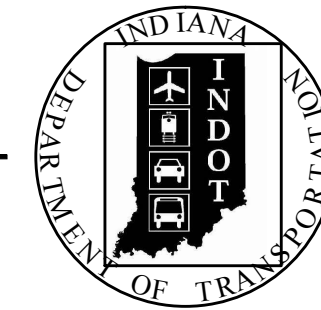


PROJECT	DESIGNATION
0200634	0200634
CONTRACT	BRIDGE FILE
B-33539	41-82-4999B

STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
041-82-4999B	BUILT-UP STEEL PLATE GIRDER BRIDGE	1@40'-0", 1@65'-0", 3@81'-0", 2@65'-0", 3@81'-0", 2@65'-0", 3@81'-0", 1@65'-0" AND 1@40'-0" NO SKEW	EAGLE CREEK	± STRUCTURE STA. 188+04.75

# INDIANA DEPARTMENT OF TRANSPORTATION



TRAFFIC DATA	
A.A.D.T. (2013)	20230 V.P.D.
A.A.D.T. (2017)	20380 V.P.D.
A.A.D.T. (2037)	25630 V.P.D.
DIRECTIONAL DISTRIBUTION	100 %
TRUCKS	11.6 % A.A.D.T.

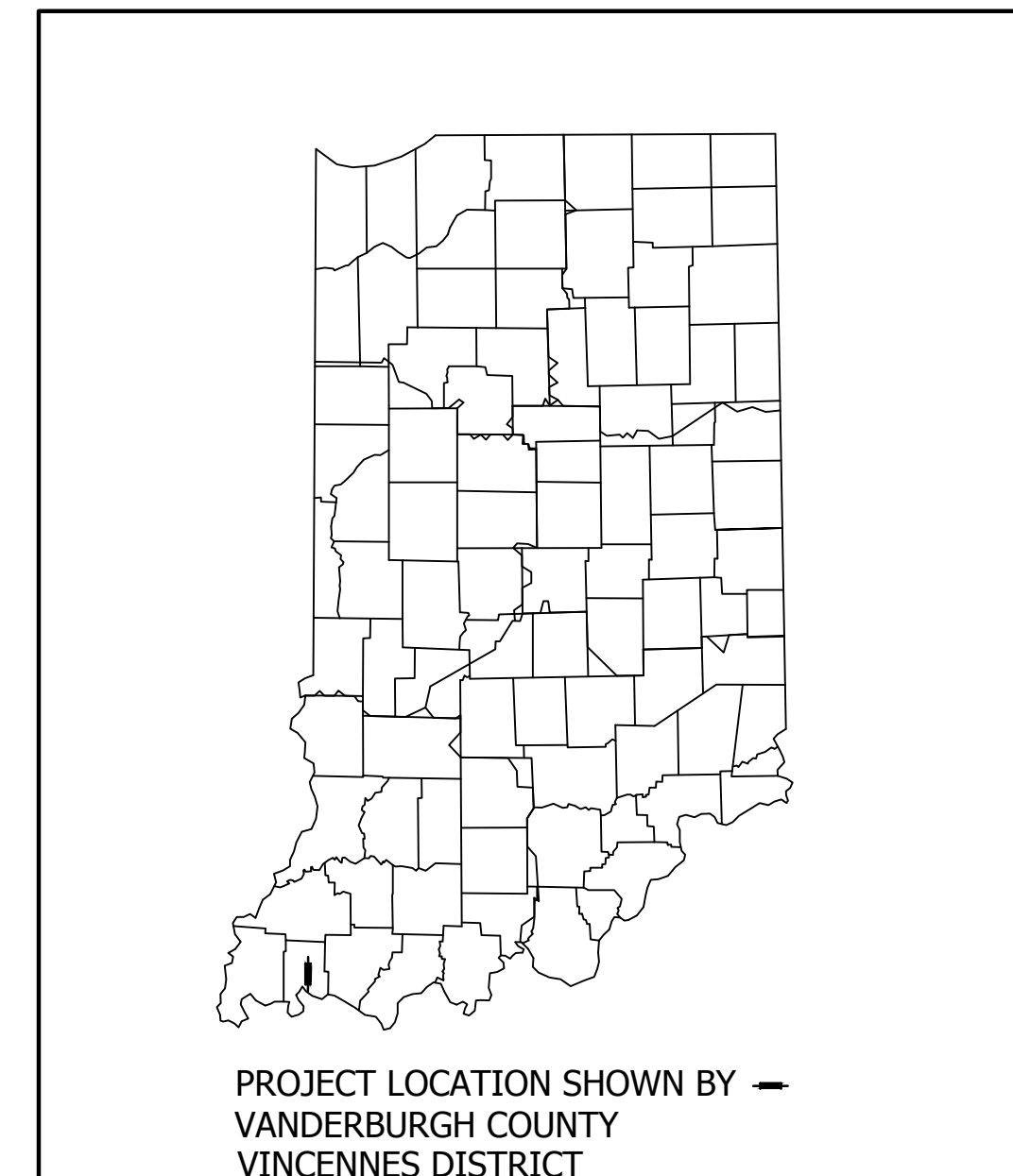
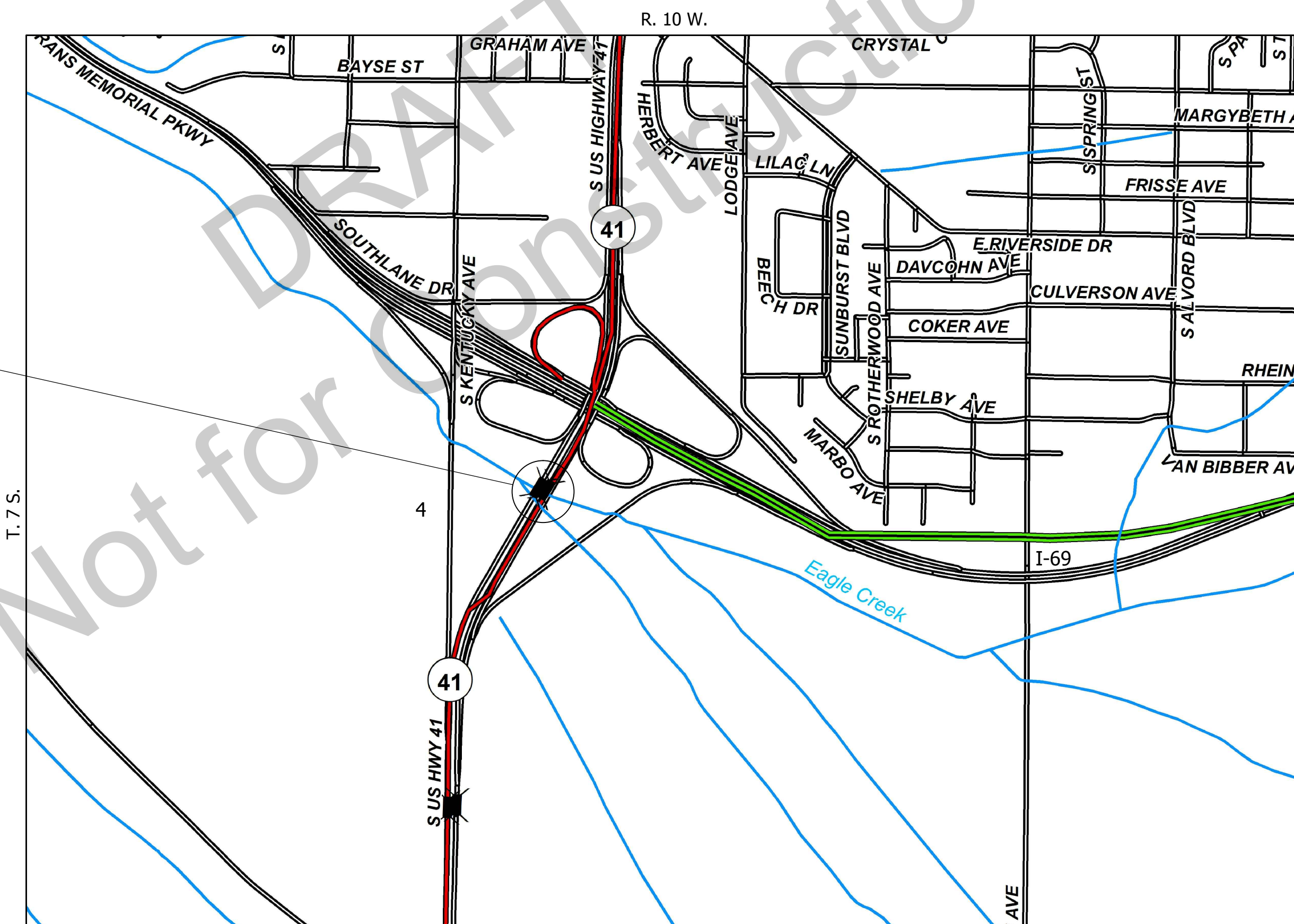
DESIGN DATA	
DESIGN SPEED	50 M.P.H.
POSTED SPEED	50 M.P.H.
PROJECT DESIGN CRITERIA	3R NON-FREEWAY
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL
RURAL/URBAN	URBAN
TERRAIN	LEVEL
ACCESS CONTROL	NONE

KIN PROJECT INFORMATION	
DESIGNATION	PROJECT DESCRIPTION
0100482	U.S. 41 over SB Cheatam Slough
9620260	U.S. 41 over NB Cheatam Slough
0200633	U.S. 41 over SB Ohio River Overflow
0200636	U.S. 41 over NB Ohio River Overflow
0200635	U.S. 41 over SB Eagle Creek
0200634	U.S. 41 over NB Eagle Creek
1298275	U.S. 41 over SB Ohio River
1592481	Roadway Plans from Cheatam Slough to Eagle Creek

## BRIDGE REHABILITATION PLANS FOR SPANS OVER 20 FEET U.S. 41 NB OVER EAGLE CREEK PROJECT NO. 0200634

DECK RECONSTRUCTION ON STRUCTURES: 041-82-4999B, U.S. 41 NB OVER EAGLE CREEK LOCATED APPROXIMATELY 0.32 MILES SOUTH OF THE U.S.41 AND I-69 INTERCHANGE, IN SECTION 4, TOWNSHIP 7 SOUTH, RANGE 10 WEST, VANDERBURGH COUNTY, INDIANA.

NOTE: SEE ROAD PLANS FOR REMOVAL OF EXISTING GUARDRAIL, PROPOSED GUARDRAIL, PAVEMENT MARKINGS, EROSION CONTROL MEASURES AND MAINTENANCE OF TRAFFIC DETAILS.



LATITUDE: 37°56'17" N. & LONGITUDE: 87°32'44" W.

H.U.C. = 05140202010020

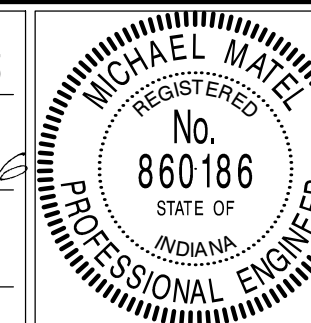
R.P. 0+98

VICINITY MAP  
VANDERBURGH COUNTY

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES.

U:\5605\ProDevelopment\Design Drawings\EAGLE CREEK\5605B101NB.dwg Donald Sheetz Plot: 11/1/2016 1:38 PM Sves:11/1/2016 9:03 AM

PLANS PREPARED BY: Butler Fairman and Seufert Inc. (317)713-4615  
PHONE  
CERTIFIED BY: *Michael M. Tate* 10/31/16  
DATE  
APPROVED FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE



INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED 2016 TO BE USED WITH THESE PLANS.

BRIDGE FILE	41-82-4999B
DESIGNATION	0200634
SURVEY BOOK	SHEET
CONTRACT	PROJECT
B-33539	0200634

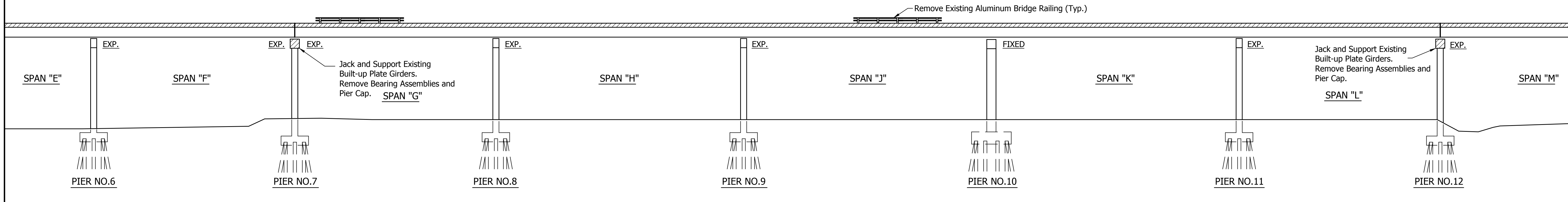
5605







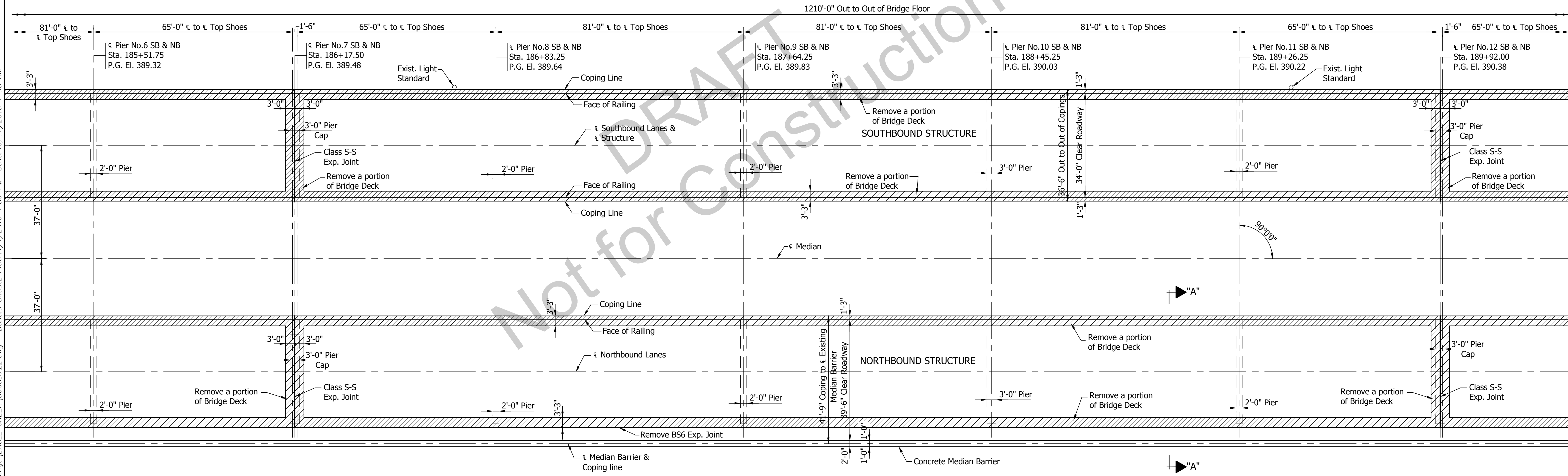
STRUCTURE IS BUILT ON A +0.24% GRADE



**PARTIAL ELEVATION**

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

Note: Hatched Areas indicate Portions to be Removed.



**PARTIAL PLAN**

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

**TWIN CONTINUOUS STEEL PLATE GIRDER AND R.C. GIRDER BRIDGES**

17 SPANS: 1 AT 40'-0", 1 AT 65'-0", 3 AT 81'-0", 2 AT 65'-0", 3 AT 81'-0", 2 AT 65'-0", 3 AT 81'-0", 1 AT 65'-0" AND 1 AT 40'-0" NO SKEW, 39'-6" CLEAR ROADWAY ON U.S.41 NORTHBOUND OVER EAGLE CREEK

NOTE: SEE ROAD PLANS FOR REMOVAL OF EXISTING GUARDRAIL, PROPOSED GUARDRAIL, PAVEMENT MARKINGS, EROSION CONTROL MEASURES AND MAINTENANCE OF TRAFFIC DETAILS.

NOTES  
See Sheets 6 thru 8 for Proposed Structure General Plans.  
See Sheet 9 for Section "A-A".

	RECOMMENDED FOR APPROVAL: <i>Michael Matel</i> 10/31/16 DESIGN ENGINEER DATE
	DESIGNED: D. SHEETZ DRAWN: D. SHEETZ
	CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA  
DEPARTMENT OF TRANSPORTATION

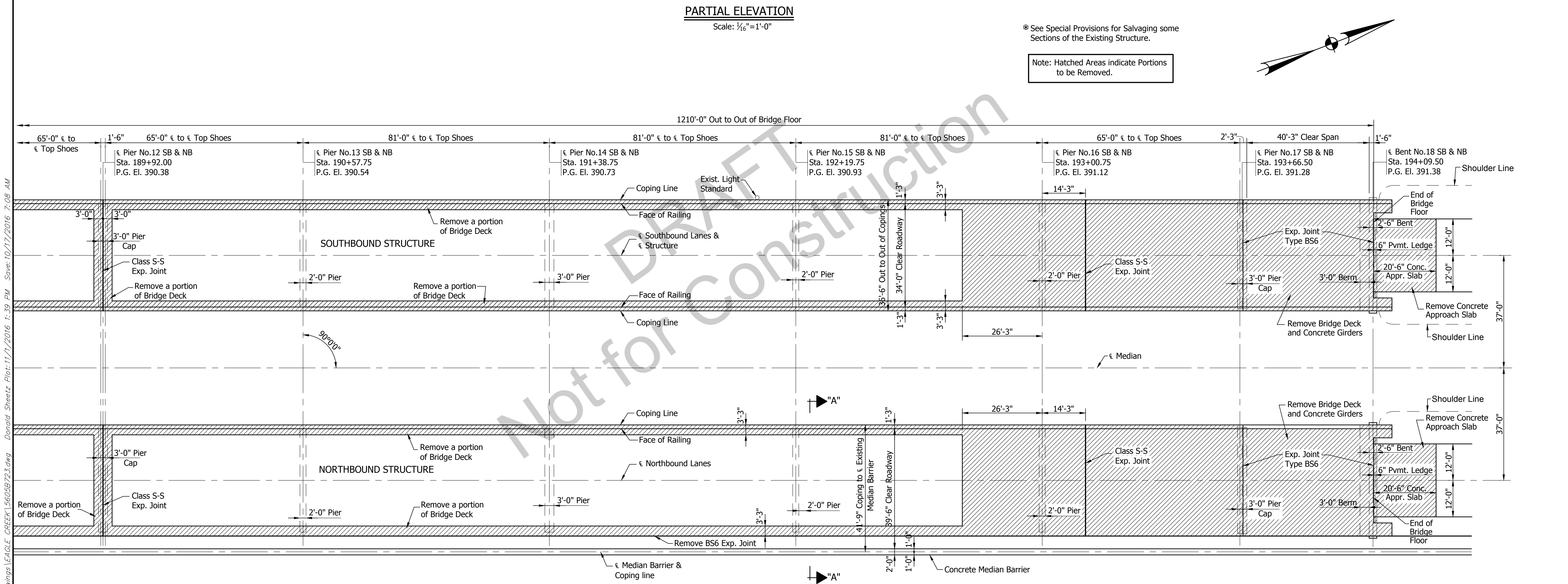
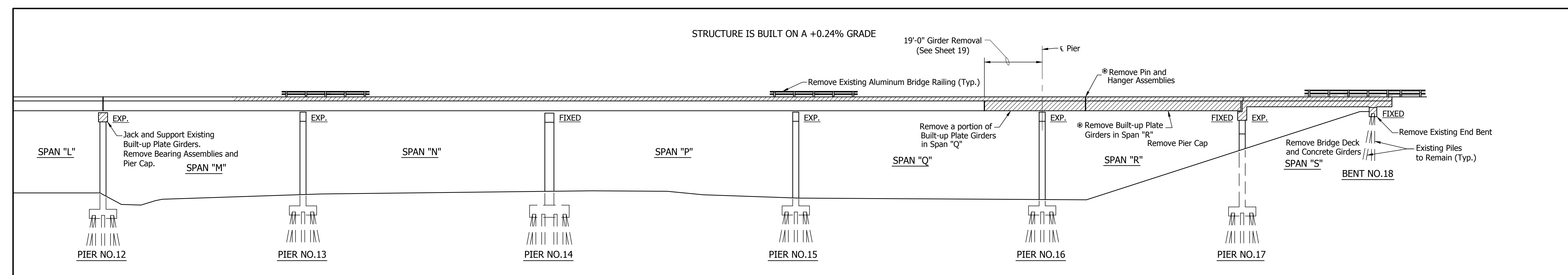
GENERAL PLAN  
EXISTING NORTHBOUND STRUCTURE

HORIZONTAL SCALE AS NOTED	BRIDGE FILE 41-82-4999B
VERTICAL SCALE AS NOTED	DESIGNATION 0200634
SURVEY BOOK	SHEET 4 OF 33
CONTRACT B-33539	PROJECT 0200634

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BFS NO.

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NOTE: SEE ROAD PLANS FOR REMOVAL OF EXISTING GUARDRAIL, PROPOSED GUARDRAIL, PAVEMENT MARKINGS, EROSION CONTROL MEASURES AND MAINTENANCE OF TRAFFIC DETAILS.

**NOTES**  
See Sheets 6 thru 8 for Proposed Structure General Plans.  
See Sheet 9 for Section "A-A".

	RECOMMENDED FOR APPROVAL: <i>M. Matel</i> 10/31/16 DESIGN ENGINEER DATE
	DESIGNED: D. SHEETZ DRAWN: D. SHEETZ
	CHECKED: M. MATEL CHECKED: M. MATEL

**INDIANA DEPARTMENT OF TRANSPORTATION**

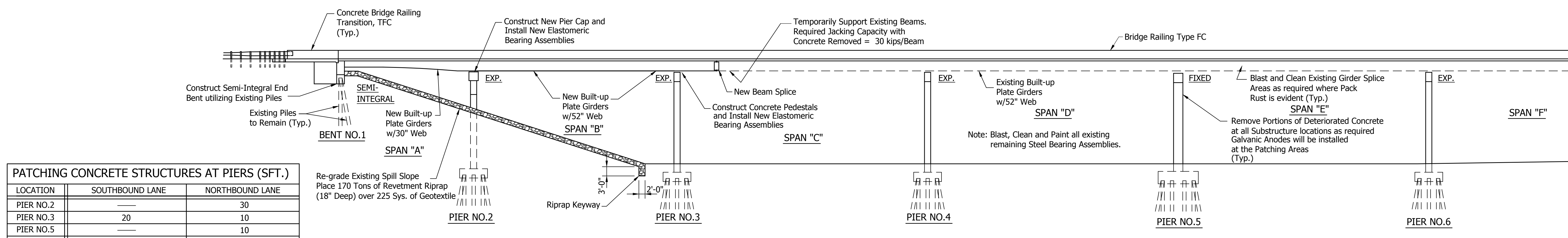
**GENERAL PLAN**

**EXISTING NORTHBOUND STRUCTURE**

HORIZONTAL SCALE AS NOTED	BRIDGE FILE 41-82-4999B
VERTICAL SCALE AS NOTED	DESIGNATION 0200634
SURVEY BOOK	SHEET 5 OF 33
CONTRACT B-33539	PROJECT 0200634

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BFS NO.

STRUCTURE IS BUILT ON A +0.24% GRADE



**PATCHING CONCRETE STRUCTURES AT PIERS (SFT.)**

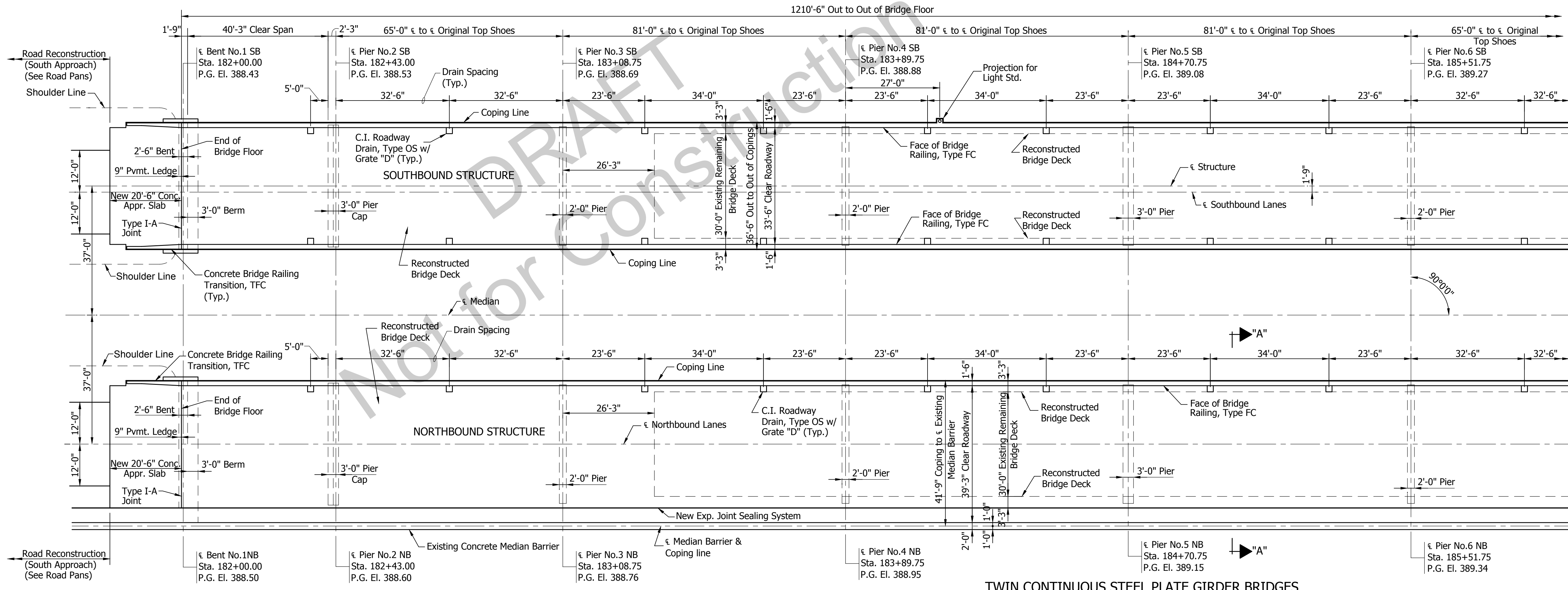
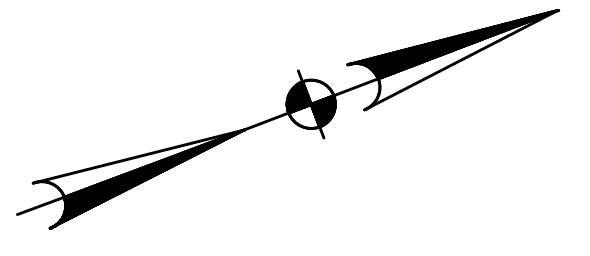
LOCATION	SOUTHBOUND LANE	NORTHBOUND LANE
PIER NO.2	—	30
PIER NO.3	20	10
PIER NO.5	—	10
PIER NO.7	350	150
PIER NO.9	—	10
PIER NO.11	10	10
PIER NO.12	40	80
PIER NO.15	50	—
PIER NO.17	50	20

**GALVANIC ANODES FOR CONCRETE PATCHING**

LOCATION	QUANTITY
PIERS	230 EACH

**PARTIAL ELEVATION**  
Scale: 1/16" = 1'-0"

Note: Install 17 Snowplowable Raised Pavement Markers. (Total Required per Structure)

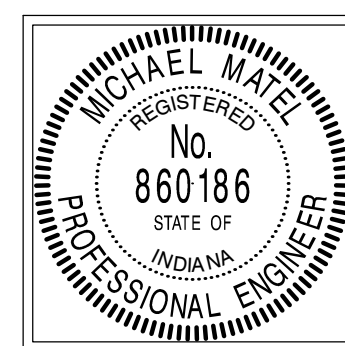


**PARTIAL PLAN**  
Scale: 1/16" = 1'-0"

**TWIN CONTINUOUS STEEL PLATE GIRDER BRIDGES**  
17 SPANS: 1 AT 40'-0", 1 AT 65'-0", 3 AT 81'-0", 2 AT 65'-0", 3 AT 81'-0", 2 AT 65'-0", 3 AT 81'-0", 1 AT 65'-0" AND 1 AT 40'-0" NO SKEW, 39'-3" CLEAR ROADWAY ON U.S.41 NORTHBOUND OVER EAGLE CREEK

NOTE: SEE ROAD PLANS FOR REMOVAL OF EXISTING GUARDRAIL, PROPOSED GUARDRAIL, PAVEMENT MARKINGS, EROSION CONTROL MEASURES AND MAINTENANCE OF TRAFFIC DETAILS.

NOTES  
See Sheets 3 thru 5 for Existing Structure General Plans.  
See Sheet 10 for Section "A-A", General Notes, Design Data and Construction Loading.



RECOMMENDED FOR APPROVAL: *Michael M. Matel* 10/31/16  
DESIGN ENGINEER DATE  
DESIGNED: D. SHEETZ DRAWN: D. SHEETZ  
CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA DEPARTMENT OF TRANSPORTATION  
GENERAL PLAN  
PROPOSED NORTHBOUND STRUCTURE

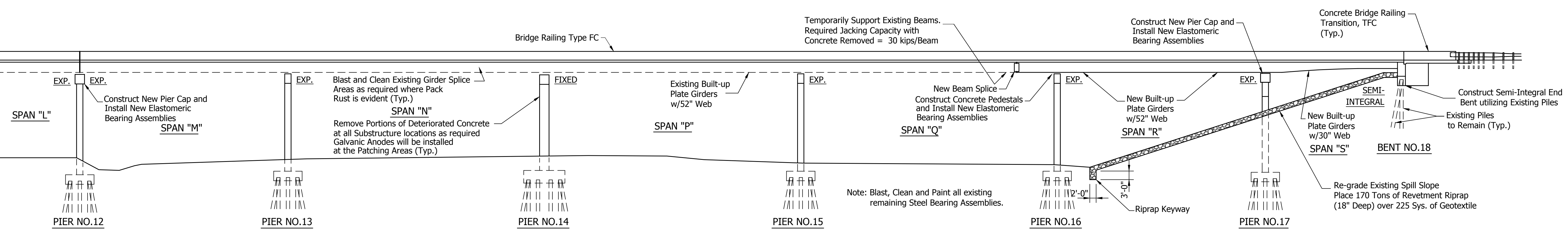
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VERTICAL SCALE	AS NOTED	DESIGNATION	0200634
SURVEY BOOK	6	SHEET	33
CONTRACT	B-33539	PROJECT	0200634

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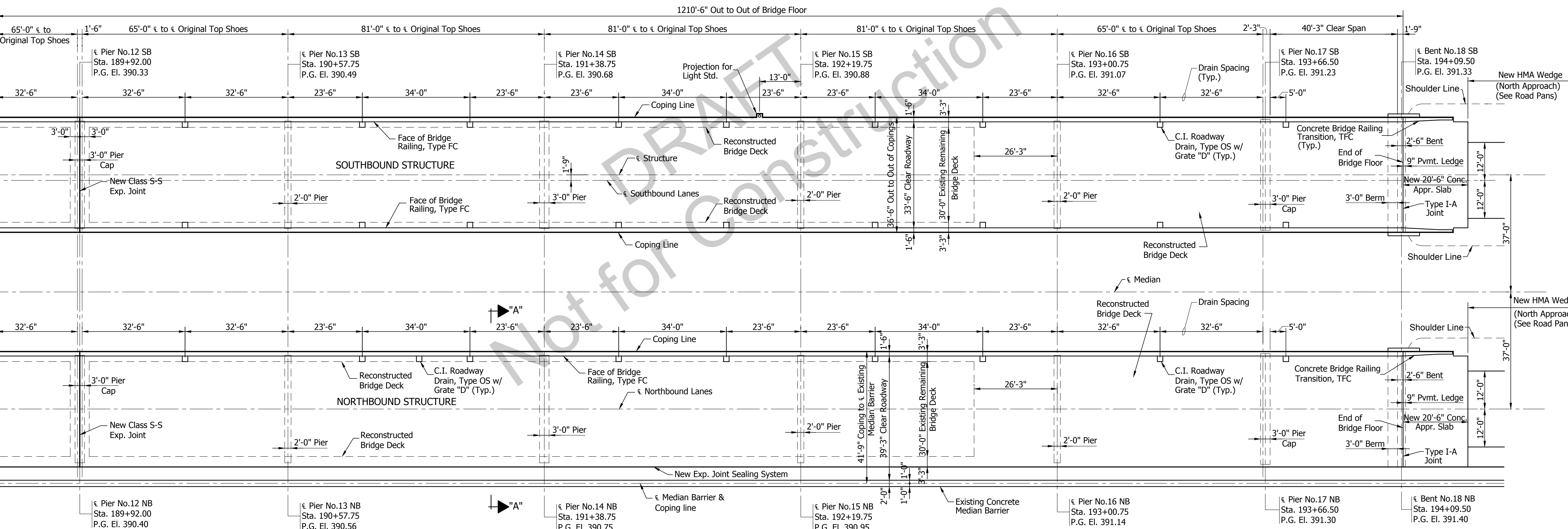
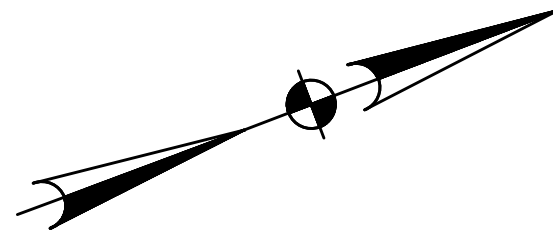
STRUCTURE IS BUILT ON A +0.24% GRADE



**PARTIAL ELEVATION**

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

Note: Install 17 Snowplowable Raised Pavement Markers. (Total Required per Structure)



**PARTIAL PLAN**

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

**TWIN CONTINUOUS STEEL PLATE GIRDER BRIDGES**

17 SPANS: 1 AT 40'-0", 1 AT 65'-0", 3 AT 81'-0", 2 AT 65'-0", 3 AT 81'-0", 2 AT 65'-0", 3 AT 81'-0", 1 AT 65'-0" AND 1 AT 40'-0" NO SKEW, 39'-3" CLEAR ROADWAY ON U.S.41 NORTHBOUND OVER EAGLE CREEK

NOTE: SEE ROAD PLANS FOR REMOVAL OF EXISTING GUARDRAIL, PROPOSED GUARDRAIL, PAVEMENT MARKINGS, EROSION CONTROL MEASURES AND MAINTENANCE OF TRAFFIC DETAILS.

**NOTES**  
See Sheets 3 thru 5 for Existing Structure General Plans. See Sheet 6 for Patching Concrete Structure Quantities. See Sheet 10 for Section "A-A", General Notes, Design Data and Construction Loading.

	RECOMMENDED FOR APPROVAL: <i>Michael Matel</i> 10/31/16 DESIGN ENGINEER DATE
	DESIGNED: D. SHEETZ DRAWN: D. SHEETZ
	CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA DEPARTMENT OF TRANSPORTATION

GENERAL PLAN  
PROPOSED NORTHBOUND STRUCTURE

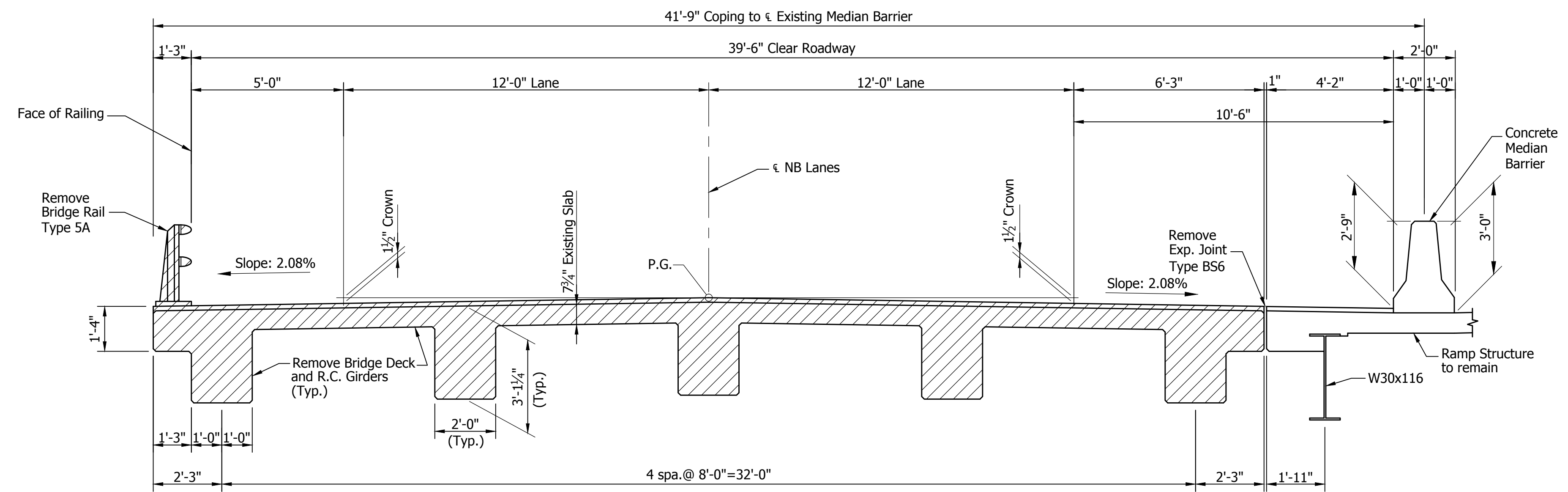
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VERTICAL SCALE	AS NOTED	DESIGNATION	0200634
SURVEY BOOK		SHEET	8 OF 33
CONTRACT	B-33539	PROJECT	0200634

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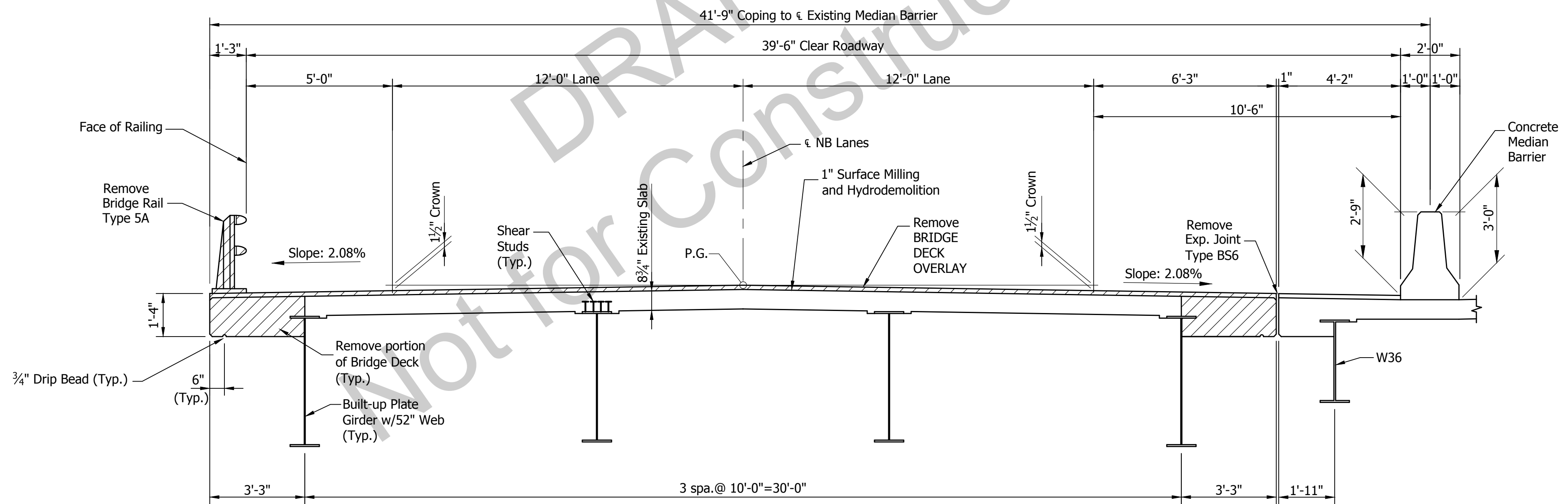
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**EXISTING SECTION "A-A"**  
**SPANS "A" AND "S"**  
**NORTHBOUND STRUCTURE**

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

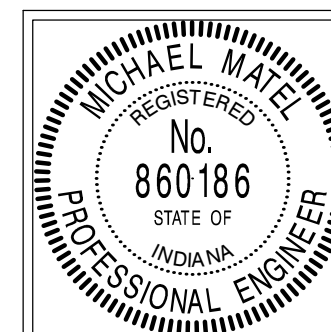
Note: Hatched Areas indicate Portions to be Removed.



**EXISTING SECTION "A-A"**  
**SPANS "B" THRU "R"**  
**NORTHBOUND STRUCTURE**

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

Note: Bridge Deck will be removed in Spans "B" and "R" and portions of Spans "C" and "Q".



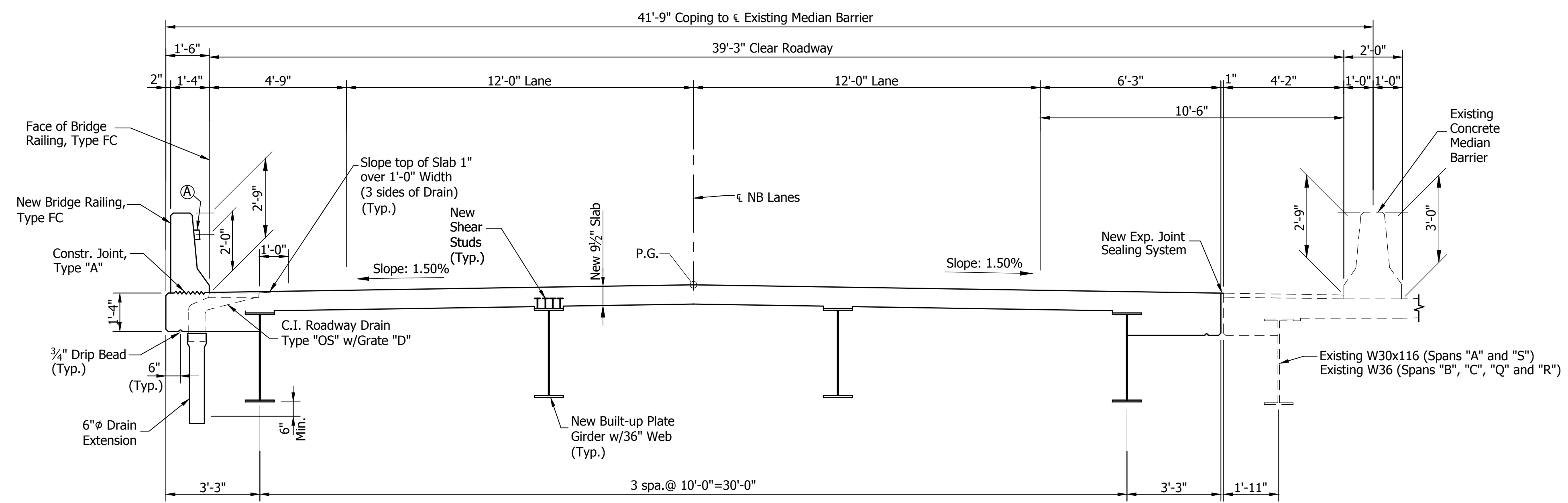
RECOMMENDED FOR APPROVAL: *Michael Matel* 10/31/16  
 DESIGN ENGINEER DATE  
 DESIGNED: D. SHEETZ DRAWN: D. SHEETZ  
 CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA DEPARTMENT OF TRANSPORTATION  
**TYPICAL SECTIONS**

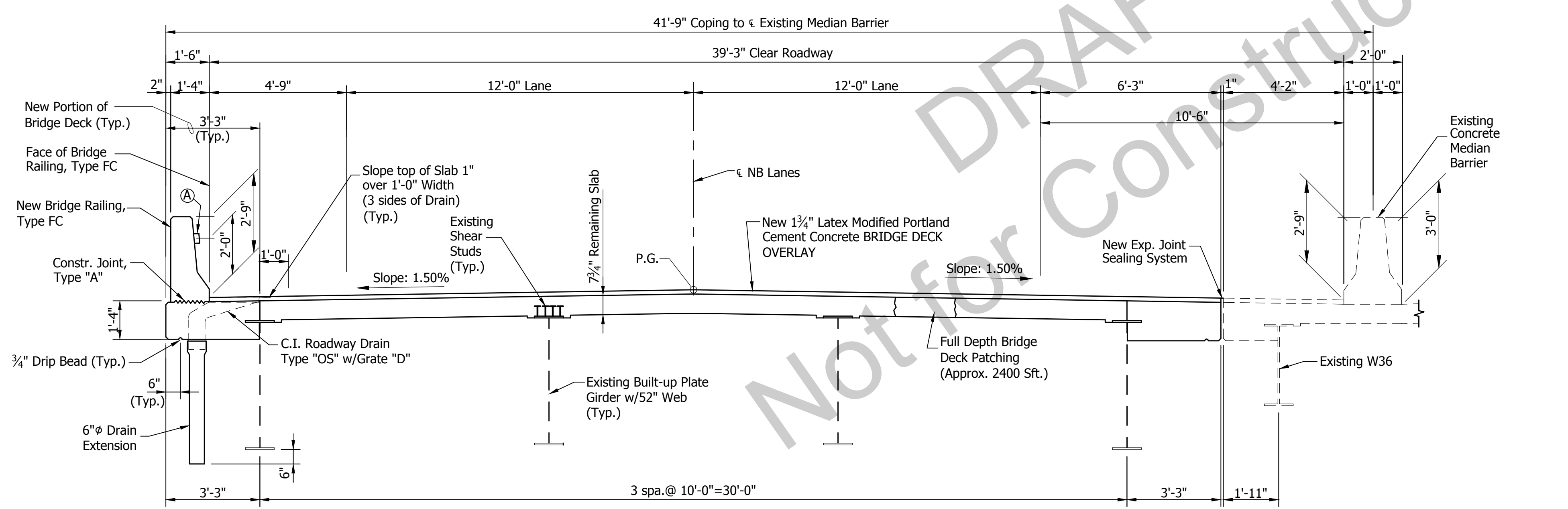
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VERTICAL SCALE	AS NOTED	DESIGNATION	0200634
SURVEY BOOK	9	SHEET	33
CONTRACT	B-33539	PROJECT	0200634

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BFS NO.

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**PROPOSED SECTION "A-A"**  
**SPANS "A", "B", "R" AND "S"**  
**PORTIONS OF SPANS "C" AND "Q"**  
**NORTHBOUND STRUCTURE**  
 Scale: 3/8"=1'-0"



**PROPOSED SECTION "A-A"**  
**PORTIONS OF SPANS "C" AND "Q"**  
**SPANS "D" THRU "P"**  
**NORTHBOUND STRUCTURE**  
 Scale: 3/8"=1'-0"

**SEISMIC DATA**  
 AASHTO LRFD Bridge Design Specifications, 6th Edition, 2012.  
 Seismic Zone 2  
 S<sub>D1</sub> = 0.257  
 Site Class D

**GENERAL NOTES**

- Plans for the existing structure are on file with the Indiana Department of Transportation as Bridge File: 41-82-4999 and 41-82-4999A and are available upon request.
- 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 the fit of the new part to the old.
- Epoxy coated reinforcing bars shall be required in various portions of the structure as shown.
- Reinforcing bars covering shall be 2-1/2" in top of approach slabs and 2" in all other areas unless noted.
- Reinforcing bars covering shall be 2-1/2" in top and 1" in bottom of floor slabs and 2" in all other areas unless noted.
- Reinforcing bars shall be A.S.T.M. A615, Grade 60.
- Concrete shall be Class C in end bents, wingwalls, floor slab and barrier railings.
- Concrete shall be Class A in all other portions of the project not noted above.
- Chamfer exposed corners of concrete 1" unless noted.
- Seal all joints and cracks in the approach pavement with a hot poured joint sealer before placing the HMA wedges.
- Surface seal shall be required on various areas of the structure as shown. (Estimated Quantity = 19860 Sft.) (Does not include Concrete Barrier Rail Transitions)

NOTE: SEE ROAD PLANS FOR REMOVAL OF EXISTING GUARDRAIL, PROPOSED GUARDRAIL, PAVEMENT MARKINGS, EROSION CONTROL MEASURES AND MAINTENANCE OF TRAFFIC DETAILS.

**DESIGN DATA**

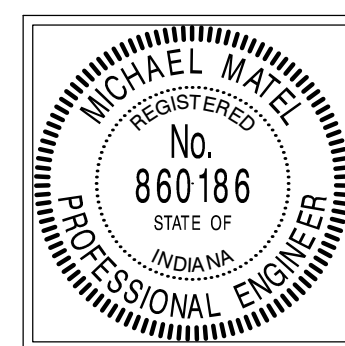
- MATERIAL DESIGN STRENGTHS:**  
 Class "A" Concrete F<sub>c</sub> = 3,500 p.s.i.  
 Class "C" Concrete F<sub>c</sub> = 4,000 p.s.i.  
 Reinforcing Steel (Grade 60) F<sub>y</sub> = 60,000 p.s.i.
- LIVE LOAD:**  
 HS20-44 loading with distribution in accordance with 2002 A.A.S.H.T.O. Specifications. Load Factor=2.17.
- DEAD LOAD:**  
 Actual plus 35 pounds per square foot (composite) for future wearing surface and 15 pounds per square foot (non composite) for permanent metal deck forms. Slab designed with a 1/2" wearing surface.
- FLOOR SLAB:**  
 New portions of slab has been designed with the AASHTO Strip Method using a structural depth of 9" and a 1/2" wearing surface.

**CONSTRUCTION LOADING**

- The exterior girder has been checked for strength, deflection and overturning using the construction loads shown below. Cantilever overhang brackets were assumed for support of the deck overhang past the edge of the exterior girder. The finishing machine was assumed to be supported 6 inches outside the vertical coping form. The top overhang brackets were assumed to be located 6 inches past the edge of the vertical coping form. The bottom overhang brackets were assumed to be braced against the intersection of the girder bottom flange and web.
- DECK FALSEWORK LOADS:** Designed for 15 psf for permanent metal stay-in-place deck forms, removable deck forms, and 2 ft exterior walkway..
- CONSTRUCTION LIVE LOAD:** Designed for 20 psf extending 2 ft past the edge of coping and 75 plf vertical force applied at a distance of 6 inches outside the face of coping over a 30 ft length of the deck with the finishing machine.
- FINISHING MACHINE LOAD:** 4500 lbs. distributed over 10 feet along the coping.
- WIND LOAD:** Designed for 70 mph horizontal wind loading in accordance with LRFD 3.8.1.

RECOMMENDED FOR APPROVAL: *Michael Matel* 10/31/16  
 DESIGN ENGINEER DATE

DESIGNED: D. SHEETZ DRAWN: D. SHEETZ  
 CHECKED: M. MATEL CHECKED: M. MATEL



INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

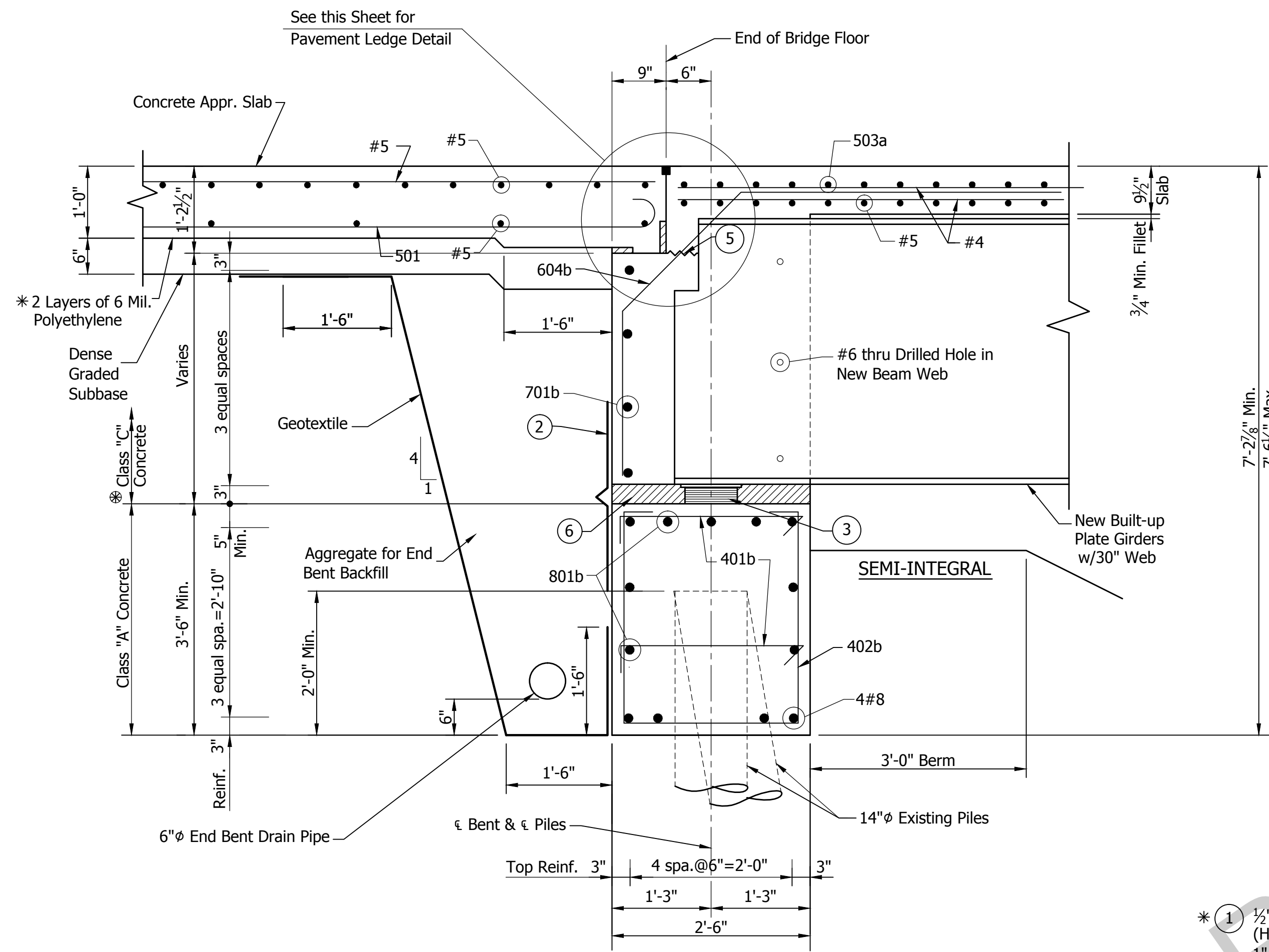
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VERTICAL SCALE	AS NOTED	DESIGNATION	0200634
SURVEY BOOK	10	SHEET	OF 33
CONTRACT	B-33539	PROJECT	0200634

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BFS NO.

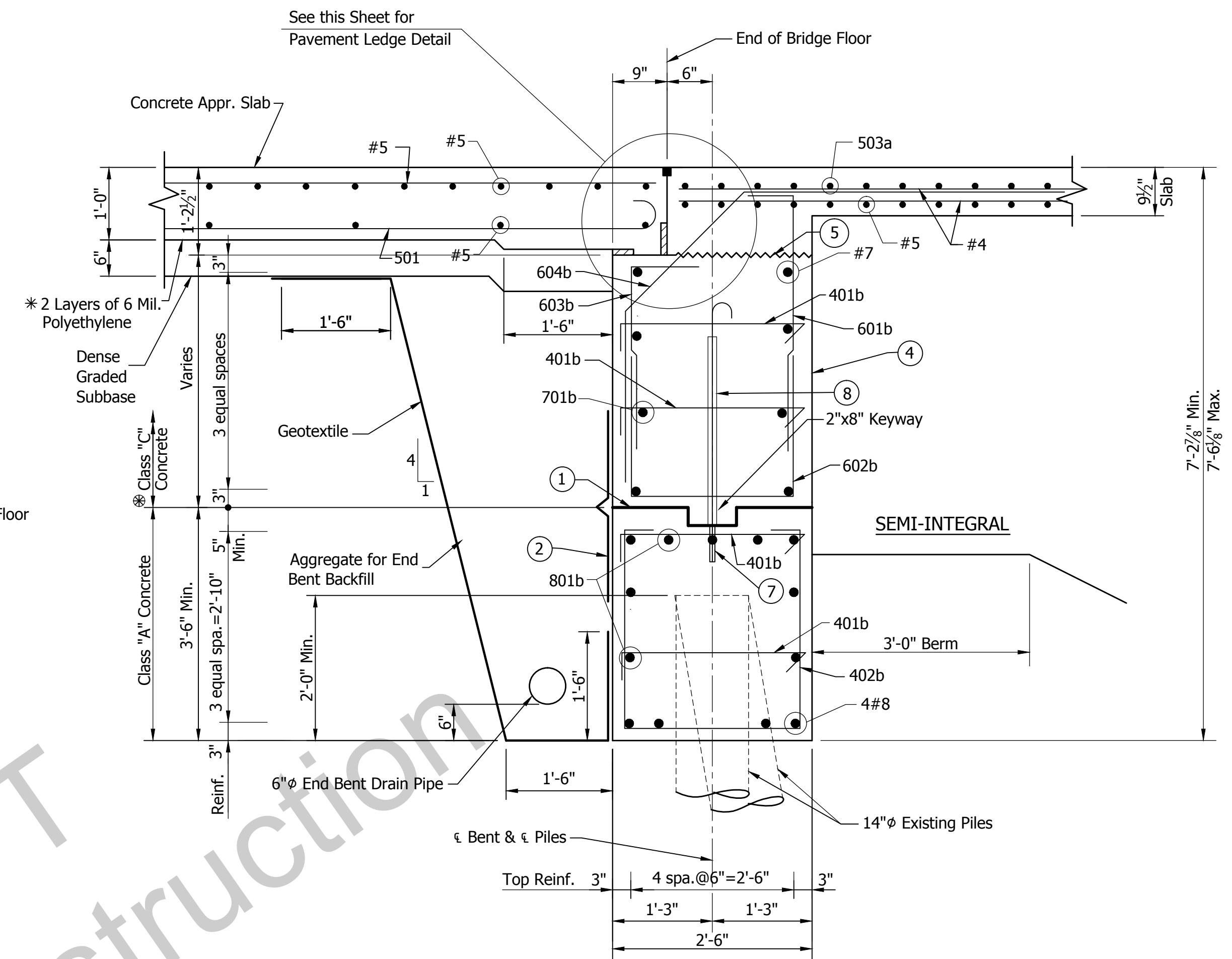




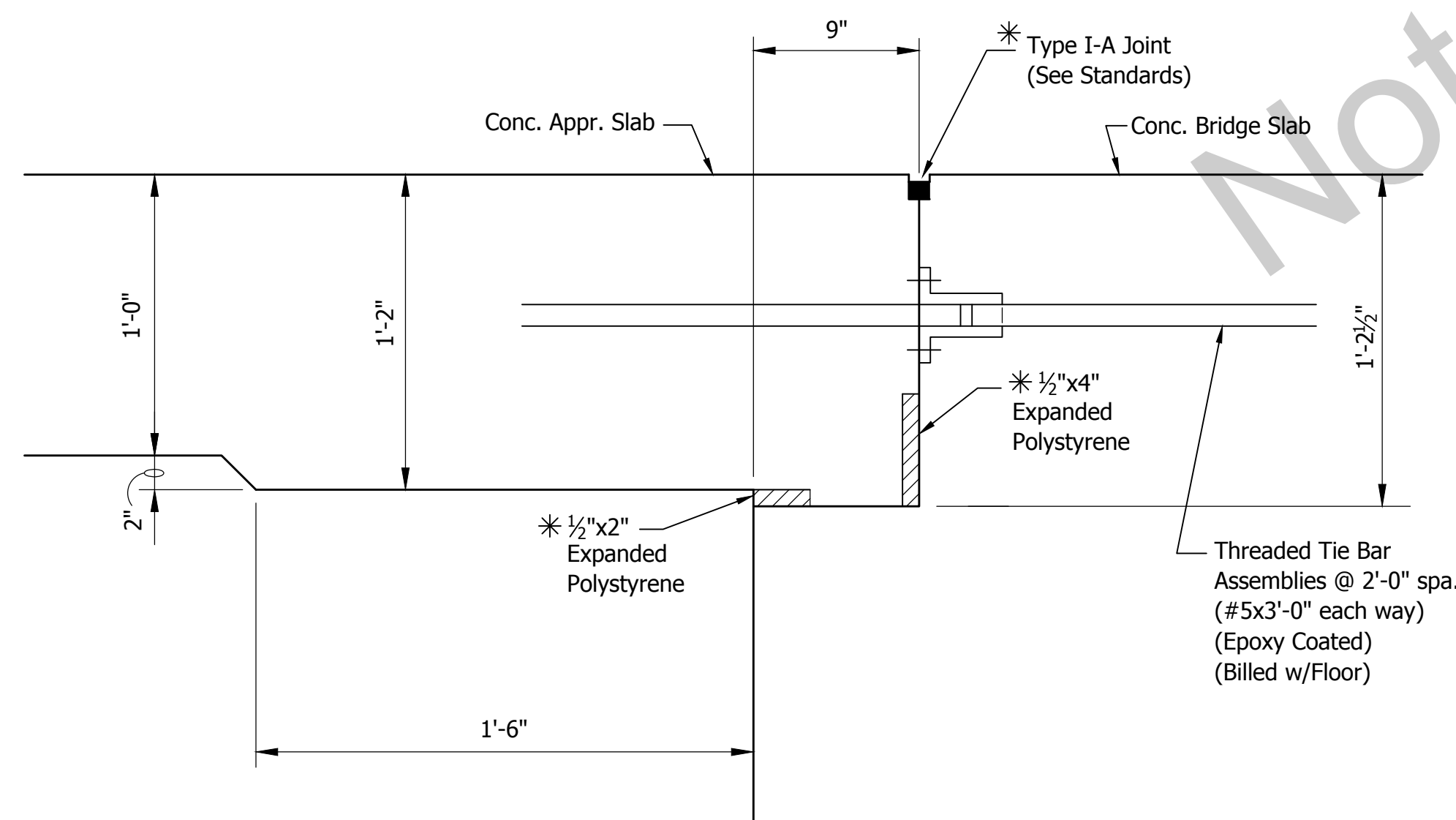
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**SECTION "B-B"**  
**AT BEAMS**  
Scale: 3/4"=1'-0"



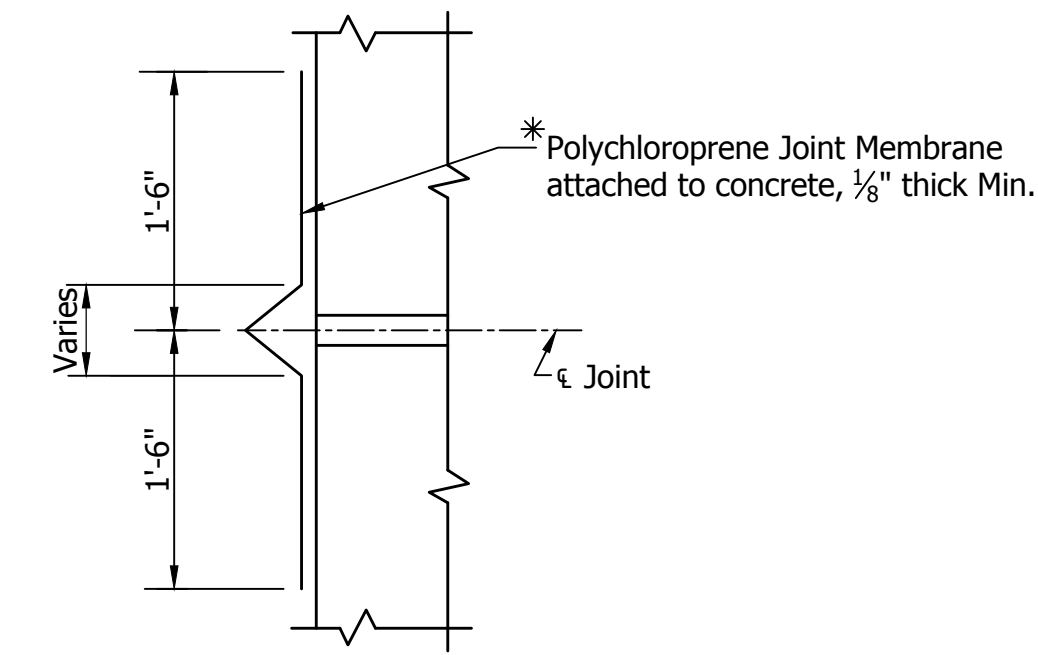
**SECTION "B-B"**  
**BETWEEN BEAMS**  
Scale: 3/4"=1'-0"



**PAVEMENT LEDGE DETAIL**  
Not to Scale

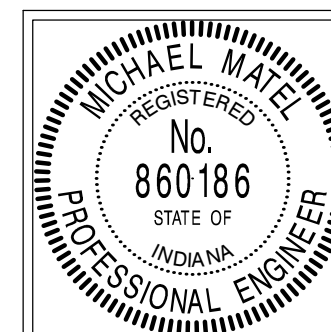
- \* 1 1/2" Expanded Polystyrene (Horizontal Face)  
1" Expanded Polystyrene (Vertical Face)
- \* 2 Polychloroprene Joint Membrane attached to concrete. (See Detail this Sheet)
- \* 3 Elastomeric Bearing Pad Assembly, Type S4-A (See Sheet 19 for Bearing Details) (See Special Provisions)
- \* 4 Surface Seal required on face of Bent and exposed face of Wingwall (Billed with Floor)
- \* 5 Optional Constr. Joint, Type "A"
- \* 6 Expanded Polystyrene cut to clear Bearing Pad by 1/2".
- \* 7 605b set in 1'-0" Field Drilled Holes with an Approved Anchor System (Min. Pullout = 26500 Lbs.)
- \* 8 PVC Pipe Sleeve, 4" Dia. Schedule 40 Top of Sleeve to be Sealed before Concrete is Poured.

\* See Special Provisions



**JOINT MEMBRANE DETAIL**  
Not to Scale

NOTE  
See Sheet 13 for Bar Bending Details and Bill of Materials.



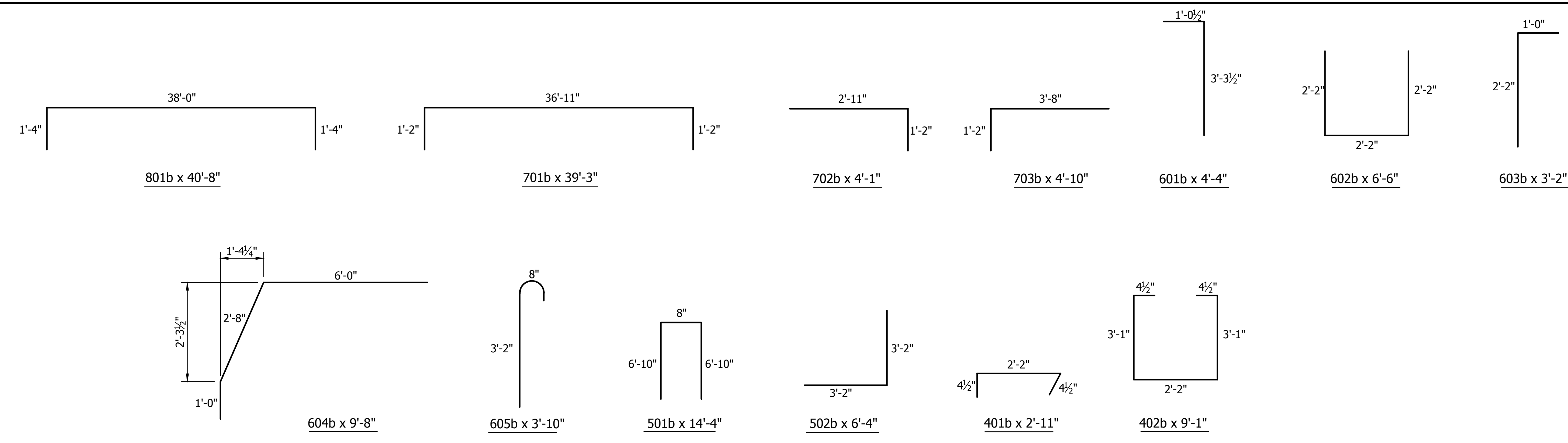
RECOMMENDED FOR APPROVAL:	<i>Michael Matel</i>	10/31/16
DESIGNED:	C. OBRIEN	DRAWN: D. SHEETZ
CHECKED:	B. WRIGHT	CHECKED: M. MATEL

INDIANA  
DEPARTMENT OF TRANSPORTATION  
**BENT NO.1 OR NO.18 DETAILS**  
NORTHBOUND STRUCTURE

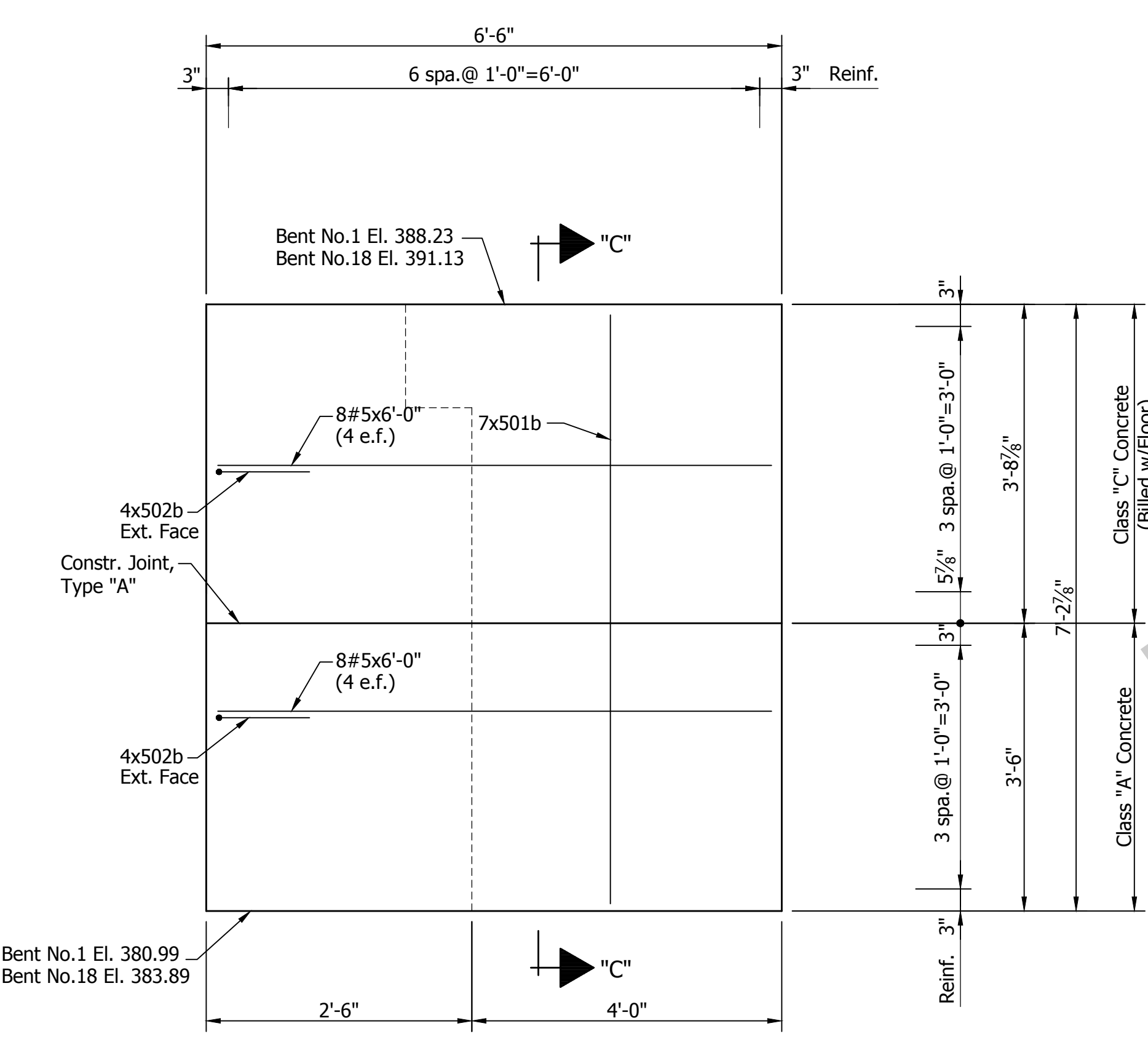
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VERTICAL SCALE	AS NOTED	DESIGNATION	0200634
SURVEY BOOK	12	SHEET	33
CONTRACT	B-33539	PROJECT	0200634

BFS NO. 5605

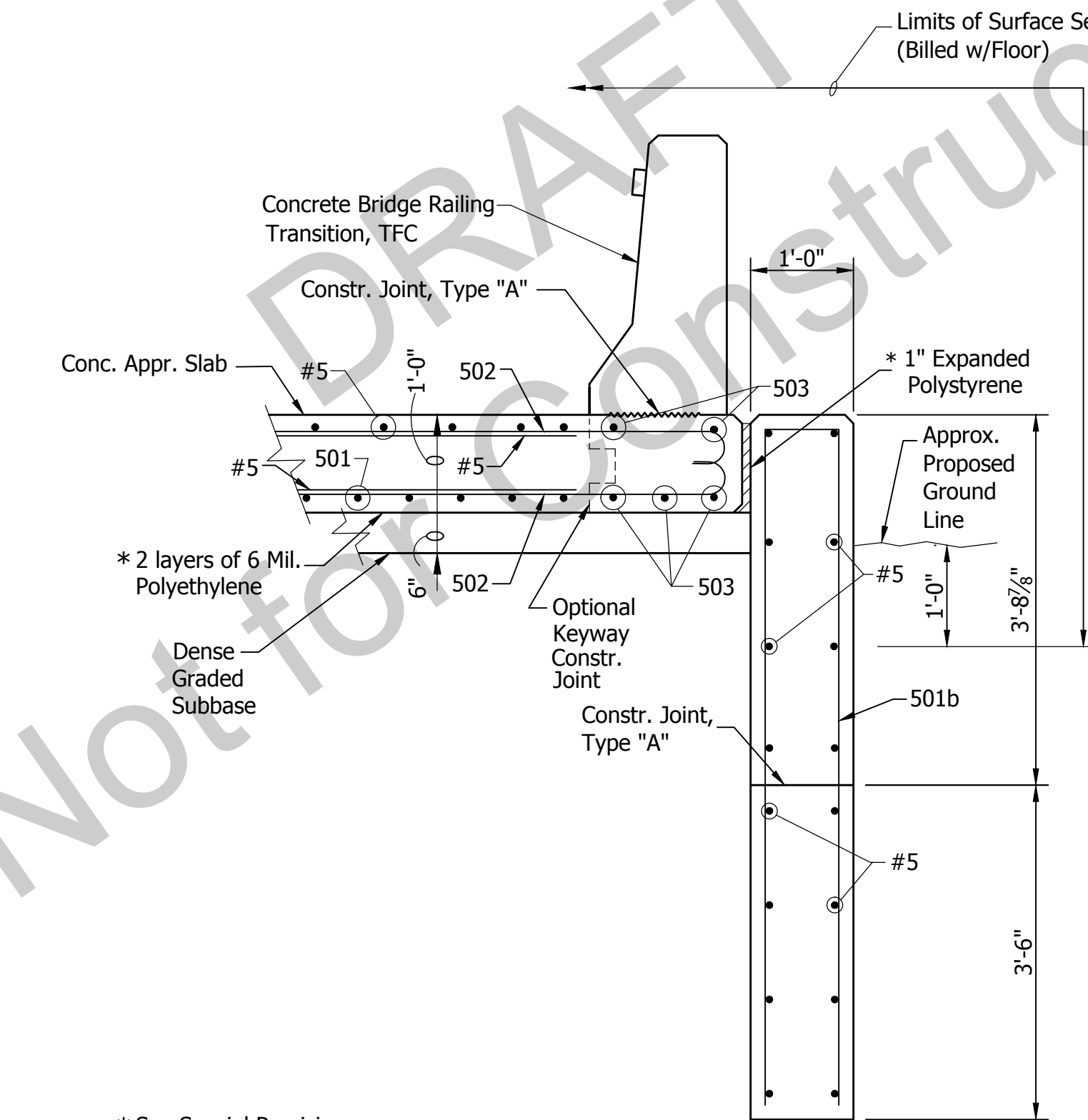
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**BAR BENDING DETAILS**  
Not to Scale



**WINGWALL DETAIL**  
Scale: 3/4" = 1'-0"



**SECTION "C-C"**  
Scale: 3/4" = 1'-0"

**BILL OF MATERIALS**  
**BENT NO.1**  
**(BENT NO.18 SAME)**  
**NORTHBOUND STRUCTURE**

REINFORCING BARS			
Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
801b	9	40'-8"	
#8	4	38'-0"	
Total #8 (Epoxy Coated)			1383
701b	4	39'-3"	
702b	4	4'-1"	
703b	4	4'-10"	
#7	12	9'-6"	
Total #7 (Epoxy Coated)			627
601b	34	4'-4"	
602b	34	6'-6"	
603b	34	3'-2"	
604b	38	9'-8"	
605b	34	3'-10"	
#6	12	9'-6"	
Total #6 (Epoxy Coated)			1634
501b	7	14'-4"	
502b	8	6'-4"	
#5	16	6'-0"	
Total #5 (Epoxy Coated)			258
401b	136	2'-11"	
402b	34	9'-1"	
Total #4 (Epoxy Coated)			471
Total Steel (Epoxy Coated)			4373
CONCRETE			
Class "A" in Substructure			
Cap			12.4 Cys.
Wingwalls			0.8 Cys.
Total Class "A" Concrete			13.2 Cys.
MISCELLANEOUS			
6" End Bent Drain Pipe			56 Lft.
Aggregate for End Bent Backfill			20 Cys.
Geotextile			44 Sys.
Field Drilled Holes in Concrete			34 Each

⊕ A.S.T.M. A615, Grade 60  
⊗ Includes 90° Elbow  
Note: See Special Provisions for Elastomeric Bearing Assembly.

RECOMMENDED FOR APPROVAL: *Michael Matel* 10/31/16  
DESIGN ENGINEER DATE

DESIGNED: C. OBRIEN DRAWN: D. SHEETZ  
CHECKED: B. WRIGHT CHECKED: M. MATEL

INDIANA DEPARTMENT OF TRANSPORTATION

**BENT NO.1 OR NO.18**  
**NORTHBOUND STRUCTURE**

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	41-82-4999B
VERTICAL SCALE	DESIGNATION
AS NOTED	0200634
SURVEY BOOK	SHEET
	13 OF 33
CONTRACT	PROJECT
B-33539	0200634

5605  
BFS NO.

**BILL OF MATERIALS**  
**PEDESTALS**  
**PIER NO.3**  
**PIER NO.16 SAME**  
**NORTHBOUND STRUCTURE**

**REINFORCING BARS**

Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
401c	12	9'-11"	
402c	24	1'-11"	
403c	4	3'-7"	
404c	4	2'-4"	
Total Steel (Plain)			126

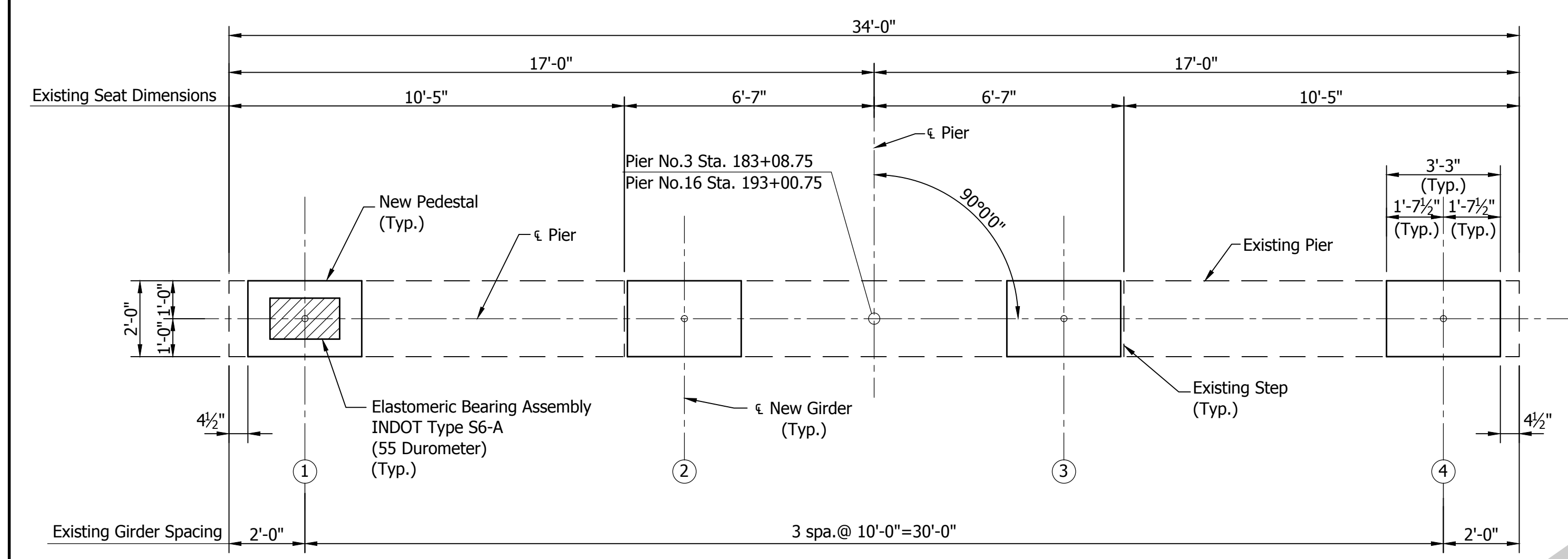
**CONCRETE**

Class "A" in Substructure	1.0 Cys.
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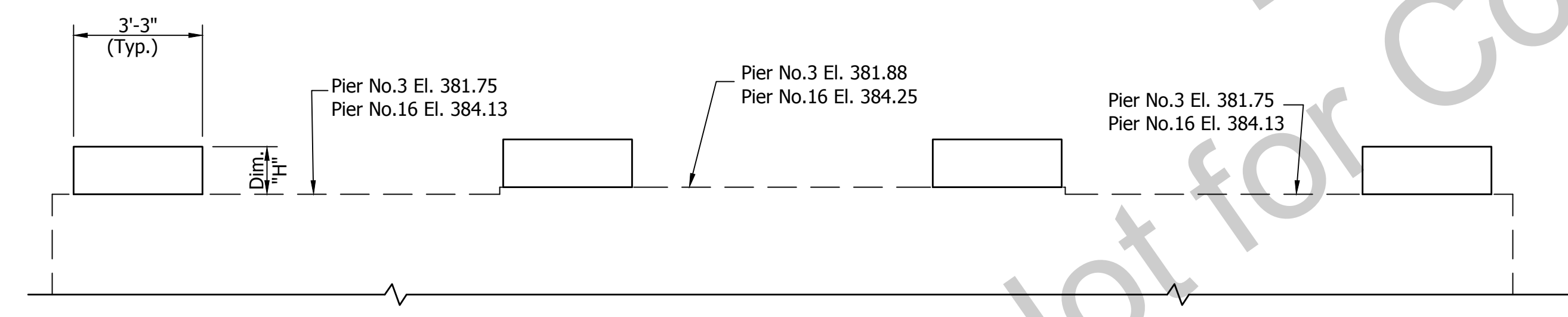
**MISCELLANEOUS**

Elastomeric Bearing Assembly	4 Each
Field Drilled Holes in Concrete	24 Each

⊕ A.S.T.M. A615, Grade 60



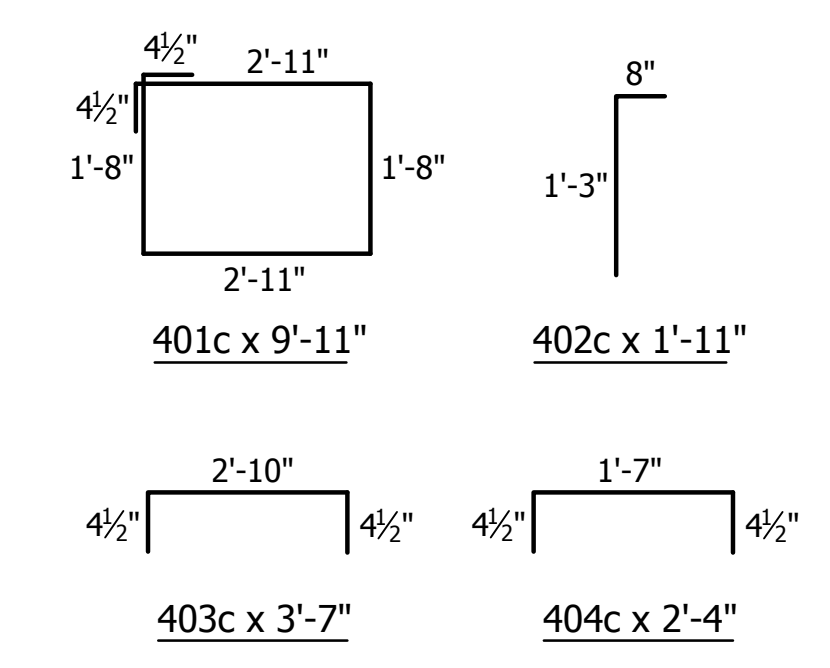
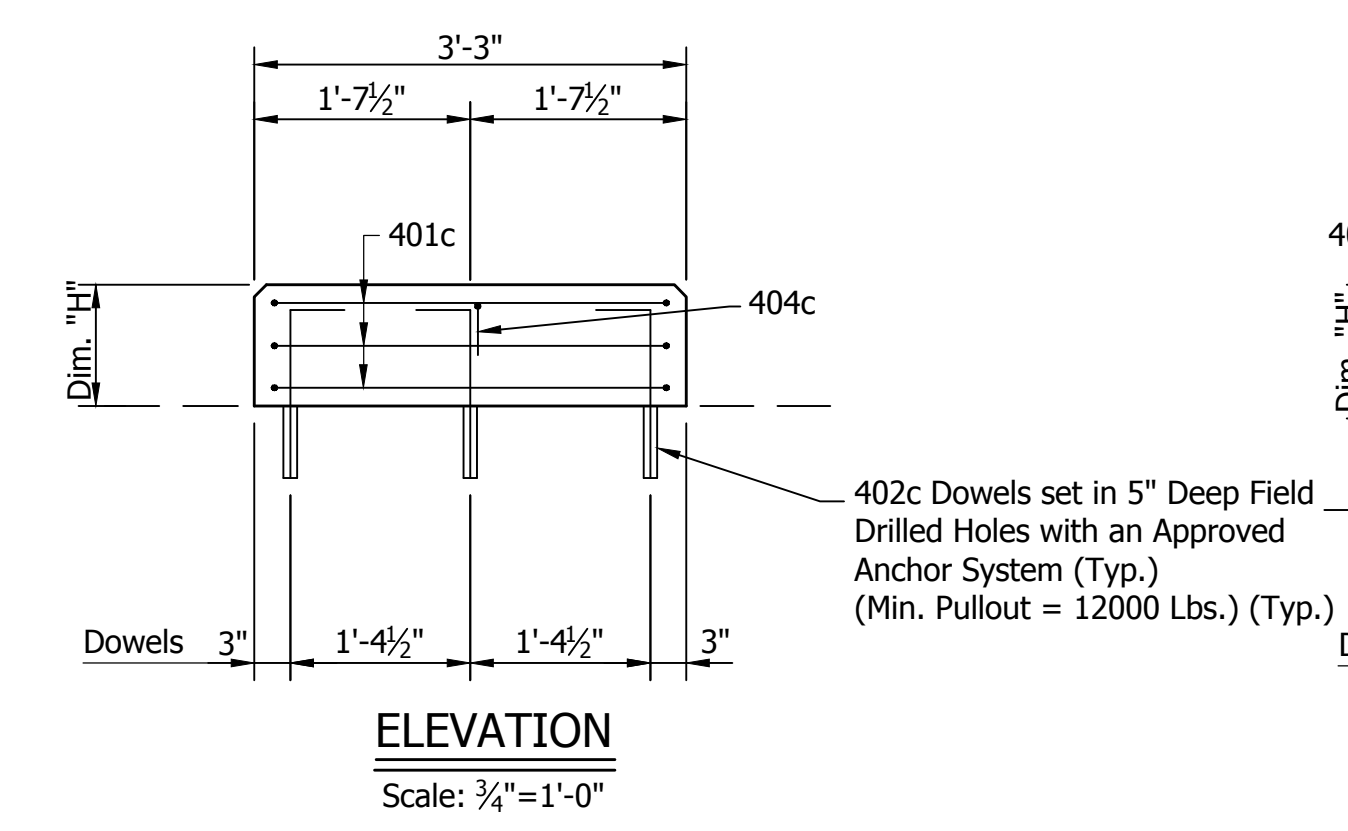
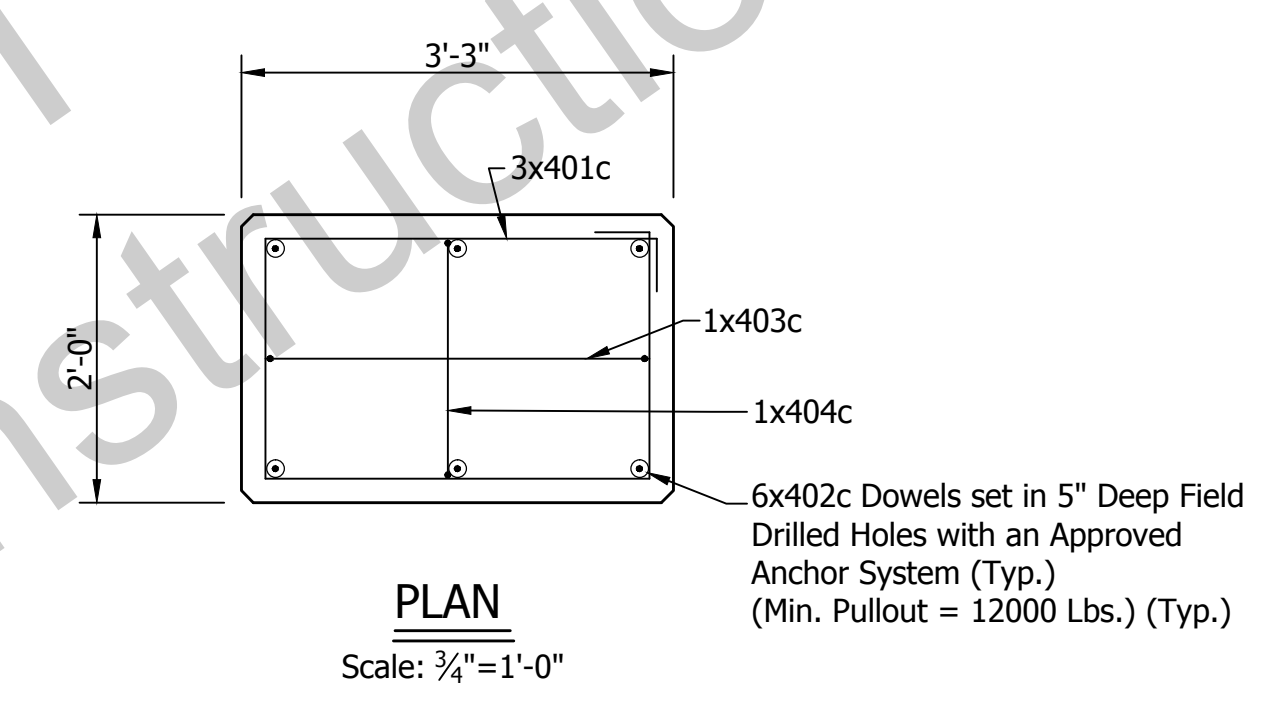
**PLAN-PIER NO.3 OR NO.16**  
 Scale: 3/8" = 1'-0"



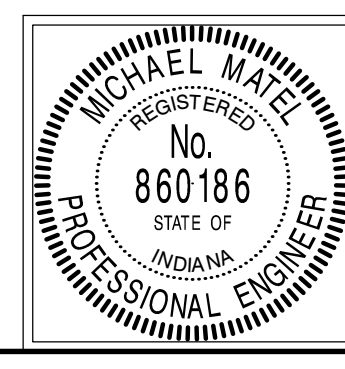
**ELEVATION-PIER NO.3 OR NO.16**  
 Scale: 3/8" = 1'-0"

**PEDESTAL ELEVATIONS AND DIMENSIONS**

PIER NO.3 NB				
Girder No.	①	②	③	④
Elevation	382.75	382.90	382.90	382.75
Dimension "H"	1'-0"	1'-0 3/4"	1'-0 3/4"	1'-0"
PIER NO.16 NB				
Girder No.	①	②	③	④
Elevation	385.13	385.28	385.28	385.13
Dimension "H"	1'-0"	1'-0 3/8"	1'-0 3/8"	1'-0"



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 DESIGN ENGINEER DATE  
 DESIGNED: D. SHEETZ DRAWN: D. SHEETZ  
 CHECKED: B. WRIGHT CHECKED: M. MATEL

**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**

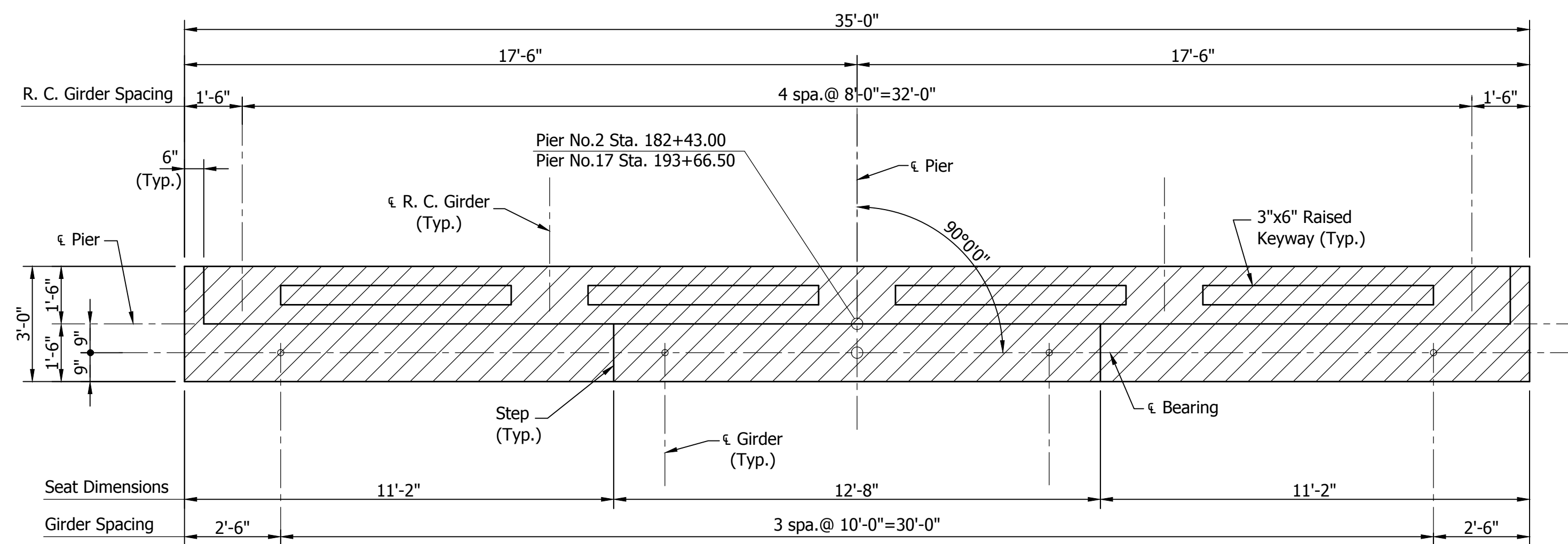
**PEDESTAL DETAILS**  
**NORTHBOUND STRUCTURE**

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	41-82-4999B
VERTICAL SCALE	DESIGNATION
AS NOTED	0200634
SURVEY BOOK	SHEET
	14 OF 33
CONTRACT	PROJECT
B-33539	0200634

5605  
 BPS NO.

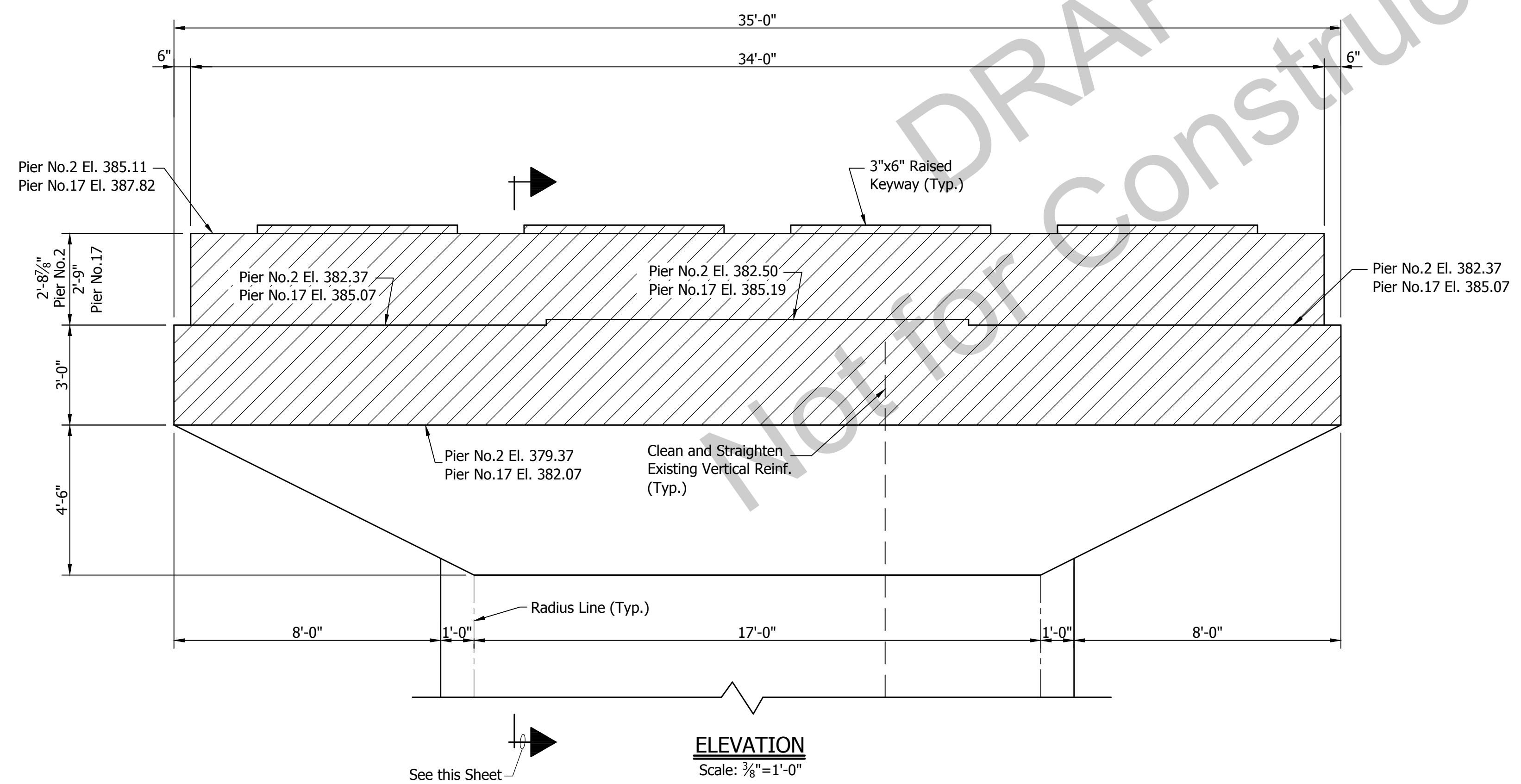


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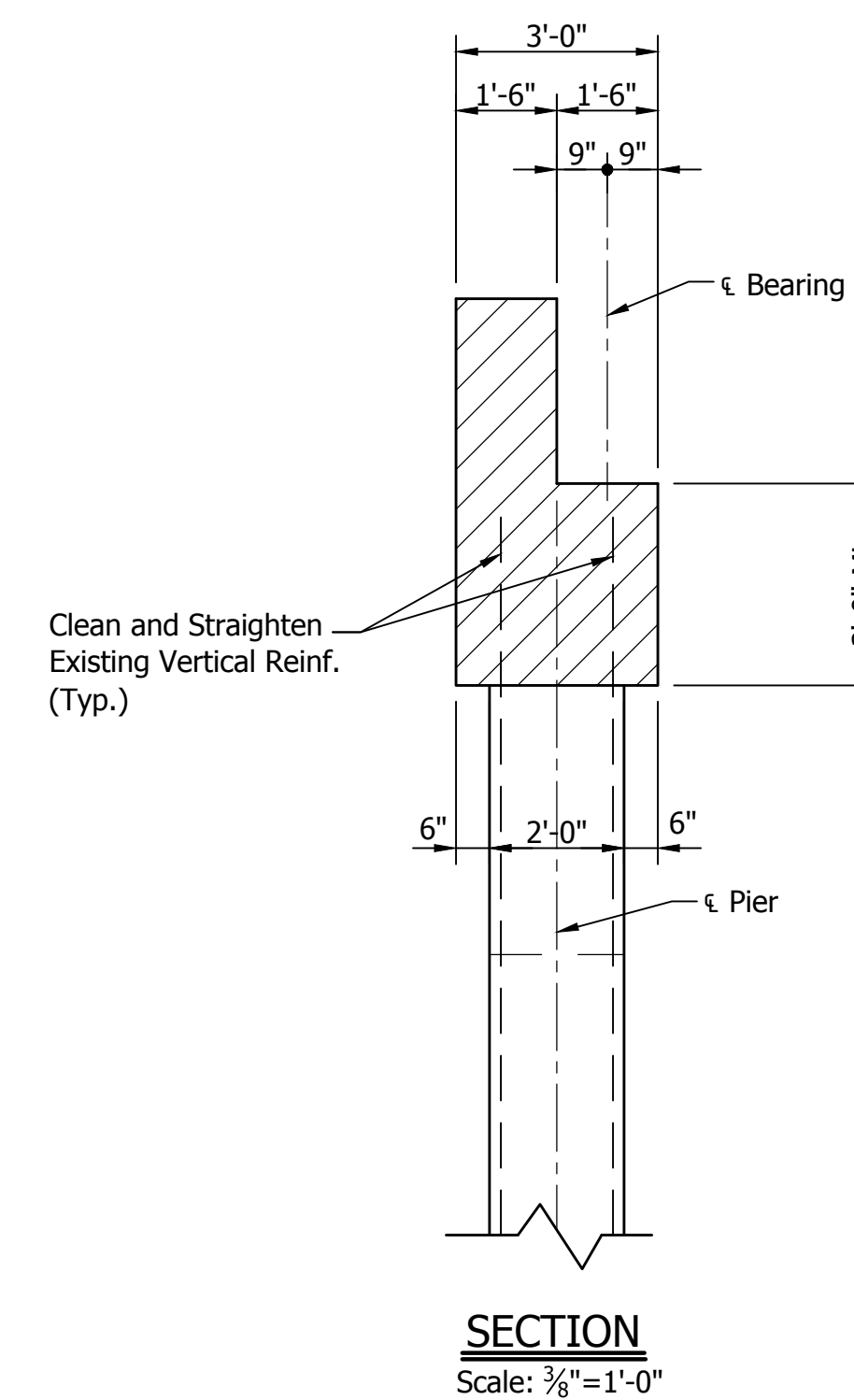
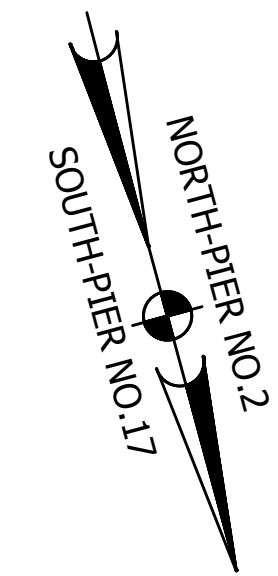
**PLAN**  
Scale: 3/8" = 1'-0"

Note: Hatched Areas indicate portions to be Removed.



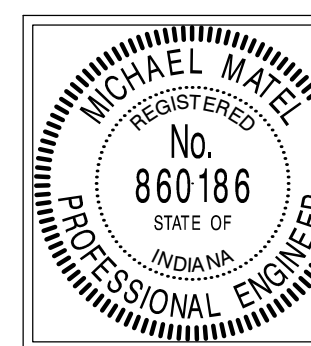
**ELEVATION**  
Scale: 3/8" = 1'-0"

See this Sheet



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

NOTE  
See Sheet 16 for Reconstruction Details.



RECOMMENDED FOR APPROVAL: *Michael Matel* 10/31/16  
DESIGN ENGINEER DATE  
DESIGNED: D. SHEETZ DRAWN: D. SHEETZ  
CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA  
DEPARTMENT OF TRANSPORTATION  
PIER NO. 2 OR NO. 17 DETAILS  
NORTHBOUND STRUCTURE

HORIZONTAL SCALE AS NOTED	BRIDGE FILE 41-82-4999B
VERTICAL SCALE AS NOTED	DESIGNATION 0200634
SURVEY BOOK	SHEET 15 OF 33
CONTRACT B-33539	PROJECT 0200634

5605  
BFS NO.

**BILL OF MATERIALS**  
**PIER NO.2**  
**PIER NO.17 SAME**  
**NORTHBOUND STRUCTURE**

**REINFORCING BARS**

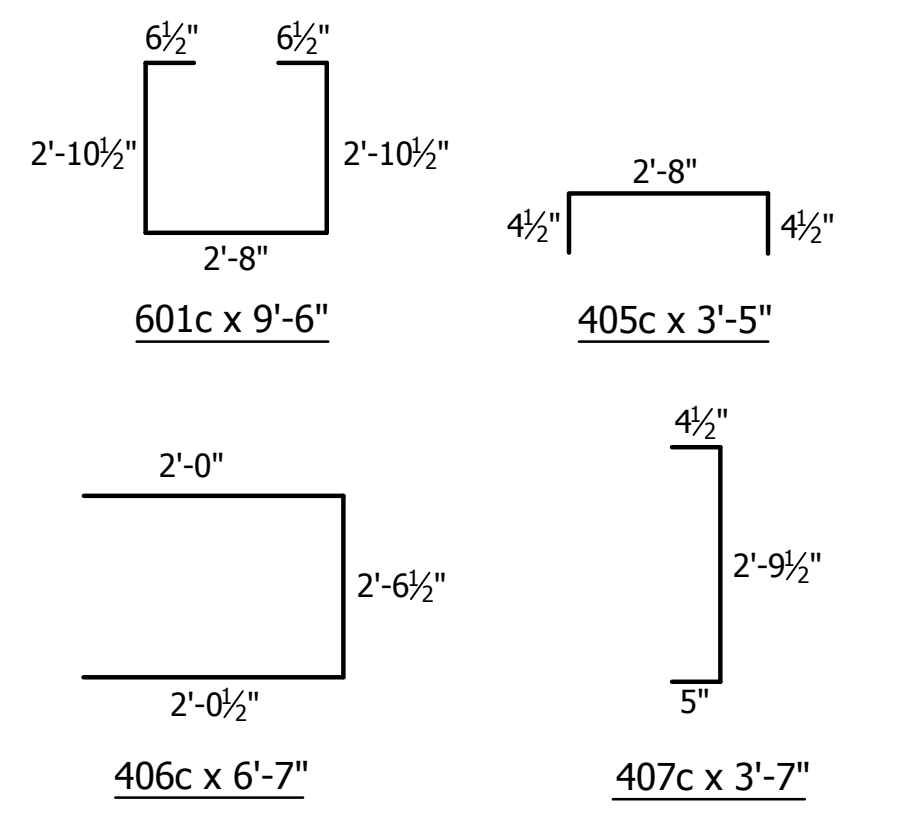
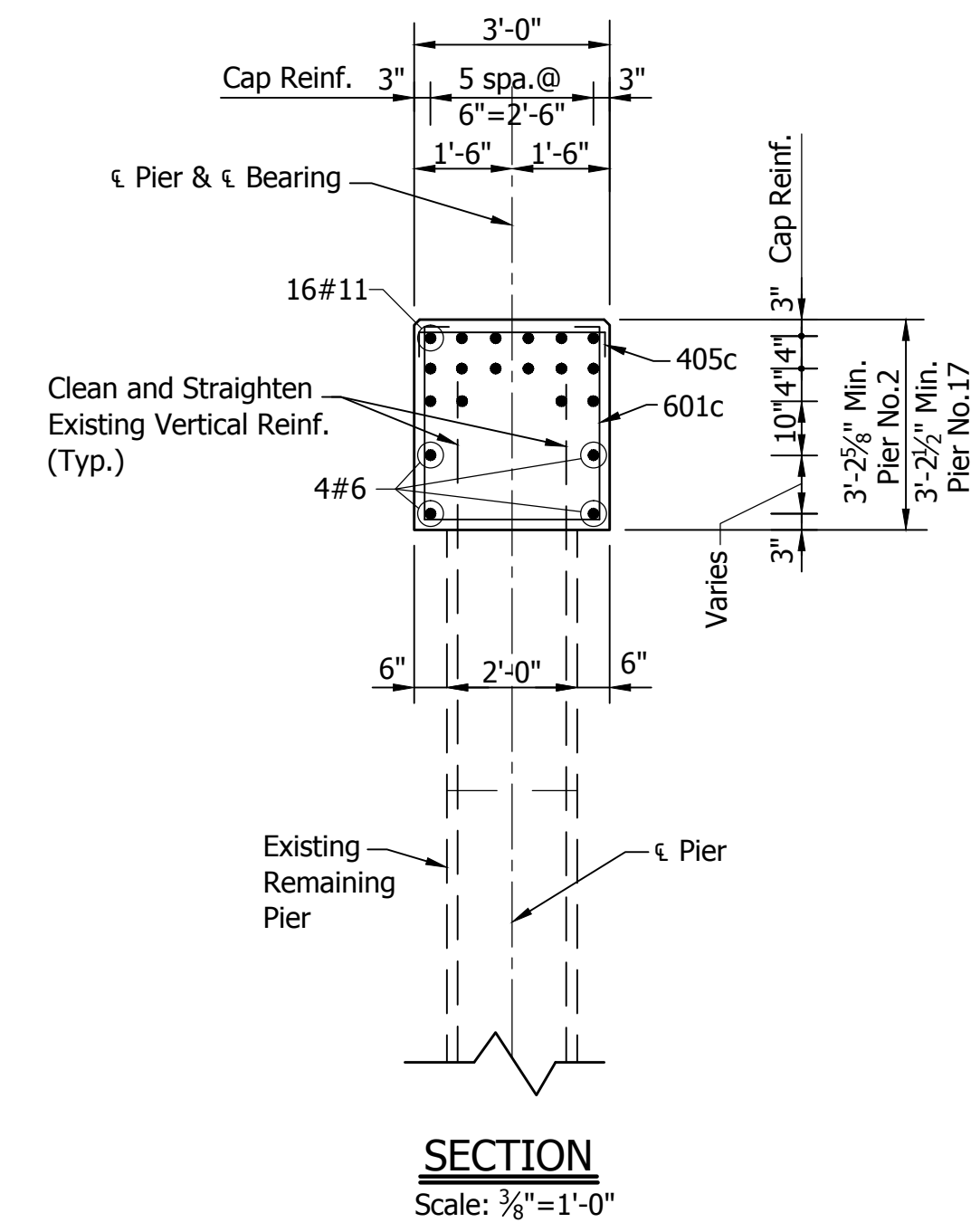
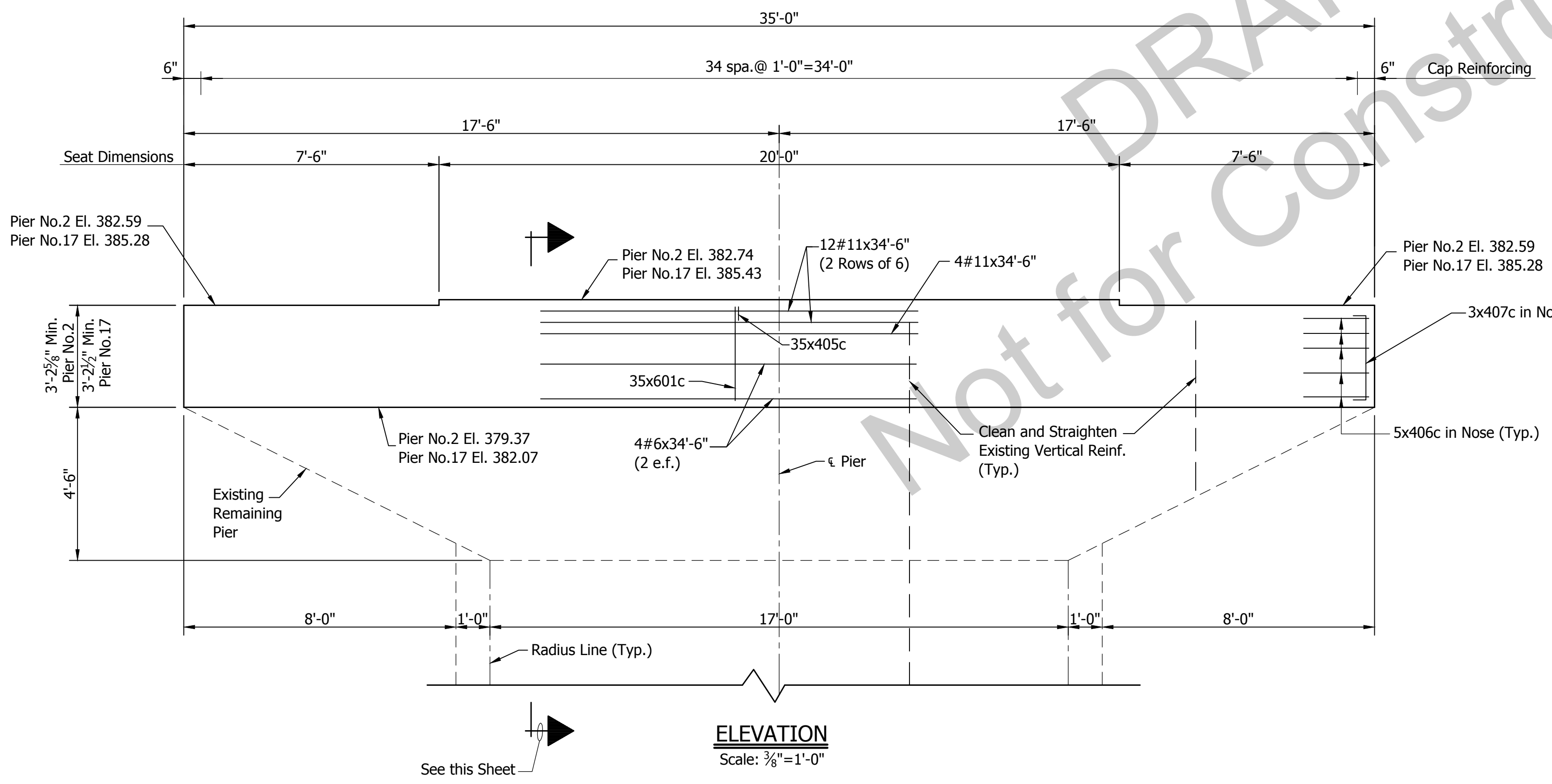
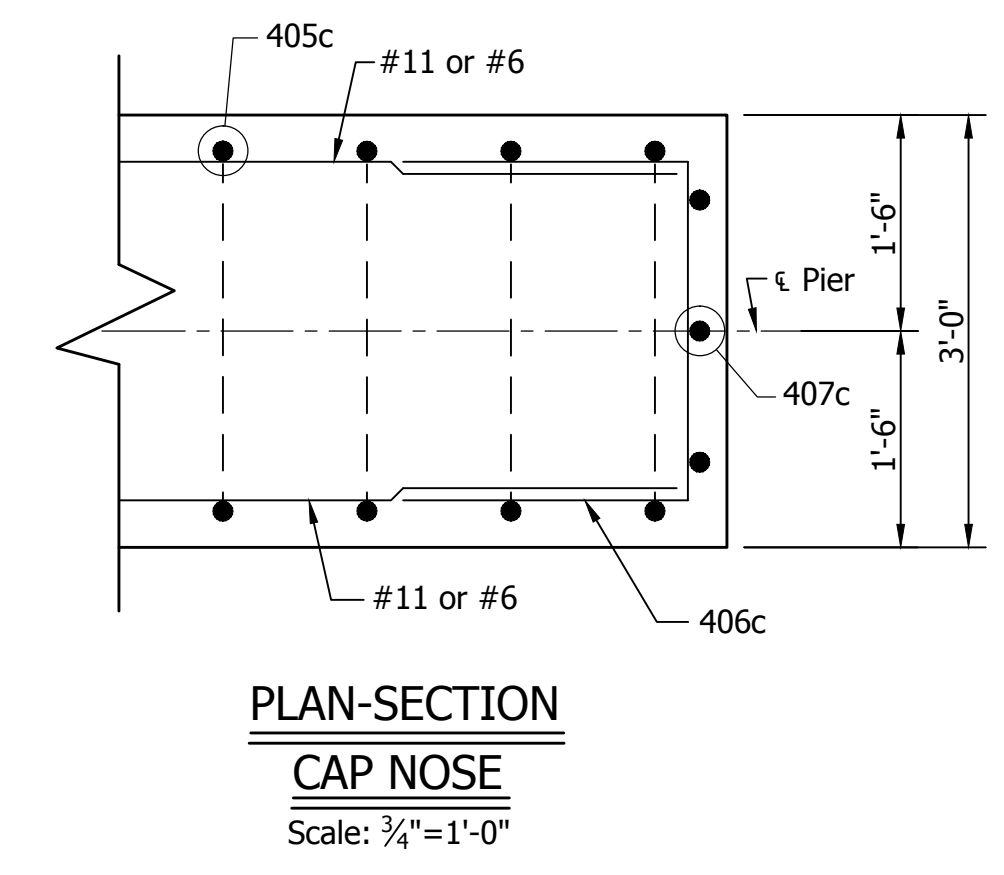
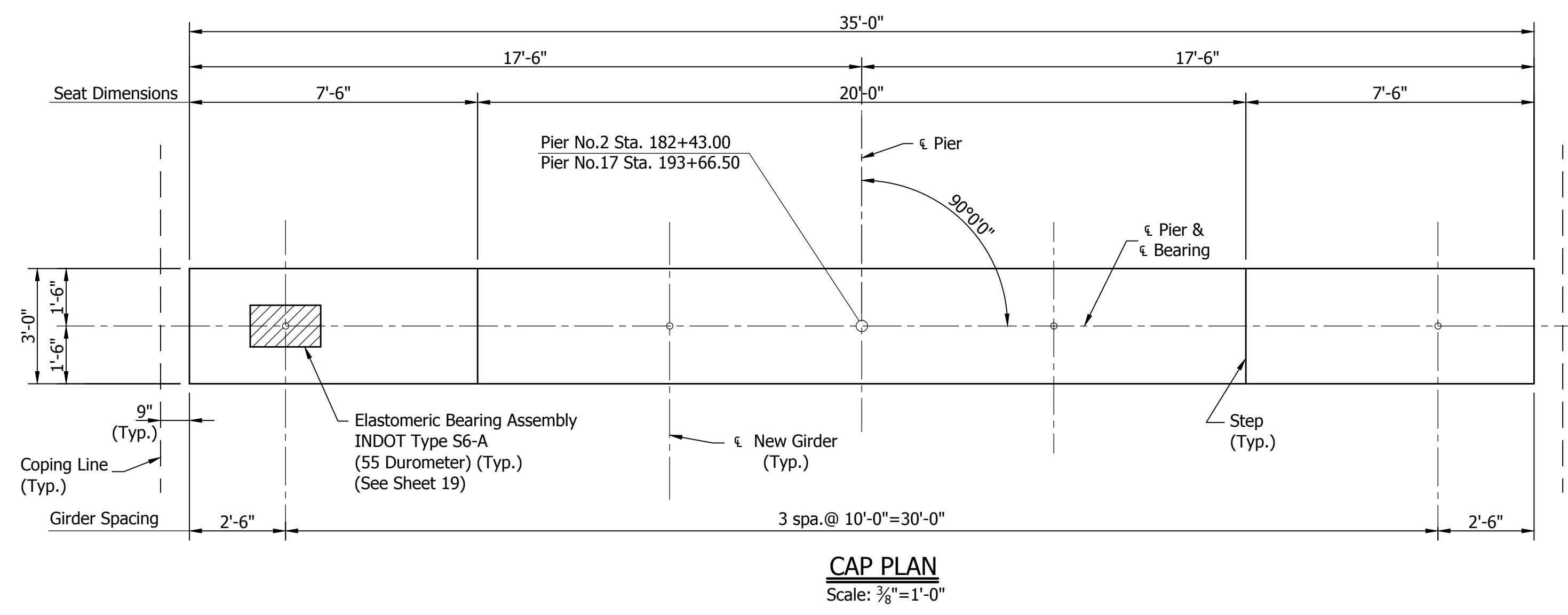
Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
#11	16	34'-6"	
Total #11 (Plain)			2933
601c	35	9'-6"	
#6	4	34'-6"	
Total #6 (Plain)			707
405c	35	3'-5"	
406c	10	6'-7"	
407c	6	3'-7"	
Total #4 (Plain)			138
Total Steel (Plain)			3778

**CONCRETE**

Class "A" in Substructure	12.9 Cys.
---------------------------	-----------

⊕ A.S.T.M. A615, Grade 60

Note: See Special Provisions for Elastomeric Bearing Assembly.



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 DESIGN ENGINEER DATE

DESIGNED: C. OBRIEN DRAWN: D. SHEETZ  
 CHECKED: B. WRIGHT CHECKED: M. MATEL

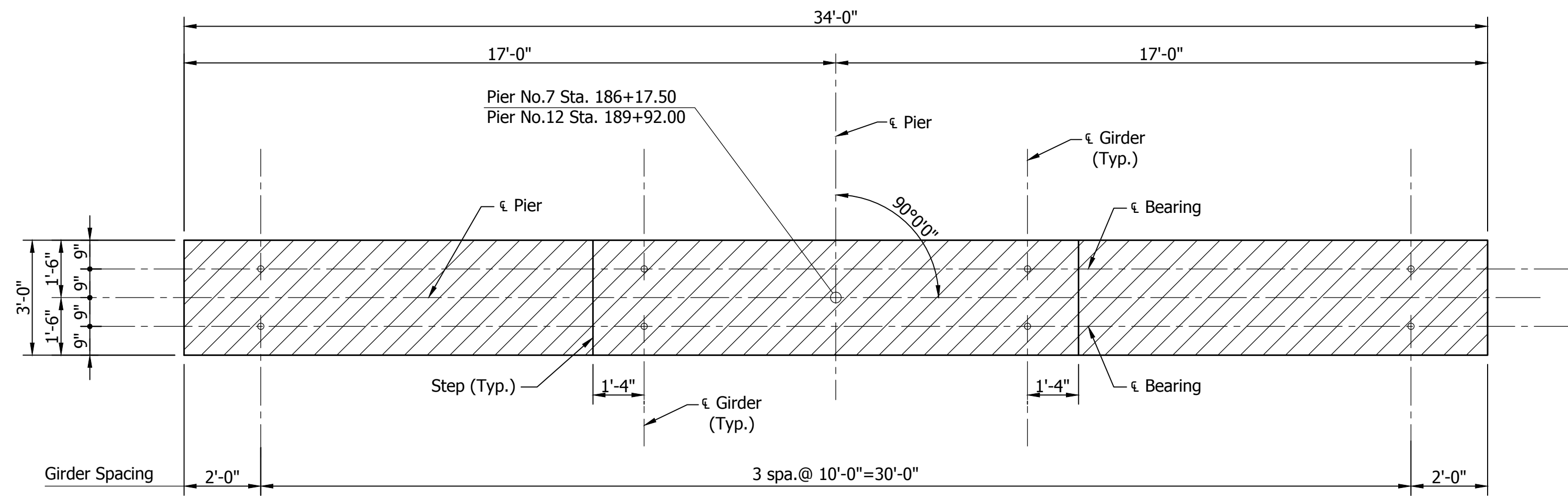
INDIANA DEPARTMENT OF TRANSPORTATION

**PIER NO.2 OR NO.17 DETAILS**  
**NORTHBOUND STRUCTURE**

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	41-82-4999B
VERTICAL SCALE	DESIGNATION
AS NOTED	0200634
SURVEY BOOK	SHEET
	16 OF 33
CONTRACT	PROJECT
B-33539	0200634

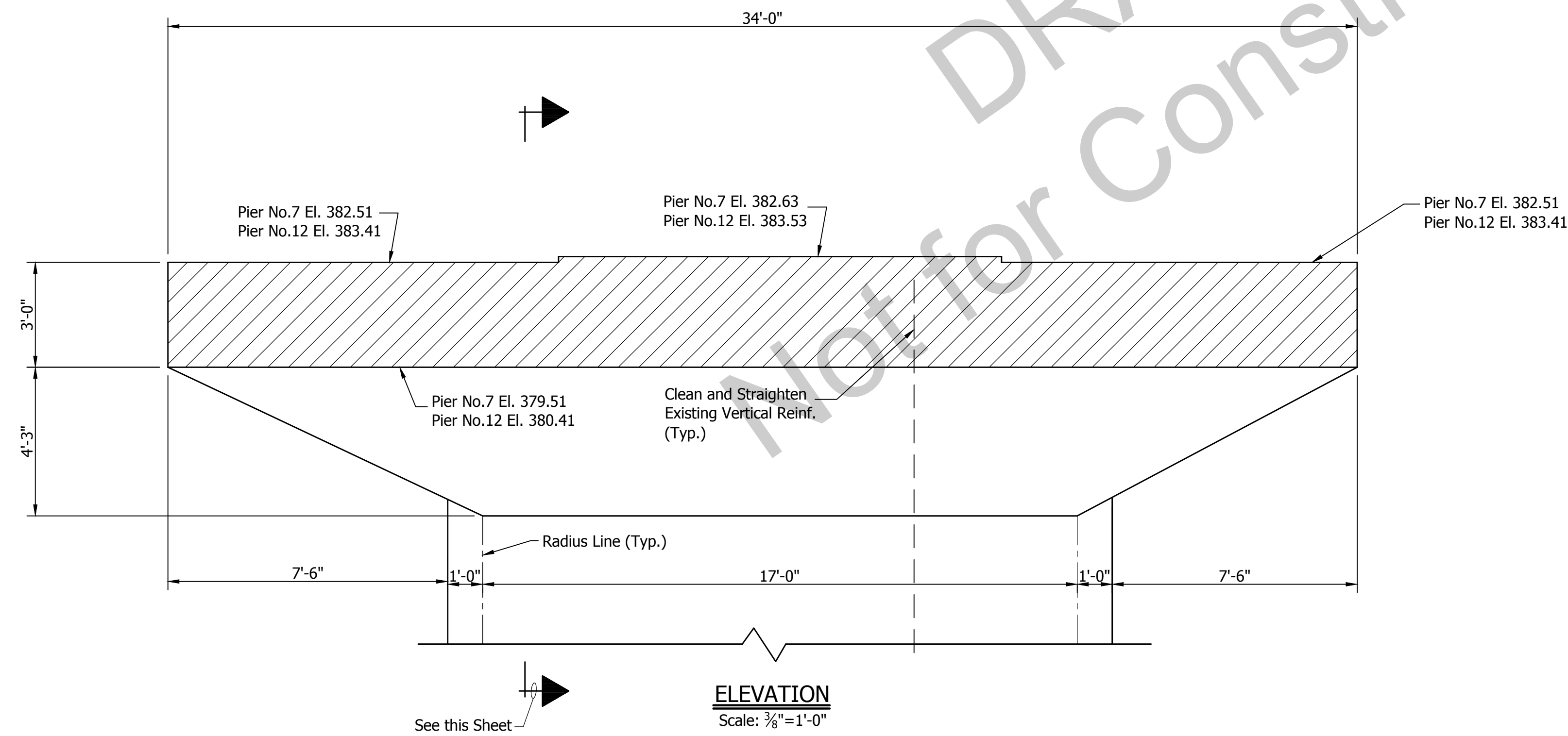
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 BPS NO.

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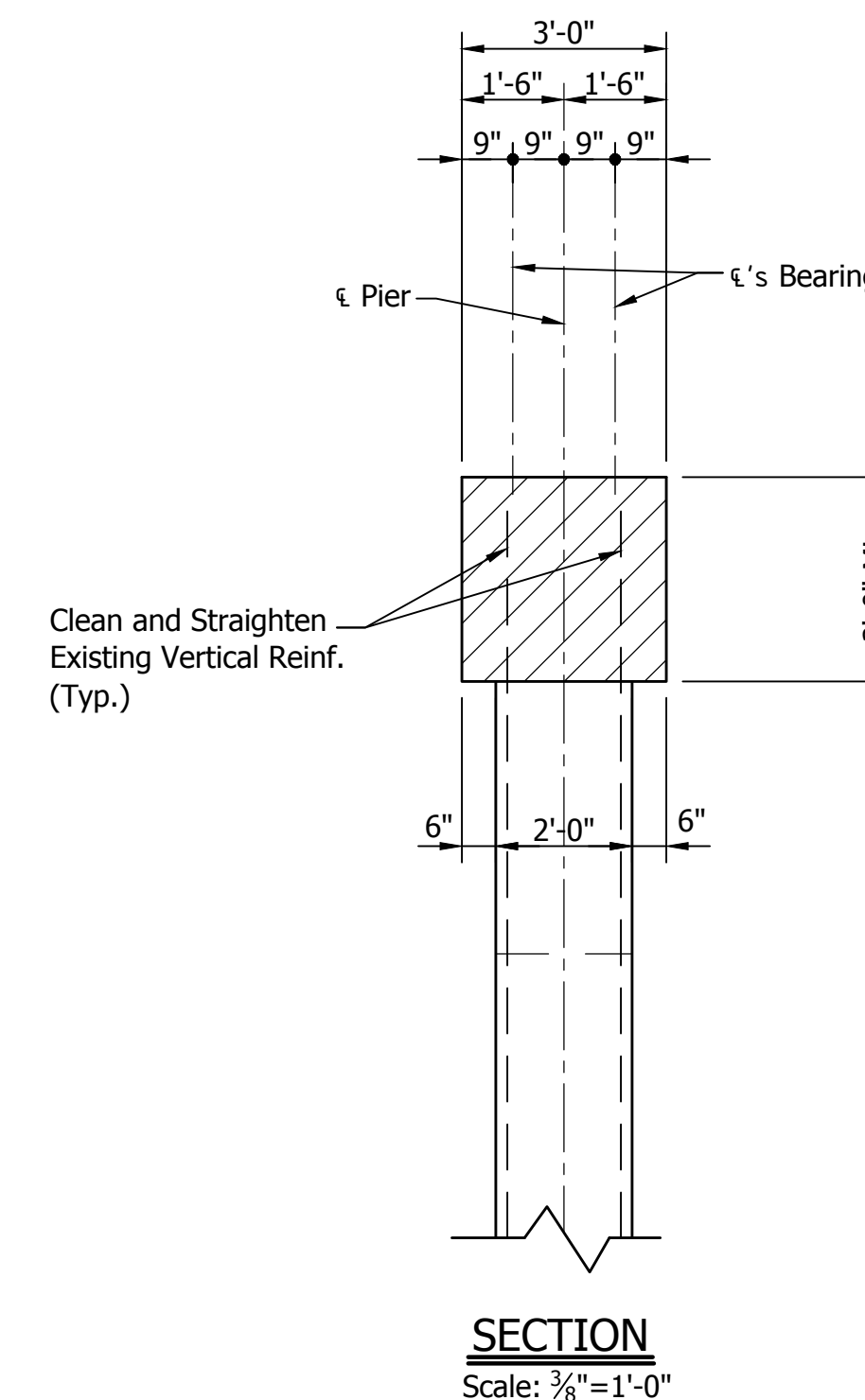


**PLAN**  
Scale: 3/8" = 1'-0"

Note: Hatched Areas indicate portions to be Removed.

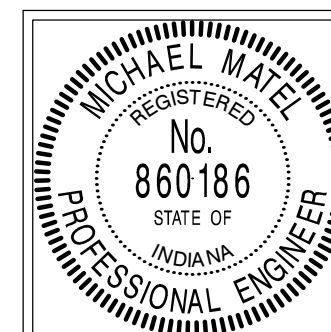


**ELEVATION**  
Scale: 3/8" = 1'-0"



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

NOTE  
See Sheet 18 for Reconstruction Details.



RECOMMENDED FOR APPROVAL: *Michael M. Matel* 10/31/16  
DESIGN ENGINEER DATE  
DESIGNED: C. OBRIEN DRAWN: D. SHEETZ  
CHECKED: B. WRIGHT CHECKED: M. MATEL

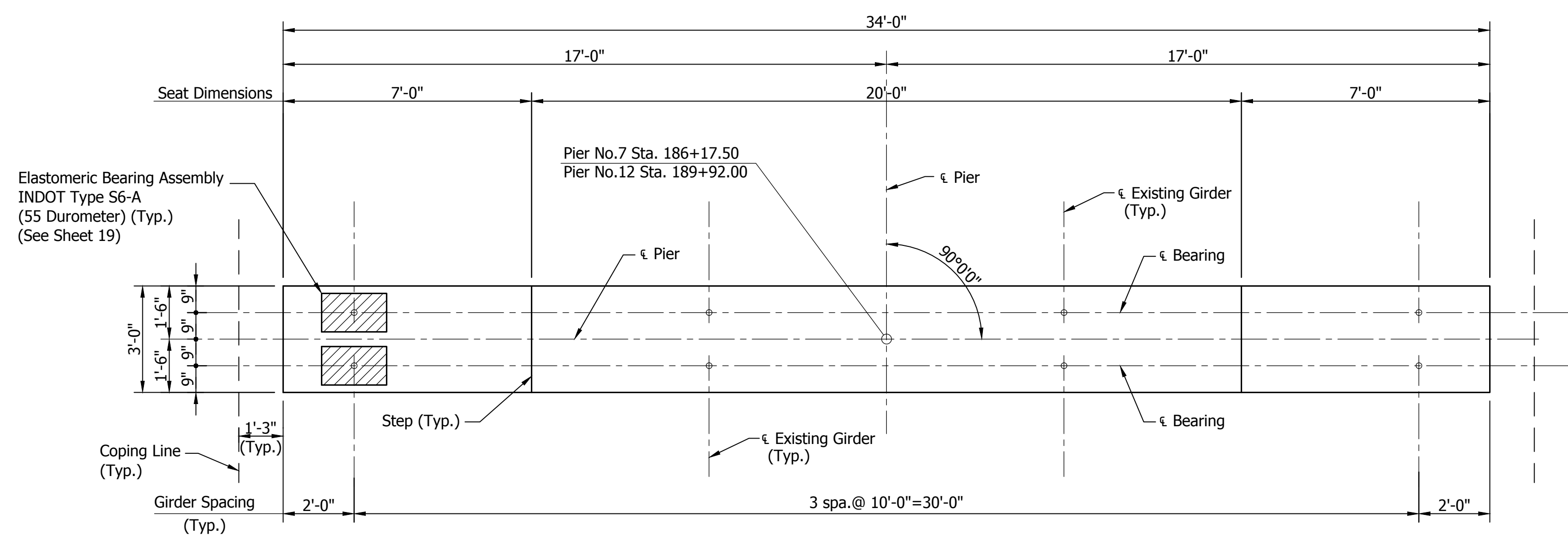
INDIANA DEPARTMENT OF TRANSPORTATION  
PIER NO. 7 OR NO. 12 DETAILS  
NORTHBOUND STRUCTURE

HORIZONTAL SCALE	AS NOTED	BRIDGE FILE	41-82-4999B
VERTICAL SCALE	AS NOTED	DESIGNATION	0200634
SURVEY BOOK	17	SHEET	33
CONTRACT	B-33539	PROJECT	0200634

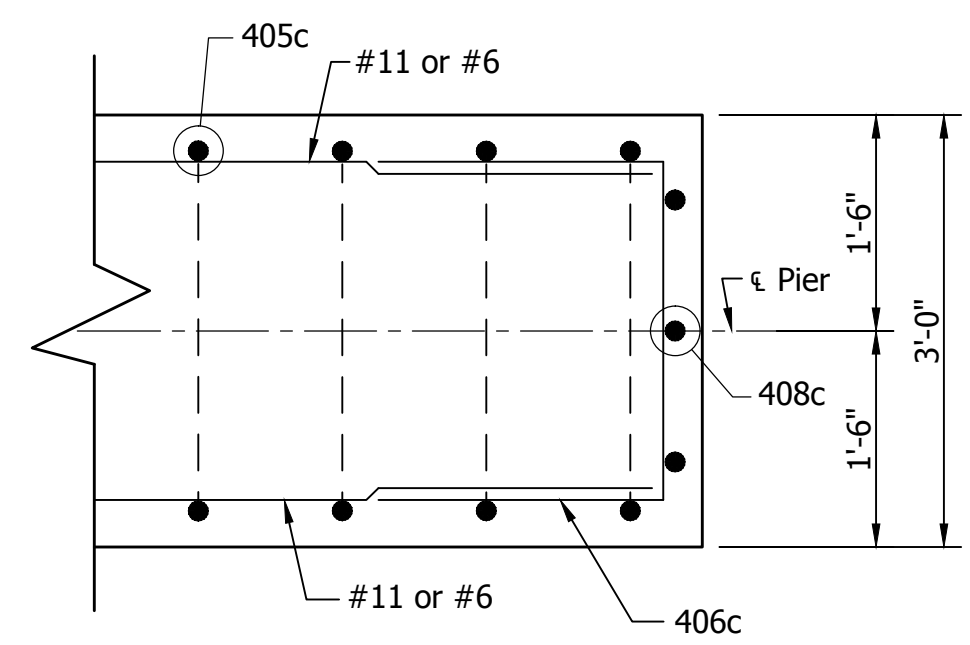
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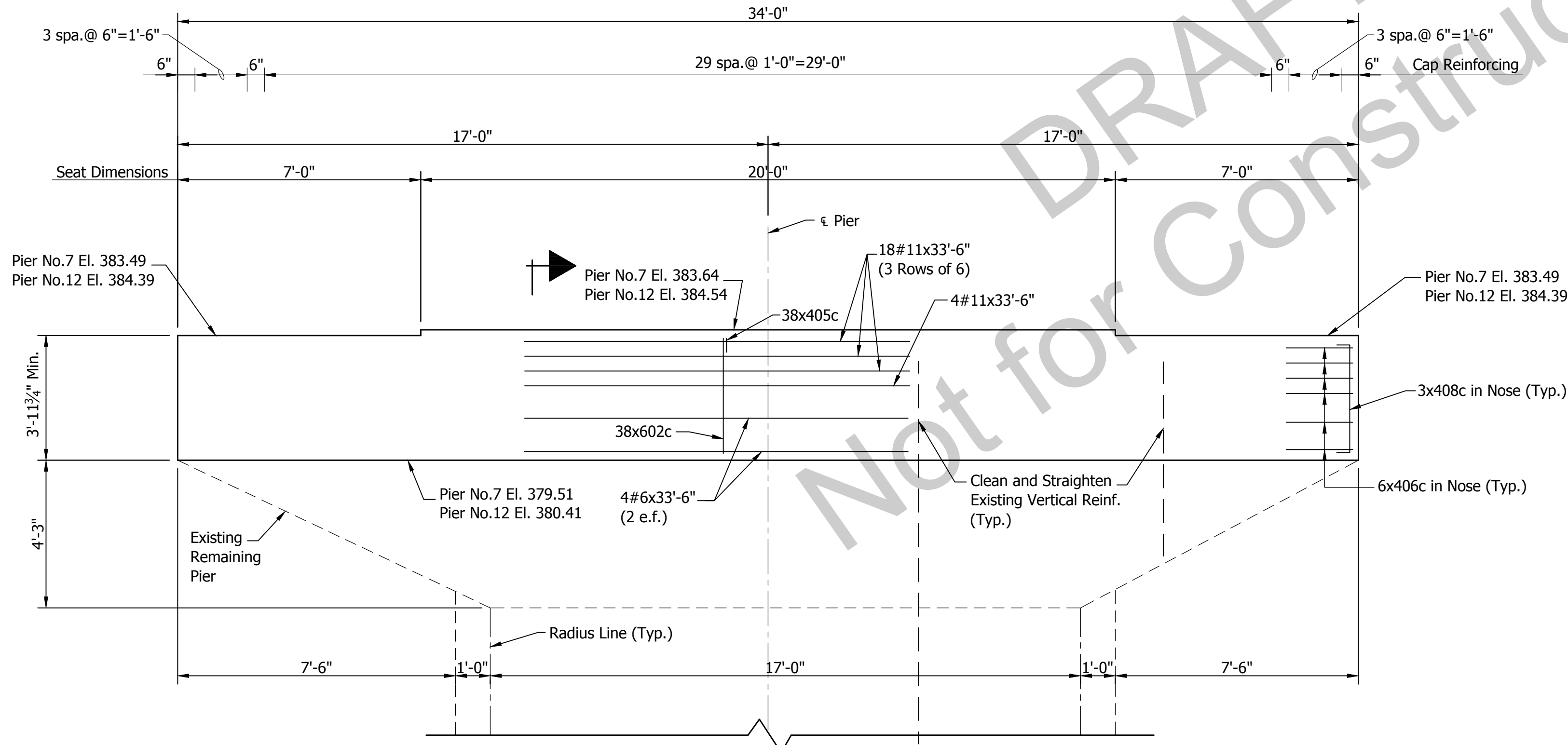
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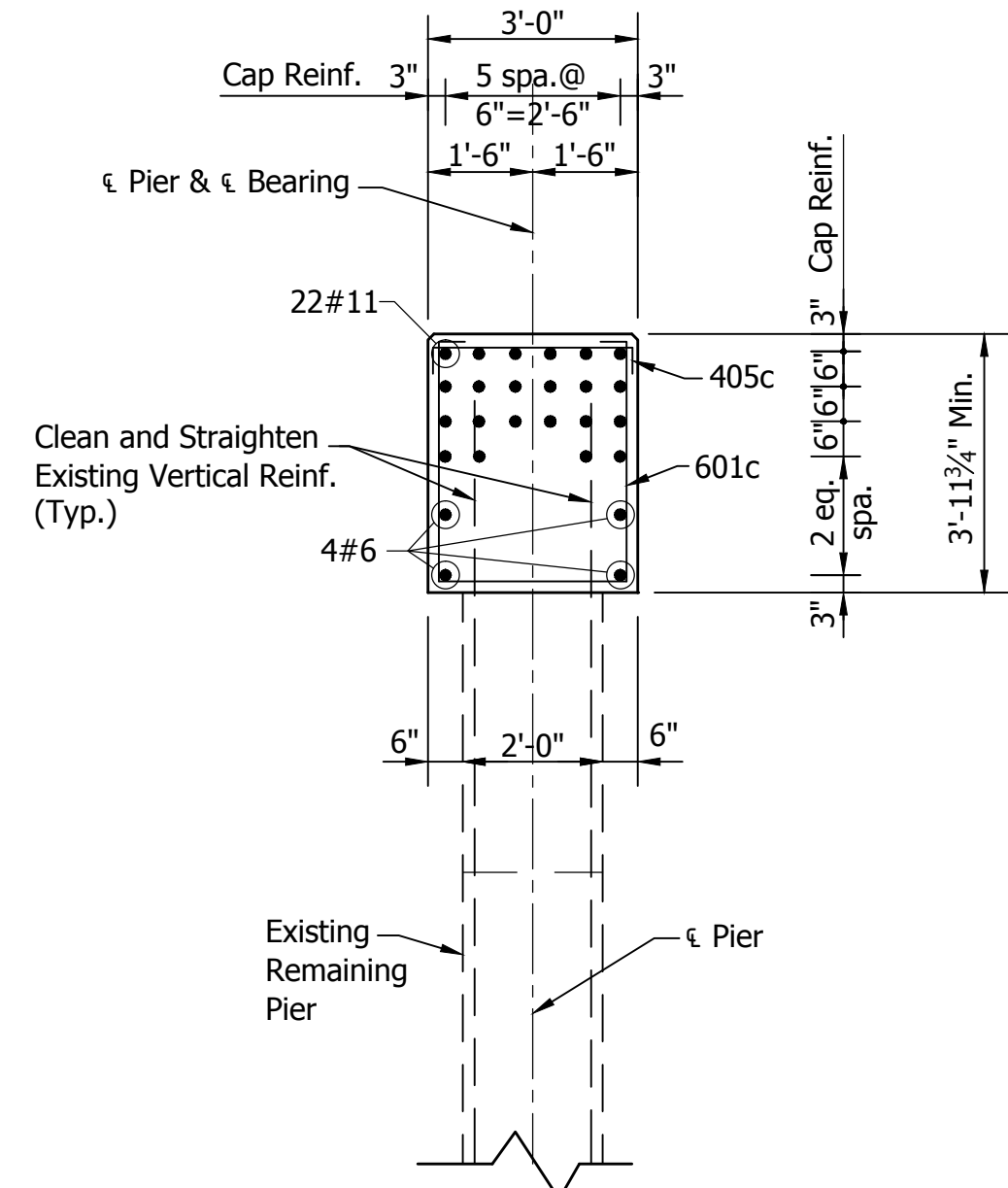
**CAP PLAN**  
Scale: 3/8"=1'-0"



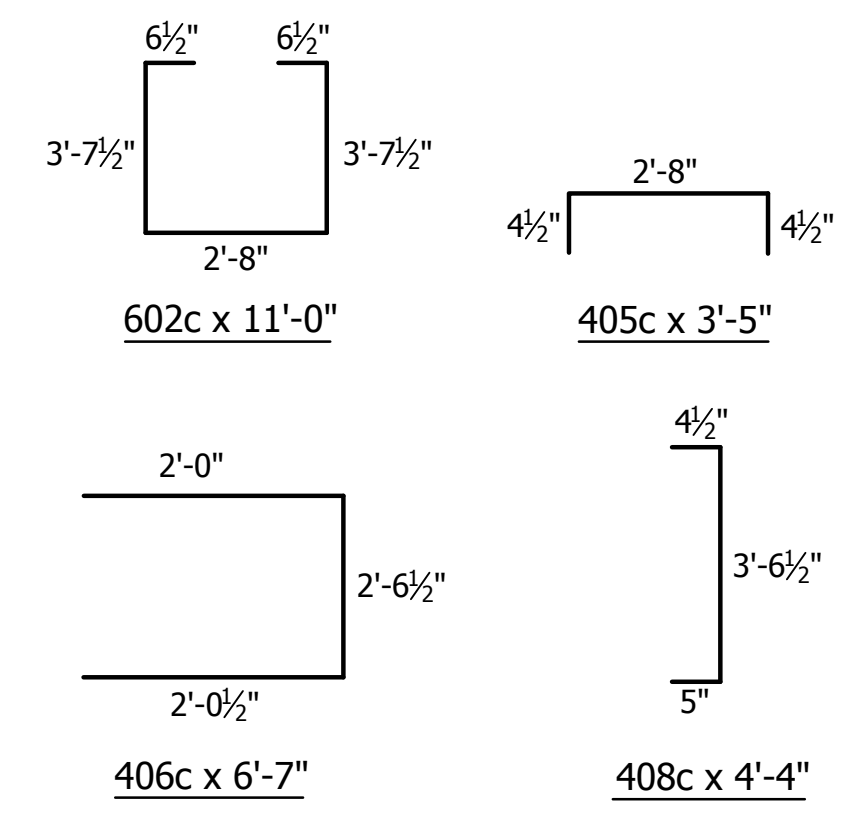
**PLAN-SECTION  
CAP NOSE**  
Scale: 3/4"=1'-0"



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



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

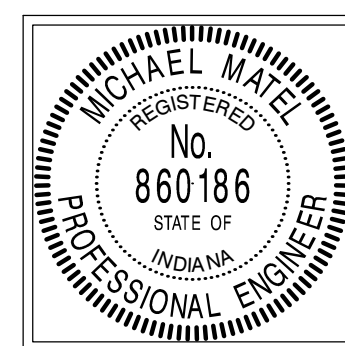


**BAR BENDING DETAILS**  
Not to Scale

**BILL OF MATERIALS  
PIER NO.7  
PIER NO.12 SAME  
NORTHBOUND STRUCTURE**

REINFORCING BARS			
Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
#11	22	33'-6"	
Total #11 (Epoxy Coated)			3916
602c	38	11'-0"	
#6	4	33'-6"	
Total #6 (Epoxy Coated)			829
405c	38	3'-5"	
406c	12	6'-7"	
408c	6	4'-4"	
Total #4 (Epoxy Coated)			157
Total Steel (Epoxy Coated)			4902
CONCRETE			
Class "A" in Substructure			15.4 Cys.
Elastomeric Bearing Assembly			8 Each

⊕ A.S.T.M. A615, Grade 60



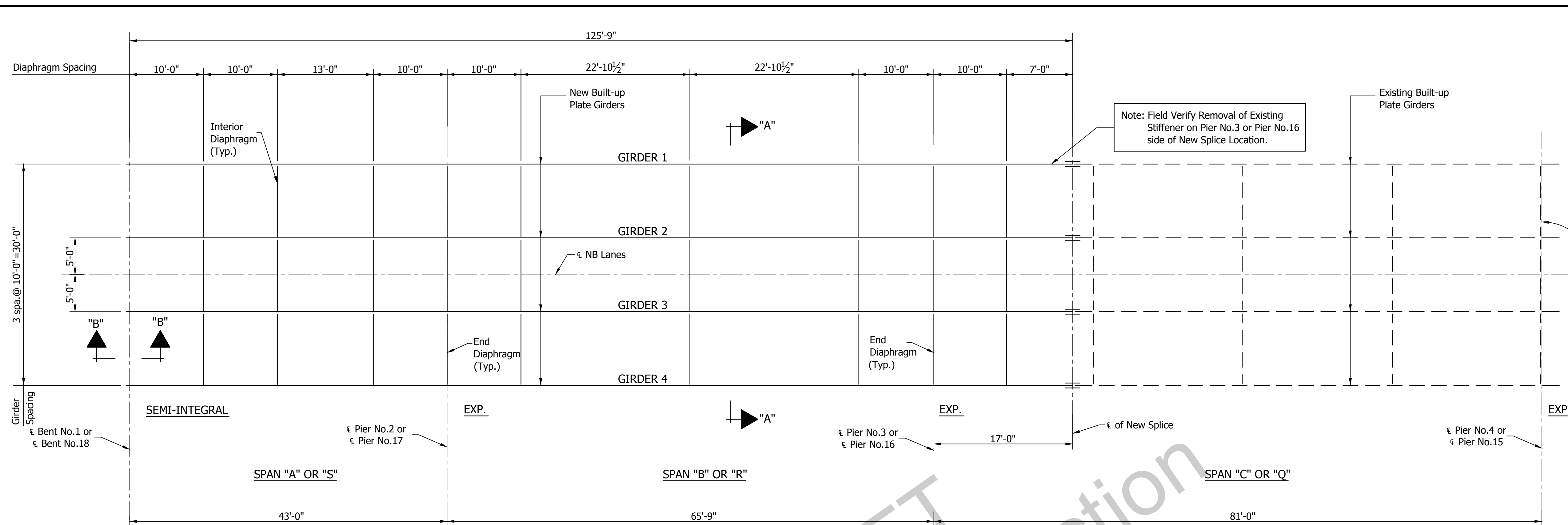
RECOMMENDED FOR APPROVAL: *Michael Matel* 10/31/16  
DESIGN ENGINEER DATE  
DESIGNED: C. OBRIEN DRAWN: D. SHEETZ  
CHECKED: B. WRIGHT CHECKED: M. MATEL

INDIANA DEPARTMENT OF TRANSPORTATION  
**PIER NO.7 OR NO.12 DETAILS  
NORTHBOUND STRUCTURE**

HORIZONTAL SCALE AS NOTED	BRIDGE FILE 41-82-4999B
VERTICAL SCALE AS NOTED	DESIGNATION 0200634
SURVEY BOOK	SHEET 18 OF 33
CONTRACT B-33539	PROJECT 0200634

BFS NO. 5605

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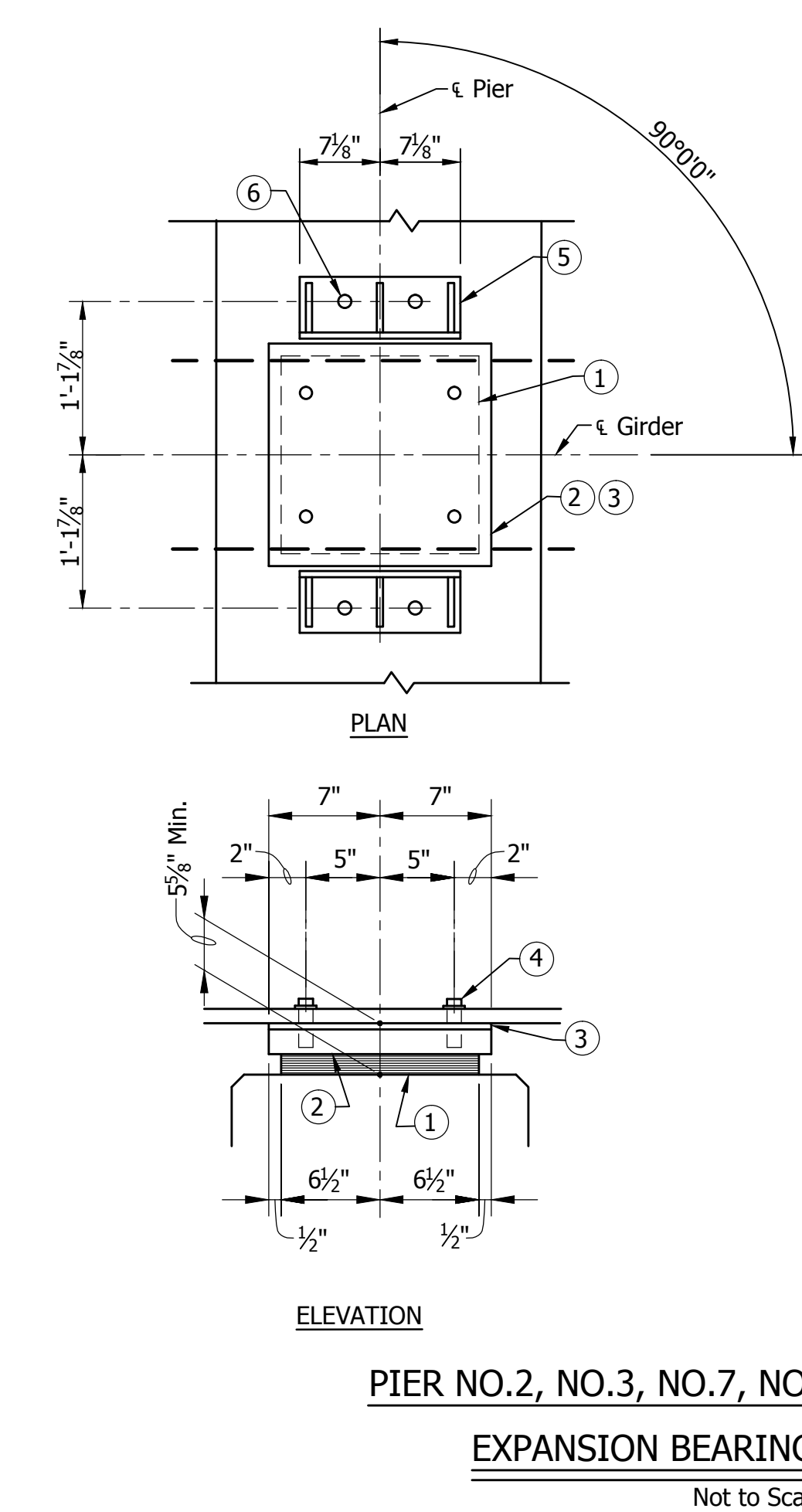
**STRUCTURAL STEEL FABRICATION NOTES**

All Structural Steel shall be A.S.T.M. A709, Grade 50 unless otherwise noted.

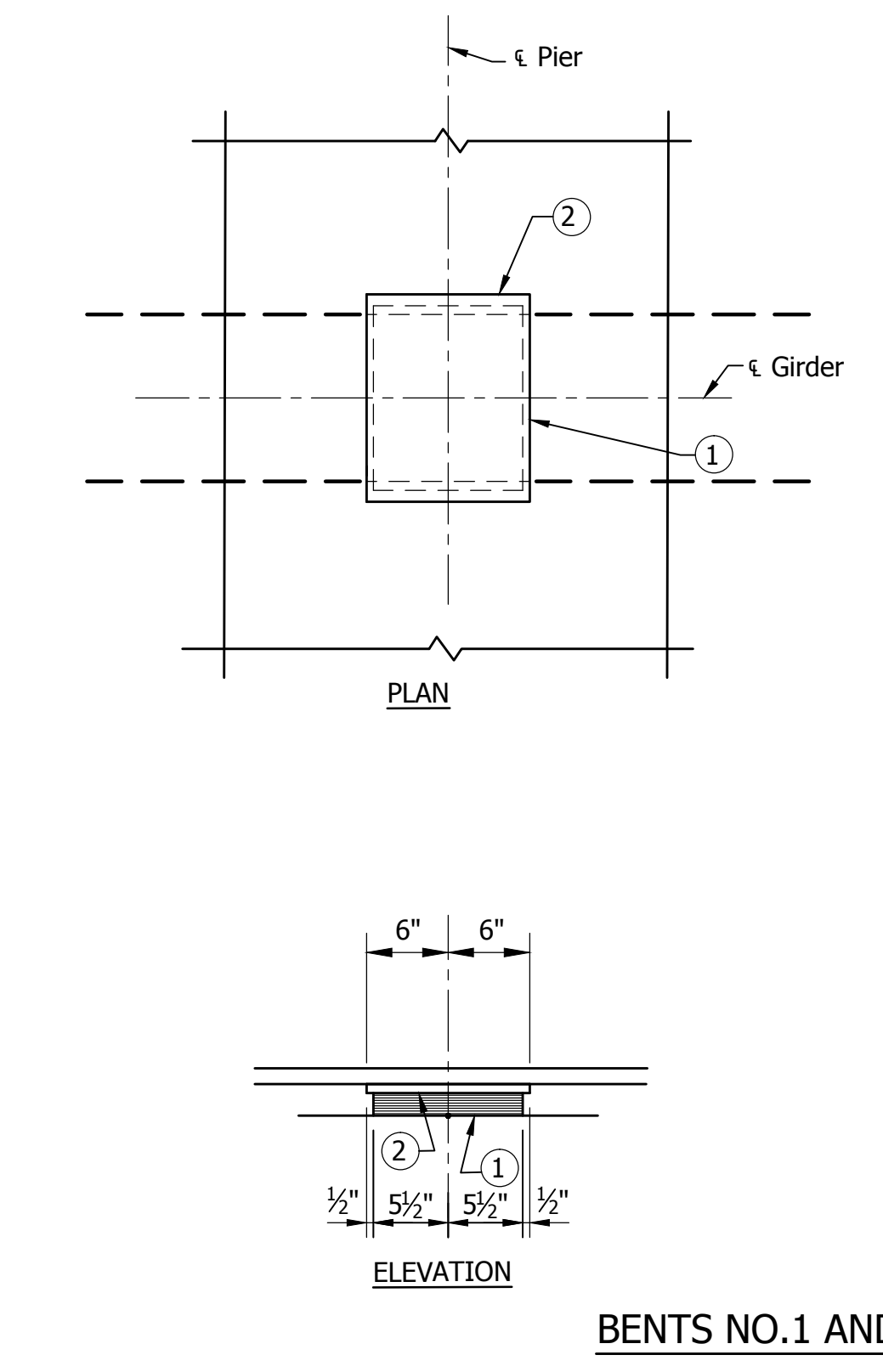
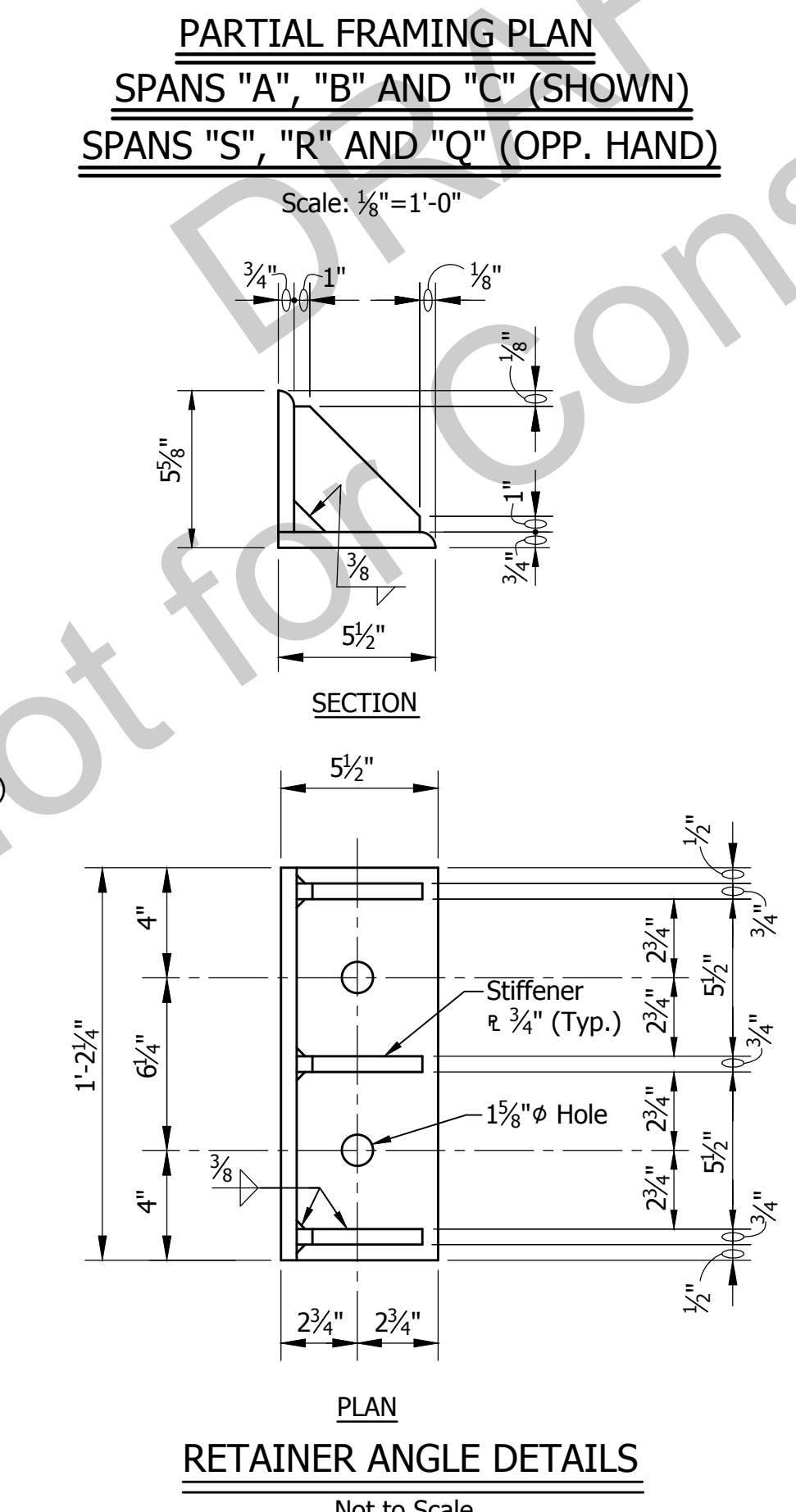
All bolts shall be 7/8"  $\phi$  A325 High Strength and all holes shall be 15/16"  $\phi$  unless otherwise noted.

Estimated weight of Structural Steel of 168442 pounds includes 16660 pounds of Grade 36 and 151782 pounds of Grade 50. The weight of high strength bolts is not included in the estimated weight of Structural Steel. The cost of these bolts shall be included in the cost of Structural Steel.

The dimensions for these detail plans are based on construction plans and/or shop drawings of the original structure. It is the Contractor's responsibility to verify controlling dimensions in the field prior to fabrication.



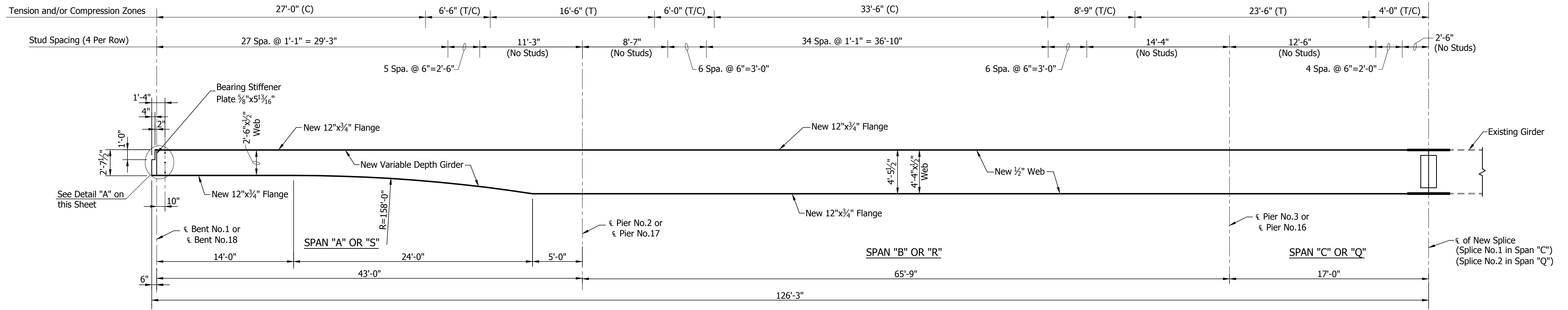
- 1 Elastomeric Bearing Assembly INDOT Type S6-A (55 Durometer) (Bonded to Top Plate)
- 2 1 1/2"x1'-2"x1'-10" Top Plate Drill and Tap 1" Deep for 3/4"  $\phi$  Bolts
- 3 1'-2"x1'-0" Shim Plates with 7/8"  $\phi$  Holes (Thickness = 1/2" Min.)
- 4 3/4"  $\phi$  Hex Bolt (A325) with Lock Washer (Typ.)
- 5 Retainer Angle (See Detail this Sheet) (Typ.)
- 6 1 1/2"  $\phi$  x 1'-6" Threaded Anchor Rod (A307) with Hex Nut and Washer. (See Detail this Sheet) Set in 1'-3" Deep Field Drilled Hole with an Approved Anchor System. (Min. Pullout = 106,000 Lbs.) (Typ.) Weight of Threaded Anchor Rods is not included in the Estimated Weight of Structural Steel.



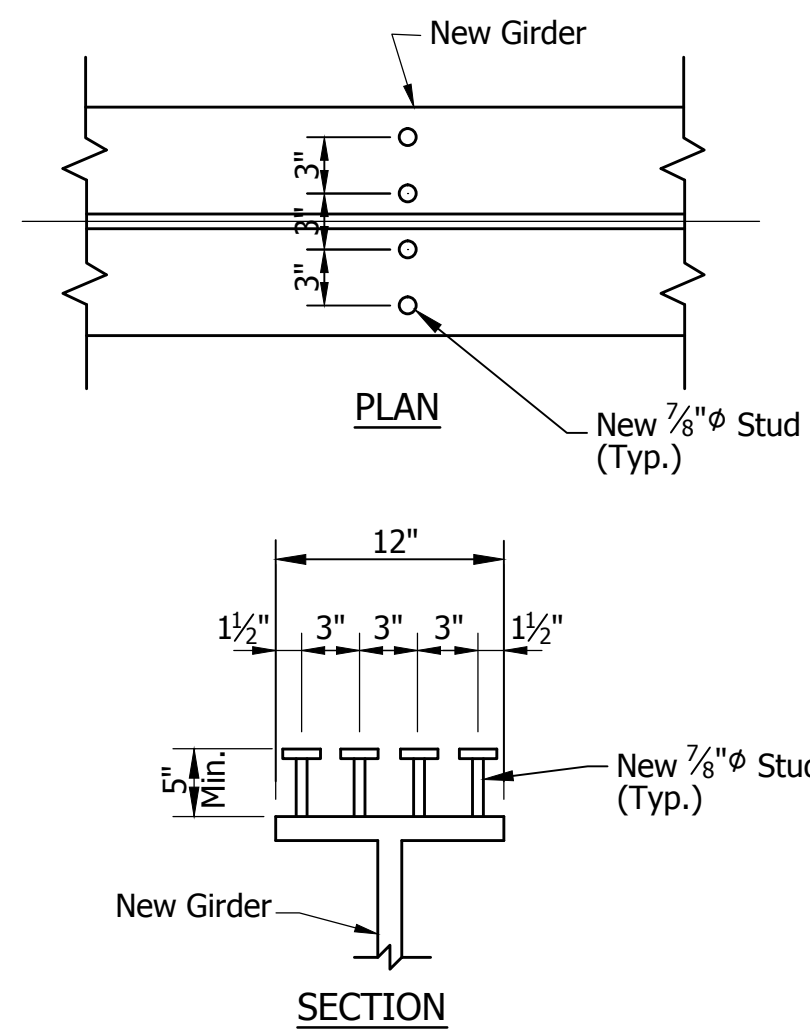
- 1 Elastomeric Bearing Assembly INDOT Type S4-A (55 Durometer) (Bonded to Top Plate)
  - 2 1'-0"x1'-5" Top Plate
- NOTES**
- See Sheet 12 for Section "B-B".
  - See Sheet 20 for Girder Elevations and Shear Stud Details.
  - See Sheet 21 for Splice Details.
  - See Sheet 22 for Cross Frame Diaphragm Details.
  - See Sheet 23 for No Load Camber and Reaming Diagrams.
  - See Sheet 26 for Section "A-A".

	RECOMMENDED FOR APPROVAL: <i>Michael M. Matel</i> 10/31/16 DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION  STRUCTURAL STEEL DETAILS NORTHBOUND STRUCTURE	HORIZONTAL SCALE	BRIDGE FILE
	DESIGNED: C. OBRIEN DRAWN: D. SHEETZ CHECKED: B. WRIGHT CHECKED: M. MATEL		AS NOTED 41-82-4999B	VERTICAL SCALE
			AS NOTED	0200634
			SURVEY BOOK	SHEET
			CONTRACT	19 OF 33
			B-33539	PROJECT
				0200634

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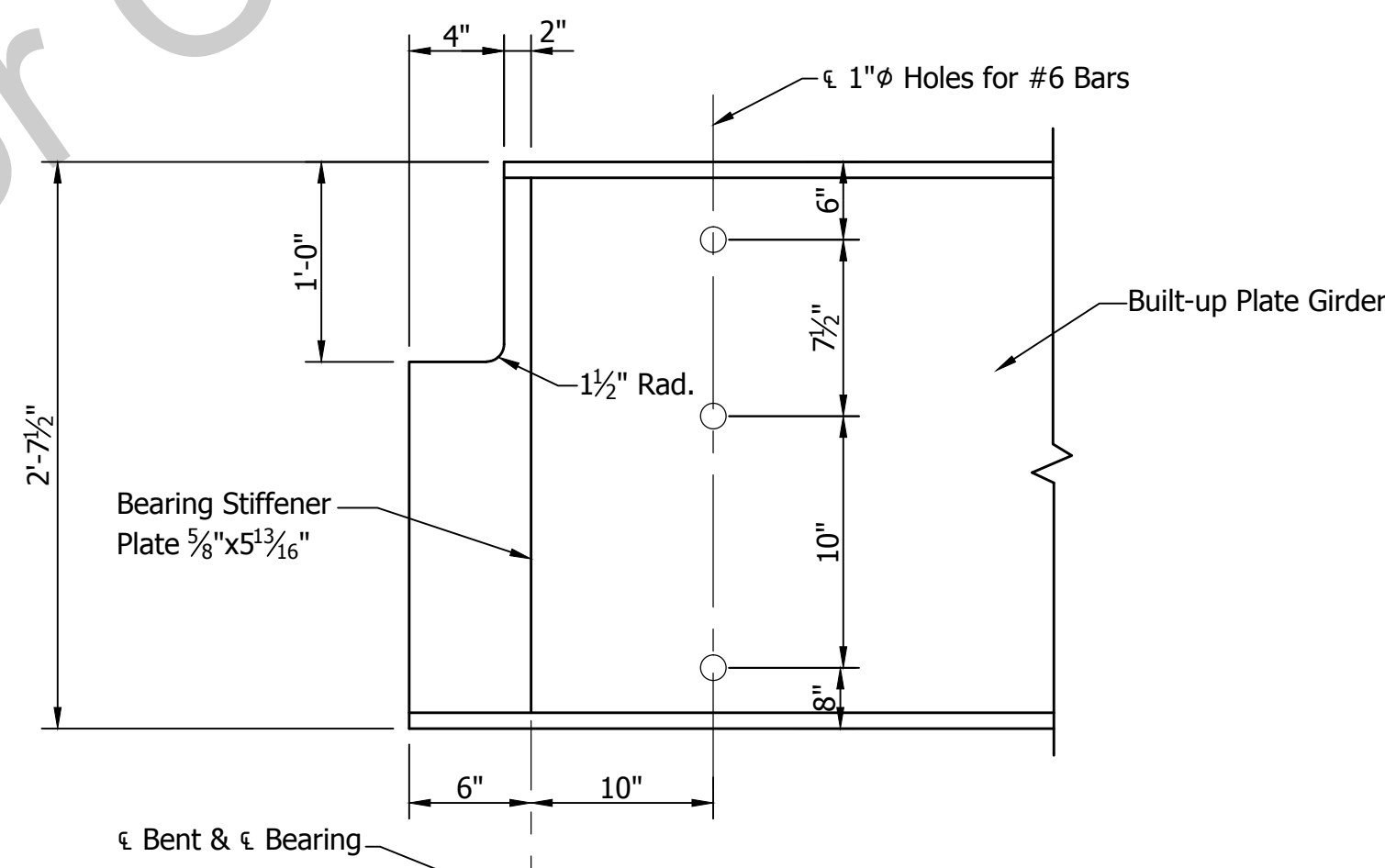


**ELEVATION**  
**NEW GIRDERS 1 THRU 4**  
**SPANS "A", "B" AND "C" (SHOWN)**  
**SPANS "S", "R" AND "Q" (OPP. HAND)**  
 Not to Scale



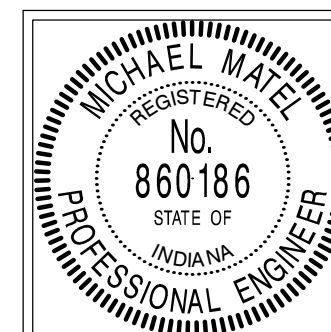
**SHEAR STUD DETAILS**  
 Not to Scale

**Notes:**  
 Top of Beams shall be cleaned prior to installation of Shear Studs per Section 619.  
 The cost and installation of 7/8"  $\phi$  Shear Studs on New Girders shall be included in the cost of Structural Steel.  
 Shear Stud Connectors on New Girders:  
 Total = 2720 Each



**DETAIL "A"**  
 Not to Scale

**NOTES**  
 See Sheet 19 for Framing Plan and Structural Steel Fabrication Notes.  
 See Sheet 21 for Splice Detail.



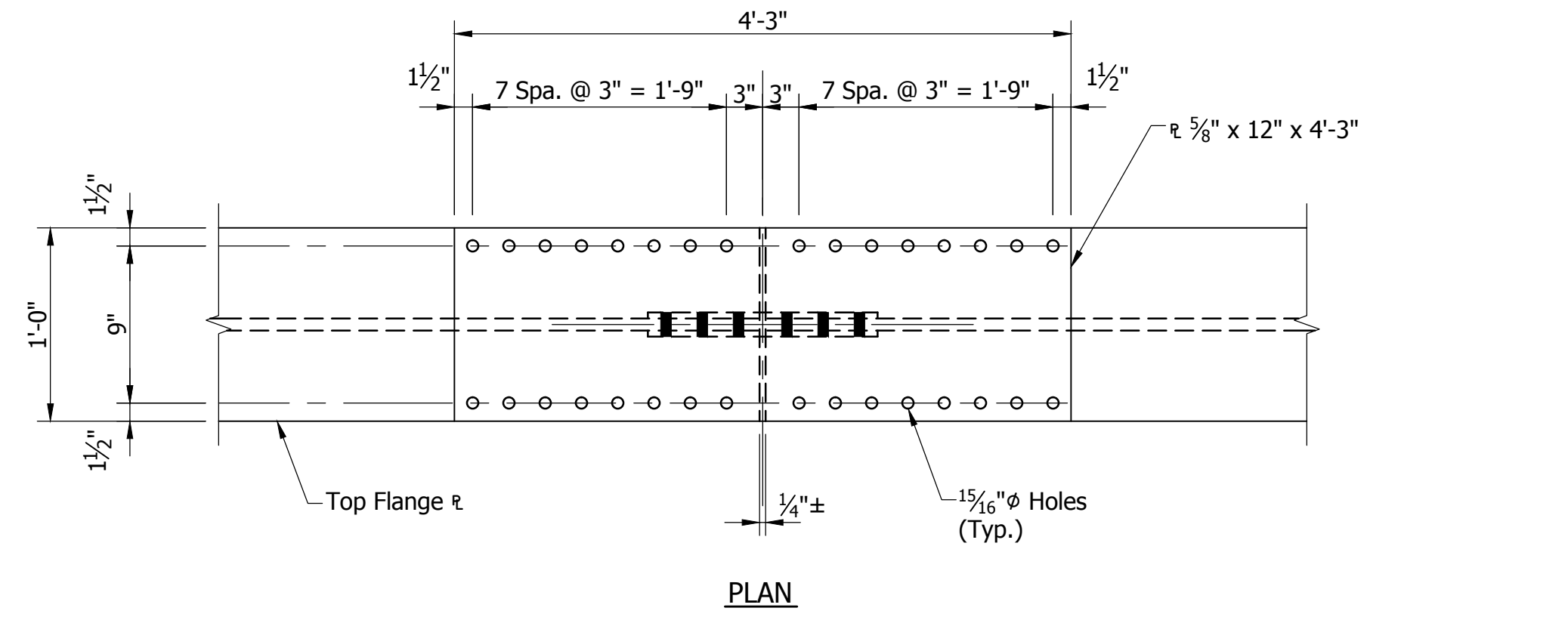
RECOMMENDED FOR APPROVAL: *Michael M. Matel* 10/31/16  
 DESIGN ENGINEER DATE  
 DESIGNED: C. OBRIEN DRAWN: D. SHEETZ  
 CHECKED: B. WRIGHT CHECKED: M. MATEL

INDIANA  
 DEPARTMENT OF TRANSPORTATION  
**STRUCTURAL STEEL DETAILS**  
**NORTHBOUND STRUCTURE**

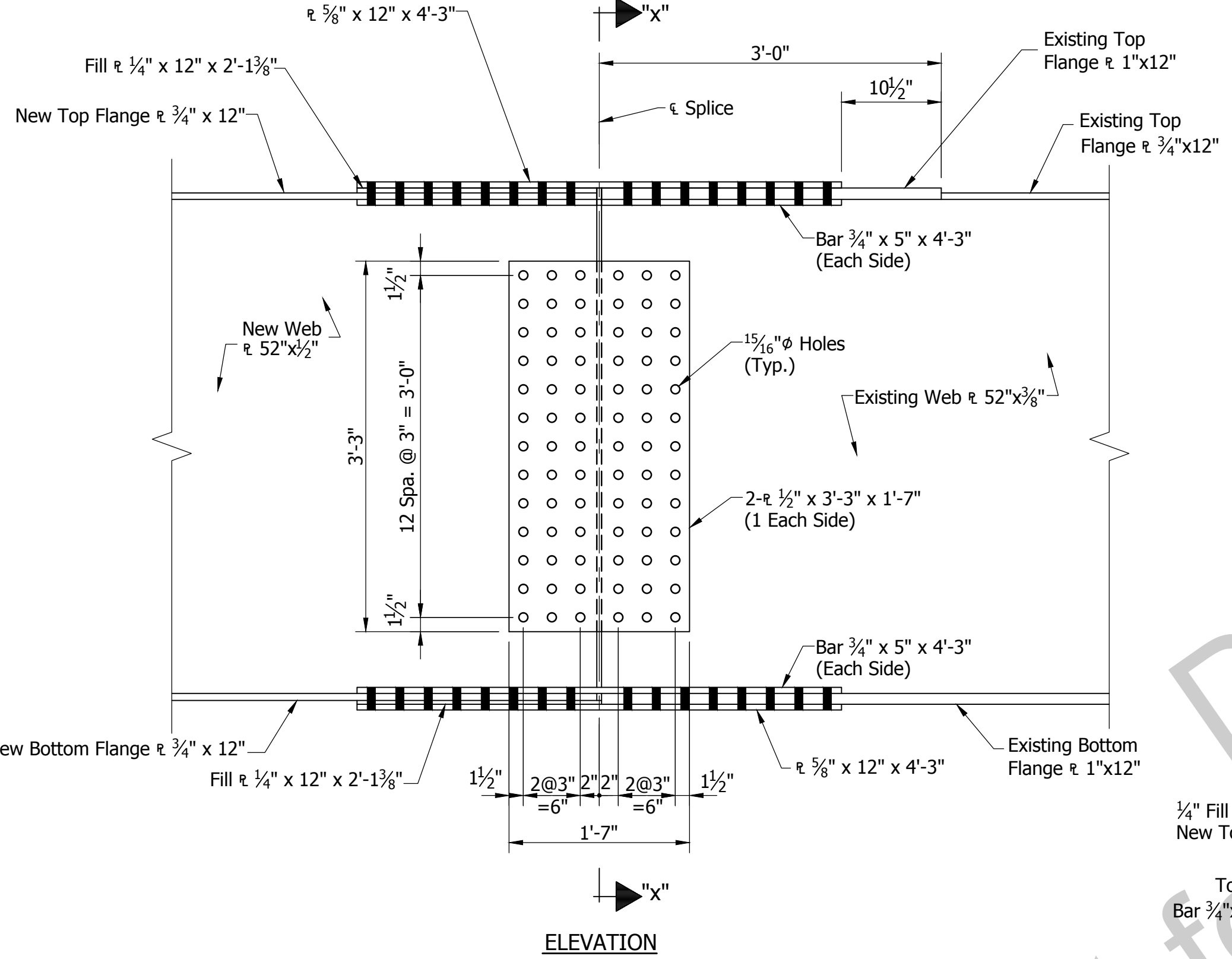
HORIZONTAL SCALE AS NOTED	BRIDGE FILE 41-82-4999B
VERTICAL SCALE AS NOTED	DESIGNATION 0200634
SURVEY BOOK	SHEET 20 OF 33
CONTRACT B-33539	PROJECT 0200634

5605  
 BPS NO.

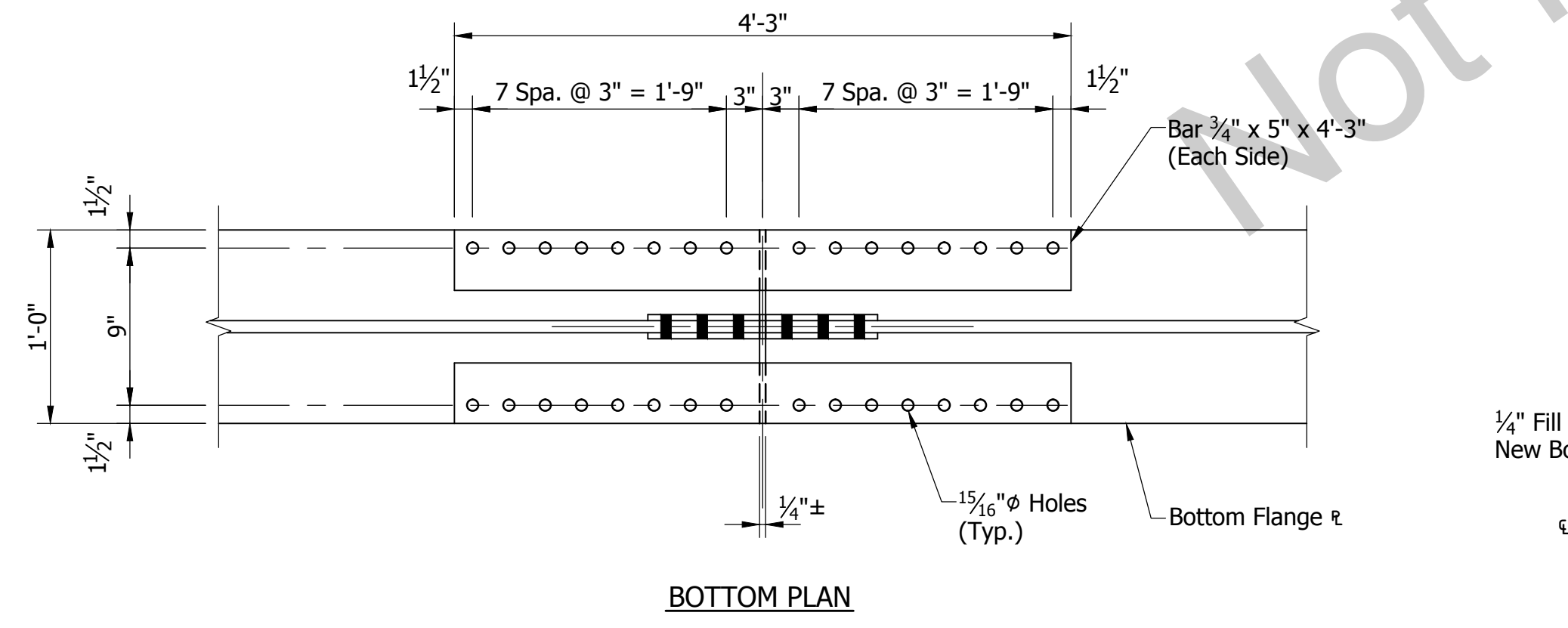
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PLAN



ELEVATION



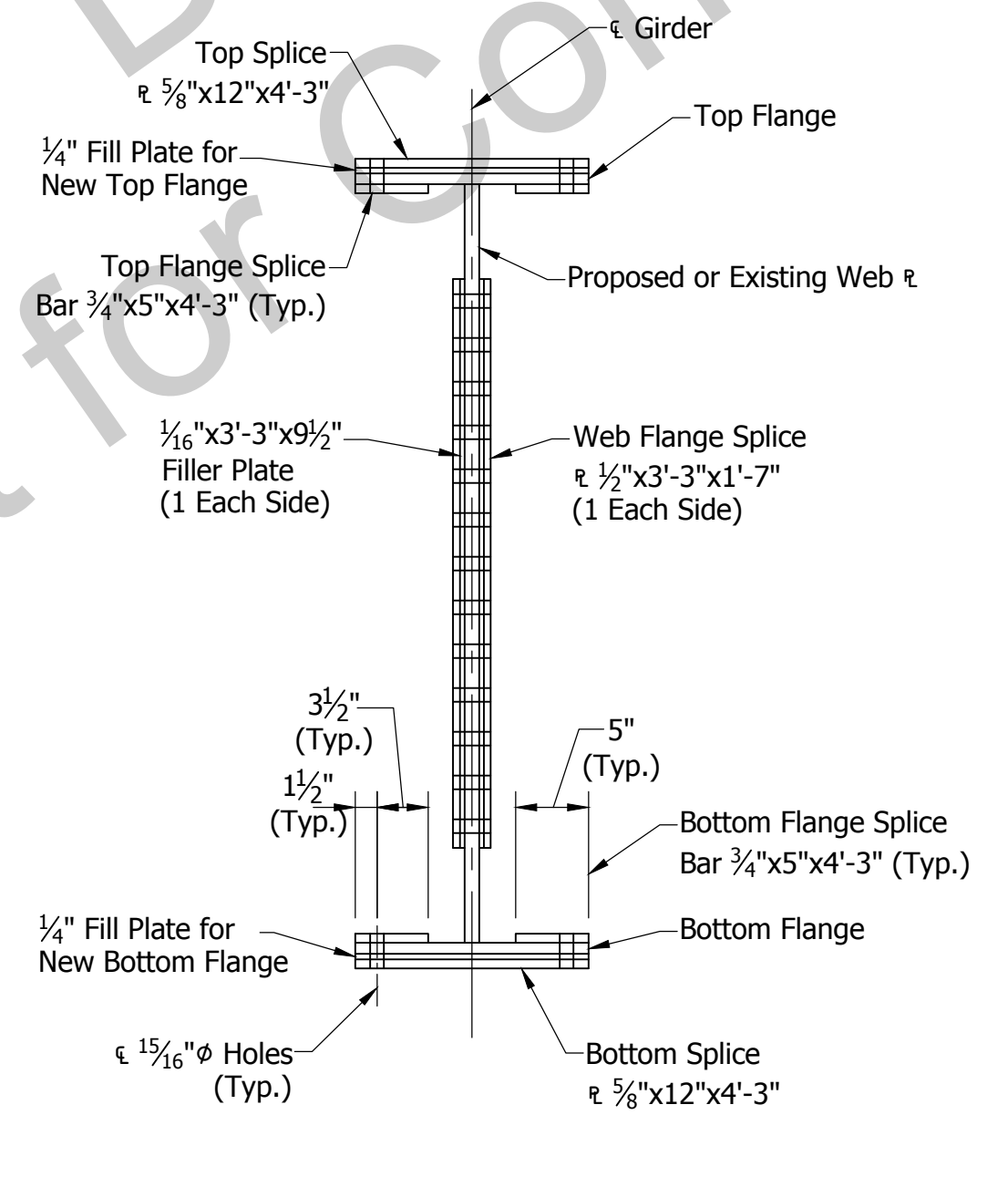
BOTTOM PLAN

**SPLICE NO.1 AND NO.2 DETAILS**  
Scale: 1" = 1'-0"

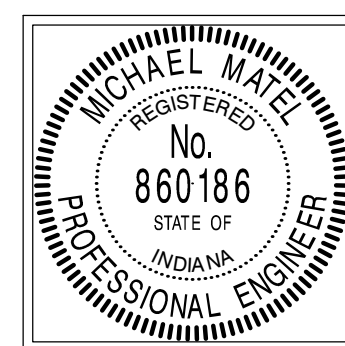
TOP OF SPLICE ELEVATIONS		
GIRDER	SPLICE NO.1	SPLICE NO.2
1	387.81	390.09
2	387.96	390.24
3	387.96	390.24
4	387.81	390.09

Notes:  
Splice Elevations shown in Table are with falsework removed and allow for steel dead load only.  
Top of Splice Plates shall be adjusted to the Elevations shown in Table before field splices are bolted.

DRAFT Not for Construction



**SECTION "X-X"**  
Scale: 1" = 1'-0"



RECOMMENDED FOR APPROVAL: *Michael M. Matel* 10/31/16  
DESIGN ENGINEER DATE  
DESIGNED: C. O'BRIEN DRAWN: J. THURMAN  
CHECKED: B. WRIGHT CHECKED: M. MATEL

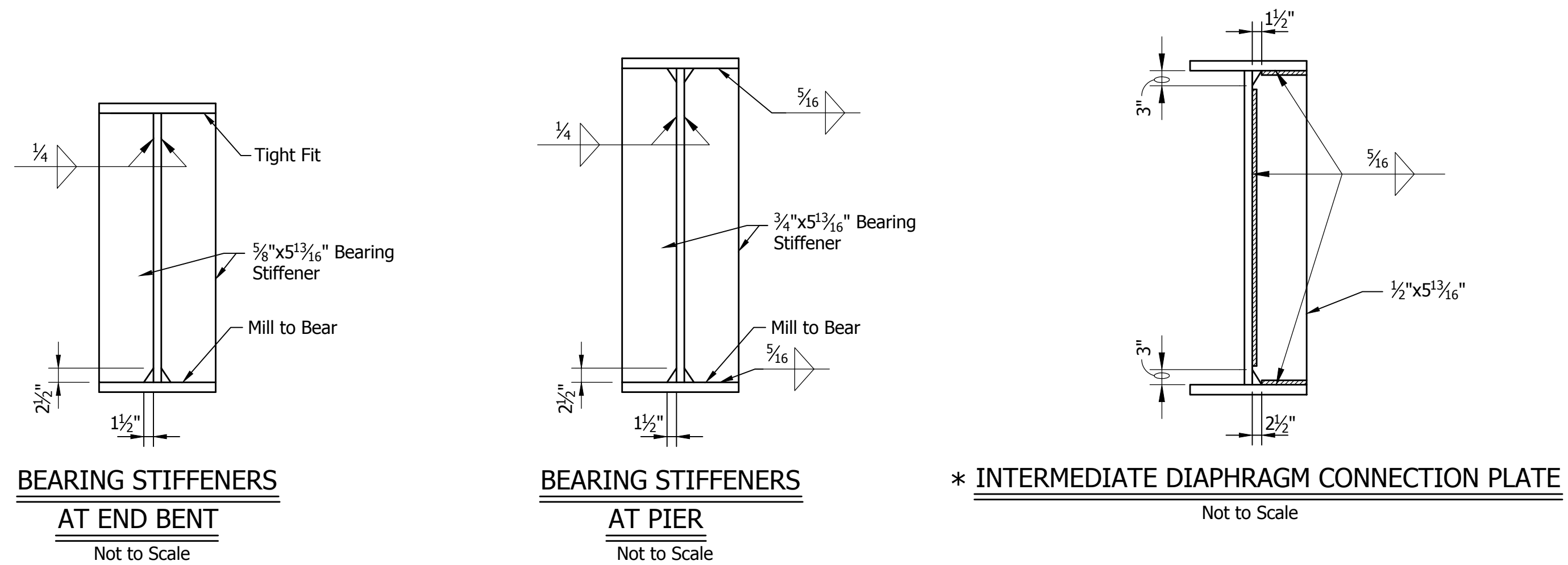
INDIANA DEPARTMENT OF TRANSPORTATION  
**STRUCTURAL STEEL DETAILS**  
NORTHBOUND STRUCTURE

HORIZONTAL SCALE	AS NOTED	BRIDGE FILE	41-82-4999B
VERTICAL SCALE	AS NOTED	DESIGNATION	0200634
SURVEY BOOK		SHEET	21 OF 33
CONTRACT	B-33539	PROJECT	0200634

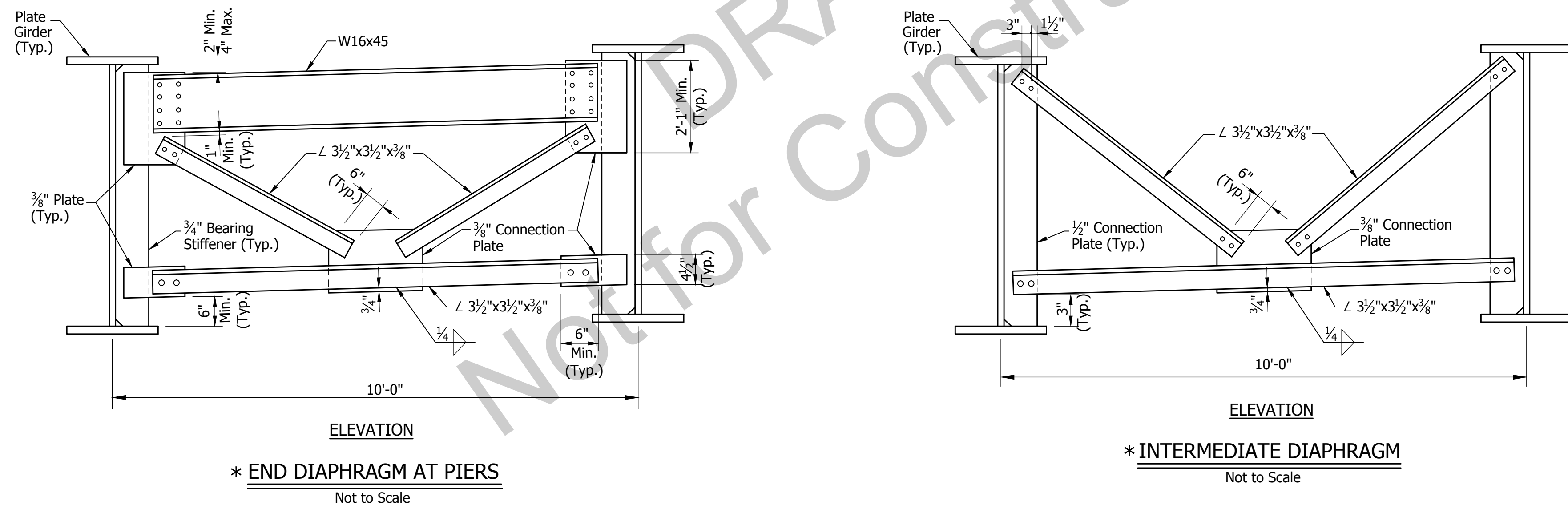
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\* Note: All Structural Steel for the End and Intermediate Diaphragms shall be Grade 36 Steel.



NOTE  
See Sheet 19 for Framing Plan and Structural Steel Fabrication Notes.

RECOMMENDED FOR APPROVAL: *Michael Matel* 10/31/16  
DESIGN ENGINEER DATE

DESIGNED: C. OBRIEN DRAWN: D. SHEETZ  
CHECKED: B. WRIGHT CHECKED: M. MATEL

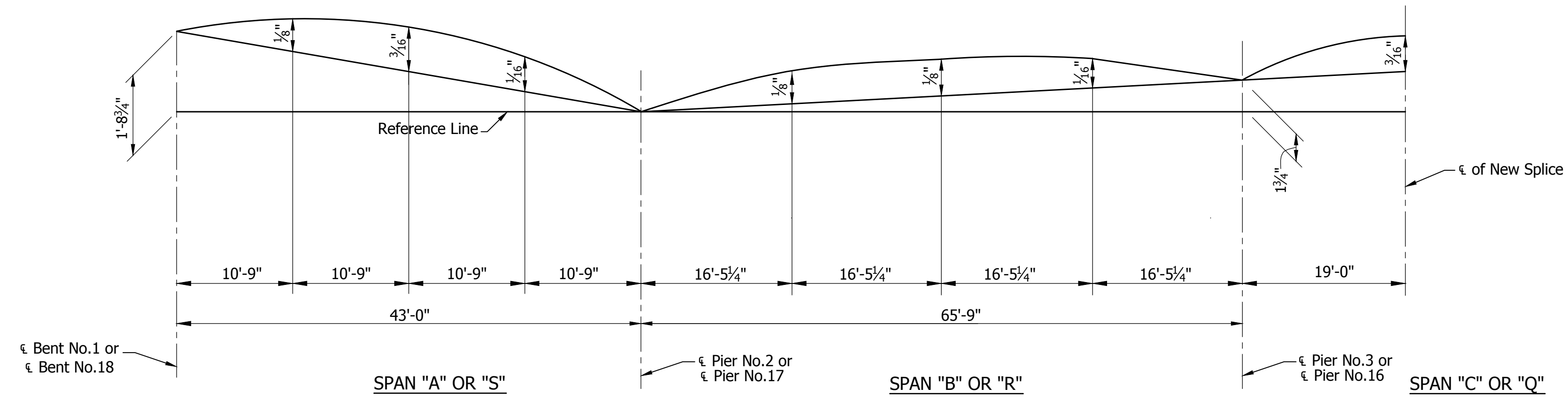
INDIANA DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL DETAILS  
NORTHBOUND STRUCTURE

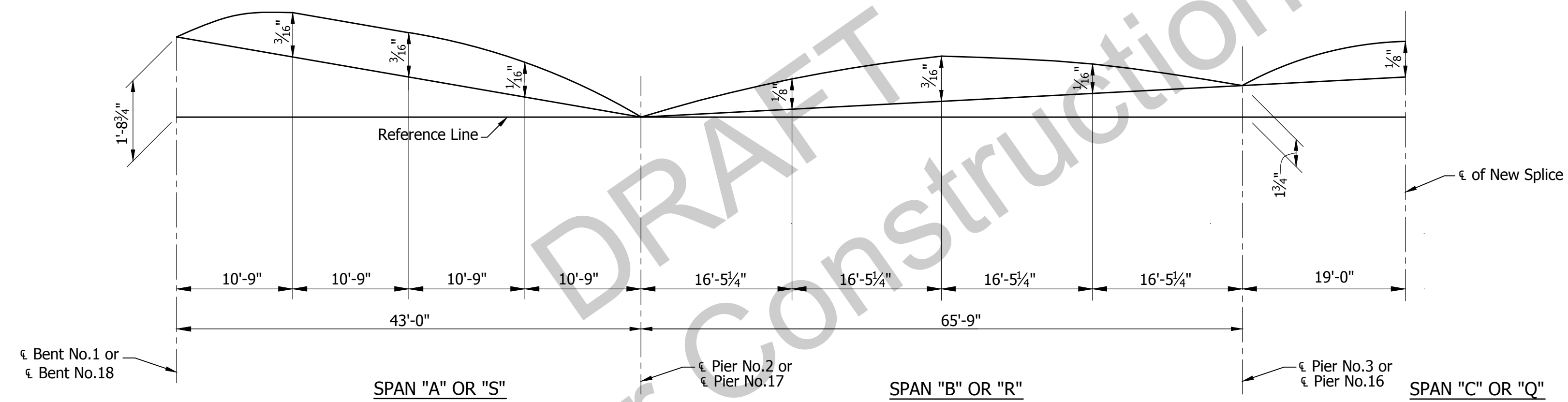
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VERTICAL SCALE AS NOTED	DESIGNATION 0200634
SURVEY BOOK	SHEET 22 OF 33
CONTRACT B-33539	PROJECT 0200634

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BFS NO.

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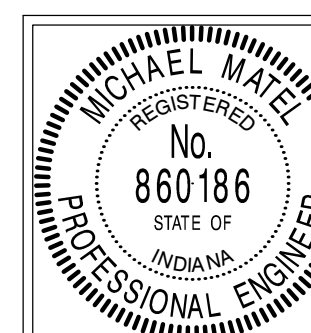
**NO LOAD CAMBER AND REAMING DIAGRAM (EXTERIOR GIRDERS)**  
Not to Scale



**NO LOAD CAMBER AND REAMING DIAGRAM (INTERIOR GIRDERS)**  
Not to Scale

TABLE OF CAMBERS (EXTERIOR GIRDERS)									
	SPAN "A" OR "S"			SPAN "B" OR "R"			SPAN "C" OR "Q"		
	1/4 PT.	1/2 PT.	3/4 PT.	1/4 PT.	1/2 PT.	3/4 PT.	ε Splice	—	—
DEAD LOAD STEEL	0	0	0	0	0	0	0	—	—
DEAD LOAD CONCRETE	1/8"	3/16"	1/16"	1/8"	1/8"	1/16"	3/16"	—	—
SUBTOTAL	1/8"	3/16"	1/16"	1/8"	1/8"	1/16"	3/16"	—	—
VERTICAL CURVE	0	0	0	0	0	0	0	—	—
TOTAL	1/8"	3/16"	1/16"	1/8"	1/8"	1/16"	3/16"	—	—

TABLE OF CAMBERS (INTERIOR GIRDERS)									
	SPAN "A" OR "S"			SPAN "B" OR "R"			SPAN "C" OR "Q"		
	1/4 PT.	1/2 PT.	3/4 PT.	1/4 PT.	1/2 PT.	3/4 PT.	ε Splice	—	—
DEAD LOAD STEEL	0	0	0	0	0	0	0	—	—
DEAD LOAD CONCRETE	3/16"	3/16"	1/16"	1/8"	3/16"	1/16"	1/8"	—	—
SUBTOTAL	3/16"	3/16"	1/16"	1/8"	3/16"	1/16"	1/8"	—	—
VERTICAL CURVE	0	0	0	0	0	0	0	—	—
TOTAL	3/16"	3/16"	1/16"	1/8"	3/16"	1/16"	1/8"	—	—



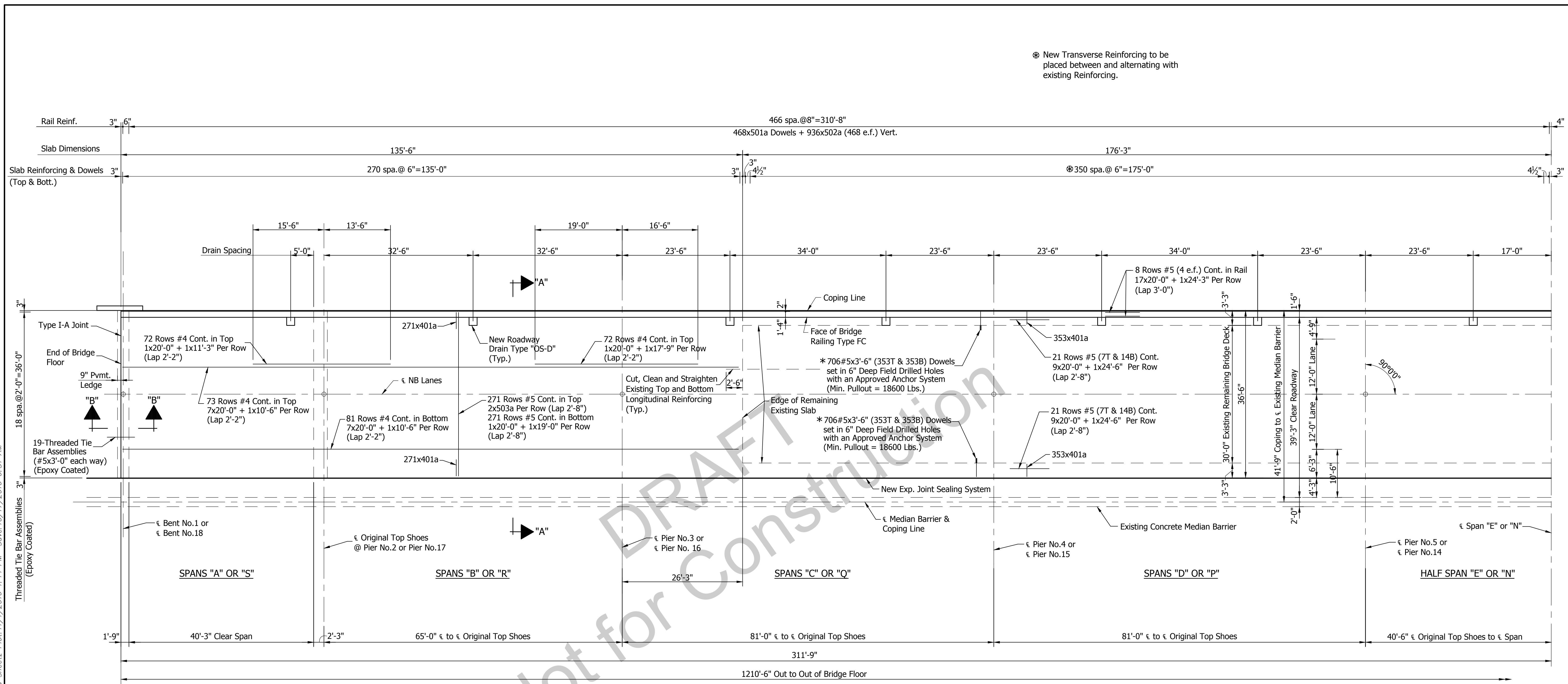
RECOMMENDED FOR APPROVAL: *Michael Matel* 10/31/16  
DESIGN ENGINEER DATE  
DESIGNED: C. OBRIEN DRAWN: D. SHEETZ  
CHECKED: B. WRIGHT CHECKED: M. MATEL

INDIANA DEPARTMENT OF TRANSPORTATION  
STRUCTURAL STEEL DETAILS  
NORTHBOUND STRUCTURE

HORIZONTAL SCALE AS NOTED	BRIDGE FILE 41-82-4999B
VERTICAL SCALE AS NOTED	DESIGNATION 0200634
SURVEY BOOK	SHEET 23 OF 33
CONTRACT B-33539	PROJECT 0200634

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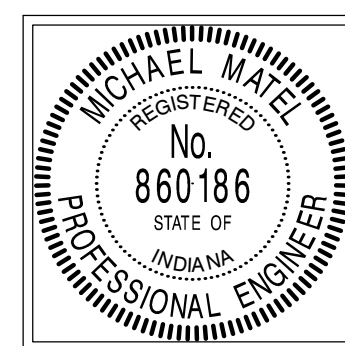


⊗ New Transverse Reinforcing to be placed between and alternating with existing Reinforcing.

**PLAN**  
**SPANS "A", "B", "C", "D" AND HALF SPAN "E" (SHOWN)**  
**HALF SPAN "N", SPANS "P", "Q", "R" AND "S" (OPP. HAND)**  
**NORTHBOUND STRUCTURE**  
 Scale: 3/32" = 1'-0"

\* Note: As an alternate, clean and straighten exposed existing transverse reinforcing in lieu of field drilled holes and dowels.

- NOTES**
- See Sheet 12 for Section "B-B"
  - See Sheet 25 for Balance of Plan.
  - See Sheets 26 and 27 for Sections "A-A" and Additional Notes.
  - See Sheet 28 for Concrete Dead Load Deflection Diagrams.
  - See Sheet 29 for Screenshot Plans and Screenshot Notes.
  - See Sheet 30 for Screenshot Elevations.
  - See Sheet 31 for Bar Bending Details and Bill of Materials.



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 DESIGN ENGINEER DATE  
 DESIGNED: C. OBRIEN DRAWN: D. SHEETZ  
 CHECKED: B. WRIGHT CHECKED: M. MATEL

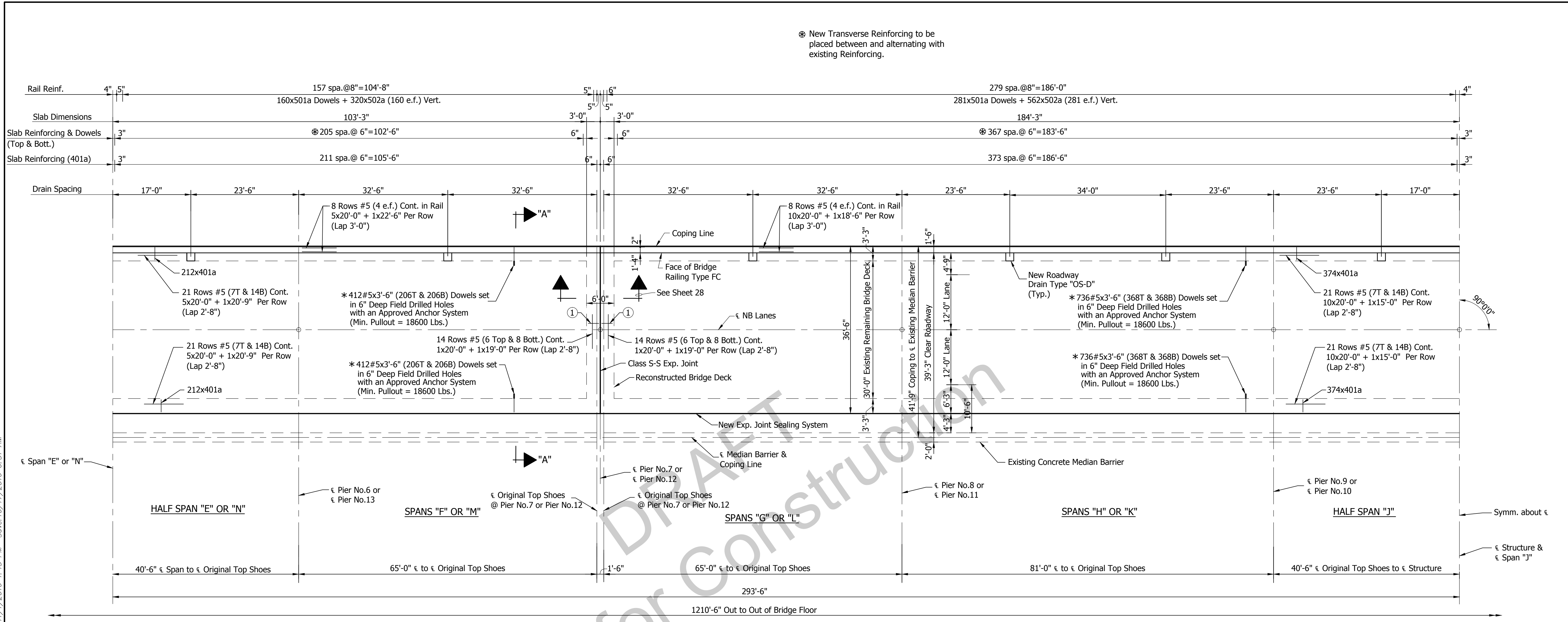
**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**

**FLOOR DETAILS**  
**NORTHBOUND STRUCTURE**

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	41-82-4999B
VERTICAL SCALE	DESIGNATION
AS NOTED	0200634
SURVEY BOOK	SHEET
	24 OF 33
CONTRACT	PROJECT
B-33539	0200634

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① 45x504a spa. w/ Exist. Bottom #5 (15 req'd. @ each Girder Spa.)

\* Note: As an alternate, clean and straighten exposed existing transverse reinforcing in lieu of field drilled holes and dowels.

**PLAN**  
**HALF SPAN "E", SPANS "F", "G", "H" AND HALF SPAN "J" (SHOWN)**  
**HALF SPAN "J", SPANS "K", "L", "M" AND HALF SPAN "N" (OPP. HAND)**  
**NORTHBOUND STRUCTURE**

Scale: 3/32" = 1'-0"

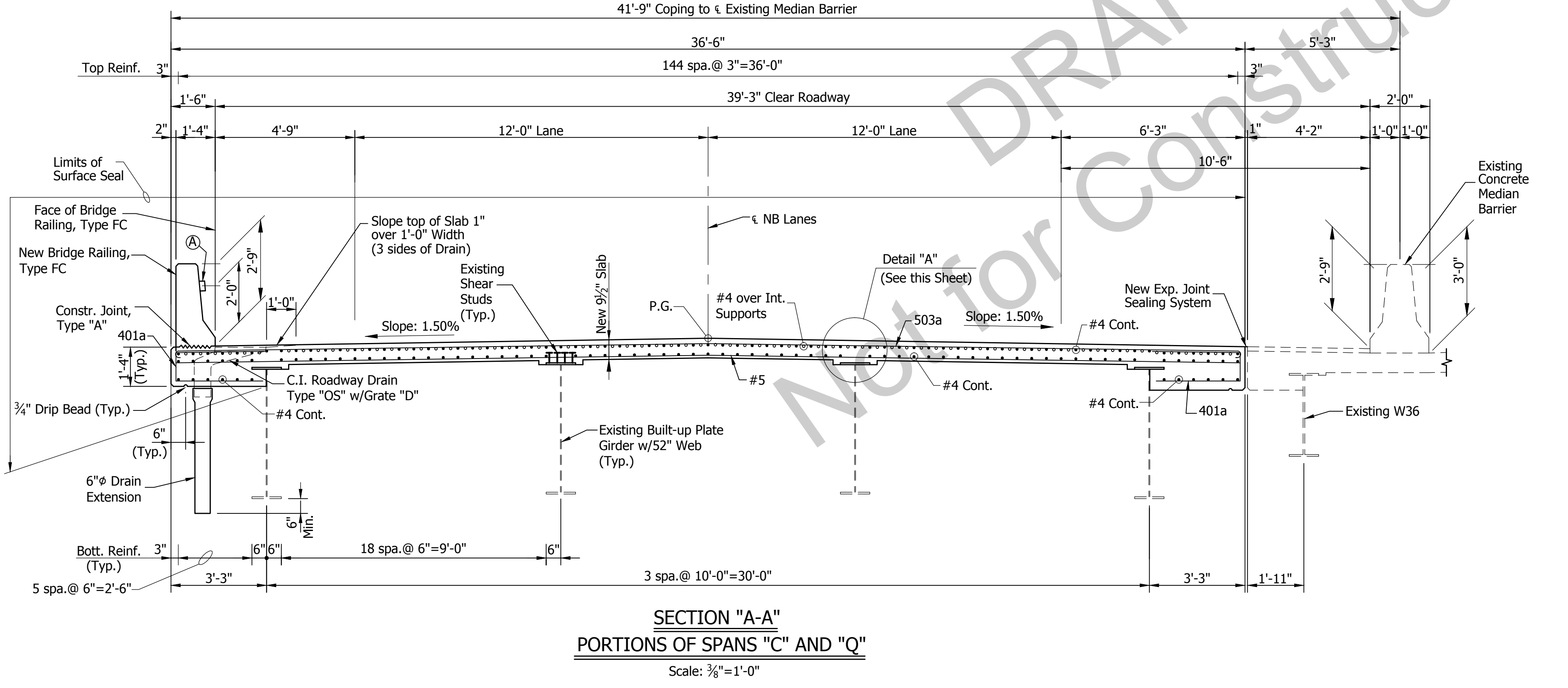
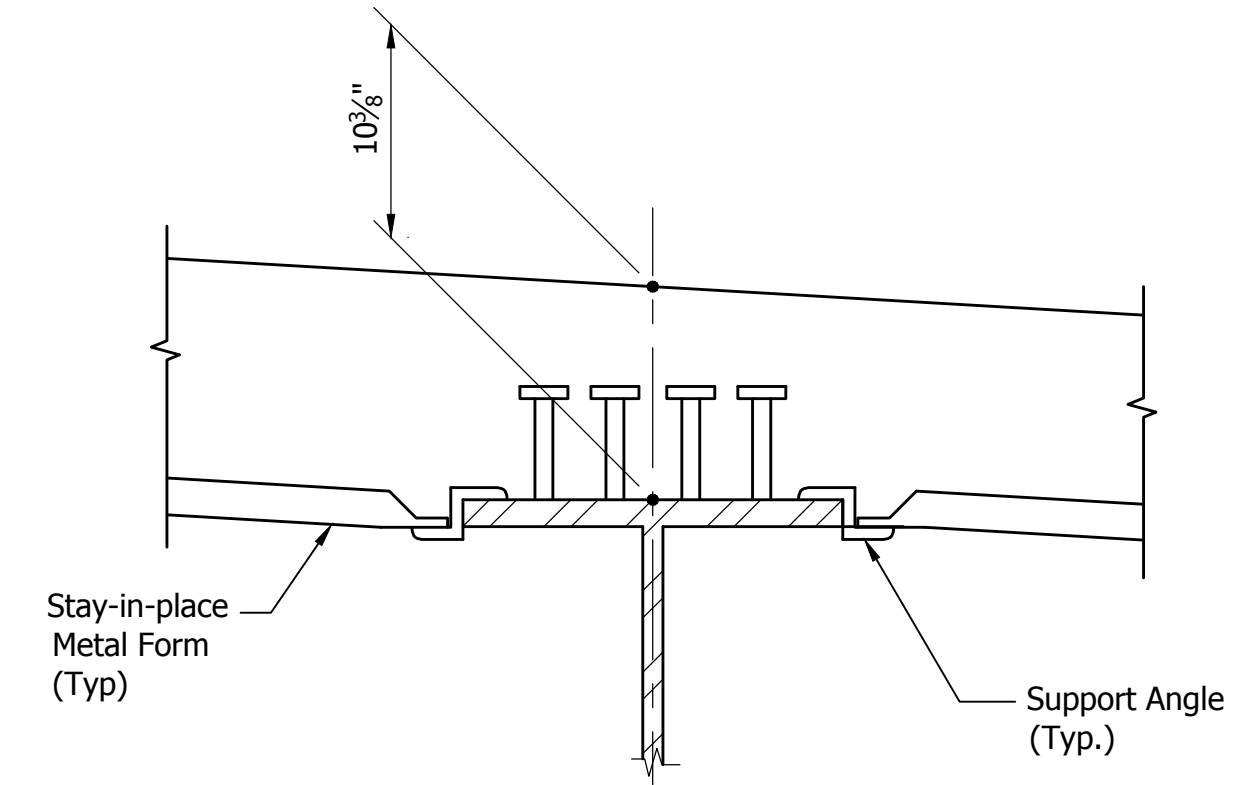
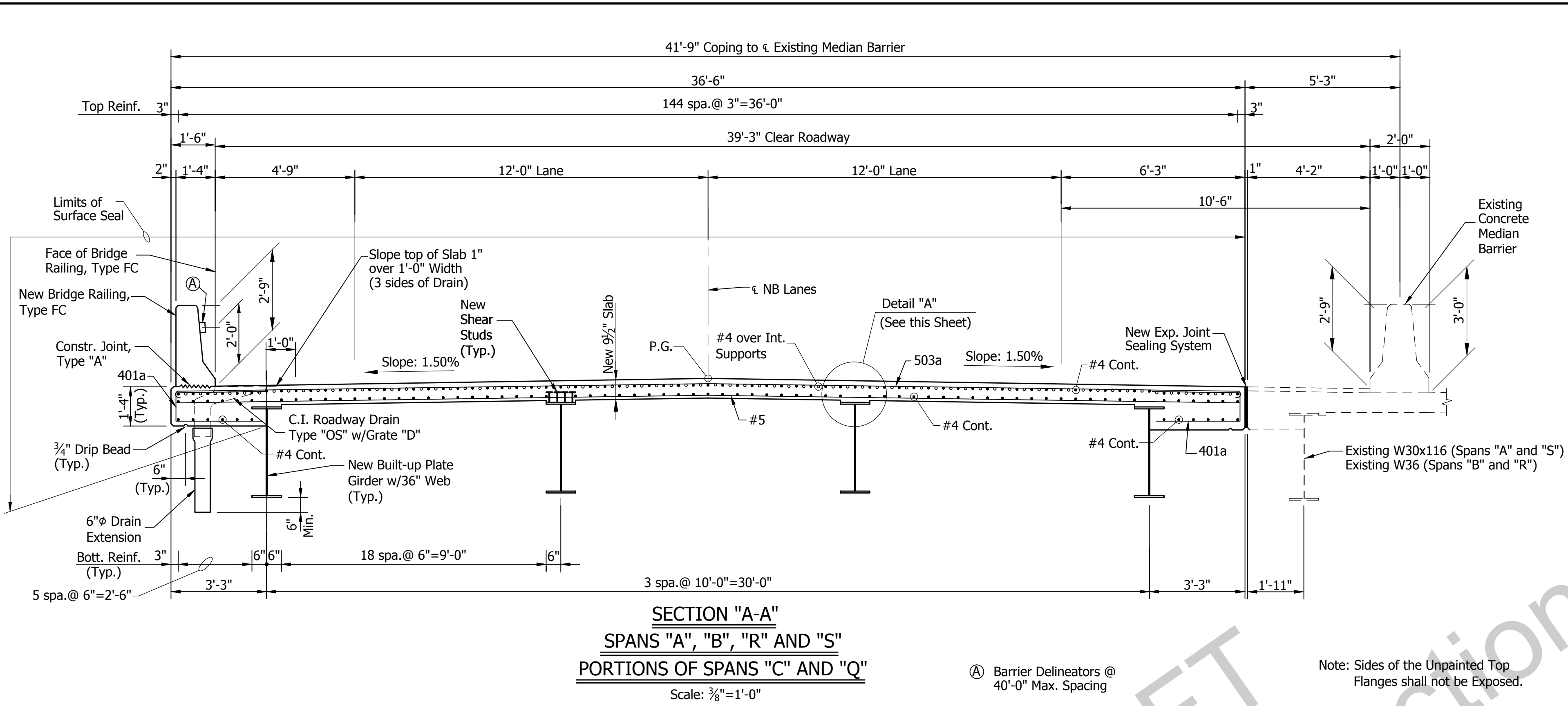
**NOTES**  
 See Sheet 24 for Balance of Plan.  
 See Sheets 26 and 27 for Sections "A-A" and Additional Notes.  
 See Sheet 28 for Concrete Dead Load Deflection Diagrams.  
 See Sheet 29 for Screed Plans and Screed Notes.  
 See Sheet 30 for Screed Elevations.  
 See Sheet 31 for Bar Bending Details and Bill of Materials.

	RECOMMENDED FOR APPROVAL: <i>Michael M. Matel</i> 10/31/16 DESIGN ENGINEER DATE	<b>INDIANA</b> <b>DEPARTMENT OF TRANSPORTATION</b>  <b>FLOOR DETAILS</b> <b>NORTHBOUND STRUCTURE</b>	HORIZONTAL SCALE AS NOTED	BRIDGE FILE 41-82-4999B
	DESIGNED: C. OBRIEN DRAWN: D. SHEETZ		VERTICAL SCALE AS NOTED	DESIGNATION 0200634
	CHECKED: B. WRIGHT CHECKED: M. MATEL		SURVEY BOOK	SHEET 25 OF 33
			CONTRACT B-33539	PROJECT 0200634

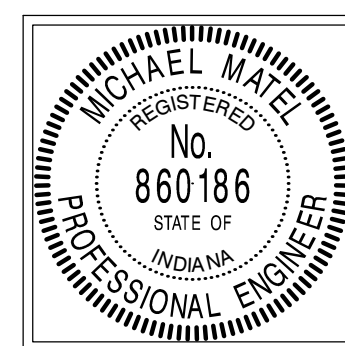
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**NOTES**  
 See Sheet 28 for Concrete Dead Load Deflection Diagrams.  
 See Sheet 29 for Screed Plans and Screed Notes.  
 See Sheet 30 for Screed Elevations.  
 See Sheet 31 for Bar Bending Details and Bill of Materials.



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 DESIGNED: C. OBRIEN DRAWN: D. SHEETZ  
 CHECKED: B. WRIGHT CHECKED: M. MATEL

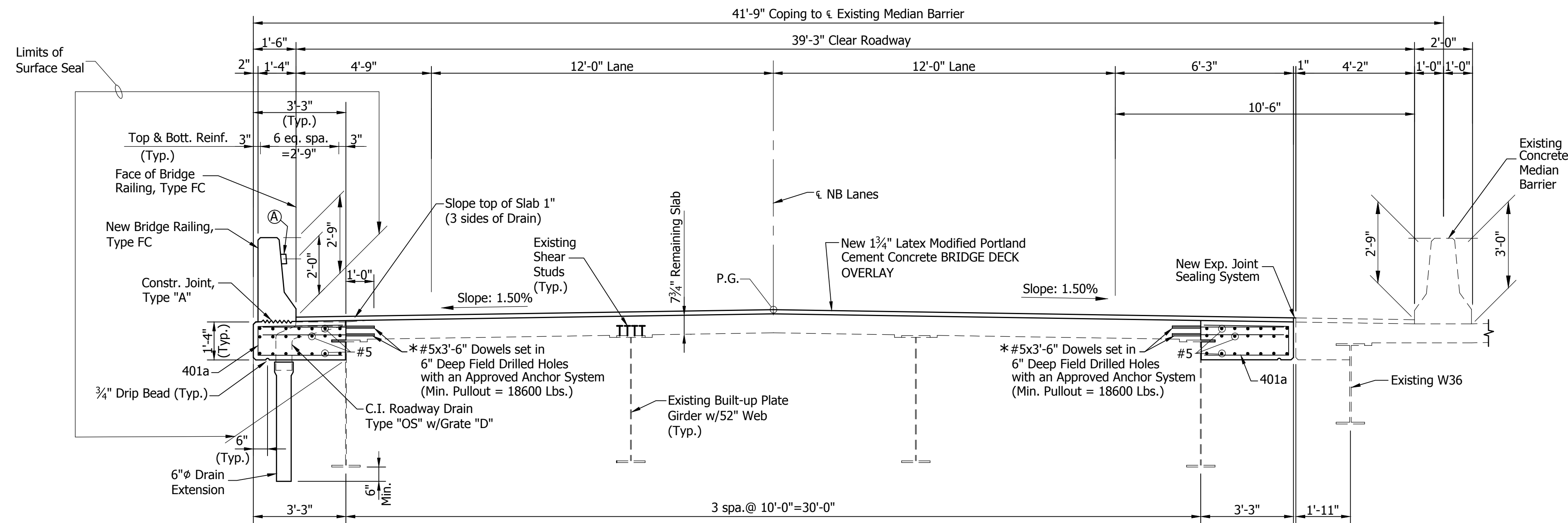
**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**

**FLOOR DETAILS**  
**NORTHBOUND STRUCTURE**

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	41-82-4999B
VERTICAL SCALE	DESIGNATION
AS NOTED	0200634
SURVEY BOOK	SHEET
	26 OF 33
CONTRACT	PROJECT
B-33539	0200634

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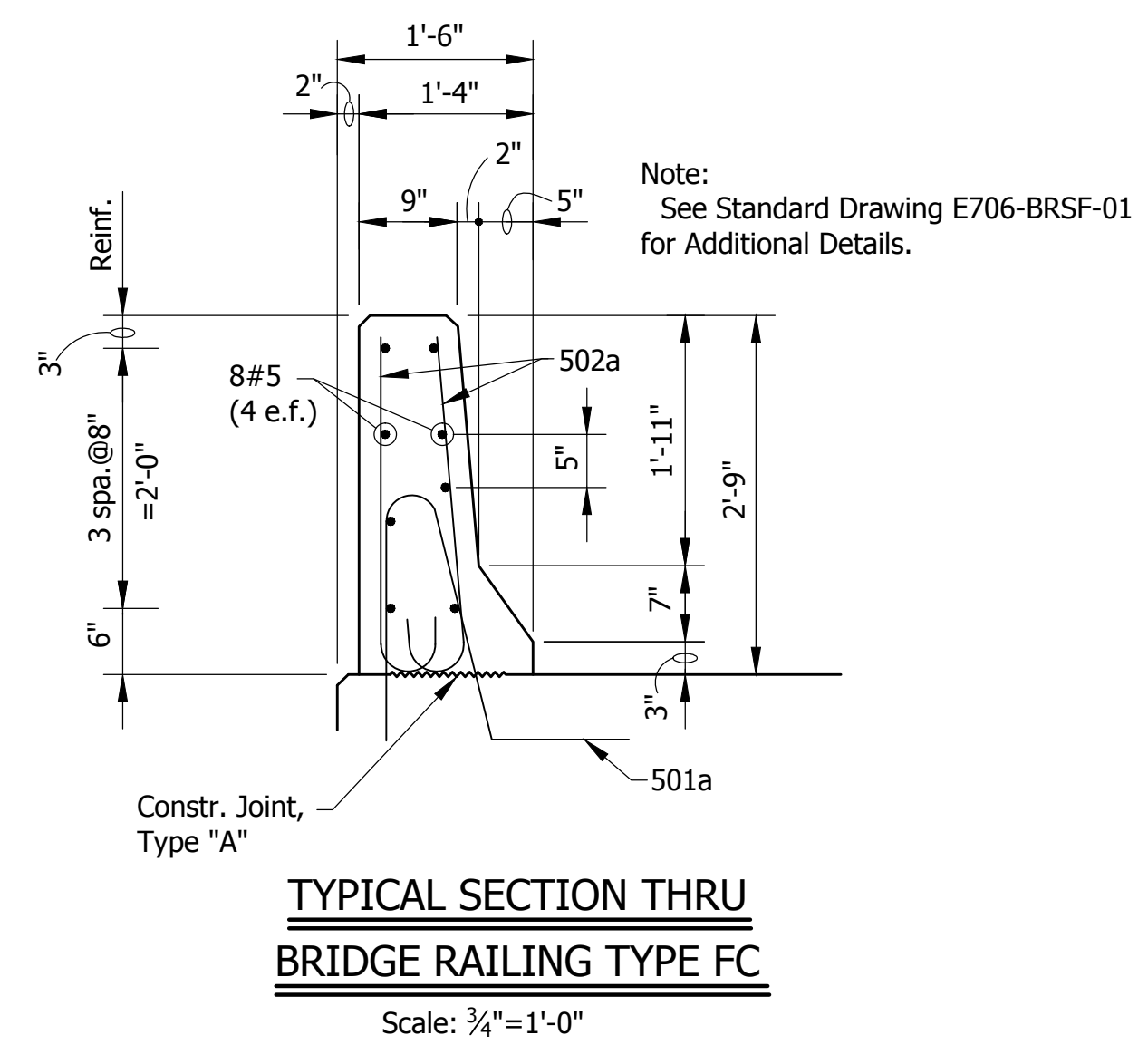
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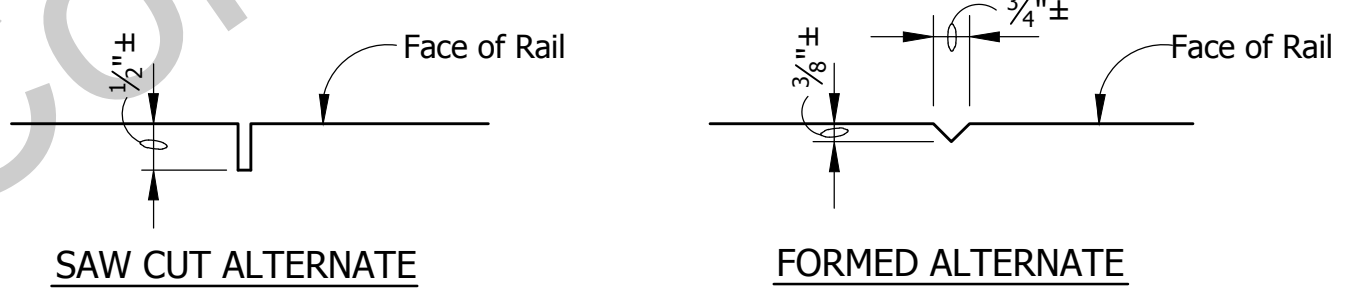
**SECTION "A-A"**  
**SPANS "D" THRU "P"**  
**PORTIONS OF SPANS "C" AND "Q"**  
 Scale: 3/8"=1'-0"

\* Note: As an alternate, clean and straighten exposed existing transverse reinforcing in lieu of field drilled holes and dowels.

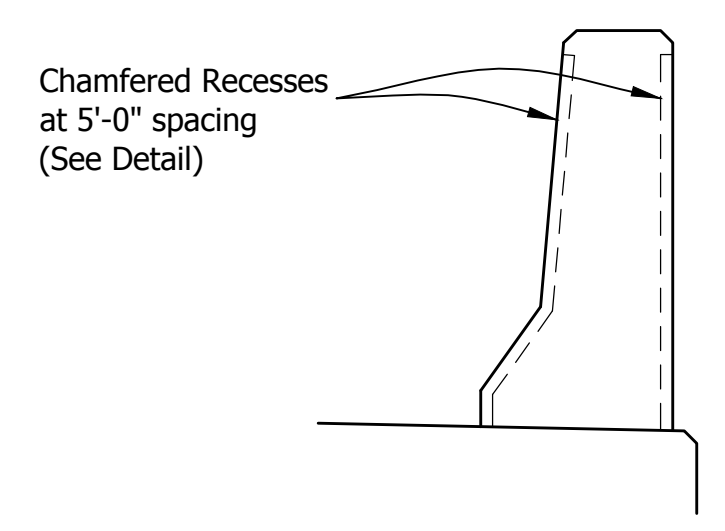
(A) Barrier Delineators @ 40'-0" Max. Spacing



**TYPICAL SECTION THRU BRIDGE RAILING TYPE FC**  
 Scale: 3/4"=1'-0"



**RECESS DETAILS**  
 Not to Scale



**TYPICAL RAIL SECTION**  
 Not to Scale

**FLOOR NOTES**

After the beams have been erected, concrete forms shall not be blocked against the end of beams in making any pours adjacent to the beam spans.

Suitable restraint shall be provided to prevent the rotation of the outside beams from construction loads such as finishing machines, forms, etc.

The top reinforcing in the slab shall be securely tied down to the slab forms and/or the beams to prevent lifting during concrete placement.

The Contractor shall have the option of using permanent metal deck forms in lieu of removable deck forms.

The Contractor shall space the reinforcing bars so to ensure a continuous bar is at the edge of each coping.

**NOTE**  
 See Sheet 31 for Bar Bending Details and Bill of Materials.

	RECOMMENDED FOR APPROVAL: <i>Michael M. Matel</i> 10/31/16 DESIGN ENGINEER DATE
	DESIGNED: C. OBRIEN DRAWN: D. SHEETZ
	CHECKED: B. WRIGHT CHECKED: M. MATEL

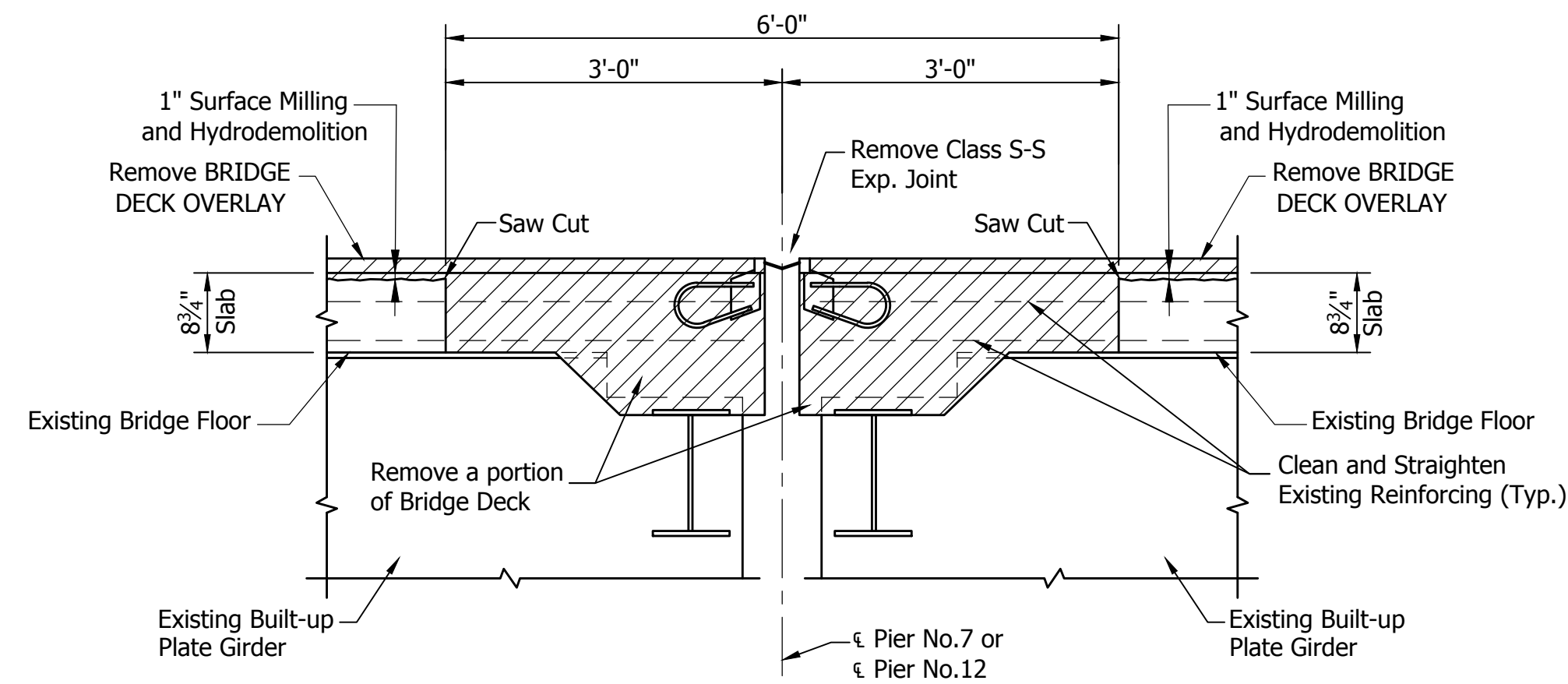
**INDIANA DEPARTMENT OF TRANSPORTATION**

**FLOOR DETAILS NORTHBOUND STRUCTURE**

HORIZONTAL SCALE AS NOTED	BRIDGE FILE 41-82-4999B
VERTICAL SCALE AS NOTED	DESIGNATION 0200634
SURVEY BOOK	SHEET 27 OF 33
CONTRACT B-33539	PROJECT 0200634

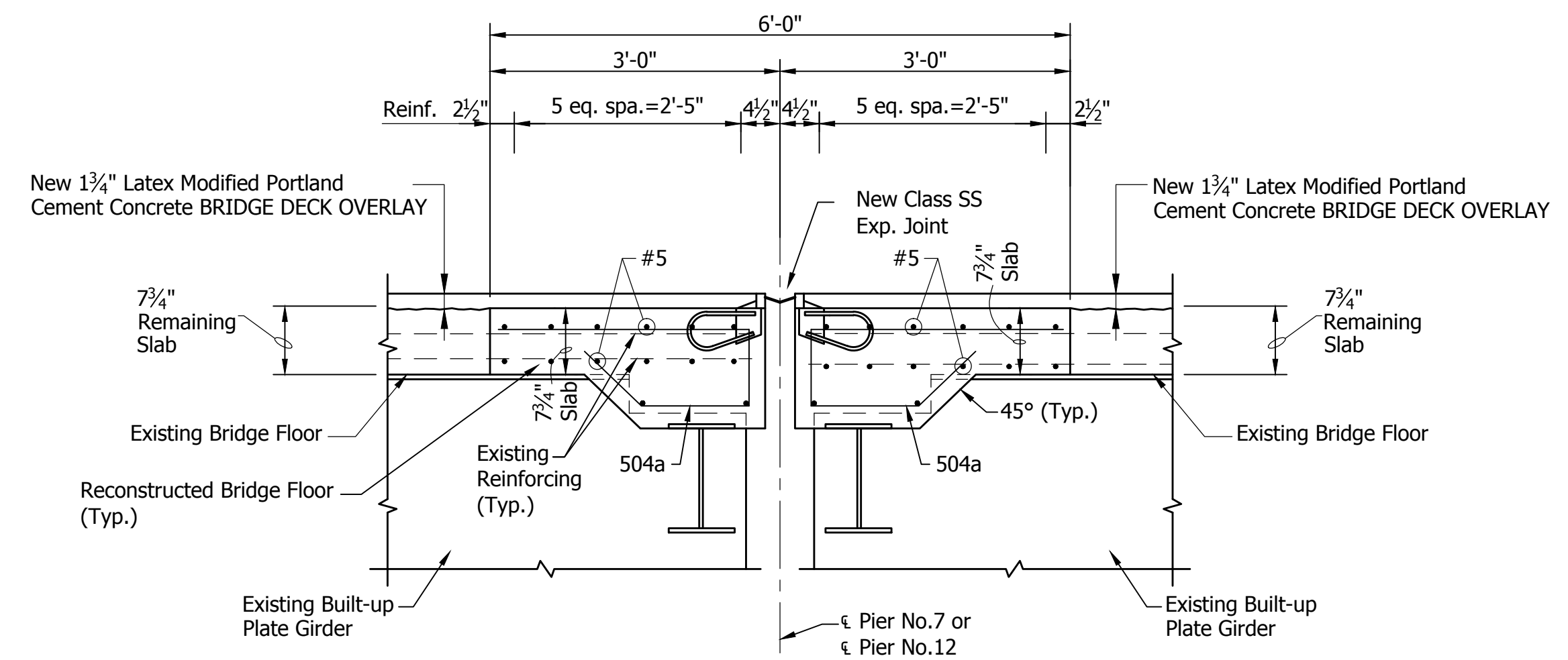
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Note: Hatched Areas Indicate Portions to be Removed.



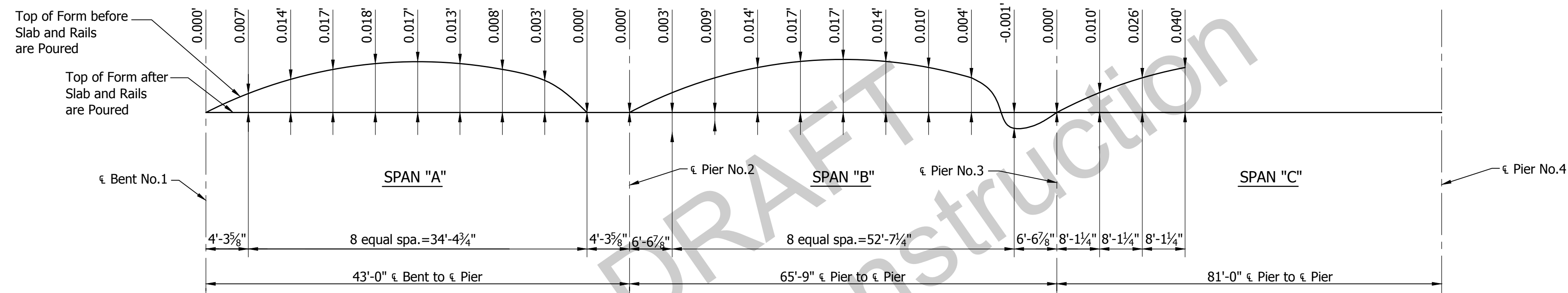
**SECTION AT PIER NO.7 OR NO.12  
(SHOWING REMOVALS)**

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



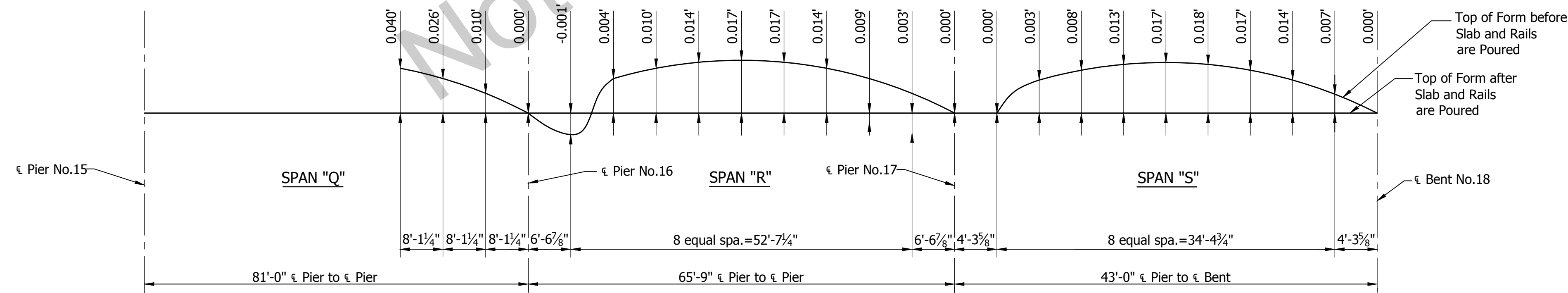
**SECTION AT PIER NO.7 OR NO.12  
(SHOWING RECONSTRUCTION)**

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



**CONCRETE DEAD LOAD DEFLECTION DIAGRAM  
SPAN "A", SPAN "B" AND PARTIAL SPAN "C"**

Not to Scale

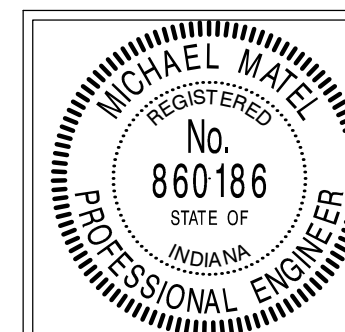


**CONCRETE DEAD LOAD DEFLECTION DIAGRAM  
PARTIAL SPAN "Q", SPAN "R" AND SPAN "S"**

Not to Scale

NOTE  
See Sheet 31 for Bar Bending Details and Bill of Materials.

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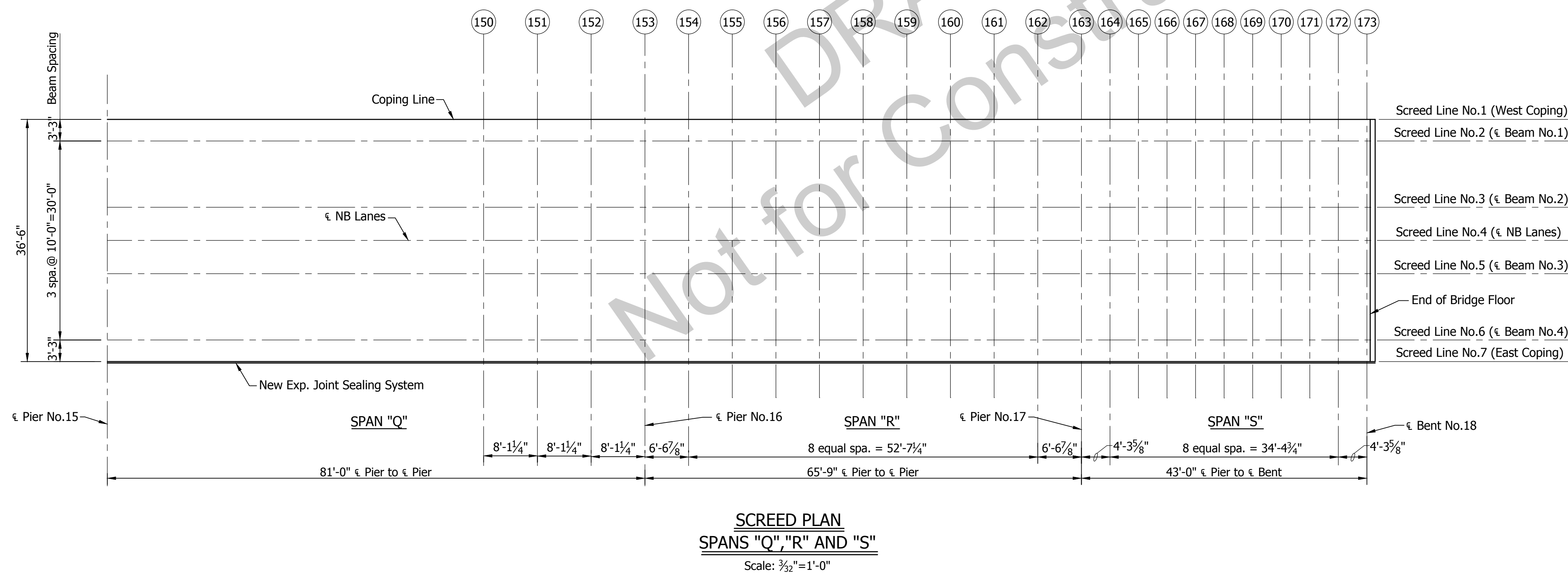
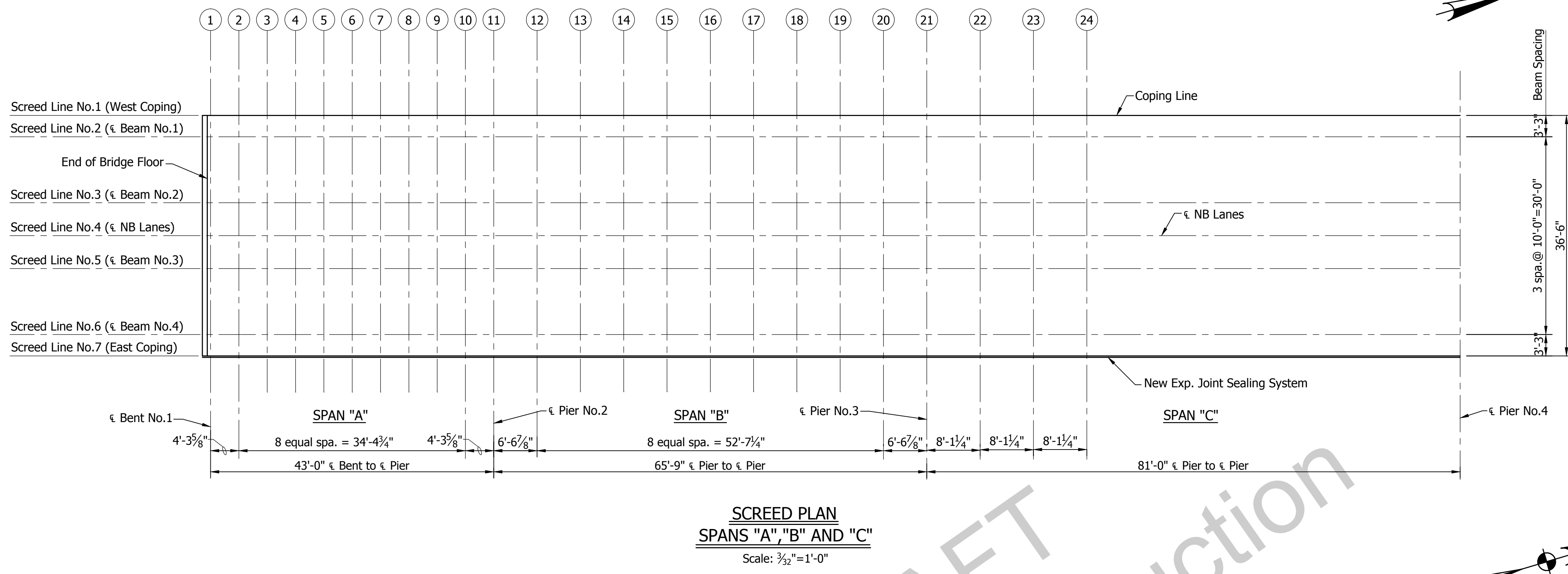
RECOMMENDED FOR APPROVAL: *Michael Matel* 10/31/16  
DESIGN ENGINEER DATE  
DESIGNED: C. OBRIEN DRAWN: D. SHEETZ  
CHECKED: B. WRIGHT CHECKED: M. MATEL

INDIANA  
DEPARTMENT OF TRANSPORTATION  
FLOOR DETAILS  
NORTHBOUND STRUCTURE

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	41-82-4999B
VERTICAL SCALE	DESIGNATION
AS NOTED	0200634
SURVEY BOOK	SHEET
	28 OF 33
CONTRACT	PROJECT
B-33539	0200634

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**SCREED NOTES**

Screed elevations will be given for setting screeds and coping forms so that the slab and copings will be at the required elevations after all the concrete has been poured.

Take elevations at the screed and coping points on top of adjacent beams, subtract these elevations from the given elevations and use resulting dimensions as the height for setting the screed or coping forms above that point. This dimension remains unchanged regardless of how much or what order the concrete is poured.

No concrete shall be poured until the above operation is completed.

Do not set screeds or coping forms by leveling.

**NOTE**  
See Sheet 30 for Screed Elevations.

	RECOMMENDED FOR APPROVAL: <i>Michael Matel</i> 10/31/16 DESIGN ENGINEER DATE
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	CHECKED: B. WRIGHT CHECKED: M. MATEL

**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**

**FLOOR DETAILS**  
**NORTHBOUND STRUCTURE**

HORIZONTAL SCALE AS NOTED	BRIDGE FILE 41-82-4999B
VERTICAL SCALE AS NOTED	DESIGNATION 0200634
SURVEY BOOK	SHEET
	29 OF 33
CONTRACT B-33539	PROJECT 0200634

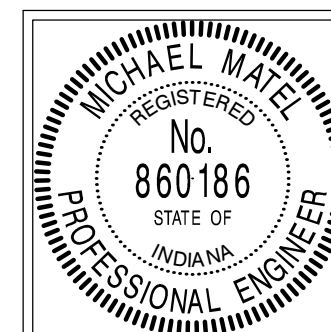
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BFS NO.



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SCREED LINE	Point:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
		1	Top of Coping Form	388.225	388.245	388.260	388.275	388.285	388.295	388.300	388.305	388.310	388.320	388.330	388.350	388.370	388.390	388.410	388.425	388.440	388.450	388.460	388.470	388.490	388.520
	Top of Exterior Beam																								
	Top of Beam to Top of Coping																								
2	Top of Screed	388.275	388.295	388.310	388.325	388.335	388.345	388.350	388.355	388.360	388.370	388.380	388.400	388.420	388.440	388.460	388.475	388.490	388.500	388.510	388.520	388.535	388.565	388.600	388.635
	Top of Beam																								
	Top of Beam to Top of Screed																								
3	Top of Screed	388.425	388.445	388.460	388.475	388.485	388.495	388.500	388.505	388.510	388.520	388.530	388.550	388.570	388.590	388.610	388.625	388.640	388.650	388.660	388.670	388.685	388.715	388.750	388.785
	Top of Beam																								
	Top of Beam to Top of Screed																								
4	Top of Screed	388.500	388.520	388.535	388.550	388.560	388.570	388.575	388.580	388.585	388.595	388.605	388.625	388.645	388.665	388.685	388.700	388.715	388.725	388.735	388.745	388.760	388.790	388.825	388.860
	Top of Beam																								
	Top of Beam to Top of Screed																								
5	Top of Screed	388.425	388.445	388.460	388.475	388.485	388.495	388.500	388.505	388.510	388.520	388.530	388.550	388.570	388.590	388.610	388.625	388.640	388.650	388.660	388.670	388.685	388.715	388.750	388.785
	Top of Beam																								
	Top of Beam to Top of Screed																								
6	Top of Screed	388.275	388.295	388.310	388.325	388.335	388.345	388.350	388.355	388.360	388.370	388.380	388.400	388.420	388.440	388.460	388.475	388.490	388.500	388.510	388.520	388.535	388.565	388.600	388.635
	Top of Beam																								
	Top of Beam to Top of Screed																								
7	Top of Coping Form	388.225	388.245	388.260	388.275	388.285	388.295	388.300	388.305	388.310	388.320	388.330	388.350	388.370	388.390	388.410	388.425	388.440	388.450	388.460	388.470	388.490	388.520	388.550	388.585
	Top of Exterior Beam																								
	Top of Beam to Top of Coping																								

SCREED LINE	Point:	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173
		1	Top of Coping Form	390.850	390.855	390.860	390.870	390.885	390.905	390.925	390.945	390.965	390.980	390.995	391.005	391.015	391.025	391.035	391.050	391.065	391.080	391.095	391.105	391.115	391.125
	Top of Exterior Beam																								
	Top of Beam to Top of Coping																								
2	Top of Screed	390.900	390.905	390.910	390.920	390.935	390.955	390.975	390.995	391.015	391.030	391.040	391.055	391.065	391.075	391.085	391.100	391.115	391.130	391.145	391.155	391.165	391.170	391.175	391.180
	Top of Beam																								
	Top of Beam to Top of Screed																								
3	Top of Screed	391.050	391.055	391.060	391.070	391.085	391.105	391.125	391.145	391.165	391.180	391.190	391.205	391.215	391.225	391.235	391.250	391.265	391.280	391.295	391.305	391.315	391.320	391.325	391.330
	Top of Beam																								
	Top of Beam to Top of Screed																								
4	Top of Screed	391.125	391.130	391.135	391.145	391.160	391.180	391.200	391.220	391.240	391.255	391.265	391.280	391.290	391.300	391.310	391.325	391.340	391.355	391.370	391.380	391.390	391.395	391.400	391.405
	Top of Beam																								
	Top of Beam to Top of Screed																								
5	Top of Screed	391.050	391.055	391.060	391.070	391.085	391.105	391.125	391.145	391.165	391.180	391.190	391.205	391.215	391.225	391.235	391.250	391.265	391.280	391.295	391.305	391.315	391.320	391.325	391.330
	Top of Beam																								
	Top of Beam to Top of Screed																								
6	Top of Screed	390.900	390.905	390.910	390.920	390.935	390.955	390.975	390.995	391.015	391.030	391.040	391.055	391.065	391.075	391.085	391.100	391.115	391.130	391.145	391.155	391.165	391.170	391.175	391.180
	Top of Beam																								
	Top of Beam to Top of Screed																								
7	Top of Coping Form	390.850	390.855	390.860	390.870	390.885	390.905	390.925	390.945	390.965	390.980	390.995	391.005	391.015	391.025	391.035	391.050	391.065	391.080	391.095	391.105	391.115	391.125	391.125	391.130
	Top of Exterior Beam																								
	Top of Beam to Top of Coping																								



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 DESIGN ENGINEER DATE

DESIGNED: C. O'BRIEN DRAWN: D. SHEETZ  
 CHECKED: B. WRIGHT CHECKED: M. MATEL

INDIANA DEPARTMENT OF TRANSPORTATION

FLOOR DETAILS  
 NORTHBOUND STRUCTURE

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	41-82-4999B
VERTICAL SCALE	DESIGNATION
AS NOTED	0200634
SURVEY BOOK	SHEET
	30 OF 33
CONTRACT	PROJECT
B-33539	0200634

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**BILL OF MATERIALS  
SUPERSTRUCTURE  
SPANS "A" THRU "S"  
NORTHBOUND STRUCTURE**

**REINFORCING BARS**

Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
501a	909	5'-6"	
502a	1818	3'-2"	
503a	1084	20'-0"	
504a	180	5'-2"	
#5	84	24'-6"	
#5	16	24'-3"	
#5	16	22'-6"	
#5	84	20'-9"	
#5	3126	20'-0"	
#5	598	19'-0"	
#5	16	18'-6"	
#5	84	15'-0"	
* #5	7416	3'-6"	
<b>Total #5 (Epoxy Coated)</b>			<b>145300</b>
401a	4840	6'-10"	
#4	2444	20'-0"	
#4	144	17'-9"	
#4	144	11'-3"	
#4	308	10'-6"	
<b>Total #4 (Epoxy Coated)</b>			<b>59695</b>
<b>Total Steel (Epoxy Coated)</b>			<b>204995</b>

**CONCRETE**

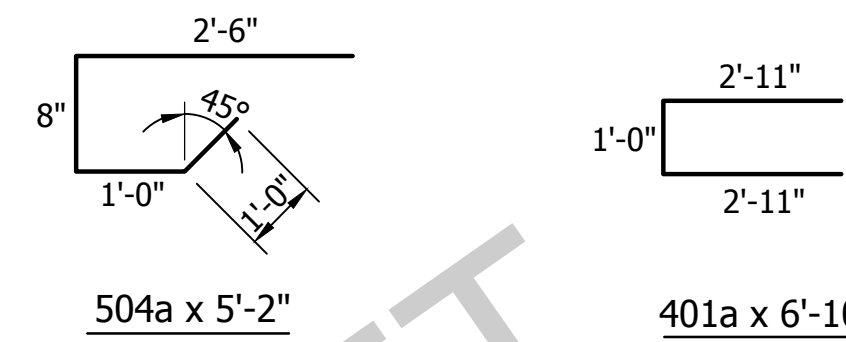
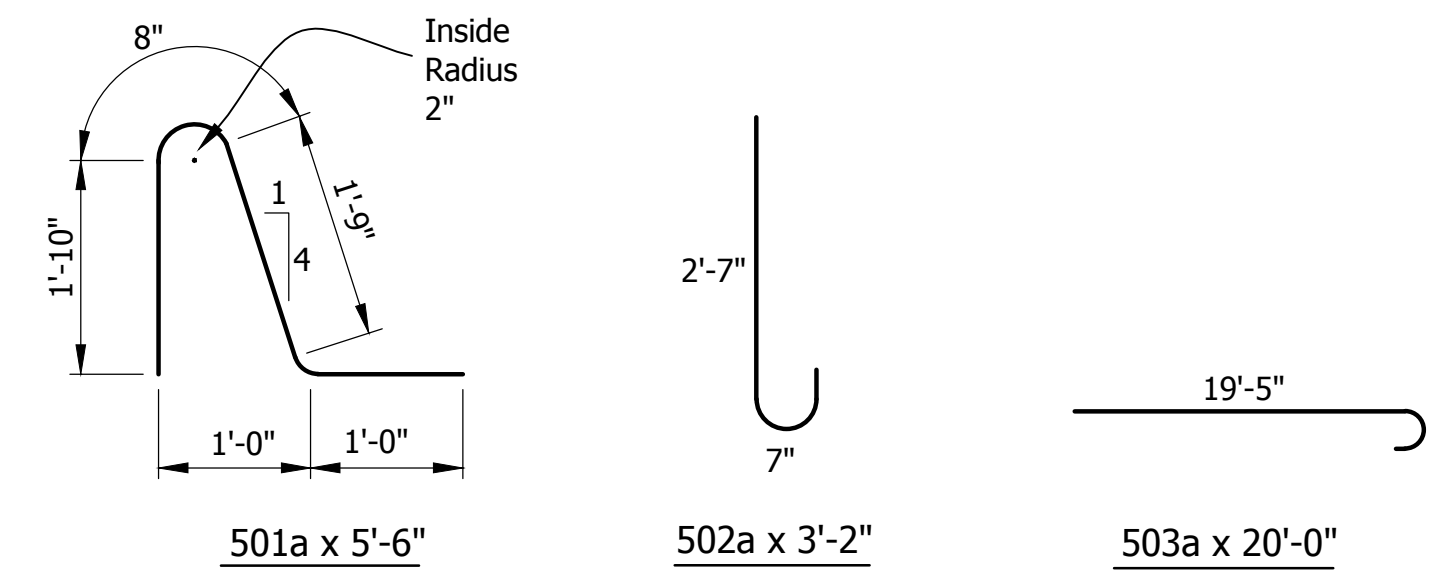
Class "C" in Superstructure	671.3 Cys.
Class "C" in Railing	115.7 Cys.

**MISCELLANEOUS**

Barrier Delineators	32 Each
Threaded Tie Bar Assemblies (#5x3'-0" each way) (Epoxy Coated)	38 Each
Surface Seal	18400 Sft.
Cast Iron Roadway Drains	
Type "OS-D"	26 Each
6" Drain Pipe Casting Extension	26 Each
* Field Drilled Holes in Concrete	7416 Each
Class S-S Expansion Joint	74 Lft.
Bridge Deck Overlay	3654 Sys.
Surface Milling	6184 Sys.
Hydrodemolition	3092 Sys.
Additional Bridge Deck Overlay	17.8 Cys.

⊕ A.S.T.M. A615, Grade 60

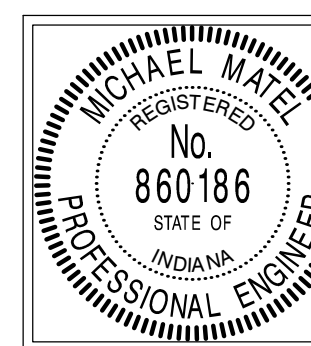
\* Note: As an alternate, clean and straighten exposed existing transverse reinforcing in lieu of field drilled holes and dowels.



**BAR BENDING DETAILS**  
Not to Scale

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RECOMMENDED FOR APPROVAL: *Michael Matel* 10/31/16  
DESIGN ENGINEER DATE

DESIGNED: C. OBRIEN DRAWN: D. SHEETZ  
CHECKED: B. WRIGHT CHECKED: M. MATEL

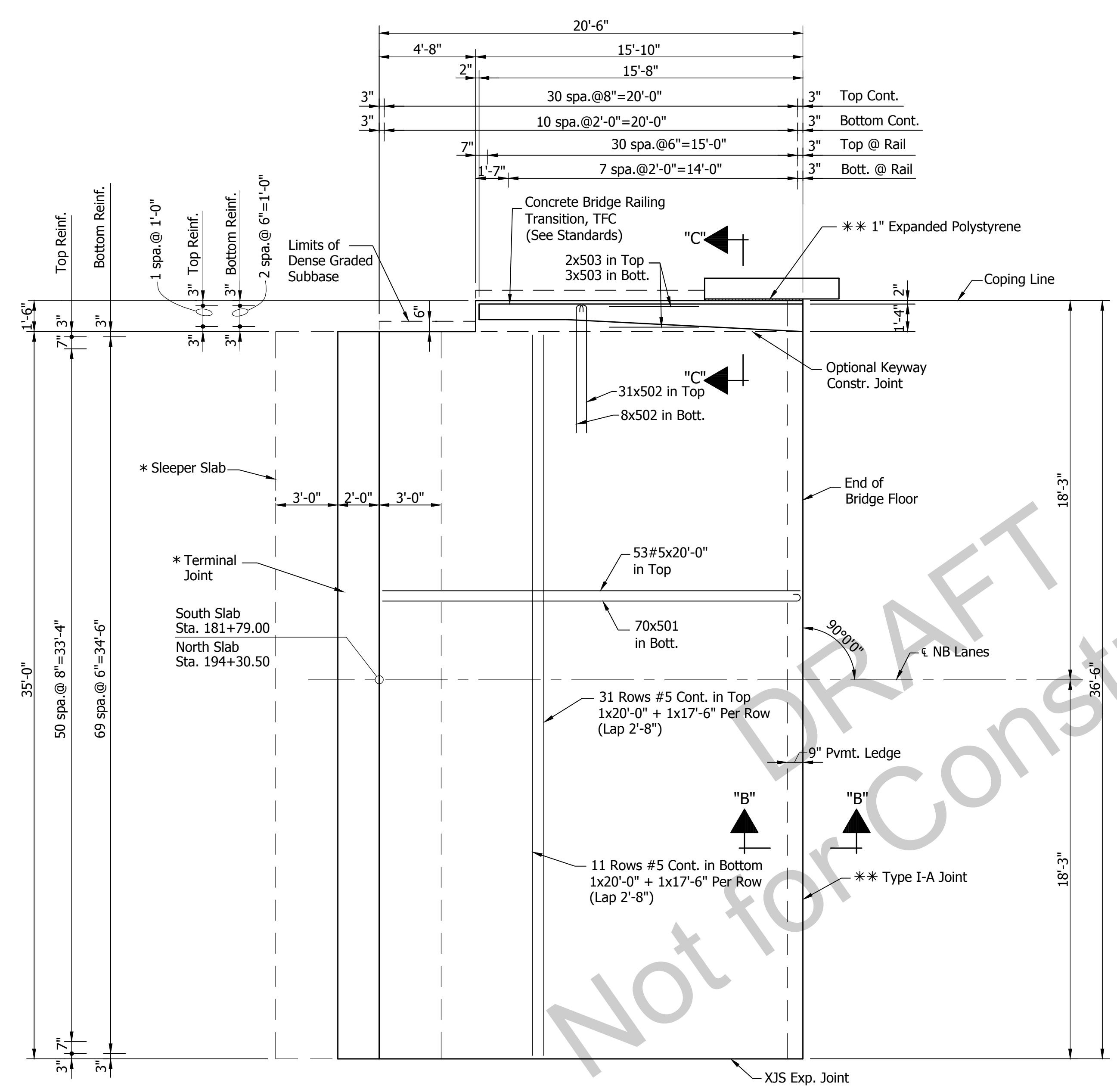
**INDIANA  
DEPARTMENT OF TRANSPORTATION**

**FLOOR DETAILS  
NORTHBOUND STRUCTURE**

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	41-82-4999B
VERTICAL SCALE	DESIGNATION
AS NOTED	0200634
SURVEY BOOK	SHEET
	31 OF 33
CONTRACT	PROJECT
B-33539	0200634

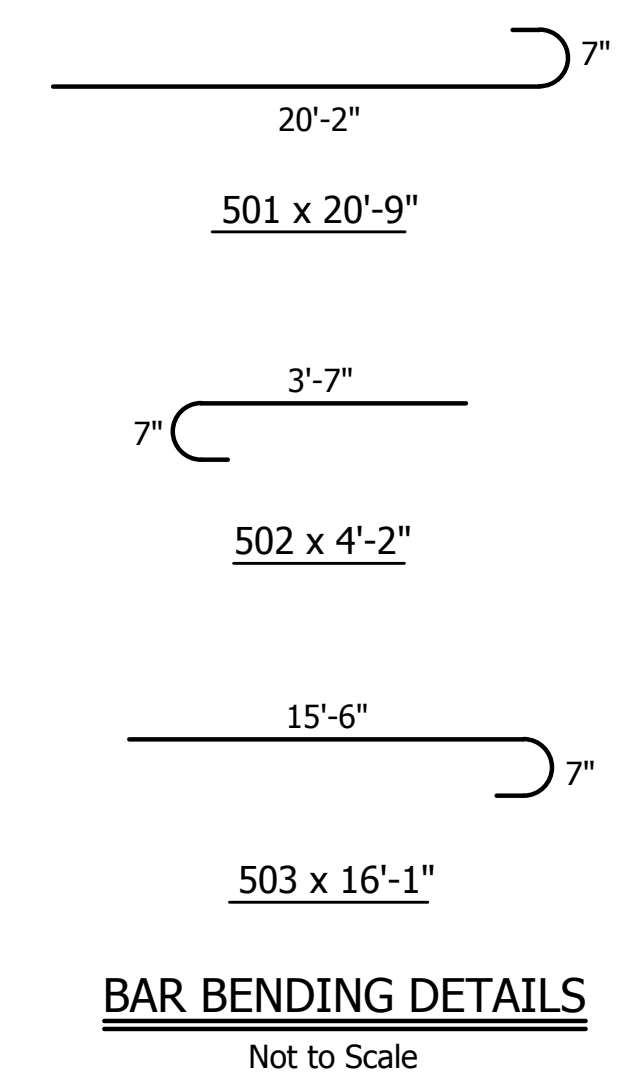
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**PLAN**  
**SOUTH APPROACH SLAB (SHOWN)**  
**NORTH APPROACH SLAB (OPP. HAND)**  
 Scale: 1/4"=1'-0"

\*\* See Special Provisions



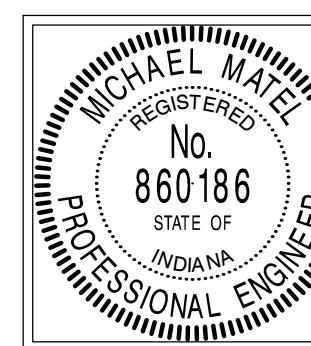
**BILL OF MATERIALS**  
**SOUTH APPR. SLAB**  
**NORTH APPR. SLAB**  
 (SAME UNLESS NOTED)  
**NORTHBOUND STRUCTURE**

REINFORCING BARS			
Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
501	70	20'-9"	
502	39	4'-2"	
503	5	16'-1"	
#5	95	20'-0"	
#5	42	17'-6"	
Total Steel (Epoxy Coated)			4517
CONCRETE			
Reinforced Concrete Bridge Approach (12")			83 Sys.
MISCELLANEOUS			
Dense Graded Subbase			14 Cys.
Concrete Bridge Railing			
Transition, TFC			1 Each
Surface Seal			730 Sft.
Terminal Joint			35 Lft.

- ⊕ A.S.T.M. A615, Grade 60
- ⊖ Does not include Bridge Railing Transition
- \* South Approach Only (See Note)

\* Note: Sleeper Slab and Terminal Joint required at South Approach Slab only if Concrete Pavement Option is used.

**NOTES**  
 See Sheet 12 for Section "B-B".  
 See Sheet 13 for Section "C-C".



RECOMMENDED FOR APPROVAL: *Michael Matel* 10/31/16  
 DESIGN ENGINEER DATE  
 DESIGNED: D. SHEETZ DRAWN: D. SHEETZ  
 CHECKED: M. MATEL CHECKED: M. MATEL

**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**  
**APPROACH SLAB DETAILS**  
**NORTHBOUND STRUCTURE**

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	041-82-4999B
VERTICAL SCALE	DESIGNATION
AS NOTED	0200634
SURVEY BOOK	SHEET
	32 OF 33
CONTRACT	PROJECT
B-33539	0200634

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**STRUCTURE QUANTITIES**

ITEM	CONCRETE				DENSE GRADED SUBBASE	REINF. CONC. BRIDGE APPR. 12"	CONC. RAILING, FC	REINF. BARS (PLAIN)	REINF. BARS (EPOXY COATED)	EST. WEIGHT STR. STEEL	ADDITIONAL BRIDGE DECK OVERLAY	HYDRO-DEMOLITION	FIELD DRILLED HOLES	CAST IRON DRAIN TYPE "OS-D"	6"Ø DRAIN PIPE EXTENSION	BRIDGE DECK OVERLAY	SURFACE MILLING	EST. AREA SURFACE SEAL	CONCRETE BRIDGE RAILING TRANSITION TFC	FIELD DRILL HOLES IN CONCRETE	2"Ø GALV. STEEL PIPE CONDUIT	GEOTEXTILE	AGGREGATE FOR END BENT BACKFILL	THREADED TIE BAR ASSEMBLIES (EPOXY COATED)	6"Ø END BENT DRAIN PIPE	BARRIER DELINEATORS	*TERMINAL JOINT	ELASTOMERIC BEARING ASSEMBLY	CLASS S-S EXPANSION JOINT	
	CLASS C IN SUPERSTR.	CLASS C IN SUBSTR.	CLASS B IN FOOTING	CLASS A IN SUBSTR.																										CYS.
<b>SUPERSTRUCTURE</b>																														
Spans "A" thru "S"	671.3						115.7		204995		17.8	3092		26	26	3654	6184	18400		7416				38		32				74
<b>SUBSTRUCTURE</b>																														
Bent No.1			13.2						4373											34		44	20		56					
Pier No.2			12.9					3778																						
Pier No.3			1.0					126												24									4	
Pier No.7			15.4						4902																				8	
Pier No.12			15.4						4902																				8	
Pier No.16			1.0					126												24									4	
Pier No.17			12.9					3778																						
Bent No.18			13.2						4373											34		44	20		56					
<b>APPROACH SLABS</b>																														
South					14	83			4517									730	1										35	
North					14	83			4517									730	1											
<b>BARRIER RAIL TRANSITIONS</b>																														
South									1102																					
North									1102																					
<b>TOTALS</b>	<b>671.3</b>			<b>85.0</b>	<b>28</b>	<b>166</b>	<b>115.7</b>	<b>7808</b>	<b>234783</b>		<b>17.8</b>	<b>3092</b>		<b>26</b>	<b>26</b>	<b>3654</b>	<b>6184</b>	<b>19860</b>	<b>2</b>	<b>7532</b>		<b>88</b>	<b>40</b>	<b>38</b>	<b>112</b>	<b>32</b>	<b>35</b>	<b>24</b>	<b>74</b>	

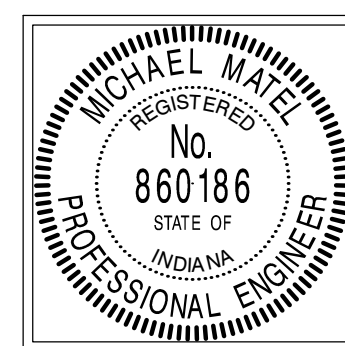
⊕ A.S.T.M. A615, Grade 60

\*Note: Sleeper Slab and Terminal Joint required at South Approach Slab only if Concrete Pavement Option is used.

⊕ Note: As an alternate, clean and straighten exposed existing transverse reinforcing in lieu of field drilled holes and dowels.

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RECOMMENDED FOR APPROVAL: *M. Matel* 10/31/16  
DESIGN ENGINEER DATE  
DESIGNED: D. SHEETZ DRAWN: D. SHEETZ  
CHECKED: M. MATEL CHECKED: M. MATEL

**INDIANA DEPARTMENT OF TRANSPORTATION**  
**BRIDGE SUMMARY**  
**NORTHBOUND STRUCTURE**

HORIZONTAL SCALE NONE	BRIDGE FILE 041-82-4999B
VERTICAL SCALE NONE	DESIGNATION 0200634
SURVEY BOOK	SHEET 33 OF 33
CONTRACT B-33539	PROJECT 0200634

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