ADDENDUM NO. 1

JAY COUNTY BRIDGE NO. 139 ON
SEVENTH STREET OVER SALAMONIE RIVER
JAY COUNTY, INDIANA

1. The *TABLE OF CONTENTS* of the Contract Documents has been revised to show Part 7 Utilities for pages 112 to 143 (see attached).
2. The *NOTICE TO BIDDERS* on page 1 of the Contract Documents has been revised to allow bids to be submitted until 8:45 am EDT (see attached).
3. The ITEMIZED PROPOSAL Items 7, 8, and 21 have been revised on page 12 of the Contract Documents to reflect plan revisions associated with the revisions to the sidewalk and curb (see attached).
4. The *PART 7 UTILITIES* section of the Contract Documents has been revised to include an additional 6 pages for the Brightspeed no-conflict workplan (see attached).
5. The FINAL TRACINGS PLAN sheets 2, 3, 10, 25, 29, 31-37 have been revised for revisions to the concrete curb over the bridge and sidewalk compacted aggregate thickness and associated earthwork quantities (see attached).
6. The EXISTING PLANS have been added to the Contract Documents (see attached).
7. Cable clamps as specified by SP30 CABLE CLAMPS are located in the Final Tracings Plans on Sheet 23.
8. The Substantial Completion Date is 12/5/2025. It is recognized that asphalt plants will be closed in December. It is recommended to all Bidders to consider that some incidental work may be scheduled later in the construction schedule to account for asphalt plant closures.
9. A list of the current plan holders is provided on the plan room website under the “Plan Holders” tab.

Revisions to Jay 139 Contract Documents

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egis GROUP | BLN BEAM·LONGEST·NEFF

BRIDGE NO. 139 – SEVENTH STREET OVER SALAMONIE RIVER
JAY COUNTY, INDIANA

TABLE OF CONTENTS

Revisions to Jay 139 Contract Documents

Notice to Bidders

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NOTICE TO BIDDERS

Sealed bids will be received by the Board of Commissioners of Jay County at the Jay County Courthouse, Auditor's Office, 120 North Court Street #2, Portland, Indiana 47371 until Monday April 14, 2025 at 8:45 a.m. EDT for the following:

Rehabilitation of Bridge No. 139
On Seventh Street
Over Salamonie River
Jay County, Indiana

Bids will be publicly opened and read aloud at a commissioners meeting in the Jay County Courthouse on April 14, 2025 at 9:00 a.m. EDT. Bids received after Monday April 14, 2025 at 8:45 a.m. EDT will be returned unopened. Bids received by facsimile machine will not be accepted. Only bids from those Contractors who are registered on the Indiana Department of Transportation's current listing of Prequalified Contractors for this type of work included in this project will be considered.

Construction shall be in accordance with the bidding documents which are on file with the County Highway Department. Said documents may be examined by prospective bidders at the following locations:

Jay County Highway Department
1035 East 200 North
Portland, Indiana 47371

Egis BLN USA, Inc.
8320 Craig Street
Indianapolis, Indiana 46250

Bidding documents are available for purchase and/or viewing through the Egis BLN USA, Inc. online plan room at http://www.blnplanroom.com beginning at 12:00 p.m. EDT on Wednesday March 19, 2025. Further information will be posted there on the Job Details page of the job posting. Order options and prices will be listed on the order page. Partial sets will not be available. Addenda will be posted to the plan room for downloading and a notification of each addendum will be emailed from the plan room to each plan holder.

Bid Documents: All bids shall be accompanied by (1) Bid Form included in the bidding documents (2) completed Form 96 (Ind. State Board of Accounts - Rev.) with required attachments (3) Non-discrimination affidavit as required by the laws of the State of Indiana, and (4) Bid security, as described below (5) Other bidding documents as described in the instructions to bidders.

Bid Security: Bid Security in the amount of five percent (5%) of the Bid shall accompany each Bid. Bid Security may be in the form of a Bid Bond (A-310), certified check or cashier's check. If the Bidder withdraws a bid within sixty (60) days after the opening date, without consent of the Owner or fails to execute a satisfactory contract within ten (10) days after notice of acceptance, the Owner may declare the Bid deposit forfeited as liquidated damages.

Bonds: The successful Bidder will be required to furnish Performance and Payment Bonds for 100% of the Contract Sum.

The Owner reserves the right to accept or reject any Bid and to waive any irregularities in the bidding. All bids may be held for a period not to exceed sixty (60) days, or as otherwise stated in the Contract Documents before awarding the contract.

Jay County is an Equal Opportunity Employer in accordance with I.C. 22-9-1-10 and shall not permit discrimination against any employee or applicant for employment to be employed in the performance of the contract, with respect to his or her hire, tenure, terms, conditions or privileges of employment or any matter directly or indirectly related to employment, because of his race, religion, color, sex, disability, national origin, or ancestry.

All out-of-state corporations must have a certificate of authority to do business in the State. Application forms may be obtained by contacting the Secretary of State, State of Indiana, Statehouse, Indianapolis, Indiana 46204.

Chad Aker, Duane Monroe, Doug Horn
Jay County Board of Commissioners

Revisions to Jay 139 Contract Documents

Itemized Proposal

egis GROUP | BLN BEAM·LONGEST·NEFF

ITEMIZED PROPOSAL
JAY COUNTY BRIDGE NO. 139
SEVENTH STREET OVER SALAMONIE RIVER
JAY COUNTY, INDIANA

	ITEM	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT
	1	Construction Engineering	1	LSUM		
	2	Inspection Hole, Deeper than 3 ft	1	EACH		
	3	Mobilization and Demobilization	1	LSUM		
	4	Clearing Right-of-Way	1	LSUM		
	5	Pavement Removal	60	SYS		
	6	Present Structure, Remove Portions, Structure No. 1	1	LSUM		
*	7	Excavation, Common	166	CYS		
*	8	Borrow	430	CYS		
	9	Sediment, Remove	10	CYS		
	10	Temporary Mulch	1	TON		
	11	Filter Sock	1057	LFT		
	12	Manufactured Surface Protection Product	1191	SYS		
	13	Temporary Seed	42	LBS		
	14	Mobilization and Demobilization for Surface Stabilization	1	EACH		
	15	Excavation, Foundation, Unclassified	18	CYS		
	16	Subgrade Treatment, Type III	175	SYS		
	17	Subgrade Treatment, Type IC	290	SYS		
	18	Aggregate for End Bent Backfill	14	CYS		
	19	Geotextile for Pavement Type 2B	138	SYS		
	20	Compacted Aggregate, No. 2	10	CYS		
	21	Compacted Aggregate, No. 53	41	CYS		
	22	Subbase for PCCP	36	CYS		
	23	Compacted Aggregate, No. 53	138	TON		
	24	Widening with HMA, Type B	54	TON		
	25	Milling, Transition	767	SYS		
	26	QC/QA-HMA, 3, 58S, Surface, 9.5 mm	92	TON		
	27	QC/QA-HMA, 3, 58S, Intermediate, 19.0 mm	109	TON		
	28	QC/QA-HMA, 3, 58S, Base, 25.0 mm	84	TON		
	29	Joint Adhesive, Surface	416	LFT		
	30	Joint Adhesive, Intermediate	416	LFT		
	31	Asphalt for Tack Coat	2111	SYS		
	32	Guardrail, Remove	560	LFT		
	33	Hand Dig Guardrail Post Holes	1	EACH		

Revisions to Jay 139 Contract Documents

Utilities

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~ INDEX TO THE ~ UTILITIES

Description

Brightspeed

Date: 3/24/2025

Subject:

Utility Relocation Work Plan for:	Brightspeed
Facility Type:	Communications

Section 1: General Information

A. Project Information

1.	Route Number:	7th St.
2.	Location:	250' west of the Salamonie River to 375' west of the Salamonie River
3.	Work Type:	Superstructure Replacement
4.	Letting Date:	2/5/2025
5.	Date Work Plan Needed	8/9/2024
6.	Target Date for Utility to be out of conflict with Project	Enter Target Date
a.	Intermediate Phase	N/A

B. Utility Designated Contact – Information

1.	Designated Contact Name:	Eric Flory
2.	Office telephone:	NA
3.	Mobile telephone:	419-576-7089
4.	Email address:	eric.flory@Brightspeed.com
5.	Agency name	Brightspeed
6.	Address:	50 N Jackson ST
7.	City, State, Zip Code:	Franklin, IN 46131
8.	Construction Emergency Contact:	
	Name:	Chase Wise
	Number:	980-376-1448

C. By signing here, the Utility has determined to the best of their ability that they do not have facilities within the project area:

Signature of Utility Representative Print Name Date

Note: A signature by the utility representative at item "(C)" fulfills the requirement to complete the rest of this form and affirms their contact information above is correct

D. Utility Coordinator Contact Information

1.	Utility Coordinator Name:	Gregory Broz
2.	Office Telephone:	317-806-4339
3.	Mobile Telephone:	317-383-1196
4.	Email Address:	gregory.broz@egis-group.com
5.	Agency Name:	Egis Group (formerly BLN)
6.	Address:	8320 Craig St
7.	City, State, Zip Code	Indianapolis, IN 46250

Section 2: A narrative description of existing facilities and any facility relocation that will be required.

A. Describe what types of existing active and inactive facilities are present.

BRIGHTSPEED IS AERIAL ON THE SOUTH SIDE OF THE ROAD. ATTACHED TO THE POWER POLE. BRIGHTSPEED IS ONE OF THE LOWER CABLES

B. Describe the location of existing active and inactive facilities.

C. Describe what will be done with existing active and inactive facilities.

Brightspeed will remain aerial on the south side of the estructure.

D. Describe the details of the proposed new facilities.

E. Describe the proposed location of the new facilities.

F. By signing here, the Utility has determined to the best of their ability that they have facilities within the project area and the facilities are not in conflict with the project based upon the plans received on <**Enter Date Received Plans**>

Eric M Flory

Eric M Flory 3/24/2025

Signature of Utility Representative Print Name Date

Note: A signature by the utility representative at item "(F)" fulfills the requirement to complete the rest of this form and

affirms their contact information above is correct.

Section 3: A statement whether the facility relocation is or is not dependent on the acquisition of additional property interests with a description of that work.

Section 4: A statement whether the utility is or is not willing to allow the project contractor to do the required work as part of the highway contract.

Section 5: From the date the work plan is approved by both parties; please provide the Utility's pre-construction scheduling information.

A.	The expected lead time in calendar days to obtain permits:	Enter Total Days
B.	The expected lead time in calendar days to obtain materials:	Enter Total Days
C.	The expected lead time in calendar days to schedule work crews:	Enter Total Days
D.	The expected lead time in calendar days to obtain new property interests:	Enter Days
E.	The earliest date when the utility could begin to implement the pre-construction activities of the work plan:	Enter Date
F.	The total number of calendar days for pre-construction activities: (accounting for concurrent activities)	Enter Total Days

Section 6: The Utility Construction Scheduling Information.

A. A statement whether the facility relocation is or is not dependent on work to be done by another utility with a description of that work.

   1. Utility A, with a description of the required work.

   2. Utility B, with a description of the required work.

   3. Utility C, with a description of the required work.

B. A statement whether the facility relocation is or is not dependent on work to be done by the project owner or the project's contractor with a description of that work.

   1. Work item A

   2. Work item B

   3. Work item C

C. How many calendar days after the events identified in Sec 6 A and B are completed can the utility begin construction: Enter Total Days

D. The number of calendar days to complete the relocation work: **Enter Total Relocation Days**

Section 7: A drawing of sufficient detail with station, offset, elevations, and scale to show the proposed location of the facility relocation, which takes precedence over the narrative description of the work, needs to be on the construction drawings. Plans must be attached to this Work Plan Document.

Section 8: For each work plan the utility shall include a cost estimate for the facility relocation. For reimbursable work the estimate will identify betterment and salvage which is not reimbursable.

Section 9: For work the utility is entitled to be compensated by the Project Owner, the work plan shall include documentation of property interests and compensable land rights.

Section 10: The implementation of this approved work plan is dependent upon the issuance of: (a notice to proceed will be provided when items in Section 6 are accomplished)

Items Completed	Yes	Not Applicable
An executed reimbursement agreement with Project Owner:	☐	☒

(Note: Double-click on box in Yes or NA to mark it with an "X")

Signature of Utility Representative

Date

Utility Representative Name Printed

City/County use only below this point ---------- City/County use only below this point

City/County use only below this point ---------- City/County use only below this point

The following sections are to be used by City/County personnel to review the utility relocation work plan.

Section 11: The City/County shall review the work plan to ensure that it:

Description	Yes	No	N/A	Utility Coordinator Initials
(1.a) is compatible with permit requirements	☐	☐	☒	GJB
(1.b) is compatible with the project plans	☒	☐	☐	GJB
(1.c) is compatible with the construction schedule	☐	☐	☒	GJB
(1.d) is compatible with other utility relocation work plans	☐	☐	☒	GJB
(2.a) has reasonable relocation scheme	☐	☐	☒	GJB
(2.b) has a reasonable cost for compensable work	☐	☐	☒	GJB

(**Note**: Double-click on box under Yes or N/A to mark it with an "X")
Comments on any sections (1.a – 2.b) that were marked No:

Utility Coordinator Signature

3/24/2025
Date

Gregory J. Broz
Utility Coordinator Name Printed

Section 12: Approved Work Plan.

I have reviewed the work plan and found it acceptable.

Project Manager Signature

3/24/2025
Date

Ryan Whelchel
Project Manager Name Printed

Revisions to Jay 139 Contract Documents

Final Tracings Plan Revisions

egis GROUP | BLN BEAM·LONGEST·NEFF

UTILITIES

AMERICAN ELECTRIC POWER DISTRIBUTION
3514 Landin Rd.
New Haven, IN 43054
Attn: Thomas McDonough
Ph: 260-408-3447
Email: tamcdonough@aep.com

AMERICAN ELECTRIC POWER TRANSMISSION
8600 Smiths Mill Rd.
New Albany, OH 43054
Attn: Josh Adams
Ph: 614-933-2297
Email: tl_publicprojects@aep.com

BRIGHTSPEED
110 N Chauncey St.
Columbia City, IN 46725
Attn: Max Downey
Ph: 317-927-4684
Email: Maxwell.K.Downey@brightspeed.com

COMCAST
720 Taylor St.
Fort Wayne, IN 46802
Attn: William Fishburn
Ph: 260-410-3504
Email: William_Fishburn@comcast.com

PORTLAND WASTEWATER
205 S Wayne St.
Portland, IN 47372
Attn: Doug Jackson
Ph: 260-729-1416
Email: djackson@thecityofportland.net

CITY OF PORTLAND WATER
205 S Wayne St.
Portland, IN 47372
Attn: Brad Clayton
Ph: 260-726-4525
Email: bclayton@thecityofportland.net

811 Know what's below. Call before you dig.

INDIANA UNDERGROUND
1-800-382-5544 OR CALL 811
24 HOURS A DAY 7 DAYS A WEEK

INDEX

REVISIONS

SHEET NO.	DATE	REVISED
3-A, 10A, 31A-37A	4/9/25	Sidewalk Comp. Agg. Thickness and associated earthwork quantities
25A & 29A	4/9/25	Curb Geometry

RYAN THOMAS WHELCHEL
REGISTERED
No. PE12300271
STATE OF INDIANA
PROFESSIONAL ENGINEER

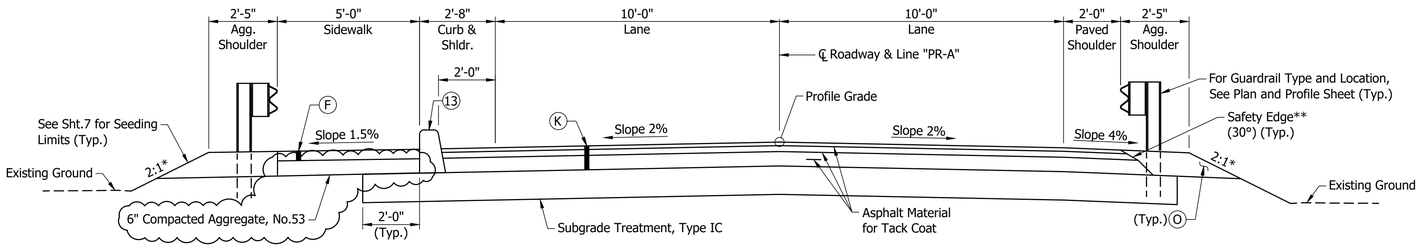
RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — 3/19/2025 DATE

DESIGNED: RTW
DRAWN: NW
CHECKED: SMS
CHECKED: RTW

JAY COUNTY, INDIANA

INDEX SHEET

HORIZONTAL SCALE	BRIDGE FILE
N/A	JAY 139
VERTICAL SCALE	DESIGNATION
N/A	
DRAWING NO.	SHEETS
	2A of 37
CONTRACT	PROJECT
	091024



TYPICAL SECTION - PROJECT LIMITS

Sta.62+25.00 "PR-A" to Sta.62+48.00 "PR-A"
Sta.64+32.50 "PR-A" to Sta.65+00.00 "PR-A"
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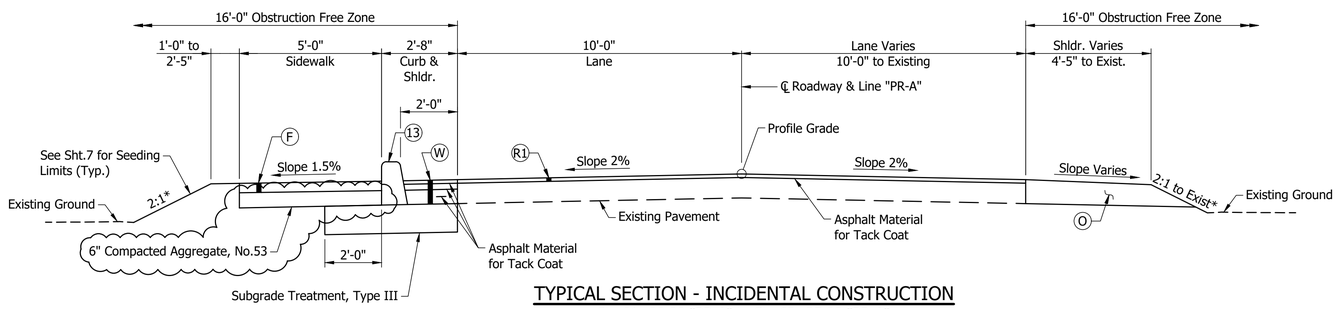
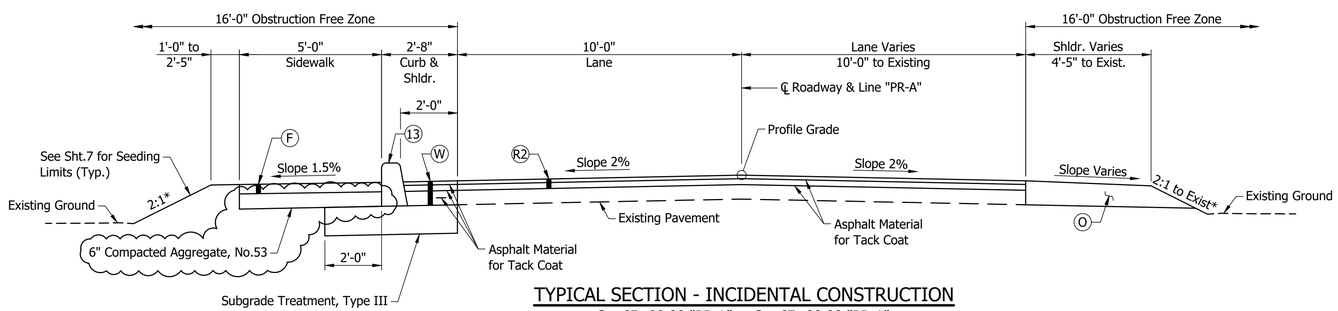


TYPICAL SECTION - INCIDENTAL CONSTRUCTION

Sta.61+00.00 "PR-A" to Sta.62+25.00 "PR-A"
Scale: 3/8" = 1'-0"



TYPICAL SECTION - INCIDENTAL CONSTRUCTION

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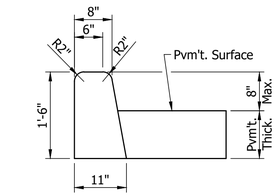
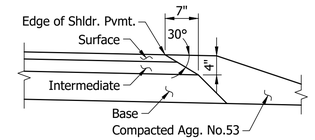


MODIFIED CONCRETE CURB DETAIL

Scale: 3/4" = 1'-0"

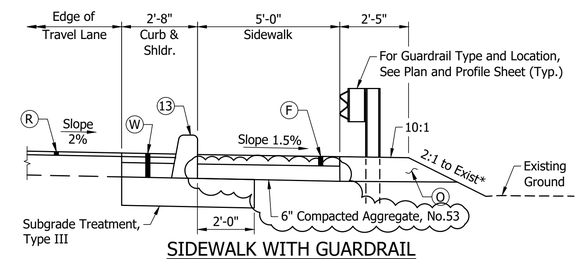


30° SAFETY EDGE

Scale: 3/4" = 1'-0"

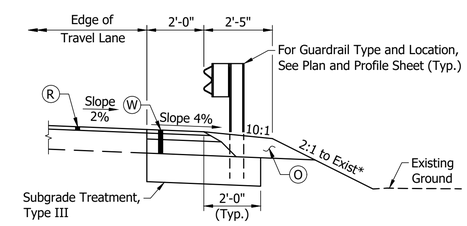
LEGEND

- (F) Concrete, Sidewalk, 4"
- (K) 165 lbs/syd QC/QA - HMA, 3, 58S, Surface, 9.5mm on 275 lbs/syd QC/QA - HMA, 3, 58S, Intermediate, 19.0mm on 660 lbs/syd QC/QA - HMA, 3, 58S, Base, 25.0mm (Tack Coat between HMA layers and between Base Layer lifts)
- (O) 10" Compacted Aggregate, No.53
- (R1) Transition Milling and Resurfacing 165 lbs/syd QC/QA - HMA 3, 58S, Surface, 9.5mm
- (R2) Transition Milling and Resurfacing 165 lbs/syd QC/QA - HMA 3, 58S, Surface, 9.5mm on 275 lbs/syd QC/QA - HMA, 3, 58S, Intermediate, 19.0mm
- (W) 165 lbs/syd QC/QA - HMA 3, 58S, Surface, 9.5mm on Widening with HMA, Type B 275 lbs/syd, HMA Intermediate, Type B on 660 lbs/syd, HMA Base, Type B (Tack Coat between HMA layers and between Base Layer lifts)
- (13) Concrete Curb, Modified



SIDEWALK WITH GUARDRAIL WITHIN INCIDENTAL CONSTRUCTION

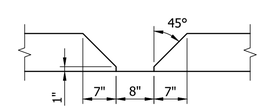
Scale: 3/8" = 1'-0"



SHOULDER WITH GUARDRAIL WITHIN INCIDENTAL CONSTRUCTION

Scale: 3/8" = 1'-0"

Note:
Cut-outs to be spaced at 25'-0" starting at Sta.61+25.00 "PR-A" and ending at Sta.66+75.00 "PR-A"



CURB CUT-OUT DETAIL

Scale: 3/4" = 1'-0"

Notes:

Erosion Control Blankets are to be used on slopes greater than 3:1.

The Contractor shall seal all visible cracks 1/4" wide or wider after the completion of the milling of the existing asphalt wearing surface and before applying the tack coat in accordance with 408. The cracks shall be filled with PG 64-22. No emulsion shall be used, and the cracks shall not be overbanded.

* See Cross Sections for slope.
** Safety Edge (30°) applicable to Surface and Intermediate Layers only.

4/9/2025 Revised Sidewalk Compacted Aggregate

R. ANTHONY WHELCHEL REGISTERED No. PE12300271 STATE OF INDIANA PROFESSIONAL ENGINEER

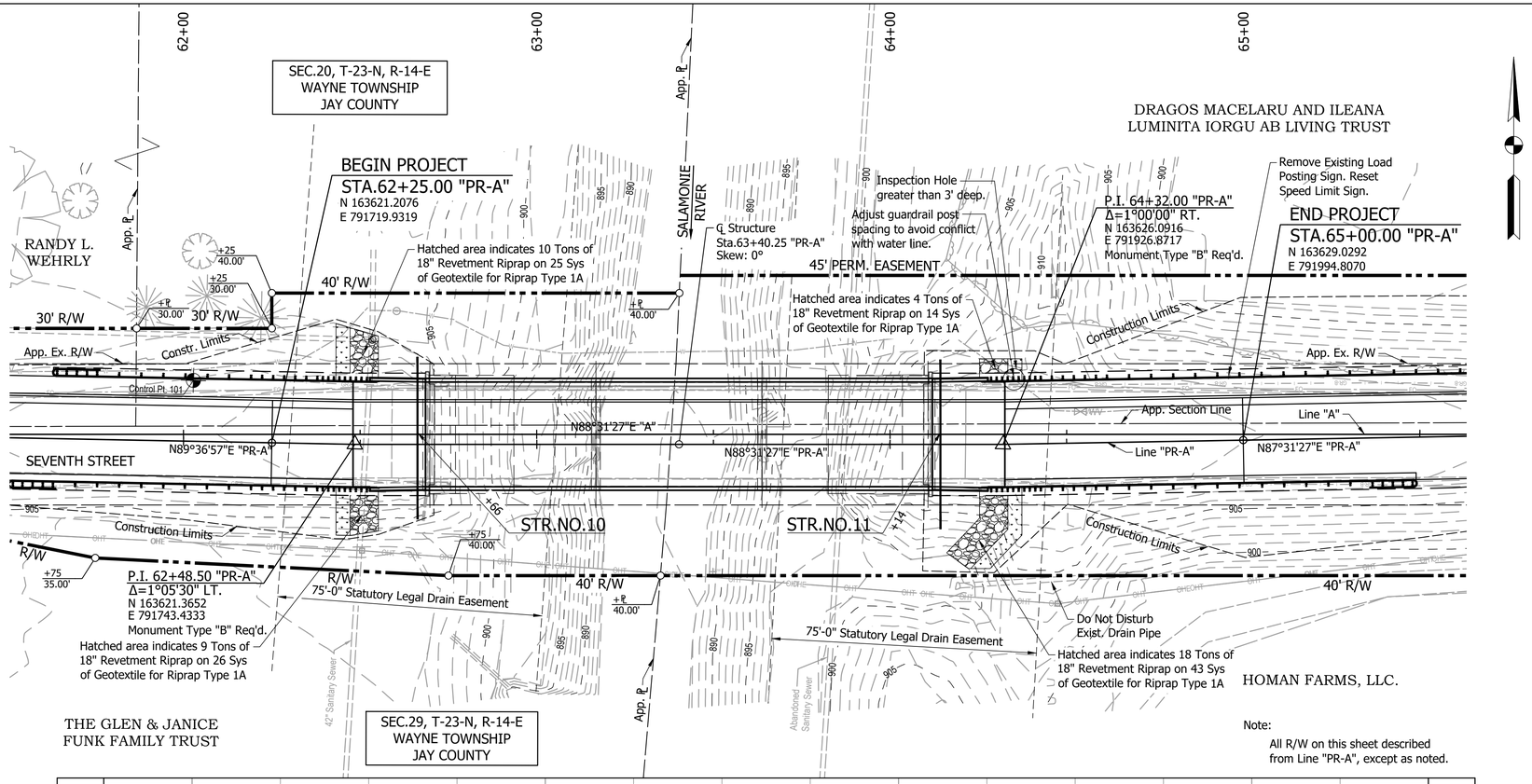
RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — 3/19/2025 DATE

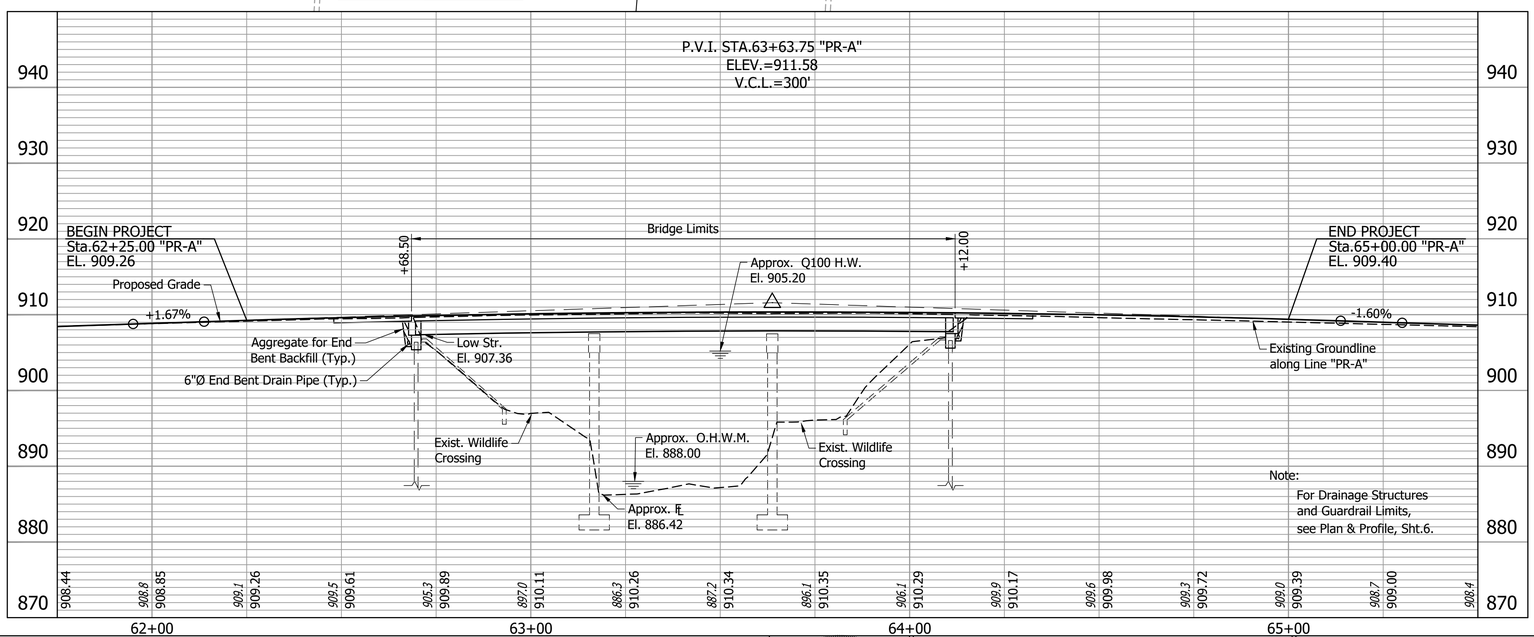
DESIGNED: RTW | DRAWN: LLG
CHECKED: SMS | CHECKED: RTW

JAY COUNTY, INDIANA

TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	JAY 139
VERTICAL SCALE	DESIGNATION
AS NOTED	
DRAWING NO.	SHEETS
	3-A of 37
CONTRACT	PROJECT
	091024





EXISTING STRUCTURE

Existing Structure is a 3 Span Prestressed Concrete Box Beam Bridge (3 @ 47'-0") with a 25'-0" Clear Roadway. (Superstructure to be replaced)

EARTHWORK SUMMARY

Common Excavation	118 Cys
Usable Common Excavation (50%)	59 Cys
Fill + 20%	526 Cys
Waterway Excavation	0 Cys
Usable Waterway Excavation (50%)	0 Cys
Borrow	467 Cys

The estimated quantities for Benching are 350 Cys for Cut and 420 Cys for Fill and are not included in the Earthwork Summary.

Quantities shown are to be used as final pay items.

HYDRAULIC DATA

Drainage Area	47.67 Sq Mi
Design Discharge, Q100	1950 cfs
High Water Elevation, Q100	El.905.20

EARTHWORK SUMMARY

Common Excavation	130 Cys
Usable Common Excavation (50%)	65 Cys
Fill + 20%	495 Cys
Waterway Excavation	0 Cys
Usable Waterway Excavation (50%)	0 Cys
Borrow	430 Cys

The estimated quantities for Benching are 350 Cys for Cut and 350 Cys for Fill and are not included in the Earthwork Summary.

Quantities shown are to be used as final pay items.

CONTINUOUS COMPOSITE PRESTRESSED
CONCRETE BOX BEAM BRIDGE
3 SPANS @ 47'-0"
24'-0" CLEAR ROADWAY SKEW: 0°
SEVENTH STREET OVER SALAMONIE RIVER
JAY COUNTY

4/9/2025 Earthwork Summary

RYAN THOMAS WHELCHEL
REGISTERED
No. PE12300271
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — 3/19/2025 DATE

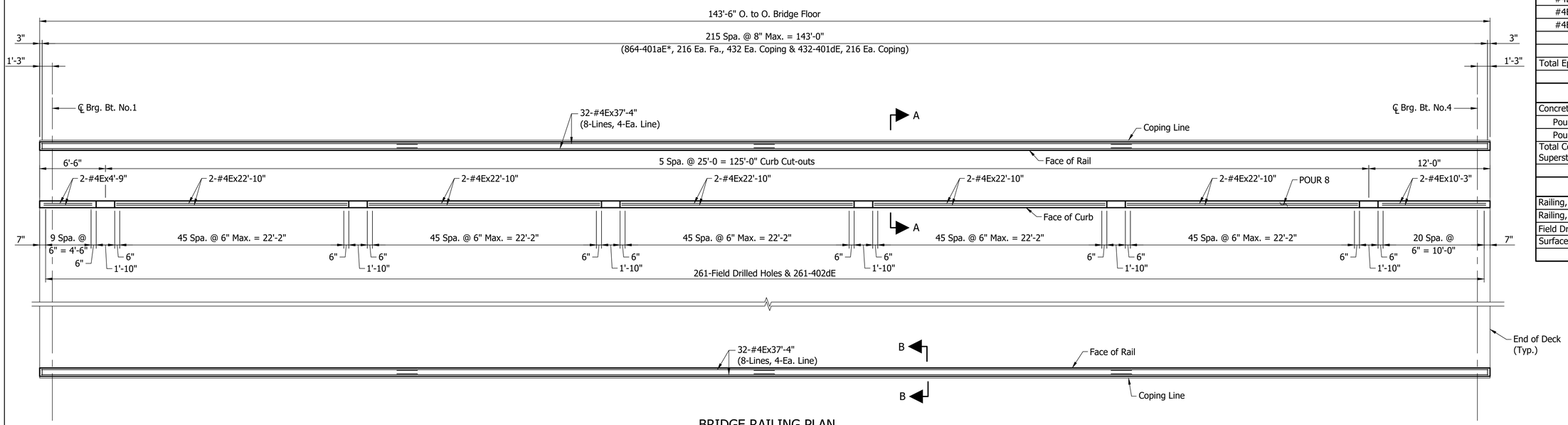
DESIGNED: RTW | DRAWN: LLG
CHECKED: SMS | CHECKED: RTW

JAY COUNTY, INDIANA

LAYOUT
LINE "PR-A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	JAY 139
VERTICAL SCALE	DESIGNATION
1" = 10'	
DRAWING NO.	SHEETS
C1 of C20	10A of 37
CONTRACT	PROJECT
	091024

lgrooms | p:\091024 - jay county as needed engineering\02bridge\04plans\091024 - sht. layout.dwg | layout | 4/9/2025 12:00:16 PM ||



BRIDGE RAILING PLAN

Scale: 3/16" = 1'-0"

BILL OF MATERIALS

BRIDGE RAILING

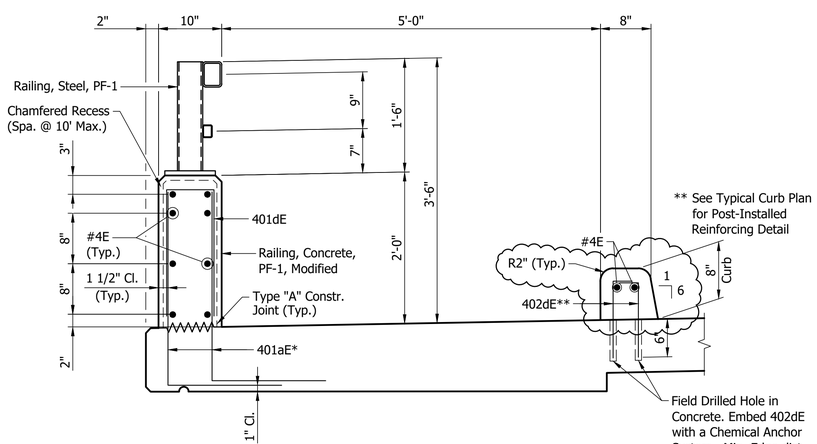
EPOXY COATED REINFORCING BARS			
SIZE or MARK	No. of BARS	LENGTH	WEIGHT (Lbs)
401dE	432	3'-11"	
402dE	286	2'-0"	
#4E	10	22'-10"	
#4E	2	10'-3"	
#4E	2	4'-9"	
Total #4E			1686
Total Epoxy Coated Reinforcing Bars			1686

CONCRETE	
Concrete Class "C" in Superstructure	
Pour No.8	2.2 Cys.
Pour No.9	0.6 Cys.
Total Concrete Class "C" in Superstructure	2.8 Cys.

MISCELLANEOUS	
Railing, Concrete, PF-1, Modified	287 Lft.
Railing, Steel, PF-1	306 Lft.
Field Drilled Hole	261 Ea.
Surface Seal (Est. Quantity)	1386 Sft.

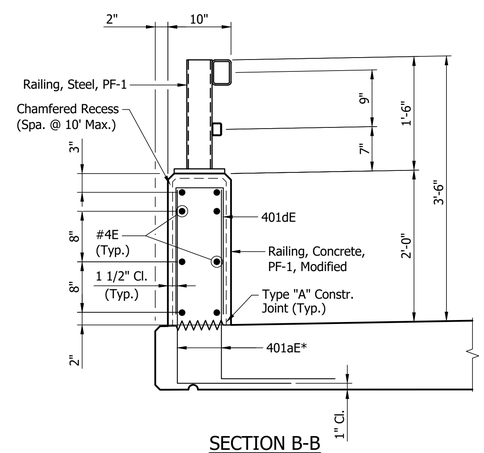
MINIMUM LAP LENGTHS

2'-0" (#4E to #4E)



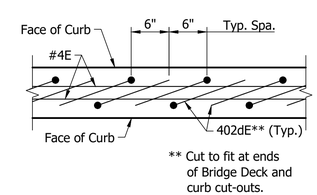
SECTION A-A

Scale: 1" = 1'-0"



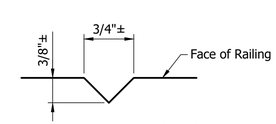
SECTION B-B

Scale: 1" = 1'-0"



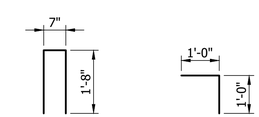
TYPICAL CURB PLAN FOR POST-INSTALLED REINFORCING

Scale: 1" = 1'-0"



CHAMFERED RECESS

No Scale



401dE x 3'-11" 402dE x 2'-0"

Notes:

For General Notes, Design Data, Typical Sections, see Dwgs.C4.

For Deck Plan, see Dwg.C10.

For Type "A" Constr. Joint, see Std.Dwg.No.E702-CJTA-01.

For Reinforcing Bar Notes, see Std.Dwg.No.E703-BRST-01.

"E" denotes Epoxy Coated Reinforcing Steel.

* Indicates reinforcing to be billed with Superstructure.

4/9/2025 Revised Curb Geometry

RYAN THOMAS WHELCHEL REGISTERED No. PE12300271 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — 3/19/2025 DATE

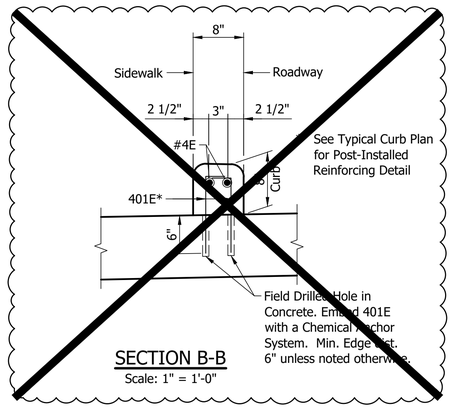
DESIGNED: LLS DRAWN: LLG

CHECKED: RTW CHECKED: RTW

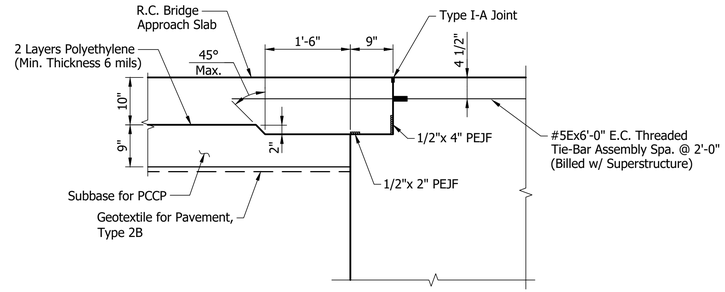
JAY COUNTY, INDIANA

BRIDGE RAILING DETAIL

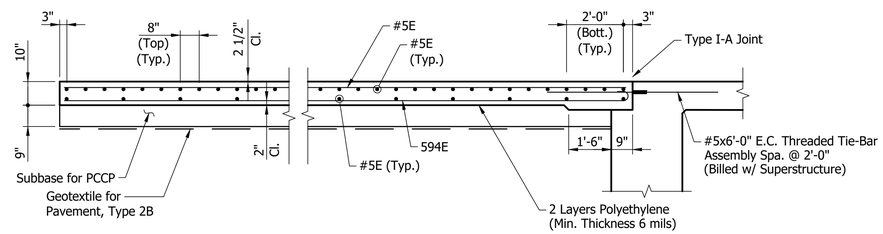
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	JAY 139
VERTICAL SCALE	DESIGNATION
AS NOTED	
DRAWING NO.	SHEETS
C16 of C20	25-A of 37
CONTRACT	PROJECT
	091024



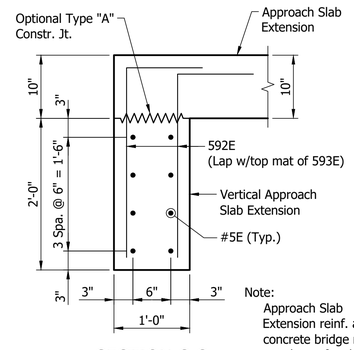
SECTION B-B
Scale: 1" = 1'-0"



PAVEMENT LEDGE DETAIL
Scale: 3/4" = 1'-0"

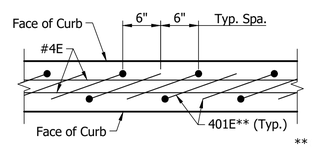


SECTION A-A
Scale: 3/8" = 1'-0"



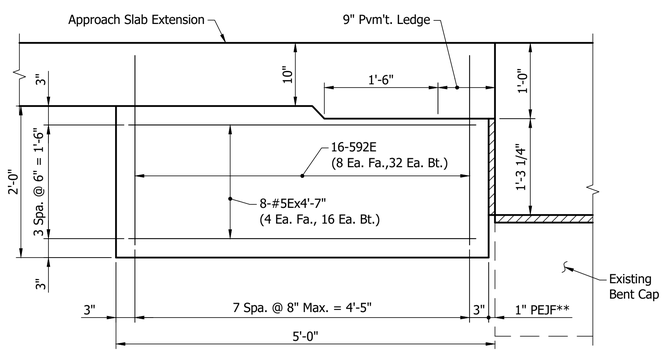
Note:
Approach Slab Extension reinf. and concrete bridge rail not shown for clarity.

SECTION C-C
Scale: 1" = 1'-0"



** Cut to fit at ends of Bridge Deck and curb cut-outs.

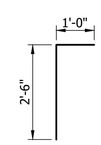
TYPICAL CURB PLAN FOR POST-INSTALLED REINFORCING
Scale: 1" = 1'-0"



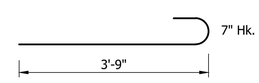
** PEJF shall extend from exterior face of vertical approach slab extension to edge of pavement ledge support.

VERTICAL APPROACH SLAB EXTENSION DETAIL
Scale: 1" = 1'-0"

401E x 2'-0"



592E x 3'-6"



593E x 4'-4"

594E x 20'-9"

BILL OF MATERIALS

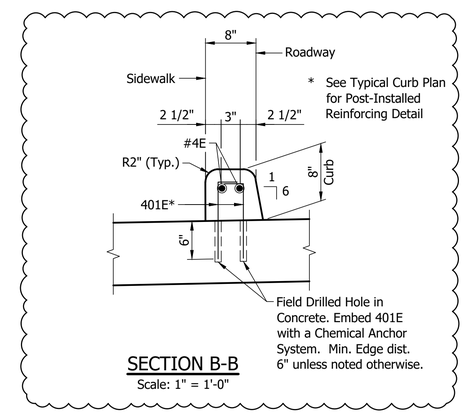
APPROACH SLAB BENT NO.1

EPOXY COATED REINFORCING BARS			
SIZE or MARK	No. of BARS	LENGTH	WEIGHT (Lbs)
592E	32	3'-6"	
593E	64	4'-4"	
594E	60	20'-9"	
#5E	16	4'-7"	
#5E	45	20'-2"	
#5E	42	29'-4"	
#5E	10	15'-6"	
Total #5E			4175
401E	37	2'-0"	
#4E	2	17'-3"	
#4E	2	0'-11"	
Total #4E			73
Total from Br. Railing Transition, TPF-1			1460
Total Epoxy Coated Reinforcing Bars			5708
CONCRETE			
Concrete Class "A" in Superstructure			0.8 Cys.
MISCELLANEOUS			
Reinforced Conc. Br. Approach, 10"			72 Sys.
Conc. Bridge Railing Transition, TPF-1			2 Ea.
Field Drilled Hole in Concrete			37 Ea.
Subbase for PCCP			18 Cys.
Geotextile for Pavement, Type 2B			69 Sys.
Longitudinal Grooving			66 Sys.
Surface Seal (Est. Quantity)			258 Sft.

BILL OF MATERIALS

APPROACH SLAB BENT NO.4

EPOXY COATED REINFORCING BARS			
SIZE or MARK	No. of BARS	LENGTH	WEIGHT (Lbs)
592E	32	3'-6"	
593E	64	4'-4"	
594E	60	20'-9"	
#5E	16	4'-7"	
#5E	45	20'-2"	
#5E	42	29'-4"	
#5E	10	15'-6"	
Total #5E			4175
401E	37	2'-0"	
#4E	2	11'-9"	
#4E	2	6'-3"	
Total #4E			73
Total from Br. Railing Transition, TPF-1			1460
Total Epoxy Coated Reinforcing Bars			5708
CONCRETE			
Concrete Class "A" in Superstructure			0.8 Cys.
MISCELLANEOUS			
Reinforced Conc. Br. Approach, 10"			72 Sys.
Conc. Bridge Railing Transition, TPF-1			2 Ea.
Field Drilled Hole in Concrete			37 Ea.
Subbase for PCCP			18 Cys.
Geotextile for Pavement, Type 2B			69 Sys.
Longitudinal Grooving			66 Sys.
Surface Seal (Est. Quantity)			258 Sft.



SECTION B-B
Scale: 1" = 1'-0"

Notes:

For General Notes, see Dwg.C4.
For locations of Sections A-A, B-B, C-C & additional details, see Dwg.C19.
For Reinforcing Bar Notes, see Std.Dwg.No.E703-BRST-01.
For additional Pavement Ledge Details, see Std.Dwg.No.E609-RCBA-04.
For Type I-A Joint, see Std.Dwg.No.E609-BRJT-01.
For Type "A" Construction Joint, see Std.Dwg.No.E702-CJTA-01.
"E" denotes Epoxy Coated Reinforcing Steel.
The Concrete for Curbs on the Approach Slabs are billed with the Bridge Railing and included in Concrete Class "C" in Superstructure.

4/9/2025 Revised Curb Geometry

RYAN THOMAS WHELCHEL REGISTERED No. PE12300271 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — 3/19/2025 DATE

DESIGNED: RTW | DRAWN: LLG
CHECKED: SMS | CHECKED: RTW

JAY COUNTY, INDIANA

APPROACH SLAB DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	JAY 139
VERTICAL SCALE	DESIGNATION
AS NOTED	
DRAWING NO.	SHEETS
C20 of C20	29A of 37
CONTRACT	PROJECT
	091024

PAVEMENT QUANTITIES AND APPROACH TABLE

LOCATION	DESCRIPTION (APPROACH TYPE OR CLASS)	WIDTH	LENGTH	RADII	DISTANCE BEYOND R/W/LINE	SURFACE BEYOND R/W LINE: COMPACTED AGGREGATE BASE	SURFACE BEYOND R/W LINE: HMA	SURFACE BEYOND R/W LINE: PCCP	GRADE 1	GRADE 2	EXCAVATION: CUT	EXCAVATION: FILL	HMA FOR APPROACHES: SURFACE	HMA FOR APPROACHES: INTERMED	HMA FOR APPROACHES: BASE	QA/QC HMA FOR ROADS: SURFACE 3, 58S 9.5MM	QA/QC HMA FOR ROADS: SURFACE 2, 70 9.5MM	QA/QC HMA FOR ROADS: INTERMD 3, 58S 19.0MM	QA/QC HMA FOR ROADS: INTERMD 5, 76 19.0MM	QA/QC HMA FOR ROADS: BASE 3, 58S 25.0MM	QA/QC HMA FOR ROADS: BASE 5, 64 25.0MM	ASPHALT MATERIAL FOR TACK COAT	JOINT ADHESIVE, SURFACE	JOINT ADHESIVE, INTERMEDIATE	WIDENING WITH HMA, TYPE B	COMPACTED AGGREGATE FOR BASE NO. 53: DEPTH 6"	COMPACTED AGGREGATE FOR BASE NO. 53: DEPTH 4"	COMPACTED AGGREGATE NO.53 SHOULDERS: DEPTH 10"	COMPACTED AGGREGATE NO.53 SHOULDERS: DEPTH 6"	MILLING TRANSITION	SUBGRADE TREATMENT TYPE IC	SUBGRADE TREATMENT, TYPE III	SIDEWALK, CONCRETE	CURB, CONCRETE, MODIFIED	INSPECTION HOLE GREATER THAN 3' DEEP	SIGN, GOUND MOUNTED, RESET	PAVEMENT REMOVAL	REMARKS
													LBS PER SYD			LBS PER SYD			LBS PER SYD																			
																165	165	275	385	660	330																		
		FT	FT	FT	FT	SYS	SYS	SYS	%	%	CYS	CYS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	SYS	LFT	LFT	TON	CYS	CYS	TONS	TONS	SYS	SYS	SYS	SYS	LFT	EACH	EACH	SYS	
Line "PR-A"																																							
Sta.61+00.00 to Sta.62+25.00	Incidental															26						306	125	125	25	12	8	45		278		65	70	125				
Sta.62+25.00 to Sta.62+68.50	Mainline															6		9		22		188	23	23		3	2	9			74		13	23			30	
Sta.64+12.00 to Sta.65+00.00	Mainline															15		26		62		549	68	68		7	5	31			216		38	68			30	
Sta.65+00.00 to Sta.67+00.00	Incidental															45		74				1068	200	200	29	19	13	53		489		110	112	200				
Sta.64+35.00	Mainline																																						
Sta.64+96.16	Mainline																																						
TOTALS																92		109		84		2111	416	416	54	41	28	138		767	290	175	233	416	1	1	60	

STRUCTURE DATA TABLE

STRUCTURE NUMBER	LOCATION: STATION	LOCATION: LEFT	LOCATION: CROSS	LOCATION: RIGHT	SIZE IN.	PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE AND TYPE	LENGTH LFT	SKEW	FLOW LINE: COVER FT	FLOW LINE: UP STREAM ELEV.	FLOW LINE: DOWN STREAM ELEV.	SERVICE LIFE YR	SITE DESIGNATION	pH	BACKFILL METHOD	STRUCTURE BACKFILL: TYPE	STRUCTURE BACKFILL: CYS	REVETMENT RIPRAP TONS	CONCRETE, CLASS A, FOR STRUCTURES CYS	GEOTEXTILES FOR RIPRAP, TYPE 1A SYS	PIPE END SECTION EA	GRATED BOX END SECTION: TYPE	GRATED BOX END SECTION: SLOPE	GRATED BOX END SECTION: EA.	SAFETY METAL END SECTION: SIZE	SAFETY METAL END SECTION: SLOPE	SAFETY METAL END SECTION: EA.	CONNECT TO STR.	REMARKS
10	62+67.75 "PR-A"		X		6	1		46																						6" End Bent Drain Pipe
11	64+12.75 "PR-A"		X		6	1		48																						6" End Bent Drain Pipe

R/W MARKER TABLE

LT./RT.	STATION	OFFSET (ft)	NO. REQ'D.	FLUSH MOUNT
Lt.	20+00 "A"	30	1	Yes
Rt.	21+00 "A"	20	1	Yes
Rt.	21+75 "A"	35	1	Yes
Lt.	22+25 "A"	30	1	Yes
Lt.	22+25 "A"	40	1	Yes
Rt.	22+75 "A"	40	1	No
Rt.	26+00 "A"	40	1	No
Rt.	26+50 "A"	20	1	Yes
TOTALS			8	

GUARDRAIL SUMMARY TABLE

LOCATION: FROM STATION	LOCATION: TO STATION	LEFT	MEDIAN LEFT	MEDIAN RIGHT	RIGHT	MGS W-BEAM GUARDRAIL LENGTH: STANDARD POST AT 6 FT. 3 IN. SPA.	STANDARD POST AT 3 FT. 1.5 IN. SPA.	DOUBLE FACED AT 6 FT. 3 IN. SPA.	DOUBLE FACED AT 3 FT. 1.5 IN. SPA.	SHOP CURVED AT ____ FT. SPA.	MGS GUARDRAIL LONG SPAN, TYPE 1	MGS GUARDRAIL LONG SPAN, TYPE 2	GUARDRAIL FLARE RATE	MGS GUARDRAIL TRANSITION WITH CURB	MGS GUARDRAIL TRANSITION WITHOUT CURB	MGS CABLE TERMINAL ANCHOR	GUARDRAIL END TREATMENT TYPE OS	MGS GURADRAIL HEIGHT TRANSITION	CURVED W-BEAM GUARDRAIL SYSTEM: TERMINAL SYSTEM	TERMINAL SYSTEM EACH	CONNECTOR SYSTEM	CONNECTOR SYSTEM EACH	GUARDRAIL REMOVE	GUARDRAIL RESET	IMPACT ATTENUATOR TYPE ____	HAND DIG GUARDRAIL POST HOLES	REMARKS
						LFT	LFT	LFT	LFT	LFT	EACH	EACH		EACH	EACH	EACH	EACH	EACH	TYPE	EACH	TYPE	EACH	LFT	LFT	EACH	EACH	
61+62.84 "PR-A"	62+53.46 "PR-A"	X													1		1						53				
61+50.34 "PR-A"	62+53.46 "PR-A"				X	12.5									1		1						115				
64+27.05 "PR-A"	66+48.93 "PR-A"	X				131.25									1		1						240			1	
64+27.05 "PR-A"	65+48.93 "PR-A"				X	31.25									1		1						152				
TOTALS						175									4		4						560			1	

MONUMENT TABLE

LOCATION	OFFSET	TYPE	BENCHMARK POST
LINE "PR-A"			
Sta.61+00.00 "PR-A"	CL	B	
Sta.62+48.50 "PR-A"	CL	B	
Sta.62+63.00 "PR-A"	19.50 Lt.		1
Sta.64+32.00 "PR-A"	CL	B	
Sta.65+94.15 "PR-A"	CL	B	
Sta.67+00.00 "PR-A"	CL	B	
TOTAL		5	1

TEMPORARY EROSION CONTROL TABLE

LOCATION	TEMPORARY SILT FENCE	DRAINAGE BARRIER AT SWALE	TEMPORARY INLET PROTECTION	TEMPORARY SLOPE DRAIN	CHECK DAM NO.REQ'D.	CHECK DAM SPA.	TEMPORARY CHECK DAM, REVETMENT RIPRAP	TEMPORARY CHECK DAM, REVETMENT RIPRAP, MODIFIED	TEMPORARY CHECK DAM, TRANSVERSABLE	TEMPORARY FILTER BERM	TEMPORARY SEDIMENT TRAP	TEMPORARY GEOTEXTILE	TEMPORARY FILTER SOCK	TEMPORARY FILTER STONE	SEDIMENT, REMOVE	NO.2 STONE	TEMPORARY MULCH	TEMPORARY SEED MIXTURE	TEMPORARY MULCH STABILIZATION, TYPE ____	MANUFACTURED SURFACE PROTECTION PRODUCT
STATION TO STATION	LFT	LFT	EACH	LFT	EACH	LFT	TON	TON	LFT	LFT	TON	SYS	LFT	TON	CYS	TON	TON	LBS	SYS	SYS
Line "PR-A"																				
61+00.00 to 62+68.50 Lt.													333		3		0.1	4		517
61+00.00 to 62+68.50 Rt.													341		3		0.1	5		377
64+12.00 to 67+00.00 Lt.													191		2		0.4	19		112
64+12.00 to 67+00.00 Rt.													192		2		0.4	14		185
TOTAL													1057		10		1.0	42		1191

PERMANENT EROSION CONTROL SUMMARY TABLE

LOCATION: FROM STATION	LOCATION: TO STATION	LEFT	MEDIAN	RIGHT	PAVEMENT SIDE DITCH: ACTUAL LENGTH	PAVEMENT SIDE DITCH: CUT OFF WALLS (8 FT EQUIV. LENGTH EACH)	RIPRAP DITCH: RIPRAP REVETMENT	RIPRAP DITCH: RIPRAP, UNIFORM	RIPRAP DITCH: GEOTEXTILE FOR RIPRAP TYPE 1A	SODDING: SODDING AT BRIDGE CONE	SODDING: TOTAL SODDING	NURSERY SODDING FOR LAWNS	SEEDING: SEED MIXTURE FLOODPLAIN	SEEDING: MULCHING MATERIAL	MOB. & DEMOB. FOR SEEDING	EROSION CONTROL BLANKETS	MULCHED SEEDING, TYPE U	WATER	COMPACTED AGGREGATE, NO.2
					LFT	EACH	TONS	TONS	SYS	SYS	SYS	SYS	LBS	TONS	EACH	SYS	SYS	KGAL	CYS
Sta.61+00.00 "PR-A"	Sta.62+68.50 "PR-A"	X					10		25	7	7	70	1	0.02		85		0.4	2
Sta.61+00.00 "PR-A"	Sta.62+68.50 "PR-A"			X			9		26	6	6	107	1	0.03		123		0.5	3
Sta.64+12.00 "PR-A"	Sta.67+00.00 "PR-A"	X					4		14	2	2		1	0.02		457	441	0.1	2
Sta.64+12.00 "PR-A"	Sta.67+00.00 "PR-A"			X			18		43	12	12		1	0.03		337	303	0.1	3
TOTALS							41		108	27	27	177	4	0.1	1	1002	744	1.1	10

4/9/2025 Revised Compacted Aggregate Base

RYAN THOMAS WHELCHEL REGISTERED No. PE12300271 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — 3/19/2025 DATE

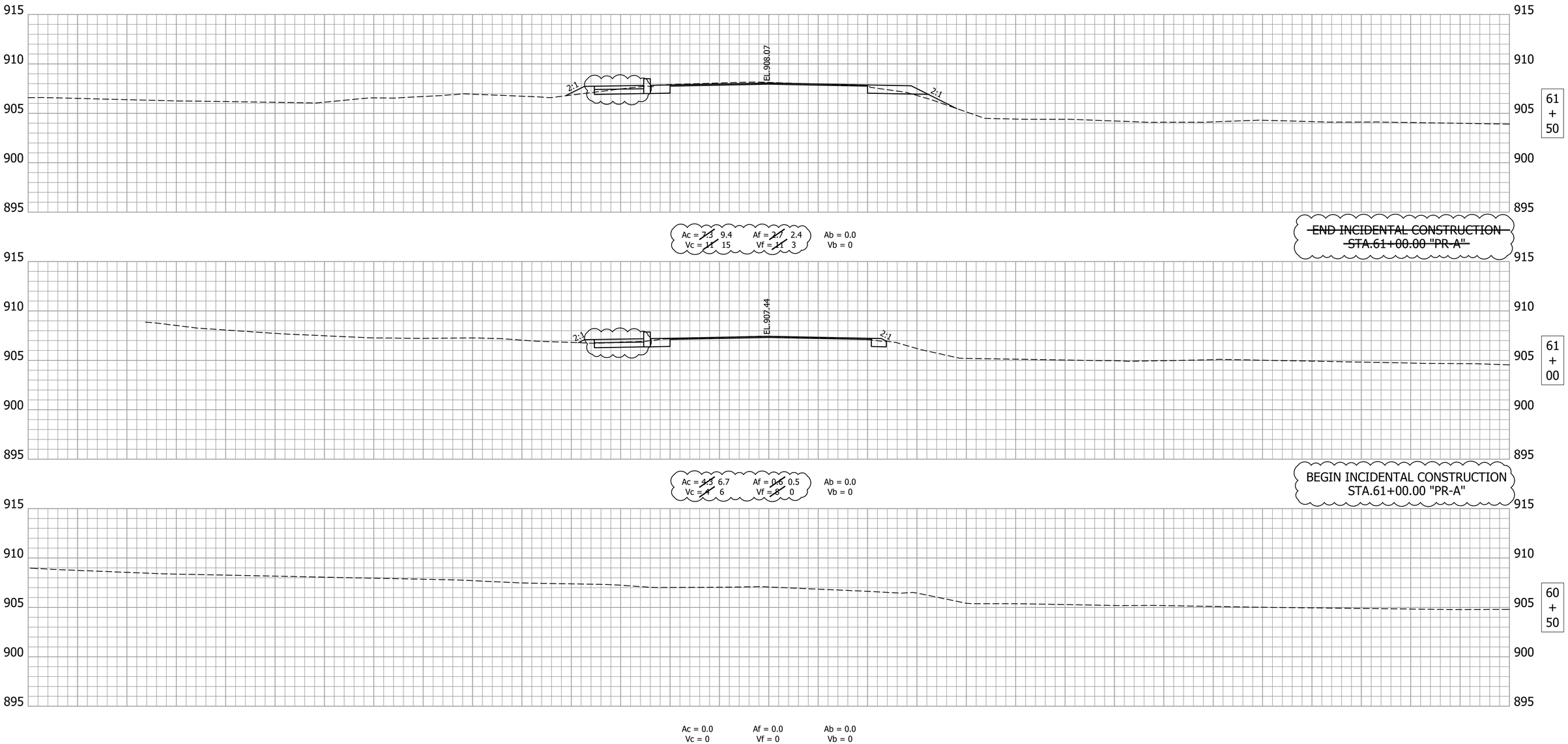
DESIGNED: RTW | DRAWN: NW

CHECKED: SMS | CHECKED: RTW

JAY COUNTY, INDIANA

ROAD SUMMARY OF QUANTITIES

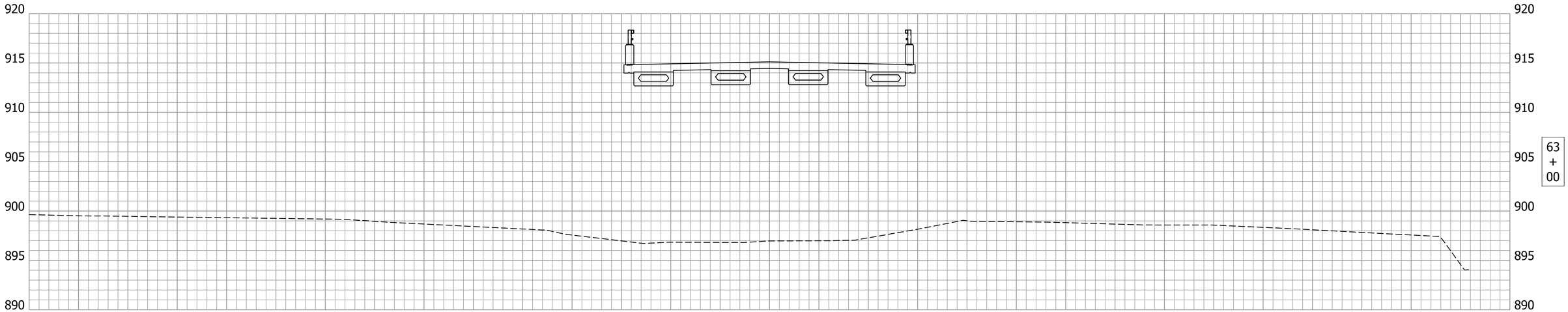
HORIZONTAL SCALE	BRIDGE FILE
N/A	JAY 139
VERTICAL SCALE	DESIGNATION
N/A	
DRAWING NO.	SHEETS
	31A of 37
CONTRACT	PROJECT
	091024



4/9/2025 Revised Earthwork Quantities

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER	3/19/2025 DATE	JAY COUNTY, INDIANA	HORIZONTAL SCALE 1" = 5' / BRIDGE FILE JAY 139 / VERTICAL SCALE 1" = 5' / DESIGNATION
DESIGNED: RTW / DRAWN: LLG		CROSS SECTIONS LINE "PR-A"	DRAWING NO. / SHEETS 32A of 37
CHECKED: LLS / CHECKED: LLS			CONTRACT / PROJECT 091024

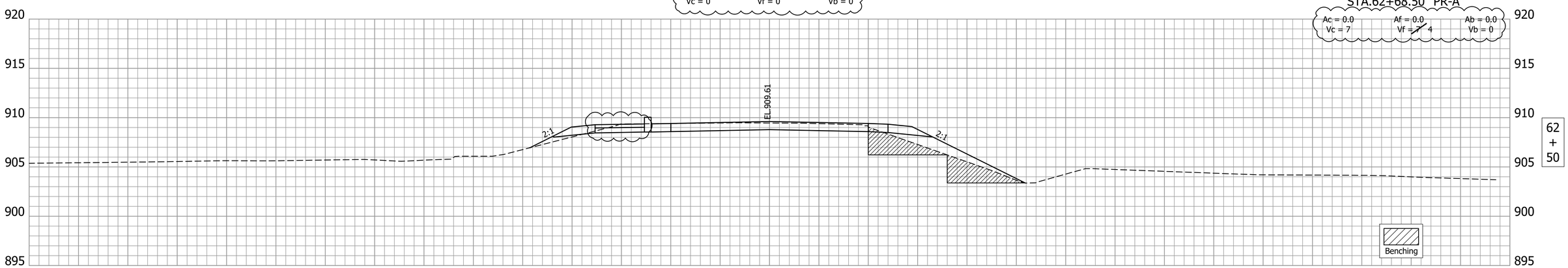
lgrooms | p:\091024 - jay county as needed engineering\02bridge\04plans\091024 - sht. cross sections.dwg | xs1 | 4/9/2025 12:00:56 PM ||



Ac = 0.0 Af = 0.0 Ab = 0.0
Vc = 0 Vf = 0 Vb = 0

BEGIN BRIDGE LIMITS
STA.62+68.50 "PR-A"

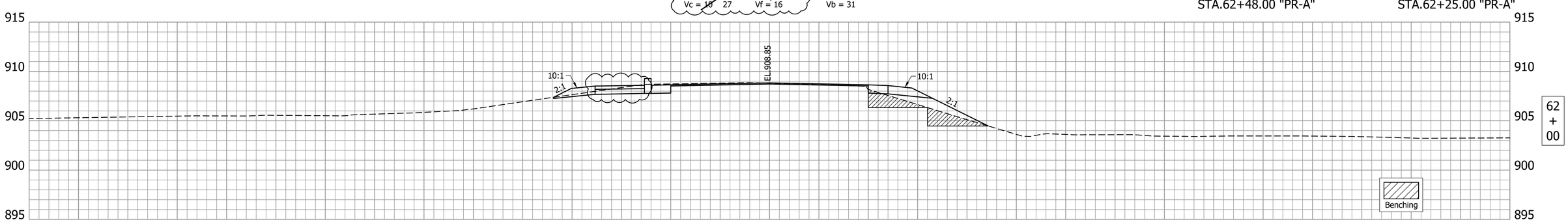
Ac = 0.0 Af = 0.0 Ab = 0.0
Vc = 7 Vf = ~~7~~ 4 Vb = 0



Ac = ~~18.4~~ 20.7 Af = ~~10.9~~ 10.7 Ab = 22.6
Vc = ~~10~~ 27 Vf = 16 Vb = 31

BEGIN PAVING EXCEPTION
STA.62+48.00 "PR-A"

BEGIN PROJECT
STA.62+25.00 "PR-A"

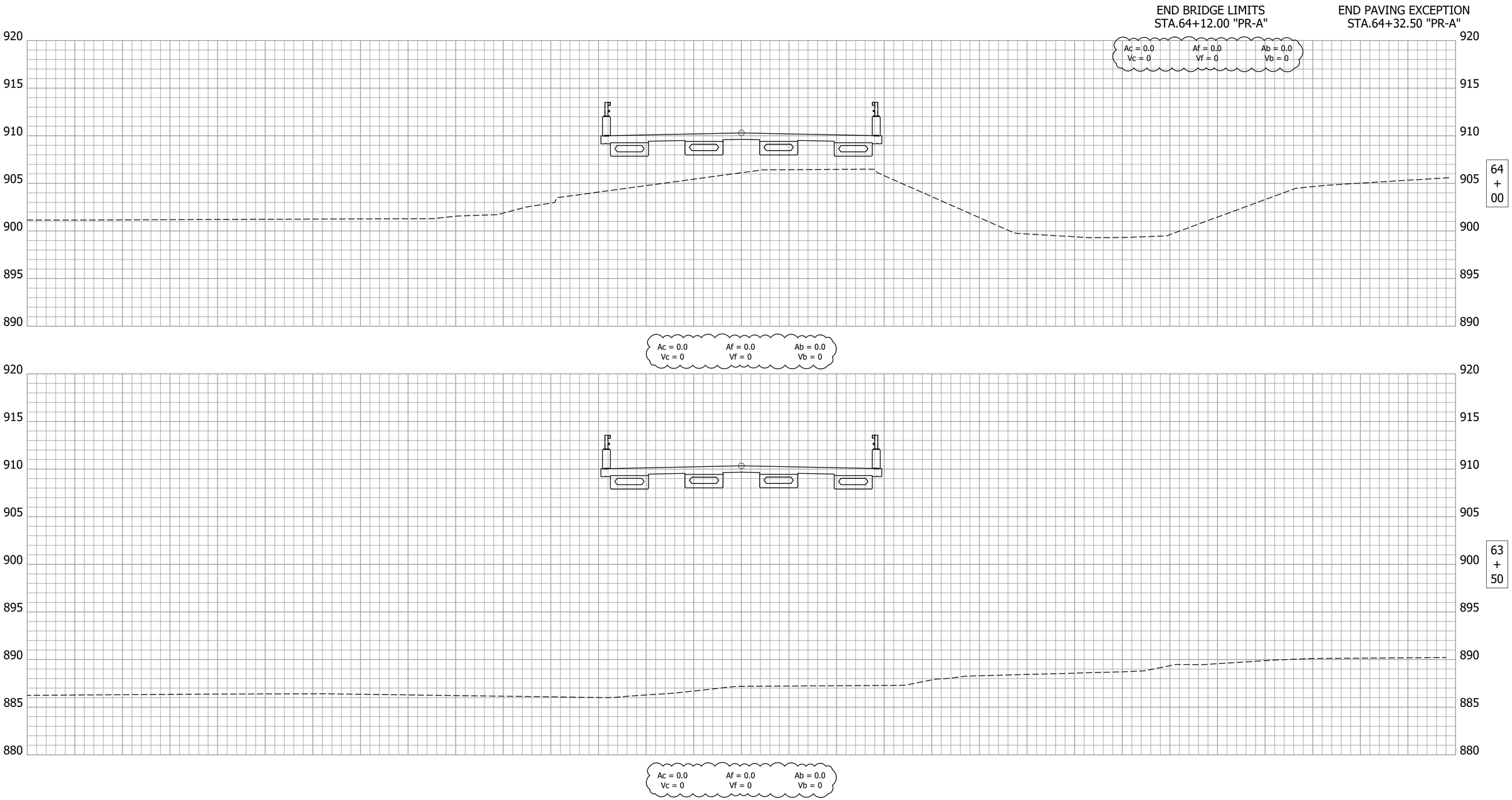


Ac = ~~6.5~~ 8.8 Af = 6.0 Ab = 11.3
Vc = ~~13~~ 17 Vf = 8 Vb = 10

4/9/2025 Revised Earthwork Quantities

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE 3/19/2025	JAY COUNTY, INDIANA	HORIZONTAL SCALE 1" = 5'	BRIDGE FILE JAY 139
		VERTICAL SCALE 1" = 5'	DESIGNATION
DESIGNED: RTW / DRAWN: LLG	CROSS SECTIONS LINE "PR-A"	DRAWING NO.	SHEETS 33A of 37
CHECKED: LLS / CHECKED: LLS		CONTRACT	PROJECT 091024

lgrooms | p:\091024 - jay county as needed engineering\02bridge\04plans\091024 - sht. cross sections.dwg | xs2 | 4/9/2025 12:00:56 PM ||



4/9/2025 Revised Earthwork Quantities

RECOMMENDED FOR APPROVAL _____ 3/19/2025
DESIGN ENGINEER DATE

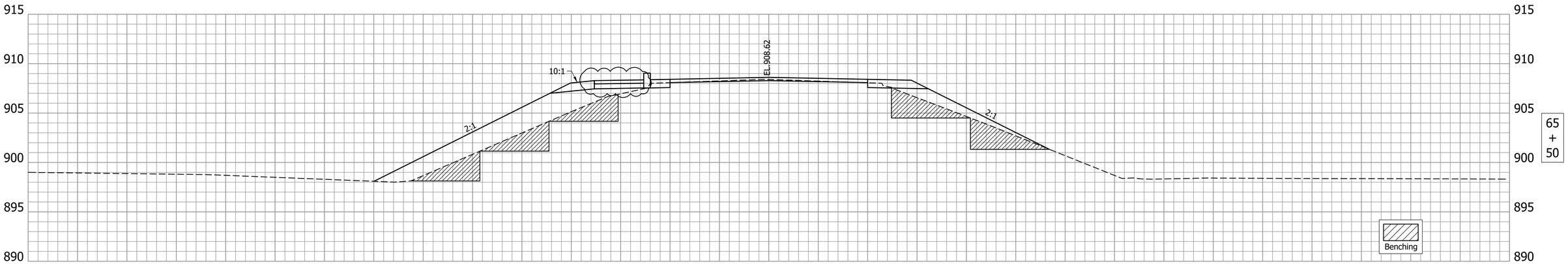
DESIGNED: LLS DRAWN: LLG
CHECKED: RTW CHECKED: LLS

JAY COUNTY, INDIANA

CROSS SECTIONS
LINE "PR-A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	JAY 139
VERTICAL SCALE	DESIGNATION
1" = 5'	
DRAWING NO.	SHEETS
	34A of 37
CONTRACT	PROJECT
	091024

lgrooms | p:\091024 - jay county as needed engineering\02bridge\04plans\091024 - sht. cross sections.dwg | xs3 | 4/9/2025 12:00:57 PM ||

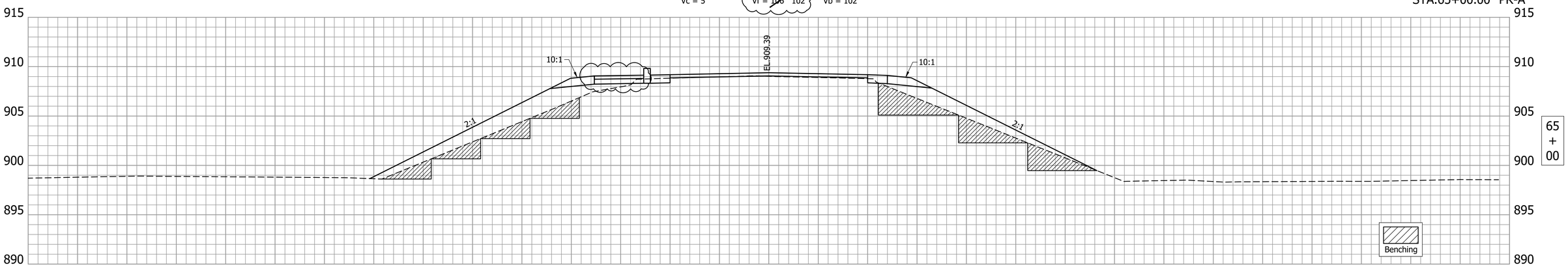


Ac = 3.2
Vc = 5

Af = 61.3 58.9
Vf = 106 102

Ab = 56.4
Vb = 102

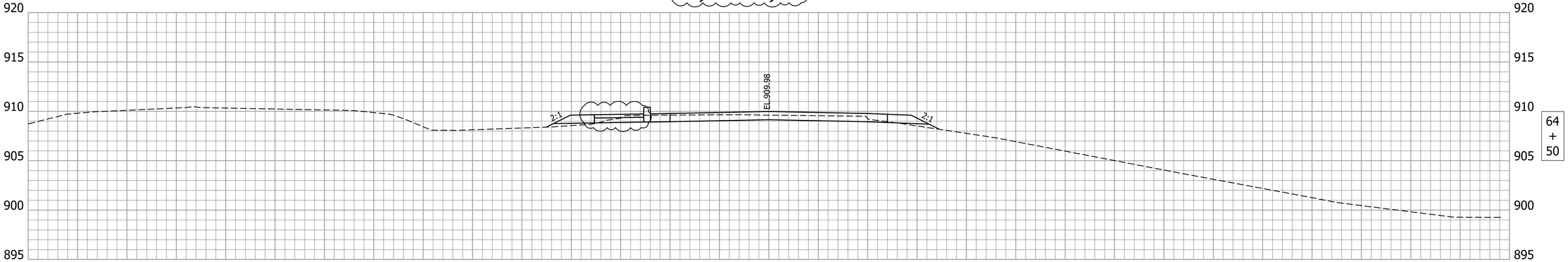
END PROJECT
STA.65+00.00 "PR-A"



Ac = 1.6 2.0
Vc = 14 16

Af = 52.7 51.0
Vf = 51 49

Ab = 53.5
Vb = 50



Ac = 13.5 15.2
Vc = 10 11

Af = 2.6 1.8
Vf = 2 1

Ab = 0.0
Vb = 0

4/9/2025 Revised Earthwork Quantities

RECOMMENDED FOR APPROVAL _____ 3/19/2025
DESIGN ENGINEER DATE

DESIGNED: RTW
DRAWN: LLG
CHECKED: LLS
CHECKED: LLS

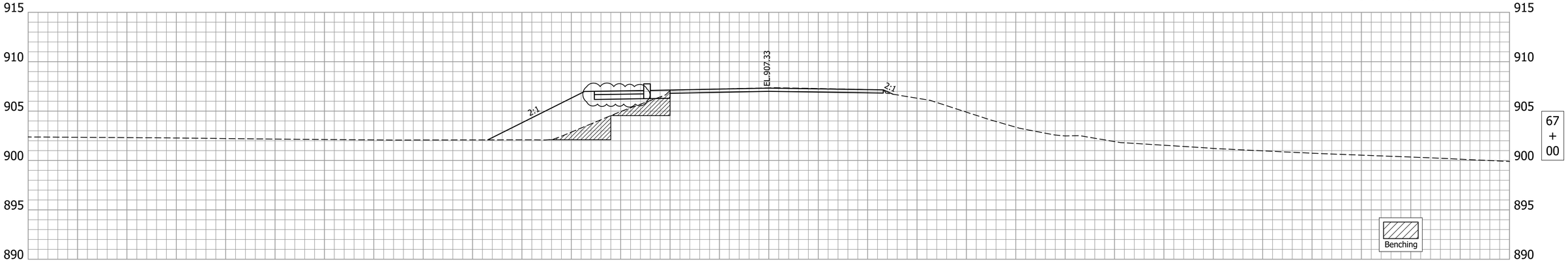
JAY COUNTY, INDIANA

CROSS SECTIONS
LINE "PR-A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	JAY 139
VERTICAL SCALE	DESIGNATION
1" = 5'	
DRAWING NO.	SHEETS
	35A of 37
CONTRACT	PROJECT
	091024

lgrooms | p:\091024 - jay county as needed engineering\02bridge\04plans\091024 - sht. cross sections.dwg | xs4 | 4/9/2025 12:00:57 PM ||

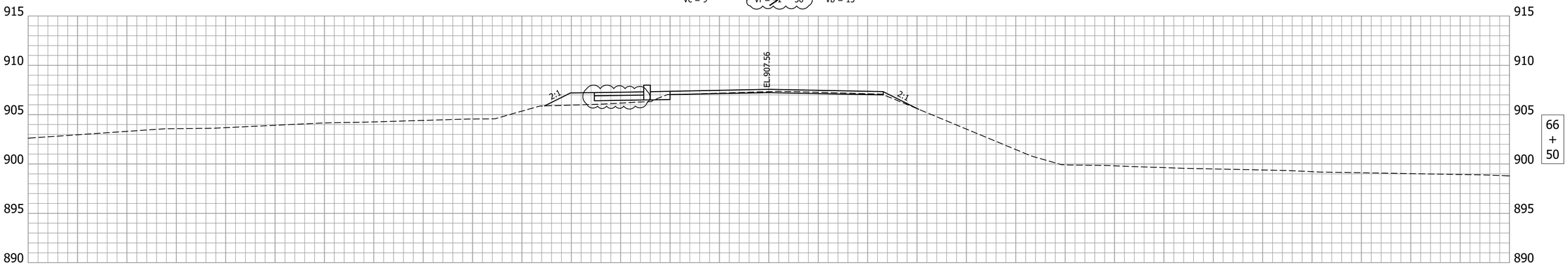
END INCIDENTAL CONSTRUCTION
STA.67+00.00 "PR-A"



Ac = 7.5
Vc = 9

Af = ~~34.8~~ 32.4
Vf = ~~41~~ 36

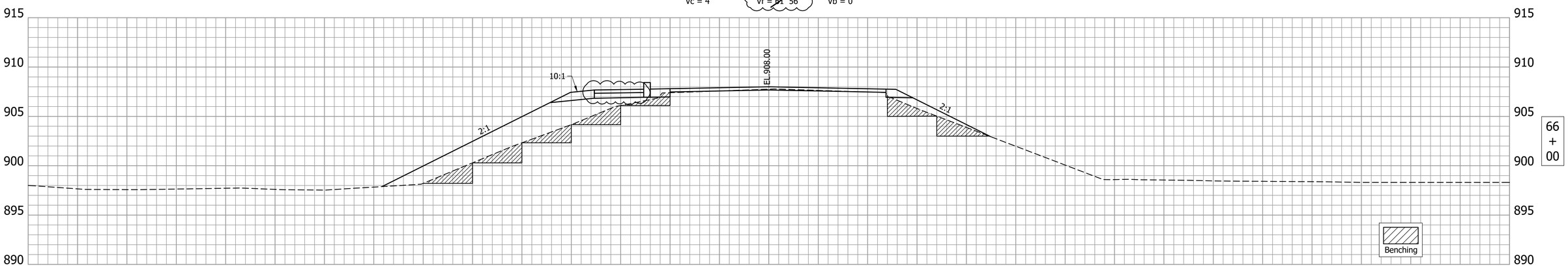
Ab = 14.1
Vb = 13



Ac = 2.4
Vc = 4

Af = ~~9.2~~ 6.7
Vf = ~~61~~ 56

Ab = 0.0
Vb = 0



Ac = 2.2
Vc = 5

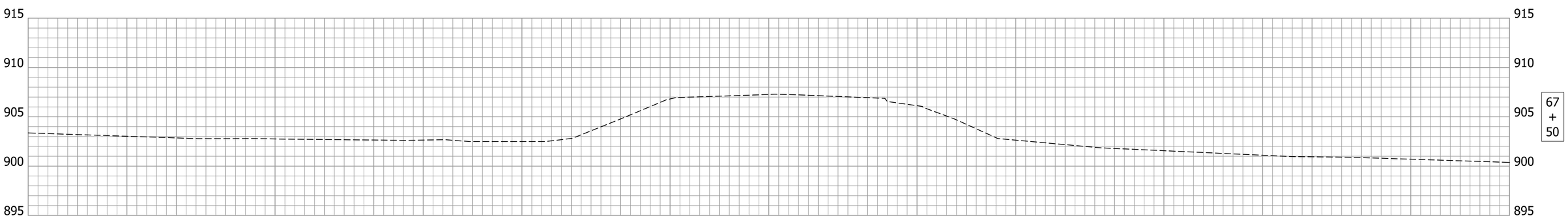
Af = ~~56.6~~ 54.1
Vf = ~~109~~ 105

Ab = 33.4
Vb = 83

4/9/2025 Revised Earthwork Quantities

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER	3/19/2025 DATE	JAY COUNTY, INDIANA	HORIZONTAL SCALE: 1" = 5' / BRIDGE FILE: JAY 139
			VERTICAL SCALE: 1" = 5' / DESIGNATION:
DESIGNED: RTW	DRAWN: LLG	CROSS SECTIONS LINE "PR-A"	DRAWING NO. / SHEETS: 36A of 37
CHECKED: LLS	CHECKED: LLS		CONTRACT / PROJECT: 091024

lgrooms | p:\091024 - jay county as needed engineering\02bridge\04plans\091024 - sht. cross sections.dwg | xs5 | 4/9/2025 12:00:58 PM ||



Ac = 0.0 Af = 0.0 Ab = 0.0
Vc = ~~7~~ 8 Vf = ~~32~~ 30 Vb = 13

4/9/2025 Revised Earthwork Quantities

RECOMMENDED FOR APPROVAL _____ 3/19/2025
DESIGN ENGINEER DATE

DESIGNED: RTW DRAWN: LLG
CHECKED: LLS CHECKED: LLS

JAY COUNTY, INDIANA

CROSS SECTIONS
LINE "PR-A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	JAY 139
VERTICAL SCALE	DESIGNATION
1" = 5'	
DRAWING NO.	SHEETS
	37A of 37
CONTRACT	PROJECT
	091024

lgrooms | p:\091024 - jay county as needed engineering\02bridge\04plans\091024 - sht. cross sections.dwg | xs6 | 4/9/2025 12:00:59 PM ||

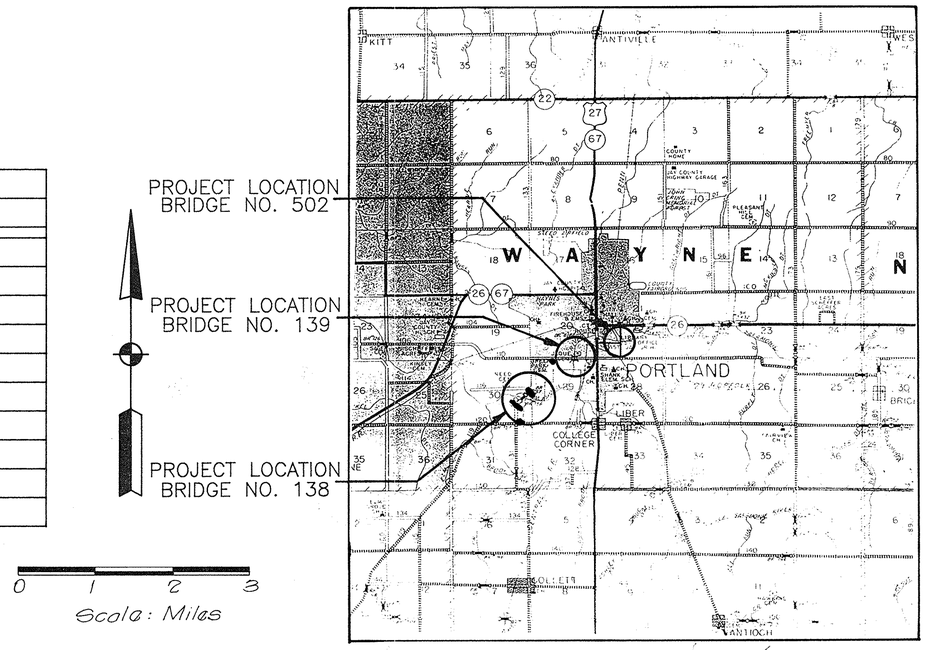
Revisions to Jay 139 Contract Documents

Existing Plan File

egis GROUP | BLN BEAM·LONGEST·NEFF

BRIDGE REPAIR PLANS
JAY COUNTY
BRIDGES NO. 138, 139, AND 502

INDEX	
SHEET	DESCRIPTION
1	TITLE SHEET
2	PLAN & PROFILE, Jay 138
3	GENERAL PLAN & DETAILS
4	PLAN & PROFILE, Jay 139
5	GENERAL PLAN & DETAILS
6	CONSTRUCTION DETAILS
7	PLAN & PROFILE, Jay 502
8	GENERAL PLAN
9	SPECIAL PROVISIONS
10	



CERTIFIED BY: [signature]

DATE: June 12, 1992

ROBERT A. WINSLOW REGISTERED No 11766 STATE OF INDIANA PROFESSIONAL ENGINEER

APPROVED BY COUNTY COMMISSIONERS

PRESIDENT John D. Mink

MEMBER Ernest Muehlenkamp

MEMBER Mike M. Miller, Jr.

AUDITOR Jane Ann Runyon

ATTESTED DATE: June 8, 1992

RECOMMENDED BY COUNTY ENGINEER

Daniel W. Watson, P.E.

DATE: 6-8-92

PLANS PREPARED BY:

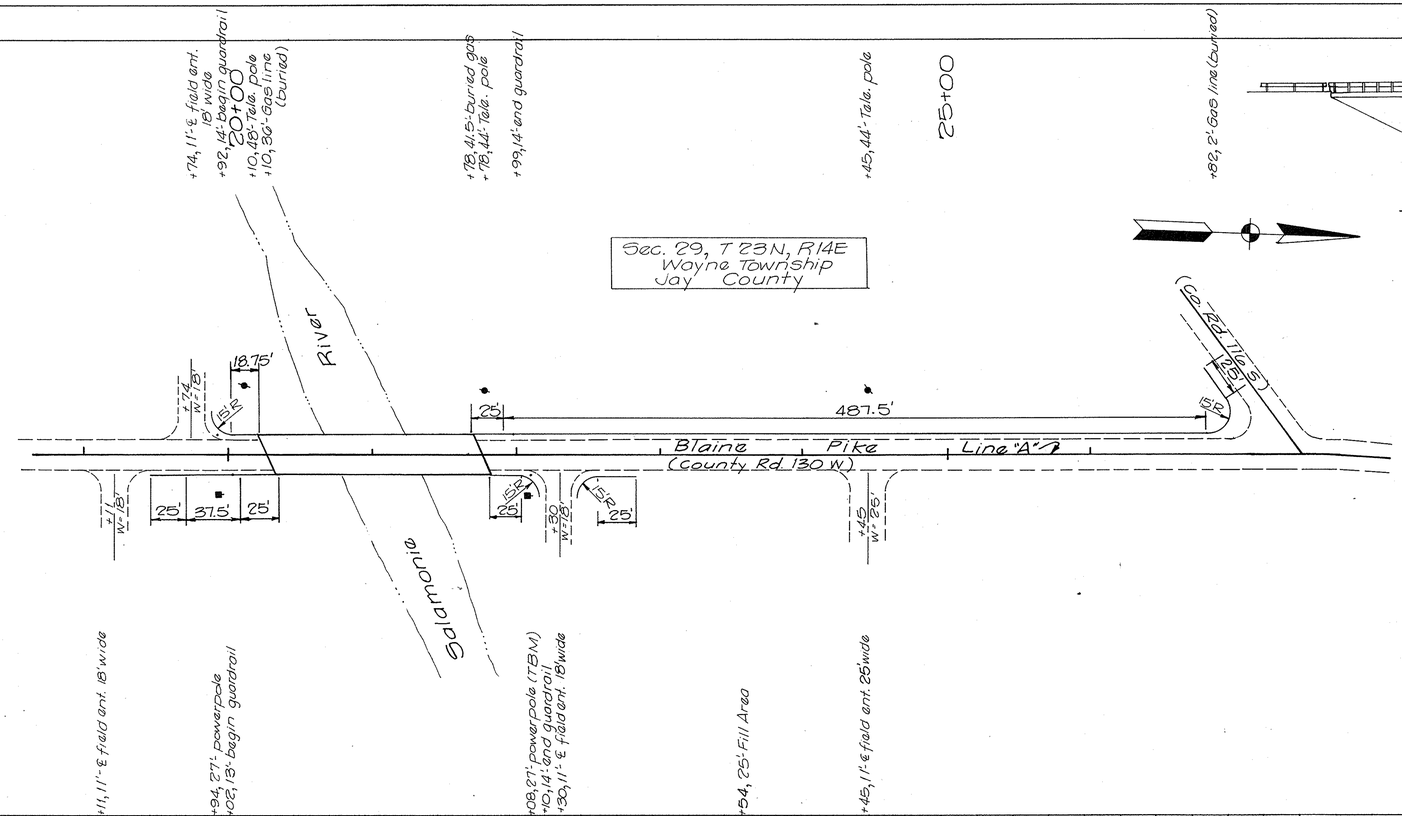
AECON
ENGINEERS & CONSULTANTS

P.O. BOX 367, SALT CREEK PARK
NASHVILLE, INDIANA 47448

PHONE (812) 988-2940
FAX (812) 988-0943

PLAN			
NOTE BOOK	SURVEYED (G.V.E.)	BY T.G.	DATE 5/92
	PLOTTED	TS	5/92
	ALIGNMENT CHECKED	DB	5/92
No.	RT. OF WAY CHECKED		

PROFILE			
NOTE BOOK	SURVEYED (G.V.E.)	BY T.G.	DATE 5/92
	PLOTTED	TS	5/92
	GRADES CHECKED	DB	5/92
No.	B. M.'s NOTED		
	STRUCTURE NOTATIONS CHECKED		



Utilities

- Jay County REMC
  W. Water & Hwy 67
  Portland, Ind. 47371
  (219) 726-7121 attn: Doug Shidler
- United Telephone
  248 W. Monroe St.
  Decatur, Ind. 46733
  (219) 724-1570 attn. Bob Keller
- Ohio Valley Gas Co.
  P.O. Box 1068
  Portland, Ind. 47371
  (219) 726-8114 attn: Joe Jobe

TBM - Bolt spike in pwr. pole.
Sta. 22+08, 87' rt. Elev. 100.00

a= 18.75' of W-beam rail, @ 6'-3 spa. plus 25 l.f. of guardrail shop curved @ 15' radius plus terminal end. (left)

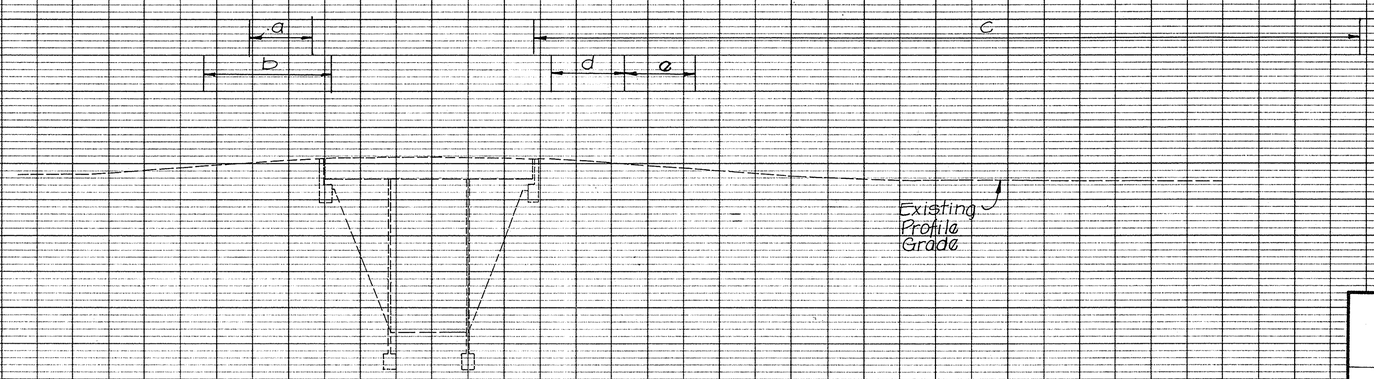
b= 25'-0 W-beam rail @ 6'-3 spa. plus 37'-6 of W-beam @ 12'-6 spa. plus 25'-0 buried end. (right)

c= 25'-0 W-beam rail @ 6'-3 spa. plus 487'-6 of W-beam @ 12'-6 spa. plus 37.5 l.f. of guardrail shop curved @ 15' radius, plus 25'-0 buried end (left)

d= 25'-0 W-beam rail @ 6'-3 spa, plus 25 l.f. of guardrail shop curved @ 15 radius plus Terminal end (right)

e= Terminal end plus 25 l.f. of guardrail shop curved @ 15 radius plus 25'-0 buried end. (right)

Note:
1) All shop curved Guardrail shall have posts spaced at 6'-3", and the Pay length shall be 1.3 times the actual length installed.
2) Cost of Terminal ends to be included in the cost of the various guardrail items.
3) Pay lengths are measured from end posts.



AECON
ENGINEERS & CONSULTANTS

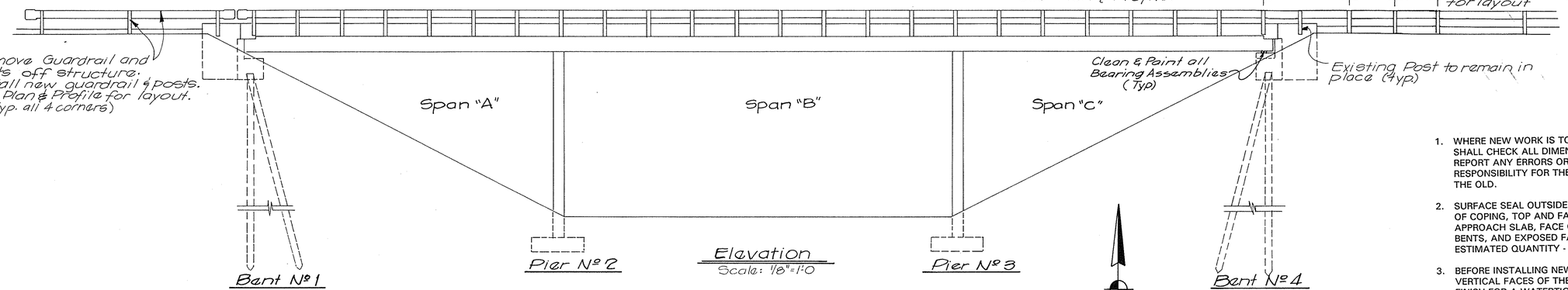
Plan & Profile
Bridge Nº 138
Jay County, Ind.

DESIGNED	RAW	5/92	SCALE	1" = 50'
DRAWN	CRE	5/92	JOB. NO.	38138.00
CHECKED	RAW	6/92	SHEET	2 of 9
CERTIFIED				

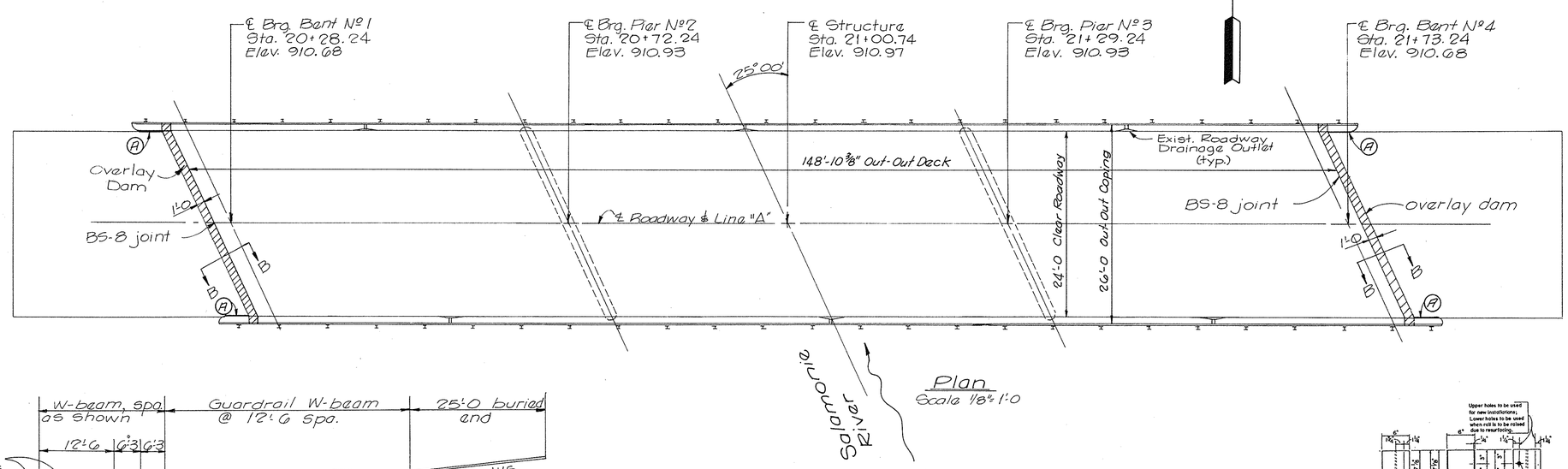
19 20 21 22 23 24 25 26

PLATE 1 - PLAN - PROFILE B. R. R. STANDARD
1975

TP114



Elevation
Scale: 1/8"=1'-0



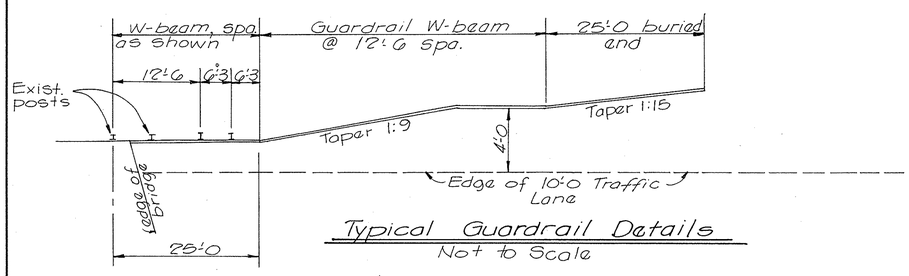
Plan
Scale 1/8"=1'-0

Solomon River

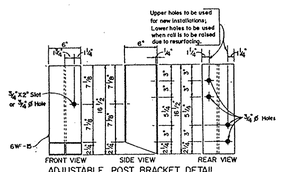
(A) Clean and Reseal Joints

GENERAL NOTES

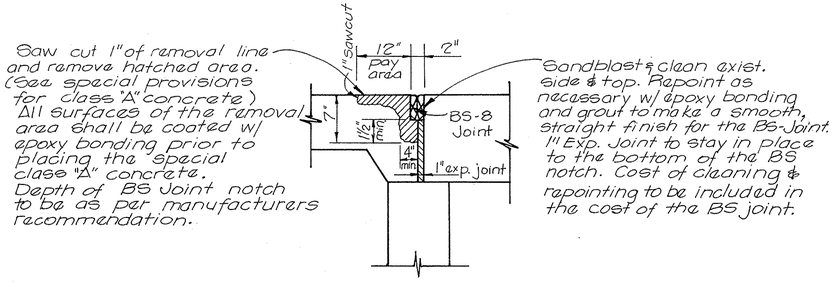
1. WHERE NEW WORK IS TO BE FITTED TO OLD WORK, THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND CONDITIONS IN THE FIELD AND REPORT ANY ERRORS OR DISCREPANCIES TO THE ENGINEER AND ASSUME RESPONSIBILITY FOR THEIR CORRECTNESS AND FIT OF THE NEW PART TO THE OLD.
2. SURFACE SEAL OUTSIDE FACE OF DECK GIRDER AND COPING, UNDERSIDE OF COPING, TOP AND FACE OF CURB, TOP OF BRIDGE DECK, AND APPROACH SLAB, FACE OF MUDWALLS, BEARING SURFACE OF END BENTS, AND EXPOSED FACES OF END BENT COPS AND WINGS. ESTIMATED QUANTITY - 7230 SFT.
3. BEFORE INSTALLING NEW BS-8 EXPANSION JOINT SEALS, CLEAN THE VERTICAL FACES OF THE JOINT NOTCH TO PROVIDE A SMOOTH, EVEN FINISH FOR A WATERTIGHT SEAL.
4. CLEAN AND POINT ALL BEARING ASSEMBLIES
5. ALL SHOP CURVED W-BEAM RAILING SHALL HAVE POSTS SPACED AT 6'-3", AND THE PAY LENGTH SHALL BE 1.3 TIMES THE ACTUAL LENGTH INSTALLED. PAY LENGTHS ARE MEASURED FROM END POSTS.
6. SEE SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS FOR ITEMS INCLUDED IN THIS CONTRACT.



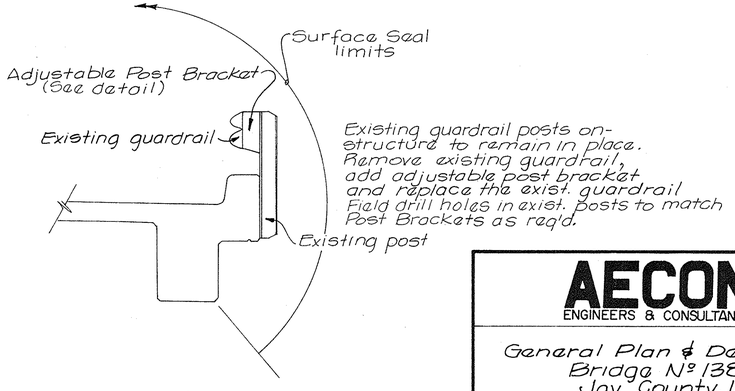
Typical Guardrail Details
Not to Scale



ADJUSTABLE POST BRACKET DETAIL
Not to Scale



Section B-B
Typical Joint Detail
Not to Scale



Typical Section thru Bridge Railing
Not to Scale

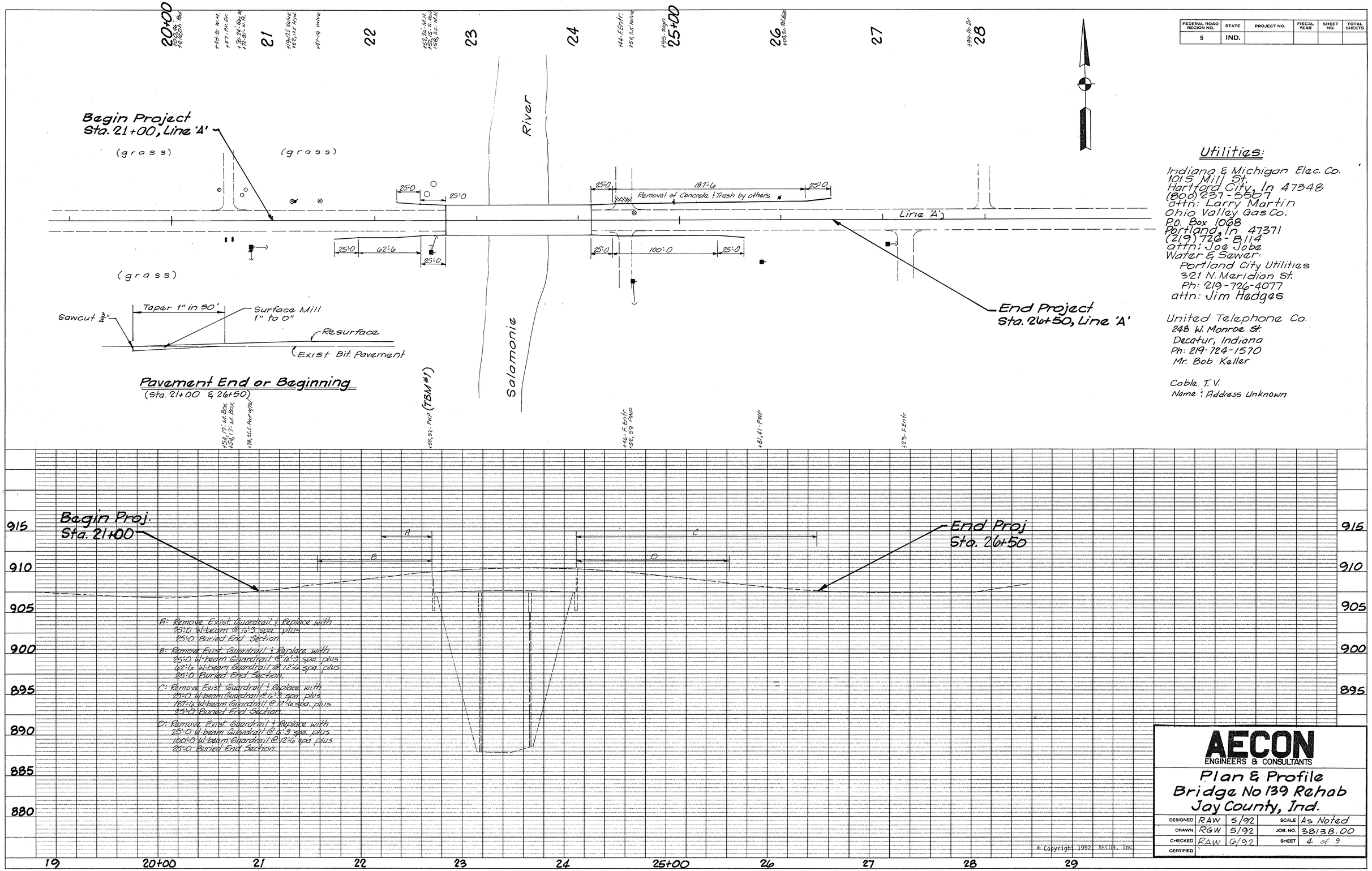
AECON
ENGINEERS & CONSULTANTS

General Plan & Details
Bridge Nº 138
Jay County, In.

DESIGNED	RAW	5/92	SCALE	as shown
DRAWN	CRE	5/92	JOB. NO.	38138.00
CHECKED	RAW	6/92	SHEET	3 of 9
CERTIFIED				

PRINT GRAPHICS N61401

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.				



A: Remove Exist. Guardrail & Replace with
25'-0 W-beam @ 6'-3 spa. plus
25'-0 Buried End Section.

B: Remove Exist Guardrail & Replace with
25'-0 W-beam Guardrail @ 6'-3 spa. plus
62'-6 W-beam Guardrail @ 12'-6 spa. plus
25'-0 Buried End Section.

C: Remove Exist Guardrail & Replace with
25'-0 W-beam Guardrail @ 6'-3 spa. plus
187'-6 W-beam Guardrail @ 12'-6 spa. plus
25'-0 Buried End Section.

D: Remove Exist. Guardrail & Replace with
25'-0 W-beam Guardrail @ 6'-3 spa. plus
100'-0 W-beam Guardrail @ 12'-6 spa. plus
25'-0 Buried End Section.

Utilities:

Indiana & Michigan Elec. Co.
1015 Mill St.
Hartford City, In 47348
(800) 237-5567
attn: Larry Martin
Ohio Valley Gas Co.
P.O. Box 1068
Portland, In 47371
(219) 726-8114
attn: Joe Jobe
Water & Sewer:
Portland City Utilities
321 N. Meridian St.
Ph: 219-726-4077
attn: Jim Hedges

United Telephone Co.
248 W. Monroe St.
Decatur, Indiana
Ph: 219-724-1570
Mr. Bob Keller

Cable T.V.
Name & Address Unknown

PLAN	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
No.	HIGHWAY CHECKED		
	RT. OF WAY CHECKED		

PROFILE	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
No.	GRADES CHECKED		
	B. M.'s NOTED		
	STRUCTURE NOTATIONS CHECKED		

AECON
ENGINEERS & CONSULTANTS

Plan & Profile
Bridge No 139 Rehab
Jay County, Ind.

DESIGNED	RAW	5/92	SCALE	As Noted
DRAWN	RGW	5/92	JOB. NO.	38138.00
CHECKED	RAW	6/92	SHEET	4 of 9
CERTIFIED				

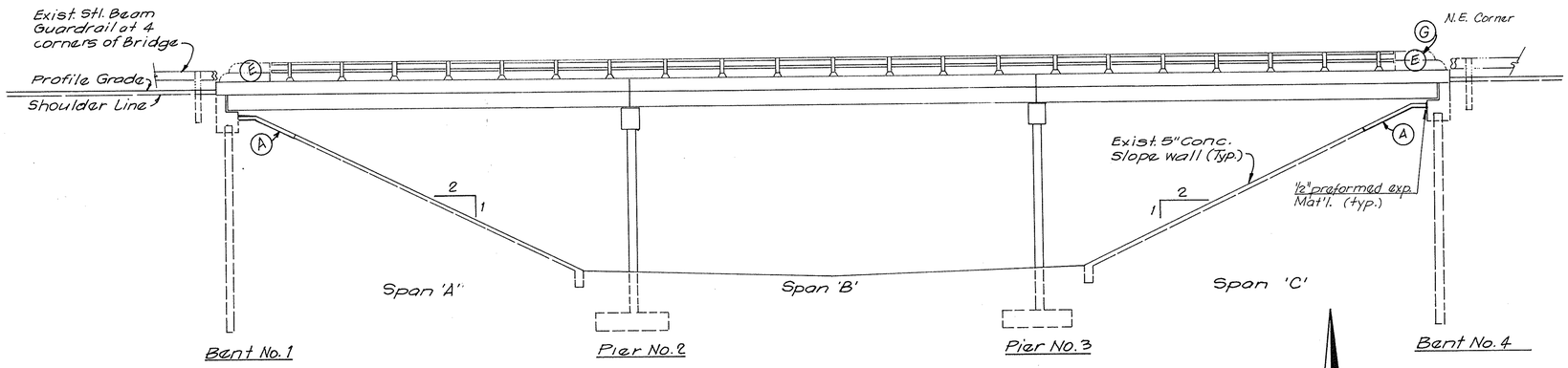
PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	FILE

PLATE 1 - PLAN - PROFILE B. R. R. STANDARD
1975

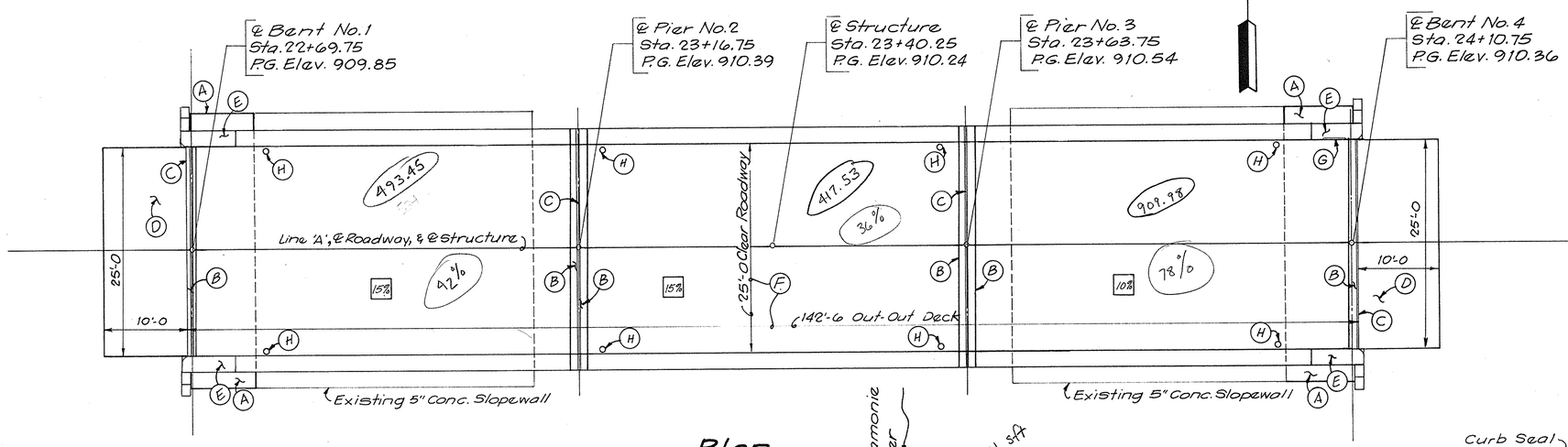
TP114

GENERAL NOTES

1. WHERE NEW WORK IS TO BE FITTED TO OLD WORK, THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND CONDITIONS IN THE FIELD AND REPORT ANY ERRORS OR DISCREPANCIES TO THE ENGINEER AND ASSUME RESPONSIBILITY FOR THEIR CONDITIONS AND FIT OF THE NEW PART TO THE OLD.
2. SURFACE SEAL OUTSIDE FACE OF PRESTRESSED BOX BEAMS AND COPINGS, UNDERSIDE OF COPINGS, TOP AND FACE OF CURBS, TOP AND SIDES OF THE CONCRETE RAIL SECTIONS, TOP OF THE APPROACH SLABS, FACE OF THE MUDWALLS, AND EXPOSED TOP, SIDES, AND ENDS OF THE PIER CAPS AND END BENTS. ESTIMATED QUANTITY = 3410 SFT.
3. EXTEND EXISTING DECK DRAINS WITH 3" DIA. X 9" LONG PVC PIPE EPOXY GROUTED AND BONDED TO INSIDE EXISTING DRAIN.
4. BEFORE INSTALLING NEW BS-6 EXPANSION JOINT SEALS, CLEAN THE VERTICAL FACES OF THE JOINT NOTCH TO PROVIDE A SMOOTH, EVEN FINISH FOR A WATERTIGHT SEAL.
5. CONSTRUCT SLOPEWALL AT LOCATIONS AS SHOWN ON PLANS IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
6. SCARIFY THE EXISTING DECK ¼" DEEP AND OVERLAY WITH LATEX BRIDGE DECK OVERLAY 1½" THICK.
7. SEE SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS FOR ITEMS INCLUDED IN THIS CONTRACT.



Elevation
Scale ⅛" = 1'-0



Plan
Scale: ⅛" = 1'-0

Salamonie River

1821 sft

1175

LEGEND

A CONCRETE SLOPEWALL, 4" & ½" Preformed Exp. at End Bent

B CONCRETE REMOVAL FOR EXPANSION JOINT

C EXPANSION JOINT, BS-6

D REMOVE ASPHALT AND BASE AND REPLACE WITH 6" COMPACTED AGGREGATE AND 10" R.C. SLAB

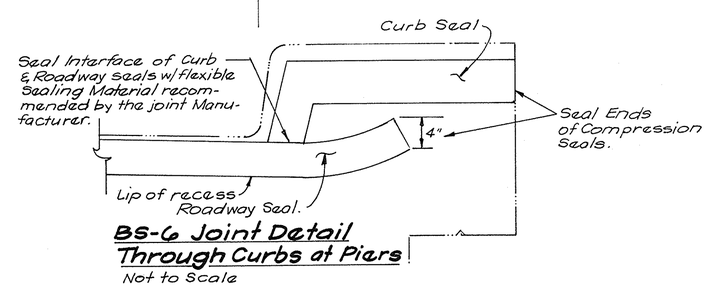
E REMOVE AND REPOUR CONCRETE RAILING

F SURFACE MILLING, CONCRETE AND 1½" BRIDGE DECK OVERLAY (LATEX)

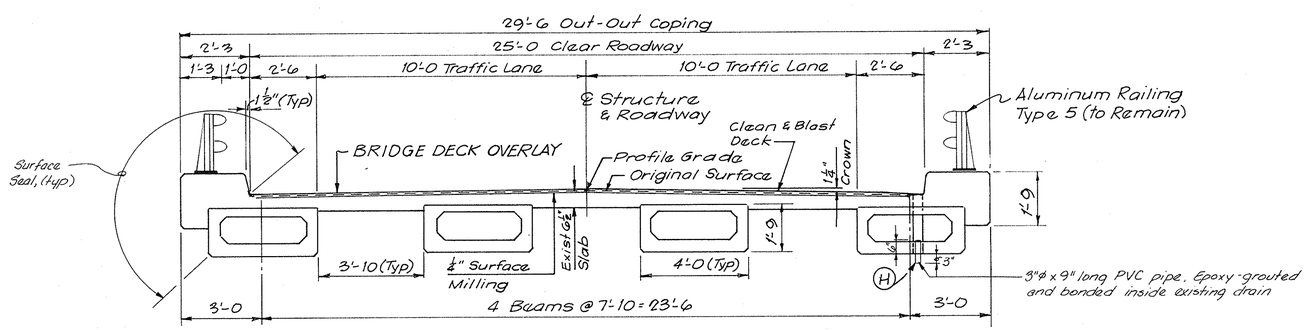
G REMOVE PLAQUE AND CAST IN PLACE WITH NEW CONCRETE RAILING.

H EXTEND EXISTING 4" DECK DRAINS WITH 3" PVC.

[15%] Indicates estimated percentage of partial depth bridge deck patching



BS-6 Joint Detail Through Curbs at Piers
Not to Scale



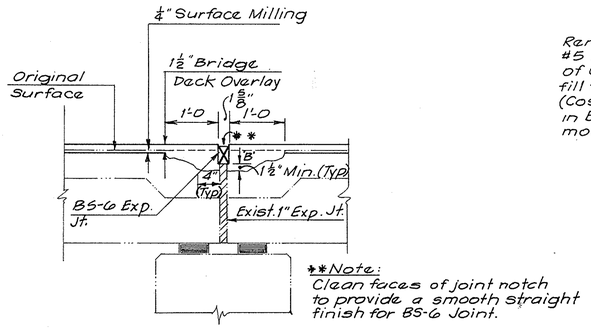
Typical Cross Section ⊥ to ℄ Roadway
Scale: ⅜" = 1'-0

AECON
ENGINEERS & CONSULTANTS

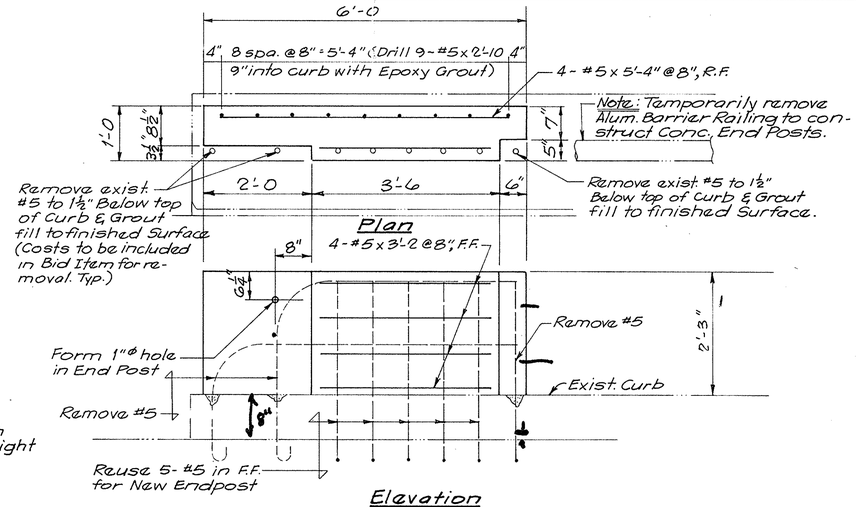
General Plan & Details
Bridge No. 139
Jay County, In.

DESIGNED	RAW	5/92	SCALE	As shown
DRAWN	RGW	5/92	JOB NO	38138.00
CHECKED	RAW	6/92	SHEET	5 of 9
CERTIFIED				

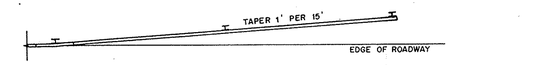
PRINT GRAPHICS 1-93 1-93



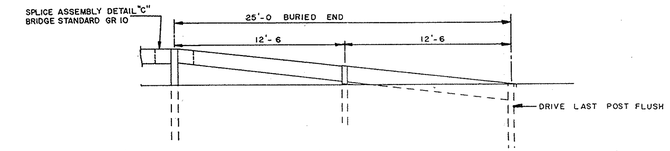
Typical Expansion Jt. Detail
(Piers No. 2 & 3)
¾" = 1'-0



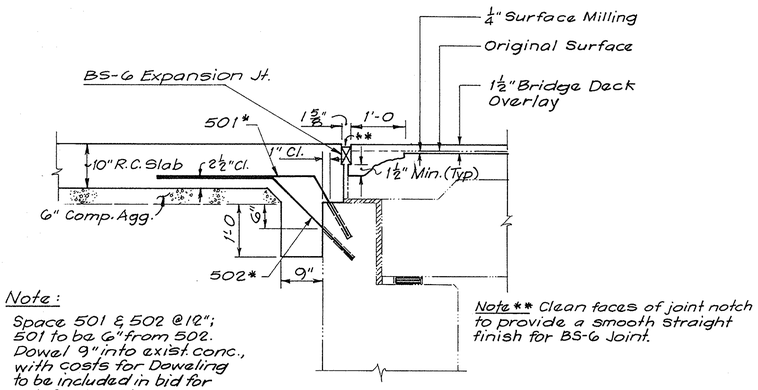
Concrete End Post Details
¾" = 1'-0 (Typ. for 4 Posts)



PLAN



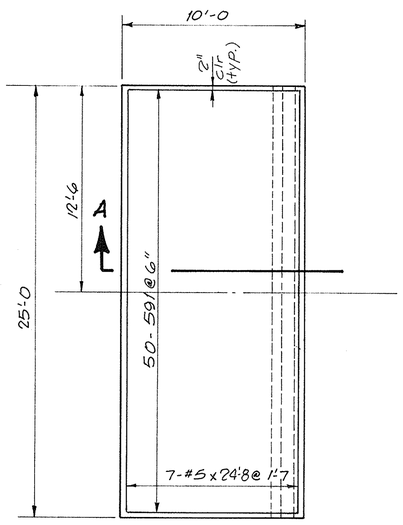
BURIED END DETAIL



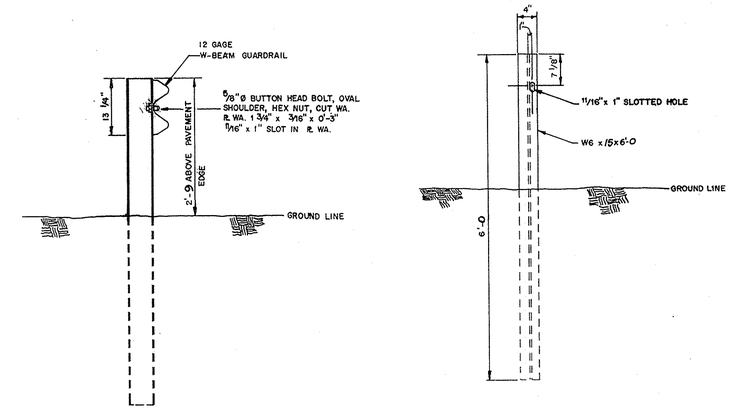
Note:
Space 501 & 502 @ 12"; 501 to be 6" from 502. Dowel 9" into exist. conc., with costs for Doweling to be included in bid for reinforcing steel.

Note ** Clean faces of joint notch to provide a smooth straight finish for BS-6 Joint.

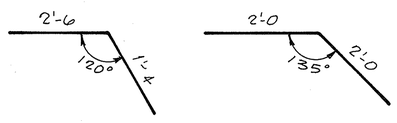
Typical Expansion Jt. Detail
(End Bents 1 & 4)
¾" = 1'-0



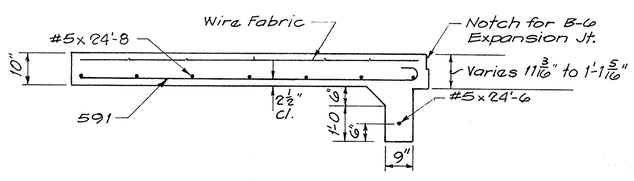
Typ. Plan - R.C. Approach Slab
¼" = 1'-0



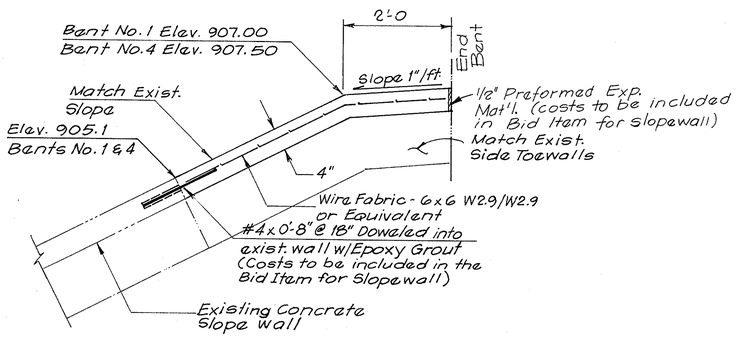
Off Structure Guardrail Details
Not to Scale



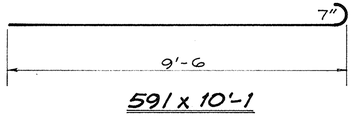
501 x 3'-10 502 x 4'-0



Section A
½" = 1'-0



Slopewall Detail
Not to Scale



591 x 10'-1

Bill of Materials

EPOXY-COATED REINFORCING STEEL			
Size	Number	Length	Weight
501	52	3'-10	
502	50	4'-0	
591	100	10'-1	
#5	14	24'-8	
#5	16	5'-4	
#5	16	3'-2	
#5	36	2'-10	
		Total #5	2,077 Lbs
TOTAL REINFORCING STEEL			2,077 Lbs
Concrete			CYS
Class 'C' in End Posts (4 @ .44)			1.76 CYS
MISCELLANEOUS			
Concrete Slopewall, 4"			55.8 SYS
BS-6 Expansion Joint			122. LFT
10" R.C. Approach Pavem't.			55.6 SYS

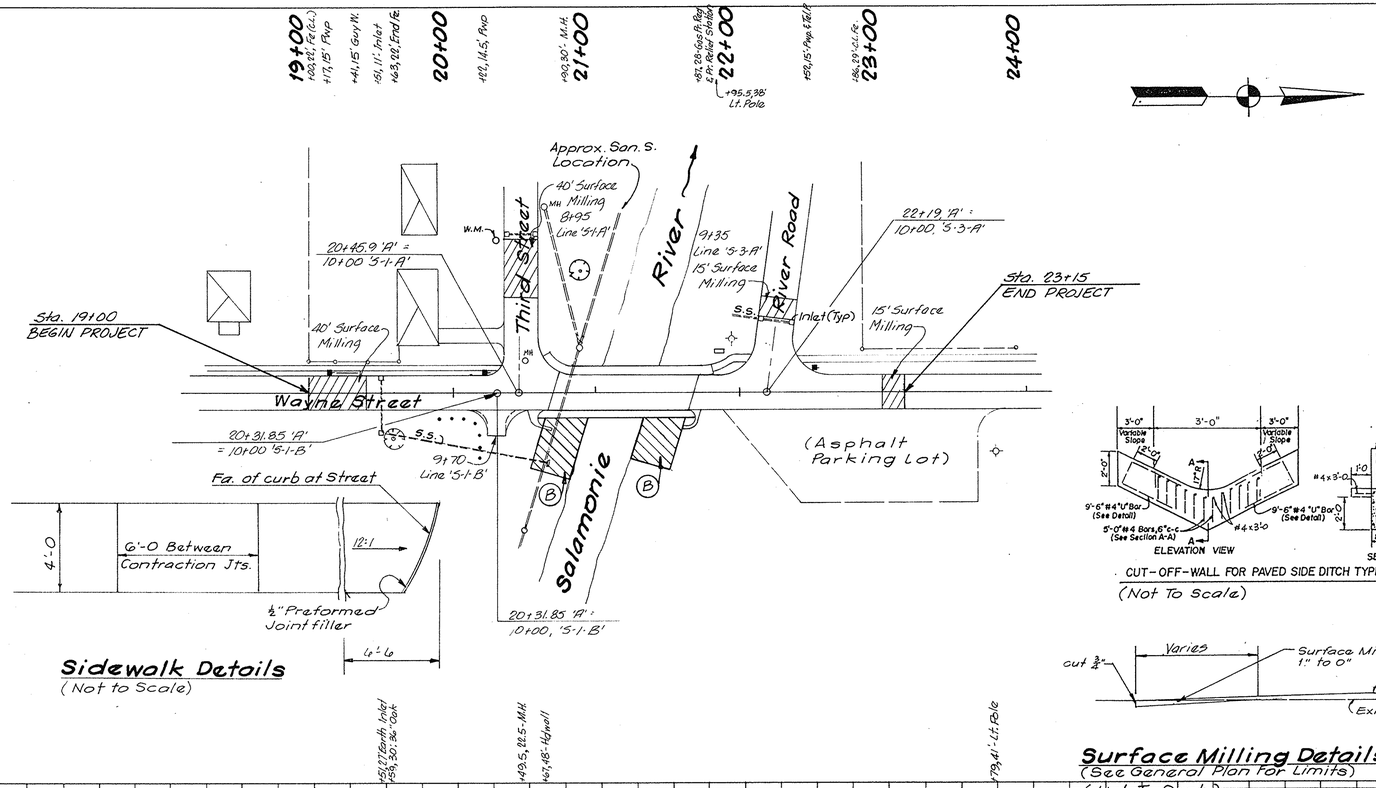
AECON
ENGINEERS & CONSULTANTS

Construction Details
Bridge No. 139
Jay County, In.

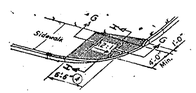
DESIGNED	RAW	5/92	SCALE	As Shown
DRAWN	RGW	5/92	JOB NO.	38138.00
CHECKED	RAW	6/92	SHEET	6 of 9
CERTIFIED				

PRINT GRAPHICS R61-103

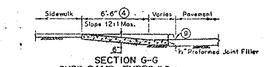
FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.				



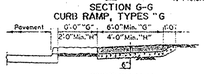
Sidewalk Details
(Not to Scale)



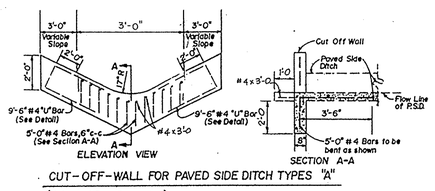
CURB RAMP, TYPE "G"



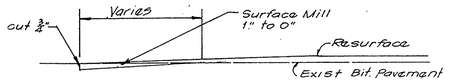
SECTION G-G
CURB RAMP, TYPES "G



SECTION H-H
CURB RAMP, TYPES "G



CUT-OFF-WALL FOR PAVED SIDE DITCH TYPES "A"
(Not To Scale)



Surface Milling Details
(See General Plan for Limits)
(Not To Scale)

Utilities

Ind. & Michigan Elec. Co.
101 S Mill St.
Hartford City, Ind. 47348
(800)-237-5507 attn: Larry Martin
Ohio Valley Gas Co.
P.O. Box 1068
Portland, Ind. 47371
(219)-726-8114 attn: Joe Jobe

Water and Sewer:
Portland City Utilities
321 N. Meridian Street
219-726-4077
attn. Jim Hedges

United Telephone Co.
248 W. Monroe St.
Decatur, Ind. 46733
(219) 724-1570
attn: Bob Keller

Legend

(B) Slope Protection (See the Special Provisions)

PLAN		BY	DATE
NOTE BOOK No.	SURVEYED		
	PLOTTED		
	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		

PROFILE		BY	DATE
NOTE BOOK No.	SURVEYED		
	PLOTTED		
	GRADES CHECKED		
	B. M.'s NOTED		
	STRUCTURE NOTATIONS CHECKED		

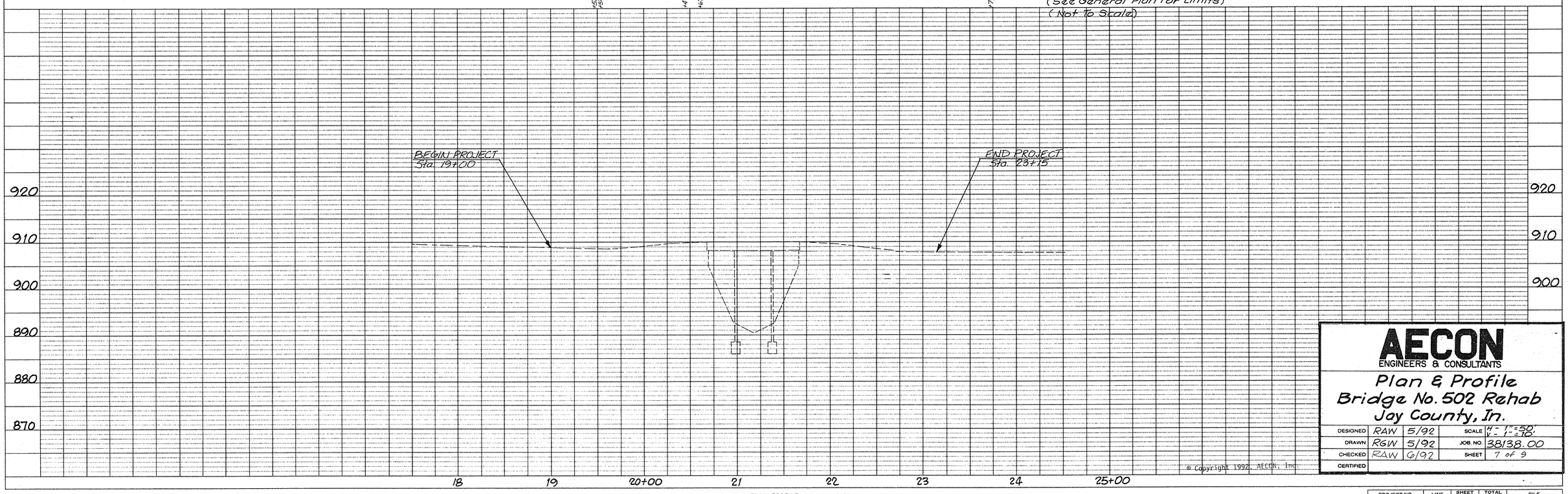


PLATE 1 - PLAN - PROFILE B. R. R. STANDARD
1975

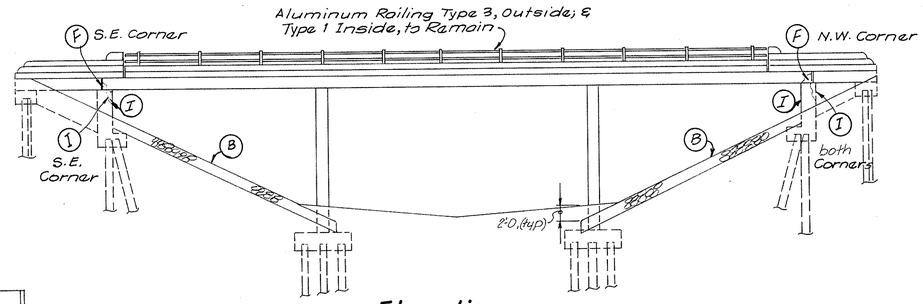
AECON
ENGINEERS & CONSULTANTS

Plan & Profile
Bridge No. 502 Rehab
Jay County, In.

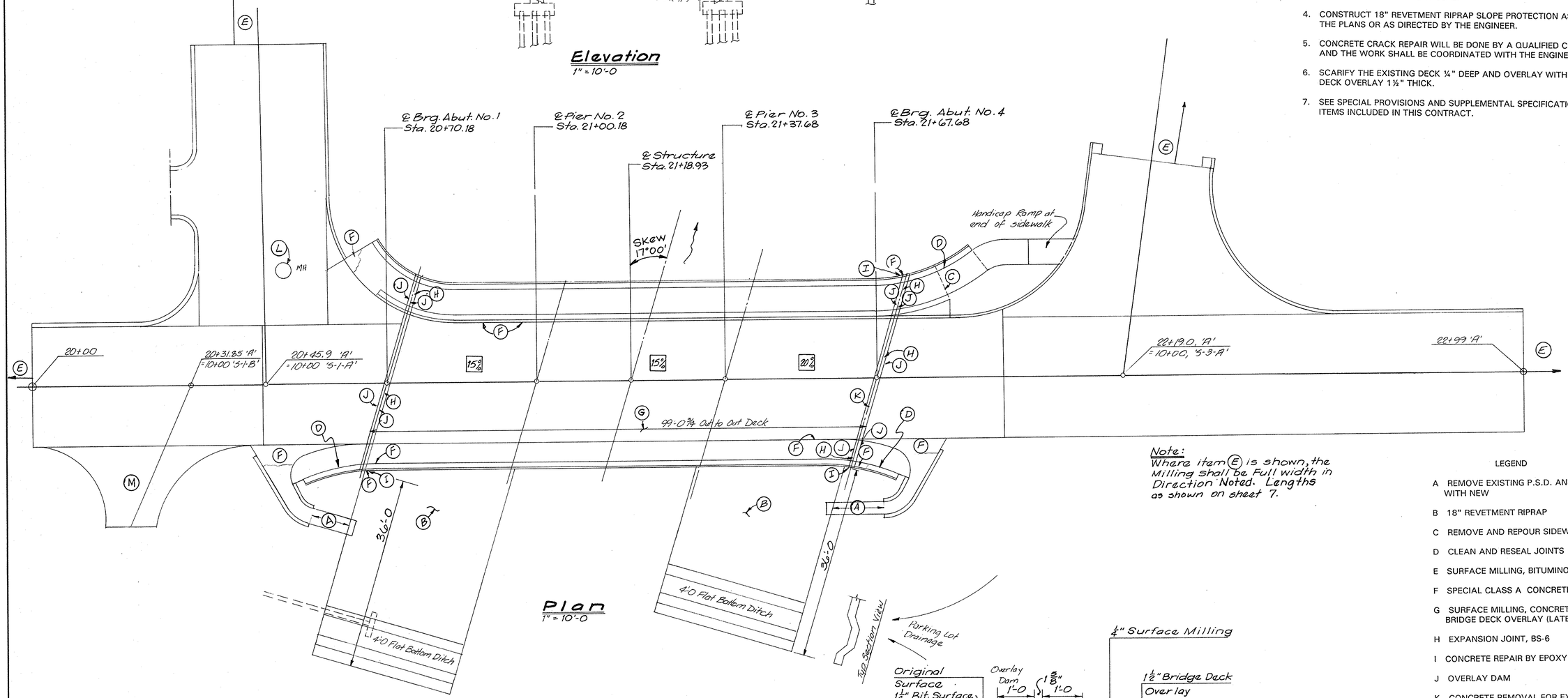
DESIGNED	RAW	5/92	SCALE	H - 1"=50' V - 1"=10'
DRAWN	RGW	5/92	JOB. NO.	38138.00
CHECKED	RAW	6/92	SHEET	7 of 9
CERTIFIED				

PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	FILE

TP114

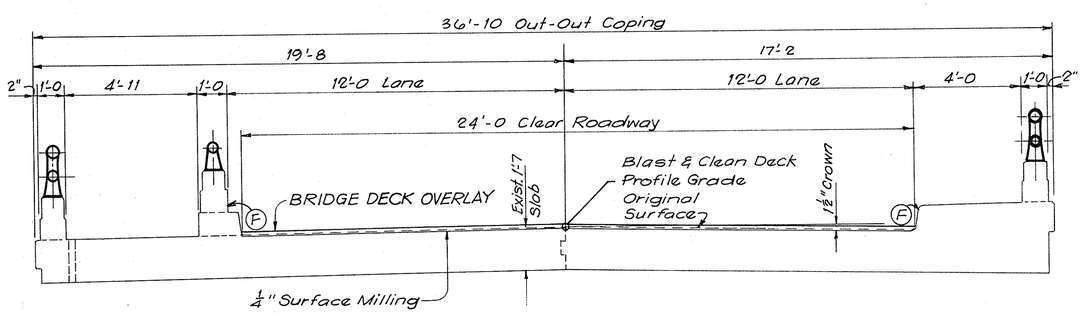


Elevation
1" = 10'-0

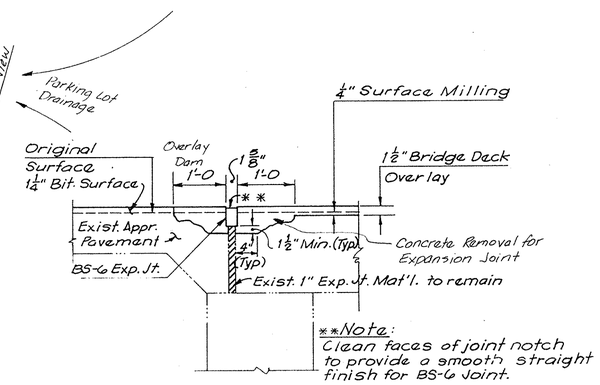


Plan
1" = 10'-0

Note:
Where item (E) is shown, the Milling shall be Full width in Direction Noted. Lengths as shown on sheet 7.



Cross Section of Deck ⊥ to ℄ Roadway
3/8" = 1'-0



Typical Expansion Jt. Detail
(Bents No. 1 & 4)
3/4" = 1'-0

GENERAL NOTES

1. WHERE NEW WORK IS TO BE FITTED TO OLD WORK, THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND CONDITIONS IN THE FIELD AND REPORT ANY ERRORS OR DISCREPANCIES TO THE ENGINEER AND ASSUME RESPONSIBILITY FOR THEIR CONDITIONS AND FIT OF THE NEW PART TO THE OLD.
2. SURFACE SEAL OUTSIDE FACE OF DECK AND COPING, UNDERSIDE OF COPING, TOP AND FACE OF CURB AND SIDEWALK, TOP AND SIDES OF CONCRETE RAILING AND EXPOSED FACES OF THE ENDS OF THE ABUTMENTS AND WINGS. ESTIMATED QUANTITY = 3170 SFT.
3. BEFORE INSTALLING NEW BS-6 EXPANSION JOINT SEALS, CLEAN THE VERTICAL FACES OF THE JOINT NOTCH TO PROVIDE A SMOOTH, EVEN FINISH FOR A WATERTIGHT SEAL.
4. CONSTRUCT 18" REVETMENT RIPRAP SLOPE PROTECTION AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
5. CONCRETE CRACK REPAIR WILL BE DONE BY A QUALIFIED CONTRACTOR AND THE WORK SHALL BE COORDINATED WITH THE ENGINEER.
6. SCARIFY THE EXISTING DECK ¼" DEEP AND OVERLAY WITH LATEX BRIDGE DECK OVERLAY 1½" THICK.
7. SEE SPECIAL PROVISIONS AND SUPPLEMENTAL SPECIFICATIONS FOR ITEMS INCLUDED IN THIS CONTRACT.

LEGEND

- A REMOVE EXISTING P.S.D. AND REPLACE WITH NEW
- B 18" REVETMENT RIPRAP
- C REMOVE AND REPOUR SIDEWALK
- D CLEAN AND RESEAL JOINTS
- E SURFACE MILLING, BITUMINOUS
- F SPECIAL CLASS A CONCRETE
- G SURFACE MILLING, CONCRETE AND 1½" BRIDGE DECK OVERLAY (LATEX)
- H EXPANSION JOINT, BS-6
- I CONCRETE REPAIR BY EPOXY INJECTION
- J OVERLAY DAM
- K CONCRETE REMOVAL FOR EXPANSION JOINT
- L ADJUST CASTING TO GRADE
- M 1" BITUMINOUS SURFACE OVER 3". BITUMINOUS BASE AT PARK ENTRANCE

15% INDICATES ESTIMATED PERCENTAGE OF PARTIAL DEPTH BRIDGE DECK PATCHING

AECON
ENGINEERS & CONSULTANTS

General Plan
Bridge No. 502 Rehab.
Jay County, In.

DESIGNED	RAW	5/29	SCALE	As Shown
DRAWN	RGW	5/29	JOB NO	38138.00
CHECKED	RAW	6/92	SHEET	8 of 9
CERTIFIED				

PRINT GRAPHICS 961403

SPECIAL PROVISIONS
COUNTY BRIDGE NOS. 138, 139, AND 502
JAY COUNTY, INDIANA

1. SCOPE OF WORK
The intent of these Special Provisions and Supplemental Specifications, together with the Standard Specifications and Plans, is to provide for the repairs for the following bridges:

Jay County Bridge No. 138 on Blaine Pike over the Salamonie River approximately 1 mile southwest of Portland, Indiana

Jay County Bridge No. 139 on Seventh Street over the Salamonie River in Portland, Indiana

Jay County Bridge N. 502 on Wayne Street over the Salamonie River in Portland, Indiana

The work shown on the plans and presented in the specifications is for the complete repair of the various items of work presented. The amount bid for the various items shall be for the complete work. Where minor variations are encountered which required minor variations in the type of repair, minor variations in the material requirements, or additional miscellaneous hardware or other items, no additional allowance shall be made the Contractor. However, the work shall be completed as if shown on the plans or directed by these specifications. Where substantial variations are encountered, an extra work agreement shall be negotiated between the Owner and Contractor prior to commencing work on any item with such substantial variations. If the Contractor proceeds with any work without obtaining an extra work agreement, such work shall be deemed to be a minor variation.

2. CONTRACT TIME FOR COMPLETION
Time being of the utmost importance, all work must be completed as follows:

Bridge No. 138 completed within 25 calendar days after closing the road. The road shall be closed no more than 12 calendar days,

Bridge No. 139 completed within 50 calendar days after closing the road. The road shall be closed no more than 35 calendar days, and

Bridge No. 502 completed within 55 calendar days after closing the road. The road shall be closed no more than 40 calendar days.

Bridge Nos. 138 and 139 can not be closed at the same time.

All work on all bridges must be completed within 120 calendar days after the date of the "Notice to Proceed".

3. PRECONSTRUCTION CONFERENCE
The Contractor for the project shall have a preconstruction conference after the award and prior to the start of construction. This meeting shall be held at the site or as otherwise agreed to by the Engineer, Contractor, and OWNER. The meeting is mandatory and work shall not begin prior to the meeting being held. The Engineer will take and distribute minutes of the meeting. The Contractor shall review those notes and shall in writing, within 15 days of receipt, inform the Engineer if there are errors or changes to be made. If no response is received within this time period it shall be assumed that there are no corrections and the record of the minutes shall become a part of the construction documents as are change orders, work directives, etc.

4. ROAD CLOSING & SIGNING
The road is currently open to traffic.

Just prior to and during construction the road will be closed unless stated differently under "Contract Time For Completion". Suitable barricades, barriers, and construction signing for protection of work site shall be the responsibility of the Contractor. (See Section 107.10). At all times, until completion of the project, the barricades and signs shall be maintained in proper order by the Contractor. The roads shall be closed during construction as stated under "Contract Time for Completion. The Contractor, Engineer, County Engineer, and Public Officials should agree to a road closure schedule so as to disrupt traffic and local functions the least possible. This should be done at the Preconstruction Conference.

Prior to closing the road, the Contractor shall notify the County Road Engineer, all affected school and emergency vehicle organizations, and the County Sheriff.

5. CONSTRUCTION SIGNING
This item includes 4 Type 'A' construction signs and 2 Type 'III-A' barricades for road closure. This is for the duration of the job and includes maintenance and upkeep to the satisfaction of the Engineer. Signs and barricades are to be in accordance with Standard Sheet 2A of the INDOT Standard Details. Signs and barricades will be paid separately for each bridge. However, signs can utilize overlays so the "Closed" and "Construction" can be interchanged. No additional payment will be made for this.

6. UTILITIES
Contractor shall notify all utilities prior to beginning work. Where it is necessary for utilities to be moved, this work shall be coordinated between the utility company and the Contractor to avoid delays or loss of service.

7. FIELD OFFICE
A field office is not required.

8. CONSTRUCTION OBSERVATION
If the Contractor fails to give the Engineer at least 24 hours notice, a $100.00 charge will be assessed to the Contractor by the Engineer, if an inspector is available and sent to the project site. If no inspector is available then the contractor shall be delayed a minimum of 24 hours.

Construction observation shall be performed by the Engineer (AECON, Inc., 812-988-2940).

9. CONSTRUCTION STAKING
The Contractor is responsible for the construction staking of the project and shall furnish all materials and labor relating to it. This is not a pay item; the cost shall be included in the various pay items of the project. The Engineer will provide the location of control points at the outset of the project.

The Contractor shall verify all dimensions where old and new work are joined, and shall be responsible for same. Note: No materials shall be ordered until measurements are verified by the Contractor.

10. WAGE SCALE
All work under this contract shall be in accordance with prevailing wage scales by law and specifications. The current wage scale (will be forwarded when available)(is included in these specifications).

11. CONTROL OF MATERIALS
Materials certification shall be required for certain materials, as set out in Section 915. Three (3) copies of each certification shall be submitted by the Contractor to the Engineer prior to the use of the material. All certification shall be sworn to by a person having legal authority to bind the company preparing the certification, and they shall be notarized. The Engineer may order additional samples and tests, at the cost of the Contractor, of any material received on the contract for which certification has been furnished. If such test results are in disagreement with the certification, the test results shall prevail. The Engineer may suspend further acceptance of certifications from the manufacturer of the material in question. All tests of material will be made by an independent laboratory approved by the Engineer. Unless otherwise designated, the standards for materials and methods of tests of AASHTO and ASTM referred to in these specifications or elsewhere shall be the standard, interim, or tentative specifications included in the last published edition.

12. ENGINEER'S RESPONSIBILITY
The Engineer shall not be responsible for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto or the Contractor's compliance with laws, rules, regulations, ordinances, codes or orders applicable to its furnishing and performing the work. The Engineer shall not supervise, direct, or control any work.

13. REMOVAL OF PRESENT STRUCTURE (PORTIONS - BRIDGE NO. 139)
This work consists of the removal of the existing concrete railing at the ends of Bridge No. 139. The concrete railing shall be removed down to the top of the curb as shown on the plans. This includes removal of required reinforcing steel and grouting as necessary. Removal of concrete shall be in accordance with 202.03(b). All material shall be removed from the site.

The cost of this work shall be bid as lump sum, "Removal of Present Structure (Portions - Bridge No. 139)". Payment will be for all labor, materials, equipment, tools and incidental necessary to complete the work.

14. SITE WORK
This work consists of site preparation, earthwork, grading, mulched seeding disturbed areas, final clean-up and any other pay items necessary for the completion of the project. Significant amounts of earthwork, grading, and seeding are not anticipated, and this work covers preparation and final finishing to leave each site graded to drain in a neat appearance. If this is not a bid item, the costs will be covered in other bid items. If covered by a bid item, the cost of this work will be bid and paid as a lump sum for all labor, materials, equipment, tools and incidentals necessary to complete the work.

15. WORKING OUTSIDE OF RIGHT-OF-WAY
The Contractor shall not work off the right-of-way including, but not limited to, the excavation of material, grading, clearing, etc. without providing the Engineer written approval from the property owner. Such approval shall clearly state the nature of the work which may be performed off of the right-of-way.

16. SURFACE MILLING, CONCRETE
This work shall be in accordance with the applicable parts of Section 722, IDOH Specifications.

17. SURFACE MILLING, BITUMINOUS
This work shall be in accordance with the applicable parts of Section 202, IDOH Specifications, and as shown on the plans. The cost of saw cutting at the ends of the surface milling and cleaning and disposing of the surface milled material is included in this item.

18. PARTIAL DEPTH BRIDGE DECK PATCHING
This work consists of removing unsound concrete and patching with special class 'A' concrete or latex modified concrete. All work shall be in accordance with the applicable parts of Section 722.

19. BRIDGE DECK OVERLY (LATEX)
This work shall be in accordance with IDOH Specifications, Section 722.

20. FINISHING MACHINE
The bridge deck finishing machine shall conform to the 1988 Standard Specifications, Section 722.08

21. DECK FINISH
The deck shall be finished with a tined surface as per IDOH Specification, Section 722.09.

22. REINFORCED CONCRETE PAVEMENT, 10"
This work consists of the removing of asphalt and base and the repouring of reinforced Concrete Pavement 10" thick. All work shall conform with applicable parts of Section 500 and 610. Each approach shall be poured as one pour and may be hand finished as per Section 501.15. Final finishing shall be Method 2 - Tining.

This work will be paid for at the contract unit price per square yard. Payment will be full compensation for removing the asphalt and base, and shall include all labor, materials, equipment, tools, and incidentals necessary to complete this work.

23. OPENING THE STRUCTURE TO TRAFFIC
The structure may not be opened to traffic for at least 5 days from the placement of latex concrete, or until the concrete has attained a cylinder strength of 4,000 psi, whichever comes first. The Contractor's equipment is considered traffic. Opening of the project to public usage shall have prior approval of the engineer.

24. CONCRETE REMOVAL FOR EXPANSION JOINT
This work shall consist of the removal of concrete in areas at or near new bridge expansion joints in accordance with the requirements herein and in reasonably close conformance with the lines, grades, and at the locations shown on the plans, or as directed. Removal of concrete shall be in accordance with 202.03(b). This work will be measured by the square foot. This work will be paid for at the contract unit price per square foot of top surface area for concrete removal for expansion joint.

25. OVERLAY DAMS
This work shall consist of the removal of existing concrete from the bridge floor and replacing with new concrete at expansion joints at the locations shown on the plans or as otherwise directed.

The existing concrete shall be cut out, and the area shall be thoroughly cleaned of all loose concrete, dirt, or other foreign materials to a depth and over an area necessary to produce a firm and solid connecting surface for the adherence of the new concrete. Where the bond between existing concrete and reinforcing steel has been destroyed, the concrete adjacent to the bar shall be removed by handchipping to a depth of a minimum of one inch around the entire periphery of the bar so exposed. Care shall be taken to prevent cutting or otherwise damaging exposed reinforcing steel.

Power driven hand tools for removal by handchipping, as set out above, will be permitted. Pneumatic hammers with a maximum weight of 69 pounds may be used for the tops of mudwalls. If at any time during the removal process, the tools or methods being used appear to cause damage such as cracks, spalling on the concrete that is to remain, the work shall cease immediately and shall not resume until the Engineer is assured the tools or methods being used will not cause further damage.

Before applying the concrete, the surface to be repaired, the reinforcing steel, and the concrete under and around the steel shall be thoroughly cleaned by sandblasting and coated with epoxy resin adhesive in accordance with 908.11. Final cleaning shall be done with an air compressor. The air compressor shall be equipped with suitable separators, traps, or filters which will remove water, oil, grease, or other substances from the air lines.

The cavity shall be filled with class A concrete in accordance with 702, except the cement used shall be portland cement type IIIA, or portland cement type III with the addition of an air entraining mixture to the concrete. However, special class A concrete may be used with 846 pounds of portland cement type IA per cubic yard, or 846 pounds of portland cement type I per cubic yard with the addition of an air entraining admixture to the concrete. In all cases, air entrainment in the concrete mix shall be from 5 to 8 percent by volume, and coarse aggregate used shall be No. 11.

This work will be paid for at the contract unit price per square foot for overlay dams, complete in place and accepted. Payment shall include and be full compensation for removing the existing concrete; for furnishing, hauling, and placing all materials including the epoxy; for preparing the surface; and for all labor, equipment, tools, and incidentals necessary to complete this work.

26. EXPANSION JOINT BS PLACEMENT IN JOINT SEAT
This item consists of furnishing and placing the pre-molded expansion joint as shown on the plans and 905.02(d).

The expansion joint or joints shall meet the dimension and tolerance requirements, as specified in the following table, for the type or types joints specified or furnished.

Expansion Joint Type	Seal Width	Seal Height	Minimum Joint Width	Maximum Joint Width	Minimum Joint Width @ Installation
BS 2	1 ¾" (± ⅛")	1 ¾" (± ⅛")	¾" (± ⅛")	1 ¼" (± ⅛")	⅞" (+ ⅛" - ¼")
BS 6	2 ½" (± ⅛")	2 ¼" (± ⅛")	1 ⅛" (± ⅛")	2 ⅛" (± ⅛")	1 ¼" (+ ⅛" - ¼")
BS 8	3" (± ⅛")	3 ¼" (± ¼")	1 ¼" (± ¼")	2 ⅝" (± ⅛")	1 ⅝" (+ ⅛" - ¼")
BS 9	4" (± ¼")	4 ¾" (± ⅜")	1 ¾" (± ¼")	3 ⅝" (± ⅛")	2 ½" (+ ⅛" - ¼")
BS 11	5" (± ¼")	5 ¼" (± ¼")	1 ¾" (± ¼")	4 ¼" (± ⅛")	3" (+ ⅛" - ¼")

Expansion joint BS2, BS6, BS8, BS9, and BS11. These joints shall be constructed in accordance with the details shown on the plans. The distance from the top of the bridge floor down to the seat for the joint, as shown on the plans, shall be determined in accordance with the joint manufacturer's recommendations. When the joint is at its minimum width, the distance from the top of the bridge floor down to the top of the joint seal shall be 1/2 of an inch minimum and 3/4 of an inch maximum for joints BS2, BS6, and BS8, and 3/4 of an inch minimum and one inch maximum for joints BS9 and BS11. The strip seal installed shall be continuous throughout the full length of the joint, except the installation in curbs shall be in accordance with the details as shown on the plans. Neat, well made factory splices in the strip seal will be permitted. However, field splices of the strip seal will not be permitted.

This work will be paid for at the contract unit price per linear foot, complete in place and accepted, for the type or types of BS joints specified in the Itemized Proposal, which payment shall include and be full compensation for furnishing, hauling, and placing all materials, and for all labor, equipment, tools and incidentals necessary to complete the item.

27. CLEANING AND SEALING EXISTING JOINTS (BRIDGE NOS. 138 and 502)
This work consists of cleaning and sealing joints that are not replaced with BS-6 or BS-8 expansion joint seals on Bridge Nos. 138 and 502. Joints shall be thoroughly cleaned by sandblasting and the joints clean and dry when placing the sealant. The work and material shall be in accordance with the applicable provisions of Section 905.02 and manufacturer's recommendations. Dow Corning 888 Highway Joint Sealant or equal shall be used.

This work will not be measured for payment. Payment will be made of the contract lump sum price for Cleaning and Sealing Existing Joints. This payment shall be for the cost for all labor, materials, equipment, tools, and incidentals necessary to complete the work.

28. SPECIAL CLASS A CONCRETE
This work shall consist of the removal of weathered or disintegrated areas of existing concrete from the bridge and replacing it with new mortar or Class 'A' concrete at locations as shown on the plans or as otherwise directed.

Removal of unsound concrete and protection of reinforcing steel shall be in accordance with 722.05(a)2. The slope of the cavity may be such that a thin layer of unsound concrete exists along the periphery of the hole after placement of the mortar or concrete. This condition shall be corrected by making a cut perpendicular to the surface of a minimum depth of one inch or to the top of reinforcing steel, whichever is less, at least one inch outside the originally spalled area.

Power-driven hand tools for removal by handchipping, as set out above, will be permitted in accordance with 722.05(a)2.

Cleaning of the existing concrete surface shall be in accordance with 722.05(b).

The prepared surface shall be coated with epoxy resin adhesive in accordance with AASHTO M235, Class 'I', and the cavity shall be filled with Class 'A' concrete, except that the coarse aggregate used shall be size No. 11. Epoxy resin adhesive shall not be allowed to dry before mortar or concrete is placed against it. If drying does occur, it shall be recoated before any more material is placed. Where the cavity is less than ½ of an inch depth, the filling material shall be portland cement mortar composed of one part portland cement and two parts No. 23 sand. Where the surface is to be cleaned out to such depth and area that the new concrete or mortar does not stay in place without support, a form shall be placed over the area and the space so enclosed filled with concrete or mortar, well rodded in. New concrete or mortar shall be protected from the elements for at least 72 hours after completion. This work shall not be done in freezing weather nor when the surface contains frost.

The cement used in the mortar or class A concrete shall be portland cement type IIIA, or portland cement type III with the addition of an airentraining admixture to the concrete. However, class A concrete may also be made using 846 pounds of portland cement type IA per cubic yard, or 846 pounds of portland cement type I per cubic yard with the addition of an airentraining admixture to the concrete. In all cases, air entrainment in the concrete mix shall be from 5 to 8 percent by volume.

This work will be measured by the square foot for areas that average 4 inches or less in depth. Individual patches of less than one square foot will be considered to be one square foot. For areas that average over 4" in depth, the work will be measured by the cubic foot. The cubic foot price will be 3 times the bid price per square foot.

The accepted quantities of special class A concrete used for patching areas will be paid for a the contract unit price per square foot or cubic foot for special Class 'A' concrete special. The costs of removing the existing concrete; furnishing, hauling, and placing all materials including the epoxy; preparing the surface; and all labor, equipment, tools, and incidentals necessary shall be included in the cost of this work.

29. EXTENSION OF DECK DRAINS (BRIDGE NO. 139)
This work consists of extending the existing deck drains in Bridge NO. 139 by inserting a 3" dia. P.V.C. pipe 9" long inside the bottom 6" of the existing drains. The P.V.C. Pipe will be epoxy grouted and bonded in place so that 3" will extend below the bottom of the beam.

This work will be paid for at the contract unit price for each deck drain extended. Payment will be full compensation for and shall include all labor, materials, equipment, tools, and incidentals necessary to complete the work.

30. CONCRETE REPAIR BY EPOXY INJECTION
Description: This work shall consist of furnishing all supervision, labor, materials, and equipment to structurally rebond concrete cracks, fractures, or delaminations by means of an epoxy injection system.

Approvals: Prior to the start of the work, the Contractor shall submit a notarized qualification statement indicating the firm has been engaged in this type of work for not less than 1 year. In addition, the certification shall indicate that the personnel performing the repair shall have 1 year minimum experience with the epoxy injection system.

The epoxy injection system proposed for use shall be approved prior to the start of the repair. A copy of comprehensive preparation, mixing, and application instructions shall be furnished which have been developed especially for use with the proposed epoxy injection system.

Materials: The epoxy resin adhesive shall be Concresive 1380 as manufactured by Adhesive Engineering Company, San Carlos, California, or approved equal. The epoxy shall be low viscosity, capable of penetrating crack widths down to 0.005 of an inch. The epoxy shall be capable of bonding to dry or damp surfaces, and shall exhibit a slant shear strength exceeding the concrete strength when tested fully cured in accordance with AASHTO T 237.

The surface seal material shall have adequate strength to hold injection fittings firmly in place and to resist injection pressures adequately to prevent leakage during injection.

Construction Requirements: The location and extent of cracks to be repaired by epoxy injection will be determined by the Engineer. The Contractor and Engineer shall consult and agree as to when the work is to be done. The work shall be performed with two-component automatic metering and mixing equipment using the Structural Concrete Bonding™ process by Adhesive Engineering Company, San Carlos, California, or an approved equivalent process. Concrete surfaces adjacent to the cracks shall be cleaned to the extent necessary to achieve adequate bond of the surface seal material. Entry ports shall be provided along the crack at intervals determined in the field to insure full depth penetration of the injection resin. Surface seal shall be applied between entry ports, and on both faces of through cracks when possible.
Epoxy injection shall begin at the lower entry port and continue until there is an appearance of epoxy at the adjacent entry port. Injection shall continue until all cracks are completely filled. If port to port travel is not apparent, the work shall be stopped immediately and the Engineer notified. Upon completion of the injection, the adhesive shall be allowed to cure for sufficient time to allow removal of surface seal without any draining or rushack of material from the cracks. Surface seal material and injection adhesive runs or spills shall be removed from concrete surfaces. The face of the crack shall be finished flush to the adjacent concrete showing no indentations or protrusions caused by the placement of entry ports.

Method of Measurement: Furnishing equipment for epoxy injection will not be measured for payment. Crack preparation for epoxy injection and epoxy material will be measured by the linear foot of prepared crack.

Basis of Payment: This work will be paid for at the contract lump sum price for furnishing equipment, and at the contract unit price per linear foot for crack preparation and epoxy material. Payment shall include all labor, material, equipment, tools, and incidentals necessary to complete the work.

31. PAVED SIDE DITCH, A (BRIDGE NO. 502)
This work will be in accordance with IDOH Specifications, Section 607. Included with this is the removal of existing P.S.D. concrete below the curb section, grading, and pouring the new section and cut-off wall. Existing reinforcing steel extending beyond the curb section shall be left in place and incorporated into the new P.S.D. extension. The cut-off wall will be poured at about 1'-0" from the outlet end. The P.S.D. will not be poured until the Revetment Riprap has been completed. This is so the P.S.D. can extend about 1'-0" over the top of the Revetment Riprap.

32. GEOTEXTILES
Geotextiles shall conform to the requirements of Section 616.09 of the Indiana Department of Highway Standard Specifications, 1988.

33. REVETMENT RIPRAP (18")
This work shall be in accordance with Section 616. In areas where water drains over the riprap from paved side ditches, storm drains, or surface drainage outlets, depressions or flat bottom ditches in the riprap will be made to control the drainage without concentrating the water in a "V" type ditch. In areas under deck drains, care shall be taken to chink voids with smaller rock to make a dense splash pad.

34. CONCRETE SLOPEWALL
This work consists of grading and constructing 4" concrete slopewall at locations shown on the plans or as directed in accordance with Section 616. Included with this is the work necessary to install dowels into the existing slopewall as shown on the plans.

35. RUBBING
All exposed surfaces which cannot be repaired to the satisfaction of the Engineer shall be rubbed as specified for a Class 2 Finish.

36. SURFACE SEAL
The Epoxy Penetrating Sealing shall be done in accordance with Section 709 of the Specifications. Areas to be surface sealed are as noted in the general notes for each bridge.

37. CLEAN AND PAINT BEARING ASSEMBLIES
This work shall consist of cleaning and painting the bearing assemblies at locations directed. This work shall be in accordance with the applicable provisions of 619.
This work will not be measured for payment. Payment for this work will be made at the contract lump sum price for clean and paint bearing assemblies, for the applicable structure. This payment shall include the costs for all materials, equipment, tools, and labor, and incidentals necessary to complete the work.

38. BITUMINOUS SURFACE
This work shall consist of one or more courses of bituminous mixture constructed on the prepared asphalt base or existing pavement in accordance with Section 400. The basis of payment shall be by the ton. Tack coat is required, and the cost of this will be included in the unit price per ton bid.

39. MULCHED SEEDING
This work consists of seeding and mulching the areas disturbed during repair work as directed by the Engineer, and in accordance with the provision of Section 621. This includes all disturbed stream bank areas. The cost of this will be included in other bid items.

40. REMOVAL OF GUARDRAIL
This work shall consist of the removal of the existing guardrail in accordance with the applicable provisions of 202 and the following.

All guardrail, posts, and hardware will become the property of the County after removal. The guardrail, posts, and hardware removed shall be stored as directed. The guardrail or posts shall not be damaged during removal.

This work will be measured by the linear foot. This work will be paid for at the contract unit price per linear foot for removal of guardrail. The costs of removal and storage of the guardrail, posts, and hardware shall be included in the cost of this work.

41. OFF-STRUCTURE W-BEAM GUARDRAIL
This work shall consist of the fabrication, assembly, and installation of W-beam guardrail, any shop or field curved sections, and terminal end pieces in accordance with those requirements, and at the locations shown on the plans. This work may also consist of the extension of existing rub-rail type guardrail with W-beam guardrail. The materials for the W-beam guardrail shall be in accordance with 909.09, 909.10, 909.11, and 909.12. The adjustable post brackets are not required unless noted on the drawings. The post spacing and post lengths shall be as shown on the plans for each specific location. W-beam guardrail will be measured by the linear foot, complete in place. W-beam guardrail will be paid for at the contract unit price per linear foot. The pay length for shop curved guardrail shall be 1.3 times the actual length. Payment will be measured from end posts.

Payment will be made under:

Pay Item	Pay Unit
Guardrail, W-beam, 6'-3" Spacing	Linear Foot
Guardrail, W-beam, 12'-6" Spacing	Linear Foot

42. GUARDRAIL END TREATMENT (BURIED)
The pay item for "Guardrail End Treatment (Buried)" includes the splice plate "C" assembly detail and all posts and guardrail furnished and installed as shown on the plans and required by the specifications. The basis of payment shall be for each "Guardrail End Treatment (Buried)" installed.

43. ADJUSTABLE POST BRACKETS (BRIDGE NO. 138)
This work consists of furnishing and installing adjustable post brackets on the Bridge No. 138 guardrail posts as shown on the plans. Field drilled holes may be required for installation and all work and material shall conform to Sections 909.10(a) and 909.11(a).

44. ADJUST CASTING TO GRADE (BRIDGE NO. 502)
This item consists of adjusting the manhole frame and cover in Third Street to grade for the asphalt surface overlay. Maximum increase in the raised adjustment is 2 inches.

This work will be paid for at the contract price for each. Payment will be full compensation for all labor, materials, equipment, tools, and incidentals necessary to complete this work.

JAY COUNTY BRIDGE NO. 138

ESTIMATE OF QUANTITIES

Item	Description	Quantity	Unit
1	Mobilization/Demobilization	1	L.S.
2	Overlay Dams	60.4	SFT.
3	Expansion Joint, BS-8	64.4	L.F.
4	Clean and Seal Joints	1	L.S.
5	Clean and Paint Bearing Assemblies	1	L.S.
6	Surface Seal	1	L.S.
7	Guardrail, Remove	100	LFT.
8	Guardrail, W-Beam, 6'-3" Spacing	240	LFT.
9	Guardrail, W-Beam, 12'-6" Spacing	525	LFT.
10	Guardrail, End Treatment (Buried)	3	EACH
11	Adjustable Post Brackets	54	EACH
12	Construction Signs Type A	4	EACH
13	Standard Barricades Type III-A	2	EACH

JAY COUNTY BRIDGE NO. 139

ESTIMATE OF QUANTITIES

Item	Description	Quantity	Unit
1	Mobilization/Demobilization	1	L.S.
2	Removal of Present Structure (Portions)	1	L.S.
3	Class 'C' Concrete in Railing	1.76	CYS.
4	Reinforced Concrete Pavement, 10"	55.6	SYS.
5	Epoxy Coated Reinforcing Steel	2077	LBS.
6	Compacted Aggregate for Base, Type 'O', No. 53	20	TONS
7	Surface Mill, Concrete	396	SYS.
8	Surface Milling, Bituminous	222	SYS.
9	Removal for Expansion Joints	175	SFT.
10	Special Class 'A' Concrete	20	SFT.
11	Partial Depth Bridge Deck Patching	475	SFD
12	Extension of Deck Drains	8	EACH
13	Bridge Deck Overlay (Latex)	396	SYS.
14	Additional Bridge Deck Overlay	3	CYS.
15	Expansion Joint, BS-6	122	L.F.
16	Stopewall, Concrete	55.8	SYS.
17	Surface Seal	1	L.S.
18	Bituminous Surface	60	TON
19	Guardrail, Remove	262.5	LFT.
20	Guardrail, W-Beam, 6'-3" Spacing	100	LFT.
21	Guardrail, W-Beam, 12'-6" Spacing	350	LFT.
22	Guardrail, End Treatment (Buried)	4	EACH
23	Construction Signs Type A	4	EACH
24	Standard Barricades Type III-A	2	EACH

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JAY COUNTY BRIDGE NO. 502

ESTIMATE OF QUANTITIES

Item	Description	Quantity	Unit
1	Mobilization/Demobilization	1	L.S.
2	Surface Milling, Concrete	264	SYS.
3	Surface Milling, Bituminous	293.3	SYS.
4	Concrete Removal for Expansion Joints	54	SFT.
5	Overlay Dams	118	SFT.
6	Partial Depth Bridge Deck Patching	400	SFT.
7	Special Class 'A' Concrete	140	SFT.
8	Expansion Joint, BS-6	86	L.F.
9	Clean and Seal Joints	1	L.S.
10	Bridge Deck Overlay (Latex)	264	SYS.
11	Additional Bridge Deck Overlay	4	CYS.
12	Epoxy Injection, Furnishing Equipment	1	L.S.
13	Epoxy Injection, Crack Repair	30	LFT.
14	Adjust Casting to Grade	1	L.S.
15	Surface Seal	1	L.S.
16	Bituminous Surface	90	TONS
17	Bituminous Base	8	TONS
18	Site Work	1	L.S.
19	Paved Side Ditch, A	20	LFT.
20	Revetment Riprap	210	TONS
21	Geotextiles	280	SYS.
22	Sidewalk	14.5	SYS.
23	Construction Signs Type A	7	EACH
24	Standard Barricades Type III-A	2	EACH

1075 SFT

11 days

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AECON
ENGINEERS & CONSULTANTS

SPECIAL PROVISIONS
Bridge Nos 138, 139 & 502
Jay County, In.

DESIGNED	RAW	6/92	SCALE	none
DRAWN	CRE	6/92	JOB NO	38138.00
CHECKED	RAW	6/92	SHEET	9 of 9
CERTIFIED				