11–5–2021 LETTING ITEM 022

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	1
	ILLINOIS	CONTRACT NO. 64H58		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED
HIGHWAY PLANS

FAP ROUTE 642 (IL 78)
SECTION 10BR–5
PROJECT STP–7KJM(024)
BRIDGE REPLACEMENT OVER PLUM RIVER
JO DAVIESS COUNTY

C–92–023–21

FOR INDEX OF SHEETS AND
HIGHWAY STANDARDS, SEE SHEET NO. 2

TRAFFIC DATA

	2022 ADT	2032 ADT
IL 78	925	975
	DESIGN SPEED	POSTED SPEED
IL 78	60 MPH	55 MPH

DESIGN DESIGNATION

FUNCTIONAL CLASSIFICATION

MAJOR COLLECTOR

P.V. = 87.2% S.U. = 4.6% M.U. = 8.2%

D-92-030-12

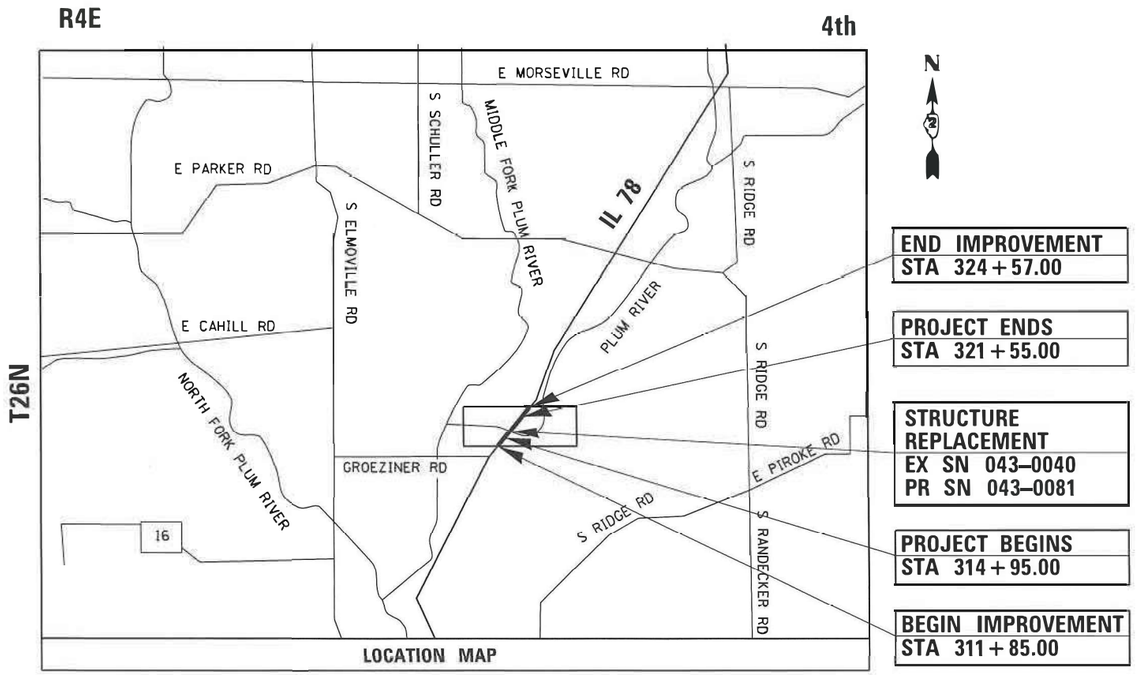
LOCATION OF SECTION INDICATED THUS: –

Globetrotters®
Engineering Corporation
ENGINEERS ARCHITECTS
300 South Wacker Drive
Chicago, Illinois 60606
(312) 922–6400

100′ 200′ 300′ — 1″ = 100′
0 10′ 20′ 30′ — 1″ = 10′
0 50′ 100′ — 1″ = 50′
0 50′ 100′ — 1″ = 40′
0 50′ 100′ — 1″ = 30′
0 50′ 100′ — 1″ = 20′

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 EXCAVATORS
1–800–892–0123
OR 811



GROSS LENGTH = 660 FT. = 0.13 MILE
NET LENGTH = 660 FT. = 0.13 MILE

END IMPROVEMENT
STA 324 + 57.00

PROJECT ENDS
STA 321 + 55.00

STRUCTURE REPLACEMENT
EX SN 043–0040
PR SN 043–0081

PROJECT BEGINS
STA 314 + 95.00

BEGIN IMPROVEMENT
STA 311 + 85.00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 11, 2021
Mansoor Ahmad
REGIONAL ENGINEER

October 1 2021
ENGINEER OF DESIGN AND ENVIRONMENT

October 2021
Stephen M Travis
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PROJECT ENGINEER: STEVE ROBERY
PROJECT MANAGER: COREY CONDERMAN (815) 284–5936
EMAIL: Corey.Conderman© Illinois.gov

CONTRACT NO. 64H58

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REV. 9/14/21

8/9/2021
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701201-05	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701306-04	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS, DAY ONLY, FOR SPEEDS ≥ 45 MPH
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APPLICATION RATES

AGG BASE COURSE TYPE B - 2.05 TONS/CU YD
HMA MATERIALS - 112 LBS/SQ YD/IN
BITUMINOUS MATERIAL (PRIME COAT)(ON AGGREGATE) 0.25 LBS/SQ FT
BITUMINOUS MATERIAL (TACK COAT)(ON EXISTING SURFACE) - 0.05 LBS/SQ FT
BITUMINOUS MATERIAL (TACK COAT)(BETWEEN LIFTS) - 0.025 LBS/ SQ FT

STATE OF ILLINOIS
CHRISTOPHER B. WINE
ILLINOIS
062.047129
LICENSED PROFESSIONAL ENGINEER

8/9/21

Christopher B. Wine
Licensed Professional Engineer
State of Illinois, No. 062-047129
Expires 11/30/2021

FOR SHEETS 1-38 AND 67-98

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS & HIGHWAY STANDARDS
IL 78 OVER PLUM RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	2
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES

7. THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS WITHIN THE PROJECT LIMITS. SEEDING CLASS 4 OR 2A SHALL BE USED, EXCEPT IN FRONT OF PROPERTIES WHERE THE GRASS WILL BE MOWED, THEN USE SEEDING, CLASS 1A. CLASS 2A SHALL BE USED ON FRONT SLOPES AND DITCH BOTTOMS. CLASS 4 SHALL BE USED BEHIND TYPE A GUTTER, ON ALL BACKSLOPES AND AREAS BEHIND THE BACKSLOPE, AND BEYOND THE TOE OF FRONT SLOPE ON FILL SECTIONS WITHOUT DITCHES.

10. FERTILIZER NUTRIENTS SHALL BE APPLIED AT THE RATE SPECIFIED IN SECTIONS 250 AND 525 OF THE STANDARD SPECIFICATIONS. THIS SHALL BE INCLUDED IN THE COST OF THE SEEDING OR SODDING.

11. PREVIOUSLY PUGMILLED STOCKPILES OF "TYPE A" OLDER THAN 1 MONTH WILL NOT BE APPROVED FOR USE UNTIL A MOISTURE CHECK IS RUN TO VERIFY MOISTURE CONTENT. MATERIAL SHIPPED TO PROJECTS WITHOUT BEING TESTED WILL NOT BE ACCEPTED.

25. THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

	LOCATION:	PAVEMENT		SHOULDERS	
	MIXTURE USE(S):	SURFACE	BINDER	SURFACE	LOWER LIFTS
	LIFT THICKNESS:	1½"	1¼"	2¾"	5¼"
	PG:	PG 58-28	PG 58-28	PG 58-28	PG 58-28
	DESIGN AIR VOIDS:	4.0 @ N50	4.0 @ N50	4.0 @ N50	4.0 @ N50
	MIXTURE COMPOSITION (MIXTURE GRADATION):	IL 9.5	IL 9.5, OR 9.5FG	IL 9.5, OR 9.5FG	IL 9.5, OR 9.5FG
	FRICTION AGGREGATE:	C	N/A	C	N/A
	MIXTURE WEIGHT:	112 lbs/sy/in	N/A	112 lbs/sy/in	N/A
	QUALITY MANAGEMENT PROGRAM:	QC/QA	QC/QA	QC/QA	QC/QA
	SUBLOT SIZE:	N/A	N/A	N/A	N/A
*	NUMBER OR ROLLER PASSES:	N/A	N/A	N/A	N/A

* WHEN A NUMBER OF ROLLER PASSES IS SPECIFIED, THE CONTRACTOR MAY OPT TO USE INTELLIGENT COMPACTION IN LIEU OF DENSITY TESTING UNDER THE QUALITY CONTROL FOR PERFORMANCE (QCP) PROGRAM.

31. ON FULL DEPTH PAVEMENT, SHOULDER WIDTHS OF 6 FT. OR LESS MAY BE PLACED, AT THE CONTRACTOR'S OPTION, SIMULTANEOUSLY WITH THE ADJACENT TRAFFIC LANE FOR BOTH THE BINDER AND SURFACE COURSES, PROVIDED THE CROSS SLOPE OF BOTH THE PAVEMENT AND SHOULDER CAN BE SATISFACTORILY OBTAINED. THE SHOULDER WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED ON THE PLANS.

37. THE NEW NUMBER FOR THIS STRUCTURE WILL BE 043-0081.

46a. BRIDGE FLOWS MUST BE MAINTAINED THROUGHOUT THE PROJECT. NORMAL FLOW SHALL BE ALLOWED TO PASS AT THE RATE IT ENTERS THE JOBSITE. HIGH FLOWS SHALL BE ALLOWED TO PASS WITHOUT CAUSING DAMAGE TO UPSTREAM PROPERTIES.

80. THE CONTRACTOR SHALL SUPPLY THE RESIDENT ENGINEER WITH THE MANUFACTURER'S INSTALLATION REQUIREMENTS FOR THE TYPE OF STEEL PLATE BEAM GUARDRAIL TERMINAL TYPE 1 SPECIAL (TANGENT) OR STEEL PLATE BEAM GUARDRAIL TERMINAL TYPE I SPECIAL (FLARED).

83. DELINEATORS SHALL BE INSTALLED AS SHOWN IN STANDARD 635001, EXCEPT THAT THE POST SHALL BE ROTATED 180 AND ONLY METAL-BACKED DELINEATORS SHALL BE PERMITTED. DELINEATORS SHALL BE PLACED AT THE ENDS OF APPROACH GUARDRAIL TERMINAL SECTIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR DELINEATORS.

84. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTING AND MAINTAINING AN ELECTRONIC LOG OF ALL STAKEOUT SURVEY THAT IS PERFORMED ON THE JOB, EITHER BY HIM/HER OR ANY SUB-CONTRACTOR PERFORMING THE STAKEOUT. UPON REQUEST, ALL LOGS SHALL BE SUBMITTED TO THE DEPARTMENT. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THIS WORK, BUT SHALL BE CONSIDERED INCLUDED IN THE COST FOR CONSTRUCTION LAYOUT.

88. PAVEMENT MARKING SHALL BE DONE ACCORDING TO STANDARD 780001, EXCEPT AS FOLLOWS:

1. ALL WORDS, SUCH AS ONLY, SHALL BE 8 FEET HIGH
2. ALL NON-FREEWAY ARROWS SHALL BE THE LARGE SIZE
3. THE DISTANCE BETWEEN YELLOW NO PASSING LINES SHALL BE 8 INCHES, NOT 7 INCHES, AS SHOWN IN THE DETAIL OF TYPICAL LANE AND EDGE LINES.
4. CENTERLINE SKIP DASH PAVEMENT MARKING ON MULTI-LANE DIVIDED, MULTI-LANE UNDIVIDED, AND ONE-WAY ROADWAY SHALL BE ACCORDING TO DISTRICT STANDARD 41.1

89. PERMANENT SURVEY MARKERS, TYPE II, SHALL BE SET AT INTERVALS OF 1 MILE OR AS DIRECTED BY THE ENGINEER. BRIDGE OR CULVERT PROJECTS SHALL HAVE ONE SURVEY MARKER PLACED NEAR THE STRUCTURE. ESTIMATED: 1 EACH.

91. PERMANENT SURVEY MARKERS, TYPE II SHALL BE CAST-IN-PLACE AS SHOWN ON DISTRICT STANDARD 66.2, OR ANOTHER OPTION WOULD BE TO INSTALL A VAULTED STYLE MONUMENT AS DESCRIBED BY NGS AS A 3D MONUMENT (TOP SECURITY SLEEVE ROD MONUMENT), WITH INSTALLATION INSTRUCTIONS PROVIDED BY THE DISTRICT CHIEF OF SURVEYS. IF POURED IN PLACE, THE BOTTOM OF THE MARKER SHALL BE 5'-0" BELOW THE GROUND SURFACE.

92. THE PERMANENT SURVEY MARKERS, IF POSSIBLE, SHALL BE INSTALLED AT THE BEGINNING OF THE JOB AND PROTECTED THROUGHOUT.

93. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A DESCRIPTION OF LOCATION, ELEVATION, AND COORDINATES FOR EACH PERMANENT SURVEY MARKER. THE HORIZONTAL COORDINATES MUST BE DERIVED BY GPS AND THE ELEVATION DERIVED USING AN ELECTRONIC LEVEL. THE META DATA, SUCH AS THE GEOID USED, (NGS ADJUSTMENT ie: 97 HARN, 03, 07), AND THE BASE POINT(S) NAME OR NUMBER SHALL BE SUBMITTED ALONG WITH A COMPLETE COLLECTION LOG. IF COLLECTED USING RTK METHOD, IT WILL REQUIRE EITHER 3 COLLECTIONS (AVERAGED) FROM 2 DIFFERENT BASES, OR A MINIMUM OF 3 COLLECTIONS (AVERAGED), AT LEAST 2 HOURS APART, FROM THE SAME BASE. IF USING A CORS TYPE NETWORK, THE COLLECTION PROCEDURE SHALL INCLUDE LOCALIZING WITH CHECK SHOTS ON AT LEAST 2 DIFFERENT HARN MONUMENTS BOTH BEFORE AND AFTER COLLECTION. THE LEVEL CIRCUIT SHALL BE RUN FROM FURNISHED MARK TO FURNISHED MARK AND THEN ADJUSTED. THE ERROR OF CLOSURE SHALL BE SUBMITTED WITH THE ELECTRONIC LEVEL NOTES IN A RECOGNIZED FORMAT APPROVED BY THE ENGINEER AND/OR THE CHIEF OF SURVEYS. THE ENGINEER SHALL SUBMIT THIS INFORMATION TO THE DISTRICT CHIEF OF SURVEYS.

98. RIGHT-OF-WAY MARKERS WILL BE ERECTED PER HIGHWAY STANDARD 666001 WITH THE BACK FACE OF THE MARKER ON THE RIGHT-OF-WAY LINE, UNLESS THE NEW RIGHT-OF-WAY LINE HAS BEEN SURVEYED AND PINNED, IN WHICH INSTANCE THE RIGHT-OF-WAY MARKERS WILL BE ERECTED 12 INCHES INSIDE THE NEW RIGHT-OF-WAY LINE. THE METHOD OF INSTALLATION SHALL BE APPROVED BY THE ENGINEER.

102. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.39 OF THE STANDARD SPECIFICATIONS. THE FOLLOWING LISTED UTILITIES LOCATED WITHIN THE PROJECT LIMITS OR IMMEDIATELY ADJACENT TO THE PROJECT CONSTRUCTION LIMITS ARE MEMBERS OF JULIE:

COMMONWEALTH EDISION	(815) 490-2869
FRONTIER	(815) 544-6171

IDOT IS NOT A MEMBER OF JULIE. IF YOU ARE NEAR ANY OVERHEAD LIGHTING, INTERSECTION LIGHTING OR TRAFFIC SIGNALS, CONTACT THE IDOT TRAFFIC OFFICE AT 815/284-5469 AT LEAST 48 HOURS PRIOR TO WORK.

106. RELOCATE TEMPORARY IMPACT ATTENUATORS SHALL INCLUDE STORAGE AND TRANSPORTATION TO AND FROM STORAGE, WHEN THE DEVICE IS NOT NEEDED FOR A TIME, AS SHOWN ON THE STAGING PLANS. THIS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER EACH FOR IMPACT ATTENUATORS, RELOCATE OF THE TYPE SPECIFIED.

107. WHEN RELOCATE TEMPORARY CONCRETE BARRIER IS SPECIFIED, THE WALL SHALL BE REMOVED, STORAGE AND TRANSPORTATION TO AND FROM STORAGE, WHEN THE WALL IS NOT NEEDED FOR A TIME AS SHOWN ON THE STAGING PLANS, RELOCATED AND REINSTATED AT THE NEW LOCATION. THE REINSTALLATION REQUIREMENTS SHALL BE THE SAME AS THOSE FOR A NEW INSTALLATION. THIS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR RELOCATE TEMPORARY CONCRETE BARRIER.

108. THE TEMPORARY CONCRETE BARRIER SHALL BE PINNED TO THE PAVEMENT WITH 3 ANCHOR PINS PER SECTION ON THE TRAFFIC SIDE OF THE BARRIER WALL AT THE FOLLOWING LOCATIONS:

ON THE EXISTING BRIDGE FOR STAGE I TRAFFIC ONLY. SEE BRIDGE PLANS FOR DETAILS.

ON THE ROADWAY AT THE ENDS OF THE BARRIERS FOR STAGES 1 AND 2.

THE BARRIER UNIT AT EACH END SHALL BE ANCHORED AS SPECIFIED IN ARTICLE 704.04. ALL ANCHORING AND PINNING HOLES SHALL BE CORE DRILLED. THE PINNING OF TEMPORARY CONCRETE BARRIER WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED FOR PAYMENT AS PART OF THE ITEM TEMPORARY CONCRETE BARRIER.

COMMITMENTS

TREES THREE (3) INCHES OR GREATER IN DIAMETER AT BREAST HEIGHT WILL NOT BE CLEARED FROM APRIL 1 THROUGH SEPTEMBER 30.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
IL 78 OVER PLUM RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	3
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

					STP	STP
					CONSTRUCTION CODE	
					80% FED 20% STATE	80% FED 20% STATE
					ROADWAY	BRIDGE
					0004	0010
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	RURAL	RURAL
	20100500	TREE REMOVAL, ACRES	ACRE	0.5	0.50	
	20200100	EARTH EXCAVATION	CU YD	2,742	2,742	
	20300100	CHANNEL EXCAVATION	CU YD	1,867	1,867	
	20300200	ROCK EXCAVATION IN CHANNEL	CU YD	188	188	
	20400800	FURNISHED EXCAVATION	CU YD	500	500	
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	5,000	5,000	
	25000210	SEEDING, CLASS 2A	ACRE	1	1.00	
	25000300	SEEDING, CLASS 3	ACRE	0.25	0.25	
	25000310	SEEDING, CLASS 4	ACRE	0.25	0.25	
**	25000750	MOWING	ACRE	1	1.00	
	25100125	MULCH, METHOD 3	ACRE	1	1.00	
	25100630	EROSION CONTROL BLANKET	SQ YD	378	378	
	25100900	TURF REINFORCEMENT MAT	SQ YD	1,044	1,044	
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUNDS	631	631	

* SPECIALTY ITEM

** 100% STATE

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SUMMARY OF QUANTITIES
IL 78 OVER PLUM RIVER

SCALE: | SHEET 1 OF 8 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	4
		CONTRACT NO. 64H58		
	ILLINOIS FED. AID PROJECT			

REV. 8/19/21

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP CONSTRUCTION CODE 80% FED 20% STATE ROADWAY 0004 RURAL	STP CONSTRUCTION CODE 80% FED 20% STATE BRIDGE 0010 RURAL
28000305	TEMPORARY DITCH CHECK	FOOT	40	40	
28000400	PERIMETER EROSION BARRIER	FOOT	1159	1,159	
28001100	TEMPORARY EROSION CONTROL BLANKET	SQ YD	6,104	6,104	
28100105	STONE RIPRAP, CLASS A3	SQ YD	42	42	
28100109	STONE RIPRAP, CLASS A5	SQ YD	364		364
28100811	STONE DUMPED RIPRAP, CLASS A6	TON	476	476	
28200200	FILTER FABRIC	SQ YD	1,217	853	364
28400400	SLOPE MATTRESS 6"	SQ YD	610		610
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	2,812	2,812	
31200100	STABILIZED SUBBASE 4"	SQ YD	101	101	
35300210	PORTALND CEMENT CONCRETE BASE COURSE 7 1/2"	SQ YD	1,024	1,024	
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	1,404	1,404	
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	598	598	
40602978	HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N50	TON	120	120	

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP CONSTRUCTION CODE 80% FED 20% STATE ROADWAY 0004 RURAL	STP CONSTRUCTION CODE 80% FED 20% STATE BRIDGE 0010 RURAL
40604050	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	TON	162	162	
42000060	WELDED WIRE REINFORCEMENT	SQ YD	172	172	
42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APROACH SLAB	SQ YD	172	172	
42001300	PROTECTIVE COAT	SQ YD	1,105	1,105	
44000100	PAVEMENT REMOVAL	SQ YD	1,294	1,294	
44004250	PAVED SHOULDER REMOVAL	SQ YD	112	112	
48100500	AGGREGATE SHOULDERS, TYPE A 6"	SQ YD	271	271	
48203018	HOT-MIX ASPHALT SHOULDERS, 5 1/4"	SQ YD	612	612	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1
50200100	STRUCTURE EXCAVATION	CU YD	273		273
50300225	CONCRETE STRUCTURES	CU YD	117.5		117.5
50300255	CONCRETE SUPERSTRUCTURES	CU YD	274		274
50300260	BRIDGE DECK GROOVING	SQ YD	845		845
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	94.6		94.6

* SPECIALTY ITEM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 78 OVER PLUM RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	6
		CONTRACT NO. 64H58		
	ILLINOIS FED. AID PROJECT			

REV. 10/4/21 REV. 9/14/21 REV. 8/19/21

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP CONSTRUCTION CODE 80% FED 20% STATE ROADWAY 0004 RURAL	STP CONSTRUCTION CODE 80% FED 20% STATE BRIDGE 0010 RURAL
	50401315	FURNISHING AND ERECTING PRESTRESSED CONCRETE BEAMS,IL 36N	FOOT	1,137		1,137
	50800105	REINFORCEMENT BARS	POUND	1,090		1,090
	50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	133,040		133,040
	50800515	BAR SPLICERS	EACH	932		932
	51201900	FURNISH STEEL PILES HP14x89	FOOT	205		205
	51202305	DRIVING PILES	FOOT	205		205
	51203900	TEST PILE STEEL HP14x89	EACH	2		2
	51204650	PILE SHOES	EACH	12		12
	51500100	NAME PLATES	EACH	1		1
*	51603000	DRILLED SHAFT IN SOIL	CU YD	5.5		5.5
*	51604000	DRILLED SHAFT IN ROCK	CU YD	8.8		8.8
	52200010	TEMPORARY SHEET PILING	SQ FT	328		328
	52200020	TEMPORARY SOIL RETENTION SYSTEM	SQ FT	657		657
	54262712	METAL FLARED END SECTIONS 12"	EACH	4	4	

* SPECIALTY ITEM

MODEL: $MODELNAME$
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	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 78 OVER PLUM RIVER

SCALE: | SHEET 4 OF 8 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	7
		CONTRACT NO. 64H58		
	ILLINOIS FED. AID PROJECT			

REV. 10/4/21 REV. 9/23/21 REV. 9/14/21 REV. 8/19/21

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP CONSTRUCTION CODE 80% FED 20% STATE ROADWAY 0004 RURAL	STP CONSTRUCTION CODE 80% FED 20% STATE BRIDGE 0010 RURAL
	58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	153		153
	59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	737	737	
	60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	4	4	
	60100080	FRENCH DRAINS	CU YD	2	2	
	60100945	PIPE DRAINS 12"	FOOT	138	138	
	60500080	REMOVING INLETS	EACH	2	2	
	61000050	CONCRETE THRUST BLOCKS	EACH	4	4	
	61000335	TYPE G INLET BOX, STANDARD 610001	EACH	4	4	
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	325	325	
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4	
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4	
	63200310	GUARDRAIL REMOVAL	FOOT	775	775	
	63500105	DELINEATORS	EACH	4	4	
	66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	13	13	

* SPECIALTY ITEM

MODEL: $MODELNAME$
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	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 78 OVER PLUM RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	8
		CONTRACT NO. 64H58		
	ILLINOIS FED. AID PROJECT			

REV. 9/23/21 REV. 9/14/21

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP CONSTRUCTION CODE 80% FED 20% STATE ROADWAY 0004 RURAL	STP CONSTRUCTION CODE 80% FED 20% STATE BRIDGE 0010 RURAL
*	66700305	PERMANENT SURVEY MARKERS, TYPE II	EACH	1	1	
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	9	9	
	67100100	MOBILIZATION	L SUM	1	1	
	70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1	
	70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	
	70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1	
	70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1	
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	15	15	
	70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
	70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6	
	70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28	28	
*	70300904	PAVEMENT MARKING TAPE, TYPE IV 4"	FOOT	3,563	3,563	
*	70300924	PAVEMENT MARKING TAPE, TYPE IV 24"	FOOT	32	32	
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	1,175	1,175	

* SPECIALTY ITEM

MODEL: $MODELNAME$
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PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 78 OVER PLUM RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	9
		CONTRACT NO. 64H58		
	ILLINOIS FED. AID PROJECT			

REV. 9/23/21 REV. 9/14/21 REV. 8/19/21

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP CONSTRUCTION CODE 80% FED 20% STATE ROADWAY 0004 RURAL	STP CONSTRUCTION CODE 80% FED 20% STATE BRIDGE 0010 RURAL
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1,050	1,050	
	70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2	
	70600332	IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2	
*	72000100	SIGN PANEL - TYPE 1	SQ FT	33	33	
*	72000200	SIGN PANEL - TYPE 2	SQ FT	11	11	
*	72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	5	5	
*	72400200	REMOVE SIGN PANEL ASSEMBLY - TYPE B	EACH	16	16	
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
*	72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	44	44	
	73000100	WOOD SIGN SUPPORT	FOOT	48	48	
*	78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	5,760	5,760	
	X0326649	LINEAR DELINEATOR PANELS, 6 INCH	EACH	6	6	
	X2810210	STONE RIPRAP, CLASS A5 (SPECIAL)	TON	1,692	1,692	
	X2810212	STONE RIPRAP, CLASS A6 (SPECIAL)	TON	107		107

* SPECIALTY ITEM

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PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 78 OVER PLUM RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	10
		CONTRACT NO. 64H58		
	ILLINOIS FED. AID PROJECT			

REV. 9/23/21 REV. 9/14/21 REV. 8/19/21

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	STP CONSTRUCTION CODE 80% FED 20% STATE ROADWAY 0004 RURAL	STP CONSTRUCTION CODE 80% FED 20% STATE BRIDGE 0010 RURAL
	X4400110	TEMPORARY PAVEMENT REMOVAL	SQ YD	863	863	
*	X7820007	GUARDRAIL REFLECTORS, TYPE C (SPECIAL)	EACH	4	4	
	Z0018010	DRAINAGE SCUPPERS, DS-33	EACH	2	2	
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	
*	Z0025505	PROPERTY MARKERS	EACH	10	10	
	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	146	146	
	Z0062456	TEMPORARY PAVEMENT	SQYD	863	863	

* SPECIALTY ITEM

MODEL: $MODELNAME$
FILE NAME: P:\projects\2001\2002\CICADD\CADSheets\I203012-sht-SQQ.dgn

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PLOT DATE = 8/9/2021	DATE -	REVISED -	

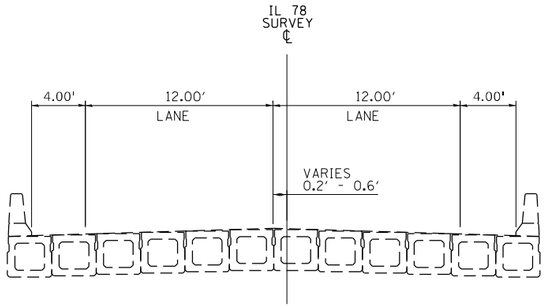
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES
IL 78 OVER PLUM RIVER

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

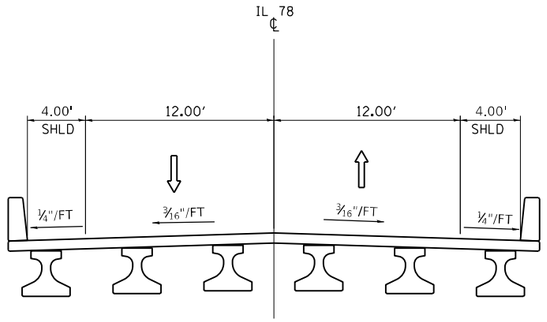
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	11
		CONTRACT NO. 64H58		
	ILLINOIS FED. AID PROJECT			

REV. 9/23/21 REV. 9/14/21



EXISTING TYPICAL SECTION IL 78

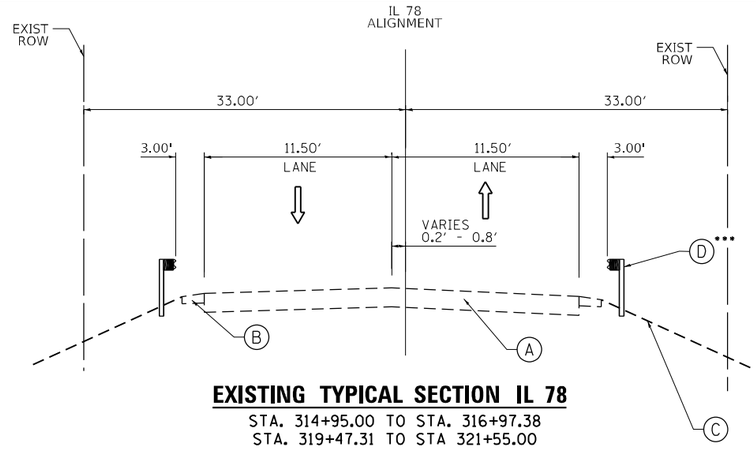
STA. 317+25.68 TO STA. 319+18.93



PROPOSED TYPICAL SECTION IL 78

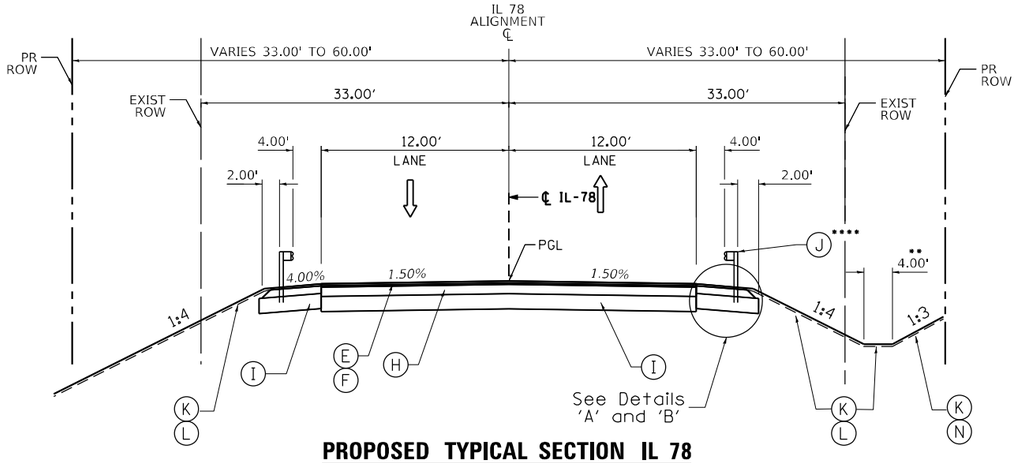
STA. 317+25.68 TO STA. 319+18.93

BRIDGE APPROACH SLAB - STA. 316+97.67 TO STA. 317+25.38
STA. 319+18.93 TO STA. 319+47.85



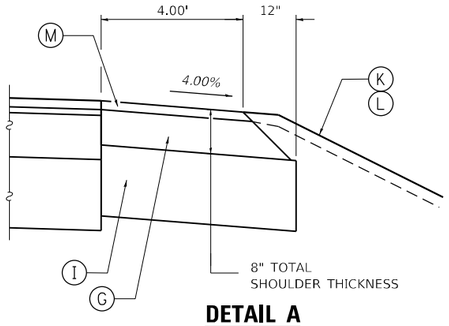
EXISTING TYPICAL SECTION IL 78

STA. 314+95.00 TO STA. 316+97.38
STA. 319+47.31 TO STA 321+55.00



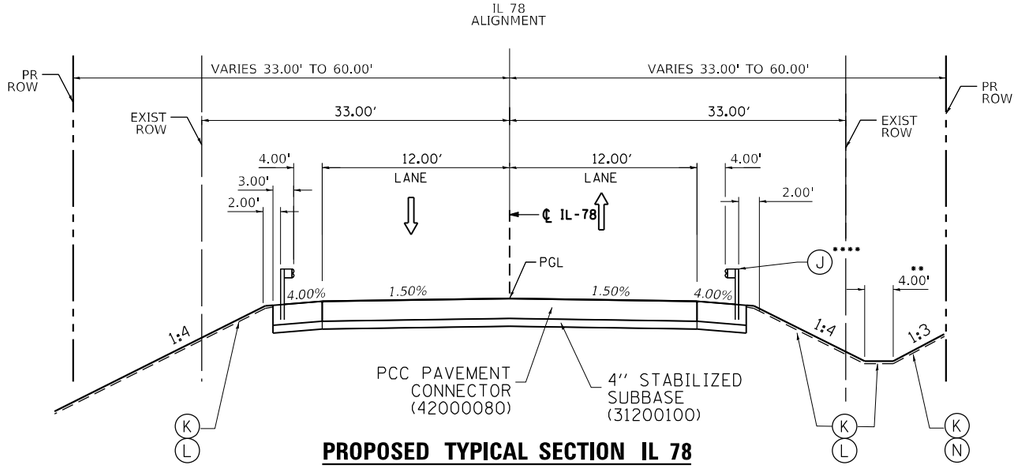
PROPOSED TYPICAL SECTION IL 78

STA. 314+95.00 TO STA. 316+77.38
STA. 319+67.14 TO STA 321+55.00



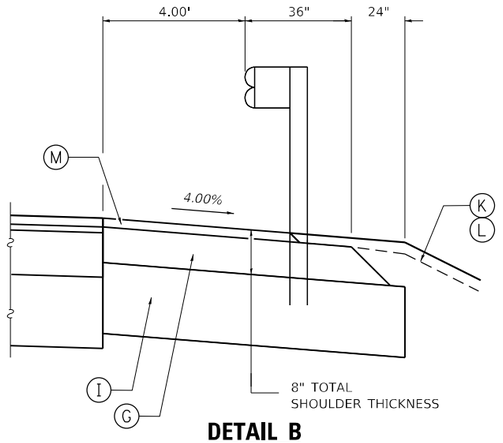
DETAIL A

HOT-MIX ASPHALT SHOULDER
WITHOUT GUARDRAIL



PROPOSED TYPICAL SECTION IL 78

STA. 316+77.38 TO STA. 316+97.67
STA. 319+47.85 TO STA 319+67.14



DETAIL B

HOT-MIX ASPHALT SHOULDER
WITH GUARDRAIL

LEGEND:

- (A) PAVEMENT REMOVAL (44000100)
- (B) PAVED SHOULDER REMOVAL (44004250)
- (C) EXISTING GROUND
- (D) GUARDRAIL REMOVAL (63200310)
- (E) 1.5" HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50 (40604050)
- (F) 1.25" HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N50 (40602978)
- (G) HOT-MIX ASPHALT SHOULDERS, 5 ¼" (48203018)
- (H) PORTLAND CEMENT CONCRETE BASE COURSE 7 1/2" (35300210)
- (I) AGGREGATE SUBGRADE IMPROVEMENT 12" (30300112)
- (J) STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS (63000001)
- (K) TOPSOIL FURNISH AND PLACE, 4" (21101615)
- (L) SEEDING, CLASS 2A (25000210)
- (M) 2 ¾" HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50 (40604050)
- (N) SEEDING CLASS 4 (25000310)

* SUPERELEVATION RUNOUT TRANSITION
FROM -1.5% TO -0.26%
STATION 321+27 TO STATION 321+55

** DITCH FROM STATION 314+95 TO STATION 317+53 RT.

*** GUARDRAIL REMOVAL LIMITS
STATION 315+92 TO STATION 317+57 LT.
STATION 319+04 TO STATION 321+46 LT.
STATION 315+52 TO STATION 317+67 RT.
STATION 319+14 TO STATION 320+67 RT.

**** PROPOSED GUARDRAIL LIMITS
STATION 315+39 TO STATION 315+70 LT.
STATION 319+65 TO STATION 320+84 LT.
STATION 315+60 TO STATION 316+79 RT.
STATION 319+74 TO STATION 320+05 RT.

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	PLOT DATE = 8/9/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
IL 78 OVER PLUM RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	12
		CONTRACT NO. 64H58		
		ILLINOIS FED. AID PROJECT		

EARTHWORK SCHEDULE

LOCATION		20200100 EARTH EXCAVATION			EMBANKMENT			EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)		
IL 78		CU YD			CU YD			CU YD		
BEGIN STA.	END STA.	PRE-STAGE	STAGE 1	STAGE 2	PRE-STAGE	STAGE 1	STAGE 2	PRE-STAGE	STAGE 1	STAGE 2
311+50	312+00	4.54	0.00	15.74	10.46	0.00	4.54	-7.06	0.00	7.27
312+00	312+50	9.08	0.00	31.83	21.35	0.00	9.08	-14.54	0.00	14.79
312+50	313+00	10.20	0.00	29.85	20.83	0.00	10.48	-13.18	0.00	11.91
313+00	313+50	12.00	0.00	25.06	18.37	0.00	12.69	-9.37	0.00	6.11
313+50	314+00	18.51	0.00	49.19	39.24	0.00	13.38	-25.36	0.00	23.51
314+00	314+50	24.14	0.00	81.06	66.70	0.00	18.60	-48.60	0.00	42.20
314+50	314+95	15.90	19.76	54.85	69.25	17.69	17.40	-57.33	-2.87	23.74
314+95	315+00	1.14	4.40	2.79	8.17	3.85	1.62	-7.32	-0.55	0.47
315+00	315+50	13.34	51.33	36.79	77.86	30.66	14.05	-67.86	7.84	13.54
315+50	316+00	17.08	53.11	33.78	65.29	31.99	15.45	-52.48	7.84	9.89
316+00	316+50	17.85	47.06	20.27	51.19	45.28	30.36	-37.80	-9.99	-15.16
316+50	316+96	16.08	41.46	5.50	49.54	52.53	38.19	-37.48	-21.44	-34.07
316+96	317+26	10.74	26.19	1.59	36.83	38.36	23.40	-28.78	-18.72	-22.21
319+18	319+52	9.19	16.77	20.48	30.74	65.43	6.09	-23.85	-52.85	9.27
319+52	320+00	15.37	31.26	26.74	31.43	75.76	11.85	-19.90	-52.32	8.21
320+00	320+50	18.75	42.27	26.35	18.96	53.89	15.85	-4.90	-22.19	3.91
320+50	321+00	18.84	40.06	26.68	24.54	42.82	17.77	-10.41	-12.78	2.24
321+00	321+50	17.13	35.18	29.41	38.88	30.05	13.64	-26.03	-3.67	8.42
321+50	321+55	1.58	3.45	3.24	4.55	1.76	0.90	-3.37	0.83	1.53
321+55	322+00	21.08	15.65	43.73	20.06	6.54	4.60	-4.25	5.20	28.20
322+00	322+50	30.50	0.00	57.96	21.26	0.00	15.08	1.62	0.00	28.39
322+50	323+00	23.69	0.00	32.80	27.67	0.00	23.71	-9.90	0.00	0.89
323+00	323+50	16.52	0.00	13.41	10.85	0.00	16.52	1.54	0.00	-6.46
323+50	324+00	16.71	0.00	9.35	6.99	0.00	16.71	5.54	0.00	-9.70
324+00	324+50	17.33	0.00	8.70	6.95	0.00	17.33	6.05	0.00	-10.81
324+50	325+00	16.13	0.00	17.28	14.34	0.00	16.13	-2.24	0.00	-3.17
Bridge North Cone		0.00	143.00	143.00	0.00	0.00	0.00	0.00	107.25	107.25
Bridge South cone		0.00	465.00	465.00	0.00	0.00	0.00	0.00	348.75	348.75
TOTAL		**393.42**	**1035.95**	**1312.43**	**792.30**	**496.61**	**385.42**	**-497.24**	**280.35**	**598.90**
GRAND TOTAL		**2741.80**			**1674.33**			**382.02**		

20100500 TREE REMOVAL

ACRE	STA	STA	LT/RT	AREA	REMARKS
	PLUM RIVER				
0.04	3+08	3+67	RT	1,797	
0.02	3+35	3+84	LT	866	
0.13	4+36	7+80	LT	5,726	
0.24	4+90	7+91	RT	10,297	
0.43	SUBTOTAL				
0.50	TOTAL				

20300100 CHANNEL EXCAVATION

CU YD	STA	STA	LT/RT	AREA	REMARKS
37	3+30	3+40		999	
419	3+40	4+00		11,315	
367	4+00	4+85		9,903	
219	4+85	5+05		5,912	
826	5+05	7+91		22,291	
1,867	TOTAL				

20300200 ROCK EXCAVATION IN CHANNEL

CU YD	STA	STA	LT/RT	AREA	REMARKS
5	3+30	3+40		140	
128	3+40	4+00		3,464	
44	4+00	4+85		1,190	
10	4+85	5+05		280	
188	TOTAL				

21101615 TOPSOIL FURNISH AND PLACE, 4"

SQ YD	STA	STA	LT/CL/RT	SQ FT	REMARKS
	IL 78				
901	314+65	317+09	LT	8,109	SLOPE AREA
550	314+65	317+05	RT	4,952	SLOPE AREA
847	319+22	321+85	LT	7,626	SLOPE AREA
839	319+36	321+85	RT	7,549	SLOPE AREA
253	314+65	316+87	RT	2,278	SLOPE AREA
50	317+04	317+50	RT	446	SLOPE AREA
	PLUM RIVER				
683	4+50	7+90	LT	6,143	SLOPE AREA
266	3+50	5+10	RT	2,396	SLOPE AREA
611					CONTINGENCY
5000	TOTAL				

25000210 SEEDING CLASS 2A

ACRE	STA	STA	LT/CL/RT	SQ FT	REMARKS
	IL 78				
0.30	311+84	317+09	LT	13,058	SLOPE AREA
0.13	313+95	317+05	RT	5,551	SLOPE AREA
0.29	319+22	324+60	LT	12,497	SLOPE AREA
0.21	319+36	322+55	RT	9,246	SLOPE AREA
0.93	SUBTOTAL				
1.00	TOTAL				

25000300 SEEDING CLASS 3

ACRE	STA	STA	LT/CL/RT	SQ FT	REMARKS
	PLUM RIVER				
0.17	4+50	7+90	LT	7,617	SLOPE AREA
0.06	3+50	5+10	RT	2,671	SLOPE AREA
0.24	SUBTOTAL				
0.25	TOTAL				

MODEL: $MODELNAME$
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PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
IL 78 OVER PLUM RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	13
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

25000310 SEEDING CLASS 4

ACRE	STA	STA	LT/CL/RT	SQ FT	REMARKS
	IL 78				
0.07	313+97	316+87	RT	2,956	SLOPE AREA
0.01	317+04	317+50	RT	446	SLOPE AREA
0.08	SUBTOTAL				
0.25	TOTAL				

25000750 MOWING

ACRE	STA	STA	LT/CL/RT	SQ FT	REMARKS
0.30	311+84	317+09	LT	13,058	SLOPE AREA
0.13	313+95	317+05	RT	5,551	SLOPE AREA
0.29	319+22	324+60	LT	12,497	SLOPE AREA
0.21	319+36	322+55	RT	9,246	SLOPE AREA
0.07	313+97	316+87	RT	2,956	SLOPE AREA
0.01	317+04	317+50	RT	446	SLOPE AREA
1.00	SUBTOTAL				
1.00	TOTAL				

25100125 MULCH, METHOD 3

ACRE	STA	STA	LT/CL/RT	SQ FT	REMARKS
	IL 78				
0.30	311+84	317+09	LT	13,058	SLOPE AREA
0.13	313+95	317+05	RT	5,551	SLOPE AREA
0.29	319+22	324+60	LT	12,497	SLOPE AREA
0.21	319+36	322+55	RT	9,246	SLOPE AREA
0.93	SUBTOTAL				
1.00	TOTAL				

25100630 EROSION CONTROL BLANKET

SQ YD	STA	STA	LT/CL/RT	SQ FT	REMARKS
	IL 78				
328	313+97	316+87	RT	2,956	SLOPE AREA
50	317+04	317+50	RT	446	SLOPE AREA
378	TOTAL				

25100900 TURF REINFORCEMENT MAT

SQ YD	STA	STA	LT/CL/RT	SQ FT	REMARKS
	PLUM RIVER				
683	4+50	7+90	LT	6,143	CADD AREA
266	3+50	5+10	RT	2,396	CADD AREA
95	10% CONTINGENCY				
1044	TOTAL				

28000250 TEMPORARY EROSION CONTROL SEEDING

LBS	STA	STA	LT/CL/RT	SQ FT	ACRE
	TEMPORARY PAVEMENT				
46	311+85	317+55	LT	3990	0.09
44	319+10	324+55	LT	3815	0.09
	IL 78				
150	311+84	317+09	LT	13,058	0.30
64	313+95	317+05	RT	5,551	0.13
143	319+22	324+60	LT	12,497	0.29
106	319+36	322+55	RT	9,246	0.21
34	313+97	316+87	RT	2,956	0.07
5	317+04	317+50	RT	433	0.01
34	313+97	316+87	RT	2,956	0.07
5	317+04	317+50	RT	433	0.01
631	TOTAL				

28000305 TEMPORARY DITCH CHECK

FOOT	STA	LT/RT	LIN FT	REMARKS
	IL 78			
11	315+00	RT	11	
11	316+50	RT	11	
18	317+25	RT	18	
40	TOTAL			

28000400 PERIMETER EROSION BARRIER

FOOT	STA	STA	LT/CL/RT	LIN FT	REMARKS
	IL 78				
588	311+84	317+62	LT	588	
571	318+72	324+57	LT	571	
1159	TOTAL				

28001100 TEMPORARY EROSION CONTROL BLANKET

SQ YD	STA	STA	LT/RT	SQ FT	REMARKS
	TEMPORARY PAVEMENT				
443	311+85	317+55	LT	3990	
424	319+10	324+55	LT	3815	
	IL 78				
1451	311+84	317+09	LT	13,058	SLOPE AREA
617	313+95	317+05	RT	5,551	SLOPE AREA
1389	319+22	324+60	LT	12,497	SLOPE AREA
1027	319+36	322+55	RT	9,246	SLOPE AREA
328	313+97	316+87	RT	2,956	SLOPE AREA
48	317+04	317+50	RT	433	SLOPE AREA
328	313+97	316+87	RT	2,956	SLOPE AREA
48	317+04	317+50	RT	433	SLOPE AREA
6104	TOTAL				

28100105 STONE RIPRAP, CLASS A3

SQ YD	STA	STA	LT/RT	LIN FT	REMARKS
	IL 78				
4	316+84	316+94	LT	36	
30	316+88	317+08	RT	270	
4	319+44	319+54	LT	36	
4	319+50	319+60	RT	36	
42	TOTAL				

28100109 STONE RIPRAP, CLASS A5

SQ YD	STA	STA	SQ FT	REMARKS
	IL 78			
364	318+77	319+36	3,276	
364	TOTAL			

28100811 STONE DUMPED RIPRAP, CLASS A6

TON	STA	STA	AREA	REMARKS
	PLUM RIVER			
17	3+30	3+40		
101	3+40	4+00		
271	4+00	4+85		
87	4+85	5+05		
476	TOTAL			

28200200 FILTER FABRIC

SQ YD	STA	STA	LT/CT/RT	SQ FT	REMARKS
	BRIDGE PLANS				
364					
	IL 78				
346	318+77	319+36	CT	3,114	
	PLUM RIVER				
507	3+30	4+85		4,563	
1217	TOTAL				

28400400 SLOPE MATTRESS, 6"

SQ YD	STA	STA	SQ FT	REMARKS
	IL 78			
611	317+04	317+76	5,496	
611	TOTAL			

42000060 WELDED WIRE REINFORCEMENT

SQ YD	STA	STA	SQ FT
42.9	316+77.38	316+96.67	385.8
42.9	316+77.38	316+96.67	385.8
42.9	319+47.85	319+67.14	385.8
42.9	319+47.85	319+67.14	385.8
172	TOTAL		

44000100 PAVEMENT REMOVAL

SQ YD	STA	STA	WIDTH	SQ FT	REMARKS
	IL 78				
673.1	314+95	317+59	23	6,058	
620.7	319+13	321+55	23	5,586	
1294	TOTAL				

44004250 PAVED SHOULDER REMOVAL

SQ YD	STA	STA	LT/RT	SQ FT	REMARKS
	IL 78				
32.8	316+91	317+53	RT	295	
27.6	316+91	317+56	LT	248	
25.1	319+09	319+74	LT	226	
25.7	319+16	319+74	RT	231	
112	TOTAL				

48100500 AGGREGATE SHOULDERS, TYPE A 6"

SQ YD	STA	STA	LT/RT	SQ FT
103.3	311+85	314+95	LT	930
33.3	314+95	315+95	RT	300
100.7	321+55	324+57	LT	906
33.3	321+55	322+55	RT	300
271	TOTAL			

50100100 REMOVAL OF EXISTING STRUCTURES

EACH	STA	STA	REMARKS
	IL 78		
1	317+60	319+12	
1	TOTAL		

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FILE NAME: P:\projects\20012602\C\CADD\CADsheets\0203012-int-Schedules.dgn

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	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = 8/16/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
IL 78 OVER PLUM RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	14
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

60100060 CONCRETE HEADWALLS FOR PIPE DRAINS

EACH	STA	LT/RT	OFST	EACH	REMARKS
	IL 78				
1	317+16	LT	51'	1	
1	317+30	RT	51'	1	
1	319+74	LT	51'	1	
1	319+88	RT	51'	1	
4	TOTAL				

60100080 FRENCH DRAIN

CU YD	STA	LT/RT	OFST	EACH	REMARKS
	IL 78				
0.5	314+96	LT	20'	1	
0.5	314+96	RT	20'	1	
0.5	321+53	LT	20'	1	
0.5	321+53	RT	20'	1	
2	TOTAL				

60500080 REMOVING INLETS

EACH	STA	LT/RT	REMARKS
	IL 78		
1	319+22	LT	
1	319+31	RT	
2	TOTAL		

63000001 STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS

FOOT	STA	STA	OFFSET	LT/RT	LIN/FT
	IL 78				
37.5	316+33	316+70	16	LT	37.5
125	315+54	316+79	16	RT	125
125	319+65	320+90	16	LT	125
37.5	319+74	320+11	16	RT	37.5
325	TOTAL				

63100085 TRAFFIC BARRIER TERMINAL, TYPE 6

EACH	STA	STA	OFFSET	LT/RT
	IL 78			
1	316+70	317+07	16	LT
1	316+79	317+16	16	RT
1	319+28	319+65	16	LT
1	319+37	319+74	16	RT
4	TOTAL			

63100167 TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT

EACH	STA	STA	OFFSET	LT/RT
	IL 78			
1	315+04	315+54	16	RT
1	315+83	316+33	16	LT
1	320+11	320+61	16	RT
1	320+90	321+40	16	LT
4	TOTAL			

63200310 GUARDRAIL REMOVAL

FOOT	STA	STA	LT/RT	REMARKS
	IL 78			
215	315+52.32	317+66.90	RT	
165	315+92.43	317+57.02	LT	
241	319+04.25	321+45.53	LT	
153	319+13.77	320+66.93	RT	
775	TOTAL			

70400100 TEMPORARY CONCRETE BARRIER

FOOT	STA	STA	REMARKS
	IL 78		
1175	312+10	323+85	MOT 1
1175	TOTAL		

70400200 RELOCATE TEMPORARY CONCRETE BARRIER

FOOT	STA	STA	REMARKS
	IL 78		
1050	313+15	323+65	MOT 2
1050	TOTAL		

70600260 IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3

EACH	STA	OFFSET	LT/RT
	IL 78		
1	312+12.84	5.27	RT
1	323+84.38	4.62	RT
2	TOTAL		

70600332 IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3

EACH	STA	OFFSET	LT/RT
	IL 78		
1	313+13.21	7.15	LT
1	323+71.85	8.10	LT
2	TOTAL		

X2810210 STONE RIPRAP, CLASS A5 (SPECIAL)

TON	STA	STA	AREA
	PLUM RIVER		
952	3+40	4+00	
25	4+00	4+85	
50	4+85	5+05	
664	5+05	7+91	
1692	TOTAL		

X2810212 STONE RIPRAP, CLASS A6 (SPECIAL)

TON	STA	STA	AREA
	PLUM RIVER		
107	5+05	7+91	
107	TOTAL		

X4400110 TEMPORARY PAVEMENT REMOVAL

SQ YD	STA	STA	LT/RT	WIDTH	SQ FT
	IL 78				
443	311+84.95	317+54.66	LT	7	3,988
420	319+10.32	324+49.64	LT	7	3,775
863	TOTAL				

X7820007 GUARDRAIL REFLECTORS, TYPE C (SPECIAL)

EACH	STA	LT/RT	REMARKS
	IL 78		
1	315+04	RT	
1	315+83	LT	
1	320+62	RT	
1	321+40	LT	
4	TOTAL		

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FILE NAME: P:\projects\2021\022\CiCADD\CADsheets\0203012-sht-Schedules.dgn

USER NAME = BS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALES	CHECKED -	REVISED -
PLOT DATE = 8/9/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES
IL 78 OVER PLUM RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	15
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

PAVEMENT SCHEDULE

						30300112	31200100	35300210	40600275	40600290	40602978	40604050	42000080	48203018	Z0062456
LOCATION		LT/RT	DESCRIPTION	LENGTH	WIDTH	AGGREGATE SUBGRADE IMPROVEMENT 12"	STABILIZED SUBBASE 4"	PORTLAND CEMENT CONCRETE BASE COURSE 7 1/2"	BITIMINOUS MATERIAL (PRIME COAT)	BITIMINOUS MATERIAL (TACK COAT)	HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N50	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	HOT-MIX ASPHALT SHOULDERS, 5 1/4"	TEMPORARY PAVEMENT
STA	STA			(FOOT)	(FOOT)	(TON)	(SQ YD)	(SQ YD)	(POUND)	(POUND)	(TON)	(TON)	(SQ YD)	(SQ YD)	(SQ YD)
HMA Shoulder															
314+95.00	315+11.00	RT	HMA SHLD	16.0	4.0	3.6			16.3	1.6				7.1	
315+11.00	316+77.00	RT	HMA SHLD	166.0	7.0	64.6			296.3	29.1				129.1	
314+95.00	315+90.00	LT	HMA SHLD	95.0	4.0	21.1			96.9	9.5				42.2	
315+90.00	316+77.00	LT	HMA SHLD	87.0	7.0	33.8			155.3	15.2				67.7	
319+67.00	320+61.00	RT	HMA SHLD	94.0	7.0	36.6			167.8	16.5				73.1	
320+61.00	321+55.00	RT	HMA SHLD	94.0	4.0	20.9			95.9	9.4				41.8	
319+67.00	321+40.00	LT	HMA SHLD	173.0	7.0	67.3			308.8	30.3				134.6	
321+40.00	321+55.00	LT	HMA SHLD	15.0	4.0	3.3			15.3	1.5				6.7	
Roadway															
314+95.00	316+77.38	LT	HMA RW	182.4	12.0	121.6		243.2		109.4	22.1	18.4			
314+95.00	316+77.38	RT	HMA RW	182.4	12.0	121.6		243.2		109.4	22.1	18.4			
319+47.85	321+56.00	LT	HMA RW	208.2	12.0	138.8		277.5		124.9	25.3	21.0			
319+47.85	321+56.00	RT	HMA RW	208.2	12.0	138.8		277.5		124.9	25.3	21.0			
Bridge Approach															
316+77.38	316+96.67	LT	PCC BRIDGE	19.3	20.0		42.9						42.9		
316+77.38	316+96.67	RT	PCC BRIDGE	19.3	20.0		42.9						42.9		
319+47.85	319+67.14	LT	PCC BRIDGE	19.3	20.0		42.9						42.9		
319+47.85	319+67.14	RT	PCC BRIDGE	19.3	20.0		42.9						42.9		
Temporary Pavement															
311+84.95	317+54.66	LT	TEMP	569.7	7.0										443.1
319+10.32	324+49.64	LT	TEMP	539.3	7.0										419.5
313+95.00	314+95.00	RT	TEMP	100.0	7.0										77.8
321+56.00	322+55.00	RT	TEMP	99.0	7.0										77.0
Total:						771.8	171.5	1041.4	1152.6	581.6	94.8	79.0	171.5	502.2	1017.4

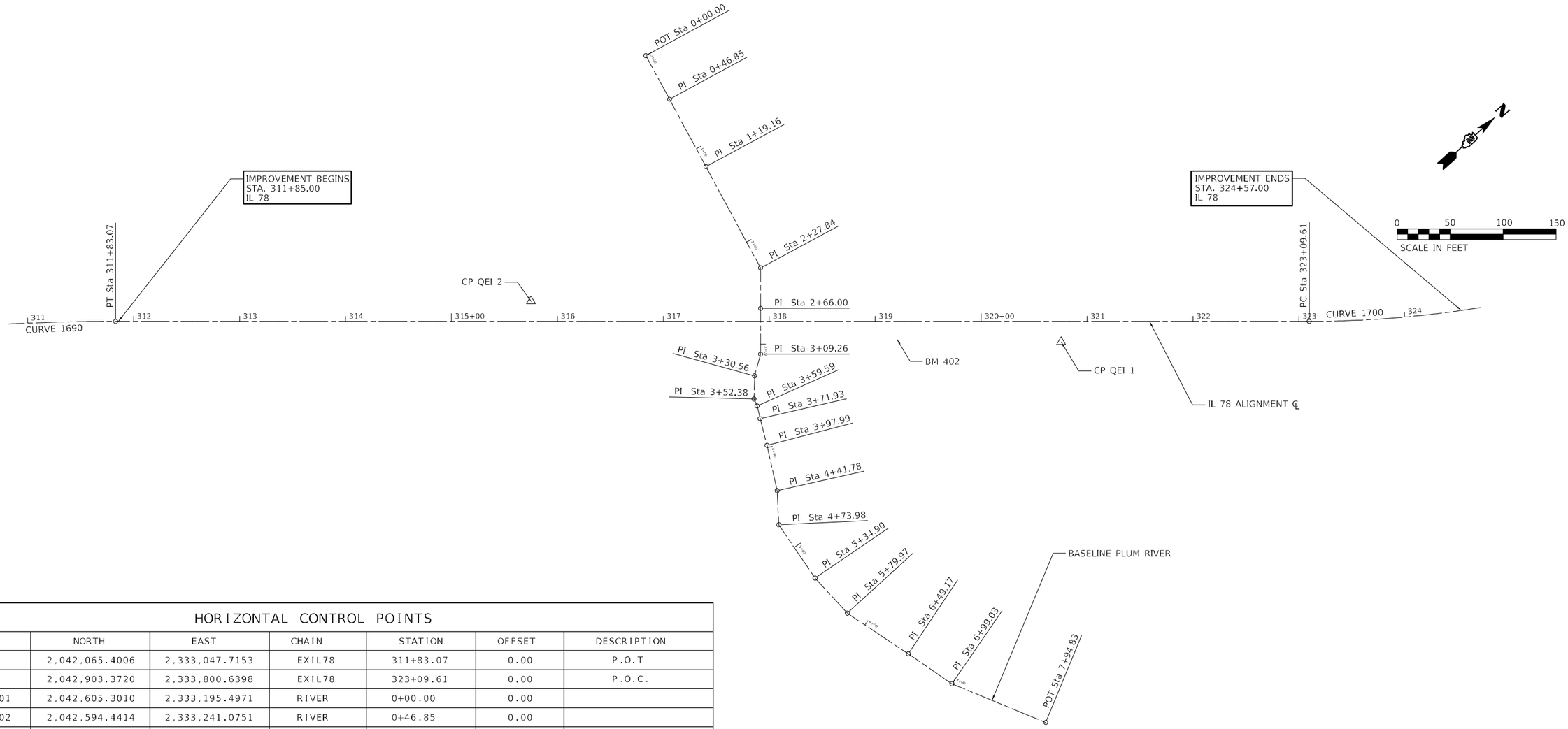
MODEL: $MODELNAME$
FILE NAME: P:\projects\2012\02\CiCADD\CADD\CADsheets\2123012-sht-Schedules.dgn

USER NAME = BS	DESIGNED -	REVISED -	**STATE OF ILLINOIS** **DEPARTMENT OF TRANSPORTATION**
	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

PAVEMENT SCHEDULE
IL 78 OVER PLUM RIVER

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

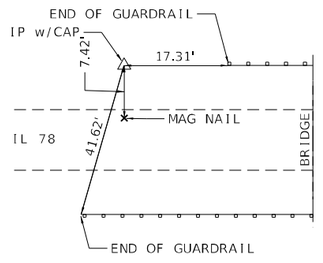
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	16
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		



HORIZONTAL CONTROL POINTS

POINT	NORTH	EAST	CHAIN	STATION	OFFSET	DESCRIPTION
P.T.	2,042,065.4006	2,333,047.7153	EXIL78	311+83.07	0.00	P.O.T
P.C.	2,042,903.3720	2,333,800.6398	EXIL78	323+09.61	0.00	P.O.C.
HWLRIV01	2,042,605.3010	2,333,195.4971	RIVER	0+00.00	0.00	
HWLRIV02	2,042,594.4414	2,333,241.0751	RIVER	0+46.85	0.00	
HWLRIV03	2,042,577.4711	2,333,311.3609	RIVER	1+19.16	0.00	
HWLRIV04	2,042,551.8648	2,333,416.9835	RIVER	2+27.84	0.00	
HWLRIV05	2,042,526.3952	2,333,445.4032	RIVER	2+66.00	0.00	
HWLRIV06	2,042,497.4984	2,333,477.5895	RIVER	3+09.26	0.00	
HWLRIV07	2,042,479.5633	2,333,489.0844	RIVER	3+30.56	0.00	
HWLRIV08	2,042,464.5798	2,333,504.9502	RIVER	3+52.38	0.00	
HWLRIV09	2,042,462.3603	2,333,511.8010	RIVER	3+59.59	0.00	
HWLRIV10	2,042,456.3643	2,333,522.5913	RIVER	3+71.93	0.00	
HWLRIV11	2,042,444.3904	2,333,545.7365	RIVER	3+97.99	0.00	
HWLRIV12	2,042,422.9622	2,333,583.9249	RIVER	4+41.78	0.00	
HWLRIV13	2,042,402.5741	2,333,608.8506	RIVER	4+73.98	0.00	
HWLRIV14	2,042,394.4254	2,333,669.2228	RIVER	5+34.90	0.00	
HWLRIV15	2,042,394.8714	2,333,714.2907	RIVER	5+79.97	0.00	
HWLRIV16	2,042,412.0308	2,333,781.3314	RIVER	6+49.17	0.00	
HWLRIV17	2,042,423.7522	2,333,829.7957	RIVER	6+99.03	0.00	
HWLRIV18	2,042,465.2101	2,333,916.1561	RIVER	7+94.83	0.00	

HORIZONTAL CONTROL POINT
QEI #2
N: 2042369.6577
E: 2333295.8215
ELV: 728.306



HORIZONTAL CONTROL POINT
QEI #1
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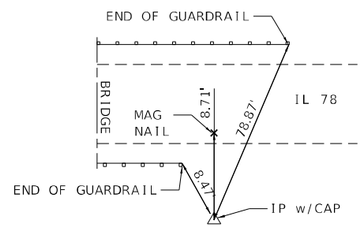
E: 2333658.4286
ELV: 727.314



BENCHMARK INFO

402 BM SET:
IDOT DISK ON PARAPET WALL AT
NORTHEAST END OF BRIDGE

NORTHING: 2042602.5929
EASTING: 2333553.4095
ELEVATION: 731.671

MODEL: $MODEL NAME$
FILE NAME: P:\projects\2012\002\Civil\CADD\CADSheets\D203012-sht-ATB.dgn

USER NAME = BS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = 8/9/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORIZONTAL AND VERTICAL CONTROL
IL 78 OVER PLUM RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	17
		CONTRACT NO. 64H58		
	ILLINOIS FED. AID PROJECT			

Partial chain EXIL78 description (IL 78 ALIGNMENT)
==========

Curve Data

Curve 1690
P.I. Station 309+47.54 N 2,041,888.6020 E 2,332,888.8603
Delta = 13° 19' 47.68" (RT)
Degree = 2° 49' 00.72"
Tangent = 237.6819
Length = 473.2177
Radius = 2,034.0253
External = 13.8398
Long Chord = 472.1512
Mid. Ord. = 13.7463
P.C. Station 307+09.86 N 2,041,679.9413 E 2,332,775.0473
P.T. Station 311+83.07 N 2,042,065.4006 E 2,333,047.7153
C.C. N 2,040,705.9566 E 2,334,560.7160
Back = N 28° 36' 36.20" E
Ahead = N 41° 56' 23.88" E
Chord Bear = N 35° 16' 30.04" E

Course from PT 1690 to PC 1700 N 41° 56' 23.88" E Dist 1,126.5395

Curve Data

Curve 1700
P.I. Station 325+24.60 N 2,043,063.2859 E 2,333,944.3238
Delta = 24° 08' 10.53" (LT)
Degree = 5° 41' 52.98"
Tangent = 214.9827
Length = 423.5881
Radius = 1,005.5332
External = 22.7248
Long Chord = 420.4630
Mid. Ord. = 22.2226
P.C. Station 323+09.61 N 2,042,903.3720 E 2,333,800.6398
P.T. Station 327+33.20 N 2,043,267.9729 E 2,334,010.0562
C.C. N 2,043,575.4217 E 2,333,052.6784
Back = N 41° 56' 23.88" E
Ahead = N 17° 48' 13.35" E
Chord Bear = N 29° 52' 18.62" E

Beginning chain RIVER description (BASELINE PLUM RIVER)
==========

Point HWLRIV01 N 2,042,605.3010 E 2,333,195.4971 Sta 0+00.00

Course from HWLRIV01 to HWLRIV02 S 76° 35' 53.86" E Dist 46.8539

Point HWLRIV02 N 2,042,594.4414 E 2,333,241.0751 Sta 0+46.85

Course from HWLRIV02 to HWLRIV03 S 76° 25' 33.39" E Dist 72.3055

Point HWLRIV03 N 2,042,577.4711 E 2,333,311.3609 Sta 1+19.16

Course from HWLRIV03 to HWLRIV04 S 76° 22' 21.35" E Dist 108.6822

Point HWLRIV04 N 2,042,551.8648 E 2,333,416.9835 Sta 2+27.84

Course from HWLRIV04 to HWLRIV05 S 48° 08' 00.09" E Dist 38.1626

Point HWLRIV05 N 2,042,526.3952 E 2,333,445.4032 Sta 2+66.00

Course from HWLRIV05 to HWLRIV06 S 48° 04' 57.43" E Dist 43.2548

Point HWLRIV06 N 2,042,497.4984 E 2,333,477.5895 Sta 3+09.26

Course from HWLRIV06 to HWLRIV07 S 32° 39' 23.00" E Dist 21.3027

Point HWLRIV07 N 2,042,479.5633 E 2,333,489.0844 Sta 3+30.56

Course from HWLRIV07 to HWLRIV08 S 46° 38' 17.63" E Dist 21.8226

Point HWLRIV08 N 2,042,464.5798 E 2,333,504.9502 Sta 3+52.38

Course from HWLRIV08 to HWLRIV09 S 72° 02' 55.14" E Dist 7.2014

Point HWLRIV09 N 2,042,462.3603 E 2,333,511.8010 Sta 3+59.59

Course from HWLRIV09 to HWLRIV10 S 60° 56' 23.74" E Dist 12.3444

Point HWLRIV10 N 2,042,456.3643 E 2,333,522.5913 Sta 3+71.93

Course from HWLRIV10 to HWLRIV11 S 62° 38' 44.68" E Dist 26.0591

Point HWLRIV11 N 2,042,444.3904 E 2,333,545.7365 Sta 3+97.99

Course from HWLRIV11 to HWLRIV12 S 60° 42' 08.84" E Dist 43.7895

Point HWLRIV12 N 2,042,422.9622 E 2,333,583.9249 Sta 4+41.78

Course from HWLRIV12 to HWLRIV13 S 50° 43' 05.70" E Dist 32.2020

Point HWLRIV13 N 2,042,402.5741 E 2,333,608.8506 Sta 4+73.98

Course from HWLRIV13 to HWLRIV14 S 82° 18' 47.10" E Dist 60.9197

Point HWLRIV14 N 2,042,394.4254 E 2,333,669.2228 Sta 5+34.90

Course from HWLRIV14 to HWLRIV15 N 89° 25' 58.95" E Dist 45.0701

Point HWLRIV15 N 2,042,394.8714 E 2,333,714.2907 Sta 5+79.97

Course from HWLRIV15 to HWLRIV16 N 75° 38' 35.32" E Dist 69.2019

Point HWLRIV16 N 2,042,412.0308 E 2,333,781.3314 Sta 6+49.17

Course from HWLRIV16 to HWLRIV17 N 76° 24' 13.43" E Dist 49.8616

Point HWLRIV17 N 2,042,423.7522 E 2,333,829.7957 Sta 6+99.03

Course from HWLRIV17 to HWLRIV18 N 64° 21' 22.79" E Dist 95.7960

Point HWLRIV18 N 2,042,465.2101 E 2,333,916.1561 Sta 7+94.83

==========
Ending chain RIVER description

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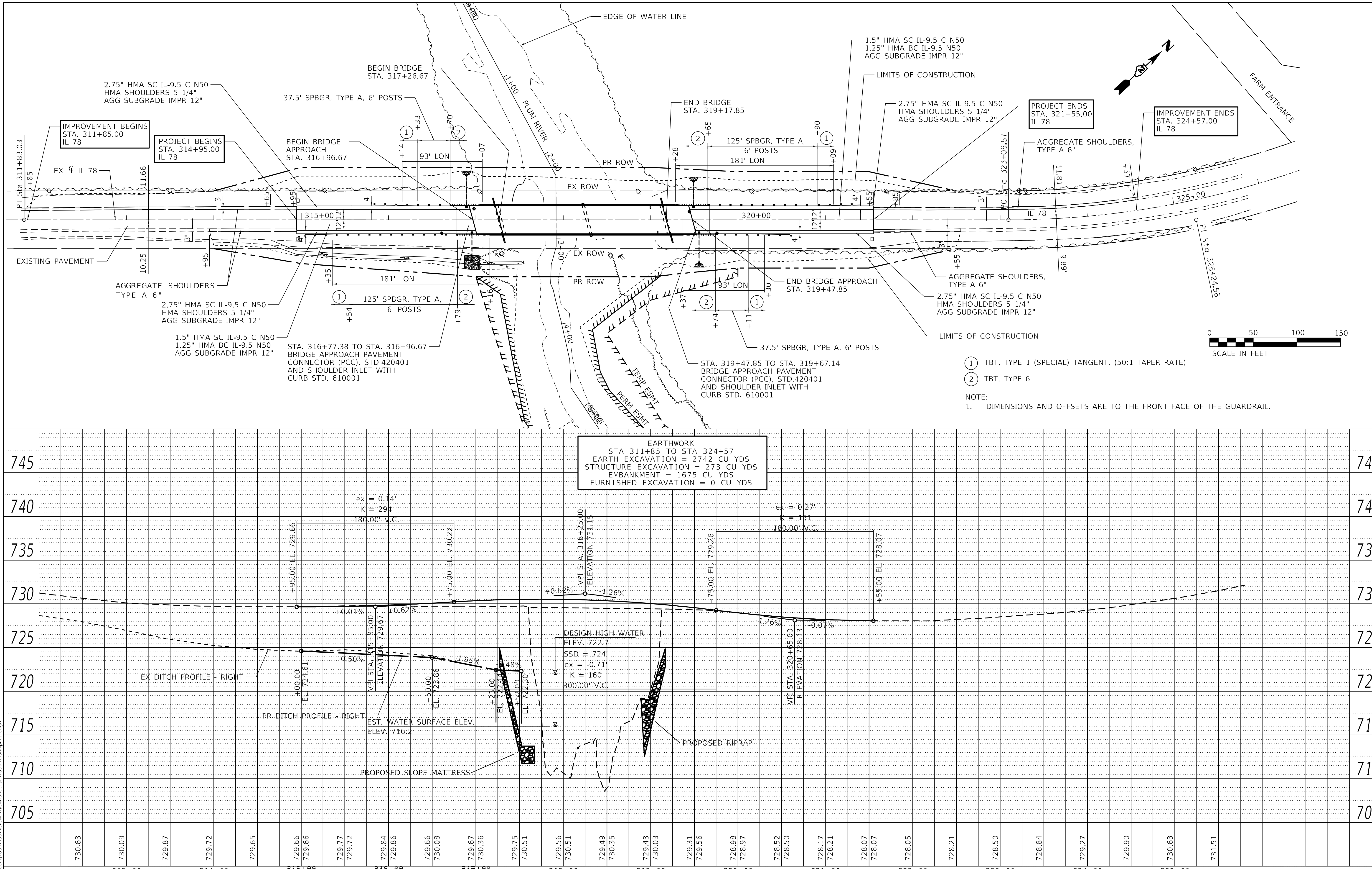
	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HORIZONTAL AND VERTICAL CONTROL
IL 78 OVER PLUM RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	18
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		


EDGE OF WATER LINE
BEGIN BRIDGE STA. 317+26.67
37.5' SPBGR, TYPE A, 6' POSTS
2.75" HMA SC IL-9.5 C N50
HMA SHOULDERS 5 1/4"
AGG SUBGRADE IMPR 12"
IMPROVEMENT BEGINS STA. 311+85.00 IL 78
PROJECT BEGINS STA. 314+95.00 IL 78
BEGIN BRIDGE APPROACH STA. 316+96.67
93' LON
PLUM RIVER
PR ROW
EX ROW
EX ℄ IL 78
PT Sta 311+83.03
EXISTING PAVEMENT
AGGREGATE SHOULDERS TYPE A 6"
181' LON
125' SPBGR, TYPE A, 6' POSTS
1.5" HMA SC IL-9.5 C N50
1.25" HMA BC IL-9.5 N50
AGG SUBGRADE IMPR 12"
STA. 316+77.38 TO STA. 316+96.67
BRIDGE APPROACH PAVEMENT CONNECTOR (PCC), STD.420401
AND SHOULDER INLET WITH CURB STD. 610001
END BRIDGE STA. 319+17.85
LIMITS OF CONSTRUCTION
PROJECT ENDS STA. 321+55.00 IL 78
IMPROVEMENT ENDS STA. 324+57.00 IL 78
FARM ENTRANCE
AGGREGATE SHOULDERS, TYPE A 6"
PC Sta 323+09.57
PT Sta 325+24.56
END BRIDGE APPROACH STA. 319+47.85
STA. 319+47.85 TO STA. 319+67.14
BRIDGE APPROACH PAVEMENT CONNECTOR (PCC), STD.420401
AND SHOULDER INLET WITH CURB STD. 610001
TEMP ESMT
PERM ESMT
SCALE IN FEET 0 50 100 150
1 TBT, TYPE 1 (SPECIAL) TANGENT, (50:1 TAPER RATE)
2 TBT, TYPE 6
NOTE:
1. DIMENSIONS AND OFFSETS ARE TO THE FRONT FACE OF THE GUARDRAIL.
EARTHWORK
STA 311+85 TO STA 324+57
EARTH EXCAVATION = 2742 CU YDS
STRUCTURE EXCAVATION = 273 CU YDS
EMBANKMENT = 1675 CU YDS
FURNISHED EXCAVATION = 0 CU YDS
ex = 0.14' K = 294 180.00' V.C.
ex = 0.27' K = 151 180.00' V.C.
VPI STA. 318+25.00 ELEVATION 731.15
+95.00 EL. 729.66
+75.00 EL. 730.22
+75.00 EL. 729.26
+55.00 EL. 728.07
+0.62% -1.26% +0.01% +0.62% -1.26% -0.07%
DESIGN HIGH WATER ELEV. 722.7
SSD = 724 ex = -0.71' K = 160 300.00' V.C.
VPI STA. 315+85.00 ELEVATION 729.67
VPI STA. 320+65.00 ELEVATION 728.13
-0.50% -1.95%
+00.00 EL. 724.61
+52.00 EL. 723.86
+52.00 EL. 721.30
EX DITCH PROFILE - RIGHT
PR DITCH PROFILE - RIGHT
EST. WATER SURFACE ELEV. ELEV. 716.2
PROPOSED SLOPE MATTRESS
PROPOSED RIPRAP
745 740 735 730 725 720 715 710 705
312+00 313+00 314+00 315+00 316+00 317+00 318+00 319+00 320+00 321+00 322+00 323+00 324+00 325+00

USER NAME = BS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
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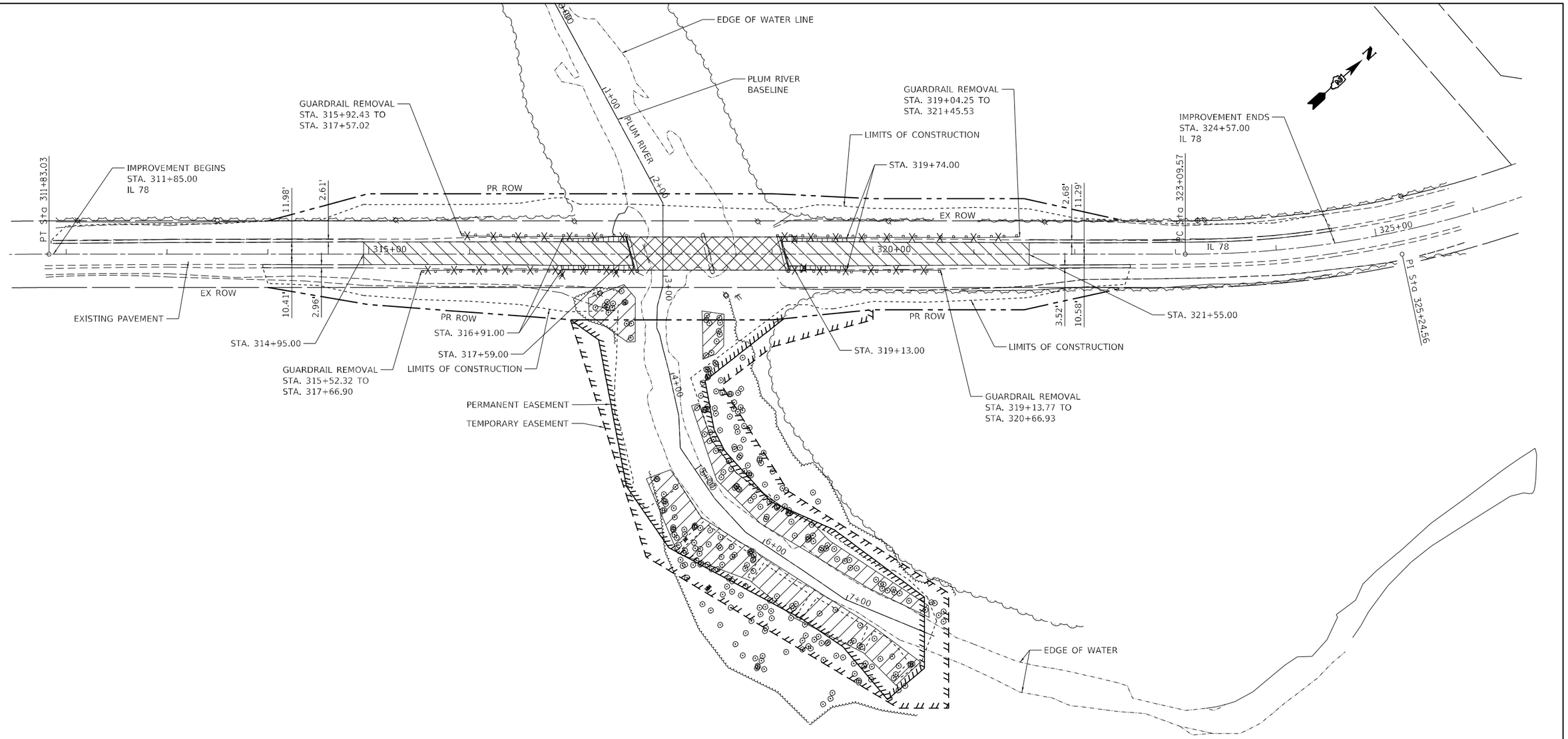
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
IL 78 OVER PLUM RIVER

SCALE: 1"=50' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	19
		CONTRACT NO. 64H58		
		ILLINOIS FED. AID PROJECT		



LEGEND:

- BRIDGE REMOVAL
- PAVEMENT REMOVAL
- GUARDRAIL REMOVAL
- SIGN REMOVAL
- TREE REMOVAL
- INLET REMOVAL
- PAVED SHOULDER REMOVAL

0 50 100 150
SCALE IN FEET

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PLOT DATE = 8/9/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL PLAN
IL 78 OVER PLUM RIVER

SCALE: 1"=50' | SHEET 20 OF 98 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	20
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

IL ROUTE 78 MAINTENANCE OF TRAFFIC STAGING NOTES

PRE-STAGE

EXISTING: ONE LANE IN EACH DIRECTION

PROPOSED: ONE LANE IN EACH DIRECTION

TRAFFIC CONTROL AND PROTECTION
INSTALL IDOT STANDARD 701326

REMOVE GUARDRAIL AND INSTALL TEMPORARY PAVEMENT ON SOUTH BOUND LANES.

STAGE 1

EXISTING: ONE LANE IN EACH DIRECTION

PROPOSED: ONE LANE, ONE WAY TRAFFIC IN CONSTRUCTION AREA CONTROLLED BY IDOT STANDARD 701201 AND
701321.

TRAFFIC CONTROL AND PROTECTION
1. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES ACCORDING TO IDOT STANDARD 701321.
2. INSTALL ADVANCE WARNING SIGNS ALONG IL 78.
3. INSTALL TEMPORARY PAVEMENT MARKINGS AND STOP LINE FOR TEMPORARY SIGNALS.
4. SHIFT IL 78 TRAFFIC TO THE WEST SIDE OF THE EXISTING BRIDGE (SEE BRIDGE PLAN FOR DETAILS).

CONSTRUCTION
1. REMOVE EAST PORTION OF EXISTING BRIDGE AND APPROACH PAVEMENT AS REQUIRED.
2. CONSTRUCT EAST PORTION OF PROPOSED BRIDGE AND ROADWAY PAVEMENT AS REQUIRED.
3. CONSTRUCT PROPOSED GUARDRAIL ALONG EAST SIDE OF ROADWAY.

4. PERFORM LANDSCAPING OPERATIONS.

SHIFT TEMPORARY TRAFFIC CONTROLL DEVICES (STRIPING, BARRIERS AND ATTENUATORS) FOR STAGE 2.

STAGE 2

EXISTING: ONE LANE, ONE WAY TRAFFIC IN CONSTRUCTION AREA CONTROLLED BY TEMPORARY TRAFFIC SIGNAL AND IDOT STANDARD 701321.

PROPOSED: ONE LANE, ONE WAY TRAFFIC IN CONSTRUCTION AREA CONTROLLED BY TEMPORARY TRAFFIC SIGNAL AND IDOT STANDARD 701321.

TRAFFIC CONTROL AND PROTECTION
1. REMOVE AND REINSTALL TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS USING IDOT STANDARD 701321 FOR TRAFFIC RELOCATION. PAY ITEM AND SPEC STIPULATES RELOCATION OF STANDARD 701321 AS INCIDENTAL AND INCLUDED IN EACH FOR STAGE 1.

2. REMOVE BRIDGE WEIGHT LIMIT SIGNS. SEE PAVEMENT MARK AND SIGNING PLAN FOR SIGN LOCATIONS.

CONSTRUCTION
1. REMOVE WEST PORTION OF EXISTING BRIDGE AND APPROACH PAVEMENT AS REQUIRED.

2. CONSTRUCT WEST PORTION OF PROPOSED BRIDGE AND ROADWAY PAVEMENT AS REQUIRED.

3. CONSTRUCT PROPOSED GUARDRAIL ALONG WEST SIDE OF ROADWAY.

4. PERFORM LANDSCAPING OPERATIONS.

REMOVE STANDARD 701321

STAGE 3

EXISTING: ONE LANE, ONE WAY TRAFFIC IN CONSTRUCTION AREA CONTROLLED BY TRAFFIC SIGNAL.

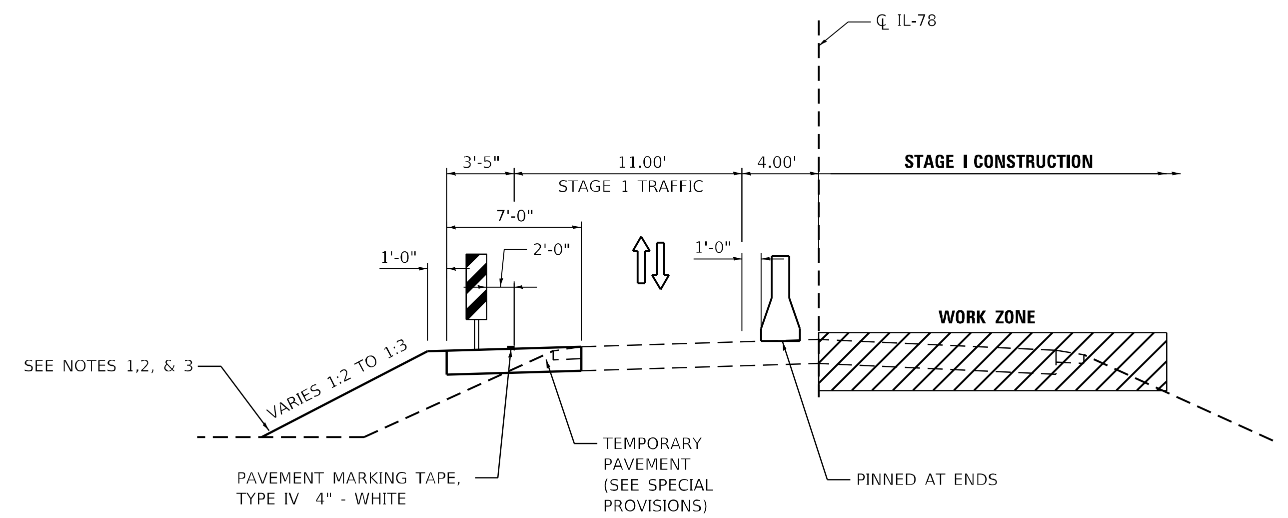
PROPOSED ONE LANE IN EACH DIRECTION.

TRAFFIC CONTROL AND PROTECTION
1. INSTALL IDOT STANDARD 701306.

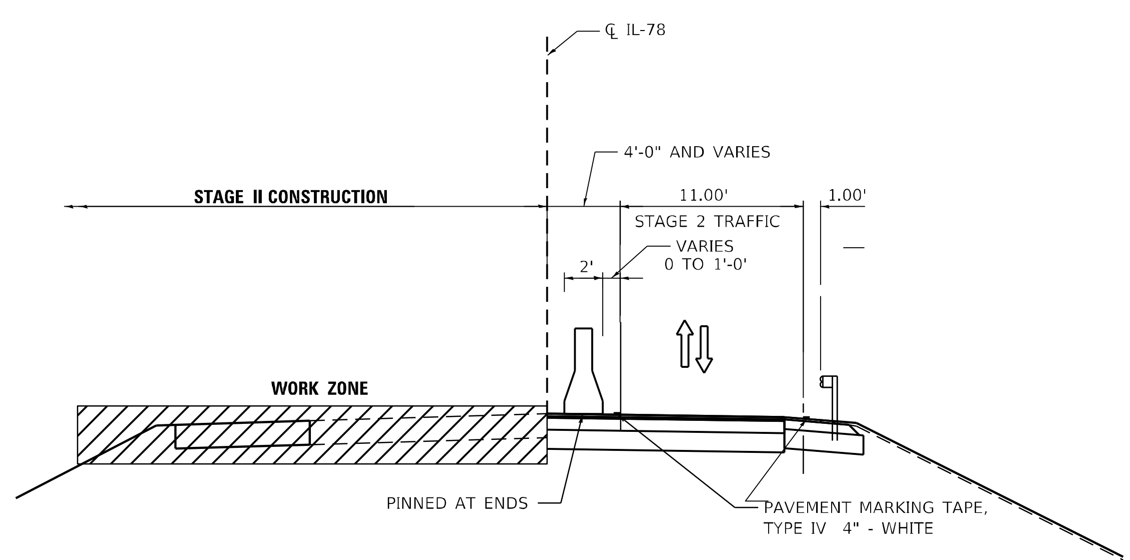
CONSTRUCTION
1. INSTALL PAVEMENT MARKINGS ON ROADWAY AND BRIDGE.

IL 78 MOT NOTES FOR TYPICAL SECTION

1. EMBANKMENT FOR TEMPORARY PAVEMENT SHALL INCLUDE TEMPORARY EROSION CONTROL SEEDING AND TEMPORARY EROSION CONTROL BLANKET.
2. PLACEMENT AND RMOVAL OF EMBANKMENT FOR TEMPORARY PAVEMENT SHALL BE INCLUDED FOR PAYMENT AS PART OF THE ITEMS FOR TEMPORARY PAVEMENT AND FOR TEMPORARY PAVEMENT REMOVAL. SEE SPECIAL PROVISIONS
3. AGGREGATE SHOULDERS, TYPE A 6" SHALL BE PLACED AS SHOWN ON THE PLAN AND PROFILE SHEET AFTER REMOVAL OF THE TEMPORARY PAVEMENT.



TYPICAL SECTION IL 78
STAGE 1



TYPICAL SECTION IL 78
STAGE 2

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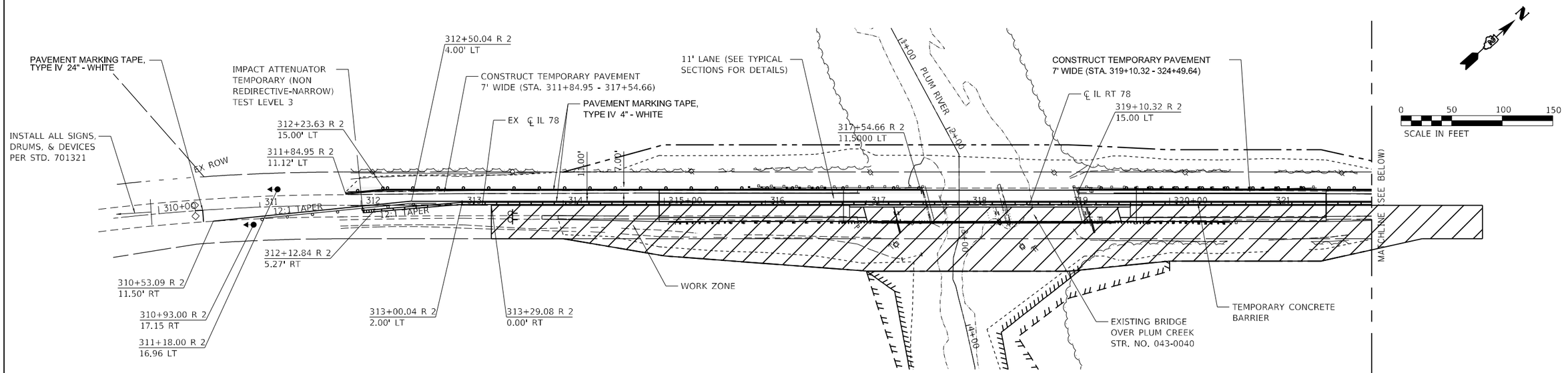
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
IL 78 OVER PLUM RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	21
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		



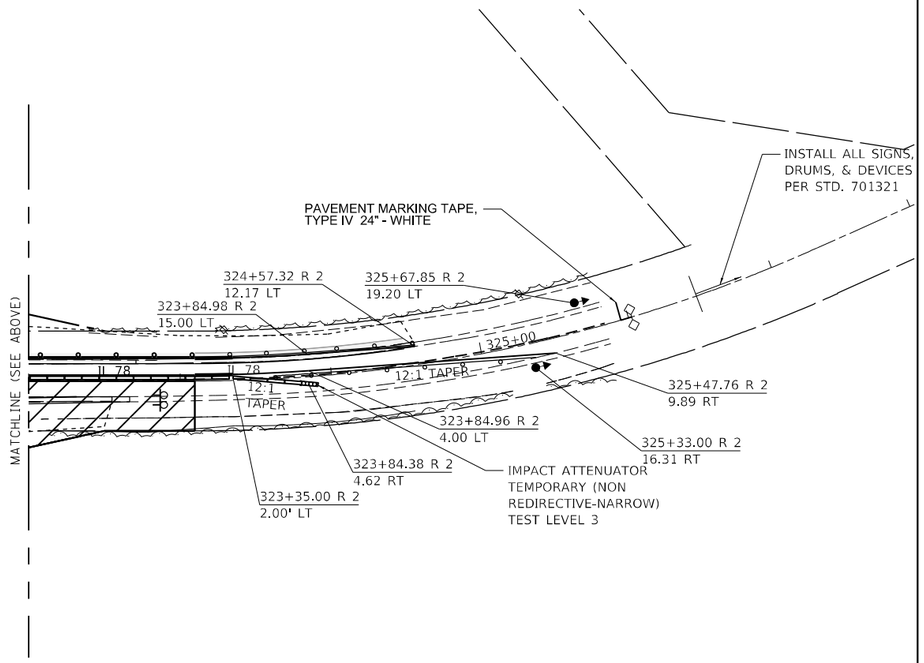
STAGE 1 TRAFFIC CONTROL

NOTES:

1. TYPE III BARRACADE TO BE PLACED WHEN NO WORK IS BEING PERFORMED.
2. FOR TEMPORARY LANE WIDTHS AND LOCATIONS OF TEMPORARY CONCRETE BARRIER, SEE STRUCTURAL PLANS.
3. FURNISH IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3 AT BOTH ENDS OF TEMPORARY CONCRETE BARRIERS, 2 REQUIRED.
4. SEE GENERAL NOTE 108 FOR PINNING OF TEMPORARY CONCRETE BARRIERS.
5. DRUMS WITH STEADY BURNING BI-DIRECTIONAL LIGHTS SHALL BE PROVIDED ON TAPERS.

SYMBOLS

WORK ZONE	VERTICAL PANELS - SEE NOTE 5
TYPE III BARRICADE	TEMP. CONCRETE BARRIER
TRAFFIC SIGNAL	TEMP. PAVEMENT
IMPACT ATTENUATOR	DETECTOR LOOPS



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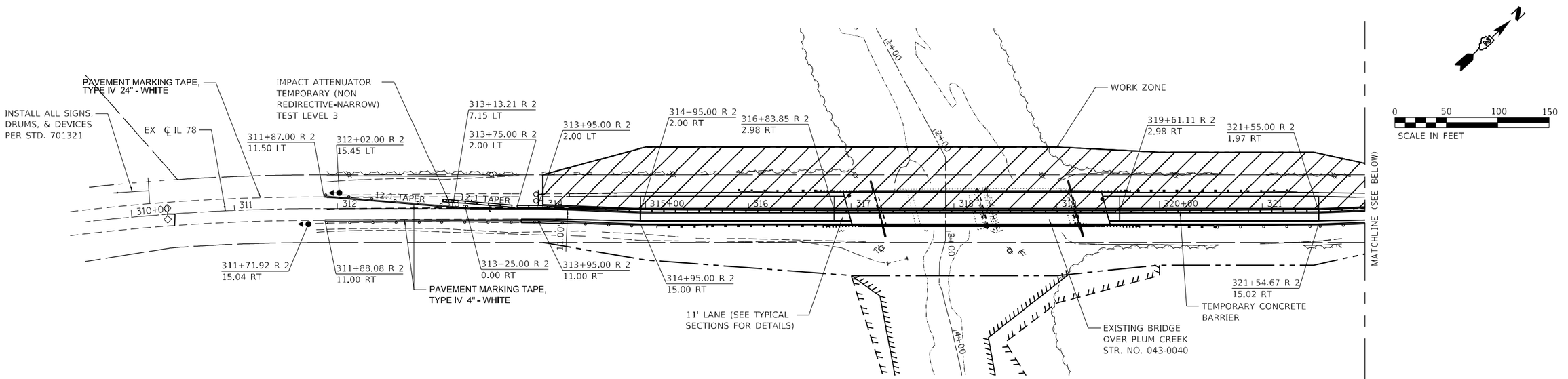
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC — STAGE 1
IL 78 OVER PLUM RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	22
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		



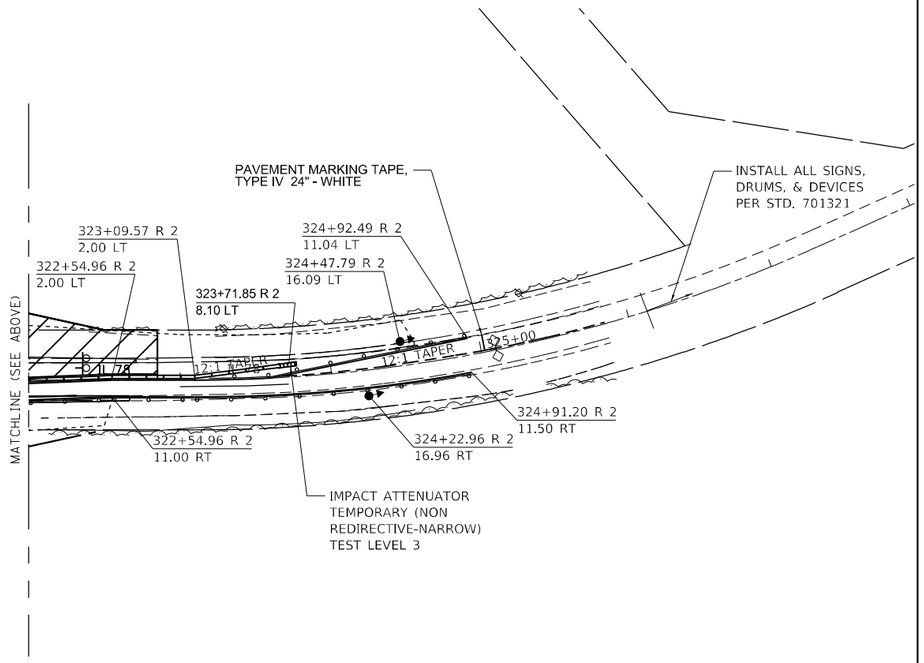
STAGE 2 TRAFFIC CONTROL

NOTES:

1. TYPE III BARRACADE TO BE PLACED WHEN NO WORK IS BEING PERFORMED.
2. FOR TEMPORARY LANE WIDTHS AND LOCATIONS OF TEMPORARY CONCRETE BARRIER, SEE STRUCTURAL PLANS.
3. FURNISH IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3 AT BOTH ENDS OF TEMPORARY CONCRETE BARRIERS, 2 REQUIRED.
4. SEE GENERAL NOTE 108 FOR PINNING OF TEMPORARY CONCRETE BARRIERS.
5. DRUMS WITH STEADY BURNING BI-DIRECTIONAL LIGHTS SHALL BE PROVIDED ON TAPERS.

SYMBOLS

WORK ZONE	VERTICAL PANELS - SEE NOTE 5
TYPE III BARRICADE	TEMP. CONCRETE BARRIER
TRAFFIC SIGNAL	TEMP. PAVEMENT
IMPACT ATTENUATOR	DETECTOR LOOPS



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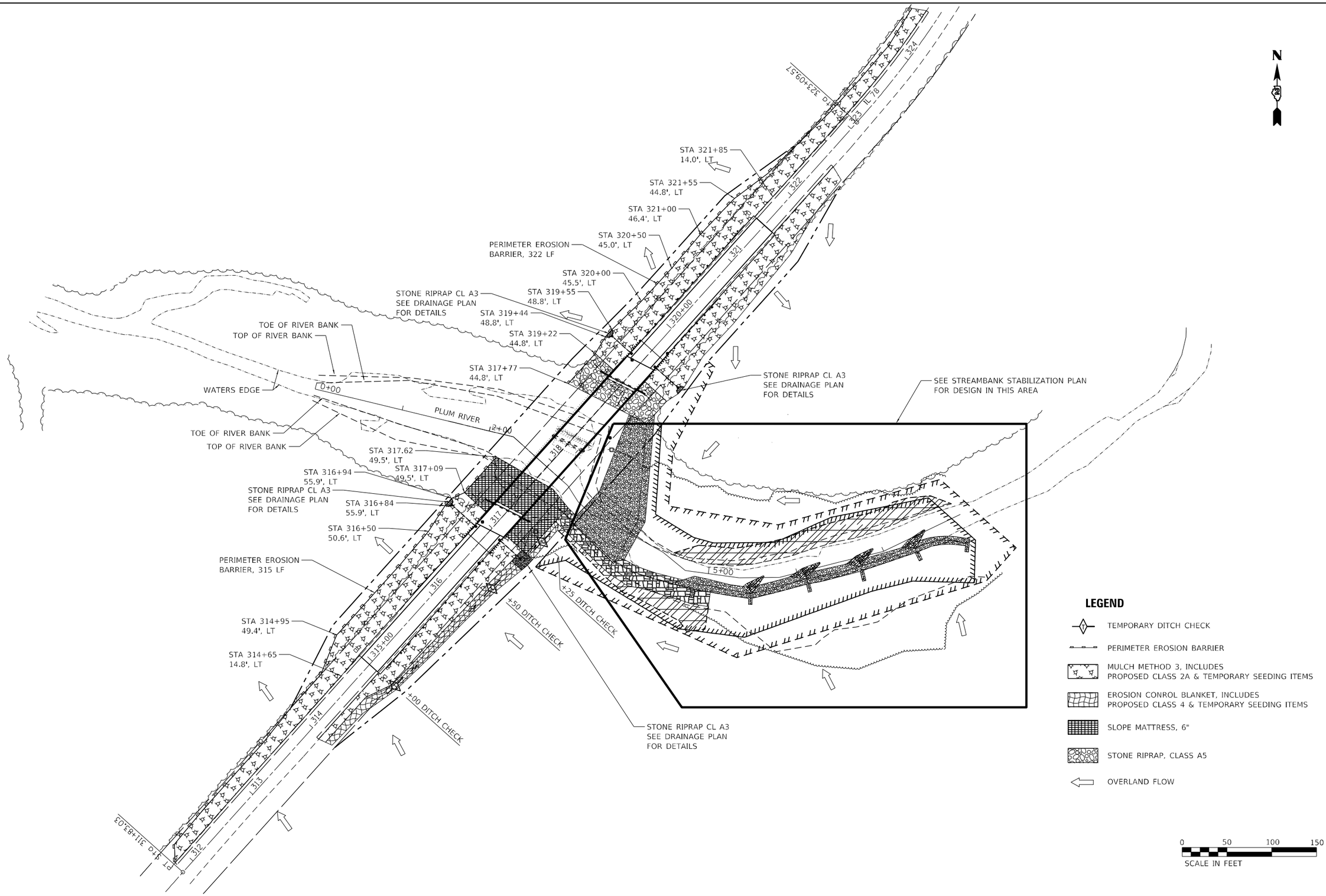
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC – STAGE 2
IL 78 OVER PLUM RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	23
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		



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PLOT DATE = 8/9/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN
IL 78 OVER PLUM RIVER

SCALE: 1"=50' | SHEET 24 OF 98 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	24
		CONTRACT NO. 64H58		
	ILLINOIS FED. AID PROJECT			

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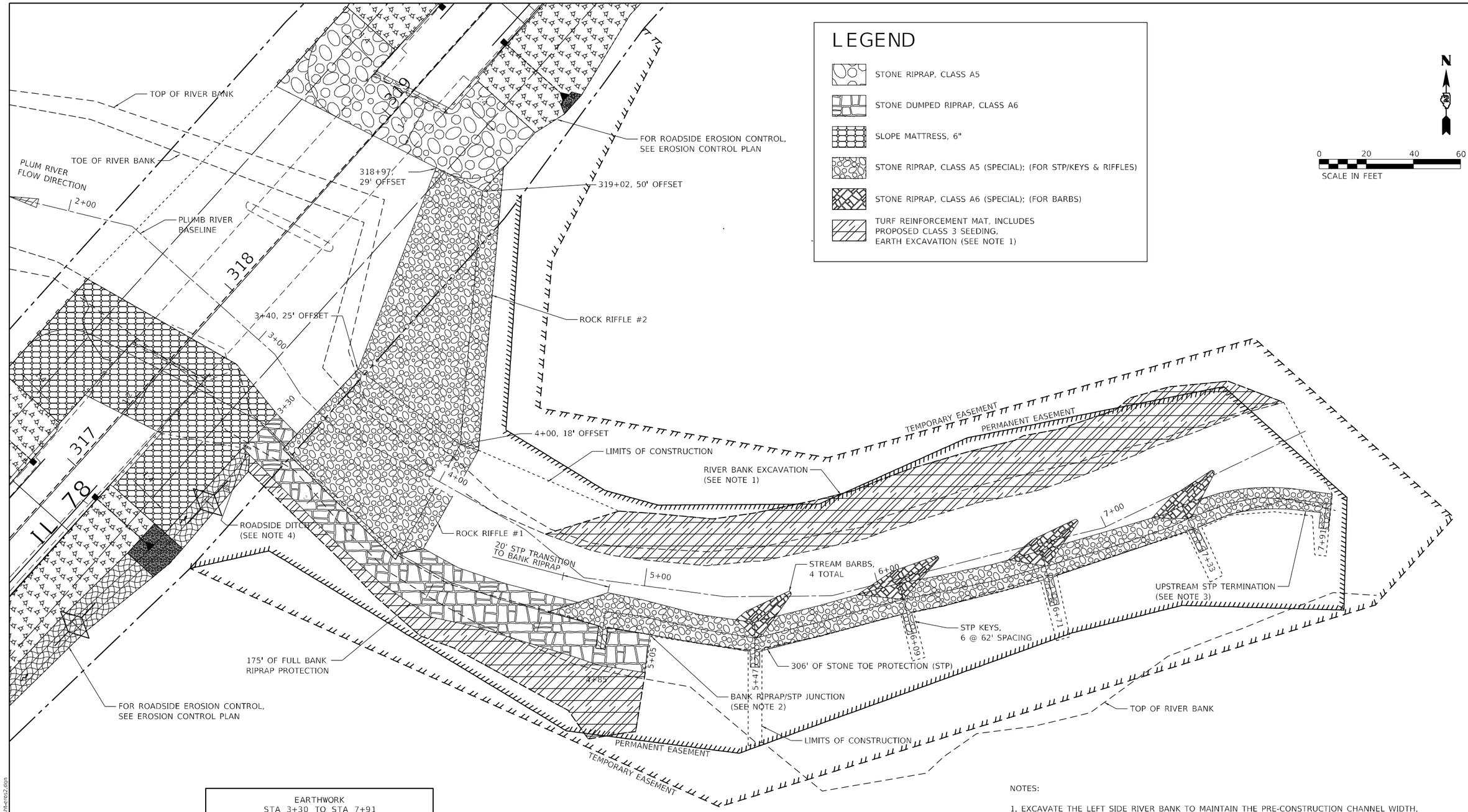

EARTHWORK
STA 3+30 TO STA 7+91
CHANNEL EXCAVATION = 1867 CU YDS
ROCK EXCAVATION IN CHANNEL = 188 CU YDS
EMBANKMENT = 182 CU YDS
FURNISHED EXCAVATION = 0 CU YDS

NOTES:

1. EXCAVATE THE LEFT SIDE RIVER BANK TO MAINTAIN THE PRE-CONSTRUCTION CHANNEL WIDTH. SEE RIVER CROSS SECTIONS FOR EXTENT OF EXCAVATION.

2. THE STONE TOE PROTECTION (STP) AND THE FULL BANK RIPRAP WILL OVERLAP A SHORT DISTANCE. THE DISTANCE WILL BE LONG ENOUGH TO CREATE A SMOOTH TRANSITION IN THE TOE OF THE ROCK. THE UPSTREAM END OF THE FULL BANK RIPRAP WILL TRANSITION FROM FULL BANK RIPRAP TO THE STP AND KEY INTO THE BANK TO PREVENT FLOODING.

3. THE UPSTREAM END OF THE STP WILL CURVE INTO THE BANK AND TIE IN A MINIMUM OF 12 FEET TO PROVIDE A CUTOFF.

4. SHAPE THE BANK RIPRAP TO ALLOW THE ROADSIDE DITCH TO DRAIN AND FLOW OVER THE RIPRAP.

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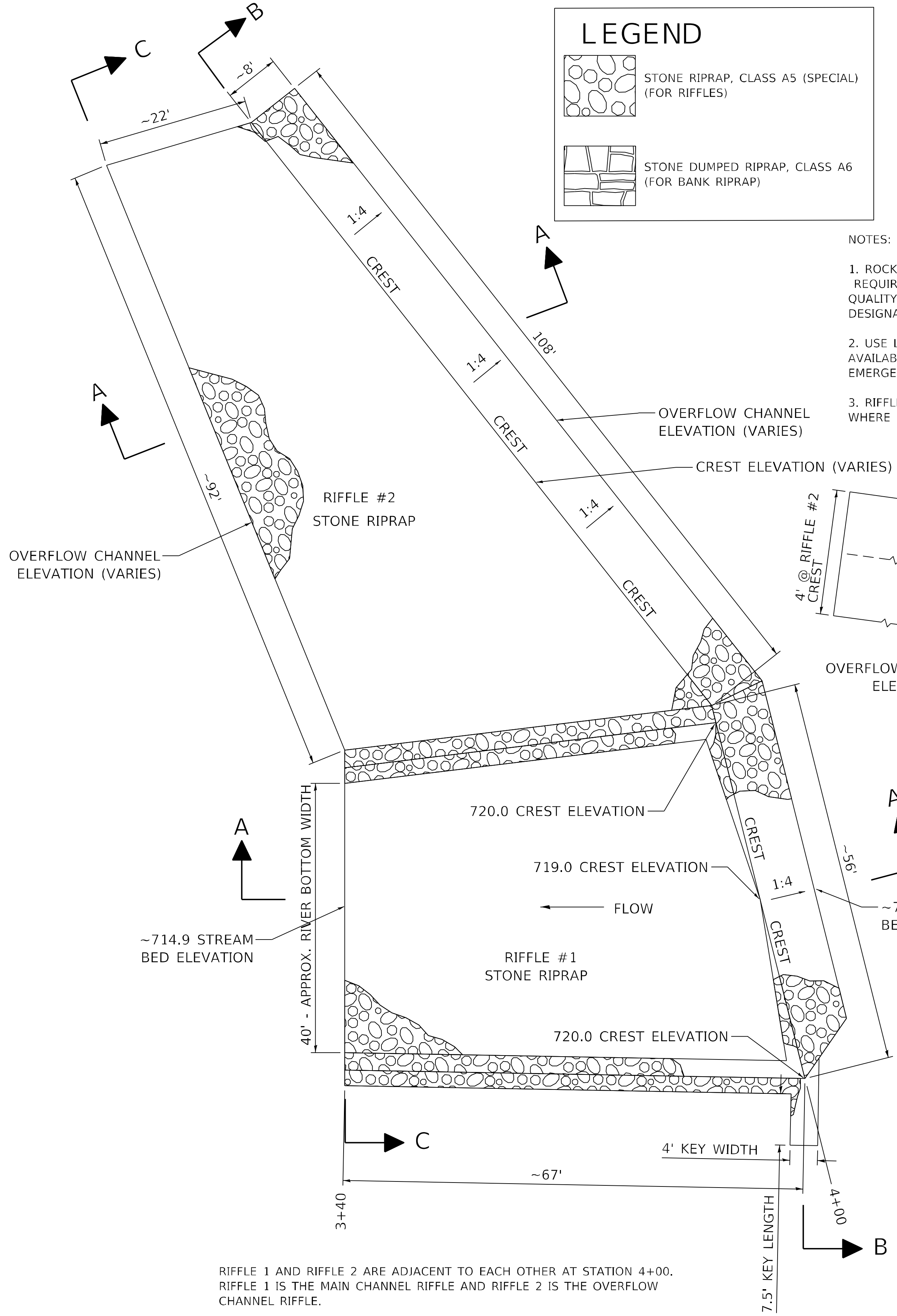
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STREAMBANK STABILIZATION – PLAN
IL 78 OVER PLUM RIVER

SCALE: | SHEET 1 OF 4 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	25
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		



LEGEND

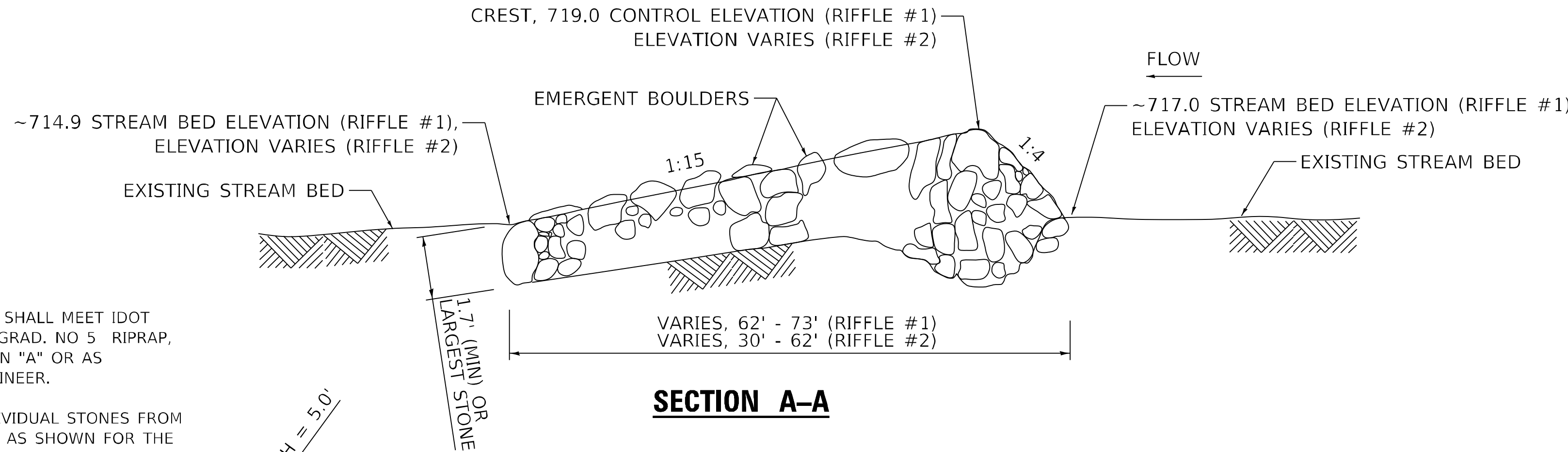
- STONE RIPRAP, CLASS A5 (SPECIAL) (FOR RIFFLES)
- STONE DUMPED RIPRAP, CLASS A6 (FOR BANK RIPRAP)

NOTES:

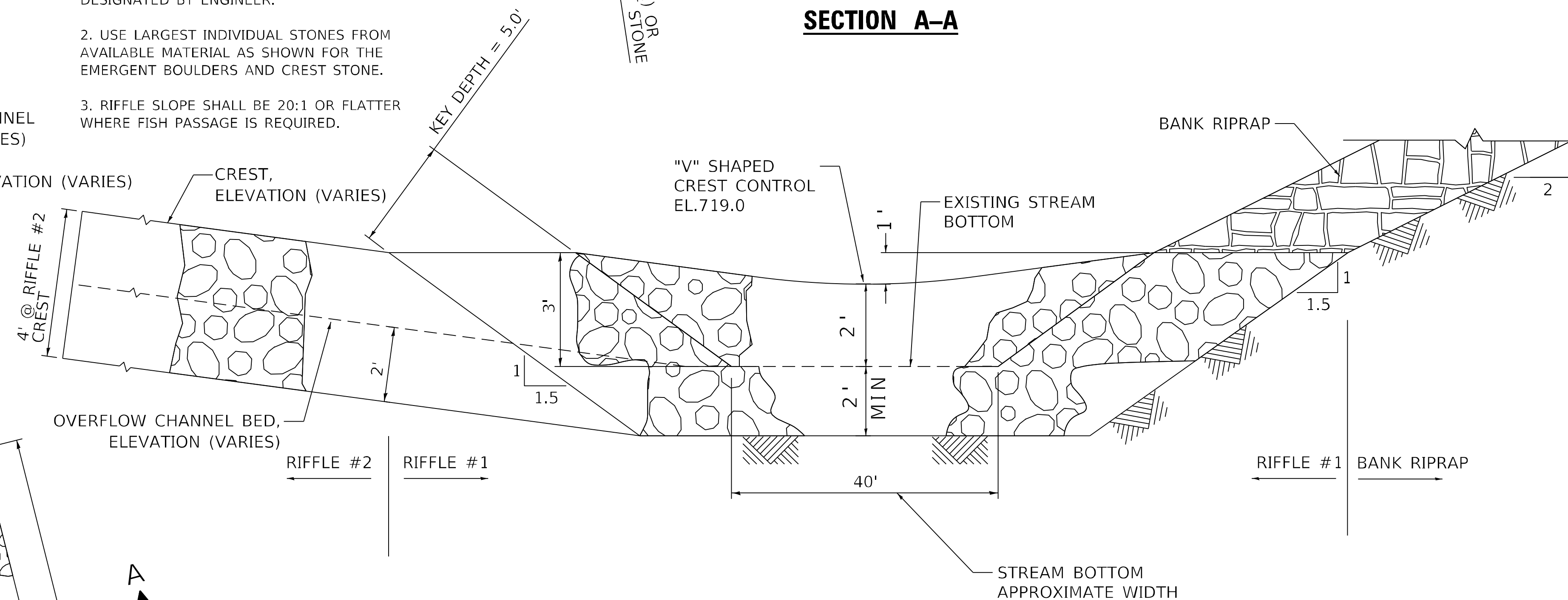
1. ROCK GRADATION SHALL MEET IDOT REQUIREMENT FOR GRAD. NO 5 RIPRAP, QUALITY DESIGNATION "A" OR AS DESIGNATED BY ENGINEER.
2. USE LARGEST INDIVIDUAL STONES FROM AVAILABLE MATERIAL AS SHOWN FOR THE EMERGENT BOULDERS AND CREST STONE.
3. RIFFLE SLOPE SHALL BE 20:1 OR FLATTER WHERE FISH PASSAGE IS REQUIRED.

RIFFLE 1 AND RIFFLE 2 ARE ADJACENT TO EACH OTHER AT STATION 4+00. RIFFLE 1 IS THE MAIN CHANNEL RIFFLE AND RIFFLE 2 IS THE OVERFLOW CHANNEL RIFFLE.

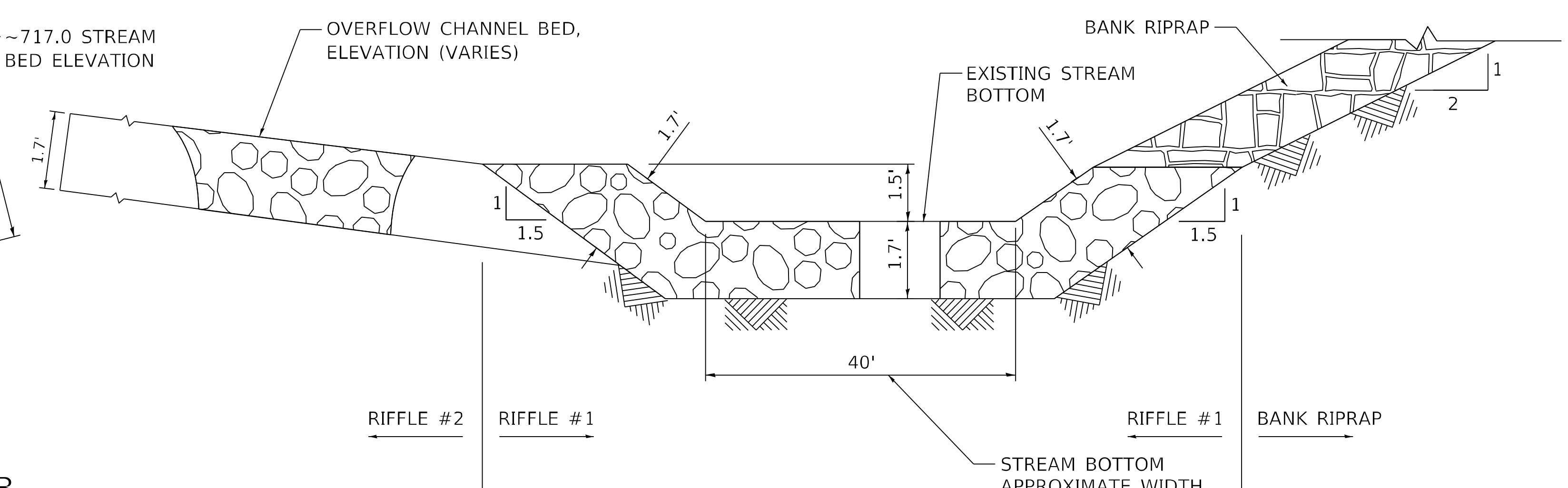
ROCK RIFFLE PLAN



SECTION A–A



SECTION B–B



SECTION C–C

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STREAMBANK STABILIZATION – ROCK RIFFLE TYPICAL SECTIONS
IL 78 OVER PLUM RIVER

SCALE: | SHEET 2 OF 4 SHEETS | STA. TO STA.

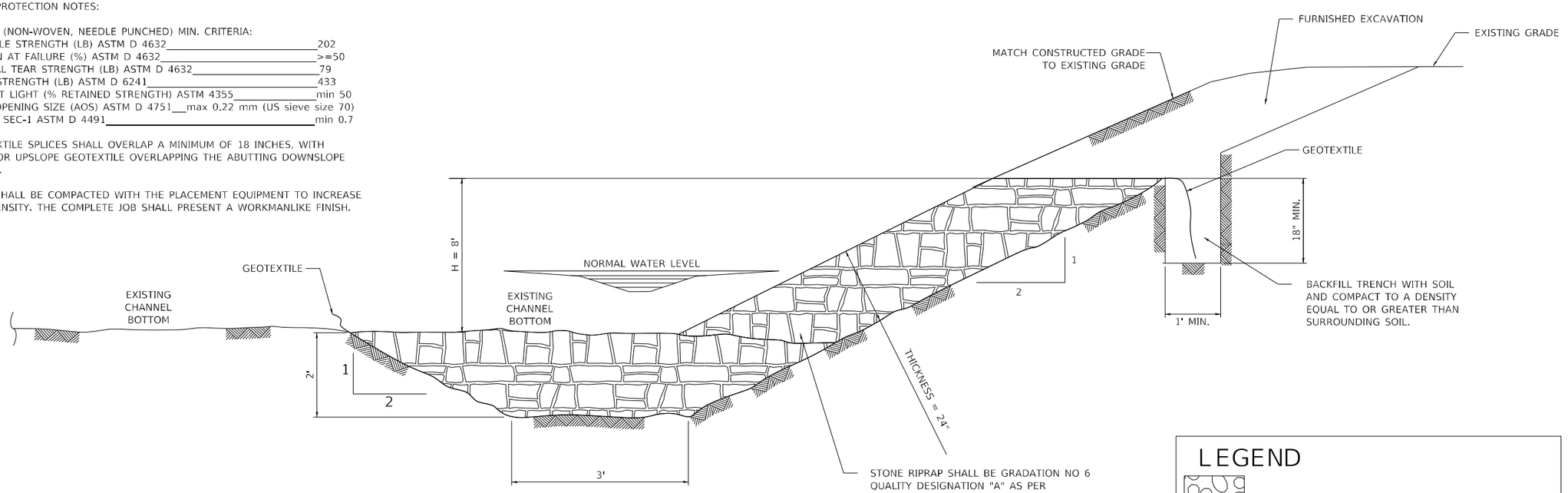
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	26
		CONTRACT NO. 64H58		
		ILLINOIS FED. AID PROJECT		

BANK RIPRAP PROTECTION NOTES:

1. GEOTEXTILE (NON-WOVEN, NEEDLE PUNCHED) MIN. CRITERIA:
   GRAB TENSILE STRENGTH (LB) ASTM D 4632_____202
   ELONGATION AT FAILURE (%) ASTM D 4632_____>=50
   TRAPEZOIDAL TEAR STRENGTH (LB) ASTM D 4632_____79
   PUNCTURE STRENGTH (LB) ASTM D 6241_____433
   ULTRAVIOLET LIGHT (% RETAINED STRENGTH) ASTM 4355_____min 50
   APPARENT OPENING SIZE (AOS) ASTM D 4751__max 0.22 mm (US sieve size 70)
   PERMITIVITY SEC-1 ASTM D 4491_____min 0.7

2. ANY GEOTEXTILE SPLICES SHALL OVERLAP A MINIMUM OF 18 INCHES, WITH UPSTREAM OR UPSLOPE GEOTEXTILE OVERLAPPING THE ABUTTING DOWNSLOPE GEOTEXTILE.

3. THE ROCK SHALL BE COMPACTED WITH THE PLACEMENT EQUIPMENT TO INCREASE IN-PLACE DENSITY. THE COMPLETE JOB SHALL PRESENT A WORKMANLIKE FINISH.



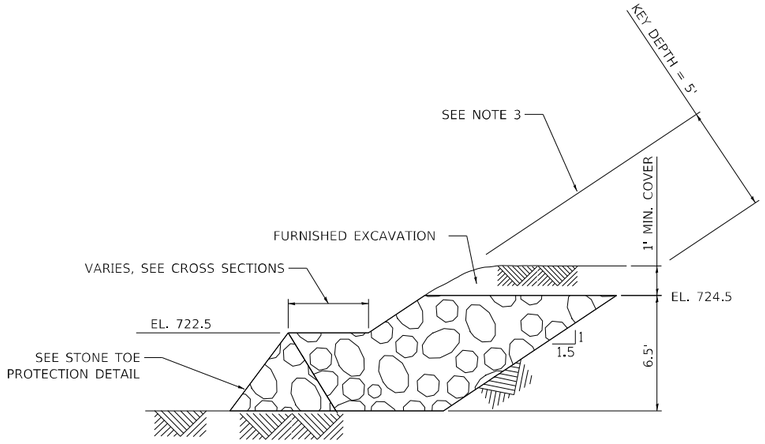
TYPICAL SECTION – BANK RIPRAP PROTECTION

START STATION = 3+30
END STATION = 5+05
TOTAL LENGTH = 175 FT.

LEGEND

STONE RIPRAP, CLASS A5 (SPECIAL); (FOR STP & KEYS)

STONE DUMPED RIPRAP, CLASS A6 (FOR BANK RIP RAP)



KEY DETAIL

STATION: 4+85, 5+47, 6+09, 6+71, 7+33, 7+91

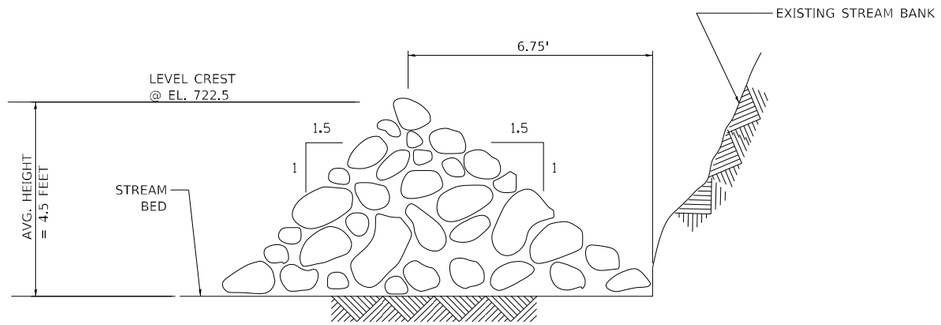
STONE TOE PROTECTION NOTES:

1. ROCK GRADATION SHALL MEET IDOT REQUIREMENTS FOR GRAD. NO. 5 RIPRAP, QUALITY DESIGNATION "A", OR AS DESIGNATED BY ENGINEER

2. THE KEY FOR STP WILL ALSO ACT AS KEY FOR BARBS

3. KEY SHALL BE CONSTRUCTED SO THAT THE VERTICAL SECTION REMAINS EMBEDDED IN THE EXISTING STREAM BANK.

4. LOCATION: RIGHT SIDE OF STREAM BANK LOOKING UPSTREAM.



TYPICAL SECTION – STONE TOE PROTECTION

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PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STREAMBANK STABILIZATION – TYPICAL SECTIONS
IL 78 OVER PLUM RIVER

SCALE: | SHEET 3 OF 4 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	27
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

MODEL: $MODELNAME$
FILE NAME: P:\projects\20012\002\C\CADD\CADsheets\D20301 2-sht-E R6-river-detail.dgn

BARB	* BANK	STATION	TOTAL LENGTH OF BARB	BARB CONTROL ELEVATION	h1	h2	SLOPE	ANGLE O	** AZIMUTH
1	Right	5+47	20 ft	722.5	4.5 ft	2 ft	6:1	26	64.7
2	Right	6+09	20 ft	722.5	4.5 ft	2 ft	6:1	23	53.8
3	Right	6+71	20 ft	722.5	4.5 ft	2 ft	6:1	24	50.4
4	Right	7+33	20 ft	722.5	4.5 ft	2 ft	6:1	25	36.5

RIPRAP REFERENCE TABLE

GRAD. NO.	D_{100}	D_{50}
5	1.7 FT	9.8 IN
6	2.0 FT	12.1 IN

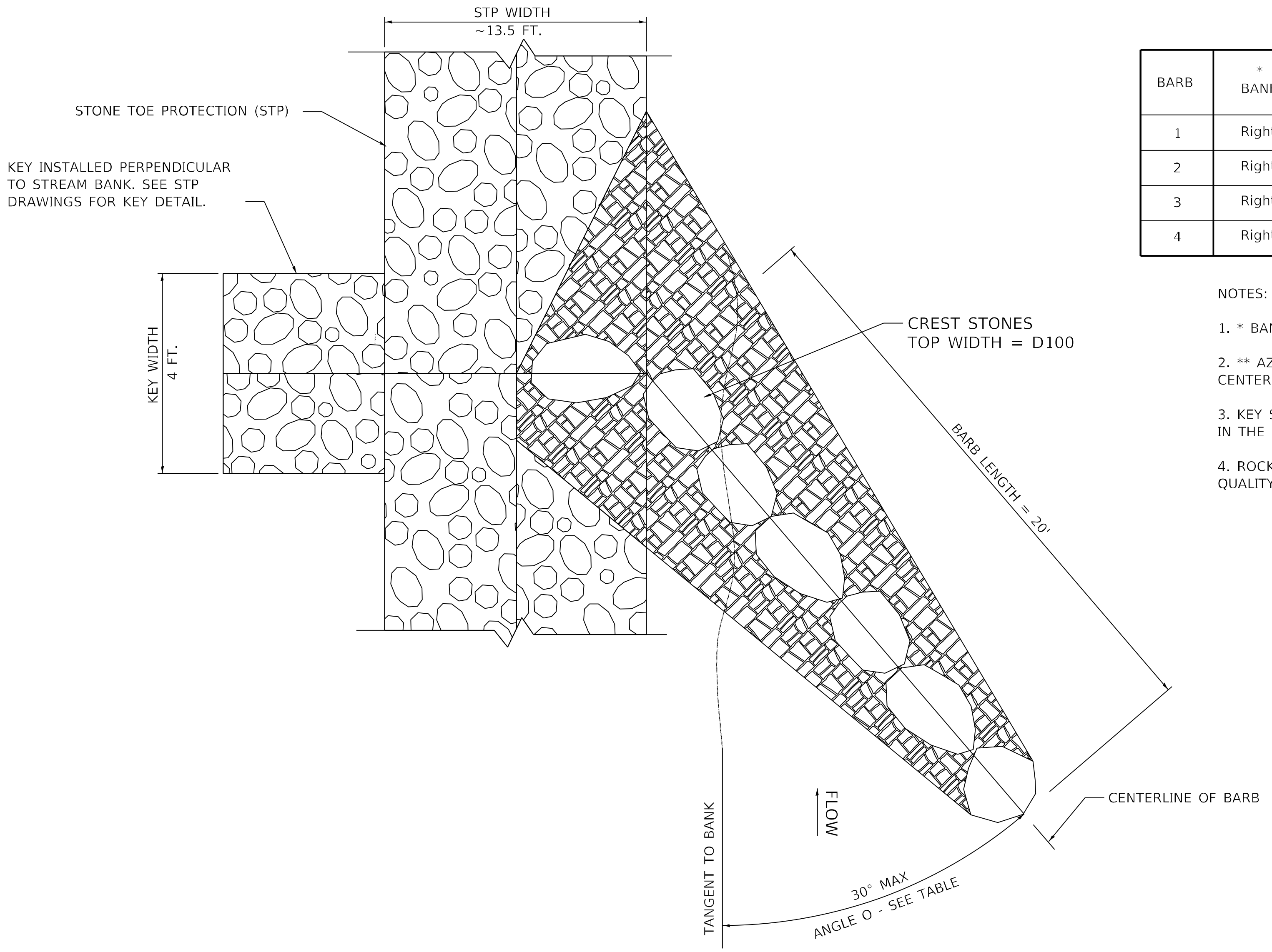
NOTES:

1. * BANK SIDE LOOKING UPSTREAM.
2. ** AZIMUTH IS THE COMPASS READING FROM MAGNETIC NORTH ALONG THE CENTERLINE OF THE WEIR.
3. KEY SHALL BE CONSTRUCTED SO THAT THE VERTICAL SECTION REMAIN EMBEDDED IN THE EXISTING STREAM BANK.
4. ROCK GRADATION SHALL MEET IDOT REQUIREMENTS FOR GRAD. NO 6 RIPROFF, QUALITY DESIGNATION "A" OR AS DESIGNATED BY ENGINEER.

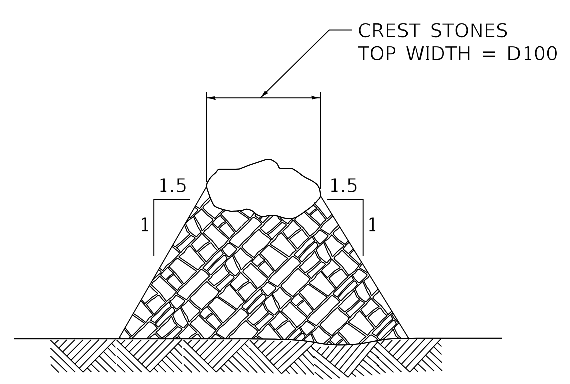
LEGEND

STONE RIPRAP, CLASS A5 (SPECIAL); (FOR STP/KEYS)

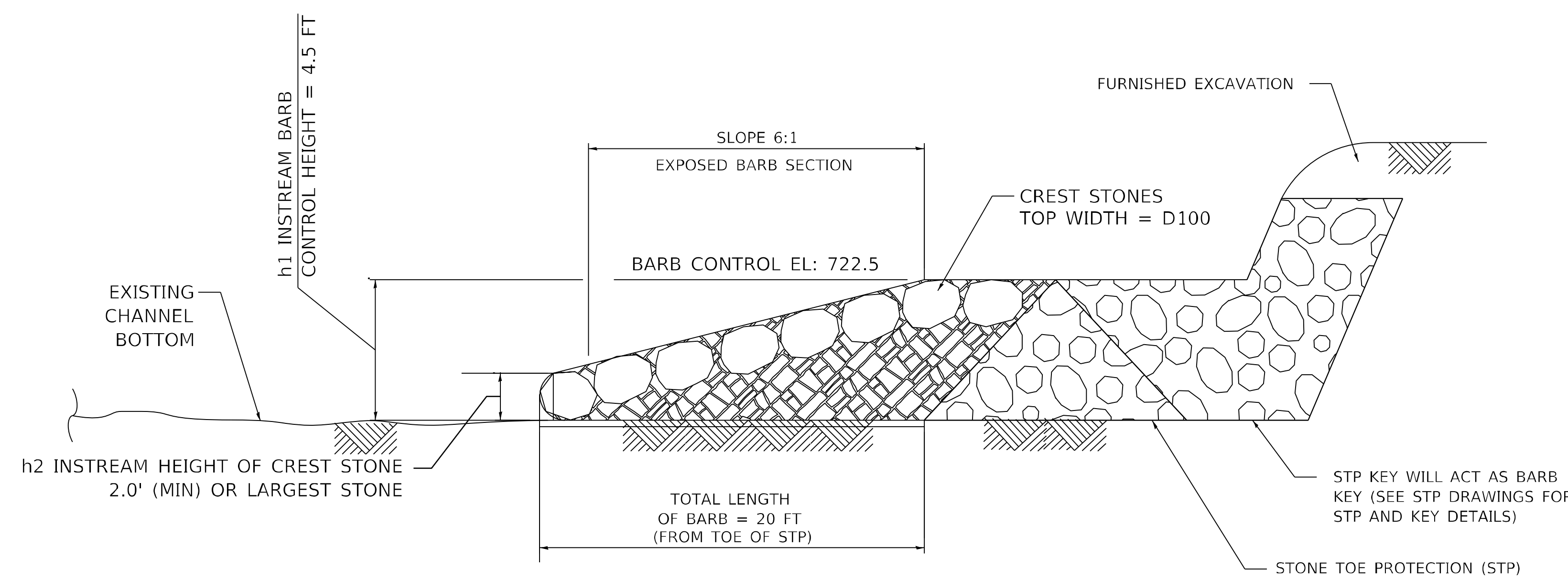
STONE RIPRAP, CLASS A6 (SPECIAL); (FOR BARBS)



TYPICAL BARB PLAN

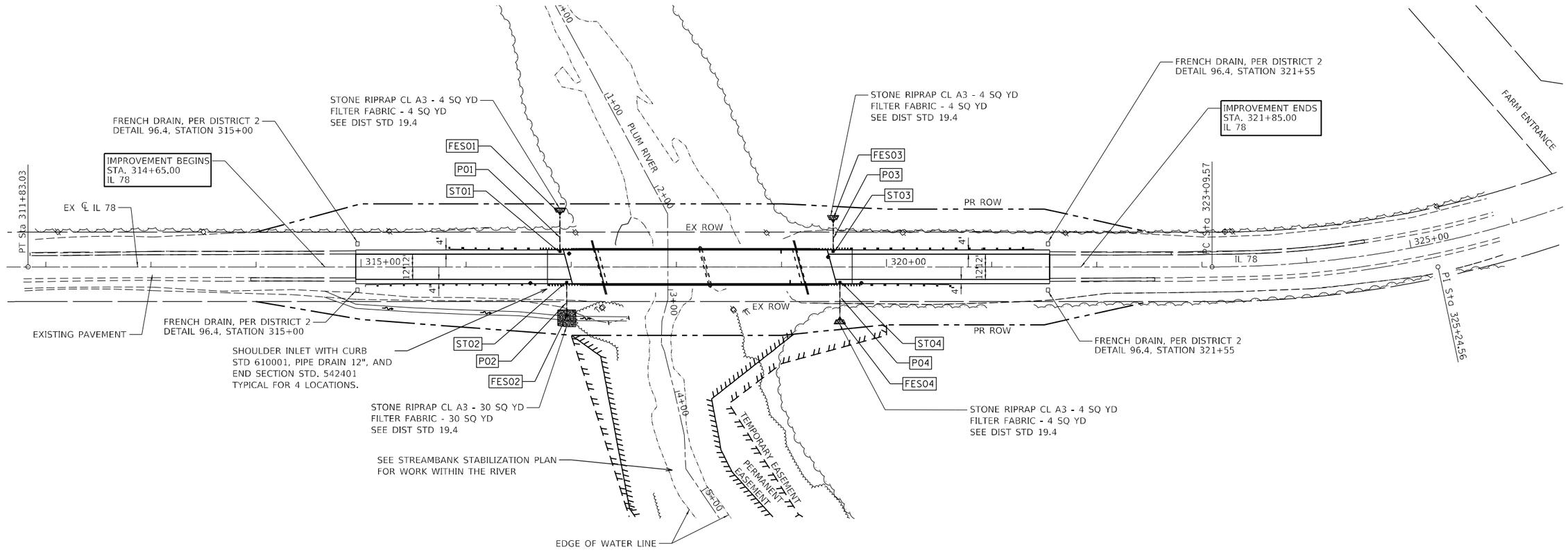


TYPICAL BARB SECTION



TYPICAL PROFILE, CENTERLINE OF STREAM BARB

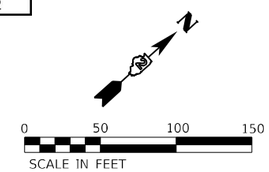
STATION: 5+47, 6+09, 6+71, 7+33



TYPE G INLET BOX STANDARD 610001 (61000335)					
STRUCTURE NUMBER	STATION	OFFSET	RIM ELEV.	INV. ELEV	EACH
ST01	316+89	18' LT	729.88	727.21	1
ST02	316+96	18' RT	729.92	727.25	1
ST03	319+49	18' LT	729.12	726.45	1
ST04	319+56	18' RT	729.03	726.36	1
TOTAL					4

PIPE NUMBER	STRUCT TO STRUCT	PIPE DRAINS, 12" (60100945) LENGTH (FEET)	DIAMETER (IN)	METAL FLARED END SECTIONS, 12" (54264712) EACH	FES. INV. ELEV	CONC. THRUST BLOCKS (61000050) EACH
P01	ST01 TO FES01	38.00	12	1	721.75	1
P02	ST02 TO FES02	31.00	12	1	722.97	1
P03	ST03 TO FES03	31.00	12	1	722.77	1
P04	ST04 TO FES04	38.00	12	1	721.32	1
TOTAL		138.00		4		4

FRENCH DRAINS (60100080)		
STATION	OFFSET	CU. YDS.
315+00	20' LT	0.5
315+00	20' RT	0.5
321+55	20' LT	0.5
321+55	20' RT	0.5
TOTAL		2



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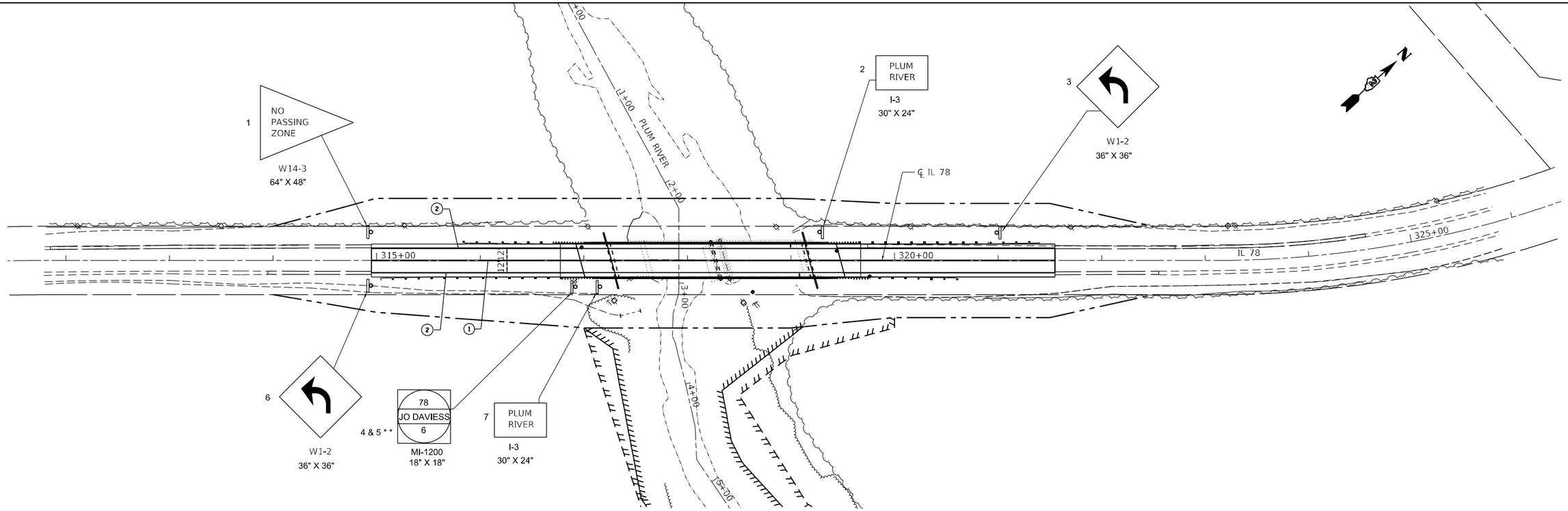
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = 8/9/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE PLAN
IL 78 OVER PLUM RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	29
		CONTRACT NO. 64H58		
		ILLINOIS	FED. AID PROJECT	



EXISTING SIGNS TO BE REMOVED

SIGN LOCATION	DESCRIPTION	STATION	OFFSET	MUTCD CODE	72400100 REMOVE SIGN PANEL ASSEMBLY - TYPE A EACH	72400200 REMOVE SIGN PANEL ASSEMBLY - TYPE B EACH
IL 78	NO PASSING ZONE	314+95	LT	W14-3		1
IL 78	RIVER CROSSING (PLUM RIVER)	319+25	LT	I-3	1	
IL 78	CURVE LEFT	320+50	LT	W1-2	1	
IL 78	REFERENCE MARKER (MILE POST 6) **	316+90	RT	M1-I200	1	
IL 78	REFERENCE MARKER (MILE POST 6) **	316+90	RT	M1-I200	**	
IL 78	CURVE LEFT	315+50	RT	W1-2	1	
IL 78	RIVER CROSSING (PLUM RIVER)	317+40	RT	I-3	1	
IL 78 NEAR BRIDGE	BRIDGE WEIGHT LIMIT - TONS		RT	R12-I101		1
IL 78 NEAR BRIDGE	BRIDGE WEIGHT LIMIT - TONS		LT	R12-I101		1
IL 78 AT US 20 IN STOCKTON	BRIDGE WEIGHT LIMIT - TONS, WITH MILES AHEAD PLATE			R12-I101 & R12-I103		3
IL 78 AT US 52 IN MOUNT CARROLL	BRIDGE WEIGHT LIMIT - TONS, WITH MILES AHEAD PLATE			R12-I101 & R12-I103		4
IL 78 AT LORAN RD	BRIDGE WEIGHT LIMIT - TONS, WITH MILES AHEAD PLATE			R12-I101 & R12-I104		1
IL 78 AT BETHEL RD	BRIDGE WEIGHT LIMIT - TONS, WITH MILES AHEAD PLATE			R12-I101 & R12-I105		1
IL 78 AT PARKER RD	BRIDGE WEIGHT LIMIT - TONS, WITH MILES AHEAD PLATE			R12-I101 & R12-I106		1
IL 78 AT ELIZABETH RD	BRIDGE WEIGHT LIMIT - TONS, WITH MILES AHEAD PLATE			R12-I101 & R12-I107		1
IL 78 SOUTH END STOCKTON	BRIDGE WEIGHT LIMIT - TONS, WITH MILES AHEAD PLATE			R12-I101 & R12-I108		1
IL 78 NORTH END MOUNT CARROLL	BRIDGE WEIGHT LIMIT - TONS, WITH MILES AHEAD PLATE			R12-I101 & R12-I109		1
				PROJECT TOTALS	5	16

** SIGN PANELS BACK-TO-BACK ON SAME POST

NOTES:

1. BRIDGE WEIGHT LIMIT SIGNS SHALL BE REMOVED BETWEEN STAGE 1 & STAGE 2.
2. EXISTING SIGNS TO BE REMOVED SHALL BE DELIVERED TO THE IDOT SIGN SHOP.

GROUND MOUNT SIGNING SCHEDULE - IL 78

SIGN NUMBER	DESCRIPTION	STATION	OFFSET	W WIDTH (IN)	H HEIGHT (IN)	PANEL AREA (SQ FT)	MUTCD CODE	SIGN PANELS 72000100 SIGN PANEL - TYPE 1 (SQ FT)	72000200 SIGN PANEL - TYPE 2 (SQ FT)	72800100 TELESCOPING STEEL SIGN SUPPORT (FOOT)	730000100 WOOD SIGN SUPPORT (FOOT)
1	NO PASSING ZONE	314+95	LT	63.96	48	10.66	W14-3		10.66		16
2	RIVER CROSSING (PLUM RIVER)	319+27	LT	30	24	5.0	I-3	5.0		15	
3	CURVE LEFT	321+00	LT	36	36	9.0	W1-2	9.0			16
4	REFERENCE MARKER (MILE POST 6) **	316+90	RT	18	18	2.25	M1-I200	2.25		14	
5	REFERENCE MARKER (MILE POST 6) **	316+90	RT	18	18	2.25	M1-I200	2.25		**	
6	CURVE LEFT	316+00	RT	36	36	9.0	W1-2	9.0			16
7	RIVER CROSSING (PLUM RIVER)	317+15	RT	30	24	5.0	I-3	5.0		15	
						PROJECT TOTALS		32.50	10.66	44	48

** SIGN PANELS BACK-TO-BACK ON SAME POST

LEGEND:

(1) PAINT PAVEMENT MARKING- LINE 4" YELLOW DOUBLE CENTER LINE

(2) PAINT PAVEMENT MARKING- LINE 4" WHITE EDGE LINE

PAVEMENT MARKING NOTES:

1. PAINT PAVEMENT MARKING LINES SHALL CONSIST OF TWO COATS.
2. LIMITS OF PAVEMENT MARKINGS ARE FROM STA. 314+95 TO STA. 321+55

0 50 100 150
SCALE IN FEET

MODEL: $MODELNAME$
FILE NAME: P:\projects\2021\002\C\CADD\CADDsheets\D2103012-sht-pmk.dgn

USER NAME = BS	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = 8/16/2021	DATE -	REVISED -	

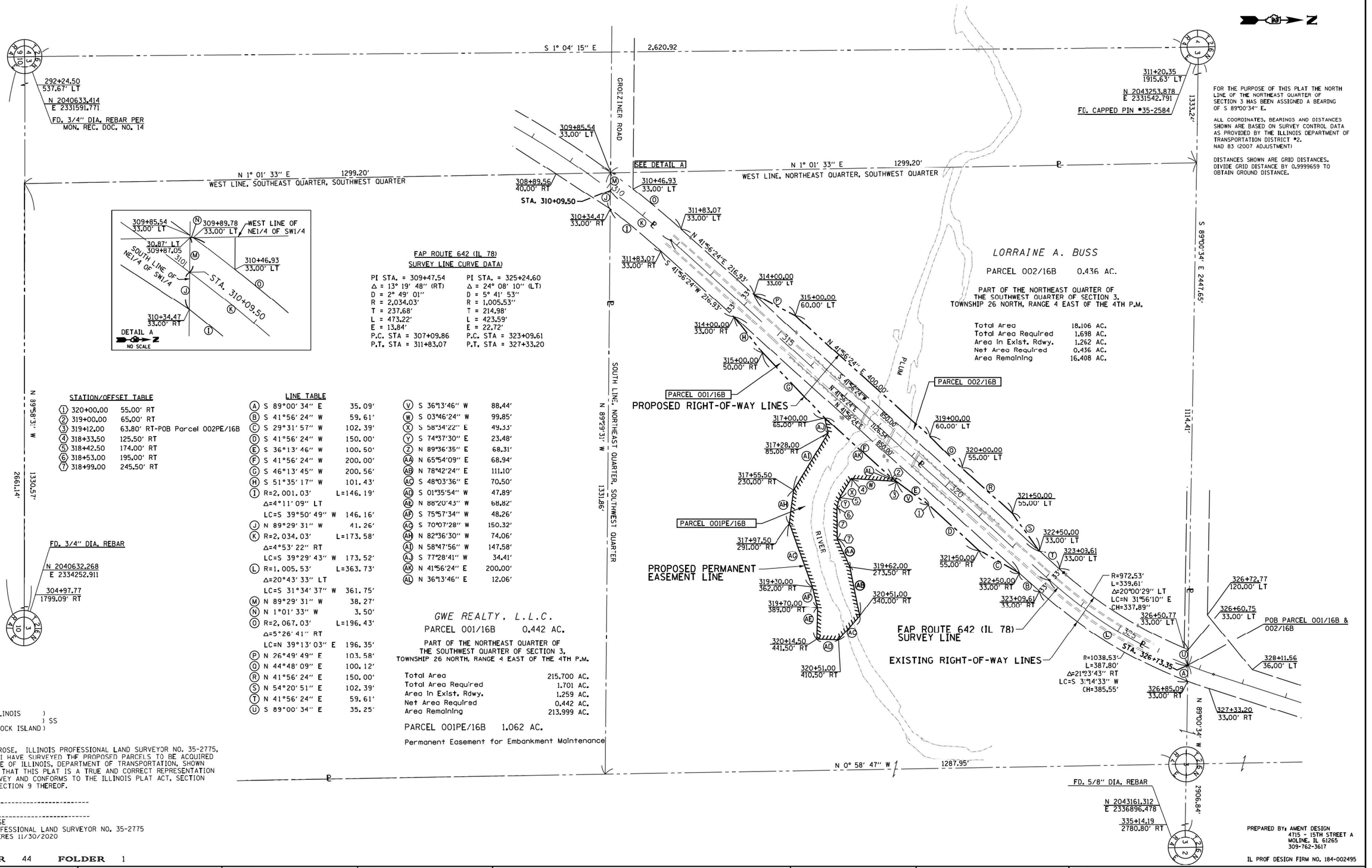
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING & SIGNING PLAN
IL 78 OVER PLUM RIVER

SCALE: 1"=50' | SHEET 1 OF 1 SHEETS | STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	30
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

Township 26 North, Range 4 East of the 4th Principal Meridian



FAP ROUTE 642 (IL 78)
SURVEY LINE CURVE DATA)

PI STA. = 309+47.54	PI STA. = 325+24.60
Δ = 13° 19' 48" (RT)	Δ = 24° 08' 10" (LT)
D = 2° 49' 01"	D = 5° 41' 53"
R = 2,034.03'	R = 1,005.53"
T = 237.68'	T = 214.98'
L = 473.22'	L = 423.59'
E = 13.84'	E = 22.72'
P.C. STA = 307+09.86	P.C. STA = 323+09.61
P.T. STA = 311+83.07	P.T. STA = 327+33.20

STATION/OFFSET TABLE

1	320+00.00	55.00' RT
2	319+00.00	65.00' RT
3	319+12.00	63.80' RT-POB Parcel 002PE/16B
4	318+33.50	125.50' RT
5	318+42.50	174.00' RT
6	318+53.00	195.00' RT
7	318+99.00	245.50' RT

LINE TABLE

A	S 89°00' 34" E	35.09'
B	S 41°56' 24" W	59.61'
C	S 29°31' 57" W	102.39'
D	S 41°56' 24" W	150.00'
E	S 36°13' 46" W	100.50'
F	S 41°56' 24" W	200.00'
G	S 46°13' 45" W	200.56'
H	S 51°35' 17" W	101.43'
I	R=2,001.03'	L=146.19'
	Δ=4°11' 09" LT	
	LC=S 39°50' 49" W	146.16'
J	N 89°29' 31" W	41.26'
K	R=2,034.03'	L=173.58'
	Δ=4°53' 22" RT	
	LC=S 39°29' 43" W	173.52'
L	R=1,005.53'	L=363.73'
	Δ=20°43' 33" LT	
	LC=S 31°34' 37" W	361.75'
M	N 89°29' 31" W	38.27'
N	N 1°01' 33" W	3.50'
O	R=2,067.03'	L=196.43'
	Δ=5°26' 41" RT	
	LC=N 39°13' 03" E	196.35'
P	N 26°49' 49" E	103.58'
Q	N 44°48' 09" E	100.12'
R	N 41°56' 24" E	150.00'
S	N 54°20' 51" E	102.39'
T	N 41°56' 24" E	59.61'
U	S 89°00' 34" E	35.25'
V	S 36°13' 46" W	88.44'
W	S 03°46' 24" W	99.85'
X	S 58°34' 22" E	49.55'
Y	S 74°37' 30" E	23.48'
Z	N 89°36' 35" E	68.31'
AA	N 65°54' 09" E	68.94'
AB	N 78°42' 24" E	111.10'
AC	S 48°03' 36" E	70.50'
AD	S 01°35' 54" W	47.89'
AE	N 88°20' 43" W	68.82'
AF	S 75°57' 34" W	48.26'
AG	S 70°07' 28" W	150.32'
AH	N 82°36' 30" W	74.06'
AI	N 58°47' 56" W	147.58'
AJ	S 77°28' 41" W	34.41'
AK	N 41°56' 24" E	200.00'
AL	N 36°13' 46" E	12.06'

GWE REALTY, L.L.C.

PARCEL 001/16B 0.442 AC.

PART OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 26 NORTH, RANGE 4 EAST OF THE 4TH P.M.

Total Area	215.700 AC.
Total Area Required	1.701 AC.
Area In Exist. Rdwy.	1.259 AC.
Net Area Required	0.442 AC.
Area Remaining	213.999 AC.

PARCEL 001PE/16B 1.062 AC.

Permanent Easement for Embankment Maintenance

LORRAINE A. BUSS

PARCEL 002/16B 0.436 AC.

PART OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 26 NORTH, RANGE 4 EAST OF THE 4TH P.M.

Total Area	18.106 AC.
Total Area Required	1.698 AC.
Area in Exist. Rdwy.	1.262 AC.
Net Area Required	0.436 AC.
Area Remaining	16.408 AC.

STATE OF ILLINOIS)
) SS
COUNTY OF ROCK ISLAND)

I, JIMMY D. ROSE, ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-2775, STATE THAT I HAVE SURVEYED THE PROPOSED PARCELS TO BE ACQUIRED BY THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION, SHOWN HEREON, AND THAT THIS PLAT IS A TRUE AND CORRECT REPRESENTATION OF SAID SURVEY AND CONFORMS TO THE ILLINOIS PLAT ACT, SECTION 1(b)(6) AND SECTION 9 THEREOF.

DATED_____

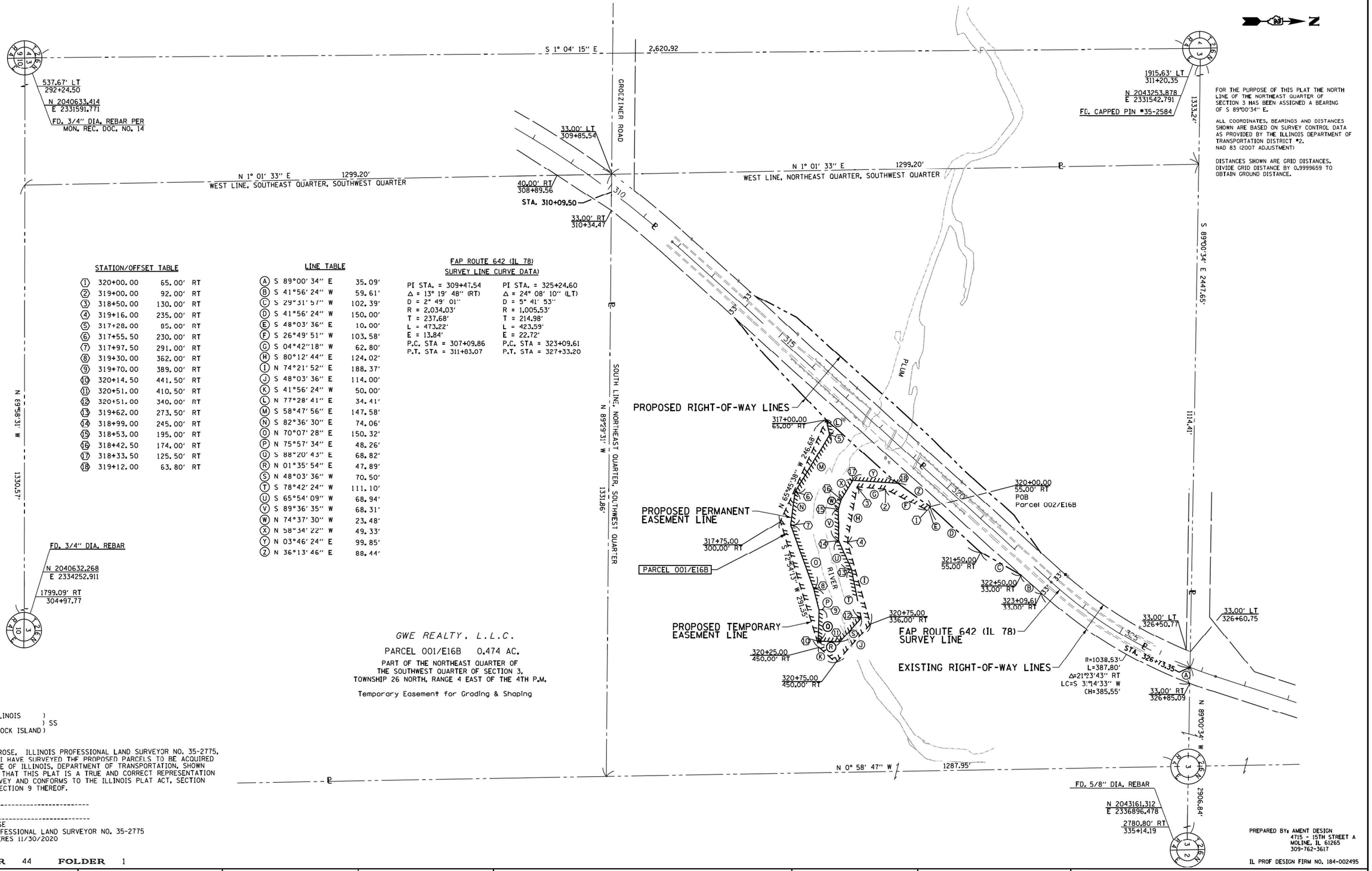
_____
JIMMY D. ROSE
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-2775
LICENSE EXPIRES 11/30/2020

DRAWER 44 FOLDER 1

p:\planroom\data\Illinois.gov\IDOT\Documents\IDOT Offices\District 2\Projects\P283812\CADData\LandReq\Z283812-RwPL.dgn

FILE NAME =	USER NAME = spayersm	DESIGNED -	REVISED	**ILLINOIS DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY PLAT**	FAP RTE 642 (IL 78)	SECTION 3	COUNTY JO DAVIESS JOB# R-92-008-14
		DRAWN -	REVISED -		SEC 10BR-5	T26N, R4E. OF 4TH P.M.	PROJECT# SHEET 31
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -		SCALE: 100 FT	SHEET NO. 16B	STA 308+00 TO STA 328+00 CONTRACT NO. 64H58
	PLOT DATE = May-27-2021 09:52:38 AM	DATE -	REVISED -				

Township 26 North, Range 4 East of the 4th Principal Meridian



FOR THE PURPOSE OF THIS PLAT THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 3 HAS BEEN ASSIGNED A BEARING OF S 89°00'34" E.

ALL COORDINATES, BEARINGS AND DISTANCES SHOWN ARE BASED ON SURVEY CONTROL DATA AS PROVIDED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT #2. NAD 83 (2007 ADJUSTMENT)

DISTANCES SHOWN ARE GRID DISTANCES. DIVIDE GRID DISTANCE BY 0.9999659 TO OBTAIN GROUND DISTANCE.

STATION/OFFSET TABLE

1	320+00.00	65.00'	RT
2	319+00.00	92.00'	RT
3	318+50.00	130.00'	RT
4	319+16.00	235.00'	RT
5	317+28.00	85.00'	RT
6	317+55.50	230.00'	RT
7	317+97.50	291.00'	RT
8	319+30.00	362.00'	RT
9	319+70.00	389.00'	RT
10	320+14.50	441.50'	RT
11	320+51.00	410.50'	RT
12	320+51.00	340.00'	RT
13	319+62.00	273.50'	RT
14	318+99.00	245.00'	RT
15	318+53.00	195.00'	RT
16	318+42.50	174.00'	RT
17	318+33.50	125.50'	RT
18	319+12.00	63.80'	RT

LINE TABLE

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C	S 29°31' 57" W	102.39'
D	S 41°56' 24" W	150.00'
E	S 48°03' 36" E	10.00'
F	S 26°49' 51" W	103.58'
G	S 04°42"18" W	62.80'
H	S 80°12' 44" E	124.02'
I	N 74°21' 52" E	188.37'
J	S 48°03' 36" E	114.00'
K	S 41°56' 24" W	50.00'
L	N 77°28' 41" E	34.41'
M	S 58°47' 56" E	147.58'
N	S 82°36' 30" E	74.06'
O	N 70°07' 28" E	150.32'
P	N 75°57' 34" E	48.26'
Q	S 88°20' 43" E	68.82'
R	N 01°35' 54" E	47.89'
S	N 48°03' 36" W	70.50'
T	S 78°42' 24" W	111.10'
U	S 65°54' 09" W	68.94'
V	S 89°36' 35" W	68.31'
W	N 74°37' 30" W	23.48'
X	N 58°34' 22" W	49.33'
Y	N 03°46' 24" E	99.85'
Z	N 36°13' 46" E	88.44'

FAP ROUTE 642 (IL 78)
SURVEY LINE CURVE DATA)

PI STA. = 309+47.54	PI STA. = 325+24.60
Δ = 13° 19' 48" (RT)	Δ = 24° 08' 10" (LT)
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R = 2,034.03'	R = 1,005.53'
T = 237.68'	T = 214.98'
L = 473.22'	L = 423.59'
E = 13.84'	E = 22.72'
P.C. STA = 307+09.86	P.C. STA = 323+09.61
P.T. STA = 311+83.07	P.T. STA = 327+33.20

GWE REALTY, L.L.C.

PARCEL 001/E16B 0.474 AC.

PART OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 26 NORTH, RANGE 4 EAST OF THE 4TH P.M.

Temporary Easement for Grading & Shaping

STATE OF ILLINOIS)
) SS
COUNTY OF ROCK ISLAND)

I, JIMMY D. ROSE, ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-2775, STATE THAT I HAVE SURVEYED THE PROPOSED PARCELS TO BE ACQUIRED BY THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION, SHOWN HEREON, AND THAT THIS PLAT IS A TRUE AND CORRECT REPRESENTATION OF SAID SURVEY AND CONFORMS TO THE ILLINOIS PLAT ACT, SECTION 1(b)(6) AND SECTION 9 THEREOF.

DATED_____

_____
JIMMY D. ROSE
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-2775
LICENSE EXPIRES 11/30/2020

DRAWER 44 **FOLDER** 1

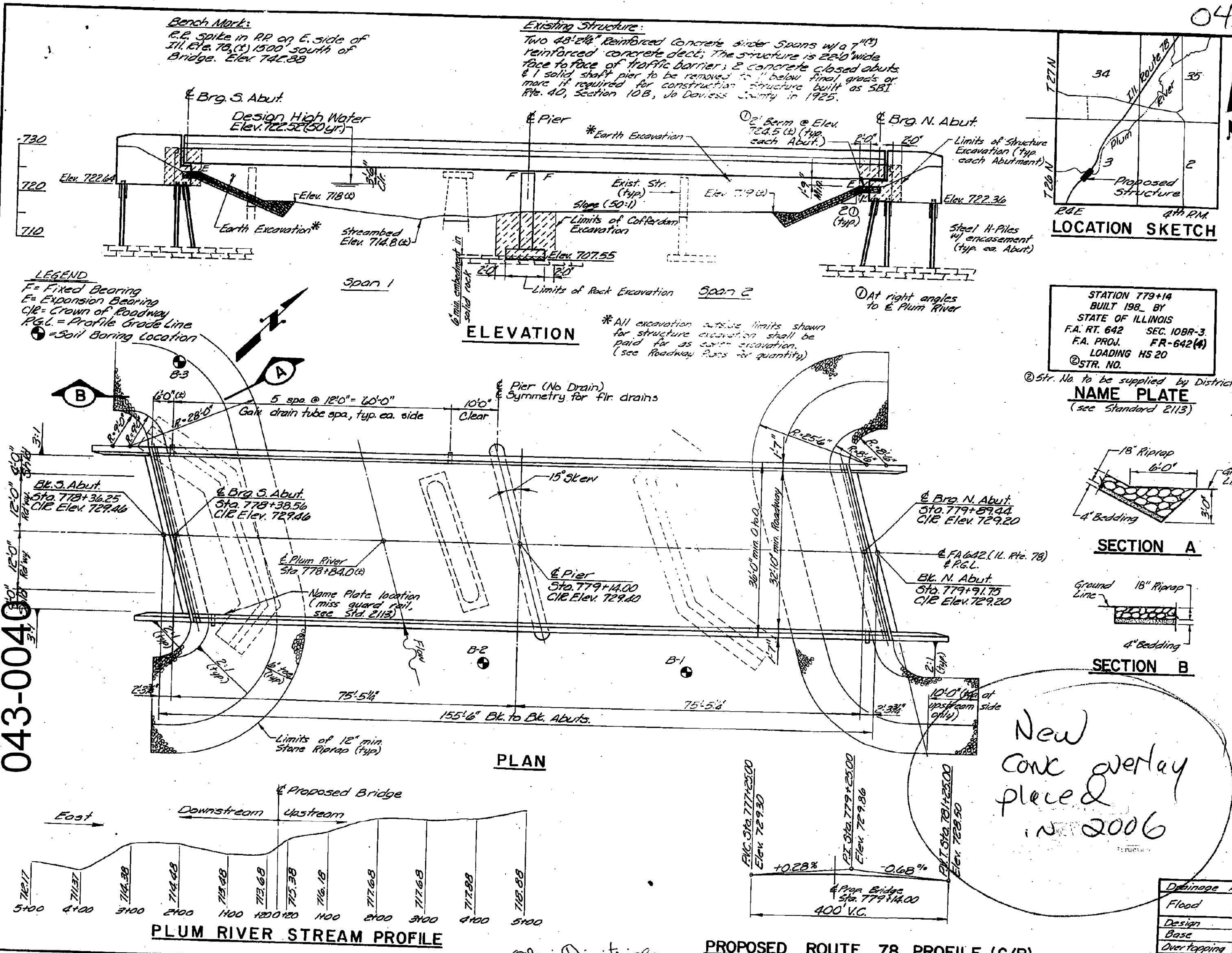
PREPARED BY: AMENT DESIGN
4715 - 15TH STREET A
MOLINE, IL 61265
309-762-3617
IL PROF DESIGN FIRM NO. 184-002495

FILE NAME =	USER NAME = spayersm	DESIGNED -	REVISED
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = May-27-2021 09:56:02 AM	DATE -	REVISED -

ILLINOIS DEPARTMENT OF TRANSPORTATION
TEMPORARY EASEMENT PLAT

FAP RTE 642 (IL 78)	SECTION 3	COUNTY JO DAVIESS	JOB# R-92-008-14
SEC 10BR-5	T26N, R4E. OF 4TH P.M.	PROJECT#	SHEET 32
SCALE: 100 FT	SHEET NO. E16B	STA 308+00 TO STA 328+00	CONTRACT NO. 64H58

043-0040



GENERAL NOTES

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 642 (ILL. 78)	10BR-3	JO DAVIESS	31	7
STA. 778+36.77		TO STA. 779+91.23		
FED. ROAD DIST. NO. 7		ILLINOIS	PROJECT	

1. THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED OCTOBER 1, 1979 SHALL APPLY.
2. CLASS X CONCRETE SHALL BE USED THROUGHOUT FOR CAST-IN-PLACE CONCRETE. THE AGGREGATES FOR PARAPET CONCRETE ABOVE P.P.C. DECK BEAMS SHALL CONFORM TO THE REQUIREMENTS OF HANDRAIL CONCRETE.
3. ALL STRUCTURAL STEEL SHALL BE SHOP PAINTED WITH TWO COATS OF BASIC LEAD SILICO CHROMATE PAINT.
4. EXPANSION GUARDS WHICH ARE NOT CAST IN THE PRECAST UNIT SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH ARTICLE 503.07(c) OF THE STANDARD SPECIFICATIONS AND ARE INCLUDED IN QUANTITY OF STRUCTURAL STEEL.
5. THE CONTRACTOR SHALL DRIVE ONE HP 8 x 36 STEEL TEST PILE IN A PERMANENT LOCATION AT EACH ABUTMENT AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF PILES.
6. THE TOP SURFACE OF THE BEAMS SHALL BE FINISHED IN ACCORDANCE WITH ARTICLE 505.06 OF THE STANDARD SPECIFICATION EXCEPT THAT THE SURFACE SHALL NOT BE ROUGHENED BY BROOMING. THE FINISHED SURFACE SHALL BE FREE OF DEPRESSIONS OR HIGH SPOTS WITH SHARP CORNERS, AND THE TOP EDGE OF KEYS SHALL BE ROUNDED OR CHAMFERRED A MINIMUM OF 1/4".
7. REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M-31 OR M-53 GRADE 60.
8. PROTECTIVE COAT SHALL NOT BE APPLIED TO SURFACES TO WHICH WATERPROOFING MEMBRANE SYSTEM IS APPLIED.
9. A CALCIUM NITRITE CORROSION INHIBITOR AS COVERED IN THE SPECIAL PROVISIONS SHALL BE USED IN THE CONCRETE FOR PRECAST PRESTRESSED CONCRETE DECK BEAMS.
10. SEE PROPOSAL FOR BORING DATA.

DESIGN NOTES

1. **DESIGN LOADING:** HS20-44 WITH ALLOWANCE FOR 25 PSF FUTURE WEARING SURFACE.
2. **DESIGN STRESSES:** (LOAD FACTOR DESIGN)
   CAST-IN-PLACE CONCRETE
   f'_c = 3,500 PSI
   f_y = 60,000 PSI
   PRECAST PRESTRESSED CONCRETE
   f'_c = 5,000 PSI
   f'_{ci} = 4,200 PSI
   f'_{si} = 189,000 PSI (1/2" ∅ DECK BEAM STRANDS)
   f'_s = 270,000 PSI (1/2" ∅ DECK BEAM STRANDS)
   f_y = 60,000 PSI (REINFORCEMENT BARS)
3. **DESIGN SPECIFICATIONS:** AASHTO 1977 WITH 1978, 1979 AND 1980 INTERIM SPECIFICATIONS AS APPLICABLE.

SUMMARY OF QUANTITIES

ITEM	UNIT	QUANTITIES SUBSTRUCTURE	SUPERSTRUCTURE	TOTAL
STRUCTURE EXCAVATION	CU. YDS.	227	—	227
ROCK EXCAVATION FOR STRUCTURES	CU. YDS.	10	—	10
BITUM. CONC. SURF. CRSE. MIX D, CLI	TON	—	68	68
REMOVAL OF EXIST. STR.	EACH	—	—	1
CLASS X CONCRETE	CU. YDS.	157.4	36.7	194.1
PPC DECK BEAMS (33" DEEP)	SQ. FT.	—	5472	5472
REINFORCEMENT BARS	LBS.	10,840	2530	13,370
REINFORCEMENT BARS (EPOXY COATED)	LBS.	480	2690	3170
STEEL PILES HP 8 x 36	LIN. FT.	340	—	340
TEST PILES STEEL (HP 8 x 36)	EACH	2	—	2
METAL SHOES	EACH	20	—	20
PORTLAND CEMENT MORTAR FAIRING COURSE	LIN. FT.	—	1672	1672
STONE RIP RAP	SQ. YDS.	427	—	427
NAME PLATE	EACH	—	1	1
PROTECTIVE COAT	SQ. YDS.	—	130	130
PREFORMED JOINT SEAL (2-1/2")	LIN. FT.	—	75	75
STRUCTURAL STEEL	LBS.	—	4750	4750
WATERPROOFING MEMBRANE SYSTEM	SQ. YDS.	—	555	555
COFFERDAM	EACH	1	—	1
COFFERDAM EXCAVATION	CU. YDS.	182	—	182

WATERWAY INFORMATION

Drainage Area 14 sq. mi. Low Grade Elev. 727.84 H.W. Elev.

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater Elev. Exist.	Headwater Elev. Prop.	Headwater Elev. Long. Encroa.
Design	50	3920	410	560	722.5	2.40	1.12	724.9	723.62	725.26
Base	100	4510	430	590	722.7	3.08	1.43	725.78	724.13	725.71
Overtopping	—	—	—	—	—	—	—	—	—	—
Max. Calc.	500	5920	476	650	723.25	4.78	2.22	728.0	725.47	726.2

CLARK DIETZ ENGINEERS
A Division of CRS GROUP ENGINEERS, INC.

DATE	TO	FOR
10/81	IDOT - Springfield, Ill.	Final Plans
6/81	IDOT - Springfield, Ill.	Prefinal Plans
PROJECT CONTROL		

ACTIVITY	NAME	DATE
DESIGNED BY:	SCJ	6-81
DRAWN BY:	DLD	6-81
CHECKED BY:	JFJ	6-81
APPROVED BY:	AD	6-81
REGISTRATION NO:		

NO.	DATE	REVISION	APPROVED

SCALE: None
DATE:
JOB NO. 1757.12

DRAWING NO. 1 of 6

GENERAL PLAN & ELEVATION
FA 642 (IL. RTE. 78) OVER PLUM RIVER
SECTION 10 BR-3 JO DAVIESS COUNTY
STA. 779 + 14.00

043-0040

FOR INFORMATION ONLY

USER NAME = BS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = 8/9/2021	DATE -	REVISED -

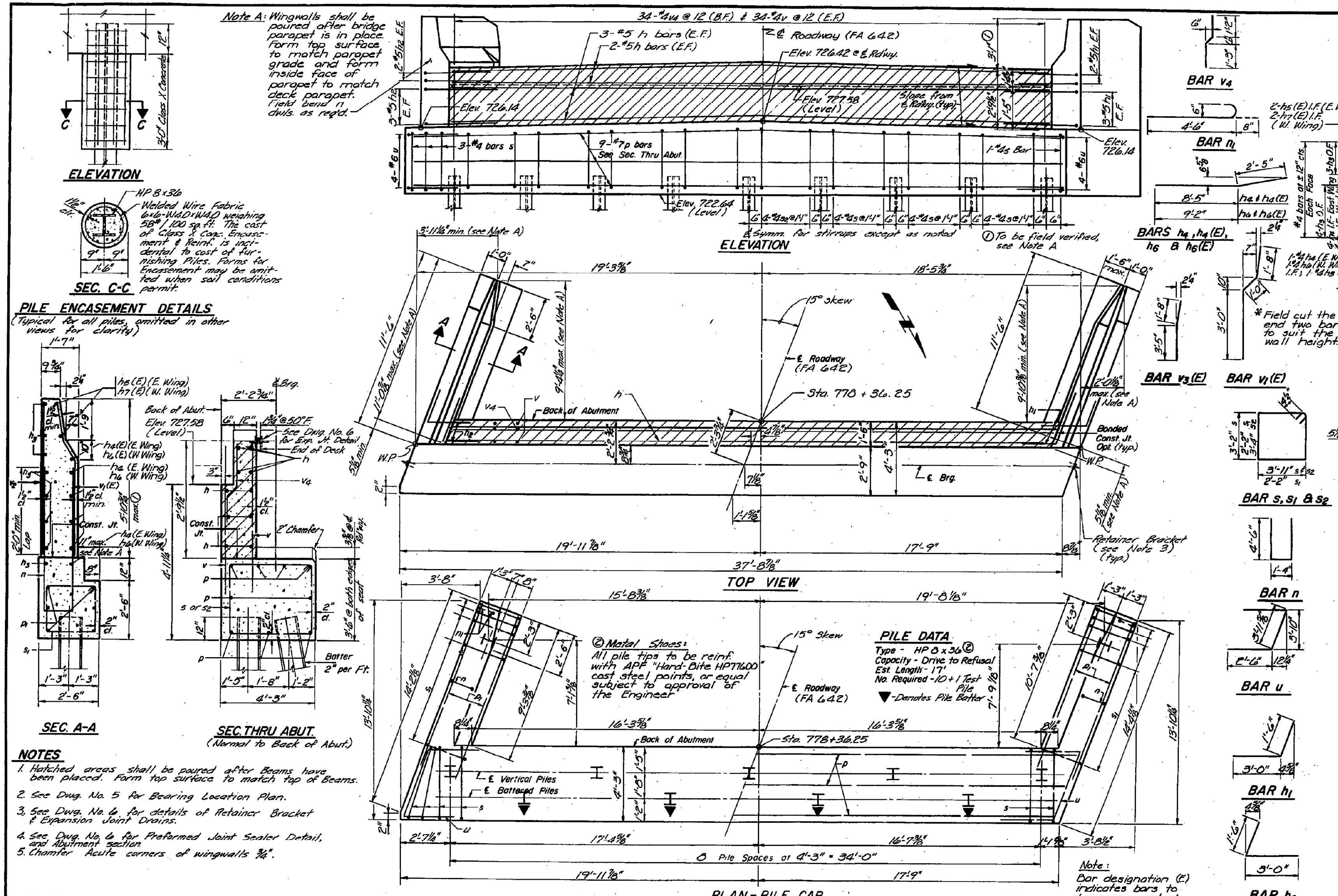
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS
IL 78 OVER PLUM RIVER

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

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	33
		CONTRACT NO. 64H58		
		ILLINOIS	FED. AID PROJECT	

MODEL: $MODELNAME$
FILE NAME: P:\projects\2001\2\002\CADD\CADsheets\D203012-sht-Existing Structure Plans.dgn



Note A: Wingwalls shall be poured after bridge parapet is in place. Form top surface to match parapet grade and form inside face of parapet to match deck parapet. Field bend n dwls. as req'd.

HP 8 x 36. Welded Wire Fabric 6x6-W4.0xW4.0 weighing 58# / 100 sq. ft. The cost of Class X Conc. Encasement & Reinf. is incidental to cost of furnishing Piles. Forms for Encasement may be omitted when soil conditions permit.

① To be field verified, see Note A

② Metal Shoes: All pile tips to be reinf. with APF "Hard-Bite HP7600" cast steel points, or equal subject to approval of the Engineer

PILE DATA

Type - HP 8 x 36 ②
Capacity - Drive to Refusal
Est. Length - 17'
No. Required - 10 + 1 Test Pile
▼ - Denotes Pile Batter

* Field cut the end two bars to suit the wall height.

Note: Bar designation (E) indicates bars to be epoxy coated.

NOTES

1. Hatched areas shall be poured after Beams have been placed. Form top surface to match top of Beams.
2. See Dwg. No. 5 for Bearing Location Plan.
3. See Dwg. No. 6 for details of Retainer Bracket & Expansion Joint Drains.
4. See Dwg. No. 6 for Preformed Joint Sealer Detail, and Abutment section.
5. Chamfer Acute corners of wingwalls 3/4".

BILL OF MATERIAL

Bar	No	Size	Length	Shape
h	10	#5	33'-8"	—
h_1	10	#5	4'-6"	┘
h_2	10	#5	4'-6"	└
h_3	16	#4	11'-2"	—
h_4	5	#4	10'-10"	—
h_4(E)	1	#4	10'-10"	—
h_5(E)	2	#4	10'-11"	—
h_6	5	#4	11'-7"	—
h_6(E)	1	#4	11'-7"	—
h_7(E)	2	#4	11'-4"	—
n	18	#6	10'-4"	⊔
n_1	12	#6	5'-2"	⊃
p	9	#7	37'-4"	—
p_1	12	#7	12'-0"	—
s	28	#4	14'-11"	◻
s_1	24	#4	9'-5"	◻
s_2	8	#4	15'-3"	◻
u	8	#6	9'-0"	⊐
v	68	#5	4'-4"	—
v_1 (E)	18	#6	5'-8"	—
v_2	24	#6	5'-8"	—
v_3 (E)	6	#6	5'-1"	—
v_4	34	#5	3'-2"	—
Metal Shoes			Ea.	10
Class X Concrete			Cu. Yds.	38.5
Reinforcement Bars			Lbs.	3240
Stl. HP 8 x36 Piles			Lin. Ft.	170
Test Pile (Steel HP8x36)			Ea.	1
Structure Excavation			Cu. Yds.	111
Reinf. Bars (Epoxy Coated)			Lbs.	240

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 642 (ILL 78)	10BR-3	JO DAVIESS	31	8

STA. 778 + 36.77 TO STA. 779 + 91.23
FED. ROAD DIST. NO. 7 ILLINOIS PROJECT

CLARK DIETZ ENGINEERS
A Division of CRS GROUP ENGINEERS, INC.

DATE	TO	FOR

PROJECT CONTROL

ACTIVITY	NAME	DATE
DESIGNED BY:	SCJ	6-81
DRAWN BY:	DWH/DLD	6-81
CHECKED BY:	JFJ	6-81
APPROVED BY:	AD	6-81
REGISTRATION NO:		

NO.	DATE	REVISION	APPROVED

SCALE: None
DATE:
JOB NO. 1757.12

DRAWING NO. 2 of 6

SOUTH ABUTMENT
FA 642 (IL. RTE. 78) OVER PLUM RIVER
SECTION 10 BR-3 JO DAVIESS COUNTY
STA. 779 + 14.00

FOR INFORMATION ONLY

USER NAME = BS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALES	CHECKED -	REVISED -
PLOT DATE = 8/9/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS
IL 78 OVER PLUM RIVER

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

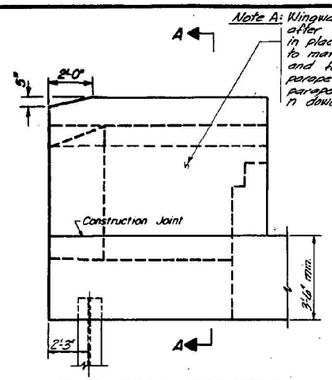
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	34

CONTRACT NO. 64H58
ILLINOIS FED. AID PROJECT

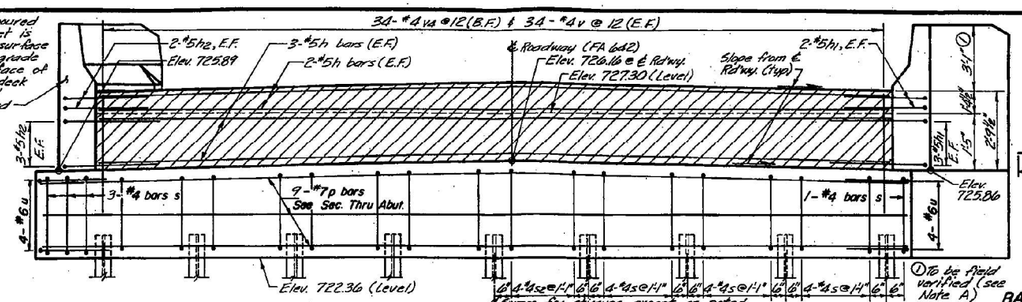
MODEL: $MODELNAME$
FILE NAME: P:\projects\2001\2\002\C\CADD\CADsheets\D203012-sht-Existing Structure Plans.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 642 (ILL. 78)	10BR-5	JO DAVIESS	31	9
STA. 778+36.77	TO STA. 779+91.25			
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

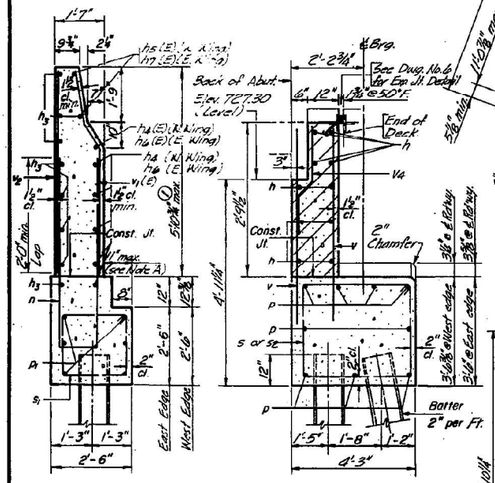
Note A: Wingwalls shall be poured after Bridge Parapet is in place. Form top surface to match parapet grade and form inside face of parapet to match deck parapet. Field bend n dowels as required



WING WALL ELEVATION

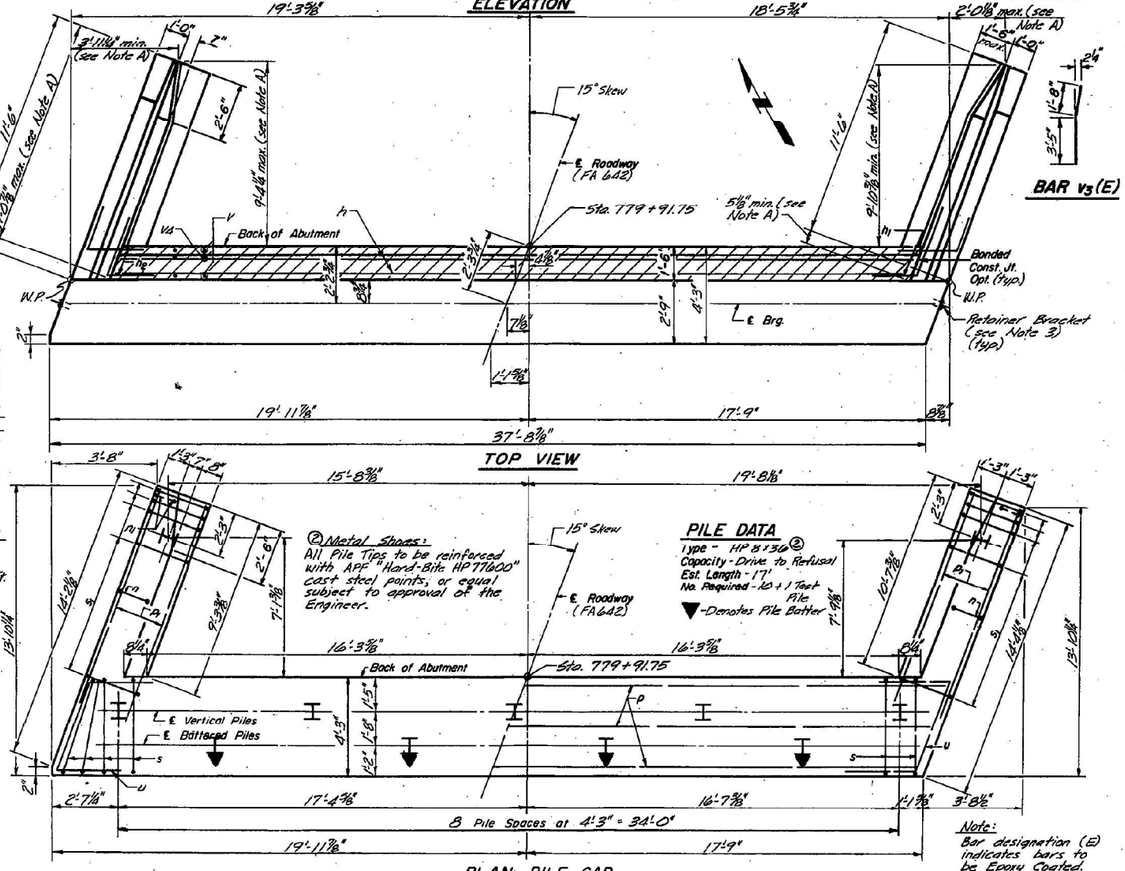


ELEVATION



SEC. A-A

SEC. THRU ABUT.
(Normal to Back of Abut.)



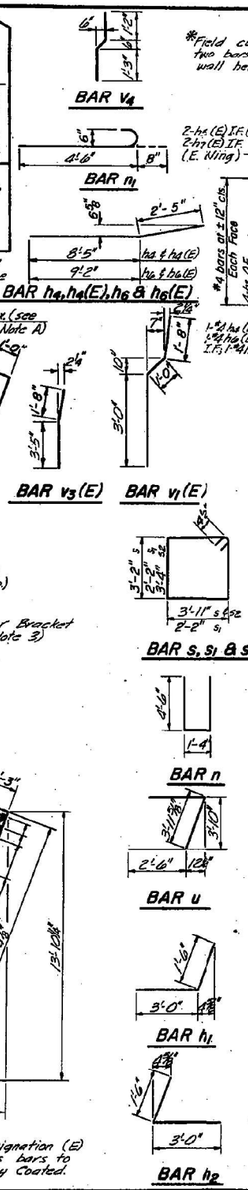
TOP VIEW

② Metal Shoes: All Pile Tips to be reinforced with ARF "Hard-Bite HP77\600" cast steel points, or equal, subject to approval of the Engineer.

PLAN-PILE CAP

Note: Bar designation (E) indicates bars to be Epoxy Coated.

*Field cut the end two bars to suit the wall height.



BILL OF MATERIAL

Bar	No	Size	Length	Shape
h	10	#5	33'-8"	
h1	10	#5	3'-6"	
h2	10	#5	4'-6"	
h3	16	#4	11'-2"	
h4	5	#4	10'-10"	
h4(E)	1	#4	10'-10"	
h6(E)	2	#4	10'-11"	
h6	5	#4	11'-7"	
h7(E)	1	#4	11'-7"	
h7(E)	2	#4	11'-4"	
n	18	#6	10'-4"	
n1	12	#6	5'-2"	
p	9	#7	37'-4"	
p1	12	#7	12'-0"	
s	28	#4	14'-11"	
s1	24	#4	9'-5"	
s2	8	#4	15'-3"	
u	8	#6	9'-0"	
v	68	#5	4'-4"	
v1 (E)	18	#6	5'-8"	
v2	24	#6	5'-8"	
v3 (E)	6	#6	5'-1"	
v4	34	#5	3'-2"	
Metal Shoes			Ea.	10
Class X Concrete			Cu. Yds.	38.7
Reinforcement Bars			Lbs.	3240
5ft. HP8x36 Piles			Lin. Ft.	170
Test Pile (Steel HP8x36)			Ea.	1
Structure Excavation			Cu. Yds.	116
Reinf. Bars (Epoxy Coated)			Lbs.	240

NOTES

1. Hatched areas shall be poured after Bearing have been placed. Form top surface to match top of Beams.
2. See Dwg. No. 5 for Bearing Location Plan.
3. See Dwg. No. 6 for details of Retainer Bracket & Expansion Joint Drains.
4. See Dwg. No. 6 for Preformed Joint Sealer Detail, and Abutment Section.
5. See Dwg. No. 2 for Pile Encasement Details.
6. Chamfer acute corners of wingwalls ¾".

CLARK DIETZ ENGINEERS
A Division of CRS GROUP ENGINEERS, INC.

DATE	TO	FOR
		PROJECT CONTROL

ACTIVITY	NAME	DATE
DESIGNED BY:	SCJ	6-81
DRAWN BY:	DLD	6-81
CHECKED BY:	JPJ	6-81
APPROVED BY:	AD	6-81
REGISTRATION NO:		

NO.	DATE	REVISION	APPROVED

SCALE: None
DATE:
JOB NO. 1757.12

DRAWING NO. 3 of 6

NORTH ABUTMENT
FA 642 (IL. RTE. 78) OVER PLUM RIVER
SECTION 10 BR-3 JO DAVIESS COUNTY
STA. 779+14.00

FOR INFORMATION ONLY

USER NAME = BS	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS
IL 78 OVER PLUM RIVER

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

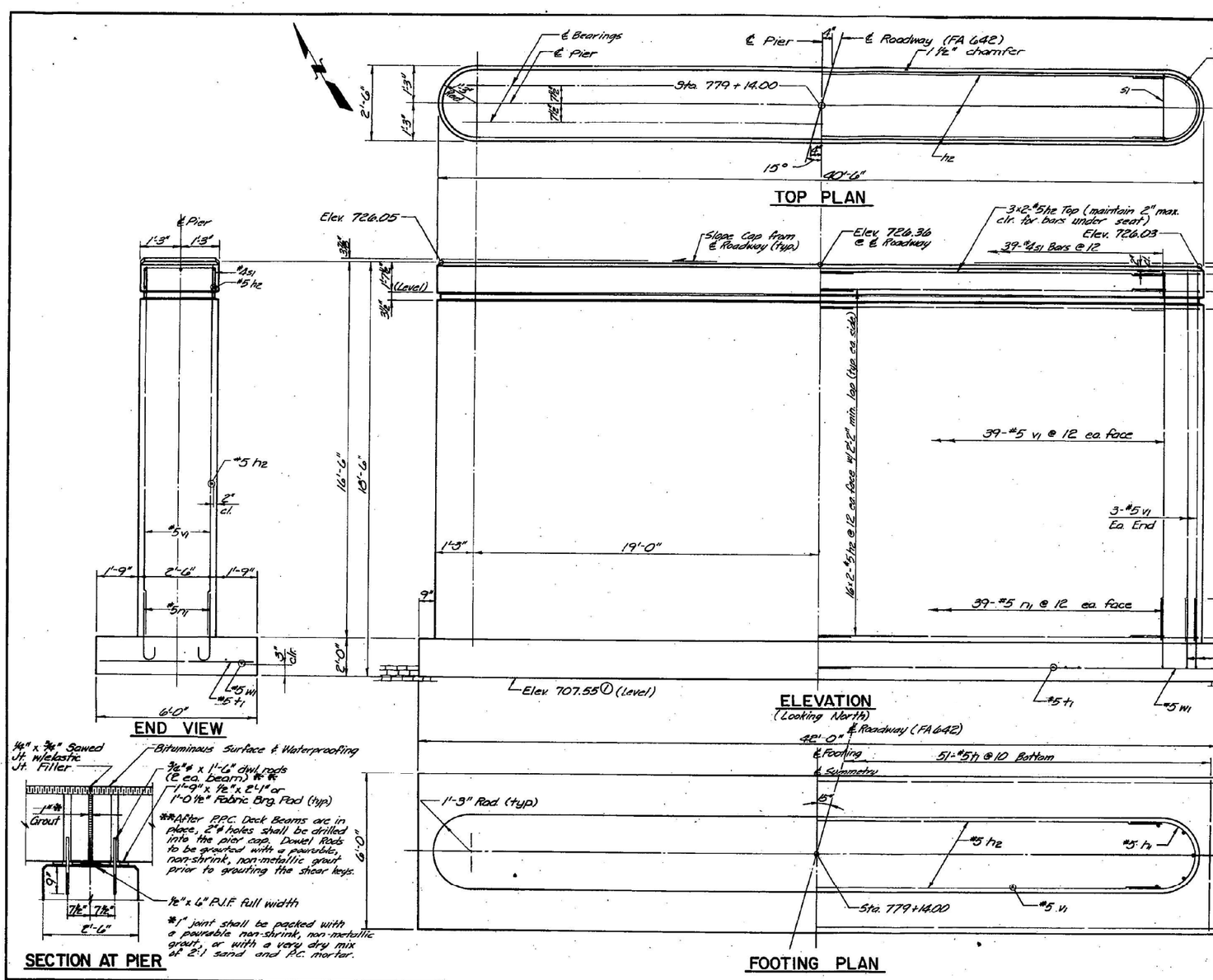
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	35
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

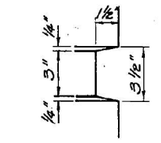
MODEL: $MODELNAME$
FILE NAME: P:\projects\2001216002\C\CADD\CADsheets\0203012-sht-Existing Structure Plans.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 642 (ILL 78)	10BR-3	JO DAVIESS	31	10
STA. 778+36.77		TO STA. 779+91.23		
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		

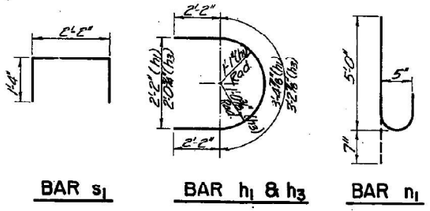
NOTES

1. All edges shall have standard ¾" chamfers except as noted.
2. Space reinf. in cap to miss dowel rod holes.
3. See Dwg. No. 5 for Bearing Location Plan.
4. Design Bearing Pressure: 60 tsf.
5. Bars indicated thus 6x2-#5 indicates 6 lines of bars with 2 lengths per line.





NOTCH DETAIL



BAR s_1 BAR h_1 & h_3 BAR n_1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1	30	#5	7'-9"	
h2	70	#5	20'-1"	
h3	4	#5	7'-7"	
n1	84	#5	5'-7"	
s1	39	#4	4'-10"	
t1	51	#5	5'-8"	
v1	84	#5	16'-4"	
w1	12	#5	21'-10"	

Item	Unit	Quantity
Class X Conc.	C.Y.	802
Reinforcement	Lbs.	4360
Rock Excavation for Structures	C.Y.	10
Cofferdam	Each	1
Cofferdam Excavation	C.Y.	182

SECTION AT PIER

**After P.P.C. Deck Beams are in place, 2" ø holes shall be drilled into the pier cap. Dowel Rods to be grouted with a pourable, non-shrink, non-metallic grout prior to grouting the shear keys.

½" x 6" P.J.F. full width

*1" joint shall be packed with a pourable non-shrink, non-metallic grout, or with a very dry mix of 2:1 sand and P.C. mortar.

CLARK DIETZ ENGINEERS
A Division of CRS GROUP ENGINEERS, INC.

DATE | TO | FOR
PROJECT CONTROL

ACTIVITY	NAME	DATE
DESIGNED BY:	SCJ	6-81
DRAWN BY:	DWH / DLD	6-81
CHECKED BY:	JFJ	6-81
APPROVED BY:	AD	6-81
REGISTRATION NO:		

NO.	DATE	REVISION	APPROVED

SCALE None
DATE
JOB NO. 1757.12

DRAWING NO. 4 of 6

PIER
FA 642 (IL. RTE. 78) OVER PLUM RIVER
SECTION 10BR-3 JO DAVIESS COUNTY
STA. 779+14.00

FOR INFORMATION ONLY

USER NAME = BS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALES	CHECKED -	REVISED -
PLOT DATE = 8/9/2021	DATE -	REVISED -

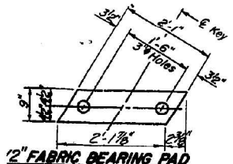
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS
IL 78 OVER PLUM RIVER
SCALE: | SHEET 4 OF 6 SHEETS | STA. | TO STA.

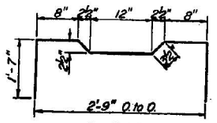
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	36
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

MODEL: $MODELNAME5
FILE NAME: P:\projects\2012\002\CADD\CADSheets\D203012-sht-Existing Structure Plan.dgn

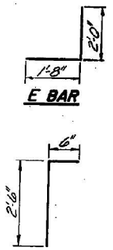
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 642 (ILL 78)	10BR-3	JO DAVIESS	31	11
STA 778+35.77	TO STA 779+91.23			
FED. ROAD DIST. NO. 7	ILLINOIS	PROJECT		



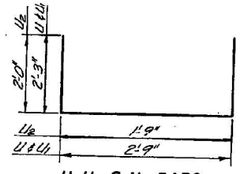
½" FABRIC BEARING PAD
(Interior)



A1 BAR



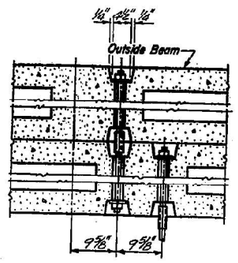
¼" GRAPHITED ASBESTOS BEARING PAD
(Interior)

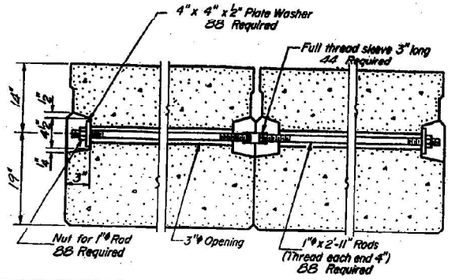


U, U1, & U2 BARS

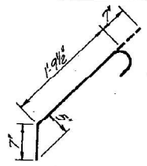
½" FABRIC BEARING PAD
(Exterior)

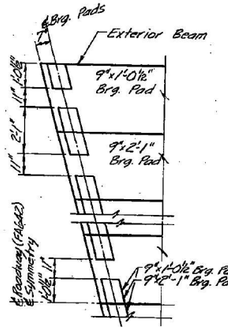
¼" GRAPHITED ASBESTOS BEARING PAD
(Exterior @ ℄ Bridge)



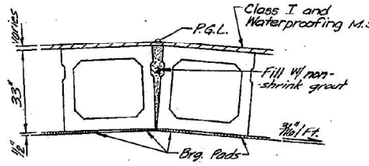


TYPICAL TRANSVERSE TIE ASSEMBLY

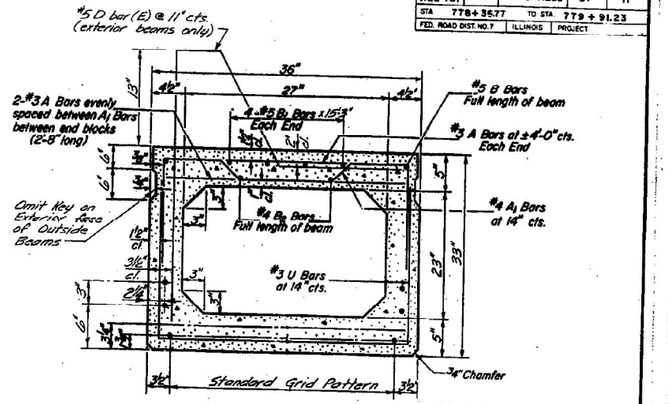




BEARING LOCATION PLAN
Note: Provide 2-⅛" Fabric Shim Pads as required for all bearings.

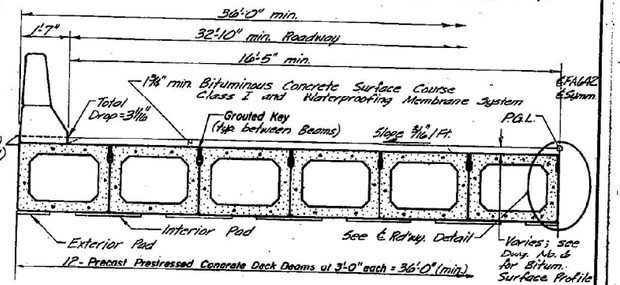


℄ ROADWAY DETAIL

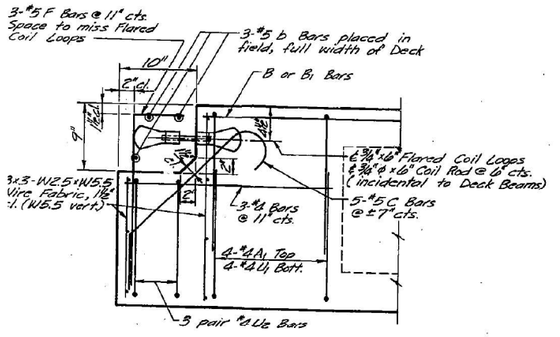


Note: Place strands symmetrically about ℄ beam.

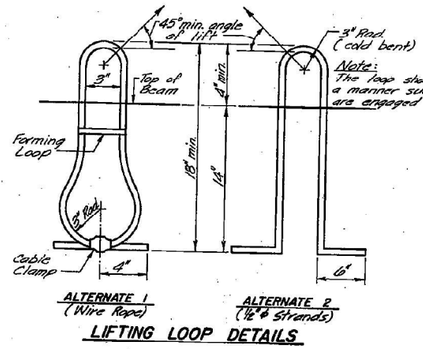
TYPICAL SECTION
19-½"ϕ Strands Each Strand Stressed to 28,900 Lbs.
8-Strands 1¾" up, 7-Strands 3½" up, 2-Strands 6" up, 2-Strands 9" up



HALF CROSS SECTION



BEAM END REINFORCEMENT
(Expansion End Only) (Dimensions are at right angles)
Note: See End Plan on Dwg. No. 6 for Reinforcement at Fixed Ends.



Note: The loop shall be formed in a manner such that all strands are engaged during lifting

ALTERNATE 1 (Wire Rope)
ALTERNATE 2 (½"ϕ Strands)

LIFTING LOOP DETAILS

NOTES:

Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the bms. Cleaning shall be done by sandblasting the keyway areas between top of the beam & the btm edge of the key.
Prestressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand, Grade 270.
The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.
Lifting loops shall be ⅜" diameter, 6 x 25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 46,000 lbs. or 3-½"ϕ-270 ksi strands.
The 1"ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads sel. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.
Reinforcement bars shall conform to AASHTO: M-31 or M-53, Grade 60.
The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two ⅛ fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.
Longitudinal shear keys shall be grouted in accordance with the Special Provisions.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
b	6	#5	36'-9"	—
Precast Prestressed Concrete Deck Beams			Sq. Ft.	5472
Reinforcement Bars			Lbs.	230
Class X Concrete (Block Out)			Cu. Yds.	1.7

CLARK DIETZ ENGINEERS
ivision of CRS GROUP ENGINEERS, INC.

DATE	TO	FOR
		PROJECT CONTROL

ACTIVITY	NAME	DATE
DESIGNED BY:	SCJ	6-21
DRAWN BY:	DLD	6-21
CHECKED BY:	JFJ	6-21
APPROVED BY:	AD	6-21

SCALE: None
DATE:

DRAWING NO. 5 of 6

SUPERSTRUCTURE DETAILS
FA 642 (IL. RTE. 78) OVER PLUM RIVER
SECTION 10BR-3 JO DAVIESS COUNTY

FOR INFORMATION ONLY

MODEL: \$MODELNAME\$
FILE NAME: P:\projects\2021\2002\C\CADD\CADSheets\D203012-sht-Existing Structure Plans.dgn

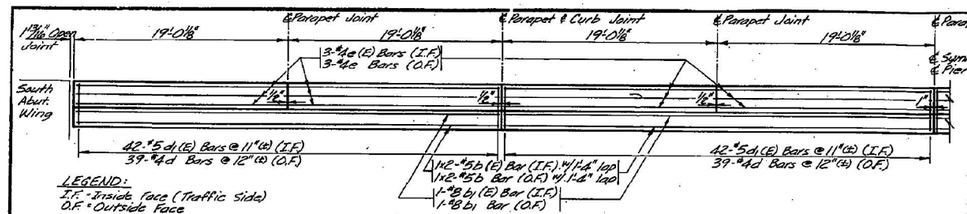
USER NAME = BS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED -	REVISED -
PLOT DATE = 8/9/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS
IL 78 OVER PLUM RIVER
SCALE: | SHEET 2 OF 6 SHEETS | STA. | TO STA.

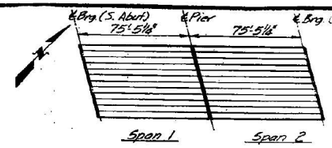
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	37
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 642 (ILL 78)	10BR-5	JO DAVIESS	31	12
STA. 778+36.77	TO STA 779+91.23			
FED. ROAD DIST NO 7	ILLINOIS	PROJECT		



LEGEND:
I.F. = Inside Face (Traffic Side)
O.F. = Outside Face

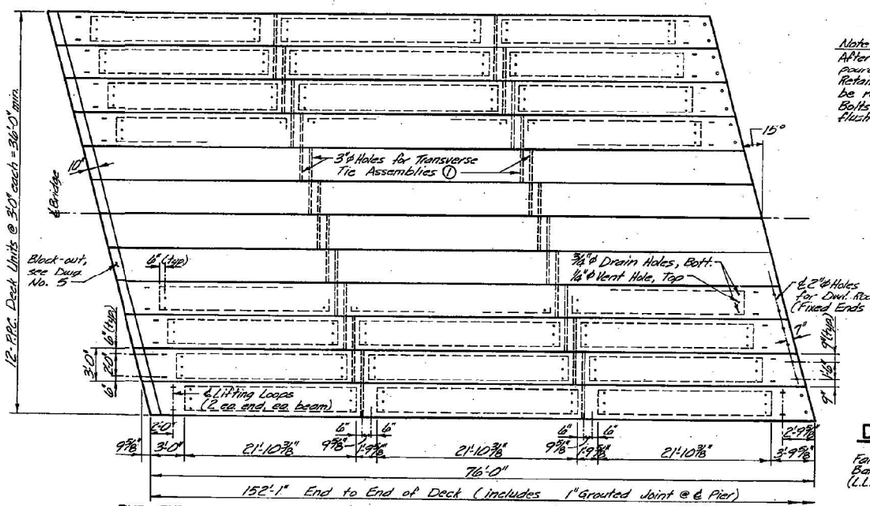
PARAPET ELEVATION
(Span 1 shown, Span 2 opp. hand)



KEY PLAN

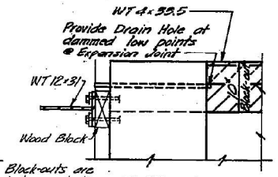
NOTES

1. Ends of Beams shall be aligned at the Expansion Joint. Any lineal variation in the Beam lengths shall be placed at the Fixed end.
2. Anchor Bolts shall be cast in the masonry or placed in drilled holes and grouted in place. Cost including Retainer Bracket and accessories is incidental to beams.
3. Acute corners of P.P.C. Deck Units and Parapet Joints to have ⅜" chamfer.

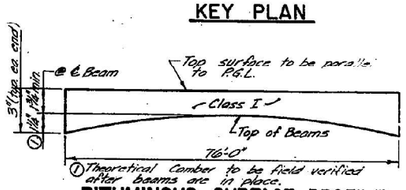


TYP. EXP. END — TYP. FIXED END

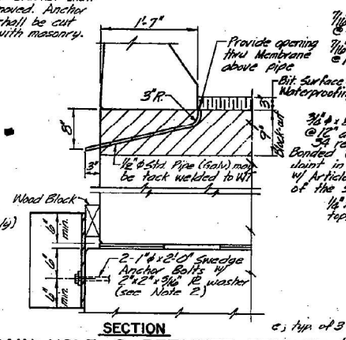
PARTIAL PLAN
(Span 1 shown, Span 2 opp. hand)



PLAN

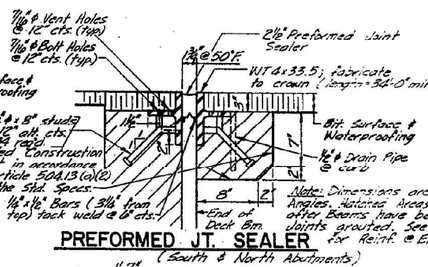


BITUMINOUS SURFACE PROFILE



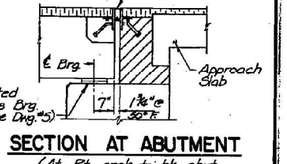
SECTION

DRAIN HOLE & RETAINER BRACKET

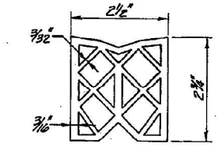


Note: Dimensions are at Right Angles. Hatched Areas to be poured after Beams have been erected & Joints grouted. See Dwg. No. 5 for Reinf. @ End of Beam

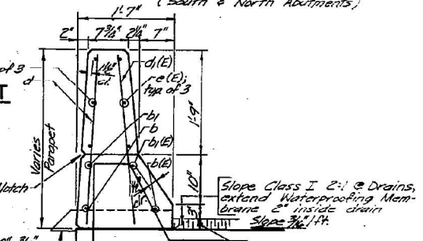
PREFORMED JT. SEALER
(South & North Abutments)



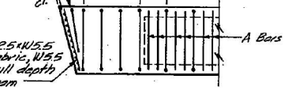
SECTION AT ABUTMENT
(At Rt. angle to bk. abut., typ. for each abut.)



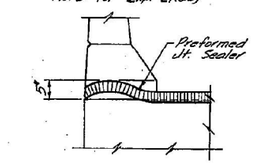
PREF. JT. SEALER DETAIL



SECTION THRU PARAPET
(Top of Parapet to be parallel to P.G.L.)



END PLAN
(Fixed Ends only; see Dwg. No. 5 for Exp Ends)

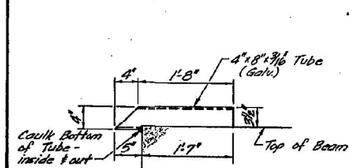


END OF SEALER TREATMENT

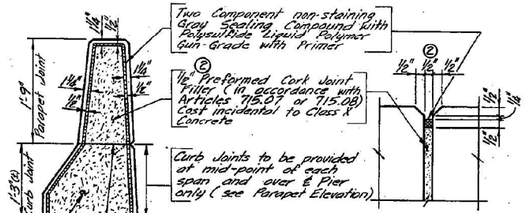
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
b	16	#5	191.5"	—
b(E)	16	#5	191.5"	—
b1	8	#8	37'-8"	—
b1(E)	8	#8	37'-8"	—
d	312	#4	2'-9"	—
d(E)	336	#5	2'-9"	—
e	48	#4	18'-8"	—
e(E)	48	#4	18'-8"	—

Item	Unit	Quantity
Reinforcement Bars	Lbs.	2300
Reinf. Bars (Epoxy Coated)	Lbs.	2690
Class X Concrete	Cu. Yds.	350



DRAIN DETAIL
(see Dwg. No. 1 for Drain Spacing)



PARAPET & CURB JOINT DETAILS

② Thickness of Preformed Cork Joint to be 1" at Joint over ℄ Pier only.

① A regid. Int. Beams
2 regid. Ext. Beams

CLARK DIETZ ENGINEERS
A Division of CRS GROUP ENGINEERS, INC.

DATE	TO	FOR

PROJECT CONTROL

ACTIVITY	NAME	DATE
DESIGNED BY:	SCJ	6-81
DRAWN BY:	DLD	6-81
CHECKED BY:	JFJ	6-81
APPROVED BY:	AD	6-81
REGISTRATION NO:		

NO.	DATE	REVISION	APPROVED

SCALE: None
DATE:
JOB NO. 1757.12

DRAWING NO. 6 of 6

SUPERSTRUCTURE DETAILS
FA 642 (IL. RTE. 78) OVER PLUM RIVER
SECTION 10 BR-3 JO DAVIESS COUNTY
STA. 779+14.00

MODEL: $MODELNAME$
FILE NAME: P:\projects\20012\002\CICADD\CADSheets\D203012-sht-Existing Structure Plans.dgn

FOR INFORMATION ONLY

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	DRAWN -	REVISED -	
PLOT SCALE = $SCALES	CHECKED -	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STRUCTURE PLANS
IL 78 OVER PLUM RIVER

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

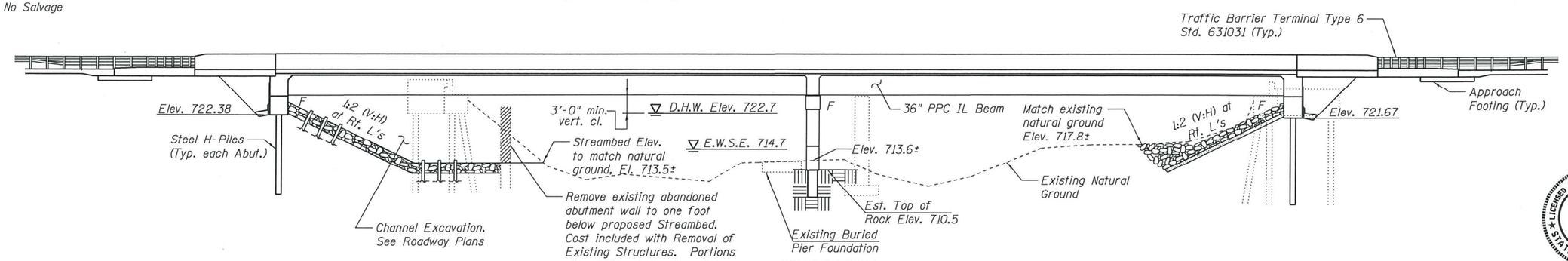
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	38
			CONTRACT NO. 64H58	
		ILLINOIS	FED. AID PROJECT	

Benchmark: Metal disc at Station 326+53.34, 29.94' Left, Elevation 732.93. Metal disc at Station 311+71.76, 26.90' Right, Elevation 730.10.

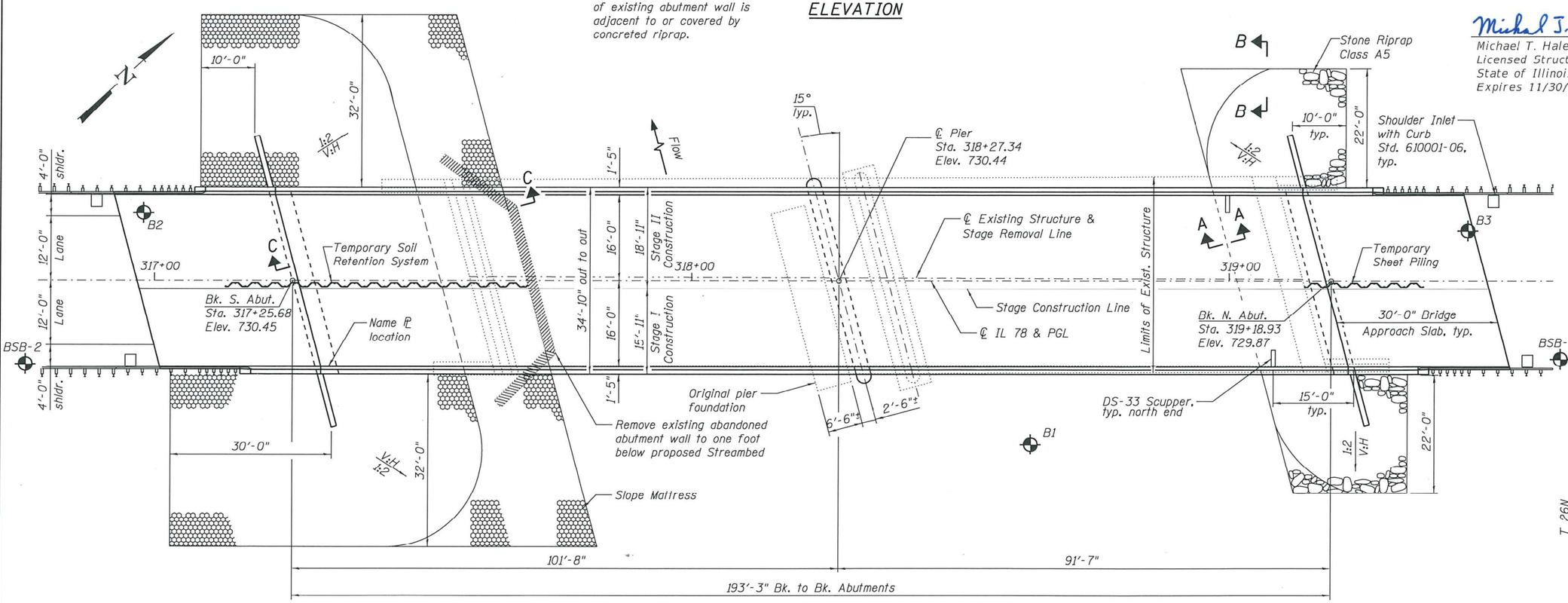
Existing Structure: S.N. 043-0040 was originally built in 1925 as SBI Route 40, Section 10B. The original structure was a two-span reinforced concrete girder and deck supported by closed concrete abutments and a solid wall pier founded on spread footings. In 1982 the original structure was removed and replaced as F.A.P. Route 642 Section 10 BR-3 with a two-span PPC Deck Beam superstructure founded on pile-supported stub-type abutments and a solid wall pier on a spread footing. The existing structure is 155'-6" bk to bk of abutments and 36'-0" wide out to out of deck. The structure is to be removed and replaced utilizing stage construction.

No Salvage

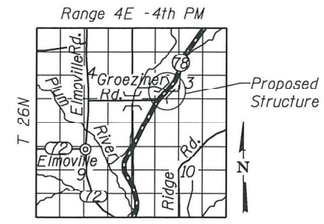
Notes:
1. See Roadway Plans for river training and bank stabilization details.
2. See Sheet 2 of 28 for Sections A-A through C-C.



ELEVATION



PLAN



LOCATION SKETCH

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
f'c = 4,000 psi (Superstructure Concrete)
fy = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 8,500 psi
f'ci = 6,500 psi
fpu = 270,000 psi (0.6" ϕ Low Relaxation Strands)
fpbt = 202,300 psi (0.6" ϕ Low Relaxation Strands)

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition.

LOADING HL-93

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.074g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.111g
Soil Site Class = D

STATE OF ILLINOIS ★ LICENSED STRUCTURAL ENGINEER ★ MICHAEL T. HALEY 081-005991 CHATHAM

Michael T. Haley 9/29/2021

Michael T. Haley — Date
Licensed Structural Engineer
State of Illinois No. 081-005991
Expires 11/30/2022

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 78 OVER PLUM RIVER
F.A.P. ROUTE 642 - SECTION 10BR-5
JO DAVIESS COUNTY
STATION 318+27.34
STRUCTURE NO. 043-0081

LIN ENGINEERING, LTD. Consulting Engineers, Springfield, Illinois

USER NAME =	DESIGNED - AML	REVISED -	
	CHECKED - MTH	REVISED -	
PLOT SCALE =	DRAWN - AJF	REVISED -	
PLOT DATE = 2:31:33 PM	CHECKED - MTH	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	39
		CONTRACT NO. 64H58		
	ILLINOIS FED. AID PROJECT			

MODEL: Default
FILE NAME: E:\2017-2\Struct\4. Final Design\CADD\CADD_Sheets\043008I-64H58-001-GPE.DGN

9/29/2021 2:31:33 PM

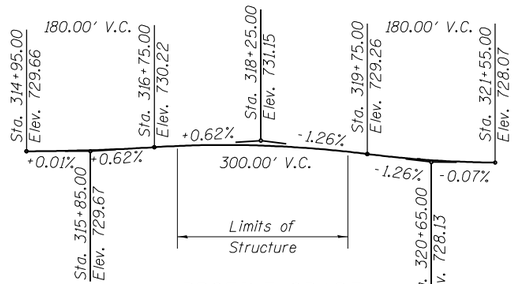
GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

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.

No slipforming of the parapets will be allowed.



PROFILE GRADE
(Along ℄ IL 78)

INDEX OF SHEETS

1. General Plan & Elevation
2. General Data
3. Stage Construction Details
4. Temporary Concrete Barrier for Stage Construction
5.-7. Top of Slab Elevations
8.-9. Top of Approach Slab Elevations
10. Superstructure
11. Superstructure Details
12.-13. Diaphragm Details
14. Drainage Scupper, DS-33
15.-16. Bridge Approach Slab Details
17. Framing Details
18.-19. IL36N Beam
20. IL36N Beam Details
21. South Abutment
22. North Abutment
23. Pier Details
24. HP Pile Details
25. Bar Splicer Assembly Details
26.-28. Soil Boring Data

STATION 318+27.34
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RT. 642 - SEC. 10BR-5
LOADING HL-93
STRUCTURE NO. 043-0081

NAME PLATE
See Std. 515001

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A5	Sq. Yd.	-	364	364
Filter Fabric	Sq. Yd.	-	364	364
Slope Mattress 6"	Sq. Yd.	-	610	610
Protective Coat	Sq. Yd.	1105	-	1105
Removal of Existing Structures	Each	1	-	1
Structure Excavation	Cu. Yd.	-	273	273
Concrete Structures	Cu. Yd.	-	117.5	117.5
Concrete Superstructure	Cu. Yd.	274.0	-	274.0
Bridge Deck Grooving	Sq. Yd.	845	-	845
Concrete Superstructure (Approach Slab)	Cu. Yd.	94.6	-	94.6
Furnishing and Erecting Precast Prestressed Concrete Beams, IL 36N	Foot	1,137	-	1,137
Reinforcement Bars	Pound	-	1,090	1,090
Reinforcement Bars, Epoxy Coated	Pound	107,010	26,030	133,040
Bar Splicers	Each	732	200	932
Furnishing Steel Piles HP14x89	Foot	-	205	205
Driving Piles	Foot	-	205	205
Test Pile Steel HP14x89	Each	-	2	2
Pile Shoes	Each	-	12	12
Name Plates	Each	1	-	1
Drilled Shaft in Soil	Cu. Yd.	-	5.5	5.5
Drilled Shaft in Rock	Cu. Yd.	-	8.8	8.8
Temporary Sheet Piling	Sq. Ft.	-	328	328
Temporary Soil Retention System	Sq. Ft.	-	657	657
Granular Backfill for Structures	Cu. Yd.	-	153.0	153.0
Geocomposite Wall Drain	Sq. Yd.	-	737	737
Drainage Scuppers, DS-33	Each	2	-	2
Pipe Underdrains for Structures 4"	Foot	-	146	146

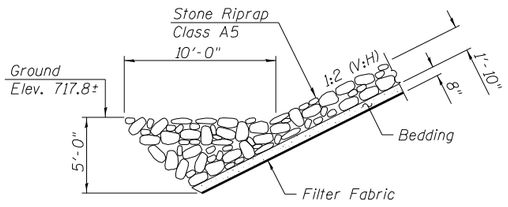
WATERWAY INFORMATION

Drainage Area = 13.8 sq. mi. Low Grade Elev. 728.1 @ Sta. 321+00

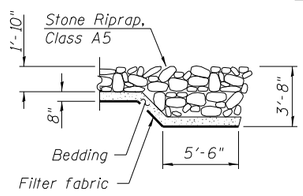
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	2270	613	636	722.0	2.0	2.0	724.0	724.0
Design	50	3710	706	737	722.7	3.0	2.9	725.7	725.6
Base	100	4380	747	781	723.0	4.3	3.2	727.3	726.2
Overtopping	200	4800	774	811	723.2	4.9	4.9	728.1	728.1
Max. Calc.	-	-	-	-	-				

DESIGN SCOUR ELEVATION TABLE

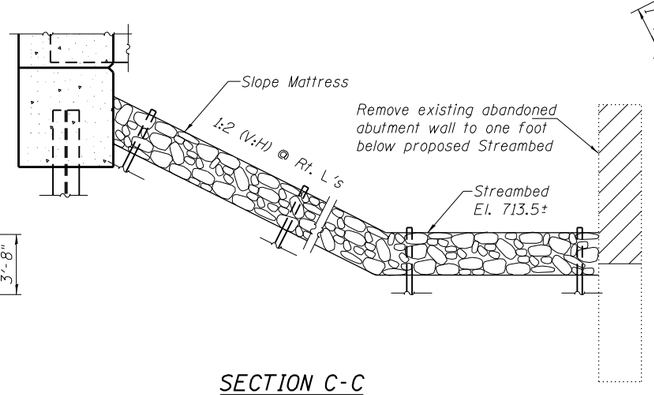
	S. Abut.	Pier	N. Abut.	Item 113
Q100	722.38	710.50	721.67	8
Q200	722.38	710.50	721.67	
Design	722.38	710.50	721.67	
Check	722.38	710.50	721.67	



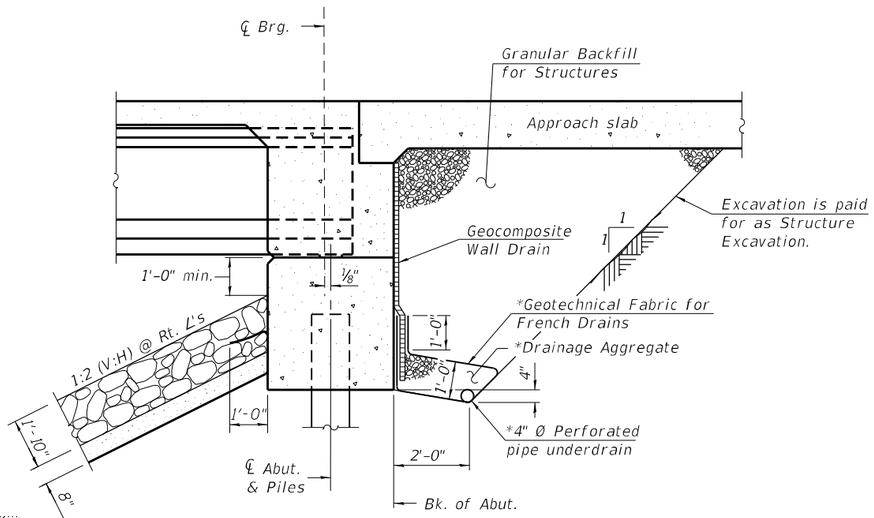
SECTION A-A



SECTION B-B



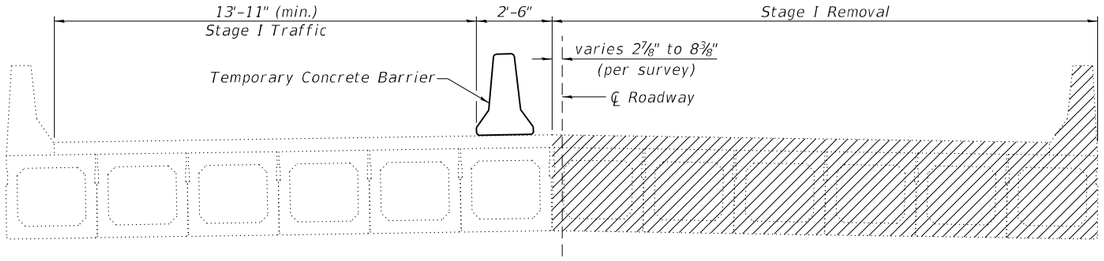
SECTION C-C
(Horiz. dim. @ Rt. L's)



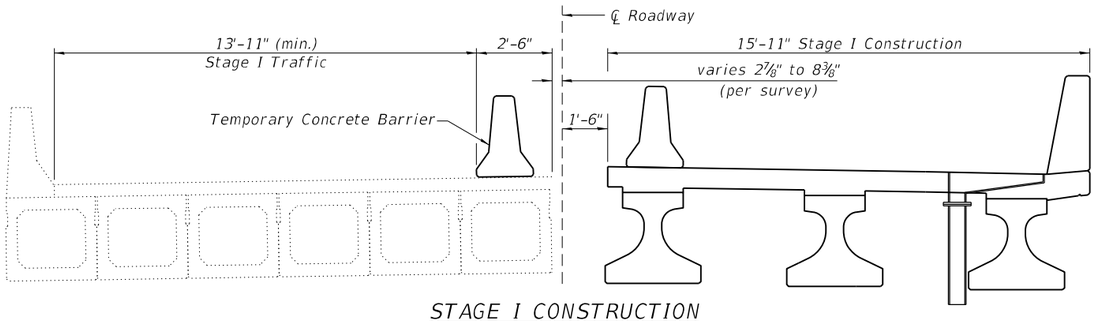
SECTION THRU INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)
N. Abut. shown, S. Abut. similar except as noted.
See Section C-C for slope protection at S. Abut.

*Included in the cost of Pipe Underdrains for Structures. (See Special Provisions)

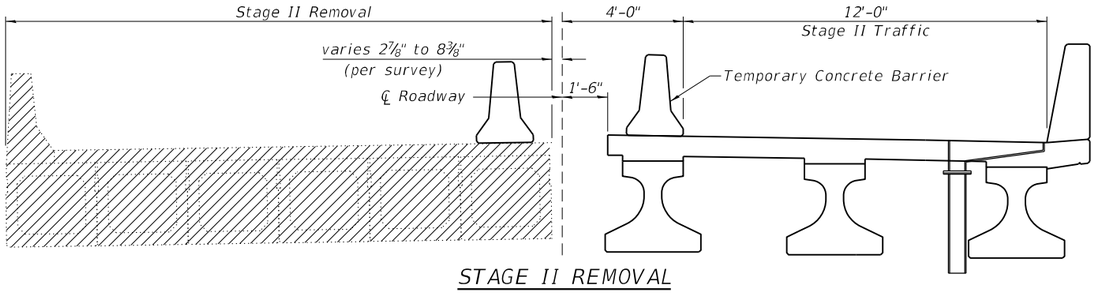
Note:
All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



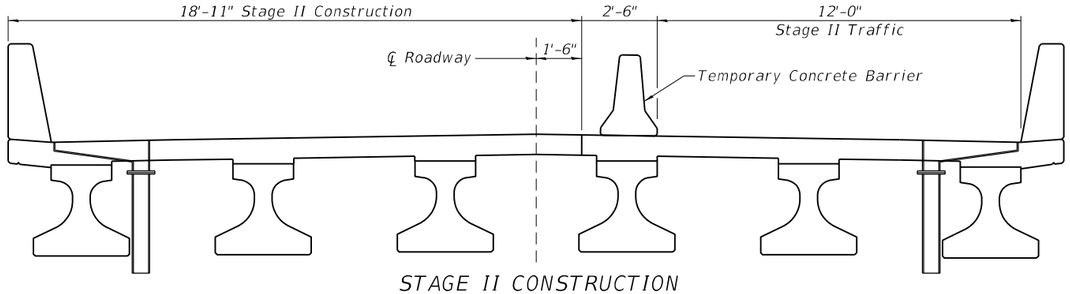
STAGE I REMOVAL



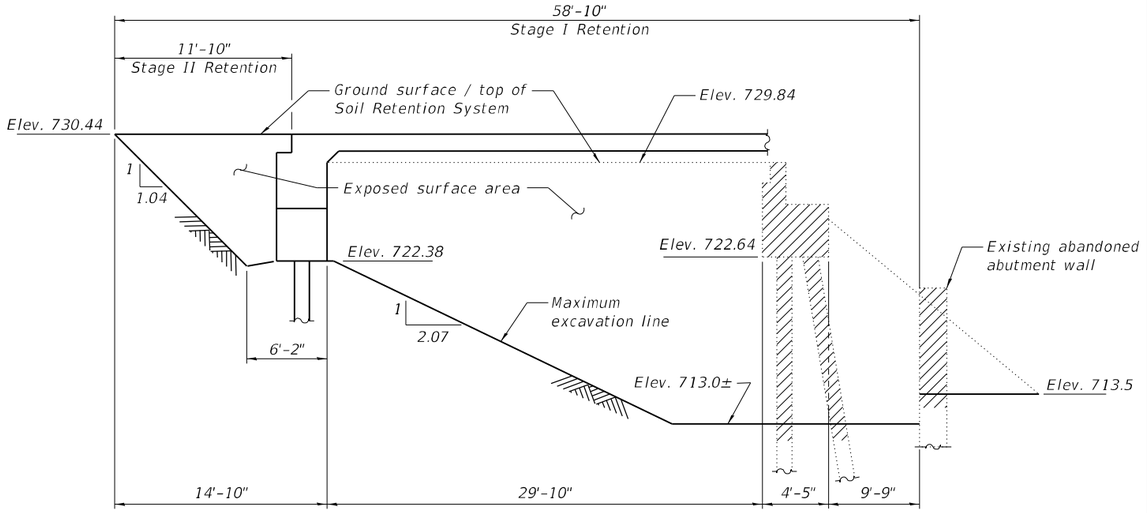
STAGE I CONSTRUCTION



STAGE II REMOVAL

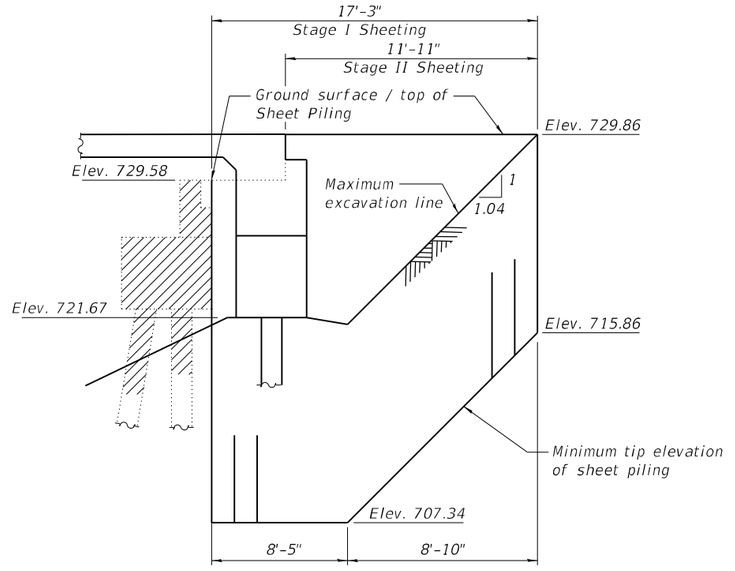


STAGE II CONSTRUCTION



TEMPORARY SOIL RETENTION SYSTEM
AT SOUTH ABUTMENT

A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.



TEMPORARY SHEET PILING
AT NORTH ABUTMENT

Min. Section Modulus
for Sheeting = 10.66 in³/ft

If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

Notes:
All sections are looking north.
Hatching represents limits of Removal of Existing Structures.
See roadway plans for quantity of Temporary Concrete Barrier.
See Sheet 4 of 28 for details of Temporary Concrete Barrier.
See Sheets 21 thru 23 of 28 for location of Stage Construction line for substructure units.

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Springfield, Illinois

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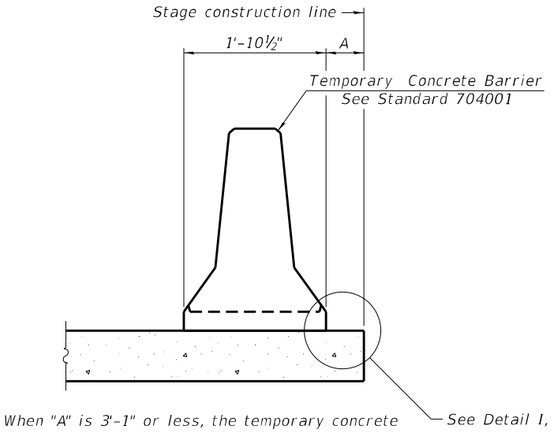
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

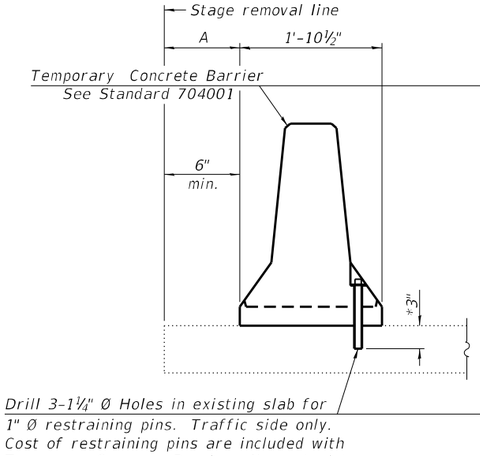
STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 043-0081
SHEET 3 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	41
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		



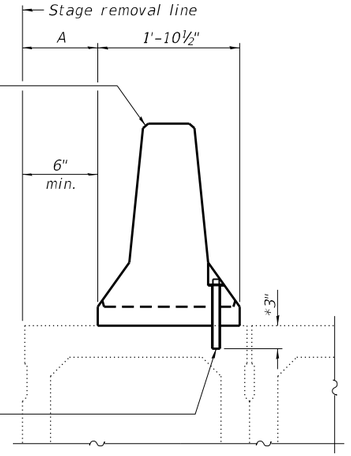
When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



Drill 3-1¼" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

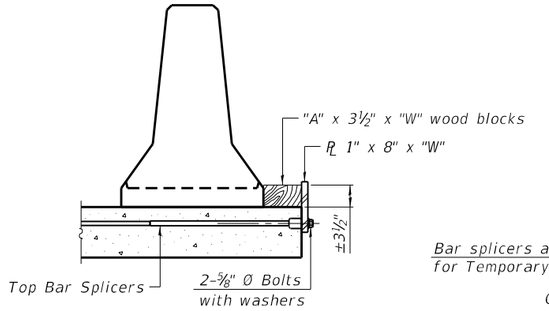
EXISTING SLAB



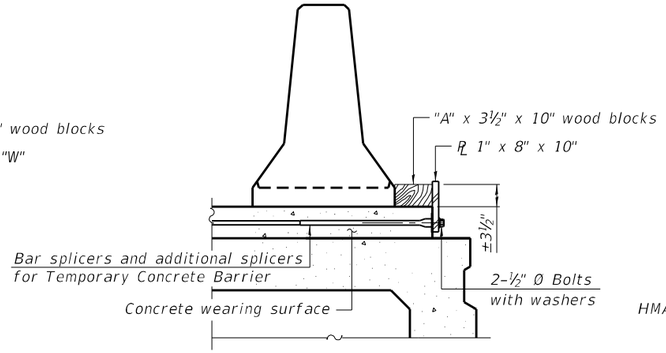
* When hot-mix asphalt wearng surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

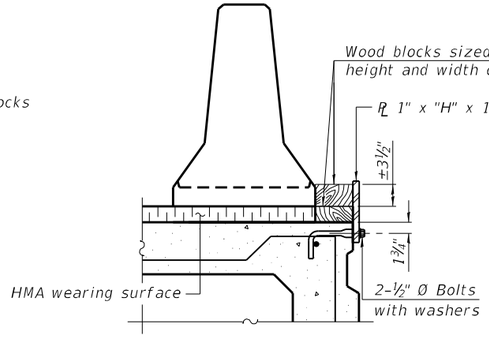
SECTIONS THRU SLAB OR DECK BEAM



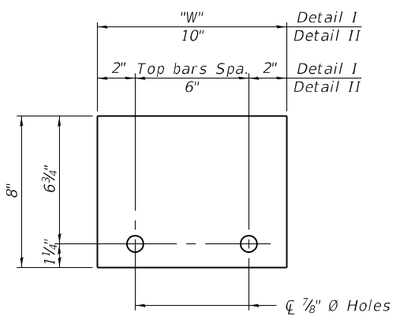
DETAIL I



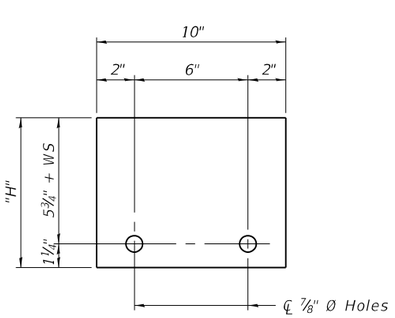
DETAIL II



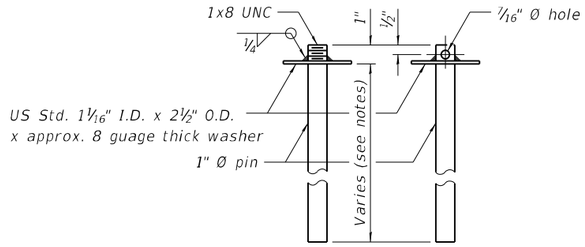
DETAIL III



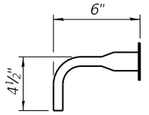
STEEL RETAINER ℄ 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER ℄ 1" x "H" x 10"
(Detail III)



RESTRAINING PIN



BAR SPLICER FOR #4 BAR - DETAIL III

Notes:

Cost of retainer assembly is included with Temporary Concrete Barrier.

A retainer assembly shall be located at the approximate ℄ of each temporary concrete barrier.

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than 1½", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.

Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.

Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

R-27

2-17-2017

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Springfield, Illinois

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 043-0081
SHEET 4 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	42
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

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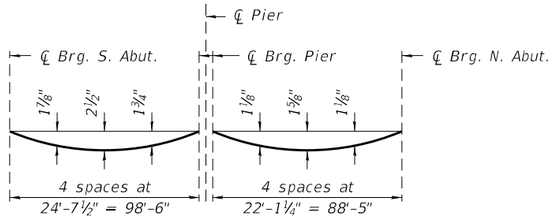
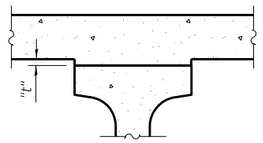


DEAD LOAD DEFLECTION DIAGRAM

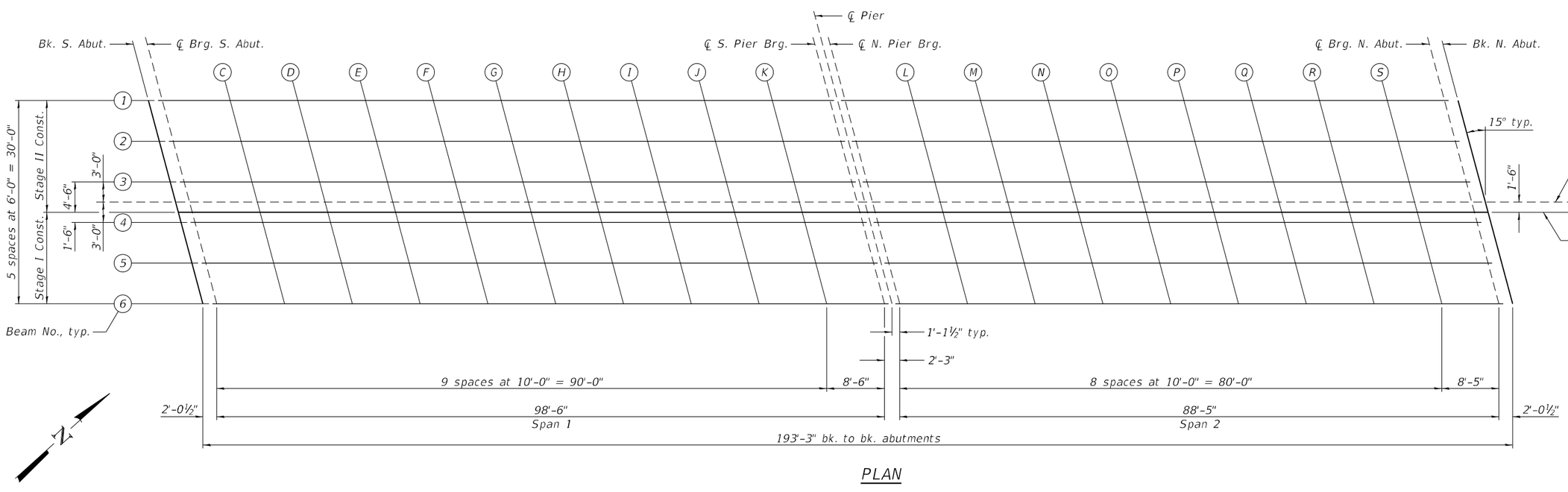
(Includes weight of concrete, excluding beams)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets 6 and 7 of 28.



To determine "t": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" shown on sheets 6 and 7 of 28, minus slab thickness, equals the fillet heights "t" above top flanges of beams.

FILLET HEIGHTS



PLAN

MODEL: Default
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LIN ENGINEERING, LTD. Consulting Engineers Springfield, Illinois	USER NAME =	DESIGNED - AML	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TOP OF SLAB ELEVATIONS STRUCTURE NO. 043-0081
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	PLOT SCALE =	DRAWN - AJF	REVISED -		SHEET 5 OF 28 SHEETS
	PLOT DATE = 11:47:38 AM	CHECKED - MTH	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	43
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	317+21.66	-15.00	730.20	730.20
℄ Brg. S. Abut.	317+23.70	-15.00	730.21	730.21
C	317+33.70	-15.00	730.24	730.30
D	317+43.70	-15.00	730.26	730.37
E	317+53.70	-15.00	730.27	730.43
F	317+63.70	-15.00	730.28	730.47
G	317+73.70	-15.00	730.29	730.48
H	317+83.70	-15.00	730.28	730.46
I	317+93.70	-15.00	730.27	730.43
J	318+03.70	-15.00	730.26	730.37
K	318+13.70	-15.00	730.24	730.29
℄ S. Pier Brg.	318+22.20	-15.00	730.21	730.21
℄ Pier	318+23.33	-15.00	730.21	730.21
℄ N. Pier Brg.	318+24.45	-15.00	730.21	730.21
L	318+34.45	-15.00	730.17	730.21
M	318+44.45	-15.00	730.13	730.21
N	318+54.45	-15.00	730.08	730.19
O	318+64.45	-15.00	730.03	730.15
P	318+74.45	-15.00	729.97	730.09
Q	318+84.45	-15.00	729.90	730.01
R	318+94.45	-15.00	729.83	729.91
S	319+04.45	-15.00	729.75	729.79
℄ Brg. N. Abut.	319+12.87	-15.00	729.68	729.68
Bk. N. Abut.	319+14.91	-15.00	729.66	729.66

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	317+23.27	-9.00	730.31	730.31
℄ Brg. S. Abut.	317+25.31	-9.00	730.32	730.32
C	317+35.31	-9.00	730.34	730.41
D	317+45.31	-9.00	730.37	730.49
E	317+55.31	-9.00	730.38	730.56
F	317+65.31	-9.00	730.39	730.59
G	317+75.31	-9.00	730.39	730.60
H	317+85.31	-9.00	730.39	730.59
I	317+95.31	-9.00	730.38	730.54
J	318+05.31	-9.00	730.36	730.48
K	318+15.31	-9.00	730.34	730.39
℄ S. Pier Brg.	318+23.81	-9.00	730.31	730.31
℄ Pier	318+24.94	-9.00	730.31	730.31
℄ N. Pier Brg.	318+26.06	-9.00	730.31	730.31
L	318+36.06	-9.00	730.27	730.32
M	318+46.06	-9.00	730.23	730.32
N	318+56.06	-9.00	730.18	730.30
O	318+66.06	-9.00	730.13	730.26
P	318+76.06	-9.00	730.06	730.20
Q	318+86.06	-9.00	730.00	730.11
R	318+96.06	-9.00	729.92	730.01
S	319+06.06	-9.00	729.84	729.89
℄ Brg. N. Abut.	319+14.48	-9.00	729.77	729.77
Bk. N. Abut.	319+16.52	-9.00	729.75	729.75

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	317+24.88	-3.00	730.41	730.41
℄ Brg. S. Abut.	317+26.92	-3.00	730.41	730.41
C	317+36.92	-3.00	730.44	730.51
D	317+46.92	-3.00	730.46	730.59
E	317+56.92	-3.00	730.47	730.65
F	317+66.92	-3.00	730.48	730.68
G	317+76.92	-3.00	730.48	730.69
H	317+86.92	-3.00	730.48	730.67
I	317+96.92	-3.00	730.47	730.63
J	318+06.92	-3.00	730.45	730.56
K	318+16.92	-3.00	730.42	730.48
℄ S. Pier Brg.	318+25.42	-3.00	730.40	730.40
℄ Pier	318+26.54	-3.00	730.39	730.39
℄ N. Pier Brg.	318+27.67	-3.00	730.39	730.39
L	318+37.67	-3.00	730.35	730.40
M	318+47.67	-3.00	730.31	730.40
N	318+57.67	-3.00	730.26	730.38
O	318+67.67	-3.00	730.21	730.34
P	318+77.67	-3.00	730.14	730.28
Q	318+87.67	-3.00	730.08	730.19
R	318+97.67	-3.00	730.00	730.09
S	319+07.67	-3.00	729.92	729.96
℄ Brg. N. Abut.	319+16.08	-3.00	729.85	729.85
Bk. N. Abut.	319+18.13	-3.00	729.83	729.83

℄ ROADWAY & PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	317+25.68	0.000	730.45	730.45
℄ Brg. S. Abut.	317+27.72	0.000	730.46	730.46
C	317+37.72	0.000	730.49	730.55
D	317+47.72	0.000	730.51	730.63
E	317+57.72	0.000	730.52	730.69
F	317+67.72	0.000	730.53	730.73
G	317+77.72	0.000	730.53	730.74
H	317+87.72	0.000	730.52	730.72
I	317+97.72	0.000	730.51	730.67
J	318+07.72	0.000	730.49	730.61
K	318+17.72	0.000	730.47	730.52
℄ S. Pier Brg.	318+26.22	0.000	730.44	730.44
℄ Pier	318+27.35	0.000	730.44	730.44
℄ N. Pier Brg.	318+28.47	0.000	730.43	730.43
L	318+38.47	0.000	730.40	730.44
M	318+48.47	0.000	730.35	730.44
N	318+58.47	0.000	730.30	730.42
O	318+68.47	0.000	730.25	730.38
P	318+78.47	0.000	730.18	730.32
Q	318+88.47	0.000	730.12	730.23
R	318+98.47	0.000	730.04	730.12
S	319+08.47	0.000	729.96	730.00
℄ Brg. N. Abut.	319+16.89	0.000	729.89	729.89
Bk. N. Abut.	319+18.93	0.000	729.87	729.87

Note:
Offsets measured from ℄ roadway.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 043-0081
SHEET 6 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	44
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

STAGE CONST. LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	317+26.08	1.50	730.43	730.43
℄ Brg. S. Abut.	317+28.12	1.50	730.44	730.44
C	317+38.12	1.50	730.46	730.53
D	317+48.12	1.50	730.48	730.61
E	317+58.12	1.50	730.50	730.67
F	317+68.12	1.50	730.50	730.71
G	317+78.12	1.50	730.50	730.71
H	317+88.12	1.50	730.50	730.70
I	317+98.12	1.50	730.49	730.65
J	318+08.12	1.50	730.47	730.58
K	318+18.12	1.50	730.44	730.50
℄ S. Pier Brg.	318+26.62	1.50	730.42	730.42
℄ Pier	318+27.75	1.50	730.41	730.41
℄ N. Pier Brg.	318+28.87	1.50	730.41	730.41
L	318+38.87	1.50	730.37	730.42
M	318+48.87	1.50	730.33	730.42
N	318+58.87	1.50	730.28	730.40
O	318+68.87	1.50	730.22	730.36
P	318+78.87	1.50	730.16	730.29
Q	318+88.87	1.50	730.09	730.21
R	318+98.87	1.50	730.02	730.10
S	319+08.87	1.50	729.93	729.97
℄ Brg. N. Abut.	319+17.29	1.50	729.86	729.86
Bk. N. Abut.	319+19.33	1.50	729.84	729.84

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	317+26.48	3.00	730.41	730.41
℄ Brg. S. Abut.	317+28.53	3.00	730.42	730.42
C	317+38.53	3.00	730.44	730.51
D	317+48.53	3.00	730.46	730.59
E	317+58.53	3.00	730.47	730.65
F	317+68.53	3.00	730.48	730.68
G	317+78.53	3.00	730.48	730.69
H	317+88.53	3.00	730.48	730.67
I	317+98.53	3.00	730.46	730.63
J	318+08.53	3.00	730.44	730.56
K	318+18.53	3.00	730.42	730.47
℄ S. Pier Brg.	318+27.03	3.00	730.39	730.39
℄ Pier	318+28.15	3.00	730.39	730.39
℄ N. Pier Brg.	318+29.28	3.00	730.39	730.39
L	318+39.28	3.00	730.35	730.40
M	318+49.28	3.00	730.30	730.39
N	318+59.28	3.00	730.25	730.37
O	318+69.28	3.00	730.20	730.33
P	318+79.28	3.00	730.13	730.27
Q	318+89.28	3.00	730.06	730.18
R	318+99.28	3.00	729.99	730.07
S	319+09.28	3.00	729.91	729.95
℄ Brg. N. Abut.	319+17.69	3.00	729.83	729.83
Bk. N. Abut.	319+19.73	3.00	729.82	729.82

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	317+28.09	9.00	730.33	730.33
℄ Brg. S. Abut.	317+30.13	9.00	730.33	730.33
C	317+40.13	9.00	730.36	730.42
D	317+50.13	9.00	730.37	730.50
E	317+60.13	9.00	730.39	730.56
F	317+70.13	9.00	730.39	730.59
G	317+80.13	9.00	730.39	730.60
H	317+90.13	9.00	730.38	730.58
I	318+00.13	9.00	730.37	730.54
J	318+10.13	9.00	730.35	730.47
K	318+20.13	9.00	730.32	730.38
℄ S. Pier Brg.	318+28.63	9.00	730.30	730.30
℄ Pier	318+29.76	9.00	730.29	730.29
℄ N. Pier Brg.	318+30.88	9.00	730.29	730.29
L	318+40.88	9.00	730.25	730.30
M	318+50.88	9.00	730.21	730.29
N	318+60.88	9.00	730.15	730.27
O	318+70.88	9.00	730.10	730.23
P	318+80.88	9.00	730.03	730.17
Q	318+90.88	9.00	729.96	730.08
R	319+00.88	9.00	729.89	729.97
S	319+10.88	9.00	729.80	729.84
℄ Brg. N. Abut.	319+19.30	9.00	729.73	729.73
Bk. N. Abut.	319+21.34	9.00	729.71	729.71

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	317+29.70	15.00	730.23	730.23
℄ Brg. S. Abut.	317+31.74	15.00	730.23	730.23
C	317+41.74	15.00	730.25	730.32
D	317+51.74	15.00	730.27	730.39
E	317+61.74	15.00	730.28	730.44
F	317+71.74	15.00	730.29	730.47
G	317+81.74	15.00	730.28	730.48
H	317+91.74	15.00	730.28	730.46
I	318+01.74	15.00	730.26	730.41
J	318+11.74	15.00	730.24	730.35
K	318+21.74	15.00	730.22	730.26
℄ S. Pier Brg.	318+30.24	15.00	730.19	730.19
℄ Pier	318+31.37	15.00	730.18	730.18
℄ N. Pier Brg.	318+32.49	15.00	730.18	730.18
L	318+42.49	15.00	730.14	730.18
M	318+52.49	15.00	730.09	730.17
N	318+62.49	15.00	730.04	730.15
O	318+72.49	15.00	729.98	730.10
P	318+82.49	15.00	729.92	730.04
Q	318+92.49	15.00	729.85	729.95
R	319+02.49	15.00	729.77	729.85
S	319+12.49	15.00	729.69	729.72
℄ Brg. N. Abut.	319+20.91	15.00	729.61	729.61
Bk. N. Abut.	319+22.95	15.00	729.59	729.59

Note:
Offsets measured from ℄ roadway.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 043-0081
SHEET 7 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	45
			CONTRACT NO. 64H58	
	ILLINOIS	FED. AID PROJECT		

WEST EDGE OF SHOULDER

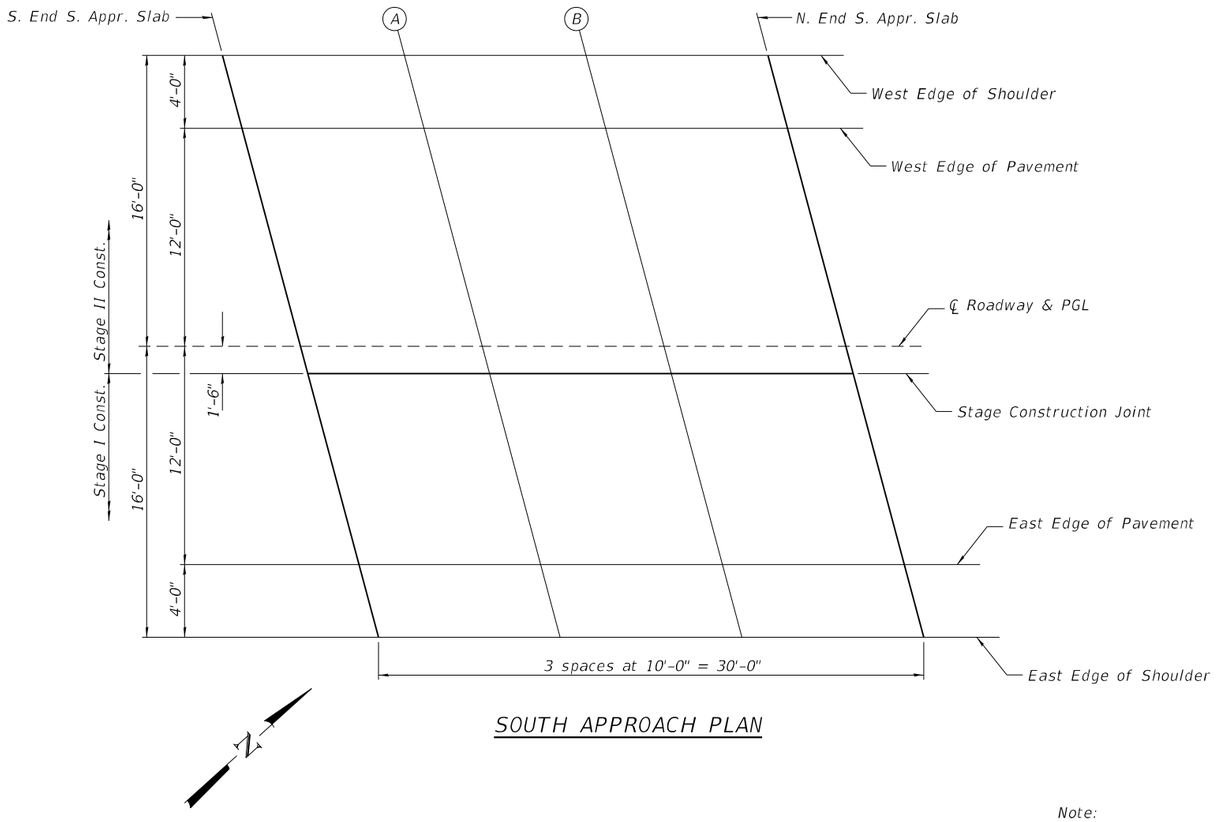
Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr. Slab	316+92.43	-16.00	730.06
A	317+02.43	-16.00	730.11
B	317+12.43	-16.00	730.15
N. End S. Appr. Slab	317+22.43	-16.00	730.18

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr. Slab	316+93.50	-12.00	730.14
A	317+03.50	-12.00	730.19
B	317+13.50	-12.00	730.23
N. End S. Appr. Slab	317+23.50	-12.00	730.27

℄ ROADWAY & PGL

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr. Slab	316+96.72	0.000	730.34
A	317+06.72	0.000	730.39
B	317+16.72	0.000	730.42
N. End S. Appr. Slab	317+26.72	0.000	730.46



SOUTH APPROACH PLAN

Note:
Offsets measured from ℄ roadway.

STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr. Slab	316+97.12	1.50	730.32
A	317+07.12	1.50	730.36
B	317+17.12	1.50	730.40
N. End S. Appr. Slab	317+27.12	1.50	730.44

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr. Slab	316+99.93	12.00	730.18
A	317+09.93	12.00	730.22
B	317+19.93	12.00	730.26
N. End S. Appr. Slab	317+29.93	12.00	730.29

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
S. End S. Appr. Slab	317+01.00	16.00	730.10
A	317+11.00	16.00	730.14
B	317+21.00	16.00	730.18
N. End S. Appr. Slab	317+31.00	16.00	730.21

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8/9/2021 11:47:42 AM

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Springfield, Illinois

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB ELEVATIONS
STRUCTURE NO. 043-0081
SHEET 8 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	46
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
S. End N. Appr. Slab	319+13.61	-16.00	729.66
T	319+23.61	-16.00	729.56
U	319+33.61	-16.00	729.47
N. End N. Appr. Slab	319+43.61	-16.00	729.36

WEST EDGE OF PAVEMENT

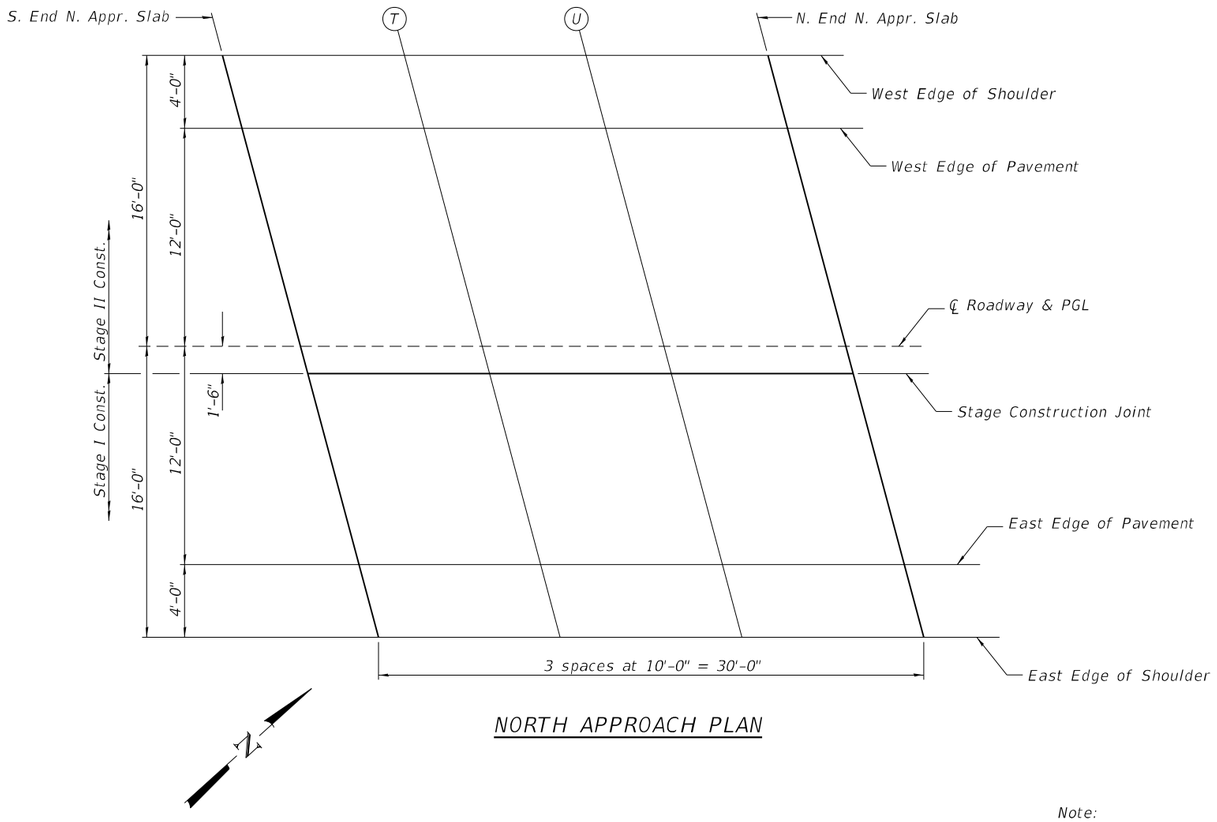
Location	Station	Offset	Theoretical Grade Elevations
S. End N. Appr. Slab	319+14.68	-12.00	729.73
T	319+24.68	-12.00	729.63
U	319+34.68	-12.00	729.54
N. End N. Appr. Slab	319+44.68	-12.00	729.43

℄ ROADWAY & PGL

Location	Station	Offset	Theoretical Grade Elevations
S. End N. Appr. Slab	319+17.89	0.000	729.88
T	319+27.89	0.000	729.78
U	319+37.89	0.000	729.68
N. End N. Appr. Slab	319+47.89	0.000	729.58

STAGE CONSTRUCTION JOINT

Location	Station	Offset	Theoretical Grade Elevations
S. End N. Appr. Slab	319+18.30	1.50	729.85
T	319+28.30	1.50	729.76
U	319+38.30	1.50	729.66
N. End N. Appr. Slab	319+48.30	1.50	729.55



NORTH APPROACH PLAN

Note:
Offsets measured from ℄ roadway.

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
S. End N. Appr. Slab	319+21.11	12.00	729.67
T	319+31.11	12.00	729.57
U	319+41.11	12.00	729.47
N. End N. Appr. Slab	319+51.11	12.00	729.36

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
S. End N. Appr. Slab	319+22.18	16.00	729.58
T	319+32.18	16.00	729.48
U	319+42.18	16.00	729.38
N. End N. Appr. Slab	319+52.18	16.00	729.27

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Springfield, Illinois

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REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB ELEVATIONS
STRUCTURE NO. 043-0081
SHEET 9 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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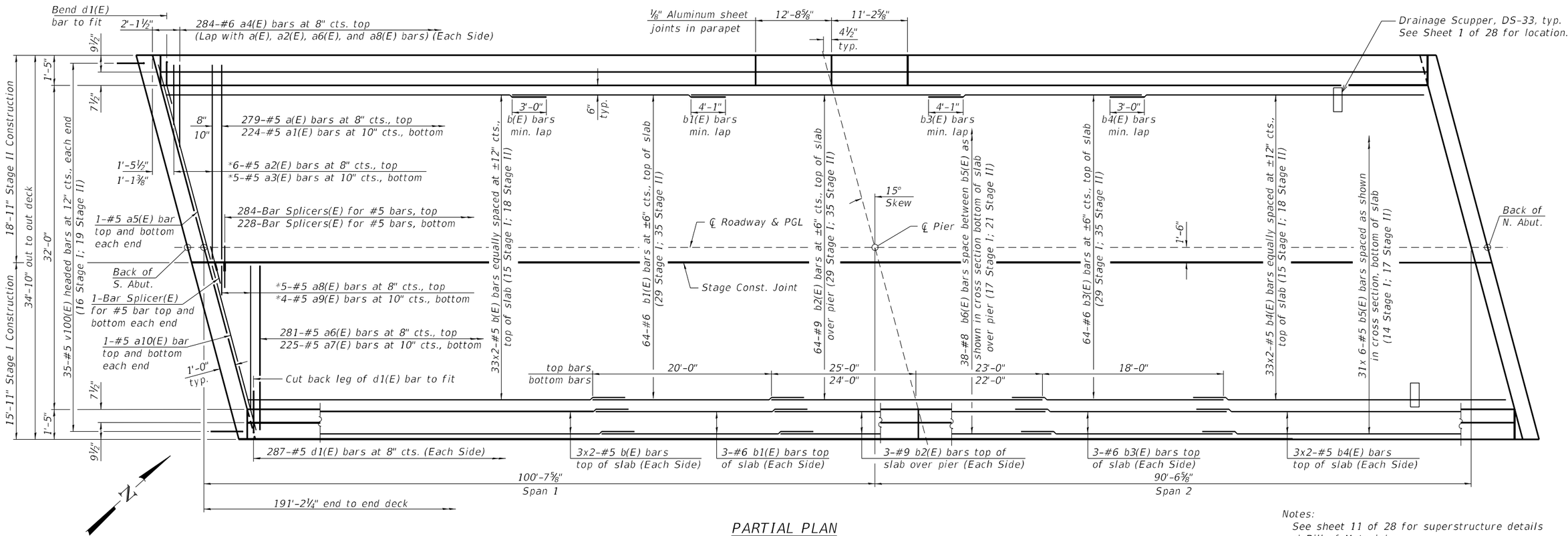
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		



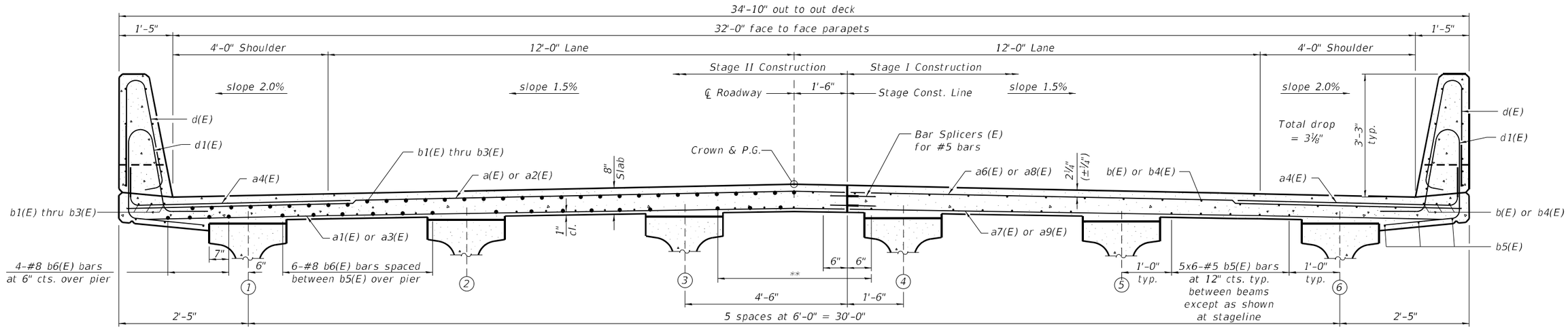
* See Field Cutting Diagram on sheet 11 of 28.

MINIMUM BAR LAP

#5 bar = 3'-6"

PARTIAL PLAN

Notes:
See sheet 11 of 28 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



NEAR PIER

CROSS SECTION

(Looking North)

NEAR MIDSPAN

** 5x6-#5 b5(E) bars at 12" cts. (1 stage I; 4 stage II)
6-#8 b6(E) bars spaced between b5(E) over pier (1 stage I; 5 stage II)

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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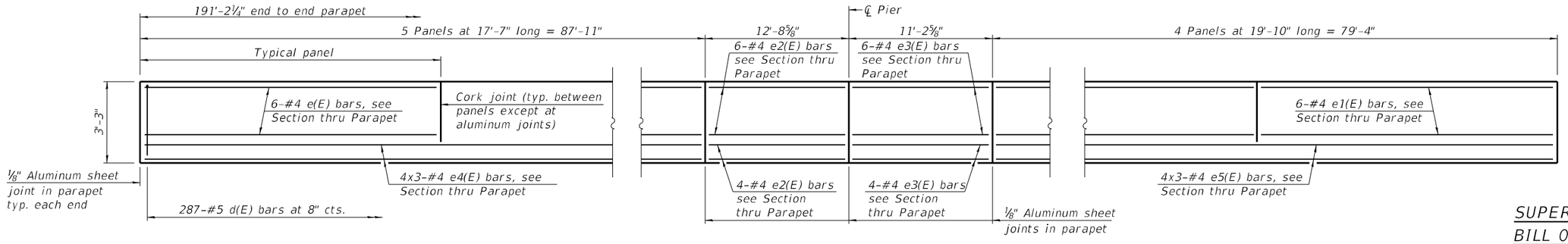
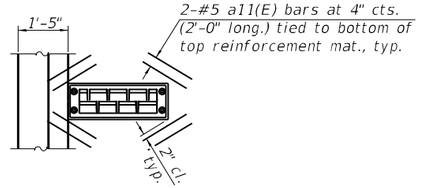


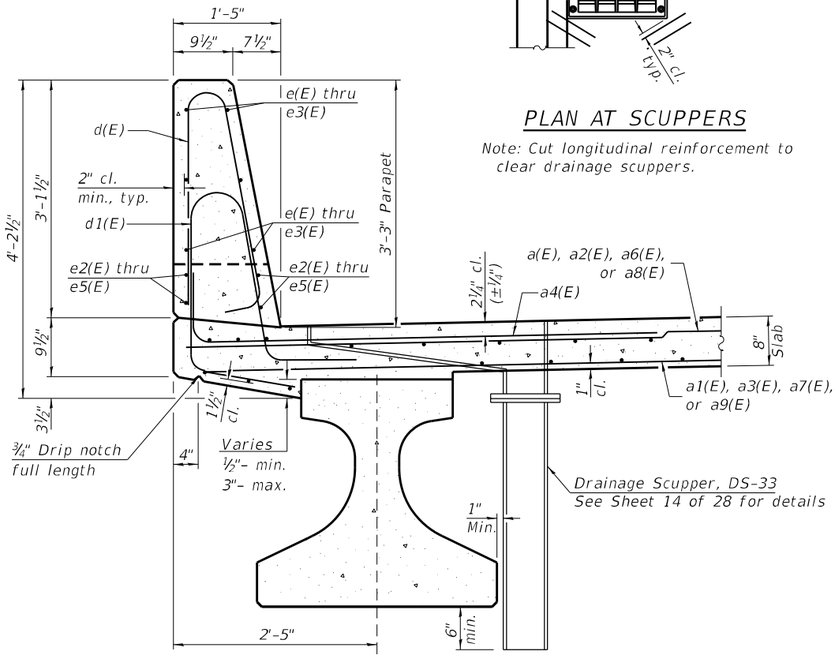
INSIDE ELEVATION OF PARAPET

(Looking West at West Parapet; East Parapet mirror image)

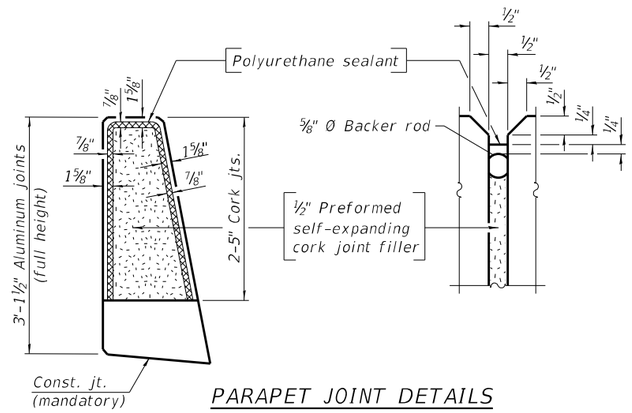


PLAN AT SCUPPERS

Note: Cut longitudinal reinforcement to clear drainage scuppers.



SECTION THRU PARAPET



PARAPET JOINT DETAILS

Notes:

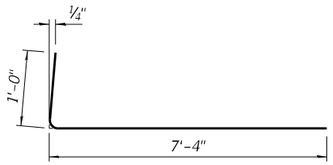
The ⅛" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.

The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.

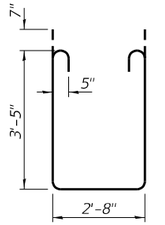
Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.

MINIMUM BAR LAP

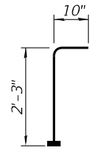
#4 bar = 2'-5"



BAR a4(E)

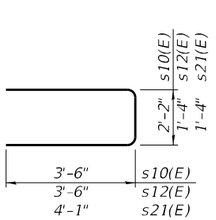


BAR s11(E)

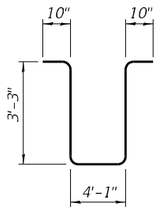


BAR v100(E)

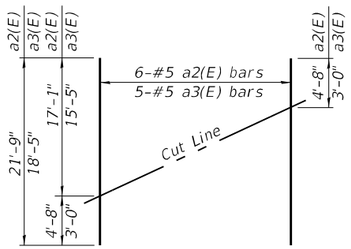
(Headed)



BARS s10(E), s12(E) & s21(E)

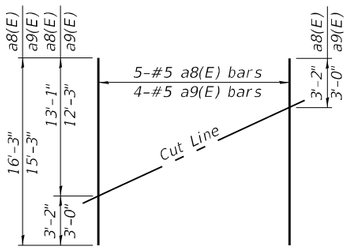


BARS s20(E)



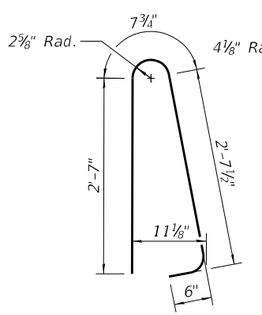
FIELD CUTTING DIAGRAM

Order a2(E) and a3(E) bars full length. Cut as shown and use remainder of bars in opposite end of deck.

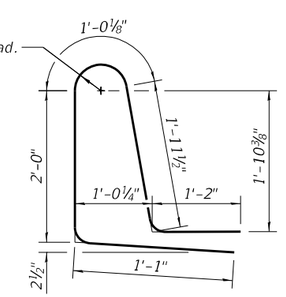


FIELD CUTTING DIAGRAM

Order a8(E) and a9(E) bars full length. Cut as shown and use remainder of bars in opposite end of deck.



BAR d(E)

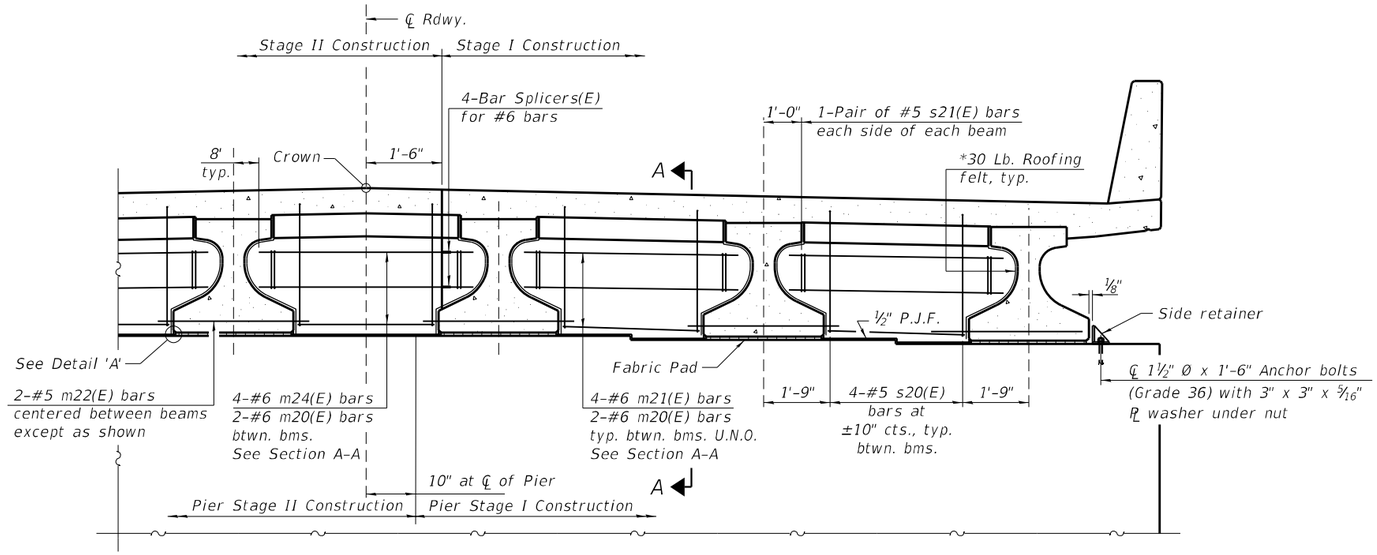


BAR d1(E)

SUPERSTRUCTURE BILL OF MATERIAL

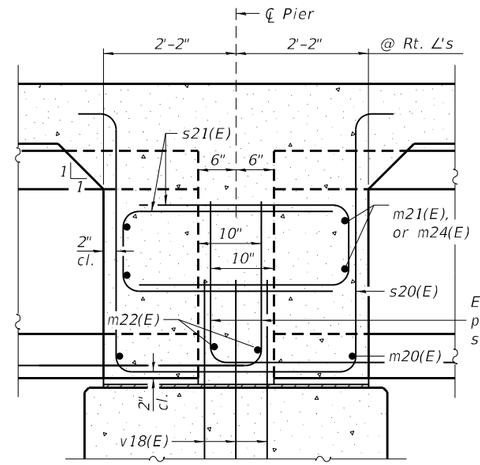
Bar	No.	Size	Length	Shape
a(E)	279	#5	18'-7"	
a1(E)	224	#5	18'-3"	
a2(E)	6	#5	21'-9"	
a3(E)	5	#5	18'-5"	
a4(E)	568	#6	8'-4"	
a5(E)	4	#5	19'-2"	
a6(E)	281	#5	15'-7"	
a7(E)	225	#5	15'-3"	
a8(E)	5	#5	16'-3"	
a9(E)	4	#5	15'-3"	
a10(E)	4	#5	16'-1"	
a11(E)	16	#5	2'-0"	
b(E)	78	#5	30'-9"	
b1(E)	70	#6	24'-1"	
b2(E)	70	#9	48'-0"	
b3(E)	70	#6	22'-1"	
b4(E)	78	#5	27'-9"	
b5(E)	186	#5	34'-10"	
b6(E)	38	#8	46'-0"	
d(E)	574	#5	6'-5"	
d1(E)	574	#5	7'-3"	
e(E)	60	#4	17'-3"	
e1(E)	48	#4	19'-6"	
e2(E)	20	#4	12'-5"	
e3(E)	20	#4	10'-11"	
e4(E)	24	#4	30'-10"	
e5(E)	24	#4	28'-0"	
m10(E)	8	#6	16'-1"	
m11(E)	16	#6	4'-10"	
m12(E)	8	#6	1'-7"	
m13(E)	10	#6	2'-6"	
m14(E)	4	#6	6"	
m15(E)	24	#5	4'-0"	
m17(E)	4	#6	3'-9"	
m18(E)	8	#6	19'-3"	
m20(E)	10	#6	2'-7"	
m21(E)	16	#6	4'-10"	
m22(E)	12	#5	4'-0"	
m24(E)	4	#6	3'-9"	
s10(E)	48	#5	9'-0"	
s11(E)	48	#5	10'-8"	
s12(E)	48	#5	8'-4"	
s20(E)	20	#5	12'-3"	
s21(E)	20	#5	9'-6"	
v100(E)	70	#5	3'-1"	
Reinforcement Bars, Epoxy Coated		Lbs.	71,740	
Concrete Superstructure		Cu. Yds.	266.2	

Bars indicated thus 1 x 2-#4 etc. indicates 1 line of bars with 2 lengths per line.



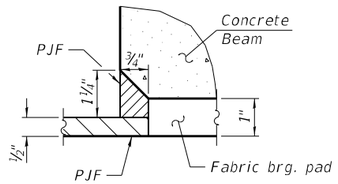
DIAPHRAGM AT PIER

*Bonded to sides of beams embedded into diaphragm.
(Looking North)

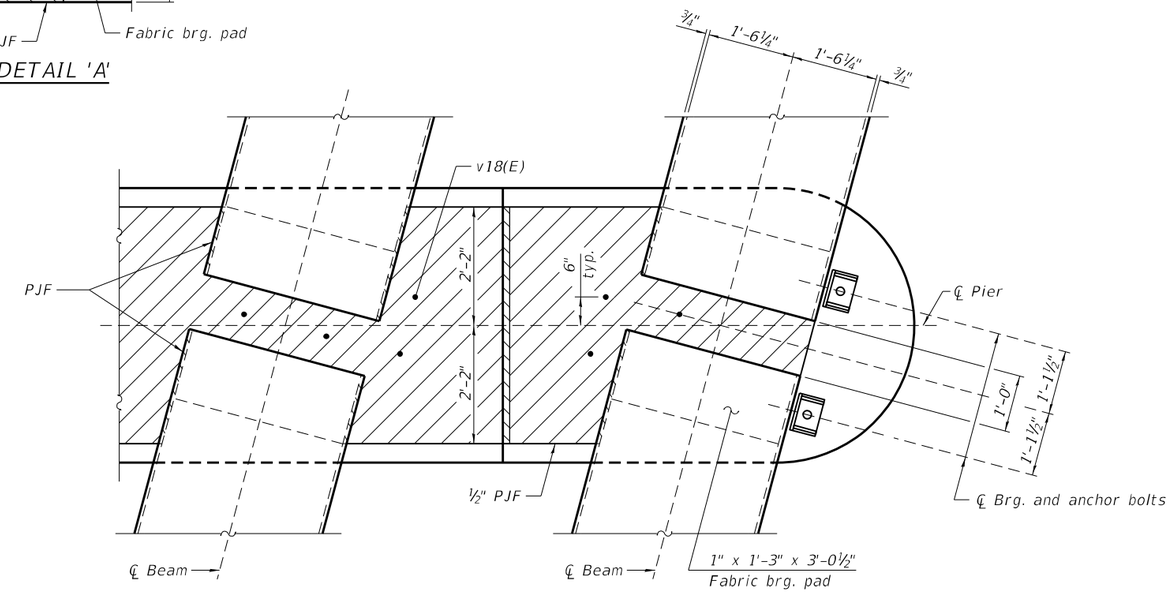


SECTION A-A

(Dimensions along ℄ of beam except as shown)

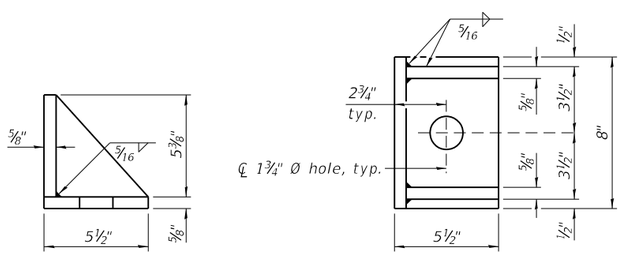


DETAIL 'A'



PLAN AT PIER

(Showing bearing pads and PJF details)



SIDE RETAINER

(2 required each side of pier).
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

Notes:
See sheet 11 of 28 for superstructure details and Bill of Material.
Cost of 30 Lb. roofing felt is included with Concrete Superstructure.
Cost of side retainer and anchor bolts shall be included with Concrete Structures.
The s20(E) and s21(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
Anchor bolts and side retainers shall be according to Article 521.06 of the Standard Specifications. Side retainers shall be hot dip galvanized.
Anchor bolts and side retainers shall be installed as each exterior beam is erected unless an equivalent temporary means of lateral restraint is used.

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Consulting Engineers
Springfield, Illinois

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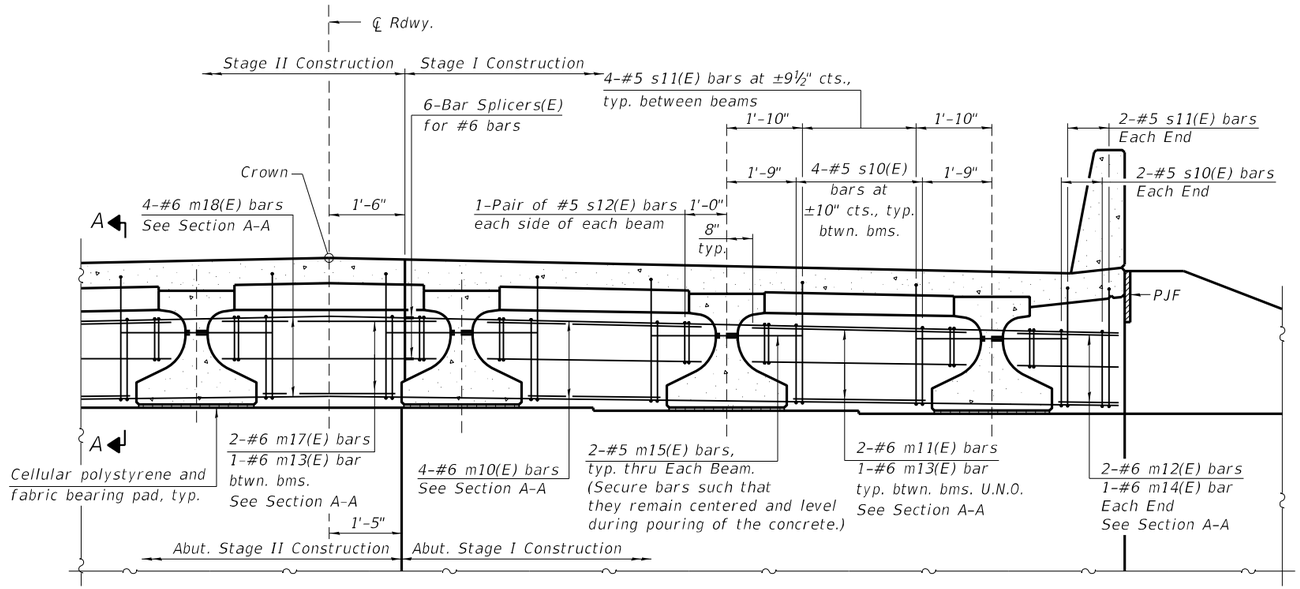
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

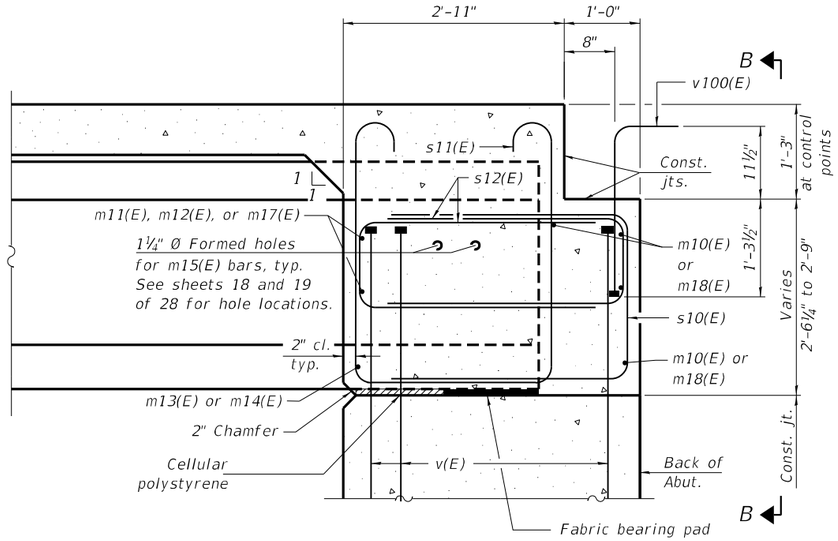
DIAPHRAGM DETAILS
STRUCTURE NO. 043-0081
SHEET 12 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	50
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		



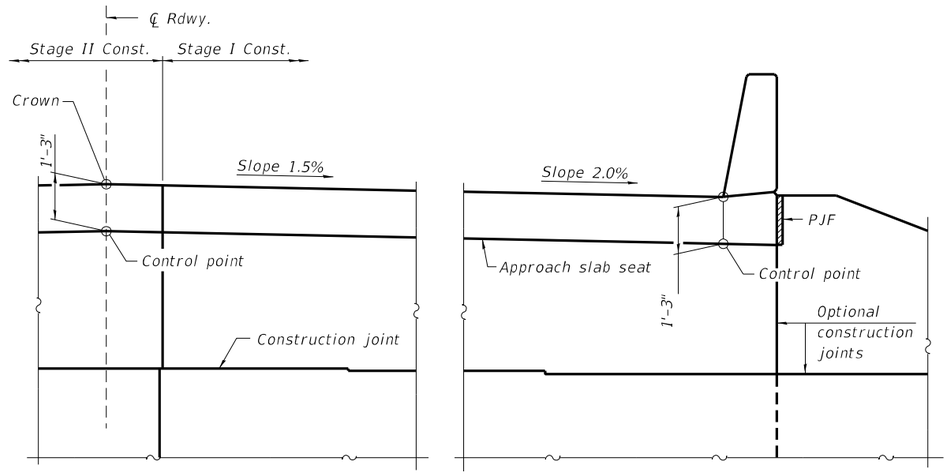
DIAPHRAGM AT ABUTMENT

(North Abutment looking North; South Abutment similar)
(All horizontal dimensions at right angles to ℄ roadway)



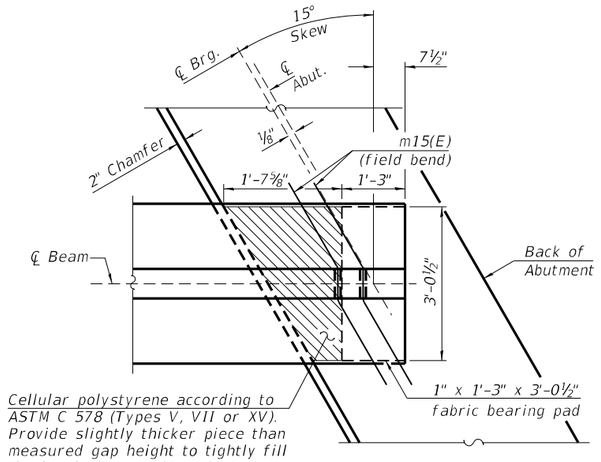
SECTION A-A

(at Rt. ℄'s)



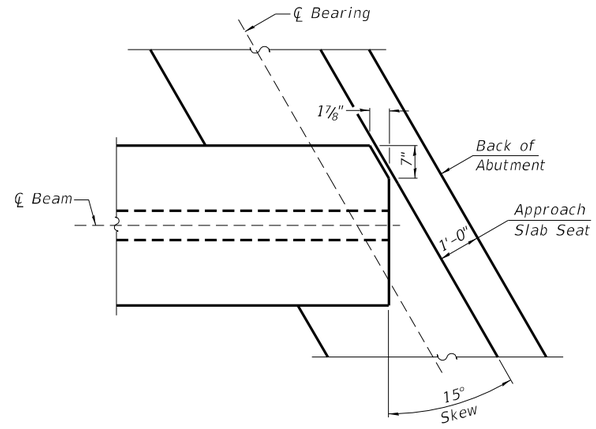
VIEW B-B

(South Abutment looking North; North Abutment similar)



PLAN AT ABUTMENT

(Showing bottom flange of beam)



TOP FLANGE CLIPPING DETAIL

Notes:

See sheet 11 of 28 for superstructure details and Bill of Material.
See sheet 15 of 28 for PJF details.
The s10(E), s11(E) and s12(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams. The approach slab seat shall have a constant slope determined from the control points shown.
Cost of cellular polystyrene is included with Concrete Superstructure.

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		CHECKED - MTH	REVISED -	
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	PLOT DATE = 2:27:20 PM	CHECKED - MTH	REVISED -	

DIAPHRAGM DETAILS
STRUCTURE NO. 043-0081
SHEET 13 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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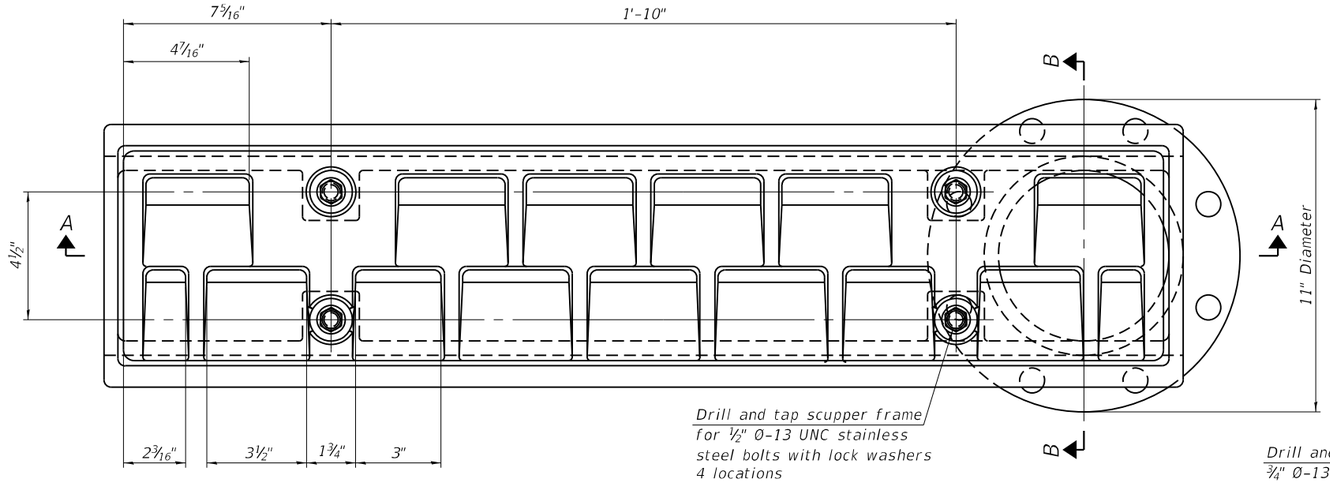
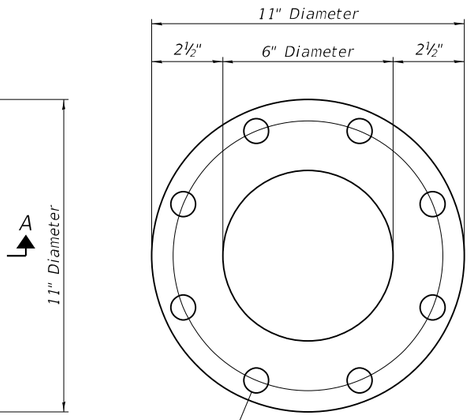
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		



PLAN



BOTTOM VIEW OF FLANGE ONLY

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M105, Class 35B and AASHTO M306.

Bolts, nuts and washers shall be according to ASTM A307 and shall be galvanized according to AASHTO M232. As an alternate stainless steel may be used.

Stainless steel hardware shall be according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frames and downspouts; however, the scupper grates shall remain cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval.

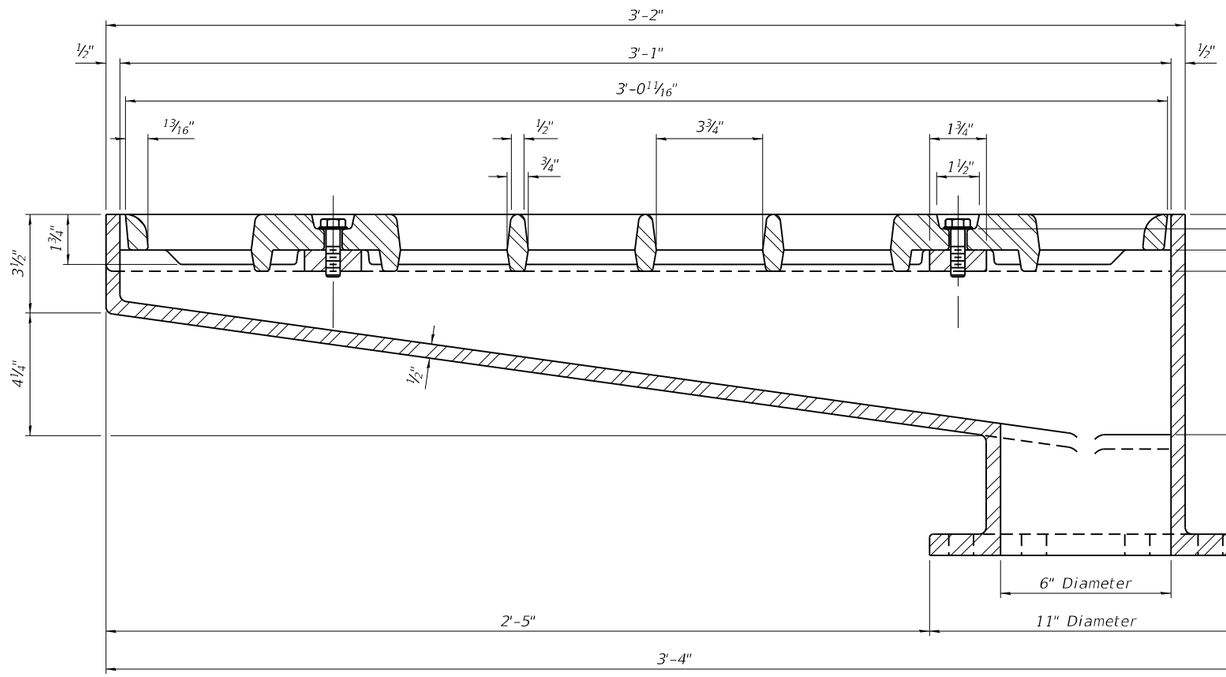
Structural steel scupper frames and downspouts, when utilized, shall be galvanized according to AASHTO M111.

As an alternate, fiberglass may be used for downspouts according to ASTM D2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. in lieu of the cast iron or structural steel.

Exterior surfaces of downspouts and exterior exposed surfaces of the scupper frame below deck shall be pigmented by the manufacturer with a color that matches the concrete.

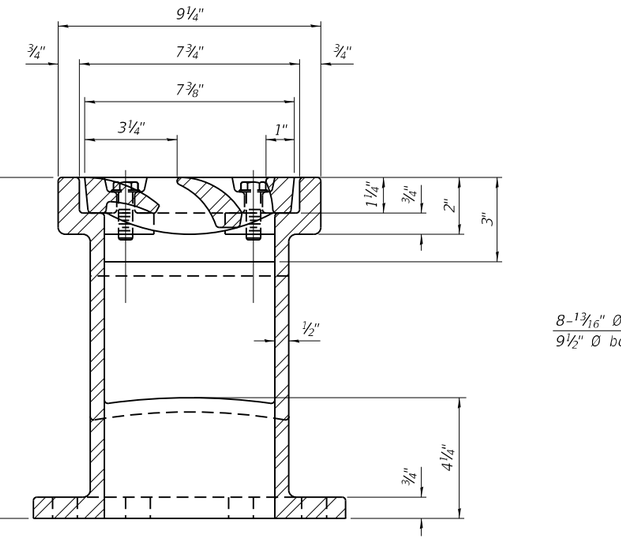
The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

Cost of the grate, frame, downspout, nuts and washers including complete installation of the scupper shall be paid for at the contract unit price for Drainage Scupper, DS-33.

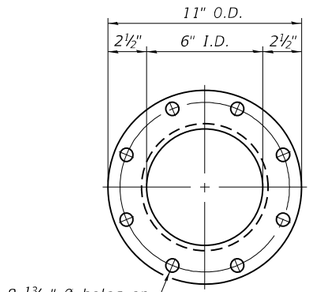


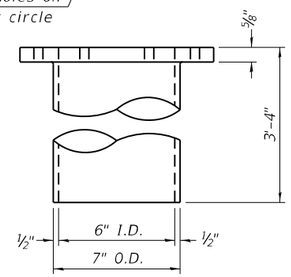
SECTION A-A

See sheet 11 of 28 for scupper location relative to parapet.



SECTION B-B

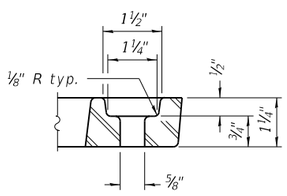




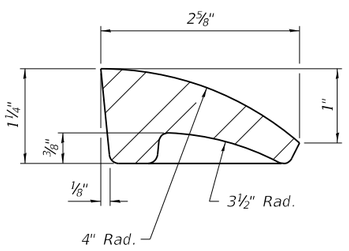
DOWNSPOUT

BILL OF MATERIAL

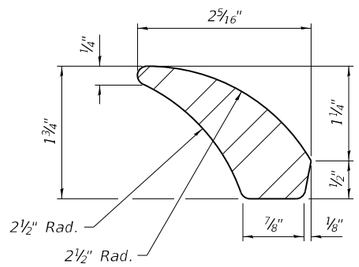
ITEM	UNIT	QUANTITY
Drainage Scupper, DS-33	Each	2



GRATE BOLT HOLE DETAIL



FIRST VANE DETAIL



SECOND VANE DETAIL

DS-33 1-1-2020

LIN ENGINEERING, LTD. Consulting Engineers Springfield, Illinois	USER NAME =	DESIGNED - AML	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAINAGE SCUPPER, DS-33 STRUCTURE NO. 043-0081
		CHECKED - MTH	REVISED -		
	PLOT SCALE =	DRAWN - AJF	REVISED -		
	PLOT DATE = 11:47:51 AM	CHECKED - MTH	REVISED -		SHEET 14 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	52
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

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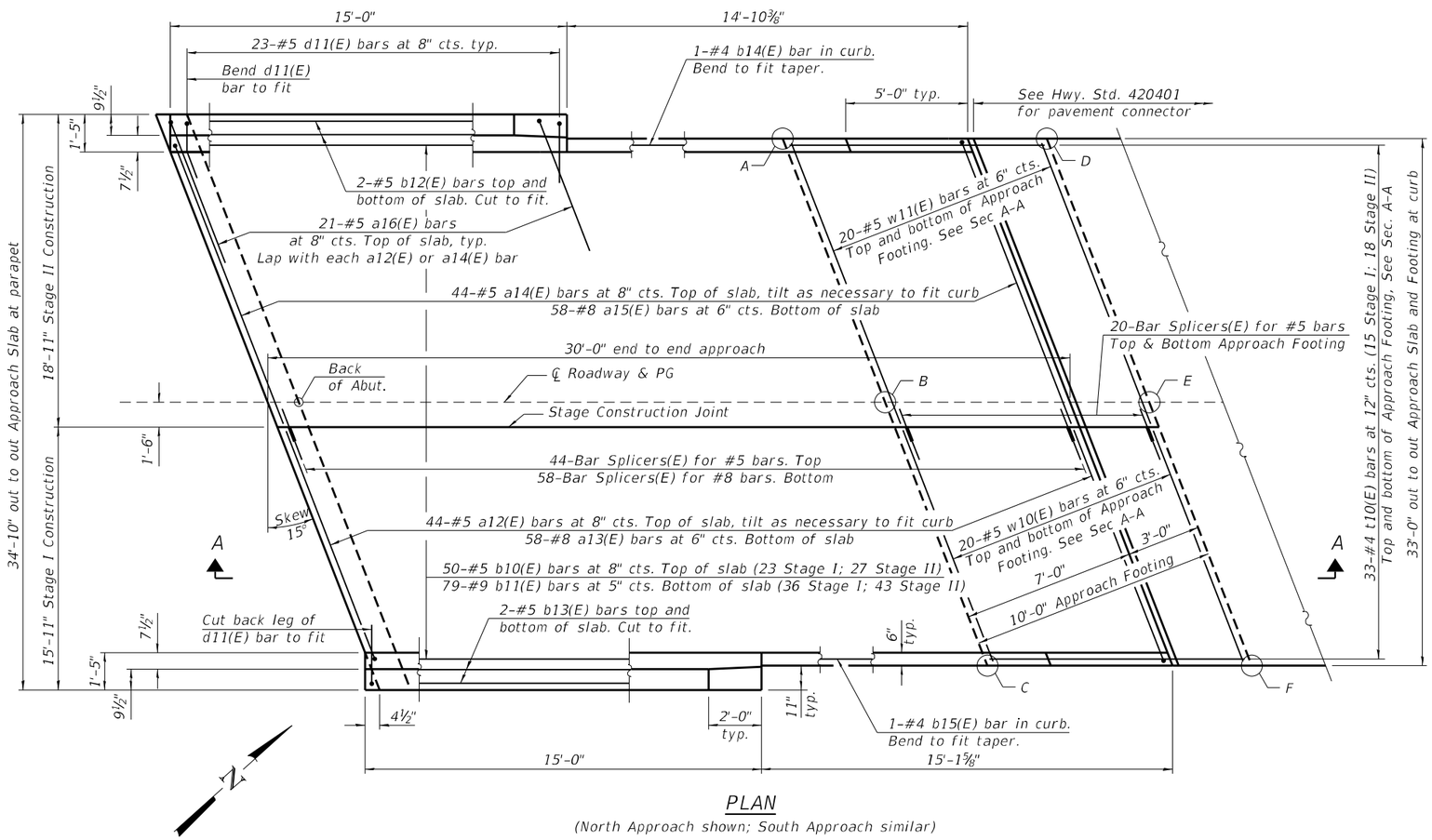


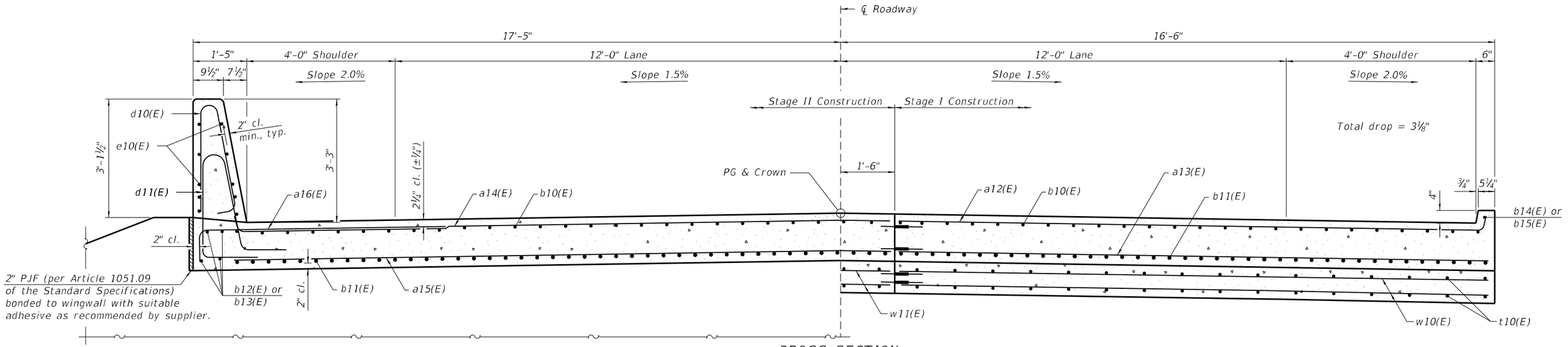
PLAN

(North Approach shown; South Approach similar)

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

	South Approach		North Approach	
Point	Top	Bottom	Top	Bottom
A	728.83	728.00	728.18	727.35
B	729.12	728.29	728.41	727.57
C	728.87	728.04	728.09	727.26
D	728.78	727.95	728.07	727.24
E	729.07	728.24	728.29	727.46
F	728.83	727.99	727.97	727.14

Note:
Points A thru C are along edge of footing closest to the bridge while points D thru E are along edge of footing furthest from bridge.



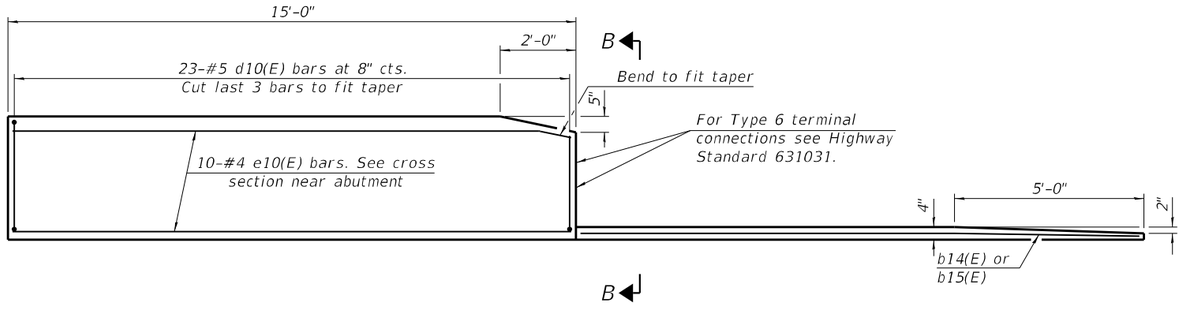
NEAR ABUTMENT

CROSS SECTION

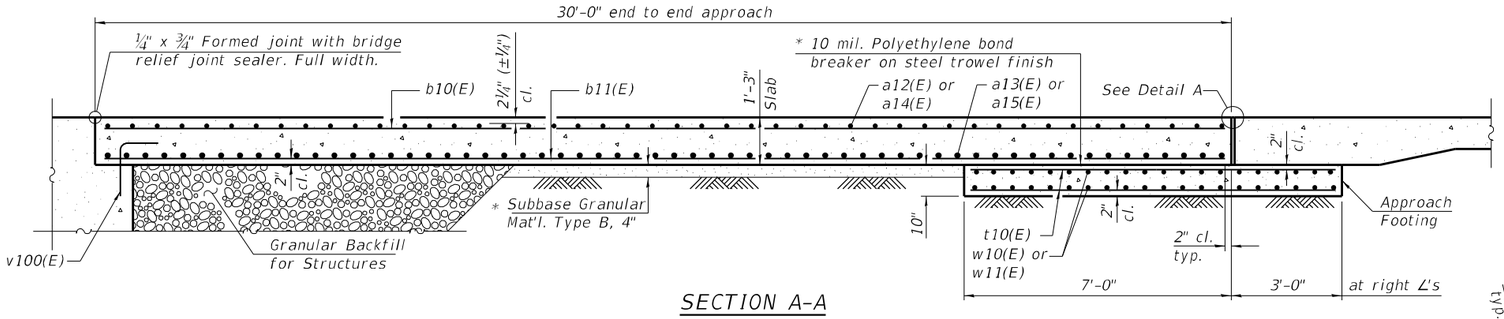
(Looking North)

AT APPROACH FOOTING

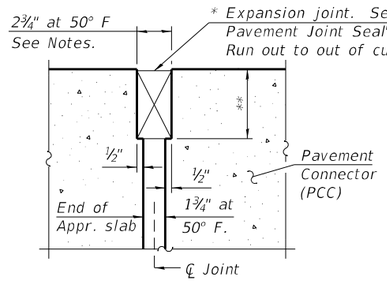
(Sheet 1 of 2)



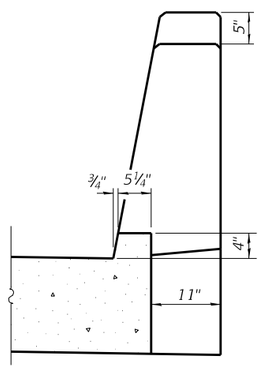
INSIDE ELEVATION OF PARAPET AND CURB



SECTION A-A



DETAIL A
(@ Rt. ∠'s)



VIEW B-B

* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations

Notes:

The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.

Parapet concrete shall be paid for as Concrete Superstructure.

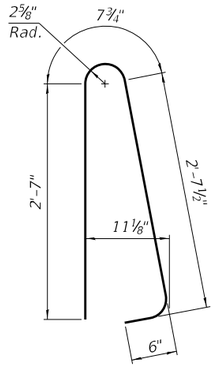
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).

Approach footing concrete shall be paid for as Concrete Structures.

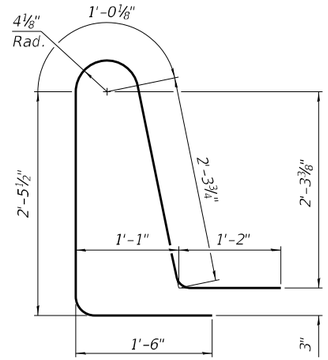
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.

Cost of excavation for approach footing included with Concrete Structures.

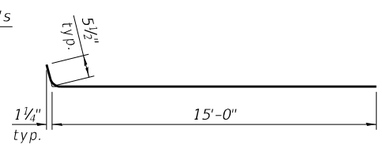
For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 28.



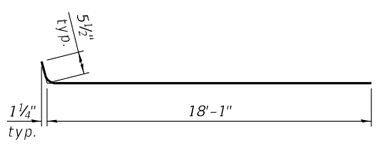
BAR d10(E)



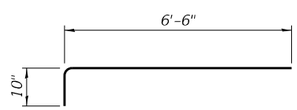
BAR d11(E)



BAR a12(E)



BAR a14(E)

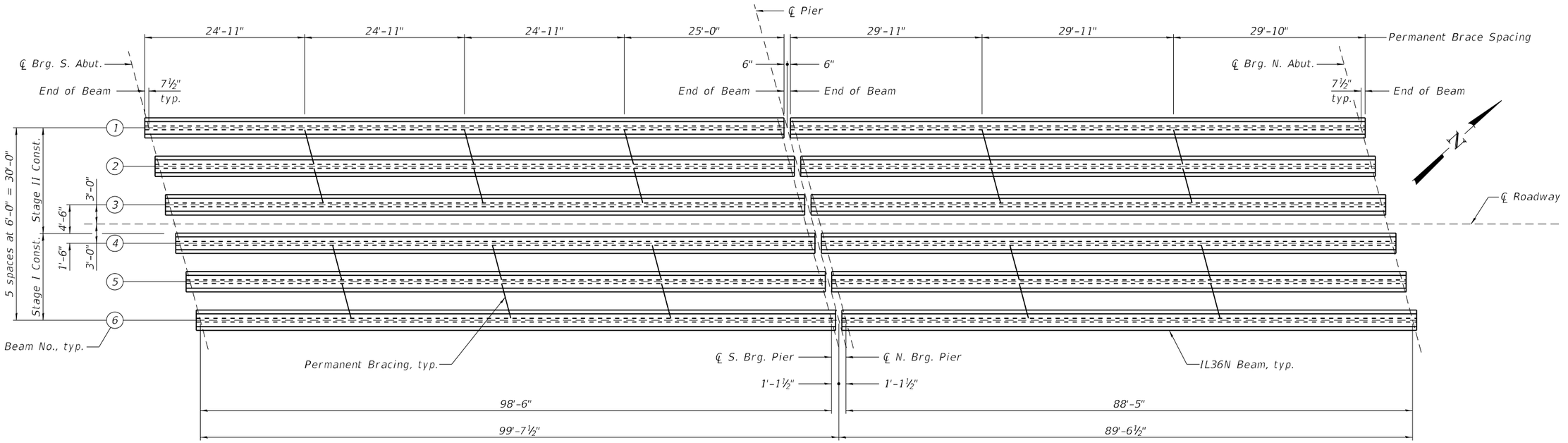


BAR a16(E)

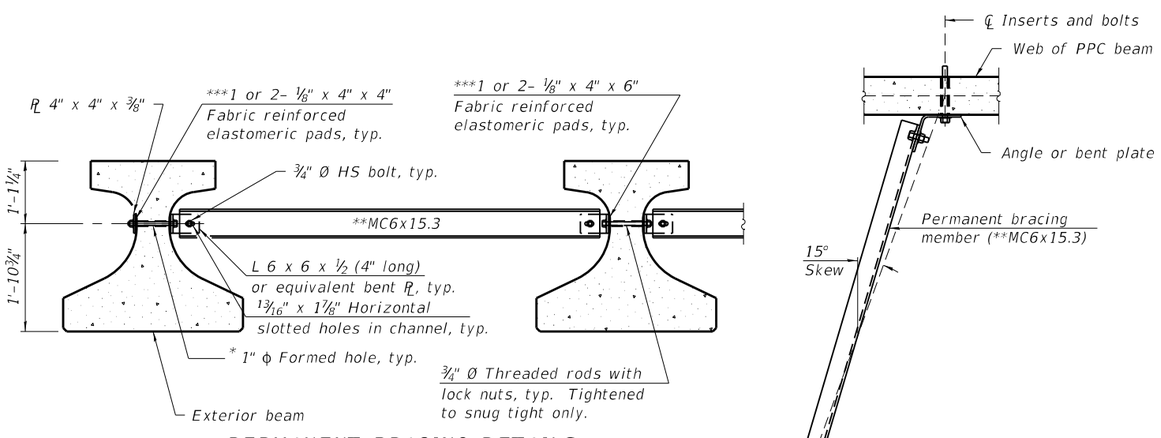
TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a12(E)	88	#5	15'-6"	
a13(E)	116	#8	15'-2"	
a14(E)	88	#5	18'-7"	
a15(E)	116	#8	18'-3"	
a16(E)	84	#5	7'-4"	
b10(E)	100	#5	29'-8"	
b11(E)	158	#9	29'-8"	
b12(E)	8	#5	15'-0"	
b13(E)	8	#5	14'-8"	
b14(E)	2	#4	14'-6"	
b15(E)	2	#4	14'-10"	
d10(E)	92	#5	6'-5"	
d11(E)	92	#5	8'-6"	
e10(E)	40	#4	14'-8"	
t10(E)	132	#4	10'-0"	
w10(E)	80	#5	15'-2"	
w11(E)	80	#5	18'-3"	
Concrete Superstructure		Cu. Yd.	7.8	
Concrete Superstructure (Approach Slab)		Cu. Yd.	94.6	
Concrete Structures		Cu. Yd.	20.4	
Reinforcement Bars, Epoxy Coated		Pound	38,950	

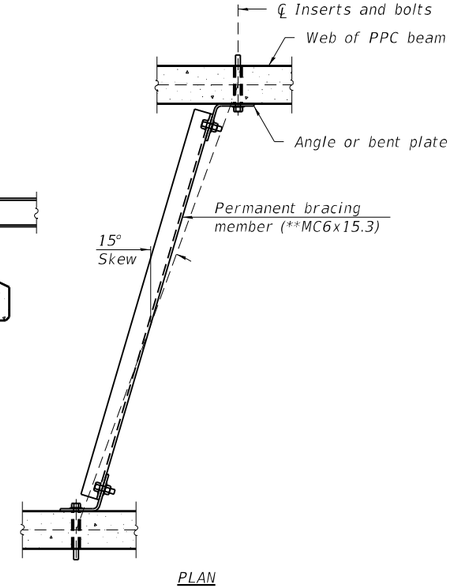
(Sheet 2 of 2)



FRAMING PLAN



PERMANENT BRACING DETAILS



PLAN

Notes:

All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted.

Two hardened washers are required for each set of oversized holes.

All holes shall be 15⁄16" Ø unless otherwise noted.

5⁄16" x 3" x 3" plate washers are required over all slotted holes.

All bolts, threaded rods, and hardware shall be galvanized according to AASHTO M232.

Threaded rods shall be ASTM F 1554 Grade 55.

Bracing shall be installed as beams are erected and tightened as soon as possible during erection.

Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete Beams.

* *Fabricator shall locate to miss strands within permissible tolerances.*

** *Alternate MC6x18 channels are permitted to facilitate material acquisition.*

*** *Place pads as necessary to provide a flat mounting surface between the steel and concrete.*

INTERIOR BEAM MOMENT TABLE				
		0.4 Sp. 1	Pier	0.6 Sp. 2
I	(in^4)	100433	100433	100433
I'	(in^4)	280629	280629	280629
Sb	(in^3)	6832	6832	6832
Sb'	(in^3)	11525	11525	11525
St	(in^3)	4715	4715	4715
St'	(in^3)	24088	24088	24088
DC1	(k/')	1.386	1.386	1.386
MDC1	('k)	1612	0	1298
DC2	(k/')	0.188	0.188	0.188
MDC2	('k)	144	-207	99
DW	(k/')	0.300	0.300	0.300
MDW	('k)	204	-311	141
LLDF		0.515	0.522	0.529
M_{L+IM}	('k)	1127	-1255	1018

INTERIOR BEAM REACTION TABLE					
		S. Abut.	Pier Span 1	Pier Span 2	N. Abut.
	LLDF	0.671	0.671	0.671	0.671
	RDC1 (k)	74.9	73.4	66.3	67.8
④	RDC2 (k)	7.2	11.1	11.1	6.0
③	RDW (k)	10.6	16.9	16.9	8.9
⑤	R_{L+IM} (k)	75.3	67.7	67.7	73.0
	RTotal (k)	168.0	169.1	162.0	155.8

④ *At continuous pier, reactions from composite loads are assumed to be equally distributed to each bearing line.*

I: Non-composite moment of inertia of beam section ($in.^4$).
I': Composite moment of inertia of beam section ($in.^4$).
Sb: Non-composite section modulus for the bottom fiber of the prestressed beam ($in.^3$).
Sb': Composite section modulus for the bottom fiber of the prestressed beam ($in.^3$).
St: Non-composite section modulus for the top fiber of the prestressed beam ($in.^3$).
St': Composite section modulus for the top fiber of the prestressed beam ($in.^3$).
DC1: Un-factored non-composite dead load (kips/ft.).
MDC1: Un-factored moment due to non-composite dead load (kip-ft.).
DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft).
M_{L+IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
LLDF: Live Load Distribution Factor.

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Consulting Engineers
Springfield, Illinois

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	CHECKED - MTH	REVISED -	
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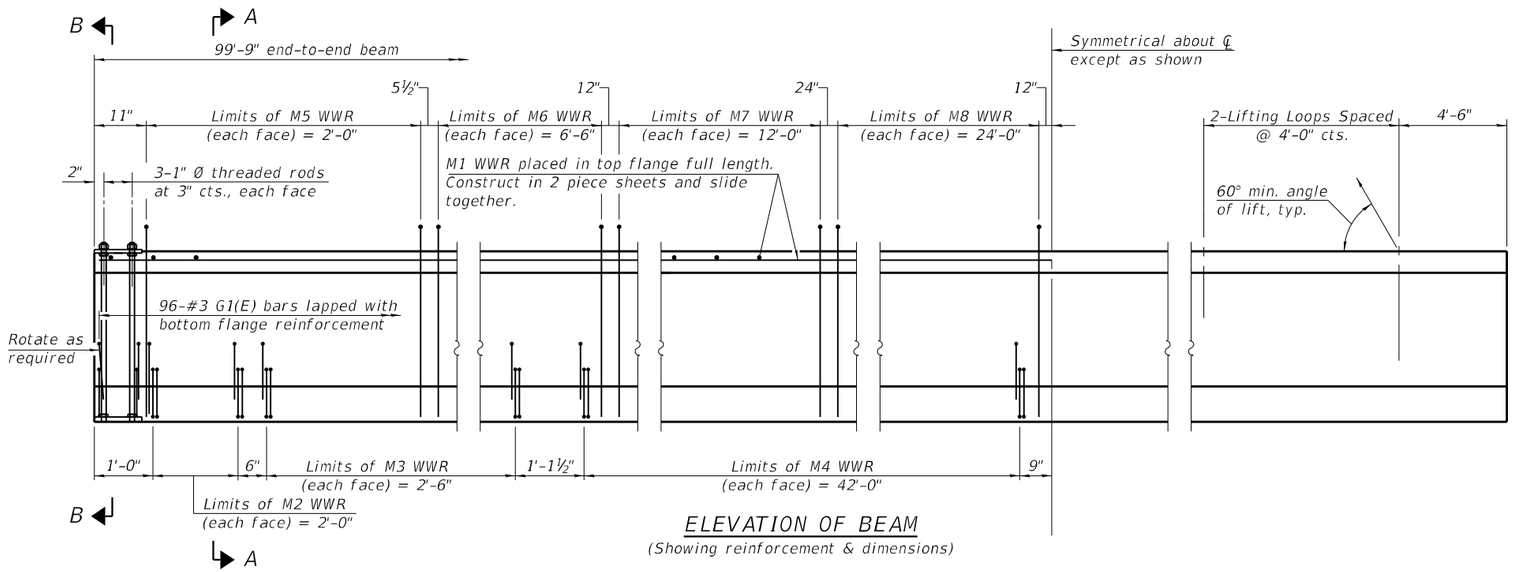
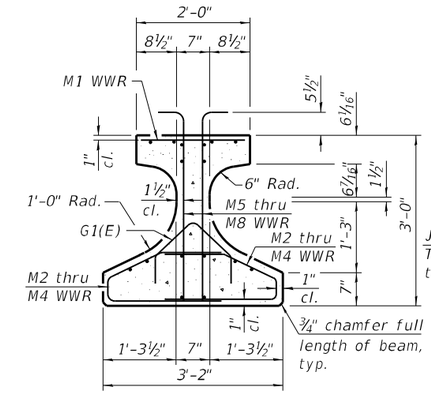
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING DETAILS
STRUCTURE NO. 043-0081
SHEET 17 OF 28 SHEETS

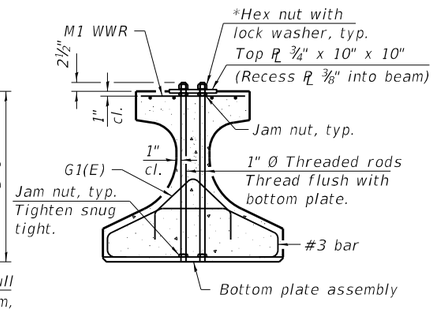
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	55
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		



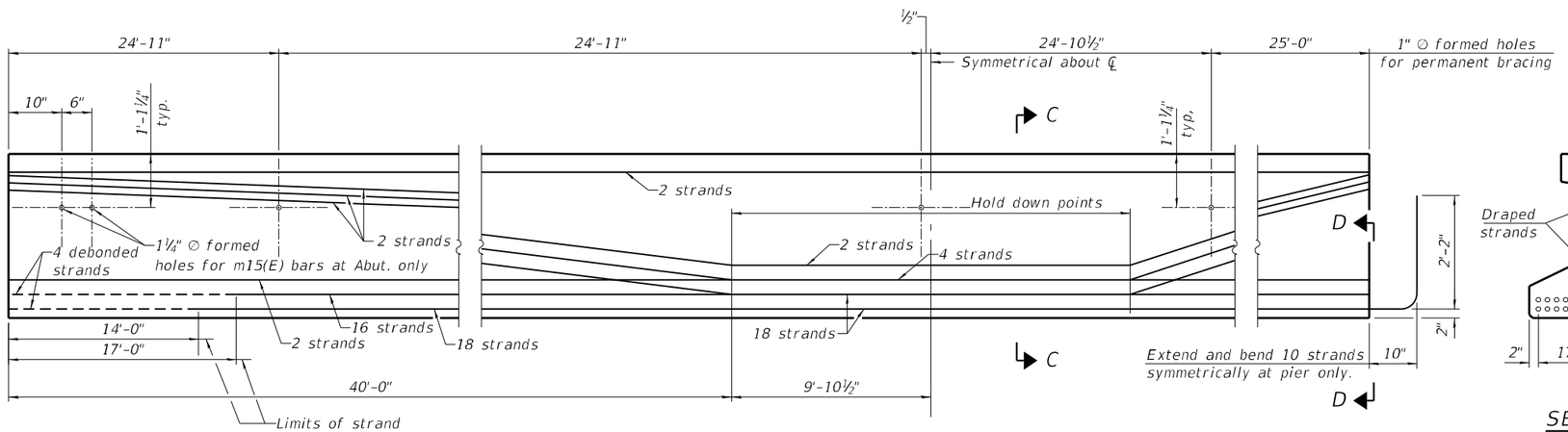
ELEVATION OF BEAM
(Showing reinforcement & dimensions)



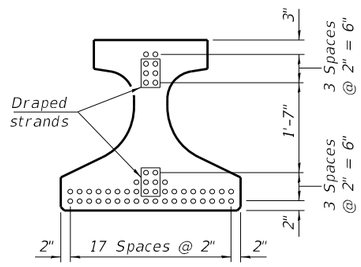
SECTION A-A



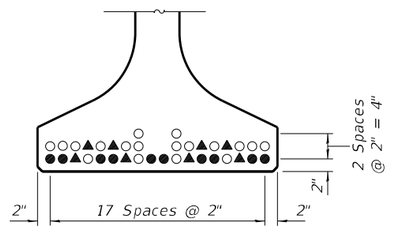
SECTION B-B
*Only tighten sufficiently to compress lock washers



ELEVATION OF BEAM
(Showing prestressing steel)



SECTION C-C
(44-0.6" Ø 270 ksi strands)



VIEW D-D

- ○ Fully bonded strand
- ▲ Partially debonded strand
- ● Extended and bent strand (at pier only)

SPAN 1
IL36-2438 Beam
Strand Pattern = 42B-2T-8db-6d

Note:
See sheet 20 of 28 for additional details and Bill of Material.

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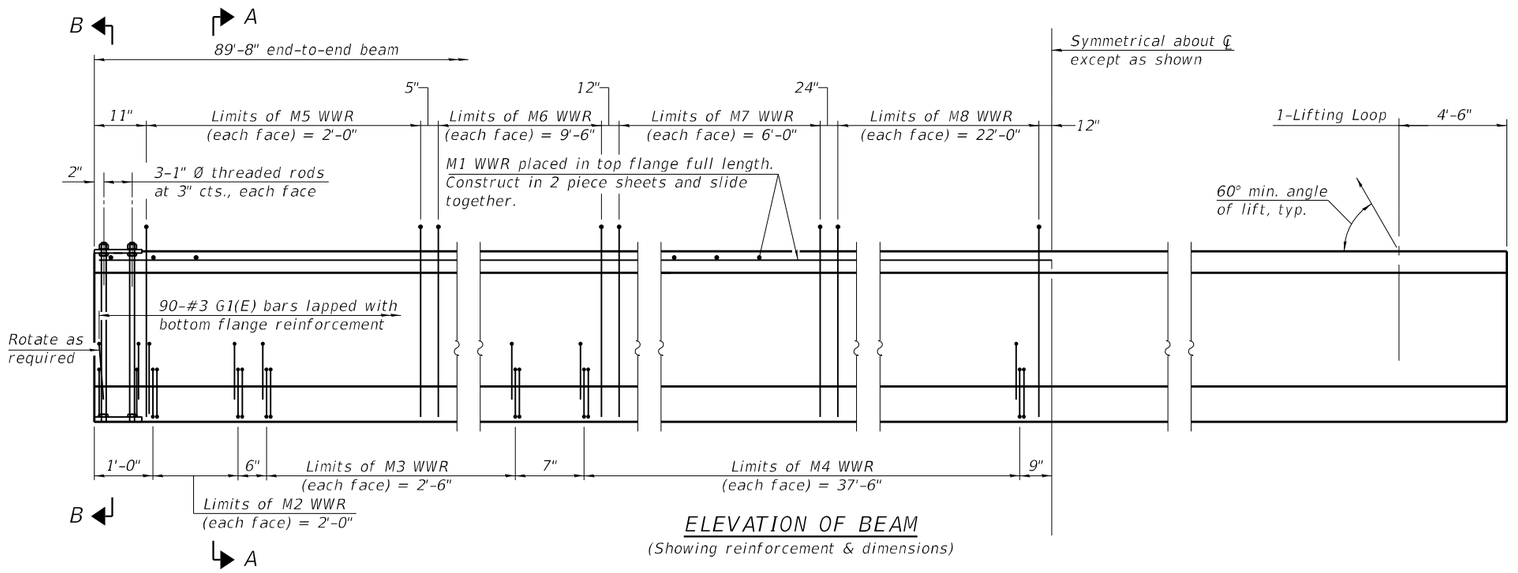
	PLOT SCALE =	DRAWN - AJF	REVISED -
	PLOT DATE = 11:47:56 AM	CHECKED - MTH	REVISED -

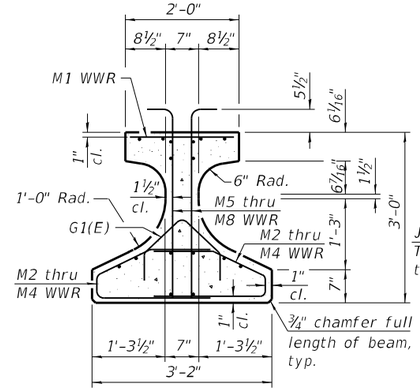
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL36N BEAM (SPAN 1)
STRUCTURE NO. 043-0081
SHEET 18 OF 28 SHEETS

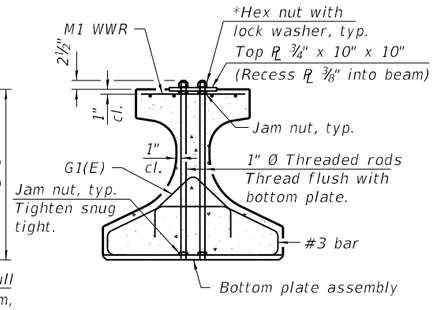
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	56
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		



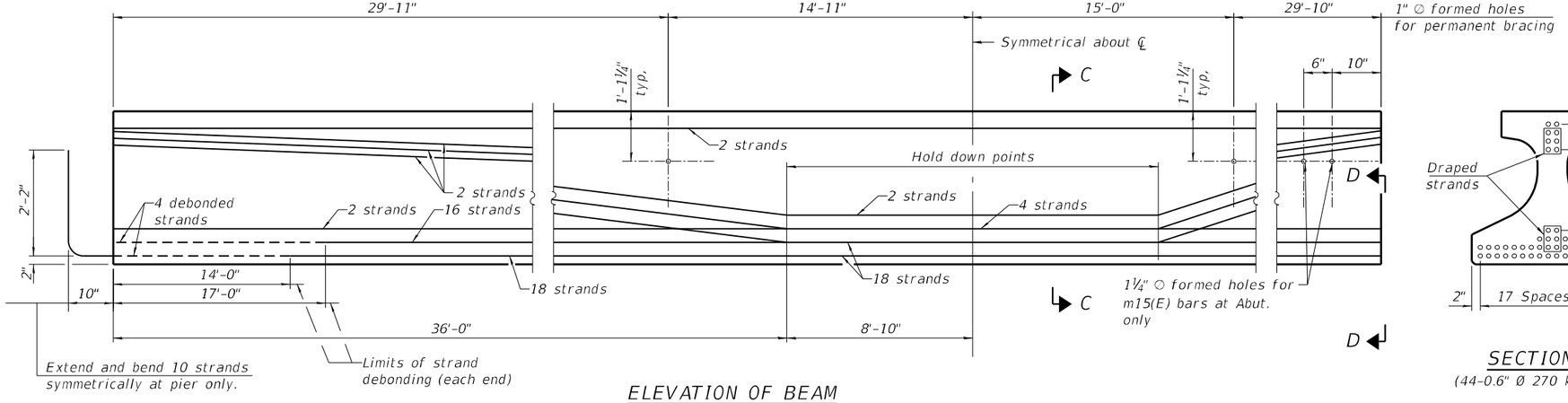
ELEVATION OF BEAM
(Showing reinforcement & dimensions)



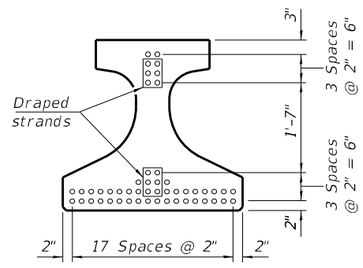
SECTION A-A



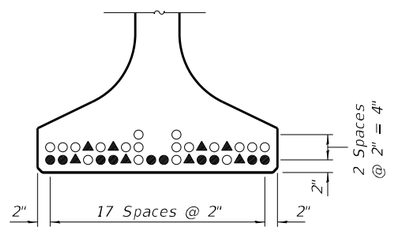
SECTION B-B
*Only tighten sufficiently to compress lock washers



ELEVATION OF BEAM
(Showing prestressing steel)



SECTION C-C
(44-0.6" Ø 270 ksi strands)



VIEW D-D

- ○ Fully bonded strand
- ▲ Partially debonded strand
- ● Extended and bent strand (at pier only)

SPAN 2
IL36-2438 Beam
Strand Pattern = 42B-2T-8db-6d

Note:
See sheet 20 of 28 for additional details and Bill of Material.

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Consulting Engineers
Springfield, Illinois

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IL36N BEAM (SPAN 2)
STRUCTURE NO. 043-0081
SHEET 19 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	57
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

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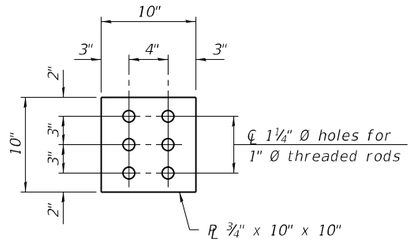
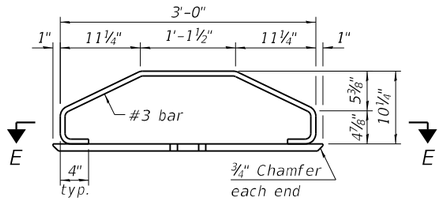
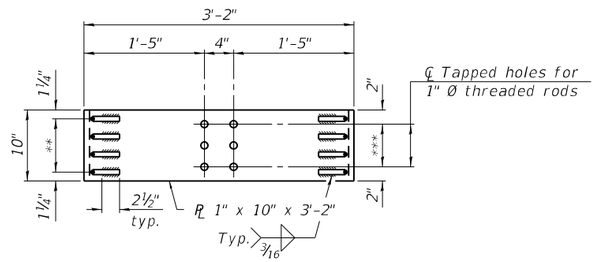
8/9/2021 11:47:58 AM



PLAN – TOP PLATE



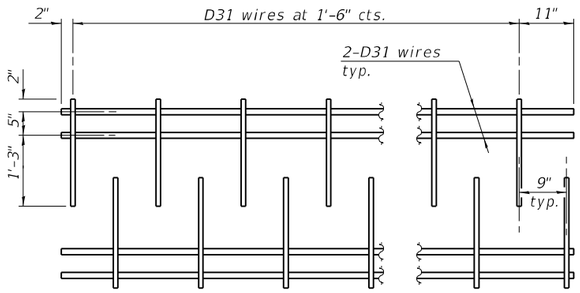
ELEVATION – BOTTOM PLATE ASSEMBLY



SECTION E-E

** 3 Spaces at 2½" = 7½"

*** 2 Spaces at 3" = 6"



M1 WWR DETAIL

When multiple sheets of M1 WWR are required along the beam length, #5(E) bars (5'-0" long) shall be used to splice the longitudinal D31 wires together (Min. Lap 2'-2").

NOTES

Inserts for ¾" Ø threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams.

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter for beam strands shall be 0.6" and the nominal cross-sectional area shall be 0.217 sq. in. The nominal diameter for lifting loops shall be ½" and the nominal cross sectional area shall be 0.153 sq. in.

The beams shall have a final concrete compressive strength, f'c, of 8500 psi and a release concrete compressive strength, f'ci, of 6500 psi.

A minimum 2½" Ø lifting pin shall be used to engage the lifting loops during handling.

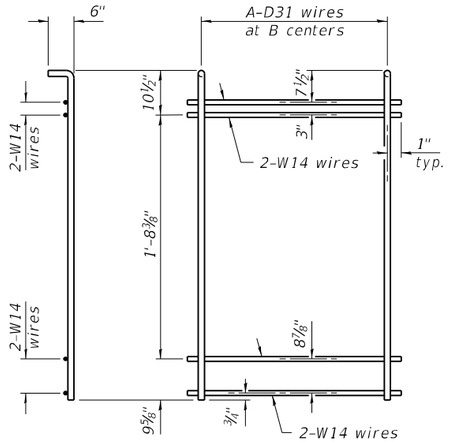
Bend the extended strands inward on the fascia beams to maintain 1½" clearance inside the pier diaphragm.

The top and bottom plates shall be AASHTO M270 Grade 50.

The top plates and bottom plate assemblies shall be galvanized according to AASHTO M111. The threaded rods, nuts and washers shall be galvanized according to AASHTO M232.

Threaded rods shall be ASTM F 1554 Grade 55.

Welded Wire Reinforcement (WWR) shall conform to ASTM A884 with a Class A, Type 1 epoxy coating or ASTM A1060, Table 3 galvanized coating.



M5 THRU M8 WWR DETAIL

(See Table of Dimensions)

TABLE OF DIMENSIONS

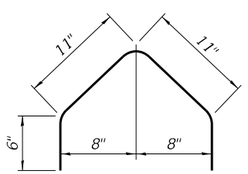
(WWR tables are based on Grade 60.)

SPAN 1

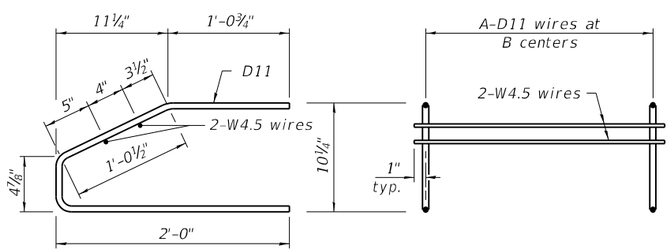
WWR	A	B
M2	9	3"
M3	6	6"
M4	29	1'-6"
M5	9	3"
M6	14	6"
M7	13	1'-0"
M8	13	2'-0"

SPAN 2

WWR	A	B
M2	9	3"
M3	6	6"
M4	26	1'-6"
M5	9	3"
M6	20	6"
M7	7	1'-0"
M8	12	2'-0"

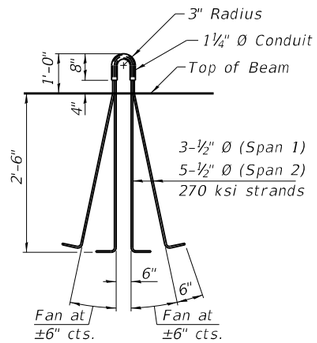


BAR G1(E)



M2 THRU M4 WWR DETAIL

(See Table of Dimensions)



LIFTING LOOP DETAIL

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete Beams, IL36N	Ft.	1137

IL36-2438D 2-25-2019

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Consulting Engineers
Springfield, Illinois

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL36N BEAM DETAILS
STRUCTURE NO. 043-0081
SHEET 20 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	58
		CONTRACT NO. 64H58		
	ILLINOIS FED. AID PROJECT			

MODEL: Default
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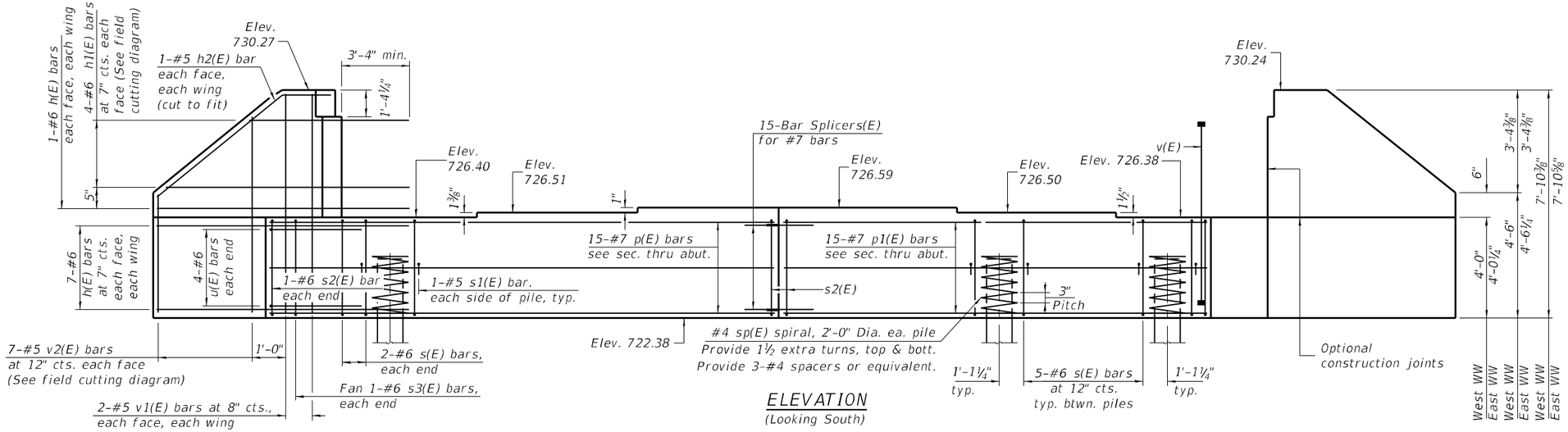
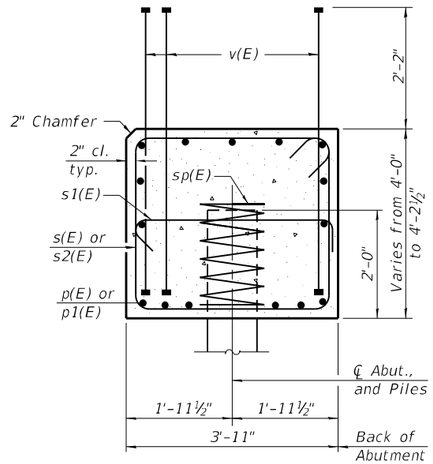
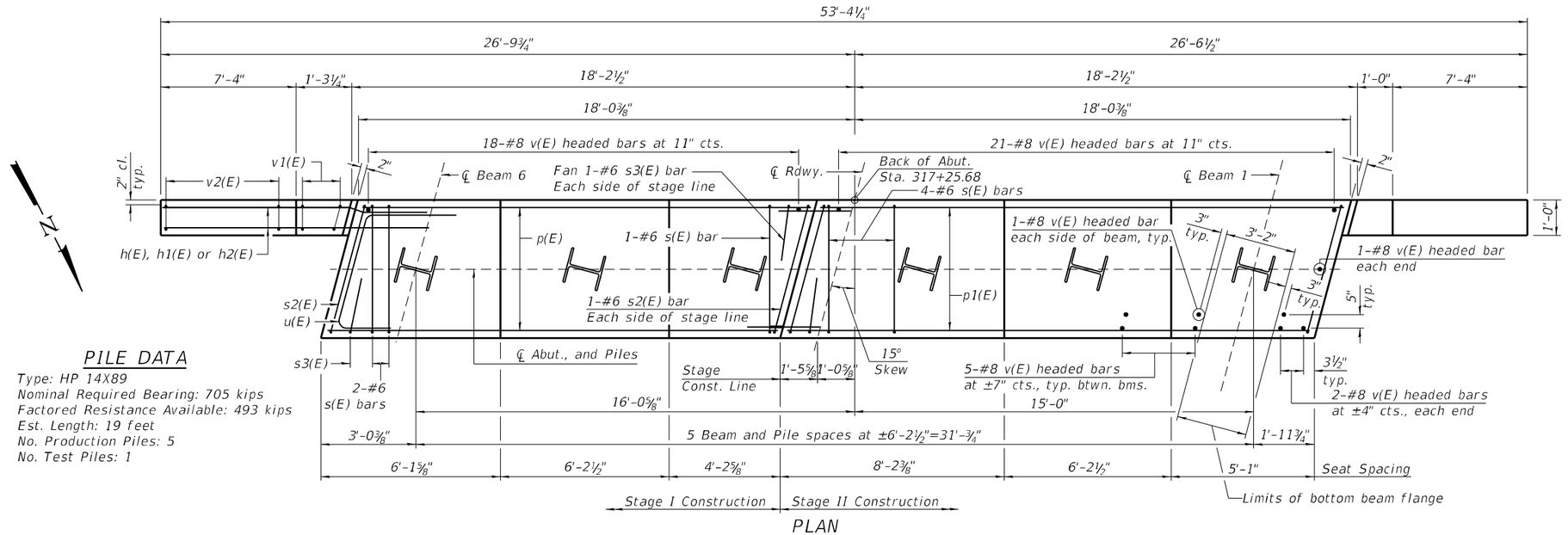
8/9/2021 11:47:59 AM



ELEVATION
(Looking South)

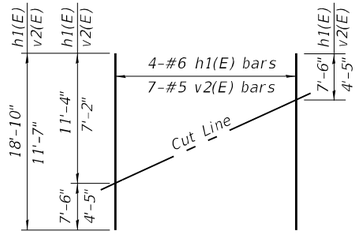


SEC. THRU ABUT.
Dimensions at right angles to abutment.



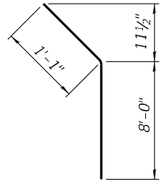
PLAN

PILE DATA
Type: HP 14X89
Nominal Required Bearing: 705 kips
Factored Resistance Available: 493 kips
Est. Length: 19 feet
No. Production Piles: 5
No. Test Piles: 1

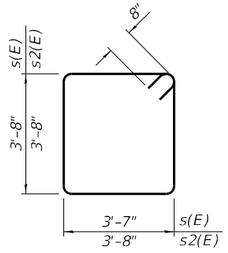


FIELD CUTTING DIAGRAM
Order h1(E) and v2(E) full length. Cut as shown and use remainder of bars in opposite face of wing.

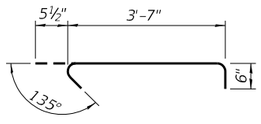
BAR v(E)
(Headed)



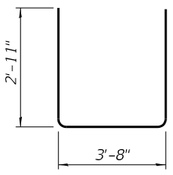
BAR h2(E)



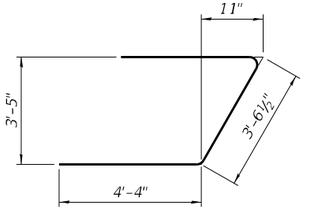
BAR s(E) & s2(E)



BAR s1(E)



BAR s3(E)



BAR u(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	32	#6	11'-9"	
h1(E)	8	#6	18'-10"	
h2(E)	4	#5	9'-1"	
p(E)	15	#7	16'-3"	
p1(E)	15	#7	19'-2"	
s(E)	29	#6	15'-10"	
s1(E)	12	#5	4'-7"	
s2(E)	4	#6	16'-0"	
s3(E)	4	#6	9'-6"	
* sp(E)	6	#4	2'-0"	
u(E)	8	#6	12'-3"	
v(E)	82	#8	5'-10"	
v1(E)	8	#5	7'-7"	
v2(E)	14	#5	11'-7"	
Structure Excavation		Cu. Yd.	115	
Concrete Structures		Cu. Yd.	25.8	
Reinforcement Bars, Epoxy Coated		Pound	4,310	
Furnishing Steel Piles, HP14x89		Foot	95	
Driving Piles		Foot	95	
Test Pile, Steel HP14x89		Each	1	
Pile Shoes		Each	6	

* Length is height of spiral

Notes:
Pour steps monolithically with cap.
Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
For details of piles see sheet 24 of 28.
See sheet 25 of 28 for Bar Splicer details.
See sheet 2 of 28 for drainage details.

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Consulting Engineers
Springfield, Illinois

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT
STRUCTURE NO. 043-0081
SHEET 21 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	59
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

MODEL: Default
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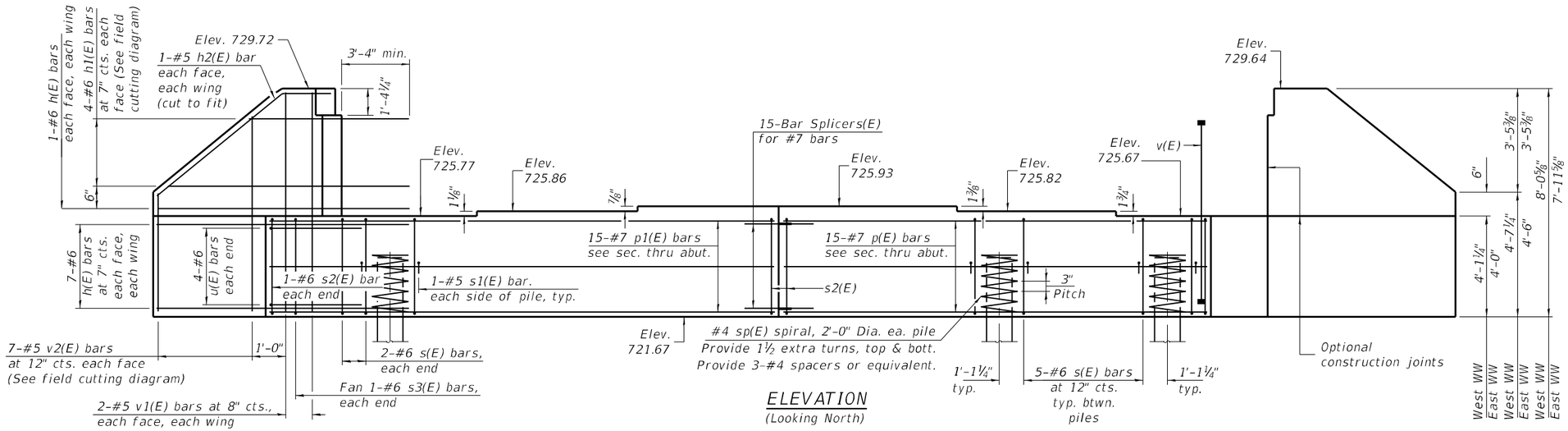
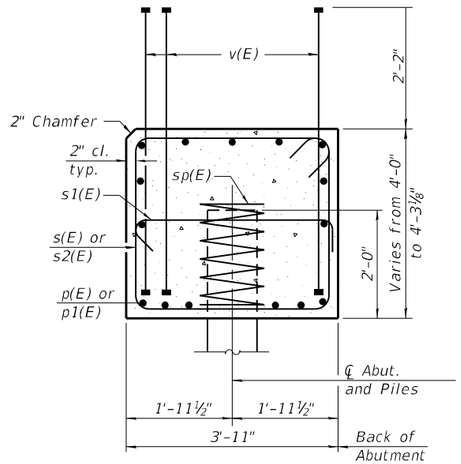
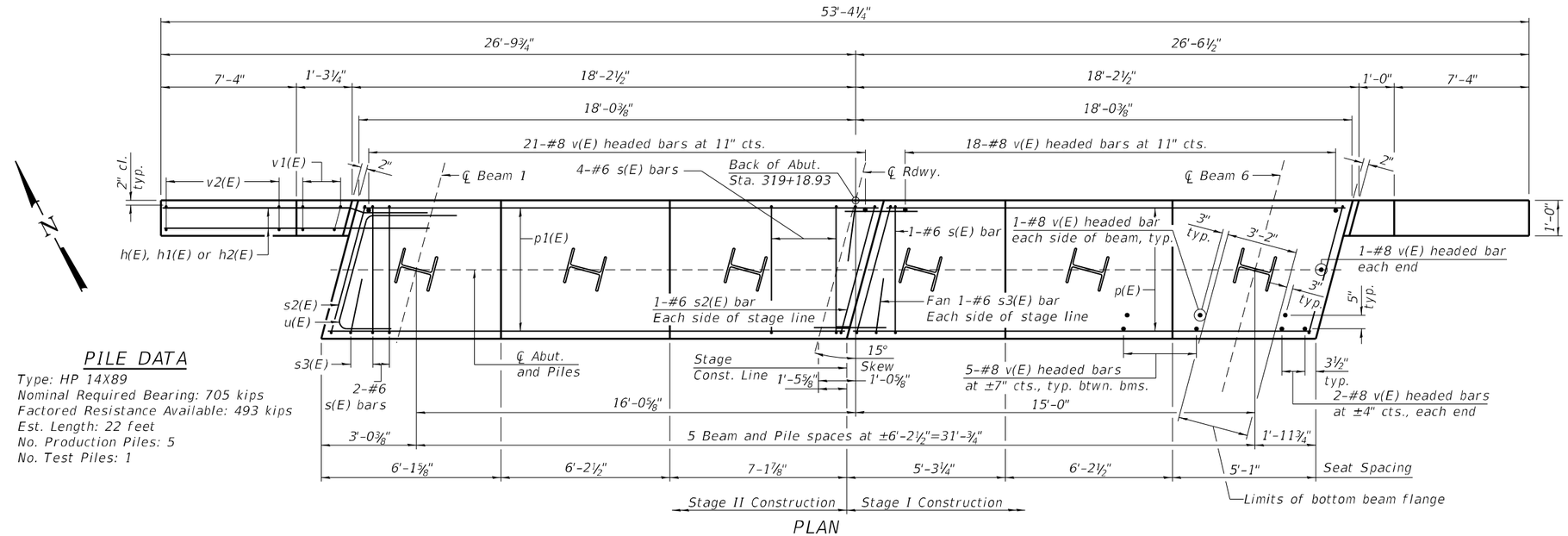
8/9/2021 11:48:01 AM



ELEVATION
(Looking North)

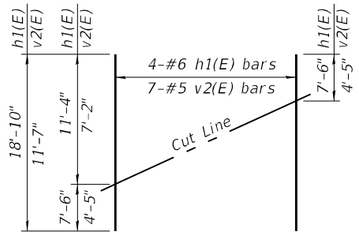


SEC. THRU ABUT.
Dimensions at right angles to abutment.



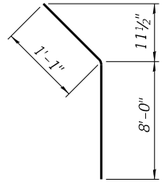
PLAN

PILE DATA
Type: HP 14X89
Nominal Required Bearing: 705 kips
Factored Resistance Available: 493 kips
Est. Length: 22 feet
No. Production Piles: 5
No. Test Piles: 1

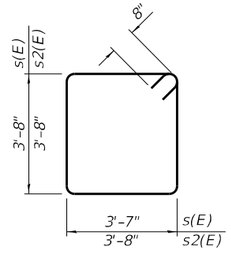


FIELD CUTTING DIAGRAM
Order h1(E) and v2(E) full length. Cut as shown and use remainder of bars in opposite face of wing.

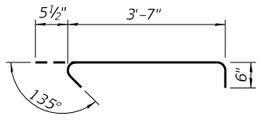
BAR v(E)
(Headed)



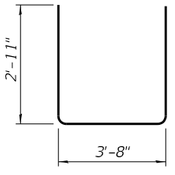
BAR h2(E)



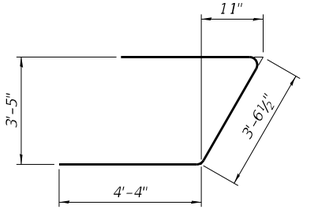
BAR s(E) & s2(E)



BAR s1(E)



BAR s3(E)



BAR u(E)

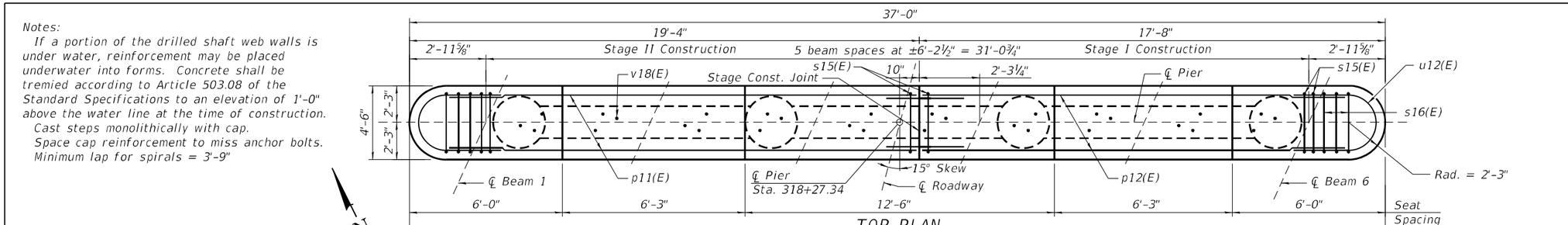
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	32	#6	11'-9"	
h1(E)	8	#6	18'-10"	
h2(E)	4	#5	9'-1"	
p(E)	15	#7	16'-3"	
p1(E)	15	#7	19'-2"	
s(E)	29	#6	15'-10"	
s1(E)	12	#5	4'-7"	
s2(E)	4	#6	16'-0"	
s3(E)	4	#6	9'-6"	
* sp(E)	6	#4	2'-0"	
u(E)	8	#6	12'-3"	
v(E)	82	#8	5'-10"	
v1(E)	8	#5	7'-7"	
v2(E)	14	#5	11'-7"	
Structure Excavation	Cu. Yd.	118		
Concrete Structures	Cu. Yd.	26.0		
Reinforcement Bars, Epoxy Coated	Pound	4,310		
Furnishing Steel Piles, HP14x89	Foot	110		
Driving Piles	Foot	110		
Test Pile, Steel HP14x89	Each	1		
Pile Shoes	Each	6		

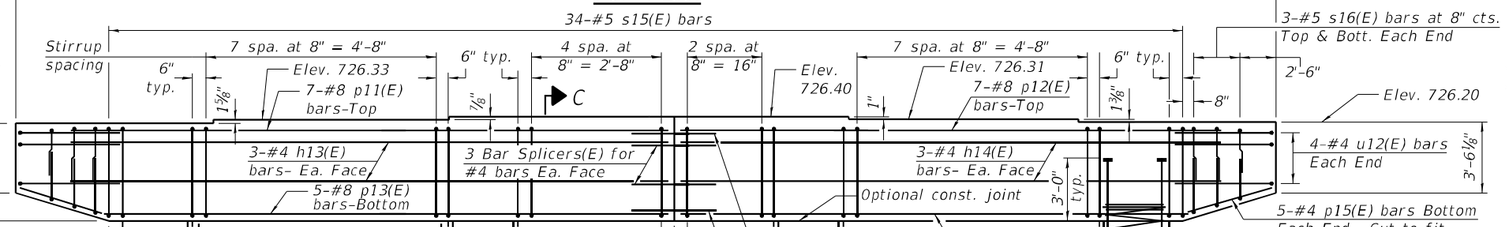
* Length is height of spiral

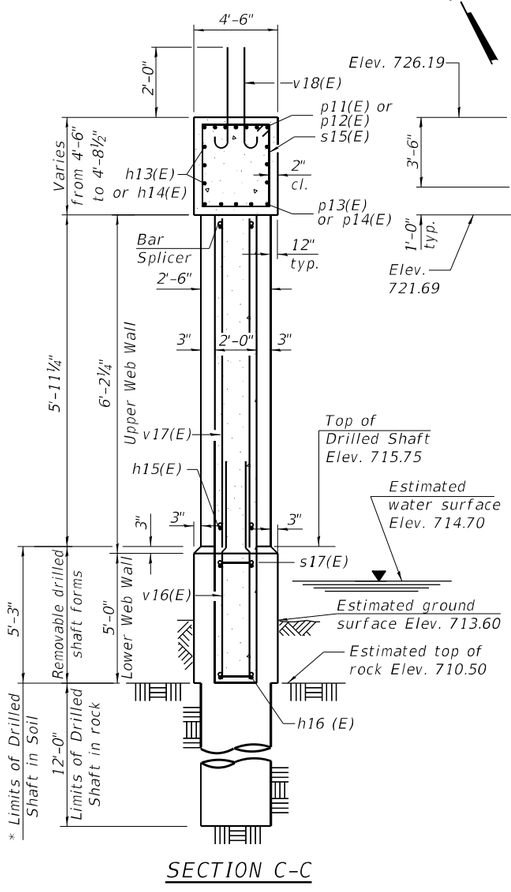
Notes:
Pour steps monolithically with cap.
Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
For details of piles see sheet 24 of 28.
See sheet 25 of 28 for Bar Splicer details.
See sheet 2 of 28 for drainage details.

Notes:
If a portion of the drilled shaft web walls is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.
Cast steps monolithically with cap.
Space cap reinforcement to miss anchor bolts.
Minimum lap for spirals = 3'-9"

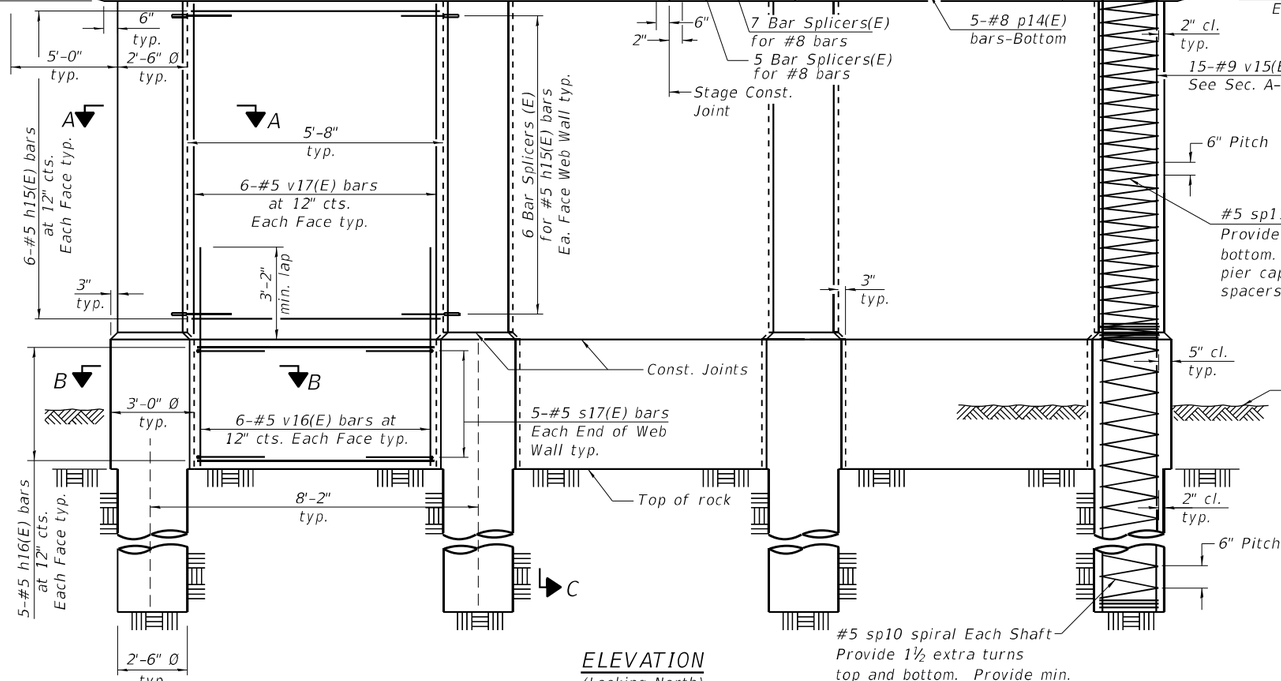


TOP PLAN





SECTION C-C



ELEVATION
(Looking North)

#5 sp11(E) spiral each column
Provide 1½ extra turns top and bottom. Extend spiral 2" into pier cap. Provide min. 4-#4 spacers or equivalent.

BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h13(E)	6	#4	16'-11"	
	h14(E)	6	#4	15'-3"	
	h15(E)	36	#5	5'-11"	
	h16(E)	30	#5	4'-10"	
	p11(E)	7	#8	16'-11"	
	p12(E)	7	#8	15'-3"	
	p13(E)	5	#8	14'-8"	
	p14(E)	5	#8	13'-0"	
	p15(E)	10	#4	4'-6"	
	s15(E)	34	#5	17'-7"	
	s16(E)	12	#5	11'-4"	
	s17(E)	30	#5	8'-0"	
**	sp10	4	#5	17'-3"	
**	sp11(E)	4	#5	6'-2"	
	u12(E)	8	#4	12'-3"	
	v15(E)	60	#9	26'-3"	
	v16(E)	36	#5	8'-3"	
	v17(E)	36	#5	5'-10"	
	v18(E)	30	#8	4'-2"	
	Structure Excavation		Cu. Yd.		40
	Concrete Structures		Cu. Yd.		45.3
	Reinforcement Bars		Pound		1,090
	Reinforcement Bars, Epoxy Coated		Pound		13,730
	Drilled Shaft in Soil		Cu. Yd.		5.5
	Drilled Shaft in Rock		Cu. Yd.		8.8

** Length is height of spiral.

BAR v15(E)
(Headed)

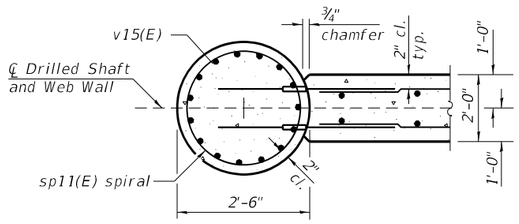
BARS s16(E) & s17(E)

BAR v18(E)

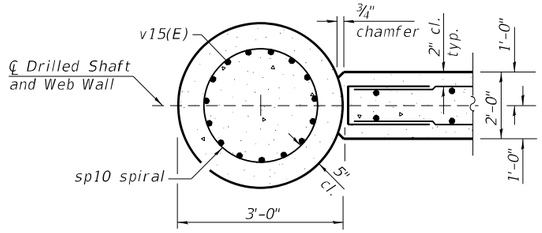
BAR s15(E)

BAR u12(E)

Construction Sequence for Web Wall:
1. Excavate between shafts to elevation of web wall base and set lower web wall forms through water to bear on the circular edge of drilled shafts. Secure in place with fill, struts or tie forms together as required.
2. Place the lower web wall reinforcement cage into the forms using spacers to maintain proper clearances.
3. If the forms can be sealed against the shafts and streambed to allow dewatering, the reinforcement and the concrete placement may be completed in the dry. Alternatively, the rebar cage can be lowered into position through water and the concrete discharged at the base of the excavation through a tremie pipe or pump hose, displacing water, sediment, and tainted concrete out the top of the forms.
4. Construct Columns.
5. Construct upper web walls.
6. Construct the center web walls during stage II construction prior the pouring of the pier cap.



SECTION A-A



SECTION B-B

* If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

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Springfield, Illinois

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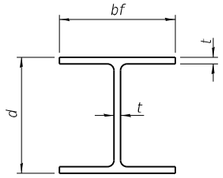
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

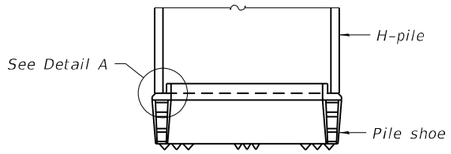
PIER DETAILS
STRUCTURE NO. 043-0081
SHEET 23 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	61
		CONTRACT NO. 64H58		
		ILLINOIS	FED. AID PROJECT	

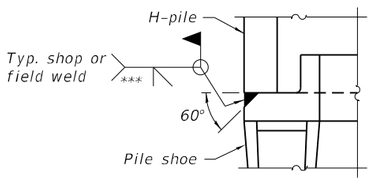


STEEL PILE TABLE

Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	11/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	11/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



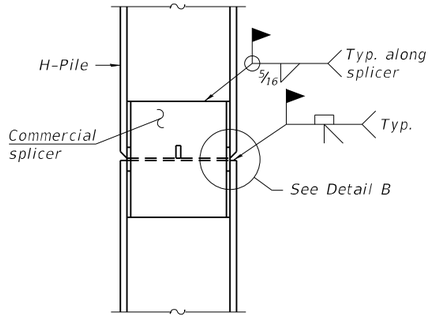
ELEVATION



DETAIL A

SHOE ATTACHMENT

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.



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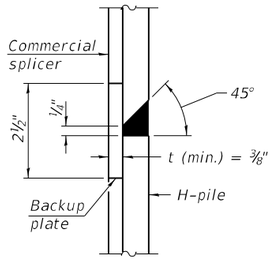
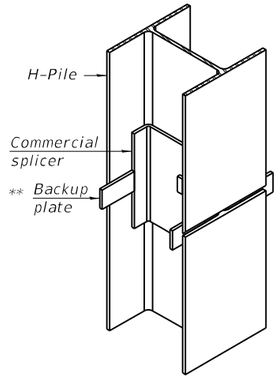
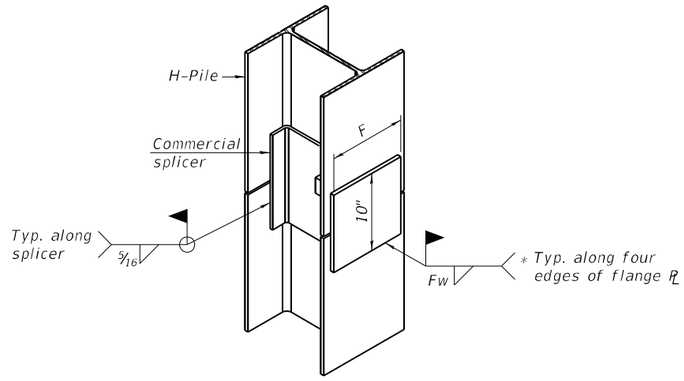


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



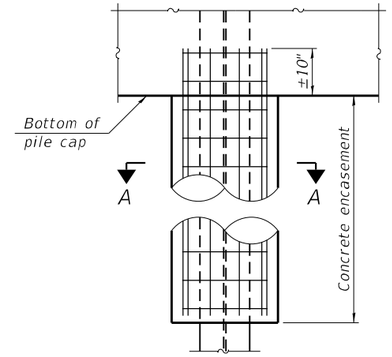
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

* Interrupt welds 1/4" from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer (5/16" min.).



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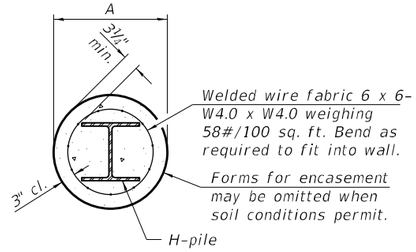
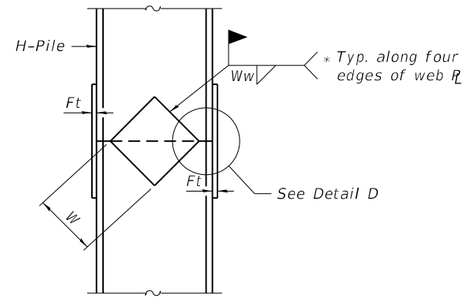


SECTION A-A

INDIVIDUAL PILE CONCRETE ENCASEMENT

(when specified)



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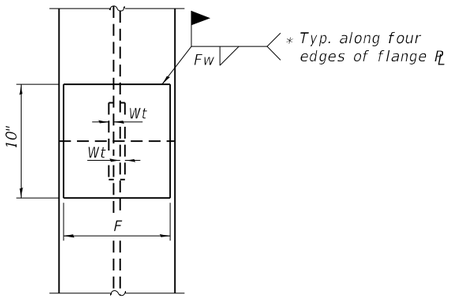
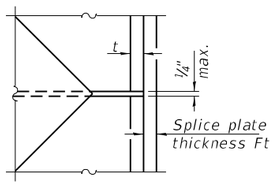


END VIEW



DETAIL D

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	3/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

WELDED PLATE FIELD SPLICE

F-HP 1-1-2020

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DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 043-0081
SHEET 24 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	62
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

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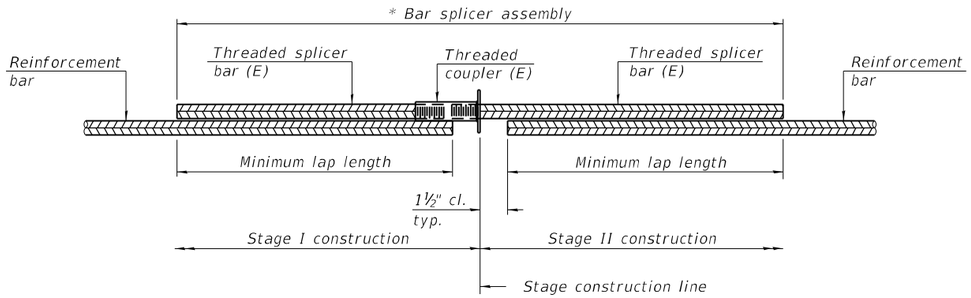


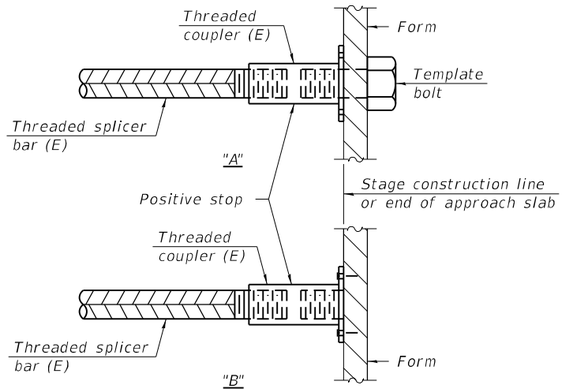
STANDARD BAR SPLICER ASSEMBLY PLAN

(All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1½" + thread length

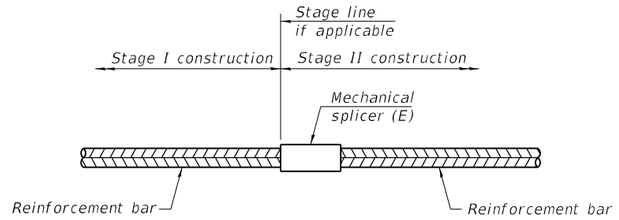
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Deck	#5	512	3'-6"
Approach	#5	168	3'-6"
Approach	#8	116	4'-9"
Pier Diaphragm	#6	4	4'-0"
Abut. Diaphragm	#6	12	4'-0"
South Abutment	#7	15	5'-6"
North Abutment	#7	15	5'-6"
Pier	#8	12	5'-9"
Pier	#5	72	3'-7"
Pier	#4	6	2'-7"



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Notes:
Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
All reinforcement shall be lapped and tied to the splicer bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 1-1-2020

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY DETAILS
STRUCTURE NO. 043-0081
SHEET 25 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	63
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

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8/9/2021 11:48:06 AM

Illinois Department of Transportation
Division of Highways
GSG Consultants, Inc.

SOIL BORING LOG

Page 1 of 1

Date 10/9/20

ROUTE IL Route 78 DESCRIPTION IL Route 78 over Plum River LOGGED BY MH

SECTION FAP Route 642 (IL 78) LOCATION Stockton, IL, SEC. , TWP. , RNG. ,
Latitude 42.274684, Longitude -90.029938

COUNTY Jo Daviess DRILLING METHOD MUD ROTARY HAMMER TYPE AUTO

STRUCT. NO. SN 043-0081
Station 318+24.75

BORING NO. BSB-1
Station 319+76
Offset 15.30ft SE
Ground Surface Elev. 728.53 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter None ft
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
				Brown, Moist FILL: SAND, with gravel
727.03				
	2			
	3	1.5	24	Dark Gray, Moist to Very Moist FILL: SILTY CLAY, trace sand
	4	P		
	2			
	2	1.0	29	
-5	2	P		
723.03				
	2			Brown, Gray and Black, Very Moist FILL: CLAYEY SILT, with fine sand, trace organics
	2	0.8	29	
	2	B		
	2			
	2	0.5	46	
-10	3	P		
718.03				
	1			Stiff Gray and Brown, Very Moist SILTY CLAY, trace sand (CL/ML)
	1	1.0	45	
	2	B		
715.53				
	4			Medium Dense to Loose Dark Gray and Brown, Wet to Moist SAND, with gravel, little silt (SP)
	6		20	
-15	8			
	2			
	2		23	
	8			Clay seam at 17 feet
				Gravel seam at 18.5 feet
	2			
	3		13	
-20	7			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
707.53				WEATHERED LIMESTONE Top of Rock at 21 feet
706.53				LIMESTONE, Gray and Brown, Moderately Weathered, Highly Fractured, Some Vugs Run 1: 22 to 29 feet Recovery: 100% RQD: 36%
-25				
699.53				LIMESTONE, Gray, Slightly Weathered, Moderately Fractured, Some Vugs Run 2: 29 to 37 feet Recovery: 100% RQD: 75%
-30				
691.53				End of Boring
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
GSG Consultants, Inc.

SOIL BORING LOG

Page 1 of 1

Date 10/8/20

ROUTE IL Route 78 DESCRIPTION IL Route 78 over Plum River LOGGED BY MH

SECTION FAP Route 642 (IL 78) LOCATION Stockton, IL, SEC. , TWP. , RNG. ,
Latitude 42.274101, Longitude -90.030644

COUNTY Jo Daviess DRILLING METHOD MUD ROTARY HAMMER TYPE AUTO

STRUCT. NO. SN 043-0081
Station 318+24.75

BORING NO. BSB-2
Station 316+61
Offset 15.40ft SE
Ground Surface Elev. 729.16 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter None ft
Upon Completion N/A ft
After N/A Hrs. N/A ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
				14 inches of Asphalt
727.99				
	3			Dark Gray, Very Moist FILL: SILTY CLAY, trace sand
	2			
	2			
	1			
	1	0.3	35	
-5	2	P		
	2			
	2	0.3	28	
	2	P		
721.16				
	3			Brown, Gray and Black, Very Moist FILL: SILTY CLAY, trace sand
	3	1.0	27	
-10	5	P		
718.66				
	1			Medium Stiff Brown, Moist SILTY CLAY, trace sand (CL)
	1	0.8	20	
	1	B		
716.16				
	2			Loose to Extremely Dense Gray and Brown, Wet to Moist SAND, with silt, trace gravel (SP)
	2		26	
-15	4			
	12			
	21		13	
	20			
	3			Rock Fragments at 19 feet
-20	50/3		18	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
708.66				Top of Rock at 20.5 feet
707.66				LIMESTONE, Gray and Brown, Moderately Weathered and Fractured, Run 1: 21.5 to 31.5 feet Recovery: 91% RQD: 61% 2-inch Brown Sand seam at 24.5 feet Compressive Strength at 26-27 feet: 11,800 psi
-25				
-30				
697.66				LIMESTONE, Gray, Moderately Weathered and Fractured, Some Vugs Run 2: 31.5 to 36.5 feet Recovery: 100% RQD: 70%
-35				
692.66				End of Boring
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 5/22/12

ROUTE FA 642 DESCRIPTION 043-0040 IL 78 Bridge over Plum River, .2 m. N. of Groeziner Road LOGGED BY W. Garza

SECTION 10 BR-3 LOCATION Pleasant Valley - 3SW, SEC. , TWP. 26N, RNG. 4E

COUNTY Jo Daviess DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. 043-0040
Station 318+37

BORING NO. B-1
Station 318+64
Offset 31.00ft Rt CL
Ground Surface Elev. 721.0 ft

Surface Water Elev. 716.0 ft
Stream Bed Elev. 712.0 ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
				-90.030302 42.274548 VERY STIFF Brown SILTY CLAY LOAM
		2.1	21	
718.50	P			
	2			MEDIUM brown SANDY LOAM
	3	0.6	29	
	6	P		
716.50				
-5				
	3			MEDIUM tan dirty weathered LIMESTONE
	10		17	
	9			
714.00				
	6			DENSE tan dirty weathered LIMESTONE
	13			
712.00	21			
-10				
710.50		100.2"		VERY DENSE tan weathered LIMESTONE Auger Refusal @ 10.5'
				Borehole continued with rock coring.
-15				
-20				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

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8/9/2021 11:48:08 AM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING DATA
STRUCTURE NO. 043-0081
SHEET 26 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	64
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

ROCK CORE LOG

Page 1 of 1

Date 5/22/12

ROUTE FA 642 DESCRIPTION 043-0040 IL 78 Bridge over Plum River, .2 m. N. of Groeziner Road LOGGED BY W. Garza

SECTION 10 BR-3 LOCATION Pleasant Valley - 3SW, SEC. , TWP. 26N, RNG. 4E

COUNTY Jo Daviess CORING METHOD

STRUCT. NO. 043-0040 CORING BARREL TYPE & SIZE

Station 318+37 Core Diameter 2 in

BORING NO. B-1 Top of Rock Elev. 714.00 ft

Station 318+64 Begin Core Elev. 710.50 ft

Offset 31.00ft Rt CL

Ground Surface Elev. 721.0 ft

Dolomite: tan-buff, aphanitic, dense, vuggy, displaying minor laminations and vertical fracturing. t.s.f.: 707.7 to 707.2	710.50	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
			1	100	32	3.4	963
Dolomite: as above. t.s.f.: 702.7 to 702.2	705.50		2	100	48	2.4	1156
Dolomite: as above. t.s.f.: 698.2 to 697.7	700.50		3	100	57	2.4	1390
End of Boring	695.50						

Color pictures of the cores

Cores will be stored for examination until

The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 5/23/12

ROUTE FA 642 DESCRIPTION 043-0040 IL 78 Bridge over Plum River, .2 m. N. of Groeziner Road LOGGED BY W. Garza

SECTION 10 BR-3 LOCATION Pleasant Valley - 3SW, SEC. , TWP. 26N, RNG. 4E

COUNTY Jo Daviess DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. 043-0040

Station 318+37

BORING NO. B-2

Station 317+18

Offset 12.00ft Lt CL

Ground Surface Elev. 728.9 ft

Surface Water Elev. 716.0 ft

Stream Bed Elev. 712.0 ft

Groundwater Elev.:

First Encounter 711.4 ft ▼

Upon Completion ft

After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
-90.030694 42.274212 3.5" Asphalt 7.5" Concrete			0.6 P	21
MEDIUM black SILTY CLAY LOAM MEDIUM dark gray SILTY CLAY LOAM	726.40	3 2 8	0.5 P	28
SOFT gray SILTY LOAM	724.90	2 2 3	0.4 P	35
STIFF black SILTY LOAM with 16% ORGANICS	722.40	2 3 6	1.1 P	49
STIFF light brown SILTY CLAY LOAM	719.90	5 4 5	1.3 B	24
SOFT tan LOAM with LIMESTONE fragments	717.40	1 2 2	0.3 B	32
MEDIUM tan moist weathered LIMESTONE	714.40	4 4 8		
MEDIUM tan weathered LIMESTONE	712.40 ▼	4 7 8		
VERY DENSE tan weathered LIMESTONE Auger Refusal @ 21.5'	709.90 707.40			
Borehole continued with rock coring.				

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
		18 100/8"		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)

The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

ROCK CORE LOG

Page 1 of 1

Date 5/23/12

ROUTE FA 642 DESCRIPTION 043-0040 IL 78 Bridge over Plum River, .2 m. N. of Groeziner Road LOGGED BY W. Garza

SECTION 10 BR-3 LOCATION Pleasant Valley - 3SW, SEC. , TWP. 26N, RNG. 4E

COUNTY Jo Daviess CORING METHOD

STRUCT. NO. 043-0040 CORING BARREL TYPE & SIZE

Station 318+37 Core Diameter 2 in

BORING NO. B-2 Top of Rock Elev. 714.40 ft

Station 317+18 Begin Core Elev. 707.40 ft

Offset 12.00ft Lt CL

Ground Surface Elev. 728.9 ft

Dolomite: tan-buff, vuggy, fractured and laminated with no testable segments.	707.40	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
			1	90	10	8.4	
Dolomite: as above, with minor laminations and vertical fractures. t.s.f.: 699.3 to 698.8	702.40		2	100	75	2.8	1195
Dolomite: as above. t.s.f.: 695.3 to 694.6	697.40		3	100	55	2.8	1062
End of Boring	692.40						

Color pictures of the cores

Cores will be stored for examination until

The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

MODEL: Default
FILE NAME: P:\projects\20012\002\S\CADD\CAD_Sheets\043008I-64H58-027-Soil Borings.DGN

8/9/2021 11:48:14 AM

LIN ENGINEERING, LTD.
Consulting Engineers
Springfield, Illinois

USER NAME =	DESIGNED - AML	REVISED -
	CHECKED - MTH	REVISED -
PLOT SCALE =	DRAWN - AJF	REVISED -
PLOT DATE = 11:48:14 AM	CHECKED - MTH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING DATA
STRUCTURE NO. 043-0081

SHEET 27 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	65
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 5/24/12

ROUTE FA 642 DESCRIPTION 043-0040 IL 78 Bridge over Plum River, .2 m. N. of Groeziner Road LOGGED BY W. Garza

SECTION 10 BR-3 LOCATION Pleasant Valley - 3SW, SEC. , TWP. 26N, RNG. 4E

COUNTY Jo Daviess DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. 043-0040
Station 318+37

BORING NO. B-3
Station 319+45
Offset 9.00ft Lt CL
Ground Surface Elev. 728.9 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

		DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
-90.030220 42.274843 10.3" Asphalt, 9.5" Concrete	728.9				
MEDIUM black SILTY CLAY LOAM	726.40		1 2 2	0.5 P	35
MEDIUM brown SILTY LOAM	724.90	-5	1 2 3	0.7 P	31
STIFF brown SILTY LOAM	722.40		2 3 4	1.0 P	35
MEDIUM dark brown SILTY CLAY LOAM	719.90	-10	2 2 4	0.8 P	34
SOFT brown/tan LOAM with LIMESTONE fragments with 10% ORGANICS	717.40		2 4 11	0.3 P	35
MEDIUM brown/tan dirty weathered LIMESTONE	714.40	-15	5 6 6		
STIFF olive-green CLAY LOAM with LIMESTONE fragments	712.40		6 6 10	2.0 P	16
	709.90	-20			
VERY DENSE tan weathered LIMESTONE	707.40		9 11 100/3"		
Borehole continued with rock coring.		-25			
		-30			
		-35			
		-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

ROCK CORE LOG

Page 1 of 1

Date 5/24/12

ROUTE FA 642 DESCRIPTION 043-0040 IL 78 Bridge over Plum River, .2 m. N. of Groeziner Road LOGGED BY W. Garza

SECTION 10 BR-3 LOCATION Pleasant Valley - 3SW, SEC. , TWP. 26N, RNG. 4E

COUNTY Jo Daviess CORING METHOD

STRUCT. NO. 043-0040
Station 318+37

CORING BARREL TYPE & SIZE

Core Diameter 2 in
Top of Rock Elev. 714.40 ft
Begin Core Elev. 707.40 ft

BORING NO. B-3
Station 319+45
Offset 9.00ft Lt CL
Ground Surface Elev. 728.9 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Dolomite: tan-buff, dense, vuggy with some fracturing. t.s.f.: 705.4 to 705.0	707.40	1	100	22	1.8	957
Dolomite: as above. t.s.f.: 697.8 to 697.4	702.40	2	100	53	2.4	944
Dolomite: as above, though more massively bedded. t.s.f.: 695.9 to 695.4	697.40	3	80	43	3.6	1181
End of Boring	692.40					

Color pictures of the cores
Cores will be stored for examination until
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

(Sheet 3 of 3)

LIN ENGINEERING, LTD. Consulting Engineers Springfield, Illinois	USER NAME =	DESIGNED - AML	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED - MTH	REVISED -	
	PLOT SCALE =	DRAWN - AJF	REVISED -	
	PLOT DATE = 11:48:21 AM	CHECKED - MTH	REVISED -	

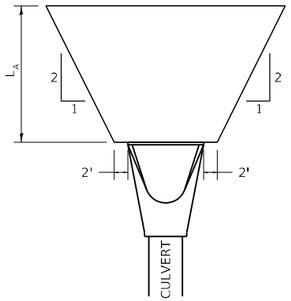
SOIL BORING DATA
STRUCTURE NO. 043-0081
SHEET 28 OF 28 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	66
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

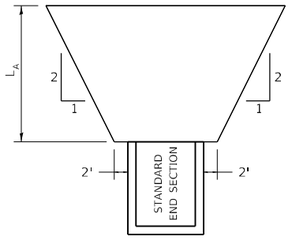
MODEL: Default
FILE NAME: P:\projects\2001\002\S\CADD\CAD_Sheets\043008164H58-028-Soil Borings.DGN

8/9/2021 11:48:21 AM

RIPRAP AT END SECTIONS



FLARED END SECTION

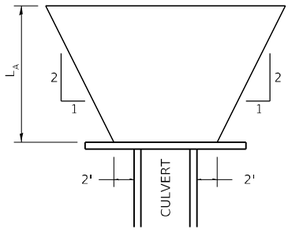


STANDARD END SECTION

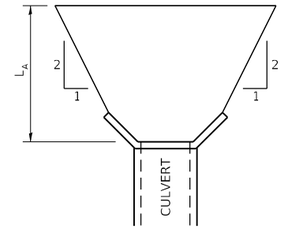
L_A = APRON LENGTH (ft)

IF THE CULVERT OUTLETS INTO A DEFINED CHANNEL, RIPRAP BANK TO BANK FOR LENGTH (L_A).

STANDARD END SECTION:
542001 (PIPE), 542011 (ELLIPTICAL)
DISTRICT STANDARD 10.1 (BOX).



CULVERT WITH HEADWALL

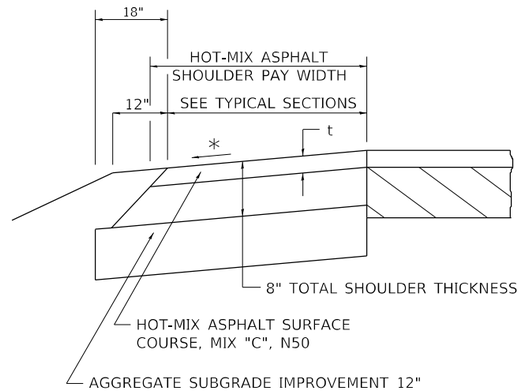


CULVERT WITH WING WALLS

REVISED - 7-13-16
REVISED - 11-12-14
REVISED - 2-10-14

RIPRAP AT END SECTIONS 19.4

HOT-MIX ASPHALT SHOULDER



t = SEE TYPICAL SECTIONS
FOR THICKNESS

GENERAL NOTES

THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 AND SQUARE YARD FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED.

USE HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50. WHEN RESURFACING EXISTING HOT-MIX ASPHALT SHOULDERS. THE THICKNESS IS SHOWN ON THE TYPICAL SECTIONS. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50.

REMOVAL OF MATERIAL FOR PLACEMENT OF THE HOT-MIX ASPHALT SHOULDER TO BE PAID FOR IN UNITS FOR EXCAVATING AND GRADING EXISTING SHOULDERS OR IN CUBIC YARDS FOR EARTH EXCAVATION OR EARTH EXCAVATION WIDENING.

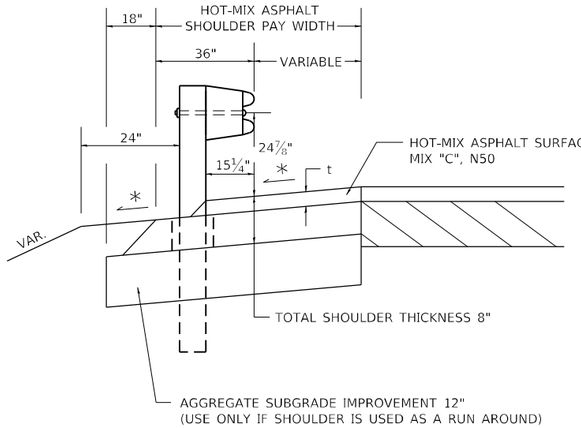
* 4% WHEN MAINLINE IS ON TANGENT. FOR CROSS SLOPE ON SUPERELEVATION SECTION, SEE HIGHWAY STANDARD 482001 OR 482006.

NTS

REVISED - 1-05-16
REVISED - 3-13-13

HOT-MIX ASPHALT SHOULDER 22.4

DETAIL OF HOT-MIX ASPHALT SHOULDER AT GUARDRAIL



t = SEE TYPICAL SECTIONS
FOR THICKNESS

GENERAL NOTES

THE TOP LIFT SHALL NOT BE PLACED BEHIND THE GUARDRAIL POSTS. WHEN PLACING THE TOP LIFT THE RAIL MUST BE REMOVED FROM THE POSTS. THE POST SHALL NOT BE REMOVED. THE RAIL ELEMENT SHALL BE REINSTALLED WITHIN 72 HOURS OF THE COMPLETION OF THE SURFACE COURSE.

THE HEIGHT OF THE GUARDRAIL SHALL BE SET 24⅞" FROM THE FINISHED SURFACE.

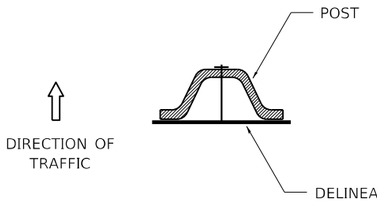
THE HOT-MIX ASPHALT SHOULDER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 482 EXCEPT THE TOP LIFT SHALL BE HOT-MIX ASPHALT SURFACE COURSE, MIXTURE C, N50. THE WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR HOT-MIX ASPHALT SURFACE COURSE, MIXTURE "C", N50 AND SQUARE YARD FOR HOT-MIX ASPHALT SHOULDERS OF THE THICKNESS SPECIFIED. THE REMOVAL & REINSTALLATION OF THE GUARDRAIL WILL BE INCLUDED IN THE COST OF THE HOT-MIX ASPHALT SURFACE COURSE, MIXTURE C, N50.

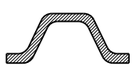
* 4% WHEN MAINLINE IS ON TANGENT. FOR CROSS SLOPE ON SUPERELEVATED SECTION, SEE HIGHWAY STANDARD 482001 OR 482006.

REVISED - 1-05-16
REVISED - 6-27-14
REVISED - 8-27-13
REVISED - 3-13-13

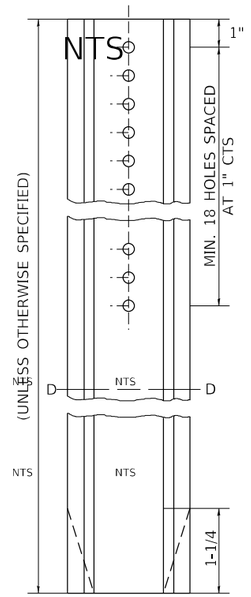
DETAIL OF HOT-MIX ASPHALT SHOULDER AT GUARDRAIL 23.4

DELINEATOR AND POST ORIENTATION





SECTION D-D



DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180° . THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE DELINEATOR ATTACHECD AS SHOWN ABOVE.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

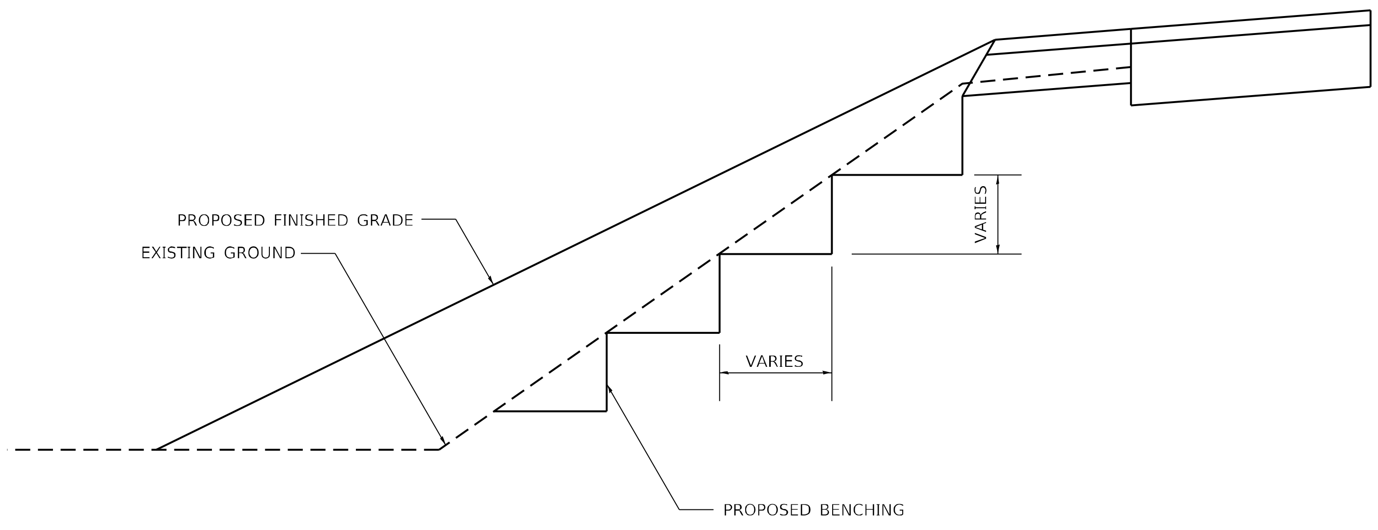
REVISED - 10-03-11

DELINEATOR AND POST ORIENTATION 37.4

REVISED -	REGION 2 / DISTRICT 2 STANDARD				
REVISED -		F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -		642	10BR-5	JO DAVIESS	98	67
REVISED -	SCALE: SSCALES SHEET 1 OF 10 SHEETS STA. TO STA.			CONTRACT NO. 64H58		
				ILLINOIS	FED. AID PROJECT	

FILE NAME: P:\projects\2021\002\CIVIL\CADD\CADsheets\D203012-sht-Details-02.dgn
PLOT DATE = 8/9/2021

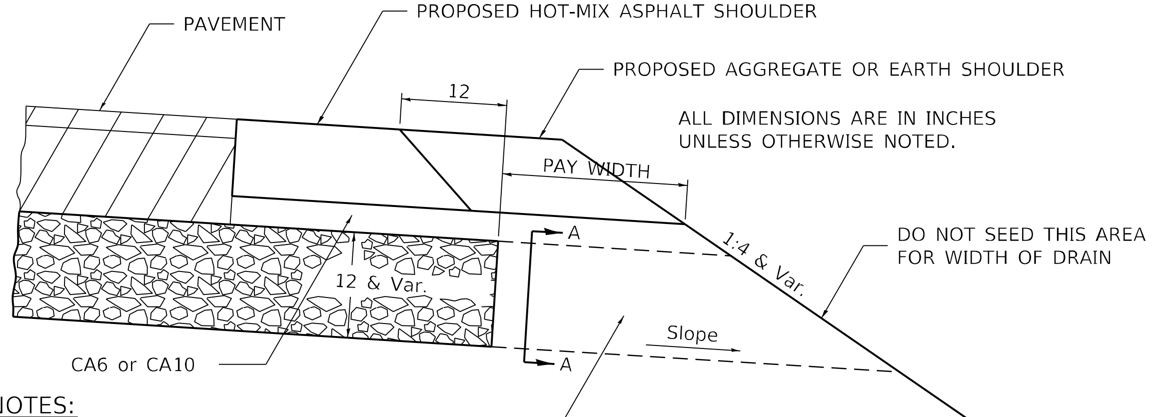
TYPICAL BENCHING ON EXISTING EMBANKMENT



REVISED - 2-22-06

TYPICAL BENCHING ON EXISTING EMBANKMENT 50.4

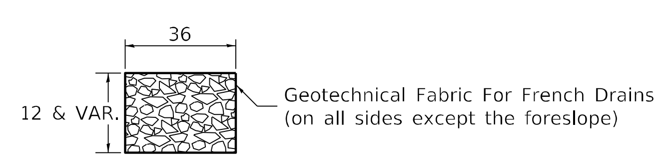
DRAIN FOR AGGREGATE BASE COURSE



ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

NOTES:

The rock outlets shall be constructed using CA7 and will be paid for at the contract unit price per CUBIC YARD for FRENCH DRAINS. The thickness shall be the same as the adjacent sub-base material as noted on the plans and shall include the cost of the filter fabric. The Rock outlets will be measured in CU YD , the width being 36 by the length shown above. The cost of the CA6 or CA10 under the shoulder shall be included in the contract unit price per SQ. YD. for AGGREGATE SUBGRADE IMPROVEMENT of the thickness specified. The fabric to be used shall conform to the Geotechnical Fabric For French Drains.



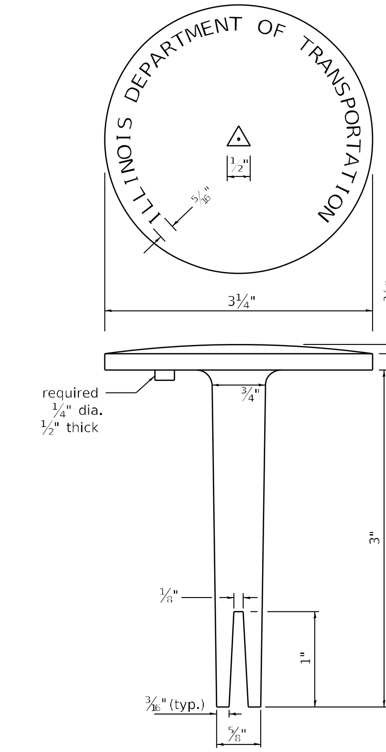
SECTION A-A

NOTE: Slope same as shoulder with 2% min.

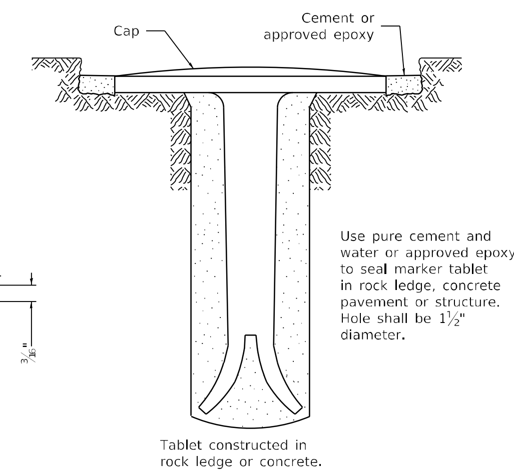
REVISED - 8-27-13
REVISED - 10-09-12

DRAIN FOR AGGREGATE BASE COURSE 96.4

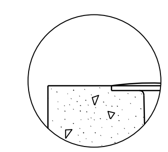
PERMANENT SURVEY MARKERS, TYPE II



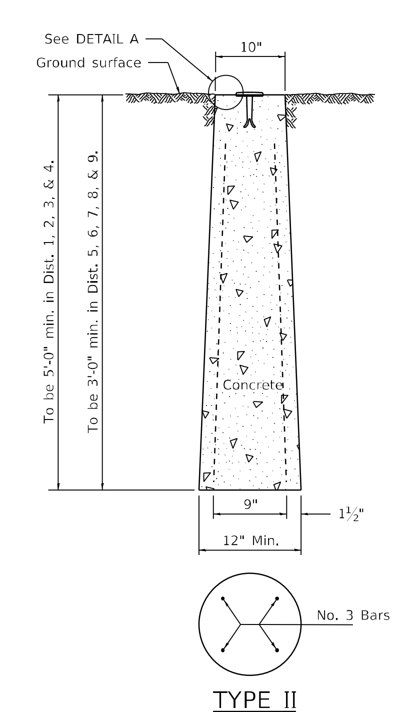
BRASS OR ALUMINUM TABLET



TYPE II



DETAIL A



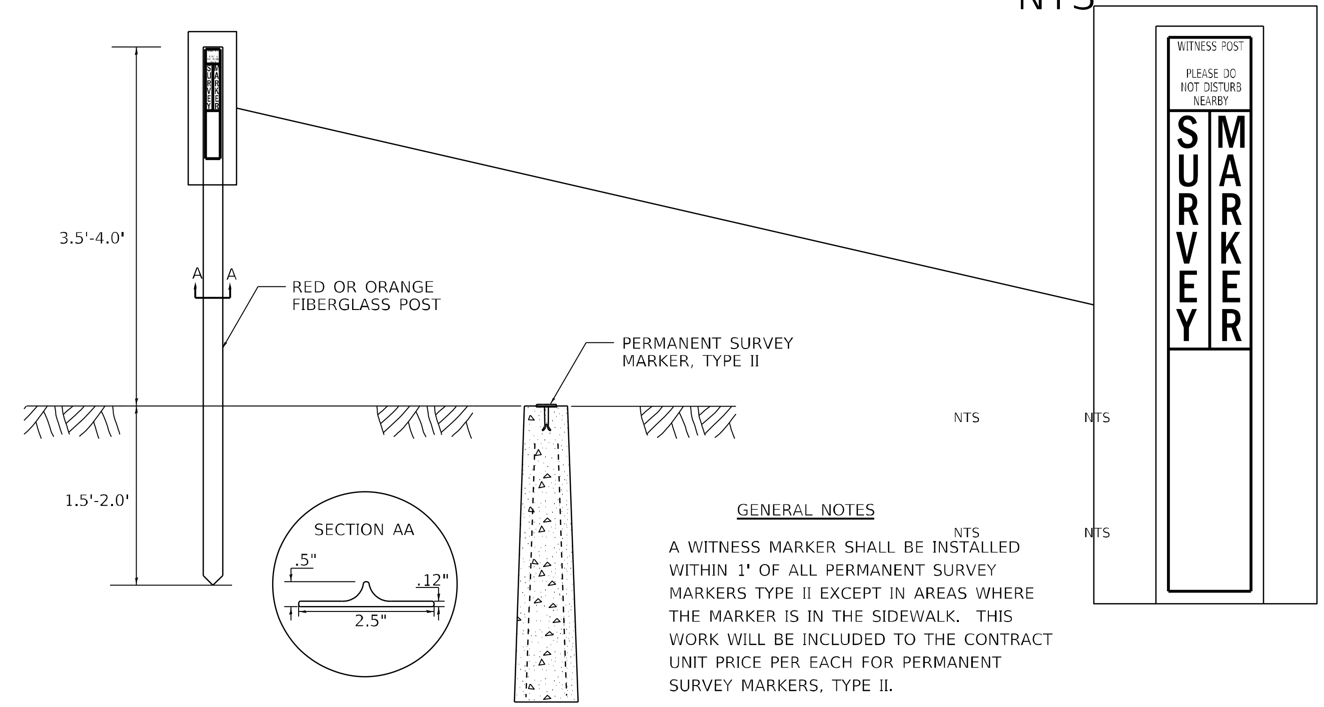
TYPE II

NTS CAST-IN-PLACE MARKER

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

WITNESS MARKER FOR PERMANENT SURVEY MARKERS, TYPE II

NTS



GENERAL NOTES

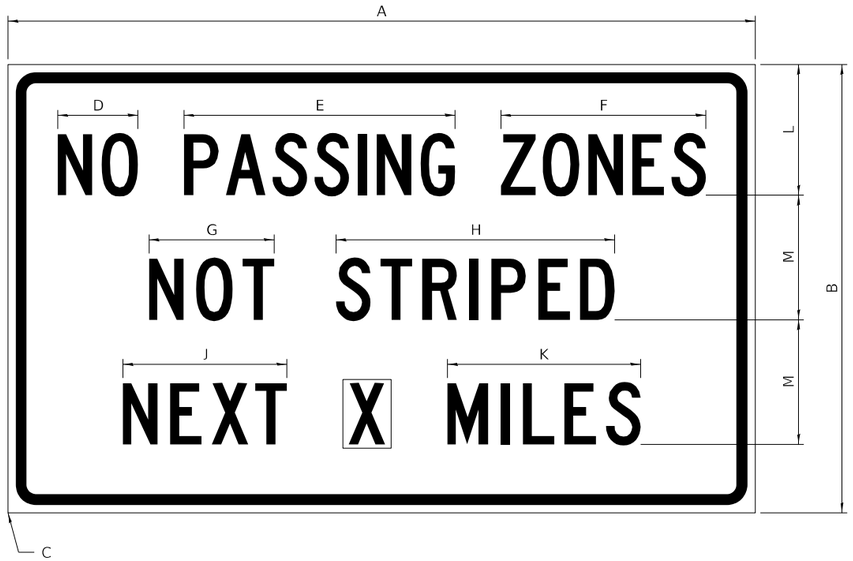
A WITNESS MARKER SHALL BE INSTALLED WITHIN 1' OF ALL PERMANENT SURVEY MARKERS TYPE II EXCEPT IN AREAS WHERE THE MARKER IS IN THE SIDEWALK. THIS WORK WILL BE INCLUDED TO THE CONTRACT UNIT PRICE PER EACH FOR PERMANENT SURVEY MARKERS, TYPE II.

PERMANENT SURVEY MARKERS, TYPE II 66.2

REVISED -	REGION 2 / DISTRICT 2 STANDARD	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -		642	10BR-5	JO DAVIESS	98	68
REVISED -				CONTRACT NO. 64H58		
REVISED -	SCALE: SSCALES SHEET 2 OF 10 SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		

WORK ZONE SIGN DETAILS

ILLINOIS STANDARD G20-I100



COLOR LEGEND AND BORDER BACKGROUND: BLACK ORANGE — NON-REFLECTORIZED REFLECTORIZED

SIGN SIZE	DIMENSIONS											
	A	B	C	D	E	F	G	H	J	K	L	M
60 x 36	60.00	36.00	2.25	6.4	21.80	16.40	10.00	22.40	13.20	15.50	10.50	10.00

SIGN SIZE	SERIES BY LINE			MARGIN	BORDER
	1	2	3		
60 x 36	5C	5C	5C	0.625	0.875

Sign not to scale

GENERAL NOTES

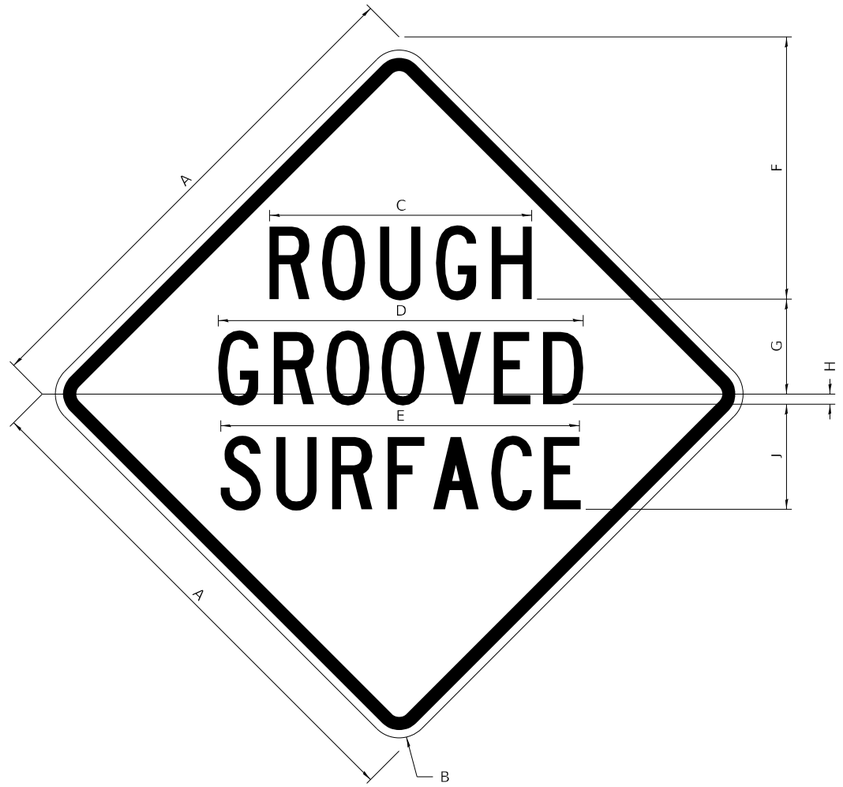
All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

ILLINOIS STANDARD W8-I107



COLOR LEGEND AND BORDER BACKGROUND: BLACK ORANGE — NON-REFLECTORIZED REFLECTORIZED

SIGN SIZE	DIMENSIONS								
	A	B	C	D	E	F	G	H	J
48 x 48	48.00	3.00	25.00	34.80	34.20	24.94	9.00	1.00	10.00

SIGN SIZE	SERIES BY LINE			MARGIN	BORDER
	1	2	3		
48 x 48	7C	7C	7C	1.250	0.750

Sign not to scale

WORK ZONE SIGN DETAILS SHEET 1 OF 4 34.1

MODEL: $MODELNAME$
FILE NAME: P:\projects\200122002\CIVIL\CADD\CADsheets\0203012-sht-Details-02.dgn

USER NAME = BS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALES	CHECKED - NTS	REVISED -
PLOT DATE = 8/9/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

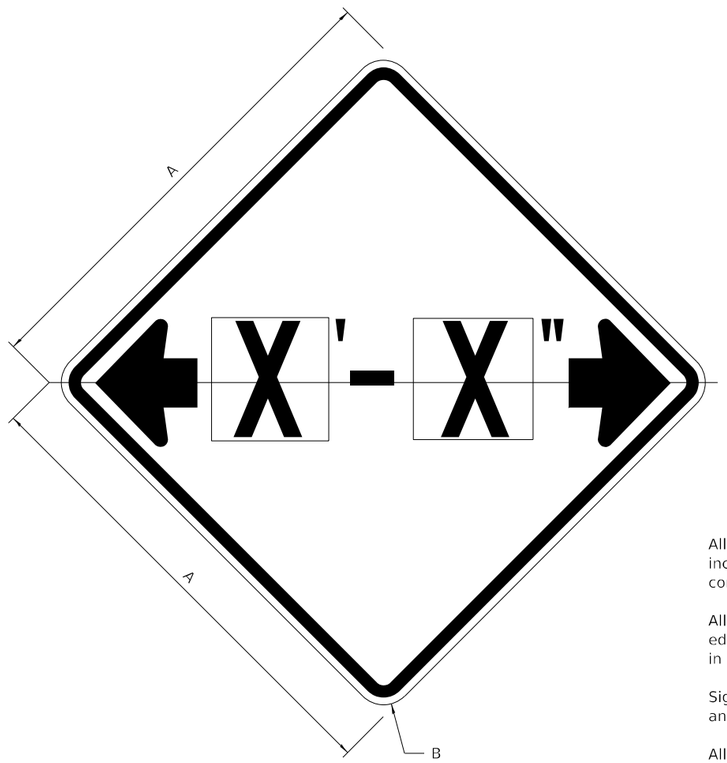
SCALE: NTS | SHEET 3 OF 10 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	69
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		

WORK ZONE SIGN DETAILS

ILLINOIS STANDARD W12-I102

(1)



COLOR | LEGEND AND BORDER | BLACK | NON-REFLECTORIZED
BACKGROUND | FL ORANGE | REFLECTORIZED

SIGN SIZE	DIMENSIONS	
	A	B
48 x 48	48.00	3.00

SIGN SIZE	SERIES BY LINE	MARGIN	BORDER
	1		
48 x 48	12C	0.750	1.250

Sign not to scale

GENERAL NOTES

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

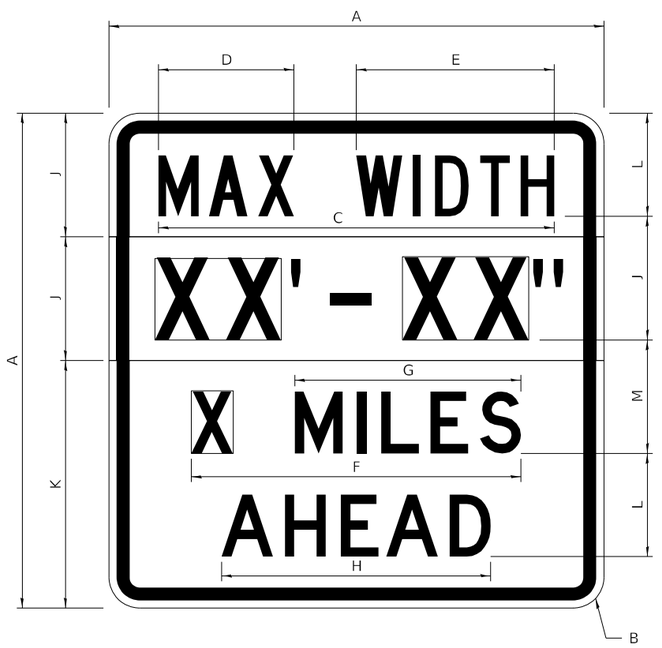
Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

(1) Illinois Standard signs W12-I102 and W12-I103 shall be used as described in the special provisions.

ILLINOIS STANDARD W12-I103

(1)



COLOR | LEGEND AND BORDER | BLACK | NON-REFLECTORIZED
BACKGROUND | WHITE | REFLECTORIZED
BACKGROUND (WIDTH) | FL ORANGE | REFLECTORIZED

SIGN SIZE	DIMENSIONS											
	A	B	C	D	E	F	G	H	J	K	L	M
48 x 48	48.00	3.00	38.40	13.20	19.20	32.00	22.00	26.20	12.00	24.00	10.00	11.00

SIGN SIZE	SERIES BY LINE				MARGIN	BORDER
	1	2	3	4		
48 x 48	6C	8D	6D	6D	0.750	1.250

Sign not to scale

XX'-XX" WIDTH AND X MILES ARE VARIABLE
TOP AND BOTTOM OF BACKGROUND WHITE

WORK ZONE SIGN DETAILS SHEET 2 OF 4 34.1

MODEL: $MODELNAME$
FILE NAME: P:\projects\20012602\CIC\ADD\CAD\sheets\0203012-sht-Details-02.dgn

USER NAME = BS	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - NTS	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

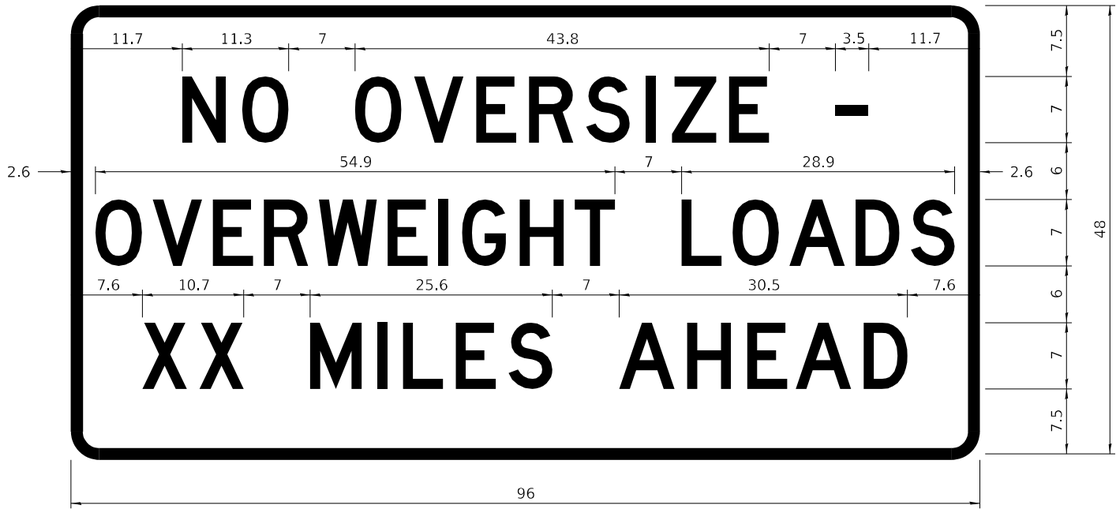
REGION 2 / DISTRICT 2 STANDARD

SCALE: NTS | SHEET 4 OF 10 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	70
		CONTRACT NO. 64H58		
	ILLINOIS FED. AID PROJECT			

WORK ZONE SIGN DETAILS

ROAD CLOSED TO OVERSIZED LOADS



COLOR | LEGEND AND BORDER | BLACK | NON-REFLECTORIZED
BACKGROUND | ORANGE | REFLECTORIZED

Permit Loads - Loads Over 13 Feet; 3.0" Radius, 1.3" Border;
[NO OVERSIZE -] D; [OVERWEIGHT LOADS] D 85% spacing; [XX MILES AHEAD] D;
Table of letter and object lefts.

N	O	O	V	E	R	S	I	Z	E	-
11.7	18.1	30.0	36.2	42.8	48.4	54.4	60.7	63.5	69.5	80.8

O	V	E	R	W	E	I	G	H	T	L	O	A	D	S
2.6	8.6	15.0	20.4	26.2	33.4	38.8	41.3	47.4	53.2	64.5	69.9	75.9	82.9	88.7

X	X	M	I	L	E	S	A	H	E	A	D
7.6	13.6	25.3	32.3	35.1	40.6	46.2	57.9	65.1	71.4	76.6	83.7

Sign not to scale

STOP LINE SIGN FOR TEMPORARY SIGNALS

COLOR | LEGEND AND BORDER | BLACK | NON-REFLECTORIZED
BACKGROUND | WHITE | REFLECTORIZED

SIGN SIZE	SERIES BY LINE		
	1	2	3
24 x 24	4C	4C	4C

Sign not to scale

GENERAL NOTES

All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

WORK ZONE SIGN DETAILS SHEET 3 OF 4 34.1

MODEL: $MODELNAME$
FILE NAME: P:\projects\20012602\CiCADD\CADsheets\0203012-sht-Details-02.dgn

USER NAME = BS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED - NTS	REVISED -
PLOT DATE = 8/9/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

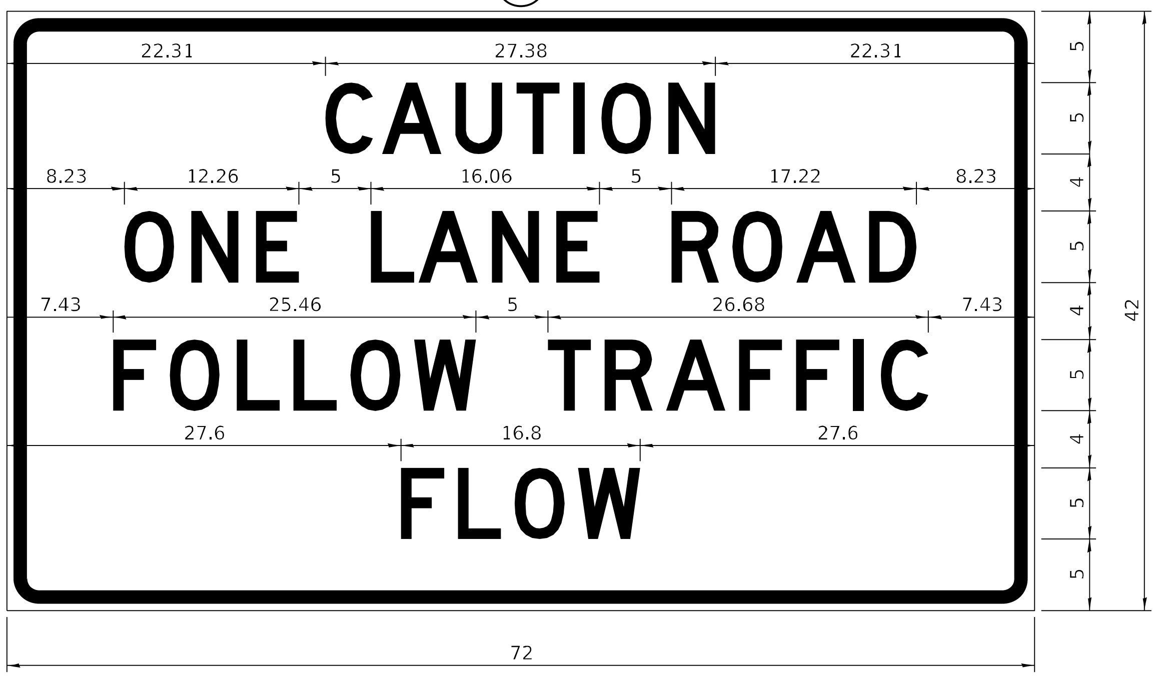
SCALE: NTS | SHEET 5 OF 10 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	71
		CONTRACT NO. 64H58		
	ILLINOIS FED. AID PROJECT			

WORK ZONE SIGN DETAILS

ENTRANCE SIGN FOR USE WITH TEMPORARY SIGNALS

(2)



COLOR	LEGEND AND BORDER	BLACK	NON-REFLECTORIZED
	BACKGROUND	ORANGE	REFLECTORIZED

2.25" Radius, 0.88" Border, 0.50" IndenT;
[CAUTION] D; [ONE LANE ROAD] D;
[FOLLOW TRAFFIC] D; [FLOW] D

(2) This sign shall be installed at entrances located between the temporary signals as shown in the staging plans.

Table Of Widths And Spaces

	C		A		U		T		I		O		N	
22.31	3.36	0.62	4.18	0.94	3.36	0.94	3.04	0.94	0.78	1.17	3.52	1.17	3.36	22.31

	O		N		E
8.23	3.51	1.17	3.36	1.18	3.04

	L		A		N		E
5.00	3.05	0.31	4.18	0.94	3.36	1.17	3.05

	R		O		A		D	
5.00	3.36	0.93	3.52	0.94	4.18	0.93	3.36	8.23

	F		O		L		L		O		W
7.43	3.04	0.94	3.52	1.17	3.04	0.94	3.05	0.94	3.51	0.94	4.37

	T		R		A		F		F		I		C	
5.00	3.05	0.94	3.36	0.94	4.18	0.93	3.05	0.94	3.04	0.94	0.78	1.18	3.35	7.43

	F		L		O		W	
27.60	3.05	0.94	3.04	0.94	3.52	0.93	4.38	27.60

Sign not to scale

GENERAL NOTES

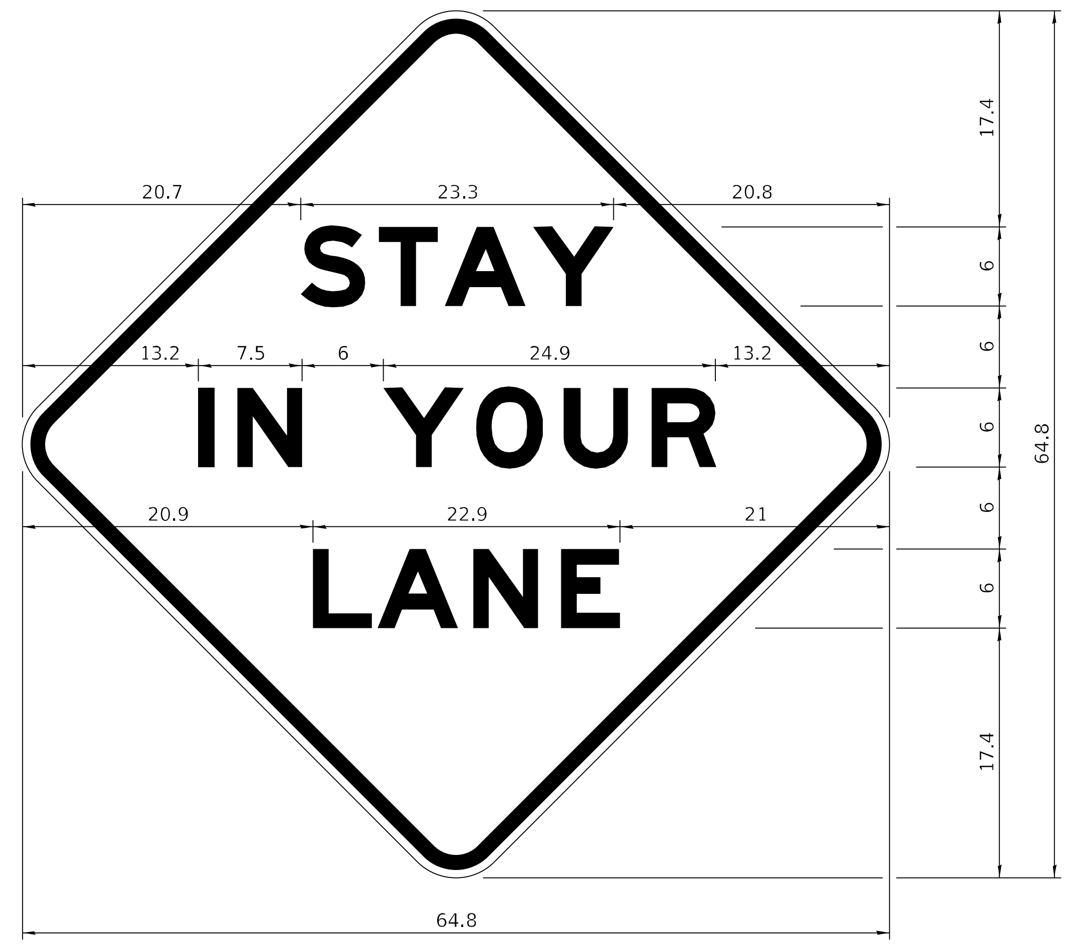
All work to furnish and install these signs shall be included in the cost of the specified traffic control standards and shall not be paid separately.

All Illinois Standard signs shall conform to the latest edition of the "Illinois Standard Highway Signs Book" in effect on the date of invitation for bids.

Signs shall meet the applicable portions of Sections 701 and 720 of the Standard Specifications.

All dimensions are in inches unless otherwise noted.

STAY IN YOUR LANE



COLOR	LEGEND AND BORDER	BLACK	NON-REFLECTORIZED
	BACKGROUND	ORANGE	REFLECTORIZED

48.0" across sides 3.8" Radius, 1.0" Border, 0.6" Indent;
"STAY" E Mod; "IN YOUR" E Mod; "LANE" E Mod;

Table of Letter and Object Lefts

S	T	A	Y
20.7	26.8	31.6	38.0

I	N	Y	O	U	R
13.2	15.9	26.7	33.9	40.5	46.8

L	A	N	E
20.9	25.8	33.1	39.4

Sign not to scale

WORK ZONE SIGN DETAILS SHEET 4 OF 4 34.1

MODEL: $MODELNAME$
FILE NAME: P:\projects\20012\002\C\CADD\CADsheets\D203012-sht-Details-D2.dgn

USER NAME = BS	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - NTS	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE: NTS | SHEET 6 OF 10 SHEETS | STA. | TO STA.

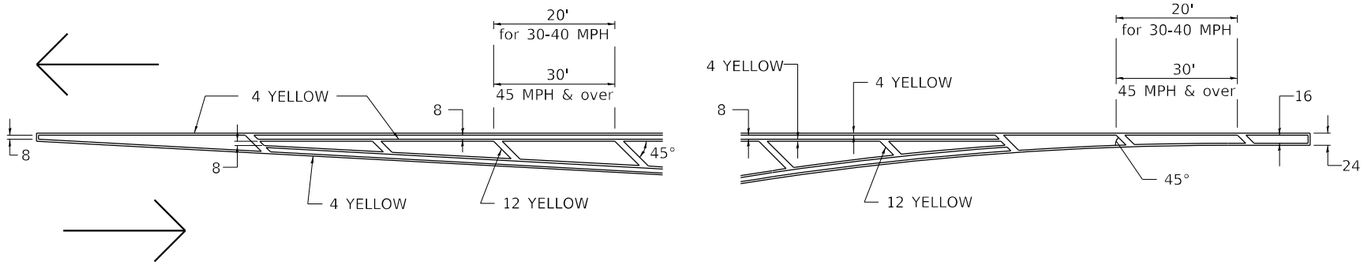
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	72

CONTRACT NO. 64H58

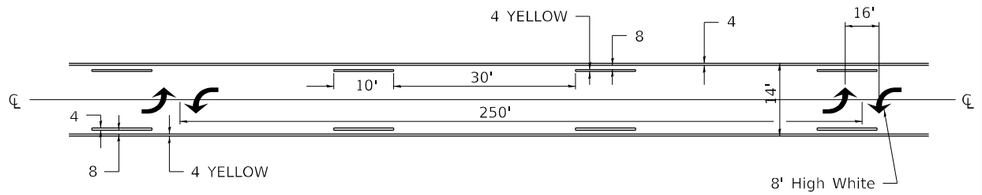
ILLINOIS | FED. AID PROJECT

TYPICAL PAVEMENT MARKINGS

TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

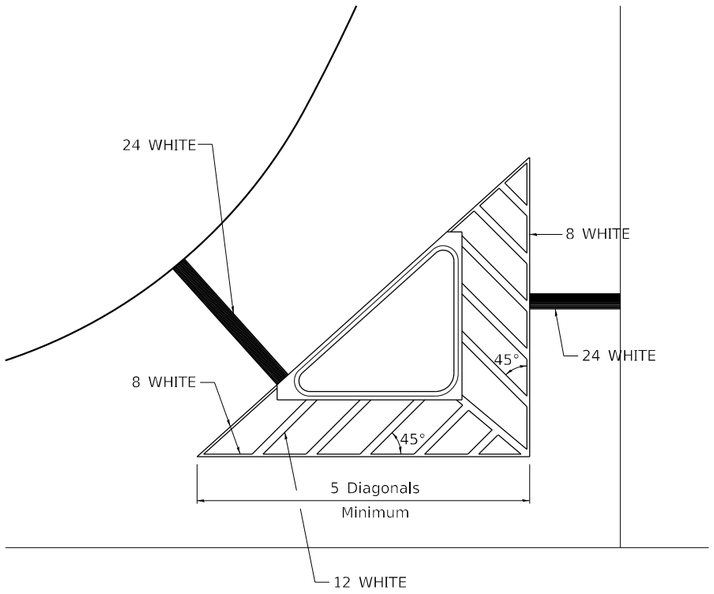


MEDIAN PAVEMENT MARKING



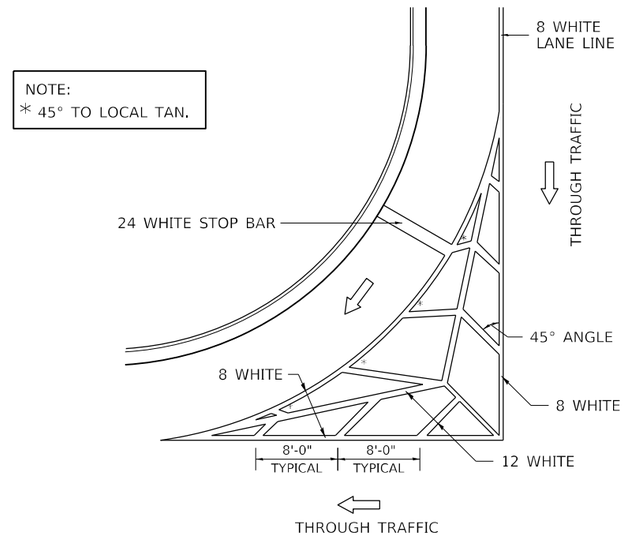
** ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

TYPICAL ISLAND OFFSET SHOULDER WIDTH



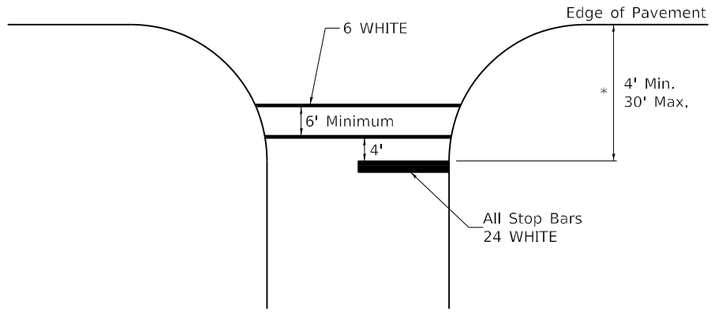
TYPICAL MARKING FOR PAINTED ISLANDS

NOTE:
* 45° TO LOCAL TAN.



STANDARD CROSSWALK MARKING

See Schedules for Locations



* Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

TYPICAL PAVEMENT MARKINGS SHEET 1 OF 3 41.1

MODEL: sMODELNAME$
FILE NAME: P:\projects\2001210021\C\CADD\CADsheets\D203012-sht-Details-02.dgn

USER NAME = BS	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - NTS	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

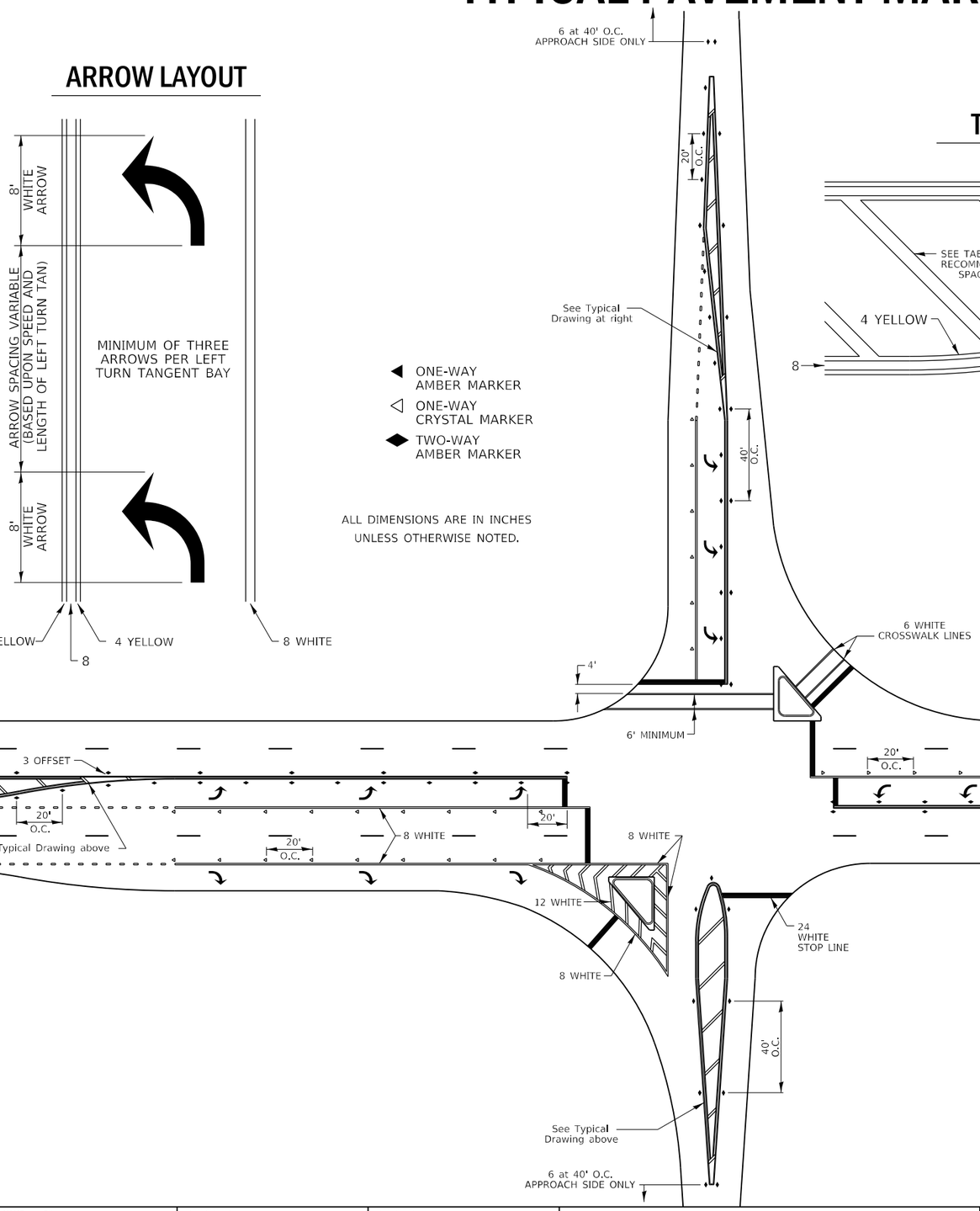
REGION 2 / DISTRICT 2 STANDARD

SCALE: NTS | SHEET 7 OF 10 SHEETS | STA. | TO STA.

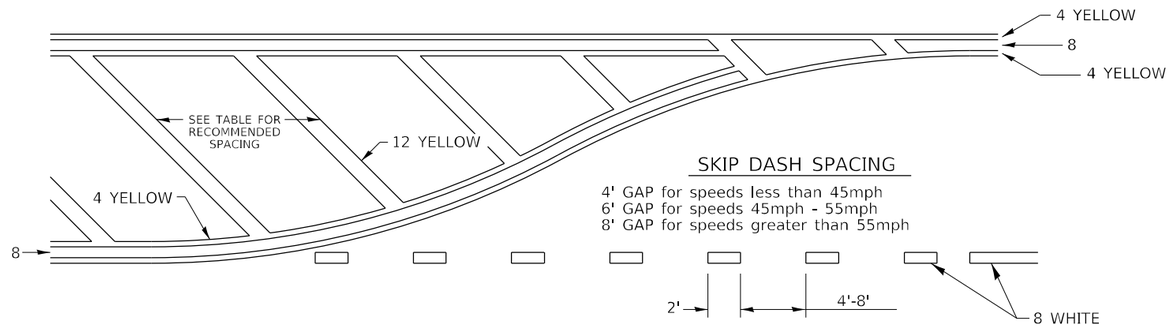
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	73
		CONTRACT NO. 64H58		
		ILLINOIS	FED. AID PROJECT	

TYPICAL PAVEMENT MARKINGS

ARROW LAYOUT



TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 30MPH	50'	15'	10'
30-40MPH	75'	20'	15'
45MPH & over	75'	30'	20'

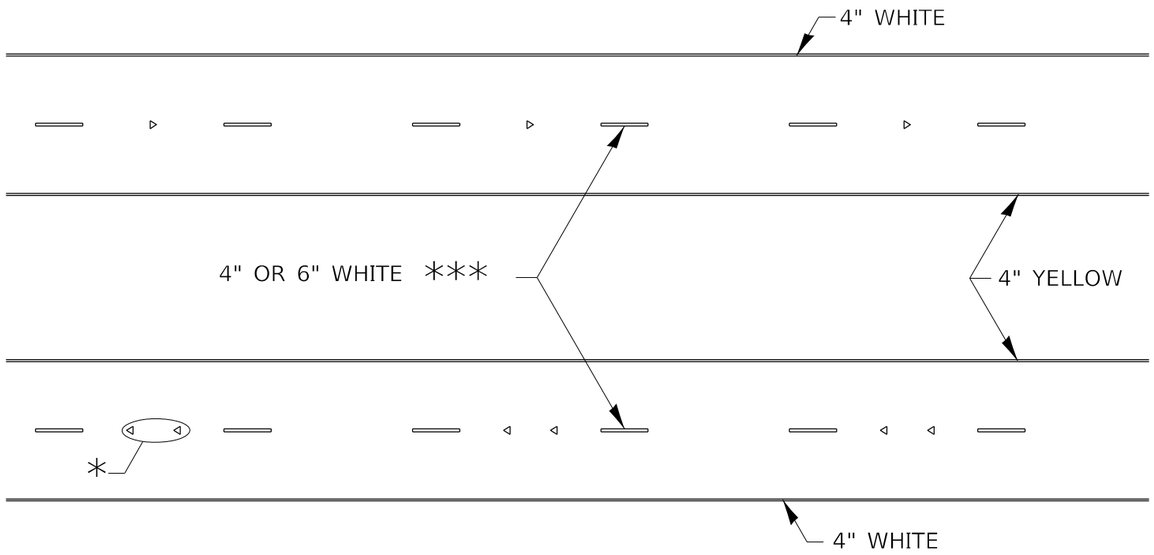
NOTE: if the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.

TYPICAL PAVEMENT MARKINGS SHEET 2 OF 3 41.1

USER NAME = BS	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN -	REVISED -			642	10BR-5	JO DAVIESS	98	74
PLOT SCALE = $SCALE$	CHECKED - NTS	REVISED -					CONTRACT NO. 64H58		
PLOT DATE = 8/9/2021	DATE -	REVISED -		SCALE: NTS SHEET 8 OF 10 SHEETS STA. TO STA.			ILLINOIS	FED. AID PROJECT	

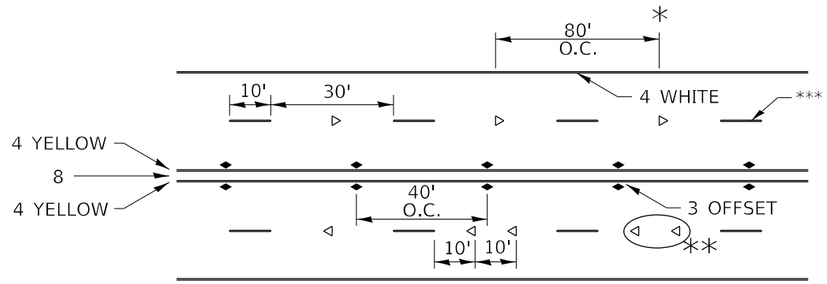
MODEL: $MODELNAME$
FILE NAME: P:\projects\20012\002\C\CADD\CADsheets\D20312-sht-Details-02.dgn

TYPICAL PAVEMENT MARKINGS



* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.
USE DOUBLE MARKERS WHEN ADT ≥ 20,000.

MULTI-LANE / DIVIDED



SYMBOLS

* REDUCE TO 40' O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH LOWER THAN POSTED SPEEDS.

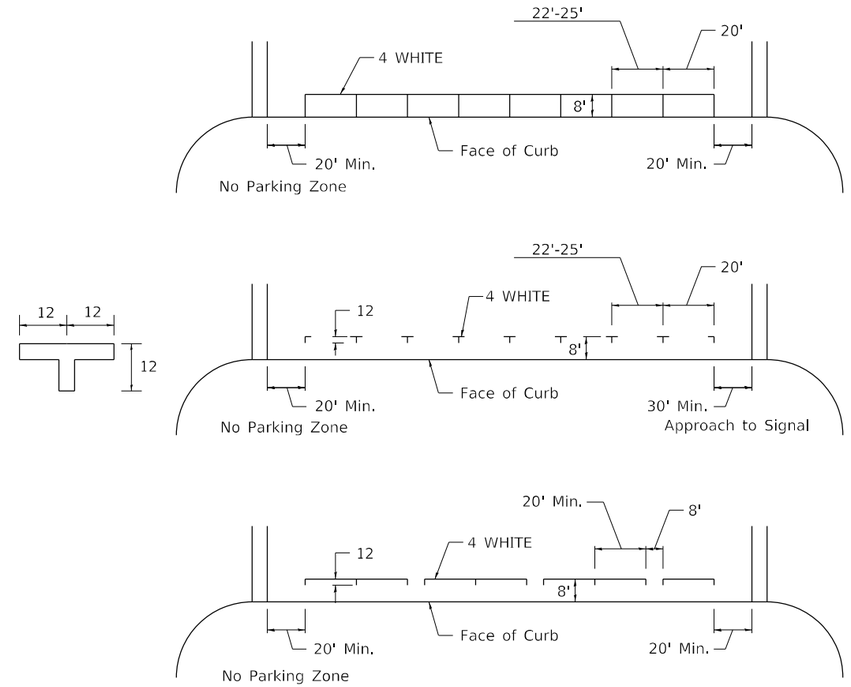
** USE DOUBLE MARKERS WHEN ADT ≥ 20,000

*** CENTERLINE SKIP DASH PAVEMENT MARKING SPEED LIMIT LESS THAN 40 MPH USE 4" LINE. SPEED LIMIT 40 MPH AND OVER USE 6" LINE.

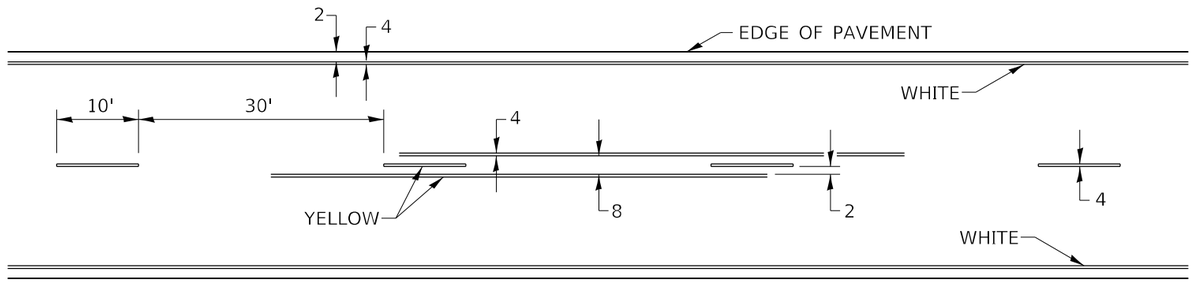
MULTI-LANE / UNDIVIDED & ONE WAY

(FOR MULTI-LANE UNDIVIDED HIGHWAYS USE THIS DETAIL NOT HIGHWAY STANDARD 781001)

TYPICAL PARKING SPACING



TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION - NO PASSING ZONES



TYPICAL PAVEMENT MARKINGS SHEET 3 OF 3 41.1

MODEL: $MODELNAME$
FILE NAME: P:\projects\2021\2\002\C\CADD\CADsheets\0203012-sht-details-02.dgn

USER NAME = BS	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - NTS	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

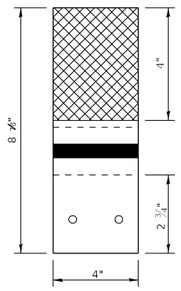
SCALE: NTS | SHEET 9 OF 10 SHEETS | STA. | TO STA.

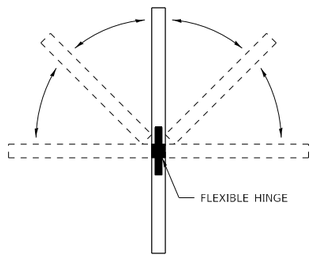
F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	75

CONTRACT NO. 64H58

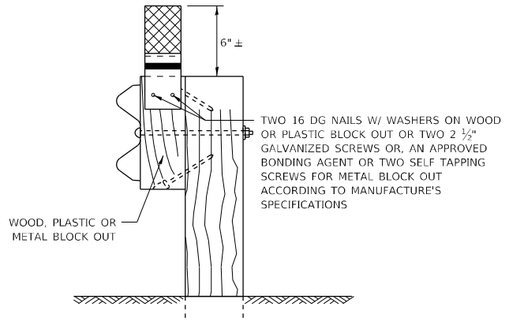
ILLINOIS | FED. AID PROJECT

GUARDRAIL REFLECTORS, TYPE C (SPECIAL)





SIDE VIEW

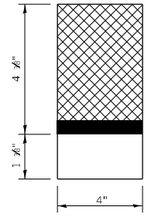


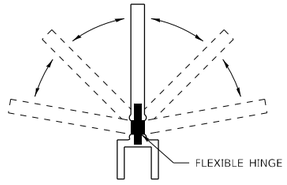
MOUNTED ON A WOOD OR PASTIC GUARDRAIL BLOCK OUT

REFLECTORS SHALL BE MOUNTED DIRECTLY TO WOOD OR PLASTIC BLOCK OUTS.

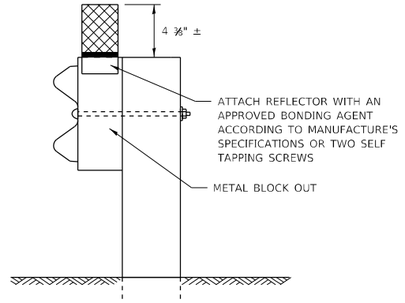
REFLECTORS MOUNTED ON WOODEN OR PLASTIC BLOCK OUT SHALL BE MOUNTED USING TWO 16 DG NAILS AND TWO ⅜" WASHERS OR TWO 2 ½" GALVANIZED SCREWS WITH WASHERS.

REFLECTORS MOUNTED ON WOOD OR PLASTIC GUARDRAIL BLOCK OUT





SIDE VIEW



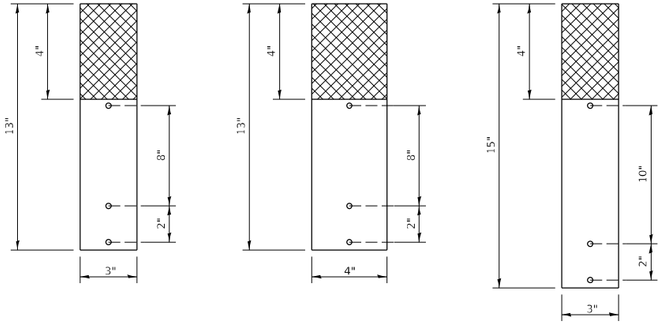
MOUNTED ON A METAL GUARDRAIL BLOCK OUT

REFLECTORS SHALL BE MOUNTED DIRECTLY TO METAL BLOCK OUT.

REFLECTORS MOUNTED ON METAL BLOCK OUT SHALL BE MOUNTED USING AN APPROVED BONDING AGENT PER THE MANUFACTURE'S SPECIFICATIONS OR TWO SELF TAPPING GALVANIZED SCREWS WITH WASHERS.

REFLECTORS MOUNTED ON METAL GUARDRAIL BLOCK OUT

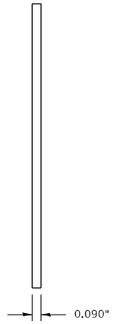
STRAIGHT GUARDRAIL / DELINEATOR REFLECTOR

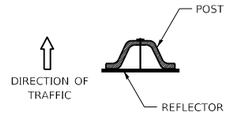


REFLECTORS MAY BE MOUNTED TO DELINEATOR POST USING TWO 10/24 X 1 ½" BOLTS WITH NUTS AND WASHERS.

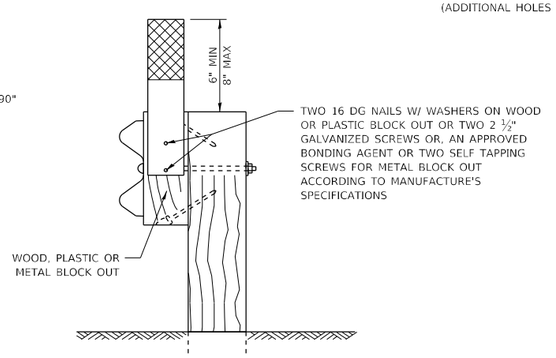
ADDITIONAL HOLES SHALL BE DRILLED IN THE REFLECTORS AS SHOWN ABOVE.

SIDE VIEW



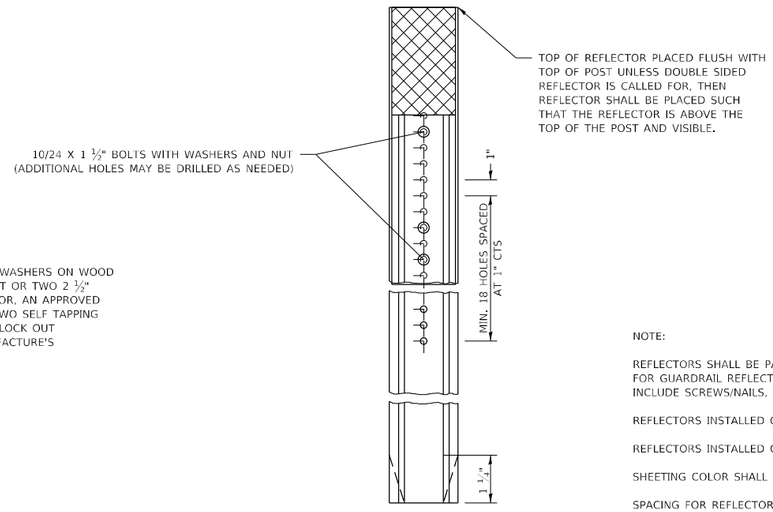


DELINEATORS SHALL BE INSTALLED ACCORDING TO STANDARD 635001 EXCEPT THAT THE POST SHALL BE ROTATED 180° . THE POST WILL HAVE THE WIDE SIDE FACING TRAFFIC AND THE REFLECTOR ATTACHECD AS SHOWN ABOVE.



MOUNTED ON A WOOD OR PASTIC GUARDRAIL BLOCK OUT

ADDITIONAL SHEETING MAY BE ADDED AS NEEDED FOR TURN AROUNDS AS SHOWN IN THE PLANS



MOUNTED ON A DELINEATOR POST

NOTE:

REFLECTORS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER EACH FOR GUARDRAIL REFLECTORS, TYPE C (SPECIAL), WHICH PRICE SHALL ALSO INCLUDE SCREWS/NAILS, WASHERS OR BONDING AGENT.

REFLECTORS INSTALLED ON TWO LANE ROADS SHALL BE DOUBLE SIDED.

REFLECTORS INSTALLED ON DIVIDED HIGHWAYS SHALL BE SINGLE SIDED.

SHEETING COLOR SHALL BE CALLED OUT IN THE PLANS.

SPACING FOR REFLECTORS SHALL BE ACCORDING TO STANDARD 782006 UNLESS OTHERWISE NOTED IN THE PLANS.

REFLECTORS MOUNTED ON GUARDRAIL SHALL BE 4" WIDE.

REFLECTORS MOUNTED ON DELINEATOR POST SHALL BE 3" WIDE.

GUARDRAIL REFLECTORS. TYPE C (SPECIAL)

MODEL: $MODELNAME$
FILE NAME: P:\projects\2021\2002\C\CADD\CADsheets\D203012-sht-Details-02.dgn

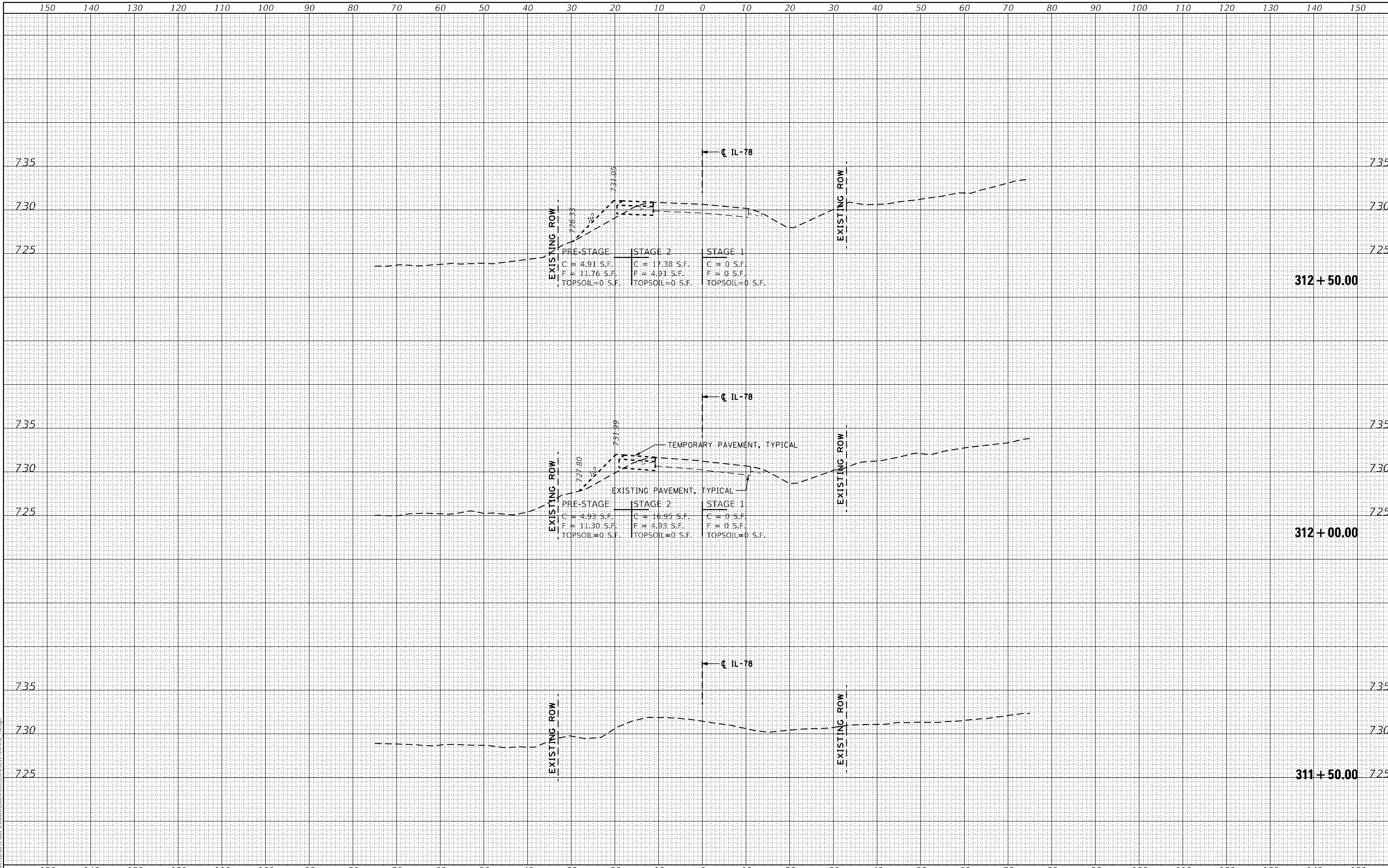
USER NAME = BS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALES	CHECKED - NTS	REVISED -
PLOT DATE = 8/9/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE: NTS | SHEET 10 OF 10 SHEETS | STA. | TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	76
		CONTRACT NO. 64H58		
		ILLINOIS	FED. AID PROJECT	



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

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

MODEL: $MODELNAME$
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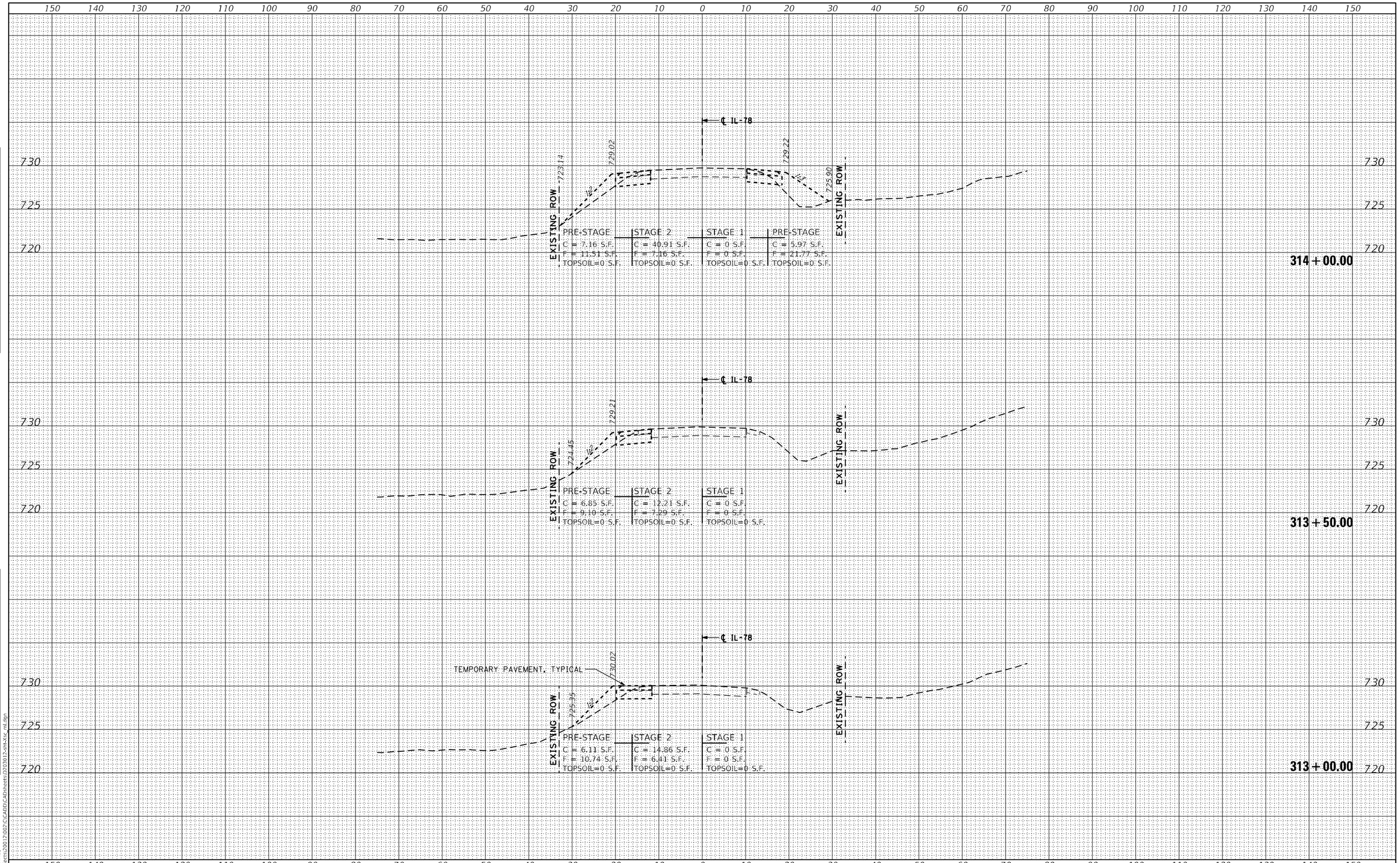
USER NAME = BS	DESIGNED - MMA	REVISED -	
	DRAWN - MMA	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - RCH	REVISED -	
PLOT DATE = 8/9/2021	DATE - 06/30/21	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – IL 78
IL 78 OVER PLUM RIVER

SCALE: 1"=10'H,5'V | SHEET 1 OF 9 SHEETS | STA. 311+50.00 TO STA. 312+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	77
		CONTRACT NO. 64H58		
		ILLINOIS FED. AID PROJECT		



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

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

MODEL: SMODELNAME
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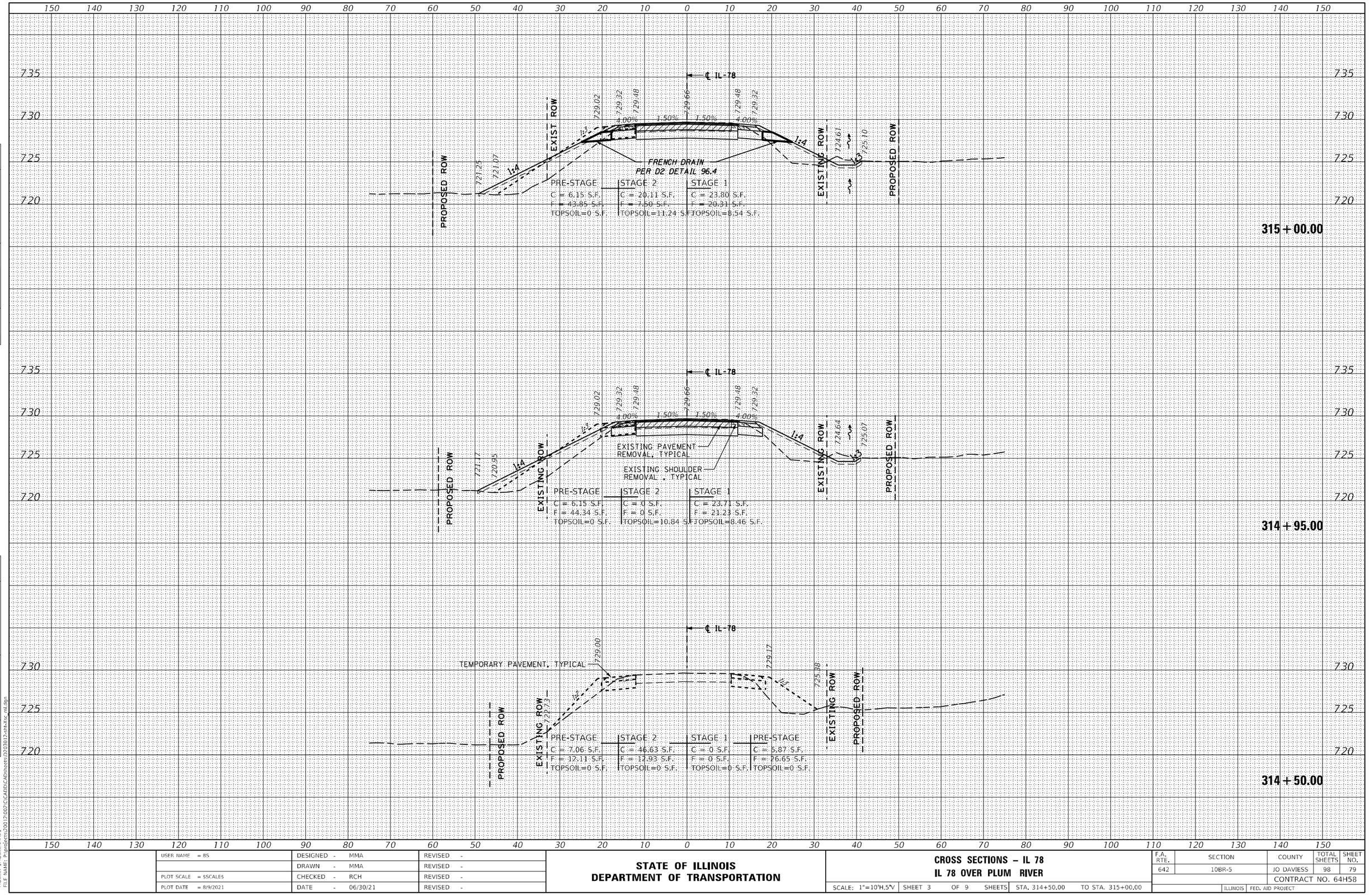
USER NAME = BS	DESIGNED - MMA	REVISED -	
	DRAWN - MMA	REVISED -	
PLOT SCALE = 5SCALE5	CHECKED - RCH	REVISED -	
PLOT DATE = 8/9/2021	DATE - 06/30/21	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – IL 78
IL 78 OVER PLUM RIVER

SCALE: 1"=10'H.5'V | SHEET 2 OF 9 SHEETS | STA. 313+00.00 TO STA. 314+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	78
		CONTRACT NO. 64H58		
		ILLINOIS	FED. AID PROJECT	



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

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

MODEL: $MODEL NAME$
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	DRAWN - MMA	REVISED -	
PLOT SCALE = $SCALES	CHECKED - RCH	REVISED -	
PLOT DATE = 8/9/2021	DATE - 06/30/21	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

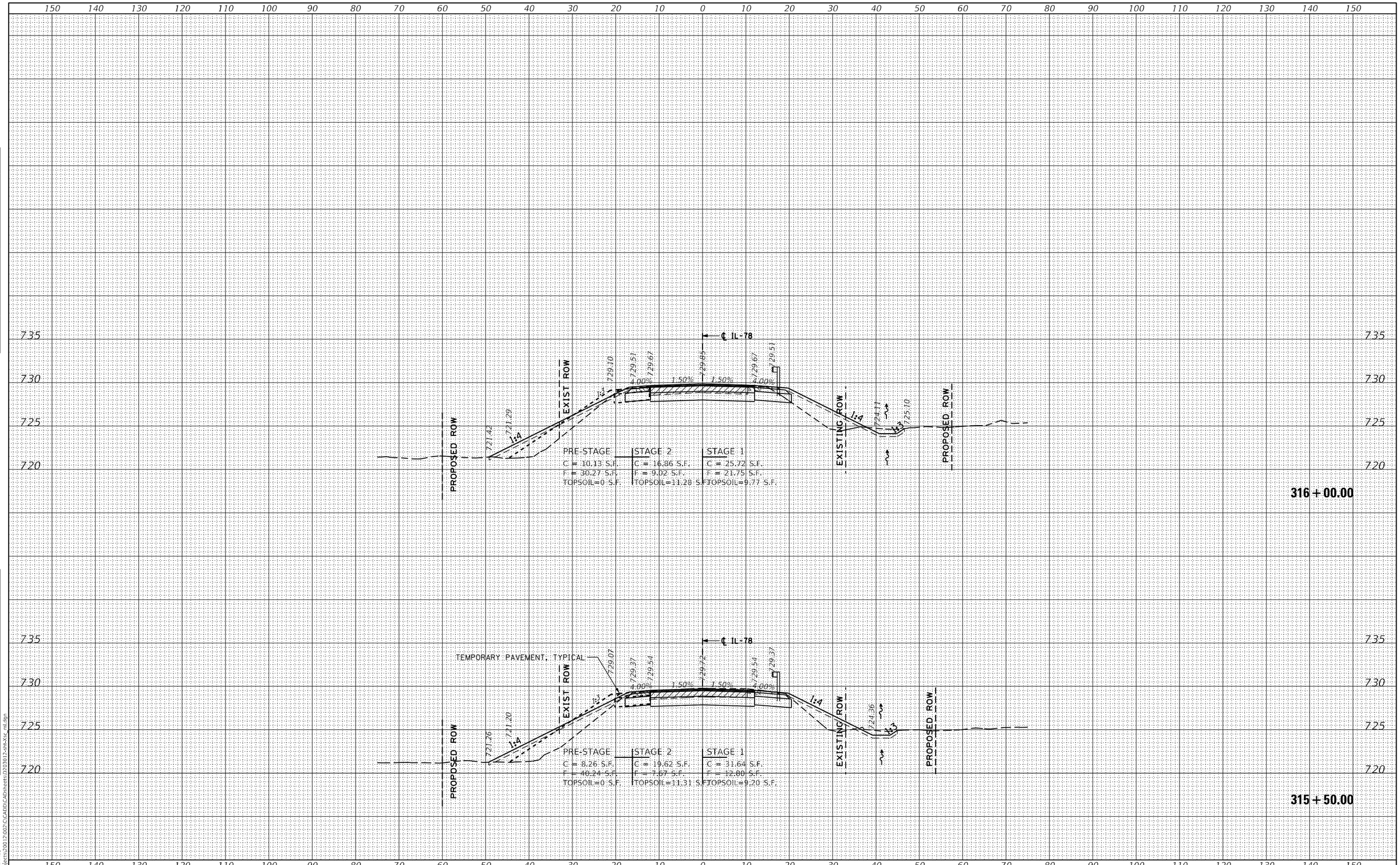
CROSS SECTIONS – IL 78
IL 78 OVER PLUM RIVER

SCALE: 1"=10'H,5'V | SHEET 3 OF 9 SHEETS | STA. 314+50.00 TO STA. 315+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	79
		CONTRACT NO. 64H58		
		ILLINOIS	FED. AID PROJECT	

FINAL SURVEY	
NOTE BOOK	
NO.	

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		



ORIGINAL SURVEY	
NOTE BOOK	
NO.	

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

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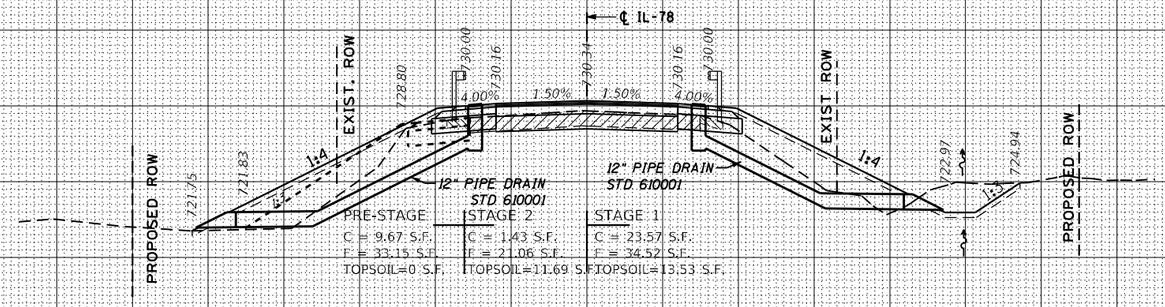
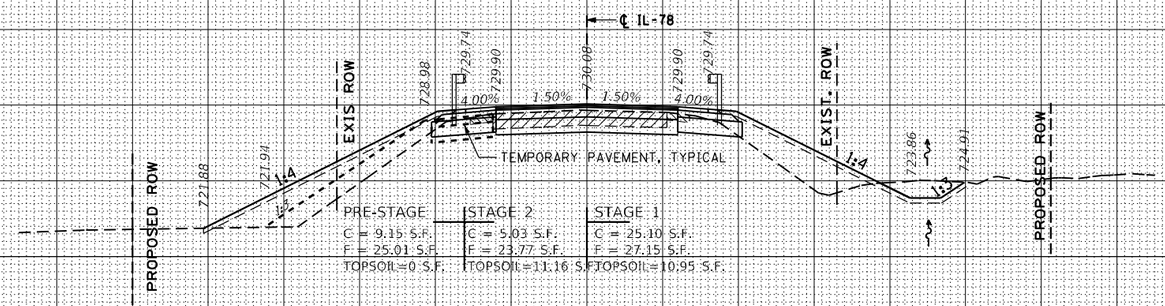
USER NAME = BS	DESIGNED - MMA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS – IL 78 IL 78 OVER PLUM RIVER	
	DRAWN - MMA	REVISED -			
PLOT SCALE = 5SCALES	CHECKED - RCH	REVISED -			
PLOT DATE = 8/9/2021	DATE - 06/30/21	REVISED -		SCALE: 1"=10'H,5'V | SHEET 4 OF 9 SHEETS | STA. 315+50.00 TO STA. 316+00.00	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	80
		CONTRACT NO. 64H58		
	ILLINOIS | FED. AID PROJECT			

BRIDGE OMISSION
STA. 316+96
TO STA. 319+52



316 + 96.00



316 + 50.00

USER NAME = BS	DESIGNED - MMA	REVISED -	**STATE OF ILLINOIS**
	DRAWN - MMA	REVISED -	**DEPARTMENT OF TRANSPORTATION**
PLOT SCALE = $SCALE$	CHECKED - RCH	REVISED -	**CROSS SECTIONS – IL 78**
PLOT DATE = 8/9/2021	DATE - 06/30/21	REVISED -	**IL 78 OVER PLUM RIVER**

SCALE: 1"=10'H,5'V | SHEET 5 OF 9 SHEETS | STA. 316+50.00 TO STA. 316+96.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	81
		CONTRACT NO. 64H58		
		ILLINOIS FED. AID PROJECT		

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

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

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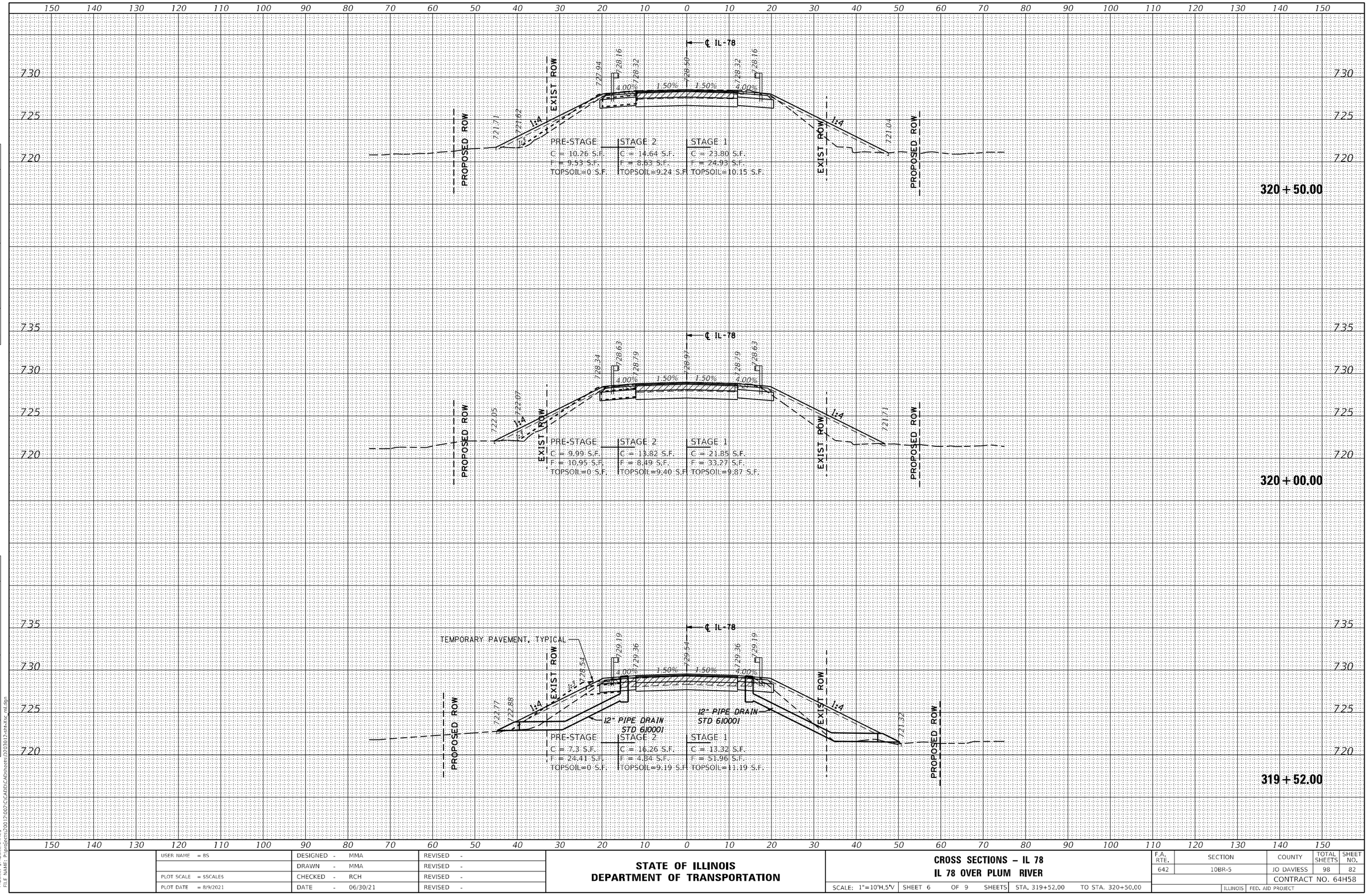

USER NAME = BS	DESIGNED - MMA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS – IL 78 IL 78 OVER PLUM RIVER	
	DRAWN - MMA	REVISED -			
PLOT SCALE = 5SCALES	CHECKED - RCH	REVISED -			
PLOT DATE = 8/9/2021	DATE - 06/30/21	REVISED -		SCALE: 1"=10'H.5'V | SHEET 6 OF 9 SHEETS | STA. 319+52.00 TO STA. 320+50.00	

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	82
		CONTRACT NO. 64H58		
		ILLINOIS | FED. AID PROJECT		

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

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

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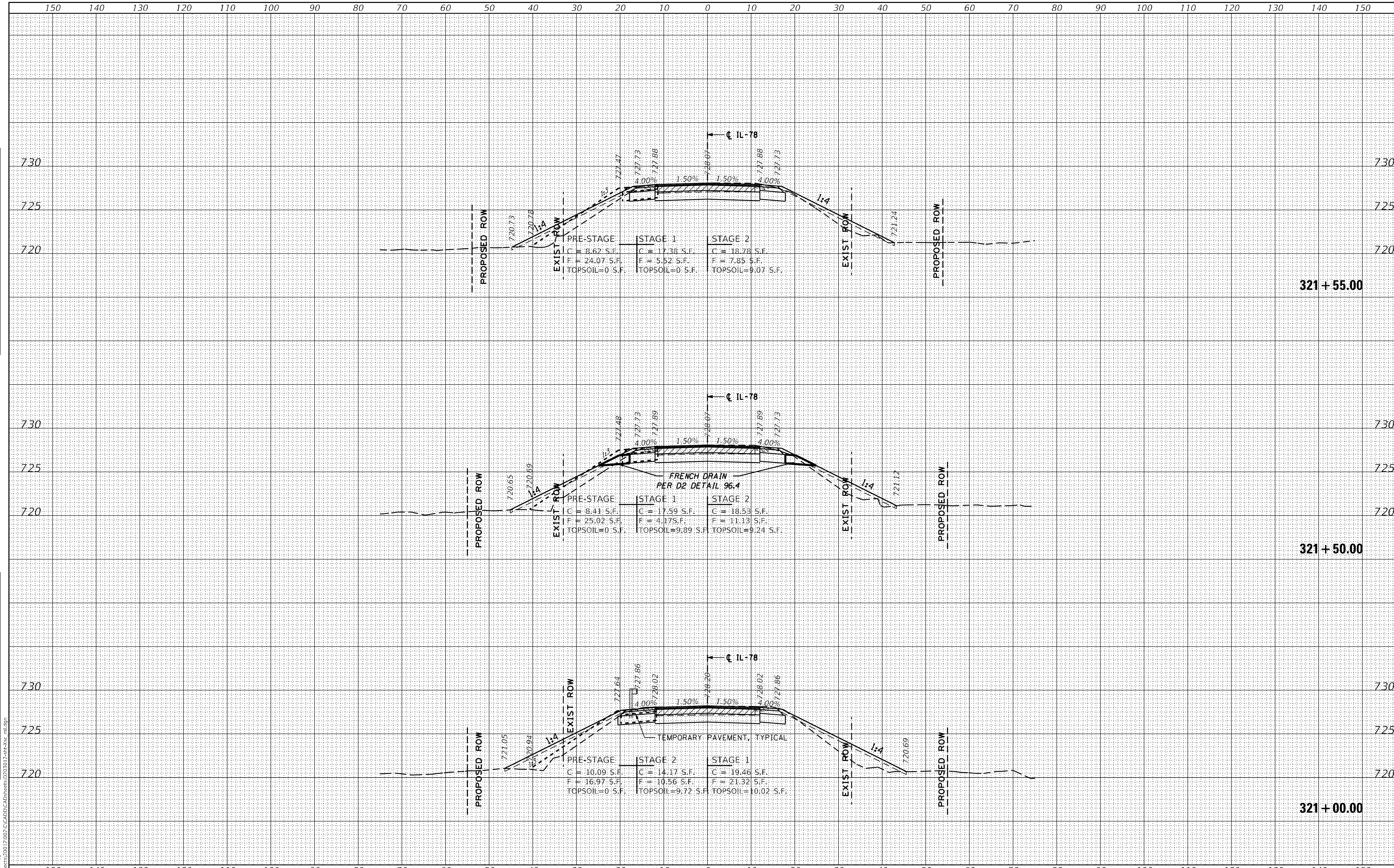

FINAL SURVEY — NOTE BOOK NO. — SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED — BY — DATE

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

MODEL: $MODELNAME$
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	DRAWN - MMA	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - RCH	REVISED -	
PLOT DATE = 8/9/2021	DATE - 06/30/21	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – IL 78
IL 78 OVER PLUM RIVER

SCALE: 1"=10'H,5'V | SHEET 7 OF 9 SHEETS | STA. 321+00.00 TO STA. 321+55.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	83
		CONTRACT NO. 64H58		
		ILLINOIS FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

725
720

EXISTING ROW
724.54
727.32
1:3
PRE-STAGE
C = 8.52 S.F.
F = 4.80 S.F.
TOPSOIL=0 S.F.
STAGE 2
C = 6.56 S.F.
F = 8.52 S.F.
TOPSOIL=0 S.F.
STAGE 1
C = 0 S.F.
F = 0 S.F.
TOPSOIL=0 S.F.
EXISTING ROW

323+50.00

℄ IL-78

EXISTING ROW
723.80
727.06
1:3
PRE-STAGE
C = 9.32 S.F.
F = 6.92 S.F.
TOPSOIL=0 S.F.
STAGE 2
C = 7.92 S.F.
F = 9.32 S.F.
TOPSOIL=0 S.F.
STAGE 1
C = 0 S.F.
F = 0 S.F.
TOPSOIL=0 S.F.
EXISTING ROW

323+00.00

℄ IL-78

EXISTING ROW
722.99
727.34
1:3
6%
728.75
6%
724.53
EXISTING ROW
PRE-STAGE
C = 8.94 S.F.
F = 10.57 S.F.
TOPSOIL=0 S.F.
STAGE 2
C = 27.50 S.F.
F = 16.29 S.F.
TOPSOIL=0 S.F.
STAGE 1
C = 0 S.F.
F = 0 S.F.
TOPSOIL=0 S.F.
PRE-STAGE
C = 7.33 S.F.
F = 12.38 S.F.
TOPSOIL=0 S.F.

322+50.00

℄ IL-78

TEMPORARY PAVEMENT, TYPICAL
722.40
728.20
1:3
6%
6%
EXIST ROW
722.15
PROPOSED ROW
EXISTING ROW
723.60
PROPOSED ROW
PRE-STAGE
C = 8.96 S.F.
F = 16.61 S.F.
TOPSOIL=0 S.F.
STAGE 2
C = 35.10 S.F.
F = 16.66 S.F.
TOPSOIL=0 S.F.
STAGE 1
C = 0 S.F.
F = 0 S.F.
TOPSOIL=0 S.F.
PRE-STAGE
C = 7.71 S.F.
F = 14.31 S.F.
TOPSOIL=0 S.F.

322+00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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

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

MODEL: $MODELNAME$
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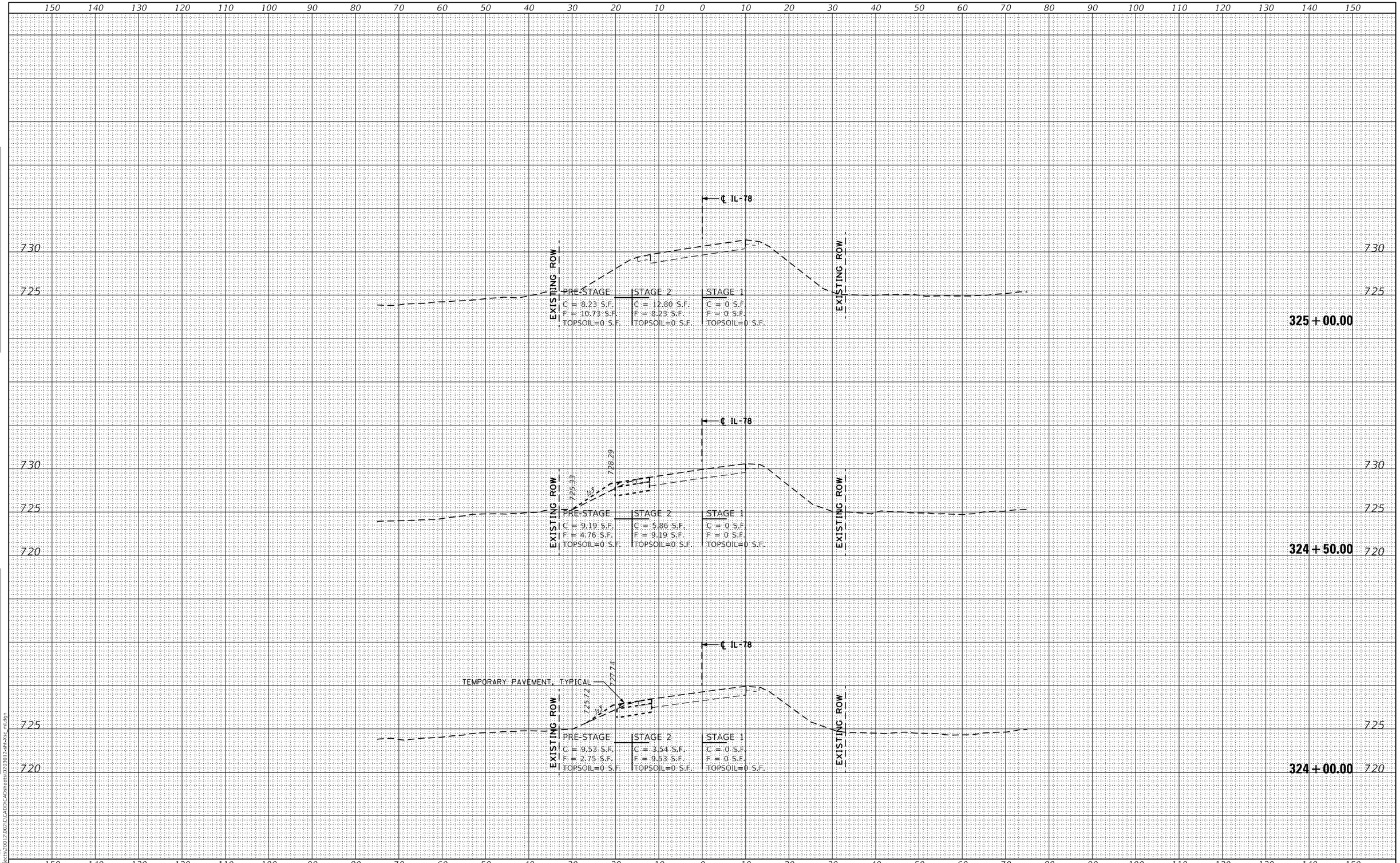
	DRAWN - MMA	REVISED -	
PLOT SCALE = $SCALES	CHECKED - RCH	REVISED -	
PLOT DATE = 8/9/2021	DATE - 06/30/21	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – IL 78
IL 78 OVER PLUM RIVER

SCALE: 1"=10'H,5'V | SHEET 8 OF 9 SHEETS | STA. 322+00.00 | TO STA. 323+50.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	84
		CONTRACT NO. 64H58		
		ILLINOIS	FED. AID PROJECT	



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

BY	DATE

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

BY	DATE

MODEL: SMODEL NAMES
FILE NAME: P:\projects\2021202\CADD\CAD\sheets\2021202-sht-Xsc ml.dgn

USER NAME = BS	DESIGNED - MMA	REVISED -
	DRAWN - MMA	REVISED -
PLOT SCALE = 5SCALES	CHECKED - RCH	REVISED -
PLOT DATE = 8/9/2021	DATE - 06/30/21	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

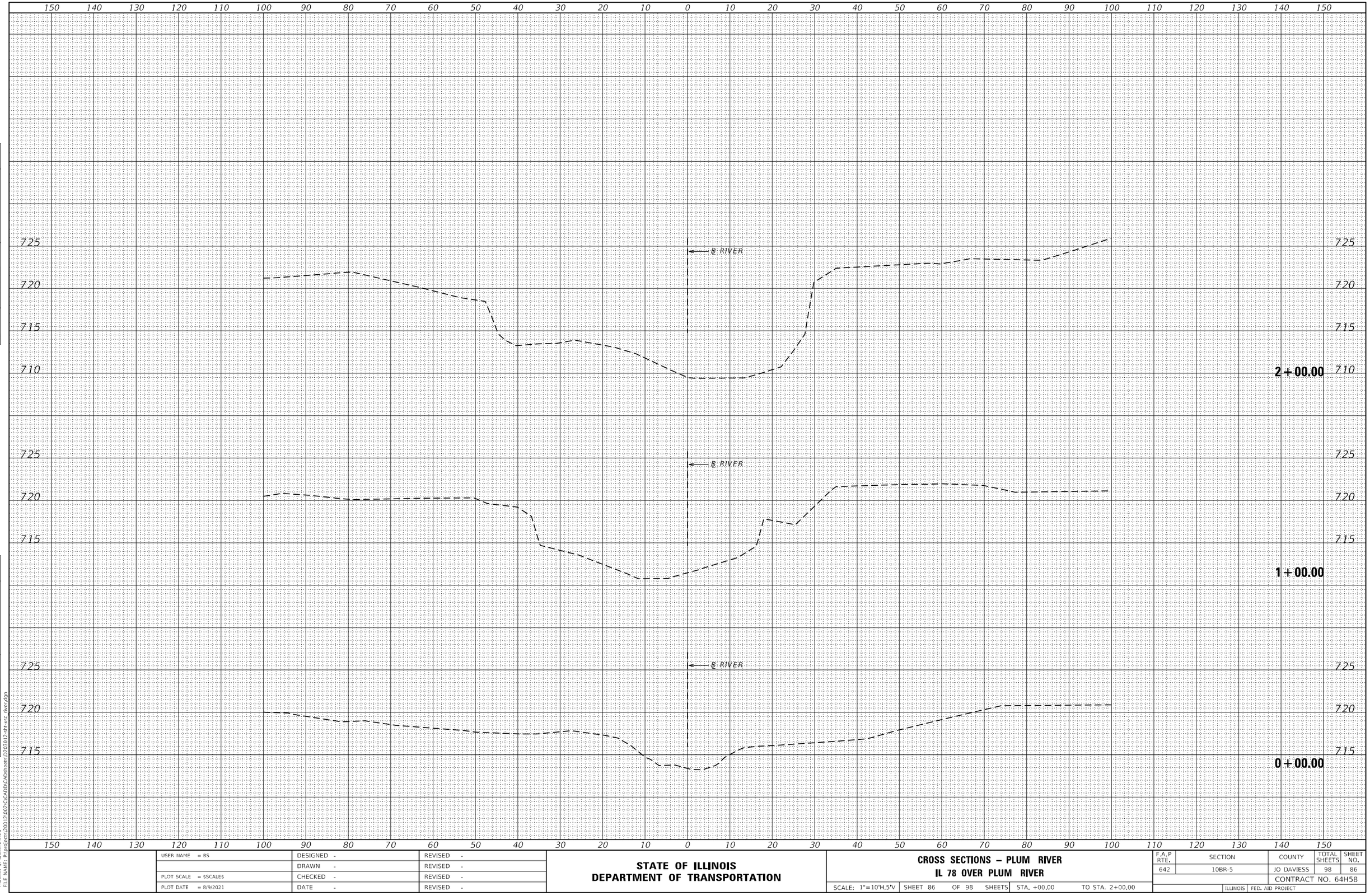
CROSS SECTIONS – IL 78
IL 78 OVER PLUM RIVER

SCALE: 1"=10'H.5'V | SHEET 9 OF 9 SHEETS | STA. 324+00.00 TO STA. 325+00.00

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	85
		CONTRACT NO. 64H58		
		ILLINOIS	FED. AID PROJECT	

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

BY	DATE



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

BY	DATE

MODEL: SMODELNAME
FILE NAME: P:\projects\2021202\CADD\CAD\sheets\20230112-sht-xsc river.dgn

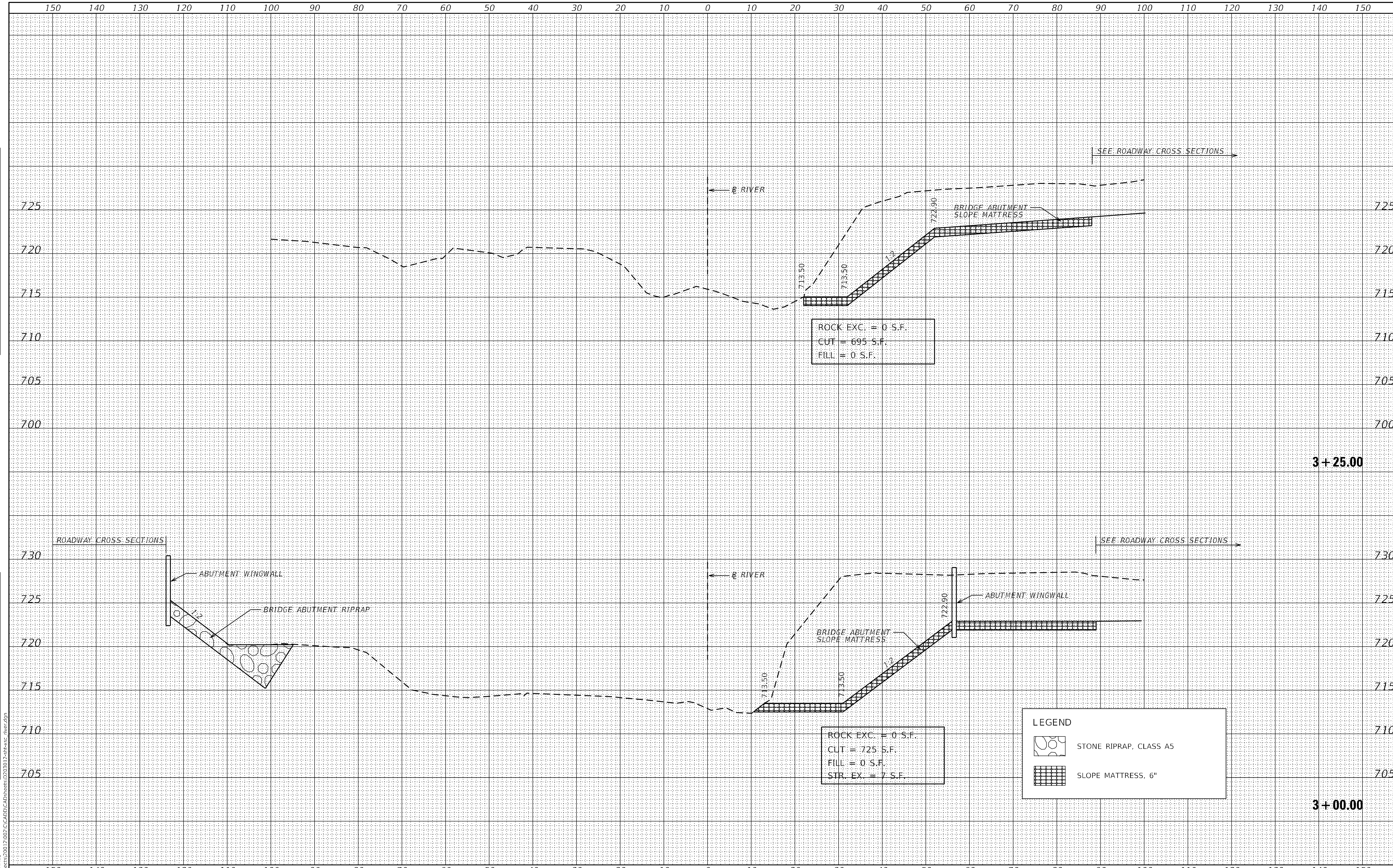
USER NAME = BS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = 8/9/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – PLUM RIVER
IL 78 OVER PLUM RIVER

SCALE: 1"=10'H,5'V | SHEET 86 OF 98 SHEETS | STA. +00.00 | TO STA. 2+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	86
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		



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

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

MODEL: $MODELNAME$
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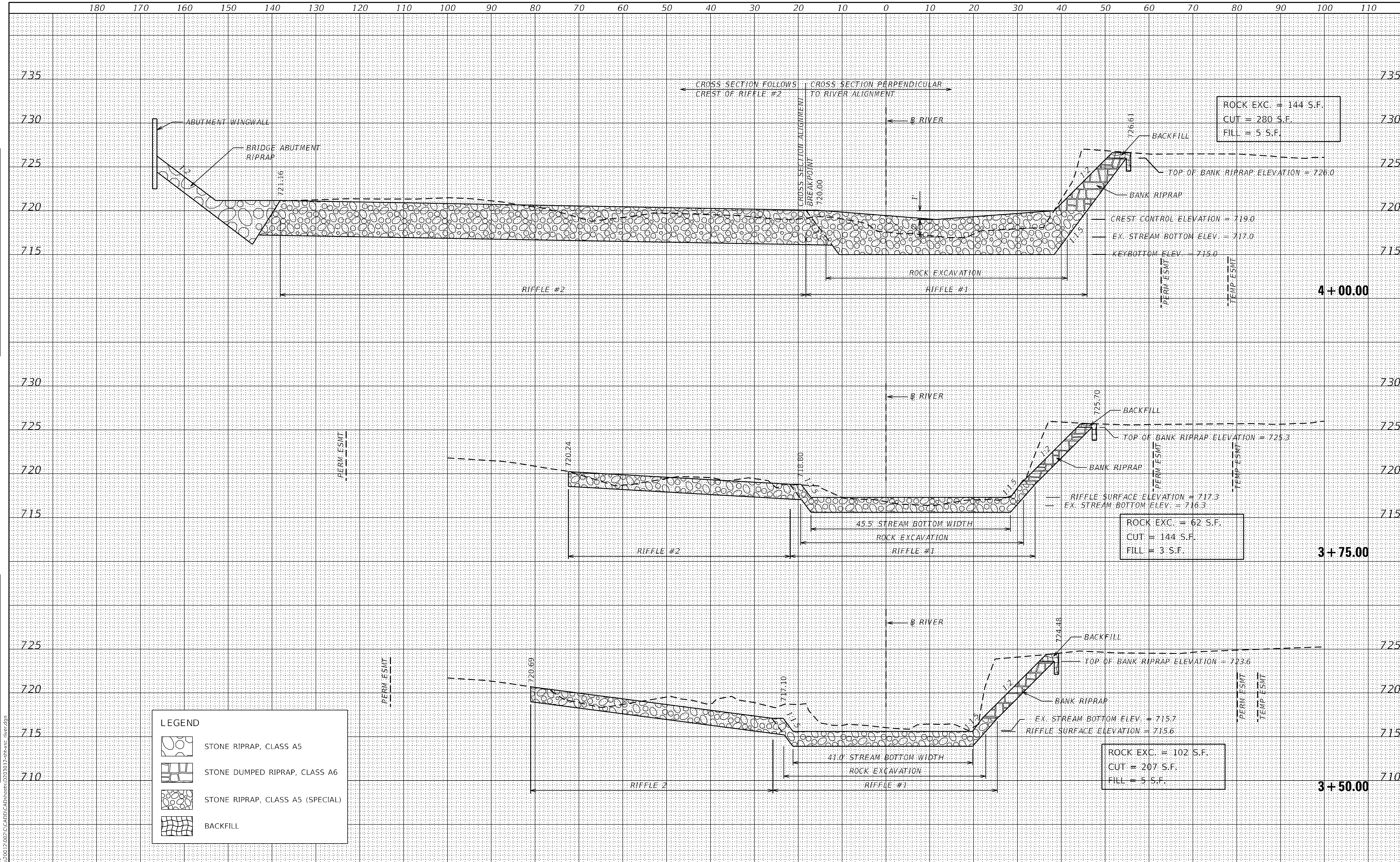
	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – PLUM RIVER
IL 78 OVER PLUM RIVER

SCALE: 1"=10'H,5'V | SHEET 87 OF 98 SHEETS | STA. 3+00.00 TO STA. 3+25.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	87
		CONTRACT NO. 64H58		
		ILLINOIS FED. AID PROJECT		



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	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - PLUM RIVER
IL 78 OVER PLUM RIVER

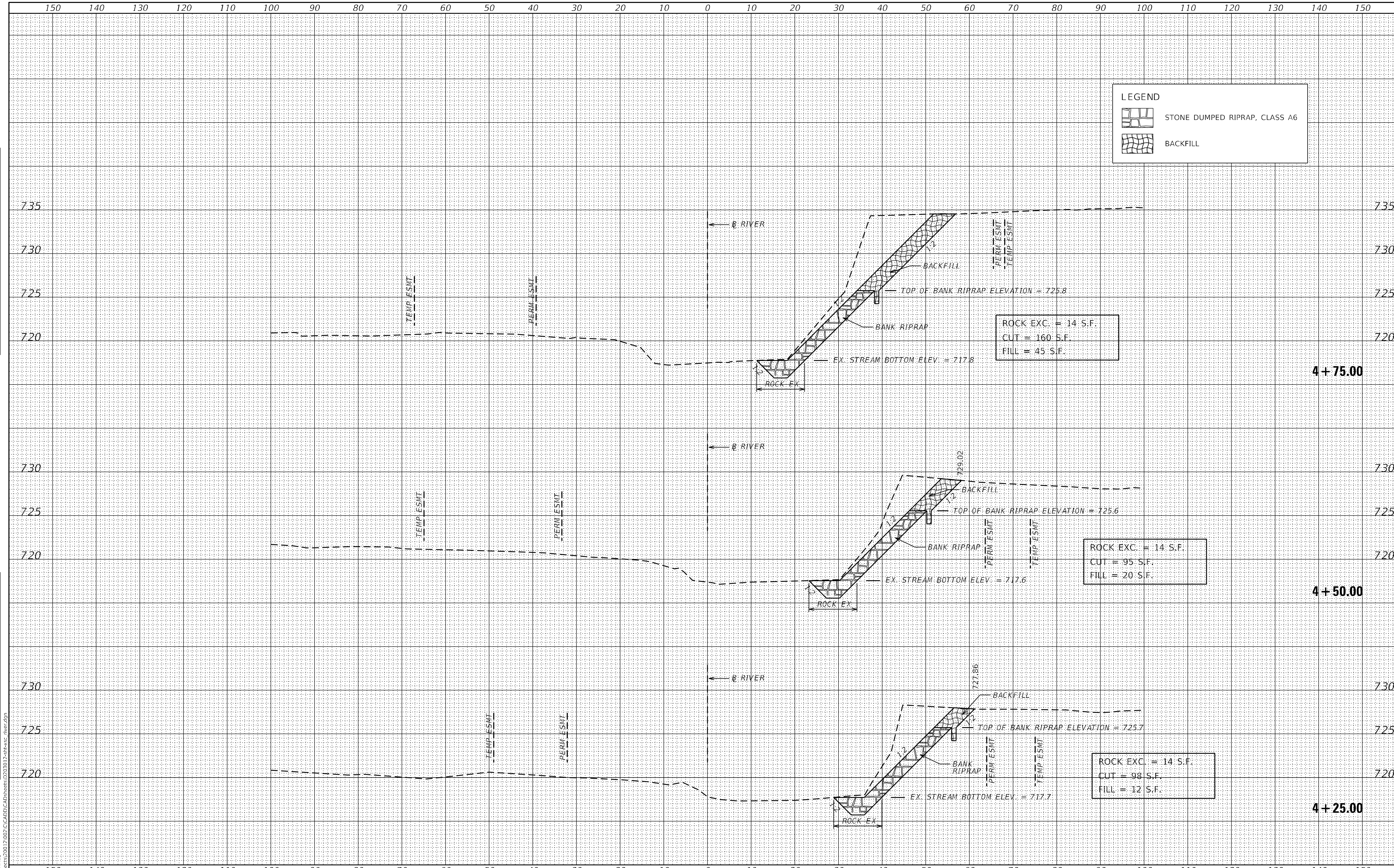
SCALE: 1"=10'H,5'V | SHEET 88 OF 98 SHEETS | STA. 3+50.00 TO STA. 4+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	88

CONTRACT NO. 64H58

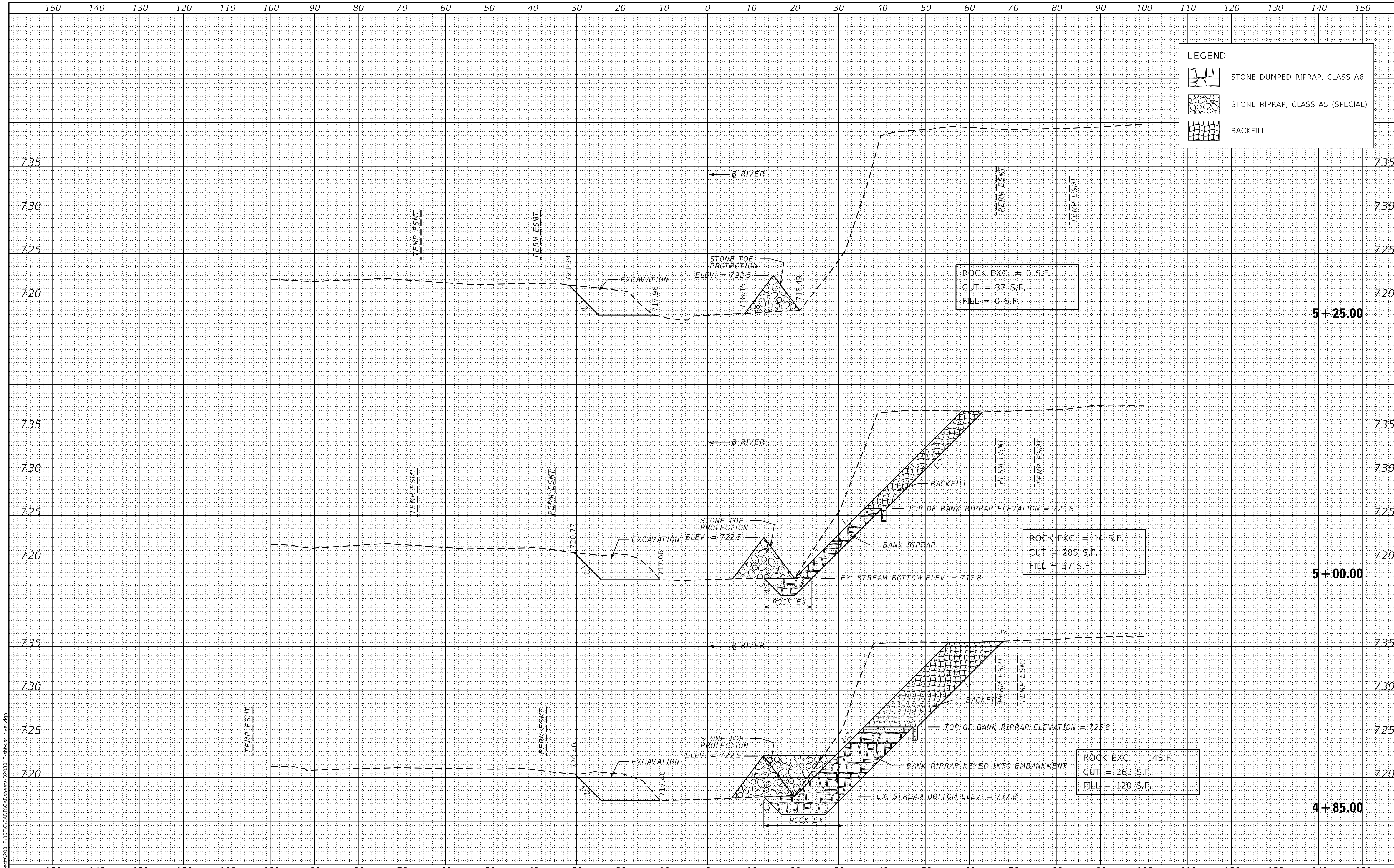
ILLINOIS FED. AID PROJECT

MODEL: $MODELNAME$
FILE NAME: P:\projects\2001\2\002\CADD\CADsheets\...



USER NAME = BS	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS – PLUM RIVER IL 78 OVER PLUM RIVER
	DRAWN -	REVISED -		
PLOT SCALE = $SCALE$	CHECKED -	REVISED -		
PLOT DATE = 8/9/2021	DATE -	REVISED -		SCALE: 1"=10'H,5'V SHEET 89 OF 98 SHEETS STA. 4+25.00 TO STA. 4+75.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	89
		CONTRACT NO. 64H58		
		ILLINOIS FED. AID PROJECT		


LEGEND
STONE DUMPED RIPRAP, CLASS A6
STONE RIPRAP, CLASS A5 (SPECIAL)
BACKFILL
℄ RIVER
TEMP ESMT
PERM ESMT
STONE TOE PROTECTION ELEV. = 722.5
EXCAVATION
721.39
717.96
718.15
718.49
ROCK EXC. = 0 S.F.
CUT = 37 S.F.
FILL = 0 S.F.
5+25.00
BACKFILL
TOP OF BANK RIPRAP ELEVATION = 725.8
BANK RIPRAP
720.77
717.66
EX. STREAM BOTTOM ELEV. = 717.8
ROCK EX
ROCK EXC. = 14 S.F.
CUT = 285 S.F.
FILL = 57 S.F.
5+00.00
BANK RIPRAP KEYED INTO EMBANKMENT
720.40
717.40
ROCK EXC. = 14S.F.
CUT = 263 S.F.
FILL = 120 S.F.
4+85.00
735
730
725
720
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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

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

MODEL: $MODELNAME$
FILE NAME: P:\projects\2001\2001\CADD\CADsheets\\2012e-xs_river.dgn

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	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

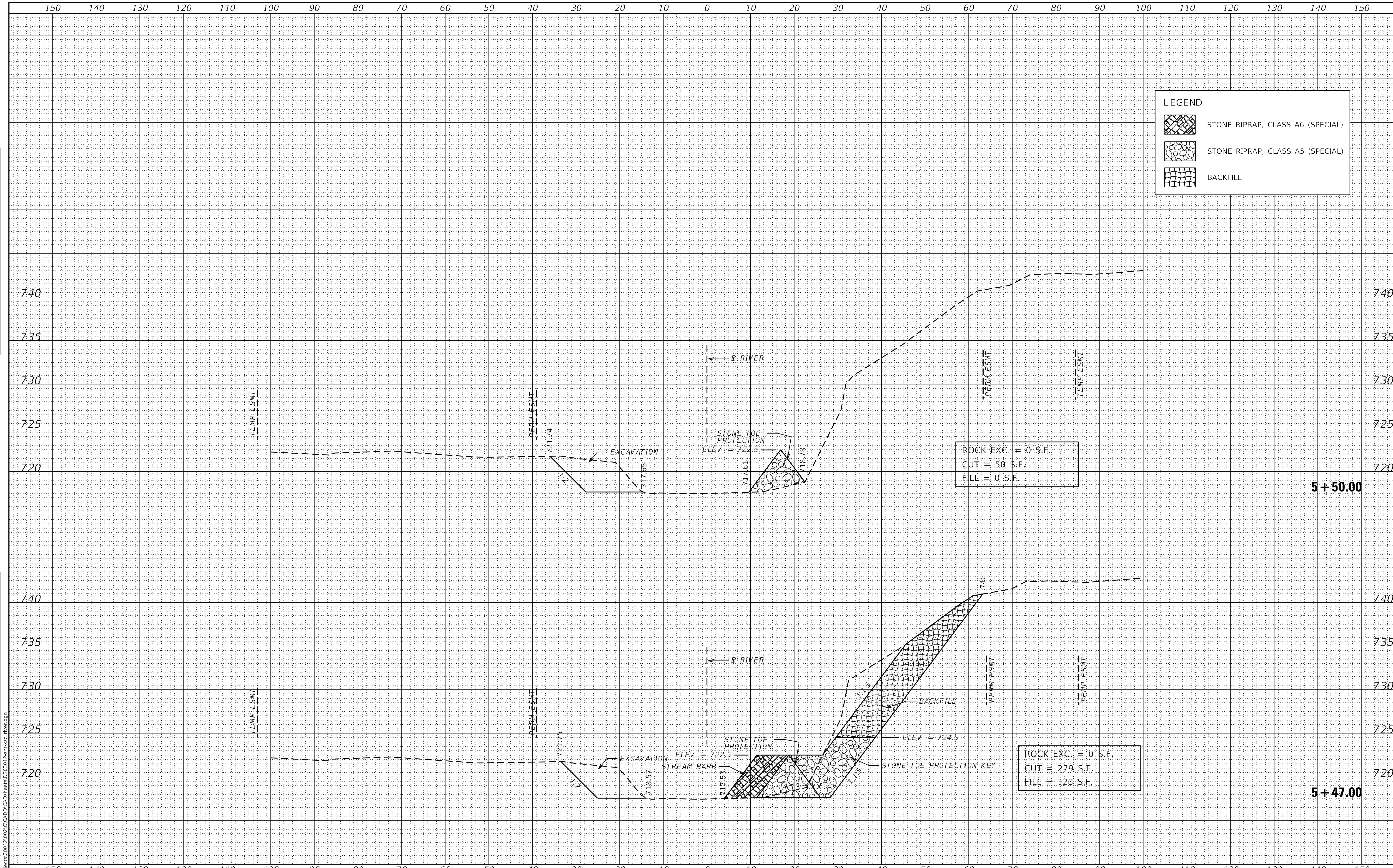
CROSS SECTIONS – PLUM RIVER
IL 78 OVER PLUM RIVER

SCALE: 1"=10'H,5'V | SHEET 90 OF 98 SHEETS | STA. 4+85.00 TO STA. 5+25.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	90

CONTRACT NO. 64H58

ILLINOIS | FED. AID PROJECT



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

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

MODEL: $MODELNAME$

USER NAME = BS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = 8/9/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

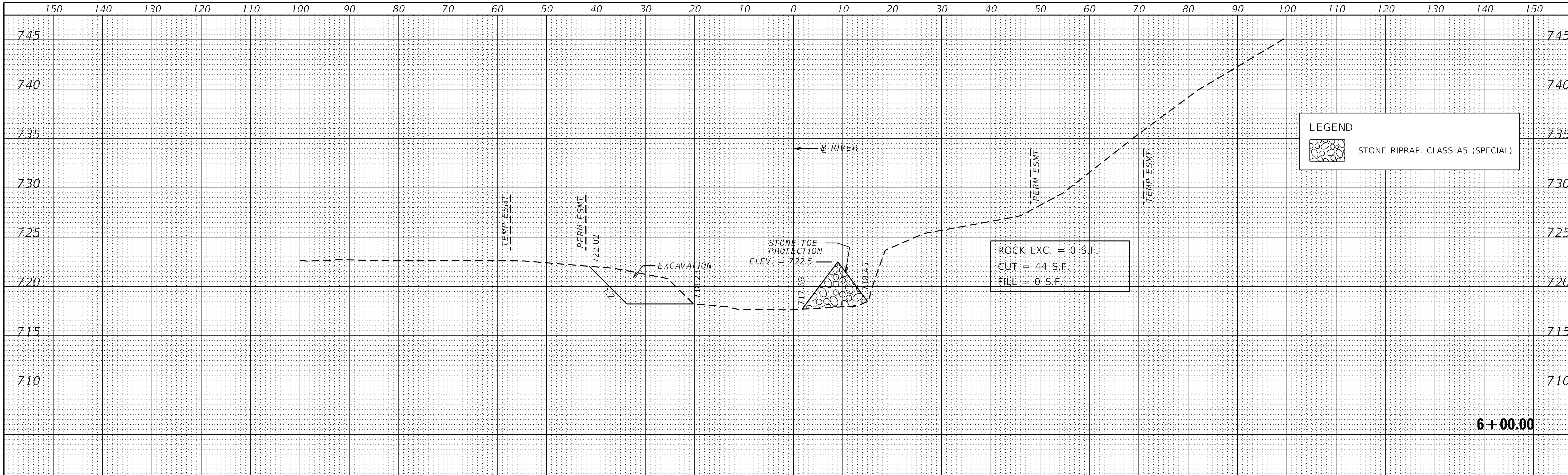
CROSS SECTIONS – PLUM RIVER
IL 78 OVER PLUM RIVER

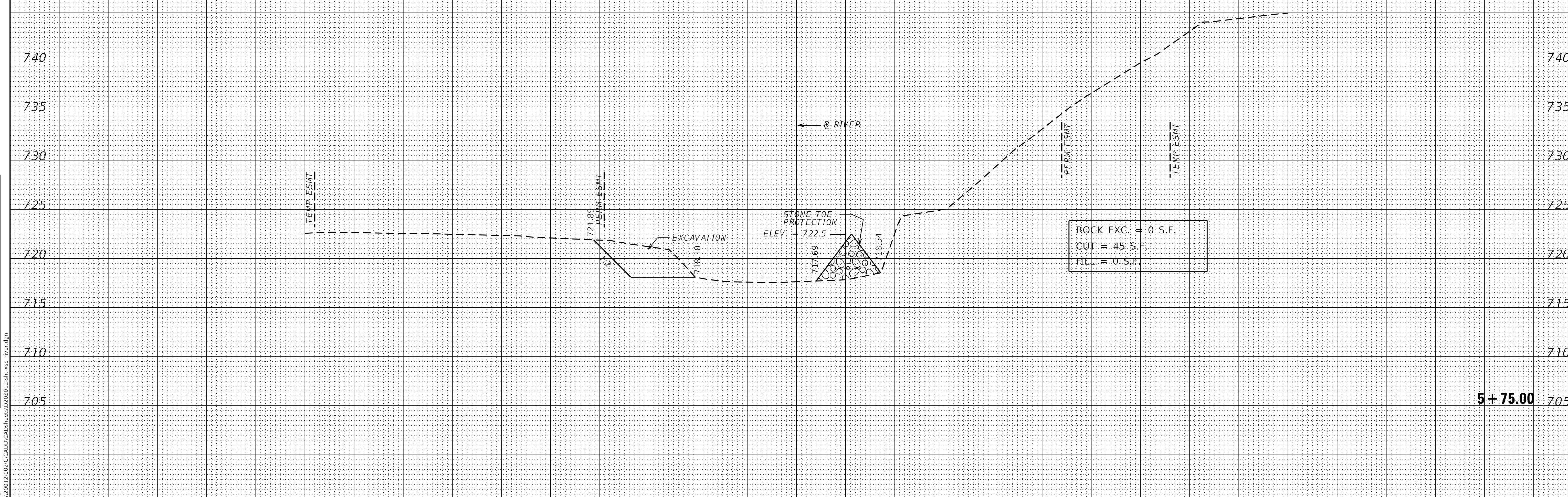
SCALE: 1"=10'H,5'V | SHEET 91 OF 98 SHEETS | STA. 5+47.00 TO STA. 5+50.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	91

CONTRACT NO. 64H58

ILLINOIS | FED. AID PROJECT





FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

USER NAME = BS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = 8/9/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

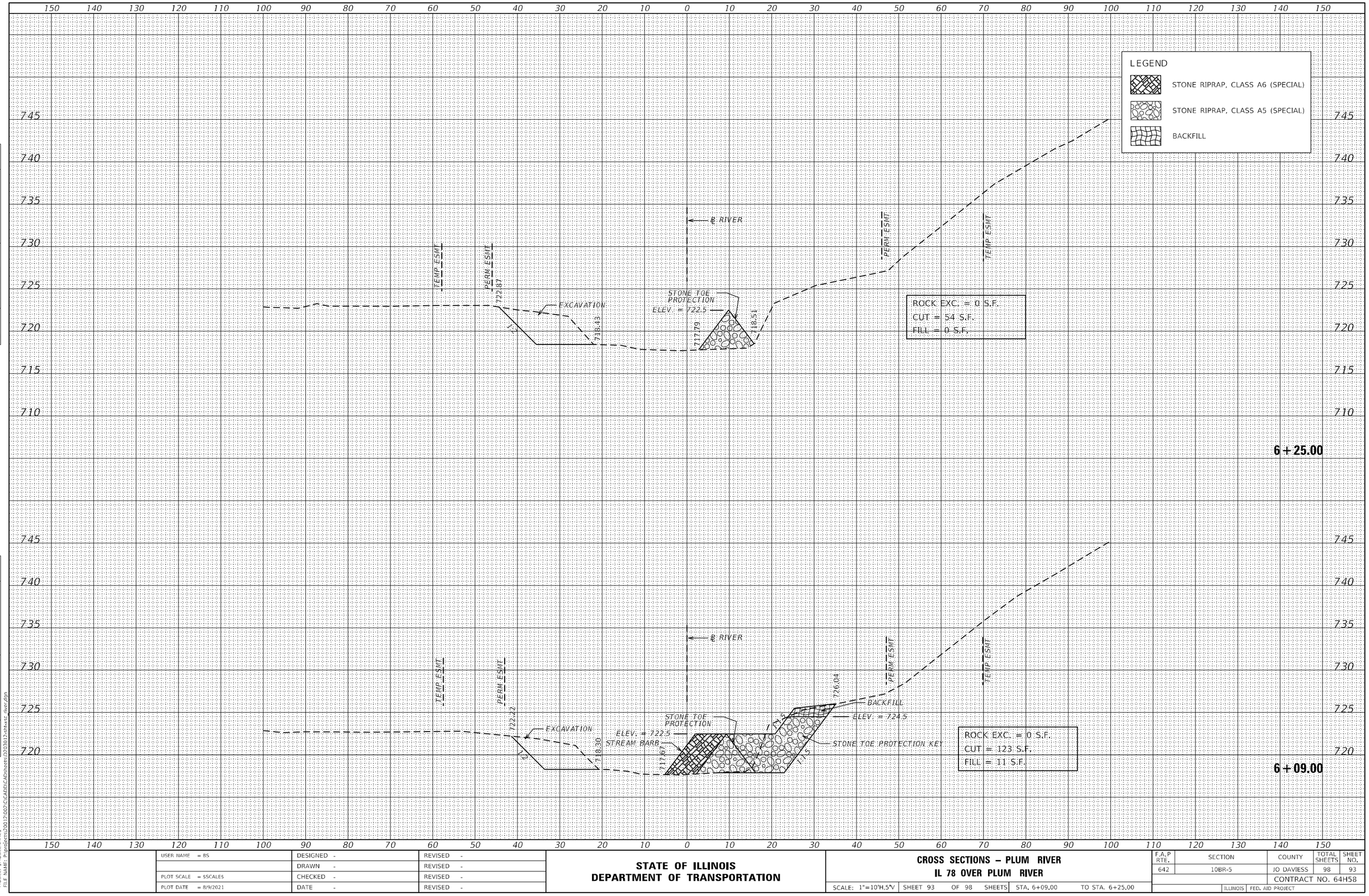
CROSS SECTIONS – PLUM RIVER
IL 78 OVER PLUM RIVER

SCALE: 1"=10'H,5'V | SHEET 92 OF 98 SHEETS | STA. 5+75.00 TO STA. 6+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	92

CONTRACT NO. 64H58

ILLINOIS | FED. AID PROJECT



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

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

MODEL: $MODEL NAME$
FILE NAME: P:\projects\2021\2002\CICADD\CADsheets\D203012-sht-xsc_river.dgn

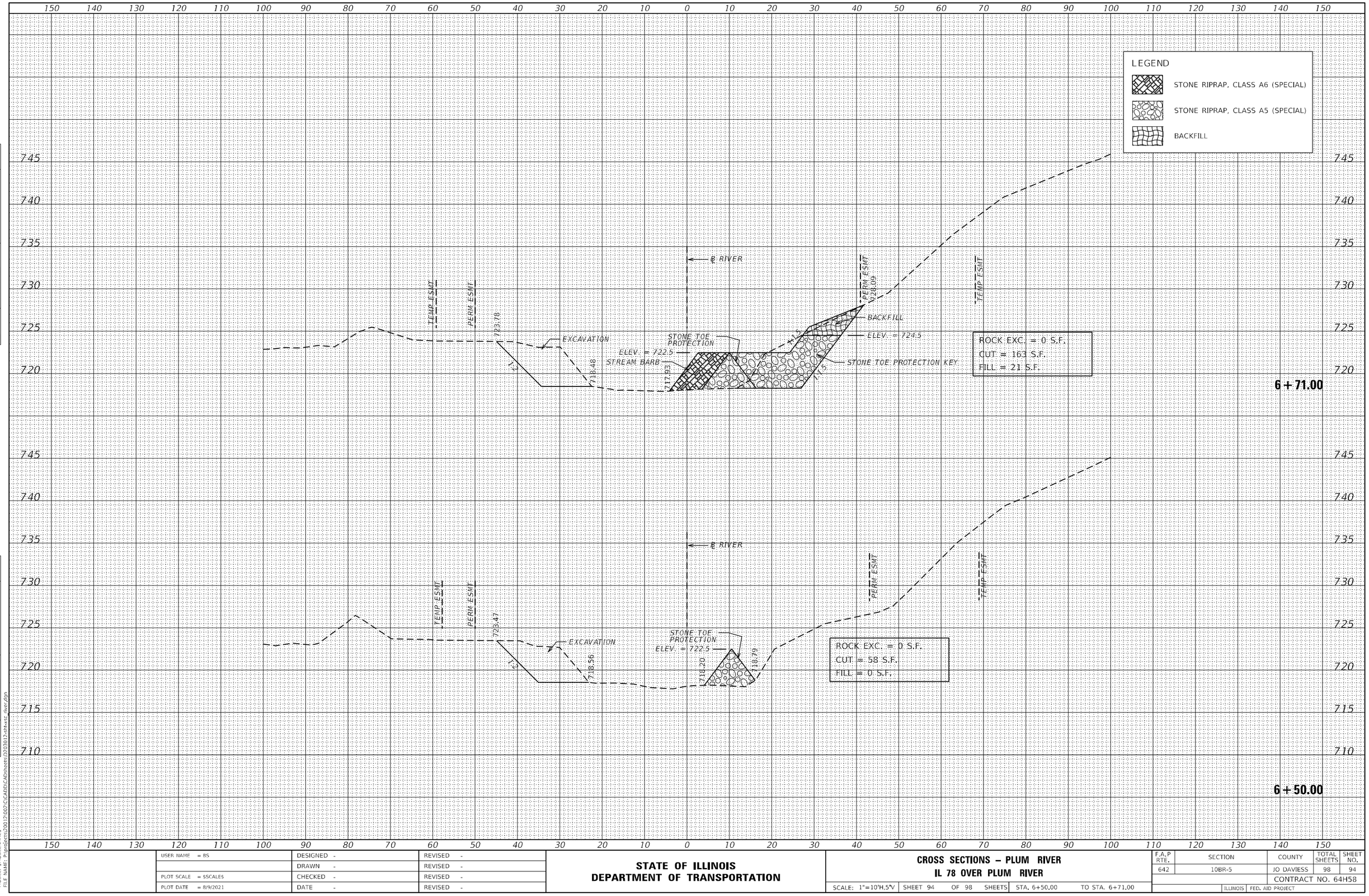
USER NAME = BS	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = $SCALES	CHECKED -	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – PLUM RIVER
IL 78 OVER PLUM RIVER

SCALE: 1"=10'H,5'V | SHEET 93 OF 98 SHEETS | STA. 6+09.00 TO STA. 6+25.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	93
		CONTRACT NO. 64H58		
		ILLINOIS	FED. AID PROJECT	



FINAL SURVEY

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

ORIGINAL SURVEY

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

MODEL: $MODELNAME$
FILE NAME: P:\projects\20012002\CiCADD\CADsheets\D2013012-sht-xsc_river.dgn

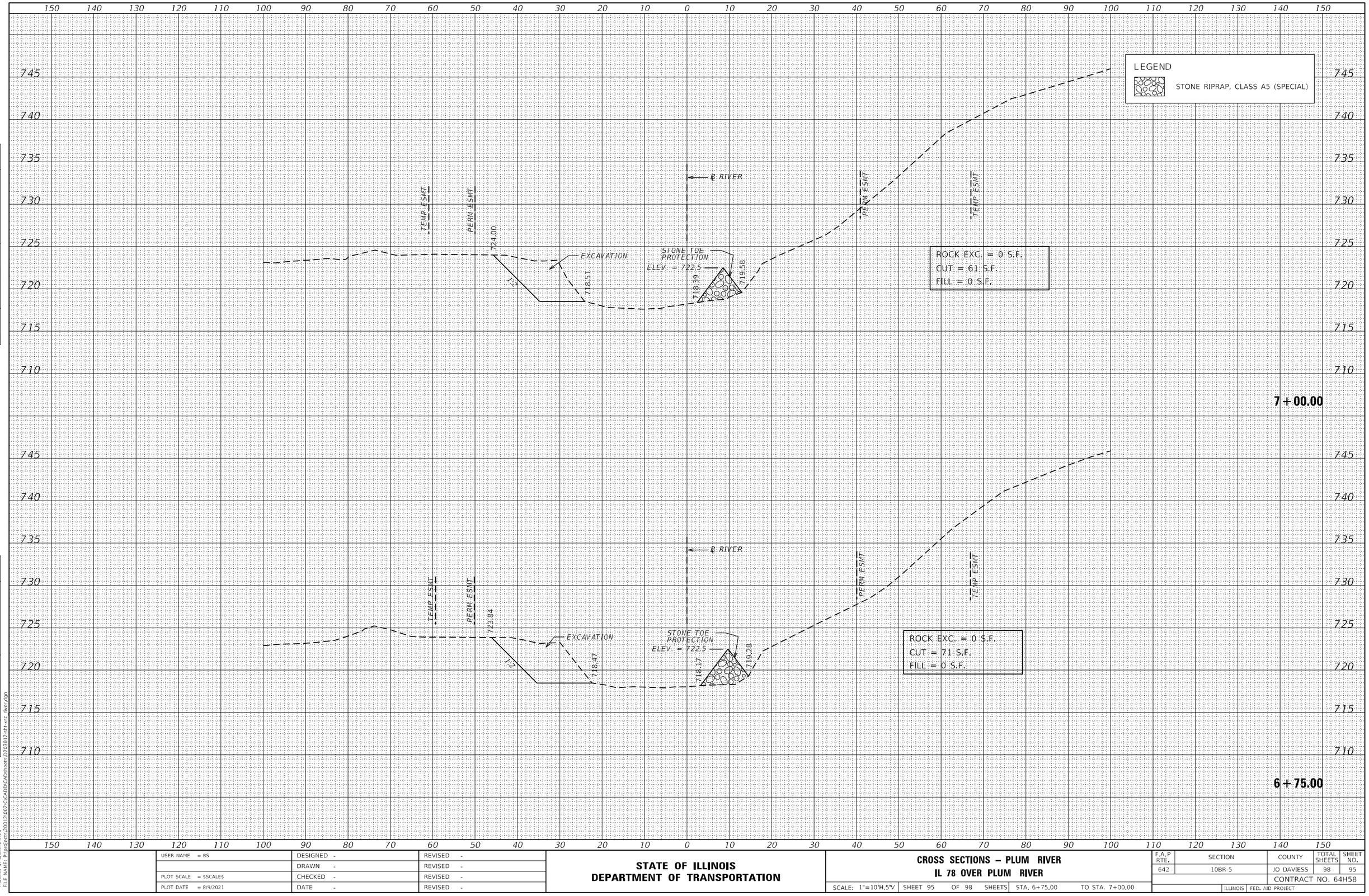
USER NAME = BS	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – PLUM RIVER
IL 78 OVER PLUM RIVER

SCALE: 1"=10'H,5'V | SHEET 94 OF 98 SHEETS | STA. 6+50.00 | TO STA. 6+71.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	94
		CONTRACT NO. 64H58		
	ILLINOIS	FED. AID PROJECT		



USER NAME = BS	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – PLUM RIVER
IL 78 OVER PLUM RIVER

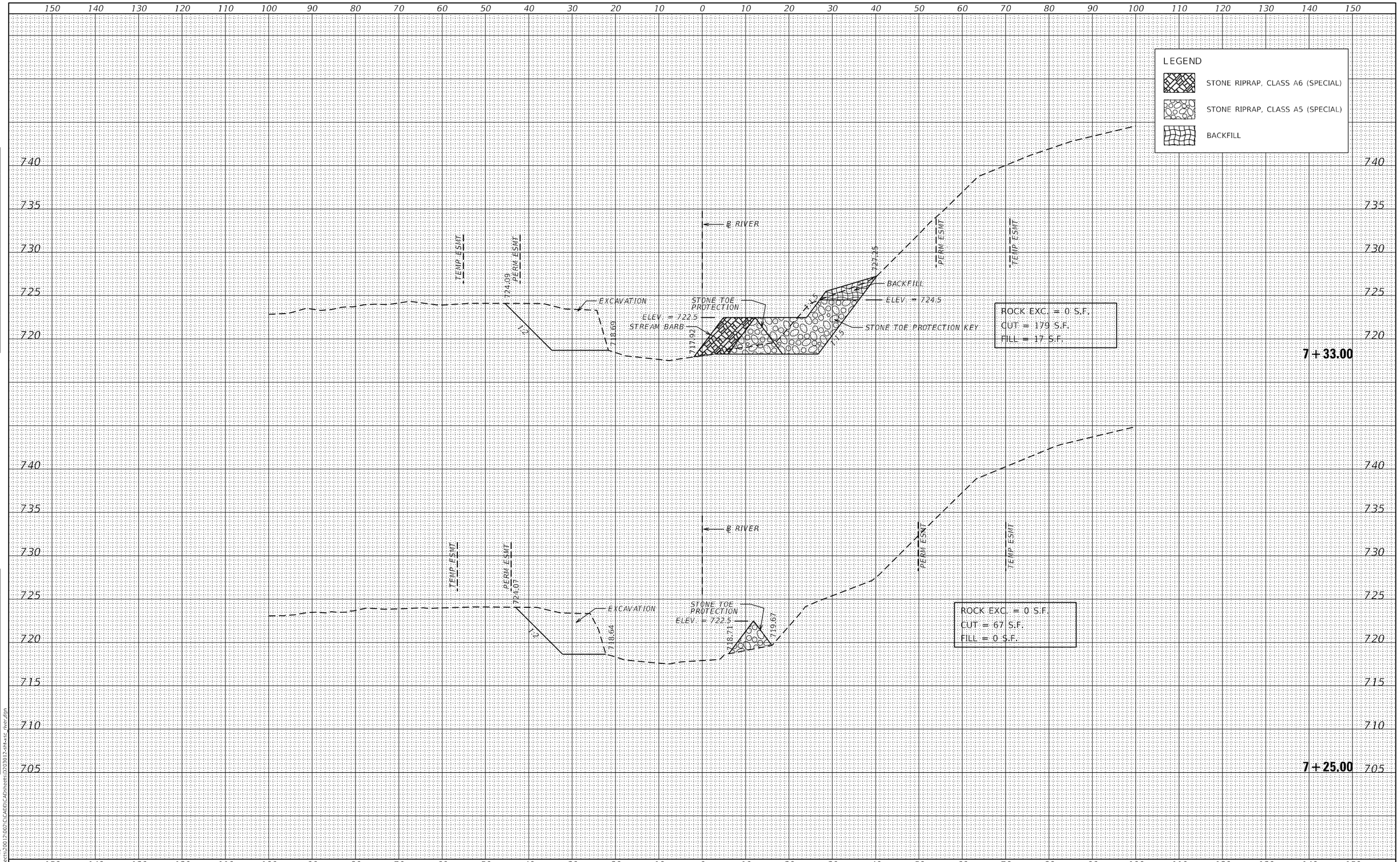
SCALE: 1"=10'H,5'V | SHEET 95 OF 98 SHEETS | STA. 6+75.00 | TO STA. 7+00.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	95
		CONTRACT NO. 64H58		
		ILLINOIS	FED. AID PROJECT	

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

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

MODEL: $MODELNAME$
FILE NAME: P:\projects\20012002\CiCADD\CADsheets\D203012-sht-xsc_river.dgn



USER NAME = BS	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – PLUM RIVER
IL 78 OVER PLUM RIVER

SCALE: 1"=10'H,5'V | SHEET 96 OF 98 SHEETS | STA. 7+25.00 | TO STA. 7+33.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	96
		CONTRACT NO. 64H58		
		ILLINOIS	FED. AID PROJECT	

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

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

MODEL: $MODELNAME
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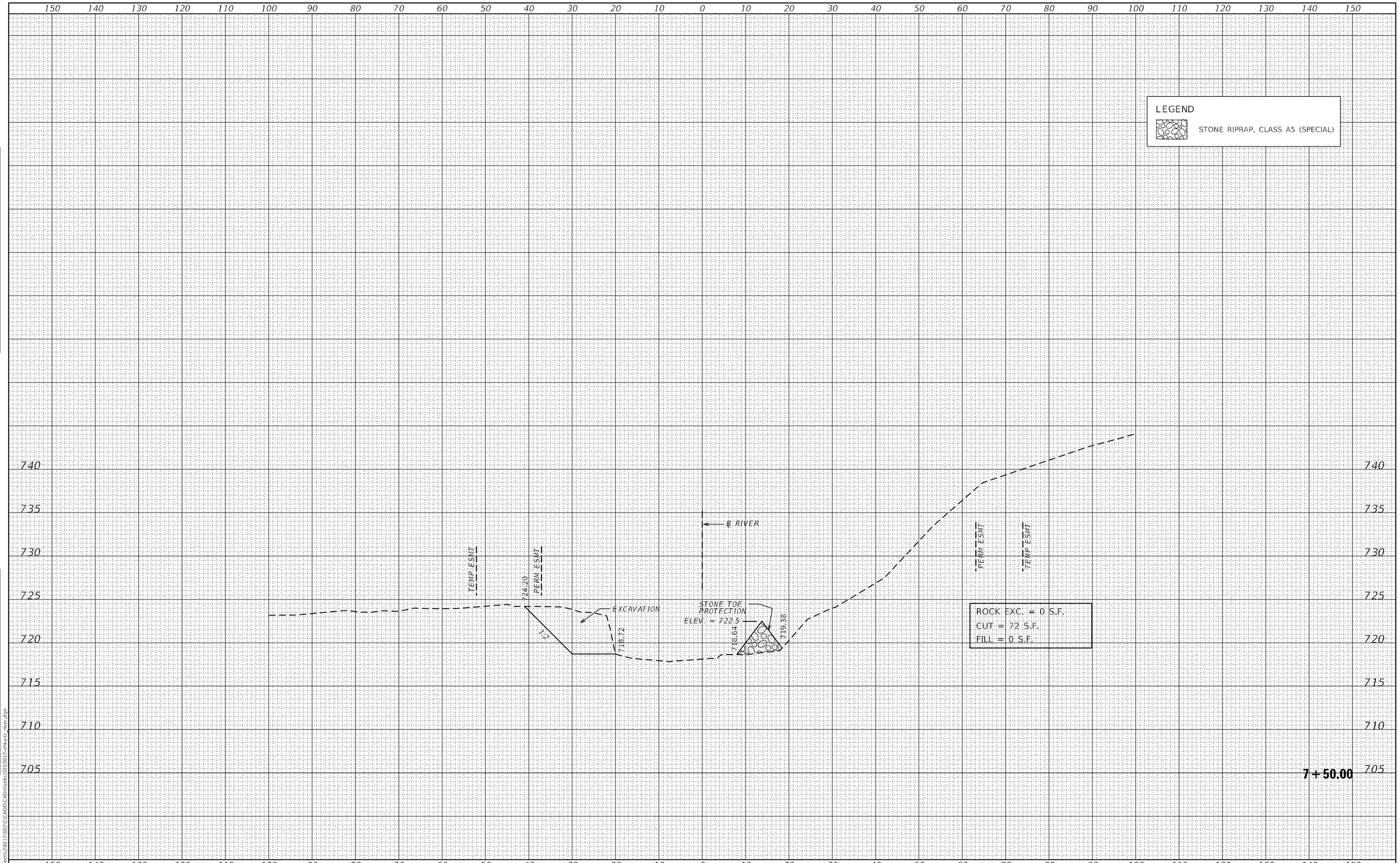


USER NAME = BS	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 5SCALE5	CHECKED -	REVISED -	
PLOT DATE = 8/9/2021	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – PLUM RIVER
IL 78 OVER PLUM RIVER

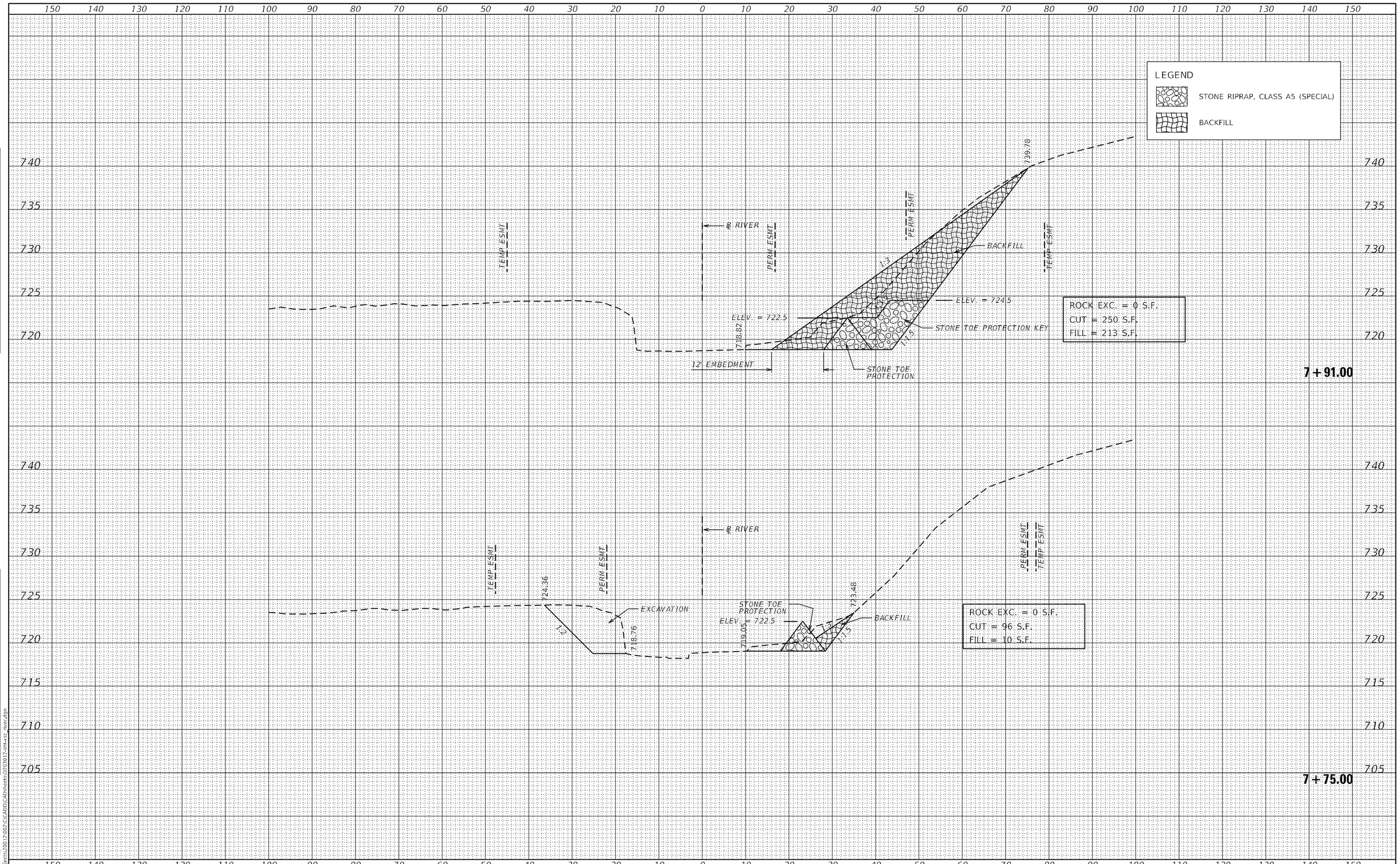
SCALE: 1"=10'H,5'V | SHEET 97 OF 98 SHEETS | STA. 7+50.00 TO STA. 7+50.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	97
		CONTRACT NO. 64H58		
		ILLINOIS	FED. AID PROJECT	

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

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

MODEL: SMODEL NAMES
FILE NAME: P:\projects\2021202\CADD\CADD\sheets\2021202-sht-xsc river.dgn



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

BY	DATE

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

MODEL: $MODEL NAME$
FILE NAME: P:\projects\2021\002\CIVIL\CAD\sheets\D203012-sht-xsc_river.dgn

USER NAME = BS	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = 8/9/2021	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS – PLUM RIVER
IL 78 OVER PLUM RIVER

SCALE: 1"=10'H,5'V | SHEET 98 OF 98 SHEETS | STA. 7+75.00 TO STA. 7+91.00

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
642	10BR-5	JO DAVIESS	98	98
		CONTRACT NO. 64H58		
		ILLINOIS	FED. AID PROJECT	