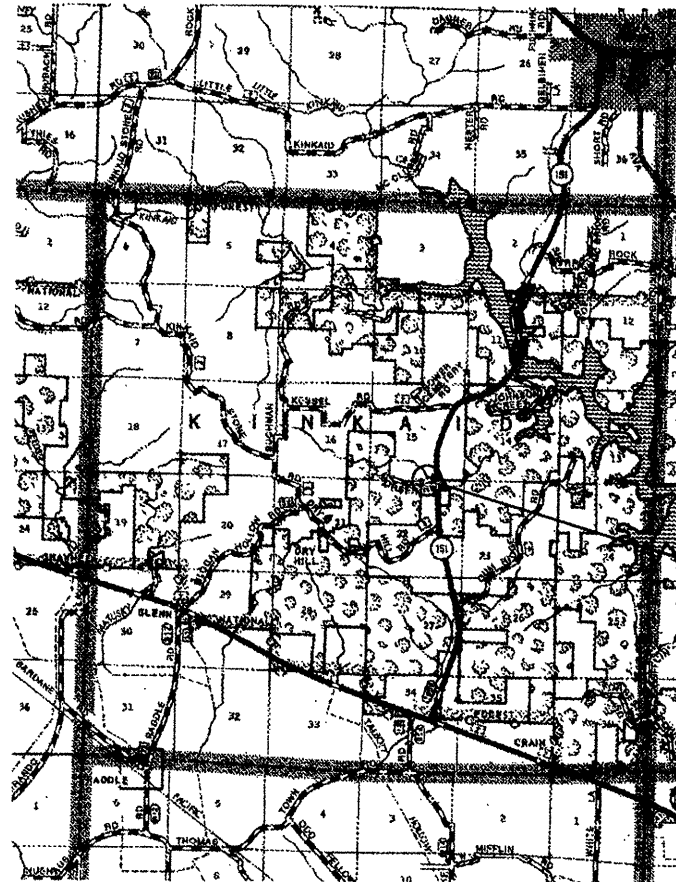


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED
HIGHWAY BRIDGE PROGRAM

TOWNSHIP ROUTE 151A (MORBER ROAD)
KINKAID TOWNSHIP

SECTION 08-08106-00-BR
PROJECT NO. BROS-077(54)
JOB NO. C-99-512-09
JOHNSON CREEK

JACKSON COUNTY

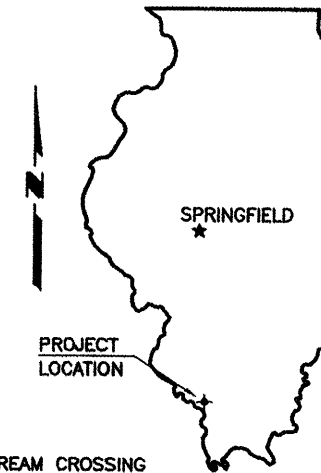


LOCATION MAP

SCALE: 1" = 2 MILES

NET LENGTH OF IMPROVEMENT = 413.47 FT. = 0.0783 MILES

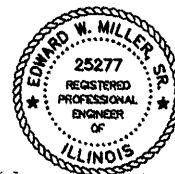
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 151A	08-08106-00-BR	JACKSON	12	1
PROJECT NO. BROS-077(54)			CONTRACT NO. 99357	



SUMMARY OF QUANTITIES

CODE NO.	PAY ITEM	UNIT	TOTAL
* X0324028	GROUT FOR USE WITH RIPRAP	CU YD	36.0
* X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.3
* Z0001000	AGGREGATE FOR TEMPORARY CROSSING	TON	517
* Z0065000	SETTING PILES IN ROCK	EACH	8
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	65
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	112
20200100	EARTH EXCAVATION	CU YD	88
20300100	CHANNEL EXCAVATION	CU YD	30
20400100	BORROW EXCAVATION	CU YD	317
28100809	STONE DUMPED RIPRAP, CLASS A5	TON	179
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	379
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50104400	CONCRETE HEADWALL REMOVAL	EACH	2
50105220	PIPE CULVERT REMOVAL	FOOT	57
50200100	STRUCTURE EXCAVATION	CU YD	44
50300225	CONCRETE STRUCTURES	CU YD	17.4
50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	1,104
50800105	REINFORCEMENT BARS	POUND	2,370
Δ 50900205	STEEL RAILING, TYPE S1	FOOT	94
51201300	FURNISHING STEEL PILES HP8X36	FOOT	96
51500100	NAME PLATES	EACH	1
54200223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	106
54210072	PIPE CULVERTS, CLASS D, TYPE 1 72" (TEMPORARY)	FOOT	84
67100100	MOBILIZATION	L SUM	1
Δ 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4

* SEE SPECIAL PROVISIONS Δ SPECIALTY ITEMS



4-5-11

Edward W. Miller

Edward W. Miller
PROFESSIONAL ENGINEER
#062-025277
EXPIRES NOV. 30, 2011

E. MILLER ENGINEERING, INC.
CONSULTING ENGINEERS
HARRISBURG, ILLINOIS

CONTRACT NO. 99357

INDEX OF SHEETS

1. COVER SHEET
 2. PLAN & PROFILE - TEMPORARY STREAM CROSSING
 3. PLAN & PROFILE - MAINLINE
 4. GENERAL PLAN & ELEVATION
 5. 17" X 48" PPC DECK BEAMS
 6. 17" X 48" PPC DECK BEAMS DETAILS
 7. ABUTMENT
 8. STEEL RAILING, TYPE S1
 9. NAME PLATES
 10. PILING DETAILS
 11. CROSS SECTIONS - TEMPORARY STREAM CROSSING
 12. CROSS SECTIONS - MAINLINE
- STANDARDS 280001-05 TEMPORARY EROSION CONTROL SYSTEMS
701901-01 TRAFFIC CONTROL DEVICES
BLR-21-8 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES

CLASSIFICATION : LOCAL ROAD
ADT : 25
DESIGN SPEED : 30 MPH

ILLINOIS DEPARTMENT OF TRANSPORTATION

Approved	<u>4-6-2011</u> <i>John P. ...</i> Kinkaid Township Road Commissioner
Approved	<u>4-6-2011</u> <i>A.C. ...</i> Jackson County Engineer
Passed	<u>4-11-2011</u> <i>Demi W. Hill</i> District 9 Engineer of Local Roads and Streets
Releasing for Bid Based on Limited Review	<u>4-11-2011</u> <i>Mary C. Zanic</i> Deputy Director of Highways, Region 5 Engineer Illinois Department of Transportation



B.M. - Double Nail in Power Pole
 43' Lt. Sta. 15+23
 Assumed Elev. 492.90

Existing Structure - Concrete deck on steel stringers with closed concrete abutments. 16.0' W x 26.0' L

CURVE DATA
 PI Sta = 0+36.77
 $\Delta = 32^{\circ}47'20''$ T = 36.78'
 D = 45^{\circ}50'12'' L = 71.53'
 R = 125.00' E = 5.30'

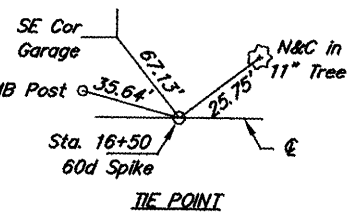
CURVE DATA
 PI Sta = 2+58.79
 $\Delta = 40^{\circ}58'37''$ T = 46.71'
 D = 45^{\circ}50'12'' L = 89.40'
 R = 125.00' E = 8.44'

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 151A	08-08106-00-BR	JACKSON	12	2

PROJECT NO. BROS-077(54) CONTRACT NO. 99357

EXISTING CURVE
 D = 6^{\circ}04'25''
 R = 943.35'

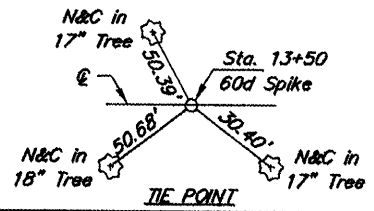
EXISTING CURVE
 D = 3^{\circ}25'10''
 R = 1675.64'



Begin Temporary Stream Crossing
 Sta. 13+67.03 Bk = Sta. 0+00 Ah

End Temporary Stream Crossing
 Sta. 3+01.48 Bk = Sta. 16+66.22 Ah

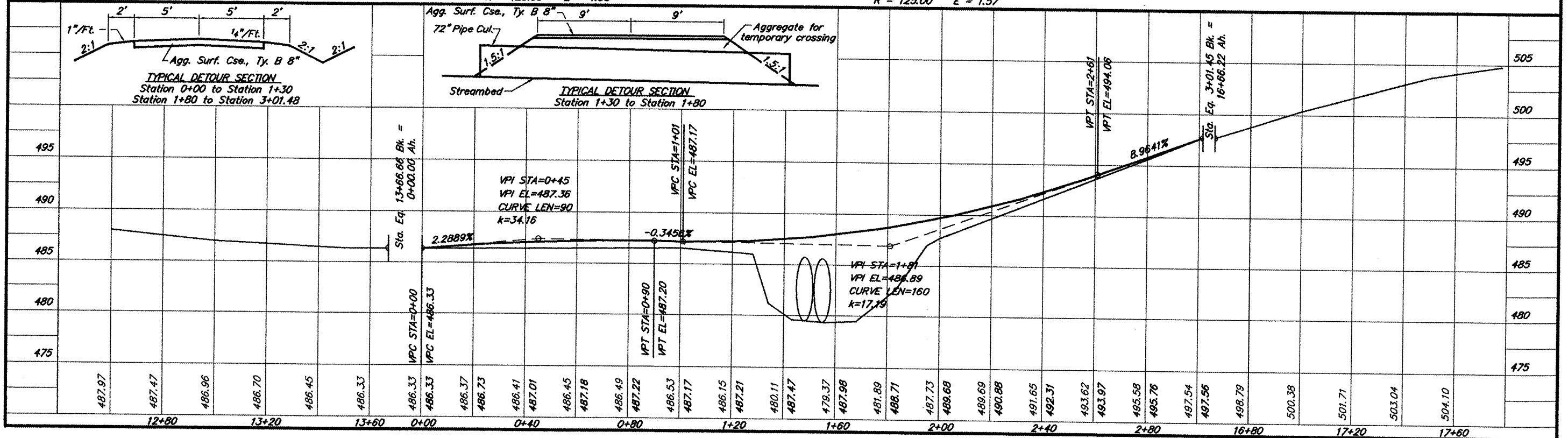
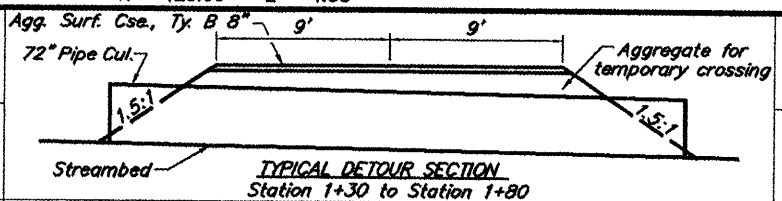
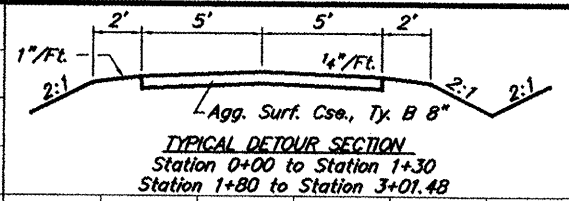
SCALES:
 1" = 40' HOR
 1" = 10' VER



CURVE DATA
 PI Sta = 1+05.69
 $\Delta = 30^{\circ}34'15''$ T = 34.16'
 D = 45^{\circ}50'12'' L = 66.69'
 R = 125.00' E = 4.58'

CURVE DATA
 PI Sta = 1+92.53
 $\Delta = 18^{\circ}04'01''$ T = 19.87'
 D = 45^{\circ}50'12'' L = 39.42'
 R = 125.00' E = 1.57'

Station 1+51.5 - Pipe Culverts,
 Class D, Type 1 72" (Temporary) - 84 Foot
 Skewed 19' Rt. Forward
 US 18.8' Lt., DS 20.9' Rt.
 Match existing channel grade.



B.M. - Double Nail in Power Pole
 43' Lt. Sta. 15+23
 Assumed Elev. 492.90

Existing Structure - Concrete deck on steel stringers with closed concrete abutments. 16.0' W x 26.0' L

Place Stone Dumped Riprap, Class A5 on transition area between existing channel bank and the abutment slopes as directed by the Engineer. Estimated quantity - 57 Tons
 Riprap to be grouted. See Special Provisions.

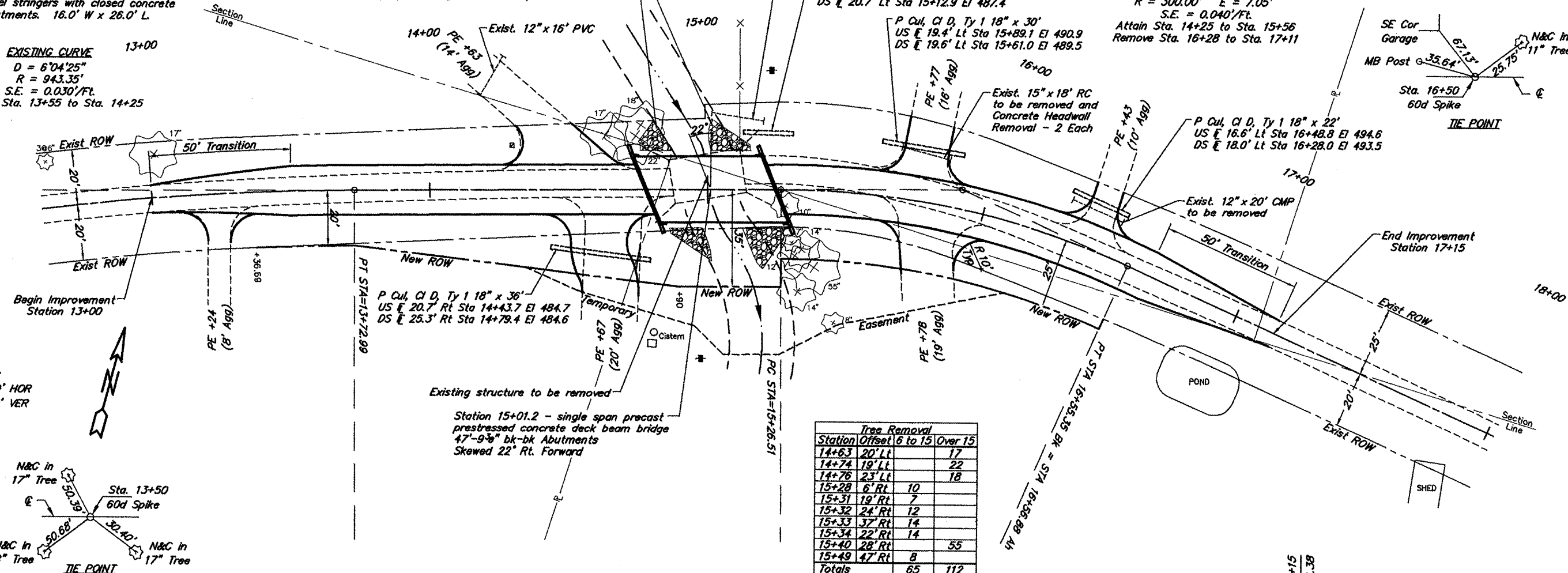
CURVE DATA

PI Sta = 15+91.94
 $\Delta = 24^{\circ}36'21''$ T = 65.43'
 $D = 19^{\circ}05'55''$ L = 128.84'
 $R = 300.00'$ E = 7.05'
 $S.E. = 0.040'/ft.$
 Attain Sta. 14+25 to Sta. 15+56
 Remove Sta. 16+28 to Sta. 17+11

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 151A	08-08106-00-BR	JACKSON	12	3

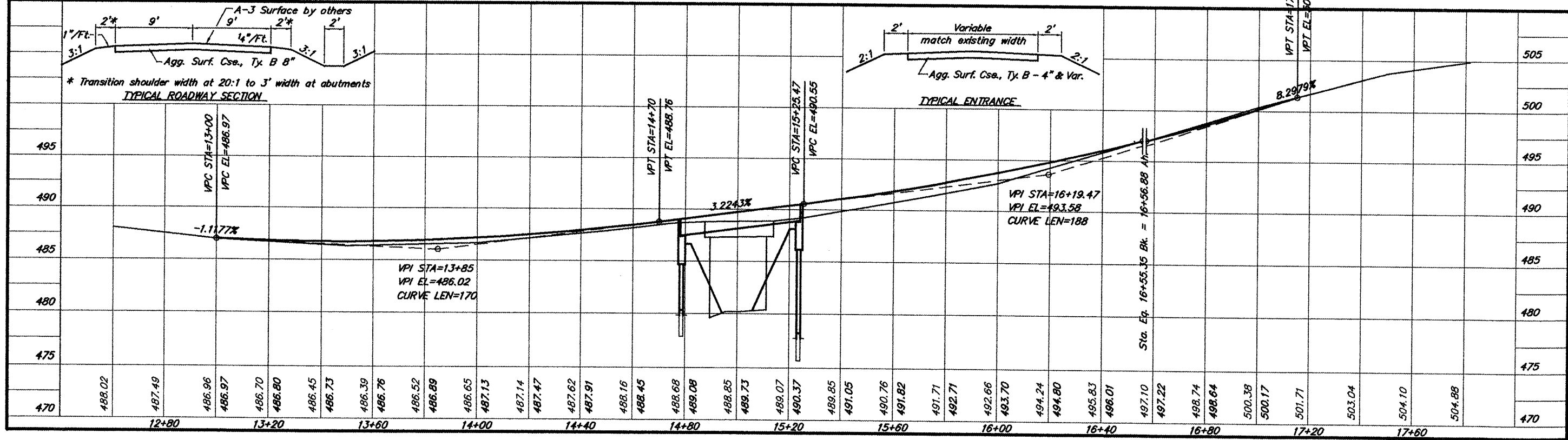
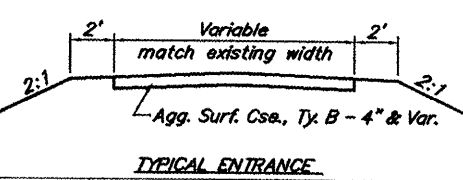
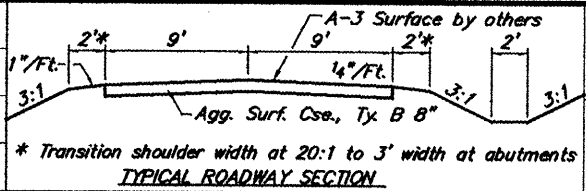
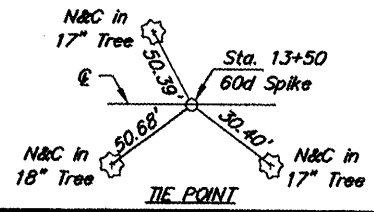
PROJECT NO. BROS-077(54) CONTRACT NO. 99357

EXISTING CURVE 13+00
 $D = 6^{\circ}04'25''$
 $R = 943.35'$
 $S.E. = 0.030'/ft.$
 Remove Sta. 13+55 to Sta. 14+25



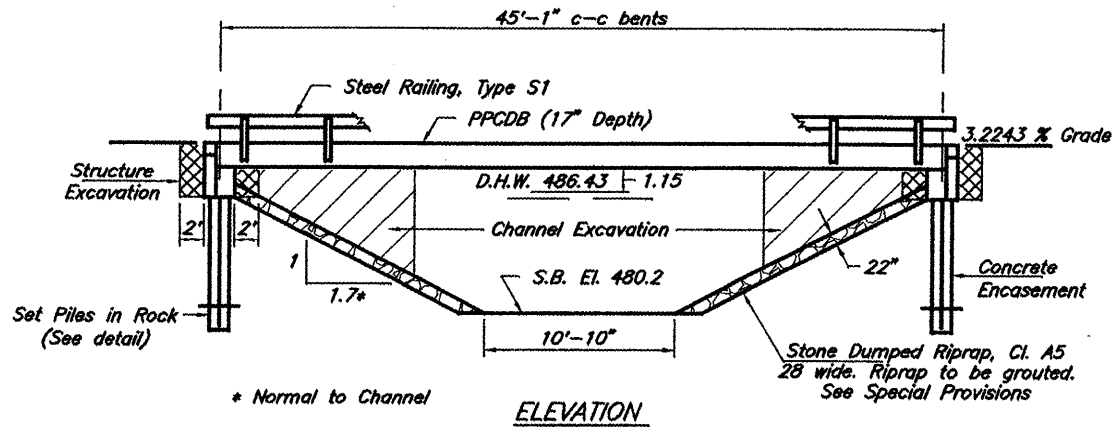
Station	Offset	6 to 15	Over 15
14+63	20' Lt		17
14+74	19' Lt		22
14+76	23' Lt		18
15+28	6' Rt	10	
15+31	19' Rt	7	
15+32	24' Rt	12	
15+33	37' Rt	14	
15+34	22' Rt	14	
15+40	28' Rt		55
15+49	47' Rt	8	
Totals		65	112

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



B.M. - Double nail in Power Pole
 43' Lt Station 15+23
 Assumed Elev. 492.90

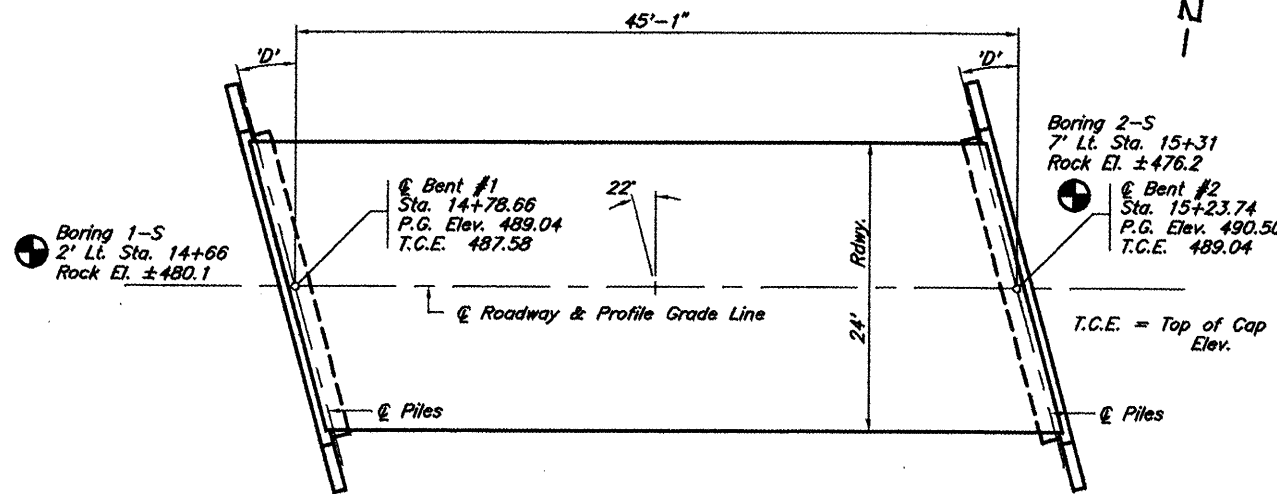
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 151A	08-08106-00-BR	JACKSON	12	4
PROJECT NO. BROS-077(54)			CONTRACT NO. 99357	



GENERAL NOTES

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

Existing Structure - Concrete deck on steel steel stringers with closed concrete abutments. 16.0' W x 26.0' L.



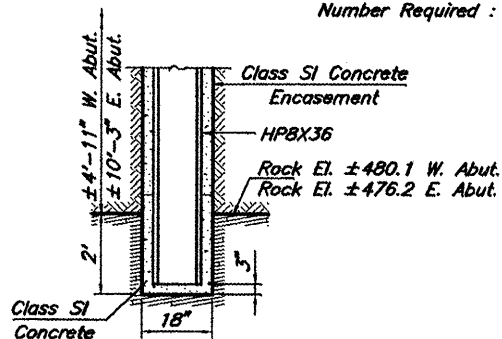
Skew Angle "D" = 22° Right Forward

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.		Total
			Piers	Abuts.	
Channel Excavation	Cu. Yds.			30	30
Stone Dumped Riprap, Cl. A5	Tons			122	122
Removal of Existing Structures	Each				1
Structure Excavation	Cu. Yds.			44	44
Concrete Structures	Cu. Yds.			17.4	17.4
P.P. Conc. Dk. Bm. 17" Dp.	Sq. Ft.	1104			1104
Reinforcement Bars	Pound			2370	2370
Steel Railing, Type S1	Foot	94			94
Furnishing Steel Piles HPB36	Foot			96	96
Setting Piles in Rock	Each			8	8
Name Plates	Each			1	1

PILE DATA (2-ABUTS.)

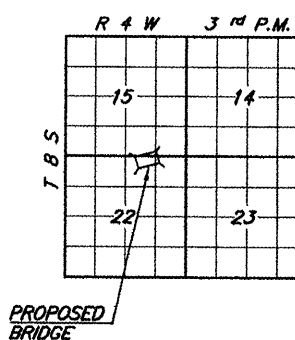
Type & Size : HPB36
 Set in Rock
 Estimated Length : 10 feet Bent #1
 14 feet Bent #2
 Number Required : 8



JOHNSON CREEK
 SEC. 08-08106-00-BR BUILT 20
 KINKAID TOWNSHIP
 JACKSON COUNTY
 LOADING HL-93
 STR. NO. 039-3269

LETTERING FOR NAME PLATE

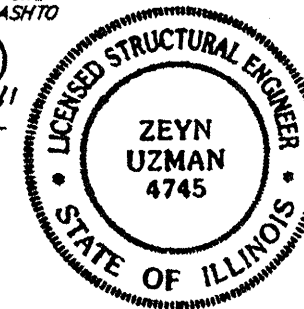
Locate Name Plate at Southwest Corner of Bridge (See Sheet 8)



LOCATION SKETCH

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 comply with the requirements of the current AASHTO LRFD Specifications.

[Signature]
 Zejn Uzman
 S.E. #0-4745
 Expires Nov. 30, 2012



DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications and all applicable interims.

LOADING HL-93

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

SEISMIC DATA

Seismic Performance Category (SPC) = B
 Bedrock Acceleration Coefficient (A) = 13.6%
 Site Coefficient (S) = 1.0

WATERWAY INFORMATION

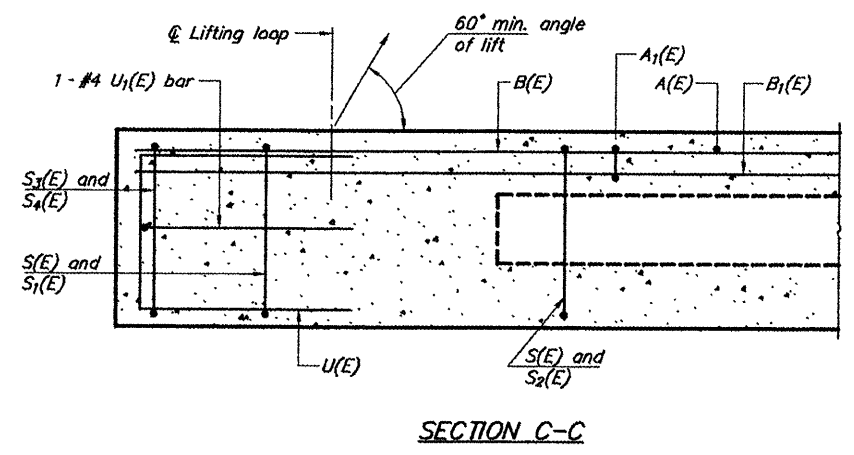
Drainage Area = 1.58 Sq. Mi. Low Grade Elev. = 486.73 At Sta. 13+44

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	15	1380	133.9	132.9	486.43	0.00	0.05	486.43	486.48
Base	100	2430	153.6	187.5	488.14	0.14	0.58	488.28	488.72
Overtopping	±113	2506		189.1	488.22		0.78		489.00
Max. Calc.	500								

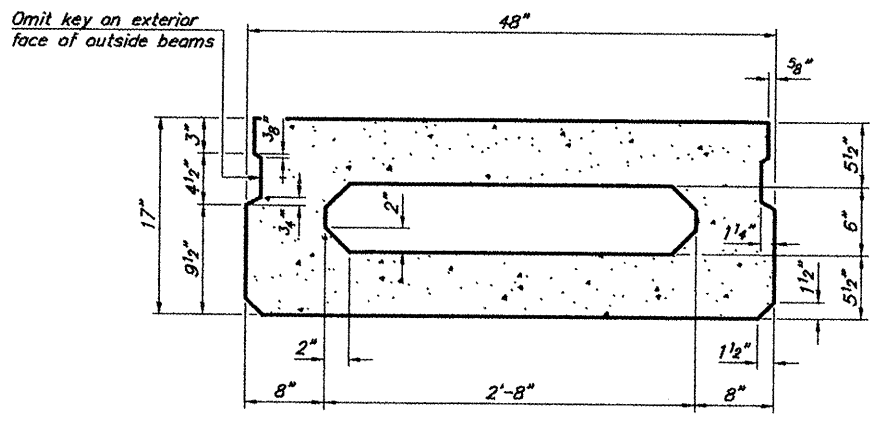
Over Road Flow (Sq Ft): Exist. 0.9 177.9
 Note: Deck elevation used for overtopping to allow for future raising of the approaches

GENERAL PLAN & ELEVATION
 TOWNSHIP ROUTE 151A (MORBER ROAD)
 JOHNSON CREEK
 SECTION 08-08106-00-BR
 JACKSON COUNTY
 STRUCTURE NO. 039-3269

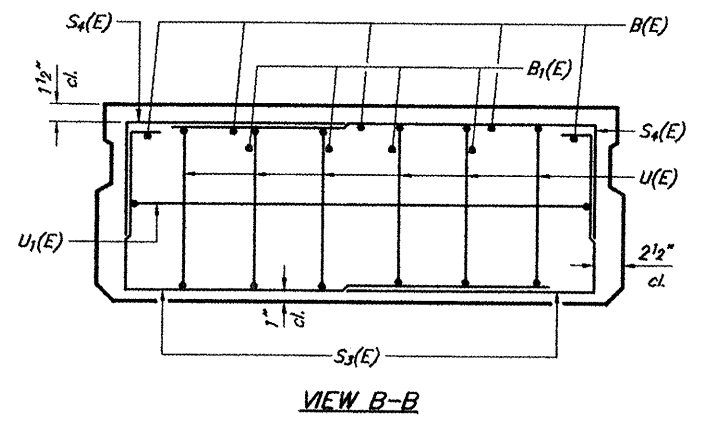
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
TR 151A	08-08106-00-BR	JACKSON	12	5
PROJECT NO. BROS-077(54)		CONTRACT NO. 99357		



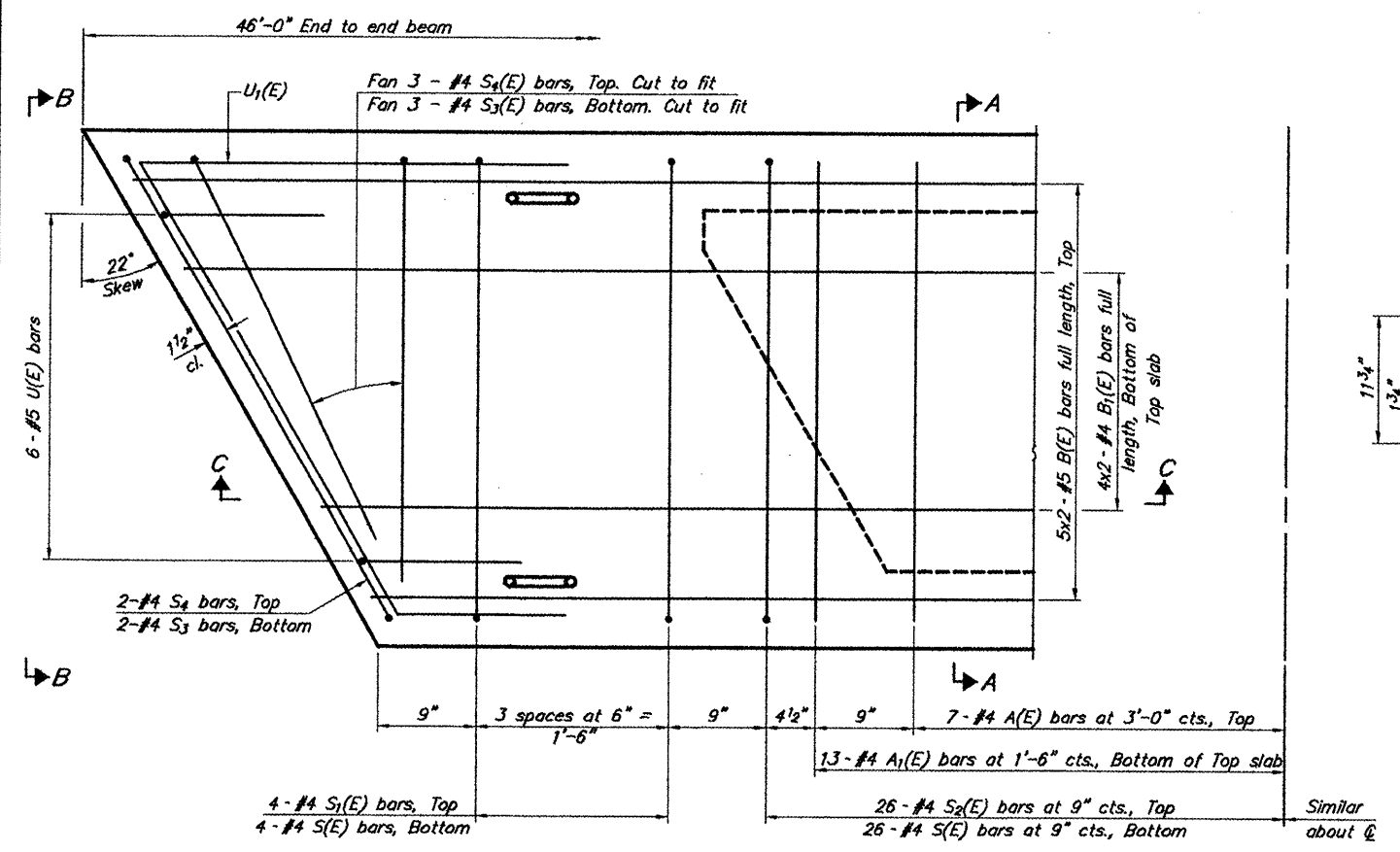
SECTION C-C



SECTION A-A
(Showing dimensions)

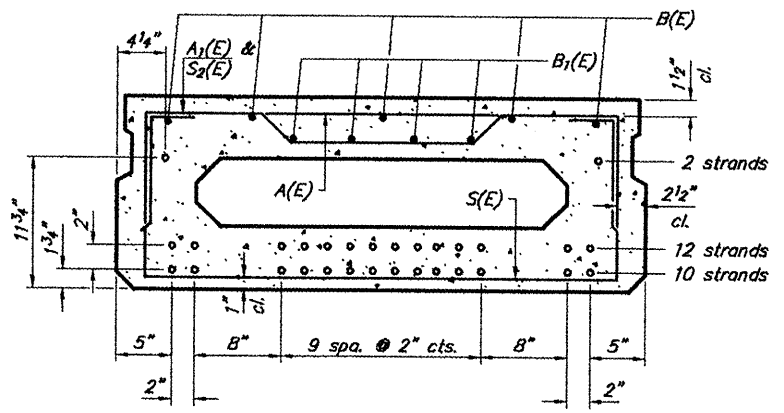


VIEW B-B



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 A-A
(Showing reinforcement and permissible strand locations)

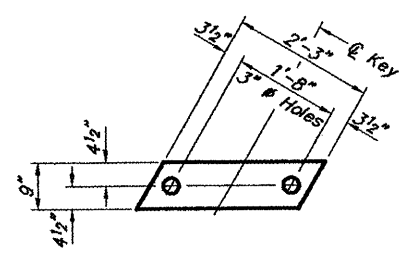
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST
ONE BEAM ONLY
(For information only)

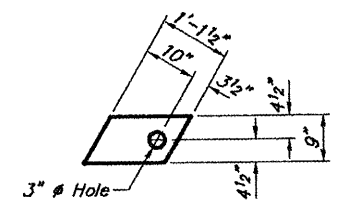
Bar	No.	Size	Length	Shape
A(E)	14	#4	3'-7"	—
A1(E)	26	#4	3'-10"	—
B(E)	10	#5	23'-11"	—
B1(E)	8	#4	23'-8"	—
S(E)	60	#4	6'-9"	□
S1(E)	8	#4	5'-3"	□
S2(E)	52	#4	5'-6"	□
S3(E)	10	#4	4'-5"	□
S4(E)	10	#4	3'-8"	□
U(E)	12	#5	3'-8"	□
U1(E)	2	#4	7'-9"	□

17" X 48" PPC DECK BEAM
TOWNSHIP ROUTE 151A (MORBER ROAD)
JOHNSON CREEK
SECTION 08-08106-00-BR
JACKSON COUNTY
STRUCTURE NO. 039-3269

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
TR 151A	08-08106-00-BR	JACKSON	12	6
PROJECT NO. BROS-077(54)			CONTRACT NO. 99357	

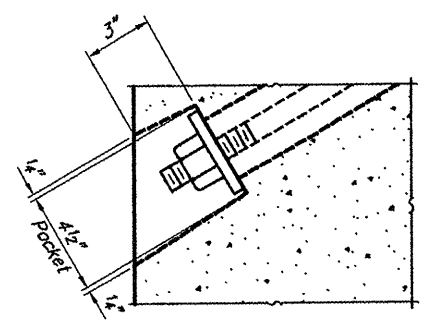


FABRIC BEARING PAD
(Interior)

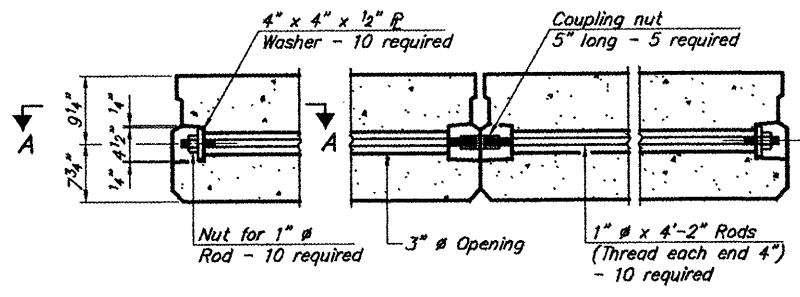


FABRIC BEARING PAD
(Exterior)

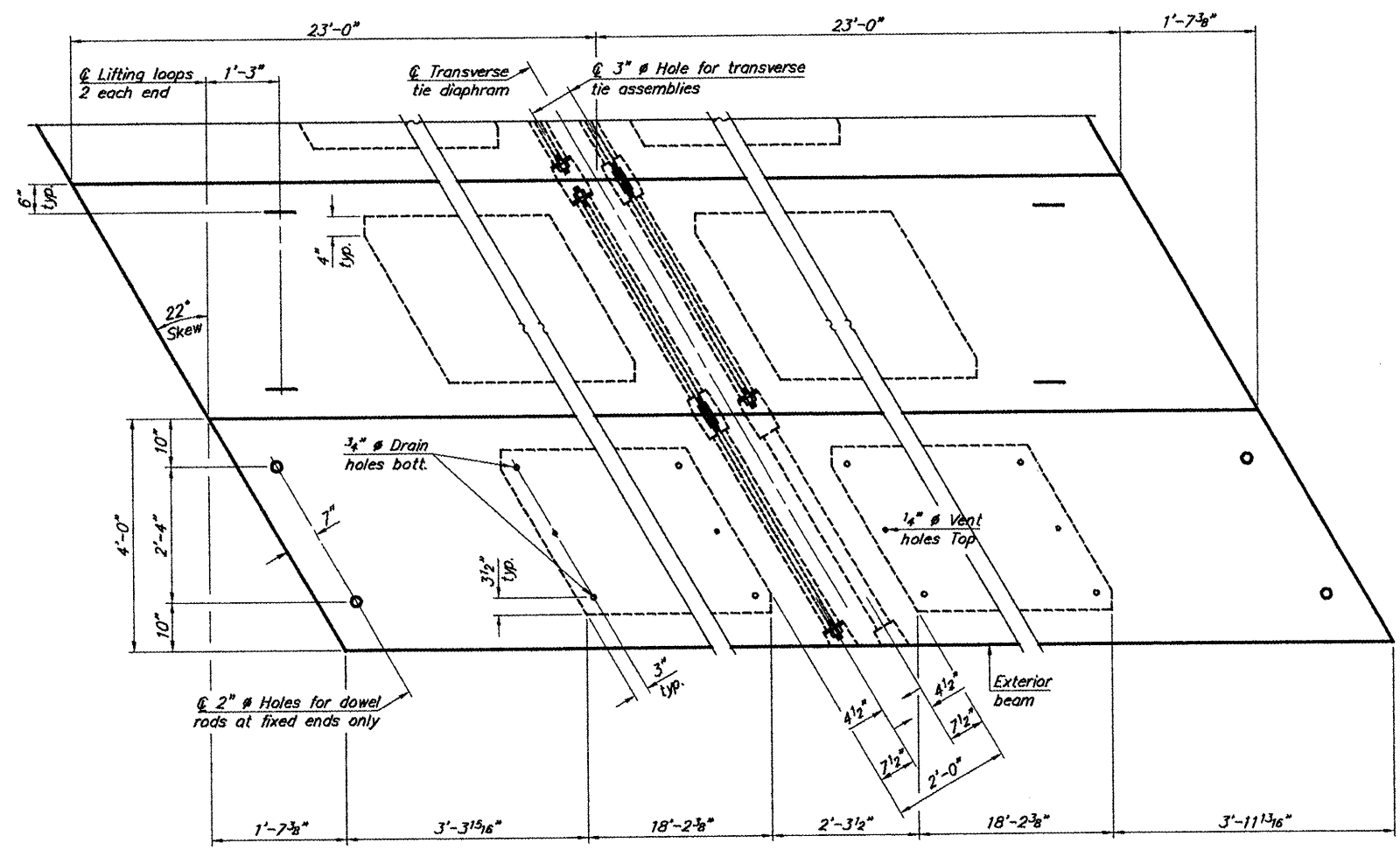
FIXED
Note: Omit holes when using expansion bearings.



SECTION A-A



TYPICAL TRANSVERSE TIE ASSEMBLY

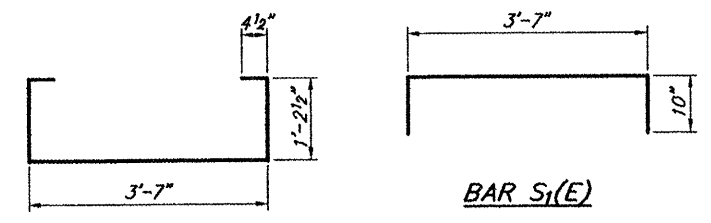


PLAN VIEW

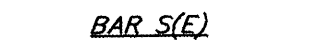
Note: Connect beams in pairs with the transverse tie configuration shown.

NOTES

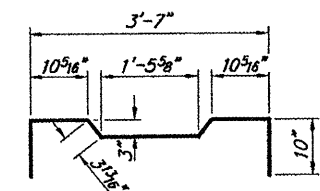
Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" # rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).
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" # lifting pin shall be used to engage the lifting loops during handling.
Corrosion inhibitor, per Article 1020.05(b)(12) and 1021.06 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.



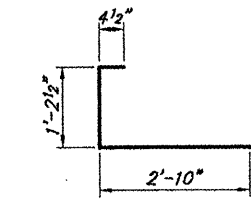
BAR S1(E)



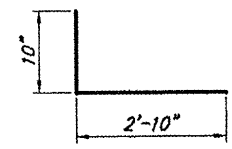
BAR S(E)



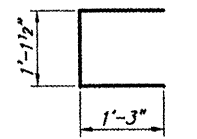
BAR S2(E)



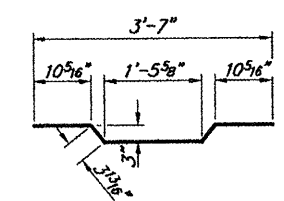
BAR S3(E)



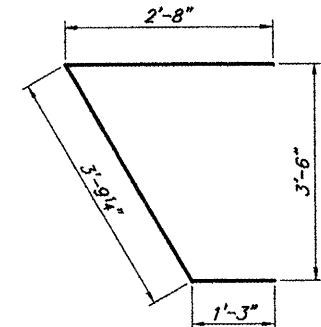
BAR S4(E)



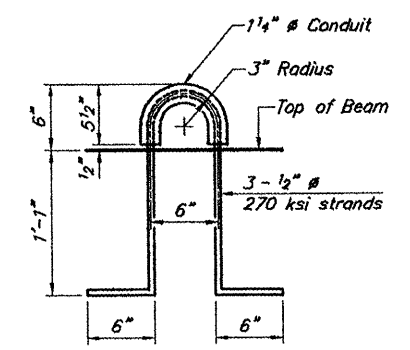
BAR U(E)



BAR A1(E)



BAR U1(E)



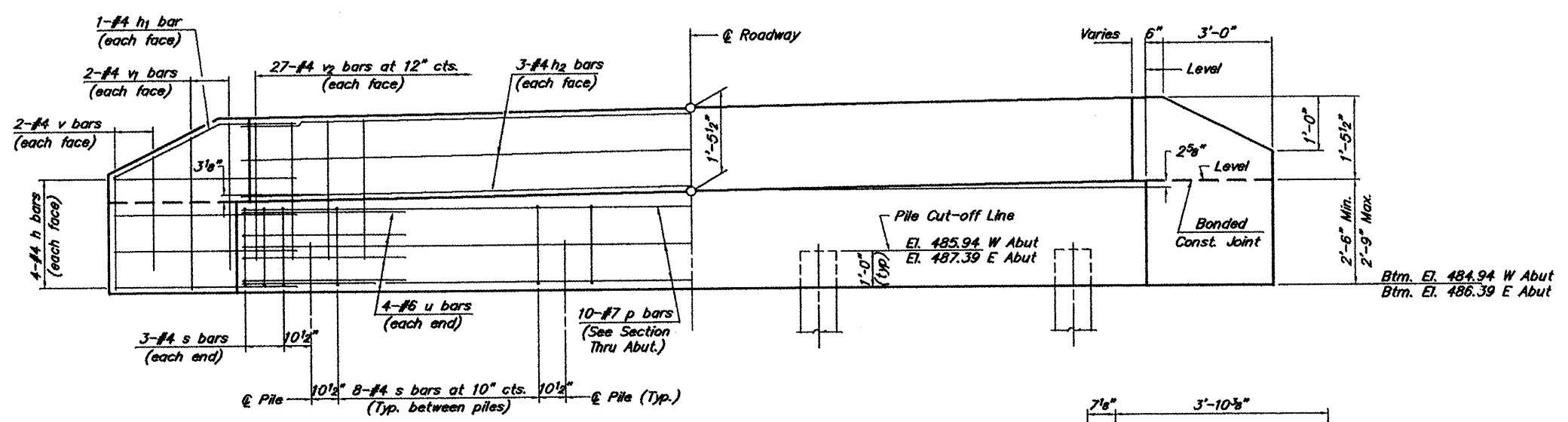
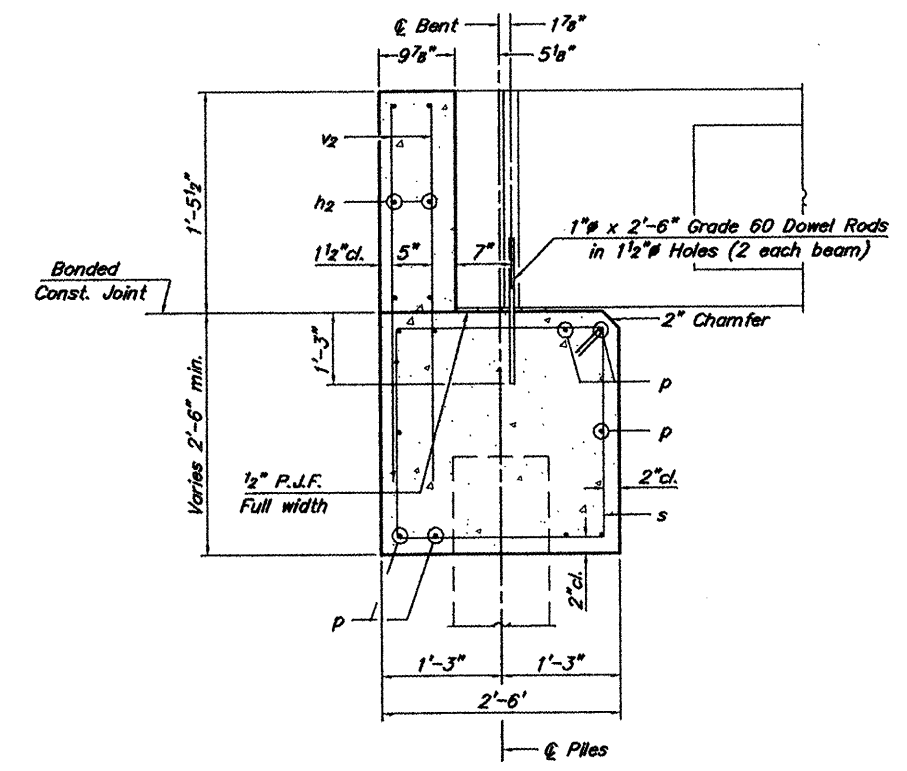
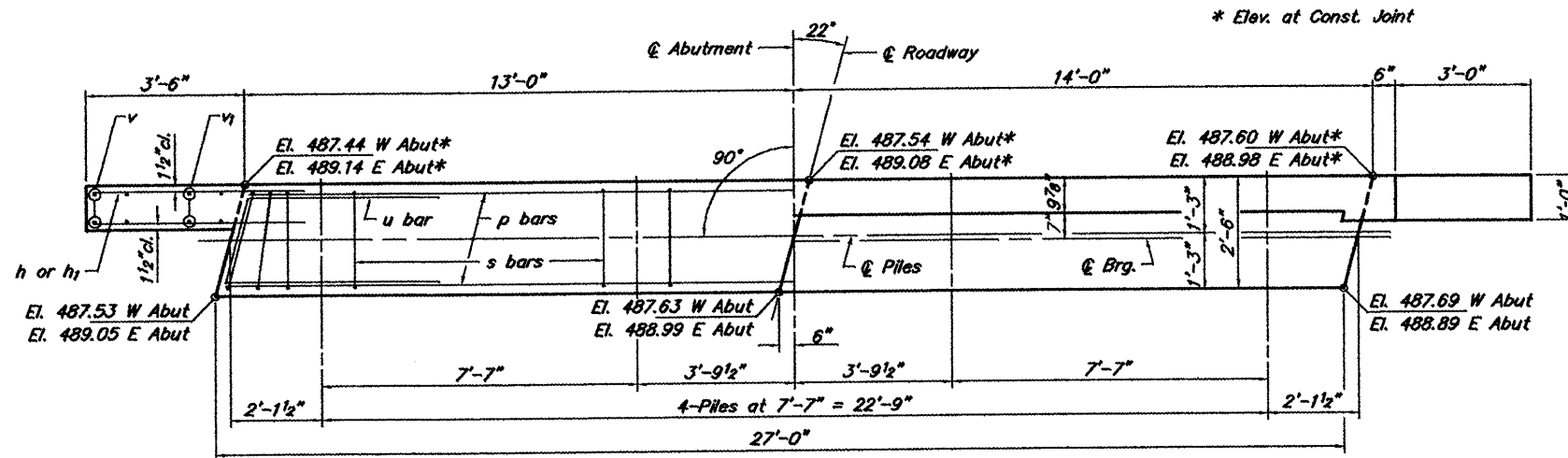
LIFTING LOOP DETAIL

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (17" depth)	Sq. Ft.	1104
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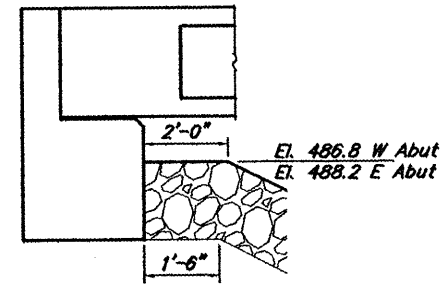
17" X 48" PPC DECK BEAM DETAILS
TOWNSHIP ROUTE 151A (MORBER ROAD)
JOHNSON CREEK
SECTION 08-08106-00-BR
JACKSON COUNTY
STRUCTURE NO. 039-3269

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
TR 151A	08-08106-00-BR	JACKSON	12	7
PROJECT NO. BROS-077(54)			CONTRACT NO. 99357	



BILL OF MATERIAL FOR ONE ABUTMENT

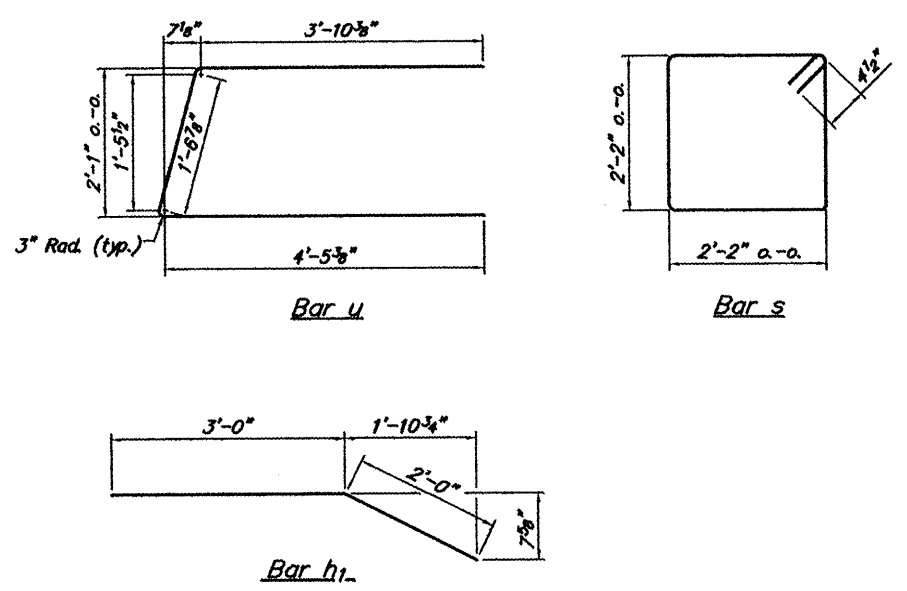
Bar	No.	Size	Length	Shape
h	16	#4	5'-4"	—
h ₁	4	#4	5'-4"	—
h ₂	6	#4	26'-8"	—
p	10	#7	26'-8"	—
s	30	#4	9'-5"	□
u	8	#6	10'-8"	—
v	8	#4	2'-10"	—
v ₁	8	#4	3'-6"	—
v ₂	54	#4	3'-1"	—
Concrete Structures			8.7	Cu. Yds.
Reinforcement Bars			1185	Lbs.



- 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 conform to A.A.S.H.T.O. M-31, M-42 or M-53, Grade 60.

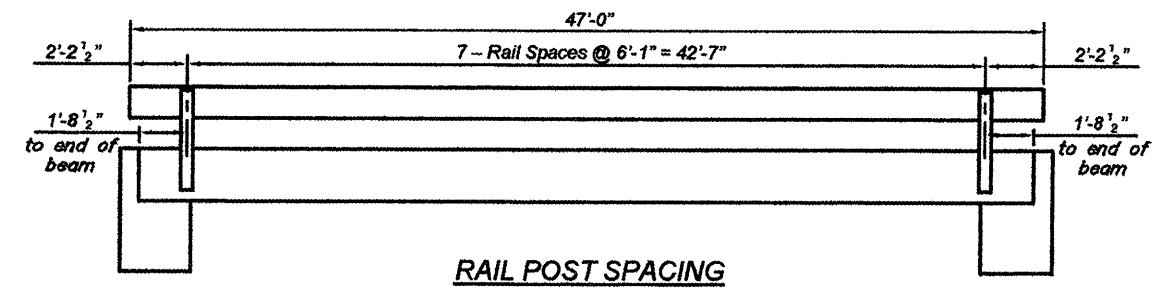
DESIGN STRESSES

f_c = 3,500 psi
f_y = 60,000 psi



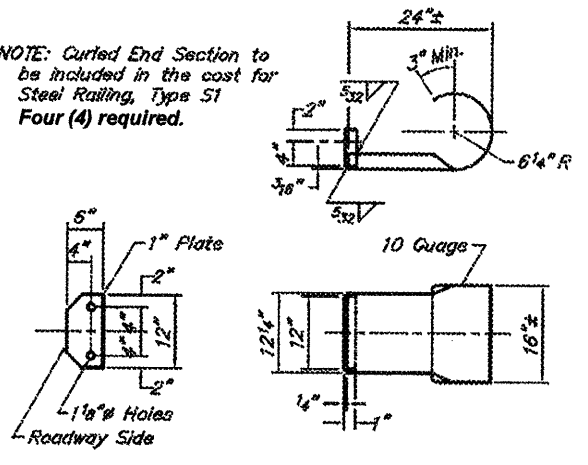
ABUTMENT
TOWNSHIP ROUTE 151A (MORBER ROAD)
JOHNSON CREEK
SECTION 08-08106-00-BR
JACKSON COUNTY
STRUCTURE NO. 039-3269

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 151A	08-08106-00-BR	JACKSON	12	8
PROJECT NO. BROS-077(54)			CONTRACT NO. 99357	

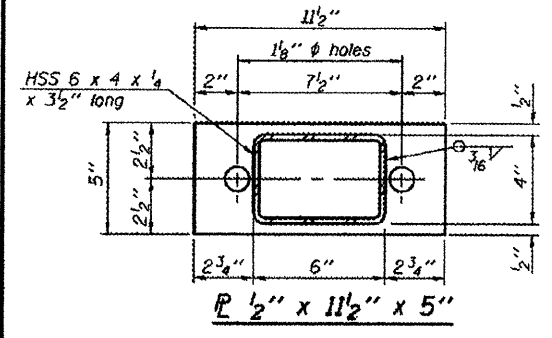


RAIL POST SPACING

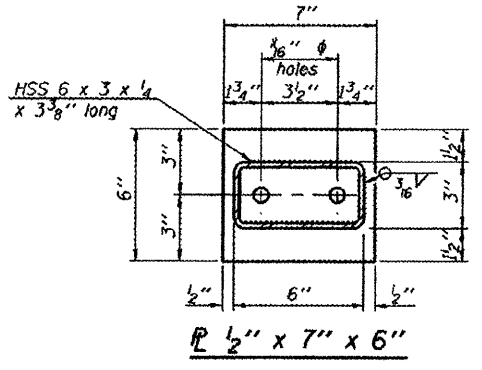
NOTE: Curled End Section to be included in the cost for Steel Railing, Type S1 Four (4) required.



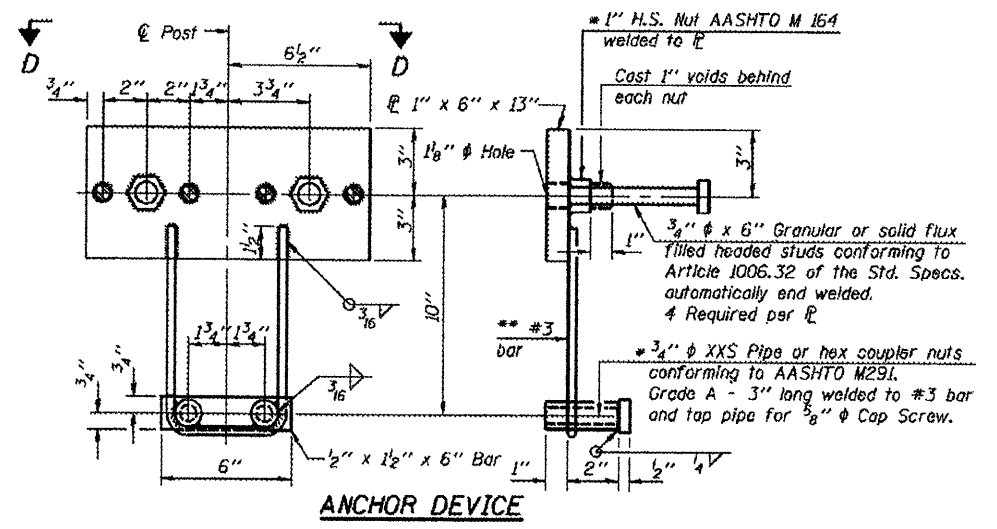
CURLLED END SECTION DETAILS



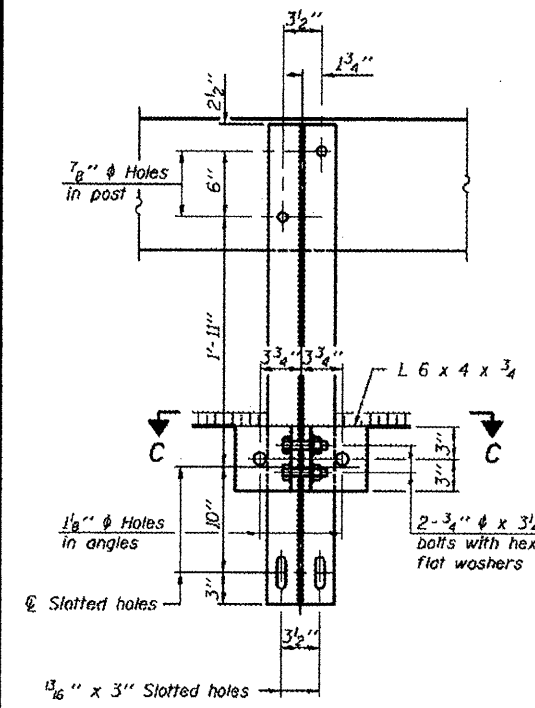
1/2" x 1 1/2" x 5"



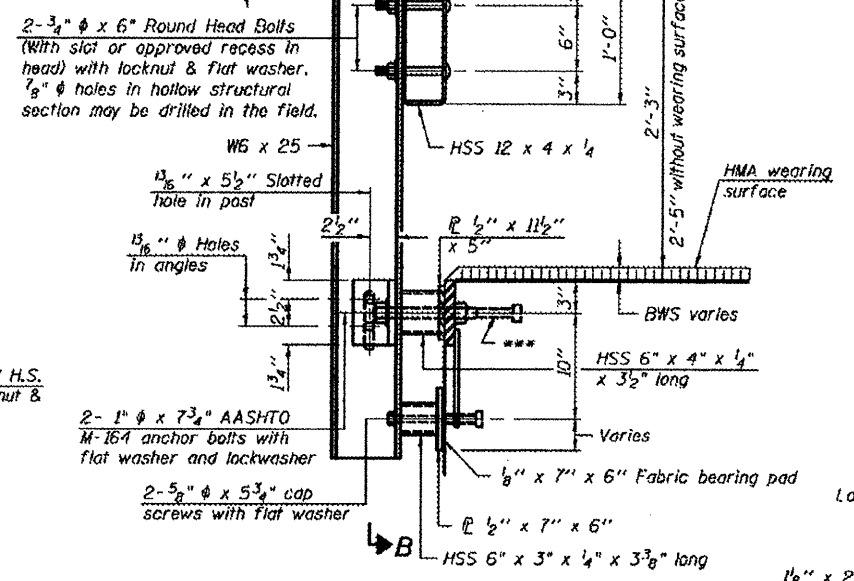
1/2" x 7" x 6"



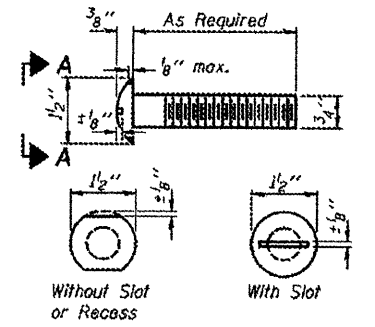
ANCHOR DEVICE



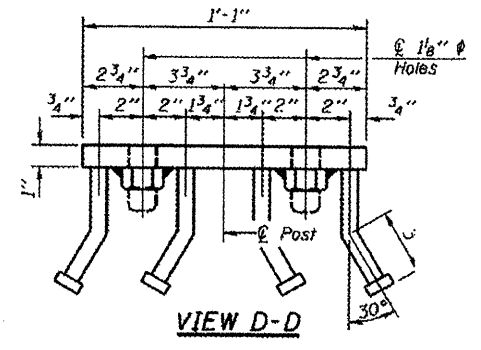
SECTION B-B



SECTION AT RAILING POST



VIEW A-A ROUND HEAD BOLT

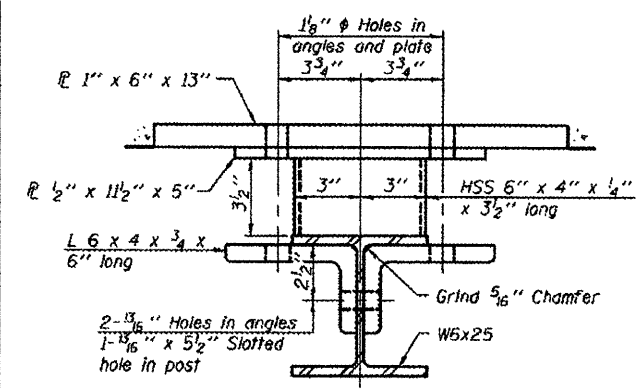


VIEW D-D

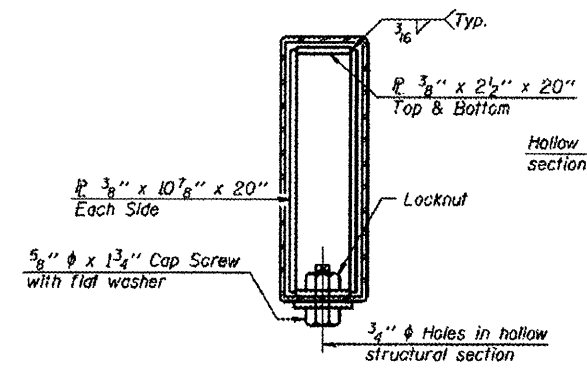
Notes:
 All field drilled holes shall be coated with an approved zinc rich paint before erection.
 For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type S-1.
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
 * Threaded areas shall be plugged or blocked off during casting of beam.
 ** Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".
 *** 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.
 10'-9" Maximum Post Spacing

BILL OF MATERIAL

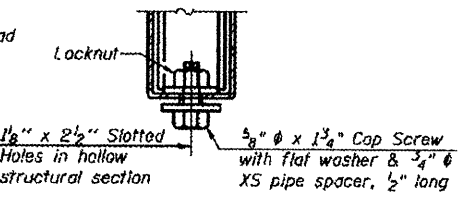
Item	Unit	Quantity
Steel Railing, Type S-1	Foot	94



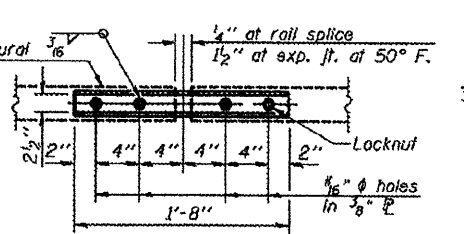
SECTION C-C



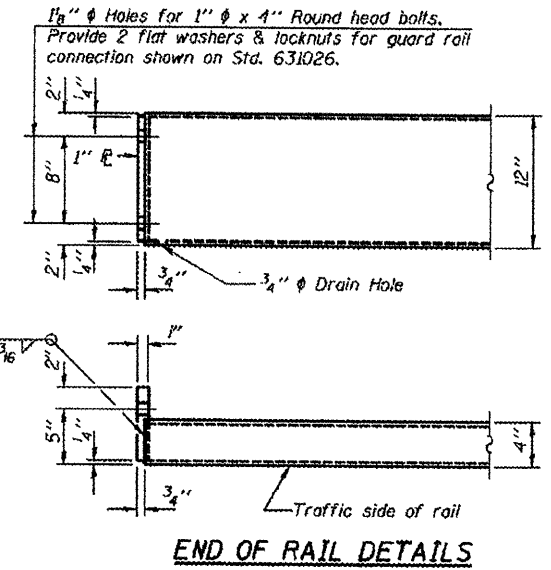
SECTIONS AT RAIL SPLICE



RAIL SPLICE CONNECTION AT EXPANSION JT.



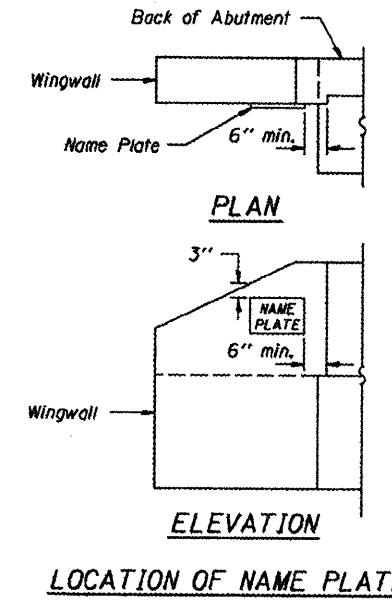
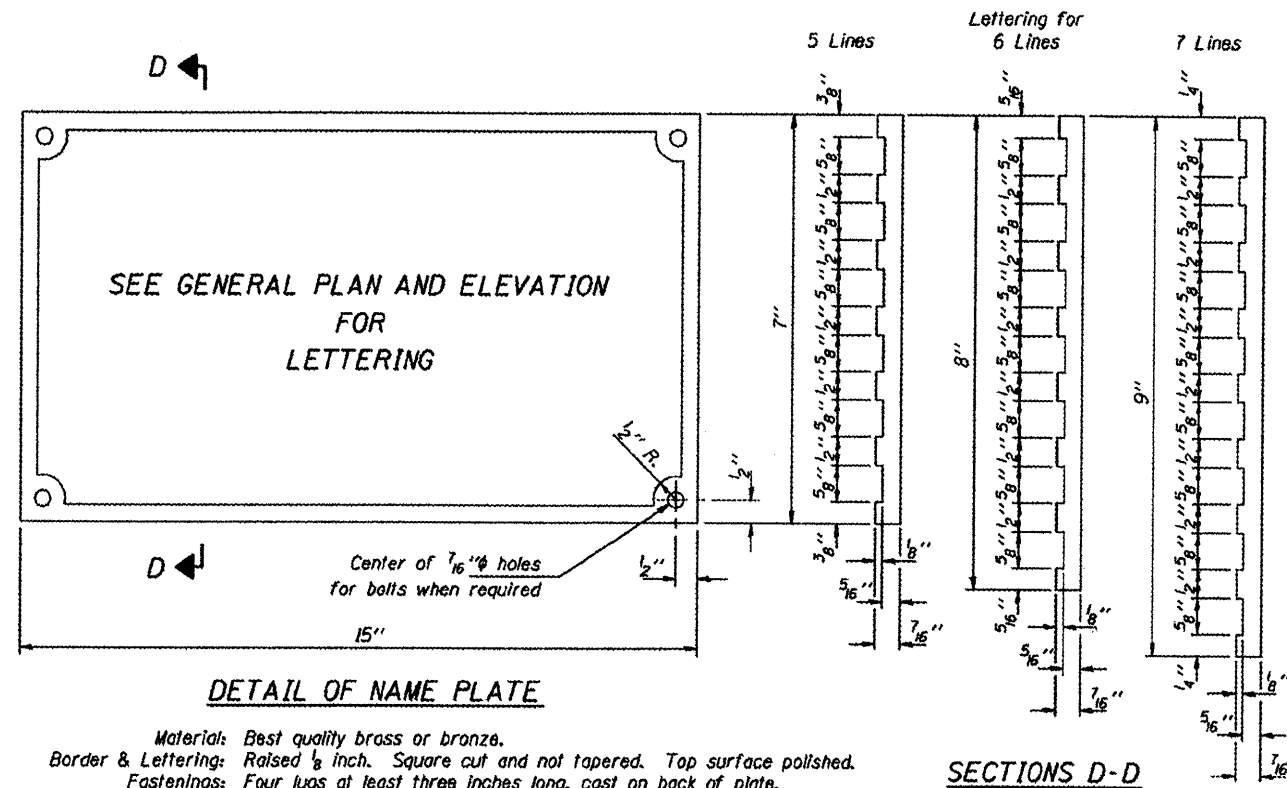
PLAN-BOTT. SPLICE TYPICAL



END OF RAIL DETAILS

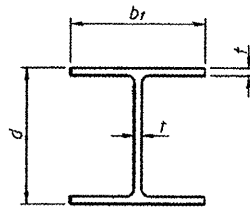
STEEL RAILING, TYPE S-1
 TOWNSHIP ROUTE 151A (MORBER ROAD)
 JOHNSON CREEK
 SECTION 08-08106-00-BR
 JACKSON COUNTY
 STRUCTURE NO. 039-3269

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 151A	08-08106-00-BR	JACKSON	12	9
PROJECT NO. BROS-077(54)			CONTRACT NO. 99357	



NAME PLATES
TOWNSHIP ROUTE 151A (MORBER ROAD)
JOHNSON CREEK
SECTION 08-08106-00-BR
JACKSON COUNTY
STRUCTURE NO. 039-3269

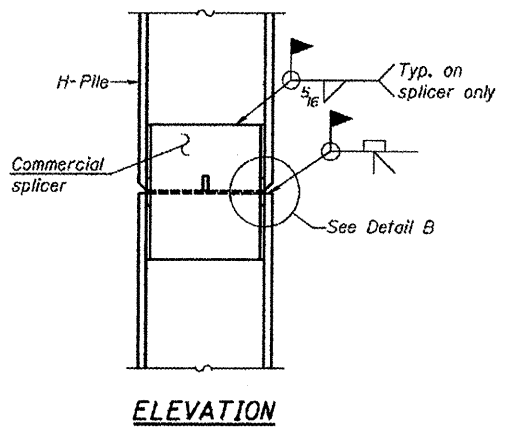
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 151A	08-08106-00-BR	JACKSON	12	10
PROJECT NO. BROS-077(54)			CONTRACT NO. 99357	



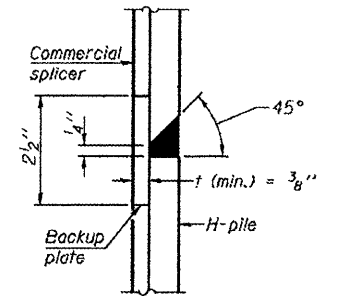
STEEL PILE TABLE

Designation	Depth d	Flange width br	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"	1/16"	24"	0.113
HP 8x35	8"	8 1/2"	7/16"	18"	0.063

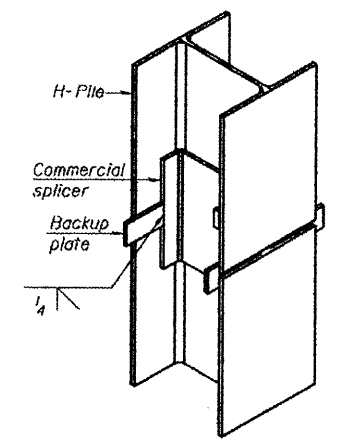
Note: The steel H-piles shall be according to AASHTO M270 Grade 50.



ELEVATION

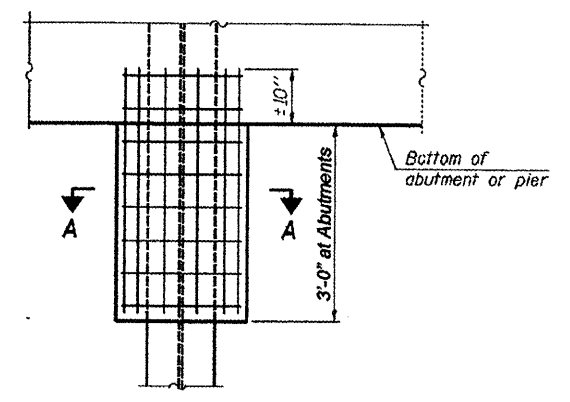


DETAIL "B"

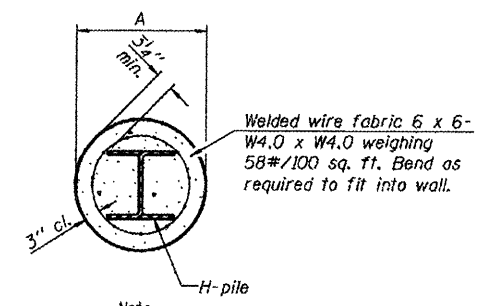


ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE

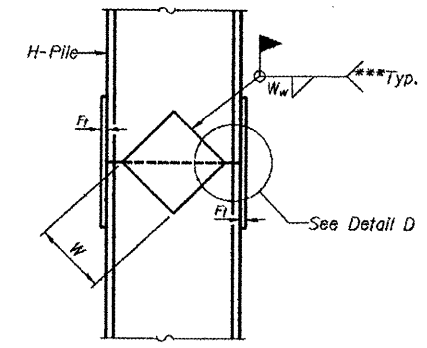


ELEVATION

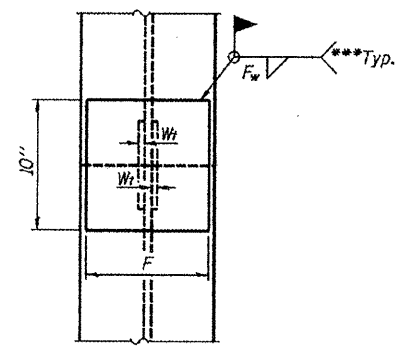


SECTION A-A

PILE ENCASEMENT

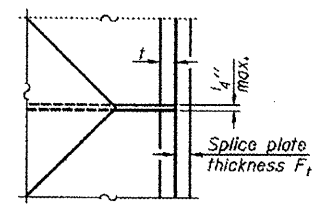


ELEVATION



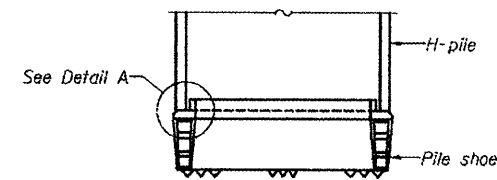
END VIEW

Designation	F	F _t	F _w	W	W _t	W _w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5 1/8"	1 1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5 1/8"	1 1/2"
x89	12 1/2"	3/4"	1/2"	7 3/4"	5 1/8"	1 1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5 1/8"	1 1/2"
HP 12x84	10"	7/8"	1/2"	6 1/2"	5 1/8"	1 1/2"
x74	10"	7/8"	1/2"	6 1/2"	5 1/8"	1 1/2"
x63	10"	5/8"	1/2"	6 1/2"	1 1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1 1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1 1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1 1/2"	3/8"
HP 8x35	7"	5/8"	7/16"	4 1/4"	1 1/2"	3/8"

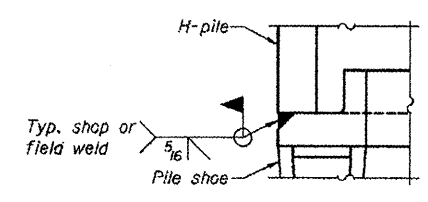


DETAIL D

WELDED PLATE FIELD SPLICE

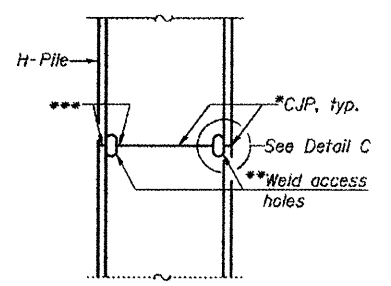


ELEVATION

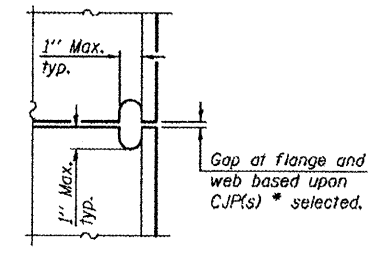


DETAIL A

H-PILE SHOE ATTACHMENT



ELEVATION

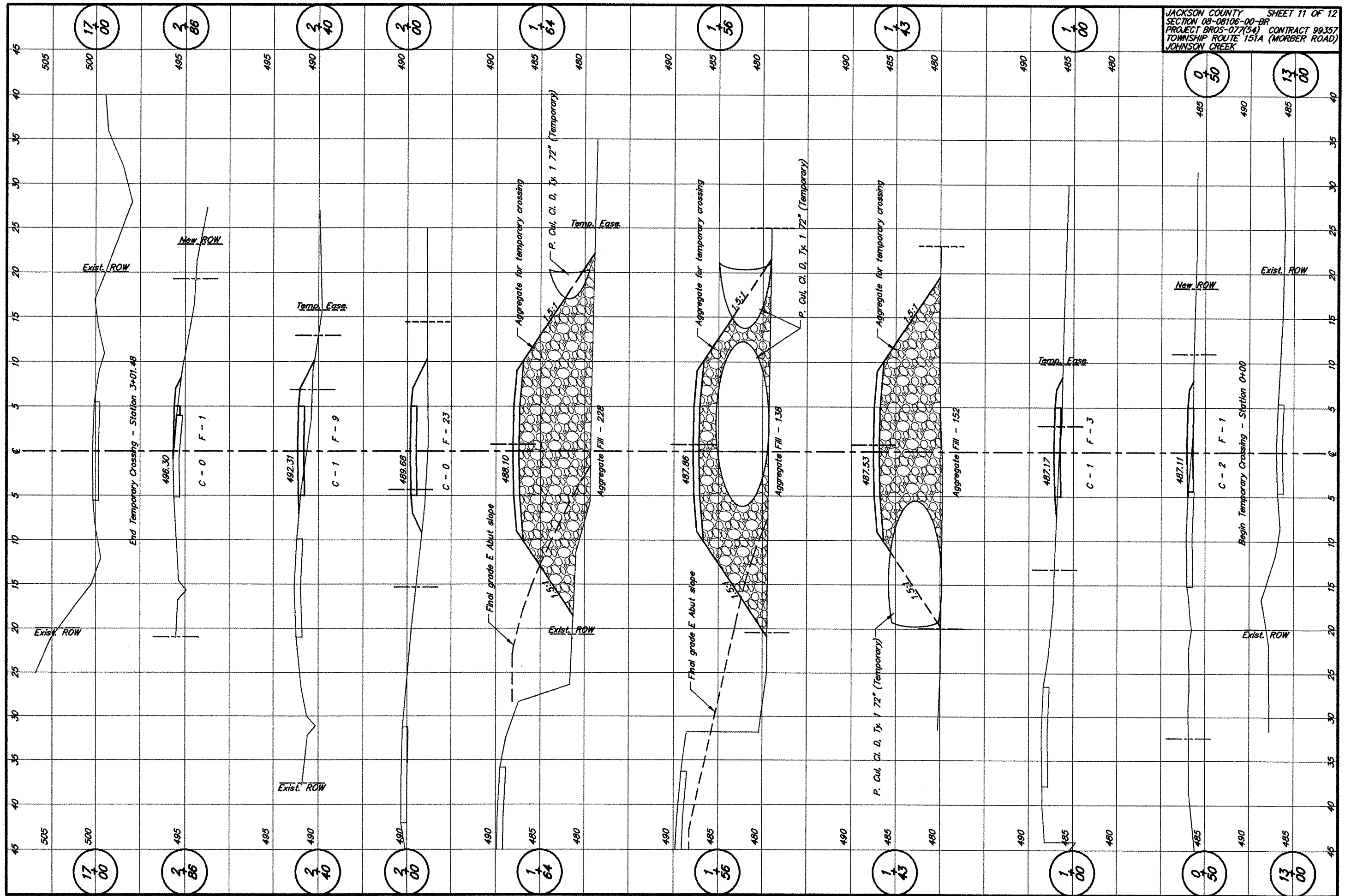


DETAIL C

COMPLETE PENETRATION WELD SPLICE

*Use joint conforming to Figure 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
 TOWNSHIP ROUTE 151A (MORBER ROAD)
 JOHNSON CREEK
 SECTION 08-08106-00-BR
 JACKSON COUNTY
 STRUCTURE NO. 039-3269



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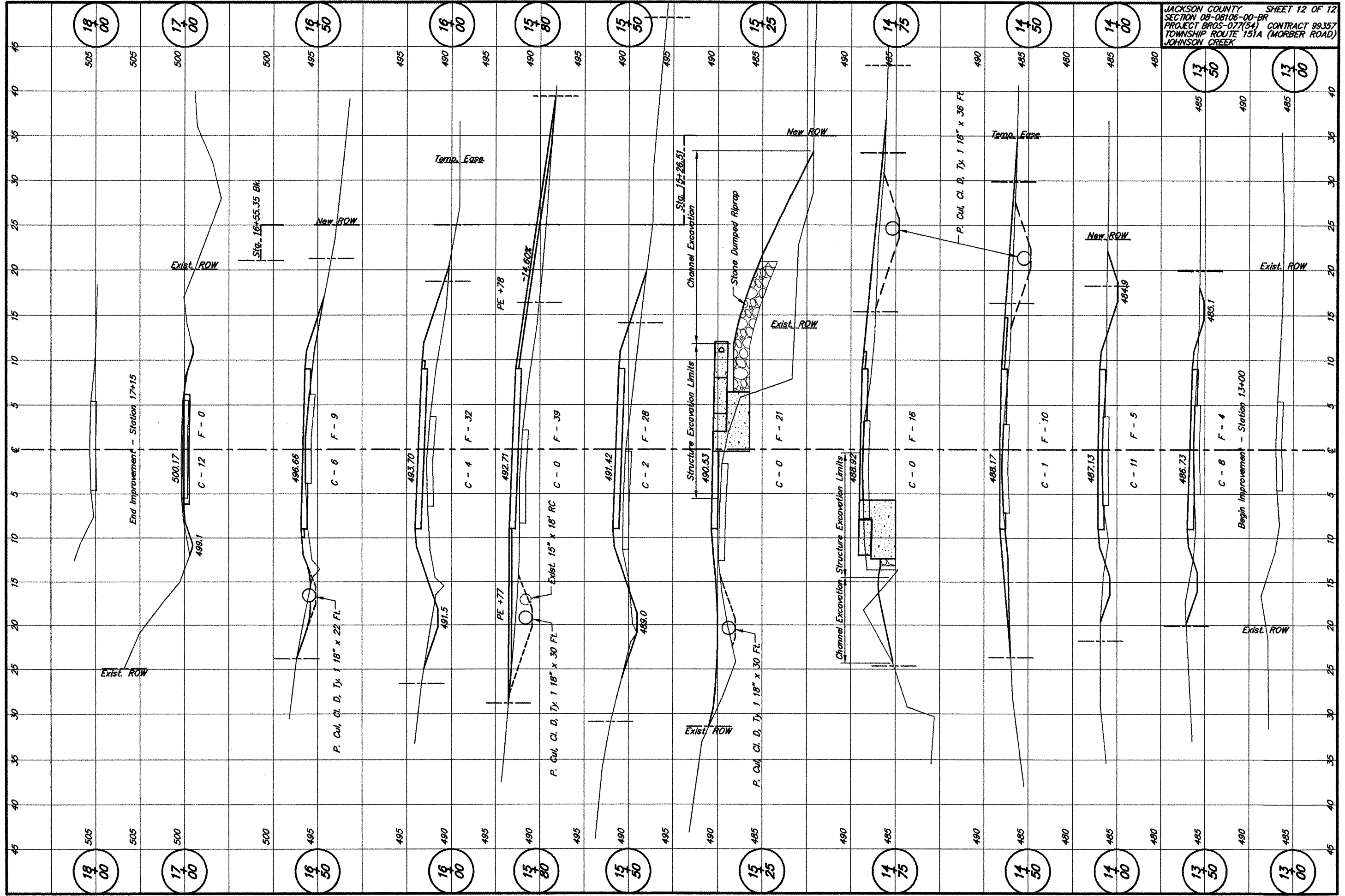
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Temp. Eas.

Temp. Eas.

Temp. Eas.

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Exist. ROW

Exist. ROW

Sig. 16+55.35 Bk.

New ROW

Temp. Eas.

PE +78

PE +77

Exist. ROW

Structure Excavation Limits

Channel Excavation

Stone Dumped Riprap

Exist. ROW

New ROW

Channel Excavation Structure Excavation Limits

P. Cul. Cl. D. Ty. 18" x 36 FL

Temp. Eas.

New ROW

Exist. ROW

Begin Improvement - Station 13+00

End Improvement - Station 17+15

C - 12

C - 6

C - 4

C - 0

C - 2

C - 0

C - 0

C - 1

C - 11

C - 8

F - 0

F - 9

F - 32

F - 39

F - 28

F - 21

F - 16

F - 10

F - 5

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