

PROJECT	DESIGNATION
1900094	1383721
CONTRACT	BRIDGE FILE
B-42401	046-15-01987 B

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
046-15-01987 B	REHABILITATION TO STEEL THROUGH TRUSS BRIDGE	5 SPANS: 175'-0" SKEW: 0	WHITEWATER RIVER	STA.1082+85.00 "NN"

KIN PROJECT INFORMATION	
DESIGNATION	PROJECT DESCRIPTION
1383721	Bridge Deck Replacement for Structure 046-15-01987 B
1900094	Bridge Deck Replacement for Structure 046-15-03054 B (Lead)

INDIANA DEPARTMENT OF TRANSPORTATION



BRIDGE REHABILITATION PLANS

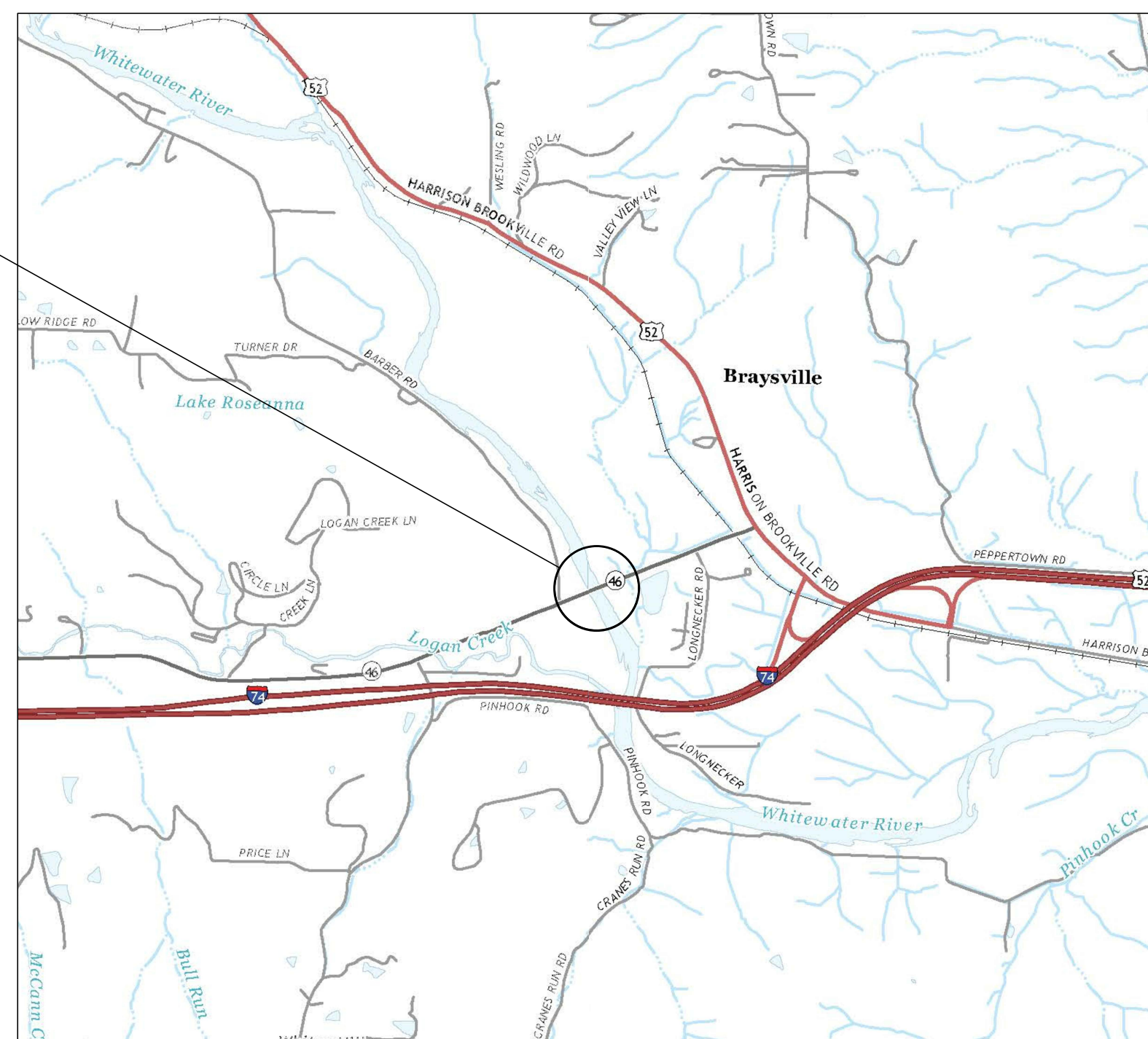
FOR SPANS OVER 20 FEET
ROUTE: SR 46 AT: RP 153+43

PROJECT NO. 1383721 P.E.
R/W
1383721 CONST.

NO ADDITIONAL RIGHT-OF-WAY
REQUIRED FOR THIS PROJECT

Bridge Deck Replacement on SR 46 over Whitewater River
Located 0.44 Miles West of US 52 in
Sections 9 & 10, T-7-N, R-1-W, Logan and Harrison Townships, Dearborn County, Indiana

PROJECT LOCATION
Begin Project-Sta.1078+08.50 "NN"
End Project-Sta.1087+61.50 "NN"



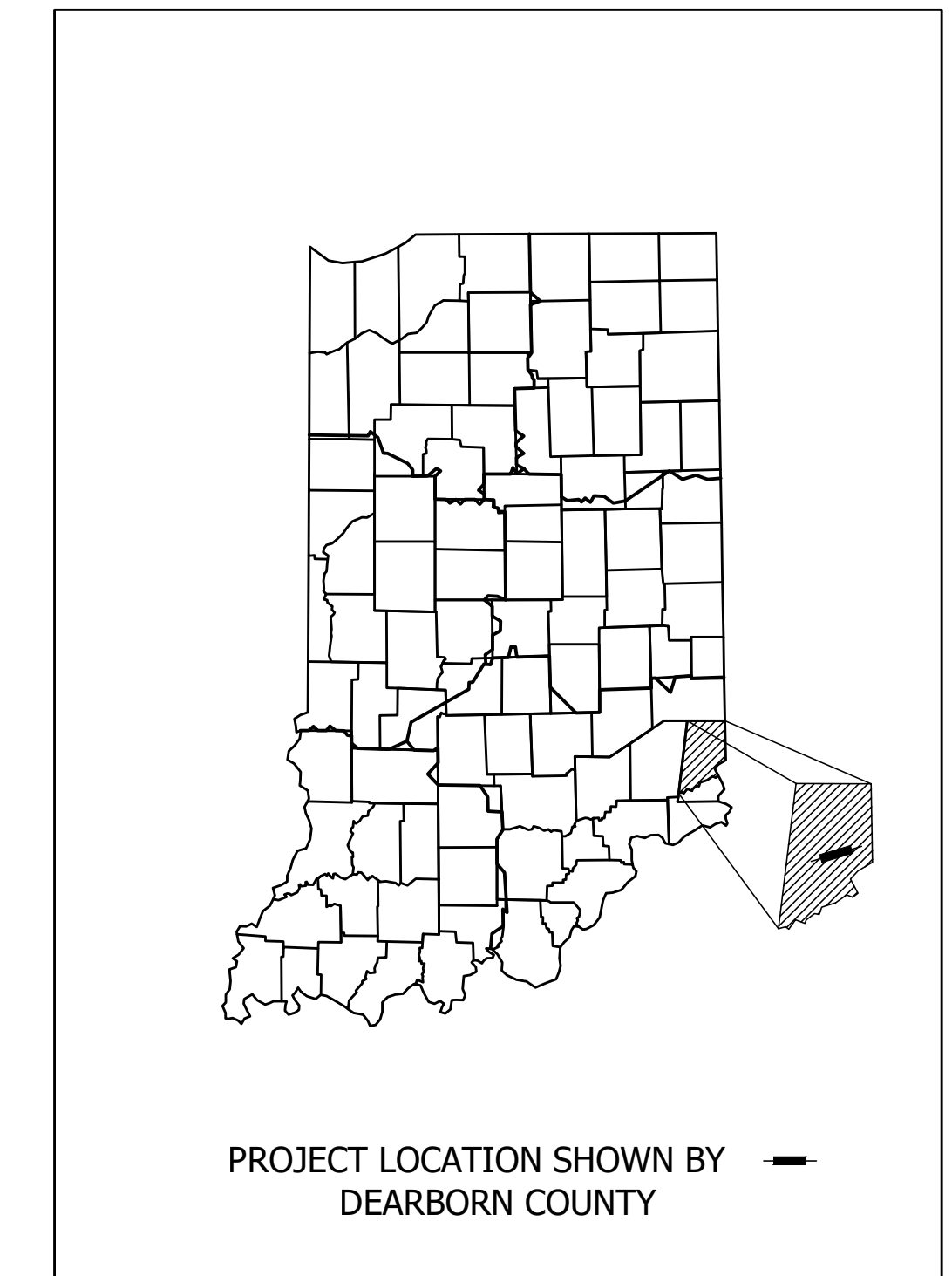
LOCATION MAP
SCALE: 1:24000

TRAFFIC DATA

A.A.D.T. (2023)	3705	V.P.D.
A.A.D.T. (2043)	4169	V.P.D.
D.H.V (2043)	501	V.P.H.
DIRECTIONAL DISTRIBUTION	47.85	%
TRUCKS	10	% A.A.D.T.
	5	% D.H.V.

DESIGN DATA

DESIGN SPEED	55	M.P.H.
PROJECT DESIGN CRITERIA	3R	(NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	STATE COLLECTOR	
RURAL/URBAN	RURAL	
TERRAIN	LEVEL	
ACCESS CONTROL	NONE	



LATITUDE: 39°16'48.14"N LONGITUDE: 84°52'26.5"W

BRIDGE LENGTH: 0.168 MI.
ROADWAY LENGTH: 0.007 MI.
TOTAL LENGTH: 0.180 MI.
MAX. GRADE: -0.97 %

HUC 12: 050800030806
HUC 14: 05080003080090

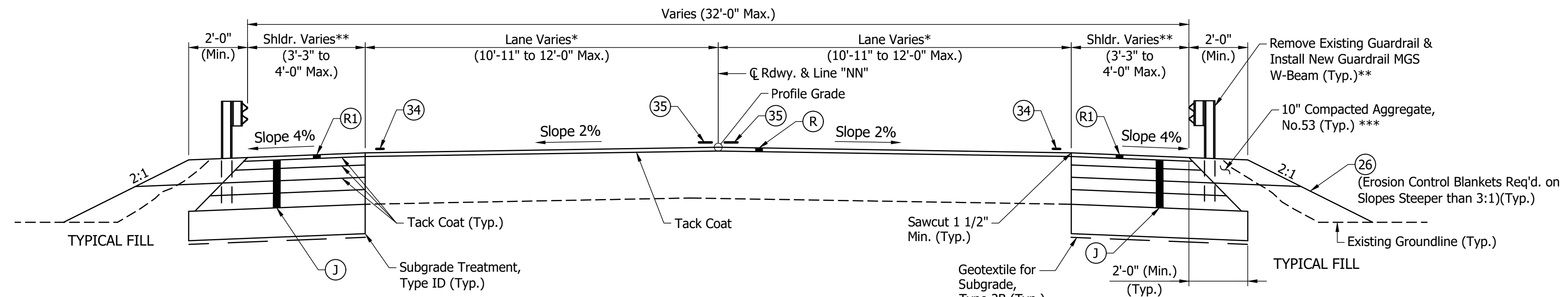
INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2022
TO BE USED WITH THESE PLANS.

PLANS PREPARED BY:



PLANS PREPARED BY: BEAM, LONGEST & NEFF, LLC (317)849-5832 PHONE NUMBER
CERTIFIED BY: _____ DATE
APPROVED FOR LETTING: _____ DATE
INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE FILE	
046-15-01987 B	
DESIGNATION	
1383721	
DRAWING NO.	SHEETS
1	of 36
CONTRACT	PROJECT
B-42401	1900094

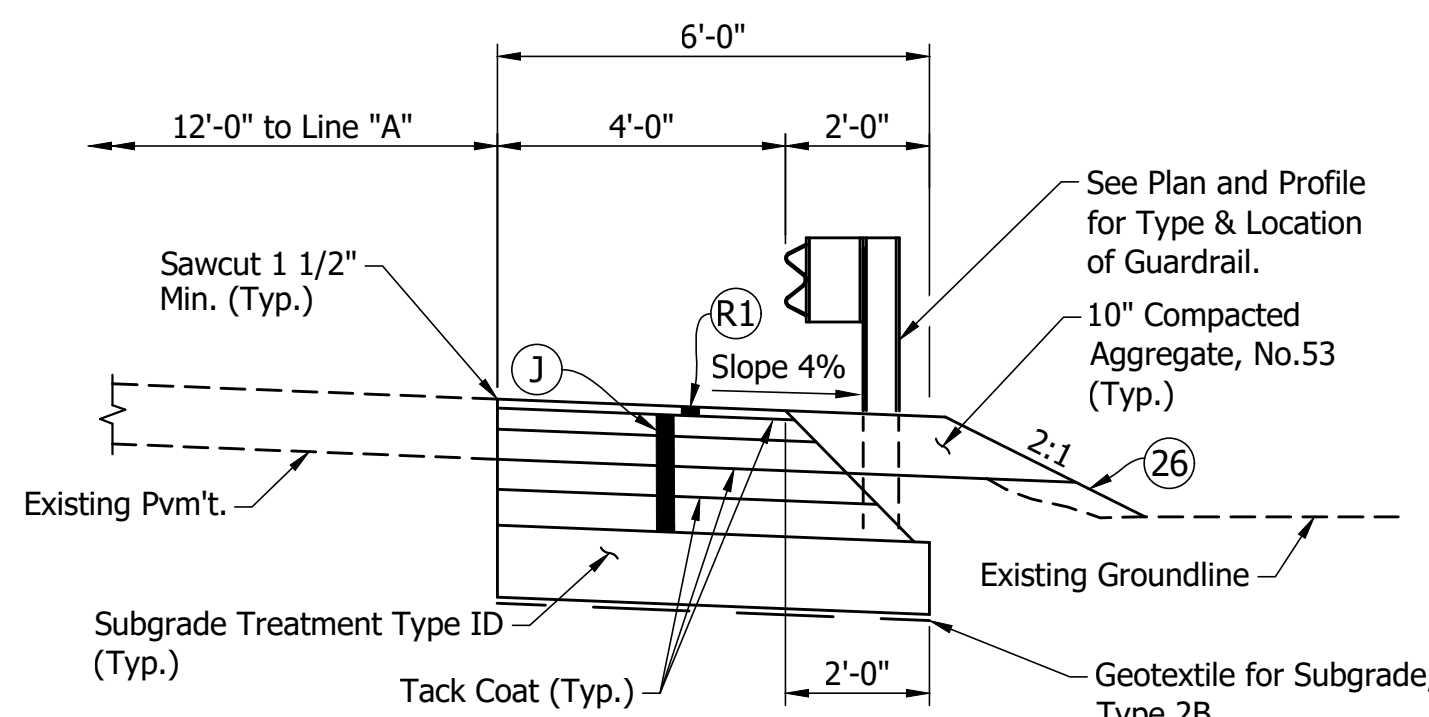


TYPICAL SECTION THROUGH RESURFACE

STA.1077+18.50 "NN" to STA.1077+78.50 "NN"
 STA.1087+91.50 "NN" to STA.1088+51.50 "NN"
 Scale: 3/8" = 1'-0"

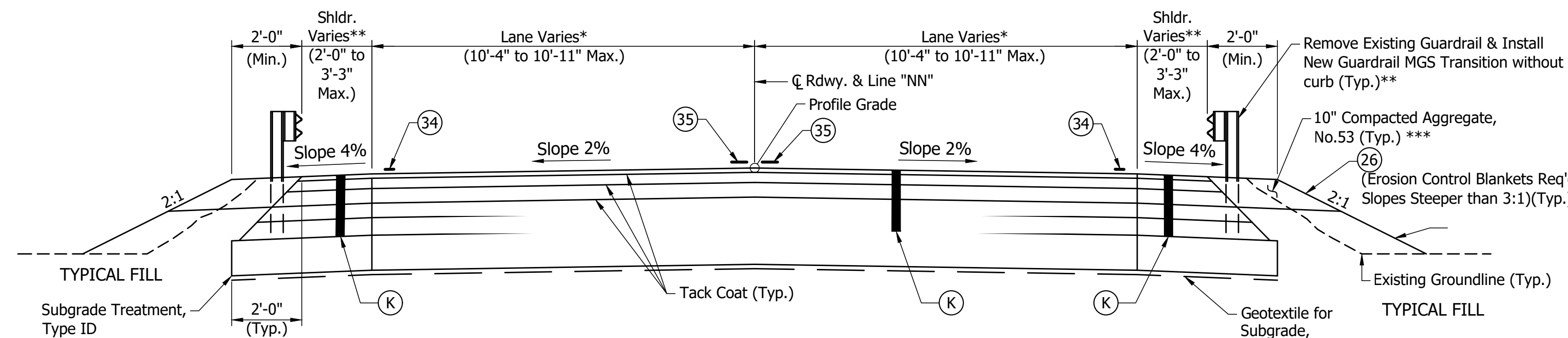
LEGEND

- (26) Mulched Seeding, R:
Apply to Areas above El. 534.0
Seed Mixture Floodplain:
Apply to Areas below El. 534.0
- (34) Line, Paint, Solid, White, 4 in.
- (35) Line, Paint, Solid, Yellow, 4 in.
- (J) Widening with HMA, Type B
(385 lb/syd, HMA Intermediate, Type B on 550 lb/syd, HMA Base, Type B on 550 lb/syd, HMA Base, Type B) on 6" Compacted Aggregate, No. 53 (Tack Coat between HMA Layers)
- (K) 165 lb/syd, QC/QA-HMA, 3, 64, Surface, 9.5 mm on 385 lb/syd, QC/QA-HMA, 3, 64, Intermediate, 19.0 mm on 550 lb/syd, QC/QA-HMA, 3, 64, Base, 25.0 mm on 550 lb/syd, QC/QA-HMA, 3, 64, Base, 25.0 mm on 6" Compacted Aggregate, No. 53 (Tack Coat between HMA Layers)
- (R) 165 lb/syd, QC/QA-HMA, 3, 64, Surface, 9.5 mm on Milling, Asphalt, 1.5 in.
After Milling, seal visible cracks 0.25 in. wide or wider, before applying tack coat, with PG 64-22 only. No Emulsion shall be used. The sealed cracks shall not be overbonded.
- (R1) 165 lb/syd, QC/QA-HMA, 3, 64, Surface, 9.5 mm on Widening with HMA, Type B



SECTION A-A

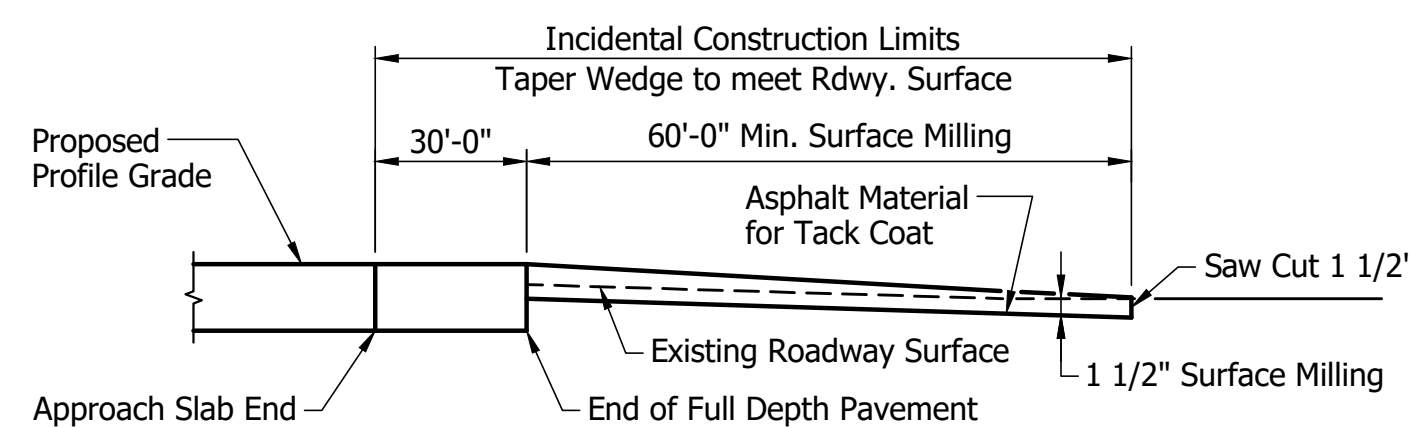
STA.1077+06.50 "NN" to STA.1077+18.50 "NN" LT.
 STA.1076+62.75 "NN" to STA.1077+18.50 "NN" RT.
 STA.1088+51.50 "NN" to STA.1089+07.25 "NN" LT.
 STA.1088+51.50 "NN" to STA.1088+63.50 "NN" RT.
 Scale: 3/8" = 1'-0"



TYPICAL SECTION THROUGH FULL DEPTH PAVEMENT

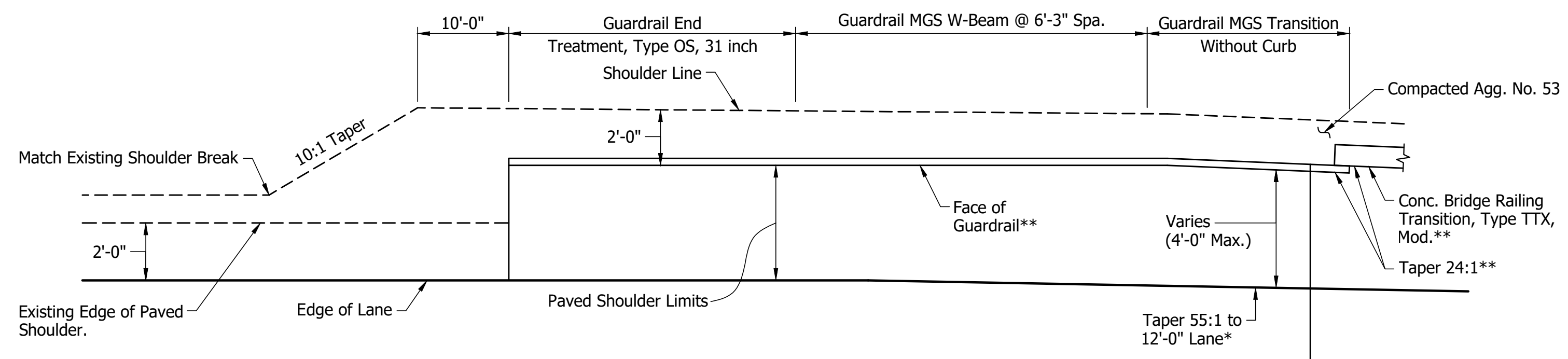
STA.1077+78.50 "NN" to STA.1078+08.50 "NN"
 STA.1087+61.50 "NN" to STA.1087+91.50 "NN"
 Scale: 3/8" = 1'-0"

Note to Reviewer:
 Pavement Design is Preliminary



MATCHING EXISTING PAVEMENT - LINE "NN"

(REQ'D. @ END OF PROJECT)
 (NO SCALE)



SHOULDER AND GUARDRAIL DETAILS

(Typ. all 4 Corners)
 (NO SCALE)

Notes:

- * Travel Lanes shall Taper from 10'-0" on Bridge to 12'-0" on Approaches utilizing a 55:1 Taper.
 - ** New Guardrail and Shoulder at all Quadrants shall Taper 24:1 until Front Face of Guardrail is 16'-0" from Line "NN".
 - *** Place Compacted Aggregate only within limits of New Guardrail and areas to tie into existing shoulders at end of New Guardrail.
- For Location of Section A-A, see Sht. XX.

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: RTW	DRAWN: LLH	
CHECKED: AVW	CHECKED: AVW	

INDIANA
 DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	046-15-01987 B
VERTICAL SCALE	DESIGNATION
AS NOTED	1383721
DRAWING NO.	SHEETS
	3 of 36
CONTRACT	PROJECT
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LEGEND

- PCM Portable Changeable Message Sign
- (A) Barricade Type III-A & Road Closure Sign Assembly
- (B) Barricade Type III-B
- (C) Barricade Type III-B & Road Closure Sign Assembly
- (D) XM4-8 Detour Route Marker Assembly
 - 1. Advance Turn
 - 2. Directional
 - 3. Confirming
 - 4. End

CONSTRUCTION SIGNS TYPE "A"

- (1) R11-2 Road Closed
- (2) XW20-2 Detour Ahead
- (3) XW20-3 Road Closed Ahead
- (4) XG20-2 End Construction
- (5) R11-4 Road Closed To Thru Traffic
- (6) XG20-5 Road Closed on or After xx/xx/xxxx
- (7) XW2-6-A Worksite Penalty Sign
- (8) R11-3 Road Closed xxx Miles Ahead Local Traffic Only

CONSTRUCTION SIGNS TYPE "B"

- INDIANA 46 M1-5 30"x24"
- EAST M3-2 24"x12"
- WEST M3-4 24"x12"

MAINTENANCE OF TRAFFIC - COMMON QUANTITIES
(Quantities shown are included with Lead Des.No.1900094)

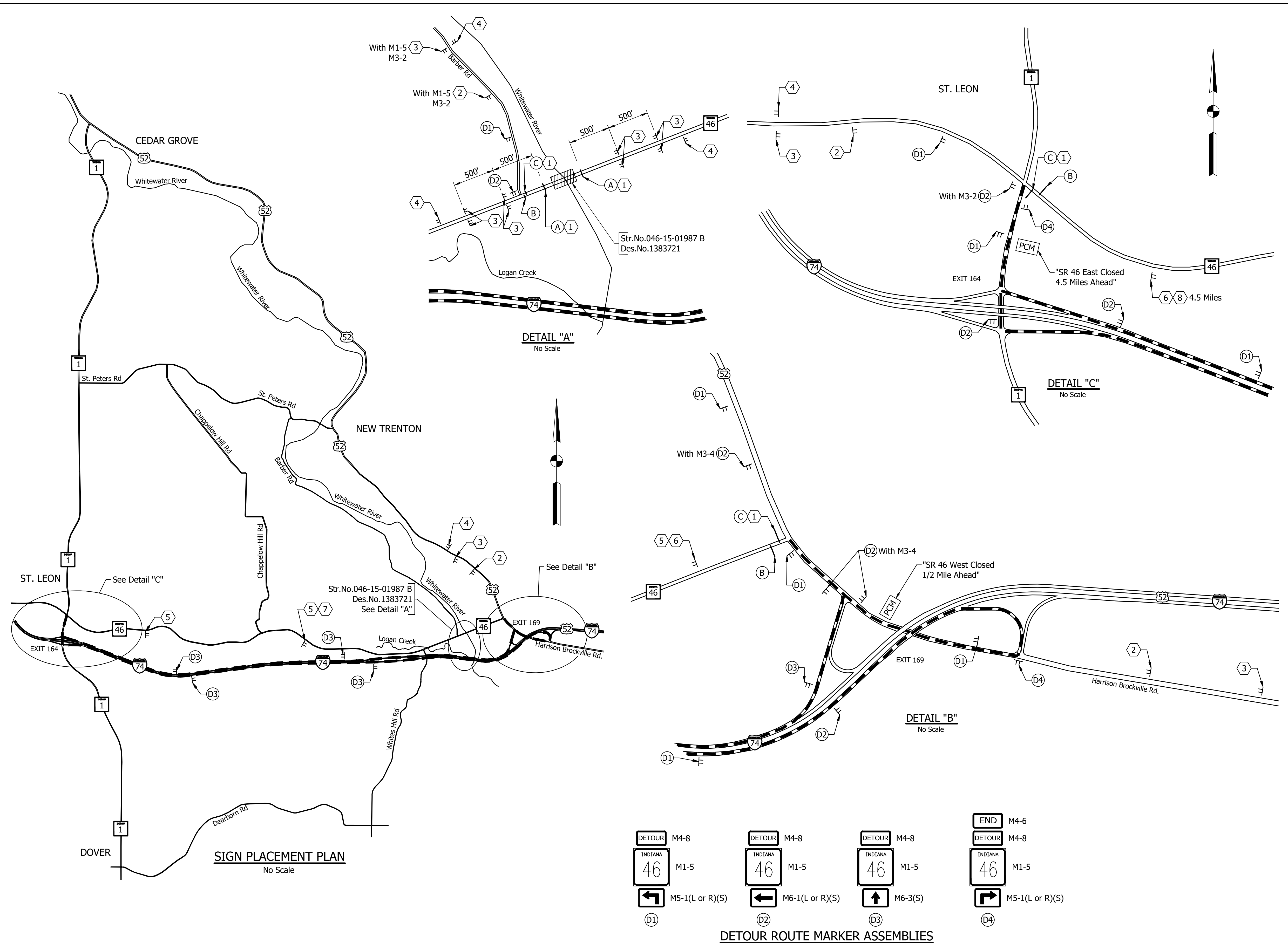
ITEM	QUANTITY
Barricade Type III-B	48 Lft.
Road Closure Sign Assembly	2 Ea.
Construction Signs Type "A"	15 Ea.
Construction Signs Type "B"	3 Ea.
Detour Route Marker Assembly	23 Ea.
Portable Changeable Message Sign	2 Ea.

MAINTENANCE OF TRAFFIC
Str.No.046-15-01987 B QUANTITIES
(Des.No.1383721)

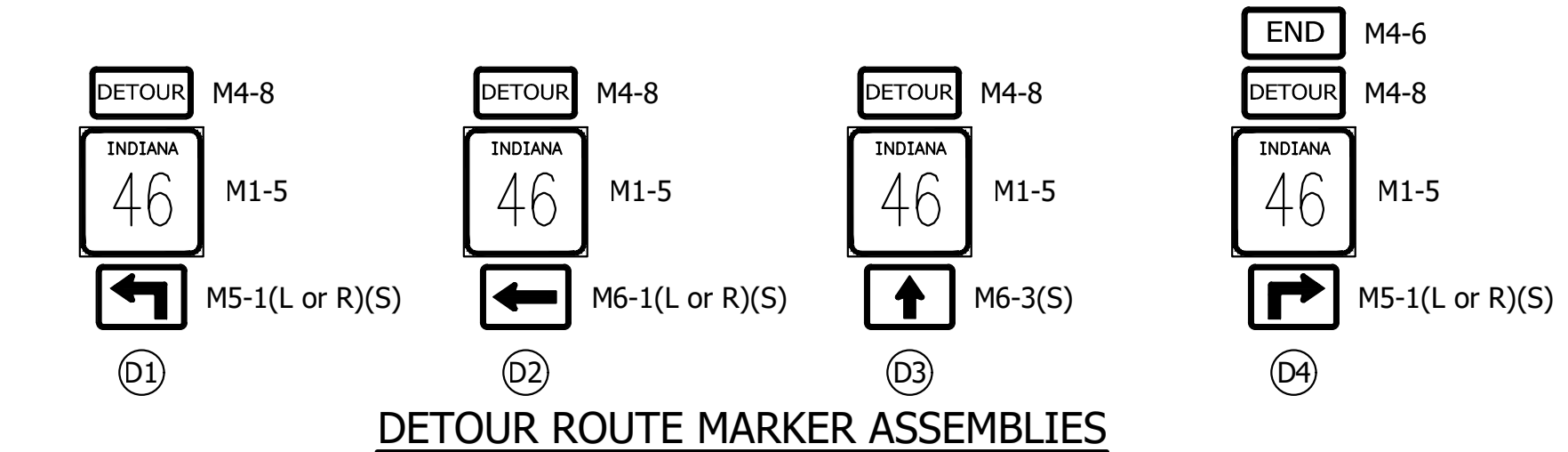
ITEM	QUANTITY
Barricade Type III-A	48 Lft.
Barricade Type III-B	48 Lft.
Road Closure Sign Assembly	2 Ea.
Construction Signs Type "A"	13 Ea.
Construction Signs Type "B"	4 Ea.
Maintaining Traffic	1 LSum

MAINTENANCE OF TRAFFIC GENERAL NOTES

- All construction signs, drums, and barricades shall be equipped with Construction Warning Lights, Type A.
- Actual construction sign location shall be determined by the Project Engineer. The locations shown are approximate and may be adjusted by the Project Engineer.
- The Contractor shall be required to erect, furnish and maintain all construction signs and barricades as shown.
- Maintenance of Traffic shall be in accordance with Section 104.04 of the Indiana Department of Transportation Standard Specifications, 2020. The Indiana Manual on Uniform Traffic Control Devices, 2011, with Revisions #1, #2, and #3, and the Maintaining Traffic Sequence for Individual Segments as detailed.
- Access to drives to be maintained at all times. When construction is around drives, the Contractor shall contact the property owner and work out a time schedule that will cause the least inconvenience to the property owner.
- The Contractor shall coordinate with the INDOT Area Engineer about Portable Changeable Message Sign locations and Message.

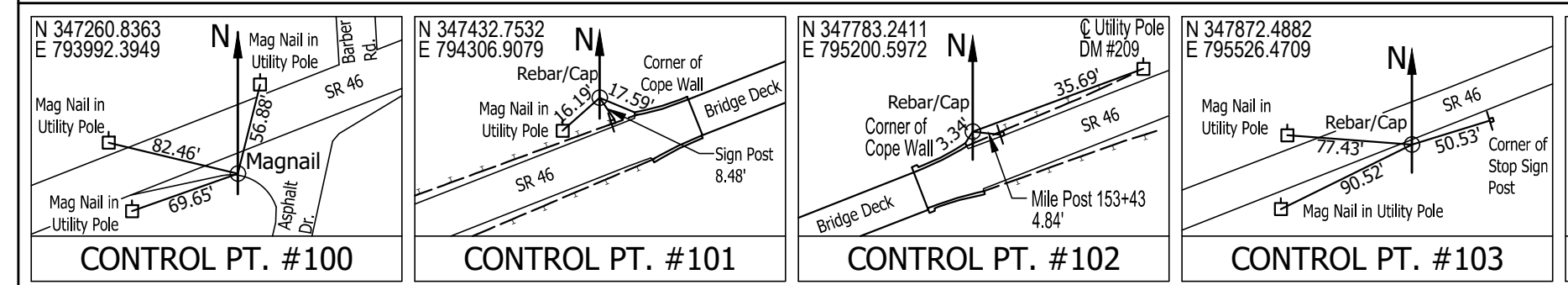
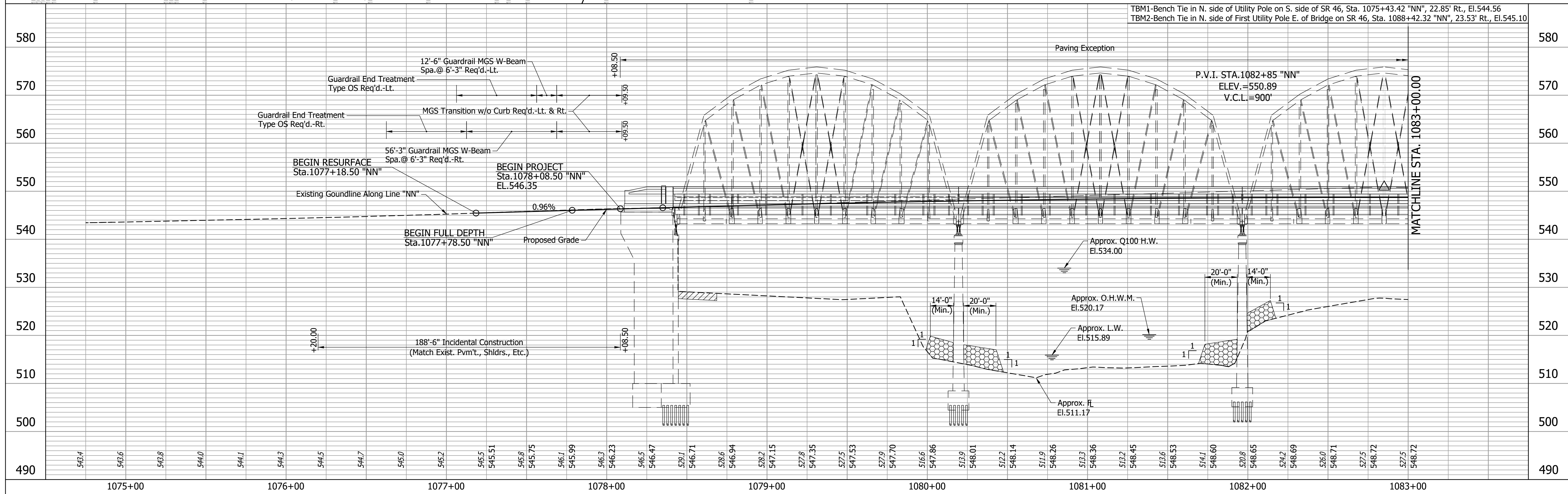
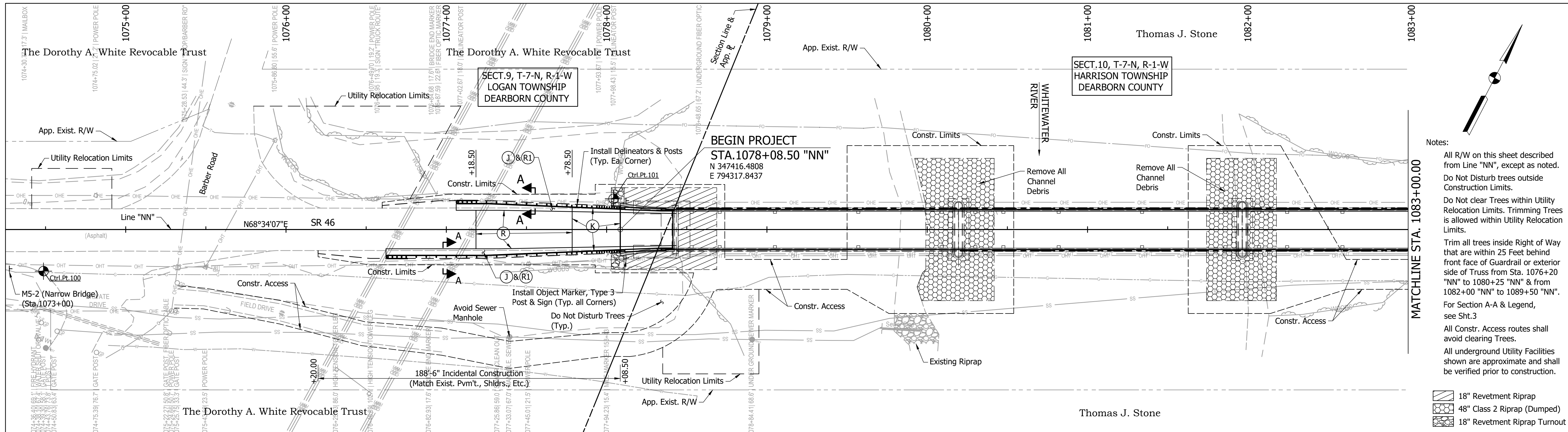


SIGN PLACEMENT PLAN
No Scale



DETOUR ROUTE MARKER ASSEMBLIES

RECOMMENDED FOR APPROVAL _____ DESIGNED: RTW CHECKED: AVW	DESIGN ENGINEER _____	DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION MAINTENANCE OF TRAFFIC	HORIZONTAL SCALE N/A	BRIDGE FILE 046-15-01987 B
	DRAWN: LLH CHECKED: AVW	DRAWING NO. _____		SHEETS 4 of 36	VERTICAL SCALE N/A
				CONTRACT B-42401	PROJECT 1900094

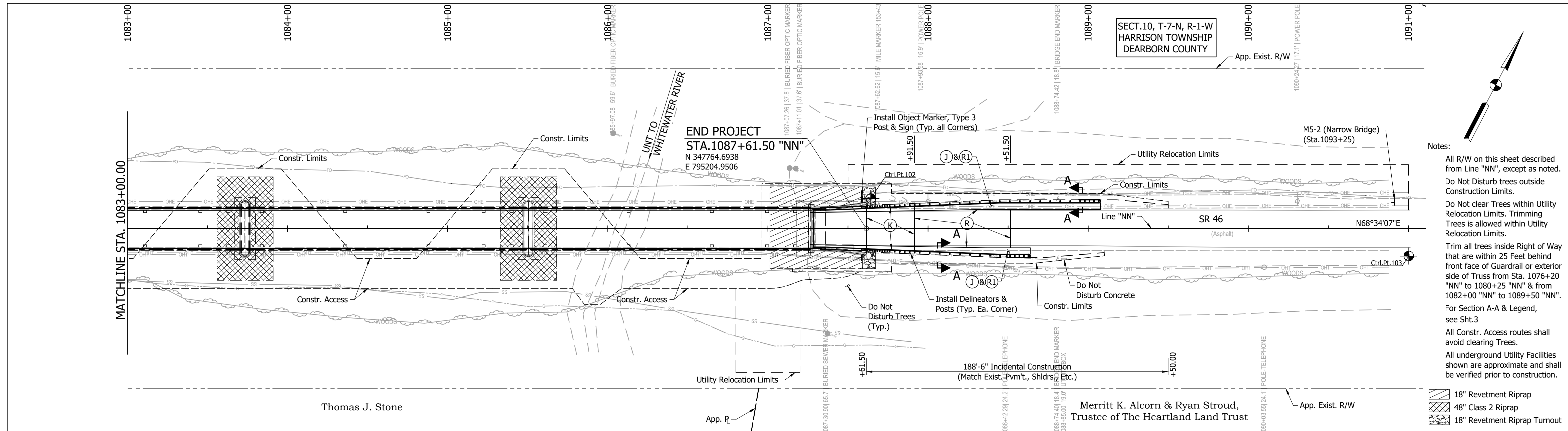


RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: RTW	DRAWN: MEN	
CHECKED: AWV	CHECKED: AWV	

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE
LINE "NN"

HORIZONTAL SCALE 1"=30'	BRIDGE FILE 046-15-01987 B
VERTICAL SCALE 1"=10'	DESIGNATION 1383721
DRAWING NO.	SHEETS 5 of 49
CONTRACT B-42401	PROJECT 1900094



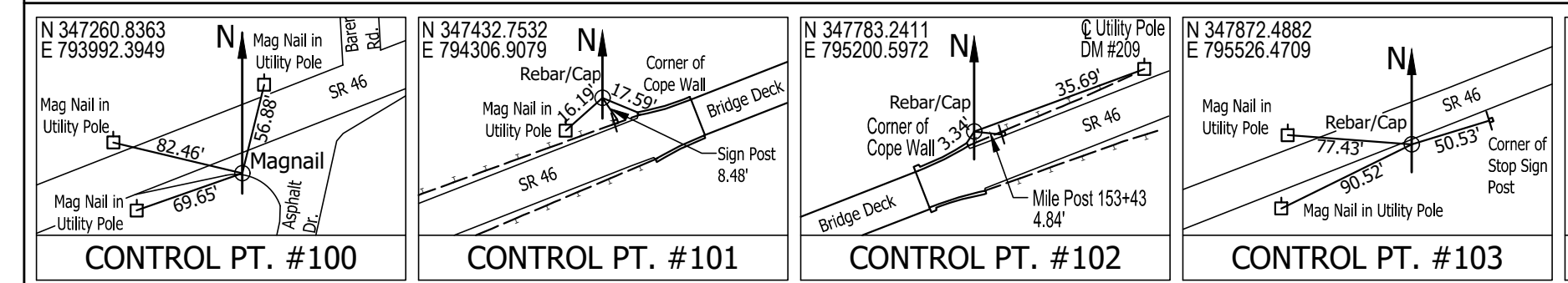
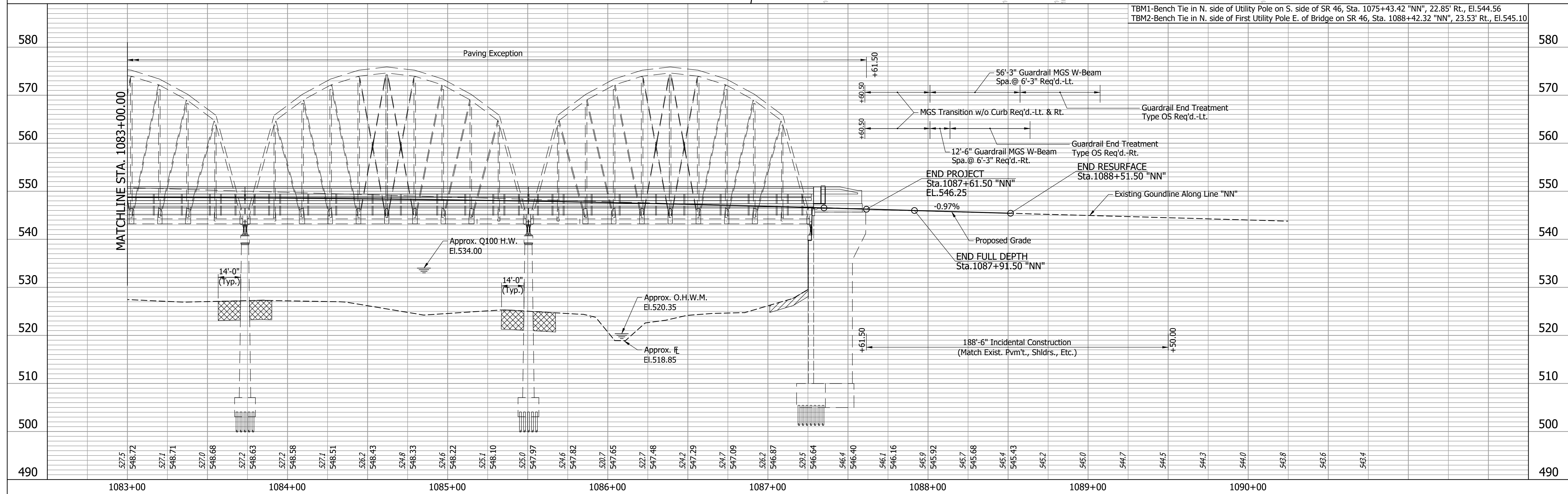
Notes:

- All R/W on this sheet described from Line "NN", except as noted.
- Do Not Disturb trees outside Construction Limits.
- Do Not clear Trees within Utility Relocation Limits. Trimming Trees is allowed within Utility Relocation Limits.
- Trim all trees inside Right of Way that are within 25 Feet behind front face of Guardrail or exterior side of Truss from Sta. 1076+20 "NN" to 1080+25 "NN" & from 1082+00 "NN" to 1089+50 "NN".
- For Section A-A & Legend, see Sht.3
- All Constr. Access routes shall avoid clearing Trees.
- All underground Utility Facilities shown are approximate and shall be verified prior to construction.

Thomas J. Stone

Merritt K. Alcorn & Ryan Stroud,
Trustee of The Heartland Land Trust

- 18" Revetment Riprap
- 48" Class 2 Riprap
- 18" Revetment Riprap Turnout

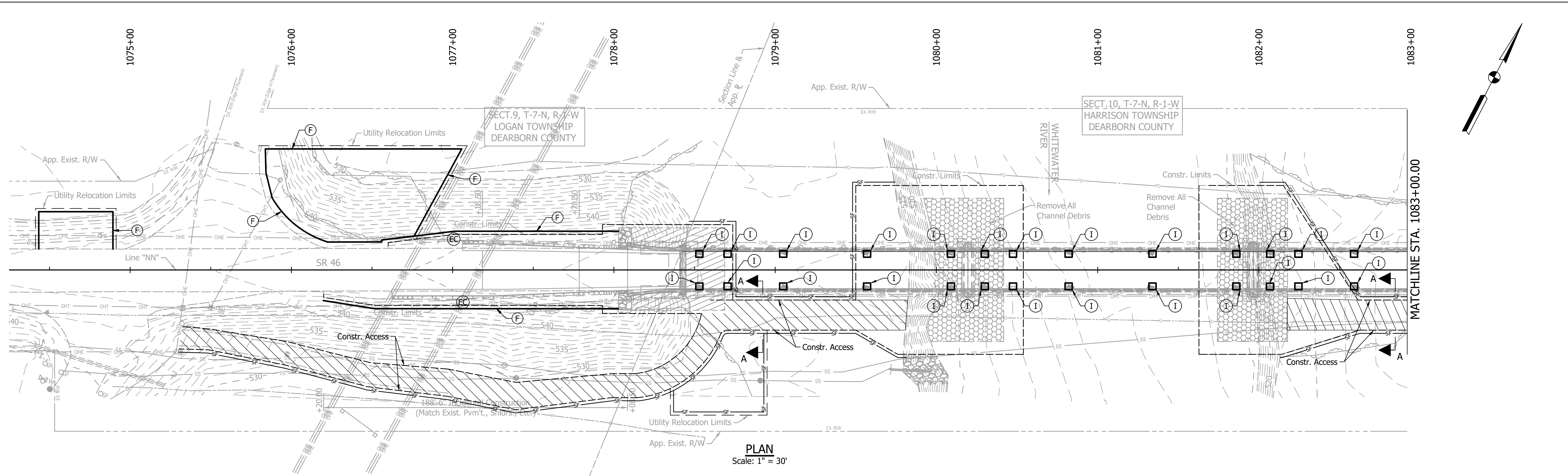


RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: RTW	DRAWN: MEN	
CHECKED: AWW	CHECKED: AWW	

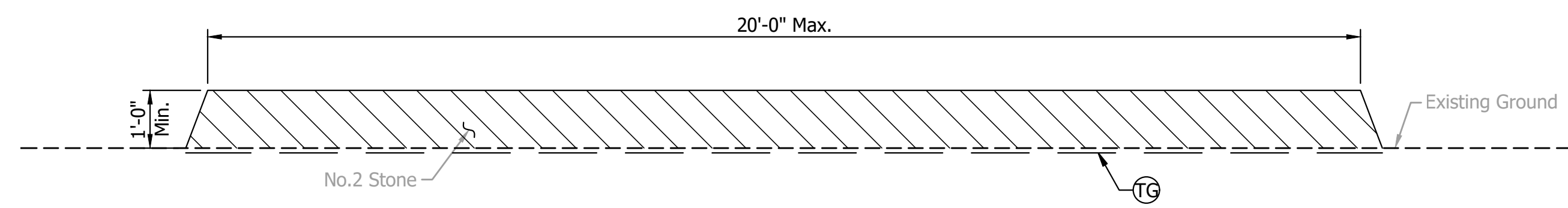
INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE
LINE "NN"

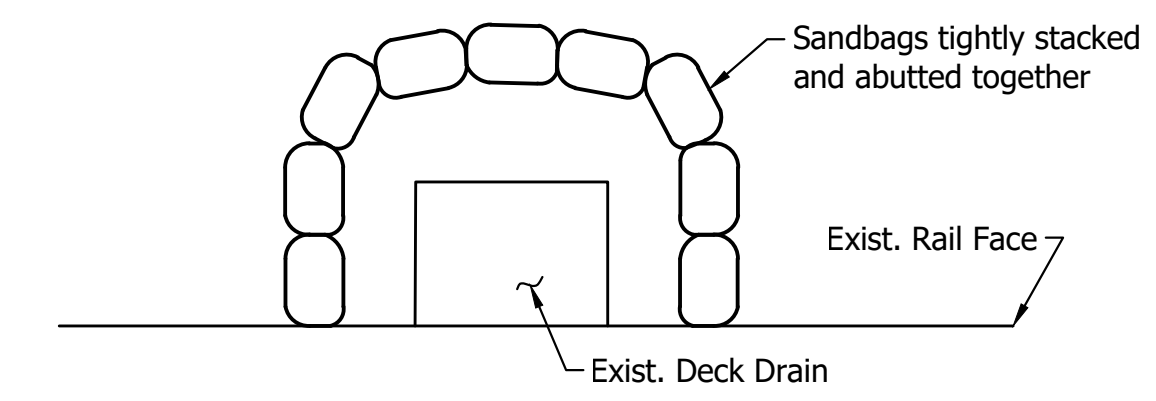
HORIZONTAL SCALE 1"=30'	BRIDGE FILE 046-15-01987 B
VERTICAL SCALE 1"=10'	DESIGNATION 1383721
DRAWING NO.	SHEETS 6 of 49
CONTRACT B-42401	PROJECT 1900094



PLAN
Scale: 1" = 30'



CONSTRUCTION ACCESS - SECTION A-A
Scale: 1/2" = 1'-0"



TYPICAL TEMPORARY INLET PROTECTION DETAIL
No Scale

LEGEND

- (F) Filter Sock
- SF Temporary Silt Fence
- (I) Temporary Inlet Protection
- (EC) Manufactured Surface Protection Product, Type 1
- (TG) Temporary Geotextile
- ▨ No. 2 Stone

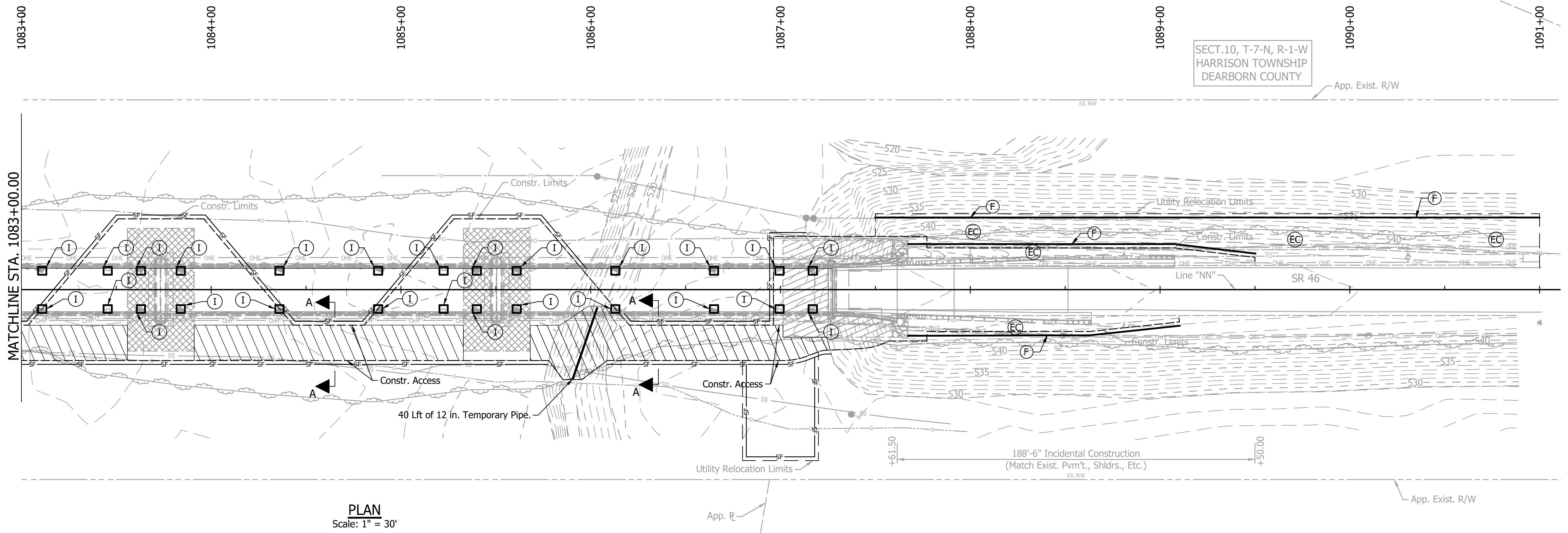
Note:
Install Temporary Inlet Protection at each Existing Deck Drain.

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: RTW _____	DRAWN: LLH _____	
CHECKED: AVW _____	CHECKED: AVW _____	

**INDIANA
DEPARTMENT OF TRANSPORTATION**

**EROSION CONTROL
LINE "NN"**

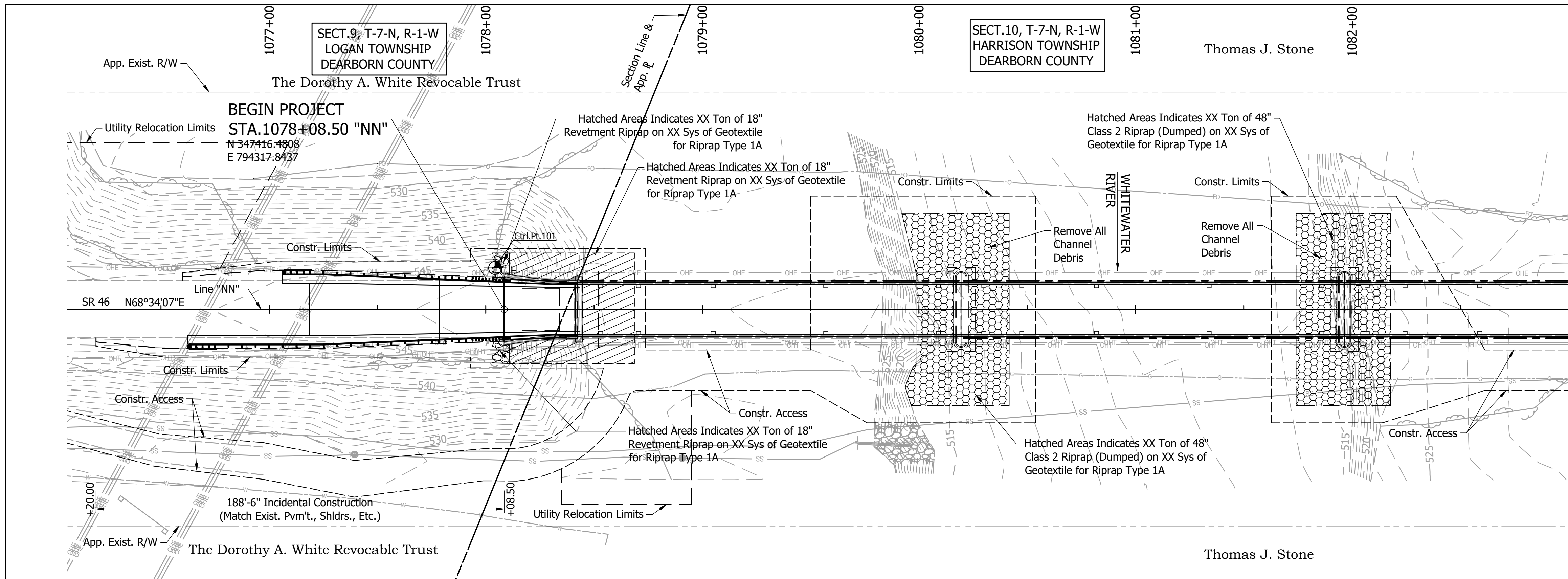
HORIZONTAL SCALE AS NOTED	BRIDGE FILE 046-15-01987 B
VERTICAL SCALE AS NOTED	DESIGNATION 1383721
DRAWING NO.	SHEETS 7 of 49
CONTRACT B-42401	PROJECT 1900094



PLAN
Scale: 1" = 30'

Note:
For Legend, Typical Temporary Inlet Protection Detail, and Construction Access Section A-A, see Sht. 7.
Install Temporary Inlet Protection at each Existing Deck Drain.

	RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1" = 30'	BRIDGE FILE 046-15-01987 B
	DESIGNED: RTW	DRAWN: LLH		EROSION CONTROL LINE "NN"	VERTICAL SCALE 1" = 30'	DESIGNATION 1383721
	CHECKED: AVW	CHECKED: AVW			DRAWING NO.	SHEETS 8 of 49
					CONTRACT B-42401	PROJECT 1900094



EXISTING STRUCTURE
Existing Structure is a 5 Span Steel Through Bridge (5@ 175'-0") with a 24'-0" Clear Roadway. (To Be Rehabilitated)

EARTHWORK SUMMARY

Common Excavation	xxx Cys
Usable Common Excavation (xx%)	xxx Cys
Fill + 20%	xxx Cys
Waterway Excavation	xx Cys
Usable Waterway Excavation (50%)	xx Cys
Borrow/Waste	xx Cys

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

HYDRAULIC DATA

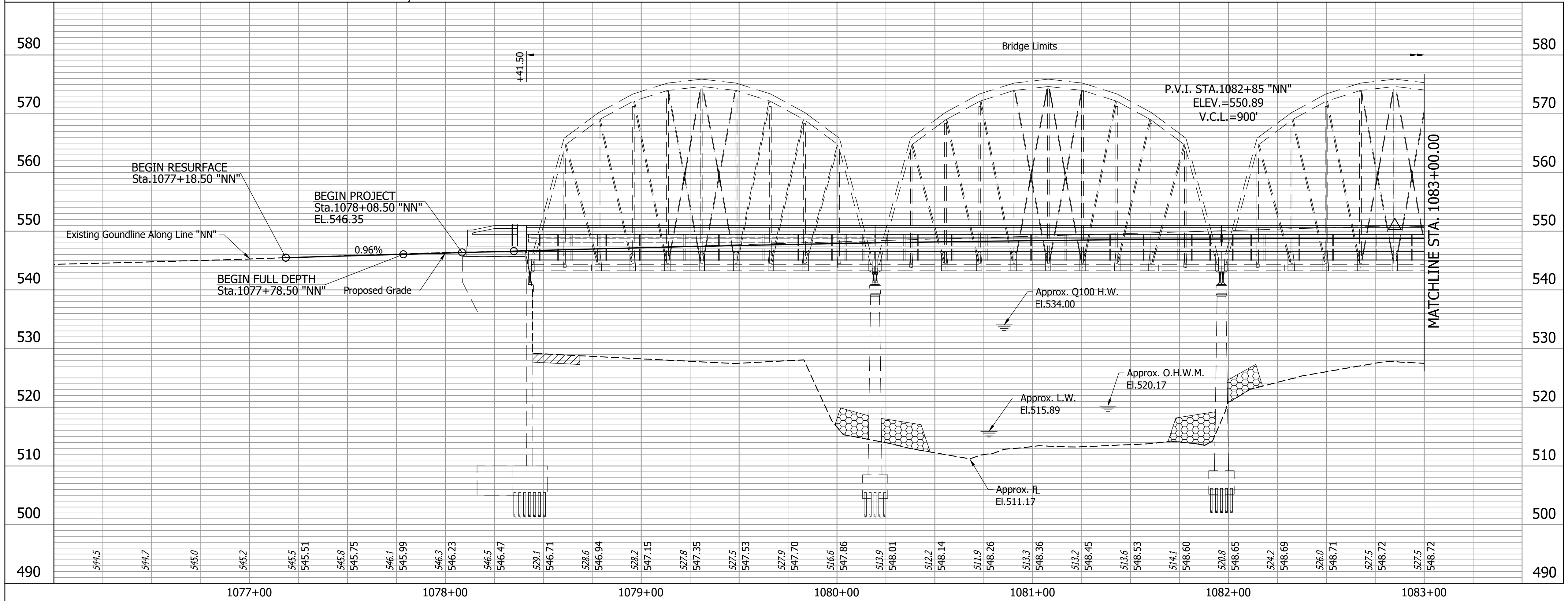
Drainage Area	1331 Sq Mi
Design Discharge, Q100	62,000 cfs
Design Discharge, Q500	N/A cfs
High Water Elevation, Q100	El.534.00

Existing Bridge

Skew	0°
Flowline Elevation (@ Upstream Coping)	El.511.17
Contraction Scour, Q100	0.40 ft
Pier Scour, Q100 (Pier 2 Controls)	14.96 ft
Total Scour, Q100 (Pier 2 Controls)	15.36 ft
Low Scour Elevation, Q100 (Pier 2 Controls)	El.495.81
Max. Velocity, Q100 (Q Channel)	10.32 ft/sec
Avg. Velocity, Q100	6.38 ft/sec

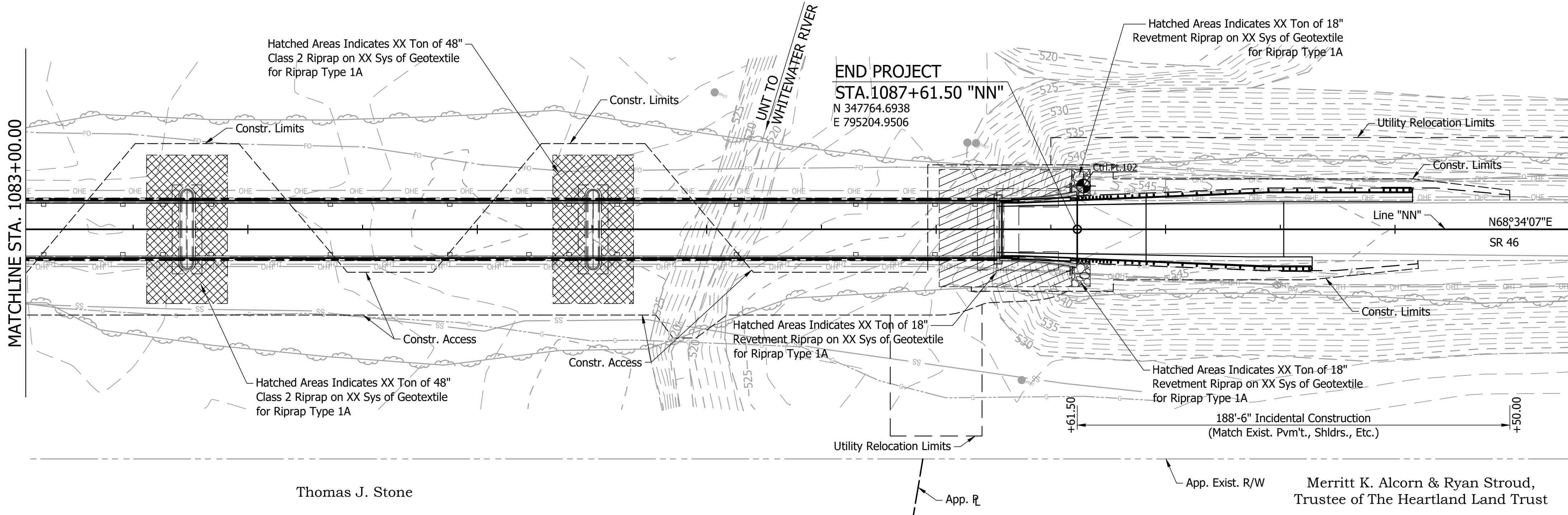
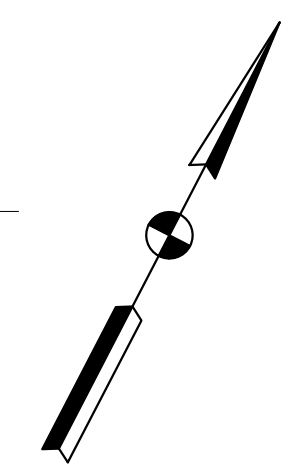
Notes:
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For Legend, see Sht.3

Legend:



STEEL THROUGH TRUSS BRIDGE
5 SPANS @ 175'-0"
23'-1 1/2" CLEAR ROADWAY SKEW: 0°
SR 46 OVER WHITEWATER RIVER
DEARBORN COUNTY

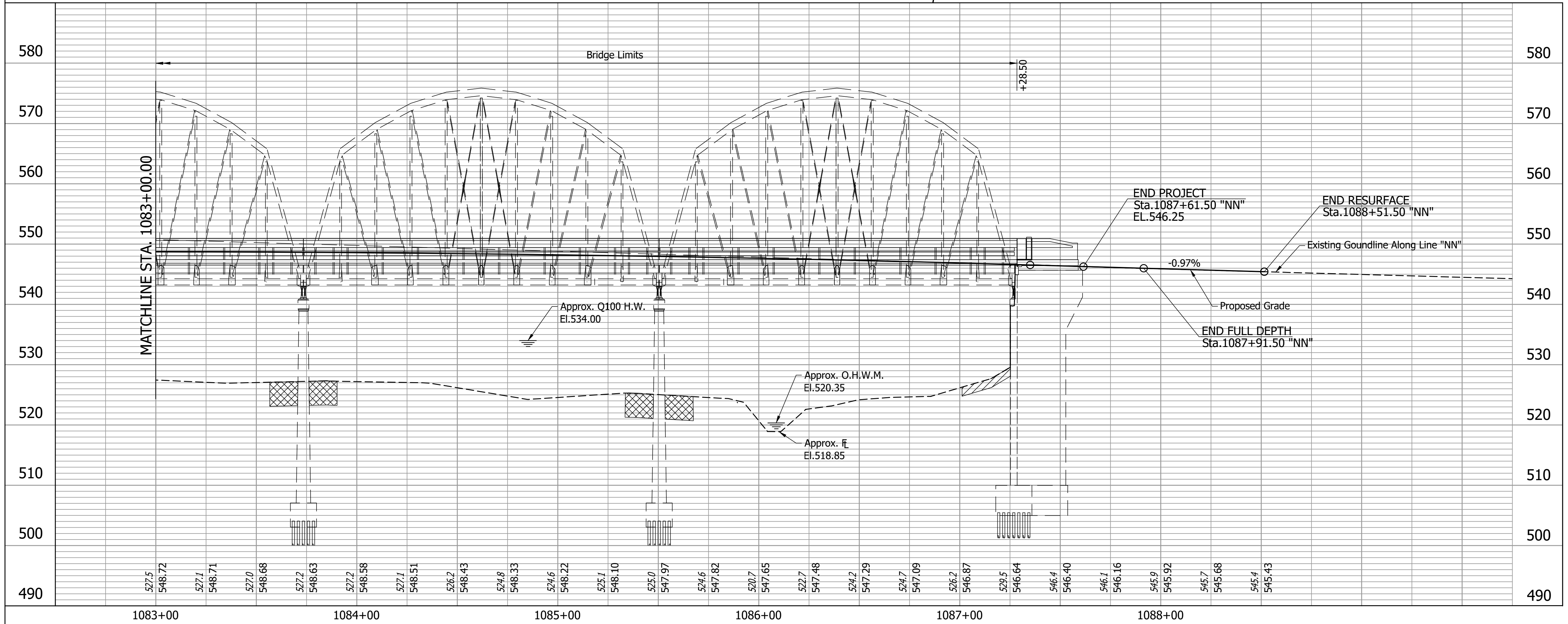
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
	DESIGNED: RTW	DRAWN: MEN		1"=30'	046-15-01987 B
CHECKED: AWV	CHECKED: AWV		LAYOUT LINE "NN"	VERTICAL SCALE	DESIGNATION
				1"=10'	1383721
			DRAWING NO. SHEETS	CONTRACT PROJECT	
				B-42401 1900094	



Notes:
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 For Legend, see Sht.3

- 18" Revetment Riprap
- 48" Class 2 Riprap
- 18" Revetment Riprap Turnout

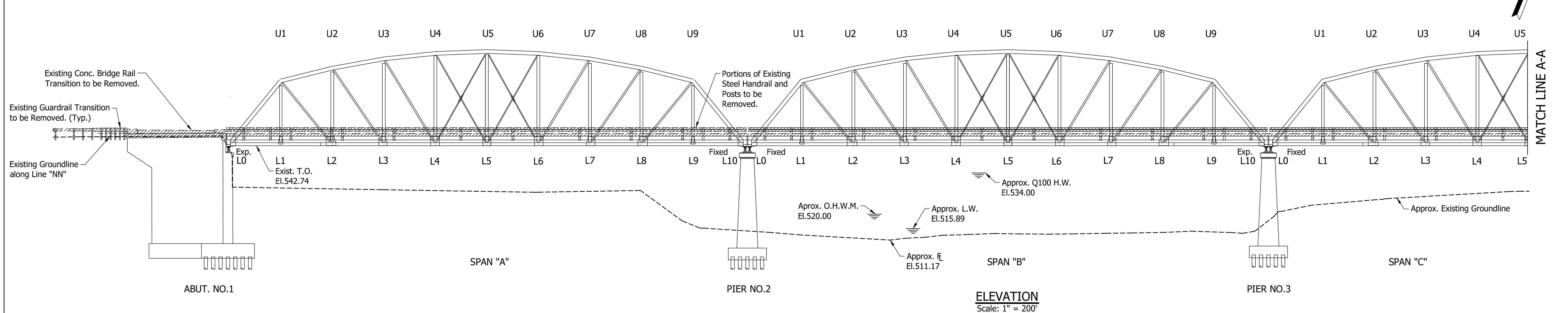
Thomas J. Stone
 App. R
 App. Exist. R/W
 Merritt K. Alcorn & Ryan Stroud,
 Trustee of The Heartland Land Trust



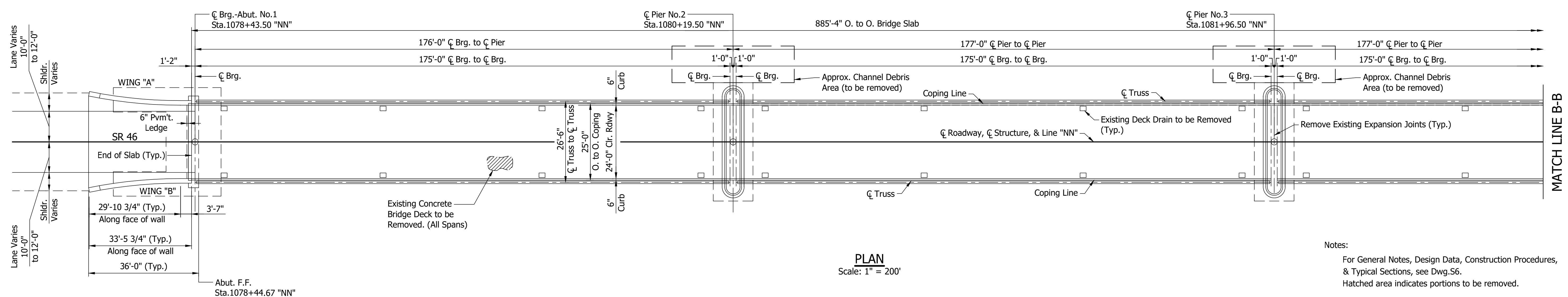
STEEL THROUGH TRUSS BRIDGE
 5 SPANS @ 175'-0"
 23'-1 1/2" CLEAR ROADWAY SKEW: 0°
 SR 46 OVER WHITWATER RIVER
 DEARBORN COUNTY

DESIGNED: RTW		DRAWN: MEN		INDIANA DEPARTMENT OF TRANSPORTATION LAYOUT LINE "NN"	HORIZONTAL SCALE 1"=30'	BRIDGE FILE 046-15-01987 B
CHECKED: AWV		CHECKED: AWV			VERTICAL SCALE 1"=10'	DESIGNATION 1383721
					DRAWING NO. S2 of S20	SHEETS 10 of 49
					CONTRACT B-42401	PROJECT 1900094

EXISTING STRUCTURE BUILT TO 900' VERTICAL CURVE



ELEVATION
Scale: 1" = 200'



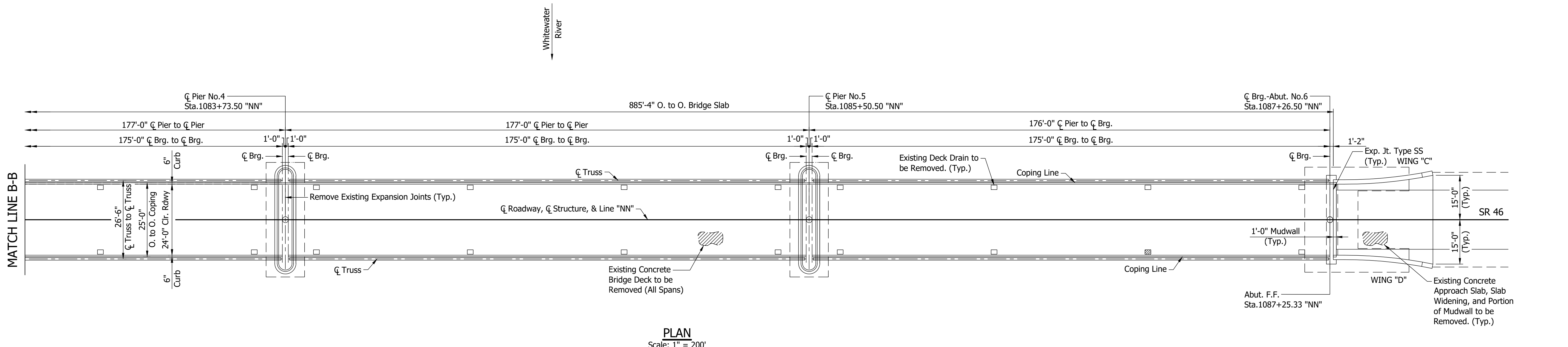
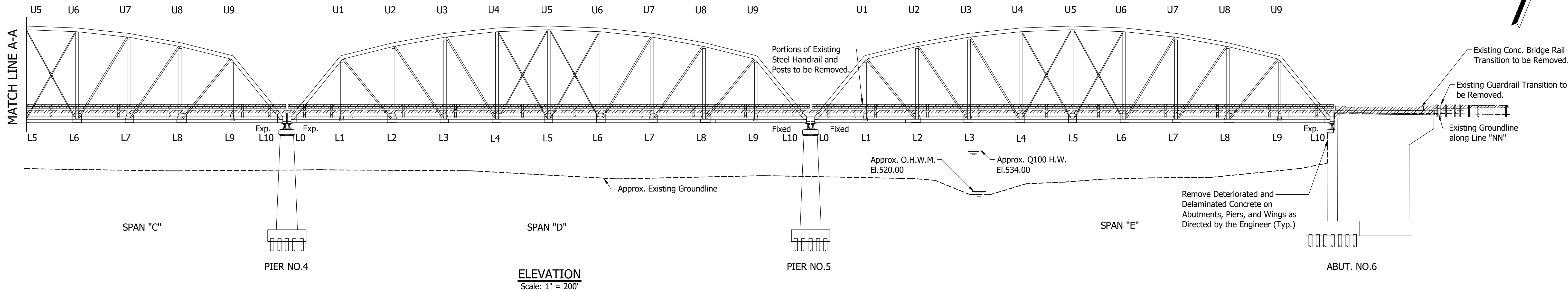
PLAN
Scale: 1" = 200'

Notes:
For General Notes, Design Data, Construction Procedures, & Typical Sections, see Dwg.56.
Hatched area indicates portions to be removed.

STEEL THROUGH TRUSS BRIDGE
5 SPANS @ 175'-0"
24'-0" CLEAR ROADWAY SKEW: 0°
SR 46 OVER WHITEWATER RIVER
DEARBORN COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGNED: RTW _____ CHECKED: AVW _____	DESIGN ENGINEER _____	DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION GENERAL PLAN EXISTING	HORIZONTAL SCALE 1" = 200'	BRIDGE FILE 046-15-01987 B
	DRAWN: LLH _____			VERTICAL SCALE 1" = 200'	DESIGNATION 1383721
	CHECKED: AVW _____	CHECKED: AVW _____		DRAWING NO. S3 of S7	SHEETS 11 of 36
				CONTRACT B-42401	PROJECT 1900094

STRUCTURE BUILT TO 900' VERTICAL CURVE

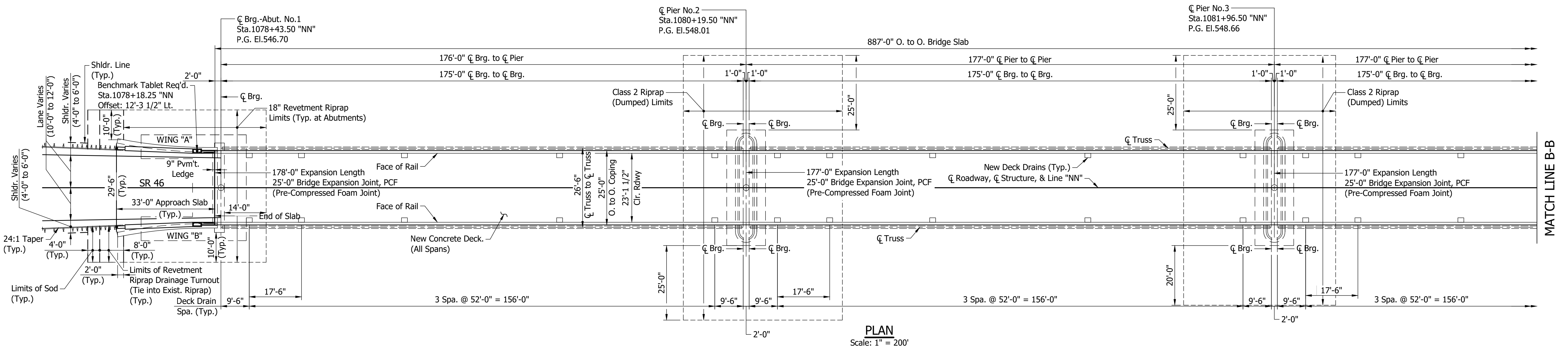
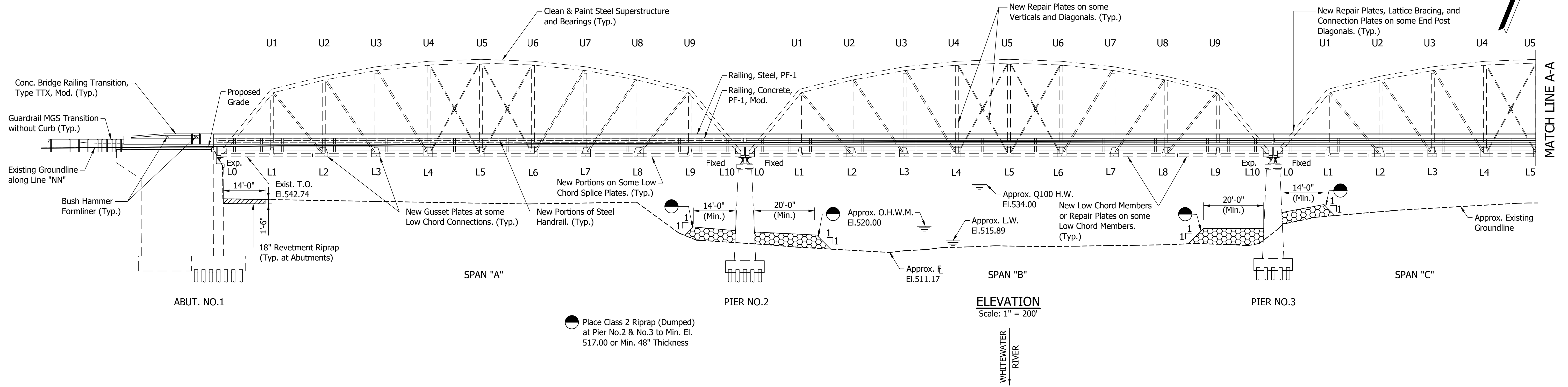


Notes:
 For General Notes, Design Data, Construction Procedures, & Typical Sections, see Dwg. S6.
 Hatched area indicates portions to be removed.

STEEL THROUGH TRUSS BRIDGE
5 SPANS @ 175'-0"
24'-0" CLEAR ROADWAY SKEW: 0°
SR 46 OVER WHITEWATER RIVER
DEARBORN COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____ DESIGNED: RTW _____ DRAWN: LLH _____ CHECKED: AVW _____ CHECKED: AVW _____	INDIANA DEPARTMENT OF TRANSPORTATION GENERAL PLAN EXISTING	HORIZONTAL SCALE	BRIDGE FILE
		AS NOTED	046-15-01987 B
		VERTICAL SCALE	DESIGNATION
		AS NOTED	1383721
		DRAWING NO.	SHEETS
		S4 of S7	12 of 36
		CONTRACT	PROJECT
		B-42401	1900094

PROPOSED STRUCTURE BUILT TO 900' VERTICAL CURVE

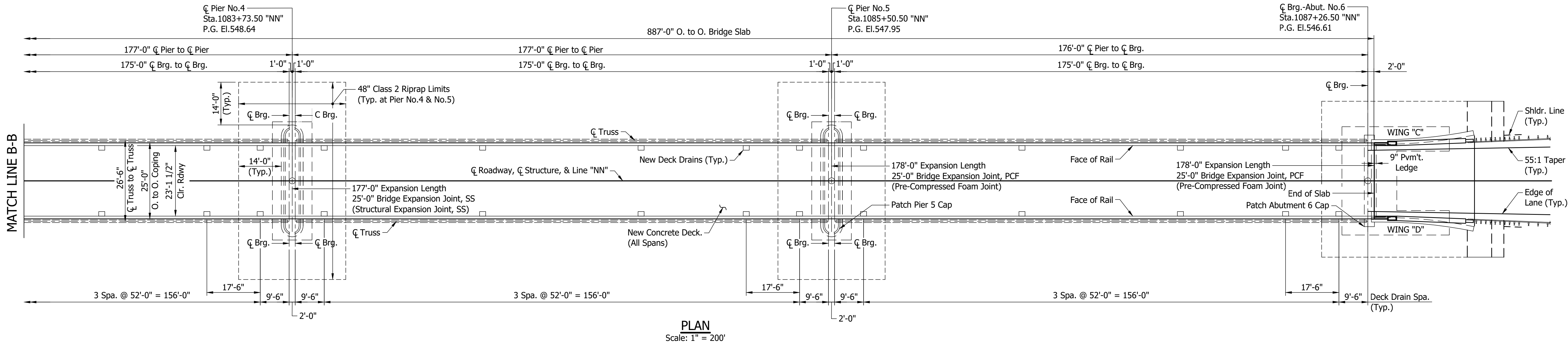
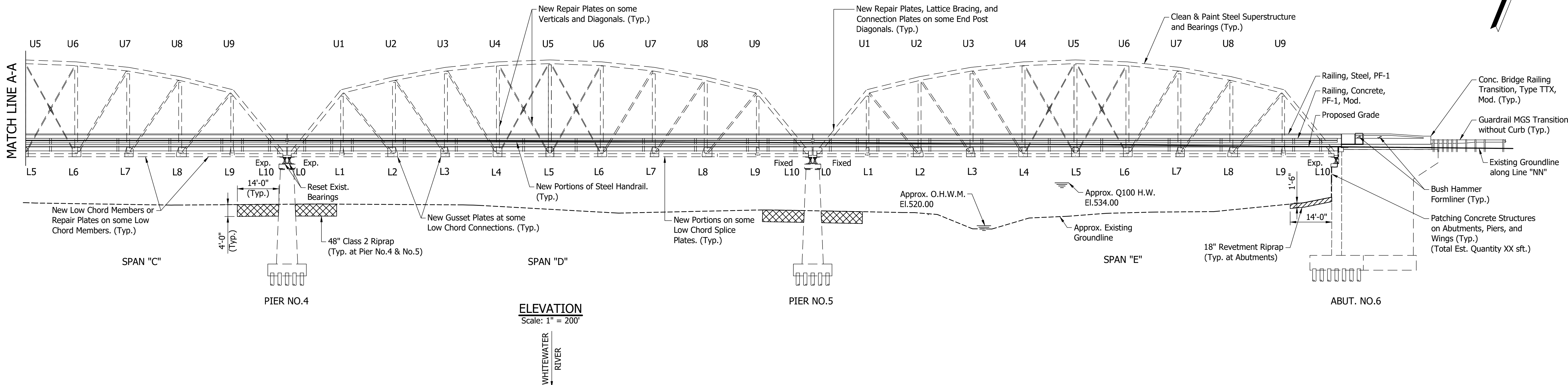


Notes:
For General Notes, Design Data, Construction Procedures, & Typical Sections, see Dwg.S7.

STEEL THROUGH TRUSS BRIDGE
5 SPANS @ 175'-0"
23'-1 1/2" CLEAR ROADWAY SKEW: 0°
SR 46 OVER WHITTEWATER RIVER
DEARBORN COUNTY

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
				1" = 200'	046-15-01987 B
DESIGNED: RTW	DRAWN: LLH		GENERAL PLAN PROPOSED	VERTICAL SCALE	DESIGNATION
CHECKED: AVW	CHECKED: AVW			1" = 200'	1383721
			DRAWING NO.	SHEETS	
				S5 of S7	13
			CONTRACT	PROJECT	
			B-42401	1900094	

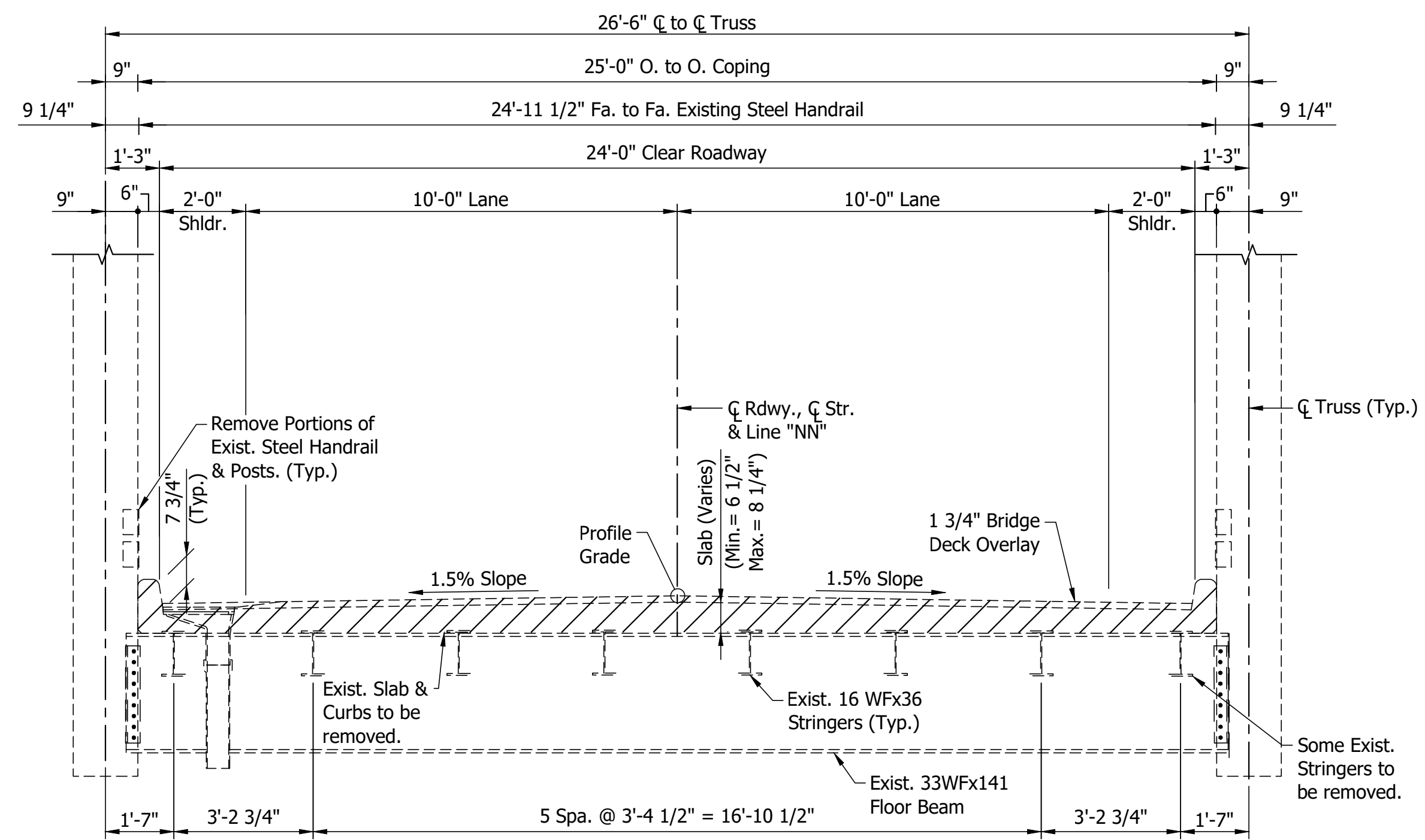
PROPOSED STRUCTURE BUILT TO 900' VERTICAL CURVE



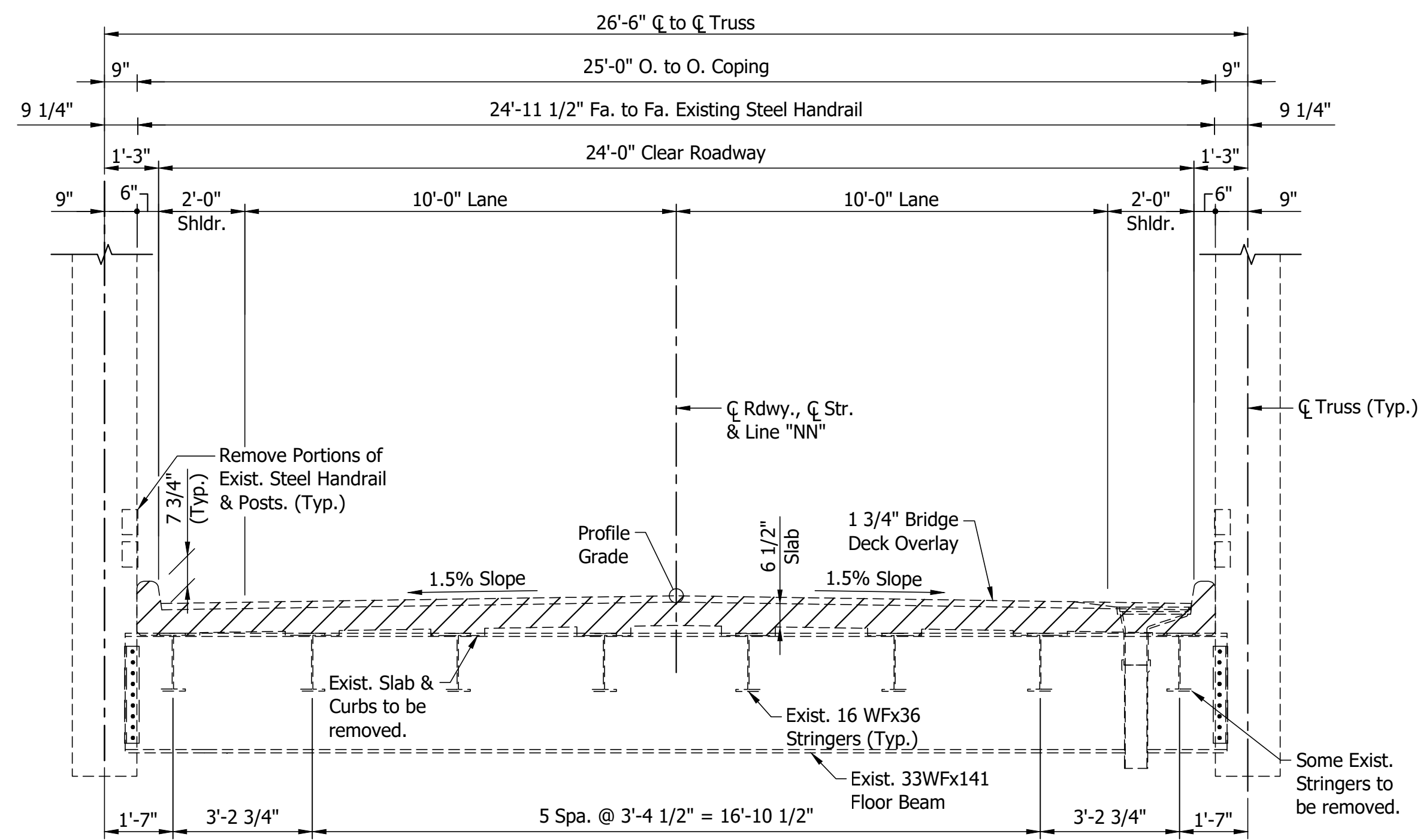
Notes:
For General Notes, Design Data, Construction Procedures,
& Typical Sections, see Dwg.S7.

STEEL THROUGH TRUSS BRIDGE
5 SPANS @ 175'-0"
23'-1 1/2" CLEAR ROADWAY SKEW: 0°
SR 46 OVER WHITEWATER RIVER
DEARBORN COUNTY

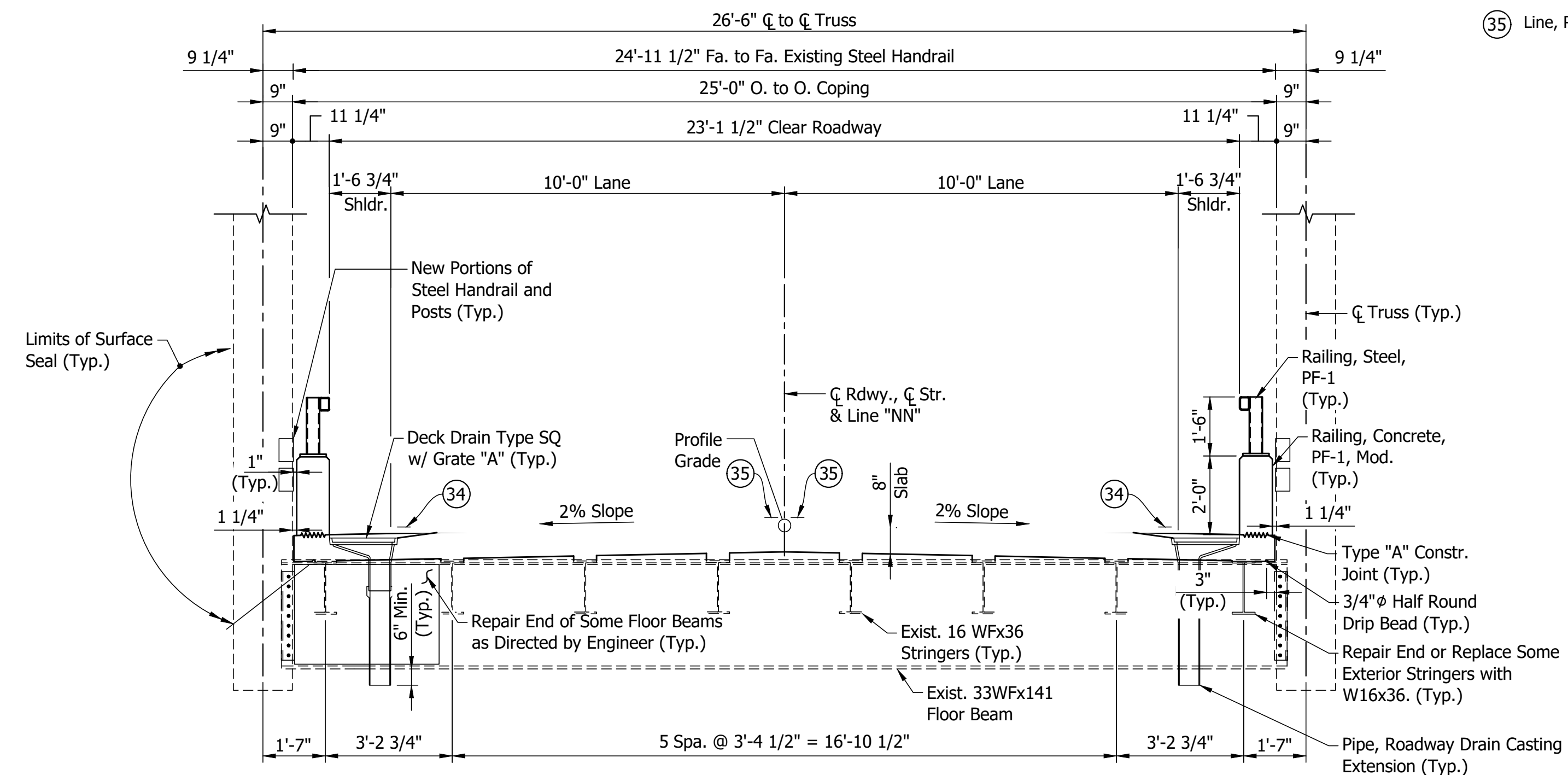
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			VERTICAL SCALE 1" = 200'	DESIGNATION 1383721
DESIGNED: RTW	DRAWN: LLH	GENERAL PLAN PROPOSED	DRAWING NO.	SHEETS
CHECKED: AVW	CHECKED: AVW		S6 of S7	14 of 36
			CONTRACT B-42401	PROJECT 1900094



TYPICAL SECTION - EXISTING
(Spans A, B, & C)
Scale: 3/8" = 1'-0"



TYPICAL SECTION - EXISTING
(Spans D & E)
Scale: 3/8" = 1'-0"



TYPICAL SECTION - PROPOSED
(All Spans)
Scale: 3/8" = 1'-0"

LEGEND

- ③④ Line, Paint, Solid, White, 4 in.
- ③⑤ Line, Paint, Solid, Yellow, 4 in.

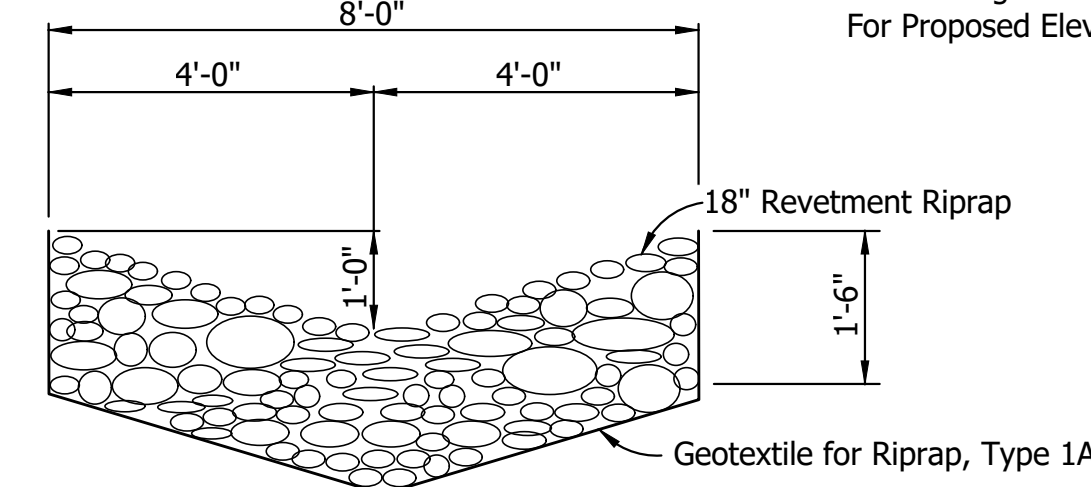
CONSTRUCTION PROCEDURE

1. Remove and repair bottom lateral connections and bracing where feasible as shown on detail plans.
2. Remove existing concrete deck, curbs, portions of handrail, approach slabs, portions of mudwalls, and concrete transition rails.
3. Replace or repair truss gusset plates, bearings, verticals, diagonals, low chords, low chord splices, bottom lateral connections and bracing, stringers, and floor beams.
4. Reset Truss Bearings.
5. Clean and paint truss, floor beams, and stringers.
6. Replace or patch portions of abutments, piers and wings.
7. Construct deck, rails, portions of handrail, portions of mudwalls, joints, portions of bridge seats, and approach slabs.
8. Complete all other work as shown in the detail plans.

The sequence of the above notes does not necessarily indicate sequence of construction operations.

Structure to be closed to traffic during all phases of work. See Maintenance of Traffic Details.

Notes:
Hatched area indicates portions to be removed.
For Existing Elevation and Plan, see Dwgs. S3 & S4.
For Proposed Elevation and Plan, see Dwgs. S4 & S5.



RIPRAP DRAINAGE TURNOUT DETAIL
No Scale

GENERAL NOTES

Reinforcing Steel covering shall be 2 1/2" in the top and 1" minimum in the bottom of the floor slab, and 2" in all other parts, unless noted.
Reinforcing Steel in bridge slab, piers, railing and abutments shall be epoxy coated.
Portions of the present structure shall be Removed.
Missing or deteriorated bolts and rivets shall be replaced as directed by the Engineer.
All bolts and rivets that are Removed or open holes shall be replaced or filled with A325 round headed bolts of the applicable size. At no time shall standard bolts be utilized without the written consent of the Engineer.
The Contractor shall be responsible for and provide adequate Jacking, Shoring, and temporary support prior to all structural repairs. The Contractor shall submit to the Project Engineer/Supervisor (PE/S), 14 days prior to indicated work, a plan detailing their proposed method for jacking, shoring, and temporary support of the existing structure during the construction of truss members. Each drawing must include Contract Number, Contractors Name, and shall be designed and sealed by a Professional Engineer Licensed in the State of Indiana. See Special Provisions for additional details.
The top of slab from coping to coping, the face and underside of slab copings to the outside face of the exterior stringer, the top and faces of all newly reconstructed exposed Bridge Seats, top of approach slabs, and all concrete bridge railings and transitions to be sealed in accordance with 702.21.
(Estimated Quantity = xxx Sft.)
Where new work is to be fitted to the old work, the Contractor shall check and verify all dimensions, elevations, and conditions in the field and report any errors or discrepancies to the Engineer and assume responsibility for their correctness and the fit of the new construction to the existing structure.
Do not paint top of top Flange of Stringers and Floor Beams.
Plans for existing structure are on file in the Research and Documents Section at the Indiana Department of Transportation, as Bridge File No.046-15-01987 and are available upon request.
Existing Plans indicate that the existing structural steel is Painted with Basic Lead Silico Chromate Paint.
Roofing Felt in accordance with ASTM D 226 #15 (Type 1), to be placed between the bridge slab and mudwall. See Special Provisions for additional details.
Concrete in bridge slab and railing to be Class "C".
Concrete in substructure to be Class "A".
Paint Color shall match Federal Standards 595 Color No.14260 Green.

DESIGN DATA

LIVE LOAD
Floor Beams & Stringers originally Designed for H-20 loading, 2-20 Ton Trucks 9'-0" C. to C. spaces. Trusses originally designed for H-20, 600 lbs. per foot and 28 kip concentrated. Deck designed for HL-93 in accordance with the AASHTO LRFD Bridge Design Specifications, 8th Ed., 2017
Portions of Superstructure checked for HS-15 loading with impact and distribution of loads, in accordance with 2002 AASHTO Standard Specifications, 17th Ed.

DEAD LOAD
Actual weight plus 35 psf (composite) for future wearing surface and 2 psf (Non-Composite) for permanent metal deck forms (If metal deck forms are used, the lightest section feasible shall be chosen and the troughs are to be filled with polystyrene to reduce weight)

FLOOR SLAB
Slab designed for HL-93 loading with a 1 1/2" sacrificial wearing surface. In the future event of the installation of a FWS, the Existing sacrificed Wearing Surface must be milled off of the existing deck prior to its installation to avoid overstressing members of the truss.

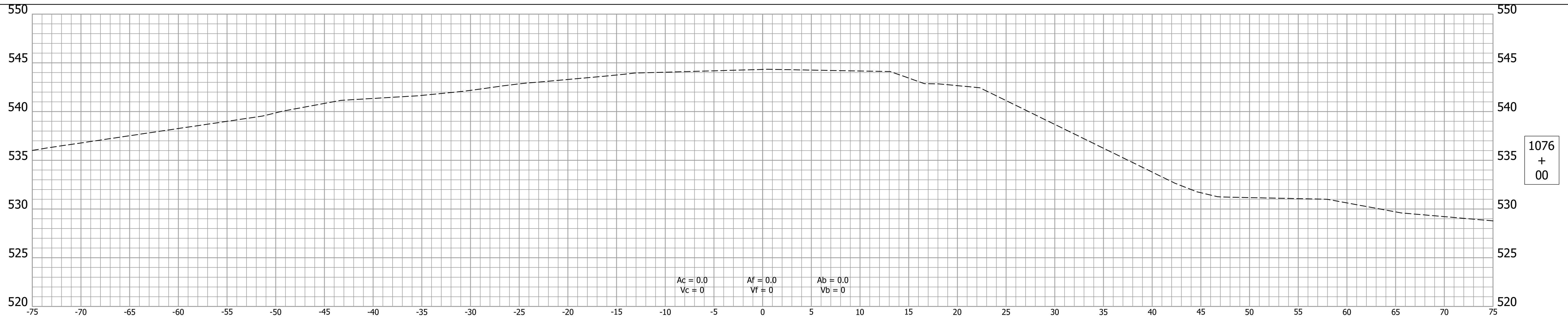
DESIGN STRENGTHS
To be in accordance with 2018 AASHTO LRFD Bridge Design Specifications.

- CONCRETE:
 - Class "C": f_c=4,000 psi
 - Class "A": f_c=3,500 psi
- REINFORCING STEEL:
 - Grade 60: f_y=60,000 psi
- STRUCTURAL STEEL:
 - ASTM A709 Grade 50: f_y=50,000 psi

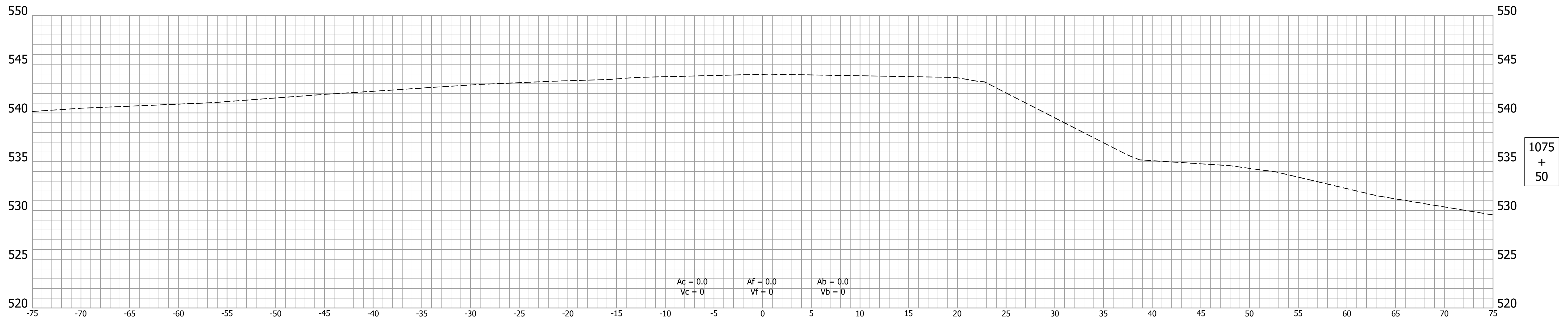
SEISMIC DATA
AASHTO Guide Design Specifications for LRFD Seismic Bridge Design
Seismic Zone Category A
S1 = 0.047
Site Class D
Fv = 2.4

STEEL THROUGH TRUSS BRIDGE
5 SPANS @ 175'-0"
23'-1 1/2" CLEAR ROADWAY SKEW: 0°
SR 46 OVER WHITEWATER RIVER
DEARBORN COUNTY

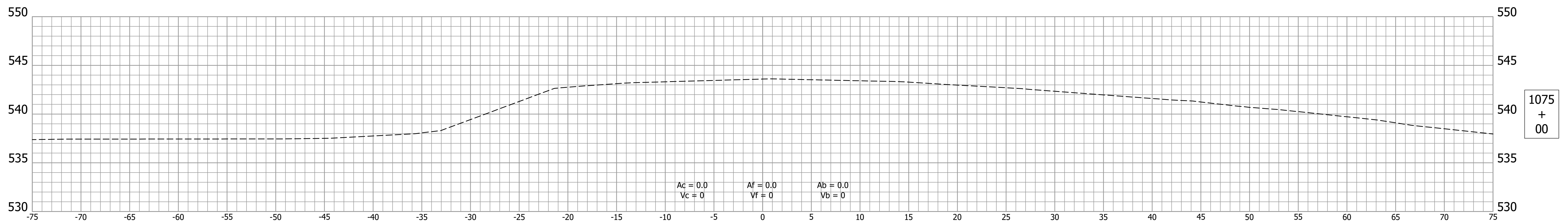
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DESIGNED: RTW	DRAWN: LLH	GENERAL PLAN	VERTICAL SCALE	DESIGNATION
			AS NOTED	1383721
CHECKED: AWW	CHECKED: AWW	TYPICAL SECTIONS	DRAWING NO.	SHEETS
			S7 of S7	15 of 36
			CONTRACT	PROJECT
			B-42401	1900094



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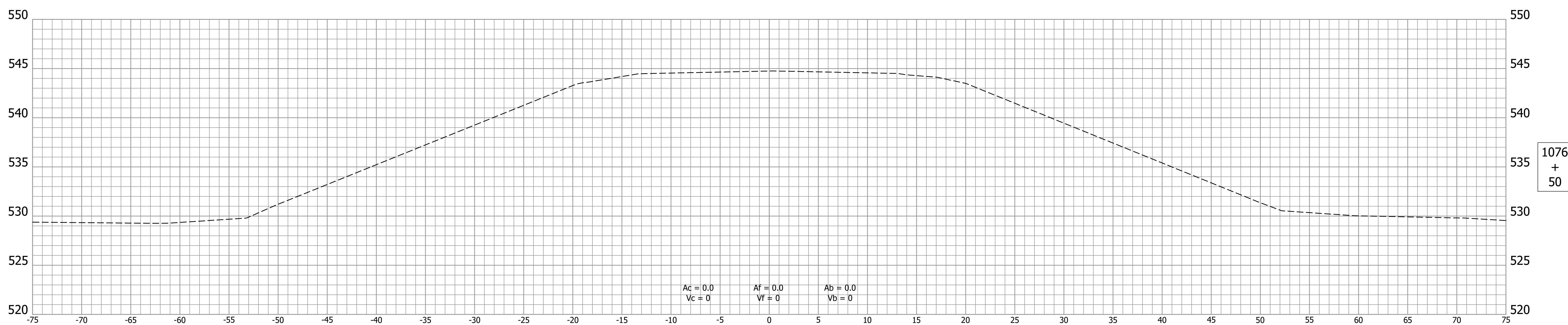
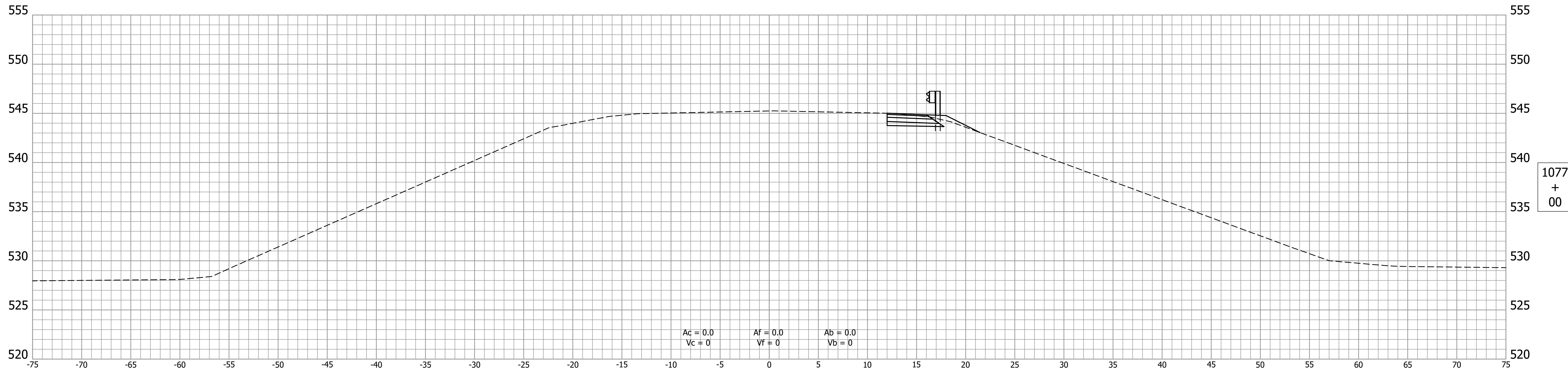


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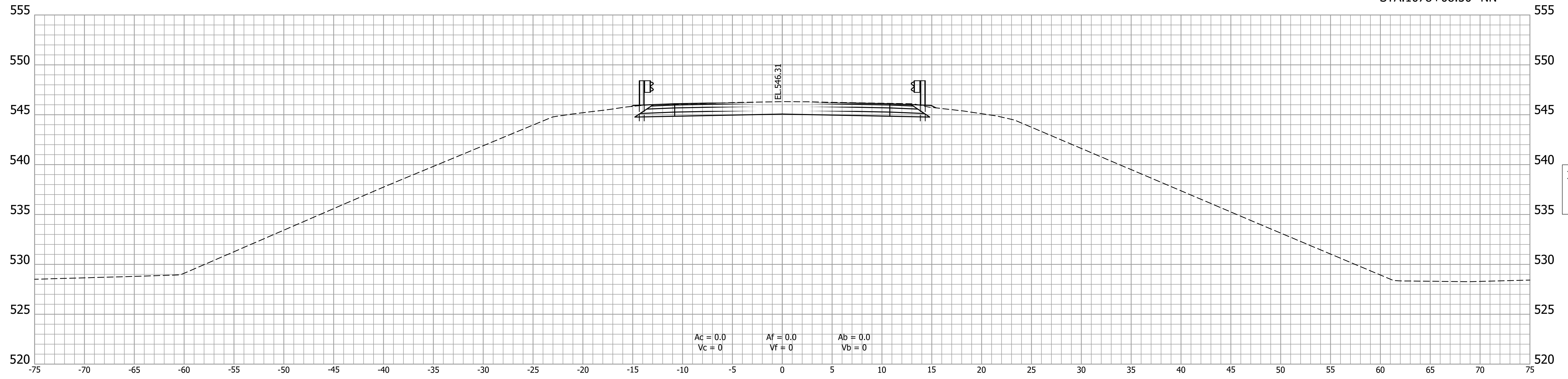
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						CONTRACT B-42401	PROJECT 1900094
CROSS SECTIONS LINE "NN"							



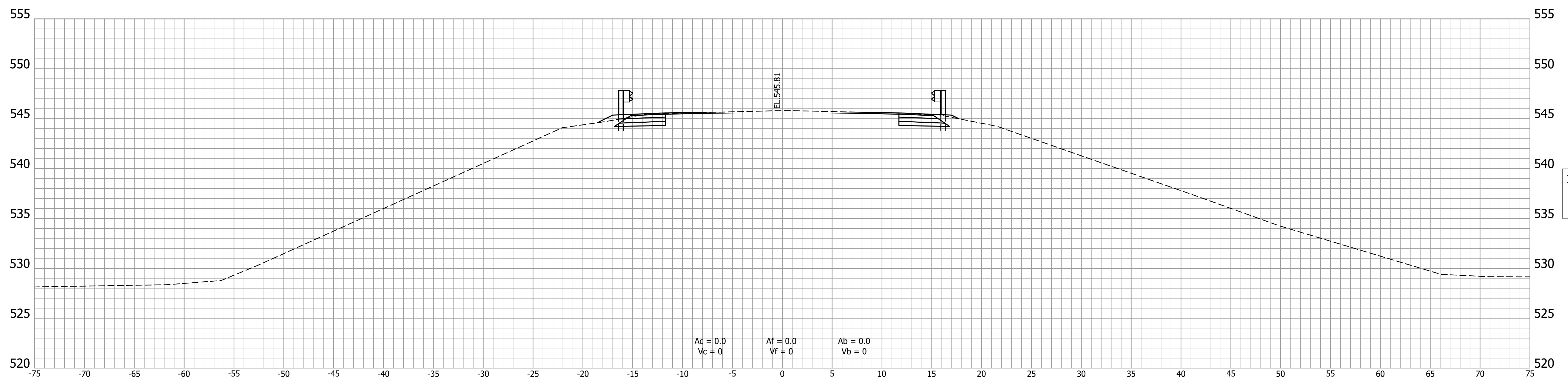
BEGIN INCIDENTAL
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RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 5'	BRIDGE FILE 046-15-01987 B
			VERTICAL SCALE 1" = 5'	DESIGNATION 1383721
DESIGNED: RTW _____ DRAWN: MEN _____	CROSS SECTIONS LINE "NN"		DRAWING NO.	SHEETS 20 of 36
CHECKED: AVW _____ CHECKED: AVW _____			CONTRACT B-42401	PROJECT 1900094

BEGIN PROJECT/PAVING EXCEPTION
STA.1078+08.50 "NN"

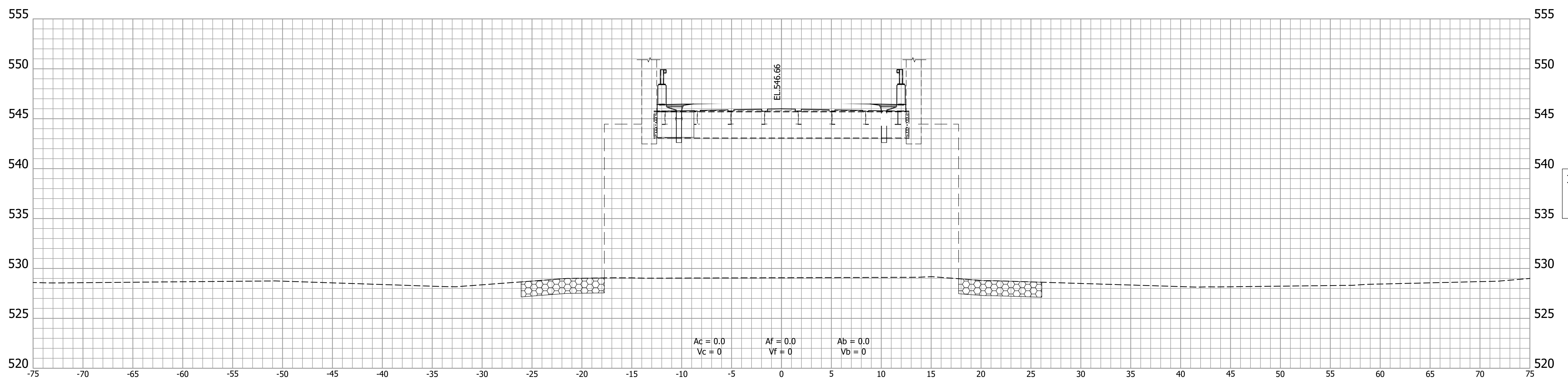
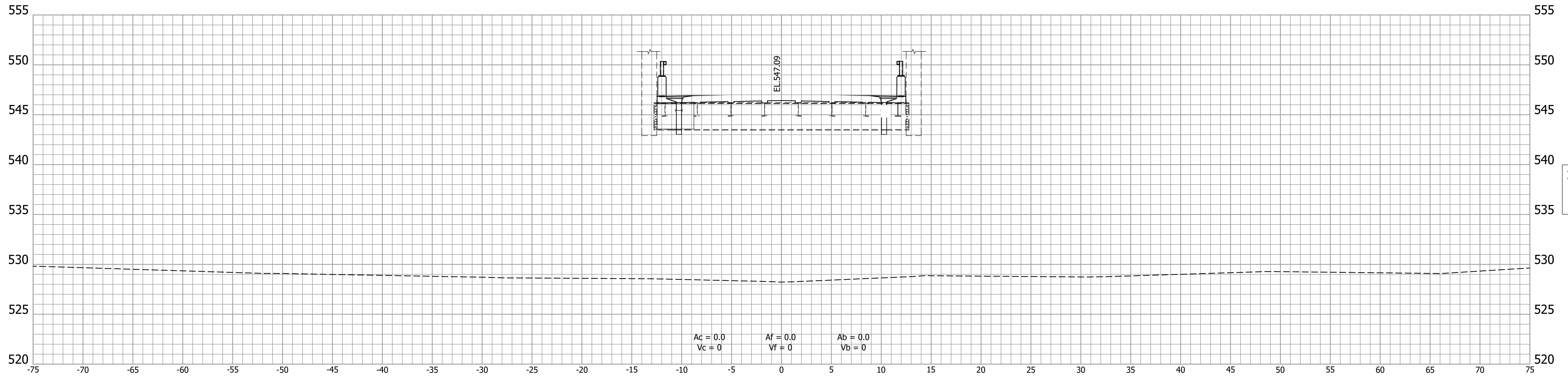


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	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1" = 5'	BRIDGE FILE 046-15-01987 B
			VERTICAL SCALE 1" = 5'	DESIGNATION 1383721
			DRAWING NO.	SHEETS 21 of 36
			CONTRACT B-42401	PROJECT 1900094
DESIGNED: RTW	DRAWN: MEN	CROSS SECTIONS LINE "NN"		
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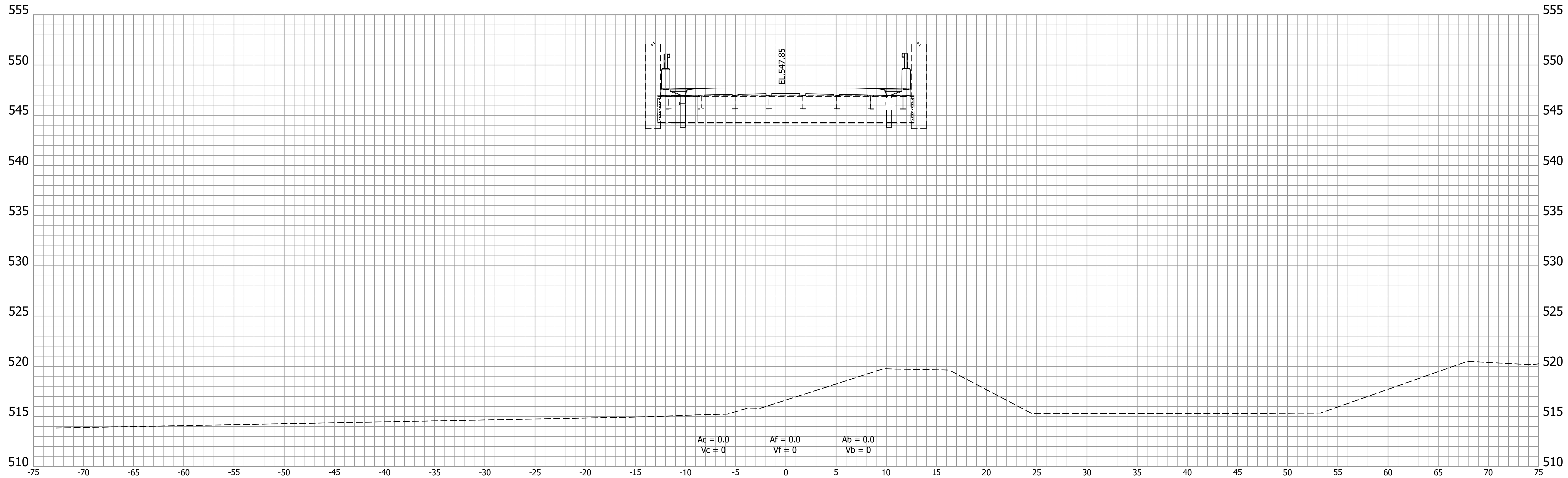
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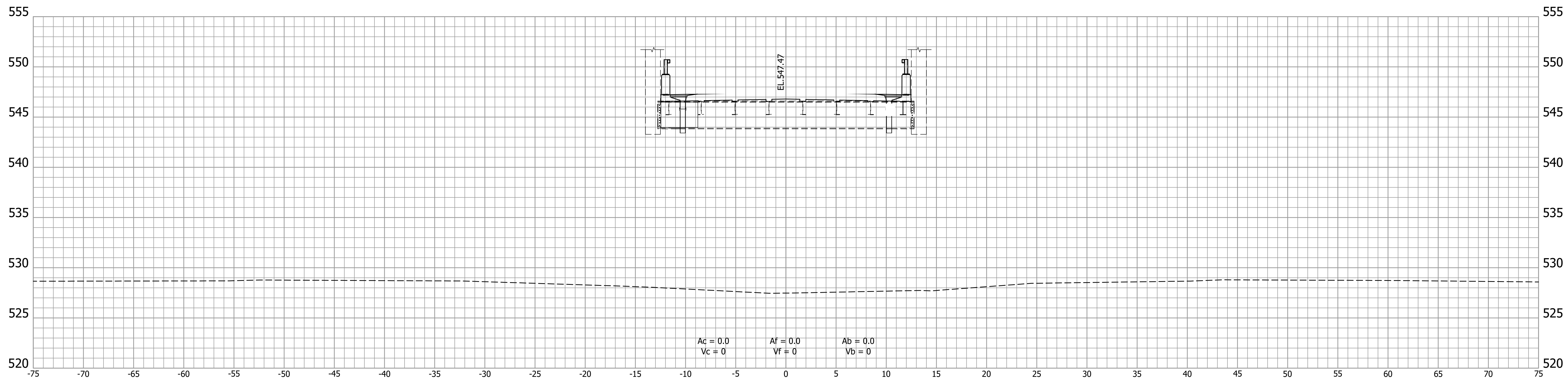
INDIANA
DEPARTMENT OF TRANSPORTATION

**CROSS SECTIONS
LINE "NN"**

HORIZONTAL SCALE 1" = 5'	BRIDGE FILE 046-15-01987 B
VERTICAL SCALE 1" = 5'	DESIGNATION 1383721
DRAWING NO.	SHEETS
	22 of 36
CONTRACT B-42401	PROJECT 1900094

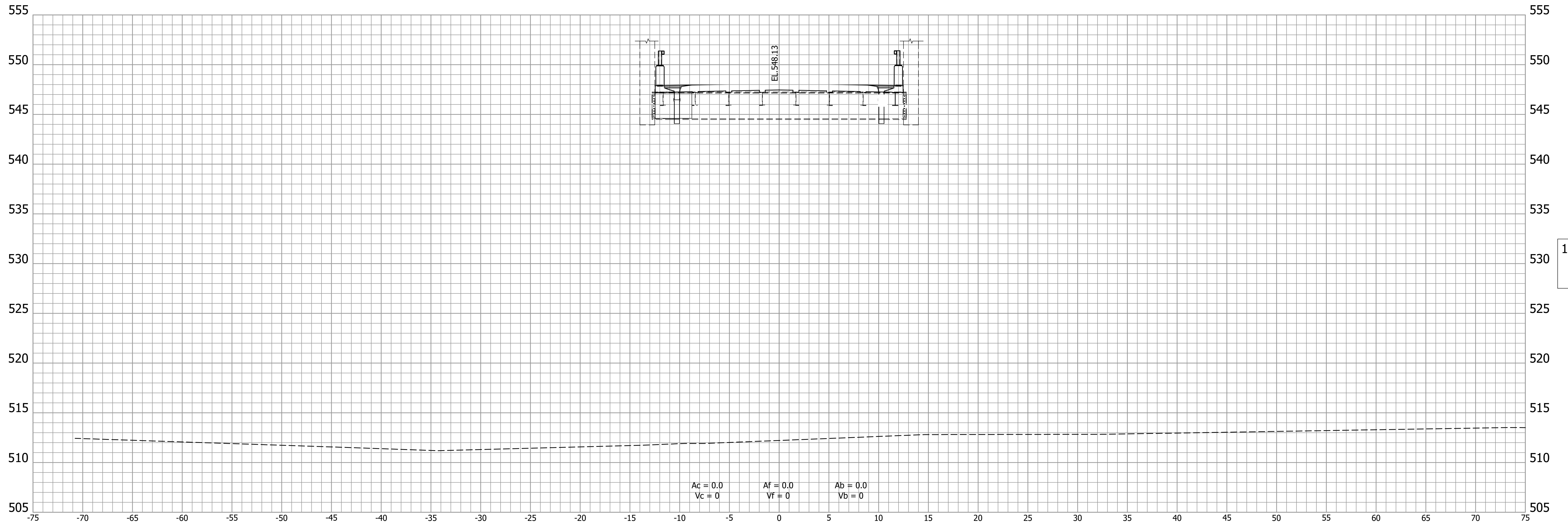


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						CONTRACT B-42401	PROJECT 1900094

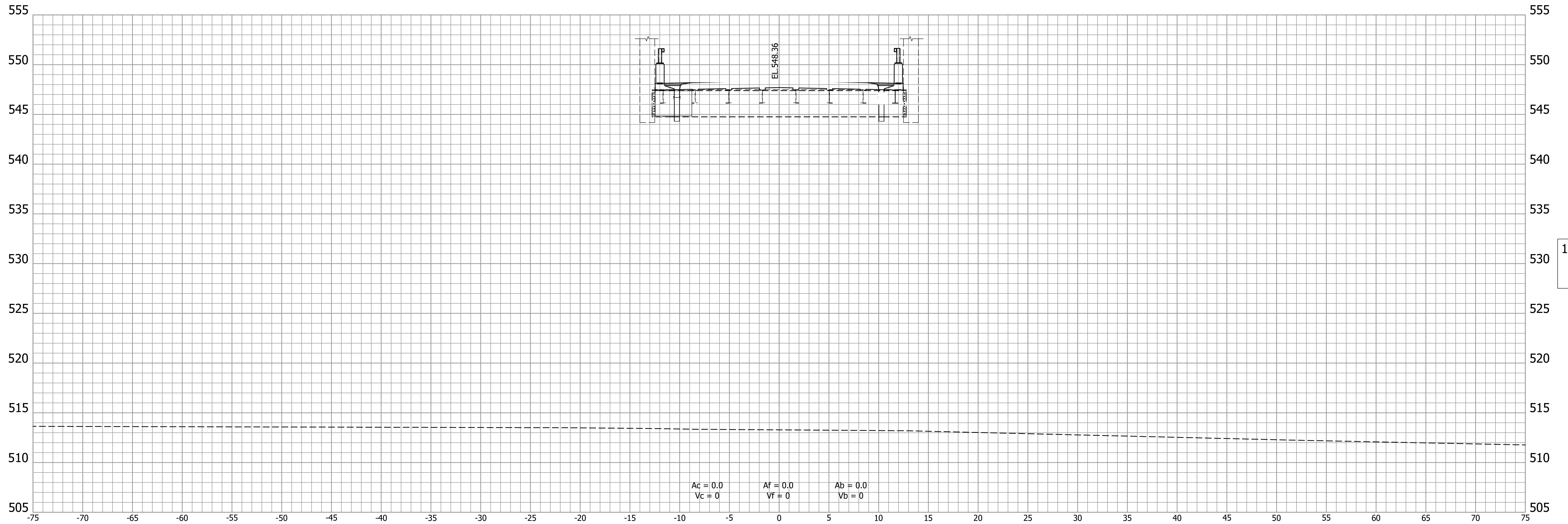


RECOMMENDED FOR APPROVAL _____		DESIGN ENGINEER _____	DATE _____
DESIGNED: RTW _____	DRAWN: MEN _____		
CHECKED: AVW _____	CHECKED: AVW _____		

**INDIANA
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
LINE "NN"**

HORIZONTAL SCALE 1" = 5'	BRIDGE FILE 046-15-01987 B
VERTICAL SCALE 1" = 5'	DESIGNATION 1383721
DRAWING NO.	SHEETS
	24 of 36
CONTRACT B-42401	PROJECT 1900094



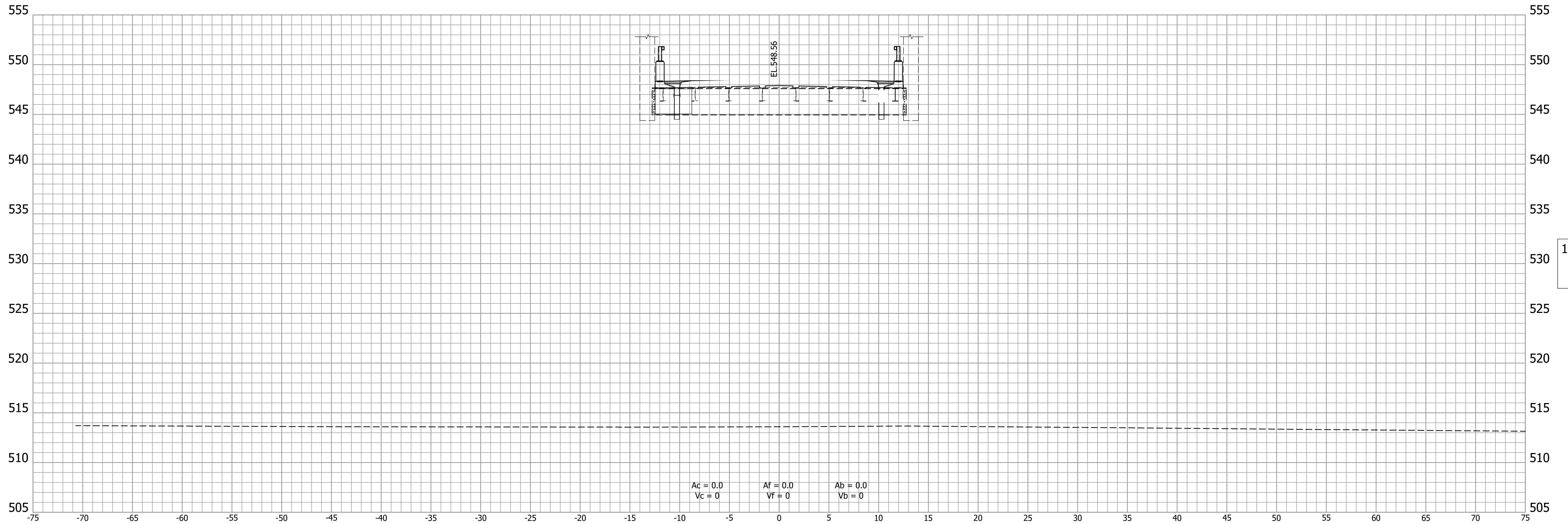
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					CONTRACT B-42401	PROJECT 1900094



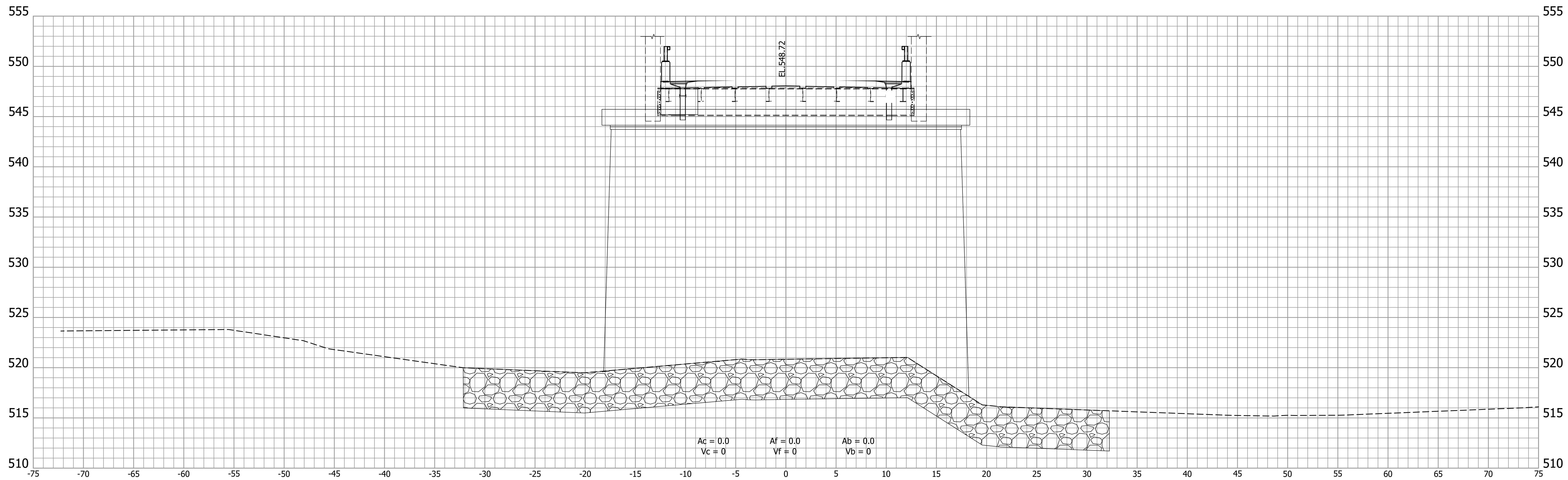
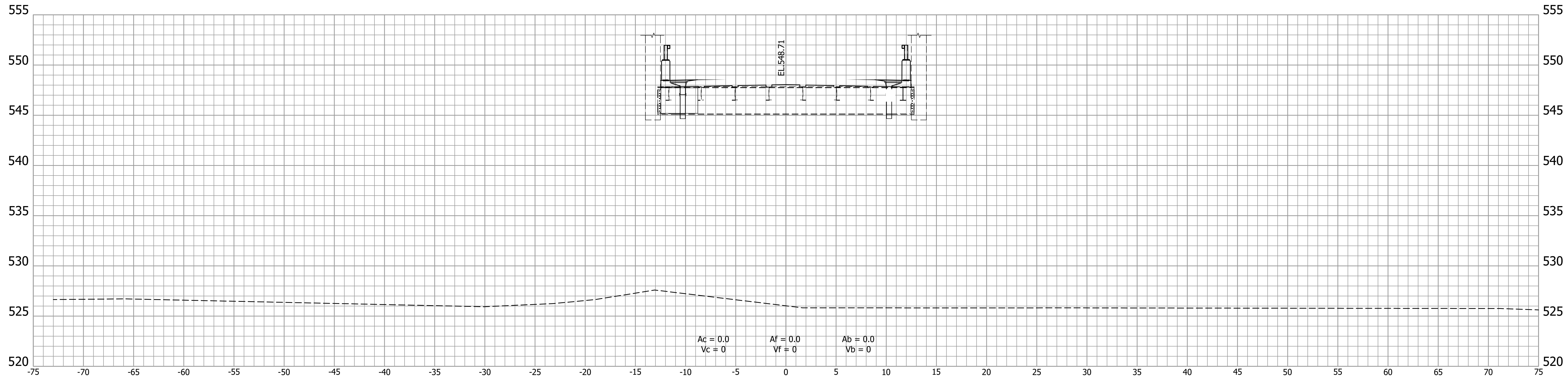
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						CONTRACT B-42401	PROJECT 1900094
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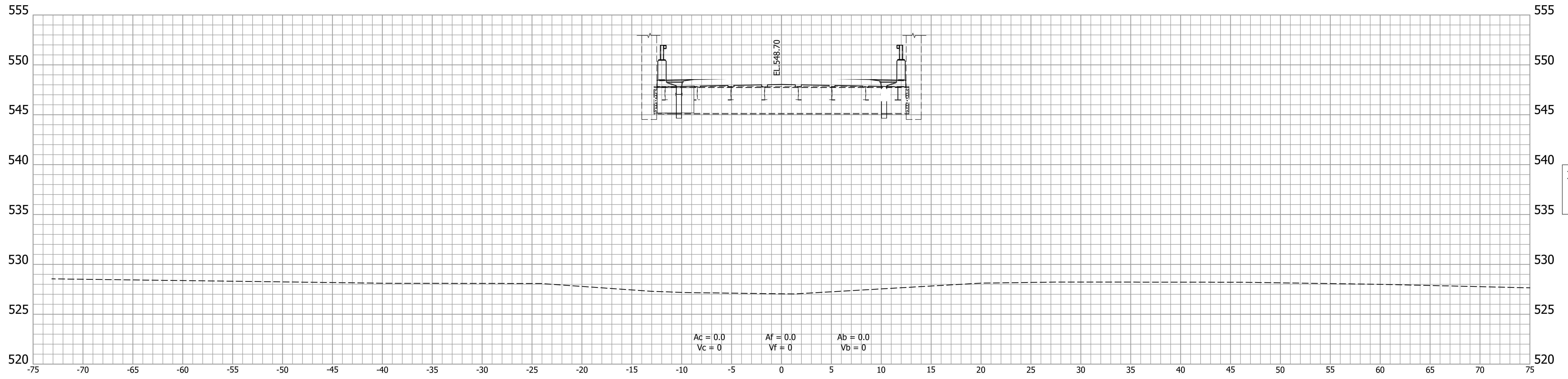


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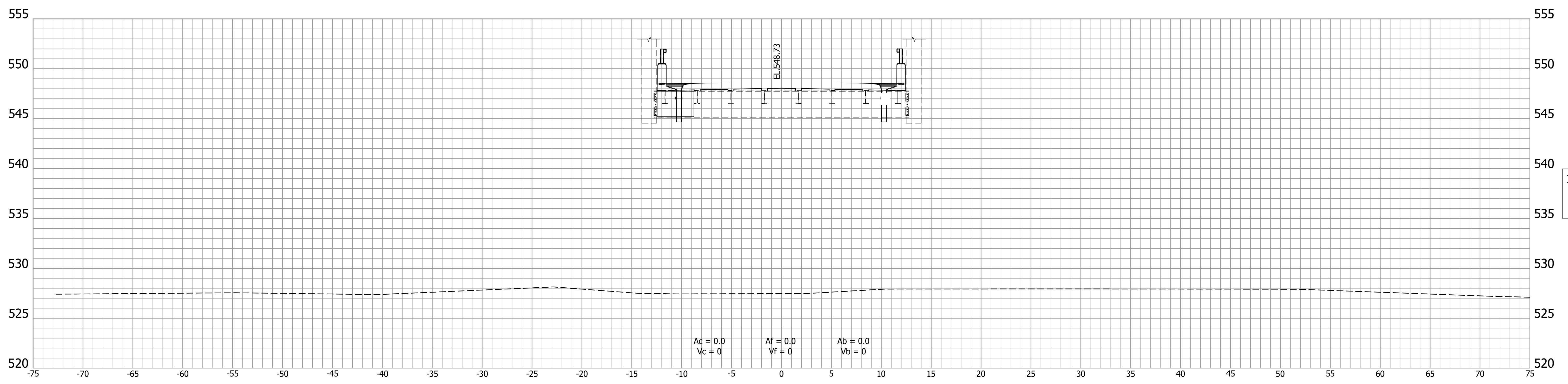
**INDIANA
DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS
LINE "NN"**

HORIZONTAL SCALE 1" = 5'	BRIDGE FILE 046-15-01987 B
VERTICAL SCALE 1" = 5'	DESIGNATION 1383721
DRAWING NO.	SHEETS
	27 of 36
CONTRACT B-42401	PROJECT 1900094

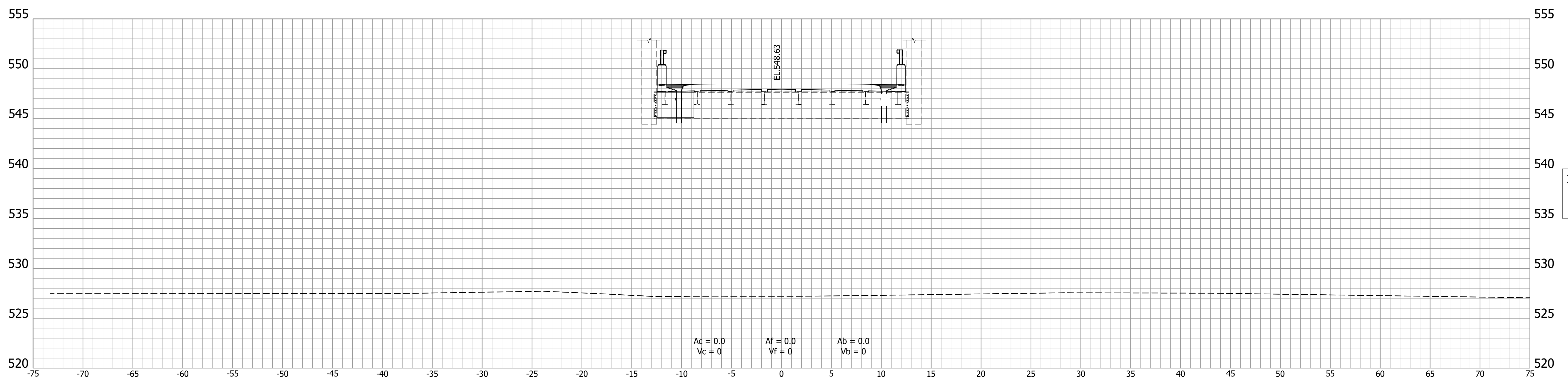
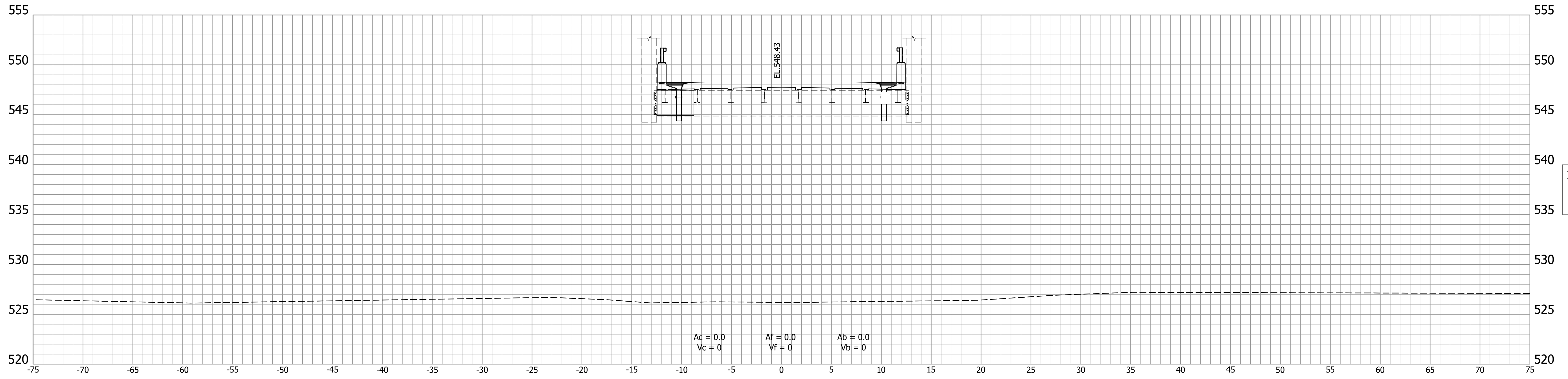


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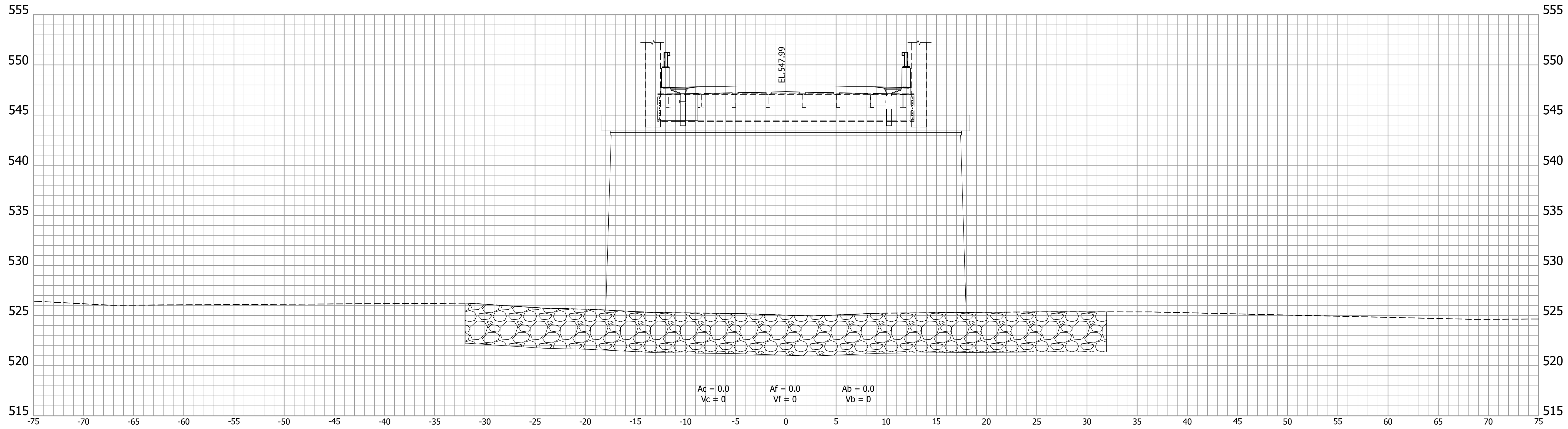


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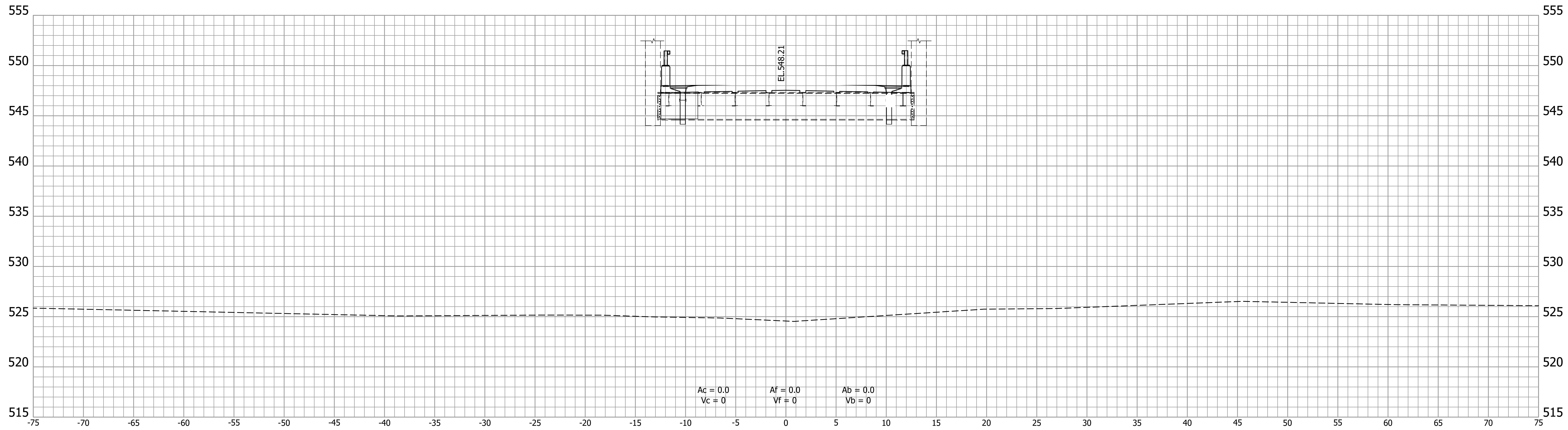
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	DESIGNED: RTW _____	DRAWN: MEN _____		CROSS SECTIONS LINE "NN"	VERTICAL SCALE 1" = 5'	DESIGNATION 1383721
	CHECKED: AWW _____	CHECKED: AWW _____			DRAWING NO.	SHEETS 28 of 36
					CONTRACT B-42401	PROJECT 1900094



	RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1" = 5'	BRIDGE FILE 046-15-01987 B
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					CONTRACT B-42401	PROJECT 1900094

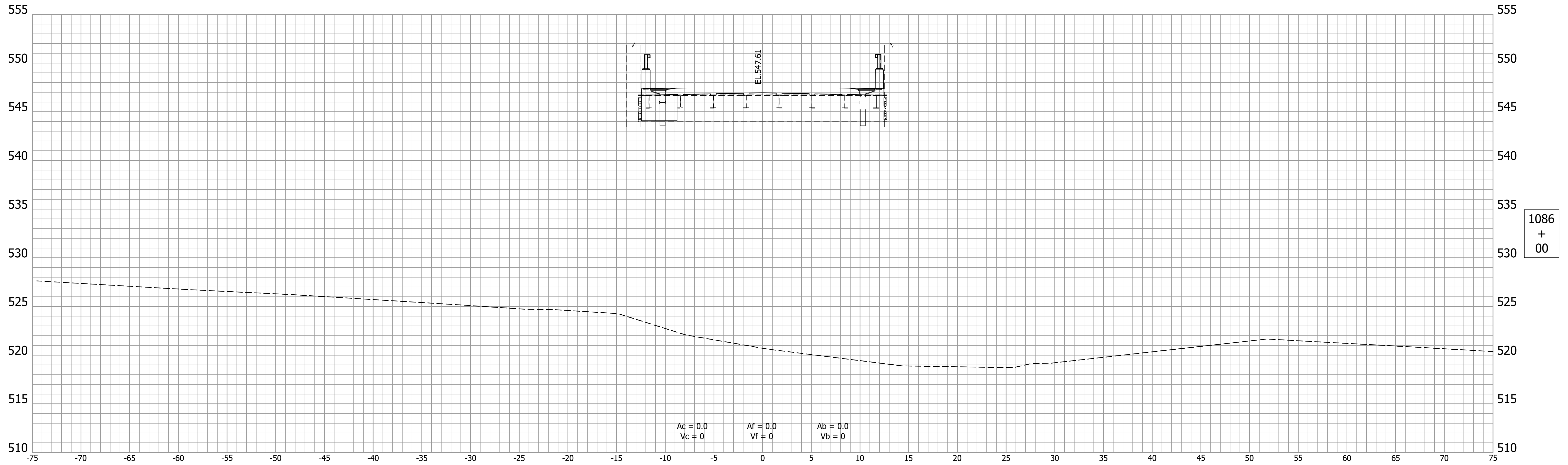
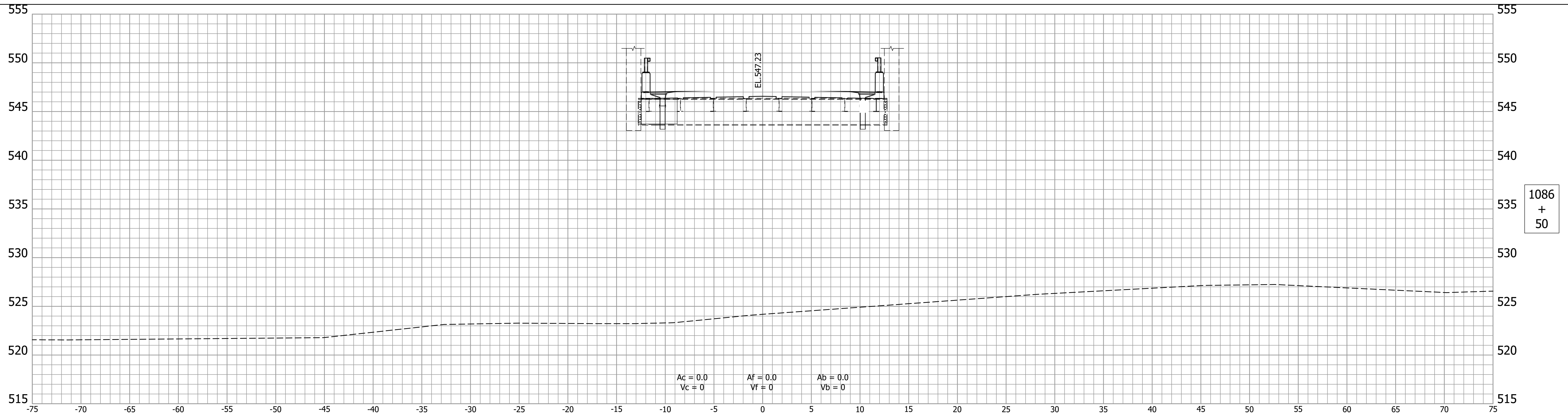


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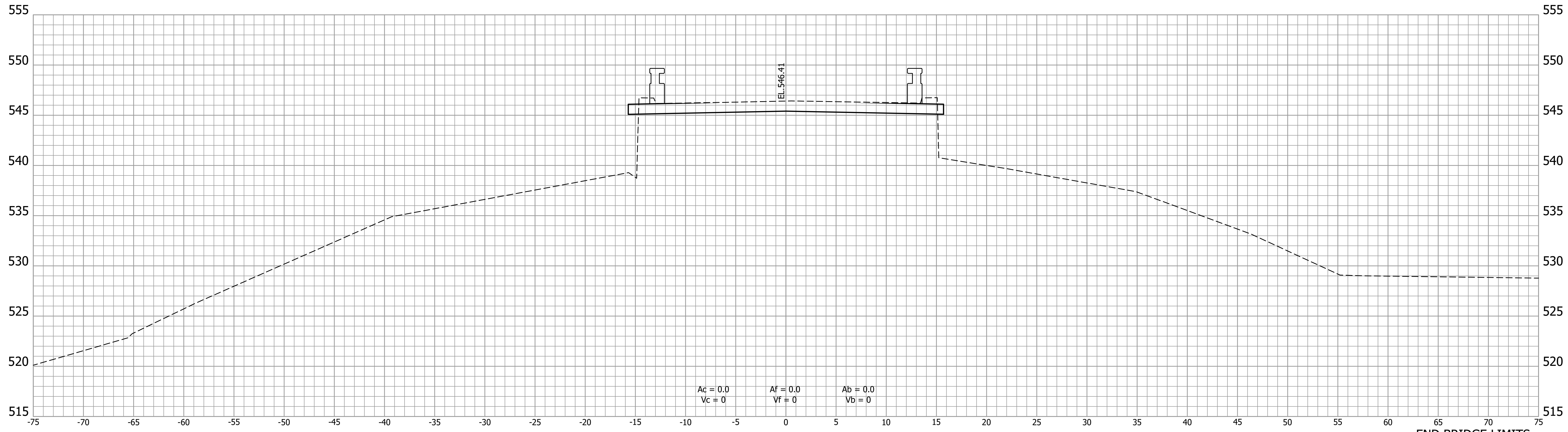


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	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 5'	BRIDGE FILE 046-15-01987 B		
				VERTICAL SCALE 1" = 5'	DESIGNATION 1383721		
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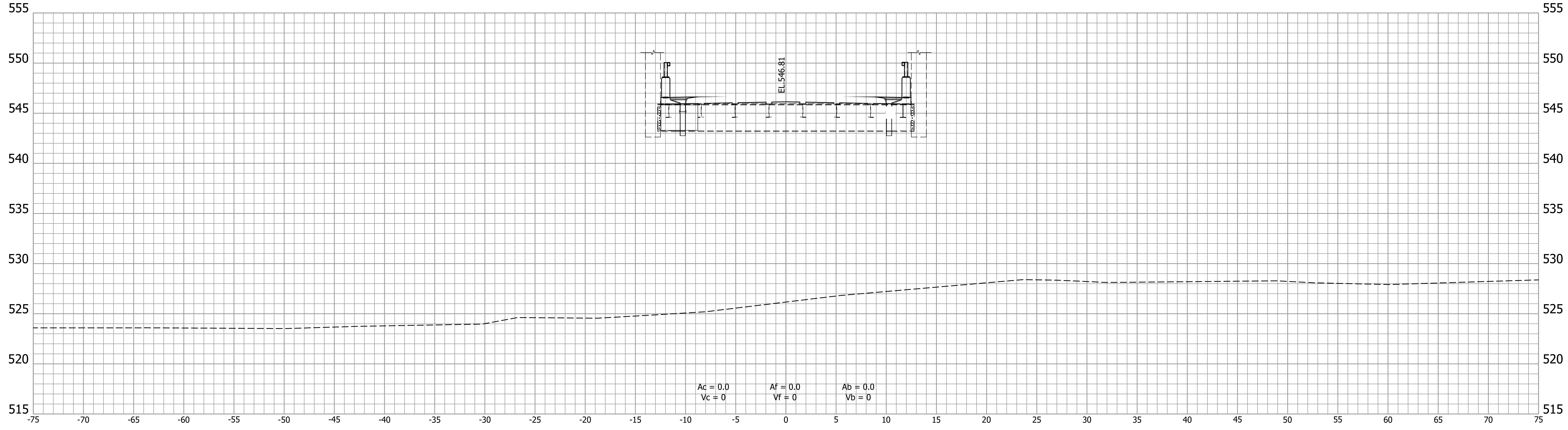


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						CONTRACT B-42401	PROJECT 1900094
CROSS SECTIONS LINE "NN"							



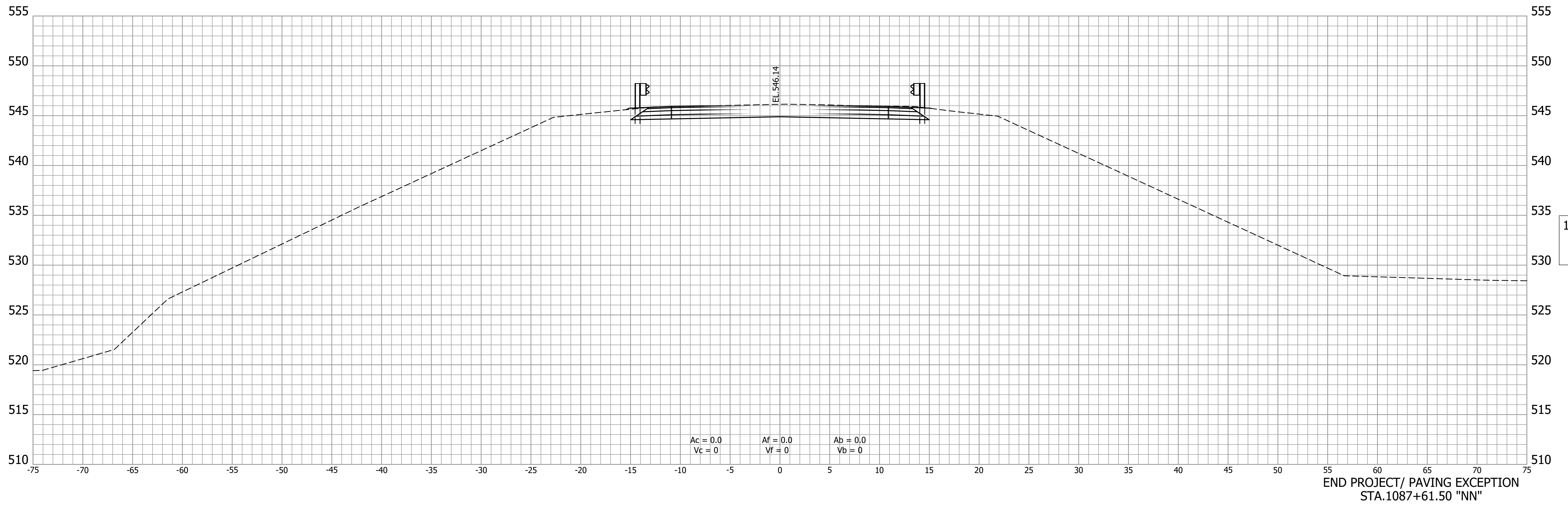
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END BRIDGE LIMITS
STA. 1087+28.50 "NN"



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	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 5'	BRIDGE FILE 046-15-01987 B		
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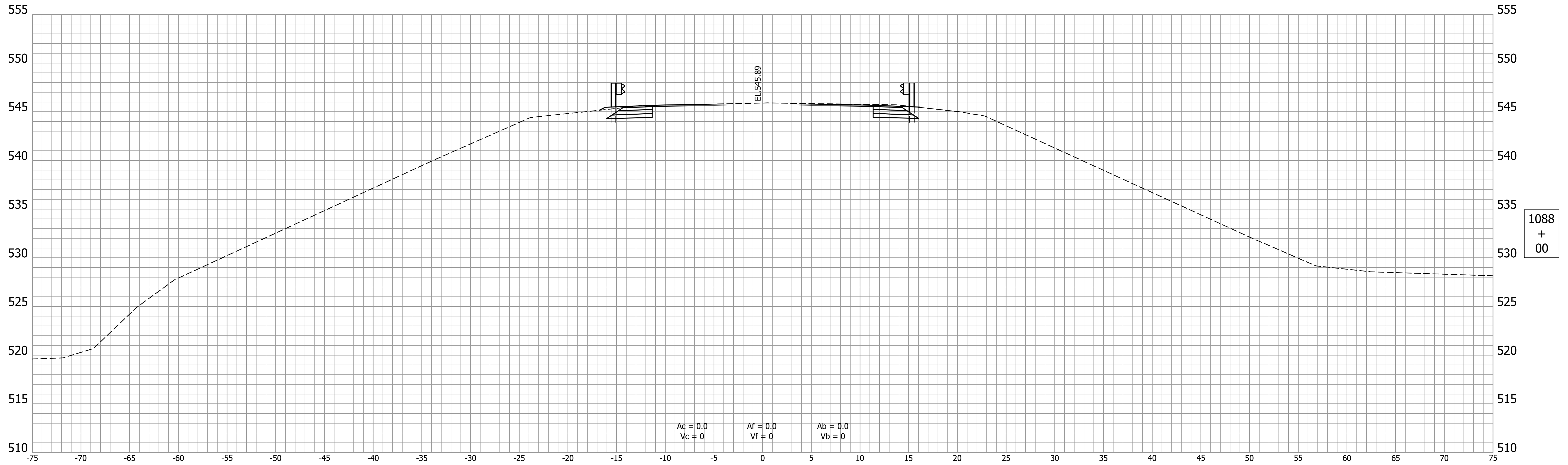
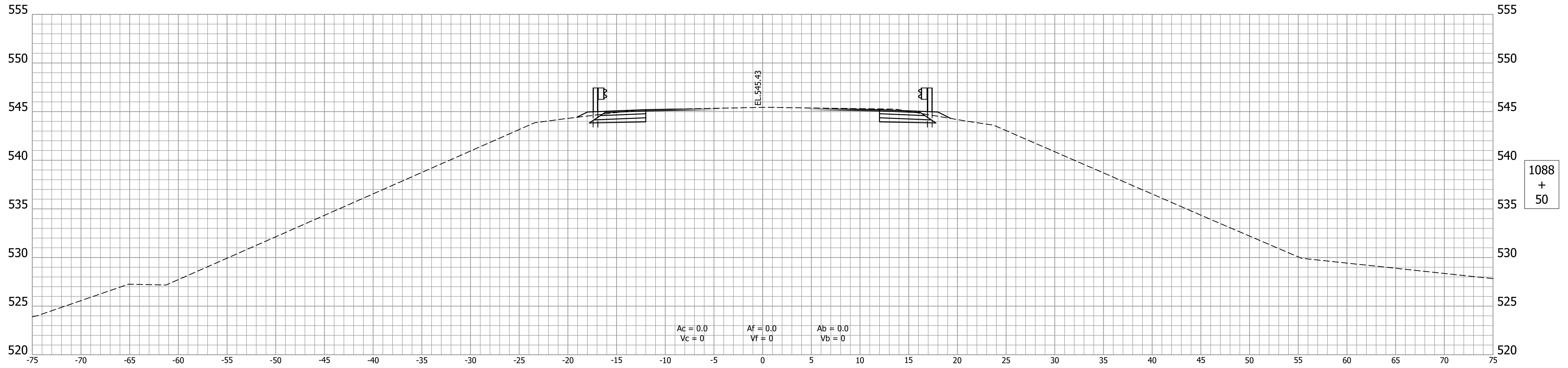
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RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: RTW _____	DRAWN: MEN _____	
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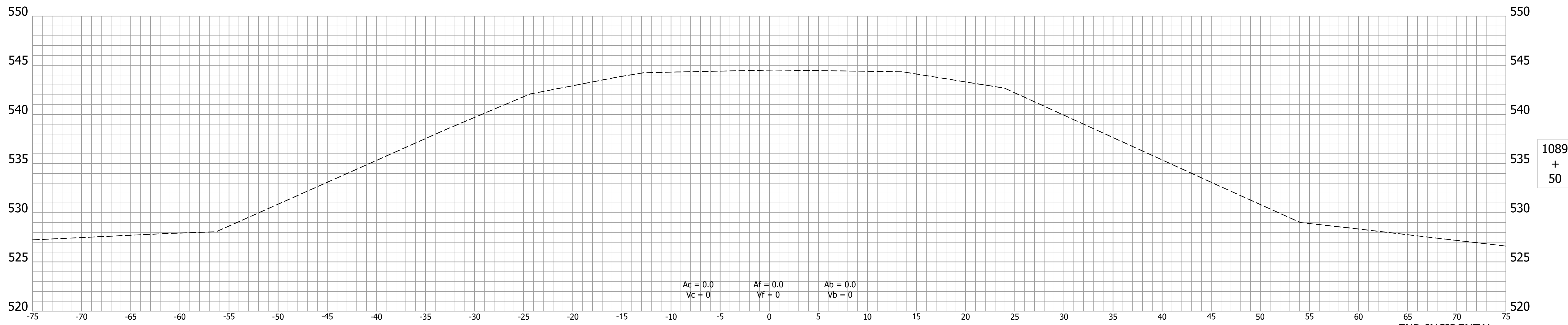
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
LINE "NN"

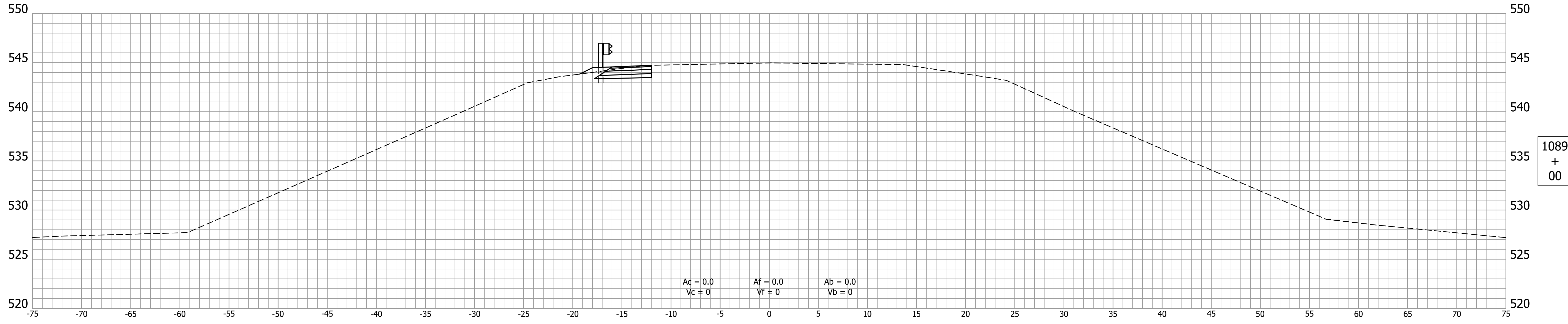
HORIZONTAL SCALE 1" = 5'	BRIDGE FILE 046-15-01987 B
VERTICAL SCALE 1" = 5'	DESIGNATION 1383721
DRAWING NO.	SHEETS
	33 of 36
CONTRACT B-42401	PROJECT 1900094



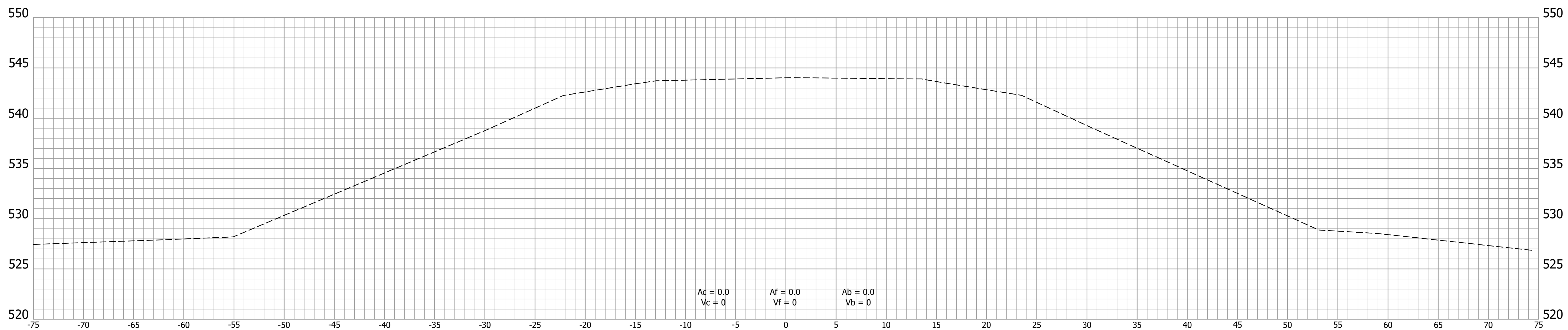
		RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION CROSS SECTIONS LINE "NN"	HORIZONTAL SCALE 1" = 5'	BRIDGE FILE 046-15-01987 B		
							VERTICAL SCALE 1" = 5'	DESIGNATION 1383721	
							DRAWING NO.	SHEETS 34 of 36	
							CONTRACT B-42401	PROJECT 1900094	
<small>nwashington p:\190029 - sr 46 rehab des 1383721\02bridge\04plans\190029 - sht cross sections.dwg x section 16 7/13/2022 4:49:03 PM </small>									



END INCIDENTAL
STA.1089+50.00 "NN"



	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 5'	BRIDGE FILE 046-15-01987 B		
				VERTICAL SCALE 1" = 5'	DESIGNATION 1383721		
		DESIGNED: RTW _____	DRAWN: MEN _____	CROSS SECTIONS LINE "NN"		DRAWING NO.	SHEETS 35 of 36
		CHECKED: AWW _____	CHECKED: AWW _____			CONTRACT B-42401	PROJECT 1900094



Ac = 0.0
Vc = 0

Af = 0.0
Vf = 0

Ab = 0.0
Vb = 0

		RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1" = 5'	BRIDGE FILE 046-15-01987 B
		DESIGNED: RTW _____	DRAWN: MEN _____			VERTICAL SCALE 1" = 5'	DESIGNATION 1383721
		CHECKED: AVW _____	CHECKED: AVW _____			DRAWING NO.	SHEETS 36 of 36
						CONTRACT B-42401	PROJECT 1900094
CROSS SECTIONS LINE "NN"							