

03-08-2024 LETTING ITEM 156

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UNL ST.	16-00001-00-BR	PIKE	26	1
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93815	
FED. ROAD DIST. NO. 7 ILLINOIS			FED AID PROJECT NO. FQ5W(222)	

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES, TYPICAL SECTIONS, DETAILS
3	SUMMARY OF QUANTITIES, SCHEDULES OF QUANTITIES
4	TRAFFIC CONTROL PLAN
5	EROSION CONTROL PLAN
6	PLAN AND PROFILE
7-18	STRUCTURE PLANS
19-26	CROSS SECTIONS

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED

ILLINOIS SPECIAL BRIDGE PROGRAM

VILLAGE OF NEBO/PIKE COUNTY

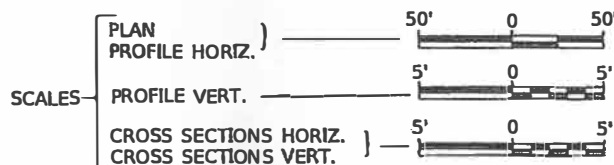
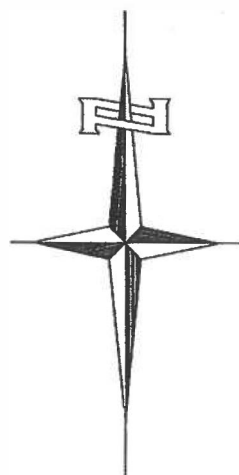
SECTION 16-00001-00-BR

UNION STREET (MS 6010)

OVER SPRING CREEK

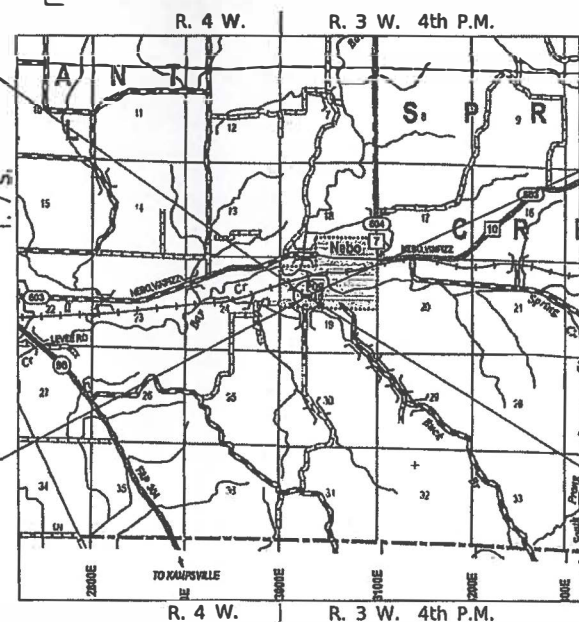
PROJECT NO. FQ5W(222)

JOB NUMBER C-96-078-21



PROPOSED STRUCTURE SN 075-3331
THREE SPAN 17' & 21' PPC DECK BEAM
SUPERSTRUCTURE ON CONCRETE SPILL-THRU
ABUTMENTS, 114'-0" BK TO BK,
AND 28'-0" O TO O DECK, SKEWED 25° LT. AHEAD.

SECTION 16-00001-00-BR
BEGINS
STATION 14+00.00



SECTION 16-00001-00-BR
ENDS
STATION 23+50.00

EXISTING STRUCTURE SN 075-3191
SINGLE SPAN WARREN PONY TRUSS SUPERSTRUCTURE
ON CLOSED CONCRETE ABUTMENTS,
83'-0" BK TO BK, AND 21'-6" O TO O DECK.
NO SKEW (TO BE REMOVED)

LOCATION MAP



APPROXIMATE SCALE

NET LENGTH OF PROJECT = 950.00 FEET = 0.180 MILES

DESIGN CLASSIFICATION: LOCAL ROAD (NON-URBAN)
DESIGN ADT = 103 (2024)
DESIGN SPEED = 30
3R GUIDELINES

- HIGHWAY STANDARDS (INCLUDED IN PROPOSAL)**
- 000001-08 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
 - 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
 - 515001-04 NAME PLATE FOR BRIDGES
 - 630301-09 SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL
 - 631032-10 TRAFFIC BARRIER TERMINAL, TYPE 6A
 - 701901-09 TRAFFIC CONTROL DEVICES
 - 720001-01 SIGN PANEL MOUNTING DETAILS
 - 720006-04 SIGN PANEL ERECTING DETAILS
 - 725001-01 OBJECT AND TERMINAL MARKERS
 - 728001-01 TELESCOPING STEEL SIGN SUPPORT
 - BLR 21-9 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

UTILITY COMPANIES

AMEREN ILLINOIS
PEORIA, ILLINOIS

FRONTIER COMMUNICATIONS
JACKSONVILLE, IL

PIKE COUNTY WATER
PITTSFIELD, ILLINOIS

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

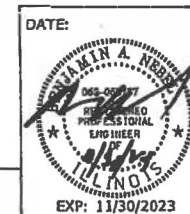
CONTRACT NO. 93815

APPROVED 12-1-23 2023
John S. Wilcox
VILLAGE OF NEBO
PRESIDENT

APPROVED 11-29-23 2023
Ch. R. [Signature]
PIKE COUNTY ENGINEER

PASSED 12-12-23 2023
[Signature]
DISTRICT SIX ENGINEER OF
LOCAL ROADS & STREETS

Released For
Bid Based on
Limited Review 12-12-2023
[Signature]
REGION FOUR ENGINEER
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SIGNATURE
ENGINEERS SEAL

Hutchison Engineering, Inc.
JACKSONVILLE SHOREWOOD
PEORIA-QUAD CITIES-CARBONDALE

2023 JOB#4851

GENERAL NOTES

THE REMOVAL OF EXISTING SEALCOAT SURFACE AND AGGREGATE BASE COURSE WHICH MAY BE NECESSARY FOR THE CONSTRUCTION OF THE PROJECT SHALL BE REMOVED AS EARTH EXCAVATION AND NO COMPENSATION WILL BE ALLOWED FOR ADDITIONAL LABOR OR EQUIPMENT REQUIRED.

ALL WASTE OR UNDESIRABLE MATERIAL AS IDENTIFIED BY THE ENGINEER SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY AT THE CONTRACTOR'S EXPENSE.

ALL EXISTING PRIVATELY OWNED UTILITIES REQUIRING ADJUSTMENT WILL BE MADE BY THE UTILITY COMPANY INVOLVED. WHERE NO PROVISIONS HAVE BEEN MADE FOR ADJUSTMENTS ON THE PLANS, NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO DELAYS OR INCONVENIENCES CAUSED BY THE SAID UTILITY ADJUSTMENTS.

THE PROFILE GRADE ELEVATIONS SHOWN ON THE PLAN AND PROFILE SHEETS AND IN THE STATION CROSS SECTIONS ARE TO THE TOP OF THE FINISHED SURFACE.

ALL EXISTING DRAINAGE STRUCTURES NOT BEING REMOVED BY THE CONTRACTOR THAT ARE DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

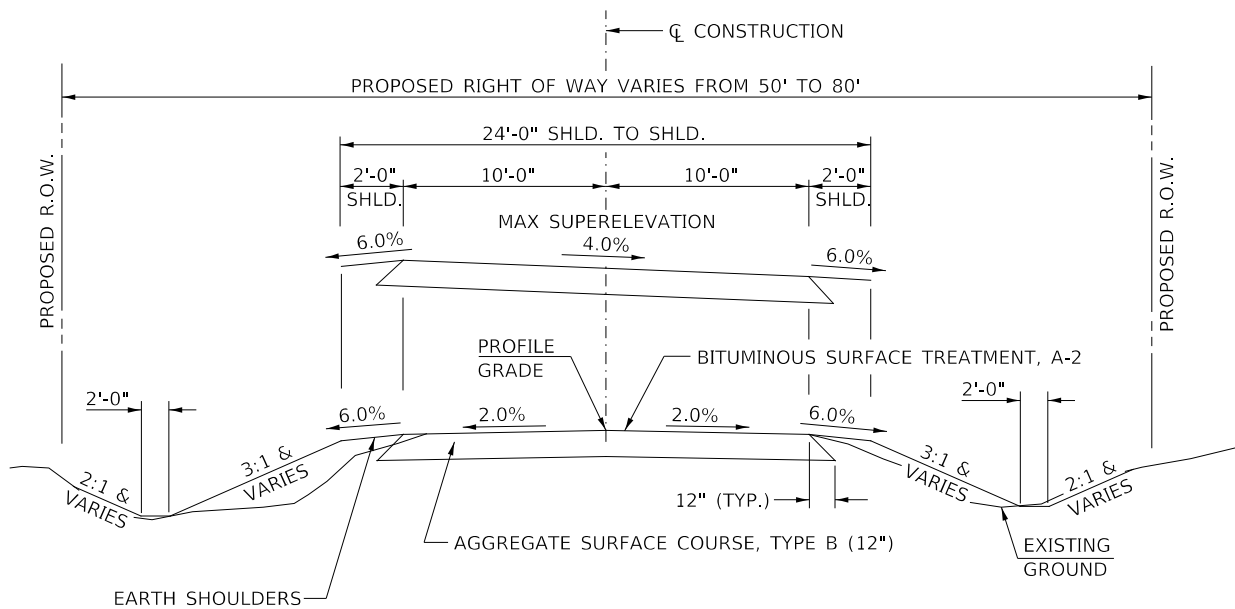
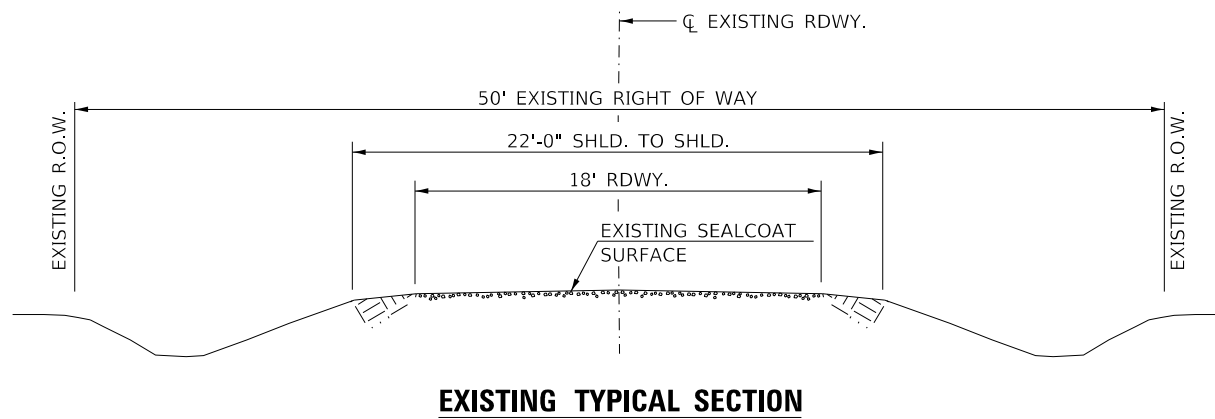
ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS SHALL BE INTERPRETED TO BE THE LATEST STANDARDS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

THE LOCATION OF UNDERGROUND UTILITIES SHOWN ON THE PLANS REPRESENTS THE BEST KNOWLEDGE OF THE COUNTY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY LOCATIONS OF UNDERGROUND INSTALLATIONS BEFORE STARTING CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL INDEMNIFY THE COUNTY & THE MUNICIPALITY, ITS OFFICERS AND EMPLOYEES AGAINST ALL CLAIMS DUE TO DAMAGE TO CORPORATE OR PRIVATE PROPERTY RESULTING FROM HIS CONSTRUCTION OPERATIONS AS DESCRIBED IN ARTICLES 107.20 AND 107.26 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR MAY BE REQUIRED TO CONDUCT SOME OF HIS GRADING AND TRENCHING OPERATIONS AROUND TRANSMISSION POLES AND UNDER TRANSMISSION LINES. THE ADDED COST OF SO DOING SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND PRESERVE PROPERTY MARKERS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT, HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

ALL ELEVATIONS SHOWN REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.



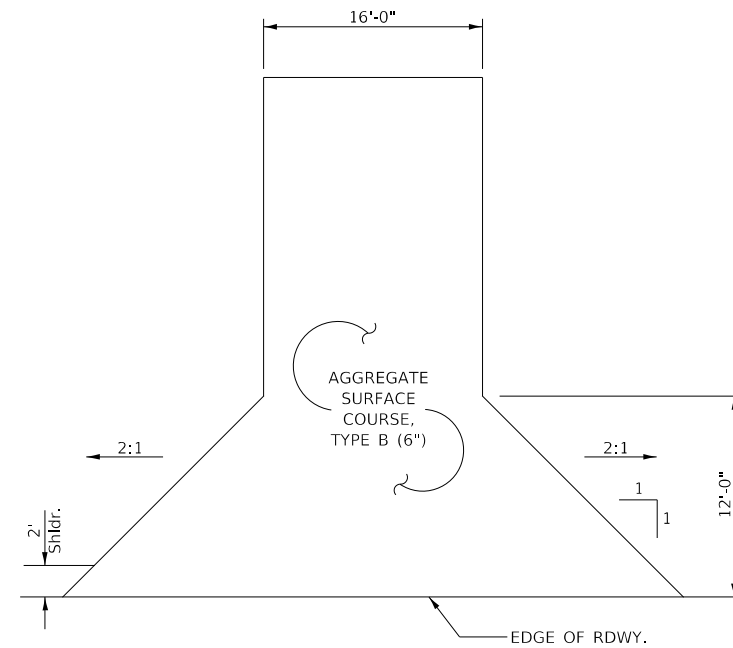
PROPOSED TYPICAL SECTION

STA. 14+00.00 TO STA. 19+40.00
STA. 20+54.00 TO STA. 23+50.00

EXCEPT TRANSITIONS AND SUPERELEVATION

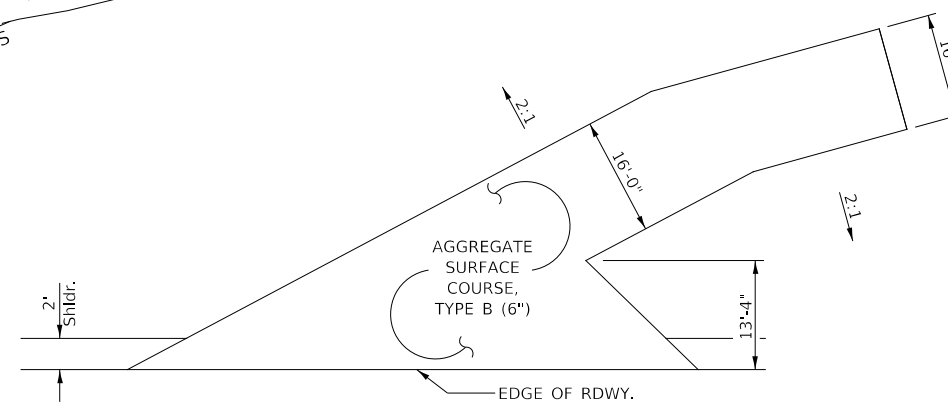
S.E. ATTAINED = STA. 16+52.38 TO STA. 17+44.38
S.E. REMOVED = STA. 18+42.34 TO STA. 19+34.34

BRIDGE OMISSION
STA. 19+40.00 TO STA. 20+54.00



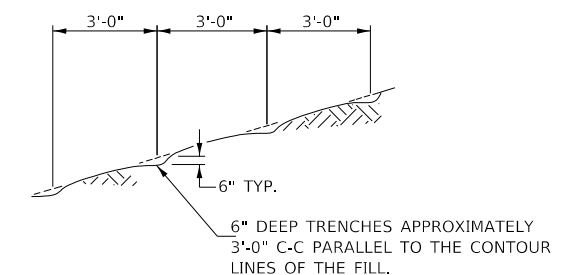
PROPOSED PRIVATE ENTRANCE

STA 15+69 RT (16' WIDE)



PROPOSED PRIVATE ENTRANCE

STA 17+87.50 LT (16' WIDE)



NOTE: ALL SLOPES 3:1 OR STEEPER AND GREATER THAN 5' IN HEIGHT SHALL BE CONTOUR PLOWED AS SHOWN IN DETAIL. COST SHALL BE INCLUDED WITH SEEDING, CLASS 2 (SPECIAL).

DETAIL OF CONTOUR PLOWING

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USER NAME = JSavage	DESIGNED - CRN	REVISED - _____
	DRAWN - CRN	REVISED - _____
PLOT SCALE = 2,000' / in.	CHECKED - JPS/BAN	REVISED - _____
PLOT DATE = 12/1/2023	DATE - 10/13/2023	REVISED - _____

**PIKE COUNTY
UNION STREET (MS 6010)
OVER SPRING CREEK**

GENERAL NOTES, TYPICAL SECTIONS, DETAILS

SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. 14+00.00 TO STA. 23+50.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	2
CONTRACT NO. 93815				
FED. ROAD DIST. NO. 7		ILLINOIS		FED. AID PROJECT NO. FQ5W(222)

SUMMARY OF QUANTITIES				
CODE NO.	ITEM	UNIT	QUANTITY	
20200100	EARTH EXCAVATION	CU YD	760	
20300100	CHANNEL EXCAVATION	CU YD	460	
20400800	FURNISHED EXCAVATION	CU YD	1,930	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	800	
28000305	TEMPORARY DITCH CHECKS	FOOT	360	
28000400	PERIMETER EROSION BARRIER	FOOT	925	
28000500	INLET AND PIPE PROTECTION	EACH	1	
28100209	STONE RIPRAP, CLASS A5	TON	570	
28300400	AGGREGATE DITCH	TON	115	
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	1,319	
SP	50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
	50105220	PIPE CULVERT REMOVAL	FOOT	20
	50200100	STRUCTURE EXCAVATION	CU YD	75
	50200300	COFFERDAM EXCAVATION	CU YD	100
	50201101	COFFERDAM (TYPE 1) (LOCATION-1)	EACH	1
	50201102	COFFERDAM (TYPE 1) (LOCATION-2)	EACH	1
	50300225	CONCRETE STRUCTURES	CU YD	91.4
	50300280	CONCRETE ENCASEMENT	CU YD	2.6
	50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	1,731
	50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	1,400
	50800105	REINFORCEMENT BARS	POUND	8,600
*	50900205	STEEL RAILING, TYPE S1	FOOT	228
	51200957	FURNISHING METAL SHELL PILES 12" x 0.250"	FOOT	898
	51202305	DRIVING PILES	FOOT	898
	51203200	TEST PILE METAL SHELLS	EACH	4
	51204650	PILE SHOES	EACH	22
	51500100	NAME PLATES	EACH	1
SP	542D0223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	30
SP	59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	14
*	63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	2
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2
	67100100	MOBILIZATION	L SUM	1
*	72000100	SIGN PANEL - TYPE 1	SQ FT	33
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
*	72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	103
SP	X1500005	BITUMINOUS SURFACE TREATMENT, A2	SQ YD	2,205
#	BDE	Z0076600	TRAINEES	500
SP, BDE	X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	1.3
#	SP	Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	500
SP	X7010216	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1

SP: SEE SPECIAL PROVISIONS
 BDE: SEE BDE SPECIAL PROVISIONS
 # 0042 * SPECIALTY ITEMS

TEMPORARY DITCH CHECKS

STATION	SIDE	FOOT
14+09	RIGHT	12
14+15	LEFT	12
14+22	RIGHT	12
14+30	LEFT	12
14+35	RIGHT	12
14+45	LEFT	12
14+48	RIGHT	12
14+60	LEFT	12
14+61	RIGHT	12
14+74	RIGHT	12
14+75	LEFT	12
14+87	RIGHT	12
14+90	LEFT	12
15+00	RIGHT	12
15+05	LEFT	12
15+20	LEFT	12
15+35	LEFT	12
15+50	LEFT	12
15+65	LEFT	12
15+80	LEFT	12
16+95	LEFT	12
16+60	LEFT	12
17+20	LEFT	12
17+75	LEFT	12
20+75	LEFT	12
21+50	LEFT	12
22+25	LEFT	12
22+90	RIGHT	12
23+50	LEFT	12
23+50	RIGHT	12
TOTAL		360

TRAFFIC BARRIER TERMINAL, TYPE 6A			
STATION TO STATION	SIDE	EACH	
18+86.00	19+33.50	RIGHT	1
20+60.53	20+99.81	LEFT	1
TOTAL			2

TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT			
STATION TO STATION	SIDE	EACH	
18+44.82	18+86.00	RIGHT	1
20+99.81	21+52.76	LEFT	1
TOTAL			2

SIGN PANEL - TYPE 1 (W1-2R)			
STATION	OFFSET	SIDE	SQ FT
19+33	17'	RIGHT	9
TOTAL			9

SIGN PANEL - TYPE 1 (W1-8R)			
STATION	OFFSET	SIDE	SQ FT
20+69	17'	RIGHT	3
21+49	17'	RIGHT	3
TOTAL			6

EARTHWORK SUMMARY						
STATION TO STATION	EARTH EXCAVATION	CHANNEL EXCAVATION	STRUCTURE EXCAVATION	COFFERDAM EXCAVATION	FILL	WASTE (SHORTAGE)
RDWY 14+00.00 - 19+40.00	622				2,220	(1,754)
RDWY 20+54.00 - 23+50.00	136				278	(176)
CHANNEL		460				
STRUCTURE			75			
COFFERDAM				100		
TOTAL	758	460	75	100	2,498	(1,930)
USE	760	460	75	100	-	(1,930)

(@ 25% SHRINKAGE)

AGGREGATE SURFACE COURSE, TYPE B 140#/CF					
STATION TO STATION	THICKNESS	WIDTH	LENGTH	TON	
14+00.00	14+50.00	1.00'	19.86' AVG.	50.00'	70
14+50.00	19+40.00	1.00'	21.00'	490.00'	720
ENTR. RT 15+69.00		0.50'	16.50'	40.55'	28
ENTR. RT 17+87.50		0.50'	16.50'	110.00'	67
20+54.00	23+00.00	1.00'	21.00'	246.00'	362
23+00.00	23+50.00	1.00'	20.69' AVG	50.00'	72
TOTAL					1,319

BITUMINOUS SURFACE TREATMENT, A-2 0.25#/SF				
STATION TO STATION	WIDTH	LENGTH	SQ YD	
14+00.00	14+50.00	18.86' AVG.	50.00'	105
14+00.00	14+50.00	20.00'	490.00'	1,089
BRIDGE DECK		28.00'	114.00'	355
14+00.00	14+50.00	20.00'	246.00'	547
14+00.00	14+50.00	19.69' AVG.	50.00'	109
TOTAL				2,205

AGGREGATE DITCH**				
STATION TO STATION	SIDE	WIDTH	TON	
14+00	16+10	LEFT	6'	75
14+00	15+10	RIGHT	6'	40
TOTAL				115

**AGGREGATE DITCH SHALL CONFORM TO MATERIAL TYPE B-3 OF THE STANDARD SPECIFICATIONS

SIGN PANEL - TYPE 1 (W1-2L)			
STATION	OFFSET	SIDE	SQ FT
20+77	17'	LEFT	9
TOTAL			9

SIGN PANEL - TYPE 1 (W1-8L)			
STATION	OFFSET	SIDE	SQ FT
20+72	17'	LEFT	3
21+52	17'	LEFT	3
22+32	17'	LEFT	3
TOTAL			9

INLET AND PIPE PROTECTION		
STATION	SIDE	EACH
15+54	RIGHT	1
TOTAL		1

PIPE CULVERT REMOVAL			
STATION	SIZE	SIDE	FOOT
15+69	22"	RIGHT	20
TOTAL			20

PIPE CULVERTS, CLASS D, TYPE 1 18"		
STATION	SIDE	FOOT
15+69	RIGHT	30
TOTAL		30

PERIMETER EROSION BARRIER			
STATION TO STATION	SIDE	FOOT	
15+00	19+31	RIGHT	440
17+75	19+49	LEFT	315
20+45	22+10	RIGHT	170
TOTAL		925	

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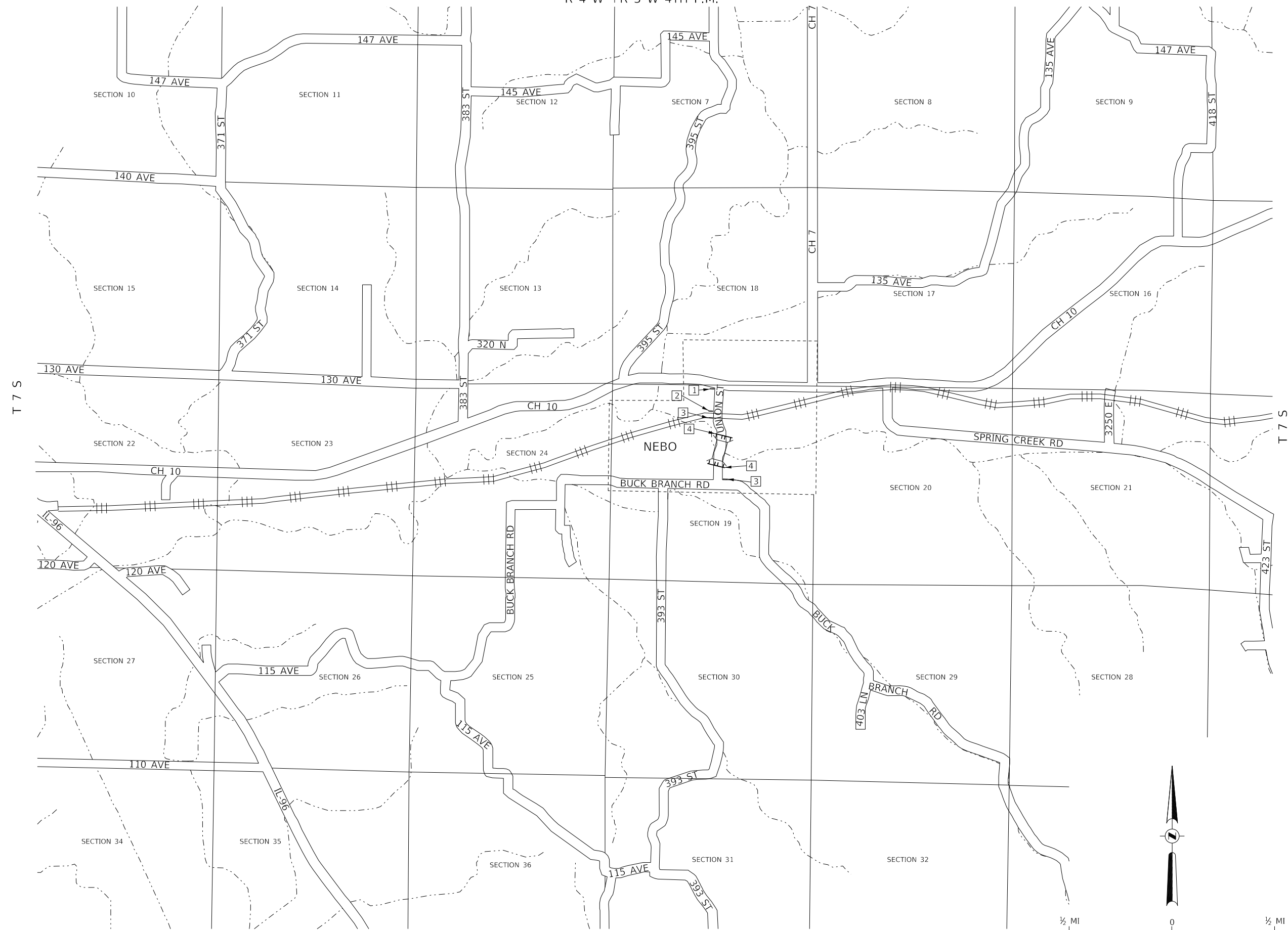
**PIKE COUNTY
 UNION STREET (MS 6010)
 OVER SPRING CREEK**

**SUMMARY OF QUANTITIES,
 SCHEDULES OF QUANTITIES**

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	DRAWN - CRN	REVISED - _____
PLOT SCALE = 100,0000' / in.	CHECKED - JPS/BAN	REVISED - _____
PLOT DATE = 12/1/2023	DATE - 11/27/2023	REVISED - _____

SCALE: NONE	SHEET 1 OF 1 SHEETS	STA. 14+00.00 TO STA. 23+50.00	RTE. SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			UN. ST. 16-00001-00-BR	PIKE	26	3
			CONTRACT NO. 93815			
			FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT NO. F05W(222)			

R 4 W | R 3 W 4TH P.M.



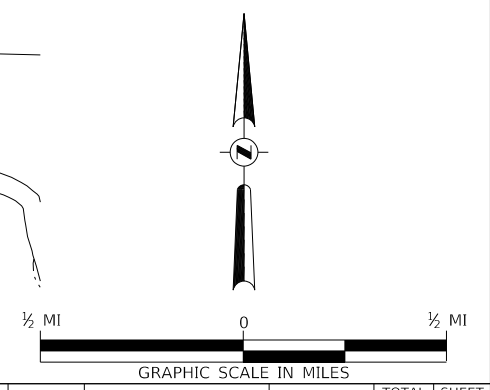
1 ROAD CLOSED 1/4 MILE AHEAD LOCAL TRAFFIC ONLY R11-3
ROAD CLOSED 1/4 MILE AHEAD LOCAL TRAFFIC ONLY

2 ROAD CLOSED AHEAD W20-3
ROAD CLOSED AHEAD

3 ROAD CLOSED 500 FT W20-3
ROAD CLOSED 500 FT

4 TYPE III BARRICADES

SEE STANDARD BLR 21 AND SPECIAL PROVISIONS



R 4 W | R 3 W 4TH P.M.

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DRAWN - CRN	REVISIONS -	
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PLOT DATE = 12/1/2023	DATE - 10/13/2023	REVISED -

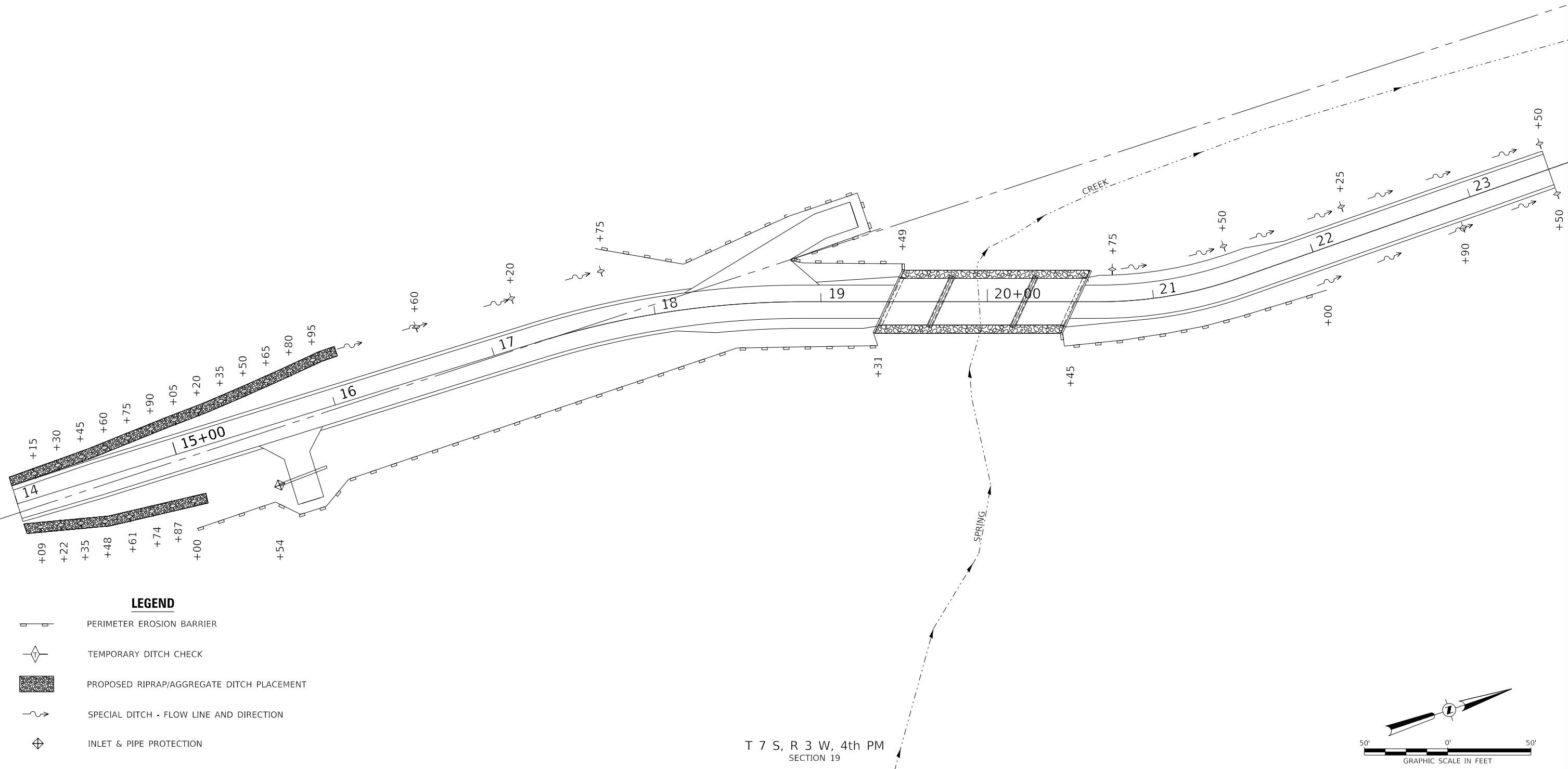
**PIKE COUNTY
UNION STREET (MS 6010)
OVER SPRING CREEK**

TRAFFIC CONTROL PLAN






SCALE: NONE SHEET 1 OF 1 SHEETS STA. 14+00.00 TO STA. 23+50.00

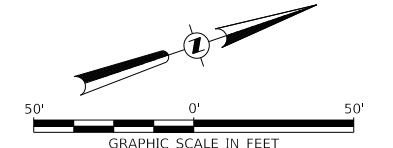
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	4
CONTRACT NO. 93815				
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT NO. FQ5W(222)	

NOTE: TEMPORARY EROSION CONTROL SEEDING SHALL BE DONE IN ACCORDANCE WITH ARTICLE 280.04 OF THE STANDARD SPECIFICATIONS.



LEGEND

-  PERIMETER EROSION BARRIER
-  TEMPORARY DITCH CHECK
-  PROPOSED RIPRAP/AGGREGATE DITCH PLACEMENT
-  SPECIAL DITCH - FLOW LINE AND DIRECTION
-  INLET & PIPE PROTECTION



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	DRAWN - CRN	REVISED - _____
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PLOT DATE = 12/1/2023	DATE - 11/22/2023	REVISED - _____

**PIKE COUNTY
UNION STREET (MS 6010)
OVER SPRING CREEK**

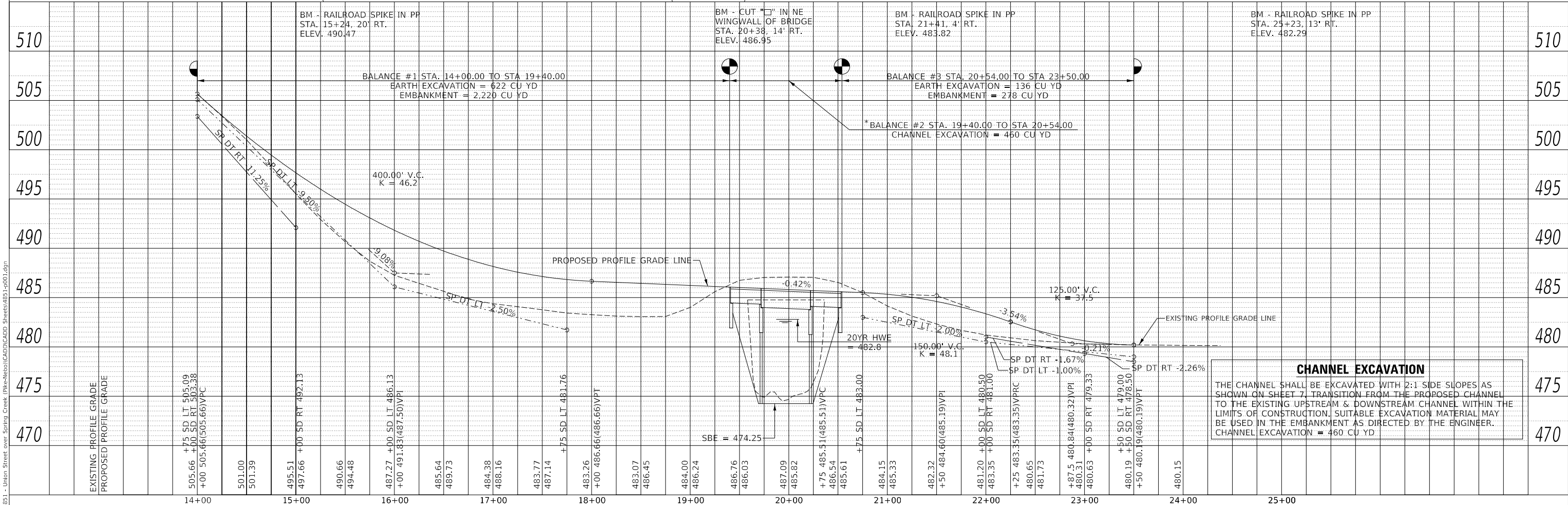
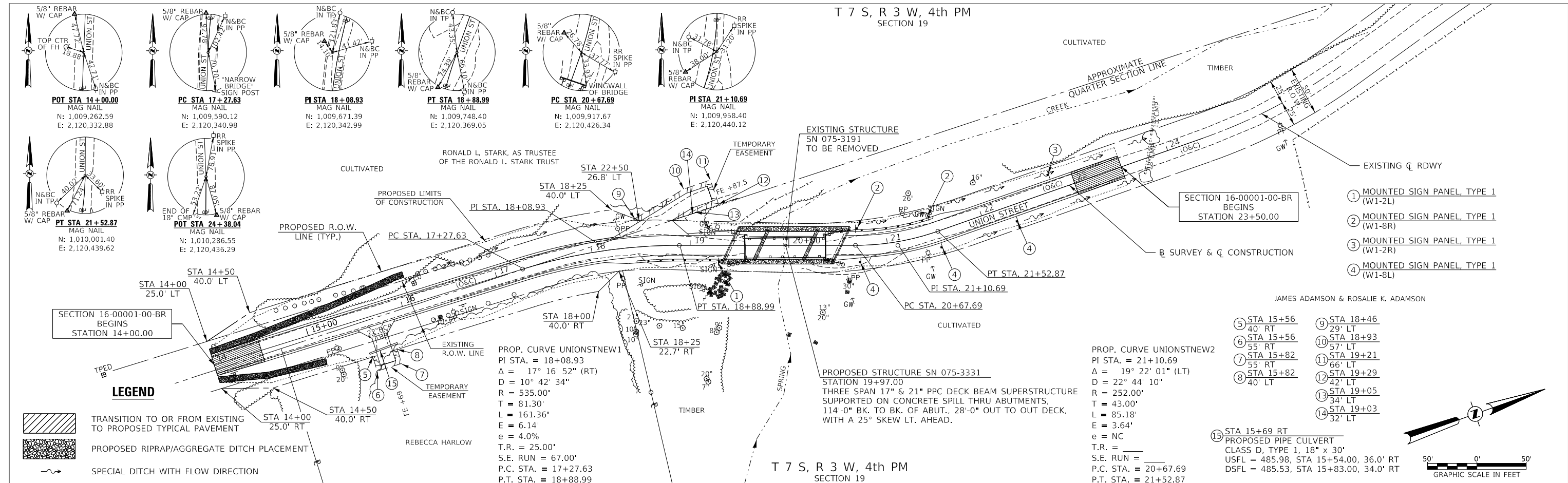
EROSION CONTROL PLAN

SCALE: 1"=50' SHEET 1 OF 1 SHEETS STA. 14+00.00 TO STA. 23+50.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	5
FED. ROAD DIST. NO. 7 ILLINOIS			CONTRACT NO. 93815	
FED. AID PROJECT NO. FQ5W(222)				

DATE	
BY	
PLAN	
SURVEYED	
PLOTTED	
ALIGNED	
CHECKED	
FILE NAME	
NO.	

DATE	
BY	
PROFILE	
SURVEYED	
GRADES	
CHECKED	
STRUCTURE	
NOTATION	
NO.	



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USER NAME = JSavage	DESIGNED - CRN	REVISED -	PIKE COUNTY UNION STREET (MS 6010) OVER SPRING CREEK	PLAN AND PROFILE SCALE: 1"=50' SHEET NO. 1 OF 1 SHEETS STA. 14+00.00 TO STA. 23+50.00	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = 100.0000' / in.	DRAWN - CRN	REVISED -			UN. ST.	16-00001-00-BR	PIKE	26	6	
PLOT DATE = 12/1/2023	CHECKED - JPS/BAN	REVISED -			CONTRACT NO. 93815					
DATE = 12/1/2023	DATE = 12/1/2023	REVISED -			FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. F05W(222)			

B.M.: Railroad spike in PP
Sta. 15+24, 20' Lt.
Elev. 490.47

Cut "□" in NE
Wingwall of Bridge
Sta. 20+38, 14' Rt.
Elev. 486.95

Railroad Spike in PP
Sta. 21+41, 4' Rt.
Elev. 483.82

Railroad Spike in PP
Sta. 25+23, 13' Rt.
Elev. 482.29

SPRING CREEK
BUILT 202_ BY
PIKE COUNTY HIGHWAY DEPARTMENT
PIKE COUNTY
SEC. 16-00001-00-BR
STATION 19+97.00
STR. NO. 075-3331 LOADING HL-93

NAME PLATE

Locate Name Plate at S.E. Wingwall
Corner of Bridge (See Std. 515001)

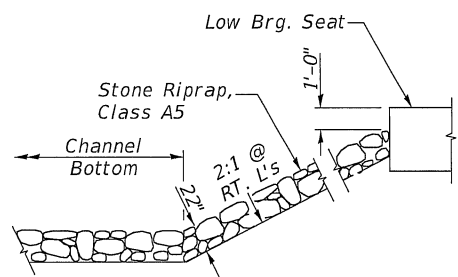
GENERAL NOTES

For Soil Boring Logs, See Special Provisions.
A Corrosion Inhibitor shall be used in the concrete for Precast Prestressed Concrete Deck Beams according to Article 1020.05(b)(10) of the Standard Specifications.
Reinforcement Bars designated (E) shall be epoxy coated.
Layout of the slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
The top surface of the beams shall be finished according to the IDOT Manual for Fabrication of Precast Prestressed Concrete Products.
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on the project.

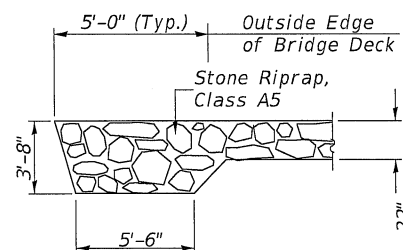
Existing Structure:

Single span Warren Pony Truss on closed concrete abutments.
The structure is 83'-0" back to back of abutments, 21'-6" out to out deck width and is not skewed.
Str. No. 075-3191

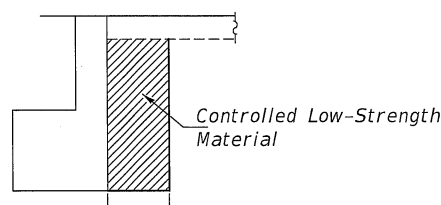
Salvage: None



STONE RIPRAP DETAIL



SECTION A-A



SECTION B-B

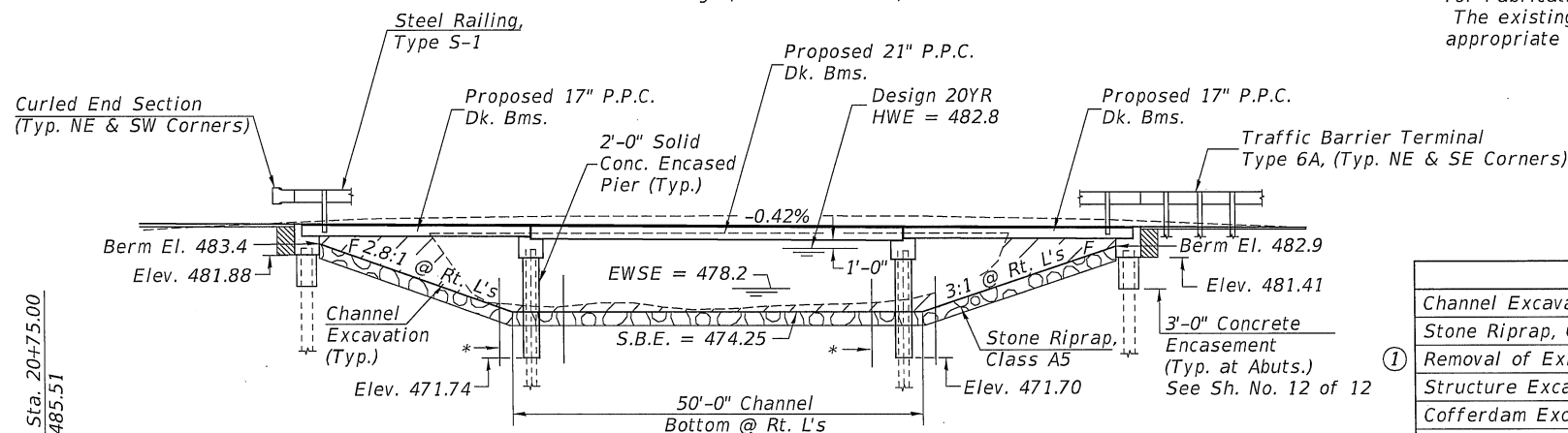
OVER-THE-ROAD AREA

Freq. Yr.	Exist	Prop
Design	1,510	456
Base	1,977	642

WATERWAY INFORMATION

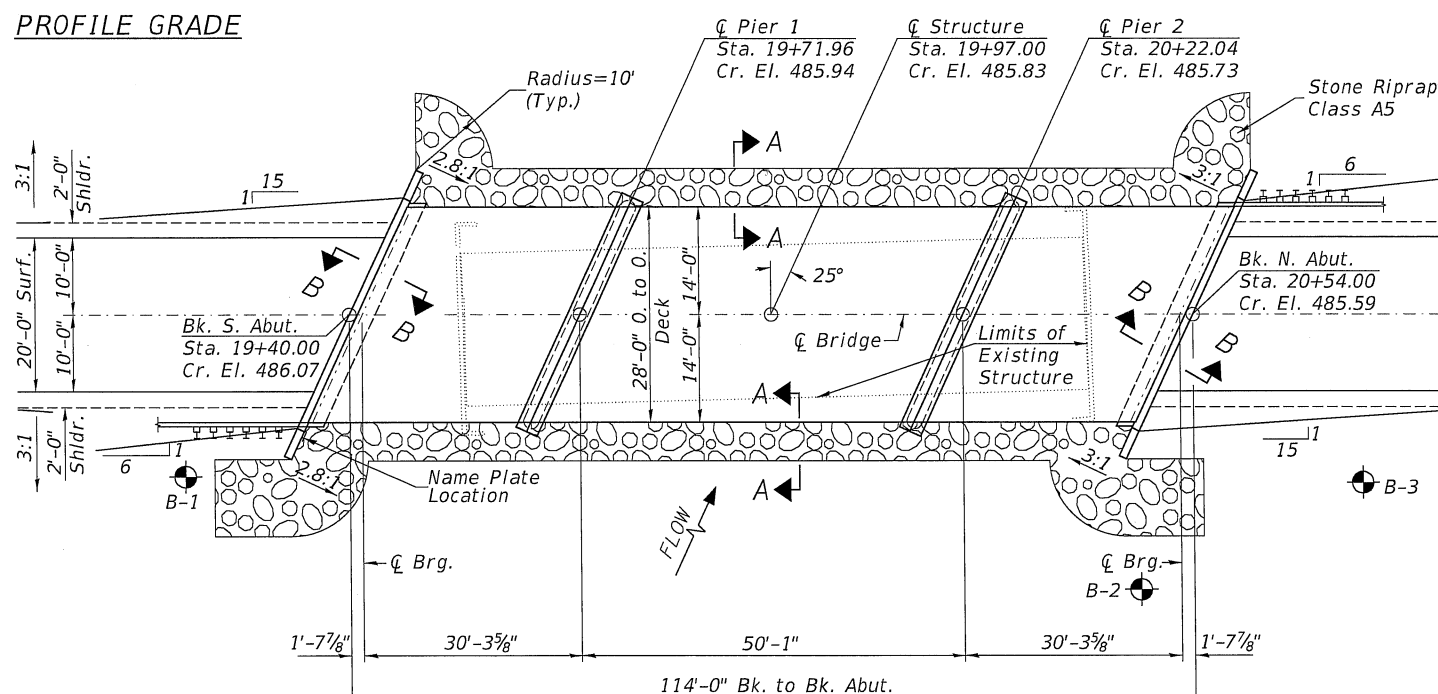
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	20	3,335	525	645	482.8	0.2	0.1	483.0	482.9
Base	100	4,930	586	725	483.6	0.1	0.0	483.7	483.6

Construction of this project complies with IDNR,
Office of Water Resources Individual Permit #DS2023082



ELEVATION

PROFILE GRADE



PLAN

DESIGN SPECIFICATIONS

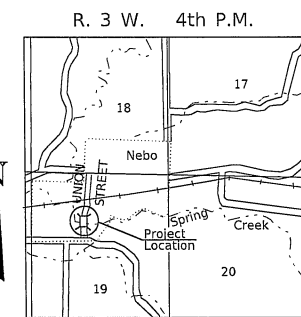
2020 AASHTO LRFD Bridge Design Specifications,
9th Edition

DESIGN STRESSES

(FIELD UNITS) (PRECAST PRESTRESSED UNITS)
f'c = 3,500 p.s.i. f'c = 6,000 p.s.i.
fy = 60,000 p.s.i. (Rein.) f'ci = 5,000 p.s.i.
f's = 270,000 p.s.i. (1/2" Strands)
f'si = 201,960 p.s.i. (1/2" Strands)

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.



LOCATION SKETCH

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Channel Excavation	CU YD	—	460	460
Stone Riprap, Class A5	TON	—	570	570
Removal of Existing Structures	EACH	—	—	1
Structure Excavation	CU YD	—	75	75
Cofferdam Excavation	CU YD	—	100	100
Cofferdam (Type 1) (Location-1)	EACH	—	1	1
Cofferdam (Type 1) (Location-2)	EACH	—	1	1
Concrete Structures	CU YD	—	91.4	91.4
Concrete Encasement	CU YD	—	2.6	2.6
Precast Prestressed Concrete Deck Beams (17" Depth)	SQ FT	1,731	—	1,731
Precast Prestressed Concrete Deck Beams (21" Depth)	SQ FT	1,400	—	1,400
Reinforcement Bars	POUND	—	8,600	8,600
Steel Railing, Type S1	FOOT	228	—	228
Furnishing Metal Shell Piles 12" x 0.250"	FOOT	—	898	898
Driving Piles	FOOT	—	898	898
Test Pile Metal Shells	EACH	—	4	4
Pile Shoes	EACH	—	22	22
Name Plates	EACH	—	1	1
Terminal Marker - Direct Applied	EACH	2	—	2
Controlled Low-Strength Material	CU YD	—	14	14
Bituminous Surface Treatment, A2	SQ YD	355	—	355

① See Special Provisions

Benjamin A. Nebel
Professional Engineer
Illinois State Board of Examiners
No. 081-006527
LCS
JACKSONVILLE, ILLINOIS
Lic Exp 11/30/24

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO Standard Specification for Highway Bridges.
This design complies with all requirements of the current AASHTO Guide Specifications for Seismic Design of highway bridges.

Illinois Structural No. 6527
Expires 11/30/2024

USER NAME	DESIGNED	REVISIONS
= JSavage	- LBK	-
	DRAWN - LBK	REVISIONS -
	CHECKED - JPS/BAN	REVISIONS -
	DATE - 11/22/2023	REVISIONS -

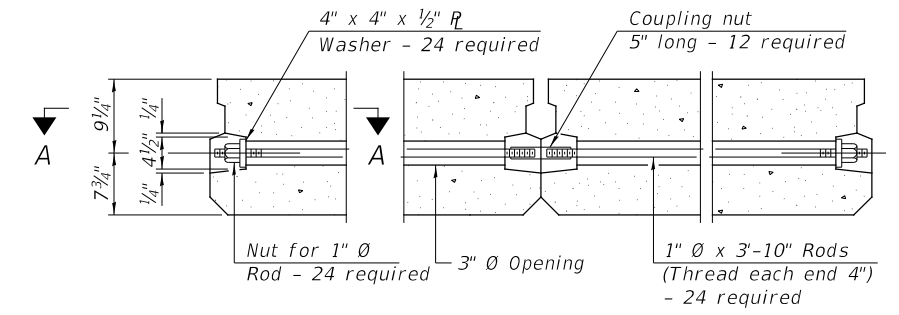
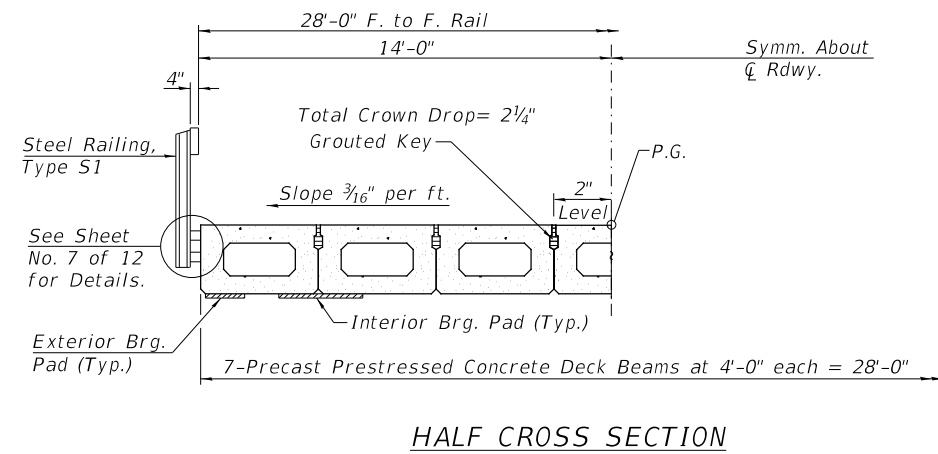
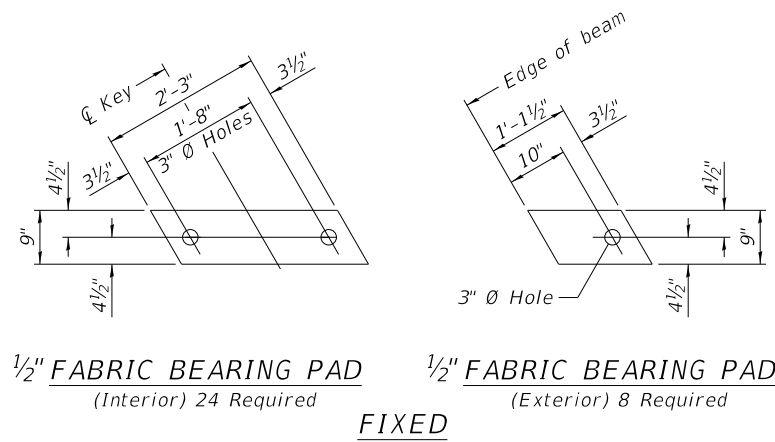
DESIGNED	REVISIONS
- LBK	-
DRAWN - LBK	REVISIONS -
CHECKED - JPS/BAN	REVISIONS -
DATE - 11/22/2023	REVISIONS -

**PIKE COUNTY
UNION STREET (MS 6010)
OVER SPRING CREEK**

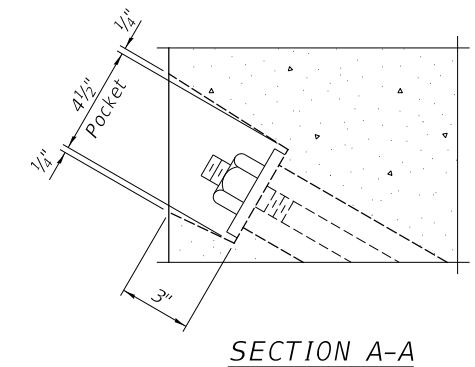
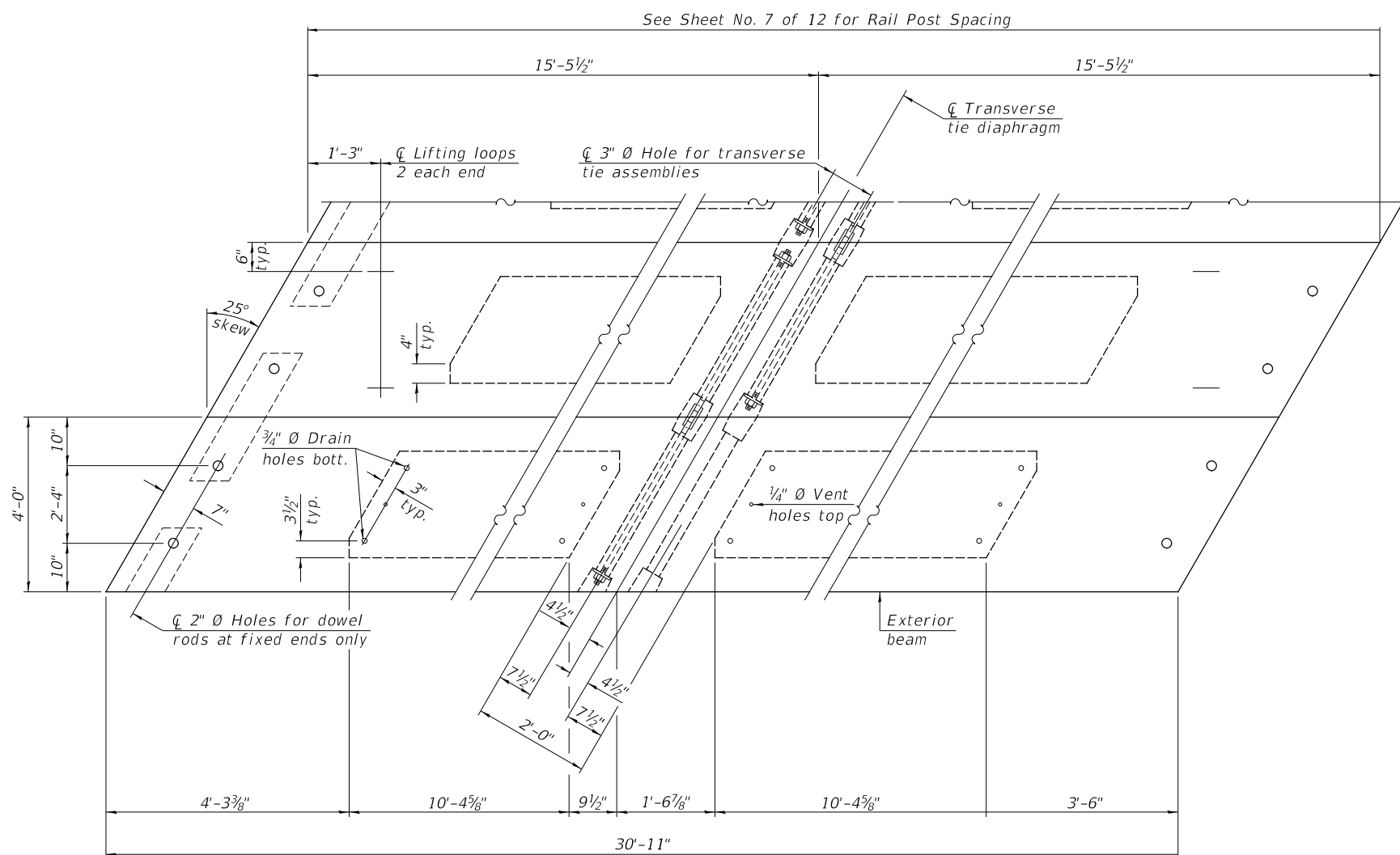
GENERAL PLAN AND ELEVATION

SCALE: NONE SHEET 1 OF 12 SHEETS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	7
	SN 075-3331		CONTRACT NO. 93815	
FED. ROAD DIST. NO. 7	ILLINOIS		FED. AID PROJECT NO. FQ5W(222)	



TYPICAL TRANSVERSE TIE ASSEMBLY



NOTES

- Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
- The 1" Ø rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
- Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
- A minimum 2 1/2" Ø lifting pin shall be used to engage the lifting loops during handling.
- Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
- Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
- Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Precast Prestressed Concrete Deck Beams (17" Depth)	SQ FT	1,731

MODEL FILE NAME:

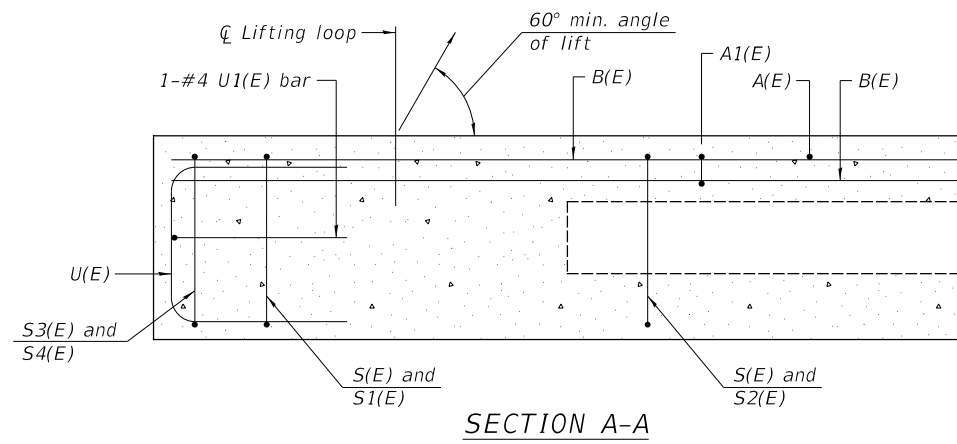
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DRAWN - LBK	REVISED - _____	
PLOT SCALE = 100.0000' / in.	CHECKED - JPS/BAN	REVISED - _____
PLOT DATE = 12/1/2023	DATE - 10/17/2023	REVISED - _____

**PIKE COUNTY
UNION STREET (MS 6010)
OVER SPRING CREEK**

SUPERSTRUCTURE SPAN 1 AND 3

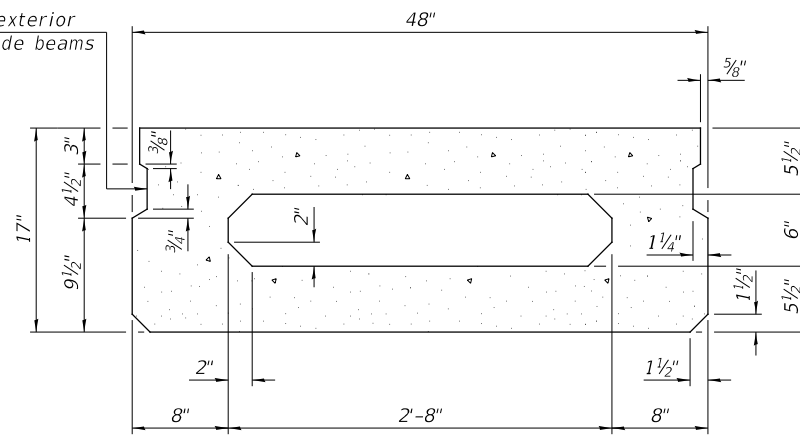
SCALE: NONE SHEET 2 OF 12 SHEETS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	8
	SN 075-3331		CONTRACT NO. 93815	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT NO. F05W(222)		

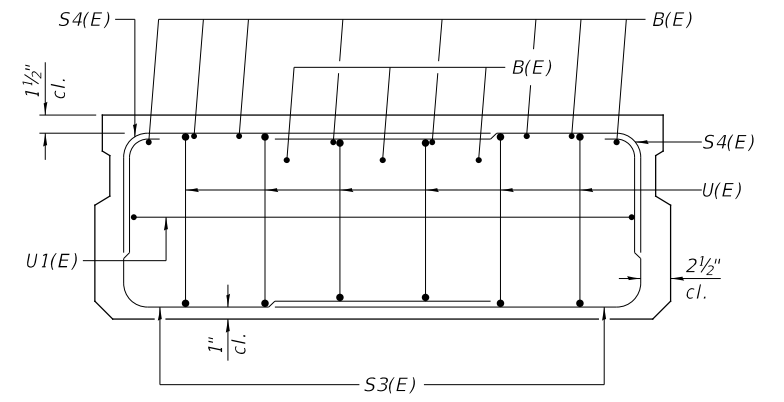


SECTION A-A

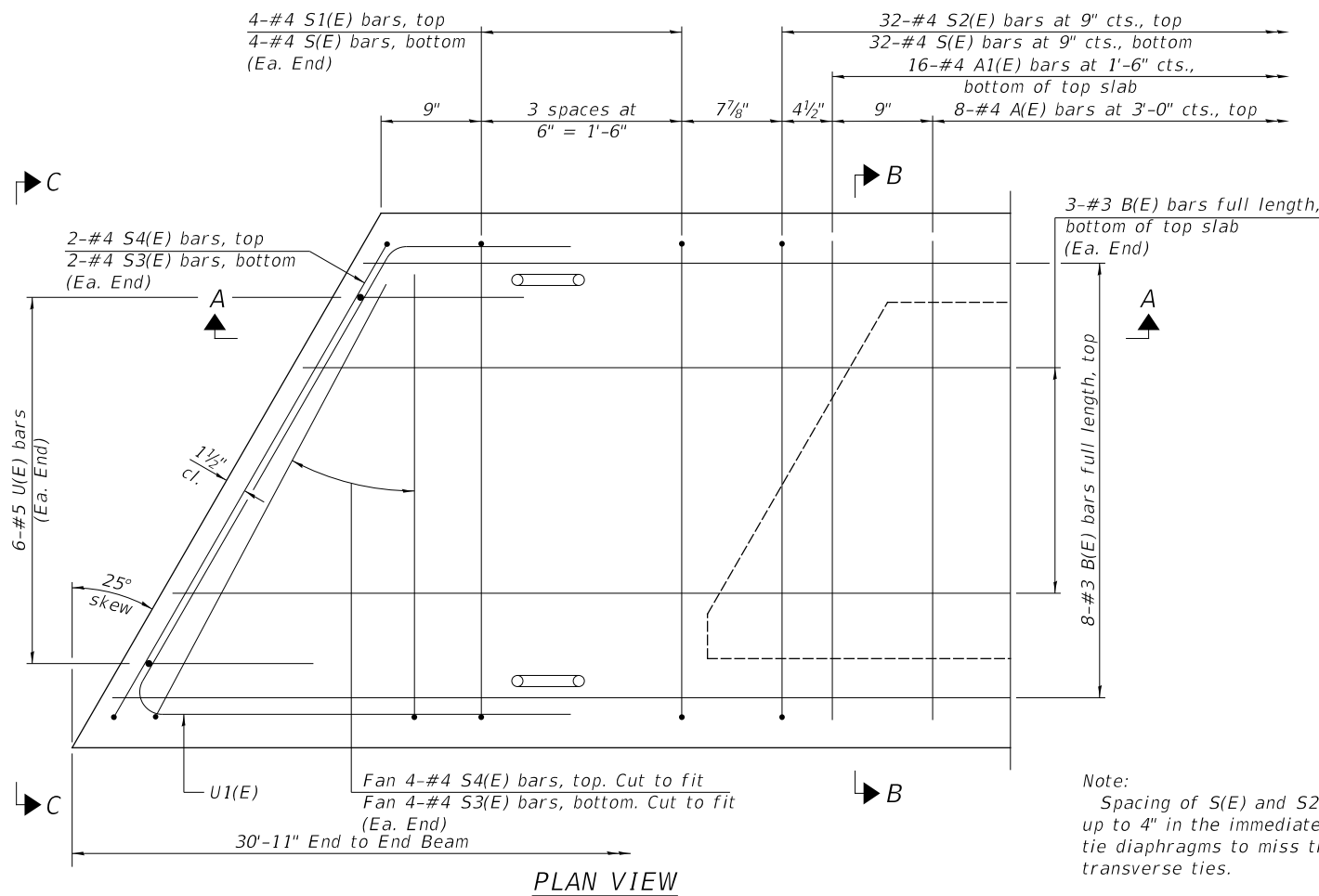
Omit key on exterior face of outside beams



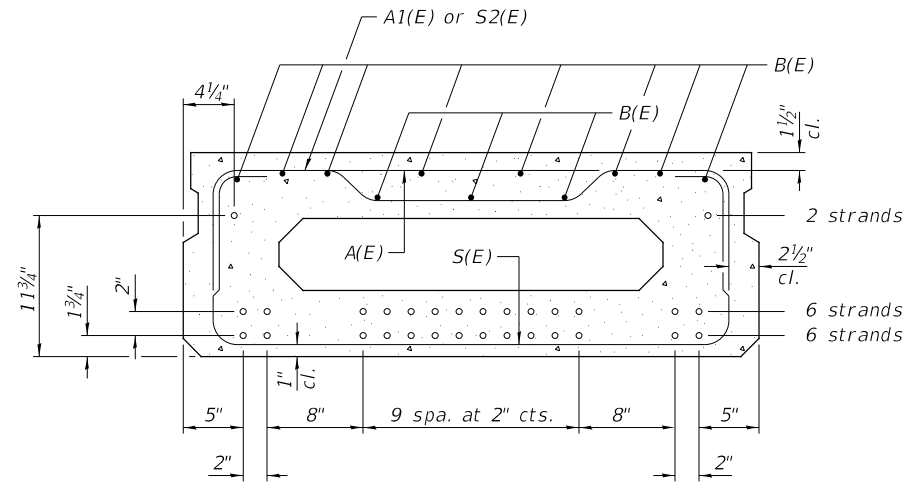
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



SECTION B-B

(Showing reinforcement and permissible strand locations)
 14-1/2" Ø Strands Each Strand Stressed to 30,900 Lbs.
 6-Strands 1 3/4" up, 6-Strands 3 3/4" up, 2-Strands 11 3/4" up.
 Note:
 Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

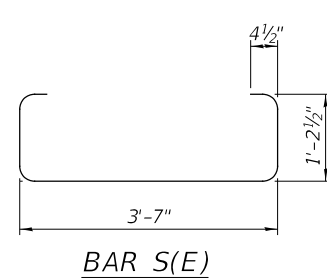
BAR LIST
ONE BEAM ONLY
 (For information only)

Bar	No.	Size	Length	Shape
A(E)	8	#4	3'-7"	—
A1(E)	16	#4	3'-10"	—
B(E)	11	#3	30'-8"	—
S(E)	40	#4	6'-9"	⌊
S1(E)	8	#4	5'-3"	⌊
S2(E)	32	#4	5'-6"	⌊
S3(E)	8	#4	5'-2"	⌊
S4(E)	8	#4	4'-5"	⌊
U(E)	12	#5	3'-8"	⌊
U1(E)	2	#4	8'-0"	⌊

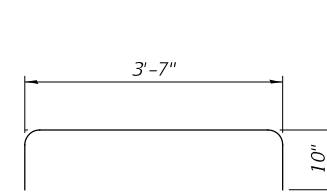
Note:
 See sheet 2 of 12 for additional details and Bill of Material.

MINIMUM BAR LAP
 #3 bar = 1'-6"

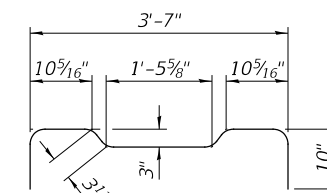
Note:
 Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



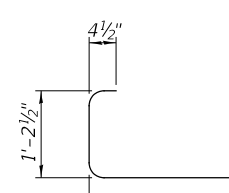
BAR S(E)



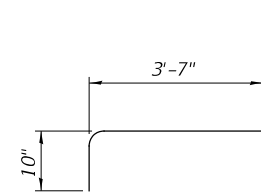
BAR S1(E)



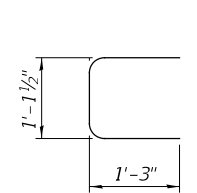
BAR S2(E)



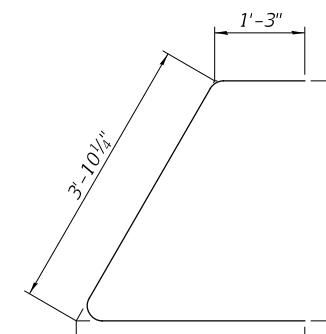
BAR S3(E)



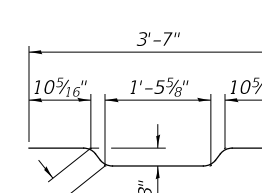
BAR S4(E)



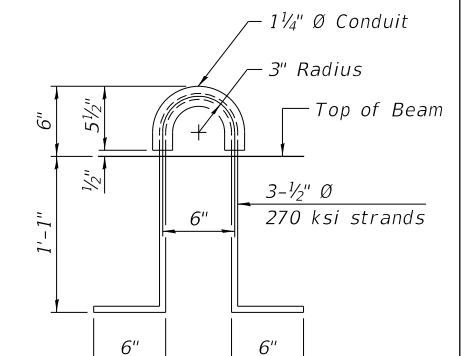
BAR U(E)



BAR U1(E)



BAR A1(E)



LIFTING LOOP DETAIL

MODEL FILE NAME:

USER NAME = JSavage	DESIGNED - LBK	REVISED -
DRAWN - LBK	REVISED -	
PLOT SCALE = 100.0000' / in.	CHECKED - JPS/BAN	REVISED -
PLOT DATE = 12/11/2023	DATE - 10/11/2023	REVISED -

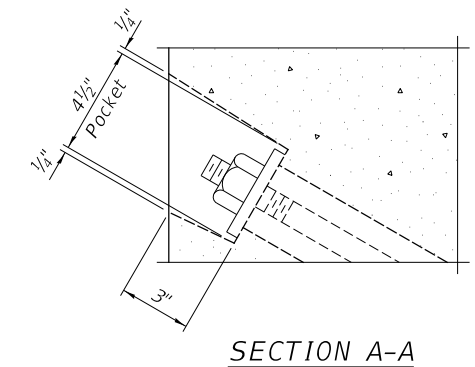
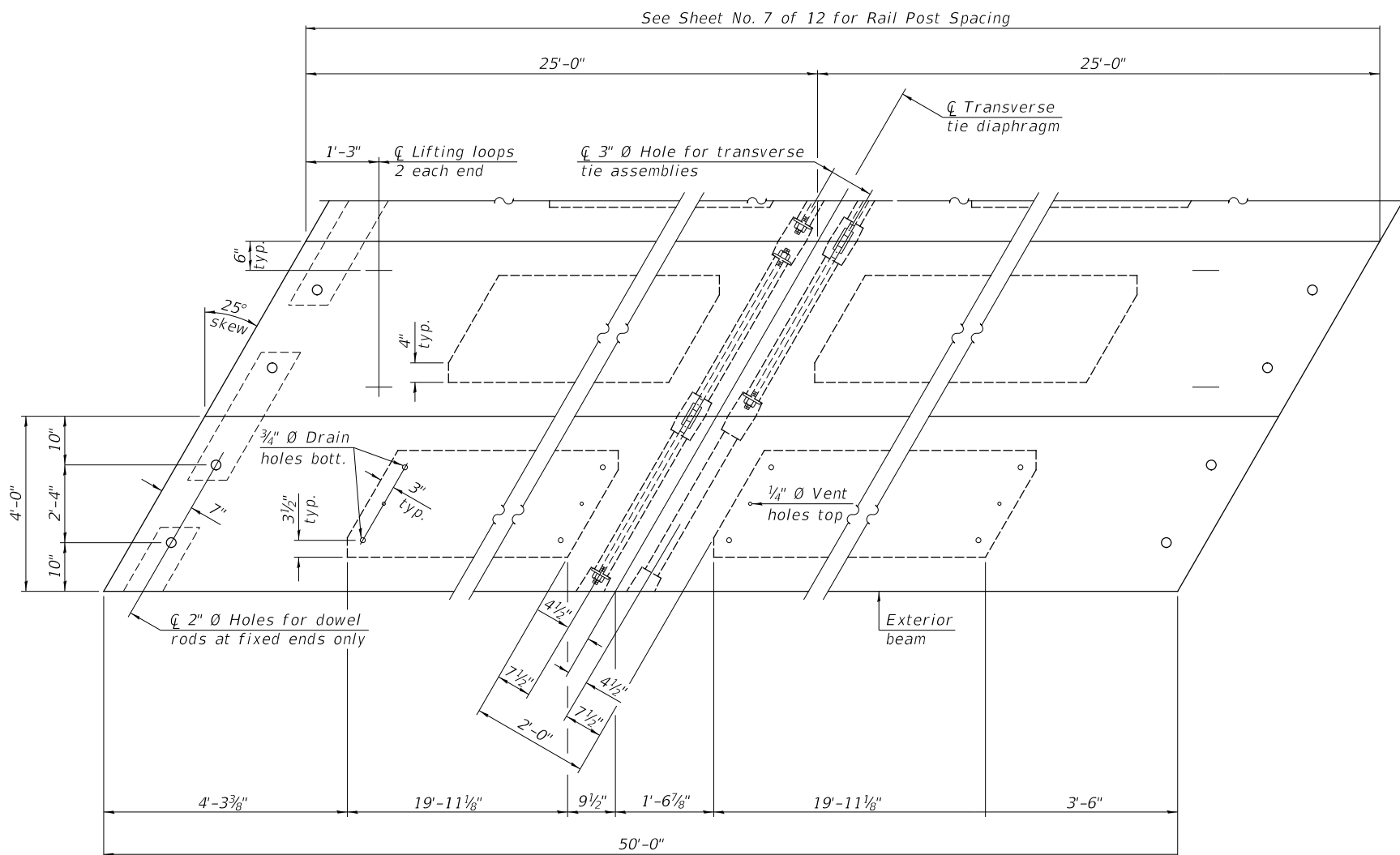
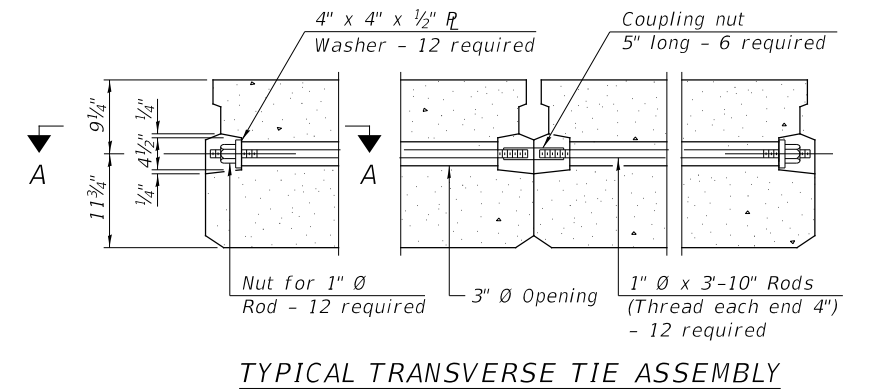
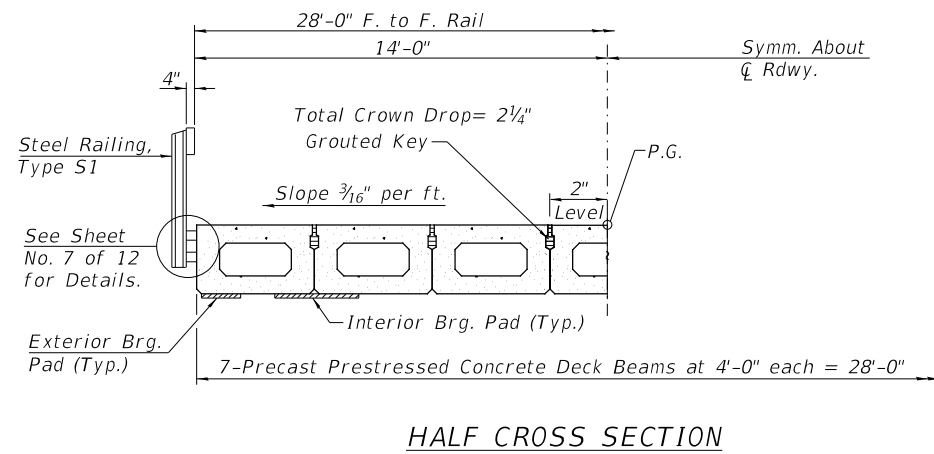
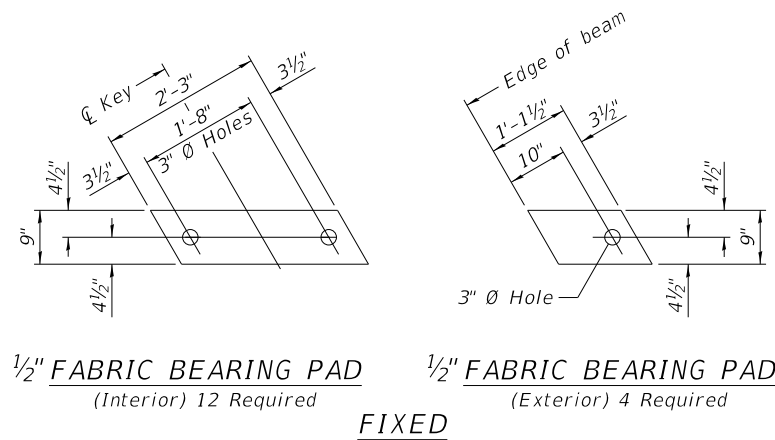
PIKE COUNTY
UNION STREET (MS 6010)
OVER SPRING CREEK

SUPERSTRUCTURE DETAILS SPAN 1 AND 3

SCALE: NONE SHEET 3 OF 12 SHEETS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	9
	SN 075-3331		CONTRACT NO. 93815	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT NO. F05W(222)		

4851-b001.dgn



NOTES

- Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
- The 1" \bar{O} rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
- Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
- A minimum 2 1/2" \bar{O} lifting pin shall be used to engage the lifting loops during handling.
- Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
- Compressive strength of prestressed concrete, $f'c$, shall be 6000 psi.
- Compressive strength of prestressed concrete at release, $f'ci$, shall be 5000 psi.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Precast Prestressed Concrete Deck Beams (21" Depth)	SQ FT	1,400

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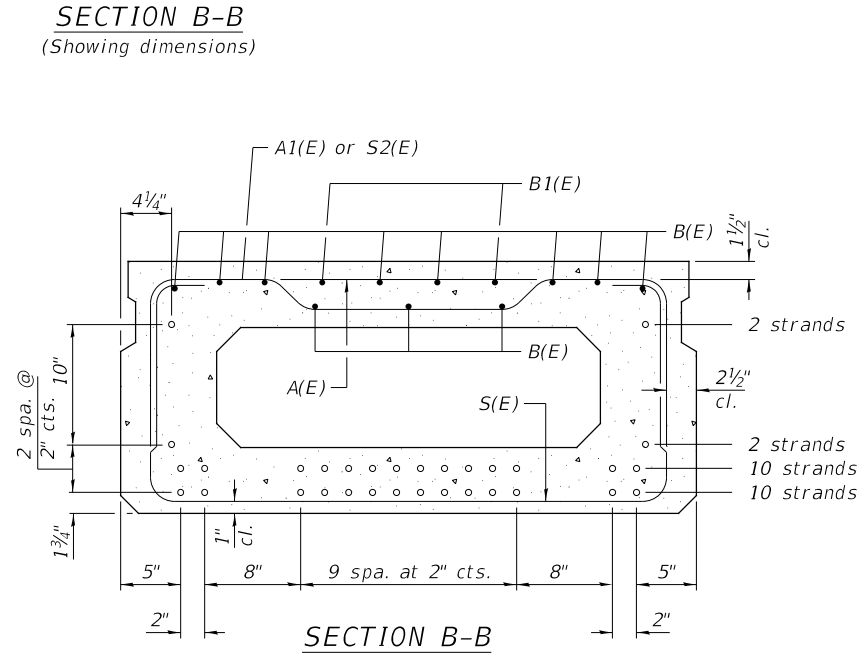
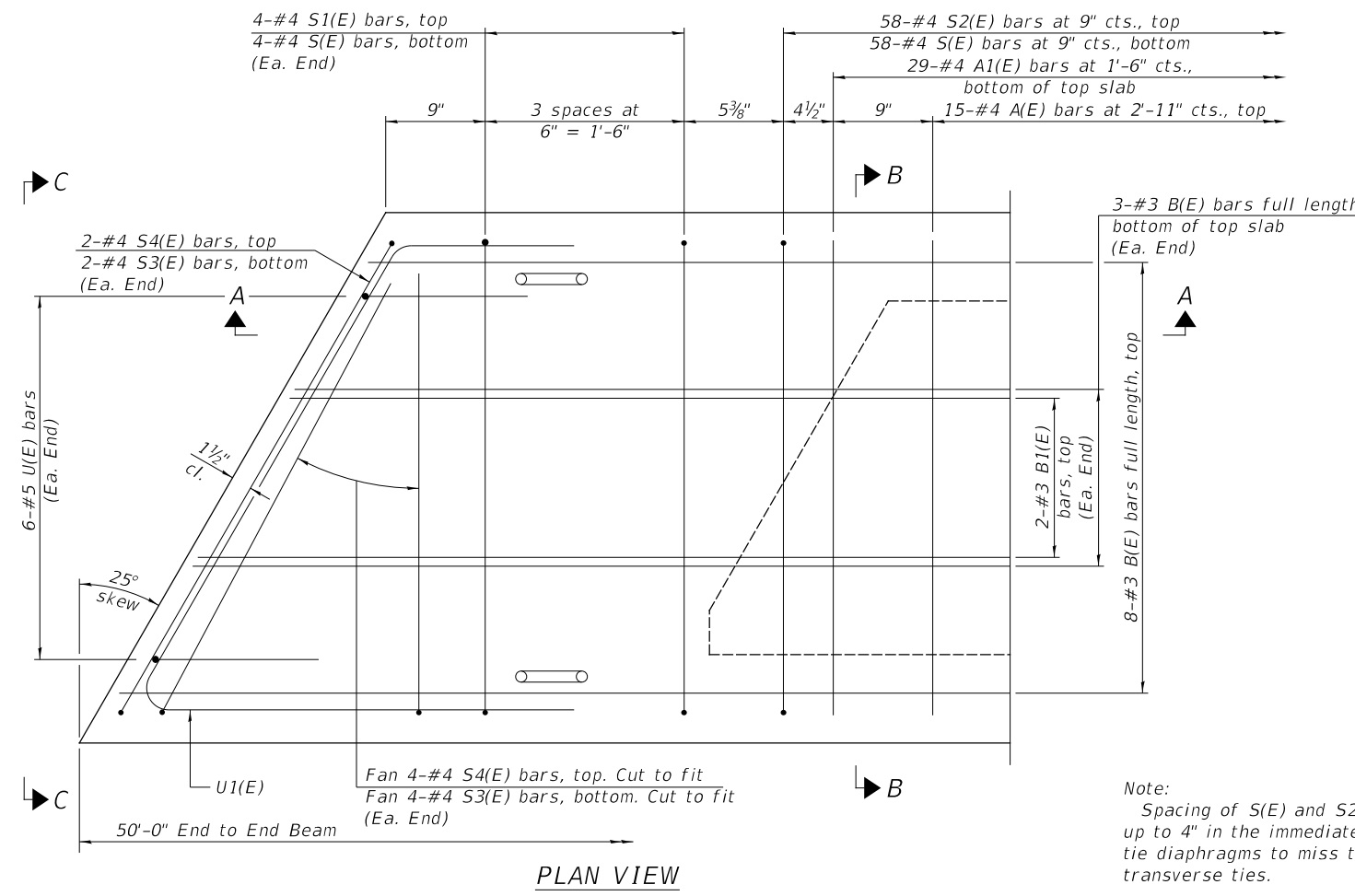
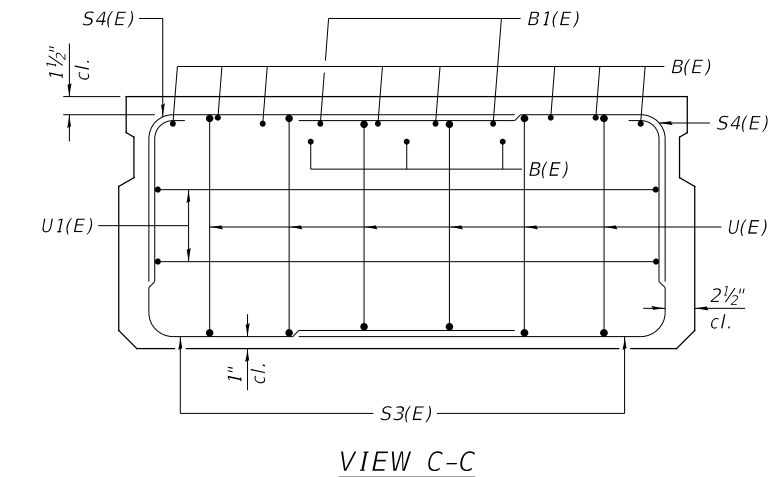
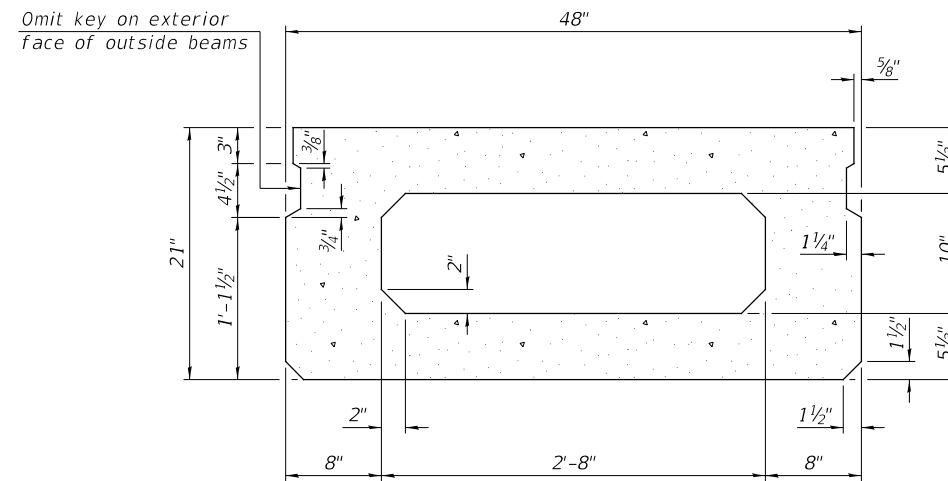
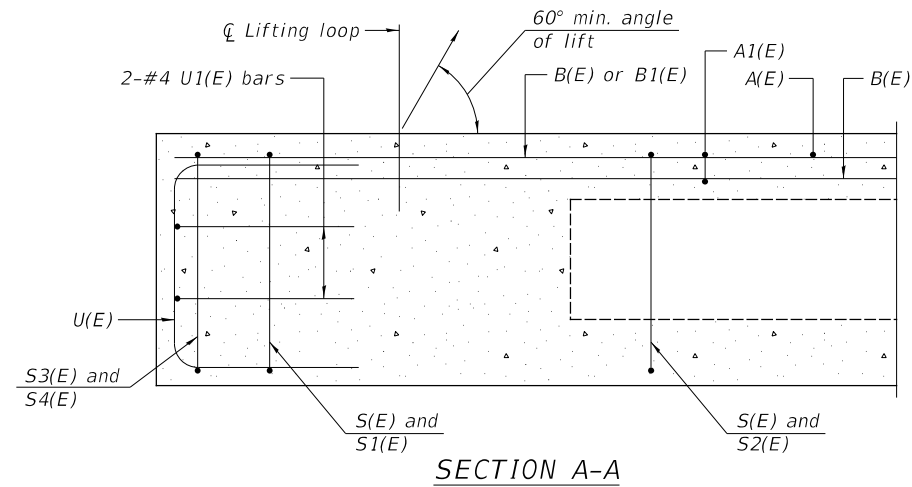
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DRAWN - LBK	REVISED - _____	
PLOT SCALE = 100,0000' / in.	CHECKED - JPS/BAN	REVISED - _____
PLOT DATE = 12/1/2023	DATE - 10/17/2023	REVISED - _____

**PIKE COUNTY
UNION STREET (MS 6010)
OVER SPRING CREEK**

SUPERSTRUCTURE SPAN 2

SCALE: NONE SHEET 4 OF 12 SHEETS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	10
	SN 075-3331		CONTRACT NO. 93815	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT NO. F05W(222)		



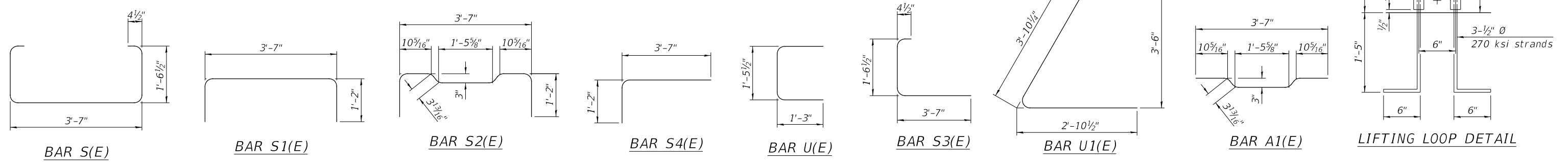
BAR LIST
ONE BEAM ONLY
(For information only)

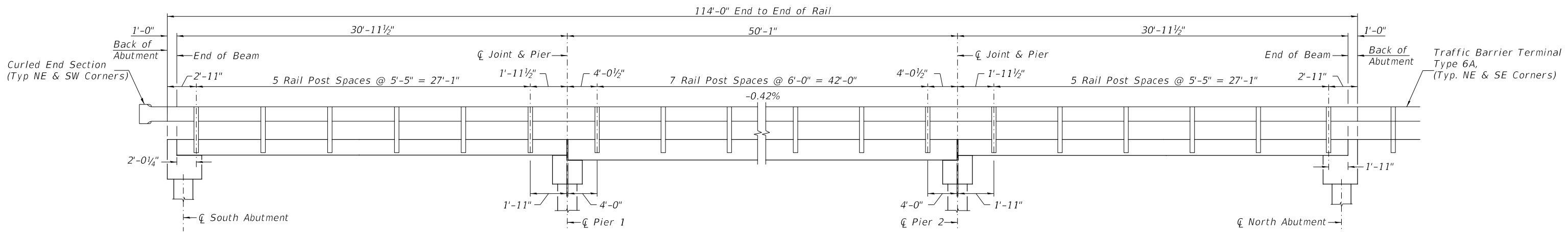
Bar	No.	Size	Length	Shape
A(E)	15	#4	3'-7"	—
A1(E)	29	#4	3'-10"	—
B(E)	11	#3	49'-9"	—
B1(E)	4	#3	10'-0"	—
S(E)	66	#4	7'-5"	⌊
S1(E)	8	#4	5'-11"	⌊
S2(E)	58	#4	6'-2"	⌊
S3(E)	8	#4	5'-6"	⌊
S4(E)	8	#4	4'-9"	⌊
U(E)	12	#5	4'-0"	⌊
U1(E)	4	#4	8'-0"	⌊

Note:
See sheet 4 of 12 for additional details and Bill of Material.

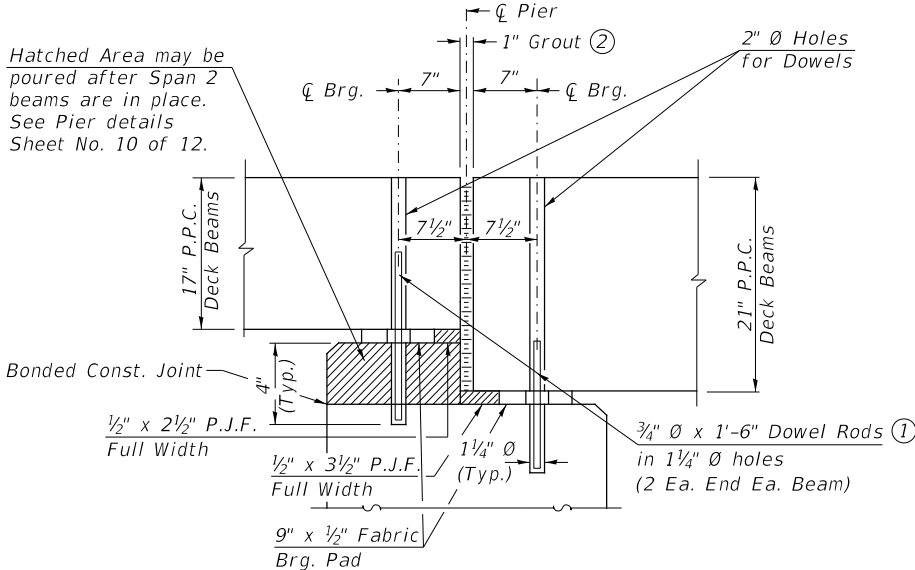
Note:
Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

MINIMUM BAR LAP
#3 bar = 1'-6"

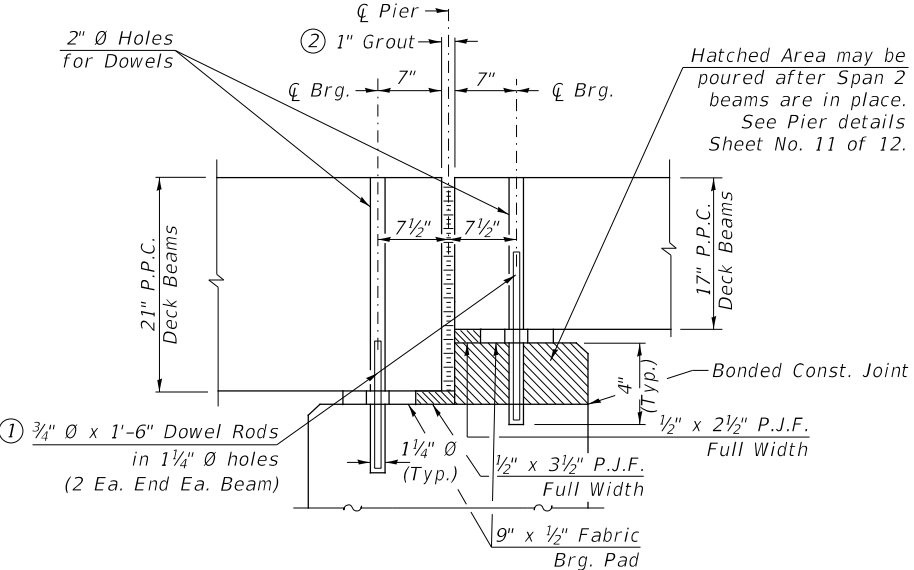




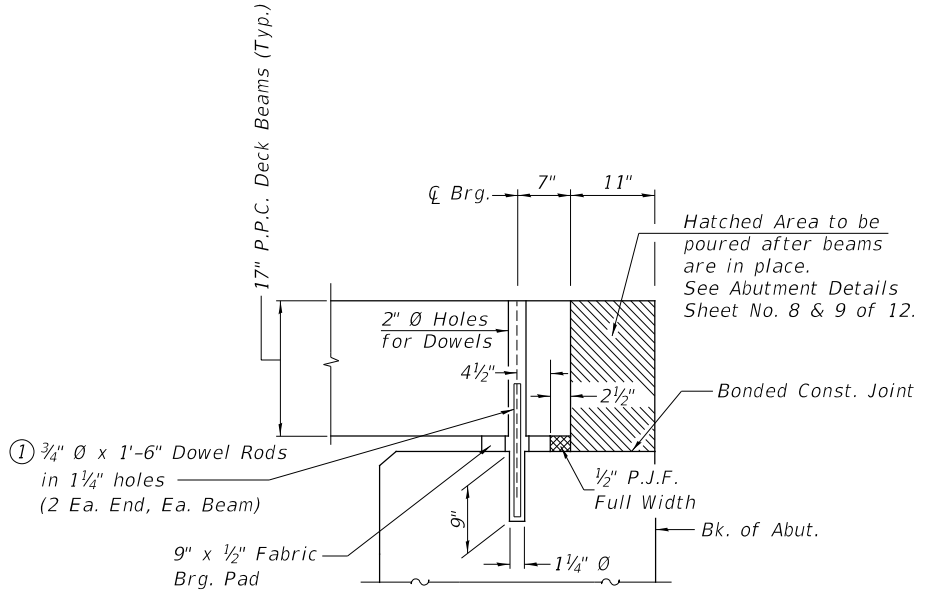
RAIL POST SPACING



SECTION THRU PIER (PIER #1)
(At Right Angles)



SECTION THRU PIER (PIER #2)
(At Right Angles)



SECTION THRU ABUTMENTS
(At Right Angles)

① Dowel Rods to be grouted after beams are in place and allowed to cure (Min. 24 hr.) prior to grouting the shear keys.

② 1" Joint shall be packed with a very dry mix of 2:1 sand and P.C. mortar. 1" Dimension may vary $\pm 1/8$ " to accommodate tolerance in beam lengths.

MODEL FILE NAME:

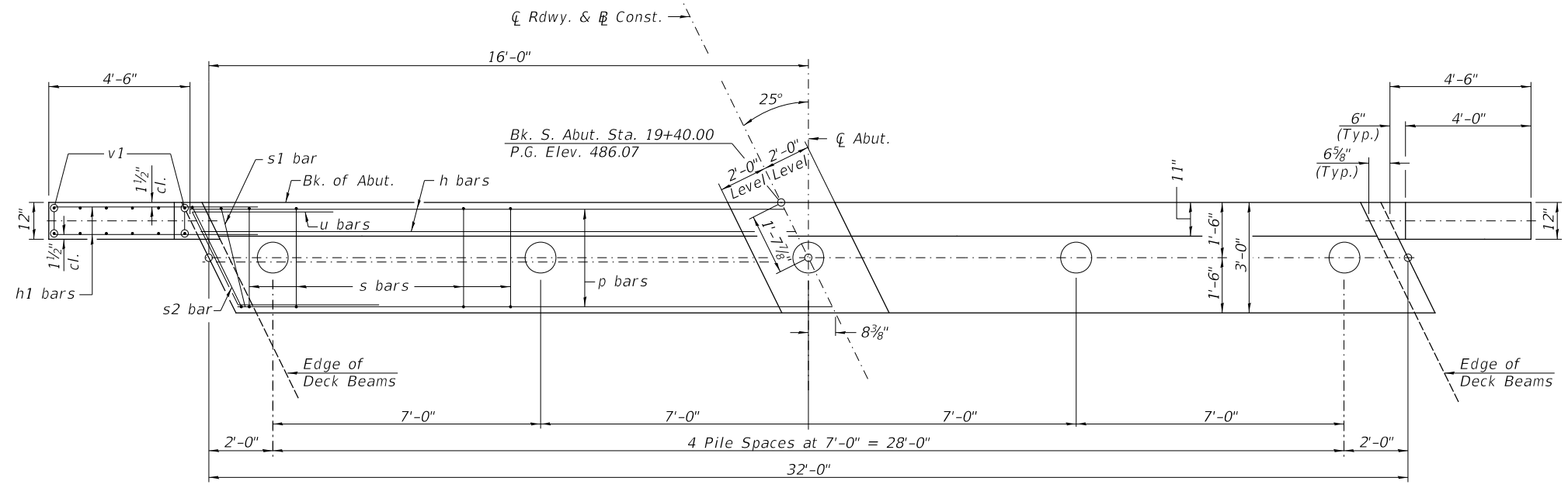
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DRAWN - LBK	REVISED - _____	
PLOT SCALE = 100,0000' / in.	CHECKED - JPS/BAN	REVISED - _____
PLOT DATE = 12/1/2023	DATE - 10/17/2023	REVISED - _____

**PIKE COUNTY
UNION STREET (MS 6010)
OVER SPRING CREEK**

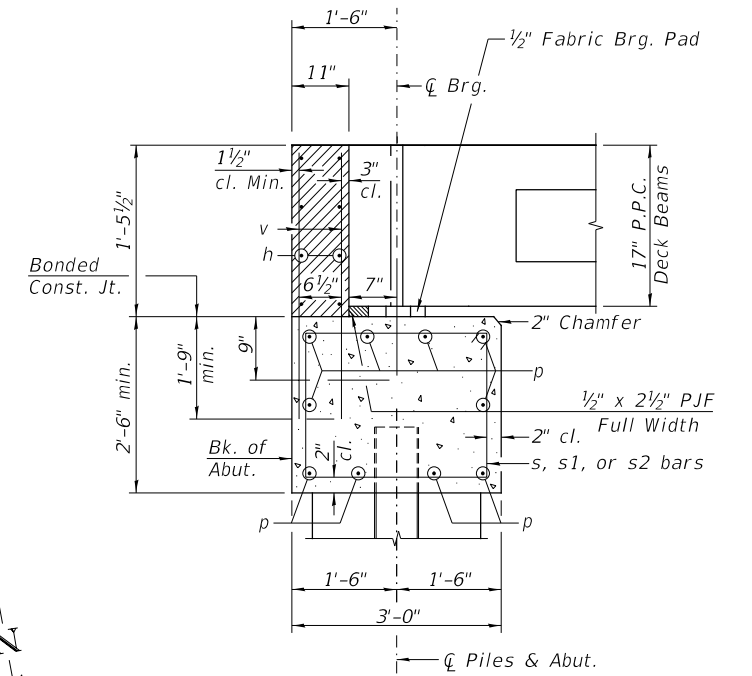
**RAIL POST SPACING &
SUPERSTRUCTURE DETAILS**

SCALE: NONE SHEET 7 OF 12 SHEETS

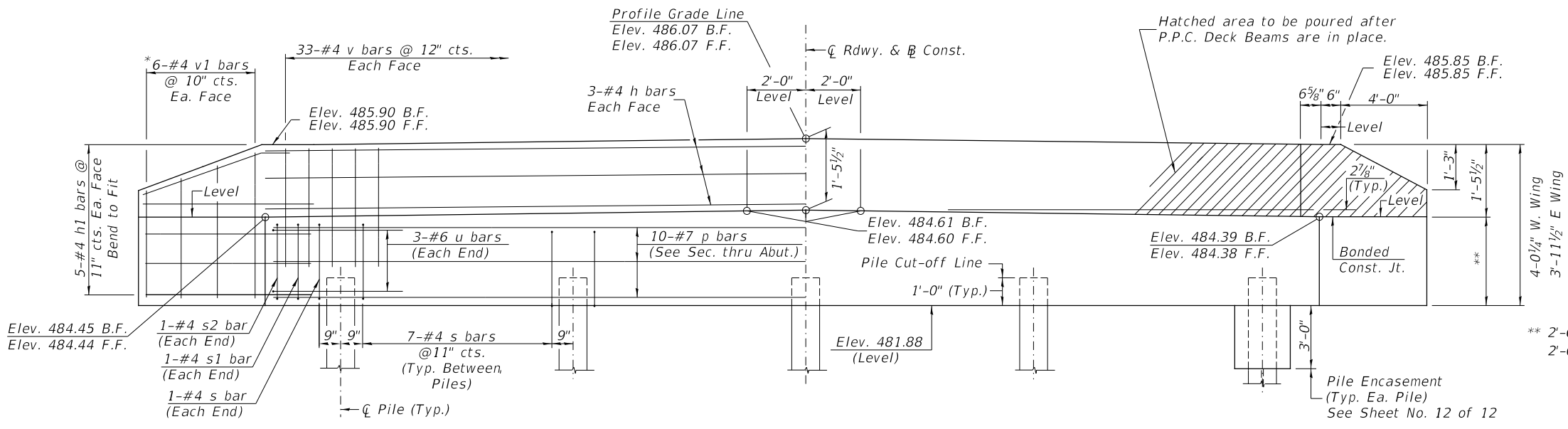
RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	13
	SN 075-3331		CONTRACT NO. 93815	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT NO. F05W(222)		



PLAN



SECTION THRU ABUTMENT
(At Right Angles)



ELEVATION
(Front View of Abutment)

SOUTH ABUTMENT
BILL OF MATERIAL

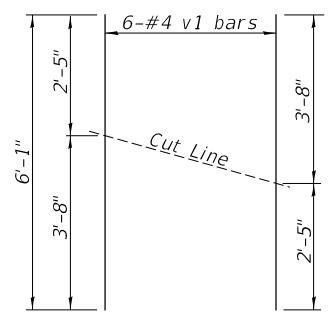
BAR	NO.	SIZE	LENGTH	SHAPE
h	6	#4	31'-9"	—
h1	20	#4	6'-6"	—
p	10	#7	31'-9"	—
s	30	#4	10'-5"	□
s1	2	#4	7'-8"	□
s2	2	#4	8'-0"	□
u	6	#6	11'-8"	┘
v	66	#4	3'-4"	—
v1	12	#4	6'-1"	—
Structure Excavation				CU YD 35
Concrete Structures				CU YD 11.9
Concrete Encasement				CU YD 1.3
Reinforcement Bars				POUND 1,390
Furnishing Metal Shell Piles 12" x 0.250"				FOOT 168
Driving Piles				FOOT 168
Test Pile Metal Shells				EACH 1
Pile Shoes				EACH 5

PILE DATA

Type & Size: Metal Shell 12" x 0.250" walls w/ pile shoes
 Nominal Required Bearing: 318 kips
 Factored Resistance Available: 175 kips
 Est. Length: 42'
 No. Req'd: 5 (Includes 1 Test Pile)

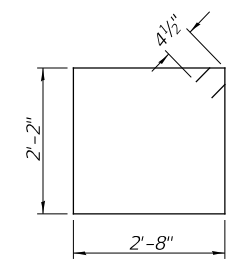
NOTES

- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
- All edges shall have standard 3/4" chamfer.

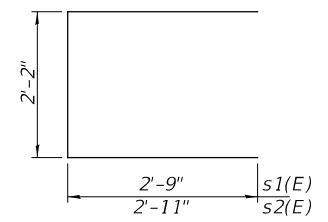


BAR CUTTING DIAGRAM

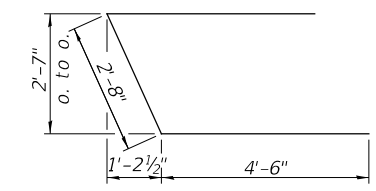
*Order v1 bars full length. Cut as shown and use remainder of bars in opposite face.



BAR s



BAR s1 & s2



BAR u

MODEL: 4851-b001.dgn

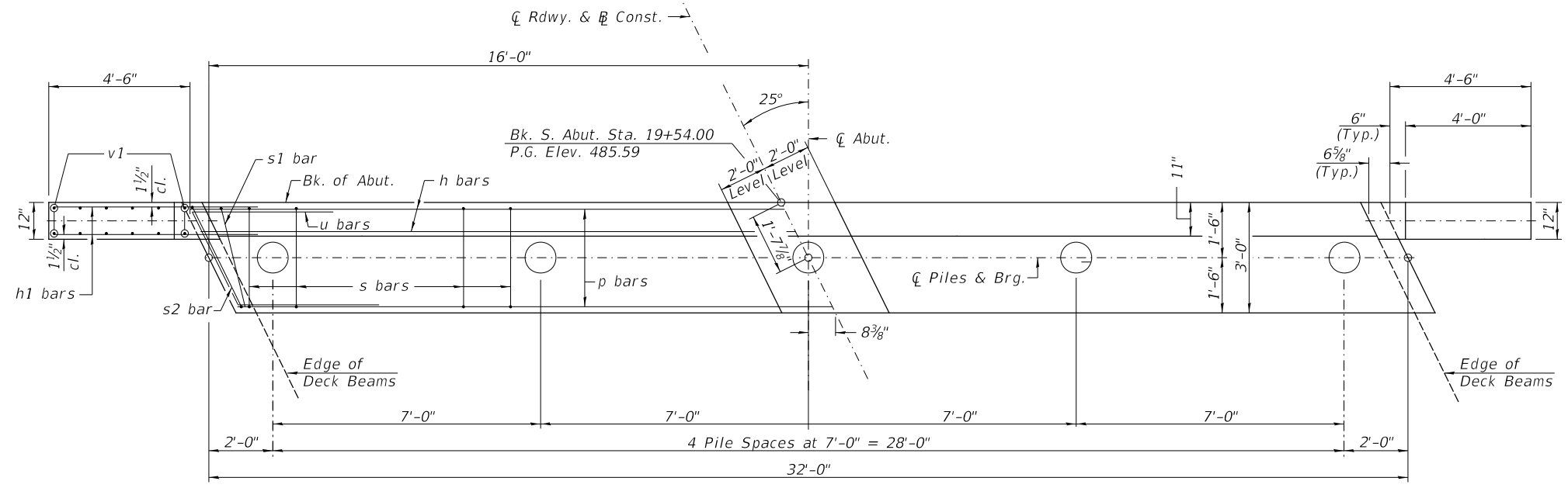
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DRAWN - LBK	REVISED -	
PLOT SCALE = 100.0000' / in.	CHECKED - JPS/BAN	REVISED -
PLOT DATE = 12/1/2023	DATE - 10/17/2023	REVISED -

PIKE COUNTY
UNION STREET (MS 6010)
OVER SPRING CREEK

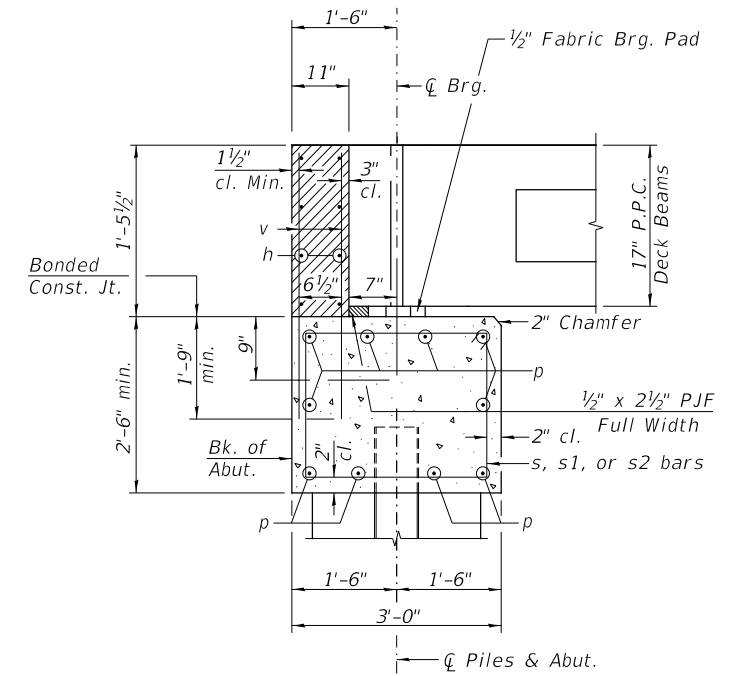
SOUTH ABUTMENT

SCALE: NONE SHEET 8 OF 12 SHEETS

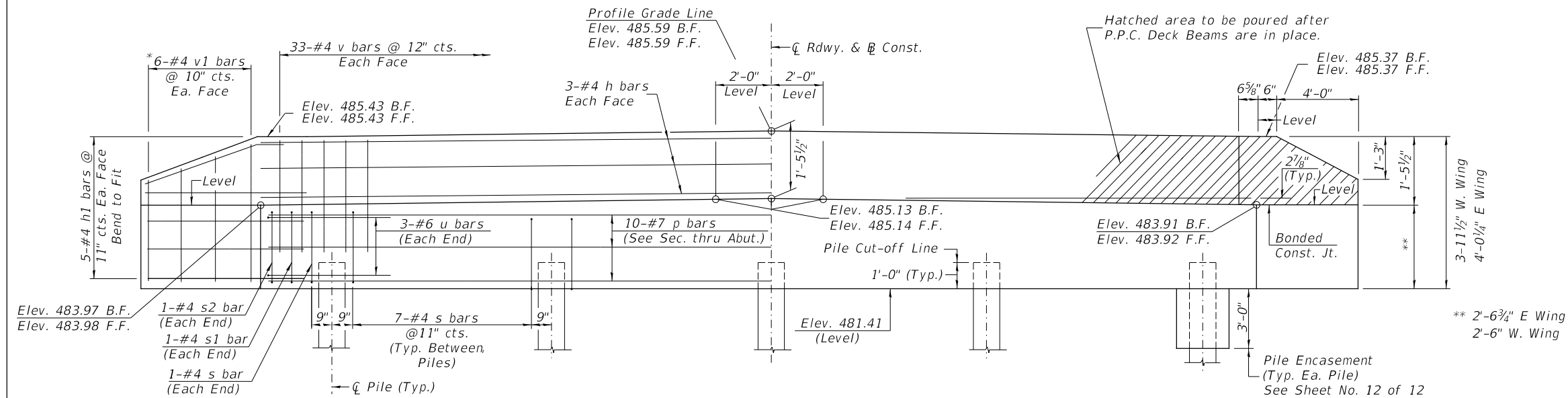
RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	14
SN 075-3331		CONTRACT NO. 93815		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT NO. F05W(222)		



PLAN



SECTION THRU ABUT.
(At Right Angles)



ELEVATION
(Front View of Abutment)

NORTH ABUTMENT
BILL OF MATERIAL

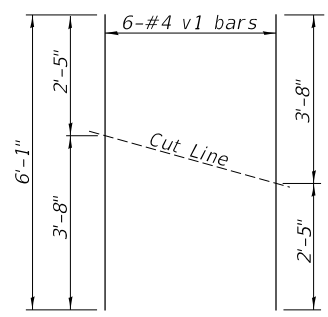
BAR	NO.	SIZE	LENGTH	SHAPE
h	6	#4	31'-9"	—
h1	20	#4	6'-6"	—
p	10	#7	31'-9"	—
s	30	#4	10'-5"	□
s1	2	#4	7'-8"	□
s2	2	#4	8'-0"	□
u	6	#6	11'-8"	└
v	66	#4	3'-4"	—
v1	12	#4	6'-1"	—
Structure Excavation				CU YD 40
Concrete Structures				CU YD 11.9
Concrete Encasement				CU YD 1.3
Reinforcement Bars				POUND 1,400
Furnishing Metal Shell Piles 12" x 0.250"				FOOT 180
Driving Piles				FOOT 180
Test Pile Metal Shells				EACH 1
Pile Shoes				EACH 5

PILE DATA

Type & Size: Metal Shell 12" x 0.250" walls w/ pile shoes
 Nominal Required Bearing: 318 kips
 Factored Resistance Available: 175 kips
 Est. Length: 45'
 No. Req'd.: 5 (Includes 1 Test Pile)

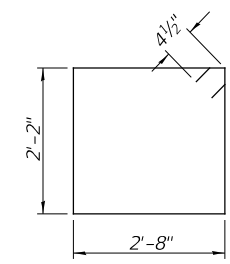
NOTES

- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
- All edges shall have standard 3/4" chamfer.

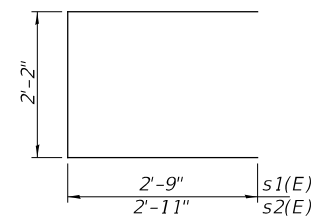


BAR CUTTING DIAGRAM

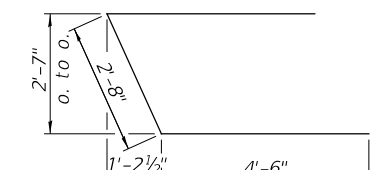
*Order v1 bars full length. Cut as shown and use remainder of bars in opposite face.



BAR s



BAR s1 & s2



BAR u

MODEL FILE NAME:

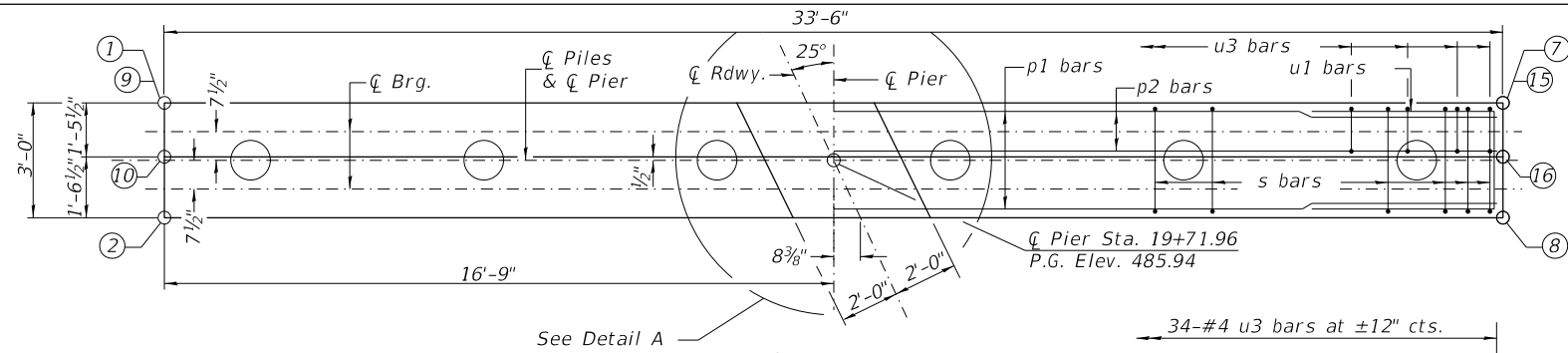
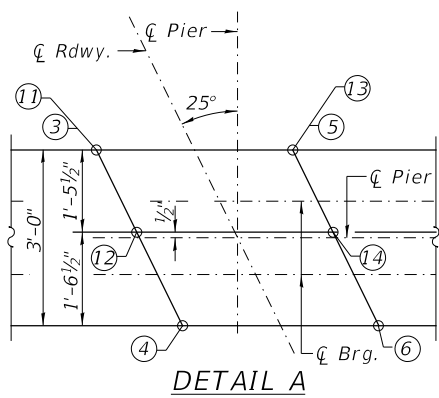
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PLOT SCALE = 100,0000' / in.	DRAWN - LBK	REVISED -
PLOT DATE = 12/1/2023	CHECKED - JPS/BAN	REVISED -
	DATE - 10/17/2023	REVISED -

PIKE COUNTY
UNION STREET (MS 6010)
OVER SPRING CREEK

SCALE: NONE SHEET 9 OF 12 SHEETS

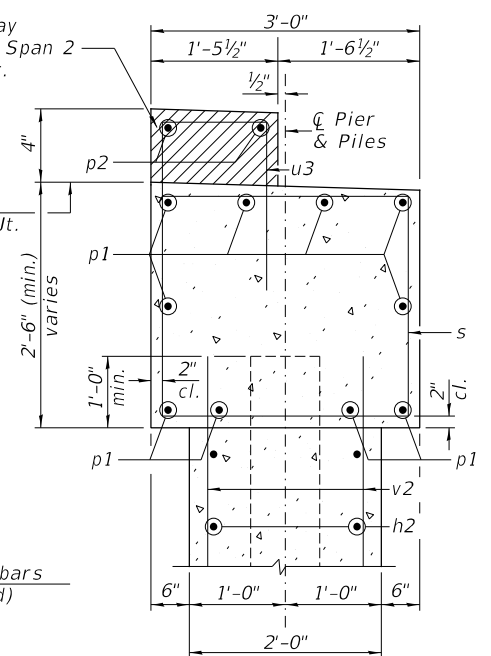
NORTH ABUTMENT

RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	15
	SN 075-3331		CONTRACT NO. 93815	
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT NO. F05W(222)	



Hatched Area may be poured after Span 2 P.P.C. Beams set.

Bonded Const. Jt.



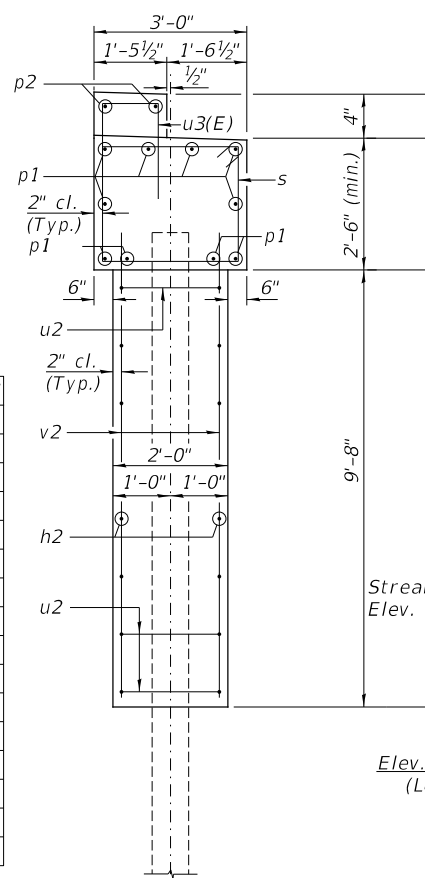
SECTION A-A

PIER #1
BILL OF MATERIAL

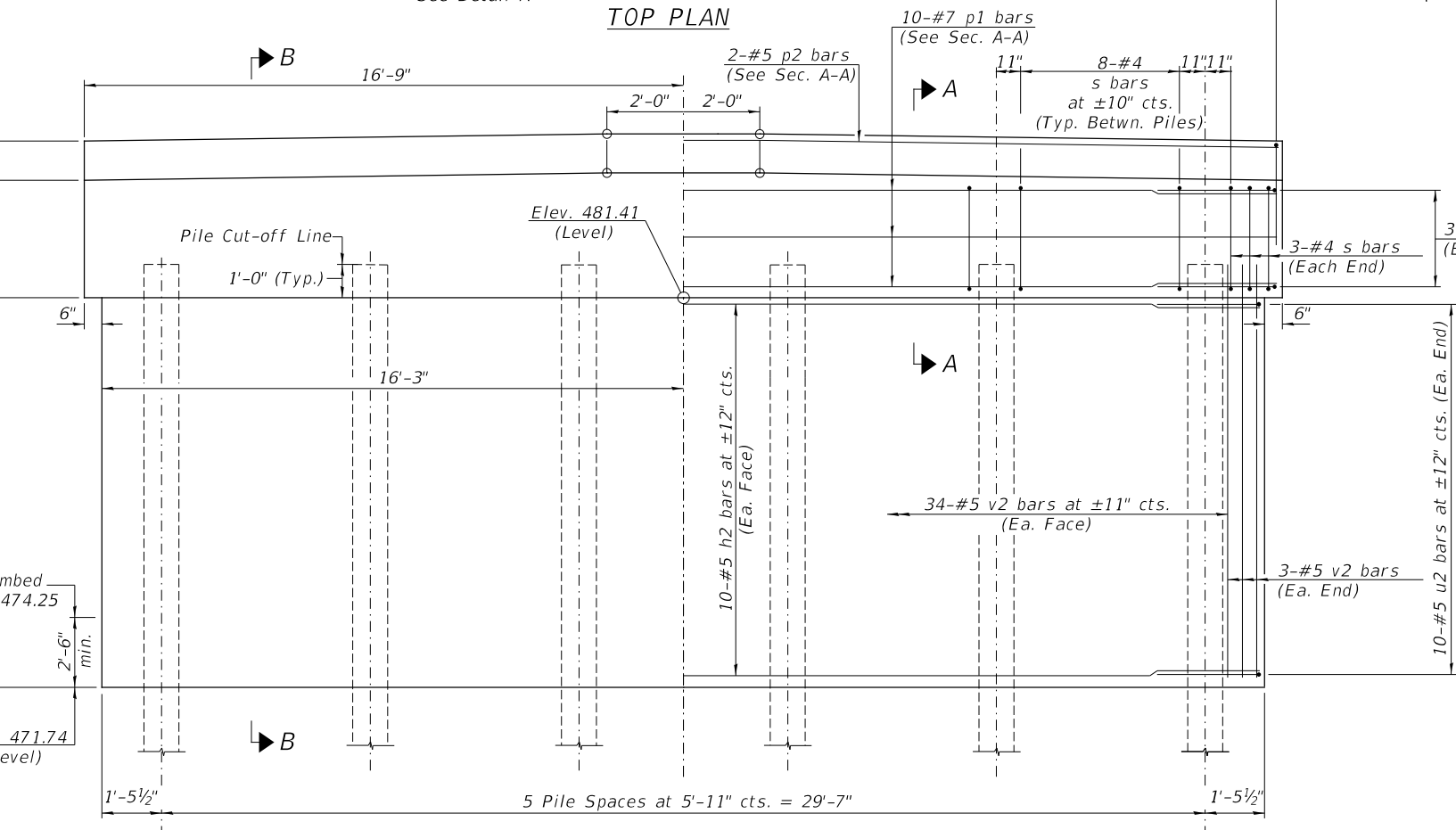
BAR	NO.	SIZE	LENGTH	SHAPE
h2	20	#5	30'-6"	—
p1	10	#7	32'-2"	—
p2	2	#5	32'-2"	—
s	46	#4	10'-5"	□
u1	6	#6	11'-7"	┌
u2	20	#5	8'-2"	┌
u3	34	#4	3'-5"	┌
v2	80	#5	10'-6"	—
Cofferdam Excavation		CU YD	50	
Cofferdam (Type 1) (Location-1)		EACH	1	
Concrete Structures		CU YD	33.8	
Reinforcement Bars		POUND	2,910	
Furnishing Metal Shell Piles 12"x0.250"		FOOT	275	
Driving Piles		FOOT	275	
Test Pile Metal Shells		EACH	1	
Pile Shoes		EACH	6	

TABLE OF ELEVATIONS

LOCATION	DESCRIPTION	ELEVATION
①	Top of Cap	483.99
②	Top of Cap	483.96
③	Top of Cap	484.16
④	Top of Cap	484.14
⑤	Top of Cap	484.15
⑥	Top of Cap	484.14
⑦	Top of Cap	483.91
⑧	Top of Cap	483.92
⑨	Top of Step	484.32
⑩	Top of Step	484.30
⑪	Top of Step	484.49
⑫	Top of Step	484.48
⑬	Top of Step	484.48
⑭	Top of Step	484.47
⑮	Top of Step	484.24
⑯	Top of Step	484.25



SECTION B-B



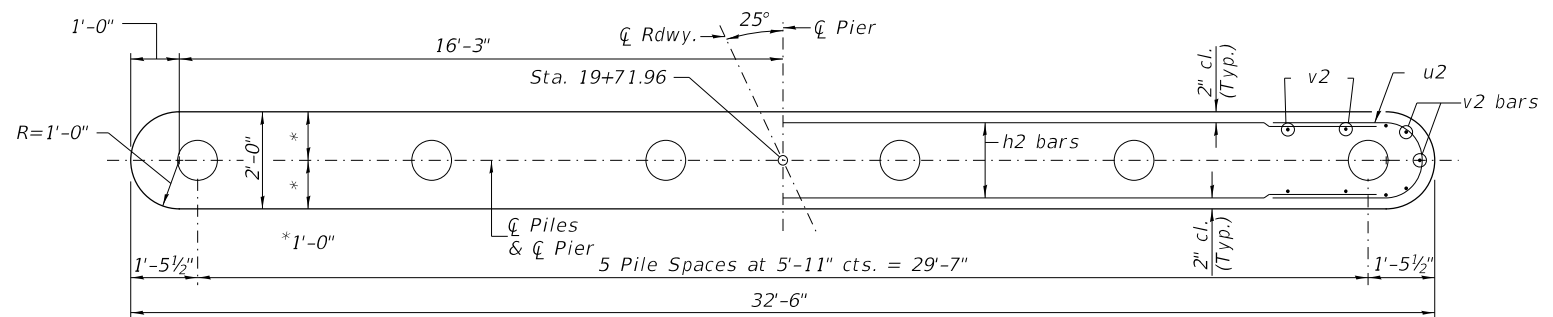
ELEVATION
(Looking South)

NOTES

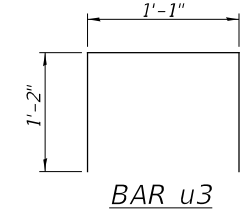
- All edges shall have standard 3/4" chamfer.
- If a portion of the pier wall is underwater, concrete shall be tremied under water into forms according to Article 503.08 of the Standard Specifications. Concrete shall be tremied to an Elevation 1'-0" above the water level at the time of construction.
- The Pier Stem shall be constructed in a single continuous concrete pour.
- See Sheet No. 12 of 12 for Pile Details.

PILE DATA

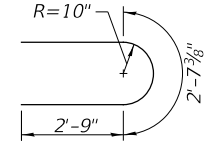
Type & Size: Metal Shell 12" x 0.250" walls w/ pile shoes
 Nominal Required Bearing: 314 kips
 Factored Resistance Available: 172 kips
 Est. Length: 55'
 No. Req'd.: 6 (Includes 1 Test Pile)



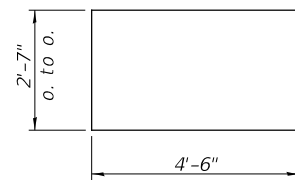
FOOTING PLAN



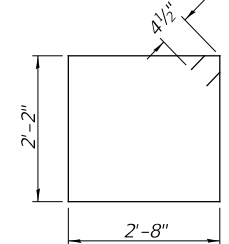
BAR u3



BAR u2



BAR u1



BAR s

MODEL FILE NAME:

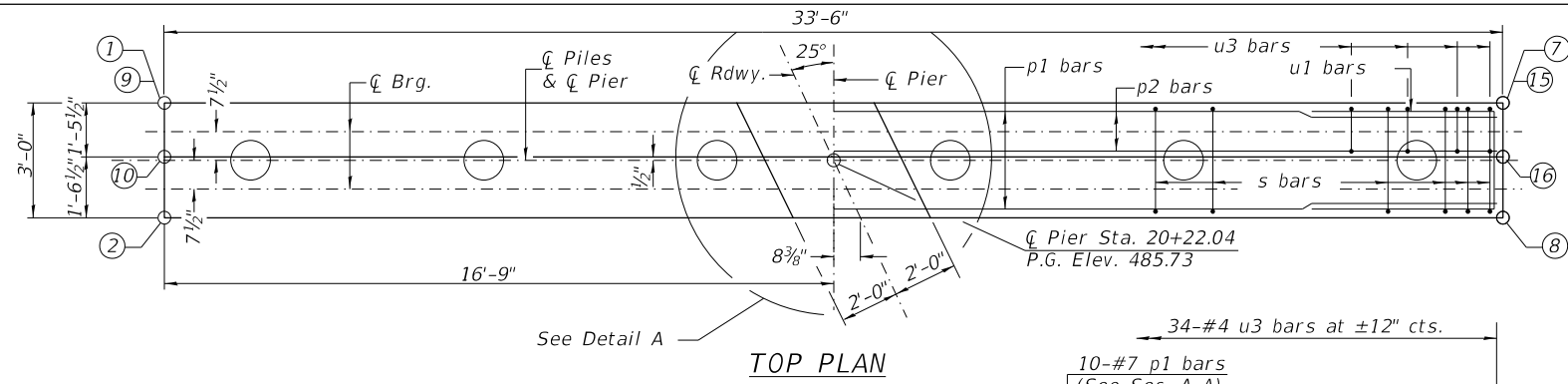
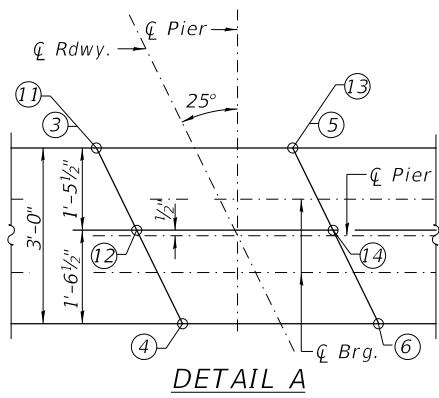
USER NAME = JSavage	DESIGNED - LBK	REVISED - _____
PLOT SCALE = 100.0000' / in.	DRAWN - LBK	REVISED - _____
PLOT DATE = 12/1/2023	CHECKED - JPS/BAN	REVISED - _____
	DATE - 10/17/2023	REVISED - _____

PIKE COUNTY
UNION STREET (MS 6010)
OVER SPRING CREEK

SCALE: NONE SHEET 10 OF 12 SHEETS

PIER 1

RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	16
	SN 075-3331		CONTRACT NO. 93815	
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT NO. F05W(222)	



Hatched Area may be poured after Span 2 P.P.C. Beams set.

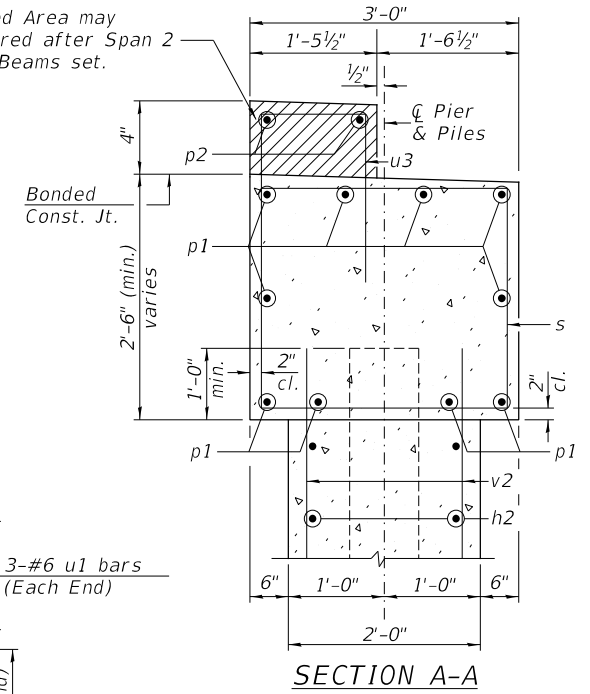
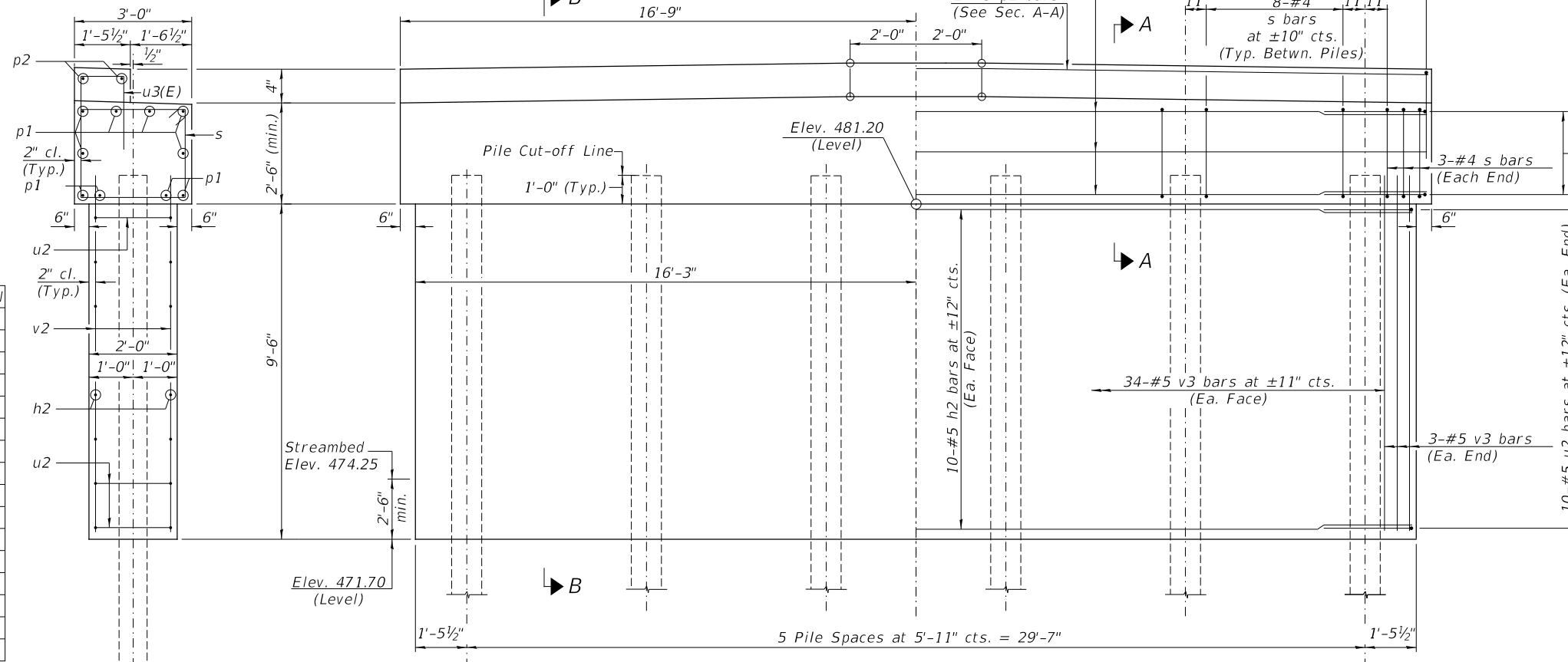


TABLE OF ELEVATIONS

LOCATION	DESCRIPTION	ELEVATION
①	Top of Cap	483.71
②	Top of Cap	483.70
③	Top of Cap	483.93
④	Top of Cap	483.94
⑤	Top of Cap	483.93
⑥	Top of Cap	483.94
⑦	Top of Cap	483.75
⑧	Top of Cap	483.78
⑨	Top of Step	484.04
⑩	Top of Step	484.04
⑪	Top of Step	484.28
⑫	Top of Step	484.26
⑬	Top of Step	484.28
⑭	Top of Step	484.27
⑮	Top of Step	484.08
⑯	Top of Step	484.10



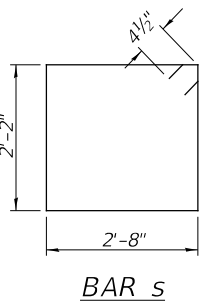
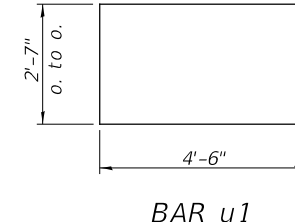
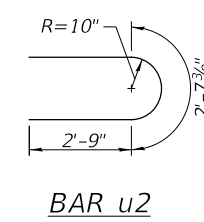
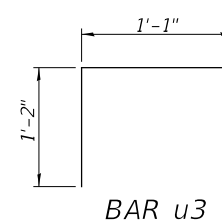
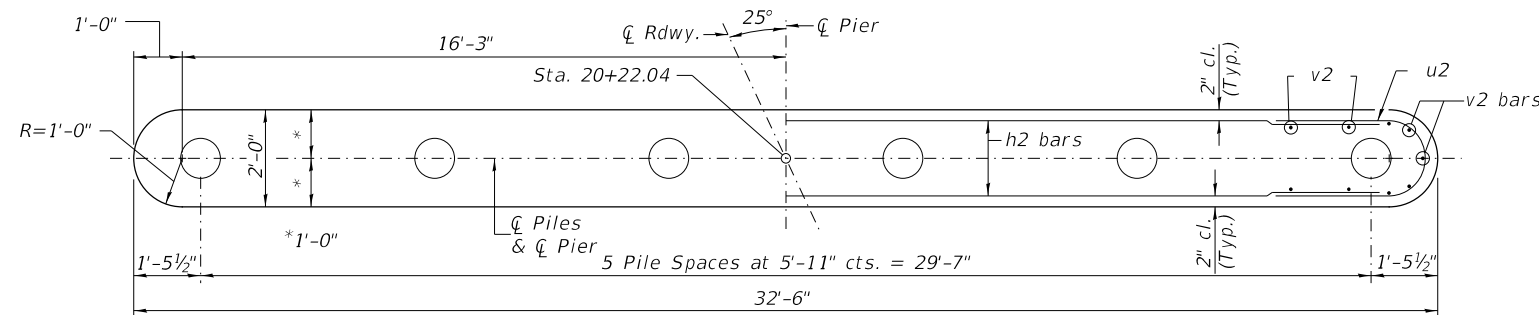
SECTION B-B

NOTES

- All edges shall have standard 3/4" chamfer.
- If a portion of the pier wall is underwater, concrete shall be tremied under water into forms according to Article 503.08 of the Standard Specifications. Concrete shall be tremied to an Elevation 1'-0" above the water level at the time of construction.
- The Pier Stem shall be constructed in a single continuous concrete pour.
- See Sheet No. 12 of 12 for Pile Details.

PILE DATA

Type & Size: Metal Shell 12" x 0.250" walls w/ pile shoes
 Nominal Required Bearing: 314 kips
 Factored Resistance Available: 172 kips
 Est. Length: 55'
 No. Req'd.: 6 (Includes 1 Test Pile)



PIER #2
BILL OF MATERIAL

BAR	NO.	SIZE	LENGTH	SHAPE
h2	20	#5	30'-6"	—
p1	10	#7	32'-2"	—
p2	2	#5	32'-2"	—
s	46	#4	10'-5"	□
u1	6	#6	11'-7"	⊏
u2	20	#5	8'-2"	⊏
u3	34	#4	3'-5"	⊏
v3	80	#5	10'-4"	—
Cofferdam Excavation		CU YD	50	
Cofferdam (Type 1) (Location-2)		EACH	1	
Concrete Structures		CU YD	33.8	
Reinforcement Bars		POUND	2,900	
Furnishing Metal Shell Piles 12"x0.250"		FOOT	275	
Driving Piles		FOOT	275	
Test Pile Metal Shells		EACH	1	
Pile Shoes		EACH	6	

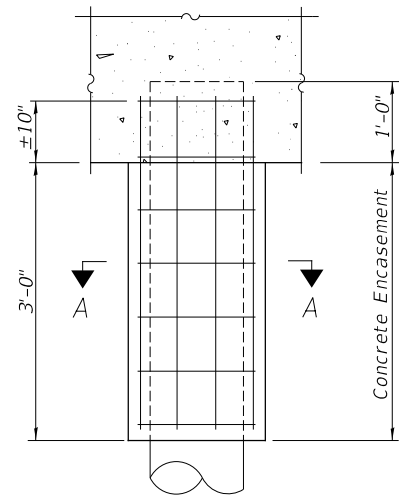
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	DRAWN - LBK	REVISED - _____
PLOT SCALE = 100.0000' / in.	CHECKED - JPS/BAN	REVISED - _____
PLOT DATE = 12/1/2023	DATE - 10/17/2023	REVISED - _____

PIKE COUNTY
UNION STREET (MS 6010)
OVER SPRING CREEK

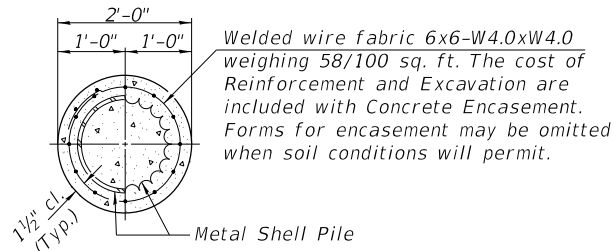
SCALE: NONE	SHEET 11	OF 12 SHEETS
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PIER 2

RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	17
	SN 075-3331		CONTRACT NO. 93815	
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT NO. F05W(222)	

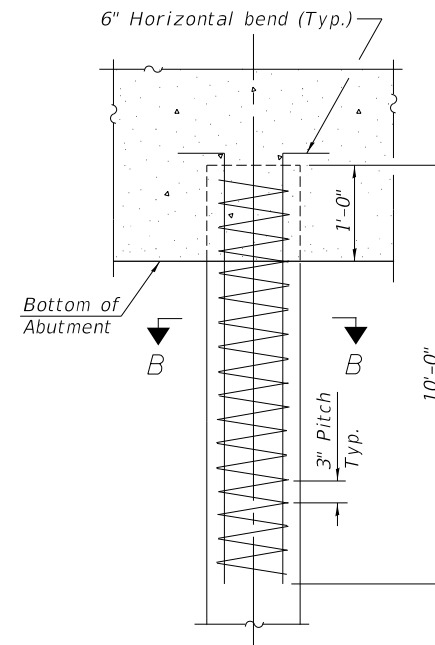


ELEVATION

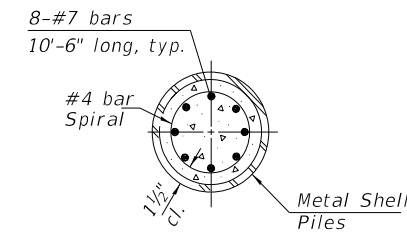


SECTION A-A

DETAIL OF METAL SHELL PILE ENCASEMENT AT ABUTMENTS



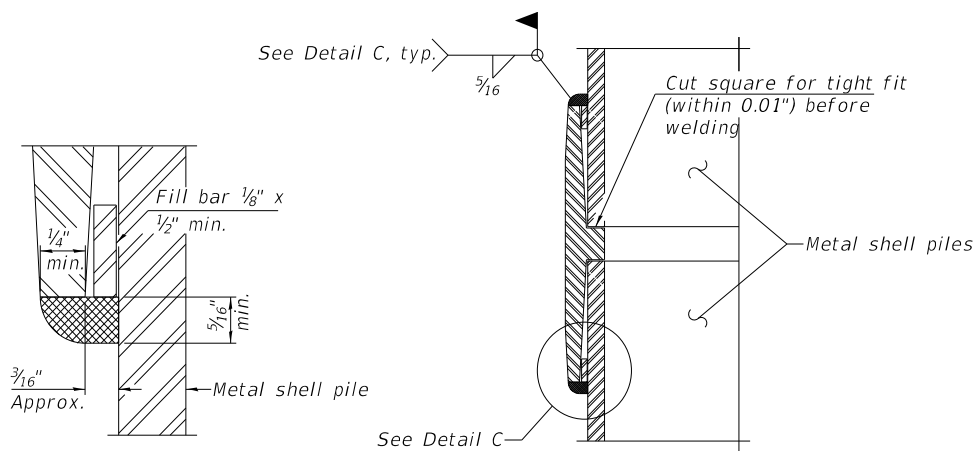
ELEVATION



SECTION B-B

The cost of Reinforcement is included with Furnishing Metal Shell Piles 12"x0.250"

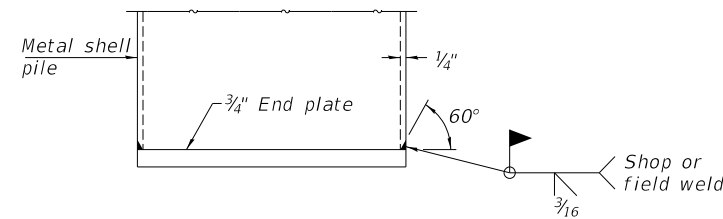
REINFORCEMENT AT ABUTMENTS



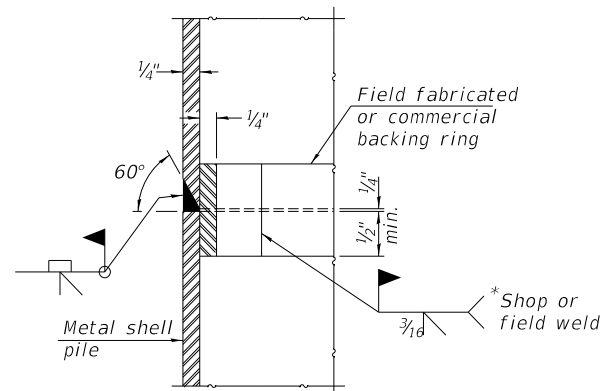
DETAIL C

WELDED COMMERCIAL SPLICE

Notes:
The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.
Pile segments shall be driven to solid contact with splicer before welding.

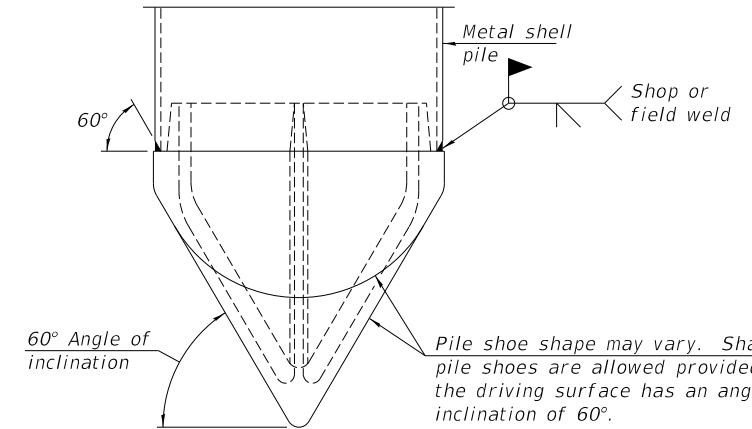


END PLATE ATTACHMENT



COMPLETE PENETRATION WELD SPLICE

* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



PILE SHOE ATTACHMENT

When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 80-50 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld.

Note:
The metal shell piles shall be according to Article 1006.05 of the Standard Specifications.

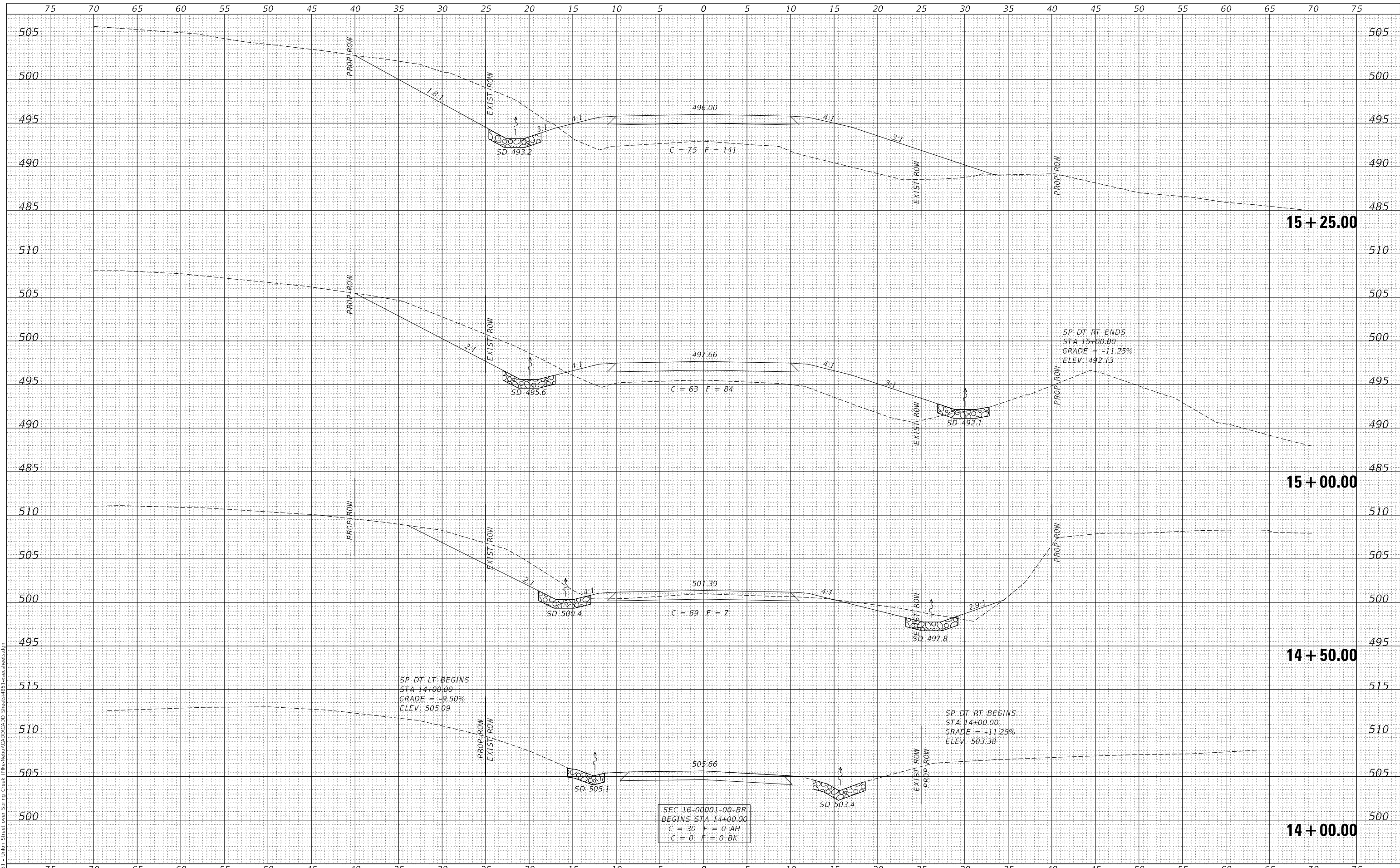
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DRAWN - LBK	REVISED - _____	
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PLOT DATE = 12/1/2023	DATE - 10/11/2023	REVISED - _____

RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	18
	SN 075-3331		CONTRACT NO. 93815	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT NO. F05W(222)		

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED

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	DRAWN - CRN	REVISED - _____
PLOT SCALE = 10.0000' / in.	CHECKED - JPS/BAN	REVISED - _____
PLOT DATE = 12/1/2023	DATE - 10/13/2023	REVISED - _____

**PIKE COUNTY
 UNION STREET (MS 6010)
 OVER SPRING CREEK**

SCALE: 1" = 5'	SHEET 1	OF 8 SHEETS	STA. 14+00.00	TO STA. 15+25.00
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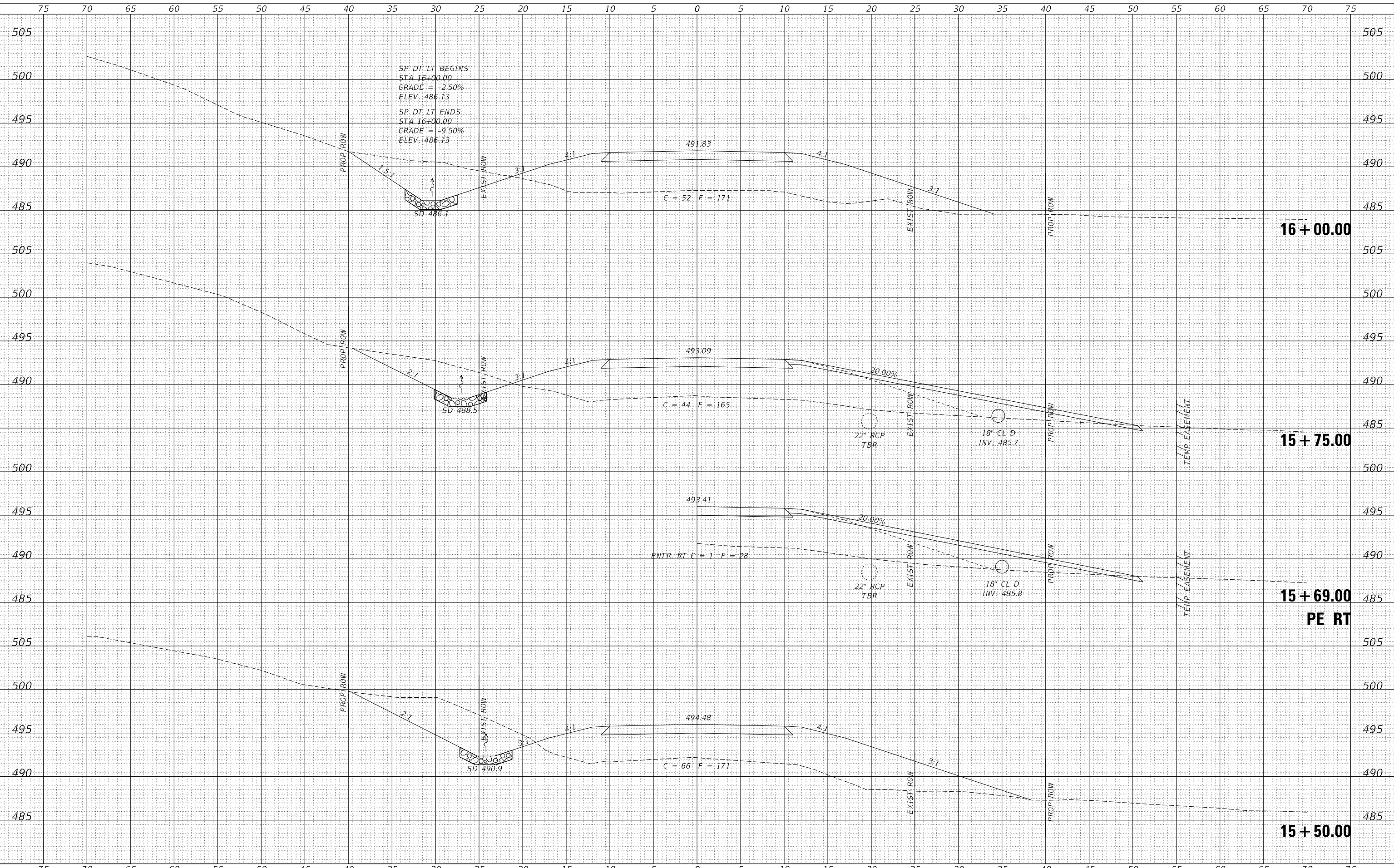
CROSS SECTIONS

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	19
CONTRACT NO. 93815				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT NO. F05W(222)		

DATE	
BY	
FINAL SURVEY NO.	
SURVEYED PLOTTED AREAS CHECKED	
NOTE BOOK NO.	
TEMPLATE AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY NO.	
SURVEYED PLOTTED AREAS CHECKED	
NOTE BOOK NO.	
TEMPLATE AREAS CHECKED	

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SP DT LT BEGINS
 STA 16+00.00
 GRADE = -2.50%
 ELEV. 486.13
 SP DT LT ENDS
 STA 16+00.00
 GRADE = -9.50%
 ELEV. 486.13

SD 486.1

SD 488.5

SD 490.9

**PIKE COUNTY
 UNION STREET (MS 6010)
 OVER SPRING CREEK**

CROSS SECTIONS

USER NAME = JSavage	DESIGNED - CRN	REVISED - _____
	DRAWN - CRN	REVISED - _____
PLOT SCALE = 10.0000' / in.	CHECKED - JPS/BAN	REVISED - _____
PLOT DATE = 12/1/2023	DATE - 10/13/2023	REVISED - _____

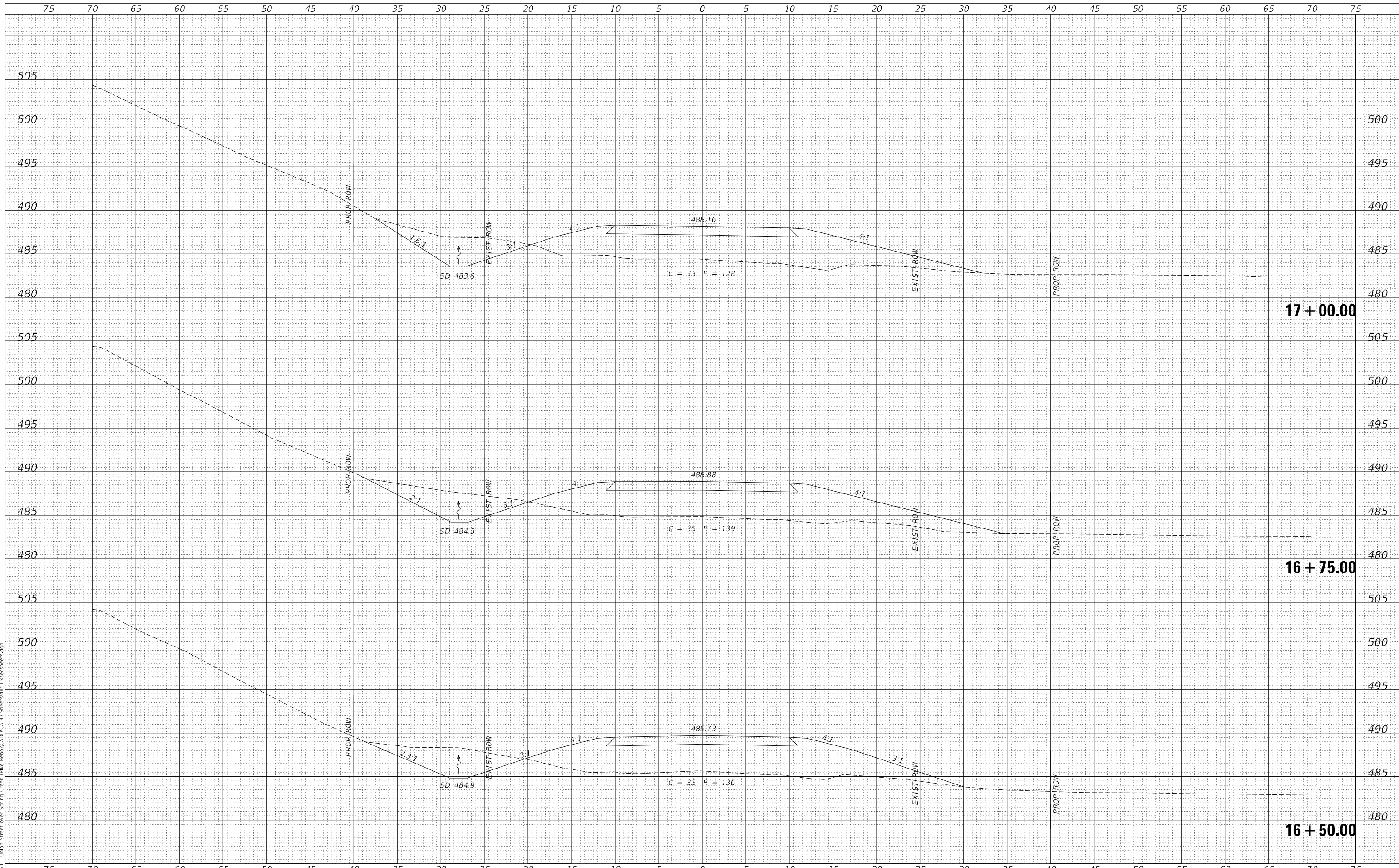
SCALE: 1" = 5' SHEET 2 OF 8 SHEETS STA. 15+50.00 TO STA. 16+00.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	20
CONTRACT NO. 93815				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT NO. F05W(222)		

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
FINAL SURVEY	
NOTE BOOK	
NO.	

DATE	
BY	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	

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USER NAME = JSavage	DESIGNED - CRN	REVISED - _____
	DRAWN - CRN	REVISED - _____
PLOT SCALE = 10.0000' / in.	CHECKED - JPS/BAN	REVISED - _____
PLOT DATE = 12/1/2023	DATE - 10/13/2023	REVISED - _____

**PIKE COUNTY
 UNION STREET (MS 6010)
 OVER SPRING CREEK**

CROSS SECTIONS

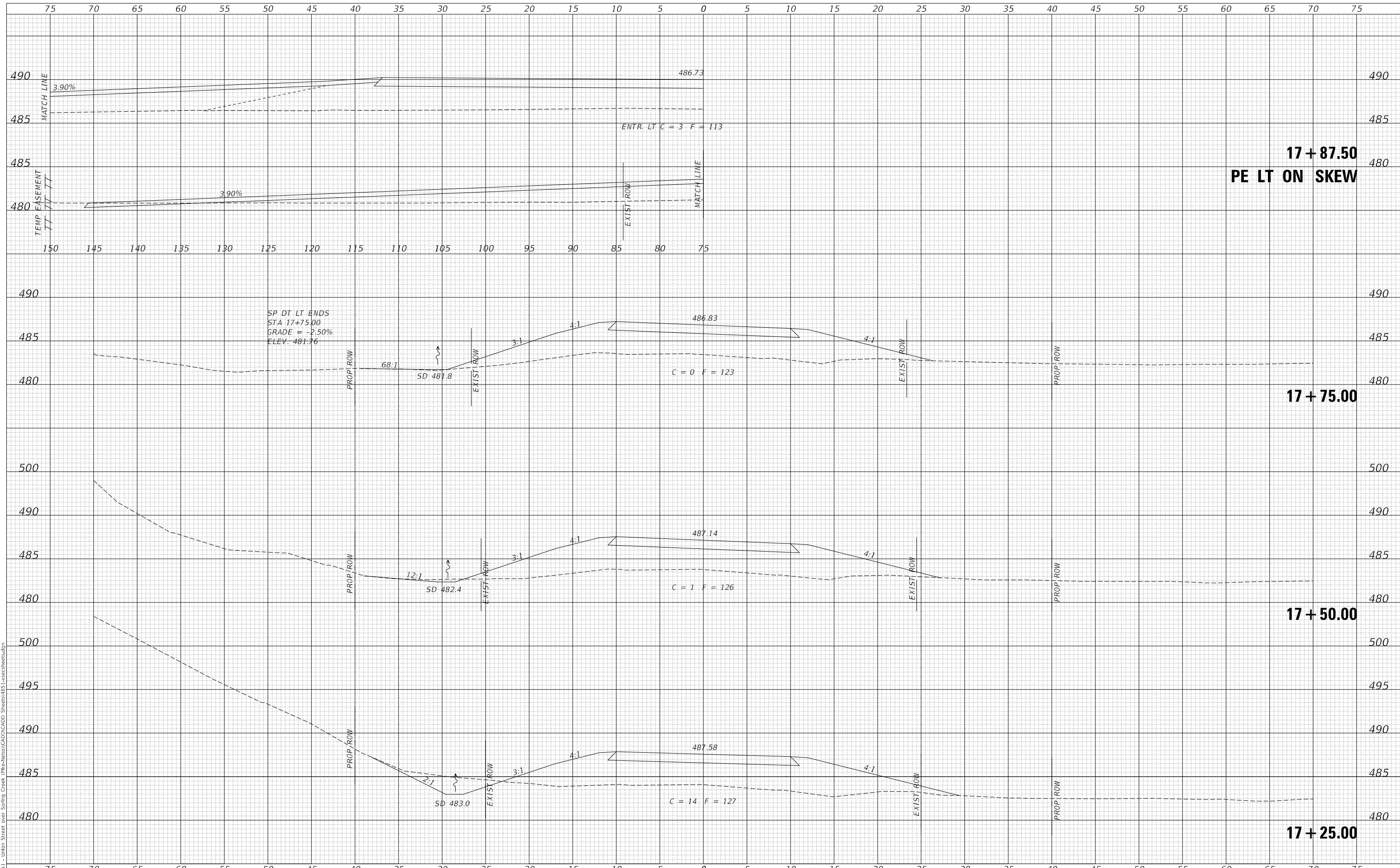
SCALE: 1" = 5' SHEET 3 OF 8 SHEETS STA. 16+50.00 TO STA. 17+00.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	21
CONTRACT NO. 93815				
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT NO. F05W(222)	

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED

MODEL: \$P0DELNAME\$
 FILE NAME: V:\1651 - Union Street over Spring Creek - PIKE-Nebo\CADD\CADD Sheets\1651\crosssections.dgn



USER NAME = JSavage	DESIGNED - CRN	REVISED - _____
	DRAWN - CRN	REVISED - _____
PLOT SCALE = 10.0000' / in.	CHECKED - JPS/BAN	REVISED - _____
PLOT DATE = 12/1/2023	DATE - 10/13/2023	REVISED - _____

**PIKE COUNTY
 UNION STREET (MS 6010)
 OVER SPRING CREEK**

CROSS SECTIONS

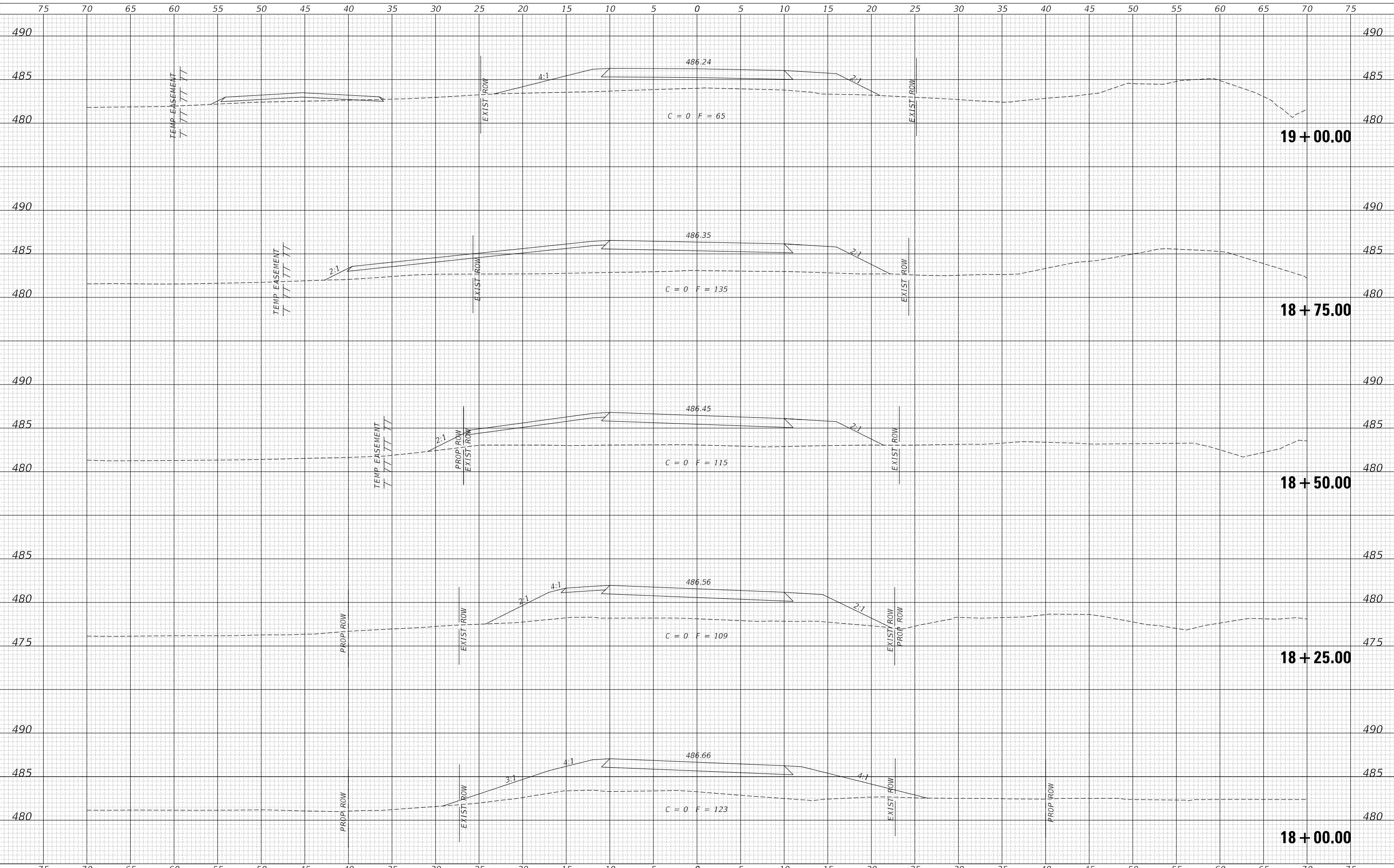
SCALE: 1" = 5' SHEET 4 OF 8 SHEETS STA. 17+25.00 TO STA. 17+87.50

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	22
CONTRACT NO. 93815				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT NO. F05W(222)		

DATE	
BY	
FINAL SURVEY NO.	
SURVEYED PLOTTED AREAS CHECKED	
NOTE BOOK NO.	
TEMPLATE AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY NO.	
SURVEYED PLOTTED AREAS CHECKED	
NOTE BOOK NO.	
TEMPLATE AREAS CHECKED	

MODEL: \$PDM\NAME\$
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USER NAME = JSavage	DESIGNED - CRN	REVISED - _____
	DRAWN - CRN	REVISED - _____
PLOT SCALE = 10.0000' / in.	CHECKED - JPS/BAN	REVISED - _____
PLOT DATE = 12/1/2023	DATE - 10/13/2023	REVISED - _____

**PIKE COUNTY
 UNION STREET (MS 6010)
 OVER SPRING CREEK**

CROSS SECTIONS

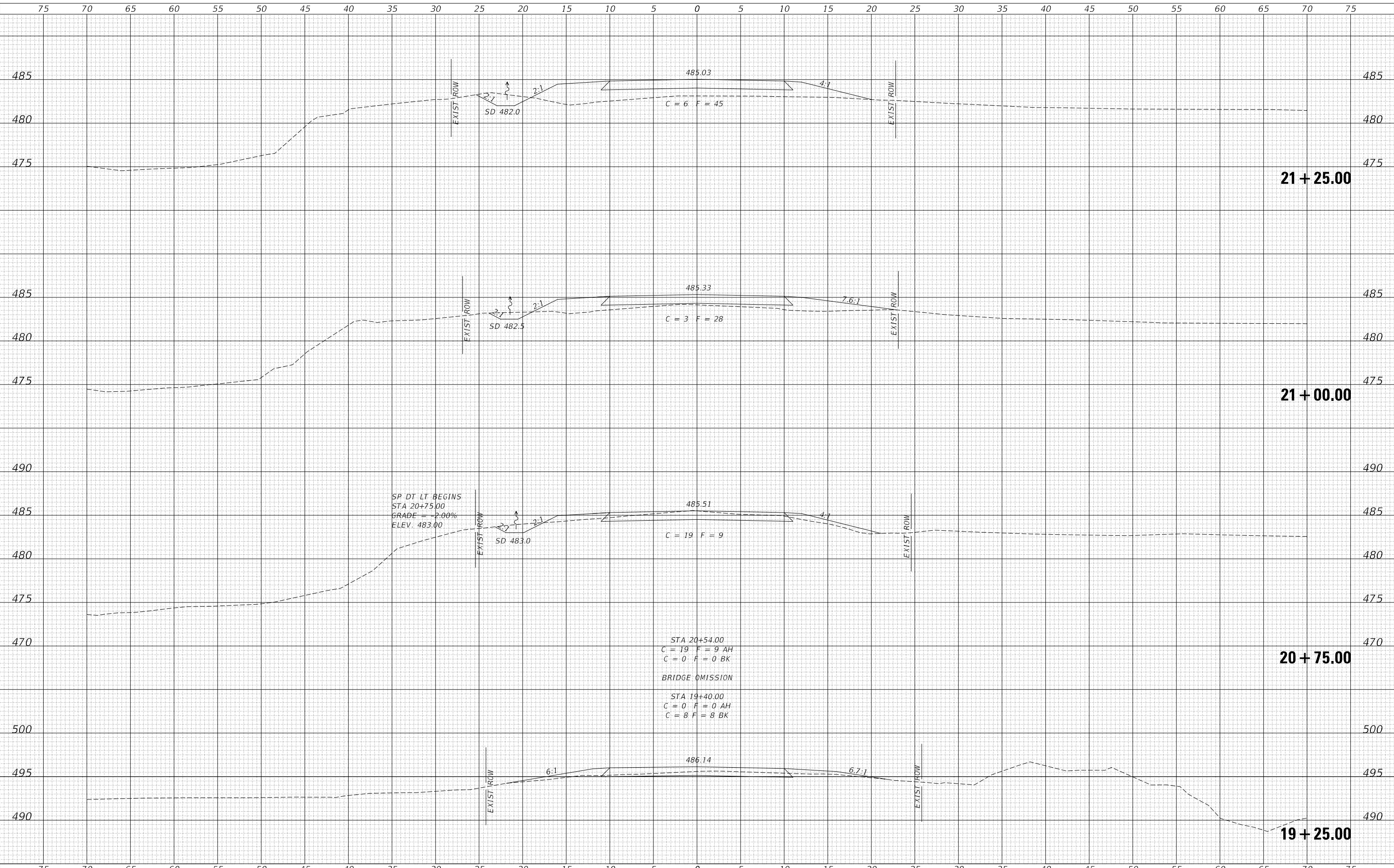
SCALE: 1" = 5' SHEET 5 OF 8 SHEETS STA. 18+00.00 TO STA. 19+00.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	23
CONTRACT NO. 93815				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT NO. F05W(222)		

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED

MODEL: \$P0DELNAME\$
 FILE NAME: V:\051 - Union Street over Spring Creek - PIKE-Nebo\CAD\CADD Sheets\051\crosssections.dgn



USER NAME = JSavage	DESIGNED - CRN	REVISED - _____
	DRAWN - CRN	REVISED - _____
PLOT SCALE = 10.0000' / in.	CHECKED - JPS/BAN	REVISED - _____
PLOT DATE = 12/1/2023	DATE - 10/13/2023	REVISED - _____

**PIKE COUNTY
 UNION STREET (MS 6010)
 OVER SPRING CREEK**

CROSS SECTIONS

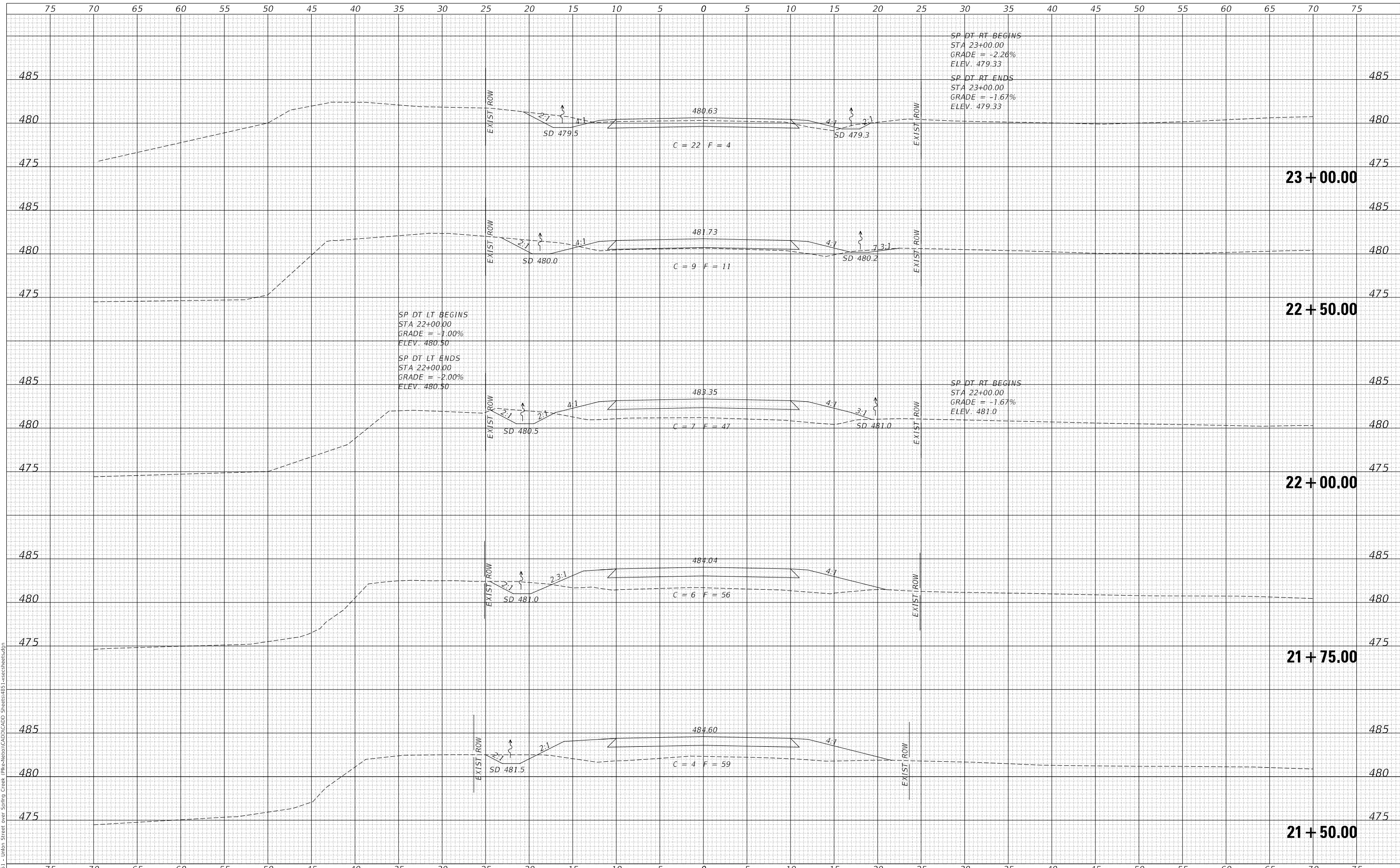
SCALE: 1" = 5' SHEET 6 OF 8 SHEETS STA. 19+25.00 TO STA. 21+25.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	24
CONTRACT NO. 93815				
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT NO. F05W(222)	

DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLOTTED
NO.	TEMPLATE
	AREAS CHECKED
	AREAS CHECKED

MODEL: \$P0DELNAME\$
 FILE NAME: V:\051 - Union Street over Spring Creek - PIKE\Info\CAD\CADD Sheets\051\crosssections.dgn



USER NAME = JSavage	DESIGNED - CRN	REVISED - _____
	DRAWN - CRN	REVISED - _____
PLOT SCALE = 10.0000' / in.	CHECKED - JPS/BAN	REVISED - _____
PLOT DATE = 12/1/2023	DATE - 10/13/2023	REVISED - _____

**PIKE COUNTY
 UNION STREET (MS 6010)
 OVER SPRING CREEK**

CROSS SECTIONS

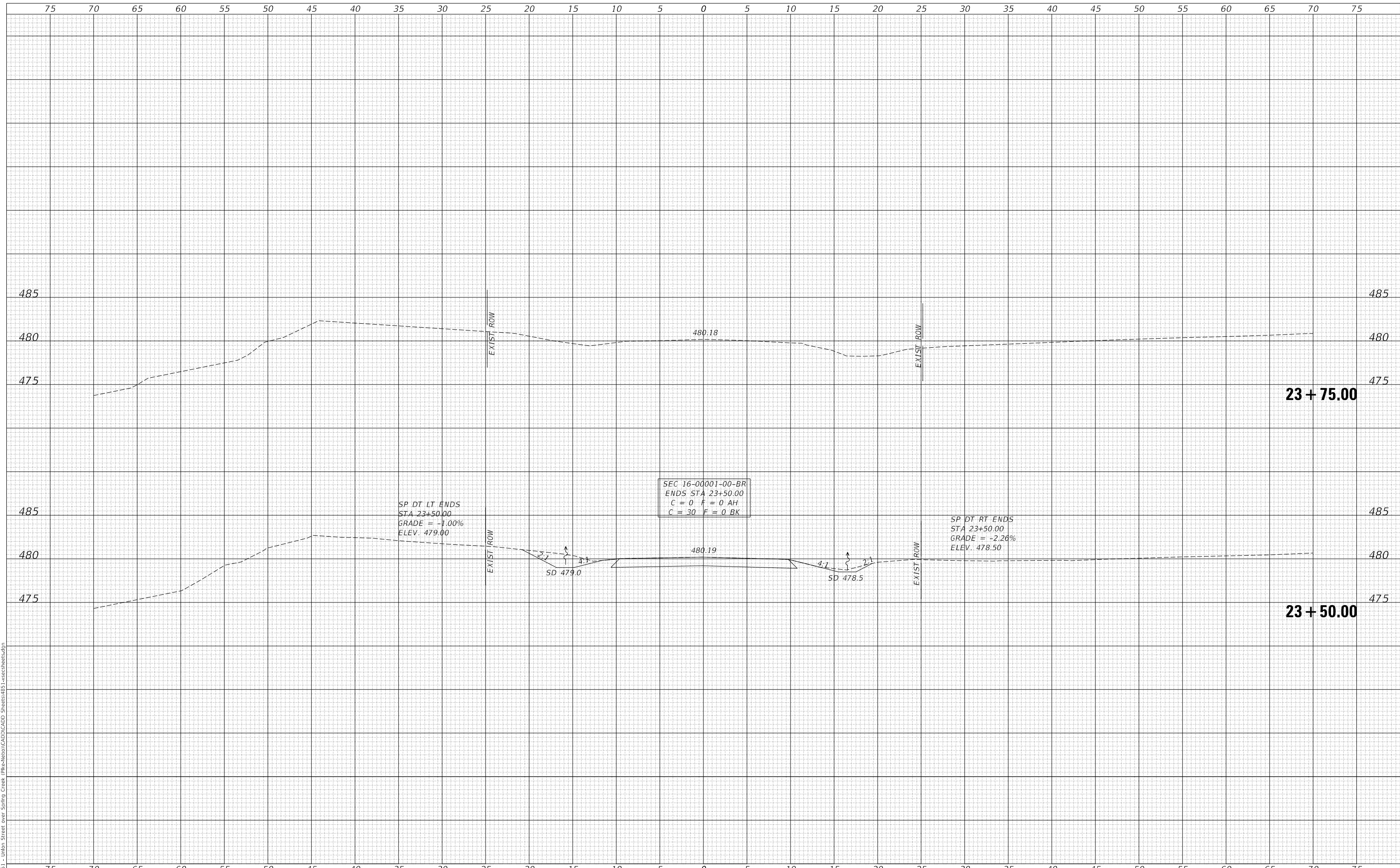
SCALE: 1" = 5'
 SHEET 7 OF 8 SHEETS
 STA. 21+50.00 TO STA. 23+00.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	25
CONTRACT NO. 93815				
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT NO. F05W(222)		

FINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE
NOTE BOOK	TEMPLATE		
	AREAS CHECKED		

ORIGINAL SURVEY NO.	SURVEYED PLOTTED AREAS CHECKED	BY	DATE
NOTE BOOK	TEMPLATE		
	AREAS CHECKED		

MODEL: \$P06L\$MMS
 FILE NAME: V:\1651 - Union Street over Spring Creek (PIKE-Neils)\CAD\CADD Sheets\1651\crosssections.dgn



USER NAME = JSavage	DESIGNED - CRN	REVISED - _____
	DRAWN - CRN	REVISED - _____
PLOT SCALE = 10.0000' / in.	CHECKED - JPS/BAN	REVISED - _____
PLOT DATE = 12/1/2023	DATE - 10/13/2023	REVISED - _____

**PIKE COUNTY
 UNION STREET (MS 6010)
 OVER SPRING CREEK**

CROSS SECTIONS

SCALE: 1" = 5' SHEET 8 OF 8 SHEETS STA. 23+50.00 TO STA. 23+75.00

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
UN. ST.	16-00001-00-BR	PIKE	26	26
CONTRACT NO. 93815				
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT NO. F05W(222)	