

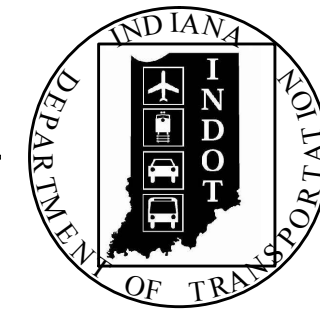
PROJECT	DESIGNATION
0200633	0200633
CONTRACT	BRIDGE FILE
B-33539	041-82-0877E

SOUTHBOUND STRUCTURE				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
041-82-0877E	PRESTRESSED CONCRETE I-BEAM BRIDGE	1@42'-9", 1@43'-0", 2@42'-5", 1@43'-0", 2@42'-5", 1@43'-0" AND 1@42'-9" NO SKEW	OHIO RIVER OVERFLOW	± STRUCTURE STA. 160+18.10

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

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

INDIANA DEPARTMENT OF TRANSPORTATION



BRIDGE REHABILITATION PLANS FOR SPANS OVER 20 FEET U.S. 41 SB OVER OHIO RIVER OVERFLOW PROJECT NO. 0200633

DECK RECONSTRUCTION ON STRUCTURE: 041-82-0877E, U.S. 41 SB OVER OHIO RIVER OVERFLOW LOCATED APPROXIMATELY 0.82 MILES SOUTH OF THE U.S.41 AND I-69 INTERCHANGE, IN SECTIONS 8 AND 9, TOWNSHIP 7 SOUTH, RANGE 10 WEST, VANDERBURGH COUNTY, INDIANA.

TRAFFIC DATA	
A.A.D.T. (2013)	19989 V.P.D.
A.A.D.T. (2017)	21260 V.P.D.
A.A.D.T. (2037)	26720 V.P.D.
DIRECTIONAL DISTRIBUTION	100 %
TRUCKS	9 % A.A.D.T.

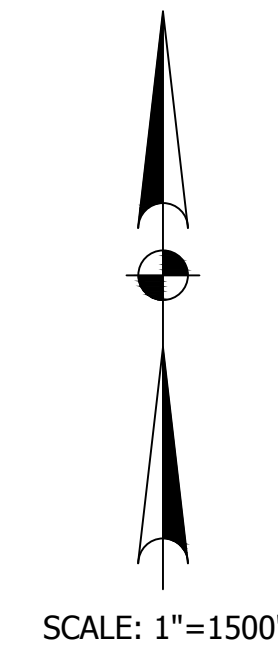
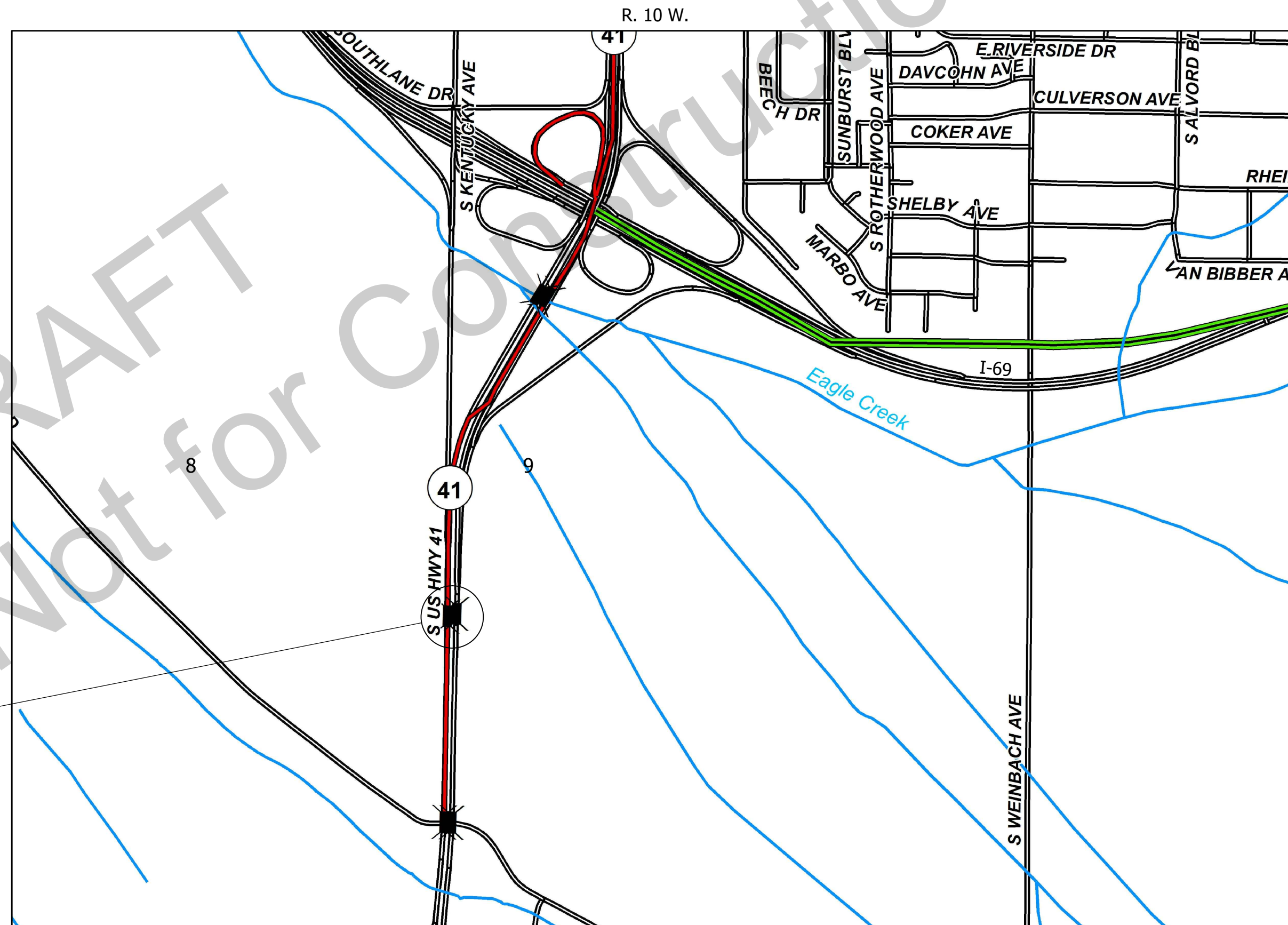
DESIGN DATA	
DESIGN SPEED	50 M.P.H.
POSTED SPEED	50 M.P.H.
PROJECT DESIGN CRITERIA	3R NON-FREEWAY
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL
RURAL/URBAN	URBAN
TERRAIN	LEVEL
ACCESS CONTROL	NONE

PROJECT LOCATION SHOWN BY
VANDERBURGH COUNTY
VINCENNES DISTRICT

LATITUDE: 37°55'47" N. & LONGITUDE: 87°32'54" W.

H.U.C. = 05140202010020

R.P. 0+43



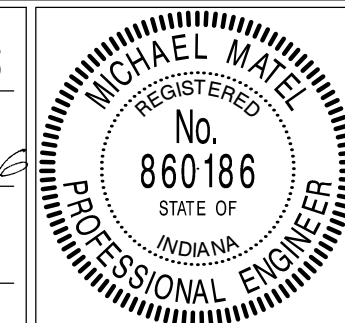
STRUCTURE: 041-82-0877E

VICINITY MAP
VANDERBURGH COUNTY

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

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

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



BRIDGE FILE	041-82-0877E
DESIGNATION	0200633
SURVEY BOOK	SHEET 1 OF 20
CONTRACT	PROJECT B-33539 0200633

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BFS NO. 5605

UTILITIES

COMMUNICATIONS: AT&T
134 NW Sixth Street
Evansville, Indiana 47708
ATTN: Marc Clark
P. (812) 464-6050
E. mc3429@att.com

AT&T
134 NW Sixth Street
Evansville, Indiana 47708
ATTN: Andy Folz
P. (812) 464-6055
E. af1896@att.com

WINDSTREAM COMMUNICATIONS
5020 Smythe Drive
Evansville, Indiana 47715
ATTN: Daniel Leskinen
E. Daniel.leskinen@windstream.com
P. (812) 759-2833
P. (812) 455-9558 (CELL)

TIME WARNER CABLE
1900 N. Fares Avenue
Evansville, Indiana 47711
ATTN: Daryl Hulsey
E. daryl.hulsey@twcable.com
P. (812) 253-2755
P. (812) 305-8348 (CELL)

ELECTRIC: KENERGY CORPORATION
ATTN: Kyle Hart
P. (270) 831-4602
E. khart@kenergycorp.com

VECTREN
Jody Chapman
1 North Main Street
Evansville, Indiana 47711
E. jwchapman@vectren.com

INDOT: SIGNALS & LIGHTING
ATTN: Robert Horton
E. rhorton@indot.in.gov
P. (812) 699-0643
P. (812) 698-4743 (CELL)

ITS TECHNOLOGY
ATTN: Konstantin Veygman
E. kveygman@indot.in.gov
P. (317) 899-8606

WEIGHT STATION: JACK MANN SCALES, INC.
2073 Mercer Road
Lexington, Kentucky 40511
ATTN: Larry Stagner
E. larry@jackmannscales.com
P. (859) 233-0322

KYTC
ATTN: David Cornett
E. davidp.cornett@ky.gov
P. (502) 564-4556

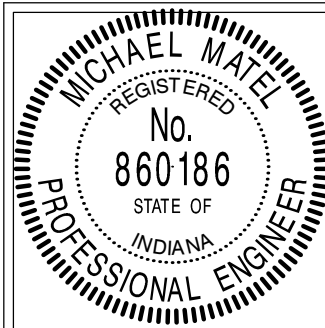
REVISIONS		
SHEET NO.	DATE	REVISED

INDEX

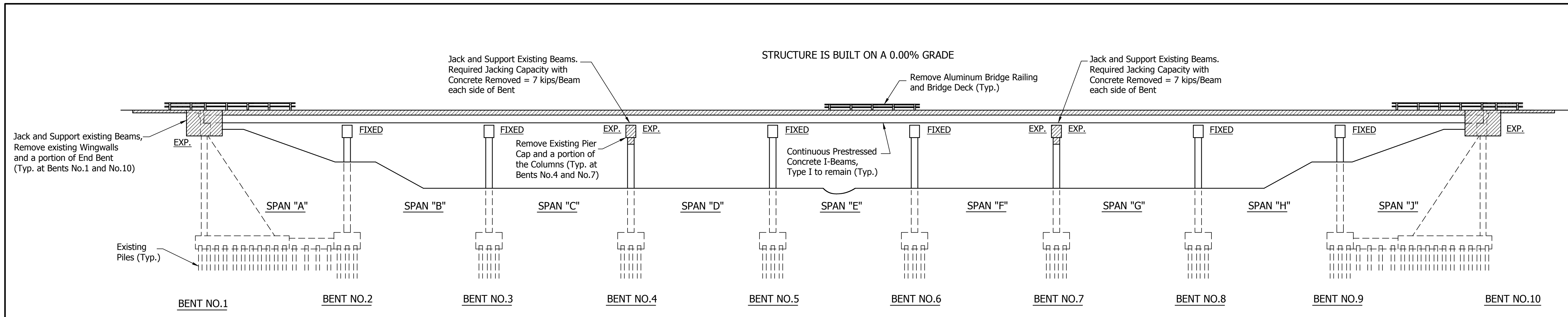
SHEET NO.	DESIGNATION
1	TITLE SHEET
2	INDEX SHEET
3	GENERAL PLAN EXISTING STRUCTURE
4	GENERAL PLAN PROPOSED STRUCTURE
5	TYPICAL SECTIONS
6	GENERAL NOTES
7-10	BENTS NO.1 AND NO.10 DETAILS-SOUTHBOUND STRUCTURE
11-12	BENTS NO.4 OR NO.7 DETAILS-SOUTHBOUND STRUCTURE
13-18	FLOOR DETAILS-SOUTHBOUND STRUCTURE
19	APPROACH SLAB DETAILS-SOUTHBOUND STRUCTURE
20	BRIDGE SUMMARY-SOUTHBOUND STRUCTURE

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

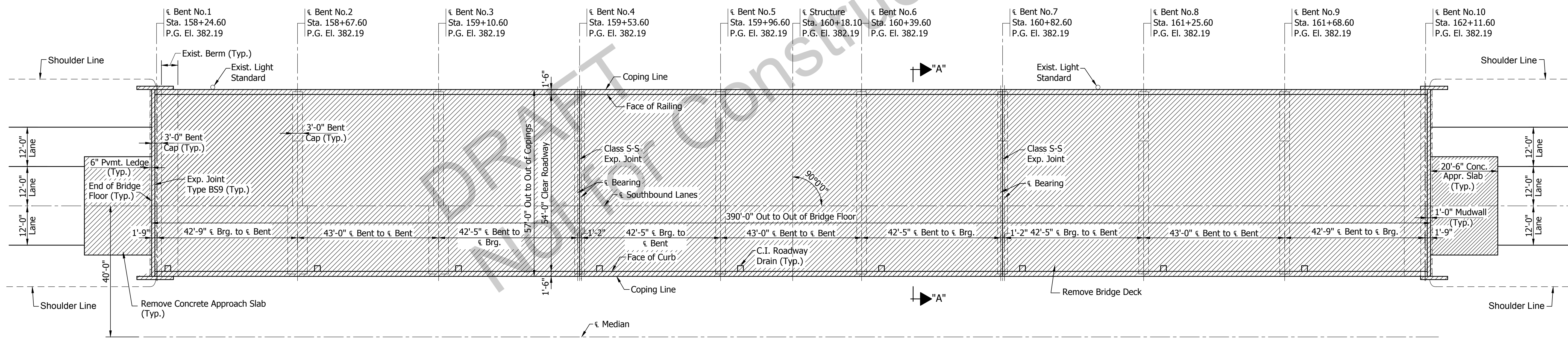
DRAFT
Not for Construction

	RECOMMENDED FOR APPROVAL: <i>Michael Matel</i> 10/31/16 DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION INDEX SHEET	HORIZONTAL SCALE NONE	BRIDGE FILE 041-82-0877E
	DESIGNED: D. SHEETZ DRAWN: D. SHEETZ		VERTICAL SCALE NONE	DESIGNATION 0200633
	CHECKED: M. MATEL CHECKED: M. MATEL		SURVEY BOOK	SHEET 2 OF 20
			CONTRACT B-33539	PROJECT 0200633

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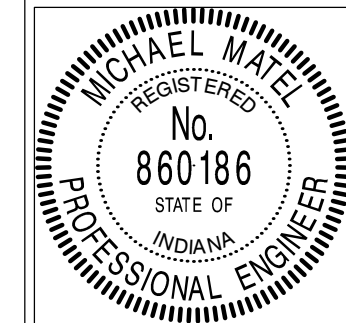
Note: Hatched Areas indicate Portions to be Removed.



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

NOTES
 See Sheet 4 for Proposed Structure General Plan.
 See Sheet 5 for Section "A-A".
 See Sheet 6 for General Notes and Design Data.

CONTINUOUS PRESTRESSED CONCRETE I-BEAM BRIDGE
 9 SPANS: 1 AT 42'-9", 1 AT 43'-0", 2 AT 42'-5", 1 AT 43'-0", 2 AT 42'-5",
 1 AT 43'-0" AND 1 AT 42'-9", NO SKEW, 54'-0" CLEAR ROADWAY
 ON U.S.41 SB OVER OHIO RIVER OVERFLOW

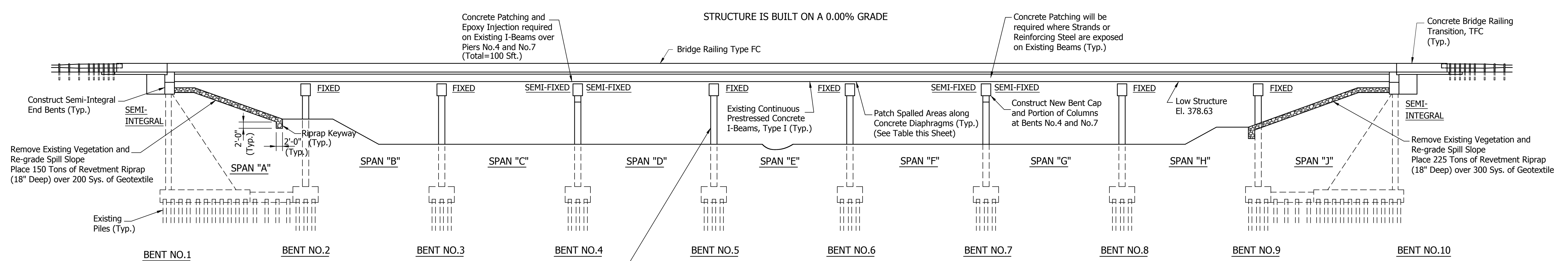


RECOMMENDED FOR APPROVAL: *[Signature]* 10/31/16
 DESIGN ENGINEER DATE
 DESIGNED: D. SHEETZ DRAWN: D. SHEETZ
 CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA
DEPARTMENT OF TRANSPORTATION
GENERAL PLAN
EXISTING STRUCTURE

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	041-82-0877E
VERTICAL SCALE	DESIGNATION
AS NOTED	0200633
SURVEY BOOK	SHEET
	3 OF 20
CONTRACT	PROJECT
B-33539	0200633

5605



PATCHING CONCRETE STRUCTURE (SB)

LOCATION	DIAPHRAGM QUANTITY (SFT.)	PIER QUANTITY (SFT.)
BENT NO.2	10	5
BENT NO.3	30	85
BENT NO.4	*	50
BENT NO.5	20	50
BENT NO.6	5	40
BENT NO.7	*	75
BENT NO.8	55	60
BENT NO.9	30	35

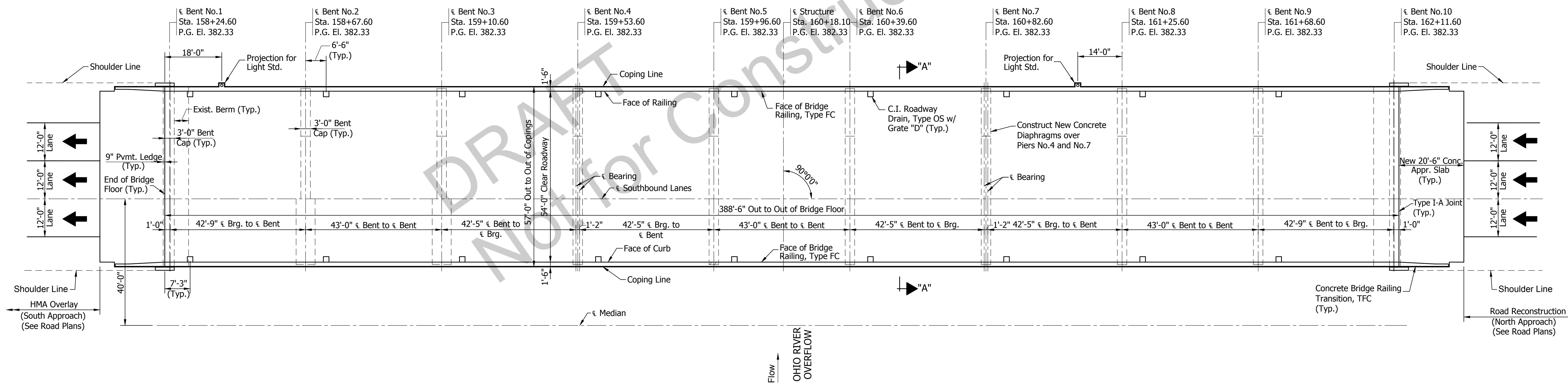
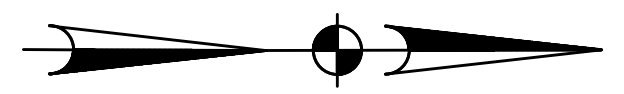
* Existing Bent Cap and Diaphragm to be Removed.

GALVANIC ANODES FOR CONCRETE PATCHING

LOCATION	QUANTITY
DIAPHRAGMS	110 EACH
PIERS	295 EACH

ELEVATION SOUTHBOUND STRUCTURE
Scale: 1/16"=1'-0"

Note: Install 7 Snowplowable Raised Pavement Markers (Field Verify)

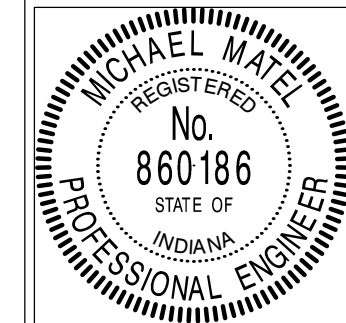


NOTE: SEE ROAD PLANS FOR REMOVAL OF EXISTING GUARDRAIL, PROPOSED GUARDRAIL, PAVEMENT MARKINGS, EROSION CONTROL MEASURES AND MAINTENANCE OF TRAFFIC DETAILS.

PLAN SOUTHBOUND STRUCTURE
Scale: 1/16"=1'-0"

NOTES
See Sheet 3 for Existing Structure General Plan.
See Sheet 5 for Section "A-A".
See Sheet 6 for General Notes and Design Data.

CONTINUOUS PRESTRESSED CONCRETE I-BEAM BRIDGE
9 SPANS: 1 AT 42'-9", 1 AT 43'-0", 2 AT 42'-5", 1 AT 43'-0", 2 AT 42'-5",
1 AT 43'-0" AND 1 AT 42'-9", NO SKEW, 54'-0" CLEAR ROADWAY
ON U.S.41 SB OVER OHIO RIVER OVERFLOW



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

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

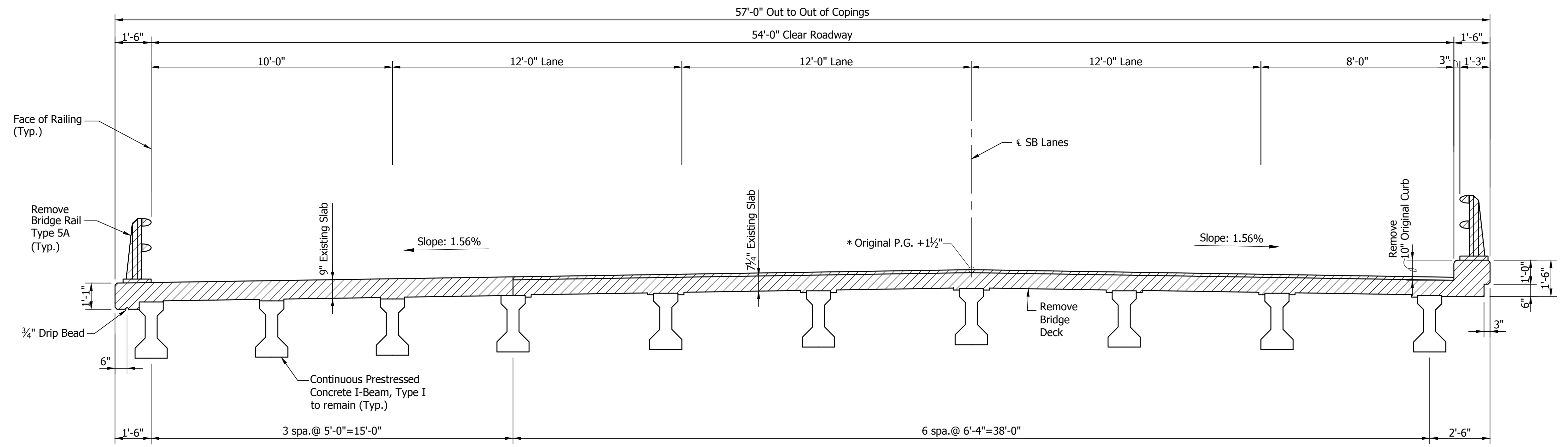
INDIANA DEPARTMENT OF TRANSPORTATION
GENERAL PLAN PROPOSED STRUCTURE

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	041-82-0877E
VERTICAL SCALE	DESIGNATION
AS NOTED	0200633
SURVEY BOOK	SHEET
	4 OF 20
CONTRACT	PROJECT
B-33539	0200633

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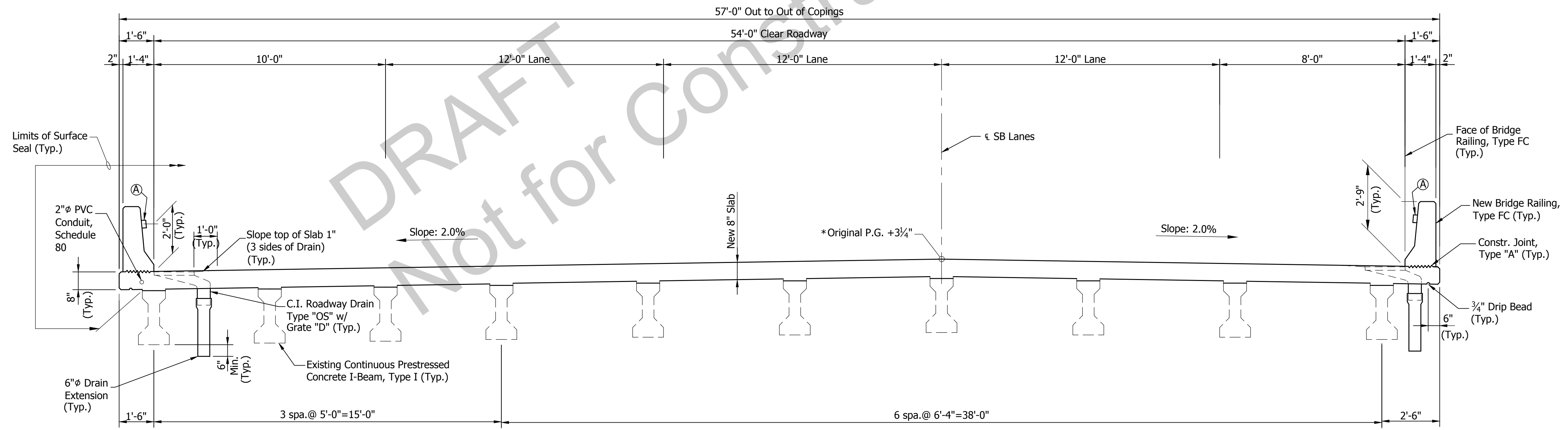
EXISTING SECTION "A-A"
SOUTHBOUND STRUCTURE

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

Note: Hatched Areas indicate Portions to be Removed.

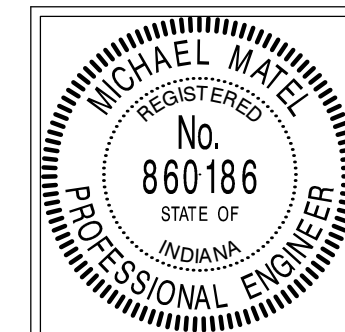
(A) Barrier Delineators @ 40'-0" Max. Spacing

* Original Plans dated December 13, 1968



PROPOSED SECTION "A-A"
SOUTHBOUND STRUCTURE

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



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

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

HORIZONTAL SCALE AS NOTED	BRIDGE FILE 041-82-0877E
VERTICAL SCALE AS NOTED	DESIGNATION 0200633
SURVEY BOOK	SHEET 5 OF 20
CONTRACT B-33539	PROJECT 0200633

BFS NO. 5605

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GENERAL NOTES

Plans for the existing structure are on file with the Indiana Department of Transportation as Structure No. 41-A-877 and Bridge Files: 41-A-877A, 41-82-877B, 41-82-877C and 41-82-877D 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 unless otherwise shown.

Reinforcing bars covering shall be 2½" in top of approach slabs.

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 portions of the project not noted above.

Chamfer exposed corners of concrete 1" unless noted.

Surface seal shall be required on various areas of the structure as shown. Estimated quantity = 30700 Sft. (Does not include Concrete Barrier Railing Transitions).

Excavation required for placement of Aggregate for End Bent Backfill at the bridge end bents beyond the limits of Foundation Excavation Unclassified shall not be paid for directly but shall be included in the cost of the Aggregate for End Bent Backfill.

DESIGN DATA

MATERIAL DESIGN STRENGTHS:

Class "C" Concrete F'c = 4,000 p.s.i.
 Class "A" Concrete F'c = 3,500 p.s.i.
 Reinforcing Bars (Grade 60) Fy = 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 deck forms. Slab design with a 1/2" wearing surface and a structural depth of 7-1/2".

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 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 centered with the finishing machine.

FINISHING MACHINE LOAD: 4500 lbs. distributed over 10 feet along the coping.

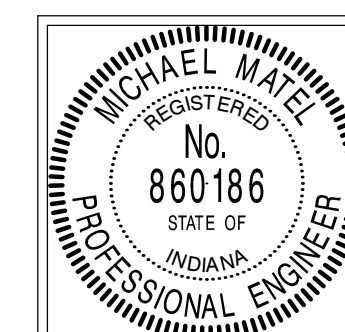
WIND LOAD: Designed for 70 mph horizontal wind loading in accordance with LRFD 3.8.1.

SEISMIC DATA

AASHTO LRFD Bridge Design Specifications, 6th Edition, 2012.
 Seismic Zone 2
 S_{D1} = 0.257
 Site Class D

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

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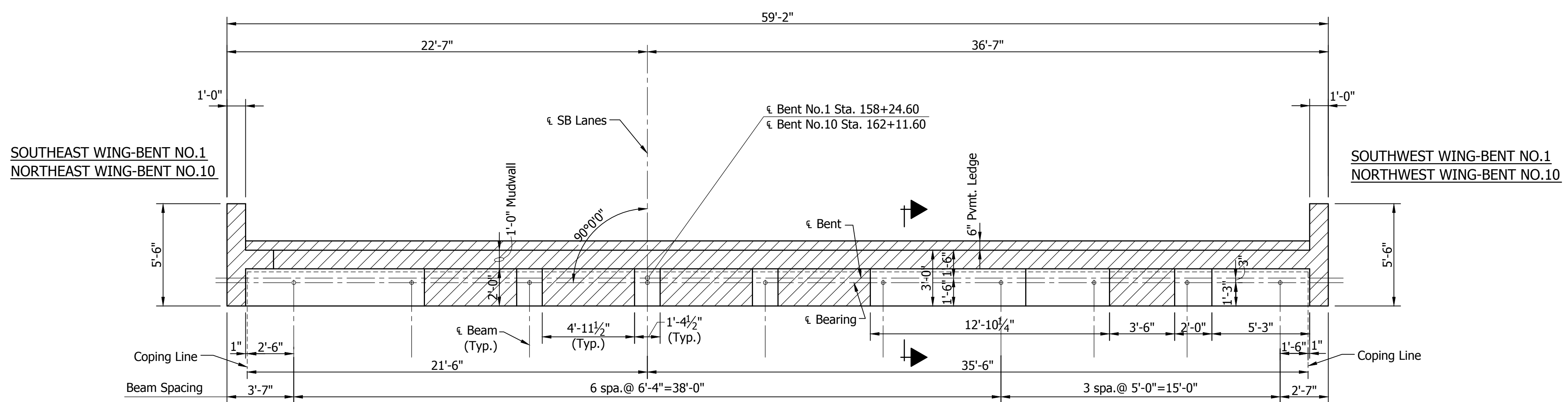
RECOMMENDED FOR APPROVAL:	<i>Michael Matel</i>	10/31/16
	DESIGN ENGINEER	DATE
DESIGNED:	D. SHEETZ	DRAWN: D. SHEETZ
CHECKED:	M. MATEL	CHECKED: M. MATEL

INDIANA DEPARTMENT OF TRANSPORTATION	
GENERAL NOTES	

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	041-82-0877E
VERTICAL SCALE	DESIGNATION
AS NOTED	0200633
SURVEY BOOK	SHEET
	6 OF 20
CONTRACT	PROJECT
B-33539	0200633

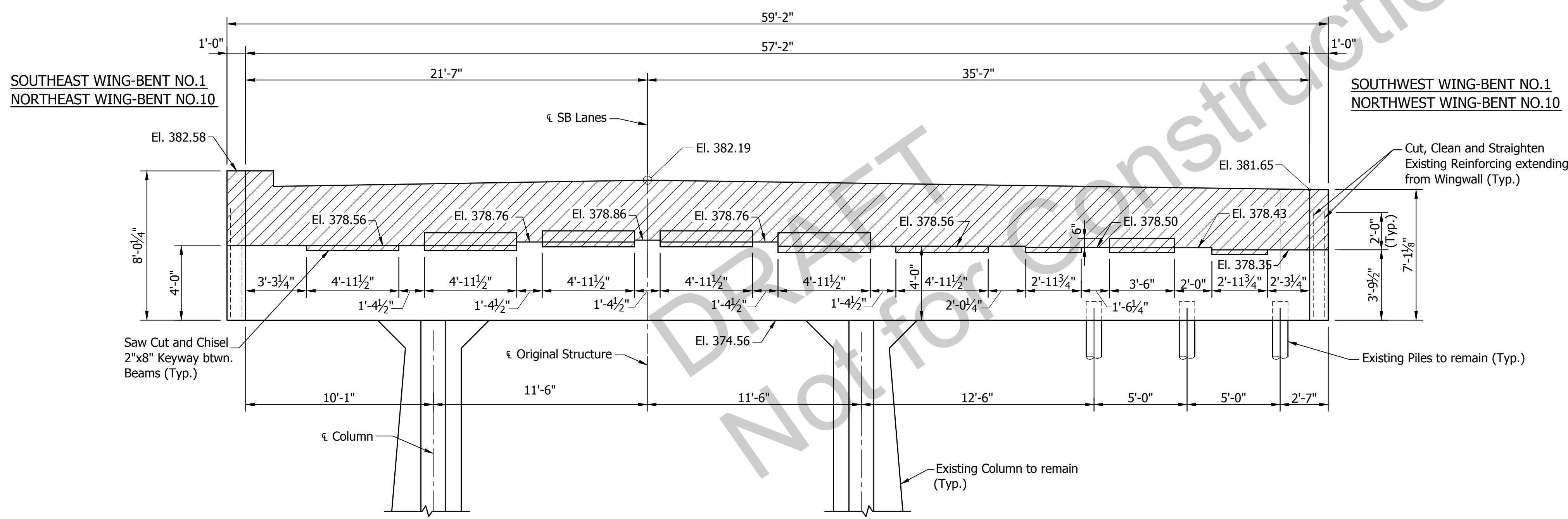
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PLAN

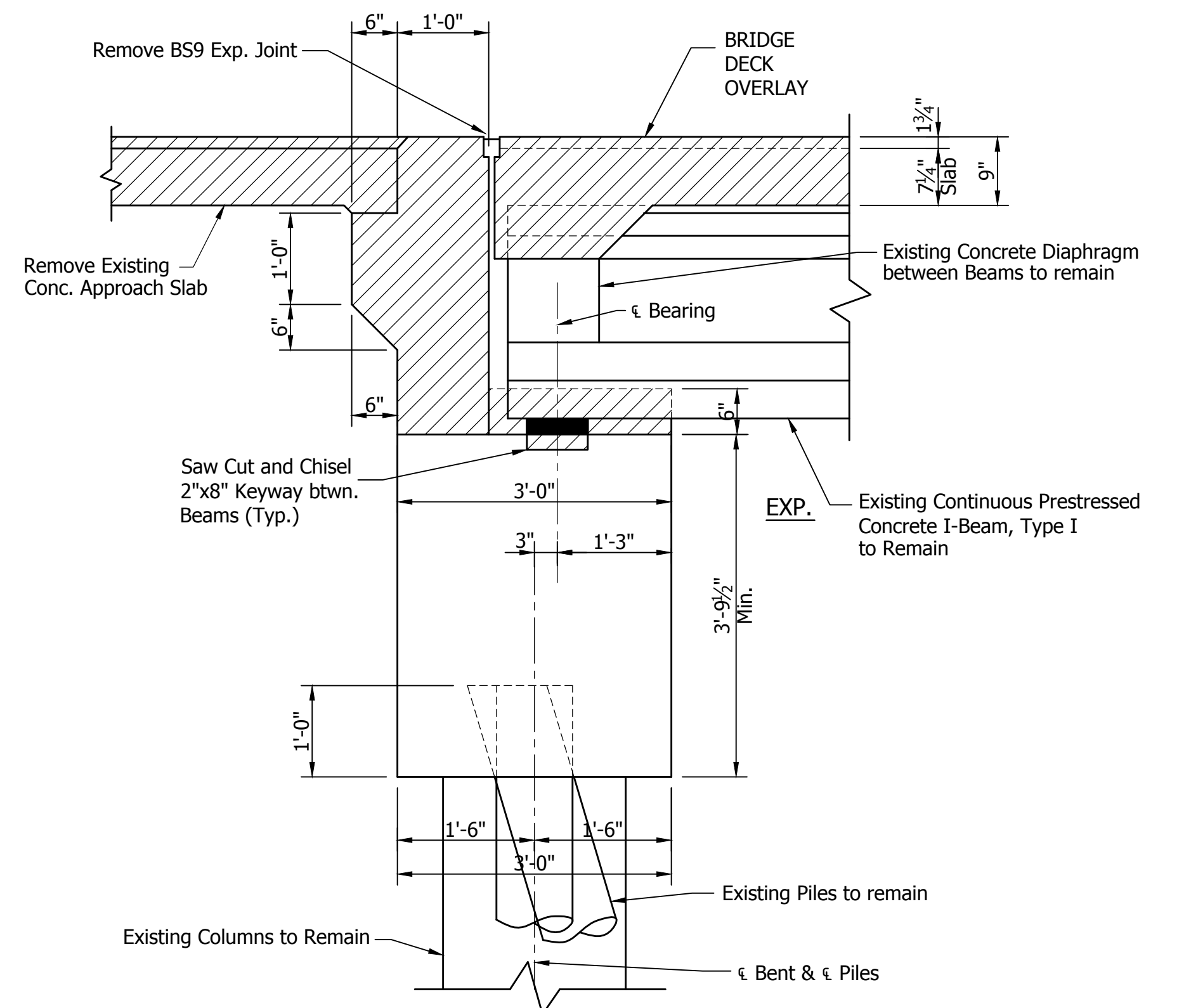
Note: Hatched Areas indicate portions to be Removed.



ELEVATION

BENT NO.1 (SHOWN)
BENT NO.10 (OPP. HAND)

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



SECTION AT BENTS NO.1 OR NO.10 (SHOWING REMOVALS)

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

NOTE
See Sheets 8 and 9 for Reconstruction Details.



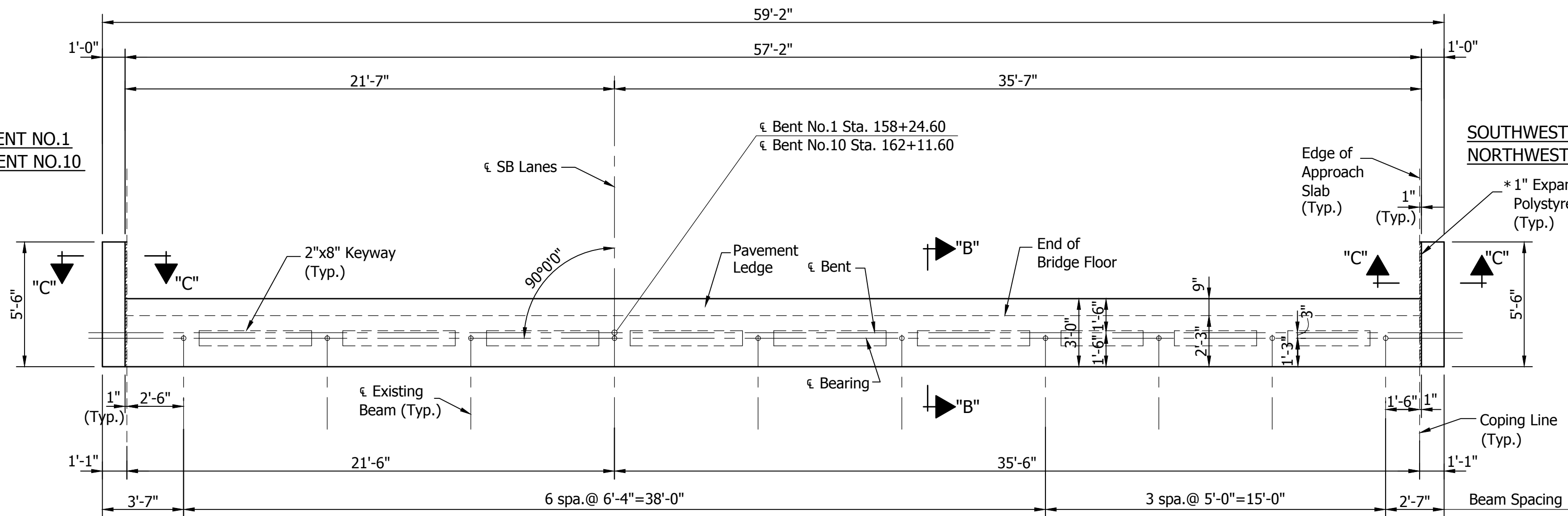
RECOMMENDED FOR APPROVAL: *Michael Matel* 10/31/16
 DESIGN ENGINEER DATE
 DESIGNED: D. SHEETZ DRAWN: D. SHEETZ
 CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA
 DEPARTMENT OF TRANSPORTATION
 BENTS NO.1 OR NO.10 DETAILS
 SOUTHBOUND STRUCTURE

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	041-82-0877E
VERTICAL SCALE	DESIGNATION
AS NOTED	0200633
SURVEY BOOK	SHEET
	7 OF 20
CONTRACT	PROJECT
B-33539	0200633

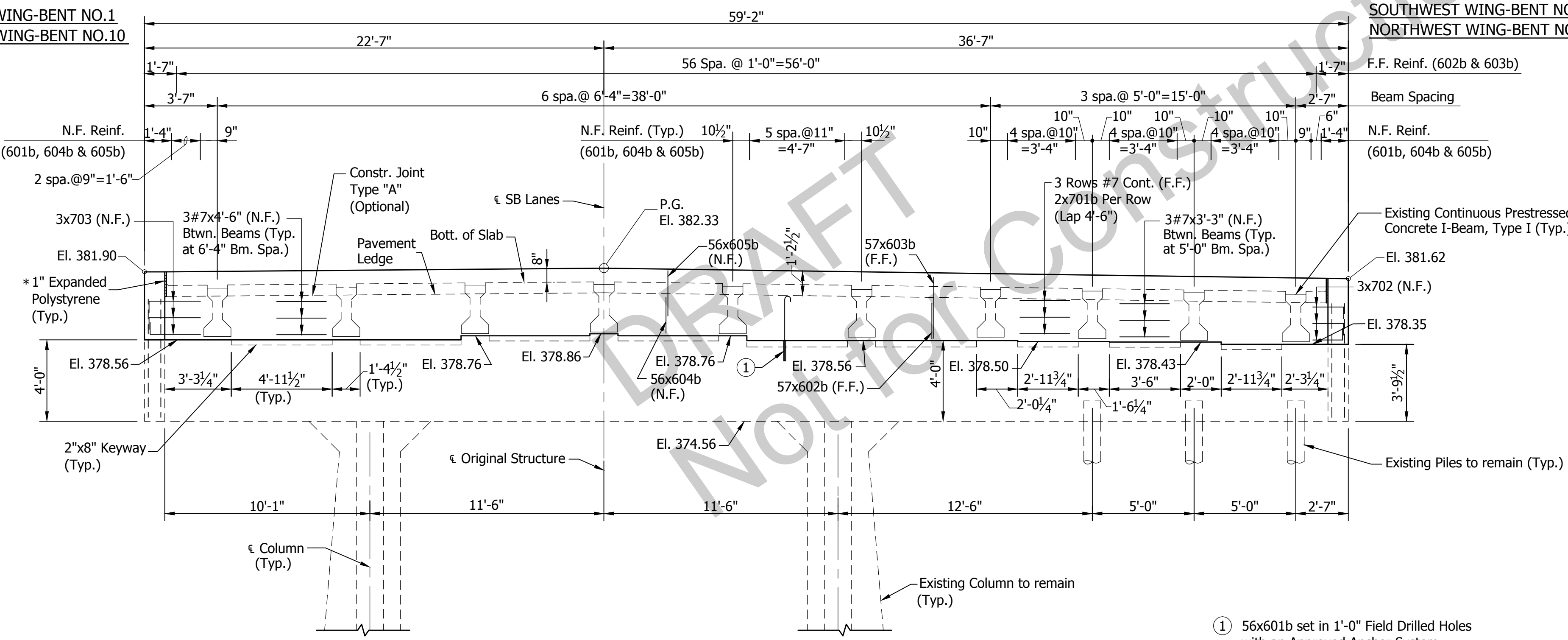
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SOUTHEAST WING-BENT NO.1
NORTHEAST WING-BENT NO.10



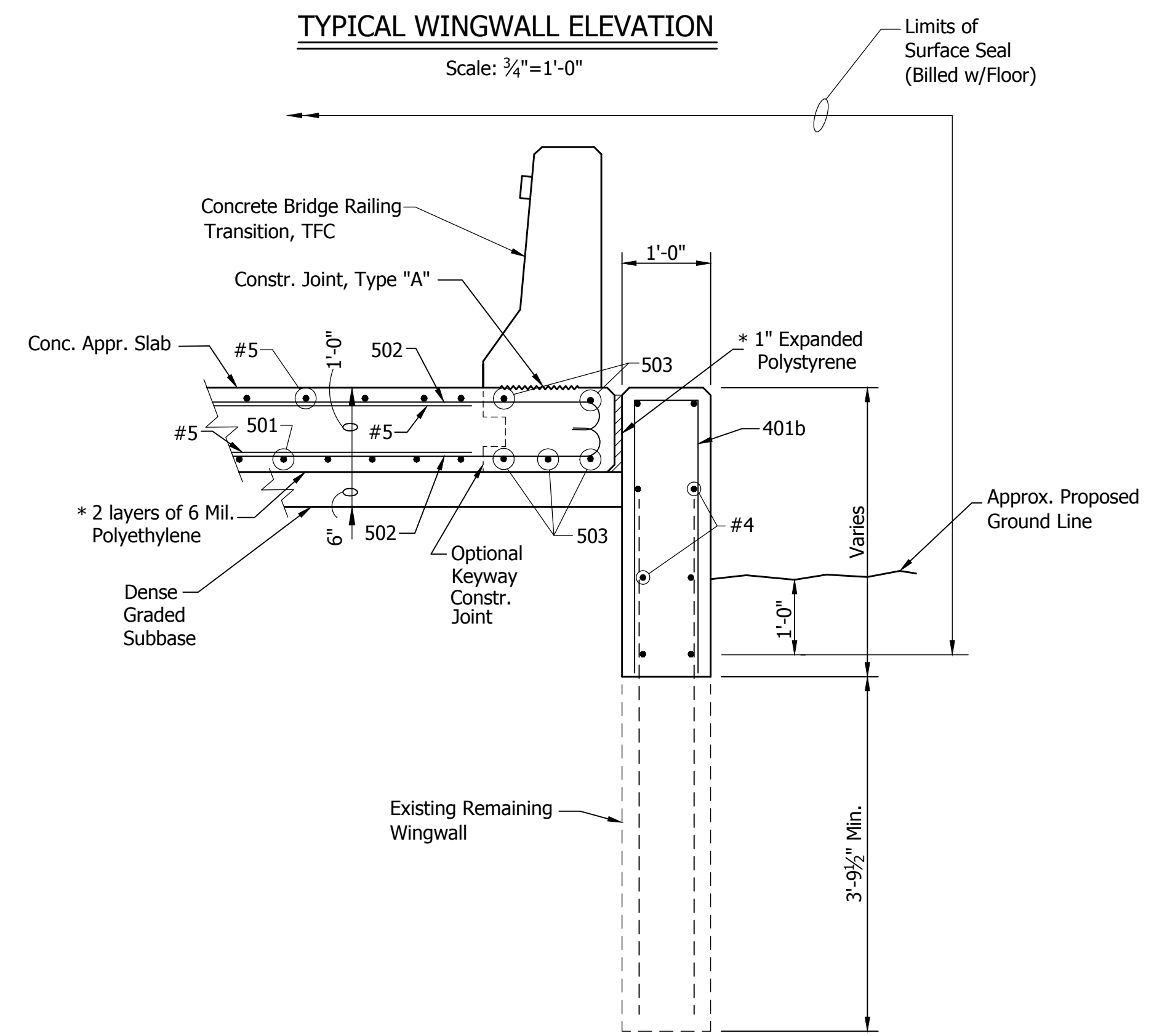
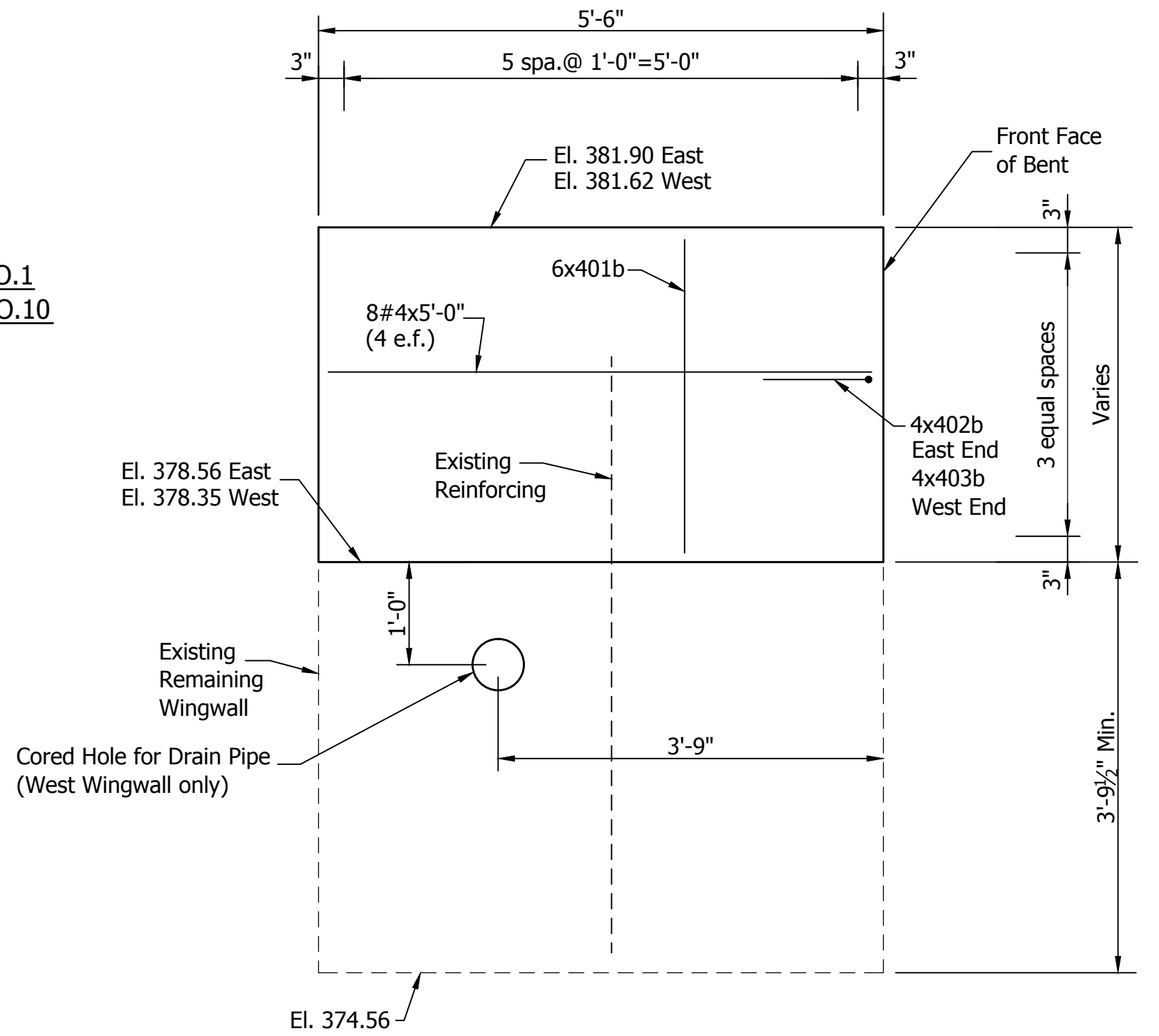
* See Special Provisions

SOUTHEAST WING-BENT NO.1
NORTHEAST WING-BENT NO.10



BENT NO.1 (SHOWN)
BENT NO.10 (OPP. HAND)
Scale: 3/4"=1'-0"

① 56x601b set in 1'-0" Field Drilled Holes with an Approved Anchor System (Min. Pullout = 26500 Lbs.)



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

NOTES
 See Sheet 7 for Removal Details.
 See Sheet 9 for Section "B-B".
 See Sheet 10 for Bar Bending Details and Bill of Materials.

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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

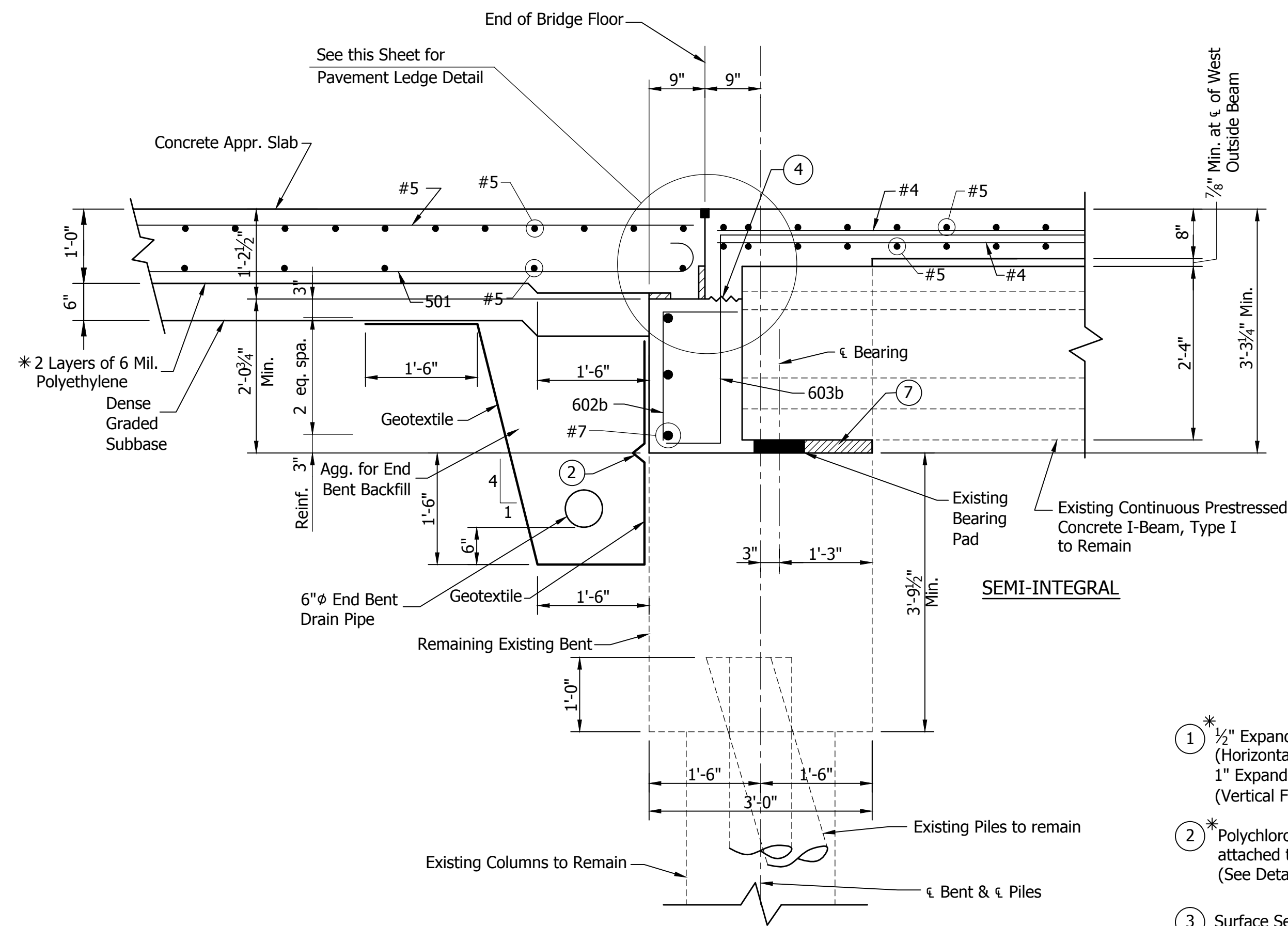
MICHAEL MATEL
 REGISTERED PROFESSIONAL ENGINEER
 No. 860186
 STATE OF INDIANA

INDIANA DEPARTMENT OF TRANSPORTATION
 BENTS NO.1 OR NO.10 DETAILS
 SOUTHBOUND STRUCTURE

HORIZONTAL SCALE AS NOTED	BRIDGE FILE 041-82-0877E
VERTICAL SCALE AS NOTED	DESIGNATION 0200633
SURVEY BOOK	SHEET 8 OF 20
CONTRACT B-33539	PROJECT 0200633

BFS NO. 5605

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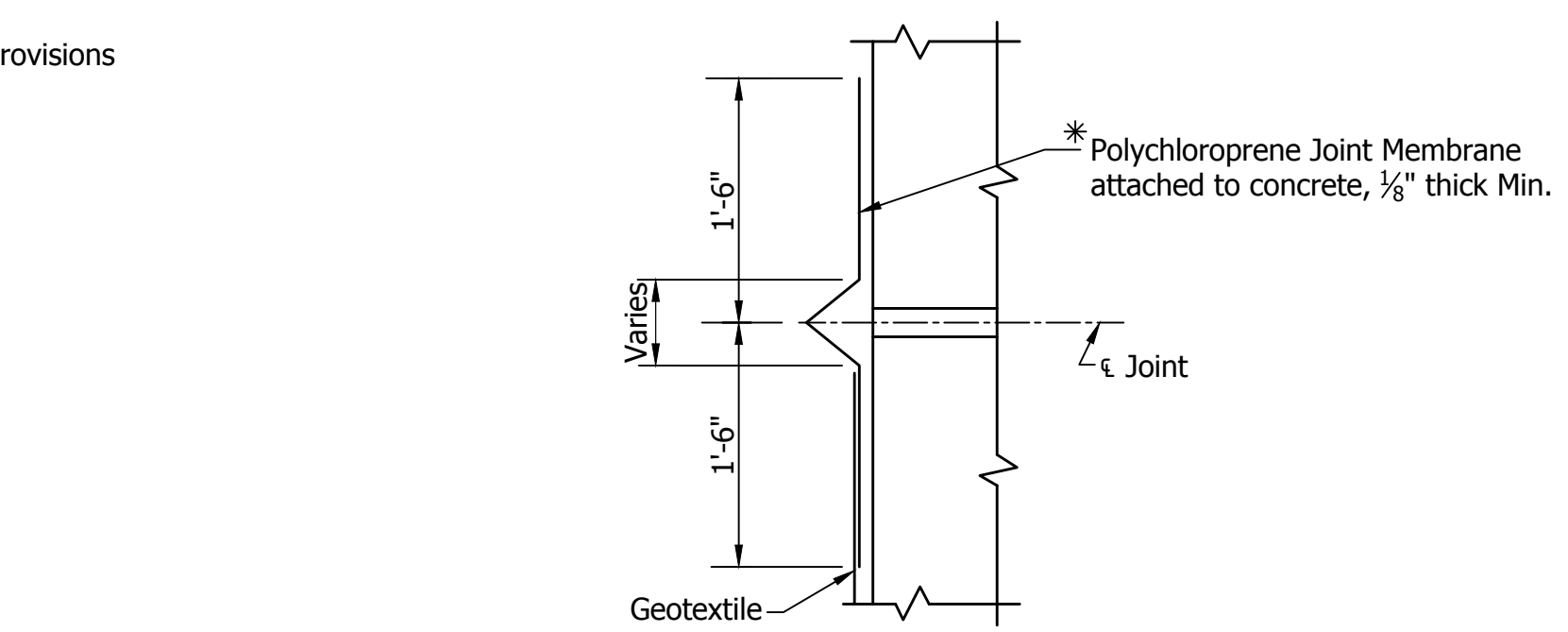


SECTION "B-B"
AT BEAMS
Scale: 3/4"=1'-0"

Note:
Vertical Dimensions are
at ϵ of Bent at ϵ of
outside Beam and do not
include Beam Camber.

- ① 1/2" Expanded Polystyrene (Horizontal Face)
1" Expanded Polystyrene (Vertical Face)
- ② Polychloroprene Joint Membrane attached to concrete. (See Detail this Sheet)
- ③ Surface Seal required on face of Bent and exposed face of Wingwall (Billed with Floor)
- ④ Optional Constr. Joint, Type "A"
- ⑤ 601b set in 1'-0" Field Drilled Holes with an Approved Anchor System (Min. Pullout = 26500 Lbs.)
- ⑥ PVC Pipe Sleeve, 4" Dia. Schedule 40 Top of Sleeve to be Sealed before Concrete is Poured.
- ⑦ Expanded Polystyrene cut to clear Bearing Pad by 1/2".

* See Special Provisions



JOINT MEMBRANE DETAIL
Not to Scale

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

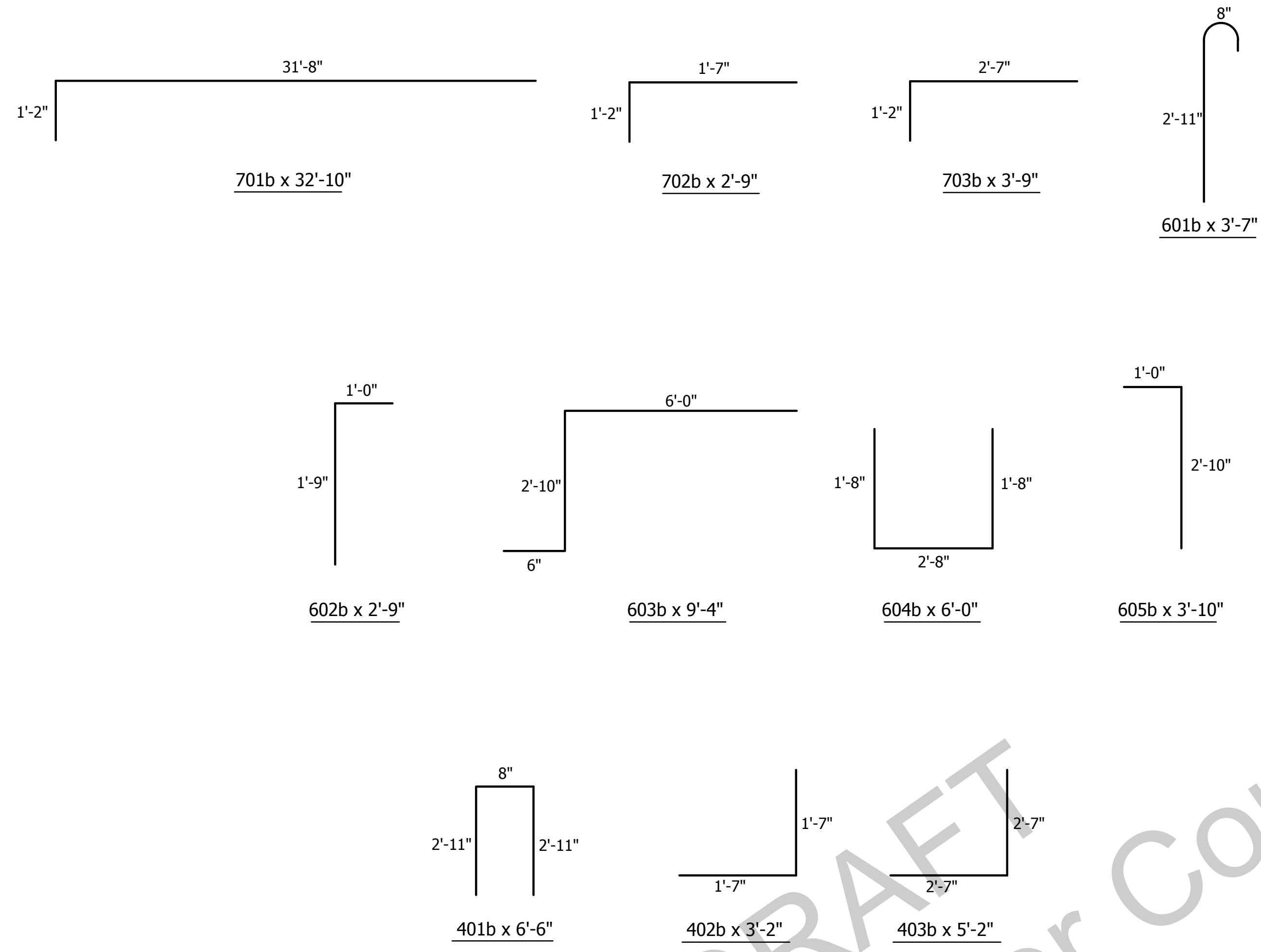
BENTS NO.1 OR NO.10 DETAILS
SOUTHBOUND STRUCTURE

NOTES
See Sheet 7 for Removal Details.
See Sheet 10 for Bar Bending Details and Bill of Materials.

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	041-82-0877E
VERTICAL SCALE	DESIGNATION
AS NOTED	0200633
SURVEY BOOK	SHEET
	9 OF 20
CONTRACT	PROJECT
B-33539	0200633

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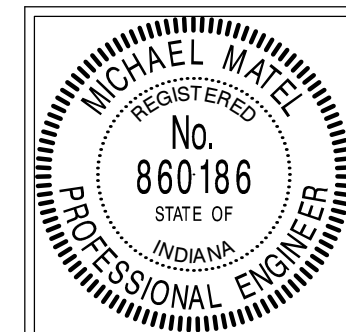


BAR BENDING DETAILS
Not to Scale

BILL OF MATERIALS
BENT NO.1
(BENT NO.10 SAME)
SOUTHBOUND STRUCTURE

REINFORCING BARS			
Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
701b	6	32'-10"	
702b	3	2'-9"	
703b	3	3'-9"	
#7	18	4'-6"	
#7	9	3'-3"	
Total #7 (Epoxy Coated)			668
601b	56	3'-7"	
602b	57	2'-9"	
603b	57	9'-4"	
604b	56	6'-0"	
605b	56	3'-10"	
Total #6 (Epoxy Coated)			2163
401b	12	6'-6"	
402b	4	3'-2"	
403b	4	5'-2"	
#4	16	5'-0"	
Total #4 (Epoxy Coated)			128
Total Steel (Epoxy Coated)			2959
MISCELLANEOUS			
Field Drilled Holes in Concrete			56 Each
Cored Hole in Concrete			1 Each
Geotextile			55 Sys.
Aggregate for End Bent Backfill			15 Cys.
6" End Bent Drain Pipe (Includes 90° Elbow)			72 Lft.

⊕ A.S.T.M. A615, Grade 60



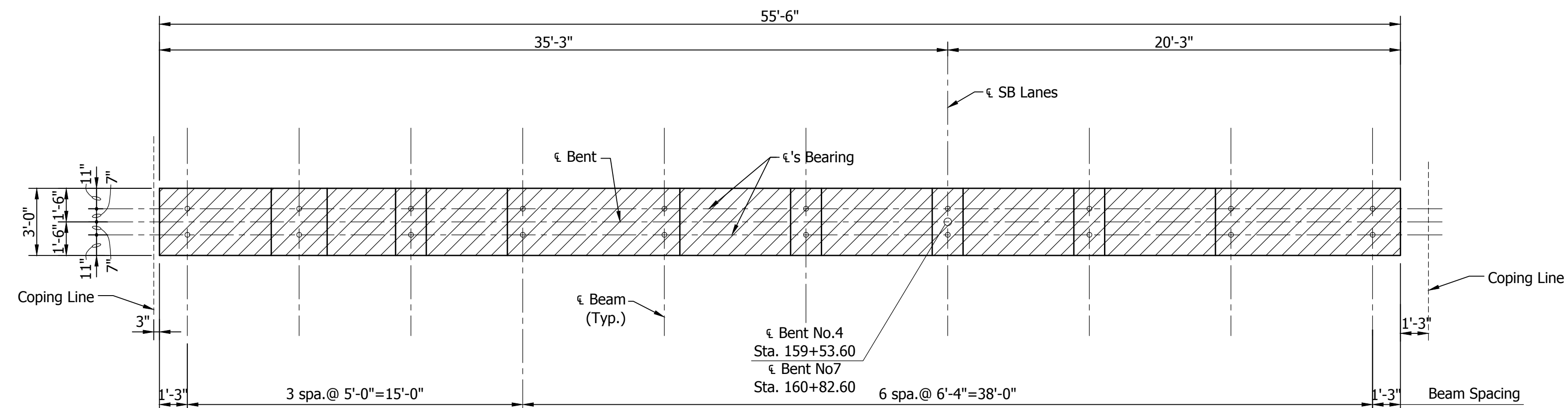
RECOMMENDED FOR APPROVAL: *Michael Matel* 10/31/16
DESIGN ENGINEER DATE
DESIGNED: D. SHEETZ DRAWN: D. SHEETZ
CHECKED: M. MATEL CHECKED: M. MATEL

INDIANA DEPARTMENT OF TRANSPORTATION
BENTS NO.1 OR NO.10 DETAILS
SOUTHBOUND STRUCTURE

HORIZONTAL SCALE AS NOTED	BRIDGE FILE 041-82-0877E
VERTICAL SCALE AS NOTED	DESIGNATION 0200633
SURVEY BOOK	SHEET 10 OF 20
CONTRACT B-33539	PROJECT 0200633

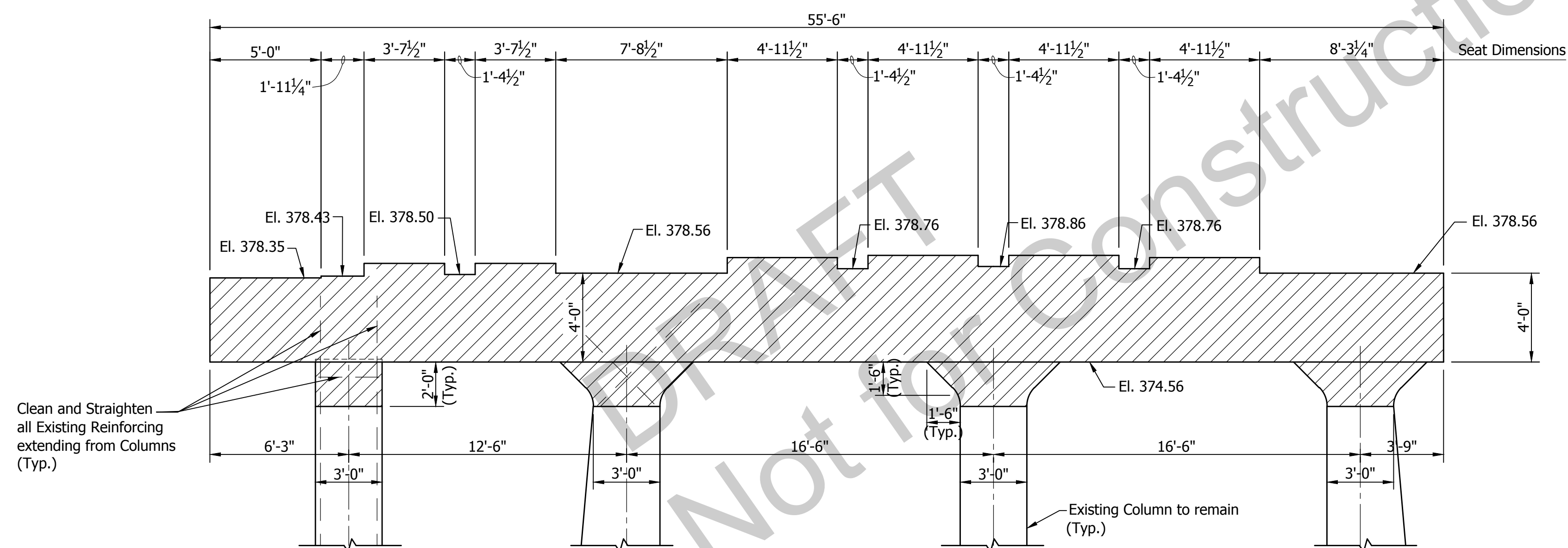
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BFS NO.

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Note: Hatched Areas indicate portions to be Removed.

CAP PLAN

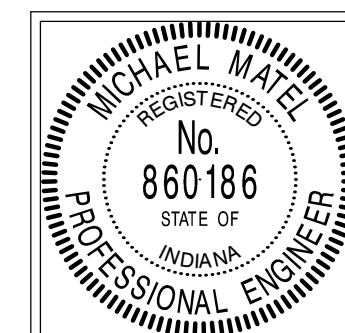


ELEVATION

BENT NO.4 OR NO.7

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

NOTE
See Sheet 12 for Reconstruction Details.



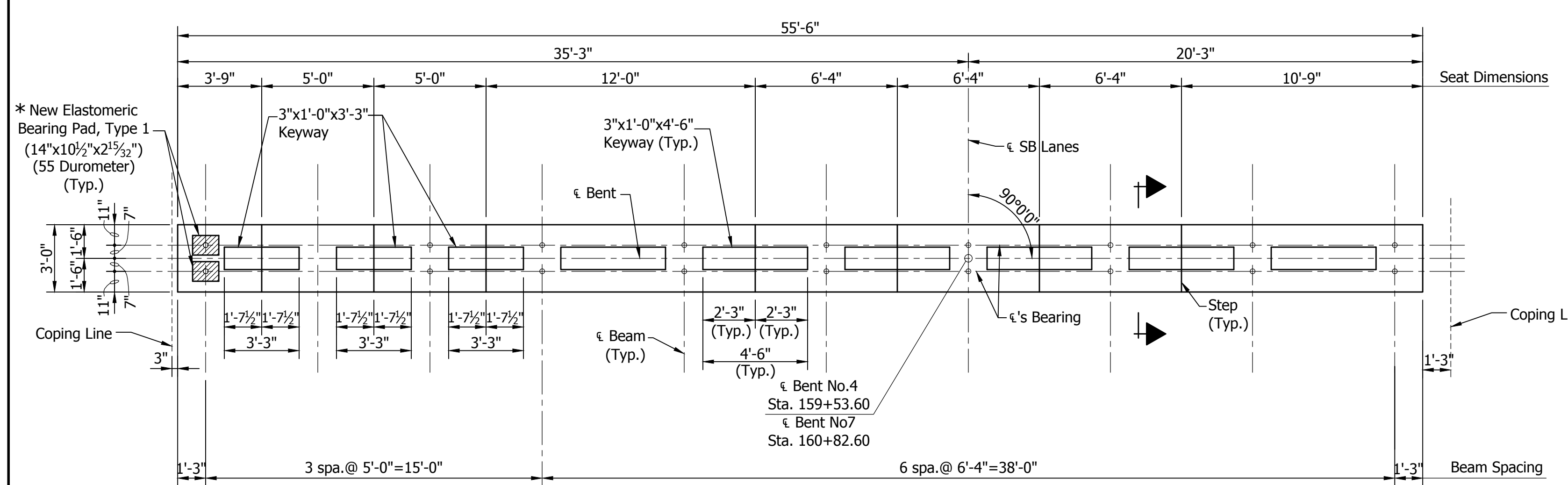
RECOMMENDED FOR APPROVAL: *Michael Matel* 10/31/16
DESIGN ENGINEER DATE
DESIGNED: C. OBRIEN DRAWN: D. SHEETZ
CHECKED: B. WRIGHT CHECKED: M. MATEL

INDIANA
DEPARTMENT OF TRANSPORTATION
BENTS NO.4 OR NO.7 DETAILS
SOUTHBOUND STRUCTURE

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	041-82-0877E
VERTICAL SCALE	DESIGNATION
AS NOTED	0200633
SURVEY BOOK	SHEET
	11 OF 20
CONTRACT	PROJECT
B-33539	0200633

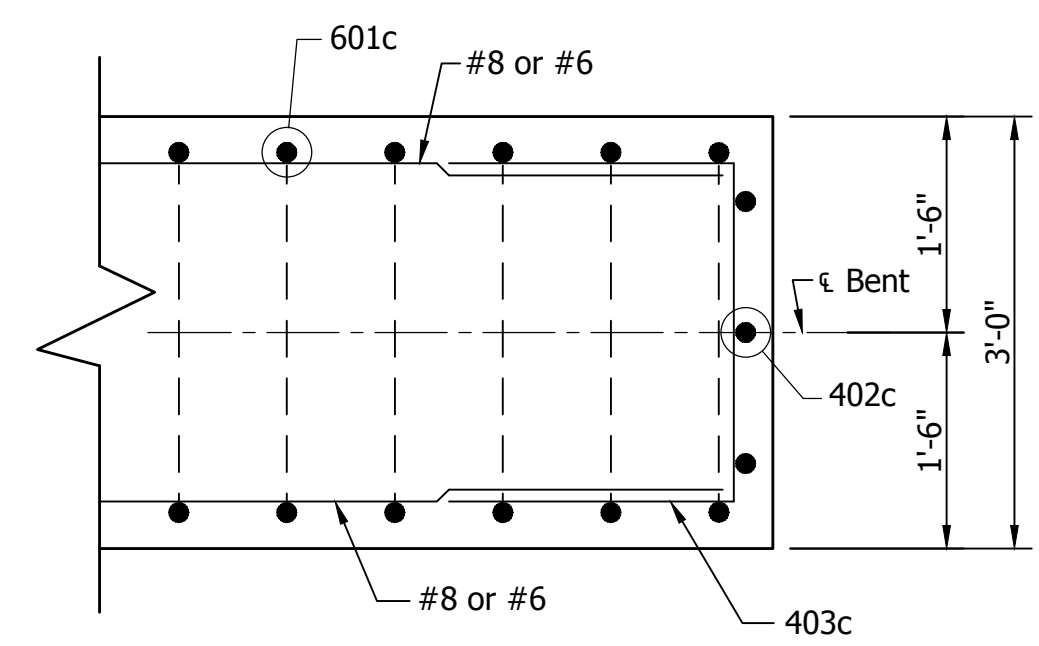
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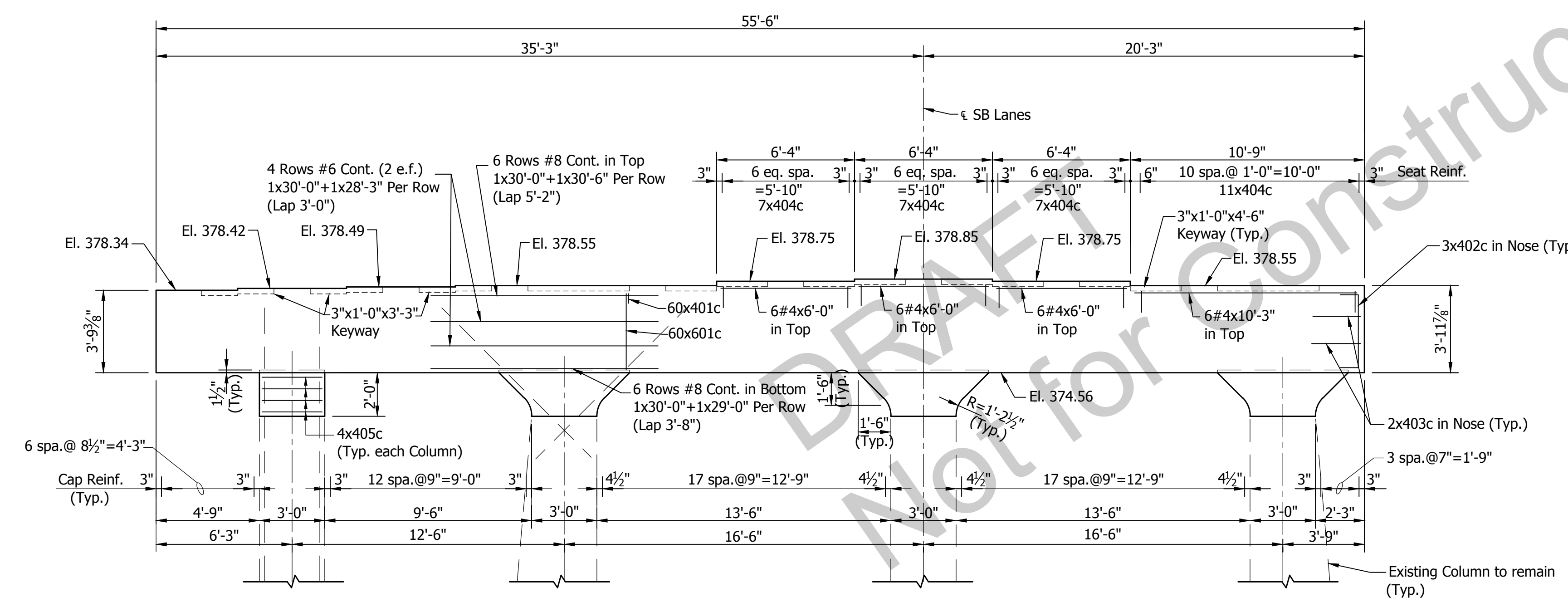


CAP PLAN

* See Special Provisions

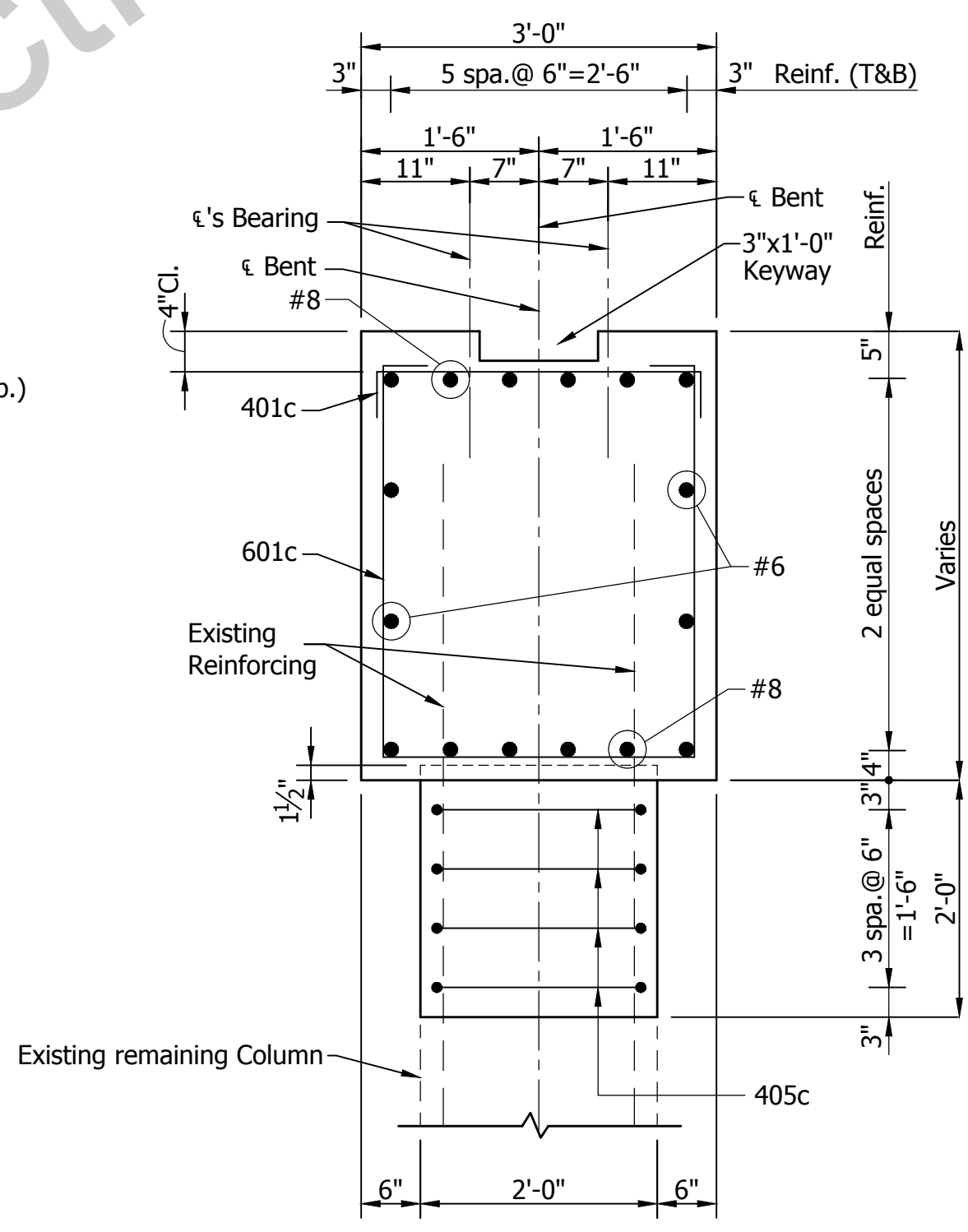


**PLAN-SECTION
CAP NOSE**
Scale: 3/4"=1'-0"



ELEVATION

BENT NO.4 OR NO.7
Scale: 1/4"=1'-0"

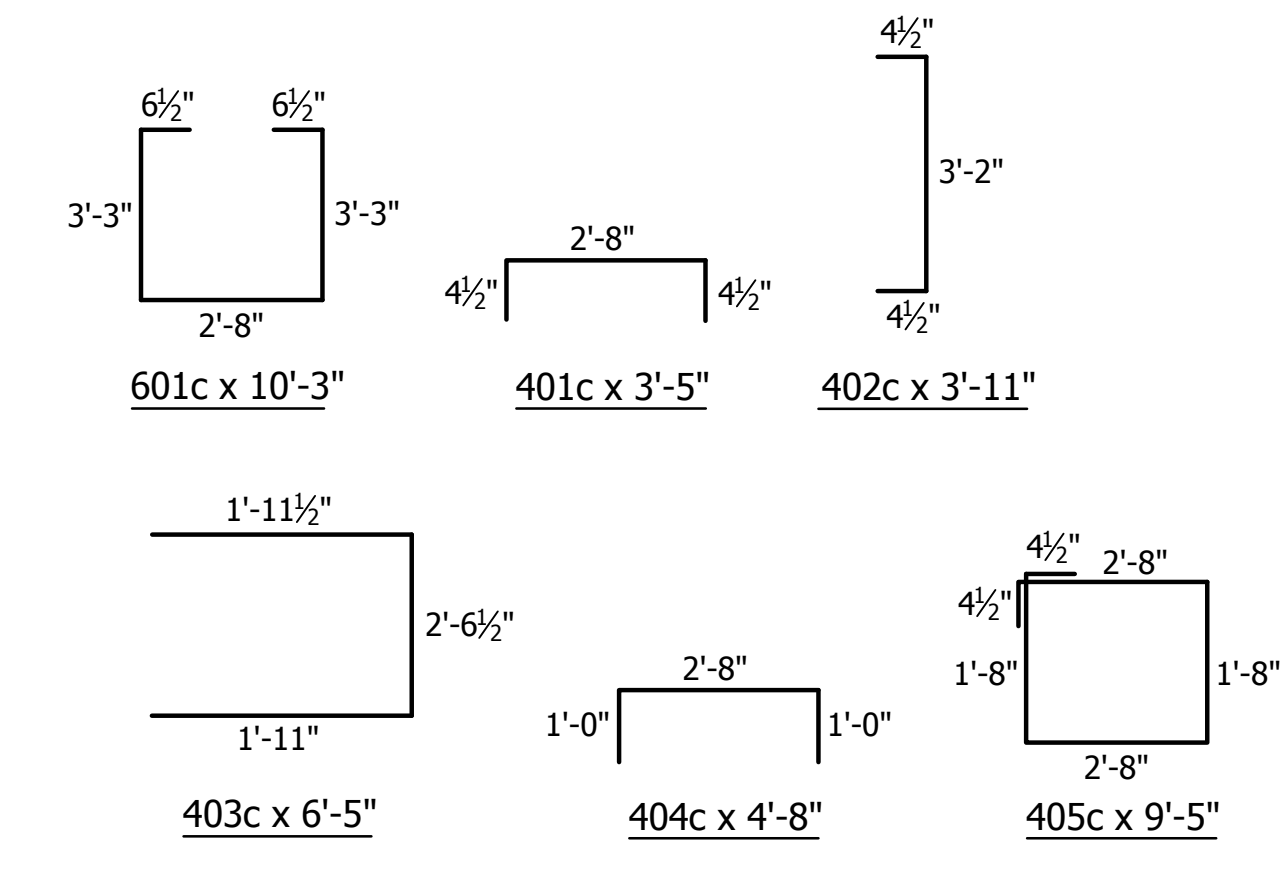


**SECTION AT BENT NO.4 OR NO.7
(SHOWING RECONSTRUCTION)**
Scale: 3/4"=1'-0"

**BILL OF MATERIALS
BENT NO.4
(BENT NO.7 SAME)
SOUTHBOUND STRUCTURE**

REINFORCING BARS			
Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
#8	6	30'-6"	
#8	12	30'-0"	
#8	6	29'-0"	
Total #8 (Plain)			1914
601c	60	10'-3"	
#6	4	30'-0"	
#6	4	28'-3"	
Total #6 (Plain)			1274
401c	60	3'-5"	
402c	6	3'-11"	
403c	4	6'-5"	
404c	32	4'-8"	
405c	16	9'-5"	
#4	6	10'-3"	
#4	18	6'-0"	
Total #4 (Plain)			483
Total Steel (Plain)			3671
CONCRETE			
Class "A" in Substructure			27.2 Cys.

A.S.T.M. A615, Grade 60



BAR BENDING DETAILS
Not to Scale



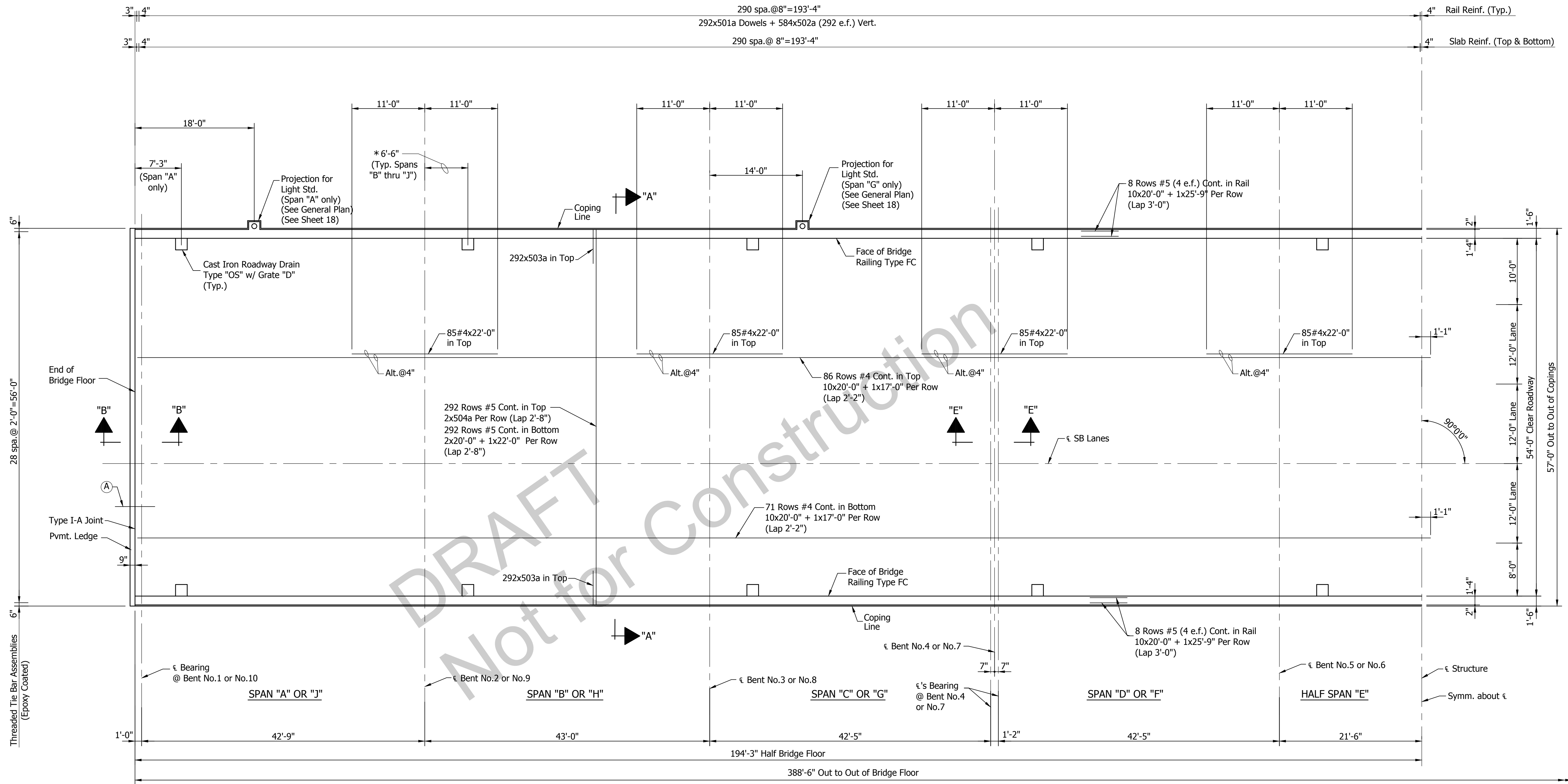
RECOMMENDED FOR APPROVAL: *Michael Matel* 10/31/16
DESIGN ENGINEER DATE
DESIGNED: C. O'BRIEN DRAWN: D. SHEETZ
CHECKED: B. WRIGHT CHECKED: M. MATEL

INDIANA DEPARTMENT OF TRANSPORTATION
BENTS NO.4 OR NO.7 DETAILS
SOUTHBOUND STRUCTURE

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	041-82-0877E
VERTICAL SCALE	DESIGNATION
AS NOTED	0200633
SURVEY BOOK	SHEET
	12 OF 20
CONTRACT	PROJECT
B-33539	0200633

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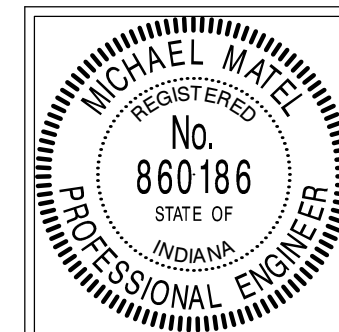
(A) 29-Threaded Tie Bar Assemblies (#5x3'-0" each way) (Epoxy Coated)

* Drain Locations for Spans "F" thru "J" are located as shown on the General Plan. (See Sheet 4)

PLAN
SPANS "A", "B", "C", "D" AND HALF SPAN "E" (SHOWN)
HALF SPAN "E", SPANS "F", "G", "H" AND "J" (ROTATE 180°)

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

NOTES
 See Sheet 9 for Section "B-B".
 See Sheet 14 for Section "A-A" and Additional Notes.
 See Sheet 15 for Section "E-E" and Sequence of Pours.
 See Sheet 16 for Concrete Dead Load Deflection Diagram and Screenshot Plan.
 See Sheet 17 for Screed Elevations.
 See Sheet 18 for Bar Bending Details and Bill of Materials.



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

INDIANA
DEPARTMENT OF TRANSPORTATION

FLOOR DETAILS
SOUTHBOUND STRUCTURE

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	041-82-0877E
VERTICAL SCALE	DESIGNATION
AS NOTED	0200633
SURVEY BOOK	SHEET
	13 OF 20
CONTRACT	PROJECT
B-33539	0200633

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BFS NO.

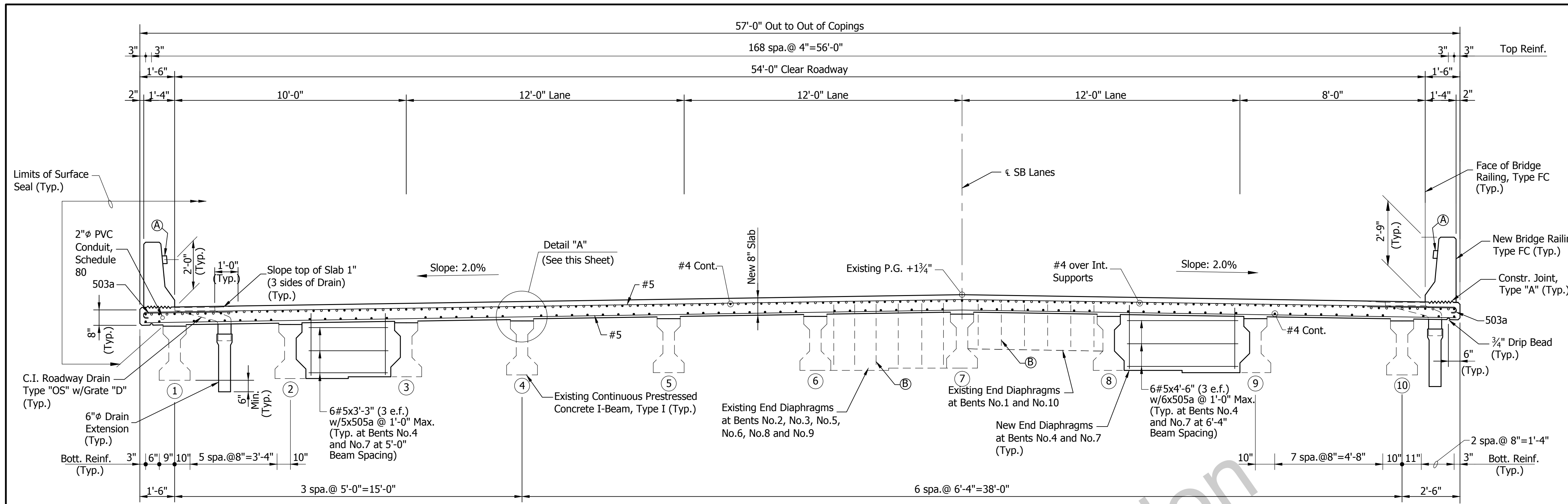
FLOOR NOTES

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.

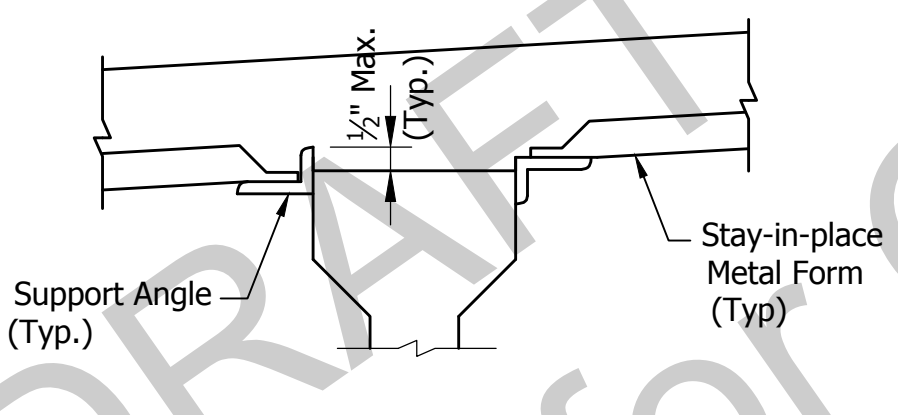
The top reinforcing in the slab shall be securely tied down to the slab forms and/or the beams to prevent lifting during concrete placement.

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

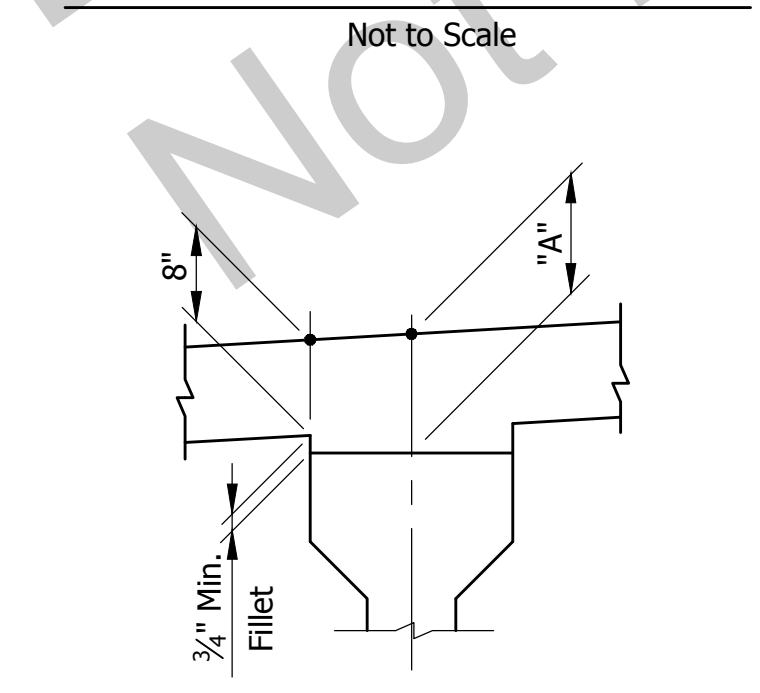


SECTION "A-A"
SOUTHBOUND STRUCTURE
Scale: 3/8"=1'-0"

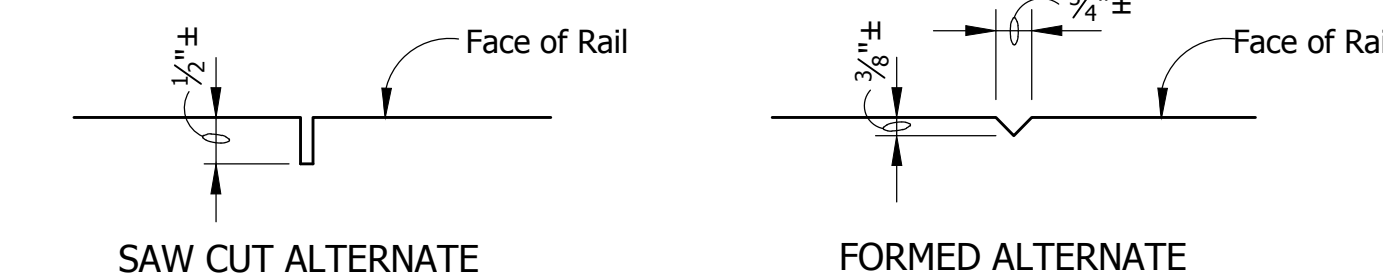
- (A) Barrier Delineators @ 40'-0" Max. Spacing
- (B) Clean and Straighten Existing Diaphragm Reinforcing as required extending into New Bridge Deck (Typ.)



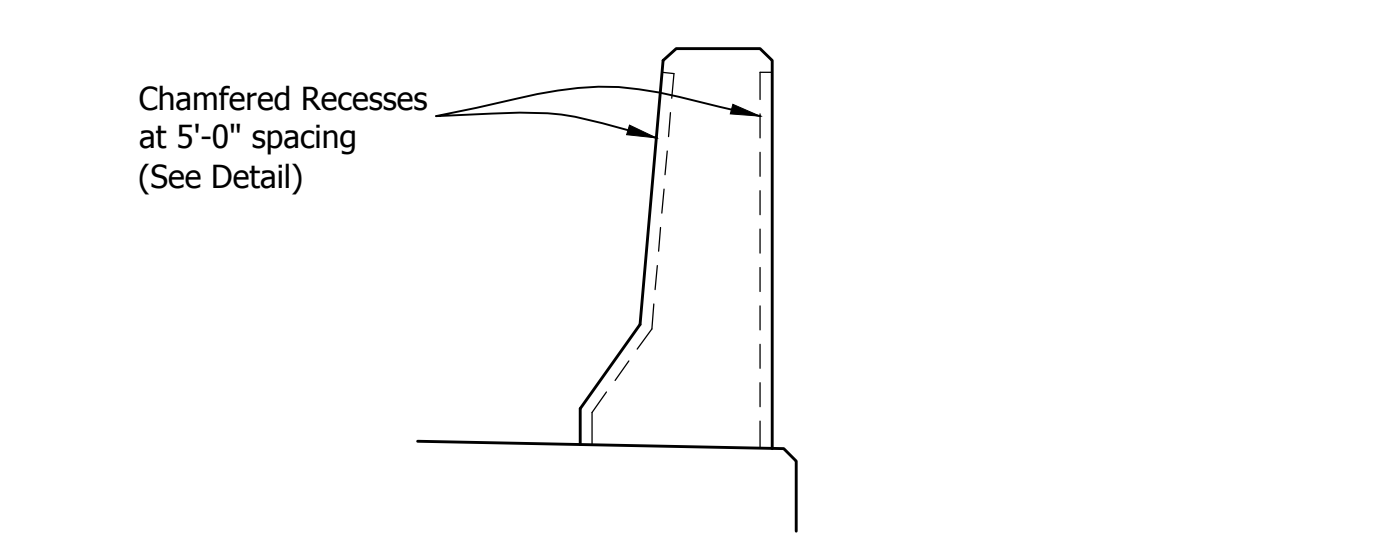
FILLET TREATMENT FOR PRESTRESSED CONCRETE BEAM
Not to Scale



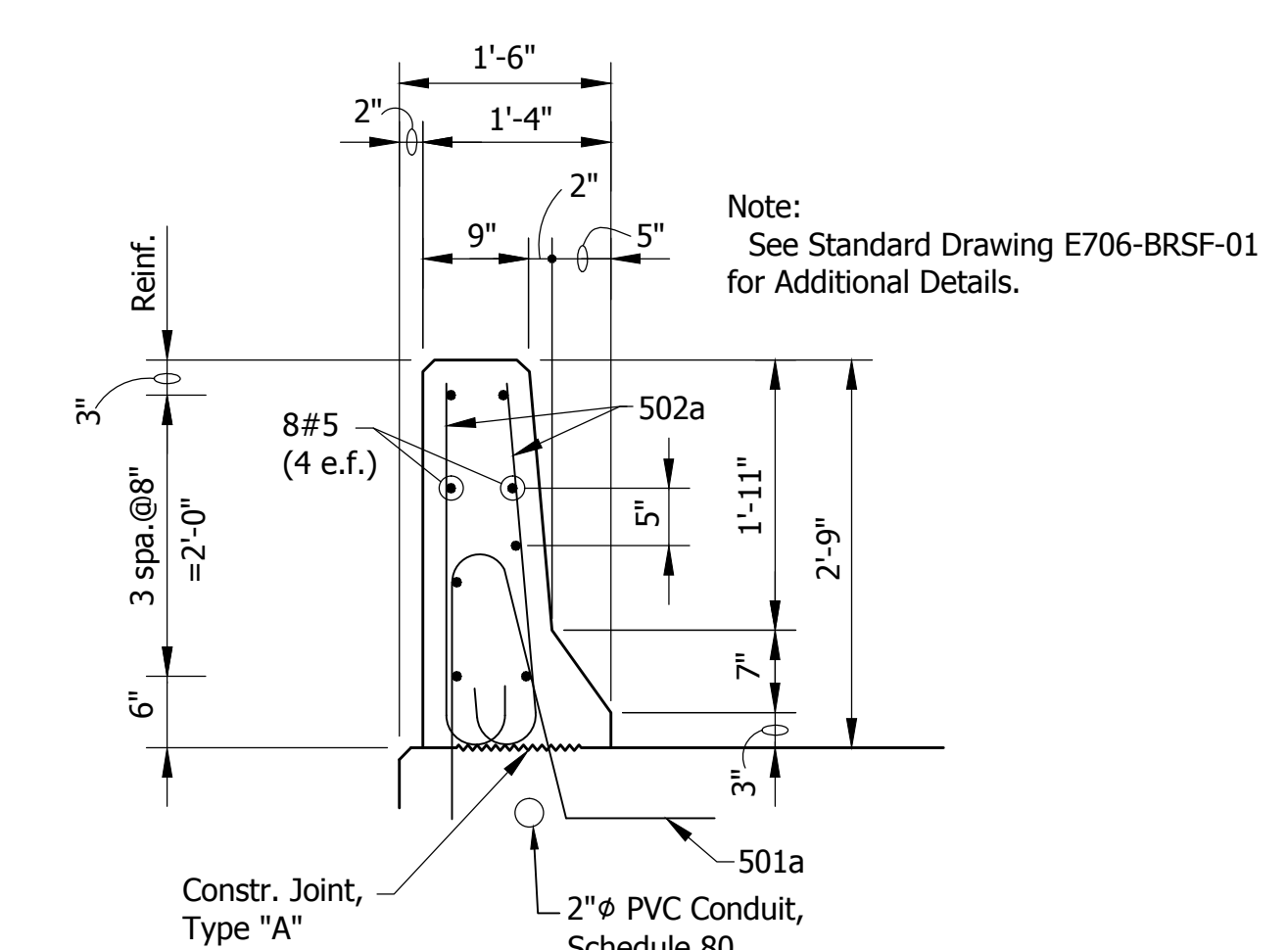
DETAIL "A"
Not to Scale



RECESS DETAILS
Not to Scale



TYPICAL RAIL SECTION
Not to Scale

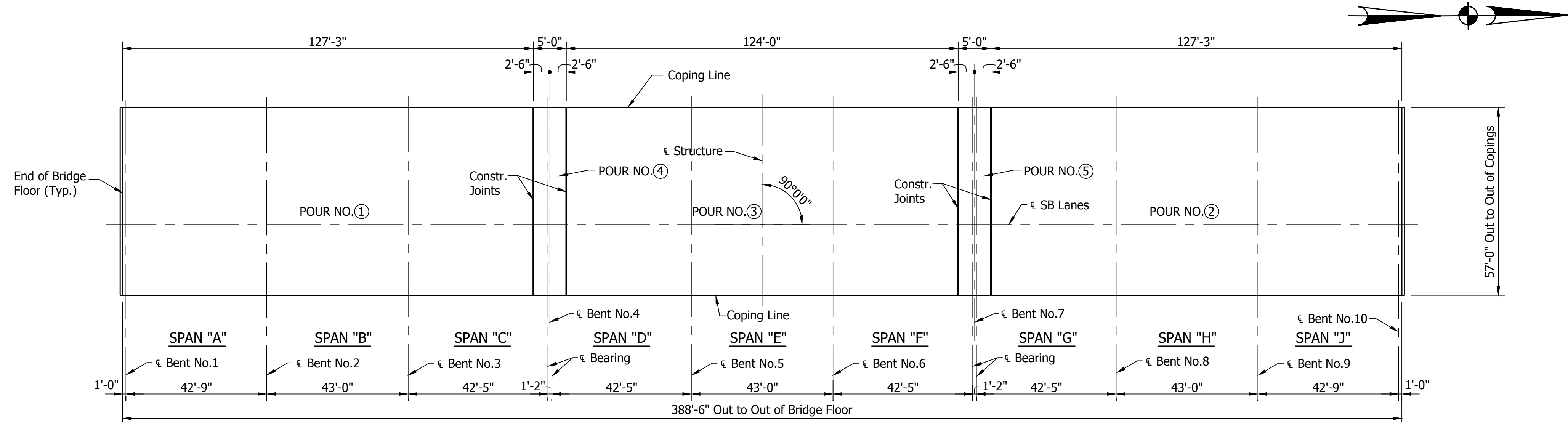


TYPICAL SECTION THRU BRIDGE RAILING TYPE FC
Scale: 3/4"=1'-0"

NOTES
See Sheet 16 for Concrete Dead Load Deflection Diagram and Screenshot Plan.
See Sheet 17 for Screenshot Elevations.
See Sheet 18 for Bar Bending Details and Bill of Materials.

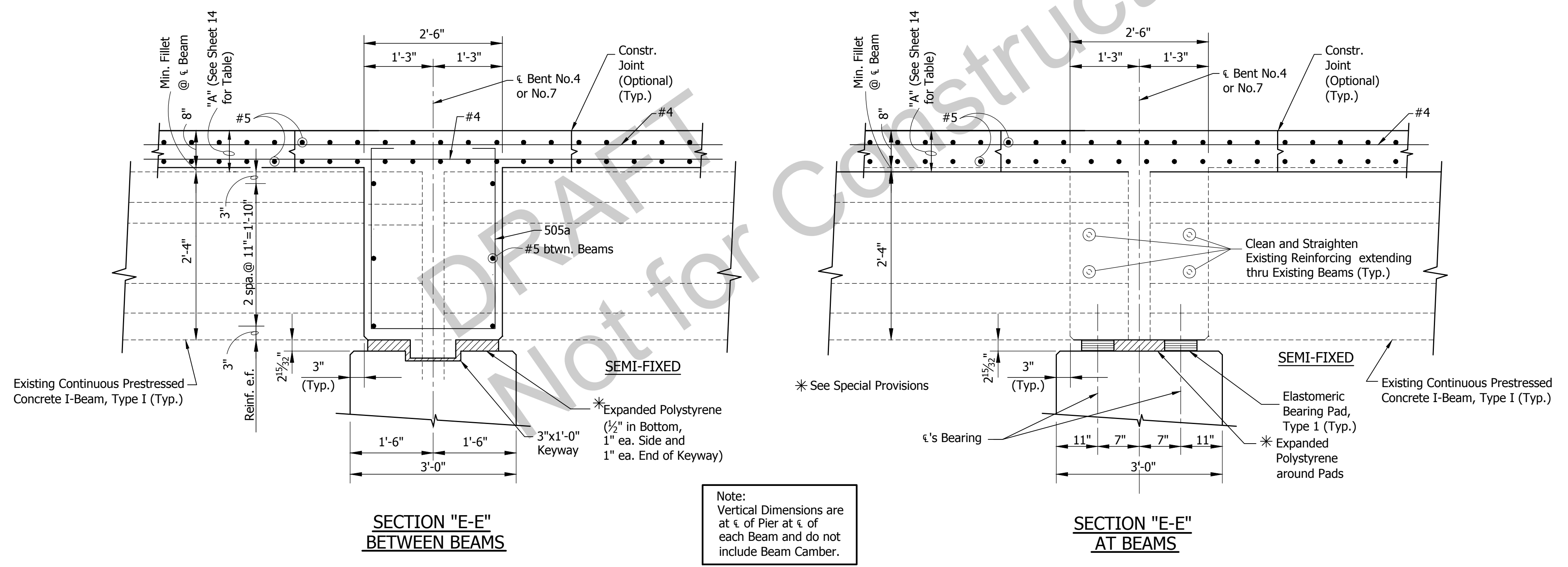
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	RECOMMENDED FOR APPROVAL: <i>M. Matel</i> 10/31/16 DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION FLOOR DETAILS SOUTHBOUND STRUCTURE	HORIZONTAL SCALE AS NOTED	BRIDGE FILE 041-82-0877E
	DESIGNED: C. O'BRIEN DRAWN: D. SHEETZ CHECKED: B. WRIGHT CHECKED: M. MATEL		VERTICAL SCALE AS NOTED SURVEY BOOK CONTRACT B-33539	DESIGNATION 0200633 SHEET 14 OF 20 PROJECT 0200633



Note: Pour Numbers indicate Sequence of Pours, Pours over Interior Supports shall be made last to reduce the effect of the Slab Dead Load in the Negative Moment Area. Pours No.4 and No.5 will include the Diaphragm at the Support and shall be held to a 5'-0" Lengths.

SEQUENCE OF POURS DIAGRAM
Not to Scale



Note: Vertical Dimensions are at ϵ of Pier at ϵ of each Beam and do not include Beam Camber.

BENTS NO. 4 AND NO.7
Not to Scale

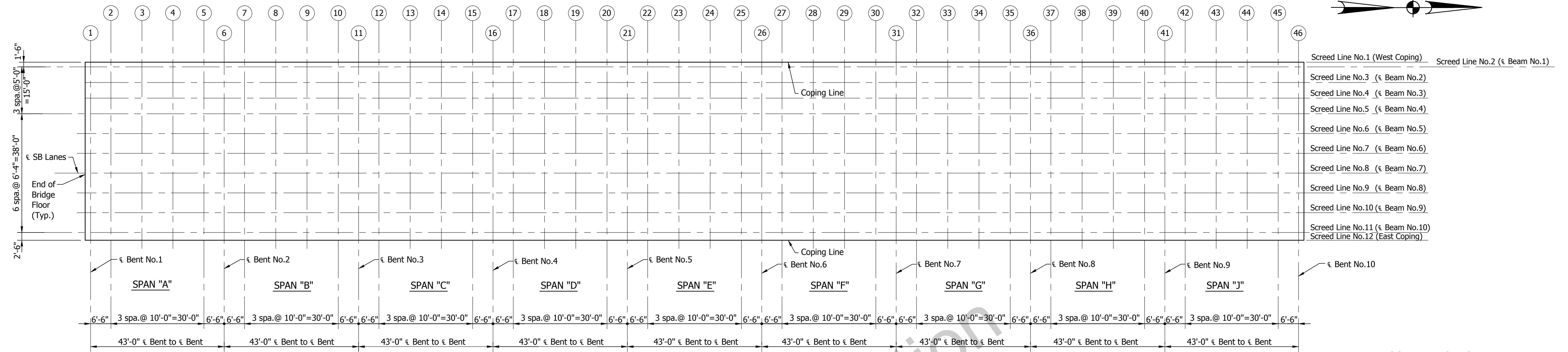
NOTE
See Sheet 18 for Bar Bending Details and Bill of Materials.

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	RECOMMENDED FOR APPROVAL: <i>Michael Matel</i> 10/31/16 DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION FLOOR DETAILS SOUTHBOUND STRUCTURE	HORIZONTAL SCALE AS NOTED	BRIDGE FILE 041-82-0877E
	DESIGNED: C. OBRIEN DRAWN: D. SHEETZ CHECKED: B. WRIGHT CHECKED: M. MATEL		VERTICAL SCALE AS NOTED	DESIGNATION 0200633
			SURVEY BOOK CONTRACT B-33539	PROJECT 0200633

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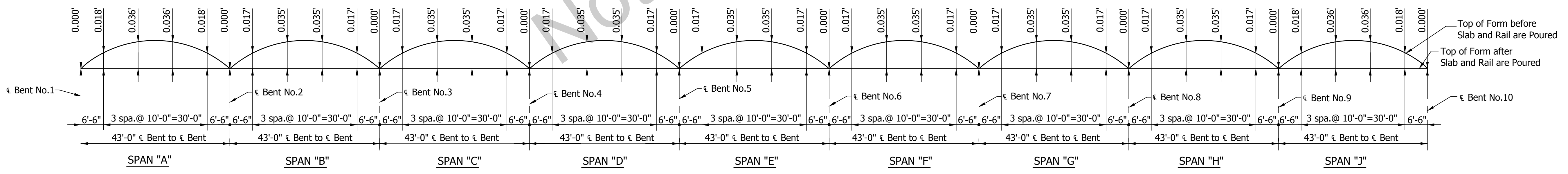
SCREED NOTES

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.

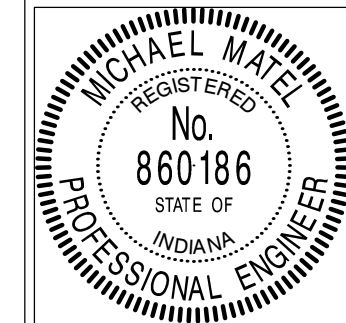
Take elevations at the screed and coping points on top of adjacent beams, subtract these elevations from the given elevations and use resulting dimensions as the height for setting the screed or coping forms above that point. This dimension remains unchanged regardless of how much or what order the concrete 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 17 for Screed Tables.



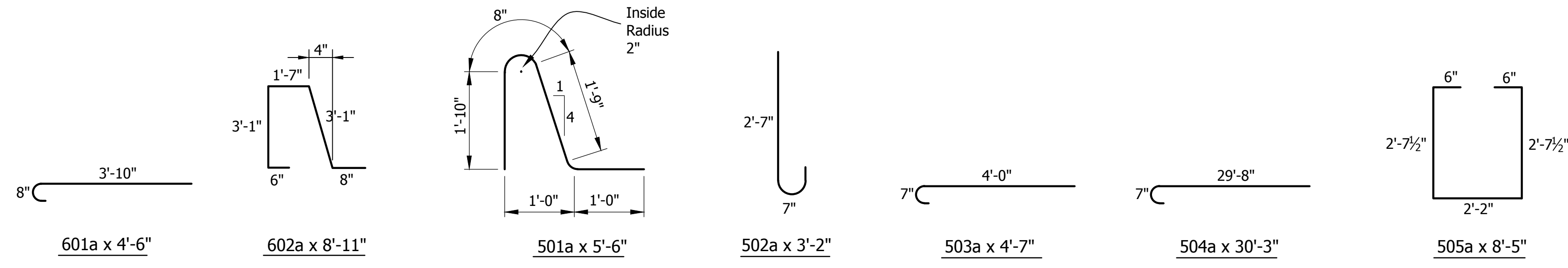
RECOMMENDED FOR APPROVAL: *Michael Matel* 10/31/16
DESIGN ENGINEER DATE
DESIGNED: C. OBRIEN DRAWN: D. SHEETZ
CHECKED: B. WRIGHT CHECKED: M. MATEL

INDIANA DEPARTMENT OF TRANSPORTATION
FLOOR DETAILS SOUTHBOUND STRUCTURE

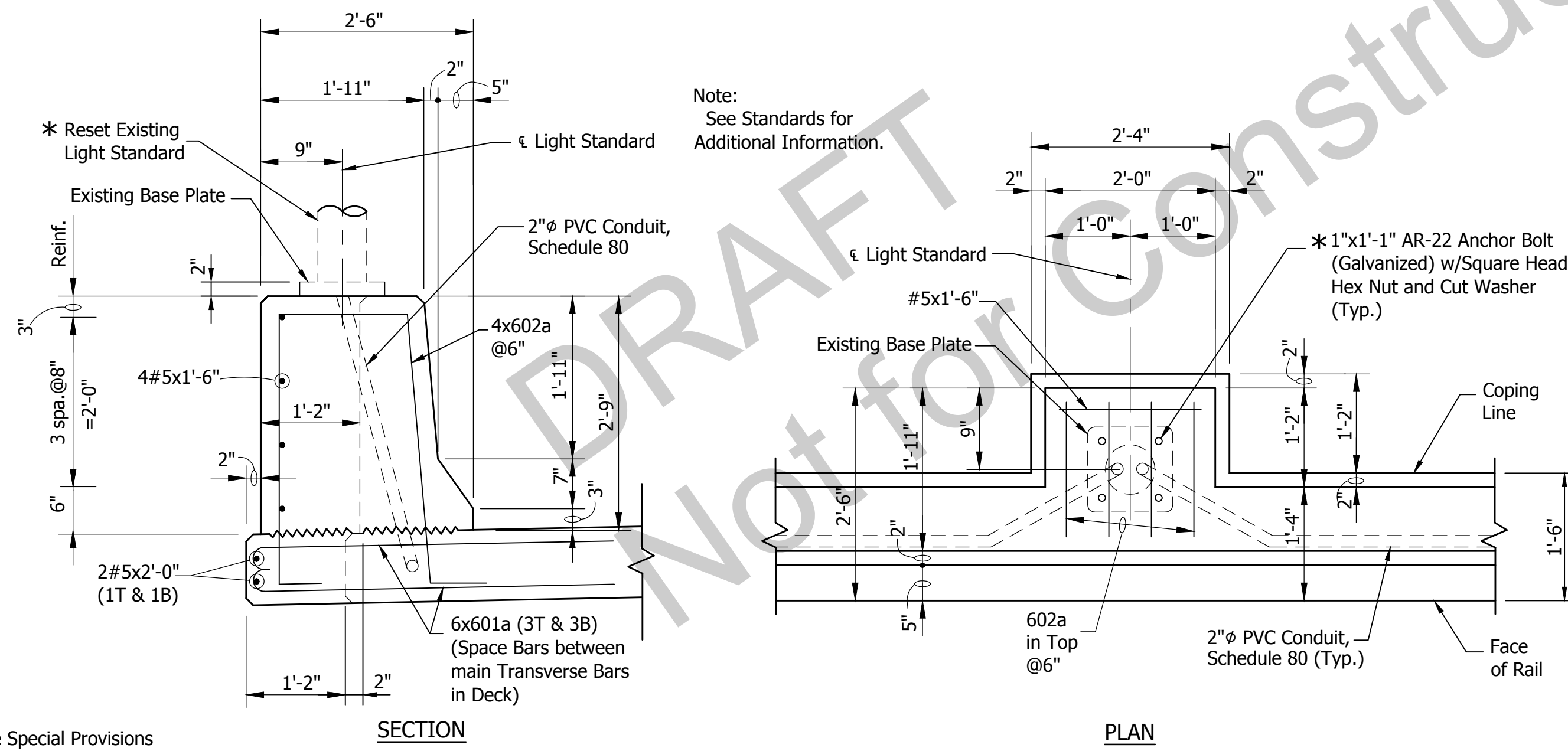
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	041-82-0877E
VERTICAL SCALE	DESIGNATION
AS NOTED	0200633
SURVEY BOOK	SHEET
	16 OF 20
CONTRACT	PROJECT
B-33539	0200633

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BAR BENDING DETAILS
Not to Scale



DETAILS AT LIGHT STANDARD
Not to Scale

BILL OF MATERIALS
SUPERSTRUCTURE
SPANS "A" THRU "J"
SOUTHBOUND STRUCTURE

REINFORCING BARS			
Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
601a	12	4'-6"	
602a	8	8'-11"	
Total #6 (Epoxy Coated)			188
501a	1168	5'-6"	
502a	2336	3'-2"	
503a	1168	4'-7"	
504a	1168	30'-3"	
505a	102	8'-5"	
#5	32	25'-9"	
#5	584	22'-0"	
#5	1488	20'-0"	
#5	72	4'-6"	
#5	36	3'-3"	
#5	4	2'-0"	
#5	8	1'-6"	
Total #5 (Epoxy Coated)			103526
#4	680	22'-0"	
#4	3140	20'-0"	
#4	314	17'-0"	
Total #4 (Epoxy Coated)			55509
Total Steel (Epoxy Coated)			159223

CONCRETE	
Class "C" in Superstructure	
Pour No.1	203.7 Cys.
Pour No.2	203.7 Cys.
Pour No.3	181.7 Cys.
Pour No.4	17.9 Cys.
Pour No.5	17.9 Cys.
Total Class "C" in Superstructure	624.9 Cys.
Class "C" in Railing	74.7 Cys.

MISCELLANEOUS	
Barrier Delineators	22 Each
Threaded Tie Bar Assemblies (#5x3'-0" each way) (Epoxy Coated)	58 Each
Surface Seal	28440 Sft.
Cast Iron Roadway Drains Type "OS-D"	18 Each
6"Ø Drain Pipe Casting Extension	18 Each
2"Ø PVC Conduit, Schedule 80	515 Lft.

- ⊕ A.S.T.M. A615, Grade 60
- ⊗ Includes Approach Slabs

RECOMMENDED FOR APPROVAL: *[Signature]* 10/31/16
DESIGN ENGINEER DATE

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

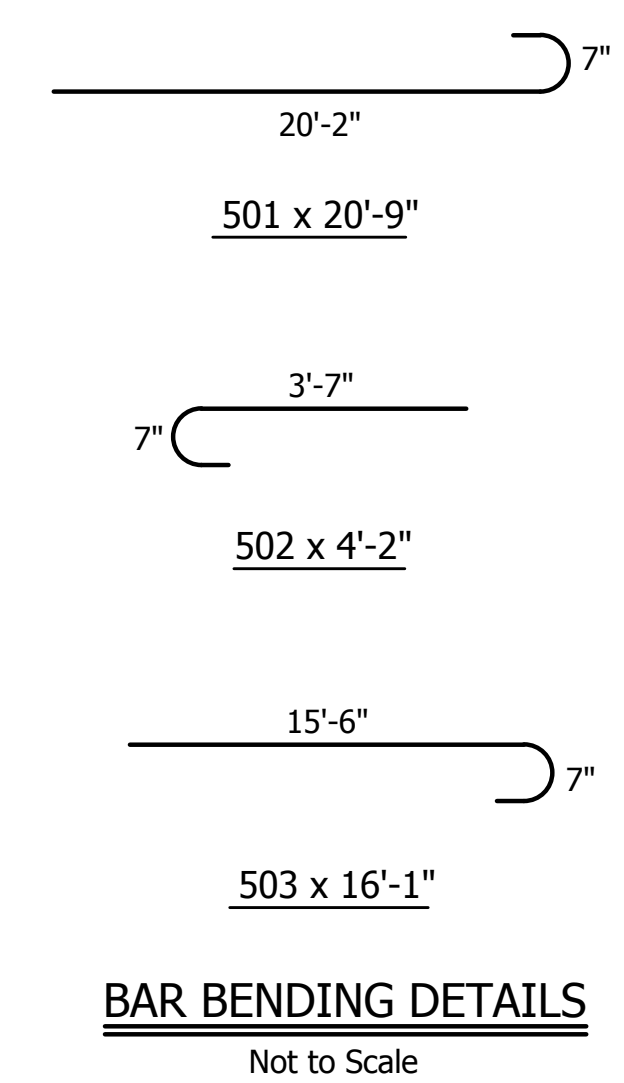
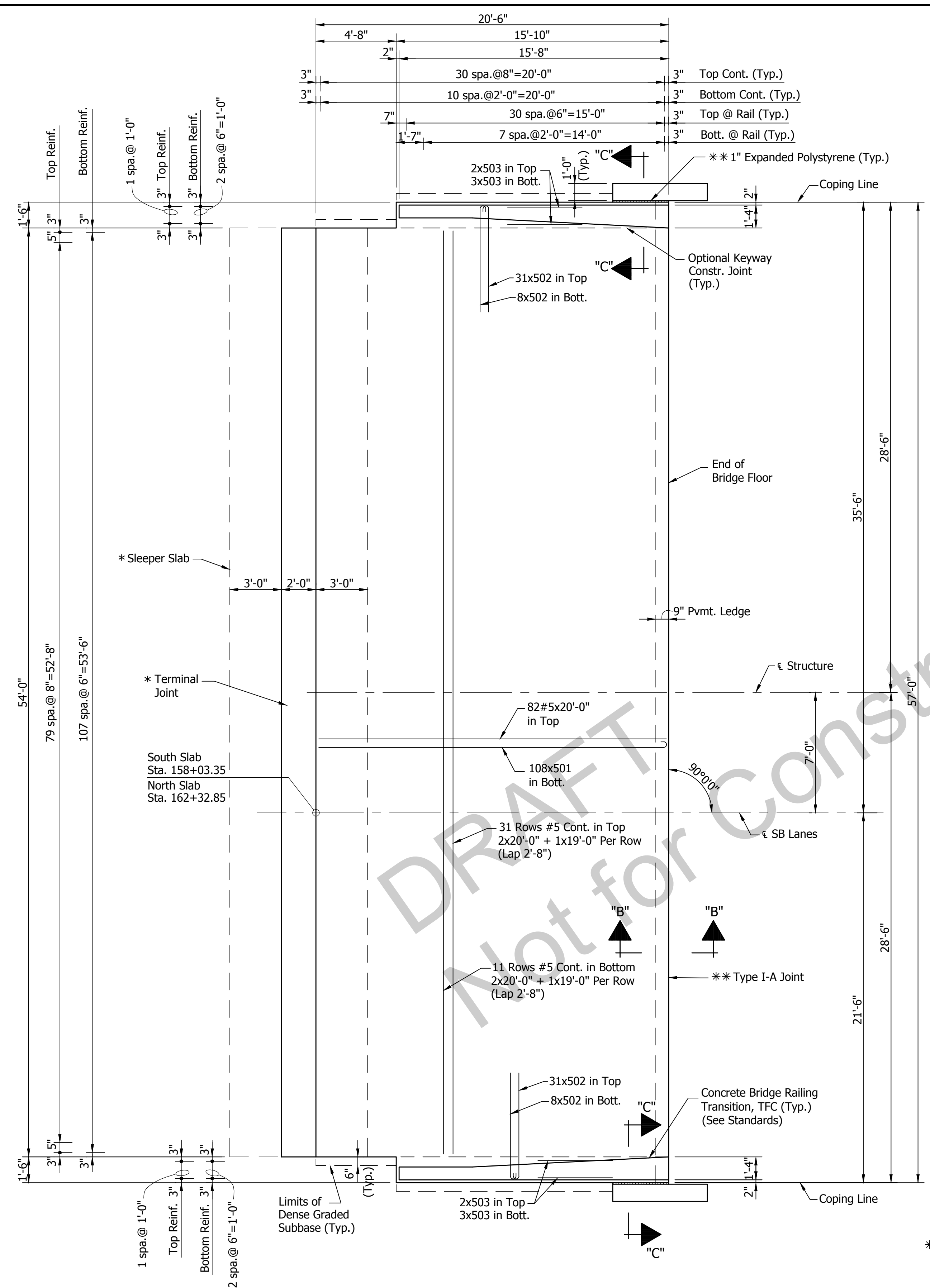
INDIANA DEPARTMENT OF TRANSPORTATION

FLOOR DETAILS SOUTHBOUND STRUCTURE

HORIZONTAL SCALE AS NOTED	BRIDGE FILE 041-82-0877E
VERTICAL SCALE AS NOTED	DESIGNATION 0200633
SURVEY BOOK	SHEET 18 OF 20
CONTRACT B-33539	PROJECT 0200633

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

REINFORCING BARS			
Mark or Size	No. of Bars	Length (Ft.)	Weight (Lbs.)
501	108	20'-9"	
502	78	4'-2"	
503	10	16'-1"	
#5	166	20'-0"	
#5	42	19'-0"	
Total Steel (Epoxy Coated)			7139
CONCRETE			
Reinforced Concrete			
Bridge Approach (12")			129 Sys.
MISCELLANEOUS			
Dense Graded Subbase			21 Cys.
Concrete Bridge Railing			
Transition, TFC			2 Each
Surface Seal			1130 Sft.
* Terminal Joint			54 Lft.

- ⊕ A.S.T.M. A615, Grade 60
- ⊖ Does Not Include Bridge Railing Transition
- * North Approach Only (See Note)

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

** See Special Provisions

NOTES
See Sheet 8 for Section "C-C".
See Sheet 9 for Section "B-B".

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

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

APPROACH SLAB DETAILS
SOUTHBOUND STRUCTURE

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	041-82-0877E
VERTICAL SCALE	DESIGNATION
AS NOTED	0200633
SURVEY BOOK	SHEET
	19 OF 20
CONTRACT	PROJECT
B-33539	0200633

5605
BFS NO.

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	2"Ø PVC CONDUIT, SCHEDULE 80	FIELD DRILLED HOLES IN CONCRETE	CAST IRON DRAIN TYPE "OS-D"	6"Ø DRAIN PIPE CASTING EXTENSION	EST. AREA SURFACE SEAL	CONCRETE BRIDGE RAILING TRANSITION TFC	6"Ø END BENT DRAIN PIPE	AGGREGATE FOR END BENT BACKFILL	GEOTEXTILE	CORED HOLE IN CONCRETE	THREADED TIE BAR ASSEMBLIES (EPOXY COATED)	BARRIER DELINEATORS	* TERMINAL JOINT
	CLASS C IN SUPERSTR.	CLASS C IN SUBSTR.	CLASS B IN FOOTING	CLASS A IN SUBSTR.																			
SUPERSTRUCTURE																							
Spans "A" thru "J"	624.9						74.7		159223		515		18	18	28440						58	22	
SUBSTRUCTURE																							
Bent No.1									2959			56					72	15	55	1			
Bent No.4				27.2					3671														
Bent No.7				27.2					3671														
Bent No.10									2959			56					72	15	55	1			
APPROACH SLABS																							
South					21	129			7139						1130	2							
North					21	129			7139						1130	2							54
BARRIER RAIL TRANSITIONS																							
South									1102														
North									1102														
TOTALS	624.9			54.4	42	258		⊕7342	⊕181623		515	112	18	18	30700	4	144	30	110	2	58	22	54

⊕ A.S.T.M. A615, Grade 60

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

DRAFT
Not for Construction

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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
BRIDGE SUMMARY
SOUTHBOUND STRUCTURE

HORIZONTAL SCALE	BRIDGE FILE
NONE	041-82-0877E
VERTICAL SCALE	DESIGNATION
NONE	0200633
SURVEY BOOK	SHEET
	20 OF 20
CONTRACT	PROJECT
B-33539	0200633

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BFS NO.