

04-24-2020 LETTING ITEM 194

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

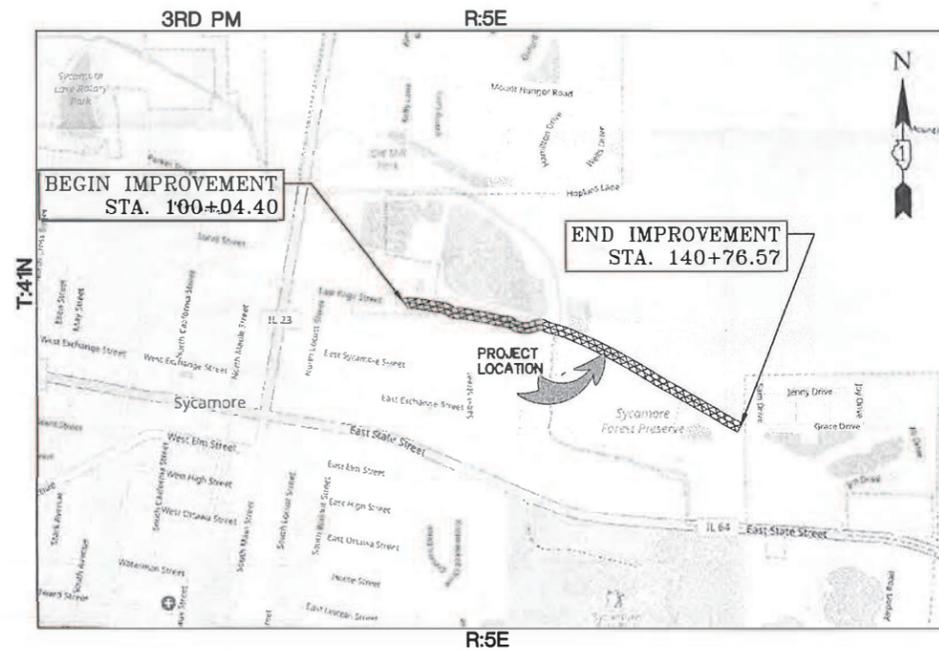
PLANS FOR PROPOSED  
FEDERAL AID HIGHWAY  
GREAT WESTERN TRAIL EXTENSION  
SEGMENT 1  
SYCAMORE FOREST PRESERVE TO OLD MILL PARK  
PROJECT No.: KLJK (070)  
SECTION No.: 18-P4006-01-BT  
JOB No.: C-93-021-19  
SYCAMORE PARK DISTRICT

PROJECT LOCATED IN THE CITY OF SYCAMORE &  
UNINCORPORATED DEKALB COUNTY

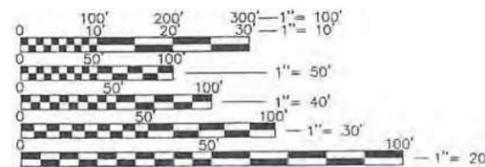
F.A.I.D. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	18-P4006-01-BT	DEKALB	58	I
CONTRACT NO. 87730		ILLINOIS		



LOCATION OF SECTION INDICATED THUS: - - -



LOCATION MAP  
(NOT TO SCALE)



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 MANAGER: JOHN MAYER, PE  
PROJECT ENGINEER: ANDREW KUSTUSCH, PE

CONTRACT NO. 87730

**ENGINEERING RESOURCE ASSOCIATES**  
Professional Design Firm No. 184-001185  
Expires April 30, 2020

35701 WEST AVENUE, SUITE 150  
WARRENVILLE, ILLINOIS 60555  
PHONE (630) 393-3060  
FAX (630) 393-2152

CITY OF SYCAMORE & DEKALB COUNTY  
GROSS LENGTH OF IMPROVEMENT = 4,072.17 LF (0.77 MILES)  
NET LENGTH OF IMPROVEMENT = 4,072.17 LF (0.77 MILES)

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

APPROVED *[Signature]*  
SYCAMORE PARK DISTRICT

PASSED *[Signature]*  
DISTRICT 3 ENGINEER OF LOCAL ROADS & STREETS

*[Signature]*  
NOV 14, 2019  
REGION 2 ENGINEER  
"RELEASING FOR BIDS BASED ON LIMITED REVIEW"



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FEDERAL AID PROGRAM ENGINEER:

18-P4006-01-BT-001 (SHEET 1 OF 58) - 11/17/2019

**GENERAL NOTES**

- BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE"(811) AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOURS NOTIFICATION IS REQUIRED). CONTACT OWNER'S PROJECT MANAGER TO LOCATE PRIVATE UTILITIES WITHIN THE PROJECT AREA, A MINIMUM OF FIVE DAYS IN ADVANCE OF CONSTRUCTION ACTIVITIES.
- ALL WORK SHALL BE IN ACCORDANCE WITH THE IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (LATEST EDITION), THE SYCAMORE, ILLINOIS "CITY CODE," AND THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", (LATEST EDITION). THE EROSION & SEDIMENT CONTROL PRACTICES SHALL BE ACCORDING TO THE ILLINOIS URBAN MANUAL (LATEST EDITION).
- NO WORK SHALL COMMENCE UNTIL TRAFFIC CONTROL REQUIREMENTS ARE MET.
- ALL UTILITIES, SCHOOL DISTRICTS, LOCAL POLICE, AND FIRE DEPARTMENTS SHALL BE NOTIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION.
- UNLESS AUTHORIZED BY THE ENGINEER, ALL EXISTING ACCESS POINTS SHALL BE MAINTAINED AT ALL TIMES BY THE CONTRACTOR.
- DURING THE CONSTRUCTION, THE CONTRACTOR WILL BE REQUIRED, AT HIS EXPENSE, TO HAVE AVAILABLE A WATER TRUCK OR SIMILAR EQUIPMENT TO CONTROL DUST. IF NECESSARY, THE CONTRACTOR SHALL BE REQUIRED TO CONTROL DUST DURING NON-WORKING HOURS. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.
- ALL SOIL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED PRIOR TO UPLAND DISTURBANCE.
- THE CONTRACTOR WILL PERFORM ALL CONSTRUCTION LAYOUT AND AS-BUILT SURVEY.

**TREE REMOVAL & CLEARING**

DUE TO THE POTENTIAL PRESENCE OF THE INDIANA BAT AND THE NORTHERN LONG-EARED BAT WITHIN THE PROJECT AREA, TREES SHALL NOT BE CLEARED FROM APRIL 1 THROUGH SEPTEMBER 30.

TREES NOT MARKED FOR REMOVAL SHALL BE CONSIDERED AS DESIGNATED TO BE SAVED AND SHALL BE PROTECTED.

ALL LIMBS, BRANCHES, AND OTHER DEBRIS RESULTING FROM THIS WORK SHALL BE DISPOSED OF BY THE CONTRACTOR AT HIS OWN EXPENSE OFFSITE.

THE EXACT CLEARING AND GRUBBING LOCATIONS ARE NOT PROVIDED ON THE PLANS. GENERAL LOCATION ARE NOTED. CLEARING AND GRUBBING SHALL NOT BE PAID FOR SEPARATELY.

**TOPSOIL**

IN GENERAL, TOPSOIL SHALL BE PLACED TO A DEPTH OF 6 INCHES. EXISTING TOPSOIL SHALL BE STOCKPILED AND RE-USED ONSITE.

THE CROSS SECTIONS INDICATE THE FINISHED GRADE OF TOPSOIL.

TOPSOIL SHALL NOT BE STOCKPILED WITHIN THE LIMITS OF THE REGULATORY 100-YEAR FLOODPLAIN. NOTE: AS A MAJORITY OF THE PROJECT AREA IS LOCATED WITHIN THE FLOODPLAIN, NO TOPSOIL OR EXCAVATION STOCKPILES SHALL REMAIN ONSITE FOR LONGER THAN 24-HOURS. CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING STOCKPILE LOCATIONS OFFSITE, IF NECESSARY.

**STORM SEWERS, STRUCTURES, & UTILITIES**

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING LOCAL AGENCIES MAINTAINING SANITARY SEWERS, WATERMANS, AND STREET LIGHTS TO VERIFY THE MATERIALS AND METHODS ALLOWED FOR THE ADJUSTMENT OR PROTECTION OF THE UTILITY INVOLVED.

THE LOCATION AND ELEVATION OF EXISTING UTILITIES ARE APPROXIMATE. THE EXACT LOCATIONS AND ELEVATIONS ARE TO BE VERIFIED BY THE CONTRACTOR THROUGH THE OWNER OF THE UTILITY.

ALL FIELD TILES ENCOUNTERED SHALL BE CAREFULLY PRESERVED AND CONNECTED TO PROPOSED DRAINAGE STRUCTURES, SEWERS OR DITCHES AS DIRECTED BY THE ENGINEER; THIS WORK WILL BE PAID AT THE APPLICABLE CONTRACT UNIT PRICE OR IN ACCORDANCE WITH ARTICLE 109.04.

SHOULD THE CONTRACTOR ENCOUNTER ANY DRAIN TILES, THE CONTRACTOR SHALL CONTACT THE OWNER OR ENGINEER IMMEDIATELY. ANY DAMAGES TO TILES SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

**HOT-MIX ASPHALT**

HOT-MIX ASPHALT SURFACE COURSE SHALL NOT BE PLACED UNTIL ALL EARTH EXCAVATION AND AGGREGATE BASE COURSE HAVE BEEN COMPLETED TO THE SATISFACTION OF THE ENGINEER.

**PAVEMENT STRIPING**

ALL PROPOSED SEGMENTS OF THE TRAIL, EXCEPT WHERE NOTED ON THE PLANS, SHALL BE PAINTED WITH A SINGLE SOLID YELLOW PAVEMENT PAINT MARKING, 4" AT THE CENTERLINE OF THE PATH.

**TRENCH BACKFILL**

WHERE TRENCH BACKFILL IS REQUIRED, THE MATERIAL USED SHALL BE COMPACTED AS SPECIFIED IN ARTICLE 550.07 OF THE STANDARD SPECIFICATIONS USING METHOD ONE. THE COST OF TRENCH BACKFILL SHALL NOT BE INCLUDED IN THE COST OF STORM SEWERS (OF THE TYPE AND DIAMETER SPECIFIED).

**PATH EXCAVATION**

THE CONTRACTOR WILL HAVE THE OPTION OF REMOVING THE EXISTING BITUMINOUS MATERIAL BY GRINDING OR EXCAVATING THE MATERIAL. IF THE BITUMINOUS MATERIAL IS REMOVED BY EXCAVATION, IT MAY NOT BE USED IN EMBANKMENT AREAS UNLESS SPECIFICALLY AUTHORIZED BY THE ENGINEER. BITUMINOUS MATERIAL REMOVED BY GRINDING MAY BE USED AS EMBANKMENT MATERIAL OR AS AGGREGATE BASE COURSE IF IT MEETS THE STANDARDS WITHIN THE SPECIAL PROVISIONS. NO BITUMINOUS MATERIAL SHALL BE REMOVED IN AREAS TO BE USED FOR TEMPORARY ACCESS.

THE CONTRACTOR SHALL NOT CROSS COMPLETED BASE COURSE OR EXISTING PAVEMENT, NOT SCHEDULED TO BE REMOVED, WITH ANY TRACKED EQUIPMENT.

ALL EMBANKMENTS AND SUB-GRADE SHALL BE COMPACTED TO THE SATISFACTION OF THE ENGINEER PRIOR TO PLACING AGGREGATE SUBGRADE OR SUBBASE GRANULAR MATERIAL. ALL EMBANKMENT AND SUBGRADE SHOULD BE CONSTRUCTED IN ACCORDANCE WITH SECTION 205 (EMBANKMENT) AND SECTION 300 (SUBGRADES, SUBBASES AND BASE COURSES) OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION AS WELL AS TO THE SATISFACTION OF THE ENGINEER.

THERE MAY BE AREAS INVOLVING DRAINAGE DITCHES, CULVERT ENTRANCES AND EXITS, AND DEPRESSIONAL PONDED AREAS THAT MAY HAVE DEPOSITS OF UNSUITABLE OR UNSTABLE MATERIAL. THESE AREAS MUST BE PUMPED DRY OF ANY WATER AND ALL UNSUITABLE/UNSTABLE MATERIAL REMOVED BEFORE ANY EMBANKMENT MATERIAL IS PLACED.

**LEGEND**

	EXISTING	PROPOSED
CURB & GUTTER	=====	
EDGE OF PAVEMENT	-----	
STORM SEWER	—▷—▷—	—▷—▷—
CHAIN LINK FENCE	—x—x—	—x—x—
PERIMETER EROSION BARRIER		—xx—xx—
TEMPORARY FENCE		—x—x—x—x—
OVERHEAD WIRE	— OH —	
10-YR FLOODPLAIN	— 10YR —	
100-YR FLOODPLAIN	— 100YR —	
FLOODWAY	— FW —	
CONTOUR	— 700 —	— 700 —
MANHOLE	⊙	●
CATCH BASIN	○	●
INLET	□	▷
STEEL END SECTION	▷	▷
CONC END SECTION	▷	▷
HYDRANT	⊕	
HANDHOLE	⊞	
UTILITY PEDESTAL	□ PED	
UTILITY POLE	○	
UTILITY POLE W/STREET LIGHT	○	
STREET LIGHT	○	○
STREET LIGHT CONTROLLER	⊞	
SIGN	⊞	⊞
TREE REMOVAL		⊞
TREE(DECIDUOUS)	⊞	
STONE RIPRAP		⊞
STABILIZED CONSTRUCTION ENTRANCE		⊞
WETLAND	⊞	
ASPHALT TRAIL		⊞
PAVEMENT REMOVAL		⊞
PERMANENT EASEMENT		⊞
CONSTRUCTION LIMITS		⊞

**INDEX OF SHEETS**

SHEET NO.	SHEET DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES, INDEX OF SHEETS, LEGEND, & HIGHWAY STANDARDS
3	SUMMARY OF QUANTITIES
4	TYPICAL SECTIONS
5	SHEET KEY PLAN
6-7	ALIGNMENT & TIES
8-11	DEMOLITION PLAN
12-20	PLAN & PROFILES
21-24	LANDSCAPE PLAN AND EROSION CONTROL PLAN
25	STRIPING, BOLLARDS, AND SIGNAGE PLAN
26	CONSTRUCTION DETAILS
27-28	EROSION CONTROL NOTES & DETAILS
29-49	STRUCTURAL DETAILS
50-58	CROSS SECTIONS

**IDOT HIGHWAY STANDARDS**

000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
602001-02	CATCH BASIN, TYPE A
602011-02	CATCH BASIN TYPE C
602401-06	PRECAST MANHOLE TYPE A
602701-02	MANHOLE STEPS
604001-05	FRAME AND LIDS TYPE 1
604036-03	GRATE TYPE 8
664001-02	CHAIN LINK FENCE
701001-02	OFF-ROAD OPERATIONS: 2L, 2W, MORE THAN 15 FT. AWAY
701006-05	OFF-ROAD OPERATIONS: 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701501-06	LANE CLOSURE, 2L, 2W, UNDIVIDED
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)

	HMA Surface
PG Grade	PG 64-22
Design Air	4.0% @ NSD
Voids	NSD
Mixture Composition	IL 9.5
Friction Aggregate	Mixture C
Density Test Method	LR 1030
Mixture Weight	112# / Sq. Yd. / in.
Quality Management Program	QC/QA
Sublot Size	N/A
Location(s)	Entire Project

**SITE BENCHMARKS:**

- BM #1 SET "PK" NAIL IN EXISTING PAVEMENT S.W. CORNER PLEASANT ST. AND EAST PAGE ST. STA. 99+79.48, 16.37'LT. ELEV: 833.32 (NAVD 88)
- BM #2 CUT SQUARE ON OLD BRIDGE PIER STA. 118+47.55, 0.60'RT. ELEV: 831.17 (NAVD 88)
- BM #3 SET "PK" NAIL IN EXISTING PAVEMENT STA. 140+81.18, 11.31'RT. ELEV: 838.66 (NAVD 88)
- BM #4 SET "PK" NAIL STA. 106+77.18, 33.76'RT. (CONTROL POINT #47) ELEV: 831.90 (NAVD 88)
- BM #5 SET "PK" NAIL STA. 117+65.06, 114.43'RT, (CONTROL POINT #84) ELEV: 827.54 (NAVD 88)
- BM #6 SET "PK" NAIL STA. 123+89.08, 10.87'LT. (CONTROL POINT #76) ELEV: 835.89 (NAVD 88)
- BM #7 SET "PK" NAIL STA. 130+00.51, 7.53'LT. (CONTROL POINT #71) ELEV: 836.78 (NAVD 88)
- BM #8 SET "PK" NAIL STA. 133+27.69, 1.07'RT. (CONTROL POINT#67) ELEV: 836.85 (NAVD 88)

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS, LEGEND  
AND HIGHWAY STANDARDS

SCALE: N.T.S. SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
—	18-P4006-01-BT	DEKALB	58	2
FED. ROAD DIST. NO. — ILLINOIS			CONTRACT NO. 87730	
			FED. AID PROJECT —	

\Veritas\1\1-draw\Systeme\PerDistrict\1160910\_00\_GreatWesternTrail\Extension\160910\_P2\_Phase II\_Engineering\CAD\160910\_P2\_General\_Notes & Details.dwg Updated by: azielinski 11/18/2019



USER NAME = azielinski	DESIGNED — AK	REVISED —
	DRAWN — RT	REVISED —
PLOT SCALE = \$SCALE\$	CHECKED — JM	REVISED —
PLOT DATE = 11/18/2019	DATE — July, 2019	REVISED —

# SUMMARY OF QUANTITIES

SPECIALTY ITEM	SPECIAL PROVISIONS	CODE NUMBER	ITEM	UNIT OF MEASURE	QUANTITY	Construction Code 0028 Federal 80%/Local 20%
	X	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	3,130	3,130
	X	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNT	505	505
		20101000	TEMPORARY FENCE	FOOT	445	445
*		20101350	TREE PRUNING (OVER 10 INCH DIAMETER)	EACH	150	150
	X	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	310	310
		21001000	GEO TECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	930	930
	X	21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	6,200	6,200
*		25000115	SEEDING, CLASS 1B	ACRE	0.50	0.50
*		25000200	SEEDING, CLASS 2	ACRE	0.50	0.50
*		25000312	SEEDING, CLASS 4A	ACRE	4.00	4.00
*		25000314	SEEDING, CLASS 4B	ACRE	0.50	0.50
*		25100630	EROSION CONTROL BLANKET	SQ YD	25,250	25,250
		28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	550	550
		28000400	PERIMETER EROSION BARRIER	FOOT	1,200	1,200
		28000500	INLET AND PIPE PROTECTION	EACH	6	6
		28100105	STONE RIPRAP, CLASS A3	SQ YD	16	16
		28100107	STONE RIPRAP, CLASS A4	SQ YD	112	112
		28200200	FILTER FABRIC	SQ YD	128	128
	X	30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	930	930
		35102000	AGGREGATE BASE COURSE, TYPE B 8"	SQ YD	5,295	5,295
		40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	8,080	8,080
	X	40604050	HOT-MX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	TON	690	690
	X	44000100	PAVEMENT REMOVAL	SQ YD	1,690	1,690
		50200100	STRUCTURE EXCAVATION	CU YD	59	59
		50300225	CONCRETE STRUCTURES	CU YD	22	22
		50300300	PROTECTIVE COAT	SQ YD	415	415
		50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	29	29
		50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	9,950	9,950
		51100300	SLOPE WALL 6 INCH	SQ YD	21	21
		51200959	FURNISHING METAL SHELL PILES 14" X 0.312"	FOOT	240	240
		51202305	DRIVING PILES	FOOT	240	240
		51203200	TEST PILE METAL SHELLS	EACH	2	2
		54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	2	2
		550B0050	STORM SEWERS, CLASS B, TYPE 1 12"	FOOT	282	282

SPECIALTY ITEM	SPECIAL PROVISIONS	CODE NUMBER	ITEM	UNIT OF MEASURE	QUANTITY	Construction Code 0028 Federal 80%/Local 20%
		550B0090	STORM SEWERS, CLASS B, TYPE 1 18"	FOOT	14	14
		58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	56	56
		58700300	CONCRETE SEALER	SQ FT	118	118
		59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	63	63
		60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	4	4
		60200105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1	1
		60207605	CATCH BASINS, TYPE C, TYPE 8 GRATE	EACH	3	3
		60220200	MANHOLES, TYPE A, 4'-DIAMETER	EACH	1	1
		60255800	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	1	1
*		66400205	CHAIN LINK FENCE, 5'	FOOT	650	650
*		66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	530	530
*		68900530	SOIL DISPOSAL ANALYSIS	EACH	2	2
		67100100	MOBILIZATION	L SUM	1	1
		70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	LSUM	1	1
		70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	1	1
*		72000100	SIGN PANEL - TYPE 1	SQFT	24	24
*		72900100	METAL POST - TYPE A	FOOT	80	80
*		78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	3,660	3,660
*		78001150	PAINT PAVEMENT MARKING - LINE 12"	FOOT	10	10
	X	Z0004002	BOLLARDS	EACH	2	2
	X	Z0013797	STABILIZED CONSTRUCTION ENTRANCE	SQ YD	232	232
	X	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES, 4"	FOOT	171	171
#	X	Z0076604	TRAINEES	HOURS	1000	1000
#	X	Z0076604	TRAINEES TPG	HOURS	1000	1000
*	X	Z0077900	WOOD POST AND RAIL FENCE	FOOT	40	40
	X	X0320050	CONSTRUCTION LAYOUT (SPECIAL)	L SUM	1	1
	X	X0322508	PEDESTRIAN TRUSS SUPERSTRUCTURE	SQ FT	2410	2410
	X	X0325110	BIAXIAL GEOGRID	SQ YD	930	930
	X	X0350805	FOLD DOWN BOLLARDS	EACH	1	1
	X	X2020410	EARTH EXCAVATION, SPECIAL	CU YD	2,300	2,300
*	X	X5091730	BRIDGE FENCE RAILING SPECIAL	FOOT	400	400
	X	X8640302	CHAIN LINK FENCE REMOVAL (Special)	FOOT	365	365
	X	XX008287	BOARDWALK STRUCTURE	SQ FT	1320	1320
	X	XX009348	TIMBER STRINGER RECREATION BRIDGE, LOCATION 1	SQ FT	416	416
	X	XX009349	TIMBER STRINGER RECREATION BRIDGE, LOCATION 2	SQ FT	240	240

# 0042

\\92.168.1.106\_H\_drive\SycamorePark\District\160910.00 GreatWesternTrailExtension\160910.P2 Phase II Engineering\CAD\160910.P2 General Notes & Details.dwg Updated by: okustusch 3/17/2020



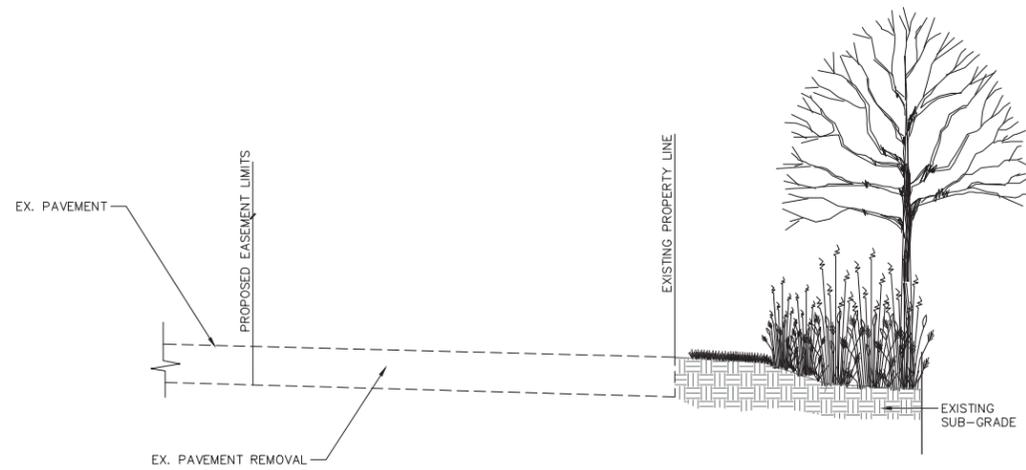
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	DATE - 11/08/19	REVISED - ---

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

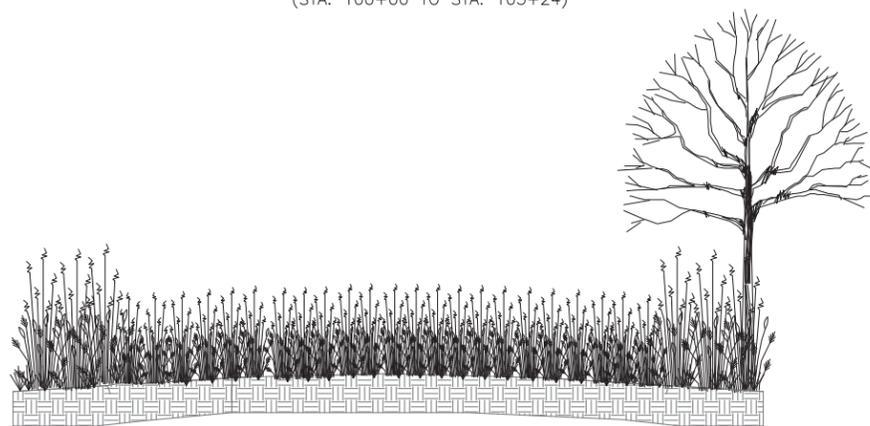
## SUMMARY OF QUANTITIES

SCALE: N.T.S.      SHEET NO. 1 OF 1 SHEETS      STA. TO STA.

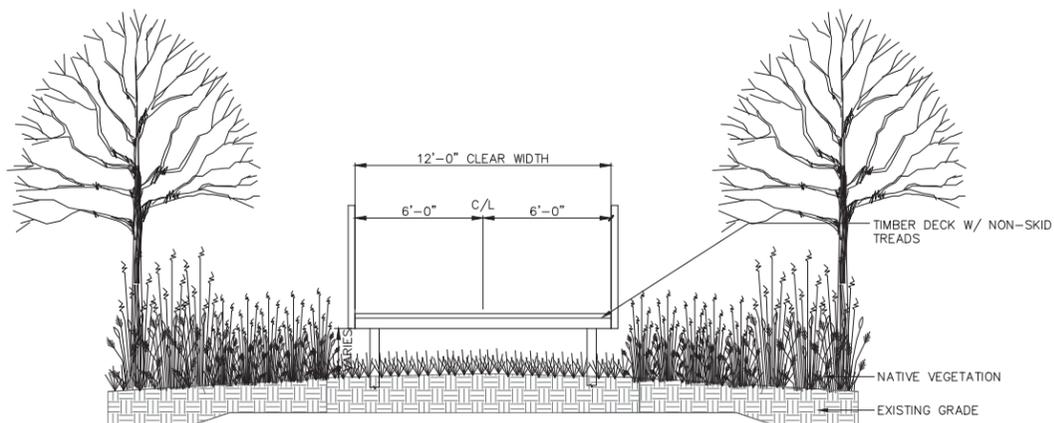
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	18-P4006-OI-BT	DEKALB	53	3
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT			CONTRACT NO. 87730	



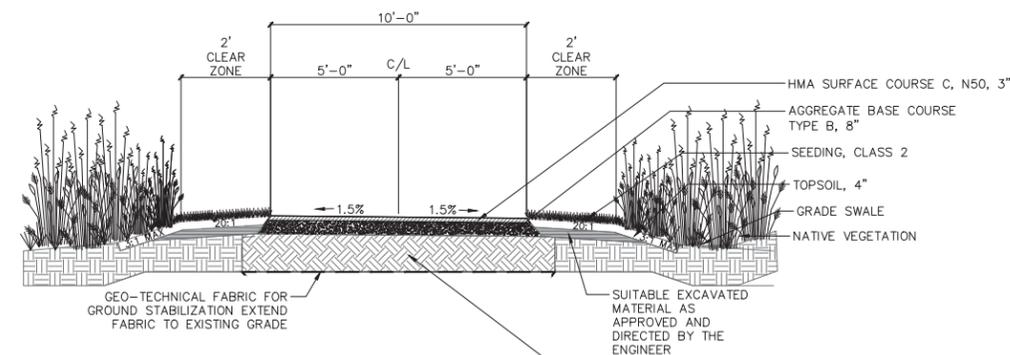
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N.T.S.  
(STA. 100+00 TO STA. 105+24)



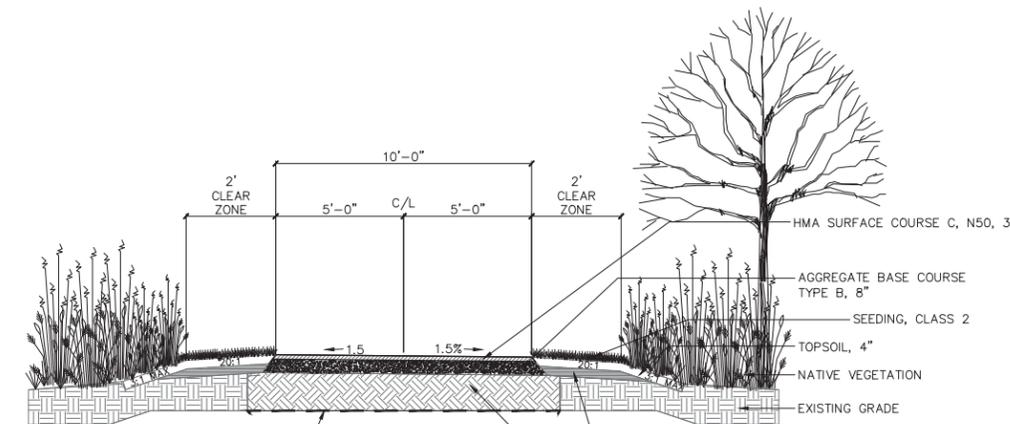
EXISTING TYPICAL SECTION  
N.T.S.  
(STA. 105+24 TO STA. 116+78)  
(STA. 118+82 TO STA. 140+73)



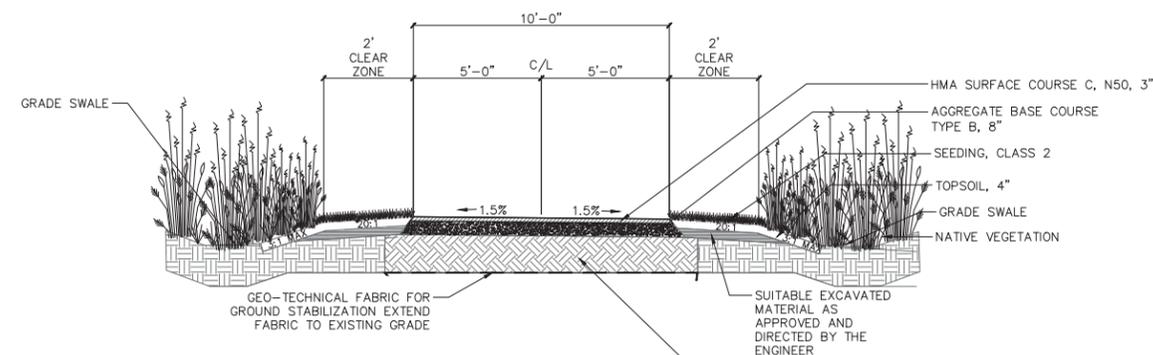
PROPOSED BOARDWALK  
TYPICAL SECTION (12')  
N.T.S.  
(STA. 112+22 TO STA. 112+42)  
(STA. 112+72 TO STA. 112+92)  
(STA. 114+37 TO STA. 115+27)



PROPOSED ASPHALT TRAIL  
TYPICAL SECTION (10')  
N.T.S.  
(STA. 101+50 TO STA. 107+50)  
(STA. 115+27 TO STA. 116+00)



PROPOSED ASPHALT TRAIL  
TYPICAL SECTION (10')  
N.T.S.  
(STA. 116+00 TO STA. 116+78)  
(STA. 118+82 TO STA. 138+50)  
(STA. 140+25 TO STA. 140+73)



PROPOSED ASPHALT TRAIL  
TYPICAL SECTION (10')  
N.T.S.  
(STA. 100+00 TO STA. 101+50)  
(STA. 107+50 TO STA. 112+22)  
(STA. 112+92 TO STA. 114+37)  
(STA. 138+50 TO STA. 140+23)

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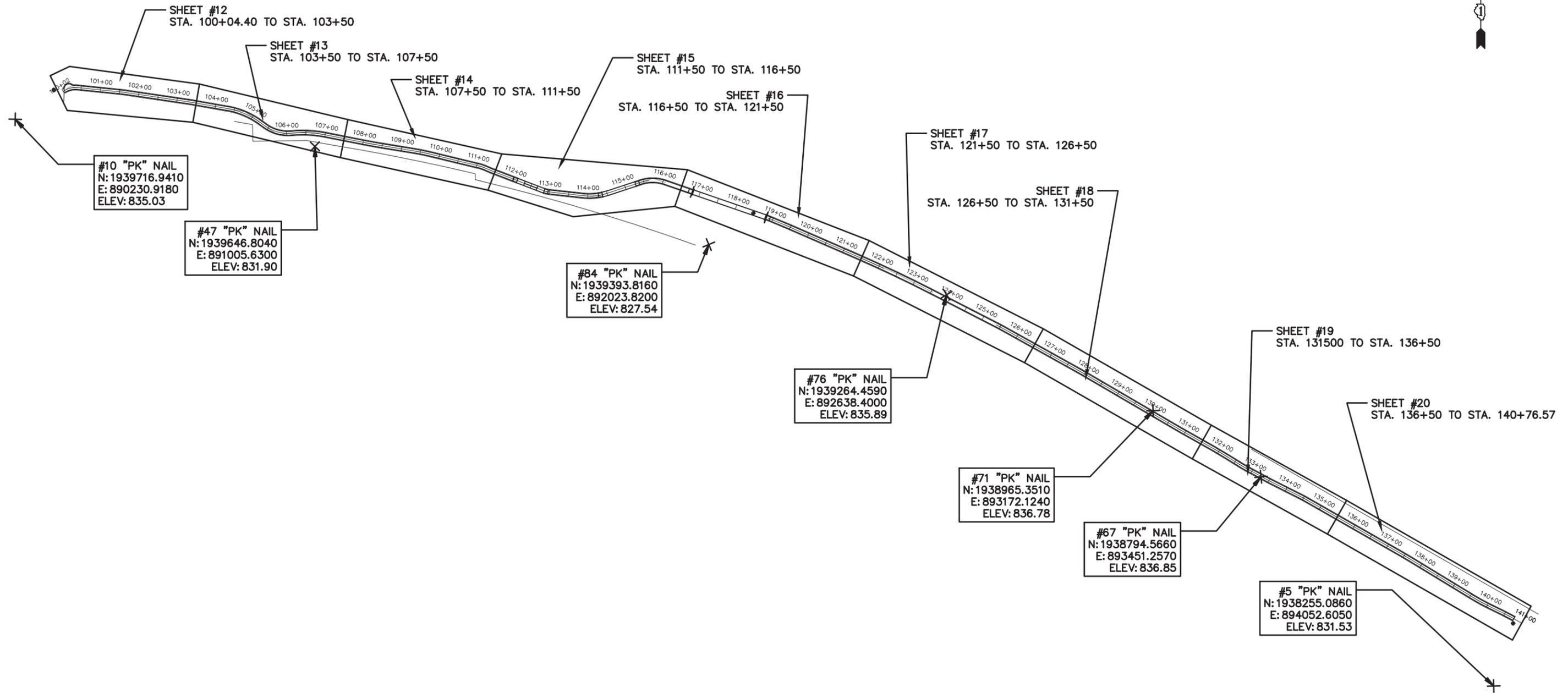
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PLOT SCALE = \$SCALE\$	CHECKED -- AK	REVISED --
PLOT DATE = 11/18/2019	DATE -- April, 2019	REVISED --

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION  
TYPICAL SECTIONS

SCALE: N.T.S. SHEET NO. 1 OF 1 SHEETS STA. 100+00 TO STA. 140+98.10

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
--	18-P4006-01-BT	DeKalb	58	4
FED. ROAD DIST. NO. -- ILLINOIS			CONTRACT NO. 87730	
FED. AID PROJECT				



USER NAME = oziefinski	DESIGNED — AK	REVISED —
	DRAWN — RT	REVISED —
PLOT SCALE = \$SCALE\$	CHECKED — JM	REVISED —
PLOT DATE = 11/18/2019	DATE — July, 2019	REVISED —

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SHEET KEY PLAN

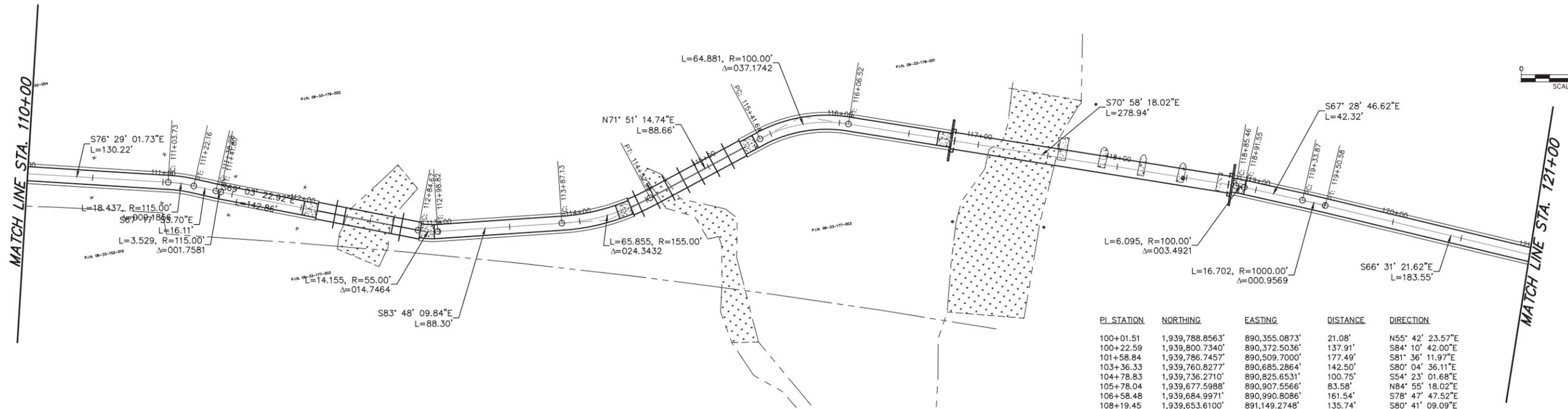
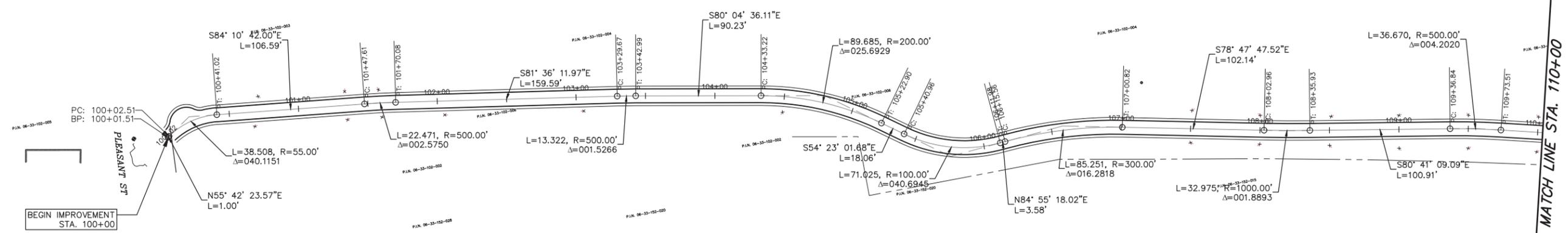
SCALE: N.T.S. SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
—	18-P4006-01-BT	DEKALB	58	5
FED. ROAD DIST. NO. — ILLINOIS			CONTRACT NO. 87730	
			FED. AID PROJECT —	

PLAN	SURVEYED	BY	DATE
	NOTE BOOK		
	ALIGNED		
	RT. OF WAY CHECKED		
	NO.		
	FILE NAME		

PROFILE	SURVEYED	BY	DATE
	B.M. NOTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NO.		
	FILE NAME		

FILE NAME: \\server1\l...  
 COUNTY: DEKALB  
 PROJECT: GREAT WESTERN TRAIL EXTENSION  
 SHEET: 58 OF 60



PL STATION	NORTHING	EASTING	DISTANCE	DIRECTION
100+01.51	1,939,788.8563'	890,355.0873'	21.08'	N55° 42' 23.57"E
100+22.59	1,939,800.7340'	890,372.5036'	137.91'	S84° 10' 42.00"E
101+58.84	1,939,786.7457'	890,509.7000'	177.49'	S81° 36' 11.97"E
103+36.33	1,939,760.8277'	890,685.2864'	142.50'	S80° 04' 36.11"E
104+78.83	1,939,736.2710'	890,825.6531'	100.75'	S54° 23' 01.68"E
105+78.04	1,939,677.5988'	890,907.5566'	83.58'	N84° 55' 18.02"E
106+58.48	1,939,684.9971'	890,990.8086'	161.54'	S78° 47' 47.52"E
108+19.45	1,939,653.6100'	891,149.2748'	135.74'	S80° 41' 09.09"E
109+55.19	1,939,631.6404'	891,283.2274'	157.80'	S76° 29' 01.73"E
111+12.97	1,939,594.7600'	891,436.6544'	27.11'	S67° 17' 53.70"E
111+40.04	1,939,584.2959'	891,461.6677'	151.75'	S69° 03' 22.92"E
112+91.79	1,939,530.0546'	891,603.3875'	128.85'	S83° 48' 09.84"E
114+20.56	1,939,516.1449'	891,731.4859'	155.72'	N71° 51' 14.74"E
115+75.27	1,939,564.6429'	891,879.4642'	315.61'	S70° 58' 18.02"E
118+88.51	1,939,461.7421'	892,177.8305'	53.72'	S67° 28' 46.62"E
119+42.23	1,939,441.1671'	892,227.4531'	302.05'	S66° 31' 21.62"E



USER NAME =	DESIGNED --	REVISED --
FILE NAME =	DRAWN -- RT	REVISED --
PLOT SCALE = \$SCALE\$	CHECKED -- AK	REVISED --
PLOT DATE = 11/18/2019	DATE -- July, 2019	REVISED --

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION  
ALIGNMENT AND TIES

SCALE: 1"=50' SHEET NO. 1 OF 2 SHEETS STA. 100+00 TO STA. 121+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-P4006-01-BT	DeKalb	58	60
CONTRACT NO. 87730				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				

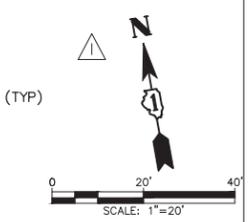
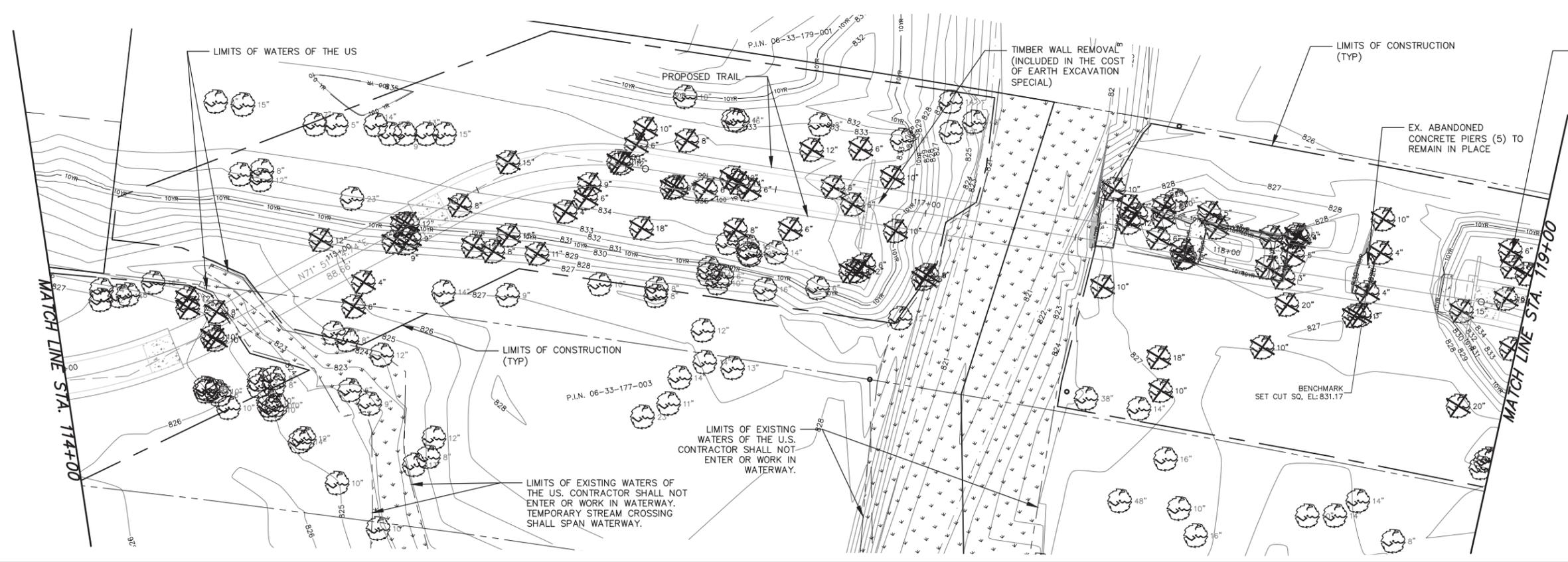
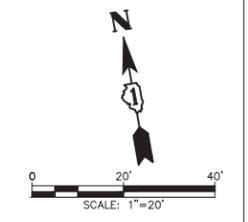
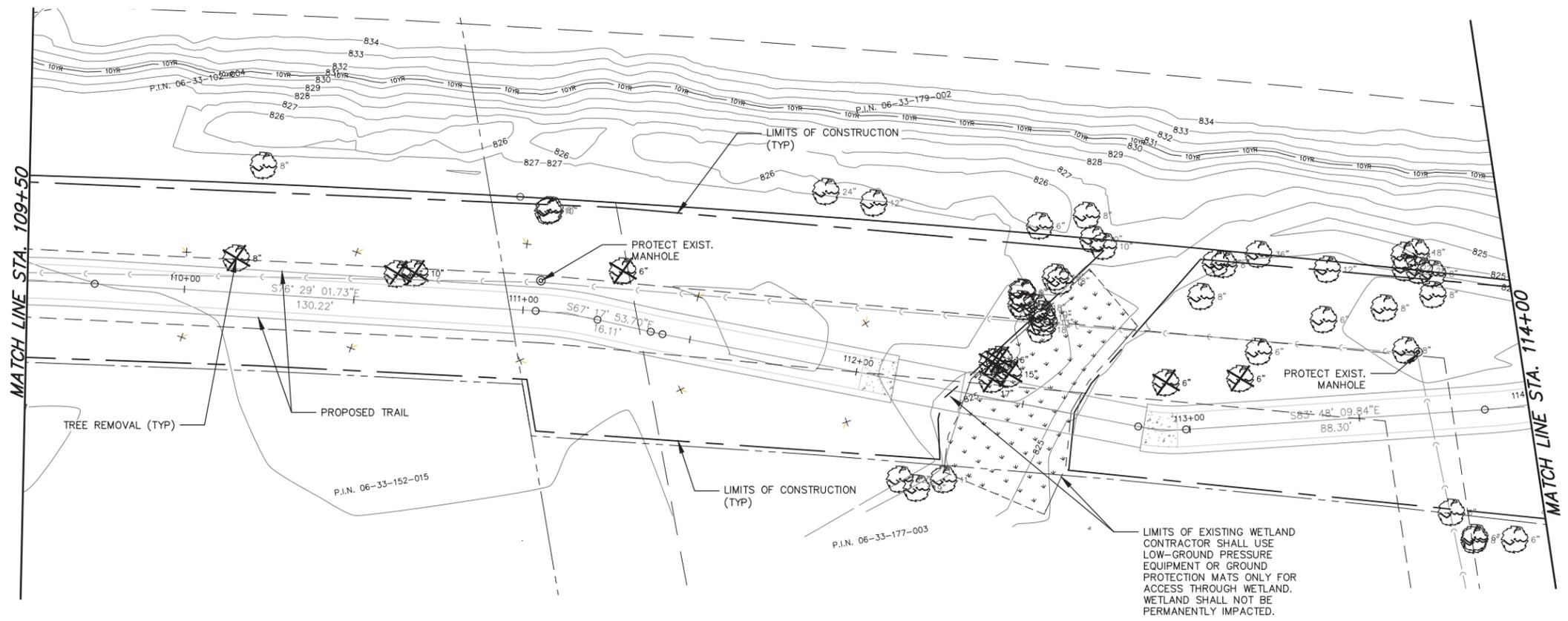




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NOTE BOOK NO.	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		
	PROP. FILE NAME		

PROFILE	SURVEYED	BY	DATE
NOTE BOOK NO.	B.M. NOTED		
	STRUCTURE NOTATIONS CHECKED		

FILE NAME: H:\scomorpe\01\160910.00  
 C:\Users\j\OneDrive\Documents\160910.P2  
 GreatWesternTrailExtension Demolition.dwg



**\*NOTE:**  
 CLEARING AND GRUBBING TO BE PERFORMED THROUGHOUT NOTED LIMITS OF CONSTRUCTION



USER NAME = okustusch  
 PLOT SCALE = \*SCALE\*  
 PLOT DATE = 3/9/2020

DESIGNED - -  
 DRAWN - RT  
 CHECKED - AK  
 DATE - April, 2019

REVISED - -  
 REVISED - - -  
 REVISED - - -  
 REVISED - - -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

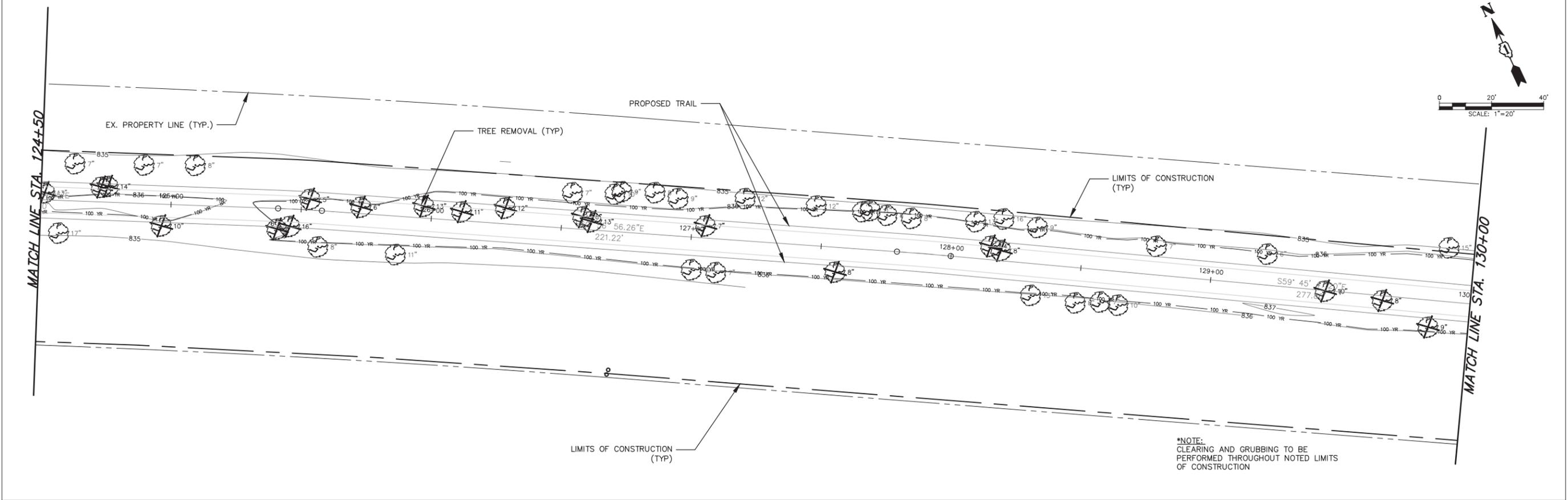
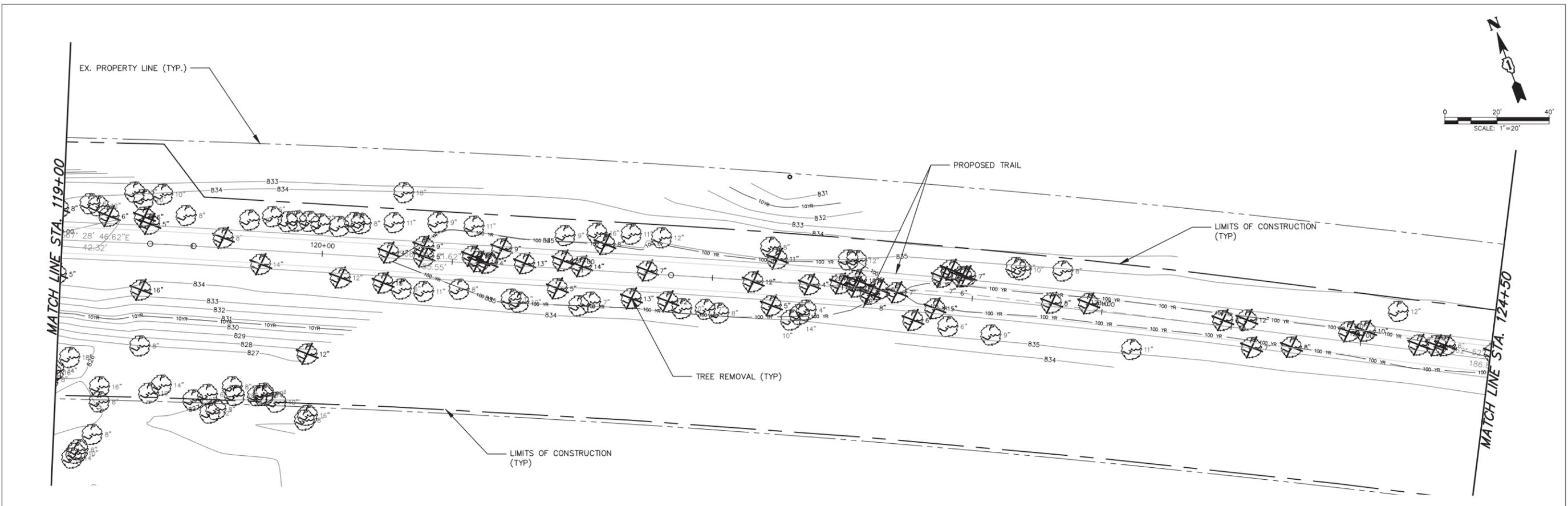
GREAT WESTERN TRAIL EXTENSION  
 DEMOLITION PLAN  
 SCALE: 1"=20'  
 SHEET NO. 2 OF 4 SHEETS  
 STA. 109+50 TO STA. 119+00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	18-P4006-01-BT	DeKalb	58	9
FED. ROAD DIST. NO. - ILLINOIS		FED. AID PROJECT		
		CONTRACT NO. 87730		

PLAN	SURVEYED	BY	DATE
	NOTE BOOK		
	NO.		
	RT. OF WAY CHECKED		
	NO.		
	FILE NAME		

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

FILE NAME: H:\Scomorep\ch\160910.00  
 State of Illinois Department of Transportation  
 Great Western Trail Extension Demolition.dwg



\*NOTE:  
 CLEARING AND GRUBBING TO BE  
 PERFORMED THROUGHOUT NOTED LIMITS  
 OF CONSTRUCTION



USER NAME =	okustusch
FILE NAME =	
PLOT SCALE =	#SCALE#
PLOT DATE =	2/4/2020
DESIGNED -	-
DRAWN -	RT
CHECKED -	AK
DATE -	June, 2019
REVISED -	-
REVISED -	---
REVISED -	---
REVISED -	---

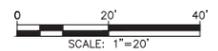
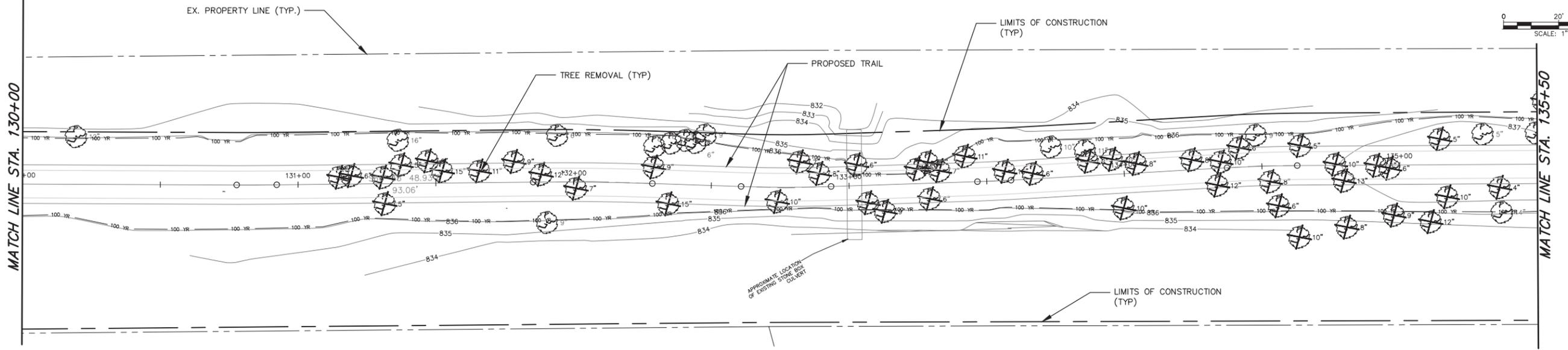
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION  
 DEMOLITION PLAN

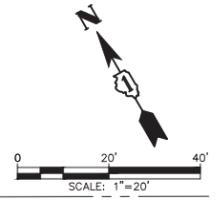
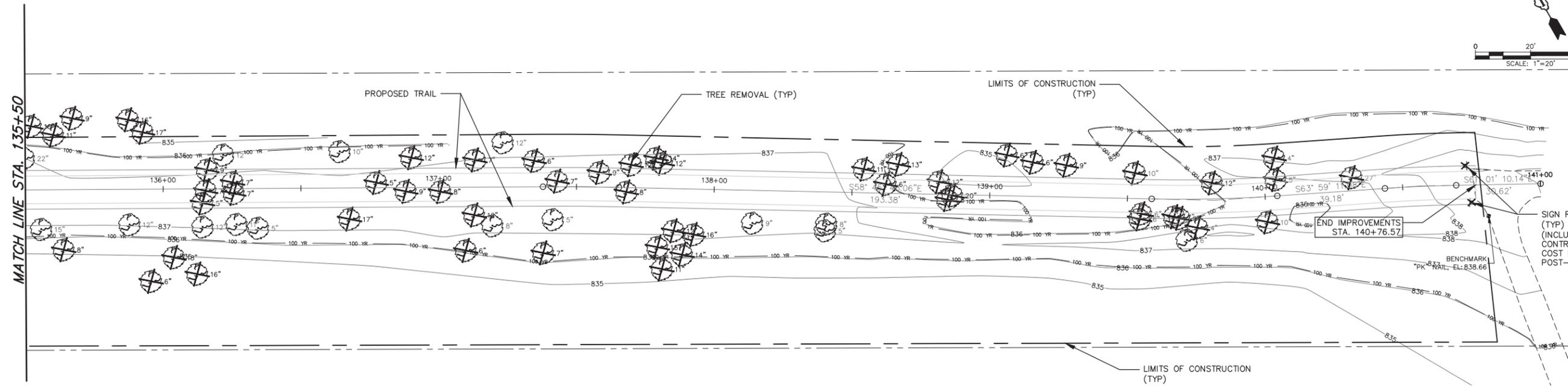
SCALE: 1"=20'	SHEET NO. 3 OF 4 SHEETS	STA. 119+00 TO STA. 130+00
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	18-P4006-01-BT	DeKalb	58	10
FED. ROAD DIST. NO. -		ILLINOIS	FED. AID PROJECT	
			CONTRACT NO. 87730	

PLAN	SURVEYED	BY	DATE
	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		
	NO. _____		
	PROJ. FILE NAME		



PROFILE	SURVEYED	BY	DATE
	GRADES CHECKED		
	BLM. NOTED		
	STRUCTURE NOTATIONS CHECKED		
	NO. _____		



\*NOTE:  
CLEARING AND GRUBBING TO BE PERFORMED THROUGHOUT NOTED LIMITS OF CONSTRUCTION

TIMBER RETAINING WALLS ALONG EAST SIDE OF TRAIL SHALL REMAIN IN PLACE.

FILE NAME: H:\S\scm\res\proj\160910\00 GreatWesternTrailExtension.dwg  
 USER: okustusch  
 DATE: 2/4/2020



USER NAME = okustusch	DESIGNED -	REVISED -
PLOT SCALE = #SCALE#	DRAWN - RT	REVISED - ---
PLOT DATE = 2/4/2020	CHECKED - AK	REVISED - ---
	DATE - June, 2019	REVISED - ---

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION DEMOLITION PLAN		
SCALE: 1"=20'	SHEET NO. 4 OF 4 SHEETS	STA. 130+00 TO STA. 140+76.57

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	18-P4006-01-BT	DeKalb	58	11
FED. ROAD DIST. NO. - ILLINOIS		FED. AID PROJECT		
		CONTRACT NO. 87730		

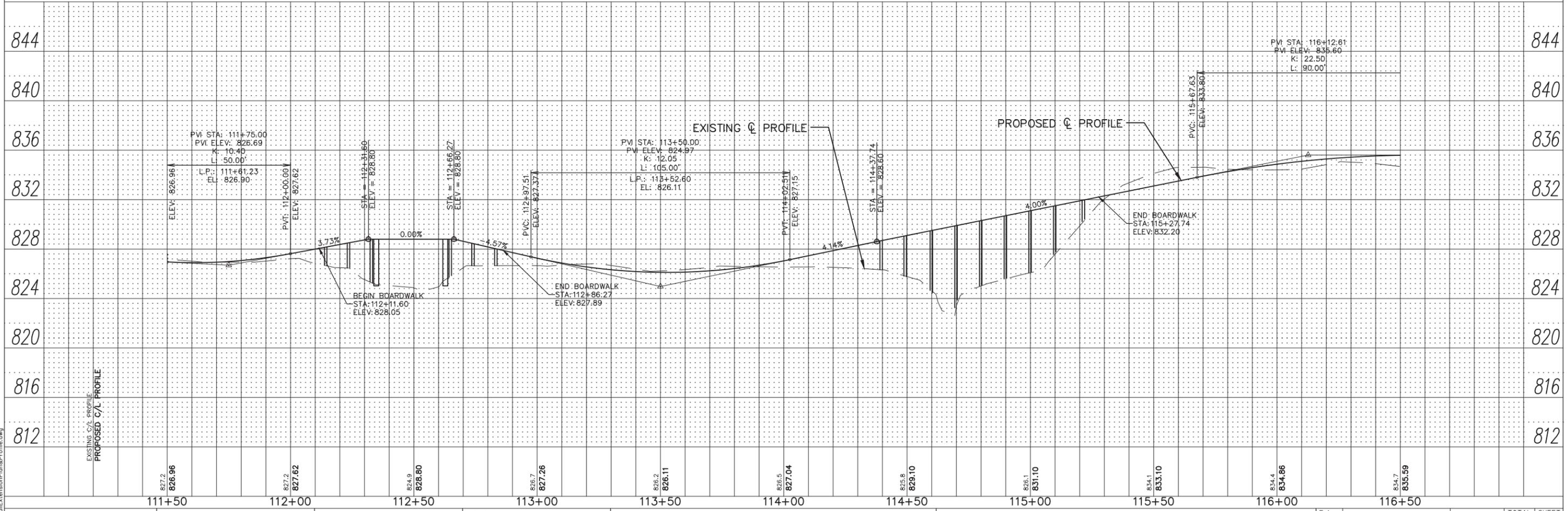
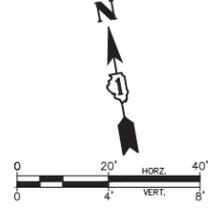
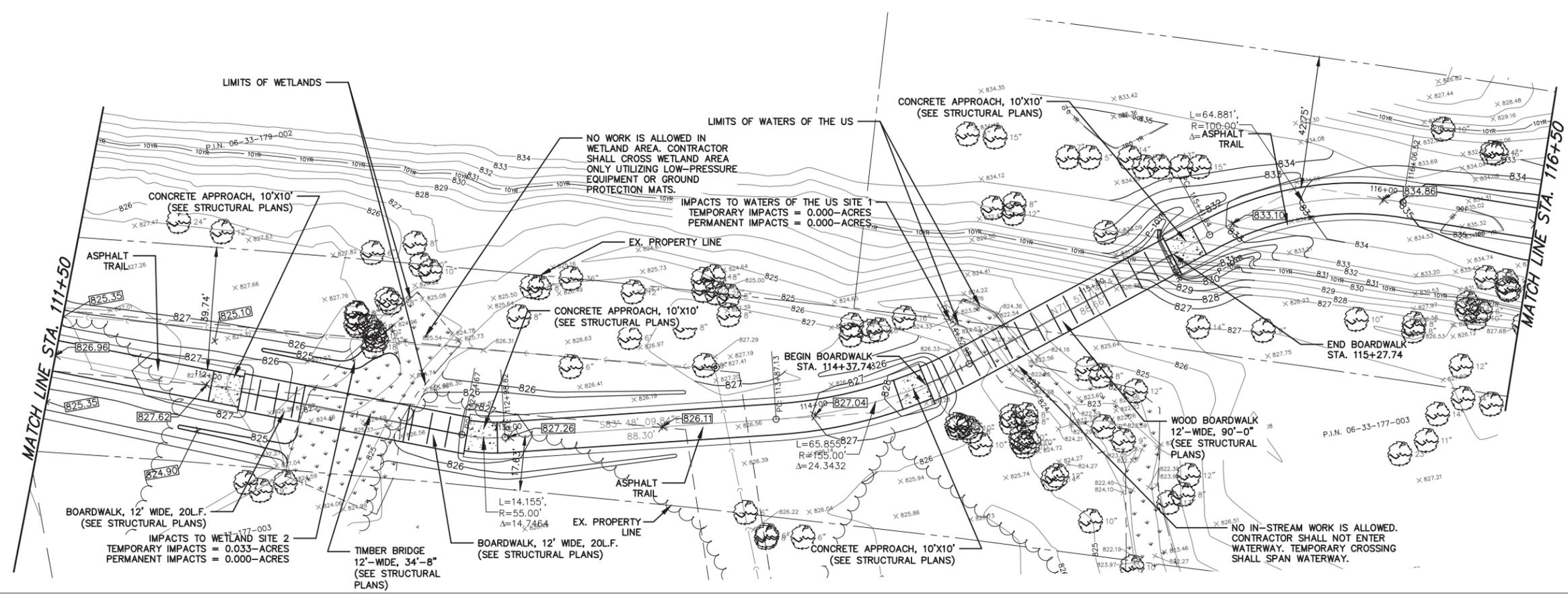






PLAN	DATE
NO.	
BY	
DATE	
SURVEYED	
ALIGNED	
CHECKED	
RT. OF WAY	
CHECKED	
NO.	
BY	
DATE	

PROFILE	DATE
NO.	
BY	
DATE	
SURVEYED	
GRADES	
CHECKED	
BLM. NOTED	
STRUCTURE	
NOTATIONS	
CHKD	
NO.	
BY	
DATE	



FILE NAME: H:\System\p\p\160910.P2  
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 GreatWesternTrailExtensionPlanProfile.dwg

**ENGINEERING RESOURCE ASSOCIATES**

USER NAME = okustusch  
 PLOT SCALE = #SCALE#  
 PLOT DATE = 3/9/2020

DESIGNED - AK  
 DRAWN - RT  
 CHECKED - JM  
 DATE - July, 2019

REVISED - ---  
 REVISED - ---  
 REVISED - ---  
 REVISED - ---

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION  
 PLAN AND PROFILE

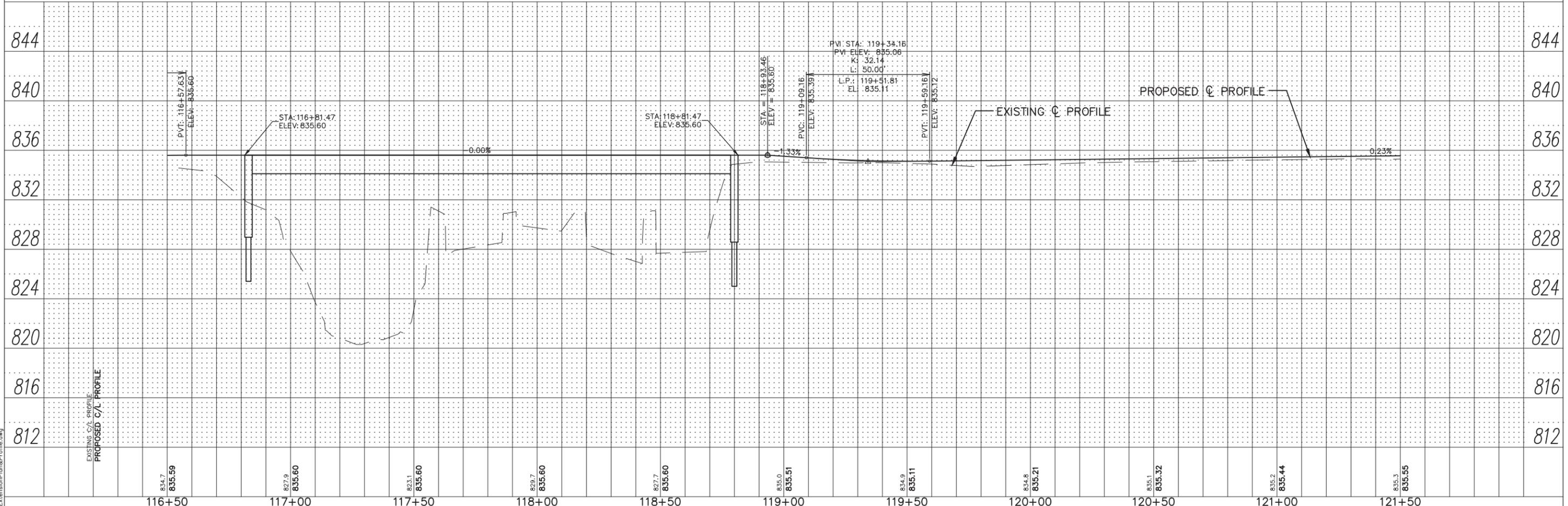
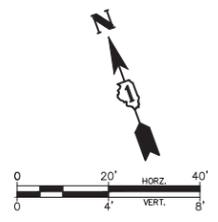
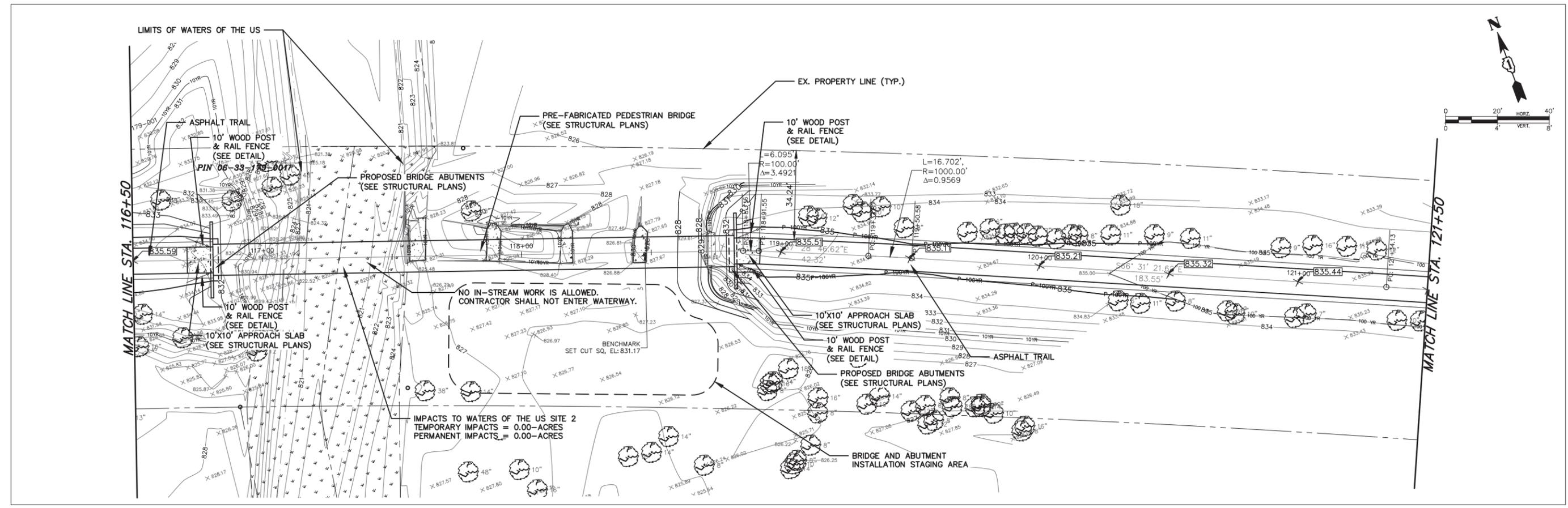
SCALE: 1"=20'  
 SHEET NO. 4 OF 9 SHEETS  
 STA. 111+50 TO STA. 116+50

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	18-P4006-01-BT	DeKalb	58	15
FED. ROAD DIST. NO. - ILLINOIS		FED. AID PROJECT		CONTRACT NO. 87730

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

PROFILE	SURVEYED	BY	DATE
	GRADES		
	NOTED		
	STRUCTURE		
	NOTATIONS		
	CHFD		
	NO.		

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 User: akustusch  
 Date: 3/9/2020



**ENGINEERING RESOURCE ASSOCIATES**

USER NAME = akustusch  
 FILE NAME =  
 PLOT SCALE = \*SCALE\*  
 PLOT DATE 3/9/2020

DESIGNED - AK  
 DRAWN - RT  
 CHECKED - JM  
 DATE - July, 2019

REVISED - ---  
 REVISED - ---  
 REVISED - ---  
 REVISED - ---

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

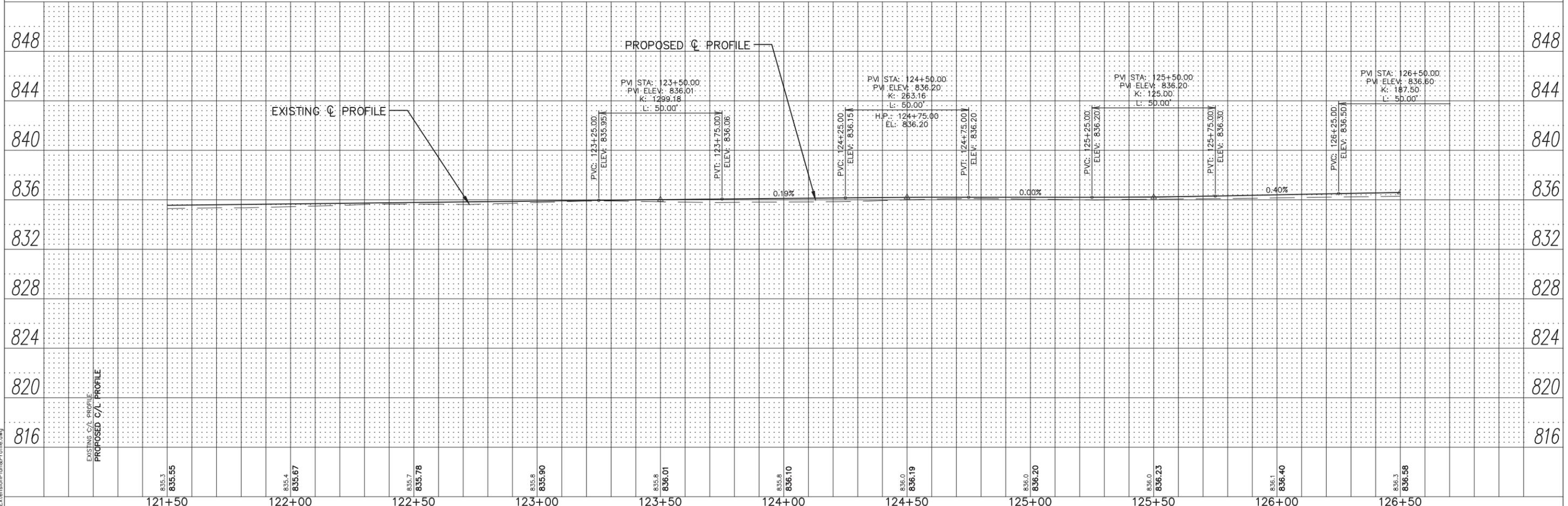
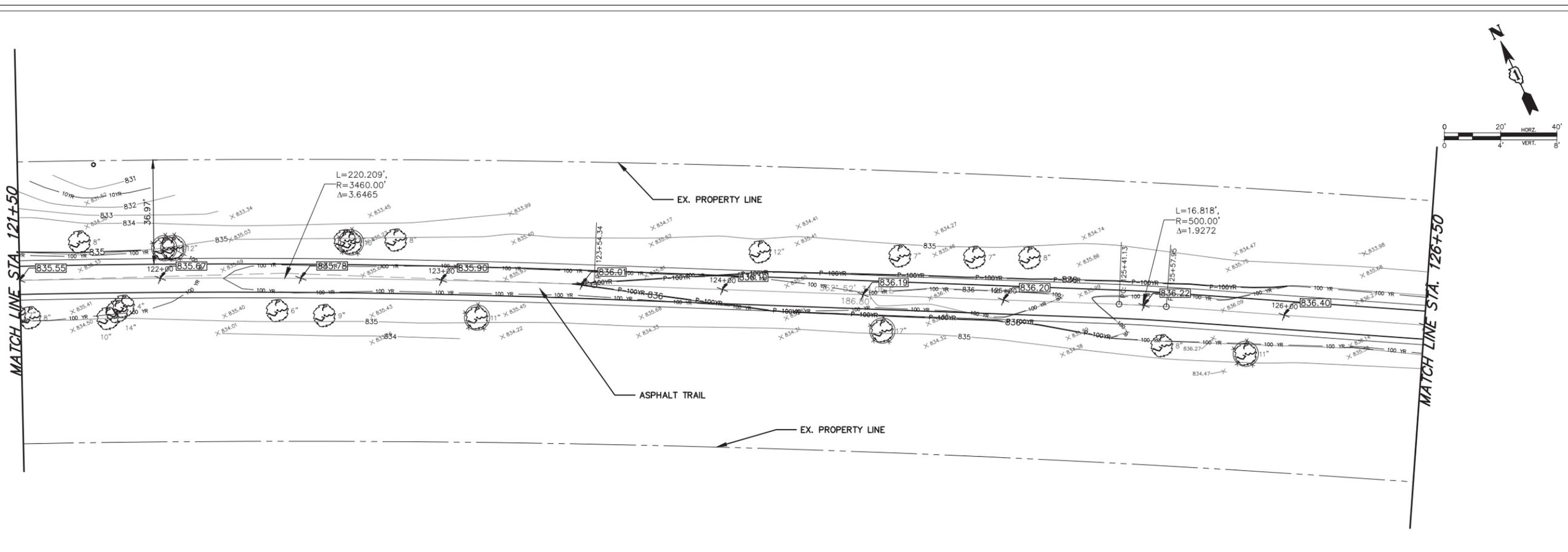
GREAT WESTERN TRAIL EXTENSION  
 PLAN AND PROFILE  
 SCALE: 1"=20'  
 SHEET NO. 5 OF 9 SHEETS  
 STA. 116+50 TO STA. 121+50

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	18-P4006-01-BT	DeKalb	58	16
FED. ROAD DIST. NO. - ILLINOIS		FED. AID PROJECT		
		CONTRACT NO. 87730		

PLAN	SURVEYED	BY	DATE
	NOTE BOOK		
	NO.		
	ALIGNED CHECKED		
	RT. OF WAY CHECKED		
	ROAD FILE NAME		

PROFILE	SURVEYED	BY	DATE
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	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
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 User: ozielinski



**ENGINEERING RESOURCE ASSOCIATES**

USER NAME =	ozielinski
DESIGNED --	AK
DRAWN --	RT
CHECKED --	JM
DATE --	July, 2019
REVISIONS	
REVISED --	

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GREAT WESTERN TRAIL EXTENSION  
PLAN AND PROFILE**

SCALE: 1"=20'    SHEET NO. 6 OF 9 SHEETS    STA. 121+50 TO STA. 126+50

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-P4006-01-BT	Dekalb	58	17
FED. ROAD DIST. NO. - ILLINOIS			CONTRACT NO. 87730	
FED. AID PROJECT				





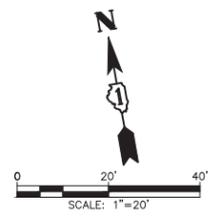
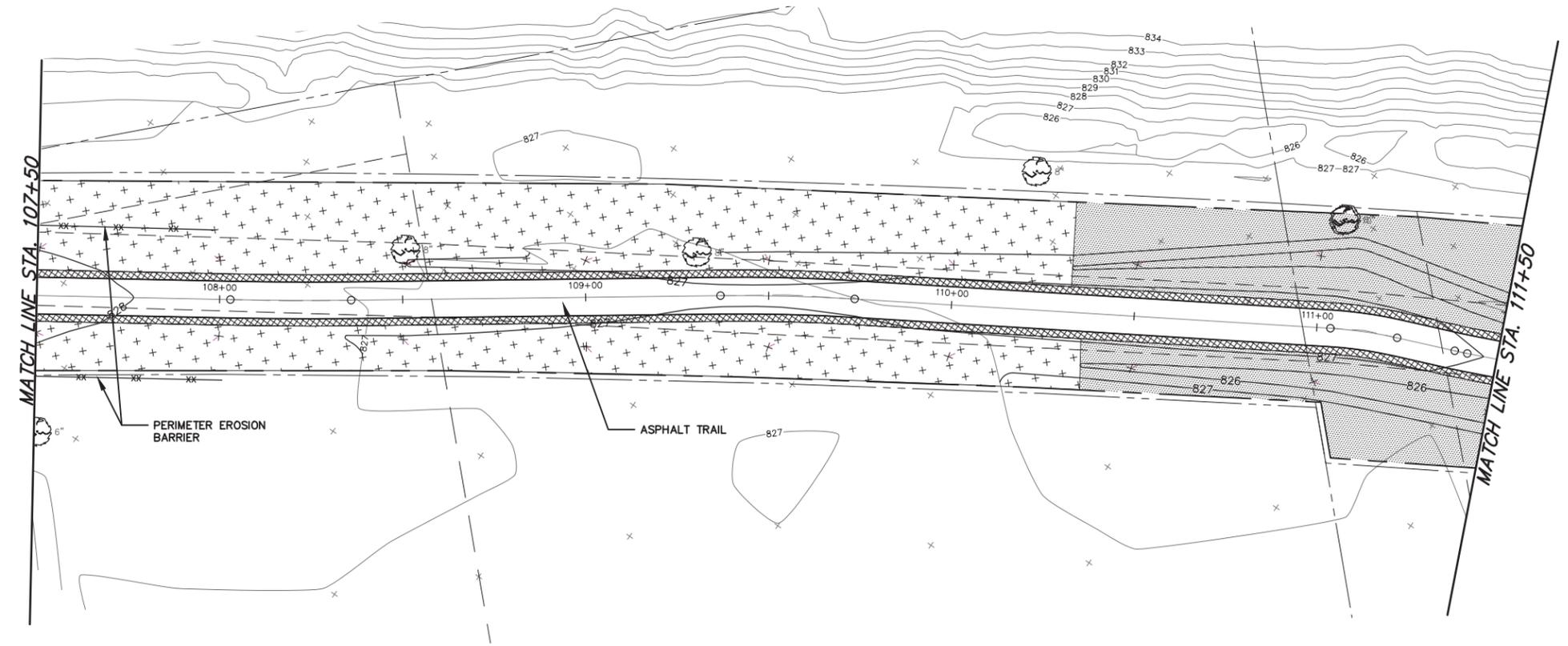




PLAN	SURVEYED	BY	DATE
	NOTE BOOK		
	NO.		
	ALIGNED CHECKED		
	RT. OF WAY CHECKED		
	ROAD FILE NAME		

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

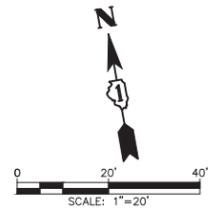
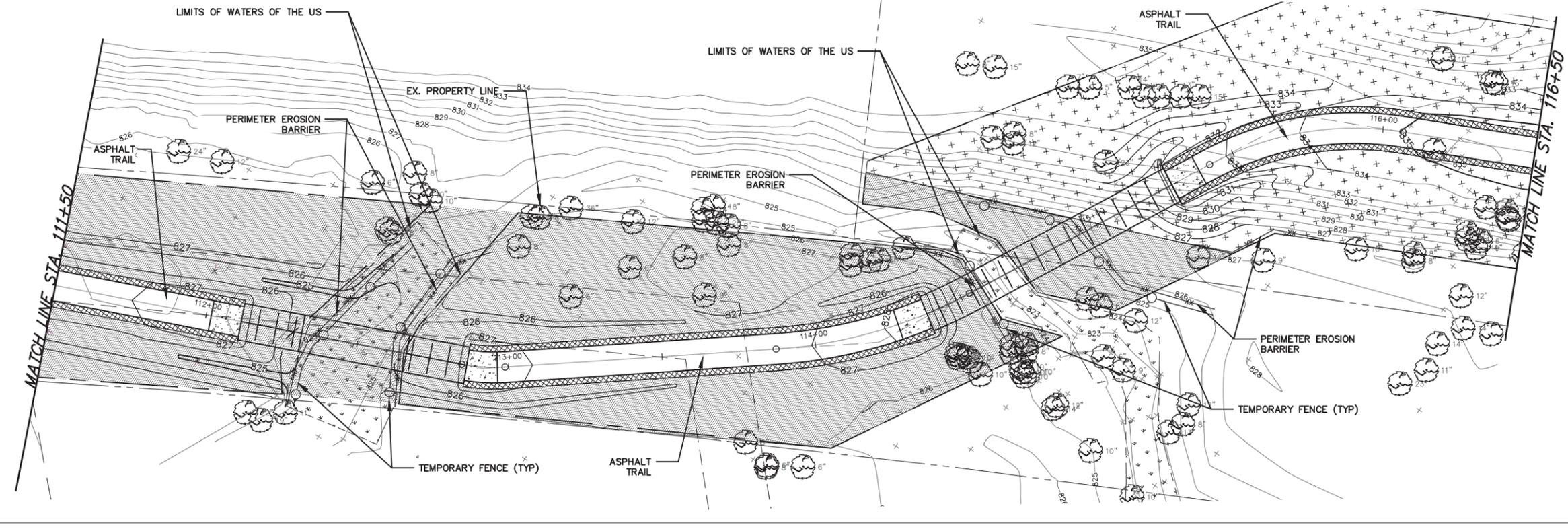
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 User: ozielinski  
 Date: 11/18/2019



**LEGEND**

- IDOT CLASS 1B SEED MIX & EROSION CONTROL BLANKET
- IDOT CLASS 2 SEED MIX & EROSION CONTROL BLANKET
- IDOT CLASS 4A SEED MIX & EROSION CONTROL BLANKET
- IDOT CLASS 4B SEED MIX & EROSION CONTROL BLANKET
- STABILIZED CONSTRUCTION ENTRANCE
- PERIMETER EROSION BARRIER
- TEMPORARY FENCE
- CONSTRUCTION ACCESS LOCATION
- INLET PROTECTION

**NOTE:**  
 SEEDING LIMITS DENOTE MAXIMUM LIMITS OF SEEDING THAT WILL BE MEASURED AND PAID FOR. ADDITIONAL DISTURBANCE BEYOND THESE LIMITS SHALL BE SEED, BLANKETED AND RESTORED AT NO COST TO THE OWNER.



USER NAME =	ozielinski
DESIGNED --	AK
DRAWN --	RT
CHECKED --	JM
DATE --	July, 2019
REVISIONS	
REVISED --	---

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION  
 LANDSCAPE PLAN AND EROSION CONTROL PLAN

SCALE: 1"=20'    SHEET NO. 2 OF 4 SHEETS    STA. 107+50 TO STA. 116+50

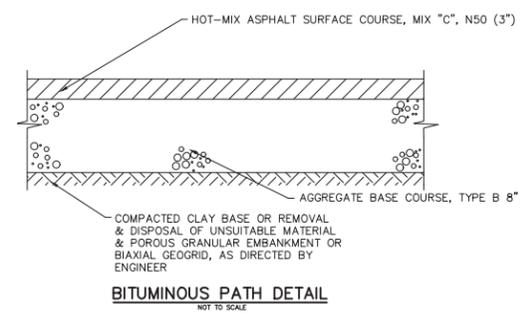
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-	18-P4006-01-BT	DeKalb	58	22
CONTRACT NO. 87730				
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT				



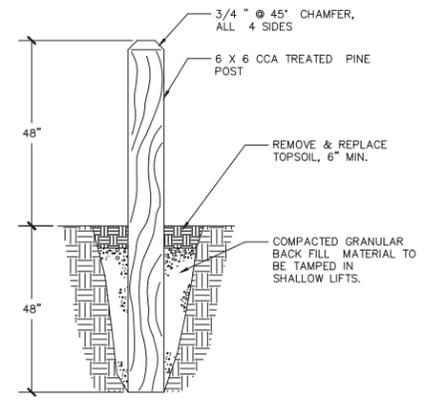




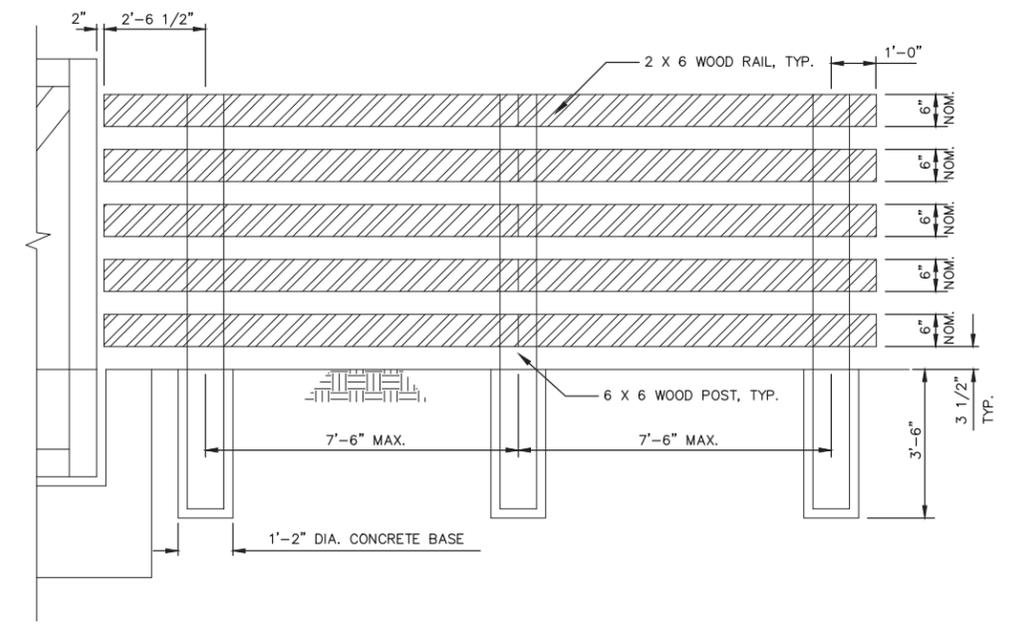
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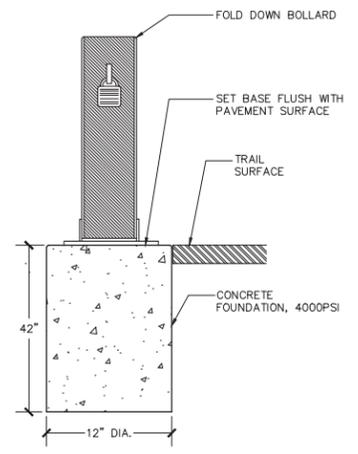
**BITUMINOUS PATH DETAIL**  
NOT TO SCALE



**WOOD BOLLARD**  
NOT TO SCALE

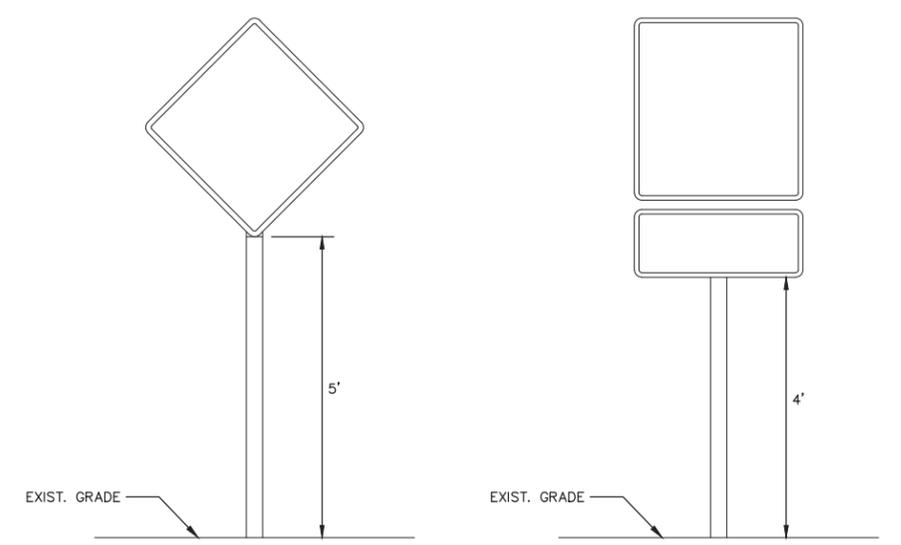


**WOOD POST AND RAIL FENCE DETAIL**  
NOT TO SCALE



NOTES:  
 1. FOLD DOWN BOLLARD SHALL BE 36" DOUBLE POST STEEL MODEL WITH DOUBLE LOCKS AND OPTIONAL PIN.  
 2. INSTALL SO THAT BOLLARD LIES FLAT ON PAVEMENT WHEN UNLOCKED. OPEN BOLLARD TO BE FLUSH WITH PAVEMENT AND PARALLEL TO EDGES OF TRAIL.

**FOLD DOWN BOLLARD**  
NOT TO SCALE



**SIGN AND POST HEIGHT DETAILS**  
NOT TO SCALE

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

USER NAME = ozielinski	DESIGNED — AK	REVISED —
	DRAWN — RT	REVISED —
PLOT SCALE = \$SCALE\$	CHECKED — JM	REVISED —
PLOT DATE = 11/18/2019	DATE — July, 2019	REVISED —

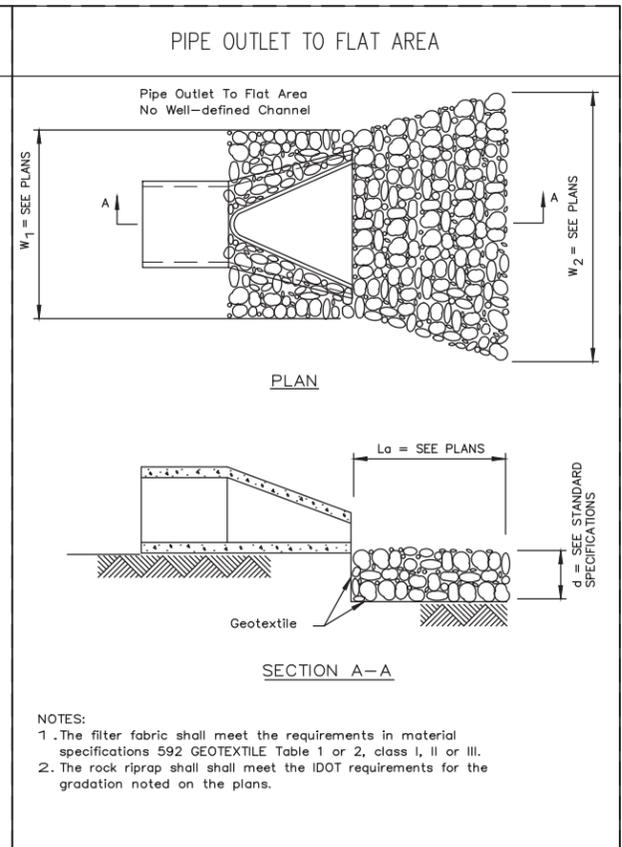
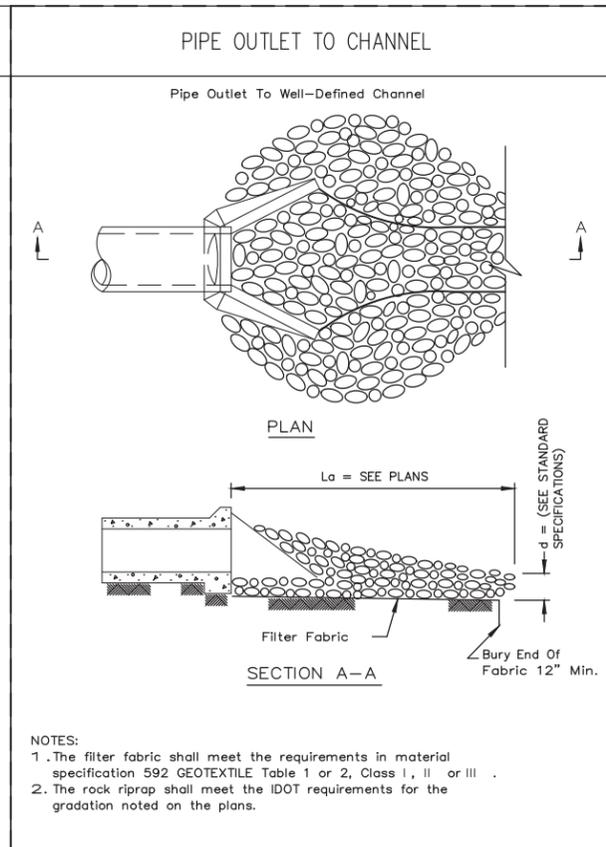
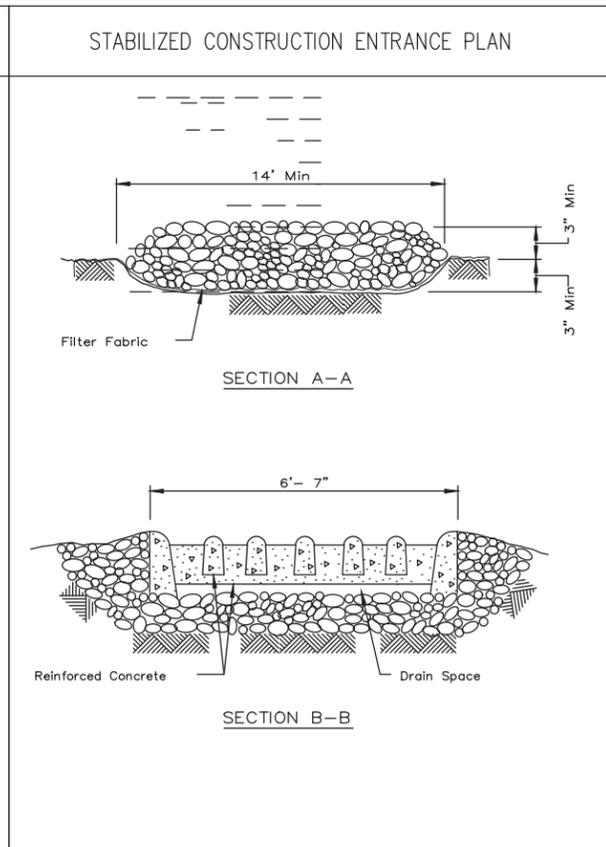
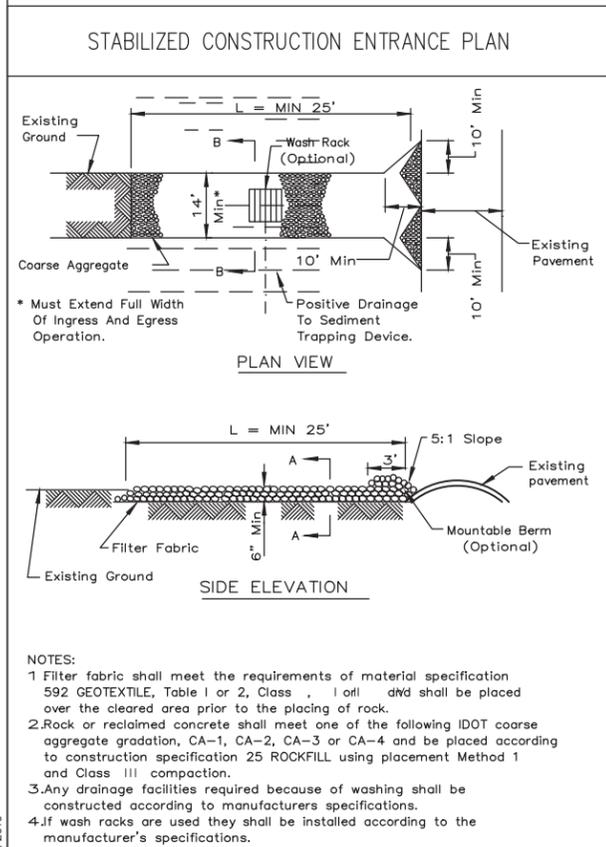
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
—	18-P4006-01-BT	DEKALB	58	26
FED. ROAD DIST. NO. — ILLINOIS FED. AID PROJECT			CONTRACT NO. 87730	





Updated by: azielinski 11/18/2019  
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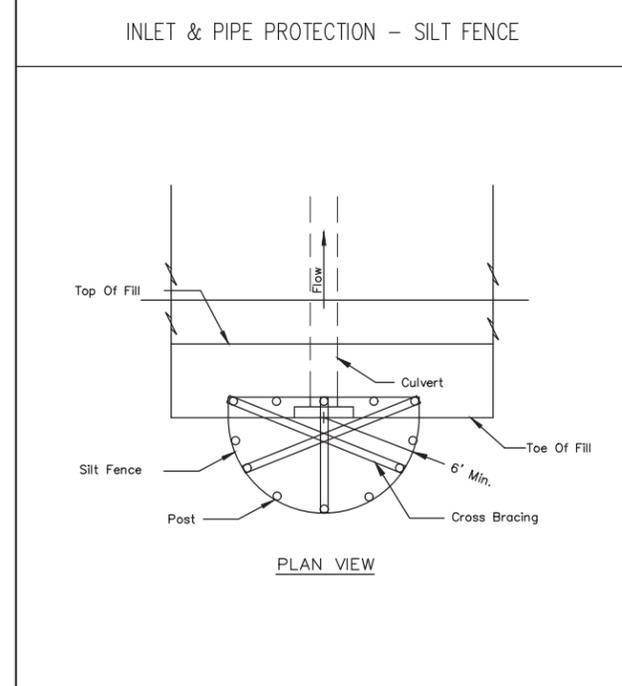
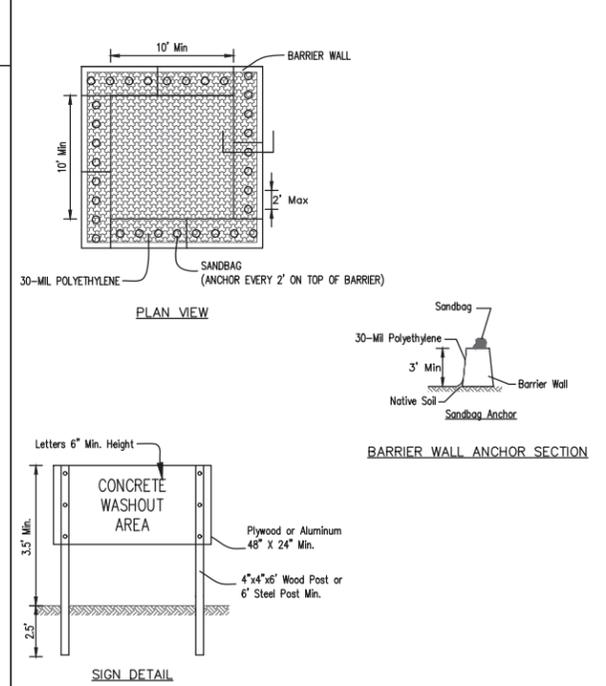
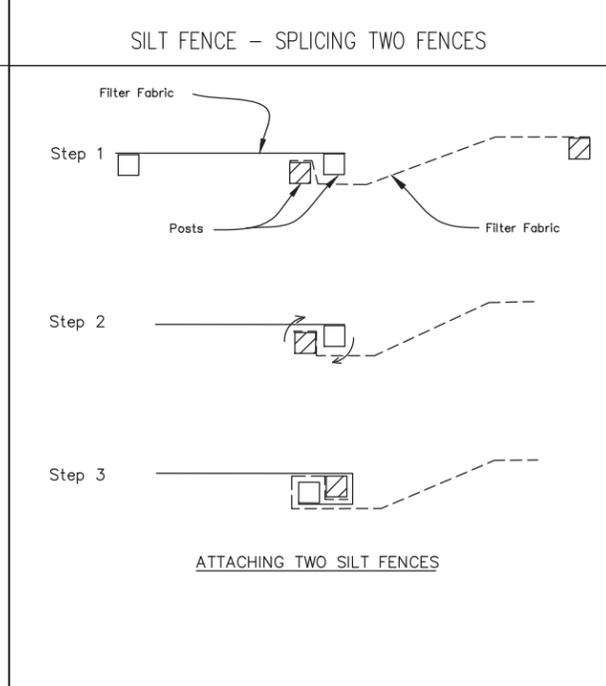
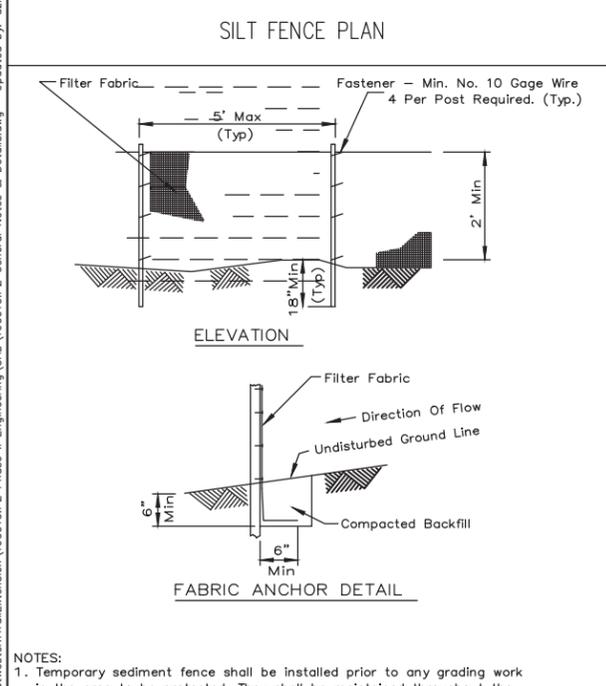


REFERENCE Project _____ Date _____		STANDARD DWG. NO. IL-630
Designed _____ Date _____		SHEET 1 OF 2
Checked _____ Date _____		DATE 8-18-94
Approved _____ Date _____		

REFERENCE Project _____ Date _____		STANDARD DWG. NO. IL-630
Designed _____ Date _____		SHEET 2 OF 2
Checked _____ Date _____		DATE 8-18-94
Approved _____ Date _____		

REFERENCE Project _____ Date _____		STANDARD DWG. NO. IL-611
Designed _____ Date _____		SHEET 1 OF 1
Checked _____ Date _____		DATE 8-18-94
Approved _____ Date _____		

REFERENCE Project _____ Date _____		STANDARD DWG. NO. IL-610
Designed _____ Date _____		SHEET 1 OF 1
Checked _____ Date _____		DATE 9-15-93
Approved _____ Date _____		



REFERENCE Project _____ Date _____		STANDARD DWG. NO. IUM-620
Designed _____ Date _____		SHEET 1 OF 1
Checked _____ Date _____		DATE 3-16-12
Approved _____ Date _____		

REFERENCE Project _____ Date _____		STANDARD DWG. NO. IUM-620B(W)
Designed _____ Date _____		SHEET 1 OF 1
Checked _____ Date _____		DATE 3-16-2012
Approved _____ Date _____		

REFERENCE Project _____ Date _____		STANDARD DWG. NO. IUM-620B(W)
Designed _____ Date _____		SHEET 1 OF 1
Checked _____ Date _____		DATE 3-16-2012
Approved _____ Date _____		

REFERENCE Project _____ Date _____		STANDARD DWG. NO. IL-508SF
Designed _____ Date _____		SHEET 1 OF 1
Checked _____ Date _____		DATE 1-29-99
Approved _____ Date _____		

**ENGINEERING RESOURCE ASSOCIATES**

USER NAME = azielinski

PLOT SCALE = \$SCALE\$

PLOT DATE = 11/18/2019

DESIGNED — AK	REVISED —
DRAWN — RT	REVISED —
CHECKED — JM	REVISED —
DATE — July, 2019	REVISED —

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

TEMPORARY CONCRETE WASHOUT FACILITY - BARRIER WALL

**EROSION CONTROL NOTES & DETAILS**

SCALE: N.T.S. SHEET NO. 2 OF 2 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-P4006-01-BT	DEKALB	58	28
FED. ROAD DIST. NO. — ILLINOIS FED. AID PROJECT			CONTRACT NO. 87730	

Benchmark: Set Cut Square in Concrete Foundation  
 Northing 1,939,474.525, Easting 892,138.912, Elev. 831.173

Existing Structure: None.

**DESIGN SPECIFICATIONS**  
 2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges, 2nd Edition

**DESIGN STRESSES**

**FIELD UNITS**

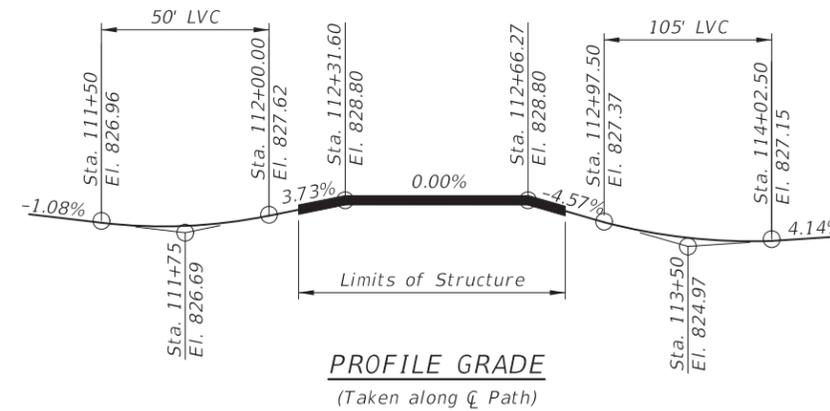
F'c = 3500 psi (approach Slab)  
 Fy = 60 ksi (Reinforcement)  
 fb = as required (see specifications)

**SEISMIC DATA**

Seismic Performance Zone (SPZ) = 1  
 Design Spectral Acceleration at 1.0 sec. (SD1) = 0.102g  
 Design Spectral Acceleration at 0.2 sec. (SDS) = 0.14g  
 Soil Site Class = D

**DESIGN LOADING**

Pedestrian Live Load (PL) 90 psf  
 H10 Truck Loading



**C PIER STATIONS & ELEVATIONS**

(Taken at C Proposed Trail)

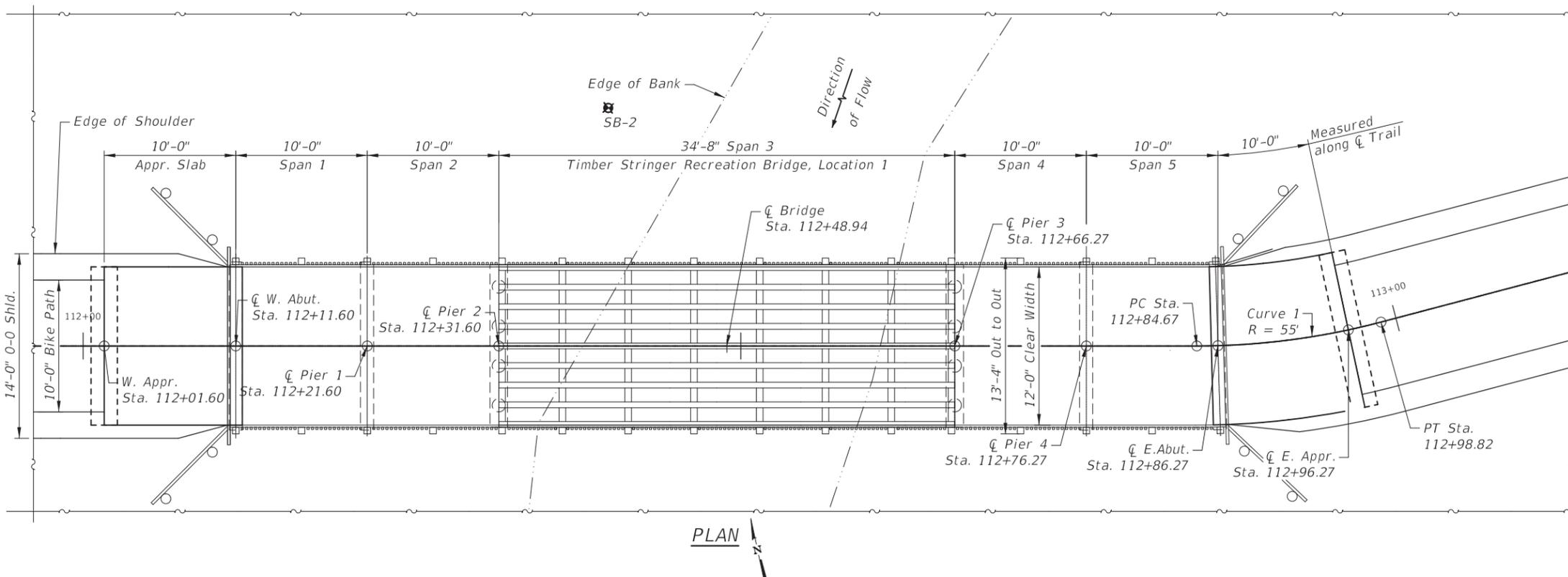
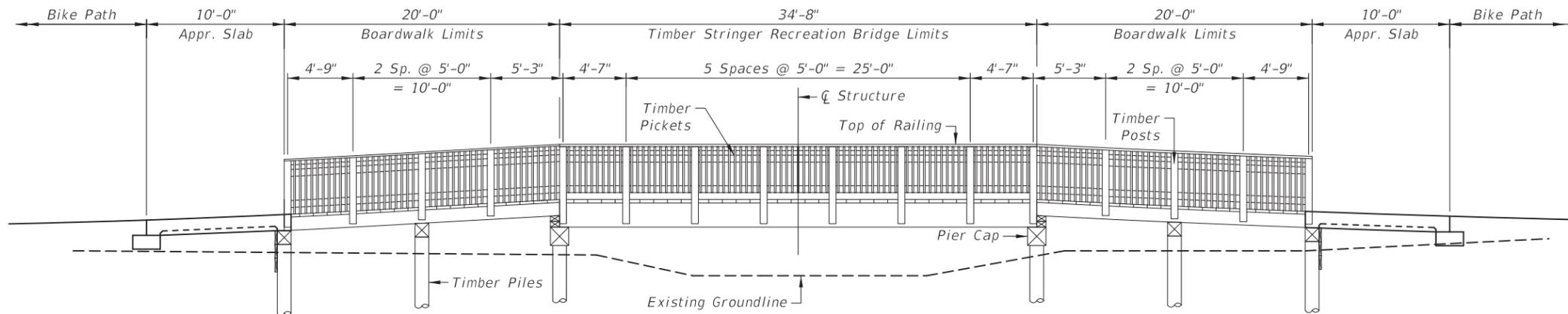
Location	Station	Elevation
C W. Appr.	112+01.60	827.68
C W. Abut.	112+11.60	828.05
C Pier 1	112+21.60	828.43
C Pier 2	112+31.60	828.80
C Pier 3	112+66.27	828.80
C Pier 4	112+76.27	828.34
C E. Abut.	112+86.27	827.89
C E. Appr.	112+96.27	827.44

**CURVE 1 DATA**

P.I. Sta. = 112+91.79  
 $\Delta = 14^\circ 44' 46.92''$   
 D = 14' 44" 46.92"  
 R = 55.0'  
 T = 7.12'  
 L = 14.155'  
 E = 0.459'  
 P.C. Sta. = 112+84.67  
 P.T. Sta. = 112+98.82

**INDEX OF SHEETS**

- A1 General Plan & Elevation
- A2 General Data
- A3 Approach Slab Plan
- A4 Approach Slab Details
- A5 Soil Boring Log



ENGINEERING RESOURCE ASSOCIATES, INC.  
 MELISSA F. LANGE, S.E.

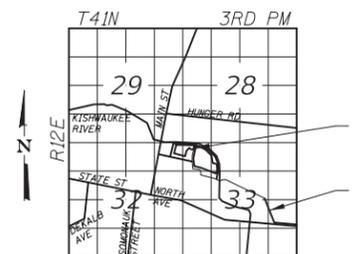


Melissa F. Lange  
 MELISSA F. LANGE, S.E.  
 # 081-006488

EXP 11-2020

DATE 3-17-2020

I certify that to the best of knowledge, information and belief, this pedestrian structure 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 LRFD Bridge Design Specifications.



**TIMBER BRIDGE A  
 GENERAL PLAN & ELEVATION  
 GREAT WESTERN TRAIL  
 DEKALB COUNTY  
 STA 112+48.94**

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PLOT SCALE = sSCALE5	DRAWN C. SEDLACKO	REVISED -
PLOT DATE = 3/13/2020	CHECKED M. LANGE	REVISED -
	DATE 11-18-2019	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

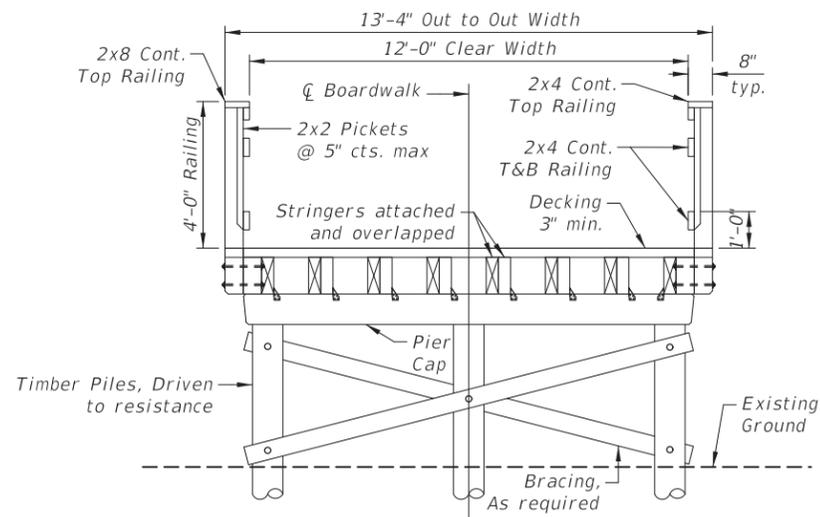
GREAT WESTERN TRAIL EXTENSION

SCALE: 1" = 5' SHEET A1 OF A5 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

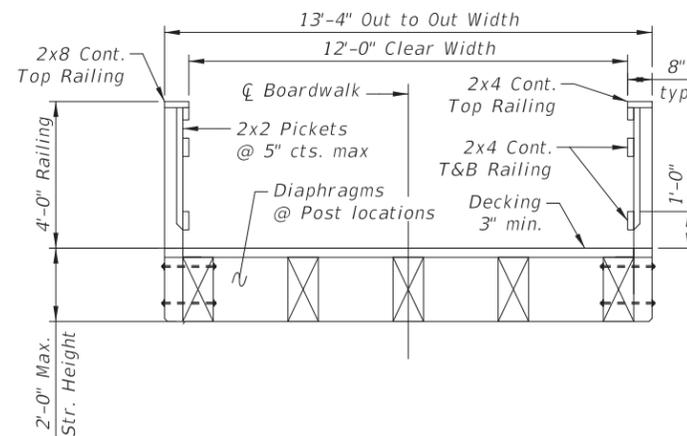
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-P4006-01-BT	DEKALB	58	29
CONTRACT NO. 87730				
ILLINOIS FED. AID PROJECT				

**TOTAL BILL OF MATERIAL**

Pay Item	Unit	Quantity
Concrete Structures	Cu. Yd.	1.8
Protective Coat	Sq. Yd.	28
Concrete Superstructure (Approach)	Cu. Yd.	9.4
Reinforcement Bars, Epoxy Coated	Pound	2660
Granular Backfill for Structures	Cu. Yd.	17
Geocomposite Wall Drain	Sq. Yd.	17
Pipe Underdrains for Structures	Foot	56
Timber Stringer Recreation Bridge, Location 1	Sq. Ft.	416
Boardwalk	Sq. Ft.	480



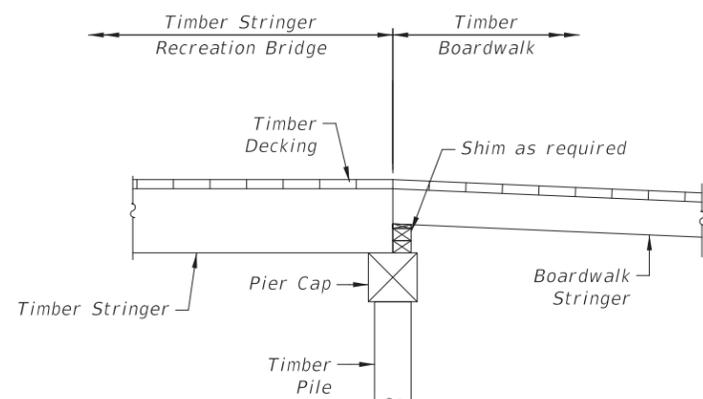
**TYPICAL SECTION - BOARDWALK**



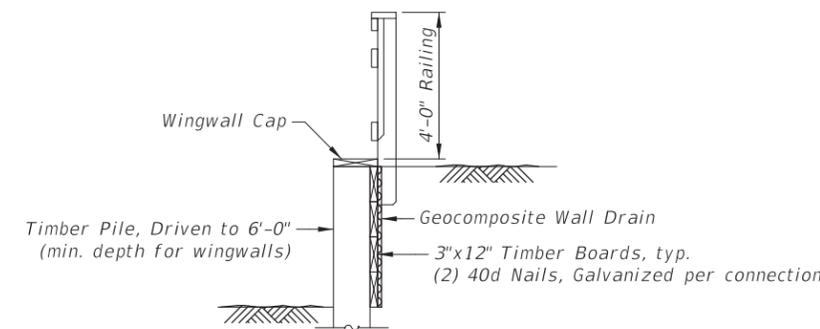
**TYPICAL SECTION - TIMBER STRINGER RECREATION BRIDGE**  
(taken Midspan)

**GENERAL NOTES**

- The contractor shall be responsible for designing, detailing, fabrication, delivery, construction and erection of the Timber Stringer Recreation Bridge and the Boardwalk.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- Boardwalk pay limits include clear width from centerline of pier to centerline of pier. Wingwalls are included in the cost of the boardwalk.
- Timber stringer recreation Bridge pay limits include clear width from centerline of pier to centerline of pier.
- Bridge/ Boardwalk Contractor will perform all work from the deck level. All foot traffic will be contained within six feet from the boardwalk path.
- Bridge/ boardwalk construction to be completed by qualified and experienced contractor approved by the Owner.
- Manufacturer Name Plate shall be provided and installed on the structure with design loading, weight, manufacturer and year built. Included in the cost Timber Stringer Recreation Bridge.

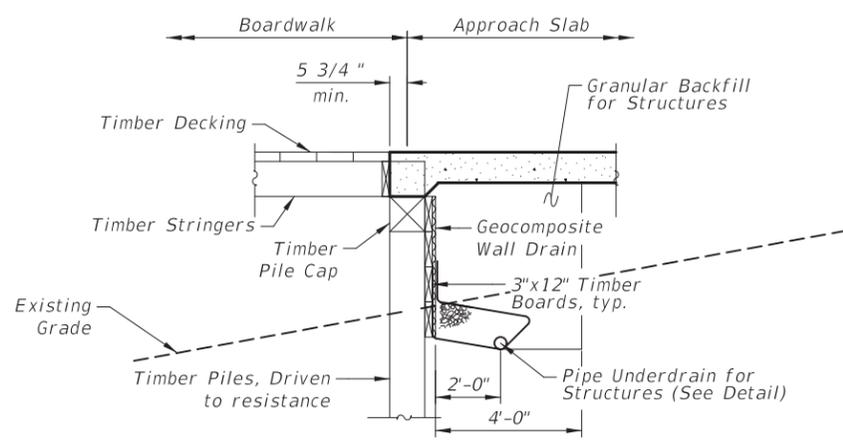


**PIER DETAIL**



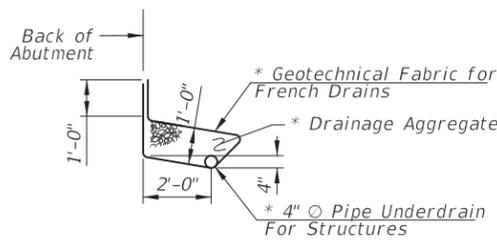
**WINGWALL DETAIL: SECTION B-B**

Wingwall Railing shall match boardwalk railing



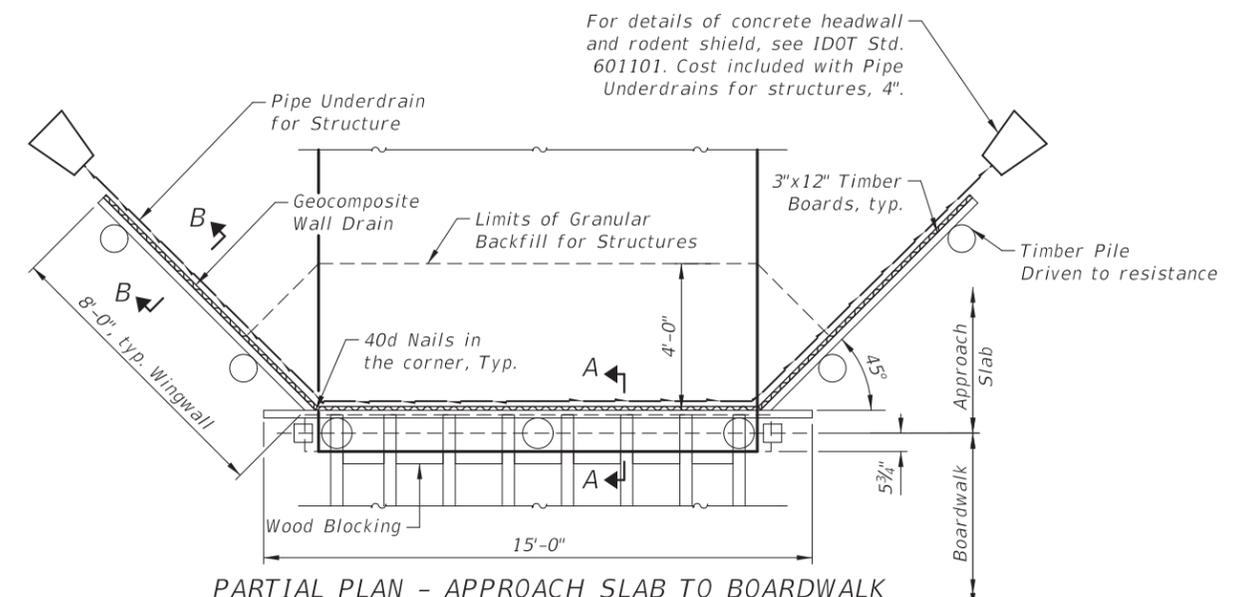
**ABUTMENT DETAIL: SECTION A-A**

(Approach slab needs to be supported by the Timber piles)



**PIPE UNDERDRAIN DETAIL**

\* Included in the Cost of Pipe Underdrains for Structures



**PARTIAL PLAN - APPROACH SLAB TO BOARDWALK**

(Wingwalls are included in the cost of the boardwalk)

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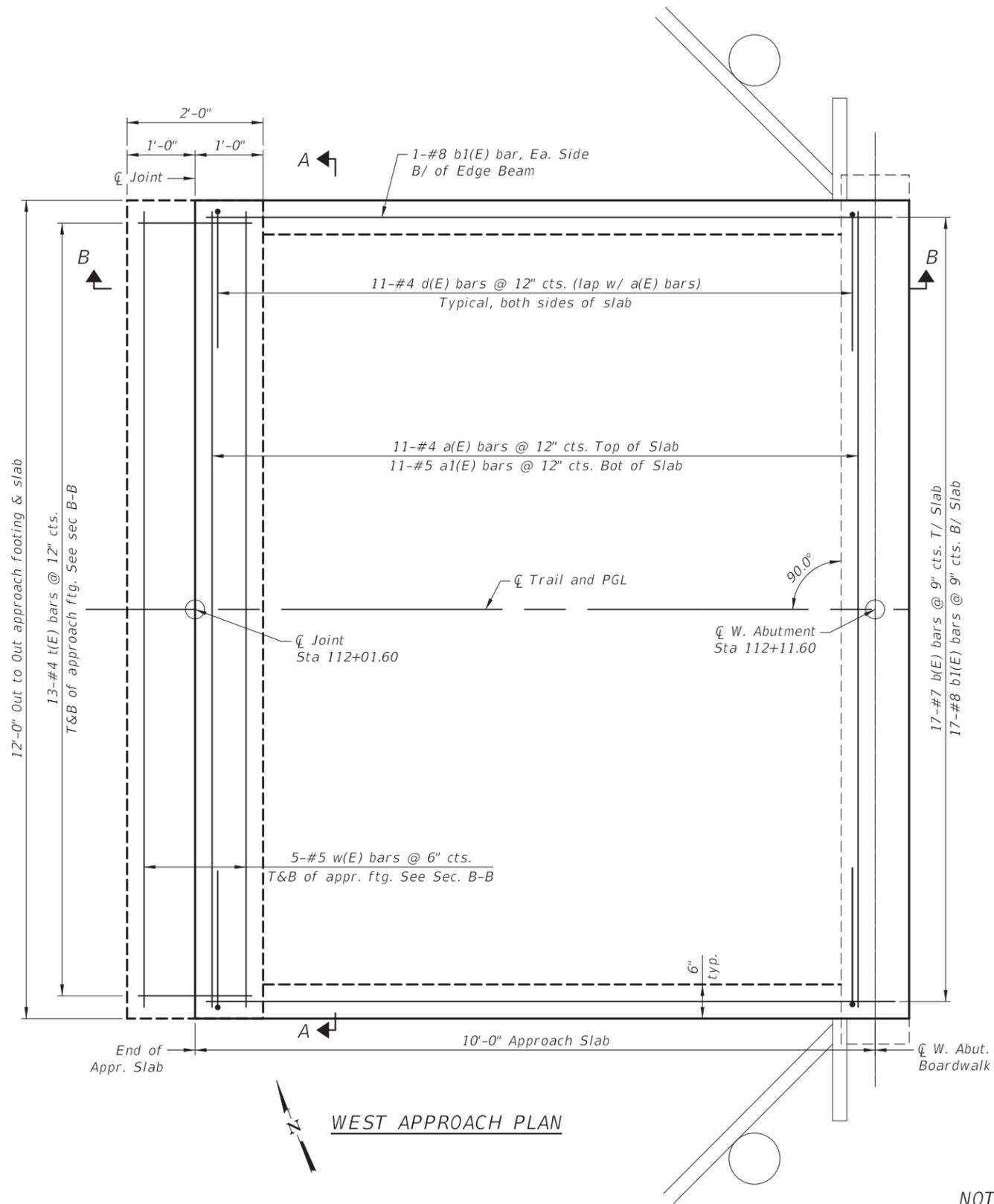


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PLOT DATE = 3/13/2020	CHECKED M. LANGE	REVISED -
	DATE 11-18-2019	REVISED -

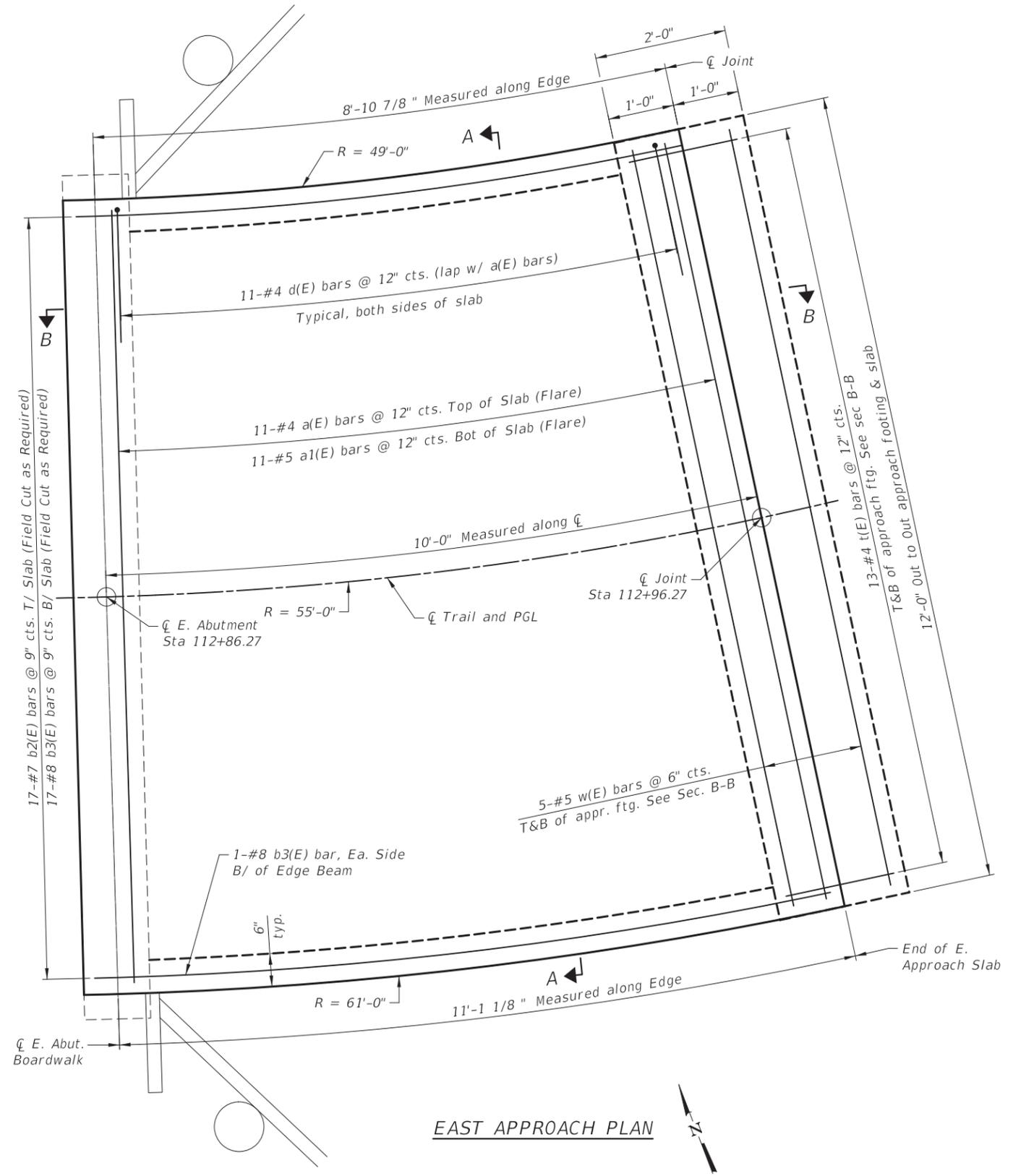
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>GREAT WESTERN TRAIL EXTENSION TIMBER BRIDGE A: GENERAL DATA</b>	
SCALE: 1" = 5'	SHEET A2 OF A5 SHEETS STA. _____ TO STA. _____

F.A. RTE. _____	SECTION 18-P4006-01-BT	COUNTY DEKALB	TOTAL SHEETS 58	SHEET NO. 30
ILLINOIS FED. AID PROJECT			CONTRACT NO. 87730	



WEST APPROACH PLAN



EAST APPROACH PLAN

NOTES

1. See Sheet a4 for Section A-A and Section B-B
2. a(E) and a1(E) bar spacing measured along  $\bar{\kappa}$  roadway

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USER NAME = susers	DESIGNED C. SEDLACKO	REVISED -
DRAWN C. SEDLACKO	REVISED -	
PLOT SCALE = sSCALE5	CHECKED M. LANGE	REVISED -
PLOT DATE = 3/13/2020	DATE 11-18-2019	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION  
TIMBER BRIDGE A: APPROACH SLABS

SCALE: 1" = 1' SHEET A3 OF A5 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-P4006-01-BT	DEKALB	58	31
CONTRACT NO. 87730				
ILLINOIS FED. AID PROJECT				



MSET PROJECT NO.: 19282		LOG OF BORING NO. SB-2			Page 1 of 2			
PROJECT: Great Western Trail				SITE LOCATION: Sycamore, Illinois				
BORING LOCATION: Structure 2, SE Abutment				CLIENT: Engineering Resource Associates				
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS		REMARKS
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc %	
0		Black CLAY, A-6 Topsoil (15")	826.5					
		Dark Grey Sandy LOAM, A-2-4, moist	825.3	SS	1	5	15	
		Brown SAND and GRAVEL, A-1-a, medium dense	824.0					
4		Clay Loam seam at 4.0'	822.5	SS	2	12	11	
				SS	3	11	14	
8				SS	4	11	19	
12		Grey SAND and GRAVEL, A-1-a, medium dense	815.5	SS	5	21	15	
				SS	6	13	13	
16		Grey Clay LOAM, A-6, very stiff	810.0	SS	7A	12	9	
					7B	9	12	123 2.21
20				SS	8	11	11	2.25 Qp
				SS	9	13	11	2.5 Qp
24				SS	10	13	14	
				SS	11	10	12	2.25 Qp
28				SS	12	15	14	2.0 Qp

WATER LEVEL OBSERVATIONS, ft.  
 DURING DRILLING: 2.5'  
 IMMEDIATELY AFTER DRILLING: 3.0'  
 DELAYED READING AFTER



BORING STARTED: 7/11/19  
 BORING COMPLETED: 7/11/19  
 LOGGED BY: GPF  
 BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 410 Nolen Drive, South Elgin, Illinois 60177 (847) 844-1895 f(847) 844-3875

MSET PROJECT NO.: 19282		LOG OF BORING NO. SB-2			Page 2 of 2			
PROJECT: Great Western Trail				SITE LOCATION: Sycamore, Illinois				
BORING LOCATION: Structure 2, SE Abutment				CLIENT: Engineering Resource Associates				
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS		REMARKS
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc %	
32		Grey Clay LOAM, A-6, very stiff	795.5					
		Grey SAND, and GRAVEL, A-1-a, with intermittent clay seams, medium dense	794.5					
				SS	13	11	11	
36								
40				SS	14	10	12	
		End of Boring at 40 Feet	786.5					

WATER LEVEL OBSERVATIONS, ft.  
 DURING DRILLING: 2.5'  
 IMMEDIATELY AFTER DRILLING: 3.0'  
 DELAYED READING AFTER



BORING STARTED: 7/11/19  
 BORING COMPLETED: 7/11/19  
 LOGGED BY: GPF  
 BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 410 Nolen Drive, South Elgin, Illinois 60177 (847) 844-1895 f(847) 844-3875

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PLOT DATE = 3/13/2020	CHECKED M. LANGE	REVISED -
	DATE 11-18-2019	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION  
 TIMBER BRIDGE A: SOIL BORING LOG

SCALE: N.T.S. SHEET A5 OF A5 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-P4006-01-BT	DEKALB	58	33
			CONTRACT NO. 87730	
		ILLINOIS	FED. AID PROJECT	

Benchmark: Set Cut Square in Concrete Foundation  
 Northing 1,939,474.525,  
 Easting 892,138.912, Elev. 831.173

Existing Structure: None.

**DESIGN STRESSES**

FIELD UNITS

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_b =$  as required (see Specifications)

**DESIGN LOADING**

Pedestrian Live Load (PL) 90 psf  
 H10 Truck (20,000 lbs)

**DESIGN SPECIFICATIONS**

2017 AASHTO LRFD Bridge Design  
 Specifications, 8th Edition

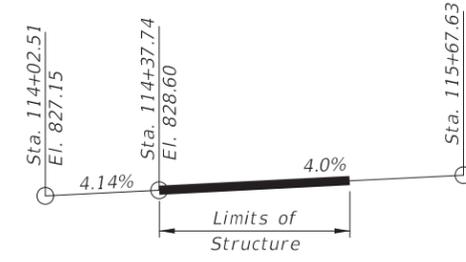
AASHTO LRFD Guide Specifications for the  
 Design of Pedestrian Bridges, 2nd Edition

**SEISMIC DATA**

Seismic Performance Zone (SPZ) = 1  
 Design Spectral Acceleration at 1.0 sec. ( $S_{D1}$ ) = 0.102g  
 Design Spectral Acceleration at 0.2 sec. ( $S_{D3}$ ) = 0.14g  
 Soil Site Class = D

**INDEX OF SHEETS**

- B1 General Plan And Elevation
- B2 General Data
- B3 Approach Slab Plan
- B4 Approach Slab Details
- B5 Soil Boring Logs



**PROFILE GRADE**

(Taken along  $\zeta$  Path)

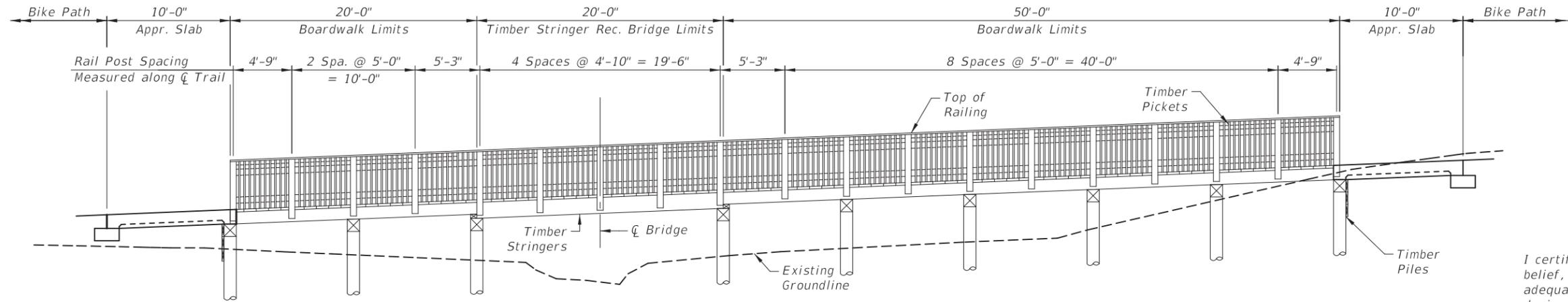
**CURVE 2 DATA**

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 $D = 36^\circ 57' 54''$   
 $R = 155.00'$   
 $T = 35.12'$   
 $L = 69.067'$   
 $E = 3.93'$   
 P.C. Sta. = 113+83.84  
 P.T. Sta. = 114+52.91

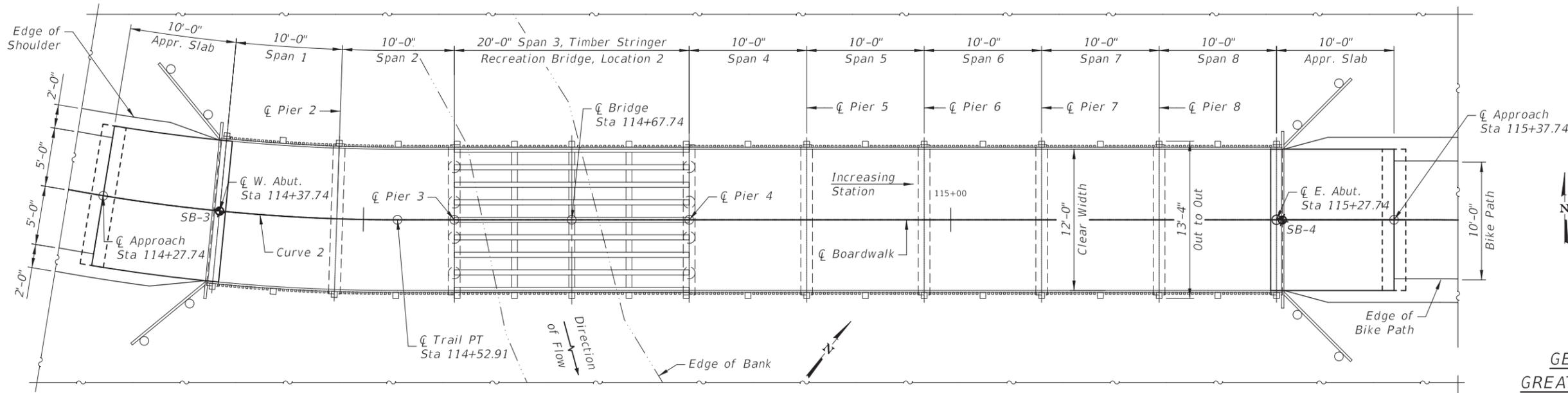
**$\zeta$  STATIONS & ELEVATIONS**

(Taken at  $\zeta$  Proposed Trail)

Location	Station	Elevation
$\zeta$ W. Appr.	114+27.74	828.19
$\zeta$ W. Abut.	114+37.74	828.60
$\zeta$ Pier 1	114+47.74	829.01
$\zeta$ Pier 2	114+57.74	829.41
$\zeta$ Pier 3	114+67.74	829.81
$\zeta$ Pier 4	114+77.74	830.61
$\zeta$ Pier 5	114+87.74	831.01
$\zeta$ Pier 6	115+07.74	831.41
$\zeta$ Pier 7	115+17.74	831.81
$\zeta$ E. Abut.	115+27.74	832.20
$\zeta$ E. Appr.	115+37.74	832.60



**ELEVATION**



**PLAN**

I certify that to the best of knowledge, information and belief, this pedestrian structure 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 LRFD Bridge Design Specifications.

ENGINEERING RESOURCE ASSOCIATES, INC.  
 MELISSA F. LANGE, S.E.

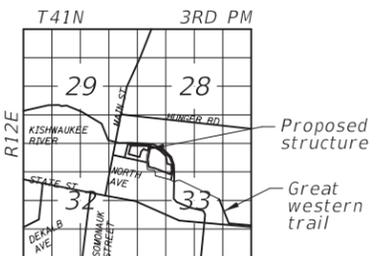


Melissa F. Lange

MELISSA F. LANGE, S.E.  
 # 081-006488

EXP 11-2020

DATE 3-17-2020



**LOCATION SKETCH**

**TIMBER BRIDGE B:**  
**GENERAL PLAN & ELEVATION**  
**GREAT WESTERN TRAIL EXTENSION**  
**DEKALB COUNTY**  
**STA 114+67.74**

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PLOT DATE = 3/13/2020	CHECKED M. LANGE	REVISED -
	DATE 11-18-2019	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

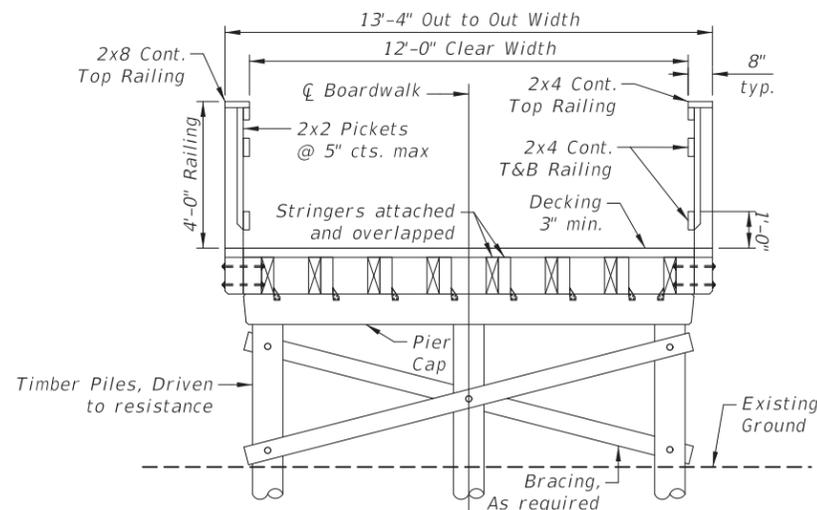
GREAT WESTERN TRAIL EXTENSION

SCALE: 1" = 5' SHEET B1 OF B5 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

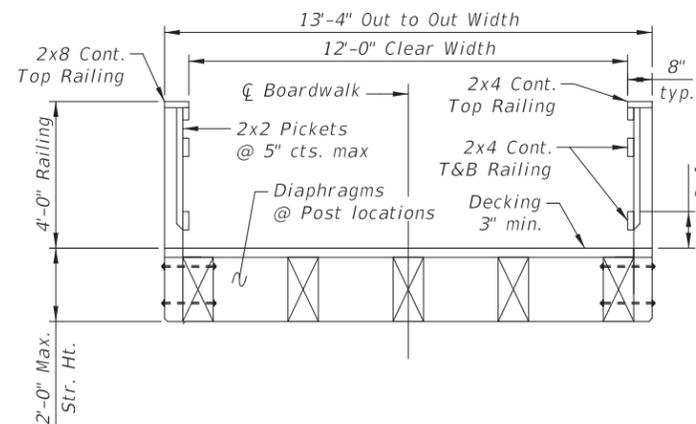
F.A. RTE.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-P4006-01-BT	DEKALB	58	34
CONTRACT NO. 87730			ILLINOIS FED. AID PROJECT	

**TOTAL BILL OF MATERIAL**

Pay Item	Unit	Quantity
Concrete Structures	Cu. Yd.	1.8
Protective Coat	Sq. Yd.	28
Concrete Superstructure (Approach)	Cu. Yd.	9.4
Reinforcement Bars, Epoxy Coated	Pound	2600
Granular Backfill for Structures	Cu. Yd.	17
Geocomposite Wall Drain	Sq. Yd.	20
Pipe Underdrains for Structures	Foot	56
Timber Stringer Recreation Bridge, Location 2	Sq. Ft.	240
Boardwalk	Sq. Ft.	840



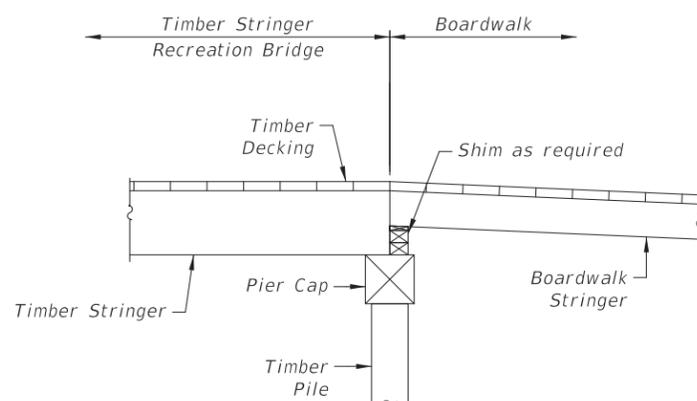
**TYPICAL SECTION- BOARDWALK**



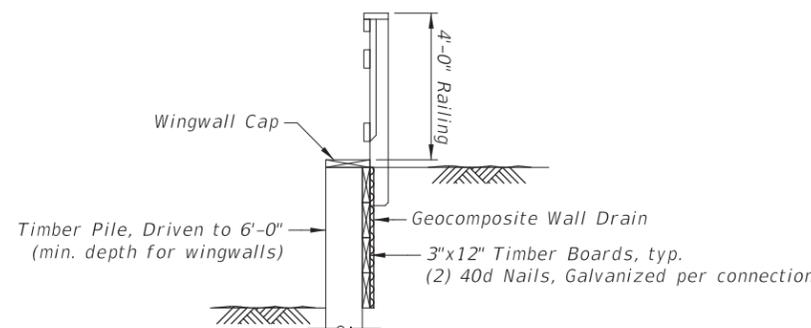
**TYPICAL SECTION - TIMBER STRINGER RECREATION BRIDGE**  
(taken Midspan)

**GENERAL NOTES**

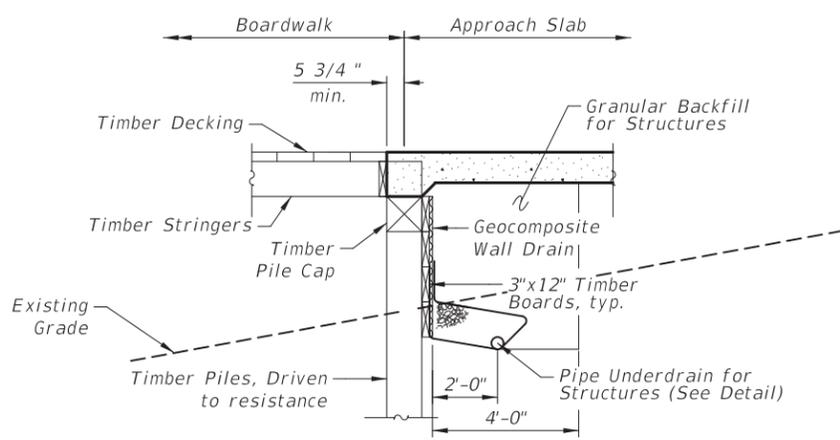
- The contractor shall be responsible for designing, detailing, fabrication, delivery, construction and erection of the Timber Stringer Recreation Bridge and the Boardwalk.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- Boardwalk pay limits include clear width from centerline of pier to centerline of pier. Wingwalls are included in the cost of the boardwalk.
- Timber stringer recreation Bridge pay limits include clear width from centerline of pier to centerline of pier.
- Bridge/ Boardwalk Contractor will perform all work from the deck level. All foot traffic will be contained within six feet from the boardwalk path.
- Bridge/ boardwalk construction to be completed by qualified and experienced contractor approved by the Owner.
- Manufacturer Name Plate shall be provided and installed on the structure with design loading, weight, manufacturer and year built. Included in the cost Timber Stringer Recreation Bridge



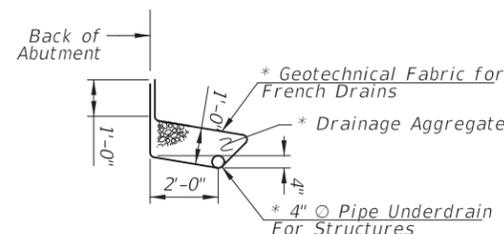
**PIER DETAIL**



**WINGWALL DETAIL: SECTION B-B**  
Wingwall Railing shall match boardwalk railing

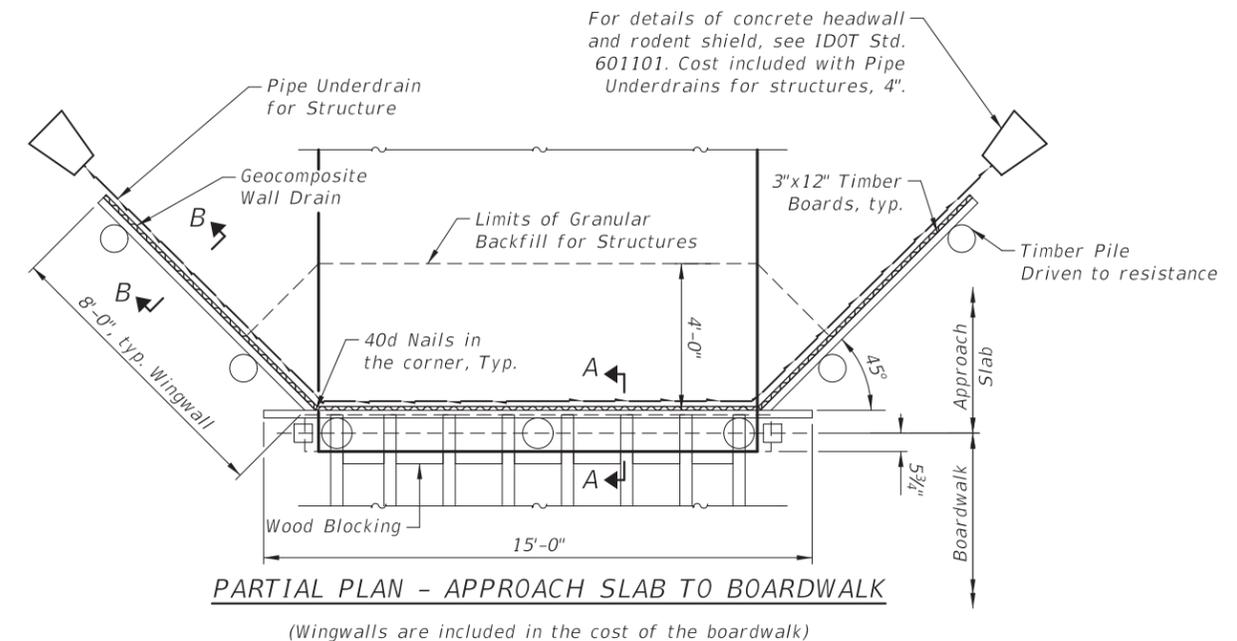


**ABUTMENT DETAIL: SECTION A-A**  
(Approach slab needs to be supported by the Timber piles)



**PIPE UNDERDRAIN DETAIL**

\* Included in the Cost of Pipe Underdrains for Structures



**PARTIAL PLAN - APPROACH SLAB TO BOARDWALK**  
(Wingwalls are included in the cost of the boardwalk)

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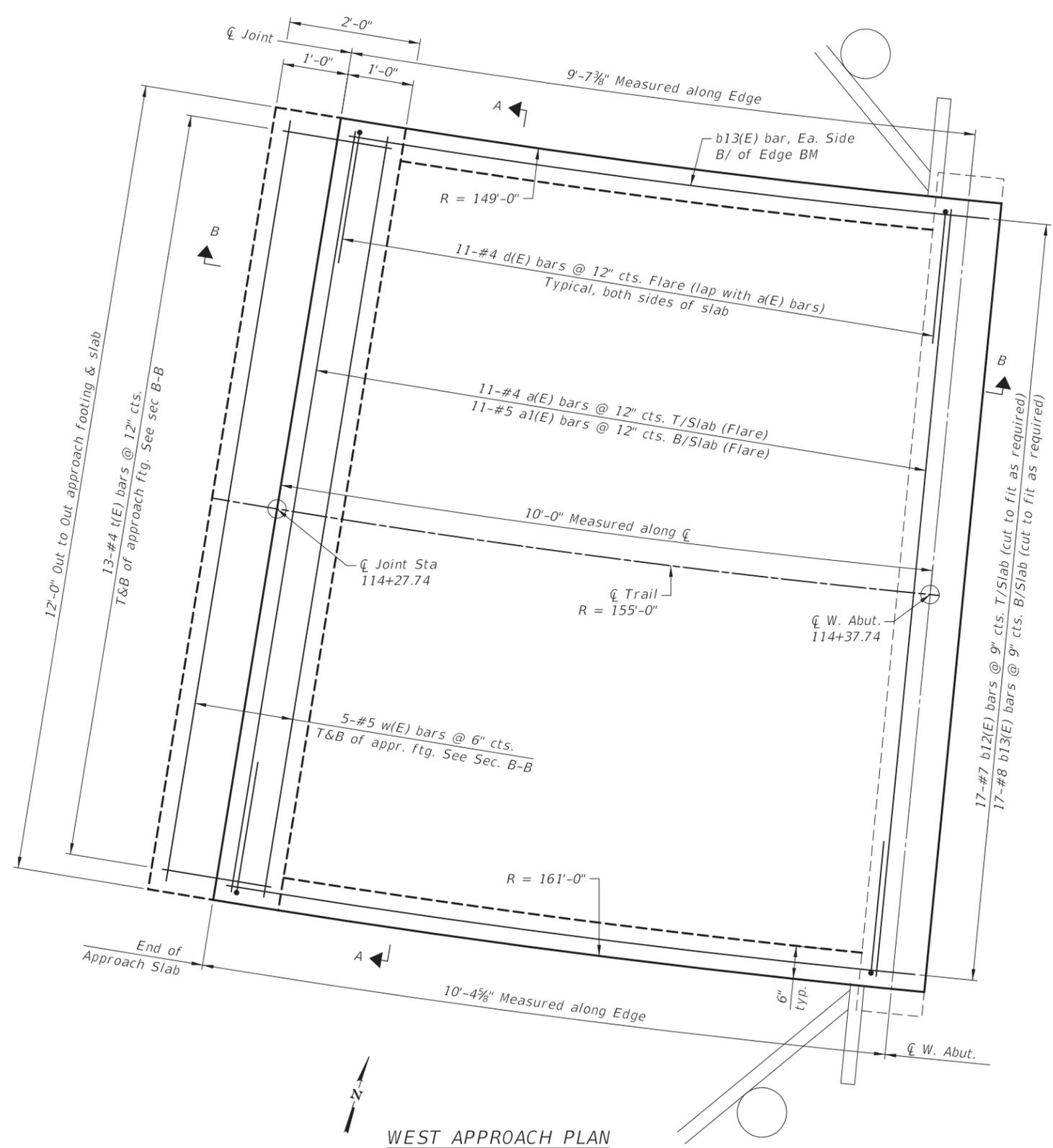
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	DATE 11-18-2019	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

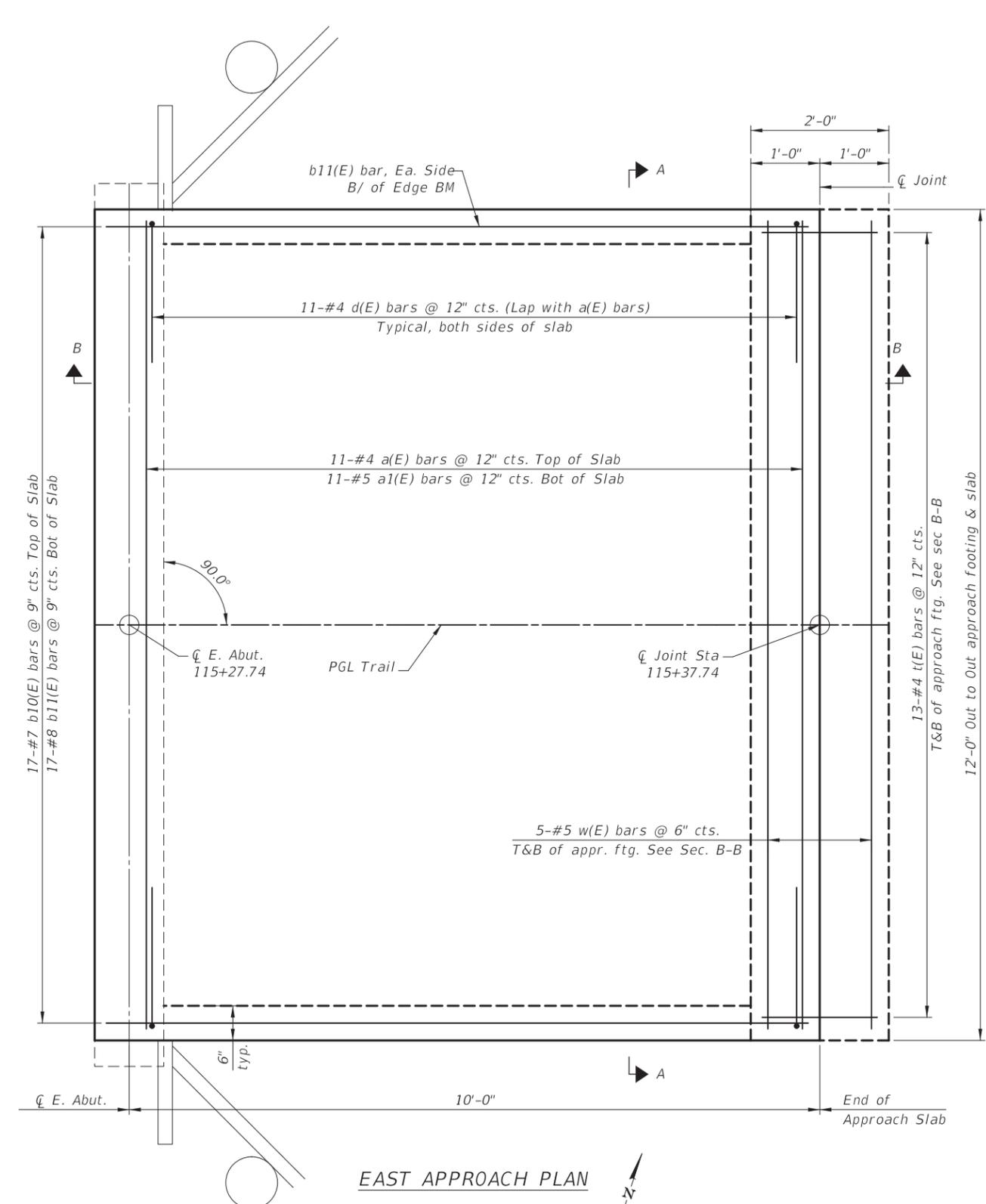
<b>GREAT WESTERN TRAIL EXTENSION TIMBER BRIDGE B: GENERAL DATA</b>	
SCALE: 1" = 5'	SHEET B2 OF B5 SHEETS STA. _____ TO STA. _____

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-P4006-01-BT	DEKALB	58	35
CONTRACT NO. 87730			ILLINOIS FED. AID PROJECT	

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WEST APPROACH PLAN



EAST APPROACH PLAN



USER NAME = sUSERS	DESIGNED C. SEDLACKO	REVISED -
DRAWN C. SEDLACKO	REVISED -	
PLOT SCALE = \$SCALE\$	CHECKED M. LANGE	REVISED -
PLOT DATE = 3/13/2020	DATE 11-18-2019	REVISED -

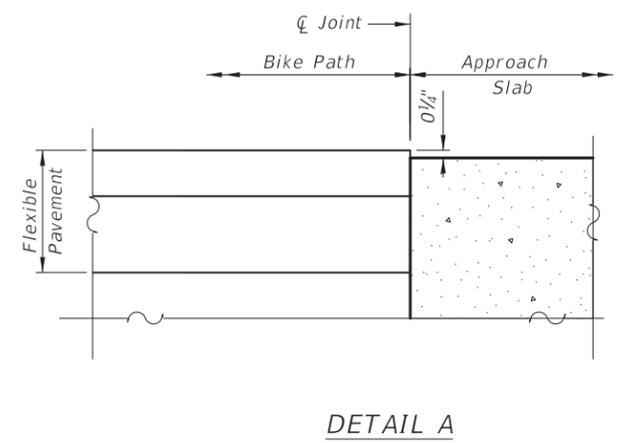
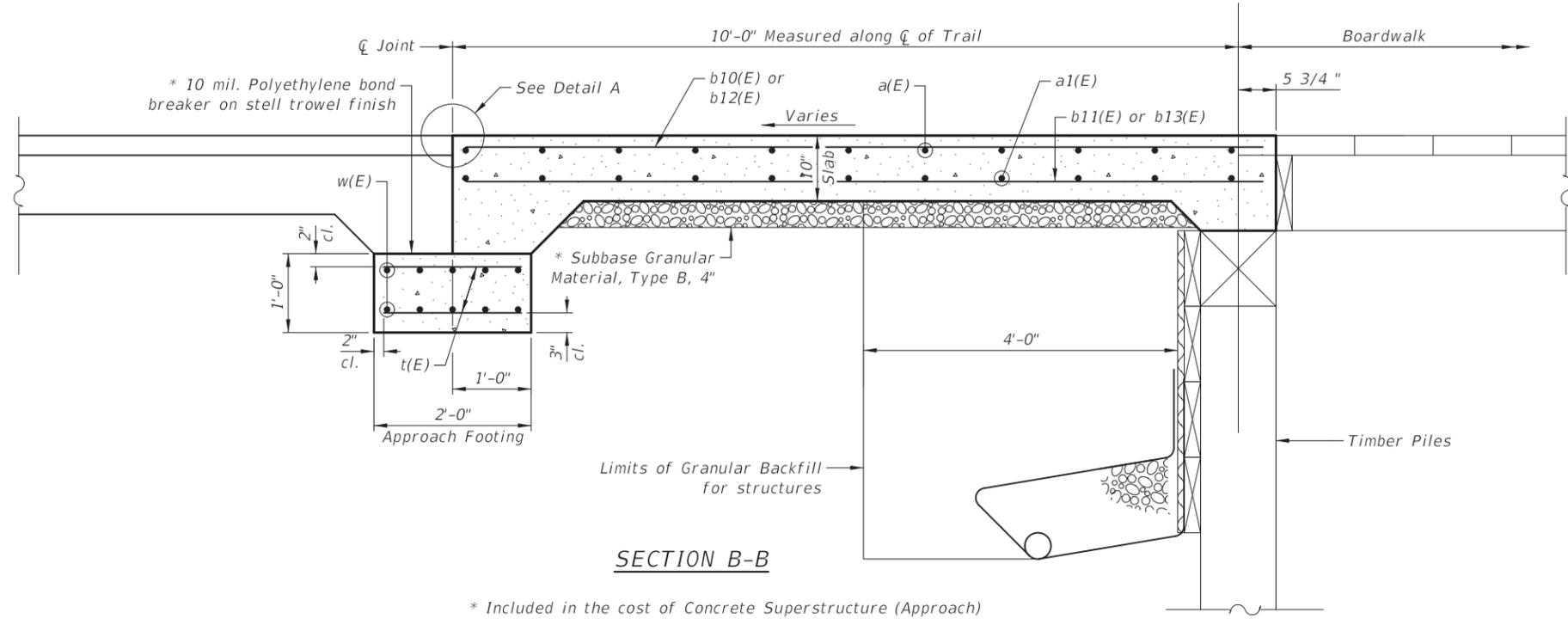
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION  
 TIMBER BRIDGE B: APPROACH SLABS

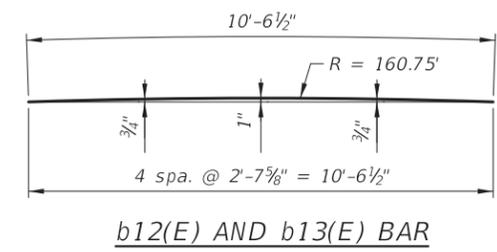
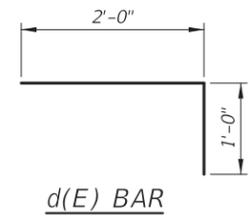
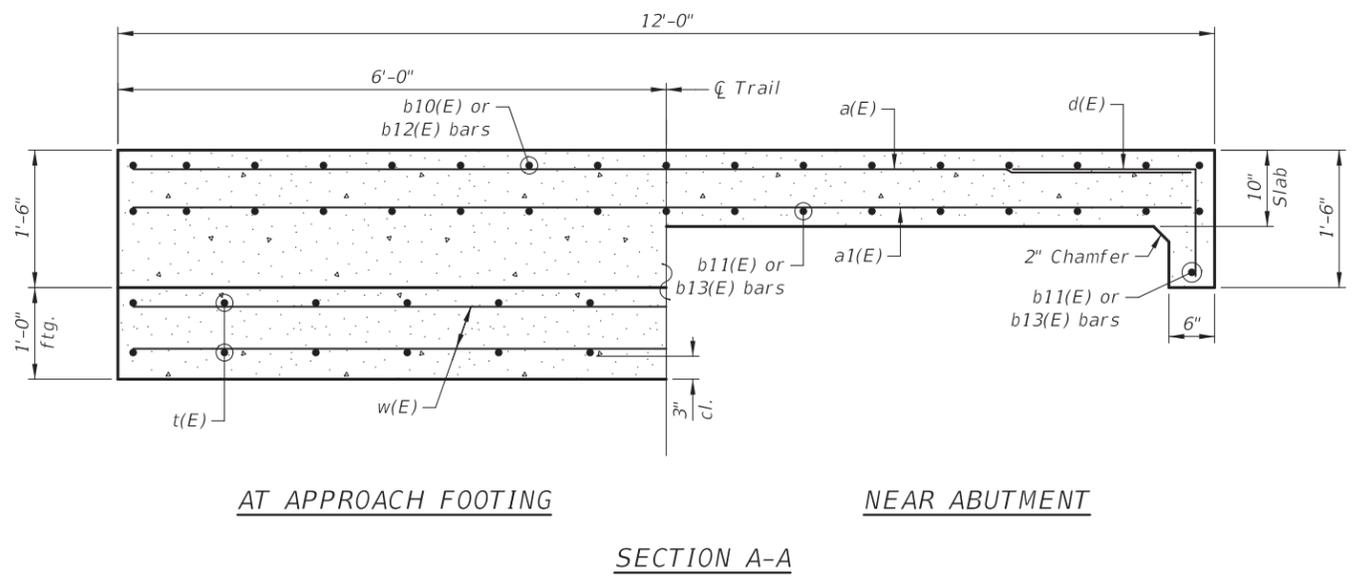
SCALE: 1" = 1' SHEET B3 OF B5 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-P4006-01-BT	DEKALB	58	36
CONTRACT NO. 87730				
ILLINOIS FED. AID PROJECT				

Notes:  
 Approach slab shall be paid for as Concrete Superstructure (Approach Slab).  
 Approach footing concrete shall be paid for as Concrete Structures.  
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Granular Backfill for Structures and drainage treatment details, see sheet B2.



\* Included in the cost of Concrete Superstructure (Approach)



TOTAL BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	22	#4	11'-8"	—
a1(E)	22	#5	11'-8"	—
b10(E)	17	#7	10'-2"	—
b11(E)	19	#8	10'-2"	—
b12(E)	17	#7	10'-6 1/2"	—
b13(E)	19	#8	10'-6 1/2"	—
d(E)	44	#4	3'-0"	└
t(E)	52	#4	1'-8"	—
w(E)	20	#5	11'-8"	—
Item		Unit	Quantity	
Concrete Structures		Cu. Yd.	1.8	
Concrete Superstructure (Approach Slab)		Cu. Yd.	9.4	
Reinforcement Bars, Epoxy Coated		Pound	2570	

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PLOT DATE = 3/13/2020	CHECKED M. LANGE	REVISED -
	DATE 11-18-2019	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION  
 TIMBER BRIDGE B: APPROACH SLAB DETAILS  
 SCALE: 1" = 2' SHEET B4 OF B5 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-P4006-01-BT	DEKALB	58	37
CONTRACT NO. 87730			ILLINOIS FED. AID PROJECT	

MSET PROJECT NO.: 19282		LOG OF BORING NO. SB-3		Page 1 of 2						
PROJECT: Great Western Trail			SITE LOCATION: Sycamore, Illinois							
BORING LOCATION: West Abutment, Structure #3			CLIENT: Engineering Resource Associates							
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE			TESTS			REMARKS
				TYPE/ INTERVAL	NO.	N-VALUE Blows per ft.	Wt% Dry Unit Weight per ft.	Unconfined Compressive Strength, tsf		
0		Black Silty CLAY, Topsoil (13")	826.0	SS	1	5	9			
		Brown (f-m) SAND, A-3, slightly dense moist clay seam at 2.5 feet	824.5							
4		Brown SAND and GRAVEL, A-1-a, slightly to medium dense	823.0	SS	2	8	12			
				SS	3	9	12			
				SS	4	7	11			
				SS	5	17	13			
		clay seam at 12.5'	813.5							
				SS	6	19	4			
		cobbles 15 to 17 feet	811.0							
				SS	7	15	8			
				SS	8	15	11			
		Grey Clay LOAM, A-6, very stiff	807.0							
				SS	9	17	12	2.60		
				SS	10	18	12	2.37		
		sand seam at 25 feet	801.0							
				SS	11	13	13	1.82		
				SS	12	12	12	2.02		

WATER LEVEL OBSERVATIONS, ft.  
 DURING DRILLING: 3.5'  
 IMMEDIATELY AFTER DRILLING: 4.0'  
 DELAYED READING AFTER: 4.0'

BORING STARTED: 7/12/19  
 BORING COMPLETED: 7/12/19  
 LOGGED BY: GPF  
 BORING METHOD: HSA

MSET

Midland Standard Engineering & Testing, Inc. 410 Nolan Drive, South Elgin, Illinois 60177 (847) 844-1895 (847) 844-3875

MSET PROJECT NO.: 19282		LOG OF BORING NO. SB-3		Page 2 of 2						
PROJECT: Great Western Trail			SITE LOCATION: Sycamore, Illinois							
BORING LOCATION: West Abutment, Structure #3			CLIENT: Engineering Resource Associates							
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE			TESTS			REMARKS
				TYPE/ INTERVAL	NO.	N-VALUE Blows per ft.	Wt% Dry Unit Weight per ft.	Unconfined Compressive Strength, tsf		
32		Grey Clay LOAM, A-6, very stiff	795.0							
				SS	13	13	11	3.0 Qp		
		Sand seam at 34.5 feet	791.5							
36		Grey SAND and GRAVEL, A-1-a, slightly dense	789.5							
				SS	14	8	11			
40		End of Boring at 40 Feet	786.0							

WATER LEVEL OBSERVATIONS, ft.  
 DURING DRILLING: 3.5'  
 IMMEDIATELY AFTER DRILLING: 4.0'  
 DELAYED READING AFTER: 4.0'

BORING STARTED: 7/12/19  
 BORING COMPLETED: 7/12/19  
 LOGGED BY: GPF  
 BORING METHOD: HSA

MSET

Midland Standard Engineering & Testing, Inc. 410 Nolan Drive, South Elgin, Illinois 60177 (847) 844-1895 (847) 844-3875

MSET PROJECT NO.: 19282		LOG OF BORING NO. SB-4		Page 1 of 2						
PROJECT: Great Western Trail			SITE LOCATION: Sycamore, Illinois							
BORING LOCATION: East Abutment, Structure #3			CLIENT: Engineering Resource Associates							
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE			TESTS			REMARKS
				TYPE/ INTERVAL	NO.	N-VALUE Blows per ft.	Wt% Dry Unit Weight per ft.	Unconfined Compressive Strength, tsf		
0		Black Silty CLAY Topsoil (12")	831.5							
		Dark Grey Sandy LOAM, A-2-4, loose	830.5	SS	1	4	27			
4		Brown SAND and GRAVEL, A-1-a, medium dense	828.5	SS	2	10	14			
				SS	3	13	14			
		Grey SAND and GRAVEL, A-1-a, medium dense, with intermittent clay seams	826.0							
8		Grey Clay LOAM, A-6, very stiff	823.5	SS	4	11	18	2.83		
				SS	5	13	19			
		Grey SAND and GRAVEL, A-1-a, medium dense	821.0							
				SS	6	13	15			
				SS	7	13	10			
				SS	8A	28	11			
				SS	8B	9	12	1.24		
				SS	9	9	12	1.32		
				SS	10	7	12	1.16		
				SS	11	6	13	0.70		
				SS	12	4	12	1.0 Qp		
20		Grey Clay LOAM, A-6, stiff	812.5							
				SS	9	9	12	1.32		
				SS	10	7	12	1.16		
				SS	11	6	13	0.70		
				SS	12	4	12	1.0 Qp		

WATER LEVEL OBSERVATIONS, ft.  
 DURING DRILLING: 2.5'  
 IMMEDIATELY AFTER DRILLING: 3.5'  
 DELAYED READING AFTER: 3.5'

BORING STARTED: 7/12/19  
 BORING COMPLETED: 7/12/19  
 LOGGED BY: GPF  
 BORING METHOD: HSA

MSET

Midland Standard Engineering & Testing, Inc. 410 Nolan Drive, South Elgin, Illinois 60177 (847) 844-1895 (847) 844-3875

MSET PROJECT NO.: 19282		LOG OF BORING NO. SB-4		Page 2 of 2						
PROJECT: Great Western Trail			SITE LOCATION: Sycamore, Illinois							
BORING LOCATION: East Abutment, Structure #3			CLIENT: Engineering Resource Associates							
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE			TESTS			REMARKS
				TYPE/ INTERVAL	NO.	N-VALUE Blows per ft.	Wt% Dry Unit Weight per ft.	Unconfined Compressive Strength, tsf		
32		Grey SAND, A-3, medium dense	799.5							
				SS	13	10	12			
36		Grey SAND and GRAVEL, A-1-a, medium dense	794.5							
				SS	14	10	12			
40		End of Boring at 40 Feet	791.5							

WATER LEVEL OBSERVATIONS, ft.  
 DURING DRILLING: 2.5'  
 IMMEDIATELY AFTER DRILLING: 3.5'  
 DELAYED READING AFTER: 3.5'

BORING STARTED: 7/12/19  
 BORING COMPLETED: 7/12/19  
 LOGGED BY: GPF  
 BORING METHOD: HSA

MSET

Midland Standard Engineering & Testing, Inc. 410 Nolan Drive, South Elgin, Illinois 60177 (847) 844-1895 (847) 844-3875

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PLOT SCALE = 55CALE5	DRAWN C. SEDLACKO	REVISED -
PLOT DATE = 3/13/2020	CHECKED M. LANGE	REVISED -
	DATE 11-18-2019	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION  
 TIMBER BRIDGE B: SOIL BORING LOGS

SCALE: N.T.S. SHEET B5 OF B5 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-P4006-01-BT	DEKALB	58	38
CONTRACT NO. 87730				
ILLINOIS FED. AID PROJECT				

Benchmark: Set Cut Square in Concrete Foundation near Sta 118+50, Elev. 831.173

Existing Structure: The original structure was a railroad supported on concrete piers. The railroad was abandoned and the concrete substructure units still remain.

**DESIGN SPECIFICATIONS**

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

AASHTO LRFD Guide Specifications for the Design of Pedestrian Bridges, 2nd Edition

**DESIGN STRESSES**

**FIELD UNITS**

$f'_c = 3,500$  psi (Substructure)  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 50,000$  psi, (M270 Grade 50W)

**SEISMIC DATA**

Seismic Performance Zone (SPZ) = Category C  
 Design Spectral Acceleration at 1.0 sec. ( $S_{D1}$ ) = 0.14g (0.2 sec)  
 Design Spectral Acceleration at 0.2 sec. ( $S_{D5}$ ) = 0.102g (1.0 sec)  
 Soil Site Class = Class D

**DESIGN LOADING**

Pedestrian Live Load (PL) 90 psf  
 H-10 Truck (20,000 lbs)

**DESIGN SCOUR ELEVATION TABLE**

Event / Limit State	Design Scour Elevations (ft.)		
	W. Abut.	E. Abut.	Item 113
Q100	830.29	830.29	5
Q200	830.29	830.29	5
Design	830.29	830.29	5
Check	830.29	830.29	5

**WATERWAY INFORMATION**

Drainage Area = 105.4 Sq. miles		Low Grade Elev. 820.15 @ Sta. 117+29						
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	100	4400	698	830.0	0.0	0.1	830.0	830.1
Base	100	7200	985	831.7	0.0	0.0	831.7	831.7
Overtopping								
Max. Calc.	500	9000	1142	832.6	0.0	0.0	832.6	832.6

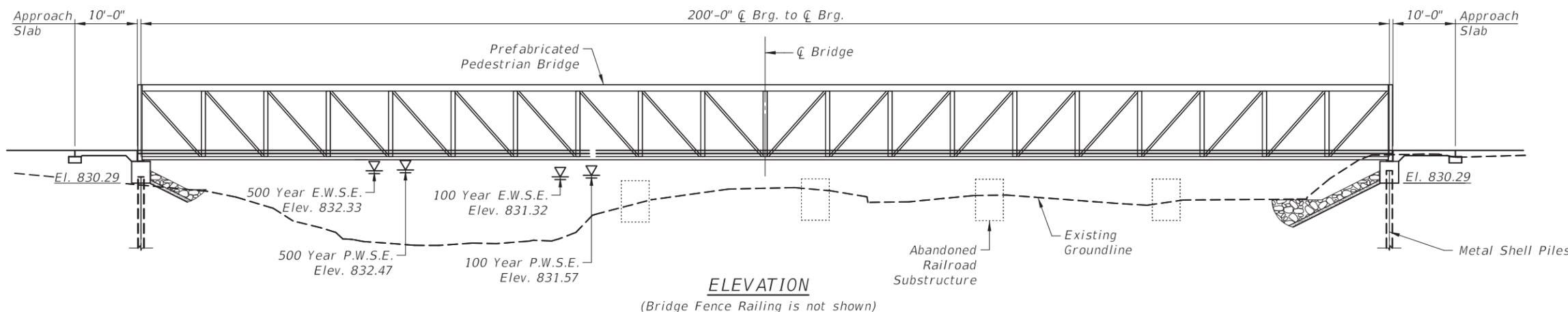
10-Year Existing Velocity = N/A  
 10-Year Proposed Velocity = 6.32 ft/s

**CURVE 4 DATA**

P.I. Sta. = 118+88.52  
 $\Delta = 3^\circ 29' 31.2''$   
 $D = 57^\circ 17' 45.6''$   
 $R = 100.00'$   
 $T = 3.05'$   
 $L = 6.095'$   
 $E = 0.0465'$   
 P.C. Sta. = 118+85.47  
 P.T. Sta. = 118+91.56

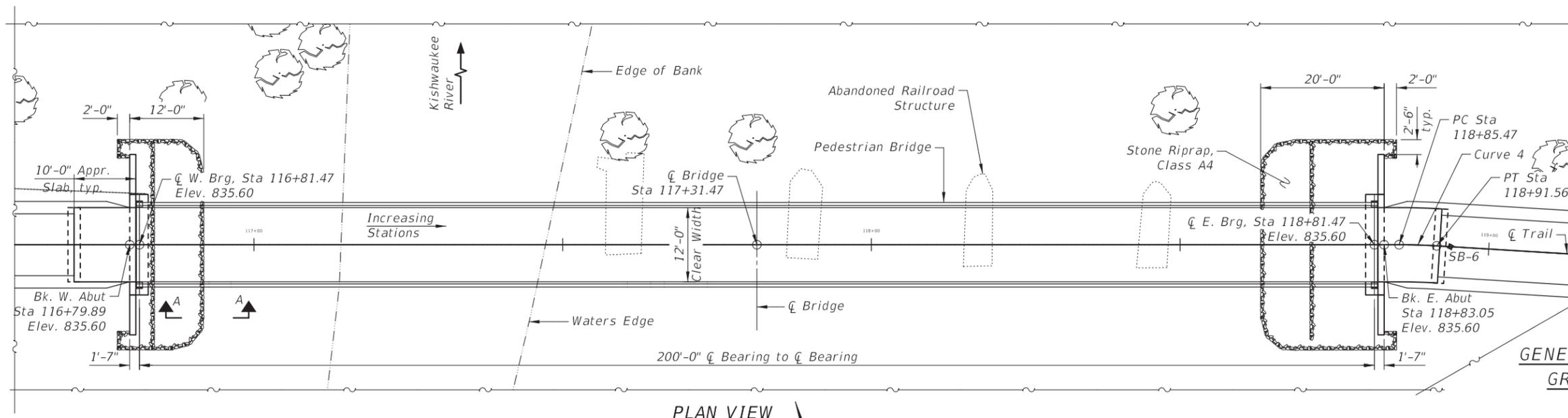
**INDEX OF SHEETS**

- S1 General Plan and Elevation
- S2 General Data
- S3 Approach Slab Plan
- S4 Approach Slab Details
- S5 Abutment Plan
- S6 Abutment Details
- S7 Pile Details
- S8 Bridge Fence Railing Details
- S9 Soil Boring Logs I
- S10 Soil Boring Logs II



**ELEVATION**

(Bridge Fence Railing is not shown)



**PLAN VIEW**

**LOCATION SKETCH**

**GENERAL PLAN & LONGITUDINAL SECTION**  
**GREAT WESTERN TRAIL EXTENSION**  
**SECTION 18-P4006-01-BT**  
**DEKALB COUNTY**  
**STA 117+31.47**  
**STRUCTURE NO. 019-P002.2 (TRACKING ONLY)**

ENGINEERING RESOURCE ASSOCIATES, INC.  
 MELISSA F. LANGE, S.E.

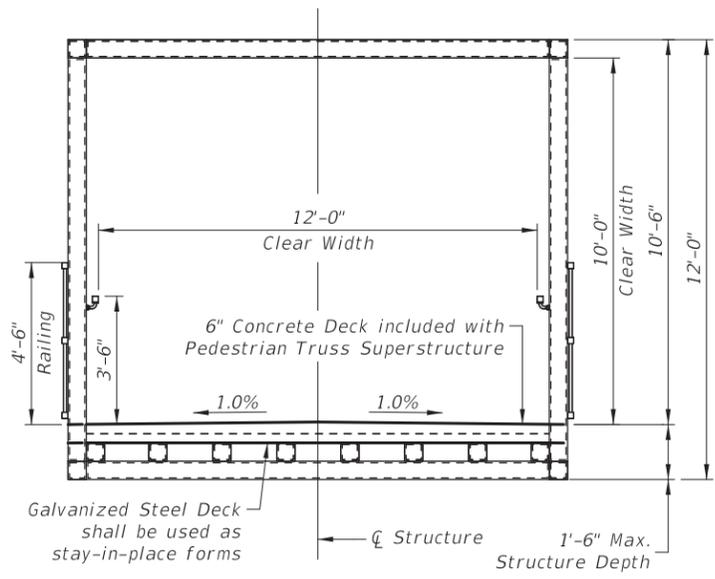
Melissa F. Lange, S.E.  
 # 081-006488  
 EXP 11-2020  
 DATE 3-17-2020

I certify that to the best of my knowledge, information and belief, this pedestrian 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 LRFD Bridge Design Specifications.

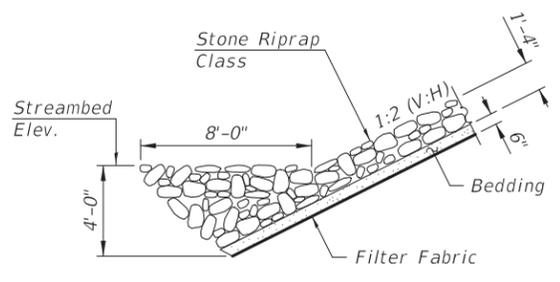
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	PLOT SCALE = sSCALE5	DRAWN C. SEDLACKO	REVISED -			18-P4006-01-BT	DEKALB	58	39	
	PLOT DATE = 3/13/2020	CHECKED M. LANGE	REVISED -			CONTRACT NO. 87730		ILLINOIS FED. AID PROJECT		

SCALE: 1" = 10' SHEET S1 OF S10 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_



TYPICAL SECTION



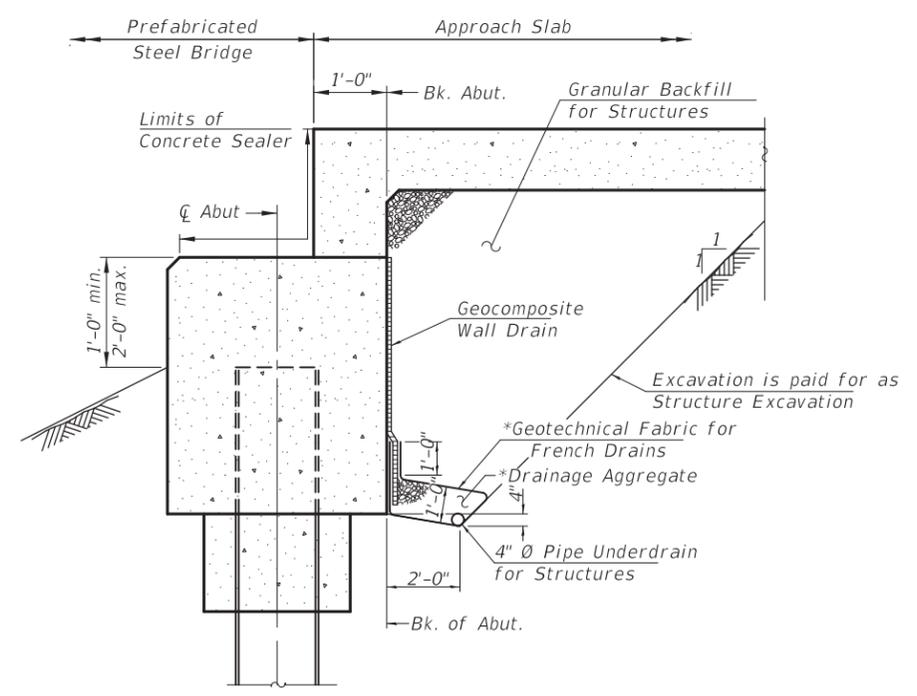
SECTION A-A

GENERAL NOTES

1. The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
2. The Contractor shall obtain a construction permit from the Illinois department of Natural Resources (IDNR), Office of Water Resources for any temporary constriction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR 3700 Floodway Construction permit number allowing permanent construction as shown in the contract plans.
3. The prefabricated pedestrian bridge shall be designed, fabricated, delivered and erected according to the Special Provisions of "Pedestrian Truss Superstructure" and design plans.
4. Manufacturer Name plate shall be provided and installed on the structure with design loading, weight, manufacturer and year built. Included in the cost of Pedestrian Truss Superstructure.
5. The last 10'-0" on each side of the pedestrian structure shall be painted. The top coat shall match the Reddish Brown, Munsell No. 2.5 YE 7/4.
6. Truss manufacturer shall provide the reinforced concrete deck design. Concrete deck to utilize stay-in-place galvanized forms. Reinforcement shall be epoxy coated. Contractor shall place the concrete after the truss is set. Cost included with Pedestrian Truss Superstructure.
7. Truss Manufacturer shall camber the truss as necessary to provide allowance for dead load deflection.
8. No field welding is permitted except as specified in the contract documents.
9. Reinforcement bars designated (E) shall be epoxy coated.
10. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 in. (0.01ft). Adjustment shall be made either by grinding the surface or by shimming the bearings.
11. Concrete Sealer shall be applied to the designated areas of the abutments.
12. When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck, the next pour shall not be made until both of the following are met:

A. At least 72 hours shall have elapsed from the end of the previous pour.

B. The concrete strength shall have attained a minimum flexural strength of 650psi or a minimum compressive strength of 3500psi.



SEC. THRU ABUT.

\*Included in the cost of Pipe Underdrains for Structures. (See Special Provisions)  
 Note:  
 All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

BRIDGE REACTIONS

Load Type	P (kips)	Lateral (kips)	Long. (kips)
Dead Load	85.23	-	-
Uniform Live Load	56.63	-	-
Vehicle Load	10.00	-	-
Wind Uplift	-21.88	-	-
Wind	21.49	40.25	-
Thermal	-	-	12.79

Table References  
 P - Vertical Load at each base plate (4 per bridge)  
 H - Horizontal load at each footing (2 per bridge)  
 L - Longitudinal load at each bearing (4 per bridge)  
 Positive - Downward load  
 Negative - Upward Load

TOTAL BILL OF MATERIAL

PAY ITEM	UNIT	QTY
Stone Riprap, Class A4	Sq. Yd.	112
Filter Fabric	Sq. Yd.	112
Structure Excavation	Cu. Yd.	59
Concrete Structures	Cu. Yd.	17.6
Protective Coat	Sq. Yd.	359
Concrete Superstructure (Approach)	Cu. Yd.	9.4
Reinforcement Bars, Epoxy Coated	Pound	4690
Furnishing Metal Shell Piles 14"x.312"	Foot	240
Driving Piles	Foot	240
Test Pile Metal Shells	Each	2
Granular Backfill for Structures	Cu. Yd.	23
Concrete Sealer	Sq. Ft.	118
Geocomposite Wall Drain	Sq. Yd.	26
Concrete Headwall for Pipe Drains	Each	4
Pedestrian Truss Superstructure	Sq. Ft.	2410
Bridge Fence Railing (Special)	Foot	400
Pipe Underdrains for Structures, 4"	Foot	58.5

MODEL: D:\draft\... ENGINEERING RESOURCE ASSOCIATES



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PLOT SCALE = 5/32" = 1"	DRAWN C. SEDLACKO	REVISED -
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	DATE 11-18-2019	REVISED -

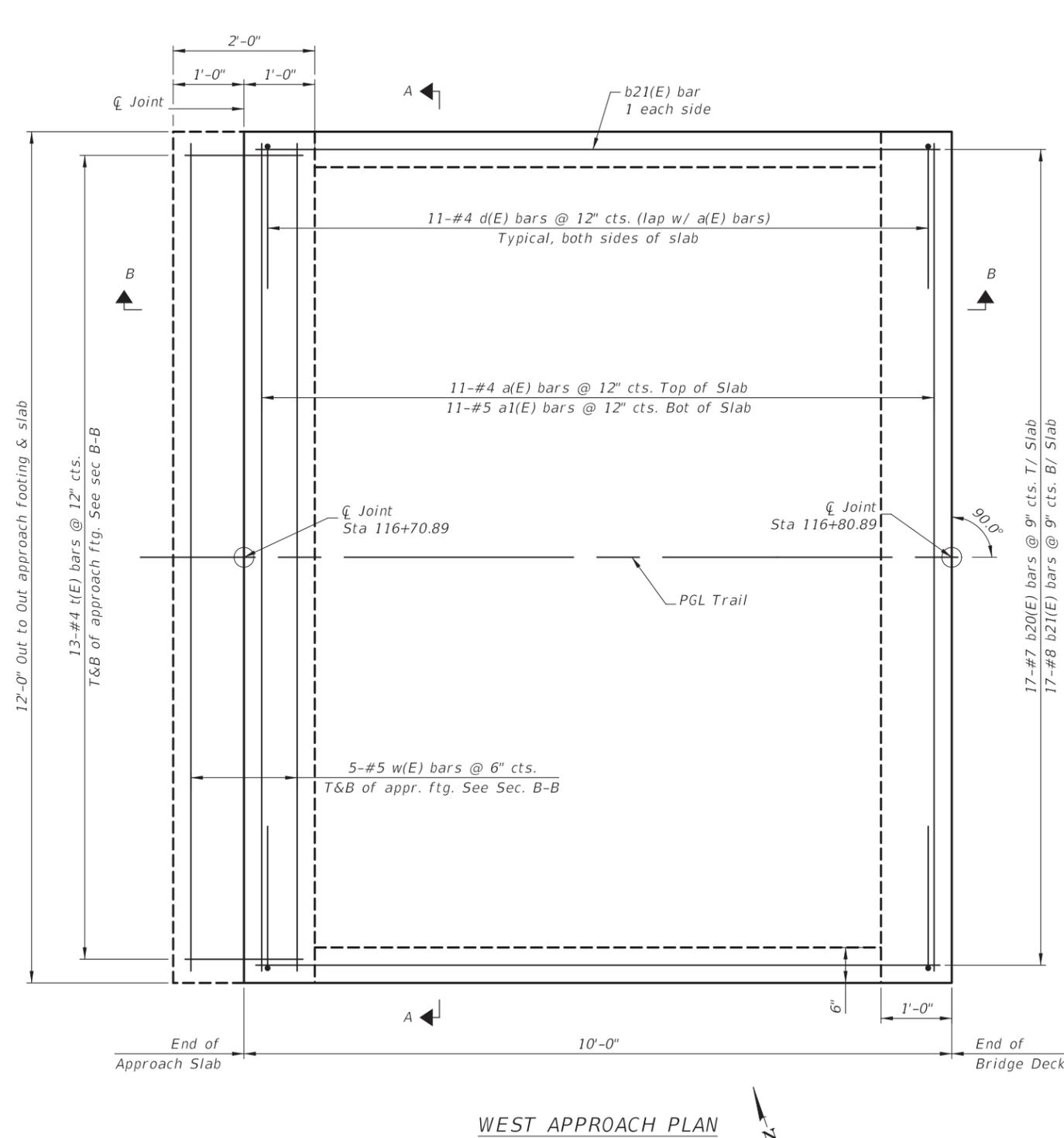
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION  
 PREFABRICATED STEEL BRIDGE: GENERAL DATA

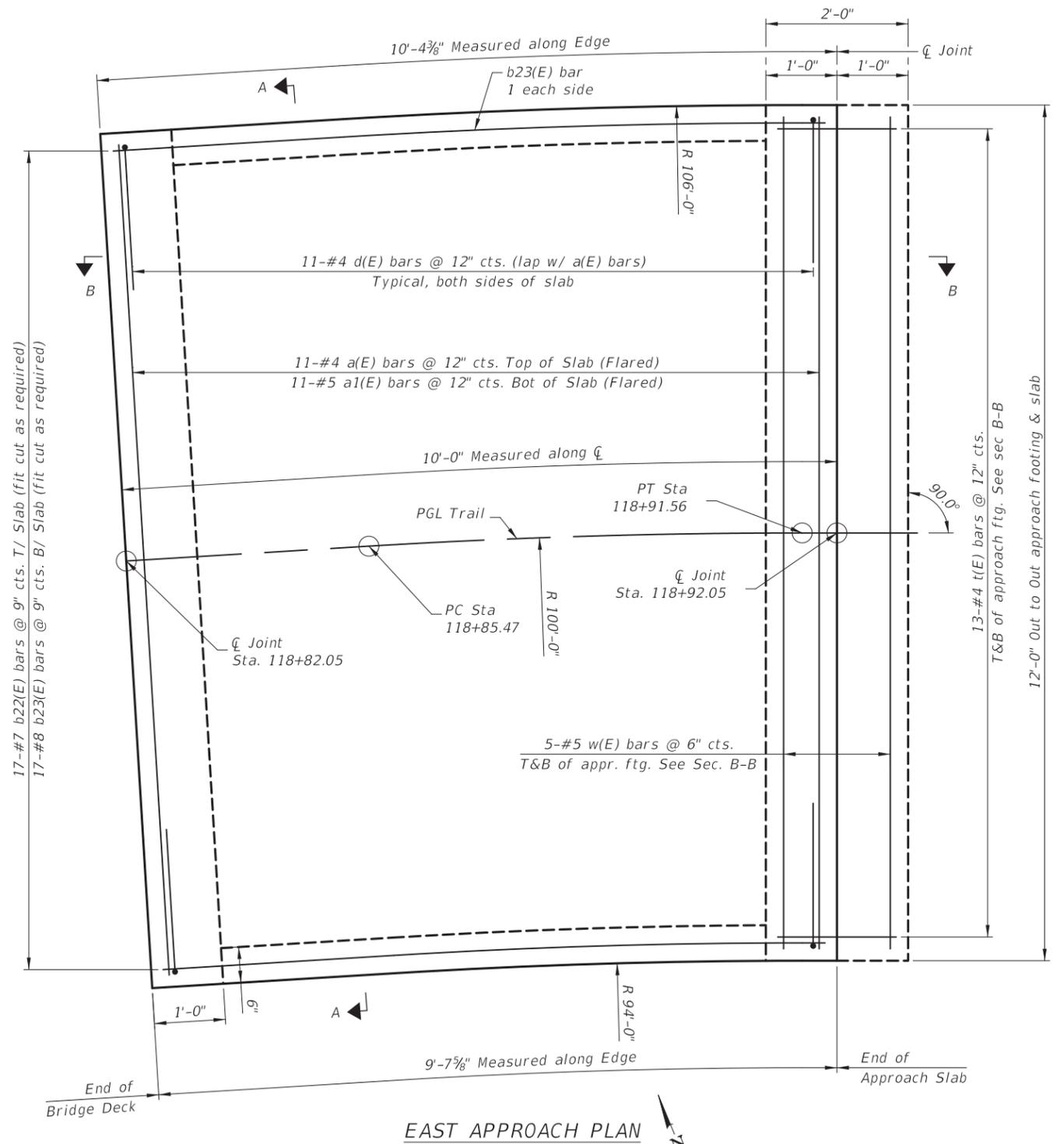
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	18-P4006-01-BT	DEKALB	58	40
CONTRACT NO. 87730				
ILLINOIS FED. AID PROJECT				

SCALE: 1" = 5' SHEET 52 OF 510 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

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WEST APPROACH PLAN



EAST APPROACH PLAN

NOTES

1. See Sheet S4 for Section A-A and Section B-B
2. a(E) and a1(E) bar spacing measured along  $\zeta$  roadway



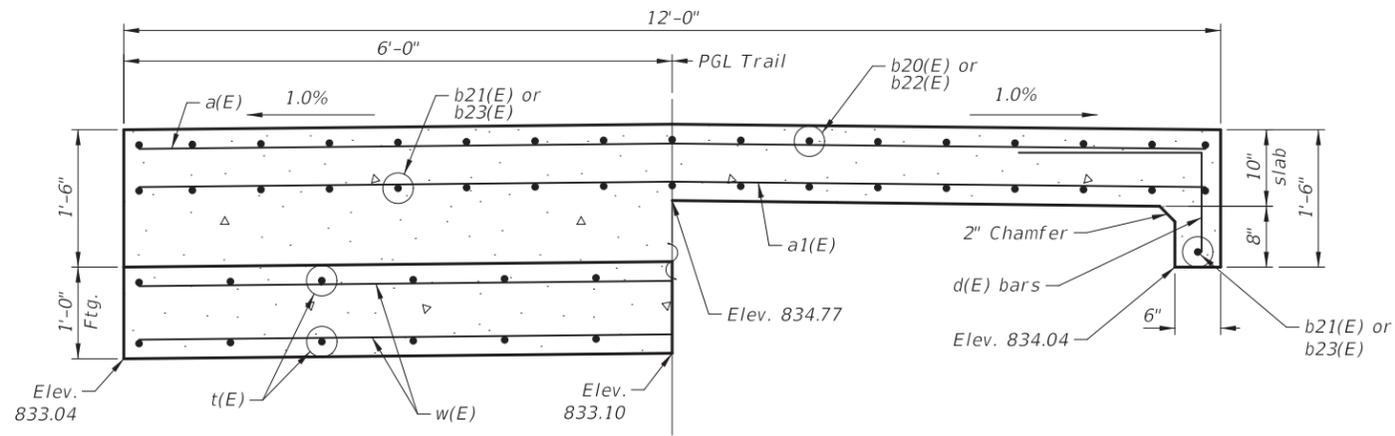
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	DATE 11-18-2019	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION  
 PREFABRICATED STEEL BRIDGE: APPROACH SLAB PLAN

SCALE: 1" = 1' SHEET S3 OF S10 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-P4006-01-BT	DEKALB	58	41
CONTRACT NO. 87730			ILLINOIS FED. AID PROJECT	



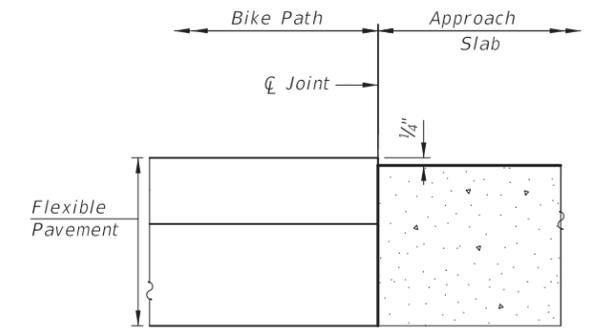
AT APPROACH FOOTING

NEAR ABUTMENT

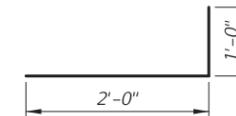
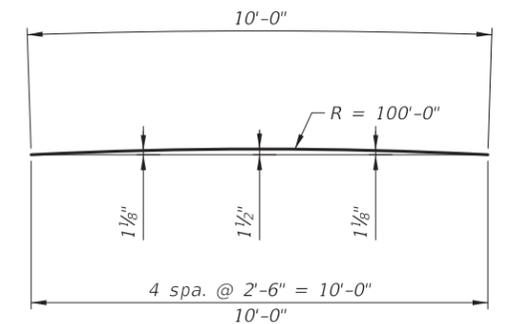
SECTION A-A

Notes:

Approach slab shall be paid for as Concrete Superstructure (Approach Slab).  
 Approach footing concrete shall be paid for as Concrete Structures.  
 The approach footing maximum applied service bearing pressure ( $Q_{max}$ ) = 2.0 ksf.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Granular Backfill for Structures and drainage treatment details, see sheet A1.  
 See Sheet S6 for v3(E) bars.

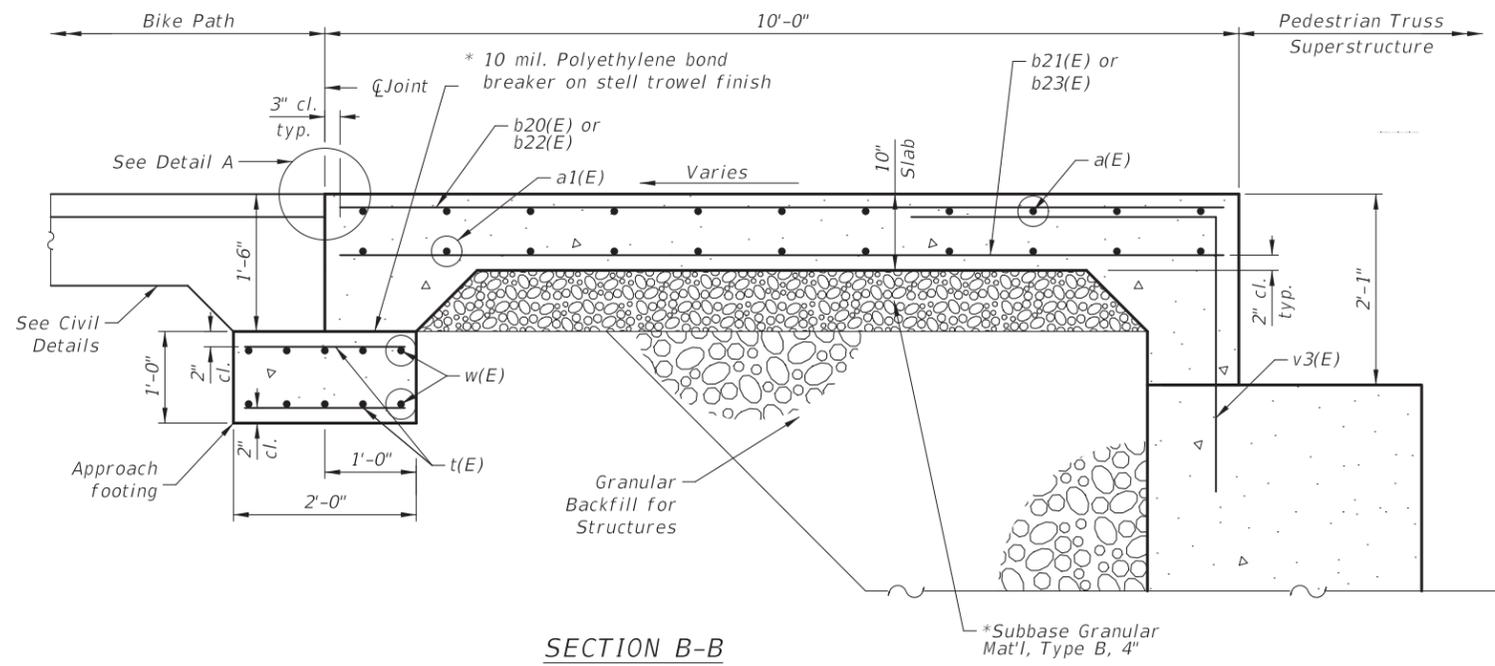


DETAIL A



d(E) BAR

b22(E) AND b23(E) BAR



SECTION B-B

\* Included in the cost of Concrete Superstructure (Approach)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	22	#4	11'-8"	—
a1(E)	22	#5	11'-8"	—
b20(E)	17	#7	9'-8"	—
b21(E)	19	#8	9'-8"	—
b22(E)	17	#7	10'-0"	—
b23(E)	19	#8	10'-0"	—
d(E)	44	#4	3'-0"	┌
t(E)	52	#4	1'-8"	—
w(E)	20	#5	11'-8"	—
Structure Excavation			Cu. Yd.	4.6
Concrete Structures			Cu. Yd.	1.8
Concrete Superstructure (Approach)			Cu. Yd.	9.4
Reinforcement Bars, Epoxy Coated			Pound	2520

MODEL: D:\draft\... ENGINEERING RESOURCE ASSOCIATES



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	DATE 11-18-2019	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION  
PREFABRICATED STEEL BRIDGE: APPROACH SLAB DETAILS

SCALE: 1" = 1' SHEET S4 OF S10 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-P4006-01-BT	DEKALB	58	42
CONTRACT NO. 87730			ILLINOIS FED. AID PROJECT	









MSET PROJECT NO.: 19282		LOG OF BORING NO. SB-5		Page 1 of 3					
PROJECT: Great Western Trail		SITE LOCATION: Sycamore, Illinois							
BORING LOCATION: West Abutment, Structure #4		CLIENT: Engineering Resource Associates							
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS			REMARKS
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc%	Dry Unit Weight, pcf	
0		FILL: Black SAND, Cinders, A-1-a	832.0						
		FILL: Brown SAND and GRAVEL, A-1-a, slightly dense	831.0	SS 1A	11	2			
		fill: Brown, Grey, & Black Clay LOAM, A-6, hard	830.0	1B	12	17			
4		FILL: Black SAND and CINDERS, A-1-a, medium dense	828.5	SS 2	9	6			
		FILL: Brown Clay LOAM, A-6, stiff	826.5	SS 3A	6	19		1.25 Qp	
		Black CLAY, A-7-6	825.5	3B	8	33			
8		Dark Grey Sandy Clay LOAM, A-6, firm	824.0	SS 4	5	24	87	0.54	
		Grey LOAM, A-2-4, slightly dense	821.5	SS 5	5	9			
12		Grey Sandy LOAM, A-2-4 with intermittent clay seams, medium dense	819.0	SS 6	16	18			
		Grey SAND and GRAVEL, A-1-a, medium dense	815.0	SS 7	7	20			
				SS 8	15	11			
				SS 9	13	16			
24		Brown SAND, A-3, medium dense	809.0	SS 10	11	13			
				SS 11	12	12			
28				SS 12	18	11			
		Grey Clay LOAM, A-6,	802.0						

WATER LEVEL OBSERVATIONS, ft.  
 DURING DRILLING: 12.5'  
 IMMEDIATELY AFTER DRILLING: 12.0'  
 DELAYED READING AFTER

MSET

BORING STARTED: 7/12/19  
 BORING COMPLETED: 7/12/19  
 LOGGED BY: GPF  
 BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 410 Nolen Drive, South Elgin, Illinois 60177 (847) 844-1895 (847) 844-3875

MSET PROJECT NO.: 19282		LOG OF BORING NO. SB-5		Page 2 of 3					
PROJECT: Great Western Trail		SITE LOCATION: Sycamore, Illinois							
BORING LOCATION: West Abutment, Structure #4		CLIENT: Engineering Resource Associates							
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS			REMARKS
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc%	Dry Unit Weight, pcf	
32		Grey Clay LOAM, A-6 with intermittent silt seams, very stiff							
				SS 13	8	13		0.85	
36									
				SS 14	11	12		1.5 Qp	
40		Brown SAND, A-3, medium dense to dense	792.5						
				SS 15	9	16			
44									
				SS 16	16	14			
48									
				SS 17	28	11			
52									
				SS 18	39	12			
56									
60									

WATER LEVEL OBSERVATIONS, ft.  
 DURING DRILLING: 12.5'  
 IMMEDIATELY AFTER DRILLING: 12.0'  
 DELAYED READING AFTER

MSET

BORING STARTED: 7/12/19  
 BORING COMPLETED: 7/12/19  
 LOGGED BY: GPF  
 BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 410 Nolen Drive, South Elgin, Illinois 60177 (847) 844-1895 (847) 844-3875

MSET PROJECT NO.: 19282		LOG OF BORING NO. SB-5		Page 2 of 3					
PROJECT: Great Western Trail		SITE LOCATION: Sycamore, Illinois							
BORING LOCATION: West Abutment, Structure #4		CLIENT: Engineering Resource Associates							
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS			REMARKS
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc%	Dry Unit Weight, pcf	
32		Grey Clay LOAM, A-6 with intermittent silt seams, very stiff							
				SS 13	8	13		0.85	
36									
				SS 14	11	12		1.5 Qp	
40		Brown SAND, A-3, medium dense to dense	792.5						
				SS 15	9	16			
44									
				SS 16	16	14			
48									
				SS 17	28	11			
52									
				SS 18	39	12			
56									
60									

WATER LEVEL OBSERVATIONS, ft.  
 DURING DRILLING: 12.5'  
 IMMEDIATELY AFTER DRILLING: 12.0'  
 DELAYED READING AFTER

MSET

BORING STARTED: 7/12/19  
 BORING COMPLETED: 7/12/19  
 LOGGED BY: GPF  
 BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 410 Nolen Drive, South Elgin, Illinois 60177 (847) 844-1895 (847) 844-3875

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PLOT DATE = 3/13/2020	CHECKED M. LANGE	REVISED -
	DATE 11-18-2019	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION  
 PREFABRICATED STEEL BRIDGE: SOIL BORING LOGS

SCALE: N.T.S. SHEET 59 OF 510 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-P4006-01-BT	DEKALB	58	47
CONTRACT NO. 87730				
ILLINOIS FED. AID PROJECT				

MSET PROJECT NO.: 19282		LOG OF BORING NO. SB-6		Page 1 of 3					
PROJECT: Great Western Trail		SITE LOCATION: Sycamore, Illinois							
BORING LOCATION: East Abutment, Structure 4		CLIENT: Engineering Resource Associates							
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS			REMARKS
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc%	Dry Unit Weight, pcf	
0		Fill: Black, Grey, & Brown Sandy CLAY, A-6, stiff	834.5	SS 1	9	12	108	1.51	
4		Concrete Debris at 4.0 Auger Refusal, Offset Borehole 5 feet	830.5	SS 2	50/ 4"				Concrete Debris No Recovery
				SS 3	4	14		1.5 Qp	
8		FILL: Black SAND, Cinders, Slag, A-1-a, slightly dense	826.0	SS 4	4	17			
12		Dark Grey Clay LOAM, A-6, trace fibers, soft, moist	824.0	SS 5	2	32		0.25 Qp	
16		Brown SAND and GRAVEL, A-1-a, medium dense	821.5	SS 6	18	7			
		Grey Clay LOAM, A-6 with intermittent sand seams, very stiff	819.0	SS 7	13	18		2.5 Qp	
20		Brown SAND and GRAVEL, A-1-a, medium dense	816.5	SS 8	21	11			
				SS 9	23	15			
24		Possible Cobble at 24.5'	810.0	SS 10	68/ 10"	12			
				SS 11	33	15			
28		Grey Clay LOAM, A-6 with intermittent sand seams, very stiff	805.5	SS 12A	12	18			
				SS 12B	18	12		3.25 Qp	

WATER LEVEL OBSERVATIONS, ft.  
 DURING DRILLING: 13.0'  
 IMMEDIATELY AFTER DRILLING: 11.5'  
 DELAYED READING AFTER

MSET

BORING STARTED: 7/11/19  
 BORING COMPLETED: 7/11/19  
 LOGGED BY: GPF  
 BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 410 Nolen Drive, South Elgin, Illinois 60177 (847) 844-1895 (847) 844-3875

MSET PROJECT NO.: 19282		LOG OF BORING NO. SB-6		Page 2 of 3					
PROJECT: Great Western Trail		SITE LOCATION: Sycamore, Illinois							
BORING LOCATION: East Abutment, Structure 4		CLIENT: Engineering Resource Associates							
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS			REMARKS
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc%	Dry Unit Weight, pcf	
32		Brown SAND, A-3 medium dense intermittant sand seams to 42 feet	803.0	SS 13	10	21			
36				SS 14	27	20			
40				SS 15	15	15			
44				SS 16	24	13			
48				SS 17	27	12			
52				SS 18	38	16			
56		to fine sand, dense	777.5						
60									

WATER LEVEL OBSERVATIONS, ft.  
 DURING DRILLING: 13.0'  
 IMMEDIATELY AFTER DRILLING: 11.5'  
 DELAYED READING AFTER

MSET

BORING STARTED: 7/11/19  
 BORING COMPLETED: 7/11/19  
 LOGGED BY: GPF  
 BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 410 Nolen Drive, South Elgin, Illinois 60177 (847) 844-1895 (847) 844-3875

MSET PROJECT NO.: 19282		LOG OF BORING NO. SB-6		Page 3 of 3					
PROJECT: Great Western Trail		SITE LOCATION: Sycamore, Illinois							
BORING LOCATION: East Abutment, Structure 4		CLIENT: Engineering Resource Associates							
DEPTH (feet)	SOIL TYPE	Material Description	Elevation	SAMPLE		TESTS			REMARKS
				TYPE/INTERVAL	NO.	N-VALUE Blows per ft.	Wc%	Dry Unit Weight, pcf	
64		Brown SAND, A-3, dense with intermittent sand seams Brown SAND, A-3, dense	772.5	SS 19	47	14			
68		Brown to Brown & Grey Sandy LOAM, A-2-4, dense to medium dense	768.0	SS 20	48	20			
72				SS 21	21	16			
		End of Boring to 75 Feet	759.5						

WATER LEVEL OBSERVATIONS, ft.  
 DURING DRILLING: 13.0'  
 IMMEDIATELY AFTER DRILLING: 11.5'  
 DELAYED READING AFTER

MSET

BORING STARTED: 7/11/19  
 BORING COMPLETED: 7/11/19  
 LOGGED BY: GPF  
 BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 410 Nolen Drive, South Elgin, Illinois 60177 (847) 844-1895 (847) 844-3875

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PLOT DATE = 3/13/2020	CHECKED M. LANGE	REVISED -
	DATE 11-18-2019	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION  
 PREFABRICATED STEEL BRIDGE: SOIL BORING LOGS

SCALE: N.T.S. SHEET S10 OF S10 SHEETS STA. \_\_\_\_\_ TO STA. \_\_\_\_\_

F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-P4006-01-BT	DEKALB	58	48
CONTRACT NO. 87730				
ILLINOIS FED. AID PROJECT				

Benchmark: See Civil Plans

Existing Structures: 48"  $\circ$  Storm Sewer (E)  
48" x 28" Elliptical Storm Sewer (SW)  
18"  $\circ$  Storm Sewer (W)

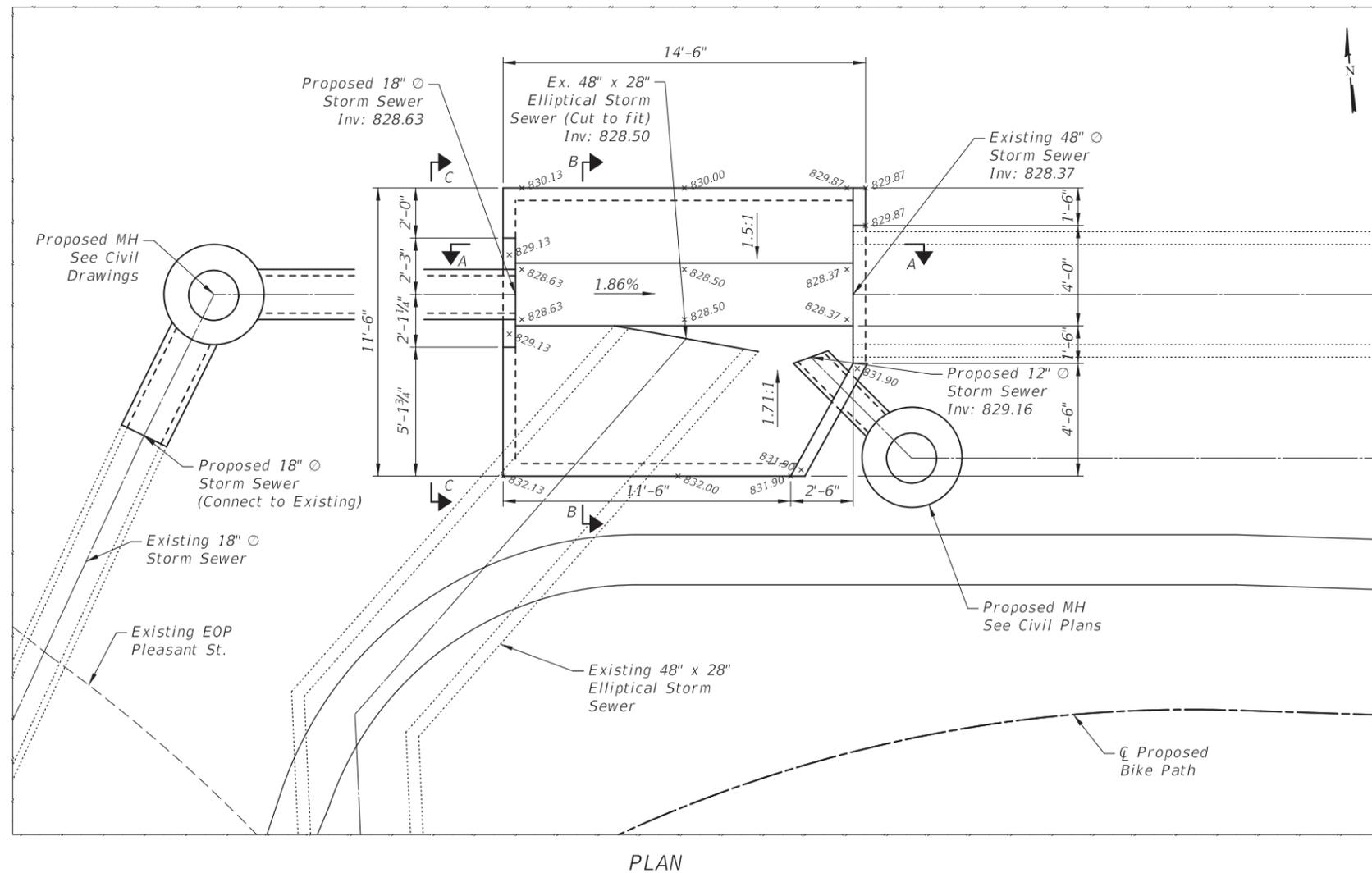
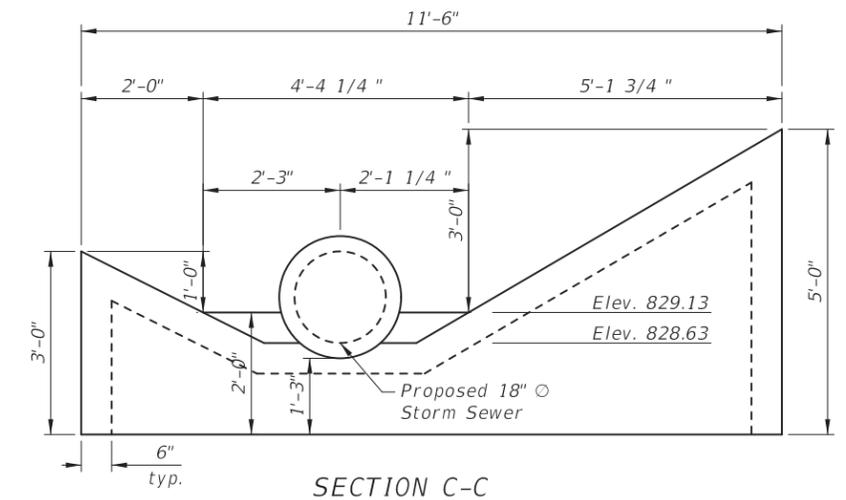
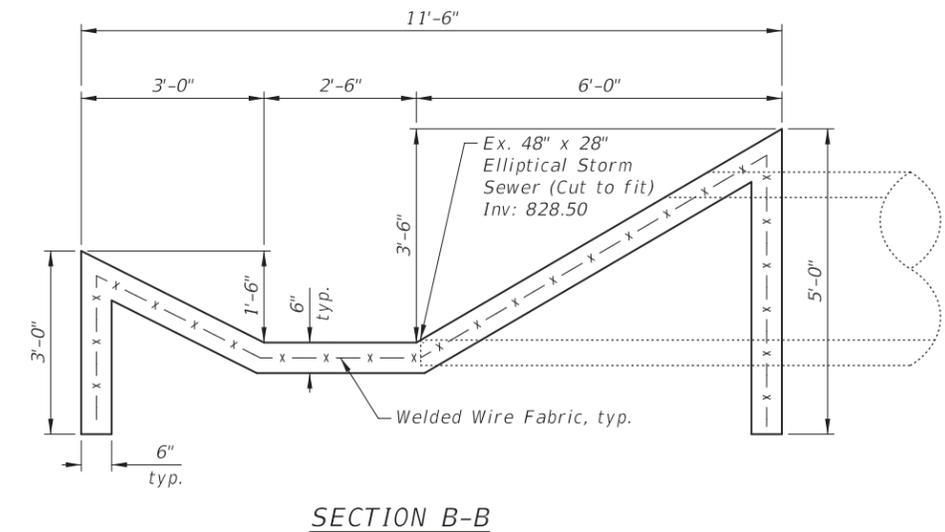
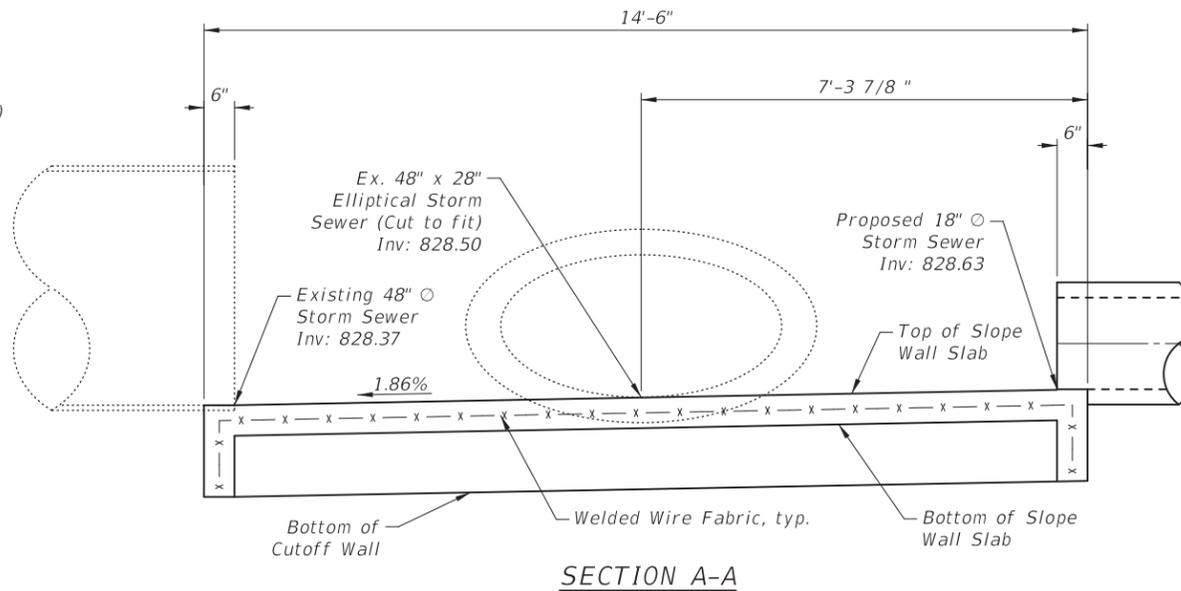
Salvage: Connect new RCP to existing storm sewers where noted.

**INDEX OF SHEETS**

J1 Concrete Slope Wall Plan and Details

**GENERAL NOTES**

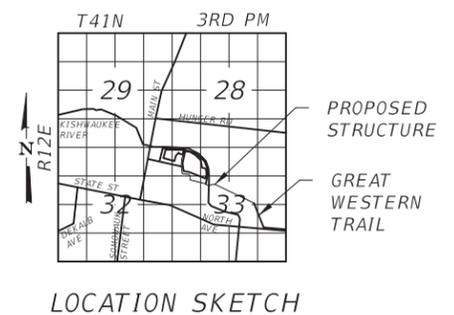
1. Cut existing storm sewers to fit.
2. Oversized holes for storm sewer pipes shall be grouted with mortar and sealed.
3. Welded Wire Fabric (W.W.F.) to be installed in all concrete slope walls, head walls and cutoff walls, per Section 511 of the Standard Specifications.



**DESIGN SPECIFICATIONS**  
2017 AASHTO LRFD Bridge Design Specifications, 8th Edition

**DESIGN STRESSES**  
FIELD UNITS

$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 65,000$  psi (W.W.F.)



**BILL OF MATERIAL**

PAY ITEM	UNIT	QTY
Concrete Slope Wall, 6 Inch	Sq. Yd.	21

**GENERAL PLAN & ELEVATION**  
**GREAT WESTERN TRAIL**  
**DEKALB COUNTY**  
**STA 100+22.79**

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	DATE 11-18-2019	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**GREAT WESTERN TRAIL EXTENSION**  
**CONCRETE SLOPE WALL PLAN AND DETAILS**

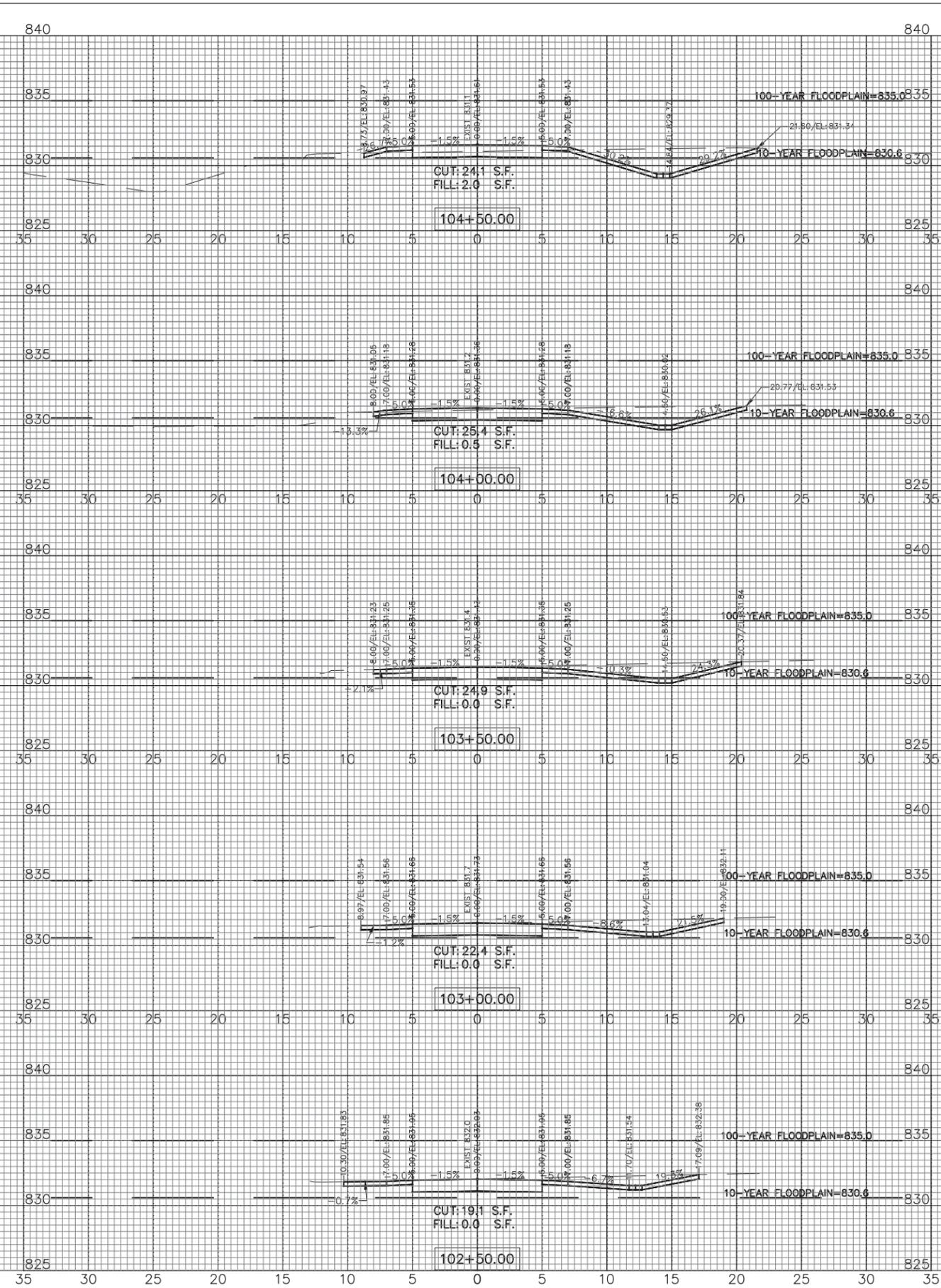
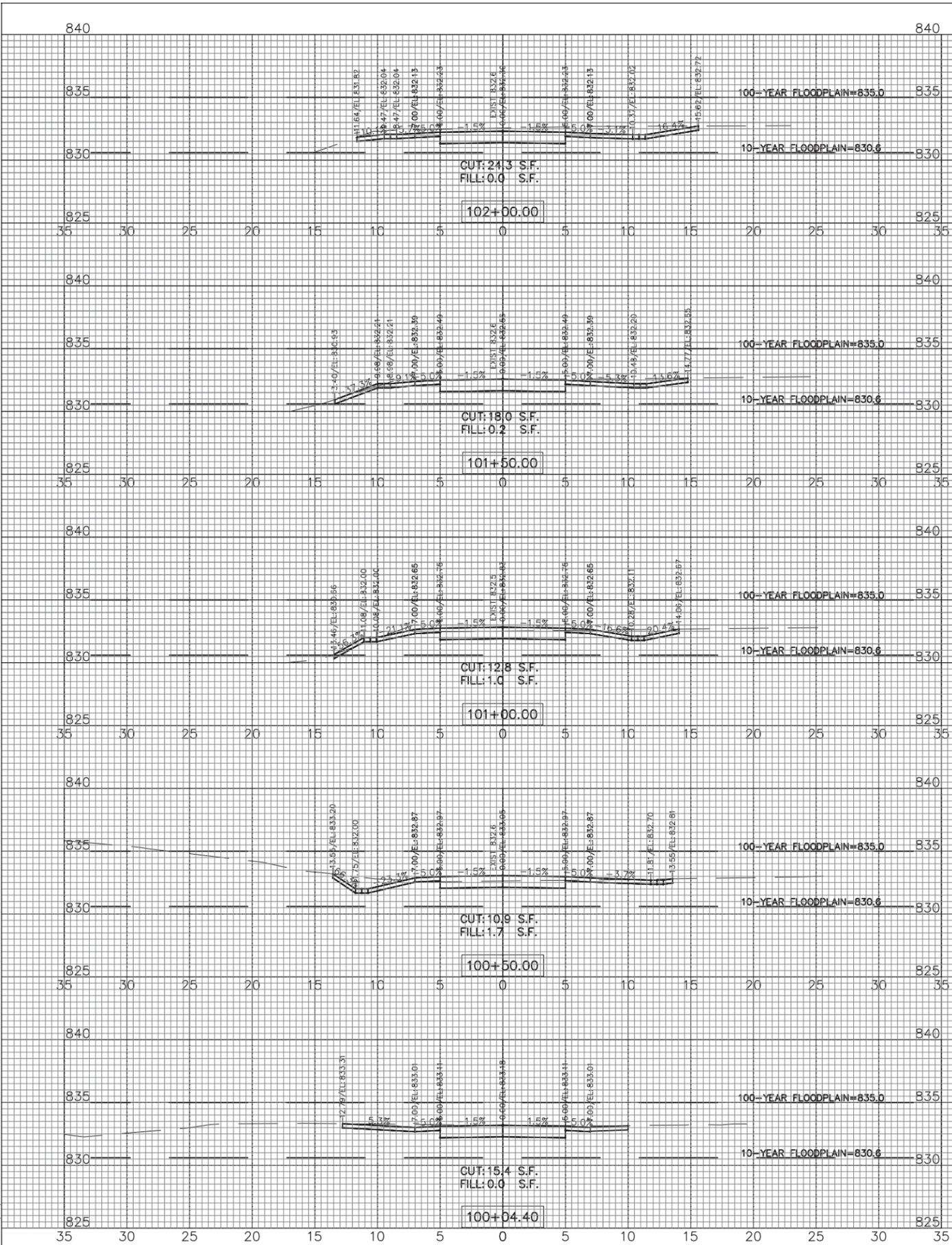
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F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	18-P4006-01-BT	DEKALB	58	49
CONTRACT NO. 87730				
ILLINOIS FED. AID PROJECT				

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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION  
 CROSS SECTIONS

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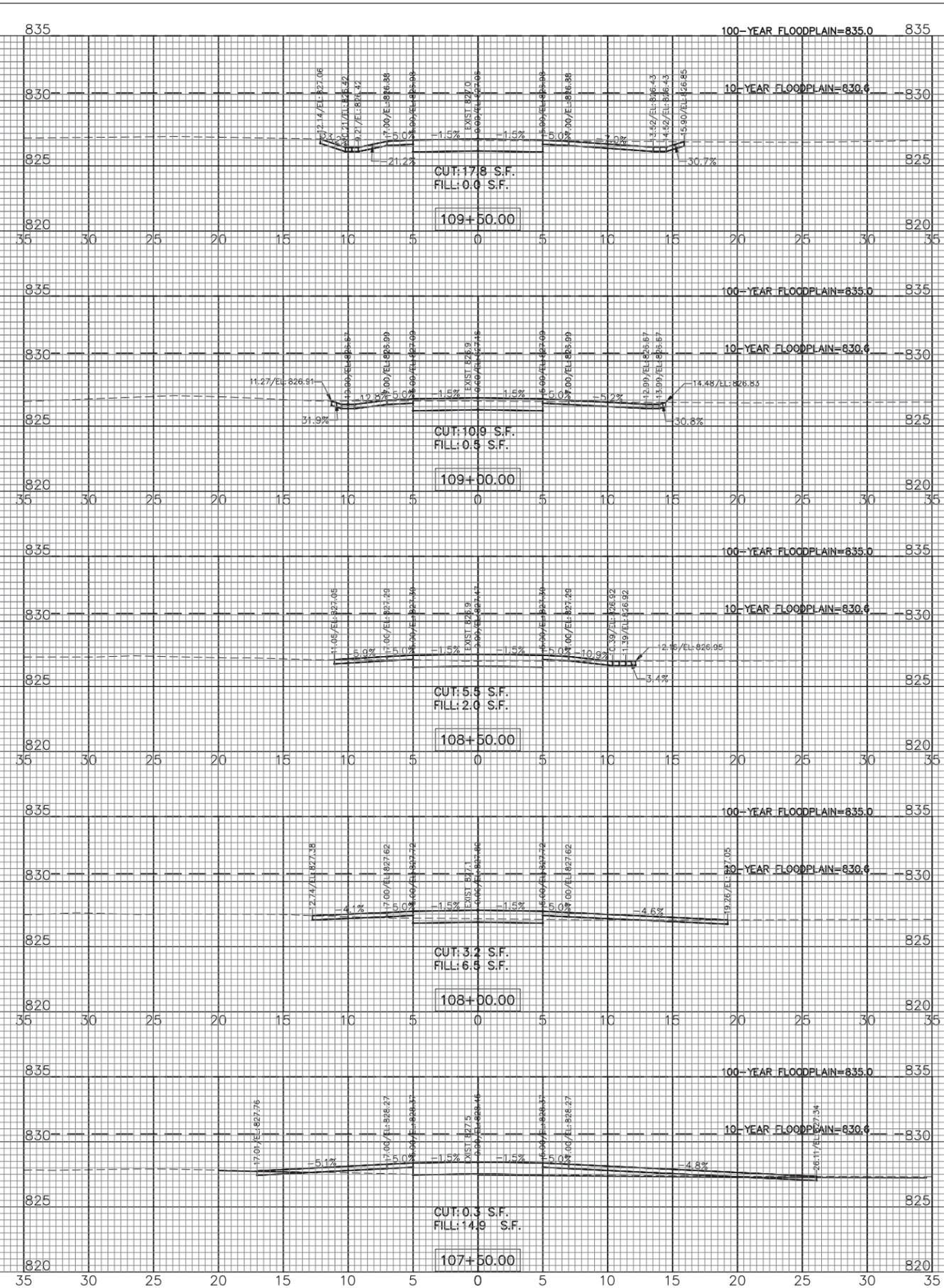
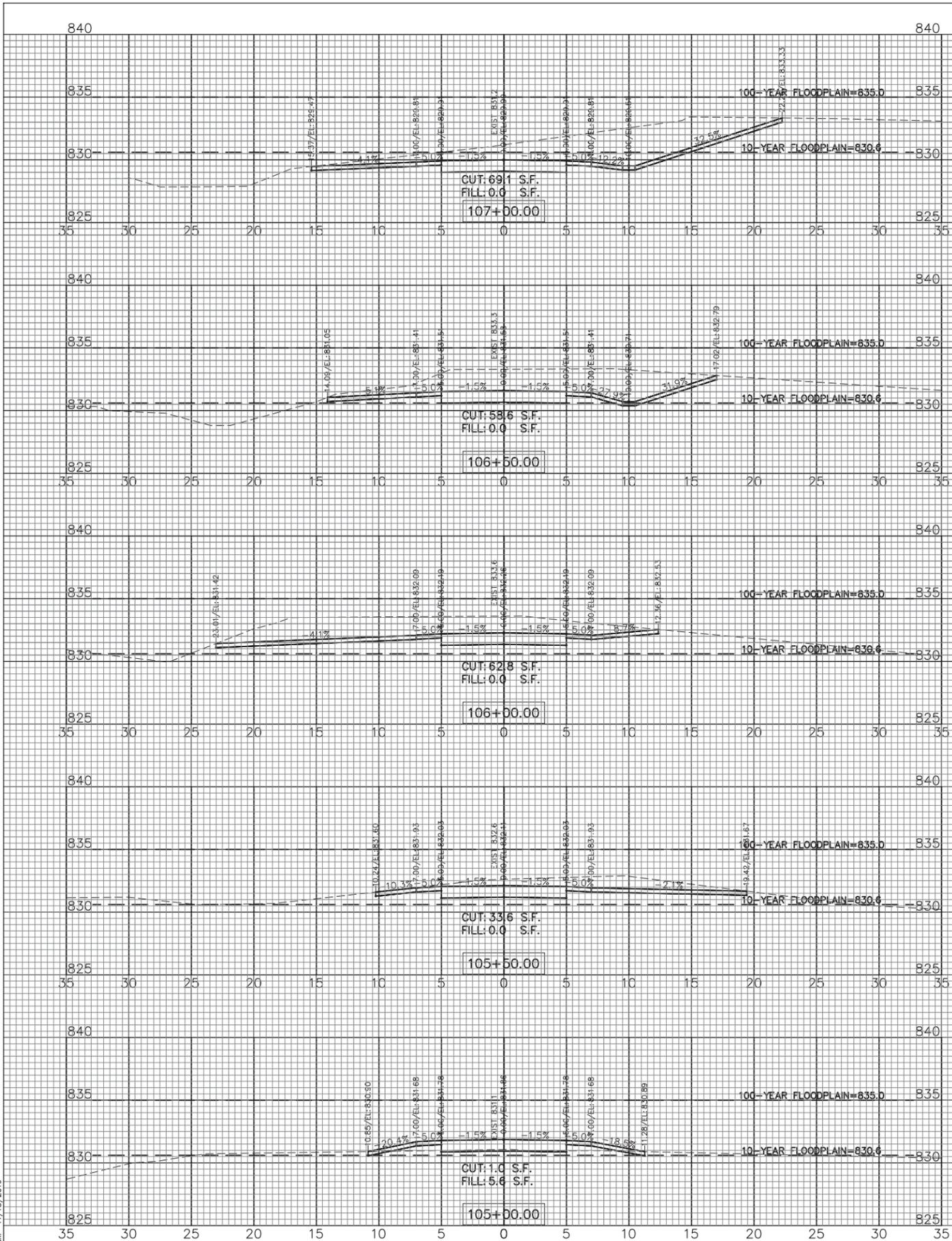
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
—	18-P4006-01-BT	DEKALB	58	50
FED. ROAD DIST. NO. — ILLINOIS FED. AID PROJECT			CONTRACT NO. 87730	

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 Updated by: oziefinski 11/19/2019



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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

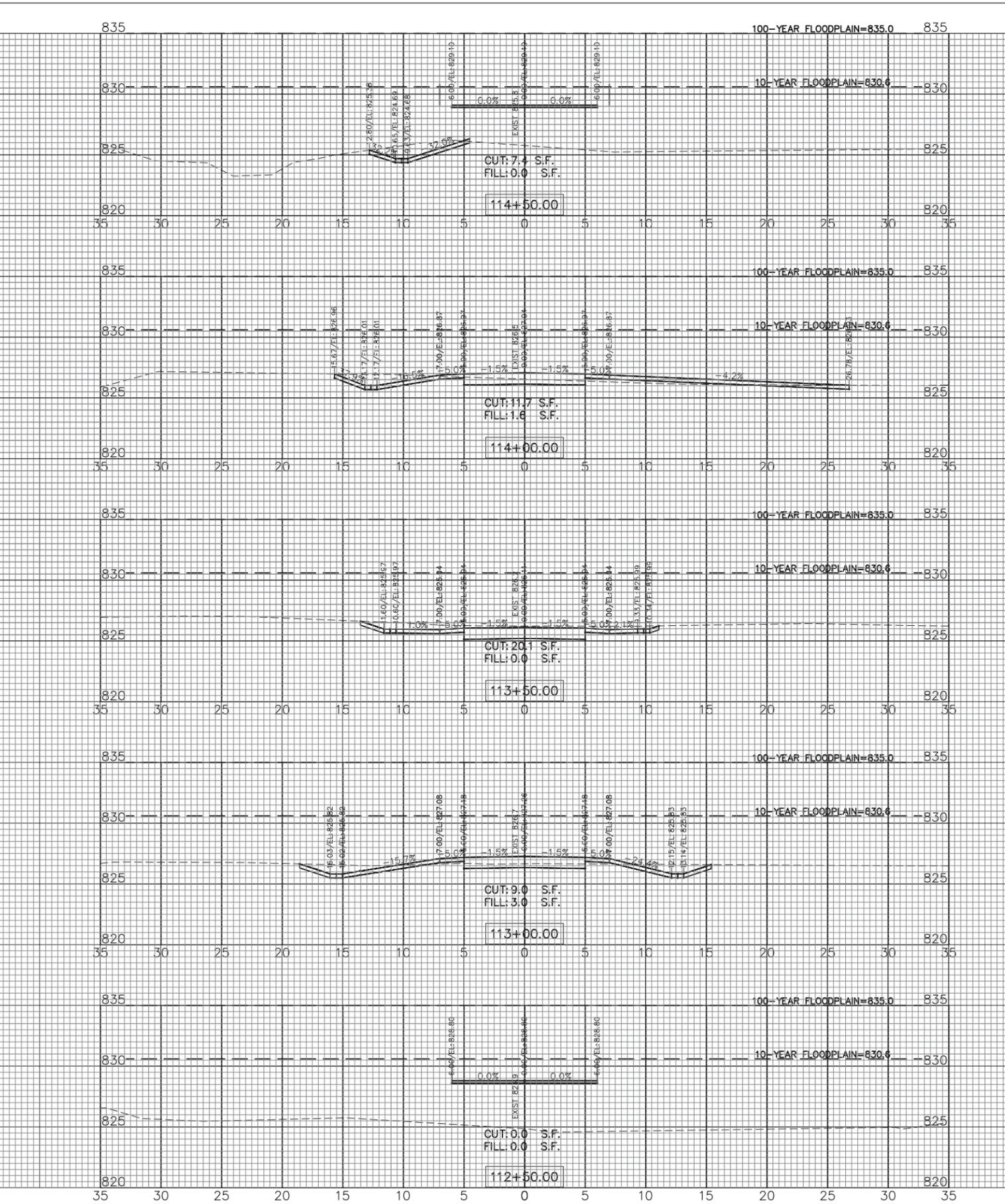
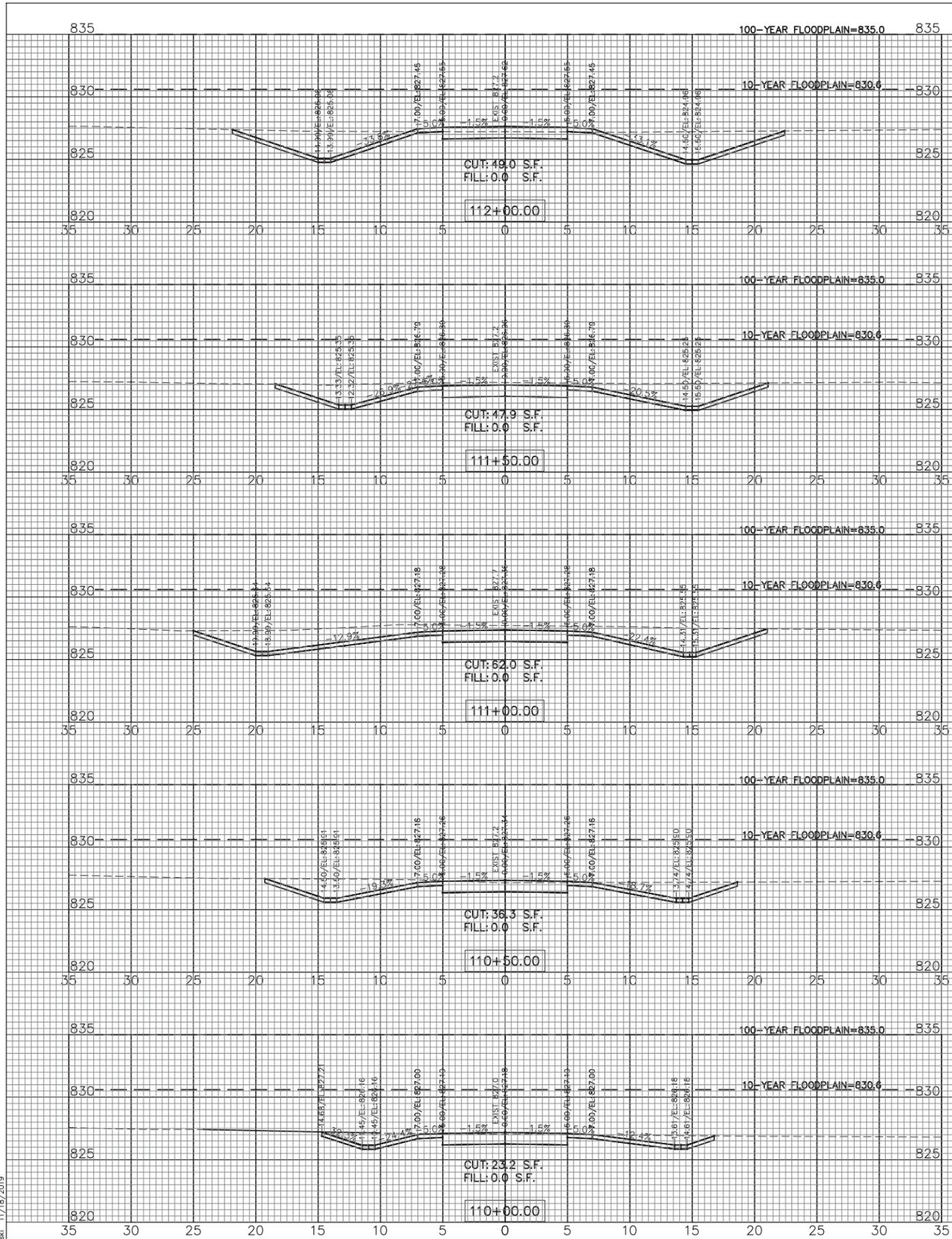
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 CROSS SECTIONS  
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 SHEET NO. 2 OF 9 SHEETS  
 STA. 105+00 TO STA. 109+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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FED. ROAD DIST. NO. — ILLINOIS FED. AID PROJECT			CONTRACT NO. 87730	

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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

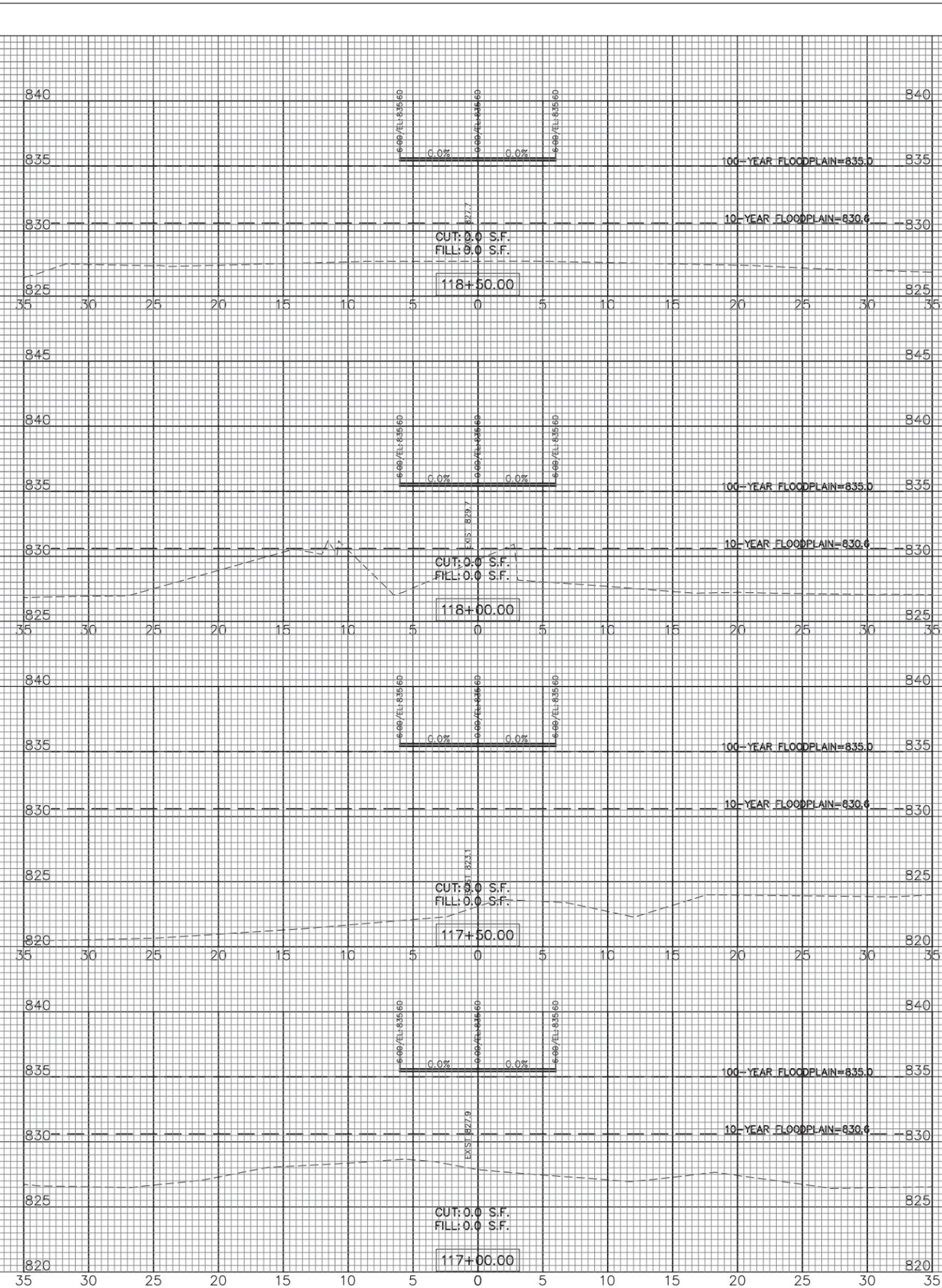
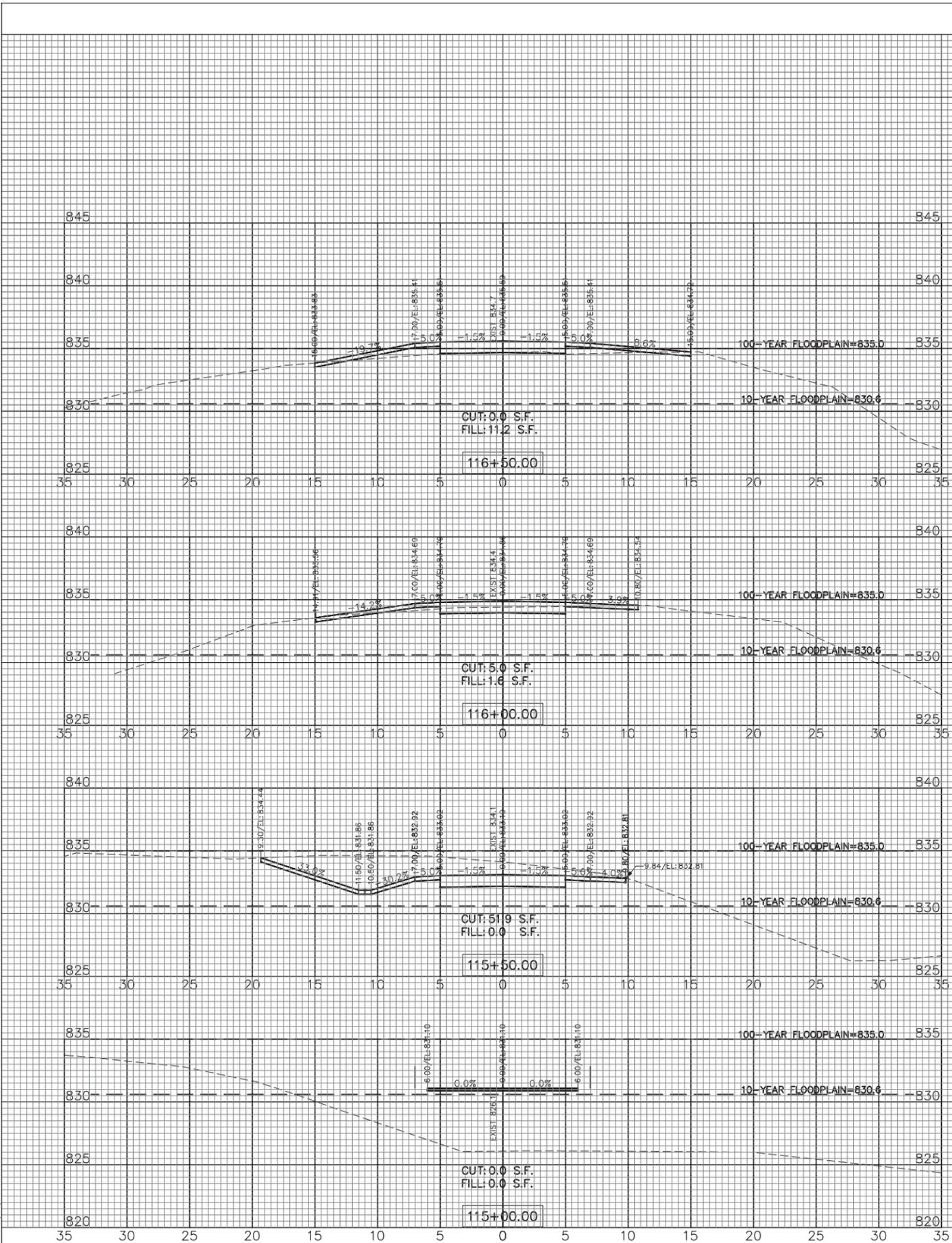
GREAT WESTERN TRAIL EXTENSION  
 CROSS SECTIONS  
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 STA. 110+00 TO STA. 114+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
—	18-P4006-01-BT	DEKALB	58	52
FED. ROAD DIST. NO. — ILLINOIS FED. AID PROJECT			CONTRACT NO. 87730	

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ORIGINAL SURVEY SURVEYED BY DATE  
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 Great Western Trail Extension\60910.P2 Phase II  
 Engineering\CAD\160910.P2 Great Western Trail Extension\CrossSections.dwg  
 Updated By: oziefinski 11/19/2019



USER NAME = oziefinski  
 PLOT SCALE = \$SCALE\$  
 PLOT DATE = 11/18/2019

DESIGNED — AK  
 DRAWN — RT  
 CHECKED — JM  
 DATE — July, 2019

REVISED —  
 REVISED —  
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 REVISED —

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

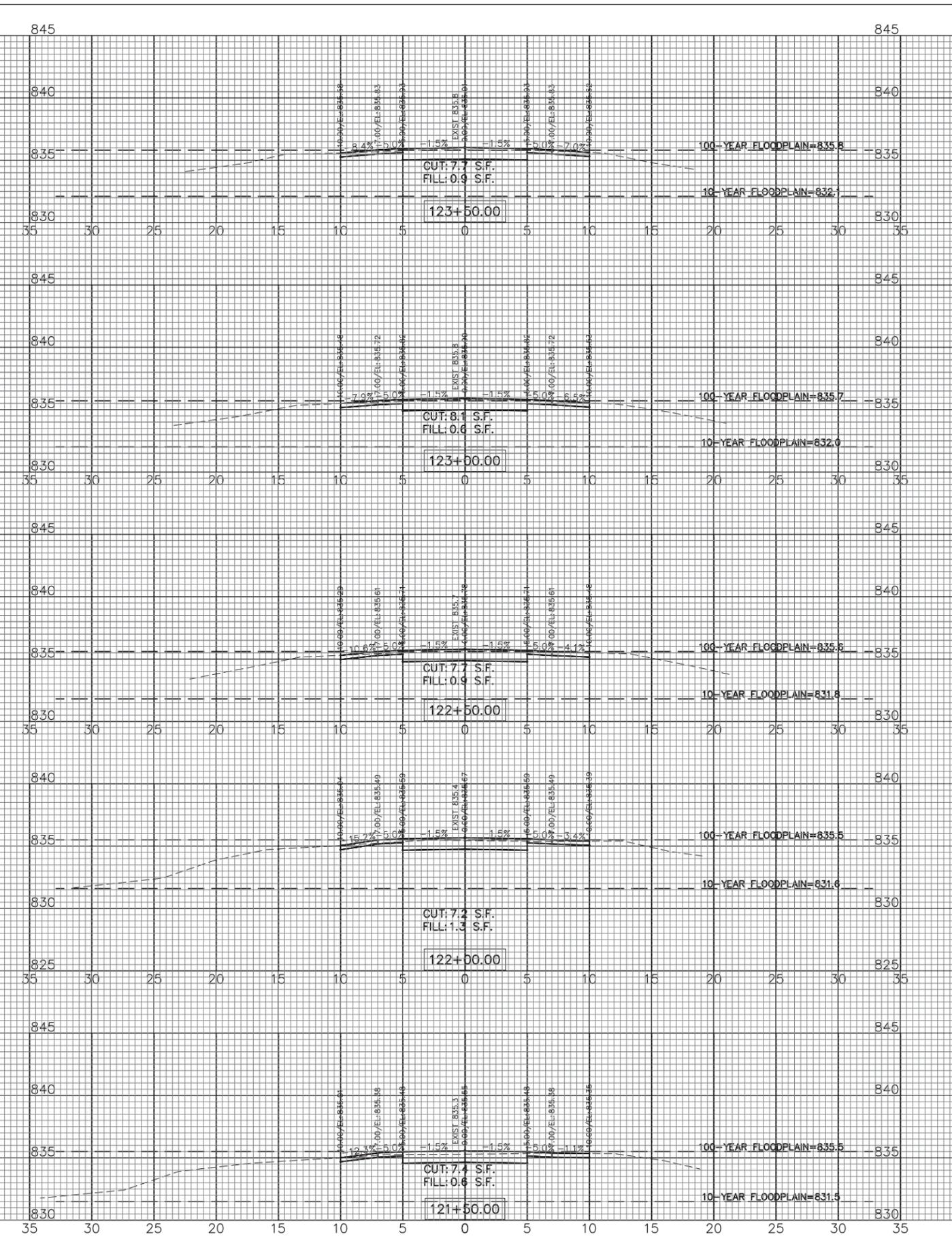
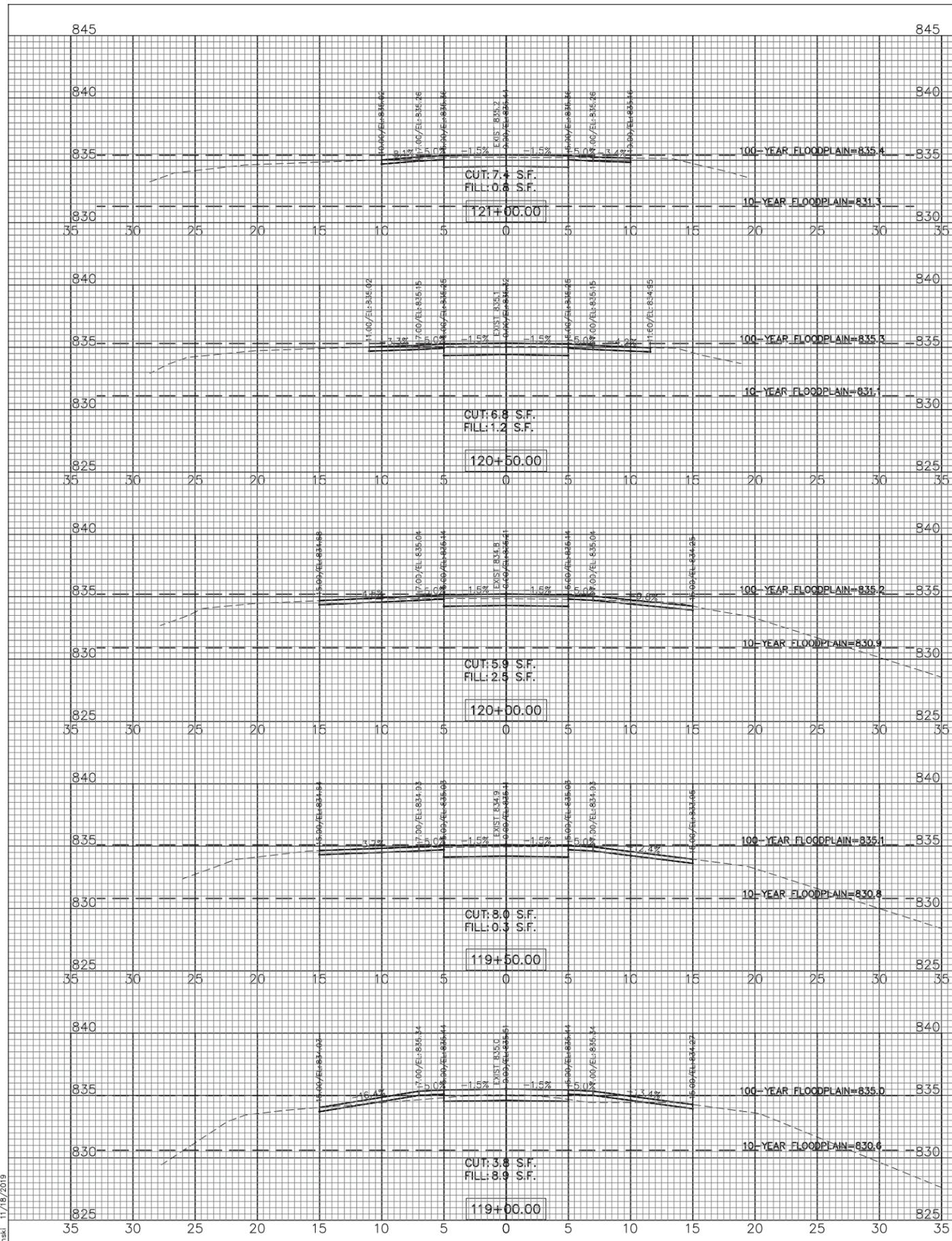
GREAT WESTERN TRAIL EXTENSION  
 CROSS SECTIONS  
 SCALE: 1"=10'H; 1"=5'V SHEET NO. 4 OF 9 SHEETS STA. 115+00 TO STA. 118+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
—	18-P4006-01-BT	DEKALB	58	53
FED. ROAD DIST. NO. — ILLINOIS FED. AID PROJECT			CONTRACT NO. 87730	

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

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

\\drasil1\drive\sycomore\pand\dist\60910.00  
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 Updated By: ozelinski 11/19/2019



USER NAME = ozelinski  
 PLOT SCALE = \$SCALE\$  
 PLOT DATE = 11/18/2019

DESIGNED — AK  
 DRAWN — RT  
 CHECKED — JM  
 DATE — June, 2019

REVISED —  
 REVISED —  
 REVISED —  
 REVISED —

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

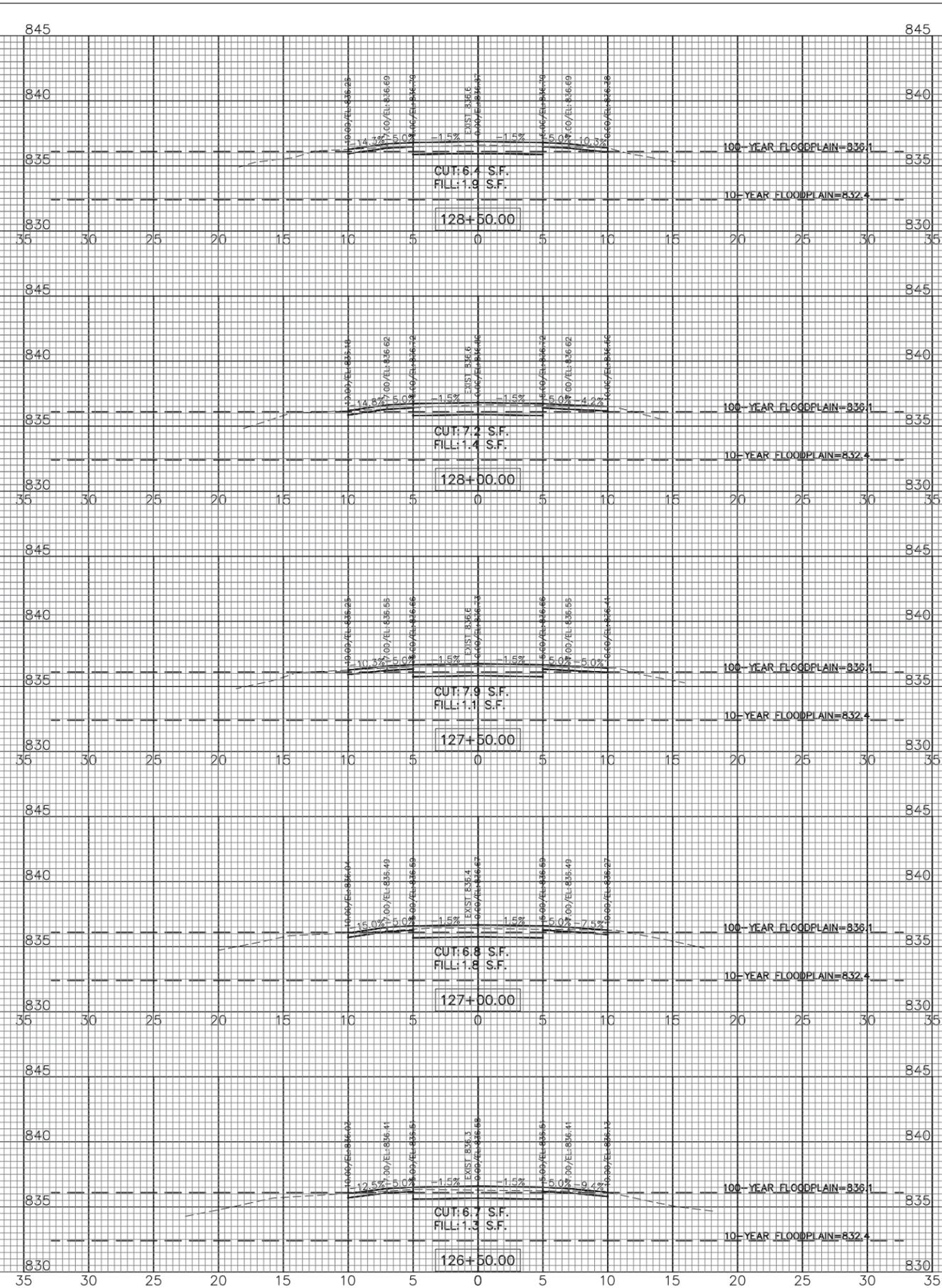
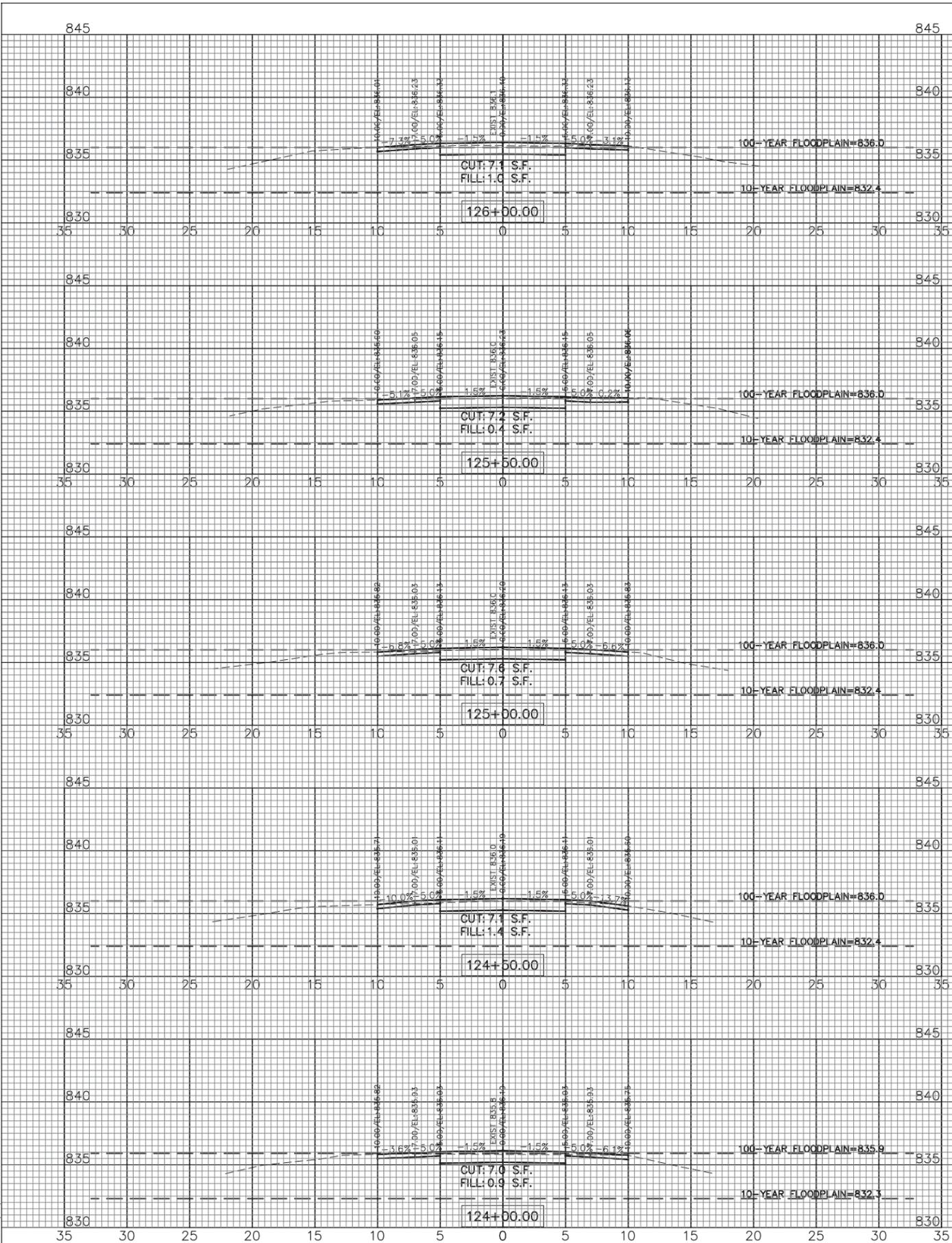
GREAT WESTERN TRAIL EXTENSION  
 CROSS SECTIONS  
 SCALE: 1"=10'H; 1"=5'V  
 SHEET NO. 5 OF 9 SHEETS  
 STA. 118+50 TO STA. 122+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
—	18-P4006-01-BT	DEKALB	58	54
FED. ROAD DIST. NO. — ILLINOIS FED. AID PROJECT			CONTRACT NO. 87730	

FINAL SURVEY	DATE
SURVEY	
PLOTTED	
APPROPRIATE	
AREAS CHECKED	
NO.	

ORIGINAL SURVEY	DATE
SURVEY	
PLOTTED	
APPROPRIATE	
AREAS CHECKED	
NO.	

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 Great Western Trail Extension\60910.P2 Phase II  
 Engineering\CAD\160910.P2\_Great Western Trail Extension\Cross Sections.dwg  
 Updated By: oziefinski 11/19/2019



USER NAME	= oziefinski
PLOT SCALE	= \$SCALE\$
PLOT DATE	= 11/18/2019

DESIGNED	— AK
DRAWN	— RT
CHECKED	— JM
DATE	— June, 2019

REVISED	—

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

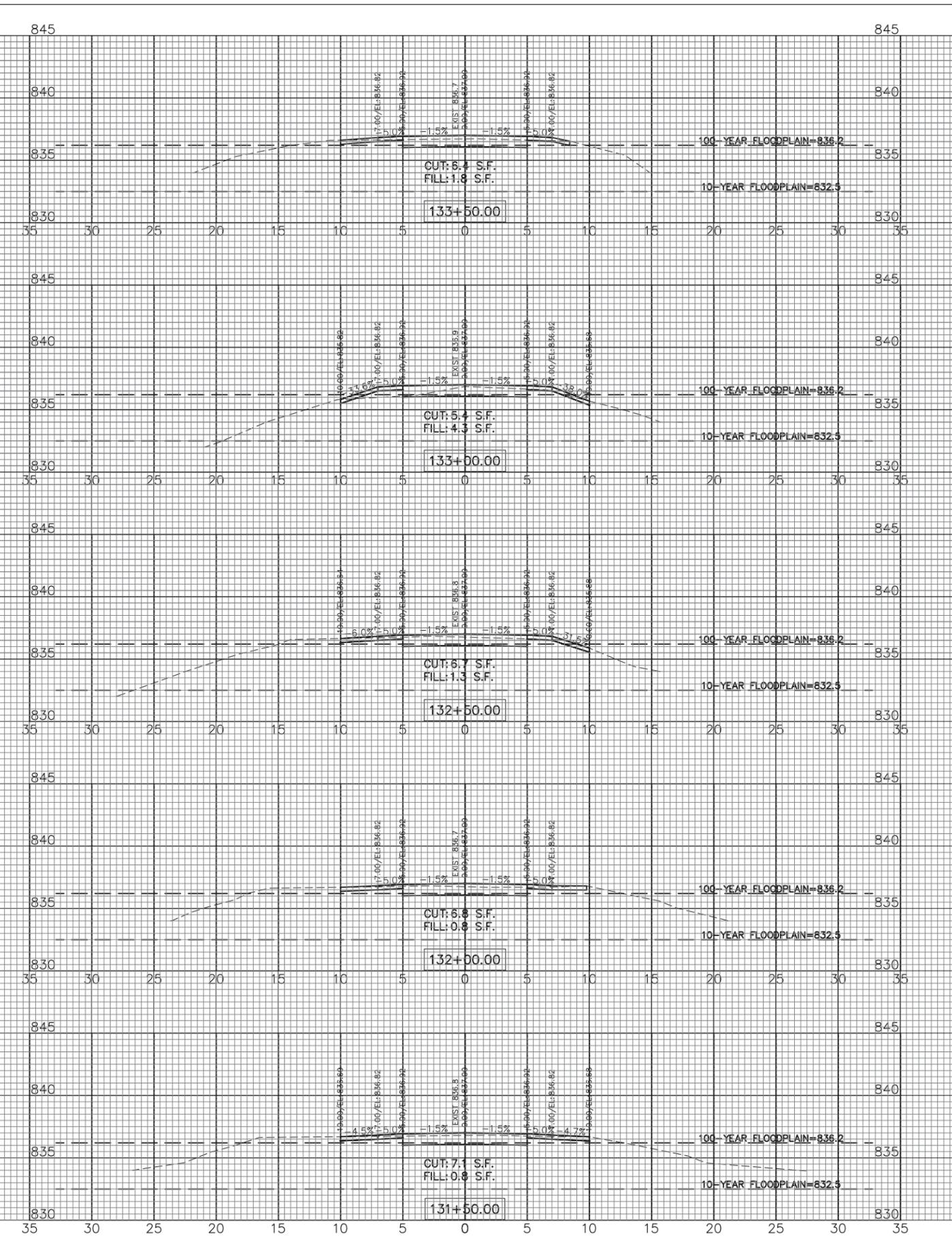
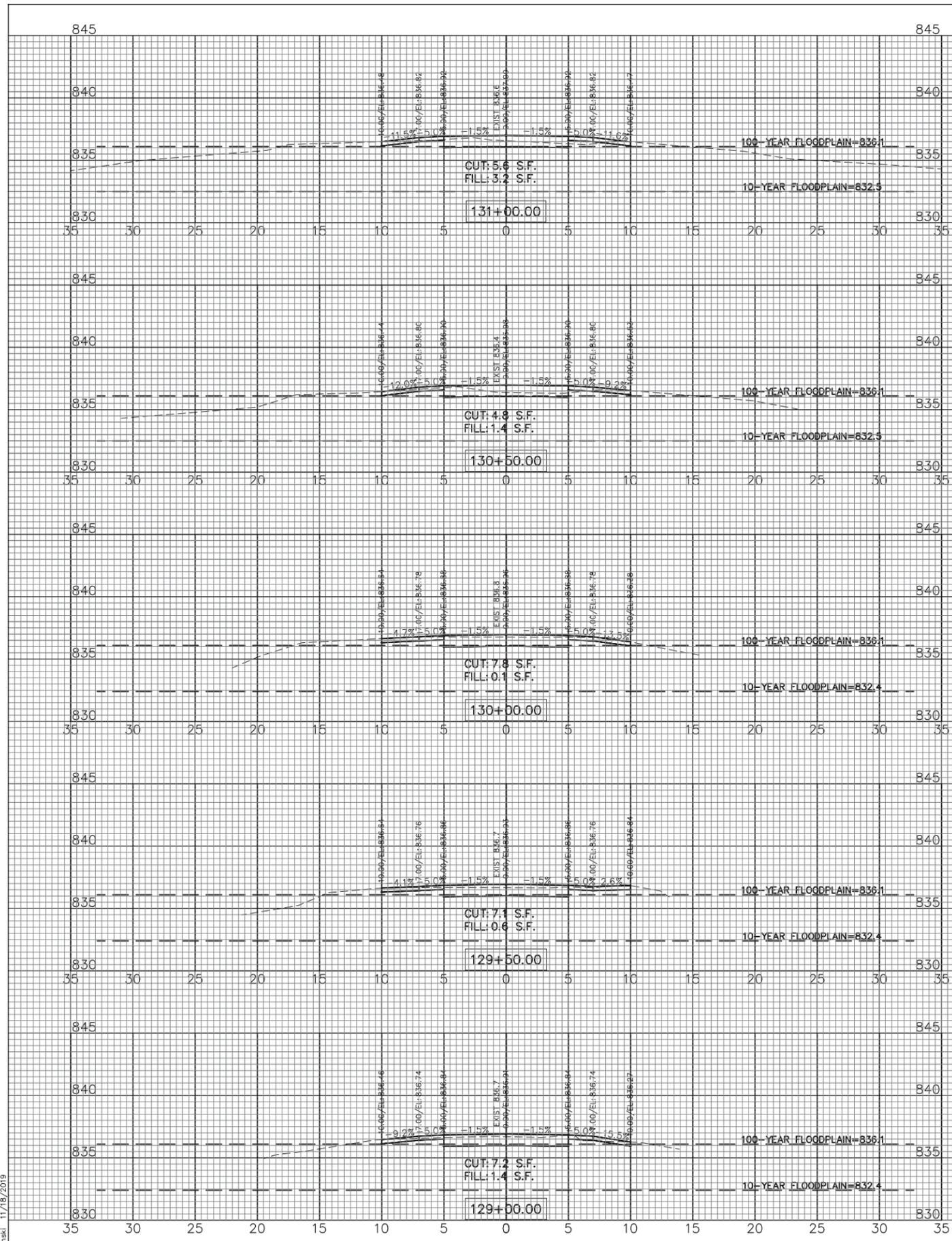
GREAT WESTERN TRAIL EXTENSION  
 CROSS SECTIONS  
 SCALE: 1"=10'H; 1"=5'V SHEET NO. 6 OF 9 SHEETS STA. 124+00 TO STA. 128+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
—	18-P4006-01-BT	DEKALB	58	55
FED. ROAD DIST. NO. — ILLINOIS FED. AID PROJECT			CONTRACT NO. 87730	

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

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

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 Updated by: ozelinski 11/19/2019



USER NAME	= ozelinski
PLOT SCALE	= \$SCALE\$
PLOT DATE	= 11/18/2019

DESIGNED	— AK
DRAWN	— RT
CHECKED	— JM
DATE	— June, 2019

REVISED	—

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

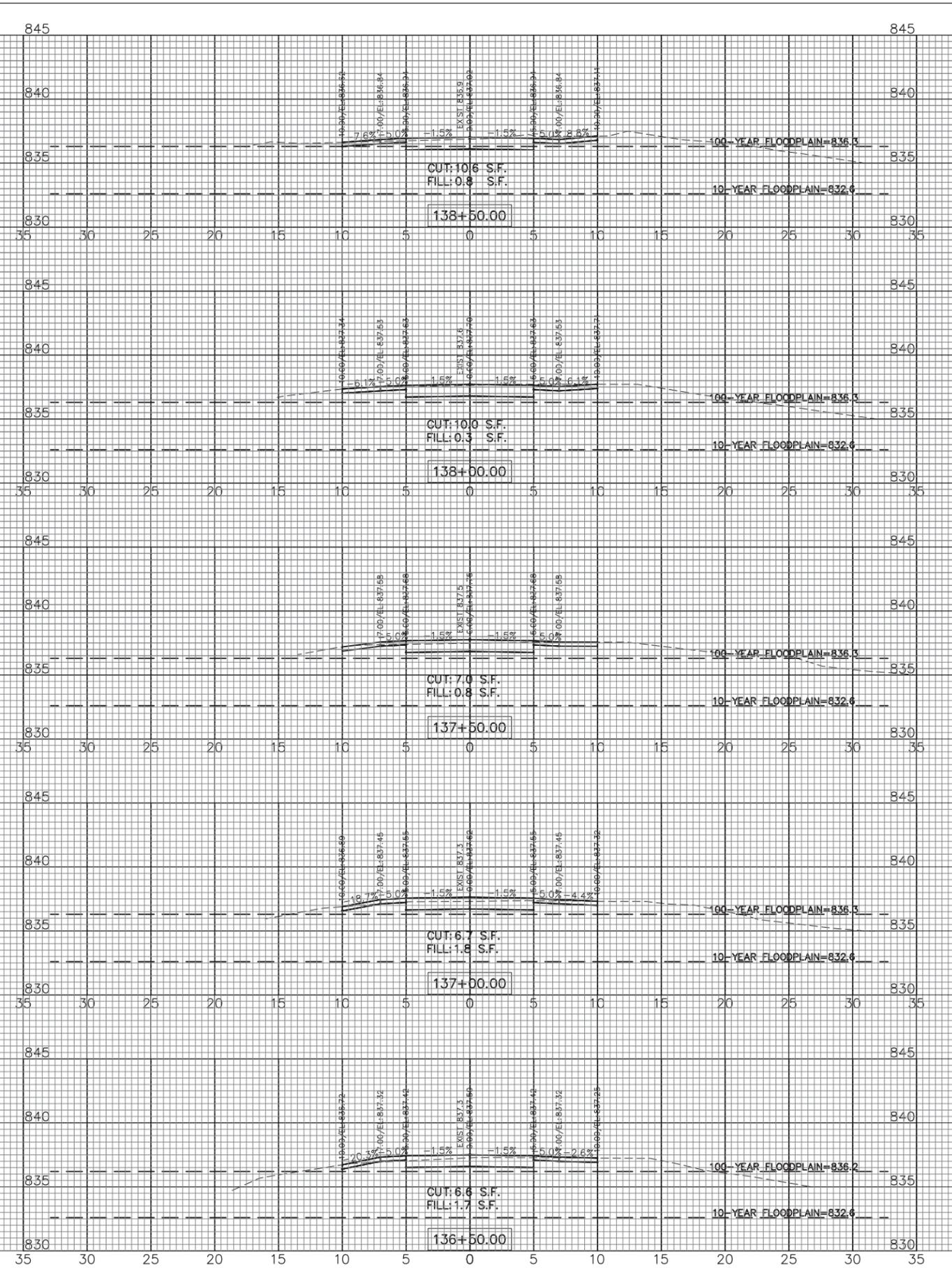
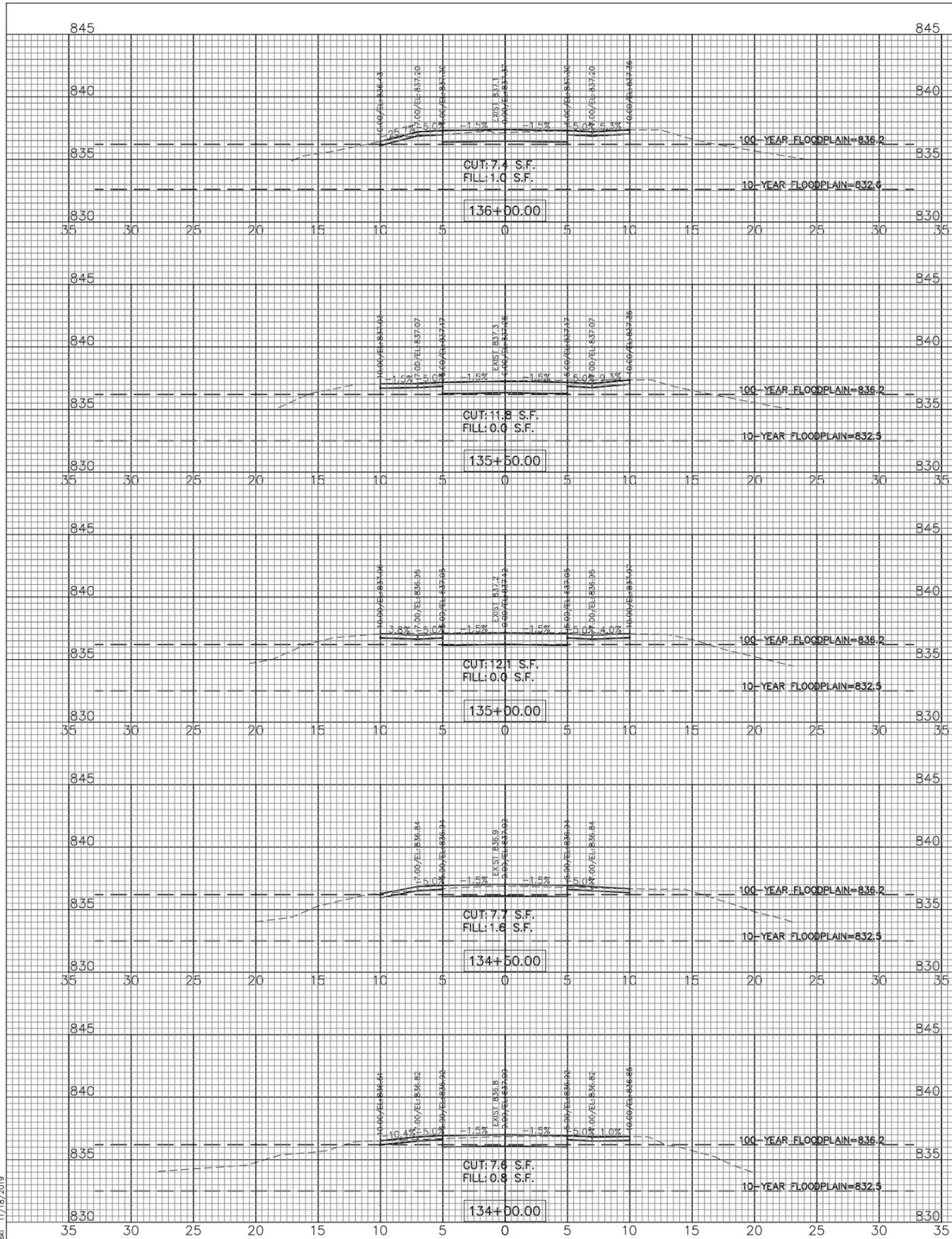
GREAT WESTERN TRAIL EXTENSION  
 CROSS SECTIONS  
 SCALE: 1"=10'H; 1"=5'V SHEET NO. 7 OF 9 SHEETS STA. 129+00 TO STA. 133+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
—	18-P4006-01-BT	DEKALB	58	56
FED. ROAD DIST. NO. — ILLINOIS FED. AID PROJECT			CONTRACT NO. 87730	

FINAL SURVEY	DATE
SURVEYED	BY
PLOTTED	
REPLACED	
NO. _____	
AREAS CHECKED	

ORIGINAL SURVEY	DATE
SURVEYED	BY
PLOTTED	
REPLACED	
NO. _____	
AREAS CHECKED	

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 Engineering\CAD\160910.P2\_GreatWesternTrailExtensionCrossSections.dwg  
 Updated By: oziefinski 11/19/2019



USER NAME = oziefinski
DESIGNED — AK
DRAWN — RT
CHECKED — JM
DATE — June, 2019
PLOT SCALE = \$SCALE\$
PLOT DATE = 11/18/2019

REVISD —	AK	REVISD —	----
REVISD —	RT	REVISD —	----
REVISD —	JM	REVISD —	----
REVISD —		REVISD —	----

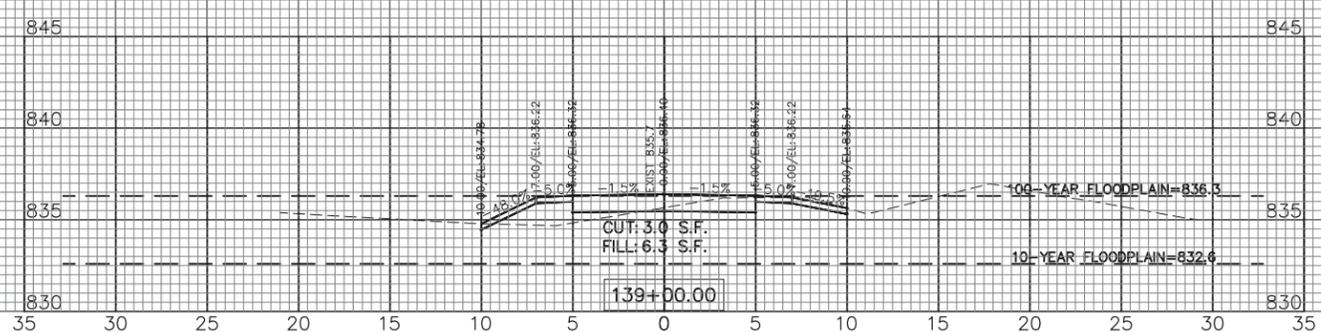
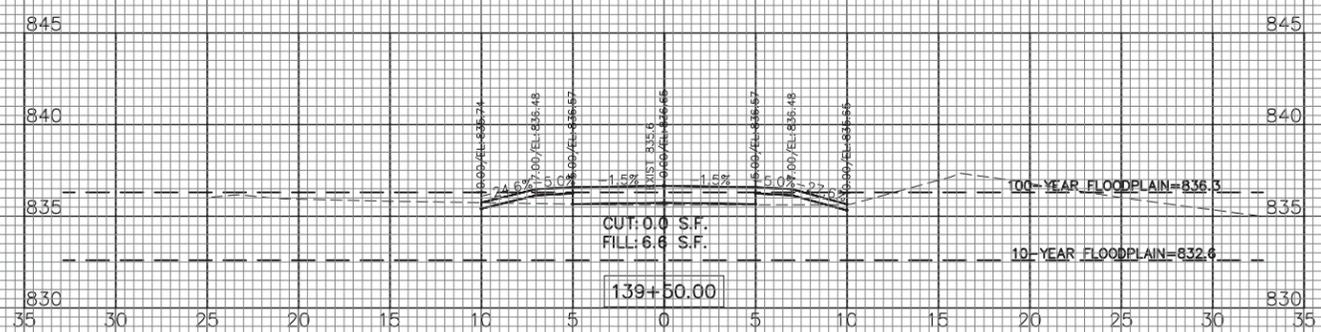
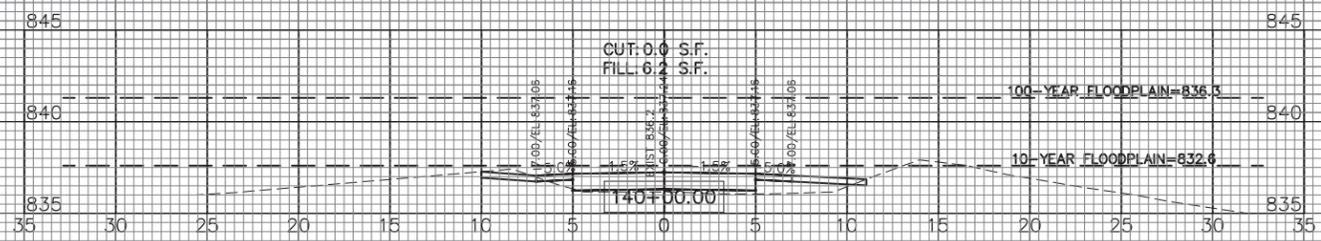
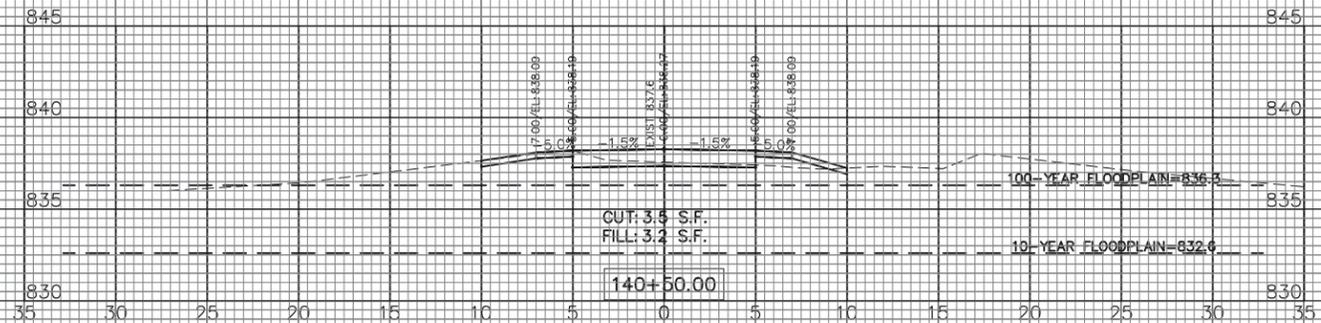
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION CROSS SECTIONS	
SCALE: 1"=10'H; 1"=5'V	SHEET NO. 8 OF 9 SHEETS
STA. 134+00 TO STA. 138+50	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
—	18-P4006-01-BT	DEKALB	58	57
FED. ROAD DIST. NO. — ILLINOIS FED. AID PROJECT			CONTRACT NO. 87730	

FINAL SURVEY NO.	SURVEYED BY	DATE

ORIGINAL SURVEY NO.	SURVEYED BY	DATE



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 Engineering\CAD\160910.P2\_GreatWesternTrailExtensionCrossSections.dwg  
 Updated by: oziefinski 11/19/2019



USER NAME = oziefinski	DESIGNED — AK	REVISED —
PLOT SCALE = \$SCALE\$	DRAWN — RT	REVISED —
PLOT DATE = 11/18/2019	CHECKED — JM	REVISED —
	DATE — June, 2019	REVISED —

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GREAT WESTERN TRAIL EXTENSION CROSS SECTIONS		
SCALE: 1"=10'H; 1"=5'V	SHEET NO. 9 OF 9 SHEETS	STA. 139+00 TO STA. 140+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
—	18-P4006-01-BT	DEKALB	58	58
FED. ROAD DIST. NO. — ILLINOIS FED. AID PROJECT			CONTRACT NO. 87730	