



03-08-2019 LETTING ITEM 176

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

**SURFACE TRANSPORTATION PROGRAM
OFF SYSTEM BRIDGE**

FAS ROUTE 864 (PYATT-CUTLER ROAD)
COUNTY UNIT ROAD DISTRICT
SECTION 17-00146-00-BR

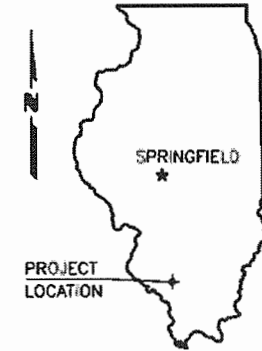
PROJECT NO. X3DI(029)

JOB NO. C-99-038-18

LITTLE GALUM CREEK

PERRY COUNTY

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 864	17-00146-00-BR	PERRY	12	1
PROJECT NO. X3DI(029)			CONTRACT NO. 99605	

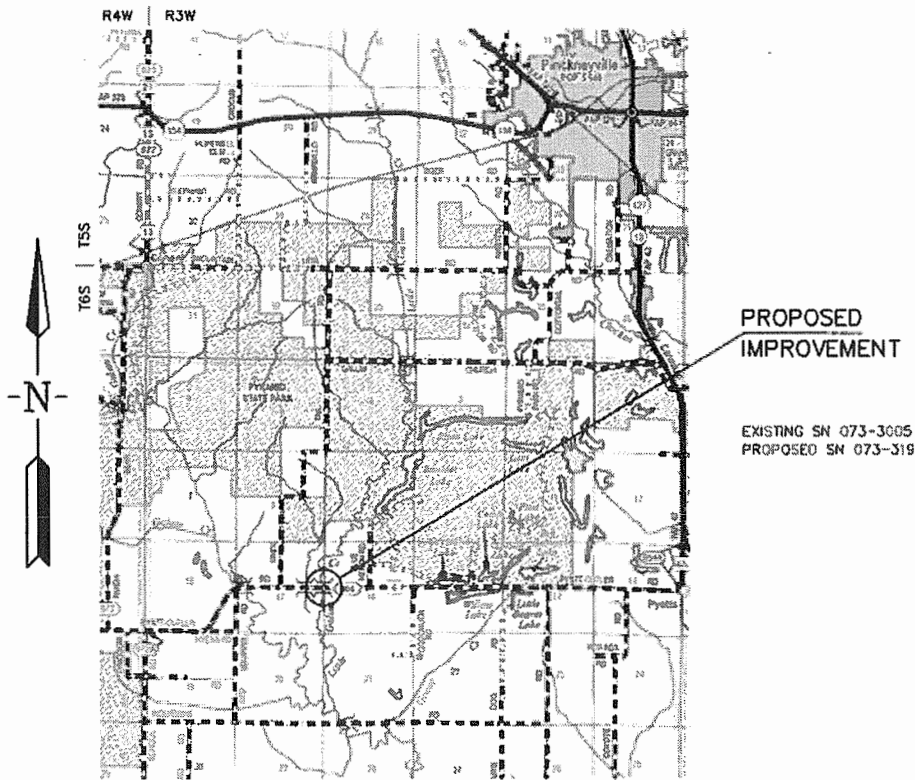


SUMMARY OF QUANTITIES

CODE NO.	PAY ITEM	UNIT	TOTAL
XX006119	TRAFFIC CONTROL AND PROTECTION (DETOUR)	L SUM	1
* X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.3
* X6333500	TRAFFIC BARRIER TERMINAL REMOVAL	EACH	8
* Z0033700	LONGITUDINAL JOINT SEALANT	FOOT	114
20200100	EARTH EXCAVATION	CU YD	25
* 20300100	CHANNEL EXCAVATION	CU YD	85
20400800	FURNISHED EXCAVATION	CU YD	486
20900110	POROUS GRANULAR BACKFILL	CU YD	76
* 28100809	STONE DUMPED RIPRAP, CLASS A5	TON	433
* 35100100	AGGREGATE BASE COURSE, TYPE A	TON	61
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	195
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	152
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	73
* 40603090	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N90	TON	30
* 40603320	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N90	TON	29
48101200	AGGREGATE SHOULDERS, TYPE B	TON	190
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50200100	STRUCTURE EXCAVATION	CU YD	41
50300225	CONCRETE STRUCTURES	CU YD	35.8
50300280	CONCRETE ENCASEMENT	CU YD	3.4
50400405	PRECAST PRESTRESSED CONCRETE DECK BEAMS (21" DEPTH)	SQ FT	1,600
50800105	REINFORCEMENT BARS	POUND	3,756
Δ 50900205	STEEL RAILING, TYPE S1	FOOT	102
51201400	FURNISHING STEEL PILES HP10X42	FOOT	750
51202305	DRIVING PILES	FOOT	750
51500100	NAME PLATES	EACH	1
Δ 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	450
Δ 63100075	TRAFFIC BARRIER TERMINAL, TYPE 5A	EACH	4
Δ 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4
67100100	MOBILIZATION	L SUM	1
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1
Δ 72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
Δ 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1,254

* SEE SPECIAL PROVISIONS

Δ SPECIALTY ITEMS



LOCATION MAP

SCALE: 1" = 2 MILES

NET LENGTH OF IMPROVEMENT = 557.00 FT. = 0.1055 MILES

INDEX OF SHEETS

- COVER SHEET
 - PLAN & PROFILE
 - DETOUR & TRAFFIC CONTROL PLAN
 - GENERAL PLAN & ELEVATION
 - 21" X 48" PPC DECK BEAM
 - 21" X 48" PPC DECK BEAM DETAILS
 - ABUTMENT
 - STEEL RAILING, TYPE S-1
 - NAME PLATE
 - PILING DETAILS
 - CROSS SECTIONS
- STANDARDS
- 000001-07 STD SYMBOLS, ABBREVIATIONS & PATTERNS
 - 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
 - 630001-12 STEEL PLATE BEAM GUARDRAIL
 - 630301-09 SHLDR WIDENING FOR TY 1 (SP) TERMINALS
 - 701901-08 TRAFFIC CONTROL DEVICES
 - 725001-01 OBJECT AND TERMINAL MARKERS
 - 780001-05 TYPICAL PAVEMENT MARKINGS
 - BLR 21-9 TYP APPLICATION OF TRAF CONTR DEVICES
 - BLR 27-1 TRAFFIC BARRIER TERMINAL, TYPE 5A

CLASSIFICATION : MAJOR COLLECTOR
ADT : 1650
DESIGN SPEED : 50 MPH

CONTRACT NO. 99605

Round Table Design, Inc.

PROFESSIONAL ENGINEERING - LAND SURVEYING
1457 HIGHWAY 145 S HARRISBURG, IL (618) 253-6017



Kevin Phillips
PROFESSIONAL ENGINEER
#062-047293
EXPIRES NOV. 30, 2019

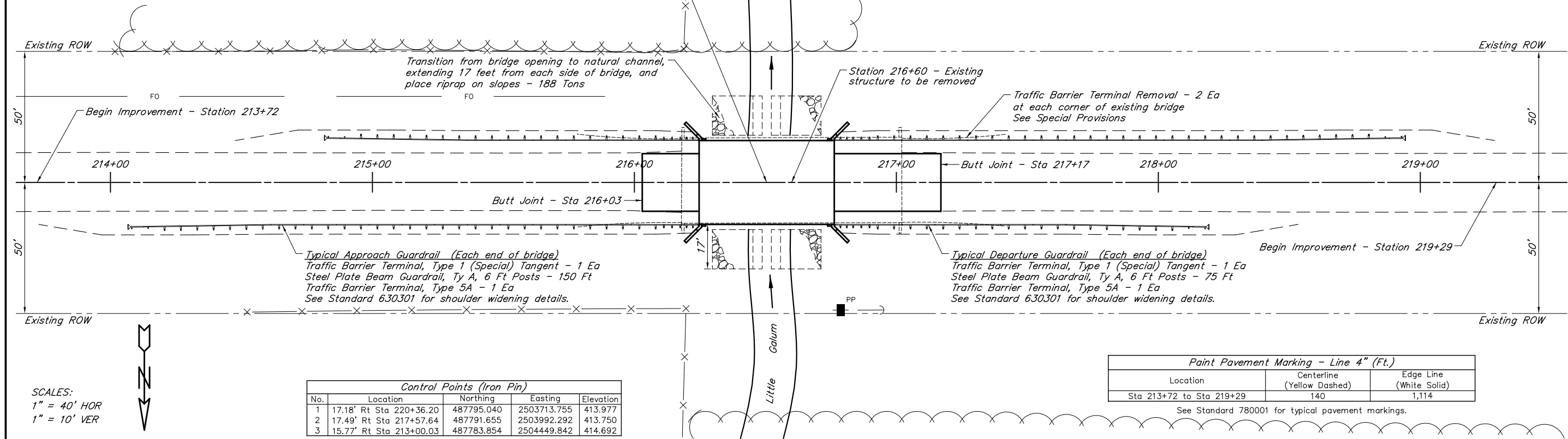
ILLINOIS DEPARTMENT OF TRANSPORTATION	
Approved	<i>Brian Otten</i> 11/21/18 Perry County Engineer
Passed	DECEMBER 07, 2018 District 9 Engineer of Local Roads and Streets
Releasing for Bid Based on Limited Review	DECEMBER 07, 2018 <i>Jeffrey L. Keirn</i> Region Five Engineer

Existing Structure - 3 Span cast-in-place concrete deck with steel stringers on concrete pile bent piers & abutments. 32.5' W x 84.0' L

Station 216+50.5 - Single span, precast prestress concrete deck beam bridge 51'-7" bk-bk Abutments

EXISTING SN 073-3005
PROPOSED SN 073-3196

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 864	17-00146-00-BR	PERRY	12	2
PROJECT NO. X3D(029)			CONTRACT NO. 99605	

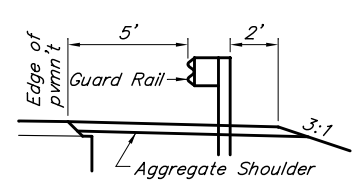


Control Points (Iron Pin)				
No.	Location	Northing	Easting	Elevation
1	17.18' Rt Sta 220+36.20	487795.040	2503713.755	413.977
2	17.49' Rt Sta 217+57.64	487791.655	2503992.292	413.750
3	15.77' Rt Sta 213+00.03	487783.854	2504449.842	414.692

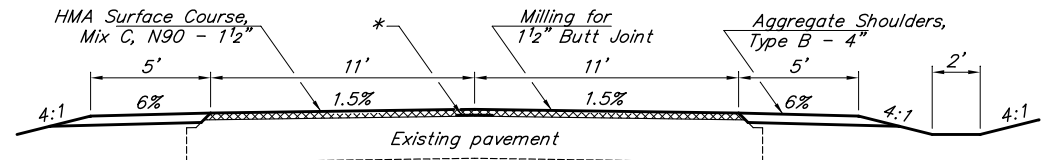
Paint Pavement Marking - Line 4" (Ft.)		
Location	Centerline (Yellow Dashed)	Edge Line (White Solid)
Sta 213+72 to Sta 219+29	140	1,114

See Standard 780001 for typical pavement markings.

SCALES:
1" = 40' HOR
1" = 10' VER



SHOULDER WIDENING FOR GUARD RAIL

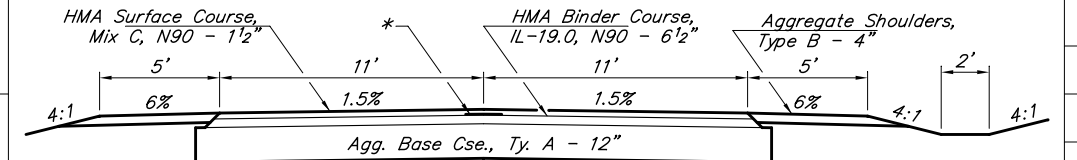


* Longitudinal Joint Sealant (Place under surface course)

TYPICAL ROADWAY SECTION

STA 216+03 - STA 216+18 AND STA 217+02 - STA 217+17

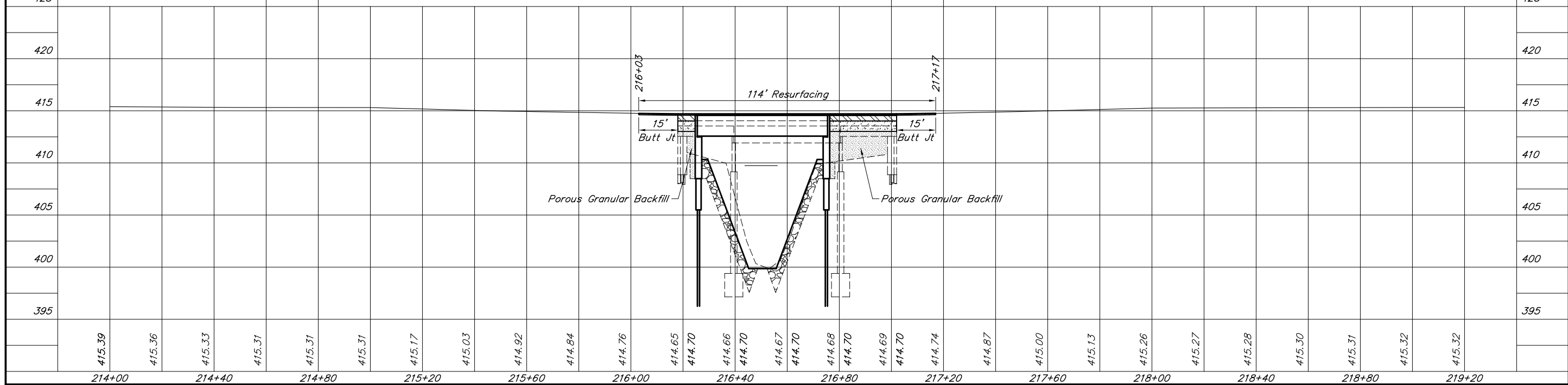
Discontinue placing aggregate shoulder at end of widening for Traffic Barrier Terminal on departure sides.



* Longitudinal Joint Sealant (Place under surface course)

TYPICAL ROADWAY SECTION

STA 216+18 - STA 216+25 AND STA 216+76 - STA 217+02



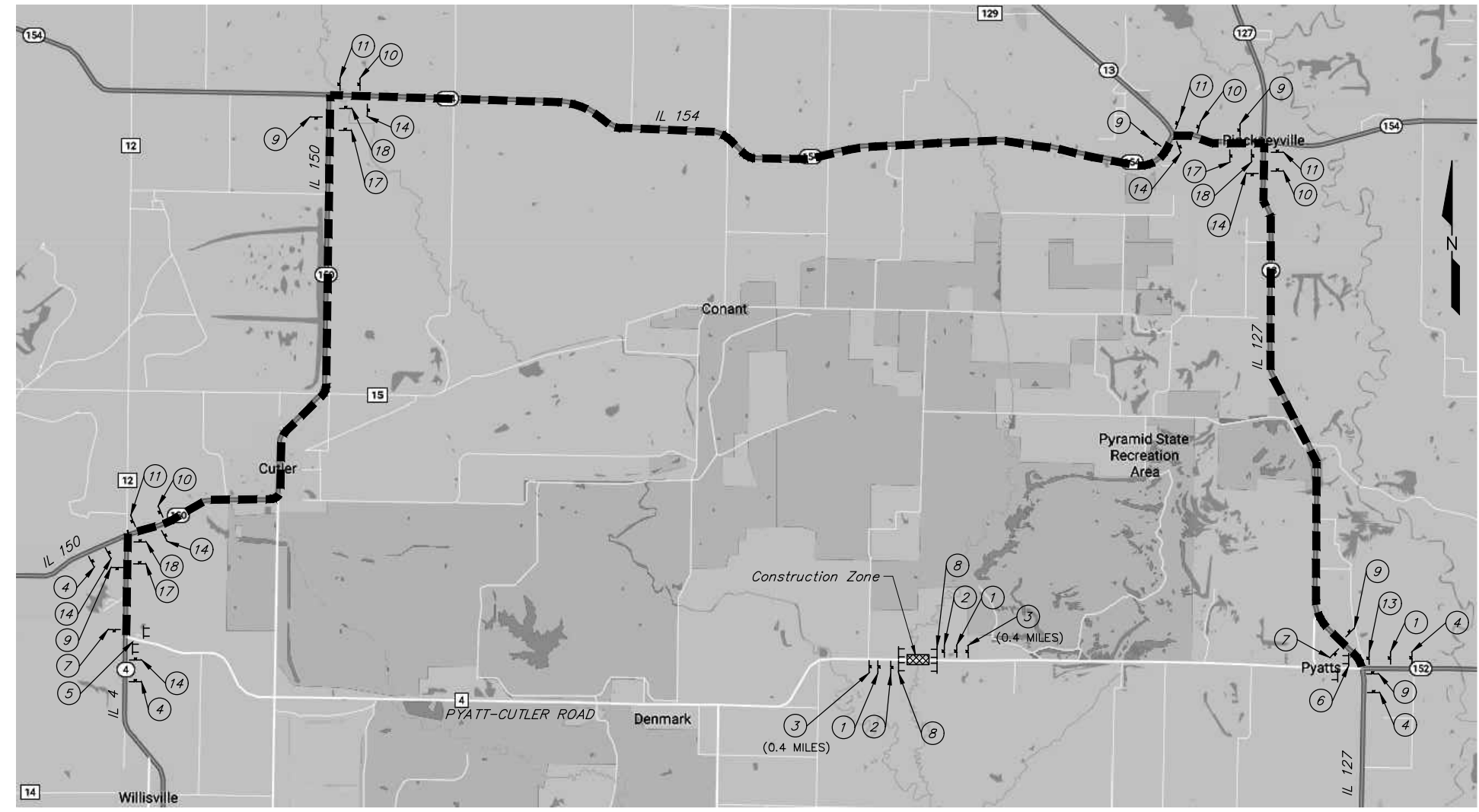
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 864	17-00146-00-BR	PERRY	12	3
PROJECT NO. X3DI(029)			CONTRACT NO. 99605	

NOTES

- All traffic control devices shall be furnished, erected, and maintained by the Contractor.
- All signs not attached to barricades shall be post mounted, unless otherwise noted.
- Locations of traffic control devices may be adjusted by the Engineer.
- Traffic control shall be in accordance with the Standard Specifications for Road and Bridge Construction, the Manual For Uniform Traffic Control Devices, the Highway Standards, and the Special Provisions.
- Placement and spacing of signs and barricades shall be in accordance with the Highway Standards or as directed by the Engineer.
- The cost of supplying, erecting and maintaining barricades, warning lights, and all signs shall be included in the cost of TRAFFIC CONTROL AND PROTECTION (DETOUR) and TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21.

LEGEND

- TTT Type III Barricades conforming to Std. 701901 (Road Closed to All Traffic)
- TTT Type III Barricades conforming to Std. 701901 (Road Closed to Thru Traffic) Place at edge of traveled way
- Post mounted sign
- Construction Zone
- Detour Route

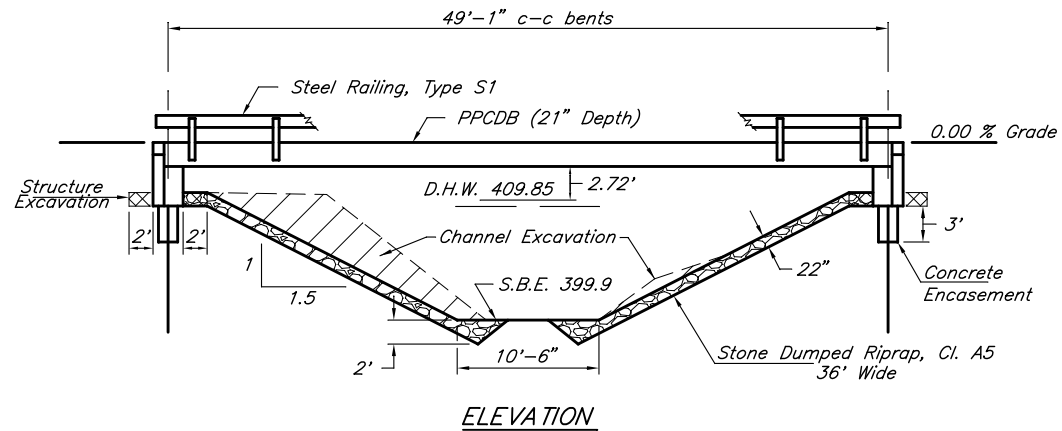


①		W20-3-3636	②		W20-3-3636	③		W20-3-3636	④		W20-2-3636	⑤		R11-3a-6030	⑥		R11-3a-6030	⑦		M4-8a-2418	⑧		R11-2-4830	⑨		M4-8-2412	⑩		M4-8-2412		
														M4-10L-4818			M4-10R-4818							SEE NOTE*		SEE NOTE*		M6-3-2115		M5-1L-2115	
⑪		M4-8-2412	⑫		M4-8-2412	⑬		M3-4-2412	⑭		M3-2-2412	⑮		M3-2-2412	⑯		M3-2-2412	⑰		M3-2-2412	⑱		M3-2-2412								
		SEE NOTE*			SEE NOTE*			SEE NOTE*			SEE NOTE*			SEE NOTE*			SEE NOTE*			SEE NOTE*			SEE NOTE*		M6-1-2115		M5-1R-2115		M6-1-2115		

* NOTE: The road name sign may be selected by the Contractor with the approval of the Engineer.

DETOUR & TRAFFIC CONTROL PLAN
 FAS ROUTE 864 (PYATT-CUTLER ROAD)
 LITTLE GALUM CREEK
 SECTION 17-00146-00-BR
 PERRY COUNTY
 STRUCTURE NO. 073-3196

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 864	17-00146-00-BR	PERRY	12	4
PROJECT NO. X3D(029)			CONTRACT NO. 99605	



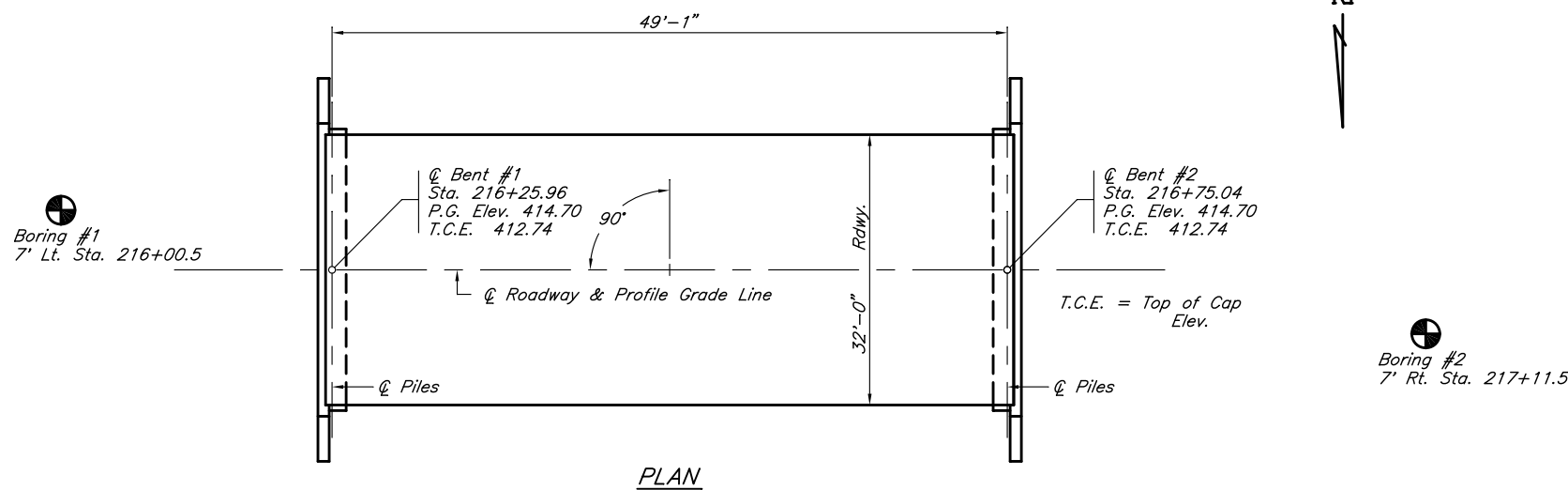
GENERAL NOTES

1. Steel H piles shall meet AASHTO M270 Grade 50 specifications.
2. See special provisions for boring logs.
3. A Corrosion inhibitor, as covered in the Standard Specifications, shall be used in the precast prestressed concrete deck beams.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.		Total
			Piers	Abuts.	
Channel Excavation	Cu. Yds.			85	85
Stone Dumped Riprap, Cl. A5	Tons			245	245
HMA Surf. Cse., Mix "C", N70	Tons	16			16
Removal of Existing Structures	Each	1			1
Structure Excavation	Cu. Yds.			41	41
Concrete Structures	Cu. Yds.			35.8	35.8
Concrete Encasement	Cu. Yds.			3.4	3.4
P.P. Conc. Dk. Bm. 21" Dp.	Sq. Ft.	1,600			1,600
Reinforcement Bars	Pound			3,756	3,756
Steel Railing, Type S1	Foot	102			102
Furnishing Steel Piles HP 10x42	Foot			750	750
Driving Piles	Foot			750	750
Name Plates	Each			1	1

Existing Structure - 3 Span cast-in-place concrete deck with steel stringers on concrete pile bent piers 32.5' W x 84.0' L



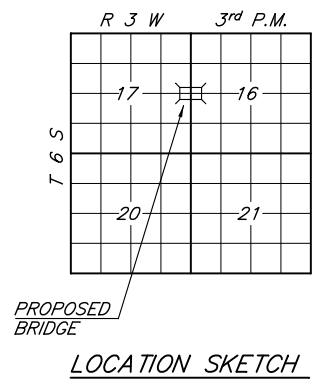
Boring #1
7' Lt. Sta. 216+00.5

Boring #2
7' Rt. Sta. 217+11.5

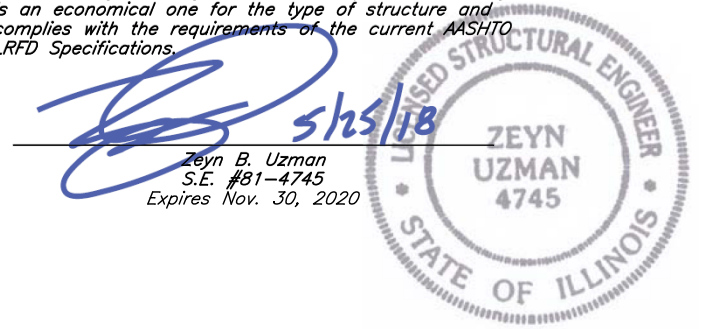
STATION 216+50.5
LITTLE GALUM CREEK
SEC. 17-00146-00-BR BUILT 20____
COUNTY UNIT ROAD DISTRICT
PERRY COUNTY
LOADING HL-93
STR. NO. 073-3196

LETTERING FOR NAME PLATE
Locate Name Plate at northeast
Corner of Bridge (See Sheet 9)

PILE DATA (2-ABUTS.)
Type & Size : HP10x42
Nominal Required Bearing : 335 kips
Factored Resistance Available : Refusal
Estimated Length : 72' Bent #1, 78' Bent #2
Number Required : 10



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 type of structure and complies with the requirements of the current AASHTO LRFD Specifications.



DESIGN SPECIFICATIONS
2014 AASHTO LRFD Bridge Design Specifications
and all applicable interims.

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface

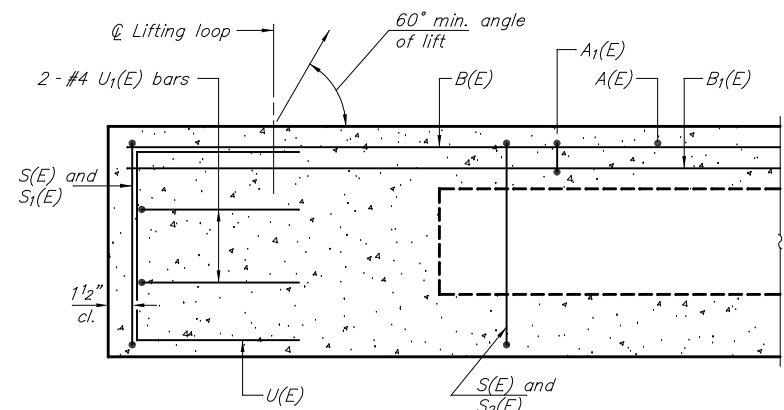
SEISMIC DATA
Soil Site Class = D
Design Spectral Acceleration at 0.2 sec. (S_{ps}) = 0.729
Design Spectral Acceleration at 1.0 sec. (S_{p1}) = 0.315
Seismic Performance Zone (SPZ) = 3

WATERWAY INFORMATION

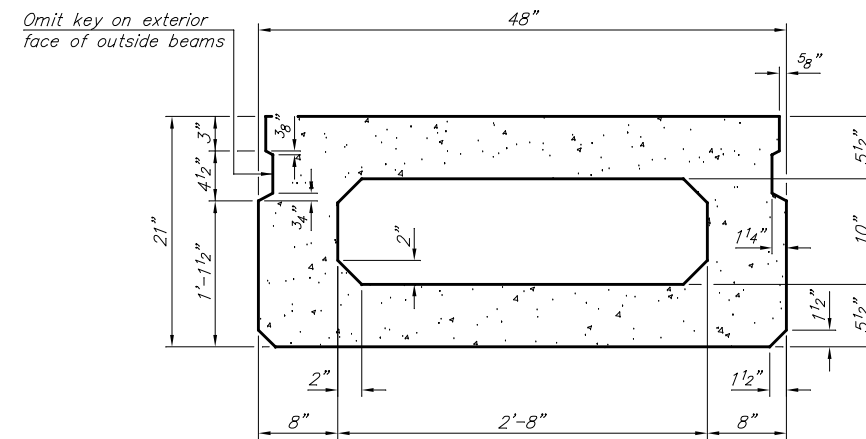
Drainage Area = 17.12 Sq. Mi.		Low Grade Elev. = 414.70		At Sta. 216+50.5					
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Natural H.W.E.	Head-Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	20	3230	207.8	253.6	409.85	1.43	1.42	411.28	411.27
Base	100	4790	231.1	273.9	410.34	4.61	4.25	414.95	414.59
Overtopping	±104	4878		274.4	410.37		4.31		414.68
Max. Calc.	500	6520	257.6	293.5	410.76	4.80	4.70	415.56	415.46
Over Road Flow (Sq Ft):					$Q_{(100)}$	$Q_{(500)}$			
					Exist. 60.0	767.0			
					Prop. 568.7				

GENERAL PLAN & ELEVATION
FAS ROUTE 864 (PYATT-CUTLER ROAD)
LITTLE GALUM CREEK
SECTION 17-00146-00-BR
PERRY COUNTY
STRUCTURE NO. 073-3196

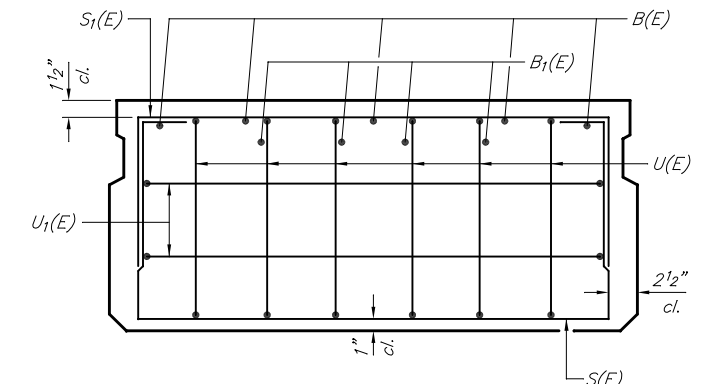
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 864	17-00146-00-BR	PERRY	12	5
PROJECT NO. X3D(029)			CONTRACT NO. 99605	



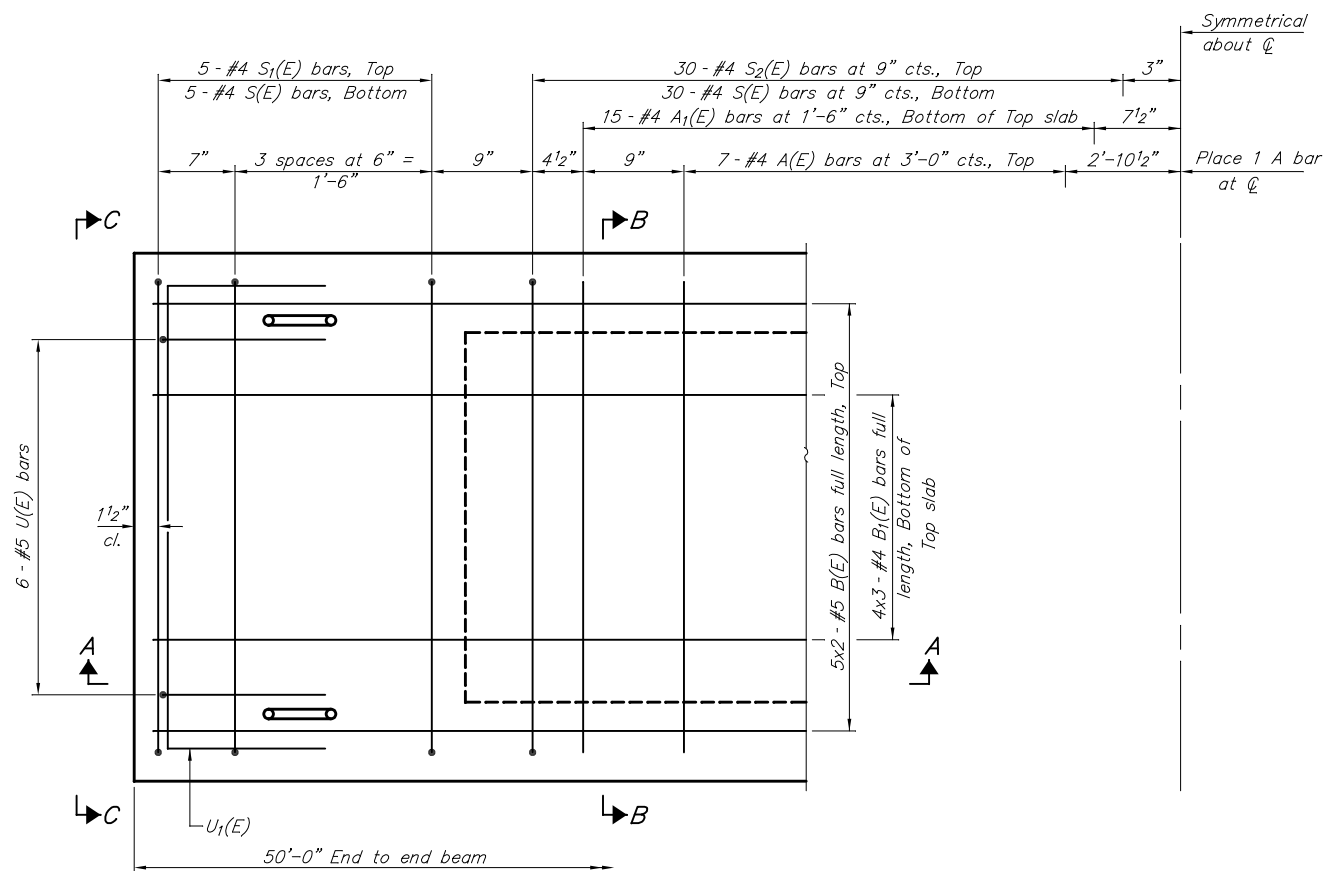
SECTION A-A



SECTION B-B
(Showing dimensions)

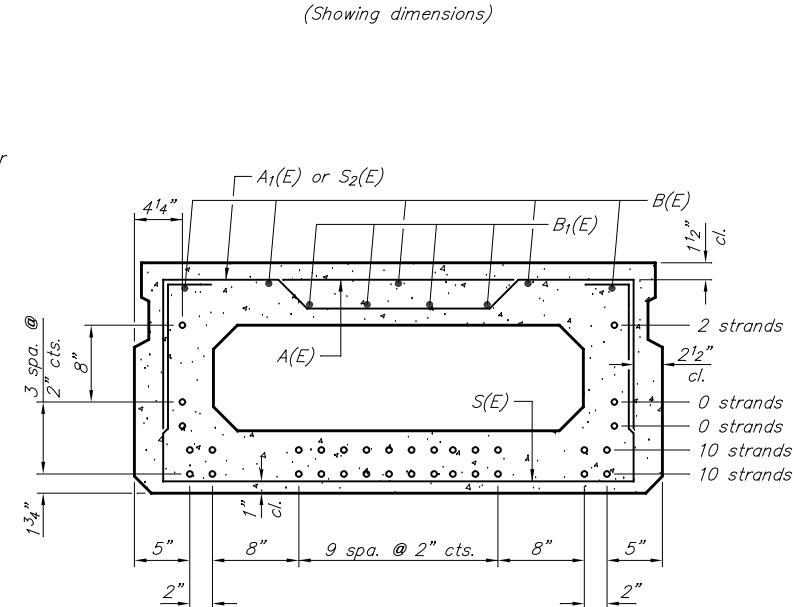


VIEW C-C



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 B-B

(Showing reinforcement and permissible strand locations)

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

BAR LIST
ONE BEAM ONLY
(For information only)

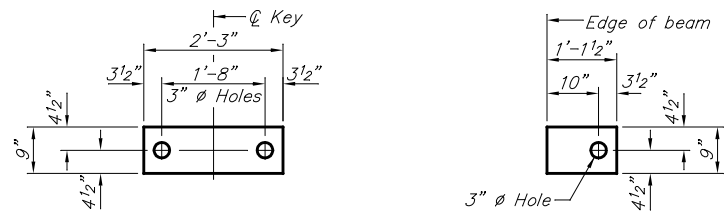
Bar	No.	Size	Length	Shape
A(E)	15	#4	3'-7"	—
A1(E)	30	#4	3'-10"	~
B(E)	10	#5	26'-2"	—
B1(E)	12	#4	17'-11"	—
S(E)	70	#4	7'-5"	□
S1(E)	10	#4	5'-11"	□
S2(E)	60	#4	6'-2"	□
U(E)	12	#5	4'-0"	□
U1(E)	4	#4	6'-0"	□

Notes:
See sheet 6 of 12 for additional details and Bill of Materials.
Bars noted thus 4x2-#5 etc. indicates 4 lines of bars with 2 lengths per line.

MINIMUM BAR LAP
#4 bar = 1'-11"
#5 bar = 2'-6"

21" X 48" PPC DECK BEAM
FAS ROUTE 864 (PYATT-CUTLER ROAD)
LITTLE GALUM CREEK
SECTION 17-00146-00-BR
PERRY COUNTY
STRUCTURE NO. 073-3196

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 864	17-00146-00-BR	PERRY	12	6
PROJECT NO. X3D(029)			CONTRACT NO. 99605	

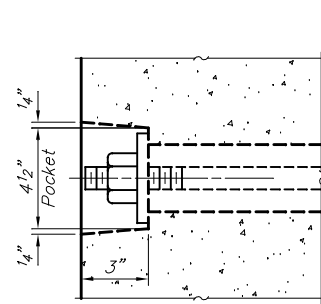


FABRIC BEARING PAD
(Interior)

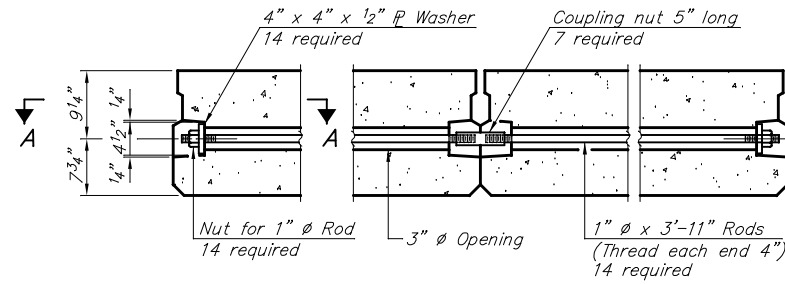
FABRIC BEARING PAD
(Exterior)

FIXED

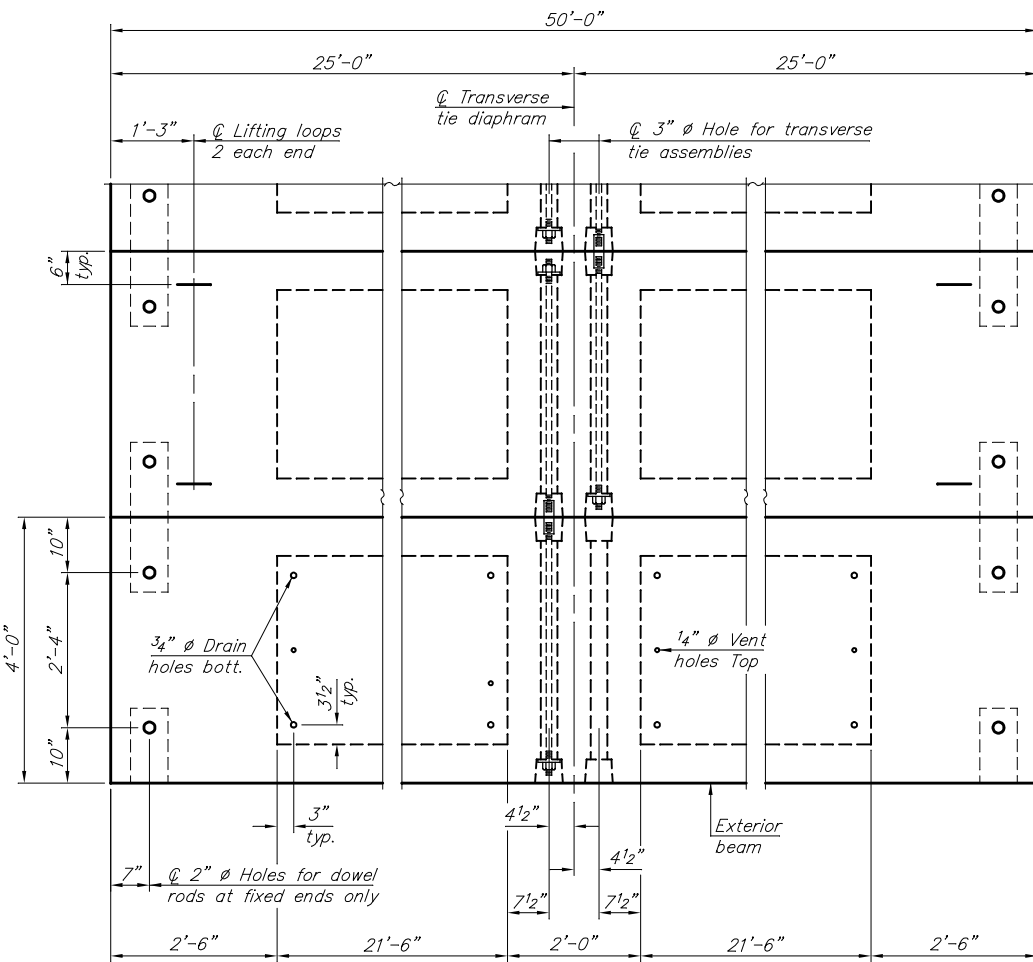
Notes:
All bearing pads shall be 1" thick.
Omit holes when using expansion bearings.
Expansion bearing pads shall be bonded to the substructure.



SECTION A-A

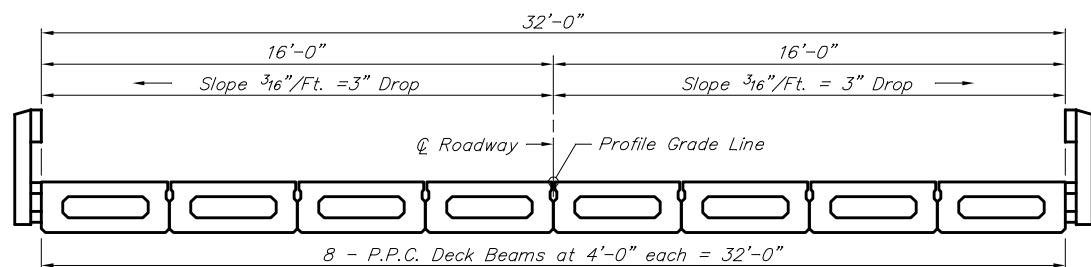


TYPICAL TRANSVERSE TIE ASSEMBLY

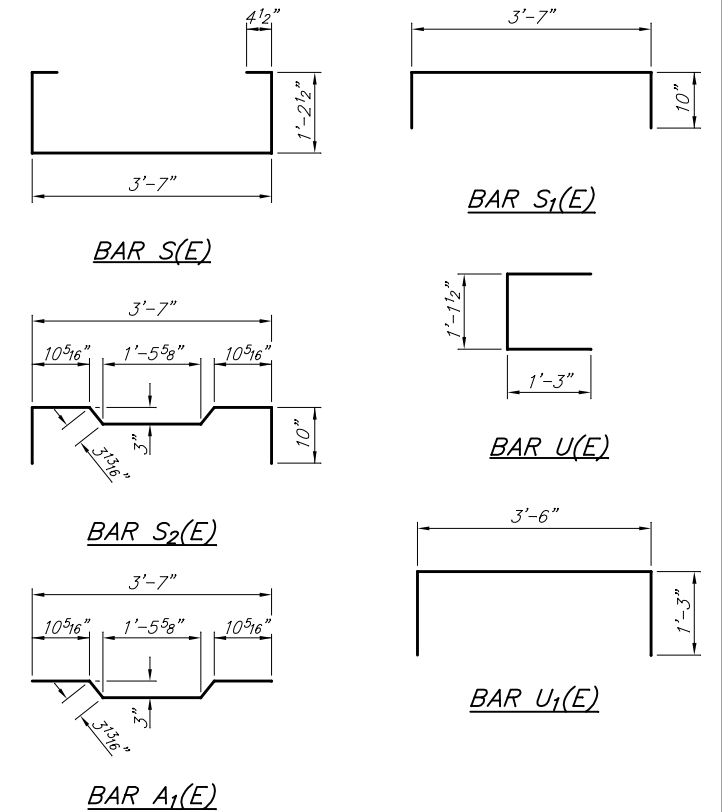


PLAN VIEW

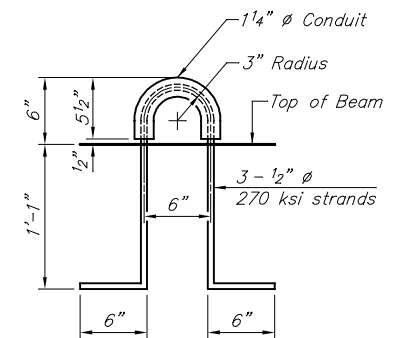
Note: Connect beams in pairs with the transverse tie configuration shown.



CROSS SECTION



BAR A1(E)



LIFTING LOOP DETAIL

NOTES

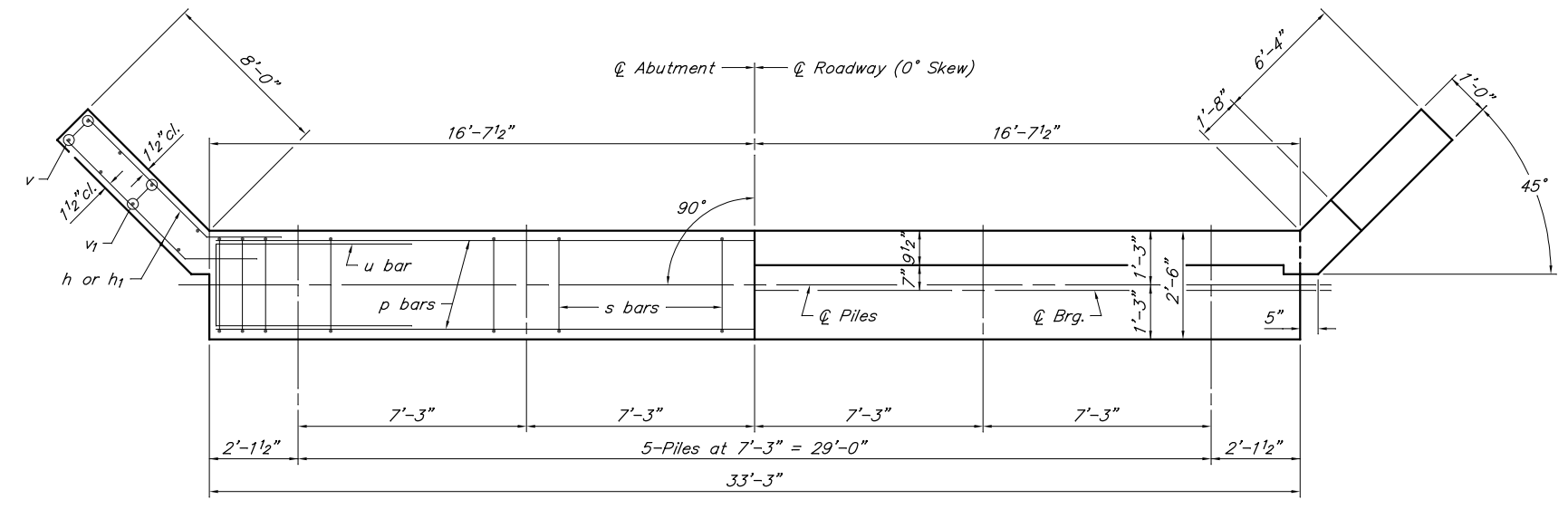
Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior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

BILL OF MATERIAL

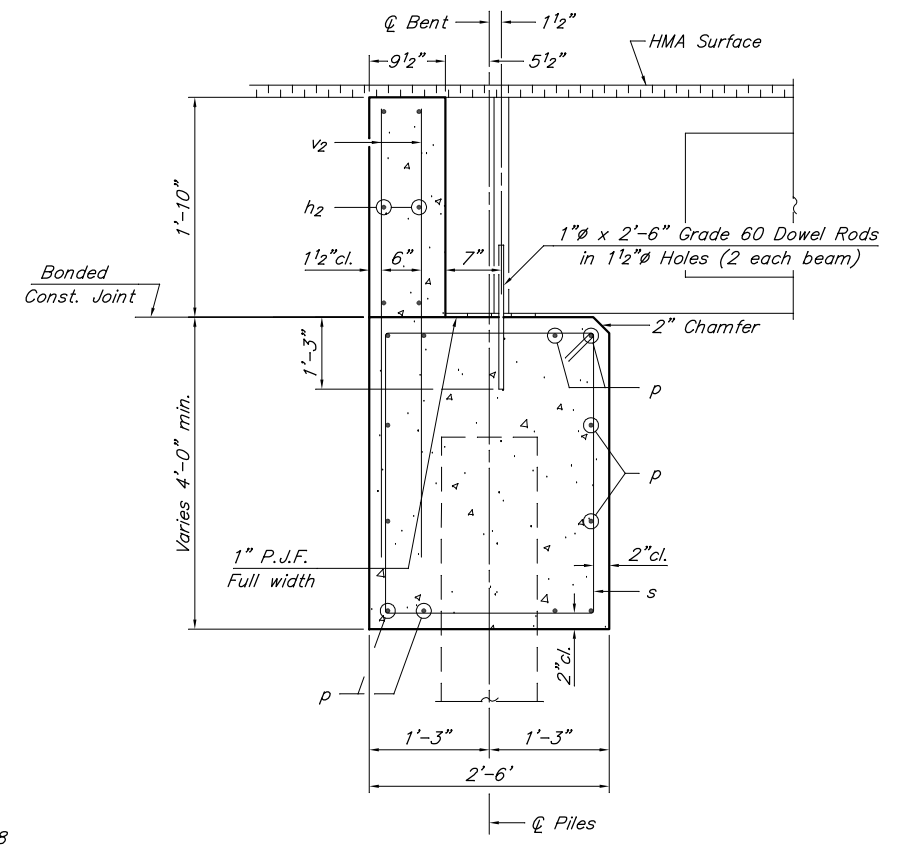
Precast Prestressed Concrete Deck Beams (17" depth)	Sq. Ft.	1,600
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17" X 48" PPC DECK BEAM DETAILS
FAS ROUTE 864 (PYATT-CUTLER ROAD)
LITTLE GALUM CREEK
SECTION 17-00146-00-BR
PERRY COUNTY
STRUCTURE NO. 073-3196

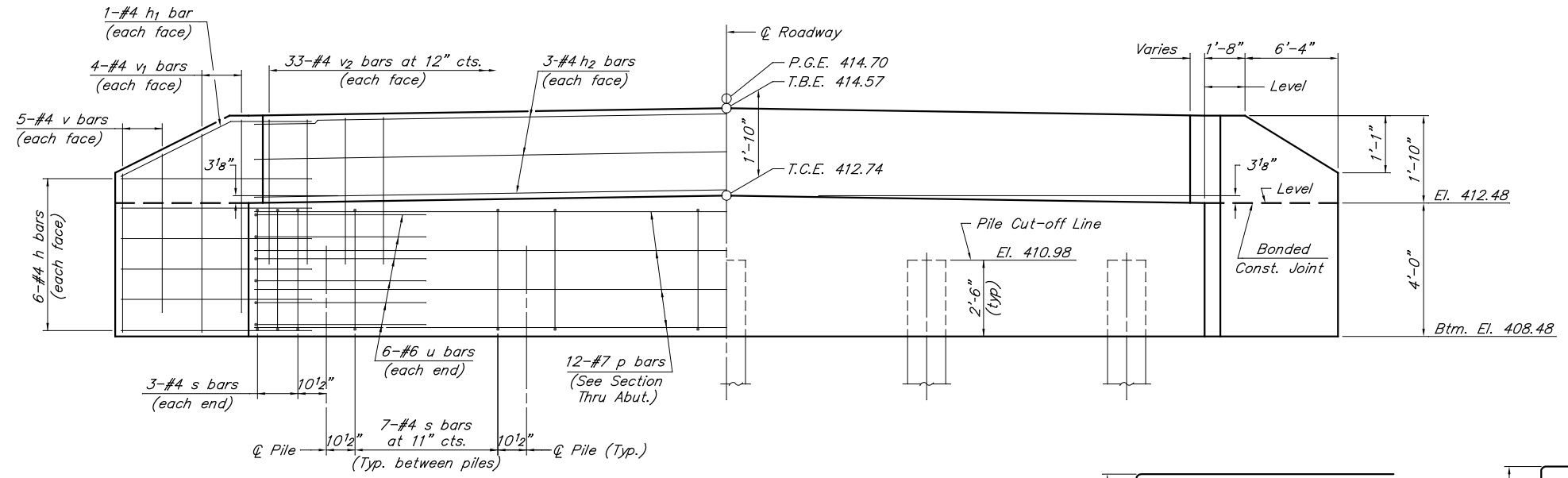
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 864	17-00146-00-BR	PERRY	12	7
PROJECT NO. X3D(029)			CONTRACT NO. 99605	



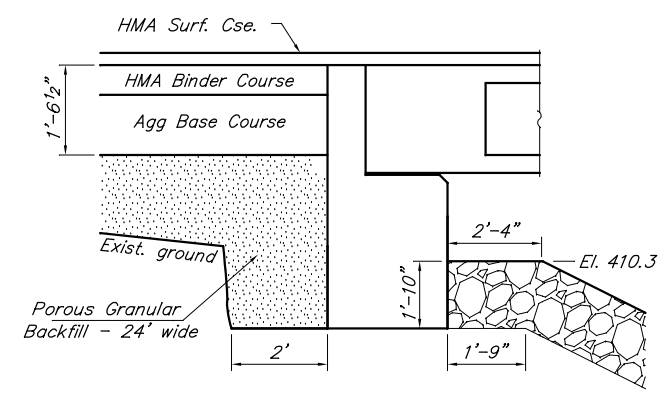
PLAN



SECTION THRU ABUT.
(At Right Angles)



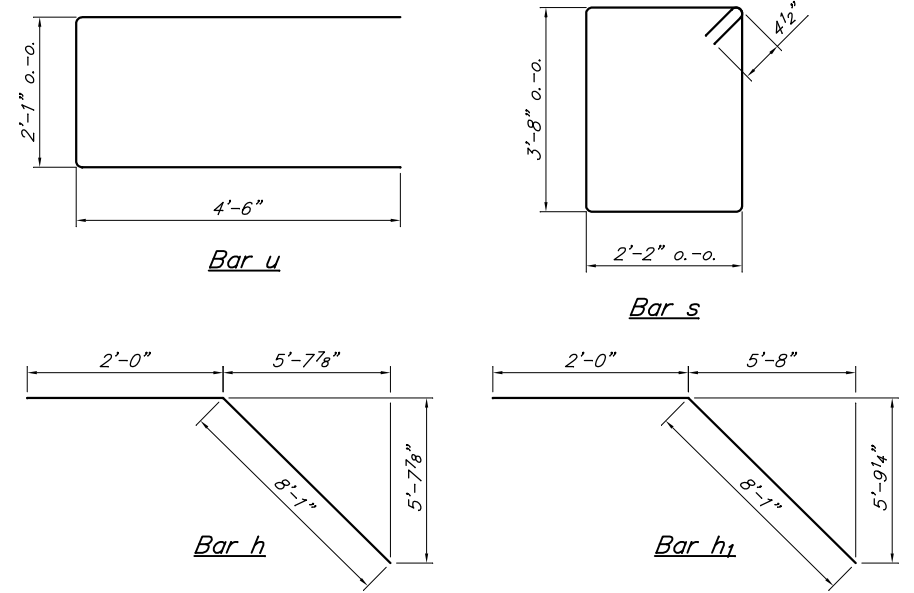
ELEVATION



BACKFILL & BERM DETAIL
(At Right Angles to Abut.)

- NOTES**
- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
 - Reinforcement bars shall be according to ASTM A 706, Grade 60.

DESIGN STRESSES
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi

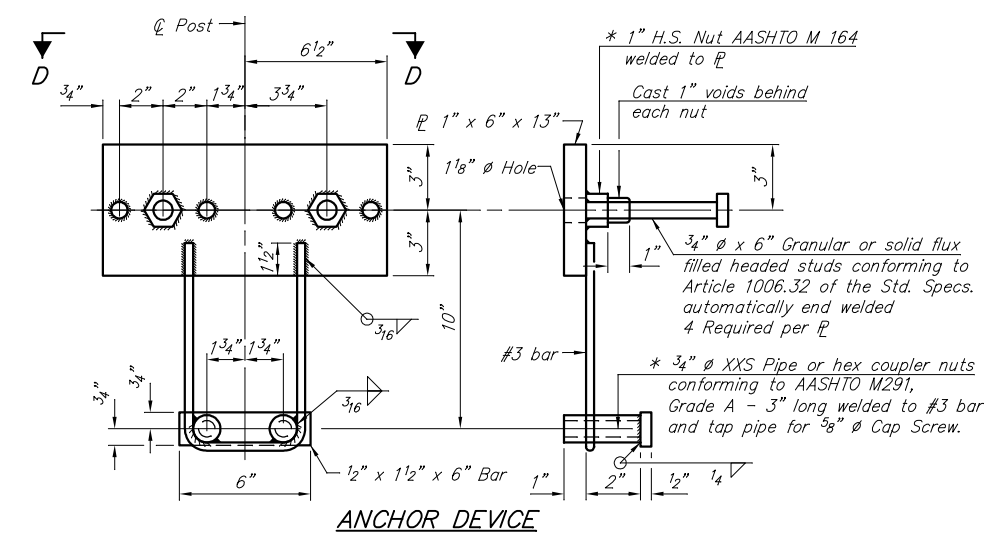
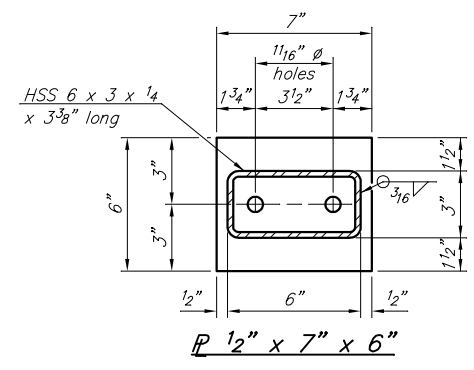
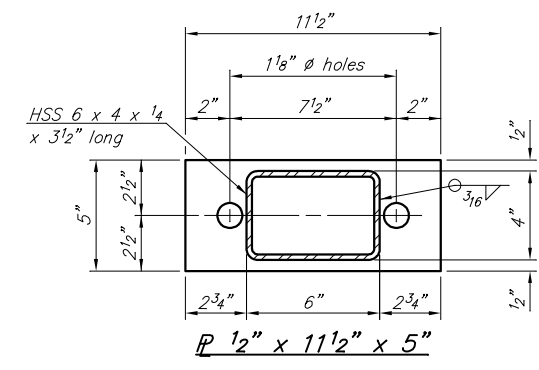
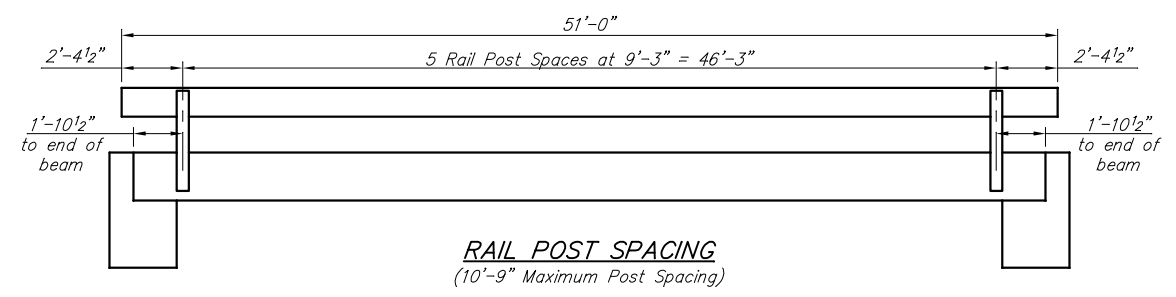


BILL OF MATERIAL FOR ONE ABUTMENT

Bar	No.	Size	Length	Shape
h	24	#4	10'-0"	—
h1	4	#4	10'-1"	—
h2	6	#4	32'-11"	—
p	12	#7	32'-11"	—
s	34	#4	12'-5"	□
u	12	#6	11'-1"	—
v	20	#4	4'-7"	—
v1	16	#4	5'-5"	—
v2	66	#4	3'-5"	—
Concrete Structures			17.9	Cu. Yds.
Reinforcement Bars			1,878	Lbs.

ABUTMENT
 FAS ROUTE 864 (PYATT-CUTLER ROAD)
 LITTLE GALUM CREEK
 SECTION 17-00146-00-BR
 PERRY COUNTY
 STRUCTURE NO. 073-3196

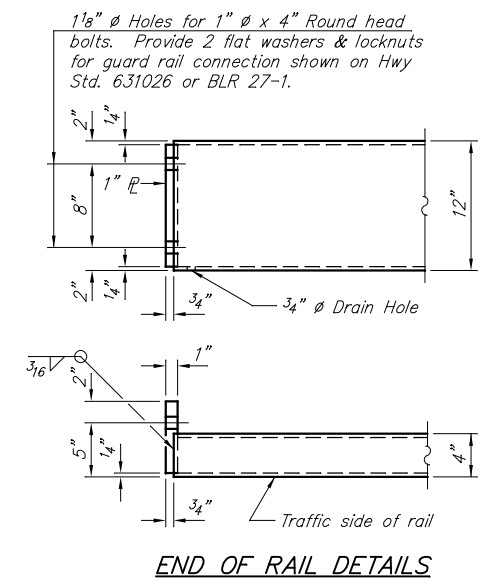
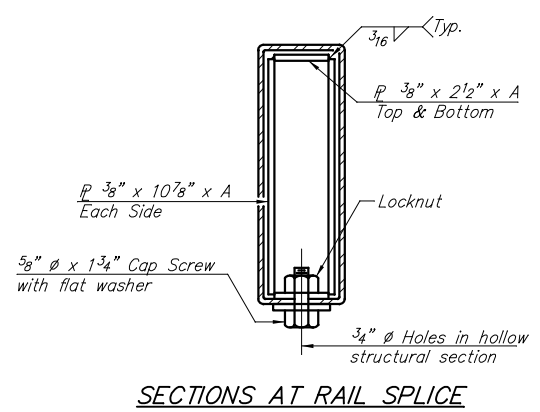
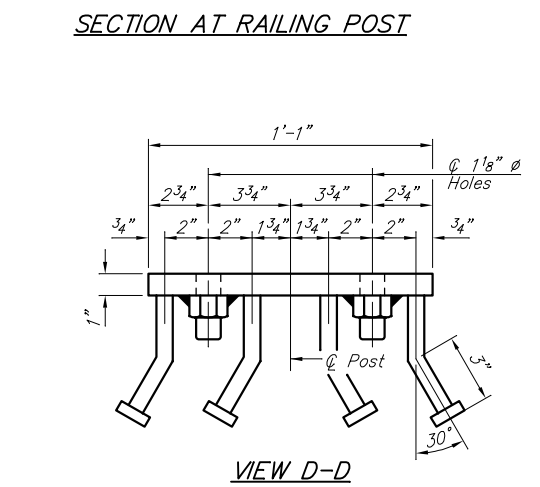
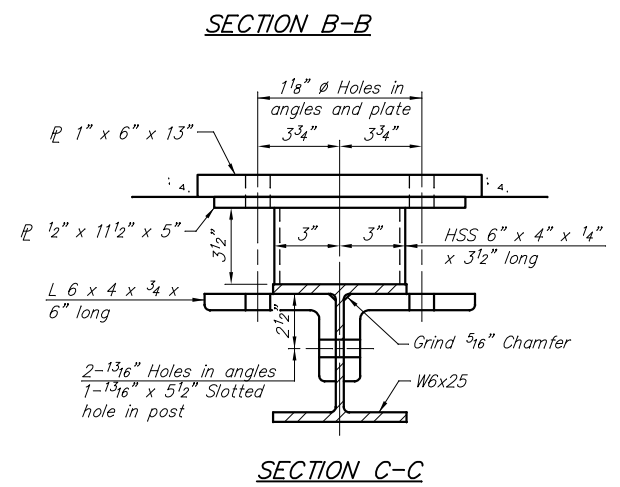
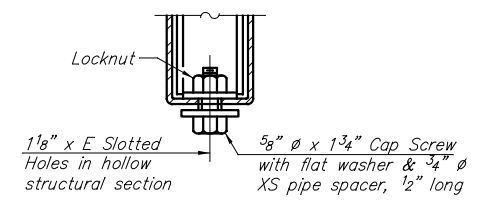
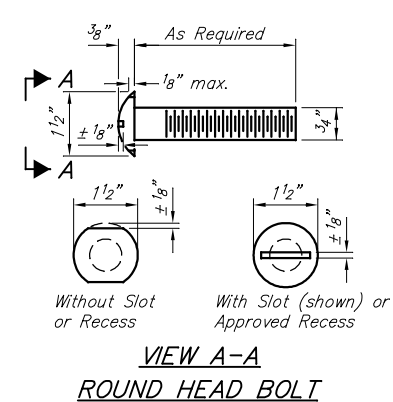
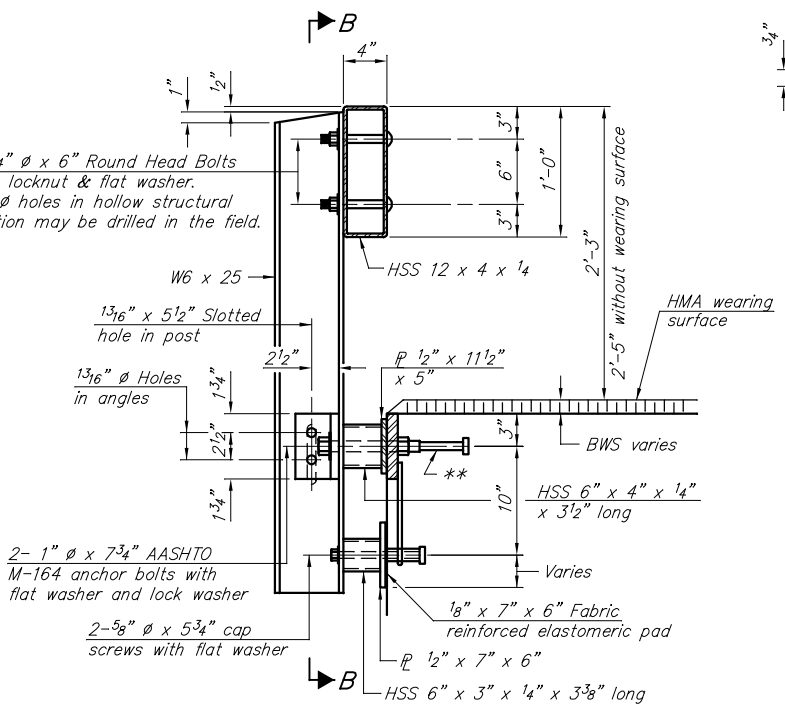
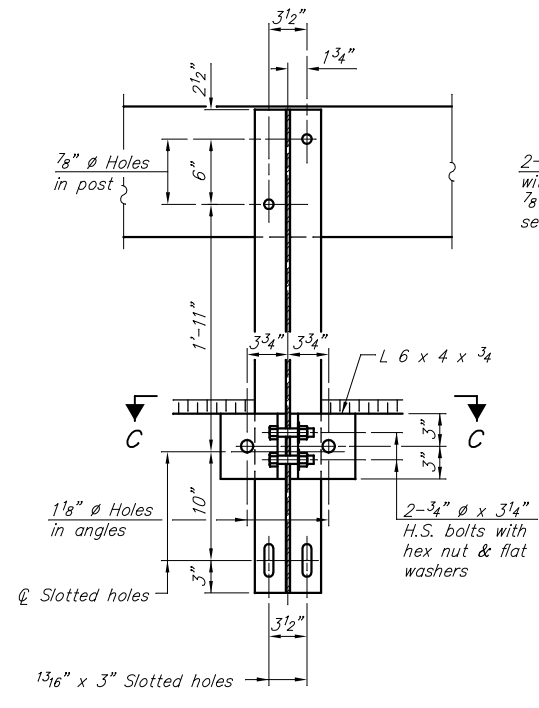
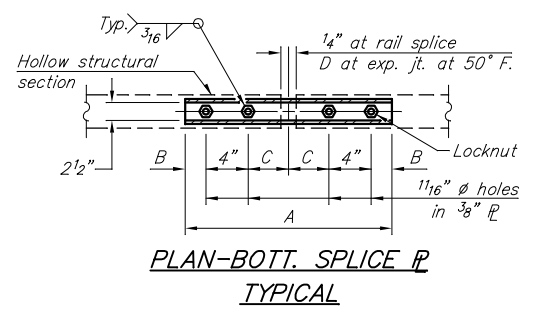
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 864	17-00146-00-BR	PERRY	12	8
PROJECT NO. X3D(029)			CONTRACT NO. 99605	



SPLICE DIMENSIONS

T	D	A	B	C	E
Up to 4"	2 1/2"	1'-8"	2"	4"	2 1/2"
>4" to 6 1/2"	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 1/2"
>6 1/2" to 9"	5"	2'-4"	3 1/2"	6 1/2"	9"
>9" to 13"	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	1 1/4"	1'-8"	2"	4"	

T = Total movement at expansion joint as shown on the design plans.



Notes:
For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

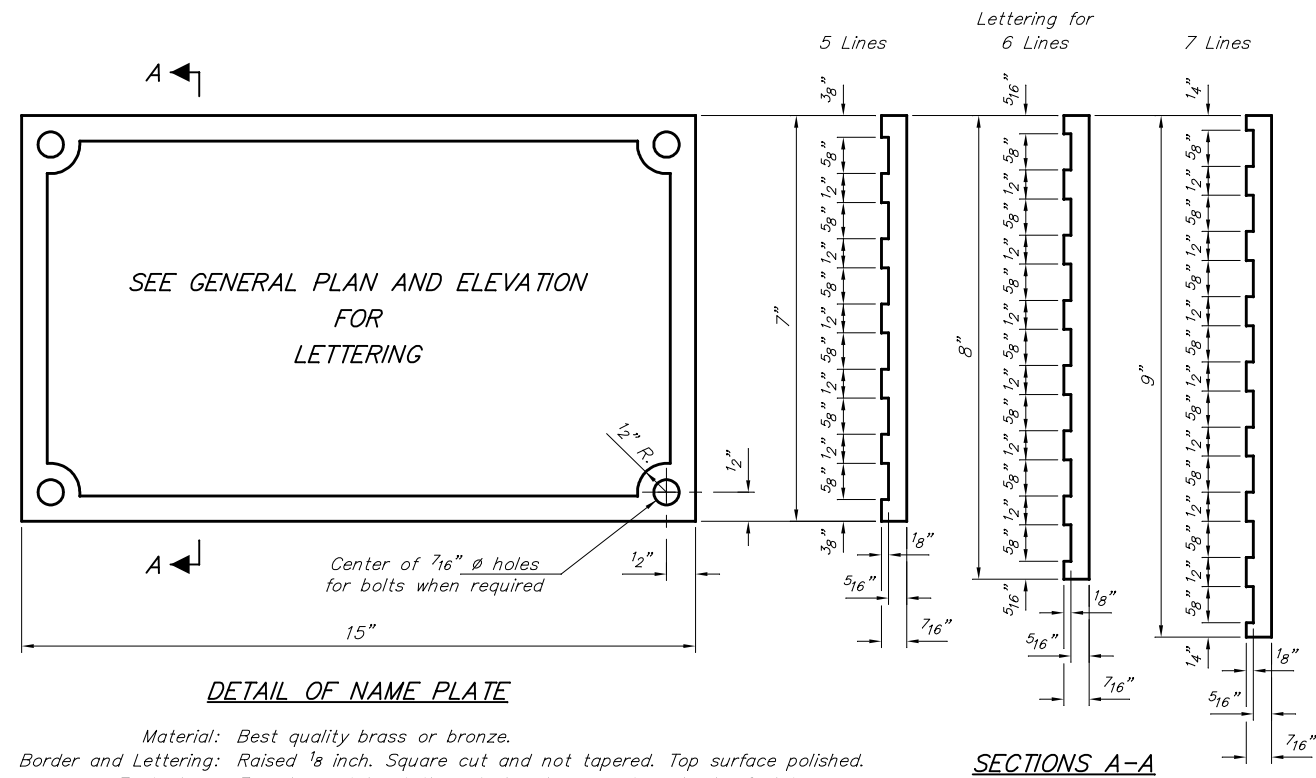
** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device. The anchorage studs may be bent down 1/2" to accommodate the top reinforcement bar placement.

BILL OF MATERIAL

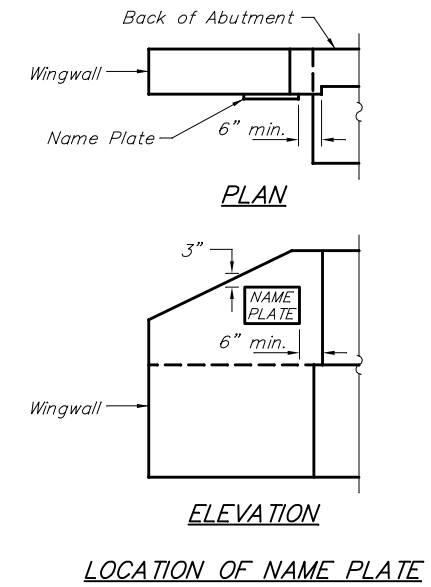
Item	Unit	Quantity
Steel Railing, Type S-1	Foot	102

STEEL RAILING, TYPE S-1
FAS ROUTE 864 (PYATT-CUTLER ROAD)
LITTLE GALUM CREEK
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ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 864	17-00146-00-BR	PERRY	12	9
PROJECT NO. X3D(029)			CONTRACT NO. 99605	

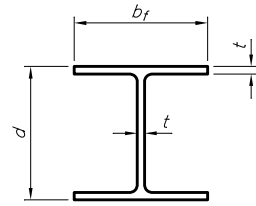


Material: Best quality brass or bronze.
 Border and Lettering: Raised 1/8 inch. Square cut and not tapered. Top surface polished.
 Fastenings: Four lugs at least three inches long, cast on back of plate.



NAME PLATE
 FAS ROUTE 864 (PYATT-CUTLER ROAD)
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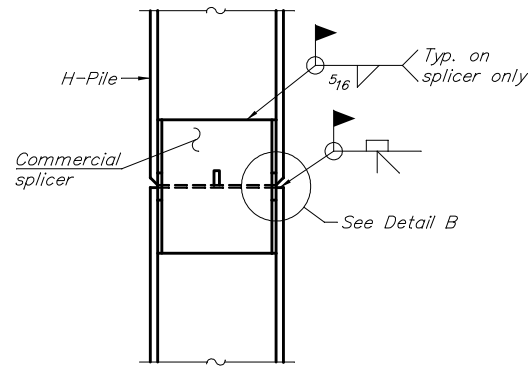
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 864	17-00146-00-BR	PERRY	12	10
PROJECT NO. X3D(029)			CONTRACT NO. 99605	



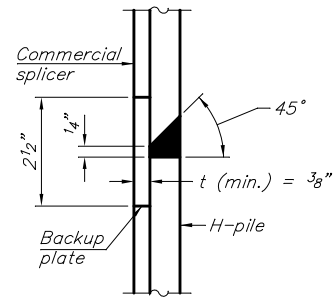
STEEL PILE TABLE

Designation	Depth d	Flange width b _f	Web and Flange thickness t	Encasement diameter A	Encasement Quantity/Ft. C.Y.
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"	0.173
x102	14"	14 3/4"	1 1/16"	30"	0.174
x89	13 7/8"	14 3/4"	5/8"	30"	0.175
x73	13 5/8"	14 5/8"	1/2"	30"	0.176
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"	0.110
x74	12 1/8"	12 1/4"	5/8"	24"	0.111
x63	12"	12 1/8"	1/2"	24"	0.112
x53	11 3/4"	12"	7/16"	24"	0.112
HP 10x57	10"	10 1/4"	9/16"	24"	0.112
x42	9 3/4"	10 1/8"	7/16"	24"	0.113
HP 8x36	8"	8 1/8"	7/16"	18"	0.063

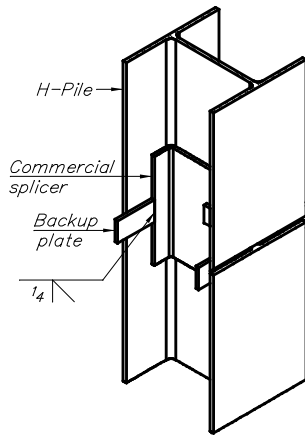
Note: The steel H-piles shall be according to AASHTO M270 Grade 50.



ELEVATION

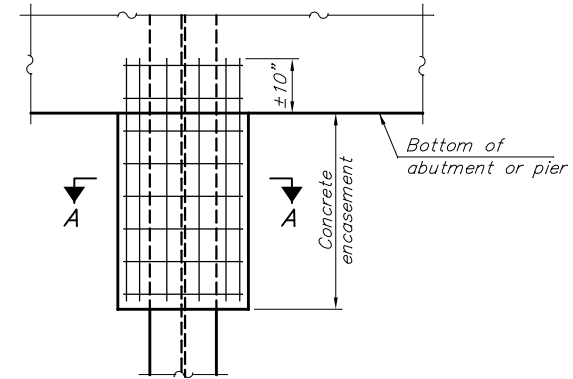


DETAIL "B"



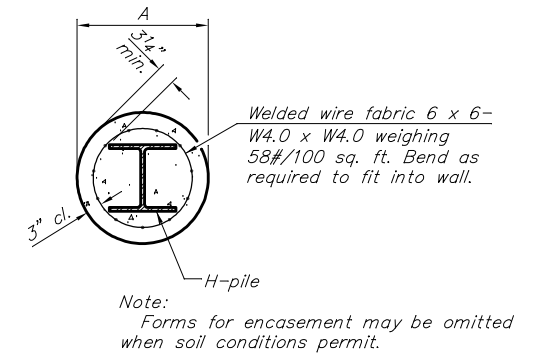
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE

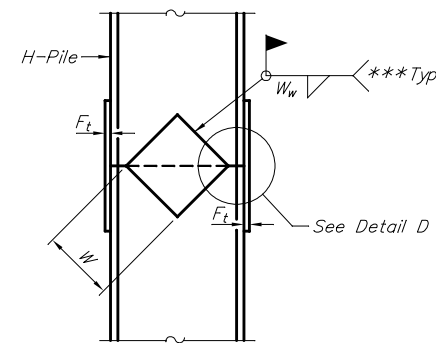


ELEVATION

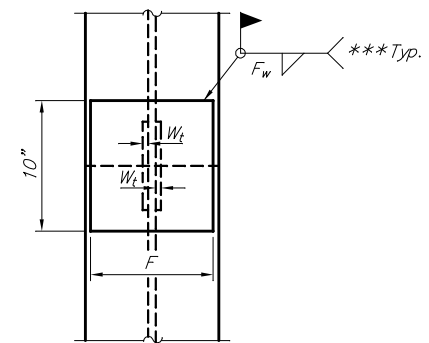
PILE ENCASEMENT



SECTION A-A

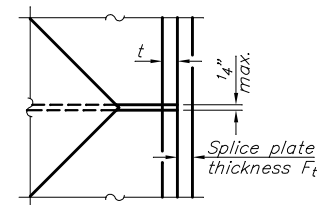


ELEVATION



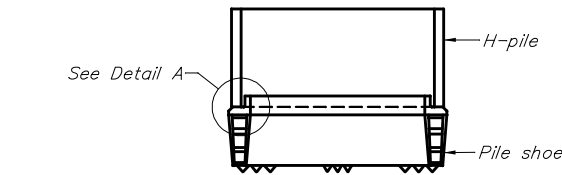
END VIEW

Designation	F	F _t	F _w	W	W _t	W _w
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"	1 1/16"	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"	1 1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1 1/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	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"

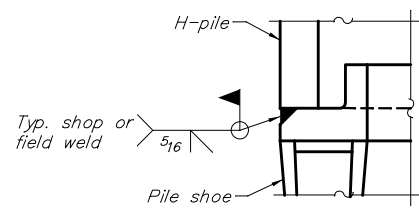


DETAIL D

WELDED PLATE FIELD SPLICE

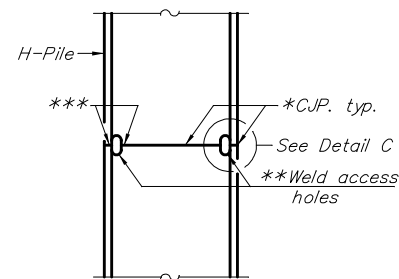


ELEVATION

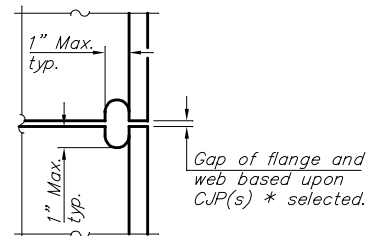


DETAIL A

H-PILE SHOE ATTACHMENT



ELEVATION



DETAIL C

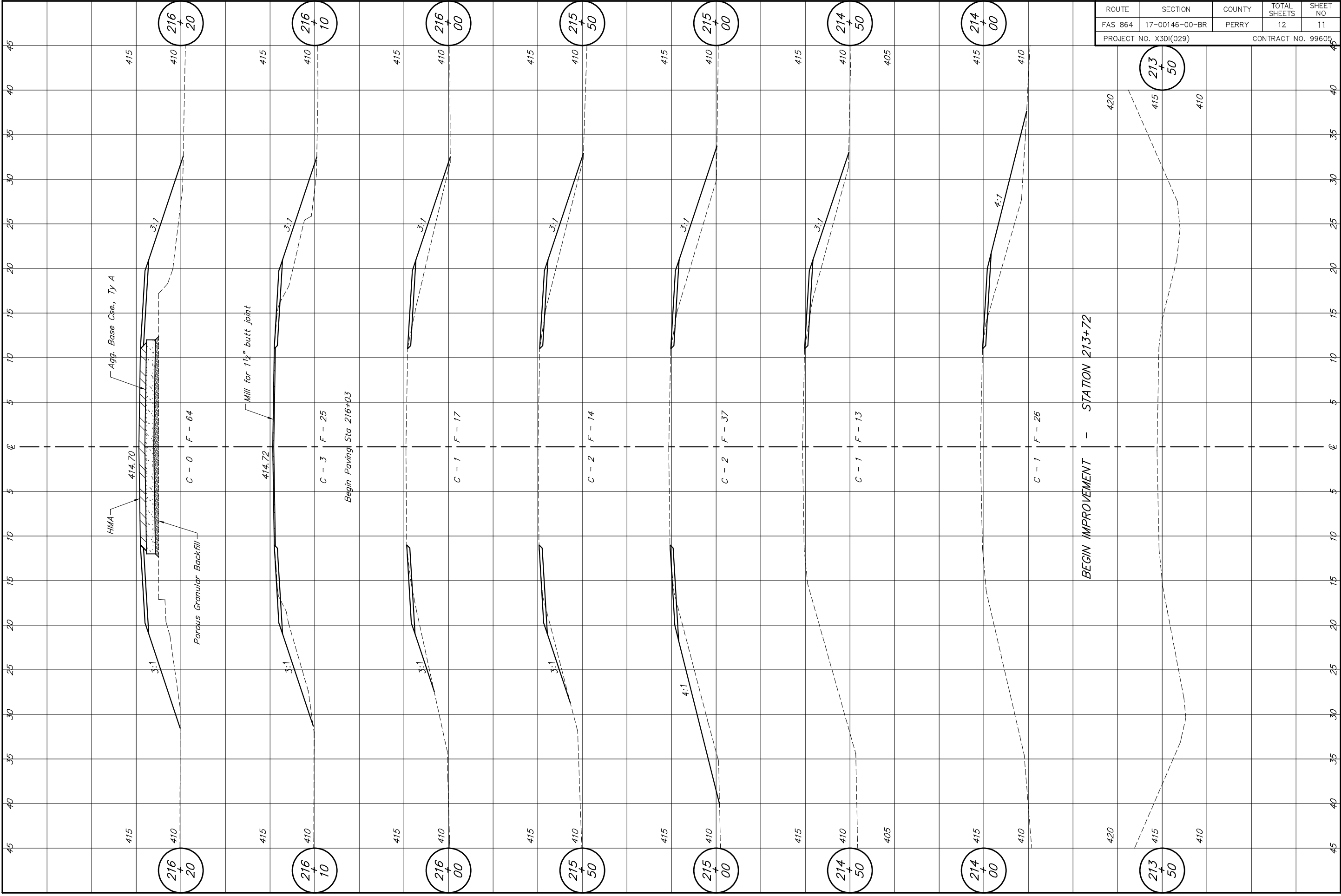
COMPLETE PENETRATION WELD SPLICE

*Use joint conforming to Fig. 3.4 in AWS D1.1. Structure Welding Code - Steel.

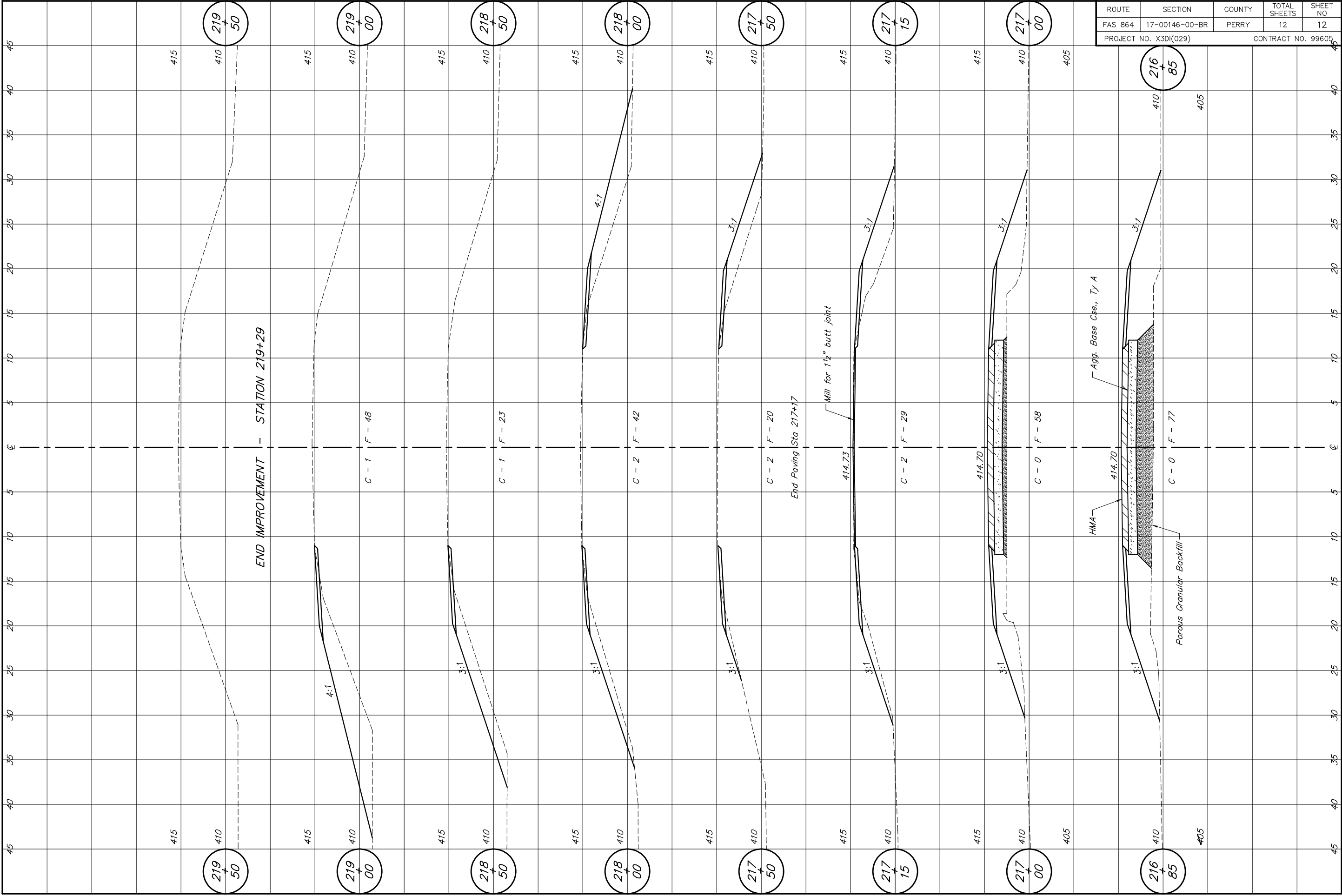
**Preparation per Fig. 5.2 in AWS D1.1. Structure Welding Code - Steel.

***Interrupt welds 1/4" from end of each pile.

PILING DETAILS
FAS ROUTE 864 (PYATT-CUTLER ROAD)
LITTLE GALUM CREEK
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ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FAS 864	17-00146-00-BR	PERRY	12	11
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ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
FAS 864	17-00146-00-BR	PERRY	12	12
PROJECT NO. X3D(029)			CONTRACT NO. 99605	