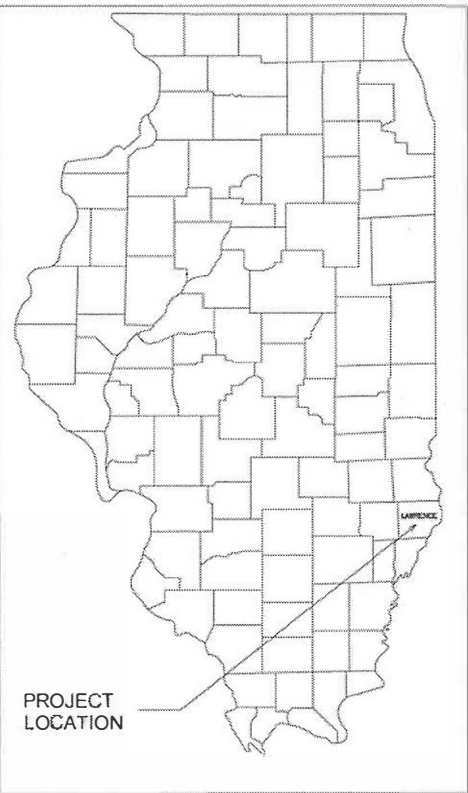


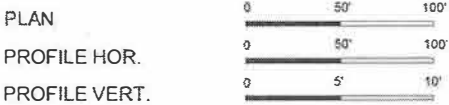
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
LOCAL BRIDGE FORMULA PROGRAM PROJECT

SECTION 21-00133-00-BR
LAWRENCE COUNTY
PROJECT BPCA(404)
JOB NO. C-97-030-25
CONTRACT 95990
FAS 801

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 801	21-00133-00-BR	LAWRENCE	21	1
CONTRACT 95990		ILLINOIS	PROJECT BPCA(404)	



INDEX OF SHEETS	
SHEET	ITEM
1	COVER SHEET
2	SUMMARY OF QUANTITIES, TYPICAL SECTIONS, GENERAL NOTES, AND DETAILS
3	SCHEDULE OF QUANTITIES
4	TYPICAL SECTIONS
5	PLAN AND PROFILE
6	BRIDGE SHOULDER AND GUARDRAIL PLAN
7	GENERAL PLAN AND ELEVATION STRUCTURE NUMBER 051-3319
8	17" X 36" PPC DECK BEAM
9	17" X 36" PPC DECK BEAM DETAILS
10	STEEL RAILING, TYPE SM
11	STEEL RAILING, TYPE SM DETAILS
12	ABUTMENT DETAILS
13	PILE DETAILS
14-15	BORING LOGS
16-21	CROSS SECTIONS OF ROADWAY



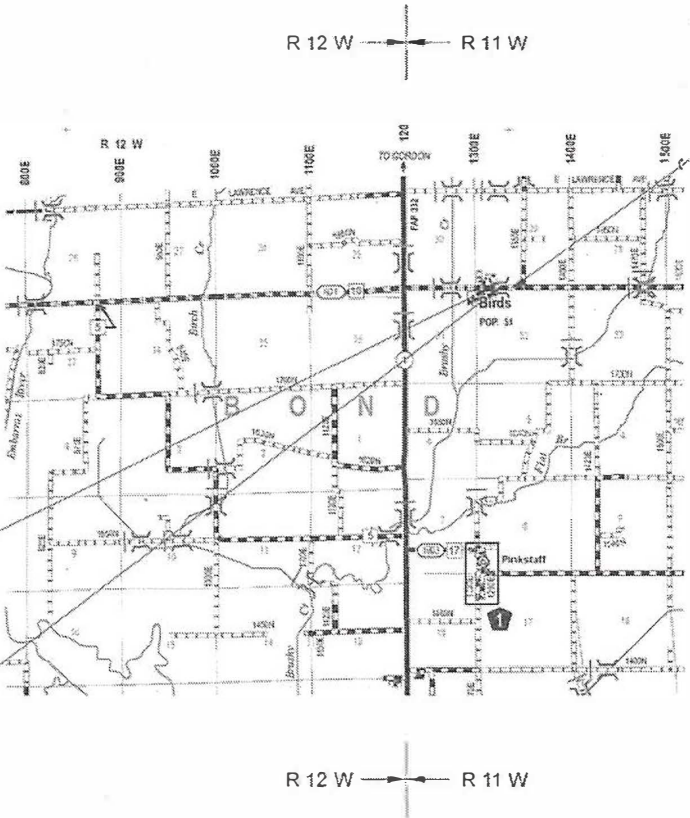
NOTE: SCALES VALID FOR 11" X 17" SHEETS

HIGHWAY STANDARDS	
STANDARD 000001-09	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
STANDARD 280001-07	TEMPORARY EROSION CONTROL SYSTEMS
STANDARD 405201-01	MAILBOX TURNOUT
STANDARD 515001-04	NAME PLATE FOR BRIDGES
STANDARD 630001-13	STEEL PLATE BEAM GUARDRAIL
STANDARD 630301-09	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
STANDARD 631032-18	TRAFFIC BARRIER TERMINAL, TYPE 6A
STANDARD 701901-11	TRAFFIC CONTROL DEVICES
STANDARD 720006-04	SIGN PANEL ERECTION DETAILS
STANDARD 725001-01	OBJECT AND TERMINAL MARKERS
STANDARD BLR 21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

J.U.L.I.E.
JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS
1-800-892-0123 OR 811
WEBSITE: <https://www.illinois1call.com/>

SECTION 21-00133-00-BR BEGINS STA. 0+00.00

STA. 4+00.00
PROPOSED STRUCTURE NUMBER 051-3319
SINGLE SPAN PRECAST PRESTRESSED CONCRETE DECK BEAM BRIDGE
39'-10" SPAN, 17" DEPTH BEAMS, 30.0' WIDE DECK
NO SKEW
EXISTING STRUCTURE NUMBER 051-3003



SECTION 21-00133-00-BR ENDS STA. 7+75.00

NET LENGTH SECTION 21-00133-00-BR = 775.00 FEET = 0.147 MILES



LICENSE EXPIRES 11/30/2027

CHARLESTON ENGINEERING, INC.
CONSULTING ENGINEERS - LAND SURVEYORS
105 NORTH KITCHELL AVENUE
P.O. BOX 397
CLNEY, ILLINOIS 62450
(618) 392-0726
ILLINOIS DEPARTMENT OF PROFESSIONAL REGULATION REGISTRATION #184 003513

APPROVED 10/11/25
Hawn M. Hawn
COUNTY ENGINEER

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PASSED 10/15/25
Brandon M. Bridges
DISTRICT SEVEN ENGINEER OF
LOCAL ROADS AND STREETS

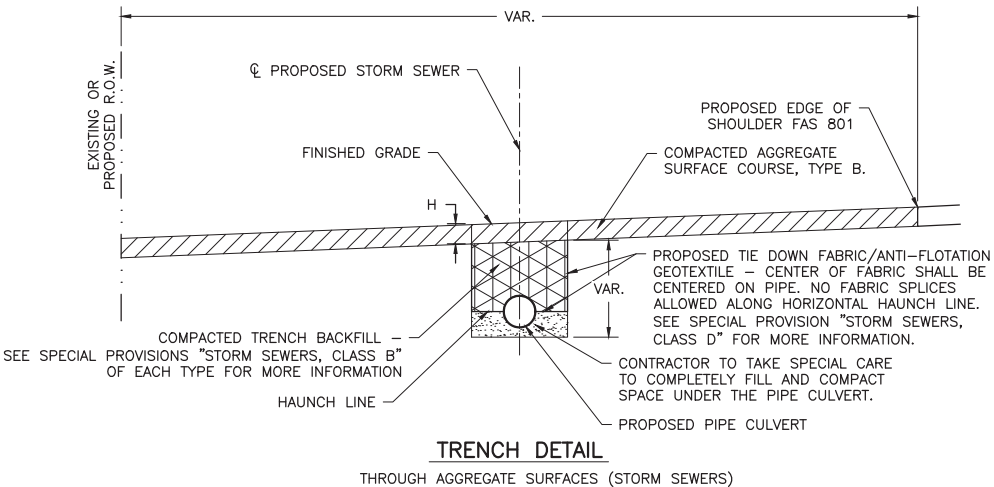
Releasing For
Bid Based on
Limited Review 10/15/25
Theresa C. Ramirez
REGION FOUR ENGINEER

FUNCTIONAL CLASSIFICATION - MAJOR COLLECTOR
ADT = 650
DESIGN SPEED = 50 MPH

THE CONTRACTOR SHALL CONTACT JULIE E. (800-892-0123) BEFORE COMMENCING WORK. UNDERGROUND UTILITIES SHOWN ON THE PLAN SHEETS WERE OBTAINED FROM LOCAL UTILITY COMPANIES AND OTHER AVAILABLE SOURCES. LOCATIONS, SIZE, MATERIAL, DESCRIPTION, OR TYPE OF EXISTING UTILITIES INDICATED ON THE PLANS ARE NOT REPRESENTED AS BEING ACCURATE, SUFFICIENT, OR COMPLETE AND SHALL BE CONSIDERED APPROXIMATE. ABOVE GROUND UTILITY LOCATIONS ARE SHOWN AS FOUND DURING THE INITIAL SURVEY FIELD WORK AND MAY NOT REFLECT CURRENT CONDITIONS. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND COORDINATION WITH UTILITY COMPANIES.

THE FOLLOWING RATES HAVE BEEN USED TO CALCULATE PLAN QUANTITIES:	
STONE DUMPED RIPRAP, CLASS A4	1.75 TONS/CU YD
AGGREGATE BASE COURSE, TY-B	2.0 TONS/CU YD
BITUMINOUS MATERIALS (PRIME COAT)	0.25 LB/SQ FT
BITUMINOUS MATERIALS (TACK COAT)-OVER NEW HMA LIFTS	0.025 LB/SQ FT
BITUMINOUS MATERIALS (TACK COAT)-OVER EX. HMA LIFTS	0.05 LB/SQ FT
AND EXISTING OIL & CHIP SURFACES	
HOT-MIX ASPHALT SURFACE COURSE	112 LBS/(SQ YD * INCH THICKNESS)

PROPOSED PAVEMENT STRUCTURE MATERIALS:
STA. 0+00.00 TO 7+75.00
1½" NOMINAL THICKNESS SURFACE COURSE - FINAL LIFT
1½" NOMINAL THICKNESS SURFACE COURSE - FIRST LIFT
2¼" NOMINAL THICKNESS BINDER COURSE
5¼" TOTAL NOMINAL THICKNESS



TILITY COMPANY	TYPE	CONTACT NAME	PHONE NUMBER	E-MAIL ADDRESS	MAILING ADDRESS
AMEREN ILLINOIS	ELECTRIC	DYLAN WILSON	618-544-1788	dwilson2@ameren.com	501 S EATON ST, ROBINSON, IL 62454
BIRDS-PINKSTAFF WATER DISTRICT	WATER	KYLE GRAY	812-943-5579	kgray.bpwater@gmail.com	13973 STATE ROUTE 1, LAWRENCEVILLE, IL 62439
FRONTIER COMMUNICATIONS	COMMUNICATIONS	BRIAN VANGUNDY	618-395-6189	brian.vangundy@ftr.com	225 E. CHESTNUT ST, OLNEY, IL 62450
ILLINOIS GAS COMPANY	GAS	JORDAN KOCHER, P.E.	618-395-8588	jkocher@ilgas.com	1927 MILLER DRIVE, OLNEY, IL 62450
NORRIS ELECTRIC CO-OP	ELECTRIC	TIM HUBER	618-783-8765	thuber@norriselectric.com	8543 N. ILLINOIS 130, NEWTON, IL 62448
METRO COMMUNICATIONS	COMMUNICATIONS	TAYLOR RICH	217-728-3608	trich@metroccom.com	8 SOUTH WASHINGTON ST, P.O. BOX 555, SULLIVAN, IL 61951

1. U.S. ARMY CORPS OF ENGINEERS SECTION 404 NATIONWIDE PERMIT.
2. TREES THREE (3) INCHES OR GREATER IN DIAMETER AT BREAST HEIGHT SHALL NOT BE CLEARED BETWEEN APRIL 1 AND SEPTEMBER 30 OF ANY GIVEN YEAR.

* SPECIALTY ITEM

EARTHWORK SCHEDULE										
CODE NUMBER		20100210	20200100	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LOCATION	STATION	EARTH EXCAVATION CU YD	CHANNEL EXCAVATION CU YD	PERCENT USED %	ESTIMATED UNSUITABLE MATERIAL CU YD	ESTIMATED SUITABLE MATERIAL CU YD	SHRINKAGE FACTOR %	ESTIMATED SUITABLE MATERIAL ADJUSTED FOR SHRINKAGE CU YD	EMBANKMENT CU YD	EARTHWORK BALANCE (+) OR SHORTAGE (-) CU YD
LT. & RT.	STA. 0+00 TO 3+78.58	235		100	0	235	25	176	650	-474
LT. & RT.	STA. 3+78.58 TO 4+21.42 (PROPOSED BRIDGE)		220	50	110	110	25	83		83
LT. & RT.	STA. 4+21.42 TO 7+75	440		100	0	440	25	330	595	-265
SUBTOTAL =		675	220		110	785		589	1245	
VOLUMES NOT SHOWN ON CROSS SECTION SHEETS										
LT. & RT.	CONCRETE STRUCTURES & CLSM ABUTMENT BACKFILL VOID	95		100	0	95	25	71		71
LT.	STA. 1+71 (PRIVATE ENTRANCE)	5		100	0	5	25	4		4
LT.	STA. 4+19 TO 4+62 (EXISTING DRIVEWAY REMOVAL)	35		0	35	0	25	0		0
LT.	STA. 4+71 (PRIVATE ENTRANCE)								85	-85
RT.	STA. 4+74 (PRIVATE ENTRANCE)								20	-20
TOTAL =		810	220		145	885		664	1350	-686

- NOTES: 1. COST OF EXCAVATION FOR CONCRETE STRUCTURES INCLUDED IN ITEM "EARTH EXCAVATION."
2. SUITABLE EXCAVATED MATERIAL EXCAVATED FROM THE CHANNEL SHALL BE USED TO CONSTRUCT THE SHOULDER WIDENING.
3. UNSUITABLE MATERIAL SHALL BE DISPOSED OFF THE JOBSITE BY THE CONTRACTOR.
4. 20400800 - FURNISHED EXCAVATION = 690 C.Y.

ROADWAY SCHEDULE				
CODE NUMBER		35101400	40200800	44000100
LOCATION	STATION	AGGREGATE BASE COURSE, TYPE B TON	AGGREGATE SURFACE COURSE, TYPE B TON	PAVEMENT REMOVAL SQ YD
LT. & RT.	STA. 0+00 TO 3+78.58	765		1778
LT. & RT.	STA. 3+78.58 TO 4+21.42			96
LT. & RT.	STA. 4+21.42 TO 7+75	745		786
				100
LT.	STA. 1+71 (P.E.)		20	
LT.	STA. 4+71 (P.E.)		60	
LT.	STA. 7+55 (F.E.)		25	
TOTAL =		1510	105	2660

NOTE: SEE PIPE CULVERT SCHEDULE FOR PRIVATE ENTRANCE PIPE CULVERT QUANTITIES

SEEDING SCHEDULE						
CODE NUMBER		X2501000	FOR INFORMATION ONLY			
LOCATION	STATION	SEEDING, CLASS 2 (SPECIAL) ACRE	NITROGEN FERTILIZER NUTRIENT (100 LBS/ACRE) POUND	PHOSPHOROUS FERTILIZER NUTRIENT (100 LBS/ACRE) POUND	SUITABLE POTASSIUM FERTILIZER NUTRIENT (100 LBS/ACRE) POUND	MULCH METHOD 2 (2 TONS/ACRE) TON
LT. & RT.	STA. 0+00 TO 3+78.58	0.45	45	45	45	0.90
LT. & RT.	STA. 4+21.42 TO 7+75	0.50	50	50	50	1.00
TOTAL =		0.95	95	95	95	1.90

NOTE: FERTILIZER AND MULCH QUANTITIES SHOWN ARE FOR INFORMATION ONLY, SEE SPECIAL PROVISIONS

GUARDRAIL SCHEDULE							
CODE NUMBER		63100087	X6310188	63000001	X6310087	63100167	72501000
LOCATION	STATION	TRAFFIC BARRIER TERMINAL, TYPE 6A	TRAFFIC BARRIER TERMINAL, TYPE 6A (MODIFIED)	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	TRAFFIC BARRIER TERMINAL (SPECIAL)	TRAFFIC BARRIER TYPE 1 (SPECIAL) TANGENT	TERMINAL MARKER - DIRECT APPLIED
		EACH	EACH	FOOT	EACH	EACH	EACH
LT.	STA. 3+42 TO 3+79	1					
RT.	STA. 3+42 TO 3+79	1					
LT.	STA. 4+22 TO 4+98		1				
RT.	STA. 4+22 TO 5+08		1				
RT.	STA. 2+17 TO 3+42			125.0			
LT.	STA. 3+04 TO 3+42			37.5			
LT.	STA. 4+98 TO 5+73			75.0			
RT.	STA. 5+08 TO 5+33				1		
RT.	STA. 1+79 TO 2+17					1	
LT.	STA. 2+67 TO 3+04					1	
LT.	STA. 5+73 TO 6+11					1	
RT.	STA. 1+79						1
LT.	STA. 2+67						1
RT.	STA. 5+33						1
LT.	STA. 6+11						1
TOTAL =		2	2	237.5	1	3	4

NOTE: SEE GUARDRAIL PLAN SHEET FOR MORE DETAIL

TREE REMOVAL SCHEDULE			
CODE NUMBER		20100210	
LOCATION	STATION	OFFSET FROM CL FT	TREE REMOVAL (OVER 15 UNITS DIAMETER) UNIT
LT.	STA. 6+04	25	40
TOTAL =			40

PIPE CULVERT SCHEDULE			
CODE NUMBER		542D0223	542D0235
LOCATION	STATION	PIPE CULVERTS, CLASS D, TYPE 1 18" FOOT	PIPE CULVERTS, CLASS D, TYPE 1 30" FOOT
LT.	STA. 4+71		100
RT.	STA. 4+74	140	
TOTAL =		140	100

STORM SEWER SCHEDULE			
CODE NUMBER		550B0090	20800150
LOCATION		STORM SEWERS, CLASS B, TYPE 1 18" FOOT	TRENCH BACKFILL CU YD
1	TO 2	60	0
2	TO 3	180	4
3	TO 4	110	4
TOTAL =		350	8

PIPE CULVERT REMOVAL SCHEDULE				
LOCATION	STATION	DIAMETER INCHES	TYPE	PIPE CULVERT REMOVAL FOOT
RT.	STA. 3+70	18	CMP	34
LT.	STA. 4+32	30	CMP	31
RT.	STA. 4+42	18	CMP	39
TOTAL =				104

- NOTES: 1. PIPE CULVERT REMOVAL WILL NOT BE PAID FOR SEPARATELY, BUT THE COST SHALL BE INCLUDED IN PIPE CULVERTS, CLASS D OF THE VARIOUS TYPES AND SIZES LISTED ON THE PLANS. SEE SPECIAL PROVISIONS.
2. ALL INFORMATION SHOWN IN THE PIPE CULVERT REMOVAL SCHEDULE IS "FOR INFORMATION ONLY"

DRAINAGE STRUCTURE REMOVAL SCHEDULE						
NO.	LOCATION	STATION	OFFSET	ITEM	EACH	
R1	LT.	STA. 3+78	20.9'	REMOVING REINFORCED CONCRETE HEADWALL OUTFALL TO MAINTAIN FLOW	1	
R2	LT.	STA. 0+37	20.3'	REMOVING INLETS TO MAINTAIN FLOW	1	
TOTAL =					2	

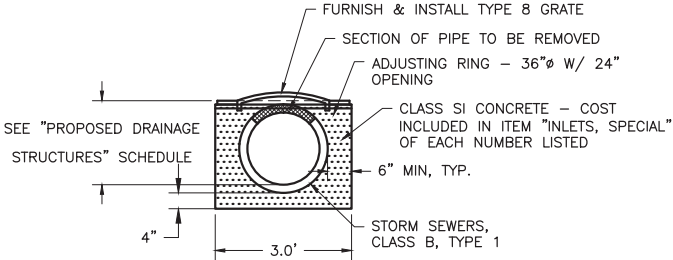
- NOTES: 1. DRAINAGE STRUCTURE REMOVAL WILL NOT BE PAID FOR SEPARATELY, BUT THE COST SHALL BE INCLUDED IN STORM SEWERS, CLASS B OF THE VARIOUS TYPES AND SIZES LISTED ON THE PLANS. SEE SPECIAL PROVISIONS.
2. ALL INFORMATION SHOWN IN THE DRAINAGE STRUCTURE REMOVAL SCHEDULE IS "FOR INFORMATION ONLY"

STORM SEWER REMOVAL SCHEDULE		
LOCATION	ITEM	FOOT
R1 TO R2	STORM SEWER REMOVAL	345
TOTAL =		345

- NOTES: 1. STORM SEWER REMOVAL WILL NOT BE PAID FOR SEPARATELY, BUT THE COST SHALL BE INCLUDED IN STORM SEWERS, CLASS B OF THE VARIOUS TYPES AND SIZES LISTED ON THE PLANS. SEE SPECIAL PROVISIONS.
2. ALL INFORMATION SHOWN IN THE STORM SEWER REMOVAL SCHEDULE IS "FOR INFORMATION ONLY"

PROPOSED DRAINAGE STRUCTURES									
CODE NUMBER			60240210	X6024242	X6024244				
DRAINAGE STRUCTURE NUMBER	STATION	OFFSET	INLETS, TYPE B, TYPE 1 FRAME, OPEN LID EACH	INLETS, SPECIAL, NO. 1 EACH	INLETS, SPECIAL, NO. 2 EACH	ITEM			PROPOSED TOP OF GRATE ELEVATION
1	3+88.00	27.0'	LT			D.S.F.L. OF #1 (OUTFALL END)			-
2	3+28.00	20.8'	LT	1		INLETS, TYPE B, TYPE 1 FRAME, OPEN LID			436.74
3	1+46.70	20.5'	LT		1	INLETS, SPECIAL, NO. 1			436.25
4	0+36.90	20.3'	LT		1	INLETS, SPECIAL, NO. 2			436.40
TOTAL =			1	1	1				

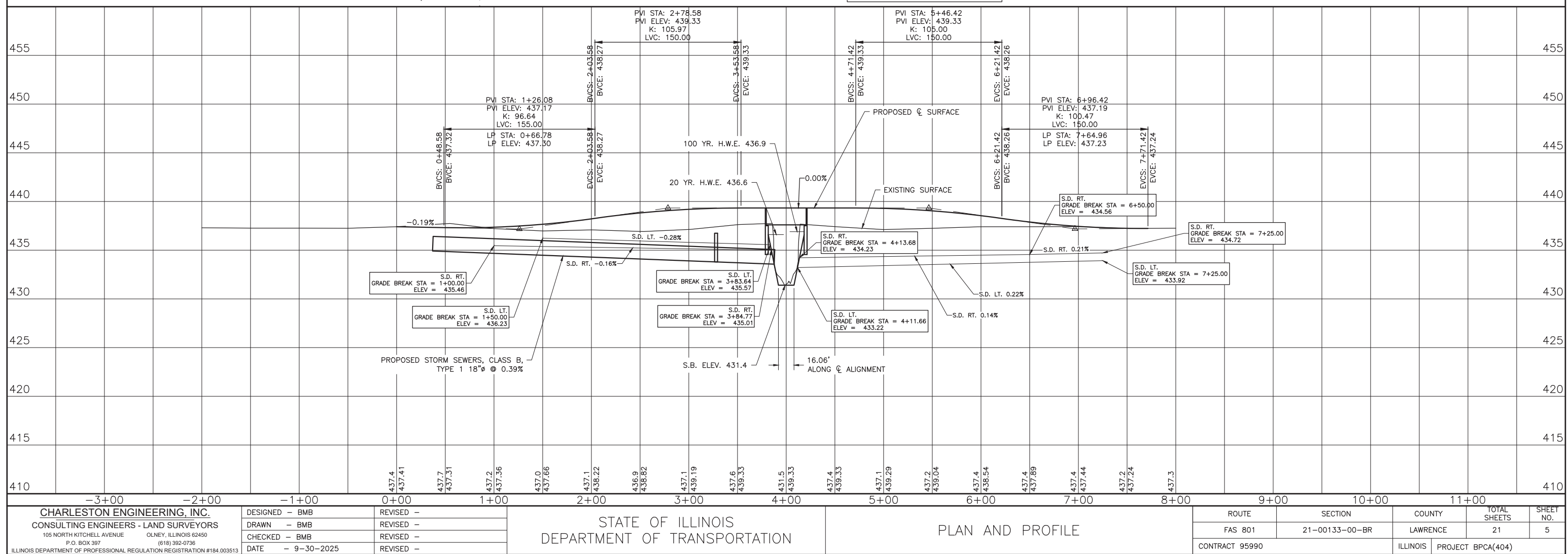
- NOTE: ALL INLETS, TYPE B SHALL BE FURNISHED WITH A REINFORCED CONCRETE FLAT SLAB TOP.
THE COST OF FURNISHING AND INSTALLING THE FLAT SLAB TOP SHALL BE INCLUDED IN THE COST OF EACH RESPECTIVE PAY ITEM.



INLETS, SPECIAL, NO. 1 & NO. 2

- NOTE:
1. INLETS, SPECIAL, NO. 2 SHALL INCLUDE CONNECTING THE EXISTING 18"Ø CMP STORM SEWER TO INLETS, SPECIAL, NO. 2.
2. THE COST OF ALL THE ABOVE WORK SHOWN AND LISTED SHALL BE INCLUDED IN INLETS, SPECIAL, OF EACH NUMBER LISTED.

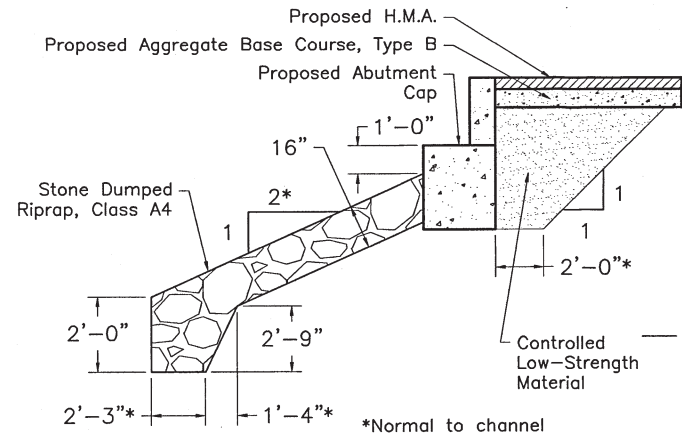
ROADWAY HOT-MIX ASPHALT AND AGGREGATE BASE COURSE ELEVATIONS								
STATION	PROPOSED			EXISTING				
	HMA CENTERLINE PROFILE GRADE (FT)	TOTAL HMA DEPTH (FT)	TOP OF AGGREGATE BASE COURSE, TYPE B @ CENTERLINE (FT)	EST. BOTTOM OF AGGREGATE BASE COURSE, TYPE B @ CENTERLINE (FT)	EST. DEPTH OF AGGREGATE BASE COURSE, TYPE B @ CENTERLINE (FT)	TOP OF AGGREGATE BASE COURSE, TYPE B @ EDGE OF B.C. (1' BEYOND HMA PAV'T) (FT)	APPROXIMATE HMA CENTERLINE PROFILE GRADE (FT)	EXISTING HMA DEPTH @ CENTERLINE (FT)
0+00	437.41	0.44	436.97	435.97	1.00	436.72	437.41	0.46
0+25	437.36	0.44	436.92	435.92	1.00	436.67	437.57	0.46
0+50	437.31	0.44	436.87	435.87	1.00	436.62	437.72	0.46
0+75	437.30	0.44	436.86	435.86	1.00	436.61	437.51	0.46
1+00	437.36	0.44	436.92	435.92	1.00	436.67	437.22	0.46
1+25	437.48	0.44	437.04	436.04	1.00	436.79	437.10	0.46
1+50	437.66	0.44	437.22	436.22	1.00	436.97	436.98	0.46
1+75	437.91	0.44	437.47	436.47	1.00	437.22	437.03	0.46
2+00	438.22	0.44	437.78	436.62	1.16	437.53	437.08	0.46
2+25	438.55	0.44	438.11	436.57	1.54	437.86	437.01	0.46
2+50	438.82	0.44	438.38	436.46	1.92	438.13	436.93	0.46
2+75	439.04	0.44	438.60	436.57	2.03	438.35	437.01	0.46
3+00	439.19	0.44	438.75	436.66	2.09	438.50	437.13	0.46
3+25	439.29	0.44	438.85	436.92	1.93	438.60	437.37	0.46
3+50	439.33	0.44	438.89	437.16	1.73	438.64	437.62	0.46
3+75	439.33	0.44	438.89	437.27	1.62	438.64	437.71	0.46
3+78.58	439.33	0.44	438.89	437.27	1.62	438.64	437.73	0.46
4+21.42	439.33	0.44	438.89	437.16	1.73	438.64	437.62	0.46
4+25	439.33	0.44	438.89	437.16	1.73	438.64	437.60	0.46
4+50	439.33	0.44	438.89	436.96	1.93	438.64	437.42	0.46
4+75	439.33	0.44	438.89	436.84	2.05	438.64	437.26	0.46
5+00	439.29	0.44	438.85	436.66	2.19	438.60	437.12	0.46
5+25	439.19	0.44	438.75	436.74	2.01	438.50	437.18	0.46
5+50	439.04	0.44	438.60	436.79	1.81	438.35	437.24	0.46
5+75	438.82	0.44	438.38	436.88	1.50	438.13	437.33	0.46
6+00	438.54	0.44	438.10	436.94	1.16	437.85	437.40	0.46
6+25	438.21	0.44	437.77	436.77	1.00	437.52	437.41	0.46
6+50	437.89	0.44	437.45	436.45	1.00	437.20	437.41	0.46
6+75	437.64	0.44	437.20	436.20	1.00	436.95	437.42	0.46
7+00	437.44	0.44	437.00	436.00	1.00	436.75	437.42	0.46
7+25	437.31	0.44	436.87	435.87	1.00	436.62	437.33	0.46
7+50	437.24	0.44	436.80	435.80	1.00	436.55	437.23	0.46
7+75	437.24	0.44	436.80	435.80	1.00	436.55	437.24	0.46



B.M.—Rt. Sta. 4+25, 65.2' Rt. of Proposed $\varnothing$ Alignment, Spike in Tree, Elev. 442.42.

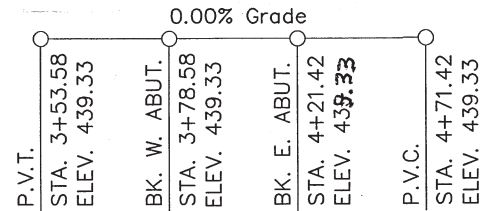
Existing Structure — Existing structure number 051-3003 consists of a precast prestressed concrete deck beam bridge with pile supported spillthrough abutments. The bk. to bk. length of abutments is 30.5' and out-to-out deck width is 26.0'. The existing structure shall be completely removed and disposed off of the jobsite. Road closure shall be used during construction.

No Salvage — See Special Provisions; "Removal of Existing Structures"



SECTION A-A

Note: See Special Provisions for Stone Dumped Riprap, Class A4



PROFILE GRADE

(along $\varnothing$ roadway)

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi

$F_y = 60,000$ psi (reinforcement)

PRECAST PRESTRESSED UNITS

$f'_c = 6,000$ psi

$f'_{ci} = 5,000$ psi

$F'_s = 270,000$ psi ($\frac{1}{2}$ " low relax. strands)

$F_{si} = 201,960$ psi ($\frac{1}{2}$ " low relax. strands)

DESIGN SPECIFICATIONS

AASHTO LRFD Bridge Design Specifications
2024 (10th edition)

SEISMIC DATA

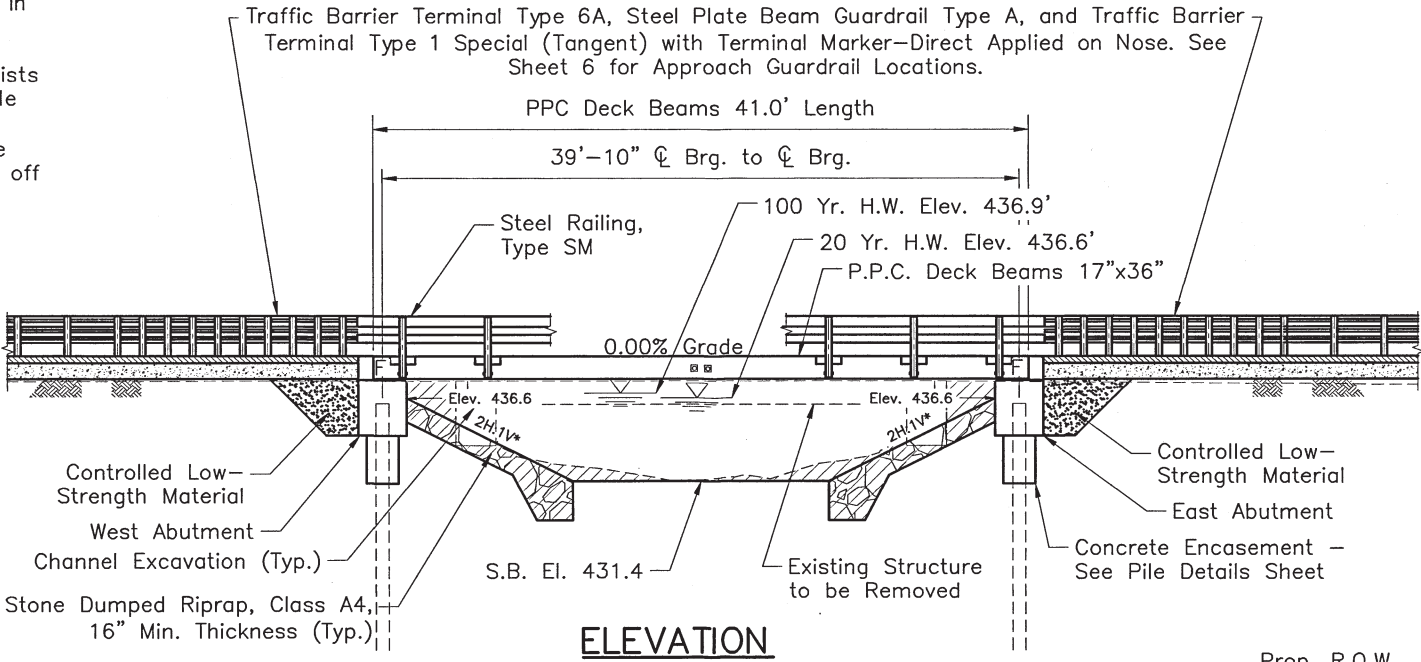
Seismic Performance Zone (SPZ) = 2

Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.229g

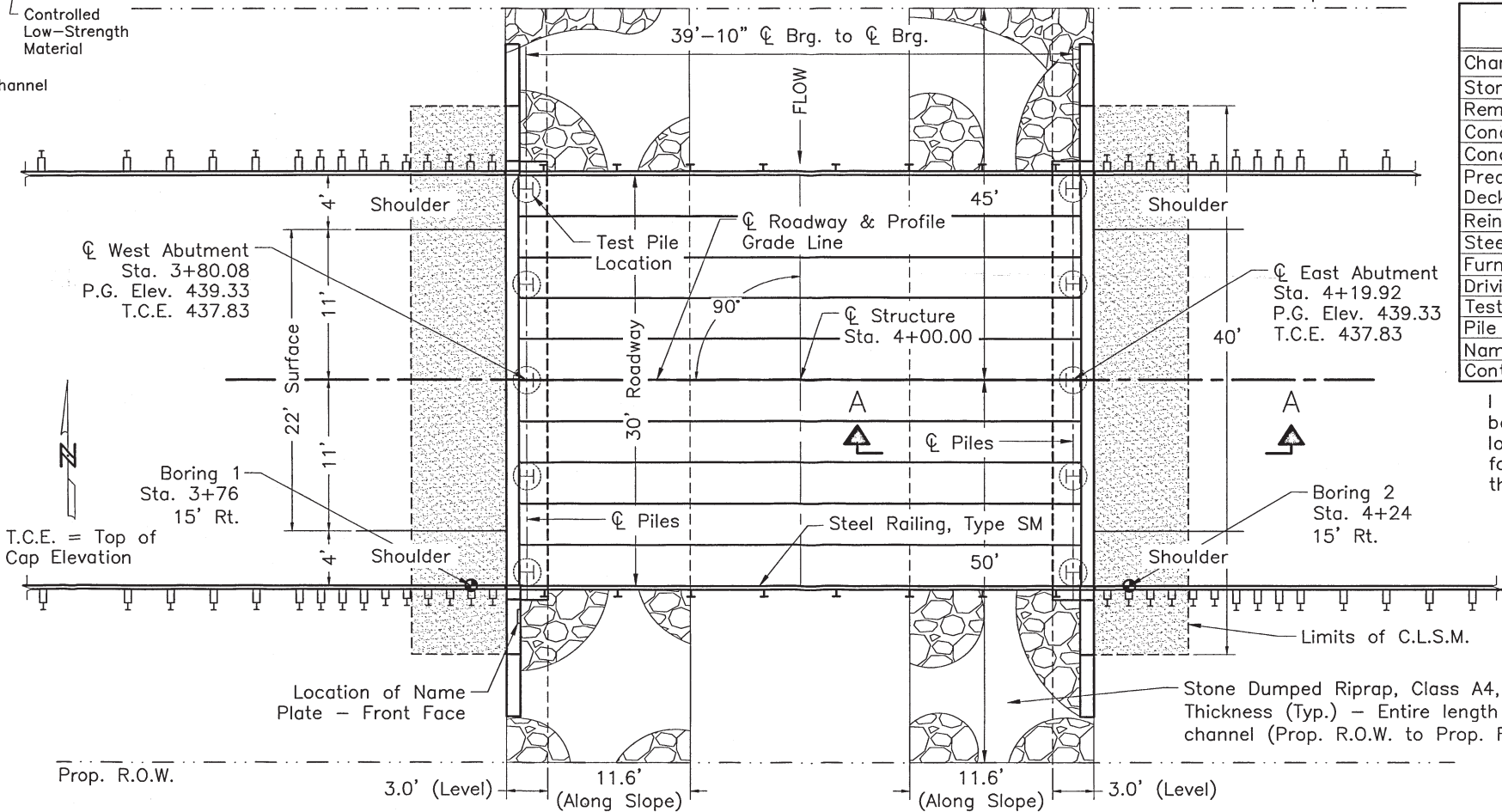
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.528g

Soil Site Class = D

DESIGNED — NRF/BMB	REVISED —
DRAWN — BMB	REVISED —
CHECKED — NRF	REVISED —
DATE — 6-23-2025	REVISED —



ELEVATION



PLAN

No Skew

LOADING HL-93

50#/sq. ft. included in dead load for future wearing surface.

LETTERING FOR NAME PLATE

Locate Name Plate at SW
Corner of Bridge (See Std. 515001)

BRUSHY FORK SYSTEM
BUILT 202 BY
LAWRENCE COUNTY
SEC. 21-00133-00-BR
FAS 801 STATION 4+00.00
STR. NO. 051-3319 LOADING HL-93

WATERWAY INFORMATION

Drainage Area=0.51 Sq.Mi. Low Grade Elev = 437.30 @ Sta. 0+66.78									
Flood	Freq. Yr.	Q. C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head — Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	20	580	89.2	134.3	436.6'	0.5'	0.2'	437.1'	436.8'
Base	100	945	89.2	143.2	436.9'	1.3'	0.5'	438.2'	437.4'

GENERAL NOTES

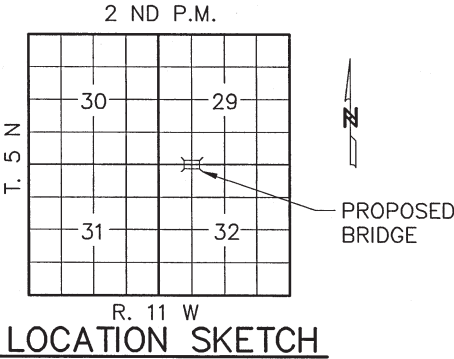
- Do not scale sheets 7-14.
- The Contractor shall drive the test pile to 110% of the nominal required bearing specified in production pile locations at the West Abutment or as approved by the Engineer before ordering the remainder of piles. The test pile shall be equipped with a steel pile shoe, and the cost of the steel pile shoe shall be included in item Test Pile Steel HP 12 X 53. See Sheet 13 for pile shoe detail.
- It shall be the responsibility of the Contractor to divert flow during construction to keep construction areas free of water. The method of water diversion shall be subject to the approval of the Engineer and shall be included in the cost of Concrete Structures.
- See Sheet 14 for boring logs.
- Excavation required to construct the abutments shall be included in the cost of Earth Excavation. No additional compensation will be allowed for Structure Excavation.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- Toe stone riprap treatment as shown in Section A-A shall extend entire channel length from proposed R.O.W. south to proposed R.O.W. north.
- All proposed construction activities shall be in accordance with Nationwide Permit Number 14 of the Department of the Army authorized under Section 404 of the Clean Water Act. The IEPA has issued Section 401 Water Quality Certification for this activity.
- Reinforcement bars designated (E) shall be epoxy coated.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Abuts.	Total
Channel Excavation	Cu. Yd.	—	220	220
Stone Dumped Riprap, Class A4	Ton	—	260	260
Removal of Existing Structures	Each	—	—	1
Concrete Structures	Cu. Yd.	—	35.2	35.2
Concrete Encasement	Cu. Yd.	—	3.5	3.5
Precast Prestressed Concrete Deck Beams (17" Depth)	Sq. Ft.	1230	—	1230
Reinforcement Bars, Epoxy Coated	Pound	—	5140	5140
Steel Railing, Type SM	Foot	86	—	86
Furnishing Steel Piles HP 12 X 53	Foot	—	612	612
Driving Piles	Foot	—	612	612
Test Pile Steel HP 12 X 53	Each	—	1	1
Pile Shoes	Each	—	9	9
Name Plates	Each	—	1	1
Controlled Low-Strength Material	Cu Yd	—	46	46

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

Nabi R. Fakroddin
7/7/2025
STATE OF ILLINOIS
NABI R. FAKRODDIN
81-3377
ST. CHARLES
ILLINOIS
LICENSED PROFESSIONAL ENGINEER
Lic Exp 11-30-26

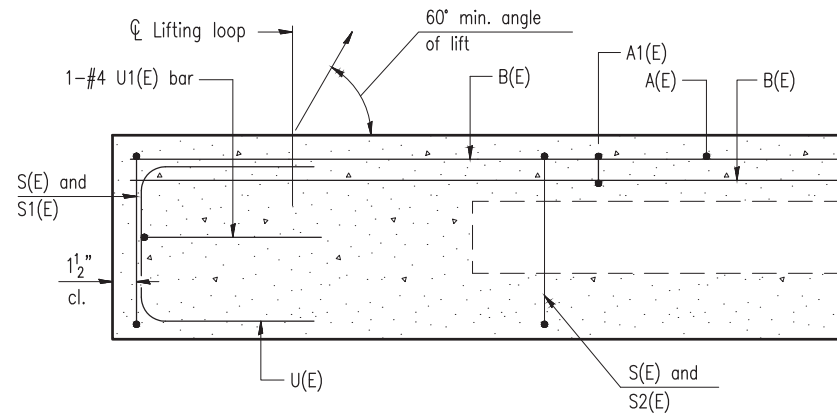


LOCATION SKETCH

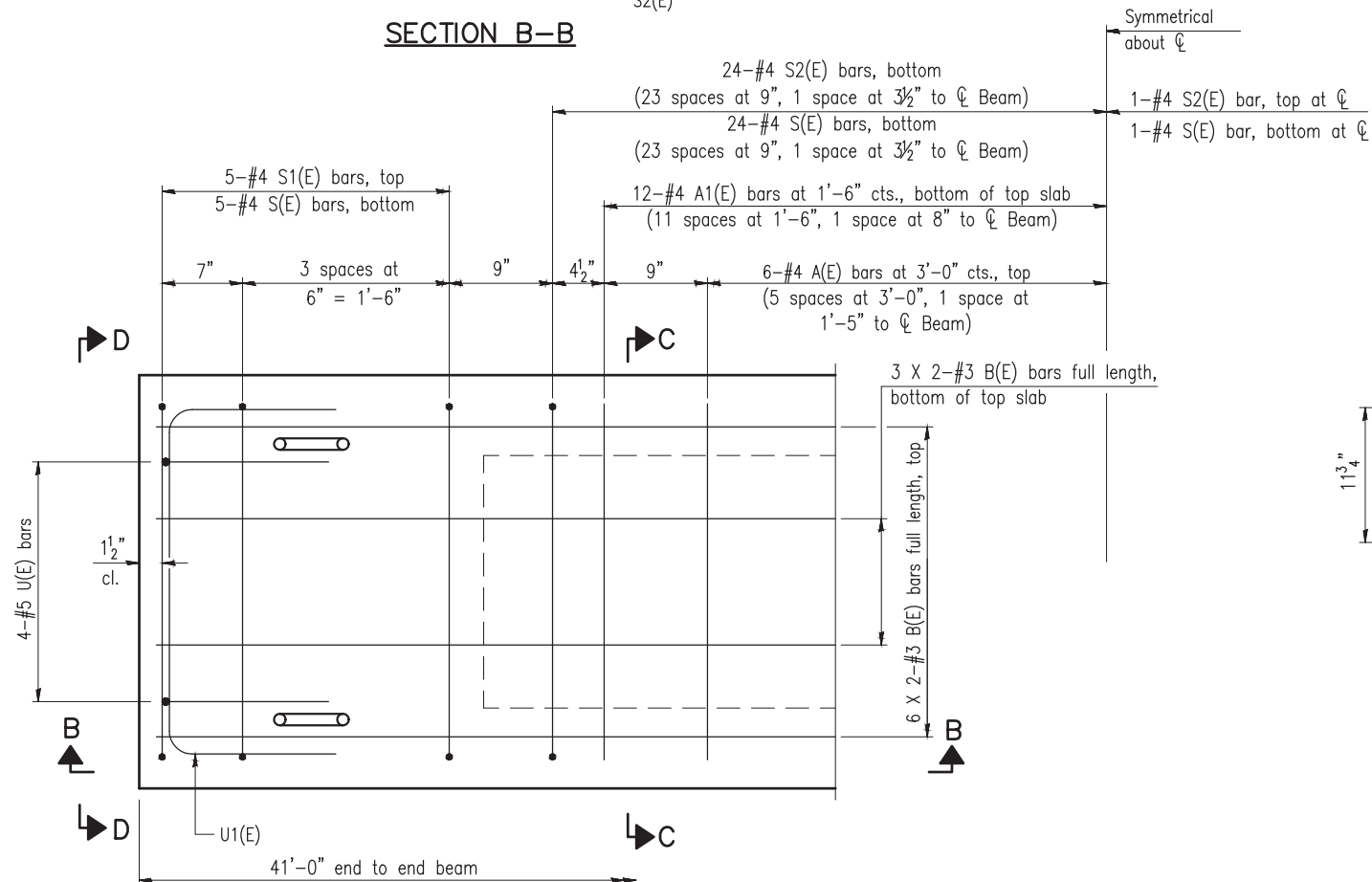
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NUMBER 051-3319

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 801	21-00133-00-BR	LAWRENCE	21	7
CONTRACT 95990		ILLINOIS	PROJECT BPCA(404)	

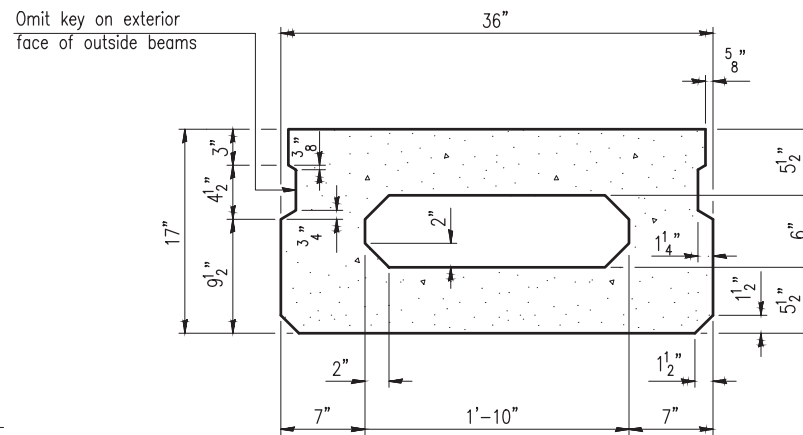


SECTION B-B



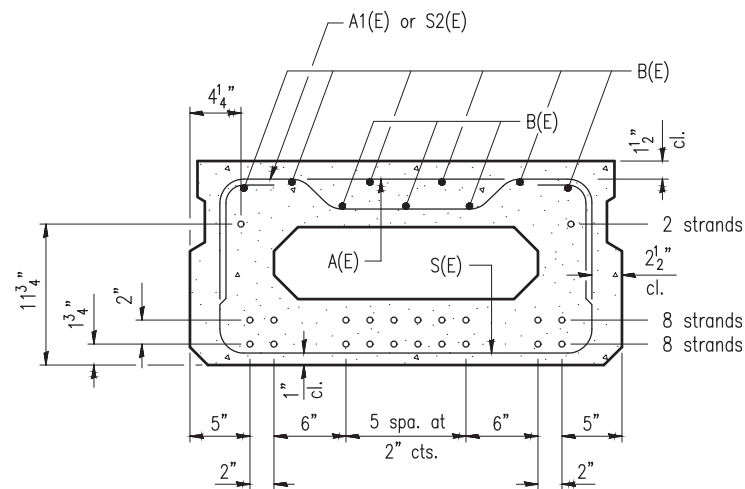
PLAN VIEW

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



SECTION C-C

(Showing dimensions)



SECTION C-C

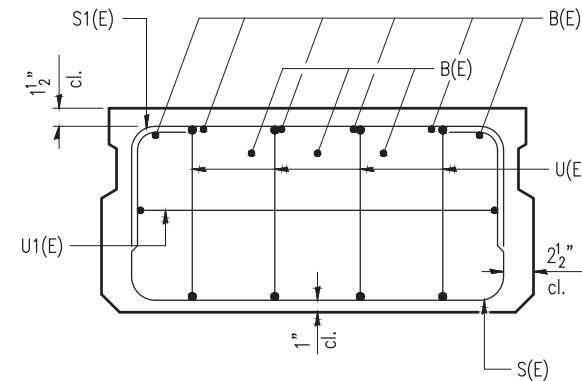
(Showing reinforcement and permissible strand locations)

Notes: 18 total strands per beam

Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

MINIMUM BAR LAP

#3 bar = 1'-6"



VIEW D-D

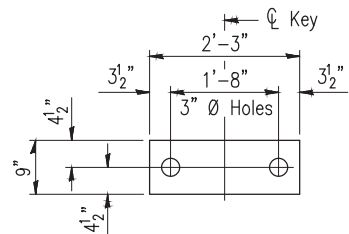
**BAR LIST
ONE BEAM ONLY**

(For information only)

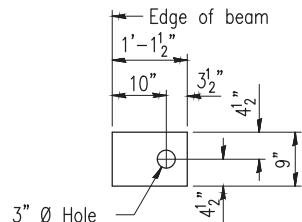
Bar	No.	Size	Length	Shape
A(E)	24	#4	2'-7"	—
A1(E)	12	#4	2'-10"	~
B(E)	18	#3	22'-0"	—
S(E)	59	#4	5'-9"	⌈
S1(E)	10	#4	4'-3"	⌈
S2(E)	49	#4	4'-6"	⌈
U(E)	8	#5	3'-8"	⌈
U1(E)	2	#4	5'-0"	⌈

Note:
See sheet 9 of 21 for additional details and Bill of Material.

DESIGNED — NRF/BMB	REVISED —	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	17" X 36" PPC DECK BEAM STRUCTURE NUMBER 051-3319	ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
DRAWN — BMB	REVISED —			FAS 801	21-00133-00-BR	LAWRENCE	21	8
CHECKED — NRF	REVISED —			CONTRACT 95990		ILLINOIS	PROJECT BPCA(404)	
DATE — 6-23-2025	REVISED —							

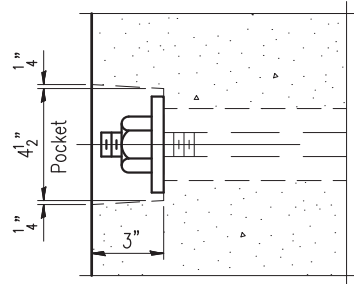


FABRIC BEARING PAD
(Interior)
18 Required

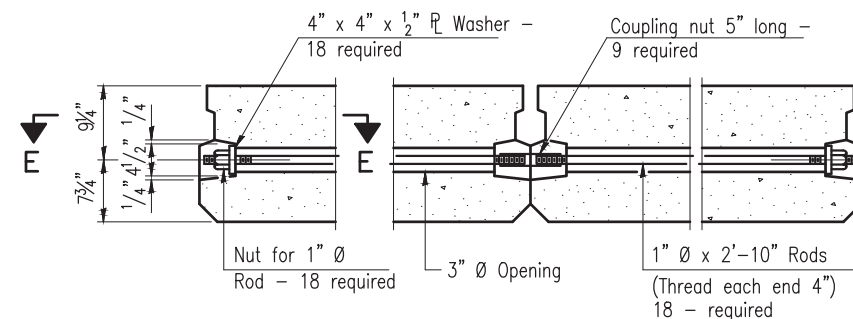


FABRIC BEARING PAD
(Exterior)
4 Required

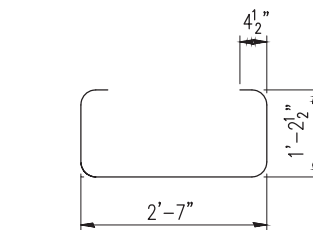
Notes:
All bearing pads shall be 1" thick.



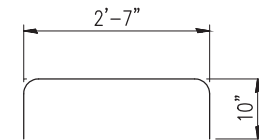
SECTION E-E



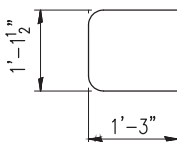
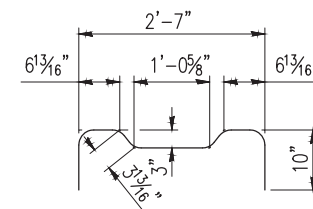
TYPICAL TRANSVERSE TIE ASSEMBLY



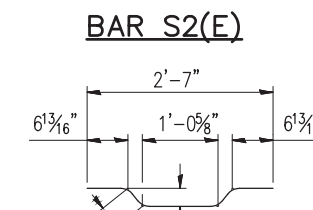
BAR S(E)



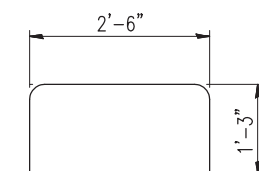
BAR S1(E)



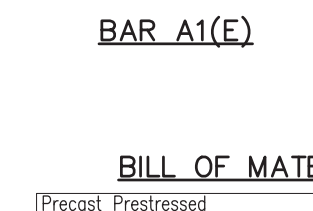
BAR U(E)



BAR S2(E)



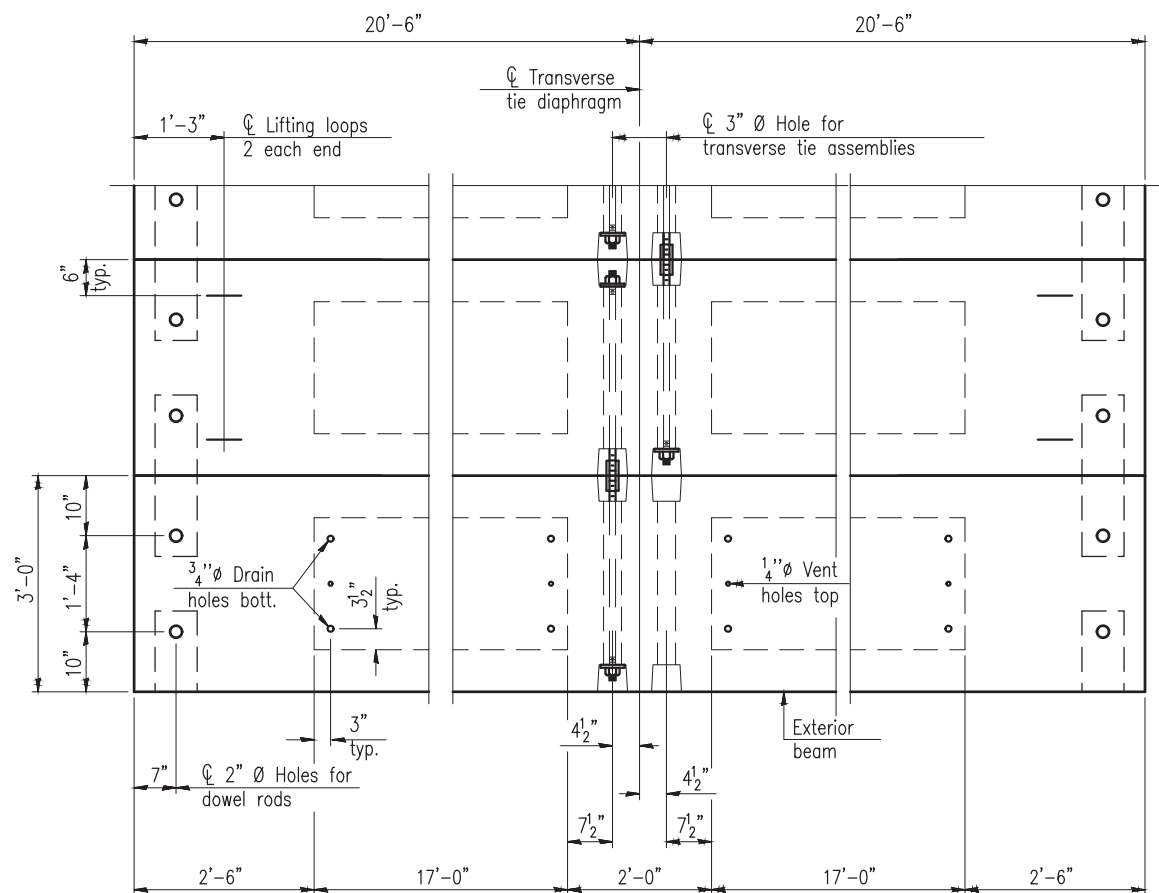
BAR U1(E)



BAR A1(E)

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (17" depth)	Sq. Ft.	1230
---	---------	------

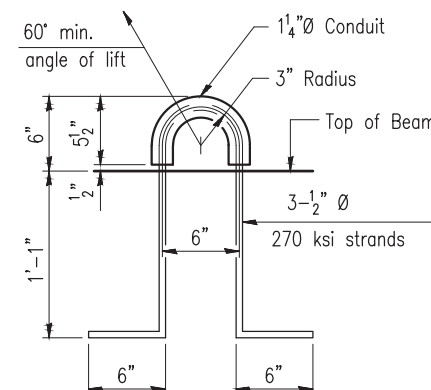


PLAN VIEW

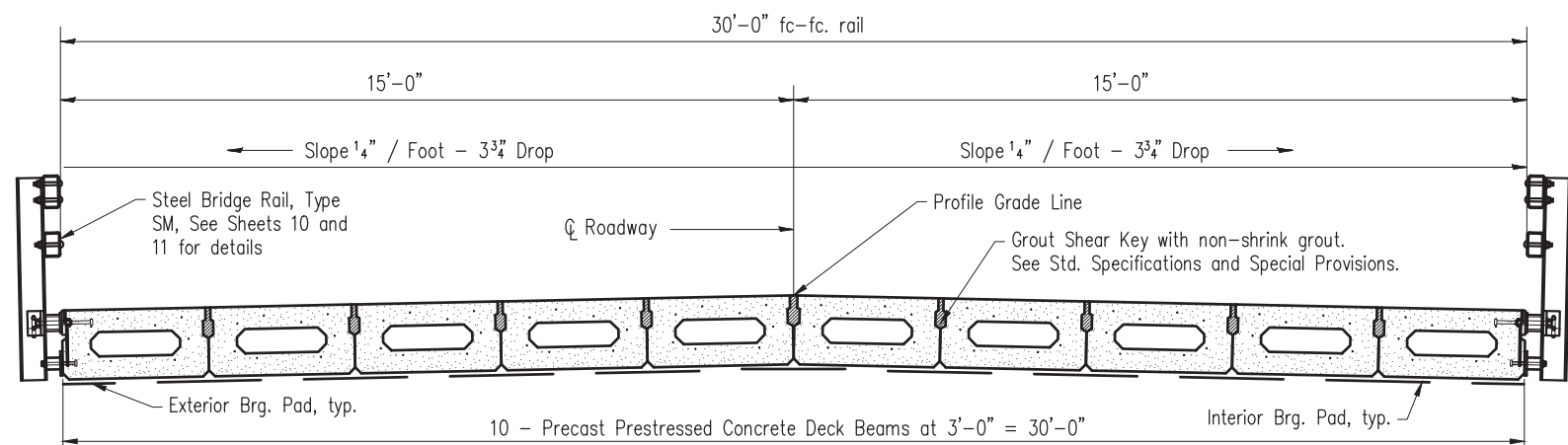
NOTES

Note:
Connect beams in pairs with the transverse tie configuration shown.

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1"Ø rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place. Reinforcement bars shall conform to ASTM A 706, Grade 60. See Standard Specifications. Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location. A minimum 2 1/2"Ø lifting pin shall be used to engage the lifting loops during handling. Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams. Compressive strength of prestressed concrete, f'c, shall be 6000 psi. Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.



LIFTING LOOP DETAIL



CROSS SECTION

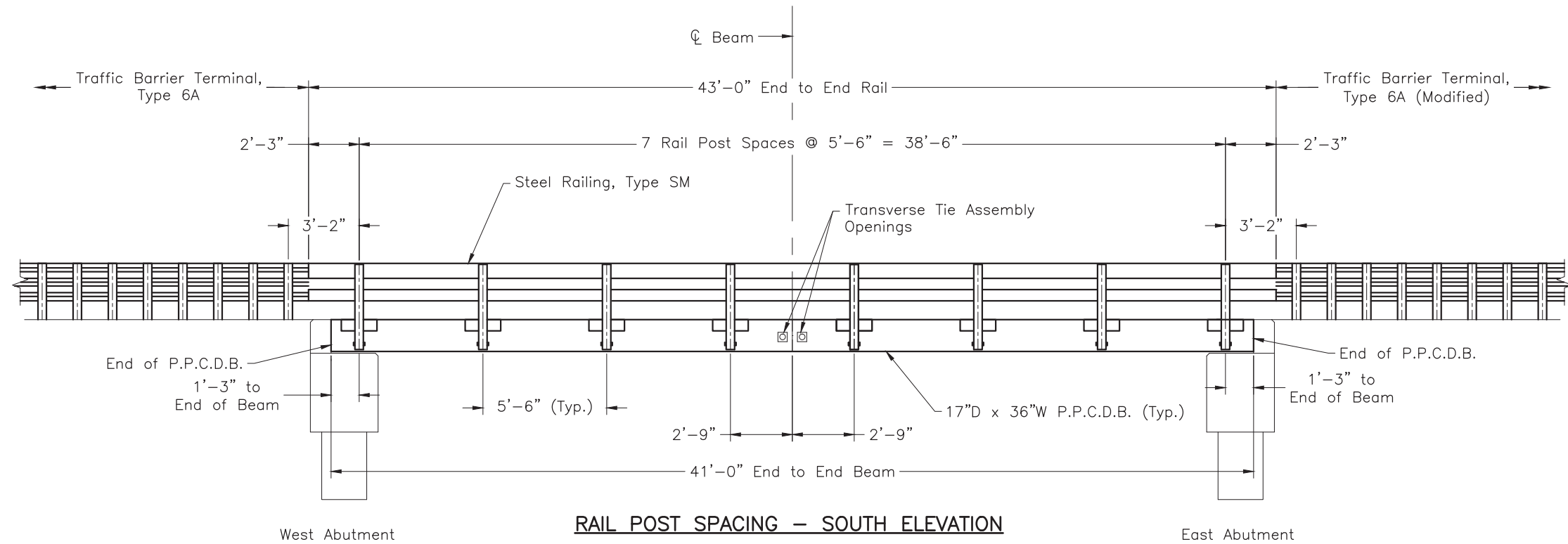
DESIGNED - NRF/BMB	REVISED -
DRAWN - BMB	REVISED -
CHECKED - NRF	REVISED -
DATE - 6-23-2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

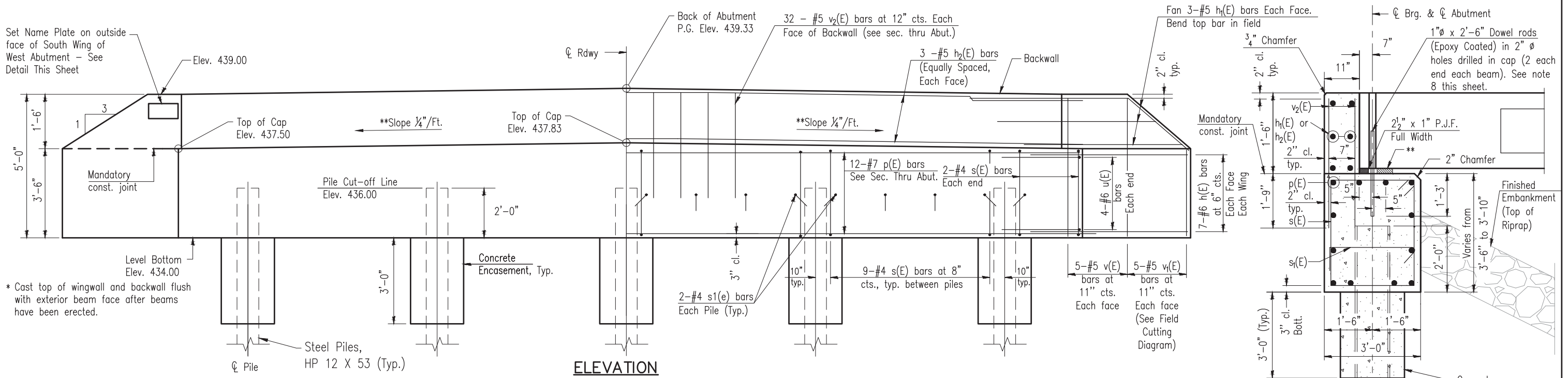
17" X 36" PPC DECK BEAM DETAILS
STRUCTURE NUMBER 051-3319

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 801	21-00133-00-BR	LAWRENCE	21	9
CONTRACT 95990	ILLINOIS	PROJECT BPCA(404)		

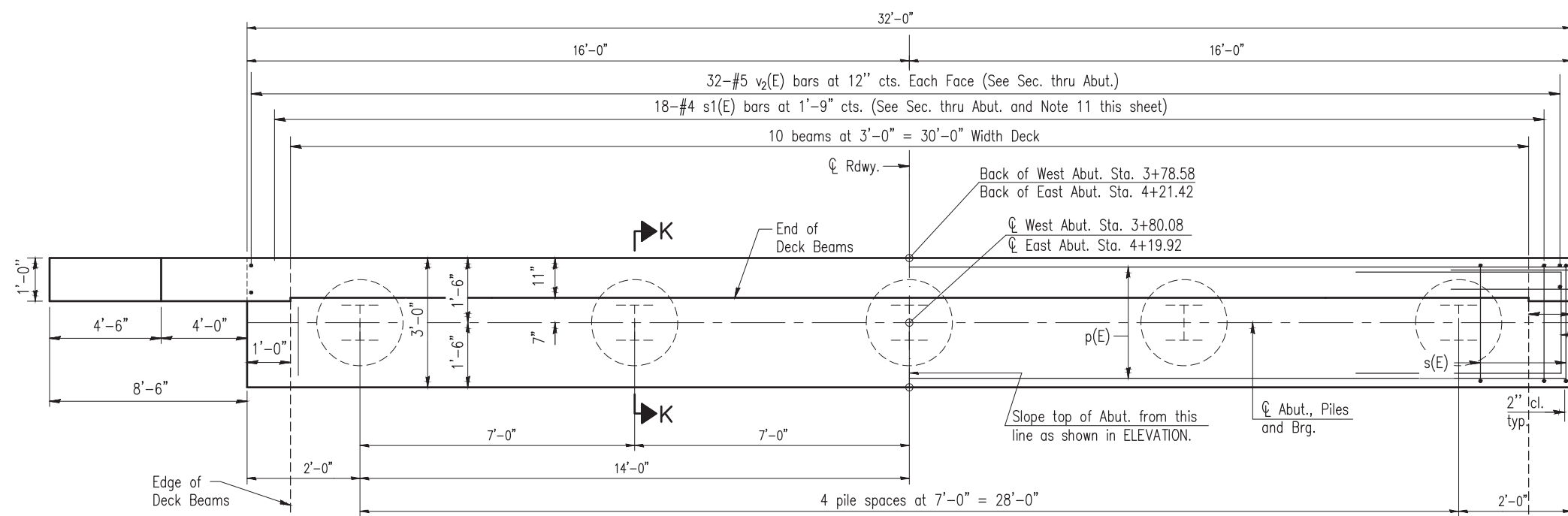
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 801	21-00133-00-BR	LAWRENCE	21	10
CONTRACT 95990		ILLINOIS	PROJECT BPCA(404)	



DESIGNED – NRF/BMB	REVISED –	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STEEL RAILING, TYPE SM DETAILS STRUCTURE NUMBER 051-3319	ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
DRAWN – BMB	REVISED –			FAS 801	21-00133-00-BR	LAWRENCE	21	11	
CHECKED – NRF	REVISED –			CONTRACT 95990		ILLINOIS	PROJECT BPCA(404)		
DATE – 6-23-2025	REVISED –								



ELEVATION



PLAN

BAR s₁(E)

BAR s(E)

BAR u(E)

NAME PLATE PLACEMENT

PILE DATA
WEST ABUTMENT

Type: Steel HP 12 X 53
Nominal Required Bearing: 418 kips
Factored Resistance Available: 230 kips
Est. Length: 68 Feet/Pile
No. Production Piles with Pile Shoes: 4
No. Test Piles with Pile Shoes: 1*

PILE DATA
EAST ABUTMENT

Type: Steel HP 12 X 53
Nominal Required Bearing: 418 kips
Factored Resistance Available: 230 kips
Est. Length: 68 Feet/Pile
No. Production Piles with Pile Shoes: 5
No. Test Piles with Pile Shoes: 0

FIELD CUTTING DIAGRAM

Order v(E) bars full length. Cut as shown and use remainder of bars in opposite face.

SECTION K-K
(At Right Angles)

BILL OF MATERIAL
FOR ONE ABUTMENT

Bar	No.	Size	Length	Shape
h(E)	28	#6	13'-2"	—
h ₁ (E)	12	#5	12'-0"	—
h ₂ (E)	6	#5	31'-8"	—
p(E)	12	#7	31'-8"	—
s(E)	40	#4	12'-1"	□
s ₁ (E)	18	#4	3'-10"	□
u(E)	8	#6	11'-6"	—
v(E)	20	#5	4'-7"	—
v ₁ (E)	10	#5	7'-8"	CUT IN FIELD
v ₂ (E)	64	#5	3'-1"	—

BILL OF MATERIAL
FOR EACH ABUTMENT

Concrete Structures	Cu. Yd.	17.6
Concrete Encasement	Cu. Yd.	1.75
Reinforcement Bars, Epoxy Coated	Pound	2570
Furnishing Steel Piles HP 12 X 53	Foot	W Abut. 272 E Abut. 340
Driving Piles	Foot	W Abut. 272 E Abut. 340
Test Pile Steel HP 12 X 53	Each	W Abut. 1 E Abut. 0
Pile Shoes	Each	W Abut. 4* E Abut. 5

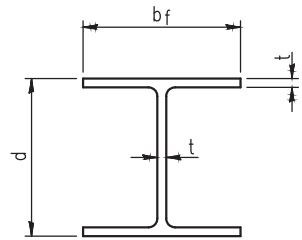
- General Notes:**
- Cast backwalls and top of Wingwalls after beams have been erected. Top of wingwall and backwall shall be cast flush with exterior beam face.
 - The backwalls and the portion of the Wingwalls above the mandatory construction joint shall be cast against the in-place beam.
 - Extend "h(E)" bars into the abutment cap.
 - For details of piles and Concrete Encasement, see sheet 13 of 21.
 - Drawings not to scale.
 - All clearances between rebar and form surface shall be 2" unless otherwise noted.
 - Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60 (Illinois Modified).
 - Space reinforcement in cap to miss PPCDB dowel rods.
 - Dowel rods shall be grouted after beams are in place and allowed to cure (min. 24 hrs.) prior to start of grouting deck beam longitudinal keyways.
 - All exposed edges shall have a standard 3/4" chamfer unless otherwise noted or as directed by the Engineer.
 - s₁(E) bars: Alternate the position of the 90° and 135° hooked ends between adjacent s₁(E) bars.
 - Reinforcement bars designated (E) shall be epoxy coated.
 - All dimensions of bent bars are out-to-out.

DESIGNED - NRF/BMB	REVISED -
DRAWN - BMB	REVISED -
CHECKED - NRF	REVISED -
DATE - 6-23-2025	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

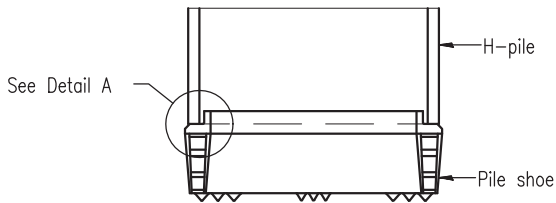
ABUTMENT DETAILS
STRUCTURE NUMBER 051-3319

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 801	21-00133-00-BR	LAWRENCE	21	12
CONTRACT 95990		ILLINOIS	PROJECT BPCA(404)	

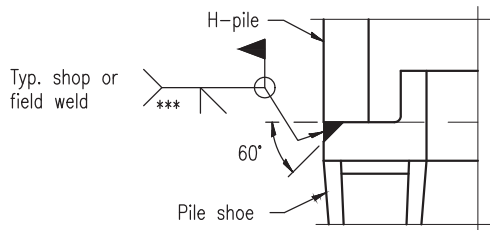


STEEL PILE TABLE

Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 12x53	11 3/4"	12"	7/16"	24"

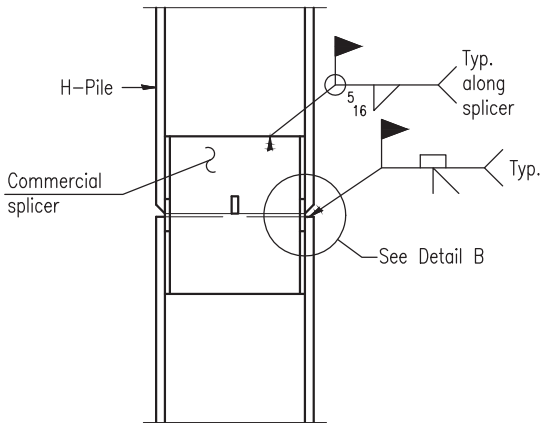


ELEVATION

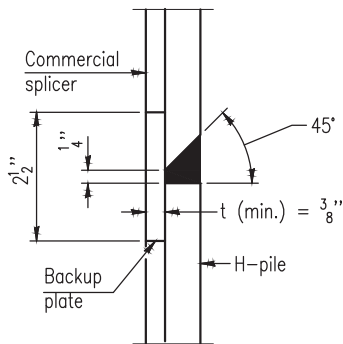


DETAIL A

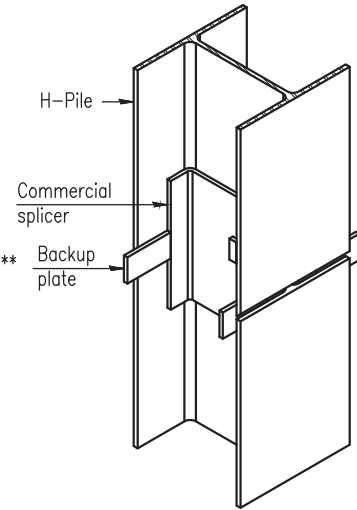
H-PILE SHOE ATTACHMENT



ELEVATION

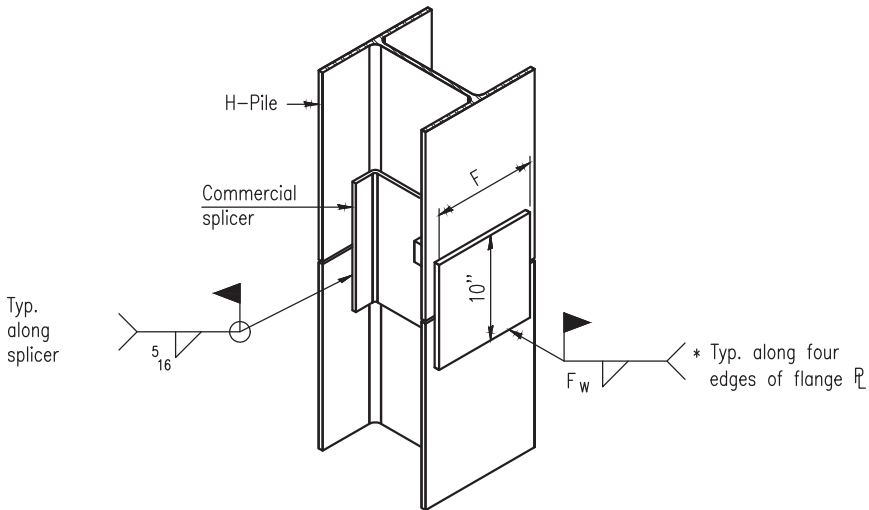


DETAIL "B"



ISOMETRIC VIEW

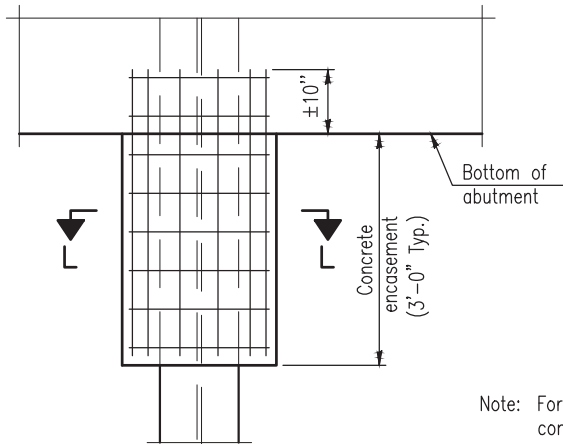
WELDED COMMERCIAL SPLICE



ISOMETRIC VIEW

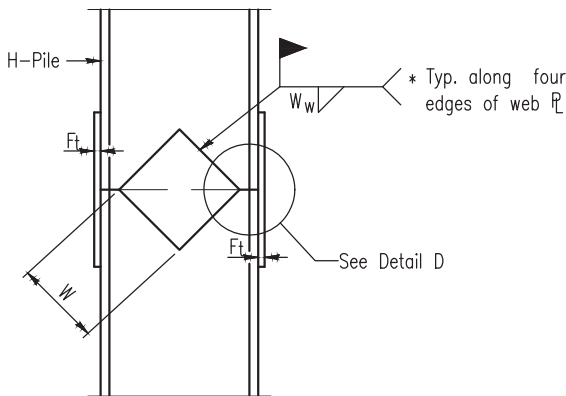
WELDED COMMERCIAL SPLICE ALTERNATE

- * 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.).

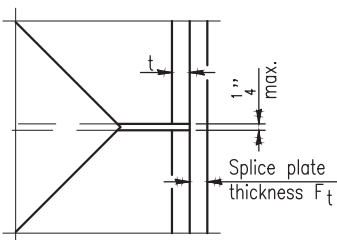


ELEVATION
DRIVEN PILES

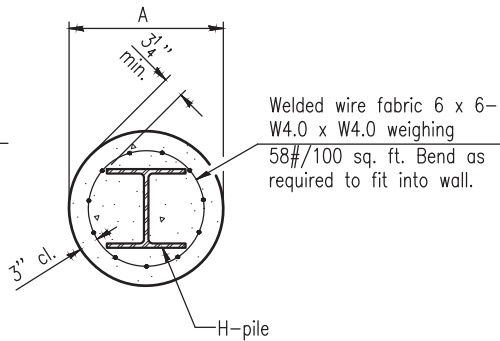
PILE ENCASEMENT



ELEVATION

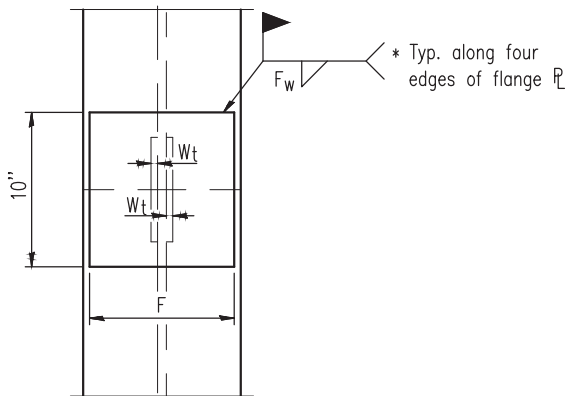


DETAIL D



Note: Forms for encasement may be omitted when soil conditions permit. If soil conditions are not favorable to use the soil as forms, the Contractor shall provide forms; the cost for the forms and all labor to install forms shall be included in item "Concrete Encasement."

SECTION L-L



END VIEW

Designation	F	Ft	Fw	W	Wt	Ww
HP 12x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"

WELDED PLATE FIELD
SPLICE

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

DESIGNED — NRF/BMB	REVISED —
DRAWN — BMB	REVISED —
CHECKED — NRF	REVISED —
DATE — 6-23-2025	REVISED —

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PILE DETAILS
STRUCTURE NUMBER 051-3319

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 801	21-00133-00-BR	LAWRENCE	21	13
CONTRACT 95990		ILLINOIS	PROJECT BPCA(404)	

NOBLE							BORING No. B-1		water level reading	
ENGINEERING CONSULTANTS				County: Lawrence, IL			Sheet No. 1 of 3		1st encounter: 23'	
Client: Charleston Engineering				Weather: M. Sunny			Temperature: 50's		water level reading	
Driller: Noble Engineering Consultants				Date Started: 2-13-23			Surface Elevation: ~437**		At completion Dry cave	
Location: Sec. #21-00133 Bond Twp.				Date Finished: 2-13-23			Driller: Tony Schocker		Backfill: Soil Cuttings	
Depth:	Sample No.	Sample Depth	N-Value	Blow Count	Recovery (%)	Qp (tsf)*	Soil Description	Moisture %	USC Class.	Elev.**
1							0.0'-1.5' Gravel, Sand, Etc. FILL			436
2	SS-1	1.0'-2.5'	17	29-11-6	30	-	1.5'-4.4' Silt, Clay, Sand, Etc. FILL	13.1	FILL	435
3										434
4	SS-2	3.5'-5.0'	6	5-3-3	70	0.8		11.9	CL	433
5										432
6	SS-3	6.0'-7.5'	7	1-3-4	100	0.9		17.1	CL	431
7										430
8										429
9	SS-4	8.5'-10.0'	6	2-2-4	100	0.8	4.4'-13.0' SILTY CLAY, trace to some sand, trace gravel, medium stiff, brown mottled gray	16.7	CL	428
10										427
11										426
12										425
13										424
14	SS-5	13.5'-15.0'	14	4-6-8	100	2.1		21.2	CH	423
15										422
16										421
17										420
18										419
19	SS-6	18.5'-20.0'	10	3-4-6	100	2.0	13.0'-23.0' CLAY, trace gravel, trace sand, very stiff, brown mottled gray	21.4	CH	418
20										417
21										416
22										415
23							23.0'-57.0' SILTY CLAY, trace to some sand, occ. wet sand seams, trace gravel, medium stiff to stiff, gray	20.7	CL	414
24	SS-7	23.5'-25.0'	3	0-1-2	100	0.6				413
25										412
26										411
27										410
28										409
29										408
30	SS-8	28.5'-30.0'	4	1-2-2	100	0.7		19.8	CL	407
Drilling Method:HSA (2-1/4" Id)				comments: * Qp test is an estimate of the unconfined compressive strength performed by a compact calibrated spring loaded cylinder						
Depth: 0' to 70.0'										
Drill Rig: Mobile B-47				**ground surface elevation is estimated based upon provided bridge deck elevation of 437.7						
Sampling: split-spoon (SS)										

NOBLE							BORING No. B-1		water level reading	
ENGINEERING CONSULTANTS				County: Lawrence, IL			Sheet No. 2 of 3		1st encounter: 23'	
Client: Charleston Engineering				Weather: M. Sunny			Temperature: 50's		water level reading	
Driller: Noble Engineering Consultants				Date Started: 2-13-23			Surface Elevation: ~437**		At completion Dry cave	
Location: Sec. #21-00133 Bond Twp.				Date Finished: 2-13-23			Driller: Tony Schocker		Backfill: Soil Cuttings	
Depth:	Sample No.	Sample Depth	N-Value	Blow Count	Recovery (%)	Qp (tsf)*	Soil Description	Moisture %	USC Class.	Elev.**
31										406
32										405
33										404
34	SS-9	33.5'-35.0'	2	0-1-1	100	0.5		27.4	CL	403
35										402
36										401
37										400
38										399
39	SS-10	38.5'-40.0'	8	2-4-4	100	1.1	23.0'-57.0' SILTY CLAY, trace to some sand, occ. wet sand seams, trace gravel, medium stiff to stiff, gray	11.9	CL	398
40										397
41										396
42										395
43										394
44	SS-11	43.5'-45.0'	10	2-5-5	100	1.1		15.9	CL	393
45										392
46										391
47										390
48										389
49	SS-12	48.5'-50.0'	10	7-5-5	100	1.0		16.8	CL	388
50										387
51										386
52										385
53										384
54	SS-13	53.5'-55.0'	11	3-5-6	100	1.2		20.3	CL	383
55										382
56										381
57										380
58										379
59							57'-70' HIGHLY WEATHERED SHALE, w/ occ. silt seams			378
60	SS-14	58.5'-60.0'	25	23-11-14	100	-				377
Drilling Method: HSA (2-1/4" Id)				comments *			Qp test is an estimate of the unconfined compressive strength performed by a compact calibrated spring loaded cylinder			
Depth: 0' to 70.0'										
Drill Rig: Mobile B-47							**ground surface elevation is estimated based upon provided bridge deck elevation of 437.7			
Sampling: split-spoon (SS)										

NOBLE							BORING No. B-1		water level reading	
ENGINEERING CONSULTANTS				County: Lawrence, IL			Sheet No. 3 of 3		1st encounter: 23'	
Client: Charleston Engineering				Weather: M. Sunny			Temperature: 50's		water level reading	
Driller: Noble Engineering Consultants				Date Started: 2-13-21			Surface Elevation: ~437**		At completion Dry cave	
Location: Sec. #21-00133 Bond Twp.				Date Finished: 2-13-21			Driller: Tony Schocker		Backfill: Soil Cuttings	
Depth:	Sample No.	Sample Depth	N-Value	Blow Count	Recovery (%)	Qp (tsf)*	Soil Description	Moisture %	USC Class.	Elev.**
61										376
62										375
63										374
64	SS-15	63.5'-65.0'	39	34-17-22	100	-	57'-70' HIGHLY WEATHERED SHALE, w/ occ. silt seams			373
65										372
66										371
67										370
68										369
69	SS-16	68.5'-70.0'	58	24-27-31	100	-				368
70										367
71										
72										
73										
74										
75										
76										
77										
78										
79										
80										
81										
82										
83										
84										
85										
86										
87										
88										
89										
90										
Drilling Method: HSA (2-1/4" Id)				comments *		Qp test is an estimate of the unconfined compressive strength performed by a compact calibrated spring loaded cylinder				
Depth: 0' to 70.0'										
Drill Rig: Mobile B-47						**ground surface elevation is estimated based upon provided bridge deck elevation of 437.7.				
Sampling: split-spoon (SS)										

NOBLE							BORING No. B-2		water level reading	
ENGINEERING CONSULTANTS				County: Lawrence, IL			Sheet No. 1 of 3		1st encounter: 22'	
Client: Charleston Engineering				Weather: M. Sunny			Temperature: 50's		water level reading	
Driller: Noble Engineering Consultants				Date Started: 2-13-23			Surface Elevation: ~437**		At completion Dry cave	
Location: Sec. #21-00133 Bond Twp.				Date Finished: 2-13-23			Driller: Tony Schocker		Backfill: Soil Cuttings	
Depth:	Sample No.	Sample Depth	N-Value	Blow Count	Recovery (%)	Qp (tsf)*	Soil Description	Moisture %	USC Class.	Elev.**
1										436
2	SS-1	1.0'-2.5'	12	9-7-5	40	-	0'-4' Silt, Clay, Crushed Rock, Sand, Etc. FILL	9.1	FILL	435
3										434
4	SS-2	3.5'-5.0'	7	2-3-4	80	0.9		12.3	CL	433
5										432
6	SS-3	6.0'-7.5'	6	1-3-3	100	0.8		14.6	CL	431
7										430
8										429
9	SS-4	8.5'-10.0'	6	2-2-4	100	0.8	4'-12.5' SILTY CLAY, trace to some sand, trace gravel, medium stiff, brown mottled gray	13.8	CL	428
10										427
11										426
12										425
13										424
14	SS-5	13.5'-15.0'	11	4-5-6	100	2.1		19.9	CH	423
15										422
16										421
17										420
18										419
19	SS-6	18.5'-20.0'	12	3-6-6	100	2.0	12.5'-22.0' CLAY, trace gravel, trace sand, very stiff, brown mottled gray	21.7	CH	418
20										417
21										416
22										415
23							22.0'-55.0' SILTY CLAY, trace to some sand, occ. wet sand seams, trace gravel, medium stiff to stiff, gray	16.3	CL	414
24	SS-7	23.5'-25.0'	3	0-1-2	100	0.6				413
25										412
26										411
27										410
28										409
29										408
30	SS-8	28.5'-30.0'	3	1-1-2	100	0.7		18.0	CL	407
Drilling Method:HSA (2-1/4" Id)				comments: * Qp test is an estimate of the unconfined compressive strength performed by a compact calibrated spring loaded cylinder						
Depth: 0' to 70.0'										
Drill Rig: Mobile B-47				**ground surface elevation is estimated based upon provided bridge deck elevation of 437.7						
Sampling: split-spoon (SS)										

NOBLE							BORING No. B-2		water level reading	
ENGINEERING CONSULTANTS				County: Lawrence, IL			Sheet No. 2 of 3		1st encounter: 22'	
Client: Charleston Engineering				Weather: M. Sunny			Temperature: 50's		water level reading	
Driller: Noble Engineering Consultants				Date Started: 2-13-23			Surface Elevation: ~437**		At completion Dry cave	
Location:Sec. #21-00133 Bond Twp.				Date Finished: 2-13-23			Driller: Tony Schocker		Backfill: Soil Cuttings	
Depth:	Sample No.	Sample Depth	N-Value	Blow Count	Recovery (%)	Qp (tsf)*	Soil Description	Moisture %	USC Class.	Elev.**
31										406
32										405
33										404
34	SS-9	33.5'-35.0'	3	0-1-2	100	0.6		18.1	CL	403
35										402
36										401
37										400
38										399
39	SS-10	38.5'-40.0'	6	2-2-4	100	1.1	22.0'-55.0' SILTY CLAY, trace to some sand, occ. wet sand seams, trace gravel, medium stiff to stiff, gray	11.9	CL	398
40										397
41										396
42										395
43										394
44	SS-11	43.5'-45.0'	11	3-5-6	100	1.1		15.9	CL	393
45										392
46										391
47										390
48										389
49	SS-12	48.5'-50.0'	10	4-5-5	100	1.0		16.8	CL	388
50										387
51										386
52										385
53										384
54	SS-13	53.5'-55.0'	11	3-5-6	100	1.1		20.3	CL	383
55										382
56										381
57										380
58										379
59							55'-70' HIGHLY WEATHERED SHALE, w/ occ. silt seams			378
60	SS-14	58.5'-60.0'	52	13-27-25	100	-				377
Drilling Method: HSA (2-1/4" Id)				comments *			Qp test is an estimate of the unconfined compressive strength performed			
Depth: 0' to 70.0'							by a compact calibrated spring loaded cylinder			
Drill Rig: Mobile B-47							**ground surface elevation is estimated based upon provided bridge deck			
Sampling: split-spoon (SS)							elevation of 437.7			

NOBLE							BORING No. B-2		water level reading	
ENGINEERING CONSULTANTS				County: Lawrence, IL			Sheet No. 3 of 3		1st encounter: 22'	
Client: Charleston Engineering				Weather: M. Sunny			Temperature: 50's		water level reading	
Driller: Noble Engineering Consultants				Date Started: 2-13-21			Surface Elevation: ~437**		At completion Dry cave	
Location: Sec. #21-00133 Bond Twp.				Date Finished: 2-13-21			Driller: Tony Schocker		Backfill: Soil Cuttings	
Depth:	Sample No.	Sample Depth	N-Value	Blow Count	Recovery (%)	Qp (tsf)*	Soil Description	Moisture %	USC Class.	Elev.**
61										376
62										375
63										374
64	SS-15	63.5'-65.0'	29	21-13-17	100	-	55'-70' HIGHLY WEATHERED SHALE, w/ occ. silt seams			373
65										372
66										371
67										370
68										369
69	SS-16	68.5'-70.0'	61	29-29-32	100	-				368
70										367
71										
72										
73										
74										
75										
76										
77										
78										
79										
80										
81										
82										
83										
84										
85										
86										
87										
88										
89										
90										
Drilling Method: HSA (2-1/4" id)				comments * Qp test is an estimate of the unconfined compressive strength performed by a compact calibrated spring loaded cylinder						
Depth: 0' to 70.0'										
Drill Rig: Mobile B-47				**ground surface elevation is estimated based upon provided bridge deck elevation of 437.7.						
Sampling: split-spoon (SS)										

