PROJECT	DESIGNATION
1600808	1901892
CONTRACT	BRIDGE FILE
B-36910	I65-111-10617 BSBL

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN & SKEW	OVER	STATION
I65-111-10617 BSBL	PRESTRESSED COMPOSITE CONCRETE BULB-TEE BEAM BRIDGE	1 SPAN: 87'-9 7/8" SKEW 20°21'02" LT.	ST. CLAIR STREET	139+46.47 LINE "R_S65"

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

FOR SPANS OVER 20 FEET

ROUTE: I-65 / I-70 S.B. AT: RP 111+95

PROJECT NO. 1600808 P.E.

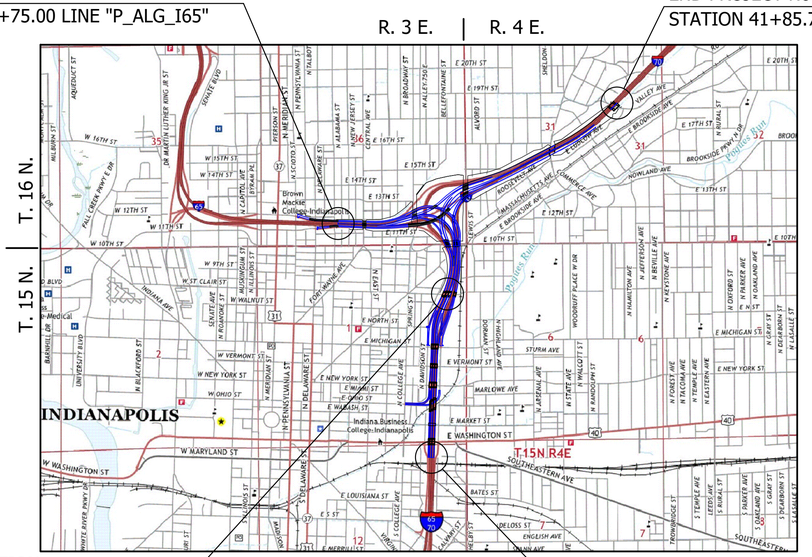
1600808 CONST.

NO ADDITIONAL RIGHT OF WAY REQUIRED FOR THIS PROJECT

BRIDGE REPLACEMENT ON I-65 / I-70 S.B. OVER ST. CLAIR STREET
LOCATED 1.65 MILES NORTH OF I-70 (SOUTH SPLIT) INTERCHANGE
SECTION 1, TOWNSHIP 15 NORTH, RANGE 3 EAST
CENTER TOWNSHIP, MARION COUNTY INDIANA

END PROJECT No. 1600808
STATION 25+75.00 LINE "P_ALG_I65"

END PROJECT No. 1600808
STATION 41+85.70 LINE "P_ALG_I70"



PROJECT LOCATION
BRIDGE FILE No. I65-111-10617 BSBL
I-65 / I-70 S.B. OVER ST. CLAIR STREET
STA. 139+46.47 LINE "R_S65"

LOCATION MAP
MARION COUNTY

BEGIN PROJECT No. 1600808
STATION 113+00.00 LINE "P_ALG_I65/I70"

TRAFFIC DATA	I-65 / I-70 S.B.	ST. CLAIR STREET
A.D.T. (2021)	58,288 V.P.D.	1,082 V.P.D.
A.D.T. (2041)	64,063 V.P.D.	1,427 V.P.D.
D.H.V. (2041)	5,125 V.P.H.	174 V.P.H.
DIRECTIONAL DISTRIBUTION	100 %	60 %
TRUCKS	10 % D.H.V.	4 % D.H.V.
DESIGN DATA		
DESIGN SPEED	55 M.P.H.	25 M.P.H.
PROJECT DESIGN CRITERIA	4R (FREEWAY)	N/A
FUNCTIONAL CLASSIFICATION	URBAN FREEWAY	LOCAL ROAD
RURAL/URBAN	URBAN (BUILT-UP)	URBAN (BUILT-UP)
TERRAIN	LEVEL	LEVEL
ACCESS CONTROL	FULL CONTROL	NONE



PROJECT LOCATION SHOWN BY

LATITUDE: 39°46'39" N LONGITUDE: 86°08'30" W

BRIDGE LENGTH :	0.017 MI.
ROADWAY LENGTH :	SEE ROAD PLANS
TOTAL LENGTH :	SEE ROAD PLANS
MAX GRADE :	1.21%

HUC: 05120201130020

SCALE: 1" = 2000'

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2020 TO
BE USED WITH THESE PLANS.

SUPERIOR CONSTRUCTION

PLANS PREPARED BY: Butler Fairman and Seufert Inc. (317)713-4615 PHONE

CERTIFIED BY: . DATE

APPROVED FOR LETTING: . DATE
INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE FILE	
I65-111-10617 BSBL	
DESIGNATION	
1901892	
SURVEY BOOK	SHEET
ELECTRONIC	1 OF 15
CONTRACT	PROJECT
B-36910	1600808

6412

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UTILITIES

REVISIONS

SHEET NO.	DATE	REVISED

KIN PROJECT INFORMATION

DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB & I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVE.	
1901914	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER COLLEGE AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901927	NOT USED	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I70 WB OVER VERMONT STREET	

INDEX

SHEET NO.	DESIGNATION
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4	LAYOUT
5	GENERAL PLAN - PLAN & ELEVATION VIEWS
6	GENERAL PLAN -TYPICAL SECTION
7	BENT NO. 1 DETAILS
8	BENT NO. 2 DETAILS
9	BENTS NO. 1 AND NO. 2 DETAILS
10	FRAMING PLAN
11	BEAM DETAILS
12	FLOOR DETAILS
13	APPROACH SLAB
14	WALL LAYOUT
15	WALL LAYOUT

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

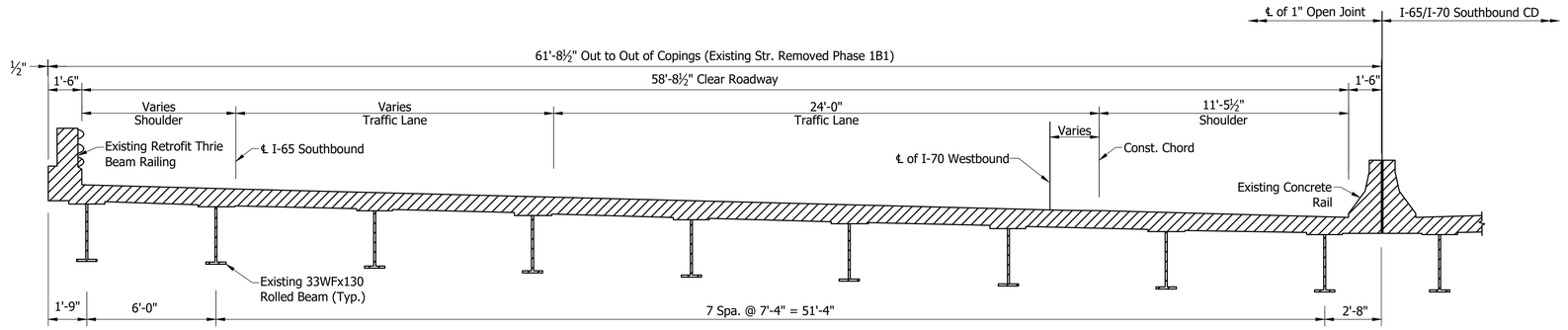
CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

INDIANA DEPARTMENT OF TRANSPORTATION

INDEX

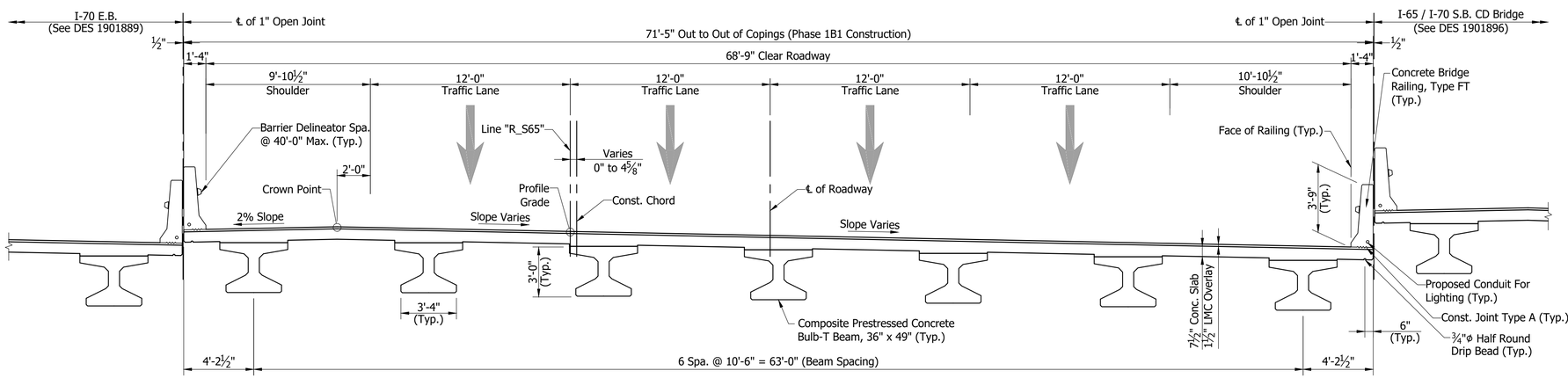
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N/A	I65-111-10617 BSBL
VERTICAL SCALE	DESIGNATION
N/A	1901892
SURVEY BOOK	SHEET
ELECTRONIC	2 OF 15
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BFS NO. 6412



EXISTING SOUTHBOUND TYPICAL SECTION

NOT TO SCALE



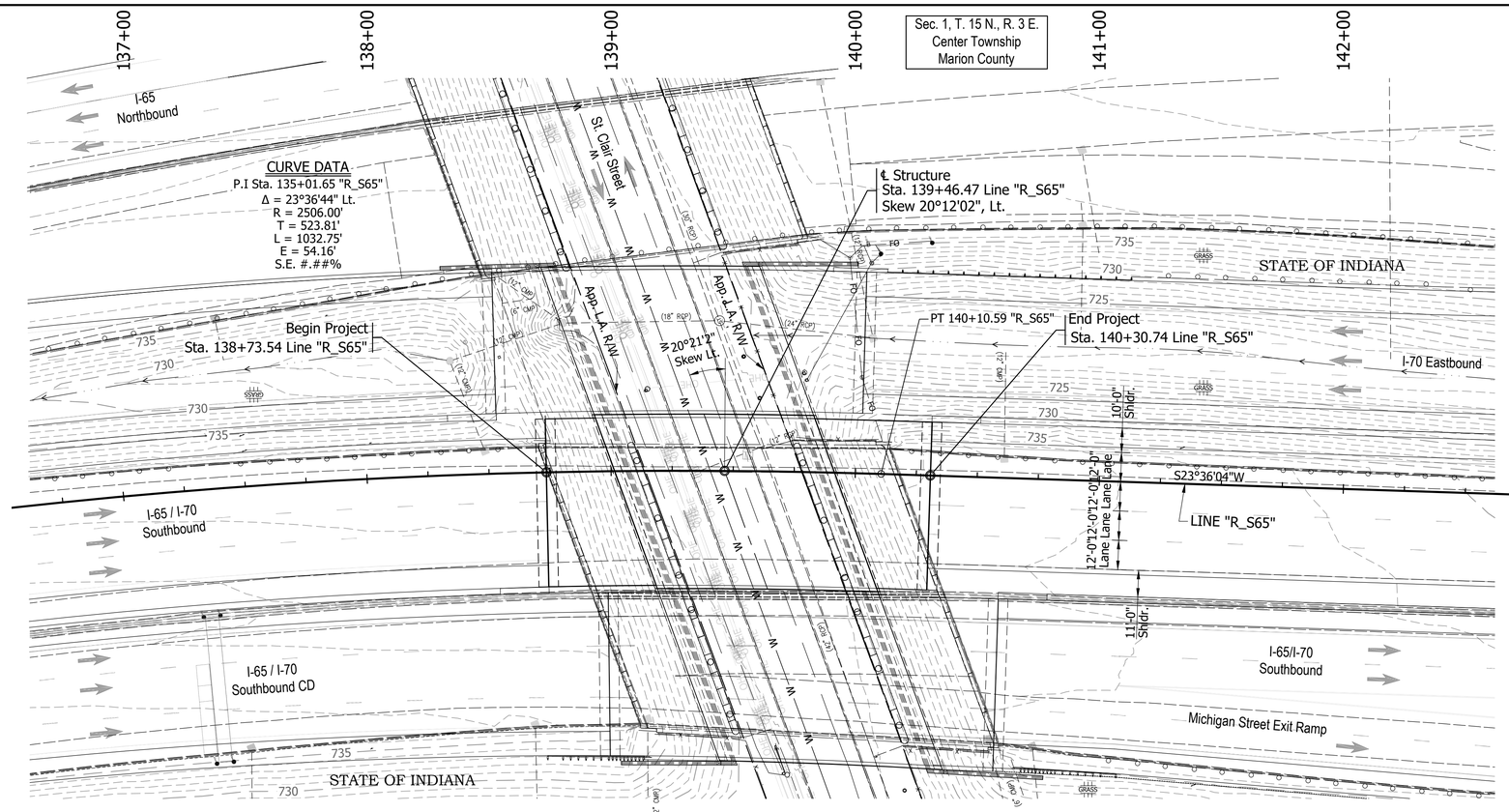
TYPICAL SECTION

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

	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: As Noted	BRIDGE FILE: I65-111-10617 BSBL
			VERTICAL SCALE: N/A	DESIGNATION: 1901892
	DESIGNED: B. WRIGHT DRAWN: K. COFFMAN	MAINTENANCE OF TRAFFIC	SURVEY BOOK: ELECTRONIC	SHEET: 3 OF 15
	CHECKED: M. EICHENAUER CHECKED: B. WRIGHT		CONTRACT: B-36910	PROJECT: 1600808

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EXISTING STRUCTURE

The existing structure was built in 1974. Structure was rehabilitated in 2003. The structure is a 3-span continuous composite 33" WF steel beam.

Span lengths: 1 @ 37'-0", 1 @ 68'-0", 1 @ 37'-0"

Clear roadway 58'-8½". Total length of 146'-0 1/8"

Existing structure to be removed.

Existing plans are on file with the Indiana Department of Transportation under Bridge File No. I-65-112-5736 & I-65-112-5736A.

EARTHWORK TABULATION

See Roadway Plans (DES #_____) for earthwork tabulation.

NOTE: ALL TOPOGRAPHY INFORMATION REFERENCED TO LINE "_____" UNLESS NOTED.

ALL R/W ON THIS SHEET DESCRIBED FROM LINE "_____" UNLESS OTHERWISE NOTED

Notes:

1. For R/W and property information, see Location Control Route Survey (DES #_____).
2. For alignment data, see Geometric Layout Sheets (DES #_____).
3. See Road Plans (DES #_____) for Horizontal & Vertical Control Data.

PRESTRESSED COMPOSITE CONCRETE BULB-TEE BEAM BRIDGE
1 SPAN: 87'-9 7/8"
68'-9" CLEAR ROADWAY
SKEW 20°21'02" LT.
I-65 / I-70 S.B. OVER ST. CLAIR STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

INDIANA DEPARTMENT OF TRANSPORTATION

LAYOUT

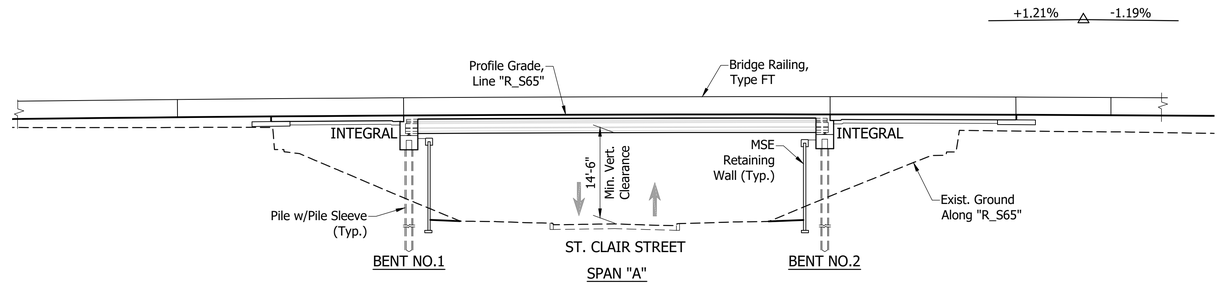
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1" = 30'	I65-111-10617 BSBL
VERTICAL SCALE	DESIGNATION
1" = 10'	1901892
SURVEY BOOK	SHEET
ELECTRONIC	4 OF 15
CONTRACT	PROJECT
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BFS NO. 6412

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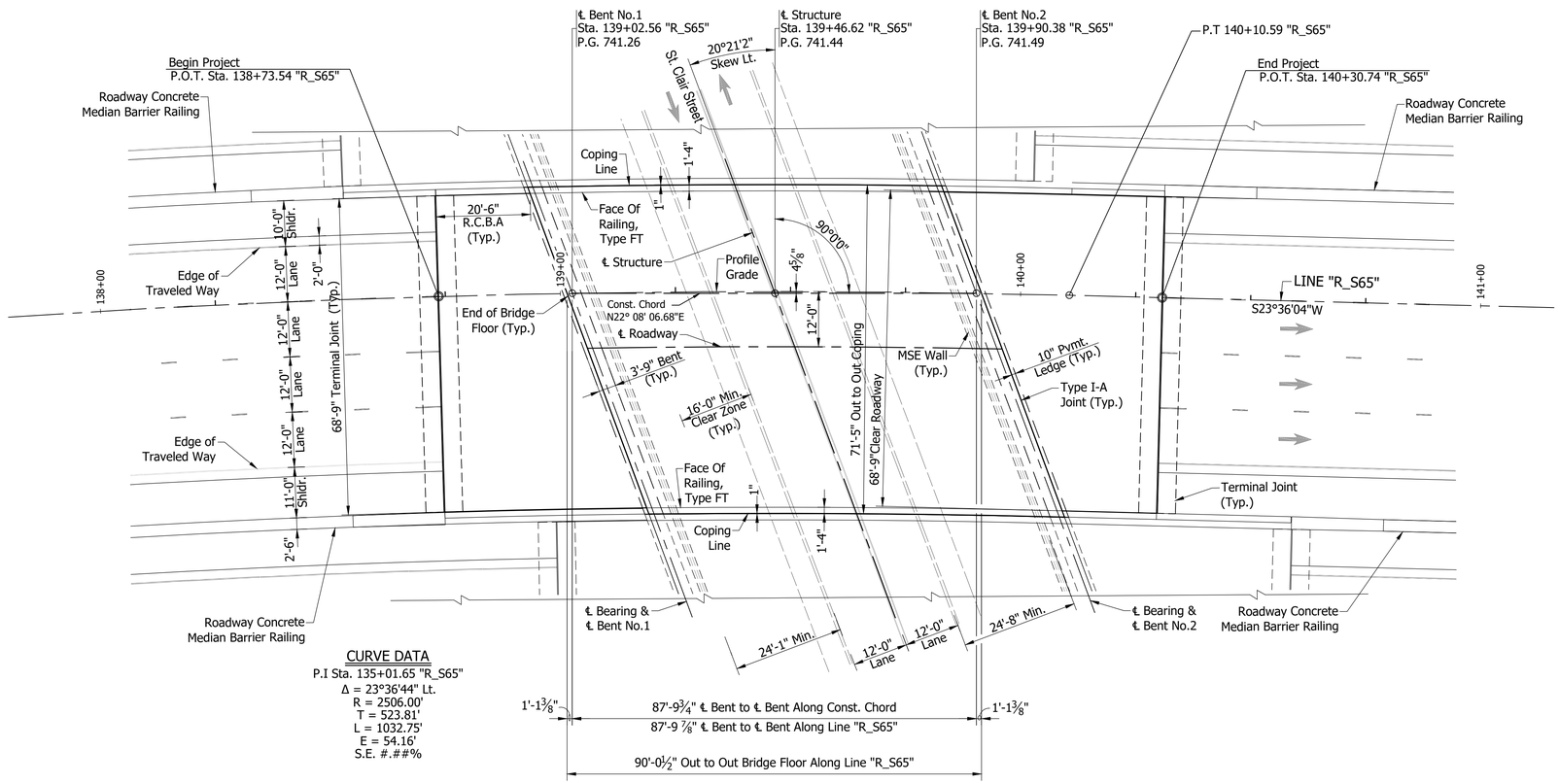
STRUCTURE TO BE BUILT ON A 399' VERTICAL CURVE

PVI Sta. 140+00
PVI El. 742.96
399 V.C.



ELEVATION

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



CURVE DATA

P.I Sta. 135+01.65 "R_S65"
Δ = 23°36'44" Lt.
R = 2506.00'
T = 523.81'
L = 1032.75'
E = 54.16'
S.E. #.##%

PLAN

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

NOTE:
See Sheet 6 For Typical Section

PRESTRESSED COMPOSITE CONCRETE BULB-TEE BEAM BRIDGE
1 SPAN: 87'-9 7/8"
68'-9" CLEAR ROADWAY; SKEW 20°21'02" LT.
I-65 / I-70 S.B. OVER ST. CLAIR STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH
CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

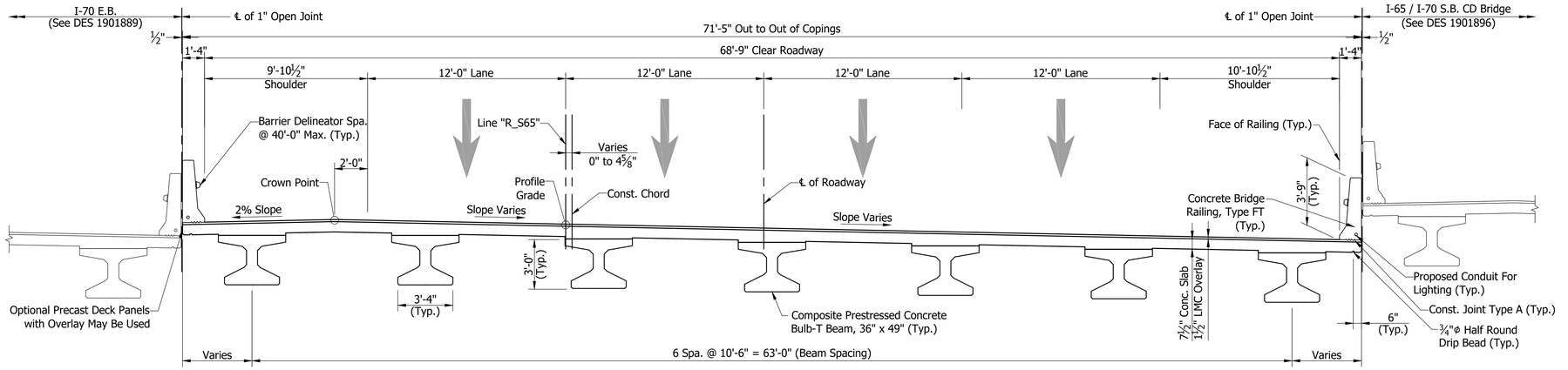
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN - PLAN & ELEVATION VIEWS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I65-111-10617 BSBL
VERTICAL SCALE	DESIGNATION
N/A	1901892
SURVEY BOOK	SHEET
ELECTRONIC	5 OF 15
CONTRACT	PROJECT
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BFS NO. 6412

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TYPICAL SECTION

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

GENERAL NOTES

The existing structure shall be removed.

Reinforcing bars covering shall be 3 ½" in top and 1" min. in bottom of floor slabs and 3" in footings except bottom steel which shall be 4", and 2" in all other parts, unless noted.

Concrete in floor slab, and diaphragms, barriers, and end bents shall be an alternate Class C in accordance with the Technical Provisions.

Reinforcing Bars in Deck, Barrier, and End Bent Diaphragm Extending into the Deck shall be Stainless Steel. Reinforcing Bars in End Bent Diaphragm not Extending into the Deck and in the Cap shall be Epoxy Coated.

All exposed faces of the MSE walls and reinforced concrete bridge approach slabs shall receive surface seal.

See Bridge Aesthetic Plan for Architectural Details.

DESIGN DATA

LIVE LOAD:

Superstructure and Substructure Designed for HL-93 loading in accordance with the AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017 and its subsequent revisions.

DEAD LOAD:

Designed for Actual Dead Load plus 35 psf of future wearing surface, and 15 psf for SIP Metal Deck Forms.

FLOOR SLAB:

Slab designed with a 7 ½" structural depth and a 1 ½" very early strength LMC wearing surface.

DESIGN STRESSES

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 beam. The finishing machine was assumed to be supported 6 in. outside the vertical coping form. The top overhang brackets were assumed to be located 6 in. 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 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30 foot length of the deck centered with the finishing machine.

FINISHING-MACHINE LOAD:

4500 lb distributed over 10 ft. along the coping.

WIND LOAD:

Designed for 70 mph horizontal wind load in accordance with LRFD 3.8.1.

ULTIMATE DESIGN STRENGTHS:

Class "A" Concrete	f'c = 3,500 p.s.i.
Class "B" Concrete	f'c = 3,000 p.s.i.
Class "C" Concrete	f'c = 4,000 p.s.i.
Reinforcing Steel (Grade 60)	Fy = 60,000 p.s.i. (barrier)
	Fy = 75,000 p.s.i. (deck)
	Fy = 75,000 p.s.i. (all other locations)

SEISMIC DESIGN DATA:

Seismic Site Class	C
PGA (g)	0.051
S_s (g)	0.12
S_1 (g)	0.051
S_{D1} (g)	0.086
Seismic Design Category	A

PRESTRESSED COMPOSITE CONCRETE BULB-TEE BEAM BRIDGE
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68'-9" CLEAR ROADWAY; SKEW 20°21'02" LT.
I-65 / I-70 S.B. OVER ST. CLAIR STREET
MARION COUNTY

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DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

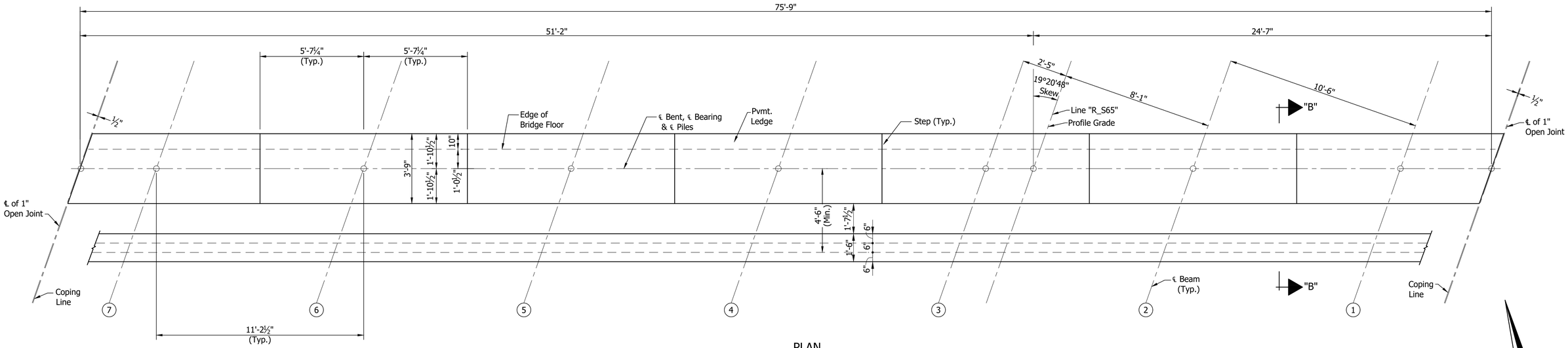
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN -TYPICAL SECTION

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I65-111-10617 BSBL
VERTICAL SCALE	DESIGNATION
N/A	1901892
SURVEY BOOK	SHEET
ELECTRONIC	6 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

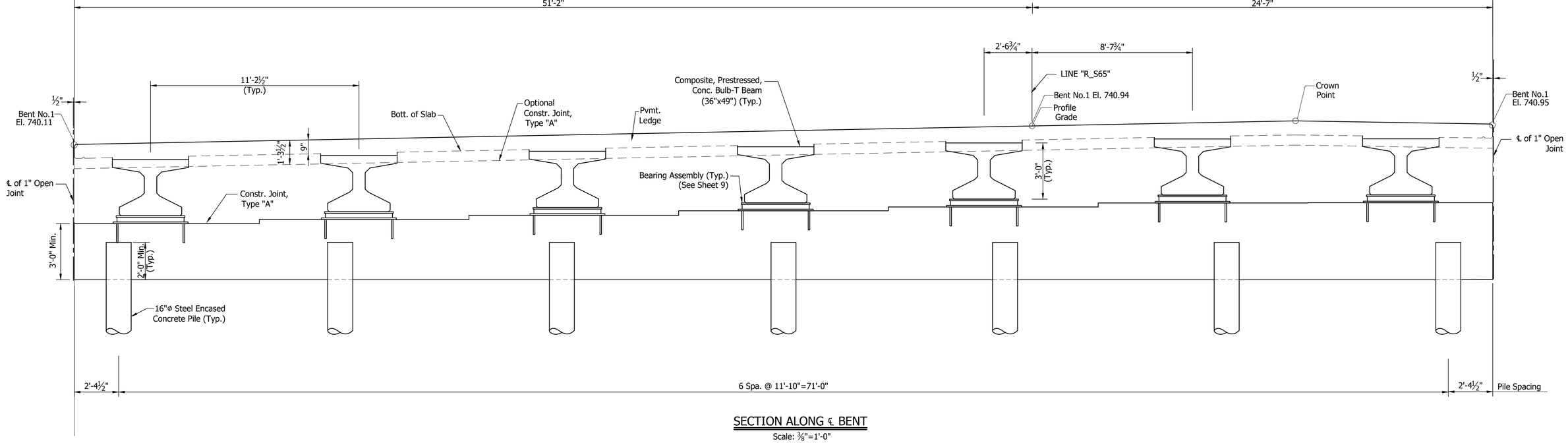
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PLAN
BENT NO.1 SB

Scale: ⅜"=1'-0"

SEAT ELEVATIONS							
Beam No.	7	6	5	4	3	2	1
Bent No.1	734.87	735.18	735.61	736.04	736.47	736.90	737.01



SECTION ALONG ℄ BENT

Scale: ⅜"=1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: V. SATHIRAJU DRAWN: K. COFFMAN

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

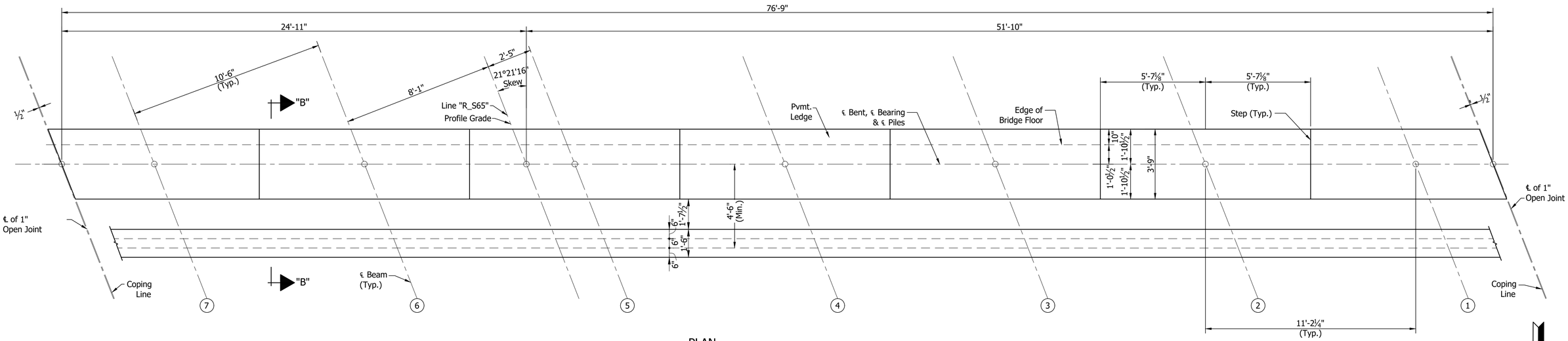
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 1 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I65-111-10617 BSBL
VERTICAL SCALE	DESIGNATION
N/A	1901892
SURVEY BOOK	SHEET
ELECTRONIC	7 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

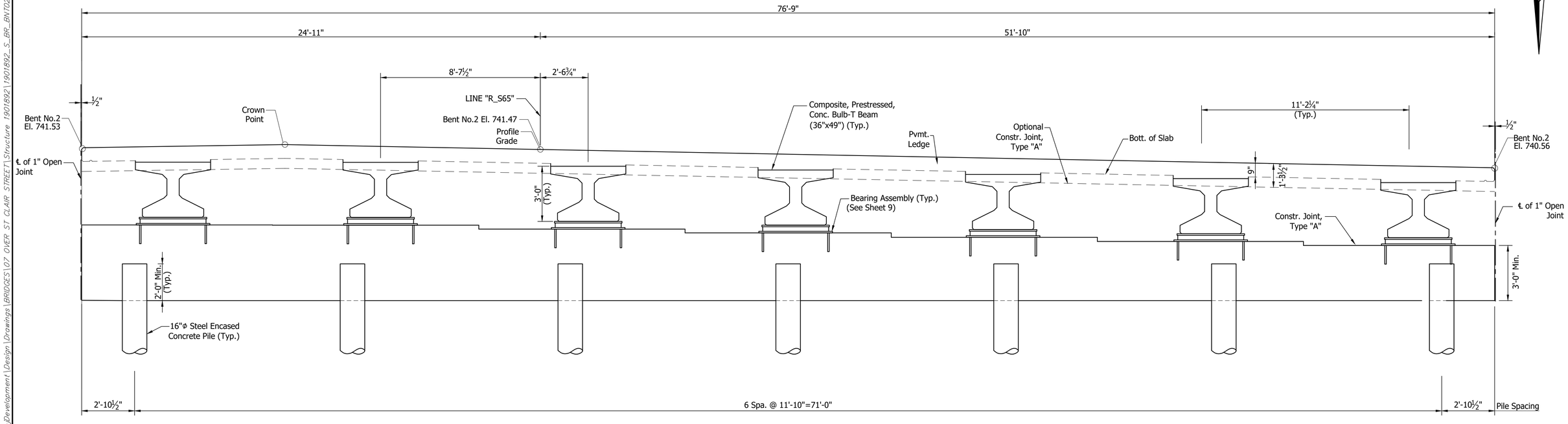
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PLAN
BENT NO.2 SB

Scale: ⅜"=1'-0"

SEAT ELEVATIONS							
Beam No.	(7)	(6)	(5)	(4)	(3)	(2)	(1)
Bent No.2	735.37	735.78	736.19	736.60	737.01	737.41	737.52



SECTION ALONG ℄ BENT

Scale: ⅜"=1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: V. SATHIRAJU DRAWN: K. COFFMAN

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

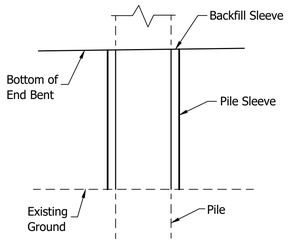
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 2 DETAILS

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As Noted	I65-111-10617 BSBL
VERTICAL SCALE	DESIGNATION
N/A	1901892
SURVEY BOOK	SHEET
ELECTRONIC	8 OF 15
CONTRACT	PROJECT
B-36910	1600808

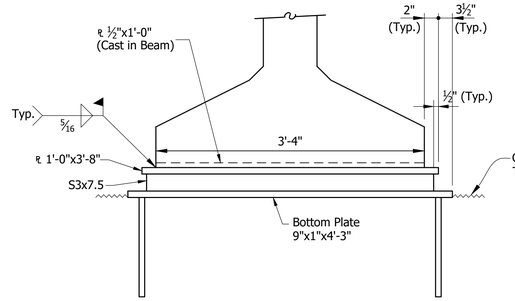
BFS NO. 6412

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PILE SLEEVE DETAIL

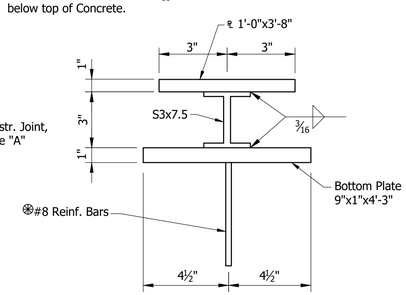
Not to Scale



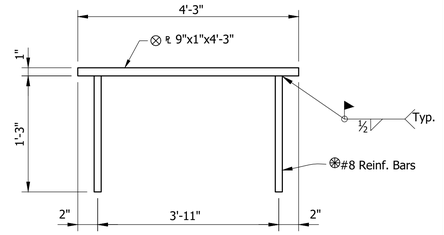
ELEVATION

⊛ As an alternate a ⅞"Φx1'-3" Long Headed Automatic Welded Stud may be used.

⊗ Setting Tolerance of Bottom Plate-Level with to not more than 1/16" below top of Concrete.



SECTION

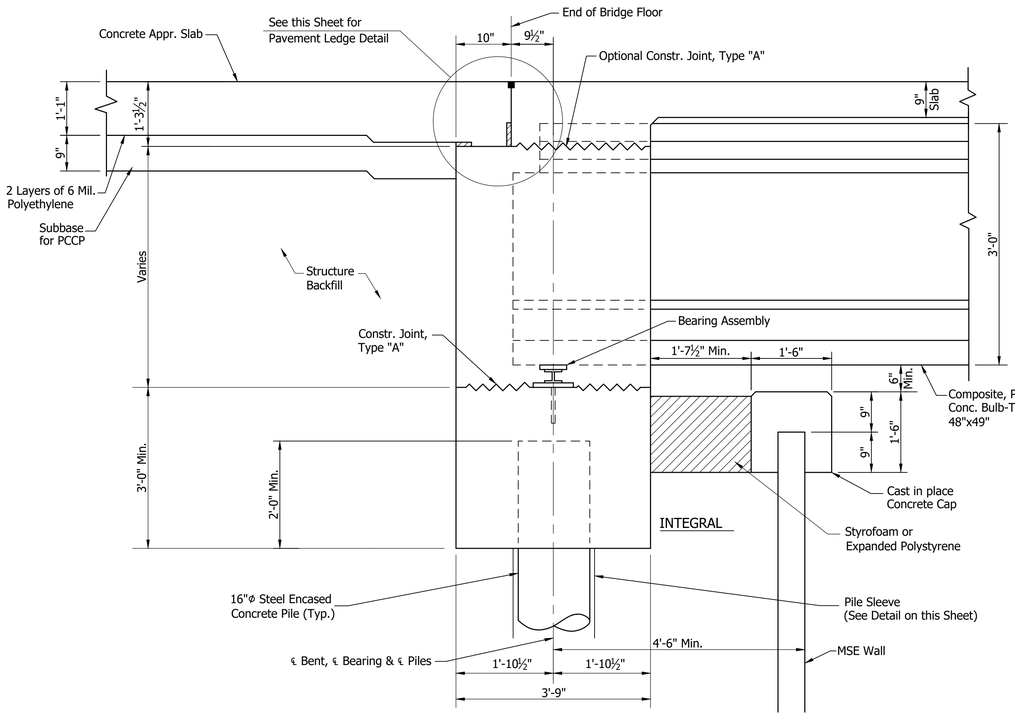


BOTTOM PLATE DETAIL

Not to Scale

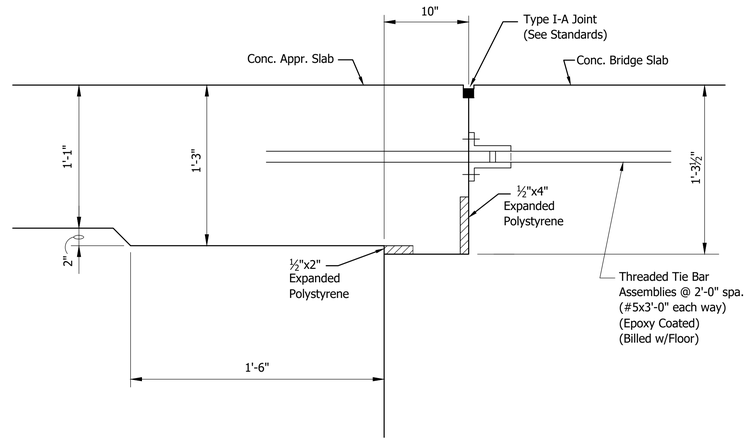
BEARING ASSEMBLY

Not to Scale



SECTION "B-B"

Not to Scale



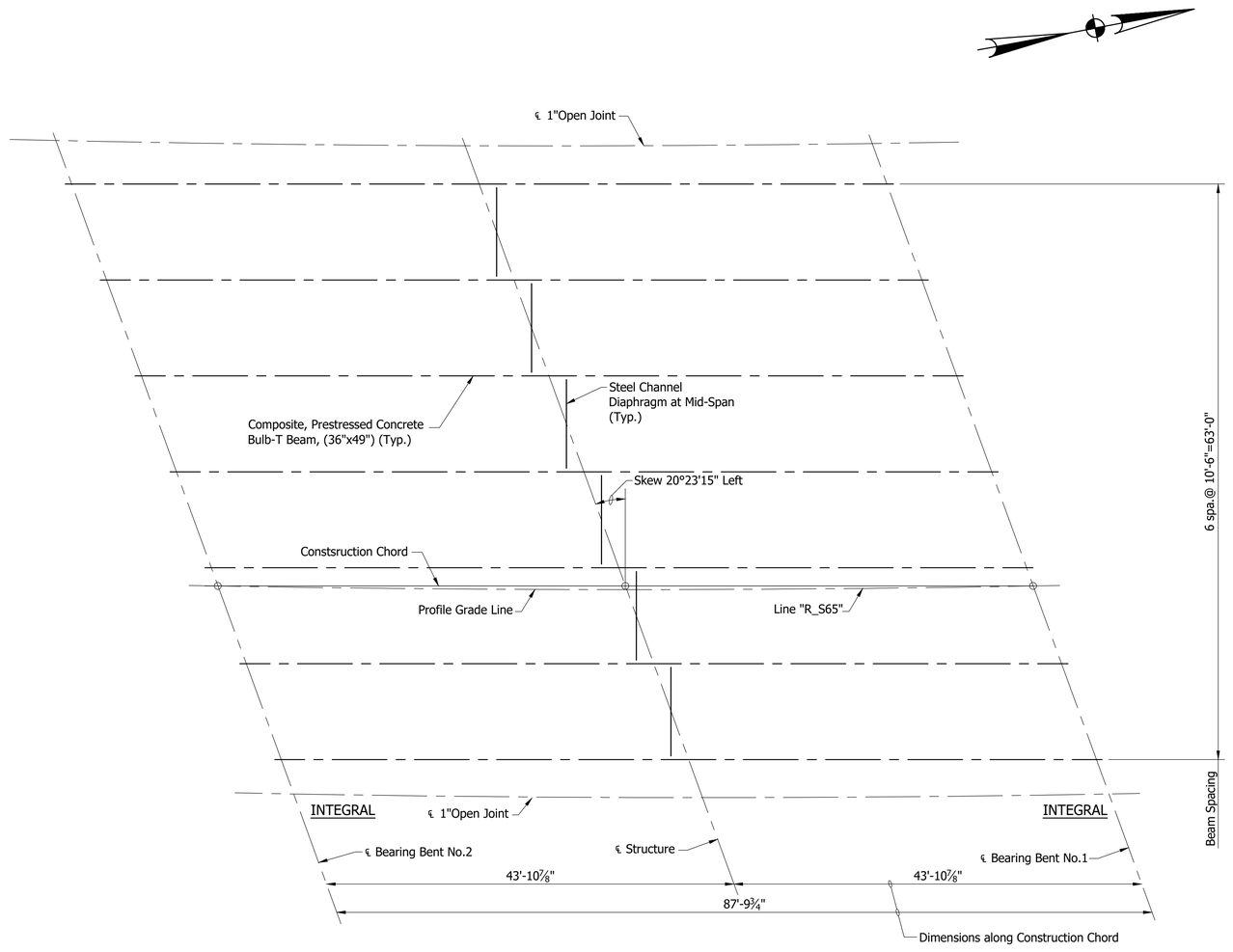
PAVEMENT LEDGE DETAIL

Not to Scale

	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: N/A	BRIDGE FILE: I65-111-10617 BSBL
			VERTICAL SCALE: N/A	DESIGNATION: 1901892
	DESIGNED: V. SATHIRAJU DRAWN: K. COFFMAN	BENTS NO. 1 AND NO. 2 DETAILS	SURVEY BOOK: ELECTRONIC	SHEET: 9 OF 15
	CHECKED: B. WRIGHT CHECKED: B.WRIGHT		CONTRACT: B-36910	PROJECT: 1600808

BFS NO. 6412

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BEAM ERECTION PLAN

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

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE

DESIGNED: V. SATHIRAJU DRAWN: D. SHEETZ

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

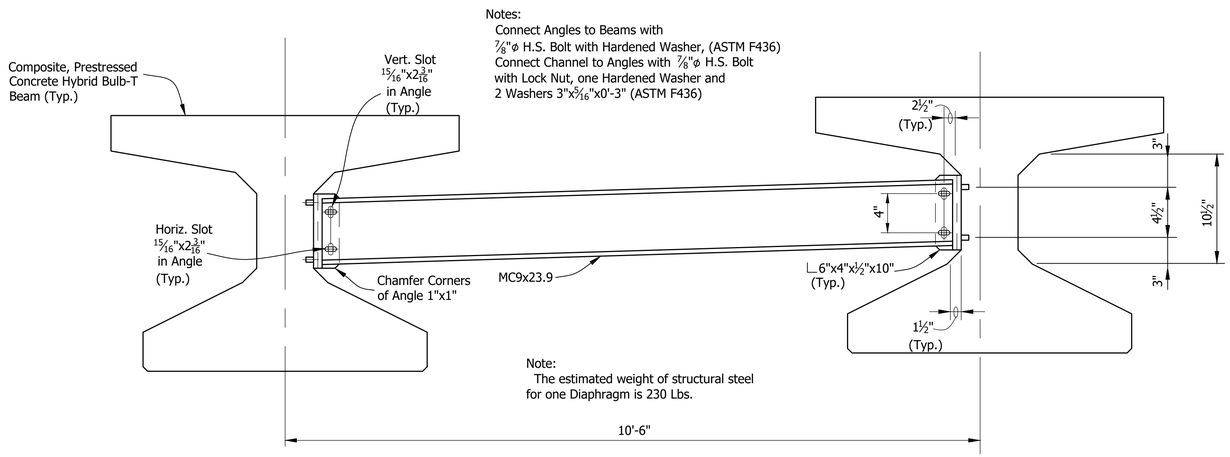
INDIANA DEPARTMENT OF TRANSPORTATION

FRAMING PLAN

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I65-111-10617 BSBL
VERTICAL SCALE	DESIGNATION
N/A	1901892
SURVEY BOOK	SHEET
ELECTRONIC	10 OF 15
CONTRACT	PROJECT
B-36910	1600808

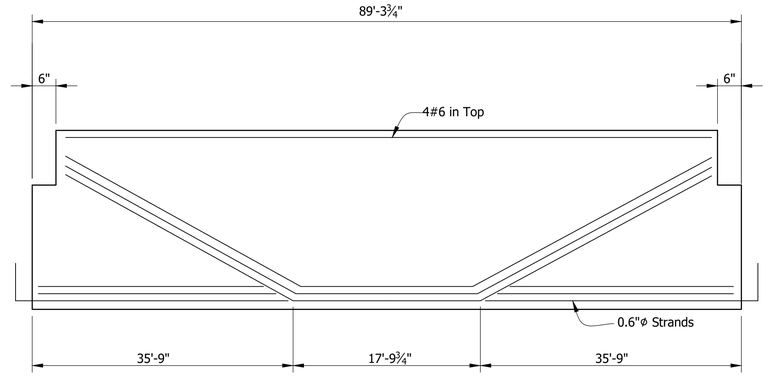
BFS NO. 6412

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ELEVATION

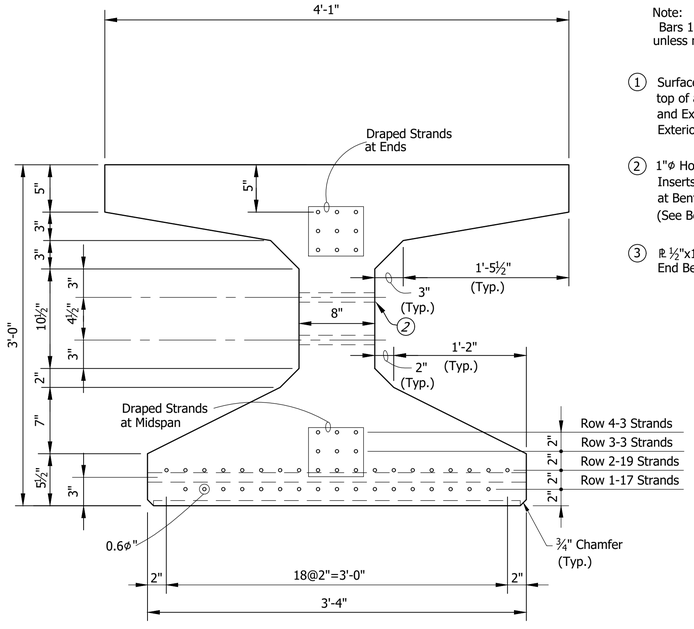
Not to Scale



BEAM ELEVATION
SPAN "A"
SHOWING DRAPED STRANDS

Not to Scale

✳ Denotes Epoxy Coated



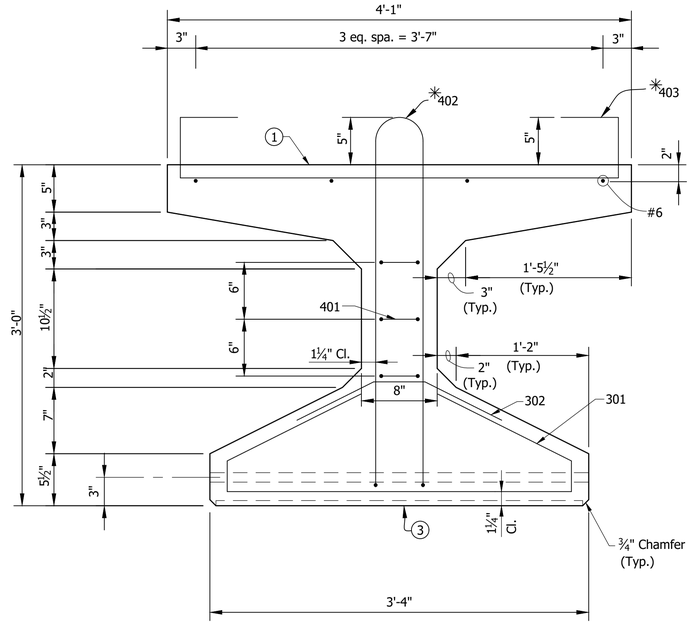
SECTION SHOWING STRANDS

Note:
Bars 1" Clear
unless noted.

① Surface Seal req'd on top of all Beams and Exterior Face of Exterior Beams

② 1"ø Holes or ¾"ø Inserts for Dowels at Bent or Pier. (See Beam Plans)

③ ℞ ½"x12"x3'-2½" at End Bent Ends only



SECTION SHOWING REINFORCING

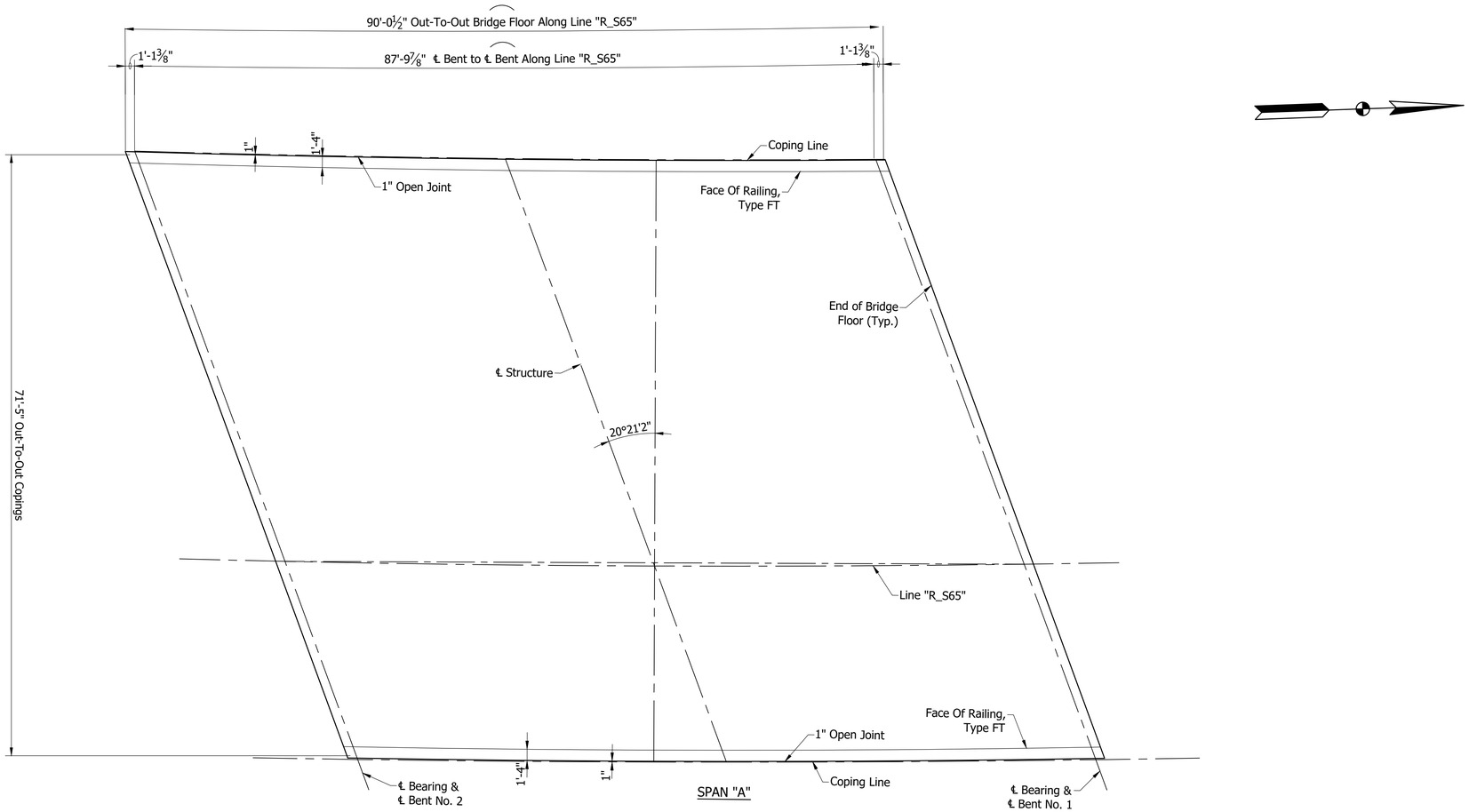
BEAM SECTIONS

Not to Scale

	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: As Noted; BRIDGE FILE: I65-111-10617 BSBL; VERTICAL SCALE: N/A; DESIGNATION: 1901892
	DESIGNED: J. GOULD DRAWN: D. PIERCEFIELD CHECKED: B. WRIGHT CHECKED: B. WRIGHT	BEAM DETAILS	SURVEY BOOK; SHEET: ELECTRONIC 11 OF 15; CONTRACT; PROJECT: B-36910 1600808

BFS NO. 6412

\\bsn1241\jobs\641200 0000\ProjDevelopment\Design\Drawings\BRIDGES\07 OVER ST CLAIR STREET\Structure 1901892\1901892_S_BR_BM001.dwg Dylan Piercefield Plot: 2/24/2020 6:40 AM Save: 2/12/2020 10:09 AM



FLOOR PLAN

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

NOTE:
See Sheet ___ For _____

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: V. SATHIRAJU DRAWN: D. PIERCEFIELD

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

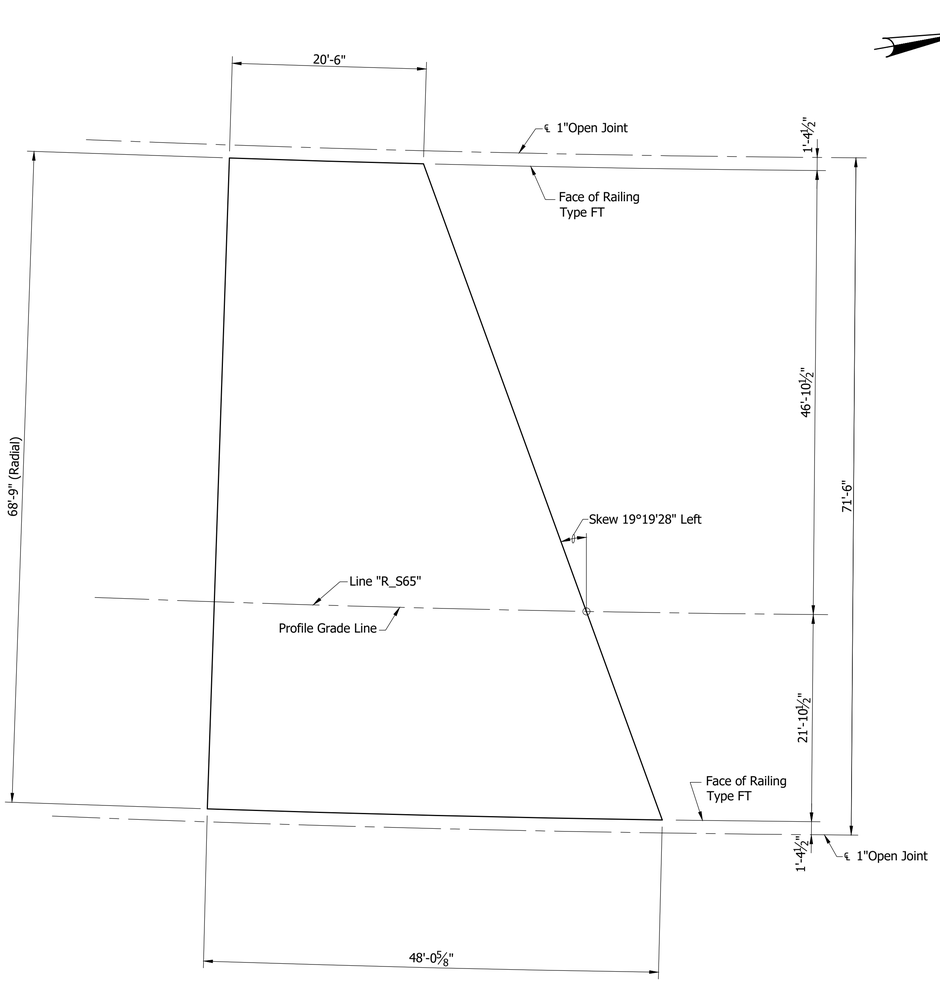
INDIANA
DEPARTMENT OF TRANSPORTATION

FLOOR DETAILS

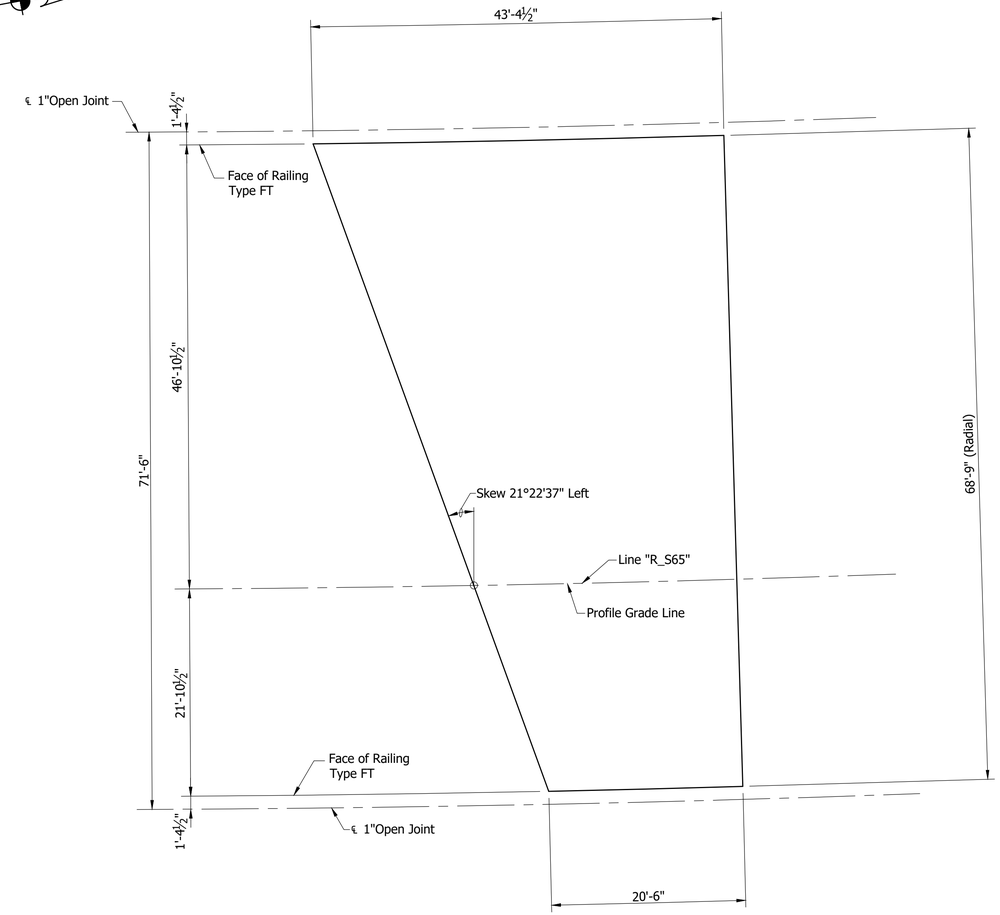
HORIZONTAL SCALE	BRIDGE FILE
As Noted	I65-111-10617 BSBL
VERTICAL SCALE	DESIGNATION
N/A	1901892
SURVEY BOOK	SHEET
ELECTRONIC	12 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

\\bfsn1241\Jobs5\641200.0000\ProjDevelopment\Design\Drawings\BRIDGES\07 OVER ST CLAIR STREET\Structure 1901892\1901892_S_BR_FL001.dwg Dylon Piercefield Plot: 2/24/2020 6:40 AM Save: 2/5/2020 8:59 AM



PLAN
SOUTH SLAB
Scale: ⅛"=1'-0"



PLAN
NORTH SLAB
Scale: ⅛"=1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE

DESIGNED: D. SHEETZ DRAWN: D. SHEETZ

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

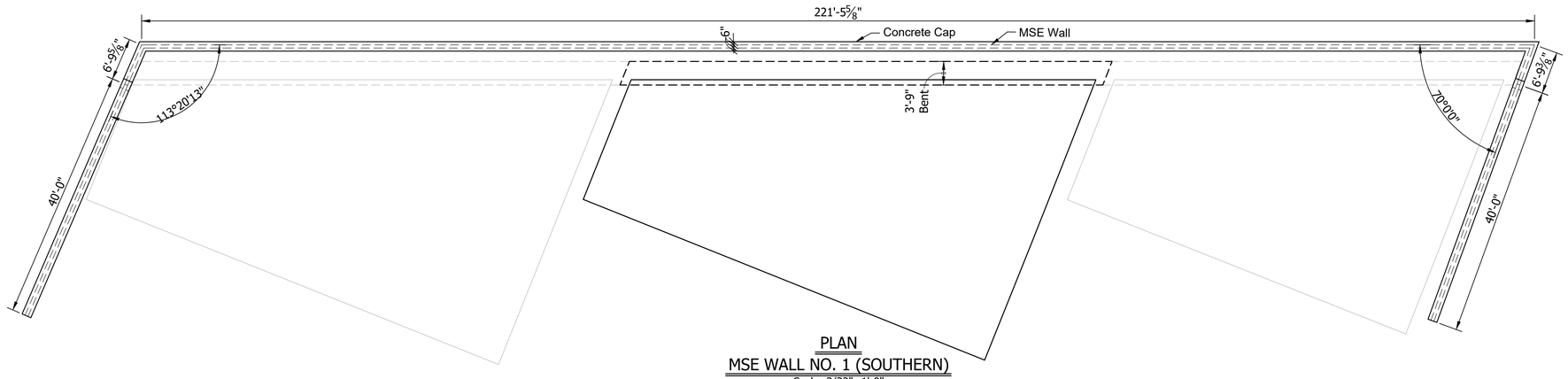
INDIANA
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB

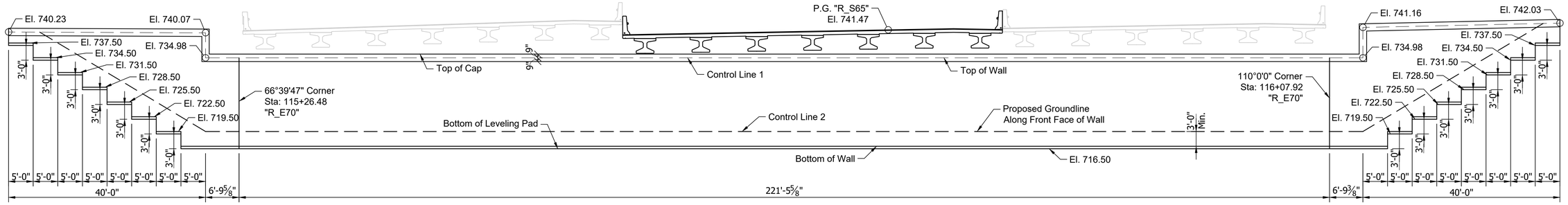
HORIZONTAL SCALE	BRIDGE FILE
As Noted	I65-111-10617 BSBL
VERTICAL SCALE	DESIGNATION
N/A	1901892
SURVEY BOOK	SHEET
ELECTRONIC	13 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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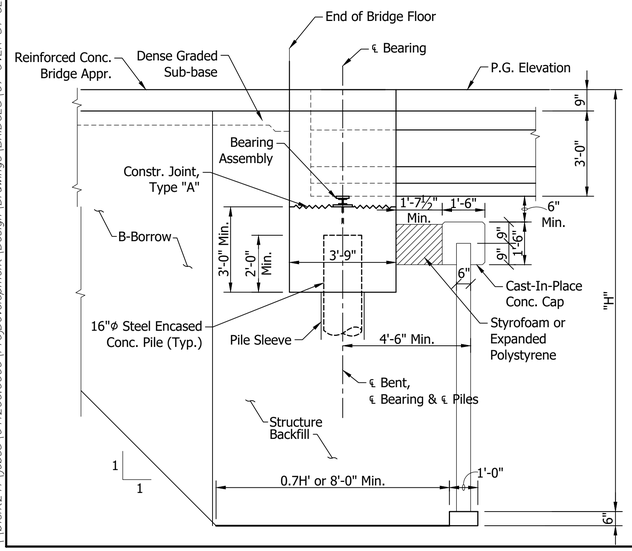


PLAN
MSE WALL NO. 1 (SOUTHERN)
Scale: 3/32"=1'-0"



ELEVATION
MSE WALL NO. 1 (SOUTHERN)
Scale: 3/32"=1'-0"

NOTE:
Elevation Looking At Back Face of Wall

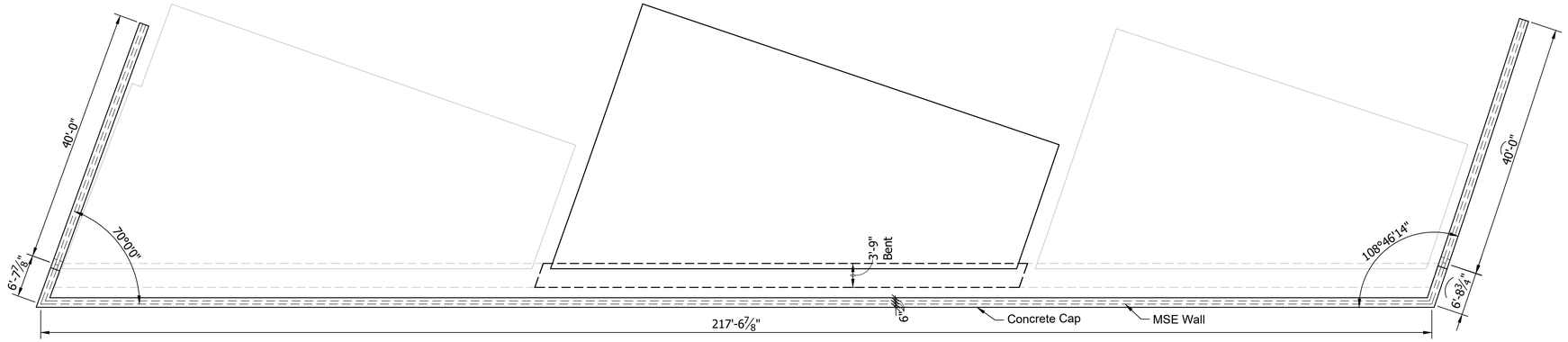


SECTION
MSE WALL NO. 1
Scale: 3/8"=1'-0"

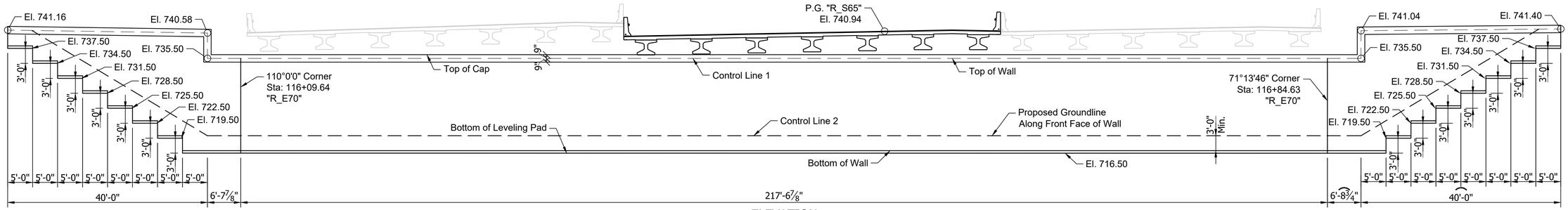
	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: AS NOTED	BRIDGE FILE: I65-111-10617 BSBL
			VERTICAL SCALE: AS NOTED	DESIGNATION: 1901892
	DESIGNED: B. WRIGHT DRAWN: D. PIERCEFIELD	WALL LAYOUT	SURVEY BOOK	SHEET
	CHECKED: M. EICHENAUER CHECKED: B. WRIGHT		ELECTRONIC	14 OF 15
			CONTRACT: B-36910	PROJECT: 1600808

BFS NO. 6412

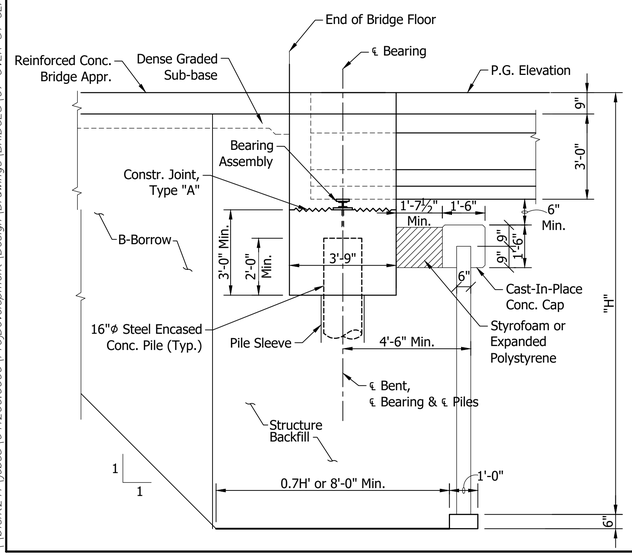
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PLAN
MSE WALL NO. 2 (NORTHERN)
Scale: 3/32"=1'-0"



ELEVATION
MSE WALL NO. 2 (NORTHERN)
Scale: 3/32"=1'-0"



SECTION
MSE WALL NO. 2
Scale: 3/8"=1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: D. PIERCEFIELD

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

INDIANA
DEPARTMENT OF TRANSPORTATION

WALL LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I65-111-10617 BSBL
VERTICAL SCALE	DESIGNATION
AS NOTED	1901892
SURVEY BOOK	SHEET
ELECTRONIC	15 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

\\bfsnt241\Jobs5\641200.0000\ProjDevelopment\Design\Drawings\BRIDGES\07 OVER ST CLAIR STREET\Structure 1901892\1901892_S_BR_WLL02.dwg Dylan Piercefield Plot: 2/24/2020 6:41 AM Save: 2/19/2020 2:14 PM

PROJECT	DESIGNATION
1600808	1901896
CONTRACT	BRIDGE FILE
B-36910	I65-111-10618 CD

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN & SKEW	OVER	STATION
I65-111-10618 CD	PRESTRESSED COMPOSITE CONCRETE BULB-TEE BEAM BRIDGE	1 SPAN: 88'-1 3/8" SKEW 20°52'06" LT.	ST. CLAIR STREET	115+75.89 LINE "R_CDS65"

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

FOR SPANS OVER 20 FEET

ROUTE: I-65 / I-70 S.B. CD AT: RP 111+95

PROJECT NO. 1600808 P.E.

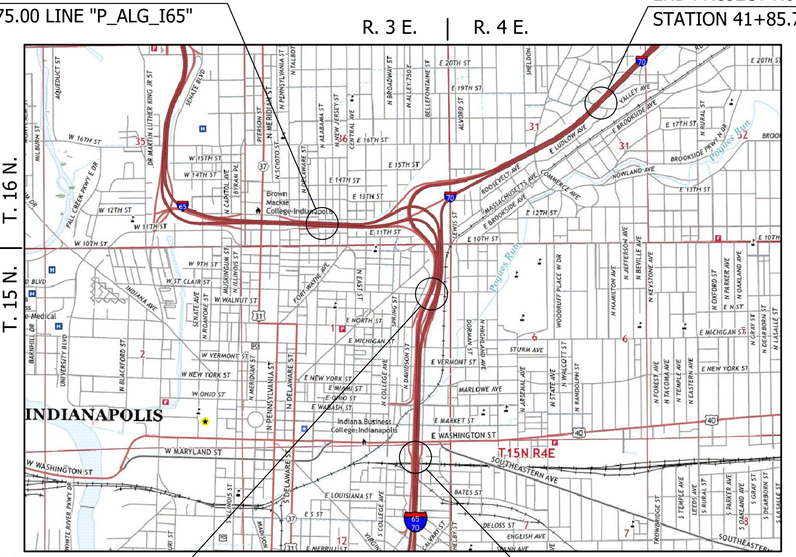
1600808 CONST.

NO ADDITIONAL RIGHT OF WAY REQUIRED FOR THIS PROJECT

BRIDGE REPLACEMENT ON I-65 / I-70 S.B. CD OVER ST. CLAIR STREET
LOCATED 1.65 MILES NORTH OF I-70 (SOUTH SPLIT) INTERCHANGE
SECTION 1, TOWNSHIP 15 NORTH, RANGE 3 EAST
CENTER TOWNSHIP, MARION COUNTY INDIANA

END PROJECT No. 1600808
STATION 25+75.00 LINE "P_ALG_I65"

END PROJECT No. 1600808
STATION 41+85.70 LINE "P_ALG_I70"



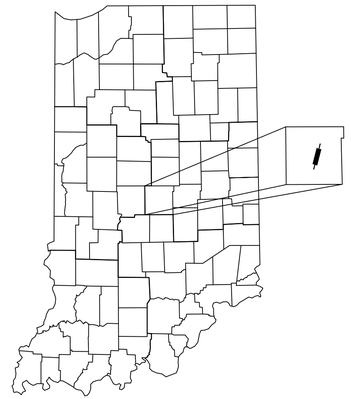
PROJECT LOCATION
BRIDGE FILE No. I65-111-10618 CD
I-65 / I-70 S.B. CD OVER ST. CLAIR STREET
STA. 115+75.89 LINE "R_CDS65"

LOCATION MAP
MARION COUNTY

BEGIN PROJECT No. 1600808
STATION 113+00.00 LINE "P_ALG_I65/I70"

SCALE: 1" = 2000'

TRAFFIC DATA	I-65 / I-70 S.B. CD	ST. CLAIR STREET
A.D.T. (2021)	33,942 V.P.D.	1,082 V.P.D.
A.D.T. (2041)	33,183 V.P.D.	1,427 V.P.D.
D.H.V. (2041)	3,982 V.P.H.	174 V.P.H.
DIRECTIONAL DISTRIBUTION	100 %	60 %
TRUCKS	4 % D.H.V.	4 % D.H.V.
DESIGN DATA		
DESIGN SPEED	55 M.P.H.	25 M.P.H.
PROJECT DESIGN CRITERIA	4R (FREEWAY)	N/A
FUNCTIONAL CLASSIFICATION	URBAN FREEWAY	LOCAL ROAD
RURAL/URBAN	URBAN (BUILT-UP)	URBAN (BUILT-UP)
TERRAIN	LEVEL	LEVEL
ACCESS CONTROL	FULL CONTROL	NONE



PROJECT LOCATION SHOWN BY

LATITUDE: 39°46'39" N LONGITUDE: 86°08'30" W

BRIDGE LENGTH :	0.017 MI.
ROADWAY LENGTH :	SEE ROAD PLANS
TOTAL LENGTH :	SEE ROAD PLANS
MAX GRADE :	1.59%

HUC: 05120201130020

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2020 TO
BE USED WITH THESE PLANS.

SUPERIOR CONSTRUCTION

PLANS PREPARED BY: Butler Fairman and Seufert Inc. (317)713-4615 PHONE

CERTIFIED BY: . DATE

APPROVED FOR LETTING: . DATE
INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE FILE	
I65-111-10618 CD	
DESIGNATION	
1901896	
SURVEY BOOK	SHEET
ELECTRONIC	1 OF 15
CONTRACT	PROJECT
B-36910	1600808

6412

\\bfsn241\Jobs5\641200.0000\ProjDevelopment\Design\Drawings\BRIDGES\07_OVER_ST_CLAIR_STREET\Structure_1901896\1901896_S_BR_TTL01.dwg Dylan Piercefield Plot: 2/24/2020 6:41 AM Save: 2/21/2020 10:37 AM

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UTILITIES

REVISIONS

SHEET NO.	DATE	REVISED

KIN PROJECT INFORMATION

DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB & I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVE.	
1901914	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER COLLEGE AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901927	NOT USED	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I70 WB OVER VERMONT STREET	

INDEX

SHEET NO.	DESIGNATION
1	TITLE
2	INDEX
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6	GENERAL PLAN - TYPICAL SECTION
7	BENT NO. 1 DETAILS
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9	BENTS NO. 1 AND NO. 2 DETAILS
10	FRAMING PLAN
11	BEAM DETAILS
12	FLOOR DETAILS
13	APPROACH SLAB
14	WALL LAYOUT
15	WALL LAYOUT

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

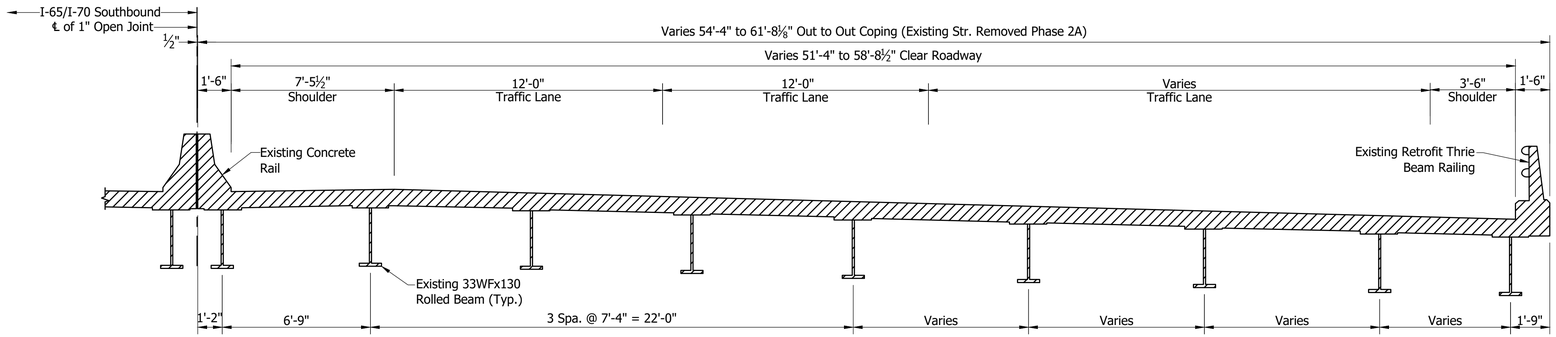
CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

INDIANA DEPARTMENT OF TRANSPORTATION

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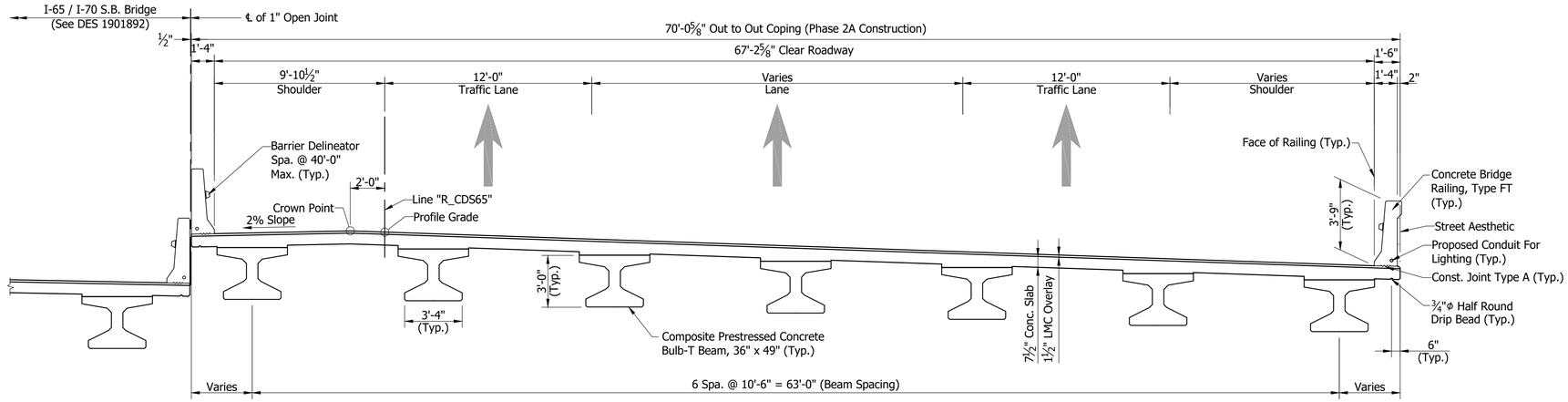
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N/A	I65-111-10618 CD
VERTICAL SCALE	DESIGNATION
N/A	1901896
SURVEY BOOK	SHEET
ELECTRONIC	2 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412



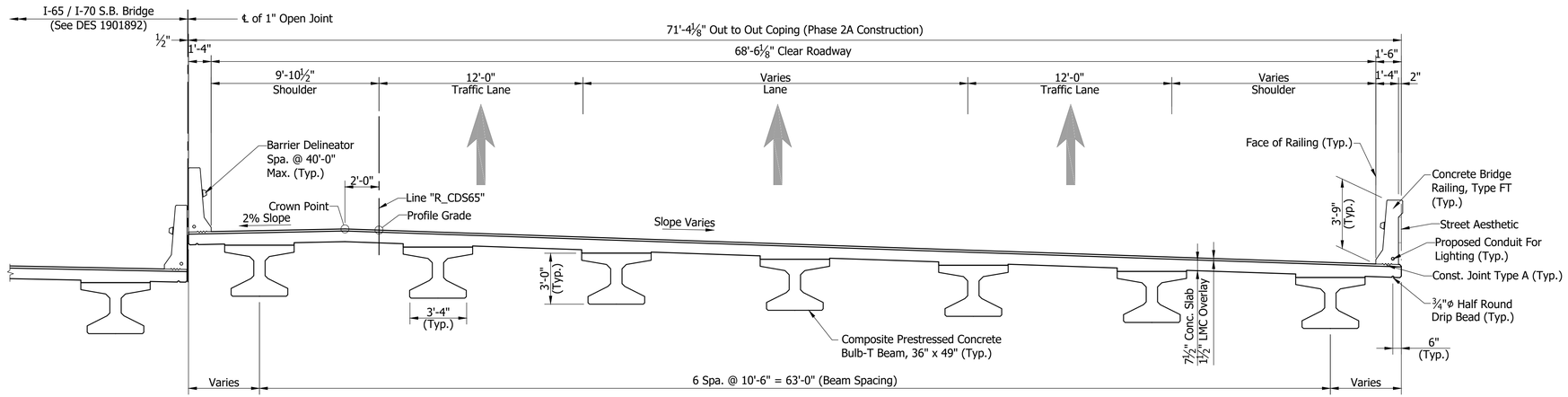
EXISTING I-65/I-70 SOUTHBOUND CD TYPICAL SECTION

NOT TO SCALE



TYPICAL SECTION - NARROW SIDE (NORTH)

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



TYPICAL SECTION - WIDE SIDE (SOUTH)

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

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE

DESIGNED: B. WRIGHT DRAWN: K. COFFMAN

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

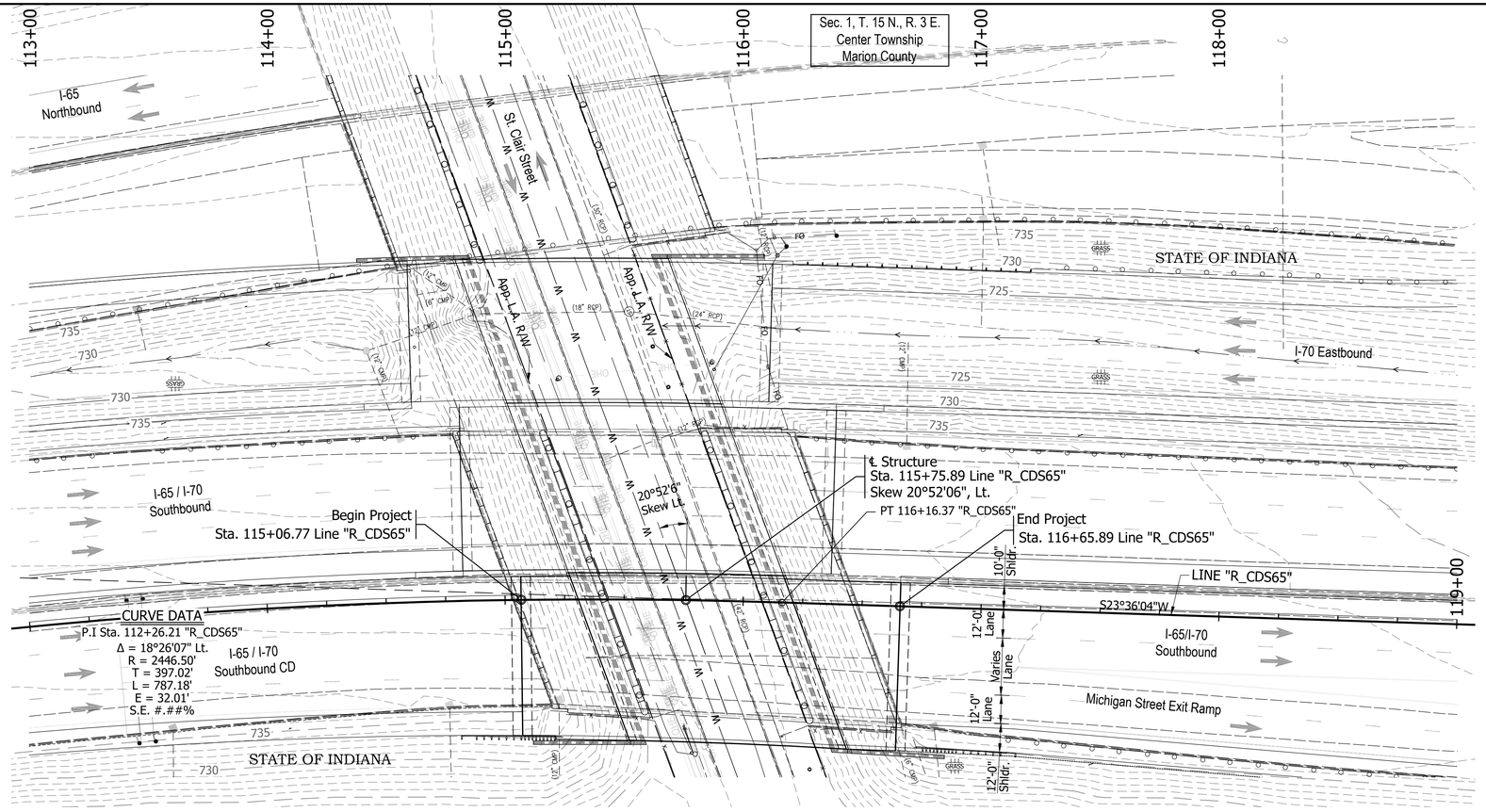
INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I65-111-10618 CD
VERTICAL SCALE	DESIGNATION
N/A	1901896
SURVEY BOOK	SHEET
ELECTRONIC	3 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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EXISTING STRUCTURE

The existing structure was built in 1974. Structure was rehabilitated in 2003. The structure is a 3-span continuous composite 33" WF steel beam.

Span lengths: 1 @ 37'-0", 1 @ 68'-0", 1 @ 37'-0"

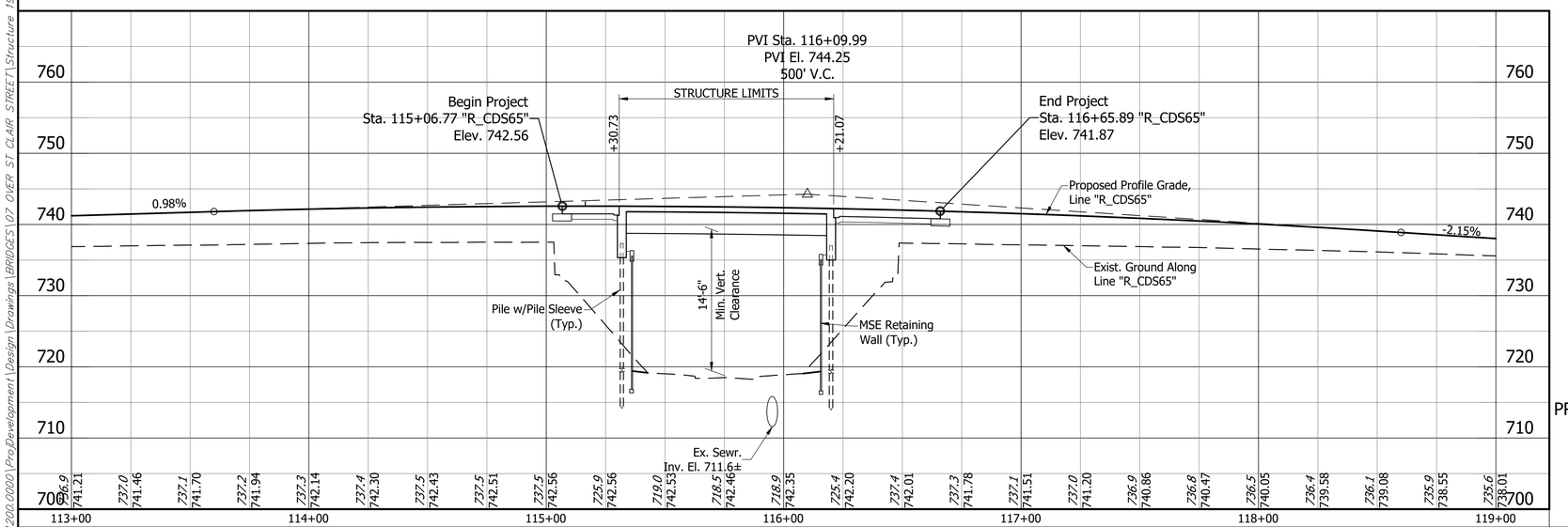
Clear roadway varies 51'-4" to 58'-8⅛". Total length of 146'-0 1/8"

Existing structure to be removed.

Existing plans are on file with the Indiana Department of Transportation under Bridge File No. I-65-112-5736 & I-65-112-5736A.

EARTHWORK TABULATION

See Roadway Plans (DES #_____) for earthwork tabulation.



NOTE: ALL TOPOGRAPHY INFORMATION REFERENCED TO LINE "_____" UNLESS NOTED.

ALL R/W ON THIS SHEET DESCRIBED FROM LINE "_____" UNLESS OTHERWISE NOTED

Notes:

1. For R/W and property information, see Location Control Route Survey (DES # _____).
2. For alignment data, see Geometric Layout Sheets (DES #_____).
3. See Road Plans (DES #_____) for Horizontal & Vertical Control Data.

PRESTRESSED COMPOSITE CONCRETE BULB-TEE BEAM BRIDGE
1 SPAN: 88'-1 3/8"
VARIES: 67'-2 5/8" TO 68'-6 1/8" CLEAR ROADWAY
SKEW 20°52'06" LT.
I-65 / I-70 S.B. CD OVER ST. CLAIR STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

INDIANA
DEPARTMENT OF TRANSPORTATION

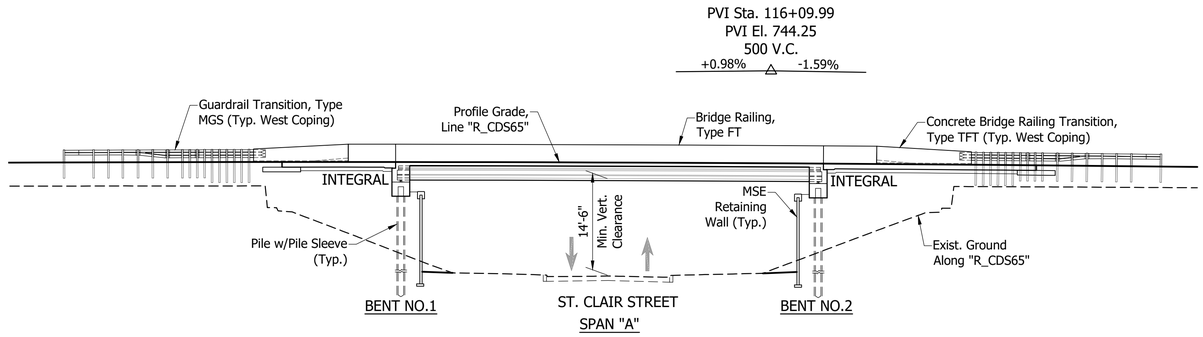
LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	I65-111-10618 CD
VERTICAL SCALE	DESIGNATION
1" = 10'	1901896
SURVEY BOOK	SHEET
ELECTRONIC	4 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

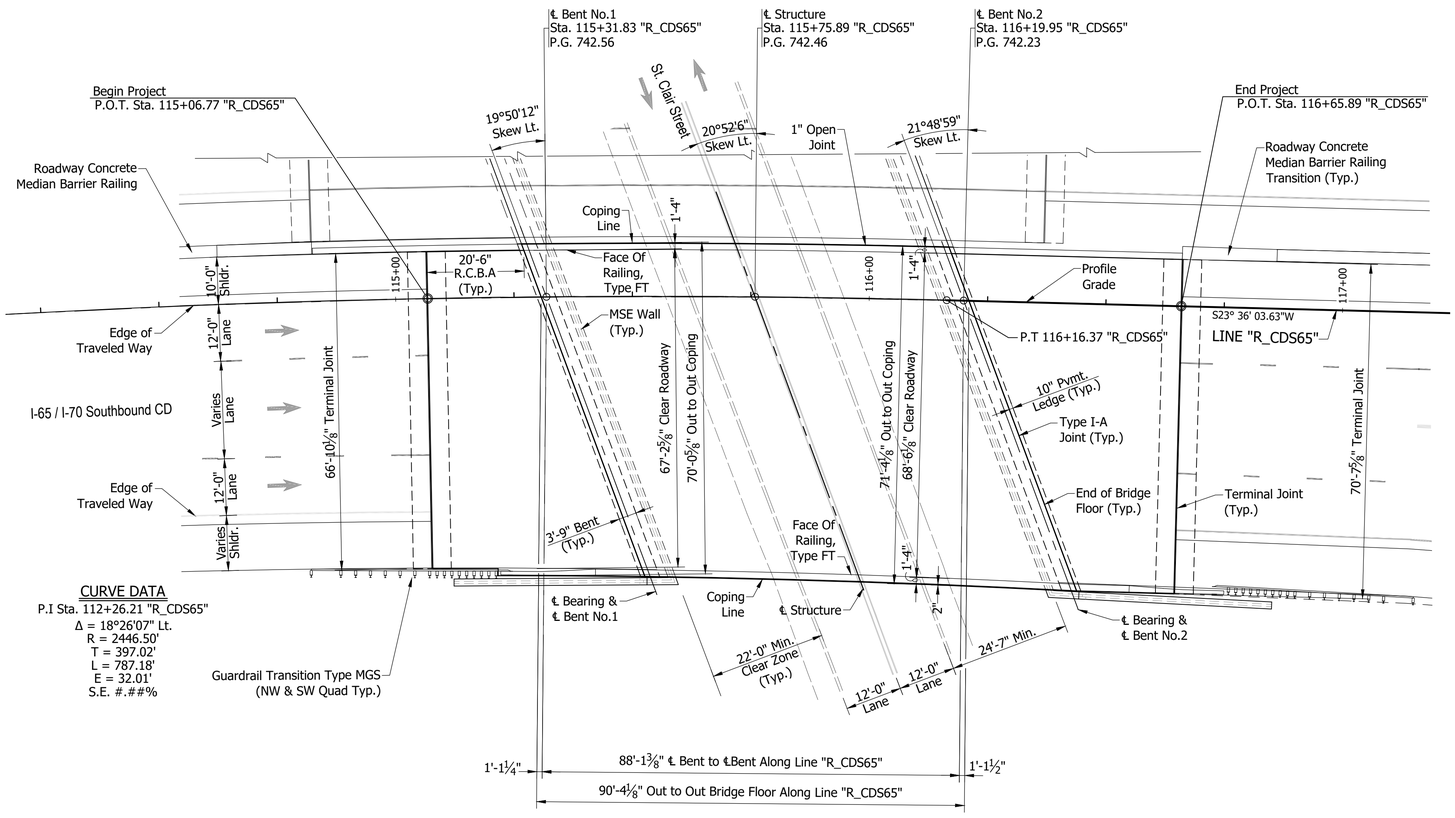
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STRUCTURE TO BE BUILT ON A 500' VERTICAL CURVE



ELEVATION

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



PLAN

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

NOTE:
See Sheet 6 For Typical Section

PRESTRESSED COMPOSITE CONCRETE BULB-TEE BEAM BRIDGE
1 SPAN: 88'-1 3/8"
VARIES: 67'-2 5/8" TO 68'-6 1/8" CLEAR ROADWAY; SKEW 20°52'06" LT.
I-65 / I-70 S.B. CD OVER ST. CLAIR STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

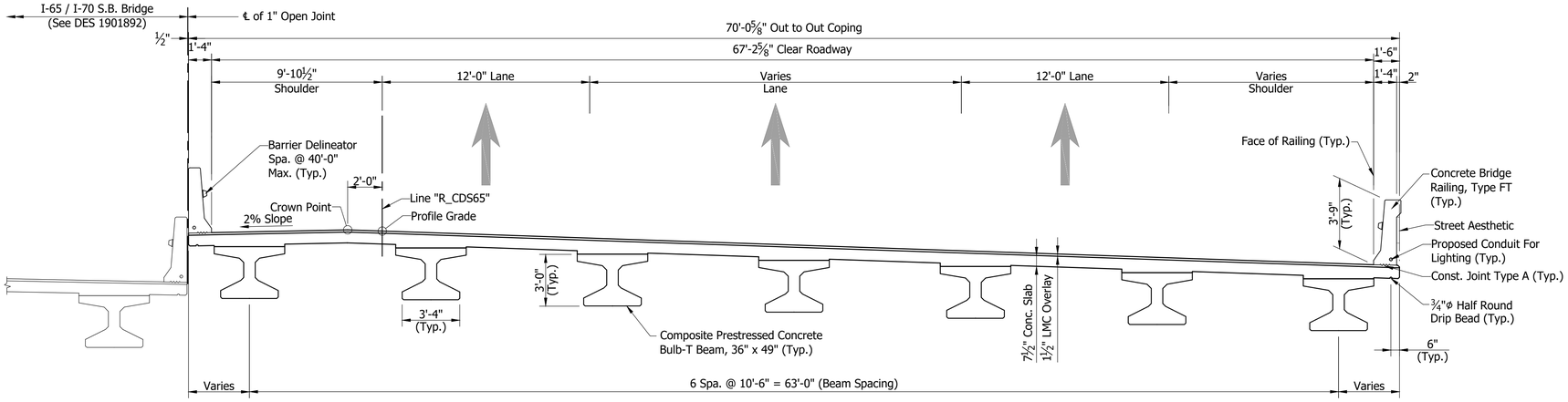
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN - PLAN & ELEVATION VIEWS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I65-111-10618 CD
VERTICAL SCALE	DESIGNATION
N/A	1901896
SURVEY BOOK	SHEET
ELECTRONIC	5 OF 15
CONTRACT	PROJECT
B-36910	1600808

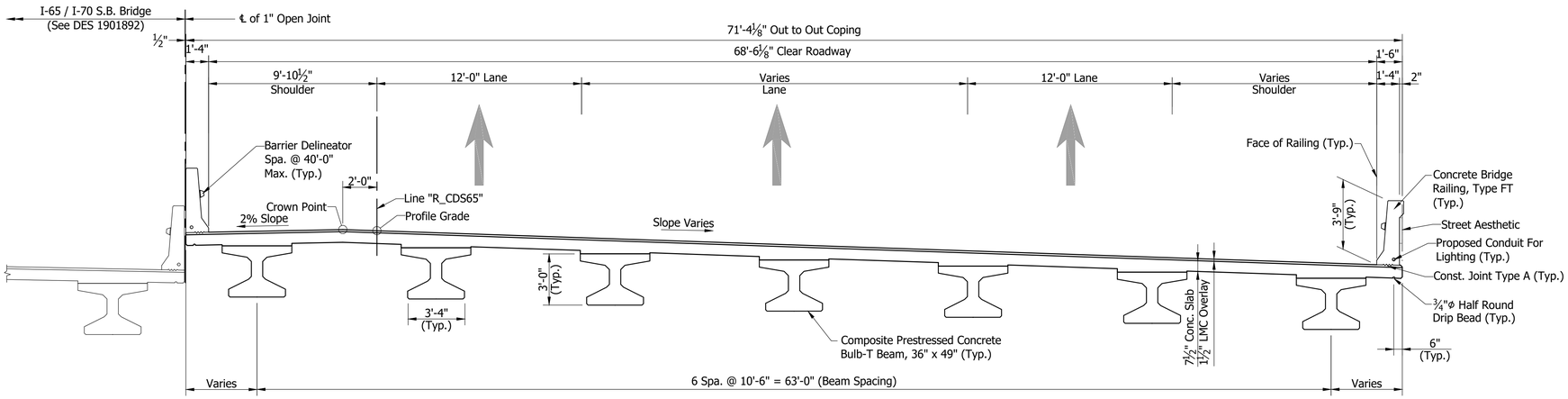
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TYPICAL SECTION - NARROW SIDE (NORTH)

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



TYPICAL SECTION - WIDE SIDE (SOUTH)

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

GENERAL NOTES

Reinforcing bars covering shall be 3 ½" in top and 1" min. in bottom of floor slabs and 3" in footings except bottom steel which shall be 4", and 2" in all other parts, unless noted.

Concrete in floor slab, and diaphragms, barriers, and end bents shall be an alternate Class C in accordance with the Technical Provisions.

Reinforcing Bars in Deck, Barrier, and End Bent Diaphragm Extending into the Deck shall be Stainless Steel. Reinforcing Bars in End Bent Diaphragm not Extending into the Deck and in the Cap shall be Epoxy Coated.

All exposed faces of the MSE walls and reinforced concrete bridge approach slabs shall receive surface seal.

See Bridge Aesthetic Plan for Architectural Details.

DESIGN DATA

LIVE LOAD:

Superstructure and Substructure Designed for HL-93 loading in accordance with the AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017 and its subsequent revisions.

DEAD LOAD:

Designed for Actual Dead Load plus 35 psf of future wearing surface, and 15 psf for SIP Metal Deck Forms.

FLOOR SLAB:

Slab designed with a 7 ½" structural depth and a 1 ½" very early strength LMC 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 beam. The finishing machine was assumed to be supported 6 in. outside the vertical coping form. The top overhang brackets were assumed to be located 6 in. 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.

DESIGN STRESSES

CONSTRUCTION LIVE LOAD:

Designed for 20 psf extending 2 ft. past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30 foot length of the deck centered with the finishing machine.

FINISHING-MACHINE LOAD:

4500 lb distributed over 10 ft. along the coping.

WIND LOAD:

Designed for 70 mph horizontal wind load in accordance with LRFD 3.8.1.

ULTIMATE DESIGN STRENGTHS:

Class "A" Concrete	f'c = 3,500 p.s.i.
Class "B" Concrete	f'c = 3,000 p.s.i.
Class "C" Concrete	f'c = 4,000 p.s.i.
Reinforcing Steel (Grade 60)	Fy = 60,000 p.s.i. (barrier)
	Fy = 75,000 p.s.i. (deck)
	Fy = 75,000 p.s.i. (all other locations)

SEISMIC DESIGN DATA:

Seismic Site Class	C
PGA (g)	0.051
S_s (g)	0.12
S_1 (g)	0.051
S_{D1} (g)	0.086
Seismic Design Category	A

PRESTRESSED COMPOSITE CONCRETE BULB-TEE BEAM BRIDGE
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MARION COUNTY

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

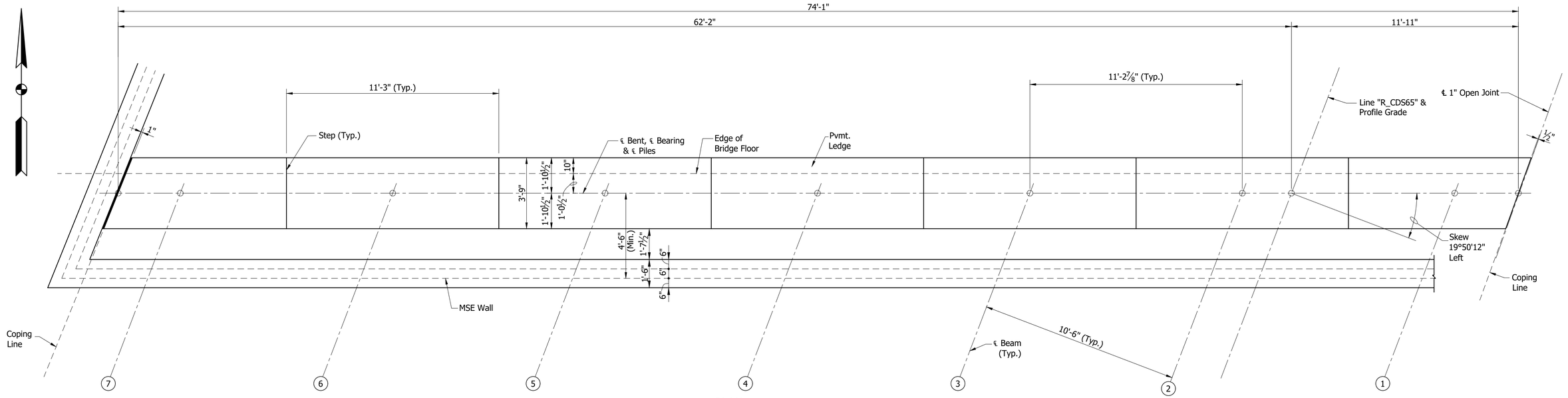
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN - TYPICAL SECTION

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I65-111-10618 CD
VERTICAL SCALE	DESIGNATION
N/A	1901896
SURVEY BOOK	SHEET
ELECTRONIC	6 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

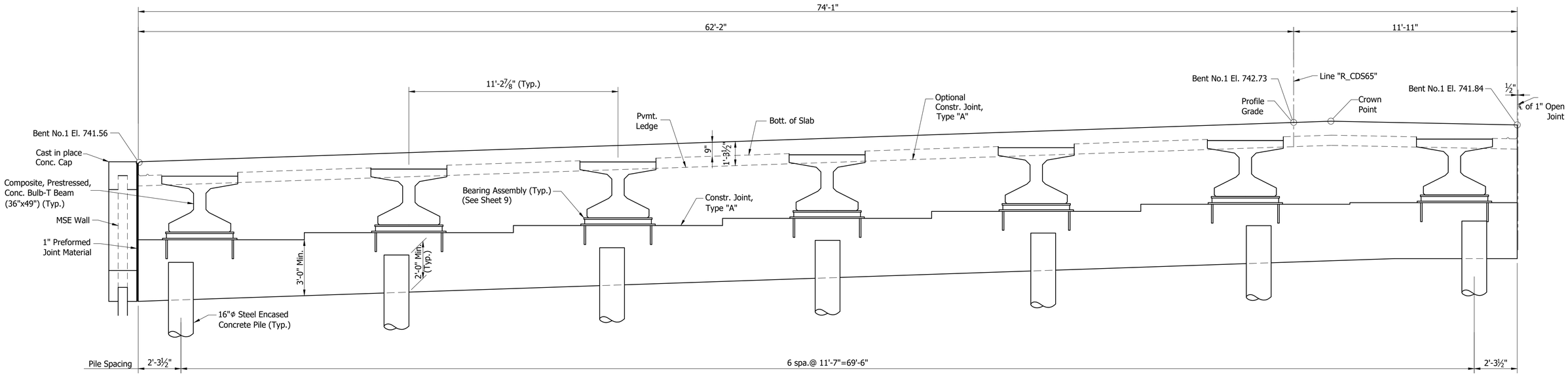
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PLAN

Scale: ⅜"=1'-0"

SEAT ELEVATIONS							
Beam No.	7	6	5	4	3	2	1
Bent No.1	737.42	737.78	738.27	738.75	739.23	739.72	739.88



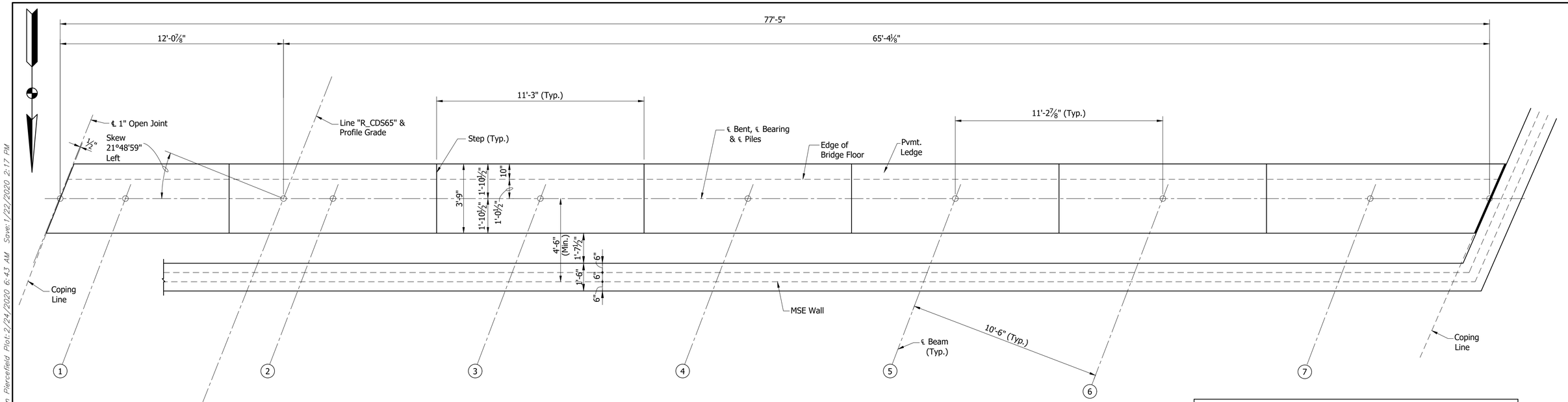
SECTION ALONG ℄ BENT

Scale: ⅜"=1'-0"

	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: As Noted; VERTICAL SCALE: N/A; BRIDGE FILE: I65-111-10618 CD; DESIGNATION: 1901896
	DESIGNED: V. SATHIRAJU DRAWN: D. SHEETZ CHECKED: B. WRIGHT CHECKED: B. WRIGHT	BENT NO. 1 DETAILS	SURVEY BOOK; SHEET: 7 OF 15; ELECTRONIC; CONTRACT: B-36910; PROJECT: 1600808

BFS NO. 6412

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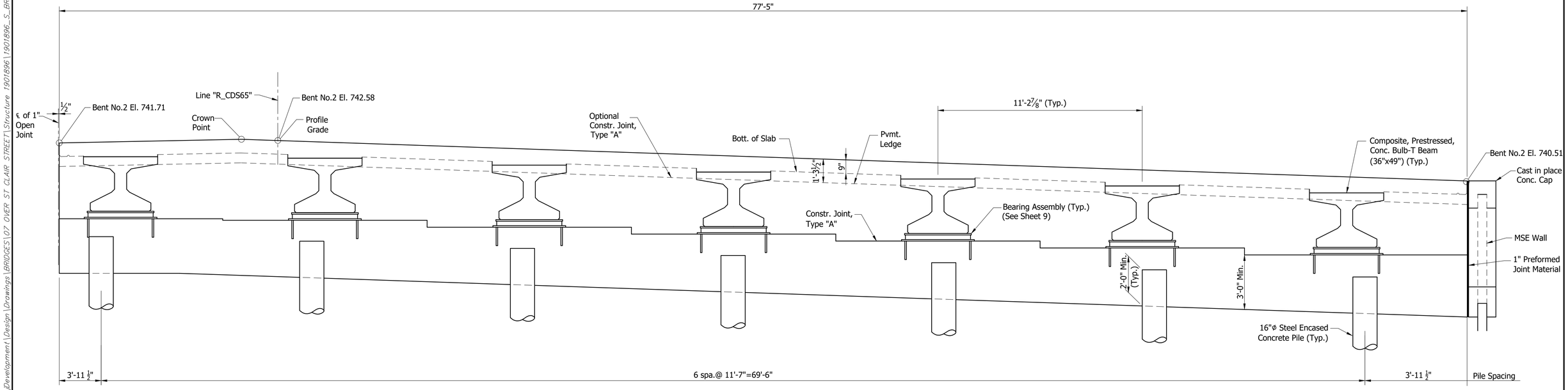


PLAN

Scale: ⅜"=1'-0"

SEAT ELEVATIONS

Beam No.	1	2	3	4	5	6	7
Bent No.1	739.23	739.08	738.63	738.17	737.72	737.27	736.81



SECTION ALONG ℄ BENT

Scale: ⅜"=1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: V. SATHIRAJU DRAWN: D. SHEETZ

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

INDIANA
DEPARTMENT OF TRANSPORTATION

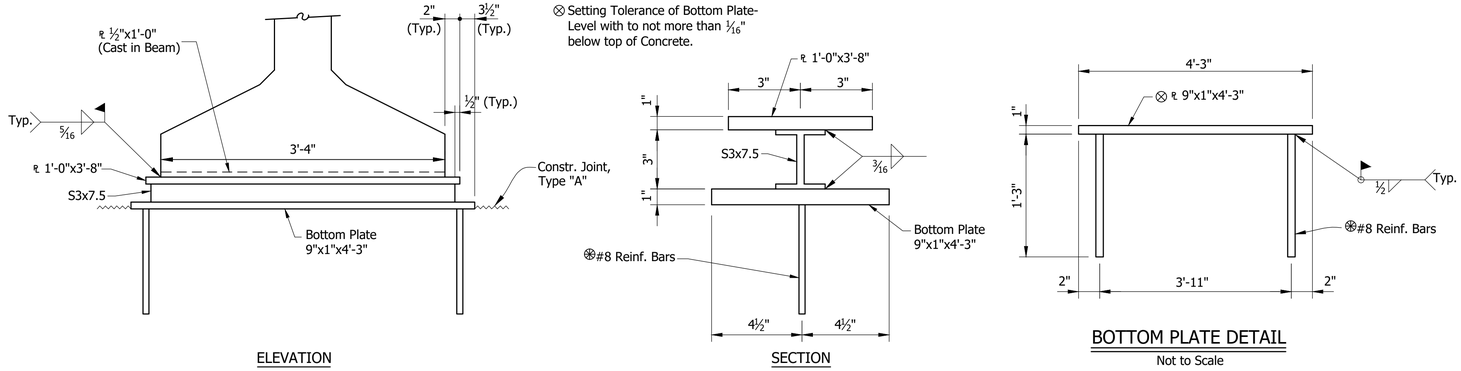
BENT NO. 2 DETAILS

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As Noted	I65-111-10618 CD
VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEET
ELECTRONIC	8 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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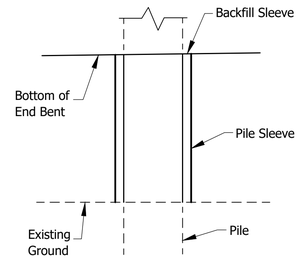


ELEVATION

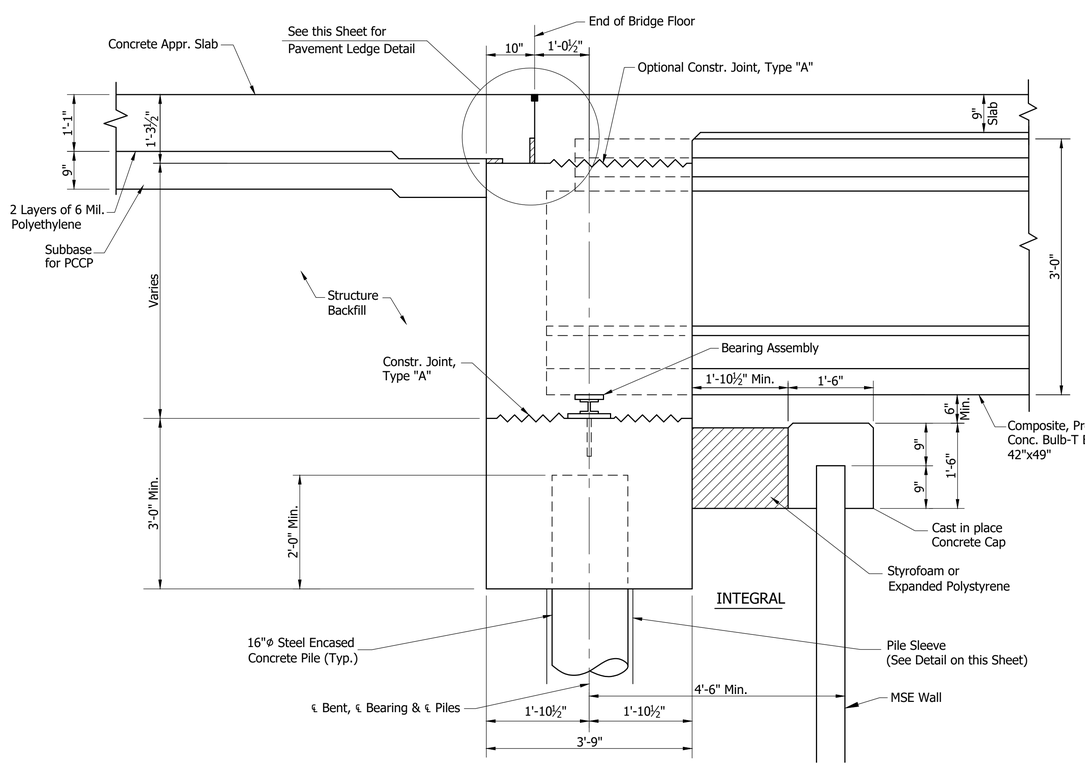
SECTION

BEARING ASSEMBLY
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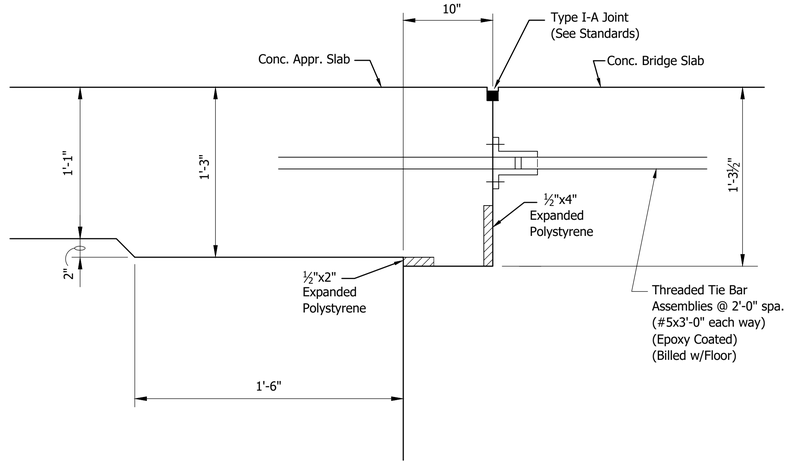
BOTTOM PLATE DETAIL
Not to Scale



PILE SLEEVE DETAIL
Not to Scale



SECTION "B-B"
Not to Scale



PAVEMENT LEDGE DETAIL
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RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: V. SATHIRAJU DRAWN: D. SHEETZ

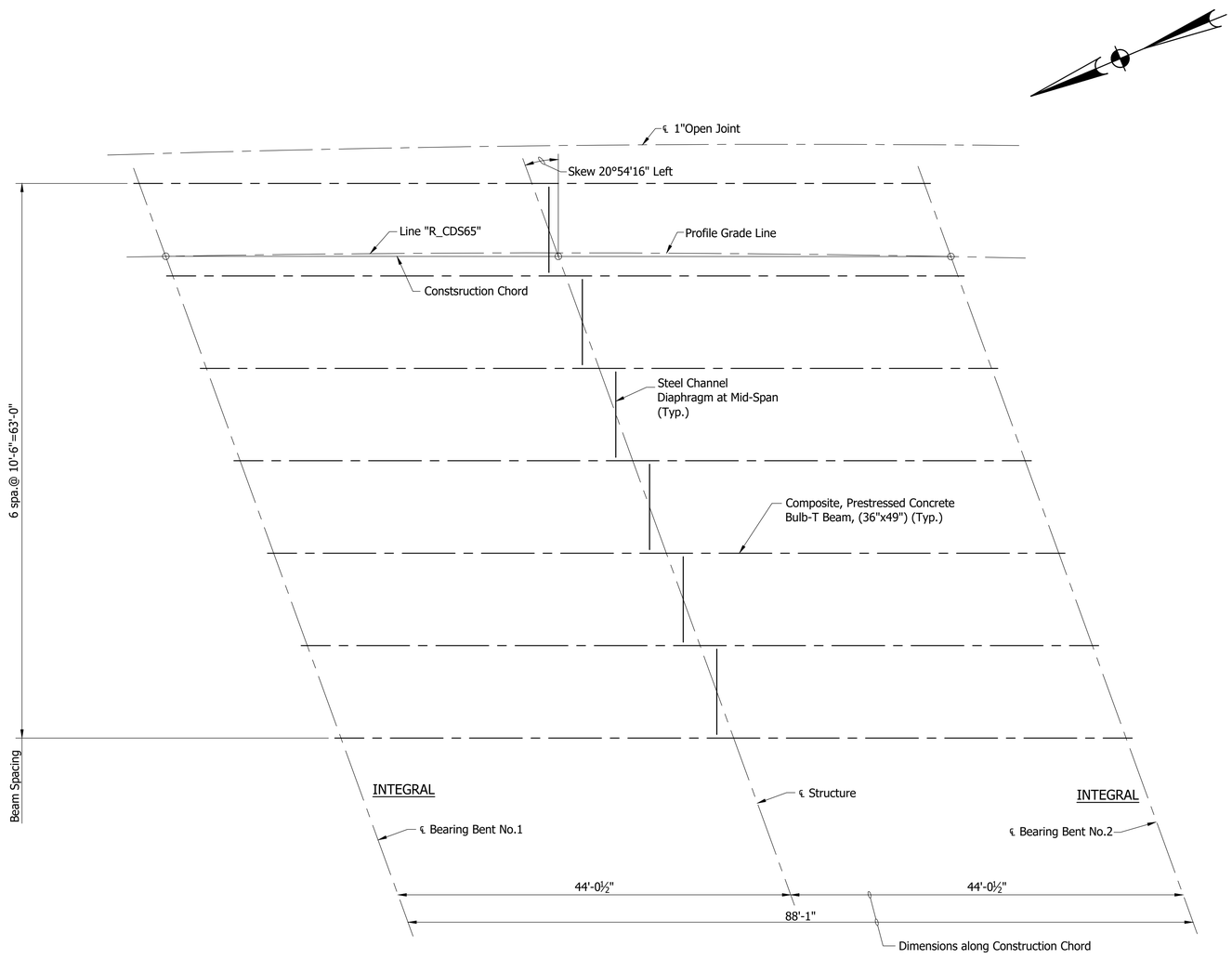
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INDIANA
DEPARTMENT OF TRANSPORTATION

BENTS NO. 1 AND NO. 2 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I65-111-10618 CD
VERTICAL SCALE	DESIGNATION
N/A	1901896
SURVEY BOOK	SHEET
ELECTRONIC	9 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412



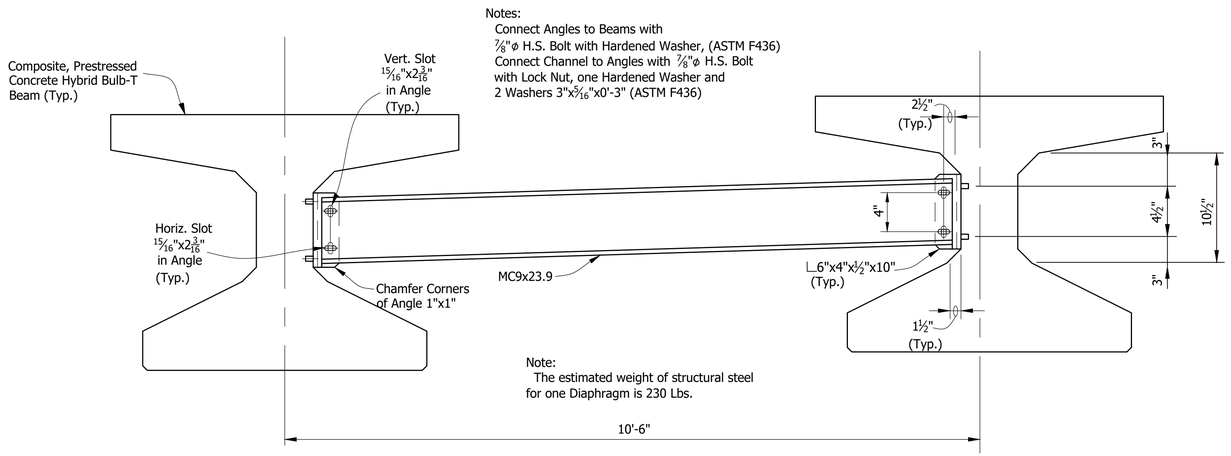
BEAM ERECTION PLAN

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

	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: As Noted	BRIDGE FILE: I65-111-10618 CD
			VERTICAL SCALE: N/A	DESIGNATION: 1901896
	DESIGNED: V. SATHIRAJU DRAWN: D. SHEETZ	FRAMING PLAN	SURVEY BOOK	SHEET: 10 OF 15
	CHECKED: B. WRIGHT CHECKED: B. WRIGHT		ELECTRONIC	
			CONTRACT: B-36910	PROJECT: 1600808

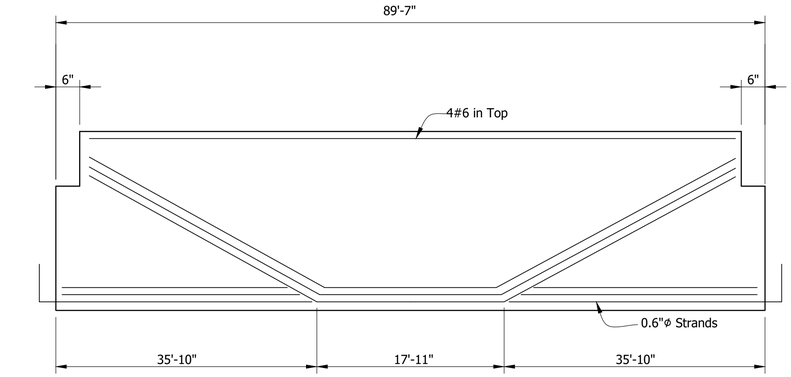
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ELEVATION

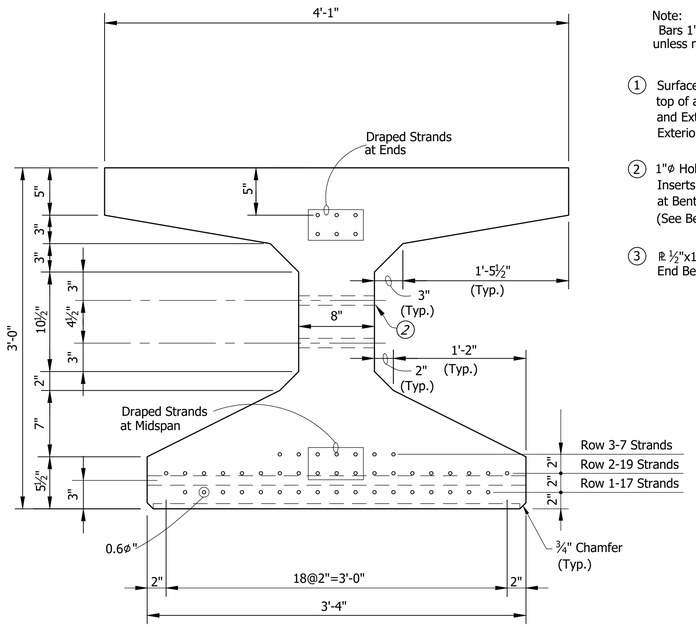
Not to Scale



BEAM ELEVATION
SPAN "A"
SHOWING DRAPED STRANDS

Not to Scale

✳ Denotes Epoxy Coated



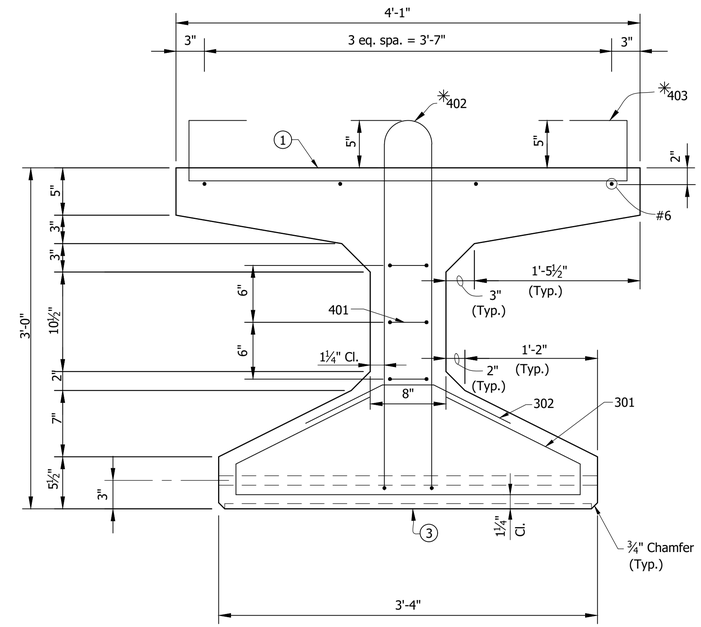
SECTION SHOWING STRANDS

Note:
Bars 1" Clear unless noted.

① Surface Seal req'd on top of all Beams and Exterior Face of Exterior Beams

② 1"ø Holes or ¾"ø Inserts for Dowels at Bent or Pier. (See Beam Plans)

③ ℞ ½"x12"x3'-2½" at End Bent Ends only



SECTION SHOWING REINFORCING

BEAM SECTIONS

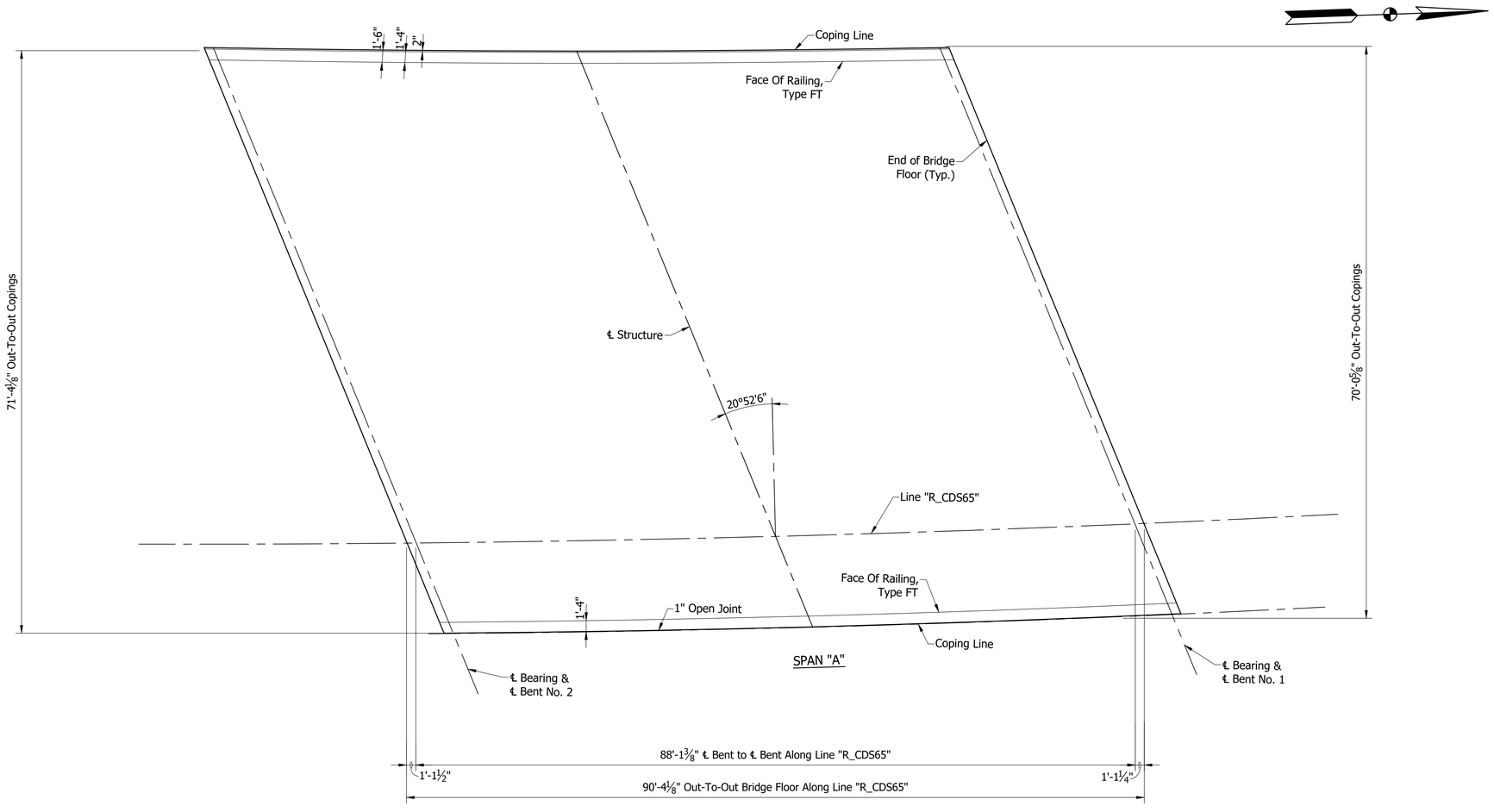
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	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: As Noted; BRIDGE FILE: I65-111-10618 CD; VERTICAL SCALE: N/A; DESIGNATION: 1901896
	DESIGNED: J. GOULD DRAWN: D. PIERCEFIELD CHECKED: B. WRIGHT CHECKED: B. WRIGHT	BEAM DETAILS	SURVEY BOOK; SHEET: ELECTRONIC 11 OF 15; CONTRACT; PROJECT: B-36910; 1600808

BFS NO. 6412

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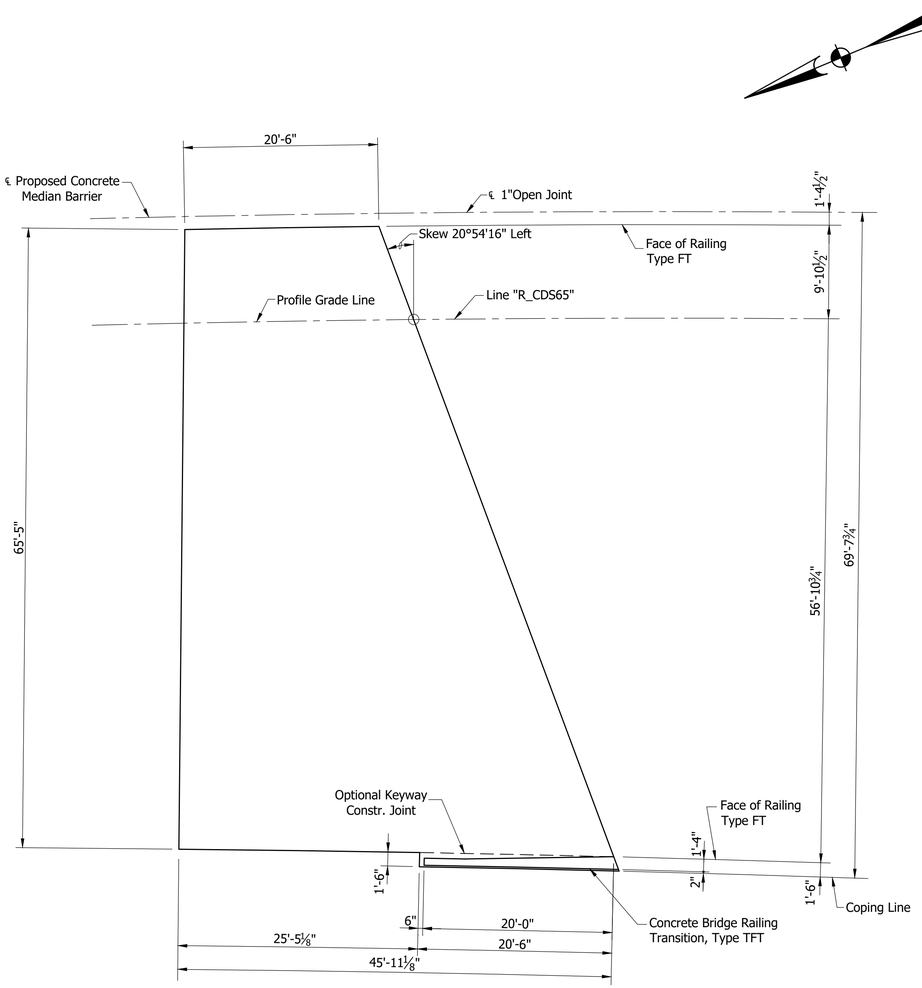
FLOOR PLAN

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

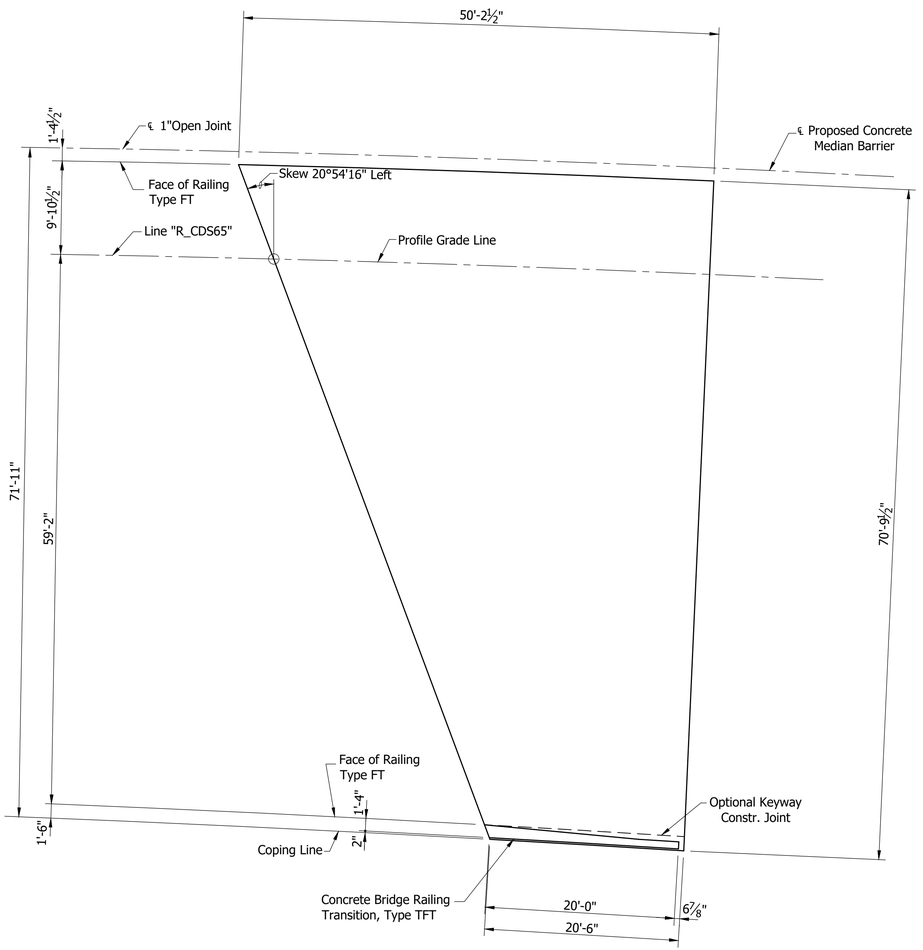
NOTE:
See Sheet ___ For _____

	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: As Noted	BRIDGE FILE: I65-111-10618 CD
			VERTICAL SCALE: N/A	DESIGNATION: 1901896
	DESIGNED: V. SATHIRAJU DRAWN: D. PIERCEFIELD	FLOOR DETAILS	SURVEY BOOK	SHEET
	CHECKED: B. WRIGHT CHECKED: B. WRIGHT		ELECTRONIC	12 OF 15
			CONTRACT	PROJECT
			B-36910	1600808

BFS NO. 6412



PLAN
NORTH SLAB
Scale: ⅛"=1'-0"



PLAN
SOUTH SLAB
Scale: ⅛"=1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE

DESIGNED: D. SHEETZ DRAWN: D. SHEETZ

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

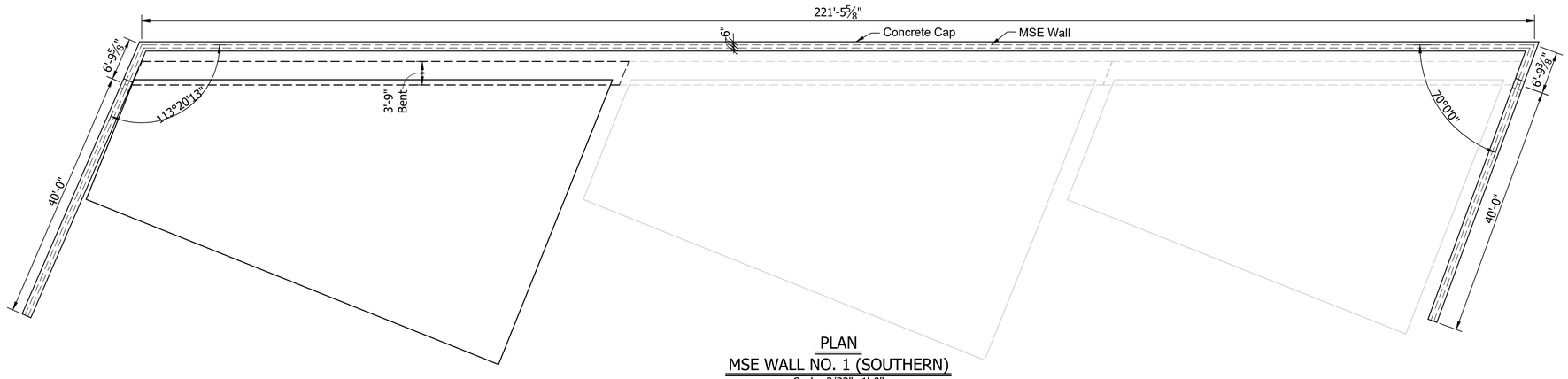
INDIANA
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB

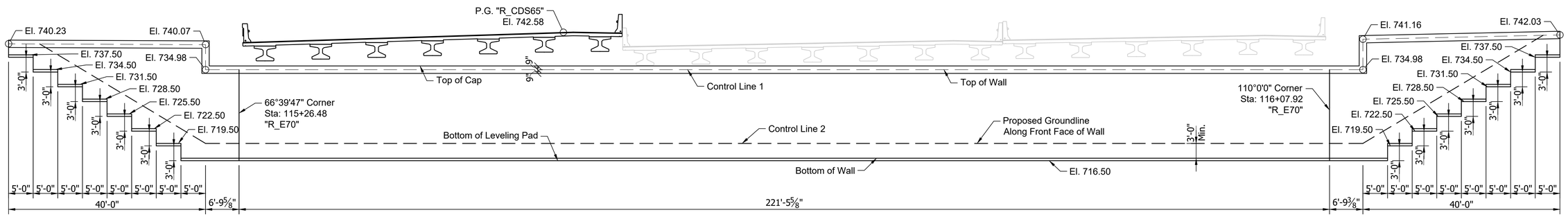
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As Noted	I65-111-10618 CD
VERTICAL SCALE	DESIGNATION
N/A	1901896
SURVEY BOOK	SHEET
ELECTRONIC	13 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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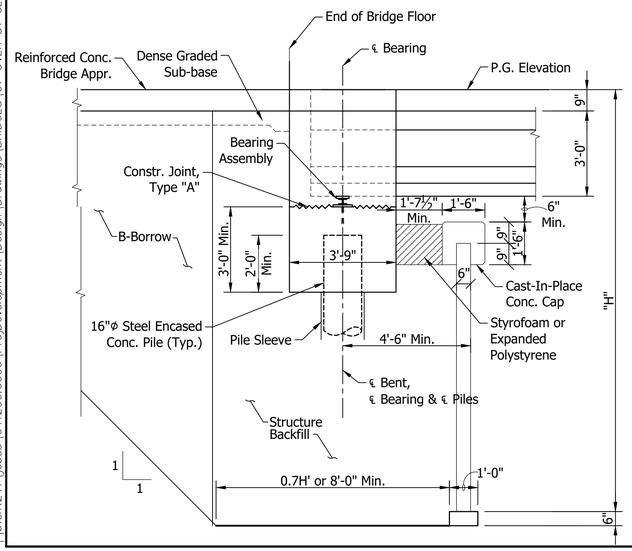


PLAN
MSE WALL NO. 1 (SOUTHERN)
Scale: 3/32"=1'-0"



ELEVATION
MSE WALL NO. 1 (SOUTHERN)
Scale: 3/32"=1'-0"

NOTE:
Elevation Looking At Back Face of Wall

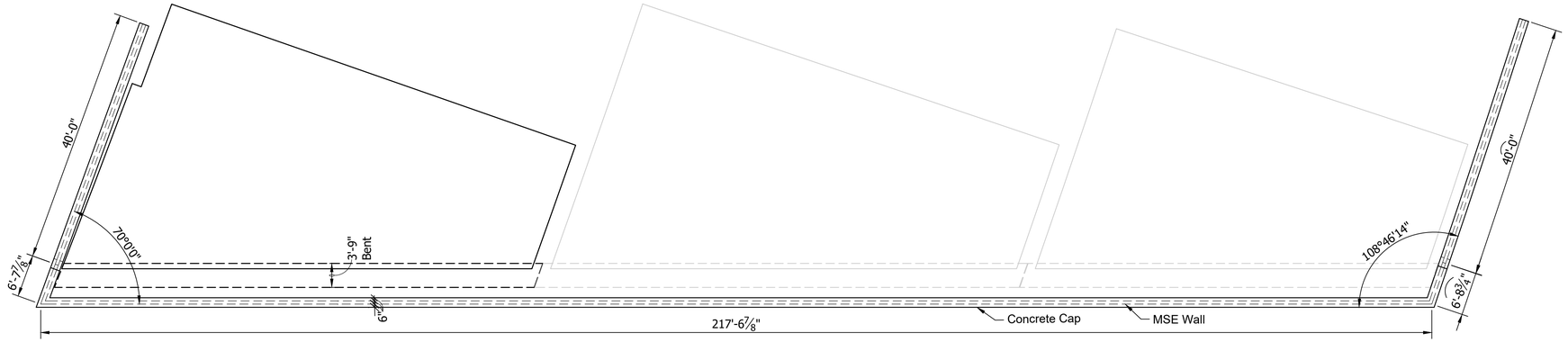


SECTION
MSE WALL NO. 1
Scale: 3/8"=1'-0"

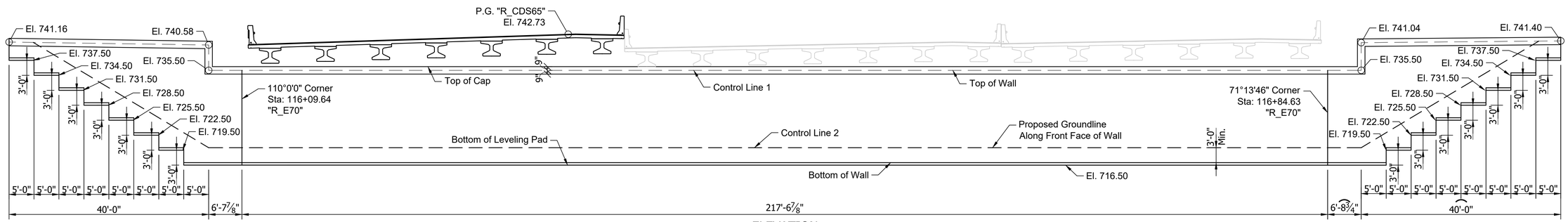
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	DESIGNED: B. WRIGHT DRAWN: D. PIERCEFIELD CHECKED: M. EICHENAUER CHECKED: B. WRIGHT	WALL LAYOUT	SURVEY BOOK; SHEET; ELECTRONIC: 14 OF 15; CONTRACT: B-36910; PROJECT: 1600808

BFS NO. 6412

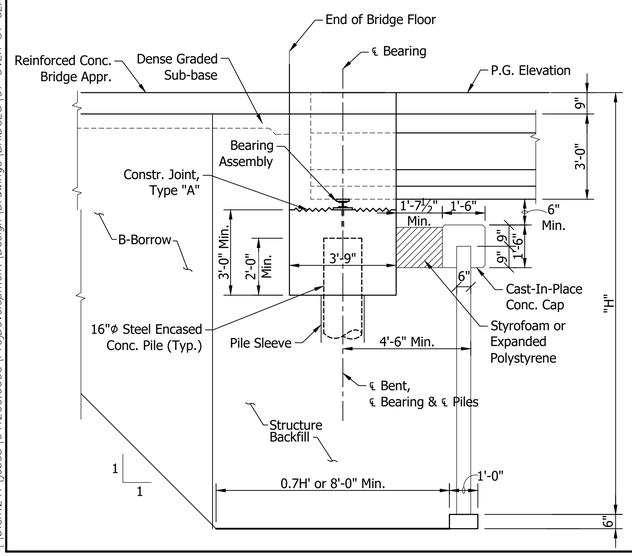
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PLAN
MSE WALL NO. 2 (NORTHERN)
Scale: 3/32"=1'-0"



ELEVATION
MSE WALL NO. 2 (NORTHERN)
Scale: 3/32"=1'-0"



SECTION
MSE WALL NO. 2
Scale: 3/8"=1'-0"

	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: AS NOTED; VERTICAL SCALE: AS NOTED; BRIDGE FILE: I65-111-10618 CD; DESIGNATION: 1901896
	DESIGNED: B. WRIGHT DRAWN: D. PIERCEFIELD CHECKED: M. EICHENAUER CHECKED: B. WRIGHT	WALL LAYOUT	SURVEY BOOK; SHEET; ELECTRONIC: 15 OF 15; CONTRACT: B-36910; PROJECT: 1600808

BFS NO. 6412

\\bfsnt241\jobs5\641200.0000\ProjDevelopment\Design\Drawings\BRIDGES\07_OVER_ST_CLAIR_STREET\Structure_1901896\1901896_S_BR_WLL02.dwg Dylan Piercefield Plot: 2/24/2020 6:44 AM Save: 2/19/2020 2:44 PM

PROJECT	DESIGNATION
1600808	1901897
CONTRACT	BRIDGE FILE
B-36910	(165)I70-079-10619 BNBL

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

FOR SPANS OVER 20 FEET

ROUTE: I-65 N.B. AT: RP 129+97.35

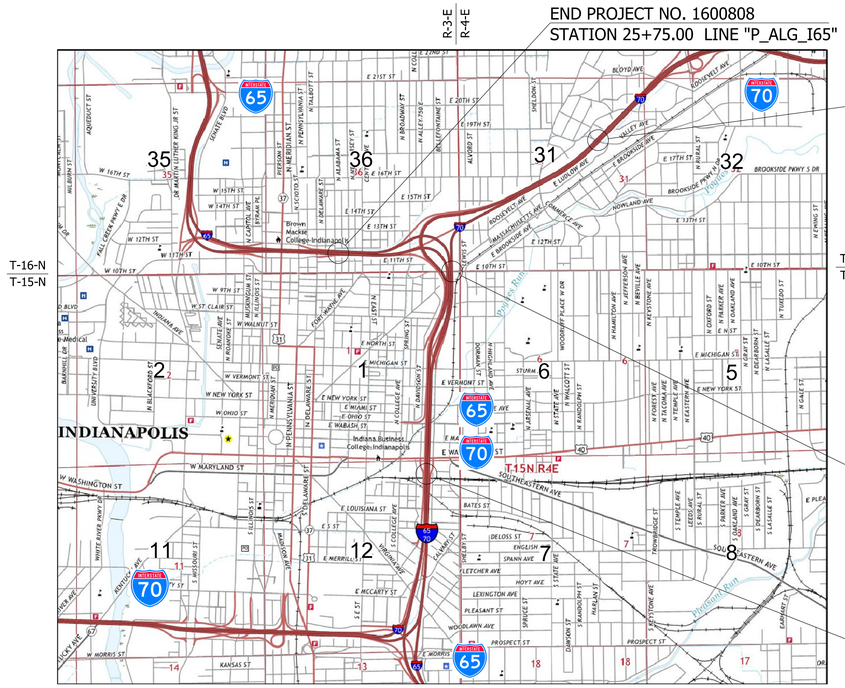
PROJECT NO. 1600808 (P.E. & CONSTR.)

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

BRIDGE REPLACEMENT ON I-65 NORTHBOUND OVER 10TH STREET
LOCATED 1.95 MILES NORTH OF I-70 (SOUTH SPLIT) INTERCHANGE
IN SECTION 36, T-16-N, R-3-E, CENTER TOWNSHIP, MARION COUNTY, INDIANA

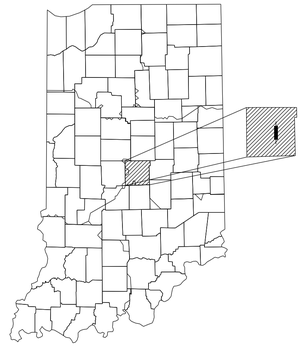
STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
(I65)I70-079 -10619 BNBL	COMPOSITE PRESTRESSED CONCRETE BULB-TEE BEAM BRIDGE	1 SPAN: 136'-4 1/4" SKEW: 2°27'12" LT	10TH STREET	LINE "R_N65" 129+97.36

DESIGNATION	KIN PROJECT INFORMATION PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVENUE	
1901914	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER COLLEGE AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901927	BRIDGE REPLACEMENT ON I-65 SB TO I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE) - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER VERMONT STREET	



LOCATION MAP
(MARION COUNTY)

TRAFFIC DATA	I-65 N.B.	10TH STREET
A.A.D.T. (2021)	34,480 V.P.D.	9,494 (EB) 6,850 (WB) V.P.D.
A.A.D.T. (2041)	41,090 V.P.D.	9,253 (EB) 7,553 (WB) V.P.D.
D.H.V (2041)	4,109 V.P.H.	1,073 (EB) 913 (WB) V.P.H.
DIRECTIONAL DISTRIBUTION	100 %	55% (EB) 45% (WB)
TRUCKS	3 % D.H.V.	2% (EB) 3% (WB)
DESIGN DATA		
DESIGN SPEED	55 M.P.H.	35 M.P.H.
PROJECT DESIGN CRITERIA	COMPLETE RECONSTRUCTION 4R (FREEWAY)	N/A
FUNCTIONAL CLASSIFICATION	URBAN FREEWAY	MINOR ARTERIAL
RURAL/URBAN	URBAN (BUILT-UP)	URBAN
TERRAIN	LEVEL	LEVEL
ACCESS CONTROL	FULL	NONE



PROJECT LOCATION SHOWN BY
MARION COUNTY

LATITUDE: 39°46'52" N LONGITUDE: 86°08'25" W

HYDROLOGIC UNIT CODE: 05120201130020

BRIDGE LENGTH:	0.026	MI.
ROADWAY LENGTH:	SEE ROAD PLANS	MI.
TOTAL LENGTH:	SEE ROAD PLANS	MI.
MAX. GRADE:	-1.86	%

SCALE: 1" = 2000'

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2020
TO BE USED WITH THESE PLANS

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

SUPERIOR CONSTRUCTION

PLANS PREPARED BY: (317) 254-9686 PHONE NUMBER

CERTIFIED BY: DATE

RECOMMENDED FOR LETTING: DATE
INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE FILE
(I65)I70-079-10619 BNBL
DESIGNATION
1901897

SURVEY BOOK	SHEETS
ELECTRONIC	1 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/21/2025 8:56:10 AM AM_PW

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 22 I65 NB over East 10th St\1901897_01 - Title.dgn

UTILITIES

INDEX

SHEET NO.	SUBJECT
1	TITLE SHEET
2	INDEX SHEET
3	MAINTENANCE OF TRAFFIC LAYOUT OVER THE BRIDGE
4	LAYOUT SHEET
5	GENERAL PLAN
6	GENERAL PLAN - TYPICAL SECTION
7	BENT NO. 1 DETAILS
8	BENT NO. 2 DETAILS
9	BENT NO. 1 & 2 DETAILS
10	FRAMING PLAN
11	BEAM DETAILS
12	SUPERSTRUCTURE DETAILS
13	APPROACH SLAB DETAILS

REVISIONS

SHEET NO.	DATE	REVISED

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

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

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: TLH

CHECKED: CML CHECKED: CML

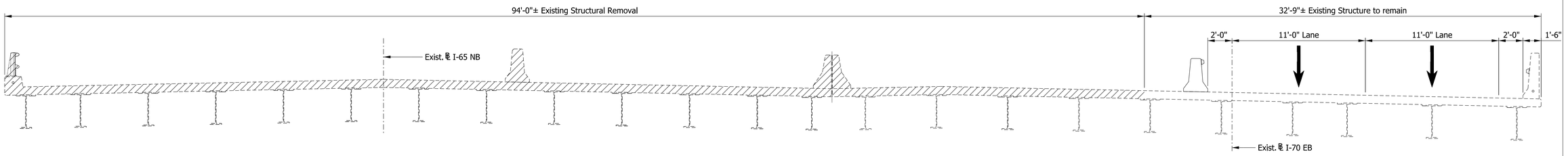
INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX

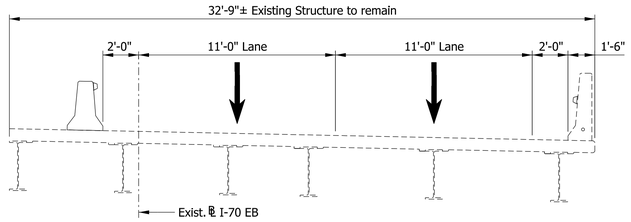
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	(I65)I70-079-10619 BNBL
	DESIGNATION
	1901897
SURVEY BOOK	SHEETS
ELECTRONIC	2 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/21/2020 8:56:13 AM

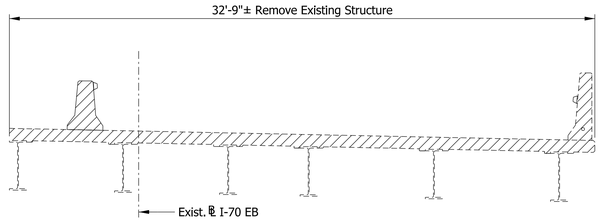
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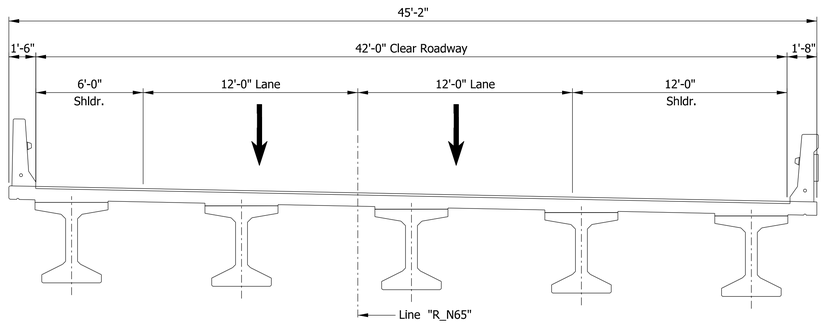
PHASE 2B



PHASE 2B



PHASE 2C - REMOVAL



CONSTRUCTION PHASE 2C

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: CBS | DRAWN: TLH

CHECKED: CML | CHECKED: CML

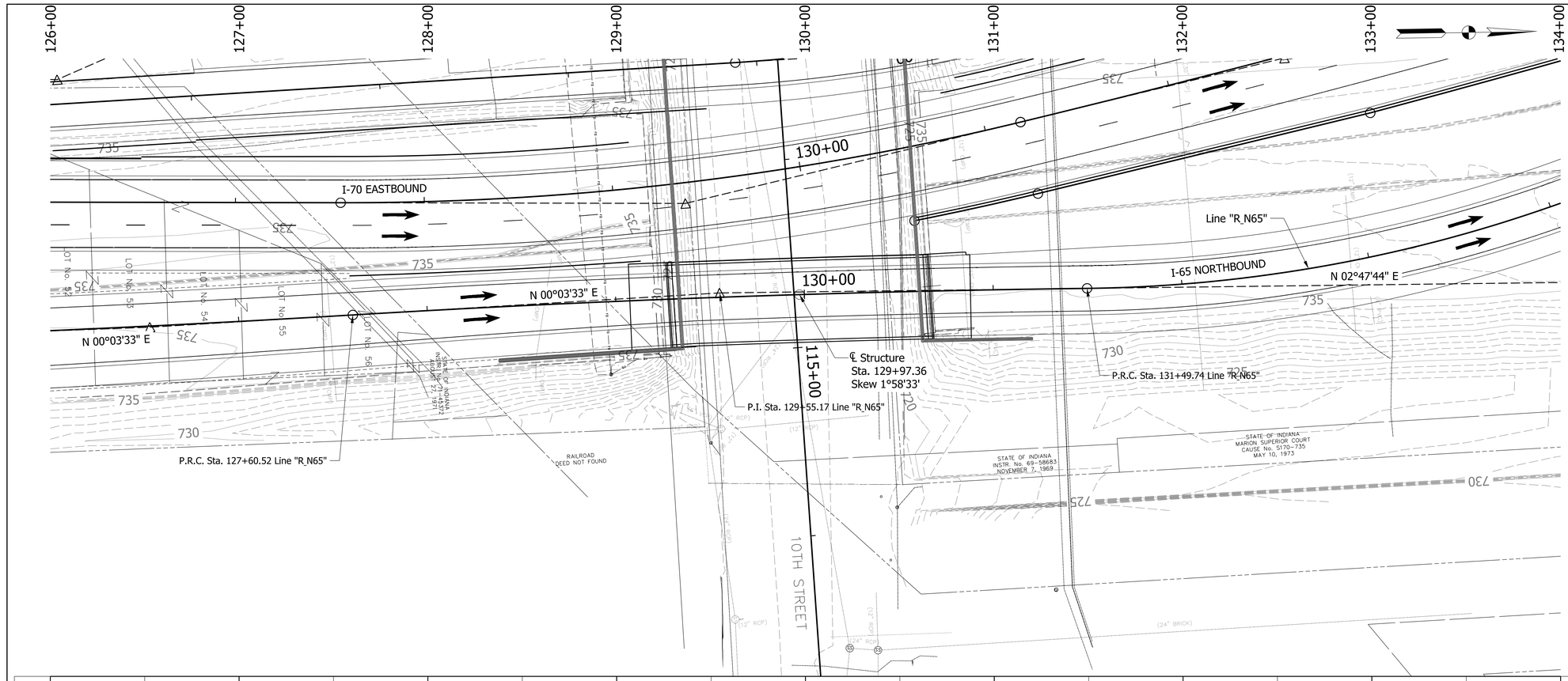
INDIANA
DEPARTMENT OF TRANSPORTATION

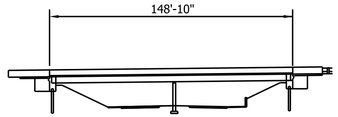
TRAFFIC MAINTENANCE

HORIZONTAL SCALE	BRIDGE FILE
1/4"=1'-0"	(I65)I70-079-10619 BNBL
VERTICAL SCALE	DESIGNATION
1/4"=1'-0"	1901897
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/21/2020 8:56:15 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 22 I65 NB over East 10th St\1901897_03 - Traffic Maintenance.dgn





EXISTING STRUCTURE:

Existing structure built in 1974 to carry both I-65 NB & I-70 EB is a continuous composite steel beam bridge. Rehabilitated in 2003 with overlay and retrofited railing is a two span 72'-8" & 72'-8" with a 0°38'27" Rt. skew. The structure has a clear roadway widths of 55'-5 1/2" & varies 46'-8 1/2" to 53'-7 1/2", Structure is to be removed.
Existing plans are on file with indiana Department of Transportation under Bridge File No. (I-65)I70-079-05737 ANBL

EARTHWORK TABULATION

Fill +20%	(See Road Plans)
Common excavation	(See Road Plans)
Excavation, foundation, Unclassified (70%)	(See Road Plans)
Waste	(See Road Plans)

HORIZONTAL CURVE DATA

LINE: "R_N65"

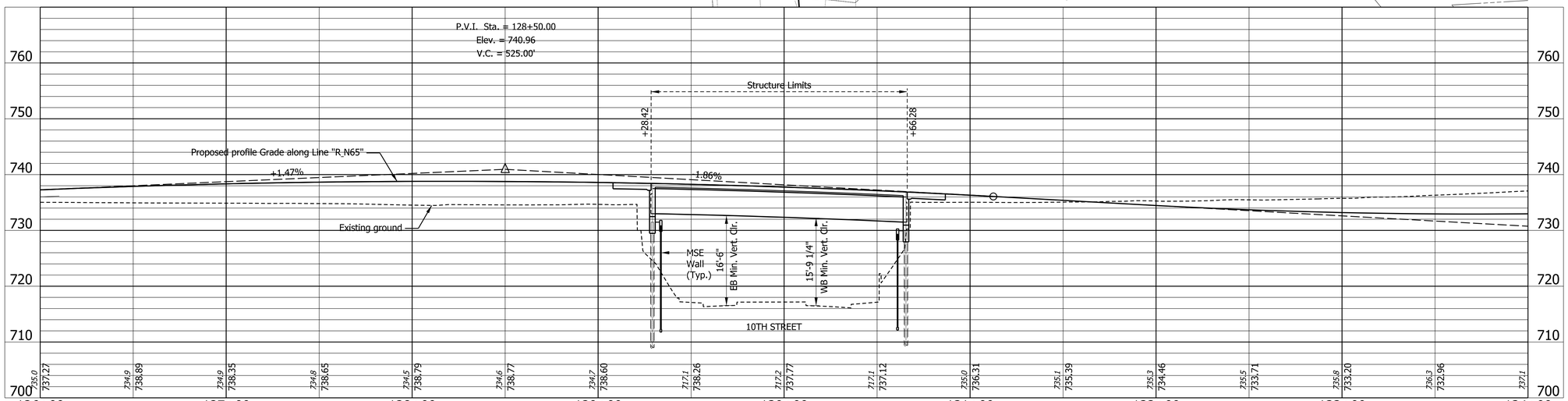
PI = 118+90.62
Delta = 21°45'00"Lt.
R = 9720.00 ft.
T = 888.58 ft.
L = 215.32 ft.
E = 73.54 ft.

PI = 129+55.17
Delta = 2°44'11"Rt.
R = 8150.00 ft.
T = 194.65 ft.
L = 389.22 ft.
E = 2.32 ft.

PI = 145+01.92
Delta = 120°33'12"Rt.
R = 772.00 ft.
T = 1352.18 ft.
L = 1624.33 ft.
E = 785.04 ft.

NOTES:

1. See sheet 2 for utility owners.
2. All r/w shall be as shown.
4. There shall be no clearing of trees beyond construction limits.
5. All topography is existing.
6. All R/W described from line "R_E70", except as noted.
7. Proposed lighting, traffic sign structures and drainage not shown and shall be the responsibility of the Design-Build Contractor during final design.



PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
1 SPAN @ 136'-4 1/4"
SKEW: 1°57'38" RT. (EB 10TH ST.)
& 0°27'39" RT. (WB 10TH ST.)
CLEAR ROADWAY: 42'-0"
I-65 N.B. OVER 10TH ST.
MARION COUNTY

Plot: 2/21/2020 8:56:23 AM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

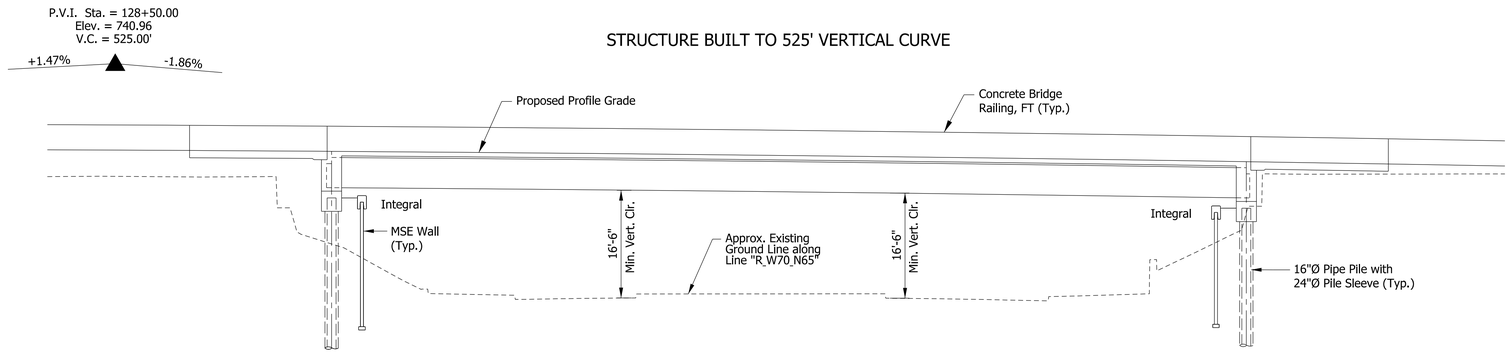
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CHECKED: _____ CHECKED: _____

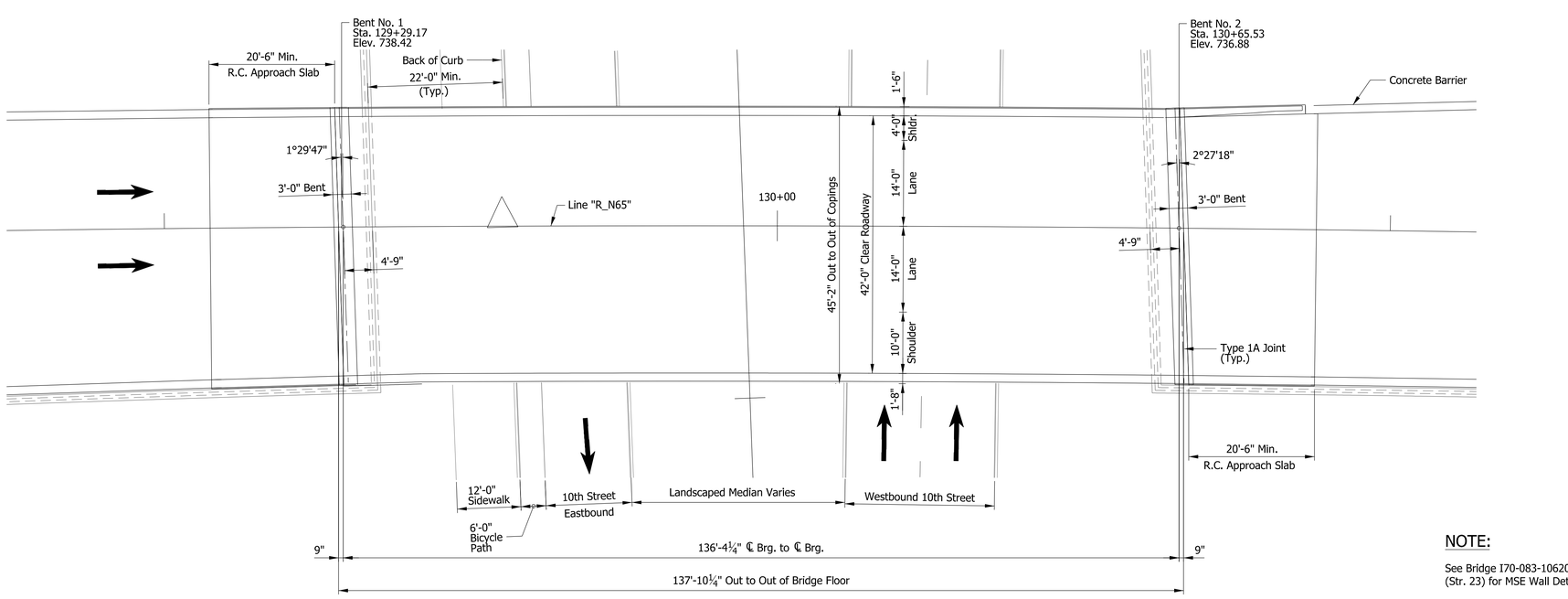
INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
	(I65)I70-079-10619 BNBL
VERTICAL SCALE	DESIGNATION
1" = 10'-0"	1901897
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 13
CONTRACT	PROJECT
B-36910	1600808



ELEVATION



PLAN

GENERAL NOTES

Reinforcing bar cover shall be 2" min. in top and 1" min. in bottom of floor slabs, 3" min. in footing except bottom bars which shall be 4" min., and 2" min. in all other parts, unless noted.

All dimensions and elevations are in feet (ft) unless otherwise noted.

Concrete in floor slab, diaphragms, barrier approach slab and end bents shall be an alternate Class "C" in accordance with the technical provisions. Reinforcing bars in deck, barrier, and end bent diaphragm extending into the deck shall be stainless steel. Reinforcing bars in end bent diaphragm not extending into the deck and in the cap shall be epoxy coated.

Anti-graffiti coating shall be placed on all exposed surfaces of new retaining walls and new bridge structures excluding top of deck or overlay and interior beams.

For aesthetics associated with the bridge opening, See Bridge Aesthetics Plan Package.

DESIGN DATA

LIVE LOAD
Superstructure and substructure designed for HL-93 loading in accordance with AASHTO LRFD Bridge Design Specifications Eighth Edition, 2017 and subsequent interim.

DEAD LOAD
Designed for actual Dead Load plus 15 psf for SIP metal deck forms.

Slab designed with a 7½" structural depth and a 1½" very early strength LMC overlay.

SEISMIC DESIGN DATA

Seismic Performance Zone = 1
Acceleration Coefficient = 0.061
Seismic Soil Profile Type = Site Class C

DESIGN STRENGTHS

Prestressed Concrete	f'c = 10,000 psi @ 28 DAYS
Class "A" Concrete	f'c = 3,500 psi
Class "B" Concrete	f'c = 3,500 psi
Class "C" Concrete	f'c = 4,000 psi
Reinforcing Bars	fy = 60,000 psi (barrier)
	fy = 75,000 psi (all other locations)

CONSTRUCTION LOADING

The exterior beam 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 beam. The finishing machine was assumed to be supported 6 inches past the edge of 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 beam bottom flange and web.

Deck Falsework Loads:	Designed for 15 lb/sft for permanent metal stay in place deck forms, removable deck forms, and 2-ft exterior walkway.
Construction Live Load:	Designed for 20 lb/sft extending 2-ft past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30-ft length of deck centered with the finishing machine.
Finishing-machine Load:	4500 lb distributed over 10-ft along the coping.
Wind Load:	Structure designed for 70 mph horizontal wind loading in accordance with AASHTO LRFD 3.8.1.

NOTE:

See Bridge I70-083-10620EBL (Str. 23) for MSE Wall Details.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
1 SPAN @ 136'-4 1/4"
SKEW: 1°57'38" RT. (EB 10TH ST.)
& 0°27'39" RT. (WB 10TH ST.)
CLEAR ROADWAY: 42'-0"
I-65 N.B. OVER 10TH ST.
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ZGC DRAWN: TLH

CHECKED: CML CHECKED: CML

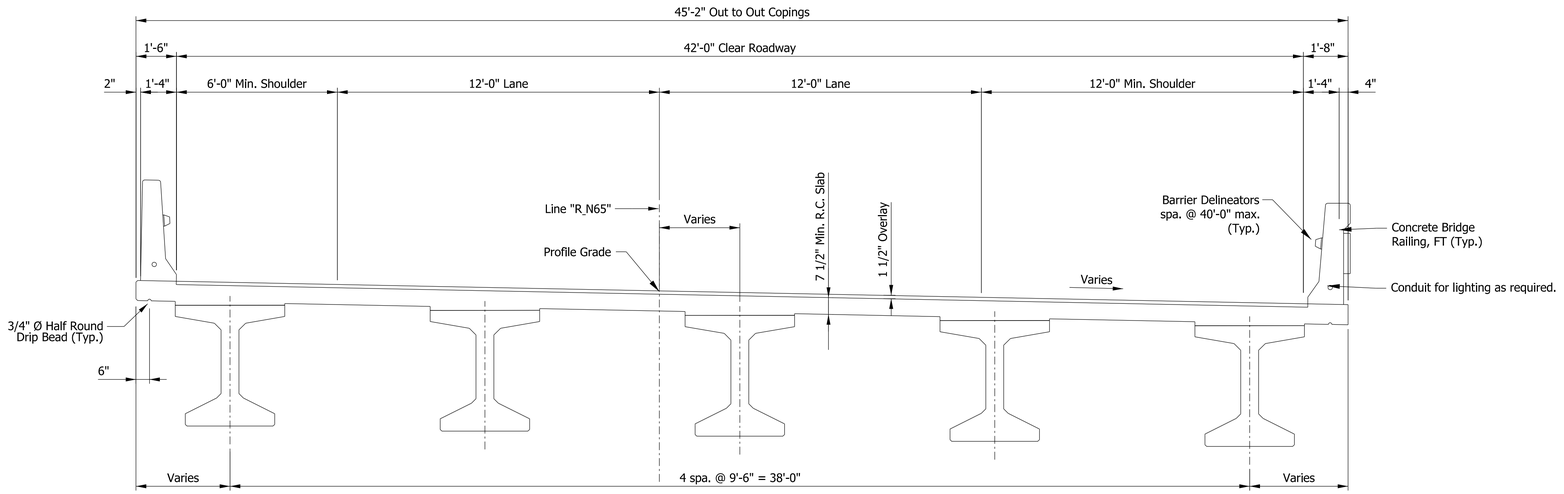
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

HORIZONTAL SCALE	BRIDGE FILE
3/32"=1'-0"	(I65)I70-079-10619 BNBL
VERTICAL SCALE	DESIGNATION
3/32"=1'-0"	1901897
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/21/2020 8:56:46 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 22 I65 NB over East 10th St\1901897_05 - Gen plan.dgn



TYPICAL BRIDGE SECTION

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
1 SPAN @ 136'-4 1/4"
SKEW: 1°57'38" RT. (EB 10TH ST.)
& 0°27'39" RT. (WB 10TH ST.)
CLEAR ROADWAY: 42'-0"
I-65 N.B. OVER 10TH ST.
MARION COUNTY

Plot: 2/21/2020 8:56:48 AM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: TLH

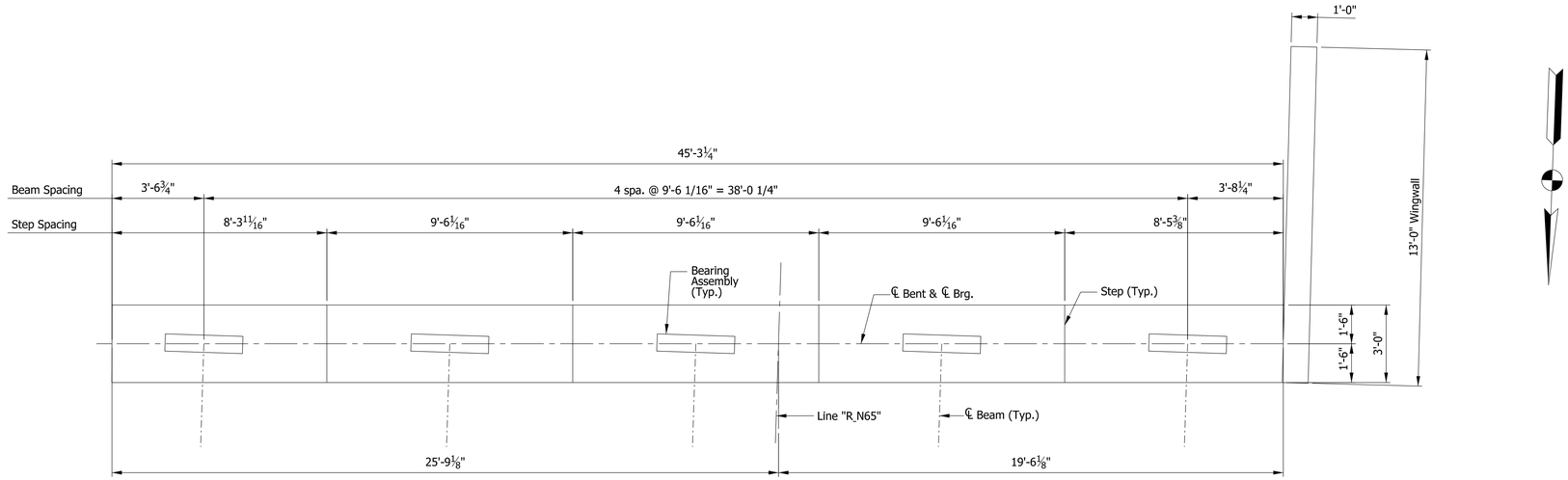
CHECKED: CML | CHECKED: CML

INDIANA
DEPARTMENT OF TRANSPORTATION

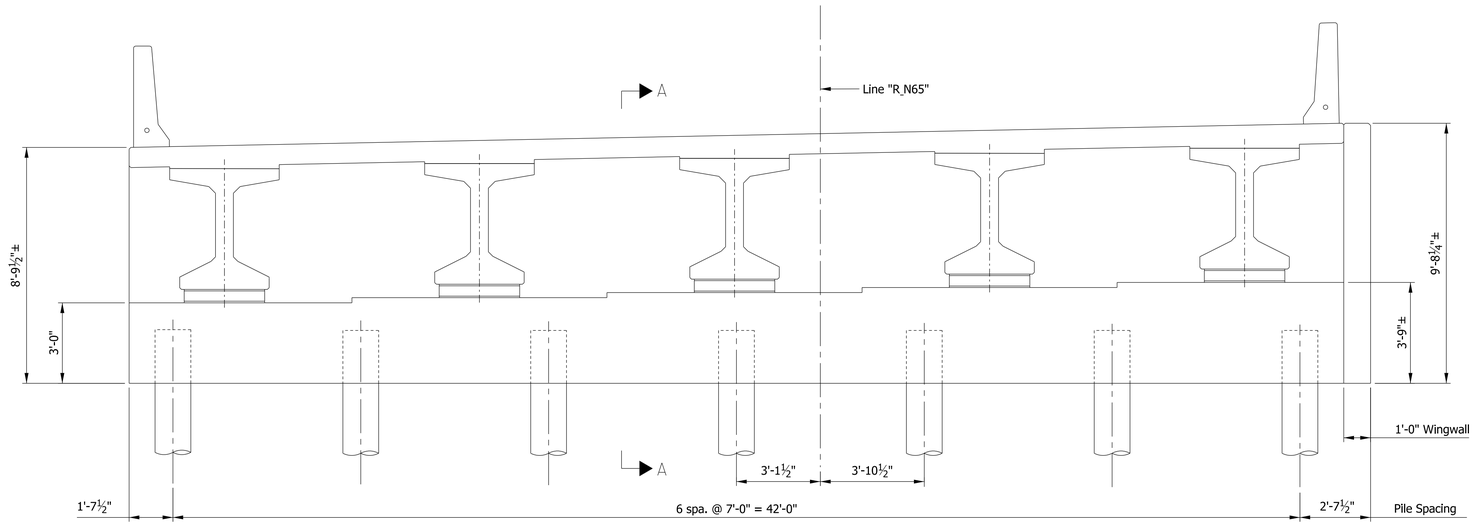
TYPICAL SECTION

HORIZONTAL SCALE	BRIDGE FILE
1/4"=1'-0"	(I65)I70-079-10619 BNBL
VERTICAL SCALE	DESIGNATION
1/4"=1'-0"	1901897
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 13
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 22 I65 NB over East 10th St\1901897_06 - Typical Section.dgn



PLAN



ELEVATION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: TLH

CHECKED: CML CHECKED: CML

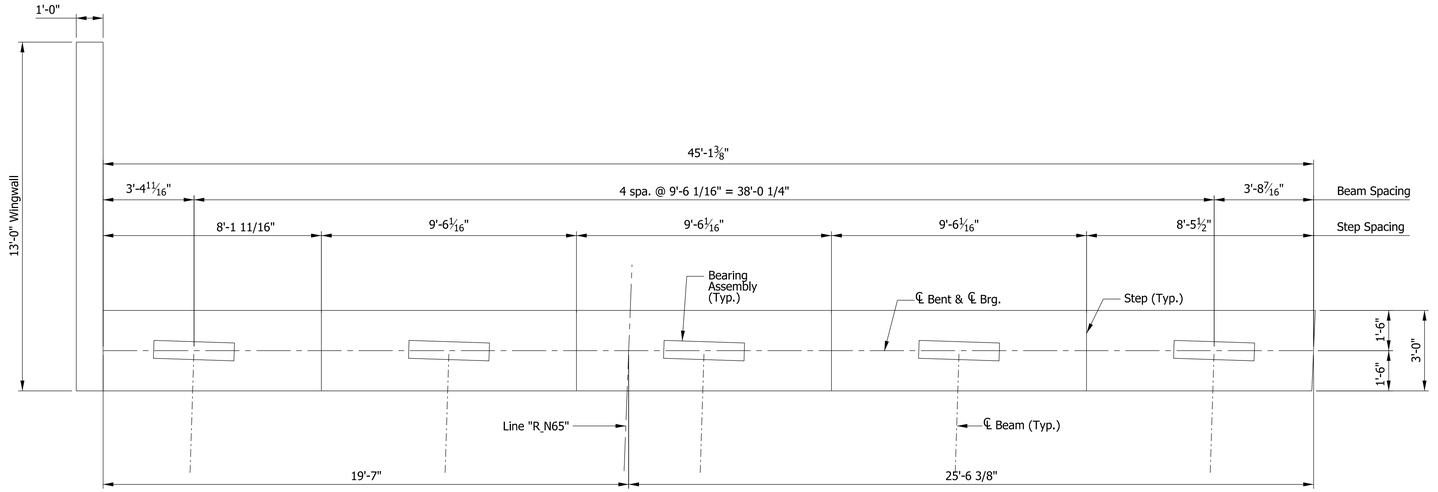
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO.1 DETAILS

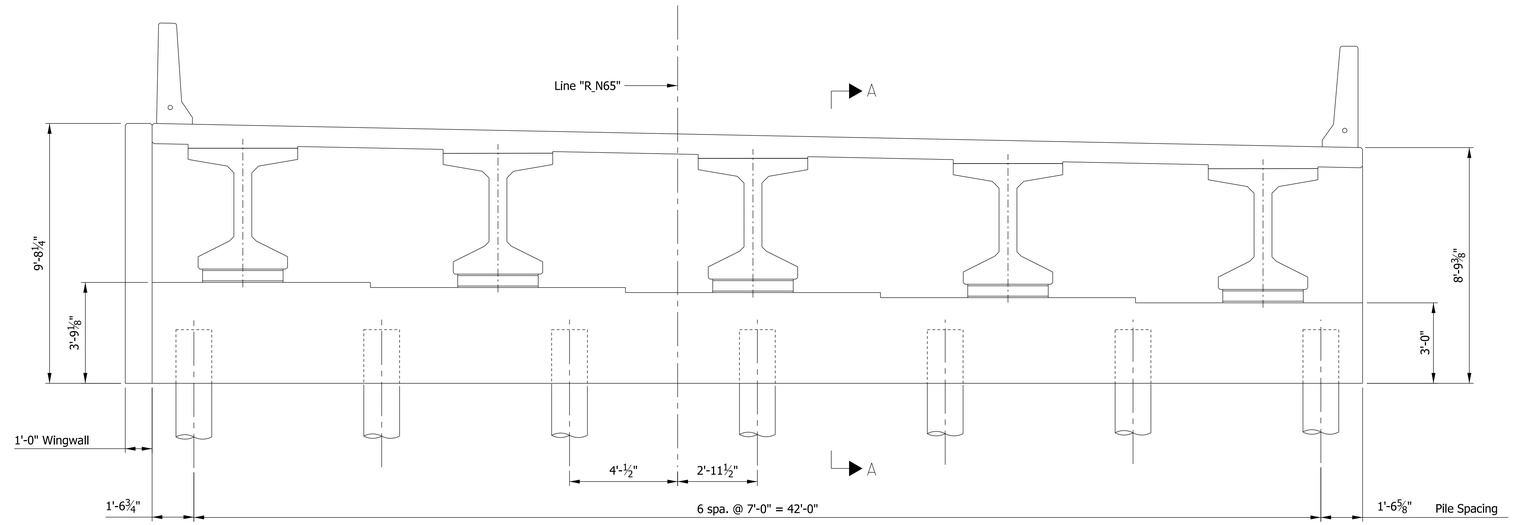
HORIZONTAL SCALE	BRIDGE FILE
1/4"=1'-0"	(I65)I70-079-10619 BNBL
VERTICAL SCALE	DESIGNATION
1/4"=1'-0"	1901897
SURVEY BOOK	SHEETS
ELECTRONIC	7 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/21/2020 8:56:49 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 22 I65 NB over East 10th St\1901897_07 - Bent No.1 Details.dgn



PLAN



ELEVATION

Plot: 2/21/2020 8:56:50 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 22 I65 NB over East 10th St\1901897_08 - Bent No.2 Details.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

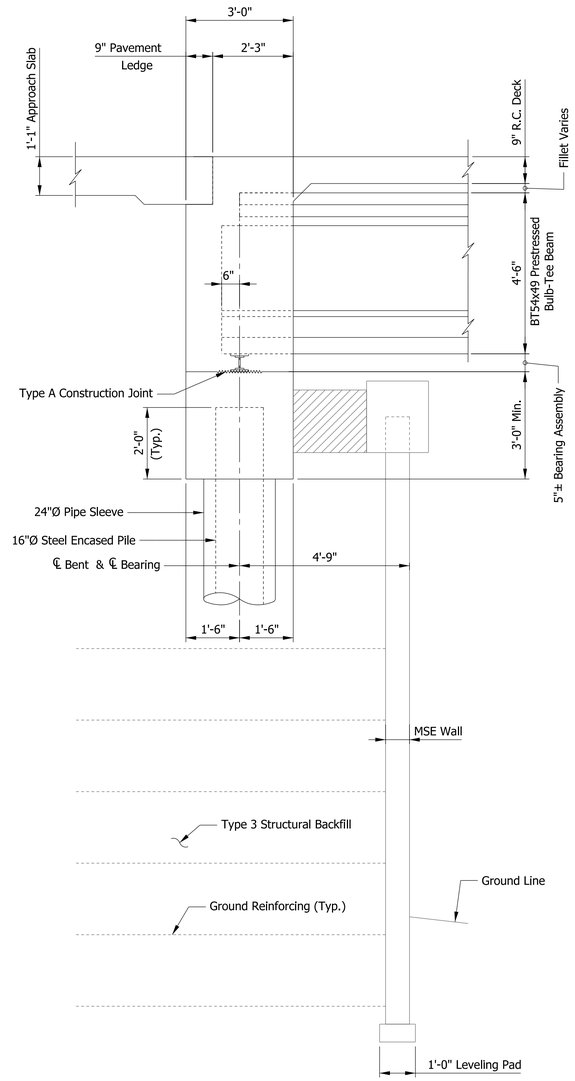
DESIGNED: ZGC | DRAWN: TLH

CHECKED: CML | CHECKED: CML

INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO.2 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1/4"=1'-0"	(I65)I70-079-10619 BNBL
VERTICAL SCALE	DESIGNATION
1/4"=1'-0"	1901897
SURVEY BOOK	SHEETS
ELECTRONIC	8 of 13
CONTRACT	PROJECT
B-36910	1600808



SECTION A-A

Scale : 1/2" = 1'-0"

NOTE:

For MSE wall details, please see plan Des. No. 1901899, sheets xx to xx.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: TLH

CHECKED: CML CHECKED: CML

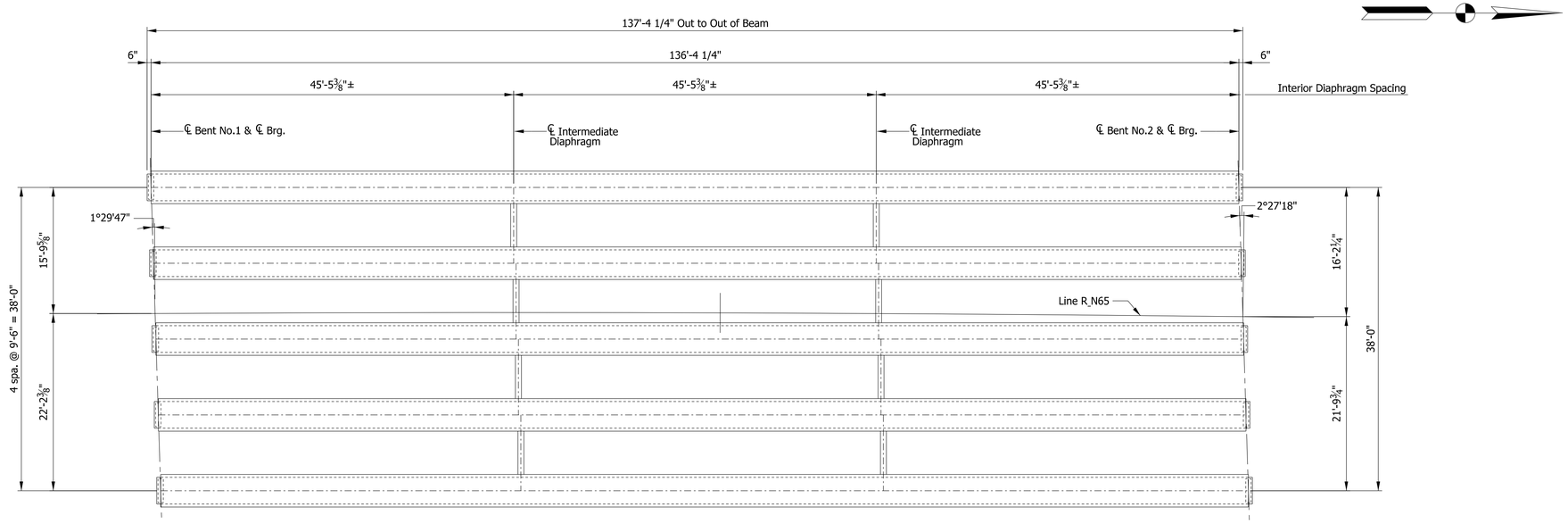
INDIANA DEPARTMENT OF TRANSPORTATION

BENT NO.1 & 2 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1/2"=1'-0"	(I65)I70-079-10619 BNBL
VERTICAL SCALE	DESIGNATION
1/2"=1'-0"	1901897
SURVEY BOOK	SHEETS
ELECTRONIC	9 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/21/2020 8:56:51 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 22 I65 NB over East 10th St\1901897_09 - Bent No.1 & 2 Section.dgn



FRAMING PLAN

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

NOTES:

For intermediate diaphragm details, see Std. Dwg. E707-SDPC - 03 & 04.

Plot: 2/21/2020 8:56:55 AM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: TLH

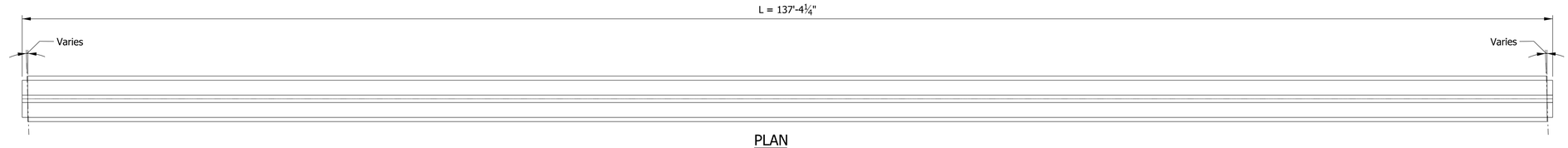
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INDIANA
DEPARTMENT OF TRANSPORTATION

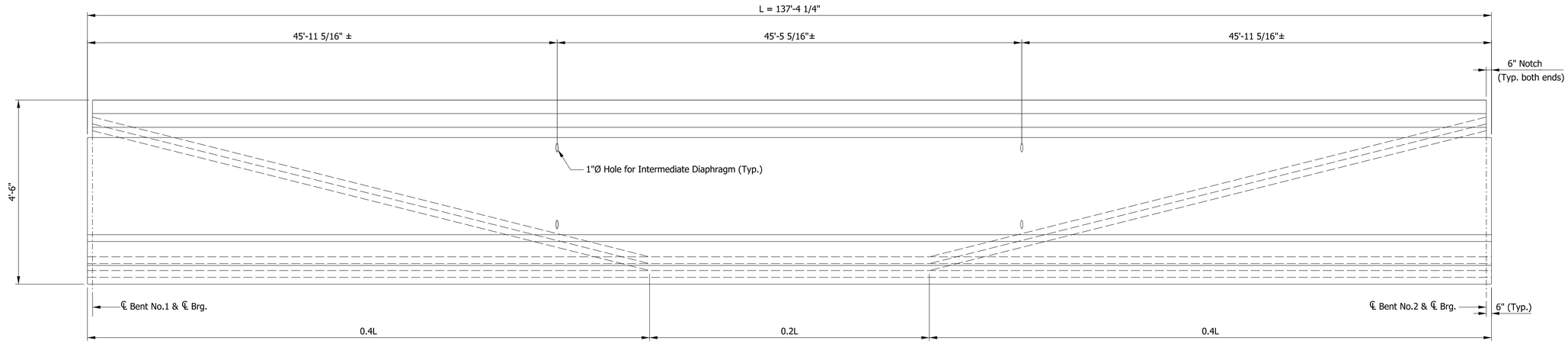
FRAMING PLAN

HORIZONTAL SCALE	BRIDGE FILE
3/32"=1'-0"	(I65)I70-079-10619 BNBL
VERTICAL SCALE	DESIGNATION
3/32"=1'-0"	1901897
SURVEY BOOK	SHEETS
ELECTRONIC	10 of 13
CONTRACT	PROJECT
B-36910	1600808

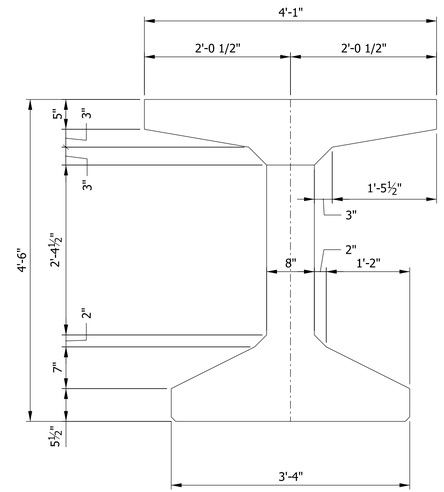
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 22 I65 NB over East 10th St\1901897_010 - Framing plan.dgn



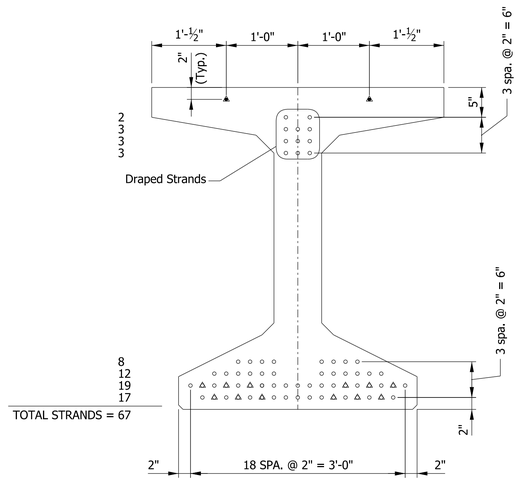
PLAN
Scale: 3/16" = 1'-0"



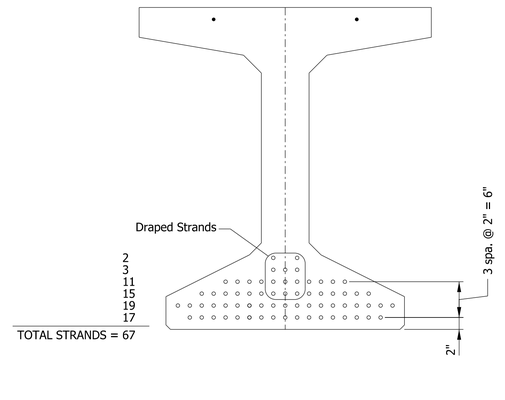
ELEVATION
Horizontal Scale: 3/16" = 1'-0"
Vertical Scale: 3/4" = 1'-0"



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



STRAND PATTERN AT BEAM END
Scale: 1" = 1'-0"



STRAND PATTERN AT MIDSPAN
Scale: 1" = 1'-0"

NOTES:

1. Prestressing reinforcement shall be a 0.6" Ø uncoated seven wire low relaxation 270 ksi with strand area = 0.217 in^2.
2. Beams shall be cast a minimum of 120 days before deck is poured.

LEGEND

△ Debonded Strand

▲ Transportation Strands to be debonded over middle 50'-0" of beam and cut after erection.

Plot: 2/21/2020 8:56:57 AM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: TLH

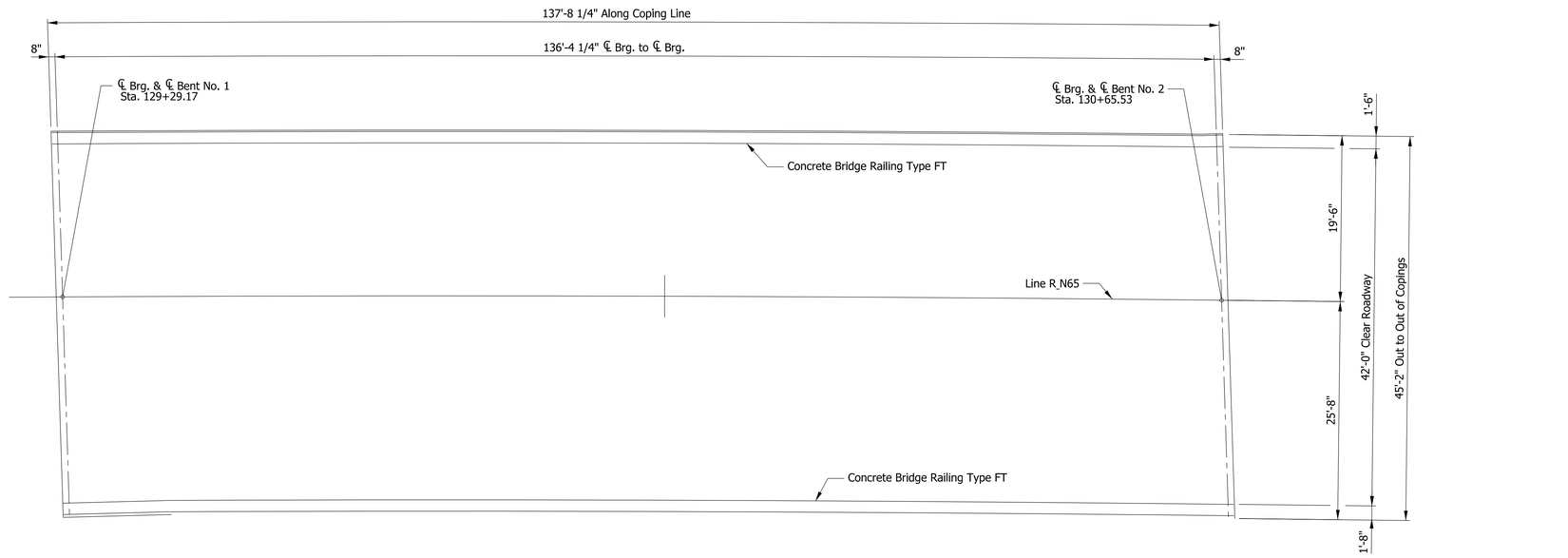
CHECKED: CML CHECKED: CML

INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

HORIZONTAL SCALE	BRIDGE FILE
3/32"=1'-0"	(I65)I70-079-10619 BNBL
VERTICAL SCALE	DESIGNATION
3/32"=1'-0"	1901897
SURVEY BOOK	SHEETS
ELECTRONIC	11 of 13
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 22 I65 NB over East 10th St\1901897_011 - Beam Details.dgn



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

Plot: 2/21/2020 8:56:58 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 22 I65 NB over East 10th St\1901897_012 - Superstructure Details.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

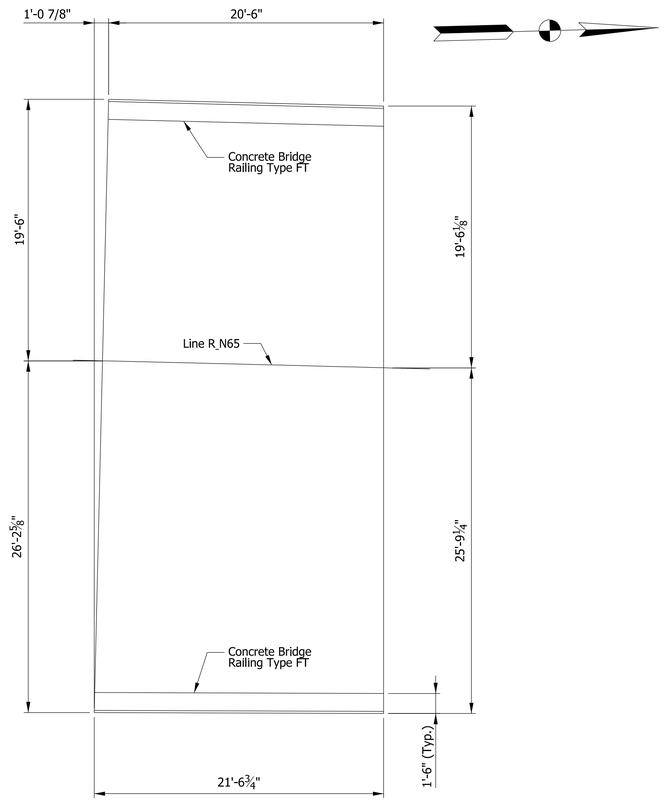
DESIGNED: ZGC DRAWN: TLH

CHECKED: CML CHECKED: CML

INDIANA
DEPARTMENT OF TRANSPORTATION

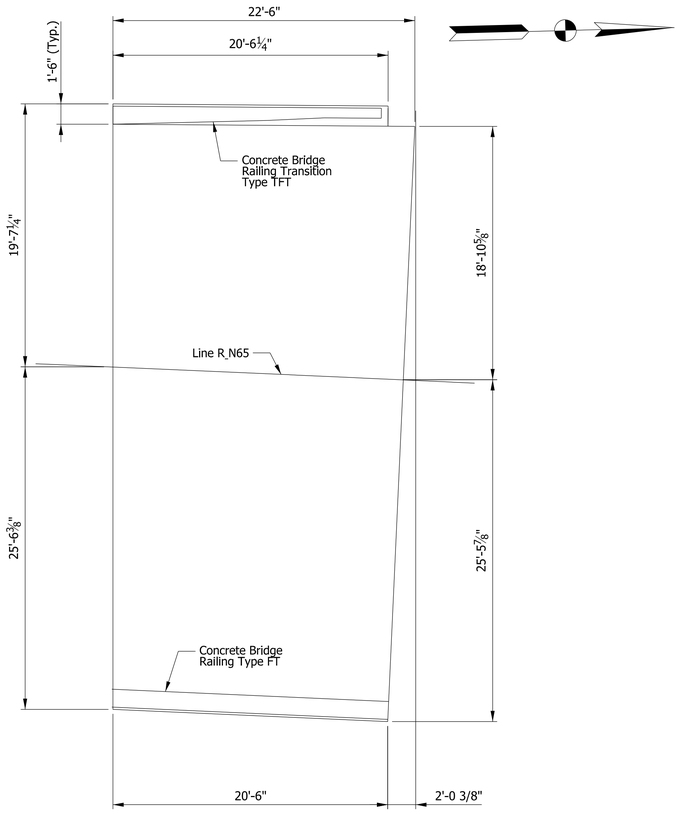
SUPERSTRUCTURE DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1/8" = 1'-0"	(I65)I70-079-10619 BNBL
VERTICAL SCALE	DESIGNATION
1/8" = 1'-0"	1901897
SURVEY BOOK	SHEETS
ELECTRONIC	12 of 13
CONTRACT	PROJECT
B-36910	1600808



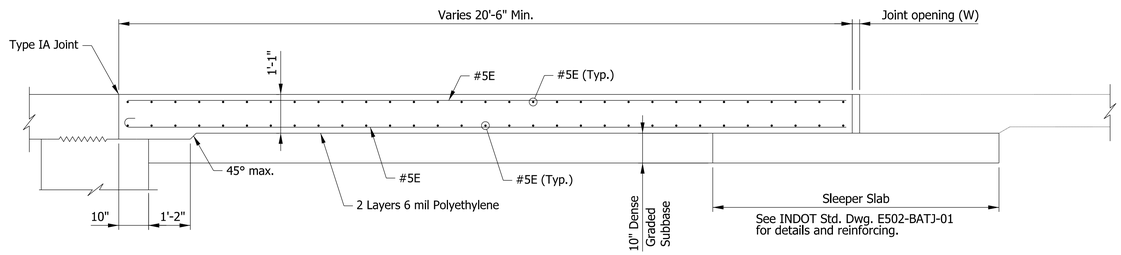
APPROACH SLAB PLAN AT BENT NO.1

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



APPROACH SLAB PLAN AT BENT NO.2

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



SECTION THROUGH APPROACH

Scale: ½" = 1'-0"

NOTE:

1. For additional Terminal Joint information, see USP. Terminal Joint Details: Type CRCP
2. Concrete Railing Type FT & Concrete Railing Transition Type TFT sit on Slab Extensions.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: TLH

CHECKED: CML | CHECKED: CML

INDIANA
DEPARTMENT OF TRANSPORTATION

R.C. APPROACH SLAB DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1/8" = 1'-0"	(I65)I70-079-10619 BNBL
VERTICAL SCALE	DESIGNATION
1/8" = 1'-0"	1901897
SURVEY BOOK	SHEETS
ELECTRONIC	13 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/21/2020 8:57:00 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 22 I65 NB over East 10th St\1901897_013 - Approach Slab Details.dgn

PROJECT	DESIGNATION
1600808	1901899
CONTRACT	BRIDGE FILE
B-36910	I70-083-10620 EBL

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN & SKEW	OVER	STATION
I70-083-10620 EBL	SIMPLE SPAN COMPOSITE PRE-STRESSED CONCRETE BULB-T BEAM BRIDGE	1 SPAN; 136'-9 3/4" SKEW: VARIES	EAST 10TH STREET	129+95.18 LINE "R_E70"

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

FOR SPANS OVER 20 FEET

ROUTE: I-70 E.B. AT: RP 112+22

PROJECT NO. 1600808 P.E.

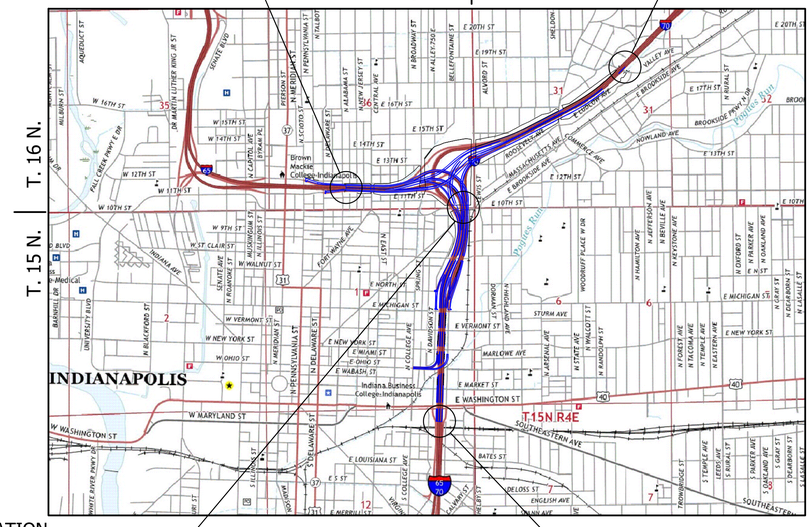
1600808 CONST.

NO ADDITIONAL RIGHT OF WAY REQUIRED FOR THIS PROJECT

BRIDGE REPLACEMENT ON I-70 E.B. OVER EAST 10TH STREET
LOCATED 1.92 MILES NORTH OF I-70 (SOUTH SPLIT) INTERCHANGE
SECTION 1, TOWNSHIPS 15 & 16 NORTH, RANGE 3 EAST
CENTER TOWNSHIP, MARION COUNTY INDIANA

END PROJECT No. 1600808
STATION 25+75.00 LINE "P_ALG_I65"

END PROJECT No. 1600808
STATION 41+85.70 LINE "P_ALG_I70"



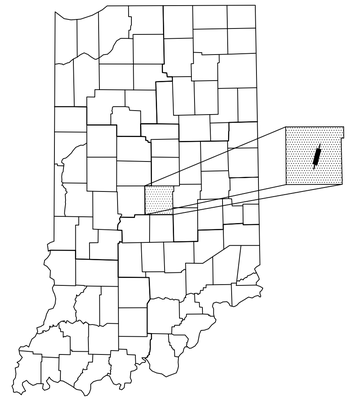
PROJECT LOCATION
BRIDGE FILE No. I70-083-10620 EBL
I-70 E.B. OVER EAST 10TH STREET
STA. 129+95.18 LINE "R_E70"

LOCATION MAP
MARION COUNTY

BEGIN PROJECT No. 1600808
STATION 113+00.00 LINE "P_ALG_I65/I70"

SCALE: 1" = 2000'

TRAFFIC DATA	I-70 E.B.	10TH ST
A.D.T. (2021)	48,680 V.P.D.	9,494 (EB) 6,850 (WB) V.P.D.
A.D.T. (2041)	57,330 V.P.D.	9,253 (EB) 7,553 (WB) V.P.D.
D.H.V. (2041)	5,733 V.P.H.	1,037 (EB) 913 (WB) V.P.D.
DIRECTIONAL DISTRIBUTION	100%	55% (EB) 45% (WB)
TRUCKS	13% D.H.V.	2% (EB) 3% (WB)
DESIGN DATA		
DESIGN SPEED	55 M.P.H.	35 M.P.H.
PROJECT DESIGN CRITERIA	4R (FREEWAY)	N/A
FUNCTIONAL CLASSIFICATION	FREEWAY	MINOR ARTERIAL
RURAL/URBAN	URBAN	URBAN
TERRAIN	LEVEL	LEVEL
ACCESS CONTROL	FULL CONTROL	NONE



PROJECT LOCATION SHOWN BY

LATITUDE: 39°46'29.5" N LONGITUDE: 86°08'27.0" W

BRIDGE LENGTH :	0.024 MI.
ROADWAY LENGTH :	SEE ROAD PLANS
TOTAL LENGTH :	SEE ROAD PLANS
MAX GRADE :	+3.50%

HUC: 05120201130020

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2020 TO
BE USED WITH THESE PLANS.

SUPERIOR CONSTRUCTION

PLANS PREPARED BY: Butler Fairman and Seufert Inc. (317)713-4615 PHONE

CERTIFIED BY: #/#/# DATE

APPROVED FOR LETTING: #/#/# INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE	
I70-083-10620 EBL	
DESIGNATION	
1901899	
SURVEY BOOK	SHEET
ELECTRONIC	1 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

\\bfsnt241\Jobs5\641200.0000\ProjDevelopment\Design\Drawings\BRIDGES\08 OVER 10TH STREET\Structure 1901899\1901899_S_BR_TTL01.dwg Dylan Piercefield Plot: 2/24/2020 10:05 AM Save: 2/21/2020 10:38 AM

\\bfn1241\Jobs\641200.0000\ProjDevelopment\Design\Drawings\BRIDGES\08 OVER 10TH STREET\Structure 1901899\1901899_S_BR_IN001.dwg Dylan Piercefield Plot: 2/24/2020 10:05 AM Save: 2/18/2020 3:37 PM

UTILITIES

REVISIONS

SHEET NO.	DATE	REVISED

KIN PROJECT INFORMATION

DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB & I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVE.	
1901914	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER COLLEGE AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901927	NOT USED	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I70 WB OVER VERMONT STREET	

INDEX

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6	GENERAL PLAN - TYPICAL SECTION
7	BENT NO. 1 DETAILS
8	BENT NO. 2 DETAILS
9	BENTS NO. 1 AND BENT NO. 2 DETAILS
10	FRAMING PLAN
11	BEAM DETAILS
12	FLOOR DETAILS
13	APPROACH SLAB
14	WALL LAYOUT
15	WALL LAYOUT

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER #/#/# DATE

DESIGNED: B. WRIGHT DRAWN: K. COFFMAN

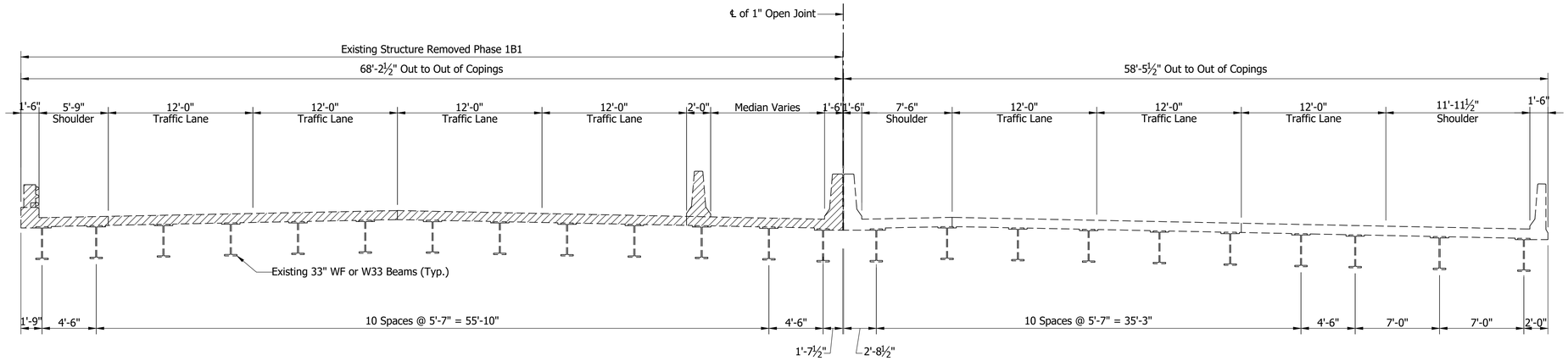
CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

INDIANA DEPARTMENT OF TRANSPORTATION

INDEX

HORIZONTAL SCALE	BRIDGE FILE
N/A	I70-083-10620 EBL
VERTICAL SCALE	DESIGNATION
N/A	1901899
SURVEY BOOK	SHEET
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CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412



I-65 NORTHBOUND

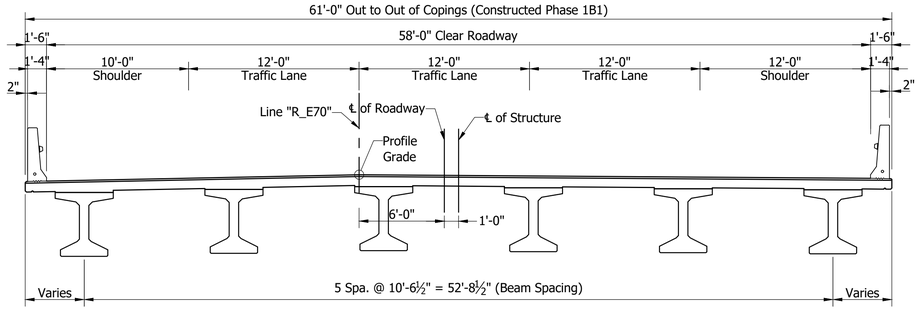
I-70 EASTBOUND

EXISTING TYPICAL SECTION

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

LEGEND

Limits of Removal



PROPOSED TYPICAL SECTION

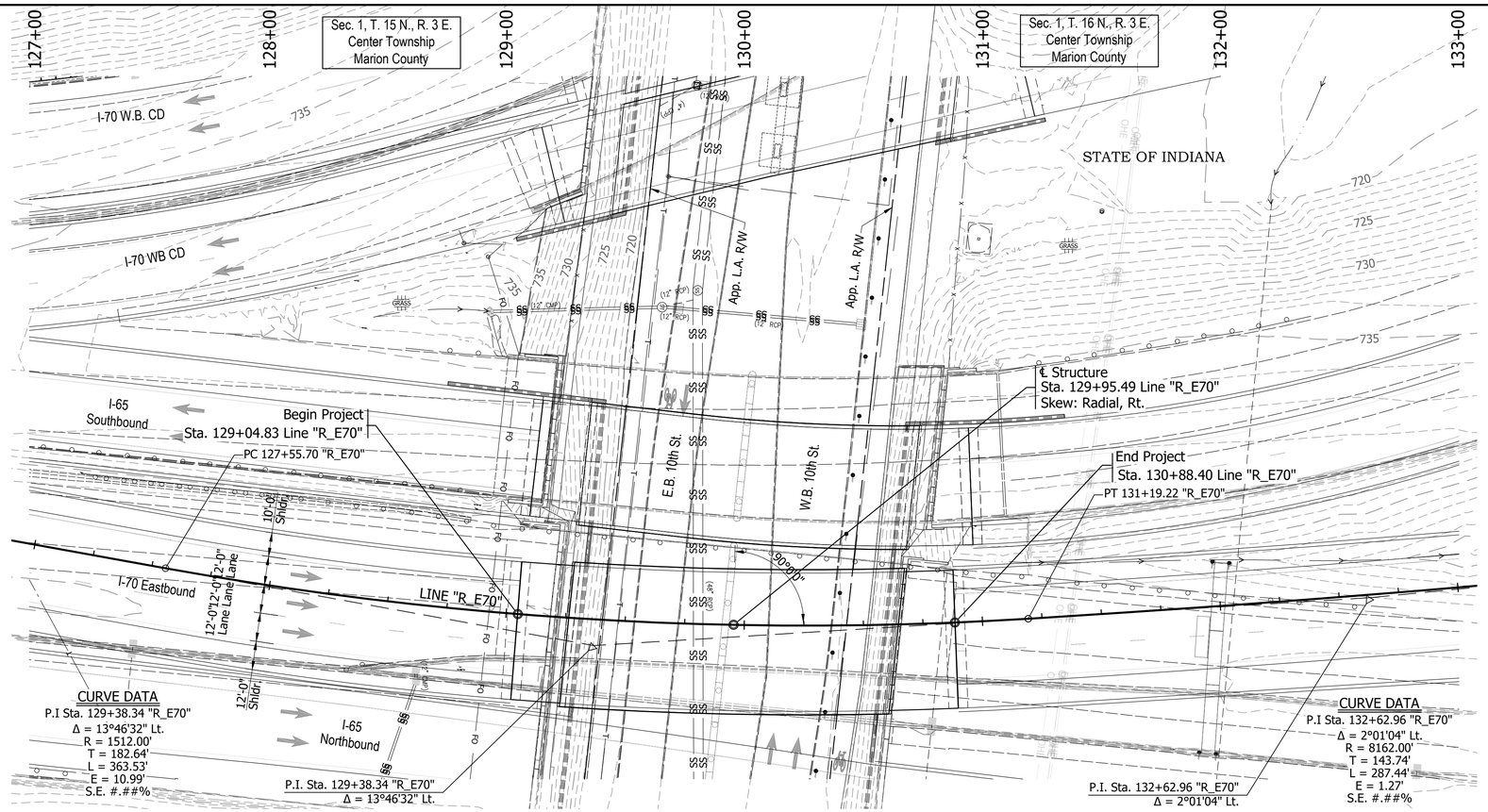
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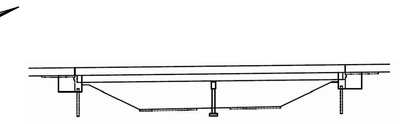
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	DESIGNED: B. WRIGHT DRAWN: M. SCOTT CHECKED: M. EICHENAUER CHECKED: B. WRIGHT	MAINTENANCE OF TRAFFIC	SURVEY BOOK: ELECTRONIC; SHEET: 3 OF 15; CONTRACT: B-36910; PROJECT: 1600808

BFS NO. 6412

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EXISTING STRUCTURE

The existing structure was built in 1974. Structure was rehabilitated in 2003. The structure is a 2-span continuous composite steel beam bridge.

Span lengths: 1 @ 72'-8", 1 @72'-8"

Clear roadway varies. Total length of 145'-10"

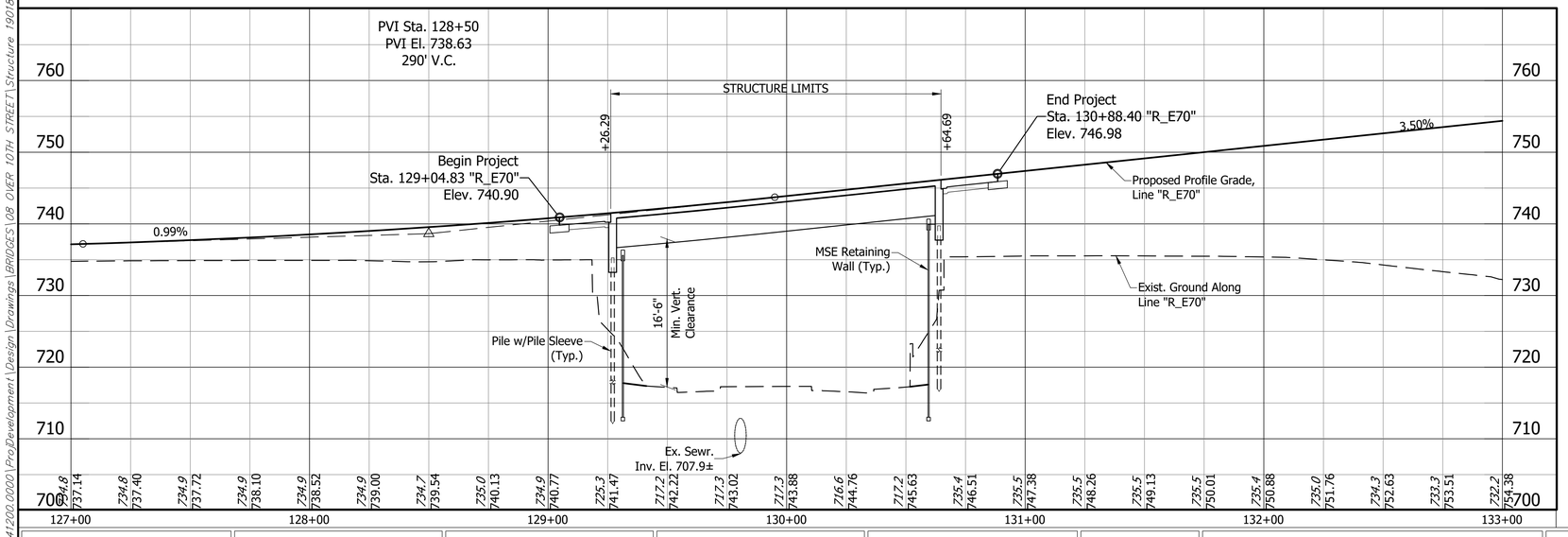
Existing structure to be removed.

Existing plans are on file with the Indiana Department of Transportation under Bridge File No. I-65-112-05738 BSB.

EARTHWORK TABULATION

See Roadway Plans (DES #_____) for earthwork tabulation.

NOTE: ALL TOPOGRAPHY INFORMATION REFERENCED TO LINE "_____" UNLESS NOTED.
ALL R/W ON THIS SHEET DESCRIBED FROM LINE "_____" UNLESS OTHERWISE NOTED



Notes:

1. For R/W and property information, see Location Control Route Survey (DES # _____).
2. For alignment data, see Geometric Layout Sheets (DES #_____).
3. See Road Plans (DES #_____) for Horizontal & Vertical Control Data.

SIMPLE SPAN COMPOSITE PRE-STRESSED
CONCRETE BULB-T BEAM BRIDGE
1 SPAN; 136'-9 3/4"
58'-0" CLEAR ROADWAY
SKEW: VARIES
I-70 E.B. OVER EAST 10TH STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER #/#/# DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH
CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

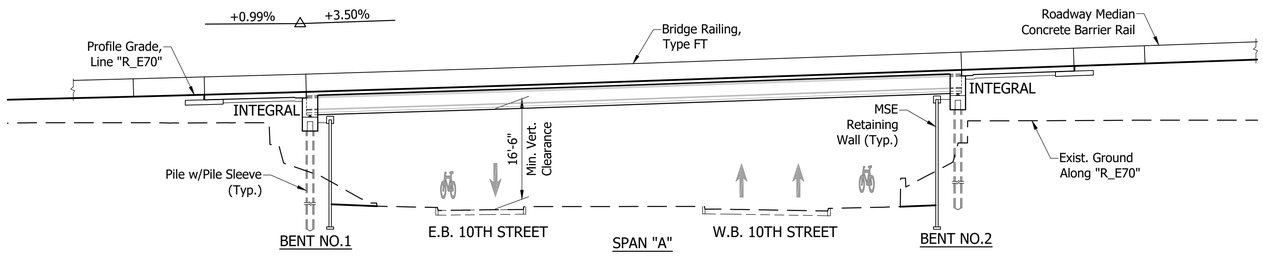
INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	I70-083-10620 EBL
VERTICAL SCALE	DESIGNATION
1" = 10'	1901899
SURVEY BOOK	SHEET
ELECTRONIC	4 OF 15
CONTRACT	PROJECT
B-36910	1600808

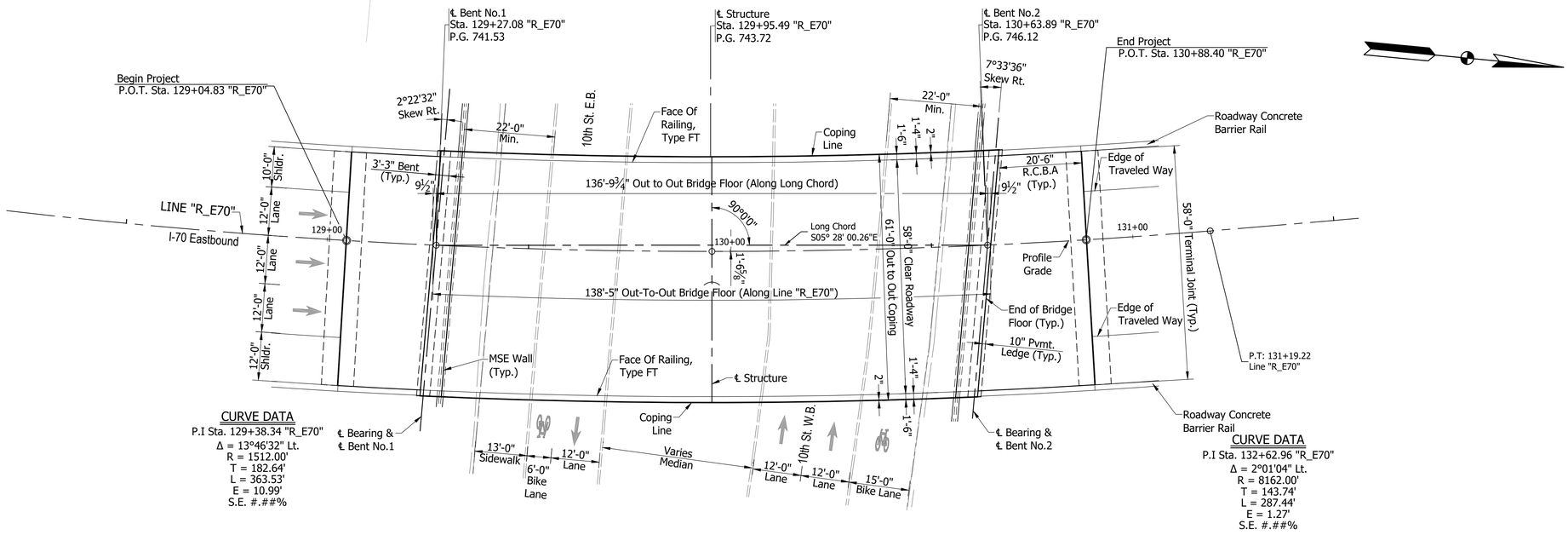
BFS NO. 6412

STRUCTURE TO BE BUILT ON A 290' VERTICAL CURVE



ELEVATION

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



CURVE DATA
P.I Sta. 129+38.34 "R_E70"
Δ = 13°46'32" Lt.
R = 1512.00'
T = 182.64'
L = 363.53'
E = 10.99'
S.E. #.##%

CURVE DATA
P.I Sta. 132+62.96 "R_E70"
Δ = 2°01'04" Lt.
R = 8162.00'
T = 143.74'
L = 287.44'
E = 1.27'
S.E. #.##%

NOTE:
See Sheet 6 For Typical Section

PLAN

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

SIMPLE SPAN COMPOSITE PRE-STRESSED CONCRETE
BULB-T BEAM BRIDGE
1 SPAN; 136'-9 3/4"
58'-0" CLEAR ROADWAY; SKEW: VARIES
I-70 E.B. OVER EAST 10TH STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER #/#/# DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

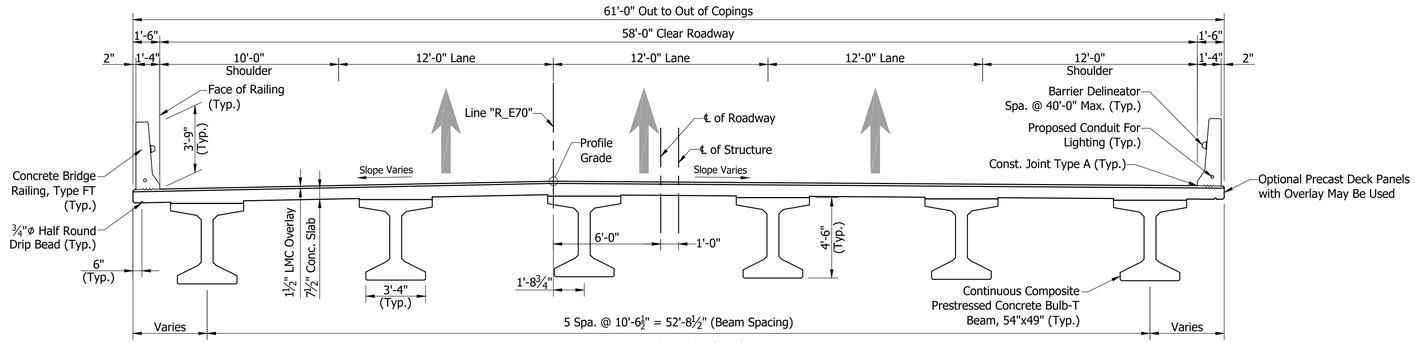
INDIANA
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GENERAL PLAN - PLAN & ELEVATION VIEWS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10620 EBL
VERTICAL SCALE	DESIGNATION
N/A	1901899
SURVEY BOOK	SHEET
ELECTRONIC	5 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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TYPICAL SECTION

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

GENERAL NOTES

The existing structure shall be removed.

Reinforcing bars covering shall be 3 ½" in top and 1" min. in bottom of floor slabs and 3" in footings except bottom steel which shall be 4", and 2" in all other parts, unless noted.

Concrete in floor slab, and diaphragms, barriers, and end bents shall be an alternate Class C in accordance with the Technical Provisions.

Reinforcing Bars in Deck, Barrier, and End Bent Diaphragm Extending into the Deck shall be Stainless Steel. Reinforcing Bars in End Bent Diaphragm not Extending into the Deck and in the Cap shall be Epoxy Coated.

All exposed faces of the MSE walls and reinforced concrete bridge approach slabs shall receive surface seal.

See Bridge Aesthetic Plan for Architectural Details.

DESIGN DATA

LIVE LOAD:

Superstructure and Substructure Designed for HL-93 loading in accordance with the AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017 and its subsequent revisions.

DEAD LOAD:

Designed for Actual Dead Load plus 35 psf of future wearing surface, and 15 psf for SIP Metal Deck Forms.

FLOOR SLAB:

Slab designed with a 7 ½" structural depth and a 1 ½" very early strength LMC wearing surface.

DESIGN STRESSES

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 beam. The finishing machine was assumed to be supported 6 in. outside the vertical coping form. The top overhang brackets were assumed to be located 6 in. 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 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30 foot length of the deck centered with the finishing machine.

FINISHING-MACHINE LOAD:

4500 lb distributed over 10 ft. along the coping.

WIND LOAD:

Designed for 70 mph horizontal wind load in accordance with LRFD 3.8.1.

ULTIMATE DESIGN STRENGTHS:

Class "A" Concrete	f'c = 3,500 p.s.i.
Class "B" Concrete	f'c = 3,000 p.s.i.
Class "C" Concrete	f'c = 4,000 p.s.i.
Reinforcing Steel (Grade 60)	Fy = 60,000 p.s.i. (barrier)
	Fy = 75,000 p.s.i. (deck)
	Fy = 75,000 p.s.i. (all other locations)

SEISMIC DESIGN DATA:

Seismic Site Class	C
PGA (g)	0.051
S_s (g)	0.12
S_1 (g)	0.051
S_{D1} (g)	0.086
Seismic Design Category	A

SIMPLE SPAN COMPOSITE PRE-STRESSED
CONCRETE BULB-T BEAM BRIDGE
1 SPAN; 136'-9 3/4"
58'-0" CLEAR ROADWAY; SKEW: VARIES
I-70 E.B. OVER EAST 10TH STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

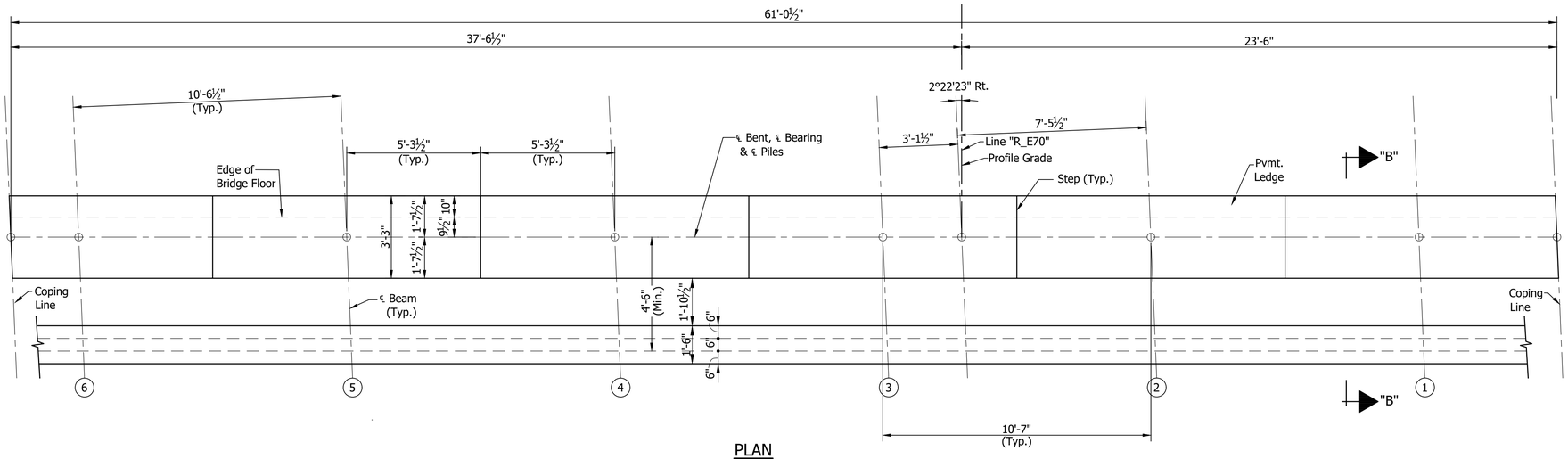
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN - TYPICAL SECTION

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As Noted	170-083-10620 EBL
VERTICAL SCALE	DESIGNATION
N/A	1901899
SURVEY BOOK	SHEET
ELECTRONIC	6 OF 15
CONTRACT	PROJECT
B-36910	1600808

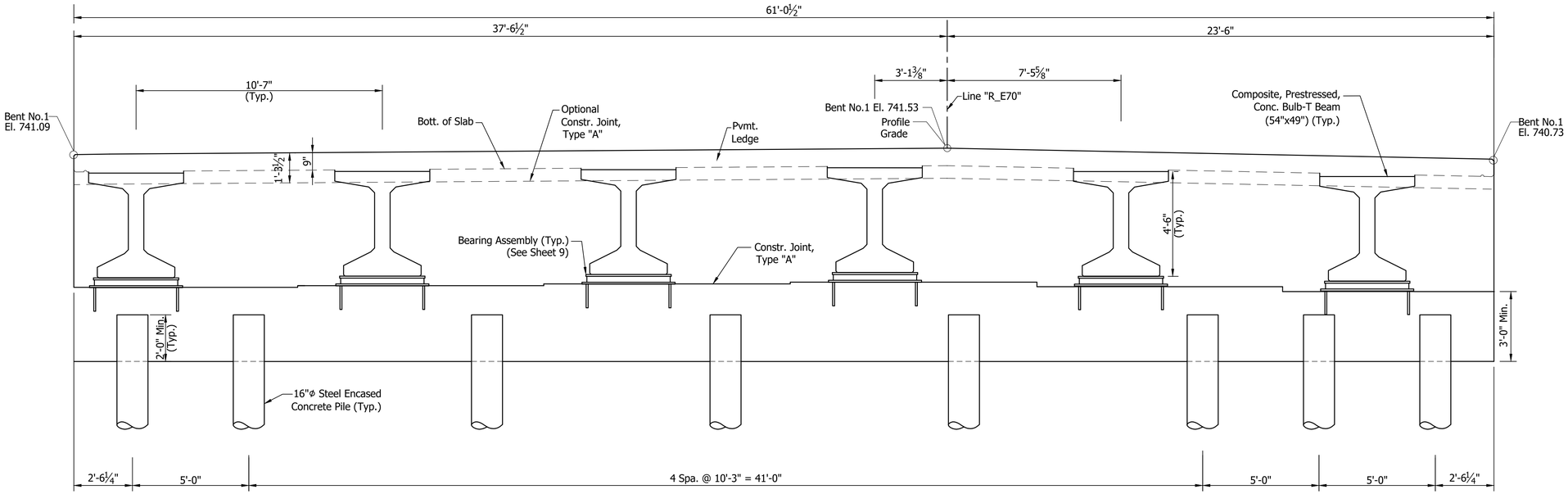
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PLAN
BENT NO.1 EB
Scale: ⅜"=1'-0"

SEAT ELEVATIONS						
Beam No.	6	5	4	3	2	1
Bent No.1	735.14	735.34	735.52	735.62	735.46	735.29



SECTION ALONG ℄ BENT
Scale: ⅜"=1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER ##/##/## DATE

DESIGNED: V. SATHIRAJU DRAWN: K. COFFMAN

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

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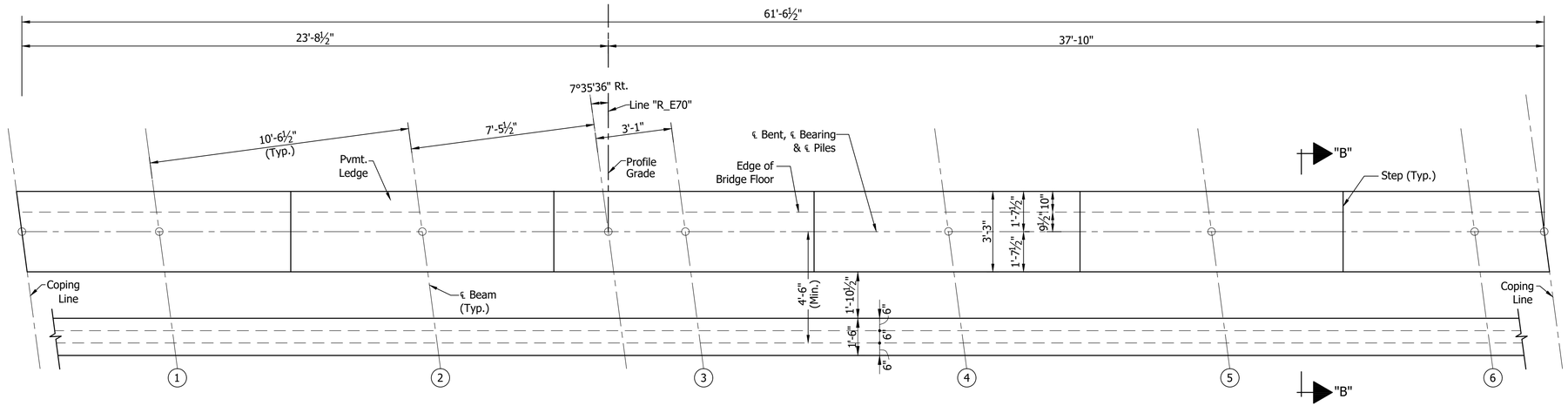
BENT NO. 1 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10620 EBL
VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEET
ELECTRONIC	7 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

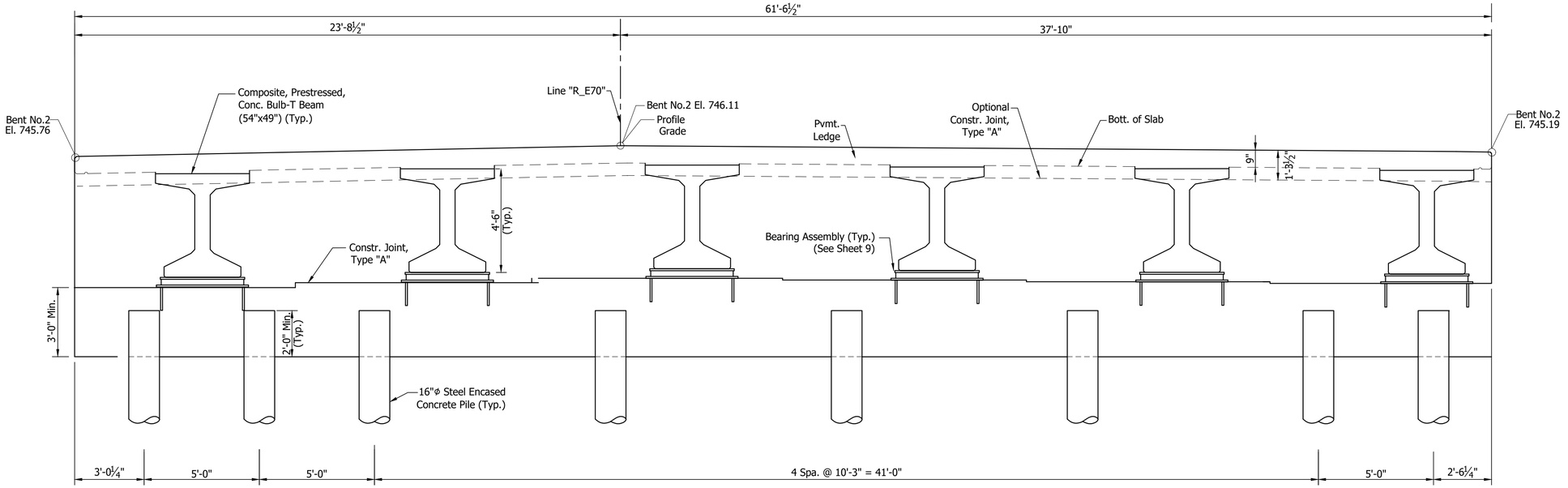
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PLAN
BENT NO.2 EB
Scale: ⅜"=1'-0"

SEAT ELEVATIONS						
Beam No.	1	2	3	4	5	6
Bent No.2	739.87	740.04	740.21	740.10	739.91	739.71



SECTION ALONG ℄ BENT
Scale: ⅜"=1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER ##/##/## DATE

DESIGNED: V. SATHIRAJU DRAWN: K. COFFMAN

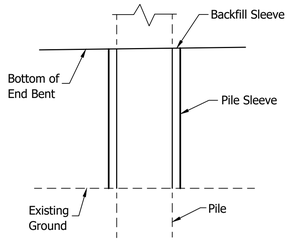
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DEPARTMENT OF TRANSPORTATION

BENT NO. 2 DETAILS

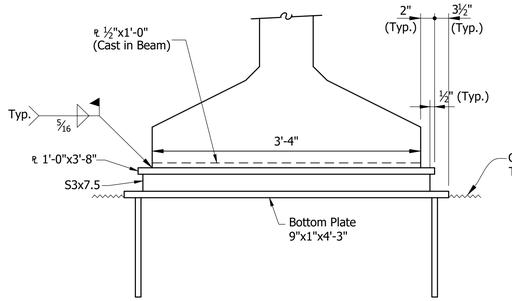
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As Noted	170-083-10620 EBL
VERTICAL SCALE	DESIGNATION
N/A	1901899
SURVEY BOOK	SHEET
ELECTRONIC	8 OF 15
CONTRACT	PROJECT
B-36910	1600808

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PILE SLEEVE DETAIL

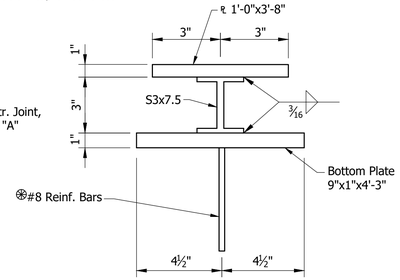
Not to Scale



ELEVATION

⊛ As an alternate a ⅞"Ø x1'-3" Long Headed Automatic Welded Stud may be used.

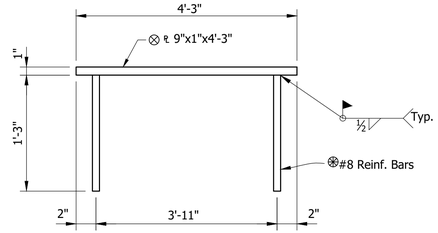
⊗ Setting Tolerance of Bottom Plate- Level with to not more than 1/16" below top of Concrete.



SECTION

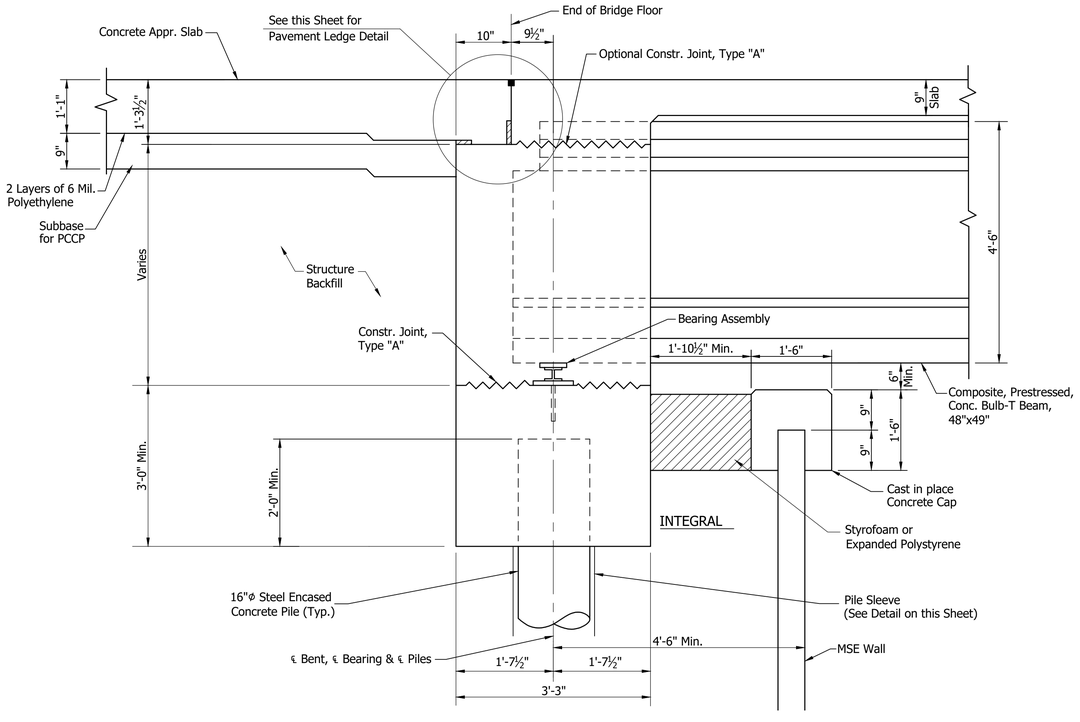
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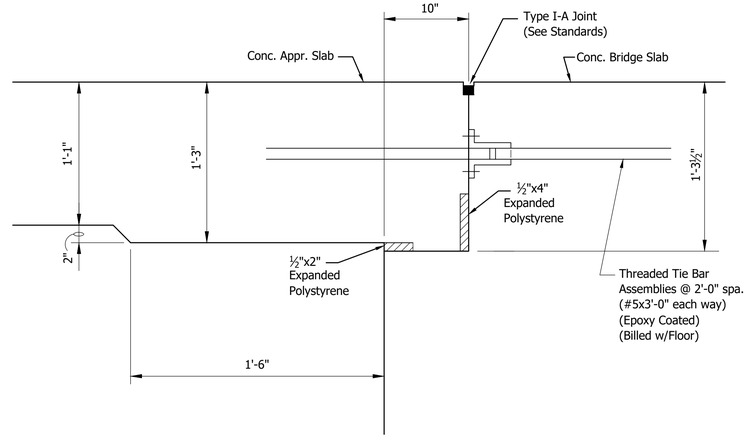
BOTTOM PLATE DETAIL

Not to Scale



SECTION "B-B"

Not to Scale



PAVEMENT LEDGE DETAIL

Not to Scale

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: V. SATHIRAJU DRAWN: K. COFFMAN

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

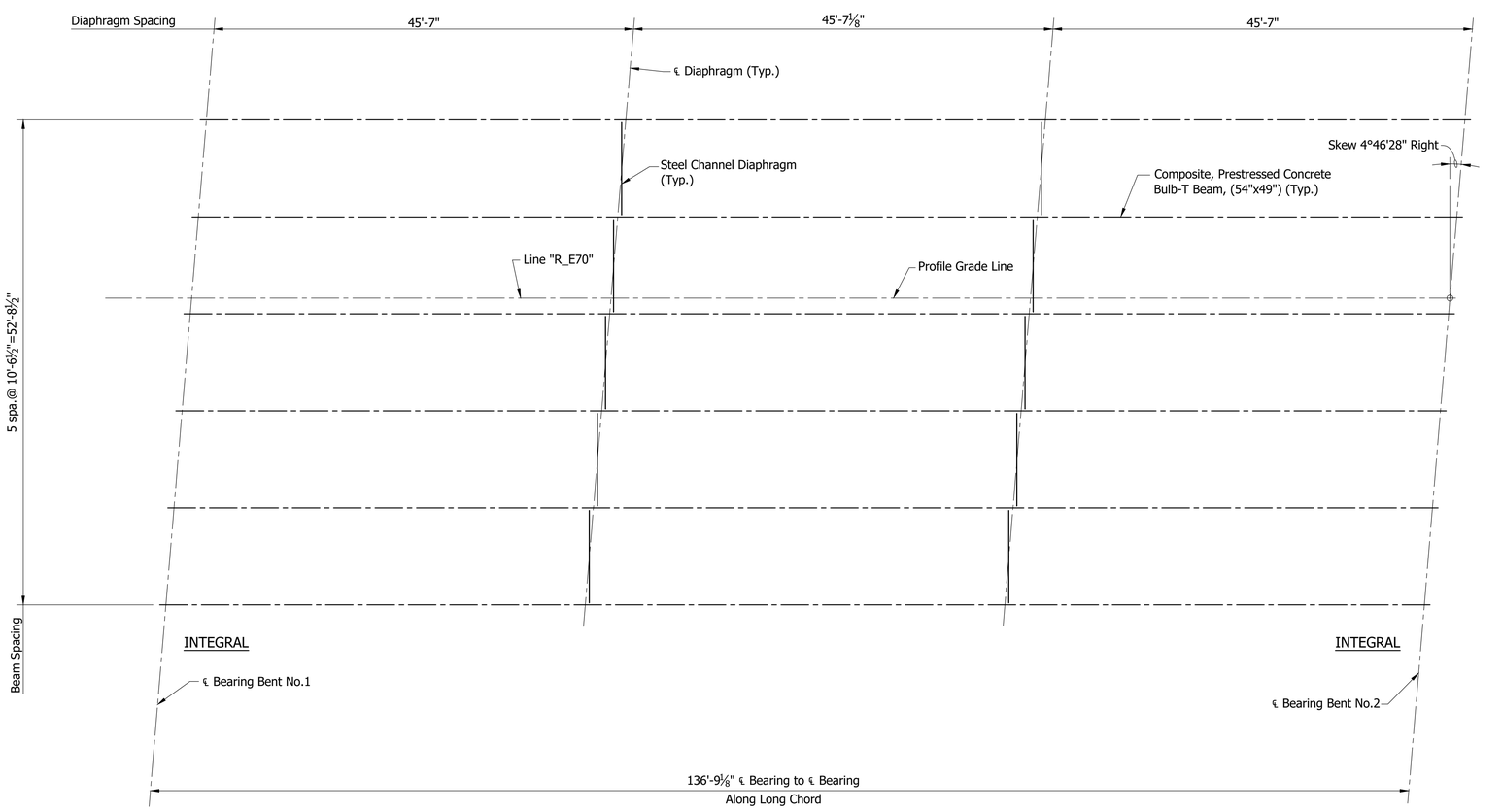
INDIANA
DEPARTMENT OF TRANSPORTATION

BENTS NO. 1 AND BENT NO. 2 DETAILS

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N/A	I70-083-10620 EBL
VERTICAL SCALE	DESIGNATION
N/A	1901899
SURVEY BOOK	SHEET
ELECTRONIC	9 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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BEAM ERECTION PLAN

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

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE

DESIGNED: B.WRIGHT DRAWN: D.SHEETZ

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

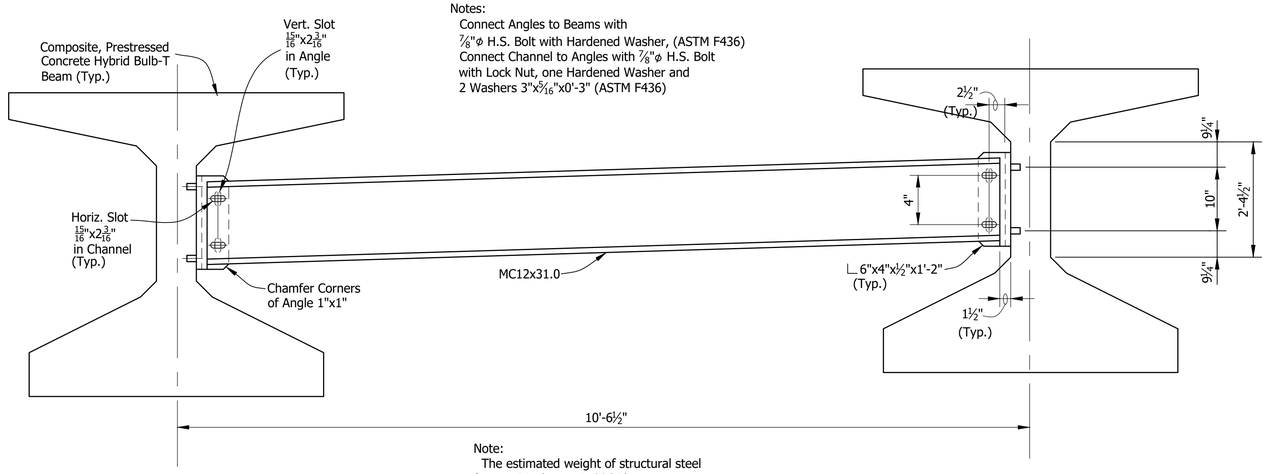
INDIANA
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10620 EBL
VERTICAL SCALE	DESIGNATION
N/A	1901899
SURVEY BOOK	SHEET
ELECTRONIC	10 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

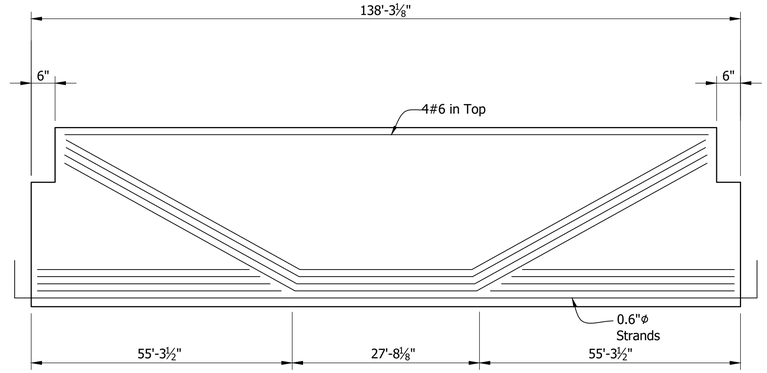
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Notes:
Connect Angles to Beams with 7/8"ø H.S. Bolt with Hardened Washer, (ASTM F436)
Connect Channel to Angles with 7/8"ø H.S. Bolt with Lock Nut, one Hardened Washer and 2 Washers 3"x5/16"x0'-3" (ASTM F436)

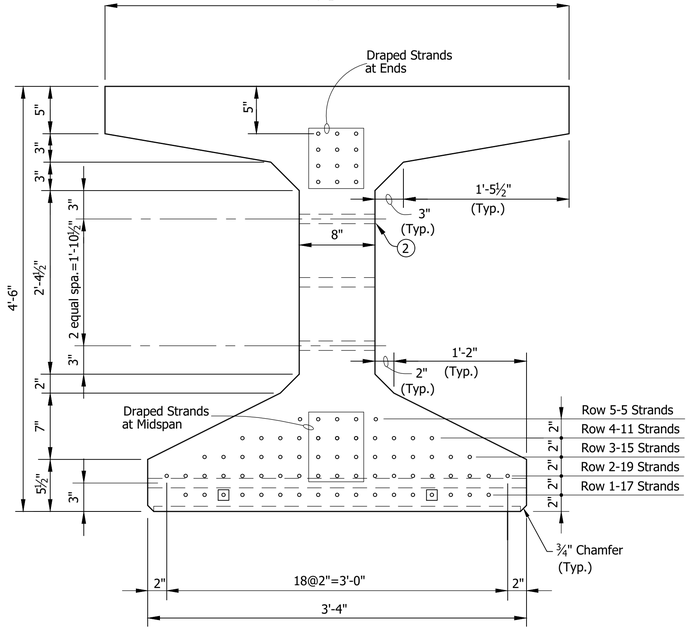
Note:
The estimated weight of structural steel for one Diaphragm is 306 Lbs.

ELEVATION
Not to Scale



BEAM ELEVATION
SHOWING DRAPED STRANDS
Not to Scale

BOTTOM STRAND DEBONDING		
STRAND SYMBOL	DEBONDED LENGTH FROM EACH END OF BEAM	APPROXIMATE STRAND SHORTENING
⊡	6'-0"	¼"



SECTION SHOWING STRANDS

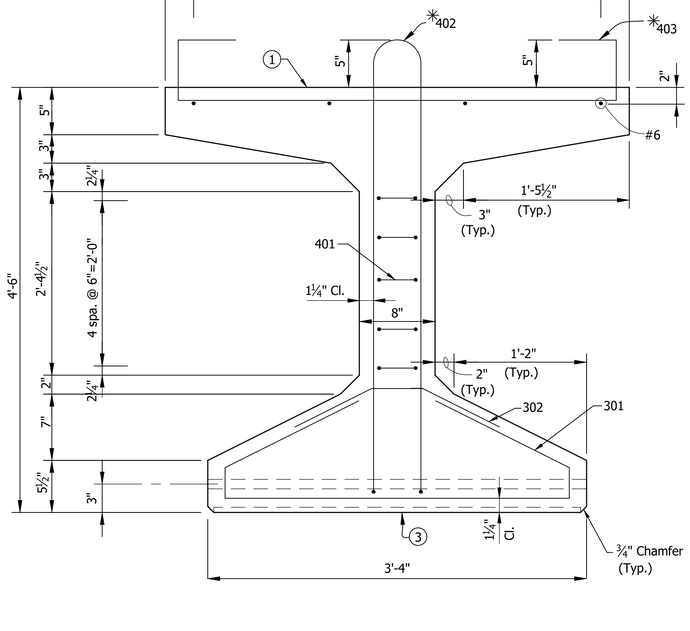
✳ Denotes Epoxy Coated

Note:
Bars 1" Clear unless noted.

① Surface Seal req'd on top of all Beams and Exterior Face of Exterior Beams

② 1"ø Holes or ¾"ø Inserts for Dowels at Bent or Pier. (See Beam Plans)

③ ℞ ½"x12"x3'-2½" at End Bent Ends



SECTION SHOWING REINFORCING

BEAM SECTIONS
Not to Scale

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: J. GOULD DRAWN: D. SHEETZ
CHECKED: B. WRIGHT CHECKED: B. WRIGHT

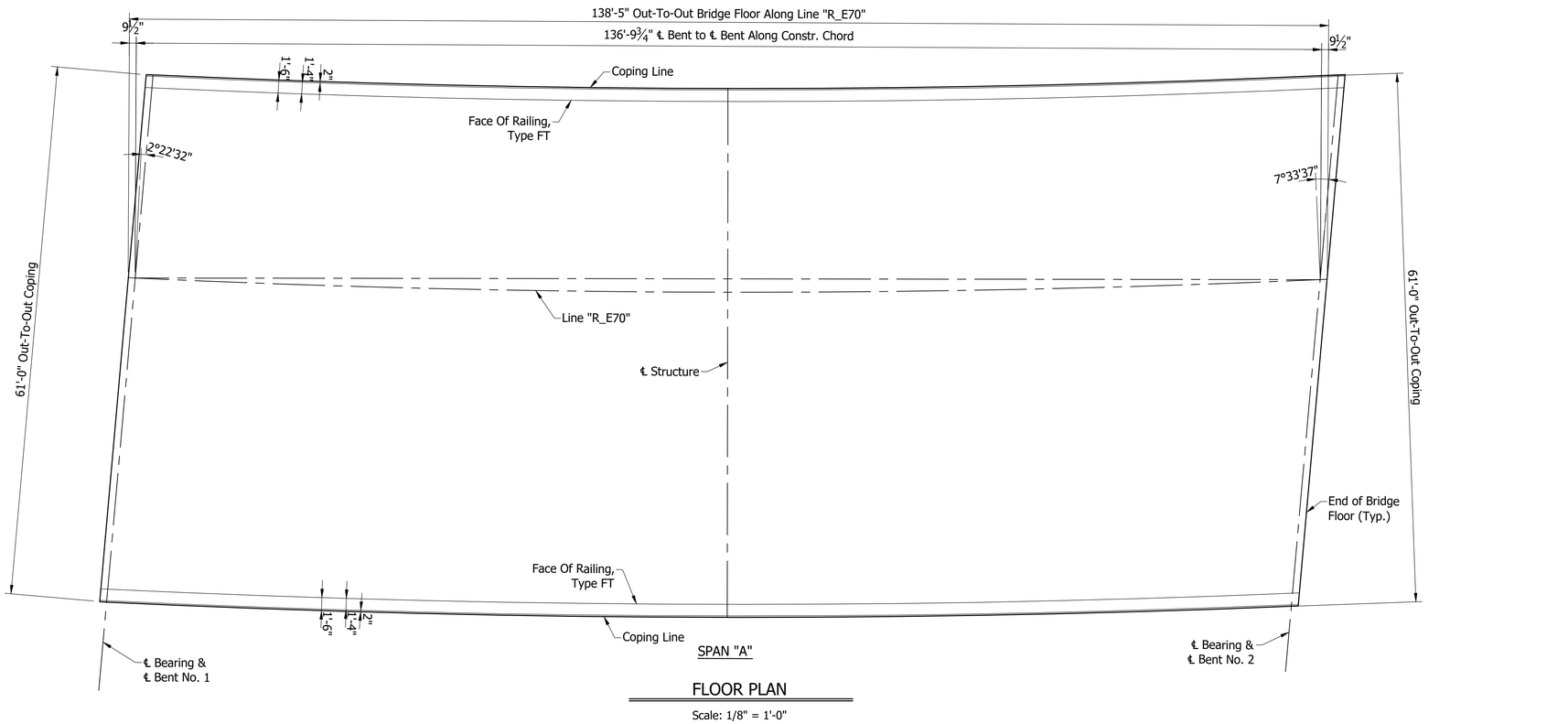
INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10620 EBL
VERTICAL SCALE	DESIGNATION
N/A	1901899
SURVEY BOOK	SHEET
ELECTRONIC	11 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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FLOOR PLAN

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

NOTE:
See Sheet ___ For _____

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: V. SATHIRAJU DRAWN: D. PIERCEFIELD

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

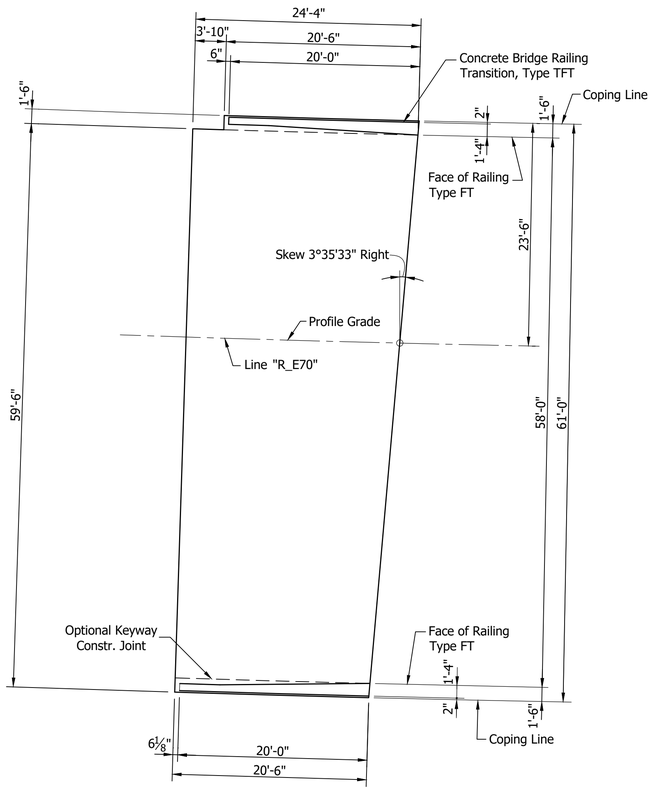
INDIANA
DEPARTMENT OF TRANSPORTATION

FLOOR DETAILS

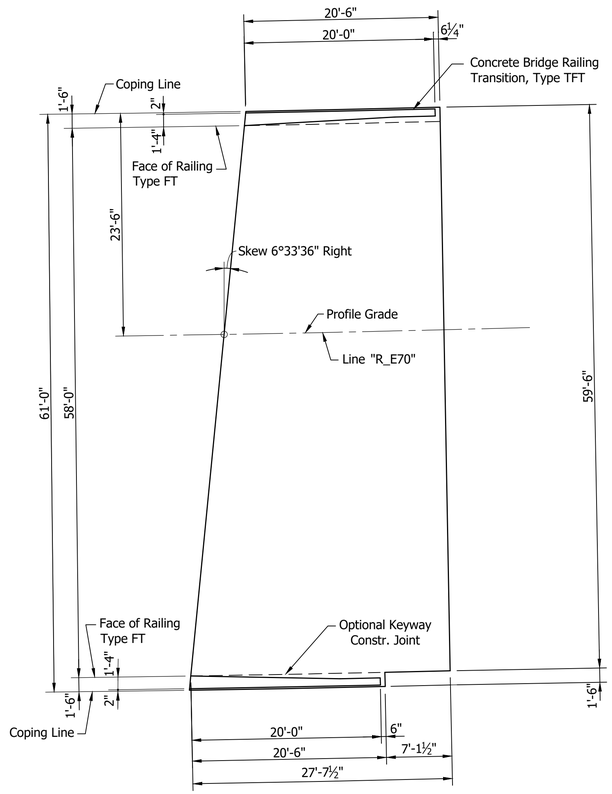
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As Noted	I70-083-10620 EBL
VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEET
ELECTRONIC	12 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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PLAN
SOUTH SLAB
Scale: ⅛"=1'-0"

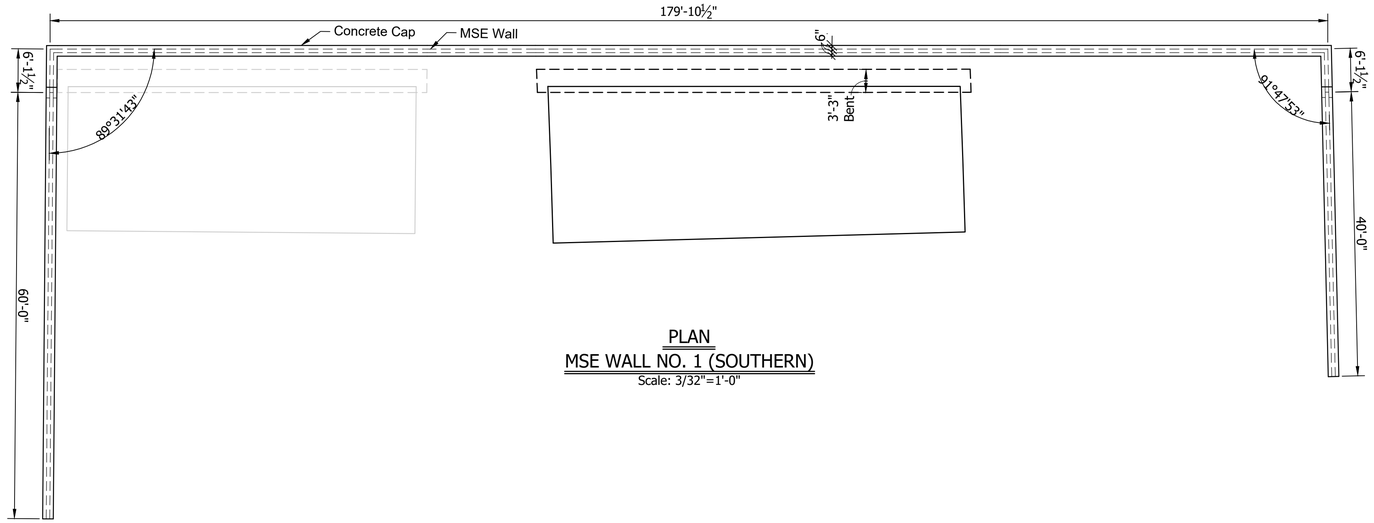


PLAN
NORTH SLAB
Scale: ⅛"=1'-0"

	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: As Noted; BRIDGE FILE: I70-083-10620 EBL; VERTICAL SCALE: N/A; DESIGNATION: 1901899
	DESIGNED: D. SHEETZ DRAWN: D. SHEETZ CHECKED: B. WRIGHT CHECKED: B. WRIGHT	APPROACH SLAB	SURVEY BOOK; ELECTRONIC: 13 OF 15; CONTRACT: B-36910; SHEET; PROJECT: 1600808

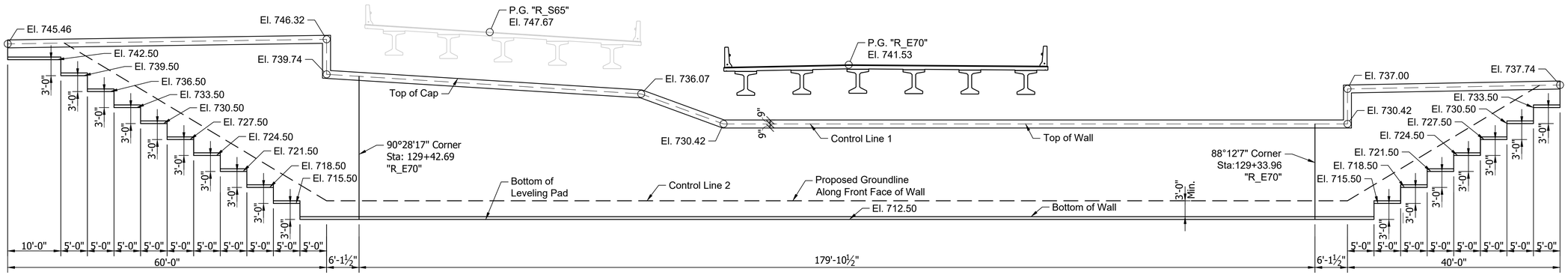
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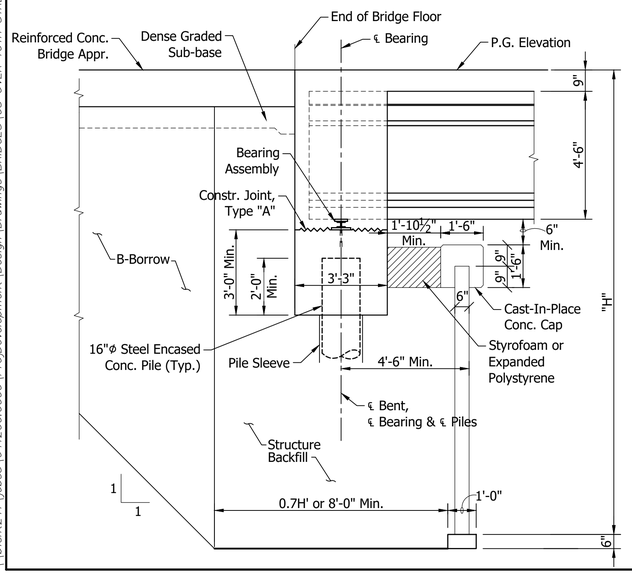


PLAN
MSE WALL NO. 1 (SOUTHERN)
Scale: 3/32"=1'-0"

NOTE:
Elevation Looking At Back Face of Wall



ELEVATION
MSE WALL NO. 1 (SOUTHERN)
Scale: 3/32"=1'-0"

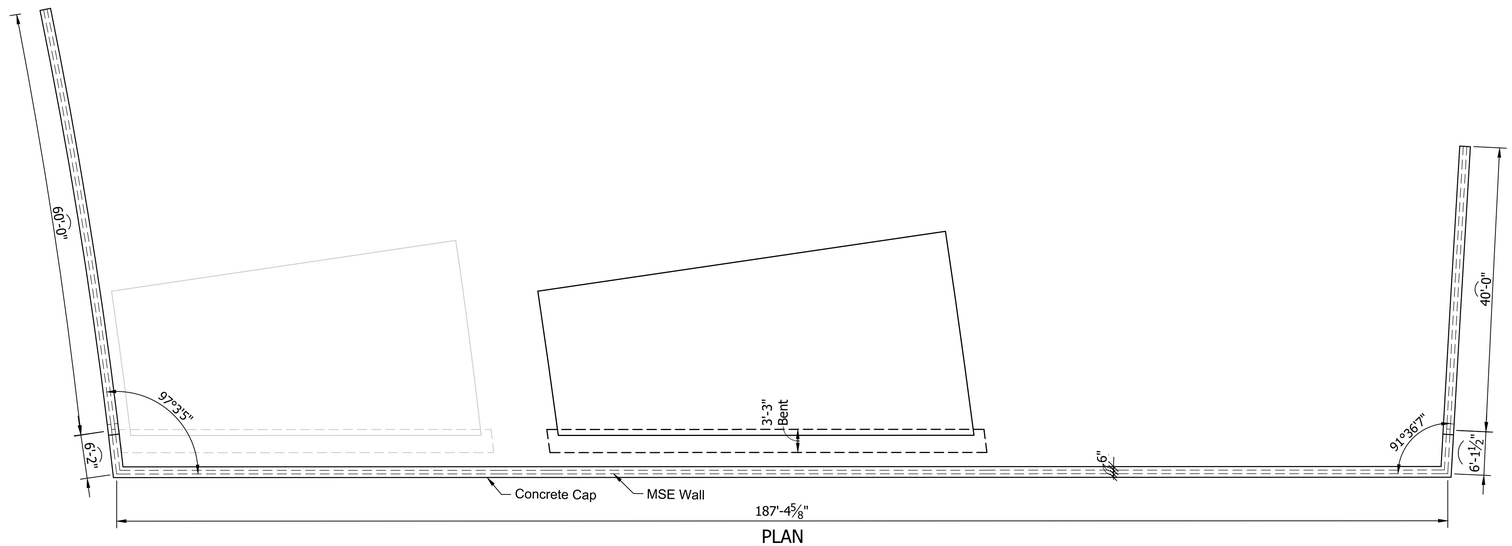


SECTION
MSE WALL NO. 1
Scale: 3/8"=1'-0"

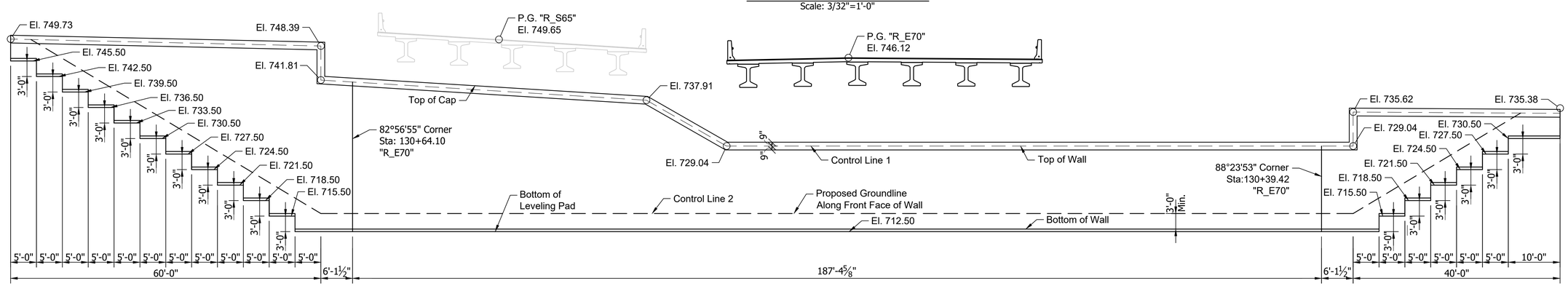
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	DESIGNED: B. WRIGHT DRAWN: D. PIERCEFIELD	WALL LAYOUT	VERTICAL SCALE: AS NOTED; DESIGNATION: 1901899
	CHECKED: M. EICHENAUER CHECKED: B. WRIGHT		SURVEY BOOK; SHEET; ELECTRONIC 14 OF 15; CONTRACT B-36910; PROJECT 1600808

BFS NO. 6412

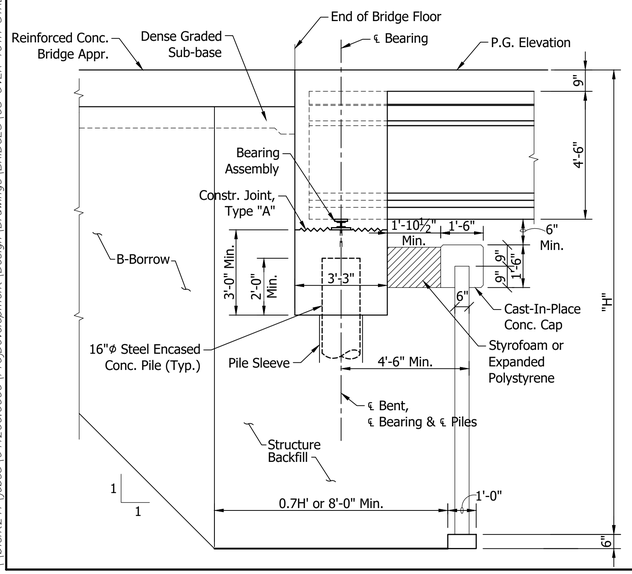
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PLAN
MSE WALL NO. 2 (NORTHERN)
Scale: 3/32"=1'-0"



ELEVATION
MSE WALL NO. 2 (NORTHERN)
Scale: 3/32"=1'-0"



SECTION
MSE WALL NO. 2
Scale: 3/8"=1'-0"

	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: AS NOTED; VERTICAL SCALE: AS NOTED; BRIDGE FILE: I70-083-10620 EBL; DESIGNATION: 1901899
	DESIGNED: B. WRIGHT DRAWN: D. PIERCEFIELD CHECKED: M. EICHENAUER CHECKED: B. WRIGHT	WALL LAYOUT	SURVEY BOOK; ELECTRONIC: 15 OF 15; CONTRACT: B-36910; SHEET; PROJECT: 1600808

BFS NO. 6412

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PROJECT	DESIGNATION
1600808	1901901
CONTRACT	BRIDGE FILE
B-36910	I65-112-10621 CSBL

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN & SKEW	OVER	STATION
I65-112-10621 CSBL	SIMPLE SPAN COMPOSITE PRESTRESSED CONCRETE BULB-T BEAM BRIDGE	1 SPAN: 136'-5 1/4" SKEW: VARIES	EAST 10TH STREET	125+85.52 LINE "R_S65"

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

FOR SPANS OVER 20 FEET

ROUTE: I-65 S.B. AT: RP 112+22

PROJECT NO. 1600808 P.E.

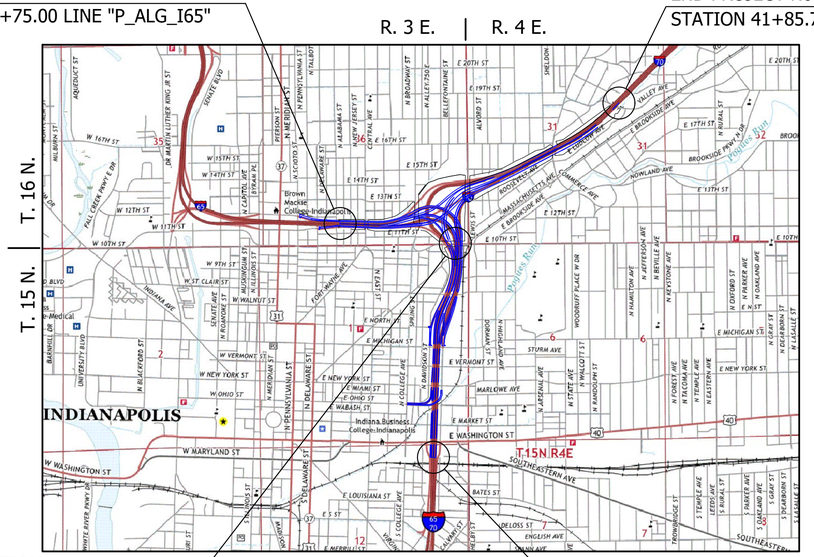
1600808 CONST.

NO ADDITIONAL RIGHT OF WAY REQUIRED FOR THIS PROJECT

BRIDGE REPLACEMENT ON I-65 S.B. OVER EAST 10TH STREET
LOCATED 1.92 MILES NORTH OF I-70 (SOUTH SPLIT) INTERCHANGE
SECTION 1, TOWNSHIPS 15 & 16 NORTH, RANGE 3 EAST
CENTER TOWNSHIP, MARION COUNTY INDIANA

END PROJECT No. 1600808
STATION 25+75.00 LINE "P_ALG_I65"

END PROJECT No. 1600808
STATION 41+85.70 LINE "P_ALG_I70"


R. 3 E.
R. 4 E.
T. 16 N.
T. 15 N.
INDIANAPOLIS
T.15N R.4E
E 20TH ST
E 10TH ST
E WASHINGTON ST
W WASHINGTON ST
W MARYLAND ST
E MARKET ST
E MICHIGAN ST
E NEW YORK ST
E VERMONT ST
W VERMONT ST
W NEW YORK ST
W OHIO ST
E OHIO ST
E WABASH ST
E LOUISIANA ST
BATES ST
DELOSS ST
ENGLISH AVE
SOUTHEASTERN AVE
MARLOWE AVE
STURM AVE
Brown Mackie College-Indianapolis
Indiana Business College-Indianapolis
N DELAWARE ST
N PENNSYLVANIA ST
N MERIDIAN ST
N ILLINOIS ST
N ALABAMA ST
N NEW JERSEY ST
N CENTRAL AVE
N COLLEGE AVE
N BROADWAY ST
N ALLEY 250 E
N ALVORD ST
N SHELDON ST
N ARSENAL AVE
N STATE AVE
N RANDOLPH ST
N KEYSTONE AVE
N JEFFERSON AVE
N BEVILLE AVE
N HAMILTON AVE
N EMERSON AVE
N KENWOOD AVE
N EDGEWOOD AVE
N KEDZIE AVE
N KOSSUTH ST
N TACOMA AVE
N TEMPLE AVE
N EASTERN AVE
N RURAL ST
S TEMPLE AVE
S RURAL ST
S EASTERN AVE
S KEYSTONE AVE
S EMERSON AVE
S KENWOOD AVE
S EDGEWOOD AVE
S KEDZIE AVE
S HARDING ST
S LAFAYETTE RD
S HARDING ST
S CAPITOL AVE
S MERIDIAN ST
S ILLINOIS ST
S DELAWARE ST
S COLLEGE AVE
S MADISON

UTILITIES

REVISIONS

SHEET NO.	DATE	REVISED

KIN PROJECT INFORMATION

DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB & I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVE.	
1901914	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER COLLEGE AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901927	NOT USED	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I70 WB OVER VERMONT STREET	

INDEX

SHEET NO.	DESIGNATION
1	TITLE
2	INDEX
3	MAINTENANCE OF TRAFFIC
4	LAYOUT
5	GENERAL PLAN - PLAN & ELEVATION VIEWS
6	GENERAL PLAN - TYPICAL SECTION
7	BENT NO. 1 DETAILS
8	BENT NO. 2 DETAILS
9	BENTS NO. 1 AND NO. 2 DETAILS
10	FRAMING PLAN
11	BEAM DETAILS
12	FLOOR DETAILS
13	APPROACH SLAB
14	WALL LAYOUT
15	WALL LAYOUT

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

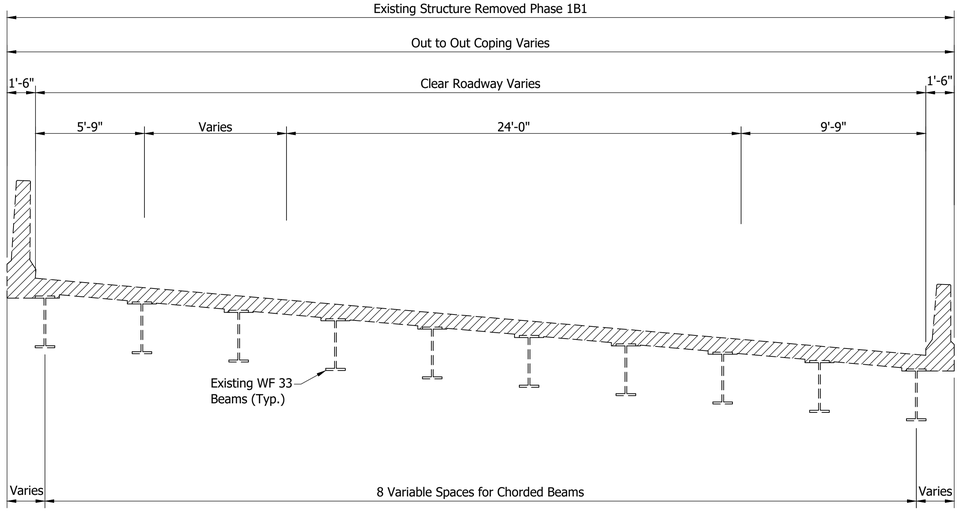
INDIANA DEPARTMENT OF TRANSPORTATION

INDEX

HORIZONTAL SCALE	BRIDGE FILE
N/A	I65-112-10621 CSBL
VERTICAL SCALE	DESIGNATION
N/A	1901901
SURVEY BOOK	SHEET
ELECTRONIC	2 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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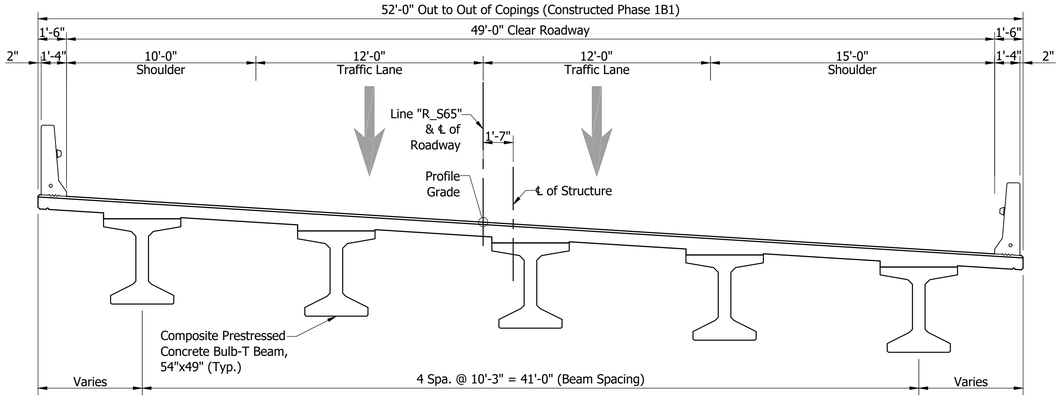


EXISTING TYPICAL SECTION

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

LEGEND

Limits of Removal



PROPOSED TYPICAL SECTION

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

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: M. SCOTT

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

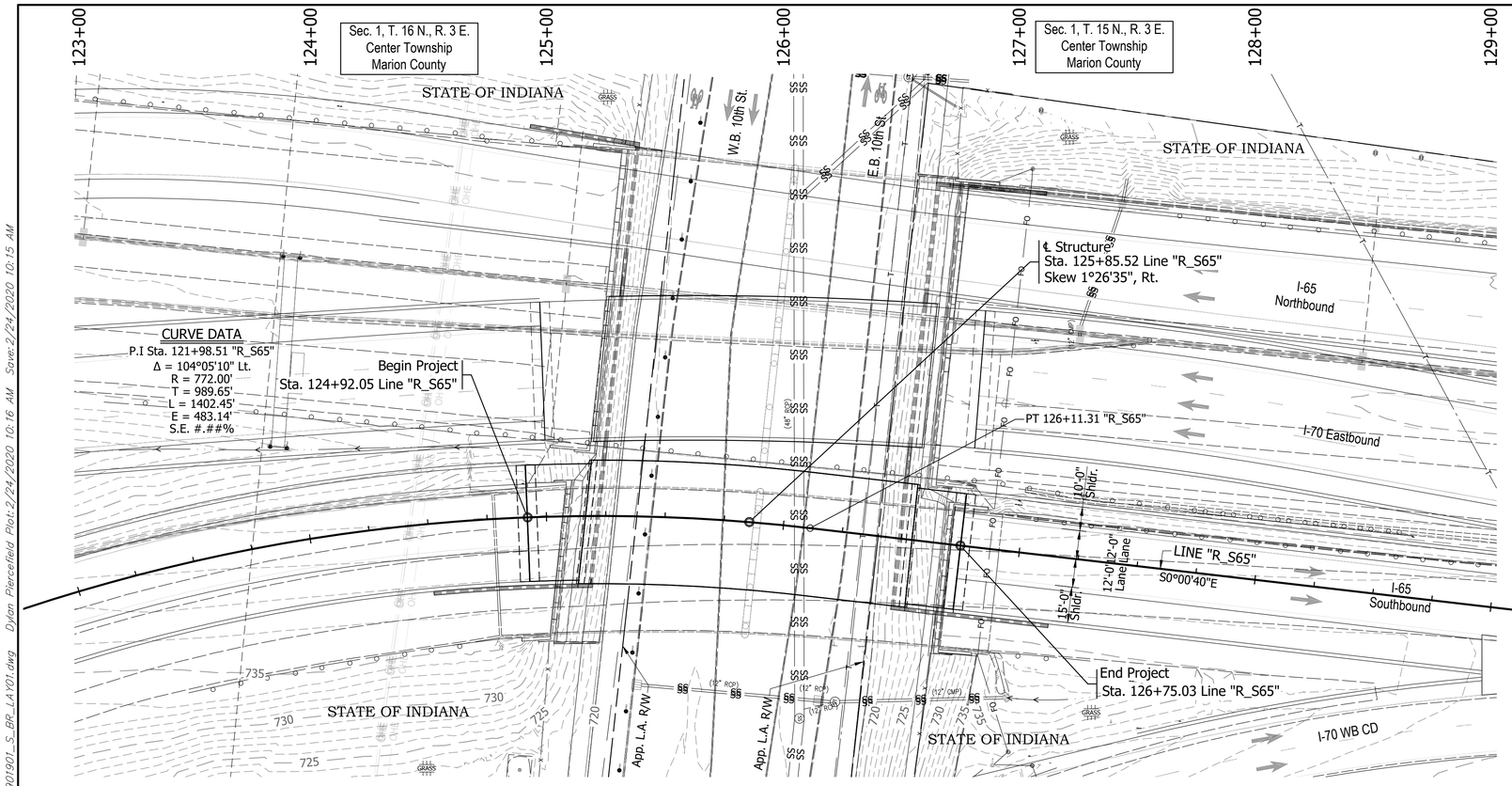
INDIANA
DEPARTMENT OF TRANSPORTATION

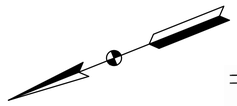
MAINTENANCE OF TRAFFIC

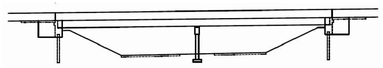
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As Noted	I65-112-10621 CSBL
VERTICAL SCALE	DESIGNATION
N/A	1901901
SURVEY BOOK	SHEET
ELECTRONIC	3 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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EXISTING STRUCTURE

The existing structure was built in 1974. Structure was rehabilitated in 2003 with overlay and retrofitted railing. The structure is a 2-span continuous composite steel beam bridge.

Span lengths: 1 @ 81'-0", 1 @81'-0"

Clear roadway is variable width. Total length of 165'-8"

Existing structure to be removed.

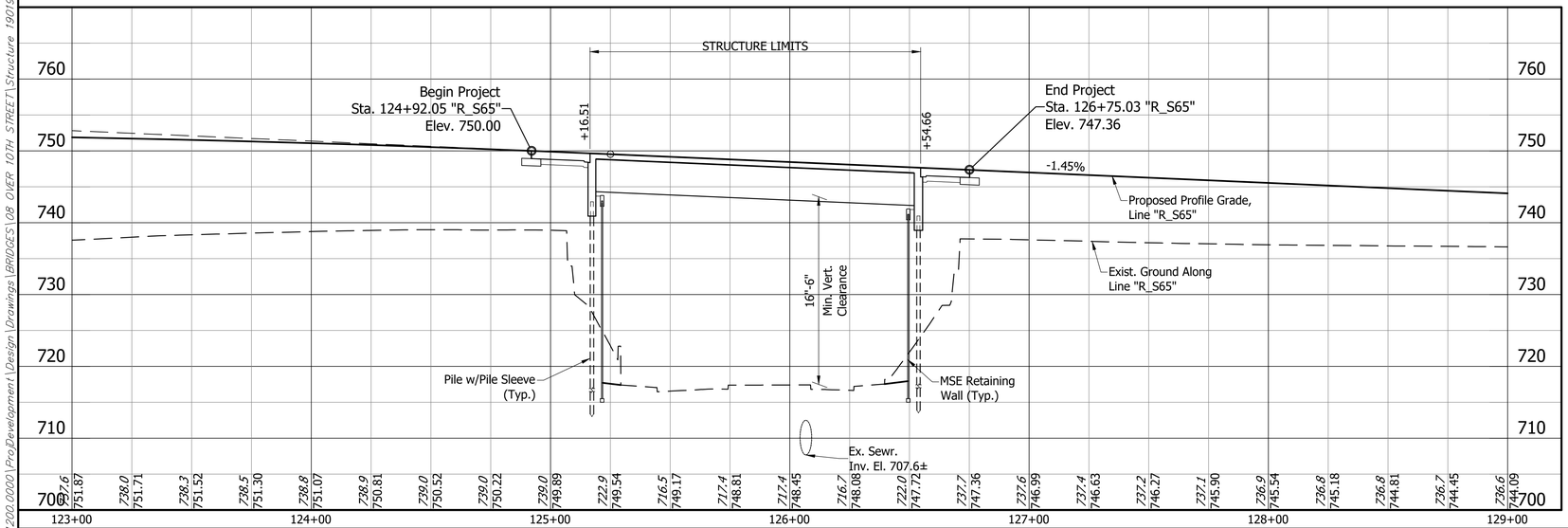
Existing plans are on file with the Indiana Department of Transportation under Bridge File No. I-65-112-0578 BSB.

EARTHWORK TABULATION

See Roadway Plans (DES #_____) for earthwork tabulation.

NOTE: ALL TOPOGRAPHY INFORMATION REFERENCED TO LINE "_____" UNLESS NOTED.

ALL R/W ON THIS SHEET DESCRIBED FROM LINE "_____" UNLESS OTHERWISE NOTED



Notes:

1. For R/W and property information, see Location Control Route Survey (DES # _____).
2. For alignment data, see Geometric Layout Sheets (DES #_____).
3. See Road Plans (DES #_____) for Horizontal & Vertical Control Data.

SIMPLE SPAN COMPOSITE PRESTRESSED
CONCRETE BULB-T BEAM BRIDGE
1 SPAN: 136'-5 1/4"
49'-0" CLEAR ROADWAY
SKEW: VARIES
I-65 S.B. OVER EAST 10TH STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

INDIANA
DEPARTMENT OF TRANSPORTATION

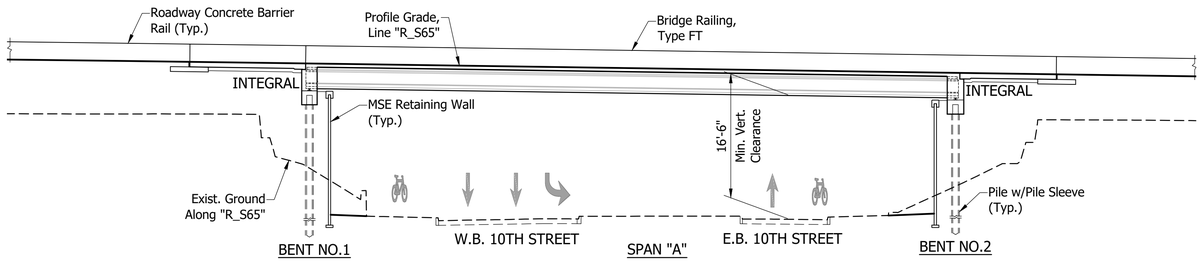
LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	I65-112-10621 CSBL
VERTICAL SCALE	DESIGNATION
1" = 10'	1901901
SURVEY BOOK	SHEET
ELECTRONIC	4 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

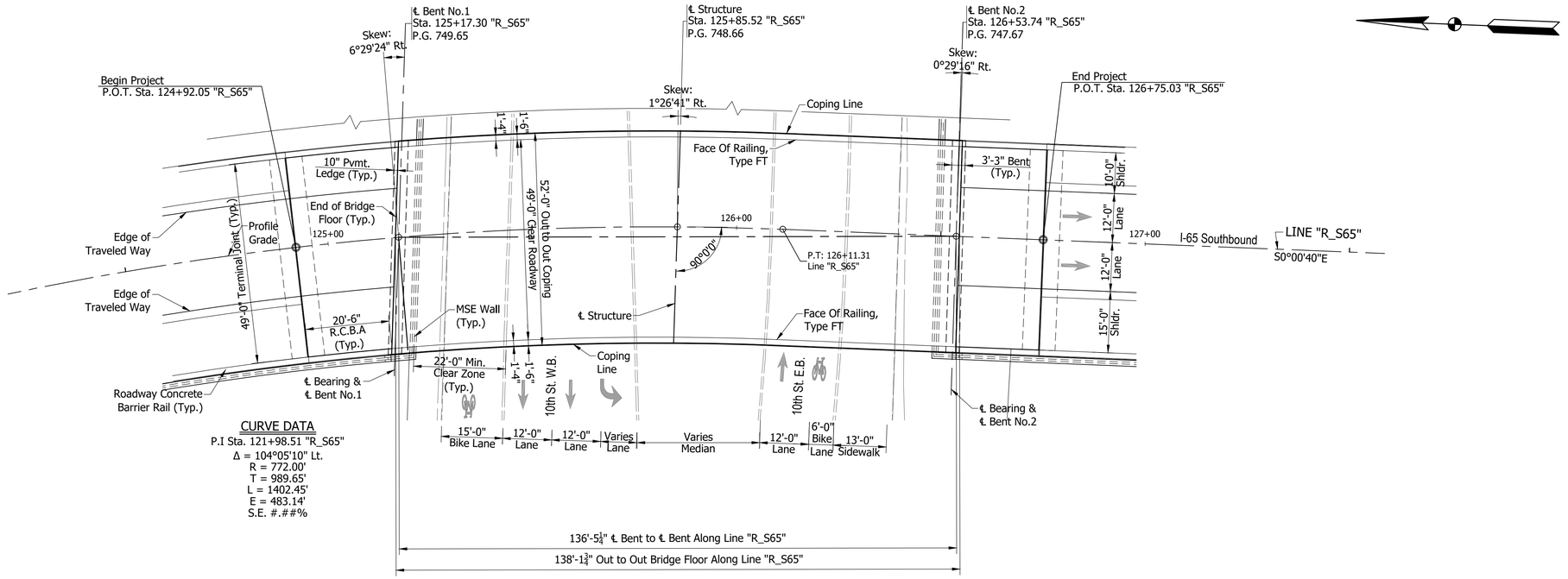
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STRUCTURE TO BE BUILT ON A -1.45% GRADE



ELEVATION

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



CURVE DATA
P.I Sta. 121+98.51 "R_S65"
Δ = 104°05'10" Lt.
R = 772.00'
T = 989.65'
L = 1402.45'
E = 483.14'
S.E. #.##%

PLAN

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

NOTE:
See Sheet 6 For Typical Section

SIMPLE SPAN COMPOSITE PRESTRESSED
CONCRETE BULB-T BEAM BRIDGE
1 SPAN: 136'-5 1/4"
49'-0" CLEAR ROADWAY; SKEW: VARIES
I-65 S.B. OVER EAST 10TH STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

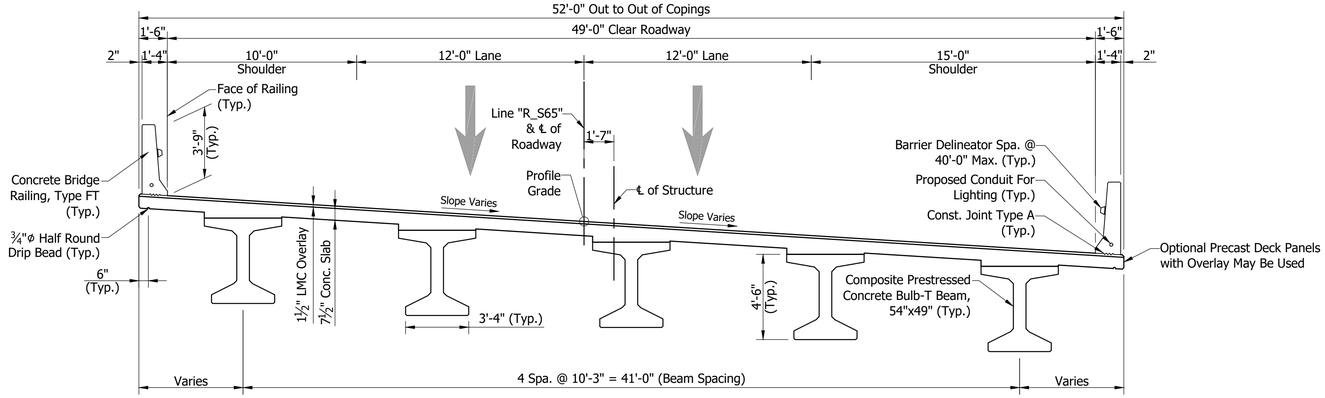
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN - PLAN & ELEVATION VIEWS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I65-112-10621 CSBL
VERTICAL SCALE	DESIGNATION
N/A	1901901
SURVEY BOOK	SHEET
ELECTRONIC	5 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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TYPICAL SECTION

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

GENERAL NOTES

The existing structure shall be removed.

Reinforcing bars covering shall be 3 ½" in top and 1" min. in bottom of floor slabs and 3" in footings except bottom steel which shall be 4", and 2" in all other parts, unless noted.

Concrete in floor slab, and diaphragms, barriers, and end bents shall be an alternate Class C in accordance with the Technical Provisions.

Reinforcing Bars in Deck, Barrier, and End Bent Diaphragm Extending into the Deck shall be Stainless Steel. Reinforcing Bars in End Bent Diaphragm not Extending into the Deck and in the Cap shall be Epoxy Coated.

All exposed faces of the MSE walls and reinforced concrete bridge approach slabs shall receive surface seal.

See Bridge Aesthetic Plan for Architectural Details.

DESIGN DATA

LIVE LOAD:

Superstructure and Substructure Designed for HL-93 loading in accordance with the AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017 and its subsequent revisions.

DEAD LOAD:

Designed for Actual Dead Load plus 35 psf of future wearing surface, and 15 psf for SIP Metal Deck Forms.

FLOOR SLAB:

Slab designed with a 7 ½" structural depth and a 1 ½" very early strength LMC wearing surface.

DESIGN STRESSES

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 beam. The finishing machine was assumed to be supported 6 in. outside the vertical coping form. The top overhang brackets were assumed to be located 6 in. 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 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30 foot length of the deck centered with the finishing machine.

FINISHING-MACHINE LOAD:

4500 lb distributed over 10 ft. along the coping.

WIND LOAD:

Designed for 70 mph horizontal wind load in accordance with LRFD 3.8.1.

ULTIMATE DESIGN STRENGTHS:

Class "A" Concrete	f'c = 3,500 p.s.i.
Class "B" Concrete	f'c = 3,000 p.s.i.
Class "C" Concrete	f'c = 4,000 p.s.i.
Reinforcing Steel (Grade 60)	Fy = 60,000 p.s.i. (barrier)
	Fy = 75,000 p.s.i. (deck)
	Fy = 75,000 p.s.i. (all other locations)

SEISMIC DESIGN DATA:

Seismic Site Class	C
PGA (g)	0.051
S_s (g)	0.12
S_1 (g)	0.051
S_{D1} (g)	0.086
Seismic Design Category	A

SIMPLE SPAN COMPOSITE PRESTRESSED
CONCRETE BULB-T BEAM BRIDGE
1 SPAN: 136'-5 1/4"
49'-0" CLEAR ROADWAY; SKEW: VARIES
I-65 S.B. OVER EAST 10TH STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

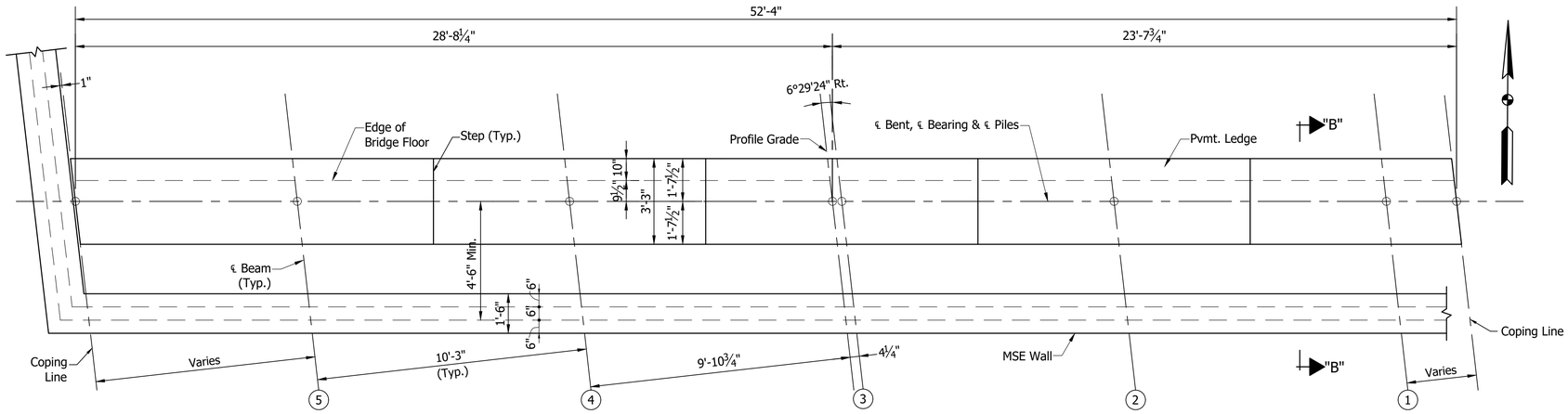
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN - TYPICAL SECTION

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I65-112-10621 CSBL
VERTICAL SCALE	DESIGNATION
N/A	1901901
SURVEY BOOK	SHEET
ELECTRONIC	6 OF 15
CONTRACT	PROJECT
B-36910	1600808

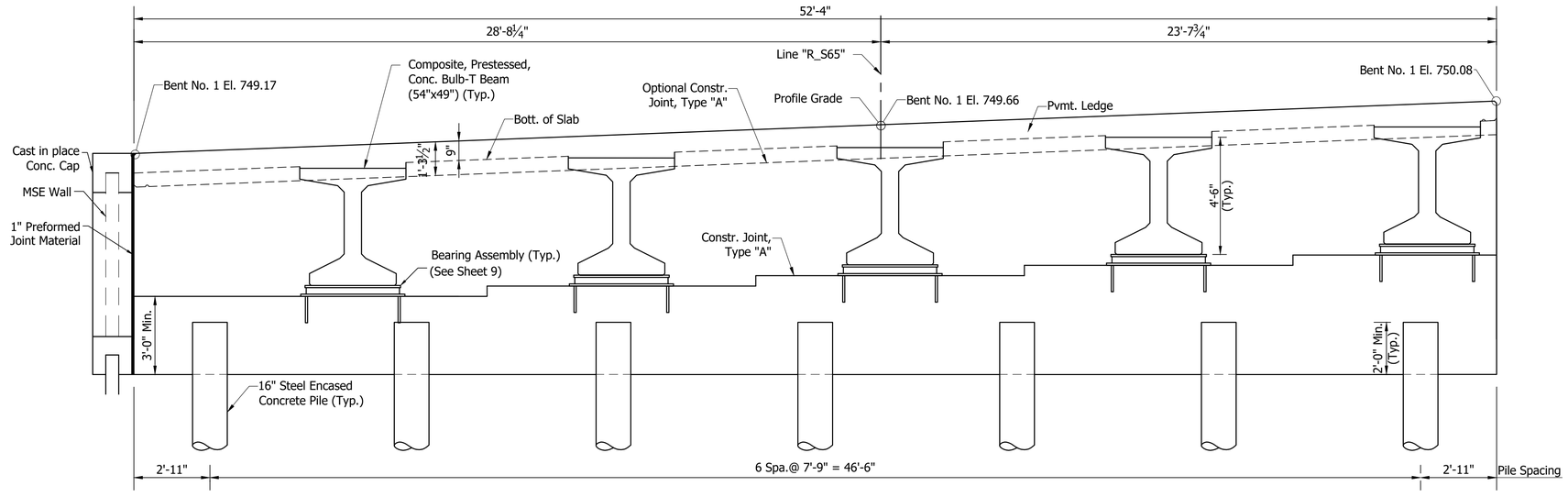
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PLAN
BENT NO. 1 SB
Scale: 3/8"=1'-0"

SEAT ELEVATIONS					
Beam No.	⑤	④	③	②	①
Bent No. 1	743.00	743.40	743.79	744.19	744.57



SECTION ALONG ℄ BENT
Scale: 3/8"=1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE

DESIGNED: V. SATHIRAJU DRAWN: D. PIERCEFIELD

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

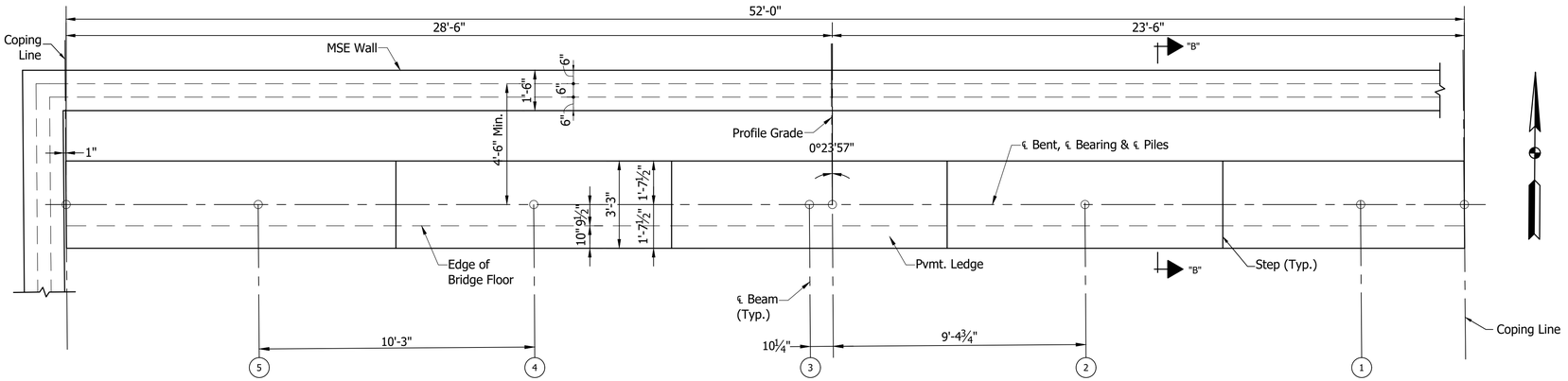
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BENT NO. 1 DETAILS

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As Noted	I65-112-10621 CSBL
VERTICAL SCALE	DESIGNATION
N/A	1901901
SURVEY BOOK	SHEET
ELECTRONIC	7 OF 15
CONTRACT	PROJECT
B-36910	1600808

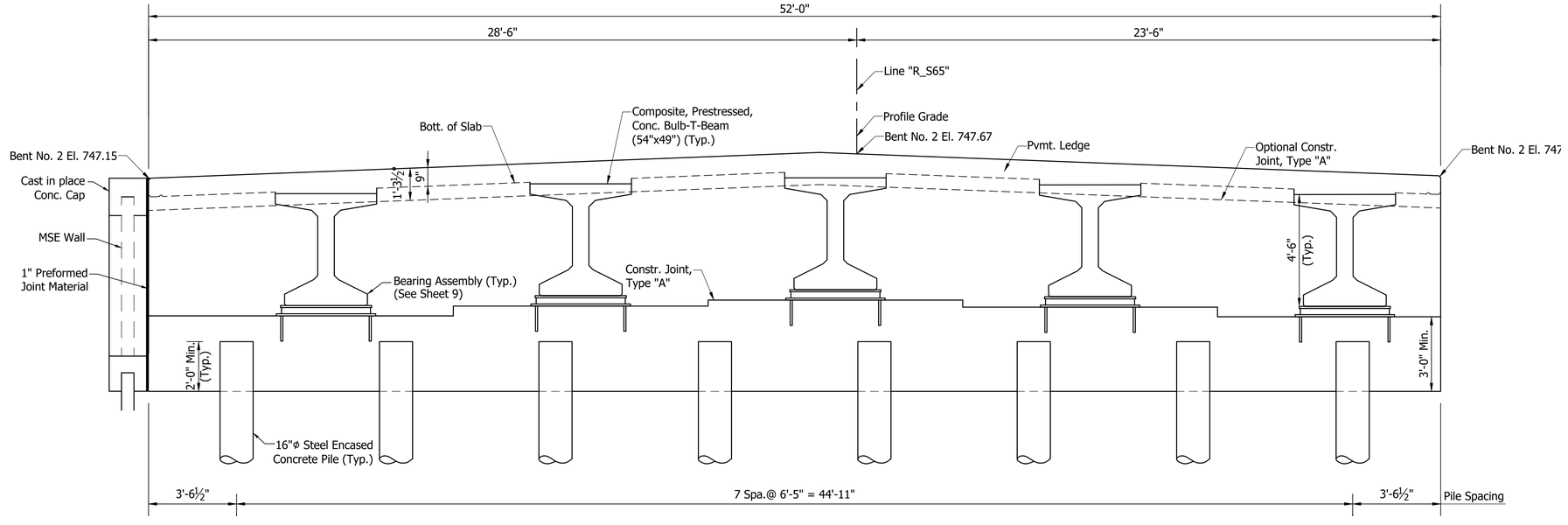
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PLAN
BENT NO. 2 SB
Scale: 3/8"=1'-0"

SEAT ELEVATIONS					
Beam No.	5	4	3	2	1
Bent No. 2	741.60	741.77	741.86	741.67	741.38



SECTION ALONG ℄ BENT
Scale: 3/8"=1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE

DESIGNED: V. SATHIRAJU DRAWN: D. PIERCEFIELD

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

INDIANA
DEPARTMENT OF TRANSPORTATION

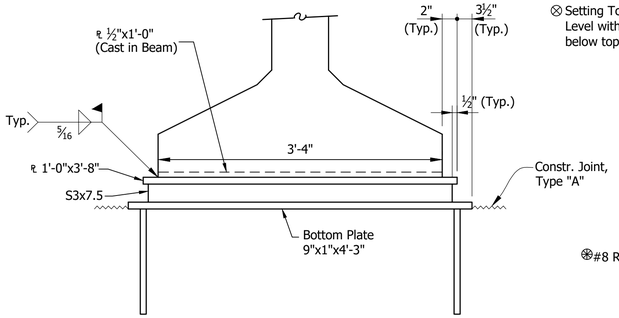
BENT NO. 2 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I65-112-10621 CSBL
VERTICAL SCALE	DESIGNATION
N/A	1901901
SURVEY BOOK	SHEET
ELECTRONIC	8 OF 15
CONTRACT	PROJECT
B-36910	1600808

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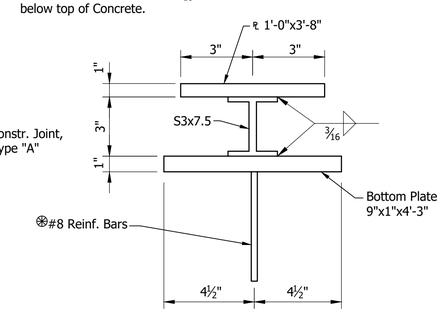
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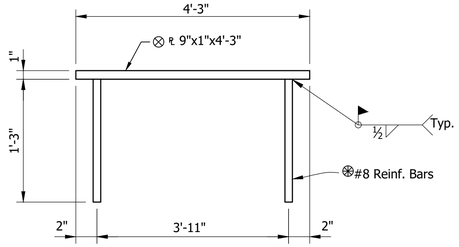
ELEVATION

⊛ As an alternate a ⅞"ø x1'-3" Long Headed Automatic Welded Stud may be used.

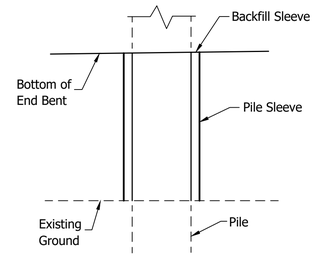
⊗ Setting Tolerance of Bottom Plate- Level with to not more than 1/16" below top of Concrete.



SECTION

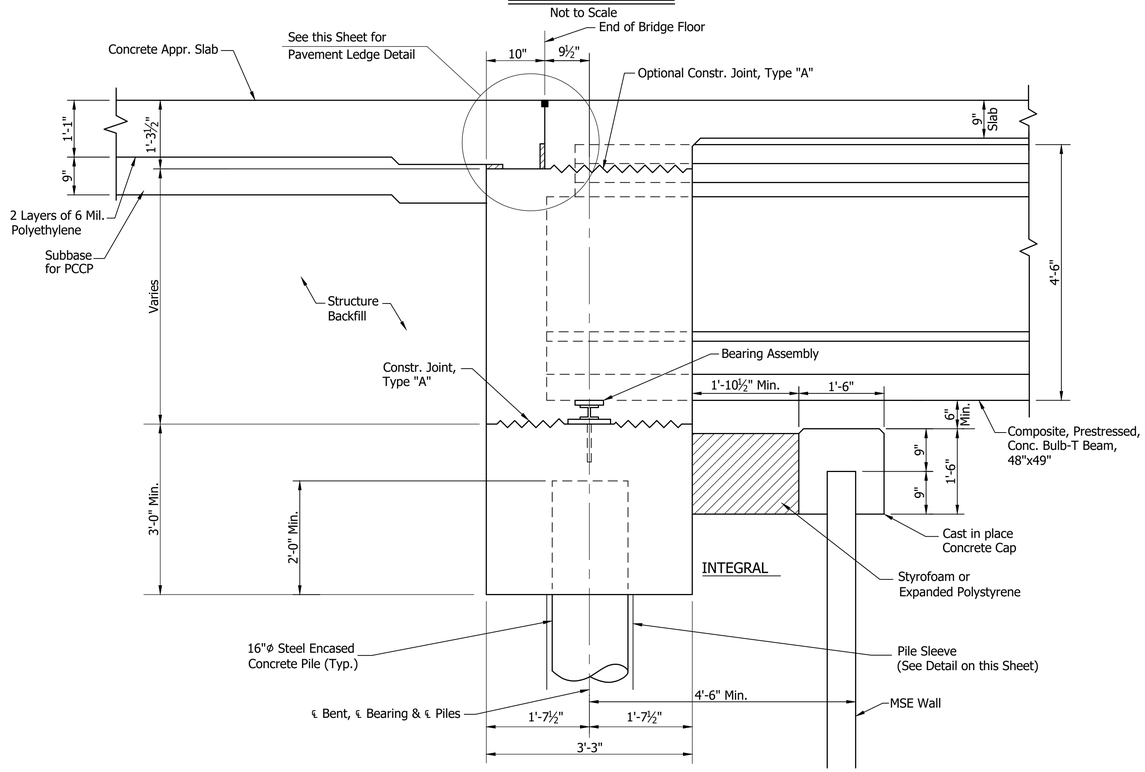


BOTTOM PLATE DETAIL
Not to Scale

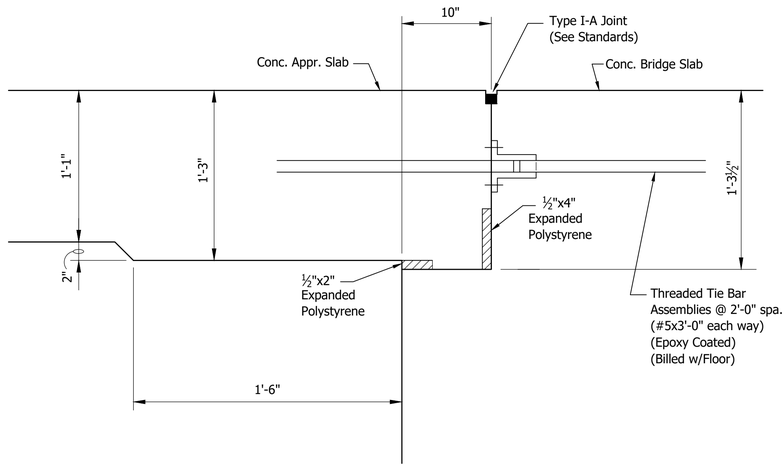


PILE SLEEVE DETAIL
Not to Scale

BEARING ASSEMBLY
Not to Scale



SECTION "B-B"
Not to Scale



PAVEMENT LEDGE DETAIL
Not to Scale

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DESIGNED: V. SATHIRAJU DRAWN: D. PIERCEFIELD

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

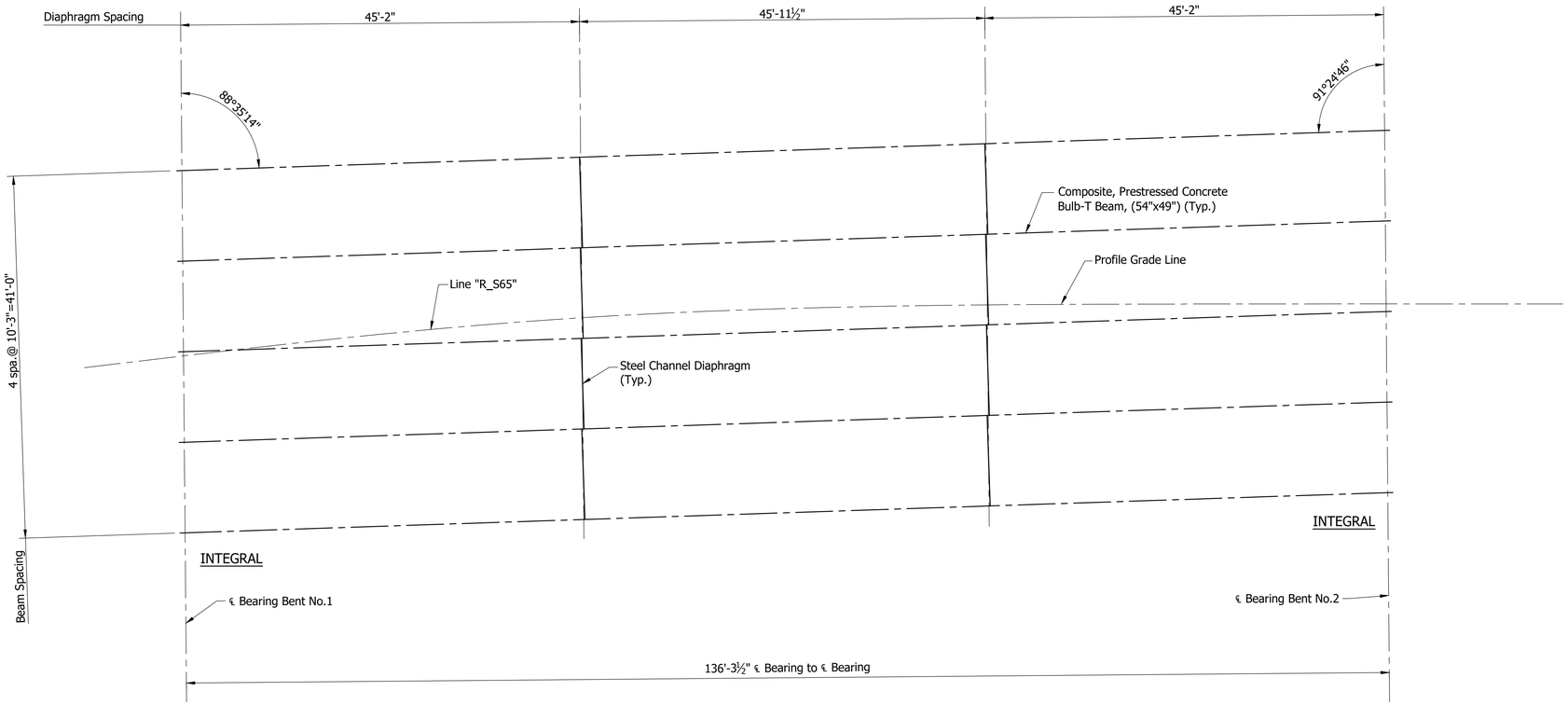
INDIANA
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BENTS NO. 1 AND NO. 2 DETAILS

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As Noted	I65-112-10621 CSBL
VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEET
ELECTRONIC	9 OF 15
CONTRACT	PROJECT
B-36910	1600808

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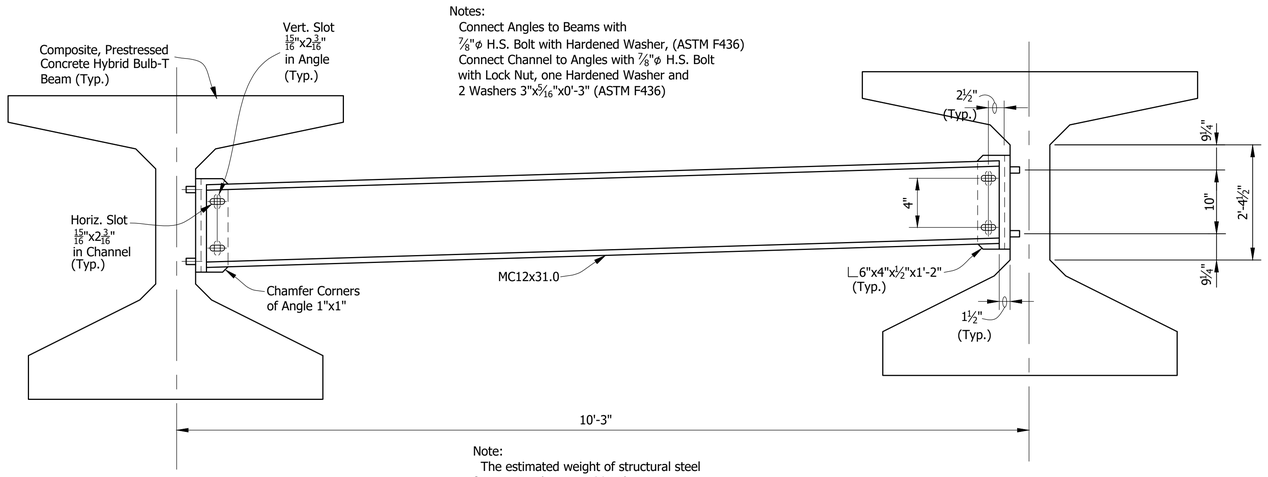
BEAM ERECTION PLAN

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

	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: As Noted	BRIDGE FILE: I65-112-10621 CSBL
			VERTICAL SCALE: N/A	DESIGNATION: 1901901
	DESIGNED: B. WRIGHT DRAWN: D. SHEETZ	FRAMING PLAN	SURVEY BOOK: ELECTRONIC	SHEET: 10 OF 15
	CHECKED: M. EICHENAUER CHECKED: B. WRIGHT		CONTRACT: B-36910	PROJECT: 1600808

BFS NO. 6412

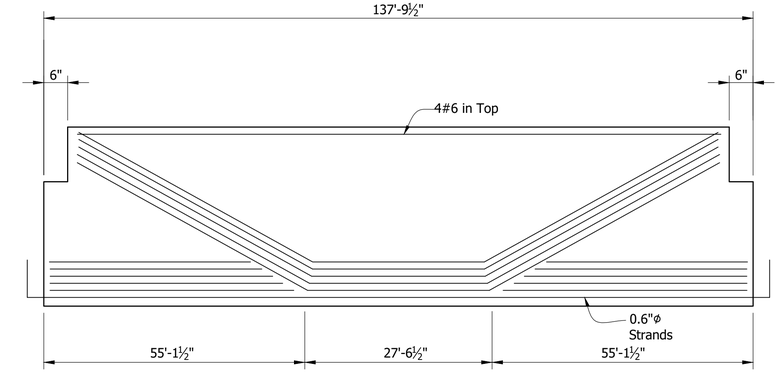
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Notes:
Connect Angles to Beams with
⅞"ϕ H.S. Bolt with Hardened Washer, (ASTM F436)
Connect Channel to Angles with ⅞"ϕ H.S. Bolt
with Lock Nut, one Hardened Washer and
2 Washers 3"x5/16"x0'-3" (ASTM F436)

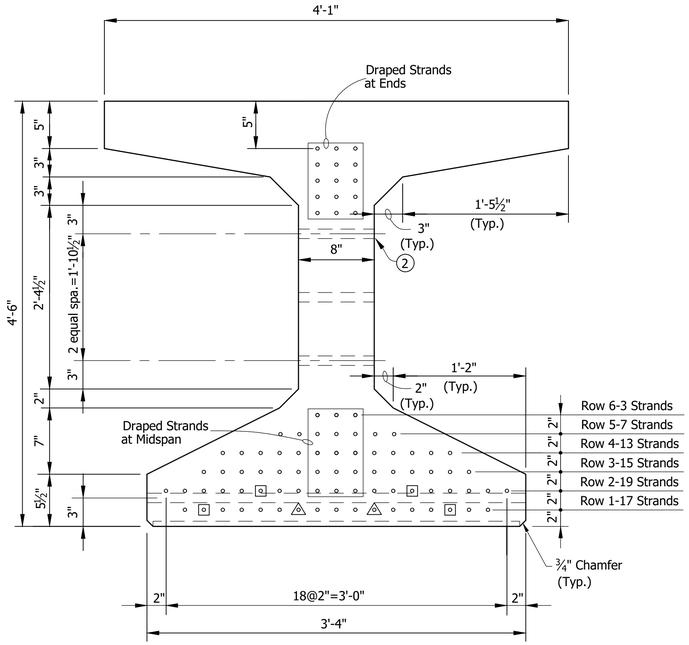
Note:
The estimated weight of structural steel
for one Diaphragm is 297 Lbs.

ELEVATION
Not to Scale



BEAM ELEVATION
SHOWING DRAPED STRANDS
Not to Scale

BOTTOM STRAND DEBONDING		
STRAND SYMBOL	DEBONDED LENGTH FROM EACH END OF BEAM	APPROXIMATE STRAND SHORTENING
△	8'-0"	¼"
⊙	6'-0"	¼"



SECTION SHOWING STRANDS

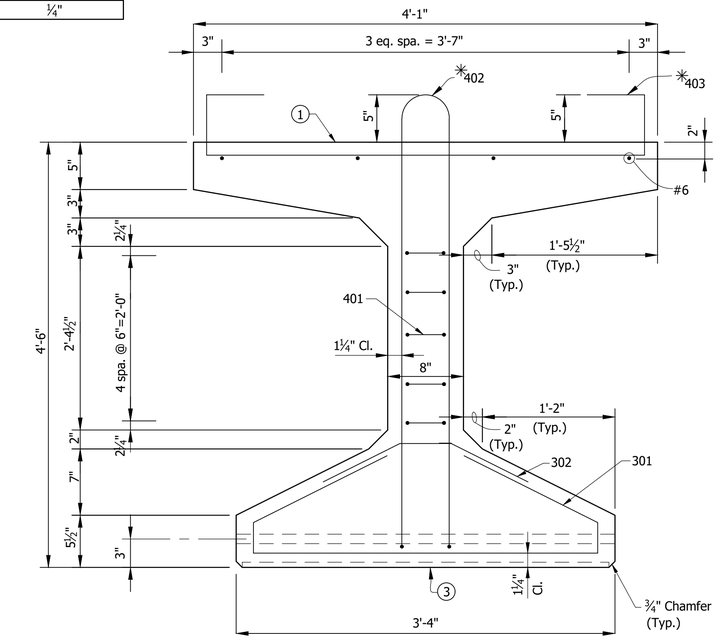
✳ Denotes Epoxy Coated

Note:
Bars 1" Clear
unless noted.

① Surface Seal req'd on top of all Beams and Exterior Face of Exterior Beams

② 1"ϕ Holes or ¾"ϕ Inserts for Dowels at Bent or Pier. (See Beam Plans)

③ PL ½"x12"x3'-2½" at End Bent Ends



SECTION SHOWING REINFORCING

BEAM SECTIONS
Not to Scale

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: V. SATHIRAJU DRAWN: D. SHEETZ

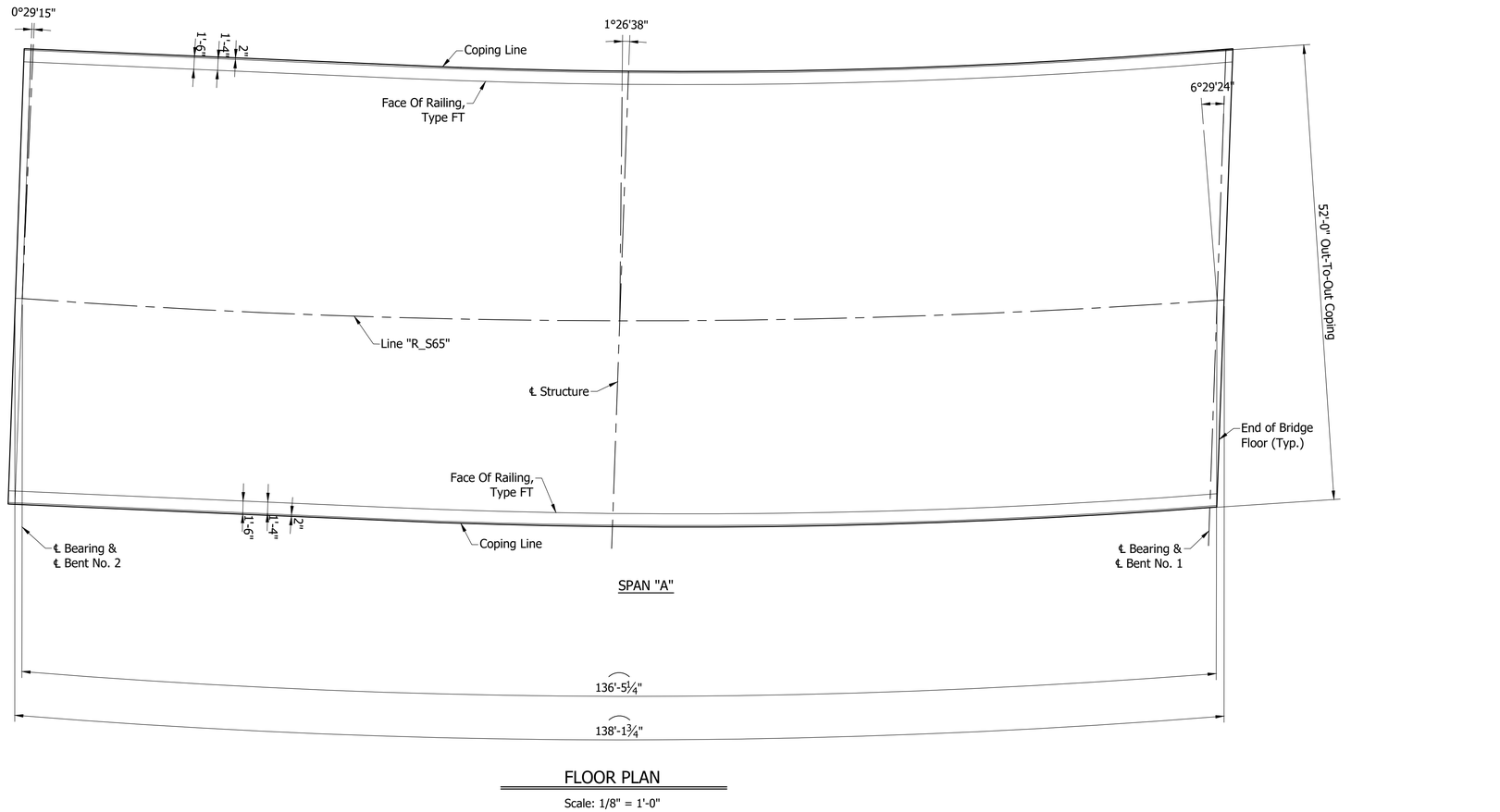
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DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I65-112-10621 CSBL
VERTICAL SCALE	DESIGNATION
N/A	1901901
SURVEY BOOK	SHEET
ELECTRONIC	11 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412



FLOOR PLAN

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

NOTE:
See Sheet ___ For _____

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: V. SATHIRAJU DRAWN: D. PIERCEFIELD

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

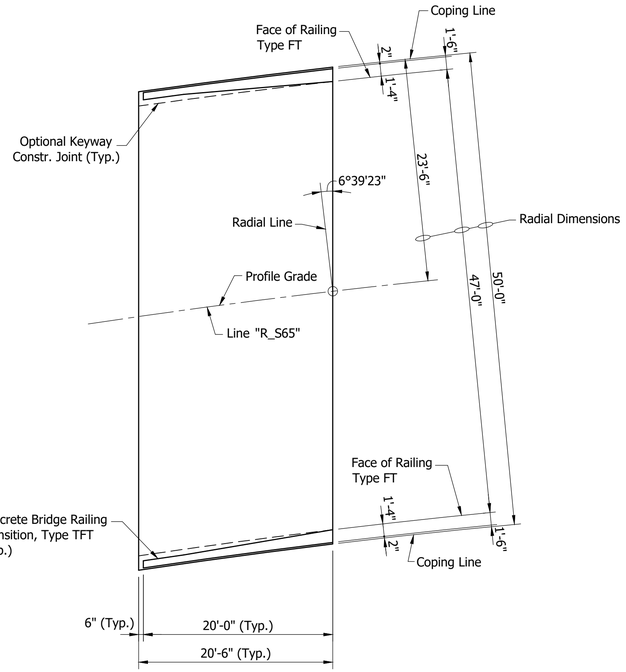
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FLOOR DETAILS

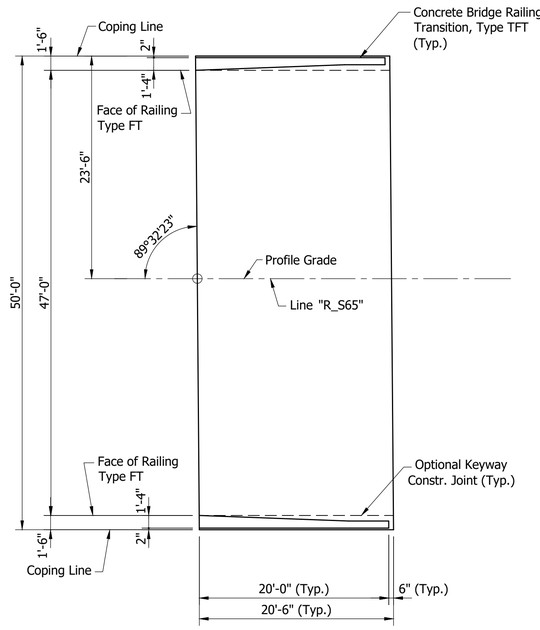
HORIZONTAL SCALE	BRIDGE FILE
As Noted	I65-112-10621 CSBL
VERTICAL SCALE	DESIGNATION
N/A	1901901
SURVEY BOOK	SHEET
ELECTRONIC	12 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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PLAN
NORTH SLAB
Scale: ⅛"=1'-0"

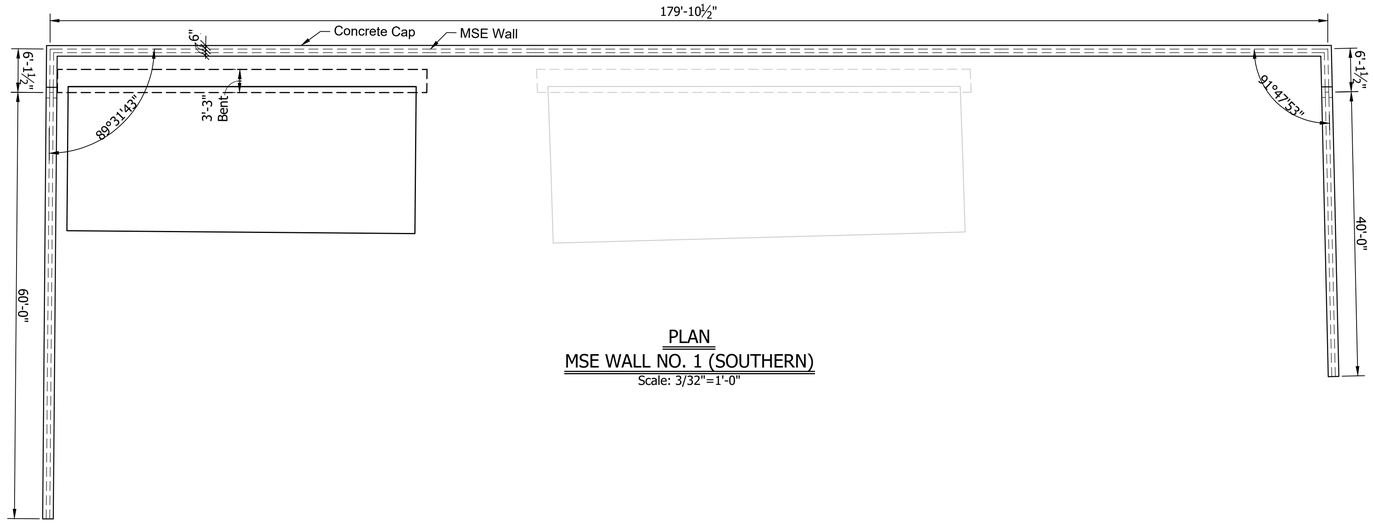


PLAN
SOUTH SLAB
Scale: ⅛"=1'-0"

	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: As Noted	BRIDGE FILE: I65-112-10621 CSBL
			VERTICAL SCALE: N/A	DESIGNATION: 1901901
	DESIGNED: D. SHEETZ DRAWN: D. SHEETZ	APPROACH SLAB	SURVEY BOOK: ELECTRONIC	SHEET: 13 OF 15
	CHECKED: B. WRIGHT CHECKED: B. WRIGHT		CONTRACT: B-36910	PROJECT: 1600808

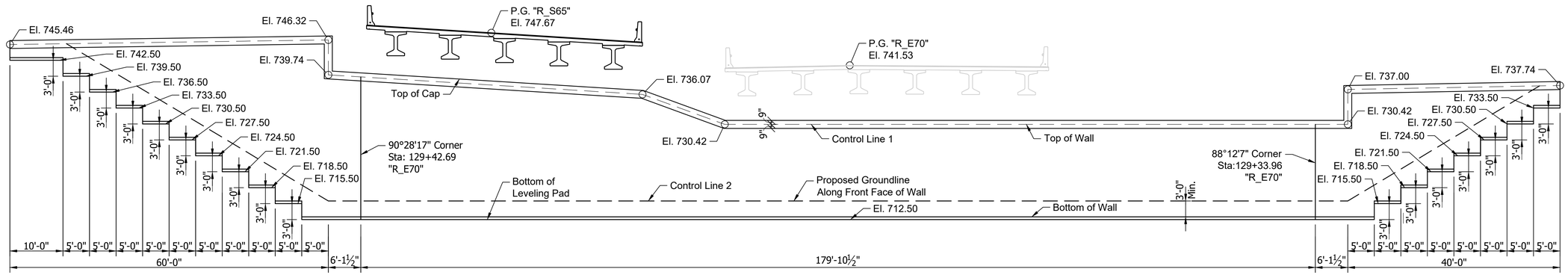
BFS NO. 6412

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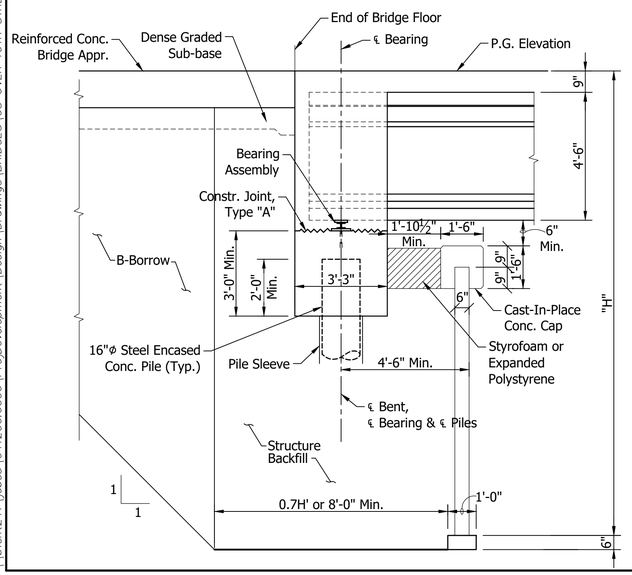


PLAN
MSE WALL NO. 1 (SOUTHERN)
Scale: 3/32"=1'-0"

NOTE:
Elevation Looking At Back Face of Wall



ELEVATION
MSE WALL NO. 1 (SOUTHERN)
Scale: 3/32"=1'-0"

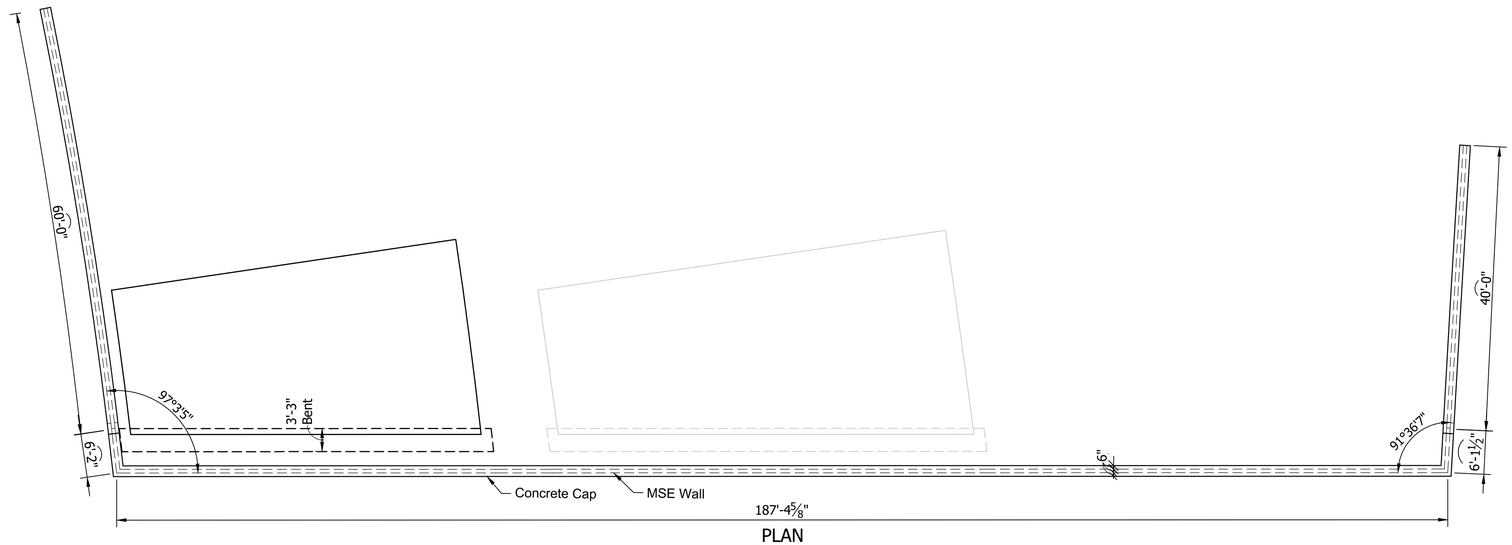


SECTION
MSE WALL NO. 1
Scale: 3/8"=1'-0"

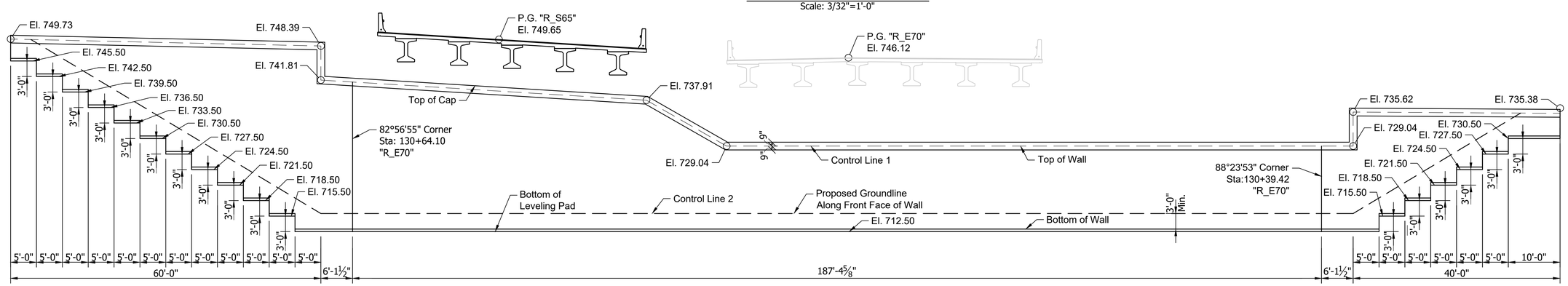
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	DESIGNED: B. WRIGHT DRAWN: D. PIERCEFIELD CHECKED: M. EICHENAUER CHECKED: B. WRIGHT	WALL LAYOUT	SURVEY BOOK; SHEET; ELECTRONIC: 14 OF 15; CONTRACT: B-36910; PROJECT: 1600808

BFS NO. 6412

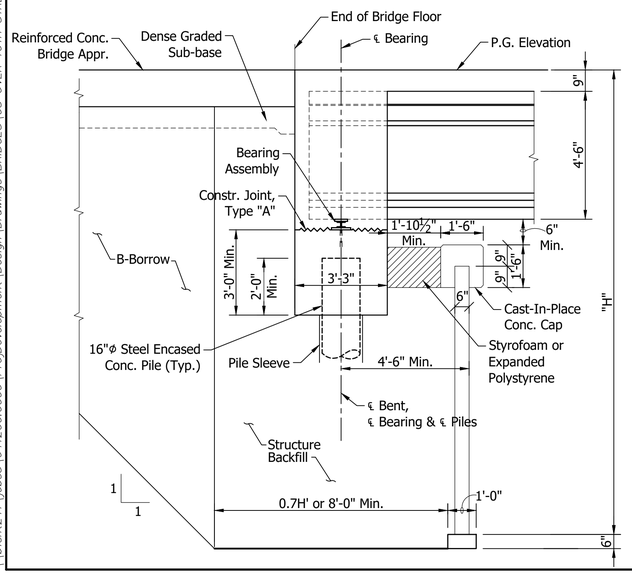
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PLAN
MSE WALL NO. 2 (NORTHERN)
Scale: 3/32"=1'-0"



ELEVATION
MSE WALL NO. 2 (NORTHERN)
Scale: 3/32"=1'-0"



SECTION
MSE WALL NO. 2
Scale: 3/8"=1'-0"

	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: AS NOTED; VERTICAL SCALE: AS NOTED; BRIDGE FILE: I65-112-10621 CSBL; DESIGNATION: 1901901
	DESIGNED: B. WRIGHT DRAWN: D. PIERCEFIELD CHECKED: M. EICHENAUER CHECKED: B. WRIGHT	WALL LAYOUT	SURVEY BOOK; SHEET; ELECTRONIC: 15 OF 15; CONTRACT: B-36910; PROJECT: 1600808

BFS NO. 6412

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PROJECT	DESIGNATION
1600808	1901903
CONTRACT	BRIDGE FILE
B-36910	I70-083-10622 CWBL

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN & SKEW	OVER	STATION
I70-083-10622 CWBL	CONTINUOUS COMPOSITE PRESTRESSED CONCRETE I BEAM TYPE II BRIDGE	2 SPANS; 75'-4 1/2", 69'-3 1/2" SKEW 19°38'39" RT.	EAST 10TH STREET	136+33.53 LINE "R_W70"

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

FOR SPANS OVER 20 FEET

ROUTE: I-70 W.B. AT: RP 82+95

PROJECT NO. 1600808 P.E.

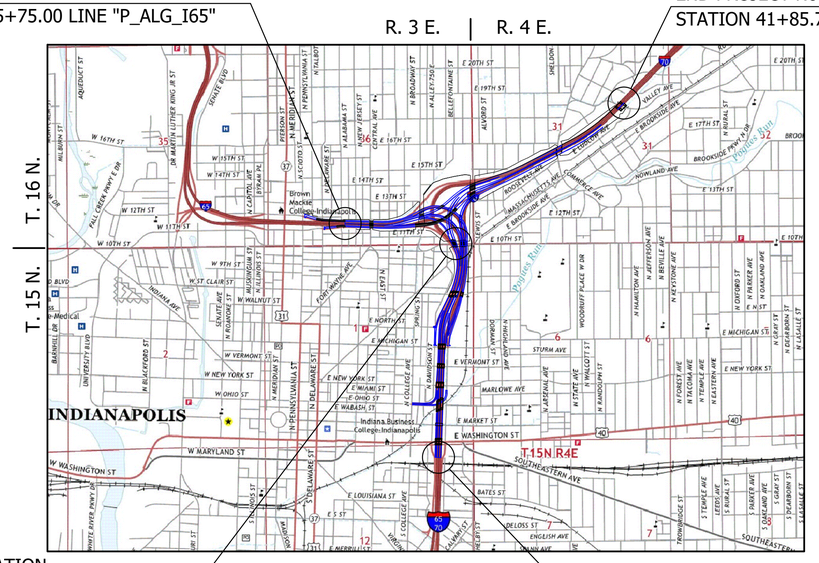
1600808 CONST.

NO ADDITIONAL RIGHT OF WAY REQUIRED FOR THIS PROJECT

BRIDGE REPLACEMENT ON I-70 W.B. OVER EAST 10TH STREET
LOCATED 1.92 MILES NORTH OF I-70 (SOUTH SPLIT) INTERCHANGE
SECTION 1, TOWNSHIPS 15 & 16 NORTH, RANGE 3 EAST
CENTER TOWNSHIP, MARION COUNTY INDIANA

END PROJECT No. 1600808
STATION 25+75.00 LINE "P_ALG_I65"

END PROJECT No. 1600808
STATION 41+85.70 LINE "P_ALG_I70"



PROJECT LOCATION
BRIDGE FILE No. I70-083-10622 CWBL
I-70 W.B. OVER EAST 10TH STREET
STA. 136+33.53 LINE "R_W70"

LOCATION MAP
MARION COUNTY

BEGIN PROJECT No. 1600808
STATION 113+00.00 LINE "P_ALG_I65/I70"

SCALE: 1" = 2000'

TRAFFIC DATA	I-70 W.B.	10TH ST
A.D.T. (2021)	36,289 V.P.D.	9,494 (EB) 6,850 (WB) V.P.D.
A.D.T. (2041)	43,111 V.P.D.	9,253 (EB) 7,553 (WB) V.P.D.
D.H.V. (2041)	3,880 V.P.H.	1,037 (EB) 913 (WB) V.P.D.
DIRECTIONAL DISTRIBUTION	100%	55% (EB) 45% (WB)
TRUCKS	15% D.H.V.	2% (EB) 3% (WB)
DESIGN DATA		
DESIGN SPEED	55 M.P.H.	35 M.P.H.
PROJECT DESIGN CRITERIA	4R (FREEWAY)	N/A
FUNCTIONAL CLASSIFICATION	FREEWAY	MINOR ARTERIAL
RURAL/URBAN	URBAN	URBAN
TERRAIN	LEVEL	LEVEL
ACCESS CONTROL	FULL CONTROL	NONE



PROJECT LOCATION SHOWN BY

LATITUDE: 39°46'52" N LONGITUDE: 86°08'28" W

BRIDGE LENGTH :	0.025 MI.
ROADWAY LENGTH :	SEE ROAD PLANS
TOTAL LENGTH :	SEE ROAD PLANS
MAX GRADE :	3.48%

HUC: 05120201130020

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2020 TO
BE USED WITH THESE PLANS.

SUPERIOR CONSTRUCTION

PLANS PREPARED BY: Butler Fairman and Seufert Inc. (317)713-4615 PHONE

CERTIFIED BY: . DATE

APPROVED FOR LETTING: . DATE
INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE FILE
I70-083-10622 CWBL
DESIGNATION
1901903

SURVEY BOOK	SHEET
ELECTRONIC	1 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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UTILITIES

REVISIONS

SHEET NO.	DATE	REVISED

KIN PROJECT INFORMATION

DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB & I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVE.	
1901914	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER COLLEGE AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901927	NOT USED	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I70 WB OVER VERMONT STREET	

INDEX

SHEET NO.	DESIGNATION
1	TITLE
2	INDEX
3	MAINTENANCE OF TRAFFIC
4	LAYOUT
5	GENERAL PLAN - PLAN & ELEVATION VIEWS
6	GENERAL PLAN - TYPICAL SECTION
7	BENTS NO. 1 AND NO. 3 DETAILS
8	BENTS NO. 1 AND NO. 3 DETAILS
9	PIER DETAILS
10	FRAMING PLAN
11	BEAM DETAILS
12	FLOOR DETAILS
13	APPROACH SLAB
14	WALL LAYOUT
15	WALL LAYOUT

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

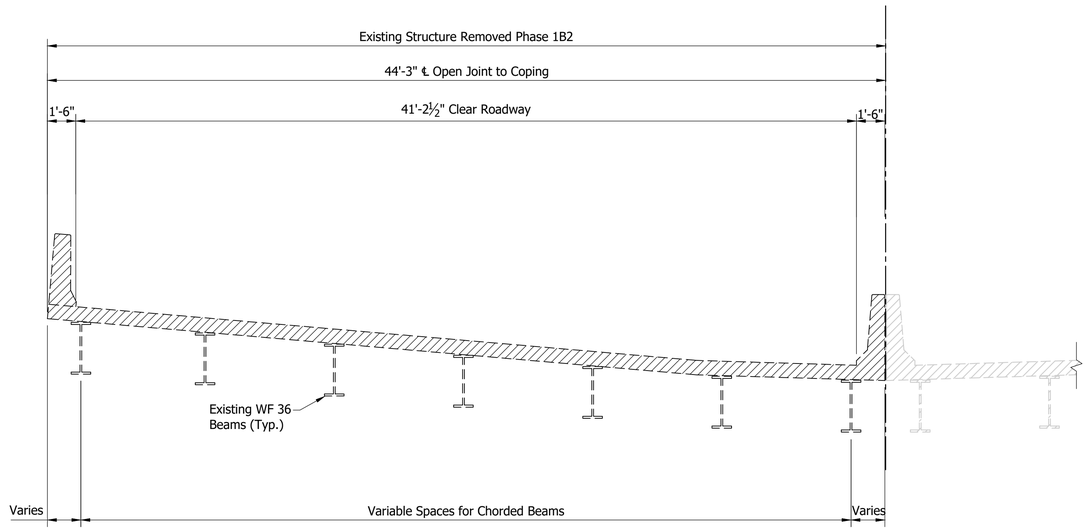
CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

INDIANA DEPARTMENT OF TRANSPORTATION

INDEX

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10622 CWBL
VERTICAL SCALE	DESIGNATION
N/A	1901903
SURVEY BOOK	SHEET
ELECTRONIC	2 OF 15
CONTRACT	PROJECT
B-36910	1600808

BPS NO. 6412

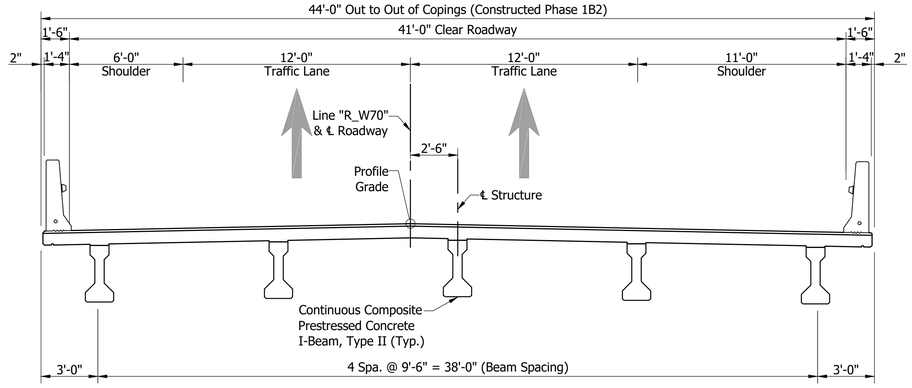


EXISTING TYPICAL SECTION

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

LEGEND

Limits of Removal



PROPOSED TYPICAL SECTION

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

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: M. SCOTT

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

INDIANA
DEPARTMENT OF TRANSPORTATION

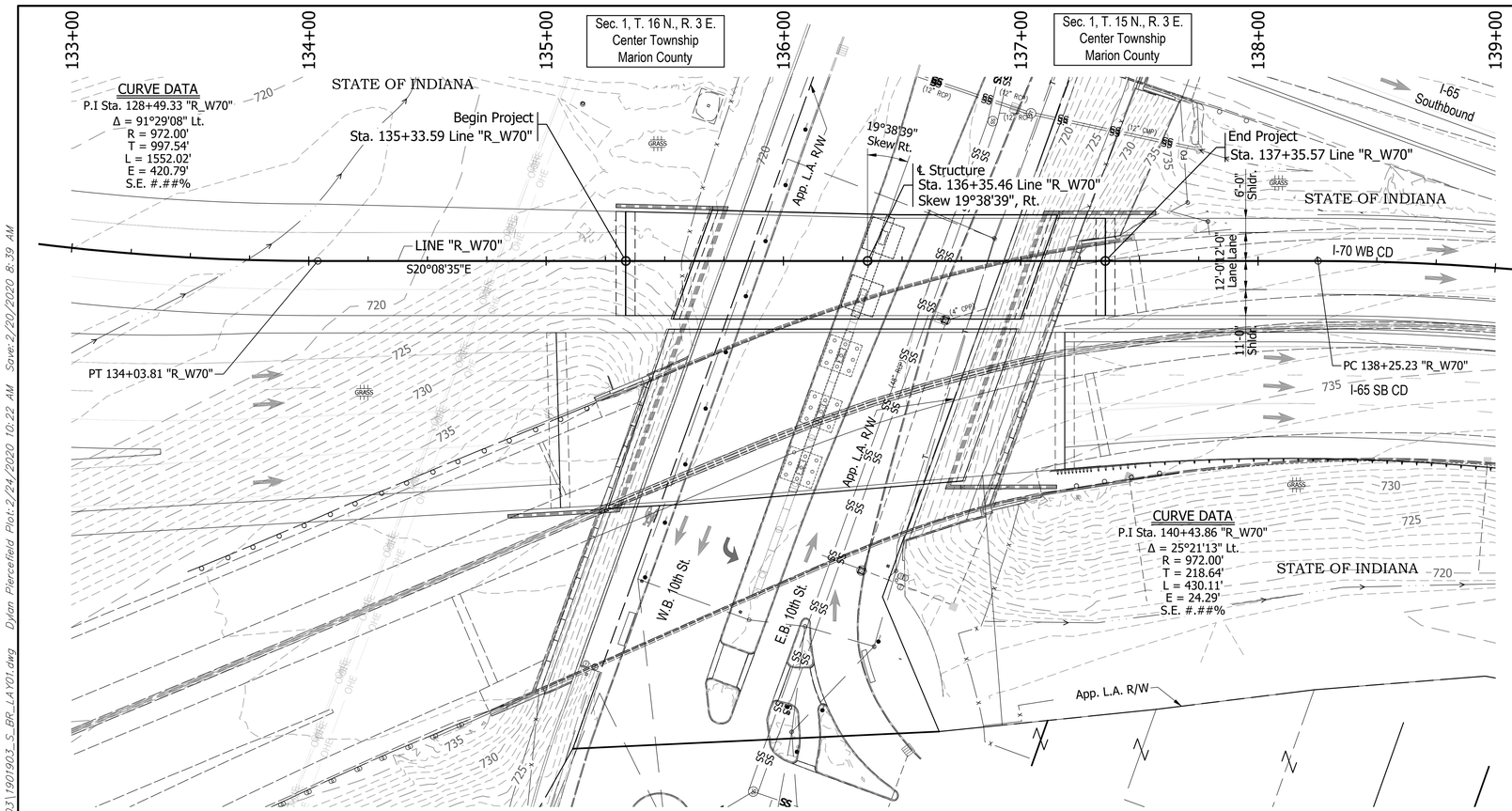
MAINTENANCE OF TRAFFIC

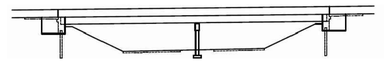
HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10622 CWBL
VERTICAL SCALE	DESIGNATION
N/A	1901903
SURVEY BOOK	SHEET
ELECTRONIC	3 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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EXISTING STRUCTURE

The existing structure was built in 1974. Structure was rehabilitated in 2003 with overlay and retrofitted railing. The structure is a 2-span continuous composite steel beam bridge.

Span lengths: 1 @ 97'-0", 1 @ 97'-0"

Clear roadway is 41'-2 ½" Total length of 196'-0"

Existing structure to be removed.

Existing plans are on file with the Indiana Department of Transportation under Bridge File No. I70-083-05739 BWBL.

EARTHWORK TABULATION

See Roadway Plans (DES #_____) for earthwork tabulation.

NOTE: ALL TOPOGRAPHY INFORMATION REFERENCED TO LINE "_____" UNLESS NOTED.

ALL R/W ON THIS SHEET DESCRIBED FROM LINE "_____" UNLESS OTHERWISE NOTED

Notes:

1. For R/W and property information, see Location Control Route Survey (DES # _____).
2. For alignment data, see Geometric Layout Sheets (DES #_____).
3. See Road Plans (DES #_____) for Horizontal & Vertical Control Data.

CONTINUOUS COMPOSITE PRESTRESSED CONCRETE I
BEAM TYPE II BRIDGE
2 SPANS; 75'-4 1/2", 69'-3 1/2"
41'-0" CLEAR ROADWAY
SKEW 19°38'39" RT.
I-70 W.B. OVER EAST 10TH STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

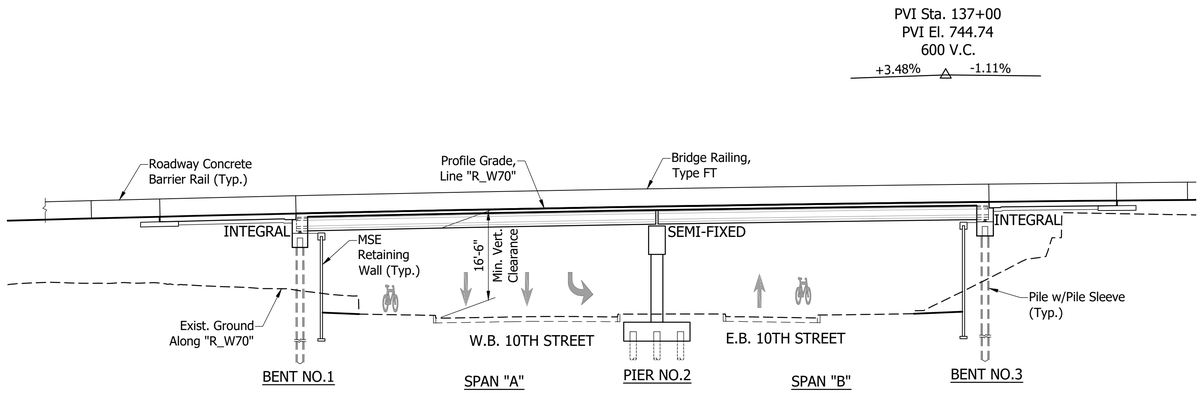
INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	I70-083-10622 CWBL
VERTICAL SCALE	DESIGNATION
1" = 10'	1901903
SURVEY BOOK	SHEET
LAYOUT	4 OF 15
CONTRACT	PROJECT
B-36910	1600808

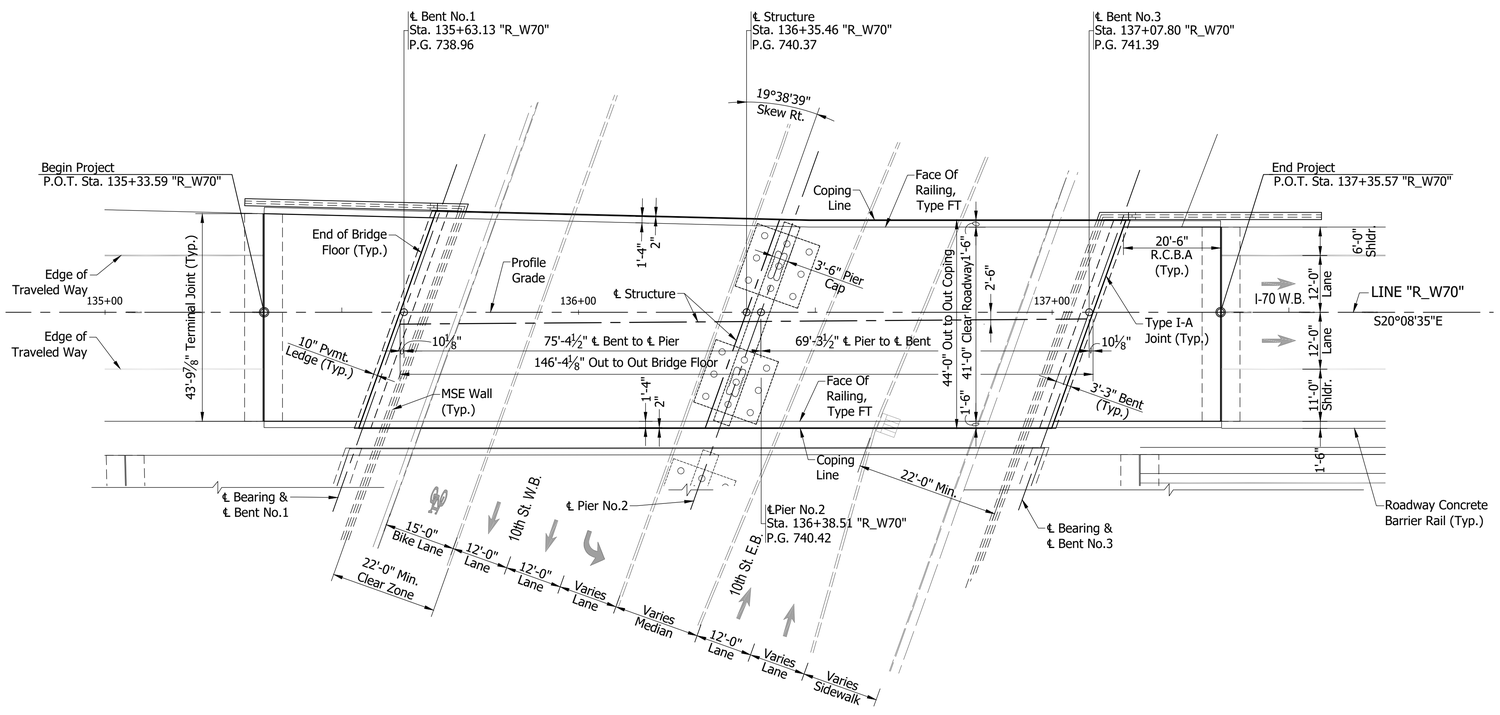
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STRUCTURE TO BE BUILT ON A 600' VERTICAL CURVE



ELEVATION

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



PLAN

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

NOTE:
See Sheet 6 For Typical Section

CONTINUOUS COMPOSITE PRESTRESSED CONCRETE I BEAM TYPE II BRIDGE
2 SPANS; 75'-4 1/2", 69'-3 1/2"
41'-0" CLEAR ROADWAY; SKEW 19°38'39" RT.
I-70 W.B. OVER EAST 10TH STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH
CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

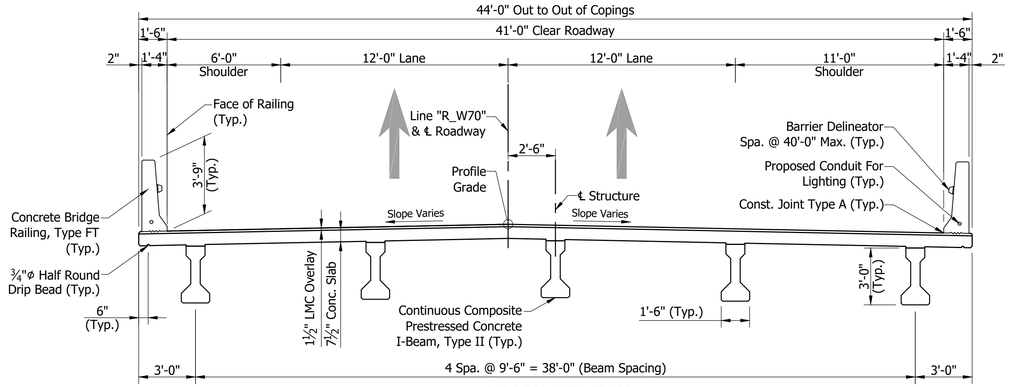
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN - PLAN & ELEVATION VIEWS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10622 CWBL
VERTICAL SCALE	DESIGNATION
N/A	1901903
SURVEY BOOK	SHEET
ELECTRONIC	5 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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TYPICAL SECTION

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

GENERAL NOTES

The existing structure shall be removed.

The minimum pile tip elevation noted is the elevation that the piles must reach.

Epoxy coated reinforcing bars shall be required in various portions of the structure as shown.

Reinforcing bars covering shall be 3 ½" in top and 1" min. in bottom of floor slabs and 3" in footings except bottom steel which shall be 4", and 2" in all other parts, unless noted.

Concrete in floor slab, and diaphragms, barriers, and end bents shall be an alternate Class C in accordance with the Technical Provisions.

Reinforcing Bars in Deck, Barrier, and End Bent Diaphragm Extending into the Deck shall be Stainless Steel. Reinforcing Bars in End Bent Diaphragm not Extending into the Deck and in the Cap shall be Epoxy Coated.

All exposed faces of the MSE walls and reinforced concrete bridge approach slabs shall receive surface seal.

See Bridge Aesthetic Plan for Architectural Details.

DESIGN DATA

LIVE LOAD:

Superstructure and Substructure Designed for HL-93 loading in accordance with the AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017 and its subsequent revisions.

DEAD LOAD:

Designed for Actual Dead Load plus 35 psf of future wearing surface, and 15 psf for SIP Metal Deck Forms.

FLOOR SLAB:

Slab designed with a 7 ½" structural depth and a 1 ½" very early strength LMC wearing surface.

DESIGN STRESSES

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 beam. The finishing machine was assumed to be supported 6 in. outside the vertical coping form. The top overhang brackets were assumed to be located 6 in. 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 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30 foot length of the deck centered with the finishing machine.

FINISHING-MACHINE LOAD:

4500 lb distributed over 10 ft. along the coping.

WIND LOAD:

Designed for 70 mph horizontal wind load in accordance with LRFD 3.8.1.

ULTIMATE DESIGN STRENGTHS:

Class "A" Concrete	f'c = 3,500 p.s.i.
Class "B" Concrete	f'c = 3,000 p.s.i.
Class "C" Concrete	f'c = 4,000 p.s.i.
Reinforcing Steel (Grade 60)	Fy = 60,000 p.s.i. (barrier)
	Fy = 75,000 p.s.i. (deck)
	Fy = 75,000 p.s.i. (all other locations)

SEISMIC DESIGN DATA:

Seismic Site Class	C
PGA (g)	0.051
S_s (g)	0.12
S_1 (g)	0.051
S_{D1} (g)	0.086
Seismic Design Category	A

CONTINUOUS COMPOSITE PRESTRESSED CONCRETE I BEAM
TYPE II BRIDGE
2 SPANS; 75'-4 1/2", 69'-3 1/2"
41'-0" CLEAR ROADWAY; SKEW 19°38'39" RT.
I-70 W.B. OVER EAST 10TH STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

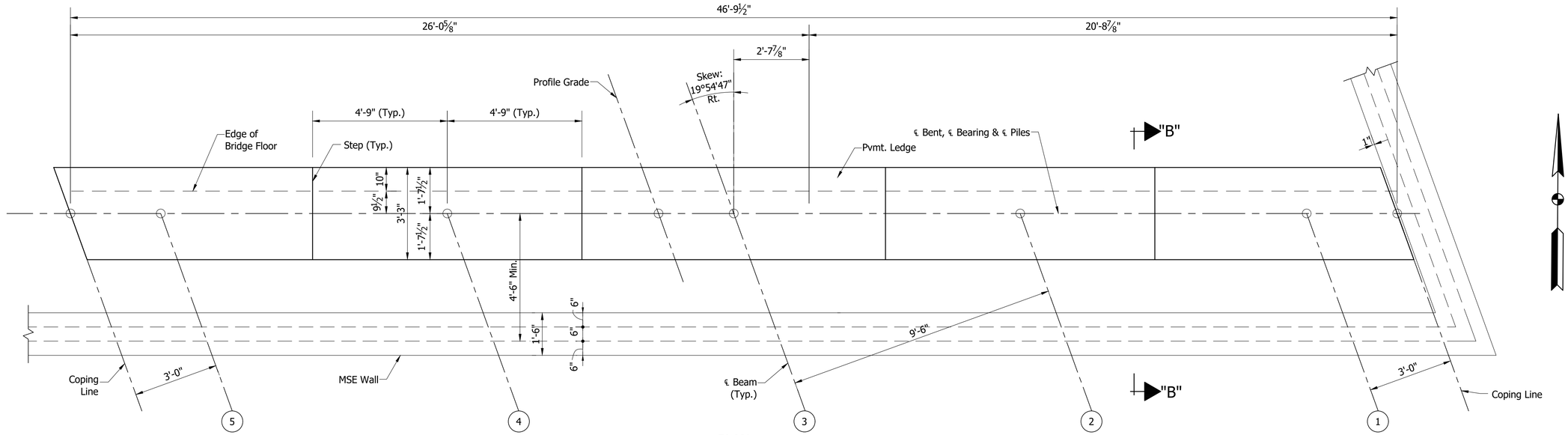
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN - TYPICAL SECTION

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10622 CWBL
VERTICAL SCALE	DESIGNATION
N/A	1901903
SURVEY BOOK	SHEET
ELECTRONIC	6 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

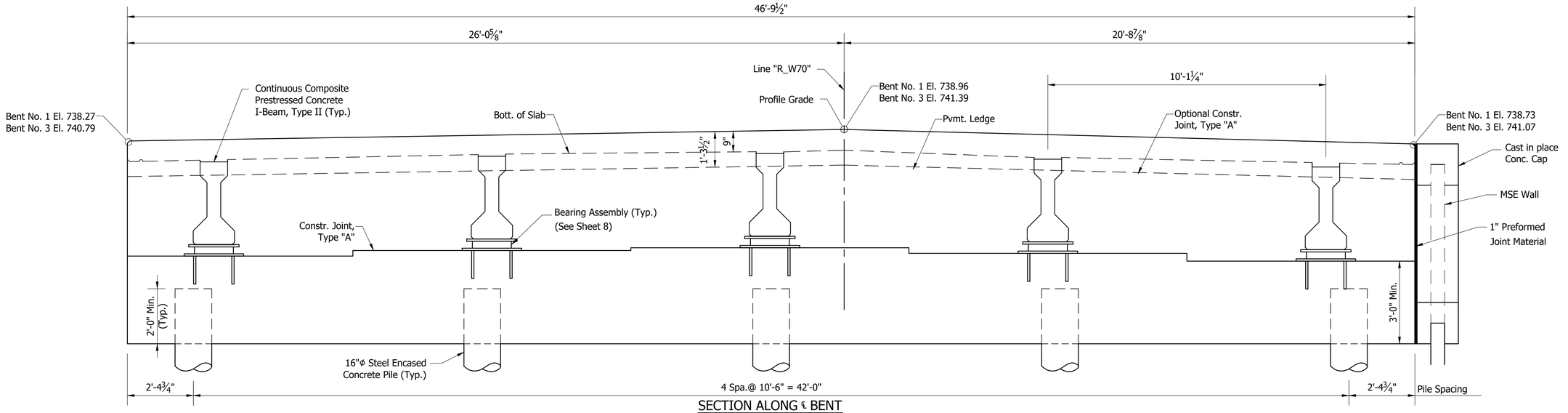
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PLAN
BENT NO. 1 WB (SHOWN)
BENT NO. 3 WB (SIMILAR)
Scale: 1/2"=1'-0"

SEAT ELEVATIONS

Beam No.	1	2	3	4	5
Bent No. 1	734.40	734.51	734.53	734.26	734.00
Bent No. 3	736.76	736.92	736.97	736.74	736.51



SECTION ALONG ℄ BENT
Scale: 1/2"=1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE

DESIGNED: V. SATHIRAJU DRAWN: D. PIERCEFIELD

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

INDIANA
DEPARTMENT OF TRANSPORTATION

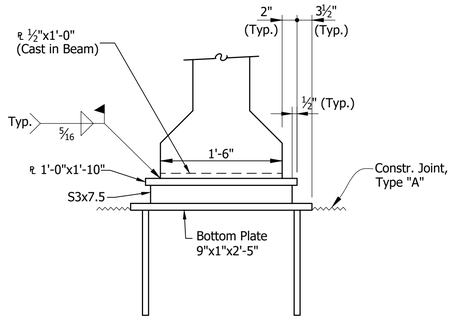
BENTS NO. 1 AND NO. 3 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10622 CWBL
VERTICAL SCALE	DESIGNATION
N/A	1901903
SURVEY BOOK	SHEET
ELECTRONIC	7 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

\\bfnt241\Jobs\641200.0000\ProjDevelopment\Design\Drawings\BRIDGES\08 OVER 10TH STREET\Structure 1901903\1901903_S_BR_BNT01.dwg Dylan Piercefield Plot:2/24/2020 10:23 AM Save:2/6/2020 3:46 PM

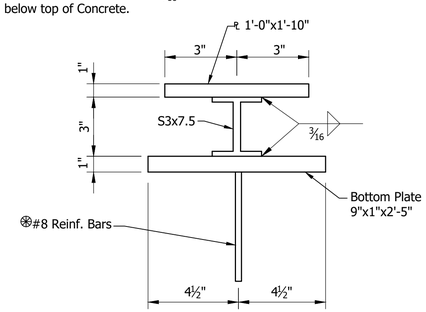
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ELEVATION

⊛ As an alternate a ⅞"ϕx1'-3" Long Headed Automatic Welded Stud may be used.

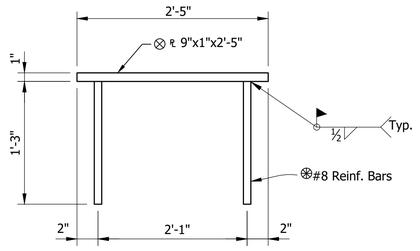
⊗ Setting Tolerance of Bottom Plate-Level with to not more than 1/16" below top of Concrete.



SECTION

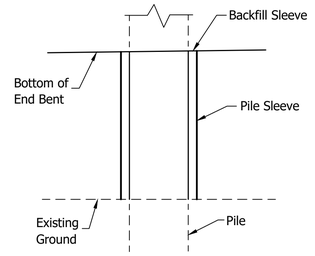
BEARING ASSEMBLY

Not to Scale



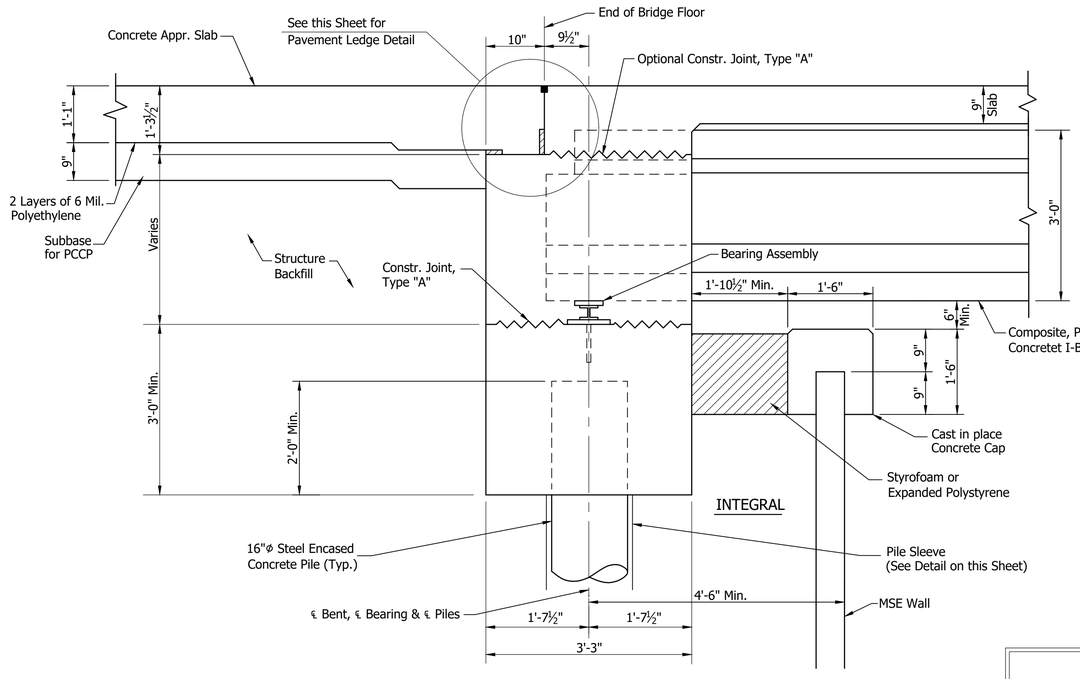
BOTTOM PLATE DETAIL

Not to Scale



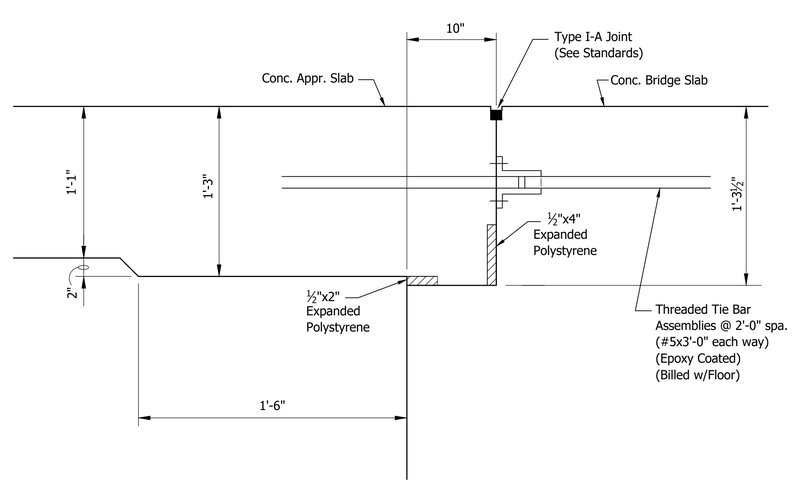
PILE SLEEVE DETAIL

Not to Scale



SECTION "B-B"

Not to Scale



PAVEMENT LEDGE DETAIL

Not to Scale

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: V. SATHIRAJU DRAWN: D. PIERCEFIELD

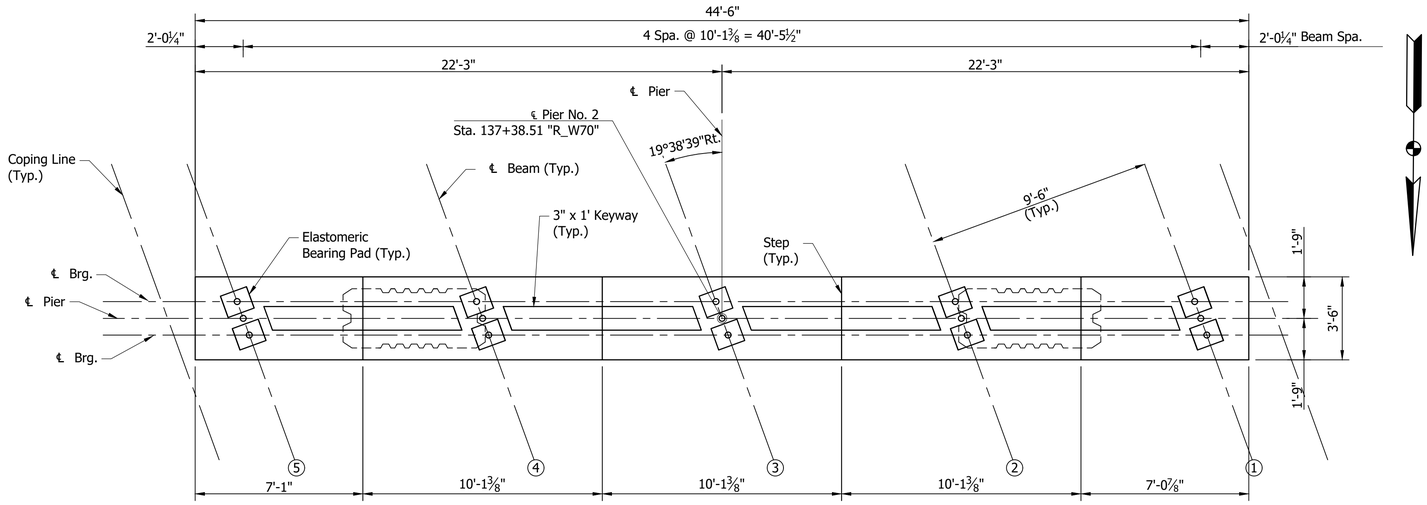
CHECKED: B. WRIGHT CHECKED: B. WRIGHT

INDIANA
DEPARTMENT OF TRANSPORTATION

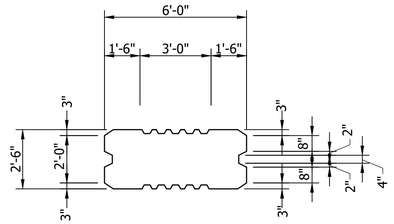
BENTS NO. 1 AND NO. 3 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10622 CWBL
VERTICAL SCALE	DESIGNATION
N/A	1901903
SURVEY BOOK	SHEET
ELECTRONIC	8 OF 15
CONTRACT	PROJECT
B-36910	1600808

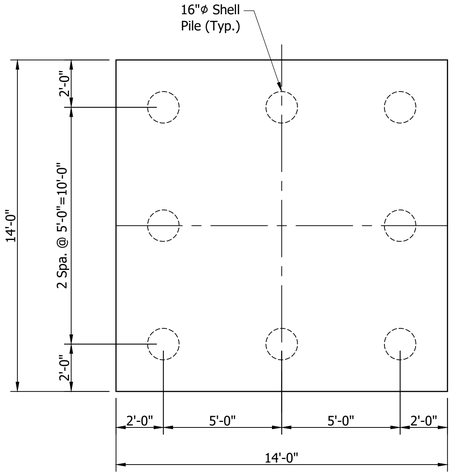
BFS NO. 6412



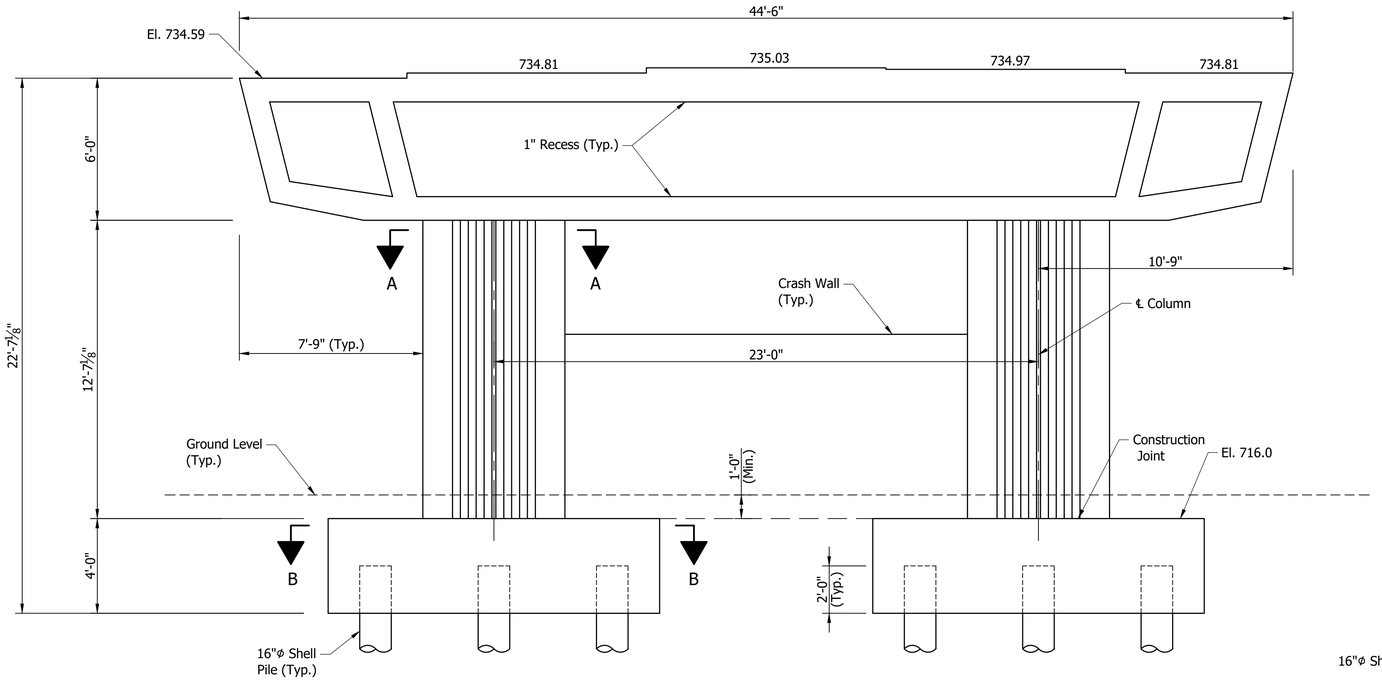
PLAN
Scale: 5/16"=1'-0"



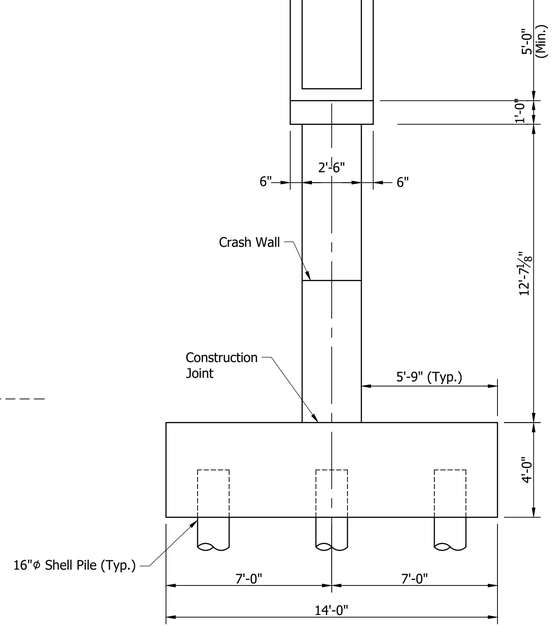
SECTION A-A
Scale: 1/4"=1'-0"



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



ELEVATION
Scale: 5/16"=1'-0"



SECTION
Scale: 5/16"=1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: V. SATHIRAJU DRAWN: K. COFFMAN

CHECKED: B. WRIGHT CHECKED: M. MATEL

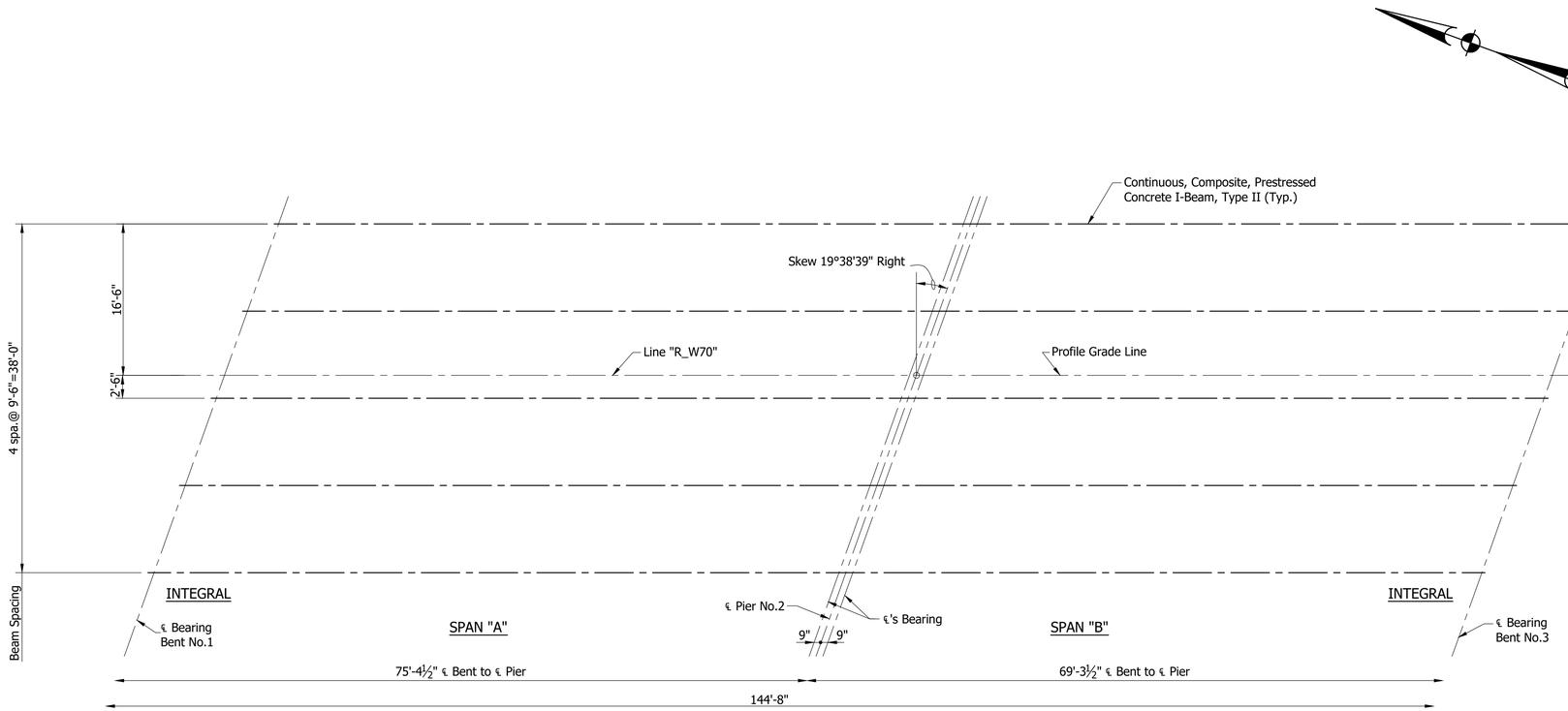
INDIANA
DEPARTMENT OF TRANSPORTATION

PIER DETAILS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10622 CWBL
VERTICAL SCALE	DESIGNATION
N/A	1901903
SURVEY BOOK	SHEET
ELECTRONIC	9 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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BEAM ERECTION PLAN

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

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE

DESIGNED: B. WRIGHT DRAWN: D. SHEETZ

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

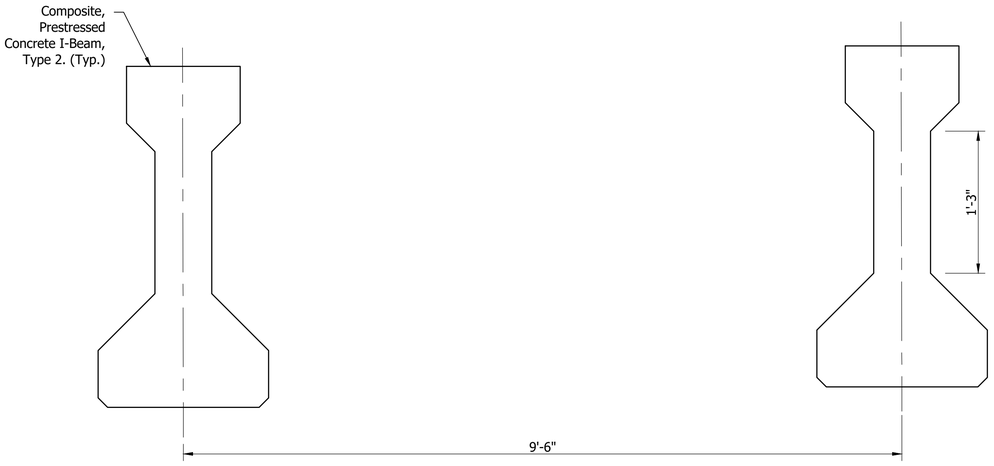
INDIANA
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN

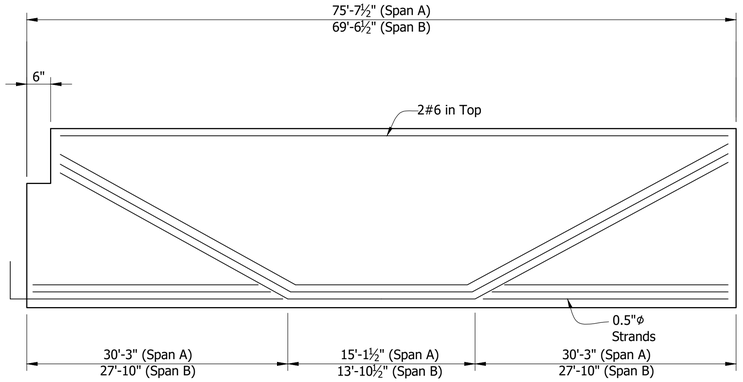
HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10622 CWBL
VERTICAL SCALE	DESIGNATION
N/A	1901903
SURVEY BOOK	SHEET
ELECTRONIC	10 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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ELEVATION
Scale: 1-1/2" = 1'-0"



BEAM ELEVATION
SPAN "A" (SHOWN) SPAN "B" (OPP. HAND)
SHOWING DRAPED STRANDS
Not to Scale

✳ Denotes Epoxy Coated

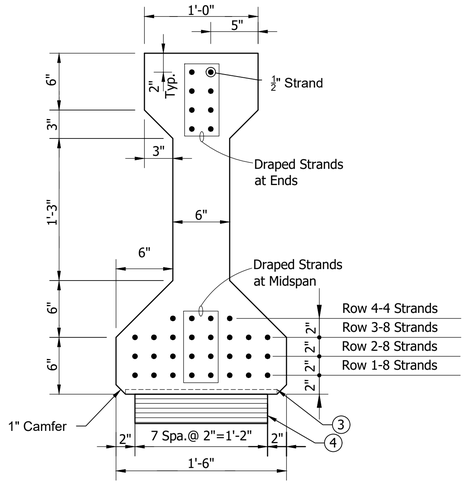
Note:
Bars 1" Clear
unless noted.

① Surface Seal req'd on top of all Beams and Exterior Face of Exterior Beams

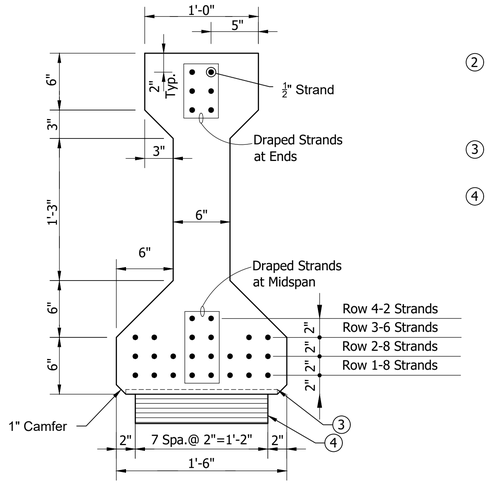
② 1" Ø Holes or ¾"Ø Inserts for Dowels at Bent or Pier. (See Beam Plans)

③ ℄ ½"x12"x1'-4" at End Bent Ends only

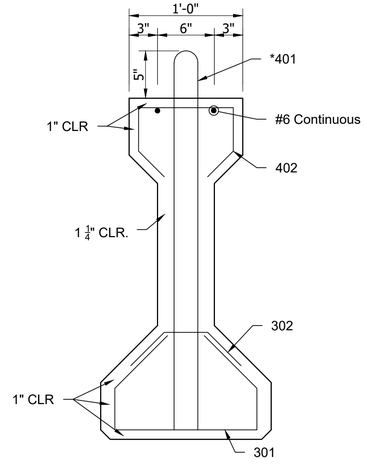
④ INDOT Elastomeric Bearing Pad, Type 2 (55 Durometer) at Pier No.2



SECTION SHOWING STRANDS (SPAN A)



SECTION SHOWING STRANDS (SPAN B)



SECTION SHOWING REINFORCING

BEAM SECTIONS
Scale: 1-1/2" = 1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: J. GOULD DRAWN: D. PIERCEFIELD

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

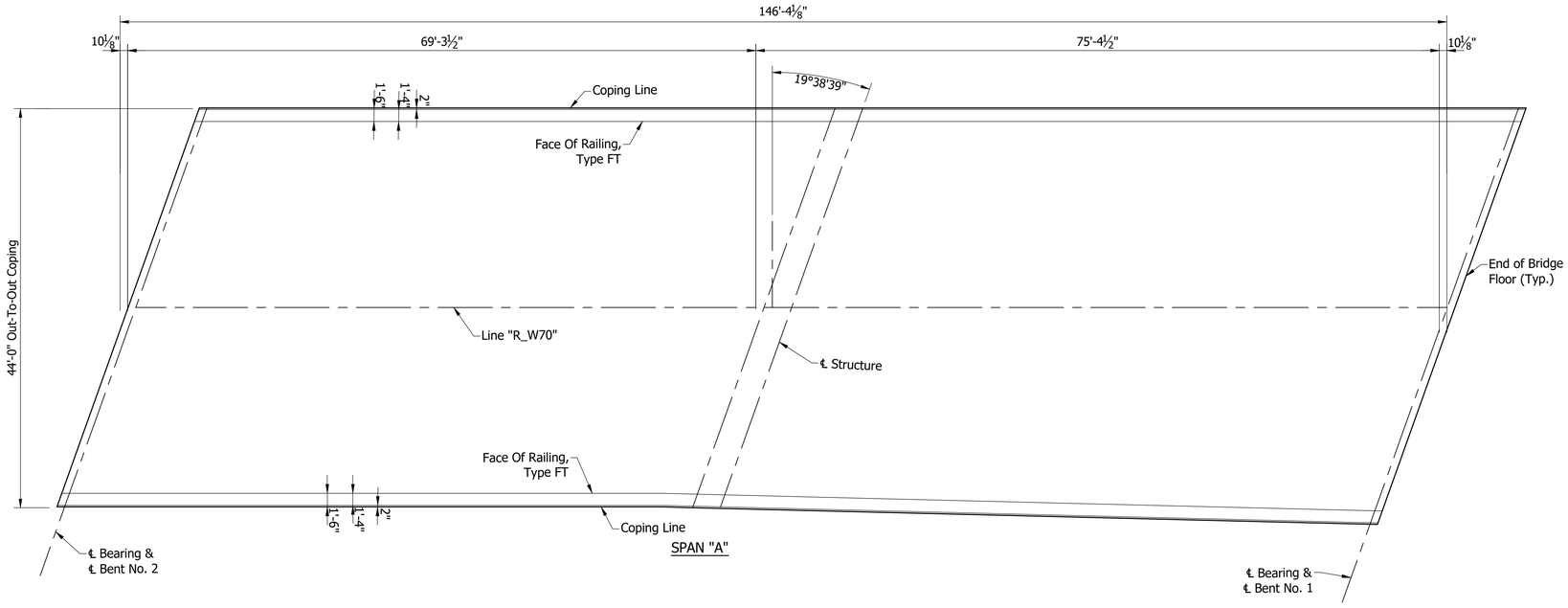
INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10622 CWBL
VERTICAL SCALE	DESIGNATION
N/A	1901903
SURVEY BOOK	SHEET
ELECTRONIC	11 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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FLOOR PLAN

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

NOTE:
See Sheet ___ For _____

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: V. SATHIRAJU DRAWN: D. PIERCEFIELD

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

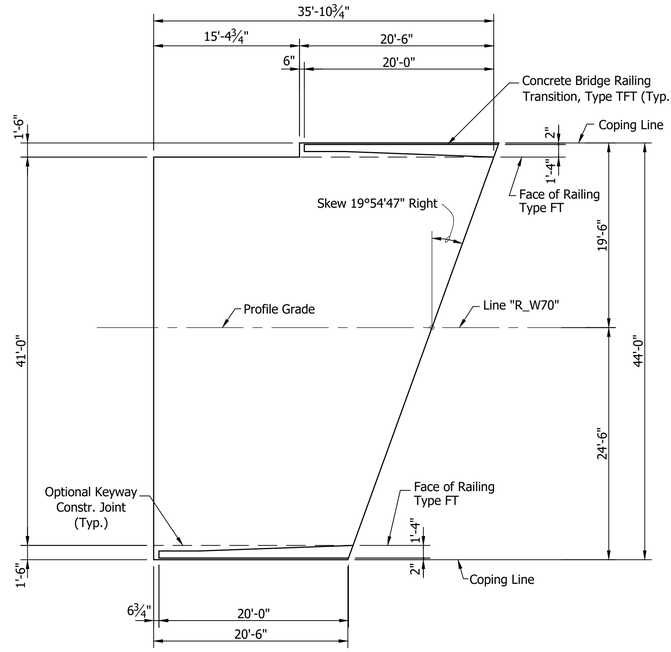
INDIANA
DEPARTMENT OF TRANSPORTATION

FLOOR DETAILS

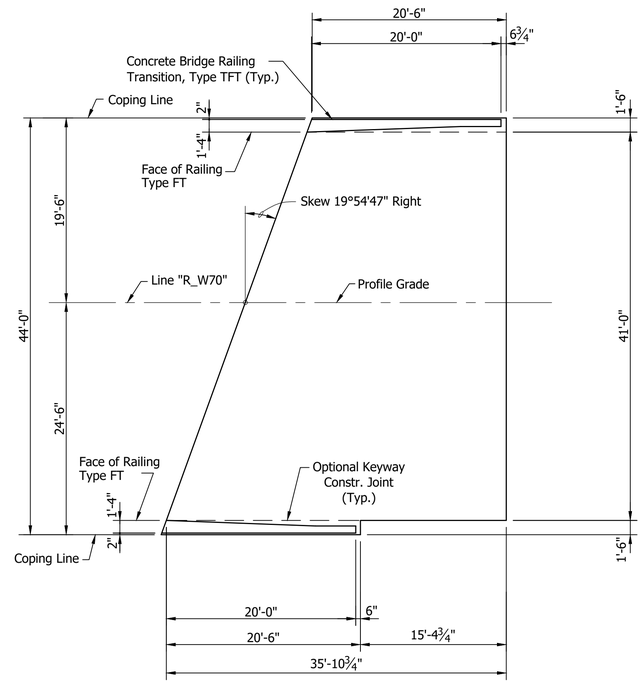
HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10622 CWBL
VERTICAL SCALE	DESIGNATION
N/A	1901903
SURVEY BOOK	SHEET
ELECTRONIC	12 OF 15
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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PLAN
NORTH SLAB
Scale: ⅛"=1'-0"

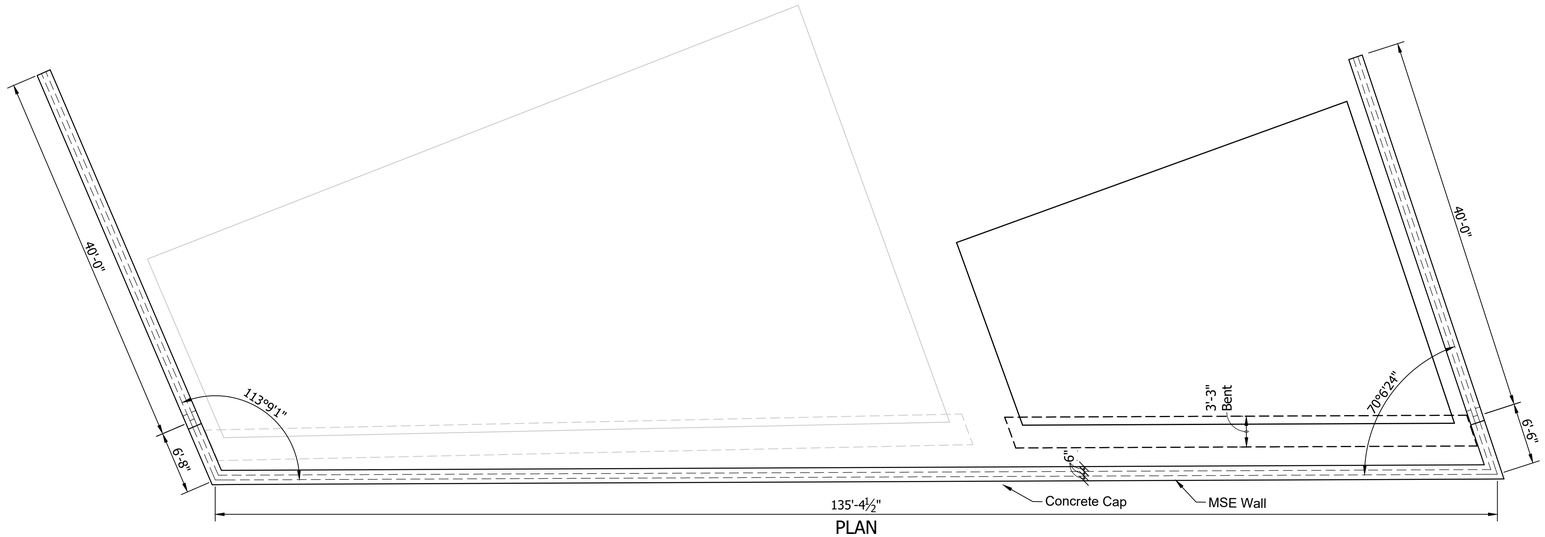


PLAN
SOUTH SLAB
Scale: ⅛"=1'-0"

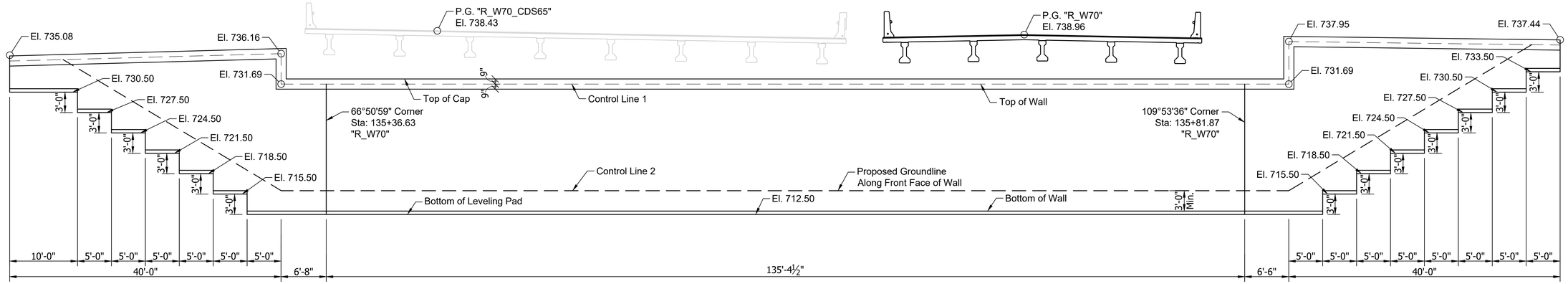
	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: As Noted; BRIDGE FILE: I70-083-10622 CWBL
			VERTICAL SCALE: N/A; DESIGNATION: 1901903
	DESIGNED: D. SHEETZ DRAWN: D. SHEETZ	APPROACH SLAB	SURVEY BOOK: ELECTRONIC; SHEET: 13 OF 15
	CHECKED: B. WRIGHT CHECKED: B. WRIGHT		CONTRACT: B-36910; PROJECT: 1600808

BFS NO. 6412

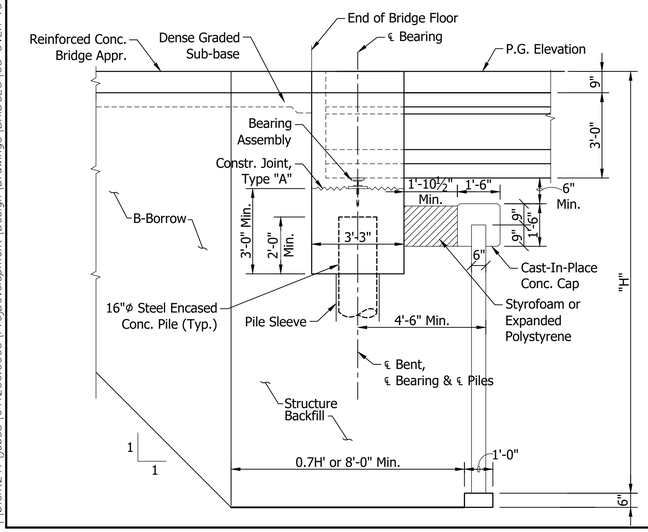
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PLAN
MSE WALL NO. 1 (NORTHERN)
Scale: 1/8"=1'-0"



ELEVATION
MSE WALL NO. 1 (NORTHERN)
Scale: 1/8"=1'-0"

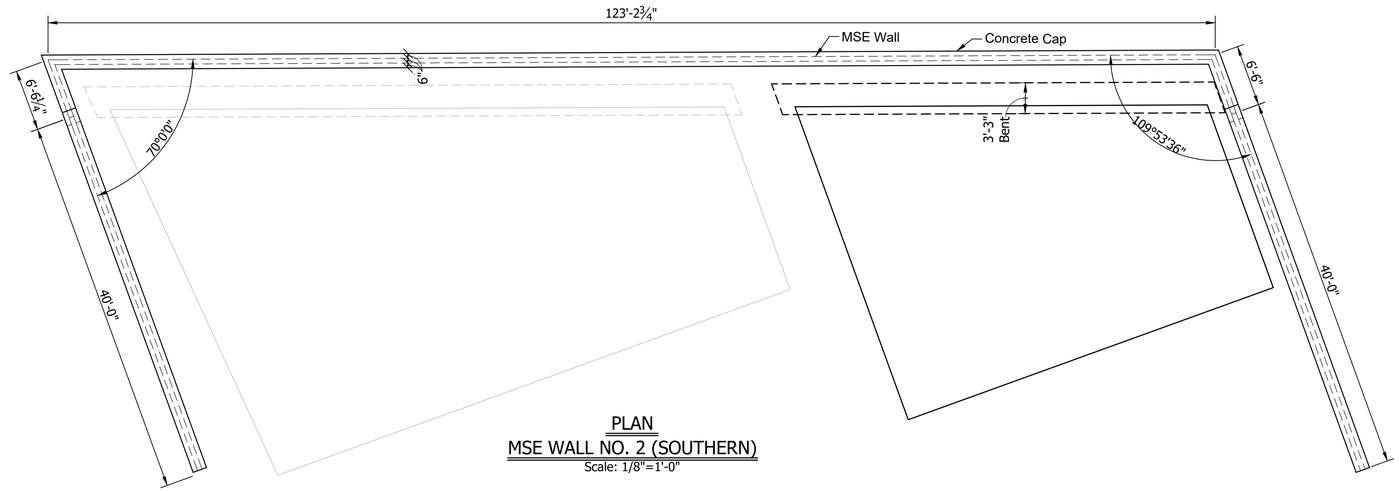


SECTION
MSE WALL NO. 1
Scale: 3/8"=1'-0"

	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: AS NOTED; BRIDGE FILE: I70-083-10622 CWBL
	DESIGNED: B. WRIGHT DRAWN: D. PIERCEFIELD	WALL LAYOUT	VERTICAL SCALE: AS NOTED; DESIGNATION: 1901903
	CHECKED: M. EICHENAUER CHECKED: B. WRIGHT		SURVEY BOOK; SHEET: ELECTRONIC 14 OF 15; CONTRACT; PROJECT: B-36910; 1600808

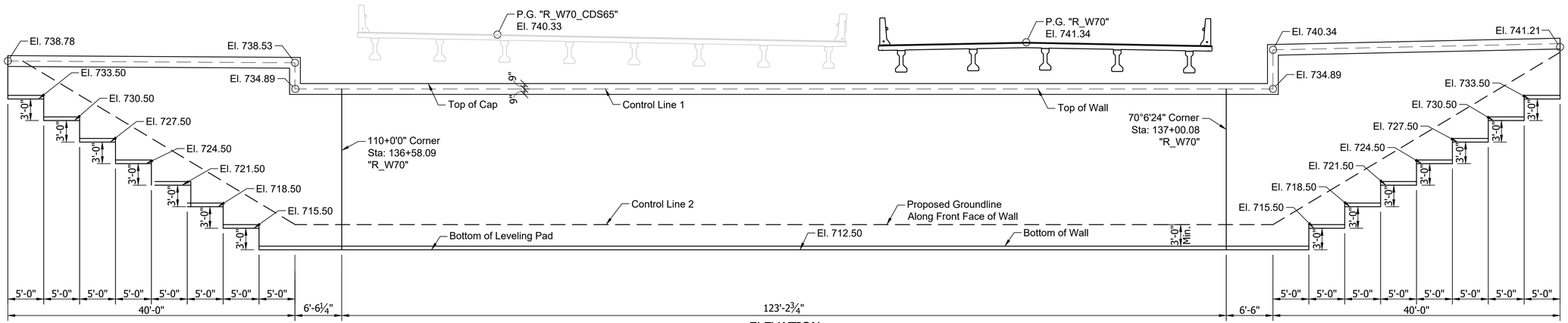
BFS NO. 6412

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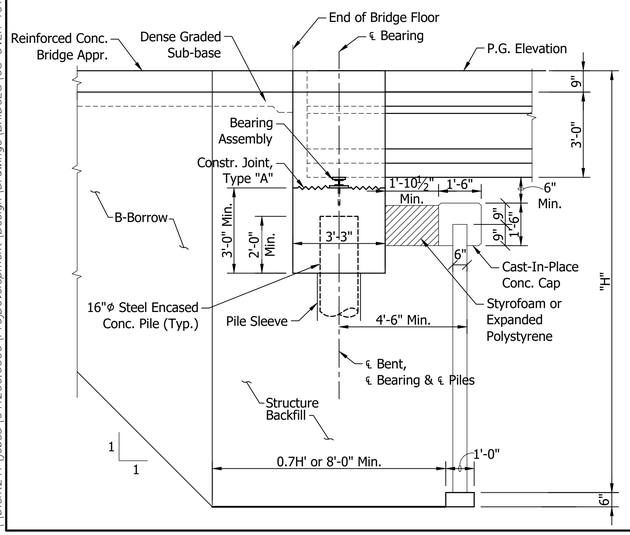


PLAN
MSE WALL NO. 2 (SOUTHERN)
Scale: 1/8"=1'-0"

NOTE:
Elevation Looking At Back Face of Wall



ELEVATION
MSE WALL NO. 2 (SOUTHERN)
Scale: 1/8"=1'-0"



SECTION
MSE WALL NO. 2
Scale: 3/8"=1'-0"

	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: AS NOTED	BRIDGE FILE: I70-083-10622 CWBL
			VERTICAL SCALE: AS NOTED	DESIGNATION: 1901903
	DESIGNED: B. WRIGHT DRAWN: D. PIERCEFIELD	WALL LAYOUT	SURVEY BOOK	SHEET
	CHECKED: M. EICHENAUER CHECKED: B. WRIGHT		ELECTRONIC	15 OF 15
			CONTRACT: B-36910	PROJECT: 1600808

BFS NO. 6412

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PROJECT	DESIGNATION
1600808	1901905
CONTRACT	BRIDGE FILE
B-36910	I70-083-10623 CD

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN & SKEW	OVER	STATION
I70-083-10623 CD	CONTINUOUS COMPOSITE PRESTRESSED CONCRETE I BEAM TYPE II BRIDGE	2 SPANS; 75'-8 1/2", 69'-3 3/4" SKEW 19°56'42" RT.	EAST 10TH STREET	122+69.66 LINE "R_W70_CDS65"

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

FOR SPANS OVER 20 FEET

ROUTE: I-65 S.B. CD & I-70 W.B. CD AT: RP 82+95

PROJECT NO. 1600808 P.E.

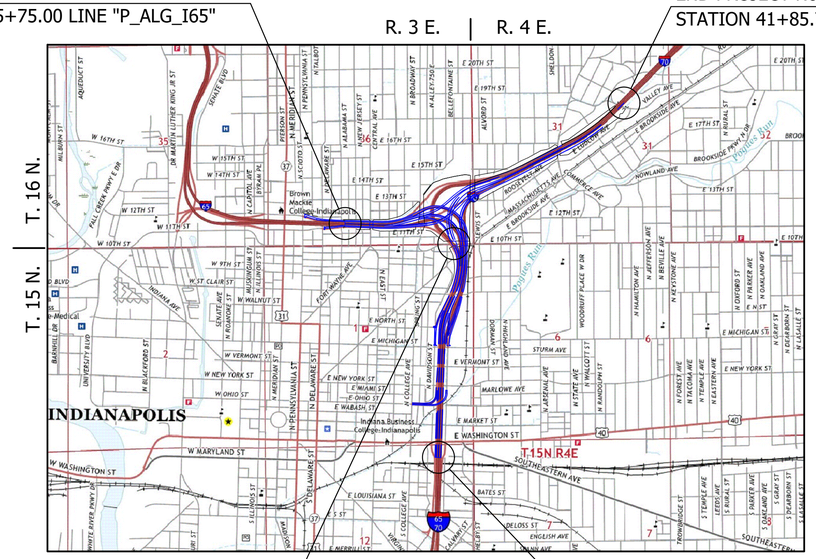
1600808 CONST.

NO ADDITIONAL RIGHT OF WAY REQUIRED FOR THIS PROJECT

BRIDGE REPLACEMENT ON I-65 S.B. CD & I-70 W.B. CD OVER EAST 10TH STREET
LOCATED 1.92 MILES NORTH OF I-70 (SOUTH SPLIT) INTERCHANGE
SECTION 1, TOWNSHIPS 15 & 16 NORTH, RANGE 3 EAST
CENTER TOWNSHIP, MARION COUNTY INDIANA

END PROJECT No. 1600808
STATION 25+75.00 LINE "P_ALG_I65"

END PROJECT No. 1600808
STATION 41+85.70 LINE "P_ALG_I70"


R. 3 E.
R. 4 E.
T. 16 N.
T. 15 N.
INDIANAPOLIS
T.15N R4E
E 10TH ST
E WASHINGTON ST
W MARYLAND ST
W WASHINGTON ST
E MICHIGAN ST
E VERMONT ST
E NEW YORK ST
W OHIO ST
E WABASH ST
E MARKET ST
W 16TH ST
W 15TH ST
W 14TH ST
W 12TH ST
W 11TH ST
W 10TH ST
W 9TH ST
W 7TH ST
W CLAIR ST
W WALNUT ST
E 20TH ST
E 19TH ST
E 17TH ST
E 16TH ST
E 15TH ST
E 14TH ST
E 13TH ST
E 12TH ST
E 11TH ST
N MERIDIAN ST
N PENNSYLVANIA ST
N DELAWARE ST
N COLLEGE AVE
N CAPITOL AVE
N ALABAMA ST
N BROADWAY ST
N ILLINOIS ST
N MISSISSIPPI ST
N BLACKFORD ST
N ROANOKE ST
N HARDING ST
N EAST ST
N ARSENAL AVE
N STATE AVE
N RANDOLPH ST
N HAMILTON AVE
N KEYSTONE AVE
N BEVILLE AVE
N ATTERSON AVE
N COFFROTH ST
N WILCOTT ST
N OAKLAND AVE
N LASALLE ST
N GERMAN ST
N FOREST AVE
N TEMPLE AVE
N TALCOTT AVE
N EASTERN AVE
S TEMPLE AVE
S RURAL ST
S PARKER AVE
S KEYSTONE AVE
S GRANT AVE
S SHERIDAN ST
S KEALING AVE
S DELAWARE ST
S ILLINOIS ST
S MERIDIAN ST
S CAPITOL AVE
S COLLEGE AVE
S ALABAMA ST
S MISSISSIPPI ST
S HARDING ST
S BLACKFORD ST
S ROANOKE ST
S WALCOTT ST
S KANSAS ST
S LASALLE ST
S GIRLS SCHOOL RD
S HOLT RD
S HOSBROOK ST
S KEALING AVE
S DEARBORN ST
S KEYSTONE AVE
S RURAL ST
S EASTERN AVE
S TALCOTT AVE
S FOREST

UTILITIES

REVISIONS

SHEET NO.	DATE	REVISED

KIN PROJECT INFORMATION

DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB & I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVE.	
1901914	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER COLLEGE AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901927	NOT USED	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I70 WB OVER VERMONT STREET	

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9	BENTS NO. 1 AND NO. 3 DETAILS
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11	FRAMING PLAN
12	BEAM DETAILS
13	FLOOR DETAILS
14	APPROACH SLAB
15	WALL LAYOUT
16	WALL LAYOUT

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

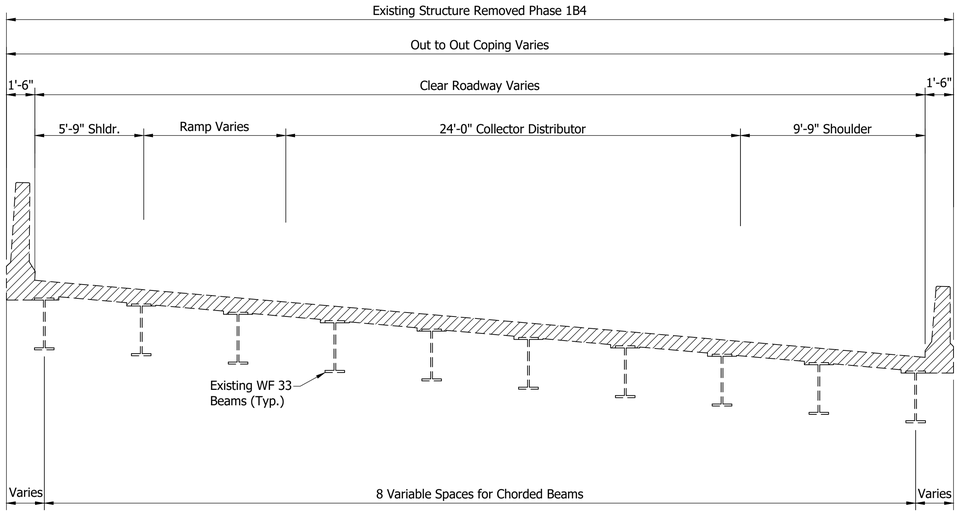
INDIANA DEPARTMENT OF TRANSPORTATION

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HORIZONTAL SCALE	BRIDGE FILE
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VERTICAL SCALE	DESIGNATION
N/A	1901905
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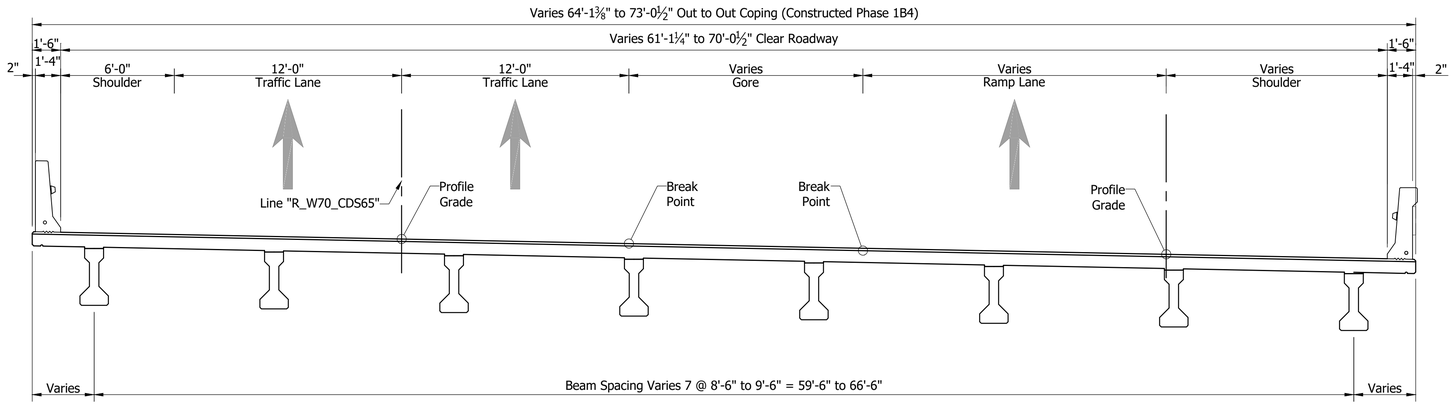
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EXISTING TYPICAL SECTION

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



PROPOSED TYPICAL SECTION

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

LEGEND

Limits of Removal

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: M. SCOTT

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

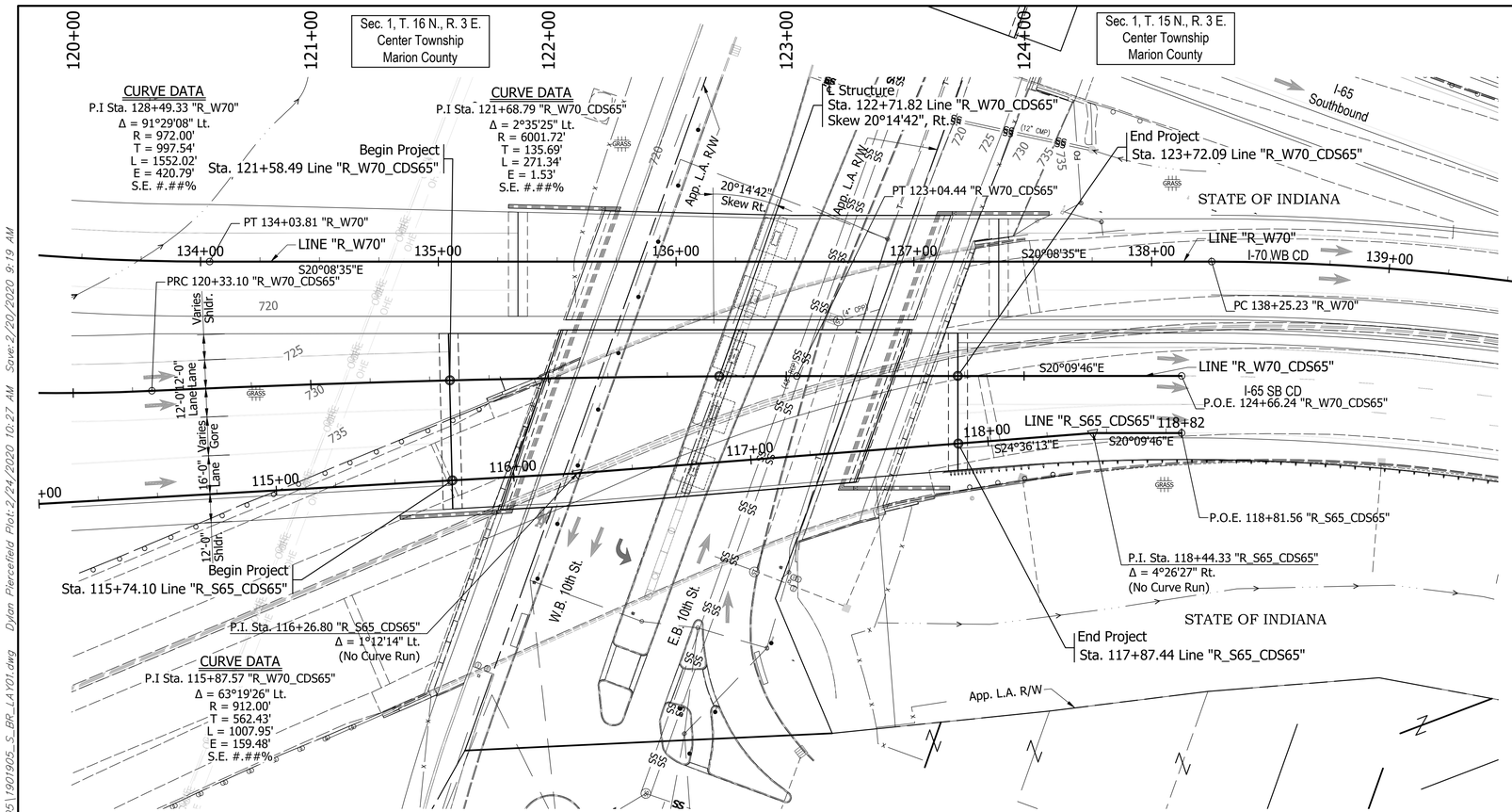
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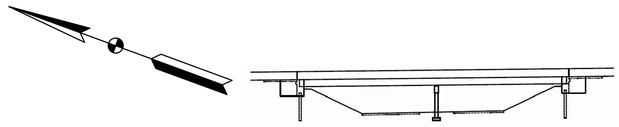
MAINTENANCE OF TRAFFIC

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10623 CD
VERTICAL SCALE	DESIGNATION
N/A	1901905
SURVEY BOOK	SHEET
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BFS NO. 6412

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EXISTING STRUCTURE

The existing structure was built in 1974. Structure was rehabilitated in 2003 with overlay and retrofitted railing. The structure is a 2-span continuous composite steel beam bridge.

Span lengths: 1 @ 81'-0", 1 @ 81'-0"

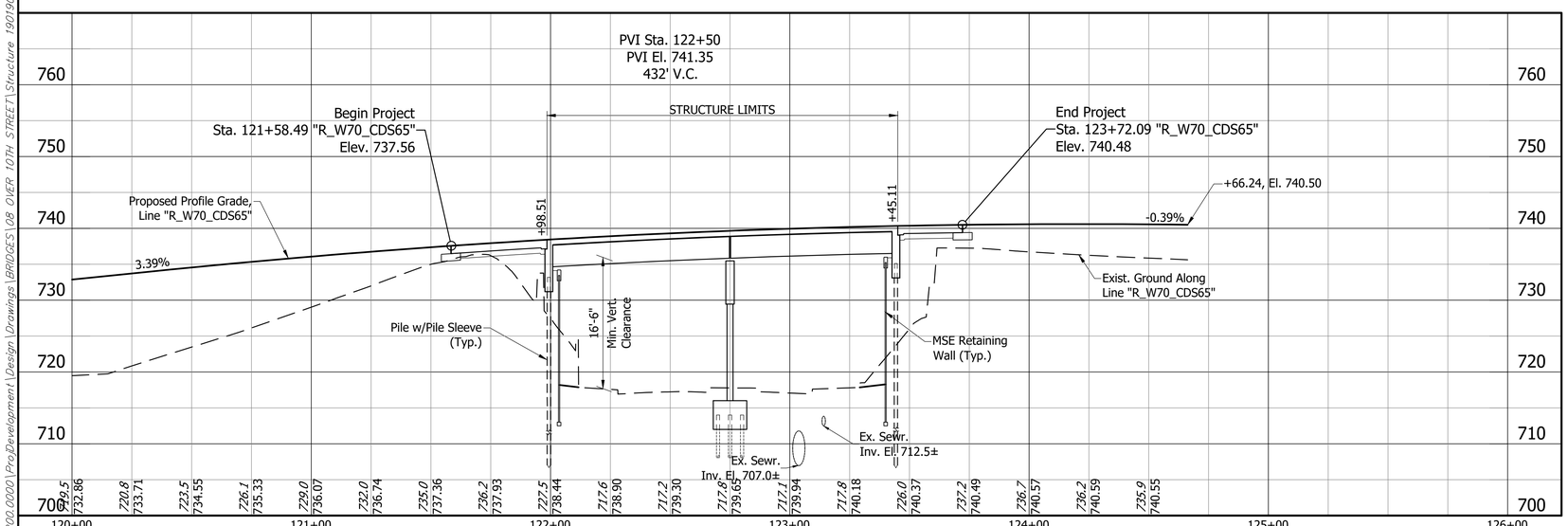
Clear roadway is variable Total length of 165'-10"

Existing structure to be removed.

Existing plans are on file with the Indiana Department of Transportation under Bridge File No. I65-113-05738B.

EARTHWORK TABULATION

See Roadway Plans (DES #_____) for earthwork tabulation.



NOTE: ALL TOPOGRAPHY INFORMATION REFERENCED TO LINE "_____" UNLESS NOTED.

ALL R/W ON THIS SHEET DESCRIBED FROM LINE "_____" UNLESS OTHERWISE NOTED

Notes:

1. For R/W and property information, see Location Control Route Survey (DES # _____).
2. For alignment data, see Geometric Layout Sheets (DES #_____).
3. See Road Plans (DES #_____) for Horizontal & Vertical Control Data.

CONTINUOUS COMPOSITE PRESTRESSED CONCRETE I
BEAM TYPE II BRIDGE
2 SPANS; 75'-8 1/2", 69'-3 3/4"
VARIES 59'-10 1/2" TO 71'-0 1/4" CLEAR ROADWAY
SKEW 19°56'42" RT.
I-65 S.B. CD & I-70 W.B. CD OVER EAST 10TH STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: L. KIRSCH

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

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DEPARTMENT OF TRANSPORTATION

LAYOUT

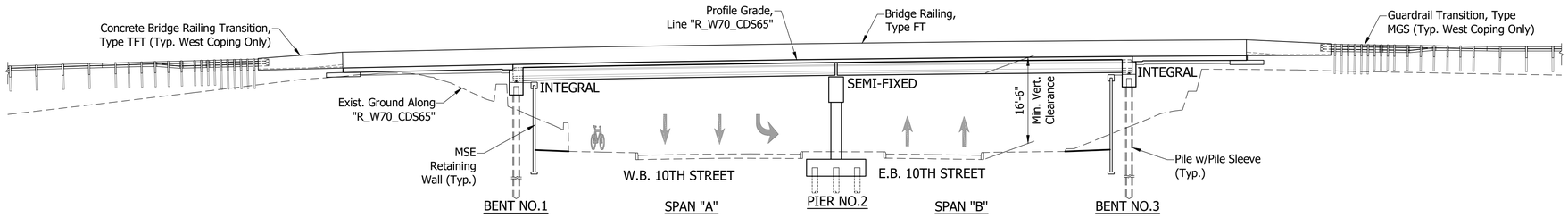
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1" = 30'	I70-083-10623 CD
VERTICAL SCALE	DESIGNATION
1" = 10'	1901905
SURVEY BOOK	SHEET
ELECTRONIC	4 OF 16
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

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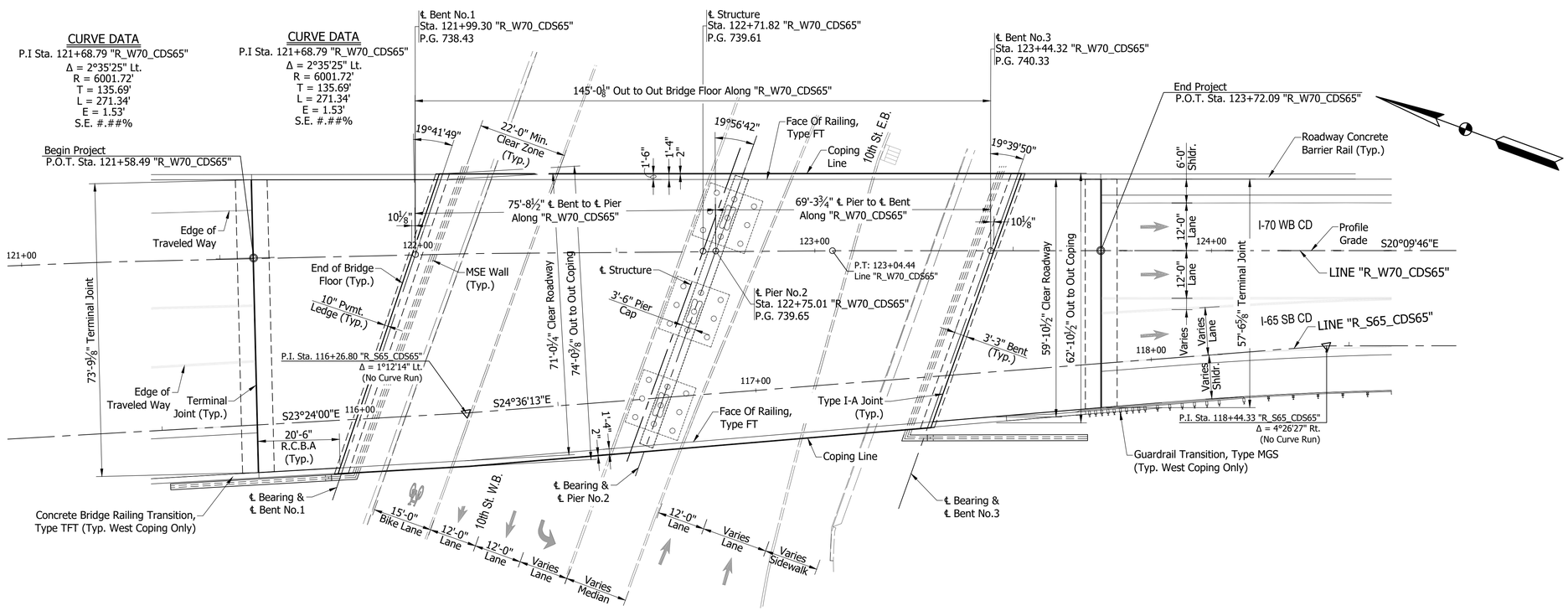
STRUCTURE TO BE BUILT ON A 432' VERTICAL CURVE
PVI Sta. 122+50
PVI El. 741.35
432' V.C.

+3.48% -0.39%



ELEVATION

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



PLAN

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

NOTE:
See Sheet 6 For Typical Section

CONTINUOUS COMPOSITE PRESTRESSED CONCRETE I BEAM TYPE II BRIDGE
2 SPANS; 75'-8 1/2", 69'-3 3/4"
VARIES 59'-10 1/2" TO 71'-0 1/4" CLEAR ROADWAY; SKEW 19°56'42" RT.
I-65 S.B. CD & I-70 W.B. CD OVER EAST 10TH STREET
MARION COUNTY

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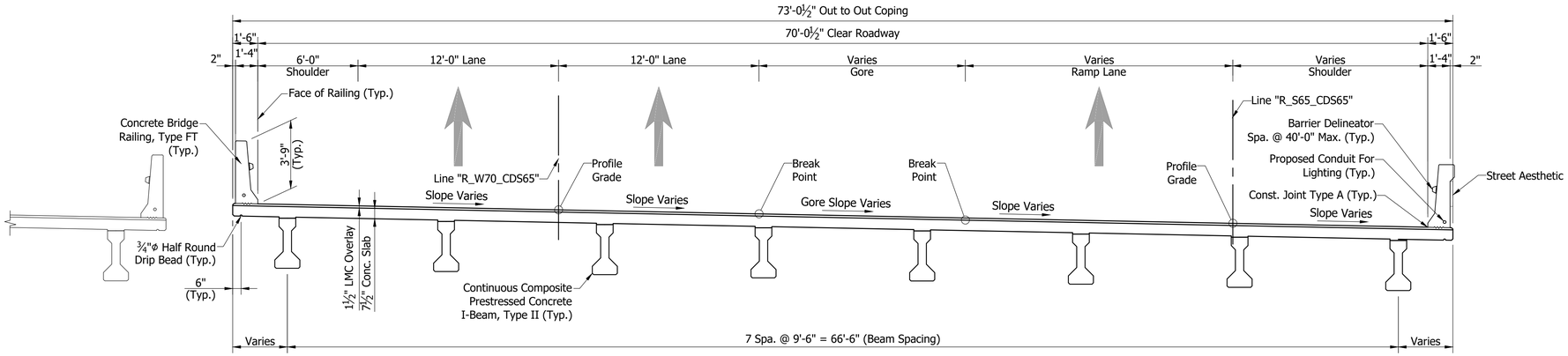
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN - PLAN & ELEVATION VIEWS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10623 CD
VERTICAL SCALE	DESIGNATION
N/A	1901905
SURVEY BOOK	SHEET
ELECTRONIC	5 OF 16
CONTRACT	PROJECT
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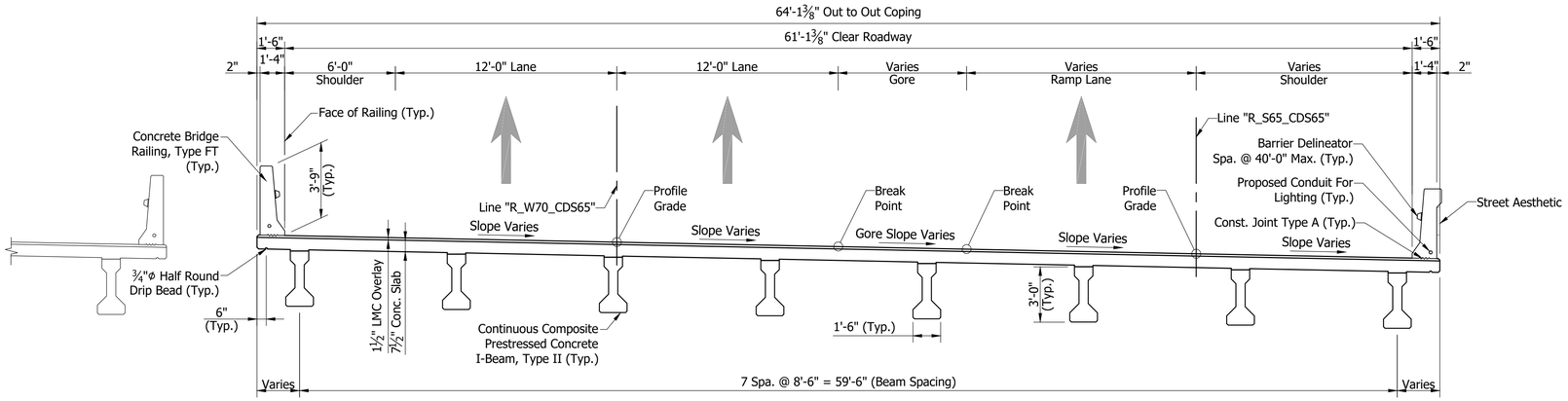
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TYPICAL SECTION - WIDE SIDE (NORTH)

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



TYPICAL SECTION - NARROW SIDE (SOUTH)

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

GENERAL NOTES

Reinforcing bars covering shall be 3 ½" in top and 1" min. in bottom of floor slabs and 3" in footings except bottom steel which shall be 4", and 2" in all other parts, unless noted.

Concrete in floor slab, and diaphragms, barriers, and end bents shall be an alternate Class C in accordance with the Technical Provisions.

Reinforcing Bars in Deck, Barrier, and End Bent Diaphragm Extending into the Deck shall be Stainless Steel. Reinforcing Bars in End Bent Diaphragm not Extending into the Deck and in the Cap shall be Epoxy Coated.

All exposed faces of the MSE walls and reinforced concrete bridge approach slabs shall receive surface seal.

See Bridge Aesthetic Plan for Architectural Details.

DESIGN DATA

LIVE LOAD:

Superstructure and Substructure Designed for HL-93 loading in accordance with the AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017 and its subsequent revisions.

DEAD LOAD:

Designed for Actual Dead Load plus 35 psf of future wearing surface, and 15 psf for SIP Metal Deck Forms.

FLOOR SLAB:

Slab designed with a 7 ½" structural depth and a 1 ½" very early strength LMC 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 beam. The finishing machine was assumed to be supported 6 in. outside the vertical coping form. The top overhang brackets were assumed to be located 6 in. 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.

DESIGN STRESSES

CONSTRUCTION LIVE LOAD:

Designed for 20 psf extending 2 ft. past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30 foot length of the deck centered with the finishing machine.

FINISHING-MACHINE LOAD:

4500 lb distributed over 10 ft. along the coping.

WIND LOAD:

Designed for 70 mph horizontal wind load in accordance with LRFD 3.8.1.

ULTIMATE DESIGN STRENGTHS:

Class "A" Concrete	f'c = 3,500 p.s.i.
Class "B" Concrete	f'c = 3,000 p.s.i.
Class "C" Concrete	f'c = 4,000 p.s.i.
Reinforcing Steel (Grade 60)	Fy = 60,000 p.s.i. (barrier)
	Fy = 75,000 p.s.i. (deck)
	Fy = 75,000 p.s.i. (all other locations)

SEISMIC DESIGN DATA:

Seismic Site Class	C
PGA (g)	0.051
S_s (g)	0.12
S_1 (g)	0.051
S_{D1} (g)	0.086
Seismic Design Category	A

CONTINUOUS COMPOSITE PRESTRESSED CONCRETE I BEAM TYPE II BRIDGE
2 SPANS; 75'-8 1/2", 69'-3 3/4"
VARIES 59'-10 1/2" TO 71'-0 1/4" CLEAR ROADWAY; SKEW 19°56'42" RT.
I-65 S.B. CD & I-70 W.B. CD OVER EAST 10TH STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

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CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

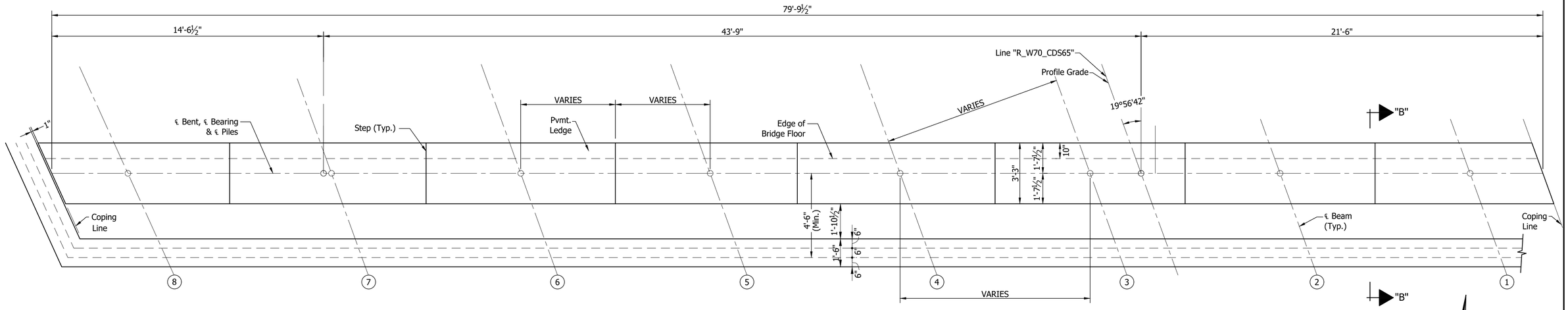
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN - TYPICAL SECTION

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10623 CD
VERTICAL SCALE	DESIGNATION
N/A	1901905
SURVEY BOOK	SHEET
ELECTRONIC	6 OF 16
CONTRACT	PROJECT
B-36910	1600808

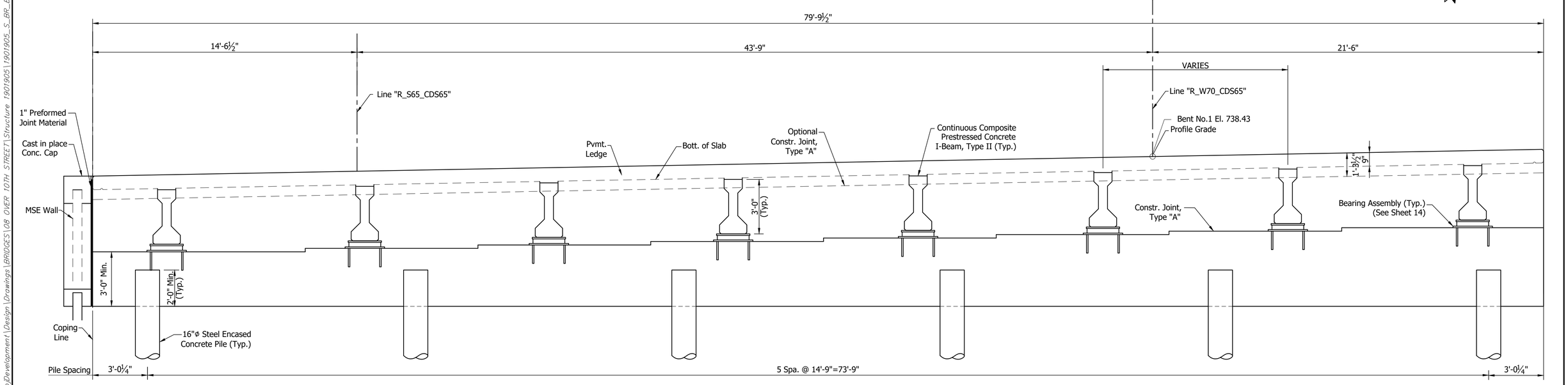
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PLAN
BENT NO.1 SBCD
Scale: ⅜"=1'-0"

SEAT ELEVATIONS								
Beam No.	①	②	③	④	⑤	⑥	⑦	⑧
Bent No.1	734.52	734.26	734.00	733.76	733.44	733.18	732.92	733.06



SECTION ALONG ℄ BENT
Scale: ⅜"=1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: V. SATHIRAJU DRAWN: K. COFFMAN

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

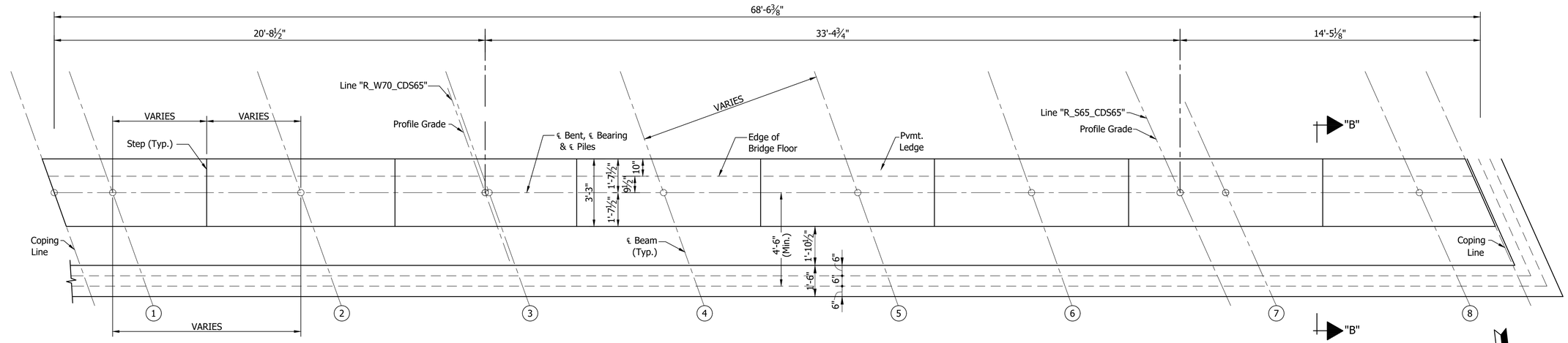
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BENT NO. 1 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10623 CD
VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEET
ELECTRONIC	7 OF 16
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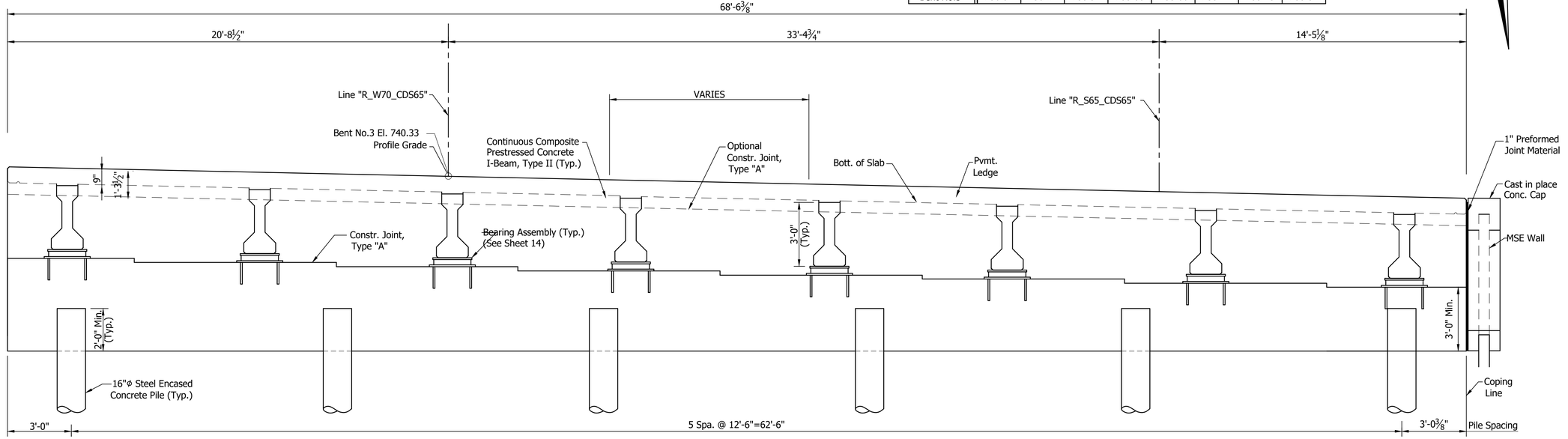
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PLAN
BENT NO.3 SBCD

Scale: ⅜"=1'-0"

SEAT ELEVATIONS								
Beam No.	1	2	3	4	5	6	7	8
Bent No.3	736.34	730.14	735.94	735.80	735.66	735.44	735.23	735.32



SECTION ALONG ℄ BENT

Scale: ⅜"=1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: V. SATHIRAJU DRAWN: K. COFFMAN

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

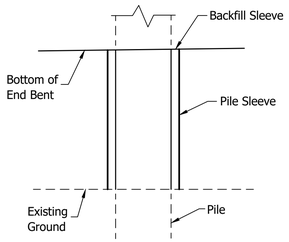
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DEPARTMENT OF TRANSPORTATION

BENT NO. 3 DETAILS

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VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEET
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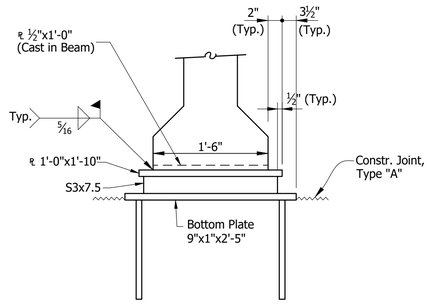
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PILE SLEEVE DETAIL

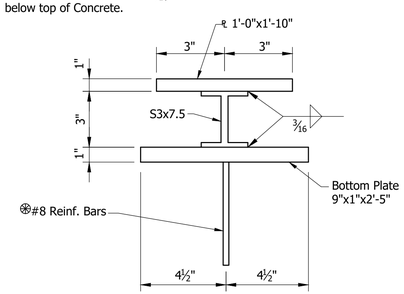
Not to Scale



ELEVATION

⊛ As an alternate a ⅞"Φx1'-3"Long Headed Automatic Welded Stud may be used.

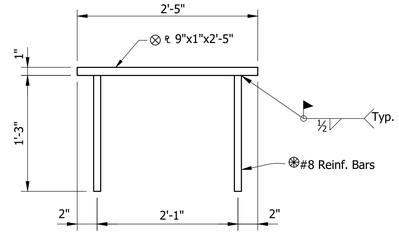
⊗ Setting Tolerance of Bottom Plate- Level with to not more than 1/16" below top of Concrete.



SECTION

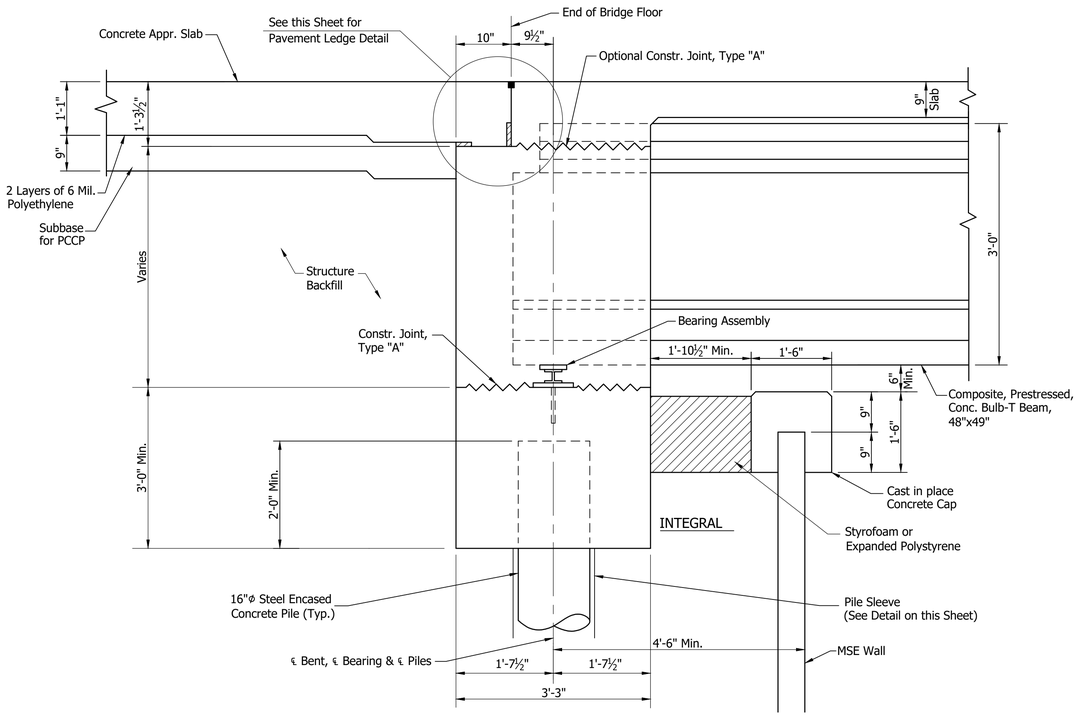
BEARING ASSEMBLY

Not to Scale



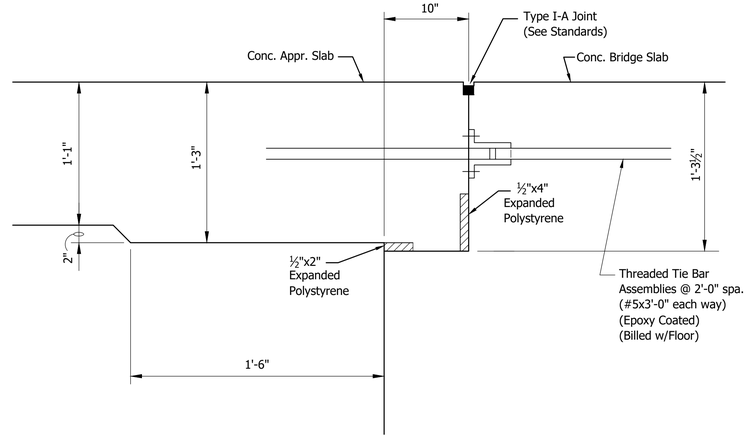
BOTTOM PLATE DETAIL

Not to Scale



SECTION "B-B"

Not to Scale



PAVEMENT LEDGE DETAIL

Not to Scale

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE

DESIGNED: V. SATHIRAJU DRAWN: K. COFFMAN

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

INDIANA DEPARTMENT OF TRANSPORTATION

BENTS NO. 1 AND BENT NO. 2 DETAILS

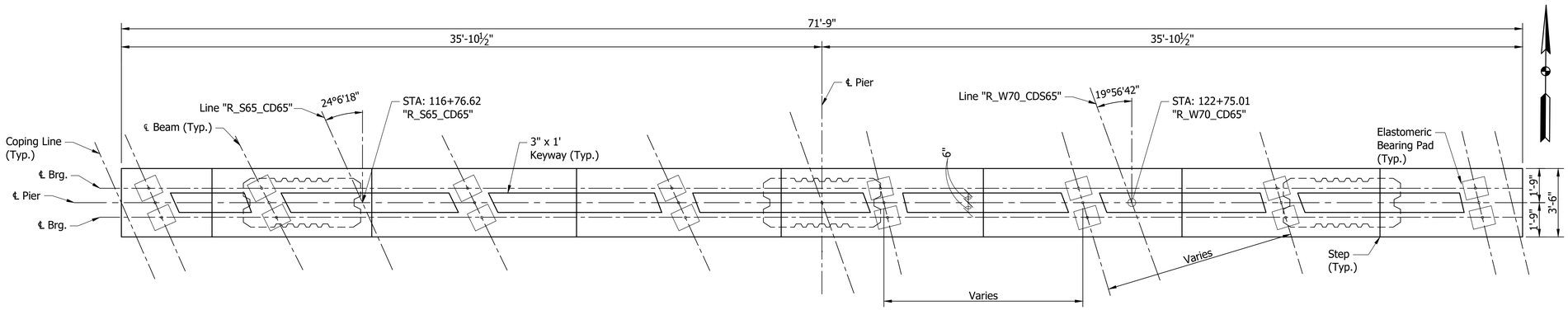
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N/A	I70-083-10623 CD
VERTICAL SCALE	DESIGNATION
N/A	1901905

SURVEY BOOK	SHEET
ELECTRONIC	9 OF 16
CONTRACT	PROJECT
B-36910	1600808

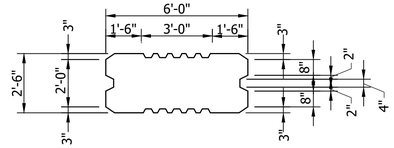
BFS NO. 6412

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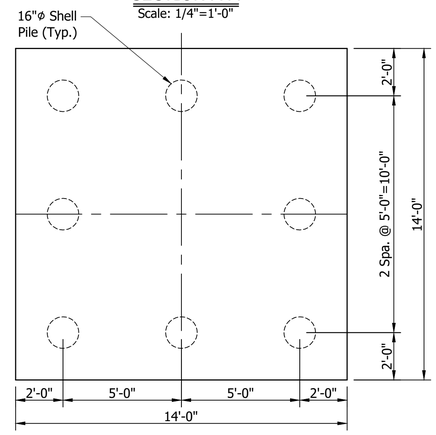
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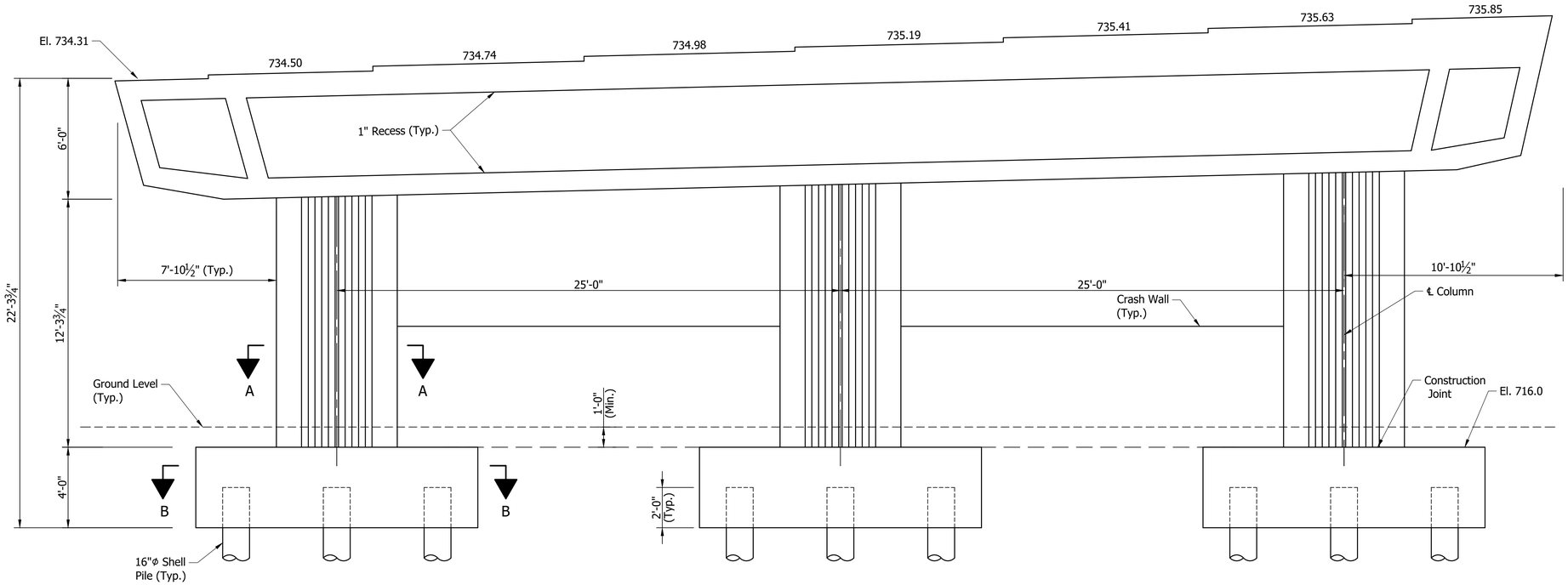
PLAN
Scale: 5/16"=1'-0"



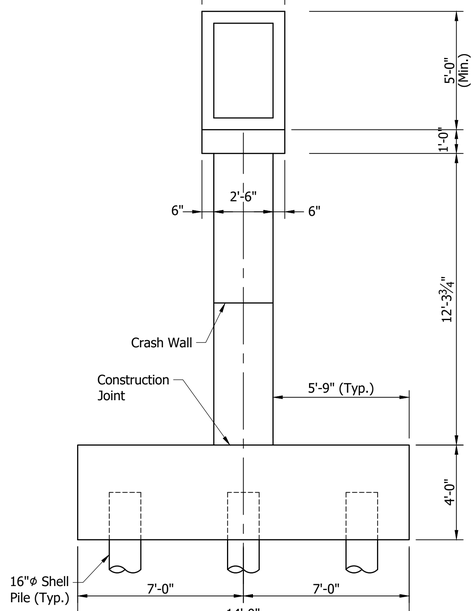
SECTION A-A
Scale: 1/4"=1'-0"



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



ELEVATION
Scale: 5/16"=1'-0"



SECTION
Scale: 5/16"=1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: V. SATHIRAJU DRAWN: K. COFFMAN

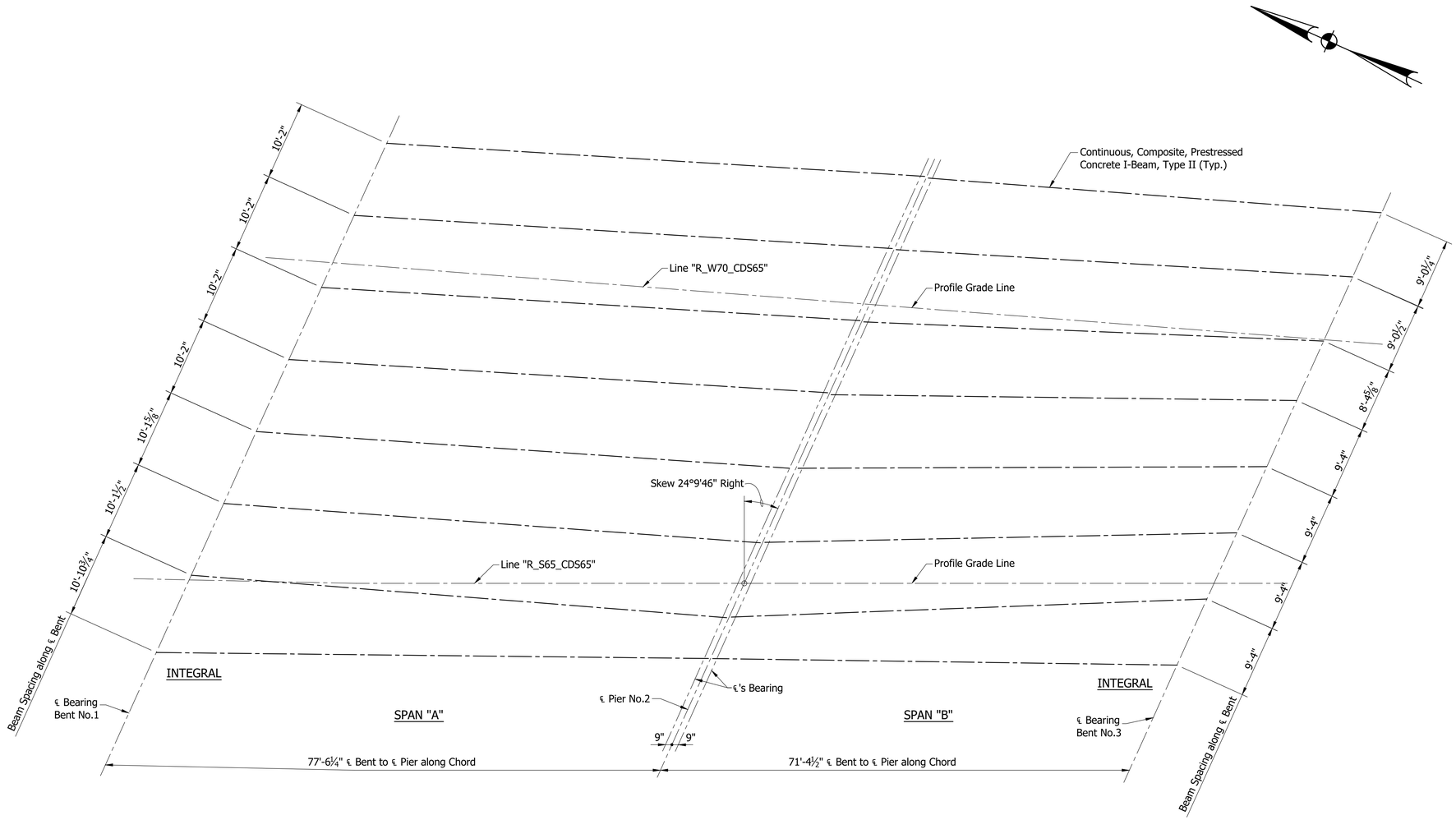
CHECKED: B. WRIGHT CHECKED: M. MATEL

INDIANA
DEPARTMENT OF TRANSPORTATION

PIER DETAILS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	I70-083-10623 CD
VERTICAL SCALE	DESIGNATION
N/A	1901905
SURVEY BOOK	SHEET
ELECTRONIC	10 OF 16
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412



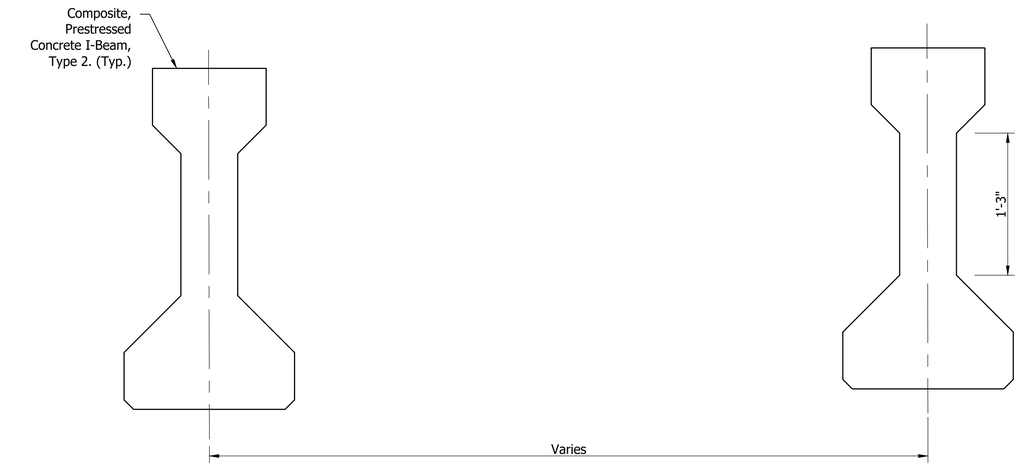
BEAM ERECTION PLAN

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

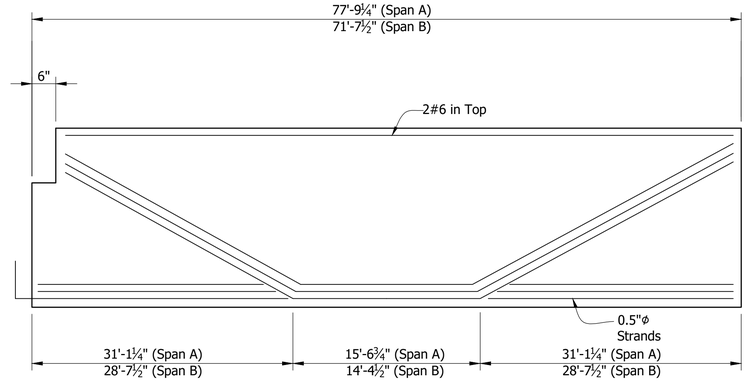
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			VERTICAL SCALE: N/A; DESIGNATION: 1901905
	DESIGNED: B. WRIGHT DRAWN: D. SHEETZ	FRAMING PLAN	SURVEY BOOK; SHEET: ELECTRONIC 11 OF 16
	CHECKED: M. EICHENAUER CHECKED: B. WRIGHT		CONTRACT: B-36910; PROJECT: 1600808

BFS NO. 6412

\\bfsrt241\Jobs5\641200.0000\ProjDevelopment\Design\Drawings\BRIDGES\08 OVER 10TH STREET\Structure 1901905\1901905_S_BR_FRM01 - FRAMING PLAN.dwg Dylan Piercefield Plot: 2/24/2020 10:28 AM Save: 2/20/2020 7:27 AM



ELEVATION
Scale: 1-1/2" = 1'-0"

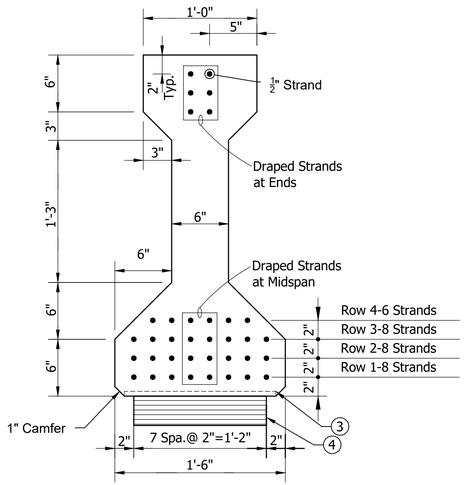


BEAM ELEVATION
SPAN "A" (SHOWN) SPAN "B" (OPP. HAND)
SHOWING DRAPED STRANDS
Not to Scale

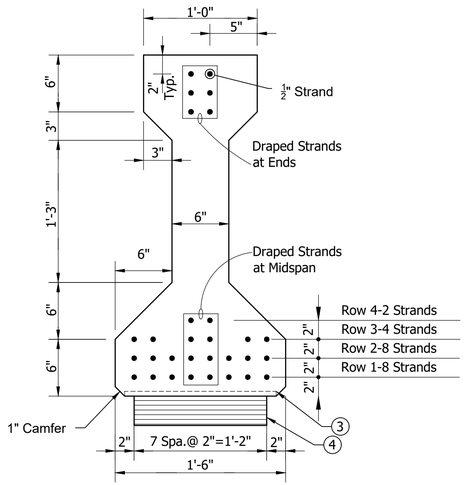
✳ Denotes Epoxy Coated

Note:
Bars 1" Clear
unless noted.

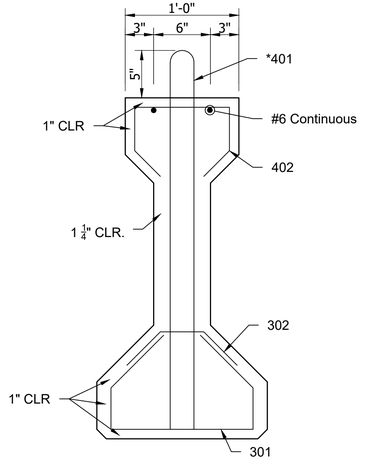
1. Surface Seal req'd on top of all Beams and Exterior Face of Exterior Beams
2. 1" Ø Holes or ¾"Ø Inserts for Dowels at Bent or Pier. (See Beam Plans)
3. ℄ ½"x12"x1'-4" at End Bent Ends only
4. INDOT Elastomeric Bearing Pad, Type 2 (55 Durometer) at Pier No.2



SECTION SHOWING STRANDS (SPAN A)



SECTION SHOWING STRANDS (SPAN B)



SECTION SHOWING REINFORCING

BEAM SECTIONS
Scale: 1-1/2" = 1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: J. GOULD DRAWN: D. PIERCEFIELD

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

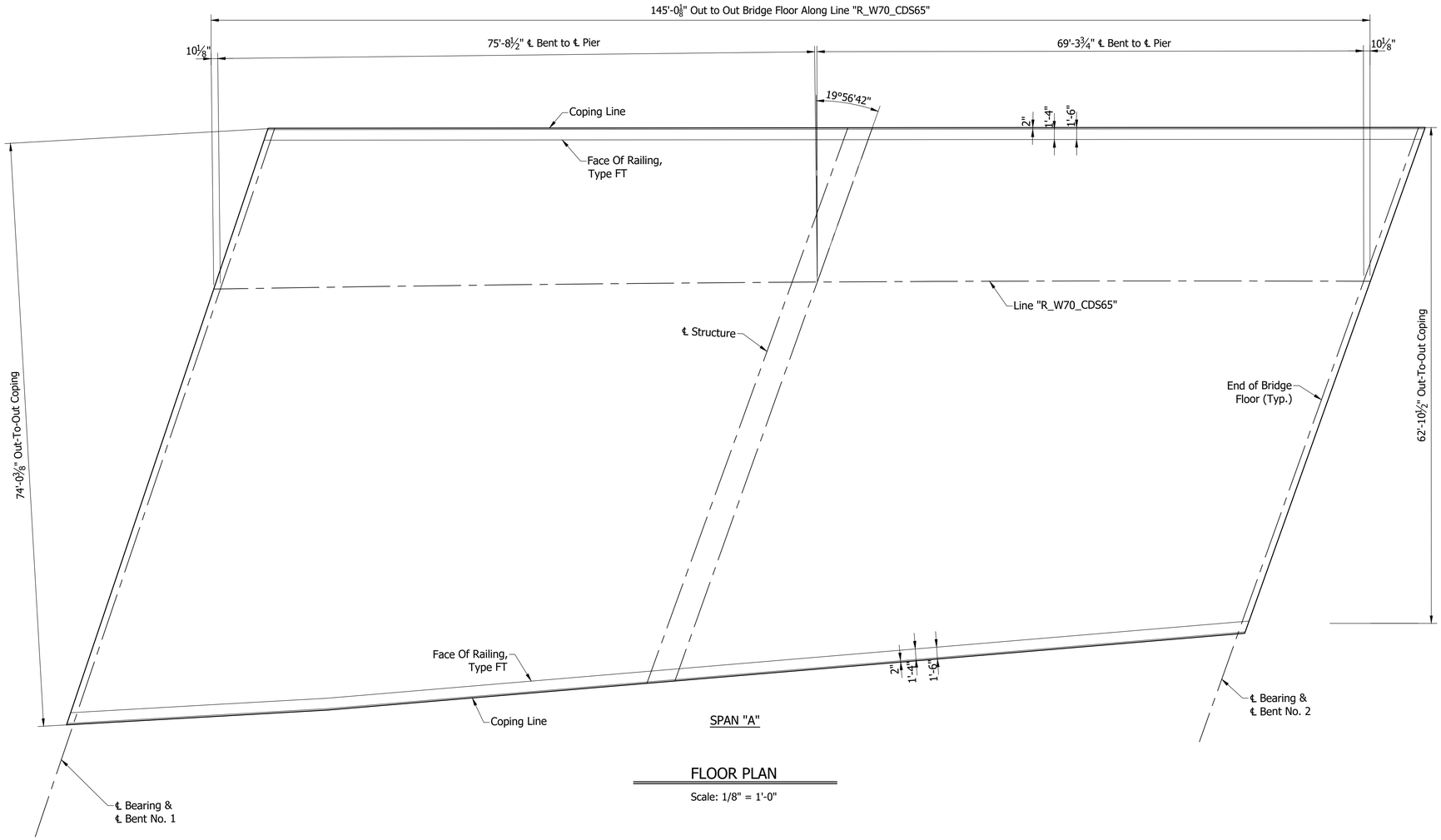
INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

HORIZONTAL SCALE	BRIDGE FILE
As Noted	170-083-10623 CD
VERTICAL SCALE	DESIGNATION
N/A	1901905
SURVEY BOOK	SHEET
ELECTRONIC	12 OF 16
CONTRACT	PROJECT
B-36910	1600808

BFS NO. 6412

\\bfsrt241\Jobs5\641200.0000\ProjDevelopment\Design\Drawings\BRIDGES\08 OVER 10TH STREET\Structure 1901905\1901905_S_BR_BMD01.dwg Dylan Piercefield Plot:2/24/2020 10:29 AM Save:2/20/2020 7:27 AM



FLOOR PLAN

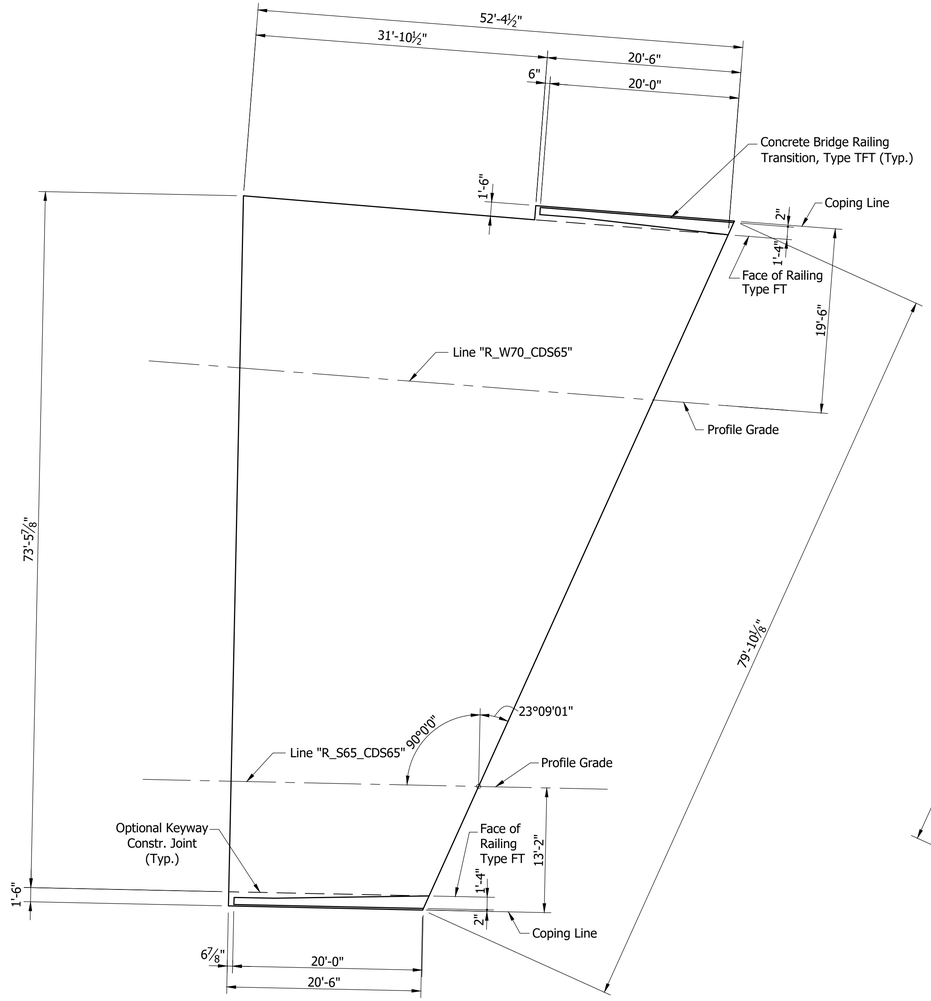
Scale: 1/8" = 1'-0"

NOTE:
See Sheet ___ For _____

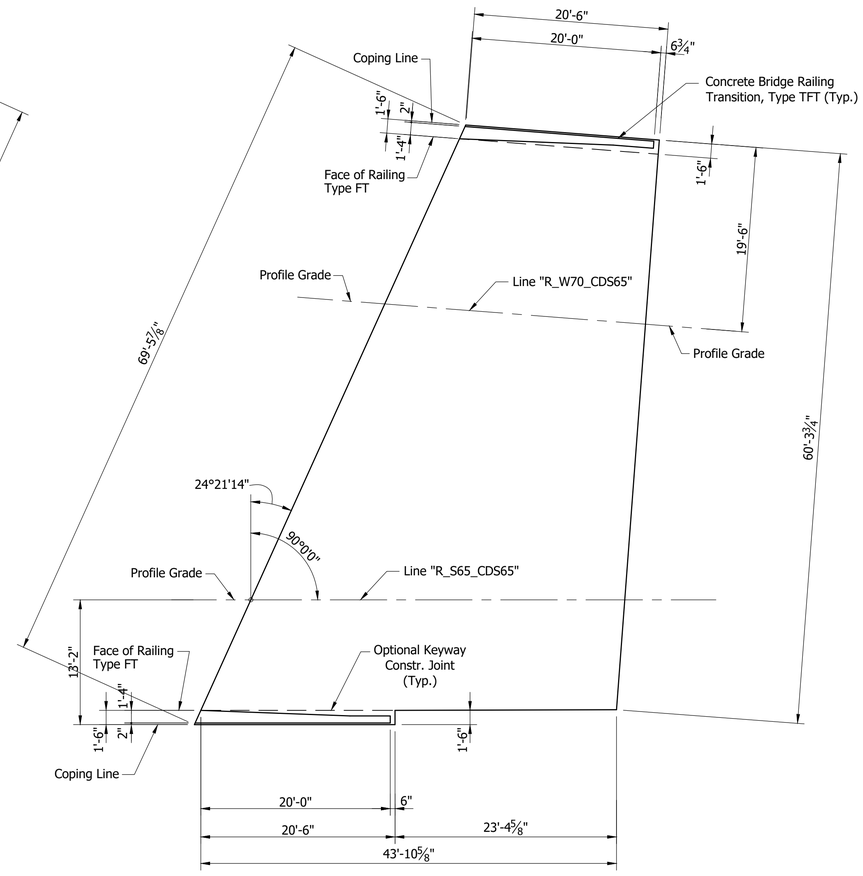
	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: As Noted	BRIDGE FILE: I70-083-10623 CD
			VERTICAL SCALE: N/A	DESIGNATION: 1901905
	DESIGNED: V. SATHIRAJU DRAWN: D. PIERCEFIELD	FLOOR DETAILS	SURVEY BOOK: ELECTRONIC	SHEET: 13 OF 16
	CHECKED: B. WRIGHT CHECKED: B. WRIGHT		CONTRACT: B-36910	PROJECT: 1600808

BFS NO. 6412

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PLAN
NORTH SLAB
Scale: ⅛"=1'-0"

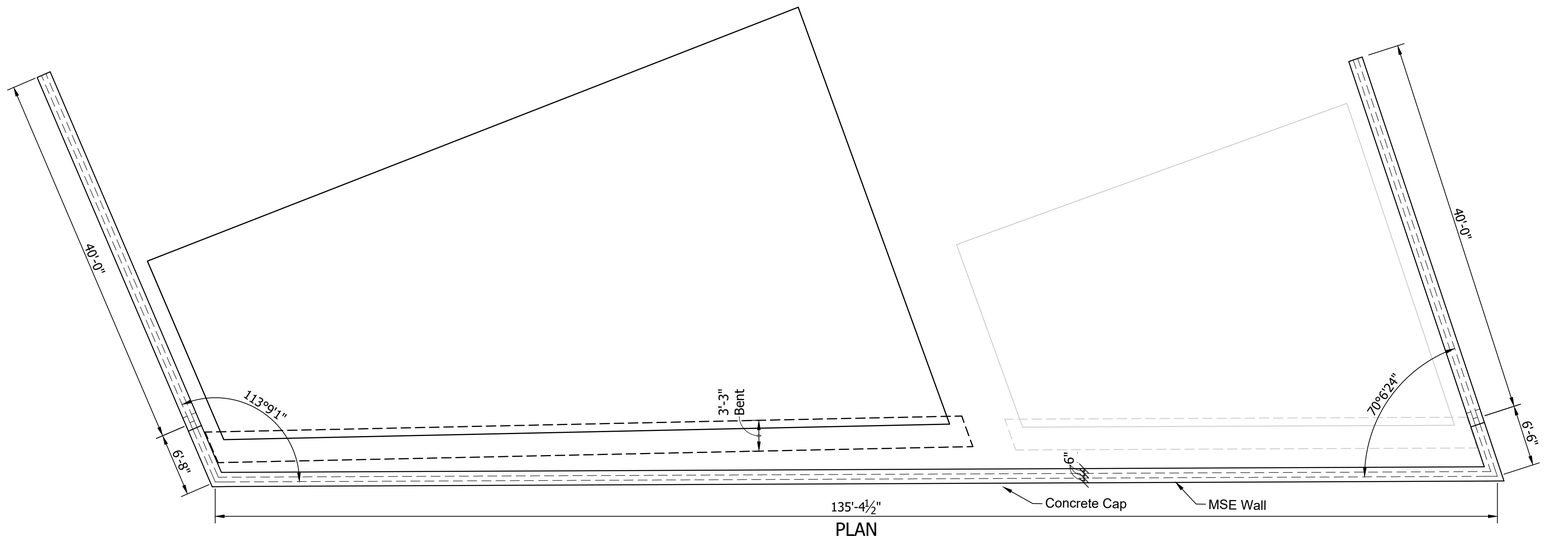


PLAN
SOUTH SLAB
Scale: ⅛"=1'-0"

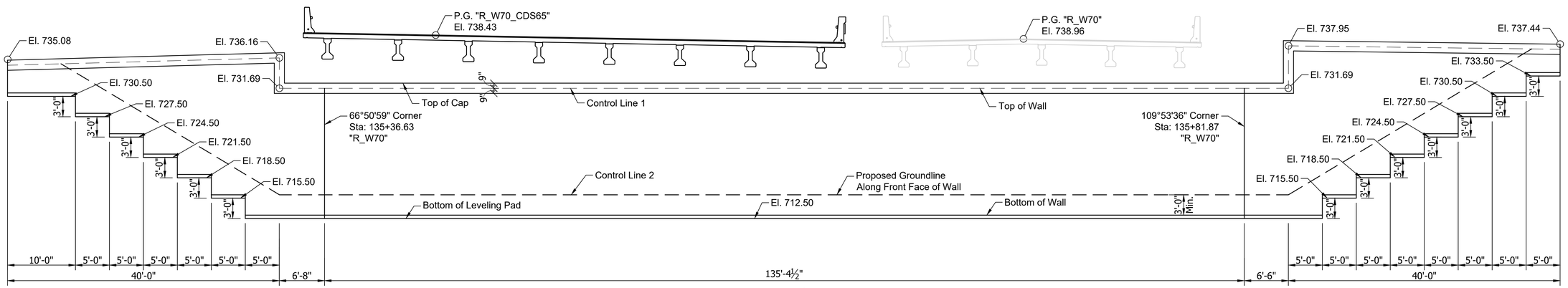
	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: As Noted	BRIDGE FILE: I70-083-10623 CD
			VERTICAL SCALE: N/A	DESIGNATION: 1901905
	DESIGNED: D. SHEETZ DRAWN: D. SHEETZ	APPROACH SLAB	SURVEY BOOK	SHEET: 14 OF 16
	CHECKED: B. WRIGHT CHECKED: B.WRIGHT		ELECTRONIC	
			CONTRACT: B-36910	PROJECT: 1600808

BPS NO. 6412

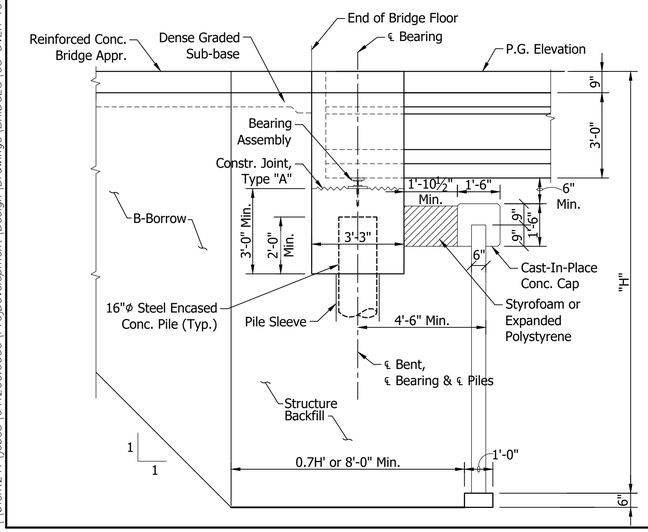
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PLAN
MSE WALL NO. 1 (NORTHERN)
Scale: 1/8"=1'-0"



ELEVATION
MSE WALL NO. 1 (NORTHERN)
Scale: 1/8"=1'-0"



SECTION
MSE WALL NO. 1
Scale: 3/8"=1'-0"

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE

DESIGNED: B. WRIGHT DRAWN: D. PIERCEFIELD

CHECKED: M. EICHENAUER CHECKED: B. WRIGHT

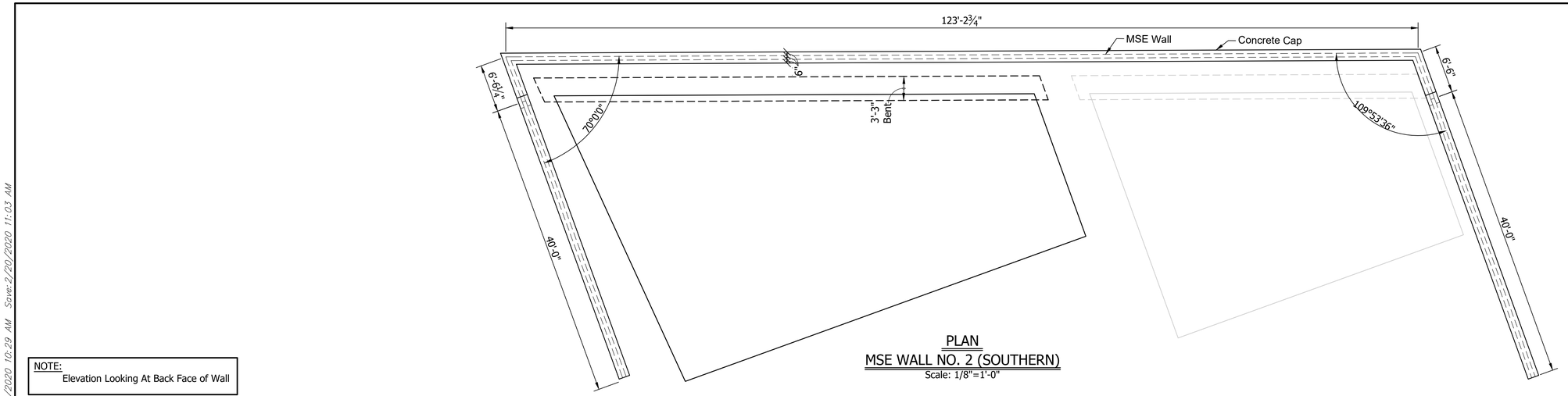
INDIANA
DEPARTMENT OF TRANSPORTATION

WALL LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I70-083-10623 CD
VERTICAL SCALE	DESIGNATION
AS NOTED	1901905
SURVEY BOOK	SHEET
ELECTRONIC	15 OF 16
CONTRACT	PROJECT
B-36910	1600808

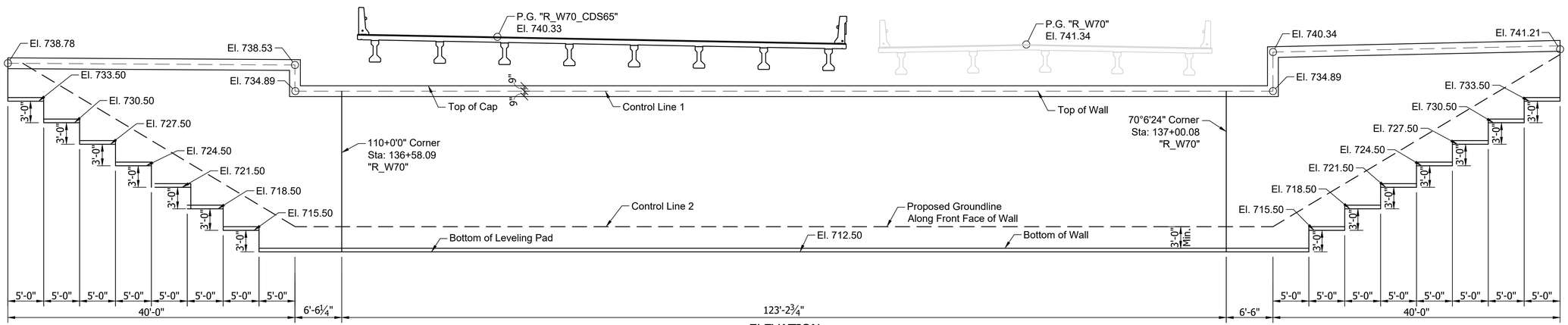
BFS NO. 6412

\\bfsnt241\Jobs5\641200.0000\ProjDevelopment\Design\Drawings\BRIDGES\08 OVER 10TH STREET\Structure 1901905\1901905_S_BR_WL01.dwg Dylan Piercefield Plot: 2/24/2020 10:29 AM Save: 2/20/2020 10:18 AM

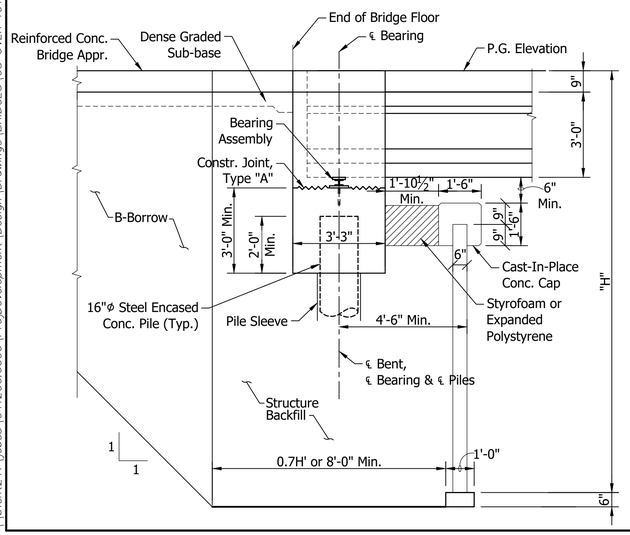


PLAN
MSE WALL NO. 2 (SOUTHERN)
Scale: 1/8"=1'-0"

NOTE:
Elevation Looking At Back Face of Wall



ELEVATION
MSE WALL NO. 2 (SOUTHERN)
Scale: 1/8"=1'-0"



SECTION
MSE WALL NO. 2
Scale: 3/8"=1'-0"

	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: AS NOTED; BRIDGE FILE: I70-083-10623 CD
	DESIGNED: B. WRIGHT DRAWN: D. PIERCEFIELD	WALL LAYOUT	VERTICAL SCALE: AS NOTED; DESIGNATION: 1901905
	CHECKED: M. EICHENAUER CHECKED: B. WRIGHT		SURVEY BOOK; SHEET: ELECTRONIC 16 OF 16; CONTRACT; PROJECT: B-36910; 1600808

BFS NO. 6412

\\bfs1241\jobs$\641200.0000\ProjDevelopment\Design\Drawings\BRIDGES\08 OVER 10TH STREET\Structure 1901905\1901905_S_BR_WL02.dwg Dylan Piercefield Plot:2/24/2020 10:29 AM Save:2/20/2020 11:03 AM

PROJECT	DESIGNATION
1600808	1901906, 1901907,1901908 & 1901909
CONTRACT	BRIDGE FILE
B-36910	I65-112-10624 CD, I65-112-10625 NBL, I65-112-10626 SBL & I65-112-10627 CD

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

FOR SPANS OVER 20 FEET

ROUTE: I-65 AT: RP 112+81

PROJECT NO. 1600808 (P.E. & CONSTR.)

TRAFFIC DATA		11TH STREET TO I-70 EB	I-65 SOUTHBOUND	I-65 NORTHBOUND	I-65 NB TO 12TH STREET	CENTRAL AVE
A.A.D.T.	(2021)	14,120 V.P.D.	53,313 V.P.D.	51,774 V.P.D.	8,777 V.P.D.	9,948 V.P.D.
A.A.D.T.	(2041)	16,420 V.P.D.	54,650 V.P.D.	58,376 V.P.D.	9,854 V.P.D.	10,239 V.P.D.
D.H.V	(2041)	1,642 V.P.H.	4,372 V.P.H.	5,429 V.P.H.	1,281 V.P.H.	1,475 V.P.H.
DIRECTIONAL DISTRIBUTION		100 %	0 %	100 %	100 %	10 %
TRUCKS		7 % D.H.V.	5 % D.H.V.	4 % D.H.V.	2 % D.H.V.	2 % D.H.V.
DESIGN DATA						
DESIGN SPEED		35 M.P.H.		55 M.P.H.	45 M.P.H.	35 M.P.H.
PROJECT DESIGN CRITERIA			COMPLETE RECONSTRUCTION (FREEWAY)			N/A
FUNCTIONAL CLASSIFICATION			URBAN FREEWAY			MINOR ARTERIAL
RURAL/URBAN			URBAN (BUILT-UP)			URBAN (BUILT-UP)
TERRAIN			LEVEL			LEVEL
ACCESS CONTROL			FULL			NONE

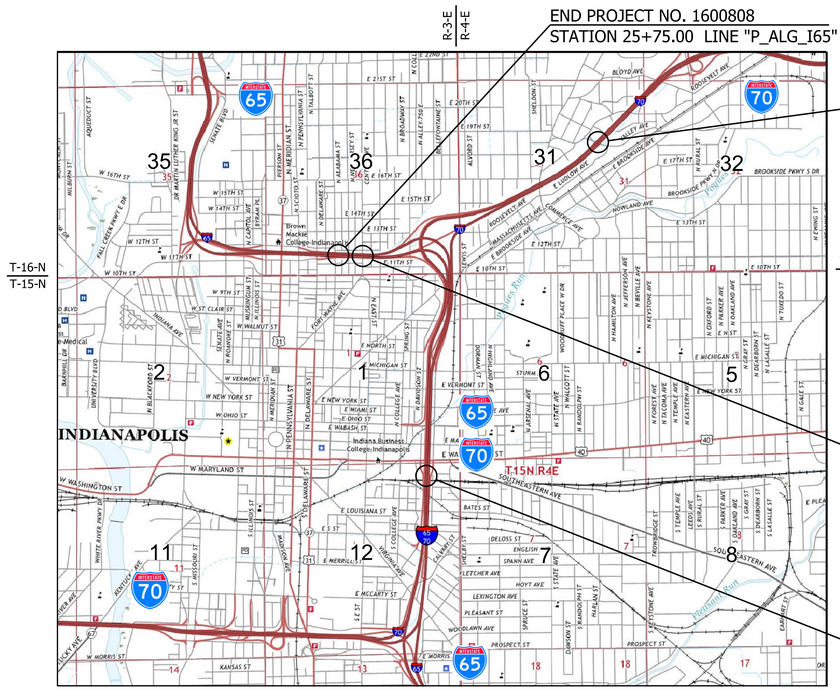
STRUCTURE INFORMATION

STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I65-112-10624 CD, I65-112-10625 NBL, I65-112-10626 SBL & I65-112-10627	PRESTRESSED CONCRETE BULB-TEE BEAM BRIDGES	1 SPAN: 86'-6" SKEW: 02°30'00" LT.	CENTRAL AVENUE	32+68.41

KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901914	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER COLLEGE AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901927	BRIDGE REPLACEMENT ON I-65 SB TO I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE) - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER VERMONT STREET	

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

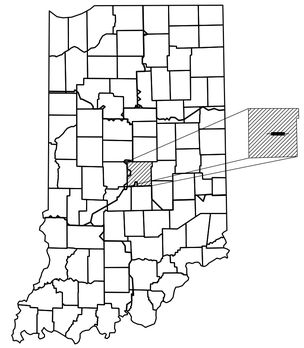
BRIDGE REPLACEMENT ON I-65 OVER CENTRAL AVENUE
LOCATED 0.4 MILES WEST OF I-70 (NORTH SPLIT) INTERCHANGE
IN SECTION 36, T-16-N, R-3-E, CENTER TOWNSHIP, MARION COUNTY, INDIANA



LOCATION MAP
(MARION COUNTY)

T-16-N
T-15-N

SCALE: 1" = 2000'



PROJECT LOCATION SHOWN BY MARION COUNTY

LATITUDE: 39°46'25.9" N LONGITUDE: 86°08'31.7" W

HYDROLOGIC UNIT CODE: 05120201130020

BRIDGE LENGTH:	0.016	MI.
ROADWAY LENGTH:	SEE ROAD PLANS	MI.
TOTAL LENGTH:	SEE ROAD PLANS	MI.
MAX. GRADE:	-0.30	%

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2020
TO BE USED WITH THESE PLANS

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

SUPERIOR CONSTRUCTION

PLANS PREPARED BY: Janssen & Spaans Engineering (317) 254-9686
PHONE NUMBER

CERTIFIED BY: _____ DATE

RECOMMENDED FOR LETTING: _____
INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE
I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
DESIGNATION
1901906, 1901907, 1901908 & 1901909

SURVEY BOOK	SHEETS		
ELECTRONIC	1	of	25
CONTRACT	PROJECT		
B-36910	1600808		

Plot: 2/26/2020 3:51:41 PM

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_01 - Title.dgn

UTILITIES

INDEX

SHEET NO.	SUBJECT
1	TITLE
2	INDEX
3	MAINTENANCE OF TRAFFIC - NORTHBOUND BRIDGE & CD RAMP 12TH ST.
4	MAINTENANCE OF TRAFFIC - SOUTHBOUND BRIDGE & CD RAMP 11TH ST.
5	LAYOUT
6	GENERAL PLAN - NORTHBOUND BRIDGE & CD RAMP 12TH ST.
7	GENERAL PLAN - TYPICAL SECTIONS - NORTHBOUND BRIDGE & CD RAMP 12TH ST.
8	GENERAL PLAN - SOUTHBOUND BRIDGE & CD RAMP 11TH ST.
9	GENERAL PLAN - TYPICAL SECTIONS - SOUTHBOUND BRIDGE & CD RAMP 11TH ST.
10	BENT NO. 1 DETAILS - NORTHBOUND BRIDGE & CD RAMP 12TH ST.
11	BENT NO. 1 DETAILS - SOUTHBOUND BRIDGE & CD RAMP 11TH ST.
12	BENT NO. 2 DETAILS - NORTHBOUND BRIDGE & CD RAMP 12TH ST.
13	BENT NO. 2 DETAILS - SOUTHBOUND BRIDGE & CD RAMP 11TH ST.
14	BENT NO. 1 & 2 DETAILS
15	FRAMING PLAN - NORTHBOUND BRIDGE & CD RAMP 12TH ST.
16	FRAMING PLAN - SOUTHBOUND BRIDGE & CD RAMP 11TH ST.
17	BEAM DETAILS - NORTHBOUND BRIDGE
18	BEAM DETAILS - SOUTHBOUND BRIDGE
19	BEAM DETAILS - CD RAMPS
20	DECK PLAN - NORTHBOUND BRIDGE & CD RAMP 12TH ST.
21	DECK PLAN - SOUTHBOUND BRIDGE & CD RAMP 11TH ST.
22	APPROACH SLAB DETAILS - NORTHBOUND BRIDGE & CD RAMP 12TH ST.
23	APPROACH SLAB DETAILS - SOUTHBOUND BRIDGE & CD RAMP 11TH ST.
24	RETAINING WALL LAYOUT - BENT NO. 1
25	RETAINING WALL LAYOUT - BENT NO. 2

REVISIONS

SHEET NO.	DATE	REVISED

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

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

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: JNR

CHECKED: CML | CHECKED: SL

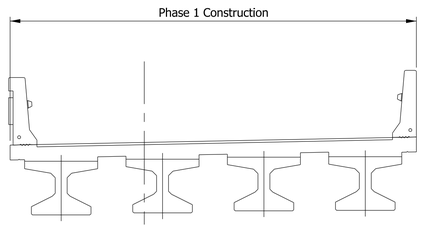
INDIANA
DEPARTMENT OF TRANSPORTATION

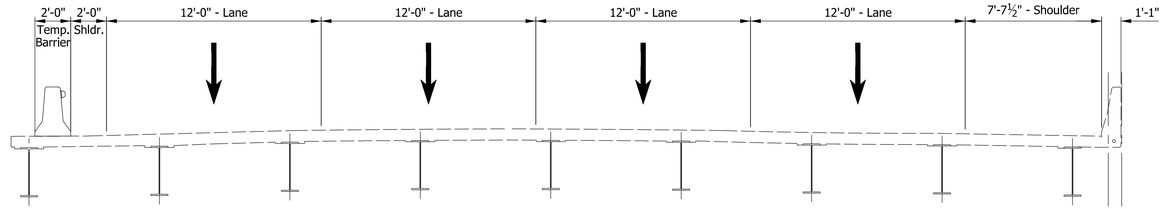
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SCALE	BRIDGE FILE: I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
	DESIGNATION: 1901906, 1901907, 1901908 & 1901909
SURVEY BOOK	SHEETS
ELECTRONIC	2 of 25
CONTRACT	PROJECT
B-36910	1600808

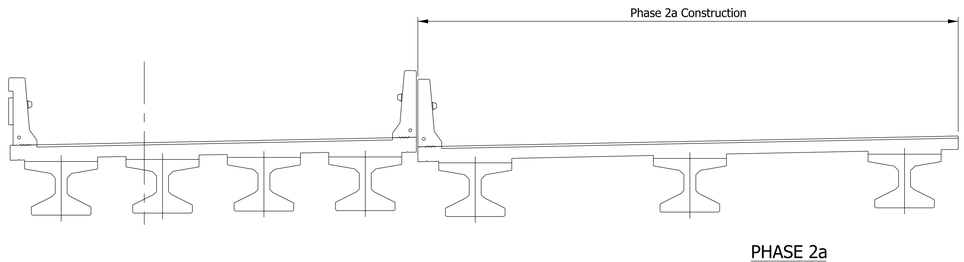
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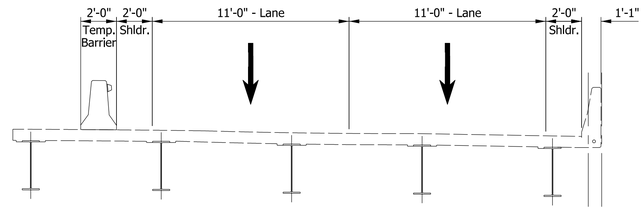
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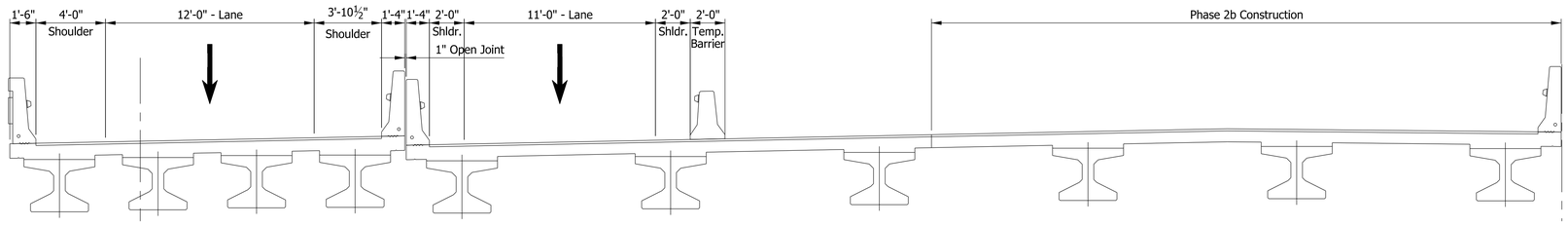


PHASE 1





PHASE 2a



PHASE 2b

Plot: 2/26/2020 3:51:46 PM

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: JNR

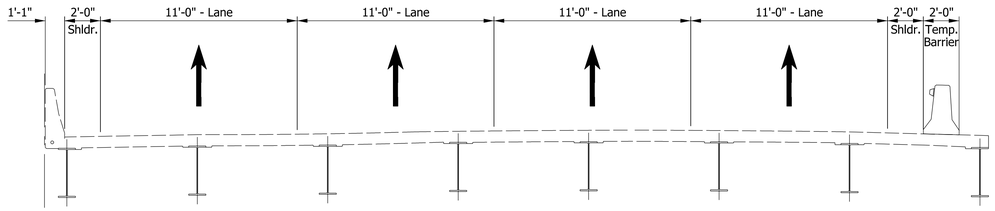
CHECKED: CML | CHECKED: SL

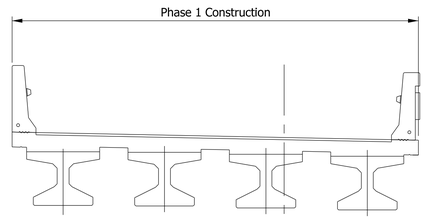
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC NORTHBOUND BRIDGE & CD RAMP 12TH ST.

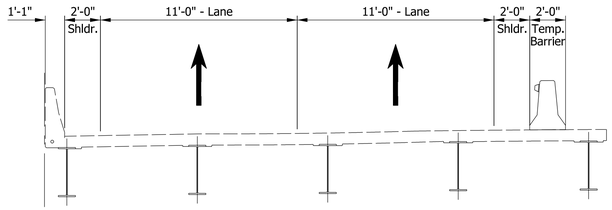
SCALE	BRIDGE FILE
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	DESIGNATION
	1901906, 1901907, 1901908 & 1901909
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 25
CONTRACT	PROJECT
B-36910	1600808

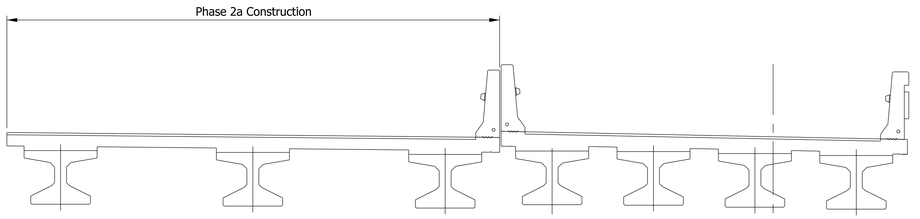
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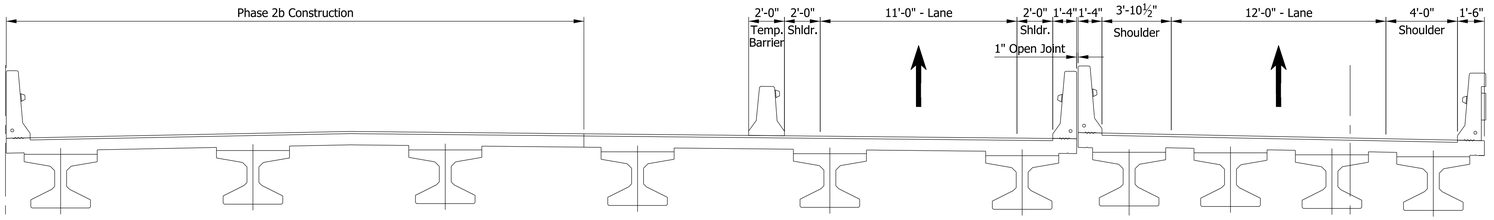


PHASE 1





PHASE 2a



PHASE 2b

Plot: 2/26/2020 3:51:47 PM

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RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: SL DRAWN: JNR

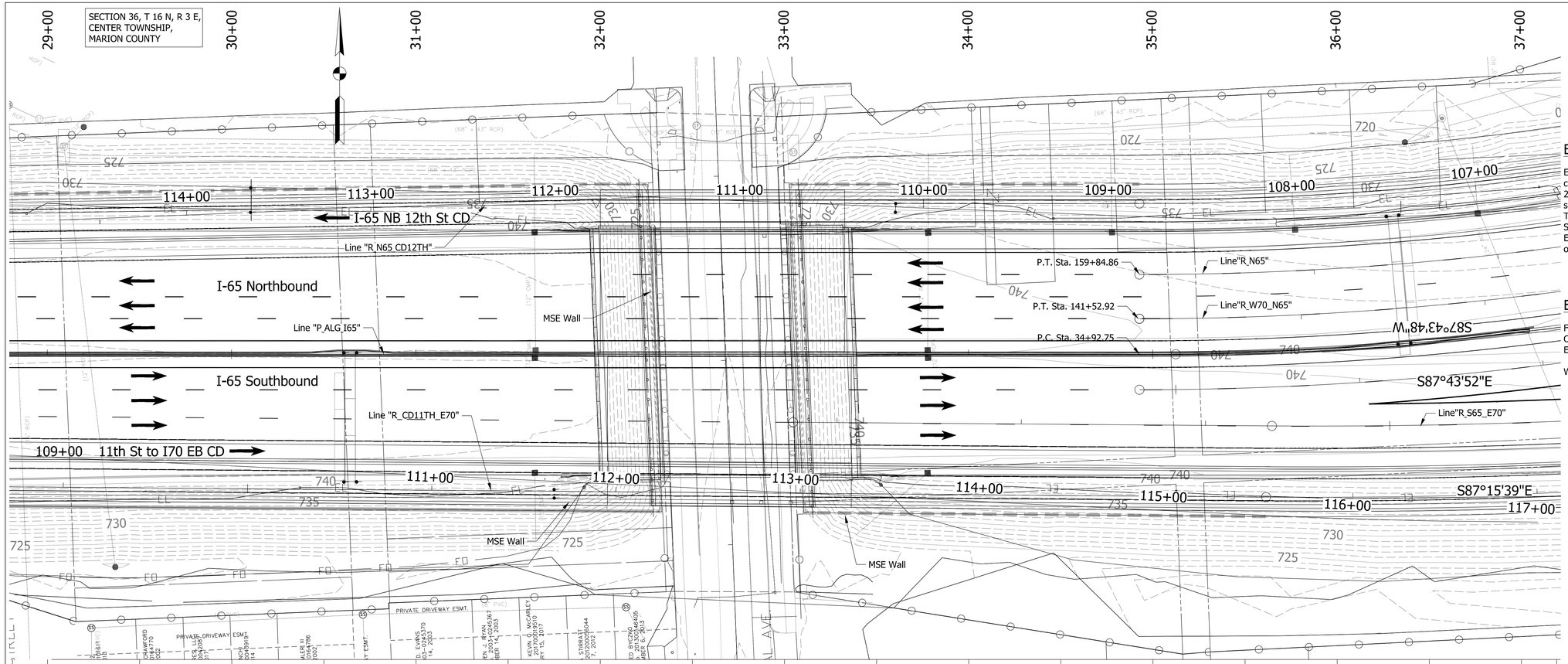
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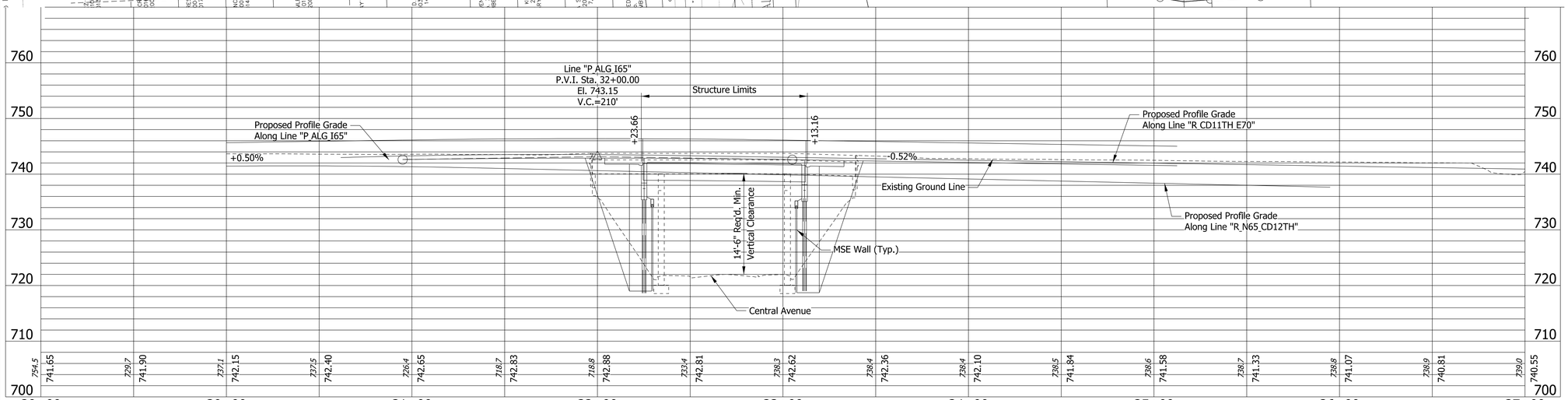
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC SOUTHBOUND BRIDGE & CD RAMP 11TH ST.

SCALE	BRIDGE FILE
1/8" = 1'-0"	I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
	DESIGNATION
	1901906, 1901907, 1901908 & 1901909
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 25
CONTRACT	PROJECT
B-36910	1600808

SECTION 36, T 16 N, R 3 E,
CENTER TOWNSHIP,
MARION COUNTY





EXISTING STRUCTURE:

Existing structure built in 1974 is a continuous composite steel beam bridge. rehabilitated in 2003 with overlay and retrofitted railing is a three span 45'-0", 82'-0", 45'-0", with a variable skew. The structure has a clear roadway width of 63'-6", Structure is to be removed.
Existing plans are on file with Indiana Department of Transportation under Bridge File No. I-65-112-5734

EARTHWORK TABULATION

Fill+20%	(See Road Plans)
Common Excavation	(See Road Plans)
Excavation, Foundation, Unclassified (70%)	(See Road Plans)
Waste	(See Road Plans)

NOTES:

1. See sheet 2 for utility owners.
2. All R/W shall be as shown.
3. There shall be no clearing of trees beyond construction limits.
4. All topography is existing.
5. All R/W described from line "P_ALG_I65", except as noted.
6. Proposed lighting, traffic sign structures and drainage not shown.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGES
1 SPAN: 86'-6"
SKEW: 02°30'00" LT.
CLEAR ROADWAYS:
VARIES SB, 63'-10½" NB
19'-10½" 12TH ST CD, &
19'-10½" 11TH ST CD
I-65 NB & SB OVER
CENTRAL AVENUE
MARION COUNTY

Plot: 2/26/2020 3:51:53 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_05 - Layout.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

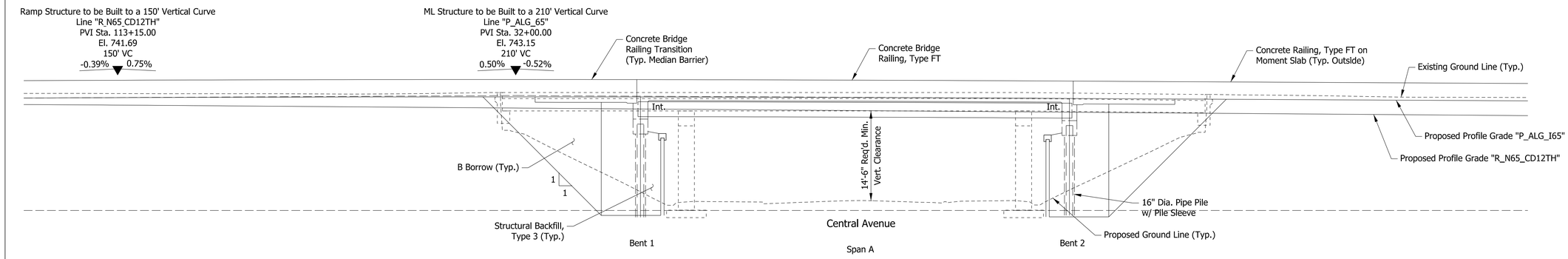
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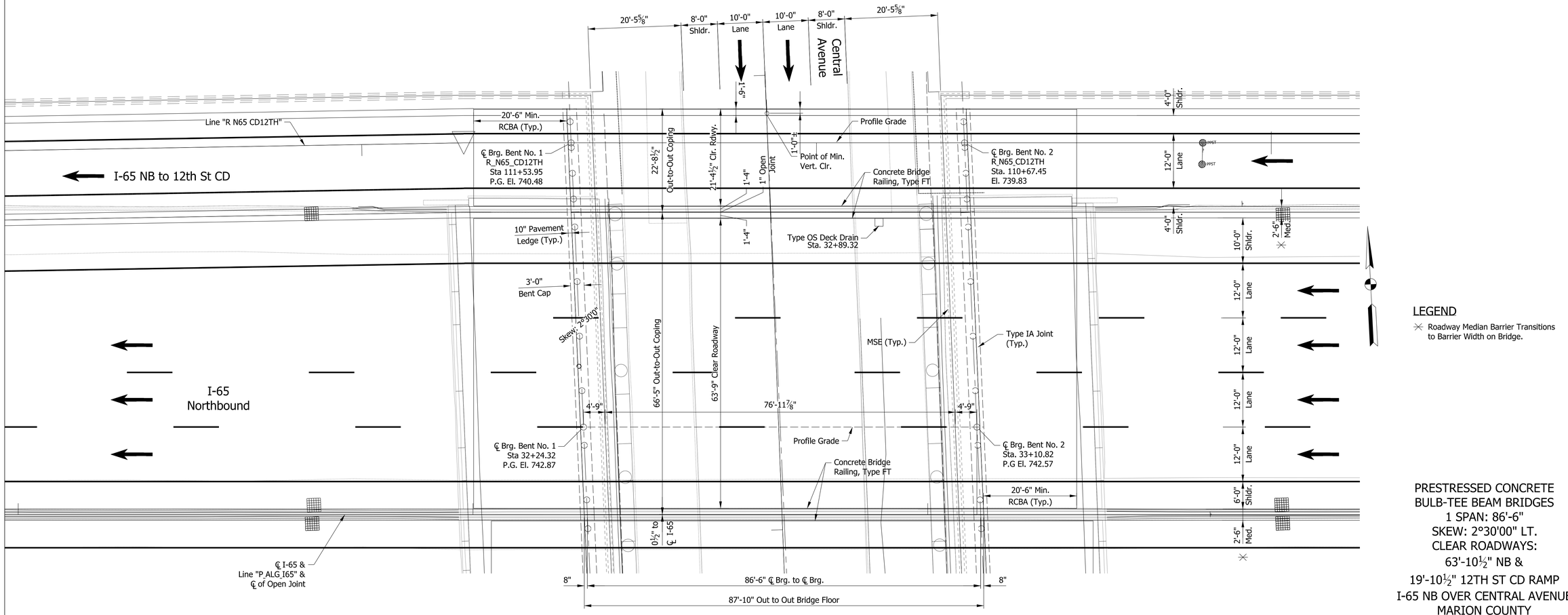
INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
VERTICAL SCALE	DESIGNATION
1" = 10'-0"	1901906, 1901907, 1901908 & 1901909
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 25
CONTRACT	PROJECT
B-36910	1600808



ELEVATION



PLAN

LEGEND

⋇ Roadway Median Barrier Transitions to Barrier Width on Bridge.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGES
1 SPAN: 86'-6"
SKEW: 2°30'00" LT.
CLEAR ROADWAYS:
63'-10½" NB &
19'-10½" 12TH ST CD RAMP
I-65 NB OVER CENTRAL AVENUE
MARION COUNTY

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: SL DRAWN: JRC
CHECKED: CML CHECKED: SL

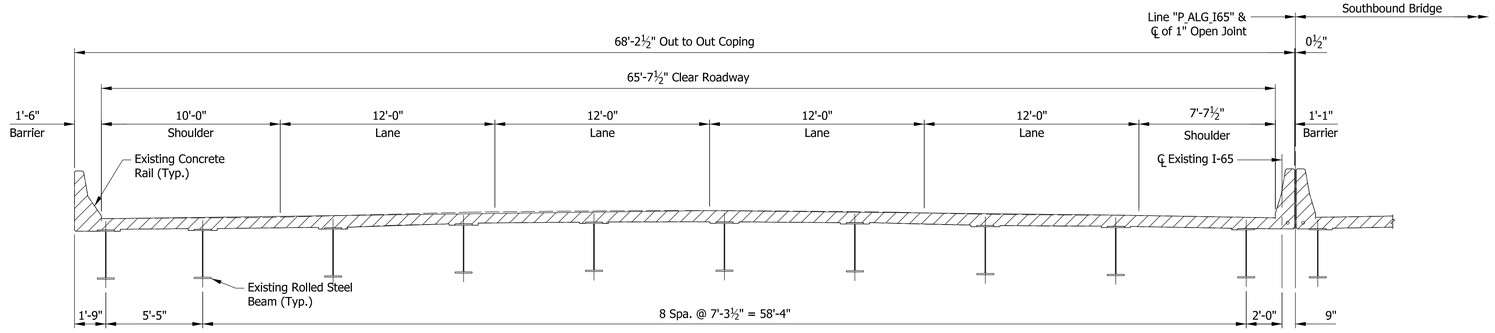
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
NORTHBOUND BRIDGE & CD RAMP 12TH ST.

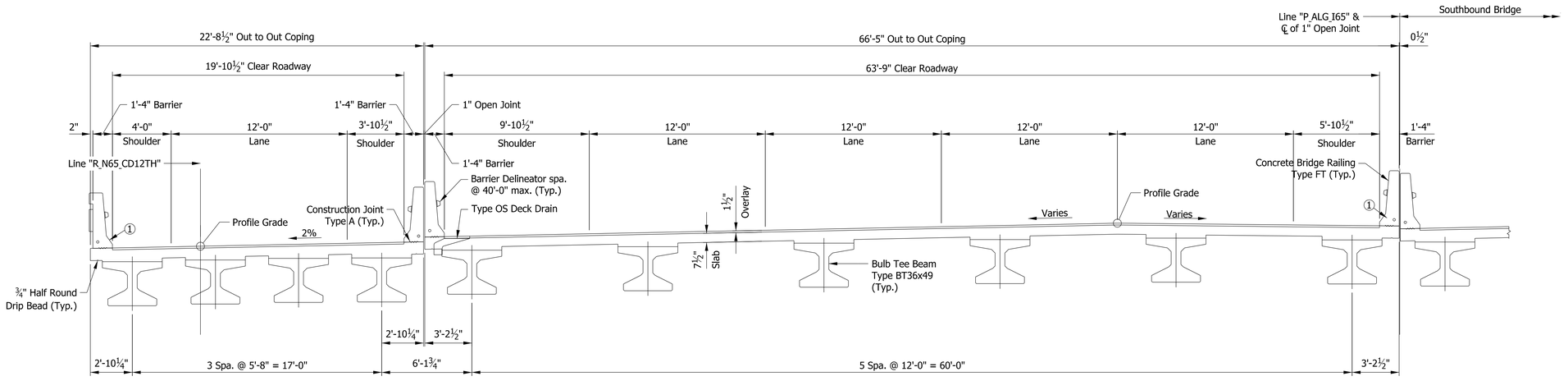
SCALE	BRIDGE FILE
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	DESIGNATION
	1901906, 1901907, 1901908 & 1901909
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 25
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/26/2020 3:52:29 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_06 - General Plan NB.dgn



EXISTING NORTHBOUND TYPICAL SECTION



PROPOSED NORTHBOUND TYPICAL SECTION

GENERAL NOTES

Reinforcing bar cover shall be 2" min. in top and 1" min. in bottom of floor slabs, 3" min. in footing except bottom bars which shall be 4" min, and 2" min. in al other parts, unless noted.

All dimensions and elevations are in feet (FT) unless otherwise noted.

Concrete in floor slab, diaphragms, barrier, approach slab, and end bents shall be and alternative class "C" in accordance with the technical provisions. Reinforcing bars in deck, barrier, and end bent diaphragm extending into the deck shall be stainless steel. reinforcing bars in end bent diaphragm not extending into the deck and in the cap shall be epoxy coated.

Anti-graffiti coating shall be placed on all exposed surfaces of new retaining walls and new bridge structures excluding top of deck or overlay and interior beams.

For aesthetics associated with the bridge opening, see Bridge Opening Aesthetics Plan package.

DESIGN DATA

Live Load
Superstructure and Substructure designed for HL-93 loading in accordance with AASHTO LRFD Bridge Design Specifications Eight Edition, 2017 & subsequent interim.

Dead Load
Designed for actual dead load plus 15 PSF for SIP metal deck forms.

Slab designed with a 7½" structural depth and a 1½" very early strength LMC overlay.

SEISMIC DESIGN DATA

Seismic Performance Zone = 1
Acceleration Coefficient = 0.061
Seismic Soil Profile Type = Site Class C

DESIGN STRENGTHS

Prestressed Concrete	f'c = 10,000 psi @ 28 Days
Class "A" Concrete	f'c = 3,500 psi
Class "B" Concrete	f'c = 3,000 psi
Class "C" Concrete	f'c = 4,000 psi
Rienforcing Bars	fy = 60,000 psi (barrier)
Reinforcing Bars	fy = 75,000 psi (all other locations)

CONSTRUCTION LOADING

The exterior beam must be 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 beam. The finishing machine was assumed to be supported 6" past the edge of the vertical coping form. The top overhang brackets were assumed to be located 6" past the edge of the vertical coping form. The bottom overhang brackets were assumed to be braced against the intersection of the beam bottom flange and web.

Deck Falsework Loads:	Designed for 15 lb/sft for permanent metal stay in place deck forms, removable deck forms, and 2-ft exterior walkway.
Construction Live Load:	Designed 20 lb/sft extending 2-ft past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30-ft length of deck centered with the finishing machine.
Finishing-Machine Load:	4500 lb distributed over 10-ft along the coping.
Wind Load	Structure designed for 70 MPH horizontal wind loading in accordance with AASHTO LRFD3.8.1.

LEGEND

- Limits of Removal
- Beam Spacing and overhang dimensions shall be determined by the Design-Build Contractor during final design.
- ① Proposed number of conduit, type, and size for lighting shall be determined by the Design-Build Contractor during final design in accordance with the project standards.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGES
1 SPAN: 86'-6"
SKEW: 2°30'00" LT.
CLEAR ROADWAYS:
63'-10½" NB &
19'-10½" 12TH ST. CD RAMP
I-65 NB OVER CENTRAL AVENUE
MARION COUNTY

Plot: 2/26/2020 3:52:42 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_07 -Typical Sections NB.dgn

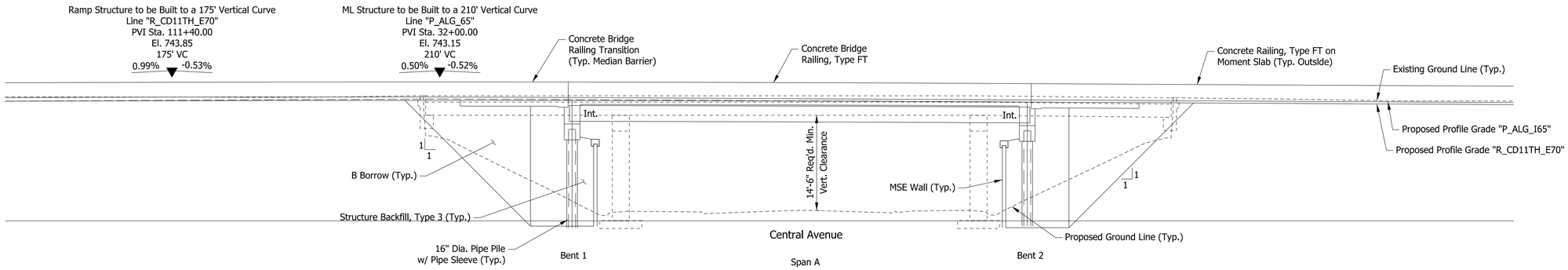
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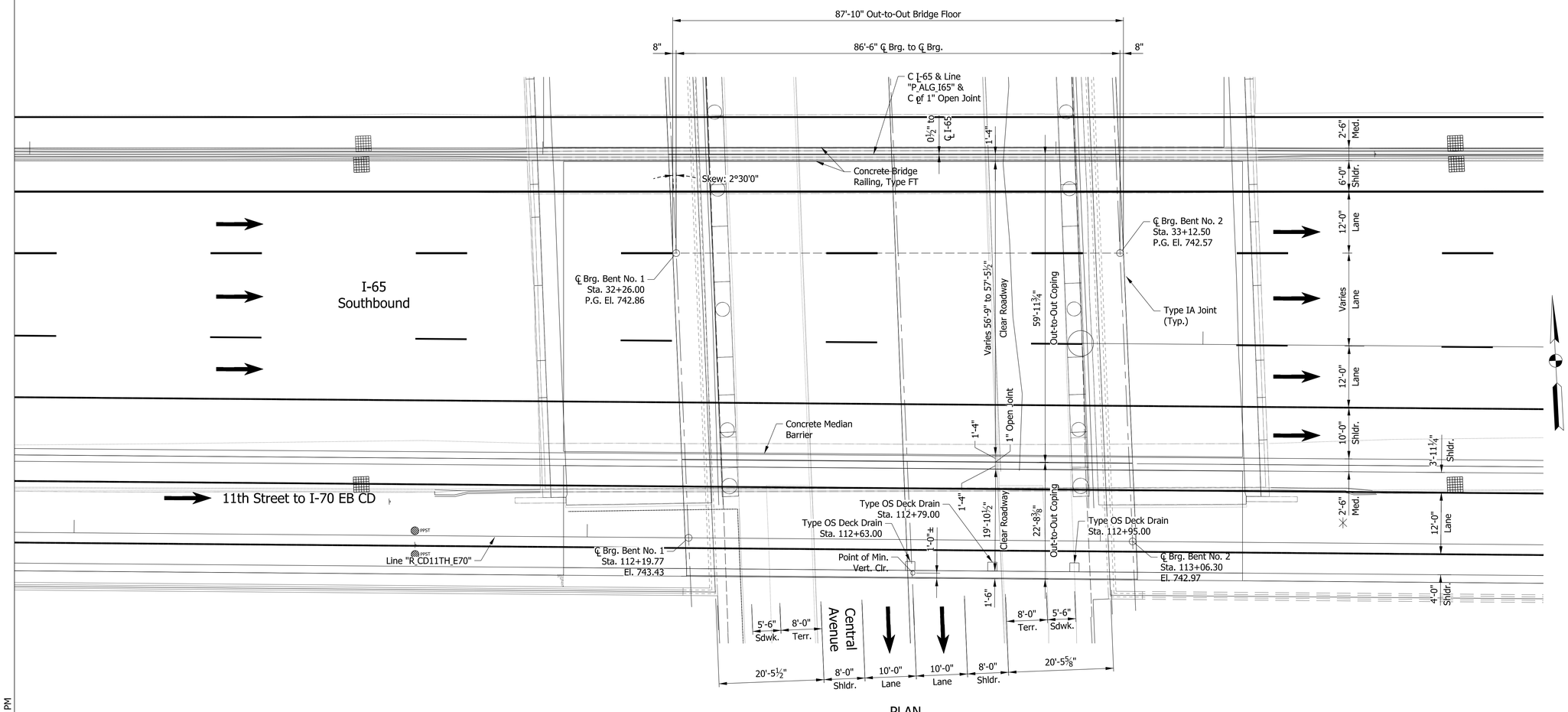
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN - TYPICAL SECTIONS
NORTHBOUND BRIDGE & CD RAMP 12TH ST.

SCALE	BRIDGE FILE
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	DESIGNATION
	1901906, 1901907, 1901908 & 1901909
SURVEY BOOK	SHEETS
ELECTRONIC	7 of 25
CONTRACT	PROJECT
B-36910	1600808



ELEVATION



PLAN

LEGEND

✳ Roadway Median Barrier Transitions to Barrier Width on Bridge.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGES
1 SPAN: 86'-6"
SKEW: 2°30'00" LT.
CLEAR ROADWAYS:
VARIES SB &
19'-10½" 11TH ST CD RAMP
I-65 SB OVER CENTRAL AVENUE
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: JRC

CHECKED: CML | CHECKED: SL

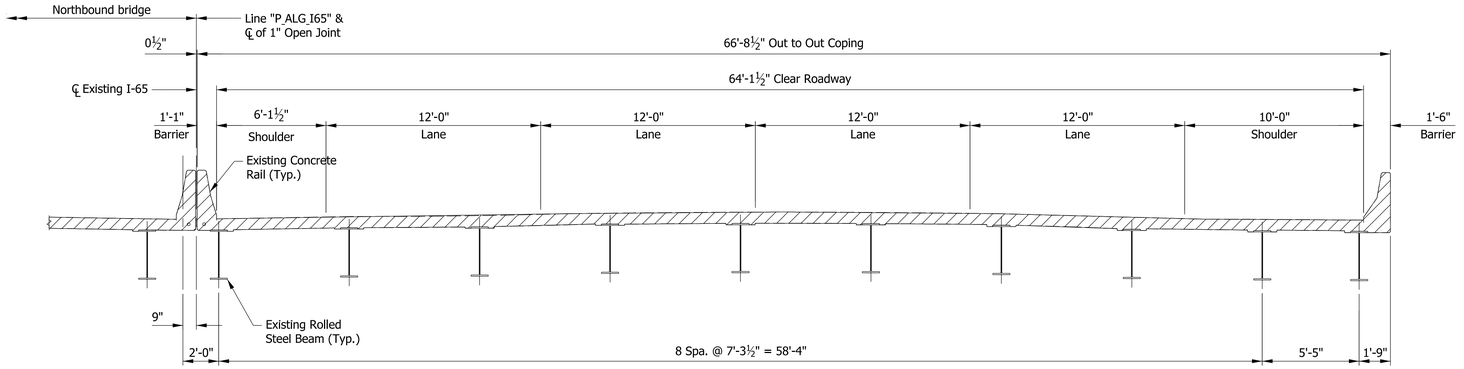
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
SOUTHBOUND BRIDGE & CD RAMP 11TH ST.

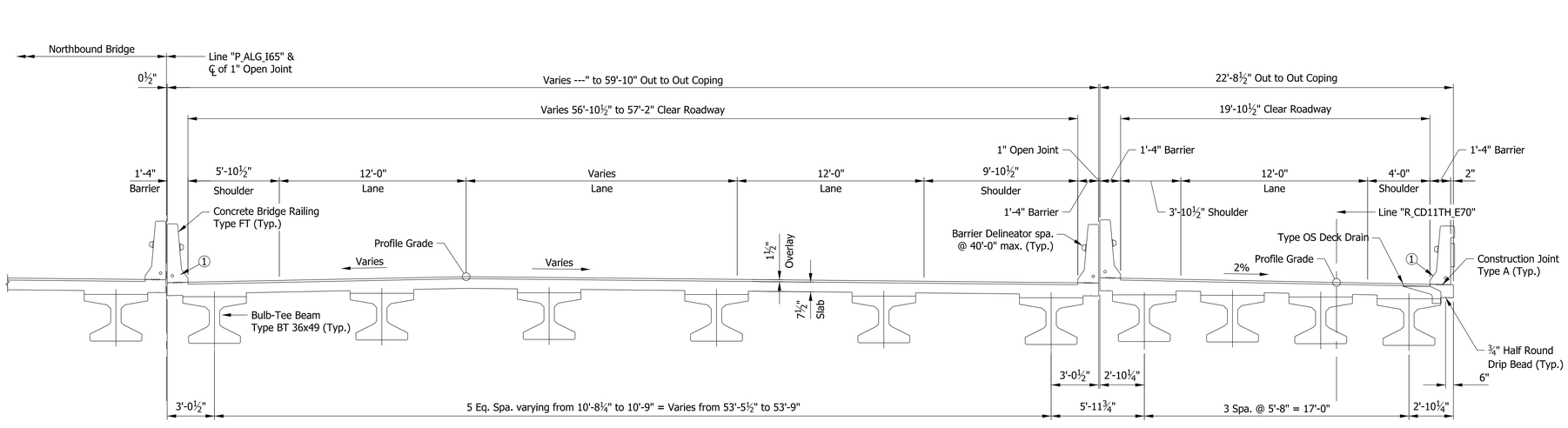
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SURVEY BOOK	SHEETS
ELECTRONIC	8 of 25
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/26/2020 3:52:49 PM

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EXISTING SOUTHBOUND TYPICAL SECTION



PROPOSED SOUTHBOUND TYPICAL SECTION

LEGEND

- Limits of Removal
- Beam Spacing and overhang dimensions shall be determlned by the Desiqn-Build Contractor during final design.
- ① Proposed number of conduit, type, and size for lighting shall be determined by the Design-Build Contractor during final design in accordance with the project standards.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGES
1 SPAN: 86'-6"
SKEW: 2°30'00" LT.
CLEAR ROADWAYS:
VARIES SB &
19'-10½" 11TH ST. CD RAMP
I-65 OVER CENTRAL AVENUE
MARION COUNTY

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: SL
DRAWN: JNR
CHECKED: CML
CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

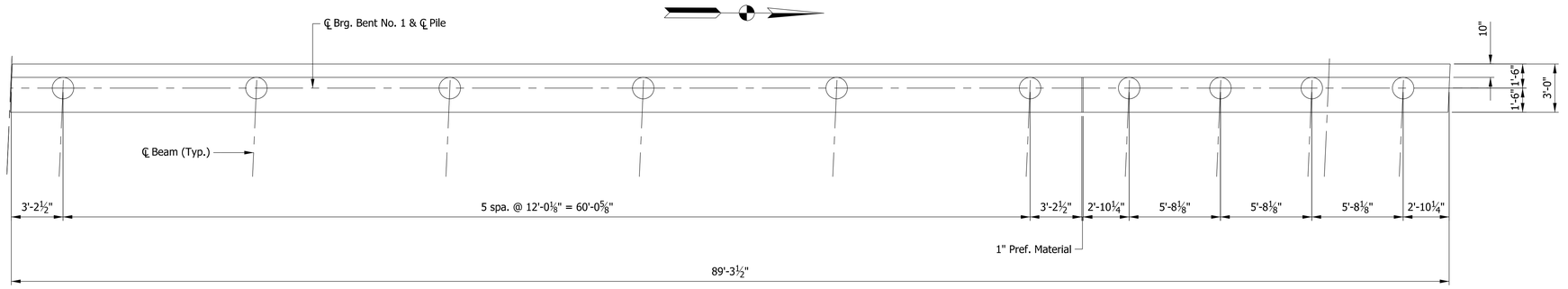
GENERAL PLAN - TYPICAL SECTIONS
SOUTHBOUND BRIDGE & CD RAMP 11TH ST.

SCALE	BRIDGE FILE
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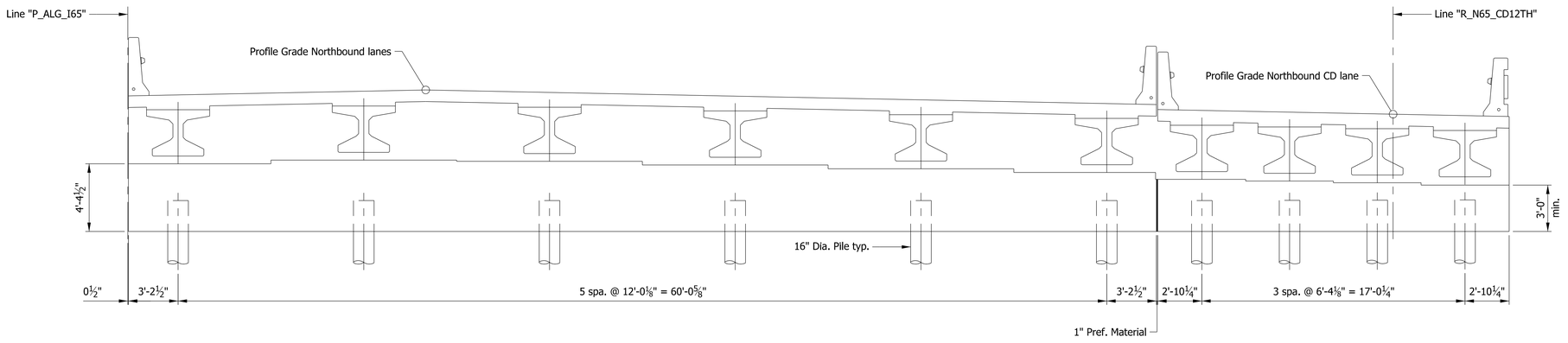
SURVEY BOOK	SHEETS
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CONTRACT	PROJECT
B-36910	1600808

Plot: 2/26/2020 3:53:02 PM

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PLAN



ELEVATION

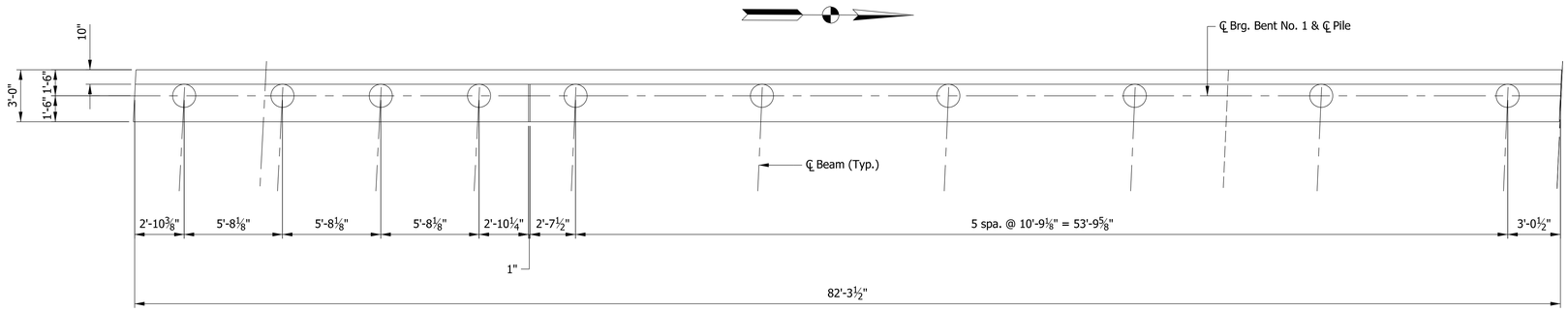
NOTE:

1. For Typical Section, see Sheet 9.

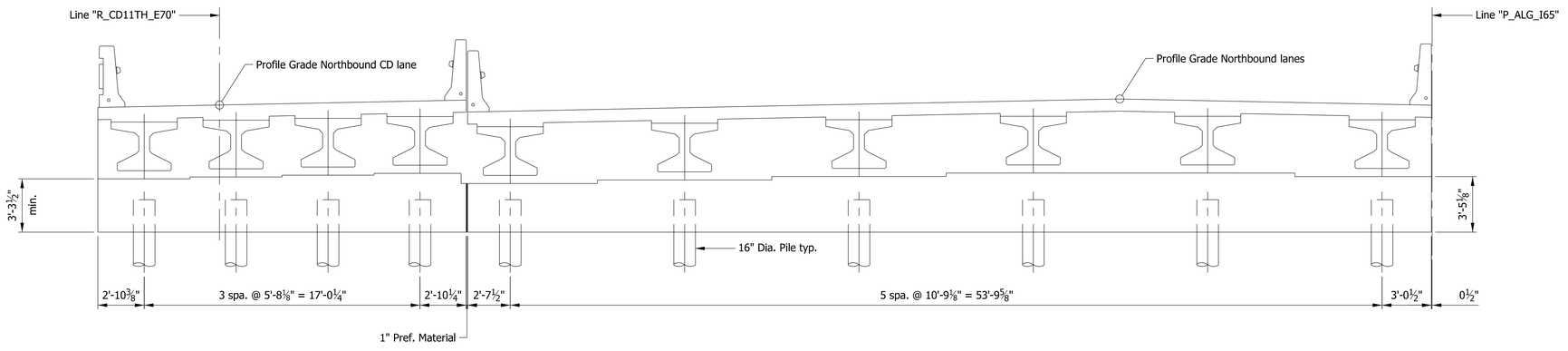
	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE 1/4" = 1'-0"	BRIDGE FILE I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
				DESIGNATION 1901906, 1901907, 1901908 & 1901909
	DESIGNED: SL DRAWN: JNR	BENT NO 1 DETAILS NORTHBOUND BRIDGE & CD RAMP 12TH ST.	SURVEY BOOK	SHEETS
	CHECKED: CML CHECKED: SL		ELECTRONIC	10 of 25
			CONTRACT	PROJECT
			B-36910	1600808

Plot: 2/26/2020 3:53:05 PM

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_10 - Bent 1 NB.dgn



ELEVATION



PLAN

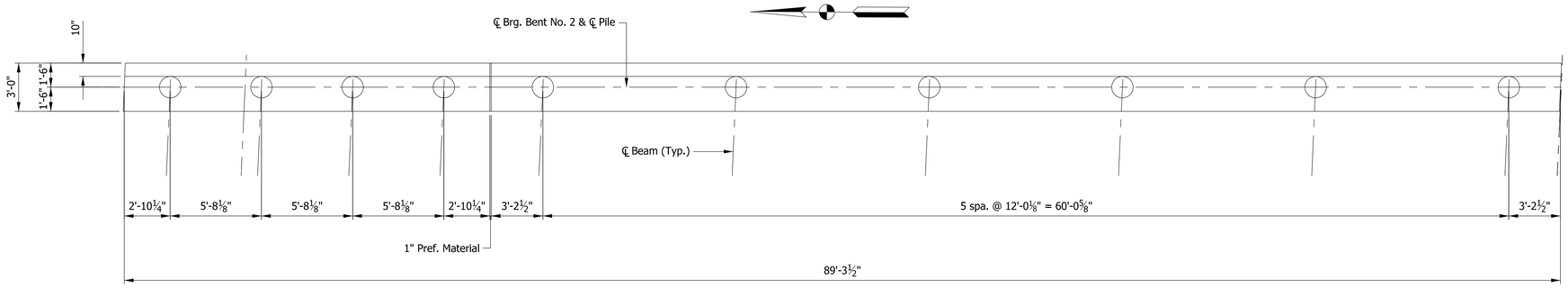
NOTE:

1. For Typical Section, see Sheet 11.

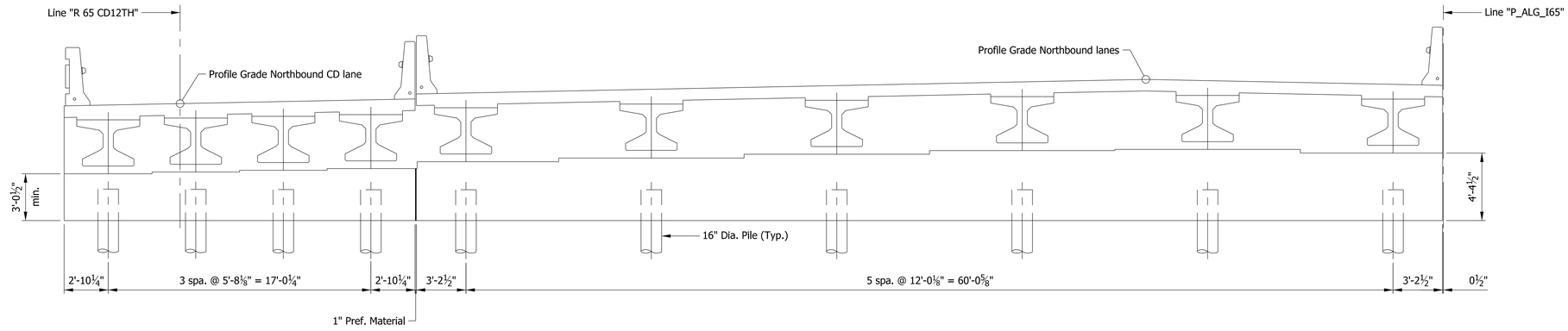
		RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE 1/4" = 1'-0"	BRIDGE FILE I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
					DESIGNATION 1901906, 1901907, 1901908 & 1901909
		DESIGNED: SL / DRAWN: JNR	BENT NO 1 DETAILS SOUTHBOUND BRIDGE & CD RAMP 11TH ST.	SURVEY BOOK	SHEETS
		CHECKED: CML / CHECKED: SL		ELECTRONIC	11 of 25
				CONTRACT	PROJECT
				B-36910	1600808

Plot: 2/26/2020 3:53:08 PM

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_11 - Bent 1 SB.dgn



PLAN



ELEVATION

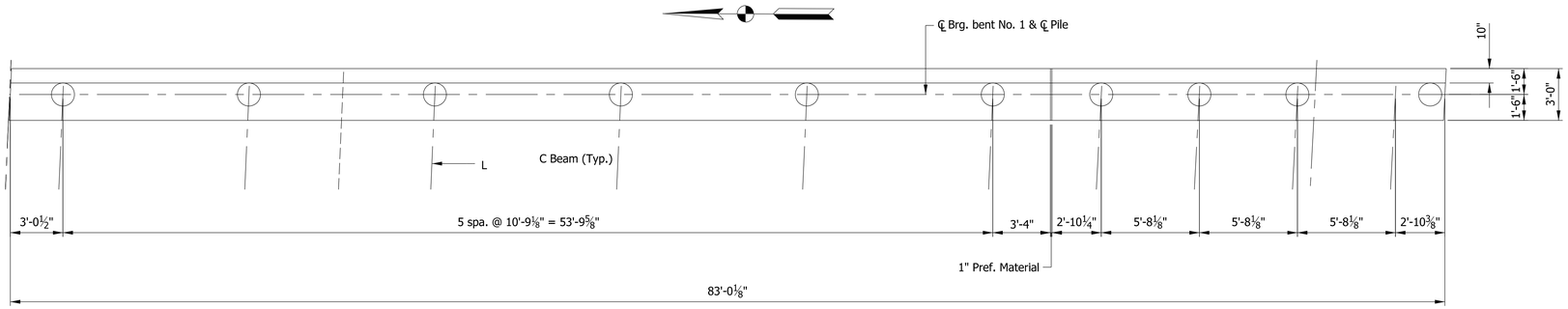
NOTE:

1. For Typical Section, see Sheet 9.

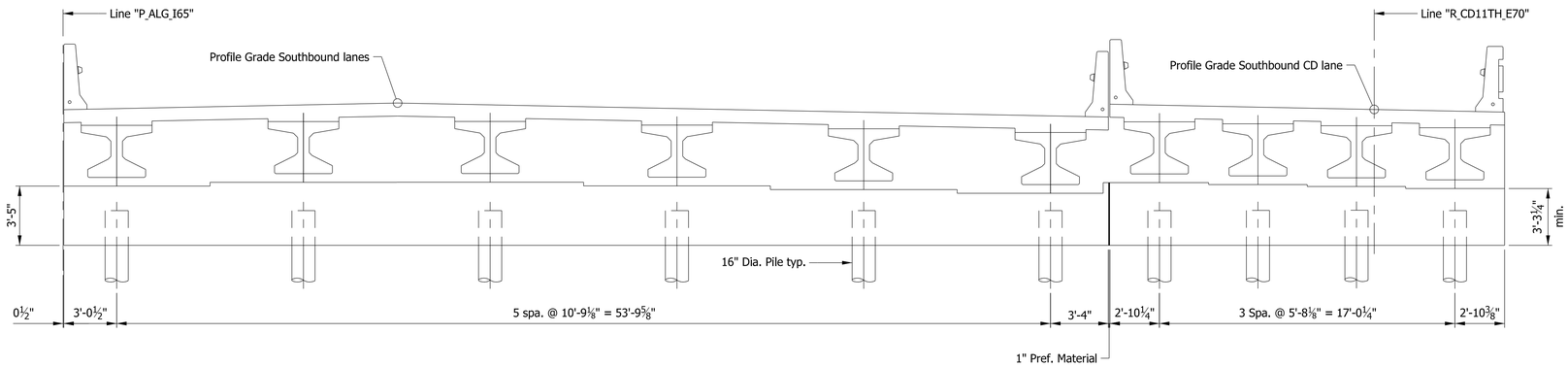
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE 1/4" = 1'-0"	BRIDGE FILE I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
			DESIGNATION 1901906, 1901907, 1901908 & 1901909
DESIGNED: SL DRAWN: JNR	BENT NO. 2 DETAILS NORTHBOUND BRIDGE & CD RAMP 12TH ST.	SURVEY BOOK	SHEETS
CHECKED: CML CHECKED: SL		ELECTRONIC	12 of 25
		CONTRACT B-36910	PROJECT 1600808

Plot: 2/26/2020 3:53:10 PM

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_12 - Bent 2 NB.dgn



PLAN



ELEVATION

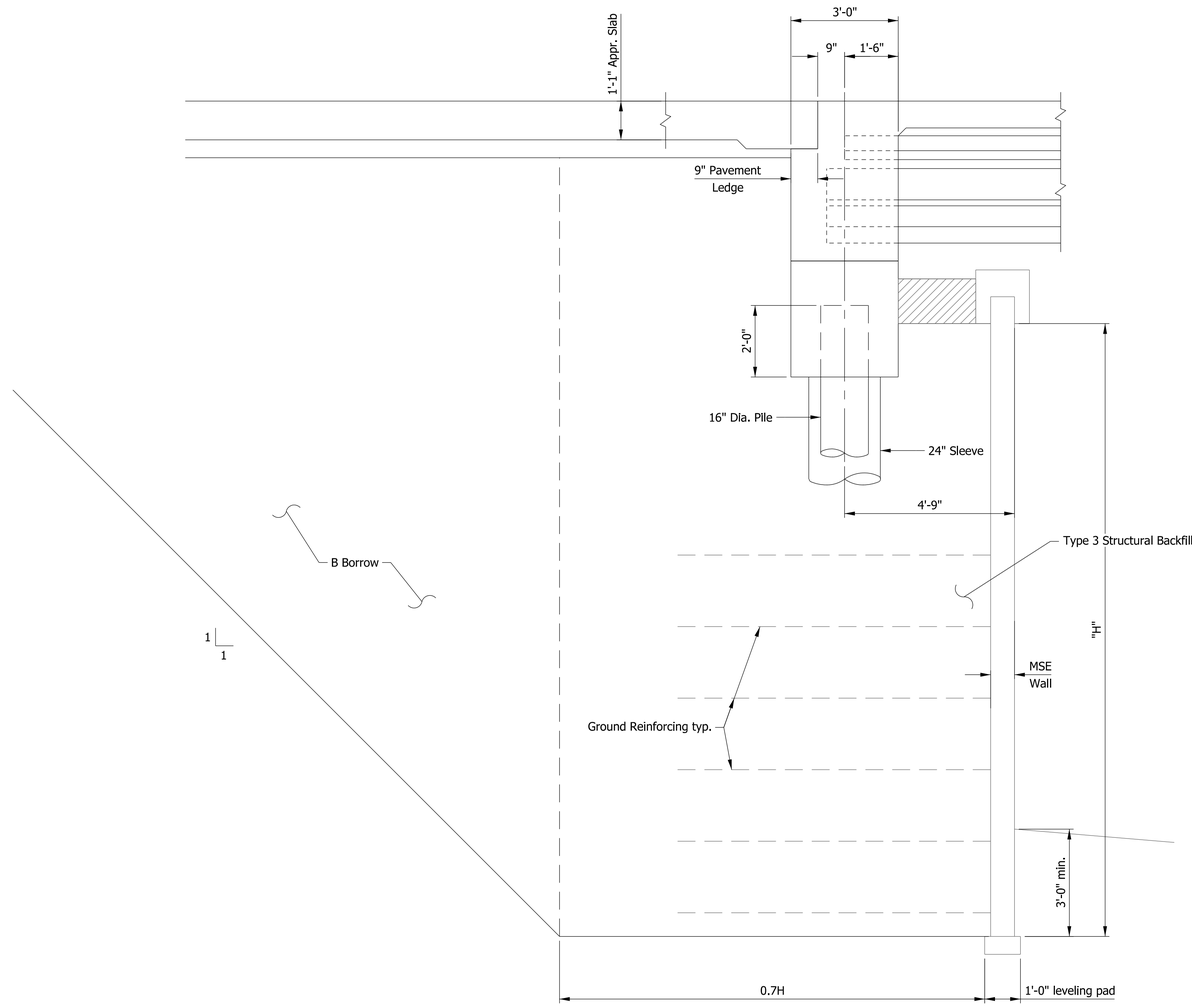
NOTE:

1. For Typical Section, see Sheet 11.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE 1/4" = 1'-0"	BRIDGE FILE I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
			DESIGNATION 1901906, 1901907, 1901908 & 1901909
DESIGNED: SL / DRAWN: JNR	BENT NO 2 DETAILS SOUTHBOUND BRIDGE & CD 11TH ST.	SURVEY BOOK	SHEETS
CHECKED: CML / CHECKED: SL		ELECTRONIC	13 of 25
		CONTRACT	PROJECT
		B-36910	1600808

Plot: 2/26/2020 3:53:13 PM

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_13 - Bent 2 SB.dgn



TYPICAL SECTION

Plot: 2/26/2020 3:53:14 PM

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: SL DRAWN: JNR

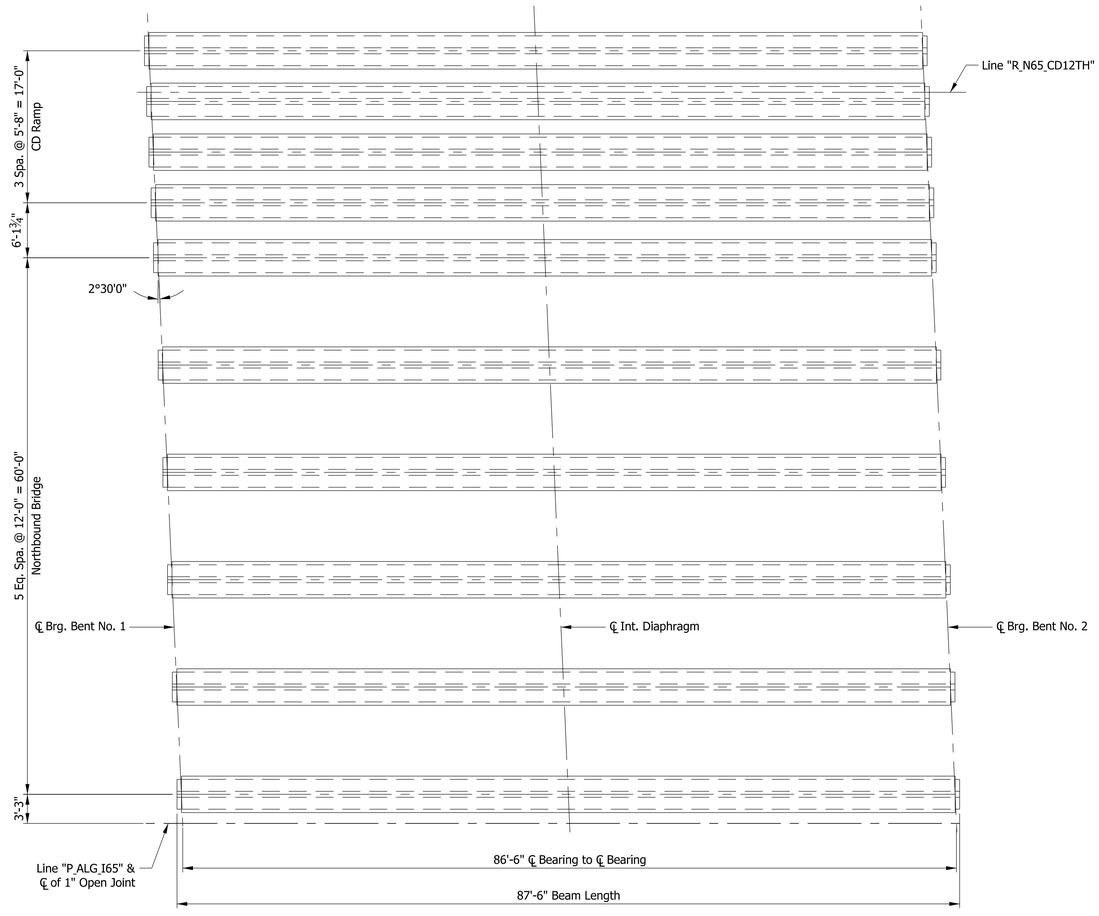
CHECKED: CML CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

BENTS NO 1 AND 2 DETAILS

SCALE	1/4" = 1'-0"
BRIDGE FILE	I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
DESIGNATION	1901906, 1901907, 1901908 & 1901909
SURVEY BOOK	
SHEETS	
ELECTRONIC	14 of 25
CONTRACT	PROJECT
B-36910	1600808

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_14 - Bent Details.dgn



FRAMING PLAN

NOTES:

1. For Intermediate Diaphragm Details, see Std. Dwg. E707-SDPC-01.

Plot: 2/26/2020 3:53:16 PM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: JNR

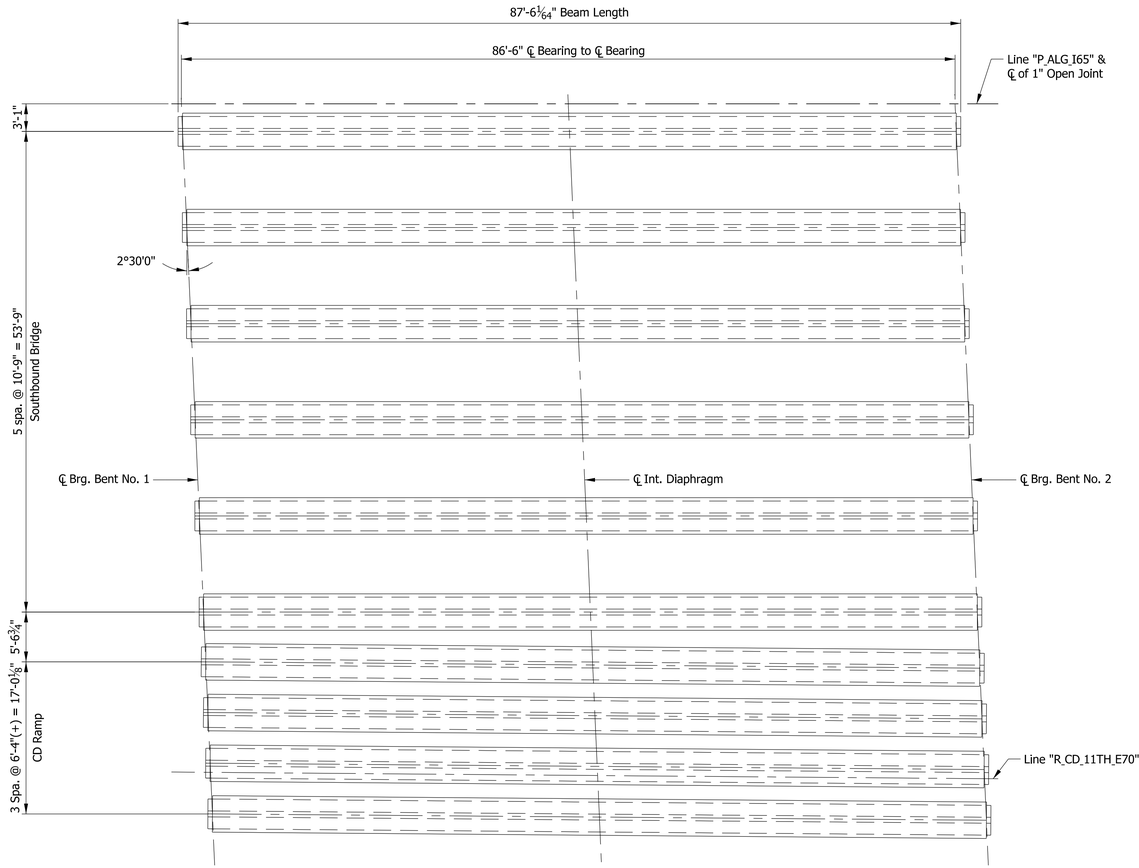
CHECKED: CML | CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
NORTHBOUND BRIDGE & CD RAMP 12TH ST.

SCALE	BRIDGE FILE
1" = 1'-0"	I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
	DESIGNATION
	1901906, 1901907, 1901908 & 1901909
SURVEY BOOK	SHEETS
ELECTRONIC	15 of 25
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_15 - Framing Plan NB.dgn



FRAMING PLAN

NOTES:

1. For Intermediate Diaphragm Details, see Std. Dwg. E707-SDPC-01.

Plot: 2/26/2020 3:53:17 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_16 - Framing Plan SB.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

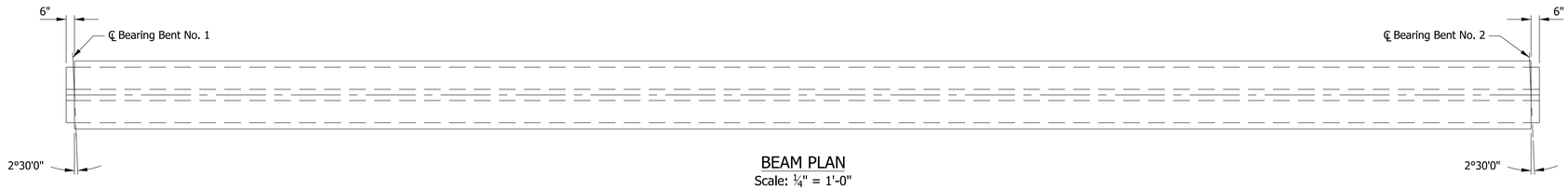
DESIGNED: SL | DRAWN: JNR

CHECKED: CML | CHECKED: SL

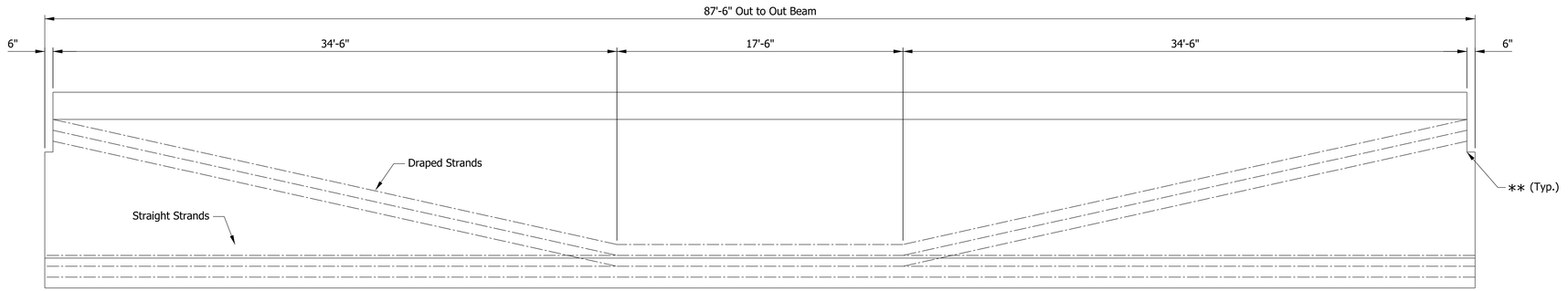
INDIANA
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
SOUTHBOUND BRIDGE & CD RAMP 11TH ST.

SCALE	1" = 1'-0"
BRIDGE FILE	I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
DESIGNATION	1901906, 1901907, 1901908 & 1901909
SURVEY BOOK	
ELECTRONIC	
SHEETS	16 of 25
CONTRACT	B-36910
PROJECT	1600808

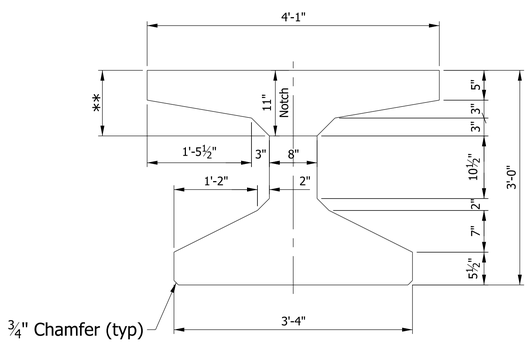


BEAM PLAN
Scale: ¼" = 1'-0"

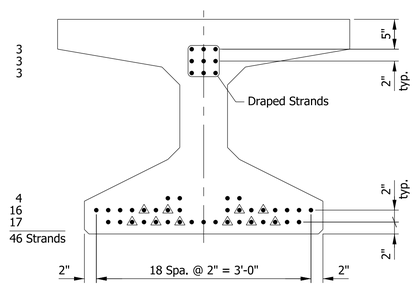


BEAM ELEVATION
Horizontal Scale: ¼" = 1'-0"
Vertical Scale: 1" = 1'-0"

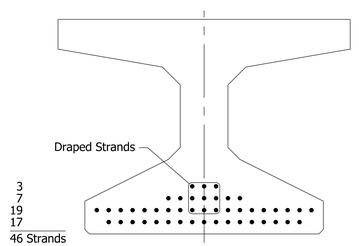
** Top Flange Notch
at Beam End (Typ.)



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



STRAND PATTERN AT BEAM END
Scale: 1" = 1'-0"
◬ - Debond Strands



STRAND PATTERN AT MIDSPAN
Scale: 1" = 1'-0"

NOTES:

1. Prestressing reinforcement shall be 0.6" dia., uncoated, seven wire, low relaxation 270 ksi with strand area = 0.217 sq. in.
2. Beam shall be cast a minimum of 120 days before deck is poured.

Plot: 2/26/2020 3:53:19 PM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: JNR

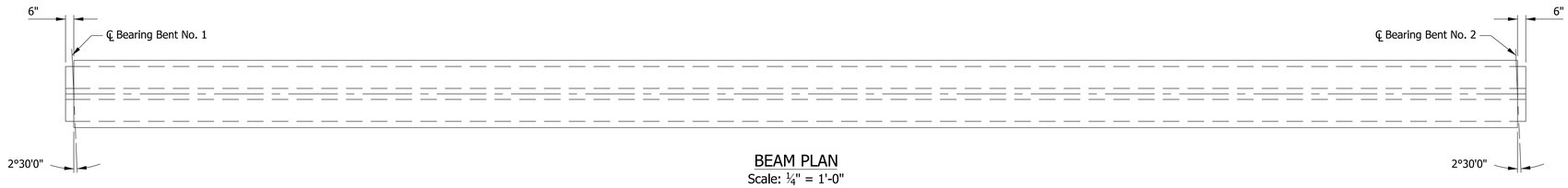
CHECKED: CML | CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

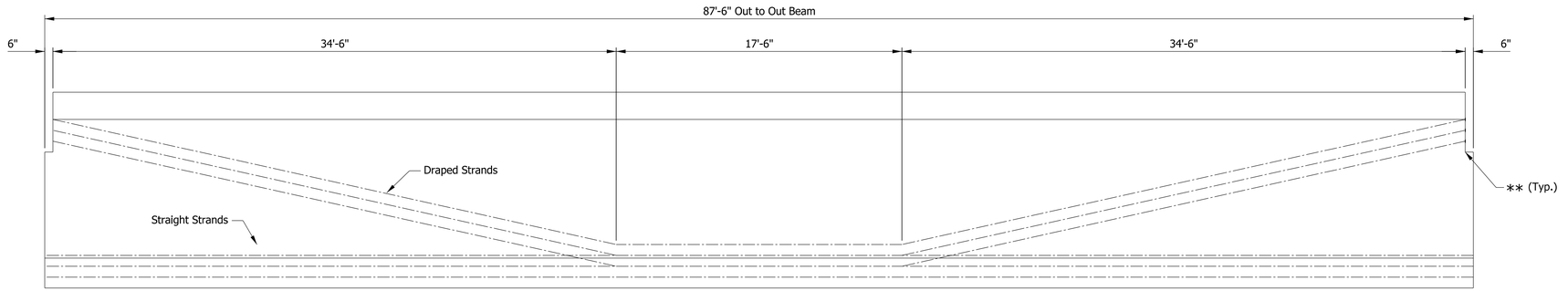
BEAM DETAILS
NORTHBOUND BRIDGE

SCALE	BRIDGE FILE
AS NOTED	I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
	DESIGNATION
	1901906, 1901907, 1901908 & 1901909
SURVEY BOOK	SHEETS
ELECTRONIC	17 of 25
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_17 - Beam Details NB.dgn

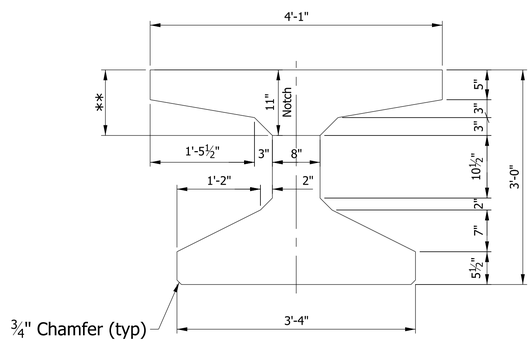


BEAM PLAN
Scale: ¼" = 1'-0"

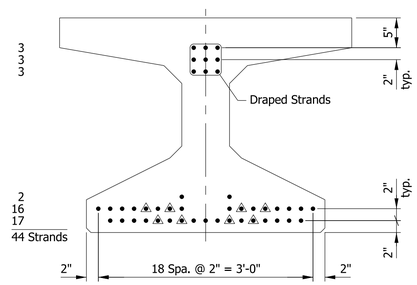


BEAM ELEVATION
Horizontal Scale: ¼" = 1'-0"
Vertical Scale: 1" = 1'-0"

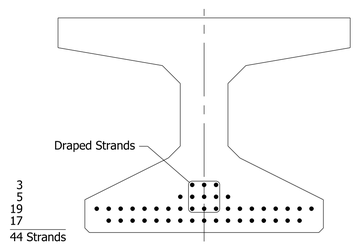
** Top Flange Notch
at Beam End (Typ.)



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



STRAND PATTERN AT BEAM END
Scale: 1" = 1'-0"



STRAND PATTERN AT MIDSPAN
Scale: 1" = 1'-0"

NOTES:

1. Prestressing reinforcement shall be 0.6" dia., uncoated, seven wire, low relaxation 270 ksi with strand area = 0.217 sq. in.
2. Beam shall be cast a minimum of 120 days before deck is poured.

Plot: 2/26/2020 3:53:21 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_18 - Beam Details SB.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

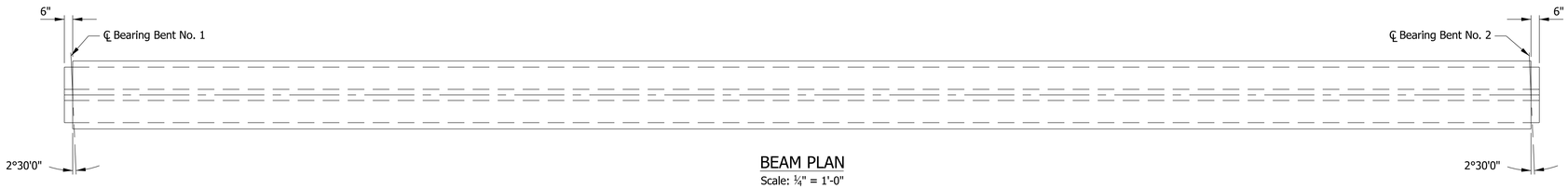
DESIGNED: SL | DRAWN: JNR

CHECKED: CML | CHECKED: SL

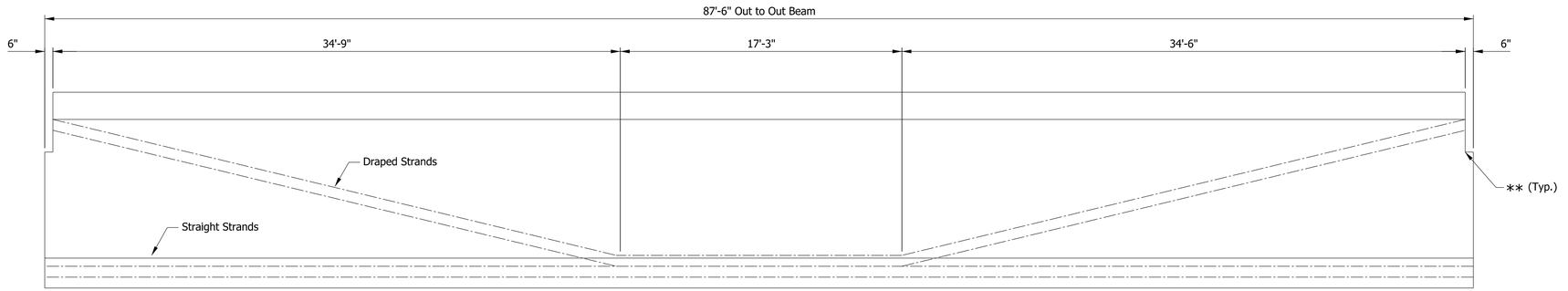
INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS
SOUTHBOUND BRIDGE

SCALE	BRIDGE FILE
AS NOTED	I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
	DESIGNATION
	1901906, 1901907, 1901908 & 1901909
SURVEY BOOK	SHEETS
ELECTRONIC	18 of 25
CONTRACT	PROJECT
B-36910	1600808

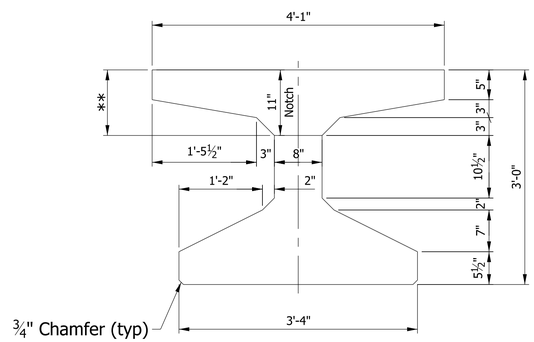


BEAM PLAN
Scale: ¼" = 1'-0"

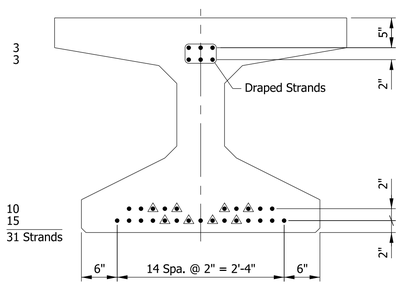


BEAM ELEVATION
Horizontal Scale: ¼" = 1'-0"
Vertical Scale: 1" = 1'-0"

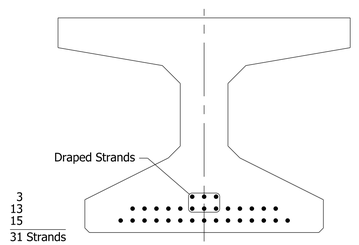
** Top Flange Notch
at Beam End (Typ.)



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



STRAND PATTERN AT BEAM END
Scale: 1" = 1'-0"



STRAND PATTERN AT MIDSPAN
Scale: 1" = 1'-0"

NOTES:

1. Prestressing reinforcement shall be 0.6" dia., uncoated, seven wire, low relaxation 270 ksi with strand area = 0.217 sq. in.
2. Beam shall be cast a minimum of 120 days before deck is poured.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: JNR

CHECKED: CML | CHECKED: SL

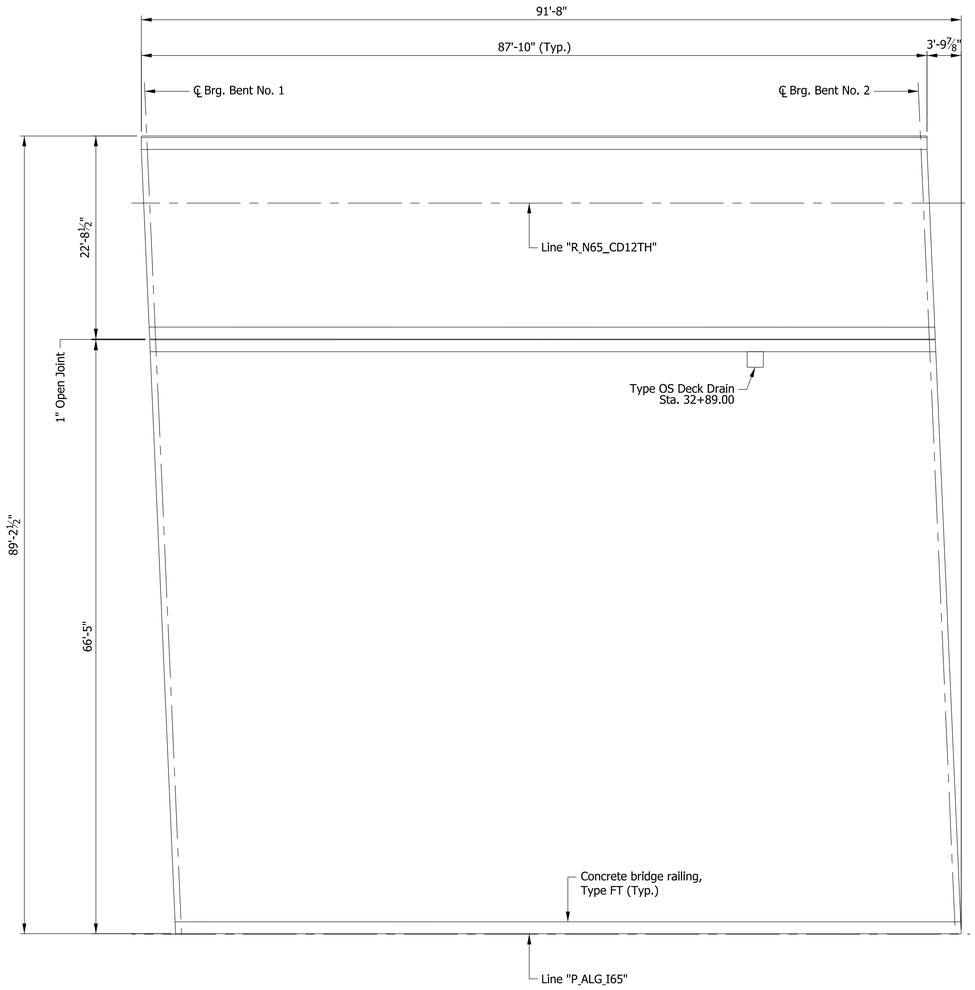
INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS
CD RAMPS

SCALE	BRIDGE FILE
AS NOTED	I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
	DESIGNATION
	1901906, 1901907, 1901908 & 1901909
SURVEY BOOK	SHEETS
ELECTRONIC	19 of 25
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/26/2020 3:53:23 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_19 - Beam Details CD.dgn

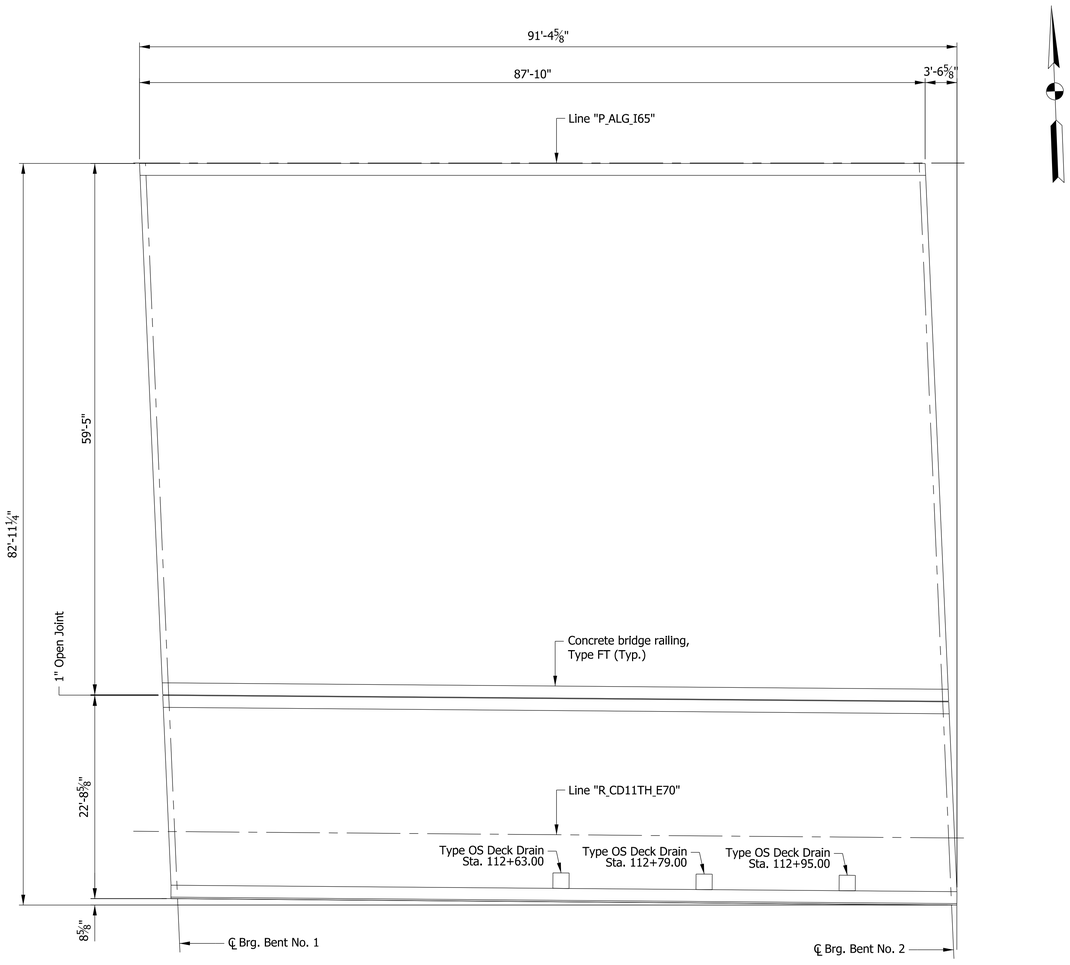


FLOOR PLAN

Plot: 2/26/2020 3:53:28 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_20 - Deck Plan NB.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE	BRIDGE FILE
		1/8" = 1'-0"	I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
			DESIGNATION
			1901906, 1901907, 1901908 & 1901909
DESIGNED: SL DRAWN: SRR	DECK PLAN NORTHBOUND BRIDGE & CD RAMP 12TH ST.	SURVEY BOOK	SHEETS
		ELECTRONIC	20 of 25
CHECKED: CML CHECKED: SL		CONTRACT	PROJECT
		B-36910	1600808



FLOOR PLAN

Plot: 2/26/2020 3:53:30 PM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: SRR

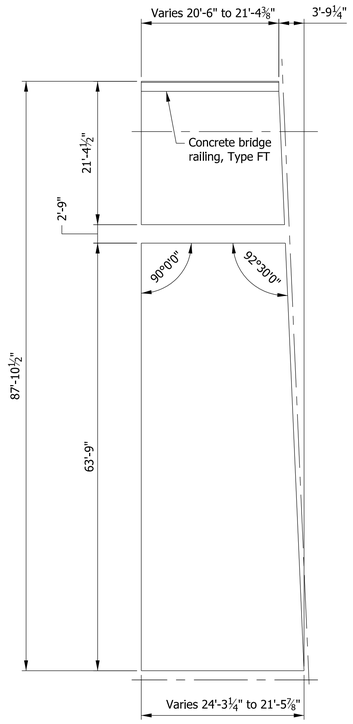
CHECKED: CML | CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

DECK PLAN
SOUTHBOUND BRIDGE & CD RAMP 11TH ST.

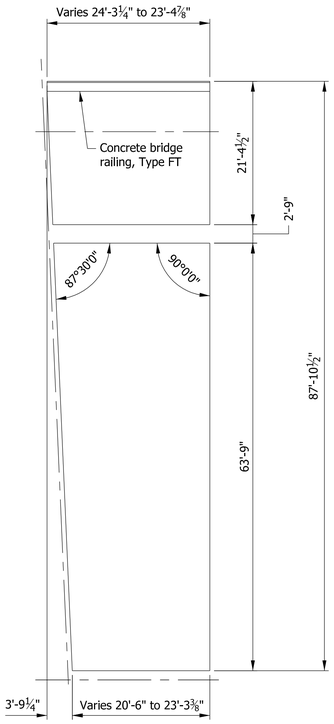
SCALE	BRIDGE FILE
1/8" = 1'-0"	I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
	DESIGNATION
	1901906, 1901907, 1901908 & 1901909
SURVEY BOOK	SHEETS
ELECTRONIC	21 of 25
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_21 - Deck Plan SB.dgn



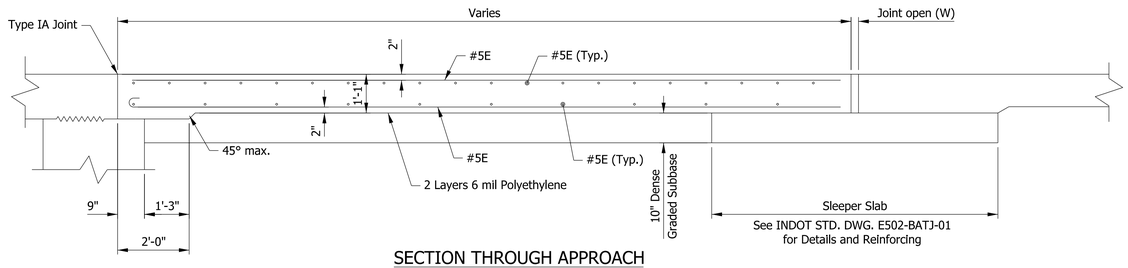
APPROACH SLABS AT END BENT NO. 1

Scale: ⅛" = 1'-0"



APPROACH SLABS AT END BENT NO. 2

Scale: ⅛" = 1'-0"



SECTION THROUGH APPROACH

Scale: ½" = 1'-0"

NOTES:

1. For additional Terminal Joint information, see USP. Terminal Joint Details, Type CRCP.
2. Concrete Bridge Railing, Type FT sits on slab extension.

Plot: 2/26/2020 3:53:32 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_22 - Approach Slab NB.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

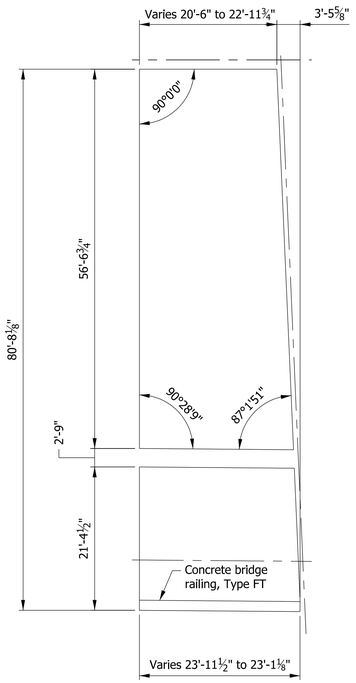
DESIGNED: SL | DRAWN: JNR

CHECKED: CML | CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

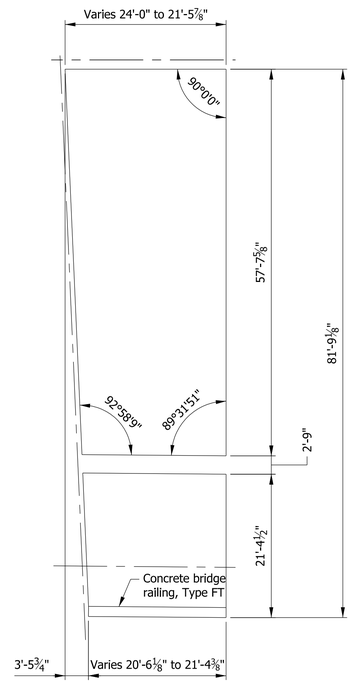
APPROACH SLABS
NORTHBOUND BRIDGE & CD RAMP 12TH ST.

SCALE	BRIDGE FILE
AS NOTED	I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
	DESIGNATION
	1901906, 1901907, 1901908 & 1901909
SURVEY BOOK	SHEETS
ELECTRONIC	22 of 25
CONTRACT	PROJECT
B-36910	1600808



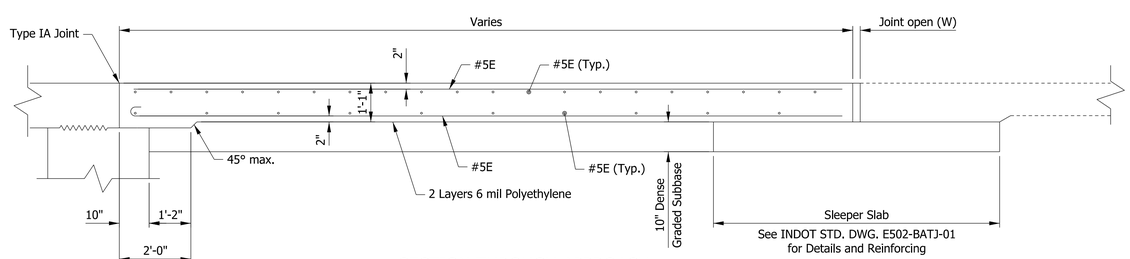
APPROACH SLABS AT END BENT NO. 1

SCALE: ⅛" = 1'



APPROACH SLABS AT END BENT NO. 2

SCALE: ⅛" = 1'



SECTION THROUGH APPROACH

Scale: ½" = 1'-0"

NOTES:

1. For additional Terminal Joint information, see USP. Terminal Joint Details, Type CRCP.
2. Concrete Bridge Railing, Type FT sits on slab extension.

Plot: 2/26/2020 3:53:34 PM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: JNR

CHECKED: CML | CHECKED: SL

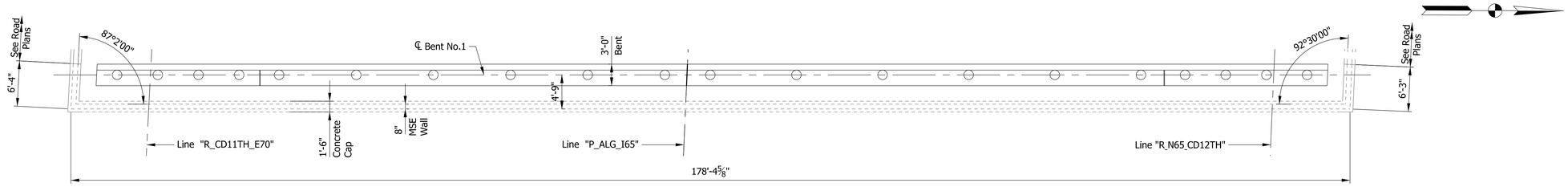
INDIANA
DEPARTMENT OF TRANSPORTATION

APPROACH SLABS
SOUTHBOUND BRIDGE & CD RAMP 11TH ST.

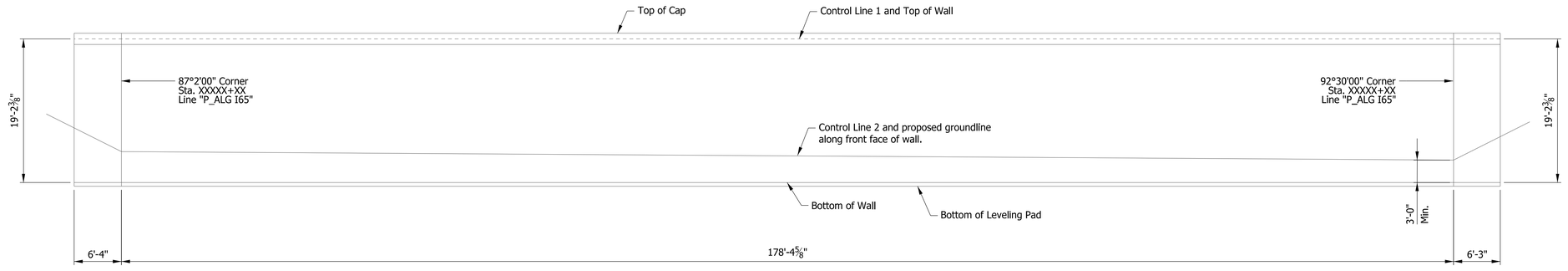
SCALE	BRIDGE FILE
AS NOTED	I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
	DESIGNATION
	1901906, 1901907, 1901908 & 1901909

SURVEY BOOK	SHEETS		
ELECTRONIC	23	of	25
CONTRACT	PROJECT		
B-36910	1600808		

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_23 - Approach Slab SB.dgn



PLAN

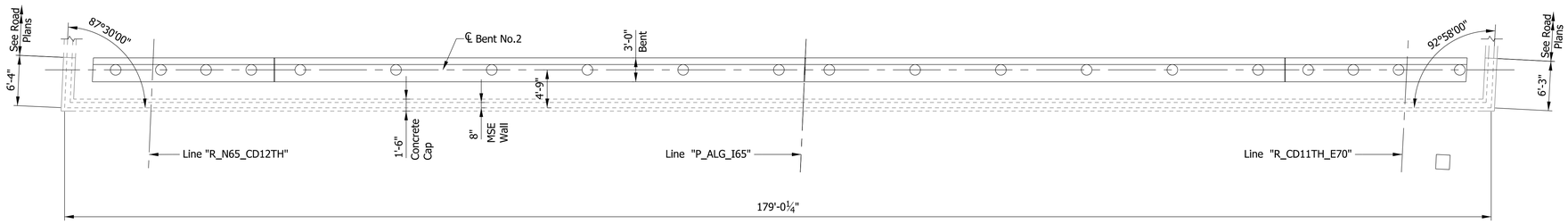


ELEVATION

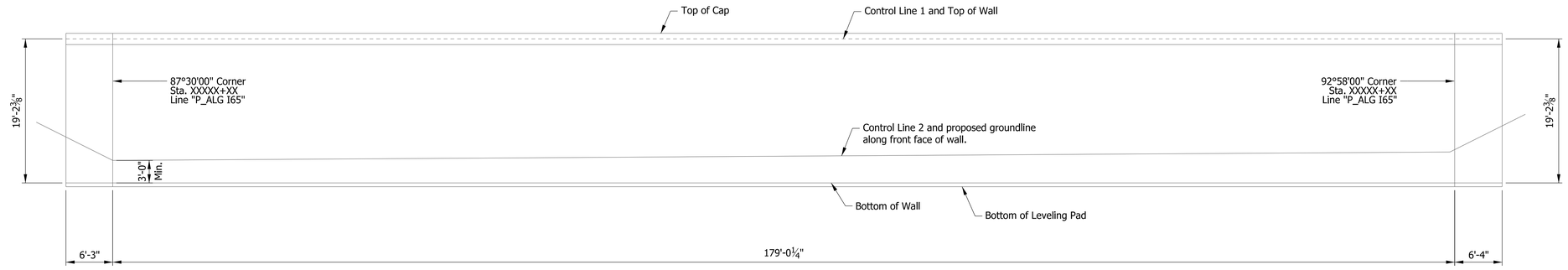
Plot: 2/26/2020 3:53:36 PM

		RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE 1/4" = 1'-0"	BRIDGE FILE: I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
					DESIGNATION: 1901906, 1901907, 1901908 & 1901909
		DESIGNED: SL / DRAWN: TLH	MSE WALL DETAILS AT BENT NO.1	SURVEY BOOK	SHEETS
		CHECKED: CML / CHECKED: SL		ELECTRONIC	24 of 25
				CONTRACT	PROJECT
				B-36910	1600808

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_24 - Retaining Wall No.1.dgn



PLAN



ELEVATION

	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE 1/4" = 1'-0"	BRIDGE FILE I65-112-10624 CD, 10625 NBL, 10626 SBL & 10627 CD
				DESIGNATION 1901906, 1901907, 1901908 & 1901909
	DESIGNED: SL / DRAWN: TLH	MSE WALL DETAILS AT BENT NO.2	SURVEY BOOK	SHEETS
	CHECKED: CML / CHECKED: SL		ELECTRONIC	25 of 25
			CONTRACT	PROJECT
			B-36910	1600808

Plot: 2/26/2020 3:53:38 PM

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 27-30 I65 NB SB & CD Ramp over Central Ave\1901906_25 - Retaining Wall No.2.dgn

PROJECT	DESIGNATION
1600808	1901914
CONTRACT	BRIDGE FILE
B-36910	I-65-112-10628 NBL

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

FOR SPANS OVER 20 FEET

ROUTE: I-70 W.B. TO I-65 N.B. AT: RP 112+55

PROJECT NO. 1600808 (P.E. & CONSTR.)

TRAFFIC DATA		I-70 W.B. TO I-65 N.B.	COLLEGE AVE.
A.A.D.T.	(2021)	31,350 V.P.D.	9,434 (NB) 7,024 (SB) V.P.D.
A.A.D.T.	(2041)	32,513 V.P.D.	7,170 (NB) 7,886 (SB) V.P.D.
D.H.V	(2041)	2,601 V.P.H.	798 (NB) 723 (SB) V.P.H.
DIRECTIONAL DISTRIBUTION		100%	48% (NB) 52% (SB)
TRUCKS		6% D.H.V.	2% (NB) 3% (SB)
DESIGN DATA			
DESIGN SPEED		55 M.P.H.	35 M.P.H.
PROJECT DESIGN CRITERIA		4R (FREEWAY)	N/A
FUNCTIONAL CLASSIFICATION		FREEWAY	MINOR ARTERIAL
RURAL/URBAN		URBAN	URBAN
TERRAIN		LEVEL	LEVEL
ACCESS CONTROL		FULL CONTROL	NONE

STRUCTURE INFORMATION

STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I65-112-10628 NBL	COMPOSITE CONCRETE BULB-TEE BEAM	ONE SPAN 116'-8½" SKEW: 15°48'25"	COLLEGE AVENUE	127+55.80 Line "R_W70_N65"

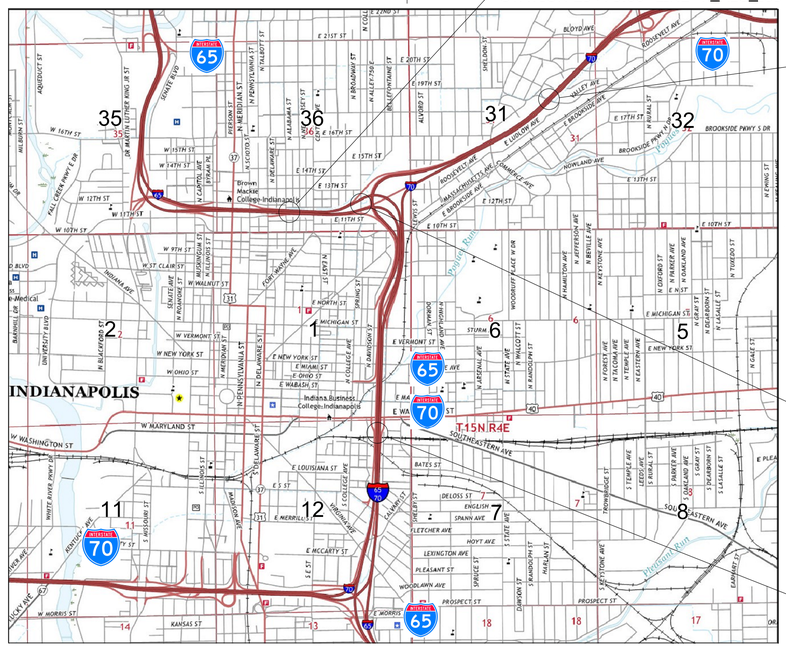
KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901927	BRIDGE REPLACEMENT ON I-65 SB TO I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE) - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER VERMONT STREET	

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

BRIDGE REPLACEMENT ON I-70 W.B. TO I-65 N.B. OVER COLLEGE AVE., LOCATED 2.06 MILES NORTH OF I-70 (SOUTH SPLIT) INTERCHANGE, IN SECTION 36, OF TOWNSHIP 16 NORTH, RANGE 3 EAST, CENTER TOWNSHIP, IN MARION COUNTY INDIANA

R-3-E R-4-E

END PROJECT NO. 1600808
STATION 25+75.00 LINE "P_ALG_I65"


INDIANAPOLIS
T15N R4E
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T-15-N
E 21ST ST
E 20TH ST
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E 17TH ST
E 15TH ST
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E 10TH ST
W 16TH ST
W 15TH ST
W 14TH ST
W 12TH ST
W 10TH ST
W 9TH ST
W ST. CLAIR ST
E ST. CLAIR ST
E NORTH ST
E MICHIGAN ST
E VERMONT ST
E NEW YORK ST
E MIAMI ST
E OHIO ST
E WABASH ST
W MARYLAND ST
W WASHINGTON ST
E LOUISIANA ST
E S ST
E MERRILL ST
E MCCARTY ST
W MORRIS ST
KANSAS ST
DELOSS ST
ENGLISH AVE
SPANN AVE
HOYT AVE
LEXINGTON AVE
PLEASANT ST
WOODLAWN AVE
PROSPECT ST
BATES ST
FLETCHER AVE
BLOYD AVE
ROOSEVELT AVE
VALLEY AVE
ROWLAND AVE
BROOKSIDE PKWY S DR
SOUTHEASTERN AVE
EASTERN AVE
Fall Creek
Pogue's Run
Hoosier Run
Brown Mackie College-Indianapolis
Indiana Business College-Indianapolis
N COLLEGE AVE
N DELAWARE ST
N PENNSYLVANIA ST
N MERIDIAN ST
N ILLINOIS ST
N ALABAMA ST
N PARK AVE
N CAPITOL AVE
N TALBOTT ST
N BROADWAY ST
N KEYSTONE AVE
N RITTER AVE
N LINWOOD AVE
N EMERSON AVE
N ARLINGTON AVE
N HAMILTON AVE
N KENWOOD AVE
N BEVILLE AVE
N OXFORD ST
N BAKER AVE
N OAKLAND AVE
N GRAY ST
N DEARBORN ST
N LASALLE ST
N TUXEDO ST
N KING ST
N GALE ST
S TEMPLE AVE
S RURAL ST
S BAKER AVE
S OAKLAND AVE
S GRAY ST
S DEARBORN ST
S LASALLE ST
S KEYSTONE AVE
S EMERSON AVE
S ARLINGTON AVE
S HARDING ST
S RANDOLPH ST
S STATE AVE
S MADISON AVE
S HARDING ST
S WISCONSIN ST
S ILLINOIS ST
S DELAWARE ST
S COLLEGE AVE
S MERIDIAN ST
S PENNSYLVANIA ST
S KENTUCKY AVE
S CAPITOL AVE
S MISSOURI ST
S MONTCALM ST
S ALABAMA ST
S LOCUST ST
S DELAWARE ST
S ALABAMA ST
S MERIDIAN ST
S PENNSYLVANIA ST
S ILLINOIS ST
S MISSOURI ST
S MONTCALM ST
S LOCUST ST
S KENTUCKY AVE
S CAPITOL AVE

UTILITIES

INDEX

SHEET NO.	SUBJECT
1	TITLE
2	INDEX
3	MAINTENANCE OF TRAFFIC
4	LAYOUT
5	GENERAL PLAN
6	GENERAL PLAN - TYPICAL SECTION
7	BENT NO. 1 DETAILS
8	BENT NO. 2 DETAILS
9	BENT NO. 1 & 2 DETAILS
10	FRAMING PLAN
11	BEAM DETAILS
12	SUPERSTRUCTURE DETAILS
13	APPROACH SLAB DETAILS

REVISIONS

SHEET NO.	DATE	REVISED

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

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

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: XX DRAWN: SRR

CHECKED: CML CHECKED: XX

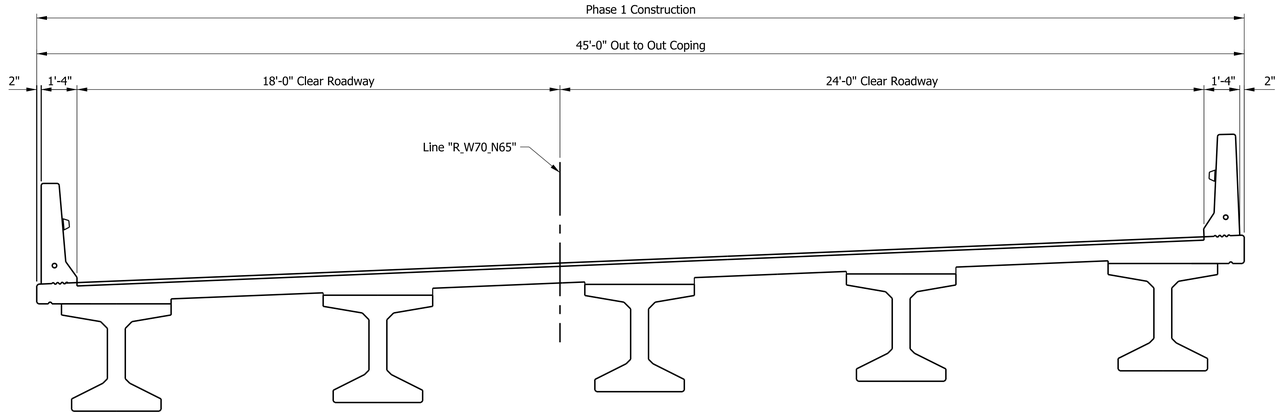
INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX

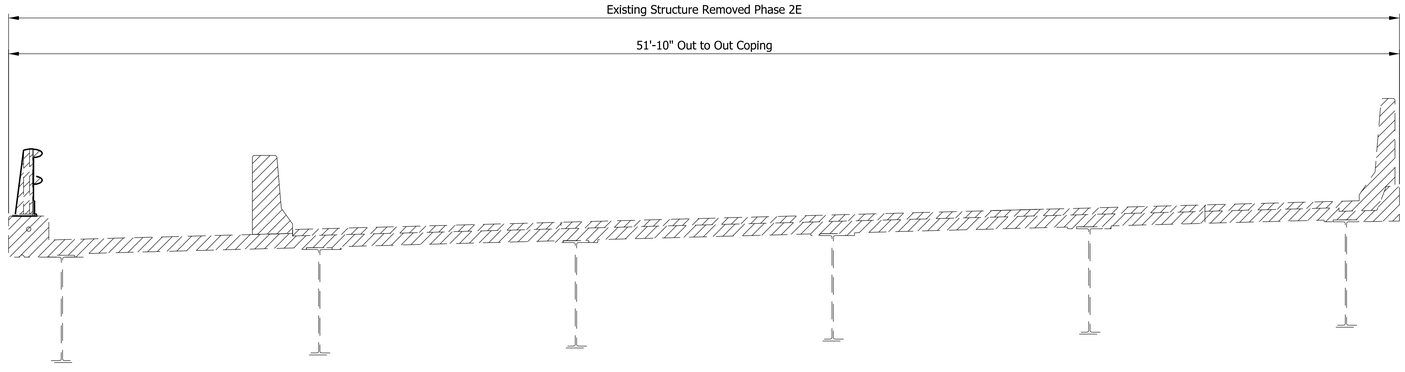
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	I65-112-10628 NBL
VERTICAL SCALE	DESIGNATION
	1901914
SURVEY BOOK	SHEETS
ELECTRONIC	2 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/28/2020 9:02:19 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 31 I70 WB to I65 NB over College Ave\1901914_02 - Index.dgn



PHASE 1



PHASE 2E

LEGEND

Limits of Removal

Plot: 2/28/2020 9:02:20 AM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: XX DRAWN: SRR

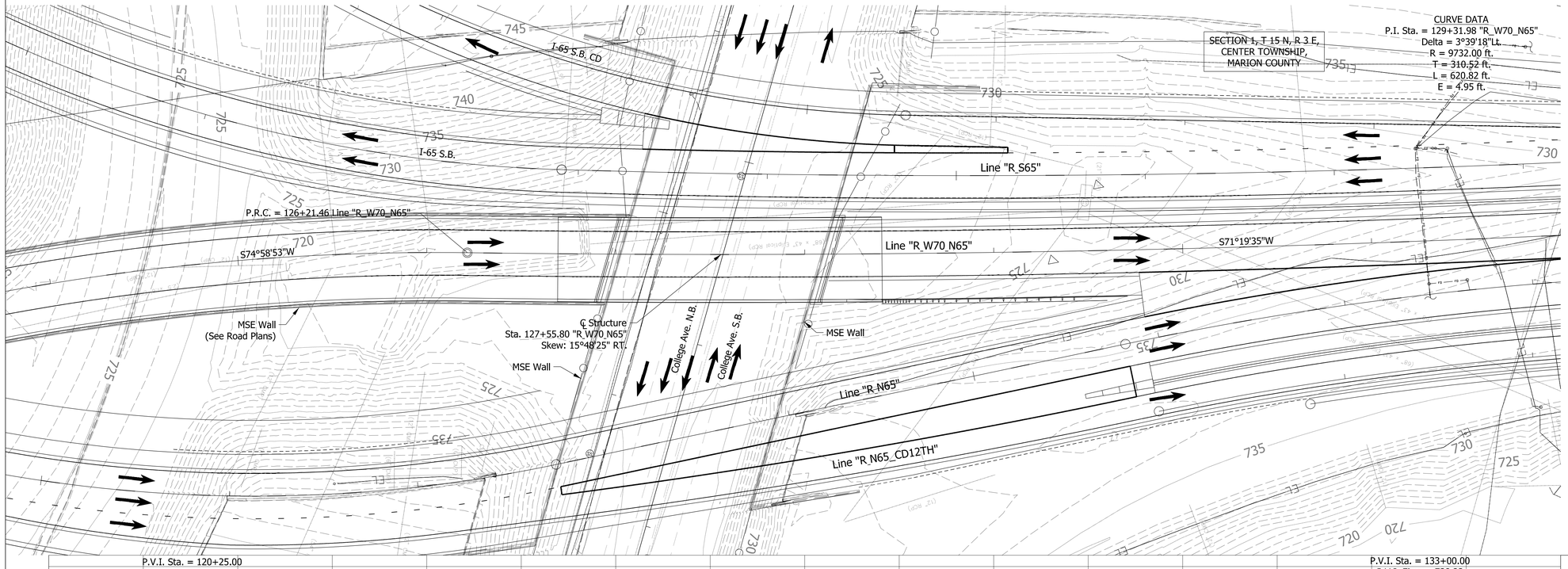
CHECKED: CML CHECKED: XX

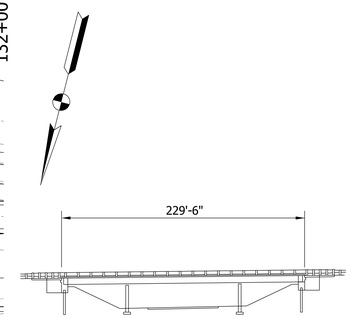
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC

SCALE	BRIDGE FILE
3/8" = 1'-0"	I65-112-10628 NBL
	DESIGNATION
	1901914
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 13
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 31 I70 WB to I65 NB over College Ave\1901914_03 - MOT.dgn



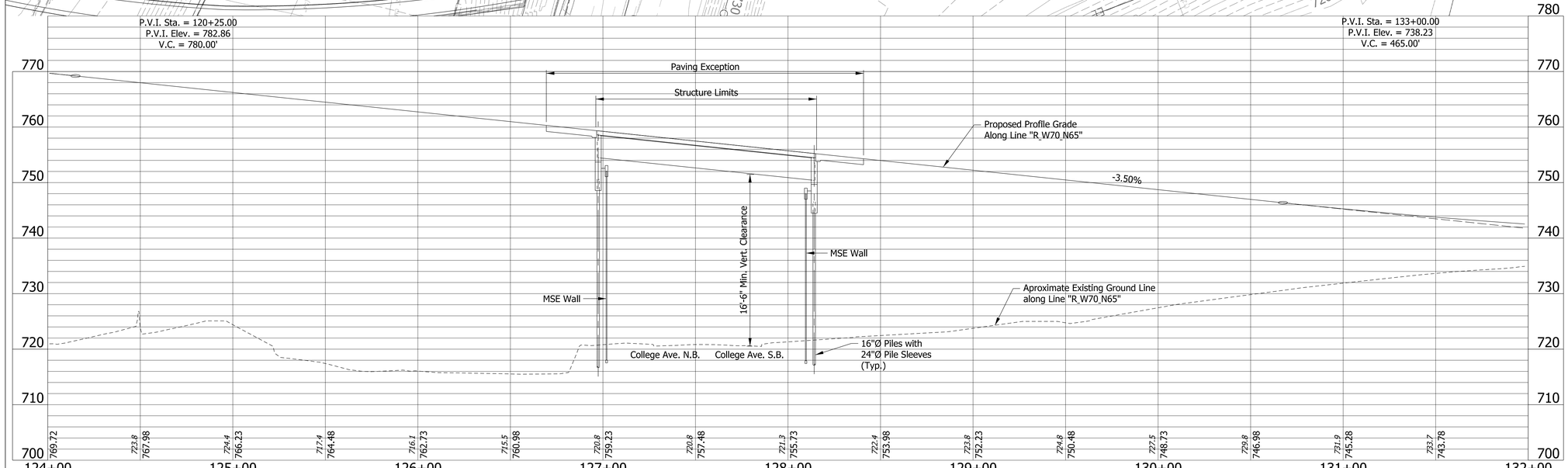


EXISTING STRUCTURE:

Existing structure built in 1969 is a continuous composite steel beam bridge rehabilitation in 1988 with overlay and retrofitted railing is a three span 43'-6", 124'-3 1/2" and 59'-9" with a 47°46'58" Rt. skew. The structure has a clear roadway width of 39'-9". Structure is to be removed. Existing plans are on file with Indiana Department of Transportation under Bridge File No. (I65-113-5749 A)

EARTHWORK TABULATION

Fill +20%	(See Road Plans)
Common Excavation	(See Road Plans)
Excavation, Foundation, Unclassified (70%)	(See Road Plans)
Waste	(See Road Plans)



NOTES:

1. See sheet 2 for utility owners.
2. All r/w shall be as shown.
4. There shall be no clearing of trees beyond construction limits.
5. All topography is existing.
6. All R/W described from line "R_W70_N65", except as noted.

COMPOSITE CONCRETE
BULB-TEE BEAM BRIDGE
1 SPAN: 116'-8½"
SKEW: 15°48'25" RT.
CLEAR ROADWAY: 42'-0"
I-70 W.B. TO I-65 N.B.
OVER COLLEGE AVE.
MARION COUNTY

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: XX
DRAWN: SRR
CHECKED: CML
CHECKED: XX

INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT

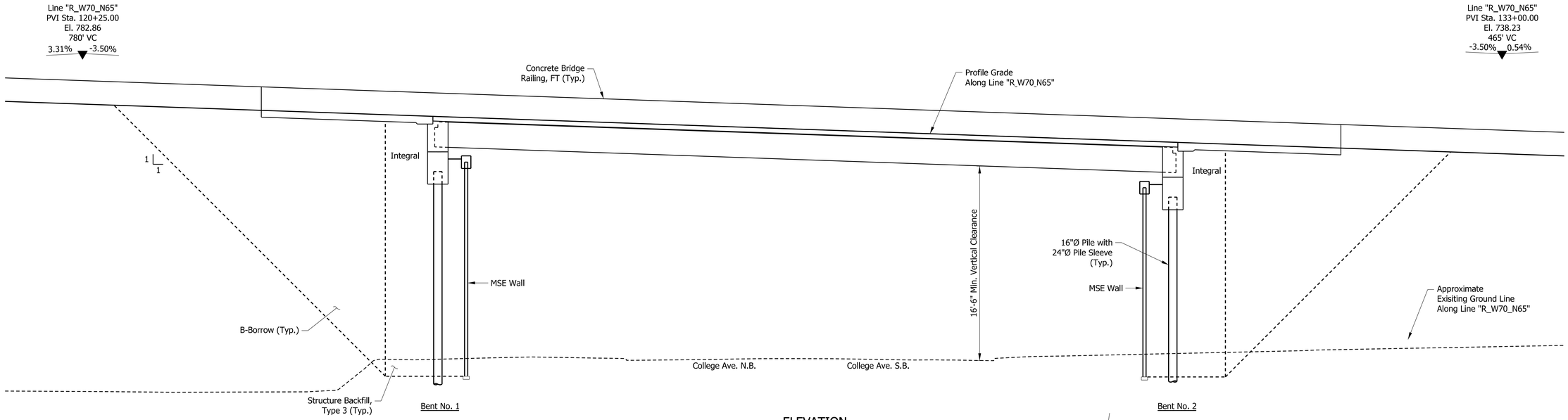
HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	I65-112-10628 NBL
VERTICAL SCALE	DESIGNATION
1" = 10'-0"	1901914
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/28/2020 9:02:27 AM

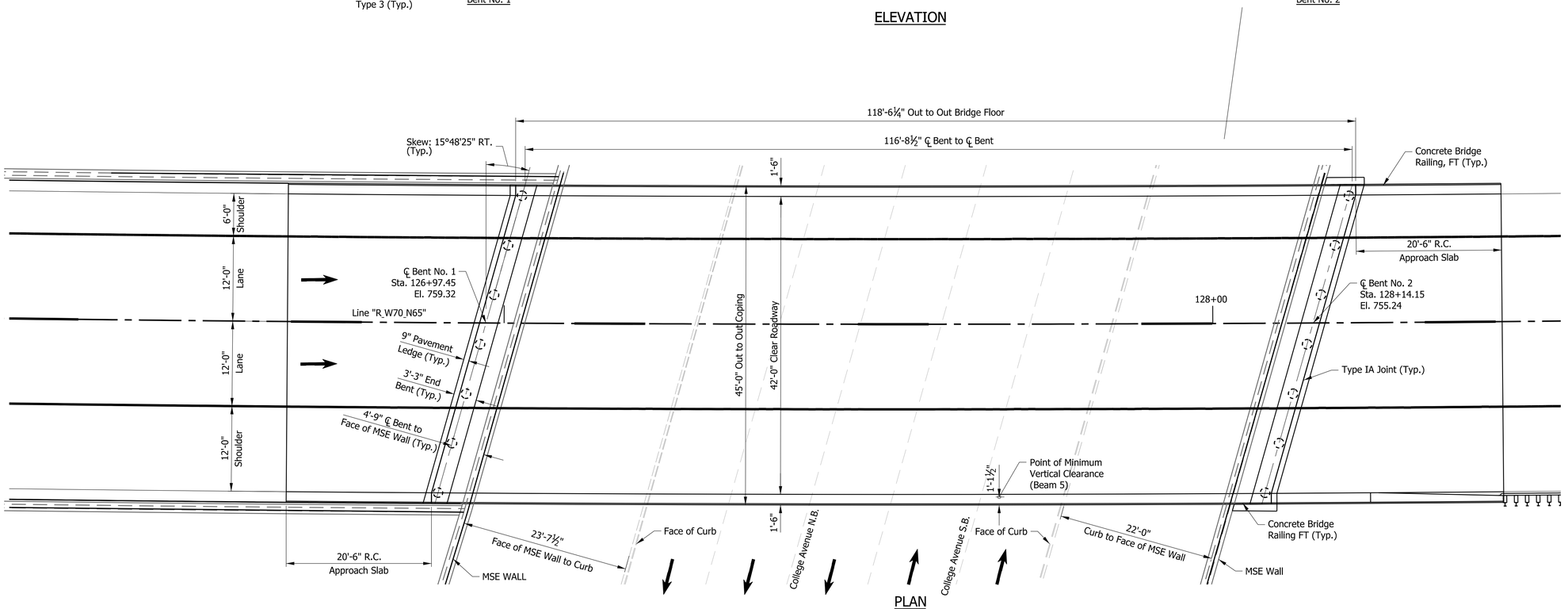
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 31 I70 WB to I65 NB over College Ave\1901914_04 - Layout.dgn

Line "R_W70_N65"
PVI Sta. 120+25.00
El. 782.86
780' VC
3.31% -3.50%

Line "R_W70_N65"
PVI Sta. 133+00.00
El. 738.23
465' VC
-3.50% 0.54%



ELEVATION



PLAN

COMPOSITE CONCRETE
BULB-TEE BEAM BRIDGE
1 SPAN: 116'-8½"
SKEW: 15°48'25" RT.
CLEAR ROADWAY: 42'-0"
I-70 W.B. TO I-65 N.B.
OVER COLLEGE AVE.
MARION COUNTY

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: XX
DRAWN: SRR
CHECKED: CML
CHECKED: XX

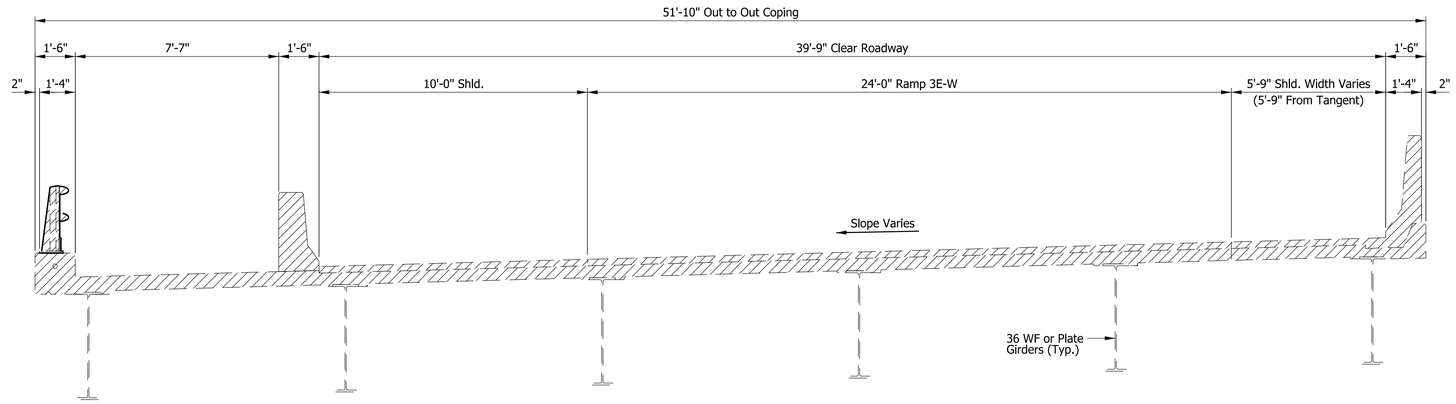
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

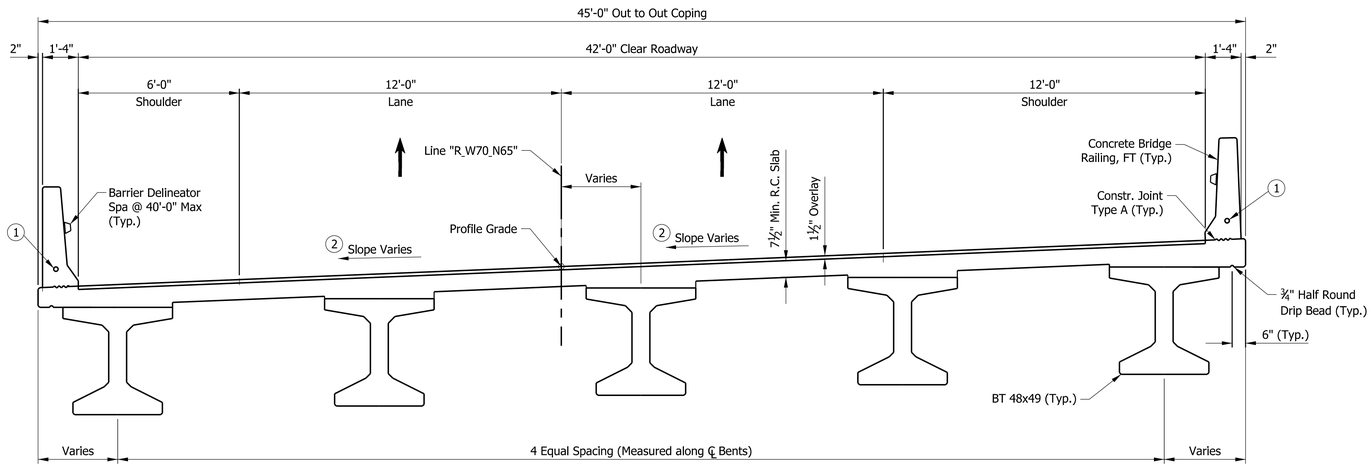
SCALE	BRIDGE FILE
1/8" = 1'-0"	I65-112-10628 NBL
	DESIGNATION
	1901914
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/28/2020 9:03:02 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 31 I70 WB to I65 NB over College Ave\1901914_05 - General Plan.dgn



EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION

GENERAL NOTES

Reinforcing bar cover shall be 2" min. in top and 1" min. in bottom of floor slabs, 3" min. in footing except bottom bars which shall be 4" min., and 2" min. in all other parts, unless noted.

All dimensions and elevations are in feet (ft) unless otherwise noted.

Concrete in floor slab, diaphragms, barrier approach slab and end bents shall be an alternate Class "C" in accordance with the technical provisions. Reinforcing bars in deck, barrier, and end bent diaphragm extending into the deck shall be stainless steel. Reinforcing bars in end bent diaphragm not extending into the deck and in the cap shall be epoxy coated.

Anti-graffiti coating shall be placed on all exposed surfaces of new retaining walls and new bridge structures excluding top of deck or overlay and interior beams.

DESIGN DATA

LIVE LOAD
Superstructure and substructure designed for HL-93 loading in accordance with AASHTO LRFD Bridge Design Specifications Eighth Edition, 2017 and subsequent interim.

DEAD LOAD
Designed for actual Dead Load plus 15 psf for SIP metal deck forms.

Slab designed with a 7½" structural depth and a 1½" very early strength LMC overlay.

SEISMIC DESIGN DATA

Seismic Performance Zone = 1
Acceleration Coefficient = 0.061
Seismic Soil Profile Type = Site Class C

DESIGN STRENGTHS

Prestressed Concrete	f'c = 10,000 psi @ 28 DAYS
Class "A" Concrete	f'c = 3,500 psi
Class "B" Concrete	f'c = 3,500 psi
Class "C" Concrete	f'c = 4,000 psi
Reinforcing Bars	fy = 60,000 psi (barrier)
	fy = 75,000 psi (all other locations)

CONSTRUCTION LOADING

The exterior beam 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 beam. The finishing machine was assumed to be supported 6 inches past the edge of 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 beam bottom flange and web.

Deck Falsework Loads:	Designed for 15 lb/sft for permanent metal stay in place deck forms, removable deck forms, and 2-ft exterior walkway.
Construction Live Load:	Designed for 20 lb/sft extending 2-ft past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30-ft length of deck centered with the finishing machine.
Finishing-machine Load:	4500 lb distributed over 10-ft along the coping.
Wind Load:	Structure designed for 70 mph horizontal wind loading in accordance with AASHTO LRFD 3.8.1.

LEGEND

Limits of Removal
(1) Counduit for Lighting
(2) See Road Plan

COMPOSITE CONCRETE
BULB-TEE BEAM BRIDGE
1 SPAN: 116'-8½"
SKEW: 15°48'25" RT.
CLEAR ROADWAY: 42'-0"
I-70 W.B. TO I-65 NB OVER
COLLEGE AVE.
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: XX | DRAWN: SRR
CHECKED: CML | CHECKED: XX

INDIANA
DEPARTMENT OF TRANSPORTATION

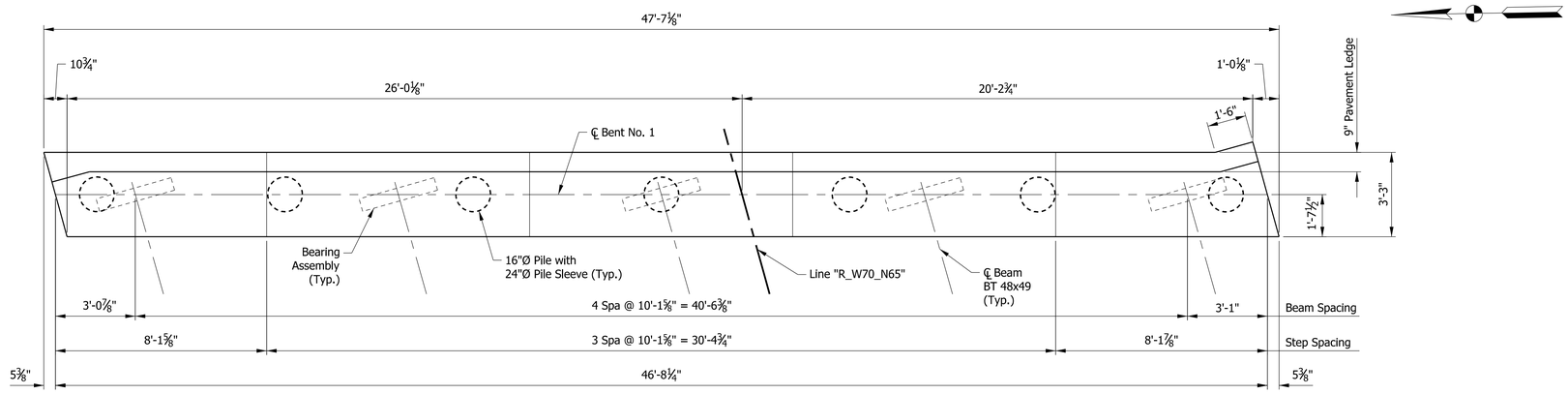
GENERAL PLAN
TYPICAL SECTION

SCALE	BRIDGE FILE
3/8" = 1'-0"	I65-112-10628 NBL
	DESIGNATION
	1901914

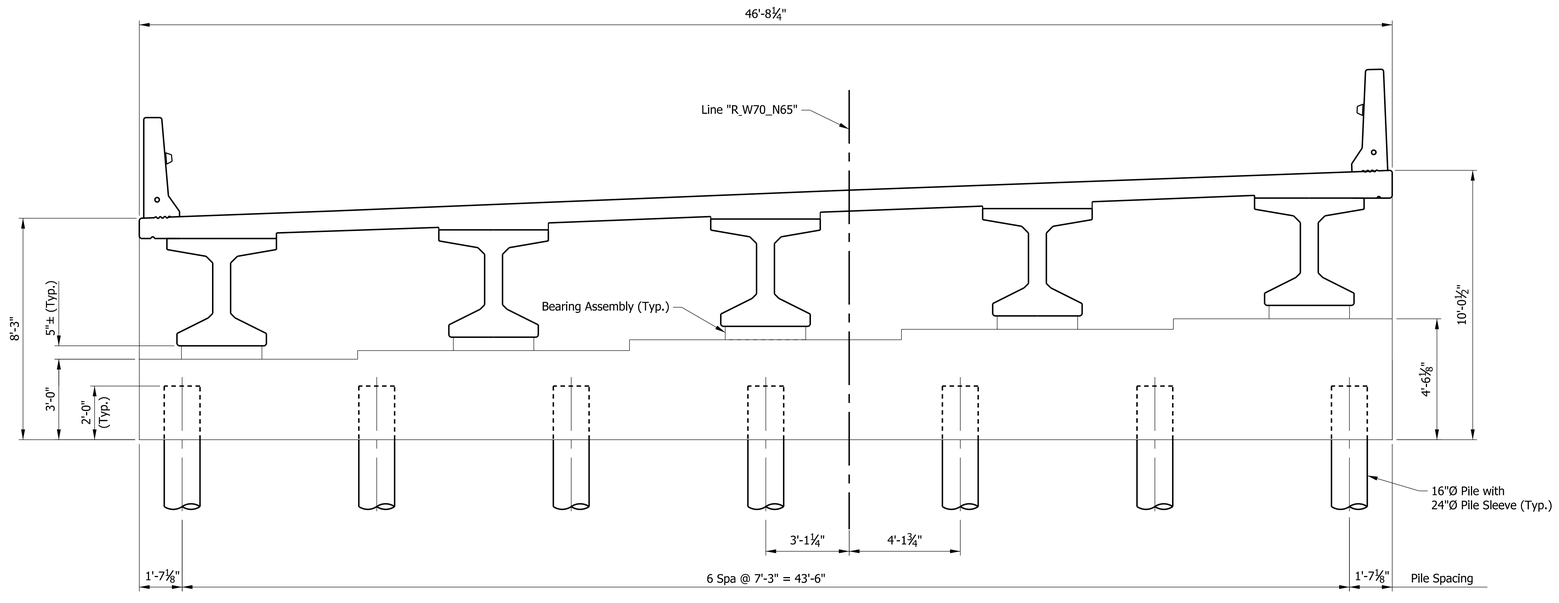
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/28/2020 9:03:03 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 31 I70 WB to I65 NB over College Ave\1901914_06 - Typical Section.dgn



PLAN

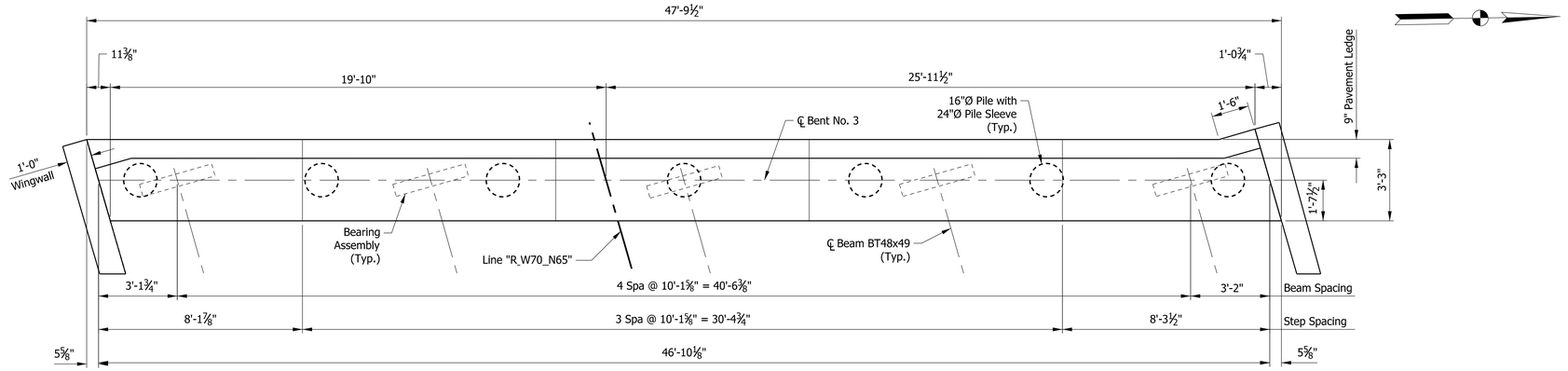


SECTION ALONG ℄ BENT

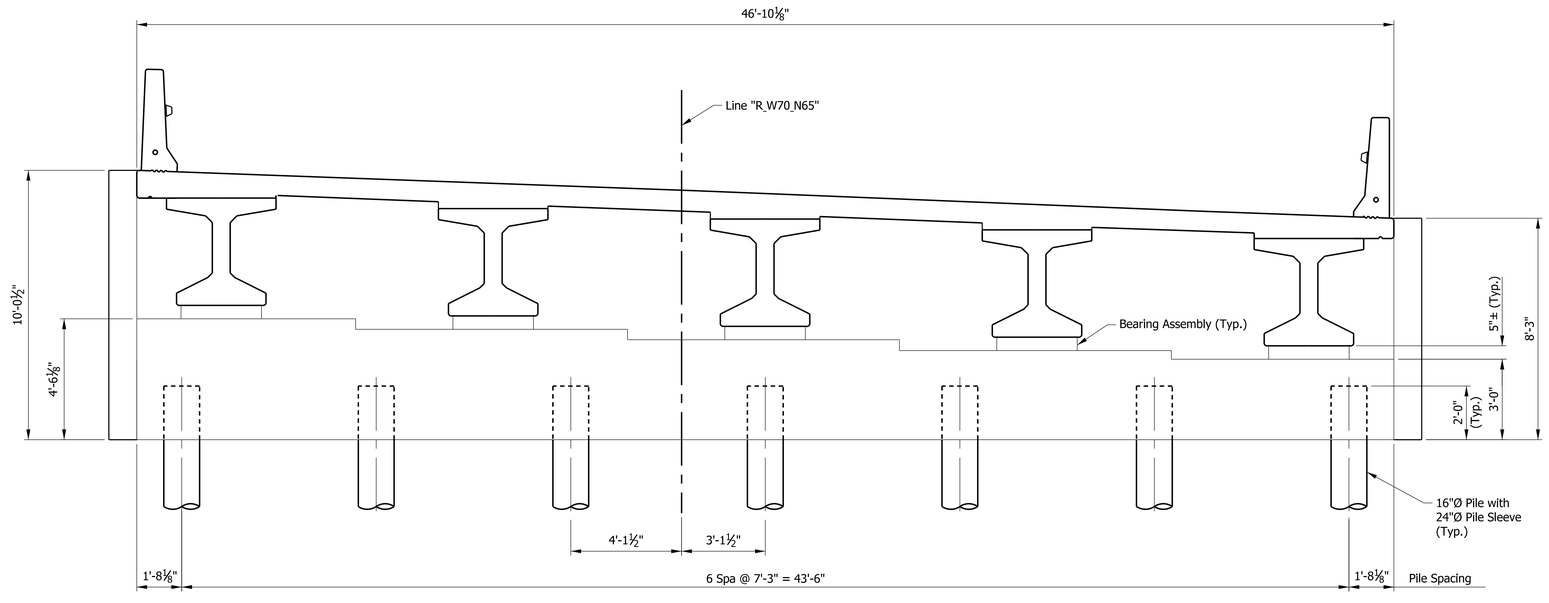
		RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE	BRIDGE FILE
				3/8" = 1'-0"	I65-112-10628 NBL
					DESIGNATION
					1901914
		DESIGNED: XX / DRAWN: SRR	BENT NO. 1 DETAILS	SURVEY BOOK	SHEETS
		CHECKED: CML / CHECKED: XX		ELECTRONIC	7 of 13
				CONTRACT	PROJECT
				B-36910	1600808

Plot: 2/28/2020 9:03:06 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 31 I70 WB to I65 NB over College Ave\1901914_07 - Bent No. 1.dgn



PLAN

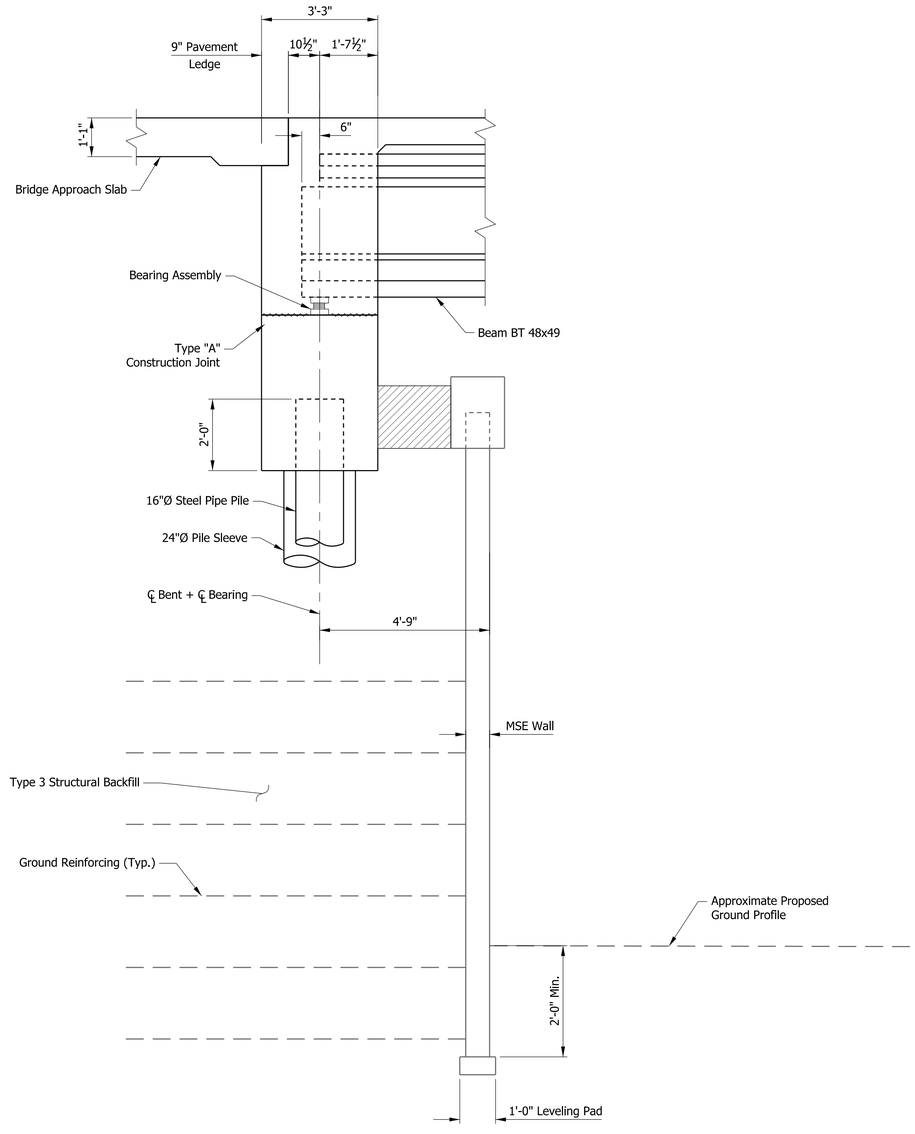


SECTION ALONG ℄ BENT

		RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 3/8" = 1'-0"	BRIDGE FILE: I65-112-10628 NBL
					DESIGNATION: 1901914
		DESIGNED: XX / DRAWN: SRR	BENT NO. 2 DETAILS	SURVEY BOOK: ELECTRONIC	SHEETS: 8 of 13
		CHECKED: CML / CHECKED: XX		CONTRACT: B-36910	PROJECT: 1600808

Plot: 2/28/2020 9:03:08 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 31 I70 WB to I65 NB over College Ave\1901914_08 - Bent No. 2.dgn



TYPICAL SECTION

NOTE:

For MSE Wall Details, see plan Designation No. 1901915, Sheets 14 to 15.

Plot: 2/28/2020 9:03:09 AM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: XX | DRAWN: SRR

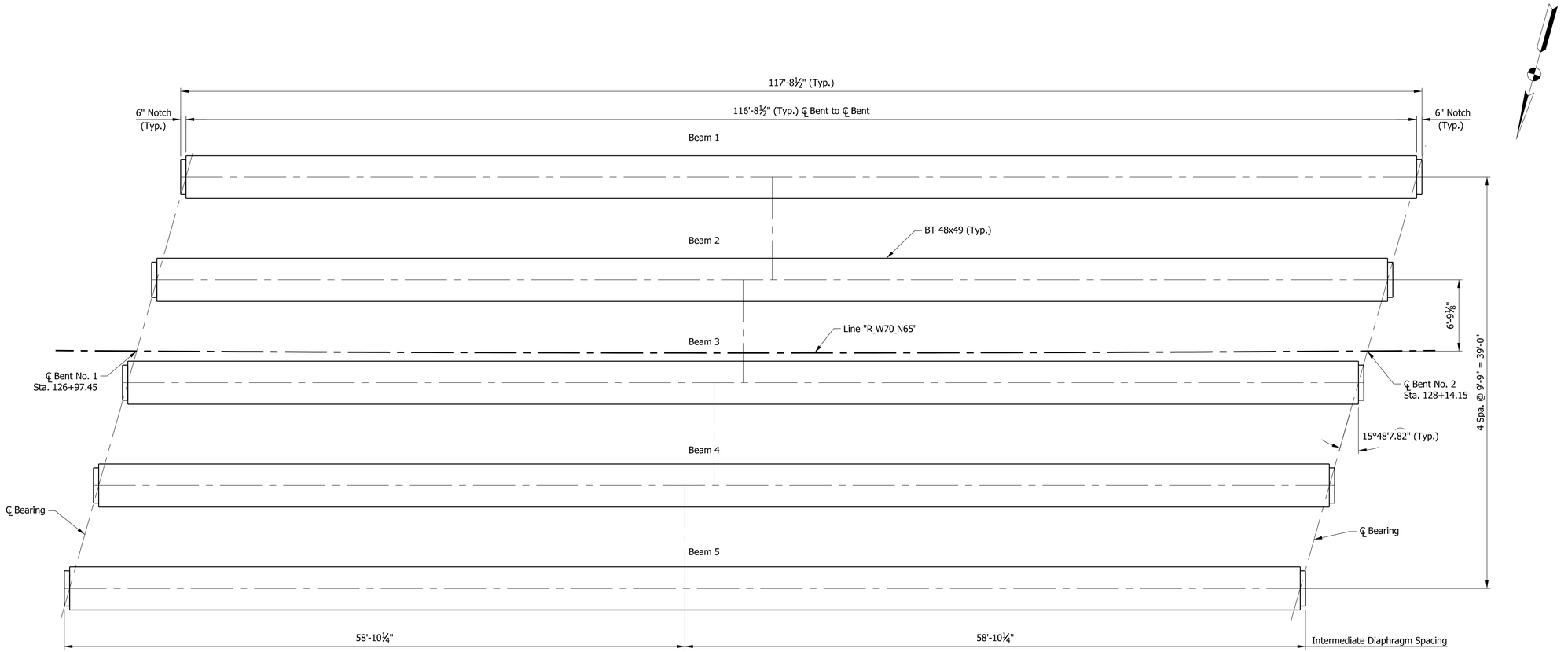
CHECKED: CML | CHECKED: XX

INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 1 & 2 DETAILS

SCALE	BRIDGE FILE
1/2" = 1'-0"	I65-112-10628 NBL
	DESIGNATION
	1901914
SURVEY BOOK	SHEETS
ELECTRONIC	9 of 13
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 31 I70 WB to I65 NB over College Ave\1901914_09 - Bent No. 1 & 2 Details.dgn



PLAN

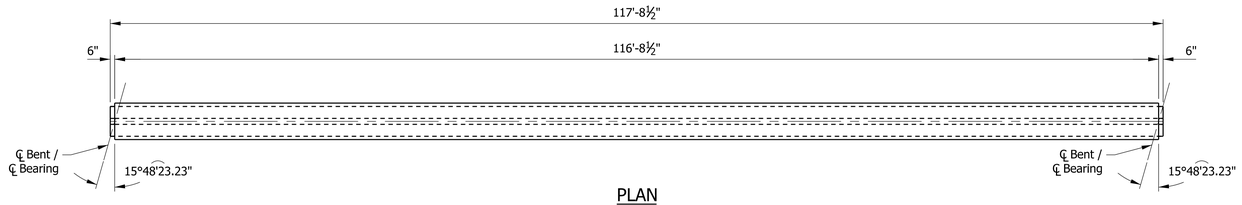
NOTES:

For intermediate diaphragm details, see Std. Dwg. E707-SDPC - 03 & 04.

		RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE	BRIDGE FILE
				3/16" = 1'-0"	I65-112-10628 NBL
					DESIGNATION
					1901914
		DESIGNED: XX / DRAWN: SRR	FRAMING PLAN	SURVEY BOOK	SHEETS
				ELECTRONIC	10 of 13
		CHECKED: CML / CHECKED: XX		CONTRACT	PROJECT
				B-36910	1600808

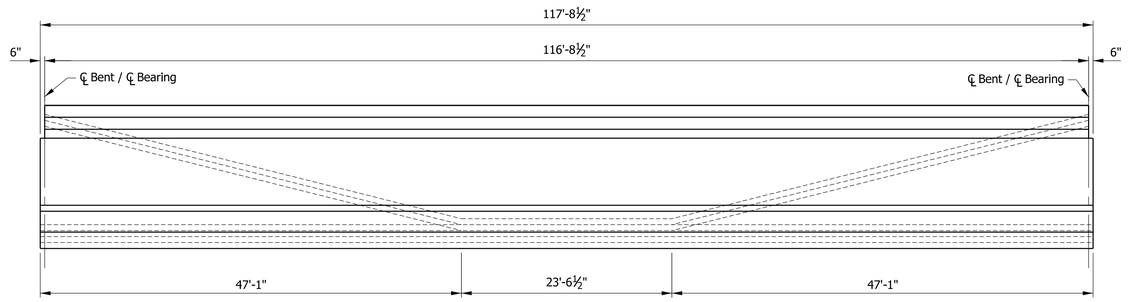
Plot: 2/28/2020 9:03:11 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 31 I70 WB to I65 NB over College Ave\1901914_10 - WB Framing Plan.dgn



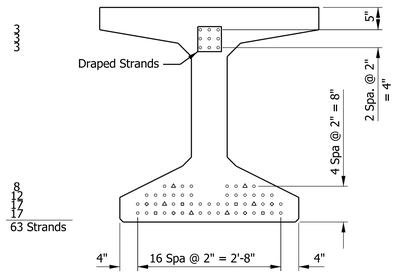
PLAN

Scale: ⅛" = 1'-0"



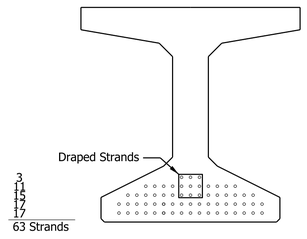
ELEVATION

Horizontal Scale: ⅛" = 1'-0"
Vertical Scale: ½" = 1'-0"



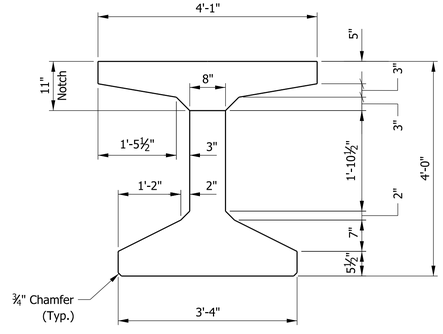
STRAND PATTERN
AT BEAM END

Scale: ¾" = 1'-0"



STRAND PATTERN
AT MIDSPAN

Scale: ¾" = 1'-0"



TYPICAL SECTION

Scale: ¾" = 1'-0"

LEGEND

△ Debonded 5' from beam end
▫ Debonded 10' from beam end
◇ Debonded 15' from beam end

NOTES:

1. For intermediate diaphragm details, see Std. Dwg. E707-SDPC - 03 & 04.

2. Prestressing reinforcement shall be a 0.6"Ø uncoated seven wire low relaxation 270ksi with strand area= 0.217 in².

3. Beams shall be cast a minimum of 120 days before deck is poured

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: XX
DRAWN: SRR
CHECKED: CML
CHECKED: XX

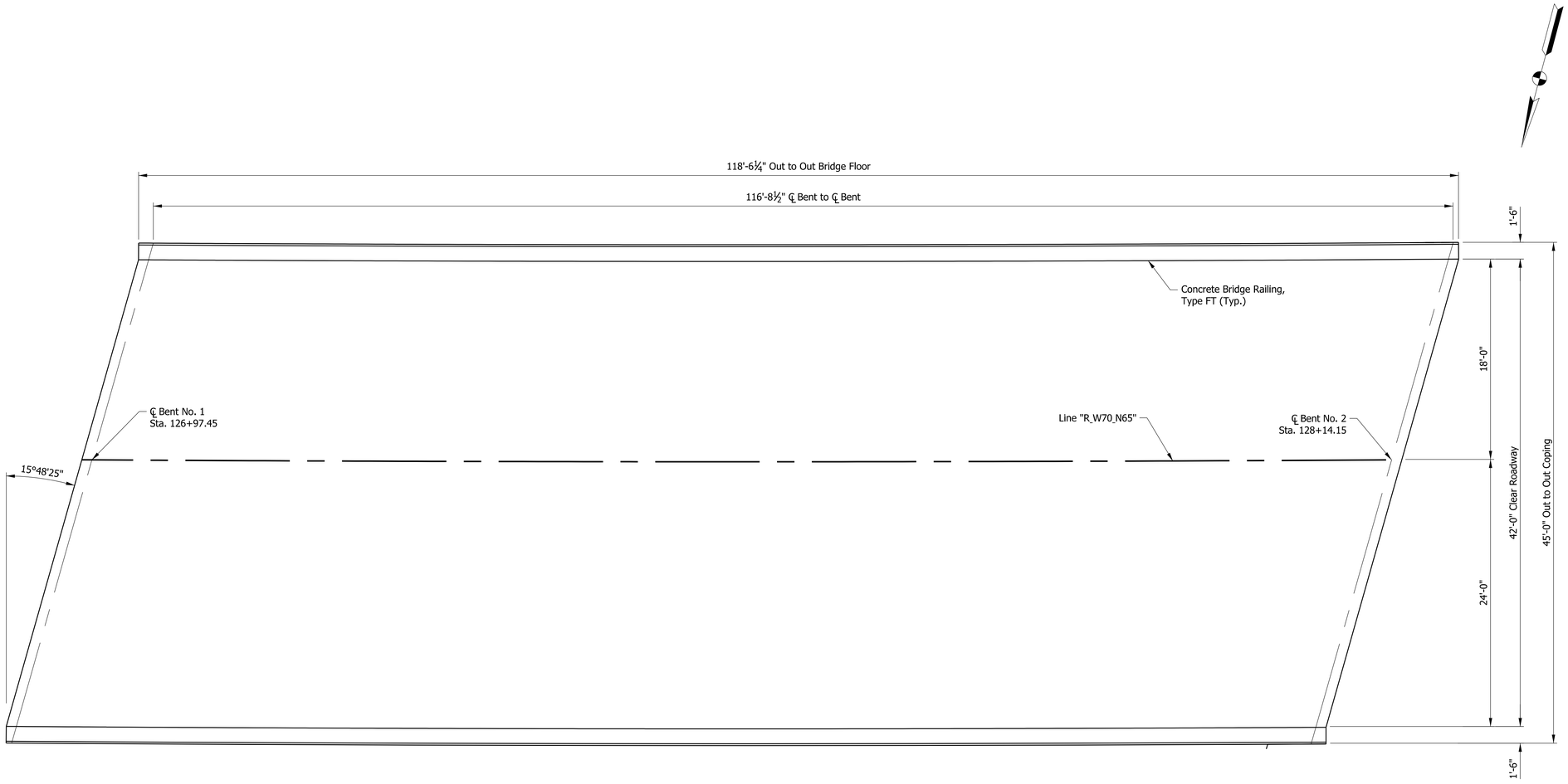
INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

SCALE	BRIDGE FILE
AS NOTED	I65-112-10628 NBL
	DESIGNATION
	1901914
SURVEY BOOK	SHEETS
ELECTRONIC	11 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/28/2020 9:03:12 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 31 I70 WB to I65 NB over College Ave\1901914_11 - Beam Details.dgn

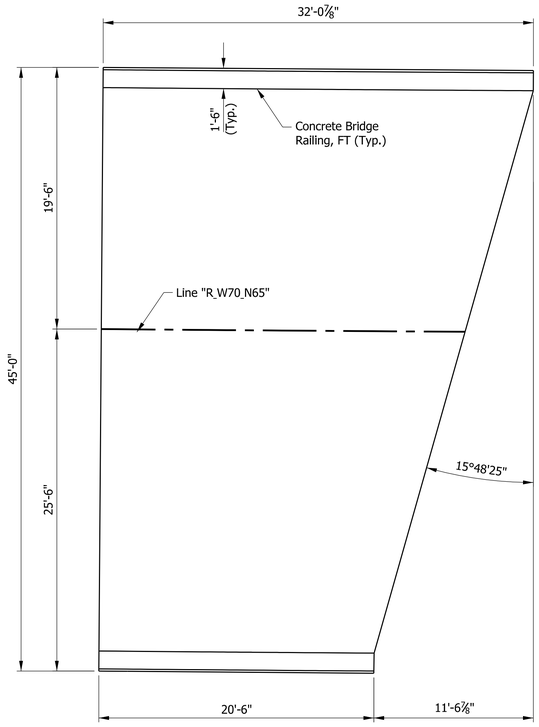


FLOOR PLAN

		RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 3/16" = 1'-0"	BRIDGE FILE: I65-112-10628 NBL
					DESIGNATION: 1901914
		DESIGNED: XX / DRAWN: SRR	SUPERSTRUCTURE DETAILS	SURVEY BOOK: ELECTRONIC	SHEETS: 12 of 13
		CHECKED: CML / CHECKED: XX		CONTRACT: B-36910	PROJECT: 1600808

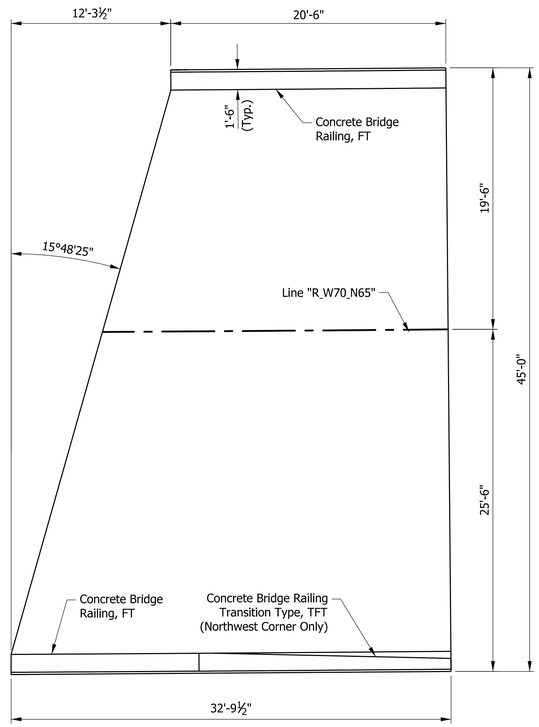
Plot: 2/28/2020 9:03:14 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 31 I70 WB to I65 NB over College Ave\1901914_12 - Deck Plan.dgn



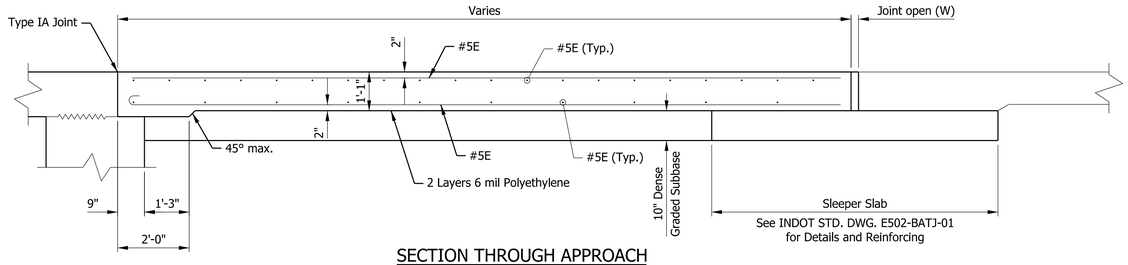
APPROACH SLAB AT END BENT NO. 1

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



APPROACH SLAB AT END BENT NO. 2

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



SECTION THROUGH APPROACH

Scale: ½" = 1'-0"

NOTE:

1.For additional Terminal Joint information, see USP. Terminal Joint Details: Type CRCP

2. Concrete Railing FT and TFT sit on Slab Extension. For more details, see Std. Dwg. E609-TBAE-02804.

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: XX DRAWN: SRR

CHECKED: CML CHECKED: XX

INDIANA DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS

SCALE	BRIDGE FILE
AS NOTED	I65-112-10628 NBL
	DESIGNATION
	1901914
SURVEY BOOK	SHEETS
ELECTRONIC	13 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/28/2020 9:03:15 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 31 I70 WB to I65 NB over College Ave\1901914_13 - Approach Slab Details.dgn

PROJECT	DESIGNATION
1600808	1901915
CONTRACT	BRIDGE FILE
B-36910	I65-112-10629 BNBL

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

FOR SPANS OVER 20 FEET

ROUTE: I-65 NB & CD RAMP OVER COLLEGE AVE. AT: RP 112+81

PROJECT NO. 1600808 (P.E. & CONSTR.)

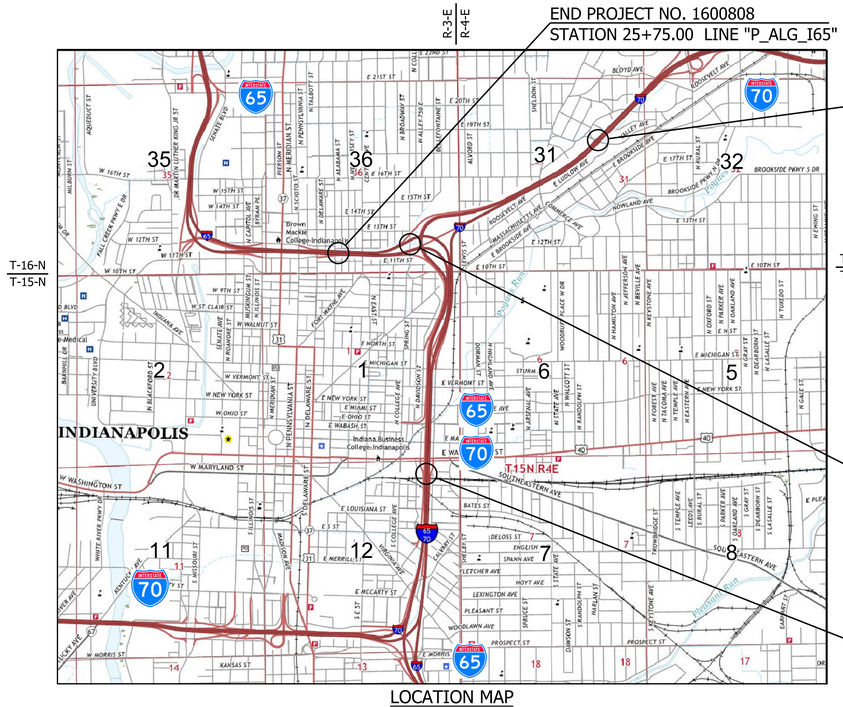
NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

Bridge Replacement on I-65 N.B. and 12th St. CD over College Ave., Located 2.06 Miles North of I-70 (South Split) Interchange, in Section 36, of Township 16 North, Range 3 East, Center Township, in Marion County Indiana

TRAFFIC DATA		I-65 N.B.	I-65 N.B. TO 12th St. CD	COLLEGE AVE.
A.A.D.T.	(2021)	34,480 V.P.D.	8,777 V.P.D.	9,434 (NB) 7,024 (SB) V.P.D.
A.A.D.T.	(2041)	41,090 V.P.D.	9,854 V.P.D.	7,170 (NB) 7,886 (SB) V.P.D.
D.H.V	(2041)	4,109 V.P.H.	1,281 V.P.H.	798 (NB) 723 (SB) V.P.H.
DIRECTIONAL DISTRIBUTION		100%	100%	48% (NB) 52% (SB)
TRUCKS		3% D.H.V.	2% D.H.V.	2% (NB) 3% (SB)
DESIGN DATA				
DESIGN SPEED		55 M.P.H.	45 M.P.H.	35 M.P.H.
PROJECT DESIGN CRITERIA		4R (FREEWAY)	4R (FREEWAY)	N/A
FUNCTIONAL CLASSIFICATION		FREEWAY	FREEWAY	MINOR ARTERIAL
RURAL/URBAN		URBAN	URBAN	URBAN
TERRAIN		LEVEL	LEVEL	LEVEL
ACCESS CONTROL		FULL CONTROL	FULL CONTROL	NONE

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I65-112-10629 BNBL	COMPOSITE CONCRETE BULB-TEE BEAM	ONE SPAN 128'-5" SKEW: 27°45'00"	COLLEGE AVENUE	148+33.98 LINE "R_N65"

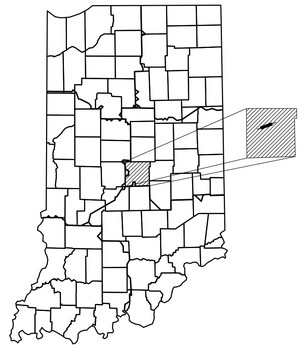
KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVENUE	
1901914	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901927	BRIDGE REPLACEMENT ON I-65 SB TO I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE) - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER VERMONT STREET	



LOCATION MAP
(MARION COUNTY)

T-16-N
T-15-N

SCALE: 1" = 2000'



PROJECT LOCATION SHOWN BY
MARION COUNTY

LATITUDE: 39°47'00.80" N LONGITUDE: 86°08'41.00" W

HYDROLOGIC UNIT CODE: 05120201130020

BRIDGE LENGTH:	0.024	MI.
ROADWAY LENGTH:	SEE ROAD PLANS	MI.
TOTAL LENGTH:	SEE ROAD PLANS	MI.
MAX. GRADE:	2.15	%

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2020
TO BE USED WITH THESE PLANS

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

SUPERIOR CONSTRUCTION

PLANS PREPARED BY: JANSSEN & SPAANS ENGINEERING (317) 254-9686 PHONE NUMBER

CERTIFIED BY: _____ DATE

RECOMMENDED FOR LETTING: _____ INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE	
I65-112-10629 BNBL	
DESIGNATION	
1901915	
SURVEY BOOK	SHEETS
ELECTRONIC	1 of 15
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/28/2020 9:25:44 AM

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 32 I65 NB & CD Exit Ramp over College Ave\1901915_01 - Title.dgn

UTILITIES

INDEX

SHEET NO.	SUBJECT
1	TITLE
2	INDEX
3	MAINTENANCE OF TRAFFIC
4	LAYOUT
5	GENERAL PLAN
6	GENERAL PLAN - TYPICAL SECTION
7	BENT NO. 1 DETAILS
8	BENT NO. 2 DETAILS
9	BENT NO. 1 & 2 DETAILS
10	FRAMING PLAN
11	BEAM DETAILS
12	SUPERSTRUCTURE DETAILS
13	APPROACH SLAB DETAILS
14	MSE WALL DETAILS AT BENT NO. 1
15	MSE WALL DETAILS AT BENT NO. 2

REVISIONS

SHEET NO.	DATE	REVISED

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

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

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: SL DRAWN: JRC

CHECKED: CML CHECKED: SL

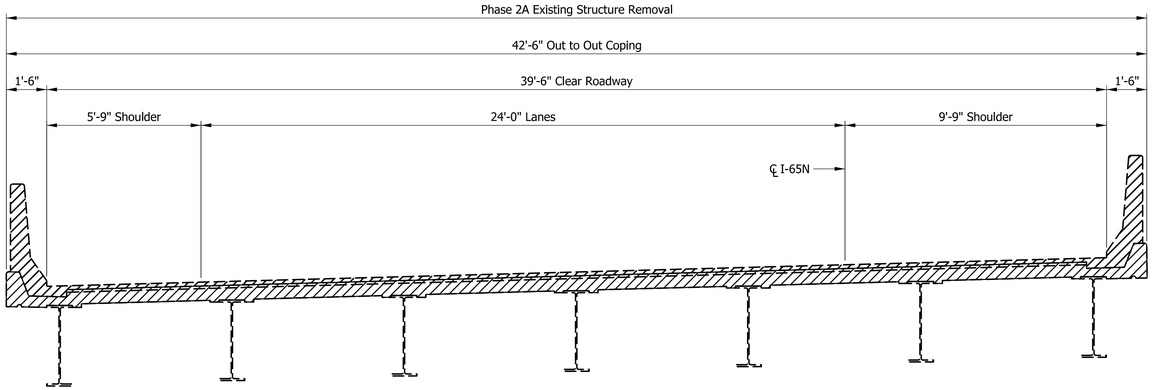
INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX

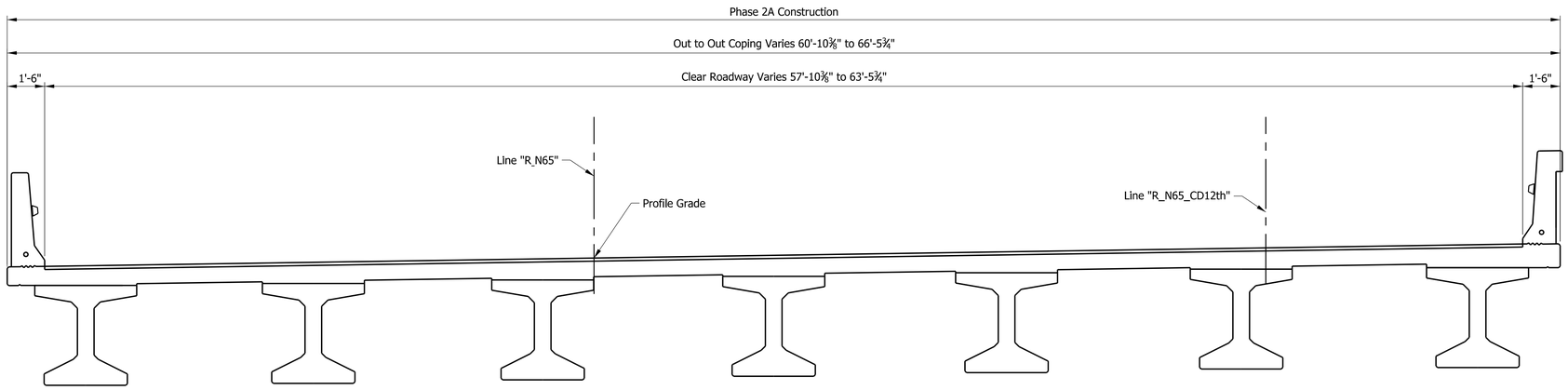
SCALE	BRIDGE FILE
	I65-112-10629 BNBL
	DESIGNATION
	1901915
SURVEY BOOK	SHEETS
ELECTRONIC	2 of 15
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/28/2020 9:25:47 AM

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 32 I65 NB & CD Exit Ramp over College Ave\1901915_02 - Index.dgn



PHASE 2A REMOVAL

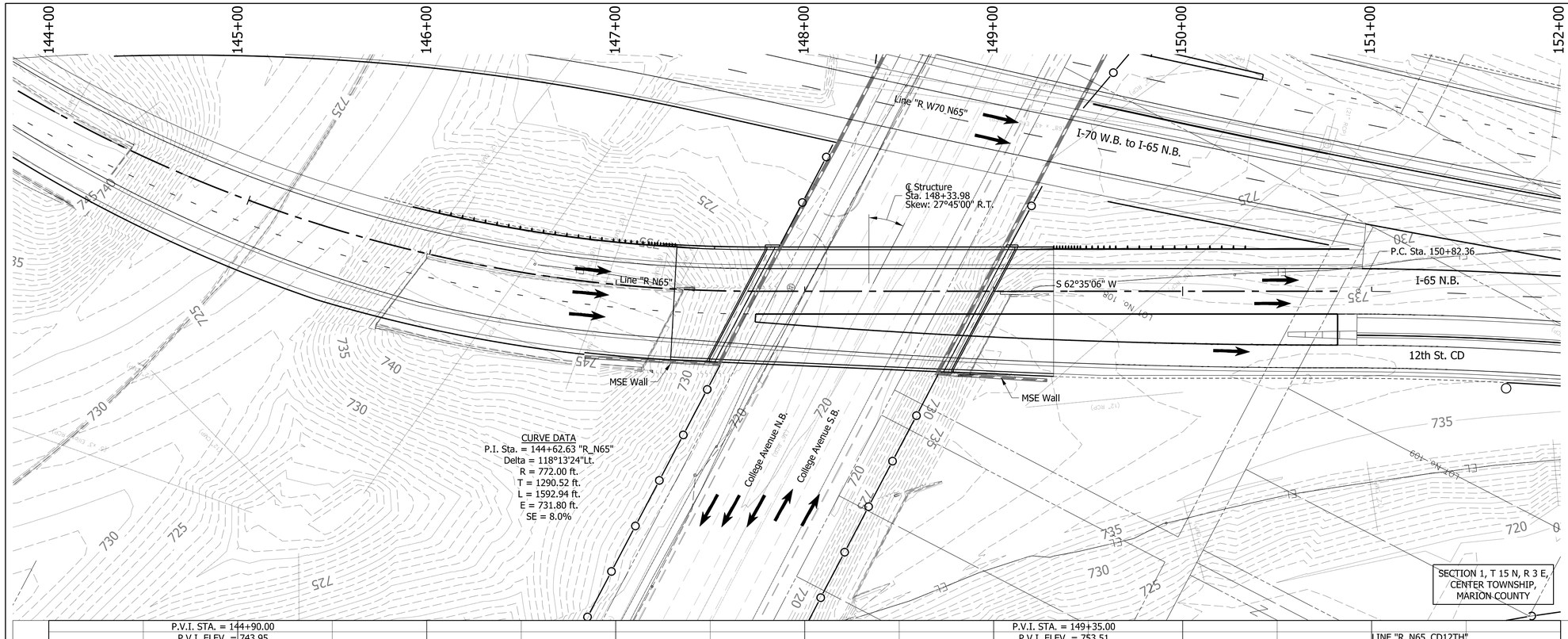


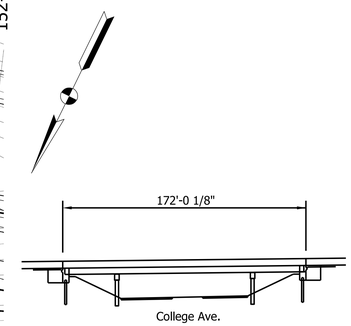
PHASE 2A CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 3/8" = 1'-0" / BRIDGE FILE: I65-112-10629 BNBL / DESIGNATION: 1901915
DESIGNED: SL	DRAWN: SRR	MAINTENANCE OF TRAFFIC	SURVEY BOOK / SHEETS: ELECTRONIC 3 of 15
CHECKED: CML	CHECKED: SL		CONTRACT: B-36910 / PROJECT: 1600808

Plot: 2/28/2020 9:25:49 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 32 I65 NB & CD Exit Ramp over College Ave\1901915_03 - MOT.dgn



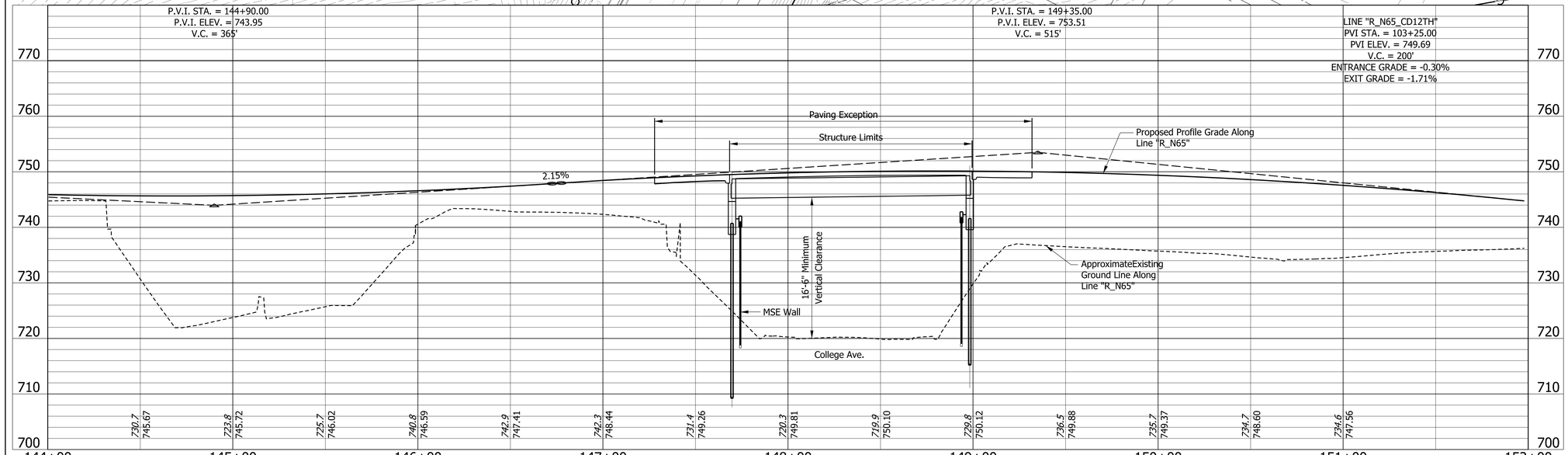


EXISTING STRUCTURE:

Existing structure built in 1969is a continuous composite steel beam bridge rehabilitation in 1986 with overlay and retrofitted railing is a three span 45'-0", 93'-4" and 32'-0" with 26 52'46" Rt. skew. the structure has a clear roadway width of 39'-6". Structure is to be removed. Existing plans are on file with
Indiana Department of Transportation under Bridge File No. (165-113-5748 A)

EARTHWORK TABULATION

Fill +20%	(See Road Plan)
Common Excavation	(See Road Plan)
Excavation, Foundation, Unclassified (70%)	(See Road Plan)
Waste	(See Road Plan)



NOTES:

1. See sheet 2 for utility owners.
2. All r/w shall be as shown.
4. There shall be no clearing of trees beyond construction limits.
5. All topography is existing.
6. All R/W described from line "R_E70", except as noted.

COMPOSITE CONCRETE
BULB-TEE BEAM BRIDGE
1 SPAN: 128'-5"
SKEW: 27°45'00" R.T.
CLEAR ROADWAYS: VARIES
57'-10⅜" TO 63'-5¾"
I-65 N.B. & 12TH ST. CD OVER
COLLEGE AVE., MARION COUNTY

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: SL DRAWN: SRR
CHECKED: CML CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

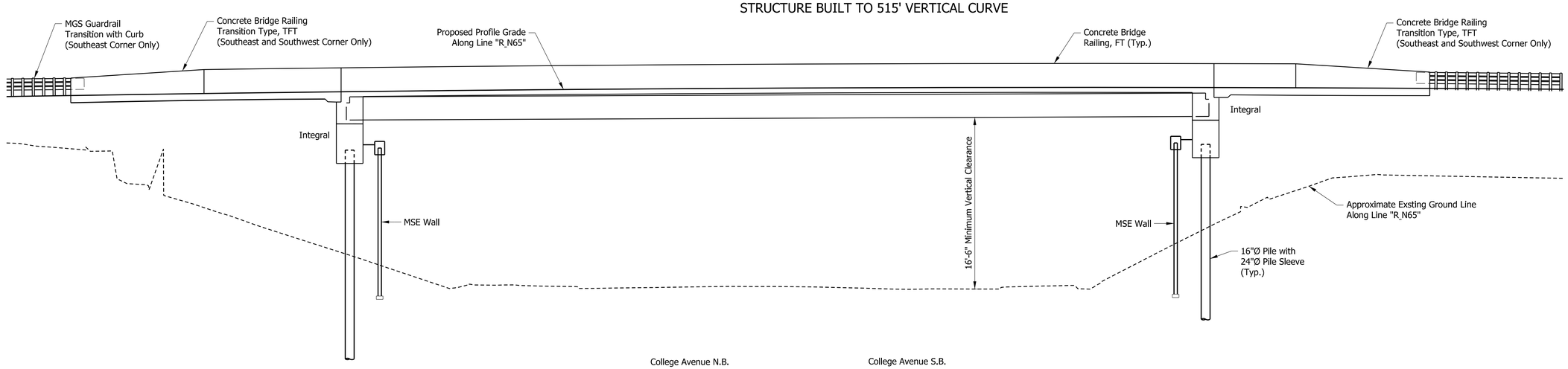
LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	I65-112-10629 BNBL
VERTICAL SCALE	DESIGNATION
1" = 10'-0"	1901915
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 15
CONTRACT	PROJECT
B-36910	1600808

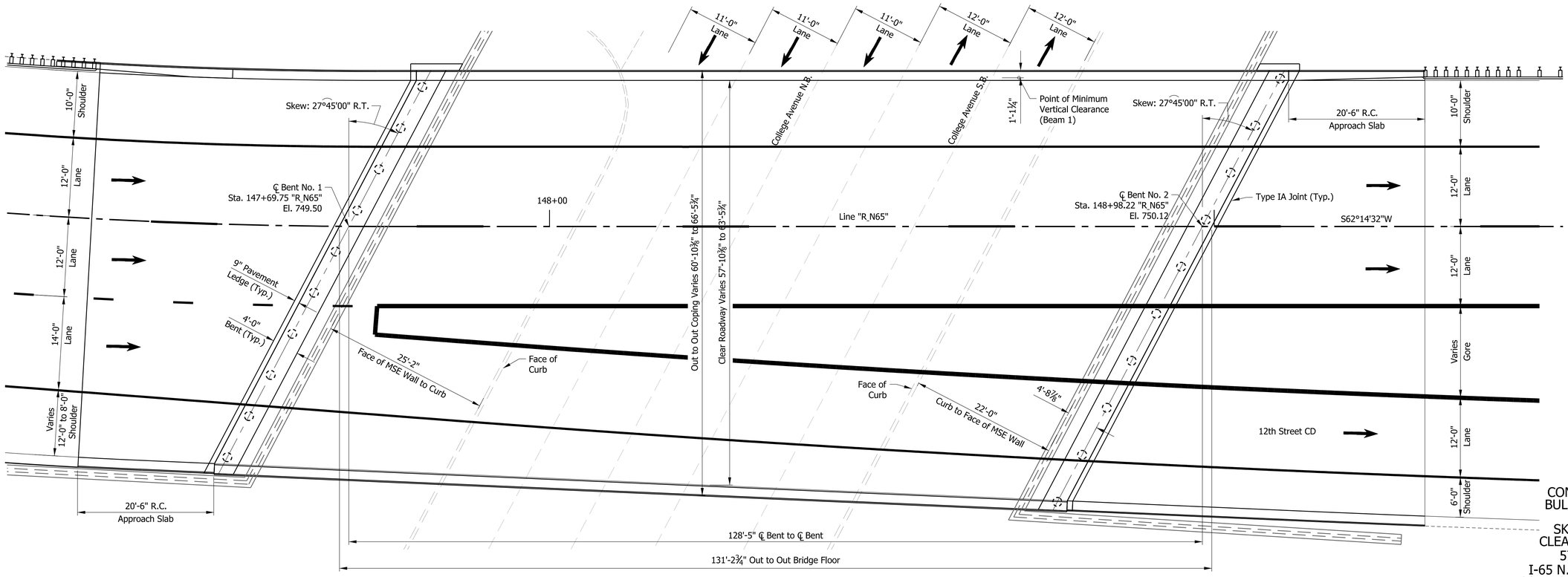
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P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 32 I65 NB & CD Exit Ramp over College Ave\1901915_04 - Layout.dgn

STRUCTURE BUILT TO 515' VERTICAL CURVE



ELEVATION



PLAN

COMPOSITE CONCRETE
BULB-TEE BEAM BRIDGE
1 SPAN: 128'-5"
SKEW: 27°45'00" R.T.
CLEAR ROADWAY: VARIES
57'-10⅜" to 63'-5¾"
I-65 N.B. & 12th ST. CD OVER
COLLEGE AVE., MARION COUNTY

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: SL DRAWN: SRR

CHECKED: CML CHECKED: SL

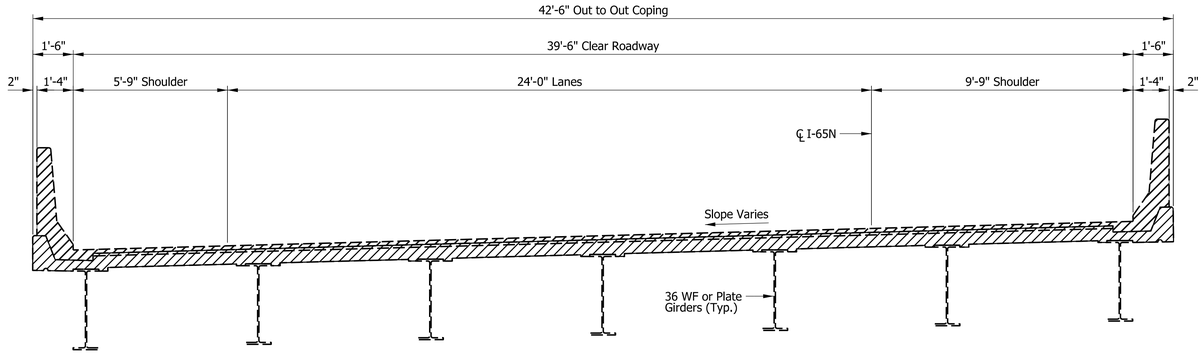
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

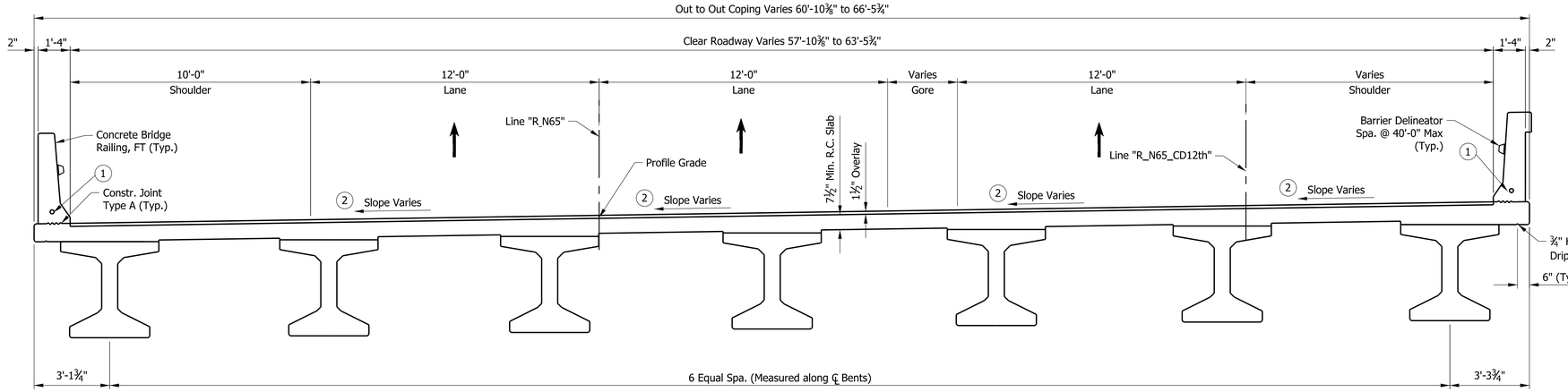
SCALE	BRIDGE FILE
1/8" = 1'-0"	I65-112-10629 BNBL
	DESIGNATION
	1901915
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 15
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/28/2020 9:26:35 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 32 I65 NB & CD Exit Ramp over College Ave\1901915_05 - General Plan.dgn



EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION

LEGEND

- Limits of Removal
- (1) Conduit for Lightning
- (2) See Road Plan

GENERAL NOTES

Reinforcing bar cover shall be 2" min. in top and 1" min. in bottom of floor slabs, 3" min. in footing except bottom bars which shall be 4" min., and 2" min. in all other parts, unless noted.

All dimensions and elevations are in feet (ft) unless otherwise noted.

Concrete in floor slab, diaphragms, barrier approach slab and end bents shall be an alternate Class "C" in accordance with the technical provisions. Reinforcing bars in deck, barrier, and end bent diaphragm extending into the deck shall be stainless steel. Reinforcing bars in end bent diaphragm not extending into the deck and in the cap shall be epoxy coated.

Anti-graffiti coating shall be placed on all exposed surfaces of new retaining walls and new bridge structures excluding top of deck or overlay and interior beams.

For aesthetics associated with the bridge opening, see bridge opening aesthetics plan package.

DESIGN DATA

LIVE LOAD
Superstructure and substructure designed for HL-93 loading in accordance with AASHTO LRFD Bridge Design Specifications Eighth Edition, 2017 and subsequent interim.

DEAD LOAD
Designed for actual Dead Load plus 15 psf for SIP metal deck forms.

Slab designed with a 7½" structural depth and a 1½" very early strength LMC overlay.

SEISMIC DESIGN DATA

Seismic Performance Zone = 1
Acceleration Coefficient = 0.061
Seismic Soil Profile Type = Site Class C

DESIGN STRENGTHS

Prestressed Concrete	f'c = 10,000 psi @ 28 DAYS
Class "A" Concrete	f'c = 3,500 psi
Class "B" Concrete	f'c = 3,500 psi
Class "C" Concrete	f'c = 4,000 psi
Reinforcing Bars	fy = 60,000 psi (barrier)
	fy = 75,000 psi (all other locations)

CONSTRUCTION LOADING

The exterior beam 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 beam. The finishing machine was assumed to be supported 6 inches past the edge of 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 beam bottom flange and web.

Deck Falsework Loads:	Designed for 15 lb/sft for permanent metal stay in place deck forms, removable deck forms, and 2-ft exterior walkway.
Construction Live Load:	Designed for 20 lb/sft extending 2-ft past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30-ft length of deck centered with the finishing machine.
Finishing-machine Load:	4500 lb distributed over 10-ft along the coping.
Wind Load:	Structure designed for 70 mph horizontal wind loading in accordance with AASHTO LRFD 3.8.1.

COMPOSITE CONCRETE
BULB-TEE BEAM BRIDGE
1 SPAN: 128'-5"
SKEW: 27°45'00" R.T.
CLEAR ROADWAYS: VARIES
57'-10⅜" TO 63'-5¾"
I-65 N.B. & 12TH ST. CD OVER
COLLEGE AVE., MARION COUNTY

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

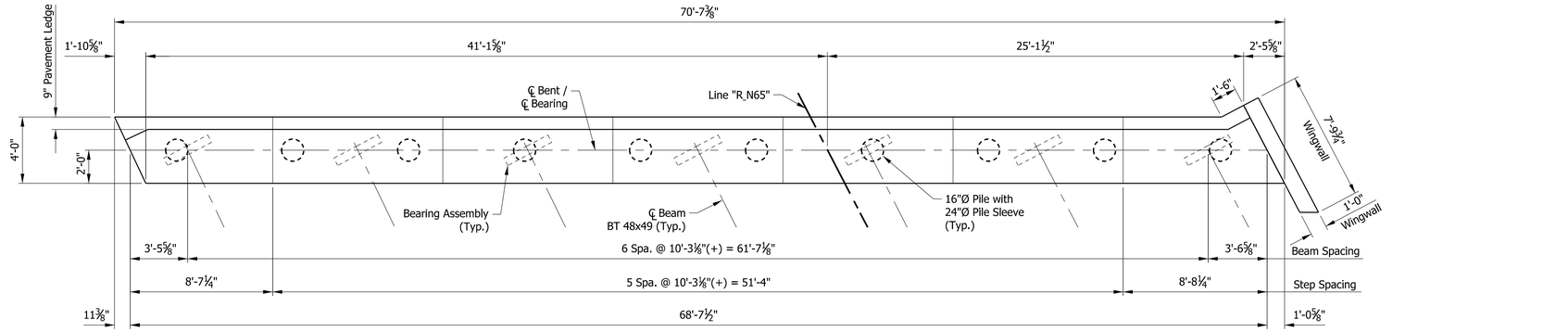
DESIGNED: SL DRAWN: SRR
CHECKED: CML CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

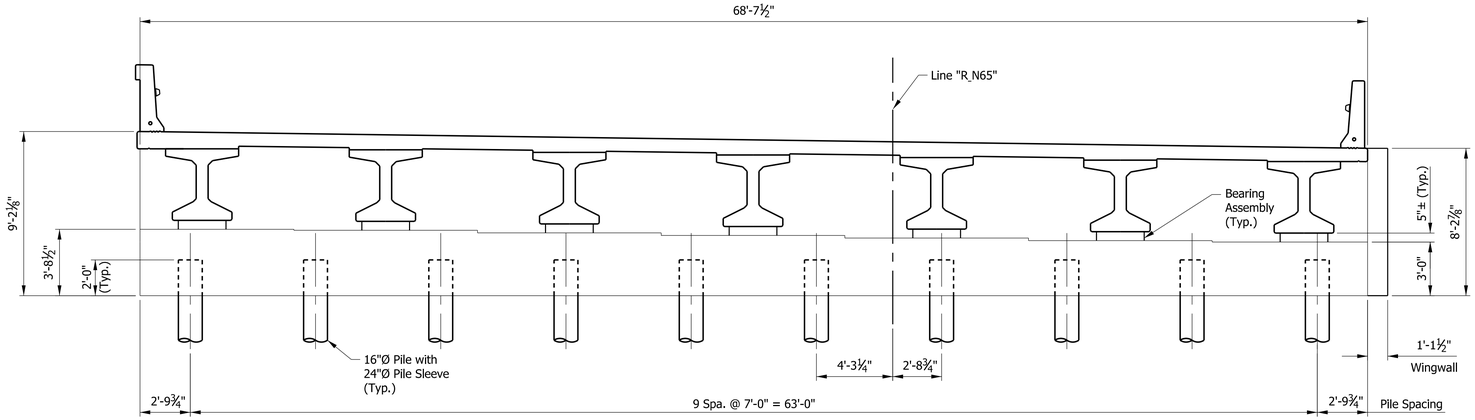
GENERAL PLAN
TYPICAL SECTION

SCALE	BRIDGE FILE
3/8" = 1'-0"	I65-112-10629 BNBL
	DESIGNATION
	1901915
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 15
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/28/2020 9:26:37 AM
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 32 I65 NB & CD Exit Ramp over College Ave\1901915_06 - Typical Section.dgn



PLAN



SECTION ALONG ℄ BENT

Plot: 2/28/2020 9:26:39 AM

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RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

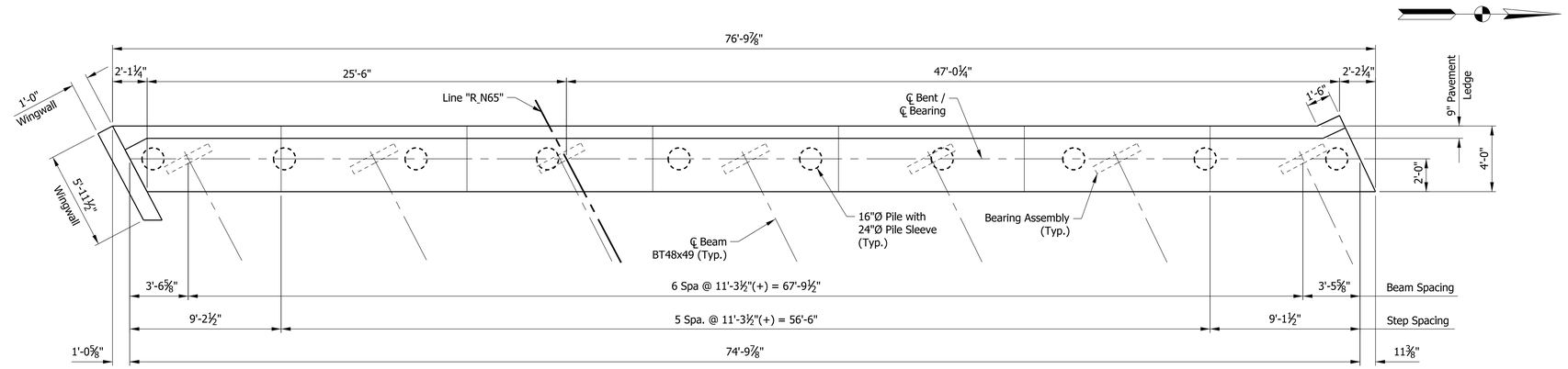
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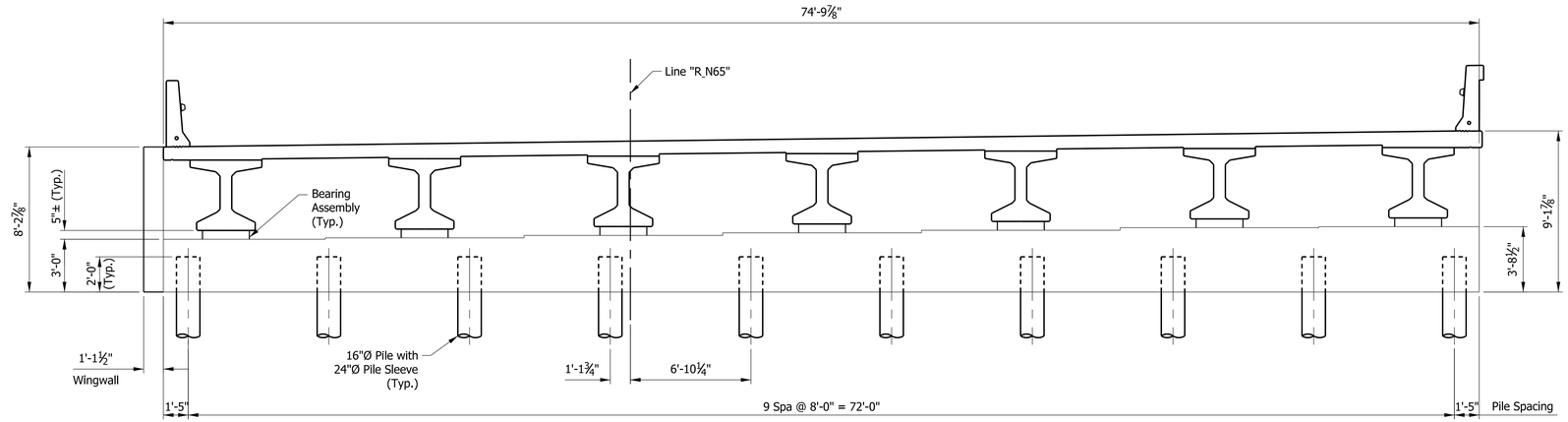
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 1 DETAILS

SCALE	BRIDGE FILE
1/4" = 1'-0"	I65-112-10629 BNBL
	DESIGNATION
	1901915
SURVEY BOOK	SHEETS
ELECTRONIC	7 of 15
CONTRACT	PROJECT
B-36910	1600808



PLAN



SECTION ALONG ℄ BENT

Plot: 2/28/2020 9:26:41 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 32 I65 NB & CD Exit Ramp over College Ave\1901915_08 - Bent No. 2.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: SRR

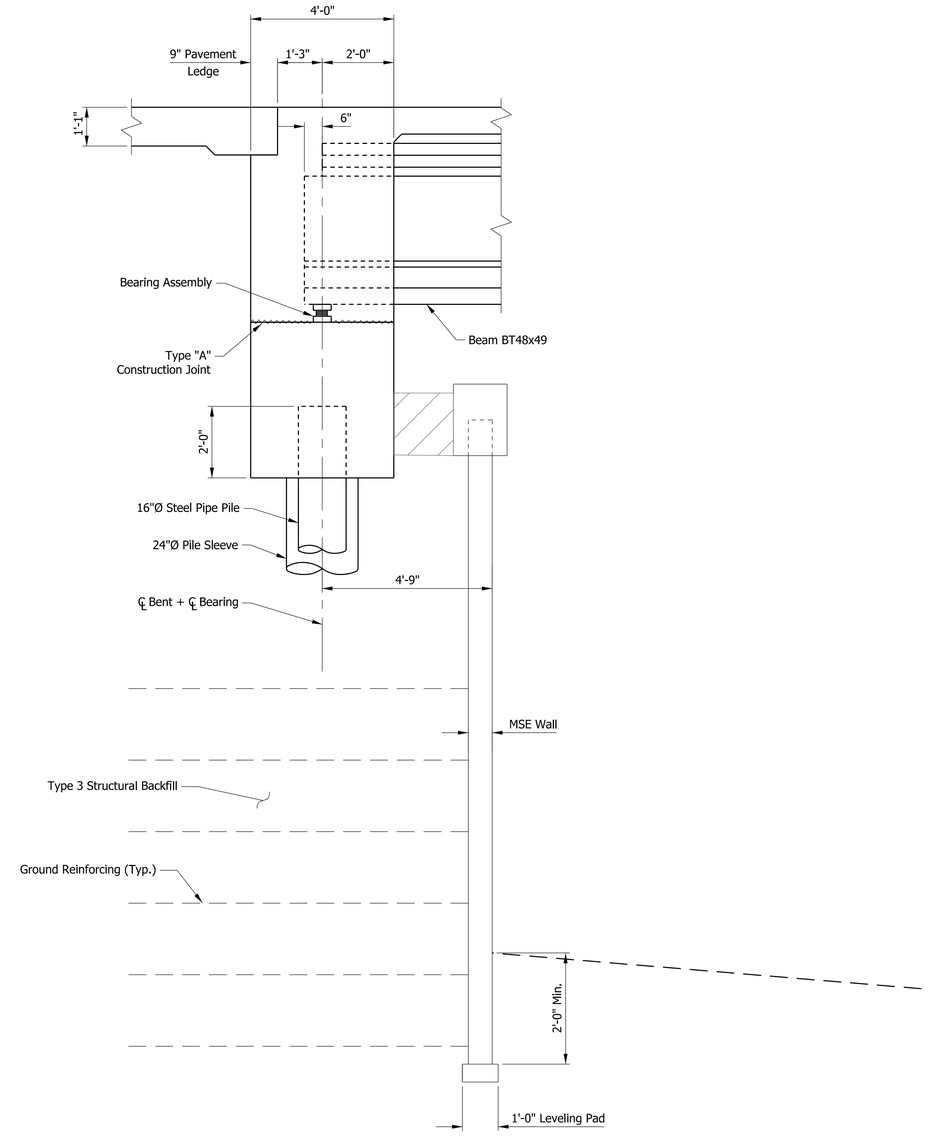
CHECKED: CML | CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 2 DETAILS

SCALE	BRIDGE FILE
1/4" = 1'-0"	I65-112-10629 BNBL
	DESIGNATION
	1901915

SURVEY BOOK	SHEETS
ELECTRONIC	8 of 15
CONTRACT	PROJECT
B-36910	1600808



TYPICAL SECTION

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: SL DRAWN: SRR

CHECKED: CML CHECKED: SL

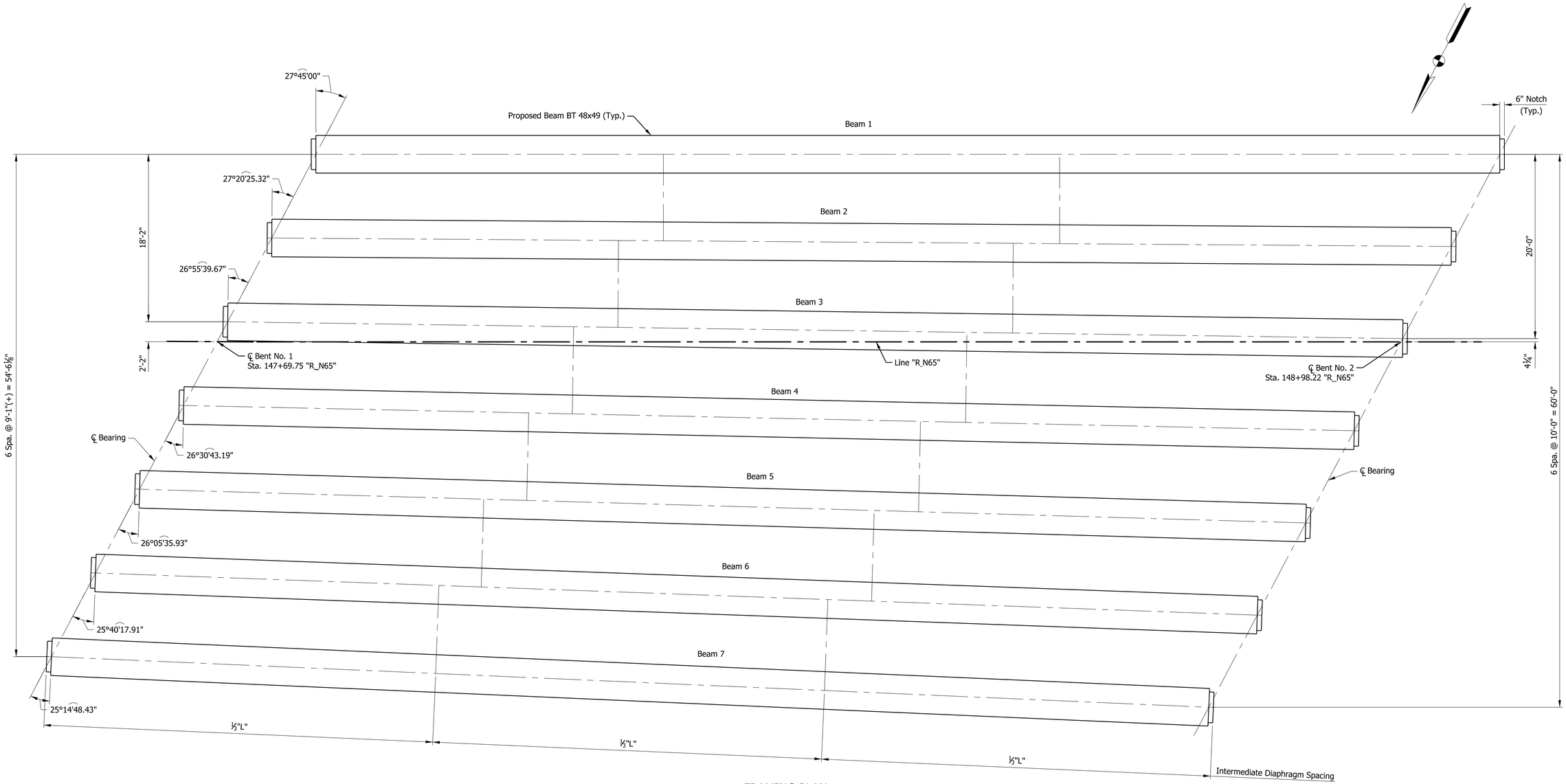
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 1 AND 2 DETAILS

SCALE	BRIDGE FILE
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	DESIGNATION
	1901915
SURVEY BOOK	SHEETS
ELECTRONIC	9 of 15
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/28/2020 9:26:43 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 32 I65 NB & CD Exit Ramp over College Ave\1901915_09 - Bent No. 1 & 2 Details.dgn



FRAMING PLAN

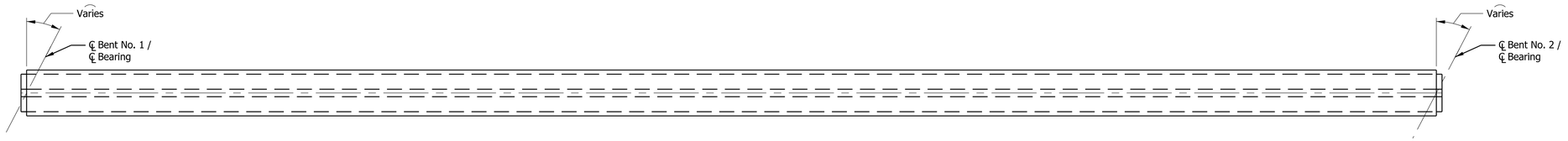
NOTES:

For intermediate diaphragm details, see Std. Dwg. E707-SDPC - 03 & 04.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 3/16" = 1'-0"	BRIDGE FILE: I65-112-10629 BNBL
			DESIGNATION: 1901915
DESIGNED: SL / DRAWN: SRR	FRAMING PLAN	SURVEY BOOK	SHEETS: ELECTRONIC 10 of 15
CHECKED: CML / CHECKED: SL		CONTRACT: B-36910	PROJECT: 1600808

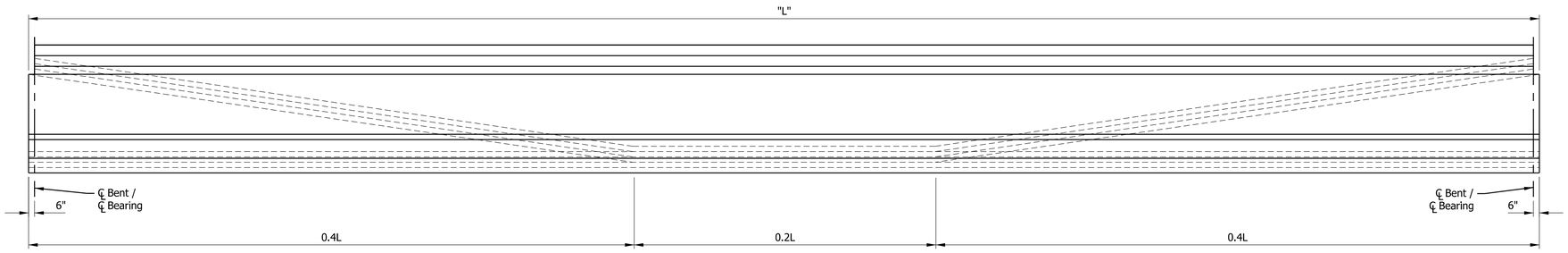
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BEAM PLAN

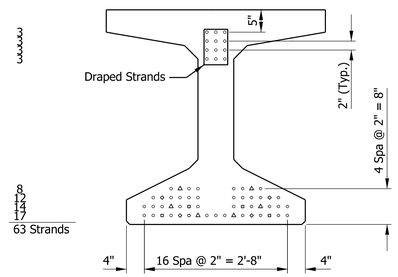
Scale: 3/16" = 1'-0"



BEAM ELEVATION

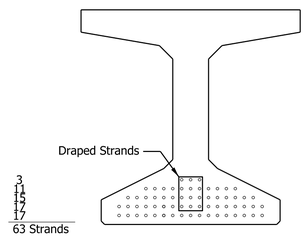
Horizontal Scale: 3/16" = 1'-0"
Vertical Scale: 1/2" = 1'-0"

Span "A"	
Beam Mark	"L"
1	129'-5"
2	128'-11¼"
3	128'-5⅝"
4	128'-0"
5	127'-6½"
6	127'-1⅛"
7	126'-7¾"



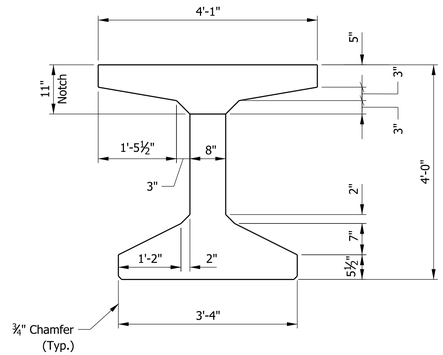
STRAND PATTERN AT BEAM END

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



STRAND PATTERN AT MIDSPAN

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



TYPICAL SECTION

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

LEGEND

- △ Debonded 5' from beam end
- ▫ Debonded 10' from beam end
- ◇ Debonded 15' from beam end

NOTES:

1. For intermediate diaphragm details, see Std. Dwg. E707-SDPC - 03 & 04.
2. Prestressing reinforcement shall be a 0.6"Ø uncoated seven wire low relaxation 270 ksl with strand area = 0.217 in².
3. Beams shall be cast a minimum of 120 days before deck is poured.

Plot: 2/28/2020 9:26:45 AM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL DRAWN: SRR

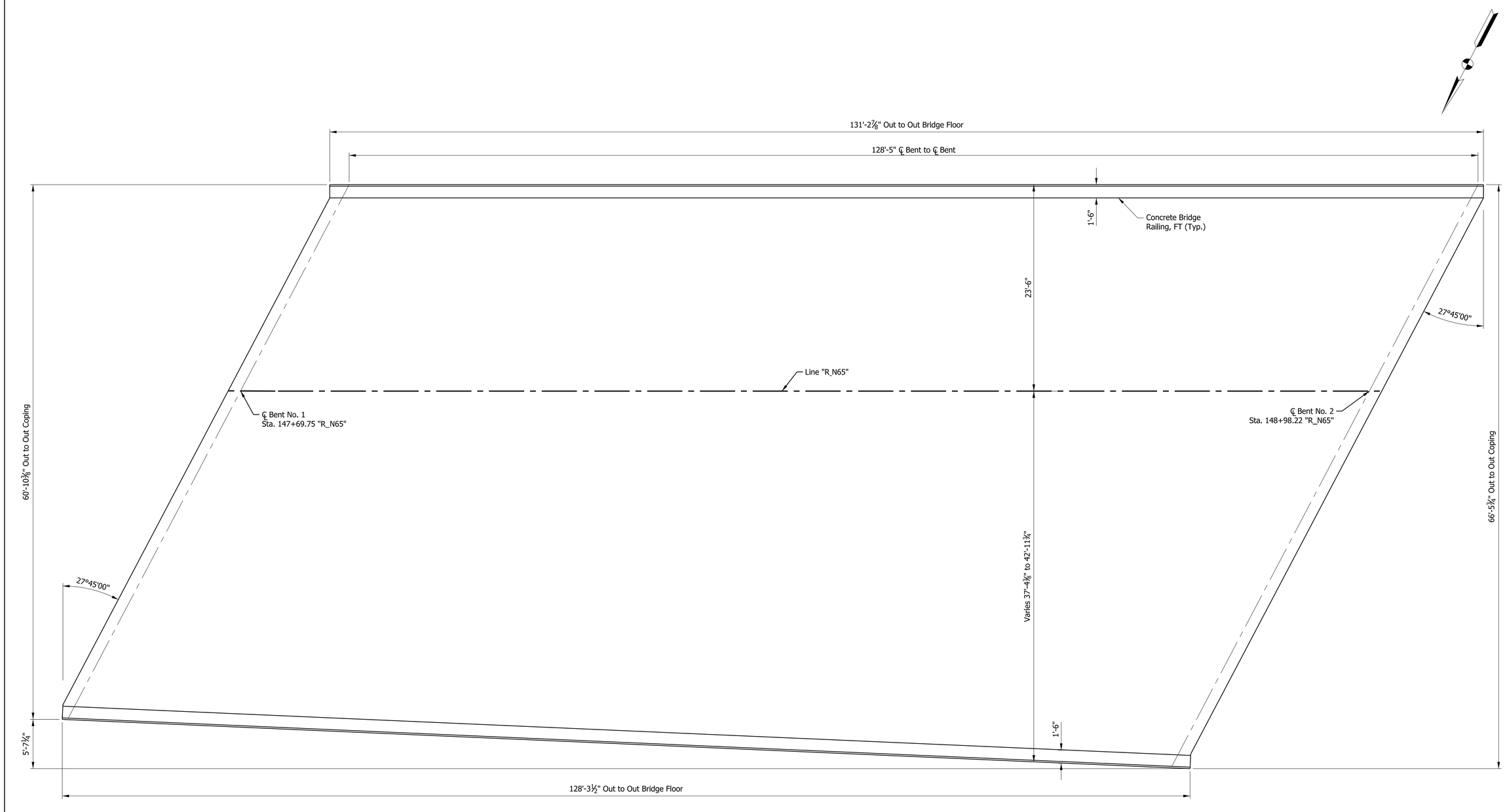
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INDIANA DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

SCALE	BRIDGE FILE
AS NOTED	I65-112-10629 BNBL
	DESIGNATION
	1901915
SURVEY BOOK	SHEETS
ELECTRONIC	11 of 15
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 32 I65 NB & CD Exit Ramp over College Ave\1901915_11 - Beam Details.dgn

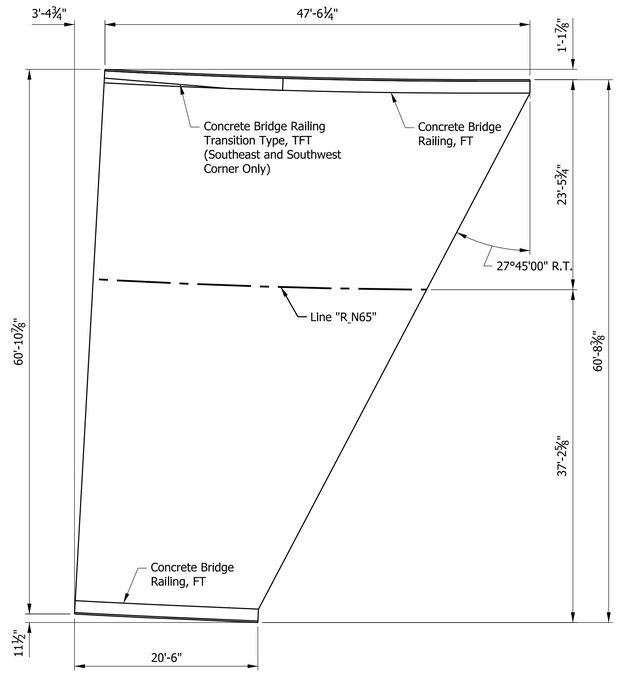


FLOOR PLAN

		RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 3/16" = 1'-0" | BRIDGE FILE: I65-112-10629 BNBL
		DESIGNED: SL | DRAWN: SRR	SUPERSTRUCTURE DETAILS	DESIGNATION: 1901915
		CHECKED: CML | CHECKED: SL		SURVEY BOOK: ELECTRONIC | SHEETS: 12 of 15
				CONTRACT: B-36910 | PROJECT: 1600808

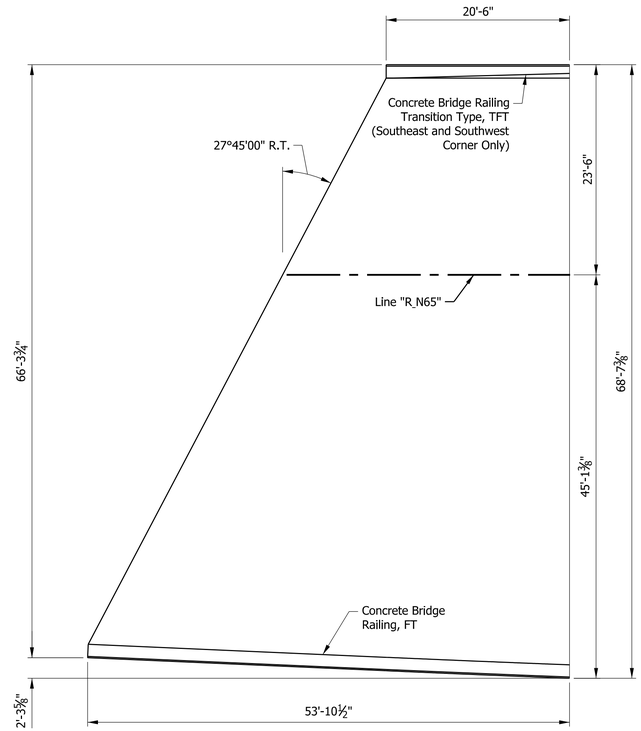
Plot: 2/28/2020 9:26:47 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 32 I65 NB & CD Exit Ramp over College Ave\1901915_12 - Deck Plan.dgn



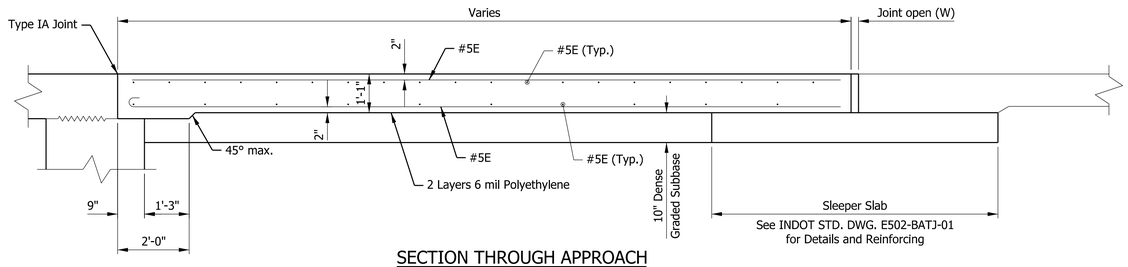
APPROACH SLAB AT END BENT NO. 1

Scale: ⅛" = 1'-0"



APPROACH SLAB AT END BENT NO. 2

Scale: ⅛" = 1'-0"



SECTION THROUGH APPROACH

Scale: ½" = 1'-0"

NOTE:

1.For additional Terminal Joint information, see USP. Terminal Joint Details: Type CRCP

2. Concrete Railing FT and TFT sit on Slab Extension. For more details, see Std. Dwg. E609-TBAE-02804.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: SRR

CHECKED: CML | CHECKED: SL

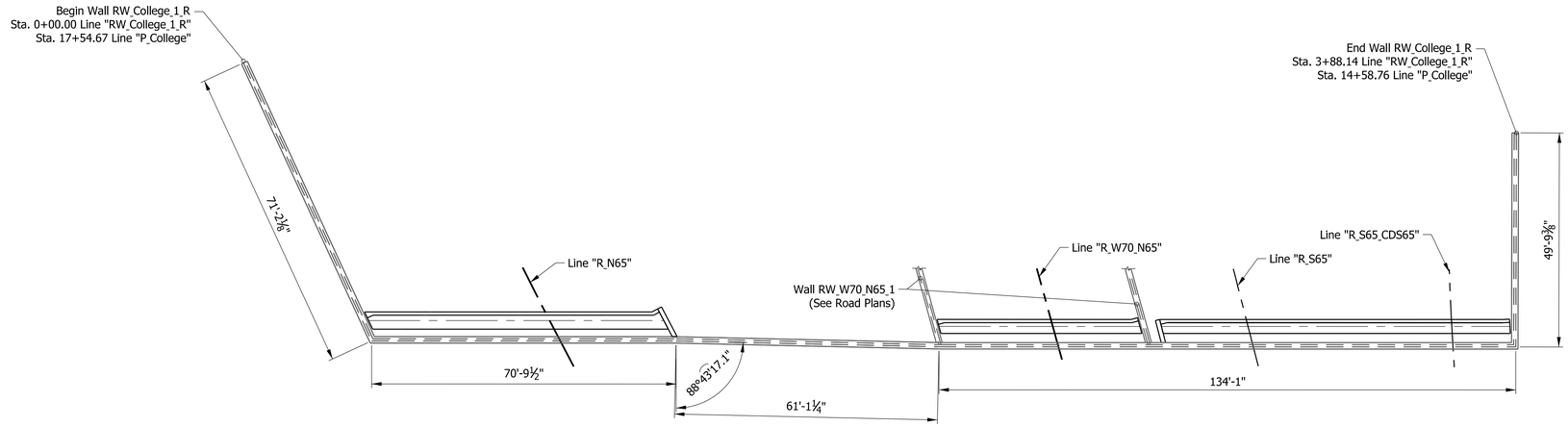
INDIANA
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB
DETAILS

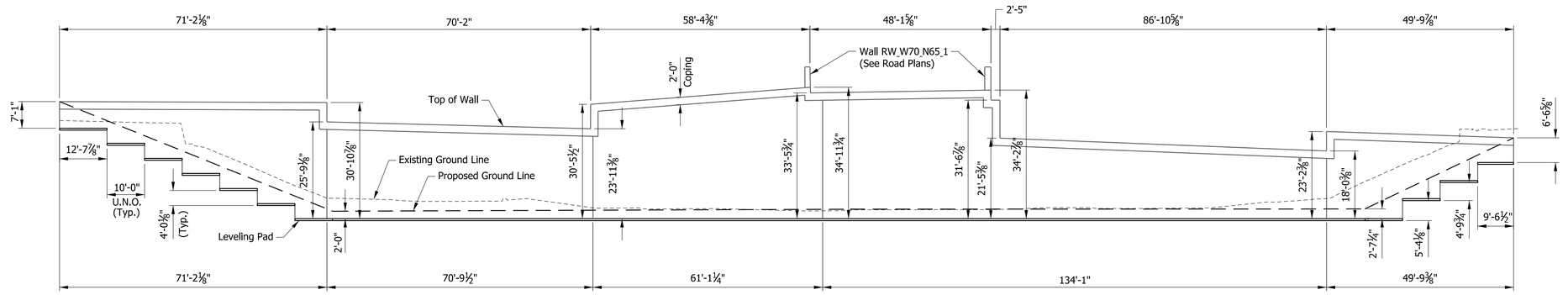
SCALE	BRIDGE FILE
AS NOTED	I65-112-10629 BNBL
	DESIGNATION
	1901915
SURVEY BOOK	SHEETS
ELECTRONIC	13 of 15
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/28/2020 9:26:49 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 32 I65 NB & CD Exit Ramp over College Ave\1901915_13 - Approach Slabs.dgn



PLAN

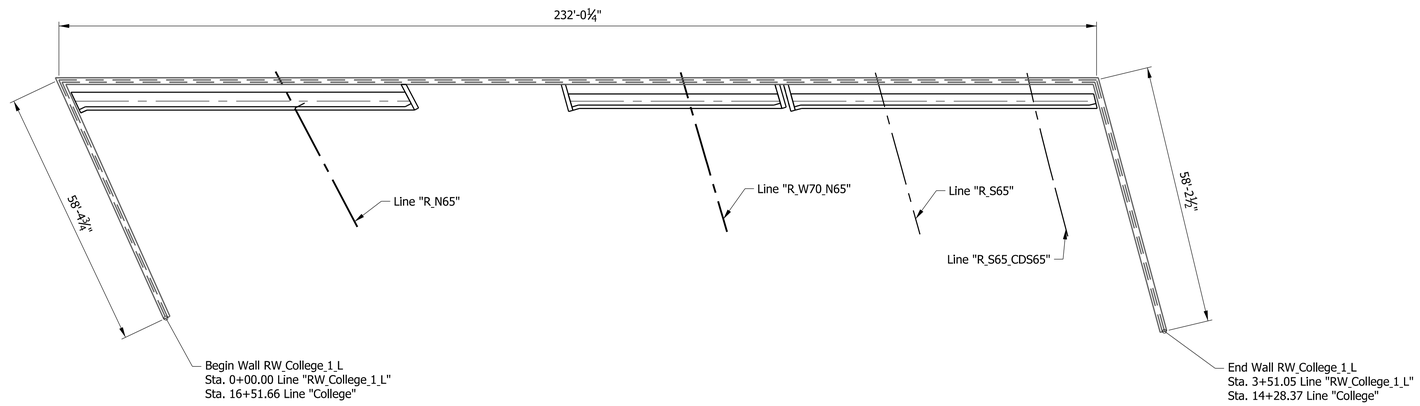


ELEVATION

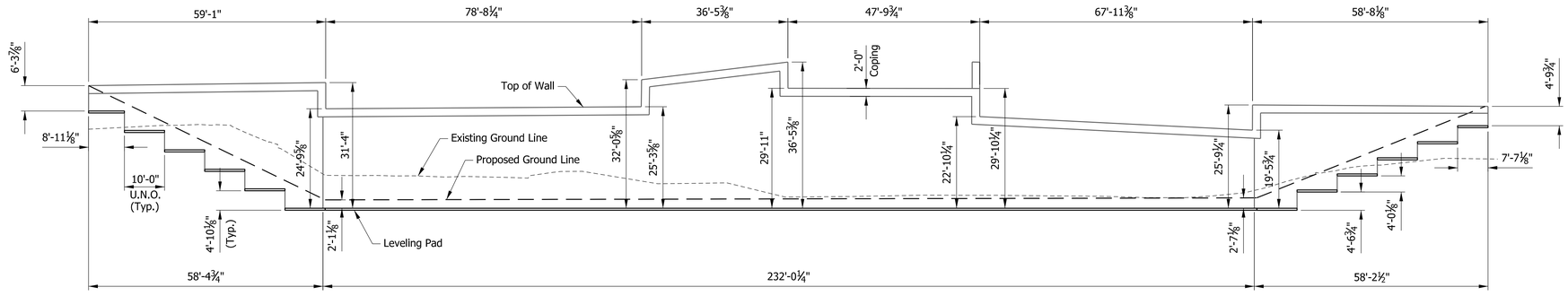
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DESIGNED: SL	DRAWN: SRR	MSE WALL DETAILS AT BENT NO. 1	BRIDGE FILE: I65-112-10629 BNBL
CHECKED: CML	CHECKED: SL		DESIGNATION: 1901915
			SURVEY BOOK / SHEETS: ELECTRONIC 14 of 15
			CONTRACT: B-36910 / PROJECT: 1600808

Plot: 2/28/2020 9:26:54 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 32 I65 NB & CD Exit Ramp over College Ave\1901915_14 - Retaining Wall 1.dgn



PLAN



ELEVATION

	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 1/8" = 1'-0"
	DESIGNED: SL DRAWN: SRR	MSE WALL DETAILS AT BENT NO. 2	BRIDGE FILE: I65-112-10629 BNBL
	CHECKED: CML CHECKED: SL		DESIGNATION: 1901915
			SURVEY BOOK / SHEETS: ELECTRONIC 15 of 15
			CONTRACT: B-36910 / PROJECT: 1600808

Plot: 2/28/2020 9:26:56 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 32 I65 NB & CD Exit Ramp over College Ave\1901915_15 - Retaining Wall 2.dgn

PROJECT	DESIGNATION
1600808	1901917
CONTRACT	BRIDGE FILE
B-36910	I65-112-10630 SBL

STRUCTURE INFORMATION

STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I65-10630 SBL	COMPOSITE CONCRETE BULB-TEE BEAM	ONE SPAN 116'-2⅛" SKEW: 14°52'16"	COLLEGE AVENUE	111+12.30 Line "R_S65"

KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB & DELAWARE ENTRANCE RAMP TO I-70 EB OVER COLLEGE AVENUE & FIVE RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901927	BRIDGE REPLACEMENT ON I-65 SB TO I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE) - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER VERMONT STREET	

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

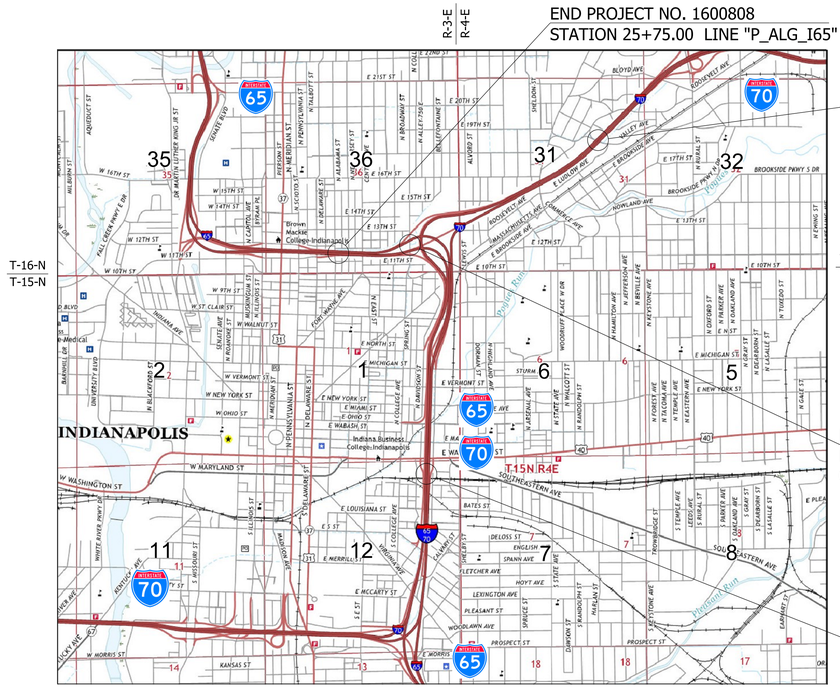
FOR SPANS OVER 20 FEET

ROUTE: I-65 N.B. & 12 St. CD AT: RP 112+55

PROJECT NO. 1600808 (P.E. & CONSTR.)

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

Bridge replacement on I-65 S.B. and I-65 S.B. C.D. over College Avenue, Located 2.06 Miles North of I-70 (South Split) Interchange, in Section 36, of Township 16 North, Range 3 East, Center Township, in Marion County Indiana



LOCATION MAP
(MARION COUNTY)

END CONSTRUCTION PROJECT NO. 1600808
STATION 43+87.40 LINE "P_ALG_I70"

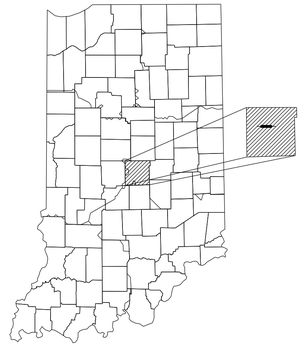
T-16-N
T-15-N

SCALE: 1" = 2000'

PROJECT LOCATION
BRIDGE FILE NO. I65-112-10630 SBL
OVER COLLEGE AVE.

BEGIN PROJECT NO. 1600808
STATION 113+00.00 LINE "P_ALG_I65/I70"

TRAFFIC DATA		I-65 S.B.	I-65 S.B. C.D.	COLLEGE AVE.
A.A.D.T.	(2021)	18,925 V.P.D.	7,850 V.P.D.	9,434 (NB) 7,024 (SB) V.P.D.
A.A.D.T.	(2041)	19,100 V.P.D.	8,083 V.P.D.	7,170 (NB) 7,886 (SB) V.P.D.
D.H.V	(2041)	1,528 V.P.H.	970 V.P.H.	798 (NB) 723 (SB) V.P.H.
DIRECTIONAL DISTRIBUTION		100%	100%	48% (NB) 52% (SB)
TRUCKS		7% D.H.V.	3% D.H.V.	2% (NB) 3% (SB)
DESIGN DATA				
DESIGN SPEED		55 M.P.H.	45 M.P.H.	35 M.P.H.
PROJECT DESIGN CRITERIA		4R (FREEWAY)	4R (FREEWAY)	N/A
FUNCTIONAL CLASSIFICATION		FREEWAY	FREEWAY	MINOR ARTERIAL
RURAL/URBAN		URBAN	URBAN	URBAN
TERRAIN		LEVEL	LEVEL	LEVEL
ACCESS CONTROL		FULL CONTROL	FULL CONTROL	NONE



PROJECT LOCATION SHOWN BY
MARION COUNTY

LATITUDE: 39°46'59.05" N LONGITUDE: 86°08'40.90" W

HYDROLOGIC UNIT CODE: 05120201130020

BRIDGE LENGTH:	0.022	MI.
ROADWAY LENGTH:	SEE ROAD PLANS	MI.
TOTAL LENGTH:	SEE ROAD PLANS	MI.
MAX. GRADE:	-0.44%	%

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2020
TO BE USED WITH THESE PLANS

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

SUPERIOR CONSTRUCTION

PLANS PREPARED BY: JANSSEN & SPAANS ENGINEERING (317) 254-9686
PHONE NUMBER

CERTIFIED BY: _____ DATE

RECOMMENDED FOR LETTING: _____ DATE
INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE FILE
I65-112-10630 SBL
DESIGNATION
1901917

SURVEY BOOK	SHEETS
ELECTRONIC	1 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 4:32:54 PM

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UTILITIES

INDEX

SHEET NO.	SUBJECT
1	TITLE
2	INDEX
3	MAINTENANCE OF TRAFFIC
4	LAYOUT
5	GENERAL PLAN
6	GENERAL PLAN - TYPICAL SECTION
7	BENT NO. 1 DETAILS
8	BENT NO. 2 DETAILS
9	BENT NO. 1 & 2 DETAILS
10	FRAMING PLAN
11	BEAM DETAILS
12	SUPERSTRUCTURE DETAILS
13	APPROACH SLAB DETAILS

REVISIONS

SHEET NO.	DATE	REVISED

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

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

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: XX DRAWN: JRC

CHECKED: CML CHECKED: XX

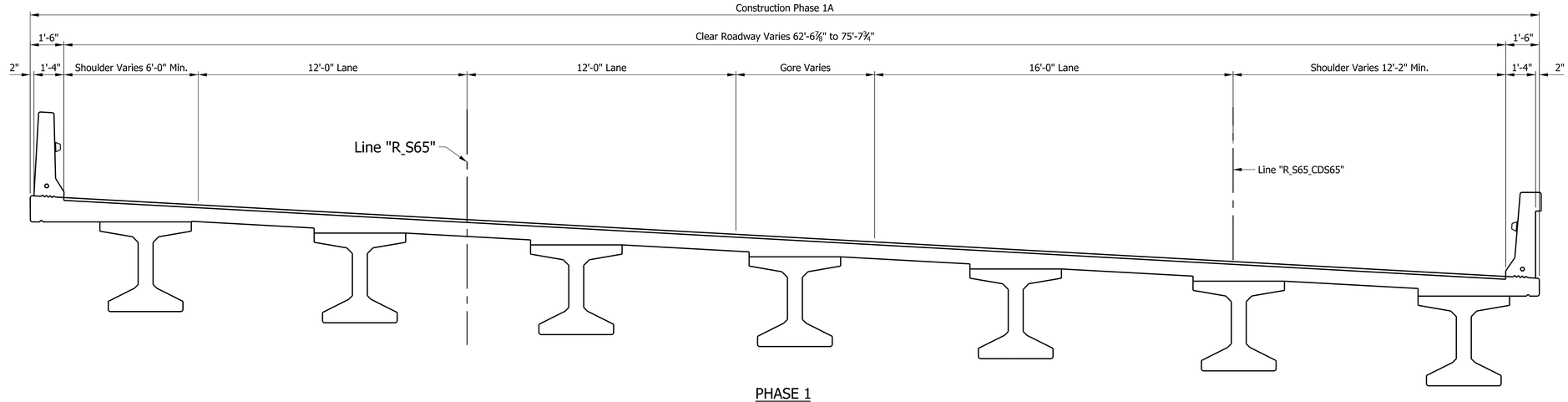
INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX

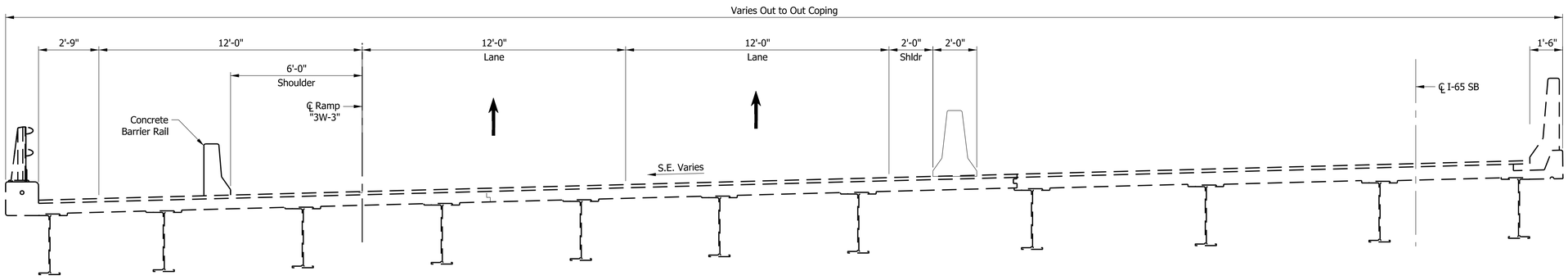
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	I65-112-10630 SBL
VERTICAL SCALE	DESIGNATION
	1901917
SURVEY BOOK	SHEETS
ELECTRONIC	2 of 13
CONTRACT	PROJECT
B-36910	1600808

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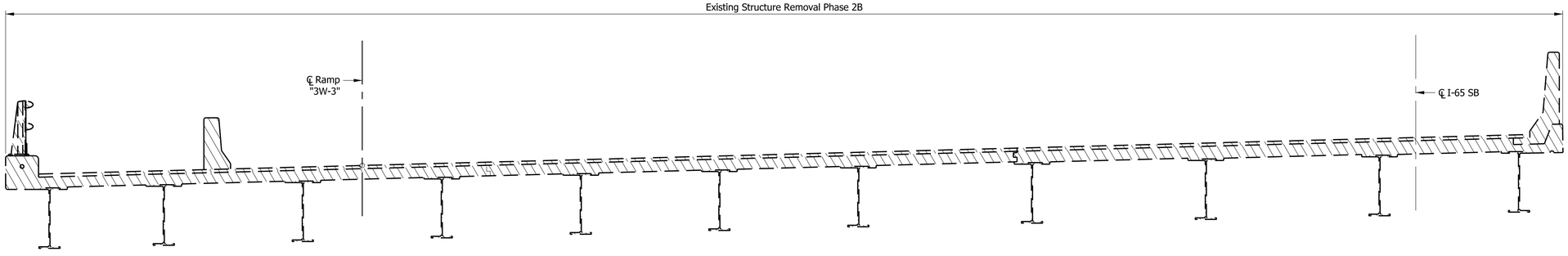
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PHASE 1



PHASE 2A



PHASE 2B

Plot: 2/25/2020 4:32:59 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 33 I65 SB over College Ave\1901917_03 - MOT.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

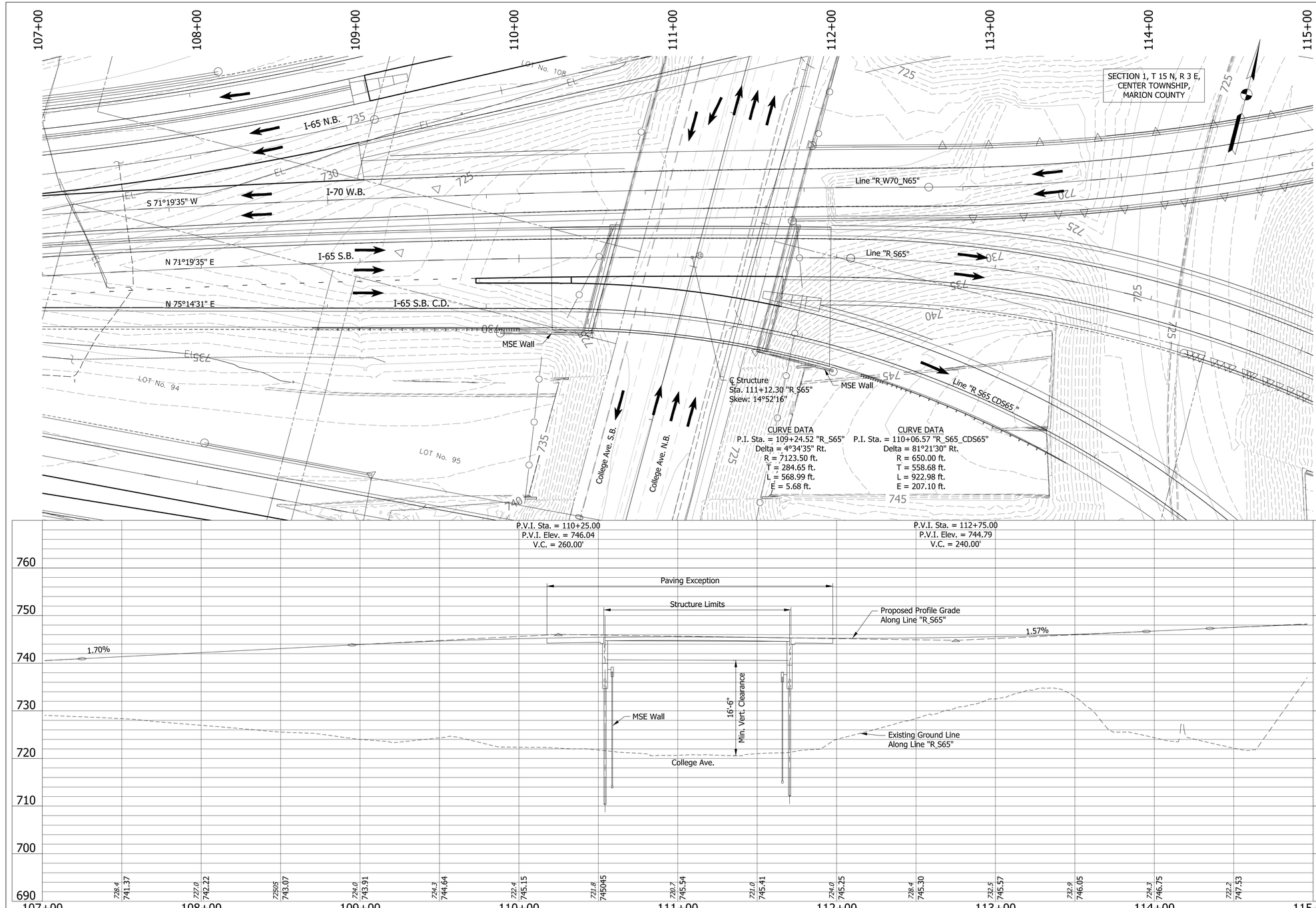
DESIGNED: XX DRAWN: SRR

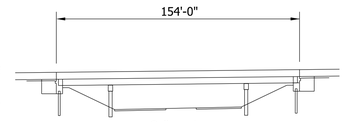
CHECKED: CML CHECKED: XX

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC

SCALE	BRIDGE FILE
3/8" = 1'-0"	I65-112-10630 SBL
	DESIGNATION
	1901917
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 13
CONTRACT	PROJECT
B-36910	1600808





EXISTING STRUCTURE

Existing structure built in 1969 is a continuous composite steel beam bridge rehabilitated in 1989 with deck reconstruction and overlay. The bridge is a three span 26'-9", 86'-0", 37'-4" with a variable skew. The structure has a variable clear roadway. Structure is to be removed. Existing plans are on file with Indiana Department of Transportation under Bridge File No. I65-113-5745A

EARTHWORK TABULATION

Fill +20%	(See Road Plans)
Common Excavation	(See Road Plans)
Excavation, Foundation, Unclassified (70%)	(See Road Plans)
Waste	(See Road Plans)

NOTES:

1. See sheet 2 for utility owners.
2. All R/W shall be as shown.
4. There shall be no clearing of trees beyond construction limits.
5. All topography is existing.
6. All R/W described from line "R_W70_N65", except as noted.

COMPOSITE CONCRETE
BULB-TEE BEAM BRIDGE
1 SPAN: 116'-2⅛"
SKEW: 14°52'16" RT.
CLEAR ROADWAY: VARIES
I-65 S.B. & I-65 S.B CD OVER
COLLEGE AVE., MARION COUNTY

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: XX
DRAWN: SRR
CHECKED: CML
CHECKED: XX

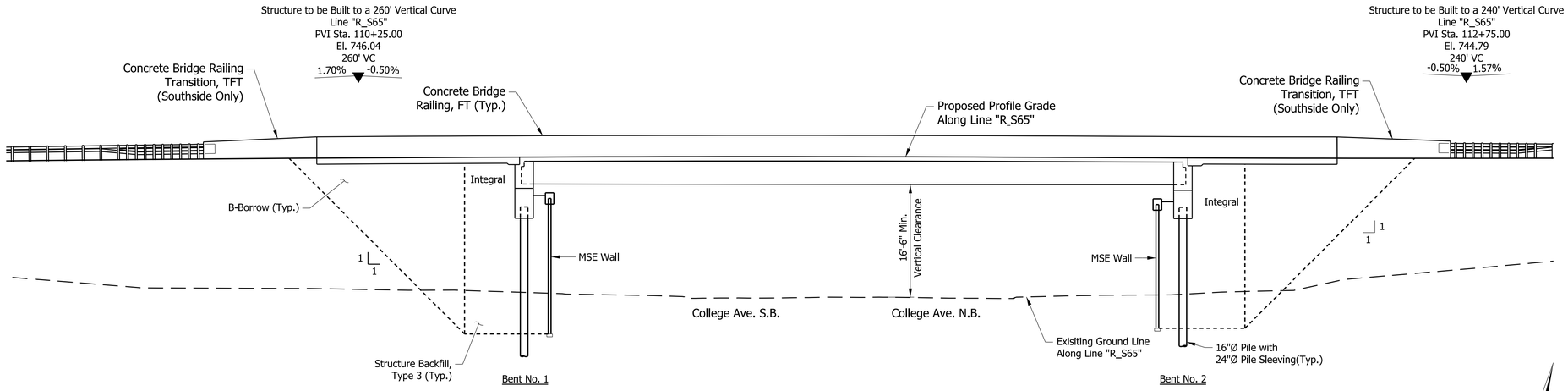
INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT

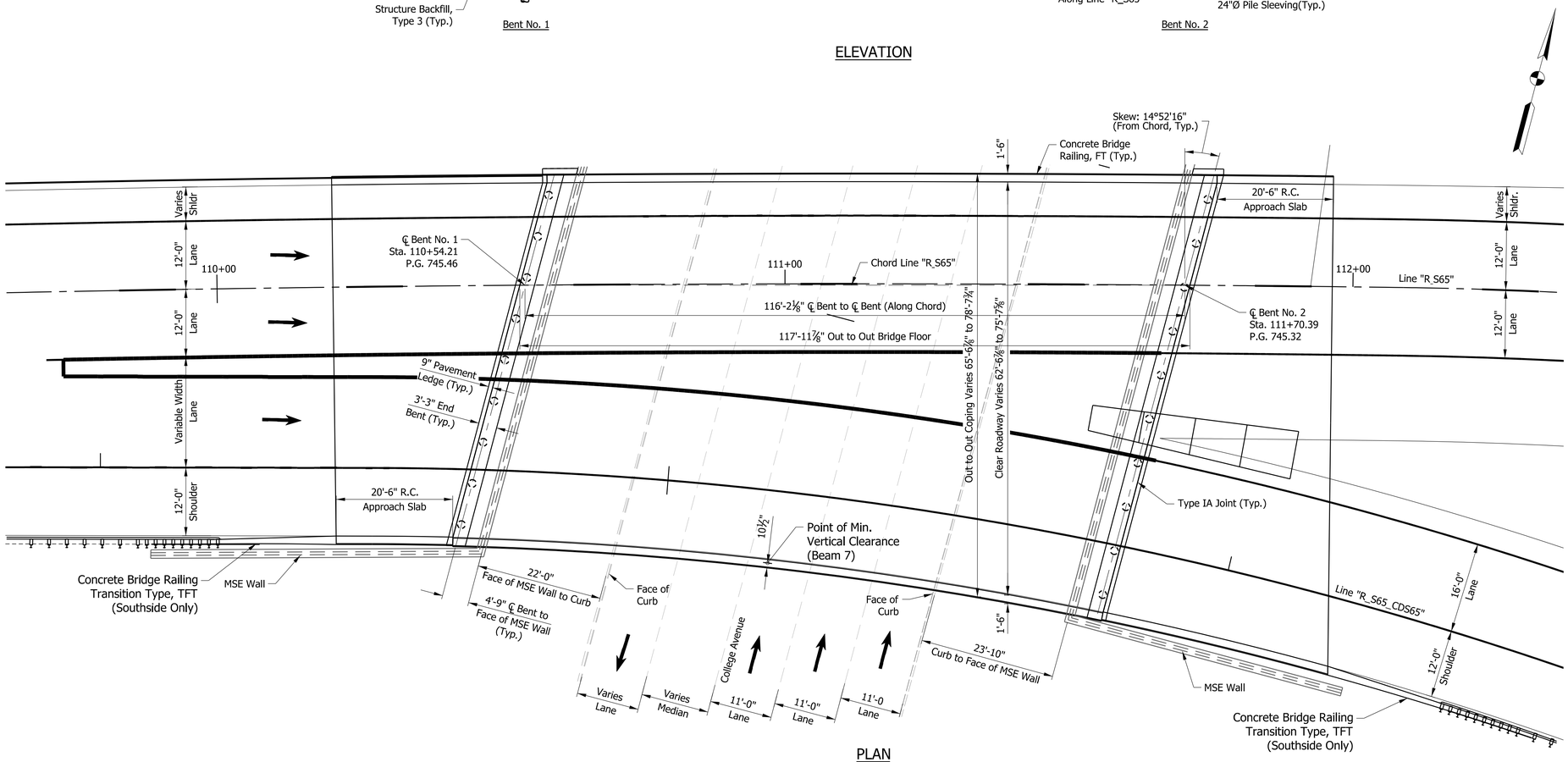
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1" = 30'-0"	I65-112-10630 SBL
VERTICAL SCALE	DESIGNATION
1" = 10'-0"	1901917
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 4:33:05 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 33 I65 SB over College Ave\1901917_04 - Layout.dgn



ELEVATION



PLAN

GENERAL NOTES

Reinforcing bar cover shall be 2" min. in top and 1" min. in bottom of floor slabs, 3" min. in footing except bottom bars which shall be 4" min., and 2" min. in all other parts, unless noted.

All dimensions and elevations are in feet (ft) unless otherwise noted.

Concrete in floor slab, diaphragms, barrier approach slab and end bents shall be an alternate Class "C" in accordance with the technical provisions. Reinforcing bars in deck, barrier, and end bent diaphragm extending into the deck shall be stainless steel. Reinforcing bars in end bent diaphragm not extending into the deck and in the cap shall be epoxy coated.

Anti-graffiti coating shall be placed on all exposed surfaces of new retaining walls and new bridge structures excluding top of deck or overlay and interior beams.

For aesthetics associated with the bridge opening, see bridge opening aesthetics plan package.

DESIGN DATA

LIVE LOAD
Superstructure and substructure designed for HL-93 loading in accordance with AASHTO LRFD Bridge Design Specifications Eighth Edition, 2017 and subsequent interim.

DEAD LOAD
Designed for actual Dead Load plus 15 psf for SIP metal deck forms.

Slab designed with a 7½" structural depth and a 1½" very early strength LMC overlay.

SEISMIC DESIGN DATA

Seismic Performance Zone = 1
Acceleration Coefficient = 0.061
Seismic Soil Profile Type = Site Class C

DESIGN STRENGTHS

Prestressed Concrete	f'c = 10,000 psi @ 28 DAYS
Class "A" Concrete	f'c = 3,500 psi
Class "B" Concrete	f'c = 3,500 psi
Class "C" Concrete	f'c = 4,000 psi
Reinforcing Bars	fy = 60,000 psi (barrier)
	fy = 75,000 psi (all other locations)

CONSTRUCTION LOADING

The exterior beam 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 beam. The finishing machine was assumed to be supported 6 inches past the edge of 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 beam bottom flange and web.

Deck Falsework Loads:	Designed for 15 lb/sft for permanent metal stay in place deck forms, removable deck forms, and 2-ft exterior walkway.
Construction Live Load:	Designed for 20 lb/sft extending 2-ft past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30-ft length of deck centered with the finishing machine.
Finishing-machine Load:	4500 lb distributed over 10-ft along the coping.
Wind Load:	Structure designed for 70 mph horizontal wind loading in accordance with AASHTO LRFD 3.8.1.

COMPOSITE CONCRETE BULB-TEE BEAM BRIDGE
1 SPAN: 116'-2⅛"
SKEW: 14°52'16" RT.
CLEAR ROADWAY: VARIES
I-65 S.B. & I-65 S.B CD OVER COLLEGE AVE., MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: XX | DRAWN: SRR
CHECKED: CML | CHECKED: XX

INDIANA DEPARTMENT OF TRANSPORTATION

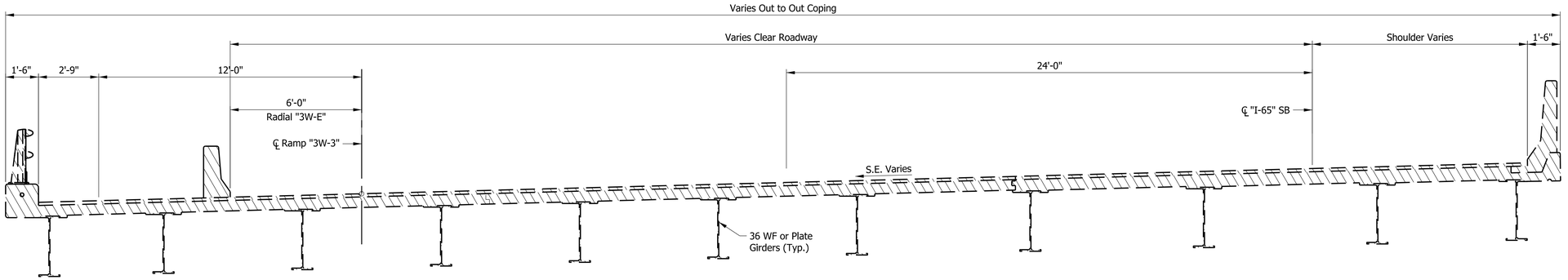
GENERAL PLAN

SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-10630 SBL
	DESIGNATION
	1901917

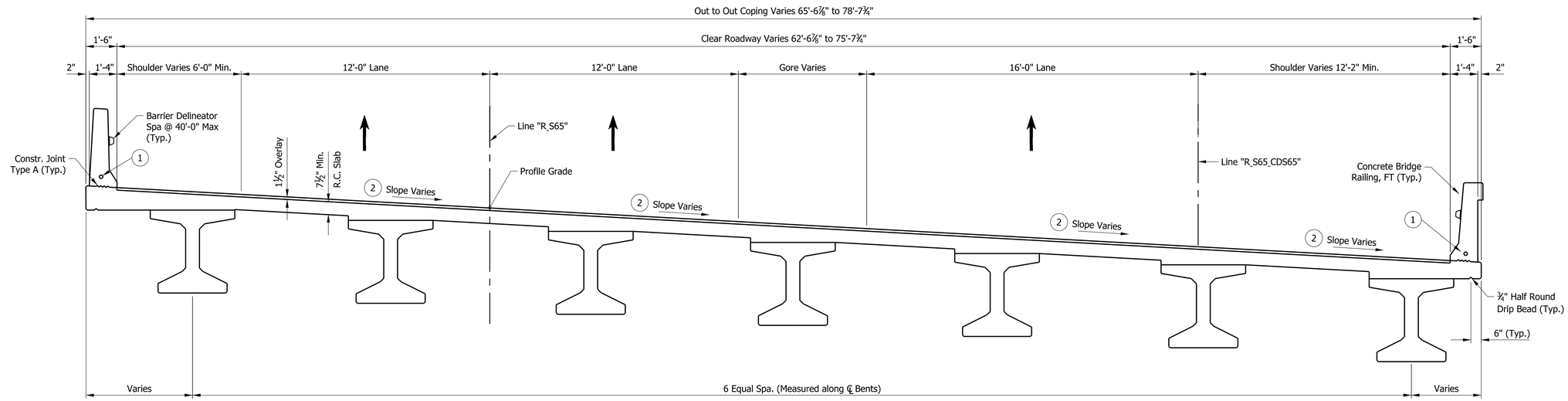
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 4:33:32 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 33 I65 SB over College Ave\1901917_05 - General Plan.dgn



EXISTING TYPICAL SECTION



PROPOSED TYPICAL SECTION

LEGEND

- Limits of Removal
- (1) Conduit for lighting
- (2) See Road Plan

COMPOSITE CONCRETE
BULB-TEE BEAM BRIDGE
1 SPAN: 116'-2⅛"
SKEW: 14°52'16" RT.
CLEAR ROADWAY: VARIES
I-65 S.B. & I-65 S.B CD OVER
COLLEGE AVE., MARION COUNTY

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: XX DRAWN: SRR
CHECKED: CML CHECKED: XX

INDIANA
DEPARTMENT OF TRANSPORTATION

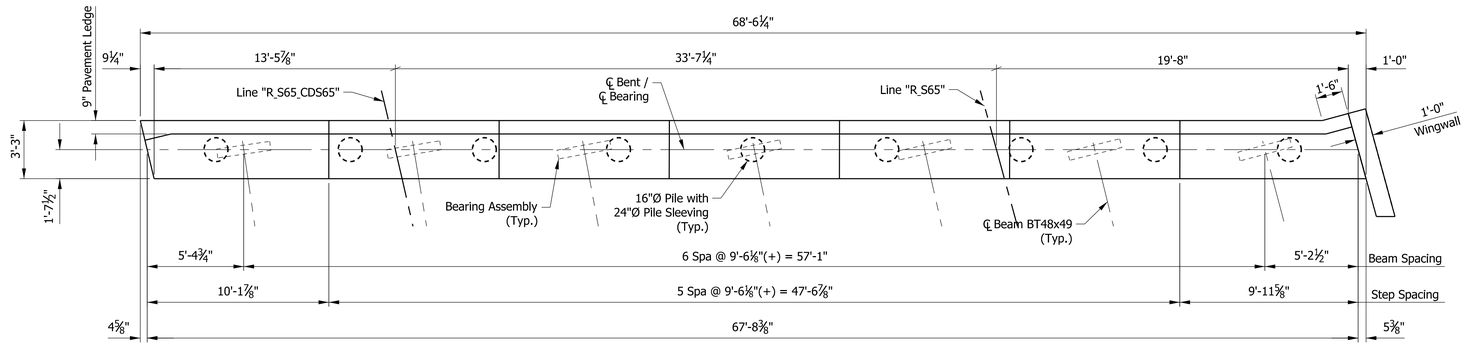
GENERAL PLAN
TYPICAL SECTION

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	DESIGNATION
	1901917

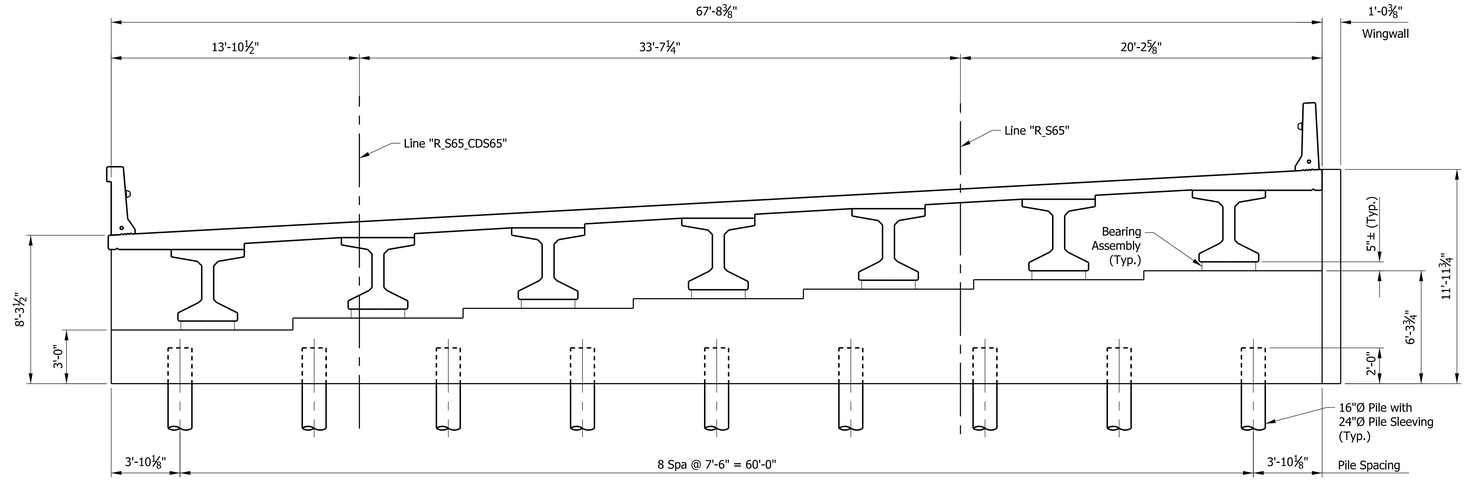
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 13
CONTRACT	PROJECT
B-36910	1600808

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P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 33 I65 SB over College Ave\1901917_06 - Typical Section.dgn



PLAN



SECTION ALONG ℄ BENT

Plot: 2/25/2020 4:33:36 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 33 I65 SB over College Ave\1901917_07 - Bent No. 1.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

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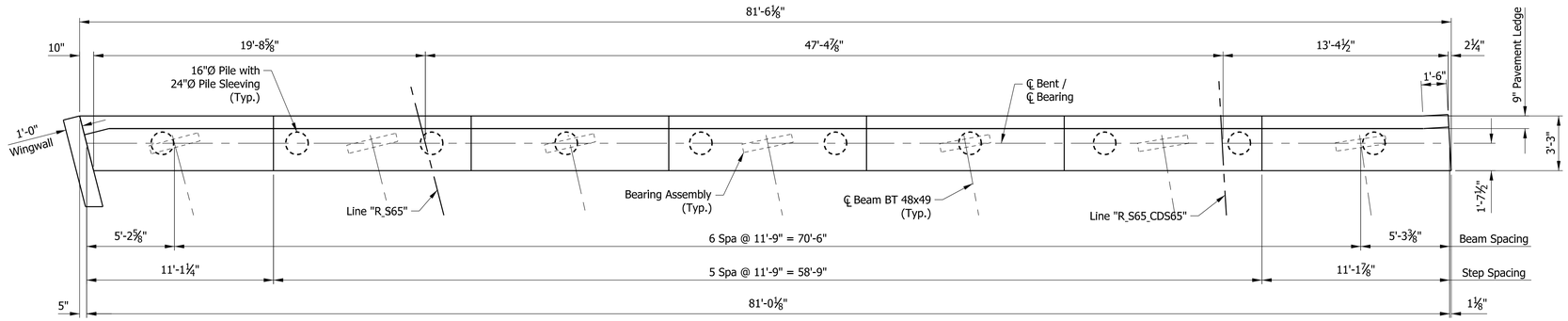
CHECKED: CML CHECKED: XX

INDIANA
DEPARTMENT OF TRANSPORTATION

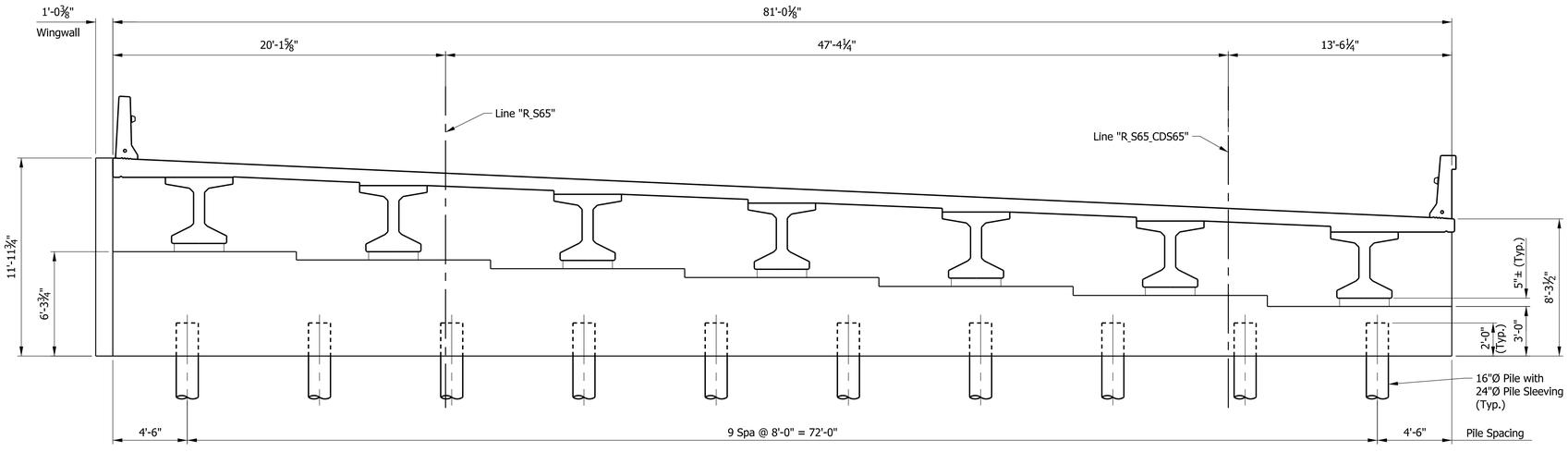
BENT NO. 1 DETAILS

SCALE	BRIDGE FILE
1/4" = 1'-0"	I65-112-10630 SBL
	DESIGNATION
	1901917

SURVEY BOOK	SHEETS
ELECTRONIC	7 of 13
CONTRACT	PROJECT
B-36910	1600808



PLAN



SECTION ALONG ℄ BENT

Plot: 2/25/2020 4:33:38 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 33 I65 SB over College Ave\1901917_08 - Bent No. 2.dgn

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: XX DRAWN: SRR

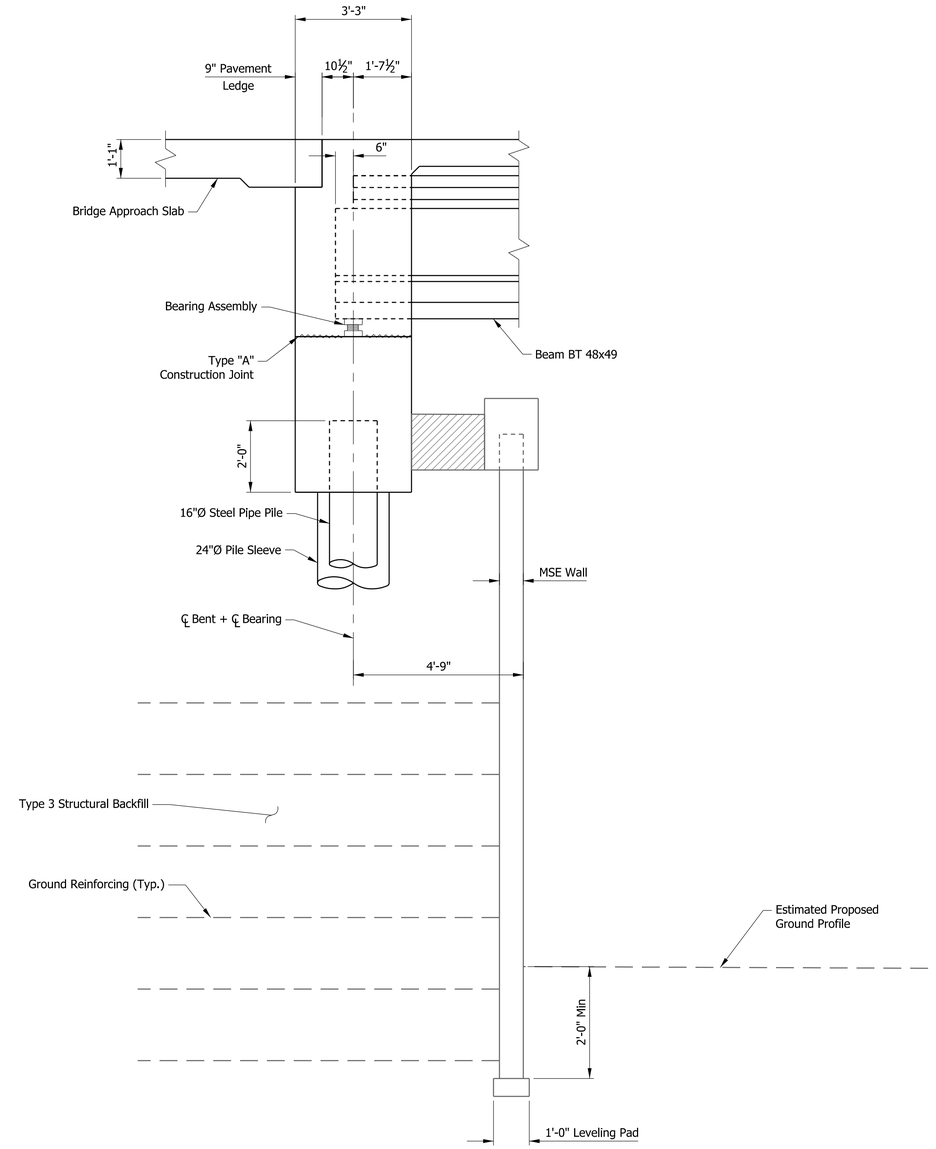
CHECKED: CML CHECKED: XX

INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 2 DETAILS

SCALE	BRIDGE FILE
1/4" = 1'-0"	I65-112-10630 SBL
	DESIGNATION
	1901917

SURVEY BOOK	SHEETS
ELECTRONIC	8 of 13
CONTRACT	PROJECT
B-36910	1600808



TYPICAL SECTION

NOTE:

For MSE Wall Details, see plan Designation No. 1901915, Sheets 14 to 15.

Plot: 2/25/2020 4:33:40 PM

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: XX | DRAWN: SRR

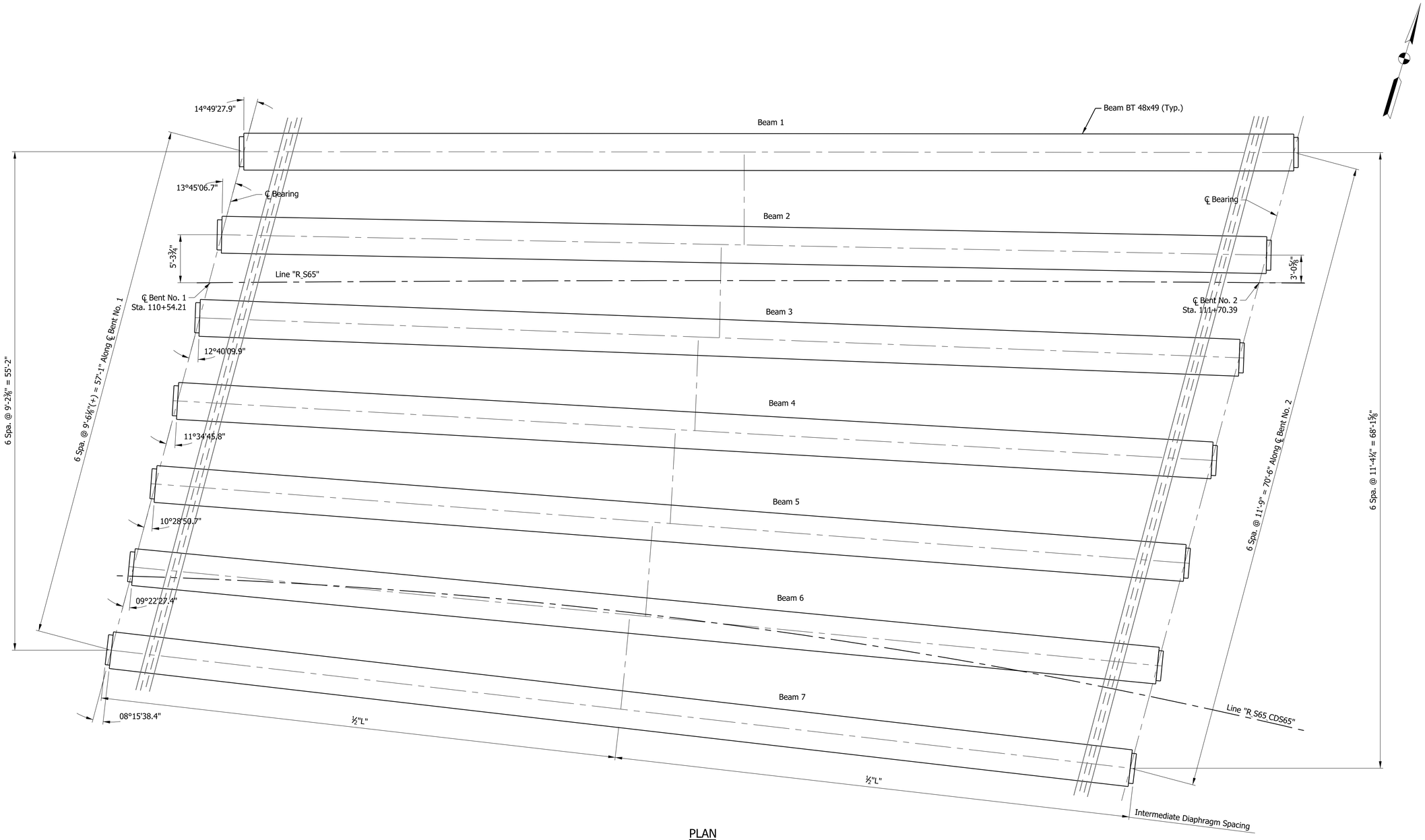
CHECKED: CML | CHECKED: XX

INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 1 & 2 DETAILS

SCALE	BRIDGE FILE
1/2" = 1'-0"	I65-112-10630 SBL
	DESIGNATION
	1901917
SURVEY BOOK	SHEETS
ELECTRONIC	9 of 13
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 33 I65 SB over College Ave\1901917_09 - Bent No. 1 & 2 Details.dgn



PLAN

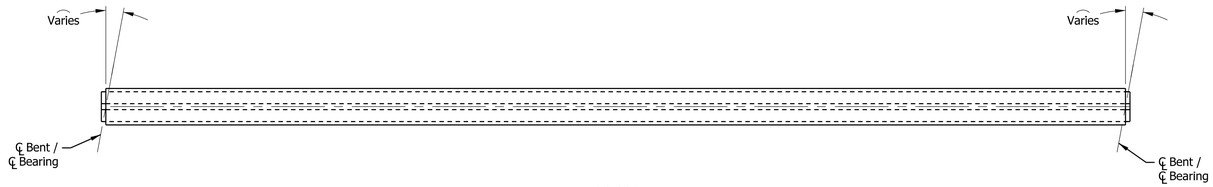
NOTES:

For intermediate diaphragm details, see Std. Dwg. E707-SDPC - 03 & 04.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 3/16" = 1'-0"	BRIDGE FILE: I65-112-10630 SBL
			DESIGNATION: 1901917
DESIGNED: XX / DRAWN: SRR	FRAMING PLAN	SURVEY BOOK: ELECTRONIC	SHEETS: 10 of 13
CHECKED: CML / CHECKED: XX		CONTRACT: B-36910	PROJECT: 1600808

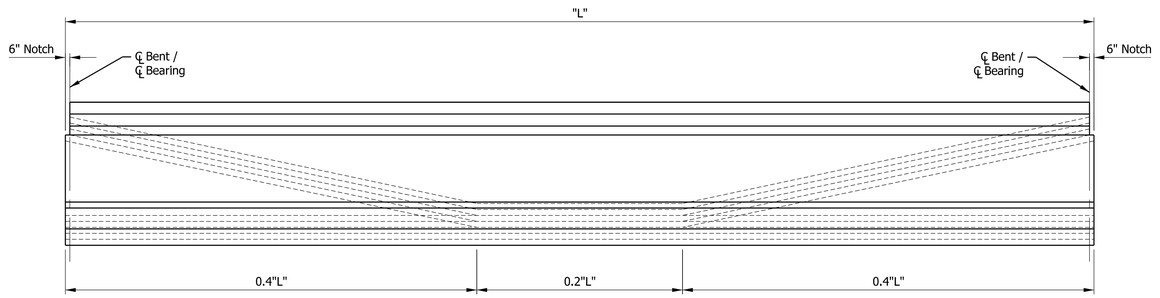
Plot: 2/25/2020 4:33:41 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 33 I65 SB over College Ave\1901917_10 - Framing Plan.dgn



PLAN

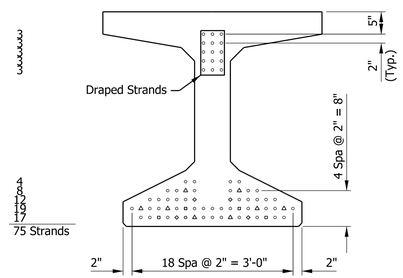
Scale: ⅛" = 1'-0"



ELEVATION

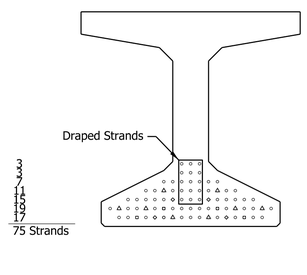
Horizontal Scale: ⅛" = 1'-0"
Vertical Scale: ½" = 1'-0"

Span "A"	
Beam Mark	"L"
1	117'-1¾"
2	116'-7½"
3	116'-1"
4	115'-7⅜"
5	115'-2¼"
6	114'-9⅝"
7	114'-5½"



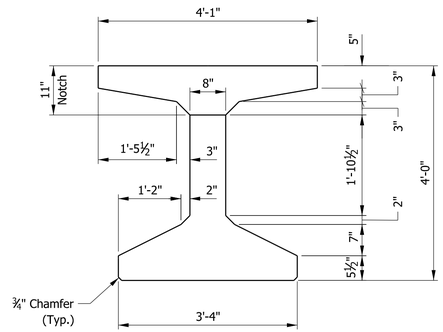
STRAND PATTERN
AT BEAM END

Scale: ¾" = 1'-0"



STRAND PATTERN
AT MIDSPAN

Scale: ¾" = 1'-0"



TYPICAL SECTION

Scale: ¾" = 1'-0"

LEGEND

△ Debonded 5' from beam end

▫ Debonded 10' from beam end

◇ Debonded 15' from beam end

NOTES:

1. For intermediate diaphragm details, see Std. Dwg. E707-SDPC - 03 & 04.

2. Prestressing reinforcement shall be a 0.6"Ø uncoated seven wire low relaxation 270ksl strand area = 0.217 in².

3. Beams shall be cast a minimum of 120 days before deck is poured.

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: XX
DRAWN: SRR
CHECKED: CML
CHECKED: XX

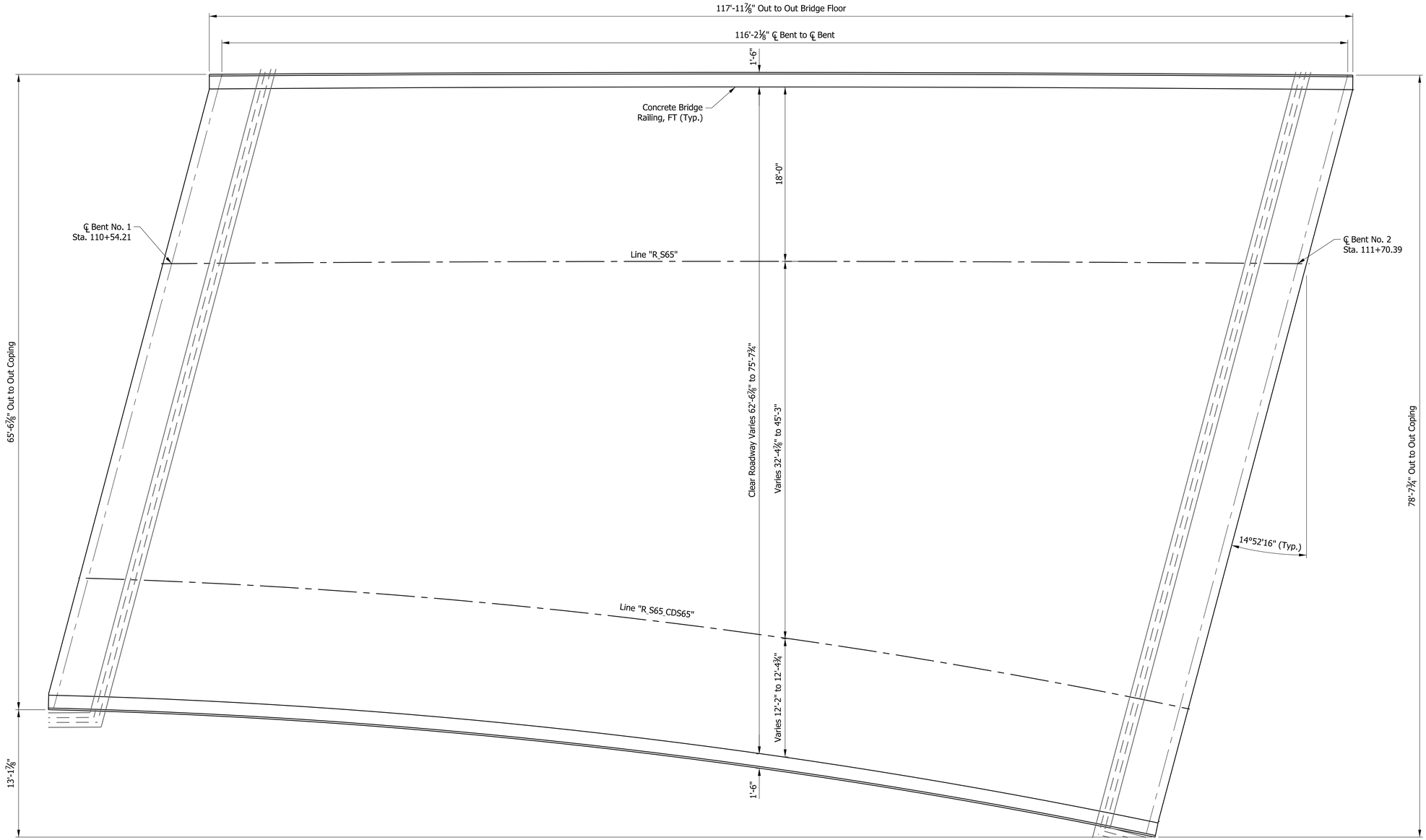
INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

SCALE	BRIDGE FILE
AS NOTED	I65-112-10630 SBL
	DESIGNATION
	1901917
SURVEY BOOK	SHEETS
ELECTRONIC	11 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 4:33:43 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 33 I65 SB over College Ave\1901917_11 - Beam Details.dgn

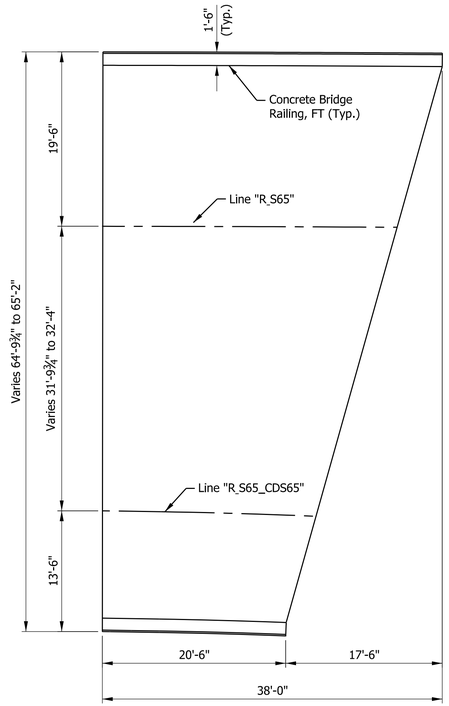


FLOOR PLAN

		RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 3/16" = 1'-0"	BRIDGE FILE: I65-112-10630 SBL
					DESIGNATION: 1901917
		DESIGNED: XX / DRAWN: SRR	SUPERSTRUCTURE DETAILS	SURVEY BOOK: ELECTRONIC	SHEETS: 12 of 13
		CHECKED: CML / CHECKED: XX		CONTRACT: B-36910	PROJECT: 1600808

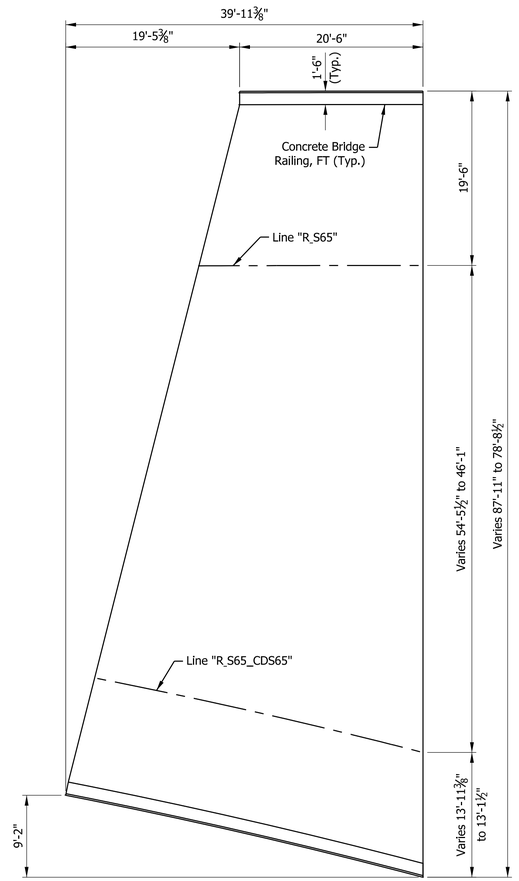
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P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 33 I65 SB over College Ave\1901917_12 - Deck Plan.dgn



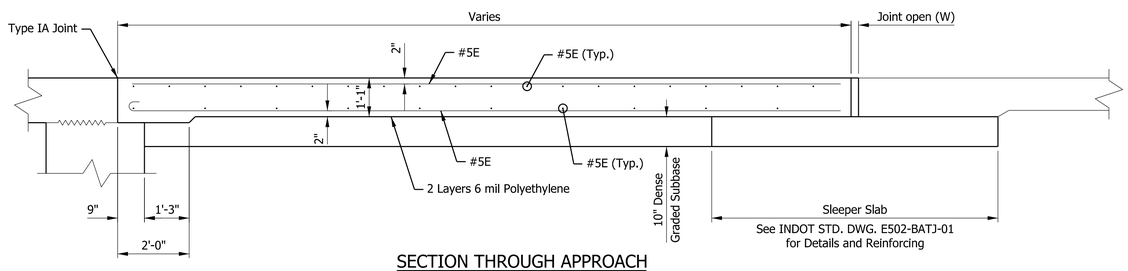
APPROACH SLAB AT END BENT NO. 1

Scale: ⅛" = 1'-0"



APPROACH SLAB AT END BENT NO. 2

Scale: ⅛" = 1'-0"



SECTION THROUGH APPROACH

Scale: ½" = 1'-0"

NOTE:

1.For additional Terminal Joint information, see USP. Terminal Joint Details: Type CRCP

2. Concrete Railing FT sit on Slab Extension. For more details, see Std. Dwg. E609-TBAE-02804.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: XX | DRAWN: SRR

CHECKED: CML | CHECKED: XX

INDIANA DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS

SCALE	BRIDGE FILE
AS NOTED	I65-112-10630 SBL
	DESIGNATION
	1901917
SURVEY BOOK	SHEETS
ELECTRONIC	13 of 13
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 4:33:46 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 33 I65 SB over College Ave\1901917_13 - Approach Slabs.dgn

PROJECT	DESIGNATION
1600808	1901918
CONTRACT	BRIDGE FILE
B-36910	I65-112-10631 SBL

STRUCTURE INFORMATION

STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I65-112-10631 SBL	CONTINUOUS COPOSITE PRESTRESSED CONCRETE BULB TEE	9 SPANS: 100'-0", 150'-0", 150'-0", 150'-0", 155'-0", 150'-0", 115'-0", 165'-0", & 100'-0" SKEW: NONE (RADIAL)	COLLEGE AVENUE AND 5 RAMPS	114+20.11 LINE "R_S65_E70"

KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	
1600808	COMPLETE ROAD RECONSTRUCTION OF I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	LEAD DES
1901935	ITS FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901936	SIGNS, LIGHTING, SIGNALS AND MARKING FOR I-65/I-70 FROM WASHINGTON STREET TO I-65 OVER DELAWARE STREET AND I-70 OVER VALLEY AVENUE	
1901847	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER WASHINGTON STREET	
1901848	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER WASHINGTON STREET	
1901849	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER WASHINGTON STREET	
1901850	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER MARKET STREET	
1901851	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER MARKET STREET	
1901852	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MARKET STREET	
1901853	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER CSX RAILROAD & OHIO STREET	
1901854	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER CSX RAILROAD & OHIO STREET	
1901855	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER CSX RAILROAD & OHIO STREET	
1901856	BRIDGE REPLACEMENT ON I-65/I-70 NB OVER NEW YORK STREET	
1901857	BRIDGE REPLACEMENT ON I-65/I-70 SB OVER NEW YORK STREET	
1901858	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER NEW YORK STREET	
1901861	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER MICHIGAN STREET	
1901864	BRIDGE REPLACEMENT ON I-65/I-70 SB CD OVER MICHIGAN STREET	
1901865	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 EB ENTRANCE RAMP	
1901881	BRIDGE REPLACEMENT ON I-65 NB OVER ST. CLAIR STREET	
1901889	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER ST. CLAIR STREET	
1901892	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON SB CD OVER ST. CLAIR STREET	
1901897	BRIDGE REPLACEMENT ON I-65 NB OVER EAST 10TH STREET	
1901899	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER EAST 10TH STREET	
1901901	BRIDGE REPLACEMENT ON I-65 SB OVER EAST 10TH STREET	
1901903	BRIDGE REPLACEMENT ON I-70 WB OVER EAST 10TH STREET	
1901905	NEW BRIDGE CONSTRUCTION ON SB CD & RAMP OVER EAST 10TH STREET	
1901906	NEW BRIDGE CONSTRUCTION ON I-65 NB CD EXIT RAMP OVER CENTRAL AVENUE	
1901907	BRIDGE REPLACEMENT ON I-65 NB OVER CENTRAL AVENUE	
1901908	BRIDGE REPLACEMENT ON I-65 SB OVER CENTRAL AVENUE	
1901909	NEW BRIDGE CONSTRUCTION ON I-65 SB CD ENTRANCE RAMP OVER CENTRAL AVENUE	
1901914	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER COLLEGE AVENUE	
1901915	BRIDGE REPLACEMENT ON I-65 NB & PENNSYLVANIA EXIT RAMP OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD RAMP OVER COLLEGE AVENUE	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER THREE RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-70 EB OVER I-65 NB	
1901923	BRIDGE REPLACEMENT ON I-70 WB & SB CD OVER LEWIS STREET & MONON TRAIL	
1901925	NEW BRIDGE CONSTRUCTION ON I-70 WB TO I-65 NB OVER LEWIS STREET & MONON TRAIL	
1901927	BRIDGE REPLACEMENT ON I-65 SB TO I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901928	BRIDGE REPLACEMENT ON I-70 EB OVER LEWIS STREET & MONON TRAIL	
1901929	PREVENTATIVE MAINTENANCE ON I-70 WB OVER ROOSEVELT AT COMMERCE AVENUE	
1901930	PREVENTATIVE MAINTENANCE ON I-70 EB OVER ROOSEVELT AT COMMERCE AVENUE	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE") - PENNSYLVANIA EXIT RAMP	
1901934	REHABILITATE AND WIDEN ON I-65 OVER 7 STREETS, ACCESS RD, MONORAIL (AKA "MONSTER BRIDGE) - DELAWARE ENTRANCE RAMP	
1902179	BRIDGE REPLACEMENT ON I-65 NB/I-70 EB OVER VERMONT STREET	
1902180	BRIDGE REPLACEMENT ON I-65 SB/I-70 WB OVER VERMONT STREET	

INDIANA DEPARTMENT OF TRANSPORTATION

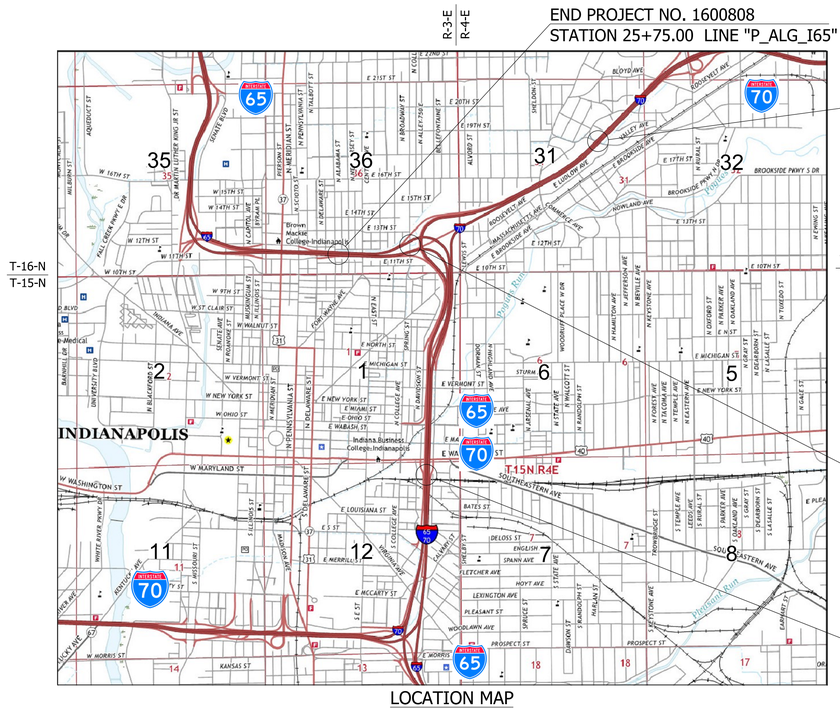
BRIDGE PLANS
FOR SPANS OVER 20 FEET

I-65 SB TO I-70 EB OVER COLLEGE AVENUE AT: RP 112+81

PROJECT NO. 1600808 (P.E. & CONSTR.)

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

Bridge Replacement on I-65 N.B. and 12th St. CD over College Ave., Located 2.06 Miles North of I-70 (South Split) Interchange, in Section 36, of Township 16 North, Range 3 East, Center Township, in Marion County Indiana


R-3-E
R-4-E
T-16-N
T-15-N
INDIANAPOLIS
T.15N R4E
65
70
31
36
1
6
5
2
11
12
7
8
35
32
Brown Mackie College-Indianapolis
Indiana Business College-Indianapolis
College Ave.
Pogues Run
Fall Creek
Virginia Run
E 21ST ST
E 20TH ST
E 19TH ST
E 16TH ST
E 15TH ST
E 14TH ST
E 13TH ST
E 12TH ST
E 11TH ST
E 10TH ST
E NORTH ST
E MICHIGAN ST
E VERMONT ST
E NEW YORK ST
E OHIO ST
E WABASH ST
W MARYLAND ST
E LOUISIANA ST
E MERRILL ST
E MCCARTY ST
W WASHINGTON ST
SOUTHEASTERN AVE
DELOSS ST
ENGLISH AVE
SPANN AVE
FLETCHER AVE
HOYT AVE
LEXINGTON AVE
PLEASANT ST
WOODLAWN AVE
PROSPECT ST
E MORRIS ST
KANSAS ST
BLOYD AVE
SOUTH ST
VALLEY AVE
E RIDGEVIEW DR
E LUDLOW AVE
NOWLAND AVE
BROOKSIDE PKWY S DR
BROOKSIDE PKWY N
E 17TH ST
E 13TH ST
E 10TH ST
E NEW YORK ST
E MICHIGAN ST
E 38TH ST
E 34TH ST
E 30TH ST
E 25TH ST
E 22ND ST
E 17TH ST
E 16TH ST
E 15TH ST
E 14TH ST
E 13TH ST
E 12TH ST
E 11TH ST
E 10TH ST
E 9TH ST
W 38TH ST
W 34TH ST
W 30TH ST
W 25TH ST
W 22ND ST
W 17TH ST
W 16TH ST
W 15TH ST
W 14TH ST
W 12TH ST
W 11TH ST
W 10TH ST
W 9TH ST
W 38TH ST
W CLAIR ST
W WALNUT ST
W VERMONT ST
W NEW YORK ST
W OHIO ST
W MARYLAND ST
E LOUISIANA ST
E MERRILL ST
E MCCARTY ST
E 5 ST
W MORRIS ST
KANSAS ST
DELOSS ST
ENGLISH AVE
SPANN AVE
FLETCHER AVE
HOYT AVE
LEXINGTON AVE
PLEASANT ST
WOODLAWN AVE
PROSPECT ST
SOUTHEASTERN AVE
BLOYD AVE
SOUTH ST
VALLEY AVE
E RIDGEVIEW DR
E LUDLOW AVE
NOWLAND AVE
BROOKSIDE PKWY S DR
BROOKSIDE PKWY N
E 17TH ST
E 13TH ST
E 10TH ST
E NEW YORK ST
E MICHIGAN ST
N MERIDIAN ST
N PENNSYLVANIA ST
N DELAWARE ST
N ILLINOIS ST
N ALABAMA ST
N MISSOURI ST
N COLLEGE AVE
N CAPITOL AVE
N SENATE AVE

UTILITIES

INDEX

SHEET NO.	SUBJECT
1	TITLE SHEET
2	INDEX SHEET
3	MAINTENANCE OF TRAFFIC LAYOUT OVER THE BRIDGE
4	LAYOUT SHEET - 1 OF 2
5	LAYOUT SHEET - 2 OF 2
6	GENERAL PLAN - 1 OF 3
7	GENERAL PLAN - 2 OF 3
8	GENERAL PLAN - 3 OF 3
9	GENERAL PLAN - TYPICAL SECTION
10	BENT NO. 1 DETAILS
11	BENT NO. 3 DETAILS
12	BENT NO. 1 & 3 DETAILS
13	BENT NO. 2 DETAILS
14	FRAMING PLAN - 1 OF 5
15	FRAMING PLAN - 2 OF 5
16	FRAMING PLAN - 3 OF 5
17	FRAMING PLAN - 4 OF 5
18	FRAMING PLAN - 5 OF 5
19	BEAM DETAILS - UNIT 1 - 1 OF 2
20	BEAM DETAILS - UNIT 1 - 2 OF 2
21	BEAM DETAILS - UNIT 2 - 1 OF 2
22	BEAM DETAILS - UNIT 2 - 2 OF 2
23	SUPERSTRUCTURE DETAILS - 1 OF 5
24	SUPERSTRUCTURE DETAILS - 2 OF 5
25	SUPERSTRUCTURE DETAILS - 3 OF 5
26	SUPERSTRUCTURE DETAILS - 4 OF 5
27	SUPERSTRUCTURE DETAILS - 5 OF 5
28	APPROACH SLAB DETAILS
29	MSE WALL DETAILS - BENT NO. 1
30	MSE WALL DETAILS - BENT NO. 10

REVISIONS

SHEET NO.	DATE	REVISED

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

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

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SL | DRAWN: JNR

CHECKED: CML | CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

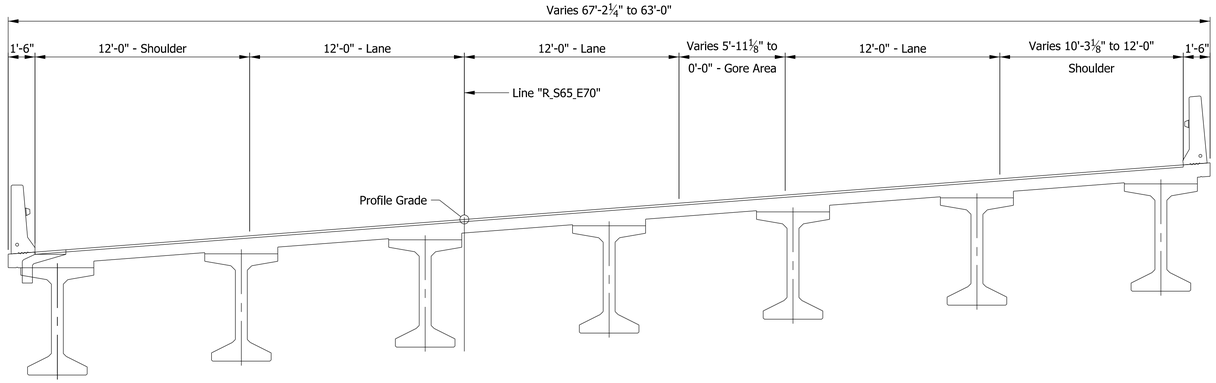
INDEX

SCALE	BRIDGE FILE
	I65-112-10631 SBL
	DESIGNATION
	1901918

SURVEY BOOK	SHEETS
ELECTRONIC	2 of 30
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:38:41 PM

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_02 - Index.dgn



TYPICAL SECTION - PHASE 1 CONSTRUCTION

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: SL

DRAWN: JNR

CHECKED: CML

CHECKED: SL

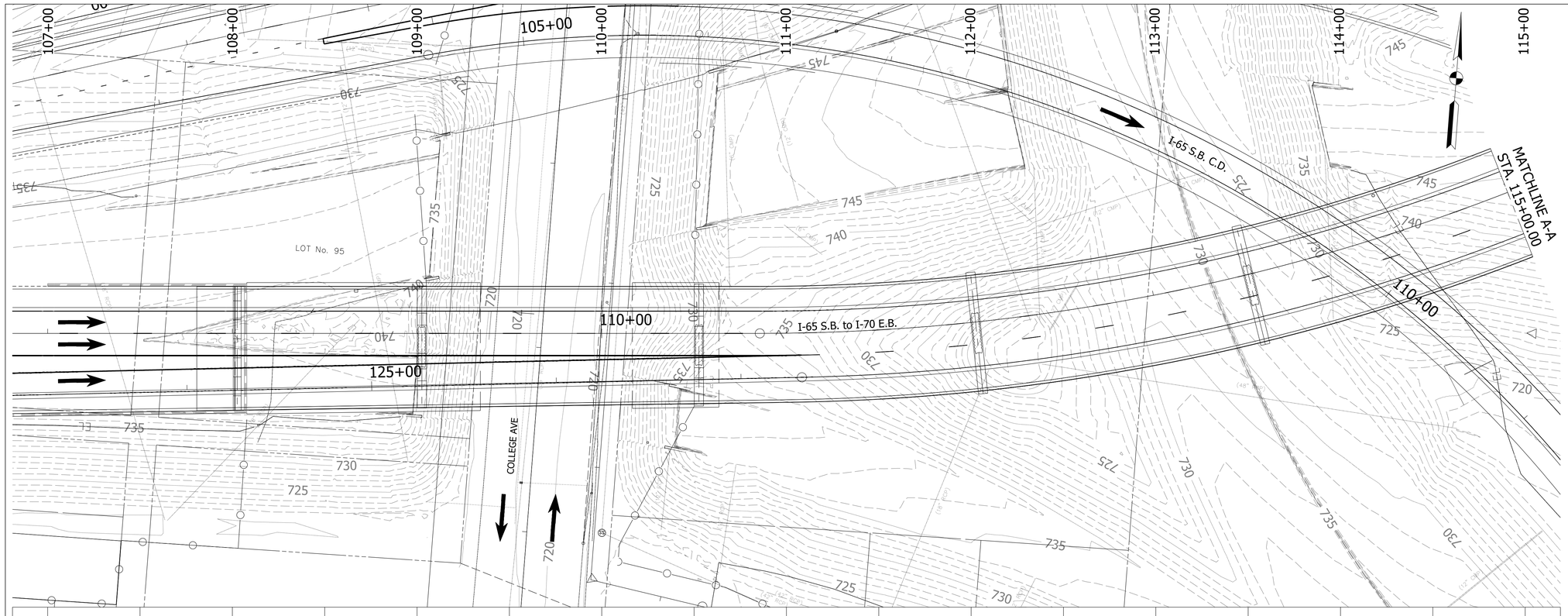
INDIANA
DEPARTMENT OF TRANSPORTATION

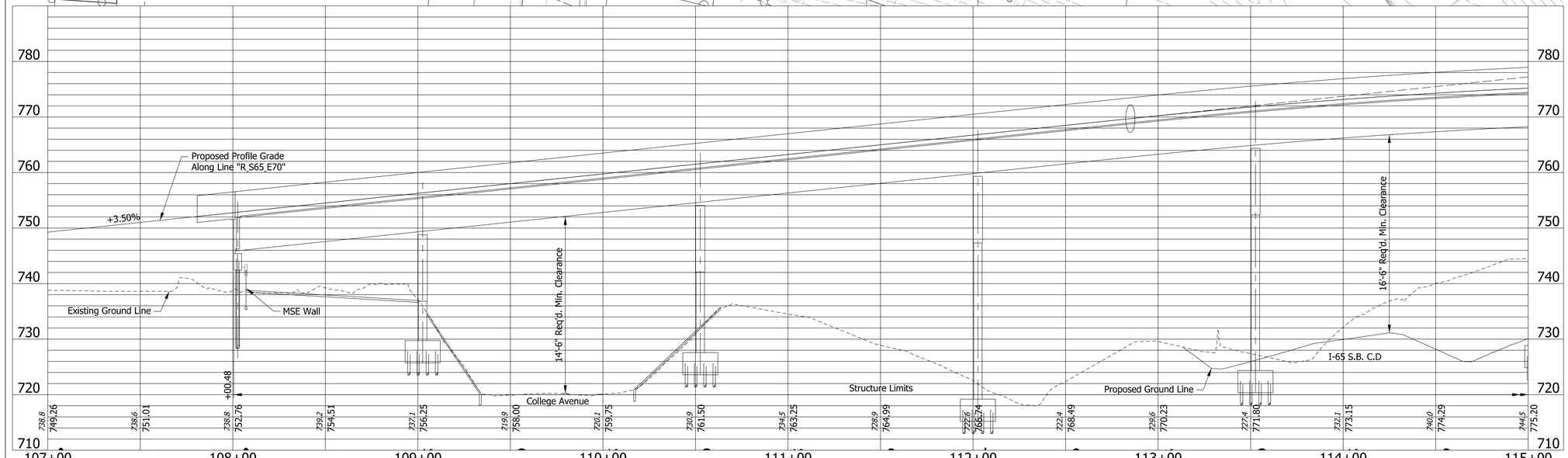
MAINTENANCE OF TRAFFIC
TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
¼" = 1'-0"	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
¼" = 1'-0"	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 30
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:38:43 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_03 - MOT Sections.dgn





EARTHWORK TABULATION

FILL +20%	(See Road Plans)
COMMON EXCAVATION	(See Road Plans)
EXCAVATION, FOUNDATION, UNCLASSIFIED (70%)	(See Road Plans)
WASTE-	(See Road Plans)

HORIZONTAL CURVE DATA FOR LINE "R_S65_E70"

P.I. = STA. 115+03.39
P.C. = STA. 110+85.58
P.T. = STA. 118+84.90
R = 1112.00
L = 799.33
△ = 41°11'07" Lt.
T = 417.81

NOTES:

1. See sheet 2 for utility owners.
2. All r/w shall be as shown.
4. There shall be no clearing of trees beyond construction limits.
5. All topography is existing.
6. All r/w described from line "R_S65_E70", except as noted.
7. For vertical profile and horizontal curve data on line "R_S65_CDS65", "R_S65", "R_W70_CDS65", "R_W70", and "R_N65", see sheet no. 6 thru 8.
8. For existing bridge information, see sheet no. 5.

PRESTRESSED CONCRETE
BULB-TEE BEAM BRIDGE
9 SPANS: 100'-0", 150'-0", 150'-0",
150'-0", 155'-0", 150'-0"
115'-0", 165'-0" & 100'-0"
SKEW: NONE (RADIAL)
CLEAR ROADWAY: VARIES
FROM 64'-2¼" TO 60'-0"
I-65 S.B. TO I-70 E.B OVER
COLLEGE AVE. AND 5 RAMPS
MARION COUNTY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: SL DRAWN: JNR

CHECKED: CML CHECKED: SL

INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT
1 OF 2

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'-0"	I65-112-10631 SBL
VERTICAL SCALE	DESIGNATION
1" = 10'-0"	1901918
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 30
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/25/2020 5:38:50 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 34 I65 SB to I70 EB over College Ave I65 & I70\1901918_04 - Layout.dgn