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FINAL PLANS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

**F.A.U. ROUTE 7975 (CARPENTER STREET) AT
10TH ST CORRIDOR /RR UNDERPASS
SECTION 13-00475-00-BR
PROJECT TIG-5146(087)
FEDERAL RAIL ADMINISTRATION TIGER GRANT W/ GXP FUNDS
CITY OF SPRINGFIELD, SANGAMON COUNTY**

C-96-206-14

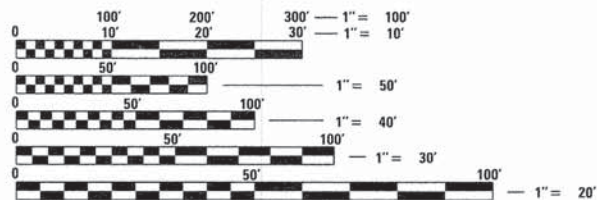
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	1
		ILLINOIS	CONTRACT NO. 93617	



LOCATION OF SECTION INDICATED THUS: - [shaded box] -

FOR LIST OF STANDARDS, SEE SHEET NO. 3

FUNCTIONAL CLASSIFICATION MINOR ARTERIAL
2012 ADT = 6100
2030 DHV = 870
FAU ROUTE 7975 CARPENTER STREET RECONSTRUCTION
DESIGN SPEED: CARPENTER ST. - 30 M.P.H.



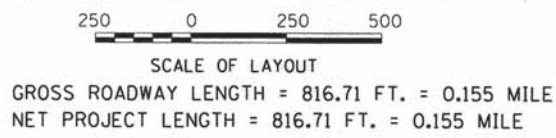
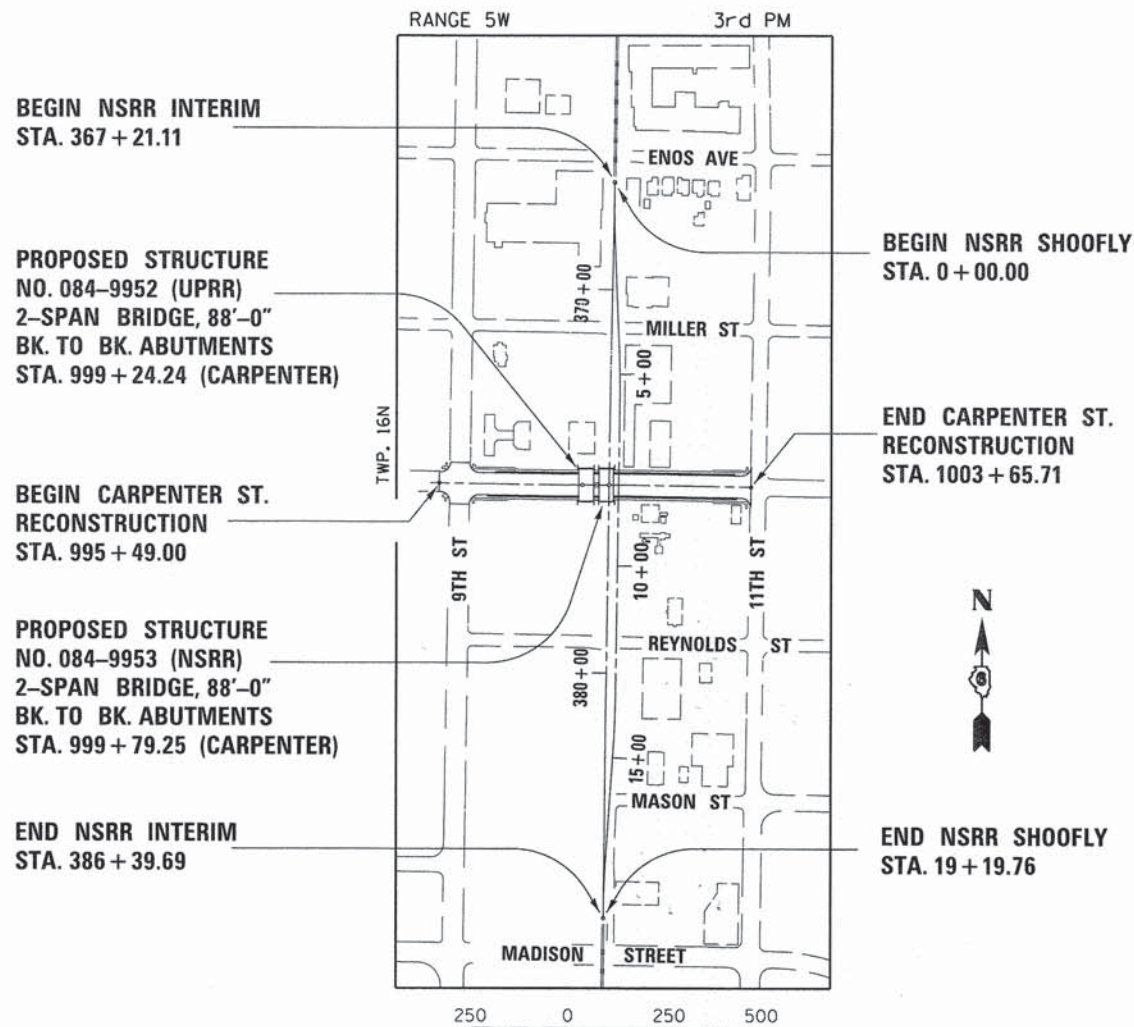
FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

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



PROJECT ENGINEER: MICHAEL MENDENHALL (217)788-2450
PROJECT MANAGER: JIM MOLL (217)788-2450

CONTRACT NO. 93617



APPROVED April 15 2014
Arnold R. Evans
FEDERAL RAILROAD ADMINISTRATION

APPROVED April 9 2014
John D. [Signature]
NORFOLK SOUTHERN RAILWAY COMPANY

APPROVED March 7 2014
Nathan Bottom
CITY ENGINEER

APPROVED March 10 2014
Jessie [Signature]
DISTRICT LOCAL ROADS AND STREETS ENGINEER

APPROVED March 10 2014
Ron [Signature]
DISTRICT CONSTRUCTION ENGINEER


APPROVED BASED ON LIMITED REVIEW March 10 2014
Don [Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION FOUR ENGINEER

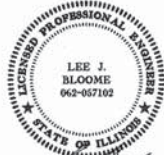
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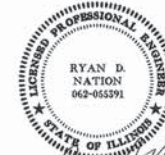


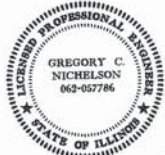



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 SIGNATURE: *Michael N. Mendenhall*
 DATE SIGNED: 02-25-2014
 LISC. EXP. DATE: 11-30-2015
 DRAWINGS: 1-22, 26-33, 40, 42, 44-45, 50-52, 55, 57-59, 64-68, 175-178


 SIGNATURE: *Lee J. Bloome*
 DATE SIGNED: 02-25-2014
 LISC. EXP. DATE: 11-30-2015
 DRAWINGS: 81-86


 SIGNATURE: *Ryan D. Nation*
 DATE SIGNED: 2-25-2014
 LISC. EXP. DATE: 11-30-2015
 DRAWINGS: 87-102


 SIGNATURE: *Gregory C. Nichelson*
 DATE SIGNED: 2-25-2014
 LISC. EXP. DATE: 11-30-2015
 DRAWINGS: 23-25, 34-39, 41, 43, 46-49, 54, 56, 60-63, 179-196


 SIGNATURE: *Kurt N. Bialobreski*
 DATE SIGNED: 2-24-2014
 LISC. EXP. DATE: 11-30-2015
 DRAWINGS: 53, 69-80

FINAL
 DESIGNED DAP 9/6/13
 DRAWN DAP 9/21/13
 REVIEWED MNM 2/25/14

FILE NAME =	USER NAME = pop00275	DESIGNED - DAP	REVISED -
0609L01798-sht-cover-001.dgn		DRAWN - DAP	REVISED -
Seal Sheet	PLOT SCALE = 1.0000' / 1"n	CHECKED - MNM	REVISED -
	PLOT DATE = 02/24/2014	DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SEAL SHEET

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	2
09L01798			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

- IN ADDITION TO THE REQUIREMENTS OF ARTICLE 107.16, THE CONTRACTOR SHALL PROTECT THE SURFACE OF ALL BRIDGE DECKS IN A MANNER SATISFACTORY TO THE ENGINEER BEFORE ANY EQUIPMENT IS ALLOWED TO CROSS THE STRUCTURE. PROTECTION SHALL BE PROVIDED FOR ALL EQUIPMENT, AS DEFINED IN ARTICLE 101.17, REGARDLESS IF TRACK MOUNTED OR WHEELED.
- ALL DRAINAGE STRUCTURES SHALL BE FREE OF SILT, DEBRIS, OR OTHER SUCH OBSTRUCTION AT THE TIME OF FINAL INSPECTION. THE CLEANING OF THESE DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE VARIOUS PAY ITEMS INVOLVED.
- ADDITIONAL DEPTH REQUIRED IN DRAINAGE STRUCTURES DUE TO CONFLICTS WITH OTHER UTILITY LINES WILL BE CONSIDERED INCLUDED WITH THE UNIT PRICE BID FOR DRAINAGE STRUCTURES AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- ELEVATION DATA IS BASED ON: IL STATE PLANE COORDINATE SYSTEM WEST ZONE DATUM OF NAD 83 (2011), ORTHO HEIGHT OF NAVD88 GEOID 12A
- ALL DISTURBED AREAS OUTSIDE THE CONSTRUCTION LIMITS SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER, AT NO ADDITIONAL COST TO THE DEPARTMENT.
- THESE PLANS HAVE BEEN PREPARED USING STANDARD SYMBOLS AS INDICATED IN THESE PLANS, AND THEY SHALL TAKE PRECEDENCE OVER THOSE SHOWN ON STANDARD 00001 IF THERE IS A CONFLICT.
- BEFORE ORDERING ANY PIPES OR DRAINAGE STRUCTURES, THE CONTRACTOR SHALL VERIFY LENGTHS AND QUANTITIES REQUIRED.
- FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:
 AGGREGATE SUBGRADE IMPROVEMENT & OTHER COARSE AGGREGATES - 2.05 TONS/CU YD
 SEEDING FERTILIZER RATIO (NIT:PHOS:POT) - 90:90:90 LBS/AC
 AGRICULTURAL GROUND LIMESTONE - 2.00 TONS/AC
 HOT MIX ASPHALT SURFACE COURSE - 112LB/SQ YD-IN
 BITUMINOUS MATERIALS (PRIME COAT) 0.1 GAL/SQ YD
 EARTHWORK SHRINKAGE FACTOR - 25%
 SUPPLEMENTAL WATERING - 3 GAL/SQ YD/APPLICATION
- THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCY IMMEDIATELY.
- DRAWINGS AND DETAILS ARE ASSUMED NOT TO SCALE UNLESS OTHERWISE NOTED.
- ADJUSTMENT OF PROPOSED GRADES TO MATCH EXISTING FIELD CONDITIONS MAY BE REQUIRED. THE ENGINEER SHALL BE NOTIFIED PRIOR TO CONSTRUCTION OF GRADE MODIFICATIONS.
- ANY DAMAGE TO THE UNDERGROUND FACILITIES CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE DEPARTMENT, INCLUDING TEMPORARY REPAIRS WHICH MAY BE REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS.
- WHEN REQUIRED BY ARTICLE 420.18, A PROTECTIVE COAT SHALL BE APPLIED TO CONCRETE PAVEMENT, GUTTER FLAGS, CURB SURFACES, CONCRETE MEDIAN, CONCRETE MEDIAN SURFACE AND OTHER CONCRETE APPURTENANCES ADJACENT TO THE PAVEMENT.
- THE FOLLOWING ITEMS, WHICH ARE TO BE REMOVED UNDER THIS CONTRACT, SHALL REMAIN THE PROPERTY OF THE OWNERS AND SHALL BE DELIVERED BY THE CONTRACTOR TO THE LOCATION NOTED:
 MANHOLE LIDS AND CASTINGS - STREET DEPARTMENT GARAGE
 CASTINGS - STREET DEPARTMENT GARAGE
 SIGN PANELS (NOT TO BE REINSTALLED) - STREET DEPARTMENT GARAGE
 SIGN POSTS - STREET DEPARTMENT GARAGE
 IF PORTIONS OF THE ABOVE NOTED ITEMS ARE DEEMED UNSALVAGEABLE BY THE ENGINEER, THE CONTRACTOR SHALL DISPOSE OF THEM IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. DELIVERY OF SALVAGED MATERIAL SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE RESPECTIVE REMOVAL ITEMS.
- THE COST OF MAKING ANY SEWER OR UNDERDRAIN CONNECTIONS TO AN EXISTING DRAINAGE STRUCTURE OR PIPE SHALL BE INCLUDED IN THE COST OF THE NEW SEWER OR UNDERDRAIN.
- EROSION CONTROL FOR THIS CONTRACT SHALL INCLUDE INLET AND PIPE PROTECTION, EROSION CONTROL BLANKET, AND PERIMETER EROSION BARRIER WITHIN THE CONSTRUCTION LIMITS ACCORDING TO ARTICLE 280 OF THE STANDARD SPECIFICATIONS AS APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL ALSO COMPLY WITH THE CITY OF SPRINGFIELD'S EROSION CONTROL ORDINANCE. NO ADDITIONAL COST TO THE DEPARTMENT WILL BE ALLOWED TO COMPLY WITH THIS ORDINANCE.
- THE CONTRACTOR SHALL CONTACT THE OWNER OF ANY NEWSPAPER, MAGAZINE OR POST OFFICE BOXES LOCATED WITHIN THE WORK AREA TO HAVE THE OWNER REMOVE SUCH BOXES.
- SEVERAL TRACK ALIGNMENTS ARE SHOWN ON THESE PLANS. THE ONLY TRACKS TO BE CONSTRUCTED IN THIS CONTRACT ARE THE NSRR SHOOFLY AND THE NSRR INTERIM TRACKS. THE UPRR MAIN 1 ALIGNMENT AND PROFILE ARE SHOWN FOR GRADING PURPOSES. THE UPRR MAIN 2, NSRR MAIN 1 AND NSRR MAIN 2 ALIGNMENTS MAY BE SHOWN ON VARIOUS SHEETS AND ARE FOR INFORMATIONAL PURPOSES. ALL TRACK CONSTRUCTION WILL BE PERFORMED BY NSRR AND PAID FOR AS FORCE ACCOUNT WORK BY THE DEPARTMENT.
- RAILROAD TRACK AND BALLAST WILL BE CONSTRUCTED BY NSRR. TRACK REMOVAL, GRADE CROSSING SURFACE REMOVAL BETWEEN THE RAILROAD TIES, RAILROAD GATE AND SIGNAL REMOVAL, AND RAILROAD SIGNAL CABINET REMOVAL WILL BE BY NSRR. NSRR WILL RELOCATE/ADJUST EXISTING COMMUNICATION LINE THAT RUNS PARALLEL TO THE EXISTING TRACK. CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH NSRR FOR THESE ITEMS.
- THE CONTRACTOR SHALL HAVE AND FOLLOW A SAFETY PLAN THAT CONFORMS TO ALL APPLICABLE OSHA AND FRA GUIDELINES.
- THE CONTRACTOR'S EMPLOYEES MUST PARTICIPATE IN A JOB SAFETY BRIEFING BEFORE BEGINNING WORK EACH DAY AND WHEN JOB CONDITIONS CHANGE. THE BRIEFING SHALL INCLUDE A DISCUSSION OF THE GENERAL WORK PLAN, EXISTING OR POTENTIAL HAZARDS AND WAYS TO ELIMINATE AND PROTECT AGAINST HAZARDS. NSRR EMPLOYEES AND OTHER CONTRACTORS INVOLVED IN THE WORK AREA MUST ALSO BE INCLUDED IN THE JOB SAFETY BRIEFING.
- ABANDONED UNDERGROUND UTILITIES AND ASSOCIATED VALVES, METERS, HYDRANTS, AND OTHER APPURTENANCES THAT CONFLICT WITH CONSTRUCTION SHALL BE REMOVED AND DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT-OF-WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER. FOR UTILITIES LESS THAN 6 IN. DIAMETER, THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. FOR LARGER UTILITIES, REMOVAL AND DISPOSAL OF APPURTENANCES SHALL BE INCLUDED IN THE COST OF UTILITY MAIN REMOVAL.
- ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

LIST OF STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREA OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420001-07	PAVEMENT JOINTS
424021-02	DEPRESSED CORNER FOR SIDEWALKS
515001-03	NAME PLATE FOR BRIDGES
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
601001-04	SUB-SURFACE DRAINS
602301-04	INLET - TYPE A
602306-03	INLET - TYPE B
602401-03	MANHOLE - TYPE A
602601-03	PRECAST REINFORCED CONCRETE FLAT SLAB TOP
602701-02	MANHOLE STEPS
604001-03	FRAME AND LIDS TYPE 1
604011-04	FRAME AND GRATE TYPE 3V
604036-02	GRATE TYPE 8
604091-02	FRAME AND GRATE TYPE 24
606001-05	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	PC CONCRETE ISLANDS AND MEDIANS
630001-10	STEEL PLATE BEAM GUARDRAIL
664001-02	CHAIN LINK FENCE
701606-09	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-09	URBAN LANE CLOSURE, MULTILANE, INTERSECTION
701801-05	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-03	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
720016-03	MAST ARM MOUNTED STREET NAME SIGNS
780001-04	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE MARKERS
782001	PRISMATIC CURB REFLECTORS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-02	HANDHOLES
814006-02	DOUBLE HANDHOLES
821101	LUMINAIRE WIRING DIAGRAM
825021-02	LIGHTING CONTROLLER BASE MOUNTED, 240V
825026-02	LIGHTING CONTROLLER BASE MOUNTED, 480V
830006-02	LIGHT POLE ALUMINUM DAVIT ARM
836001-02	LIGHT POLE FOUNDATION
838001	BREAKAWAY DEVICES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-05	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
877011-05	STEEL COMB. MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
878001-09	CONCRETE FOUNDATION DETAILS
880001-01	SPAN WIRE MOUNTED SIGNALS AND FLASHING BEACON INSTALLATION
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
B.L.R. 14-10	PORTLAND CEMENT CONCRETE PAVEMENT (NONREINFORCED)

UTILITY NOTES

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL CONTACT JULIE AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE WITHIN THE AREA. MEMBERS OF JULIE AND NON JULIE MEMBERS KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:

**MEMBERS OF JULIE
UTILITY CONTACT INFORMATION**

CWLP (WATER)
 MICHAEL T. JOHNSON - (217) 789-2323 x1617
 401 NORTH 11TH STREET
 SPRINGFIELD, IL 62702

CWLP (ELECTRIC)
 RICK MEADOWS - (217) 321-1354
 1008 EAST MILLER STREET
 SPRINGFIELD, IL 62702

WINDSTREAM KDL, INC.
 DAVID FERREIRA - (309) 282-3110 (W)
 (309) 253-0930 (M)
 211-B SW ADAMS STREET
 PEORIA, IL 61602

COMCAST
 DAVID BLY - (224) 229-3204 (W)
 (217) 306-3759 (M)
 711 SOUTH DIRKSEN PARKWAY
 SPRINGFIELD, IL 62703

AMEREN CILCO NORTH (ELECTRIC)
 GEREALD HUTCHINSON - (217) 753-5173
 825 NORTH MACARTHUR
 SPRINGFIELD, IL 62702

AMEREN CILCO NORTH (GAS)
 RICK COMBS - (217) 753-5187 (W)
 (217) 971-0517 (M)
 825 NORTH MACARTHUR
 SPRINGFIELD, IL 62702

ATT
 JEFF GOAD - (217) 789-5828 (W)
 (217) 358-2393 (M)
 1640 E. HAZEL DELL ROAD
 SPRINGFIELD, IL 62703

MCI COMMUNICATION SERVICES, INC.
 TOM BUHER - (708) 458-6410 (W)
 (708) 261-1394 (M)
 7719 WEST 60th PLACE
 SUMMIT, IL 60501

**NON JULIE
UTILITY CONTACT INFORMATION**

ST. JOHNS HOSPITAL
 GREG STADING - (217) 814-5301 (W)
 (314) 401-3729 (M)
 800 E. CARPENTER STREET
 SPRINGFIELD, IL 62769

NORFOLK SOUTHERN CORPORATION
 DANIEL PARKER - (404) 529-1256 (W)
 1200 PEACHTREE STREET, NE BOX 7-142
 ATLANTA GA, 30309

CITY OF SPRINGFIELD (SEWER DEPARTMENT)
 JOHN HIGGENBOTHAM - (217) 789-2260
 300 SOUTH SEVENTH STREET
 SPRINGFIELD, IL 62701



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DESIGNED	DJP	3/16/15
DRAWN	DJP	3/27/15
REVIEWED	JAN	7/25/15

FILE NAME	USER NAME	DESIGNED	REVISED
06894.01798-shs-gsmvnta-261.dgn	gsp00275	DJP	-
		DRAWN	DJP
		CHECKED	JWM
		DATE	2/25/14
		REVISED	-
GEN NOTES	PLOT SCALE		
	1:8000 1/2" = 1'		
	PLOT DATE		
	2/27/2014		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
GENERAL NOTES**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	3
	09L0179B	CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				



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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GCPF ELIGIBLE (25%)	STATE ONLY FUNDS (100%)	NON-PARTICIPATING	GCPF ELIGIBLE (25%)	NON-PARTICIPATING
				ROADWAY/RET. WALLS	ROAD/TRAF. SIGNALS 9TH	UPRR BRIDGE	NSRR BRIDGE	RAILWAY/TRAF. SIGNALS/MISC.
				URBAN	URBAN	S. N. 084-9952	S. N. 084-9953	URBAN
Δ 20101000	TEMPORARY FENCE	FOOT	1,563	247				1316
20200100	EARTH EXCAVATION	CU YD	21,970	19,546				2,424
20700220	POROUS GRANULAR EMBANKMENT	CU YD	118	118				
20800150	TRENCH BACKFILL	CU YD	326	326				
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	5,440	5,440				
25000110	SEEDING, CLASS 1A	ACRE	0.75	0.15				0.60
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	67	14				53
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	67	14				53
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	67	14				53
25000700	AGRICULTURAL GROUND LIMESTONE	TON	1.5	0.3				1.2
25100125	MULCH, METHOD 3	ACRE	0.65	0.15				0.50
25100630	EROSION CONTROL BLANKET	SQ YD	558	119				439
28000400	PERIMETER EROSION BARRIER	FOOT	2,261					2,261
28000500	INLET AND PIPE PROTECTION	EACH	44	38	4			2

Δ SPECIALTY ITEMS
* PAY ITEM REQUIRES A SPECIAL PROVISION

CONSTRUCTION CODE: 0040

FINAL
DESIGNED CJP 9/6/13
DRAWN DJP 9/17/13
REVIEWED JMU 2/25/14

FILE NAME * 0689L0179B-svt-500-001.dgn	USER NAME * pcc00275	DESIGNED - DJP	REVISED -
PLOT SCALE * 0.1667 1/2 in.	CHECKED - JWM	REVISED -	REVISED -
PLOT DATE * 03/06/2014	DATE - 2/25/14	REVISED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SUMMARY OF QUANTITIES

SCALE: SHEET 1 OF 15 SHEETS STA. TO STA.

F.A.U. RTE. 7975	SECTION 13-00475-00-BR 09L0179B	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 4
CONTRACT NO. 93617			ILLINOIS FED. AID PROJECT	



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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GCPF ELIGIBLE (25%)	STATE ONLY FUNDS (100%)	NON-PARTICIPATING	GCPF ELIGIBLE (25%)	NON-PARTICIPATING
				ROADWAY/RET. WALLS	ROAD/TRAF. SIGNALS 9TH	UPRR BRIDGE	NSRR BRIDGE	RAILWAY/TRAF. SIGNALS/MISC.
				URBAN	URBAN	S. N. 084-9952	S. N. 084-9953	URBAN
28100103	STONE RIPRAP, CLASS A2	SQ YD	375					375
28200200	FILTER FABRIC	SQ YD	375					375
* 30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	5,470	5,440	30			
* 35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	2,073					2,073
35400300	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 8"	SQ YD	14		14			
40200700	AGGREGATE SURFACE COURSE, TYPE A 8"	SQ YD	44	44				
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	81		81			
* 40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	72		72			
42000301	PORTLAND CEMENT CONCRETE PAVEMENT 8" (JOINTED)	SQ YD	4,535	4,535				
42001300	PROTECTIVE COAT	SQ YD	5,576	5,556	20			
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	233	233				
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4"	SQ FT	3,008	2,477	449			82
42400800	DETECTABLE WARNINGS	SQ FT	128		46			82
44000100	PAVEMENT REMOVAL	SQ YD	12,655	1,084				11,571

Δ SPECIALTY ITEMS
* PAY ITEM REQUIRES A SPECIAL PROVISION

CONSTRUCTION CODE: 0040

FINAL
 DESIGNED DJP 9/16/13
 DRAWN DJP 9/27/13
 REVIEWED JWB 2/25/14

FILE NAME: DER\131798-wht-500-2014.rvt
 USER NAME: pgs020275
 PLOT SCALE: 1/8"=1'-0"
 PLOT DATE: 2/25/14

DESIGNED - DJP
 DRAWN - DJP
 CHECKED - JWM
 DATE - 2/25/14

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 SUMMARY OF QUANTITIES**

SCALE: SHEET 2 OF 15 SHEETS STA. TO STA.

F.A.U. RTE. 7975	SECTION 13-00475-00-BR 09L0179B	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 5
CONTRACT NO. 93617			ILLINOIS FED. AID PROJECT	



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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GCPF ELIGIBLE (25%)	STATE ONLY FUNDS (100%)	NON-PARTICIPATING	GCPF ELIGIBLE (25%)	NON-PARTICIPATING
				ROADWAY/RET. WALLS	ROAD/TRAF. SIGNALS 9TH	UPRR BRIDGE	NSRR BRIDGE	RAILWAY/TRAF. SIGNALS/MISC.
				URBAN	URBAN	S. N. 084-9952	S. N. 084-9953	URBAN
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	793		793			
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	406	406				
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	183		94			89
44000600	SIDEWALK REMOVAL	SQ FT	8,095	5,705	488			1,902
50200100	STRUCTURE EXCAVATION	CU YD	426	54		170	202	
* 50300225	CONCRETE STRUCTURES	CU YD	718.5	331.1		201.6	185.8	
* 50300255	CONCRETE SUPERSTRUCTURE	CU YD	98.8				98.8	
* 50300285	FORM LINER TEXTURED SURFACE	SQ FT	3,262	1,998		654	610	
* XX008948	FURNISHING AND ERECTING STRUCTURAL STEEL BRIDGE NO. 1	L SUM	1			1		
* XX008949	FURNISHING AND ERECTING STRUCTURAL STEEL BRIDGE NO. 2	L SUM	1				1	
50500505	STUD SHEAR CONNECTORS	EACH	6,816				6,816	
* 50800105	REINFORCEMENT BARS	POUND	349,720	202,500		79,540	67,680	
* 50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	124,150	36,150		36,320	51,680	
51500100	NAME PLATES	EACH	2			1	1	

Δ SPECIALTY ITEMS
* PAY ITEM REQUIRES A SPECIAL PROVISION

CONSTRUCTION CODE: 0040

FINAL
 DESIGNED - D.P. 3/26/13
 DRAWN - D.P. 9/27/13
 REVIEWED - J.W. 2/25/14

FILE NAME: C:\P\1798\1798-001-001.dwg
 USER NAME: jprop@275
 PLOT SCALE: 0.0033 1/2 in.
 PLOT DATE: 2/27/2014

DESIGNED - DJP	REVISOR -
DRAWN - DJP	REVISION -
CHECKED - JWM	REVISION -
DATE - 2/25/14	REVISION -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SUMMARY OF QUANTITIES**

SCALE: SHEET 3 OF 15 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	6
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GCPF ELIGIBLE (25%)	STATE ONLY FUNDS (100%)	NON-PARTICIPATING	GCPF ELIGIBLE (25%)	NON-PARTICIPATING
				ROADWAY/RET. WALLS	ROAD/TRAF. SIGNALS 9TH	UPRR BRIDGE	NSRR BRIDGE	RAILWAY/TRAF. SIGNALS/MISC.
				URBAN	URBAN	S. N. 084-9952	S. N. 084-9953	URBAN
* 51603000	DRILLED SHAFT IN SOIL	CU YD	1,418	977.4		235.1	205.5	
* 51604000	DRILLED SHAFT IN ROCK	CU YD	155	56.2		52.2	46.6	
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	1					1
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	1,194	1,190				4
550A0090	STORM SEWERS, CLASS A, TYPE 1 18"	FOOT	89	89				
550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	FOOT	210	210				
55100200	STORM SEWER REMOVAL, 6"	FOOT	161	161				
55100500	STORM SEWER REMOVAL, 12"	FOOT	530	530				
55101400	STORM SEWER REMOVAL, 30"	FOOT	357	357				
* 55200900	STORM SEWERS JACKED IN PLACE, 24"	FOOT	65	65				
Δ 56100800	WATER MAIN 10"	FOOT	486	486				
58000100	MEMBRANE WATERPROOFING	SQ FT	7,052			3,705	3,347	
58700300	CONCRETE SEALER	SQ FT	19,049	12,387		3,791	2,871	
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	431	268		94	69	

Δ SPECIALTY ITEMS
* PAY ITEM REQUIRES A SPECIAL PROVISION

CONSTRUCTION CODE: 0040

FINAL
 DESIGNED - DJP 5/6/13
 DRAWN - DJP 9/27/13
 REVIEWED - JMW 2/25/14

FILE NAME = 062701079B-shrt-500-001.dgn
 USER NAME = pop02775
 PLOT SCALE = 0.0033 1/4" = 1'-0"
 PLOT DATE = 02/27/2014

DESIGNED - DJP
 DRAWN - DJP
 CHECKED - JWM
 DATE - 2/25/14

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SUMMARY OF QUANTITIES

SCALE: SHEET 4 OF 15 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	7
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



C. Copyright Hanson Professional Services Inc. 2014

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GCPF ELIGIBLE (25%)	STATE ONLY FUNDS (100%)	NON-PARTICIPATING	GCPF ELIGIBLE (25%)	NON-PARTICIPATING
				ROADWAY/RET. WALLS	ROAD/TRAF. SIGNALS 9TH	UPRR BRIDGE	NSRR BRIDGE	RAILWAY/TRAF. SIGNALS/MISC.
				URBAN	URBAN	S. N. 084-9952	S. N. 084-9953	URBAN
* 59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	268.0	76.3				191.7
60100915	PIPE DRAINS 6"	FOOT	34	34				
60100945	PIPE DRAINS 12"	FOOT	38	38				
60107600	PIPE UNDERDRAINS 4"	FOOT	1,359	1,359				
* 60109530	PIPE UNDERDRAINS, FABRIC LINED TRENCH 8"	FOOT	2,482					2,482
* 60109540	PIPE UNDERDRAINS, FABRIC LINED TRENCH 10"	FOOT	754					754
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1				
60219000	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 8 GRATE	EACH	4	4				
60219540	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	3	3				
60219570	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 3V FRAME AND GRATE	EACH	4	4				
60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1				
60222270	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 3V FRAME AND GRATE	EACH	2	2				
60240328	INLETS, TYPE B, TYPE 24 FRAME AND GRATE	EACH	6	6				
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	1					1

Δ SPECIALTY ITEMS
* PAY ITEM REQUIRES A SPECIAL PROVISION

CONSTRUCTION CODE: 0040

FINAL
 DESIGNED DJP 9/6/13
 DRAWN DJP 9/27/13
 REVIEWED JMW 2/25/14

FILE NAME : D:\2014\1798-shr-570-001.dgn	USER NAME : pop00275	DESIGNED - DJP	REVISED - -
PLOT SCALE - 0.833 1/8" = 1'	CHECKED - JWM	REVISED - -	REVISED - -
PLOT DATE - 02/27/2014	DATE - 2/25/14	REVISED - -	REVISED - -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SUMMARY OF QUANTITIES**

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 8
09L0179B		CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 5 OF 15 SHEETS STA. TO STA.



C. Copyright Hanson Professional Services Inc. 2014

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GCPF ELIGIBLE (25%)	STATE ONLY FUNDS (100%)	NON-PARTICIPATING	GCPF ELIGIBLE (25%)	NON-PARTICIPATING
				ROADWAY/RET. WALLS	ROAD/TRAF. SIGNALS 9TH	UPRR BRIDGE	NSRR BRIDGE	RAILWAY/TRAF. SIGNALS/MISC.
				URBAN	URBAN	S.N. 084-9952	S.N. 084-9953	URBAN
60260100	INLETS TO BE ADJUSTED	EACH	6	1	4			1
60500040	REMOVING MANHOLES	EACH	7	6				1
60500060	REMOVING INLETS	EACH	7	7				
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	88		88			
60604400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	FOOT	100	100				
60606800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.18	FOOT	1,207	1,207				
* 60607100	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.18 (MODIFIED)	FOOT	215	215				
60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	1,873	1,873				
60620400	CONCRETE MEDIAN, TYPE SB-9.06	SQ FT	2,062	2,062				
Δ 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	450.0					450.0
63200310	GUARDRAIL REMOVAL	FOOT	27					27
Δ 66400105	CHAIN LINK FENCE, 4'	FOOT	1396	248				1,148
67100100	MOBILIZATION	L SUM	1	0.98	0.02			
* 67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	24	23.5	0.5			

Δ SPECIALTY ITEMS
* PAY ITEM REQUIRES A SPECIAL PROVISION

CONSTRUCTION CODE: 0040

FINAL
DESIGNED - DJP 3/6/13
DRAWN - DJP 9/27/13
REVIEWED - JMM 2/25/14

FILE NAME S:\13-00475-00-09-000.dgn	USER NAME pop00275	DESIGNED - DJP	REVISED -
PLOT SCALE 0.48933 1/4 in.	CHECKED - JWM	DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SUMMARY OF QUANTITIES

SCALE: SHEET 6 OF 15 SHEETS STA. TO STA.

F.A.U. RTE. 7975	SECTION 13-00475-00-BR 09L0179B	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 9
CONTRACT NO. 93617			ILLINOIS FED. AID PROJECT	



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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GCPF ELIGIBLE (25%)	STATE ONLY FUNDS (100%)	NON-PARTICIPATING	GCPF ELIGIBLE (25%)	NON-PARTICIPATING
				ROADWAY/RET. WALLS	ROAD/TRAF. SIGNALS 9TH	UPRR BRIDGE	NSRR BRIDGE	RAILWAY/TRAF. SIGNALS/MISC.
				URBAN	URBAN	S. N. 084-9952	S. N. 084-9953	URBAN
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	L SUM	1	0.75	0.25			
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1		1			
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0.5	0.5			
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	340		340			
70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	94		94			
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	358		358			
72000100	SIGN PANEL - TYPE 1	SQ FT	79	9	18			52
72000200	SIGN PANEL - TYPE 2	SQ FT	150	30	60			60
72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	18	13				5
72900100	METAL POST - TYPE A	FOOT	259					259
72900200	METAL POST - TYPE B	FOOT	58					58
Δ 78005100	EPOXY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	68	68				
Δ 78005120	EPOXY PAVEMENT MARKING - LINE 5"	FOOT	1,470	1,470				
Δ 78005130	EPOXY PAVEMENT MARKING - LINE 6"	FOOT	1,939	1,599	340			

Δ SPECIALTY ITEMS
* PAY ITEM REQUIRES A SPECIAL PROVISION

CONSTRUCTION CODE: 0040

FINAL
 DESIGNED: DJP 9/6/13
 DRAWN: DJP 9/27/13
 REVIEWED: JRL 2/25/14

FILE NAME: 0609L0179B-STA-500-071.dgn	USER NAME: pop00275	DESIGNED: DJP	REVISED: -
PLOT SCALE: 8.0000 1/8" = 1'	CHECKED: JWM	DATE: 2/25/14	REVISED: -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SUMMARY OF QUANTITIES**

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 10
09L0179B			CONTRACT NO. 8617	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 7 OF 15 SHEETS STA. TO STA.



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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GCPF ELIGIBLE (25%)	STATE ONLY FUNDS (100%)	NON-PARTICIPATING	GCPF ELIGIBLE (25%)	NON-PARTICIPATING
				ROADWAY/RET. WALLS	ROAD/TRAF. SIGNALS 9TH	UPRR BRIDGE	NSRR BRIDGE	RAILWAY/TRAF. SIGNALS/MISC.
				URBAN	URBAN	S. N. 084-9952	S. N. 084-9953	URBAN
Δ	78005150 EPOXY PAVEMENT MARKING - LINE 12"	FOOT	124	124				
Δ	78005180 EPOXY PAVEMENT MARKING - LINE 24"	FOOT	198	104	94			
Δ	78100100 RAISED REFLECTIVE PAVEMENT MARKER	EACH	23	23				
Δ	78200300 PRISMATIC CURB REFLECTOR	EACH	19	19				
Δ	80400100 ELECTRIC SERVICE INSTALLATION	EACH	1	1				
Δ	81028350 UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	75		48			27
Δ	81028370 UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	95		71			24
Δ	81028390 UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	337		270			67
Δ	81100320 CONDUIT ATTACHED TO STRUCTURE, 1" DIA., PVC COATED GALVANIZED STEEL	FOOT	200	200				
Δ	81200270 CONDUIT EMBEDDED IN STRUCTURE, 4" DIA., PVC	FOOT	168				168	
Δ	81200200 CONDUIT EMBEDDED IN STRUCTURE, 3/4" DIA., PVC	FOOT	1,070	1,070				
Δ	81300410 JUNCTION BOX, STAINLESS STEEL, ATTACHED TO STRUCTURE, 10" X 8" X 4"	EACH	4	4				
Δ *	81400100 HANDHOLE	EACH	4	1	3			
Δ *	81400300 DOUBLE HANDHOLE	EACH	2	1	1			

Δ SPECIALTY ITEMS
* PAY ITEM REQUIRES A SPECIAL PROVISION

CONSTRUCTION CODE: 0040

FINAL
 DESIGNED - DJP 9/6/13
 DRAWN - DLP 9/22/13
 REVIEWED - JMT 2/25/14

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
0489L0179B-shc-000-001.dgn	pop00275	DJP	
		DRAWN -	REVISED -
		DJP	
		CHECKED -	REVISED -
		JWM	
		DATE -	REVISED -
		2/25/14	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SUMMARY OF QUANTITIES**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	11
09L0179B			CONTRACT NO. 3617	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 8 OF 15 SHEETS STA. TO STA.



C. Copyright Hanson Professional Services Inc. 2014

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GCPF ELIGIBLE (25%)	STATE ONLY FUNDS (100%)	NON-PARTICIPATING	GCPF ELIGIBLE (25%)	NON-PARTICIPATING
				ROADWAY/RET. WALLS	ROAD/TRAF. SIGNALS 9TH	UPRR BRIDGE	NSRR BRIDGE	RAILWAY/TRAF. SIGNALS/MISC.
				URBAN	URBAN	S. N. 084-9952	S. N. 084-9953	URBAN
Δ	81603010 UNIT DUCT, 600V, 2-1C NO.10, 1/C NO.10 GROUND, (XLP-TYPE USE), 3/4" DIA. POLYETHYLENE	FOOT	1,500	1,500				
Δ	81603085 UNIT DUCT, 600V, 3-1C NO.4, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	500	500				
Δ	81702110 ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10	FOOT	3,000	3,000				
Δ	81702130 ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	2,071	707	1,364			
Δ *	XX008950 LUMINAIRE, LED COBRA HEAD STYLE	EACH	10	10				
Δ *	XX008951 LUMINAIRE, LED LINEAR 4 FT WALL MOUNTED	EACH	176	176				
Δ *	XX008952 LUMINAIRE, DECORATIVE ELECTROLUMINESCENT LIGHT TAPE	FOOT	154					154
Δ	82500350 LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 100AMP	EACH	1	1				
Δ	82500360 LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 100AMP	EACH	1	1				
Δ	83002350 LIGHT POLE, ALUMINUM, 40 FT. M.H., 8 FT. DAVIT ARM - TWIN	EACH	2	2				
Δ	83002400 LIGHT POLE, ALUMINUM, 40 FT. M.H., 10 FT. DAVIT ARM	EACH	6	6				
Δ	83600300 LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	48	48				
Δ	83800650 BREAKAWAY DEVICE, COUPLING WITH STAINLESS STEEL SCREEN	EACH	24	24				
Δ	84200600 REMOVAL OF LIGHTING UNIT, NO SALVAGE	EACH	2					2

* PAY ITEM REQUIRES A SPECIAL PROVISION

CONSTRUCTION CODE: 0040

FINAL
 DESIGNED - DJP 3/14/13
 DRAWN - DJP 3/27/13
 REVIEWED - JWM 3/25/14

FILE NAME = D:\09L0179B\shd-500-001.dgn
 SHEETS 9

USER NAME = jpop00275
 PLOT SCALE = 1/8"=1'-0"
 PLOT DATA = 02/27/2014

DESIGNED - DJP
 DRAWN - DJP
 CHECKED - JWM
 DATE - 2/25/14

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 SUMMARY OF QUANTITIES**

SCALE: SHEET 9 OF 15 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	12
09L0179B		CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				



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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GCPF ELIGIBLE (25%)	STATE ONLY FUNDS (100%)	NON-PARTICIPATING	GCPF ELIGIBLE (25%)	NON-PARTICIPATING
				ROADWAY/RET. WALLS	ROAD/TRAF. SIGNALS 9TH	UPRR BRIDGE	NSRR BRIDGE	RAILWAY/TRAF. SIGNALS/MISC.
				URBAN	URBAN	S. N. 084-9952	S. N. 084-9953	URBAN
Δ	84200804	REMOVAL OF POLE FOUNDATION	EACH	2				2
Δ	84500110	REMOVAL OF LIGHTING CONTROLLER	EACH	1	1			
Δ *	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	4,490		3,237		1,253
Δ *	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1,387		1,387		
Δ *	87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	734		530		204
Δ *	87502640	TRAFFIC SIGNAL POST, ALUMINUM 10 FT.	EACH	2		2		
Δ *	87502690	TRAFFIC SIGNAL POST, ALUMINUM 15 FT.	EACH	2				2
Δ *	87502710	TRAFFIC SIGNAL POST, ALUMINUM 17 FT.	EACH	2		2		
Δ	87700200	STEEL MAST ARM ASSEMBLY AND POLE 32 FT.	EACH	1		1		
Δ	87700310	STEEL MAST ARM ASSEMBLY AND POLE 54 FT.	EACH	1		1		
Δ	87702860	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 26 FT.	EACH	1				1
Δ	87702970	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1		1		
Δ	87702980	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	2		1		1
Δ *	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	18		12		6

Δ SPECIALTY ITEMS
* PAY ITEM REQUIRES A SPECIAL PROVISION

CONSTRUCTION CODE: 0040

FINAL
 DESIGNED - DJP 9/6/13
 DRAWN - CJP 9/21/13
 REVIEWED - JMW 2/25/14

FILE NAME = 069%0179B-v1-500-201.dgn	USER NAME = pep@0275	DESIGNED - DJP	REVISED -
PLOT SCALE = 0.0033' / in.	PLOT DATE = 02/27/2014	DRAWN - DJP	REVISED -
		CHECKED - JWM	REVISED -
		DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SUMMARY OF QUANTITIES

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 13
09L0179B		CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 10 OF 15 SHEETS STA. TO STA.



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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GCPF ELIGIBLE (25%)	STATE ONLY FUNDS (100%)	NON-PARTICIPATING	GCPF ELIGIBLE (25%)	NON-PARTICIPATING
				ROADWAY/RET. WALLS	ROAD/TRAF. SIGNALS 9TH	UPRR BRIDGE	NSRR BRIDGE	RAILWAY/TRAF. SIGNALS/MISC.
				URBAN	URBAN	S. N. 084-9952	S. N. 084-9953	URBAN
Δ	87800200 CONCRETE FOUNDATION, TYPE D	FOOT	7		3.5			3.5
Δ *	87800400 CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10					10
Δ *	87800415 CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	56		41			15
Δ *	87800420 CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21		21			
Δ *	88040070 SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	6		4			2
Δ *	88040090 SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	12		8			4
Δ *	88040150 SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4		4			
Δ *	88040160 SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4		4			
Δ *	88102825 PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED WITH COUNT DOWN TIMER	EACH	12		8			4
Δ *	88200400 TRAFFIC SIGNAL BACKPLATE, FORMED PLASTIC	EACH	26		20			6
Δ *	88800100 PEDESTRIAN PUSH-BUTTON	EACH	12		8			4
Δ *	89000100 TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1	1				
Δ *	89501100 RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER	EACH	1					1
Δ *	89501250 RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2		1			1

Δ : SPECIALTY ITEMS
* PAY ITEM REQUIRES A SPECIAL PROVISION

CONSTRUCTION CODE: 0040

FINAL
DESIGNED DJP 3/6/13
DRAWN GJP 9/27/13
REVIEWED JME 2/25/14

FILE NAME : D:\M\0179B-whi-500-201.dgn	USER NAME : jms00275	DESIGNED - DJP	REVISED -
		DRAWN - DJP	REVISED -
		CHECKED - JWM	REVISED -
		DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SUMMARY OF QUANTITIES

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 14
09L0179B		CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 11 OF 15 SHEETS STA. TO STA.



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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GCPF ELIGIBLE (25%)	STATE ONLY FUNDS (100%)	NON-PARTICIPATING	GCPF ELIGIBLE (25%)	NON-PARTICIPATING
				ROADWAY/RET. WALLS	ROAD/TRAF. SIGNALS 9TH	UPRR BRIDGE	NSRR BRIDGE	RAILWAY/TRAF. SIGNALS/MISC.
				URBAN	URBAN	S. N. 084-9952	S. N. 084-9953	URBAN
Δ *	89502375 REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	2		1			1
Δ	89502385 REMOVE EXISTING CONCRETE FOUNDATION	EACH	8	4				4
*	LR430050 CONCRETE PAVER SIDEWALK	SQ YD	220	220				
*	X0321865 ANTI-GRAFFITI PROTECTION SYSTEM	SQ FT	8,767					8,767
*	X0323360 WOODEN POLE REMOVAL	EACH	2					2
*	X0323389 STORM SEWER CONNECTION	EACH	2	2				
*	X0323569 STEEL POST REMOVAL	EACH	1					1
*	X0324761 DRAINAGE SYSTEM (SPECIAL)	L SUM	1				1	
Δ *	X0325379 DIRECTIONAL BORING	FOOT	87					87
*	X0326390 CONCRETE SLAB REMOVAL	SQ YD	28					28
*	X0326458 PAVEMENT REPLACEMENT, SPECIAL	SQ YD	111	17				94
*	X0326671 CONCRETE SURFACE COLOR TREATMENT	SQ FT	1,549					1,549
*	X0326911 TRANSVERSE DRAINS COMPLETE	EACH	3	3				
*	X0327131 DRAINAGE STRUCTURES, NO. 1	EACH	2	2				

Δ SPECIALTY ITEMS
* PAY ITEM REQUIRES A SPECIAL PROVISION

CONSTRUCTION CODE: 0040

FINAL
 DESIGNED - DJP 9/16/11
 DRAWN - DJP 9/27/11
 REVIEWED - JMM 2/25/14

FILE NAME D:\81798-shr-500-821.dgn	USER NAME ppp89275	DESIGNED - DJP	REVISED -
		DRAWN - DJP	REVISED -
		CHECKED - JWM	REVISED -
SHEET 12	PL01 DATE - 02/25/2014	DATE - 2/25/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SUMMARY OF QUANTITIES**

SCALE: SHEET 12 OF 15 SHEETS STA. TO STA.

F.A.U. RTE. 7975	SECTION 13-00475-00-BR 09L0179B	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 15
CONTRACT NO. 93617			ILLINOIS FED. AID PROJECT	



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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GCPF ELIGIBLE (25%)	STATE ONLY FUNDS (100%)	NON-PARTICIPATING	GCPF ELIGIBLE (25%)	NON-PARTICIPATING
				ROADWAY/RET. WALLS	ROAD/TRAF. SIGNALS 9TH	UPRR BRIDGE	NSRR BRIDGE	RAILWAY/TRAF. SIGNALS/MISC.
				URBAN	URBAN	S. N. 084-9952	S. N. 084-9953	URBAN
* X0327132	DRAINAGE STRUCTURES, NO. 2	EACH	1	1				
* X0350810	BOLLARD REMOVAL	EACH	1					1
Δ * X0783300	PUMP STATION ELECTRICAL WORK	L SUM	1	1				
Δ * X0783500	PUMP STATION MECHANICAL WORK	L SUM	1	1				
* X4404400	PAVEMENT REMOVAL (SPECIAL)	SQ YD	4,061	4,061				
* X5030540	FLOOR DRAINS (SPECIAL)	EACH	18				18	
Δ * X5610706	WATER MAIN REMOVAL, 6"	FOOT	353	353				
Δ * X5610710	WATER MAIN REMOVAL, 10"	FOOT	313	313				
* X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	216			102	114	
* X6012005	PIPE DRAINS 12" (SPECIAL)	FOOT	199					199
* X6020074	INLETS, TYPE A, TYPE 3V FRAME AND GRATE	EACH	14	14				
* X6023508	INLETS, TYPE A, WITH SPECIAL FRAME AND GRATE	EACH	4	4				
* X6040205	FRAMES AND LIDS, SPECIAL	EACH	2	2				
* X6061460	PAVED DITCH (SPECIAL)	FOOT	549	549				

Δ SPECIALTY ITEMS
* PAY ITEM REQUIRES A SPECIAL PROVISION

CONSTRUCTION CODE: 0040

FINAL
 DESIGNED - DJP 9/6/13
 DRAWN - DJP 9/27/13
 REVIEWED - JRM 2/25/14

FILE NAME =	USER NAME = ppp20275	DESIGNED - DJP	REVISED -
DESIGNER = 09L0179B-INT-500-2014.rvt		DRAWN - DJP	REVISED -
		CHECKED - JWM	REVISED -
		DATE - 2/25/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SUMMARY OF QUANTITIES**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	16
09L0179B		CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 13 OF 15 SHEETS STA. TO STA.



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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GCPF ELIGIBLE (25%)	STATE ONLY FUNDS (100%)	NON-PARTICIPATING	GCPF ELIGIBLE (25%)	NON-PARTICIPATING
				ROADWAY/RET. WALLS	ROAD/TRAF. SIGNALS 9TH	UPRR BRIDGE	NSRR BRIDGE	RAILWAY/TRAF. SIGNALS/MISC.
				URBAN	URBAN	S. N. 084-9952	S. N. 084-9953	URBAN
Δ *	X6640210	TEMPORARY CHAIN LINK FENCE (PORTABLE)	FOOT	201	201			
Δ *	X6640308	CHAIN LINK GATES, (SPECIAL)	EACH	2	1			1
Δ *	X6640570	CHAIN LINK FENCE, 8' (SPECIAL)	FOOT	1,642	719			923
*	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	0.9	0.1		
*	X7240300	SIGN REMOVAL	EACH	2	2			
Δ *	X8050135	SERVICE INSTALLATION, TYPE C (MODIFIED)	EACH	2		1		1
Δ *	X8210675	LUMINAIRE, METAL HALIDE HORIZONTAL MOUNT 400W	EACH	4	2	2		
Δ *	X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1		1		
*	XX004895	PIPE UNDERDRAIN CLEANOUT, COMPLETE	EACH	17				17
*	XX005896	CONCRETE PAD REMOVAL	SQ FT	240				240
Δ *	Z0007124	STEEL RAILING (SPECIAL)	FOOT	2,066	1,690		188	188
*	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	0.98	0.02		
*	Z0022800	FENCE REMOVAL	FOOT	1,965	951			1,014
*	Z0026407	TEMPORARY SHEET PILING	SQ FT	9,153	6,255		2,898	

Δ SPECIALTY ITEMS
* PAY ITEM REQUIRES A SPECIAL PROVISION

CONSTRUCTION CODE: 0040

FINAL
DESIGNED - DJP 9/6/13
DRAWN - EJP 9/27/13
REVIEWED - JMU 2/25/14

FILE NAME =	USER NAME = pep@275	DESIGNED - DJP	REVISED -
GEN\01798\cvt\500-001.dgn		DRAWN - DJP	REVISED -
		CHECKED - JWM	REVISED -
Sheet 14		DATE - 2/25/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SUMMARY OF QUANTITIES**

SCALE: SHEET 14 OF 15 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	17
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	GCPF ELIGIBLE (25%)	STATE ONLY FUNDS (100%)	NON-PARTICIPATING	GCPF ELIGIBLE (25%)	NON-PARTICIPATING
				ROADWAY/RET. WALLS	ROAD/TRAF. SIGNALS 9TH	UPRR BRIDGE	NSRR BRIDGE	RAILWAY/TRAF. SIGNALS/MISC.
				URBAN	URBAN	S. N. 084-9952	S. N. 084-9953	URBAN
* Z0034210	MECHANICALLY STABILIZED EARTH RETAINING WALL	SQ FT	7,267	7,267				
* Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	2,283	2,072		102	109	
* Z0046306	PIPE UNDERDRAINS FOR STRUCTURES 6"	FOOT	194			100	94	
Δ * Z0047700	PUMPING STATION	L SUM	1	1				
* Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1				
Δ * Z0068300	STEEL CASINGS 36"	FOOT	70					70
* Z0069700	SUBBALLAST	CU YD	4,802					4,802
+ * Z0076600	TRAINEES	HOUR	2,500	2,500				
+ * Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	2,500	2,500				
* XX008953	SECANT LAGGING	CU FT	2,250	766			1,484	
* XX008954	PRECAST PRESTRESSED CONCRETE FASCIA BEAM	FOOT	84			84		
Δ * XX008955	ST. JOHN'S MEDIUM-VOLTAGE DISTRIBUTION RELOCATION	L SUM	1					1

Δ SPECIALTY ITEMS +0042
* PAY ITEM REQUIRES A SPECIAL PROVISION

CONSTRUCTION CODE: 0040

FINAL
DESIGNED DJP 3/6/13
DRAWN DJP 9/27/13
REVIEWED JWM 2/25/14

FILE NAME: DESM.01790-INT-500-R01.dgn	USER NAME: pop00775	DESIGNED - DJP	REVISED -
PLOT SCALE: 0.4833 1/2 in	CHECKED - JWM	REVISED -	REVISED -
PLOT DATE: 02/27/2014	DATE - 2/25/14	REVISED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SUMMARY OF QUANTITIES

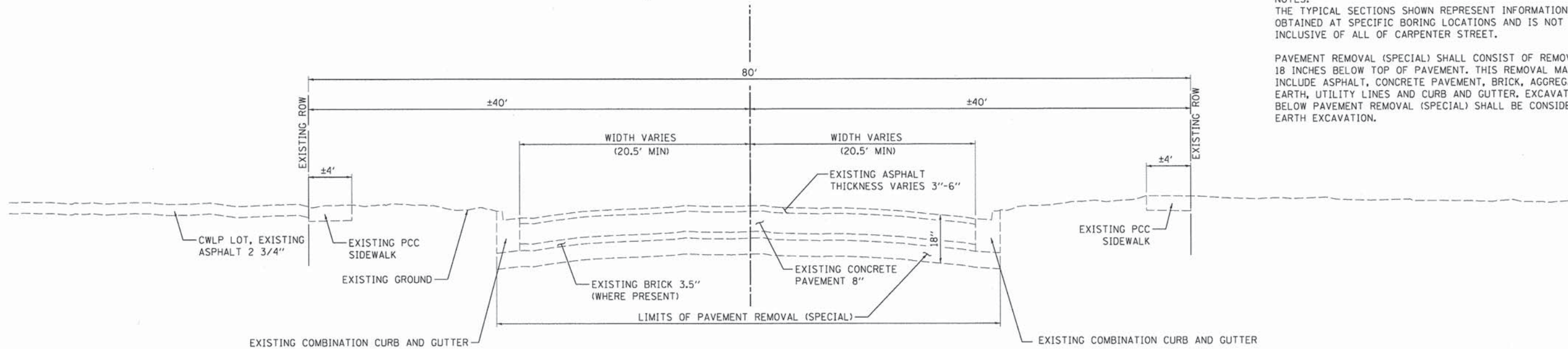
F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 18
09L0179B		CONTRACT NO. 93617	ILLINOIS FED. AID PROJECT	

SCALE: SHEET 15 OF 15 SHEETS STA. TO STA.



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EXISTING CARPENTER STREET



NOTES:
THE TYPICAL SECTIONS SHOWN REPRESENT INFORMATION OBTAINED AT SPECIFIC BORING LOCATIONS AND IS NOT INCLUSIVE OF ALL OF CARPENTER STREET.

PAVEMENT REMOVAL (SPECIAL) SHALL CONSIST OF REMOVING 18 INCHES BELOW TOP OF PAVEMENT. THIS REMOVAL MAY INCLUDE ASPHALT, CONCRETE PAVEMENT, BRICK, AGGREGATE, EARTH, UTILITY LINES AND CURB AND GUTTER. EXCAVATION BELOW PAVEMENT REMOVAL (SPECIAL) SHALL BE CONSIDERED EARTH EXCAVATION.

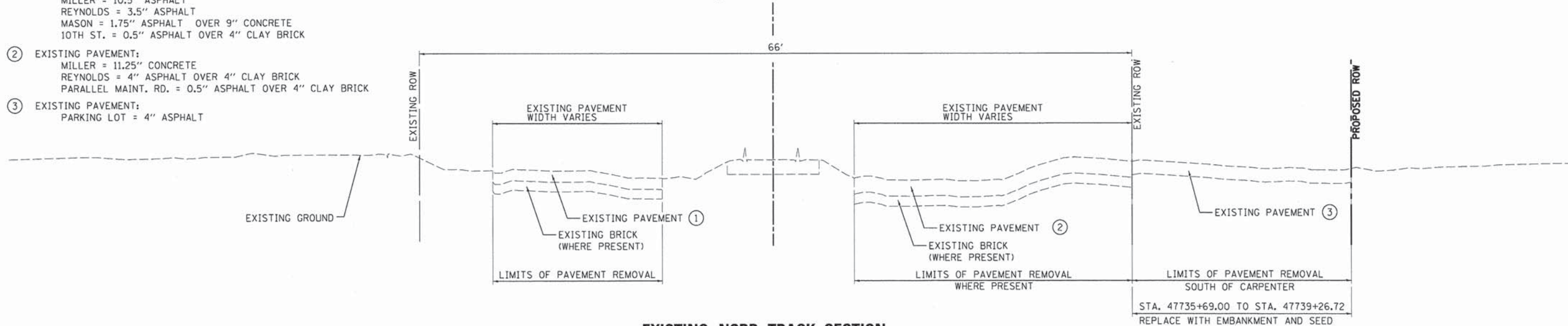
EXISTING CARPENTER STREET

LOOKING EAST

LEGEND

- ① EXISTING PAVEMENT:
MILLER = 10.5" ASPHALT
REYNOLDS = 3.5" ASPHALT
MASON = 1.75" ASPHALT OVER 9" CONCRETE
10TH ST. = 0.5" ASPHALT OVER 4" CLAY BRICK
- ② EXISTING PAVEMENT:
MILLER = 11.25" CONCRETE
REYNOLDS = 4" ASPHALT OVER 4" CLAY BRICK
PARALLEL MAINT. RD. = 0.5" ASPHALT OVER 4" CLAY BRICK
- ③ EXISTING PAVEMENT:
PARKING LOT = 4" ASPHALT

EXISTING NSRR



EXISTING NSRR TRACK SECTION

LOOKING SOUTH

DESIGNED	DJP	9/6/13
DRAWN	DJP	9/27/13
REVIEWED	JWM	2/25/14

FILE NAME = 0609L0179B-shr-typical-CAR-001.dgn	USER NAME = pop00275	DESIGNED - DJP	REVISED -
		DRAWN - DJP	REVISED -
		CHECKED - JWM	REVISED -
		DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

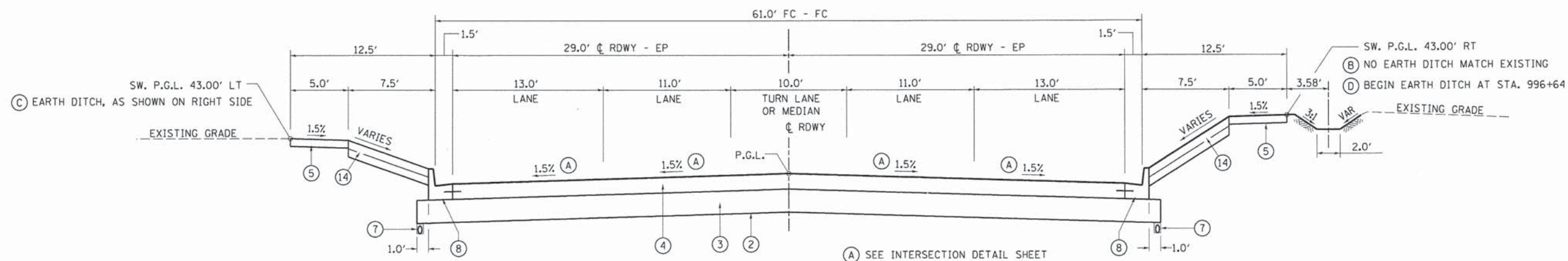
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
TYPICAL SECTIONS - EXISTING

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	19
	09L0179B		CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.



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LEFT
 STA. 996+53.09 TO STA. 996+95.00
 (C) STA. 1003+25.00 TO STA. 1003+40.71

CARPENTER STREET
 BEGIN PROJECT STA. 995+49.00
 LEFT - STA. 995+49.00 TO STA. 996+53.09 INTERSECTION OMISSION
 RIGHT - STA. 995+49.00 TO STA. 996+53.53 INTERSECTION OMISSION
 LEFT - STA. 1003+40.71 TO STA. 1003+65.71 INTERSECTION OMISSION
 RIGHT - STA. 1003+40.71 TO STA. 1003+65.71 INTERSECTION OMISSION
 END PROJECT STA. 1003+65.71

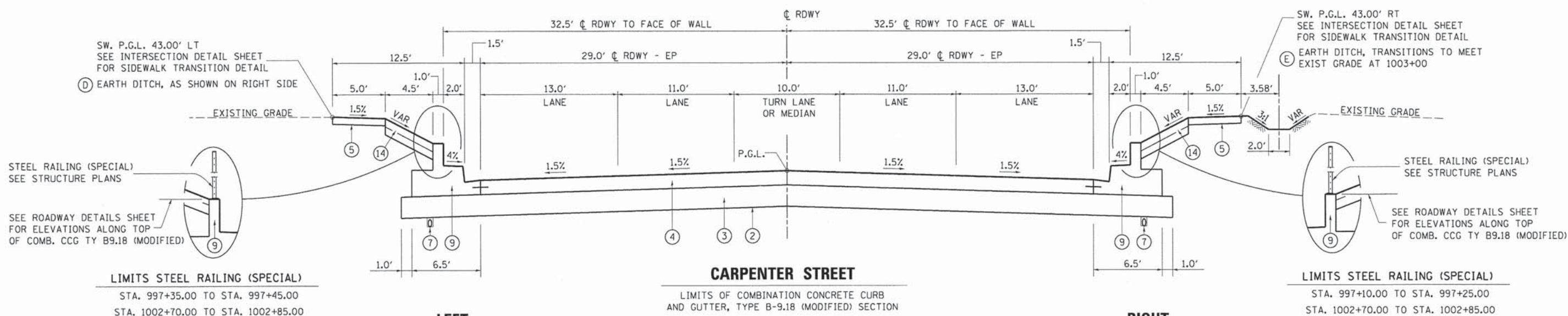
RIGHT
 (D) STA. 996+53.53 TO STA. 996+75.00
 (B) STA. 1003+30.00 TO STA. 1003+40.71

LEGEND

- (1) POROUS GRANULAR EMBANKMENT
- (2) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- (3) AGGREGATE SUBGRADE IMPROVEMENT 12"
- (4) PORTLAND CEMENT CONCRETE PAVEMENT 8" (JOINTED) MAXIMUM JOINT SPACING 15'
- (5) PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH
- (6) CONCRETE MEDIAN, TYPE SB-9.06
- (7) PIPE UNDERDRAINS 4"
- (8) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.18
- (9) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.18 (MODIFIED) SEE ROADWAY DETAILS SHEET
- (10) CONCRETE MEDIAN SURFACE, 4 INCH
- (11) SELECT GRANULAR BACKFILL, SPECIAL SEE STRUCTURE PLANS
- (12) PAVED DITCH (SPECIAL) SEE SIDEWALK / DITCH PROFILES SHEET SEE DRAINAGE DETAILS SHEET
- (13) PIPE UNDERDRAINS FOR STRUCTURES 4" SEE STRUCTURE PLANS
- (14) CONCRETE PAVER SIDEWALK SEE ROADWAY DETAILS SHEET

PCC PAVEMENT

STRUCTURAL DESIGN TRAFFIC	YEAR 2025
PV = 8260	SU = 657 MU = 469
ROAD/STREET CLASSIFICATION:	CLASS I
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE:	
P = 88%	S = 7% M = 5%
TRAFFIC FACTOR:	ACTUAL TF = 3.80 AC TYPE = N/A
	MINIMUM TF = N/A
PG GRADE:	BINDER = N/A SURFACE = N/A
SUBGRADE SUPPORT RATING:	
SSR = POOR	(STA 996+28.09 TO 1003+65.71)



LIMITS STEEL RAILING (SPECIAL)
 STA. 997+35.00 TO STA. 997+45.00
 STA. 1002+70.00 TO STA. 1002+85.00

LEFT
 STA. 996+95.00 TO STA. 997+45.00
 (D) STA. 1002+70.00 TO STA. 1003+25.00

CARPENTER STREET
 LIMITS OF COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.18 (MODIFIED) SECTION

RIGHT
 STA. 996+75.00 TO STA. 997+25.00
 (E) STA. 1002+70.00 TO STA. 1003+30.00

LIMITS STEEL RAILING (SPECIAL)
 STA. 997+10.00 TO STA. 997+25.00
 STA. 1002+70.00 TO STA. 1002+85.00

FINAL
 DESIGNED CLG 9/16/13
 DRAWN CLG 9/27/13
 REVIEWED JMM 2/25/14

FILE NAME =	USER NAME = pop00275	DESIGNED - CLG	REVISED -
D60%L0179B-sht-typical-CAR-002.dgn		DRAWN - CLG	REVISED -
		CHECKED - JMM	REVISED -
Sheet 1	PLOT DATE = 02/26/2014	DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

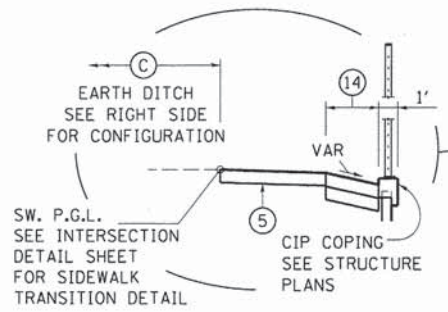
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
TYPICAL SECTIONS - CARPENTER STREET-1

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	20
	09L0179B			CONTRACT NO 3 6 1 7
ILLINOIS FED. AID PROJECT				

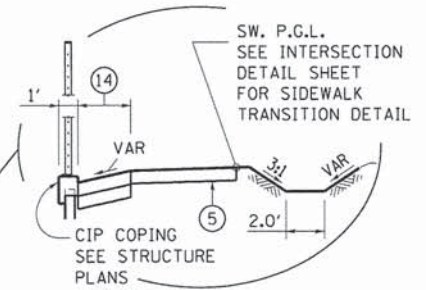
SCALE: SHEET 1 OF 3 SHEETS STA. TO STA.



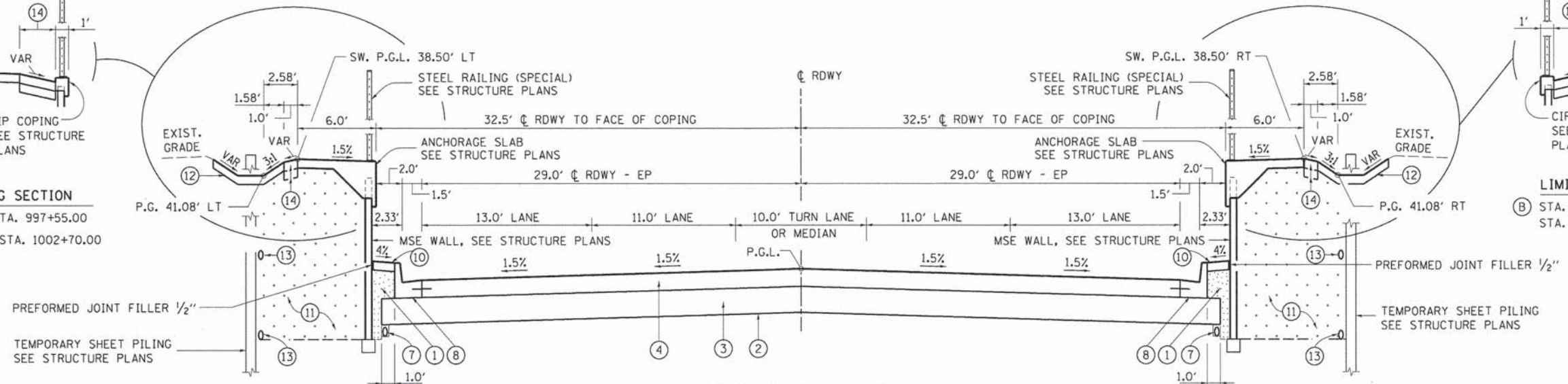
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LIMITS CIP COPING SECTION
 (A) STA. 997+45.00 TO STA. 997+55.00
 (C) STA. 1002+60.00 TO STA. 1002+70.00



LIMITS CIP COPING SECTION
 (B) STA. 997+25.00 TO STA. 997+35.00
 STA. 1002+60.00 TO STA. 1002+70.00



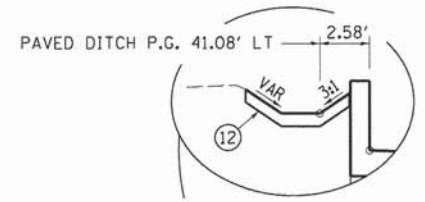
CARPENTER STREET
 LIMITS OF ANCHORAGE SLAB W/ LOWER MSE WALL SECTION

LEFT
 (A) STA. 997+45.00 TO STA. 997+55.00
 STA. 1002+10.00 TO STA. 1002+70.00

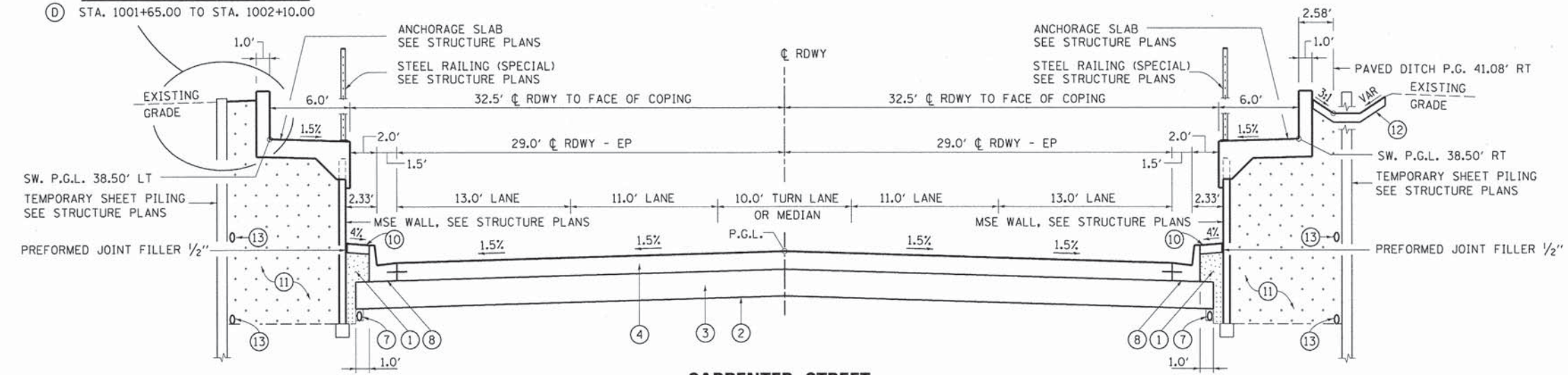
RIGHT
 (B) STA. 997+25.00 TO STA. 997+35.00
 STA. 1002+12.00 TO STA. 1002+70.00

LEGEND

- (1) POROUS GRANULAR EMBANKMENT
- (2) GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- (3) AGGREGATE SUBGRADE IMPROVEMENT 12"
- (4) PORTLAND CEMENT CONCRETE PAVEMENT 8" (JOINTED) MAXIMUM JOINT SPACING 15'
- (5) PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH
- (6) CONCRETE MEDIAN, TYPE SB-9.06
- (7) PIPE UNDERDRAINS 4"
- (8) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.18
- (9) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.18 (MODIFIED) SEE ROADWAY DETAILS SHEET
- (10) CONCRETE MEDIAN SURFACE, 4 INCH
- (11) SELECT GRANULAR BACKFILL, SPECIAL SEE STRUCTURE PLANS
- (12) PAVED DITCH (SPECIAL) SEE SIDEWALK / DITCH PROFILES SHEET SEE DRAINAGE DETAILS SHEET
- (13) PIPE UNDERDRAINS FOR STRUCTURES 4" SEE STRUCTURE PLANS
- (14) CONCRETE PAVER SIDEWALK SEE ROADWAY DETAILS SHEET



LIMITS PAVED DITCH
 (D) STA. 1001+65.00 TO STA. 1002+10.00



CARPENTER STREET
 LIMITS OF ANCHORAGE SLAB "L" WALL W/ LOWER MSE WALL SECTION

LEFT
 STA. 997+55.00 TO STA. 997+95.00
 (D) STA. 1001+65.00 TO STA. 1002+10.00

RIGHT
 STA. 997+35.00 TO STA. 997+80.00
 STA. 1001+65.00 TO STA. 1002+12.00

FINAL
 DESIGNED CLG 9/6/13
 DRAWN CLG 9/27/13
 REVIEWED JMM 2/25/14

FILE NAME = D609L0179B-sht-typical-CAR-002.dgn	USER NAME = pop00275	DESIGNED - CLG	REVISED -
PLOT SCALE = 5.0000' / 1"	DATE = 2/25/14	DRAWN - CLG	REVISED -
PLOT DATE = 02/26/2014		CHECKED - JMM	REVISED -
		DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

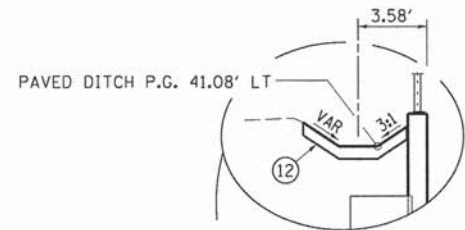
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 TYPICAL SECTIONS - CARPENTER STREET-2

SCALE: SHEET 2 OF 3 SHEETS STA. TO STA.

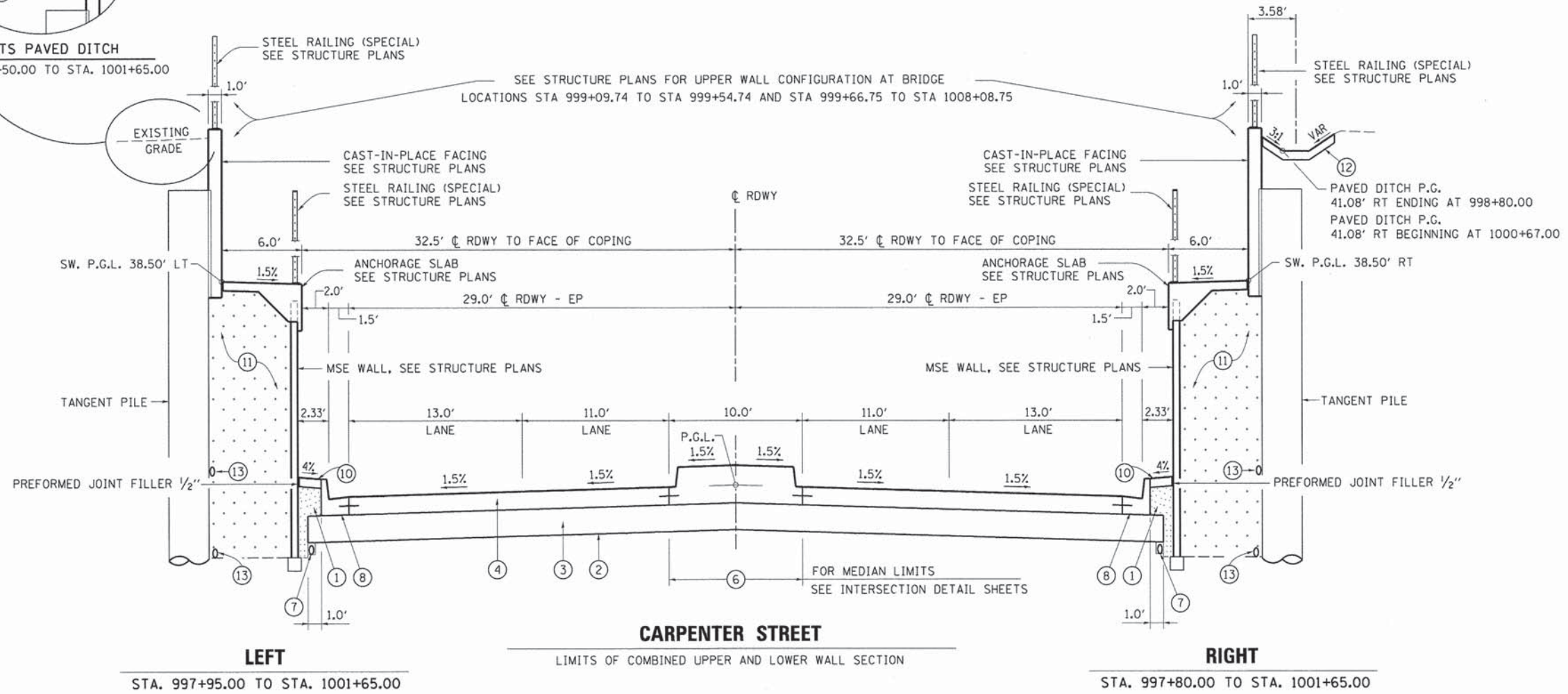
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	21
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				

LEGEND

- ① POROUS GRANULAR EMBANKMENT
- ② GEOTECHNICAL FABRIC FOR GROUND STABILIZATION
- ③ AGGREGATE SUBGRADE IMPROVEMENT 12"
- ④ PORTLAND CEMENT CONCRETE PAVEMENT 8" (JOINTED) MAXIMUM JOINT SPACING 15'
- ⑤ PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH
- ⑥ CONCRETE MEDIAN, TYPE SB-9.06
- ⑦ PIPE UNDERDRAINS 4"
- ⑧ COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.18
- ⑨ COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.18 (MODIFIED) SEE ROADWAY DETAILS SHEET
- ⑩ CONCRETE MEDIAN SURFACE, 4 INCH
- ⑪ SELECT GRANULAR BACKFILL, SPECIAL SEE STRUCTURE PLANS
- ⑫ PAVED DITCH (SPECIAL) SEE SIDEWALK / DITCH PROFILES SHEET SEE DRAINAGE DETAILS SHEET
- ⑬ PIPE UNDERDRAINS FOR STRUCTURES 4" SEE STRUCTURE PLANS
- ⑭ CONCRETE PAVER SIDEWALK SEE ROADWAY DETAILS SHEET



LIMITS PAVED DITCH
STA. 1000+50.00 TO STA. 1001+65.00



CARPENTER STREET

LIMITS OF COMBINED UPPER AND LOWER WALL SECTION

FINAL
DESIGNED CLG 9/16/13
DRAWN CLG 9/27/13
REVIEWED JWM 2/25/14

FILE NAME = D60%L0179B-sht-typical-CAR-002.dgn	USER NAME = pop0275	DESIGNED - CLG	REVISED -
		DRAWN - CLG	REVISED -
		CHECKED - JWM	REVISED -
		DATE - 2/25/14	REVISED -

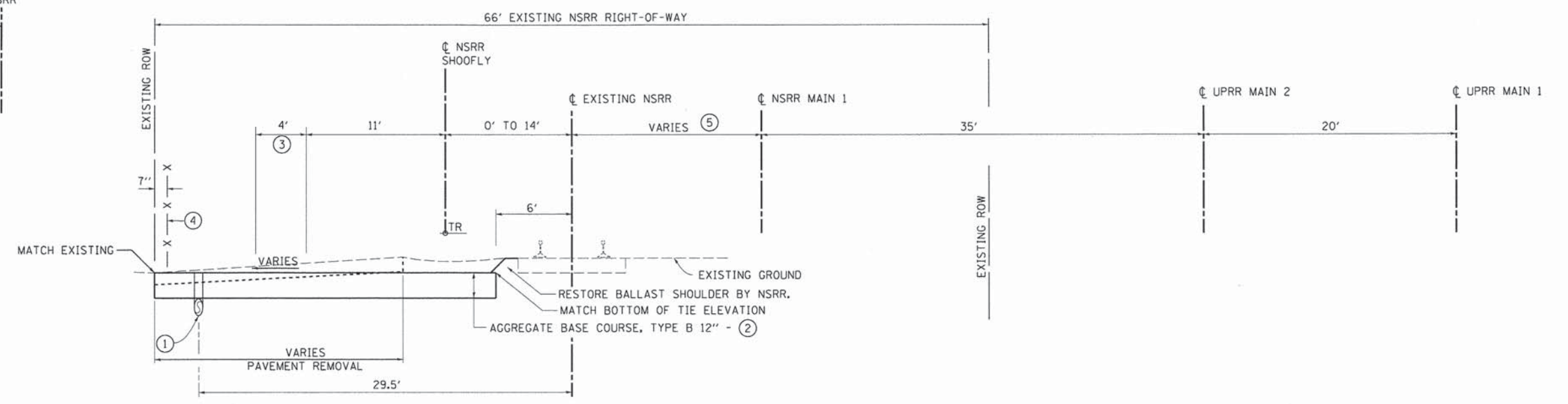
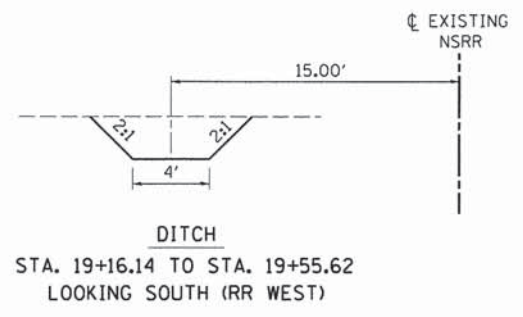
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
TYPICAL SECTIONS - CARPENTER STREET-3

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 22
CONTRACT NO. 93617			ILLINOIS FED. AID PROJECT	



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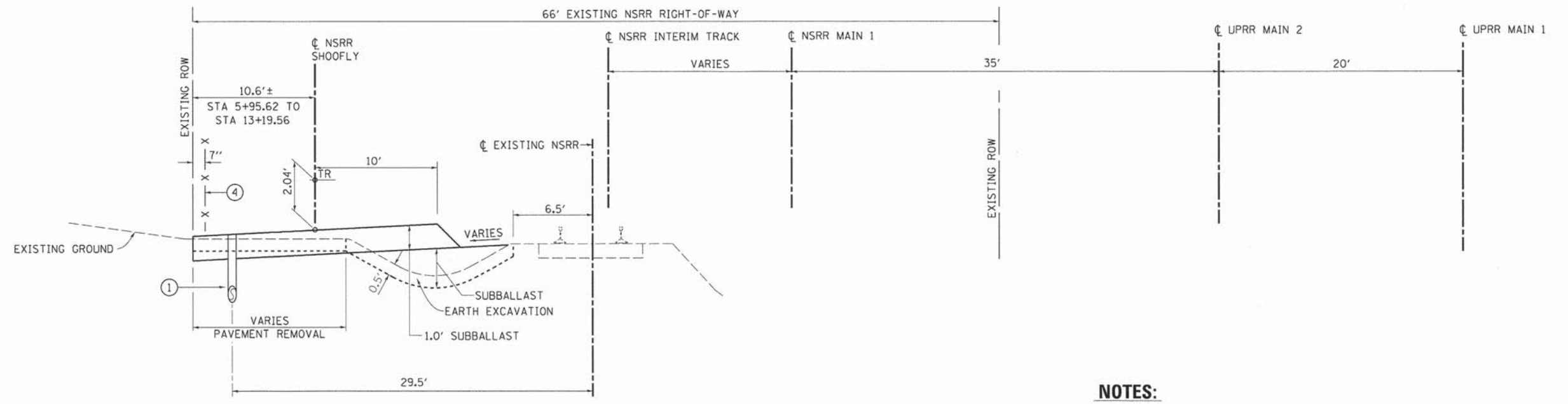


NSRR SHOOFLY TRACK

CUT OVER LOCATIONS
 STA. 0+00 TO STA. 3+44.32
 STA. 15+68.83 TO STA. 19+16.14
 LOOKING SOUTH (RR WEST)

LEGEND

- ① PIPE UNDERDRAINS, FABRIC LINED TRENCH. - DEPTH AND SIZE VARIES. SEE NSRR SHOOFLY PLAN & PROFILE FOR UNDERDRAIN PROFILE AND SIZE.
- ② DURING WINDOW IN TRAFFIC, EXCAVATE AND PLACE AGGREGATE BASE COURSE. NSRR TO RESTORE 0.5' WIDE BALLAST SHOULDER ON EXISTING NSRR.
- ③ TRANSITION DITCH WIDTH:
 4' TO 0' STA. 3+98 TO STA. 4+37
 0' TO 4' STA. 14+80 TO STA. 15+40
- ④ CHAIN LINK FENCE 8'
 STA. 0+95.00 TO STA. 4+24.00
 STA. 8+28.60 TO STA. 12+38.50
 STA. 15+66.00 TO STA. 17+14.00
 STA. 17+94.00 TO STA. 18+21.00
 SEE NOTE 2.
- ⑤ VARIES 17.4' TO 17.3' FROM STA. 0+00.00 TO STA. 3+44.32
 9.2' TO 15.1' (LT) FROM STA. 15+68.83 TO STA. 19+16.14



NSRR SHOOFLY TRACK

STA. 3+44.32 TO STA. 15+68.83
 LOOKING SOUTH (RR WEST)

NOTES:

- 1. NSRR SHOOFLY TRACK AND BALLAST WORK BY NSRR.
- 2. CHAIN LINK FENCE SHOWN ON THIS SHEET SHALL BE INSTALLED PRIOR TO NSRR CONSTRUCTION OF SHOOFLY TRACK AND BALLAST.

FINAL
 DESIGNED - GCN 9/6/13
 DRAWN - CLG 9/27/13
 REVIEWED - GCN 2/25/14

FILE NAME =	USER NAME = pop00275	DESIGNED - GCN	REVISED -
D609L0179B-shf-typical-TRACK-001.dgn		DRAWN - CLG	REVISED -
	PLOT SCALE = 5.0000' / 1"	CHECKED - GCN	REVISED -
Sheet 3	PLOT DATE = 02/26/2014	DATE - 2/25/14	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

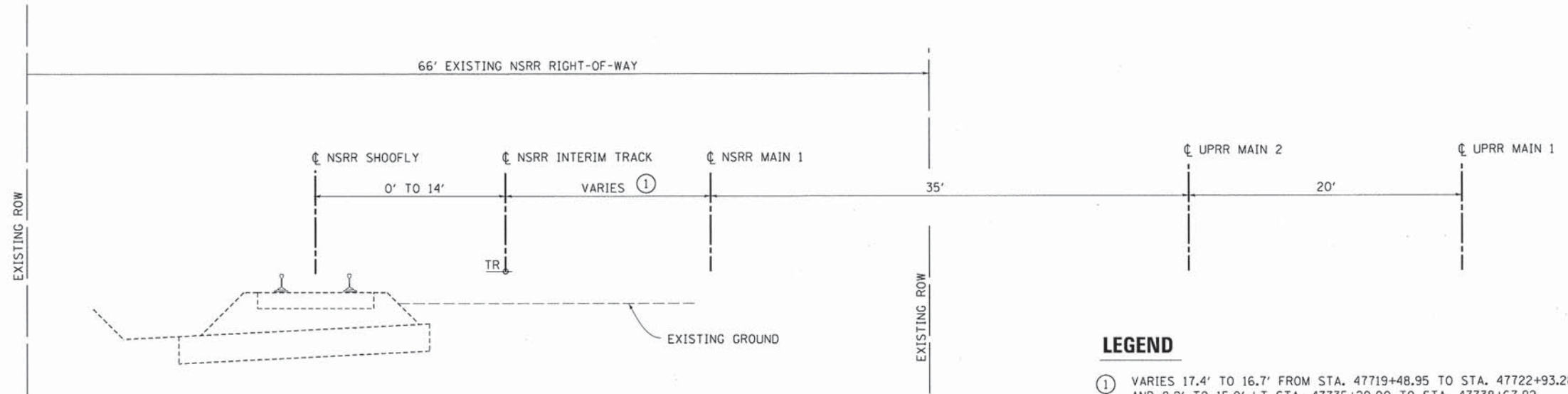
**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 TYPICAL SECTIONS - NSRR SHOOFLY**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	23
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

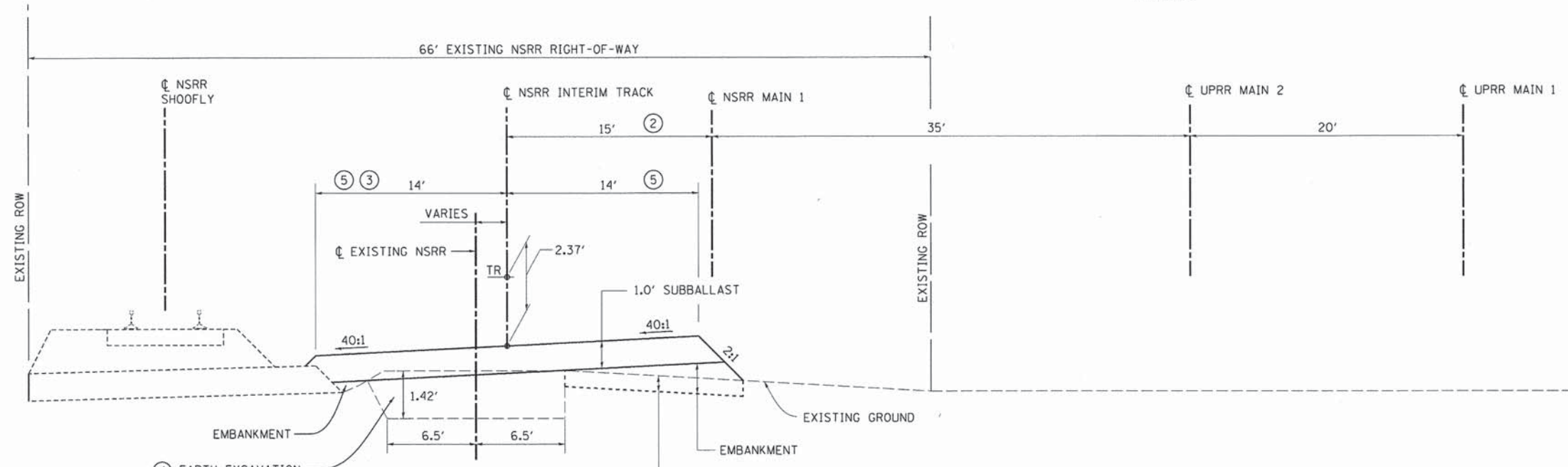


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NSRR INTERIM TRACK
CUT OVER LOCATIONS
STA. 47719+48.95 TO STA. 47722+93.28
STA. 47735+60.00 TO STA. 47738+67.92
LOOKING SOUTH (RR WEST)

- LEGEND**
- ① VARIES 17.4' TO 16.7' FROM STA. 47719+48.95 TO STA. 47722+93.28 AND 8.2' TO 15.0' LT STA. 47735+20.00 TO STA. 47738+67.92
 - ② VARIES 16.7' TO 15.0' STA. 47722+93.28 TO STA. 47727+49.50
 - ③ VARIES 4.7' TO 14.0' FROM STA. 47722+93.28 TO STA. 47725+01.47
 - ④ MIX NEW EMBANKMENT INTO EXISTING BALLAST ACCORDING TO EMBANKMENT SPECIFICATIONS.
 - ⑤ DIMENSIONS ARE PERPENDICULAR TO CL NSRR INTERIM.
 - ⑥ PIPE UNDERDRAIN, FABRIC LINED TRENCH - DEPTH AND SIZE VARIES. SEE NSRR INTERIM PLAN & PROFILE FOR UNDERDRAIN PROFILE AND SIZE.



NSRR INTERIM TRACK
STA. 47722+93.28 TO STA. 47726+80.00
LOOKING SOUTH (RR WEST)

- NOTES:**
1. NSRR INTERIM TRACK AND BALLAST WORK BY NSRR.
 2. TYPICAL SECTION TRANSITION: FROM STA. 47726+63.00 TO STA. 47726+80.00 SEE GRADING DETAILS - TRACK

DESIGNED: GCN 9/6/13
DRAWN: CLG 9/27/13
REVIEWED: GCN 2/25/14

FILE NAME =	USER NAME = pap00275	DESIGNED - GCN	REVISED -
D609L0179B-sht-typical-TRACK-001.dgn		DRAWN - CLG	REVISED -
	PLOT SCALE = 5,0000' / 1in.	CHECKED - GCN	REVISED -
Sheet 1	PLOT DATE = 02/26/2014	DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

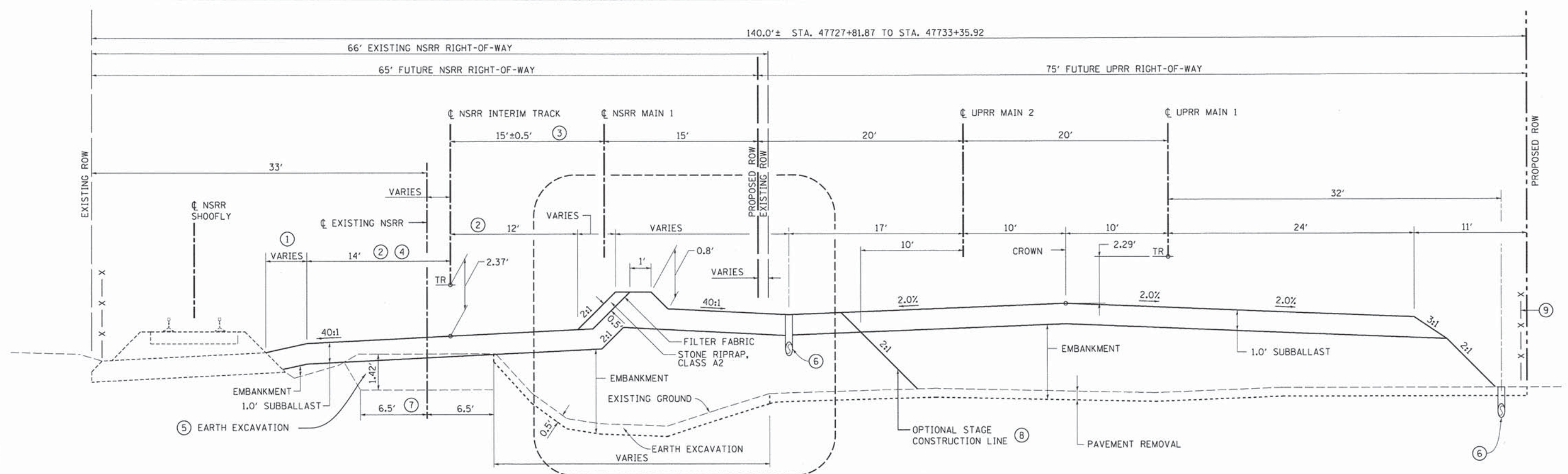
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
TYPICAL SECTIONS - NSRR INTERIM

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	24
09L0179B			CONTRACT NO. 3617	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

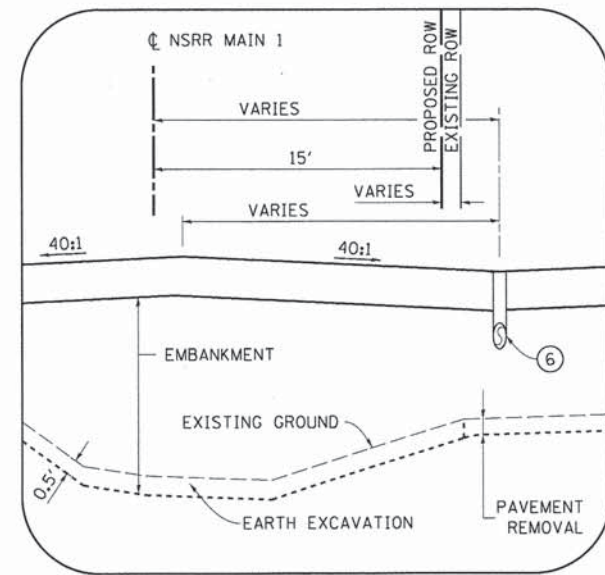


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NSRR INTERIM TRACK

STA. 47726+80.00 TO BACK OF NORTH ABUT. STA. 47726+93.87
 UPRR MAIN 1 BACK OF SOUTH ABUT. STA. 47727+81.87 TO STA. 47735+60.00
 LOOKING SOUTH (RR WEST)



NSRR INTERIM TRACK

STA. 47726+80.00 TO BACK OF NORTH ABUT. STA. 47726+93.87
 UPRR MAIN 1 BACK OF SOUTH ABUT. STA. 47727+81.87 TO STA. 47728+99.00
 LOOKING SOUTH (RR WEST)

NOTES:

1. NSRR INTERIM TRACK AND BALLAST WORK BY NSRR.
2. DIMENSIONS ARE PERPENDICULAR TO ϕ NSRR INTERIM.
3. VARIES 15.0' TO 8.2' STA. 47732+91.06 TO STA. 47735+20.00
4. VARIES 14.0' TO 5.0' FROM STA. 47733+21.35 TO STA. 47735+20.00 AND 5.0' FROM STA. 47735+20.00 TO STA. 47735+60.00
5. MIX EMBANKMENT INTO EXISTING BALLAST ACCORDING TO EMBANKMENT SPECIFICATIONS
6. PIPE UNDERDRAINS, FABRIC LINED TRENCH - DEPTH AND SIZE VARIES. SEE NSRR INTERIM PLAN & PROFILE FOR UNDERDRAIN PROFILE AND SIZE.
7. VARIES FROM 6.5' TO 0' FROM STA. 47735+20 TO STA. 47735+60.00.
8. THE CONTRACTOR MAY ELECT TO CONSTRUCT ONLY THAT PORTION OF EMBANKMENT WEST OF THE OPTIONAL STAGE CONSTRUCTION LINE DURING STAGE 2A SHOWN ON THE TRACK STAGING PLAN. THE REMAINING EMBANKMENT MAY BE CONSTRUCTED AFTER STAGE 3.
9. SEE FENCING PLAN - CARPENTER/TRACK SHEET FOR LOCATION OF FENCE.

LEGEND

1. EXTEND SUBBALLAST TO MEET TOP OF NSRR SHOOFLY SUBBALLAST.
2. DIMENSIONS ARE PERPENDICULAR TO ϕ NSRR INTERIM.
3. VARIES 15.0' TO 8.2' STA. 47732+91.06 TO STA. 47735+20.00
4. VARIES 14.0' TO 5.0' FROM STA. 47733+21.35 TO STA. 47735+20.00 AND 5.0' FROM STA. 47735+20.00 TO STA. 47735+60.00
5. MIX EMBANKMENT INTO EXISTING BALLAST ACCORDING TO EMBANKMENT SPECIFICATIONS
6. PIPE UNDERDRAINS, FABRIC LINED TRENCH - DEPTH AND SIZE VARIES. SEE NSRR INTERIM PLAN & PROFILE FOR UNDERDRAIN PROFILE AND SIZE.
7. VARIES FROM 6.5' TO 0' FROM STA. 47735+20 TO STA. 47735+60.00.
8. THE CONTRACTOR MAY ELECT TO CONSTRUCT ONLY THAT PORTION OF EMBANKMENT WEST OF THE OPTIONAL STAGE CONSTRUCTION LINE DURING STAGE 2A SHOWN ON THE TRACK STAGING PLAN. THE REMAINING EMBANKMENT MAY BE CONSTRUCTED AFTER STAGE 3.
9. SEE FENCING PLAN - CARPENTER/TRACK SHEET FOR LOCATION OF FENCE.

FINAL
 DESIGNED - GCN 9/6/13
 DRAWN - CLG 9/27/13
 REVIEWED - GCN 2/25/14

FILE NAME = D609L0179B-ah-typical-TRACK-001.dgn	USER NAME = pop00275	DESIGNED - GCN	REVISED -
		DRAWN - CLG	REVISED -
		CHECKED - GCN	REVISED -
		DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 TYPICAL SECTIONS - NSRR INTERIM

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 25
09L0179B			CONTRACT NO. 3617	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.



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EARTHWORK SCHEDULE									
LOCATION		20200100				20069700		35102400	
		A EARTH EXCAVATION	B EXCAVATION TO BE USED IN EMBANKMENT, ADJUSTED FOR SHRINKAGE (25%)	C EMBANKMENT	D EARTHWORK BALANCE EXCESS (+) OR SHORTAGE (-)	E TOPSOIL EXCAVATION AND PLACEMENT	F SUBBALLAST	G AGGREGATE BASE COURSE, TYPE B 12"	H
BEGIN STATION	OFFSET	END STATION	OFFSET	CU YD	CU YD	CU YD	CU YD	SQ YD	
SHOOFLY TRACK									
STA. 0+00.00		STA. 19+88.07		1263	945	25	920	0	
		SUBTOTAL		1263	945	25	920	0	
INTERIM TRACK									
STA. 47719+48.02		STA. 47739+00.00		1161	870	7200	-6330	0	
Grading at Sta. 47736+60		(Tie downs)		0	0	229	-229	0	
Grading at Sta. 47726+80		(Tie downs)		0	0	69	-69	0	
		SUBTOTAL		1161	870	7499	-6629	0	
CARPENTER STREET									
STA. 996+28.31		STA. 1003+65.71		19535	14,650	202	14448	0	
NW Quad 9th and Carpenter				4	5	0	5	0	
SW Quad 9th and Carpenter				6	5	0	5	0	
		SUBTOTAL		19544	14,660	202	14458	0	
		TOTAL		21969	16475	7726	8749	0	
TOTAL Rounded up to 5 CY				21970			4802	2073	

EQUATIONS USED
 B = A * 0.75
 D = B - C

SEWER AND UTILITY REMOVAL SCHEDULE										
LOCATION				55100200	55100500	55101400	60500040	60500060	X5610706	X5610710
BEGIN STATION	OFFSET	END STATION	OFFSET	STORM SEWER REMOVAL, 6"	STORM SEWER REMOVAL, 12"	STORM SEWER REMOVAL, 30"	REMOVING MANHOLES	REMOVING INLETS	WATER MAIN REMOVAL, 6"	WATER MAIN REMOVAL, 10"
FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	EACH	EACH	FOOT	FOOT
CARPENTER STREET										
996+26	3 LT	999+27	2 LT		301					
996+26	3 LT	996+59	24 LT		40					
996+29	42 RT							1		
996+45	9 RT	999+58	11 RT							313
996+59	30 LT							1		
996+59	30 LT	996+60	43 LT		13					
996+59	24 LT						1			
996+59	24 LT	996+59	30 LT		6			1		
996+60	26 RT									
996+60	26 RT	996+59	24 LT		50					
999+27	2 LT						1			
999+27	2 LT	1000+49	40 RT	133						
1000+21	20 LT	1000+25	4 RT		25			1		
1000+22	46 LT									
1000+22	46 LT	1000+25	4 RT		50					
1000+25	4 RT						1			
1000+25	4 RT	1003+46	3 RT			320				
1000+26	10 RT	1003+66	12 RT						339	
1000+34	12 RT	1000+36	26 RT						14	
1000+49	40 RT						1			
1000+49	40 RT	1000+67	51 RT	28						
1003+45	22 LT							1		
1003+45	22 LT	1003+46	3 RT		25					
1003+46	3 RT						1			
1003+46	3 RT	1003+82	2 RT			37				
1003+46	23 RT							1		
1003+46	23 RT	1003+46	3 RT		20				1	
1003+64	45 LT							1		
1003+82	2 RT						1			
UPRR MAIN 1										
47736+94	67 LT						1			
TOTALS				161	530	357	7	7	353	313

SEEDING SCHEDULE									
LOCATION				25000110	25000400	25000500	25000600	25000700	25100125
BEGIN STATION	OFFSET	END STATION	OFFSET	SEEDING, CLASS 1A	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	AGRICULTURAL GROUND LIMESTONE	MULCH, METHOD 3
ACRE	POUND	POUND	POUND	TON	ACRE	POUND	POUND	TON	ACRE
UPRR MAIN 1									
47722+92.02	102.6 LT	47724+54.38	104.8 LT	0.01	0.9	0.9	0.9	0.02	0.01
47724+50.00	54.6 LT	47726+50.00	52.9 LT	0.01	0.9	0.9	0.9	0.02	0.00
47726+50.00	52.9 LT	47726+98.76	30.72 RT	0.04	3.6	3.6	3.6	0.08	0.04
47738+69.02	54.8 LT	47739+36.78	63.5 LT	0.03	2.7	2.7	2.7	0.06	0.02
47727+77.82	35.0 RT	47735+60.00	34.6 RT	0.13	11.3	11.3	11.3	0.25	0.06
47735+60.00	34.6 RT	47739+26.72	35.0 RT	0.38	33.8	33.8	33.8	0.75	0.38
CARPENTER STREET									
996+30.60	54.1 RT	998+88.48	60.1 RT	0.10	9.0	9.0	9.0	0.20	0.09
1002+60.00	45.2 RT	1003+63.00	54.0 RT	0.02	1.8	1.8	1.8	0.04	0.01
997+44.00	43.0 LT	998+94.03	40.3 LT	0.01	0.9	0.9	0.9	0.02	0.01
1002+60.00	45.2 LT	1003+63.00	54.0 LT	0.02	1.8	1.8	1.8	0.04	0.01
TOTAL				0.75	67	67	67	1.5	0.65

EROSION AND SEDIMENT CONTROL SCHEDULE									
LOCATION				25100630	28000400	28000500	28100103	28200200	
BEGIN STATION	OFFSET	END STATION	OFFSET	EROSION CONTROL BLANKET	PERIMETER EROSION BARRIER	INLET AND PIPE PROTECTION	STONE RIPRAP, CLASS A2	FILTER FABRIC	
SQ YD	FOOT	EACH	SQ YD	FOOT	EACH	SQ YD	SQ YD		
UPRR MAIN 1									
47723+65	39.4 LT	47726+99	37.9 RT						411
47727+78	35.0 RT	47739+27	35.0 RT						1152
47724+50	54.6 LT	47726+50	52.9 LT	28					
47726+70	27.2 RT	47726+99	30.7 RT	8					
47727+78	30.2 RT	47736+00	27.2 RT	342					
47738+69	54.8 LT	47739+18	58.5 LT	61					
47739+08	52 LT							1	
47739+17	46 LT							1	
47729+00	58 LT	47735+98	47.4 LT		698				375
9TH STREET									
995+53	30 LT								1
995+52	24 RT								1
995+74	49 LT								1
995+75	41 RT								1
CARPENTER STREET									
996+31	51 LT								1
996+29.75	53 RT								1
996+30.57	46 RT								1
996+54.00	30 LT								1
996+54.00	30 RT								1
996+64.00	30 LT								1
996+64.00	30 RT								1
996+64	47 RT								1
996+64	49.5 RT	997+35	45.2 RT	44					
997+37.00	42 RT								1
997+64.00	30 LT								1
997+64.00	30 RT								1
998+64.00	30 LT								1
998+64.00	30 RT								1
999+41.00	30 LT								1
999+41.00	30 RT								1
999+61	45 LT								1
999+61	45 RT								1
999+82	30 LT								1
999+82	30 RT								1
999+88.00	30 LT								1
999+88.00	30 RT								1
999+94.00	30 LT								1
999+94.00	30 RT								1
1000+40.00	30 LT								1
1000+40.00	30 RT								1
1001+40.00	30 LT								1
1001+40.00	30 RT								1
1002+40.00	30 LT								1
1002+40.00	30 RT								1
1002+58.00	42 LT								1
1002+60	45.2 RT	1003+00	49.3 RT	25					
1002+60	45.2 LT	1003+40	49.50 LT	49					
1002+58.00	42 RT								1
1003+35	47 LT								1
1003+40.00	30 LT								1
1003+40	47 LT								1
1003+40.00	30 RT								1
1003+50.00	31 LT								1
1003+63.76	46 LT								1
1003+64.48	53 LT								1
TOTAL				558	2261	44	375	375	

FINAL
 DESIGNED - DJP
 DRAWN - DJP
 REVIEWED - JWM



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PAVEMENT, SIDEWALK, AND CURB AND GUTTER REMOVAL SCHEDULE												
LOCATION		44000100	44000155	44000200	44000500	44000600	X0326458	X4404400				
BEGIN STATION	OFFSET	END STATION	OFFSET	SQ YD	SQ YD	SQ YD	FOOT	SQ FT	SQ YD	SQ YD		
9TH STREET INTERSECTION												
995+49		L/R	996+28		L/R			793				
995+49		LT	995+76		LT		43					
995+49		RT	995+75		RT		51					
995+45		LT	995+74		LT			217				
995+53		RT	995+75		RT			271				
SUBTOTAL				793			94	488				
CARPENTER STREET												
996+28		L/R	999+92		L/R					2206		
996+31		LT	996+41		LT			141				
996+41		LT	996+89		LT			210				
996+85		LT	997+29		LT		54					
997+24		LT	997+56		LT			132				
997+52		LT	997+95		LT			55				
997+92		LT	999+72		LT			711				
998+68		LT	998+84		LT		11					
999+09		LT	999+45		LT		35					
996+32		RT	996+42		RT			150				
996+42		RT	997+93		RT			763				
997+84		RT	998+23		RT		106					
998+18		RT	999+68		RT			779				
996+52		RT	997+93		RT			336				
998+18		RT	998+89		RT			178				
1000+01		L/R	1003+66		L/R					1854		
1000+05		LT	1000+15		LT			80				
1000+15		LT	1000+30		LT		29					
1000+30	42	RT	1000+59	42	RT			278				
1000+30		LT	1001+62		LT			524				
1000+39		LT	1003+53		LT			292				
1001+50		LT	1001+88		LT		39					
1001+79		LT	1003+53		LT			657				
1003+53		LT	1003+64		LT			157				
1000+13		RT	1000+31		RT		35					
1000+31		RT	1001+47		RT			481				
1001+47		RT	1001+68		RT		42					
1001+68		RT	1003+53		RT			739				
1003+53		RT	1003+64		RT			181				
1003+66	2	LT	1003+85	6	RT				17			
SUBTOTAL				1084		0	406	0	5705	17	4061	
UPRR MAIN 1												
47719+48	86	LT	47723+06	103	LT			546				
47722+89	38	LT	47722+93	92	LT							
47723+10	39	LT	47723+48	105	LT			277				
47723+10	39	LT	47723+03	60	LT		22					
47723+49	88	LT	47726+96	105	LT			701				
47723+67	55	LT	47726+60	53	LT			187				
47727+76	35	LT	47731+07	35	RT			2543				
47727+76	87	LT	47731+31	106	LT			670				
47731+07	35	RT	47731+13	94	LT			709				
47731+29	35	RT	47731+29	32	LT		67					
47731+29	35	RT	47731+63	106	LT			556				
47731+63	101	LT	47735+31	76	LT			597				
47731+80	35	RT	47731+89	82	LT			869				
47731+86	40	LT	47739+27	35	RT			4764				
47735+31	76	LT	47739+36	54	LT			730				
SUBTOTAL				11571		0	0	89	1902	0	0	
MILLER STREET												
5+53	0	LT	6+37	0	LT			84				
SUBTOTAL								84				
MASON STREET (UPRR STATION/OFFSET)												
47735+58	104	LT	47735+68	104	LT			10				
SUBTOTAL								10				
TOTALS				12655		793		406	183	8095	111	4061

MISCELLANEOUS REMOVAL SCHEDULE												
LOCATION				63200310	84200600	84200804	89502385	X0323360	X0323569	X0350810	X0326390	XX005896
BEGIN STATION	OFFSET	END STATION	OFFSET	GUARDRAIL REMOVAL	REMOVAL OF LIGHTING UNIT, NO SALVAGE	REMOVAL OF POLE FOUNDATION	REMOVE EXISTING CONCRETE FOUNDATION	WOODEN POLE REMOVAL	STEEL POST REMOVAL	BOLLARD REMOVAL	CONCRETE SLAB REMOVAL	CONCRETE PAD REMOVAL
				FOOT	EACH	EACH	EACH	EACH	EACH	EACH	SQ YD	SQ FT
CARPENTER STREET												
999+50	24	RT					1					
999+86	25	RT					1					
1000+09	28	LT					1					
1000+41	29	LT					1					
SUBTOTAL				0	0	0	4	0	0	0	0	0
UPRR MAIN 1												
47722+51	45	LT										80
47722+57	104	LT									28	
47723+01	84	LT					1					
47723+48	57	LT					1					
47726+77	46	LT										80
47728+55	37	LT				1	1					
47729+35	25	LT							1			
47729+36	18	LT								1		
47730+17	36	LT				1	1					
47730+84	42	LT						1				
47730+94	46	LT										80
47731+22	87	LT							1			
47731+68	57	LT							1			
47735+46	76	LT	47735+73	74	LT	27						
47736+22	27	LT							1			
SUBTOTAL				27	2	2	4	2	1	1	28	240
TOTAL				27	2	2	8	2	1	1	28	240

SIGN REMOVAL					
LOCATION		72400100	X7240300		
STATION	OFFSET	REMOVE SIGN PANEL ASSEMBLY - TYPE A	SIGN REMOVAL		
		EACH	EACH		
CARPENTER STREET					
996+41	39	LT	1		
997+44	29	RT	1		
998+48	25	RT	1		1
998+66	53	LT			1
998+97	28	LT	1		
998+81	24	RT	1		
999+58	29	RT	1		
1000+44	26	RT	1		
1000+58	24	RT	1		
1000+86	28	LT	1		
1001+88	24	RT	1		
1002+72	30	RT	1		
1003+36	24	LT	1		
1003+50	28	RT	1		
SUBTOTAL			13		2
UPRR MAIN 1					
47726+70	46	LT	1		
47731+24	48	LT	1		
47735+75	30	LT	1		
47736+70	82	LT	1		
47737+21	78	LT	1		
SUBTOTAL			5		0
TOTAL			18		2

TEMPORARY FENCE, PERMANENT FENCE, AND FENCE REMOVAL SCHEDULE										
LOCATION				20101000	66400105	X6640210	X6640308	X6640570	X0022800	NOTE
BEGIN STATION	OFFSET	END STATION	OFFSET	TEMPORARY FENCE	CHAIN LINK FENCE, 4'	TEMPORARY CHAIN LINK FENCE (PORTABLE)	CHAIN LINK GATES, (SPECIAL)	CHAIN LINK FENCE, 8' (SPECIAL)	FENCE REMOVAL	
				FOOT	FOOT	FOOT	EACH	FOOT	FOOT	
CARPENTER STREET										
996+42	60	RT	998+89	60	RT				247	248
996+42	60	RT	996+41	36	RT					24
996+43	55	LT	998+44	55	LT					201
999+11	50	LT	999+54	50	LT			43		
999+11	50	RT	999+54	50	RT		1	39		SINGLE GATE 8' X 4'
996+42	36	RT	997+88	37	RT					146
998+18	37	RT	999+63	39	RT					146
1000+32	46	LT	1000+32	42	LT					4
1000+32	42	LT	1003+49	41	LT					318
1003+49	41	LT	1003+49	49	LT					8
1000+32	46	LT	1003+49	49	LT					319
1000+59	42	RT	1000+59	48	RT					6
1000+59	42	RT	1003+47	41	RT					288
1001+76	42	RT	1001+76	48	RT					6
1003+47	41	RT	1003+47	46	RT					5
1000+29	46	RT	1003+47	46	RT					318
SUBTOTAL				247	248	201	1	719	951	
UPRR MAIN 1										
47720+43	105	LT	47723+72	105	LT					329
47725+22	39	LT	47725+40	39	LT					18
47727+76	105	LT	47729+27	105	LT					150
47727+76	39	LT	47731+04	39	LT					328
47729+27	105	LT	47731+87	105	LT					260
47727+98	34	RT	47739+26	34	RT	1130		1130		
47729+27	105	LT	47729+27	138	LT				1	9
47733+46	38	LT	47735+19	31	LT					173
47735+19	31	LT	47735+14	35	RT					66
47725+38	41	RT	47725+38	81	RT					



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CURB AND GUTTER AND MEDIAN SCHEDULE										
LOCATION				60603800	60604400	60606800	60607100	60618300	20700220	60620400
				COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.18	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.18 (MODIFIED)	CONCRETE MEDIAN SURFACE, 4 INCH	POROUS GRANULAR EMBANKMENT	CONCRETE MEDIAN, TYPE SB-9.06
BEGIN STATION	OFFSET	END STATION	OFFSET	FOOT	FOOT	FOOT	FOOT	SQ FT	CU YD	SQ FT
9TH STREET INTERSECTION										
995+49.00	30.1	LT	995+76.23	54.3	LT			41.3		
995+49.00	23.7	RT	995+75.84	54.1	RT			46.9		
996+29.59	53.9	LT	996+42.00	33.3	LT			25.3		
996+30.03	54.1	RT	996+42.05	33.5	RT			25.0		
CARPENTER STREET										
996+42.00	33.3	LT	996+53.09	30.5	LT			11.5		
996+42.05	33.5	RT	996+53.53	30.5	RT			12.0		
996+53.09	30.5	LT	996+95.00	30.5	LT			41.9		
996+53.53	30.5	RT	996+75.00	30.5	RT			21.5		
996+95.00	30.5	LT	997+45.00	30.5	LT			50.0		
996+75.00	30.5	RT	997+25.00	30.5	RT			50.0		
997+45.00	30.5	LT	997+55.00	30.5	LT			10.0		
997+25.00	30.5	RT	997+35.00	30.5	RT			10.0		
997+55.00	30.5	LT	997+95.00	30.5	LT			40.0		
997+35.00	30.5	RT	997+80.00	30.5	RT			45.0		
997+95.00	30.5	LT	998+13.78	30.5	LT			18.8		
997+80.00	30.5	RT	998+13.78	30.5	RT			33.8		
998+13.78	30.5	LT	1000+95.26	30.5	LT			281.5		
998+13.78	30.5	RT	1000+95.26	30.5	RT			281.5		
1000+95.26	30.5	LT	1001+65.00	30.5	LT			69.7		
1000+95.26	30.5	RT	1001+65.00	30.5	RT			69.7		
1001+65.00	30.5	LT	1002+10.00	30.5	LT			45.0		
1001+65.00	30.5	RT	1002+12.00	30.5	RT			47.0		
1002+10.00	30.5	LT	1002+70.00	30.5	LT			60.0		
1002+12.00	30.5	RT	1002+70.00	30.5	RT			58.0		
1002+70.00	30.5	LT	1003+25.00	30.5	LT			55.0		
1002+70.00	30.5	RT	1003+30.00	30.5	RT			60.0		
1003+25.00	30.5	LT	1003+40.71	30.5	LT			15.7		
1003+30.00	30.5	RT	1003+40.71	30.5	RT			10.7		
1003+40.71	30.5	LT	1003+52.30	33.6	LT			12.1		
1003+40.71	30.5	RT	1003+52.00	33.4	RT			11.8		
1003+52.30	33.6	LT	1003+64.21	54.0	LT			24.8		
1003+52.00	33.4	RT	1003+64.21	54.0	RT			25.1		
TOTAL				88	100	1207	215	1873	118	2062

SIDEWALK AND PAVED DITCH SCHEDULE						
LOCATION			42400100	42400800	LR430050	X6061460
			PORTLAND CEMENT CONCRETE SIDEWALK 4"	DETECTABLE WARNINGS	CONCRETE PAVEMENT SIDEWALK	PAVED DITCH (SPECIAL)
BEGIN STATION	END STATION	OFFSET	SQ FT	SQ FT	SQ YD	FOOT
9TH STREET INTERSECTION						
995+45.00	995+72.86	LT	216	21		
995+53.21	995+72.96	RT	233	25		
CARPENTER STREET						
996+32.98	996+54.00	LT	180	20		
996+33.16	996+54.00	RT	192	21		
996+54.00	997+42.93	LT	445			
996+54.00	997+22.94	RT	345			
996+42.00	997+31.44	34.2 RT			50	
996+42.00	997+51.44	34.2 LT			65	
997+35.00	998+80.00	RT				146
997+42.93	997+55.00	LT	66			
997+22.94	997+35.00	RT	66			
1000+67.00	1002+60.00	RT				193
1000+50.00	1002+60.00	LT				211
1002+10.00	1002+60.00	39.5 LT			6	
1002+12.00	1002+60.00	39.5 RT			5	
1002+60.00	1002+72.07	LT	66			
1002+60.00	1002+72.07	RT	66			
1002+72.07	1003+40.00	LT	340			
1002+72.07	1003+40.00	RT	340			
1002+63.60	1003+52.00	37.5 RT			46	
1002+63.60	1003+52.30	37.5 LT			48	
1003+40.00	1003+61.08	LT	173	20		
1003+40.00	1003+61.08	RT	201	21		
UPRR MAIN 1						
47722+46.45	47722+69.85	LT	82			
TOTALS			3008	128	220	549

FINAL
 DESIGNED: DJP 9/16/11
 DRAWN: DJP 9/27/11
 REVIEWED: JRM 2/25/14

FILE NAME = 058%_0179B_sch_schedule-021.dgn	USER NAME = pop00275	DESIGNED - DJP	REVISED -
PL01 SCALE = 8/2033' = 1/4"	CHECKED - JWM	DRAWN - DJP	REVISED -
PL01 DATE = 02/27/2014	DATE - 2/25/14		REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SCHEDULE OF QUANTITIES**

SCALE: SHEET 3 OF 8 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	28
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



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PAVEMENT MARKING SCHEDULE													
LOCATION			70300240	70300280	70301000	78005100	78005120	78005130	78005150	78005180	78100100	78200300	NOTE
BEGIN STATION	END STATION	OFFSET	TEMPORARY PAVEMENT MARKING - LINE 6"	TEMPORARY PAVEMENT MARKING - LINE 24"	WORK ZONE PAVEMENT MARKING REMOVAL	EPOXY PAVEMENT MARKING - LETTERS AND SYMBOLS	EPOXY PAVEMENT MARKING - LINE 5"	EPOXY PAVEMENT MARKING - LINE 6"	EPOXY PAVEMENT MARKING - LINE 12"	EPOXY PAVEMENT MARKING - LINE 24"	RAISED REFLECTIVE PAVEMENT MARKER	PRISMATIC CURB REFLECTOR	
FOOT	FOOT	FOOT	FOOT	FOOT	SQ FT	SQ FT	FOOT	FOOT	FOOT	FOOT	EACH	EACH	
9TH STREET INTERSECTION													
995+62.70		LT/RT	57		29					57			CROSSWALK
995+71.20		LT/RT	59		29					59			CROSSWALK
995+71.20	996+28.30	RT	59		30					59			CROSSWALK
995+74.70	996+28.30	RT	54		27					54			CROSSWALK
995+72.00	996+28.10	LT	57		28					57			CROSSWALK
995+74.60	996+28.10	LT	54		27					54			CROSSWALK
995+56.70		LT/RT		32	64					32			STOP BAR
995+98.80		RT		31	62					31			STOP BAR
996+07.20		LT		31	62					31			STOP BAR
CARPENTER STREET													
996+28.10	996+31.00	LT						3					CROSSWALK
996+28.10	996+34.00	LT						6					CROSSWALK
996+28.50	996+34.00	RT						6					CROSSWALK
996+46.00		LT/RT								35			STOP BAR
996+48.00	997+62.00	RT								6			TWO WAY AMBER X 2
997+62.00	998+37.00	RT								2			ONE WAY AMBER
997+62.00	998+15.00	LT								1			ONE WAY AMBER
996+28.50	996+31.00	RT						3					CROSSWALK
996+34.00		LT/RT						65					CROSSWALK
996+42.00		LT/RT						64					CROSSWALK
996+67.00		CL				8.8							LEFT TURN ARROW
997+32.00		CL				8.8							LEFT TURN ARROW
996+48.00	998+37.00	RT					378						DOUBLE YELLOW
997+62.00	998+15.00	RT					106						DOUBLE YELLOW
997+62.00	998+37.00	RT							6				MEDIAN STRIPING
998+13.80	998+15.30	RT										1	RADIUS
998+15.30	998+72.00	LT										3	TAPER
998+72.00	1000+71.83	LT										5	TANGENT
998+15.30	998+37.24	RT										1	TAPER
998+37.24	1000+46.00	RT										5	TANGENT
1000+46.00	1002+65.00	RT					438						DOUBLE YELLOW
1000+46.00	1002+65.00	CL							36				MEDIAN STRIPING
1000+46.00	1000+93.80	RT										2	TAPER
1000+93.8	1000+95.30	LT										1	RADIUS
1000+46.00	1002+65.00	RT										5	ONE WAY AMBER
1000+72.00	1002+65.00	LT										5	ONE WAY AMBER
1002+65.00	1003+46.00	CL										4	TWO WAY AMBER X 2
1000+71.83	1000+93.80	LT										1	TAPER
1000+72.00	1002+65.00	LT					386						DOUBLE YELLOW
996+48.00	1002+65.00	RT						154					SKIP DASH 30'-10'
997+62.00	998+72.00	LT						28					WHITE DOTTED 6'-2'
1001+30.00	1003+46.00	RT							41				TAPER STRIPING
1001+30.00	1003+46.00	LT							41				TAPER STRIPING
1001+27.00		22.5 RT				8.8							RIGHT TURN ARROW
1001+77.00		20.8 RT				11.8							LETTERS - "ONLY"
1002+27.00		19.0 RT				8.8							RIGHT TURN ARROW
1002+65.00	1003+46.00	CL					162						DOUBLE YELLOW
996+48.00	997+62.00	LT						114					SOLID WHITE
1002+77.00		17.5 RT				11.8							LETTERS - "ONLY"
1003+27.00		17.5 RT				8.8							RIGHT TURN ARROW
996+48.00	1003+48.00	LT						175					SKIP DASH 30'-10'
1001+00.00	1003+46.00	RT						246					SOLID WHITE
1001+30.00	1003+46.00	RT						217					SHIFTING TAPER
1003+48.00		RT								30			STOP BAR
1001+30.00	1003+46.00	LT						217					SHIFTING TAPER
1003+53.00		LT/RT						64					CROSSWALK
1003+59.00		LT/RT						62					CROSSWALK
1003+84.40		LT								20			STOP BAR
1003+84.50		RT								19			STOP BAR
1003+59.00	EX CURB	LT						48					CROSSWALK
1003+63.00	EX CURB	LT						40					CROSSWALK
1003+59.00	EX CURB	RT						48					CROSSWALK
1003+63.00	EX CURB	RT						40					CROSSWALK
TOTAL			340	94	358	67.6	1470	1939	124	198	23	19	

SIGNS AND GUARDRAIL							
LOCATION		SIGN	72000100	72000200	72900100	72900200	63000001
STREET	LOCATION	DESCRIPTION	SQ FT	SQ FT	FOOT	FOOT	FOOT
MILLER	WEST RR ROW						75.0
	WEST RR ROW	R11-2 (48X30) - ROAD CLOSED		10.0	22		
	WEST RR ROW	OM4-1 (18X18) - OBJECT MARKER	2.3		11		
	WEST RR ROW	OM4-1 (18X18) - OBJECT MARKER	2.3		11		
MILLER	EAST RR ROW (PROP)						75.0
	EAST RR ROW (PROP)	R11-2 (48X30) - ROAD CLOSED		10.0	22		
	EAST RR ROW (PROP)	OM4-1 (18X18) - OBJECT MARKER	2.3		11		
	EAST RR ROW (PROP)	OM4-1 (18X18) - OBJECT MARKER	2.3		11		
MILLER	AT 9TH	W14-1 (30X30) DEAD END	6.3			15	
MILLER	AT 11TH	W14-1 (30X30) DEAD END	6.3			15	
REYNOLDS	WEST RR ROW						75.0
	WEST RR ROW	R11-2 (48X30) - ROAD CLOSED		10.0	22		
	WEST RR ROW	OM4-1 (18X18) - OBJECT MARKER	2.3		11		
	WEST RR ROW	OM4-1 (18X18) - OBJECT MARKER	2.3		11		
REYNOLDS	EAST RR ROW (PROP)						75.0
	EAST RR ROW (PROP)	R11-2 (48X30) - ROAD CLOSED		10.0	22		
	EAST RR ROW (PROP)	OM4-1 (18X18) - OBJECT MARKER	2.3		11		
	EAST RR ROW (PROP)	OM4-1 (18X18) - OBJECT MARKER	2.3		11		
REYNOLDS	AT 9TH	W14-1 (30X30) DEAD END	6.3			15	
REYNOLDS	AT 11TH	W14-1 (30X30) DEAD END	6.3			15	
MASON	WEST RR ROW						75.0
	WEST RR ROW	R11-2 (48X30) - ROAD CLOSED		10.0	22		
	WEST RR ROW	OM4-1 (18X18) - OBJECT MARKER	2.3		11		
	WEST RR ROW	OM4-1 (18X18) - OBJECT MARKER	2.3		11		
MASON	EAST RR ROW (PROP)						75.0
	EAST RR ROW (PROP)	R11-2 (48X30) - ROAD CLOSED		10.0	22		
	EAST RR ROW (PROP)	OM4-1 (18X18) - OBJECT MARKER	2.3		11		
	EAST RR ROW (PROP)	OM4-1 (18X18) - OBJECT MARKER	2.3		11		
TOTAL			52	60	259	58	450.0

FILE NAME:
 USER NAME:
 DESIGNED:
 DRAWN:
 CHECKED:
 DATE:

DESIGNED - DJP
 DRAWN - DJP
 CHECKED - JWM
 DATE - 2/25/14

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SCHEDULE OF QUANTITIES

F.A.U. RTE. 7975
 SECTION 13-00475-00-BR
 COUNTY SANGAMON
 TOTAL SHEETS 196
 SHEET NO. 29
 CONTRACT NO. 09L0179B
 ILLINOIS FED. AID PROJECT



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DRAINAGE STRUCTURE SCHEDULE																		
				INLETS					MANHOLES									
				60240328	X6020074	X6023508	X6040205	60260100	60257900	60219540	60219570	60219000	60218400	60222270	60221100	NA	54213657	
LOCATION: SEE DETAIL FOR REFERENCE STATION AND OFFSET LOCATION				TYPE B, TYPE 24 F&G	TYPE A, TYPE 3V F&G	TYPE A, SPECIAL F&G	FRAME AND LIDS (SPECIAL)	INLETS TO BE ADJUSTED	MANHOLES TO BE RECONSTRUCTED	TYPE A, 4'-DIA, TYPE 24 F&G	TYPE A, 4'-DIA TYPE 3V F&G	TYPE A, 4'-DIA, TYPE 8 GRATE	TYPE A, 4'-DIA, TYPE 1 FRAME CLOSED LID	TYPE A, 5'-DIA, TYPE 3V F&G	TYPE A, 5'-DIA, TYPE 1 FRAME CLOSED LID	CONNECT PIPE DRAIN TO MANHOLE, COST INCLUDED WITH PIPE DRAIN	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	COMMENTS
NO.	STATION	OFFSET	FRAME ELEV	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH		
CARPENTER STREET																		
1	996+29.75	53.13 RT	604.83		1												Remove existing inlet on 9th Street	
2	996+54.00	29.52 RT	604.43	1														
3	996+54.00	29.52 LT	604.43	1														
4	996+64.00	29.52 RT	604.23							1								
5	996+64.00	29.52 LT	604.23							1								
6	997+64.00	30.20 RT	600.75		1													
7	997+64.00	30.20 LT	600.75		1													
8	998+64.00	30.20 RT	594.66		1													
9	998+64.00	30.20 LT	594.66		1													
10	999+41.00	30.20 RT	591.39		1													
11	999+41.00	30.20 LT	591.39		1													
12	999+88.00	30.20 RT	590.83							1								
13	999+88.00	30.20 LT	590.83							1								
14	999+94.00	30.20 RT	590.85							1								
15	999+94.00	30.20 LT	590.85							1								
16	1000+40.00	30.20 RT	591.51										1				See Drainage Details sheet 1 of 2	
17	1000+40.00	30.20 LT	591.51										1					
18	1001+40.00	30.20 RT	596.52		1													
19	1001+40.00	30.20 LT	596.52		1													
20	1002+40.00	30.20 RT	602.31		1													
21	1002+40.00	30.20 LT	602.31		1													
22	1003+40.00	29.52 LT	605.99															
23	1003+40.00	29.52 RT	605.93	1														
24	1003+50.00	31.35 LT	606.30	1														
25	1003+64.48	52.85 LT	606.68		1													
26	996+64.00	3.22 LT	604.61									1					Remove existing inlet on 11th Street	
27	1003+40.00	2.54 RT	606.08											1				
28	996+26.00	3.22 LT	Match exist														Existing manhole with new pipe connections	
29	1003+82.47	2.17 RT	Match exist														Existing manhole with new pipe connections	
31	997+37.00	42.08 RT	605.84			1												
32	996+64.00	46.58 RT	605.00								1							
33	999+94.00	37.00 LT	598.50				1										Cover for 12" pipe drain riser	
36	1002+58.00	42.08 RT	606.79			1												
39	1002+58.00	42.08 LT	606.86			1												
40	1003+40.00	46.58 LT	606.40								1						Cover for 12" pipe drain riser	
41	999+94.00	37.00 RT	598.50				1											
47	999+82.00	30.20 LT	590.85		1													
48	999+82.00	30.20 RT	590.85		1													
49	1003+63.76	45.76 LT	606.57	1														
50	996+30.57	45.51 RT	604.80	1														
51	995+74.79	41.49 RT						1										
52	995+52.40	23.83 RT						1										
53	995+53.38	30.20 LT						1										
54	995+74.44	48.87 LT						1										
56	999+60.67	44.52 LT	607.95								1						Connect pipe drains, Invert 602.60	
57	999+60.75	44.50 RT	608.20								1						Connect pipe drains, Invert 602.60	
58	996+31.00	51.48 LT						1										
59	1003+35.00	46.58 LT	606.43			1												
UPRR MAIN 1																		
42	47723+24.78	109.40 LT	607.75												1		Connect pipe drain 12" (special)	
43	47731+48.82	110.57 LT	606.87												1		Connect pipe drain 12" (special)	
44	47735+63.27	103.91 LT	605.21												1		Connect pipe drain 12" (special)	
45	47739+16.88	45.67 LT	605.33					1									Adjust top to elev. 602.04	
46	47731+48.98	42.75 LT	607.25								1						Raise to top of subballast, Elev. 609.86'	
55	47739+08.40	51.99 LT	602.77													1		
TOTAL				6	14	4	2	6	1	3	4	4	1	2	1	3	1	

PIPE SCHEDULE											
		550A0050	550A0090	550A0120	56100800	X0325379	55200900	20800150	59300100		
FROM STRUCTURE	TO STRUCTURE	STORM SEWERS CLASS A, TYPE 1, 12"	STORM SEWERS CLASS A, TYPE 1, 18"	STORM SEWERS CLASS A, TYPE 1, 24"	WATER MAIN 10"	DIRECTIONAL BORING	STORM SEWERS JACKED IN PLACE, 24"	TRENCH BACKFILL	CONTROLLED LOW STRENGTH MATERIAL		
NUMBER	INV ELEV	NUMBER	INV ELEV	FOOT	FOOT	FOOT	FOOT	CU YD	CU YD		
2	601.42	4	601.22	7					0.9		
4	600.72	26	600.30		29				5.9		
3	601.42	5	601.22	7					0.9		
5	601.22	26	600.30	22					2.9		
7	597.74	9	591.65	98					12.7		
9	591.65	11	588.38	75					9.8		
11	588.38	47	587.76	39					5.1		
47	587.76	13	587.71	3					0.4		
13	586.71	15	586.69				2		0.2		
15	586.69	17	586.40				42		8.6		
17	586.40	16	586.10				56		16.5		
6	597.74	8	591.65	99					12.9		
8	591.65	10	588.38	75					9.8		
10	588.38	48	587.76	39					5.1		
48	587.76	12	587.72	3					0.4		
12	586.72	14	586.70				2		0.3		
14	586.70	16	586.40				42		6.1		
21	599.29	19	593.51	98					12.7		
19	593.51	17	588.50	97					12.6		
20	599.29	18	593.51	98					12.7		
18	593.51	16	588.50	97					12.6		
16	586.00	PUMP STATION	585.00						65		
23	601.44	27	600.50	24					6.7		
22	601.50	27	600.50				28		7.0		
24	603.18	22	602.64	7					0.9		
26	598.50	28	599.04		34				13.0		
27	598.00	29	599.50				38		49.2		
Exist	601.99	5	601.22	13					1.7		
31	603.84	32	603.00	71							
32	601.42	4	600.72		13				1.4		
36	603.50	23	602.64	82							
39	604.86	59	603.60	76							
40	603.40	22	602.64		13				1.4		
PUMP STATION	603.60	29	599.5				486		137.1	27.1	
25	603.67	49	603.56	5					0.7		
49	603.56	24	603.18	17					2.2		
1	601.82	50	601.7	6					0.8		
50	601.70	32	601.42	30					3.9		
45	602.76	55	602.75	4							
59	603.60	40	603.40	2							
STA	OFFSET	STA	OFFSET	(NSRR SHOOL FLY)							
11+91.57	43.47 RT	11+98.09	0.04 LT								
16+10.71	33.75 RT	16+08.30	10.18 LT								
SEWER ENCASUREMENT AT MILLER											191.7
TOTAL				1194	89	210	486	87	65	326	268.0

FINAL
DESIGNED - D.J.P. 9/16/11
DRAWN - D.J.P. 3/27/13
REVIEWED - J.W.M. 2/25/14

FILE NAME -	USER NAME - pop00275	DESIGNED - D.J.P.	REVISED -
DRAWN - D.J.P.	CHECKED - J.W.M.	DATE - 2/25/14	REVISED -
SCALE - 8.0000 1/4" = 1'-0"	DATE - 2/25/14	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SCHEDULE OF QUANTITIES

SCALE: SHEET 5 OF 8 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	30
	09L0179B		CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



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PAVEMENT SCHEDULE												
LOCATION			21001000	30300112	35400300	40200700	40600100	40603335	42000301	42001300	42300200	
LOCATION			GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	AGGREGATE SUBGRADE IMPROVEMENT 12"	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 8"	AGGREGATE SURFACE COURSE, TYPE A 8"	BITUMINOUS MATERIALS (PRIME COAT)	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	PORTLAND CEMENT CONCRETE PAVEMENT 8" (JOINTED)	PROTECTIVE COAT	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	
BEGIN STATION	END STATION	OFFSET	SQ YD	SQ YD	SQ YD	SQ YD	GALLON	TON	SQ YD	SQ YD	SQ YD	
9TH STREET INTERSECTION												
995+49.00	995+77.22	LT		12.2	4.9					9.5		
995+49.00	995+76.84	RT		17.9	9.5					10.8		
995+49.00	996+28.31	LT/RT				81.0	72.0					
CARPENTER STREET												
996+28.09	996+53.09	LT	29.0	107.4	107.4				94.8	103.5		
996+28.53	996+53.53	RT	29.0	108.8	108.8				96.1	104.9		
996+53.09	996+95.00	LT	29.0	149.4	149.4				135.0	148.2		
996+53.53	996+75.00	RT	29.0	76.5	76.5				69.2	75.9		
996+95.00	997+45.00	LT	29.0	203.2	203.2				161.1	192.6		
996+75.00	997+25.00	RT	29.0	203.2	203.2				161.1	193.2		
997+45.00	997+55.00	LT	29.0	35.6	35.6				32.2	37.3		
997+25.00	997+35.00	RT	29.0	35.6	35.6				32.2	37.3		
997+55.00	997+95.00	LT	29.0	142.6	142.6				128.9	149.2		
997+35.00	997+80.00	RT	29.0	160.4	160.4				145.0	167.9		
997+95.00	998+13.78	LT		66.9	66.9				60.5	70.1		
997+80.00	998+13.78	RT		120.4	120.4				108.8	126.0		
998+13.78	1000+95.23	LT	29.0	1003.2	1003.2				769.3	1050.1		
998+13.78	1000+95.23	RT	29.0	1003.2	1003.2				767.3	1050.1		
1000+29.39	1000+59.17	RT	29.0			44.0					233.1	
1000+95.23	1001+65.00	LT	29.0	248.7	248.7				224.8	260.3		
1000+95.23	1001+65.00	RT	29.0	248.7	248.7				224.8	260.3		
1001+65.00	1002+10.00	LT	29.0	160.4	160.4				145.0	167.9		
1001+65.00	1002+12.00	RT	29.0	167.5	167.5				151.4	175.4		
1002+10.00	1002+70.00	LT	29.0	213.9	213.9				193.3	223.9		
1002+12.00	1002+70.00	RT	29.0	206.7	206.7				186.9	216.4		
1002+70.00	1003+25.00	LT	29.0	223.5	223.5				177.2	212.3		
1002+70.00	1003+30.00	RT	29.0	243.9	243.9				193.3	231.4		
1003+25.00	1003+40.71	LT		56.0	56.0				50.6	55.6		
1003+30.00	1003+40.71	RT		38.2	38.2				34.5	37.9		
1003+40.71	1003+65.71	LT		108.1	108.1				95.5	104.2		
1003+40.71	1003+65.71	RT		108.1	108.1				95.5	104.2		
TOTALS				5440	5470	14	44	81	72	4535	5576	233

PIPE UNDERDRAIN SCHEDULE									
				60107600	60100915	60100945	X0326911		
BEGIN STATION	END STATION	CONNECT TO STRUCTURE	OFFSET	PIPE UNDERDRAINS 4"	PIPE DRAINS 6"	PIPE DRAINS 12"	TRANSVERSE DRAINS COMPLETE		
				FOOT	FOOT	FOOT	EACH		
CARPENTER STREET									
996+65.00	997+64.00		7	31.92	LT	100			
997+64.00	998+64.00		9	31.92	LT	101			
998+64.00	999+88.00		13	31.92	LT	125			
999+88.00	999+94.00		13	31.92	LT	7			
999+94.00	1001+40.00		15	31.92	LT	147			
1001+40.00	1002+40.00		19	31.92	LT	101			
1002+40.00	1003+35.00		21	31.92	LT	96			
996+65.00	997+64.00		6	31.92	RT	100			
997+64.00	998+64.00		8	31.92	RT	101			
998+64.00	999+88.00		12	31.92	RT	125			
999+88.00	999+94.00		12	31.92	RT	7			
999+94.00	1001+40.00		14	31.92	RT	147			
1001+40.00	1002+40.00		18	31.92	RT	101			
1002+40.00	1003+40.00		20	31.92	RT	101			
999+88.00	-		33	46.00	LT		17		
999+88.00	-		41	46.00	RT		17		
999+94.00	-		15	37.00	LT			19	
999+94.00	-		14	37.00	RT			19	
999+41.00	-		-	-	-				1
999+88.00	-		-	-	-				1
1000+40.00	-		-	-	-				1
TOTAL						1359	34	38	3

TRACK - PIPE UNDERDRAIN SCHEDULE									
				60109530	60109540	X6012005	XX004895		
LOCATION				PIPE UNDERDRAINS, FABRIC LINED TRENCH 8"	PIPE UNDERDRAINS, FABRIC LINED TRENCH 10"	PIPE DRAINS 12" (SPECIAL)	PIPE UNDERDRAIN CLEANOUT, COMPLETE		
BEGIN STATION	OFFSET	END STATION	OFFSET	FOOT	FOOT	FOOT	EACH		
NSRR SHOOLLY									
0+96.91	28.67	LT					1		
0+96.91	28.67	LT	7+30.00	6.93	LT	633			
1+88.44	24.43	LT					1		
3+77.00	13.92	LT	3+77.41	21.28	LT		7		
5+52.58	7.07	LT					1		
7+30.00	6.93	LT					1		
8+50.00	6.98	LT	11+99.11	6.79	LT	349			
8+50.00	6.98	LT					1		
10+23.53	6.84	LT					1		
11+98.09	0.04	LT	12+00.42	15.57	LT			16	
12+10.53	6.79	LT	16+07.87	17.45	LT	397			
12+10.53	6.79	LT						1	
14+03.36	7.41	LT						1	
16+08.30	10.18	LT	16+07.20	30.24	LT			20	
UPRR MAIN 1									
47727+97.28	32.00	RT					1		
47727+97.28	32.00	RT	47731+27.45	32.00	RT	330			
47727+93.00	37.00	LT	47731+37.79	37.00	LT		345		
47727+93.00	37.00	LT					1		
47729+72.00	32.00	RT					1		
47729+72.00	37.00	LT					1		
47731+27.45	32.00	RT	47731+39.97	51.53	LT		84		
47731+27.45	32.00	RT	47735+55.30	32.00	RT	428			
47731+47.79	37.00	LT					1		
47731+47.79	37.00	LT	47735+59.30	37.00	LT		409		
47733+00.00	32.00	RT					1		
47733+00.00	37.00	LT					1		
47735+55.30	32.00	RT	47735+59.48	39.93	LT		72		
47735+55.30	32.00	RT	47739+00.00	32.00	RT	345			
47737+00.00	32.00	RT					1		
47739+00.00	32.00	RT					1		
TOTALS				2482	754	199	17		

FINAL
 DESIGNED - DJP 3/6/13
 DRAWN - DJP 3/27/13
 REVIEWED - JWM 2/25/14

FILE NAME: C:\p\81718-ht-schedule-801.dgn	USER NAME: jwm00275	DESIGNED - DJP	REVISED -
PLOT SCALE: 8.0003 1/2 in.		DRAWN - DJP	REVISED -
PLOT DATE: 02/25/2014		CHECKED - JWM	REVISED -
		DATE - 2/25/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
SCHEDULE OF QUANTITIES**

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 31
09L0179B		CONTRACT NO. 936117		ILLINOIS FED. AID PROJECT

SCALE: SHEET 6 OF 8 SHEETS STA. TO STA.



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UTILITY ADJUSTMENT SCHEDULE												
LOCATION					TYPE	DESCRIPTION	OWNER	OTHER FACILITY IMPACTED	TO BE REMOVED BY CONTRACTOR (1)	TO BE RELOCATED BY CONTRACTOR	TO BE REMOVED BY OTHERS	TO REMAIN
MPLE POST	STA	OFFSET	STA	OFFSET								
CARPENTER STREET STATIONING												
	995+31	36 LT	996+41	39 LT	OVERHEAD ELECTRIC AND FIBER OPTIC		CWLP	INSIGHT		X		
	995+71	39 RT			HANDHOLE		IDOT				(4)	
	995+60	28 RT	995+59	35 LT	BURIED ELECTRIC		IDOT				X	
	995+59	35 LT	996+53	36 LT	BURIED ELECTRIC		IDOT				X	
	995+74	8 RT	996+45	9 RT	WATER MAIN		CWLP				X	
	996+12	25 RT			WATER VALVE						X	
	996+19	39 RT	996+36	39 RT	WATER MAIN		CWLP			HYDRANT	X	
	996+32	28 LT	996+37	48 LT	BURIED ELECTRIC		IDOT		X			
	996+32	28 LT	996+53	36 LT	BURIED ELECTRIC		IDOT		X			
	995+49	30 RT	996+28	29 RT	BURIED FIBER OPTIC		AT&T				X	
413.84	996+28	29 RT	1000+43	33 RT	BURIED FIBER OPTIC		AT&T		X			
	996+34	42 RT	996+51	28 RT	BURIED ELECTRIC		IDOT		X			
	996+35	57 RT	996+41	39 LT	OVERHEAD ELECTRIC		CWLP				(3)	
413.83	996+41	39 LT	1000+31	32 LT	OVERHEAD ELECTRIC AND FIBER OPTIC		CWLP	INSIGHT		X		
	996+43	30 RT	996+51	28 RT	BURIED ELECTRIC		IDOT		X			
	996+43	30 RT	996+47	35 LT	BURIED FIBER OPTIC		CWLP		X			
	996+45	9 RT	999+58	11 RT	WATER MAIN		CWLP		(2)			
	996+51	28 RT	996+47	34 LT	BURIED ELECTRIC		IDOT		X			
	996+41	39 LT	998+12	37 LT	BURIED ELECTRIC		IDOT		X			
	997+44	29 RT	999+59	28 RT	OVERHEAD STREET LIGHTING CIRCUIT		CWLP			X		
	997+83	38 RT	999+40	39 RT	PRIVATE WATER		ST JOHNS		X			
413.83	998+04	33 LT	1003+59	25 LT	GAS LINE		AMEREN		X			
	998+04	33 LT	998+04	43 LT	GAS LINE		AMEREN		X			
	998+12	37 LT	998+48	25 RT	OVERHEAD STREET LIGHTING CIRCUIT		CWLP			X		
	998+12	37 LT	999+75	51 LT	OVERHEAD STREET LIGHTING CIRCUIT		CWLP	NS RR		X		
	998+12	37 LT	998+42	132 LT	OVERHEAD PARKING LOT LIGHTING		CWLP			X		
	998+12	37 LT	998+08	44 LT	BURIED ELECTRIC		CWLP					
	998+65	32 LT	998+65	43 LT	GAS LINE		AMEREN		X			

UTILITY ADJUSTMENT SCHEDULE												
LOCATION					TYPE	DESCRIPTION	OWNER	OTHER FACILITY IMPACTED	TO BE REMOVED BY CONTRACTOR (1)	TO BE RELOCATED BY CONTRACTOR	TO BE REMOVED BY OTHERS	TO REMAIN
MPLE POST	STA	OFFSET	STA	OFFSET								
CARPENTER STREET STATIONING												
	998+90	11 RT	998+92	32	WATER SERVICE LINE	WATER SERVICE LINE	CWLP		X			
413.82	999+50	24 RT			RR CROSSING SIGNAL		NSRR				X	
	999+52	27 LT	999+54	41 LT	GAS LINE	SERVICE LINE	AMEREN		X			
413.84	999+58	23 RT	1000+26	49 RT	BURIED ELECTRIC		CWLP		X			
413.84	999+58	32 RT	1000+26	49 RT	BURIED ELECTRIC		CWLP		X			
413.83	999+59	28 RT	999+75	51 LT	OVERHEAD ELECTRIC	STREET LIGHTING CIRCUIT	CWLP	NS RR			X	
413.84	999+86	25 RT			RR CROSSING GATES		NSRR				X	
413.83	1000+09	28 LT			RR CROSSING SIGNAL		NSRR				X	
413.84	1000+19	44 LT	1000+26	49 RT	BURIED ELECTRIC		CWLP				X	
413.84	1000+19	44 LT	1001+14	45 LT	BURIED ELECTRIC		CWLP				X	
	1000+26	10 RT	1003+80	12 RT	WATER MAIN	6" CI	CWLP		(2)			
413.83	1000+31	32 LT			OVERHEAD ELECTRIC	LINES EXTEND SOUTH OFF RR ROW	AMEREN/ CWLP	WINDSTREAM			(3)	
413.83	1000+31	32 LT	1003+59	27 LT	OVERHEAD ELECTRIC AND FIBER OPTIC		CWLP	INSIGHT, WINDSTREAM			X	
	1000+36	47 LT	1003+48	42 LT	OVERHEAD ELECTRIC	OFF ROW LIGHTING	CWLP				X	
	1000+34	12 RT	1000+36	26 RT	WATER MAIN	6" CI TO HYDRANT	CWLP		(2)			
	1000+35	45 LT	1001+55	28 LT	BURIED ELECTRIC		CWLP		X			
413.83	1000+41	29 LT			RR CROSSING SIGNAL		NSRR				X	
	1000+62	46 LT	1000+63	46 RT	BURIED FIBER OPTIC		CWLP		X			
	1001+44	13 RT	1001+45	46 RT	WATER SERVICE LINE	WATER SERVICE TO SUBSTATION	CWLP		X			
	1002+72	27 LT	1002+74	46 RT	BURIED ELECTRIC		CWLP		X			
	1002+72	27 LT	1003+36	33 LT	BURIED ELECTRIC		CWLP		X			
	1003+36	33 LT	1003+66	37 LT	BURIED ELECTRIC AND FIBER OPTIC	INTER-SIGNAL ELECTRIC, FO	CITY		X			
	1003+50	37 LT	1003+52	35 RT	BURIED FIBER OPTIC		CWLP		X			
	1003+50	37 LT	1003+52	44 LT	BURIED ELECTRIC	INTER-SIGNAL ELECTRIC	CITY		X			
	1003+35	33 LT	1003+52	35 RT	BURIED ELECTRIC	INTER-SIGNAL ELECTRIC	CITY		X			
	1003+42	32 RT	1003+52	35 RT	BURIED ELECTRIC	INTER-SIGNAL ELECTRIC	CITY		X			
	1003+51	43 RT	1003+52	35 RT	BURIED ELECTRIC	INTER-SIGNAL ELECTRIC	CITY		X			
	1003+52	35 RT	1003+66	36 RT	BURIED ELECTRIC AND FIBER OPTIC	INTER-SIGNAL ELECTRIC, FO	CITY		X			
	1003+59	27 LT	1003+59	76 RT	AERIAL ELECTRIC		CWLP				X	
	1003+59	27 LT	1003+86	33 LT	AERIAL ELECTRIC		CWLP				X	

- (1) UNLESS OTHERWISE NOTED, UTILITY REMOVAL BY CONTRACTOR IS INCLUDED IN THE COST OF EARTH EXCAVATION.
- (2) SEE REMOVAL SCHEDULES FOR QUANTITY.
- (3) SEE REMOVAL PLANS FOR POLE RELOCATIONS (BY OTHERS).
- (4) ENCASMENT/ADJUSTMENT BY OTHERS.
- (5) CONFLICTS WITH PUMP STATION CONSTRUCTION ACTIVITIES.
- (6) FIBER OPTIC LINE TO BE RELOCATED BY WINDSTREAM.

FINAL
 DESIGNED - DJP 9/6/13
 DRAWN - DJP 3/27/14
 REVIEWED - JWM 2/25/14

FILE NAME -	USER NAME - pop00275	DESIGNED - DJP	REVISED -
D:\P\0179B-wtr-schedule.tbl		DRAWN - DJP	REVISED -
Sheet 7	PLOT SCALE - W.8933' = 1" = 1/4"	CHECKED - JWM	REVISED -
	PLOT DATE - 02/27/2014	DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 SCHEDULE OF QUANTITIES

SCALE: SHEET 7 OF 8 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	32
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



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UTILITY ADJUSTMENT SCHEDULE												
LOCATION					TYPE	DESCRIPTION	OWNER	OTHER FACILITY IMPACTED	TO BE REMOVED BY CONTRACTOR (1)	TO BE RELOCATED BY CONTRACTOR	TO BE REMOVED BY OTHERS	TO REMAIN
MILE POST	STA	OFFSET	STA	OFFSET								
UPRR MAIN 1 STATIONING												
413.73	47721+81	105 LT	47727+05	106 LT	OVERHEAD ELECTRIC		CWLP					X
413.74	47722+30	52 LT			RR COMMUNICATION POLE		NSRR					X
413.74	47722+51	45 LT			RR CONTROLLER BOX		NSRR			X		
	47722+73	39 LT	47723+43	26 LT	OVERHEAD ELECTRIC		CWLP					X
413.75	47723+01	84 LT			RR CROSSING SIGNAL		NSRR			X		
413.76	47723+43	113 LT	47725+28	100 LT	BURIED ELECTRIC		CWLP					X
413.76	47723+43	26 LT	47723+44	108 LT	OVERHEAD ELECTRIC, COAXIAL CABLE, AND FIBER OPTIC		CWLP	INSIGHT				X
413.76	47723+48	57 LT			RR CROSSING SIGNAL		NSRR			X		
413.76	47723+49	35 RT	47723+50	104 LT	WATER MAIN	6" CI	CWLP					(4)
413.76	47723+46	27 LT	47723+49	27 LT	WATER LINE TO HYDRANT	6" CI TO HYDRANT	CWLP			X		
413.80	47725+28	100 LT	47726+93	93 LT	BURIED ELECTRIC		CWLP		X			
413.79	47725+36	107 LT	47726+89	113 LT	OVERHEAD ELECTRIC	LIGHTING CIRCUIT WITH POLE MOUNTED LIGHTS THAT OVERHANG NS ROW	CWLP					X
413.80	47725+42	34 RT	47725+42	106 LT	BURIED FIBER OPTIC?		INSIGHT					
413.81	47726+31	34 RT	47726+35	106 LT	BURIED FIBER OPTIC?		INSIGHT					
	47726+77	46 LT			RR CONTROLLER BOX		NSRR			X		
UTILITIES AT CARPENTER ARE LISTED BY CARPENTER STREET STATIONING												
	47727+05	106 LT	47729+96	118 LT	OVERHEAD ELECTRIC		AMEREN					(4)
	47727+05	106 LT	47729+95	137 LT	OVERHEAD ELECTRIC AND FIBER OPTIC		CWLP	WINDSTREAM				(6)
413.84	47727+70	119 LT	47736+94	67 LT	BURIED FIBER OPTIC	4-4" DUCT	AT&T		X			
413.84	47727+86	102 LT	47728+99	130 LT	BURIED ELECTRIC		CWLP		X			
413.87	47729+22	45 LT	47731+13	29 LT	OVERHEAD ELECTRIC	SERVICE LINE FOR PARKING LIGHTING	CWLP	ST JOHNS			X	
413.86	47728+56	38 LT	47730+17	37 LT	BURIED ELECTRIC AND LIGHT POLES	PARKING LOT LIGHTING	ST JOHNS		X (2)			
	47729+32	36 LT	47729+55	36 LT	BURIED ELECTRIC	SERVICE LINE FOR PARKING LIGHTING	CWLP					
	47729+32	35 RT	47729+55	36 LT	BURIED ELECTRIC	PARKING LOT LIGHTING	ST JOHNS		X			
	47729+39	35 RT	47729+33	35 LT	BURIED TELEPHONE		AT&T		X			
	47729+38	86 RT	47729+55	36 LT	AERIAL TELEPHONE	SERVICE TO PARKING LOT CALL BOX	ST JOHNS				X	

- (1) UNLESS OTHERWISE NOTED, UTILITY REMOVAL BY CONTRACTOR IS INCLUDED IN THE COST OF EARTH EXCAVATION.
- (2) SEE REMOVAL SCHEDULES FOR QUANTITY.
- (3) SEE REMOVAL PLANS FOR POLE RELOCATIONS (BY OTHERS).
- (4) ENCASMENT/ADJUSTMENT BY OTHERS.
- (5) CONFLICTS WITH PUMP STATION CONSTRUCTION ACTIVITIES.
- (6) FIBER OPTIC LINE TO BE RELOCATED BY WINDSTREAM.

UTILITY ADJUSTMENT SCHEDULE												
LOCATION					TYPE	DESCRIPTION	OWNER	OTHER FACILITY IMPACTED	TO BE REMOVED BY CONTRACTOR (1)	TO BE RELOCATED BY CONTRACTOR	TO BE REMOVED BY OTHERS	TO REMAIN
MILE POST	STA	OFFSET	STA	OFFSET								
UPRR MAIN 1 STATIONING												
413.89	47729+42	96 LT	47735+26	89 LT	BURIED ELECTRIC		CWLP					X
413.91	47730+94	46 LT			CONTROLLER BOX		NSRR				X	
413.91	47731+13	29 LT	47731+13	150 LT	OVERHEAD ELECTRIC		CWLP					(3)
413.91	47731+19	91 LT	47731+20	106 LT	BURIED ELECTRIC		CWLP					X
413.91	47731+22	88 LT			RR CROSSING SIGNAL		NSRR				X	
413.91	47731+23	29 LT	47731+23	127 LT	OVERHEAD ELECTRIC		CWLP					(3)
413.91	47731+32	34 RT	47731+30	132 LT	GAS LINE	4" ST, 84' CASED AT RR	AMEREN					(4)
413.92	47731+60	34 RT	47731+60	106 LT	WATER MAIN	6" CI	CWLP					(4)
413.92	47731+68	58 LT			RR CROSSING SIGNAL		NSRR					
413.92	47731+74	34 RT	47731+73	114 LT	BURIED FIBER OPTIC		CWLP					(4)
	47735+26	89 LT	47735+40	184 LT	BURIED ELECTRIC		CWLP					X
	47735+26	89 LT	47736+13	127 LT	BURIED ELECTRIC		CWLP					X
413.99	47735+77	105 LT	47735+88	35 RT	WATER MAIN	6" CI	CWLP					(4)
	47735+77	104 LT	47737+87	72 LT	WATER SERVICE LINE		CWLP					X
413.99	47735+71	35 RT	47735+86	105 LT	BURIED ELECTRIC	MAIN FEED, TWIN 24" STEEL CASINGS IN EXISTING NSRR ROW SERVICE TO ST JOHNS	ST JOHNS			X		
413.99	47735+35	35 RT	47736+86	84 LT	BURIED FIBER OPTIC		WINDSTREAM		X			
413.99	47735+95	93 LT	47735+82	104 RT	OVERHEAD ELECTRIC		CWLP	INSIGHT				(3)
	47735+95	93 LT	47739+35	65 LT	OVERHEAD ELECTRIC AND FIBER OPTIC		CWLP	AMEREN, WINDSTREAM				X
	47735+95	103 LT	47736+92	96 LT	BURIED FIBER OPTIC	CABLE IN 2" CONDUIT	MCI/VERIZON					X
	47735+82	19 LT	47736+22	27 LT	OVERHEAD ELECTRIC	ELECTRIC SERVICE TO PARKING LOT	CWLP					X
	47735+94	52 RT	47736+22	27 LT	BURIED ELECTRIC	4" PVC CONDUIT FOR FUTURE USE	ST JOHNS					X
	47736+01	49 RT	47735+79	17 LT	BURIED ELECTRIC		ST JOHNS					X
413.99	47736+01	49 RT	47736+13	127 LT	BURIED ELECTRIC AND CABLE TV	36" DIA STEEL CASING WITH MULTIPLE CONDUITS	ST JOHNS	INSIGHT				X
414.06	47736+94	67 LT	47737+05	106 LT	MH AND BURIED FIBER OPTIC (3 LINES)		AT&T			MH(2)		
	47736+94	67 LT	47737+48	62 LT	BURIED FIBER OPTIC		AT&T			X		
	47737+56	35 RT	47737+49	86 LT	BURIED TELEPHONE	SERVICE TO PARKING LOT CALL BOX	AT&T					X

FINAL
 DESIGNED - DJP 5/6/11
 DRAWN - DJP 3/27/13
 REVIEWED - JWM 2/25/14

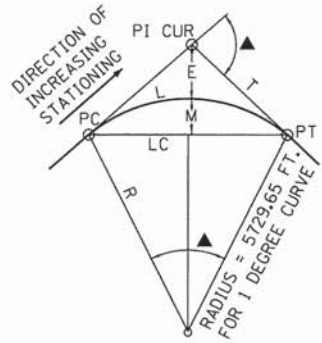
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D:\8275\1748-sht-sched-1a-881.dgn		DRAWN - DJP	REVISED -
		CHECKED - JWM	REVISED -
Sheet: 8	PLT DATE = 2/25/2014	DATE = 2/25/14	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 SCHEDULE OF QUANTITIES**

SCALE: SHEET 8 OF 8 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	33
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



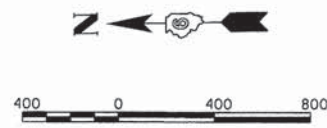
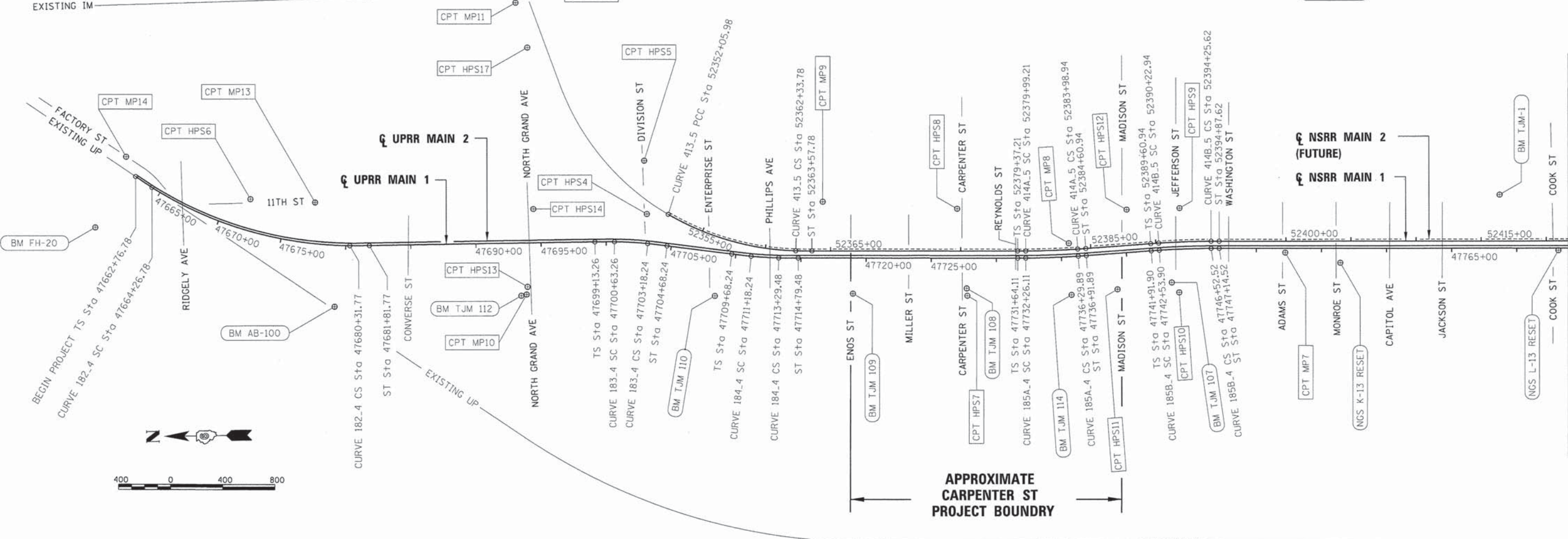
CIRCULAR CURVE USING CHORD DEFINITION

- R = RADIUS = 50/SIN (D/2)
- L_c = LENGTH (CHORDED) = $100 \cdot \Delta / D_c$
- L = LENGTH = $T \cdot R \cdot \Delta / 180$
- T = TANGENT = $R \cdot \tan (\Delta / 2)$
- D_c = DEGREE OF CURVATURE (CHORD)
- LC = LONG CHORD = $2R \cdot \sin (\Delta / 2)$
- E = EXTERNAL = $T \cdot \tan (\Delta / 4)$
- Δ = CENTRAL ANGLE OF CIRCULAR CURVE

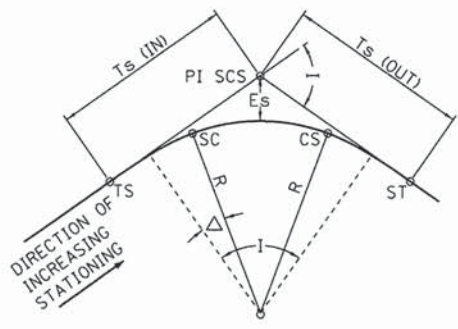
LEGEND

- SC = POINT OF CHANGE FROM SPIRAL TO CIRCULAR ARC
- CS = POINT OF CHANGE FROM CIRCULAR ARC TO SPIRAL
- ST = POINT OF CHANGE FROM SPIRAL TO TANGENT
- TS = POINT OF CHANGE FROM TANGENT TO SPIRAL
- CPT AA# = CONTROL POINT NUMBER
- BM AAA ### = BENCHMARK NUMBER

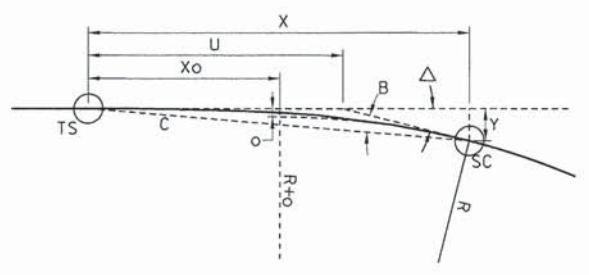
NOTE: ALIGNMENT FOR ENTIRE CORRIDOR SHOWN FOR INFORMATIONAL PURPOSES ONLY



CIRCULAR CURVE WITH SPIRAL TRANSITION



- $d = k_s = kl/100$; $D = k_s = kL/100$
- $\delta = 1/2 k_s^2 = dl/200$; $\Delta = 1/2 k_s^2 = DL/200$
- $a = 1/2 \delta = 1/4 k_s^2$; $A = 1/2 \Delta = 1/4 k_s^2$
- $b = 2/3 \delta$; $B = 2/3 \Delta$
- $Y = 0.5826 \delta s - 0.00001264 \cdot s \delta^3$
- $X = l - 0.003048 \cdot s \delta^2$
- $o = 0.1454 \cdot s \cdot \Delta$
- $X_o = 1/2 \cdot L - 0.000508 \cdot s \cdot \Delta^2$
- $T_s = (R + o) \tan (I/2) + X_o$
- $E_s = (R + o) \text{EXSEC} (I/2) + o$
- $L_s\text{-in} = \text{Spiral Length from T.S. to S.C.}$
- $L_s\text{-out} = \text{Spiral Length from C.S. to S.T.}$
- $T_s = (R+o) \tan (I/2) + X_o$



SPIRAL TRANSITION DETAIL

SPIRAL INFORMATION

- d = DEGREE OF CURVATURE OF THE SPIRAL AT ANY POINT
- l = LENGTH FROM THE TS OR ST TO ANY POINT ON THE SPIRAL HAVING COORDINATES X AND Y
- s = LENGTH l IN 100-FOOT STATIONS
- δ = DEFLECTION ANGLE FROM THE TANGENT AT THE TS OR ST TO ANY POINT ON THE SPIRAL
- θ = ORIENTATION ANGLE FROM THE TANGENT AT ANY POINT ON THE SPIRAL TO THE TS OR ST
- Δ = CENTRAL ANGLE OF THE SPIRAL FROM THE TS OR ST TO ANY POINT ON THE SPIRAL
- D = DEGREE OF CIRCULAR CURVE
- L = TOTAL LENGTH OF SPIRAL IN FEET
- S = LENGTH L IN 100-FOOT STATIONS
- A = DEFLECTION ANGLE OF THE WHOLE SPIRAL
- B = ORIENTATION ANGLE OF THE WHOLE SPIRAL
- Δ = CENTRAL ANGLE OF THE WHOLE SPIRAL
- k = INCREASE IN DEGREE OF CURVATURE PER 100-FOOT STATION ALONG THE SPIRAL

FINAL
DESIGNED GCN 9/6/13
DRAWN CLC 9/21/13
REVIEWED GCN 2/25/14

FILE NAME = 0609L0179B-shr-ATB-01.dgn	USER NAME = pap00275	DESIGNED - GCN	REVISED -
PLOT SCALE = 400.0000' / in.	DATE = 2/25/14	DRAWN - CLC	REVISED -
PLOT DATE = 02/26/2014		CHECKED - GCN	REVISED -
		DATE - 2/25/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ALIGNMENT, TIES, AND BENCHMARKS**

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 34
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				

MATCHLINE STATION 47774+00.00 (UPRR MAIN 1)



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LEGEND

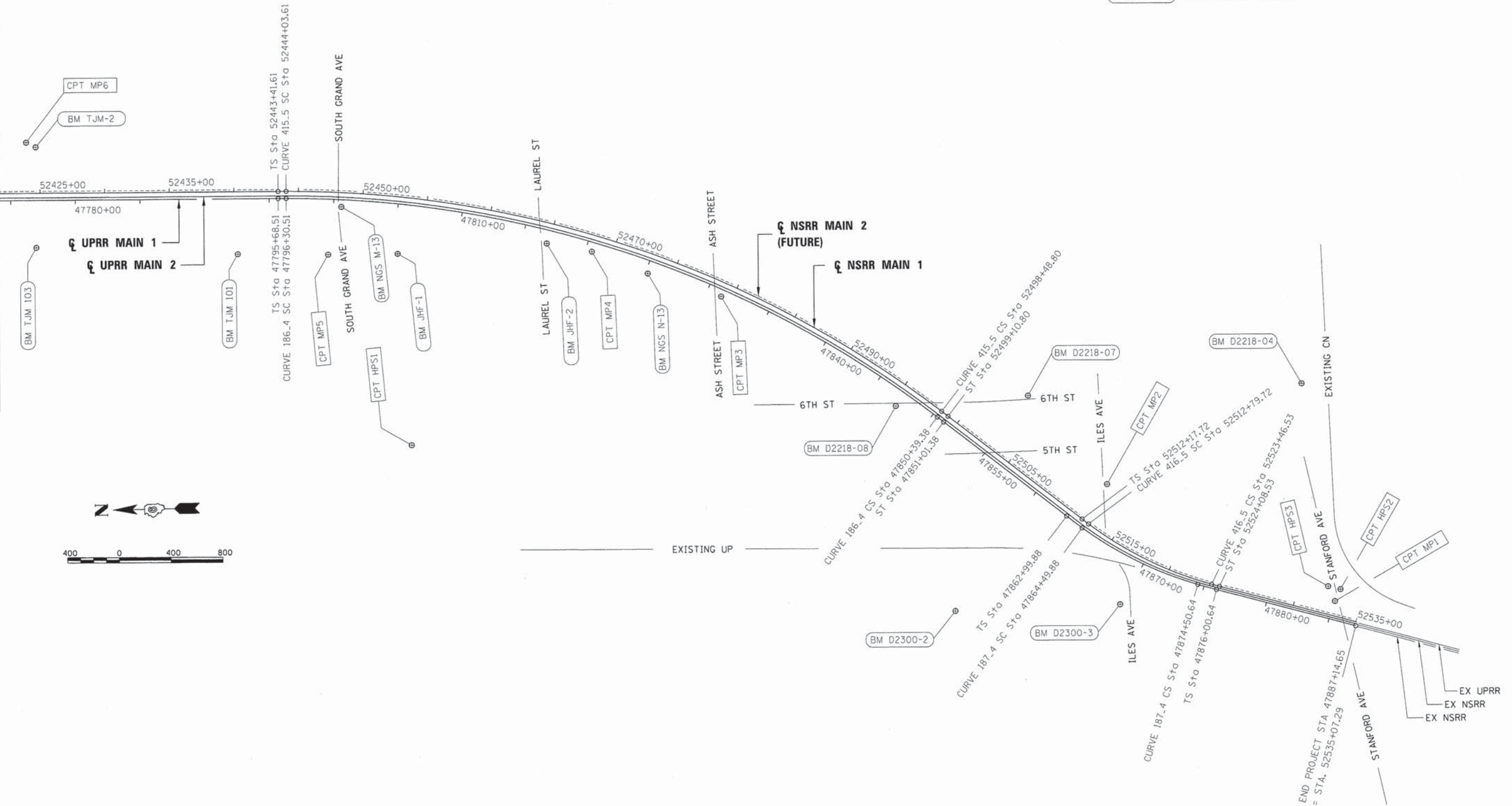
SC = POINT OF CHANGE FROM SPIRAL TO CIRCULAR ARC
 CS = POINT OF CHANGE FROM CIRCULAR ARC TO SPIRAL
 ST = POINT OF CHANGE FROM SPIRAL TO TANGENT
 TS = POINT OF CHANGE FROM TANGENT TO SPIRAL

CPT AA# = CONTROL POINT NUMBER

BM AAA *** = BENCHMARK NUMBER

NOTE: ALIGNMENT FOR ENTIRE CORRIDOR SHOWN FOR INFORMATIONAL PURPOSES ONLY

MATCHLINE STATION 47774+00.00 (UPRR MAIN 1)



DESIGNED	GCN	9/6/13
DRAWN	CLC	9/27/13
REVIEWED	GCN	2/25/14

FILE NAME = D609L0179B-sht-ATB-01.dgn
 Geometric Control Sheet 2

USER NAME = pop00275
 PLOT SCALE = 400.0000' / in.
 PLOT DATE = 02/25/2014

DESIGNED - GCN
 DRAWN - CLC
 CHECKED - GCN
 DATE - 2/25/14

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

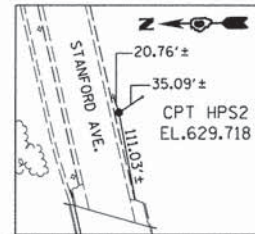
**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 ALIGNMENT, TIES, AND BENCHMARKS**

SCALE: SHEET 2 OF 6 SHEETS STA. TO STA.

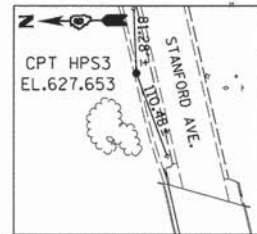
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	35
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



CONTROL POINT #HPS1
 SET I.P. IN CENTER OF HANSON NW PROPERTY (GRASS AREA)
 N 1,136,254.9375
 E 2,441,949.7000
 ELEV. 603.515



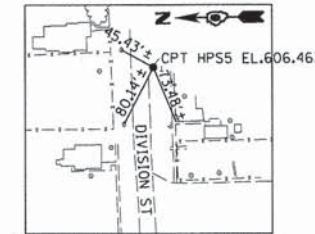
CONTROL POINT #HPS2
 SET I.P. ON SOUTH SIDE OF STANFORD AVE. APPROX. 100' EAST OF BRIDGE OVER RAILROAD
 N 1,129,093.2707
 E 2,440,696.1637
 ELEV. 629.718



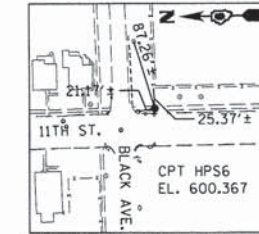
CONTROL POINT #HPS3
 SET NAIL IN C OF SIDEWALK ON NORTH SIDE OF STANFORD AVENUE APPROX. 100' EAST OF BRIDGE OVER RAILROAD
 N 1,129,188.7267
 E 2,440,720.4267
 ELEV. 627.653



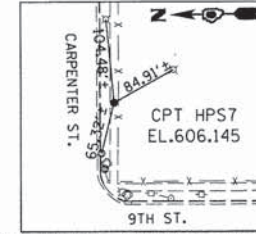
CONTROL POINT #HPS4
 SET I.P. 7' SOUTH OF SOUTH EDGE OF DIVISION STREET AND 42' WEST OF RAILROAD SIGNAL IN SW QUADRANT
 N 1,146,493.2417
 E 2,444,269.0733
 ELEV. 606.106



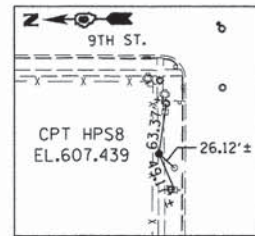
CONTROL POINT #HPS5
 SET NAIL IN EP APPROX. MIDWAY OF RADIUS IN SW QUADRANT OF 12TH STREET AND DIVISION STREET
 N 1,146,508.4440
 E 2,444,679.8280
 ELEV. 606.463



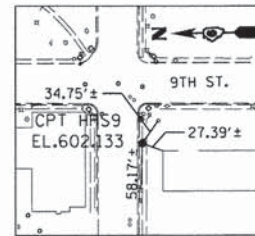
CONTROL POINT #HPS6
 SET NAIL IN CONCRETE PATCH OF BRICK WALK APPROX. 20' SOUTH OF POWER POLE IN SE QUADRANT OF 11TH STREET AND BLACK AVE.
 N 1,149,534.0340
 E 2,444,426.2573
 ELEV. 600.367



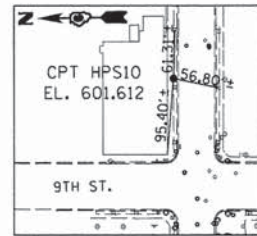
CONTROL POINT #HPS7
 SET NAIL IN SIDEWALK APPROX. 50' EAST OF SE QUADRANT OF 9TH STREET AND CARPENTER STREET
 N 1,144,047.8910
 E 2,443,664.6555
 ELEV. 606.145



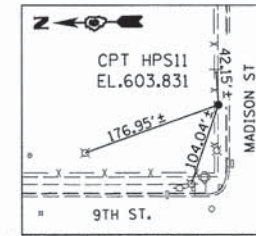
CONTROL POINT #HPS8
 SET NAIL IN SIDEWALK APPROX. 50' WEST OF NW QUADRANT OF 11TH STREET AND CARPENTER STREET
 N 1,144,112.1030
 E 2,444,277.9075
 ELEV. 607.439



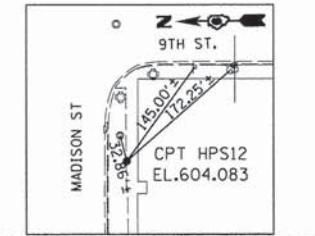
CONTROL POINT #HPS9
 SET NAIL IN ASPHALT NORTH OF SIDEWALK APPROX. 50' WEST OF SW QUADRANT OF 11TH STREET AND JEFFERSON STREET
 N 1,142,404.4865
 E 2,444,260.2030
 ELEV. 602.133



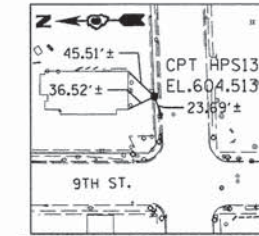
CONTROL POINT #HPS10
 SET NAIL IN SIDEWALK APPROX. 100' EAST OF NE QUADRANT OF 9TH STREET AND JEFFERSON STREET
 N 1,142,471.4950
 E 2,443,688.3390
 ELEV. 601.612



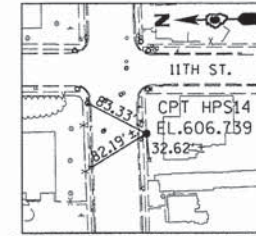
CONTROL POINT #HPS11
 SET NAIL IN NORTH EDGE OF SIDEWALK APPROX. 50' EAST OF NE QUADRANT OF 9TH STREET AND MADISON STREET
 N 1,142,889.3595
 E 2,443,641.9680
 ELEV. 603.831



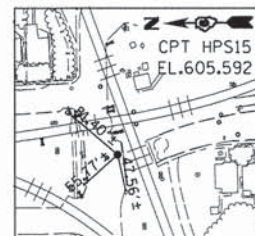
CONTROL POINT #HPS12
 SET NAIL IN NORTH EDGE OF SIDEWALK APPROX. 50' WEST OF SW QUADRANT OF 9TH STREET AND MADISON STREET
 N 1,142,810.7985
 E 2,444,253.5245
 ELEV. 604.083



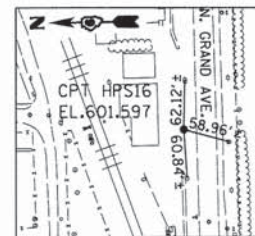
CONTROL POINT #HPS13
 SET NAIL IN NORTH EDGE OF SIDEWALK APPROX. 75' EAST OF NE QUADRANT OF 9TH STREET AND NORTH GRAND AVENUE
 N 1,147,427.3920
 E 2,443,728.0820
 ELEV. 604.513



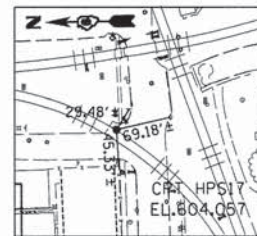
CONTROL POINT #HPS14
 SET NAIL IN SOUTH EDGE OF SIDEWALK APPROX. 50' WEST OF SW QUAD OF 11TH STREET AND NORTH GRAND AVENUE
 N 1,147,363.6315
 E 2,444,319.5005
 ELEV. 606.739



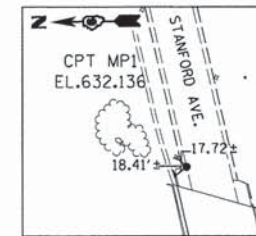
CONTROL POINT #HPS15
 SET NAIL IN ASPHALT SHOULDER APPROX. 5' SOUTH OF SOUTH LANE OF NORTH GRAND AVENUE
 N 1,147,420.4275
 E 2,445,970.8030
 ELEV. 605.592



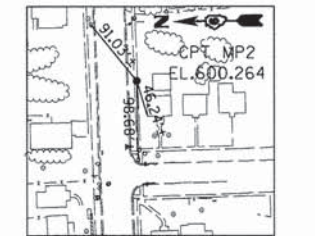
CONTROL POINT #HPS16
 SET NAIL IN ASPHALT SOUTH OF SIDEWALK ON NORTH SIDE OF NORTH GRAND AVENUE AT MIRACLE RAINBOW AUTO DETAIL
 N 1,147,472.6290
 E 2,446,493.1190
 ELEV. 601.597



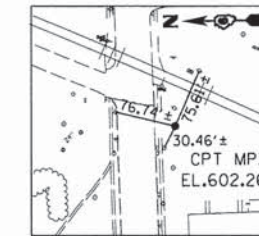
CONTROL POINT #HPS17
 SET NAIL IN NORTH SIDE OF SIDEWALK ON SOUTH SIDE OF NORTH GRAND AVENUE AT 1340 NORTH GRAND AVENUE
 N 1,147,393.5195
 E 2,445,562.4820
 ELEV. 604.057



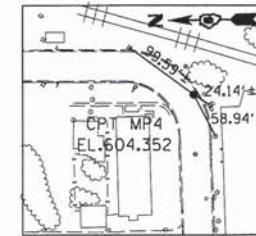
CONTROL POINT #MP1
 N 1,129,138.4333
 E 2,440,604.2887
 ELEV. 632.136



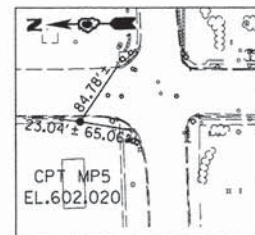
CONTROL POINT #MP2
 N 1,130,883.7397
 E 2,441,544.8010
 ELEV. 600.264



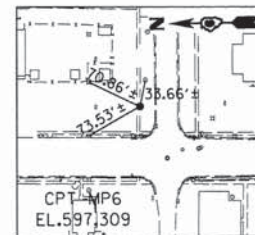
CONTROL POINT #MP3
 N 1,133,839.4933
 E 2,443,050.6063
 ELEV. 602.267



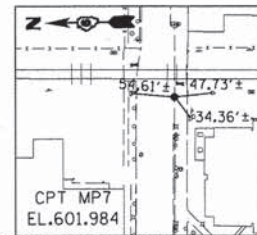
CONTROL POINT #MP4
 N 1,134,831.5710
 E 2,443,417.7337
 ELEV. 604.352



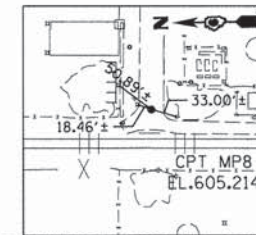
CONTROL POINT #MP5
 N 1,137,871.4293
 E 2,443,436.5803
 ELEV. 602.020



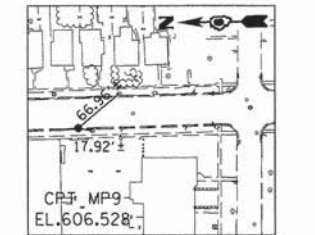
CONTROL POINT #MP6
 N 1,139,192.0730
 E 2,444,353.7153
 ELEV. 597.309



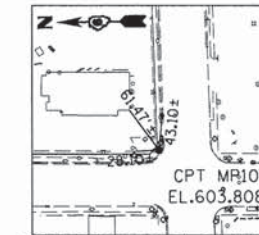
CONTROL POINT #MP7
 N 1,141,597.3217
 E 2,443,906.9077
 ELEV. 601.984



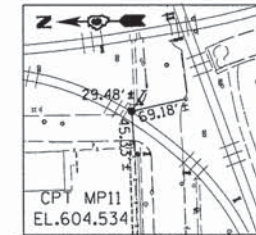
CONTROL POINT #MP8
 N 1,143,258.4373
 E 2,444,000.7783
 ELEV. 605.214



CONTROL POINT #MP9
 N 1,145,143.1010
 E 2,444,346.2403
 ELEV. 606.528



CONTROL POINT #MP10
 N 1,147,424.3633
 E 2,443,662.8833
 ELEV. 603.808



CONTROL POINT #MP11
 N 1,147,478.3917
 E 2,445,909.3707
 ELEV. 604.534

NOTES:

CONTROL POINT CROSS TIES ARE APPROXIMATE

REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM
 WEST ZONE DATUM OF NAD 83 (2011)
 ORTHO HEIGHT: NAVD88 (GEOID 12A)

NOTE: BOLD TITLES INDICATE POINTS WITHIN CARPENTER ST PROJECT BOUNDRY

DESIGNED GCN 9/6/13
 DRAWN CLC 9/27/13
 REVIEWED GCN 2/25/14

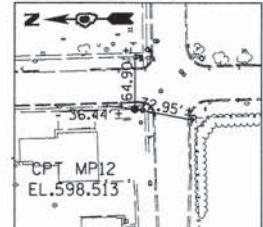
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Geometric Control Sheet 3	PLOT SCALE = 600.0000' / in.	DRAWN - CLC	REVISED -
	PLOT DATE = 02/26/2014	CHECKED - GCN	REVISED -
		DATE - 2/25/14	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 ALIGNMENT, TIES, AND BENCHMARKS**

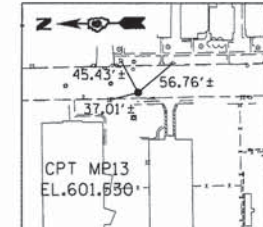
SCALE: SHEET 3 OF 6 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	36
	09L01798			CONTRACT NO. 93617
				ILLINOIS FED. AID PROJECT



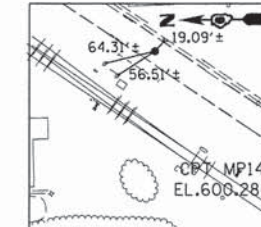
CONTROL POINT #MP12

SEE TIE ABOVE
N 1,147,495.9547
E 2,447,295.4817
ELEV. 598.513



CONTROL POINT #MP13

SEE TIE ABOVE
N 1,149,038.9733
E 2,444,390.1813
ELEV. 601.530



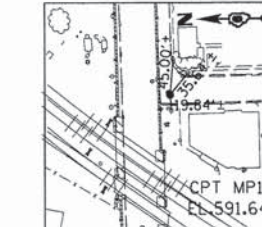
CONTROL POINT #MP14

SEE TIE ABOVE
N 1,150,484.6283
E 2,444,765.1777
ELEV. 600.284



CONTROL POINT #MP15

SEE TIE ABOVE
N 1,152,762.7927
E 2,445,944.0463
ELEV. 586.445



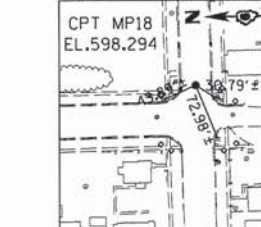
CONTROL POINT #MP16

SEE TIE ABOVE
N 1,152,745.9277
E 2,446,352.2323
ELEV. 591.641



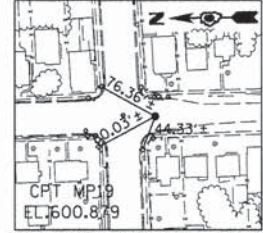
CONTROL POINT #MP17

SEE TIE ABOVE
N 1,137,071.1653
E 2,447,107.1640
ELEV. 599.385



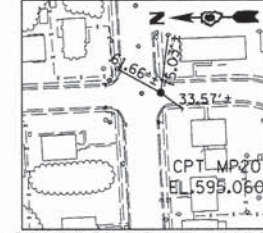
CONTROL POINT #MP18

SEE TIE ABOVE
N 1,136,862.1420
E 2,448,862.5450
ELEV. 598.294



CONTROL POINT #MP19

SEE TIE ABOVE
N 1,133,938.3877
E 2,447,164.0030
ELEV. 600.879



CONTROL POINT #MP20

SEE TIE ABOVE
N 1,134,046.4667
E 2,448,992.6143
ELEV. 595.060

NOTES:

CONTROL POINT CROSS TIES ARE APPROXIMATE
REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM
WEST ZONE DATUM OF NAD 83 (2011)
ORTHO HEIGHT: NAVD88 (GEOID 12A)

NOTE: BOLD TITLES INDICATE POINTS WITHIN CARPENTER ST PROJECT BOUNDRY

BENCHMARK D2218-08

ELEV. 593.355
CHISELED X ON NORTH END OF RETAINING WALL
SE QUADRANT OF 6TH STREET AND BROAD PLACE
N 1,132,506
E 2,442,180

BENCHMARK D2300-2

ELEV. 603.234
CHISELED X ON WEST BOLT OF FIRE HYDRANT
WEST SIDE OF 1ST STREET AT INTERSECTION
WITH NORTH BONNIE COURT
N 1,132,077
E 2,440,583

BENCHMARK D2300-3

ELEV. 604.498
CHISELED X ON WEST BOLT OF FIRE HYDRANT
NW QUADRANT OF 1ST STREET AND HIGHLAND AVE.
N 1,130,802
E 2,440,611

BENCHMARK JHF-1

ELEV. 607.422
CHISELED X ON SE BOLT OF FIRE HYDRANT
SW QUADRANT OF 9TH STREET AND PINE STREET
N 1,136,334
E 2,443,431

BENCHMARK JHF-2

ELEV. 605.788
CHISELED X ON SW BOLT OF GAS STATION SIGN
SE QUADRANT OF 9TH STREET AND LAUREL STREET
N 1,135,179
E 2,443,489

BENCHMARK TJM 101

ELEV. 600.186
CHISELED X ON WEST BOLT OF FIRE HYDRANT
NW QUADRANT 9TH STREET AND ALLEN STREET
N 1,137,570
E 2,443,455

BENCHMARK TJM 103

ELEV. 597.757
CHISELED X ON WEST BOLT OF FIRE HYDRANT
SE QUADRANT OF 9TH STREET AND LAWRENCE STREET
N 1,139,128
E 2,443,538

BENCHMARK TJM 107

ELEV. 603.007
CHISELED X ON WEST BOLT OF FIRE HYDRANT
E QUADRANT OF 9TH STREET AND JEFFERSON STREET
N 1,142,416
E 2,443,612

BENCHMARK TJM 108

ELEV. 607.145
CHISELED X ON SW BOLT OF FIRE HYDRANT
SE QUADRANT 9TH STREET AND CARPENTER STREET
N 1,144,044
E 2,443,608

BENCHMARK TJM 109

ELEV. 606.418
CHISELED X ON WEST BOLT OF FIRE HYDRANT
SE QUADRANT 9TH STREET AND ENOS STREET
N 1,144,922
E 2,443,636

BENCHMARK TJM 110

ELEV. 606.239
CHISELED X ON WEST BOLT OF FIRE HYDRANT
SE QUADRANT OF 9TH STREET AND ENTERPRISE STREET
N 1,145,981
E 2,443,633

BENCHMARK TJM 112

ELEV. 604.856
CHISELED SQUARE ON SW CORNER CONTROLLER
BOX FOUNDATION - NE QUADRANT OF 9TH
STREET AND NORTH GRAND AVENUE
N 1,147,465
E 2,443,654

BENCHMARK TJM 114

ELEV. 604.856
CHISELED X ON SW BOLT OF FIRE HYDRANT
SE QUADRANT 9TH STREET AND MASON STREET
N 1,143,243
E 2,443,604

BENCHMARK TJM-1

ELEV. 598.122
CHISELED X ON WEST BOLT OF FIRE HYDRANT
SE QUADRANT OF 11TH STREET AND EDWARDS STREET
N 1,139,944
E 2,444,329

BENCHMARK TJM-2

ELEV. 597.536
CHISELED X ON WEST BOLT OF FIRE HYDRANT - SE
QUADRANT OF 11TH STREET AND LAWRENCE STREET
N 1,139,118
E 2,444,316

BENCHMARK TJM-3

ELEV. 599.939
CHISELED X ON WEST BOLT OF FIRE HYDRANT
SE QUADRANT OF 11TH STREET AND KANSAS STREET
N 1,137,917
E 2,444,297

BENCHMARK FH-20

ELEV. 599.939
CHISELED SQUARE ON NW CORNER FOUNDATION
OF SIGN - EAST SIDE OF 9TH STREET SOUTH
OF GARFIELD AVENUE
N 1,150,729
E 2,444,225

BENCHMARK FH-21

ELEV. 590.711
CHISELED S ON NW BOLT OF FIRE HYDRANT
EAST SIDE OF PEORIA ROAD BETWEEN PERCY
AVENUE AND GRIFFITHS AVENUE
N 1,151,716
E 2,444,878

BENCHMARK FH-8

ELEV. 590.143
CHISELED SQUARE ON NORTHWEST CORNER MAST
ARM FOUNDATION - SE QUADRANT OF PEORIA ROAD
AND SAGAMON AVENUE
N 1,152,707
E 2,445,538

BENCHMARK FH-9

ELEV. 591.932
CHISELED SQUARE ON WEST END OF RETAINING
WALL - SOUTH SIDE OF SANGAMON AVENUE
ACROSS FROM 15TH STREET
N 1,152,733
E 2,445,909

BENCHMARK NGS K-13 RESET

ELEV. 598.961
BRASS DISK ON STATE JOURNAL REGISTER
PROPERTY - MONROE STREET
N 1,141,175
E 2,443,822

BENCHMARK NGS L-13 RESET

ELEV. 599.392
BRASS DISK ON SW CORNER RR BRIDGE ABUTMENT
COOK STREET UNDERPASS
N 1,139,498
E 2,443,894

BENCHMARK NGS M-13

ELEV. 598.414
BRASS DISK ON SW CORNER RR BRIDGE ABUTMENT
SOUTH GRAND AVENUE UNDERPASS
N 1,136,762
E 2,443,805

BENCHMARK NGS N-13

ELEV. 601.40
BRASS DISK AT NE CORNER ILES PARK
OAK STREET AND WEST SIDE OF RAILROAD
N 1,134,403
E 2,443,239

DESIGNED	GCN	9/6/13
DRAWN	CLG	9/27/13
REVIEWED	GCN	2/25/14

FILE NAME =	USER NAME = pop00275	DESIGNED - GCN	REVISED -
D609L0179B-shr-ATB-01.dgn		DRAWN - CLG	REVISED -
Geometric Control Sheet 4		CHECKED - GCN	REVISED -
		DATE - 2/25/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ALIGNMENT, TIES, AND BENCHMARKS**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	37
	09L0179B		CONTRACT NO. 9 3 6 1 7	
				ILLINOIS FED. AID PROJECT

SCALE: SHEET 4 OF 6 SHEETS STA. TO STA.



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UPRR MAIN 1 ALIGNMENT CONTROL							
ALIGNMENT ELEMENT	DESCRIPTION	ALIGNMENT POINT	STATION	DISTANCE	BEARING	NORTHING	EASTING
BEGIN	BEGIN	BEGIN	47658+00.35	2,366.35'	S 34°42'27" W	1,150,804.9579	2,444,882.8391
CURVE 182_4	TOTAL DELTA = 34°51'23" LT	TS	47662+76.78	476.43'	S 34°42'27" W	1,150,413.2992	2,444,611.5650
	DELTA = 31°52'38" LT	SC	47664+26.78	150.00'	S 33°13'05" W	1,150,289.2571	2,444,527.2310
	DEGREE (chord) = 1°59'10"						
	R = 2,884.93'	PISCS	47672+57.52			1,149,607.0628	2,444,053.1425
CURVE 183_4	L = 1,604.99'	PICUR	47672+50.68			1,149,599.9907	2,444,075.8773
	T = 823.90'						
	LS-in = 150.0', Se=2.5" - DS = 50 MPH	CS	47680+31.77	1,604.99'	S 1°20'27" W	1,148,776.3180	2,444,056.5986
	LS-out = 150.0', Se=2.5" - DS = 50 MPH	ST	47681+81.77	150.00'	S 0°08'55" E	1,148,626.3253	2,444,055.6881
CURVE 184_4	TOTAL DELTA = 8°05'58" RT	TS	47699+13.26	1,731.49'	S 0°08'55" E	1,146,894.8359	2,444,060.1824
	DELTA = 5°05'58" RT	SC	47700+63.26	150.00'	S 1°21'04" W	1,146,744.8433	2,444,059.2628
	DEGREE (chord) = 2°00'00"						
	R = 2,864.93'	PISCS	47701+91.12			1,146,616.9820	2,444,060.9036
CURVE 184A_4	L = 254.98'	PICUR	47701+90.84			1,146,617.2990	2,444,056.2544
	T = 127.58'						
	LS-in = 150.0', Se=2.5" - DS = 50 MPH	CS	47703+18.24	254.98'	S 6°27'03" W	1,146,490.5269	2,444,041.9208
	LS-out = 150.0', Se=2.5" - DS = 50 MPH	ST	47704+68.24	150.00'	S 7°57'03" W	1,146,341.7980	2,444,022.4704
CURVE 185A_4	TOTAL DELTA = 7°10'28" LT	TS	47709+68.24	500.00'	S 7°57'03" W	1,145,846.6042	2,443,953.3100
	DELTA = 4°11'44" LT	SC	47711+18.24	150.00'	S 6°27'40" W	1,145,697.8763	2,443,933.8505
	DEGREE (chord) = 1°59'10"						
	R = 2,884.93'	PISCS	47712+24.12			1,145,593.1851	2,443,917.9166
CURVE 185B_4	L = 211.24'	PICUR	47712+23.91			1,145,592.8766	2,443,921.9594
	T = 105.67'						
	LS-in = 150.0', Se=2.5" - DS = 50 MPH	CS	47713+29.48	211.24'	S 2°15'57" W	1,145,487.2883	2,443,917.7818
	LS-out = 150.0', Se=2.5" - DS = 50 MPH	ST	47714+79.48	150.00'	S 0°46'34" W	1,145,337.3298	2,443,914.4503
CURVE 186A_4	TOTAL DELTA = 4°13'21" LT	TS	47731+64.11	1,684.63'	S 0°46'34" W	1,143,652.8528	2,443,891.6289
	DELTA = 3°39'37" LT	SC	47732+26.11	62.00'	S 0°29'43" W	1,143,590.8572	2,443,890.8903
	DEGREE (chord) = 0°54'23"						
	R = 6320.5153'	PISCS	47734+28.11			1,143,388.8758	2,443,888.0525
CURVE 186B_4	L = 403.79'	PICUR	47734+28.07			1,143,388.9012	2,443,889.1449
	T = 201.96'						
	LS-in = 62.0', Se=0.75" - DS = 50 MPH	CS	47736+29.89	403.78'	S 3°09'55" E	1,143,187.2457	2,443,900.2963
	LS-out = 62.0', Se=0.75" - DS = 50 MPH	ST	47736+91.89	62.00'	S 3°26'46" E	1,143,125.3519	2,443,903.9220
CURVE 187A_4	TOTAL DELTA = 4°13'21" RT	TS	47741+91.90	500.01'	S 3°26'46" E	1,142,626.2560	2,443,933.9777
	DELTA = 3°39'15" RT	SC	47742+53.90	62.00'	S 3°09'43" E	1,142,564.3621	2,443,937.6023
	DEGREE (chord) = 0°55'00"						
	R = 6250.52'	PISCS	47744+53.32			1,142,365.3080	2,443,949.6921
CURVE 187B_4	L = 398.63'	PICUR	47744+53.28			1,142,365.2825	2,443,948.6003
	T = 199.38'						
	LS-in = 62.0', Se=0.75" - DS = 50 MPH	CS	47746+52.52	398.62'	S 0°29'31" W	1,142,165.9067	2,443,946.8881
	LS-out = 62.0', Se=0.75" - DS = 50 MPH	ST	47747+14.52	62.00'	S 0°46'34" W	1,142,103.9112	2,443,946.1507
CURVE 188A_4	TOTAL DELTA = 37°50'24" RT	TS	47795+68.51	4,853.99'	S 0°46'34" W	1,137,250.3666	2,443,880.3946
	DELTA = 37°24'41" RT	SC	47796+30.51	62.00'	S 0°59'26" W	1,137,188.3734	2,443,879.4774
	DEGREE (chord) = 0°41'30"						
	R = 8,283.78'	PISCS	47824+38.93			1,134,380.2106	2,443,841.5096
CURVE 188B_4	L = 5,408.86'	PICUR	47824+35.33			1,134,383.9778	2,443,830.9860
	T = 2,804.81'						
	LS-in = 62.0', Se=0.75" - DS = 50 MPH	CS	47850+39.38	5,408.87'	S 38°24'07" W	1,132,185.9211	2,442,088.7080
	LS-out = 62.0', Se=0.75" - DS = 50 MPH	ST	47851+01.38	62.00'	S 38°36'59" W	1,132,137.4297	2,442,050.0741
CURVE 189A_4	TOTAL DELTA = 22°51'20" LT	TS	47862+99.88	1,198.50'	S 38°36'59" W	1,131,200.9883	2,441,302.0856
	DELTA = 19°52'35" LT	SC	47864+49.88	150.00'	S 37°07'37" W	1,131,082.9836	2,441,209.4921
	DEGREE (chord) = 1°59'10"						
	R = 2,884.93'	PISCS	47869+58.10			1,130,686.6919	2,440,891.2880
CURVE 189B_4	L = 1,000.76'	PICUR	47869+55.36			1,130,679.9607	2,440,904.3918
	T = 505.48'						
	LS-in = 150.0', Se=2.5" - DS = 50 MPH	CS	47874+50.64	1,000.76'	S 17°15'02" W	1,130,197.2149	2,440,754.4914
	LS-out = 150.0', Se=2.5" - DS = 50 MPH	ST	47876+00.64	150.00'	S 15°45'39" W	1,130,053.2172	2,440,712.4997
END	END	END	47887+14.85	1,114.01'	S 15°45'39" W	1,128,981.0886	2,440,409.9081

UPRR MAIN 2 ALIGNMENT CONTROL							
ALIGNMENT ELEMENT	DESCRIPTION	ALIGNMENT POINT	STATION	DISTANCE	BEARING	NORTHING	EASTING
BEGIN	BEGIN	BEGIN	57658+00.00		S 34°42'27" W	1,150,796.9865	2,444,894.3480
CURVE 182_5	TOTAL DELTA = 34°51'23" LT	TS	57662+67.82	467.82'	S 34°42'27" W	1,150,412.4103	2,444,627.9795
	DELTA = 31°51'23" LT	SC	57664+17.82	150.00'	S 33°12'28" W	1,150,288.3632	2,444,543.6531
	DEGREE (chord) = 2°00'00"						
	R = 2,864.93'	PISCS	57672+42.28			1,149,611.3346	2,444,073.1315
CURVE 187_5	L = 1,592.82'	PICUR	57672+35.44			1,149,604.2643	2,444,095.8606
	T = 817.62'						
	LS-in = 150.0', Se=2.5" - DS = 50 MPH	CS	57680+10.64	1,592.82'	S 1°21'04" W	1,148,786.8674	2,444,076.5803
	LS-out = 150.0', Se=2.5" - DS = 50 MPH	ST	57681+60.64	150.00'	S 0°08'55" E	1,148,636.8748	2,444,075.6608
CURVE 187_5	TOTAL DELTA = 22°51'20" LT	TS	57863+15.65	1,211.38'	S 38°36'59" W	1,131,178.4483	2,441,309.6786
	DELTA = 19°51'20" LT	SC	57864+65.65	150.00'	S 37°06'59" W	1,131,060.4381	2,441,217.0923
	DEGREE (chord) = 2°00'00"						
	R = 2,864.93'	PISCS	57869+69.83			1,130,667.3103	2,440,901.4039
CURVE 187_5	L = 992.78'	PICUR	57869+67.09			1,130,660.5815	2,440,914.5031
	T = 501.44'						
	LS-in = 150.0', Se=2.5" - DS = 50 MPH	CS	57874+58.43	992.78'	S 17°15'39" W	1,130,181.7211	2,440,765.7139
	LS-out = 150.0', Se=2.5" - DS = 50 MPH	ST	57876+08.43	150.00'	S 15°45'39" W	1,130,037.7260	2,440,723.7135
END	END	END	57887+10.58	1,102.15'	S 15°45'39" W	1,128,977.0142	2,440,424.3441

UPRR MAIN 2 IS SET 20' LEFT OF UPRR MAIN 1 EXCEPT FOR THE CURVES LISTED ABOVE.

DESIGNED GCN 9/6/13
 DRAWN BLC 9/27/13
 REVIEWED GCN 2/25/14

FILE NAME = D609L0179B-sht-ATB-01.dgn
 USER NAME = pop0275
 PLOT SCALE = 400.0000 ' / in.
 PLOT DATE = 03/19/2014

DESIGNED - GCN
 DRAWN - BLC
 CHECKED - GCN
 DATE - 2/25/14

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 ALIGNMENT, TIES, AND BENCHMARKS

F.A.U. RTE. 7975
 SECTION 13-00475-00-BR
 COUNTY SANGAMON
 TOTAL SHEETS 196
 SHEET NO. 38
 CONTRACT NO. 93617
 ILLINOIS FED. AID PROJECT

SCALE: SHEET 5 OF 6 SHEETS STA. TO STA.



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NSRR MAIN 1 ALIGNMENT CONTROL							
ALIGNMENT ELEMENT	DESCRIPTION	ALIGNMENT POINT	STATION	DISTANCE	BEARING	NORTHING	EASTING
CURVE 413_5	TOTAL DELTA = 30°17'58" LT DELTA = 28°34'33" LT DEGREE (chord) = 2°46'49" R = 2,060.99' L = 1,027.80' T = 524.87' Ls-in = 0', Se=2" - Match Existing Curve Ls-out = 124.0', Se=2" - Match Existing Cur	PCC	52352+05.98		S 31°04'32" W	1,146,329.2745	2,444,264.7596
		PISCS	52357+64.62			1,145,850.8145	2,443,976.4120
		PICUR	52357+30.86			1,145,879.7262	2,443,993.8359
		CS	52362+33.78	1,027.80'	S 2°29'59" W	1,145,355.3511	2,443,970.9429
		ST	52363+57.78	124.00'	S 0°46'34" W	1,145,231.3905	2,443,968.0200
CURVE 414A_5	TOTAL DELTA = 4°13'21" LT DELTA = 3°39'20" LT DEGREE (chord) = 0°54'52" R = 6,265.52' L = 399.73' T = 199.94' Ls-in = 62.0', Se=1" - DS = 50 MPH Ls-out = 62.0', Se=1" - DS = 50 MPH	TS	52379+37.21	1,579.43'	S 0°46'34" W	1,143,652.1077	2,443,946.6238
		SC	52379+99.21	62.00'	S 0°29'34" W	1,143,590.1122	2,443,945.8862
		PISCS	52381+99.18			1,143,390.1580	2,443,943.0749
		PICUR	52381+99.15			1,143,390.1835	2,443,944.1668
		CS	52383+98.94	399.73'	S 3°09'46" E	1,143,190.5519	2,443,955.1977
CURVE 414B_5	TOTAL DELTA = 4°13'21" LT DELTA = 3°39'33" LT DEGREE (chord) = 0°54'31" R = 6,305.52' L = 402.68' T = 201.41' Ls-in = 62.0', Se=1" - DS = 50 MPH Ls-out = 62.0', Se=1" - DS = 50 MPH	TS	52389+60.94	500.00'	S 3°26'46" E	1,142,629.5621	2,443,988.8782
		SC	52390+22.94	62.00'	S 3°09'52" E	1,142,567.6683	2,443,992.5037
		PISCS	52392+24.39			1,142,366.5902	2,444,004.7145
		PICUR	52392+24.35			1,142,366.5648	2,444,003.6223
		CS	52394+25.62	402.68'	S 0°29'40" W	1,142,165.1617	2,444,001.8839
CURVE 415_5	TOTAL DELTA = 37°50'24" RT DELTA = 37°24'51" RT DEGREE (chord) = 0°41'14" R = 8,338.78' L = 5,445.19' T = 2,823.67' Ls-in = 62.0', Se=1" - DS = 50 MPH Ls-out = 62.0', Se=1" - DS = 50 MPH	TS	52443+41.61	4,853.99'	S 0°46'34" W	1,137,249.6214	2,443,935.3895
		SC	52444+03.61	62.00'	S 0°59'21" W	1,137,187.6283	2,443,934.4728
		PISCS	52472+30.88			1,134,360.6150	2,443,896.2491
		PICUR	52472+27.28			1,134,364.3824	2,443,885.7252
		CS	52498+48.80	5,445.19'	S 38°24'12" W	1,132,151.5952	2,442,131.6822
CURVE 416_5	TOTAL DELTA = 22°51'20" LT DELTA = 20°20'42" LT DEGREE (chord) = 2°01'29" R = 2,829.93' L = 1,004.82' T = 507.78' Ls-in = 124.0', Se=2" - DS = 50 MPH Ls-out = 124.0', Se=2" - DS = 50 MPH	TS	52511+86.69	1,275.89'	S 38°36'59" W	1,131,106.1988	2,441,296.7635
		SC	52513+10.69	124.00'	S 37°59'19" W	1,131,008.7518	2,441,220.0860
		PISCS	52518+20.77			1,130,610.7615	2,440,901.0298
		PICUR	52518+18.47			1,130,607.8993	2,440,906.6018
		CS	52523+15.50	1,004.81'	S 16°23'19" W	1,130,119.6026	2,440,763.3488
ST	52524+39.50	124.00'	S 15°45'39" W	1,130,000.5162	2,440,728.7976		
END	END	END	52535+07.22	1,067.72'	S 15°45'39" W	1,128,972.9399	2,440,438.7802

NSRR MAIN 2 IS SET 15' LEFT OF NSRR MAIN 1

FINAL
DESIGNED GCN 9/6/13
DRAWN BLC 9/27/13
REVIEWED GCN 2/25/14

FILE NAME = D609L0179B-sh1-ATB-01.dgn	USER NAME = pop00275	DESIGNED - GCN	REVISED -
Table2	PLOT SCALE = 408.0000' / in.	DRAWN - BLC	REVISED -
	PLOT DATE = 03/19/2014	CHECKED - GCN	REVISED -
		DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ALIGNMENT, TIES, AND BENCHMARKS

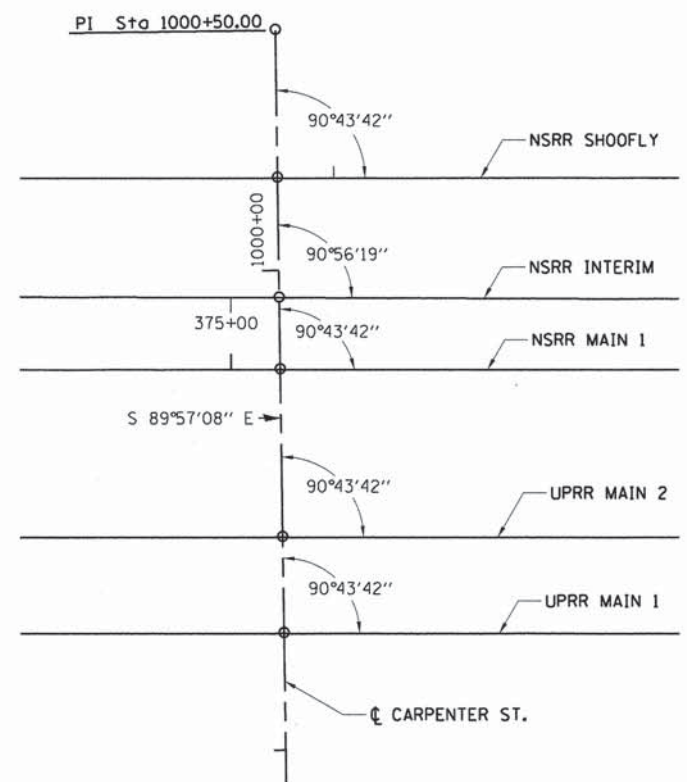
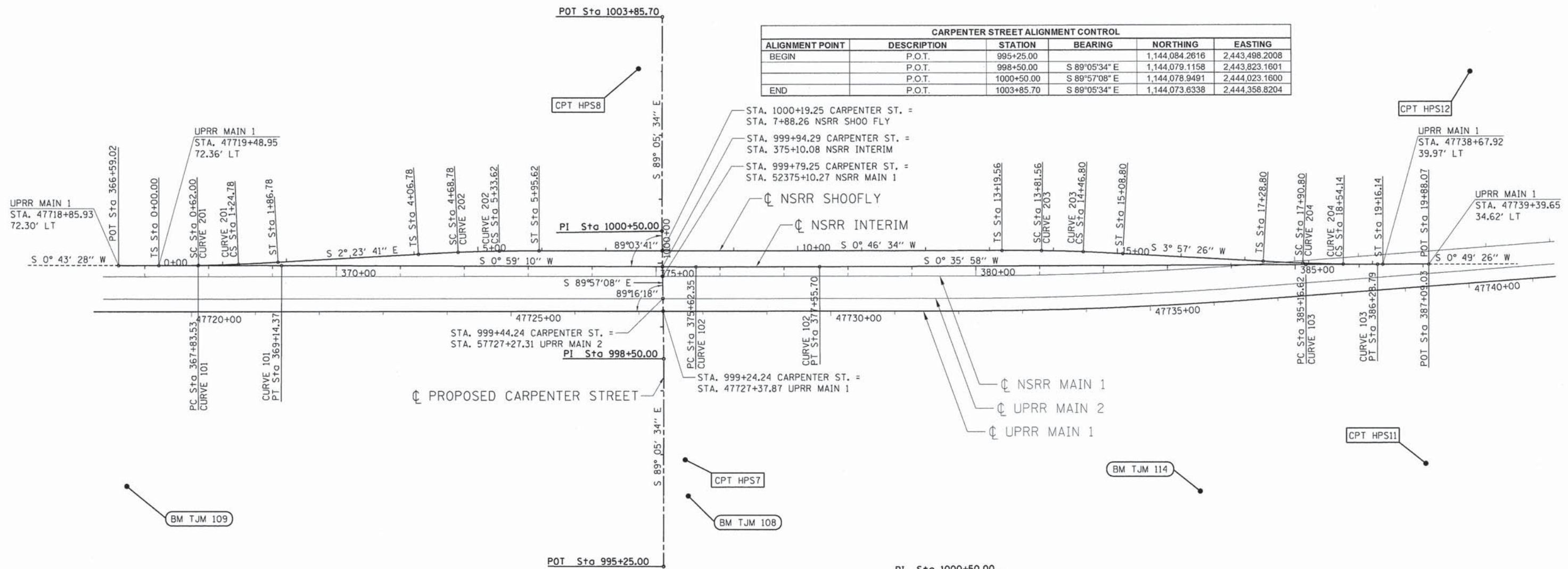
F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 39
CONTRACT NO. 09L0179B			93617	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 6 OF 6 SHEETS STA. TO STA.



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CARPENTER STREET ALIGNMENT CONTROL					
ALIGNMENT POINT	DESCRIPTION	STATION	BEARING	NORTHING	EASTING
BEGIN	P.O.T.	995+25.00		1,144,084.2616	2,443,498.2008
	P.O.T.	998+50.00	S 89°05'34" E	1,144,079.1158	2,443,823.1601
	P.O.T.	1000+50.00	S 89°57'08" E	1,144,078.9491	2,444,023.1600
END	P.O.T.	1003+85.70	S 89°05'34" E	1,144,073.6338	2,444,358.8204



NOTES:
 REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM
 WEST ZONE DATUM OF NAD 83 (2011)
 ORTHO HEIGHT: NAVD88 (GEOID 12A)



DESIGNED	CCN	9/6/13
DRAWN	DJP	9/27/13
REVIEWED	JLD	2/25/14

FILE NAME =	USER NAME = pap02275	DESIGNED - GCN	REVISED -
D609L01798-sh1-ATB-001.dgn		DRAWN - DJP	REVISED -
		CHECKED - JLD	REVISED -
		DATE - 2/25/14	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 ALIGNMENT, TIES, AND BENCHMARKS - CARPENTER STREET**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	40
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



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NSRR SHOOFLY TRACK ALIGNMENT CONTROL							
ALIGNMENT ELEMENT	DESCRIPTION	ALIGNMENT POINT	STATION	DISTANCE	BEARING	NORTHING	EASTING
BEGIN	BEGIN	BEGIN	0+00.00		S 0°43'28" W	1,144,866.9229	2,443,980.4390
CURVE 201	TOTAL DELTA = 3°07'10" LT	TS	0+00.00	0.00'	S 0°43'28" W	1,144,866.9229	2,443,980.4390
	DELTA = 1°34'10" LT	SC	0+62.00	62.00'	S 0°03'01" E	1,144,804.9255	2,443,979.9345
	DEGREE (chord) = 2°30'00"	PI SCS	0+93.41			1,144,773.5217	2,443,979.2578
	R = 2,292.01'	PI CUR	0+93.39			1,144,773.5319	2,443,979.9621
	L = 62.78'						
CURVE 202	TOTAL DELTA = 3°10'16" RT	TS	4+06.78	220.00'	S 2°23'41" E	1,144,460.3861	2,443,992.3535
	DELTA = 1°37'16" RT	SC	4+68.78	62.00'	S 1°37'11" E	1,144,398.4297	2,443,994.6648
	DEGREE (chord) = 2°30'00"	PI SCS	5+01.22			1,144,366.0260	2,443,996.2997
	R = 2,292.01'	PI CUR	5+01.21			1,144,366.0159	2,443,995.5814
	L = 64.84'						
CURVE 203	TOTAL DELTA = 3°10'52" RT	TS	13+19.56	723.94'	S 0°46'34" W	1,143,547.7250	2,443,985.2133
	DELTA = 1°37'52" RT	SC	13+81.56	62.00'	S 1°33'04" W	1,143,485.7356	2,443,984.0940
	DEGREE (chord) = 2°30'00"	PI SCS	14+14.20			1,143,453.0904	2,443,983.9312
	R = 2,292.01'	PI CUR	14+14.18			1,143,453.1202	2,443,983.2108
	L = 65.25'						
CURVE 204	TOTAL DELTA = 3°08'00" LT	TS	17+28.80	220.00'	S 3°57'26" W	1,143,139.1977	2,443,962.2173
	DELTA = 1°35'00" LT	SC	17+90.80	62.00'	S 3°10'56" W	1,143,077.3274	2,443,958.2175
	DEGREE (chord) = 2°30'00"	PI SCS	18+22.49			1,143,045.7320	2,443,955.7517
	R = 2,292.01'	PI CUR	18+22.47			1,143,045.7024	2,443,956.4592
	L = 63.34'						
END	END	END	19+88.07	71.93'	S 0°49'26" W	1,142,880.1287	2,443,953.3703

NSRR INTERIM TRACK ALIGNMENT CONTROL							
ALIGNMENT ELEMENT	DESCRIPTION	ALIGNMENT POINT	STATION	DISTANCE	BEARING	NORTHING	EASTING
BEGIN	BEGIN	BEGIN	366+59.02		S 0°43'28" W	1,144,929.9393	2,443,981.2359
CURVE 101	DELTA = 0°15'42" RT	PC	367+83.53	124.51'	S 0°43'28" W	1,144,805.4366	2,443,979.6614
	DEGREE (chord) = 0°12'00"						
	R = 28,648.00'	PI CUR	368+48.95			1,144,740.0204	2,443,978.8341
	L = 130.84'						
	T = 65.42'						
CURVE 102	TOTAL DELTA = 0°23'12" LT	TS	375+62.35	647.98'	S 0°59'10" W	1,144,674.6086	2,443,977.7081
	DELTA = 0°13'28" RT	SC	376+59.02		S 0°59'10" W	1,144,026.7295	2,443,966.5550
	DEGREE (chord) = 0°12'00"	PI CUR	376+59.02			1,143,930.0698	2,443,964.8910
	R = 28,648.00'						
	L = 193.35'						
CURVE 103	TOTAL DELTA = 0°13'28" RT	TS	377+55.70	193.35'	S 0°35'58" W	1,143,833.4011	2,443,963.8794
	DELTA = 0°13'28" RT	SC	385+16.62	760.92'	S 0°35'58" W	1,143,072.5157	2,443,955.9172
	DEGREE (chord) = 0°12'00"	PI CUR	385+72.71			1,143,016.4377	2,443,955.3304
	R = 28,648.00'						
	L = 112.16'						
END	END	END	387+09.03	80.24'	S 0°49'26" W	1,142,880.1287	2,443,953.3703

REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM
WEST ZONE DATUM OF NAD 83 (2011)
ORTHO HEIGHT: NAVD88 (GEOID 12A)

FINAL
DESIGNED GCN 9/16/13
DRAWN DJP 9/27/13
REVIEWED JLD 2/25/14

FILE NAME = D:\09L01798-ht-ATB-001.dgn	USER NAME = pop00275	DESIGNED - GCN	REVISED -
		DRAWN - DJP	REVISED -
		CHECKED - JLD	REVISED -
Sheet 2	PLOT DATE = 02/26/2014	DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

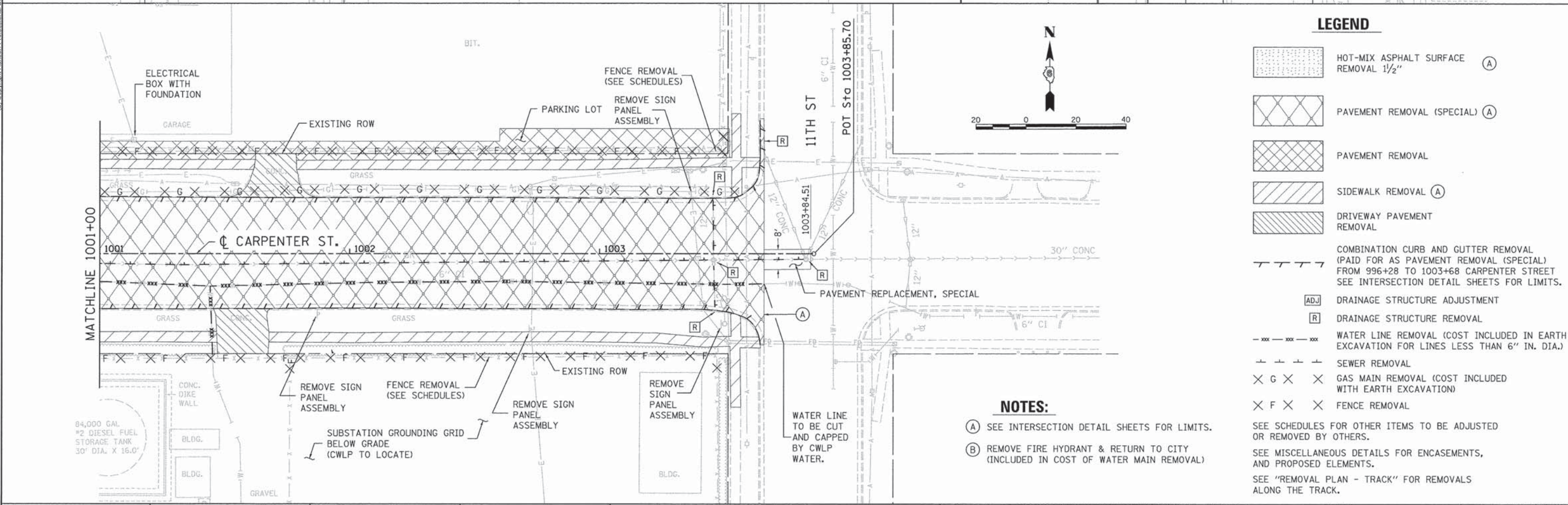
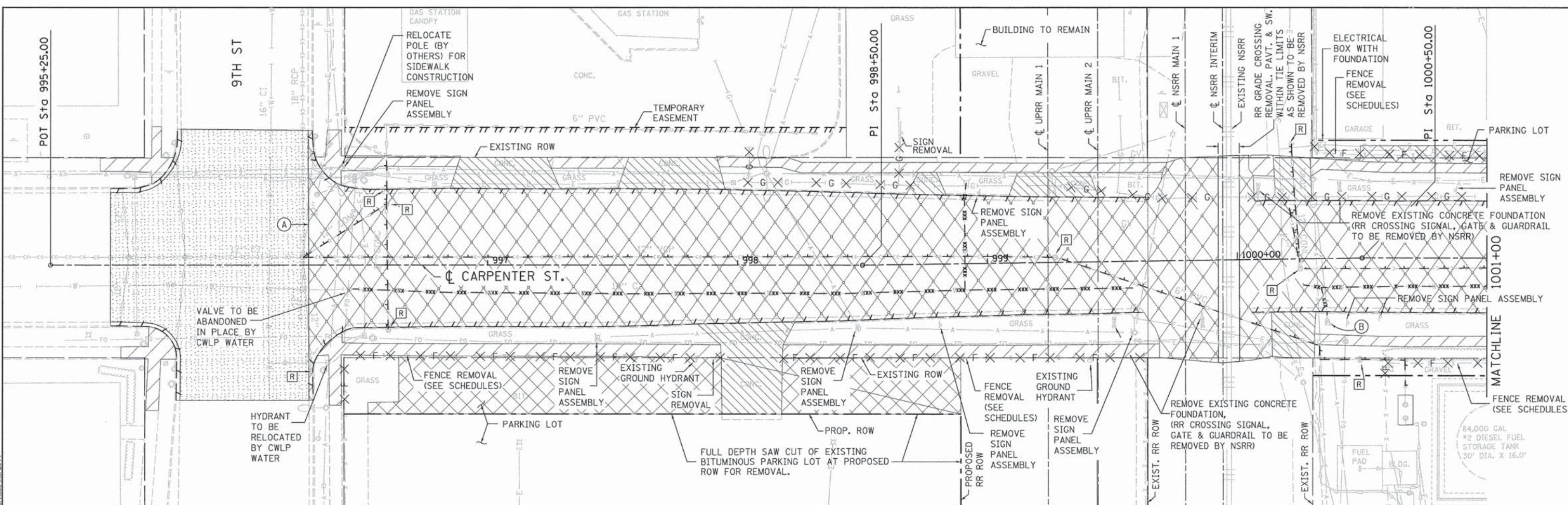
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ALIGNMENT, TIES, AND BENCHMARKS - CARPENTER STREET

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 41
09L01798		CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.



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LEGEND

- HOT-MIX ASPHALT SURFACE REMOVAL 1/2" (A)
- PAVEMENT REMOVAL (SPECIAL) (A)
- PAVEMENT REMOVAL
- SIDEWALK REMOVAL (A)
- DRIVEWAY PAVEMENT REMOVAL
- COMBINATION CURB AND GUTTER REMOVAL (PAID FOR AS PAVEMENT REMOVAL (SPECIAL) FROM 996+28 TO 1003+68 CARPENTER STREET SEE INTERSECTION DETAIL SHEETS FOR LIMITS.)
- DRAINAGE STRUCTURE ADJUSTMENT (ADJ)
- DRAINAGE STRUCTURE REMOVAL (R)
- WATER LINE REMOVAL (COST INCLUDED IN EARTH EXCAVATION FOR LINES LESS THAN 6" IN. DIA.)
- SEWER REMOVAL
- GAS MAIN REMOVAL (COST INCLUDED WITH EARTH EXCAVATION)
- FENCE REMOVAL

NOTES:

- (A) SEE INTERSECTION DETAIL SHEETS FOR LIMITS.
- (B) REMOVE FIRE HYDRANT & RETURN TO CITY (INCLUDED IN COST OF WATER MAIN REMOVAL)
- SEE SCHEDULES FOR OTHER ITEMS TO BE ADJUSTED OR REMOVED BY OTHERS.
- SEE MISCELLANEOUS DETAILS FOR ENCASEMENTS, AND PROPOSED ELEMENTS.
- SEE "REMOVAL PLAN - TRACK" FOR REMOVALS ALONG THE TRACK.

FINAL
 DESIGNED CLG 9/6/13
 DRAWN CLG 9/27/13
 REVIEWED JWM 1/25/14

FILE NAME = D609L0179B-shtrm-CAR-001.dgn	USER NAME = pop0275	DESIGNED - CLG	REVISIONS - -
PLOT SCALE = 20.0000' / 1" =	CHECKED - JWM	REVISIONS - -	REVISIONS - -
PLOT DATE = 03/07/2014	DATE - 2/25/14	REVISIONS - -	REVISIONS - -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

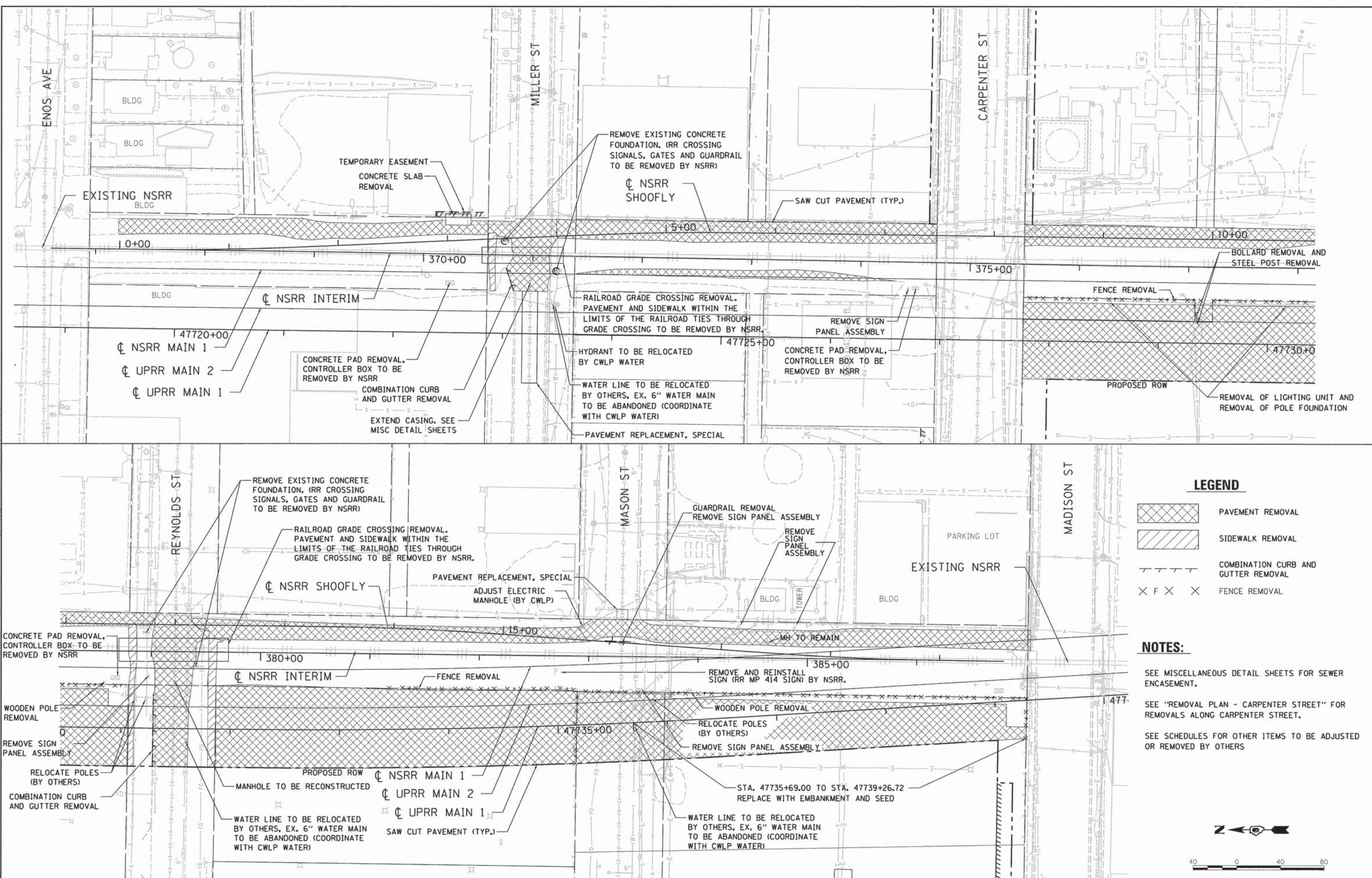
**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 REMOVAL PLAN - CARPENTER STREET**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	42
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.



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LEGEND

- PAVEMENT REMOVAL
- SIDEWALK REMOVAL
- COMBINATION CURB AND GUTTER REMOVAL
- FENCE REMOVAL

NOTES:

- SEE MISCELLANEOUS DETAIL SHEETS FOR SEWER ENCASEMENT.
- SEE "REMOVAL PLAN - CARPENTER STREET" FOR REMOVALS ALONG CARPENTER STREET.
- SEE SCHEDULES FOR OTHER ITEMS TO BE ADJUSTED OR REMOVED BY OTHERS



FINAL
DESIGNED GCN 9/6/13
DRAWN DJP 9/27/13
REVIEWED GCN 2/25/14

FILE NAME =
D609L0179B-sh-tram-Track-01.dgn

USER NAME = pop0275	DESIGNED - GCN	REVISED -
PLOT SCALE = 40,0000' / 1" =	DRAWN - DJP	REVISED -
PLOT DATE = 03/07/2014	CHECKED - GCN	REVISED -
	DATE - 2/25/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
REMOVAL PLAN - TRACK**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

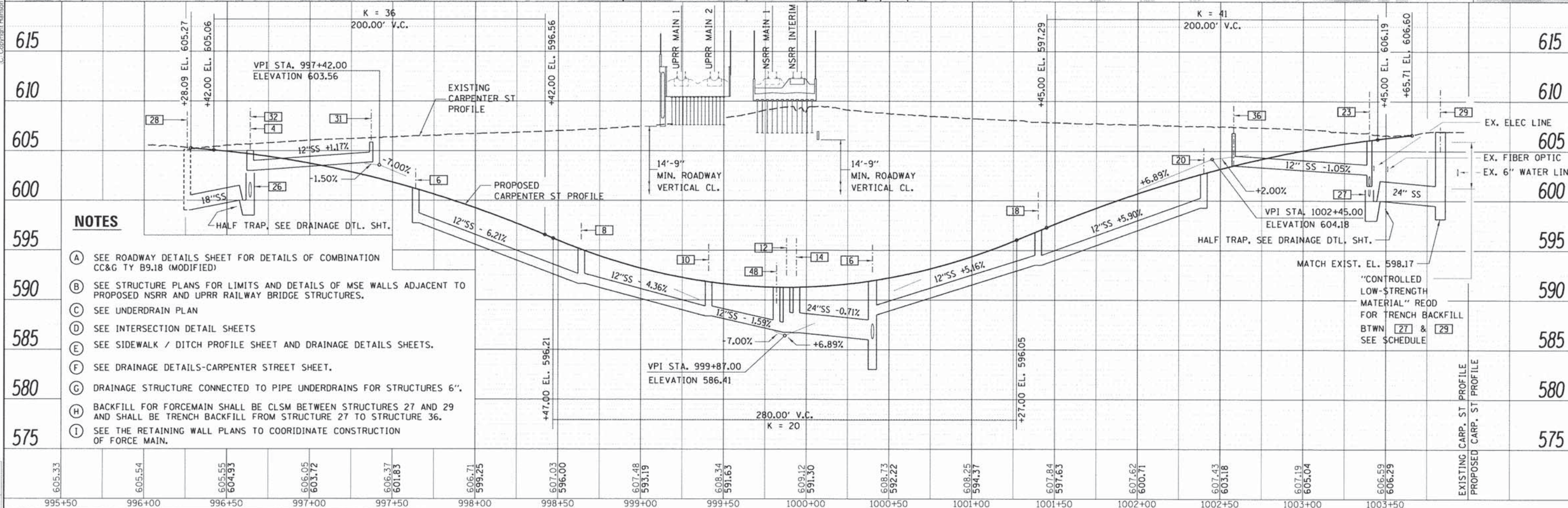
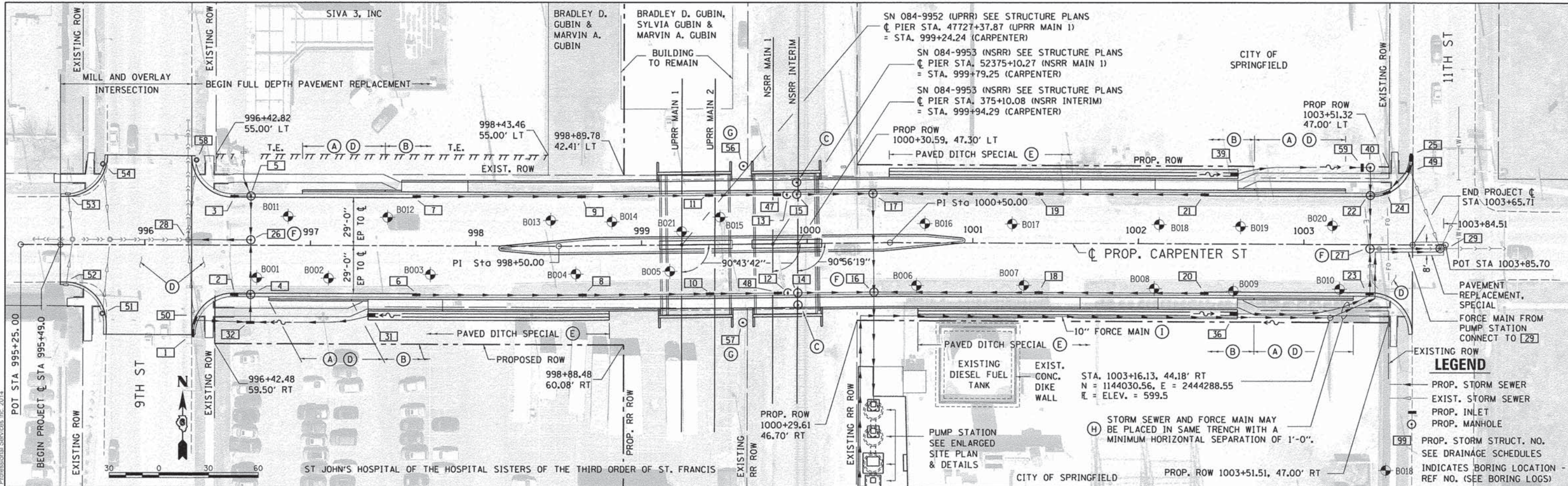
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	43
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				

DATE: _____
 BY: _____
 PLAN NO.: _____
 SURVEYED: _____
 ALIGNED: _____
 CHECKED: _____
 RT. OF WAY CHECKED: _____
 NO. OF WAY CHECKED: _____
 PLOTTED: _____
 FILE NAME: _____



DATE: _____
 BY: _____
 PROFILE NO.: _____
 SURVEYED: _____
 GRADES CHECKED: _____
 B.M. NOTED: _____
 STRUCTURE NOTATIONS: CPFD

DESIGNED: CLG 8/6/13
 DRAWN: CLG 9/27/13
 REVIEWED: JMW 2/25/14



NOTES

- (A) SEE ROADWAY DETAILS SHEET FOR DETAILS OF COMBINATION CC&G TY B9.18 (MODIFIED)
- (B) SEE STRUCTURE PLANS FOR LIMITS AND DETAILS OF MSE WALLS ADJACENT TO PROPOSED NSRR AND UPRR RAILWAY BRIDGE STRUCTURES.
- (C) SEE UNDERDRAIN PLAN
- (D) SEE INTERSECTION DETAIL SHEETS
- (E) SEE SIDEWALK / DITCH PROFILE SHEET AND DRAINAGE DETAILS SHEETS.
- (F) SEE DRAINAGE DETAILS-CARPENTER STREET SHEET.
- (G) DRAINAGE STRUCTURE CONNECTED TO PIPE UNDERDRAINS FOR STRUCTURES 6".
- (H) BACKFILL FOR FORCEMAIN SHALL BE CLSM BETWEEN STRUCTURES 27 AND 29 AND SHALL BE TRENCH BACKFILL FROM STRUCTURE 27 TO STRUCTURE 36.
- (I) SEE THE RETAINING WALL PLANS TO COORDINATE CONSTRUCTION OF FORCE MAIN.

FILE NAME: D:\09L0179B-shs-plnprf-CAR-01.dgn	USER NAME: pop00275	DESIGNED: CLG	REVISED: -
Carpenter		DRAWN: CLG	REVISED: -
		CHECKED: JMW	REVISED: -
		DATE: 2/25/14	REVISED: -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 PLAN AND PROFILE - CARPENTER STREET

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 44
09L0179B		CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				

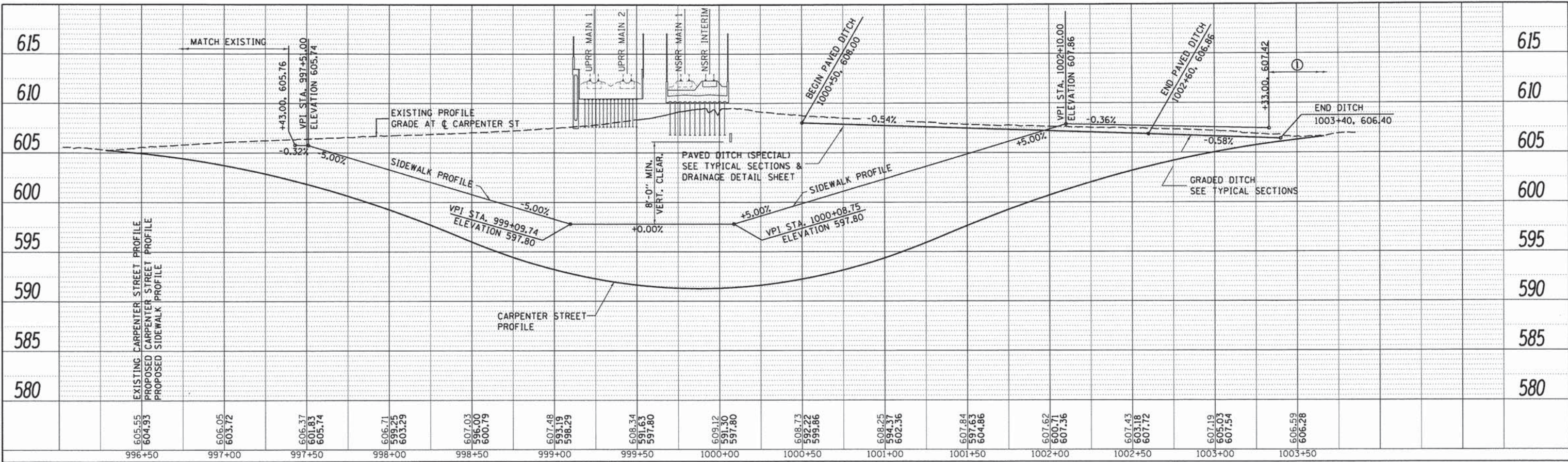
SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

DATE	
BY	
PLAN	
SUBMITTED	
PLOTTED	
ALLOTTED	
NO. 1	
NO. 2	
NO. 3	
NO. 4	
NO. 5	
NO. 6	
NO. 7	
NO. 8	
NO. 9	
NO. 10	



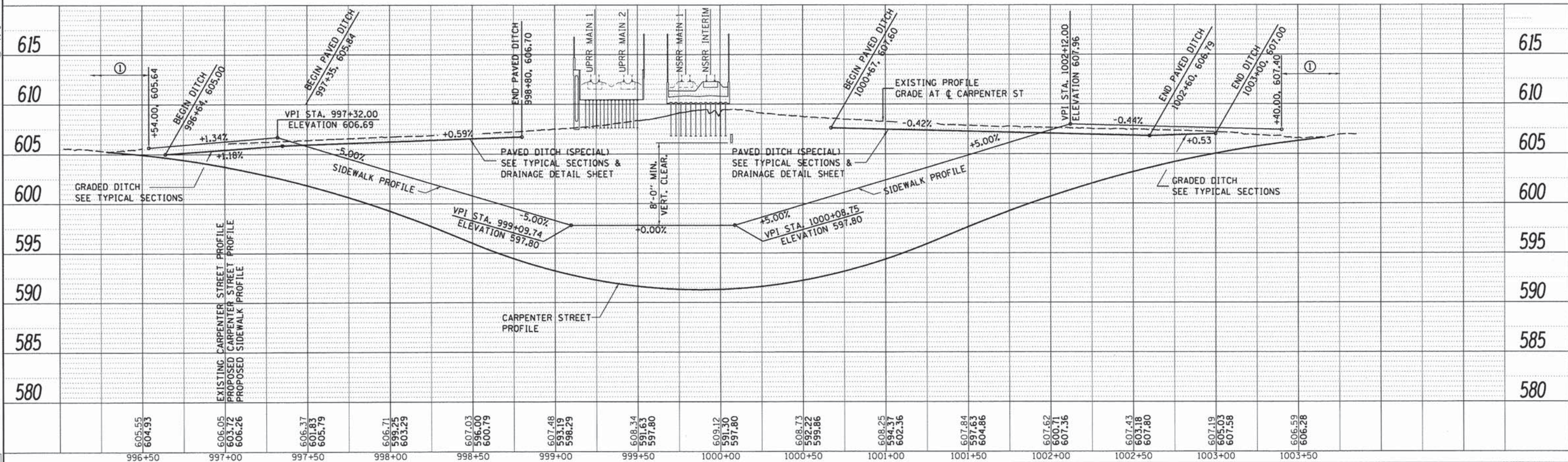
DATE	
BY	
PROFILE	
SUBMITTED	
PLOTTED	
ALLOTTED	
NO. 1	
NO. 2	
NO. 3	
NO. 4	
NO. 5	
NO. 6	
NO. 7	
NO. 8	
NO. 9	
NO. 10	

DESIGNED	JWM	9/6/13
DRAWN	DJP	9/27/13
REVIEWED	JWM	2/25/14



① FOR SIDEWALK ELEVATIONS, SEE INTERSECTION DETAIL SHEET

LEFT SIDEWALK /DITCH PROFILE



① FOR SIDEWALK ELEVATIONS, SEE INTERSECTION DETAIL SHEET

RIGHT SIDEWALK /DITCH PROFILE

FILE NAME =	USER NAME =	DESIGNED -	REVISED -	<p align="center">STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>	<p align="center">SPRINGFIELD RAIL IMPROVEMENTS PROJECT SPRINGFIELD, SANGAMON COUNTY, ILLINOIS SIDEWALK /DITCH PROFILES - CARPENTER STREET</p>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
D609L01798-sht-profile-CAR-001.dgn	pop02275	DRAWN -	REVISED -			7975	13-00475-00-BR	SANGAMON	196	45	
PLOT SCALE = 30.0000' / 1"	DATE = 2/25/14	CHECKED -	REVISED -			CONTRACT NO. 9 3 6 1 7					
PLOT DATE = 02/25/2014		DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

PLAN	SURVEYED	BY	DATE
	ALIGNED		
	CHECKED		
	RT. OF WAY		
	CHECKED		
	NO.		

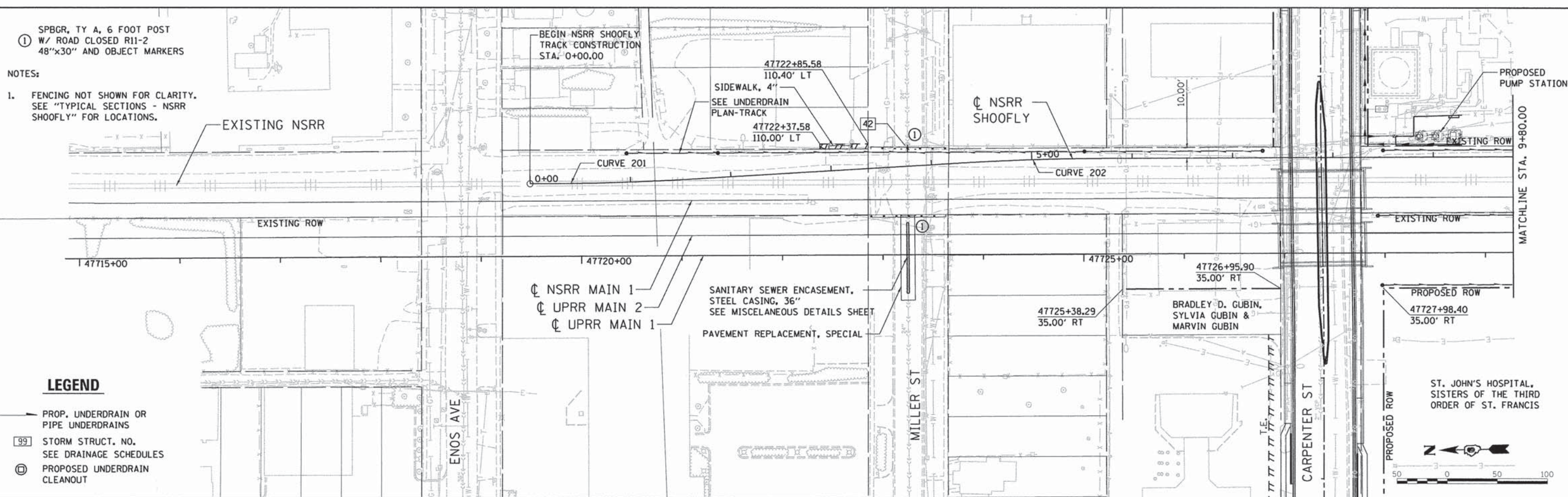


PROFILE	SURVEYED	BY	DATE
	GRADES		
	CHECKED		
	B.M. NOTED		
	STRUCTURE		
	NOTATYS		
	CHWD		
	NO.		

DESIGNED	GCN	9/6/13
DRAWN	DJP	9/27/13
REVIEWED	GCN	2/25/14

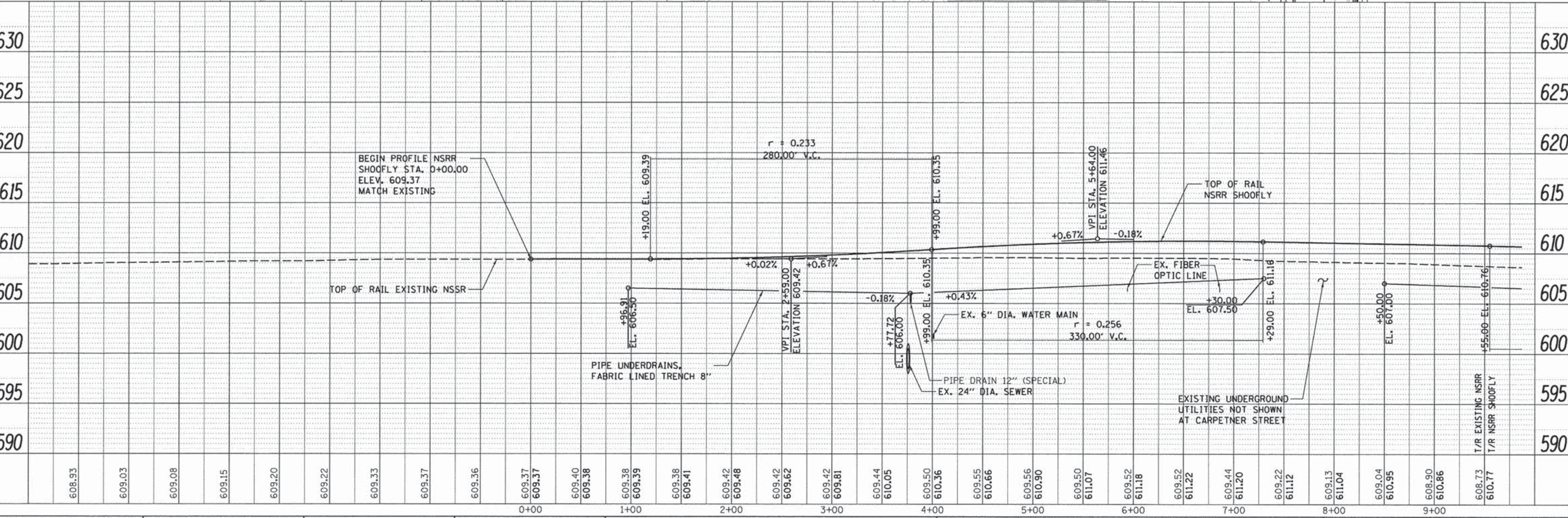
① SPBGR, TY A, 6 FOOT POST
W/ ROAD CLOSED R11-2
48"x30" AND OBJECT MARKERS

NOTES:
1. FENCING NOT SHOWN FOR CLARITY.
SEE "TYPICAL SECTIONS - NSRR
SHOOFLY" FOR LOCATIONS.



LEGEND

- PROP. UNDERDRAIN OR PIPE UNDERDRAINS
- 99 STORM STRUCT. NO. SEE DRAINAGE SCHEDULES
- ⊕ PROPOSED UNDERDRAIN CLEANOUT



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USER NAME = pop00275

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DRAWN - DJP
CHECKED - GCN
PLOT SCALE = 50.0000' / 1" =
PLOT DATE = 03/07/2014

DESIGNED - GCN
DRAWN - DJP
CHECKED - GCN
DATE - 2/25/14

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
PLAN AND PROFILE - NSRR SHOOFLY**

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

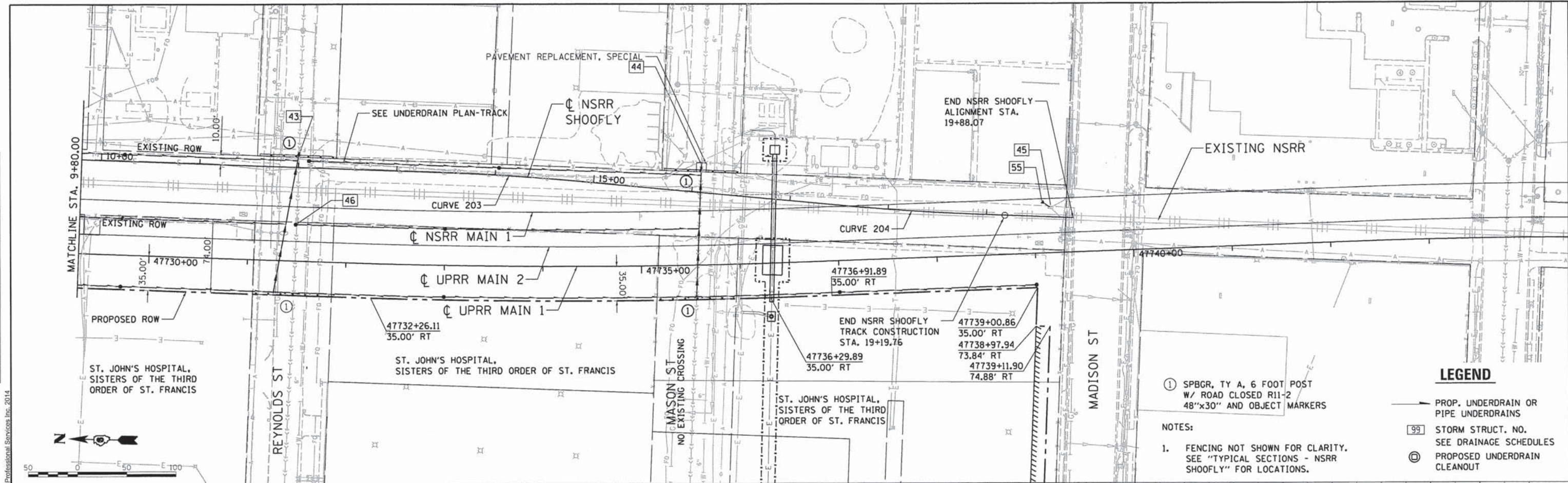
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7975	13-00475-00-BR	SANGAMON	196	46
09L0179B		CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				

PLANNED	DATE
SURVEYED	DATE
ALIGNED	DATE
ASSEMBLED	DATE
CHECKED	DATE
RT. OF WAY CHECKED	DATE
NO.	DATE
NO.	DATE



PROF. FILE	DATE
SURVEYED	DATE
PLOTTED	DATE
CHECKED	DATE
NO.	DATE
NO.	DATE

DESIGNED	GCN	9/6/13
DRAWN	DJP	9/27/13
REVIEWED	GCN	2/25/14



LEGEND

① SPBGR, TY A, 6 FOOT POST W/ ROAD CLOSED R11-2 48"x30" AND OBJECT MARKERS

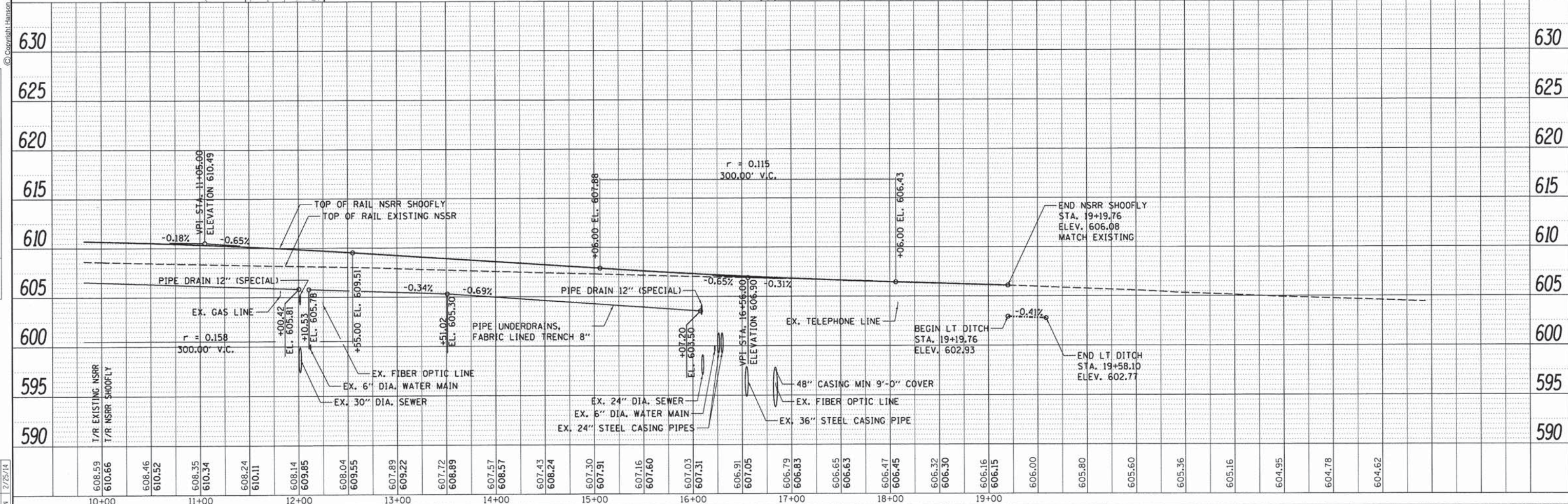
→ PROP. UNDERDRAIN OR PIPE UNDERDRAINS

99 STORM STRUCT. NO. SEE DRAINAGE SCHEDULES

⊙ PROPOSED UNDERDRAIN CLEANOUT

NOTES:

1. FENCING NOT SHOWN FOR CLARITY. SEE "TYPICAL SECTIONS - NSRR SHOOFLY" FOR LOCATIONS.



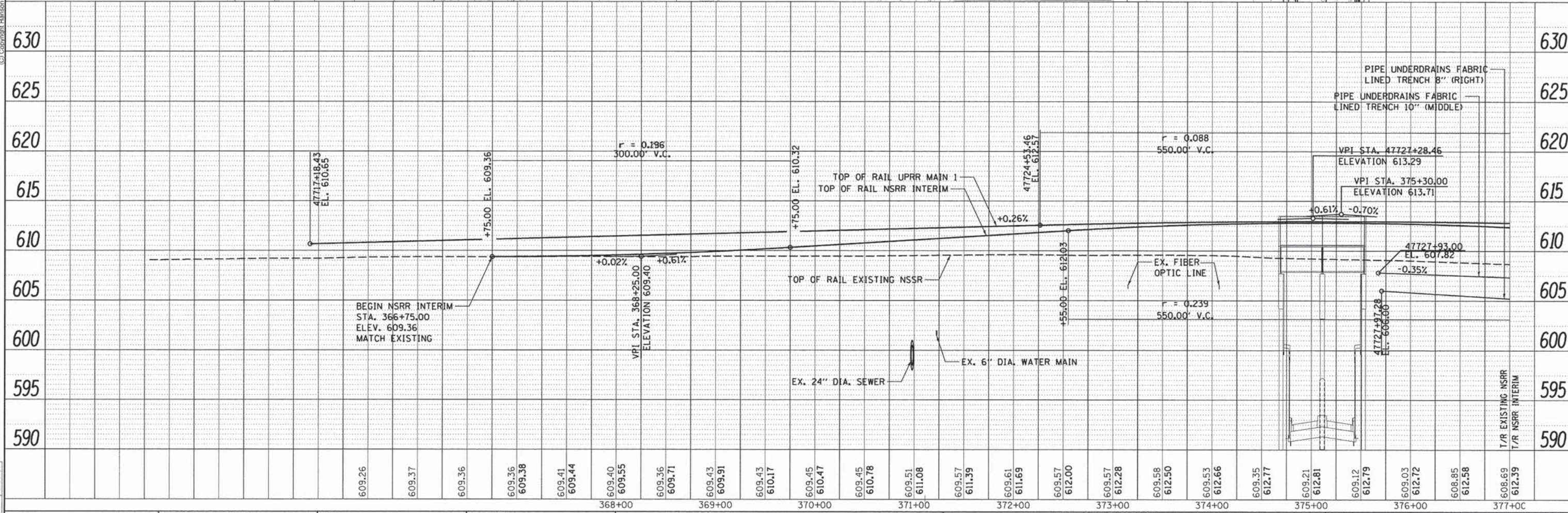
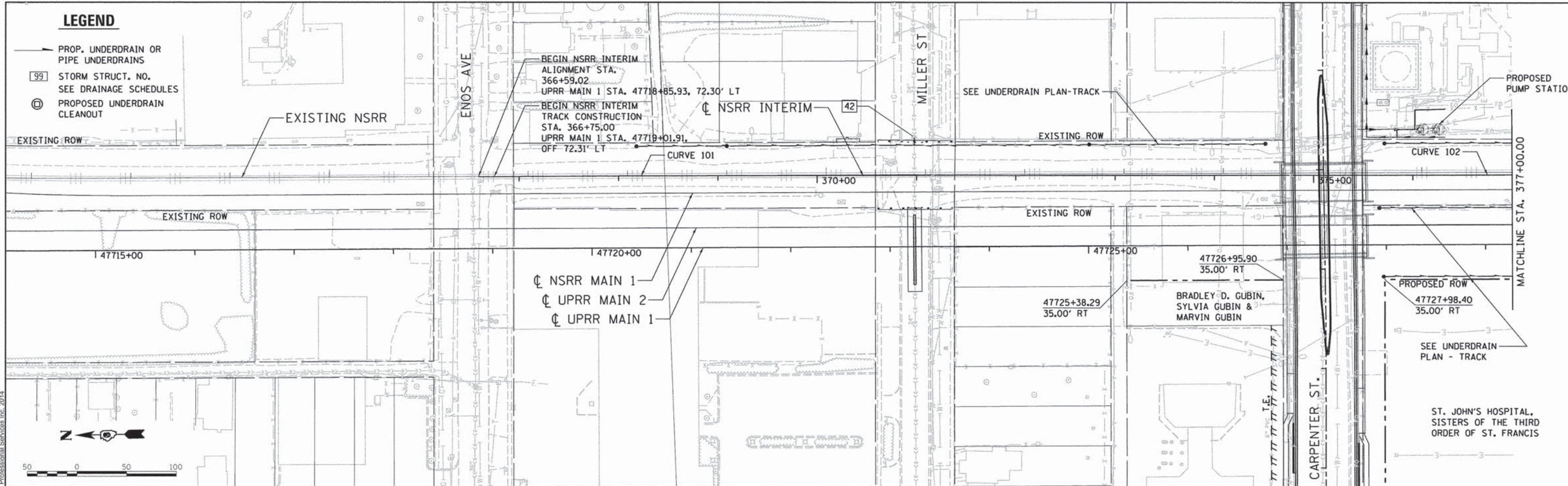
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D609L0179B-sht-plnpr-f-TRACK-002.dgn	PLOT SCALE = 50.0000' / in.	DRAWN - DJP	REVISED -			7975	13-00475-00-BR	SANGAMON	196	47
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	DATE = 2/25/14	REVIEWED -	REVISED -			SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.		ILLINOIS FED. AID PROJECT		

PLAN	SURVEYED	DATE
	ALIGNED	
	CHECKED	
	BY	
	NO. OF WAY CHECKED	
	NO.	
	NO.	



PROFILE	SURVEYED	DATE
	GRADES CHECKED	
	B.M. NOTED	
	STRUCTURE NOTATIONS CHKD	
	NO.	
	NO.	

FINAL	GCN	9/6/13
	DJP	9/27/13
	GCN	2/25/14



FILE NAME = D:\09L0179B-sht-plnprf-TRACK-003.dgn
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 DESIGNED - GCN
 DRAWN - DJP
 CHECKED - GCN
 DATE - 2/25/14

DESIGNED	GCN	9/6/13
DRAWN	DJP	9/27/13
CHECKED	GCN	2/25/14
DATE		2/25/14

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 PLAN AND PROFILE - NSRR INTERIM**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	09L0179B		CONTRACT NO.	93617
			ILLINOIS FED. AID PROJECT	

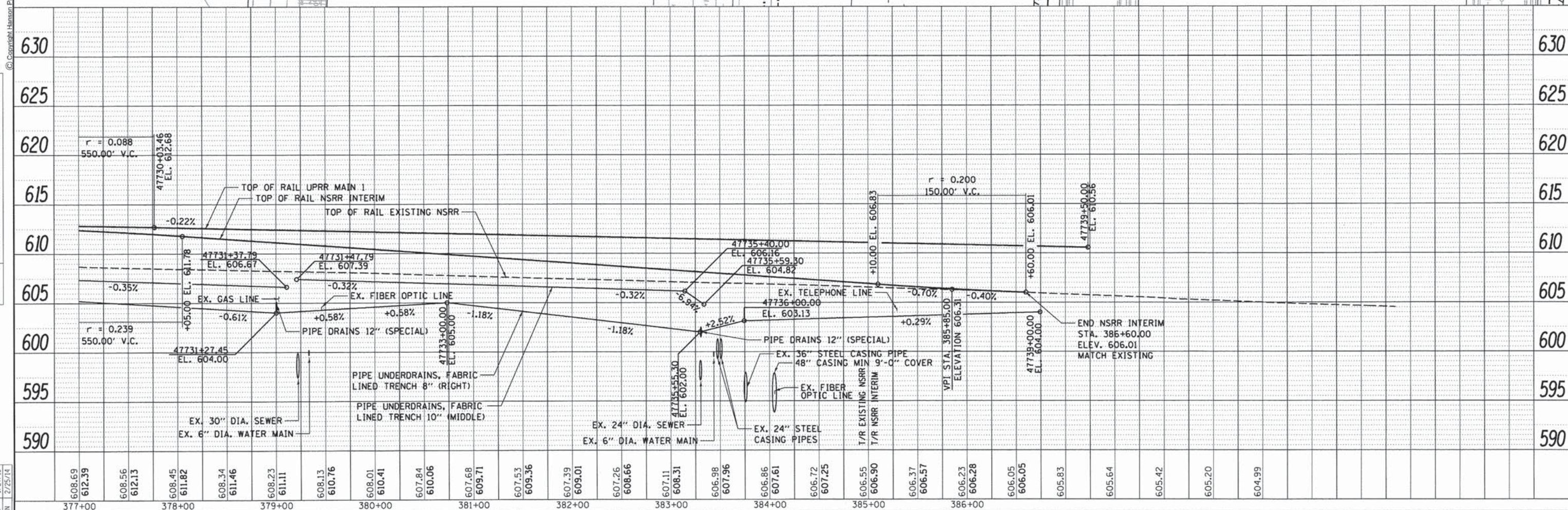
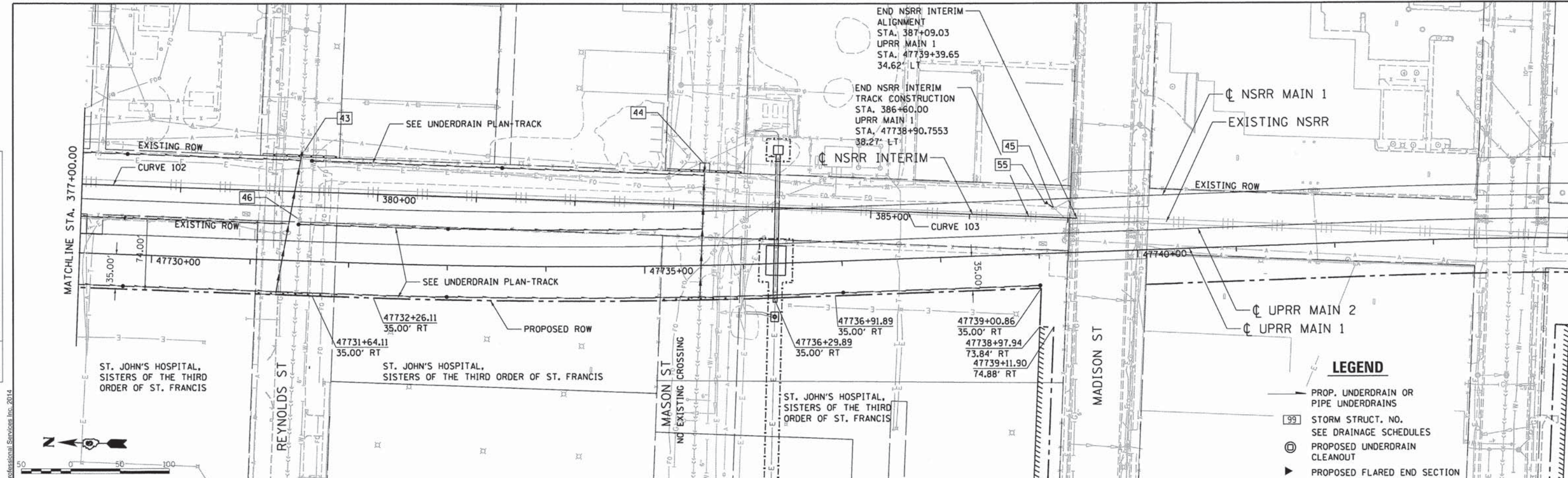
SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

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BY	
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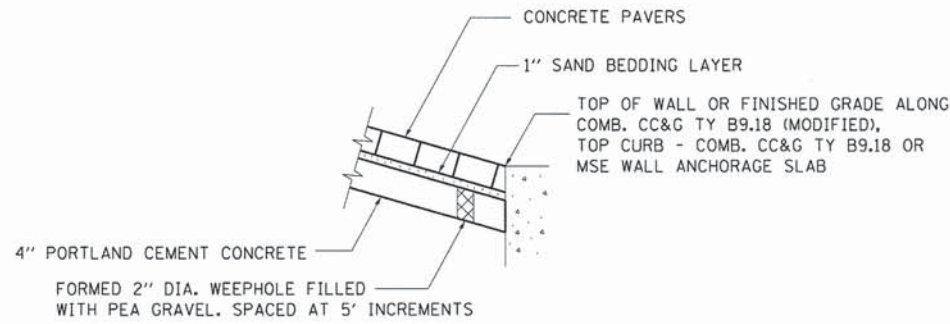


DATE	
BY	
PROF. FILE	
NO.	

DATE	9/6/13
DESIGNED	GCN
DRAWN	DJP
REVIEWED	GCN
DATE	9/27/13
DESIGNED	GCN
DRAWN	DJP
REVIEWED	GCN
DATE	2/25/14

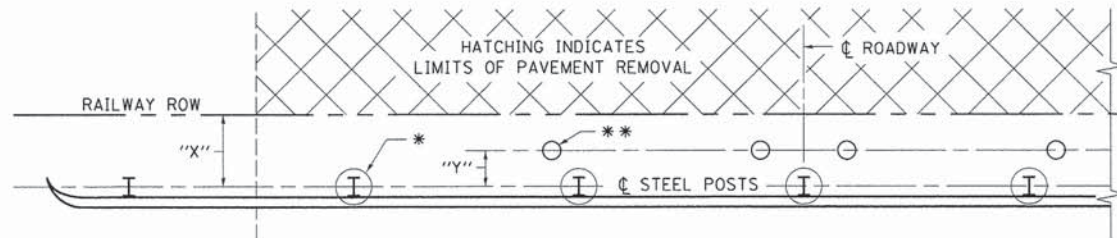


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DATE - 2/25/14		REVIEWED -	REVISED -			CONTRACT NO. 93617 ILLINOIS FED. AID PROJECT					



CONCRETE PAVER SIDEWALK

PT	LOCATION	TOP OF WALL ELEV	FINISH GRADE ELEV
NORTHWEST			
A	996+95.00 LT	604.49	604.49
B	997+35.00 LT	604.44	604.44
C	997+45.00 LT	605.61	604.51
SOUTHWEST			
A	996+75.00 RT	605.03	605.03
B	997+10.00 RT	605.13	605.13
C	997+25.00 RT	606.30	605.13
NORTHEAST			
A	1003+25.00 LT	606.35	606.35
B	1002+85.00 LT	606.33	606.33
C	1002+70.00 LT	607.51	606.33
SOUTHEAST			
A	1003+30.00 RT	606.47	606.47
B	1002+85.00 RT	606.38	606.38
C	1002+70.00 RT	607.55	606.38



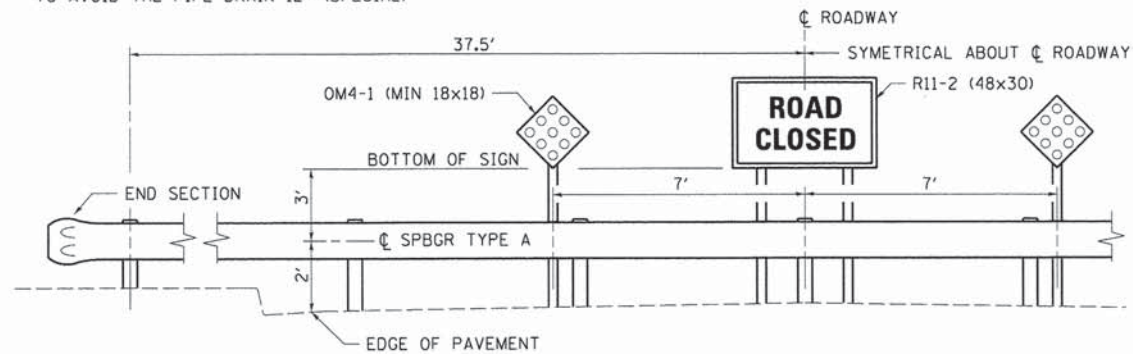
TYPICAL ROAD CLOSED AT RAILROAD ROW PLAN

GUARDRAIL AND SIGN OFFSET			
STREET	LOCATION	"X"	"Y"
MILLER	WEST RR ROW	2'	1'
MILLER	EAST RR ROW	2'	1'
REYNOLDS	WEST RR ROW	0'	3'
REYNOLDS	EAST RR ROW	2'	1'
MASON	WEST RR ROW	0'	3'
MASON	EAST RR ROW	2'	1'

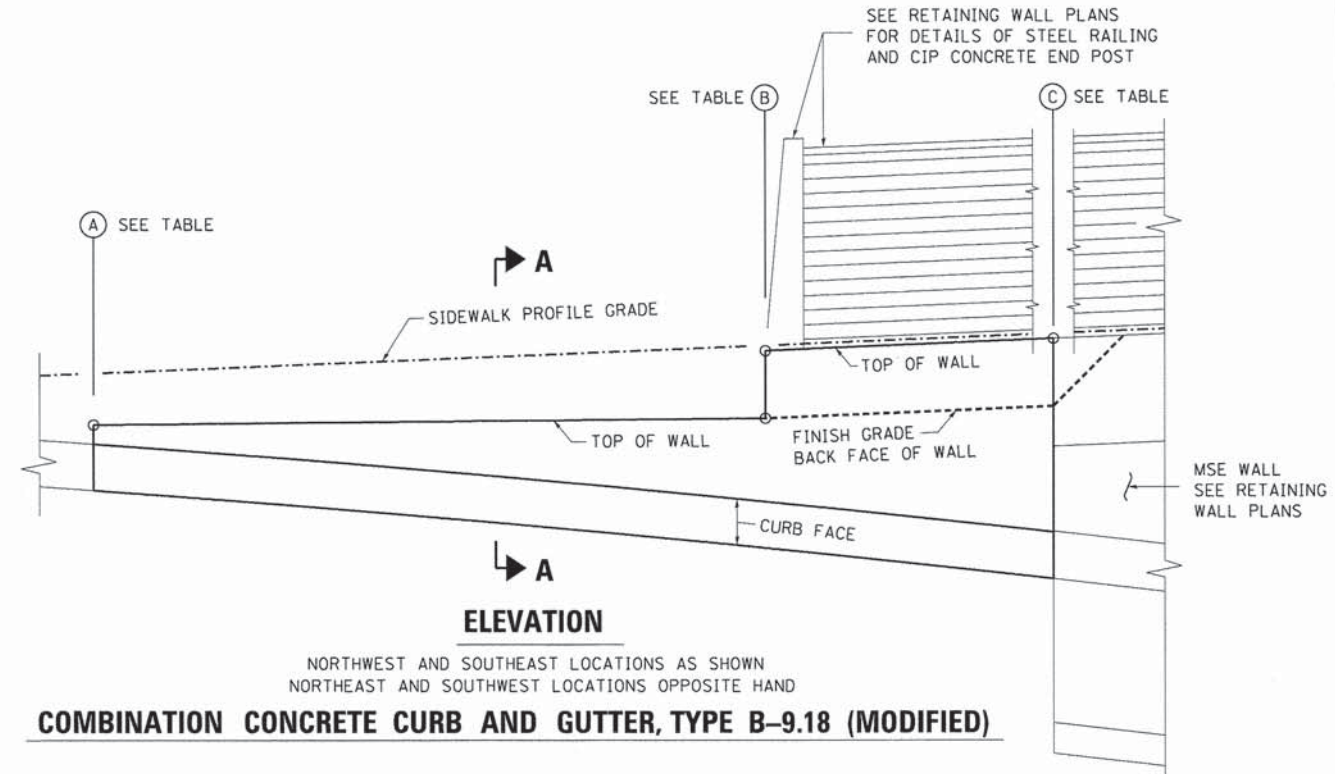
* CORE 12" DIAMETER HOLE IN EXISTING PAVEMENT FOR GUARDRAIL POSTS. BACKFILL WITH AGGREGATE AND BRING FLUSH WITH EXISTING PAVT WITH 2" THICK HMA MIXTURE. COST INCLUDED IN CONTRACT PRICE FOR SPBGR TYPE A.

** CORE 6" DIAMETER HOLE IN EXISTING PAVEMENT FOR SIGN POSTS. BACKFILL WITH AGGREGATE AND BRING FLUSH WITH EXISTING PAVT WITH 2" THICK HMA MIXTURE. COST INCLUDED IN COST OF SIGN PANEL ASSEMBLY.

NOTE: ADJUST POST SPACING OF ROAD CLOSED SIGN AT THE MASON WEST RR ROW LOCATON TO AVOID THE PIPE DRAIN 12" (SPECIAL)



TYPICAL ROAD CLOSED BARRIER AT RAILROAD ROW ELEVATION VIEW

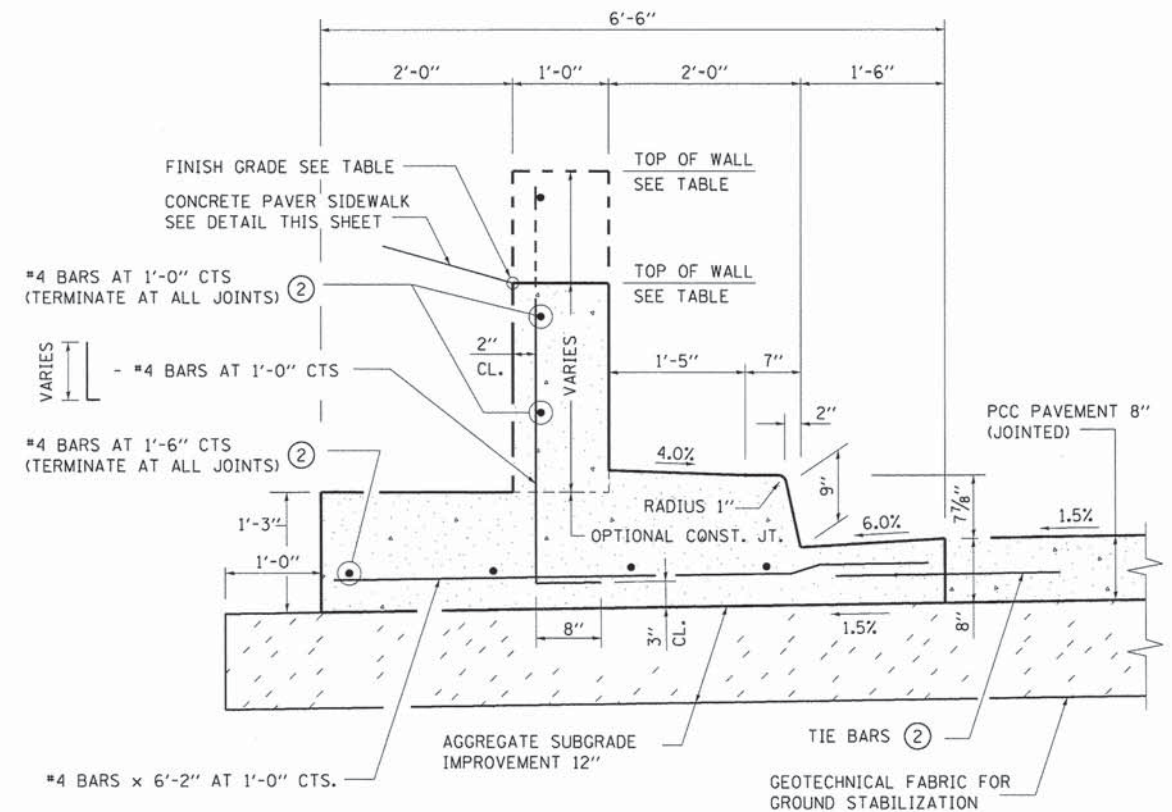


ELEVATION

NORTHWEST AND SOUTHWEST LOCATIONS AS SHOWN
NORTHEAST AND SOUTHWEST LOCATIONS OPPOSITE HAND

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.18 (MODIFIED)

- COST OF REINFORCEMENT INCLUDED IN CONTRACT UNIT PRICE PER LINEAL FOOT FOR "COMBINATION CONCRETE CURB AND GUTTER TYPE B-9.18 MODIFIED".
- JOINTS, TIE BARS AND DOWEL BARS SHALL BE IN ACCORDANCE WITH STANDARD 606001 EXCEPT THAT 7 (EQUALLY SPACED) 1/2" Ø DOWEL BARS SHALL BE PROVIDED AT ALL JOINTS.



SECTION A-A

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-9.18 (MODIFIED)

DESIGNED	CLC	9/6/13
DRAWN	CLC	9/27/13
REVIEWED	JWM	2/25/14

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
DG09L0179B-sht-details-CAR-001.dgn	pop0275	CLG	
		DRAWN -	REVISED -
		CLG	
		CHECKED -	REVISED -
		JWM	
		DATE -	REVISED -
		2/25/14	

PLOT SCALE =	DATE
5.0000' / 1"	2/25/14

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ROADWAY DETAILS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	50
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.



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FINAL
DESIGNED - DJP 9/6/13
DRAWN - CLG 9/27/13
REVIEWED - JWM 2/25/14



LEGEND

- LIMITS OF CONSTRUCTION
- INDICATES TRAFFIC DIRECTION
- ROAD CLOSED
R11-2 48 X 30
- ROAD CLOSED AHEAD
W20-3(0)-36
- DETOUR AHEAD
W20-2(0)-36
- M4-10L M4-10R 48 X 18
- END DETOUR
M4-8A 24 X 18
- DETOUR
M4-9 30 X 24
- W16-5P 24x18
(BACK ARROW & BORDER WITH ORANGE HI-REFLECTIVITY FIELD)
- TYPE 3 BARRICADES
- NO LEFT TURN (R3-2) 24 X 24
- NO RIGHT TURN (R3-1) 24 X 24
- DEAD END
W14-1 30X30
SEE NOTE 4
- CUSTOM DETOUR SIGN 1
BLACK LETTERING AND BORDER
WITH ORANGE HI-REFLECTIVITY
FIELD 48 X 48
- STOP
R1-1 36 X 36

NOTES:

- 1) TRAFFIC CONTROL IS AN INTEGRAL PART OF THE CONTRACTOR'S MEANS AND METHODS FOR COMPLETING THE WORK. THE REQUIREMENTS SET FORTH HEREIN PRESENT THE MINIMUM REQUIREMENTS FOR THE CONTROL AND PROTECTION OF PEDESTRIAN AND VEHICULAR TRAFFIC. THE CONTRACTOR SHALL IMPLEMENT ALL ADDITIONAL MEASURES NECESSARY TO FULLY PROTECT PEDESTRIANS, VEHICLES AND THE CONTRACTOR'S WORK FORCE FROM THE CONTRACTOR'S WORK ACTIVITIES AND FROM PASSING TRAFFIC. FIELD MODIFICATION OF THE TRAFFIC CONTROL SCHEME DEPICTED IN THE TRAFFIC CONTROL PLANS SHALL BE APPROVED BY THE CITY TRAFFIC ENGINEER.
- 2) ALL WORK SHOWN ON THIS SHEET (EXCEPT STANDARD 701606, 701701 AND PERMANENT DEAD END SIGNS) AND INCLUDING ANY OTHER WORK REQUIRED FOR THE DETOUR WILL BE PAID FOR AT THE CONTRACT PRICE FOR TRAFFIC CONTROL & PROTECTION, (SPECIAL).
- 3) PERMANENT CLOSURE OF MILLER ST AND REYNOLDS ST SHALL BE INSTALLED JUST PRIOR TO CROSSING SIGNAL AND GATE REMOVAL. CONTRACTOR SHALL NOT CROSS TRACK AFTER SIGNALS AND GATES ARE REMOVED.
- 4) PERMANENT DEAD END SIGNS WILL BE PLACED 50 FT +/- FROM EDGE PAVEMENT AT 9TH AND 11TH STREETS ON MILLER ST AND REYNOLDS ST. THE 4 SIGNS SHALL BE INSTALLED ALONG WITH THE PERMANENT CLOSURE BARRIER.



FILE NAME = D:\09\101798-shr-staging-CAR-001.dgn
Detour Plan

USER NAME = pop00275
PLOT SCALE = 30.0000' / 1" =
PLOT DATE = 02\26\2014

DESIGNED - CLG
DRAWN - CLG
CHECKED - JWM
DATE - 2/25/14

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

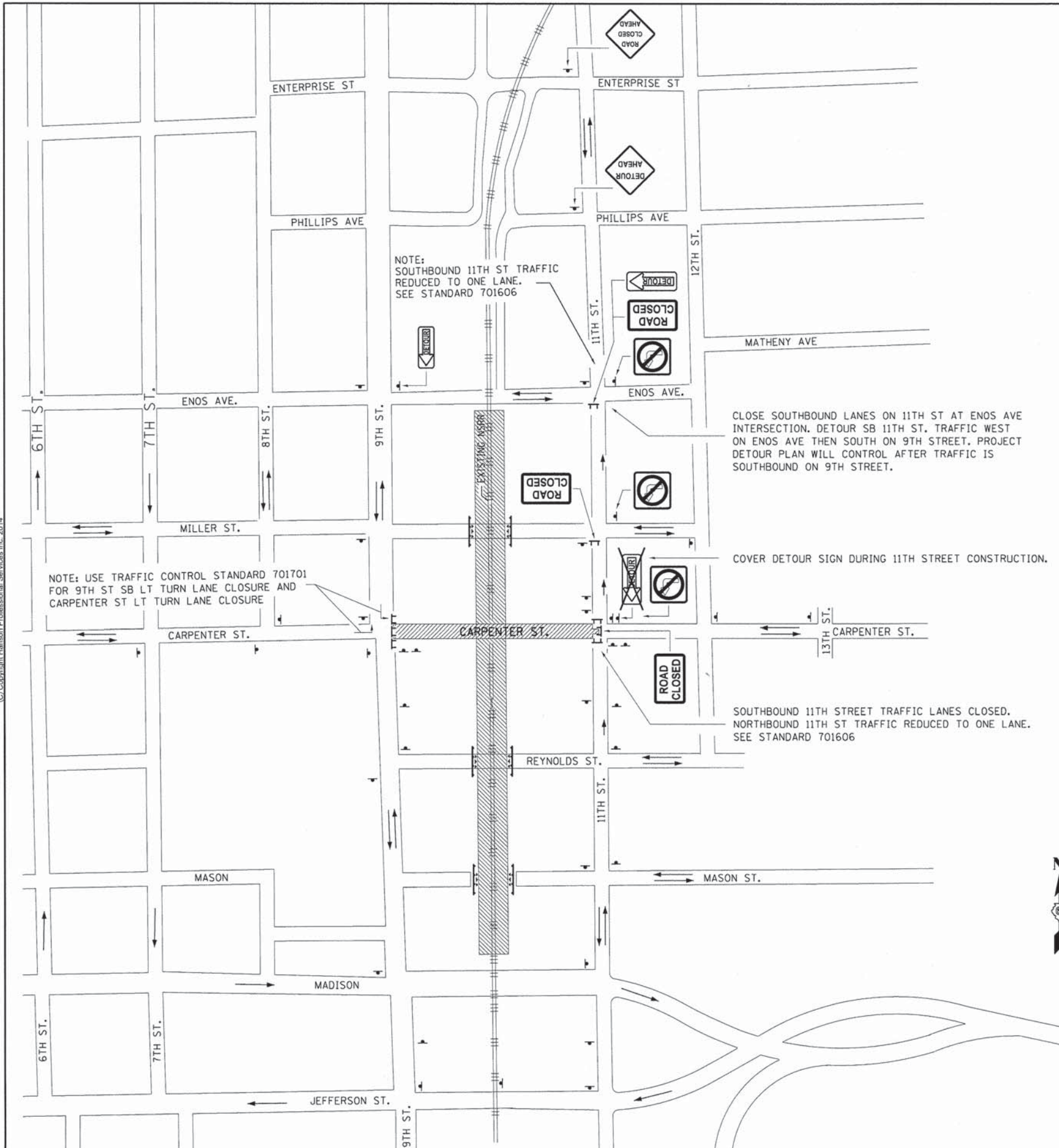
**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
DETOUR PLAN**

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	51
				CONTRACT NO. 93617
ILLINOIS FED. AID PROJECT				



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NOTE:
SOUTHBOUND 11TH ST TRAFFIC
REDUCED TO ONE LANE.
SEE STANDARD 701606






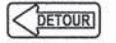


NOTE: USE TRAFFIC CONTROL STANDARD 701701
FOR 9TH ST SB LT TURN LANE CLOSURE AND
CARPENTER ST LT TURN LANE CLOSURE

CLOSE SOUTHBOUND LANES ON 11TH ST AT ENOS AVE
INTERSECTION. DETOUR SB 11TH ST. TRAFFIC WEST
ON ENOS AVE THEN SOUTH ON 9TH STREET. PROJECT
DETOUR PLAN WILL CONTROL AFTER TRAFFIC IS
SOUTHBOUND ON 9TH STREET.

COVER DETOUR SIGN DURING 11TH STREET CONSTRUCTION.

SOUTHBOUND 11TH STREET TRAFFIC LANES CLOSED.
NORTHBOUND 11TH ST TRAFFIC REDUCED TO ONE LANE.
SEE STANDARD 701606

LEGEND

-  LIMITS OF CONSTRUCTION
-  INDICATES TRAFFIC DIRECTION
-  ROAD CLOSED
R11-2 48 X 30
-  ROAD CLOSED AHEAD
W20-3(O)-36
-  DETOUR AHEAD
W20-2(O)-36
-  M4-10L 48 X 18
-  TYPE 3 BARRICADES
-  NO LEFT TURN (R3-2) 24 X 24

NOTES:

- 1) TRAFFIC CONTROL IS AN INTEGRAL PART OF THE CONTRACTOR'S MEANS AND METHODS FOR COMPLETING THE WORK. THE REQUIREMENTS SET FORTH HEREIN PRESENT THE MINIMUM REQUIREMENTS FOR THE CONTROL AND PROTECTION OF PEDESTRIAN AND VEHICULAR TRAFFIC. THE CONTRACTOR SHALL IMPLEMENT ALL ADDITIONAL MEASURES NECESSARY TO FULLY PROTECT PEDESTRIANS, VEHICLES AND THE CONTRACTOR'S WORK FORCE FROM THE CONTRACTOR'S WORK ACTIVITIES AND FROM PASSING TRAFFIC. FIELD MODIFICATION OF THE TRAFFIC CONTROL SCHEME DEPICTED IN THE TRAFFIC CONTROL PLANS SHALL BE APPROVED BY THE CITY TRAFFIC ENGINEER.
- 2) ALL WORK SHOWN ON THIS SHEET (EXCEPT STANDARDS 701606 AND 701701) AND INCLUDING ANY OTHER WORK REQUIRED FOR THE DETOUR WILL BE PAID FOR AT THE CONTRACT PRICE FOR TRAFFIC CONTROL & PROTECTION, (SPECIAL).

THIS SHEET ONLY SHOWS ADDITIONAL SIGNS REQUIRED FOR THE 11TH STREET CONSTRUCTION STAGE.

FINAL
DESIGNED DJP 9/16/13
DRAWN CLC 9/27/13
REVIEWED JMM 2/25/14

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PLOT DATE = 02/26/2014			

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

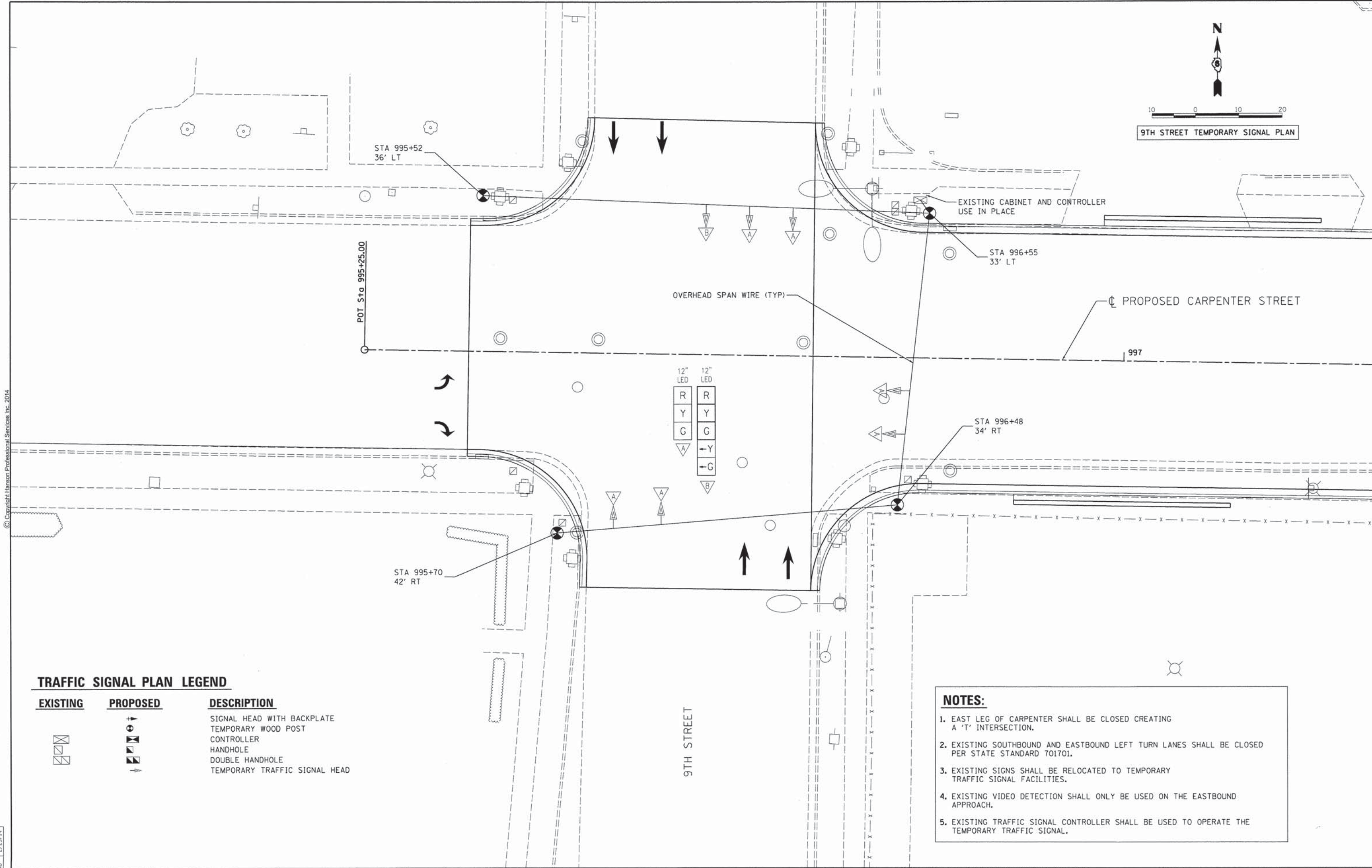
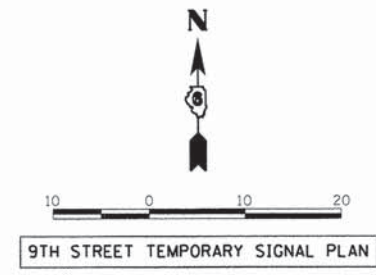
**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
DETOUR PLAN**

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	52
09L0179B		CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				



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TRAFFIC SIGNAL PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SIGNAL HEAD WITH BACKPLATE
		TEMPORARY WOOD POST
		CONTROLLER
		HANDHOLE
		DOUBLE HANDHOLE
		TEMPORARY TRAFFIC SIGNAL HEAD

- NOTES:**
- EAST LEG OF CARPENTER SHALL BE CLOSED CREATING A 'T' INTERSECTION.
 - EXISTING SOUTHBOUND AND EASTBOUND LEFT TURN LANES SHALL BE CLOSED PER STATE STANDARD 701701.
 - EXISTING SIGNS SHALL BE RELOCATED TO TEMPORARY TRAFFIC SIGNAL FACILITIES.
 - EXISTING VIDEO DETECTION SHALL ONLY BE USED ON THE EASTBOUND APPROACH.
 - EXISTING TRAFFIC SIGNAL CONTROLLER SHALL BE USED TO OPERATE THE TEMPORARY TRAFFIC SIGNAL.

FINAL
DESIGNED RLA 12/17/13
DRAWN RLA 12/17/13
REVIEWED KNB 2/25/14

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PLOT SCALE = 10,0000' / 1" =	PLOT DATE = 02/26/2014	DRAWN - RLA	REVISED -
Intersection Detail	DATE = 2/25/14	CHECKED - KNB	REVISED -
		DATE - 2/25/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

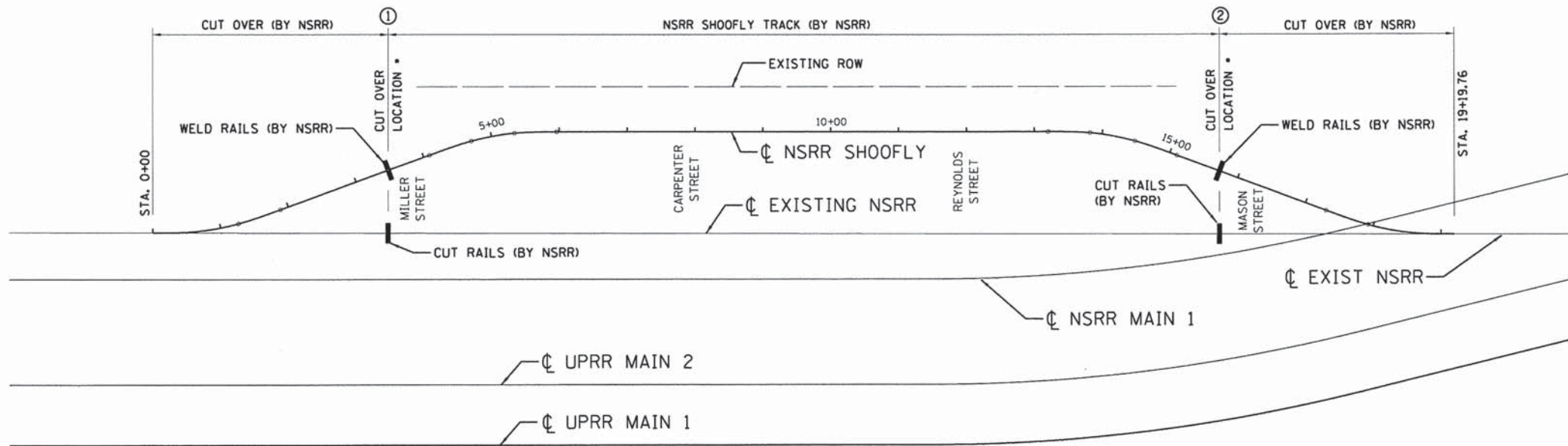
**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
TEMPORARY TRAFFIC SIGNAL PLANS**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 53
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



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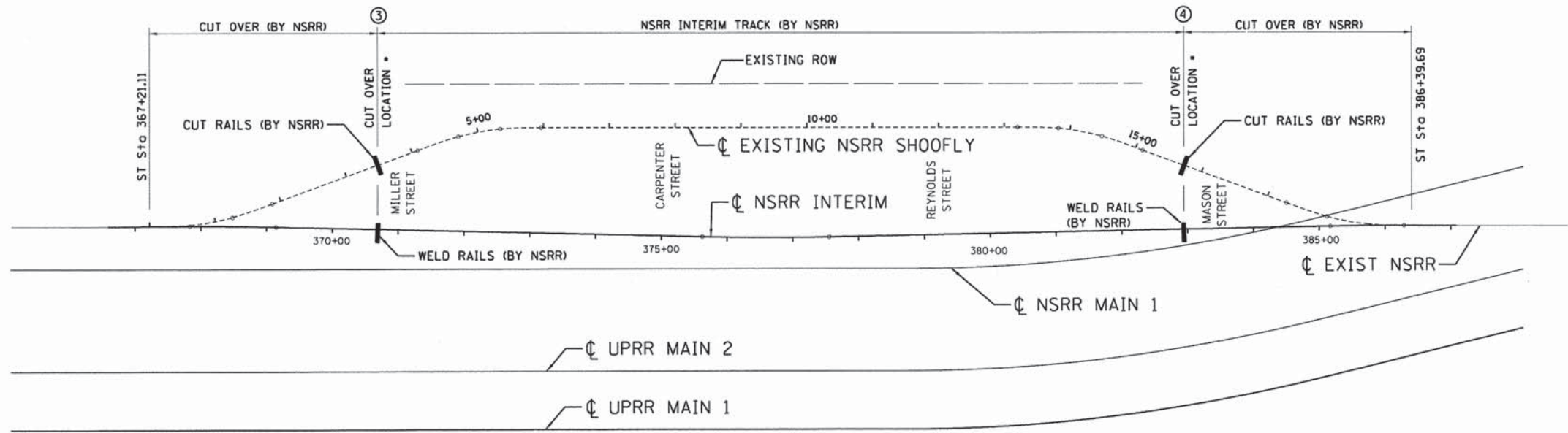


TRACK CONSTRUCTION SEQUENCE
STAGE 1A & 1B
CONSTRUCT NSRR SHOOFLY

CUT OVER LOCATION
 AT 14' TRACK CENTERS

- ① NSRR SHOOFLY STA. 3+44.32
- ② NSRR SHOOFLY STA. 15+68.83

• CUT OVER LOCATIONS MAY BE FIELD ADJUSTED BY NSRR.



TRACK CONSTRUCTION SEQUENCE
STAGE 2A & 2B
CONSTRUCT NSRR INTERIM TRACK

CUT OVER LOCATION

- ③ NSRR INTERIM STA. 370+66.37
- ④ NSRR INTERIM STA. 382+89.77

• CUT OVER LOCATIONS MAY BE FIELD ADJUSTED BY NSRR.

STAGING NOTES

CONSTRUCTION SEQUENCE:

SEE NSRR BRIDGE PLANS (SN 084-9953) FOR GENERAL CONSTRUCTION SEQUENCE.

STAGE 1A

PERMANENTLY CLOSE MILLER AND REYNOLDS STREETS AT EXISTING GRADE CROSSINGS. NSRR WILL REMOVE GRADE CROSSING SURFACES, CROSSING GATES, SIGNALS, AND CABINETS.

INSTALL STEEL CASING FOR ST. JOHN'S ELECTRICAL RUNS NEAR MASON ST.

CONSTRUCT LT PIPE UNDERDRAINS AND CONSTRUCT DRAIN PIPES.

CONSTRUCT SHOOFLY GRADING AND PLACE SUBBALLAST. IN AREAS DESIGNATED "CUT OVER (BY NSRR)" GRADING AND SUBBALLAST SHALL BE PROPERLY PLACED DURING AUTHORIZED TRACK CLOSURE WINDOWS. CONTRACTOR SHALL COORDINATE WORK WITH NSRR SO THAT NSRR CAN REPLACE AND COMPACT BALLAST SHOULDER DURING THE SAME AUTHORIZED TRACK CLOSURE WINDOW.

NSRR WILL CONSTRUCT SHOOFLY TRACK AND BALLAST UP TO CUT OVER LOCATIONS.

PLACE FENCING ALONG NSRR ROW IN LOCATIONS IDENTIFIED IN "TYPICAL SECTIONS - NSRR SHOOFLY" DRAWING.

STAGE 1B

NSRR WILL CUT OVER THE EXISTING TRACK TO THE NSRR SHOOFLY.

STAGE 2A

NSRR WILL REMOVE EXISTING TRACK.

CONSTRUCT RT PIPE UNDERDRAINS AND CONNECT TO PIPE DRAINS.

CONSTRUCT INTERIM GRADING, MIDDLE UNDERDRAINS AND SUBBALLAST. IN AREAS DESIGNATED "CUT OVER (BY NSRR)" GRADING AND SUBBALLAST SHALL BE PROPERLY PLACED DURING AUTHORIZED TRACK CLOSURE WINDOWS.

NSRR WILL CONSTRUCT INTERIM TRACK AND BALLAST UP TO CUT OVER LOCATIONS.

STAGE 2B

NSRR WILL CUT OVER NSRR SHOOFLY TRACK TO THE NSRR INTERIM.

STAGE 3

NSRR WILL REMOVE SHOOFLY TRACK. REMAINING NSRR SHOOFLY BALLAST AND GRADING WILL REMAIN IN PLACE FOR FUTURE USE BY OTHERS.

FINAL
 DESIGNED - JWM 9/5/13
 DRAWN - DJP 9/27/13
 REVIEWED - JWM 2/25/14

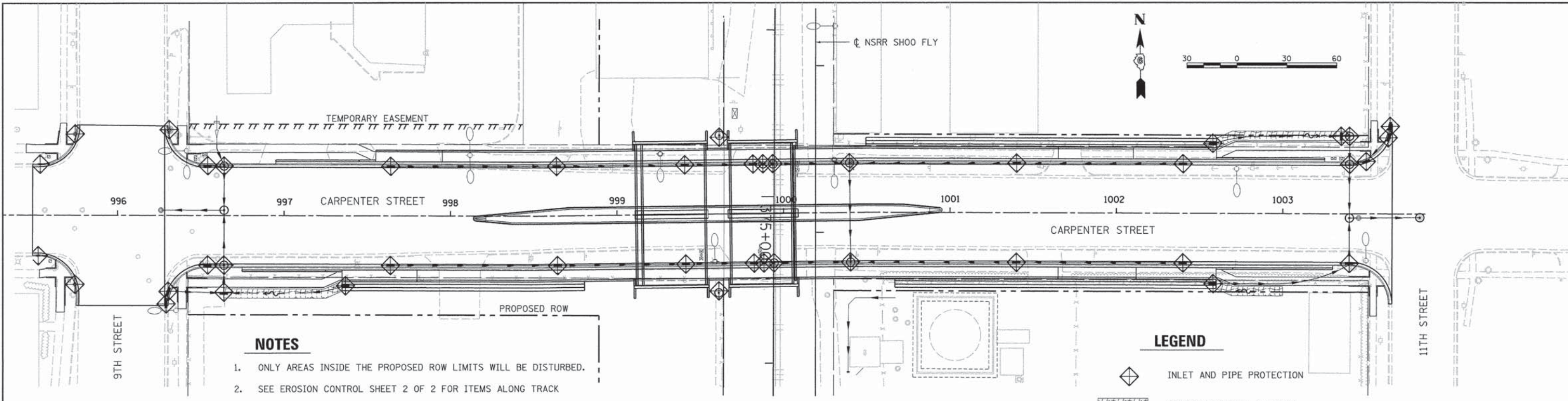
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plan 60	PLOT DATE = 02/26/2014	DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
TRACK STAGING

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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09L0179B			CONTRACT NO. 3617	
ILLINOIS FED. AID PROJECT				

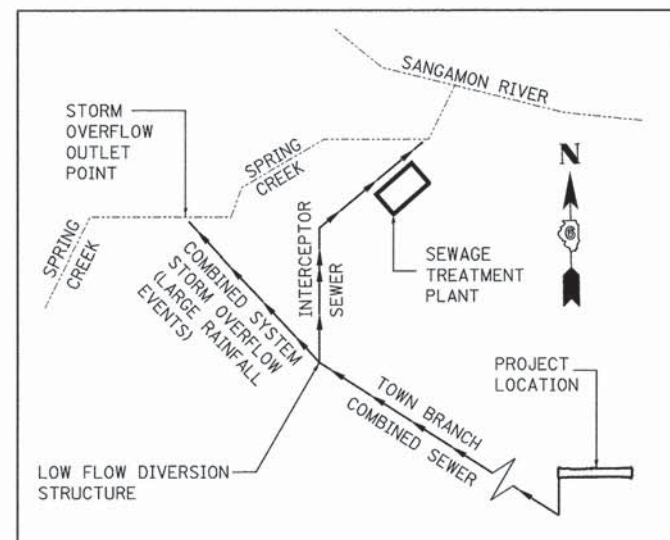


NOTES

1. ONLY AREAS INSIDE THE PROPOSED ROW LIMITS WILL BE DISTURBED.
2. SEE EROSION CONTROL SHEET 2 OF 2 FOR ITEMS ALONG TRACK

LEGEND

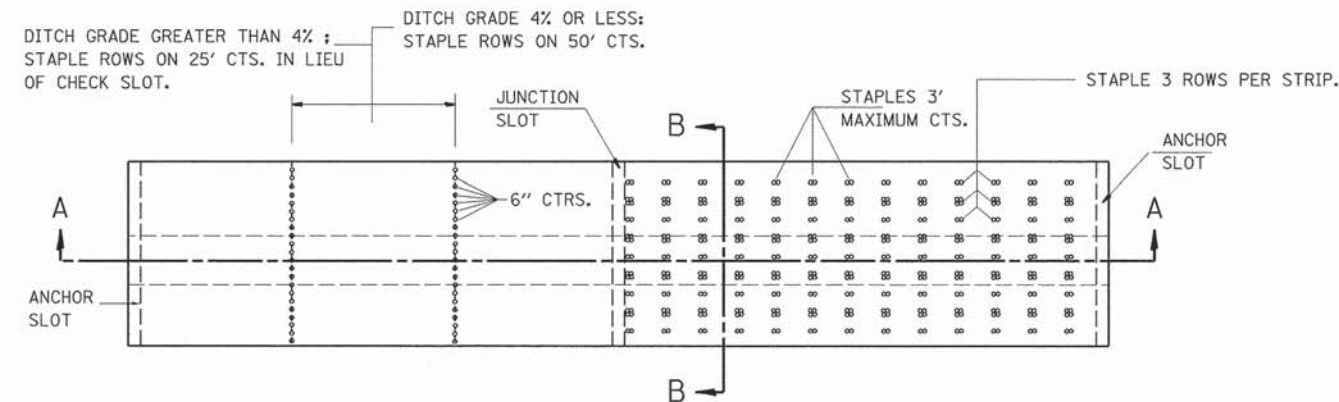
- INLET AND PIPE PROTECTION
- EROSION CONTROL BLANKET



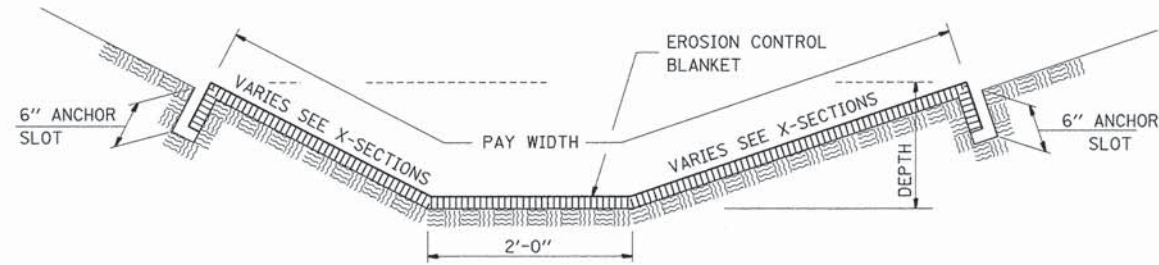
STORM WATER DISCHARGE SCHEMATIC

INTENDED SEQUENCE (ROADWAY)

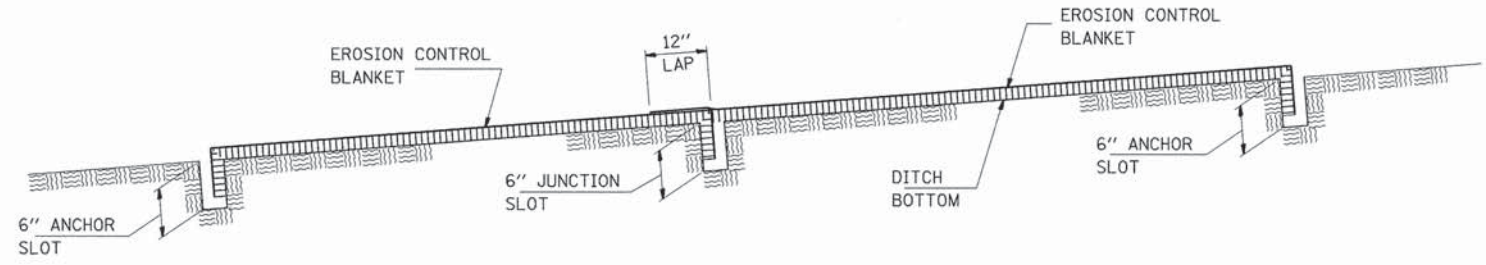
1. PLACEMENT OF INLET PROTECTION ON EXISTING STRUCTURES PRIOR TO COMMENCEMENT OF ANY WORK. PLACEMENT OF INLET PIPE PROTECTION AFTER CONSTRUCTION OF PROPOSED STRUCTURES. SEE STANDARD 280001
2. PLACEMENT OF TEMPORARY SEEDING ON GRADED SURFACES NOT HAVING PERMANENT SEEDING APPLIED.
3. PLACEMENT OF EROSION CONTROL BLANKET AFTER FINAL GRADING OF AREAS REQUIRING SUCH PROTECTION.
4. ONGOING MAINTENANCE OF EROSION CONTROL ELEMENTS PER SWPPP AND CITY OF SPRINGFIELD'S EROSION CONTROL ORDINANCE.
5. REMOVE TEMPORARY EROSION CONTROL ELEMENTS AFTER FINAL GRADING AND PERMANENT SEEDING IS ESTABLISHED AS PER THE SWPPP AND APPROVED BY THE ENGINEER.



PLAN VIEW & STAPLING LAYOUT FOR EROSION CONTROL BLANKET PLACEMENT IN DITCH



EROSION CONTROL BLANKET SECTION B - B



EROSION CONTROL BLANKET SECTION A - A

FINAL
DESIGNED - DJP 9/6/13
DRAWN - DJP 9/27/13
REVIEWED - JWM 2/25/14

FILE NAME = D609L0179B-shr-eros-CAR-001.dgn	USER NAME = pop0275	DESIGNED - DJP	REVISED -
		DRAWN - DJP	REVISED -
		CHECKED - JWM	REVISED -
		DATE - 2/25/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

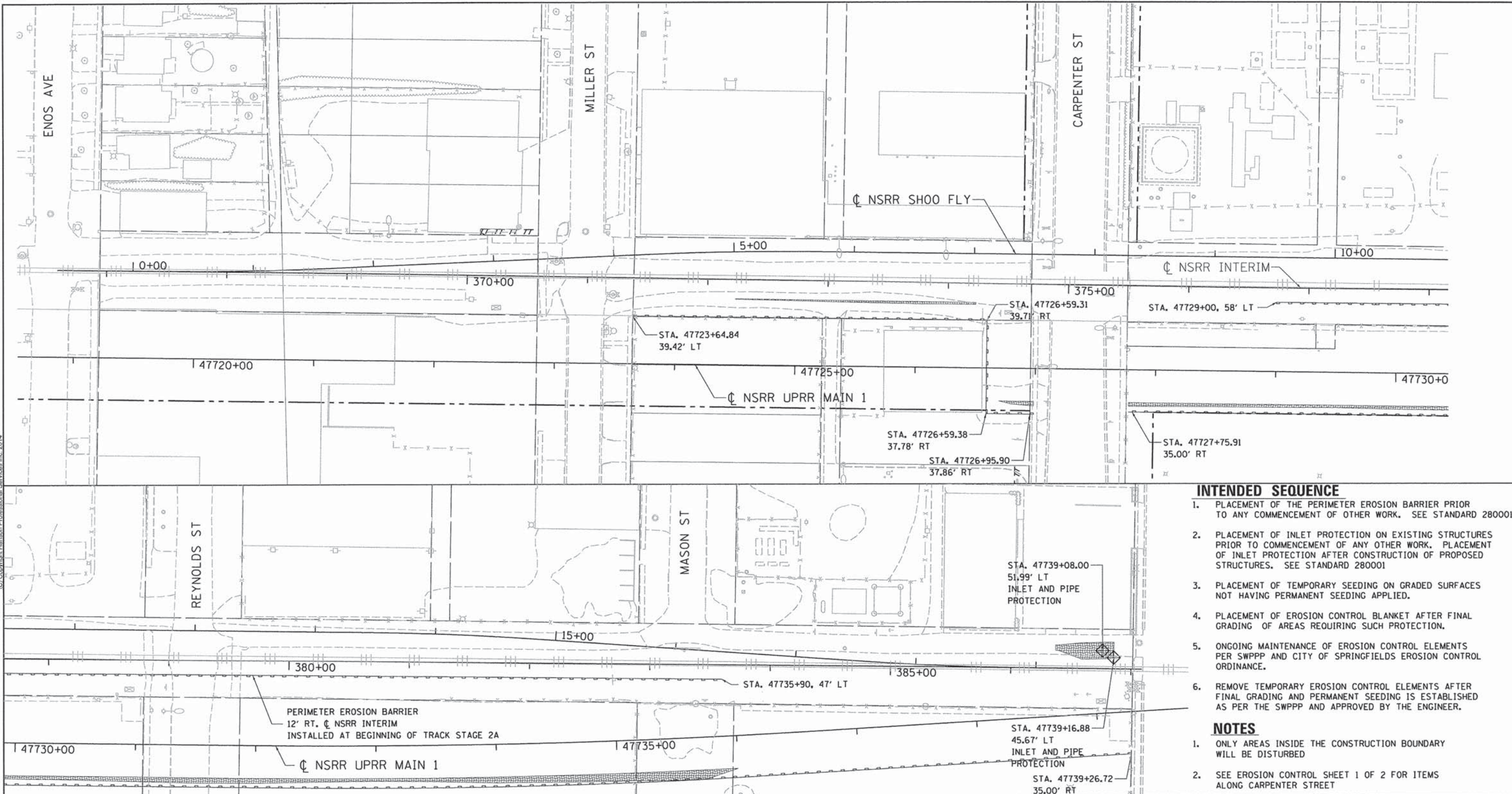
**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
EROSION CONTROL PLAN - CARPENTER STREET**

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 55
CONTRACT NO. 09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				

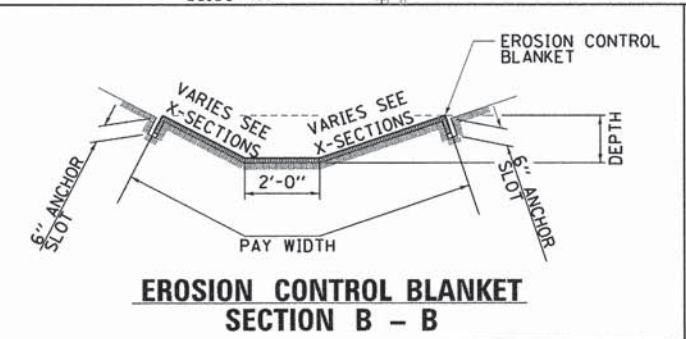
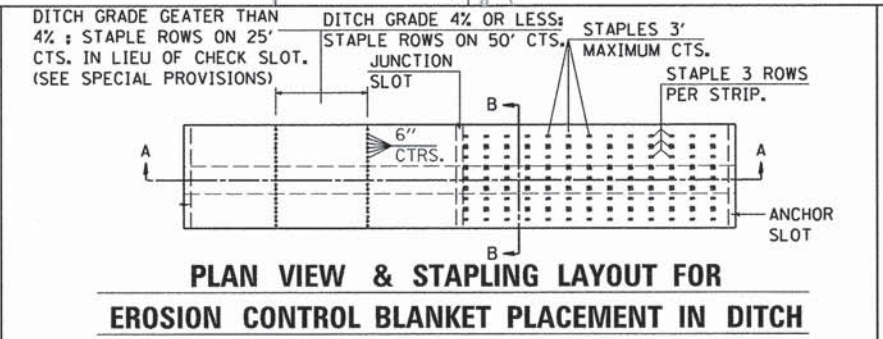
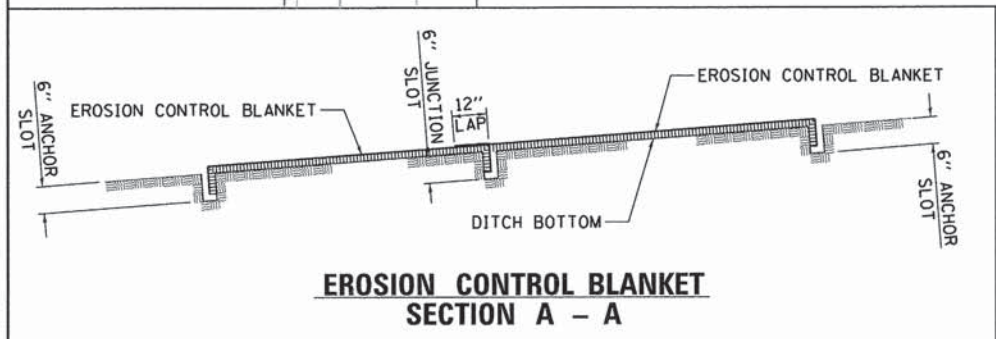
SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.



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- INTENDED SEQUENCE**
1. PLACEMENT OF THE PERIMETER EROSION BARRIER PRIOR TO ANY COMMENCEMENT OF OTHER WORK. SEE STANDARD 280001
 2. PLACEMENT OF INLET PROTECTION ON EXISTING STRUCTURES PRIOR TO COMMENCEMENT OF ANY OTHER WORK. PLACEMENT OF INLET PROTECTION AFTER CONSTRUCTION OF PROPOSED STRUCTURES. SEE STANDARD 280001
 3. PLACEMENT OF TEMPORARY SEEDING ON GRADED SURFACES NOT HAVING PERMANENT SEEDING APPLIED.
 4. PLACEMENT OF EROSION CONTROL BLANKET AFTER FINAL GRADING OF AREAS REQUIRING SUCH PROTECTION.
 5. ONGOING MAINTENANCE OF EROSION CONTROL ELEMENTS PER SWPPP AND CITY OF SPRINGFIELD'S EROSION CONTROL ORDINANCE.
 6. REMOVE TEMPORARY EROSION CONTROL ELEMENTS AFTER FINAL GRADING AND PERMANENT SEEDING IS ESTABLISHED AS PER THE SWPPP AND APPROVED BY THE ENGINEER.
- NOTES**
1. ONLY AREAS INSIDE THE CONSTRUCTION BOUNDARY WILL BE DISTURBED
 2. SEE EROSION CONTROL SHEET 1 OF 2 FOR ITEMS ALONG CARPENTER STREET



LEGEND

- EXISTING CONTOURS
- INLET AND PIPE PROTECTION
- PERIMETER EROSION BARRIER
- EROSION CONTROL BLANKET

SCALE: 40 0 40 80

FINAL
DESIGNED - DJP 9/6/13
DRAWN - DJP 9/27/13
REVIEWED - JWM 2/25/14

FILE NAME =	USER NAME = pop00275	DESIGNED - DJP	REVISED -
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	PLOT SCALE = 40,0000' / in.	CHECKED - JWM	REVISED -
	PLOT DATE = 03/07/2014	DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
EROSION CONTROL PLAN - NSRR TRACK

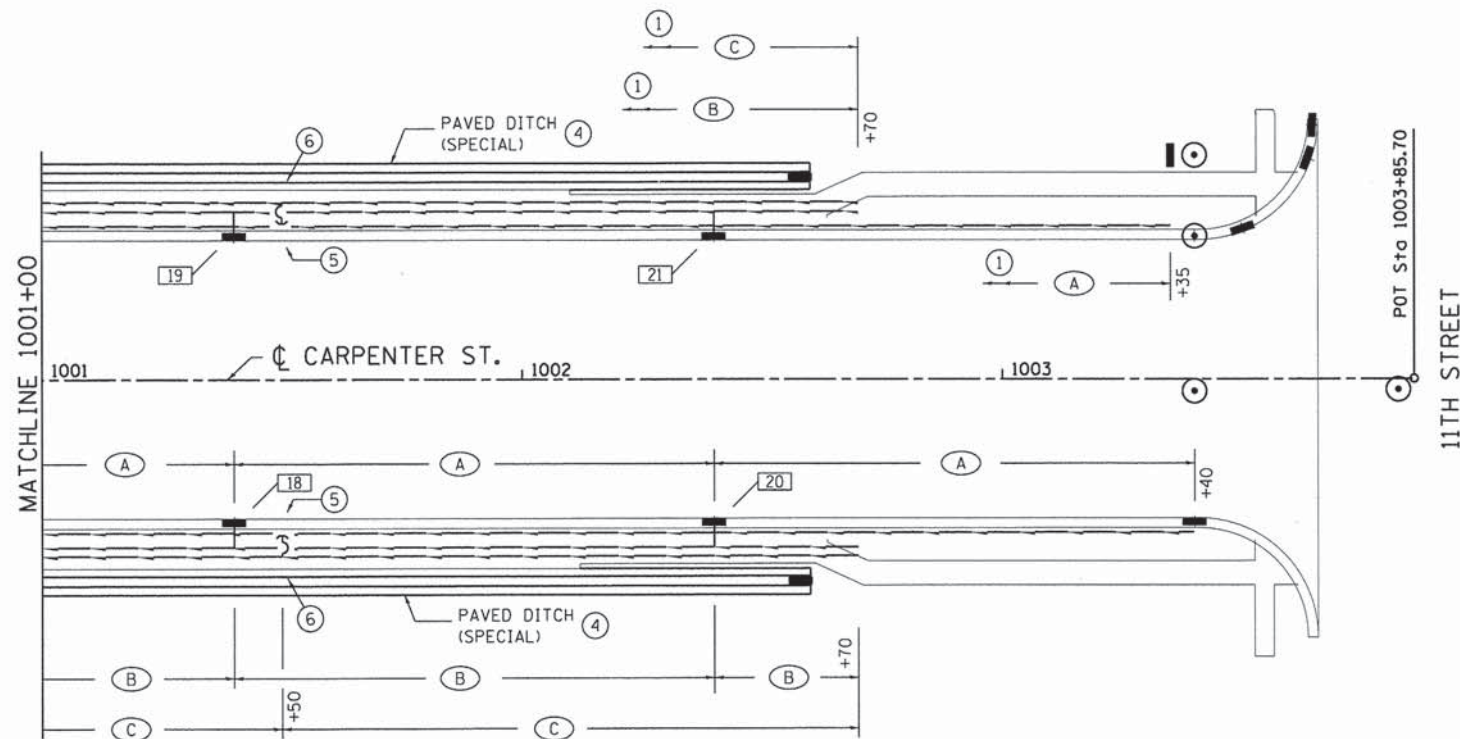
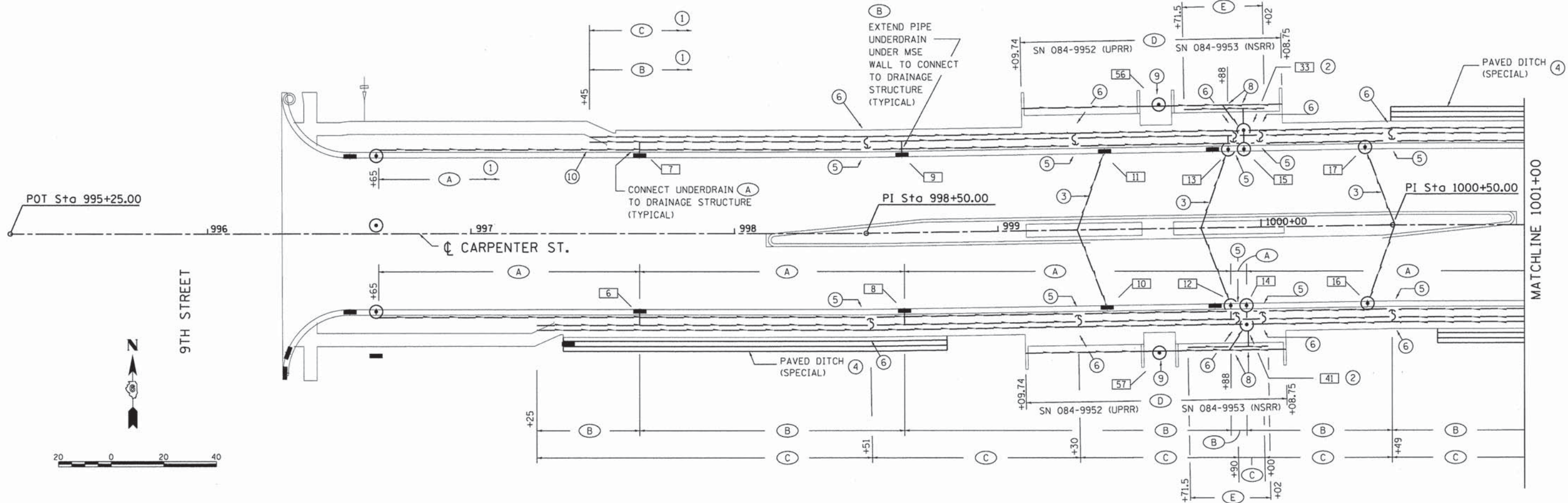
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	56
09L0179B		CONTRACT NO. 93617		

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.

ILLINOIS FED. AID PROJECT



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LEGEND

- ⊙ EXISTING DRAINAGE STRUCTURE
- ▬ PROPOSED INLET
- ⊙ PROPOSED MANHOLE
- ▬ PROPOSED PIPE UNDERDRAIN
- [16] STORM STRUCTURE NO. (UNDERDRAIN OUTLET) SEE DRAINAGE SCHEDULE
- (A) — PIPE UNDERDRAINS 4" LOCATION - OUTSIDE OF ROADWAY SUBGRADE SEE TYPICAL SECTIONS
- (B) — PIPE UNDERDRAINS FOR STRUCTURES 4" LOCATION - BASE OF MSE WALL GRANULAR BACKFILL SEE TYPICAL SECTIONS
- (C) — PIPE UNDERDRAINS FOR STRUCTURES 4" LOCATION - APPROX. AT MIDHEIGHT OF MSE WALL ABOVE ADJACENT MEDIAN SURFACE ELEVATION. SEE TYPICAL SECTIONS.
- (D) — PIPE UNDERDRAIN FOR STRUCTURES 6" LOCATION - BACK OF ABUTMENT SEE STRUCTURE PLANS
- (E) — DRAINAGE SYSTEM (SPECIAL) LOCATION - BACK OF ABUTMENT SEE STRUCTURE PLANS

NOTES

- 1 LEFT SIDE UNDERDRAIN LIMITS SIMILAR TO RIGHT EXCEPT WHERE NOTED.
- 2 PIPE DRAIN RISER, SEE PIPE DRAIN 12" RISER DETAIL - DRAINAGE DETAILS SHEET
- 3 TRANSVERSE DRAIN, SEE DETAILS - DRAINAGE DETAILS SHEET
- 4 SEE SIDEWALK / DITCH PROFILES SHEET. SEE DRAINAGE DETAILS SHEET.
- 5 (C) OUTLETS THROUGH A HOLE IN MSE WALL FOR DETAILS SEE STRUCTURE PLANS
- 6 TEE PIPE UNDERDRAIN (C). SEE STRUCTURE PLANS.
- 7 ALL PROPOSED DRAINAGE STRUCTURES SHOWN FOR REFERENCE. ONLY PIPE UNDERDRAIN OUTLET STRUCTURES ARE LABELED. SEE PLAN AND PROFILE FOR DRAINAGE PLAN LAYOUT.
- 8 PIPE DRAIN 6" AND DRAINAGE SYSTEM (SPECIAL) THROUGH ABUTMENT. CONNECT TO 12" RISER. SEE DRAINAGE DETAIL SHEET.
- 9 STRUCTURES [56] & [57] PLACED BETWEEN BRIDGE STRUCTURES CONNECTS TO FABRIC LINED PIPE UNDERDRAINS FOR STRUCTURES 6".
- 10 ADJUST PIPE UNDERDRAIN TO AVOID LIGHT POLE FOUNDATION.

DESIGNED	JJM	9/16/13
DRAWN	CLG	9/27/13
REVIEWED	JJM	2/25/14

FILE NAME =	USER NAME = pop0275	DESIGNED - CLG	REVISED -
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	PLOT DATE = 02/26/2014	DATE - 2/25/14	REVISED -

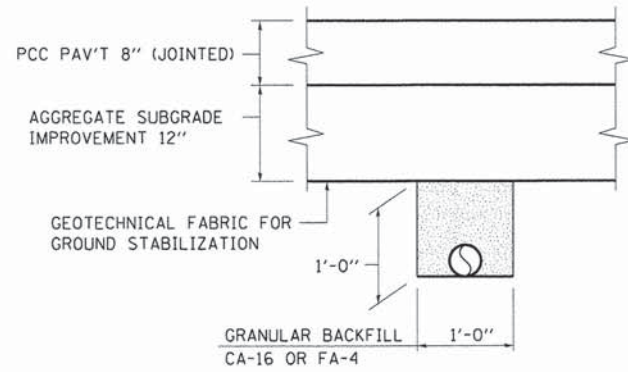
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
PIPE UNDERDRAINS PLAN - CARPENTER STREET

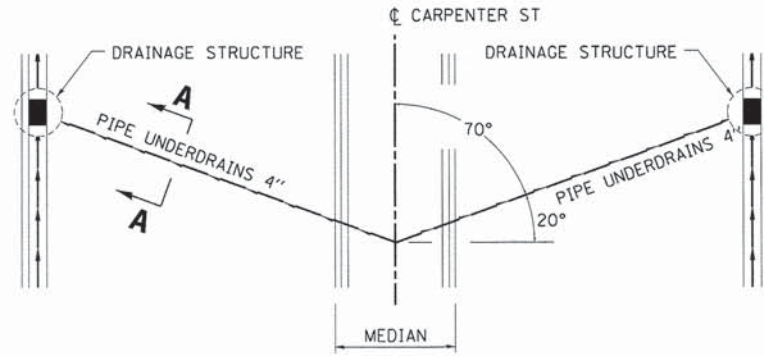
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09L0179B		CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

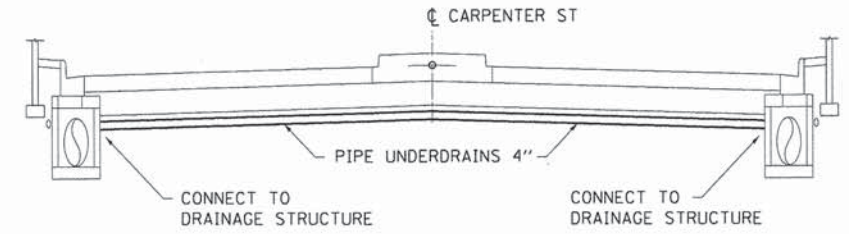
- 1 TRANSVERSE DRAIN MATERIALS AND CONSTRUCTION SHALL CONFORM TO SECTION 601 OF THE STANDARD SPECIFICATIONS EXCEPT THAT NO FABRIC ENVELOPE IS REQUIRED ON PERFORATED PIPE AND THE GRANULAR BACKFILL GRADATION SHALL BE CA-16 GRAVEL OR FA-4 NATURAL SAND.
- 2 ALL MATERIALS WILL NOT BE MEASURED SEPARATELY, BUT WILL BE INCLUDED IN THE CONTRACT PRICE PER UNIT FOR TRANSVERSE DRAINS COMPLETE.
- 3 PERFORATED PIPE SHALL BE CORRUGATED PE WITH A SMOOTH INTERIOR MEETING ARTICLE 1040.04 .



SECTION A-A



ROADWAY PLAN TRANSVERSE DRAIN LAYOUT



ROADWAY CROSS SECTION TRANSVERSE DRAIN LAYOUT

NOTE

(X) = CALLOUT DESIGNATION
SEE PIPE UNDERDRAIN
PLAN SHEET

(E) DRAINAGE SYSTEM (SPECIAL)
6" I.D. DUCTILE IRON PIPE (TYP.),
CONNECT TO RISER,
SEE STRUCTURE PLANS

(D) PIPE
UNDERDRAINS FOR
STRUCTURES 6"

(C) PIPE
UNDERDRAINS FOR
STRUCTURES 4"

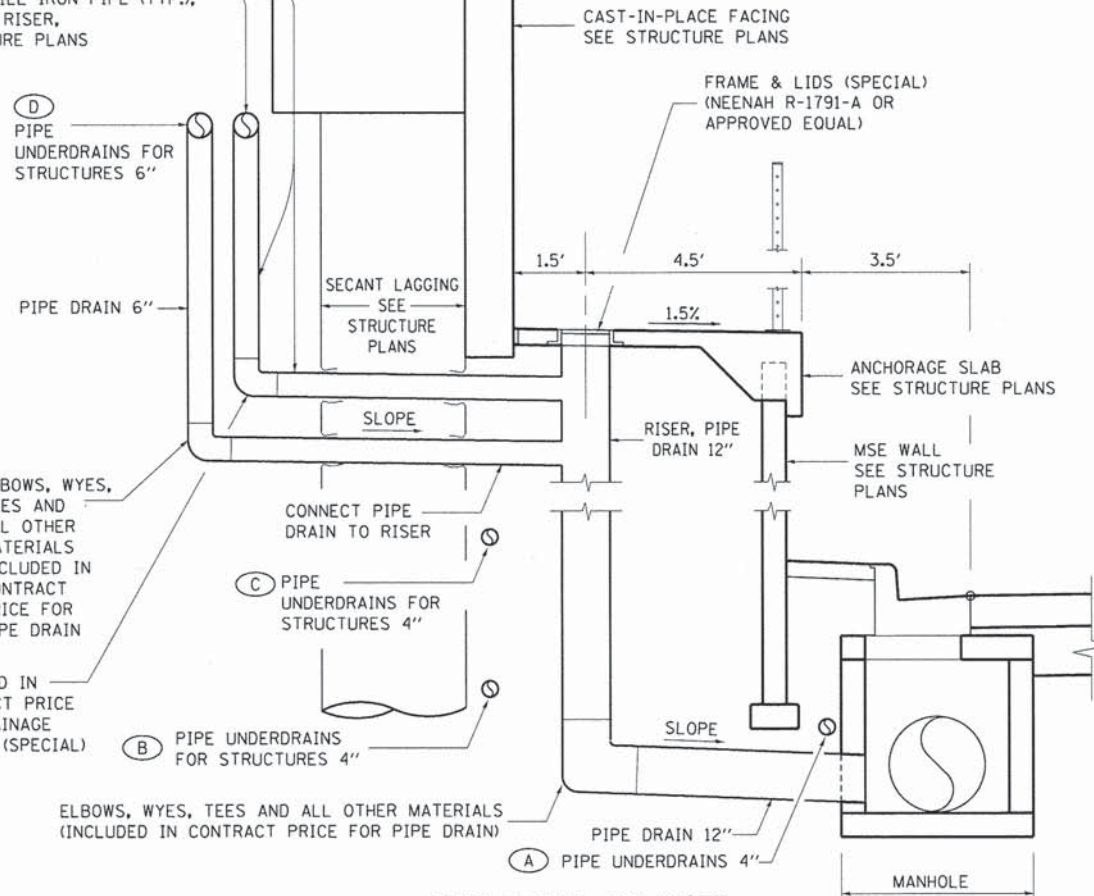
(B) PIPE UNDERDRAINS
FOR STRUCTURES 4"

(A) PIPE UNDERDRAINS 4"

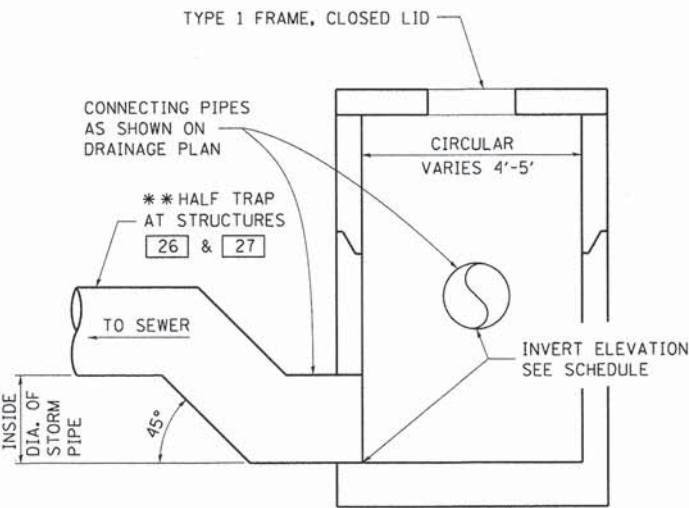
INCLUDED IN
CONTRACT PRICE
FOR DRAINAGE
SYSTEM (SPECIAL)

ELBOWS, WYES,
TEES AND ALL OTHER
MATERIALS
INCLUDED IN
CONTRACT PRICE FOR
PIPE DRAIN

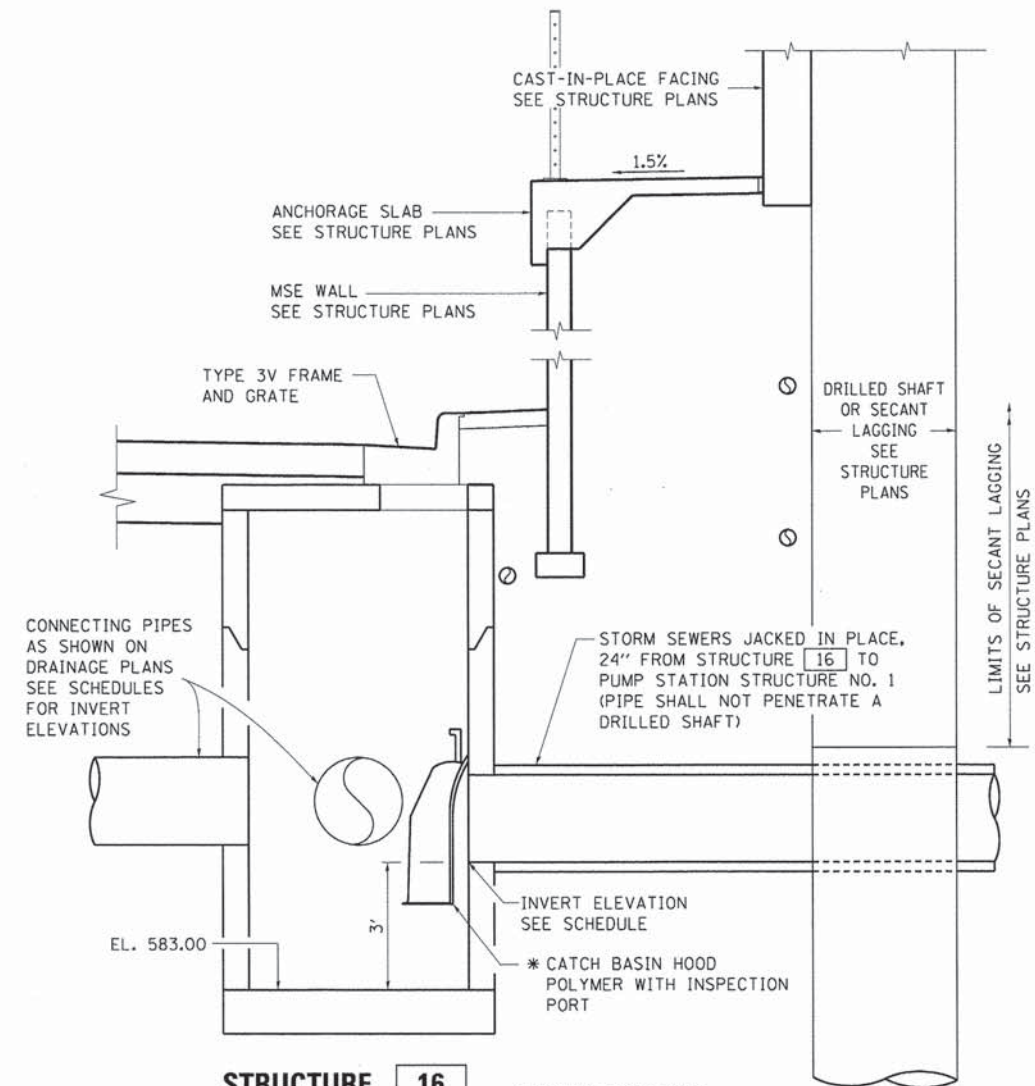
ELBOWS, WYES, TEES AND ALL OTHER MATERIALS
(INCLUDED IN CONTRACT PRICE FOR PIPE DRAIN)



PIPE DRAIN 12" RISER



TYPICAL DRAINAGE STRUCTURE WITH HALF TRAP



STRUCTURE 16

(LOOKING EAST)

* CATCH BASIN HOOD
WITH INSPECTION PORT
INCLUDED IN COST OF STRUCTURE 16

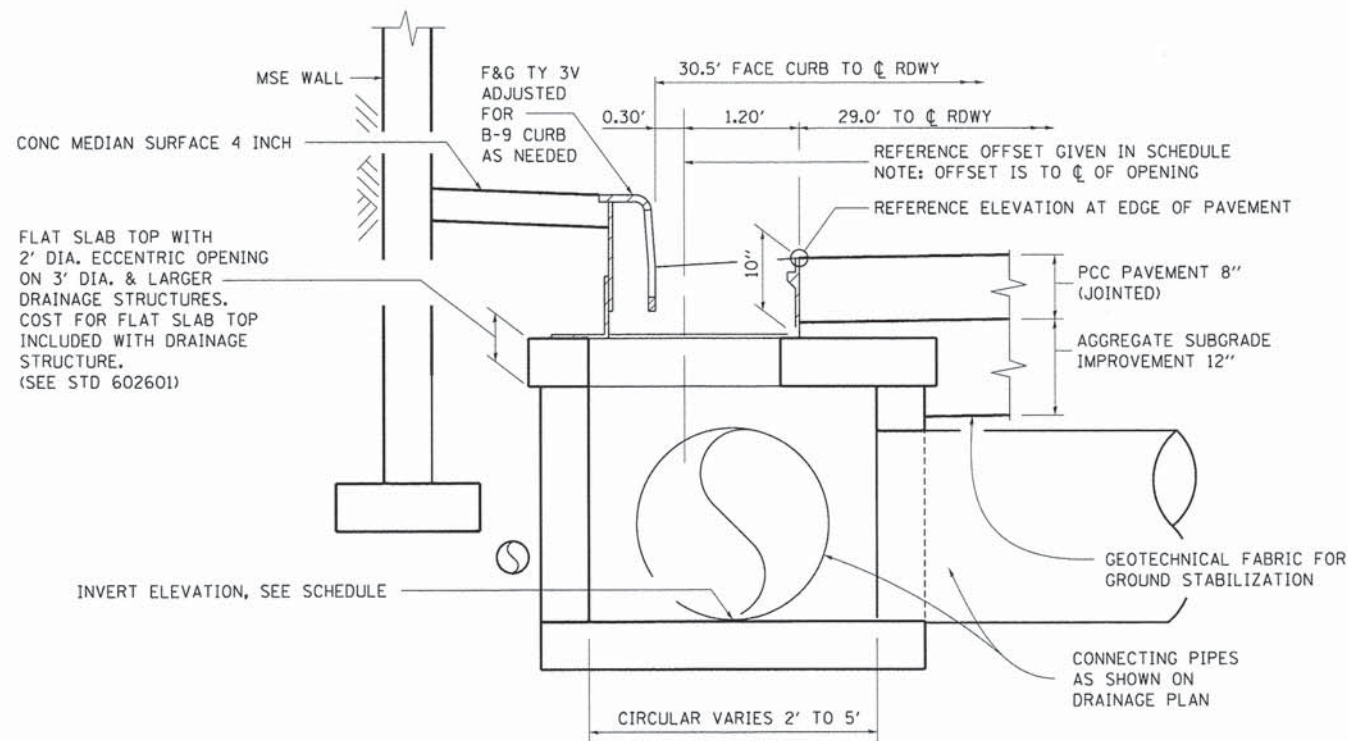
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DRAWN	CLG	9/21/13
REVIEWED	JMM	2/25/14

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D609L0179B-ahd-drain-CAR-002.dgn		DRAWN - CLG	REVISED -
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Sheet 1	PLOT DATE = 02/26/2014	DATE - 2/25/14	REVISED -

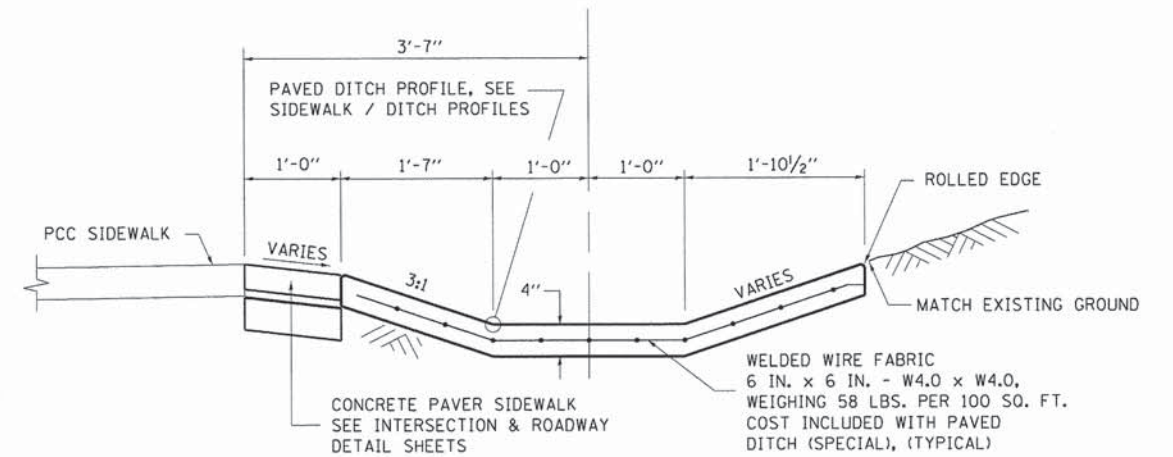
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
DRAINAGE DETAILS - CARPENTER STREET**

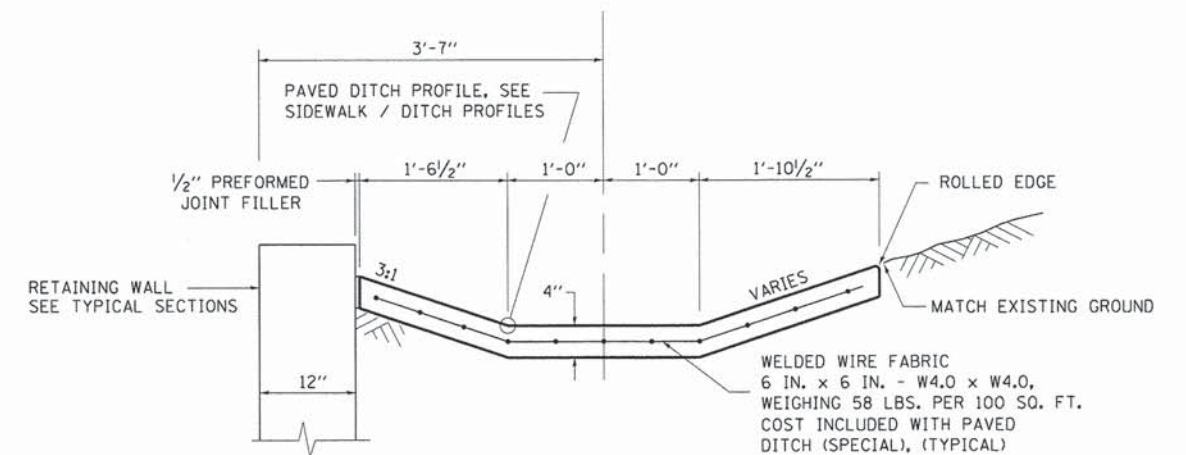
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	58
SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



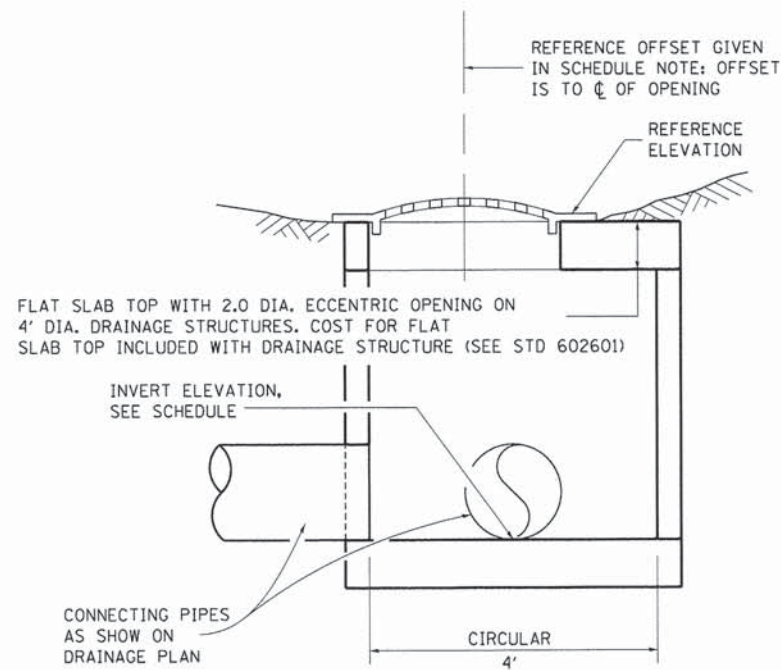
TYPICAL DRAINAGE STRUCTURE WITH TYPE 3V F&G



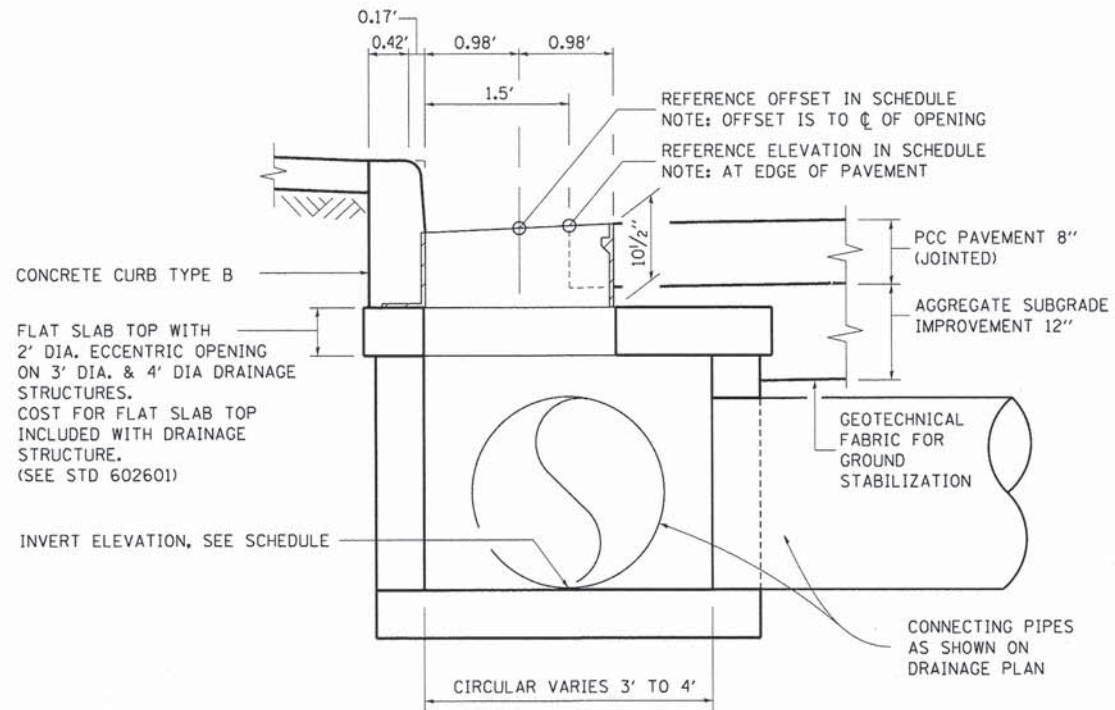
TYPICAL PAVED DITCH (SPECIAL) AT SIDEWALK



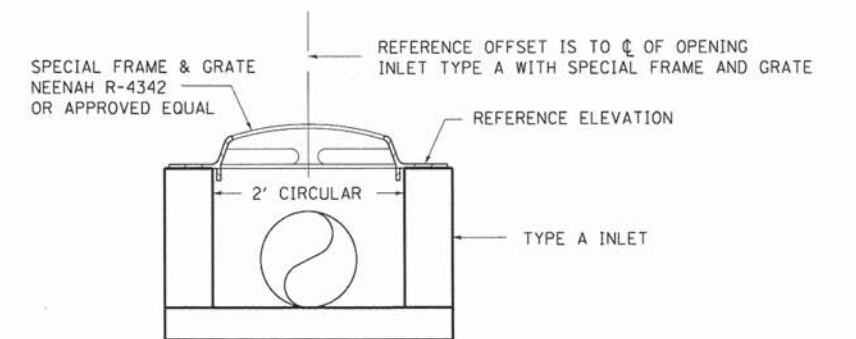
TYPICAL PAVED DITCH (SPECIAL)



TYPICAL MANHOLE TYPE A WITH TYPE 8 GRATE



TYPICAL DRAINAGE STRUCTURE WITH TYPE 24 F&G



TYPICAL DITCH DRAINAGE STRUCTURE

DESIGNED	CLG	9/16/13
DRAWN	CLG	9/27/13
REVIEWED	JMM	2/25/14

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
D609L0179B-sht-drain-CAR-003.dgn	pop0275	CLG	-
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

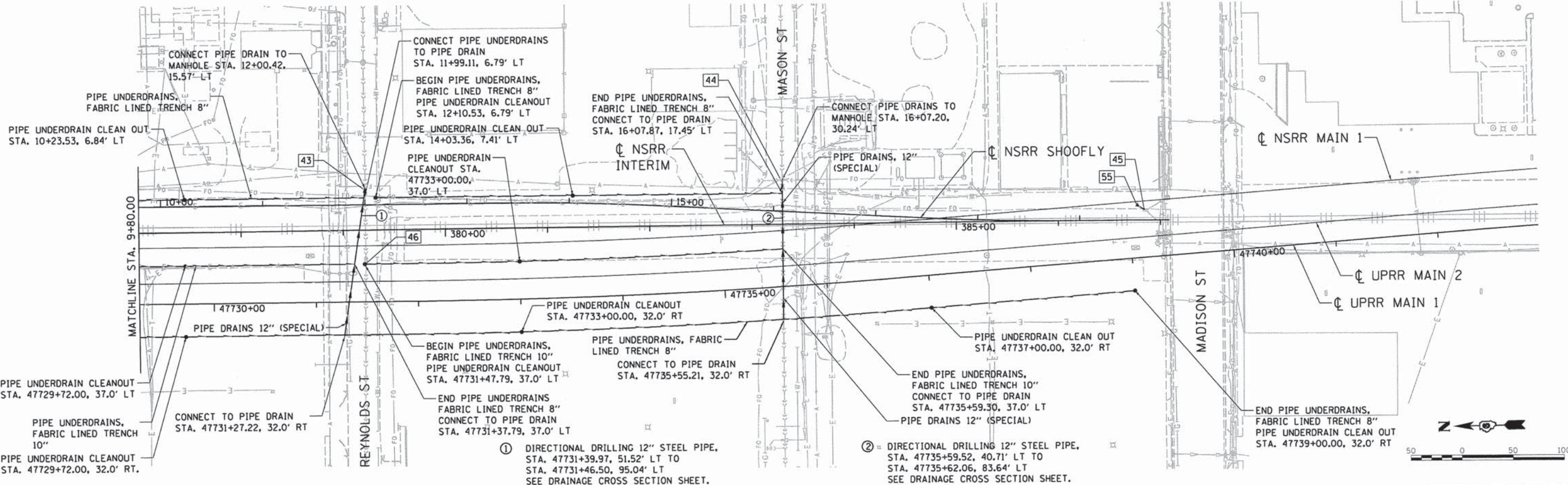
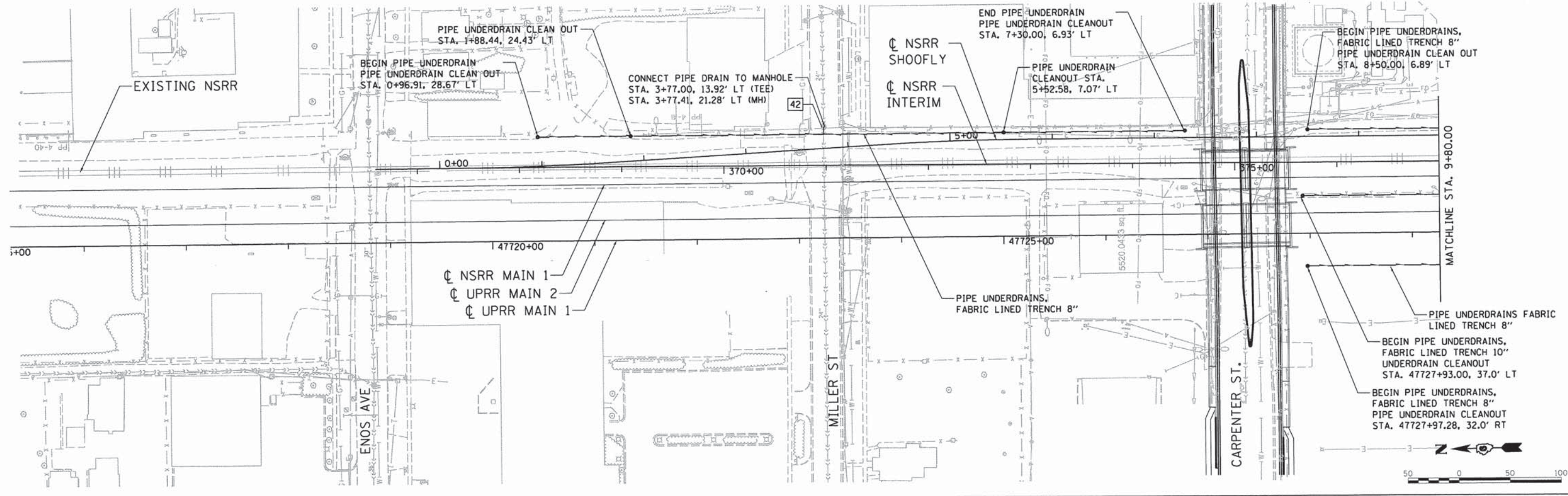
**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
DRAINAGE DETAILS - CARPENTER STREET**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	59
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.



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DESIGNED	JWM	9/6/13
DRAWN	RSJ	9/27/13
REVIEWED	JWM	2/25/14

FILE NAME = 0689L01798-shr-drain-TRACK-001.dgn

USER NAME = pop00275
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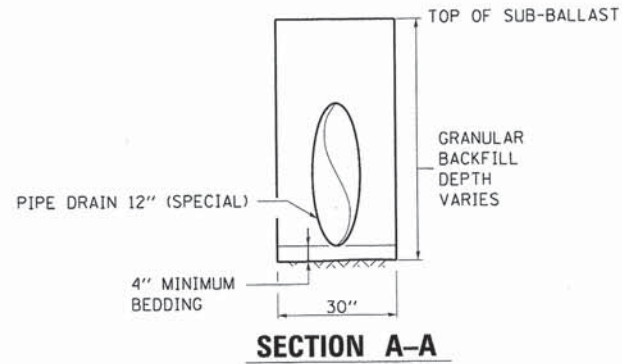
DESIGNED - JWM
 DRAWN - CLG
 CHECKED - JWM
 DATE - 2/25/14

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

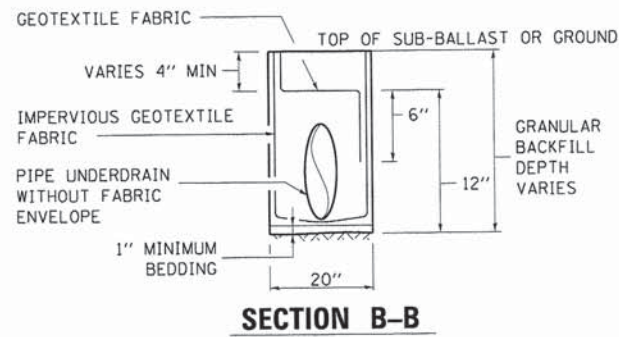
**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 PIPE UNDERDRAIN PLAN - TRACK**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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09L0179B		CONTRACT NO. 3617		
ILLINOIS FED. AID PROJECT				



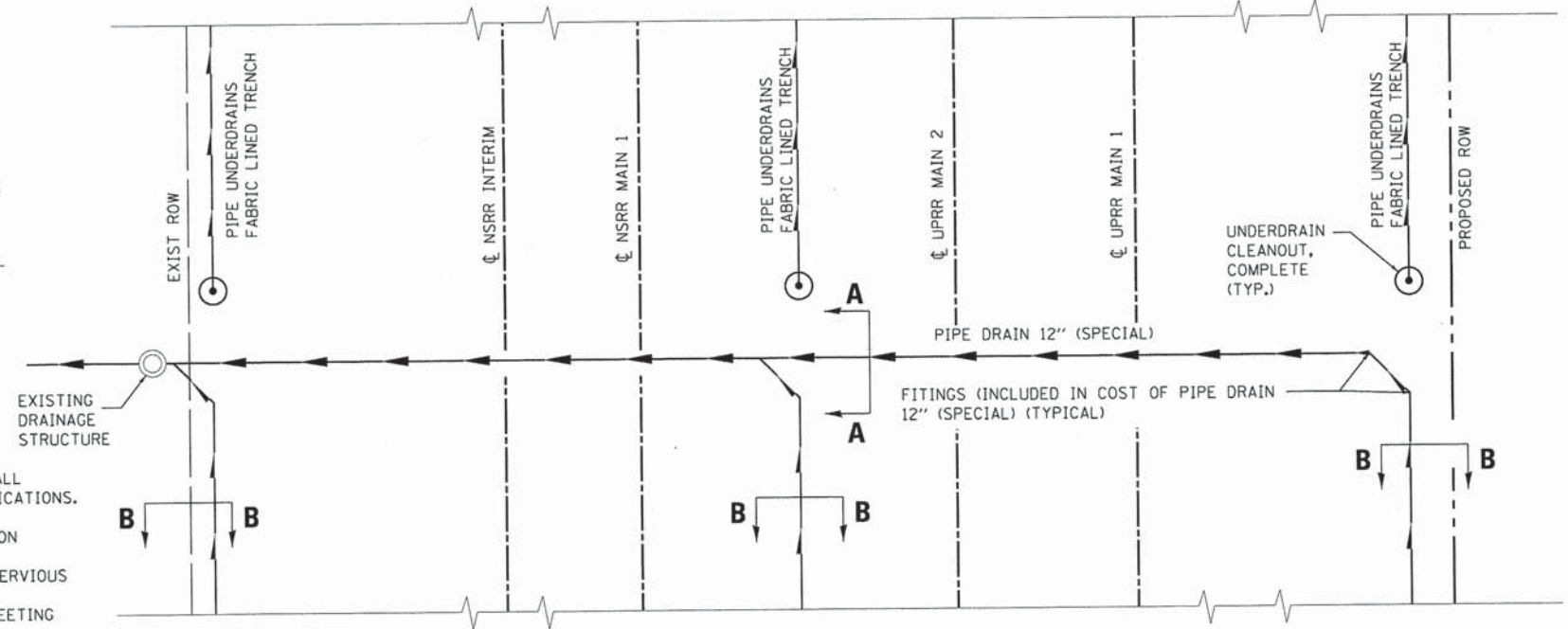
NOTES: SECTION A-A

- ① BEDDING AND GRANULAR BACKFILL SHALL BE COARSE AGGREGATE MEETING ARTICLE 1004.05, EXCEPT THAT THE GRADATION SHALL BE CA-7. GRANULAR BACKFILL SHALL BE PLACED AND COMPACTED ACCORDING TO ARTICLE 542.04(C) AND 542.04(F), RESPECTIVELY.
- ② ALL MATERIALS WILL NOT BE MEASURED SEPARATELY, BUT WILL BE INCLUDED IN THE CONTRACT PRICE PER UNIT FOR PIPE UNDERDRAIN 12" (SPECIAL).
- ③ PIPE DRAIN 12" (SPECIAL) SHALL BE A SMOOTH STEEL PIPE ACCORDING TO PROJECT SPECIFICATIONS.



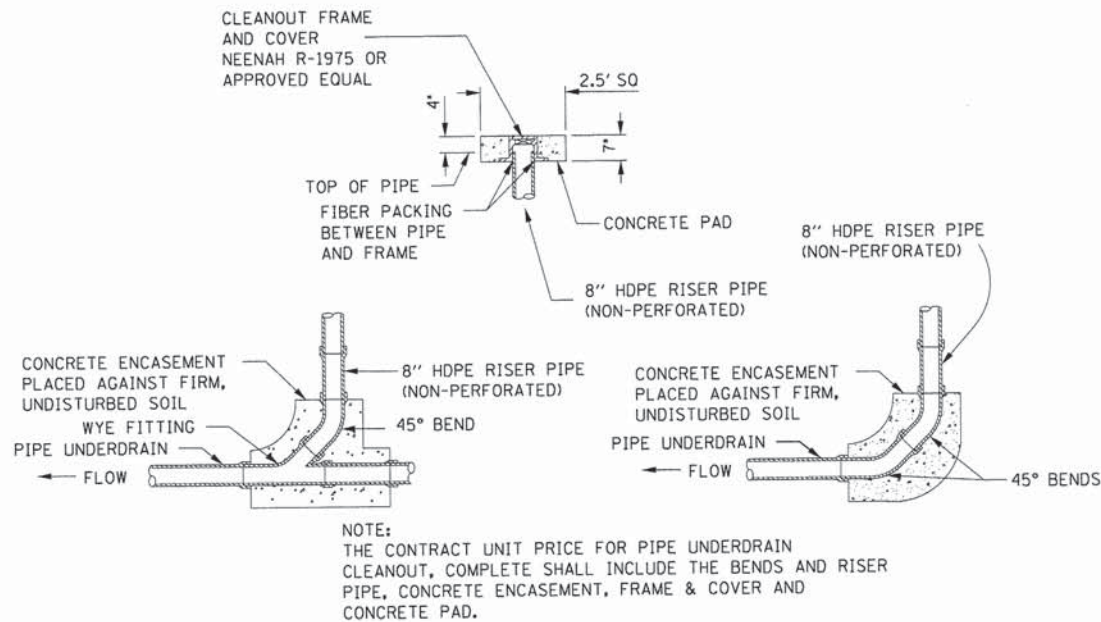
NOTES: SECTION B-B

- ① PIPE UNDERDRAIN MATERIALS AND CONSTRUCTION SHALL CONFORM TO SECTION 601 OF THE STANDARD SPECIFICATIONS, EXCEPT THAT NO FABRIC ENVELOPE IS REQUIRED ON PERFORATED PIPE. THE GRANULAR BACKFILL GRADATION SHALL BE CA-7. THE GRANULAR BACKFILL SHALL BE ENVELOPED ON THE SIDES AND BOTTOM WITH AN IMPERVIOUS GEOTECHNICAL FABRIC APPROVED BY THE ENGINEER, AND SHALL BE COVERED BY GEOTECHNICAL FABRIC MEETING ARTICLE 1080.05
- ② ALL MATERIALS WILL NOT BE MEASURED SEPARATELY, BUT WILL BE INCLUDED IN THE CONTRACT PRICE PER UNIT FOR PIPE UNDERDRAINS, FABRIC LINED TRENCH, OF THE SIZE SPECIFIED.
- ③ PERFORATED PIPE SHALL BE PERFORATED CORRUGATED PE PIPE WITH A SMOOTH INTERIOR MEETING ARTICLE 1040.04



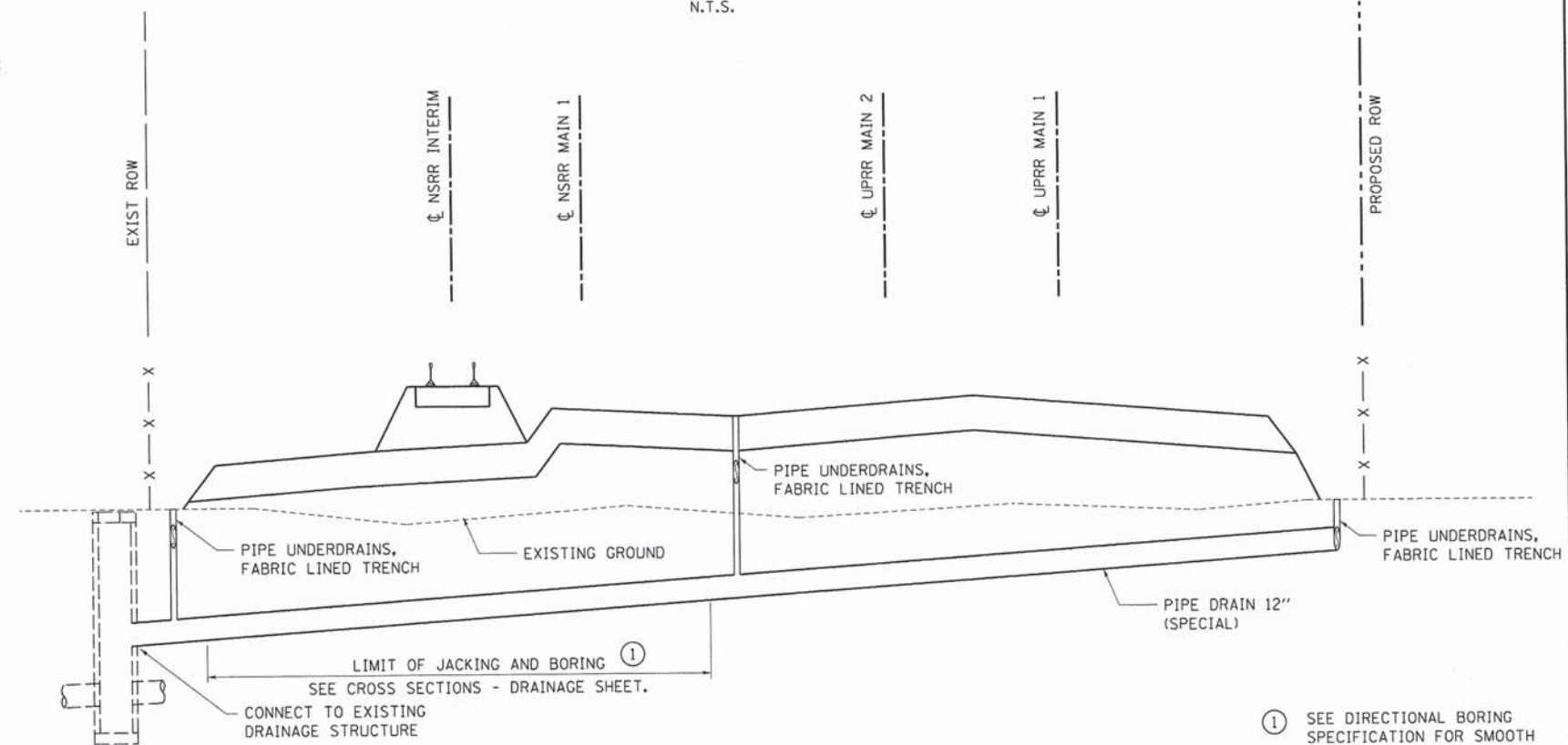
PIPE UNDERDRAIN OUTLET TO DRAINAGE STRUCTURES PLAN AT REYNOLDS AND MASON

N.T.S.



PIPE UNDERDRAIN CLEANOUT, COMPLETE DETAIL

N.T.S.



PIPE UNDERDRAIN OUTLET TO DRAINAGE STRUCTURES SECTION AT REYNOLDS AND MASON

N.T.S.

① SEE DIRECTIONAL BORING SPECIFICATION FOR SMOOTH STEEL PIPE PLACEMENT.

DESIGNED	JWM	9/6/13
DRAWN	CLG	9/27/13
REVIEWED	JWM	2/25/14

FILE NAME =	USER NAME =
D609L0179B-sht-details-TRACK-001.dgn	pop02275
PLOT SCALE = 5.0000' / 1"	CHECKED =
PLOT DATE = 02/26/2014	DATE =

DESIGNED -	JWM	REVISED -	
DRAWN -	CLG	REVISED -	
CHECKED -	JWM	REVISED -	
DATE -	2/25/14	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
DRAINAGE DETAILS - TRACK**

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	61
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				

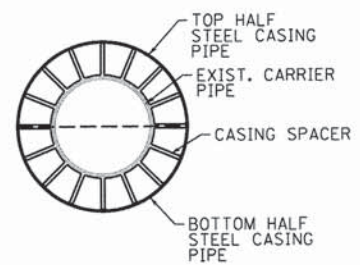
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BY	
PLAN	
NO.	
NO. OF SHEETS	
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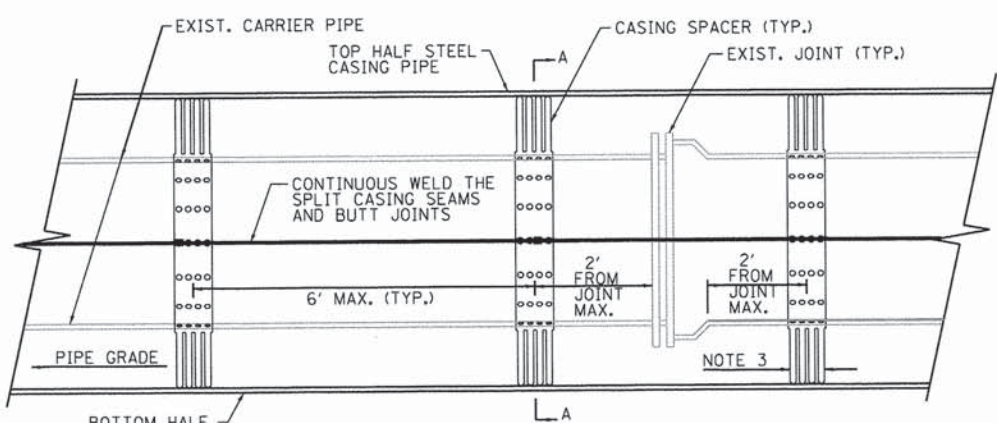
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PROFILE	
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NO. OF SHEETS	
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FILE NAME	

DATE	9/6/13
BY	LJB
DESIGNED	LJB
DATE	9/27/13
DRAWN	MOC
DATE	2/25/14
REVIEWED	LJB

FILE NAME = 060%01798-shr-misc-ss-encasement-001.dgn
 USER NAME = pop00275
 DESIGNED - LJB
 DRAWN - MOC
 CHECKED - LJB
 DATE - 2/25/14
 REVISIONS -
 REVISIONS -
 REVISIONS -
 REVISIONS -



SECTION A-A VIEW
N.T.S.



LONGITUDINAL SECTION VIEW
N.T.S.

SPLIT STEEL CASING PIPE AROUND EXIST CARRIER PIPE INSTALLATION

NOTES:

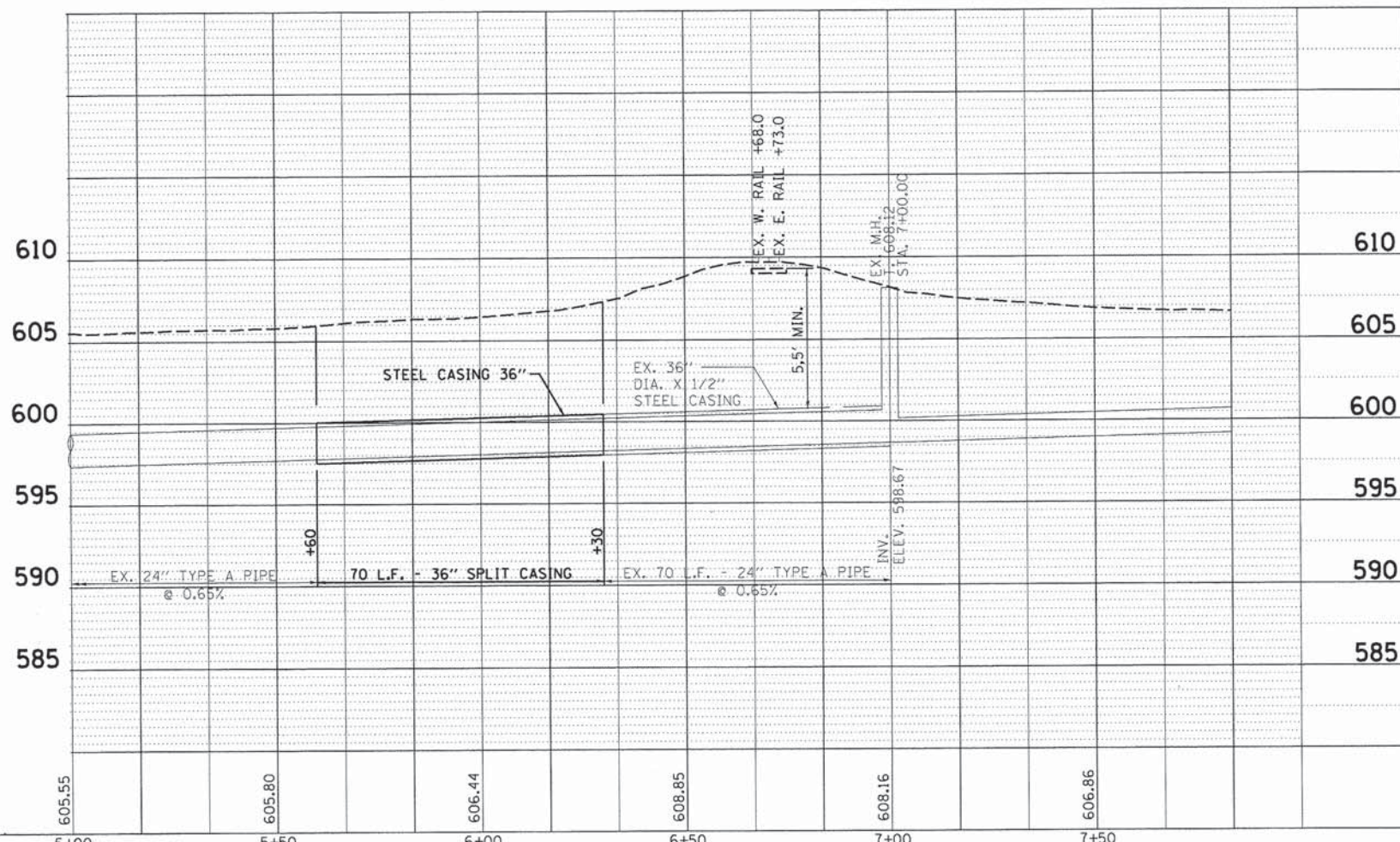
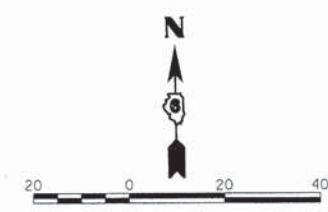
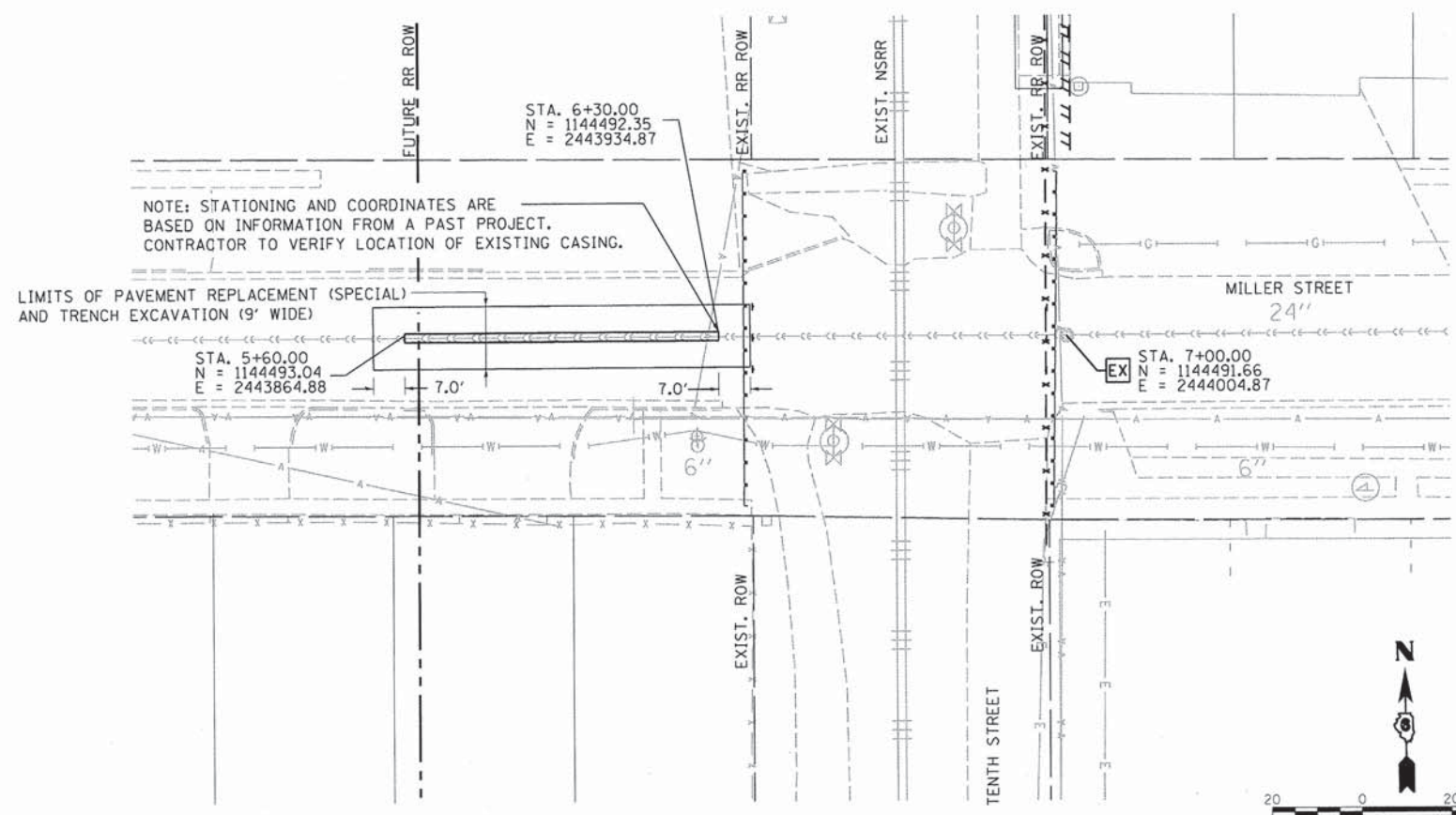
1. PAVEMENT REMOVAL AND REPLACEMENT LIMITS SHALL BE 9 FT. WIDE CENTERED ON THE SEWER.
2. STEEL CASINGS 36" SHALL BE 36" DIAMETER SPLIT CASING WITH A WALL THICKNESS OF 0.5625 IN.
3. CASING SPACER HEIGHT SHALL PROVIDE A MIN. 0.60" CLEARANCE FROM CARRIER PIPE JOINT TO INSIDE DIA. OF CASING PIPE.
4. NEW CASING PIPE SHALL BE INSTALLED TO MATCH THE ALIGNMENT OF THE EXIST. CARRIER PIPE.
5. THE CARRIER PIPE SHALL BE CONTINUOUSLY SUPPORTED DURING THE INSTALLATION OF THE CASING TO THE APPROVAL OF THE CITY SEWER ENGINEER.
6. NON-CORROSIVE/NON-REACTIVE CASING SPACERS SHALL BE REQUIRED IN ALL CASING PIPES. THE CASING SPACERS SHALL BE PLACED AT A SPACING OF NO MORE THAN EVERY 6 FEET, OR PER THE MANUFACTURERS RECOMMENDATION IF LESS THAN 6 FEET. SPACERS SHALL BE POSITIONED TO NOT BE DAMAGED BY THE WELDING OPERATION.
7. THE NEW CASING SHALL BE BACKFILLED TO THE SPRINGLINE WITH CLSM MIX 2. THE CLSM SHALL BE STAGGER POURED TO PREVENT FLOATATION OF THE CASING PIPE. THE REMAINING TRENCH SHALL BE BACKFILLED WITH CLSM ONLY AFTER THE FIRST LIFT HAS CURED.
8. THE NEW STEEL CASING SHALL BE WELDED TO THE EXISTING CASING TO FORM A WATER TIGHT SEAL. IF THERE IS AN ALIGNMENT ISSUE. THE CONTRACTOR SHALL UTILIZE A 3" WIDE STEEL BAND ON THE INSIDE OR OUTSIDE OF THE CASING TO ACT AS A TRANSITION.
9. SEAL END OF CASING PIPE WITH MFG RECOMMENDED BOOT OR OTHER METHOD APPROVED BY THE ENGINEER.

PIPE	PIPE DESCRIP.	PIPE DIA.	CASING INSIDE DIA.	CASING LENGTH	CASING WALL THICKNESS
CONCRETE	SEWER	24"	36"	70 L.F.	0.5625 IN.

CASING PIPE SHALL HAVE A MINIMUM YIELD STRENGTH OF 35,000 PSI

PIPE DETAILS & DIMENSIONS

MILLER STREET ALIGNMENT CONTROL					
ALIGNMENT POINT	DESCRIPTION	STATION	BEARING	NORTHING	EASTING
BEGIN	POT	2+91.72		1144495.5995	2443604.1400
END	POT	7+00.00	N 89° 18' 04.2" E	1144490.6198	2444012.3901



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

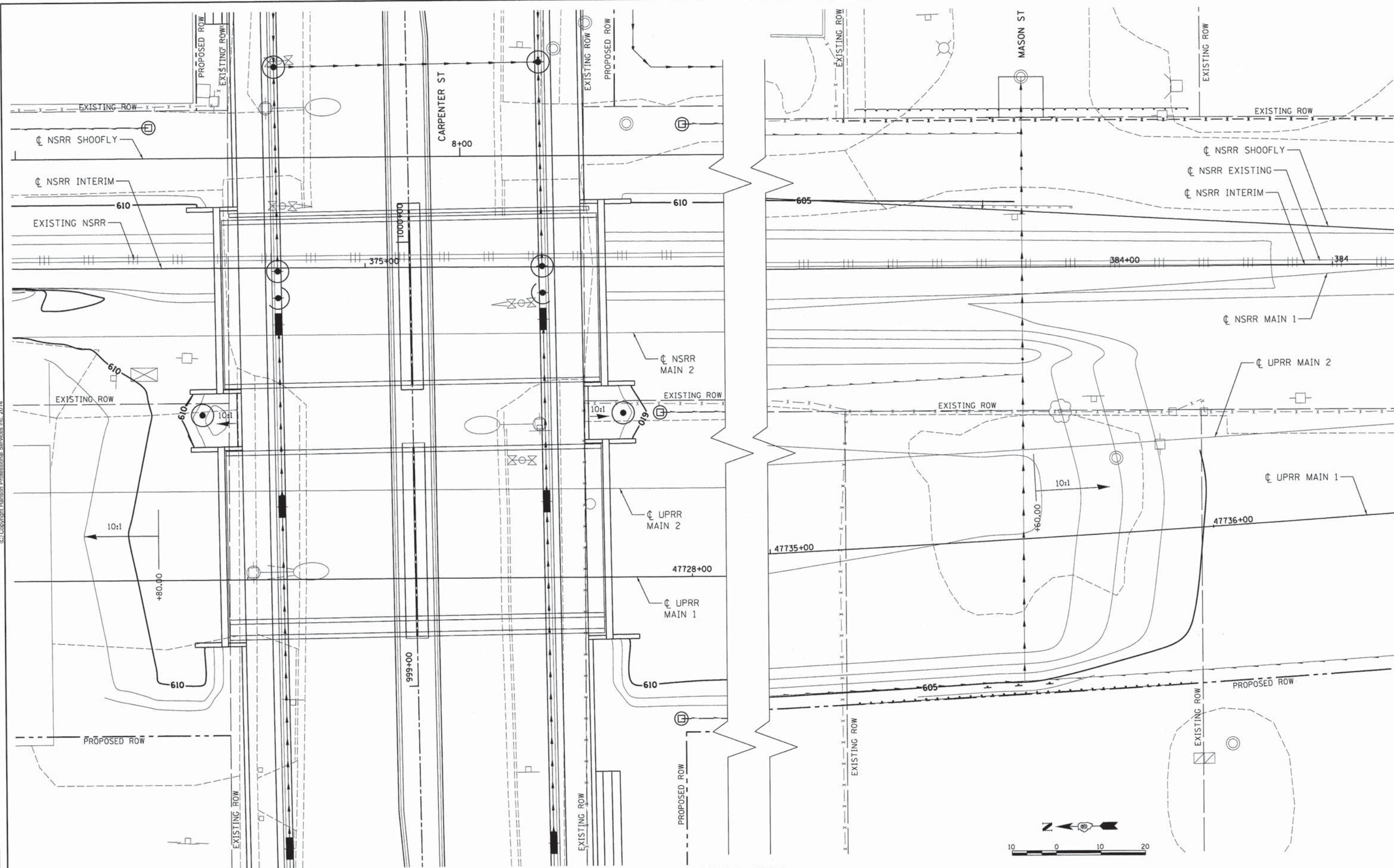
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
DRAINAGE DETAILS - TRACK

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	62
09L01798		CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				

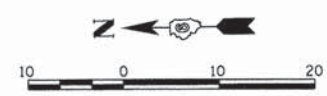
SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.



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GRADING PLAN



FINAL
DESIGNED - JMW 9/16/13
DRAWN - RSJ 9/21/13
REVIEWED - JMW 2/25/14

FILE NAME = D609L01798-sht-details-TRACK-802.dgn
Grading

USER NAME = pop00275
PLOT SCALE = 10.0000' / 1" = 120'
PLOT DATE = 02/26/2014

DESIGNED - GCN	REVISED -
DRAWN - GCN	REVISED -
CHECKED - JMW	REVISED -
DATE - 2/25/14	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
GRADING DETAILS - TRACK**

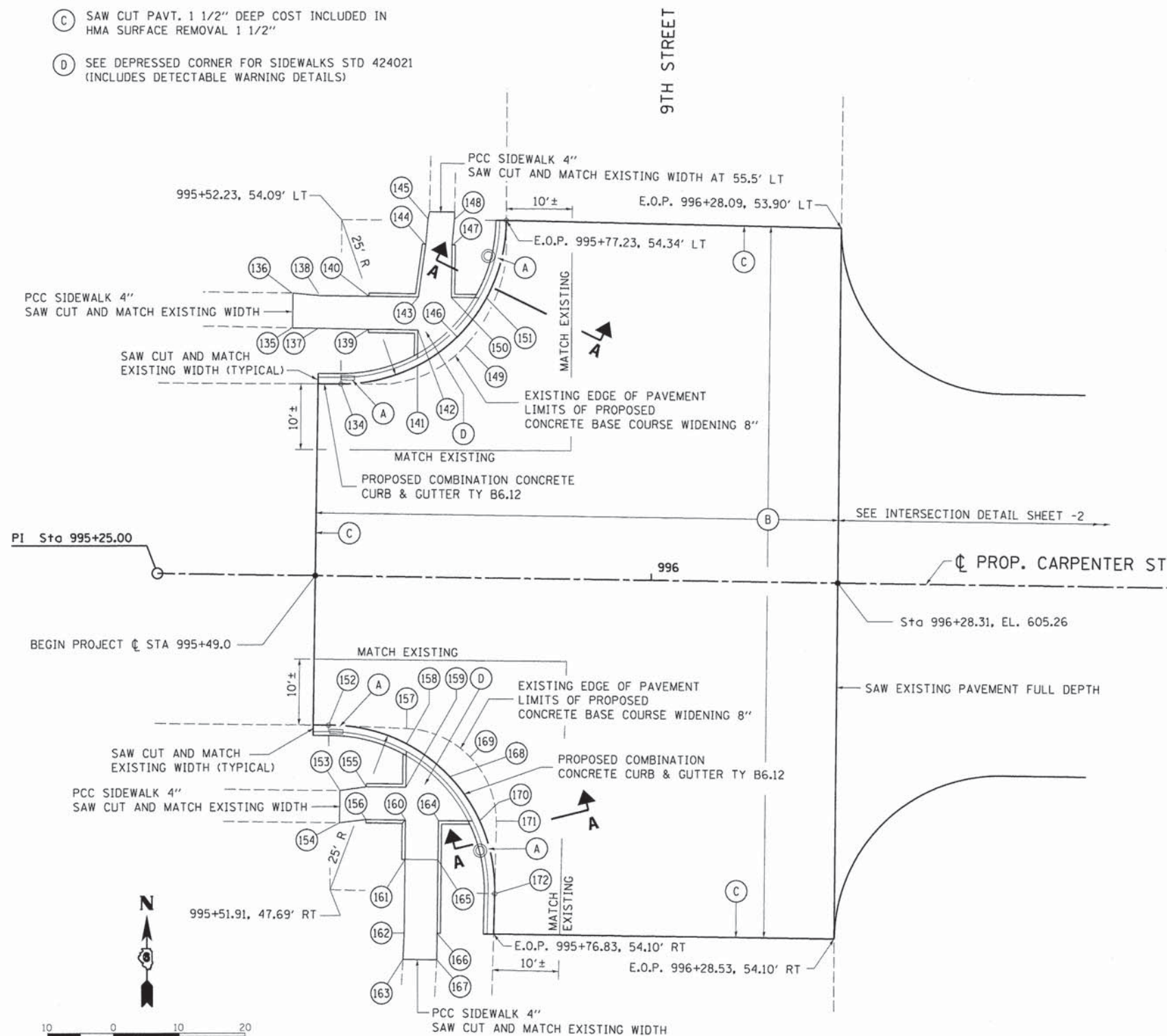
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	63
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



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- (A) EXISTING INLET TO BE ADJUSTED
- (B) LIMITS OF HMA SURFACE REMOVAL 1 1/2".
- (C) SAW CUT PAVT. 1 1/2" DEEP COST INCLUDED IN HMA SURFACE REMOVAL 1 1/2"
- (D) SEE DEPRESSED CORNER FOR SIDEWALKS STD 424021 (INCLUDES DETECTABLE WARNING DETAILS)

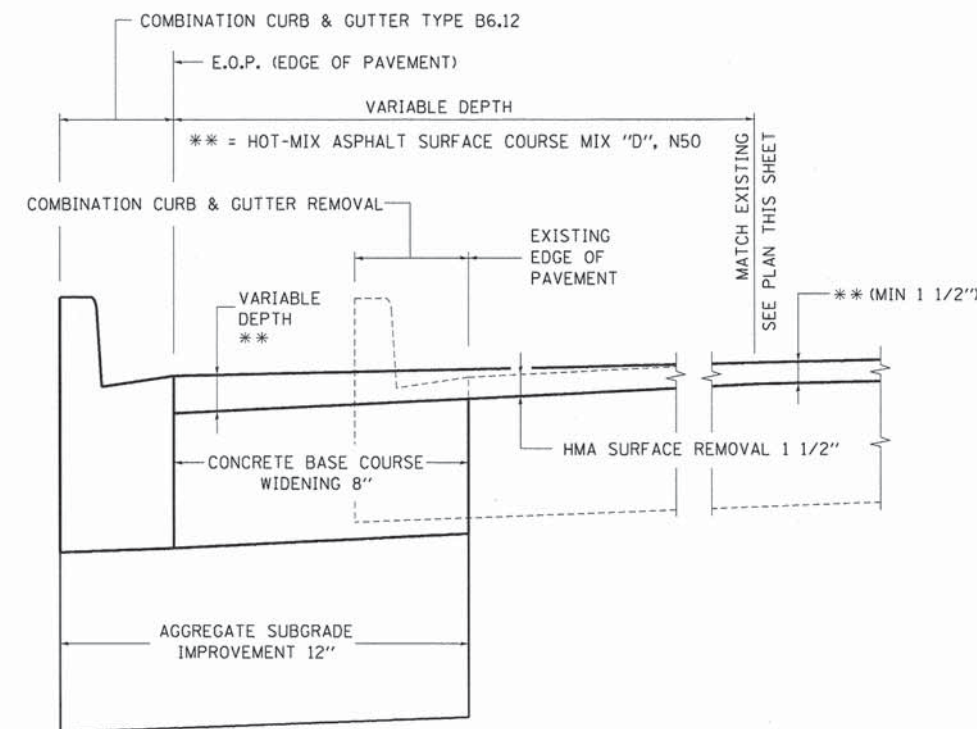


CARPENTER AT 9TH			
PT NO	STATION	OFFSET	ELEV
134	995+52.46	-29.09	604.62
135	995+45.00	-37.52	605.37 *
136	995+45.00	-42.83	605.58 *
137	995+49.00	-37.50	605.40
138	995+49.00	-42.50	605.50
139	995+56.54	-37.50	605.30
140	995+56.54	-42.50	605.40
141	995+64.04	-32.06	604.75
142	995+64.04	-37.50	604.80
143	995+64.04	-42.50	604.90
144	995+65.04	-50.50	605.52
145	995+65.35	-54.50	605.58
146	995+70.02	-36.52	604.88
147	995+69.04	-50.50	605.46
148	995+69.35	-54.50	605.50
149	995+71.31	-35.23	604.89
150	995+69.04	-42.50	604.94
151	995+74.38	-42.50	604.90

INDICATES MATCH EXISTING - *
NEGATIVE OFFSET INDICATES OFFSET TO LEFT.

CARPENTER AT 9TH			
PT NO	STATION	OFFSET	ELEV
152	995+51.81	22.69	604.59
153	995+53.20	32.61	605.20 *
154	995+53.21	37.52	605.26 *
155	995+57.20	32.00	605.20
156	995+57.21	37.00	605.26
157	995+63.18	23.04	604.68
158	995+63.18	25.38	604.68
159	995+63.20	32.00	604.76
160	995+63.21	37.00	604.86
161	995+63.22	43.00	605.30
162	995+63.24	54.10	605.40
163	995+63.11	58.10	605.49 *
164	995+68.21	37.00	604.90
165	995+68.22	43.00	605.24
166	995+68.24	54.10	605.30
167	995+68.24	58.10	605.31 *
168	995+69.85	30.29	604.81
169	995+72.90	27.22	604.87
170	995+74.51	37.00	604.89
171	995+77.01	36.95	604.93
172	995+76.91	47.98	604.93

INDICATES MATCH EXISTING - *



SECTION A-A

HOT-MIX ASPHALT MIXTURE REQUIREMENTS				
ITEM	RAP % (MAX)	AGGREGATE COMPOSITION	ASPHALT GRADE	VOIDS
HMA SURFACE	10%	IL-12.5 MIX "D"	PG 64-22	4.0% @ N50

FINAL
DESIGNED CLG 9/6/13
DRAWN CLG 9/27/13
REVIEWED JAD 2/25/14

FILE NAME = 0609L0179B-sht-intersec-CAR-003.DGN	USER NAME = pop00275	DESIGNED - CLG	REVISED -
Intersection Detail	PLOT SCALE = 10.0000' / in.	DRAWN - CLG	REVISED -
	PLOT DATE = 02/25/2014	CHECKED - JAD	REVISED -
		DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
INTERSECTION DETAIL SHEET -1

SCALE: SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 64
09L0179B		CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				



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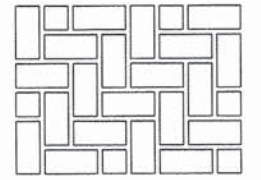
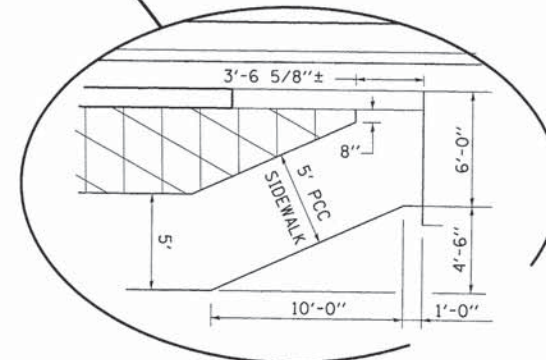
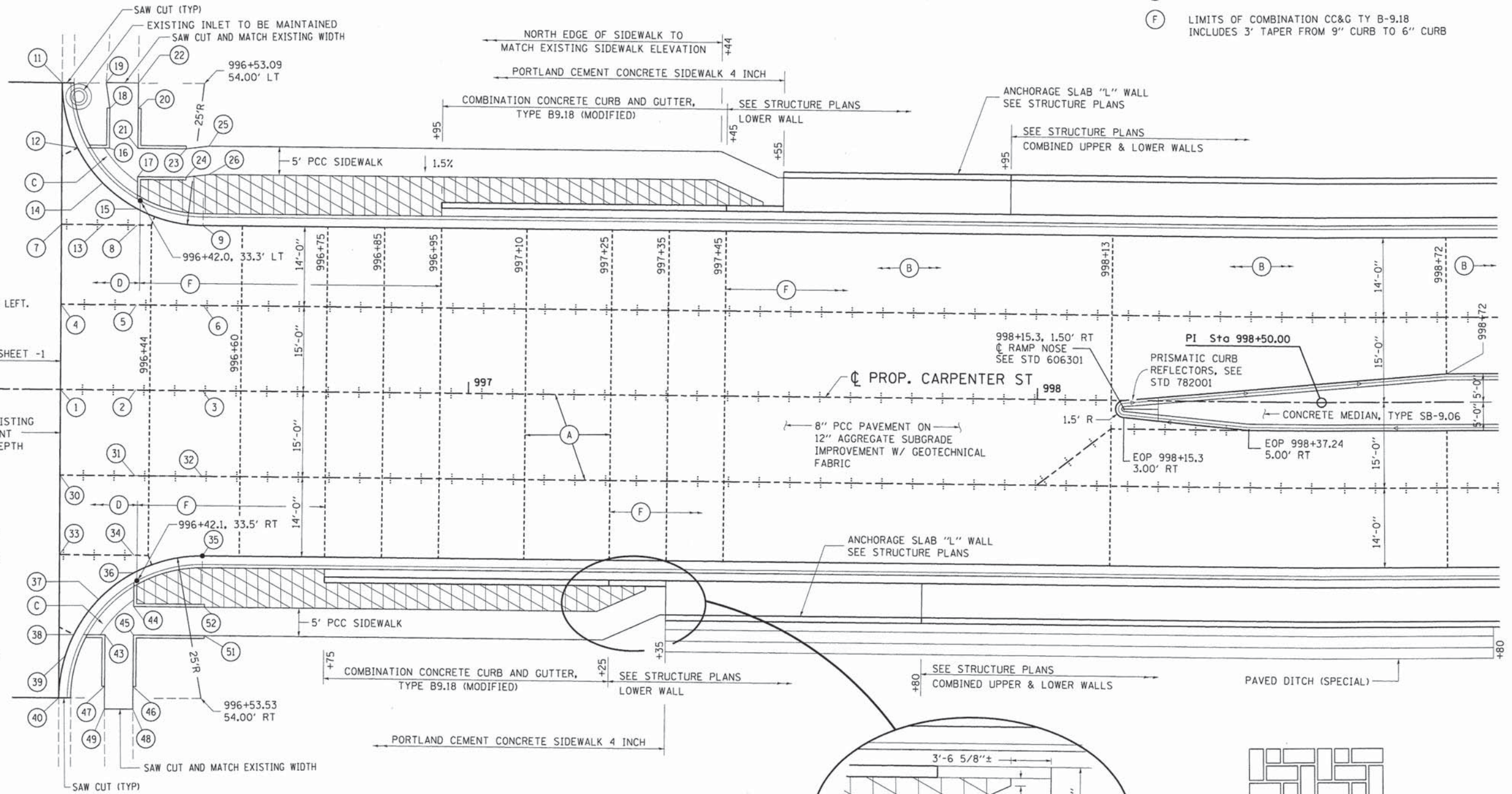
CARPENTER AT 9TH			
PT NO	STATION	OFFSET	ELEV
1	996+28.31	0.00	605.26*
2	996+41.50	0.00	605.07
3	996+53.30	0.00	604.87
4	996+28.35	-15.00	605.25*
5	996+41.50	-15.00	604.93
6	996+53.30	-15.00	604.64
7	996+28.19	-29.00	605.02*
8	996+41.50	-29.00	604.74
9	996+53.09	-29.00	604.43
11	996+28.09	-53.90	604.79*
12	996+30.89	-42.50	604.82
13	996+35.50	-29.00	604.87
14	996+35.37	-36.37	604.82
15	996+41.50	-31.85	604.73
16	996+36.50	-42.50	604.82
17	996+41.50	-37.50	604.76
18	996+36.50	-49.50	605.30
19	996+35.82	-54.00	605.36*
20	996+41.50	-49.50	605.35
21	996+41.50	-42.50	604.85
22	996+41.50	-54.00	605.42*
23	996+50.00	-42.50	605.52
24	996+50.00	-37.50	605.45
25	996+54.00	-43.00	605.59
26	996+54.00	-38.00	605.51

CARPENTER AT 9TH			
PT NO	STATION	OFFSET	ELEV
31	996+41.50	15.00	604.89*
32	996+53.30	15.00	604.64
33	996+28.43	29.00	604.95*
34	996+41.50	29.00	604.71
35	996+53.53	29.00	604.43
36	996+41.55	32.06	604.69
37	996+35.37	36.82	604.77
38	996+31.08	43.00	604.79
39	996+29.61	46.72	604.80
40	996+28.53	54.10	604.83*
43	996+36.55	43.00	604.81
44	996+41.55	38.00	604.72
45	996+41.55	43.00	604.81
46	996+41.55	52.00	605.50
47	996+36.55	52.00	605.43
48	996+41.55	56.00	605.49
49	996+36.55	56.00	605.39
51	996+54.00	43.00	605.64
52	996+54.00	38.00	605.57

LEGEND

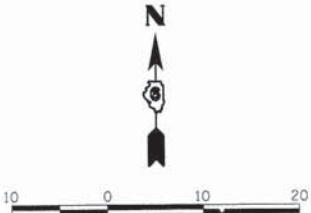
- SAWED LONGITUDINAL JOINT OR CONSTRUCTION JOINT
- TRANSVERSE CONTRACTION JOINT
- LIMITS OF "SLOPE WALL" CONCRETE PAVER SIDEWALK

- (A) SEE STD 420001 FOR JOINT DETAILS AND REINFORCEMENT.
- (B) SPACE TRANSVERSE CONTRACTION JOINTS NOT SHOWN AT A MAX. OF 15 FT.
- (C) SEE DEPRESSED CORNER FOR SIDEWALKS STD 424021 (INCLUDES DETECTABLE WARNING DETAILS)
- (D) LIMITS OF COMBINATION CC&G TY B-6.18
- (F) LIMITS OF COMBINATION CC&G TY B-9.18 INCLUDES 3' TAPER FROM 9" CURB TO 6" CURB



"SLOPE WALL" PAVER PATTERN

TYPICAL SIDEWALK TRANSITION



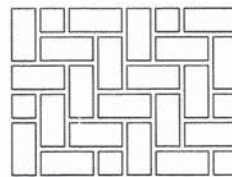
DESIGNED - CLG 9/6/13
 DRAWN - CLG 9/27/13
 REVIEWED - JAD 2/25/14

FILE NAME = D:\09L01798-sht-intersec-CAR-001.dgn	USER NAME = pop0275	DESIGNED - CLG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SPRINGFIELD RAIL IMPROVEMENTS PROJECT SPRINGFIELD, SANGAMON COUNTY, ILLINOIS INTERSECTION DETAIL SHEET -2	F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 65
PLOT SCALE = 10,0000' / in.	CHECKED - JAD	REVISED -	SCALE: SHEET 2 OF 3 SHEETS STA. TO STA.			CONTRACT NO. 09L1798				
PLOT DATE = 02\26\2014	DATE - 2/25/14	REVISED -	ILLINOIS FED. AID PROJECT							
Intersection Detail			CONTRACT NO. 09L1798							

LEGEND

- SAWED LONGITUDINAL JOINT OR CONSTRUCTION JOINT
- TRANSVERSE CONTRACTION JOINT
- [Hatched Box] LIMITS OF "GAP" CONCRETE PAVER SIDEWALK
- [Hatched Box] LIMITS OF "SLOPE WALL" CONCRETE PAVER SIDEWALK

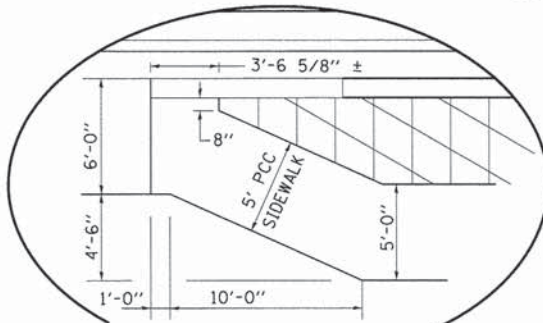
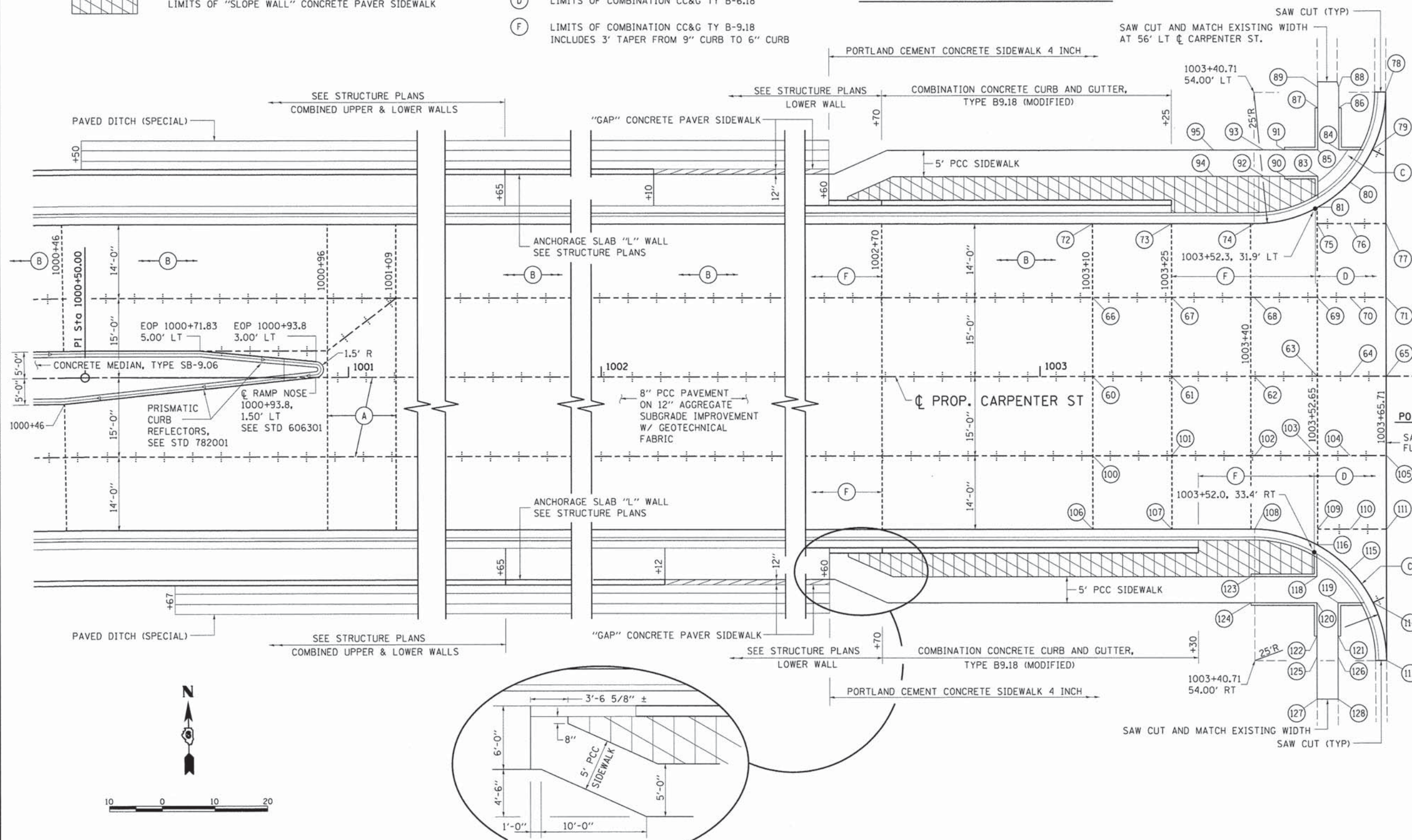
- (A) SEE STD 420001 FOR JOINT DETAILS AND REINFORCEMENT.
- (B) SPACE TRANSVERSE CONTRACTION JOINTS NOT SHOWN AT A MAX. OF 15 FT.
- (C) SEE DEPRESSED CORNER FOR SIDEWALKS STD 424021 (INCLUDES DETECTABLE WARNING DETAILS)
- (D) LIMITS OF COMBINATION CC&G TY B-6.18
- (E) LIMITS OF COMBINATION CC&G TY B-9.18 INCLUDES 3' TAPER FROM 9" CURB TO 6" CURB



"SLOPE WALL" PAVER PATTERN



"GAP" PAVER PATTERN



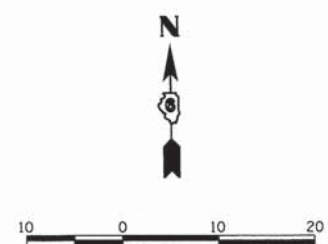
TYPICAL SIDEWALK TRANSITION

CARPENTER AT 11TH			
PT NO	STATION	OFFSET	ELEV
60	1003+10.00	0.00	605.34
61	1003+25.00	0.00	605.74
62	1003+40.71	0.00	606.10
63	1003+52.65	0.00	606.34
64	1003+58.85	0.00	606.46
65	1003+65.71	0.00	606.60
66	1003+10.00	-15.00	605.11
67	1003+25.00	-15.00	605.62
68	1003+40.71	-15.00	606.10
69	1003+52.65	-15.00	606.35
70	1003+58.85	-15.00	606.47
71	1003+65.71	-15.00	606.62
72	1003+10.00	-29.00	604.90
73	1003+25.00	-29.00	605.47
74	1003+40.71	-29.00	606.01
75	1003+52.65	-29.00	606.38
76	1003+58.85	-29.00	606.48
77	1003+65.71	-29.00	606.60
78	1003+65.71	-54.00	606.70
79	1003+63.16	-43.00	606.53
80	1003+58.92	-36.88	606.44
81	1003+52.80	-32.12	606.38
83	1003+52.80	-38.00	606.41
84	1003+56.80	-43.00	606.50
85	1003+52.80	-43.00	606.50
86	1003+56.80	-51.00	607.14
87	1003+52.80	-51.00	607.14
88	1003+56.80	-55.00	607.19
89	1003+52.80	-55.00	607.19
90	1003+46.50	-38.00	606.90
91	1003+46.50	-43.00	606.97
92	1003+42.50	38.00	606.96
93	1003+42.50	-43.00	607.03
94	1003+33.00	-38.00	607.35
95	1003+33.00	-43.00	607.42

CARPENTER AT 11TH			
PT NO	STATION	OFFSET	ELEV
100	1003+10.00	15.00	605.11
101	1003+25.00	15.00	605.62
102	1003+40.71	15.00	606.10
103	1003+52.65	15.00	606.34
104	1003+58.85	15.00	606.46
105	1003+65.71	15.00	606.59
106	1003+10.00	29.00	604.90
107	1003+25.00	29.00	605.44
108	1003+40.71	29.00	605.95
109	1003+52.65	29.00	606.30
110	1003+58.85	29.00	606.42
111	1003+65.71	29.00	606.56
113	1003+65.71	54.00	606.49
114	1003+63.16	43.00	606.43
115	1003+58.78	36.72	606.36
116	1003+52.50	31.96	606.30
118	1003+52.50	38.00	606.33
119	1003+56.50	43.00	606.41
120	1003+52.50	43.00	606.42
121	1003+56.50	49.33	606.87
122	1003+52.50	49.33	606.93
123	1003+40.00	38.00	607.33
124	1003+40.00	43.00	607.40
125	1003+52.50	53.33	606.99
126	1003+56.50	53.33	606.93
127	1003+52.50	61.33	607.37
128	1003+56.50	61.33	607.30

INDICATES MATCH EXISTING - *
NEGATIVE OFFSET INDICATES OFFSET TO LEFT.

POT Sta 1003+85.70
11TH ST.



FINAL
DESIGNED CLG 9/6/13
DRAWN CLG 9/27/13
REVIEWED JAD 2/25/14

FILE NAME = D60%_01798-sht-intersec-CAR-002.dgn	USER NAME = pop00275	DESIGNED - CLG	REVISD -
		DRAWN - CLG	REVISD -
		CHECKED - JAD	REVISD -
Intersection Detail:	PLOT DATE = 02/26/2014	DATE - 2/25/14	REVISD -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

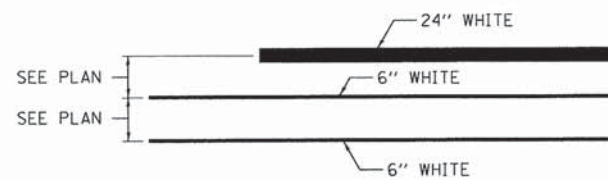
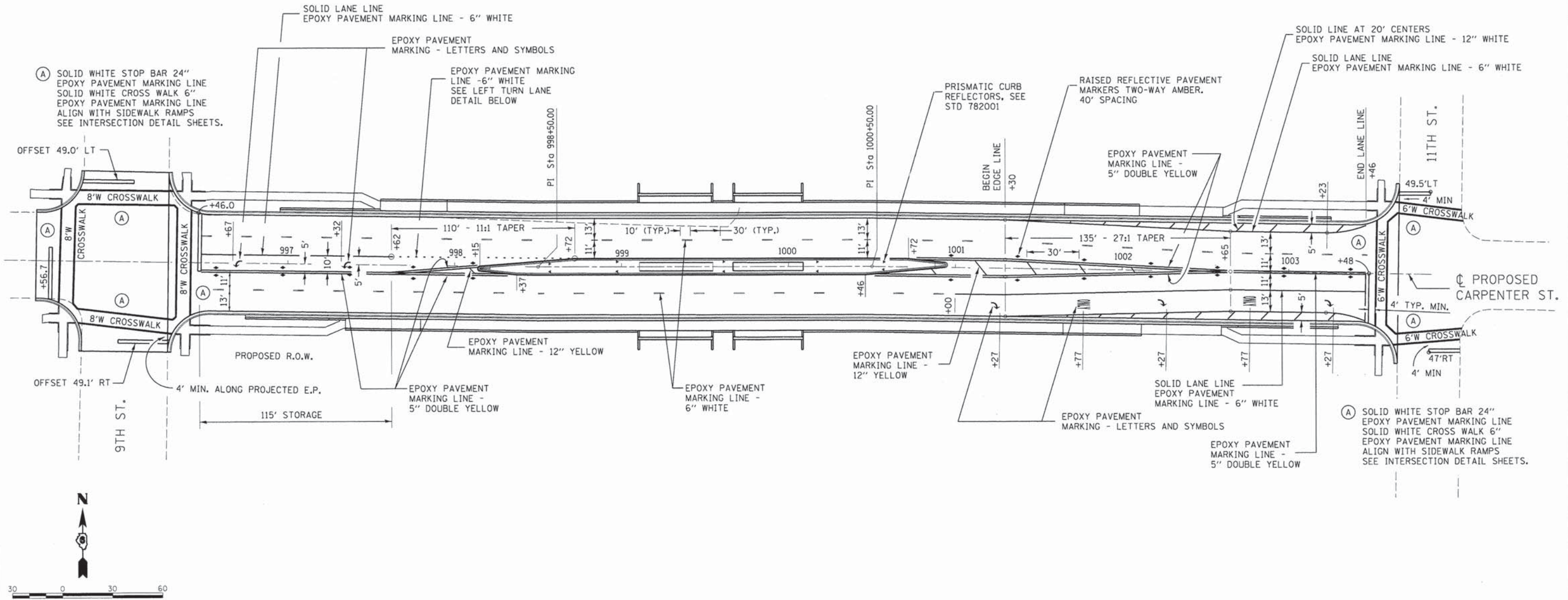
**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
INTERSECTION DETAIL SHEET -3**

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 66
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				

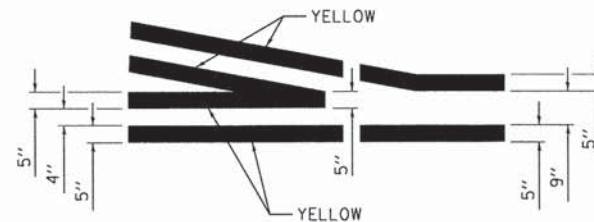
SCALE: SHEET 3 OF 3 SHEETS STA. TO STA.



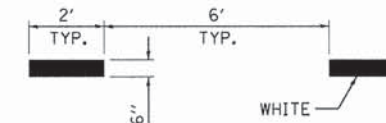
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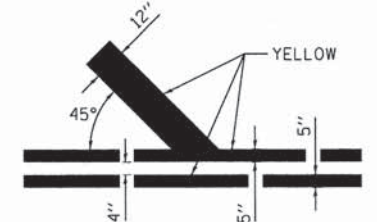
DETAIL FOR CROSSWALKS AND STOP BARS



TYPICAL APPLICATION AT LEFT TURN LANES



LEFT TURN LANE STRIPING



MEDIAN STRIPING

FINAL
 DESIGNED CLG 9/6/13
 DRAWN CLG 9/27/13
 REVIEWED JWM 2/25/14

FILE NAME =	USER NAME = pop0275	DESIGNED - CLG	REVISED -
D609L01798-sht-pmk-CAR-001.dgn		DRAWN - CLG	REVISED -
	PLOT SCALE = 30,0000 1/ in.	CHECKED - JWM	REVISED -
Pave Mark Sheet 1	PLOT DATE = 02/26/2014	DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

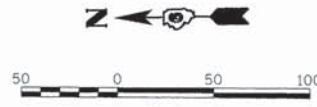
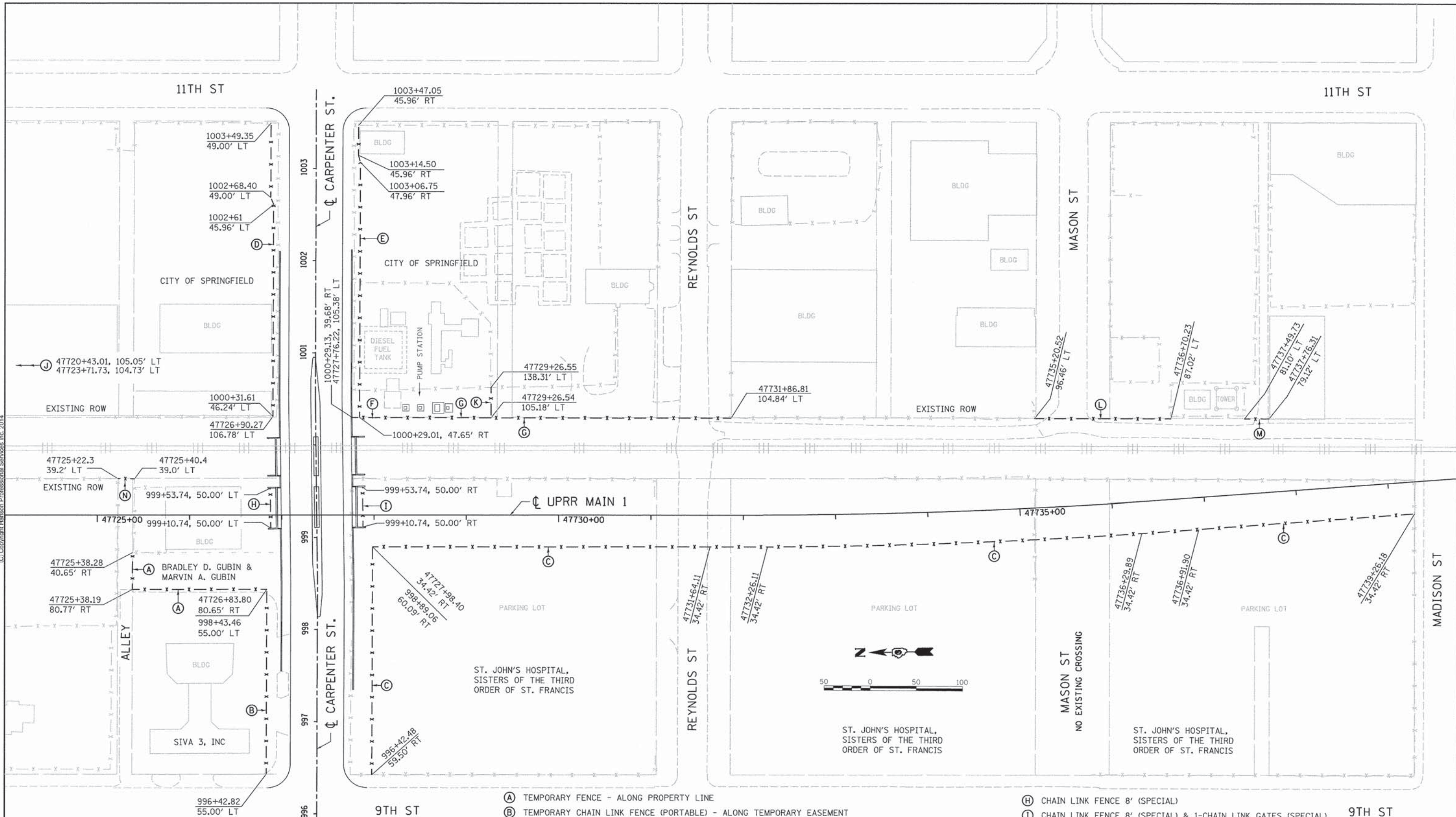
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 PAVEMENT MARKING PLAN - CARPENTER STREET

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	67
09L01798			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.



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- (A) TEMPORARY FENCE - ALONG PROPERTY LINE
- (B) TEMPORARY CHAIN LINK FENCE (PORTABLE) - ALONG TEMPORARY EASEMENT
- (C) TEMPORARY FENCE - PLACED AS SHOWN 7" IN FROM PROPOSED ROW. TEMPORARY FENCE WILL BE REMOVED AFTER CONSTRUCTION IS COMPLETE AND REPLACED WITH CHAIN LINK FENCE 4'.
- (D) CHAIN LINK FENCE 8' (SPECIAL) INSTALL PRIOR TO EXISTING FENCE BEING REMOVED, PROTECT FROM ADJACENT CONSTRUCTION OPERATIONS.
- (E) CHAIN LINK FENCE 8' (SPECIAL) INSTALL PRIOR TO EXISTING FENCE BEING REMOVED, PROTECT FROM ADJACENT CONSTRUCTION OPERATIONS.
- (F) CHAIN LINK FENCE 8' (SPECIAL) - RAILWAY FENCE - BEGINS AT BACK OF UPPER RETAINING WALL
- (G) CHAIN LINK FENCE 8' (SPECIAL) - RAILWAY FENCE
- (H) CHAIN LINK FENCE 8' (SPECIAL)
- (I) CHAIN LINK FENCE 8' (SPECIAL) & 1-CHAIN LINK GATES (SPECIAL), 8'X4' SINGLE GATE, INSTALLED AT SOUTHWEST END
- (J) CHAIN LINK FENCE 8' (SPECIAL) - RAILWAY FENCE
- (K) CHAIN LINK FENCE 8' (SPECIAL) & 1-CHAIN LINK GATES (SPECIAL) 8'X12' DOUBLE, INSTALLED 2' FROM RAILWAY FENCE
- (L) CHAIN LINK FENCE 8' (SPECIAL) - RAILWAY FENCE
- (M) CHAIN LINK FENCE 8' (SPECIAL) - RAILWAY FENCE
- (N) CHAIN LINK FENCE 4'

DESIGNED	CLG	9/6/13
DRAWN	CLG	9/27/13
REVIEWED	MNM	2/25/14

FILE NAME = D609L01798-shr-CARP-fencing-001.dgn
 USER NAME = pop00275
 PLOT SCALE = 50.0000' / 1" =
 PLOT DATE = 03/07/2014

DESIGNED - CLG
 DRAWN - CLG
 CHECKED - MNM
 DATE - 2/25/14

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 FENCING PLAN- CARPENTER /TRACK**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	68
09L0179B		CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				

TRAFFIC SIGNAL PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SIGNAL HEAD
		SIGNAL HEAD WITH BACKPLATE
		TEMPORARY SIGNAL HEAD
		PEDESTRIAN SIGNAL HEAD
		PEDESTRIAN PUSHBUTTON DETECTOR
		DETECTOR LOOP
		QUADRAPOLE DETECTOR LOOP
		SIGNAL POST
		ALUMINUM MAST ARM ASSEMBLY AND POLE
		STEEL MAST ARM ASSEMBLY AND POLE
		WOOD POLE
		WOOD POLE WITH GUY
		SERVICE INSTALLATION
		CONTROLLER
		HANDHOLE
		HEAVY DUTY HANDHOLE
		DOUBLE HANDHOLE
		JUNCTION BOX
		GULFBOX JUNCTION
		AERIAL CABLE
		CONDUIT
		CONDUIT SPLICE
		SPAN WIRE / TETHER WIRE
		SIDEWALK REMOVAL IN SO M (SO FT)
		PC CONC SDWLK 100 mm IN SO M (SO YD)
		PC CONC SDWLK 100 mm SPECIAL IN SO M (SO YD)

LENGTH - CONSTRUCTION (T=TRENCH P=PUSHED A=AUGERED E=EXISTING)
 SIZE - TYPE (S=STEEL P=PVC F=FIBER DUCT U=UNI-DUCT)

TRAFFIC SIGNAL WIRING DIAGRAM LEGEND

EXISTING	PROPOSED	DESCRIPTION
		200 mm (8") SIGNAL SECTION
		300 mm (12") SIGNAL SECTION
		DIRECTIONAL SIGNAL SECTION
		225 mm (9") PEDESTRIAN SIGNAL FACE
		300 mm (12") PEDESTRIAN SIGNAL FACE
		SIGNAL FACE WITH BACKPLATE
		PROGRAMMED SIGNAL SECTION
		SIGNAL SECTION WITH LOUVRE
		DUAL-INDICATION SIGNAL SECTION
		INDUCTION DETECTOR LOOP
		QUADRAPOLE DETECTOR LOOP
		DIRECT-CONNECTED LOOP LEAD-IN (TWISTED)
		ELECTRIC CABLE DENOTING NUMBER OF CONDUCTORS
		ELECTRIC CABLE TO BE REMOVED
		ELECTRIC CABLE IDENTIFIER TAPE CODES (R= RED W= WHITE Y= YELLOW G= GREEN B= BLUE O= ORANGE)
		PEDESTRIAN PUSHBUTTON DETECTOR
		VIDEO DETECTION CAMERA
		EMERGENCY VEHICLE PREEMPTOR



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DESIGNED	RLA	12/17/13
DRAWN	RLA	12/17/13
REVIEWED	ANG	2/25/14

FILE NAME =	D609L0179B-shr-ts13.dgn	USER NAME =	pop00275	DESIGNED -	RLA	REVISED -	
		DRAWN -	RLA	CHECKED -	KNB	REVISED -	
		PLOT SCALE =	20.0000' / 1"	DATE -	2/25/14	REVISED -	
		PLOT DATE =	02/25/2014				

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

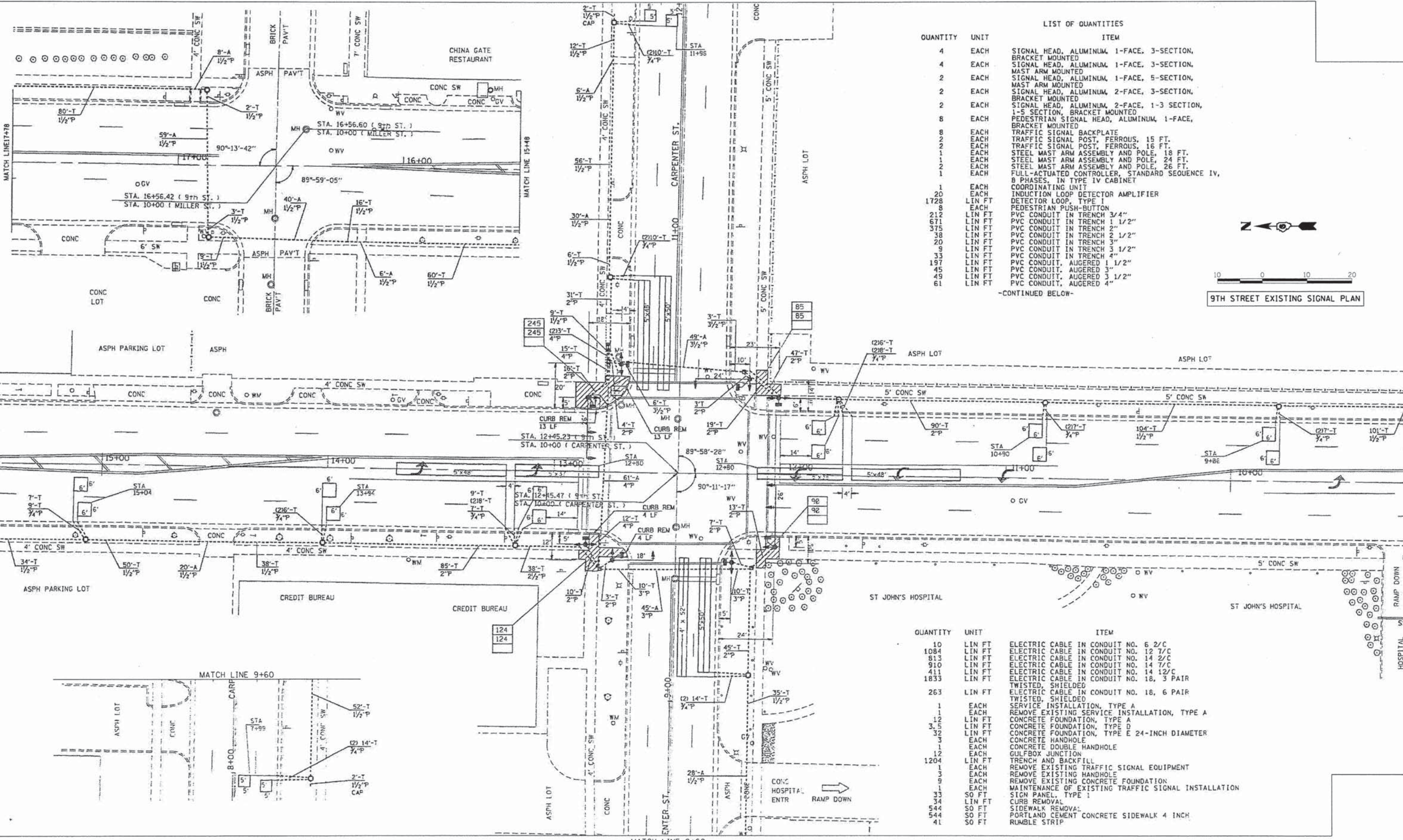
**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
LEGEND FOR TRAFFIC SIGNAL DETAILS**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	69
09L0179B			CONTRACT NO. 093617	
ILLINOIS FED. AID PROJECT				



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LIST OF QUANTITIES

QUANTITY	UNIT	ITEM
4	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 3-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 3-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, ALUMINUM, 1-FACE, 5-SECTION, MAST ARM MOUNTED
2	EACH	SIGNAL HEAD, ALUMINUM, 2-FACE, 3-SECTION, BRACKET MOUNTED
2	EACH	SIGNAL HEAD, ALUMINUM, 2-FACE, 1-3 SECTION, 1-5 SECTION, BRACKET MOUNTED
8	EACH	PEDESTRIAN SIGNAL HEAD, ALUMINUM, 1-FACE, BRACKET MOUNTED
8	EACH	TRAFFIC SIGNAL BACKPLATE
2	EACH	TRAFFIC SIGNAL POST, FERROUS, 15 FT.
2	EACH	TRAFFIC SIGNAL POST, FERROUS, 18 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 18 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.
2	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.
1	EACH	FULL-ACTUATED CONTROLLER, STANDARD SEQUENCE IV, 8 PHASES, IN TYPE IV CABINET
1	EACH	COORDINATING UNIT
20	EACH	INDUCTION LOOP DETECTOR AMPLIFIER
1728	LIN FT	DETECTOR LOOP, TYPE I
8	EACH	PEDESTRIAN PUSH-BUTTON
212	LIN FT	PVC CONDUIT IN TRENCH 3/4"
671	LIN FT	PVC CONDUIT IN TRENCH 1 1/2"
375	LIN FT	PVC CONDUIT IN TRENCH 2"
38	LIN FT	PVC CONDUIT IN TRENCH 2 1/2"
20	LIN FT	PVC CONDUIT IN TRENCH 3"
9	LIN FT	PVC CONDUIT IN TRENCH 3 1/2"
33	LIN FT	PVC CONDUIT IN TRENCH 4"
197	LIN FT	PVC CONDUIT, AUGERED 1 1/2"
45	LIN FT	PVC CONDUIT, AUGERED 3"
49	LIN FT	PVC CONDUIT, AUGERED 3 1/2"
61	LIN FT	PVC CONDUIT, AUGERED 4"

-CONTINUED BELOW-



9TH STREET EXISTING SIGNAL PLAN

QUANTITY	UNIT	ITEM
10	LIN FT	ELECTRIC CABLE IN CONDUIT NO. 6 2/C
1084	LIN FT	ELECTRIC CABLE IN CONDUIT NO. 12 7/C
813	LIN FT	ELECTRIC CABLE IN CONDUIT NO. 14 2/C
910	LIN FT	ELECTRIC CABLE IN CONDUIT NO. 14 7/C
411	LIN FT	ELECTRIC CABLE IN CONDUIT NO. 14 12/C
1833	LIN FT	ELECTRIC CABLE IN CONDUIT NO. 18, 3 PAIR TWISTED, SHIELDED
263	LIN FT	ELECTRIC CABLE IN CONDUIT NO. 18, 6 PAIR TWISTED, SHIELDED
1	EACH	SERVICE INSTALLATION, TYPE A
1	EACH	REMOVE EXISTING SERVICE INSTALLATION, TYPE A
12	LIN FT	CONCRETE FOUNDATION, TYPE A
3.5	LIN FT	CONCRETE FOUNDATION, TYPE D
32	LIN FT	CONCRETE FOUNDATION, TYPE E 24-INCH DIAMETER
3	EACH	CONCRETE HANDHOLE
1	EACH	CONCRETE DOUBLE HANDHOLE
12	EACH	GULFBOX JUNCTION
1204	LIN FT	TRENCH AND BACKFILL
1	EACH	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
3	EACH	REMOVE EXISTING HANDHOLE
9	EACH	REMOVE EXISTING CONCRETE FOUNDATION
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
3	SO FT	SIGN PANEL, TYPE 1
34	LIN FT	CURB REMOVAL
544	SO FT	SIDEWALK REMOVAL
544	SO FT	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH
41	SO FT	RUMBLE STRIP

FINAL
DESIGNED RLA 12/17/13
DRAWN RLA 12/17/13
REVIEWED KNB 2/25/14

FILE NAME = D609L01798-sht-ts07.dgn
Intersection Detail

USER NAME = pop00275
PLOT SCALE = 10.0000' / in.
PLOT DATE = 02/26/2014

DESIGNED - RLA
DRAWN - RLA
CHECKED - KNB
DATE - 2/25/14

REVISED -
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

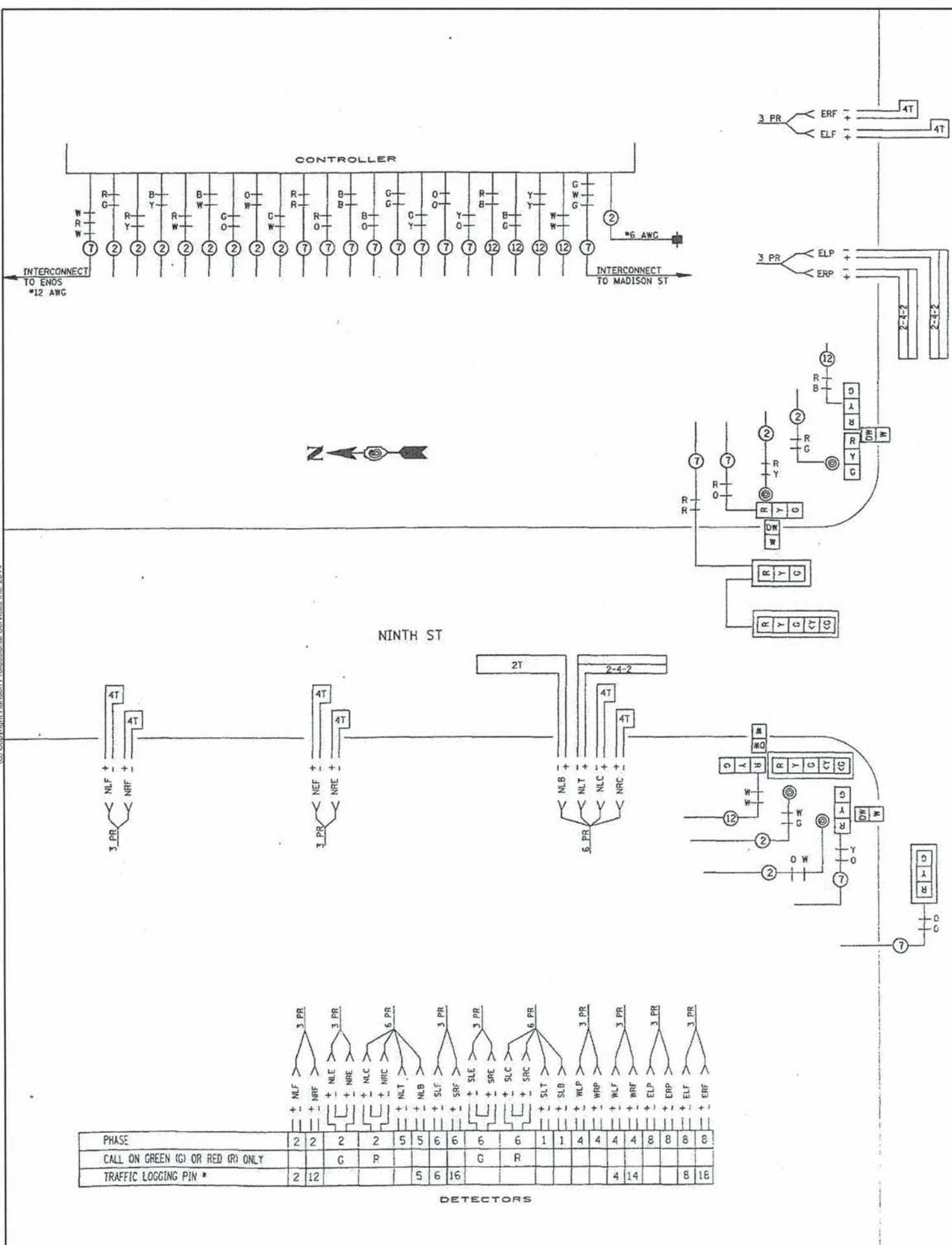
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
EXISTING TRAFFIC SIGNAL PLANS - 9TH STREET

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	70
09L01798			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				

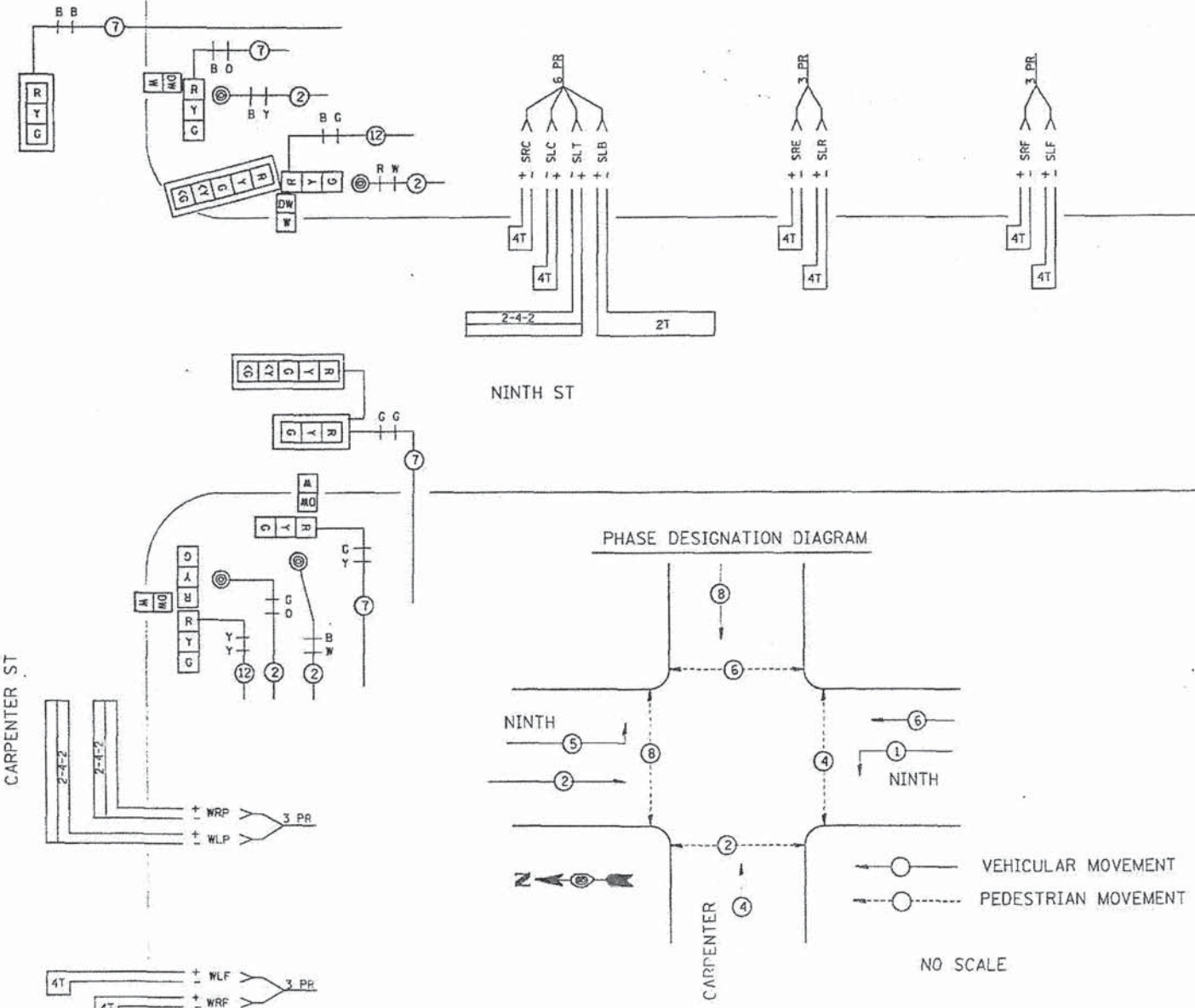


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SCHEDULE FOR MAST ARM MOUNTED STREET NAME SIGNS

QUANTITY EACH	FORMAT	LETTER SIZE	LOCATION	SIGN SIZE			SIGN PANEL	
				WIDTH	HEIGHT	SO FT	TYPE 1	TYPE 2
2	NINTH ST	6D	NW QUAD & SE QUAD	54"	18"	6.75	13.5	
2	CARPENTER ST	6D	NE QUAD & SW QUAD	78"	18"	9.75	19.5	



PHASE	2	2	2	2	5	5	6	6	6	6	1	1	4	4	4	4	8	8	8	8
CALL ON GREEN (G) OR RED (R) ONLY			G	R					G	R										
TRAFFIC LOGGING PIN *	2	12				5	6	16					4	14					8	16

DETECTORS

9TH STREET EXISTING SIGNAL PLAN

FINAL
DESIGNED - RLA 12/17/13
DRAWN - RLA 12/17/13
REVIEWED - KNB 2/25/14

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	PLOT DATE = 02/26/2014	CHECKED - KNB	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
EXISTING TRAFFIC SIGNAL PLANS - 9TH STREET

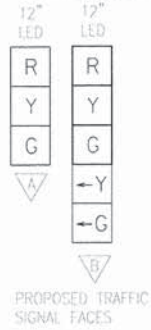
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SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



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HANDHOLES		
HANDHOLE I.D.	STATION	OFFSET
A	996+54	34' LT
B	996+52	36' RT
C	995+71	43' RT
D	995+74	56' RT
⊠	996+70	36' RT

MAST ARM POLES & POSTS		
POLE I.D.	STATION	OFFSET
①	996+43	37' RT
②	996+44	52' RT
③	996+35	50' LT
④	996+43	37' LT
⑤	995+71	48' LT
⑥	995+63	36' LT
⑦	995+55	31' RT
⑧	995+69	38' RT

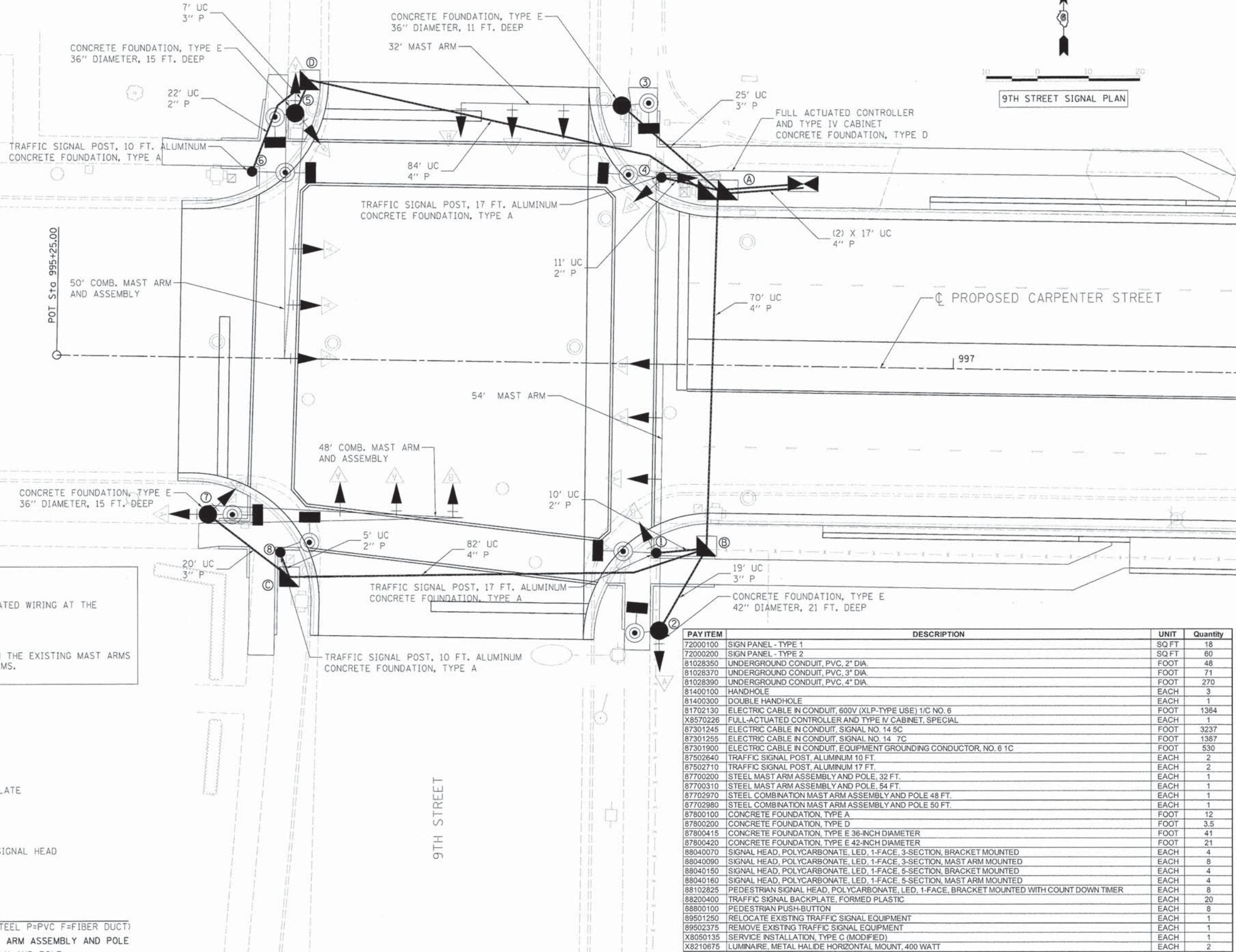


NOTES:

- ALL POSTS, MAST ARMS, SIGNAL HEADS, AND RELATED WIRING AT THE INTERSECTION SHALL BE REMOVED.
- ALL HANDHOLES SHALL BE REMOVED.
- EXISTING VIDEO DETECTION (INCLUDED WIRING) ON THE EXISTING MAST ARMS SHALL BE RELOCATED TO THE PROPOSED MAST ARMS.

TRAFFIC SIGNAL PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SIGNAL HEAD WITH BACKPLATE
		SIGNAL POST
		CONTROLLER
		HANDHOLE
		DOUBLE HANDHOLE
		PEDESTRIAN COUNTDOWN SIGNAL HEAD
		PUSH BUTTON
		CONDUIT
		LENGTH
		SIZE - TYPE (S=STEEL P=PVC F=FIBER DUCT)
		STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
		STEEL MAST ARM ASSEMBLY AND POLE



PAY ITEM	DESCRIPTION	UNIT	Quantity
72000100	SIGN PANEL - TYPE 1	SQ FT	18
72000200	SIGN PANEL - TYPE 2	SQ FT	60
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	48
81028370	UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	71
81028390	UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	270
81400100	HANDHOLE	EACH	3
81400300	DOUBLE HANDHOLE	EACH	1
81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	1364
X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	3237
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1387
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	530
87502640	TRAFFIC SIGNAL POST, ALUMINUM 10 FT.	EACH	2
87502710	TRAFFIC SIGNAL POST, ALUMINUM 17 FT.	EACH	2
87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1
87700310	STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH	1
87702970	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 48 FT.	EACH	1
87702980	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	12
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	3.5
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	41
87800420	CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER	FOOT	21
88040070	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	4
88040090	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
88040150	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
88040160	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
88102825	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED WITH COUNT DOWN TIMER	EACH	8
88200400	TRAFFIC SIGNAL BACKPLATE, FORMED PLASTIC	EACH	20
88800100	PEDESTRIAN PUSH-BUTTON	EACH	8
89501250	RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
X8050135	SERVICE INSTALLATION, TYPE C (MODIFIED)	EACH	1
X8210675	LUMINAIRE, METAL HALIDE HORIZONTAL MOUNT, 400 WATT	EACH	2

FINAL
 DESIGNED KNE 9/6/13
 DRAWN KNE 9/27/13
 REVIEWED TMA 2/25/14

FILE NAME = 09L0179B-sht-1a(1).dgn
 Intersection: Detail

USER NAME = pep00275
 PLOT SCALE = 1/8"=1'-0"
 PLOT DATE = 8/23/2014

DESIGNED - KNE
 DRAWN - KNE
 CHECKED - TMA
 DATE - 2/25/14

REVISED -
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 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

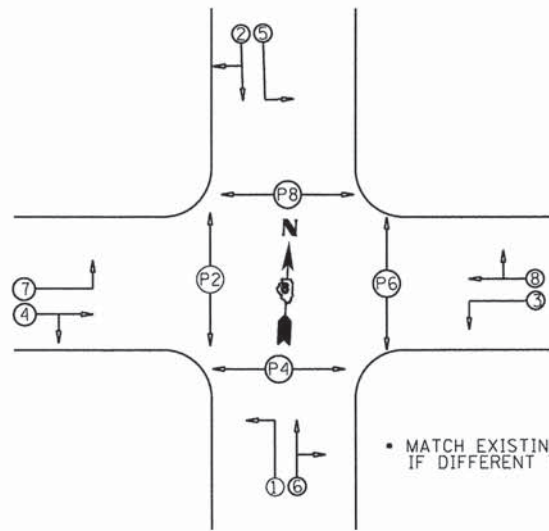
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 TRAFFIC SIGNAL PLANS - 9TH STREET

SCALE: SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	72
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



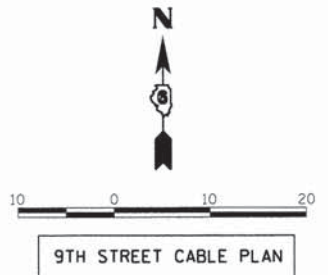
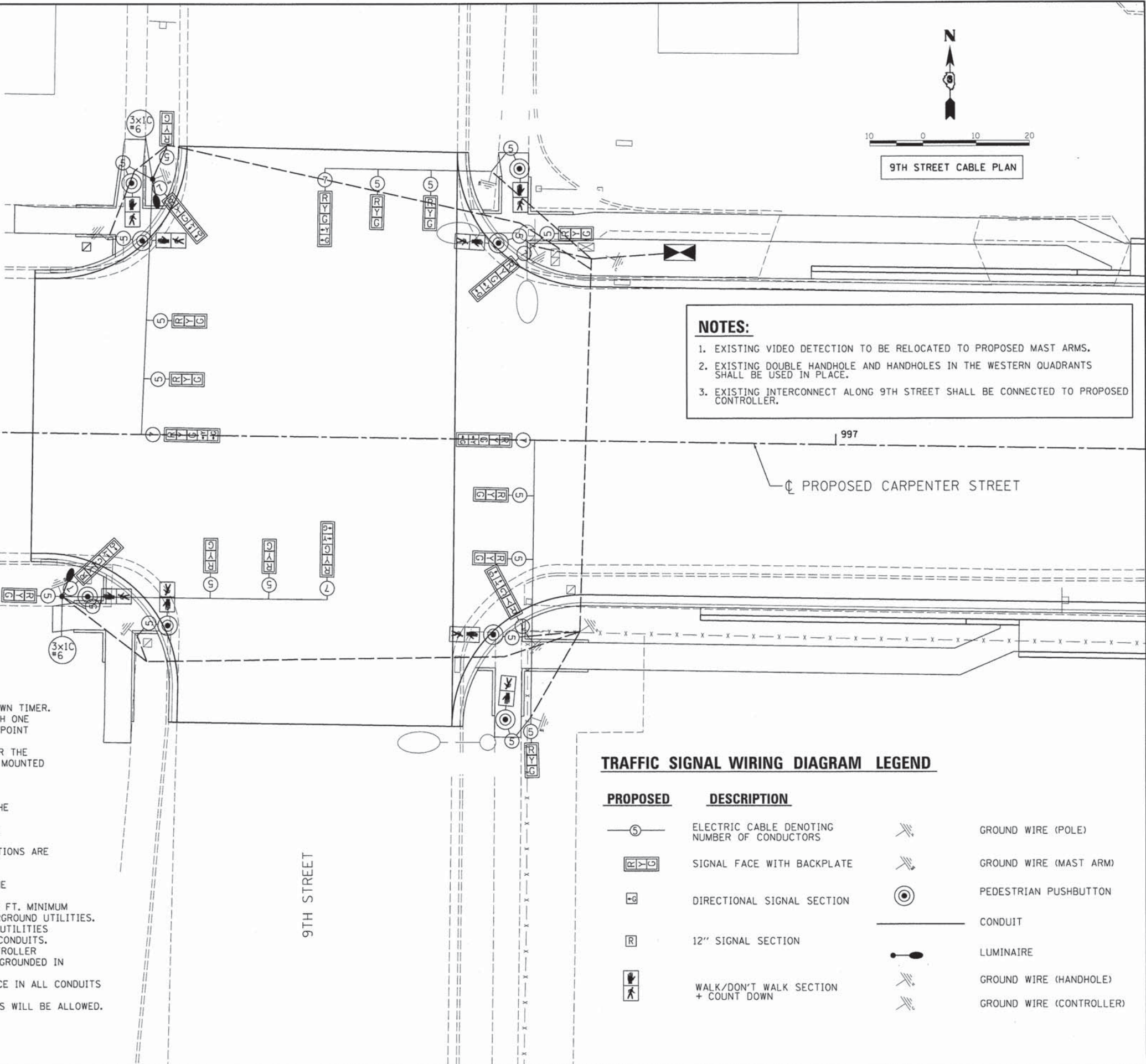
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PHASE DESIGNATION DIAGRAM

MATCH EXISTING PHASING AT INTERSECTION IF DIFFERENT THAN SHOWN

POT Sta. 995+25.00



9TH STREET CABLE PLAN

NOTES:
1. EXISTING VIDEO DETECTION TO BE RELOCATED TO PROPOSED MAST ARMS.
2. EXISTING DOUBLE HANDHOLE AND HANDHOLES IN THE WESTERN QUADRANTS SHALL BE USED IN PLACE.
3. EXISTING INTERCONNECT ALONG 9TH STREET SHALL BE CONNECTED TO PROPOSED CONTROLLER.

TRAFFIC SIGNAL GENERAL NOTES

- 1. ALL TRAFFIC SIGNAL SECTIONS SHALL HAVE 12" SINGLE LED LENSES.
2. ALL PEDESTRIAN SECTIONS SHALL HAVE 16" LENSES WITH A MAN/HAND OVERLAY AND COUNTDOWN TIMER.
3. THE RED SECTIONS OF THE SIGNAL HEADS SHARING THE SAME MAST ARM SHALL BE LEVEL WITH ONE ANOTHER...

TRAFFIC SIGNAL WIRING DIAGRAM LEGEND

Table with columns PROPOSED and DESCRIPTION. Includes symbols for electric cable, signal face, directional signal, 12" signal section, walk/don't walk section, ground wire (pole), ground wire (mast arm), pedestrian pushbutton, conduit, luminaire, ground wire (handhole), and ground wire (controller).

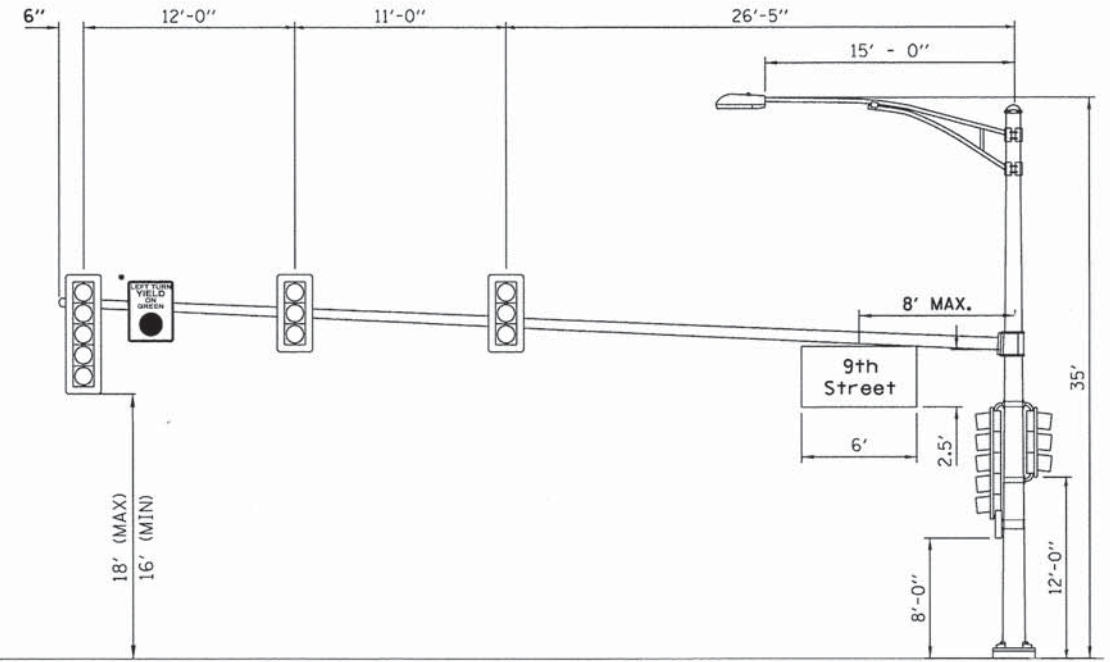
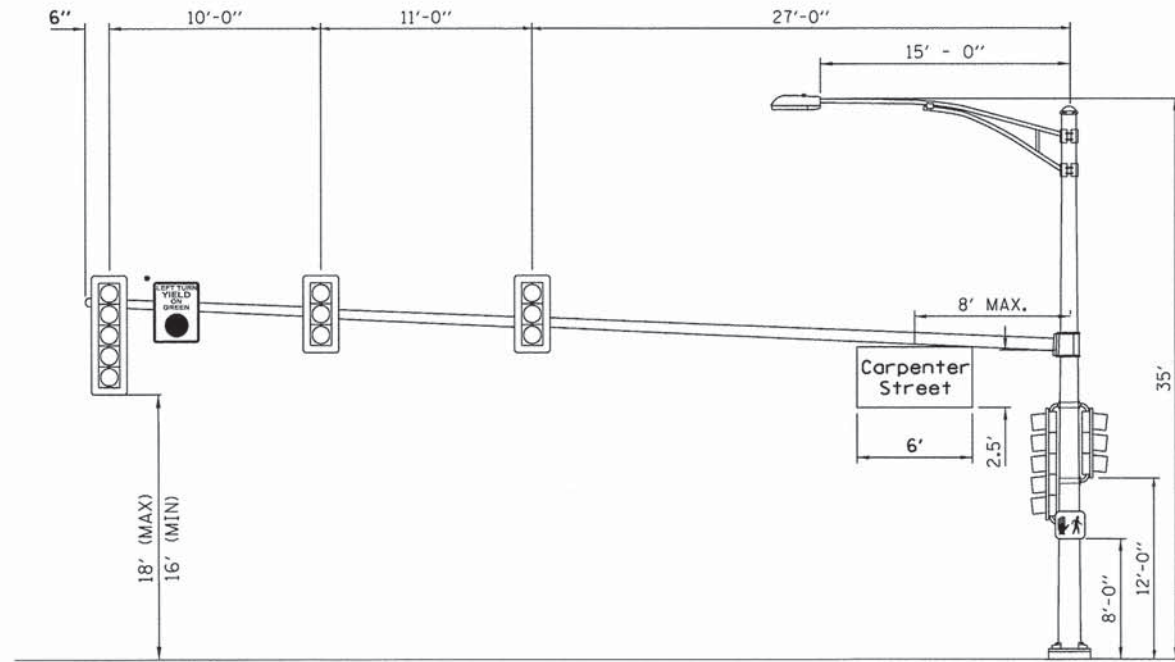
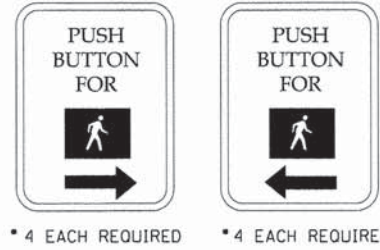
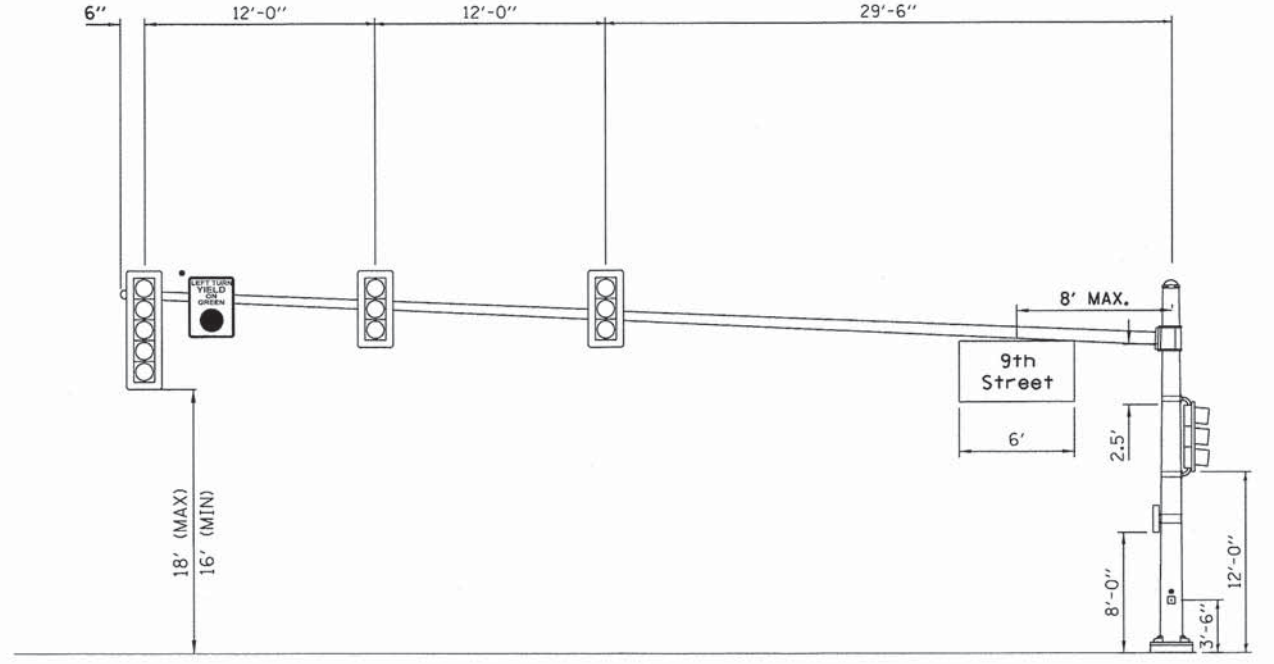
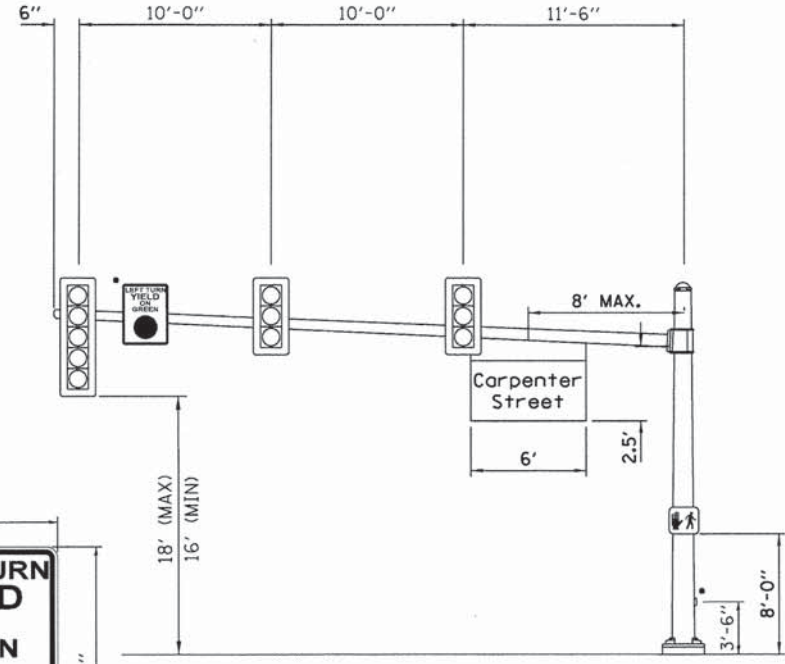
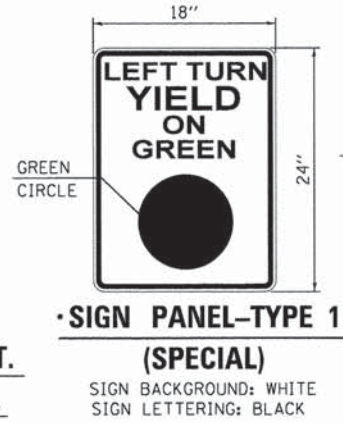
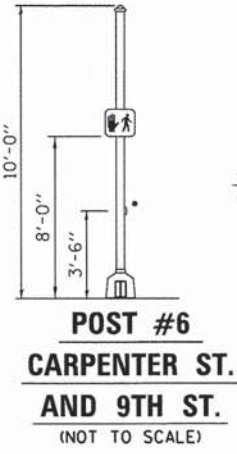
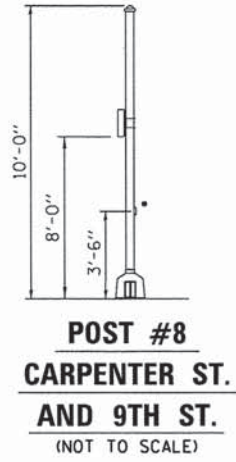
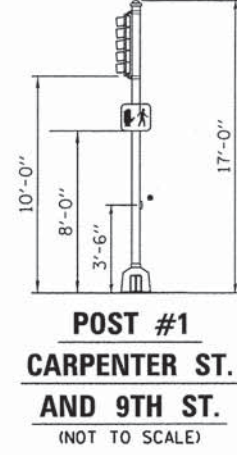
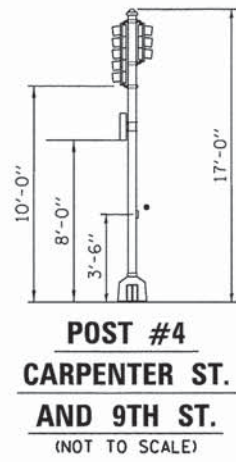
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DESIGNED KNB 9/6/13
DRAWN KNS 9/27/13
REVIEWED TMA 2/25/14

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
TRAFFIC SIGNAL PLANS - 9TH STREET

Table with fields: F.A.U. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., CONTRACT NO.



FINAL
DESIGNED - KNB 9/6/13
DRAWN - KNB 9/27/13
REVIEWED - TMA 2/25/14

FILE NAME = 0609L0179B-sht-ts05.dgn
Intersection Detail

USER NAME = pop00275
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PLOT DATE = 02/26/2014

DESIGNED - KNB
DRAWN - KNB
CHECKED - TMA
DATE - 2/25/14

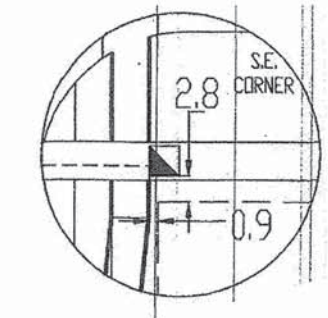
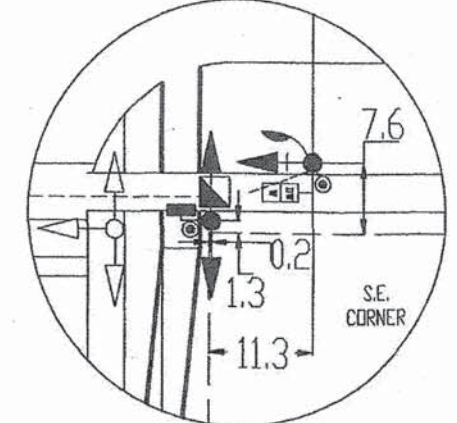
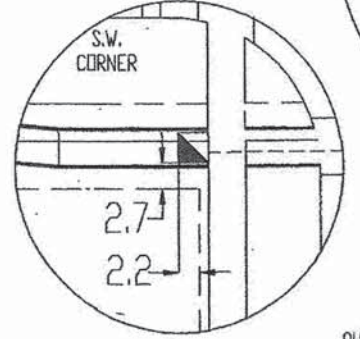
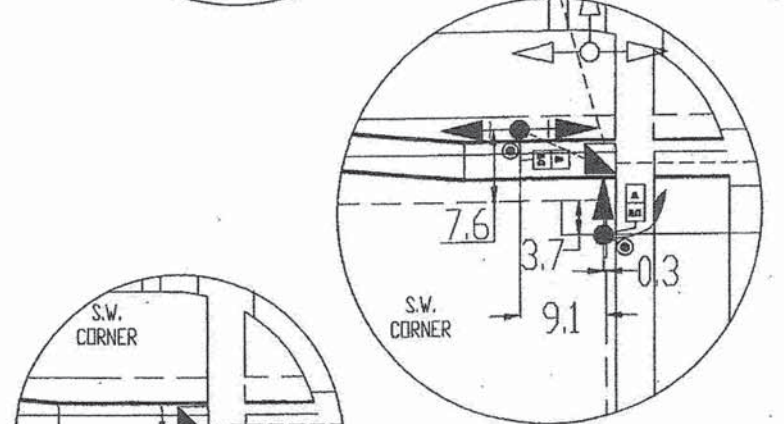
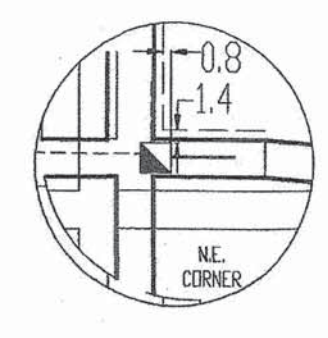
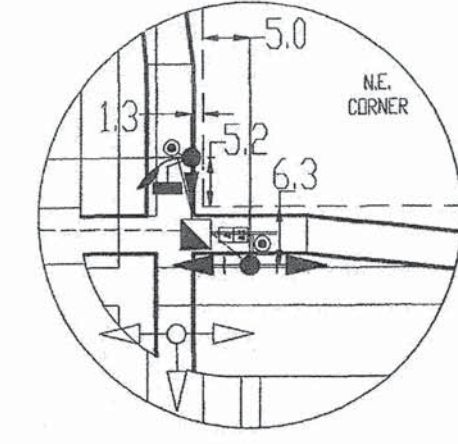
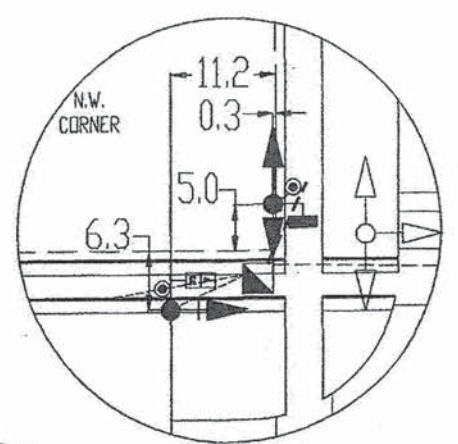
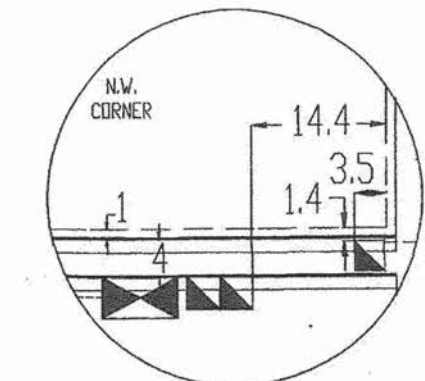
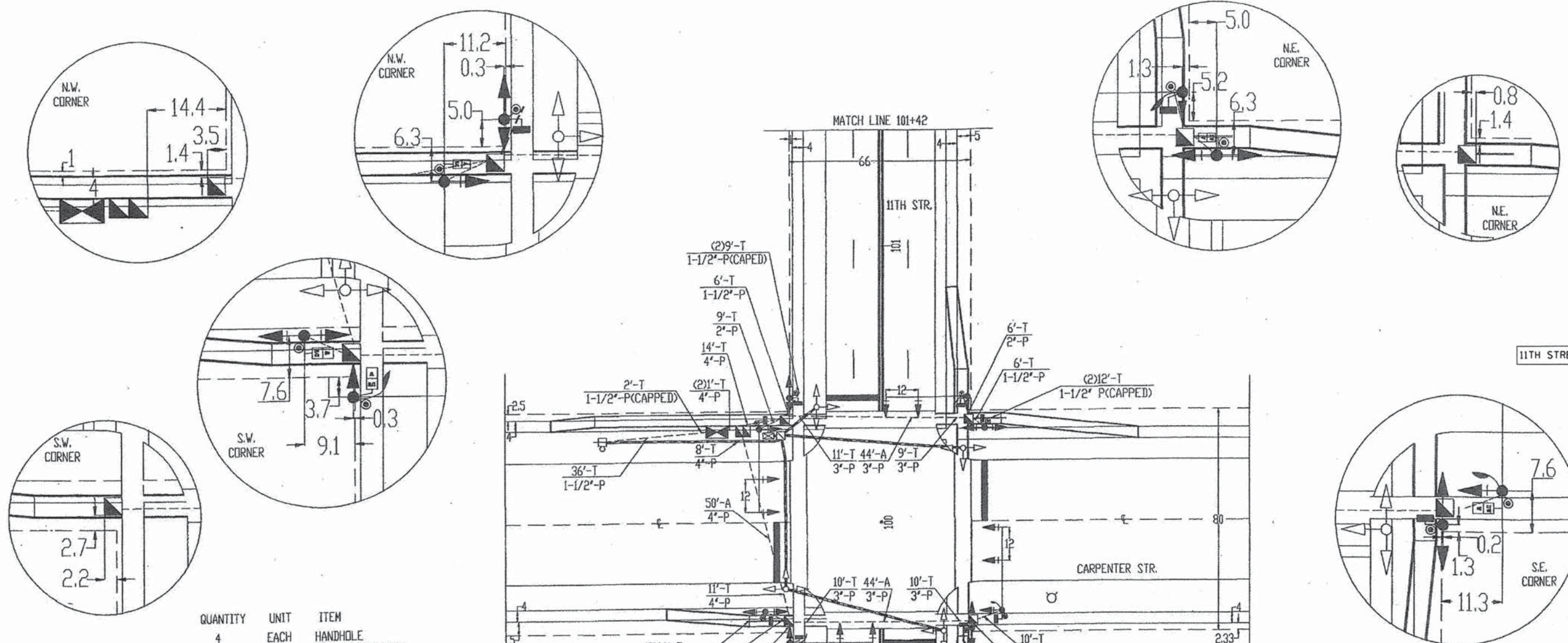
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
TRAFFIC SIGNAL PLANS - 9TH STREET

SCALE: SHEET 3 OF 3 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	74
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



11TH STREET EXISTING SIGNAL PLAN

QUANTITY	UNIT	ITEM
4	EACH	HANDHOLE
1	EACH	DOUBLE HANDHOLE
12	FOOT	CONCRETE FOUNDATION, TYPE A
35	FOOT	CONCRETE FOUNDATION, TYPE D
48	FOOT	CONCRETE FOUNDATION, TYPE E
4	EACH	SIGNAL HEAD, ALUMINIUM, 1-FACE, 3-SECTION, BRACKET MOUNTED
4	EACH	SIGNAL HEAD, ALUMINIUM, 2-FACE, 3-SECTION, BRACKET MOUNTED
8	EACH	SIGNAL HEAD, ALUMINIUM, 1-FACE, 3-SECTION, MAST ARM MOUNTED
14	EACH	TRAFFIC SIGNAL BACKPLATE
1	EACH	FULL ACTUATED CONTROLLER AND TYPE IV CABINET
1	EACH	SERVICE INSTALLATION, TYPE A
146	FOOT	CONDUIT IN TRENCH, 1-1/2\"/>

TRAFFIC SIGNAL ITEMS TO BE REMOVED

- | | | |
|------------------------------------|---|------|
| 1. REMOVE TRAFFIC SIGNAL EQUIPMENT | 1 | EACH |
| 2. HANDHOLE | 1 | EACH |
| 3. CONCRETE FOUNDATION | 5 | EACH |

LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SIGNAL HEAD
		SIGNAL HEAD WITH BACKPLATE
		STEEL MAST ARM ASSEMBLY AND POLE
		SIGNAL POST
		PEDESTRIAN SIGNAL HEAD
		PEDESTRIAN PUSH-BUTTON
		CONTROLLER
		HANDHOLE
		DOUBLE HANDHOLE
		SERVICE INSTALLATION
		CONDUIT
		LENGTH-(T-TRENCH, P-PUSHED, A-AUGERED, E-EXISTING)
		SIZE-TYPE(S-STEEL, P-P.V.C., F-FIBER DUCT, U-UNI-DUCT)
		CENTERLINE
		HYDRANT
		LIGHT POLE
		FENCE
		RIGHT-OF-WAY

FINAL
DESIGNED - RLA 12/17/13
DRAWN - RLA 12/17/13
REVIEWED - KNB 2/25/14

FILE NAME = 068%01798-shr-ts09.dgn	USER NAME = pop0275	DESIGNED - RLA	REVISED -
INTERSECTION DETAIL	PLOT SCALE = 10.0000' / 1\"/>		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
EXISTING TRAFFIC SIGNAL PLANS - 11TH STREET

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 75
CONTRACT NO. 93617			ILLINOIS FED. AID PROJECT	

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.



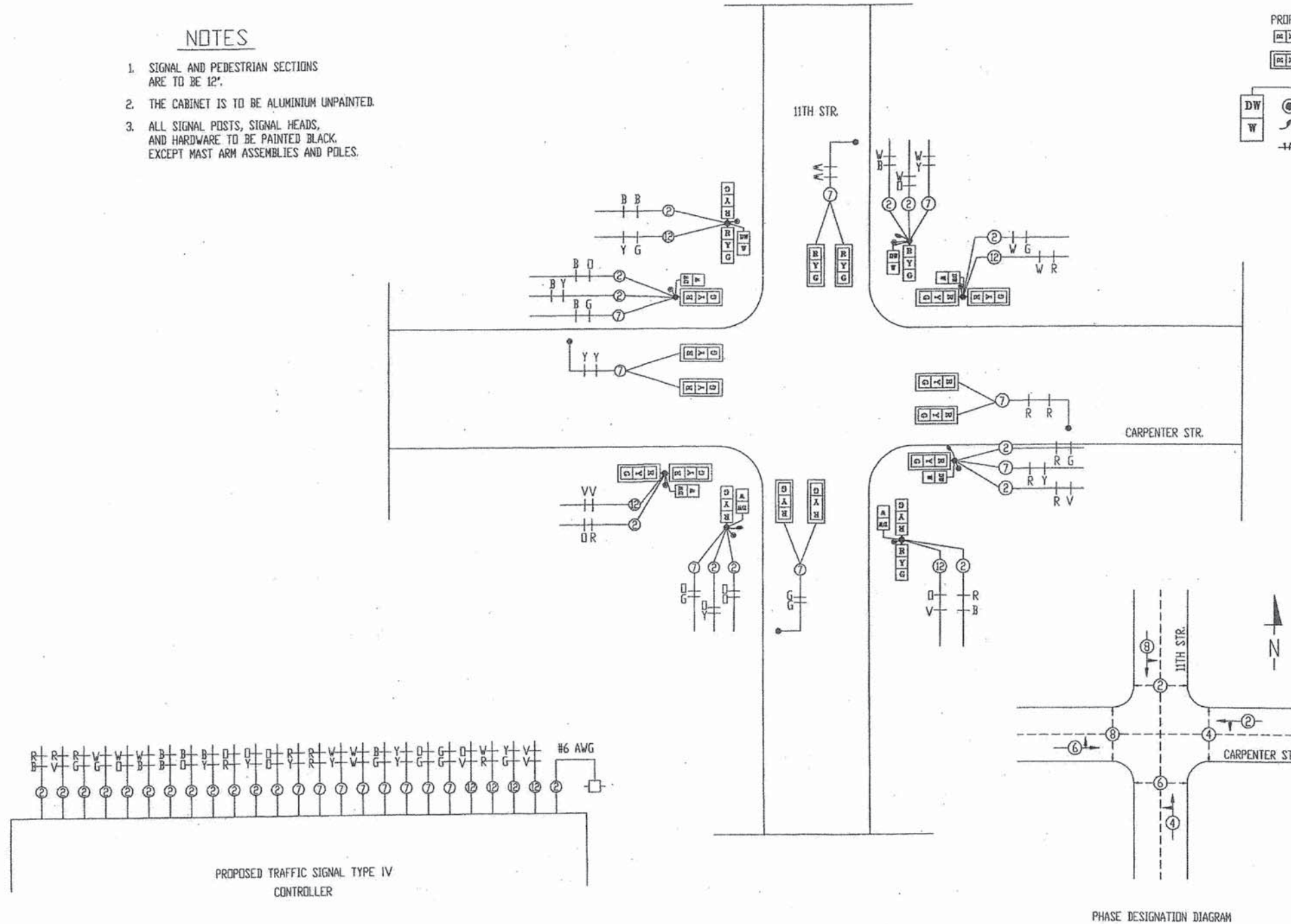
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NOTES

1. SIGNAL AND PEDESTRIAN SECTIONS ARE TO BE 12".
2. THE CABINET IS TO BE ALUMINIUM UNPAINTED.
3. ALL SIGNAL POSTS, SIGNAL HEADS, AND HARDWARE TO BE PAINTED BLACK, EXCEPT MAST ARM ASSEMBLIES AND POLES.

LEGEND

- PROPOSED
- SIGNAL FACE
 - SIGNAL FACE WITH BACKPLATE
 - PEDESTRIAN SIGNAL HEAD
 - PEDESTRIAN PUSH BUTTON
 - LUMINAIRE
 - ELECTRIC CABLE IDENTIFIER TAPE CODES
(R=RED, W=WHITE, B=BLUE, O=ORANGE, Y=YELLOW, G=GREEN, V=VIOLET)



11TH STREET EXISTING SIGNAL PLAN

DESIGNED	RLA	12/17/13
DRAWN	RLA	12/17/13
REVIEWED	KNB	2/25/14

FILE NAME =	D609L0179B-sht-tsl0.dgn	USER NAME =	pop00275	DESIGNED -	RLA	REVISED -	
INTERSECTION DATA:		PLOT SCALE =	10.0000' / 1" =	DRAWN -	RLA	REVISED -	
		PLOT DATE =	02/26/2014	CHECKED -	KNB	REVISED -	
				DATE -	2/25/14	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

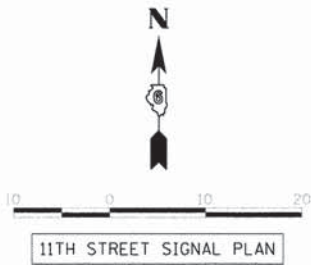
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
EXISTING TRAFFIC SIGNAL PLANS - 11TH STREET

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	76
CONTRACT NO. 09L0179B			93617	
ILLINOIS FED. AID PROJECT				

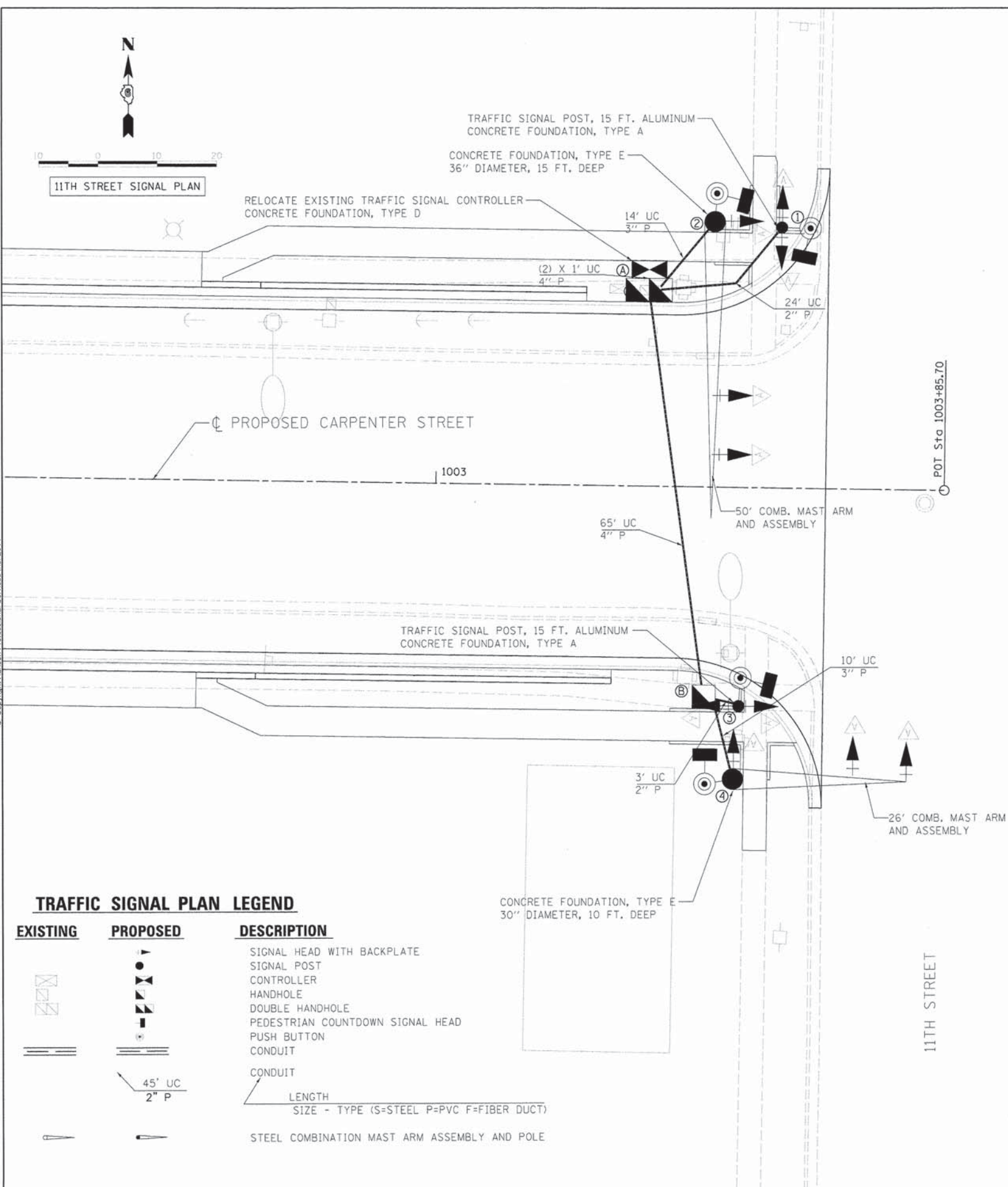
SCALE: SHEET 2 OF 2 SHEETS STA. TO STA.



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- NOTES:**
- ALL POSTS, MAST ARMS, SIGNAL HEADS, HANDHOLES AND RELATED WIRING IN THE WESTERN QUADRANTS OF THE INTERSECTION SHALL BE REMOVED.
 - THE EXISTING CONTROLLER AND CABINET SHALL BE RELOCATED TO THE LOCATION SHOWN ON THE PLANS.
 - CONDUIT SHALL BE SPLICED FROM THE EXISTING DOUBLE HANDHOLE TO THE PROPOSED HANDHOLE NEAREST THE PROPOSED CONTROLLER LOCATION. THE COST TO REMOVE AND RE-PULL EXISTING WIRE SHALL BE INCLUDED IN THE COST TO RELOCATE THE EXISTING CONTROLLER AND CABINET. NO CABLE SPLICING WILL BE ALLOWED.
 - EXISTING SIGNS AND VIDEO DETECTION ON THE EXISTING MAST ARMS SHALL BE RELOCATED TO THE PROPOSED MAST ARMS.
 - THE SIGNAL CABLE SHALL BE CONTINUOUS FROM THE CONTROLLER TO THE PROPOSED OR EXISTING SIGNAL EQUIPMENT. CABLE SHALL NOT BE SPLICED.



HANDHOLES AND CONTROLLER CABINET		
EQUIPMENT I.D.	STATION	OFFSET
A	1003+35	33' LT
B	1003+46	35' RT

MAST ARM POLES & POSTS		
POLE I.D.	STATION	OFFSET
1	1003+58	44' LT
2	1003+46	45' LT
3	1003+52	37' RT
4	1003+51	49' RT



TRAFFIC SIGNAL PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
		SIGNAL HEAD WITH BACKPLATE
		SIGNAL POST
		CONTROLLER
		HANDHOLE
		DOUBLE HANDHOLE
		PEDESTRIAN COUNTDOWN SIGNAL HEAD
		PUSH BUTTON
		CONDUIT
		CONDUIT
		STEEL COMBINATION MAST ARM ASSEMBLY AND POLE

LENGTH
SIZE - TYPE (S=STEEL P=PVC F=FIBER DUCT)

PAY ITEM	DESCRIPTION	UNIT	Quantity
72000100	SIGN PANEL - TYPE 1	SQ FT	9.25
72000200	SIGN PANEL - TYPE 2	SQ FT	30
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	27
81028370	UNDERGROUND CONDUIT, PVC, 3" DIA.	FOOT	24
81028390	UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	67
81400100	HANDHOLE	EACH	1
81400300	DOUBLE HANDHOLE	EACH	1
81702130	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6	FOOT	707
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1253
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	204
87502690	TRAFFIC SIGNAL POST, ALUMINUM 15 FT.	EACH	2
87702860	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 26 FT.	EACH	1
87702980	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 50 FT.	EACH	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	6
87800200	CONCRETE FOUNDATION, TYPE D	FOOT	3.5
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	10
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	15
88040070	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	2
88040090	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
88102825	PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, BRACKET MOUNTED WITH COUNT DOWN TIMER	EACH	4
88200400	TRAFFIC SIGNAL BACKPLATE, FORMED PLASTIC	EACH	6
88800100	PEDESTRIAN PUSH-BUTTON	EACH	4
89501100	RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER	EACH	1
89501250	RELOCATE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
X8050135	SERVICE INSTALLATION, TYPE C (MODIFIED)	EACH	1
X8210675	LUMINAIRE, METAL HALIDE HORIZONTAL MOUNT, 400 WATT	EACH	2

FINAL

FILE NAME: 00878 0179B-shr-2103.dgn	USER NAME: pop00275	DESIGNED: KNB	REVISED: -
INTERSECTION: Detail	PLDT SCALE: 1/4"=1'-0"	DRAWN: KNB	REVISED: -
	PLDT DATE: 2/25/2014	CHECKED: TMA	REVISED: -
		DATE: 2/25/14	REVISED: -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
TRAFFIC SIGNAL PLANS - 11TH STREET**

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 77
09L0179B			CONTRACT NO. 9 3 6 17	
ILLINOIS FED. AID PROJECT				

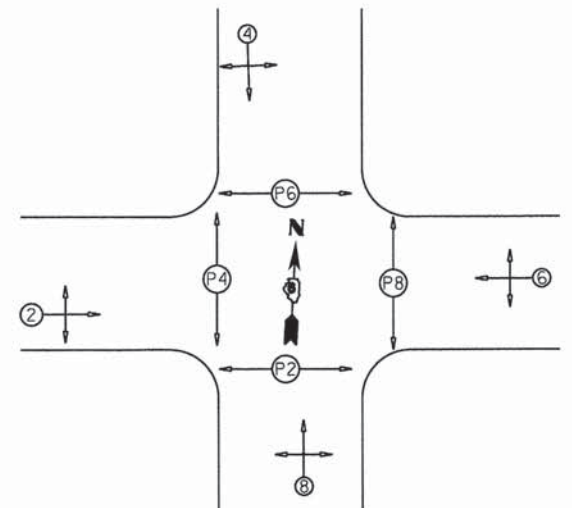
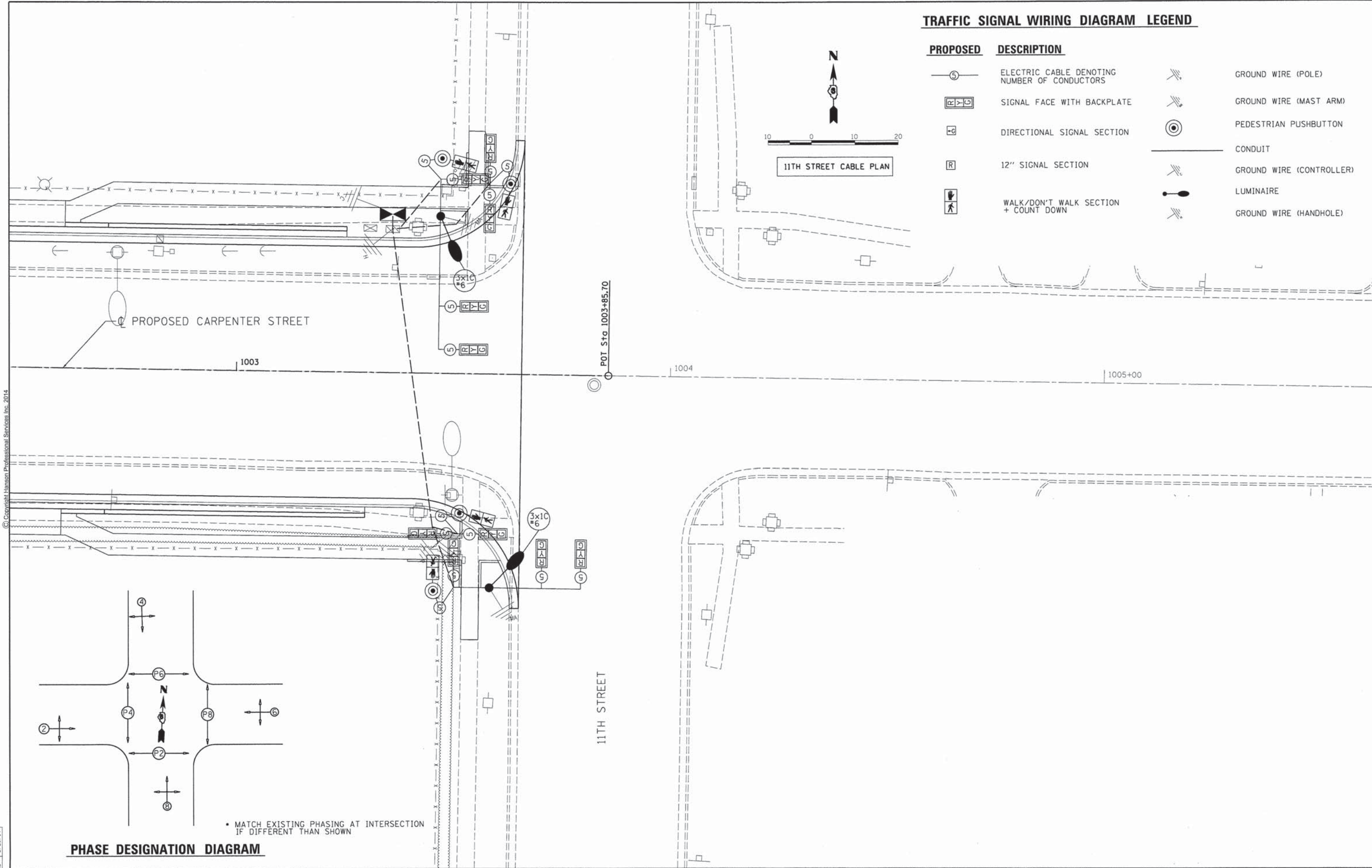
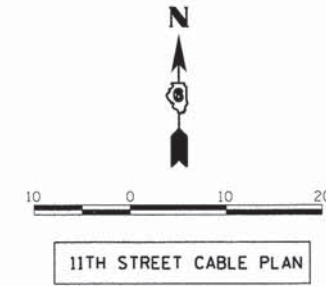
SCALE: SHEET 1 OF 3 SHEETS STA. TO STA.



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TRAFFIC SIGNAL WIRING DIAGRAM LEGEND

PROPOSED	DESCRIPTION		DESCRIPTION
	ELECTRIC CABLE DENOTING NUMBER OF CONDUCTORS		GROUND WIRE (POLE)
	SIGNAL FACE WITH BACKPLATE		GROUND WIRE (MAST ARM)
	DIRECTIONAL SIGNAL SECTION		PEDESTRIAN PUSHBUTTON
	12" SIGNAL SECTION		CONDUIT
	WALK/DON'T WALK SECTION + COUNT DOWN		GROUND WIRE (CONTROLLER)
			LUMINAIRE
			GROUND WIRE (HANDHOLE)



• MATCH EXISTING PHASING AT INTERSECTION IF DIFFERENT THAN SHOWN

PHASE DESIGNATION DIAGRAM

FINAL
DESIGNED RLA 9/6/13
DRAWN RLA 9/27/13
REVIEWED KNB 2/25/14

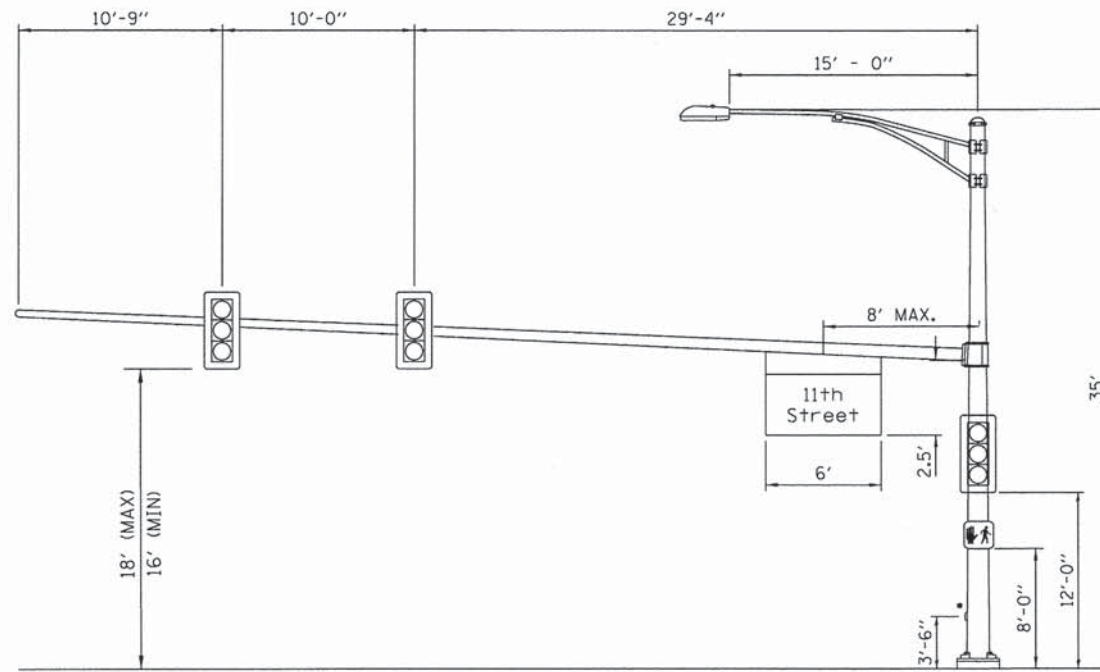
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	PLOT DATE = 02/26/2014	CHECKED - KNB	REVISED -
		DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

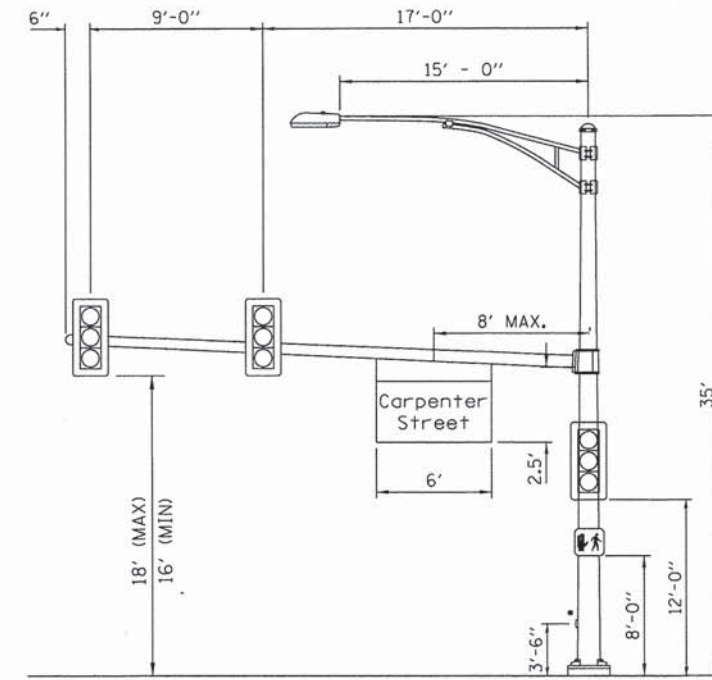
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
TRAFFIC SIGNAL PLANS - 11TH STREET

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 78
CONTRACT NO. 09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 2 OF 3 SHEETS STA. TO STA.



**CARPENTER ST. AND 11TH ST.
WESTBOUND CARPENTER ST.**
POLE# 2 (50')
(NOT TO SCALE)



**CARPENTER ST. AND 11TH ST.
SOUTHBOUND 11TH ST.**
POLE #4 (26')
(NOT TO SCALE)



* 4 EACH REQUIRED

PEDESTRIAN PUSH BUTTON SIGN
TYPE R10-4B (L OR R)



* 4 EACH REQUIRED

9" X 12"
PEDESTRIAN CROSSING
SIGN DETAIL
(NOT TO SCALE)

TYPE B SHEETING REQUIRED

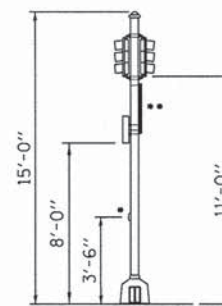
LEGEND-BLACK
BACKGROUND-WHITE

STANDARD PEDESTRIAN PUSH
BUTTONS SHALL BE SUPPLIED AND
INSTALLED BY THE CONTRACTOR

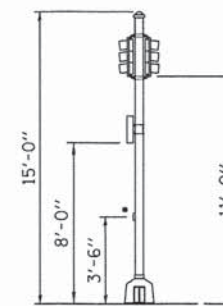


MANDATORY RIGHT TURN SIGN
TYPE R3-7R

30" X 30"
MANDATORY RIGHT TURN
SIGN DETAIL
(NOT TO SCALE)



POST #3
CARPENTER ST. AND 11TH ST.
(NOT TO SCALE)



POST #1
CARPENTER ST. AND 11TH ST.
(NOT TO SCALE)



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FINAL
DESIGNED RLA 12/17/13
DRAWN RLA 12/17/13
REVIEWED KNB 2/25/14

FILE NAME =	USER NAME = pop00275	DESIGNED - RLA	REVISED -
D609L0179B-shr-ts06.dgn		DRAWN - RLA	REVISED -
Intersection Detail	PLOT SCALE = 10.0000' / 1"	CHECKED - KNB	REVISED -
	PLOT DATE = 02/26/2014	DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

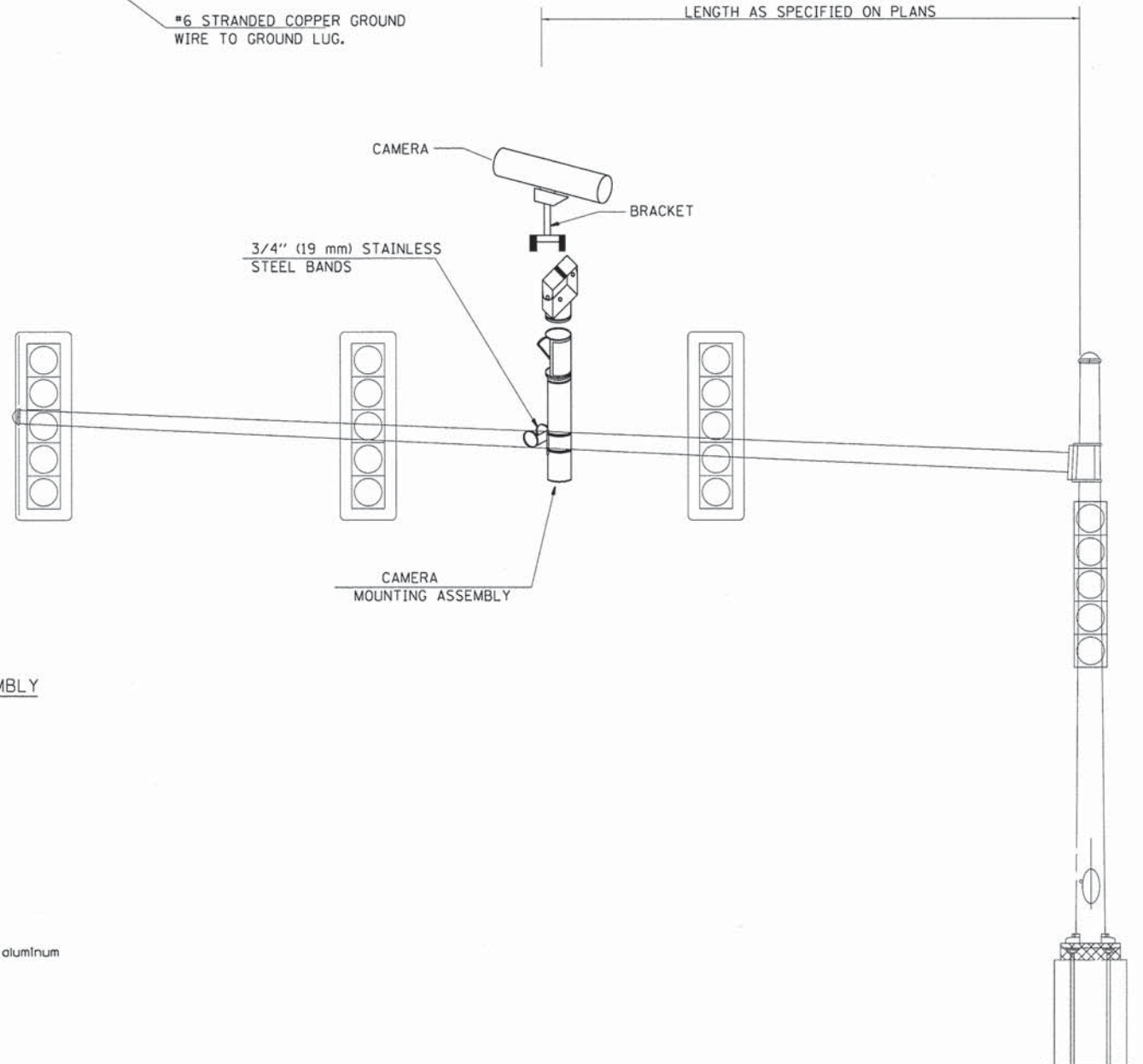
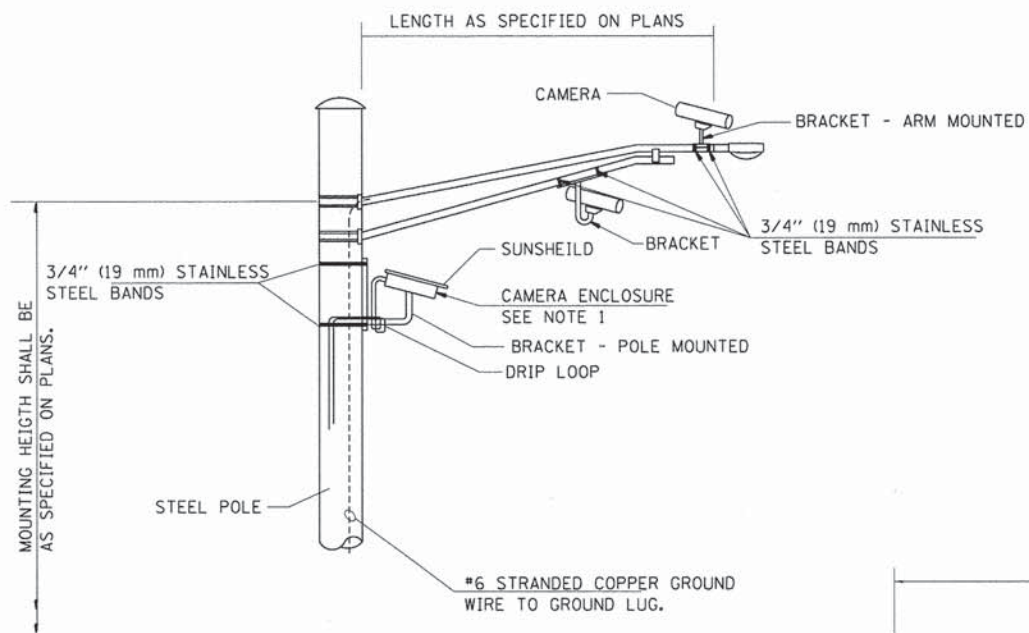
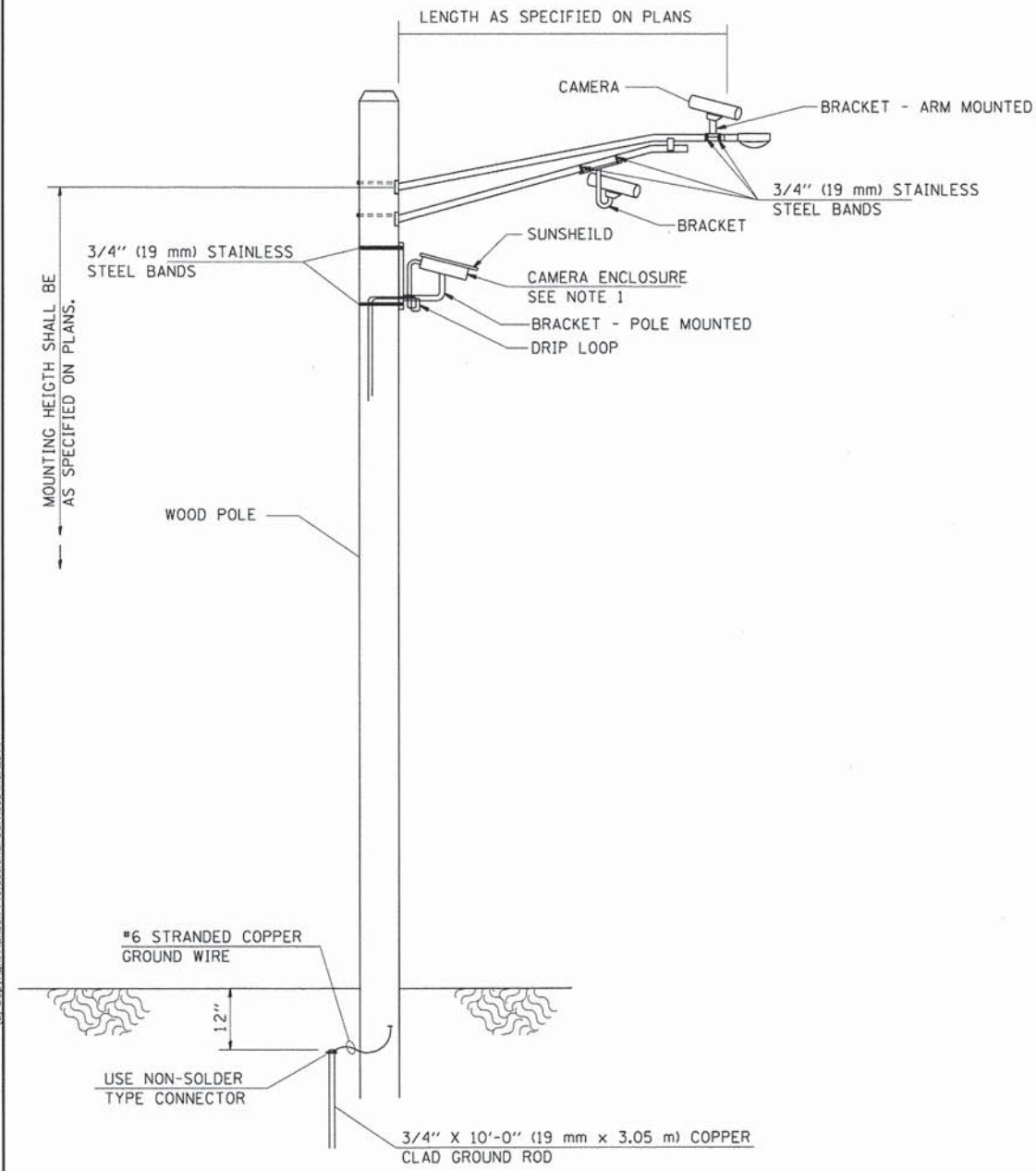
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
TRAFFIC SIGNAL PLANS - 11TH STREET

SCALE: SHEET 3 OF 3 SHEETS STA. TO STA.

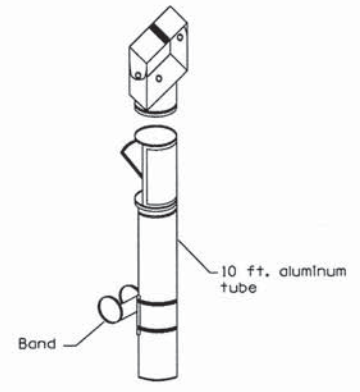
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	79
09L0179B		CONTRACT NO. 3617		
ILLINOIS FED. AID PROJECT				



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CAMERA MOUNTING ASSEMBLY



**VIDEO DETECTION SYSTEM INSTALLATION
ARM MOUNTED OR POLE MOUNTED CAMERA**

NOTE 1: CAMERA CAN BE ROTATED INSIDE THE ENCLOSURE AFTER INSTALLATION, TO ALIGN HORIZON AT HORIZONTAL PLANE.

FINAL
DESIGNED RLA 12/17/13
DRAWN RLA 12/17/13
REVIEWED KNB 2/25/14

FILE NAME =	USER NAME = pop0275
D609L0179B-sht-tsl6.dgn	
Intersection Detail	

DRAWN - RLA	CHECKED - KNB
DESIGNED - RLA	DATE - 2/25/14
PLOT SCALE = 20.0000' / in.	
PLOT DATE = 02/26/2014	

DESIGNED - RLA	REVISOR -
DRAWN - RLA	REVISION -
CHECKED - KNB	REVISION -
DATE - 2/25/14	REVISION -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
VIDEO DETECTION SYSTEM INSTALLATION DETAIL
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	80
09L0179B		CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				



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GENERAL NOTES:

1. DRAINAGE STRUCTURES, NO. 1 AND NO. 2 SHALL BE INSTALLED AND BACKFILLED PRIOR TO THE INSTALLATION OF THE NSRR SHOOFLY TRACK. THE VALVE VAULT AND ASSOCIATED SITE IMPROVEMENTS CAN BE INSTALLED AFTER THE INSTALLATION OF THE NSRR SHOOFLY TRACK.
2. CONTRACTOR SHALL COORDINATE WITH THE RAILROAD IF CONSTRUCTION ACTIVITIES ENCR OACH WITHIN 25 FT OF THE ADJACENT RAIL.
3. FENCING AROUND THE NORTH SIDE OF THE CWLP SUB-STATION SITE WILL BE REPLACED.
4. CARE IS TO BE TAKEN NOT TO DISTURB THE FUELING STATION, THE FUELING PAD, THE OIL/WATER SEPARATOR OR THE DIKE WALL.
5. FINAL SITE GRADING SHALL OCCUR ONLY AFTER ALL IMPROVEMENTS HAVE BEEN COMPLETED.
6. THERE ARE TWO (2) DRAINAGE STRUCTURES, NO. 1. EACH IS IDENTICAL WITH EXCEPTION OF THE INVERTS AND THE PIPES ENTERING AND EXITING THEM. THEY WILL BE BID PER EACH.
7. THERE ARE OVERHEAD UTILITY LINES ABOVE THE PUMP STATION AND ASSOCIATED STRUCTURES. UTILITY PROVIDERS WILL BE TEMPORARILY RELOCATING ANY LINES THAT HAVE LESS THAN 45 FEET OF VERTICAL CLEARANCE TO THE GROUND.

EXCAVATION AND BACKFILL NOTES:

1. DRAINAGE STRUCTURES, NO. 1 AND NO. 2 SHALL BE EXCAVATED USING A VERTICAL SHAFT BORING MACHINE.
2. THE CONTRACTOR SHALL SUBMIT AN EXCAVATION PLAN SEALED BY A PROFESSIONAL ENGINEER AND GROUT INSTALLATION PLAN PRIOR TO COMMENCING WORK.
3. ALL EXCAVATION, SHORING, TEMPORARY OR PERMANENT CASING, AGGREGATE OR CONCRETE BASE, CONCRETE PRECAST MANHOLE SECTIONS, FLAT SLAB TOP, ACCESS HATCHES, LOCKING MECHANISM, MASTIC, SEALANT, WATERPROOFING GROUT, AND BACKFILL SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR DRAINAGE STRUCTURES, NO. 1 AND NO. 2, RESPECTIVELY.
4. TEMPORARY OR PERMANENT CASING SHALL BE ACCORDING TO SECTION 516 OF THE STANDARD SPECIFICATIONS AND DESIGNED TO RESIST RAILROAD LIVE LOAD SURCHARGE. THE RAILROAD LIVE LOAD SURCHARGE SHALL BE BASED ON COOPER'S E-80 LIVE LOAD AND IN ACCORDANCE WITH AREMA AND RAILROAD REQUIREMENTS.
5. THE STRUCTURES SHALL BE EXCAVATED AND INSTALLED ONE AT A TIME WITH EACH BEING GROUTED AND BACKFILLED COMPLETELY BEFORE COMMENCING CONSTRUCTION ON THE NEXT.
6. THE ANNULAR SPACE BETWEEN THE DRAINAGE STRUCTURE WALL AND THE EDGE OF THE BORING SHALL BE FILLED WITH NON-SHRINK GROUT FROM THE BASE TO ELEVATION 582.
7. FROM ELEVATION 582 TO THE SURFACE, THE ANNULAR SPACE BETWEEN THE MANHOLE SECTION AND THE EDGE OF THE BORING SHALL BE FILLED WITH NON-SHRINK GROUT OR CONTROLLED LOW STRENGTH MATERIAL, MIX 2.
8. THE DRAINAGE STRUCTURE SHALL BE CHECKED AFTER THE INSTALLATION OF EACH SECTION TO ENSURE A TRUE VERTICAL INSTALLATION. IF THE ALIGNMENT IS OFF, THE CONTRACTOR SHALL TAKE CORRECTIVE ACTION TO SHIM THE STRUCTURE BACK INTO LEVEL.
9. MATERIAL REMOVED FROM THE EXCAVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

DRAINAGE STRUCTURE PIPE CONNECTION NOTES:

1. THE TWO DRAINAGE STRUCTURES, NO. 1; AND DRAINAGE STRUCTURES NO. 1 AND DRAINAGE STRUCTURES NO. 2 SHALL BE CONNECTED BY 36" DIAMETER CLASS 52 DUCTILE IRON PIPE.
2. ALL MATERIAL AND LABOR ASSOCIATED WITH EXCAVATING FOR AND INSTALLING THE 36" DIAMETER PIPE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR STORM SEWER CONNECTION.
3. THE PIPE SHALL BE INSTALLED BY TUNNELED EXCAVATION AFTER THE TWO STRUCTURES HAVE BEEN INSTALLED AND BACKFILLED.
4. ONCE THE OPENING HAS BEEN EXCAVATED, AND THE PIPE INSTALLED, THE PIPE SHALL BE SEALED TO DRAINAGE STRUCTURES, NO. 1 AND NO. 2 WITH A NON-SHRINK GROUT AND 2" DIAMETER GROUT FILL AND VENT PORTS.
5. ONCE THE GROUT HAS DRIED, THE ANNULAR SPACE BETWEEN THE ROCK AND THE PIPE SHALL BE GROUTED UNTIL MATERIAL EXITS THE VENT. ONCE THE GROUT HAS CURED, THE GROUT PIPES SHALL BE CUT OFF FLUSH WITH THE INTERIOR OF DRAINAGE STRUCTURES, NO. 1 AND NO. 2.
6. STORM SEWERS JACKED IN PLACE, 24" SHALL MEET THE REQUIREMENTS OF SECTION 552 OF THE STANDARD SPECIFICATIONS AND AS SPECIFIED IN THE SPECIAL PROVISIONS.
7. THE STORM SEWER SHALL HAVE A 36-IN DIAMETER STEEL CASING JACKED AND BORED FROM STRUCTURE 16 TO DRAINAGE STRUCTURES NO. 1 WITH THE 24-IN DIAMETER STORM SEWER INSTALLED WITHIN IT. CASING SPACERS SHALL BE USED TO SUPPORT THE CARRIER PIPE WITHIN THE CASING. A CASING END SEAL SHALL BE USED TO SEAL THE CASING TO THE CARRIER PIPE. AT DRAINAGE STRUCTURES, NO. 1, GROUT BETWEEN THE CASING AND THE CARRIER PIPE.
8. THE 24" DIAMETER STORM SEWER SHALL BE SOLID WALL PS46 PIPE.
9. THE 36" DIAMETER STEEL CASING SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR STORM SEWERS JACKED IN PLACE, 24".

PUMPING STATION NOTES:

1. THE VALVE VAULT, PUMPS, PUMP BASES, RAILS AND LIFTING CHAINS SHALL ALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR PUMPING STATION.
2. ALL PIPING, FITTINGS, VALVES AND PIPE SUPPORT BRACKETS FROM THE PUMP BASE, THROUGH THE VALVE VAULT TO TWO FEET OUTSIDE THE VALVE VAULT SHALL BE PAID FOR UNDER PUMP STATION MECHANICAL WORK.
3. ALL VALVES AND FITTINGS IN THE VALVE VAULT SHALL BE SUPPORTED ON STEEL PIPE SUPPORTS.
4. THE 2" SCHEDULE 40 DRAIN AND CHECK VALVE SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR PUMP STATION MECHANICAL WORK.

DRAINAGE STRUCTURES AND VALVE VAULT NOTES:

1. THE ACCESS HATCHES CAST INTO THE LIDS OF DRAINAGE STRUCTURES, NO. 1 AND NO. 2 SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR DRAINAGE STRUCTURES, NO. 1 AND NO. 2 RESPECTIVELY.
2. THE VALVE VAULT AND ASSOCIATED EXCAVATION AND BACKFILL SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PUMPING STATION.
3. THE VALVE VAULT SHALL CONFORM TO ASTM C-913. THE STRUCTURE SHALL BE DESIGNED FOR EARTH LOADS AND HS-20 LIVE LOAD FOR VEHICULAR TRAFFIC.
4. THE PRECAST LID FOR DRAINAGE STRUCTURES, NO. 1 SHALL BE SEALED TO THE TOP RING SECTION WITH A DOUBLE ROW OF BUTYL MASTIC. THE LID SHALL HAVE A CAST IN PLACE ALUMINUM ACCESS FRAME AND HATCH. THE HATCH SHALL BE HINGED WITH A FLUSH LOCKING MECHANISM 36" X 36" MINIMUM CLEAR OPENING. THE TOP OF THE HATCH SHALL BE A MINIMUM 1/4" ALUMINUM DIAMOND TREAD PLATE.
5. THE PRECAST CONCRETE LID FOR DRAINAGE STRUCTURES, NO. 2 SHALL BE SEALED TO THE TOP BARREL SECTION WITH TWO ROWS OF BUTYL MASTIC. THE LID SHALL HAVE A FABRICATED GALVANIZED STEEL FRAME AND HATCH SYSTEM PER THE PLANS. ORIENTATION OF THE HATCH SYSTEM SHALL BE COORDINATED WITH THE PUMP MANUFACTURER.
6. AFTER INSTALLATION IS COMPLETE, IF THERE ARE WATER LEAKS AT JOINTS, THE CONTRACTOR SHALL WATERPROOF THE LEAKS USING DRILLED PORTS AROUND THE LEAK AND A HYDROPHILIC GROUT. IF REQUIRED, IT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR DRAINAGE STRUCTURES, NO. 1 AND NO. 2, RESPECTIVELY.
7. ALL PENETRATIONS THROUGH THE WALLS OF THE DRAINAGE STRUCTURES SHALL BE SEALED WITH NON-SHRINK GROUT.
8. DRAINAGE STRUCTURES SHALL BE CHECKED DURING INSTALLATION AND GROUTING TO ENSURE A TRUE VERTICAL INSTALLATION. IF THE ALIGNMENT IS OFF, THE CONTRACTOR SHALL TAKE CORRECTIVE MEASURES TO SHIM THE STRUCTURE BACK TO LEVEL.

DRAINAGE STRUCTURES PRECAST CONCRETE MANHOLE:

1. DRAINAGE STRUCTURES SHALL BE PRECAST REINFORCED CONCRETE MANHOLES CONFORMING TO SECTION 1042 OF THE STANDARD SPECIFICATIONS. STRUCTURES SHALL BE WATER TIGHT.
2. THE EXTERIOR AND BOTTOM OF THE BASE OF THE STRUCTURES SHALL RECEIVE TWO COATS OF ASPHALT EMULSION WATERPROOFING IN ACCORDANCE WITH SECTION 503.18 OF THE STANDARD SPECIFICATIONS.
3. THE DRAINAGE STRUCTURE SECTIONS SHALL BE A MINIMUM OF 4-FT TALL WITH THE EXCEPTION OF THE FINAL SECTION. EACH SECTION SHALL BE SEALED WITH TWO (2) STRIPS OF BUTYL RUBBER SEALANT. JOINTS IN THE BUTYL RUBBER SEALANT SHALL BE OVERLAPPED TO PREVENT GAPS.
4. THE ANNULAR SPACE BETWEEN THE STRUCTURES AND THE DRILLED SHAFT SHALL BE FILLED WITH NON-SHRINK GROUT. THE GROUT SHALL BE INSTALLED AFTER EACH BARREL SECTION IS INSTALLED FROM ELEVATION 563 TO 582. FROM ELEVATION 582 TO THE SURFACE, THE ANNULAR SPACE BETWEEN THE MANHOLE AND DRILLED SHAFT SHALL BE FILLED WITH CONTROLLED LOW STRENGTH MATERIAL OR GROUT.
5. THE CONTRACTOR SHALL SUBMIT A PLAN FOR INSTALLING THE GROUT BEFORE COMMENCING THE WORK. THE PLAN SHALL ADDRESS THE INSTALLATION METHOD AND BOUYANCY ISSUES DURING INSTALLATION.
6. IF GROUNDWATER IS PRESENT BETWEEN THE STRUCTURE AND THE DRILLED SHAFT, THE CONTRACTOR SHALL USE A GROUT FORMULATED FOR CURING UNDER WATER AND SHALL INSTALL THE GROUT FROM THE BOTTOM-UP.
7. THE GROUT SHALL CONFORM TO ASTM C-1107 AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI AFTER 28 DAYS.

DESIGNED	LJB	9/6/13
DRAWN	MOC	9/27/13
REVIEWED	LJB	2/25/14

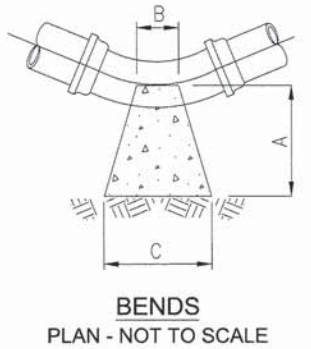
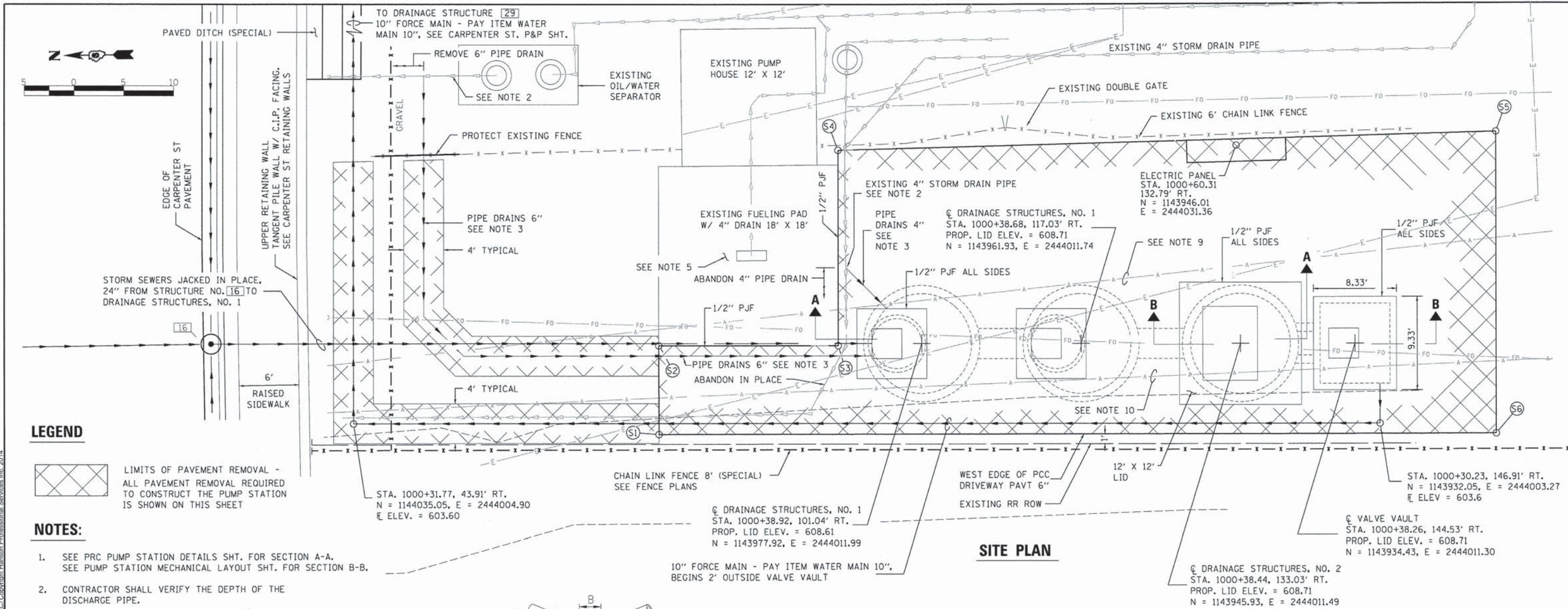
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		DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

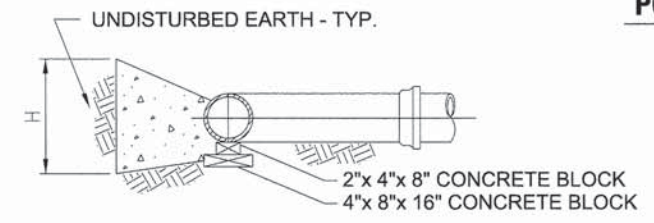
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
PUMP STATION GENERAL NOTES

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	81
09L0179B			CONTRACT NO 3617	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 1 OF 6 SHEETS STA. TO STA.



HORIZONTAL THRUST BLOCKING



TYPICAL SECTION
NOT TO SCALE

* DIMENSIONS BASED ON 50 PSI WORKING PRESSURE AND 1500 PSF ALLOWABLE SOIL BEARING PRESSURE. DIMENSIONS MAY BE REDUCED IF CONTRACTOR FURNISHES SOIL TESTING RESULTS DEMONSTRATING HIGHER ALLOWABLE SOIL BEARING PRESSURE.

*** THRUST BLOCK DIMENSIONS AND VOLUMES**

PIPE DIA.	ALL FTGS.		90 DEGREE BEND		45 DEGREE BEND		22-1/2 DEGREE BEND		11-1/4 DEGREE BEND	
	A	B	C	H	C	H	C	H	C	H
10	20	10	21	18	20	14	12	12	10	10

DIMENSIONS IN INCHES; VOLUMES IN CUBIC YARDS

LIMITS OF PAVEMENT REMOVAL & PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6"

POINT	NORTH	EAST	ELEVATION
①	1144004.43	2444003.32	608.70
②	1143936.41	2444002.13	608.48
③	1143986.30	2444011.91	608.51
④	1143985.99	2444031.51	608.48
⑤	1143919.93	2444032.28	608.85
⑥	1143920.41	2444002.07	608.55

DESIGNED: LJB 9/16/13
DRAWN: CLG 9/27/13
REVIEWED: LJB 2/25/14

FILE NAME =	USER NAME = pop02275	DESIGNED - LJB	REVISED -
D609L0179B-sht-plan-CAR-C1.dgn		DRAWN - CLG	REVISED -
	PLOT SCALE = 5.0000' / 1"	CHECKED - LJB	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

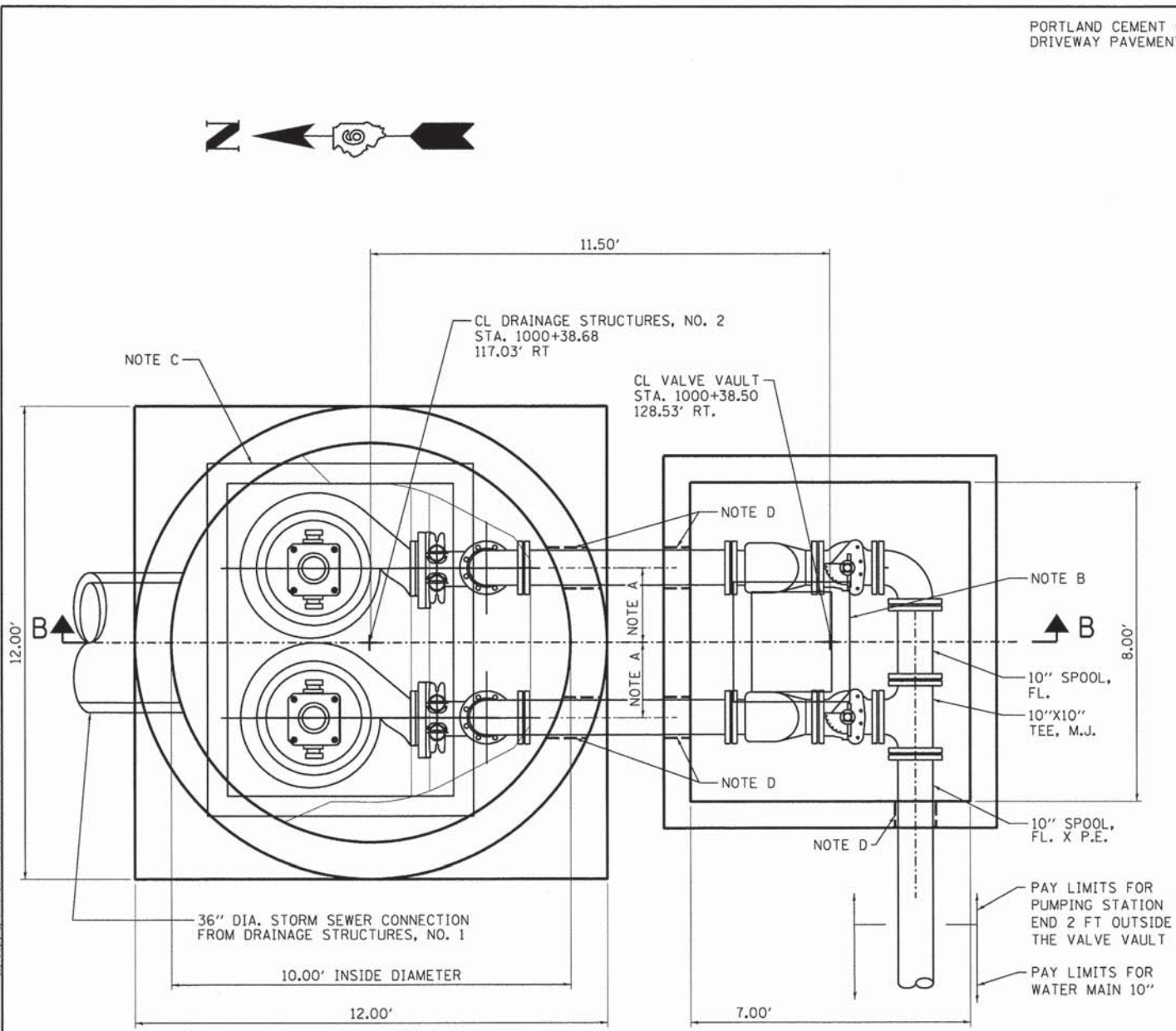
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
PUMP STATION SITE PLAN

SCALE: SHEET 2 OF 6 SHEETS STA. TO STA.

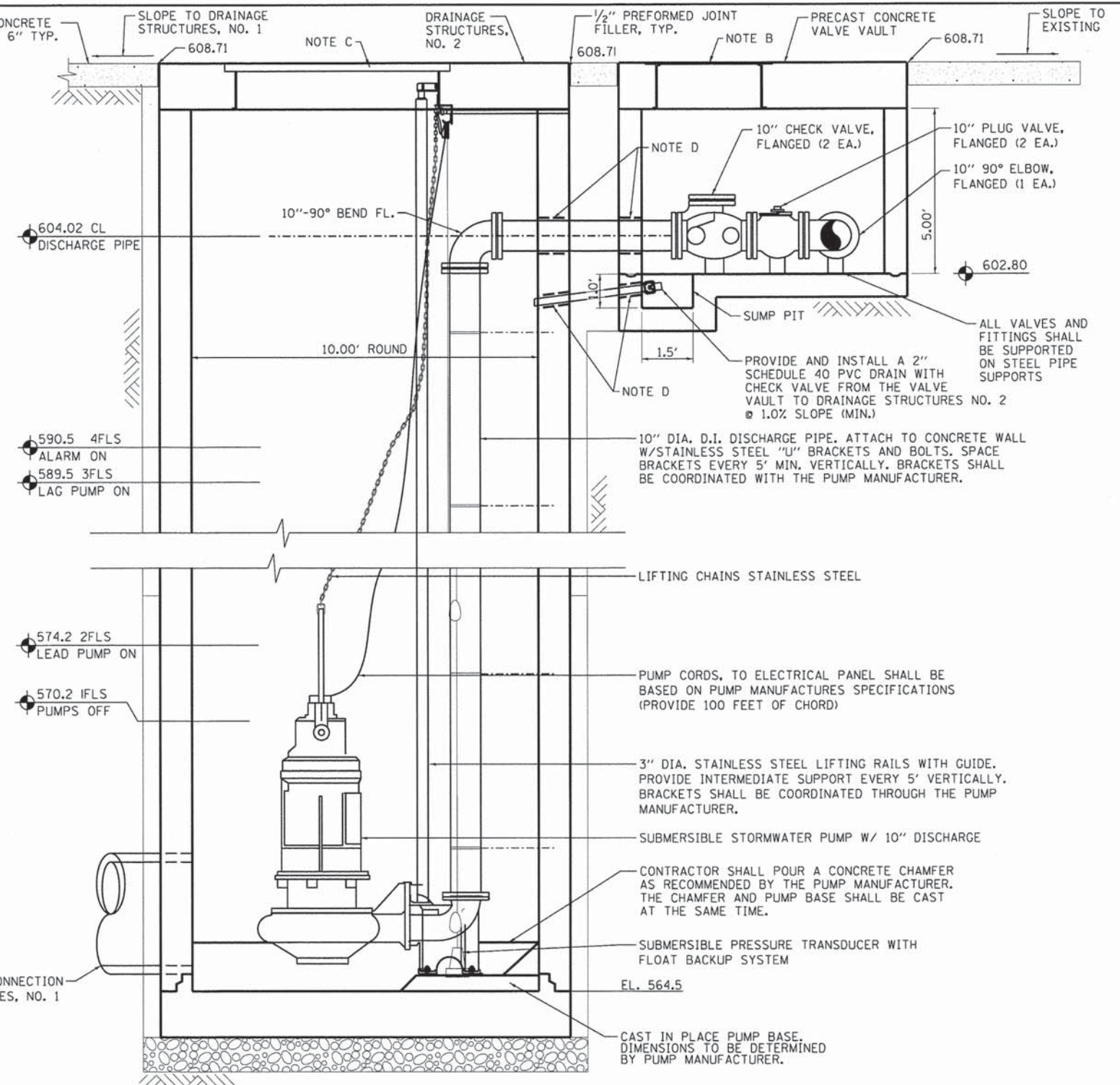
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	82
09L0179B		CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				



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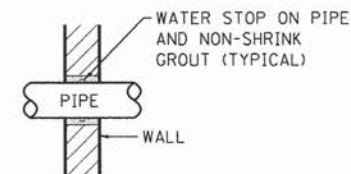
**MECHANICAL LAYOUT
DRAINAGE STRUCTURES, NO. 2 AND VALVE VAULT PLAN**
NOT TO SCALE AND SHOWN WITH THE PRC LAYOUT



**MECHANICAL LAYOUT
SECTION B-B**
NOT TO SCALE AND SHOWN WITH THE PRC LAYOUT

NOTES

- A. 1.875' - CONTRACTOR TO VERIFY DIMENSION WITH PUMP MANUFACTURE FOR MINIMUM PUMP SPACING
- B. 36" X 36" ALUMINUM ACCESS FRAME AND HATCH.
- C. CUSTOM HATCH SYSTEM. SEE MISCELLANEOUS PUMP STATION DETAILS SHEET.
- D. GROUT TYP. (SEE DETAIL THIS SHEET)



GROUT DETAIL
NOT TO SCALE

DESIGNED	LJB	9/6/13
DRAWN	MOC	9/27/13
REVIEWED	LJB	2/25/14

FILE NAME =	USER NAME = pop0275	DESIGNED - LJB	REVISED -
D609L0179B-shr-plnprf-CAR-CL.dgn		DRAWN - MOC	REVISED -
	PLOT SCALE = 2.0000' / 1in.	CHECKED - LJB	REVISED -
Sheet	PLOT DATE = 02/26/2014	DATE - 2/25/14	REVISED -

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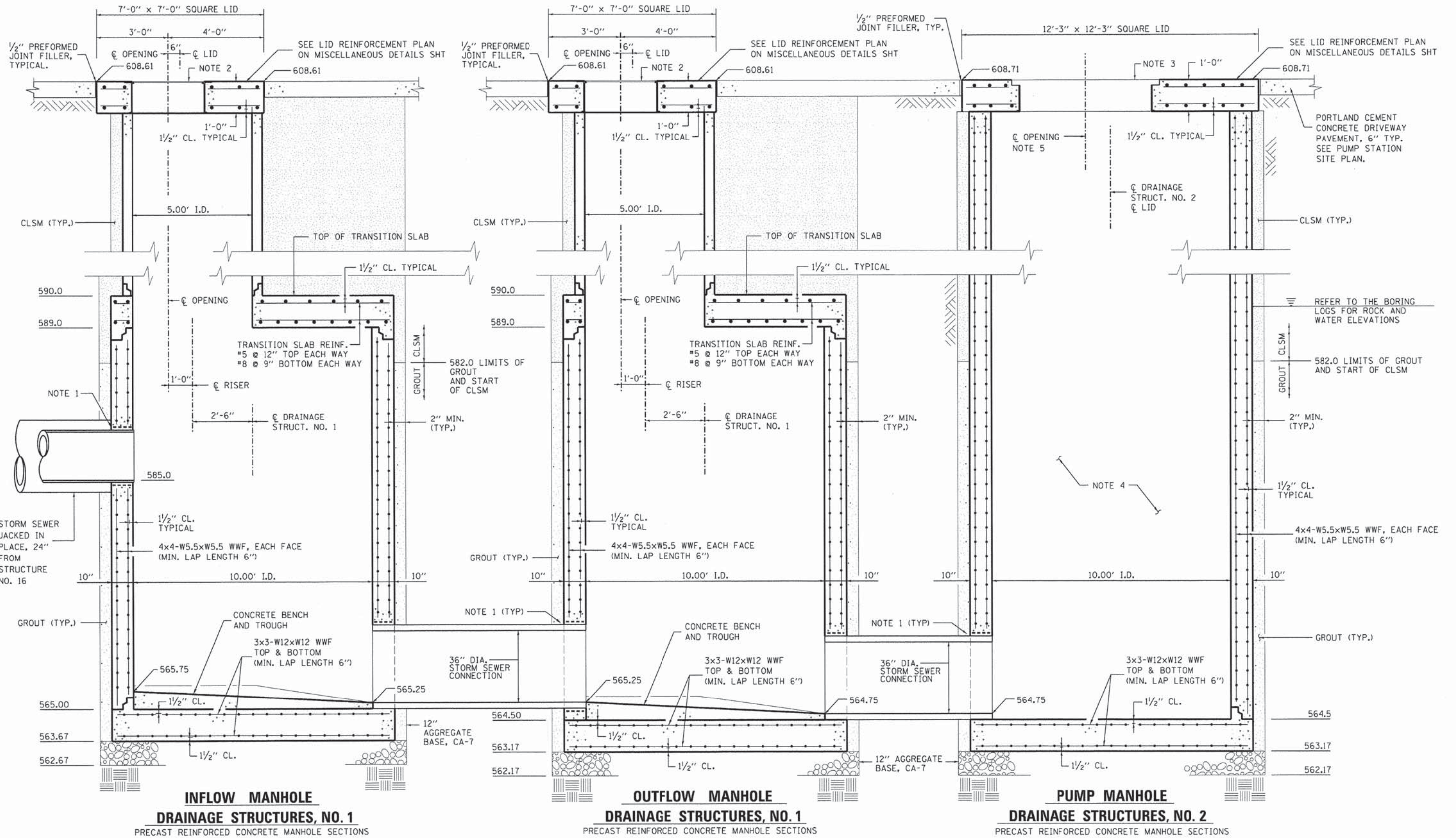
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
PUMP STATION MECHANICAL LAYOUT

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	83
09L0179B			CONTRACT NO 9 3 6 1 7	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 3 OF 6 SHEETS STA. TO STA.



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INFLOW MANHOLE
DRAINAGE STRUCTURES, NO. 1

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS
SEE MISCELLANEOUS DETAILS SHEET-1 FOR PLAN VIEW OF INFLOW MANHOLE.

OUTFLOW MANHOLE
DRAINAGE STRUCTURES, NO. 1

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS

PUMP MANHOLE
DRAINAGE STRUCTURES, NO. 2

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS

SECTION A-A

NOT TO SCALE

NOTES:

1. GROUT TYPICAL, SEE DETAIL ON PUMP STATION MECHANICAL LAYOUT SHEET.
2. 36" X 36" ALUMINUM ACCESS FRAME AND HATCH.
3. CUSTOM HATCH SYSTEM. SEE MISCELLANEOUS PUMP STATION DETAILS-2 SHEET.
4. PUMPS AND PIPING REMOVED FOR CLARITY.
5. LOCATION OF THE HATCH & HINGED SIDE OF THE HATCH TO BE COORDINATED WITH THE PUMP MANUFACTURER.

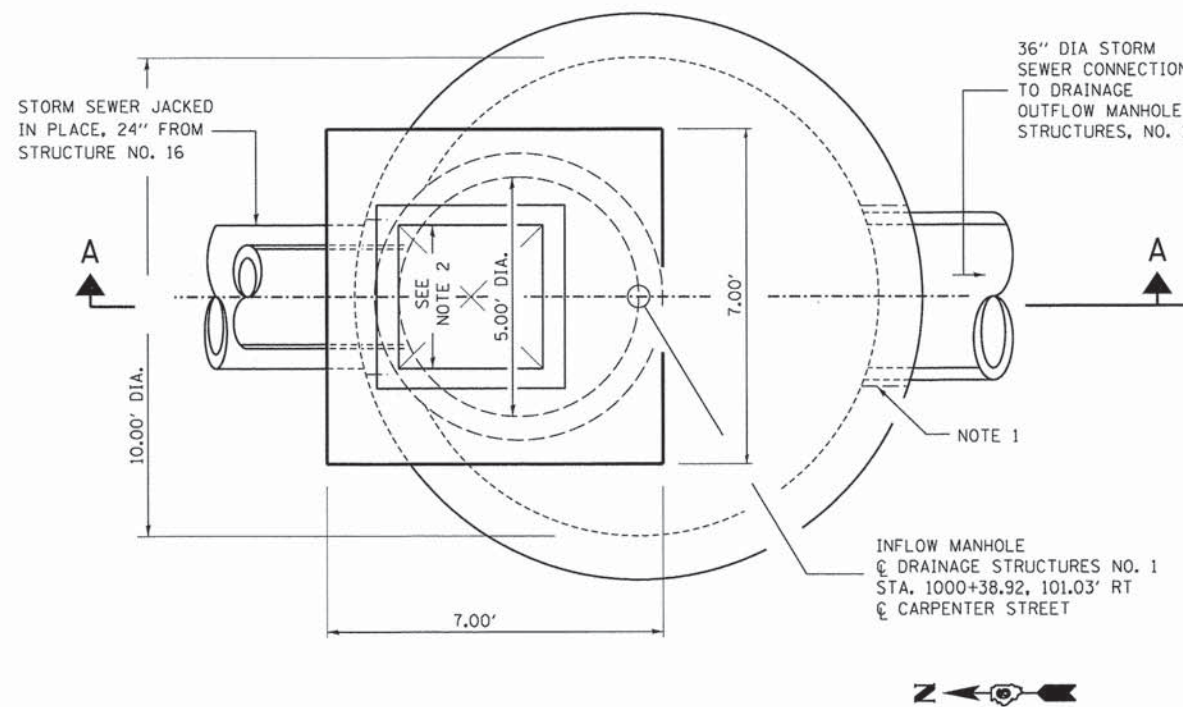
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DESIGNED LJB 9/6/13
DRAWN CLC 9/27/13
REVIEWED LJB 2/25/14

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		DRAWN - CLC	REVISED -
		CHECKED - LJB	REVISED -
		DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
PRC PUMP STATION DETAILS

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 84
O9L0179B			CONTRACT NO. 9 3 6 1 7	
ILLINOIS FED. AID PROJECT				



**INFLOW MANHOLE
DRAINAGE STRUCTURES, NO. 1**
PRECAST REINFORCED CONCRETE MANHOLE SECTIONS
NOT TO SCALE
SEE PRC PUMP STATION DETAILS SHEET FOR SECTION A-A

NOTES:

1. GROUT TYPICAL, SEE DETAIL ON PUMP STATION MECHANICAL LAYOUT SHEET.
2. 36" X 36" ALUMINUM ACCESS FRAME AND HATCH.

DESIGNED	LJB	9/6/13
DRAWN	CLG	9/27/13
REVIEWED	LJB	2/25/14

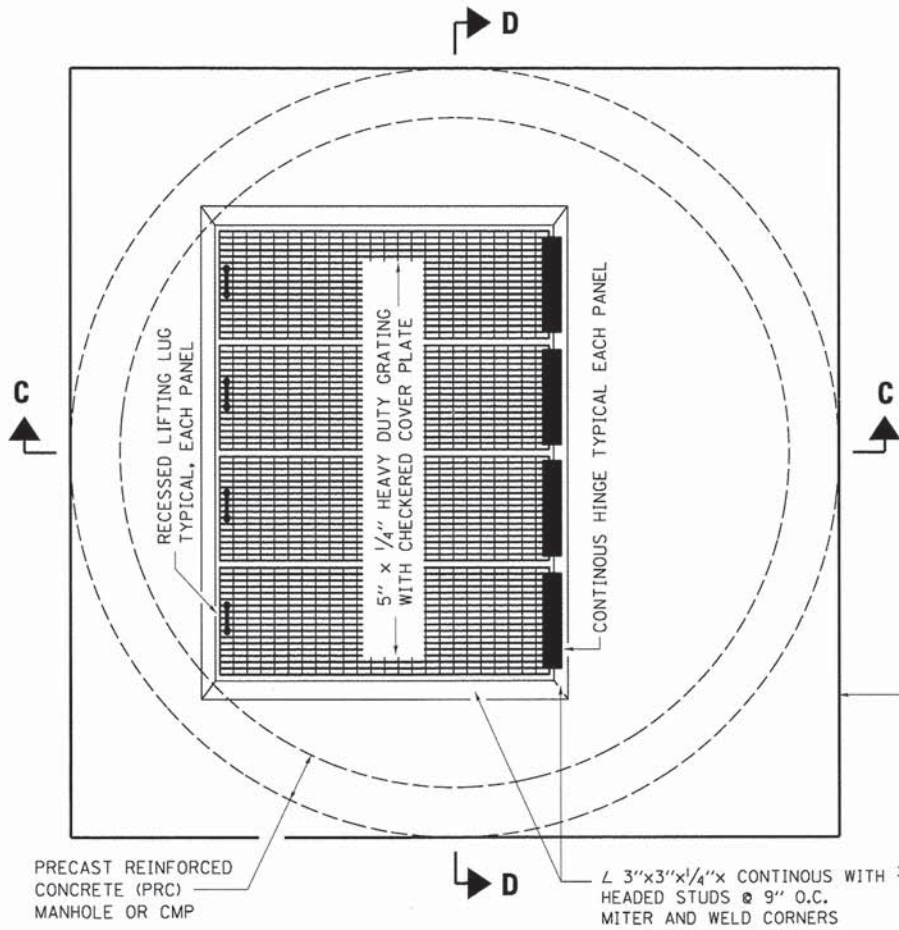
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

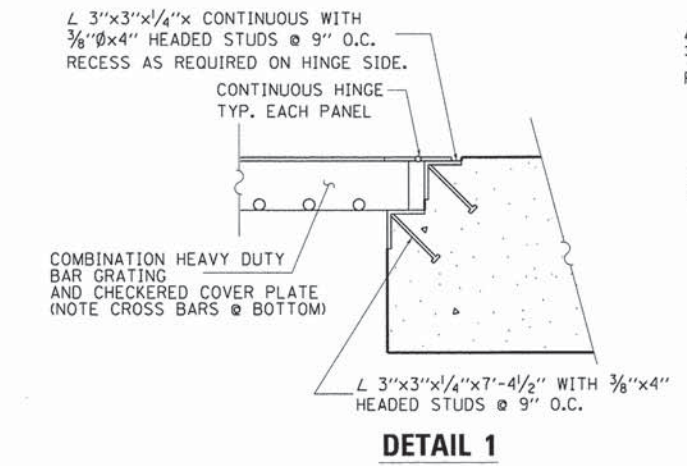
**SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
MISCELLANEOUS PUMP STATION DETAILS-1**

SCALE: SHEET 5 OF 6 SHEETS STA. TO STA.

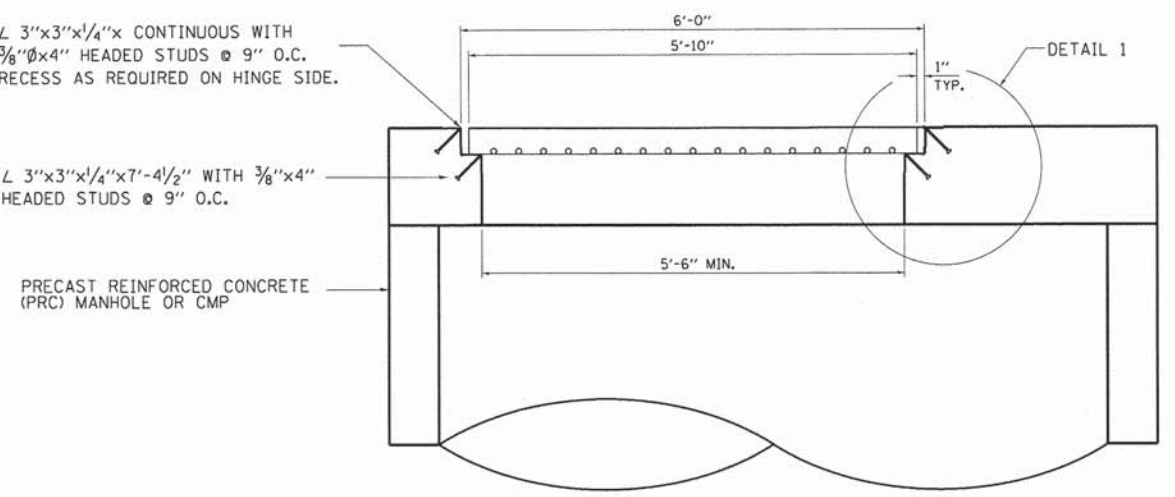
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	09L0179B		CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



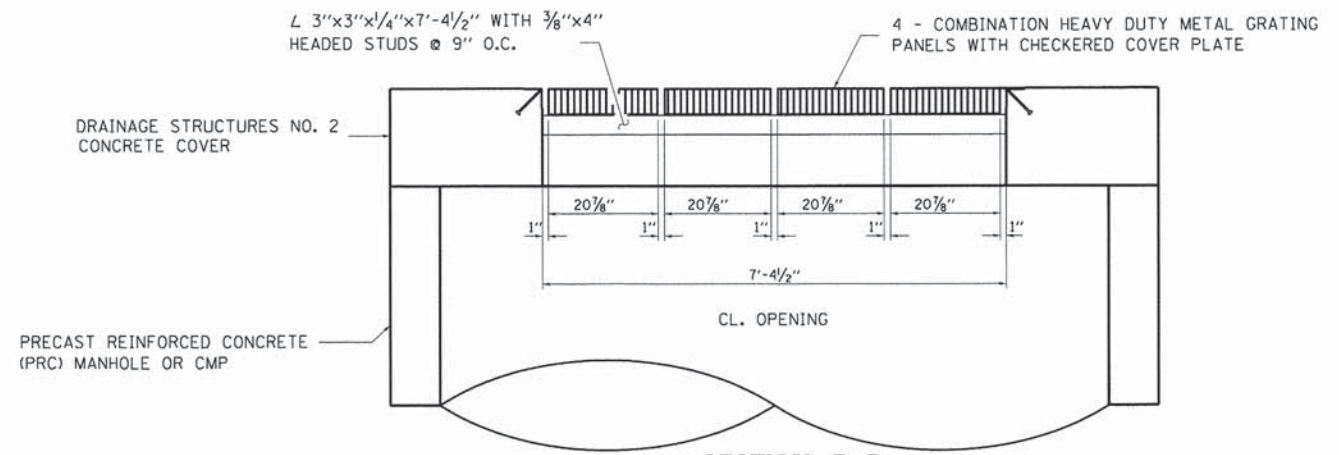
DRAINAGE STRUCTURES, NO. 2
PLAN
NOT TO SCALE



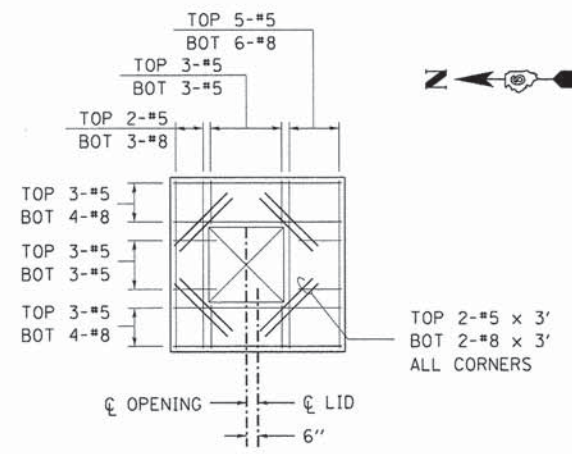
DETAIL 1



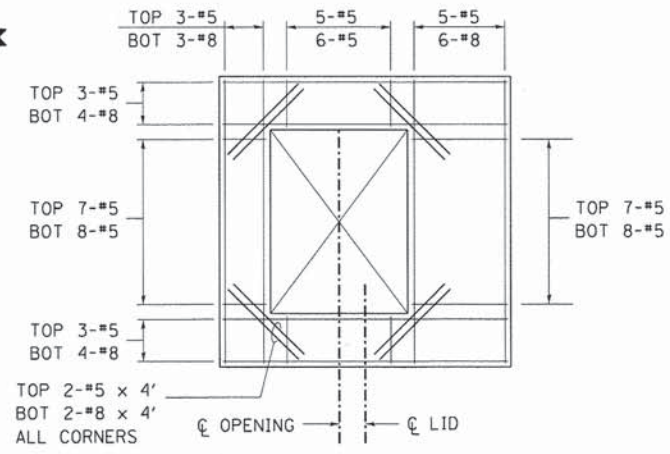
SECTION C-C
NOT TO SCALE



SECTION D-D
NOT TO SCALE



NOTE: 1/2" CLEAR COVER ON ALL REINFORCEMENT
DRAINAGE STRUCTURES, NO. 1
LID REINFORCING PLAN
NOT TO SCALE



NOTE: 1/2" CLEAR COVER ON ALL REINFORCEMENT
DRAINAGE STRUCTURES, NO. 2
LID REINFORCING PLAN
NOT TO SCALE

DRAINAGE STRUCTURES, NO. 2 GRATING COVER NOTES:

- LOADING: LIVE LOAD= AASHTO HL-93 TRUCK LOAD AND ALTERNATE TANDEM LOAD.
- COMBINATION HEAVY DUTY WELDED STEEL W-SERIES GRATING AND WELDED 1/4" CHECKERED COVERED PLATE.
- 22-W-4 GRATING: 5" X 1/4" PLAIN BEARING BARS @ 1 3/8" O.C. AND CROSS BARS @ 4" O.C.
- GALVANIZED FINISH FOR GRATING, PLATE AND ACCESSORIES.
- STEEL PLATE, BAR, AND ANGLES: AASHTO M270/ASTM A709, GRADE 36.
- HEADED STUDS: AASHTO M169/ASTM A108, GRADE 1015, 1018, OR 1020 AUTOMATIC END WELDED TO BASE METAL.
- WELD METAL: AWS D1.5
- PROVIDE LIFTING LUG AND HINGE CONNECTION AT OPPOSITE ENDS OF EACH PANEL PER GRATING MANUFACTURERS STANDARD DETAILS CAPABLE OF SUPPORTING THE WEIGHT OF THE COMBINATION GRATING AND COVER PLATE, AND CAPABLE OF OPENING 180°.
- LOCATION AND ARRANGEMENT OF THE HATCH TO BE COORDINATED WITH THE PUMP MANUFACTURER

DESIGNED	LJB	9/6/13
DRAWN	TJXCC	9/27/13
REVIEWED	LJB	2/25/14

FILE NAME =	D609L0179B-sht-details-CAR-CL.dgn
USER NAME =	pop02275
DESIGNED -	LJB
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DATE -	2/25/14

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DATE -	2/25/14

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DRAWN -	TJXCC
CHECKED -	LJB
DATE -	2/25/14

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
MISCELLANEOUS PUMP STATION DETAILS-2

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	86
09L0179B			CONTRACT NO. 3617	
ILLINOIS FED. AID PROJECT				



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GENERAL LEGEND

PLAN

	SINGLE POLE SWITCH
	TWO POLE SWITCH
	THREE WAY SWITCH
	FOUR WAY SWITCH
	FRACTIONAL H.P. MANUAL STARTER
	WEATHERPROOF SWITCH
	MOMENTARY CONTACT SINGLE POLE DOUBLE THROW SWITCH
	SIMPLEX RECEPTACLE
	EXPLOSION PROOF SIMPLEX RECEPTACLE
	DUPLEX RECEPTACLE
	WEATHERPROOF DUPLEX RECEPTACLE
	DUPLEX RECEPTACLE W/GROUND FAULT INTERRUPTOR
	QUADRUPLEX RECEPTACLE
	SPECIAL PURPOSE OUTLET (IDENTIFIED ON PLANS)
	PLUG
	JUNCTION BOX (LINE GOES TO BOX)
	EXPLOSION PROOF JUNCTION BOX (LINE GOES TO BOX)
	GROUND ROD
	DISCONNECT SWITCH. # = AMPERAGE RATING.
	POWER POLE OR RISER POLE
	LIGHT FIXTURE. # = TYPE
	EXPLOSION PROOF LIGHT FIXTURE # = TYPE
	CONDUIT (EXPOSED)
	CONDUIT (CONCEALED OR BURIED)
	OVERHEAD ELECTRIC
	NEUTRAL
	HOT
	LIGHTING PANEL
	POWER PANEL
	PANEL OR ENCLOSURE

ONE-LINE

	SURGE PROTECTOR/TVSS DEVICE
	ELECTRIC UTILITY SERVICE METER AND BASE
	CAPACITOR
	TRANSFORMER
	CABLE TERMINAL OR LUGS
	GENERATOR
	COMBINATION CIRCUIT BREAKER/STARTER WITH OVERLOAD PROTECTION. # = NEMA SIZE NO.
	GROUND - GROUND ROD, CHASSIS, BUS, OR AT EARTH POTENTIAL
	MOTOR
	EXPLOSION PROOF MOTOR
	MOTOR, # = HORSEPOWER
	CIRCUIT BREAKER
	ADJUSTABLE MOTOR CIRCUIT PROTECTOR TYPE BREAKER
	THERMAL-MAGNETIC CIRCUIT BREAKER
	FUSE
	DISCONNECT SWITCH
	FUSIBLE DISCONNECT SWITCH
	THERMAL OVERLOAD PROTECTION
	EXPLOSION PROOF CONDUIT SEAL-OFF FITTING
	TRANSFER SWITCH
	JUNCTION BOX WITH SPLICE
	GROUND BUS OR LUG
	NEUTRAL BUS
	PANELBOARD WITH MAIN BREAKER
	PANELBOARD WITH MAIN MAIN LUGS

NOTES:

1. CONDUIT TO BE SIZED PER NEC, MINIMUM 3/4", EXCEPT WHERE NOTED OTHERWISE.
2. CONDUCTORS TO BE SIZED PER NEC, MINIMUM #12 AWG EXCEPT WHERE NOTED OTHERWISE.
3. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CONFORMANCE WITH NFPA70 (NEC MOST CURRENT ISSUE), THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTINGS (OR THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE SHALL NOT BE PERMITTED.
4. METAL CONDUIT IN DIRECT CONTACT WITH THE EARTH SHALL BE PVC COATED OR SHALL RECEIVE TAR OR ASPHALT BASED COATINGS, APPLIED FOR CORROSION PROTECTION. APPLY COATINGS PER MANUFACTURER'S DIRECTIONS AND RECOMMENDATIONS FOR THE APPLICATION. SEE SPECIFICATIONS.
5. ALL ENCLOSURES RATED NEMA 4, 4X SHALL HAVE WATERTIGHT HUBS AT CONDUIT ENTRANCES U.L. LISTED NEMA 4, 4X FOR THE RESPECTIVE ENCLOSURE, TO MAINTAIN THE NEMA 4, 4X RATING.

DESIGNED	RDN	9/6/13
DRAWN	MOC	9/27/13
REVIEWED	PJT	2/25/14

FILE NAME =	USER NAME = pop02275	DESIGNED - RDN	REVISED -
D689L0179B-shr-gennote-CAR-E1.dgn		DRAWN - MOC	REVISED -
		CHECKED - PJT	REVISED -
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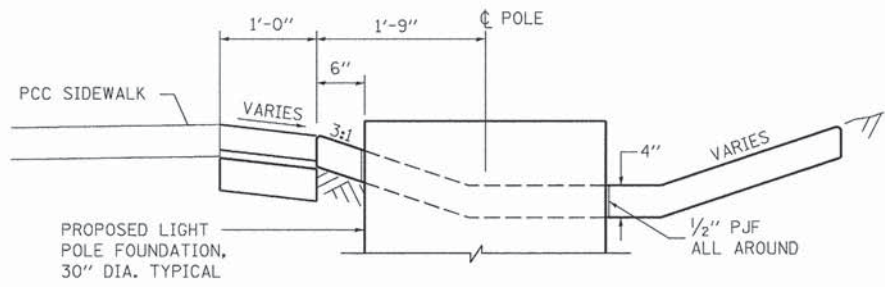
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ELECTRICAL PLANS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	09L0179B			CONTRACT NO. 93617
ILLINOIS FED. AID PROJECT				

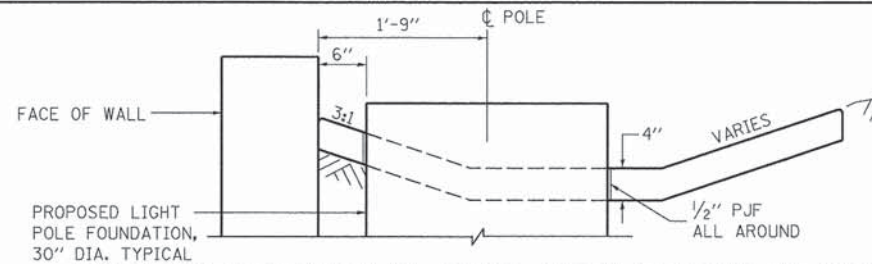
SCALE: SHEET 1 OF 16 SHEETS STA. TO STA.



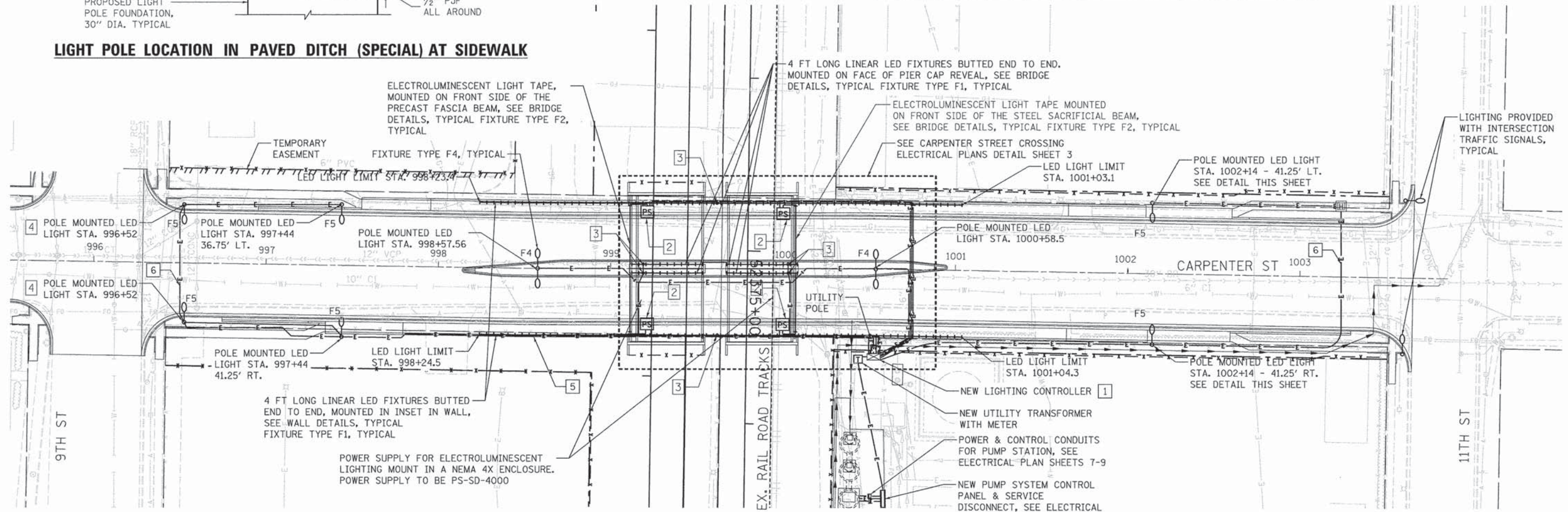
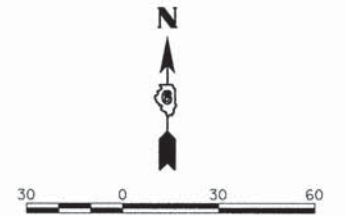
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LIGHT POLE LOCATION IN PAVED DITCH (SPECIAL) AT SIDEWALK



LIGHT POLE LOCATION IN PAVED DITCH (SPECIAL) AT WALL



LIGHTING FIXTURE SCHEDULE						
FIXT. TYPE	DESCRIPTION	MANUFACTURER & CATALOG NO.	LAMPS/WATTS	VOLTS	MOUNTING	REMARKS
F1	4 FT. LED HIGH ABUSE LINEAR LIGHT FIXTURE, LIGHT OUTPUT EQUIVALENT TO 2-T8 FLUORESCENT LAMPS, HIGH IMPACT ACRYLIC LENS, IP-65 RATED MINIMUM, COLD WEATHER AND HIGH AMBIENT RATED, FUSED.	KURTZON: WL-A-3-40-1/LED40-UNV-FD-TP-SSH-HD85-WHT OR APPROVED EQUIVALENT	40 WATT LED'S	240	SURFACE TO CONCRETE WALL OR PIER IN INSET.	SEE ELECTRIC PLAN DETAILS FOR INSTALLATION DETAILS
F2	CONTINUOUS ELECTROLUMINESCENT LIGHT TAPE. STANDARD DIMMING CAPABILITY, UV AND MOISTURE RESISTANT, LENGTHS AS NOTED ON THE PLANS, HIGHLY VISIBLE THROUGH SMOKE AND FOG, PROFILE TO BE THINNER THAN A CREDIT CARD, 0.25" CLEAR BARRIER ENCAPSULATED ENVELOPING ALL 4 SIDES OF THE LIGHT ENGINE, 40,000 HOUR EXPECTED LIFE, 3 BRIGHTNESS SETTINGS.	ELECTROLUMINIX LIGHTING-LT-200-EXTERIOR-CLASSIC NATURAL BLUE-LENGTH AS SHOWN ON THE PLANS OR APPROVED EQUIVALENT	40 WATT LED'S	240	MOUNT TO THE FRONT EDGE OF THE OVERPASS ON BOTH THE EAST AND WEST SIDES. SEE ELECTRIC DETAILS FOR SPECIFIC LOCATIONS.	PROVIDE ALL REQUIRED POWER SUPPLIES IN A NEMA 4X JUNCTION BOX PROVIDE ALL REQUIRED END CAPS AND SPLICE KITS AS REQUIRED FOR A COMPLETE AND OPERATIONAL SYSTEM.
F3	NOT USED					

LIGHTING FIXTURE SCHEDULE						
FIXT. TYPE	DESCRIPTION	MANUFACTURER & CATALOG NO.	LAMPS/WATTS	VOLTS	MOUNTING	REMARKS
F4	LED COBRA HEAD, TWIN HEAD LIGHT FIXTURE, HEAVY DUTY CAST ALUMINUM HOUSING, DIE CAST ALUMINUM DOOR FRAME, TYPE III CUTOFF OPTICS, 8 FT DAVIT ARM, GRAY POLYESTER POWDER COAT FINISH, FUSED.	LUMARK: RC LED ROADWAY SERIES OR APPROVED EQUIVALENT.	190 WATTS TOTAL FOR TWO FIXTURES.	480	POLE MOUNTED 40FT AFG. MATCH IDOT STANDARD SHEET 830006-02. PROVIDE TWIN 8 FT ARMS.	FOR LUMARK FIXTURE PROVIDE B04 OPTION ON LIGHT BARS.
F5	LED COBRA HEAD, SINGLE HEAD LIGHT FIXTURE, HEAVY DUTY CAST ALUMINUM HOUSING, DIE CAST ALUMINUM DOOR FRAME, TYPE III CUTOFF OPTICS, 10 FT DAVIT ARM, GRAY POLYESTER POWDER COAT FINISH, FUSED.	LUMARK: RC LED ROADWAY SERIES OR APPROVED EQUIVALENT.	95 WATTS	480	POLE MOUNTED 40FT AFG. MATCH IDOT STANDARD SHEET 830006-02. PROVIDE SINGLE 10 FT ARM.	FOR LUMARK FIXTURE PROVIDE B04 OPTION ON LIGHT BARS.

GENERAL NOTE:

ALL LIGHTING CIRCUITS TO BE 2#10, #10G, 3/4" C.

KEYED NOTES:

- 1 PROVIDE A 240V CIRCUIT FOR ALL OF THE ELECTROLUMINESCENT LIGHTING. PROVIDE 2-240V CKTS 1 FOR THE NORTH RUN OF F1 FIXTURE & 1 FOR THE SOUTH RUN OF F1 FIXTURES. PROVIDE A 240V CIRCUIT FOR THE F1 LIGHTS ON THE PIER. PROVIDE A 480V CKT FOR ALL OF THE POLE MOUNTED F4 & F5 FIXTURES.
- 2 SEE ELECTRIC PLAN DETAILS FOR INSTALLATION DETAILS.
- 3 PROVIDE 4" SQUARE J-BOX EMBEDDED IN STRUCTURE WITH HOMERUN TO LIGHTING CONTROLLER FOR F1 LIGHTING. AT THE PIERS PROVIDE 2-JUNCTION BOXES ONE ON EACH SIDE AND 1 HOMERUN FROM EACH PIER.
- 4 PROVIDE 2'-0" CLEAR FROM FACE OF CURB TO FACE OF POLE FOUNDATION.
- 5 ALL CONDUITS TO BE ROUTED IN RETAINING WALLS AS THEY PASS THRU THE RAILROADS RIGHT OF WAY. ONCE OUTSIDE THE RIGHT OF WAY, CONDUITS MAY BE DIRECT BURIED.
- 6 CONDUITS ROUTED AROUND DIG OUT FOR UNDERPASS TO SIMPLIFY CROSSING CARPENTER STREET. SEE ALL ROADWAY CROSS SECTIONS.

FINAL
DESIGNED RDN 9/6/13
DRAWN MOC 9/27/13
REVIEWED PJT 2/25/14

FILE NAME =	USER NAME = pop02275	DESIGNED - RDN	REVISED -
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		CHECKED - PJT	REVISED -
Sheet	PLOT DATE = 8/31/2014	DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

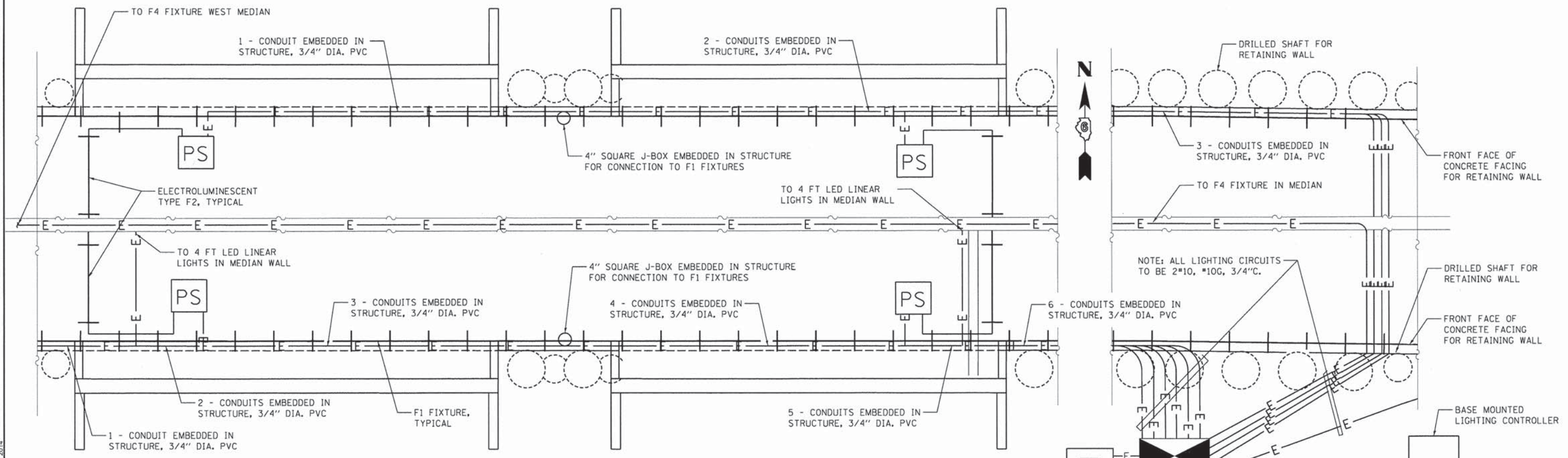
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ELECTRICAL PLANS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	88
	09L0179B			CONTRACT NO. 93617
ILLINOIS FED. AID PROJECT				

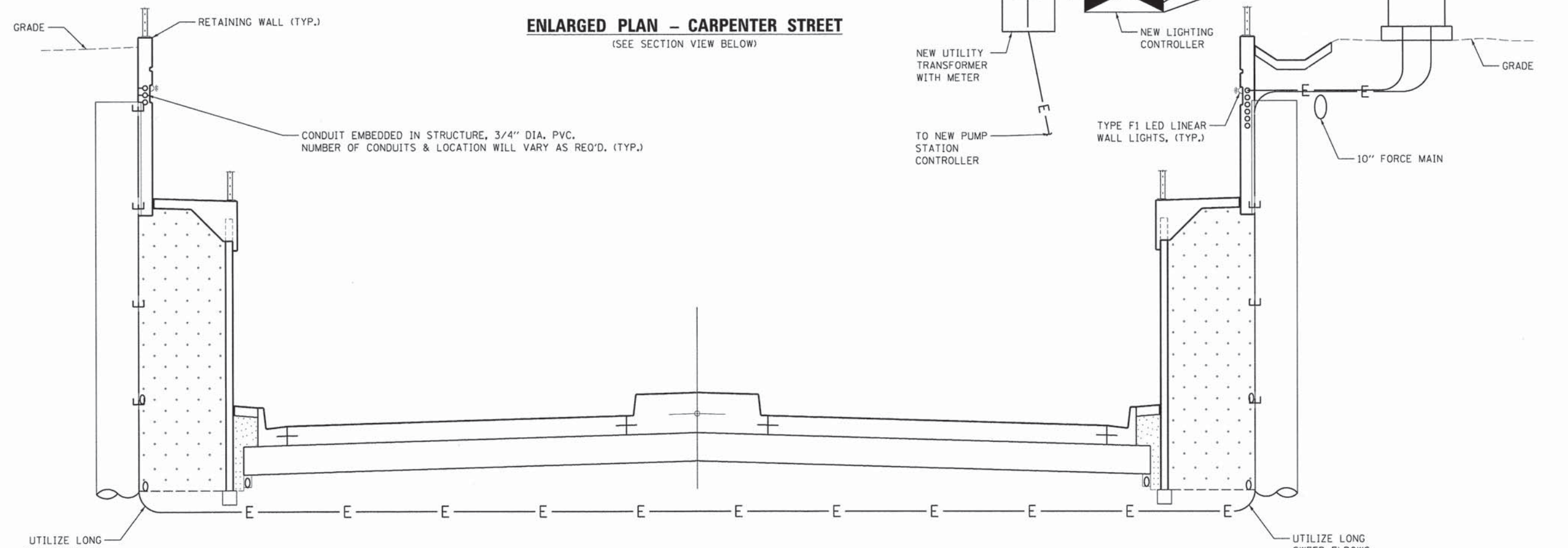
SCALE: SHEET 2 OF 16 SHEETS STA. TO STA.



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ENLARGED PLAN - CARPENTER STREET
(SEE SECTION VIEW BELOW)



SECTION VIEW OF CONDUITS CROSSING CARPENTER STREET NEAR LIGHTING CONTROLLER

FINAL
 DESIGNED - RDN 9/6/13
 DRAWN - SKB 9/27/13
 REVIEWED - PJT 2/25/14

FILE NAME = D609L0179B-shit-details-CAR-E5.dgn	USER NAME = pop00275	DESIGNED - RDN	REVISED -
Lighting Controller	PLOT SCALE = 0:1.0000' = 1" / 16'	DRAWN - SKB	REVISED -
	PLOT DATE = 02/26/2014	CHECKED - PJT	REVISED -
		DATE - 2/25/14	REVISED -

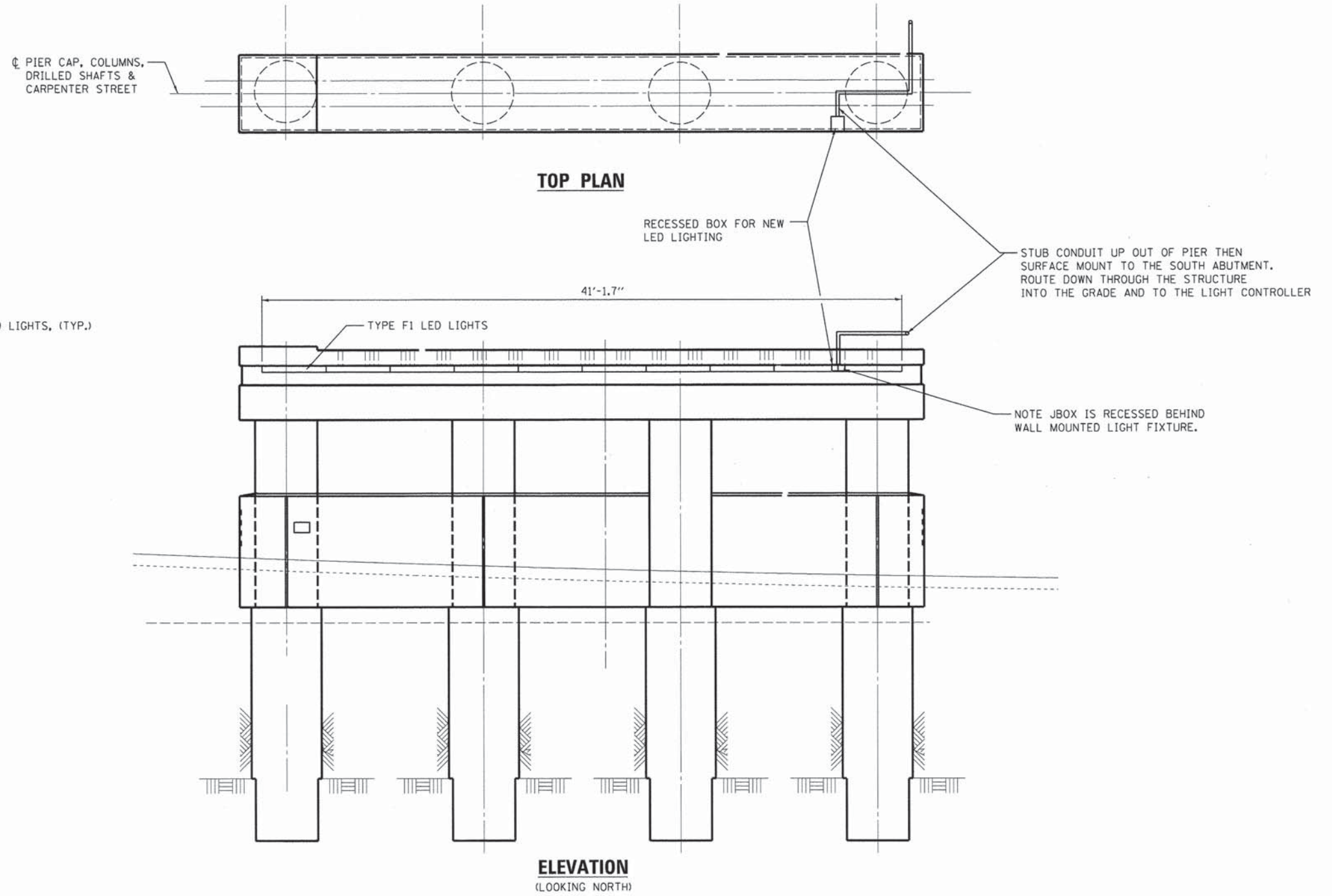
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ELECTRICAL PLANS

SCALE: SHEET 3 OF 16 SHEETS STA. TO STA.

F.A.U. RTE. 7975	SECTION 13-00475-00-BR	COUNTY SANGAMON	TOTAL SHEETS 196	SHEET NO. 89
09L0179B		CONTRACT NO. 03617		
ILLINOIS FED. AID PROJECT				

NOTE: THIS IS TYPICAL FOR EACH SIDE OF EACH PIER.



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DESIGNED	RDN	9/6/13
DRAWN	KET	9/27/13
REVIEWED	PJT	2/25/14

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DESIGNED - RDN
 DRAWN - KET
 CHECKED - PJT
 PLOT DATE = 02/26/2014

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 DATE - 2/25/14
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

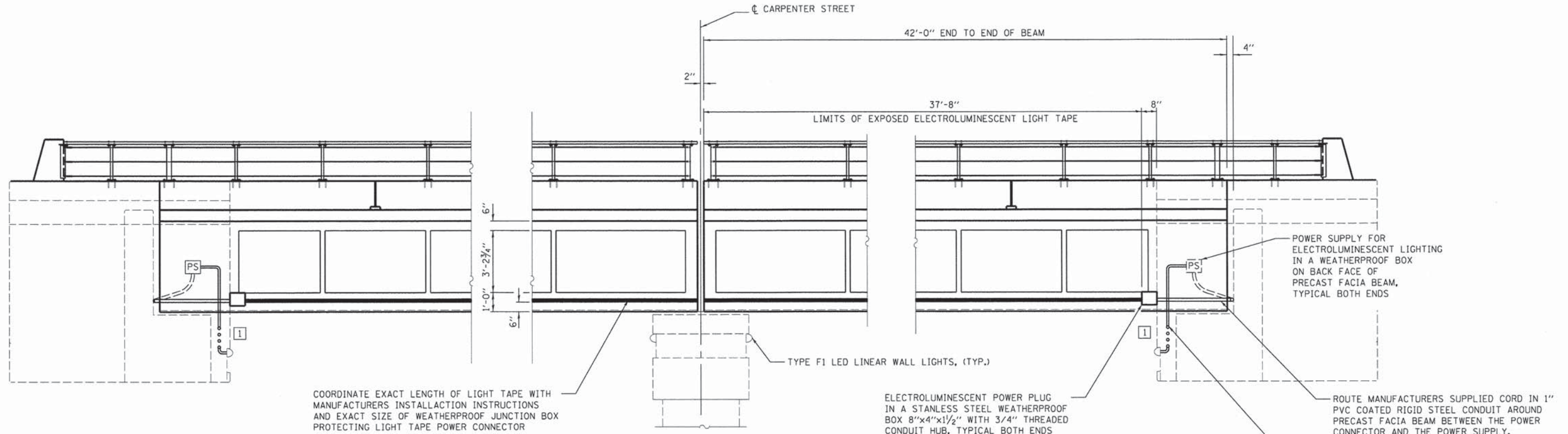
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
 SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
 ELECTRICAL PLANS

SCALE: SHEET 4 OF 16 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	90
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



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ELEVATION PRECAST FASCIA BEAM
(LOOKING EAST, UPRR BRIDGE)

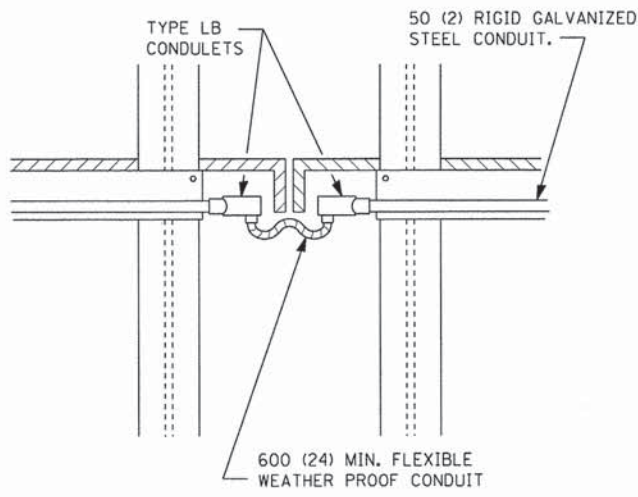
COORDINATE EXACT LENGTH OF LIGHT TAPE WITH MANUFACTURERS INSTALLATION INSTRUCTIONS AND EXACT SIZE OF WEATHERPROOF JUNCTION BOX PROTECTING LIGHT TAPE POWER CONNECTOR

ELECTROLUMINESCENT POWER PLUG IN A STAINLESS STEEL WEATHERPROOF BOX 8"x4"x1 1/2" WITH 3/4" THREADED CONDUIT HUB, TYPICAL BOTH ENDS

POWER SUPPLY FOR ELECTROLUMINESCENT LIGHTING IN A WEATHERPROOF BOX ON BACK FACE OF PRECAST FACIA BEAM, TYPICAL BOTH ENDS

ROUTE MANUFACTURERS SUPPLIED CORD IN 1" PVC COATED RIGID STEEL CONDUIT AROUND PRECAST FACIA BEAM BETWEEN THE POWER CONNECTOR AND THE POWER SUPPLY, TYPICAL BOTH ENDS

3/4" CONDUIT EMBEDDED IN STRUCTURE TO BELOW GRADE AND THE NEW LIGHTING CONTROLLER, TYPICAL BOTH ENDS



EXPANSION JOINT DETAIL
(USE SAME METHOD TO BYPASS OTHER OBSTRUCTIONS.)

KEYED NOTES:

- 1 ELECTRICAL CONDUITS ROUTED THROUGH RETAINING WALL, TYPICAL.

DESIGNED	RDN	9/6/13
DRAWN	KET	9/27/13
REVIEWED	PJT	2/25/14

FILE NAME =	USER NAME = pop00275	DESIGNED - RDN	REVISED -
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Sheet	PLOT DATE = 02/26/2014	DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

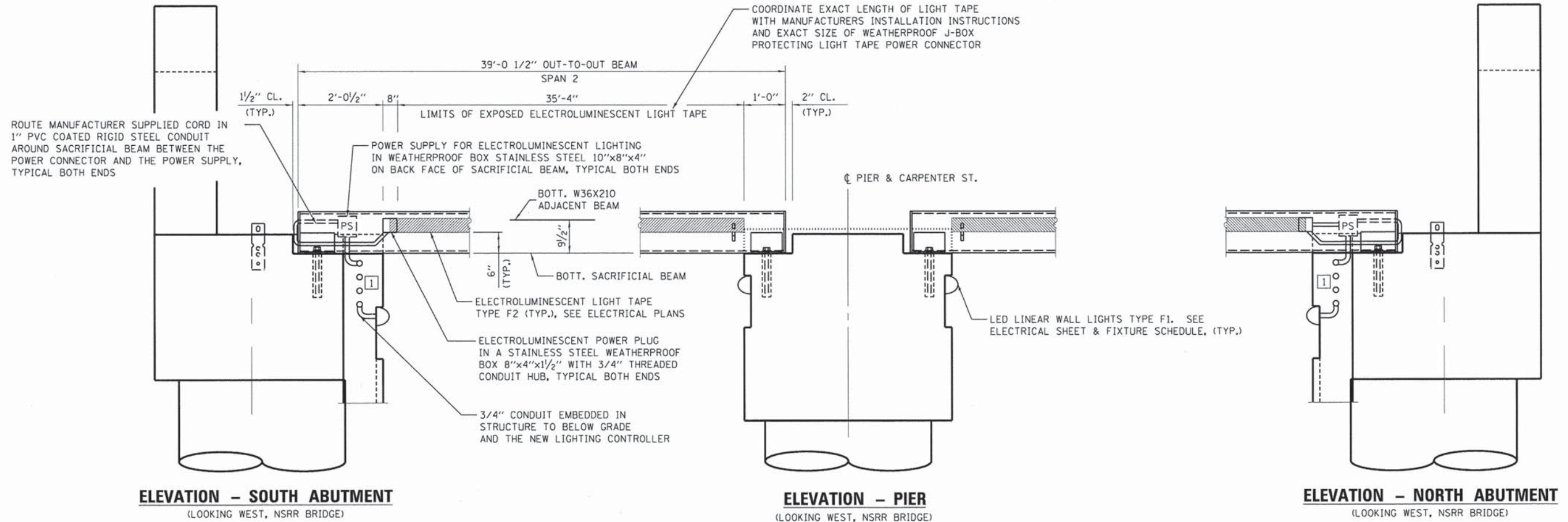
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ELECTRICAL PLANS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	91
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 5 OF 16 SHEETS STA. TO STA.



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ELEVATION – SOUTH ABUTMENT
(LOOKING WEST, NSRR BRIDGE)

ELEVATION – PIER
(LOOKING WEST, NSRR BRIDGE)

ELEVATION – NORTH ABUTMENT
(LOOKING WEST, NSRR BRIDGE)

KEYED NOTES:

- 1 ELECTRICAL CONDUITS ROUTED THROUGH RETAINING WALL, TYPICAL.

DESIGNED	RON	9/6/13
DRAWN	KET	9/27/13
REVIEWED	PJT	2/25/14

FILE NAME = D609L0179B-sht-details-CAR-E5.dgn
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USER NAME = pop02275
PLOT SCALE = 0:1.0000 'x' / in.
PLOT DATE = 02/26/2014

DESIGNED - RDN
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DATE - 2/25/14

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

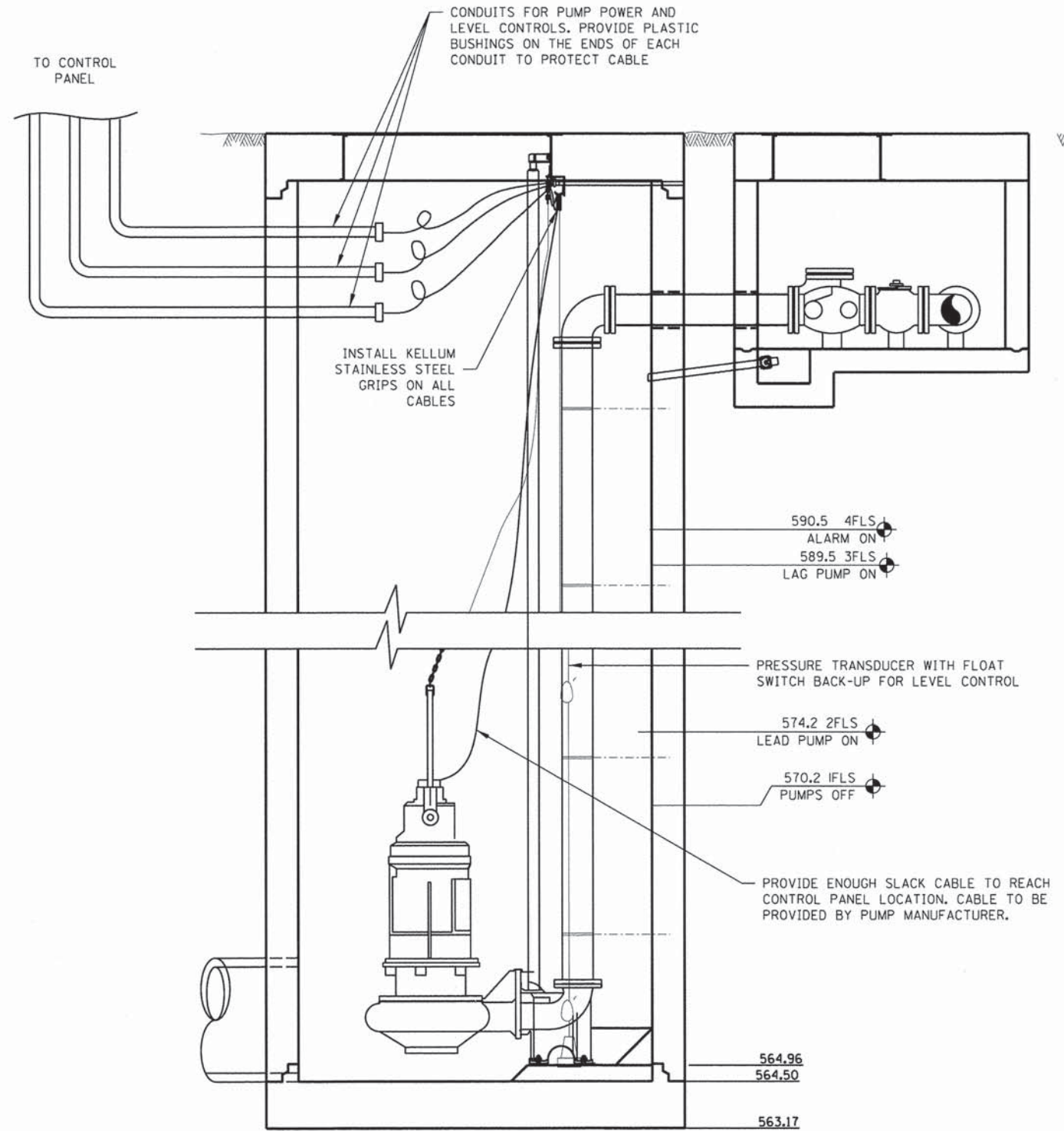
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ELECTRICAL PLANS

SCALE: SHEET 6 OF 16 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	92
09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				



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ELECTRICAL ELEVATION
NOT TO SCALE

NOTES:

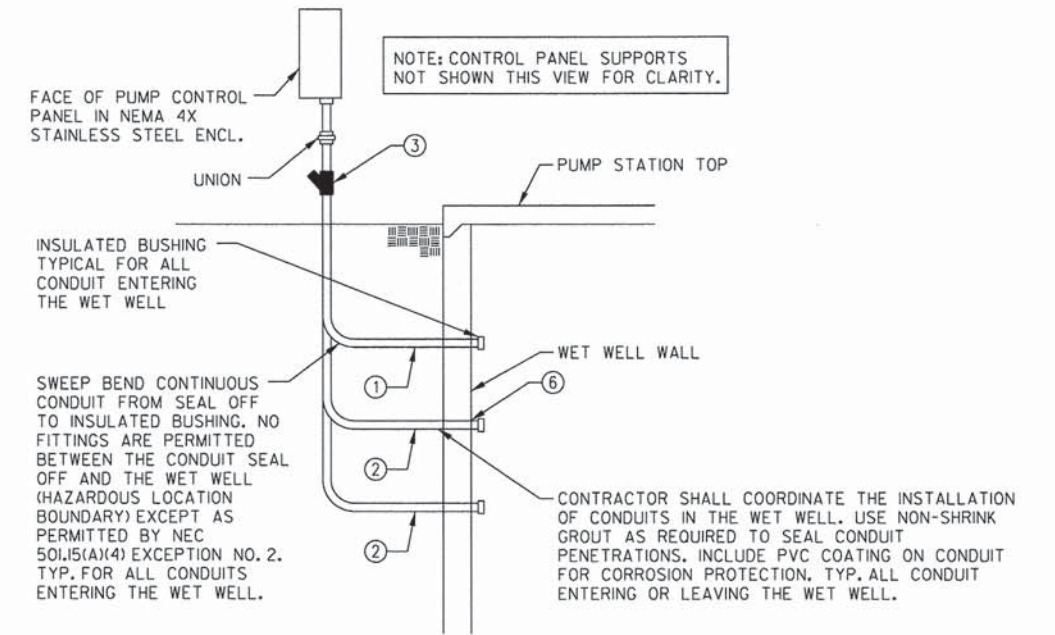
1. SHAFT SEAL FAILURE INSPECTION SHALL BE PART OF THE PUMPS ROUTINE MAINTENANCE.
2. THE PUMP CONTROLS SHALL INCORPORATE AN ALTERNATING RELAY TO EQUALIZE PUMP WEAR AND AUTOMATICALLY PROVIDE A STAND-BY.
3. VERIFY LEVEL SWITCH ELEVATIONS AND CABLE HANGAR LOCATIONS WITH ENGINEER AND PUMP MANUFACTURER REPRESENTATIVE.

GENERAL NOTES:

1. ALL ELECTRICAL EQUIPMENT INSTALLED IN THE WET WELL SHALL BE SUITABLE FOR USE IN CLASS I, DIV. I, GROUP D HAZARDOUS LOCATION AND SHALL CONFORM TO THE APPLICABLE SECTIONS OF NEC ARTICLES 500, 501, & 504 AS WELL AS ALL LOCAL CODES, ORDINANCES AND REQUIREMENTS.
2. ALL ELECTRICAL EQUIPMENT INSTALLED IN THE VALVE VAULT SHALL BE SUITABLE FOR USE IN CLASS I, DIVISION 2, GROUP D HAZARDOUS LOCATION AND SHALL CONFORM TO THE APPLICABLE SECTIONS OF NEC ARTICLES 500, 501, & 504 AS WELL AS ALL LOCAL CODES, ORDINANCES, AND REQUIREMENTS.
3. CONTRACTOR SHALL COORDINATE INSTALLATION OF ELECTRICAL EQUIPMENT, AND WORK WITH RESPECT TO PLUMBING, MECHANICAL, CONCRETE, EXCAVATION AND ALL OTHER WORK. COORDINATE THE INSTALLATION OF CONDUITS INTO THE WET WELL. USE NON-SHRINK GROUT AS REQUIRED TO SEAL CONDUIT PENETRATIONS.
4. ALL CONDUIT TERMINATIONS & OPENINGS IN ENCLOSURES SHALL BE SEALED WITH DUCT SEAL OR EQUAL.
5. LEVEL SENSING PRESSURE TRANSDUCER & BACK-UP FLOATS SHALL HAVE AN FM LISTED OR UL LISTED INTRINSICALLY SAFE BARRIER (SWITCHING AMPLIFIER) SUPPLIED FOR UNIT. INTRINSICALLY SAFE WIRING SHALL HAVE LIGHT BLUE COLORED INSULATION AND KEPT PHYSICALLY ISOLATED FROM OTHER CONDUCTORS. INTRINSICALLY SAFE WIRING AND EQUIPMENT SHALL BE INSTALLED PER ANSI/ISA RPI2.6, UL 698A, AND NEC 504. CONDUITS WITH INTRINSICALLY SAFE WIRING SHALL TERMINATE IN THE CONTROL PANEL AT THE INTRINSICALLY SAFE WIRING SECTION.
6. METAL CONDUIT IN DIRECT CONTACT WITH EARTH OR CONCRETE SHALL BE PVC COATED FOR CORROSION PROTECTION.
7. ALL CONDUIT ENTRANCES INTO THE SERVICE BREAKER, PUMP CONTROL PANEL AND ANY OTHER NEMA 4 ENCLOSURES SHALL HAVE WATER TIGHT THREADED HUBS, UL LISTED NEMA 4, 4X FOR RESPECTIVE ENCLOSURE.
8. ALL BUSHINGS, HUBS, & FITTINGS BETWEEN CONDUITS OF DISSIMILAR METALS AND/OR BETWEEN CONDUITS AND ENCLOSURES OF A DISSIMILAR METAL SHALL BE SUITABLE FOR SUCH APPLICATIONS TO ELIMINATE THE POSSIBILITY OF GALVANIC ACTION.

SHEET LEGEND:

- ① MULTI-CONDUCTOR LIQUID LEVEL SENSING CABLE (WITH MAXIMUM DIAMETER OF 5/8") IN 3" PVC COATED RIGID ALUMINUM CONDUIT. CONDUIT SHALL BE SIZED FOR 25% MAXIMUM FILL TO CONFORM TO EXPLOSION PROOF CONDUIT SEAL REQUIREMENTS. ADJUST (ENLARGE) AS REQUIRED.
- ② SUBMERSIBLE PUMP MOTOR CABLE IN 2" PVC COATED RIGID ALUMINUM CONDUIT. CONDUIT SHALL BE SIZED FOR 25% MAXIMUM FILL TO CONFORM TO EXPLOSION PROOF CONDUIT SEAL REQUIREMENTS. ADJUST (ENLARGE) AS REQUIRED.
- ③ EXPLOSION PROOF CONDUIT SEAL SUITABLE FOR CLASS I, DIVISION I, GROUP D HAZARDOUS LOCATION, CROUSE HINDS EYS, APPLETON EYS, ESU, EY, KILLARK ENY, EY EYS OR O-Z GEDNEY EYA, EY, OR EZS SERIES, REQUIRED FOR ALL CONDUITS ENTERING OR LEAVING THE WET WELL OR VALVE VAULT INSTALLED IN CONFORMANCE WITH NEC 501 & MANUFACTURER'S DIRECTIONS. NOTE CONDUIT SEALS SHALL BE SIZED AS REQUIRED FOR THE RESPECTIVE CABLE FILL. CABLE FILL SHALL NOT EXCEED 25% FOR CONDUIT SEAL APPLICATION. CONDUIT SEALS SHALL BE THE FIRST FITTING AFTER THE CONDUIT LEAVES THE WET WELL AND EMERGES FROM GRADE & THE FIRST FITTING AFTER CONDUIT ENTERS THE VALVE VAULT.
- ④ HEAVY DUTY STAINLESS STEEL CABLE RACK ADEQUATELY SIZED FOR THE RESPECTIVE PUMP & LEVEL CABLES OR HEAVY DUTY NYLON SADDLE RACKS (CABLE HANGAR WITH 3" THROAT OPENING), UNDERGROUND DEVICES CAT. NO. 3SRI. MOUNT AT IMMEDIATELY INSIDE ACCESS HATCH WITH STAINLESS STEEL STRUT SUPPORT & STAINLESS STEEL HARDWARE. PROVIDE SUFFICIENT RACKS FOR EACH PUMP CABLE & LEVEL CABLES. EACH PUMP MOTOR SHALL HAVE 10' MINIMUM SLACK CABLE TO ALLOW FOR FUTURE REMOVAL AND REINSTALLATION. LOOP SLACK CABLES AROUND SADDLE RACK AND SECURE WITH CABLE TIES.
- ⑤ SUBMERSIBLE PUMP CABLE BY PUMP MANUFACTURER. VERIFY EACH PUMP MOTOR HAS A MINIMUM OF 10 FEET OF SLACK CABLE. (2 TYP.)
- ⑥ CONDUIT HOLES SHALL BE CORED THROUGH THE STRUCTURE WALLS OR PREFORMED DURING CASTING.



CONDUIT ENTRANCE TO PUMP STATION
NOT TO SCALE

DESIGNED	RDN	9/6/13
DRAWN	MOC	9/27/13
REVIEWED	PJT	2/25/14

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
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		MOC	-
		CHECKED -	REVISED -
		PJT	-
		DATE -	REVISED -
		2/25/14	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ELECTRICAL PLANS

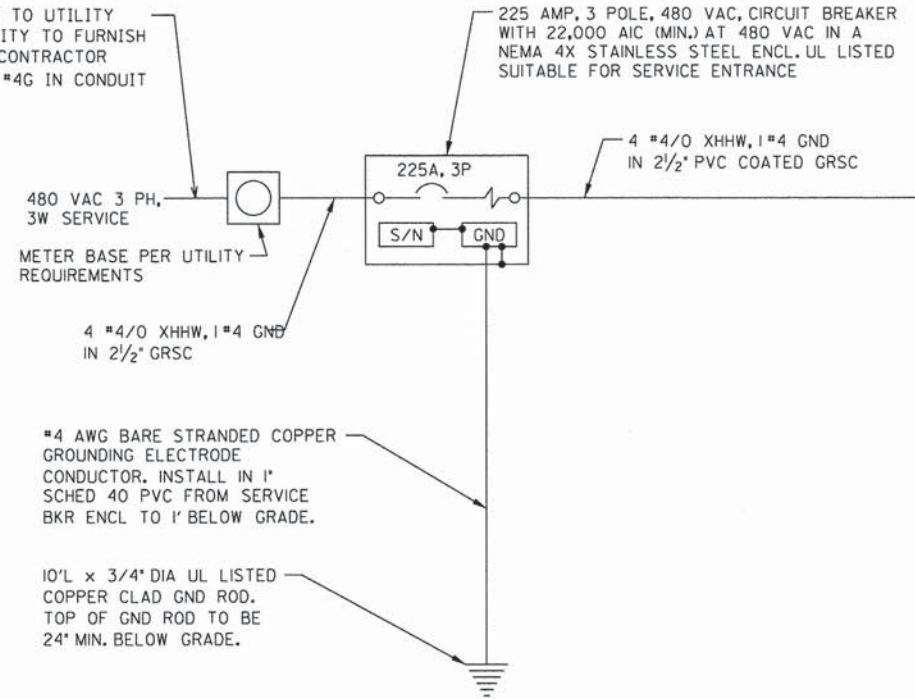
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	93
	09L0179B			CONTRACT NO. 93617
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 7 OF 16 SHEETS STA. TO STA.

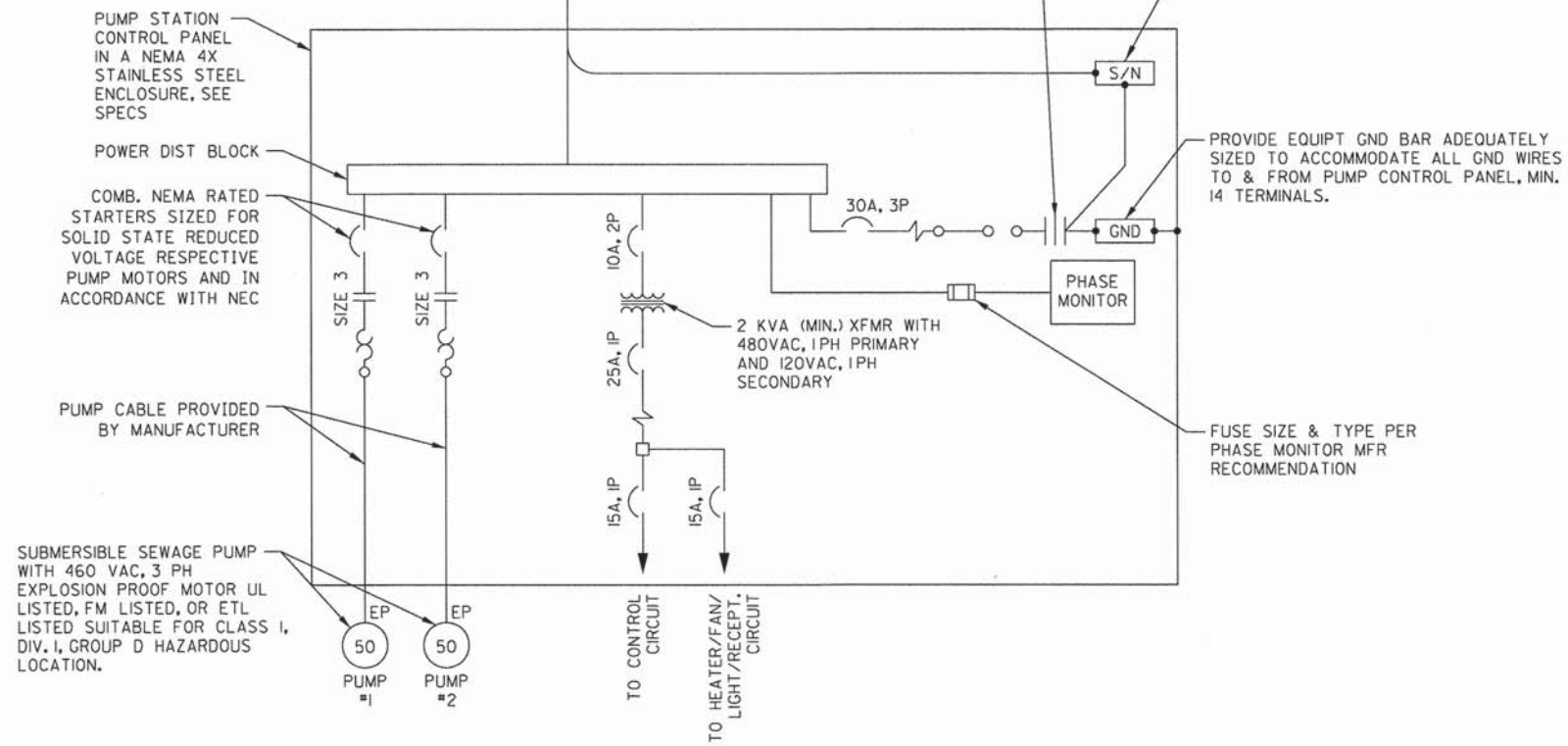


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PROVIDE 2 1/2" GRSC TO UTILITY TRANSFORMER. UTILITY TO FURNISH PRIMARY CABLING. CONTRACTOR TO FURNISH 3 #4, #4G IN CONDUIT FOR SECONDARY.



UL LISTED PER UL 1449, AC SURGE PROTECTOR SUITABLE FOR 480 VAC, 3 PH, 3W PLUS GROUND SYSTEM, WITH SURGE CURRENT RATING OF 80 KA, 8x20 MICROSECOND WAVE, PER MODE, AND STATUS INDICATION LIGHTS, JOSLYN MODEL 1456-80, OR APPROVED EQUAL. MAINTAIN LEADS AS SHORT & AS STRAIGHT AS POSSIBLE.



NOTES:

- ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 (NEC MOST CURRENT ISSUE IN FORCE), THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTING, FM LISTING, ETL LISTING (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE SHALL NOT BE PERMITTED.
- COORDINATE ELECTRIC SERVICE WORK WITH THE SERVING ELECTRIC UTILITY COMPANY, CITY WATER LIGHT & POWER, SPRINGFIELD, ILLINOIS, CHRIS HARNEY 217-757-8520 X2153
- INCLUDE WEATHER PROOF ENGRAVED PHENOLIC LEGEND PLATE FOR SERVICE BREAKER LABELED "SERVICE DISCONNECT 480 VAC, 3 PH, 3W".
- PUMP MOTOR SIZES MAY VARY DEPENDING UPON MANUFACTURER. PUMP MOTOR STARTERS SHALL BE SIZED FOR THE RESPECTIVE PUMP MOTOR FURNISHED AND SHALL BE NEMA SIZE 3 MINIMUM. VERIFY REQUIREMENTS WITH THE RESPECTIVE PUMP MOTOR MFR.
- ALL METAL CONDUITS ENTERING SERVICE ENTRANCE EQUIPMENT SHALL BE GROUNDED USING GROUNDING BUSHINGS/ GROUNDING HUBS WITH GROUND CONDUCTOR FROM BUSHING TO RESPECTIVE ENCLOSURE GROUND BUS.
- METAL CONDUIT IN DIRECT CONTACT WITH EARTH SHALL BE PVC COATED GRSC. METAL CONDUIT ENTERING THE SEWAGE PUMP STATION WET WELL SHALL BE PVC COATED RIGID ALUMINUM.
- PROVIDE NEMA 4 HUBS FOR ALL CONDUITS ENTERING ENCLOSURES THAT ARE RATED NEMA 4 OR NEMA 4X TO MAINTAIN THE NEMA 4, 4X RATING OF THE ENCLOSURE. PROVIDE NEMA 4 HUBS FOR ALL CONDUITS ENTERING THE PANELBOARD ENCLOSURE.

PUMP STATION ELECTRICAL ONE LINE
NO SCALE

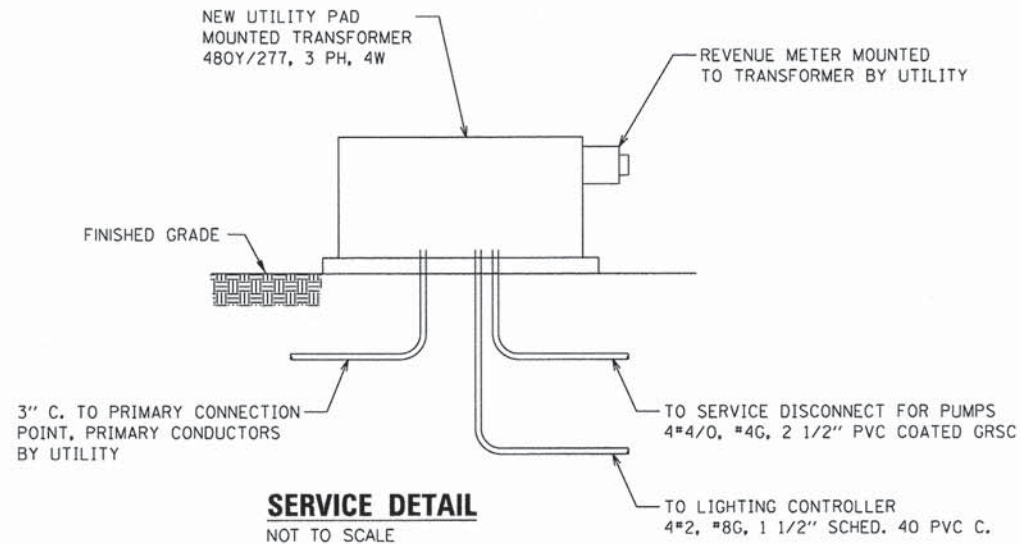
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DESIGNED RDN 9/6/13
DRAWN MOC 9/27/13
REVIEWED PJT 2/25/14

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Sheet	PLOT SCALE = 0.0833' / 1"	CHECKED - PJT	REVISED -
	PLOT DATE = 02/26/2014	DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

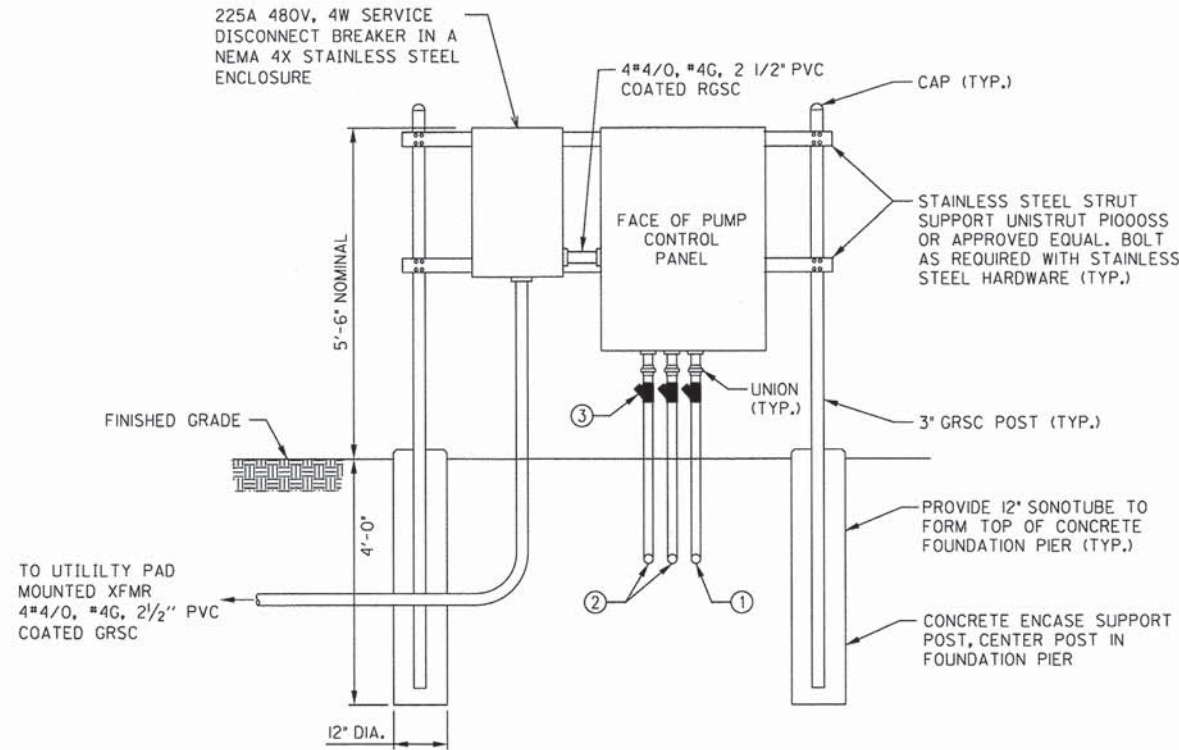
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ELECTRICAL PLANS
SCALE: SHEET 8 OF 16 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	94
09L0179B		CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				



SERVICE NOTES:

1. CONTRACTOR SHALL VERIFY AND COORDINATE SERVICE ENTRANCE WORK WITH THE SERVING ELECTRIC UTILITY COMPANY.
2. ALL METAL CONDUITS TERMINATING IN SERVICE EQUIPMENT (METER BASE & SERVICE BREAKER) SHALL HAVE GROUND BUSHING TYPE HUBS WITH BONDING JUMPERS TO THE RESPECTIVE GND BUS.
3. SEE ELECTRICAL ONE-LINE DIAGRAM FOR CONDUIT & WIRE SIZES & TYPES.
4. ELECTRICAL SERVICE SHALL BE PAID FOR AS PART OF PUMP STATION ELECTRICAL.



PUMP CONTROL PANEL NOTES:

1. PROVIDE NEMA 4 HUBS AT ALL CONDUIT ENTRIES TO PUMP CONTROL PANEL, AND SERVICE DISCONNECT SWITCH.
2. SEE ELECTRICAL ONE LINE DIAGRAM FOR INFORMATION ON SERVICE CONDUCTOR, FEEDER CONDUCTOR, CONDUIT SIZES, AND CONDUIT TYPES
3. ALL ELECTRICAL PANEL WORK, PANEL SUPPORTS, CONDUITS, FOUNDATION PIERS, AND FITTINGS SHALL BE PAID FOR AS PART OF PUMP STATION ELECTRICAL.

SHEET LEGEND:

1. MULTI-CONDUCTOR LEVEL PROBE CABLE (WITH MAXIMUM DIAMETER OF 5/8") IN 2" PVC COATED RIGID ALUMINUM. CONDUIT SHALL BE SIZED FOR 25% MAXIMUM FILL TO CONFORM TO EXPLOSION PROOF CONDUIT SEAL REQUIREMENTS. ADJUST (ENLARGE) AS REQUIRED.
2. SUBMERSIBLE PUMP MOTOR CABLE IN 3" PVC COATED RIGID ALUMINUM. CONDUIT SHALL BE SIZED FOR 25% MAXIMUM FILL TO CONFORM TO EXPLOSION PROOF CONDUIT SEAL REQUIREMENTS. ADJUST (ENLARGE) AS REQUIRED.
3. EXPLOSION PROOF CONDUIT SEAL SUITABLE FOR CLASS I, DIVISION I, GROUP D HAZARDOUS LOCATION, CROUSE HINDS EYS, APPLETON EYS, ESU, EY, KILLARK ENY, EY EYS OR O-Z GEDNEY EYA, EY, OR EZS SERIES, REQUIRED FOR ALL CONDUITS ENTERING OR LEAVING THE WET WELL OR VALVE VAULT INSTALLED IN CONFORMANCE WITH NEC 501 & MANUFACTURER'S DIRECTIONS. NOTE CONDUIT SEALS SHALL BE SIZED AS REQUIRED FOR THE RESPECTIVE CABLE FILL. CABLE FILL SHALL NOT EXCEED 25% FOR CONDUIT SEAL APPLICATION. CONDUIT SEALS SHALL BE THE FIRST FITTING AFTER THE CONDUIT LEAVES THE WET WELL AND EMERGES FROM GRADE & THE FIRST FITTING AFTER CONDUIT ENTERS THE VALVE VAULT.

LEGEND PLATE SCHEDULE		
DEVICE	LEGEND PLATE LABELING	LETER HEIGHT/COLOR
225A SERVICE BREAKER	SERVICE DISCONNECT 480 VAC, 3 PH, 3 W	1/4" BLACK LETTERING ON A WHITE BACKGROUND
PUMP CONTROL PANEL ENCLOSURE	PUMP STATION CONTROL PANEL 480 VAC, 3 PH, 3 W	1/4" WHITE LETTERING ON A RED BACKGROUND

LEGEND PLATE SCHEDULE NOTES:

1. LEGEND PLATES SHALL BE WEATHERPROOF, ABRASION RESISTANT, PHENOLIC ENGRAVED MATERIAL. LETTERING SHALL BE SIZED AS NOTED ABOVE. SECURE LEGGED PLATES TO EQUIPMENT WITH MACHINE SCREWS AND/OR RIVETS. CONTRACTOR SHALL FIELD VERIFY THAT THE RESPECTIVE LETTERING HEIGHT AND LEGENDS WILL FIT ON THE RESPECTIVE EQUIPMENT AND ADJUST LETTERING HEIGHT WHERE APPLICABLE. SEE SPECIFICATIONS FOR THE PUMP CONTROL PANEL FOR ADDITIONAL LEGEND PLATES REQUIRED FOR THAT PANEL.
2. FURNISH & INSTALL A WEATHERPROOF WARNING LABEL FOR EACH METER SOCKET, SERVICE DISCONNECT, TRANSFER SWITCH, PANELBOARD & CONTROL PANEL TO WARN PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS, PER THE REQUIREMENTS OF NEC 110.16 'FLASH PROTECTION'. LABELS SHALL BE HAZARD COMMUNICATION SYSTEMS, LLC (190 OLD MILFORD RD., P.O. BOX 1174, MILFORD, PA 18337 PHONE: 1-887-748-0244) PART NO. H6010-9VWHBJ OR APPROVED EQUAL.

DESIGNED	RON	9/16/13
DRAWN	MOC	9/27/13
REVIEWED	PJT	2/25/14

FILE NAME =	USER NAME = pap0275	DESIGNED - RON	REVISED -
D689L01798-shd-deta:ls-CAR-E2.dgn		DRAWN - MOC	REVISED -
		CHECKED - PJT	REVISED -
Sheet	PLOT DATE = 02/26/2014	DATE - 2/25/14	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ELECTRICAL PLANS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	95
	09L0179B	CONTRACT NO.	93017	
		ILLINOIS FED. AID PROJECT		

SCALE: SHEET 9 OF 16 SHEETS STA. TO STA.

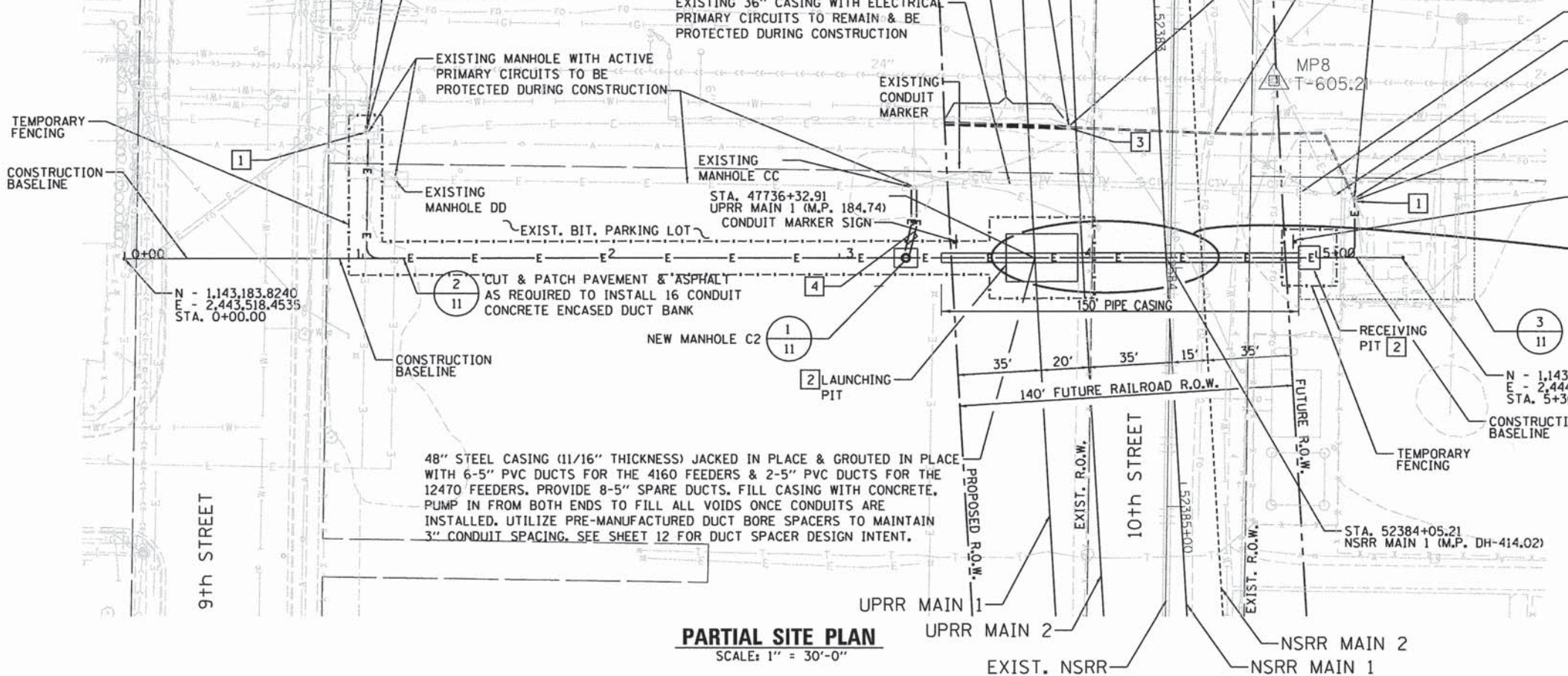
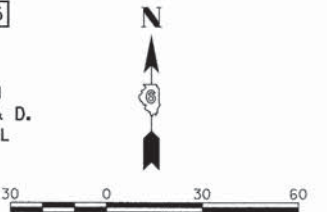


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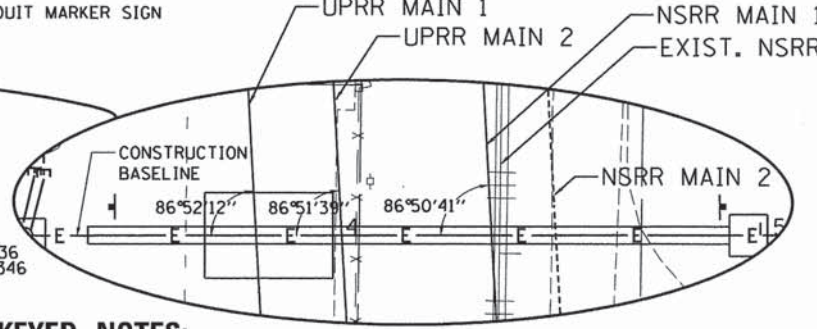
PROVIDE IN LINE 15KV SPLICES FROM NEW FEEDER CABLING TO EXISTING FEEDER CABLING IN MANHOLES A&D. RE-CONNECT EXISTING LOADS TO MATCH EXISTING CONDITIONS. NOTE SPLICES FOR 4160V FEEDERS WILL BE FROM 5KV CABLE TO 15KV CABLE AT BOTH MANHOLES A & D. GROUND 15KV CABLE SHIELDS AT MANHOLES A & D.

EXISTING MANHOLE C TO BE ABANDONED AT COMPLETION OF WORK. CUT OFF TOP OF MANHOLE 24" BELOW GRADE AND BACKFILL MANHOLE.
CONTRACTOR TO CUT EXISTING DUCT BANK 2'-0" PAST PROPOSED R.O.W. PLUG THE ENDS OF THE EXISTING 18 CONDUITS & FILL THEM WITH CLSM

EXISTING MANHOLE A&C WITH 5 TOTAL MEDIUM VOLTAGE FEEDERS TO ST. JOHN'S. FEEDERS 1, 2 & 3 ARE 4160 2 SETS; 3 *500MCM, #3/0 G. FEEDERS 4 & 5 ARE 12470 1 SET; 3 *350MCM, #350 MCM G. 15 KV FEEDERS ARE 133% EPR INSULATED WITH A TAPE SHIELD & PVC JACKET. CUT EXISTING FEEDERS ONE AT A TIME & RE-ROUTE THROUGH NEW CONDUIT SYSTEM BETWEEN MANHOLES A & D. PROVIDE NEW WIRING COMPLETE BETWEEN MANHOLES A & D. COORDINATE FEEDER SHUT DOWNS WITH ST. JOHN'S TO MAINTAIN POWER TO HOSPITAL AT ALL TIMES. ALL NEW WIRING TO BE 15KV RATED MV-105 WITH 133% INSULATION AND A TAPE SHIELD. NOTE ALL GROUND WIRE MAY BE BARE OR INSULATED 600V RATED CABLE.



PARTIAL SITE PLAN
SCALE: 1" = 30'-0"



KEYED NOTES:

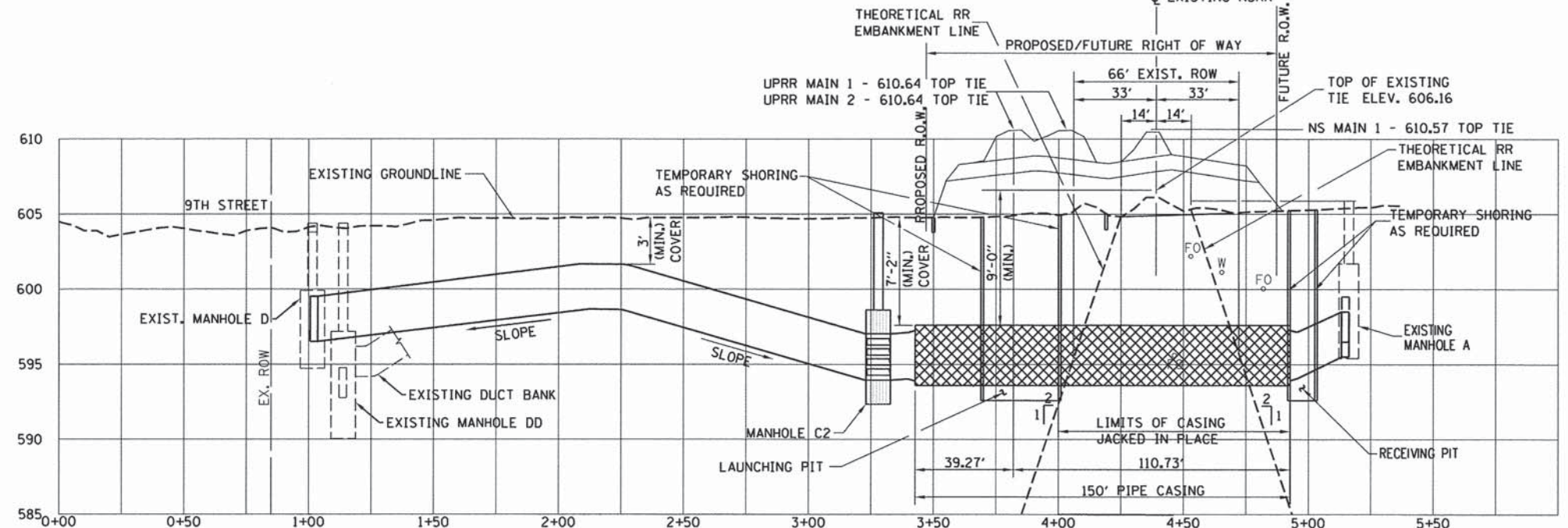
- 1 DRILL EXISTING MANHOLE FOR 16 NEW 5" DUCTS. PROVIDE BELL ENDS & GROUT IN ON BOTH SIDES FOR WATER TIGHT SEAL.
- 2 CUT AND PATCH PAVEMENT, ROCK OR GRASSY AREA. PATCH BACK TO MATCH EXISTING CONDITIONS.
- 3 A SIXTH ELECTRICAL CIRCUIT RUNS THROUGH EXISTING MANHOLE C. IT APPEARS TO BE IN A 12"-16" SQUARE J-BOX WITH A 3" CONDUIT ROUTED BETWEEN EACH END OF THE MANHOLE. CONTRACTOR TO FIELD VERIFY THIS CIRCUIT & REROUTE IT THROUGH THE NEW RACEWAY SYSTEM AND ONE OF THE SPARE DUCTS PROVIDED. THIS IS SPECULATED TO BE "KYZ" PULSE CONTROL WIRES FROM 9 SERIES OF POWER METERS TO THE BAS SYSTEM.
- 4 EXISTING MANHOLE CC CONTAINS A 480V CIRCUIT FOR A SUMP PUMP. EXTEND THIS CIRCUIT TO THE NEW MANHOLE C2 & POWER THE NEW SUMP PUMP CONTROL PANEL & PUMP. PROVIDE 3"10, #10G, 3/4" SCHED. 40 PVC C. PROVIDE A SECOND 3/4" SCHEDULE 40 PVC CONDUIT TO ROUTE THE HIGH LEVEL ALARM WIRING BACK TO ST. JOHN'S HOSPITAL. 2/C #18AWG BELDON #1120A. PROVIDE FINAL CONNECTION AND ANY REQUIRED PROGRAMMING AT THE BUILDING AUTOMATION HEAD END IN ST. JOHN'S HOSPITAL. COORDINATE ROUTING OF CABLING THROUGH EXISTING RACEWAY SYSTEM & LOCATION OF FINAL TERMINATION POINT IN THE FIELD WITH ST. JOHN'S.
- 5 EXISTING FEEDERS ARE ROUTED THROUGH 2-24" STEEL CASINGS. EACH CASING HAS 9-4" PVC CONDUITS INSIDE. UPON COMPLETION OF CIRCUIT RE-ROUTING PUMP THE TWO CASINGS AND ALL 18 CONDUIT HOLES FULL OF CONTROLLED LOW STRENGTH MATERIAL (CLSM). CLSM TO BE AS SPECIFIED BY THE IDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION.

GENERAL NOTES:

PARKING LOT SHALL REMAIN OPEN WITH AS MANY AVAILABLE PARKING SPACES AS POSSIBLE THROUGHOUT THE CONSTRUCTION. STAGE WORK TO ALLOW PARKING LOT ACCESS SOUTH OF DUCT BANK INSTALLATION FROM PARKING LOT ENTRANCE ON 9TH ST. TEMPORARY AGGREGATE MAY BE USED AS PARKING LOT SURFACE OVER INSTALLED DUCT BANK TO PROVIDE ACCESS PRIOR TO PAVEMENT PATCHING.

ALL WORK REQUIRED TO RELOCATE ST. JOHN'S MEDIUM-VOLTAGE DISTRIBUTION INCLUDING BUT NOT LIMITED TO BORING AND JACKING, STEEL CASINGS, MANHOLES, DUCT BANKS, ACCESSORIES, WIRE, CONDUIT, PUMPING EXISTING 2-24" CASINGS & 18 CONDUITS FULL WITH CLSM, SHORING, SUMP PUMP (INCLUDING CONTROLLER), PUMP DISCHARGE PIPES, TEMPORARY FENCING, REMOVAL, EXCAVATION, BACKFILLING, SURFACE RESTORATION, PAVEMENT PATCHING AND CONDUIT MARKER SIGNS WILL NOT BE PAID FOR SEPARATELY BUT INCLUDED IN THE CONTRACT UNIT PRICE OF ST. JOHN'S MEDIUM-VOLTAGE DISTRIBUTION RELOCATION.

CONTRACTOR SHALL INSTALL STEEL CASING DURING STAGE 1A PRIOR TO SHOOFLY GRADING AND UPRR GRADING. CONTRACTOR SHALL FOLLOW ALL REQUIREMENTS OF NORFOLK SOUTHERN'S NSCE-8 SPECIFICATIONS, PIPELINE AND CROSSING TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH LAST APPROVED AMERICAN RAILWAY ENGINEERING AND MAINTENANCE OF WAY ASSOCIATION SPECIFICATIONS FOR PIPELINES CONVEYING FLAMMABLE AND NON-FLAMMABLE SUBSTANCES. BLASTING NOT PERMITTED.



PROFILES FOR UNDERGROUND CASINGS AND ELECTRICAL DUCT RUNS

SCALE: HORIZONTAL: 1" = 30'-0"
VERTICAL: 1" = 5'-0"

FINAL
DESIGNED RDN 9/6/14
DRAWN SKB 9/27/14
REVIEWED PJT 2/25/14

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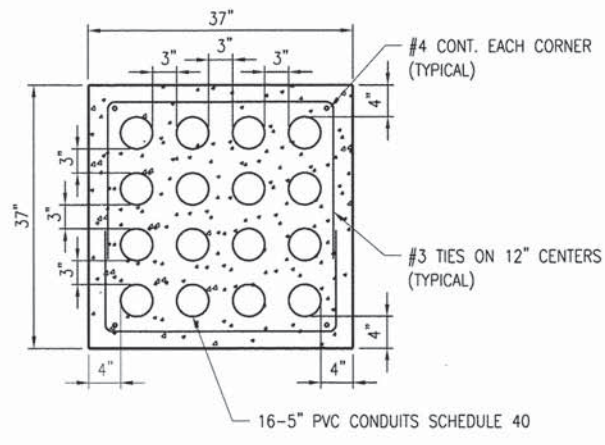
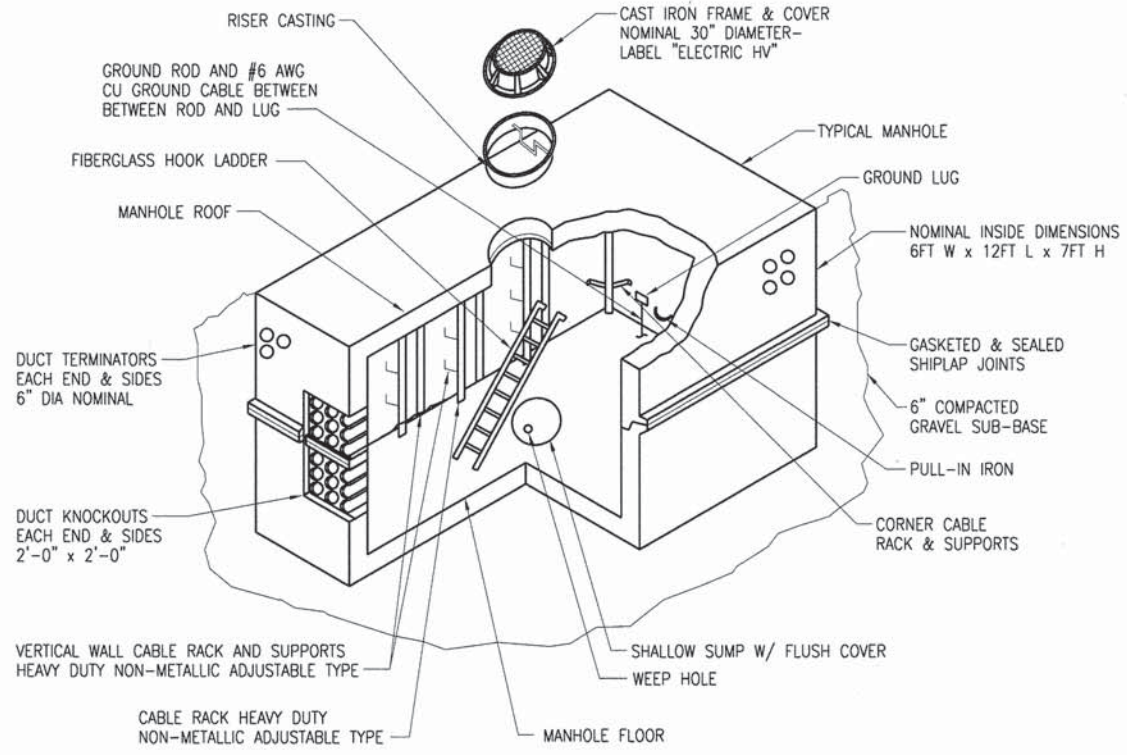
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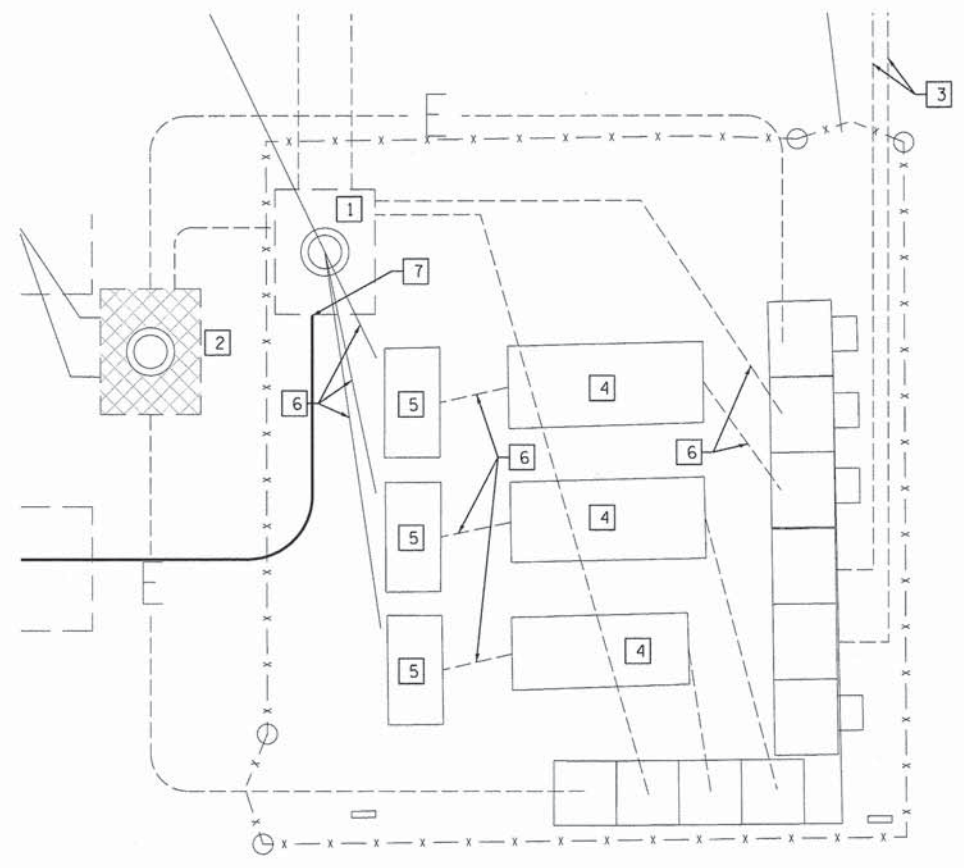
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ELECTRICAL PLANS

SCALE: SHEET 10 OF 16 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	09L0179B			CONTRACT NO. 93617
				ILLINOIS FED. AID PROJECT

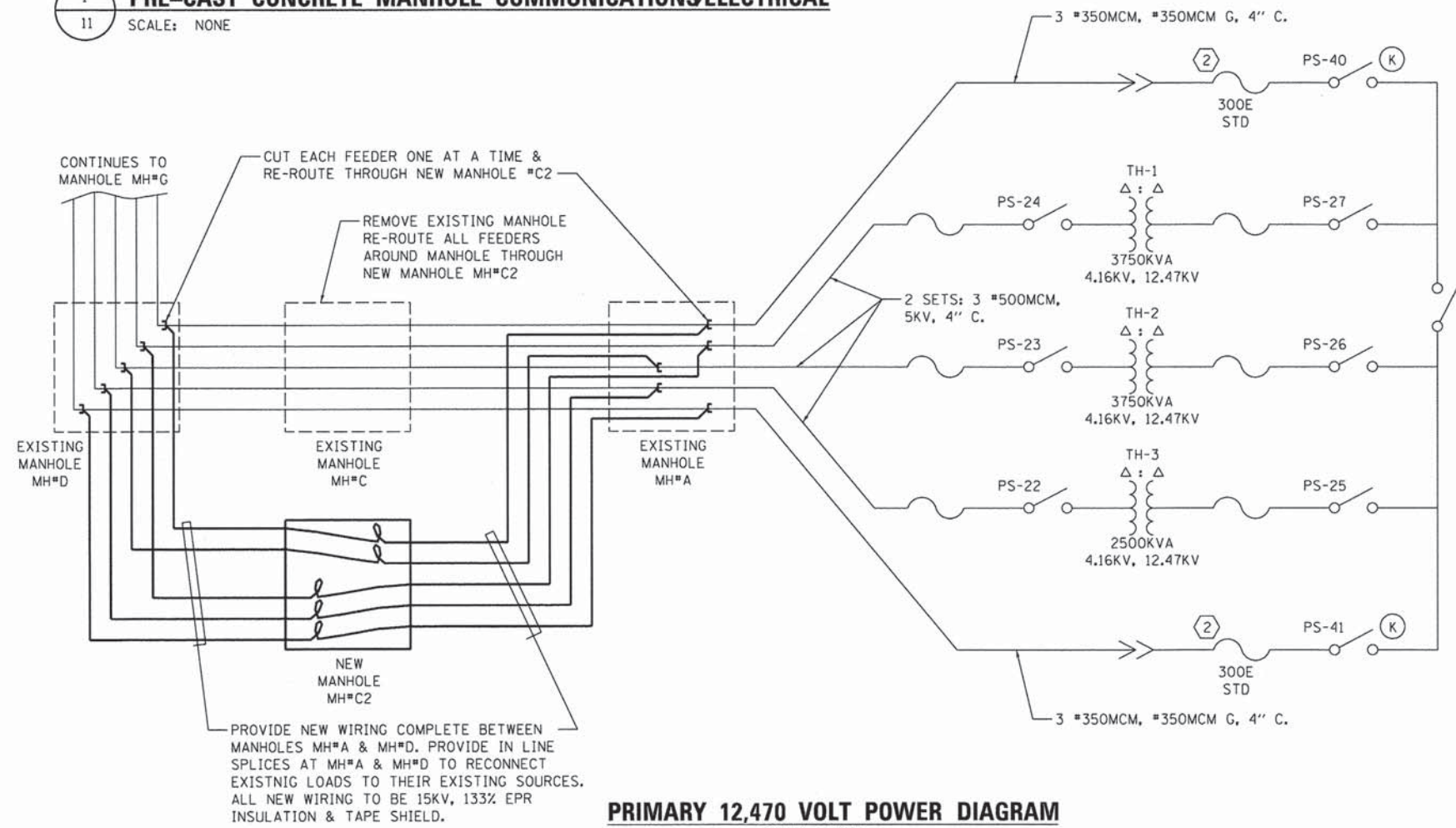


2 16-CELL POWER DUCT BANK DETAIL
SCALE: NONE



3 ENLARGED PLAN FOR ELECTRICAL EQUIPMENT SWITCHYARD
SCALE: NONE

1 PRE-CAST CONCRETE MANHOLE COMMUNICATIONS/ELECTRICAL
SCALE: NONE



PRIMARY 12,470 VOLT POWER DIAGRAM
SCALE: NONE

KEYED NOTES:

- 1 EXISTING ELECTRICAL MANHOLE-A.
- 2 EXISTING ELECTRICAL MANHOLE-AA. SEE SITE PLAN AND DETAILS.
- 3 EXISTING UNDERGROUND SERVICE CONDUITS AND CABLE FROM REYNOLDS AND JACKSON SUBSTATIONS.
- 4 EXISTING TRANSFORMERS.
- 5 EXISTING SKY 5KV SWITCHGEAR.
- 6 EXISTING UNDERGROUND CONDUIT RUNS, PROTECT DURING CONSTRUCTION.
- 7 DRILL EXISTING MANHOLE FOR 16 NEW 5\"/>

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FILE NAME =	D609L0179B-sht-details-CAP-E6.dgn
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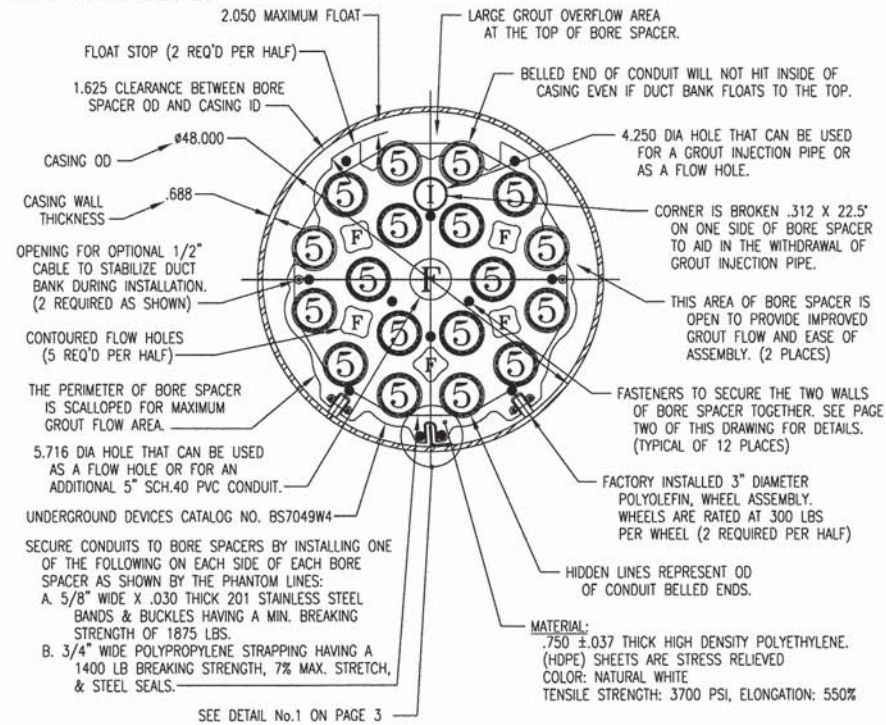
STATE OF ILLINOIS
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SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ELECTRICAL PLANS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	97
09L0179B		CONTRACT NO. 93617		
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 11 OF 16 SHEETS STA. TO STA.

MINIMUM DISTANCE BETWEEN CONDUITS	
CONDUIT SIZE	MIN. DISTANCE
5 & 5	3.000



DOUBLE WALL, FULL COMPLEMENT BORE SPACER
With 18 Ea. 5" EPC40 (Sch.40) PVC Conduits
In A 48.000 OD X .688 Wall Steel Casing

DETAIL No.1

SCALE: 4X

NOTE THAT BORE SPACER HAS A SLOT THAT RIDES OVER THE "L" ANGLE. THIS SLOT & "L" ANGLE HOLD THE BORE SPACERS AND CONDUITS IN THE CORRECT ANGULAR POSITION DURING INSTALLATION AND THE GROUTING OPERATION.

SLOT IS CHAMFERED .094 X 45° ON BOTH SIDES OF EACH BORE SPACER WALL TO ENHANCE SLIDING ACTION.

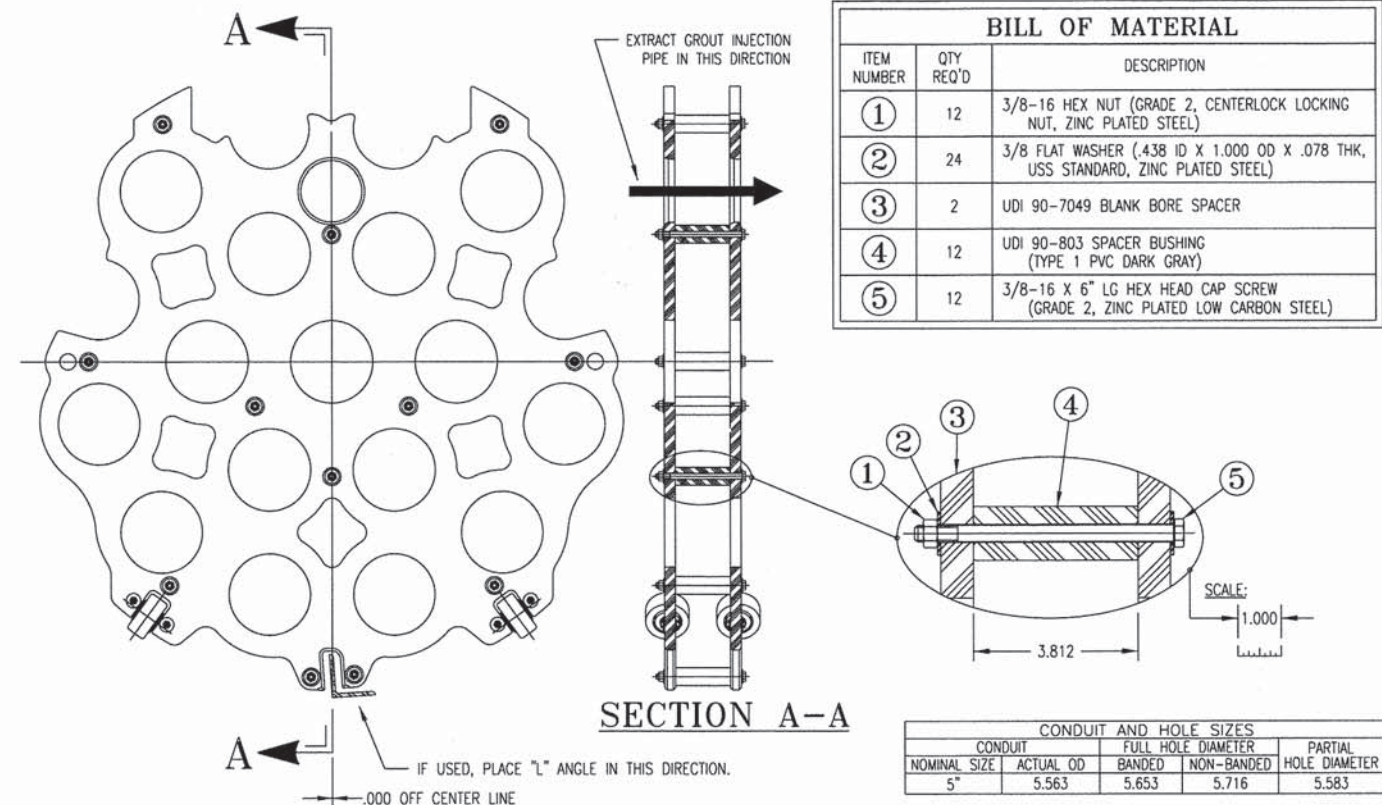
OPTIONAL 3.000 X 3.000 X .250 THICK STEEL "L" ANGLE. LENGTHS OF "L" ANGLE SHOULD BE FIELD WELDED TOGETHER AND GROUND SMOOTH FORMING A CONTINUOUS RAIL IN THE CASING AS SHOWN.

TACK WELD "L" ANGLE TO CASING ID.

DOUBLE WALL, FULL COMPLEMENT BORE SPACER
With 18 Ea. 5" EPC40 (Sch.40) PVC Conduits

- NOTES:**
1. USE ONE BORE SPACER FOR EVERY 5 FEET OF DUCT BANK.
 2. THE CASING ID MUST BE SMOOTH AND FREE FROM RIDGES, PROJECTIONS AND SEAMS THAT MIGHT IMPEDE THE ROLLING OF WHEELS.
 3. A TROUGH OR FEEDER BRIDGE SHOULD BE CONSTRUCTED AT THE LEADING END OF THE CASING TO SUPPORT SECTIONS OF DUCT BANK AS THEY ARE ASSEMBLED AND PULLED INTO THE CASING.
 4. THIS BORE SPACER IS DESIGNED FOR A CASING THAT IS STRAIGHT AND TRUE.
 5. IT IS POSSIBLE THAT THE DUCT BANK WILL ROTATE (CORKSCREW) AS IT IS PULLED THRU THE CASING UNLESS AN "OFF CENTER WEIGHT TECHNIQUE", "STABILIZATION CABLES" OR "L" ANGLE & SLOT ARE USED.
 6. THIS BORE SPACER WILL ACCOMMODATE THE "SINGLE-END", "FLUSH COUPLED EXTRACTABLE INJECTION PIPE" OR "STATIONARY SACRIFICIAL INJECTION PIPE" METHODS OF GROUT FILLING.
 7. IT IS ESSENTIAL THAT THE BORE SPACERS ARE HELD IN PLACE RELATIVE TO THE CONDUIT. REASON: AS THE GROUT IS PUMPED INTO THE CASING, THE COMPARTMENTS FORMED BETWEEN THE BORE SPACERS ARE MORE OR LESS FILLED SEQUENTIALLY, PLACING A TEMPORARY THRUST LOAD ON EACH BORE SPACER.
 8. THE DUCT BANK MUST BE HELD IN POSITION AT BOTH ENDS TO ACCOMMODATE POSSIBLE UNEVEN THRUST LOADS THAT MAY BE GENERATED DURING THE GROUTING OPERATION.
 9. WHEN FILLING THE AREA BETWEEN THE CONDUITS AND CASING WITH GROUT, TAKE CARE NOT TO EXCEED THE HYDRAULIC COLLAPSE PRESSURE OF THE CONDUITS.
 10. DEPENDING ON THE GROUT SPECIFIC GRAVITY AND GROUT FLOW, IT IS POSSIBLE THAT THE DUCT BANK WILL FLOAT TO THE TOP OF THE CASING.
 11. ACTUAL QUANTITY OF GROUT USED SHOULD BE MEASURED AND RECORDED.

BASIS OF DESIGN PRODUCT IS FROM UNDERGROUND DEVICES INC. OTHER MANUFACTURERS WILL BE CONSIDERED PER ENGINEERS APPROVAL. PROVIDE A MINIMUM OF 3 INCHES OF CLEARANCE BETWEEN ALL OF THE 5 INCH PVC DUCTS.



BILL OF MATERIAL		
ITEM NUMBER	QTY REQ'D	DESCRIPTION
①	12	3/8-16 HEX NUT (GRADE 2, CENTERLOCK LOCKING NUT, ZINC PLATED STEEL)
②	24	3/8 FLAT WASHER (.438 ID X 1.000 OD X .078 THK, USS STANDARD, ZINC PLATED STEEL)
③	2	UDI 90-7049 BLANK BORE SPACER
④	12	UDI 90-803 SPACER BUSHING (TYPE 1 PVC DARK GRAY)
⑤	12	3/8-16 X 6" LG HEX HEAD CAP SCREW (GRADE 2, ZINC PLATED LOW CARBON STEEL)

CONDUIT AND HOLE SIZES				
CONDUIT NOMINAL SIZE	CONDUIT ACTUAL OD	FULL HOLE DIAMETER		PARTIAL HOLE DIAMETER
		BANDED	NON-BANDED	
5"	5.563	5.653	5.716	5.583

DOUBLE WALL, FULL COMPLEMENT BORE SPACER
With 18 Ea. 5" EPC40 (Sch.40) PVC Conduits
In A 48.000 OD X .688 Wall Steel Casing



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REVIEWED	PJT	2/25/14

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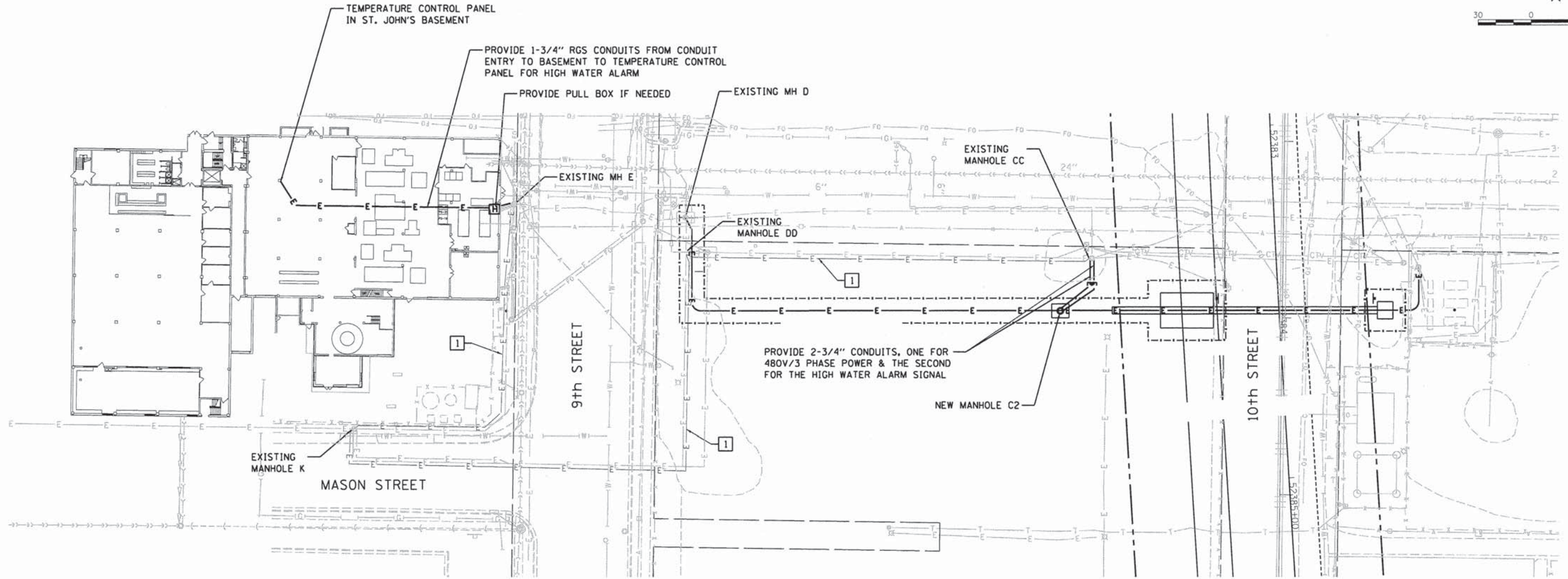
SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ELECTRICAL PLANS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	98
O9L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 12 OF 16 SHEETS STA. TO STA.



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KEYED NOTES:

- 1 ROUTE THE HIGH WATER ALARM CABLING BACK TO THE TEMPERATURE CONTROL PANEL IN THE BASEMENT OF ST. JOHN'S UTILIZING THE EXISTING RACEWAY SYSTEM SHOWN.

DESIGNED	RDN	9/6/13
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FILE NAME *	D609L01798-sht-plan-CAR-E4.dgn
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CHECKED -	PJT
DATE -	2/25/14

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DATE -	2/25/14	REVISÉD -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ELECTRICAL PLANS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
7975	13-00475-00-BR	SANGAMON	196	99
09L0179B		CONTRACT NO. 3617		
ILLINOIS FED. AID PROJECT				

SCALE: SHEET 13 OF 16 SHEETS STA. TO STA.

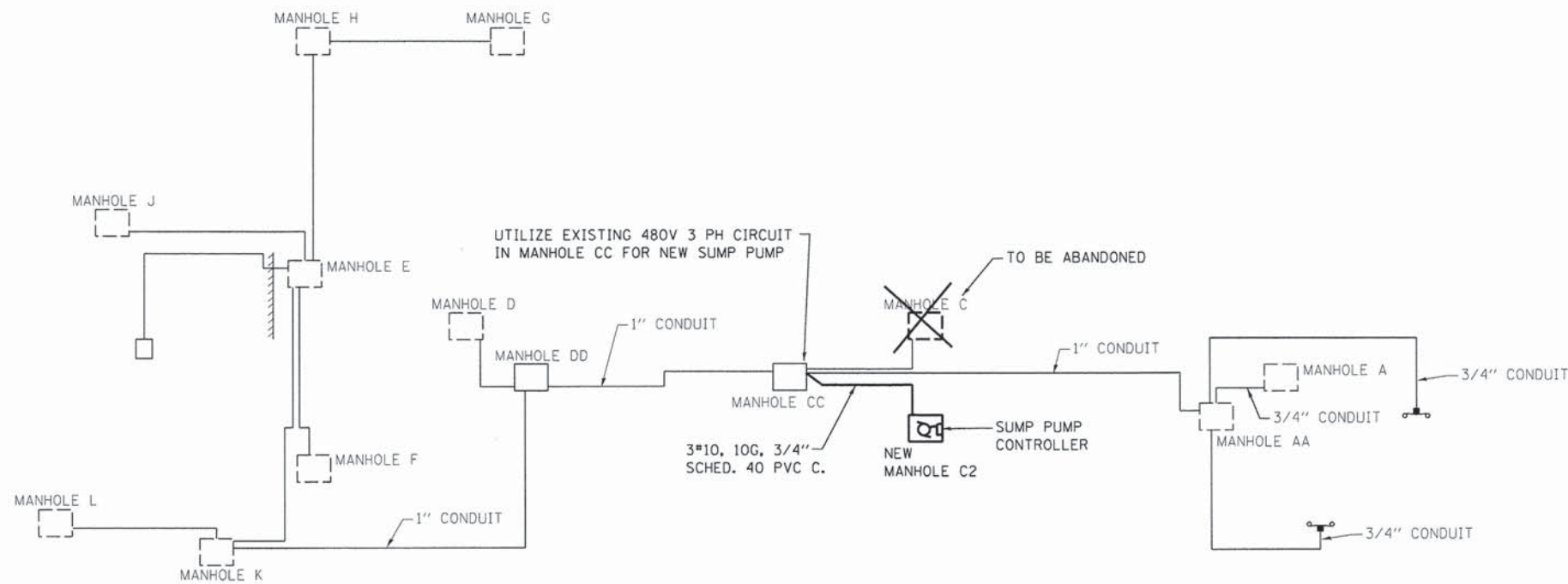
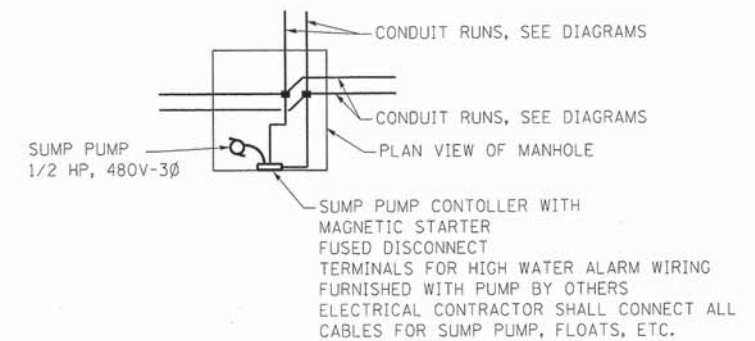


DIAGRAM FOR RELECTRIC MANHOLE SUMP PUMPS AND SWITCHYARD LIGHTING POWER WIRING (480 VOLT)



TYPICAL MANHOLE ARRANGEMENT FOR SUMP PUMP, CONTROLLER, ETC.

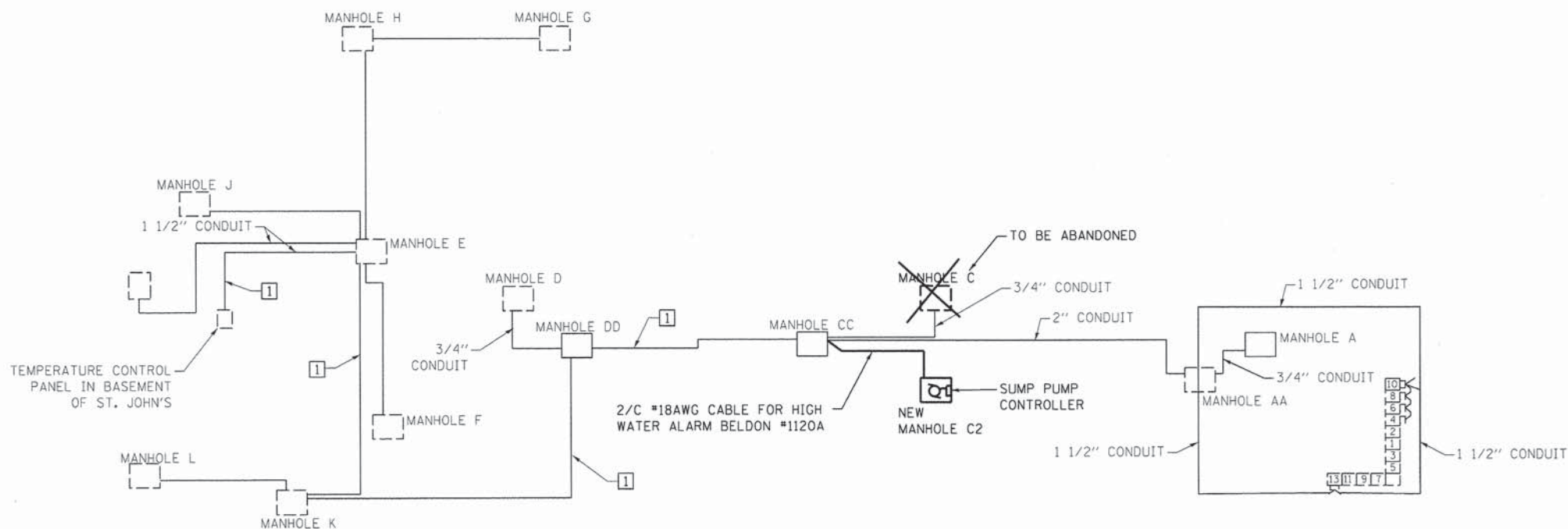


DIAGRAM FOR SUMP PUMP HIGH WATER ALARM WIRING AND POWER SYSTEM POWER LOGIC METERING WIRING

KEYED NOTES:

- 1 UTILIZE EXISTING RACEWAY SYSTEM TO ROUTE HIGH LEVEL ALARMS BACK TO ST. JOHN'S.

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SPRINGFIELD RAIL IMPROVEMENTS PROJECT
SPRINGFIELD, SANGAMON COUNTY, ILLINOIS
ELECTRICAL PLANS

SCALE: SHEET 14 OF 16 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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09L0179B			CONTRACT NO. 93617	
ILLINOIS FED. AID PROJECT				