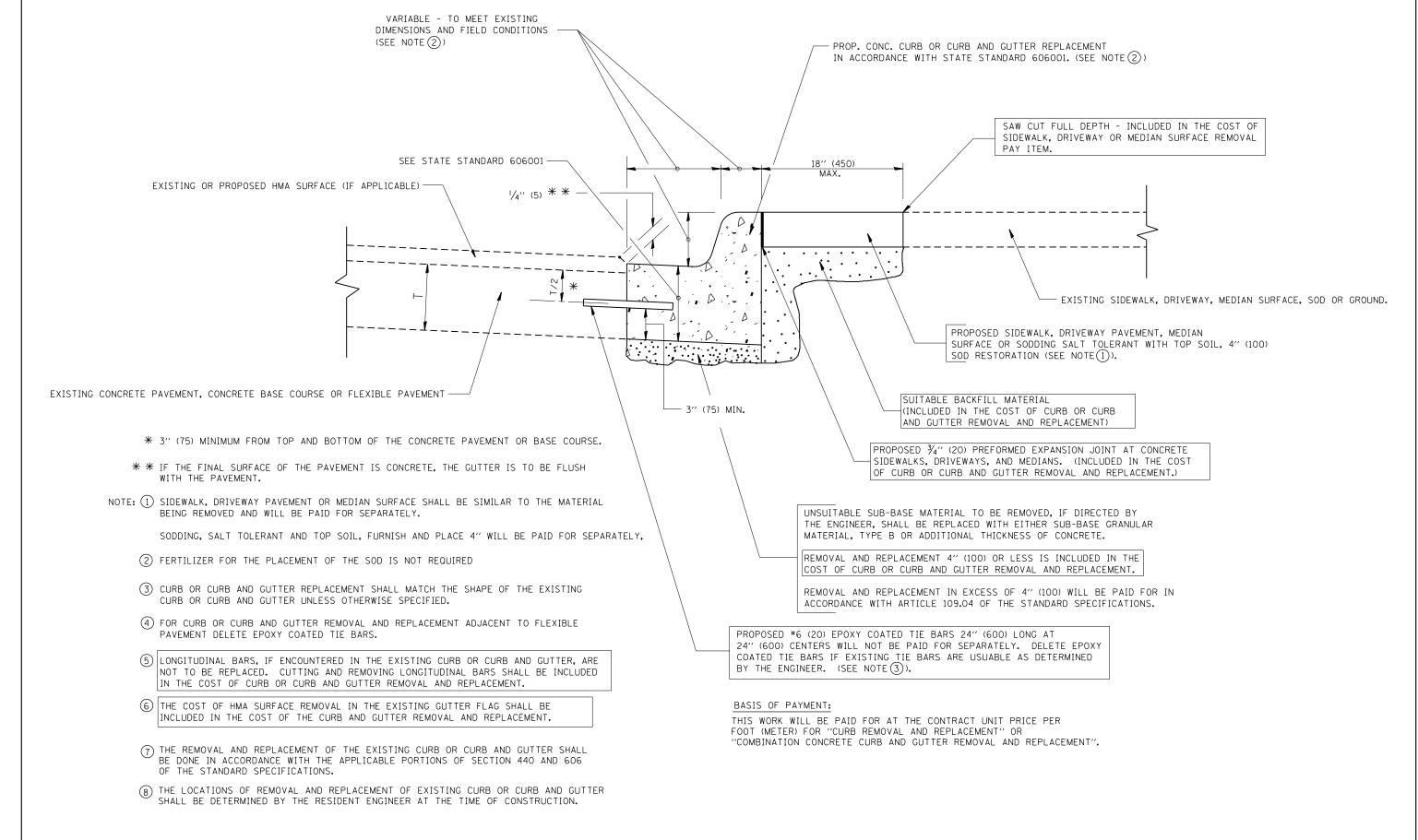
SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

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

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

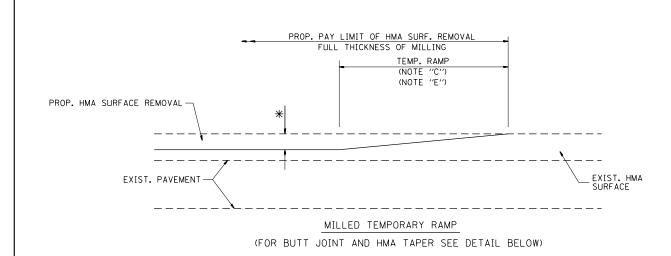
- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

FILE NAME =	USER NAME = joburke	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		PAVEMENT PATCHING FOR	F.A. · SECTION	COUNTY SHEET NO.
bd22.dgn		DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS		1321 32RS&N (12)	DUPAGE 495 347
	PLOT SCALE = 100.000 '/ in.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	HMA SURFACED PAVEMENT	BD400-04 (BD-22)	CONTRACT NO. 60B42
	PLOT DATE = 12/19/2014	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED.	

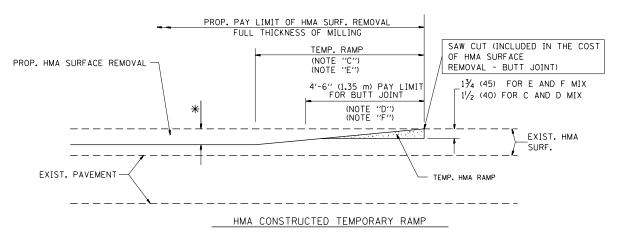


CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

L											
	FILE NAME =	USER NAME = joburke	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96		CURB OR CURB AND GUTTER	F.	A. · SECTION	ON COUNTY	TOTAL SHE	ĒΤ
	bd24.dgn		DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS	REMOVAL AND REPLACEMENT		321 32RS&N	(12) DUPAGE	495 34	48
		PLOT SCALE = 100.000 '/ in.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION			BD600-06 (BD		T NO. 60B4	12
L		PLOT DATE = 12/19/2014	DATE - 03-11-94	REVISED - R. BORO 12-15-09		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FE	ED. ROAD DIST. NO. 1 IL	LINOIS FED. AID PROJECT		



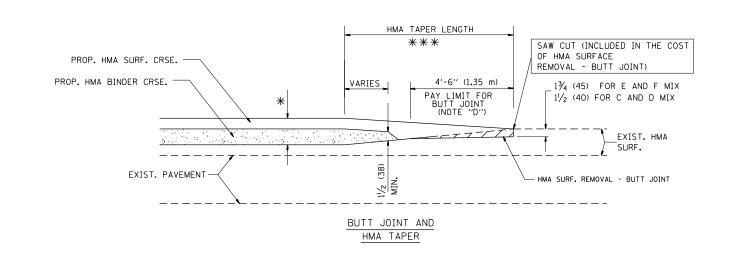
OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2

TYPICAL TEMPORARY RAMP

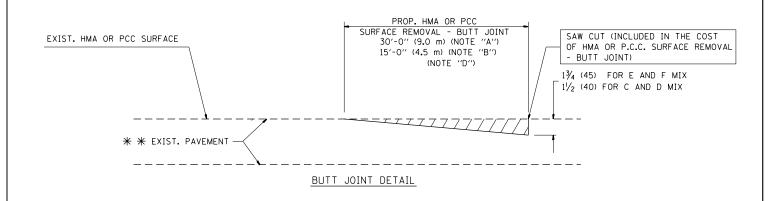


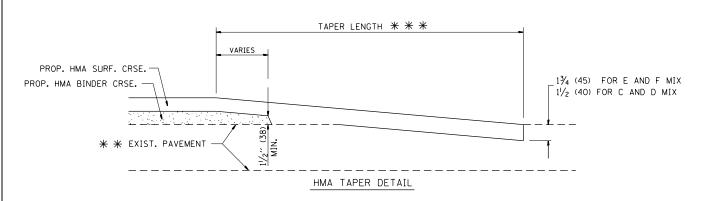
TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

FILE NAME = Joburke DESIGNED - M. DE YONG REVISED - R. SHAH 10-25-94
bd32.dgn

| DRAWN - REVISED - A. ABBAS 03-21-97
| PLOT SCALE = 99.998 '/ in. CHECKED - REVISED - M. GOMEZ 04-06-01
| PLOT DATE = 12/19/2014 DATE - 06-13-90 REVISED - R. BORO 01-01-07

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

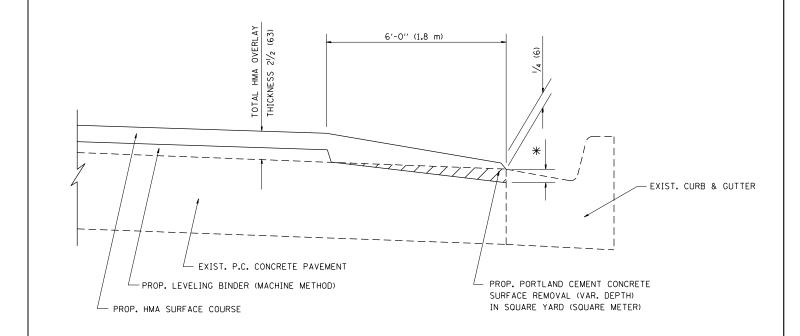
NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- imes SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- # # 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

SCALE: NONE



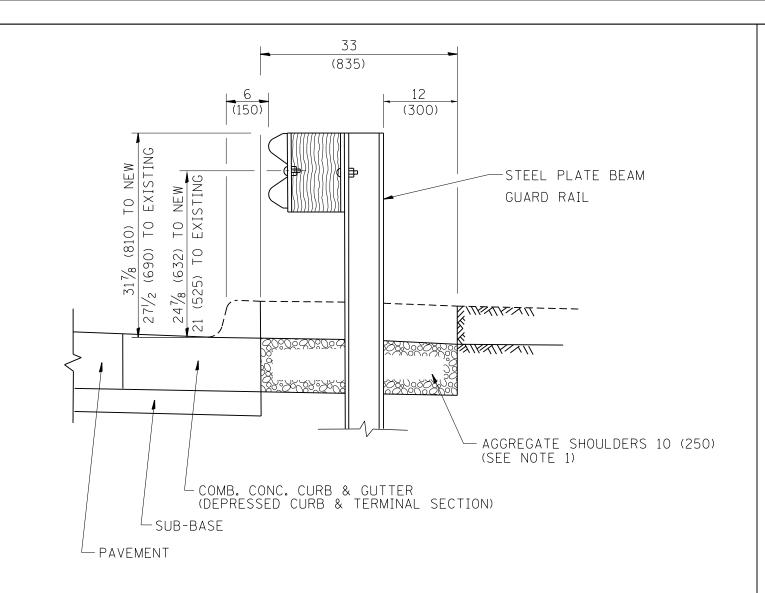
HMA TAPER AT EDGE OF P.C.C PAVEMENT

HMA SURF ACE		LEVELING BINDER	
MIX	THICKNESS	THICKNESS	★ MILLING AT GUTTER FLAG
C OR D	11/2 (38)	1 (25)	11/4 (33)
F	1¾ (44)	3/4 (19)	11/2 (38)

FILE NAME =	USER NAME = joburke	DESIGNED	-	R. SHAH	REVISED	-	R. SHAH 10-25-94
bd33.dgn		DRAWN	-	JIS	REVISED	-	A. ABBAS 05-05-99
	PLOT SCALE = 99.9998 '/ in.	CHECKED	-	A. ABBAS	REVISED	-	E. GOMEZ 12-21-00
	PLOT DATE = 12/19/2014	DATE	-	09-10-94	REVISED	-	R. BORO 01-01-07

STATE OF ILLINOIS							
DEPARTMENT	0F	TRANSPORTATION					

						F.A SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
						1321	32RS&	N (12)	DUPAGE	495	350
		EDGE OF F.C.O	FAVLI	VILIVI		В	D400-06	(BD33)	CONTRACT	NO. 6	OB42
	SCALE: NONE	SHEET NO. 1 OF 1 SHEE	s s	TA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					



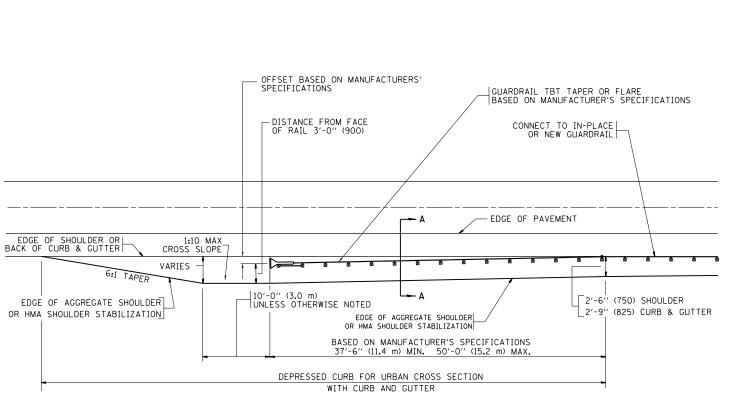
SECTION A-A

- NOTES: 1. THE AGGREGATE SHOULDER, 10" OR HMA SHOULDER, 6" (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.

BASIS OF PAYMENT: HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE

PAID FOR AT THE CONTRACT UNIT PRICE
PER SQUARE YARD (SQUARE METER) FOR
"HOT-MIX ASPHALT SHOULDERS 6" (150 mm)".

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

TBT = TRAFFIC BARRIER TERMINAL

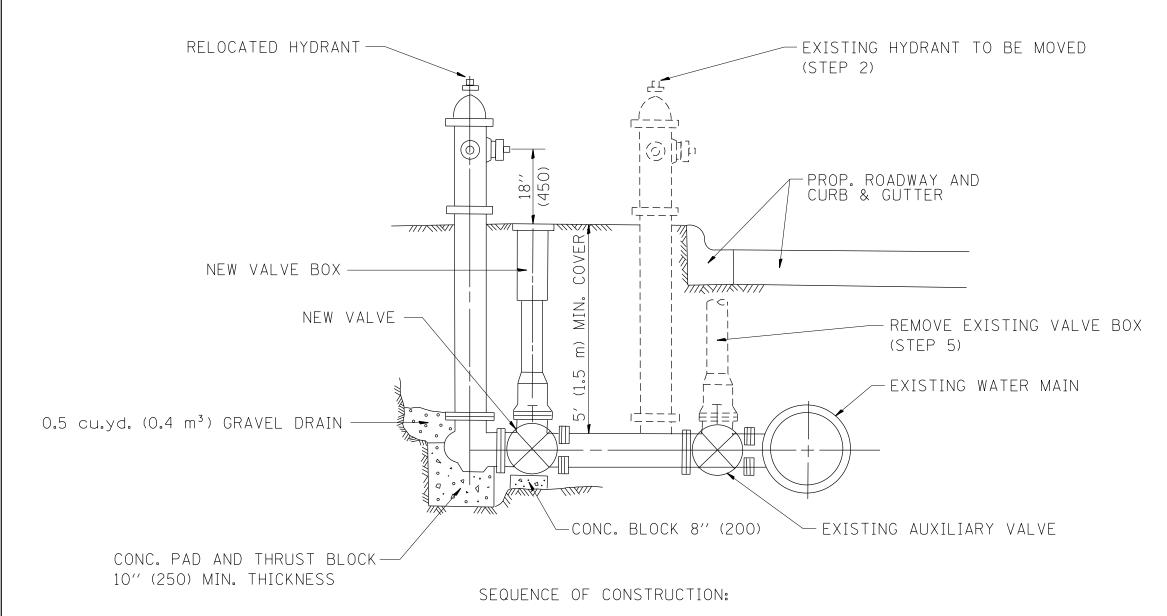
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	USER NAME = joburke	DESIGNED	-	M. DE YONG	REVISED	-	E. GOMEZ 08-28-00
bd34.dgn		DRAWN	-		REVISED	-	R. BORO 01-01-07
	PLOT SCALE = 99.9998 '/ in.	CHECKED	-		REVISED	-	R. BORO 12-08-2008
	PLOT DATE = 12/19/2014	DATE	-	09-22-90	REVISED	-	R. BORO 09-14-2009

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

	DETAILS	FOR	DEPRE	SSED	CURB	& (GUTTER	AND		
SHOULDER TREATMENT AT TBT TY 1 SPL.										
	SHEET N	0 1	OF 1	SHEET	۰ς ς	ТΔ		TO S	TΔ	

SCALE: NONE



- 1. CLOSE EXISTING VALVE.
- 2. REMOVE EXISTING HYDRANT.
- 3. INSTALL HYDRANT EXTENSION AND NEW VALVE.
- 4. RELOCATE EXISTING HYDRANT.
- 5. OPEN EXISTING VALVE, REMOVE BOX.
- 6. BACKFILL.
- 7. FLUSH AND TEST FOR CHLORIDE RESIDUAL AND PROVIDE TEST.

ALL WORK TO BE DONE IN ACCORDANCE WITH ARTICLE 564 OF THE STANDARD SPECIFICATIONS. NEW VALVE AND BOX SHALL BE SAME MAKE AND MODEL AS EXISTING.

FIRE HYDRANT TO BE MOVED

	FILE NAME =	USER NAME = joburke	DESIGNED -	REVISED - R. SHAH 09-09-94			FIRE HYDRANT TO BE MOVED	RTE.	SECTION		SHEETS NO.
	bd36.dgn		DRAWN -	REVISED - R. SHAH 10-25-94	STATE OF ILLINOIS		THE HISHART TO BE MOVES	1321	32RS&N (12)	DUPAGE	495 352
		PLOT SCALE = 99.9998 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION				BD-36	CONTRACT N	NO. 60B42
L		PLOT DATE = 12/19/2014	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROA	D DIST. NO. 1 ILLINOIS FED. A		

FRAME EXTENSION INTO PAVEMENT	INNER HOOP REINFORCEMENT DIAMETER	SEMI CIRCULAR FORM DIAMETER	OUTER HOOP REINFORCEMENT DIAMETER
UP TO 8" (200)	3′-6″ (1.1 m)	4'-0'' (1.2 m)	5′-0′′ (1.5 m)
> 8" (200) T0 14" (360)	4'-0" (1.2 m)	4'-6'' (1.4 m)	5′-0′′ (1.5 m)

DESIGNED - A. ABBAS

- A. ABBAS

- 01-04-99

TOM MATOUSEK

DRAWN

DATE

CHECKED

REVISED - T. MATOUSEK 08-28-00

REVISED - T. MATOUSEK 10-02-00

REVISED - P. LAFLEUR 08-27-02

- T. MATOUSEK 04-25-02

REVISED

DESIGNER NOTE: THIS DETAIL IS TO BE USED WHEN THE GUTTER FLAG IS LESS THAN 24"

LEGEND:

USER NAME = joburke

PLOT DATE = 12/19/2014

FILE NAME =

bd48.dgn

NOTES:

- 1. THE ROUNDOUT AND ADDED REINFORCEMENT WILL NOT BE PAID SEPARATELY. BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE PAVEMENT.
- TRANSVERSE JOINTS MAY BE MOVED TO ACCOMMODATE ROUNDOUT, EDGE OF CIRCULAR JOINT SHALL BE MINIMUM 12" (300) FROM TRANSVERSE JOINT. RELOCATED TRANSVERSE JOINT SHALL BE CONTINUOUS FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT.
- 3. SEMI-CIRCULAR FORM SHALL BE REMOVED PRIOR TO DRILL AND GROUT OF TIE BARS.
- 4. ALL REINFORCED BARS SHALL BE EPOXY COATED.
- 5. DRILL AND GROUT IS PREFERRED, HOWEVER TIE BARS CAN BE POURED IN PLACE IF CLEARANCE IS PROVIDED TO OUTER EDGE OF FRAME. MINIMUM 2" (50) CLEARANCE.
- 6. WOOD SHIMS SHALL BE USED TO ADJUST ALL FRAMES. AFTER ADJUSTING MORTAR HAS CURED, THE WOOD SHIMS SHALL BE REMOVED AND THE VOIDS UNDER THE FRAMES FILLED WITH NON SHRINK GROUT.

SECTION

32RS&N (12)

FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT

BD-48

1321

TO STA.

COUNTY

DUPAGE 495 353

CONTRACT NO. 60B42

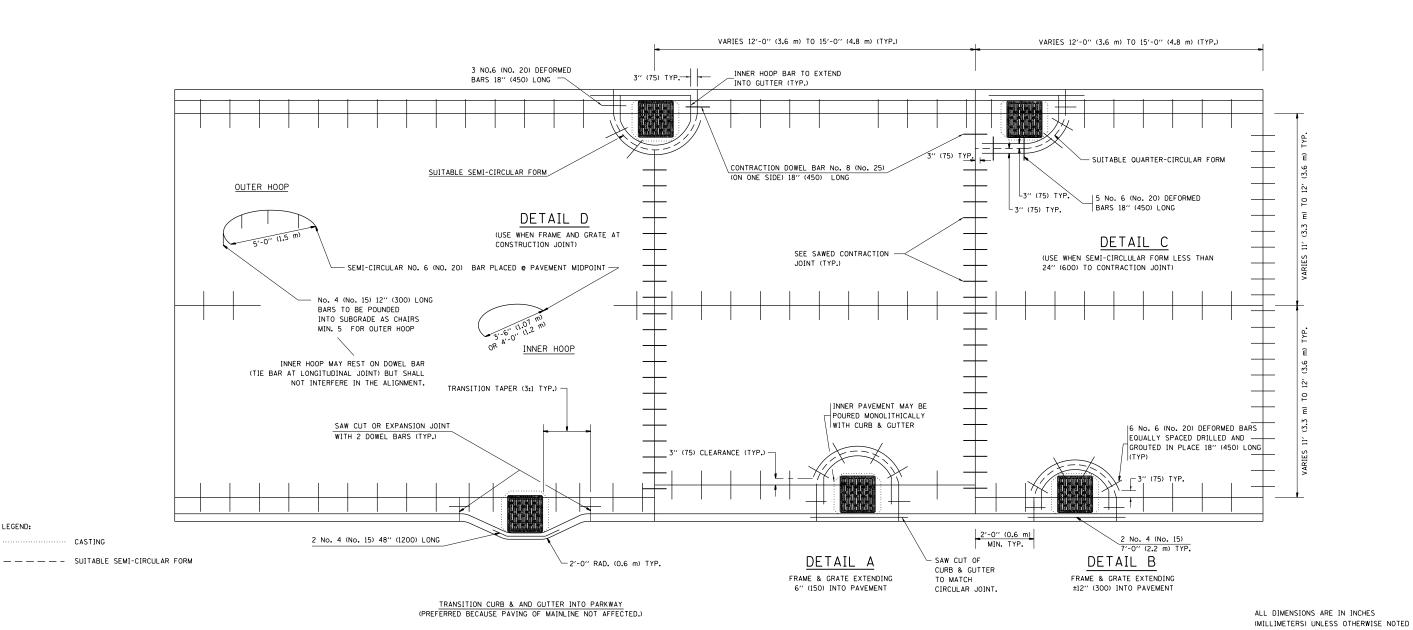
- 7. HOOP REINFORCEMENT SHALL BE ONE PIECE CONSTRUCTION.
- 8. CIRCULAR FRAMES AND GRATES MAY BE SUBSTITUTED.
- 9. CURB DOWELS MUST BE PLACED LEVEL & TRUE TO ALLOW CONTRACTION MOVEMENT.

PCC PAVEMENT ROUNDOUTS AT

CURB AND GUTTER

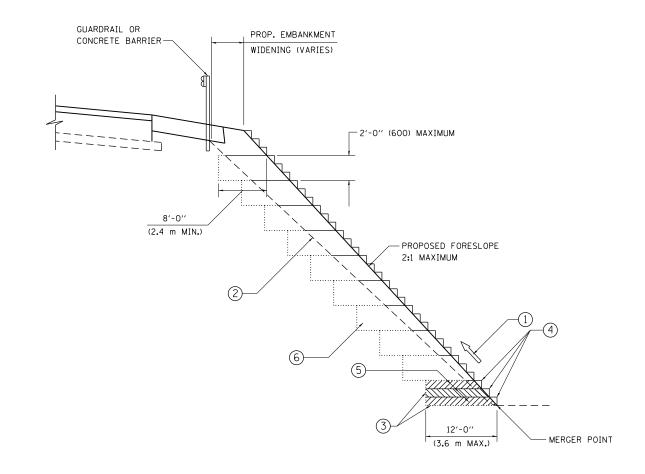
SHEET NO. 1 OF 1 SHEETS STA.

SCALE: NONE



STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION



TYPICAL BENCHING DETAIL FOR EMBANKMENT

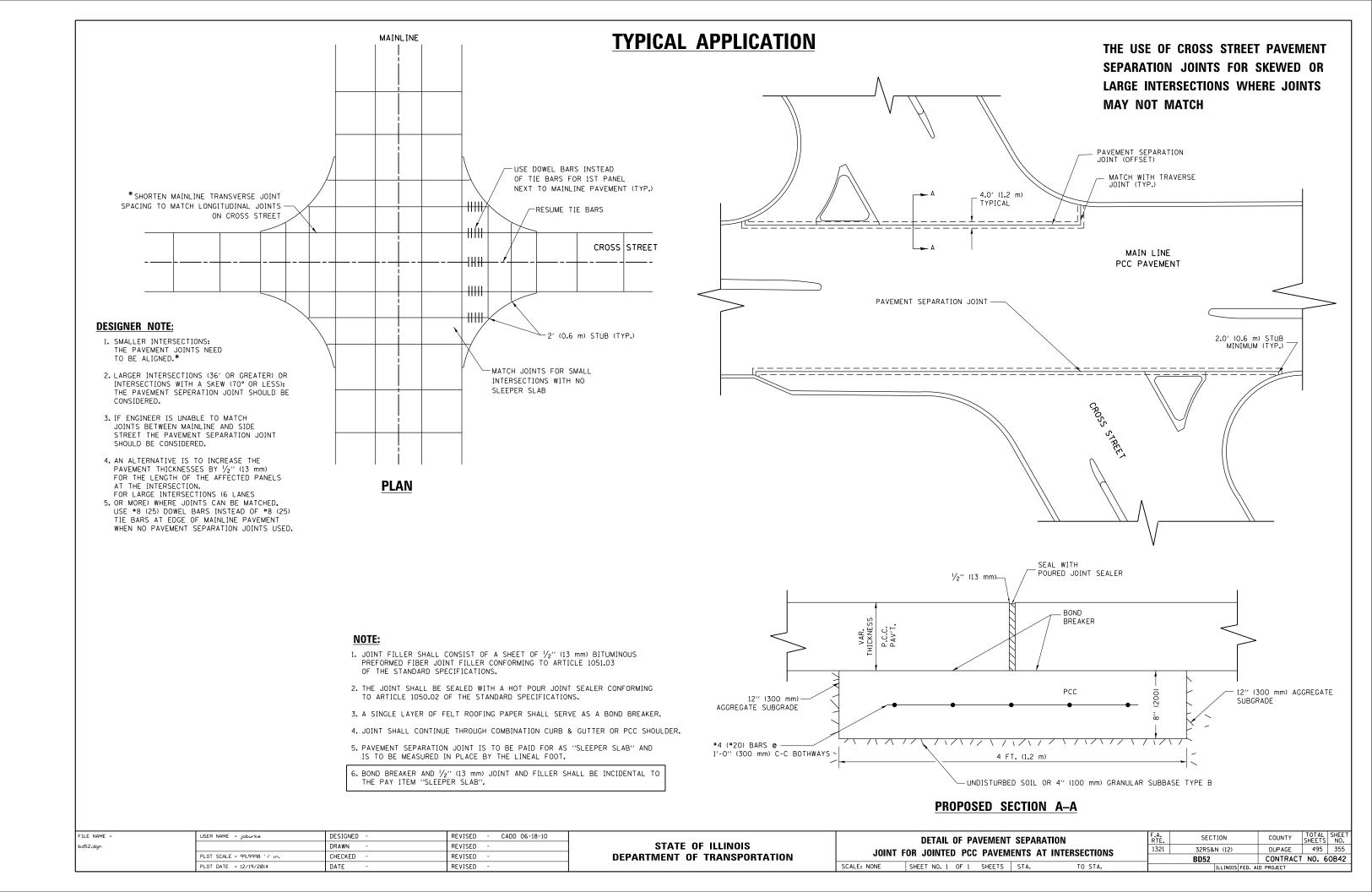
NOTES:

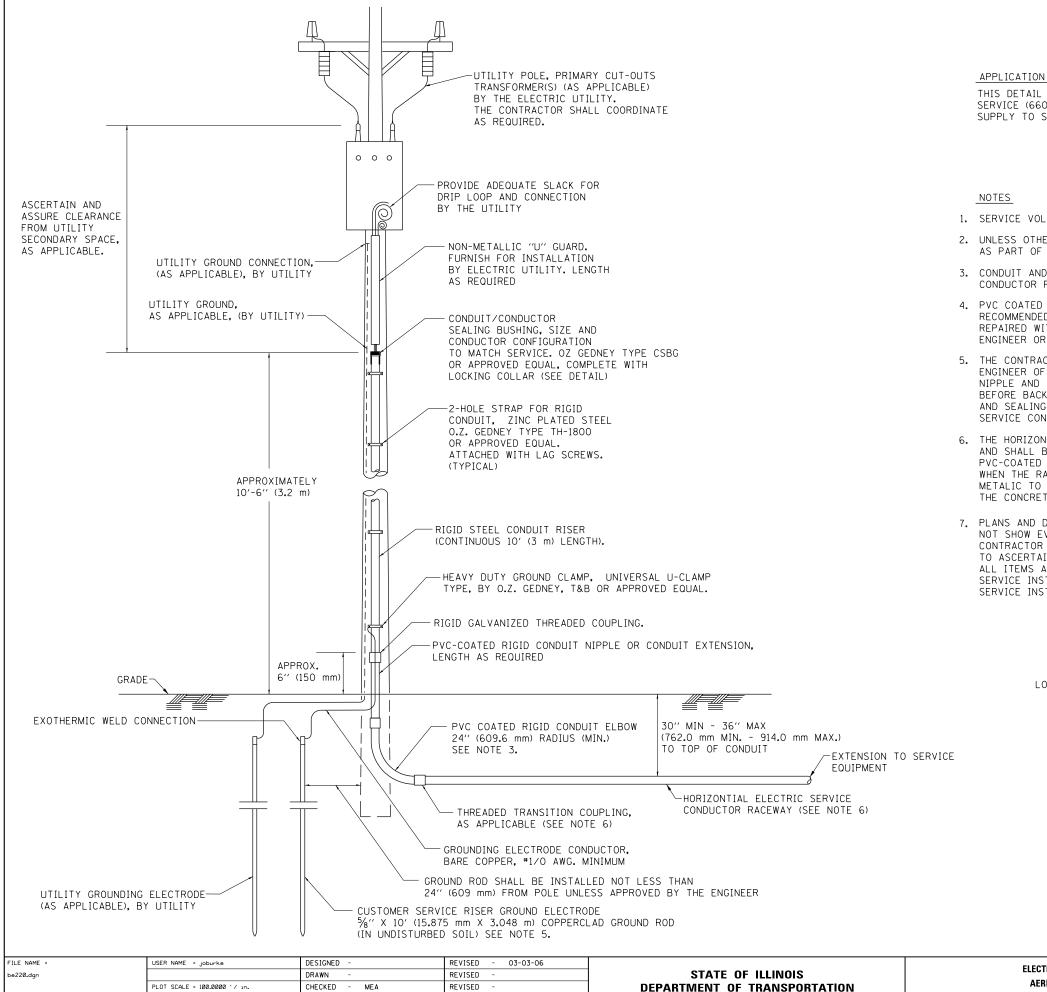
- CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.03
 OF THE STANDARD SPECIFICATIONS.
- (3) BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- (4) TRIM TO FINAL SLOPE.
- (5) EQUAL 8-INCH (200) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.05 OF THE STANDARD SPECIFICATIONS.
- 6 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).

FILE NAME =	USER NAME = joburke	DESIGNED	-		REVISED	-
bd5l.dgn		DRAWN	-	CADD	REVISED	-
	PLOT SCALE = 99.9998 '/ in.	CHECKED	-	S.E.B.	REVISED	-
	PLOT DATE = 12/19/2014	DATE	-	06-16-04	REVISED	-

STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

	BENC	F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.			
	FOR EMBAI	1321	32RS&N (12)	DUPAGE	495	354			
	TON LIVIDAL		BD-51	CONTRACT NO. 60B42					
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.						DAD DIST. NO. 1 TILLINGIS FED. A	ID PROJECT		





REVISED

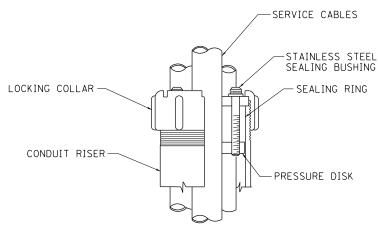
PLOT DATE = 12/19/2014

DATE

SCALE: NONE

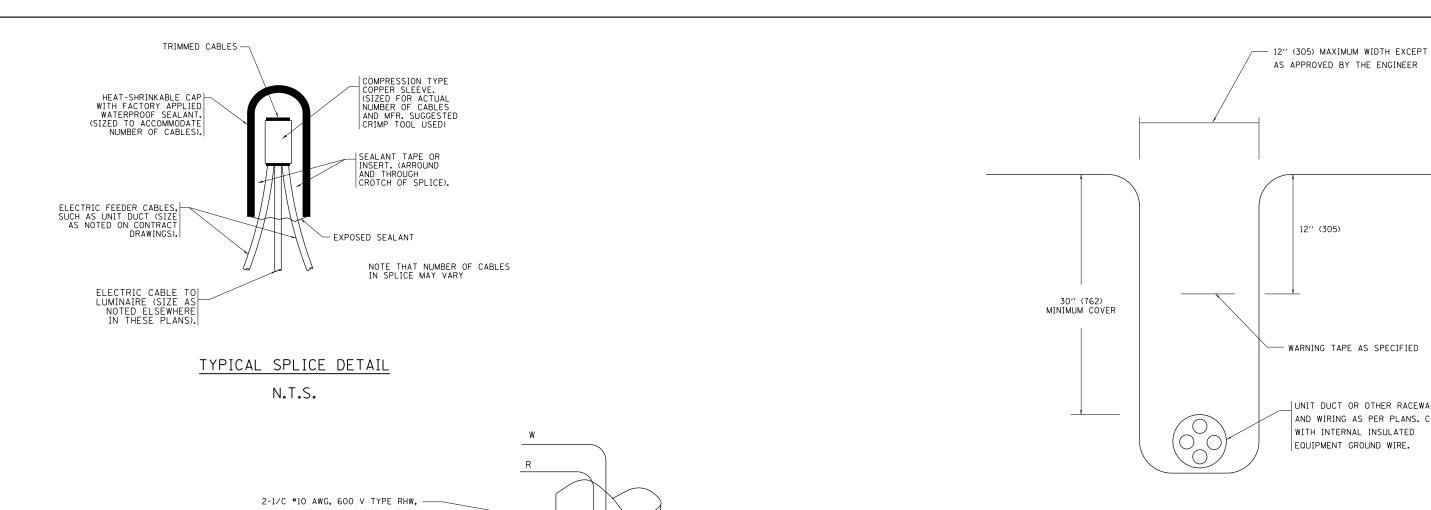
THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

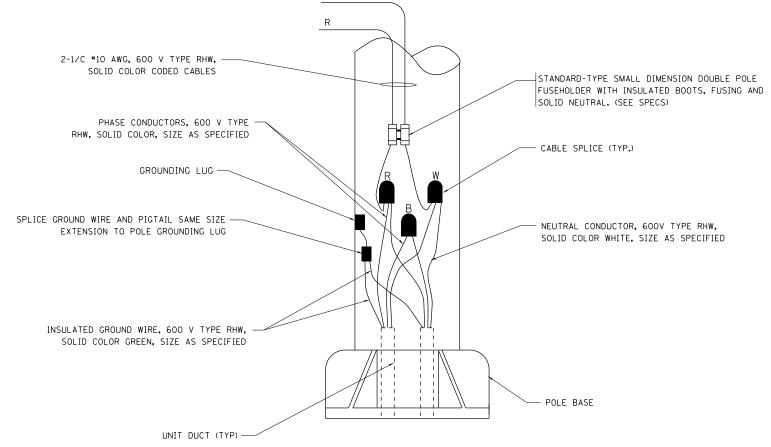
- 1. SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
- 2. UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
- 3. CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY 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

COUNTY **ELECTRIC SERVICE INSTALLATION** 32RS&N (12) 1321 DUPAGE 495 356 **AERIAL, REMOTE DISCONNECT** CONTRACT NO. 60B42 BE-220 SHEET NO. 1 OF 1 SHEETS STA. TO STA. FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT





TYPICAL WIRING IN TRENCH DETAIL N.T.S.

12" (305)

WARNING TAPE AS SPECIFIED

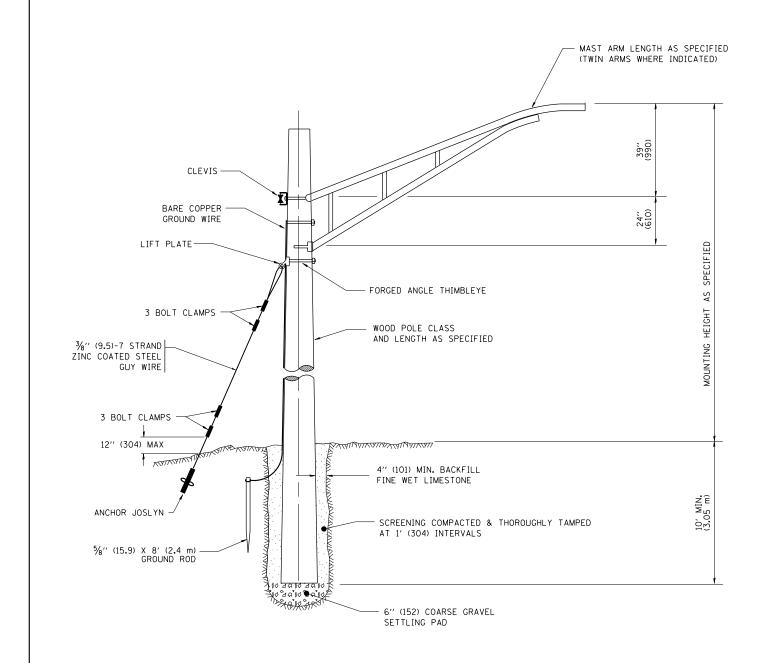
UNIT DUCT OR OTHER RACEWAY AND WIRING AS PER PLANS. COMPLETE

WITH INTERNAL INSULATED EQUIPMENT GROUND WIRE.

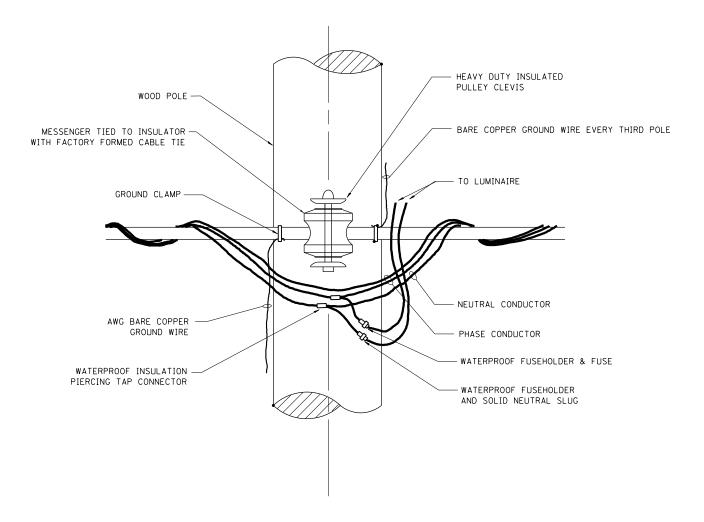
POLE WIRING DETAIL

N.T.S.

FILE NAME =	USER NAME = joburke	DESIGNED -	REVISED - 08-08-03			MISC, ELECTRICAL DETAILS		F.A	SECTION	COUNTY	TOTAL SHEET
be702.dgn		DRAWN -	REVISED -	STATE OF ILLINOIS					32RS&N (12)	DUPAGE	495 357
	PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		SHEET A				CONTRACT	T NO. 60B42
	PLOT DATE = 12/19/2014	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. ROAD	DIST. NO. 1 ILLINOIS FED. A		







TEMPORARY LIGHT POLE ATTACHMENT DETAIL

NOTES:

1. ALL DIMENSIONS IN INCHES (MILLIMETERS) UNLESS OTHERWISE INDICATED

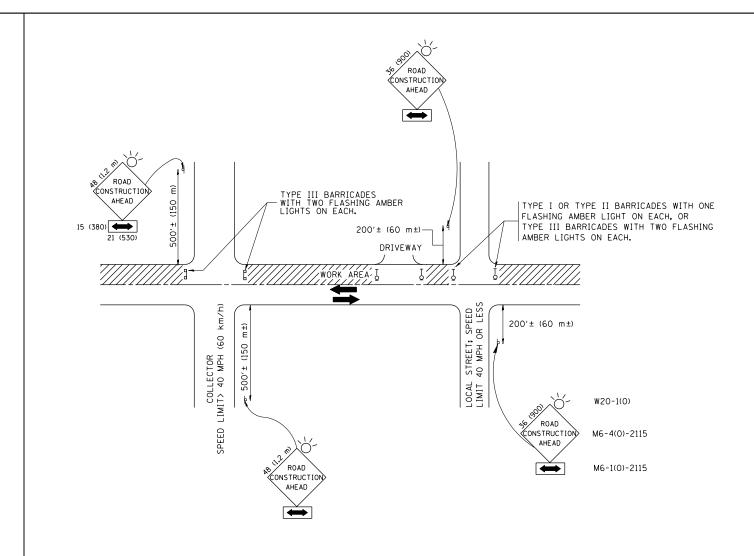
Ī	FILE NAME =	USER NAME = joburke	DESIGNED -	REVISED - 08-08-03			TEMPORARY LIGHT POLE DETAILS	F.A	SECTION	COUNTY	TOTAL SHEET
	be800.dgn		DRAWN -	REVISED -	STATE OF ILLINOIS		TEMPORANT CIGHT FOLE DETAILS	1321	32RS&N (12)	DUPAGE	495 358
		PLOT SCALE = 100.000 '/ in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION				BE-800		T NO. 60B42
		PLOT DATE = 12/19/2014	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROA		D PROJECT	

SCHEDULE OF LANDSCAPE ITEMS

			SHEET NUMBER																
ITCAA	0175	LINIT	TOTAL		_		4 -												
ITEM	SIZE	UNIT	TOTAL	1	2	3	4 5	' t	6										
TREE, ACER MIYABEI MORTON (STATE STREET MIYABE MAPLE), 2-1/2" CALIPER	2-1/2" CAL / B&B	EACH	7		3	4													
TREE, CELTIS OCCIDENTALIS (COMMON HACKBERRY)	2" CAL / B&B	EACH	24				2		8										
TREE, GLEDITSIA TRIACANTHOS INERMIS SHADEMASTER (SHADEMASTER THORNLESS COMMON HONEYLOCUST) TREE, GYMNOCLADUS DIOICUS (KENTUCKY COFFEETREE)	2-1/2" CAL / B&B	EACH	10	1	_		2												
TREE, GYMNOCLADUS DIOICUS (KENTUCKY COFFEETREE)	2-1/2" CAL / B&B 8' HT / B&B	EACH EACH	22 15		3		12	<u> </u>											
TREE, QUERCUS BICOLOR (SWAMP WHITE OAK)	2" CAL / B&B	EACH	13		3		8												
TREE, QUERCUS IMBRICARIA (SHINGLE OAK)	2" CAL / B&B	EACH	9				4												
TREE, QUERCUS MACROCARPA (BUR OAK)	2" CAL / B&B	EACH	12			3	4 !	5											
TREE, ULMUS AMERICANA PRINCETON (PRINCETON AMERICAN ELM)	2" CAL / B&B	EACH	9	2		7													
TREE, CRATAEGUS CRUSGALLI INERMIS (THORN LESS COCKSPUR HAWTHORN)	2" CAL / B&B	EACH	15	2				3											
TREE, CRATAEGUS CRUSGALLI INERMIS (THORNLESS COCKSPUR HAWTHORN) TREE, MALUS DONALD WYMAN (DONALD WYMAN CRABAPPLE)	6' HT / B&B 6' HT / B&B	EACH EACH	10 13		1		10	_											
TREE, MALUS GOLDEN RAINDROPS (GOLDEN RAINDROPS CRABAPPLE)	2" CAL / B&B	EACH	12		1			2											
TREE, SYRINGA PEKINENSIS DTR 124 (SUMMER CHARM PEKING LILAC)	2" CAL / B&B	EACH	8		3				3										
TREE, SYRINGA RETICULATA (JAPANESE TREE LILAC)	2" CAL / B&B	EACH	7		2			5											
TREE, SYRINGA RETICULATA (JAPANESE TREE LILAC)	6' HT / B&B	EACH	16				8 8	3											
SHRUB, ARONIA MELANOCARPA IROQUOIS BEAUTY (IROQUOIS BEAUTY BLACK CHOKEBERRY)	2' HT/CONTAINER	EACH	32	32															
SHRUB, RADTKO (DOUBLE KNOCKOUT ROSE)	#3 CONTAINER	EACH	304		59.00		245	C4											
SCHIZACHYRIUM SCOPARIUM 'CAROUSEL'	1 GAL 1 GAL	UNIT	10.52		2.39		5.52 1.				_			 				-	
SPOROBOLUS HETEROLEPIS BAPTISIA AUSTRALIS	1 GAL	UNIT	3.4 3.28	-		2.62 0.50 2				+ + +				 					
BAPTISIA AUSTRALIS BAPTISIA SPHAEROCARPA 'SCREAMING YELLOW'	1 GAL	UNIT	3.55	1		3.55	10 0	.5											+
ECHINACEA PURPUREA 'PRAIRIE SPLENDOR'	1 GAL	UNIT	3.9			1.17 2	2.18 0.	55											
HEMEROCALLIS 'BROCADED GOWN'	1 GAL	UNIT	0.78		0.19		0.51 0.												
HEMEROCALLIS 'CHERRY CHEEKS'	1 GAL	UNIT	0.78			0.03													
HEMEROCALLIS 'CHICAGO APACHE'	1 GAL	UNIT	0.78		0.19	0.03		05											
HEMEROCALLIS 'HAPPY RETURNS'	1 GAL	UNIT	3.19				1.26	-											
HEMEROCALLIS 'PARDON ME' HEMEROCALLIS 'ROCKET CITY'	1 GAL	UNIT	2.33	0.45		0.03	0.38 0.												
HEMEROCALLIS 'STELLA DE ORO'	1 GAL 1 GAL	UNIT	0.78 3.19		0.19	1.93		05		+ +									
HEMEROCALLIS 'STRAWBERRY CANDY'	1 GAL	UNIT	0.78	 	0.19	0.03		05											
HEMEROCALLIS 'STRUTTER'S BALL'	1 GAL	UNIT	0.78			0.03													
NEPETA 'WALKER'S LOW'	1 GAL	UNIT	2.12			1.48 (
PEROVSKIA ATRIPLICIFOLIA 'LITTLE SPIRE'	1 GAL	UNIT	3.9			1.17 2													
RUDBECKIA FULGIDA 'VIETTE'S LITTLE SUZY'	1 GAL	UNIT	2.33	0.45	1.14		0.38												
SALVIA NEMORASA 'MAY KNIGHT'	1 GAL	UNIT	3.9		1.00	1.17 2													
ALLIUM HOLLANDICUM 'SENSATION' NARCISSUS 'CARLTON'	TOP SIZE TOP SIZE	UNIT	4.32 11.63		1.06	0.10 3.47 6				+ +									
NARCISSUS 'ICE FOLLIES'	TOP SIZE	UNIT	6.28			3.79 2		04											
NARCISSUS 'TETE A TETE'	TOP SIZE	UNIT	2.08		0.17	1.45													
NARCISSUS 'PROFESSOR EINSTEIN'	TOP SIZE	UNIT	4.61	0.90			0.76 0.	69											
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FILE NAME =	USER NAME = joburke	DESIGNED NMR	REVISED - R. WANNER 05-02-00		ĺ
bml5.dgn		DRAWN RTB	REVISED - R. WANNER 09-26-07	STATE OF ILLINOIS	1
	PLOT SCALE = 100.0000 '/ in.	CHECKED MPK	REVISED -	DEPARTMENT OF TRANSPORTATION	1
	PLOT DATE = 12/19/2014	DATE 12-19-14	REVISED -		SCALE:

SCHEDU	JLE OF	LANDSCA	PING ITEN	ЛS	F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
					1321	32RS&N (12)	DUPAGE	495	359
						BM-15	CONTRACT	NO. 6	OB42
FT NO 1	OF 1	SHEETS	STA	TO STA	EED D	NAD DICT NO 1 THE INDIC CED A	ID DDO IECT		



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

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- Q) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h)
 AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- d) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROLLTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

SCALE: NONE

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

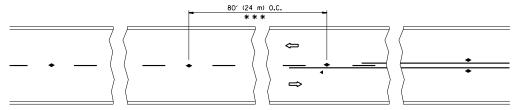
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME =	USER NAME = joburke	DESIGNED -	LHA	REVISED	- J. OBERLE 10-18-95
tol0.dgn		DRAWN -		REVISED	- A. HOUSEH 03-06-96
	PLOT SCALE = 100.000 '/ in.	CHECKED -		REVISED	- A. HOUSEH 10-15-96
	PLOT DATE = 12/19/2014	DATE -	06-89	REVISED	-T. RAMMACHER 01-06-00

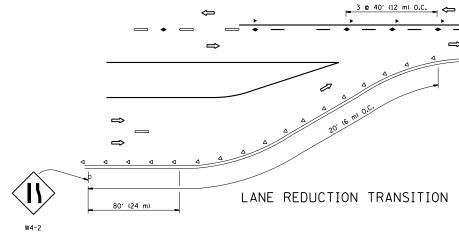
STATE	: OI	FILLINOIS
DEPARTMENT	0F	TRANSPORTATION

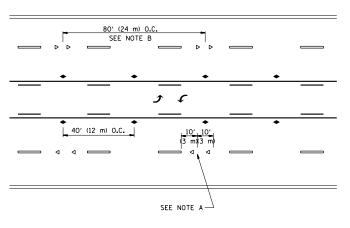
	TRAFFIC CONTRO	OL AND P	ROTECTION	I FOR	F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS						1321 32RS&N (12) DUPAGE			360
						TC-10 CONT			ACT NO. 60B42
SI	HEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. AI	D PROJECT		



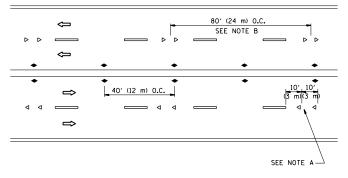
*** REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

TWO-LANE/TWO-WAY

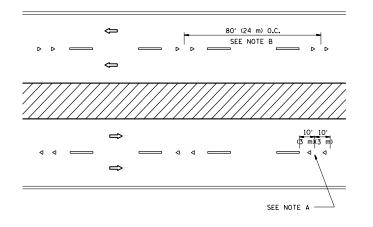




TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

- 1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
- 2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
- 3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

LANE MARKER NOTES

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

SYMBOLS

---- YELLOW STRIPE

---- WHITE STRIPE

- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (₩/O)
- ◆ TWO-WAY AMBER MARKER

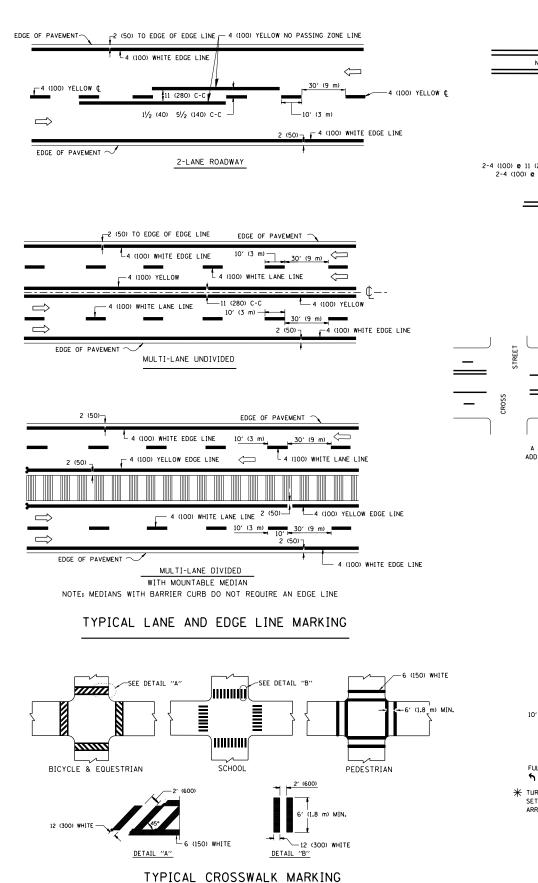
DESIGN NOTES

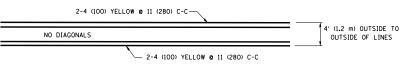
- 1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
- 2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
- 3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
- 4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.

LEFT TURN

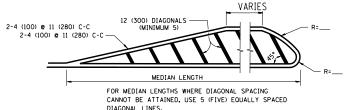
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = joburke	DESIGNED -	REVISED - T. RAMMACHER 09-19-94		TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS (SNOW_PLOW RESISTANT)		F.A RTF.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
tell.dgn		DRAWN -	REVISED -T. RAMMACHER 03-12-99	STATE OF ILLINOIS			1321	32RS&N (12)	DUPAGE	495 361
	PLOT SCALE = 100.000 ' / in.	CHECKED -	REVISED -T. RAMMACHER 01-06-00	DEPARTMENT OF TRANSPORTATION				TC-11		NO. 60B42
	PLOT DATE = 12/19/2014	DATE -	REVISED - C. JUCIUS 09-09-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD		D. AID PROJECT	



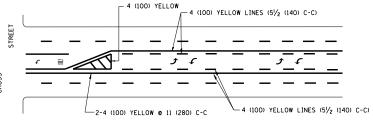


4' (1.2 m) WIDE MEDIANS ONLY

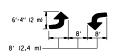


DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

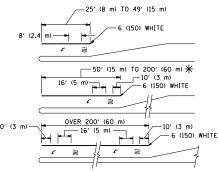


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS,



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

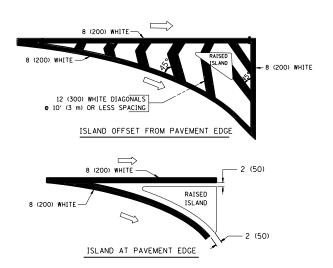


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. \P AREA = 15.6 SO. FT. (1.5 m²) ONLY AREA = 20.8 SO. FT. (1.9 m²)

* 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



TYPICAL ISLAND MARKING

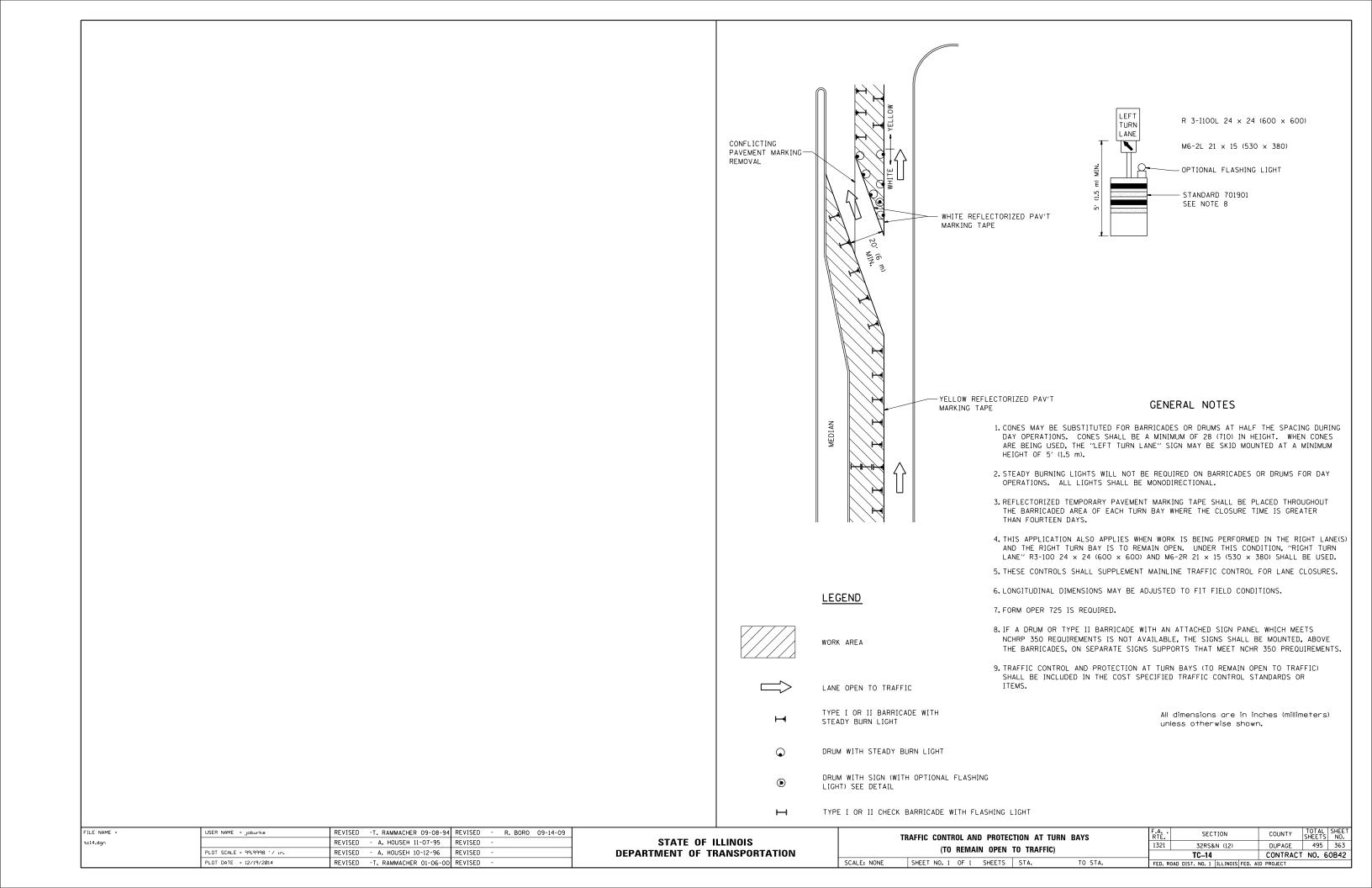
		I		
TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOL ID SOL ID	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 MOUNTABLE MEDIANS IN YELLOW: EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
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	WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART 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	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))

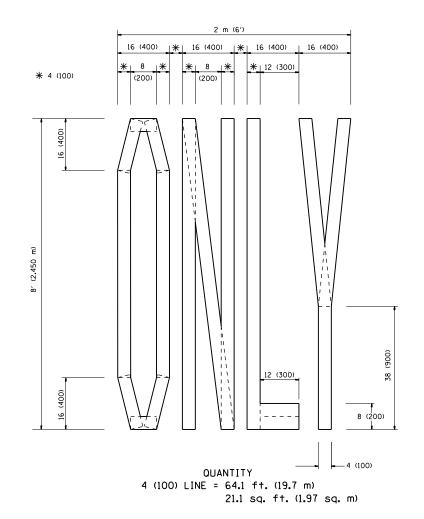
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

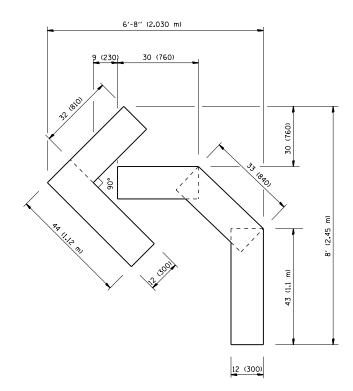
All dimensions are in inches (millimeters) unless otherwise shown.

TOTAL SHEET NO. 495 362

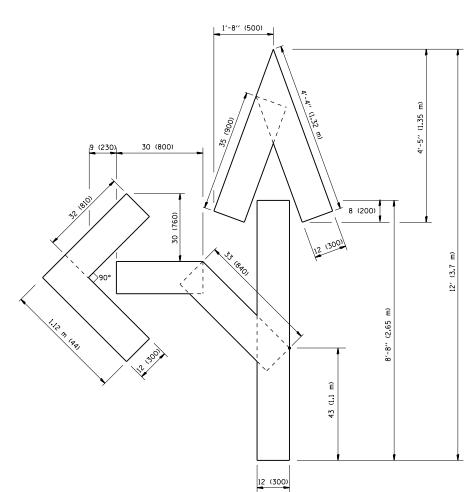
FILE NAME =	USER NAME = joburke	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94		DISTRICT ONE	F.A RTF.	SECTION	COUNTY TOTAL SHEET SHEETS NO.
tc13.dgn		DRAWN -	REVISED -C. JUCIUS 09-09-09		TYPICAL PAVEMENT MARKINGS	1321	32RS&N (12)	DUPAGE 495 362
	PLOT SCALE = 100.000 '/ in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	TTPICAL PAVEMENT WARKINGS		TC-13	CONTRACT NO. 60B42
	PLOT DATE = 12/19/2014	DATE - 03-19-90	REVISED -		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD [DIST. NO. 1 ILLINOIS FED.	AID PROJECT







OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)



OUANTITY
4 (100) LINE = 82.5 ft. (25.3 m)
27.5 sq. ft. (2.53 sq. m)

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

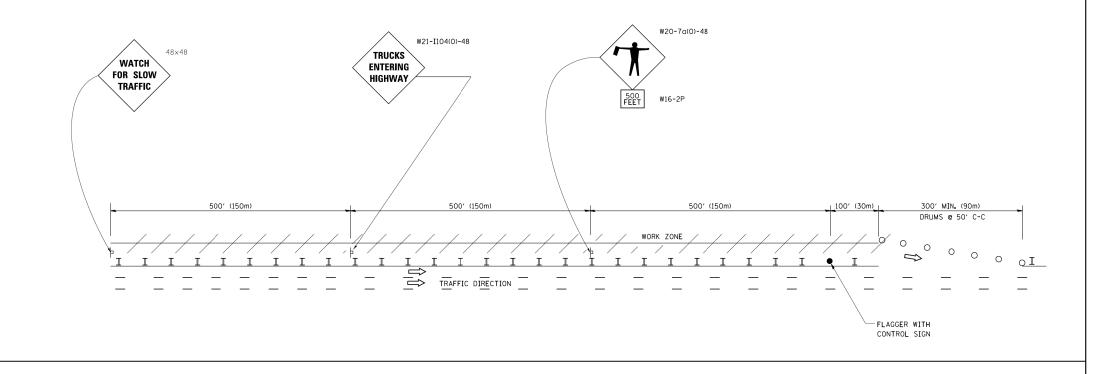
FILE NAME =	USER NAME = joburke	DESIGNED -	REVISED -T. RAMMACHER 06-05-96	
tc16.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97	
	PLOT SCALE = 99.9998 '/ in.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPAF
	PLOT DATE = 12/19/2014	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00	

STATE	OF ILLINOIS	
DEPARTMENT (OF TRANSPORTATION	

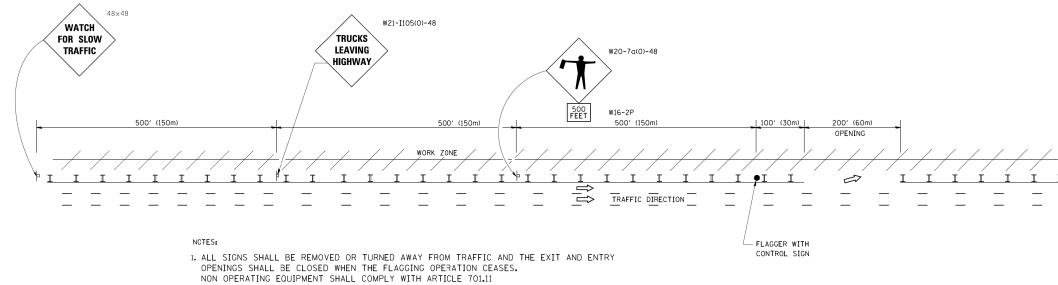
	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING			SYMBOLS	F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	FOR TRAFFIC STAGING					1321	32RS&N (12)	DUPAGE	495	364
						TC-16 CONTRACT NO. 60B4				0B42
	SCALE: NONE	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. A	D PROJECT		

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING

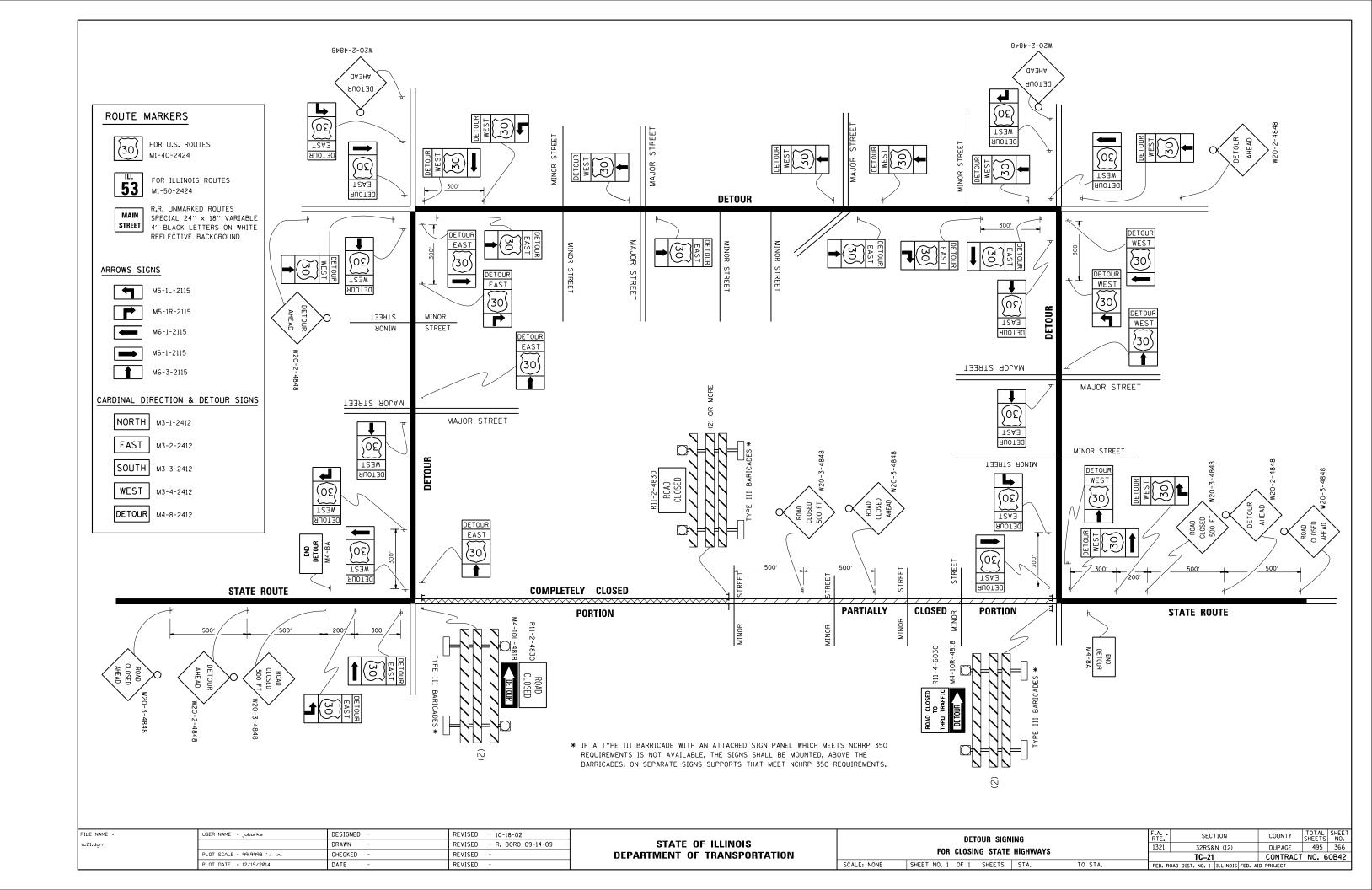


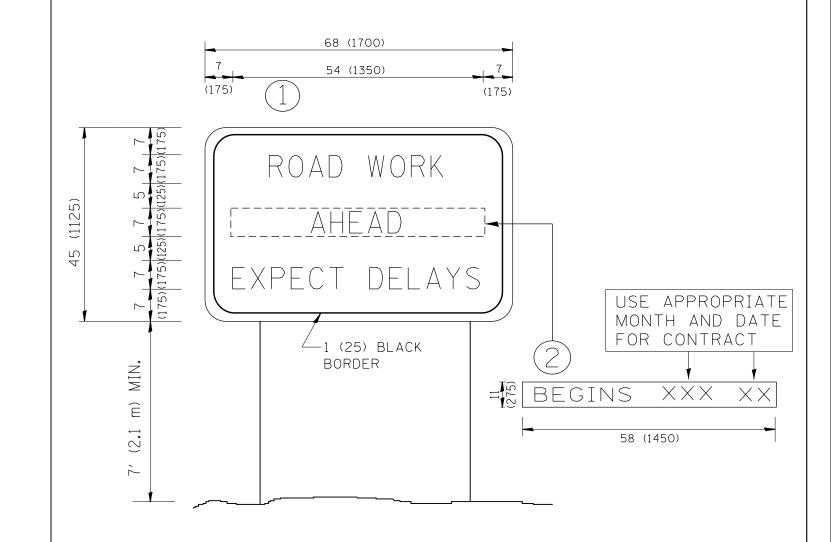
WORK ZONE ENTRY OPENING



- 2. WORK ZONE OPENINGS SHALL BE A MINIMUM OF ONE HALF MILE APART AND A MINIMUM OF ONE QUARTER MILE FROM ALL ENTRANCE AND EXIT RAMPS.
- 3. EXITING THE WORK ZONE AT ANY PLACE OTHER THAN AT A WORK ZONE EXIT OPENING WILL BE PROHIBITED.
- 4. ALL VEHICLES SHALL ENTER THE WORK ZONE AT ENTRY OPENINGS, USING THEIR TURN SIGNALS TO WARN MOTORISTS
- 5. FLAGGERS SHALL NOT STOP TRAFFIC OR DIRECT TRAFFIC INTO AN ADJACENT LANE.

FILE NAME =	USER NAME = joburke	DESIGNED -	REVISED - J.A.F02-06		EDEE	WAY/EXPRESSWAY SIGNING FOR FLAGGING OPERATIONS	F.A. · SECTION	COUNTY TOTAL SHEET
tc18.dgn		DRAWN -	REVISED - S.P.B01-07	STATE OF ILLINOIS			1321 32RS&N (12)	DUPAGE 495 365
	PLOT SCALE = 100.000 '/ in.	CHECKED -	REVISED - S.P.B12-09	DEPARTMENT OF TRANSPORTATION	AT WORK ZONE OPENINGS ON FREEWAYS/EXPRESSWAYS		TC-18	CONTRACT NO. 60B42
	PLOT DATE = 12/19/2014	DATE -	REVISED - M.D. 06-13		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FE	D. AID PROJECT

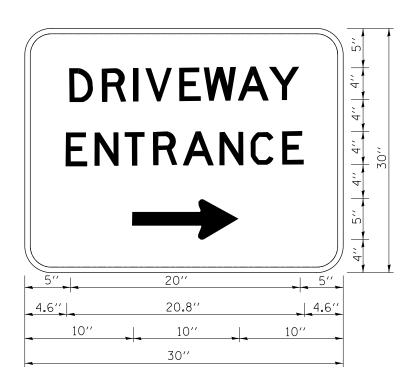




NOTES:

- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- 6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
- 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

FILE NAME =	USER NAME = joburke	DESIGNED -	REVISED - R. MIRS 09-15-97	·	ARTERIAL ROAD	F.A. · SECTION	COUNTY TOTAL SHEET
to22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS		1321 32RS&N (12)	DUPAGE 495 367
	PLOT SCALE = 100.000 '/ in.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION	INFORMATION SIGN	TC-22	CONTRACT NO. 60B42
	PLOT DATE = 12/19/2014	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		D. AID PROJECT



3.0" RADIUS, 0.5" BORDER, WHITE ON GREEN; REFLECTORIZED "DRIVEWAY" D; "ENTRANCE" D; STANDARD ARROW CUSTOM 12.0" x 5.0"

NOTES:

- 1. HALF OF THE SIGNS WILL REQUIRE A LEFT HAND FACING ARROW.
- 2. TWO SIGNS SHALL BE USED AT EACH COMMERCIAL ENTRANCE PLACED BACK-TO-BACK: ONE WITH A RIGHT HAND ARROW (SHOWN) SHALL BE PLACED ON THE NEAR RIGHT SIDE THE DRIVEWAY AND ONE WITH A LEFT HAND ARROW SHALL BE PLACED ON THE FAR LEFT SIDE OF THE DRIVEWAY.
- 3. SIGNS TO BE PAID FOR AS ITEM "TEMPORARY INFORMATION SIGNING".

FILE NAME =	USER NAME = joburke	DESIGNED -	REVISED	- C. JUCIUS 02-15-07
tc26.dgn		DRAWN -	REVISED	-
	PLOT SCALE = 100.000 '/ in.	CHECKED -	REVISED	-
	PLOT DATE = 12/19/2014	DATE -	REVISED	-

STATE OF ILLINOIS				
DEPARTMENT OF TRANSPORTATION				

1	DRIVEWAY ENTRANCE SIGNING				F.A RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
						1321	32RS&N (12)	DUPAGE	495	368
ı							TC-26	CONTRACT	NO. 6	OB42
ı	SCALE: NONE	SHEET NO. 1 OF 1 SH	IEETS	STA.	TO STA.	FED. R	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

LOOPS NEXT TO SHOULDERS PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER Ê (1.5 m) (1.8 m) (1.5 m) 1" (25 mm) UNI DUCT-TRENCHED TO E/P •• (3.0 m) (3.0 m) * = (600 mm)* * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS. ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)

USER NAME = joburke

PLOT DATE = 12/19/2014

FILE NAME

ts07.dgn

LEFT TURN LANES WITH MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH (PROTECTED / PERMITTED LEFT TURN PHASING) HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESION OF TRAFFIC SIGNALS, HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD BI4001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN. TRENCHED 1" (25 mm) PERPRENDICULAR TO MEDIAN (TYP.) ** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

VOLUME DENSITY ("FAR OUT" DETECTION)

ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

* = (600 mm)

* = (600 mm)

* = (600 mm)

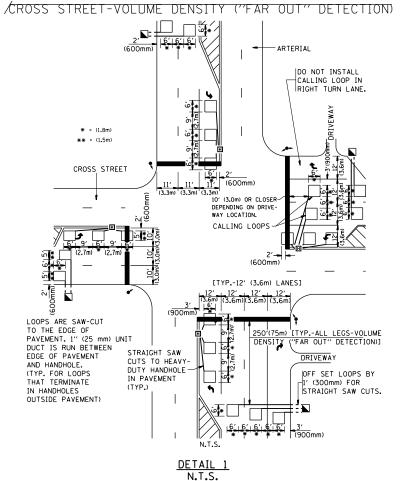
| STRAIGHT SAW CUT TO HEAVY DUTY HANDHOLE (TYP.) PLACE HEAVY DUTY HANDHOLE (TYP.) PLACE HEAVY DUTY HANDHOLE BETWEEN FIRST AND SECOND LOOP AS SHOWN.

NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)

CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)



DESIGNED

ORAWN

DATE

CHECKED

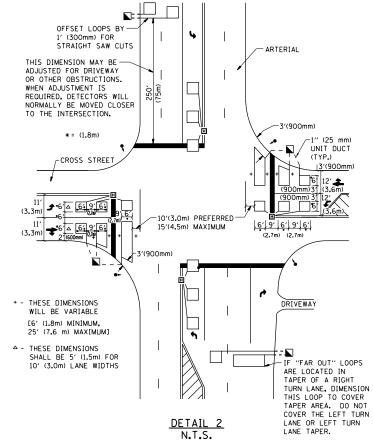
R.K.F.

REVISED

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REVISED



NOTES

VEHICLES LOOP DETECTORS

- * ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIFLDED.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- * EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX, EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATLY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- * ONE DIMENSION OF <u>ALL</u> DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- * EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- * WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE
 THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR
 (i.e. 1-1/2, 1-3/4, 2).
- * WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

PLACEMENT OF DETECTORS

TO STA.

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

JOTE.

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

DEF

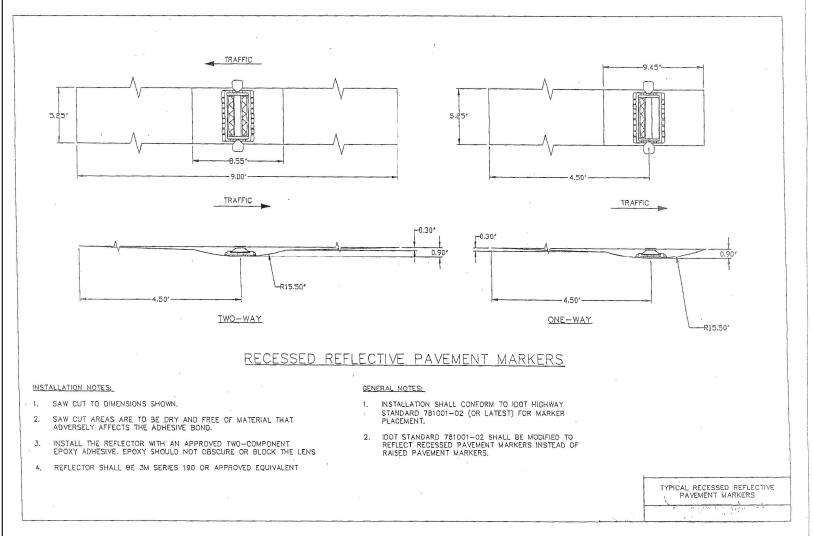
DISTRICT 1 – DETECTOR LOOP INSTALLATION

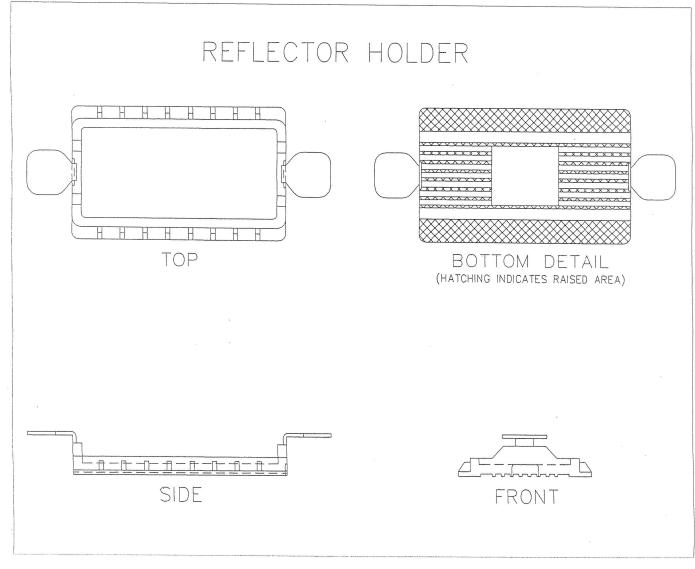
DETAILS FOR ROADWAY RESURFACING

SHEET NO. 1 OF 1 SHEETS STA.

SCALE: NONE

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION





	FDS	
HDR	ENGINEERING,	INC

USER NAME = mikelly	DESIGNED - MPK	REVISED -
	DRAWN - ML	REVISED -
PLOT SCALE = 20.0000 '/ in.	CHECKED - LGP	REVISED -
PLOT DATE = 12/18/2014	DATE - 12-19-2014	REVISED -

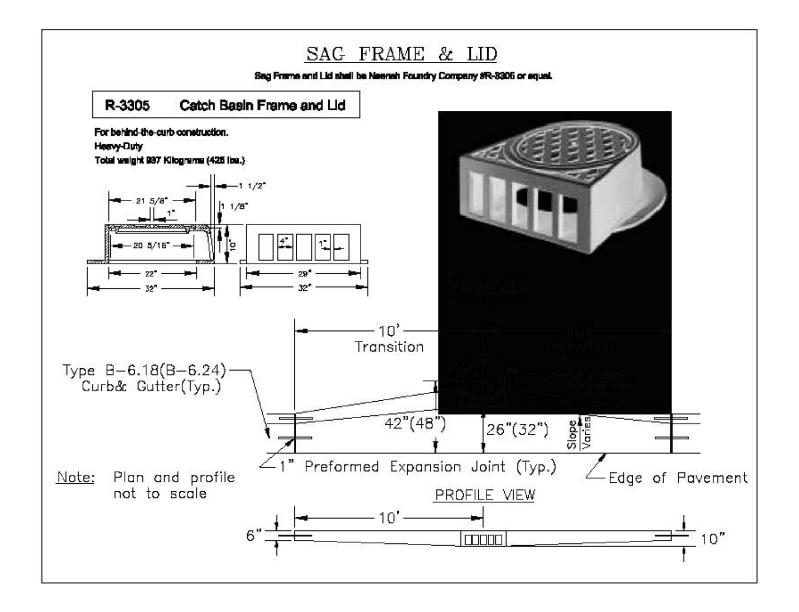
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	RECESSED REFLECTIVE PAVEMENT MARKERS DUPAGE COUNTY DETAIL							SECTION	T
								32RS&N (12)	I
	DUFAGE COUNTY DETAIL								Τ
	SCALE: N.T.S. SHEET NO. 1 OF 18 SHEETS STA. TO STA. ILLINOI				ILLINOIS FED.	ίD			

COUNTY

DUPAGE 495 370

CONTRACT NO. 60B42

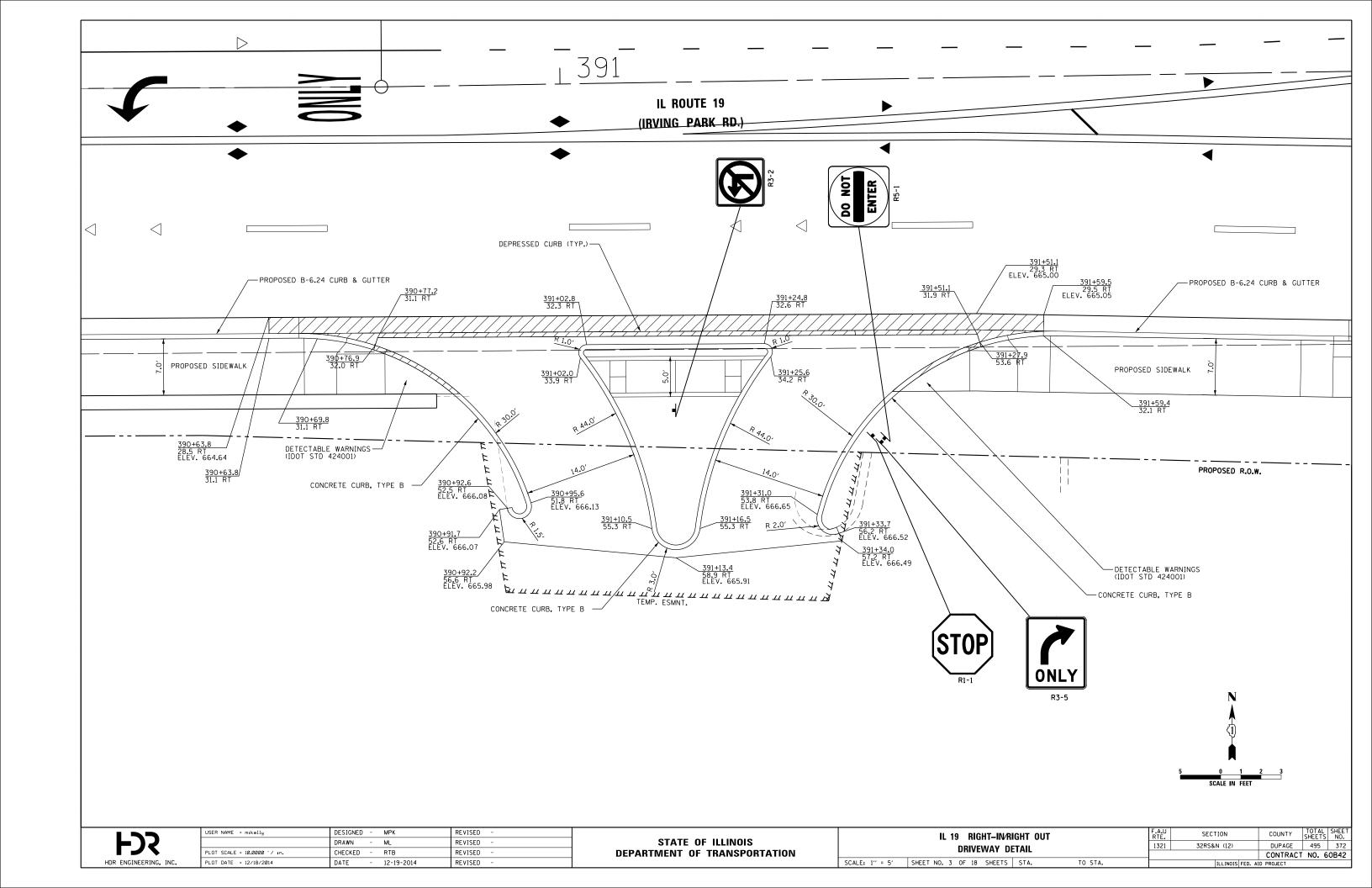


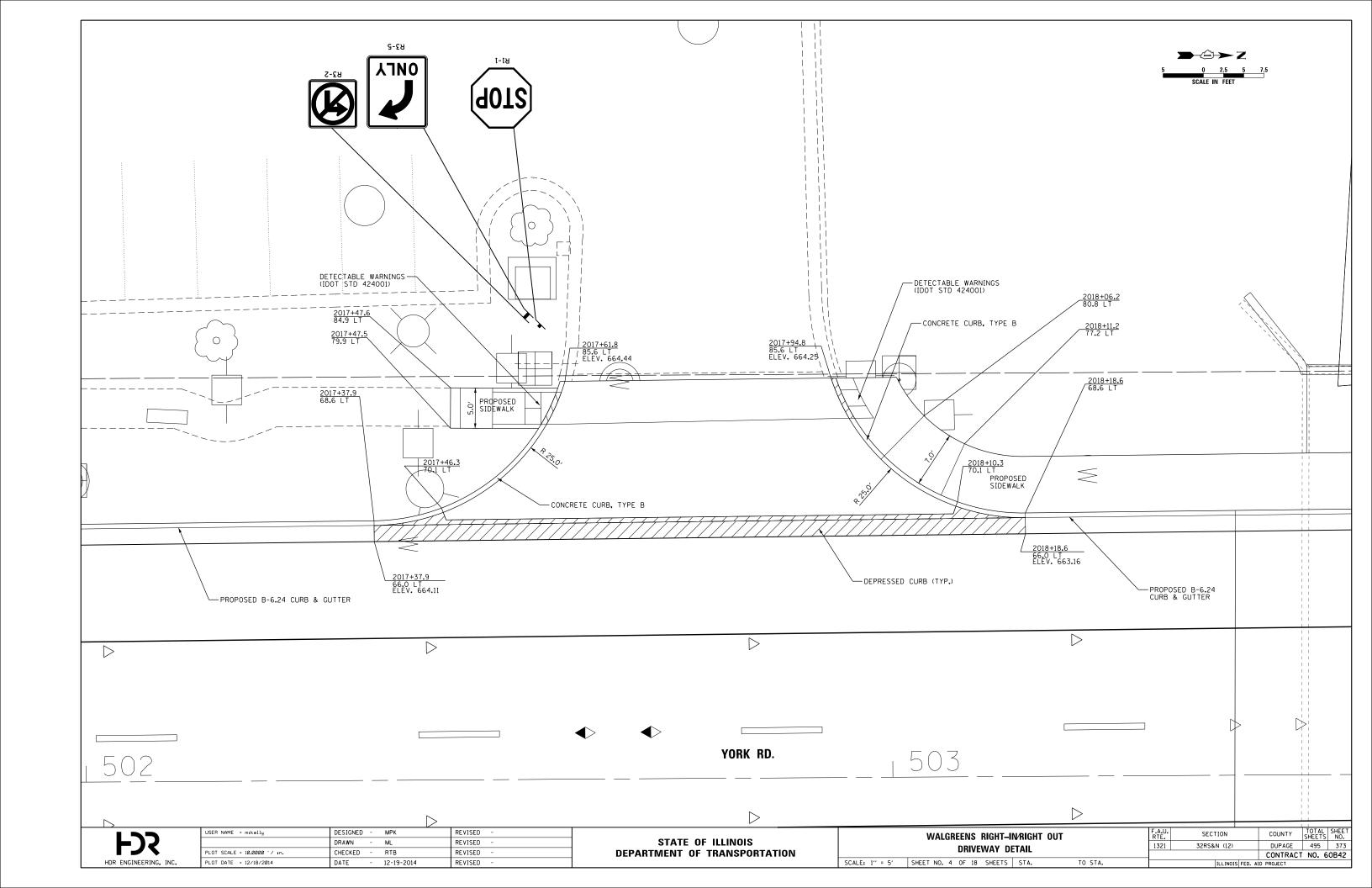
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HDR	${\tt ENGINEERING,}$	INC.

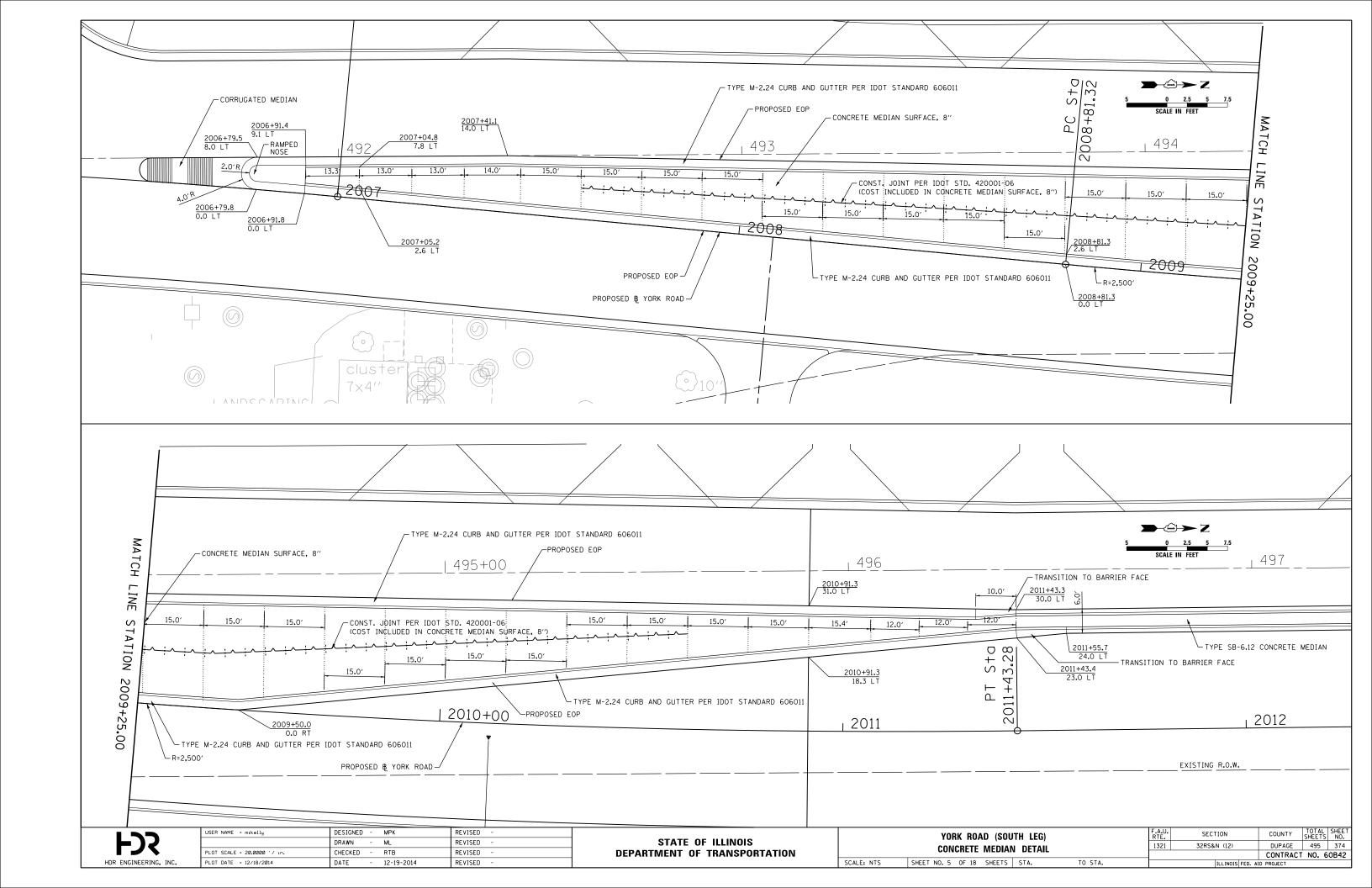
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PLOT DATE = 12/18/2014	DATE - 12-19-2014	REVISED -
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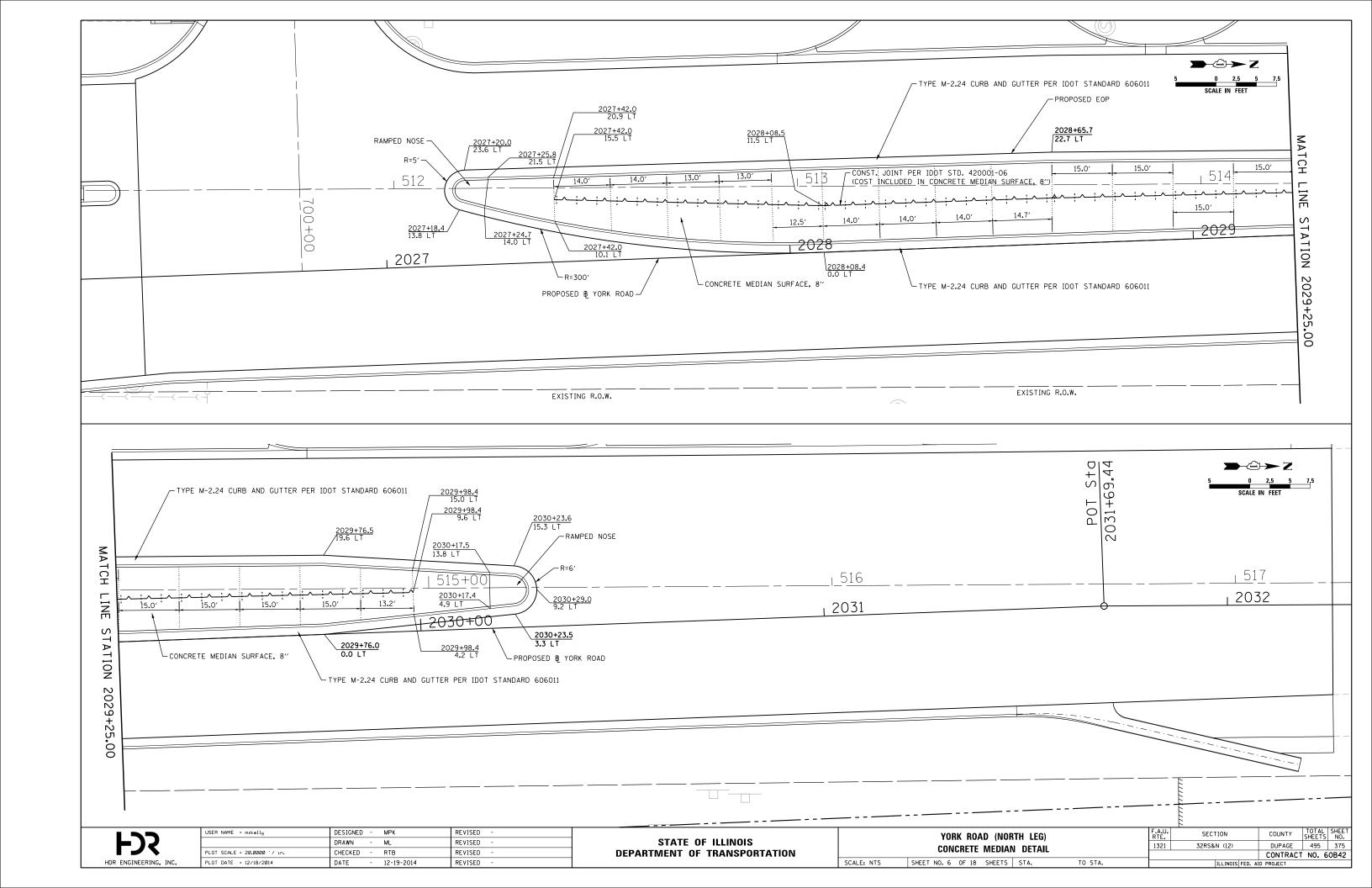
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DEPARTMENT	0F	TRANSPORTATION

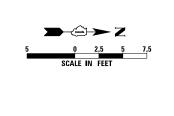
	SAG FRAME AND LID				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DUPAGE COUNTY DETAIL					32RS&N (12)	DUPAGE	495	371
							CONTRACT	NO. 6	OB42
	SCALE: NTS	SHEET NO. 2 OF 18 SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT				



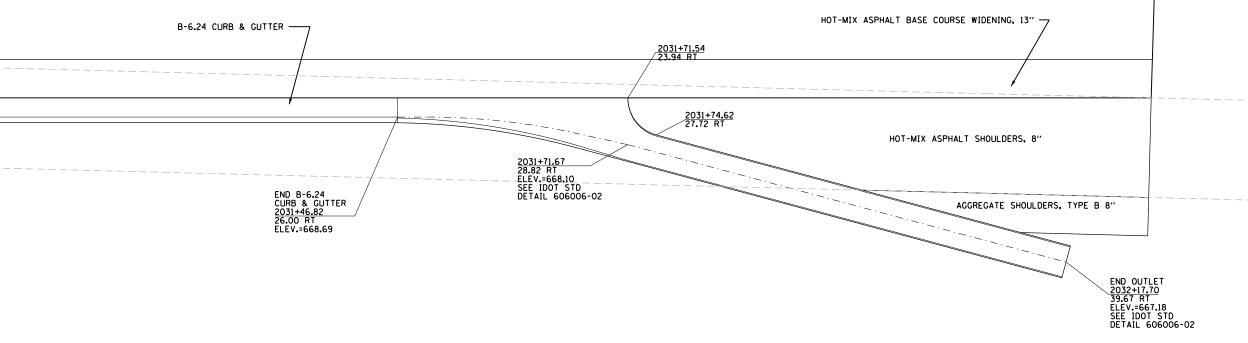








YORK ROAD



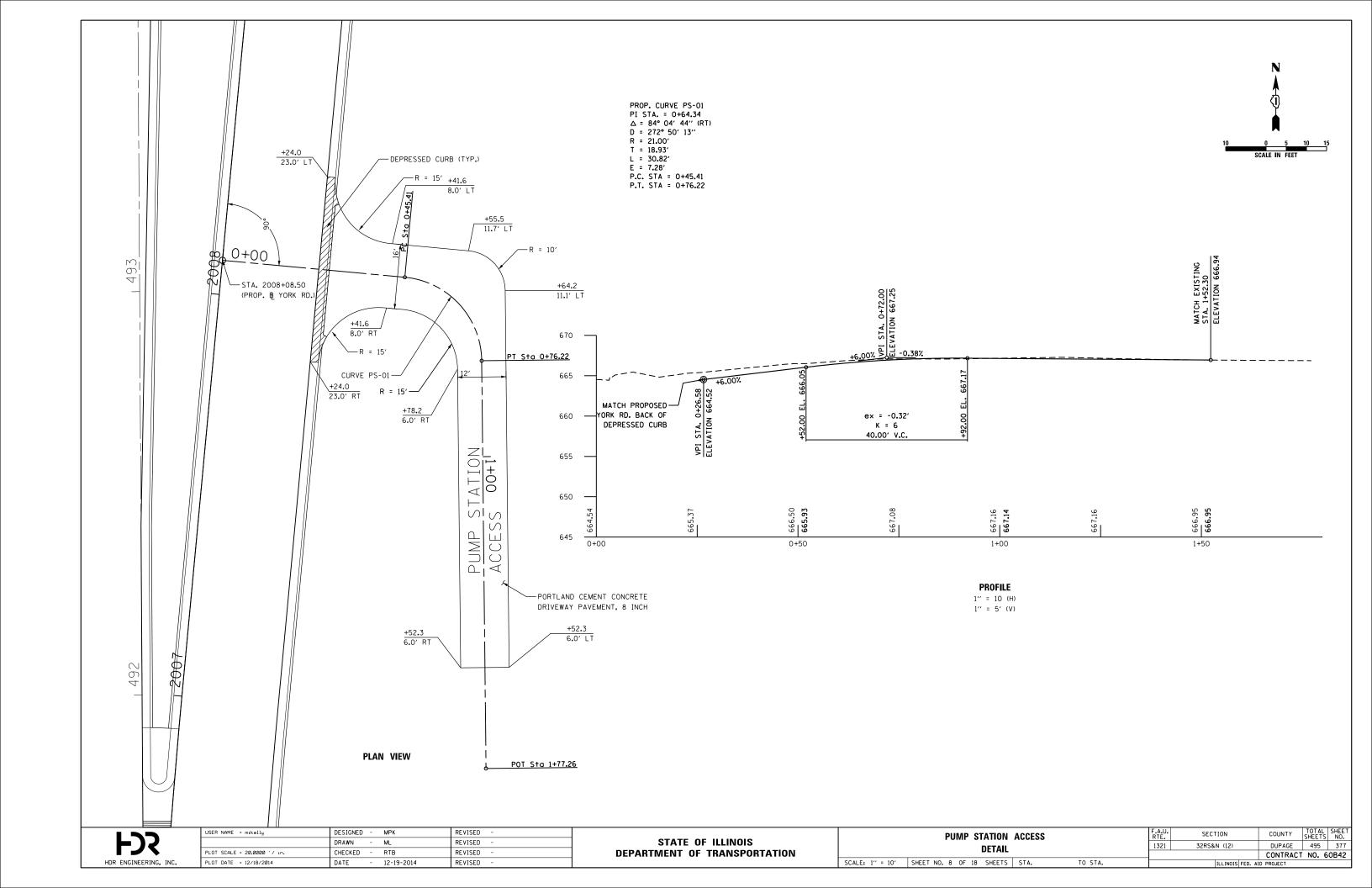
	FDS	
HDR	ENGINEERING,	INC.

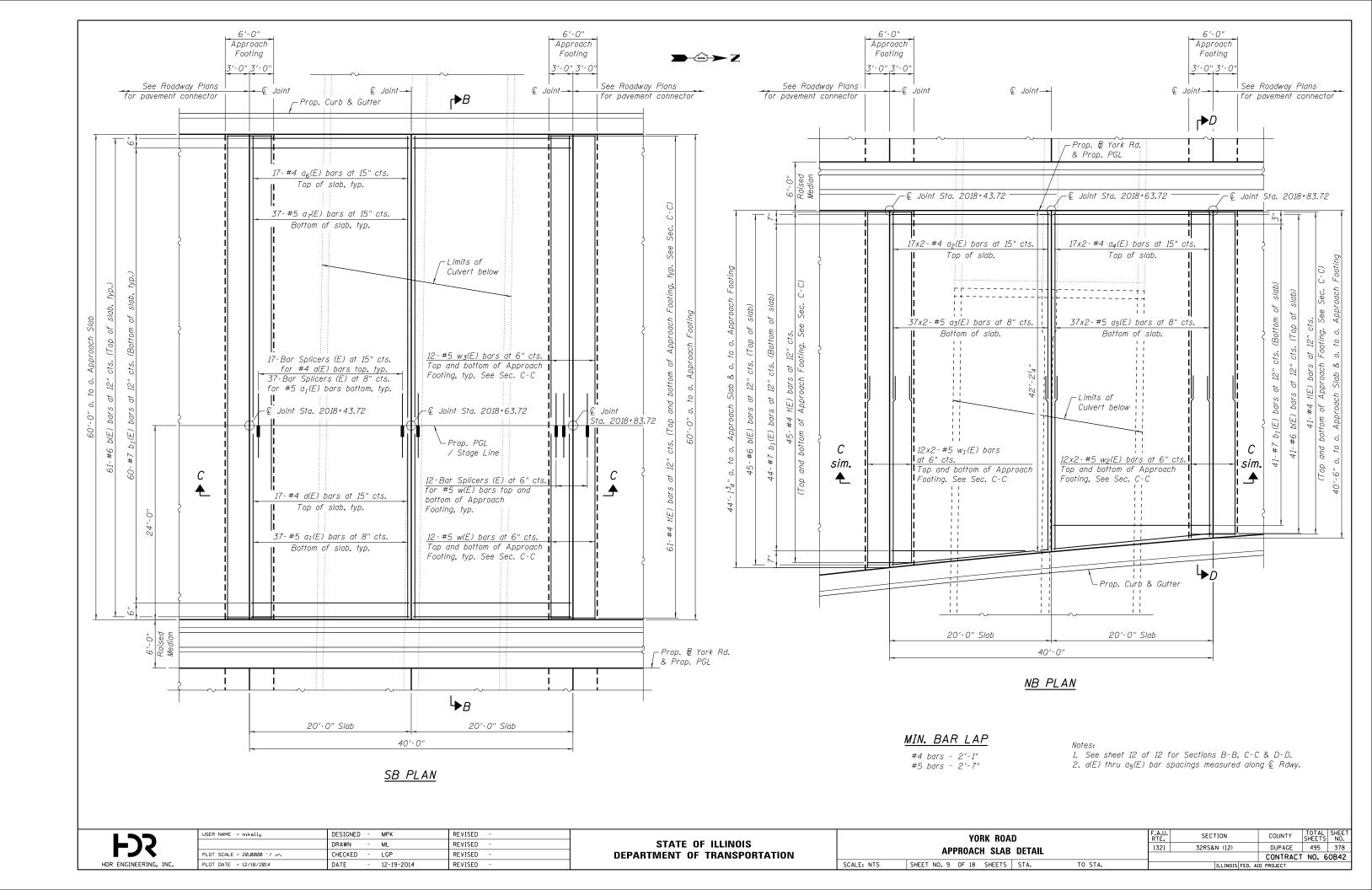
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PLOT DATE = 12/18/2014	DATE	-	12-19-2014	REVISED -	ı

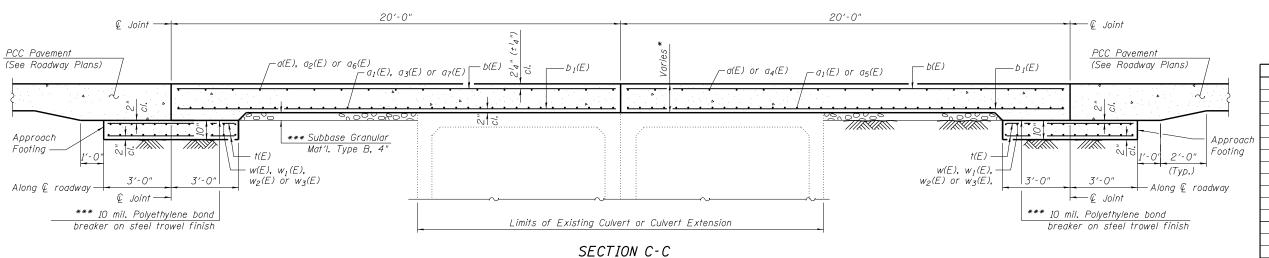
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

YORK ROAD						
	OUTLET FOR B-6.	.24 CURB AND	GUTTER DETAIL			
SCALE: 1'=5'	SHEET NO. 7 OF	18 SHEETS ST	A. TO STA.			

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.	
1321	32RS&N (12)	DUPAGE	495	376	
			CONTRACT	NO. 6	OB42
	ILL INOIS F	FED. AI	D PROJECT		





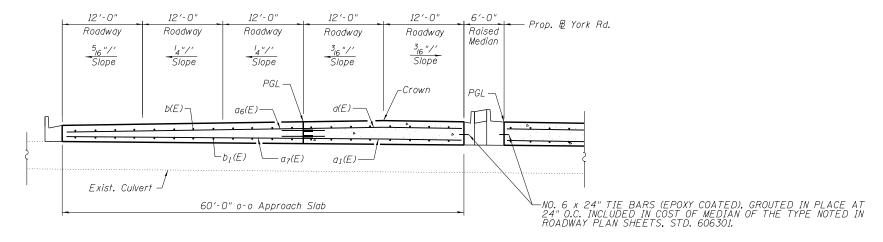


SB & NB SLABS BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	34	#4	23'-8"	
a1(E)	74	#5	23'-8"	
a2(E)	34	#4	23'-0"	
a3(E)	74	#5	23'-3"	
a4(E)	34	#4	22'-0"	
a5(E)	74	#5	22'-3"	
a6(E)	34	#4	35′-8"	
a7(E)	74	#5	35′-8"	
b(E)	208	#6	19′-8"	
b1(E)	205	#7	19′-8"	
1//- \	000	#4	5′-8"	
t(E)	208	#4	58.	
w(E)	48	#5	23′-8"	
w1(E)	48	#5	23'-3"	
w ₂ (E)	48	#5	21'-5"	
w3(E)	48	#5	35′-8"	
Concrete	L Superstri	l ucture	Cu. Yd.	189.4
Concrete			Cu. Yd.	37.9
Reinforce Epoxy Co		5,	Pound	30,840
Bar Splic	ers		Each	156

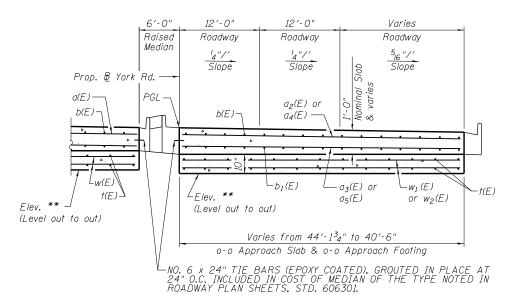
Bars indicated thus 1×2 -#5 etc. indicates 1 line of bars with 2 lengths per line.

* Varies 8" to 1'-6" (1'-3" average) *** Cost included with Concrete Superstructure.



SECTION B-B

(See Plan for dimensions not shown)



Sta.	Elev. **
2018+43.72 (NB)	660.80
2018+83.72 (NB)	660.45
2018+43.72 (SB)	660.80
2018+83.72 (SB)	660.45

Notes:

- 1. Approach slab shall be paid for as Concrete Superstructure.
- 2. Approach footing concrete shall be paid for as Concrete Structures.
- 3. Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
- 4. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
- 5. Cost of excavation for approach footing included with Concrete Structures.
- 6. Cost of thicknening PCC pavement adjacent to Aprroach Slab as shown shall be included in the cost of PCC Pavement, 10 1/4" (Jointed). No extra compensation will be allowed.

SECTION D-D

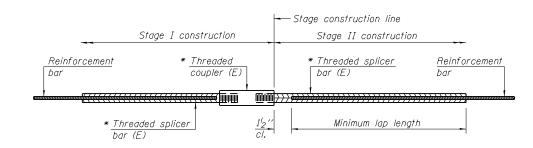
(See Plan for dimensions not shown)

FDS	
HDR ENGINEERING.	INC.

USER NAME = mikelly	DESIGNED	-	MPK	REVISED -
	DRAWN	-	ML	REVISED -
PLOT SCALE = 20.0000 '/ in.	CHECKED	-	LGP	REVISED -
PLOT DATE = 12/19/2014	DATE	-	12-19-2014	REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

		YORK ROA	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
ı	APPROACH SLAB DETAIL					32RS&N (12)	DUPAGE	495	379
ı		AITHOACH SEAD			CONTRACT	NO. 6	OB42		
	SCALE: NTS	SCALE: NTS SHEET NO. 10 OF 18 SHEETS STA. TO STA.				ILLINOIS FED. AI	D PROJECT		



STANDARD BAR SPLICER ASSEMBLY

Minimum Lap Lengths								
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6		
<i>3, 4</i>	1'-5''	1'-11''	2'-1''	2'-4''	2'-7''	2'-11''		
5	1'-9''	2'-5"	2'-7''	2'-11''	3'-3''	3′-8′′		
6	2'-1''	2'-11''	3'-1''	3′-6′′	3′-10′′	4'-5"		
7	2'-9"	3′-10′′	4'-2''	4'-8''	5′-2″	5′-10′′		
8	3′-8′′	5′-1′′	5′-5′′	6'-2''	6′-9′′	7′-8′′		
9	4'-7''	6′-5′′	6′-10′′	7′-9′′	8'-7''	9′-8′′		

Table 1: Black bar, 0.8 Class C

Table 2: Black bar, Top bar lap, 0.8 Class C

Table 3: Epoxy bar, 0.8 Class C

Table 4: Epoxy bar, Top bar lap, 0.8 Class C

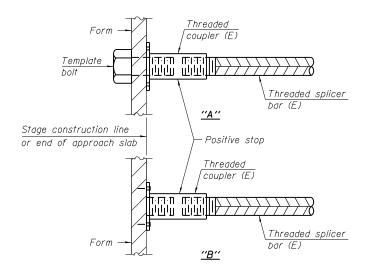
Table 5: Epoxy bar, Class C

Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min, lap length + $1_2^{\prime\prime}$ + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
York Road Approach Slab	#4	34	Table 3
York Road Approach Slab	#5	122	Table 3



INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template bolt. "B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E): Indicates epoxy coating.

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

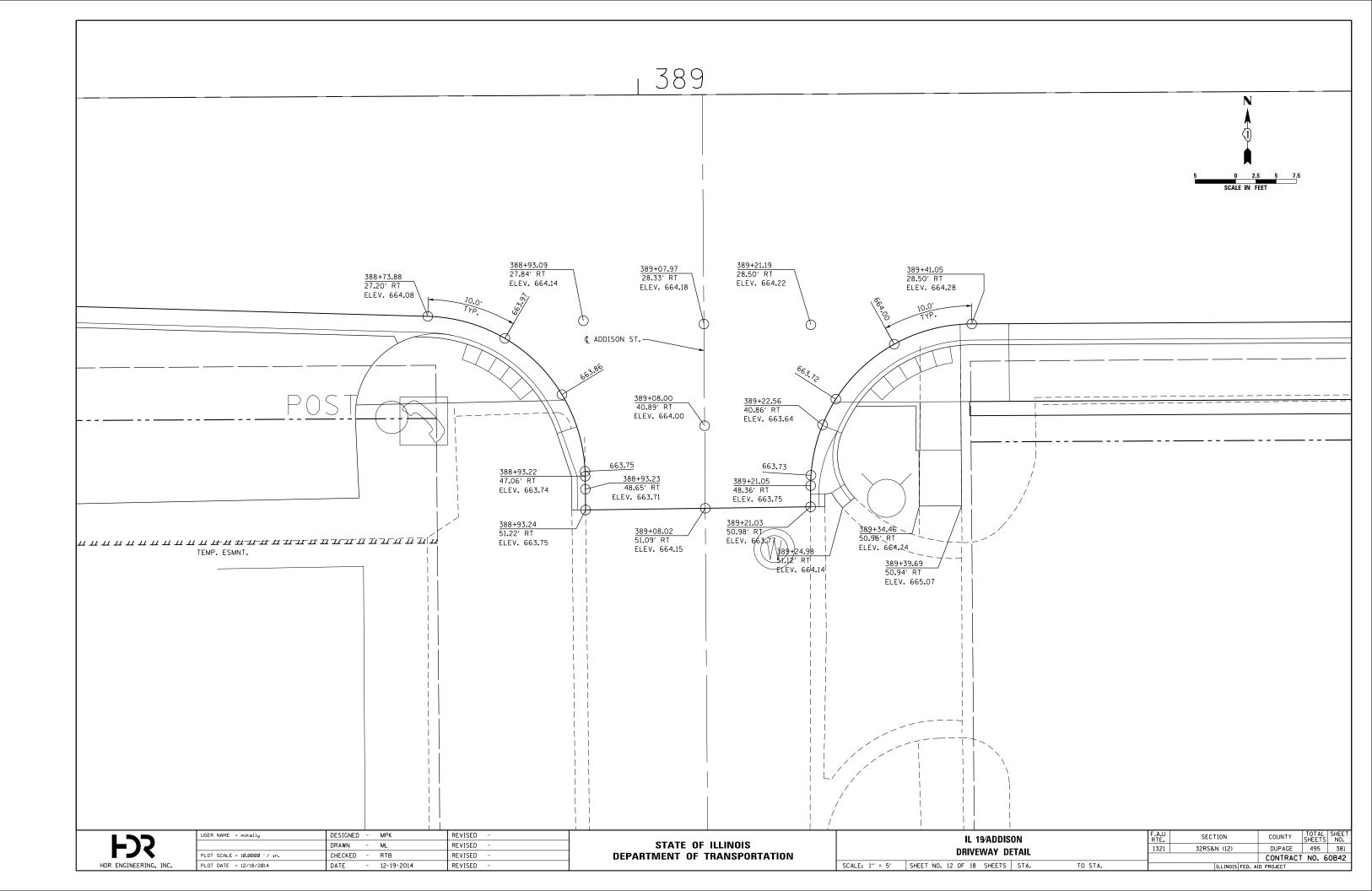
FJS	
HDR ENGINEERING, INC.	

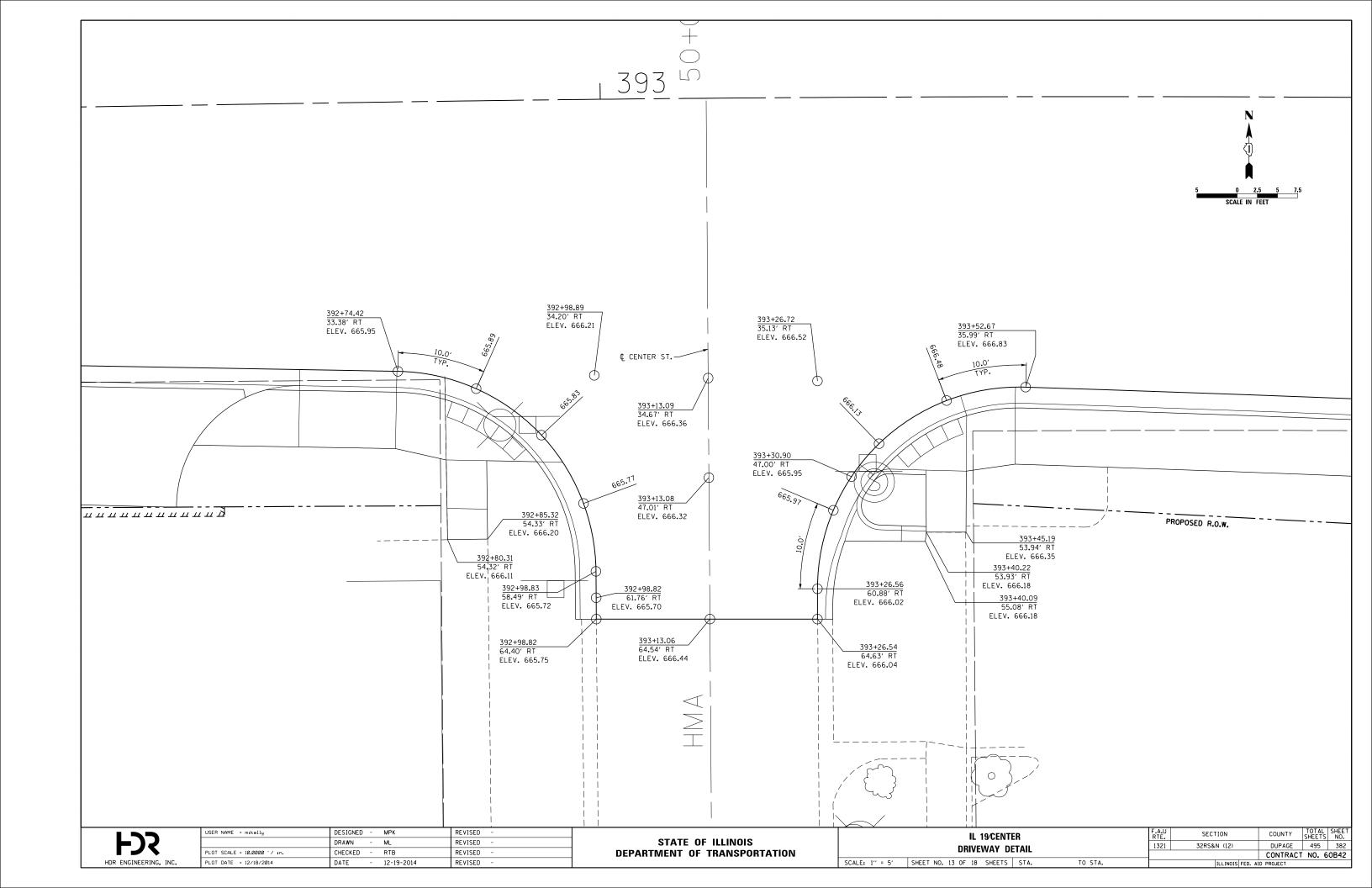
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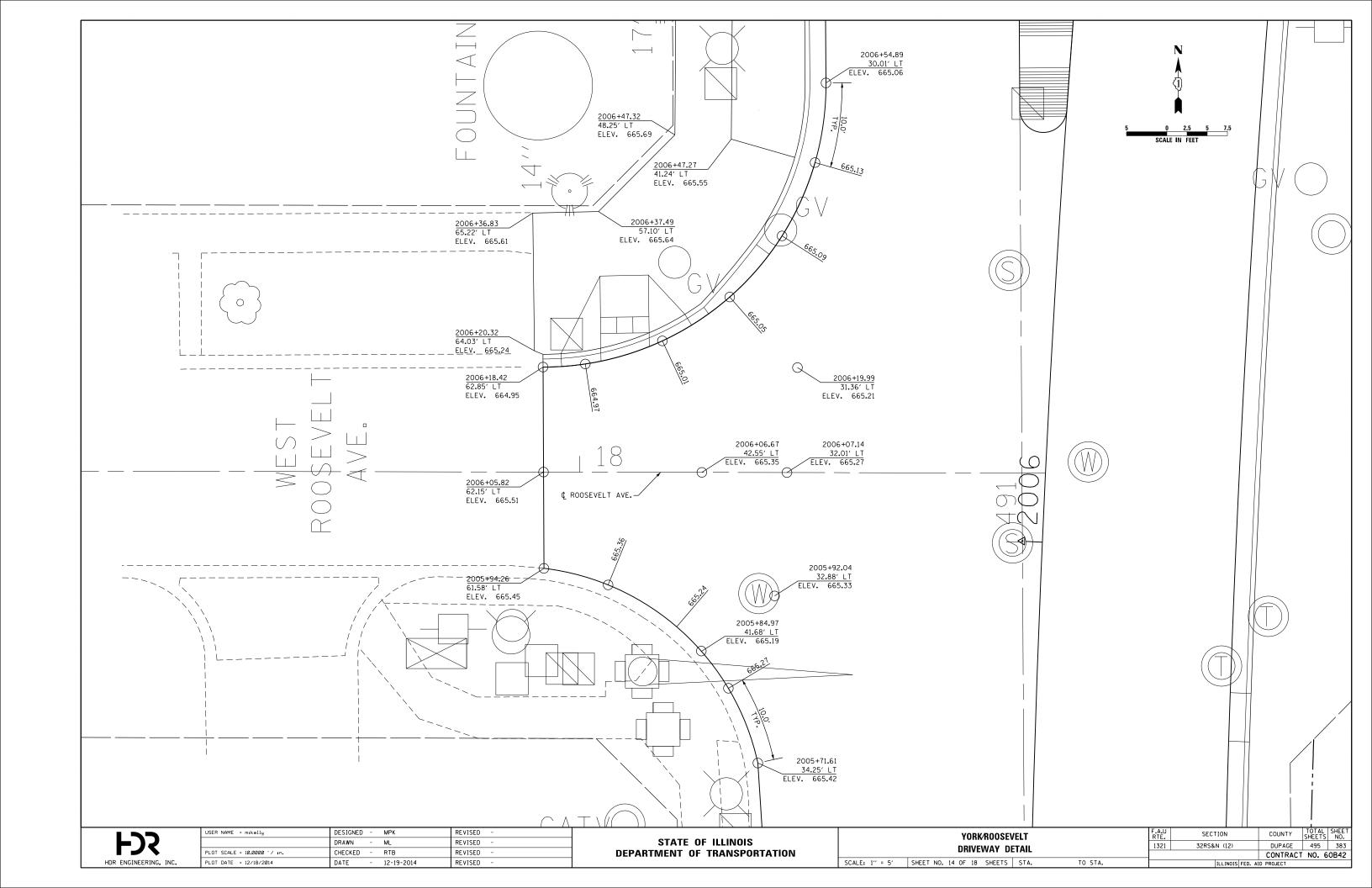
STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

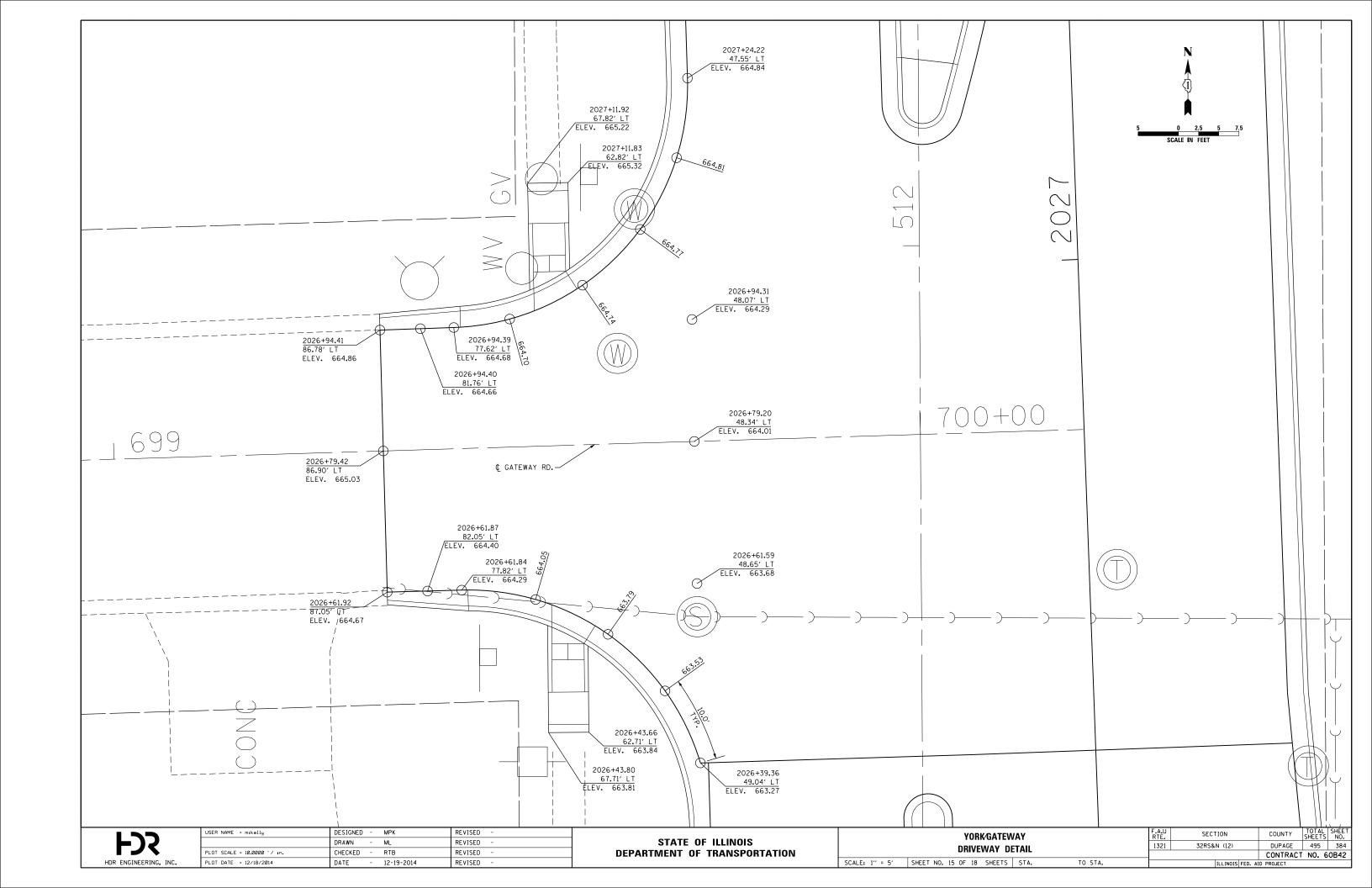
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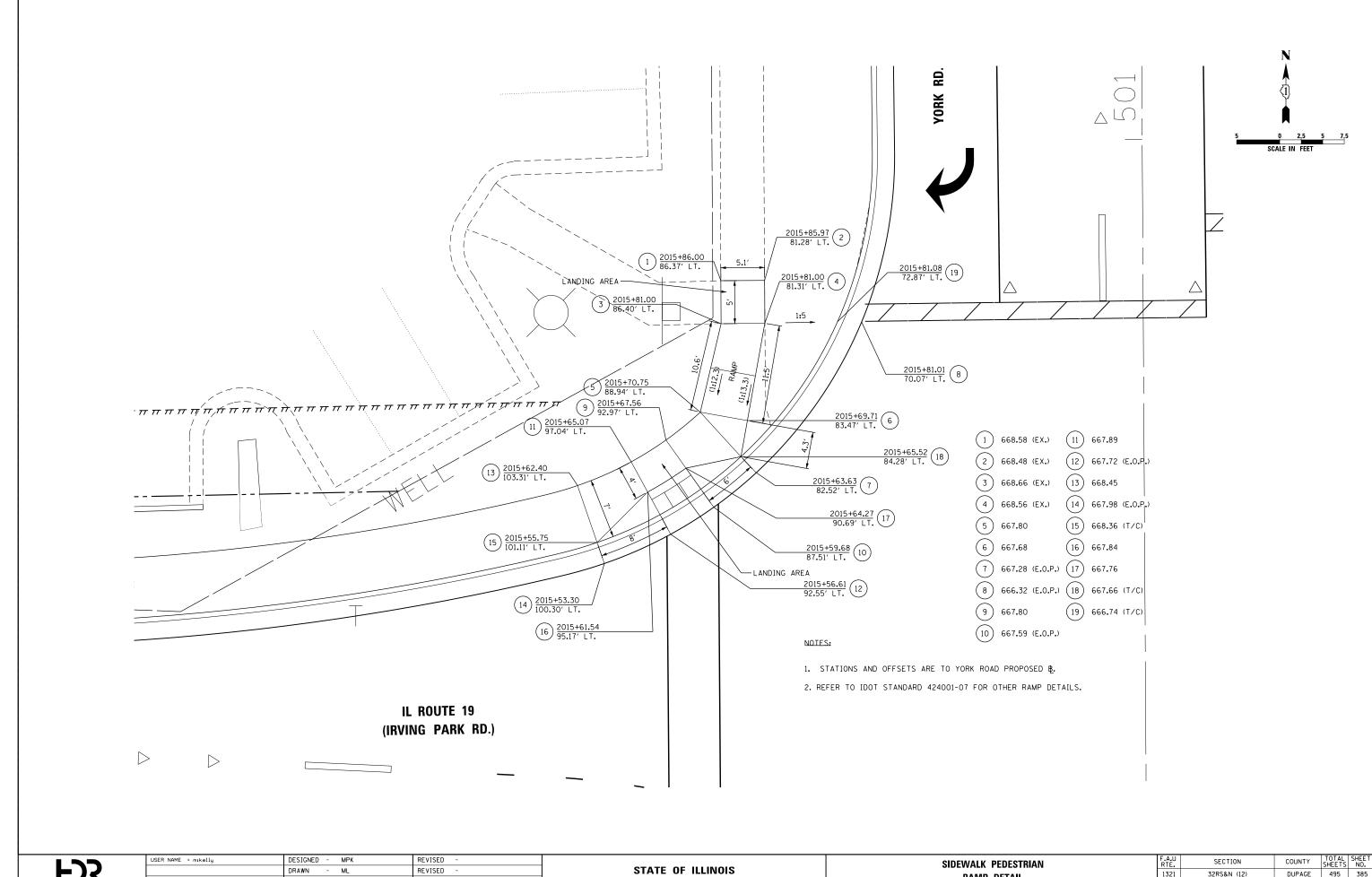
	YORK	ROAI	D		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	BAR SPLICER DETAILS				1321	32RS&N (12)	DUPAGE	495	380
							CONTRACT	NO. 6	0B42
	SHEET NO. 11 OF 18 SHI	EETS	STA.	TO STA.		TILL INDIS FED. AID PROJECT			











HDR ENGINEERING, INC.

USER NAME = mikelly	DESIGNED	-	MPK	REVISED -
	DRAWN	-	ML	REVISED -
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PLOT DATE = 12/18/2014	DATE	-	12-19-2014	REVISED -

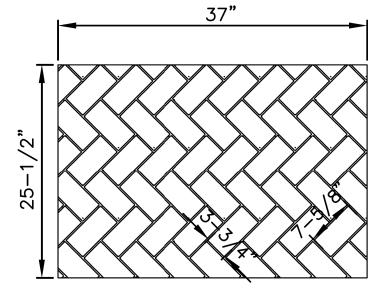
DEPARTMENT OF TRANSPORTATION

	SIDEWALK PEDESTRIAN	
	RAMP DETAIL	
SCALE: 1" = 5"	SHEET NO. 16 OF 18 SHEETS STA.	TO STA.

COUNTY TOTAL SHEET NO.

DUPAGE 495 385

CONTRACT NO. 60B42 1321 32RS&N (12)



* GROUT LINES CAN VARY FROM 1/4" TO 1/4".

NOTES:

- 1. COLORED STAMPED CONCRETE SIDEWALK SHALL BE POURED MONOLITHICALLY AND STAMPED WITH BUTTERFIELD COLOR NEW BRICK HERRINGBONE (BST-6000) PATTERN AS SHOWN IN THE DETAIL.
- 2. THE COLOR OF THE STAMPED CONCRETE SHALL BE BRICK RED.

SCALE: N.T.S.

VILLAGE OF BENSENVILLE
12 S. CENTER STREET
BENSENVILLE, IL 60106
WWW.BENSENVILLE.IL.US

STAMPED CONCRETE STANDARD

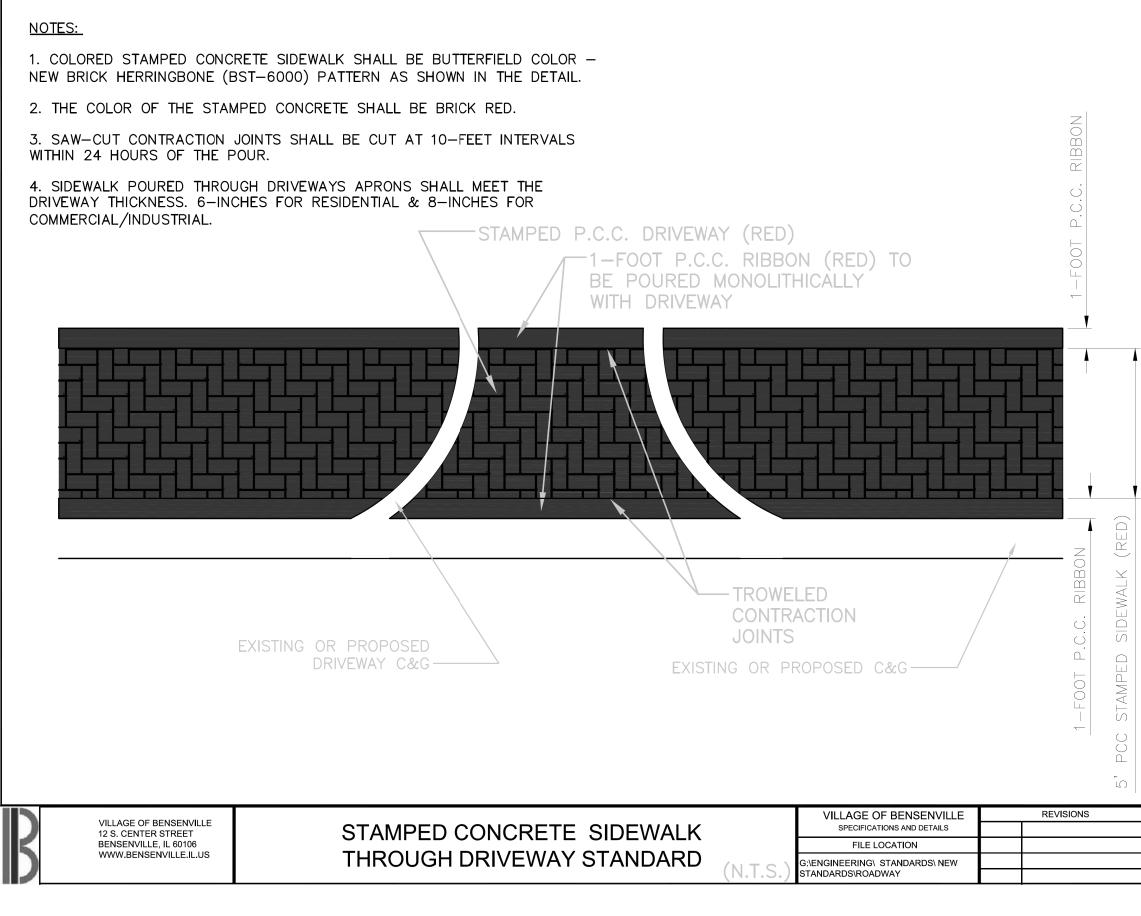
VILLAGE OF BENSENVILLE	REVISIONS
SPECIFICATIONS AND DETAILS	
FILE LOCATION	
G:\ENGINEERING\ STANDARDS\ NEW	
STANDARDS\ROADWAY	

HDR ENGINEERING, INC.

USER NAME = mikelly	DESIGNED	-	MPK	REVISED -
	DRAWN	-	ML	REVISED -
PLOT SCALE = 10.0000 '/ in.	CHECKED	-	LGP	REVISED -
PLOT DATE = 12/18/2014	DATE	-	12-19-2014	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	STAMP	ED CON	CRETE		F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PATTERN DETAIL			1321	32RS&N (12)	DUPAGE	495	386		
			IAIL				CONTRACT	NO. 6	50B42
	SHEET NO. 17 OF 18	SHEETS	STA.	TO STA.		TILINOIS EED AT	D PROJECT		





DRAWN - ML	USER NAME = mikelly	DESIGNED - MPK	REVISED -
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PEUT DATE = 12/18/2014 DATE - 12-19-2014 REVISED -	PLOT DATE = 12/18/2014	DATE - 12-19-2014	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE: N.T.S.

STAMPED CON	ICRETE	F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PATTERN DETAIL				32RS&N (12)	DUPAGE	495	387
I ATTEMN DE			CONTRACT	NO. 6	0B42		
SHEET NO. 18 OF 18 SHEETS	STA.	TO STA.	TILINOIS EED AID PROJECT				

