PROJECT	DESIGNATION
1600808	1901928
CONTRACT	BRIDGE FILE
B-36910	I70-083-10639 DEBL

INDIANA DEPARTMENT OF TRANSPORTATION

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I70-083-10639 DEBL	COMPOSITE PRESTRESSED CONCRETE BULB-TEE BEAM BRIDGE	2 SPAN: 93'-1⅜", 85'-4⅜" SKEW: VARIES	LEWIS STREET & MONON TRAIL	143+37.79

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	
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	
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	

BRIDGE PLANS

FOR SPANS OVER 20 FEET

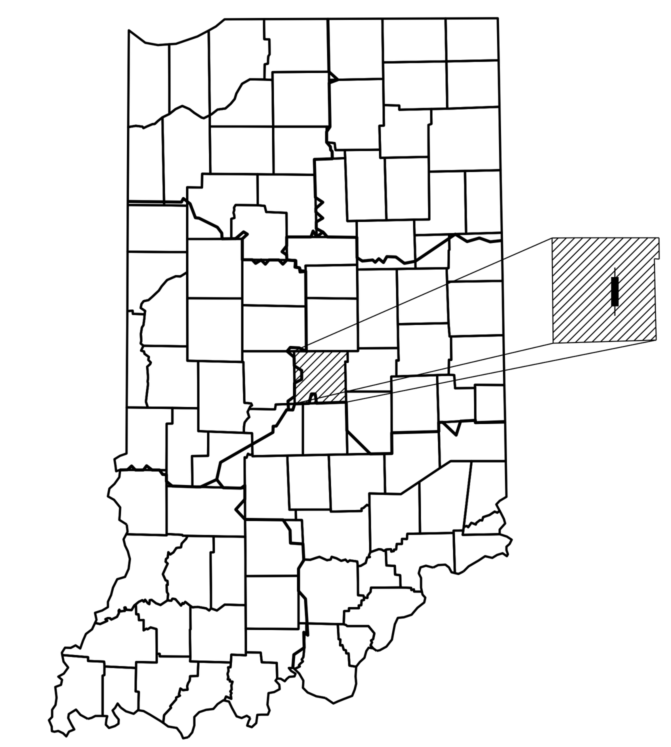
ROUTE: I-65/I-70 AT: RP 83+24

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

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

BRIDGE REPLACEMENT ON I-70 EASTBOUND OVER LEWIS STREET & MONON TRAIL
LOCATED 0.15 MILES EAST OF I-70 (NORTH SPLIT) INTERCHANGE
IN SECTION 36, T-16-N, R-3-E, CENTER TOWNSHIP, MARION COUNTY, INDIANA

TRAFFIC DATA	I-70 EASTBOUND	LEWIS STREET
A.A.D.T. (2021)	48,680 V.P.D.	N/A V.P.D.
A.A.D.T. (2041)	57,330 V.P.D.	N/A V.P.D.
D.H.V (2041)	5,733 V.P.H.	N/A V.P.H.
DIRECTIONAL DISTRIBUTION	100 %	N/A %
TRUCKS	13 % D.H.V.	N/A % D.H.V.
DESIGN DATA		
DESIGN SPEED	50 M.P.H.	25 M.P.H.
PROJECT DESIGN CRITERIA	COMPLETE RECONSTRUCTION (FREEWAY)	N/A
FUNCTIONAL CLASSIFICATION	URBAN FREEWAY	LOCAL ROAD
RURAL/URBAN	URBAN (BUILT-UP)	URBAN
TERRAIN	LEVEL	LEVEL
ACCESS CONTROL	FULL	NONE



PROJECT LOCATION SHOWN BY ━ MARION COUNTY

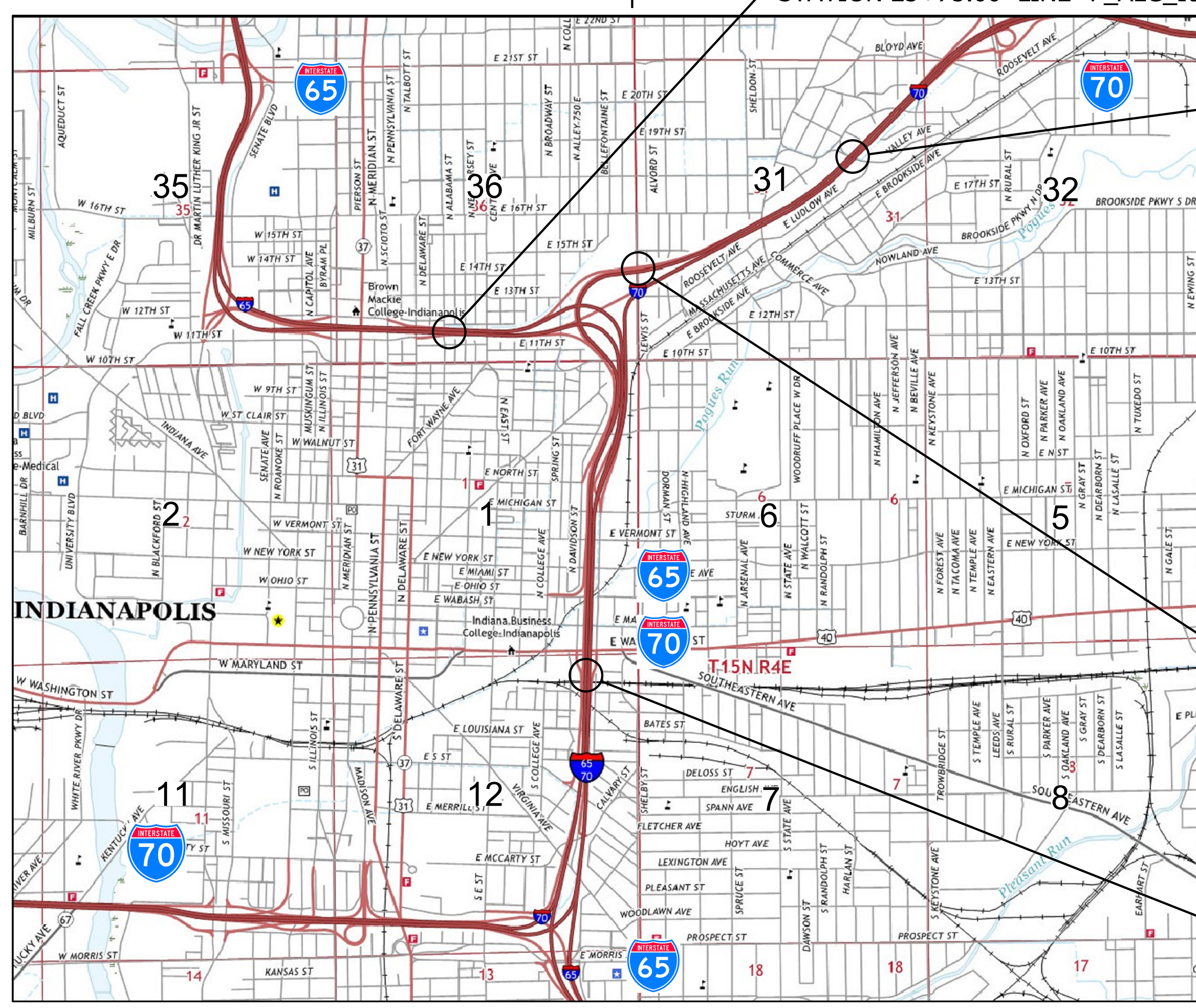
LATITUDE: 39°47'05" N LONGITUDE: 86°08'24" W

HYDROLOGIC UNIT CODE: 05120201130020

BRIDGE LENGTH: 0.029 MI.
ROADWAY LENGTH: SEE ROAD PLANS MI.
TOTAL LENGTH: SEE ROAD PLANS MI.
MAX. GRADE: -3.50 %

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

END CONSTRUCTION PROJECT NO. 1600808
STATION 43+87.40 LINE "P_ALG_I70"



SCALE: 1" = 2000'

PROJECT LOCATION
BRIDGE FILE NO. I70-083-10636 DWBL
I-70 WESTBOUND OVER LEWIS ST. & MONON TRAIL

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

LOCATION MAP
(MARION COUNTY)

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

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

SUPERIOR CONSTRUCTION

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

CERTIFIED BY: ____ DATE

RECOMMENDED FOR LETTING: ____ DATE
INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE FILE	
I70-083-10639 DEBL	
DESIGNATION	
1901928	
SURVEY BOOK	SHEETS
ELECTRONIC	1 of 14
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2023 8:01 PM

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 42 I70 EB over Lewis St & Monon Trail\1901928_01 - Title.dgn

UTILITIES

INDEX

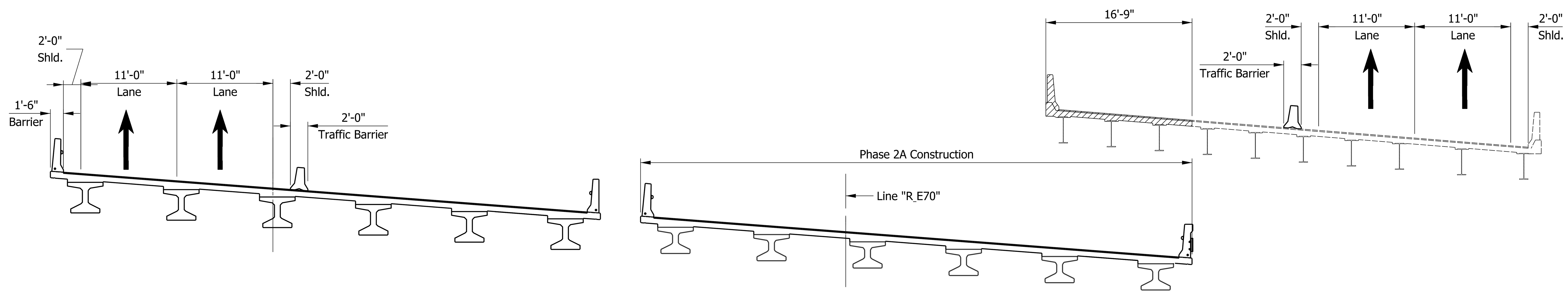
REVISIONS

SHEET NO.	DATE	REVISED

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		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: NA / BRIDGE FILE: I70-083-10639 DEBL / VERTICAL SCALE: NA / DESIGNATION: 1901928
DESIGNED: ZGC	DRAWN: KNP	INDEX	SURVEY BOOK: ELECTRONIC / SHEETS: 2 of 14
CHECKED: CML	CHECKED: ZGC		CONTRACT: B-36910 / PROJECT: 1600808



Structure 41 - I-65 SB to I-70 EB

Structure 42 - I-70 EB

PHASE 2A

LEGEND

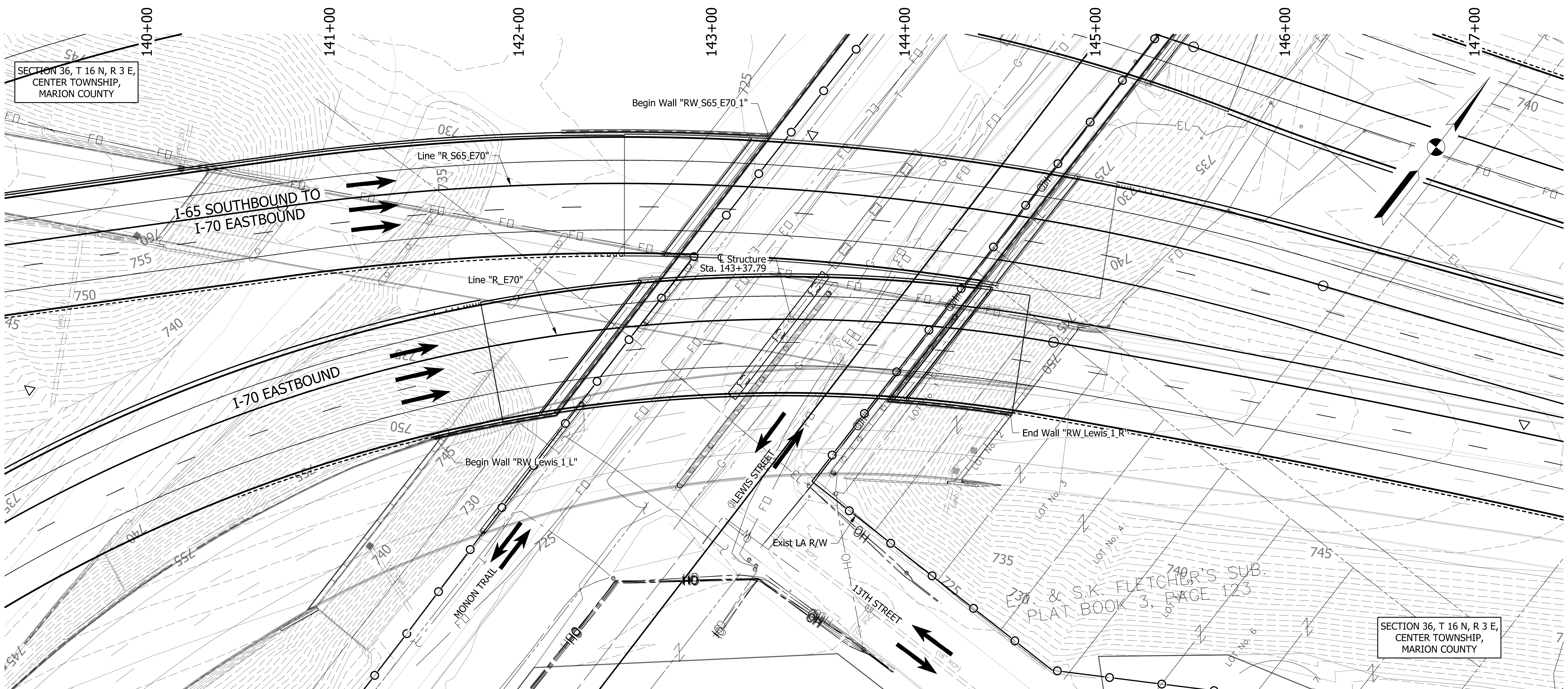
Limits of Removal

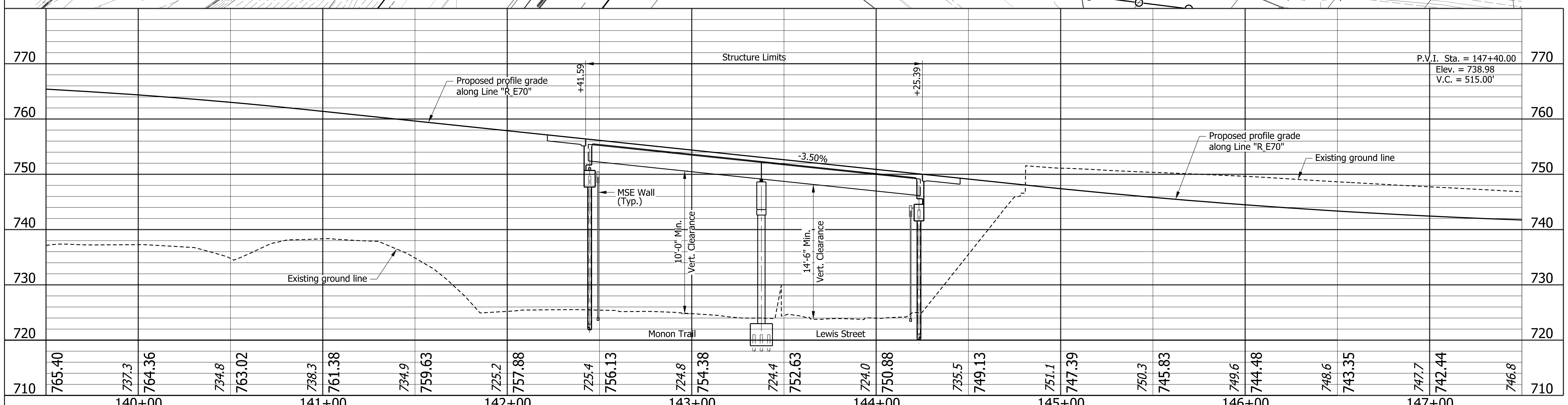
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: KNP		
CHECKED: CML	CHECKED: ZGC		

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC

SCALE	BRIDGE FILE
1/8" =1'-0"	I70-083-10639 DEBL
	DESIGNATION
	1901928
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 14
CONTRACT	PROJECT
B-36910	1600808





EXISTING STRUCTURE:

The existing structure was built in 1974 and had a rehabliation in 1989, 1995 & 2003. The structure is a 9 span continuous composite 36" WF steel beam bridge, with span lengths of 50'-0", 68'-0", 58'-0", 68'-0", 74'-0", 85'-0", 99'-6", 77'-0"& 64'-0". It has a clear roadway width of 93'-2" and a total length of 459'-8". The existing structure is to be removed. Existing plans are on file with the Indiana Department of Transportation under Bridge File No. I70-083-02432 CEBL.

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_E70"

P.I. = Sta. 140+30.09
P.C. = Sta. 134+06.66
P.T. = Sta. 144+74.08
R = 824.00'
L = 1067.42'
Delta = 74°13'18" RT
Dc = 6°57'12"
T = 623.43'

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 "R_E70", except as noted.

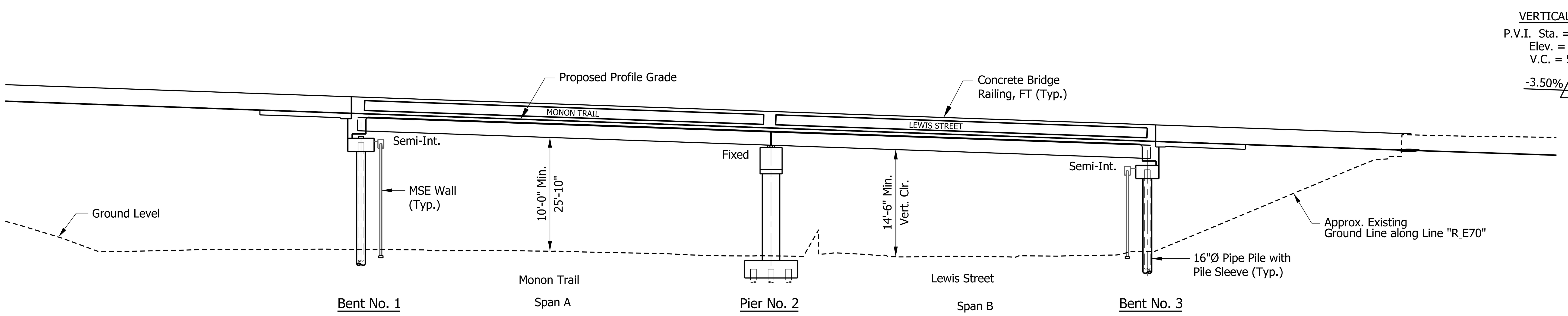
PRESTRESSED
CONCRETE BULB-TEE BEAM BRIDGE
2 SPANS: 93'-1⅜", 85'-4⅜"
SKEW: VARIES
60'-0" CLEAR ROADWAY
I-70 EASTBOUND OVER
MONON TRAIL AND LEWIS STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: KNP		
CHECKED: CML	CHECKED: ZGC		

INDIANA
DEPARTMENT OF TRANSPORTATION

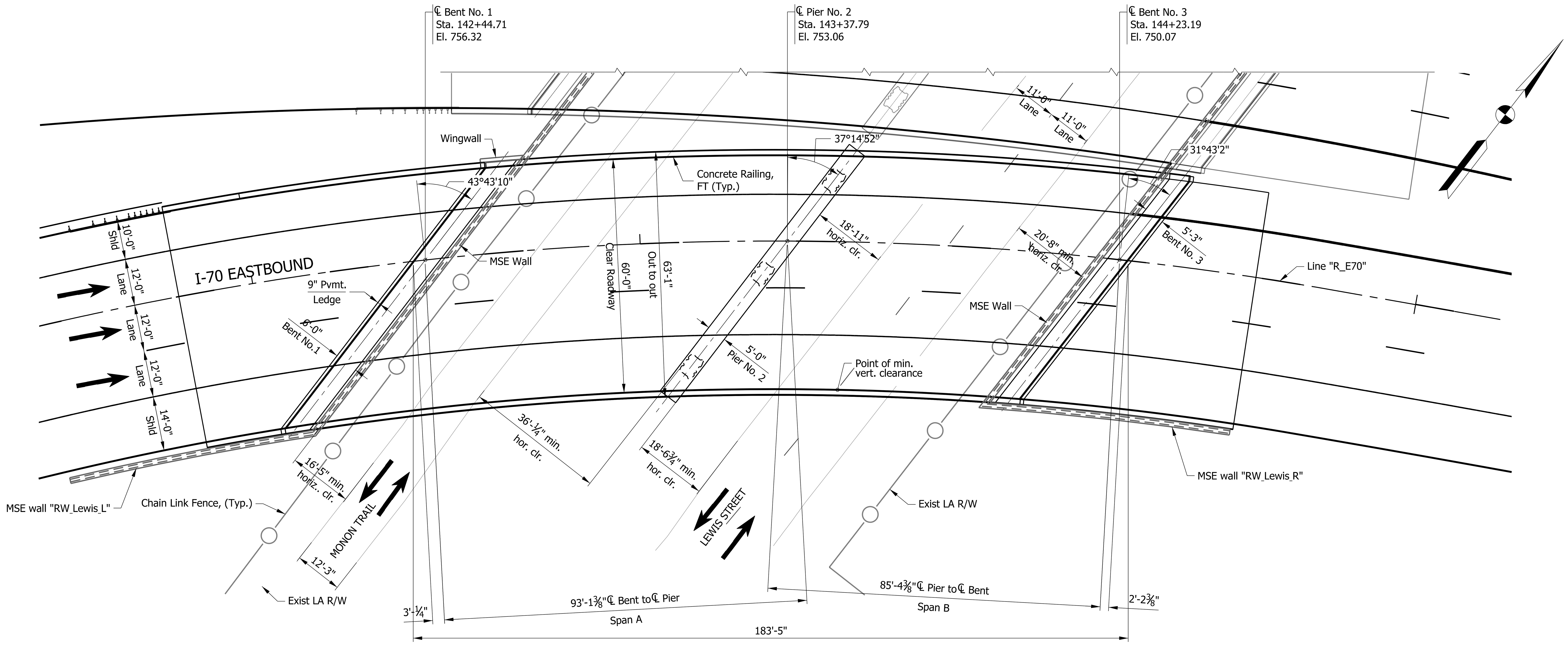
LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1"=30'-0"	I70-083-10639 DEBL
VERTICAL SCALE	DESIGNATION
1"=10'-0"	1901928
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 14
CONTRACT	PROJECT
B-36910	1600808



VERTICAL CURVE
P.V.I. Sta. = 147+40.00
Elev. = 738.98
V.C. = 515.00'
-3.50% +0.98%

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 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.

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" integral wearing surface.

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 (Barrier)	fy = 60,000 psi
Reinforcing Bars	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 outside the vertical coping form. The top overhang brackets were assumed to be located 6 inches past the edge of the vertical coping form. The bottom overhang brackets were assumed to be braced against the intersection of the 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.

PRESTRESSED
CONCRETE BULB-TEE BEAM BRIDGE
2 SPANS: 93'-1⅜", 85'-4⅜"
SKEW: VARIES
60'-0" CLEAR ROADWAY
I-70 EASTBOUND OVER
MONON TRAIL AND LEWIS STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: MSS	DRAWN: KNP		
CHECKED: PJC	CHECKED: PJC		

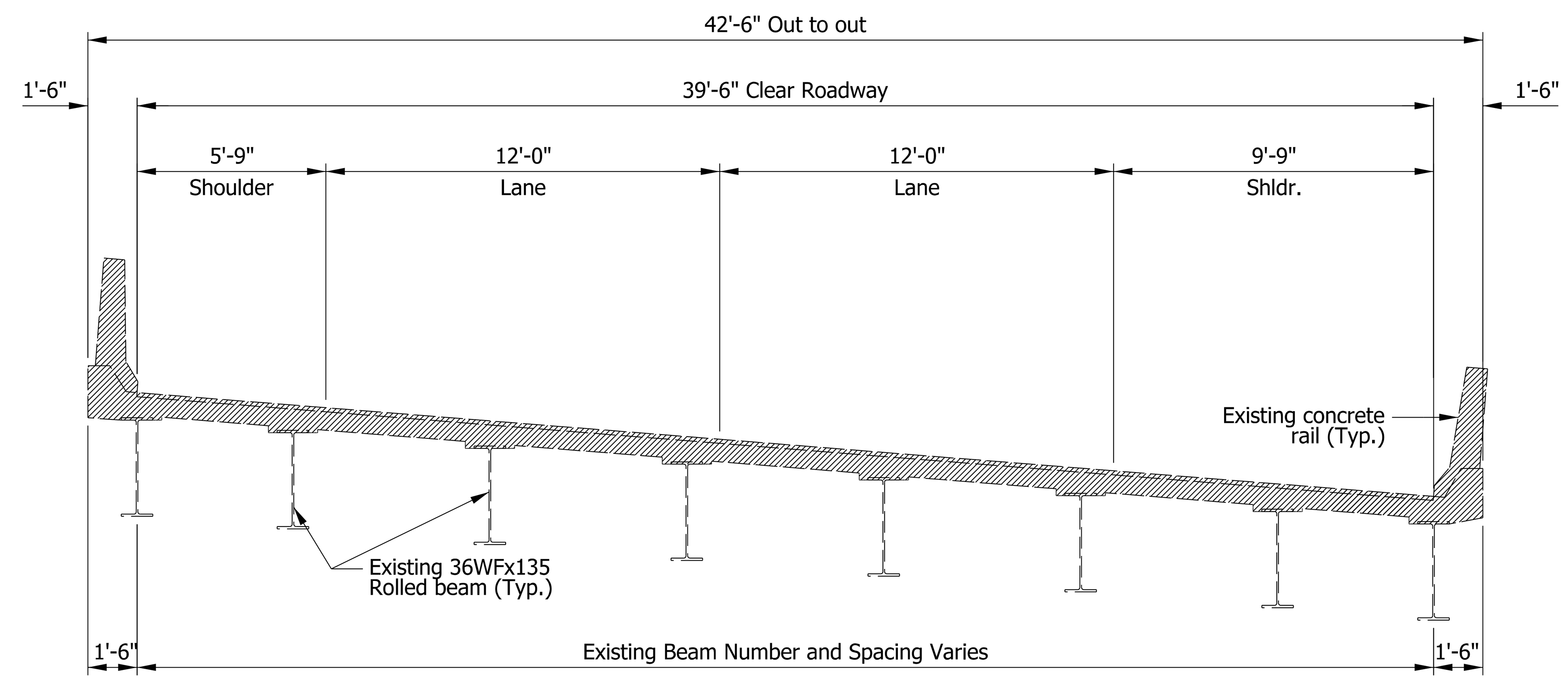
INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT

SCALE	BRIDGE FILE
1/16"=1'-0"	I70-083-10639 DEBL
	DESIGNATION
	1901928
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 14
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 8:22 PM AM_PM

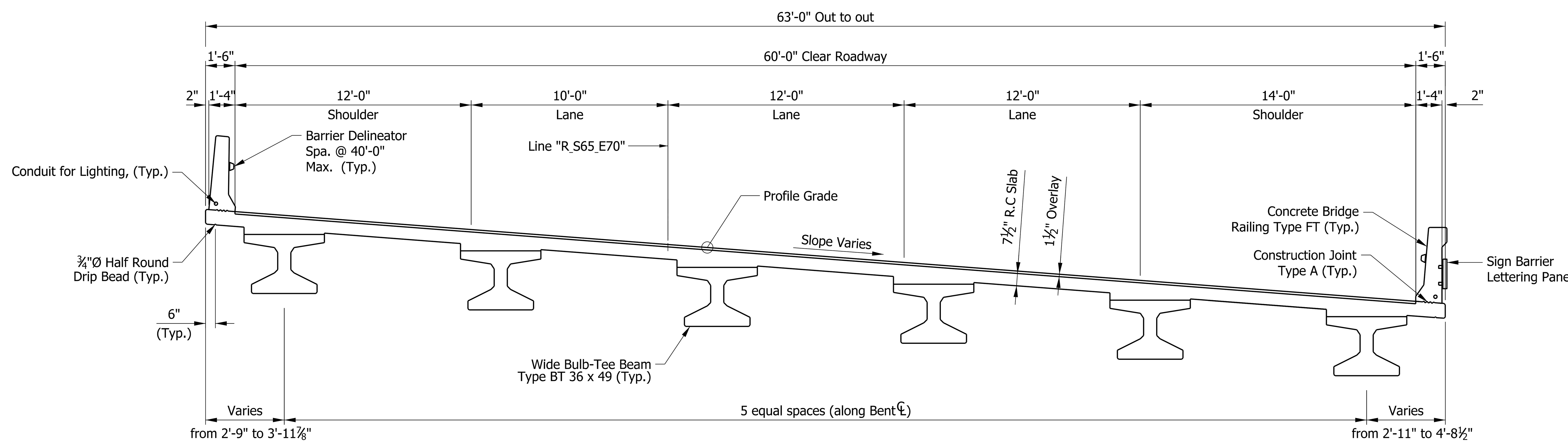
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 42 I70 EB over Lewis St & Monon Trail\1901928_05 - Gen plan.dgn



EXISTING TYPICAL SECTION

LEGEND

Limits of Removal



PROPOSED TYPICAL SECTION

PRESTRESSED
CONCRETE BULB-TEE BEAM BRIDGE
2 SPANS: 93'-1⅜", 85'-4⅜"
SKEW: VARIES
60'-0" CLEAR ROADWAY
I-70 EASTBOUND OVER
MONON TRAIL AND LEWIS STREET
MARION COUNTY

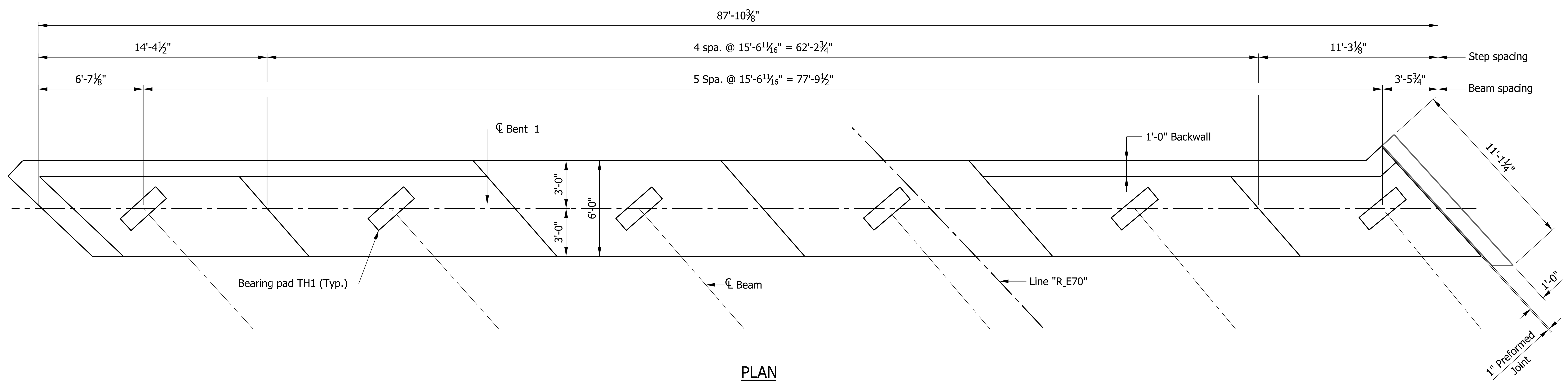
RECOMMENDED FOR APPROVAL ____ DESIGN ENGINEER ____ DATE

DESIGNED: ZGC | DRAWN: KNP
CHECKED: CML | CHECKED: ZGC

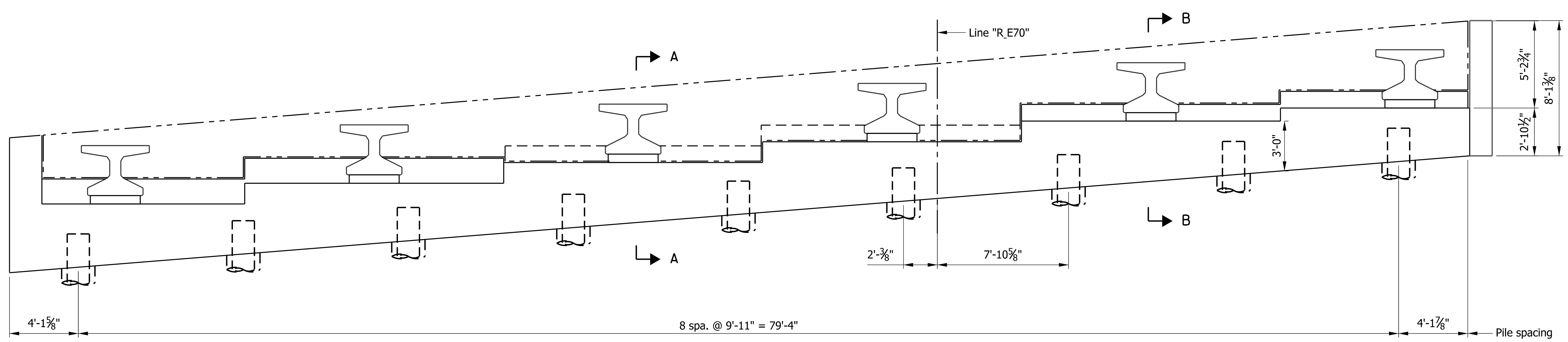
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
TYPICAL SECTIONS

SCALE	BRIDGE FILE
¼" =1'-0"	I70-083-10639 DEBL
	DESIGNATION
	1901928
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 14
CONTRACT	PROJECT
B-36910	1600808



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



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

RECOMMENDED FOR APPROVAL ____ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: KNP
CHECKED: CML | CHECKED: ZGC

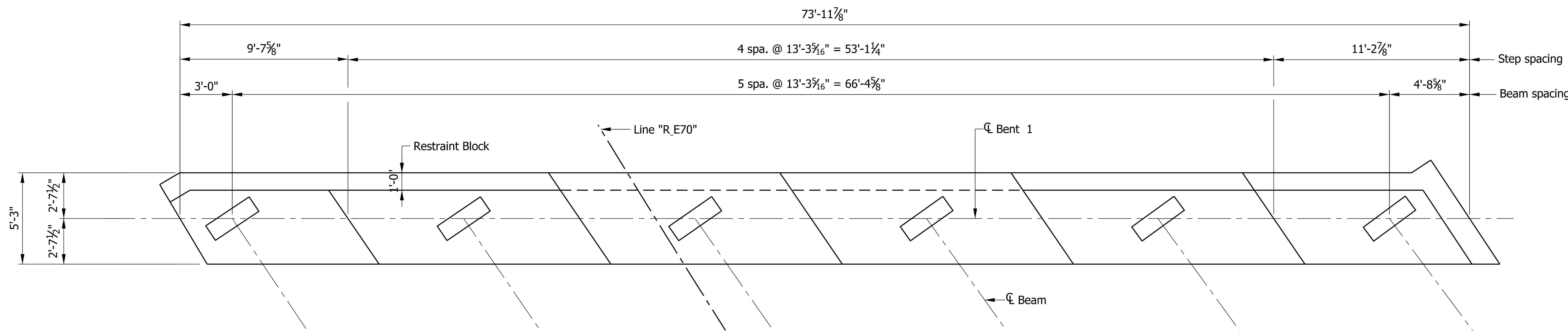
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO.1

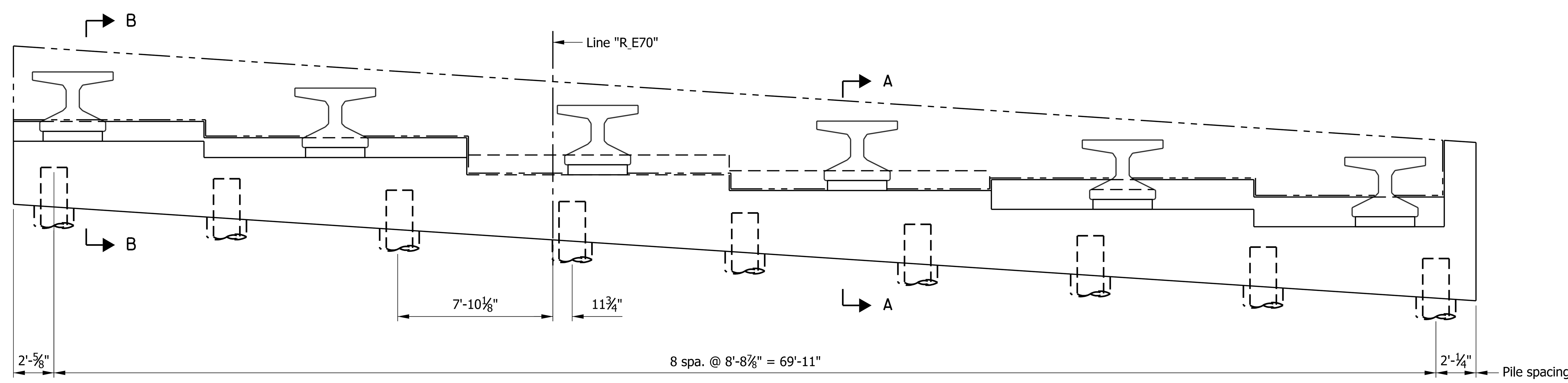
SCALE	BRIDGE FILE
AS NOTED	I70-083-10639 DEBL
	DESIGNATION
	1901928
SURVEY BOOK	SHEETS
ELECTRONIC	7 of 14
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 1:58:26 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 42 I70 EB over Lewis St & Monon Trail\1901928_07 - Bent 1.dgn



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



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

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: KNP
CHECKED: CML CHECKED: ZGC

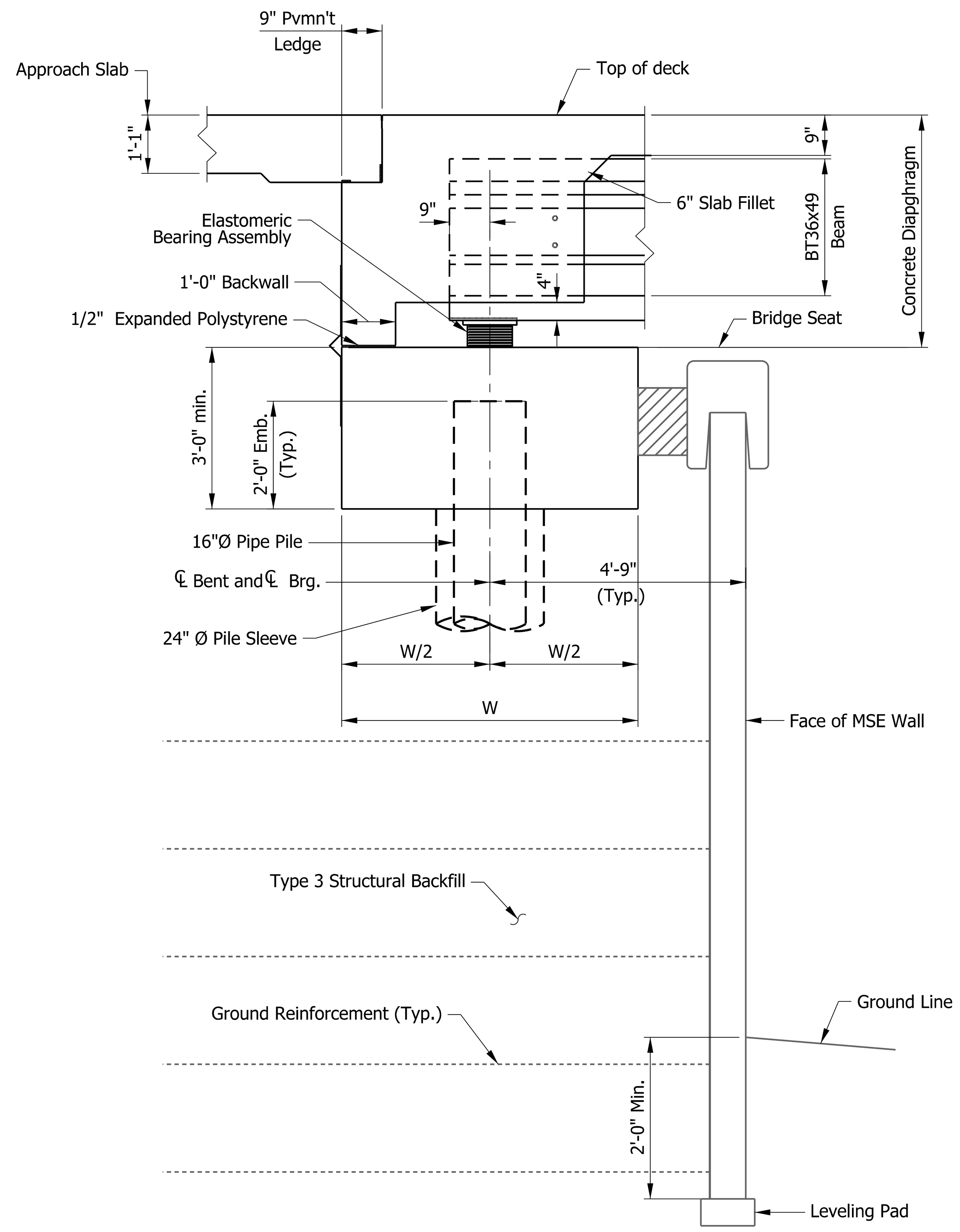
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 3

SCALE	BRIDGE FILE
1/4" = 1'-0"	I70-083-10639 DEBL
	DESIGNATION
	1901928
SURVEY BOOK	SHEETS
ELECTRONIC	8 of 14
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 1:58:27 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 42 I70 EB over Lewis St & Monon Trail\1901928_08 - Bent 3.dgn



SECTION A-A
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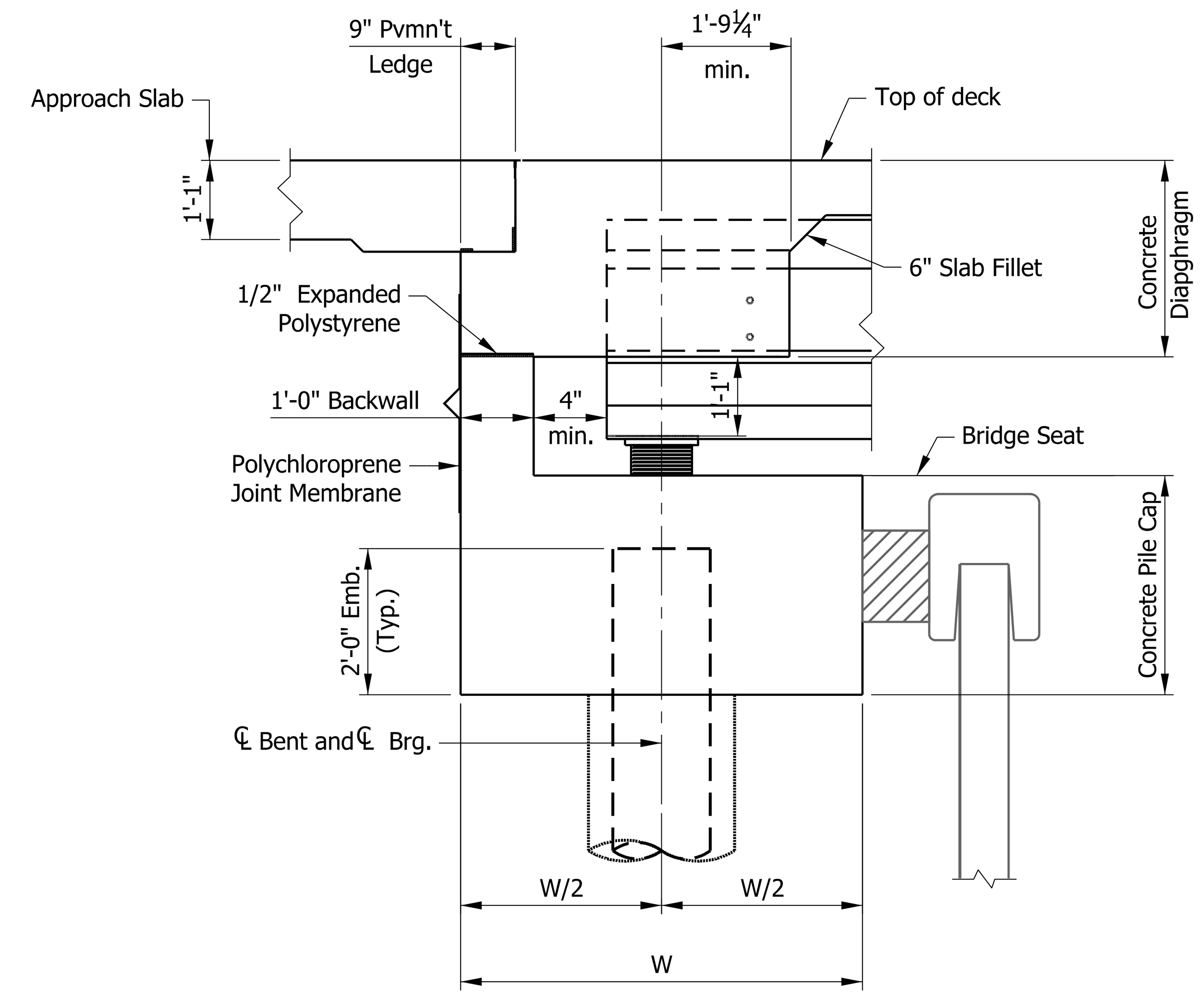


SECTION B-B
Scale: 1/2" = 1'-0"

Note:

For MSE wall details, see plan Des. 1901923 sheets 15 thru 18.

Plot: 2/27/2020 1:58:28 PM

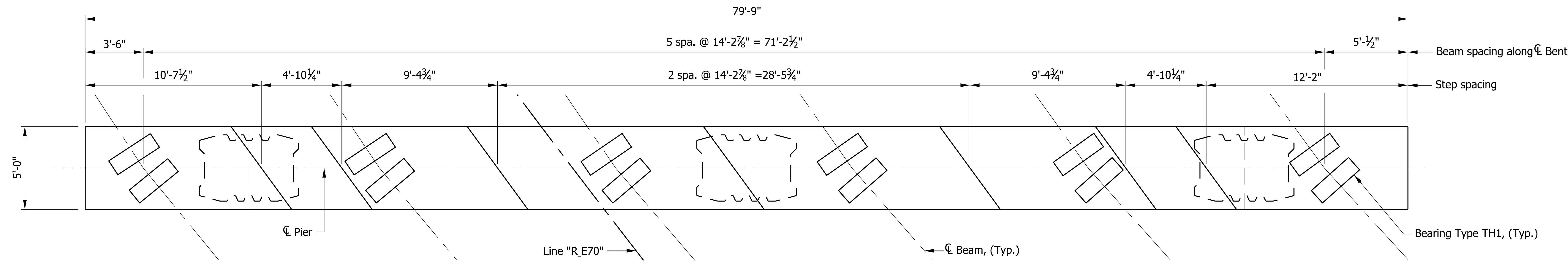
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: KNP		
CHECKED: CML	CHECKED: ZGC		

INDIANA
DEPARTMENT OF TRANSPORTATION

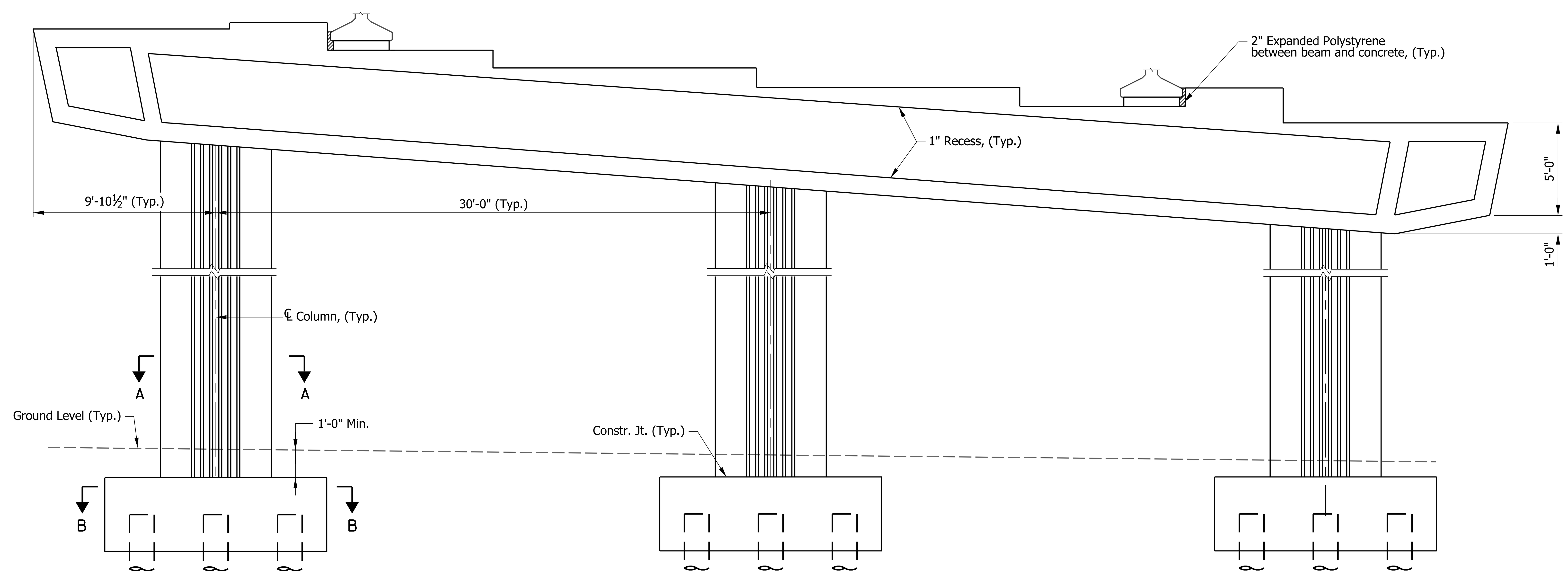
BENT NO. 1 AND 3
DETAILS

SCALE	BRIDGE FILE
AS NOTED	I70-083-10639 DEBL
	DESIGNATION
	1901928
SURVEY BOOK	SHEETS
ELECTRONIC	9 of 14
CONTRACT	PROJECT
B-36910	1600808

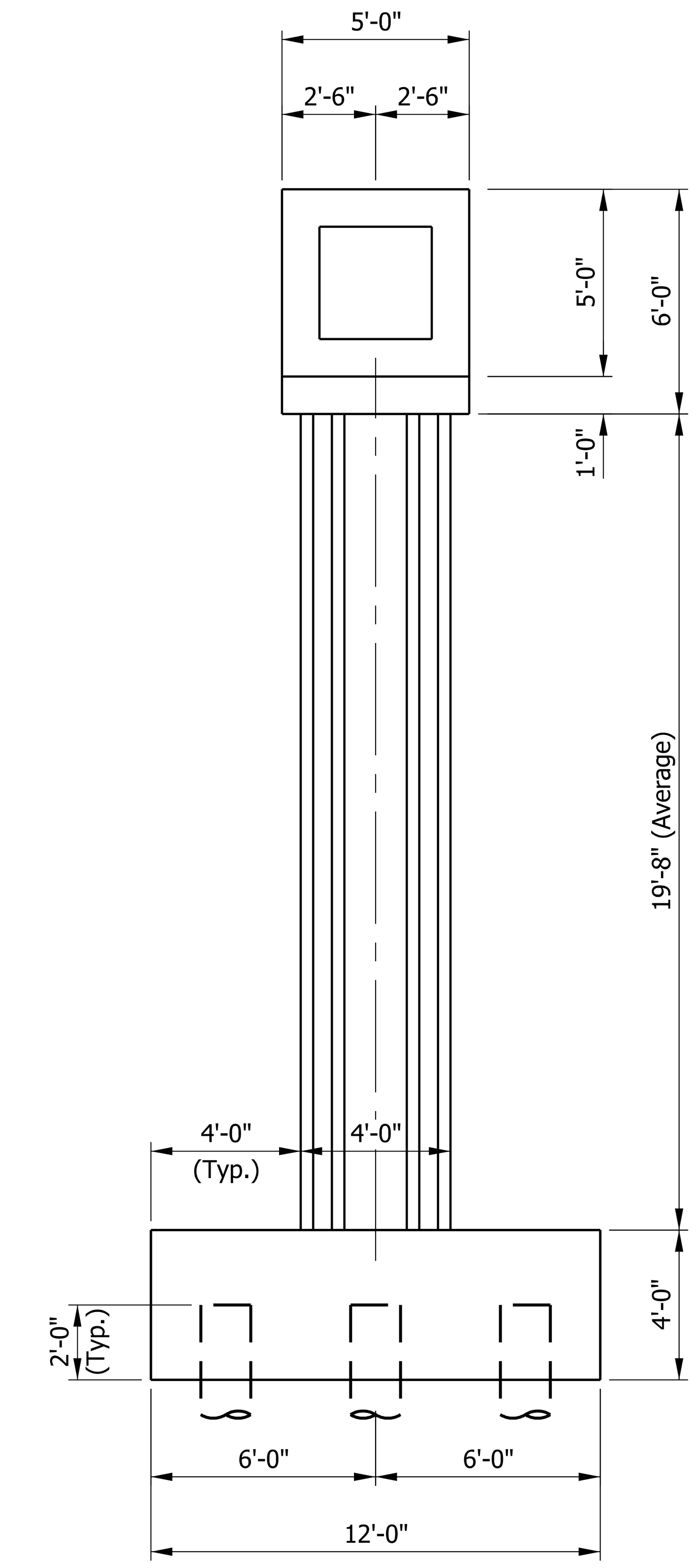
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 42 I70 EB over Lewis St & Monon Trail\1901928_09 - Bent 1-3 Details.dgn



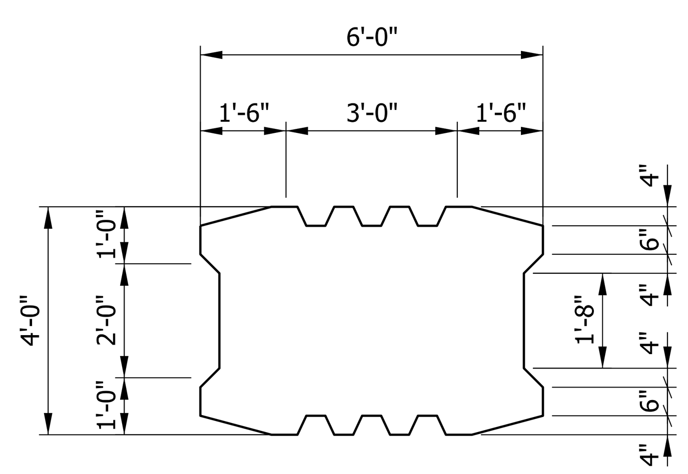
PLAN
Scale: 1/4" = 1'-0"



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



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



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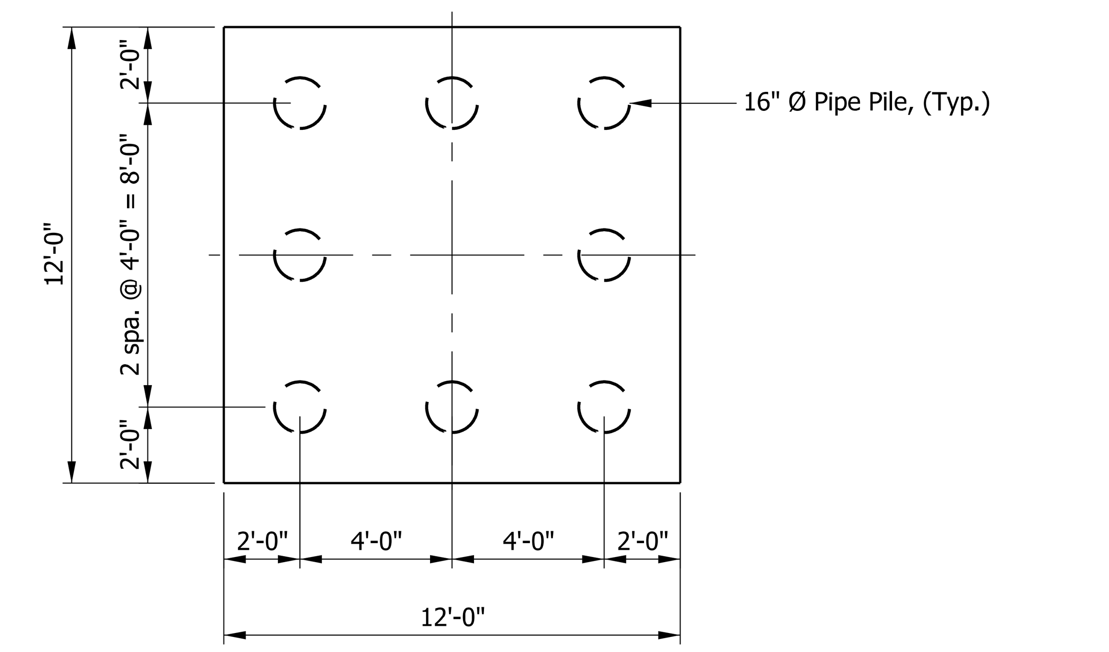


SECTION B-B
Scale: 1/4" = 1'-0"

Note:

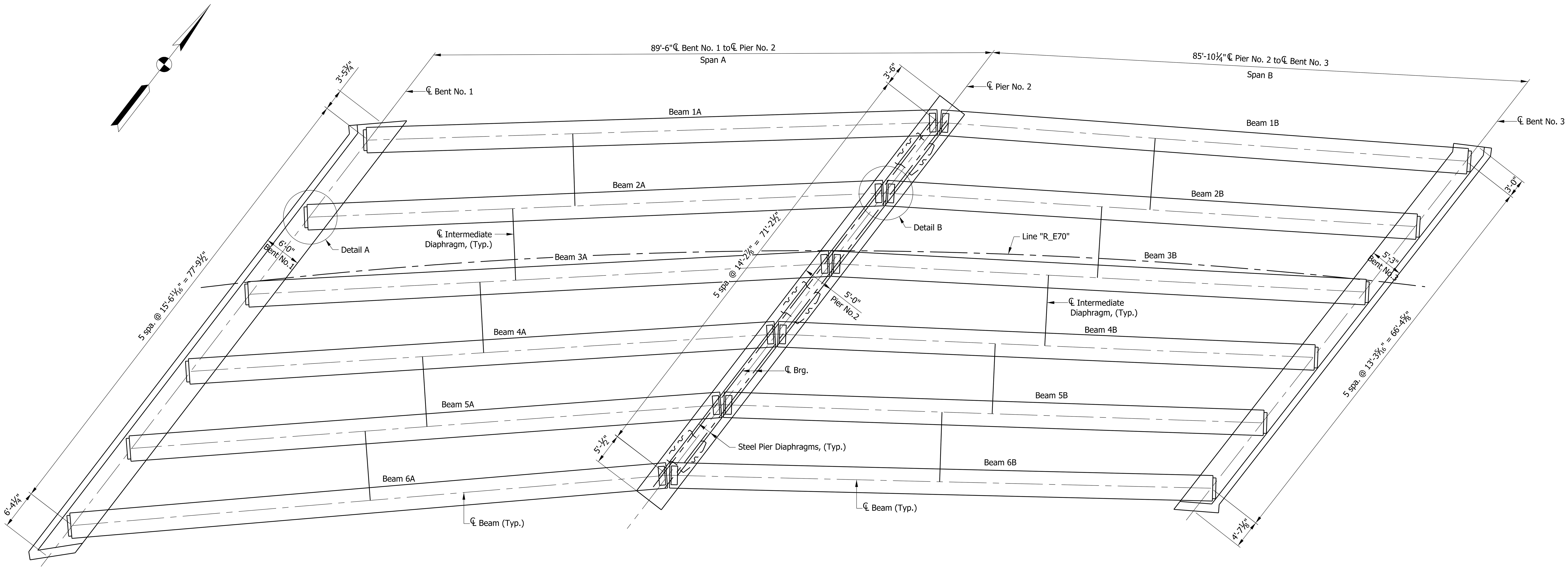
For Bearing Pad details see Std. Dwg. E-726-BEBP-03

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: ZGC	DRAWN: KNP	
CHECKED: CML	CHECKED: ZGC	

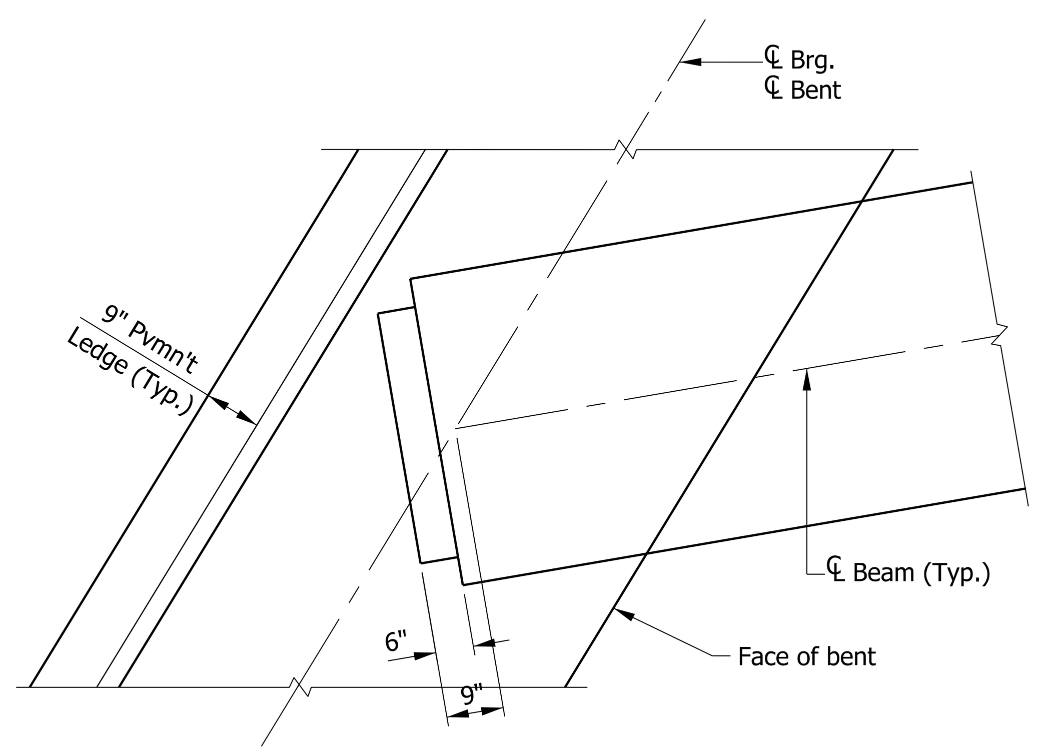
INDIANA
DEPARTMENT OF TRANSPORTATION

PIER NO.2

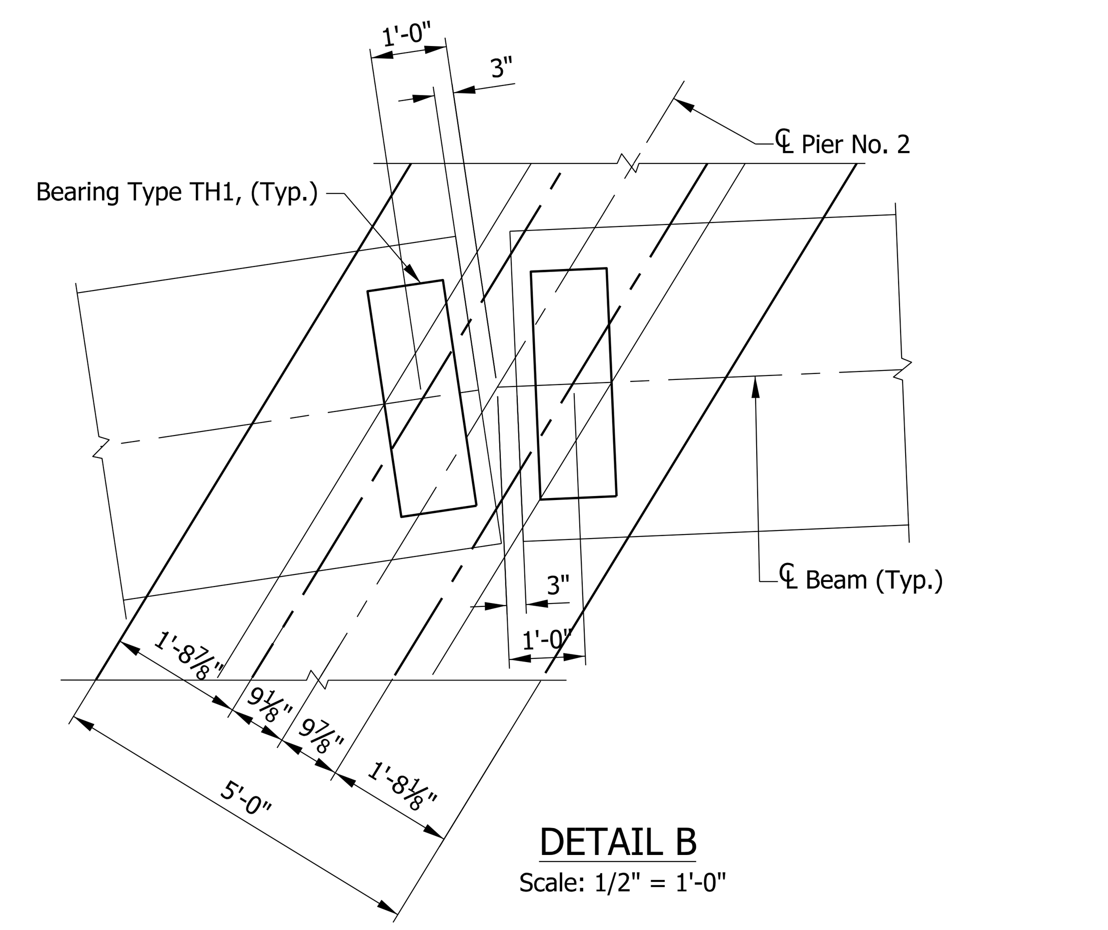
SCALE	BRIDGE FILE
AS NOTED	I70-083-10639 DEBL
	DESIGNATION
	1901928
SURVEY BOOK	SHEETS
ELECTRONIC	10 of 14
CONTRACT	PROJECT
B-36910	1600808



FRAMING PLAN



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



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

Note:

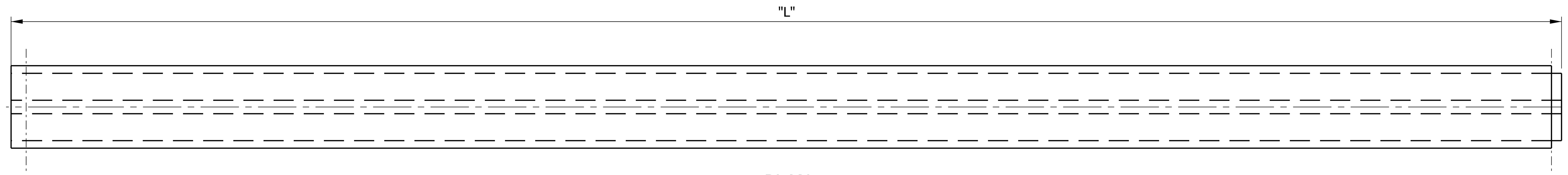
For Bearing details, see Std. Dwg. E 726-BEBP-03.

For Intermediate Diaphragm details, see Std. Dwg. E 707-SDPC-01.

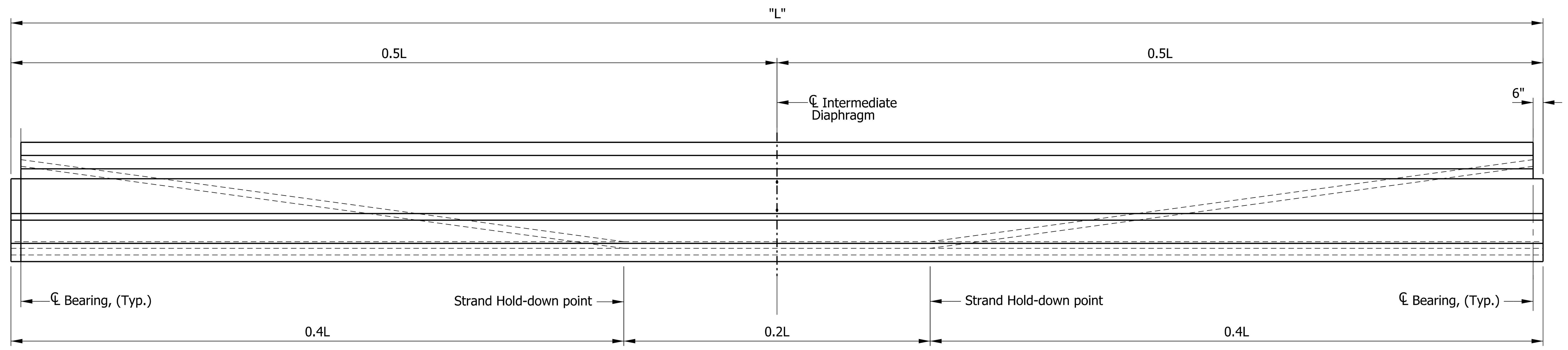
RECOMMENDED FOR APPROVAL ____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: AS NOTED	BRIDGE FILE: I70-083-10639 DEBL
			VERTICAL SCALE	DESIGNATION: 1901928
DESIGNED: ZGC	DRAWN: KNP	FRAMING PLAN	SURVEY BOOK: ELECTRONIC	SHEETS: 11 of 14
CHECKED: CML	CHECKED: ZGC		CONTRACT: B-36910	PROJECT: 1600808

Plot: 2/27/2020 1:58:31 PM

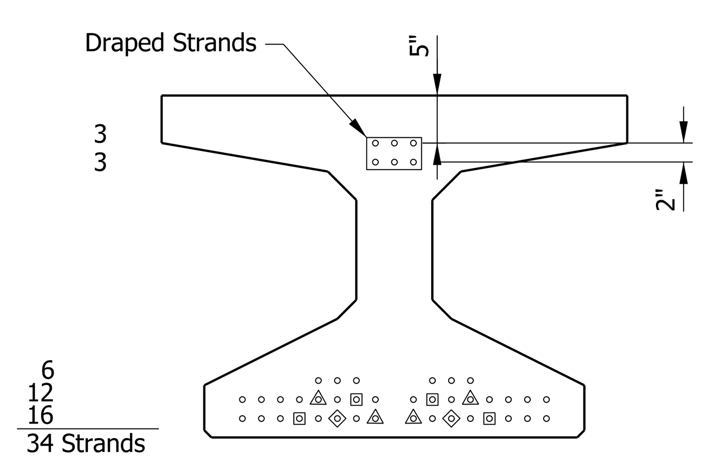
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 42 I70 EB over Lewis St & Monon Trail\1901928_11 - Frame plan.dgn



PLAN
Scale: ¼" = 1'-0"

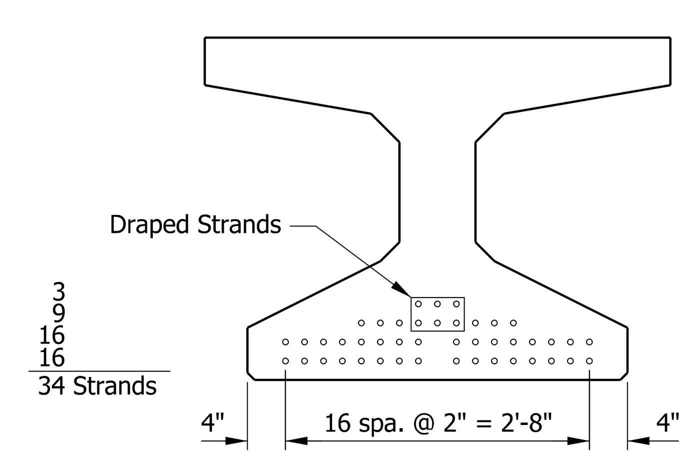


BEAM ELEVATION
Vertical Scale: ½" = 1'-0"
Horizontal Scale: ¼" = 1'-0"

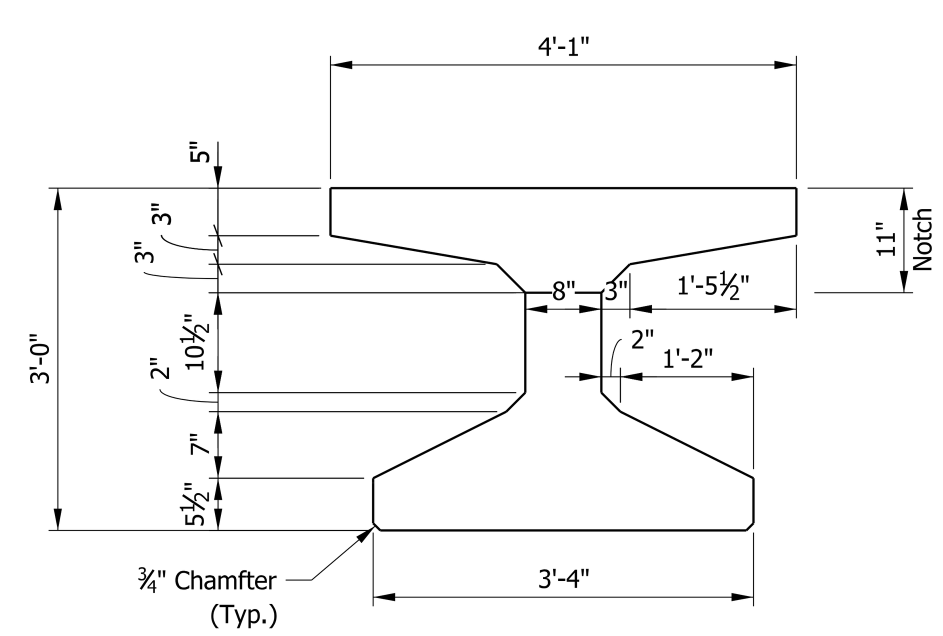


STRAND PATTERN
AT BEAM END
Scale: 3/4" = 1'-0"

△ - Debonded at 5' from end
□ - Debonded at 10' from end
◇ - Debonded at 15' from end



STRAND PATTERN
AT MIDSPAN
Scale: 3/4" = 1'-0"



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

Span "A"	
Beam Mark	"L"
1A	91'-11"
2A	92'-9⅛"
3A	93'-7¼"
4A	94'-5⅝"
5A	95'-4⅛"
6A	96'-2⅞"

Span "B"	
Beam Mark	"L"
1B	85'-1⅜"
2B	85'-6¾"
3B	86'-⅜"
4B	86'-5⅞"
5B	86'-11¾"
6B	87'-5⅝"

Notes:

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

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER SIG_DT DATE		
DESIGNED: ZGC	DRAWN: KNP		
CHECKED: CML	CHECKED: ZGC		

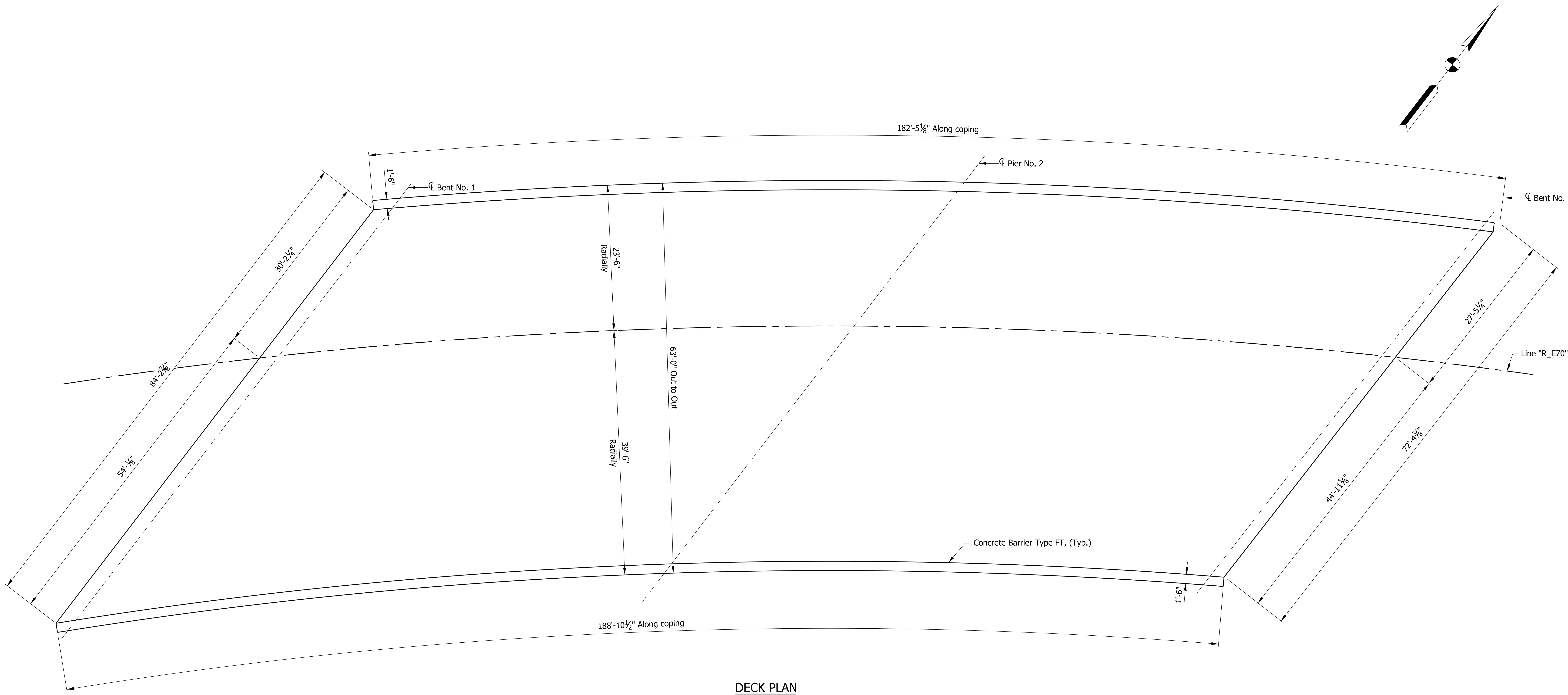
INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS
BT 36 x 49

SCALE	BRIDGE FILE		
1/4" = 1'-0"	I70-083-10639 DEBL		
	DESIGNATION		
	1901928		
SURVEY BOOK	SHEETS		
ELECTRONIC	12	of	14
CONTRACT	PROJECT		
B-36910	1600808		

Plot: 2/27/2020 1:58:33 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 42 I70 EB over Lewis St & Monon Trail\1901928_12 - Beam details.dgn



DECK PLAN

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: KNP		
CHECKED: CML	CHECKED: ZGC		

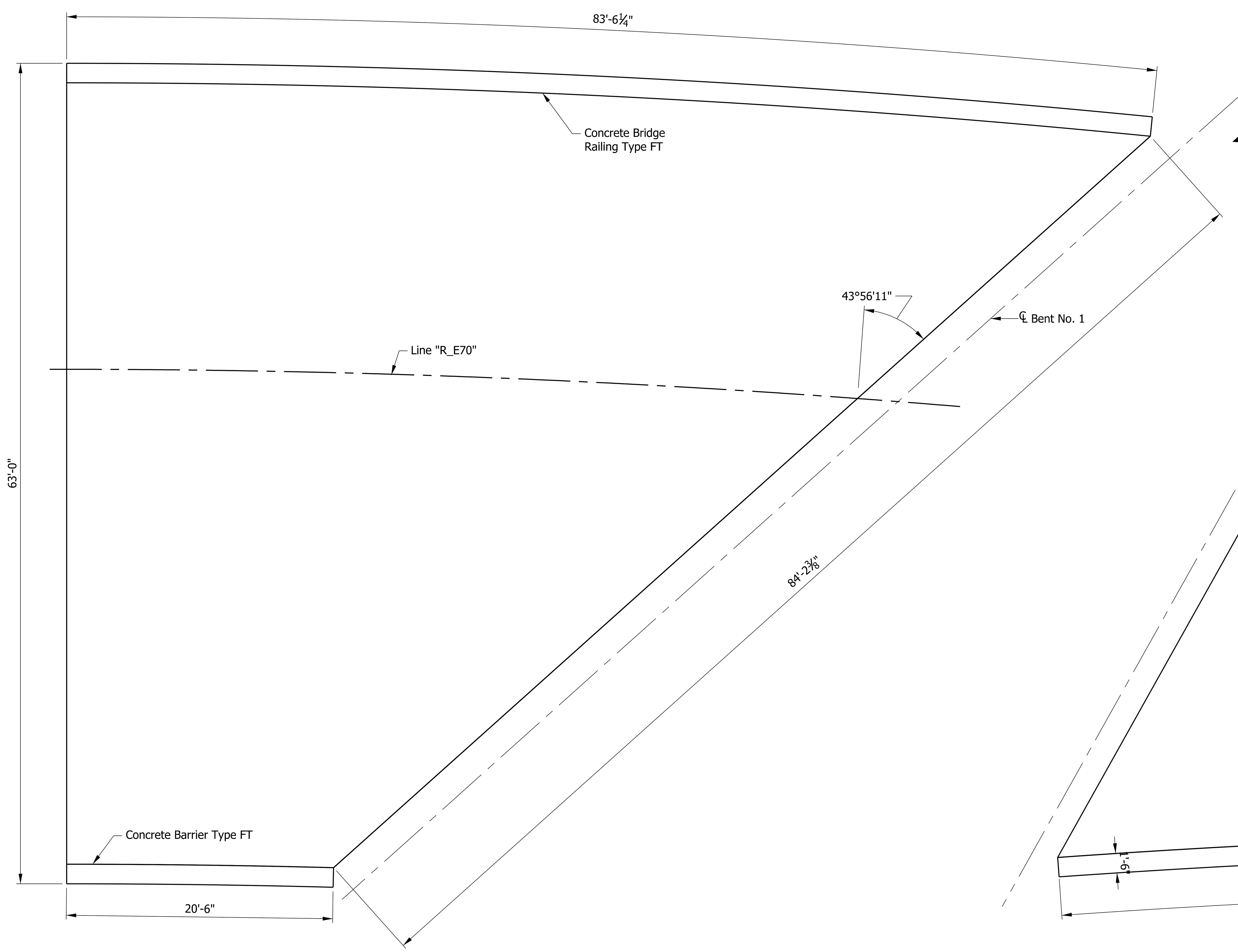
INDIANA
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

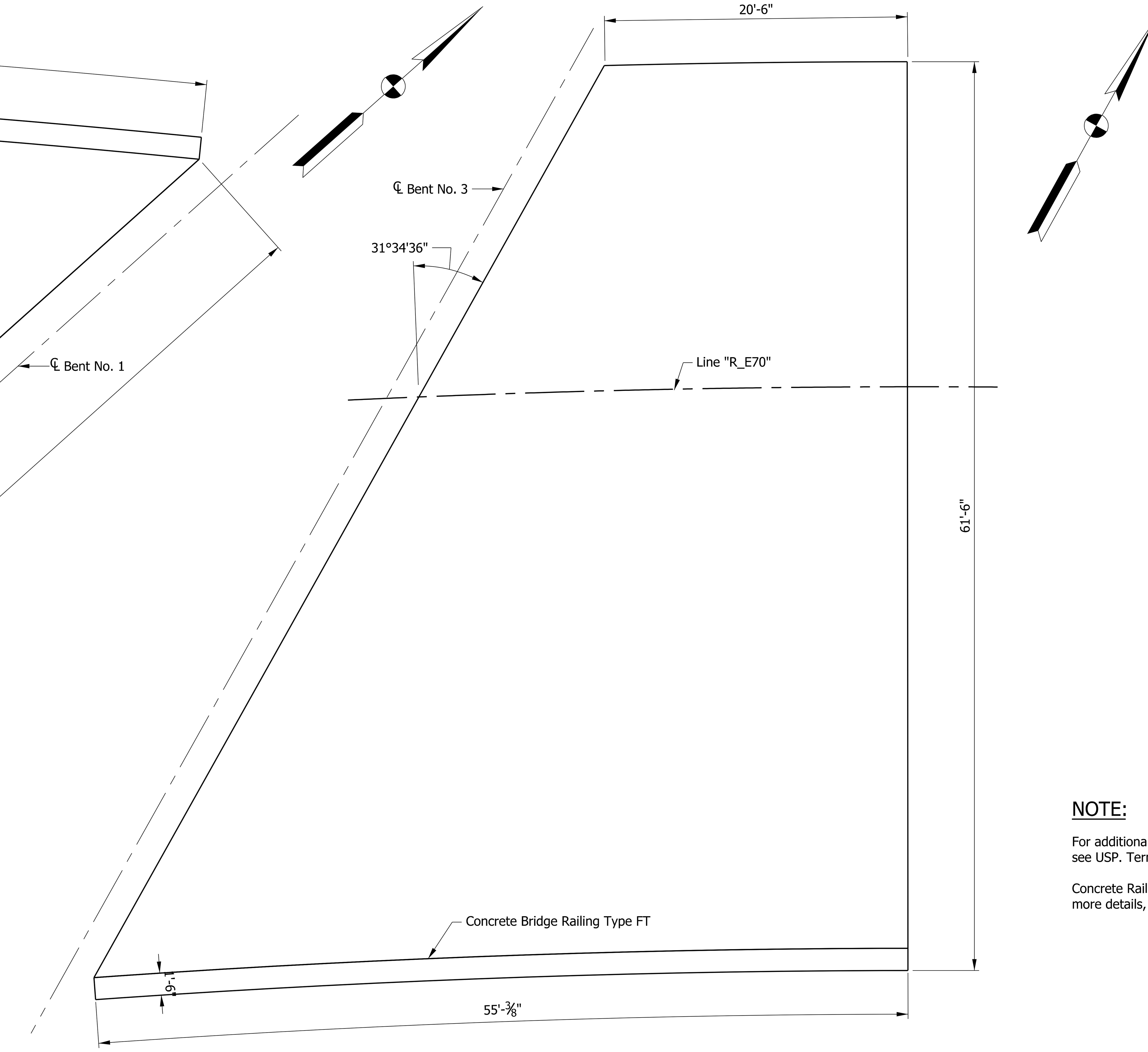
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I70-083-10639 DEBL
VERTICAL SCALE	DESIGNATION
	1901928
SURVEY BOOK	SHEETS
ELECTRONIC	13 of 14
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 1:58:34 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 42 I70 EB over Lewis St & Monon Trail\1901928_13 - Deck plan.dgn



WEST APPROACH SLAB
Scale 3/16" = 1'-0"

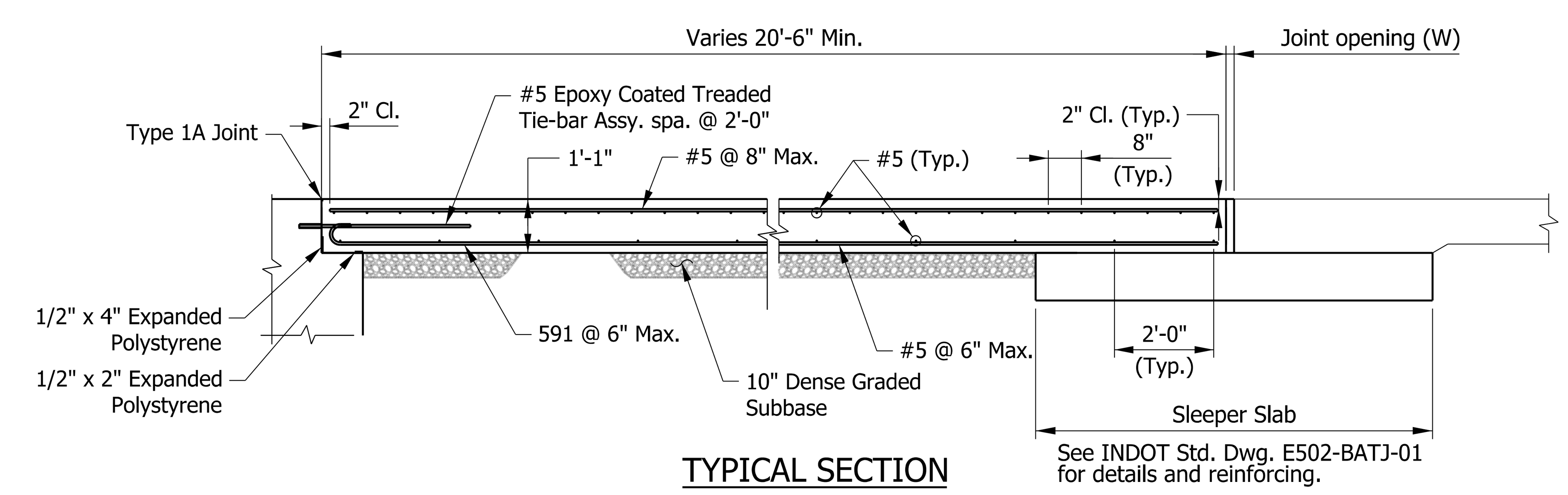


EAST APPROACH SLAB
Scale 3/16" = 1'-0"

NOTE:

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

Concrete Railing FT TFT sit on slab extension. for more details, see Std. Dwg. E-609-TBAE-02 & 04.



TYPICAL SECTION
Scale: ⅜" = 1'-0"

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: KNP		
CHECKED: CML	CHECKED: ZGC		

INDIANA
DEPARTMENT OF TRANSPORTATION

APPROACH SLABS DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I70-083-10639 DEBL
VERTICAL SCALE	DESIGNATION
	1901928
SURVEY BOOK	SHEETS
ELECTRONIC	14 of 14
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 1:58:36 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 42 I70 EB over Lewis St & Monon Trail\1901928_14 - Appr Slabs.dgn

PROJECT	DESIGNATION
1600808	1901929 & 1901930
CONTRACT	BRIDGE FILE
B-36910	I70-083-05701 JEWB & EEBL

INDIANA DEPARTMENT OF TRANSPORTATION

INDIANA DEPARTMENT OF TRANSPORTATION

TRAFFIC DATA		I-70 WESTBOUND	I-70 EASTBOUND	ROOSEVELT AVE & COMMERCE AVE
A.A.D.T.	(2021)	93,737 V.P.D.	100,568 V.P.D.	10,259 V.P.D.
A.A.D.T.	(2041)	99,926 V.P.D.	112,807 V.P.D.	10,521 V.P.D.
D.H.V	(2041)	9,493 V.P.H.	9,927 V.P.H.	1,001 V.P.H.
DIRECTIONAL DISTRIBUTION		0 %	100 %	42 %
TRUCKS		12 % D.H.V.	13 % D.H.V.	5 % D.H.V.

DESIGN DATA		
DESIGN SPEED	55 M.P.H.	30 M.P.H.
PROJECT DESIGN CRITERIA	EXISTING FREEWAY (3R)	N/A
FUNCTIONAL CLASSIFICATION	URBAN FREEWAY	MAJOR COLLECTOR
RURAL/URBAN	URBAN (BUILT-UP)	URBAN (BUILT UP)
TERRAIN	LEVEL	LEVEL
ACCESS CONTROL	FULL	NONE

STRUCTURE INFORMATION

STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I70-083-5701 JEWB & EEBL	CONTINUOUS COMPOSITE STEEL BEAM BRIDGES	3 Span: 38'-0", 77'-0", 38'-0" Skew: 28°36'38" Rt.	ROOSEVELT AVENUE & COMMERCE AVENUE	20+53.72

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	
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	
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	

BRIDGE REHABILITATION PLANS

FOR SPANS OVER 20 FEET

ROUTE: I-70 AT: RP 83+73

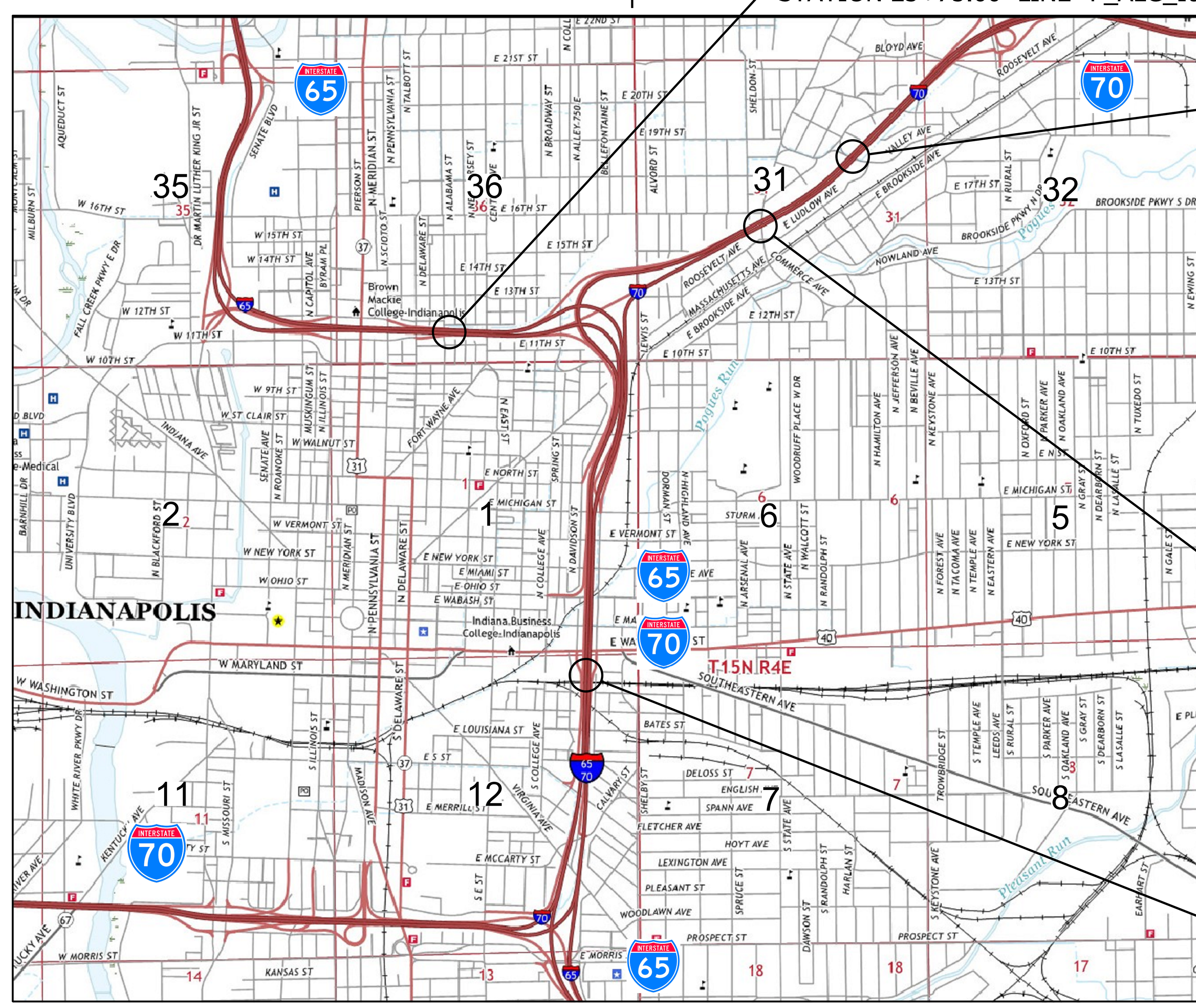
PROJECT NO. 1600808 (P.E. & CONSTR.)

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

BRIDGE DECK OVERLAY ON I-70 WESTBOUND AND BRIDGE DECK REPLACEMENT ON I-70 EASTBOUND OVER ROOSEVELT AVENUE & COMMERCE AVENUE LOCATED 0.6 MILES EAST OF I-70 (NORTH SPLIT) INTERCHANGE IN SECTION 31, T-16-N, R-4-3, CENTER TOWNSHIP, MARION COUNTY, INDIANA

R-3-E
R-4-E

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



END CONSTRUCTION PROJECT NO. 1600808
STATION 43+87.40 LINE "P_ALG_I70"

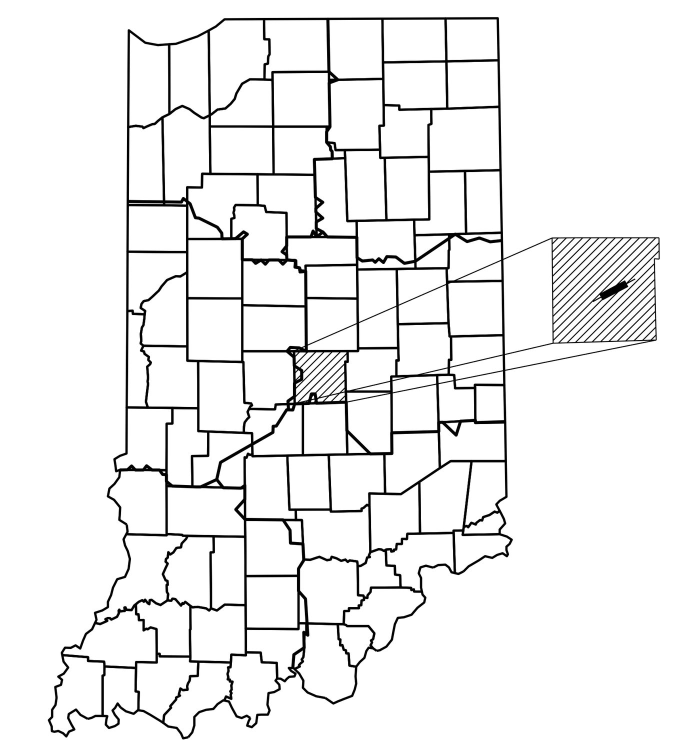
T-16-N
T-15-N

SCALE: 1" = 2000'

BRIDGE FILE NO. I70-083-05701 JEWB & EEBL
I-70 OVER ROOSEVELT AVENUE
& COMMERCE AVENUE

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

LOCATION MAP
(MARION COUNTY)



PROJECT LOCATION SHOWN BY
MARION COUNTY

LATITUDE: 39°47'17" N LONGITUDE: 86°07'55" W

HYDROLOGIC UNIT CODE: 05120201130020

BRIDGE LENGTH: 0.033 MI.
ROADWAY LENGTH: SEE ROAD PLANS MI.
TOTAL LENGTH: SEE ROAD PLANS MI.
MAX. GRADE: 1.41 %

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	
	I70-083-05701 JEWB & EEBL
	DESIGNATION
	1901929 & 1901930
SURVEY BOOK	SHEETS
ELECTRONIC	1 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 4:07:23 PM

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_01 - Title.dgn

UTILITIES

SEE PROJECT UTILITY MATRIX

INDEX

REVISIONS

SHEET NO.	DATE	REVISED

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: SRR
CHECKED: CML CHECKED: ZGC

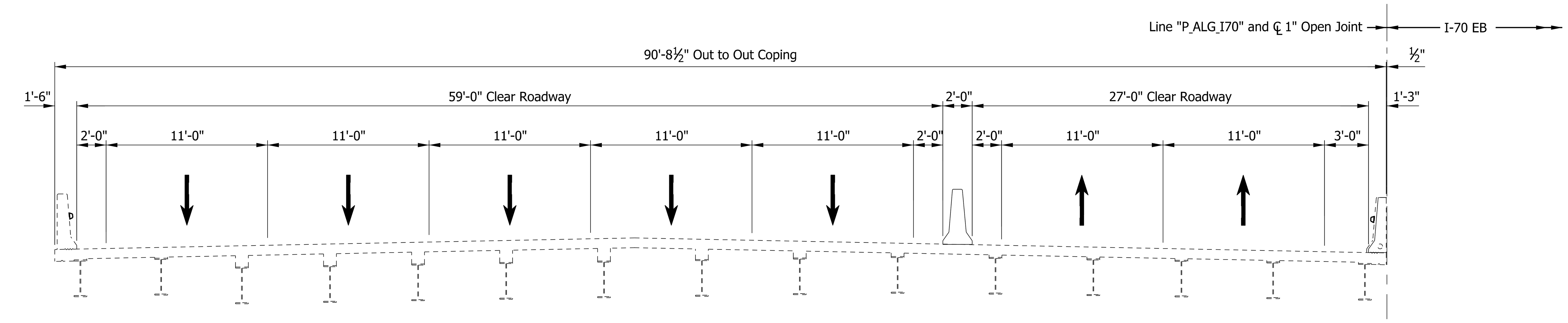
INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX

SCALE	BRIDGE FILE
	I70-083-05701 JEWB & EEBL
	DESIGNATION
	1901929 & 1901930
SURVEY BOOK	SHEETS
ELECTRONIC	2 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 4:07:26 PM

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_02 - Index.dgn



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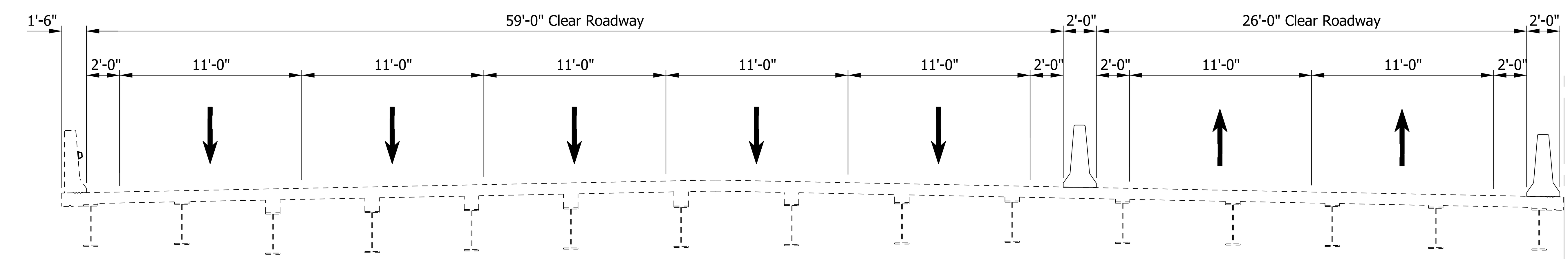

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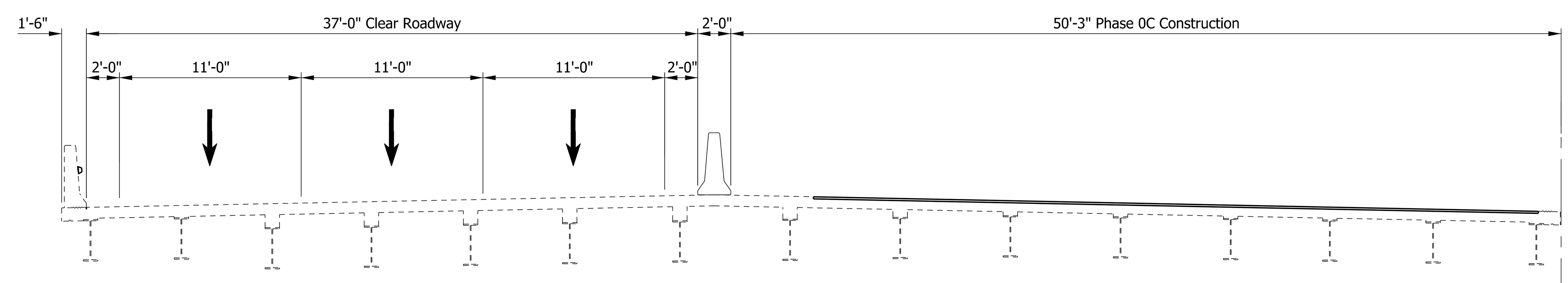

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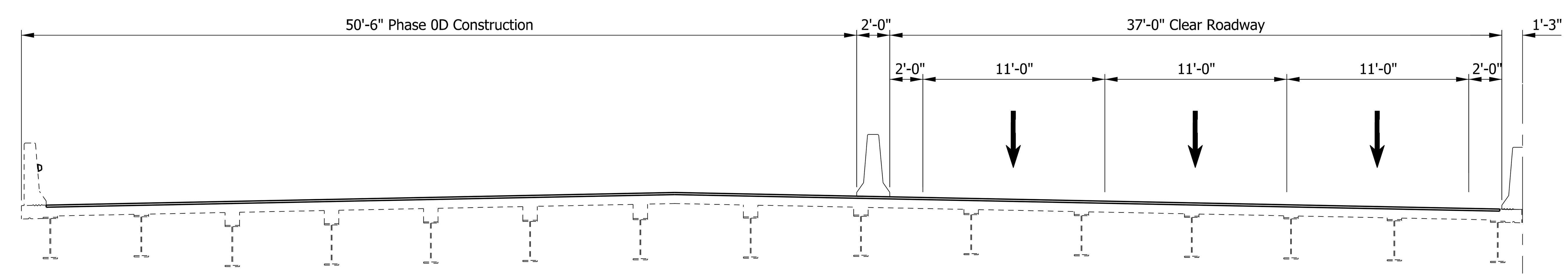


PHASE 0D

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: SRR
CHECKED: CML CHECKED: ZGC

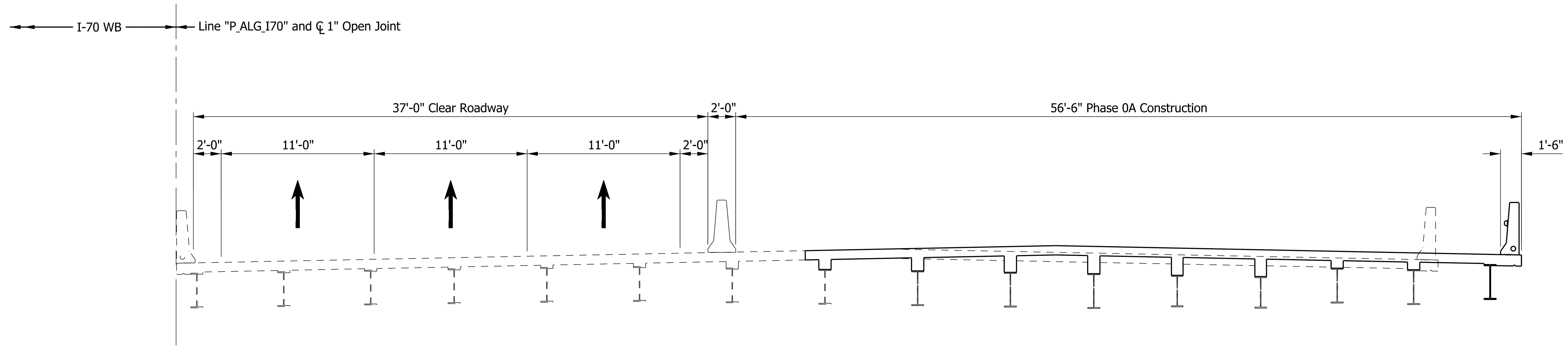
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
WESTBOUND BRIDGE

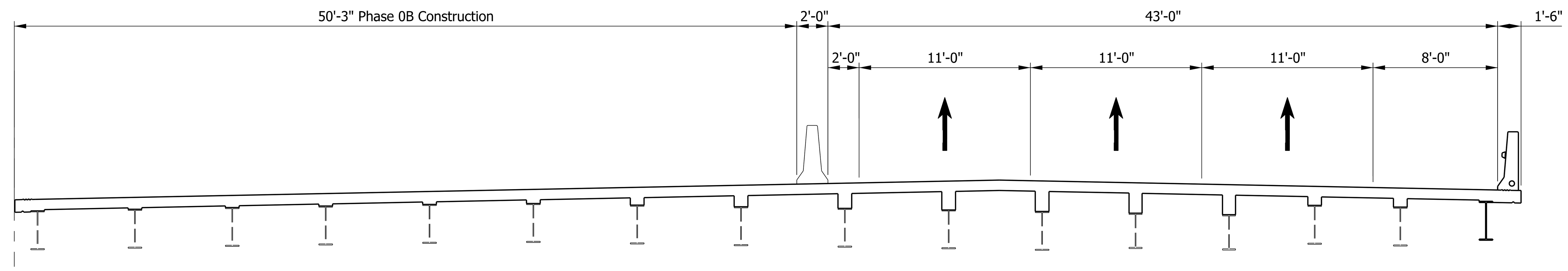
SCALE	BRIDGE FILE
3/16" = 1'-0"	I70-083-05701 JEWB & EEBL
	DESIGNATION
	1901929 & 1901930
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 4:07:33 PM

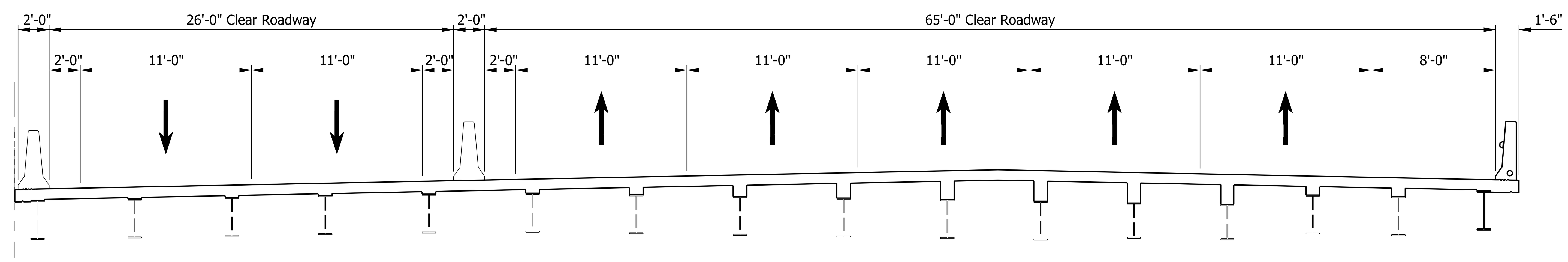
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_03 - WB MOT.dgn



PHASE 0A



PHASE 0B



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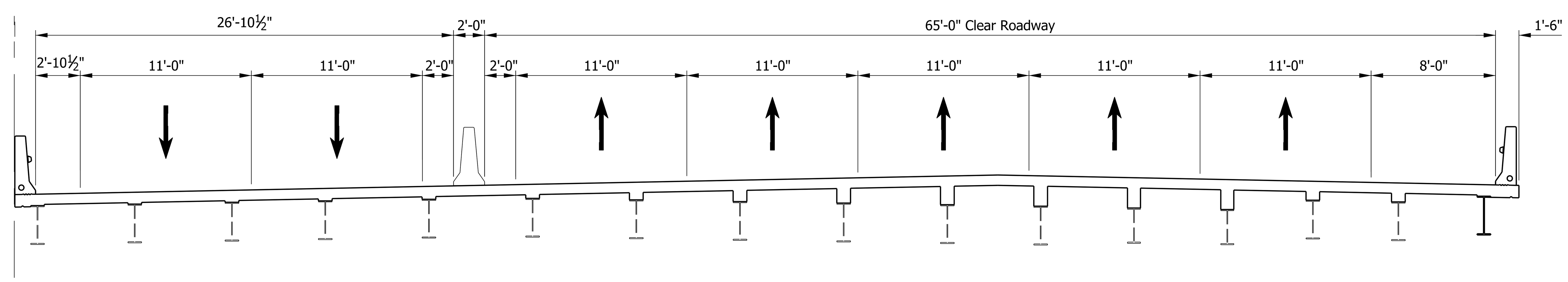


PHASE 0D

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: SRR

CHECKED: CML CHECKED: ZGC

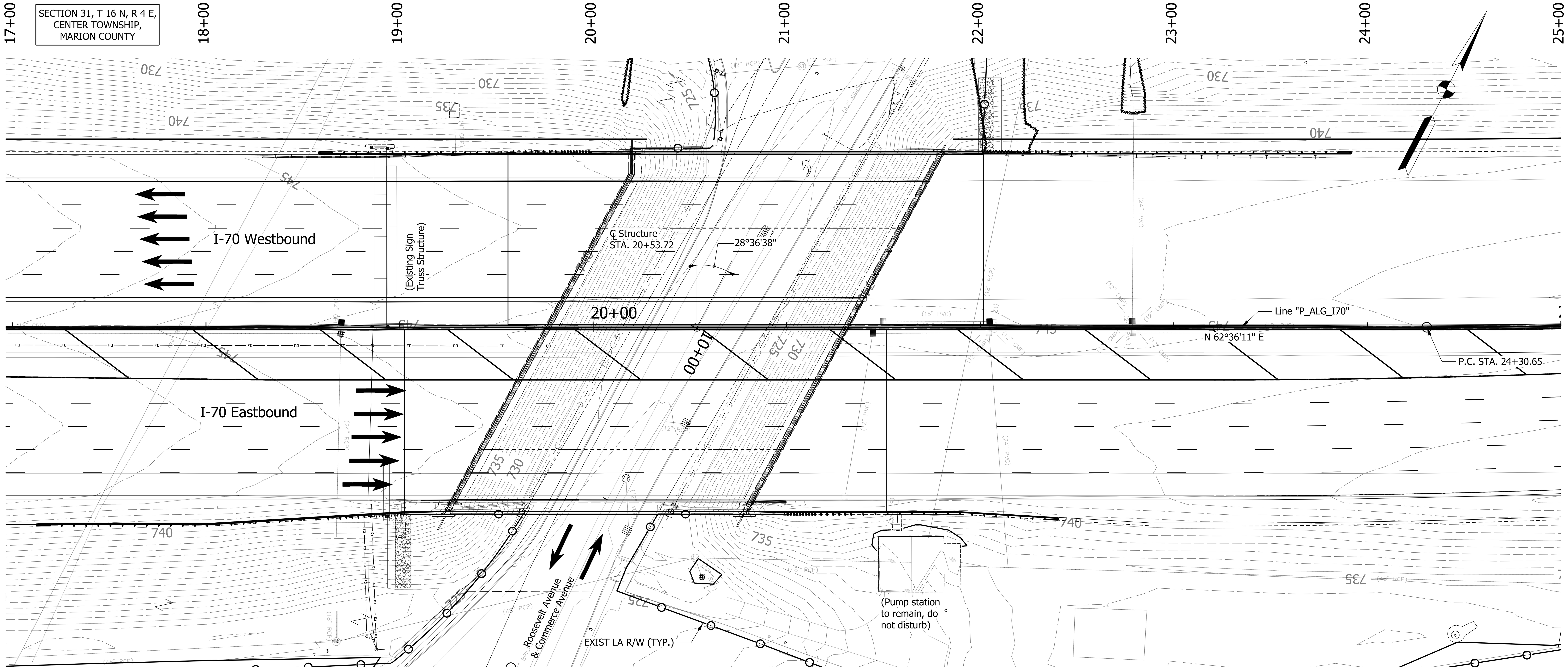
INDIANA
DEPARTMENT OF TRANSPORTATION

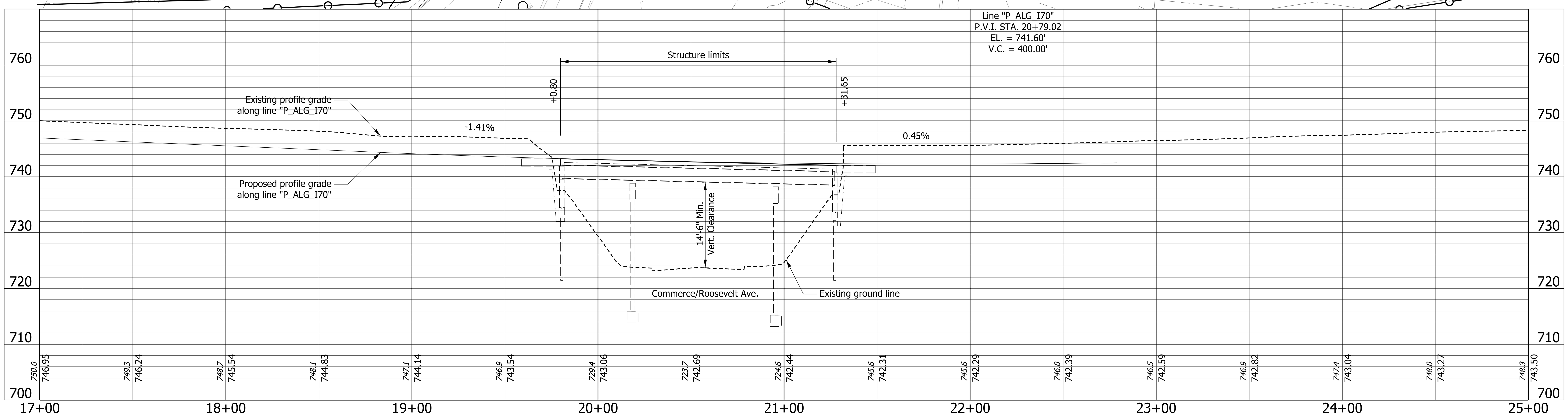
MAINTENANCE OF TRAFFIC
EASTBOUND BRIDGE

SCALE	BRIDGE FILE
3/16" = 1'-0"	I70-083-05701 JEWB & EEBL
	DESIGNATION
	1901929 & 1901930
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 4:07:36 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_04 - EB MOT.dgn





Existing Structure:

The existing structures were built in 1974 and had a rehabiliation in 1985 & 2007. The structures are 3 span continuous composite steel beam bridges, with span lengths of 38'-0", 77'-0", & 38'-0". They each have a clear roadway width of 87'-10½" and a total length of 155'-10¼". The existing westbound and eastbound structures shall undergo a mill and overlay as shown. Existing plans are on file with the Indiana Department of Transportation under bridge file NOS. I70-083-05701 DWBL & DEBL.

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: "P_ALG_I70"

P.I. STA. = 31+42.52
P.C. STA. = 24+30.65
P.T. STA. = 38+43.10
R = 4583.66'
L = 1412.45'
Delta = 17°39'20" LT.
Dc = 1°15'00"
T = 711.87'

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 limit
4. All Topography is existing.
5. All R/W described from line "P_ALG_I70", except as noted.

CONTINUOUS COMPOSITE
STEEL BEAM BRIDGES
3 SPAN: 38'-0", 77'-0", 38'-0"
SKEW: 28°36'38" RT & SQUARE
CLEAR ROADWAYS: 87'-10½" WB
AND 96'-3" TO 93'-4⅝" EB
I-70 WB AND EB
OVER ROOSEVELT AVENUE
AND COMMERCE AVENUE
MARION COUNTY

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: SRR		
CHECKED: CML	CHECKED: ZGC		

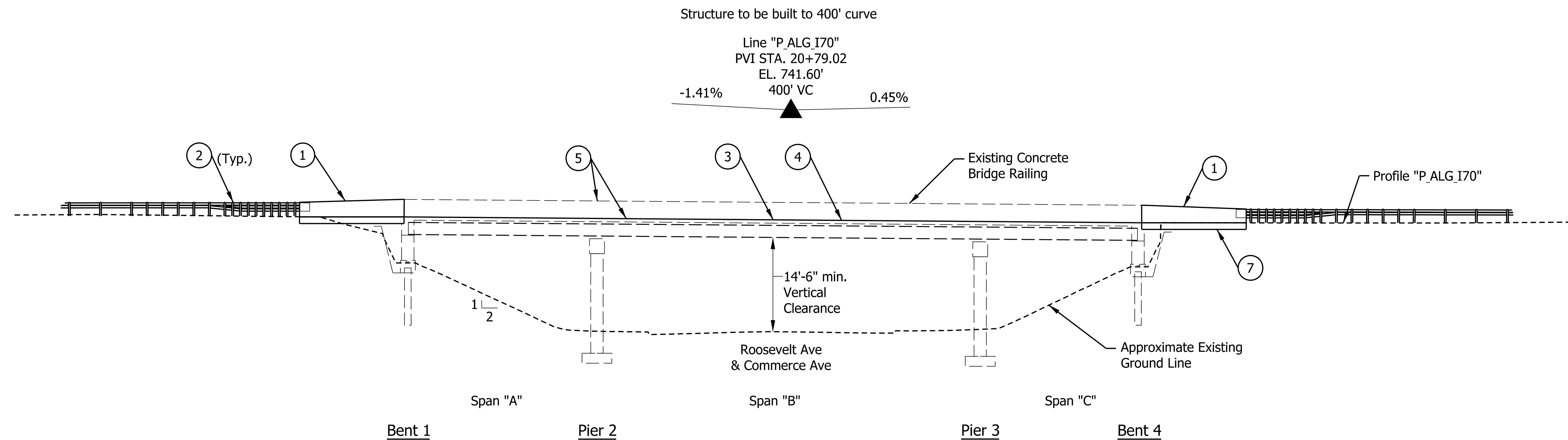
INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT

SCALE	BRIDGE FILE
1" = 30'	I70-083-05701 JEWB & EEBL
	DESIGNATION
	1901929 & 1901930
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 4:07:39 PM

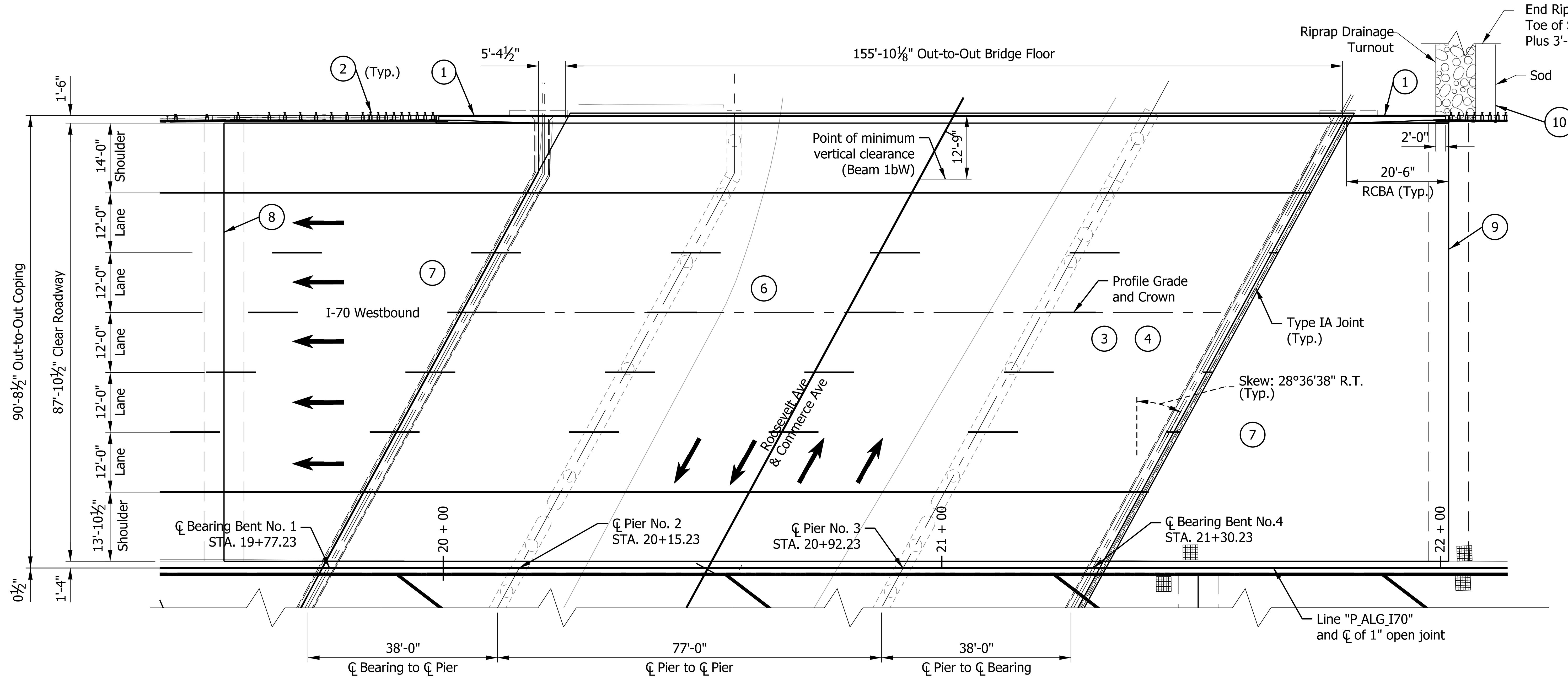
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_05 - Layout.dgn



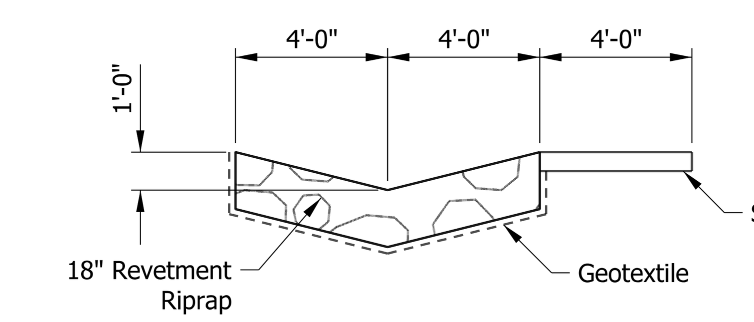
ELEVATION

LEGEND

1. Remove existing and construct new concrete barrier transition between existing type FT bridge railing and guardrail transition type TGB, install barrier delineators at 40'-0" max. spacing.
2. Remove and reset existing guardrail, transition type TGB.
3. Surface mill existing deck slab 1½" and perform full and partial depth patching as required.
4. Place new 1½" very early strength latex-modified concrete bridge deck overay, coordinate new overlay thickness with existing adjacent surfaces and adjacent roadway pavement.
5. Surface seal the concrete bridge rail, bridge rail transitions, copings, and approach slabs.
6. Replace pavement markings and snowplowable pavement markers within the project limits.
7. Remove existing approach slabs and construct new 13"(West Approach) / 16"(East Approach) reinforced concrete bridge approach slabs.
8. Remove existing terminal joint and sleeper slab and construct new modified terminal joint for continuously reinforced concrete pavement.
9. Remove existing terminal joint and construct new polymer modified asphalt terminal joint for PCC pavement.
10. Remove and Replace Riprap Drainage Turnout.



PLAN



RIPRAP DRAINAGE TURNOUT TYPICAL SECTION

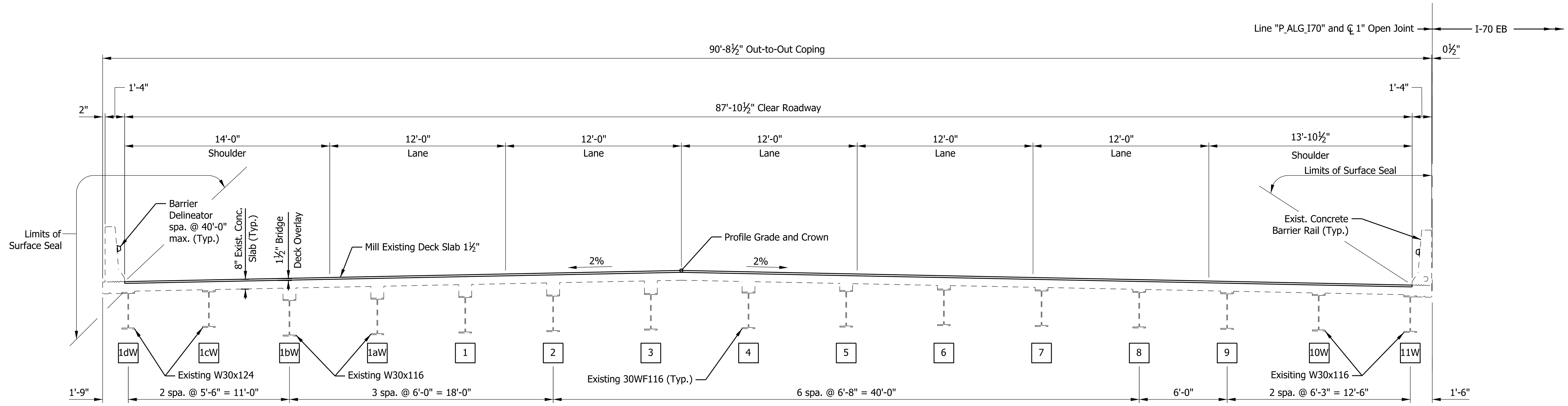
Scale: ¼ = 1'-0"

CONTINUOUS COMPOSITE
STEEL BEAM BRIDGES
3 SPAN: 38'-0", 77'-0", 38'-0"
SKEW: 28°36'38" RT & SQUARE
CLEAR ROADWAY: 87'-10½" WB
I-70 WB OVER ROOSEVELT AVENUE
AND COMMERCE AVENUE
MARION COUNTY

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER / DATE	INDIANA DEPARTMENT OF TRANSPORTATION		SCALE: 1/16" = 1'-0"	BRIDGE FILE: I70-083-05701 JEWB & EEBL
					DESIGNATION: 1901929 & 1901930
DESIGNED: ZGC	DRAWN: SRR	GENERAL PLAN WESTBOUND BRIDGE		SURVEY BOOK: ELECTRONIC	SHEETS: 6 of 18
CHECKED: CML	CHECKED: ZGC			CONTRACT: B-36910	PROJECT: 1600808

Plot: 2/27/2020 4:08:16 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_06 - WB General Plan.dgn



TYPICAL SECTION

GENERAL NOTES FOR WESTBOUND AND EASTBOUND

Plans for the existing bridges are on file at the Indiana Department of Transportation as bridge file no's I70-083-05701 DWBL and DEBL.

Where new work is to be fitted to old work, the design-build contractor shall check all dimensions and conditions in the field and report all errors or discrepancies to INDOT and assume responsibility for their correctness and fit of the new part to the old.

Existing eleveations shown are based on existing plans and the NGVD of 1929 and are for information only. The design-build contractor shall field verify all existing elevations prior to construction.

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

Reinforcing bar cover shall be 2½" min. in top and 1" min. in bottom of new floor slabs, 3" min. in footing except bottom bars which shall be 4" min., and 2" min. in all other parts unless noted.

Epoxy resin adhesive shall be used where new concrete abuts existing conrete.

All pavement markings disturbed during construction shall be replaced in kind.

WESTBOUND BRIDGE

Surface mill the existing bridge floor 1½". Remove surface milled dust.

Coordinate new overlay thickness with existing adjacent surfaces and new adjacent roadway pavement.

Concrete in floor slab, diaphragms and barrier shall be class "C". Concrete in the piers above footing shall be class "A" and pier footings shall be class "B". All reinforcing bars shall be epoxy coated.

All the exposed faces of the end bents, piers, wingwalls, barriers, the top of deck when an overlay is not present, the face of the deck coping, the underside of the deck from the coping to the face o the exterior beam, and the reinforced concrete bridge approach slabs shall receive surface seal.

EASTBOUND BRIDGE

Design-build contractor shall take care not to damage the existing shear studs on top of the existing beams during deck removal. If any studs are damaged during deck removal as determined by indot design build contractor to grind off the damaged studs without damaging the beam, and replace in kind.

Concrete in floor slab, diaphragm, barrier and end bents shall be alternative class "C" in accordance with the technical provisions. All reinforcing bars shall be epoxy coated.

All exposed faces of the reinforced concrete bridge approach slabs shall recieve surface seal.

WESTBOUND BRIDGE DESIGN DATA

LIVE LOAD

Existing bridge was built in 1974 and designed for HS20-44 loading in accordance with 1973 AASHTO standard specifications for highway bridges. Existing bridge checked for special loading of two 24,000 pound axles spaced at 4'-0" centers.

SEISMIC DESIGN DATA

Seismic performance zone = A
Acceleration coefficient = 0.0625
Seismic soil profile type = I

DESIGN STRENGTHS

Class "A" concrete	f'c = 3500 psi
Class "B" concrete	f'c = 3000 psi
Class "C" concrete	f'c = 4000 psi
Reinforcing bars	fy = 60,000 psi
Structural steel	Fy = 50,000 psi

LEGEND

X	Existing Beam Number
▨	Limits of removal

CONTINUOUS COMPOSITE
STEEL BEAM BRIDGES
3 SPAN: 38'-0", 77'-0", 38'-0"
SKEW: 28°36'38" RT & SQUARE
CLEAR ROADWAY: 87'-10½" WB
I-70 WB OVER ROOSEVELT AVENUE
AND COMMERCE AVENUE
MARION COUNTY

RECOMMENDED FOR APPROVAL ____ DESIGN ENGINEER ____ DATE

DESIGNED: ZGC DRAWN: SRR
CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

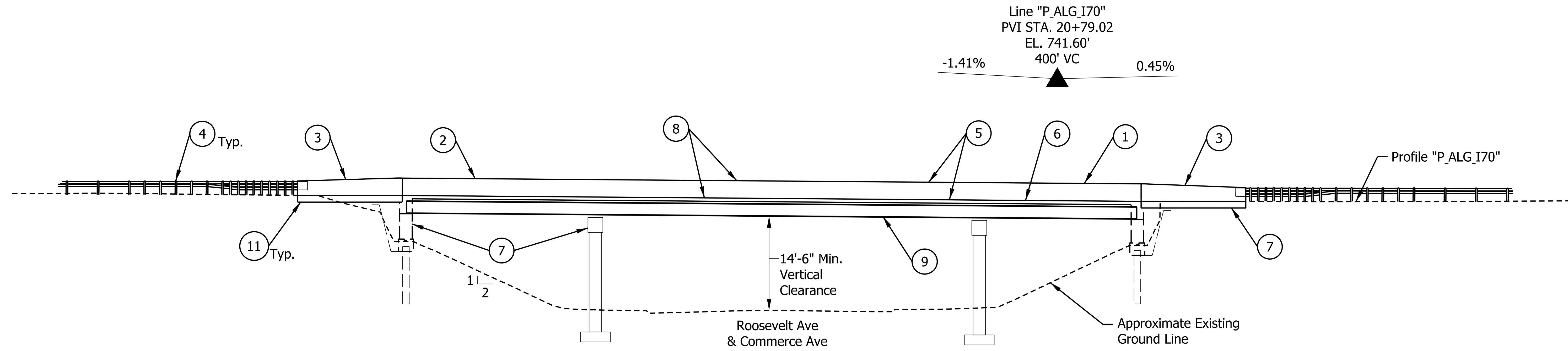
GENERAL PLAN
TYPICAL SECTION WESTBOUND BRIDGE

SCALE	BRIDGE FILE
1/4" = 1'-0"	I70-083-05701 JEWB & EEBL
	DESIGNATION
	1901929 & 1901930
SURVEY BOOK	SHEETS
ELECTRONIC	7 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 4:08:19 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_07 - WB Typical Section.dgn

Structure to be built to 400' curve

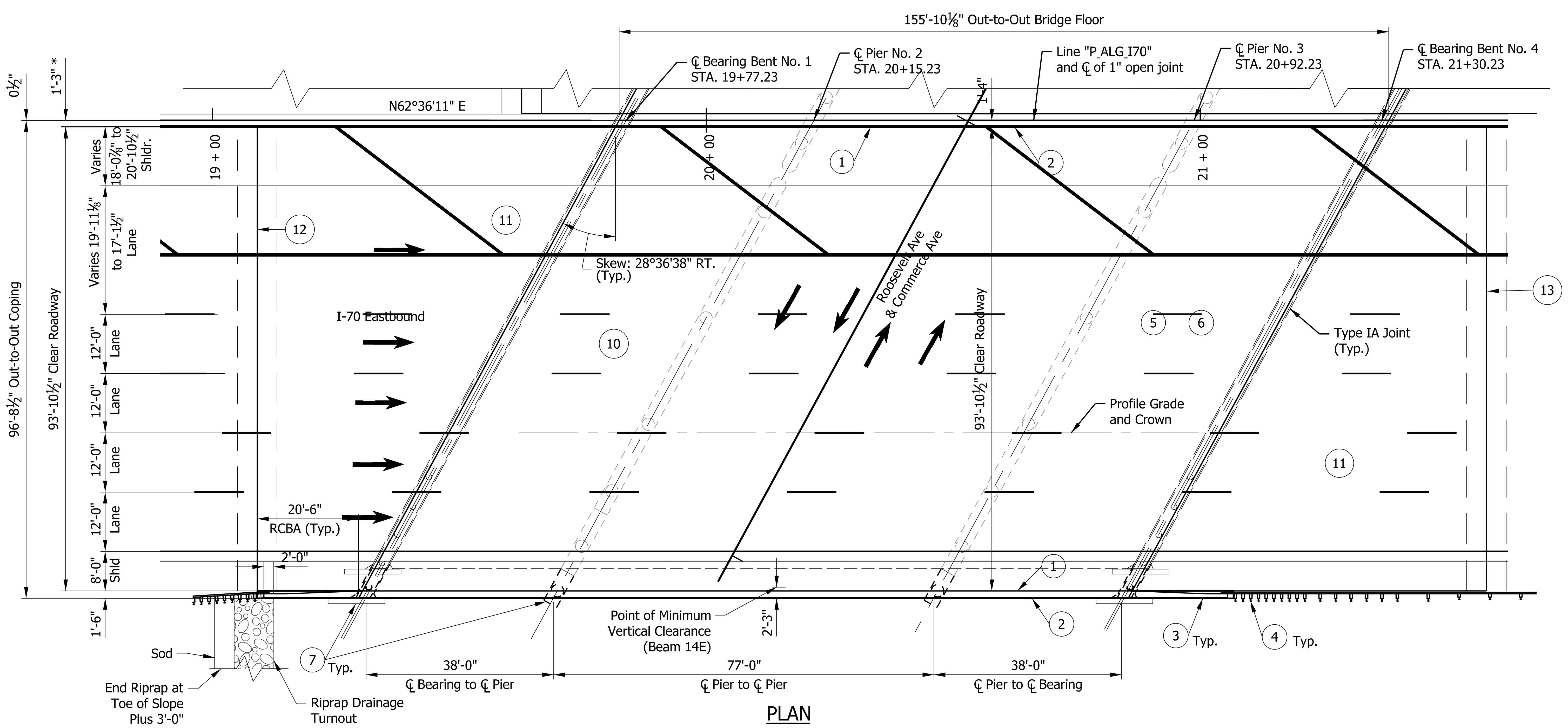


ELEVATION

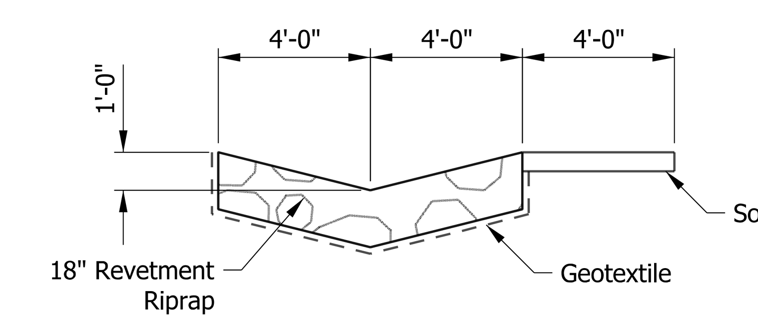
LEGEND

1. Remove existing concrete bridge railing.
2. Construct new type FT concrete bridge railing. Install barrier delineators at 40'-0" max. spacing.
3. Construct a concrete barrier transition between new type FT bridge railing and guardrail transition type TGB. Install barrier delineators at 40'-0" max. spacing
4. Remove and reset existing guardrail transition type TGB.
5. Remove existing bridge deck. Concrete removal to extend to tops of beams. Existing concrete diaphragms at end bents to remain.
6. Place new 8" concrete bridge deck. Coordinate new deck thickness with existing adjacent surfaces and new adjacent roadway pavement.
7. Widen existing end bent, slopewalls, and piers in-kind.
8. Surface seal the concrete bridge rail, bridge rail transitions, bridge deck, copings, and approach slabs.
9. Paint the new steel beams used for widening in accordance with the project standards.
10. Replace pavement markings and snowplowable pavement markers within the project limits.
11. Remove existing approach slabs and construct new 13"(West Approach) / 16"(East Approach) reinforced concrete bridge approach slabs.
12. Remove existing terminal joint and sleeper slab and construct new modified terminal joint for continuously reinforced concrete pavement.
13. Remove existing terminal joint and sleeper slab and construct new polymer modified asphalt terminal joint for PCC pavement.
14. Remove and Replace Riprap Drainage Turnout.

* Roadway median barrier transitions to barrier width on bridge.



PLAN



RIPRAP DRAINAGE TURNOUT
TYPICAL SECTION
Scale: ¼ = 1'-0"

CONTINUOUS COMPOSITE
STEEL BEAM BRIDGES
3 SPAN: 38'-0", 77'-0", 38'-0"
SKEW: 28°36'38" RT
CLEAR ROADWAYS: 96'-3" TO 93'-4⅝"
I-70 EB OVER ROOSEVELT AVENUE
AND COMMERCE AVENUE
MARION COUNTY

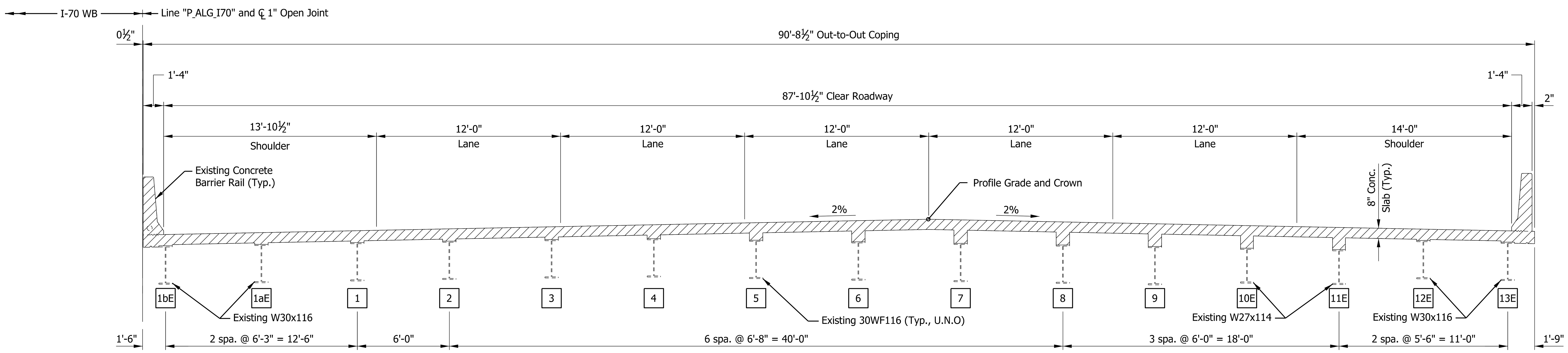
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER		DATE
DESIGNED: ZGC		DRAWN: SRR	
CHECKED: CML		CHECKED: ZGC	

INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
EASTBOUND BRIDGE

SCALE	BRIDGE FILE
1/16" = 1'-0"	I70-083-05701 JEWB & EEBL
	DESIGNATION
	1901929 & 1901930
SURVEY BOOK	SHEETS
ELECTRONIC	8 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 4:08:22 PM
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_08 - EB General Plan.dgn



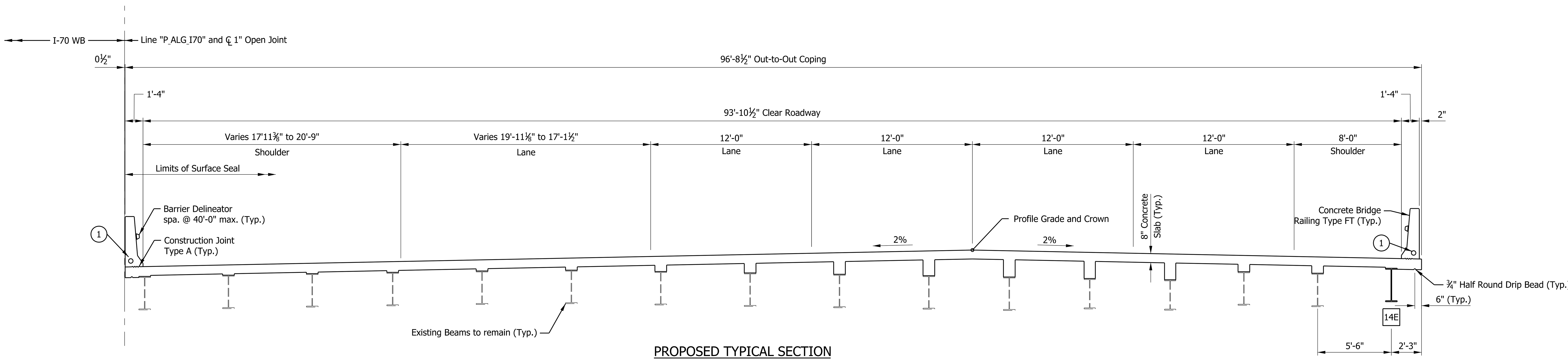
EXISTING TYPICAL SECTION

LEGEND

X Existing Beam Number

Limits of removal

1 Conduit for lighting.



PROPOSED TYPICAL SECTION

NOTES

1. For general notes, and other eastbound bridge notes, see sheet 5.

2. Welded shear studs and reinforcing bars in the fillets are provided to ensure the beams and deck are composite.

EASTBOUND BRIDGE DESIGN DATA

LIVE LOAD

Existing bridge was built in 1974 and designed for HS20-44 loading in accordance with 1973 AASHTO standard specifications for highway bridges. Existing bridge checked for special loading of two 24,000 pound axles spaced at 4'-0" centers.

Proposed portions of bridge superstructure designed for HS20-44 loading in accordance with AASHTO bridge specifications for highway bridges, 17th edition.

DEAD LOAD

Designed for actual dead load plus 35 PSF for future wearing surface and 15 PSF for SIP metal deck forms.

Slab designed with a 6½" structural depth and a 1½" integral wearing surface.

EASTBOUND BRIDGE 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 outside the veritcal 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 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

CONTINUOUS COMPOSITE
STEEL BEAM BRIDGES
3 SPAN: 38'-0", 77'-0", 38'-0"
SKEW: 28°36'38" RT
CLEAR ROADWAYS: 96'-3" TO 93'-4⅝"
I-70 EB OVER ROOSEVELT AVENUE
AND COMMERCE AVENUE
MARION COUNTY

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: SRR
CHECKED: CML | CHECKED: ZGC

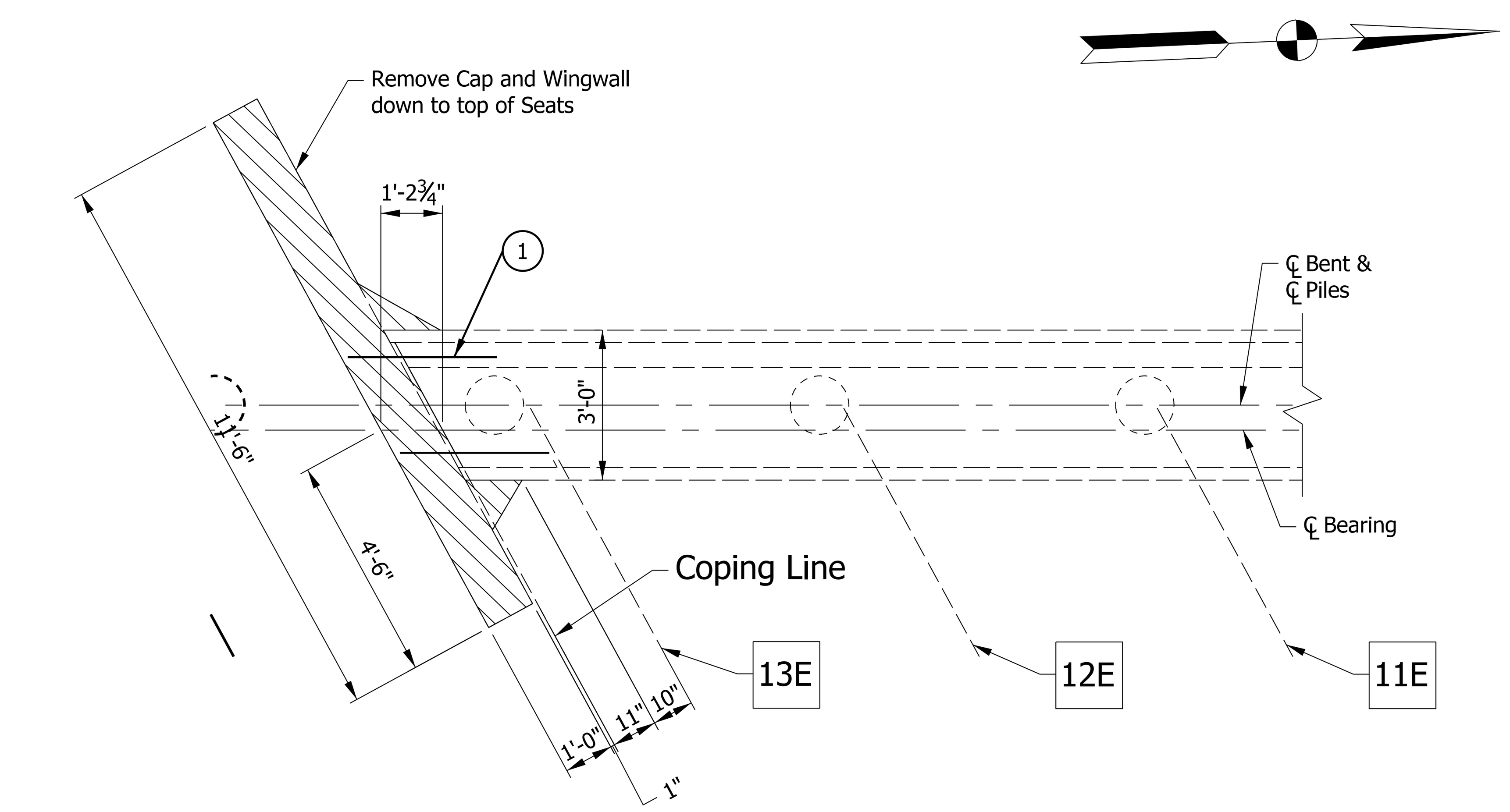
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
TYPICAL SECTION EASTBOUND BRIDGE

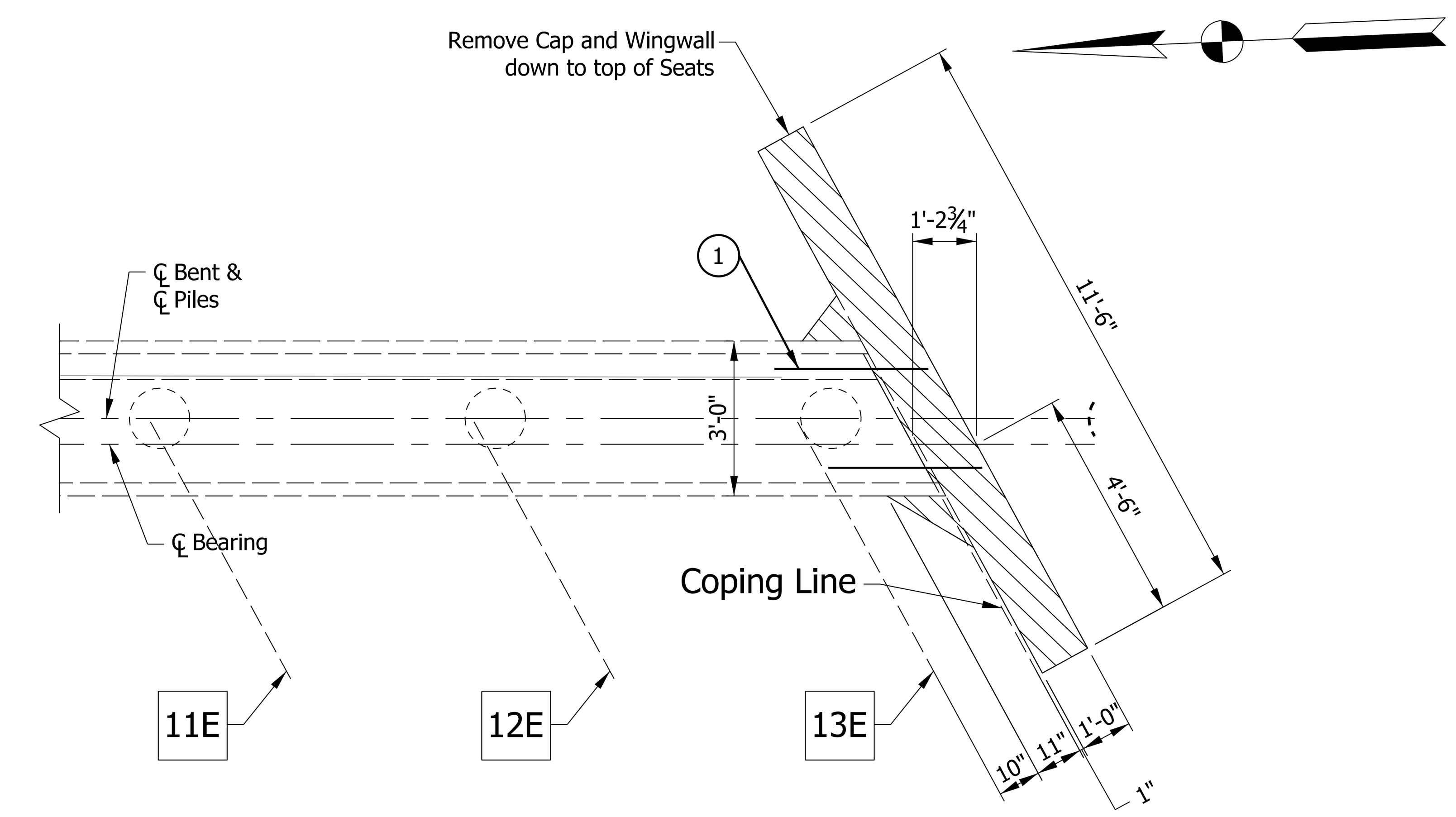
SCALE	BRIDGE FILE
1/4" = 1'-0"	I70-083-05701 JEWB & EEBL
	DESIGNATION
	1901929 & 1901930
SURVEY BOOK	SHEETS
ELECTRONIC	9 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 4:08:25 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_09 - EB Typical Section.dgn



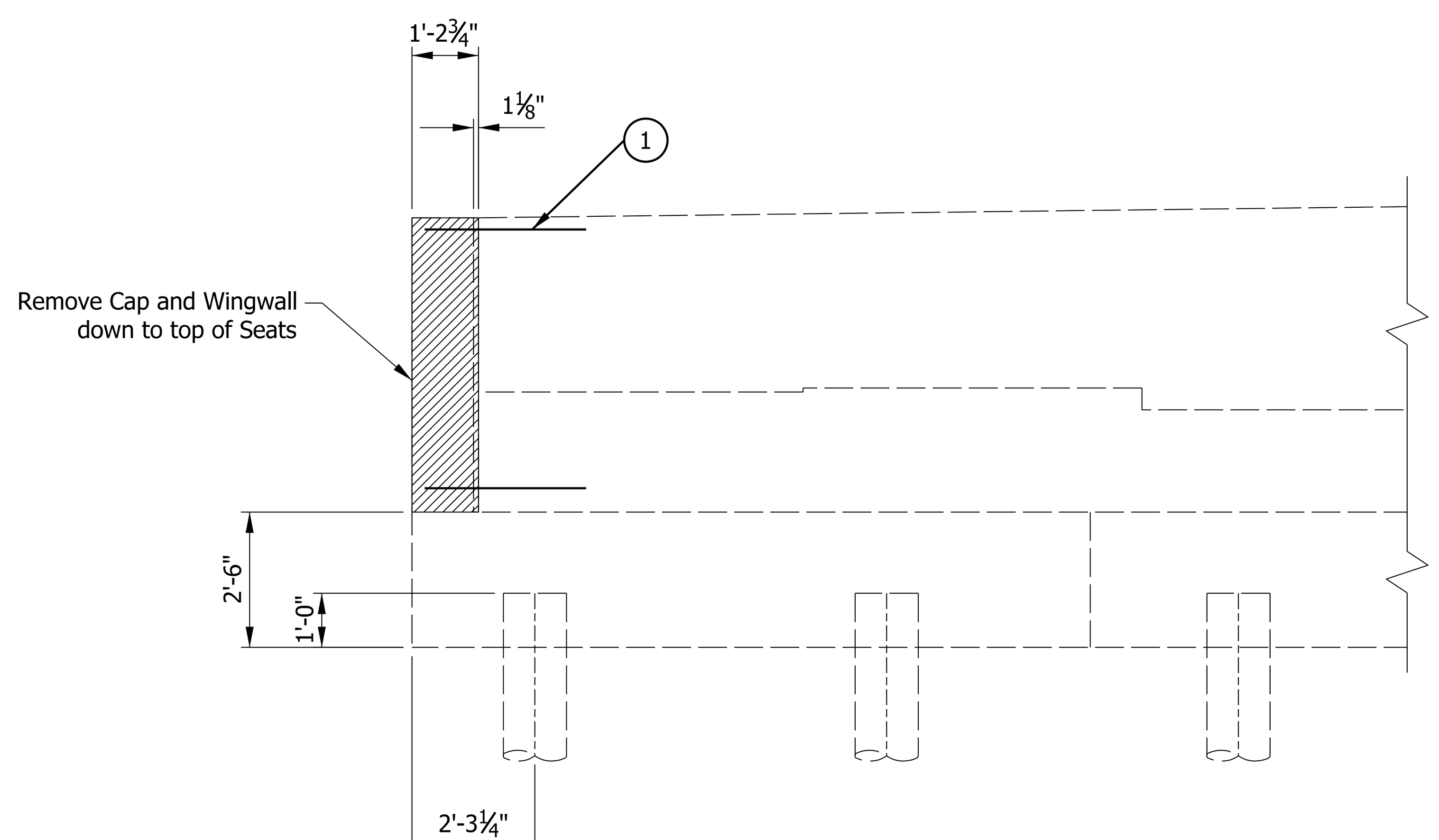
BENT NO. 1
REMOVAL PLAN



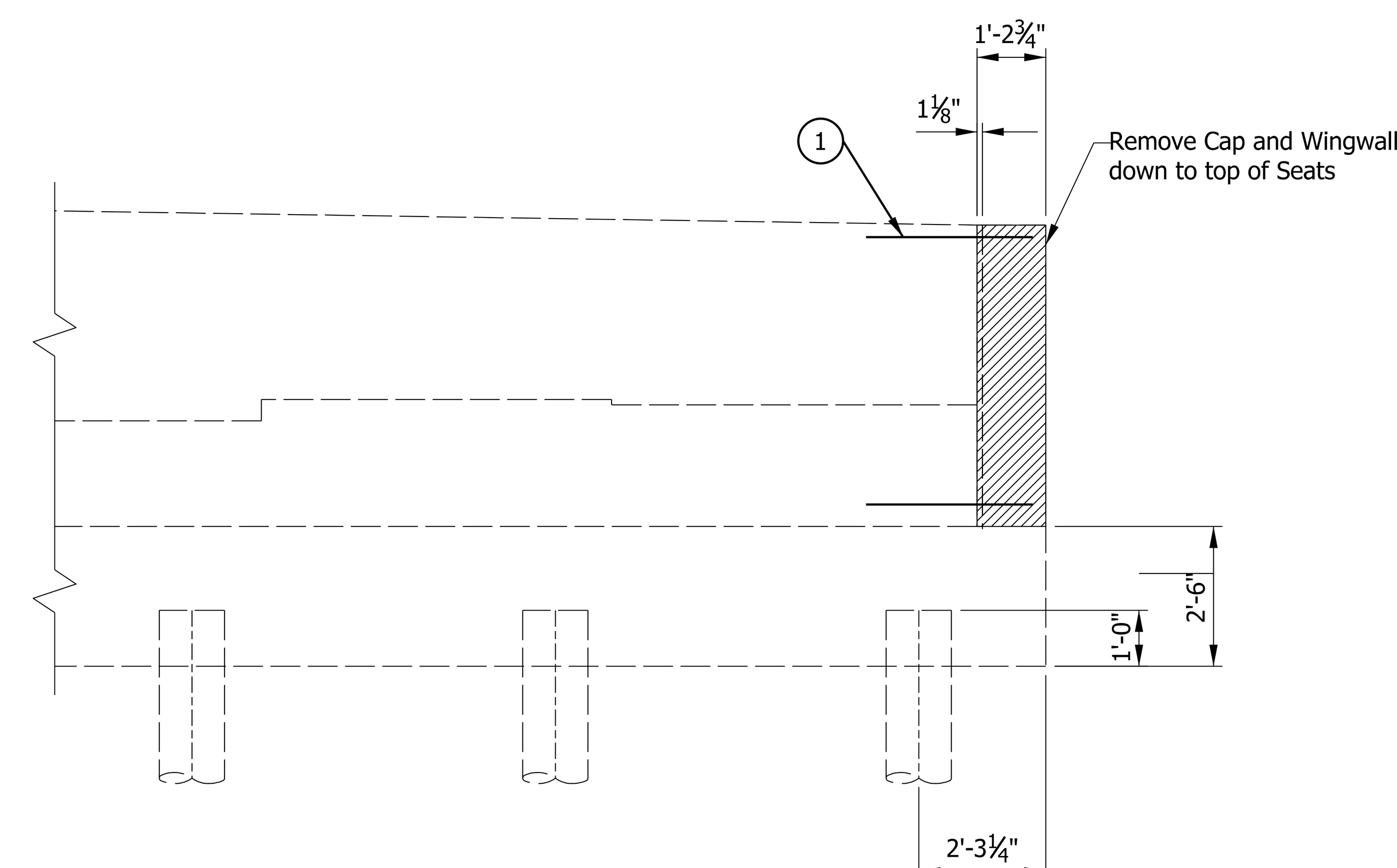
BENT NO. 4
REMOVAL PLAN

LEGEND

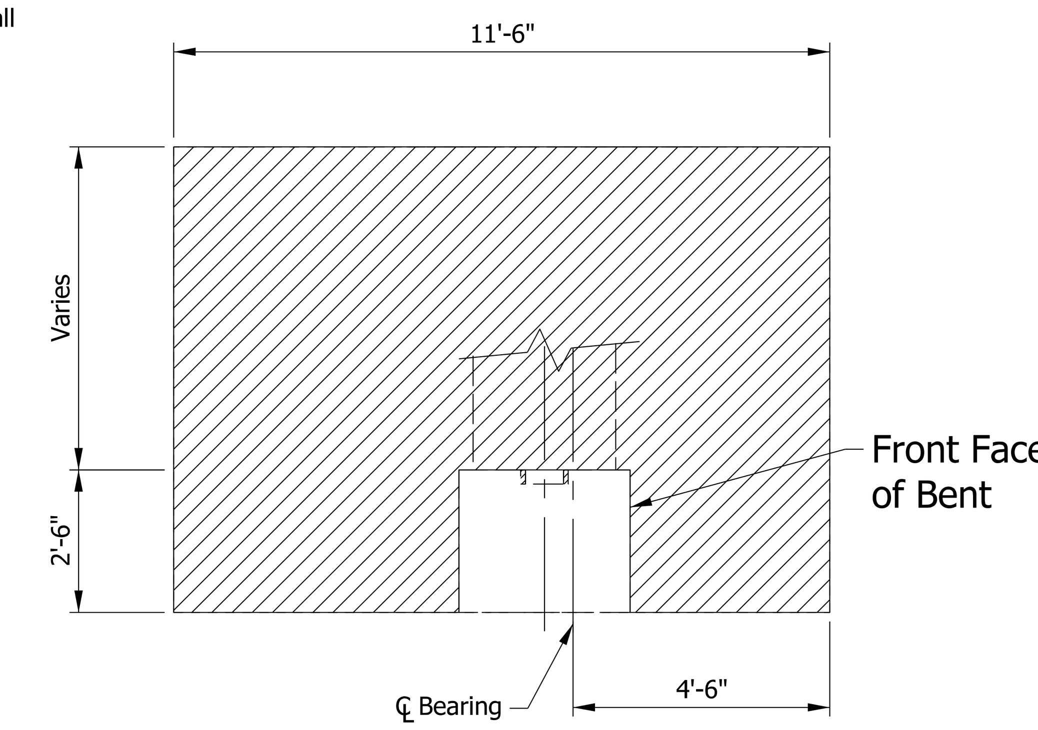
X	Existing Beam Number
(hatched)	Limits of removal
1	Existing reinforcment to be cleaned, straightened, and embedded in new concrete with galvanic anodes.



BENT NO. 1 ELEVATION



BENT NO. 4 ELEVATION



ELEVATION A-A
WINGWALL REMOVAL

Plot: 2/27/2020 4:08:31 PM

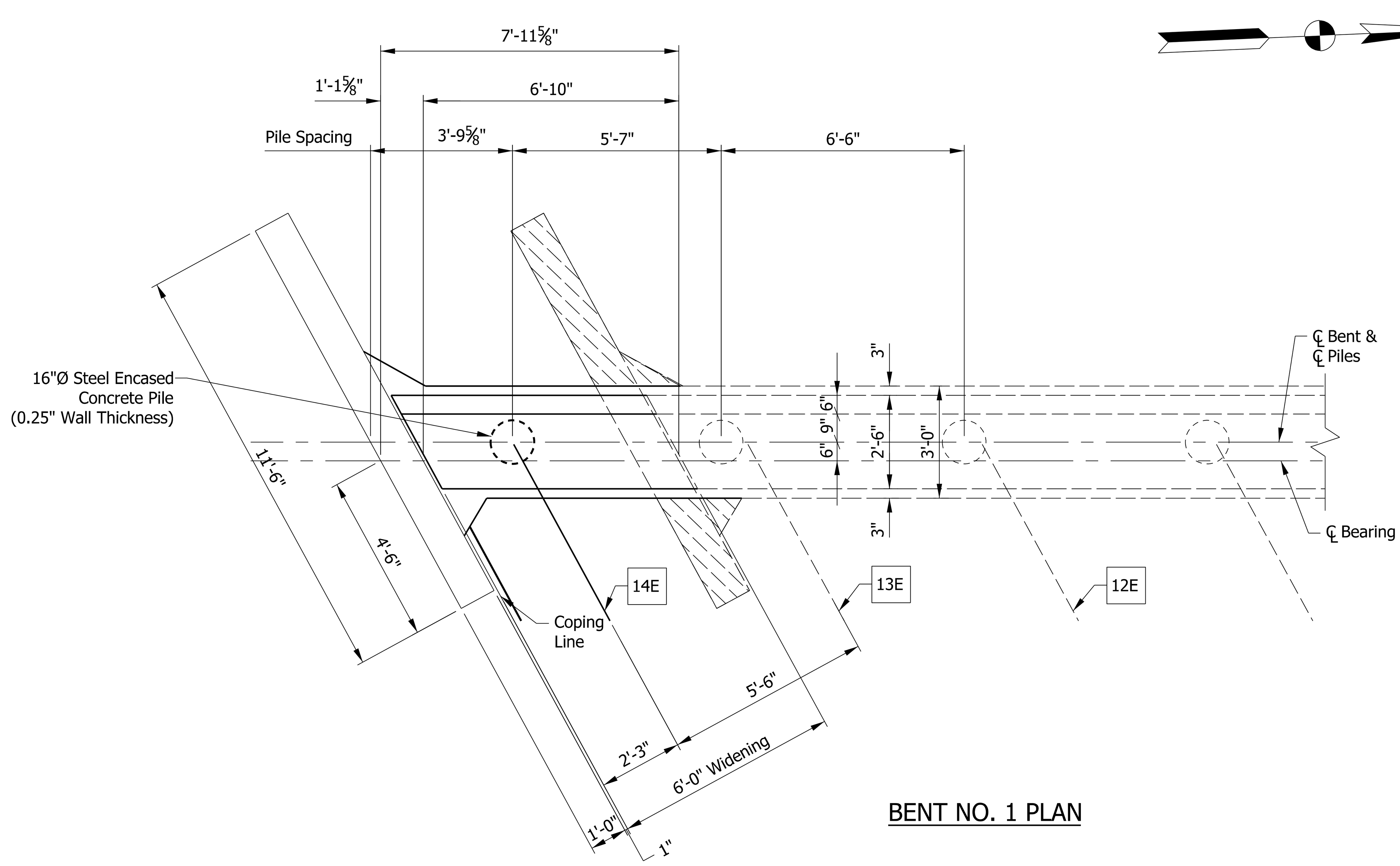
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: SRR		
CHECKED: CML	CHECKED: ZGC		

INDIANA
DEPARTMENT OF TRANSPORTATION

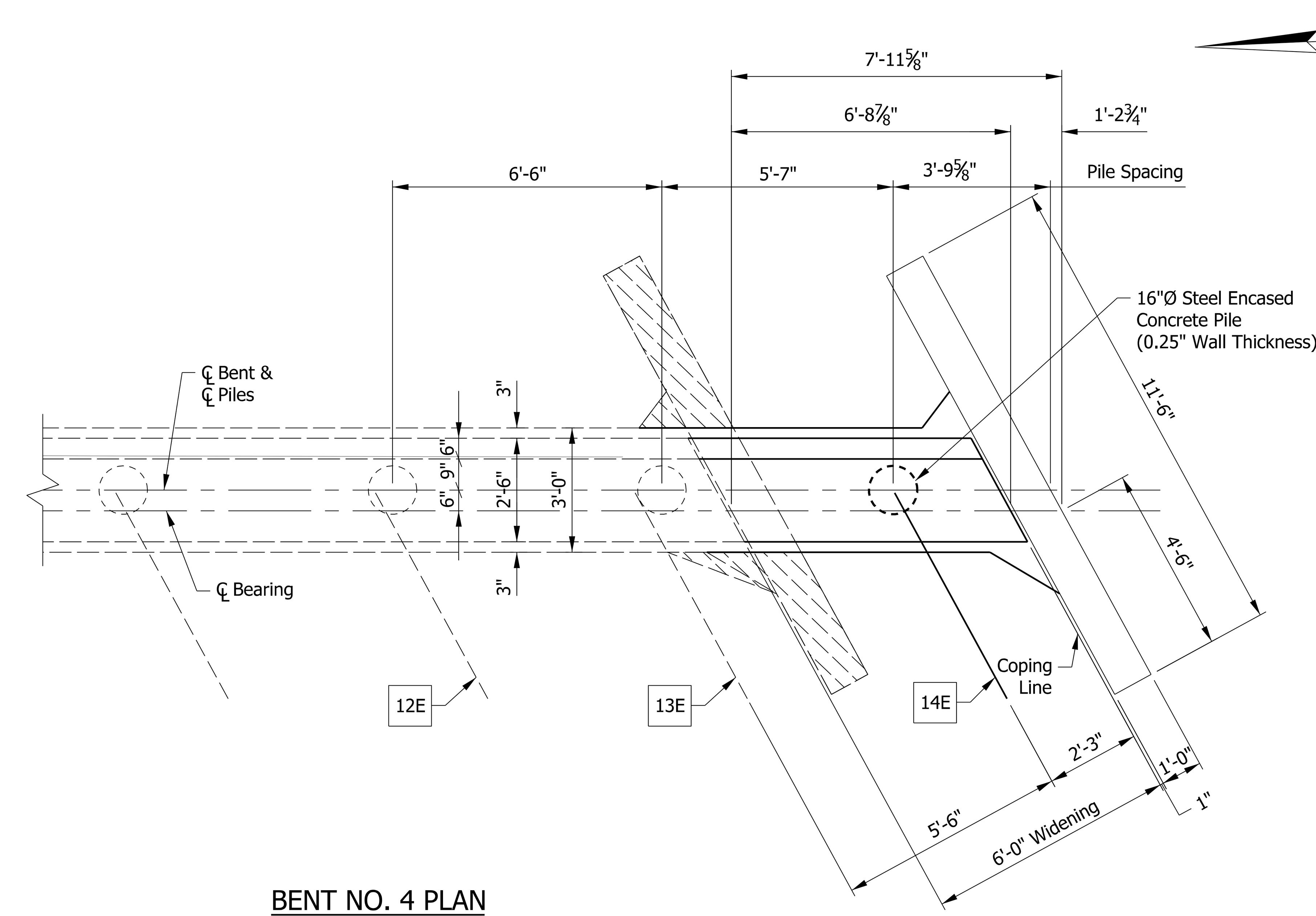
ABUTMENT REMOVAL DETAILS
EASTBOUND BRIDGE

SCALE	BRIDGE FILE
1/4" = 1'-0"	I70-083-05701 JEWB & EEBL
	DESIGNATION
	1901929 & 1901930
SURVEY BOOK	SHEETS
ELECTRONIC	10 of 18
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_10 - EB Abut Removal.dgn



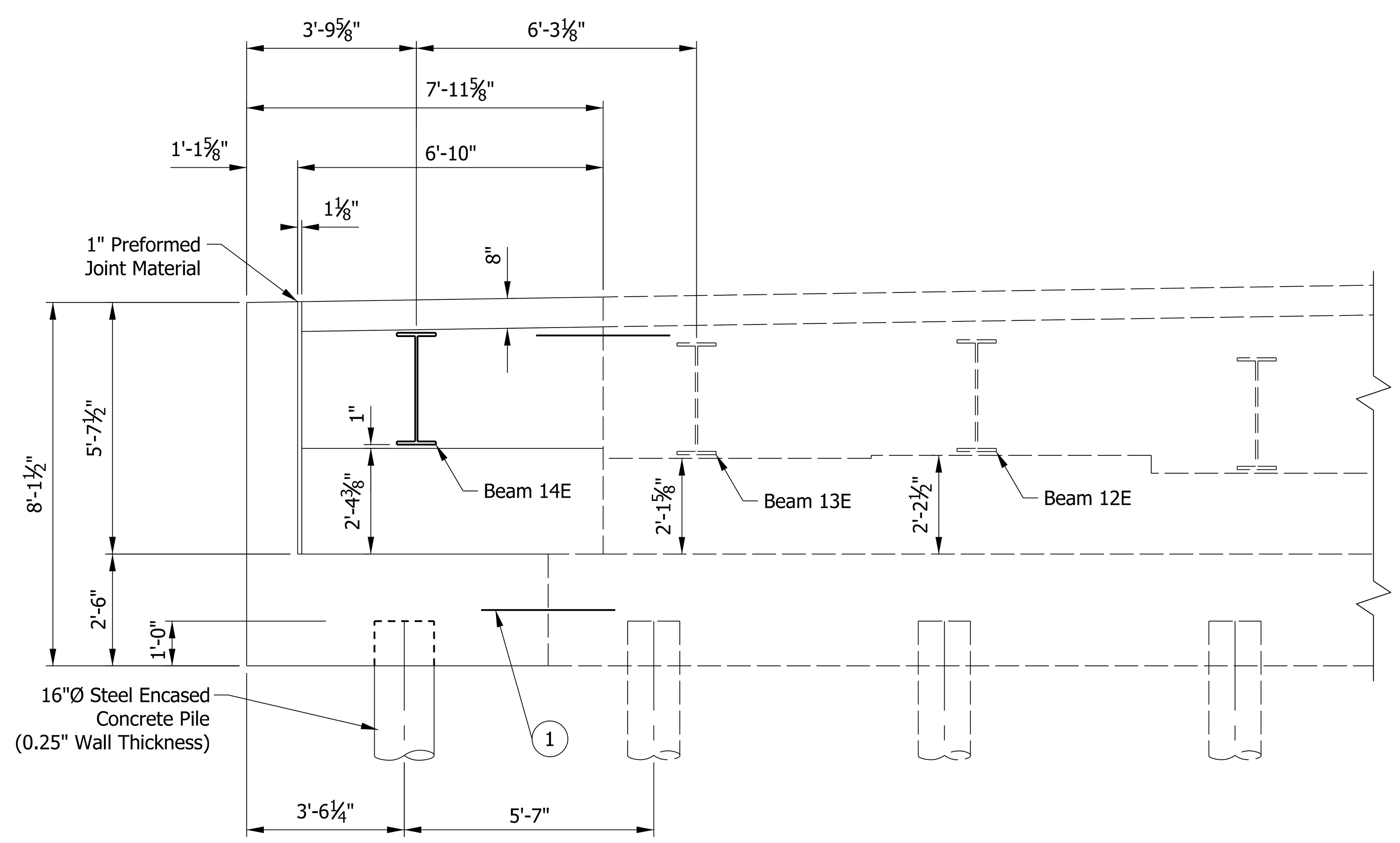
BENT NO. 1 PLAN



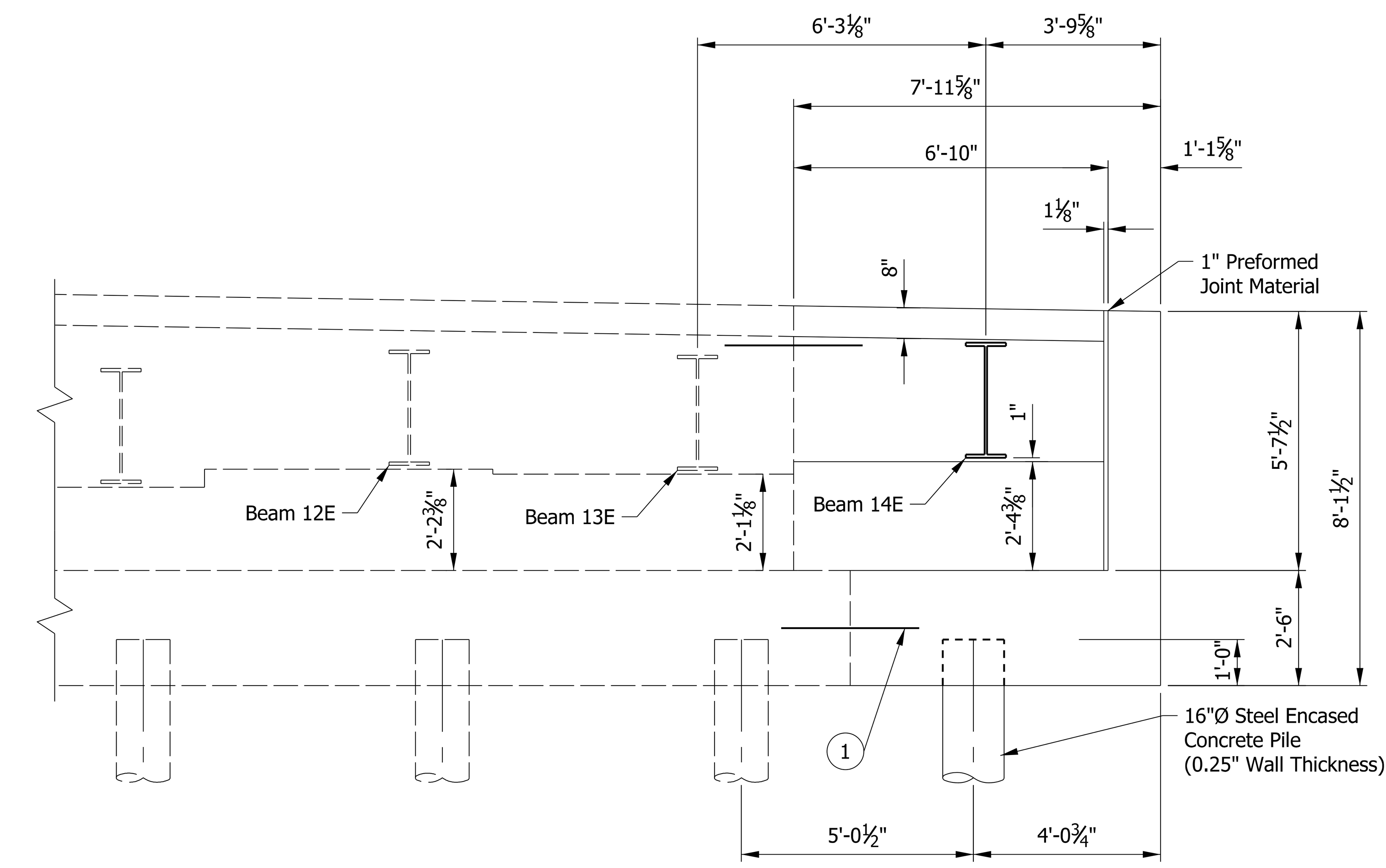
BENT NO. 4 PLAN

LEGEND

- X Existing Beam Number
- Limits of removal
- 1 Reinforced Bars in field drilled hole with approved Anchor System (Typ.)



BENT NO. 1
SECTION ALONG ℄ BEARING



BENT NO. 4
SECTION ALONG ℄ BEARING

Plot: 2/27/2020 4:08:35 PM

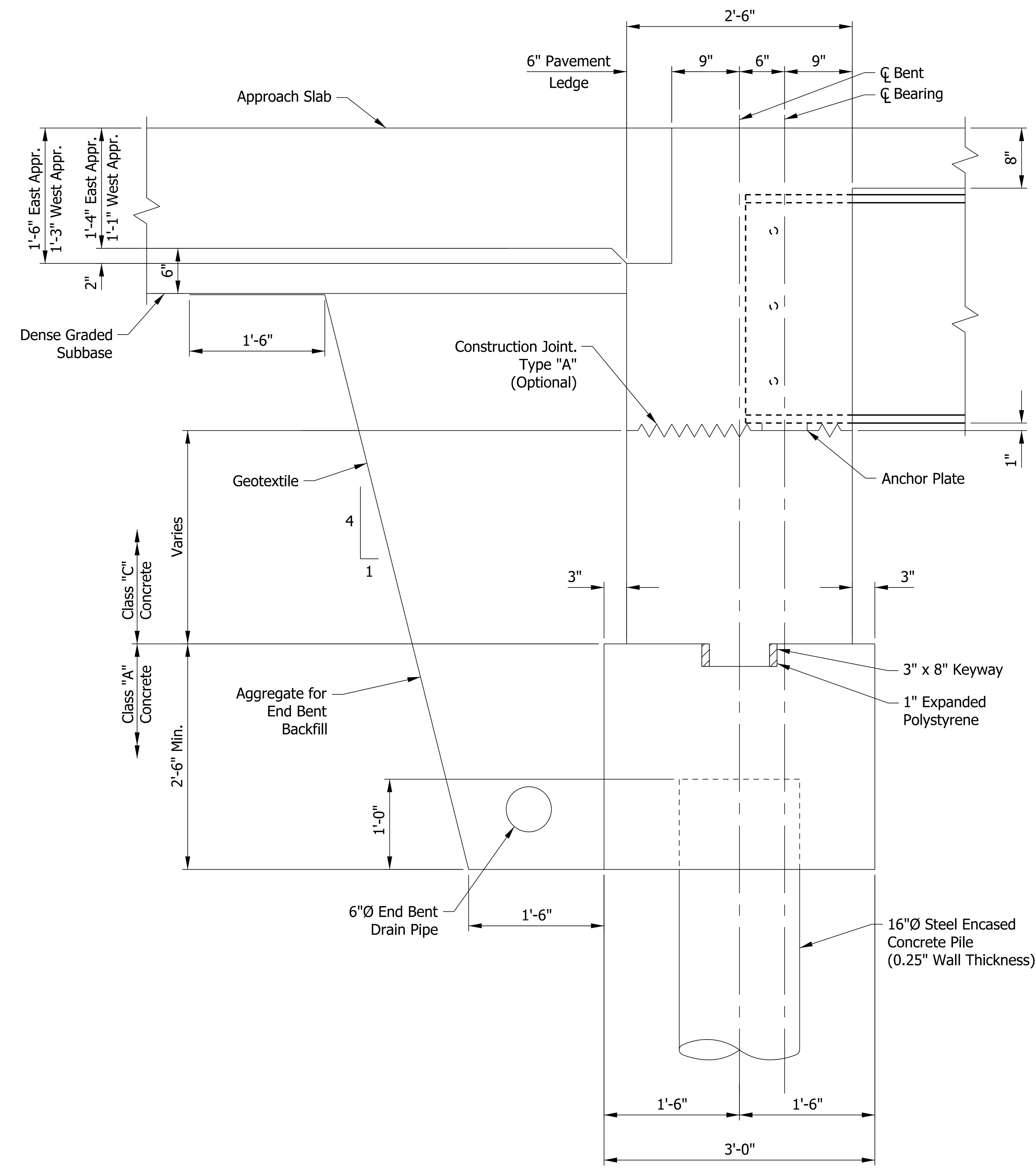
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: SRR		
CHECKED: CML	CHECKED: ZGC		

INDIANA
DEPARTMENT OF TRANSPORTATION

ABUTMENT DETAILS
EASTBOUND BRIDGE

SCALE	BRIDGE FILE
1/4" = 1'-0"	I70-083-05701 JEWB & EEBL
	DESIGNATION
	1901929 & 1901930
SURVEY BOOK	SHEETS
ELECTRONIC	11 of 18
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_11 - EB Abut.dgn

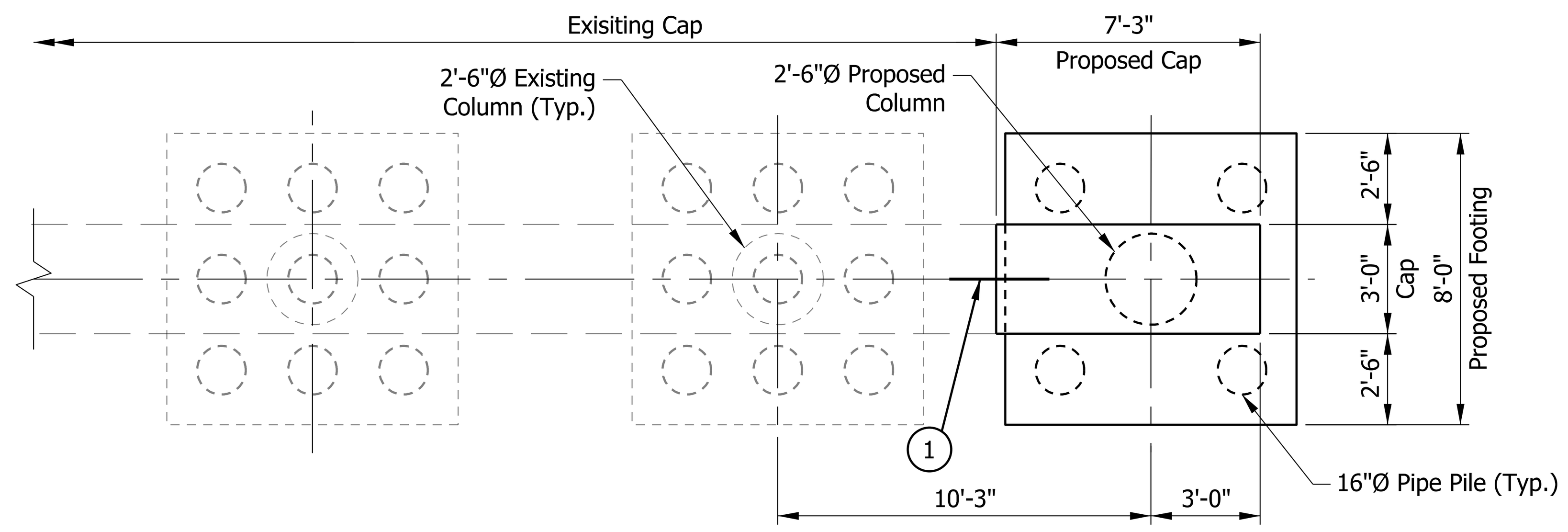


TYPICAL SECTION

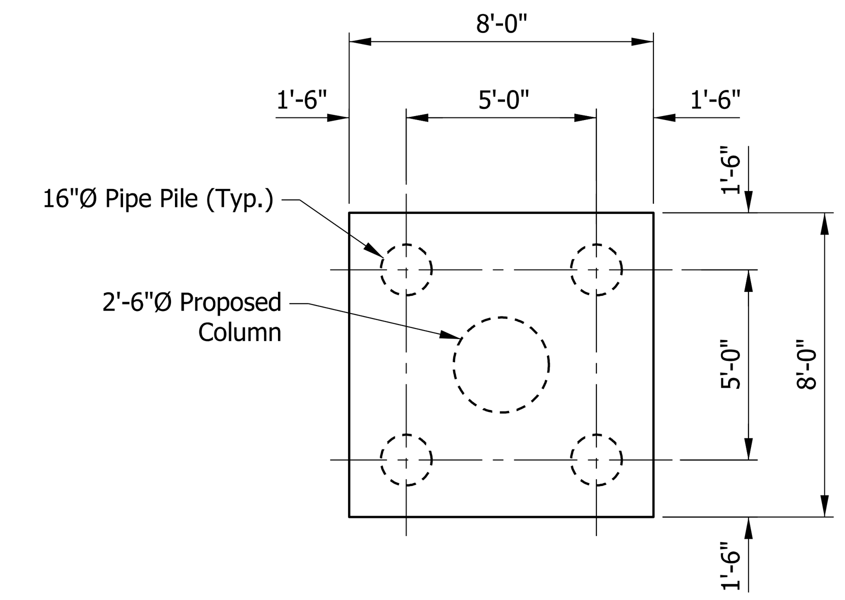
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER / DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 1" = 1'-0"	BRIDGE FILE: I70-083-05701 JEWB & EEBL
				DESIGNATION: 1901929 & 1901930
DESIGNED: ZGC	DRAWN: SRR	BENT NO. 1 & 4 DETAILS EASTBOUND BRIDGE	SURVEY BOOK: ELECTRONIC	SHEETS: 12 of 18
CHECKED: CML	CHECKED: ZGC		CONTRACT: B-36910	PROJECT: 1600808

Plot: 2/27/2020 4:08:40 PM

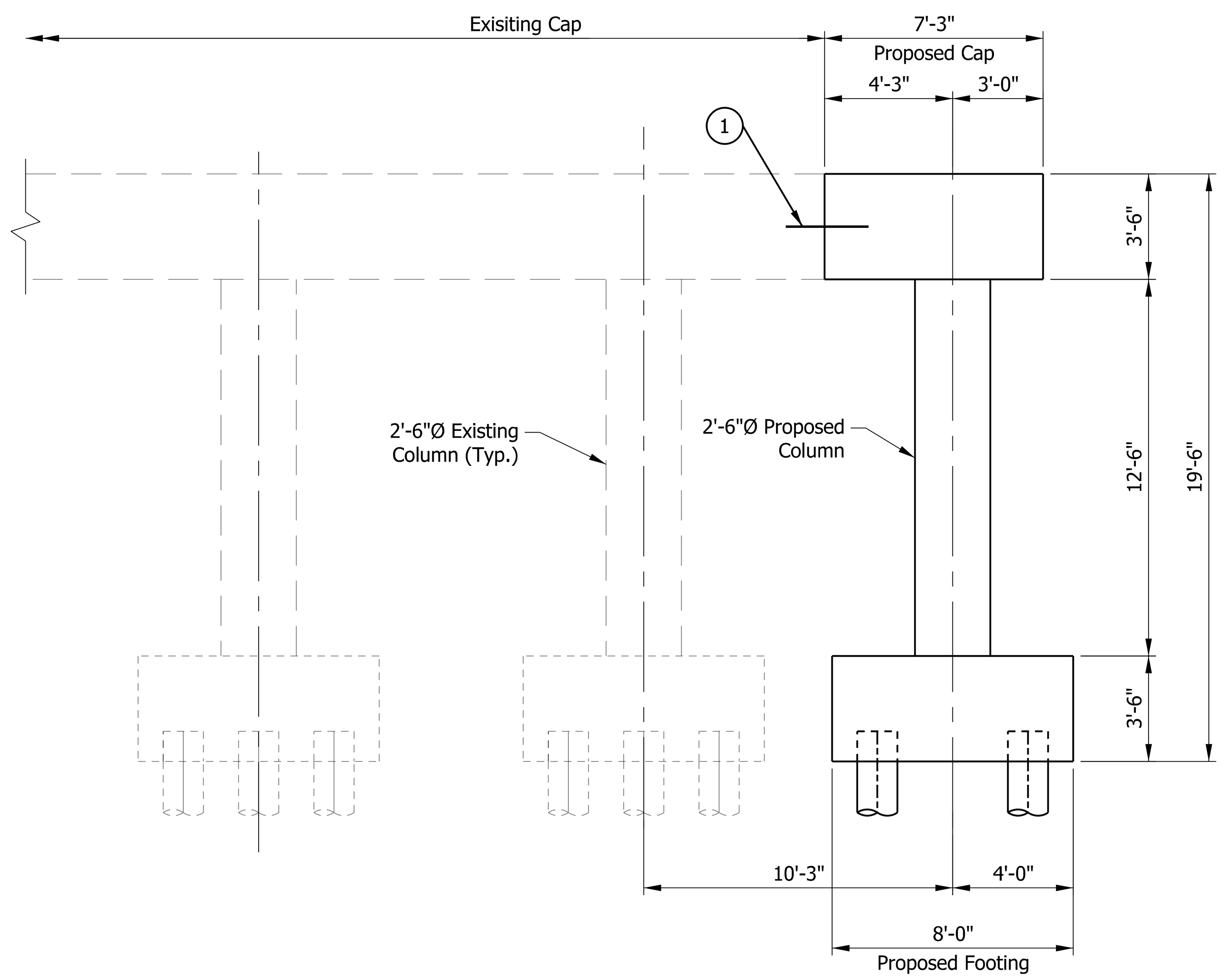
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_12 - EB Bent No. 1 & 4 Details.dgn



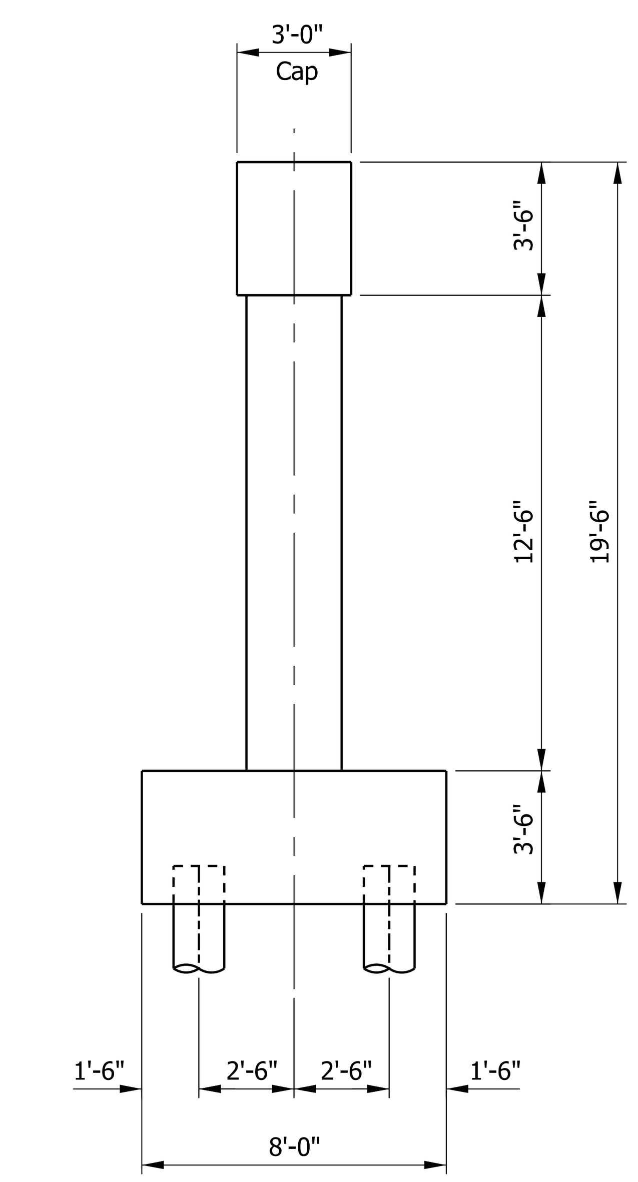
PLAN



FOOTING PLAN



ELEVATION



ELEVATION

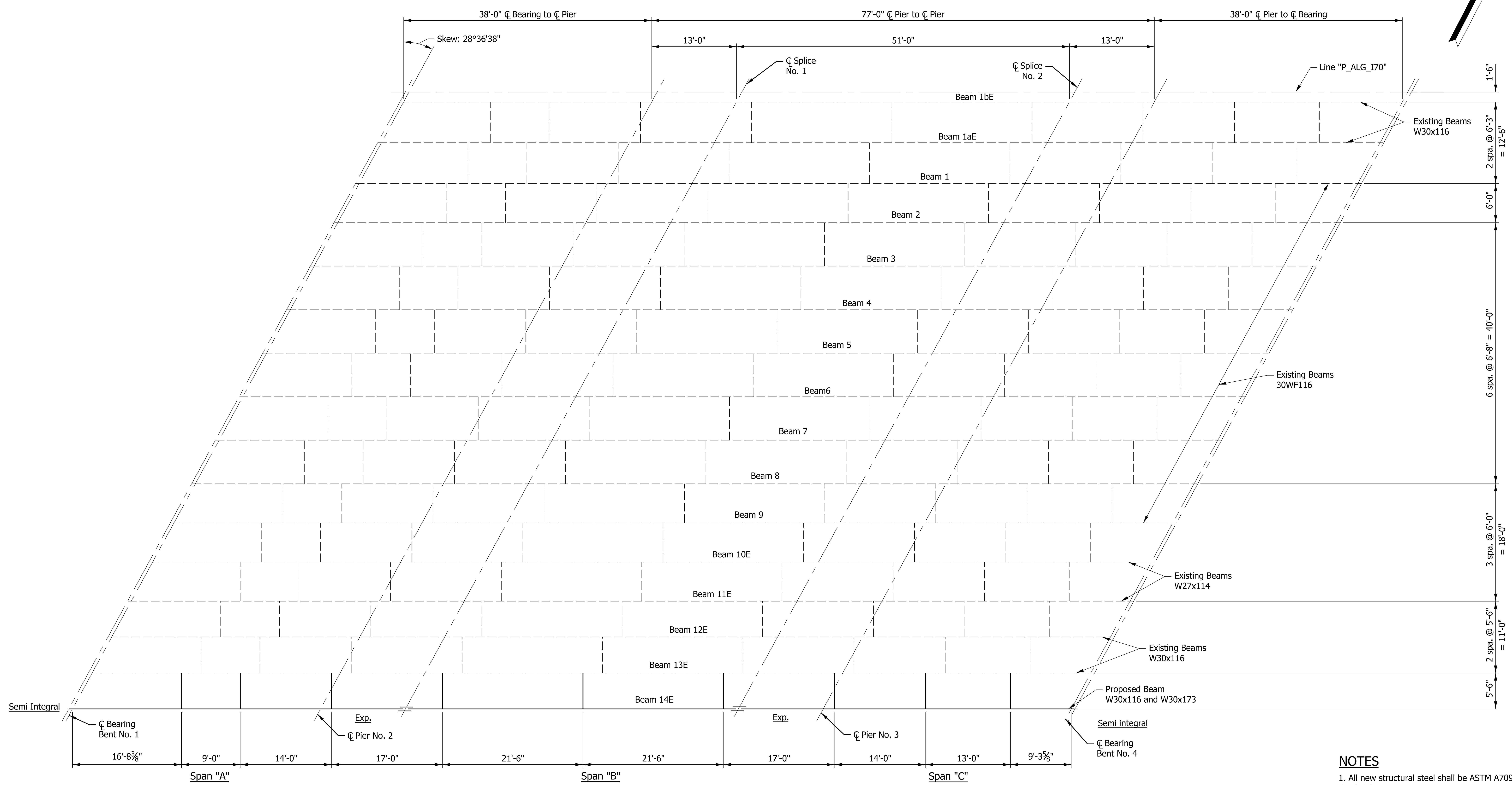
NOTE

1. Reinforced Bars in field drilled hole with approved Anchor System (Typ.)

Plot: 2/27/2020 4:08:44 PM

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 1/4" = 1'-0"	BRIDGE FILE: I70-083-05701 JEWB & EEBL
			DESIGNATION: 1901929 & 1901930
DESIGNED: ZGC — DRAWN: SRR	PIER NO. 2 & 3 DETAILS EASTBOUND BRIDGE	SURVEY BOOK: ELECTRONIC	SHEETS: 13 of 18
CHECKED: CML — CHECKED: ZGC		CONTRACT: B-36910	PROJECT: 1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_13 - Pier No. 2 & 3.dgn



FRAMING PLAN

NOTES

1. All new structural steel shall be ASTM A709 Grade 50.

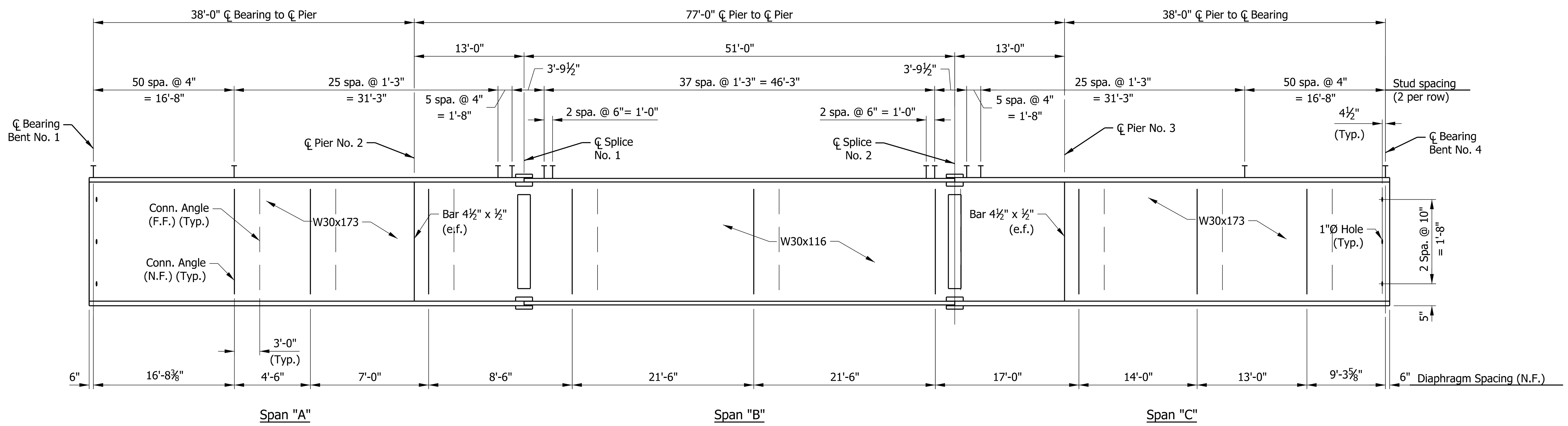
2. New diaphragms shall be C15x33.9.

3. New 4x4x⅜ connection angles required on exterior face of beam line 13E.

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE 3/32" = 1'-0" / BRIDGE FILE I70-083-05701 JEWB & EEBL / DESIGNATION 1901929 & 1901930
DESIGNED: ZGC / CHECKED: CML	DRAWN: SRR / CHECKED: ZGC	EASTBOUND FRAMING PLAN DETAILS	SURVEY BOOK ELECTRONIC / SHEETS 14 of 18 / CONTRACT B-36910 / PROJECT 1600808

Plot: 2/27/2020 4:08:45 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_14 - EB Framing Plan.dgn



ELEVATION
NEW BEAM 14E

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: SRR		
CHECKED: CML	CHECKED: ZGC		

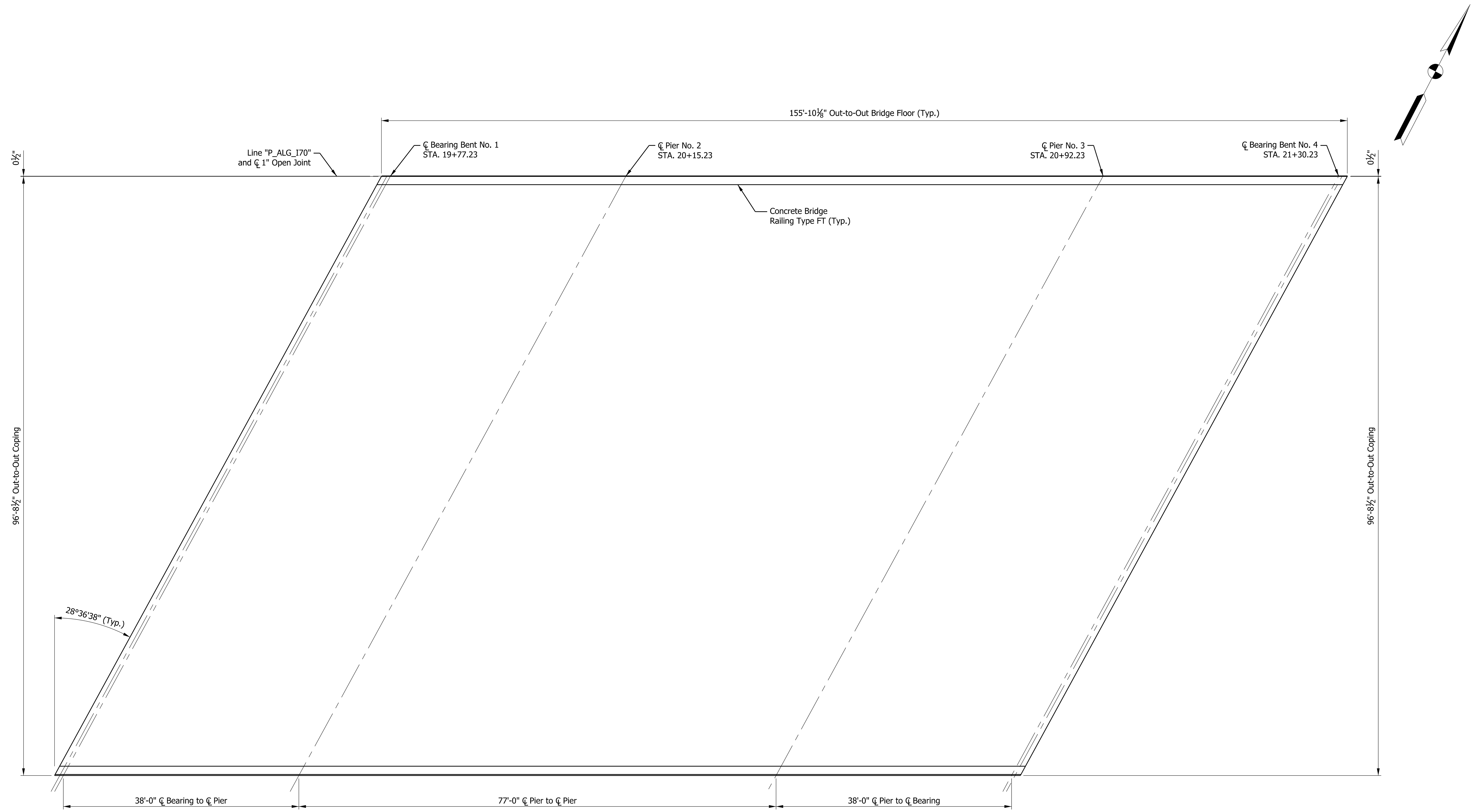
INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1/8" = 1'-0"	I70-083-05701 JEWB & EEBL
VERTICAL SCALE	DESIGNATION
3/4" = 1'-0"	1901929 & 1901930
SURVEY BOOK	SHEETS
ELECTRONIC	15 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 4:08:49 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_15 - EB Beam Details.dgn



FLOOR PLAN

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: SRR		
CHECKED: CML	CHECKED: ZGC		

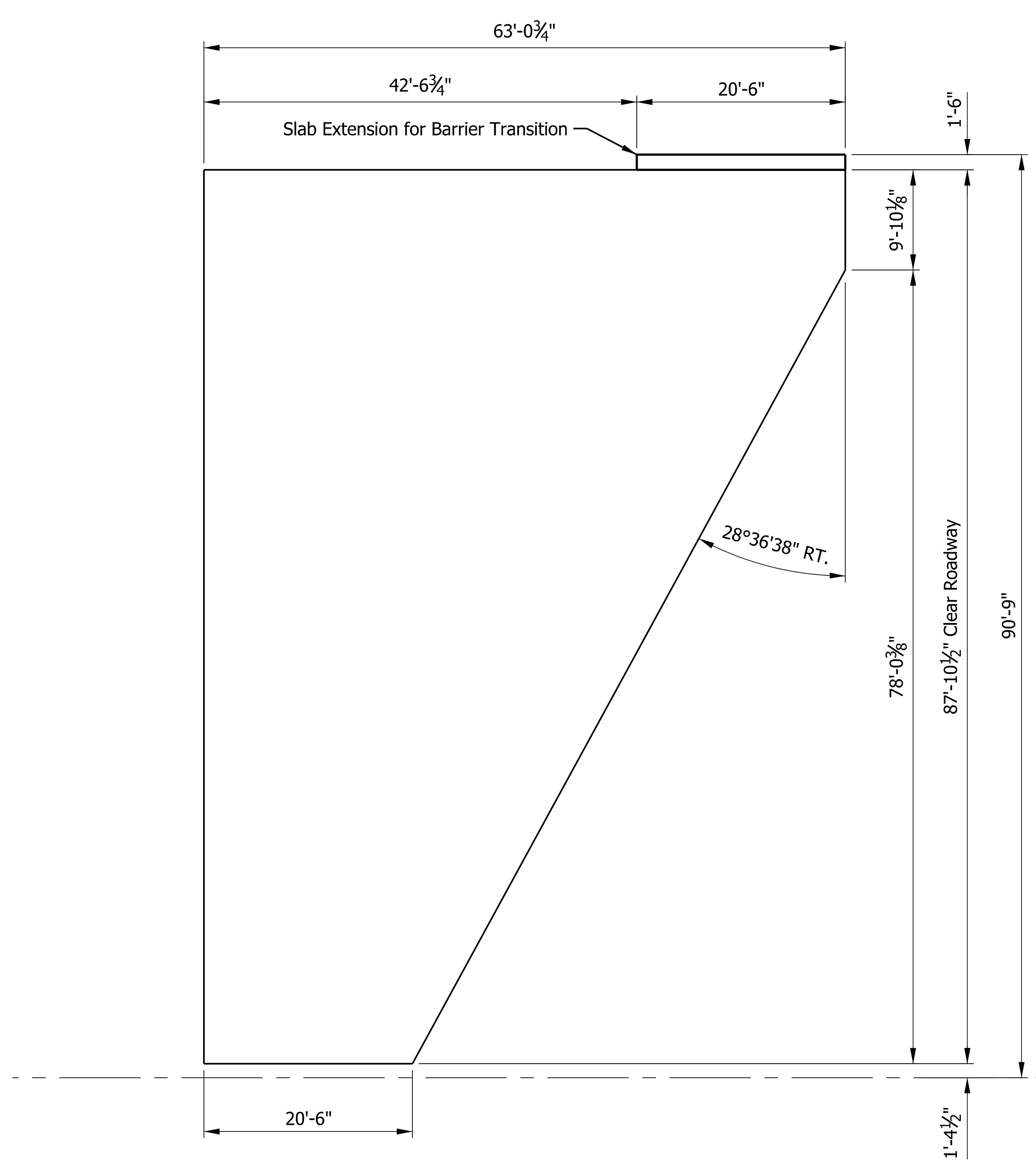
INDIANA
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
EASTBOUND BRIDGE

SCALE	BRIDGE FILE
1/8" = 1'-0"	I70-083-05701 JEWB & EEBL
	DESIGNATION
	1901929 & 1901930
SURVEY BOOK	SHEETS
ELECTRONIC	16 of 18
CONTRACT	PROJECT
B-36910	1600808

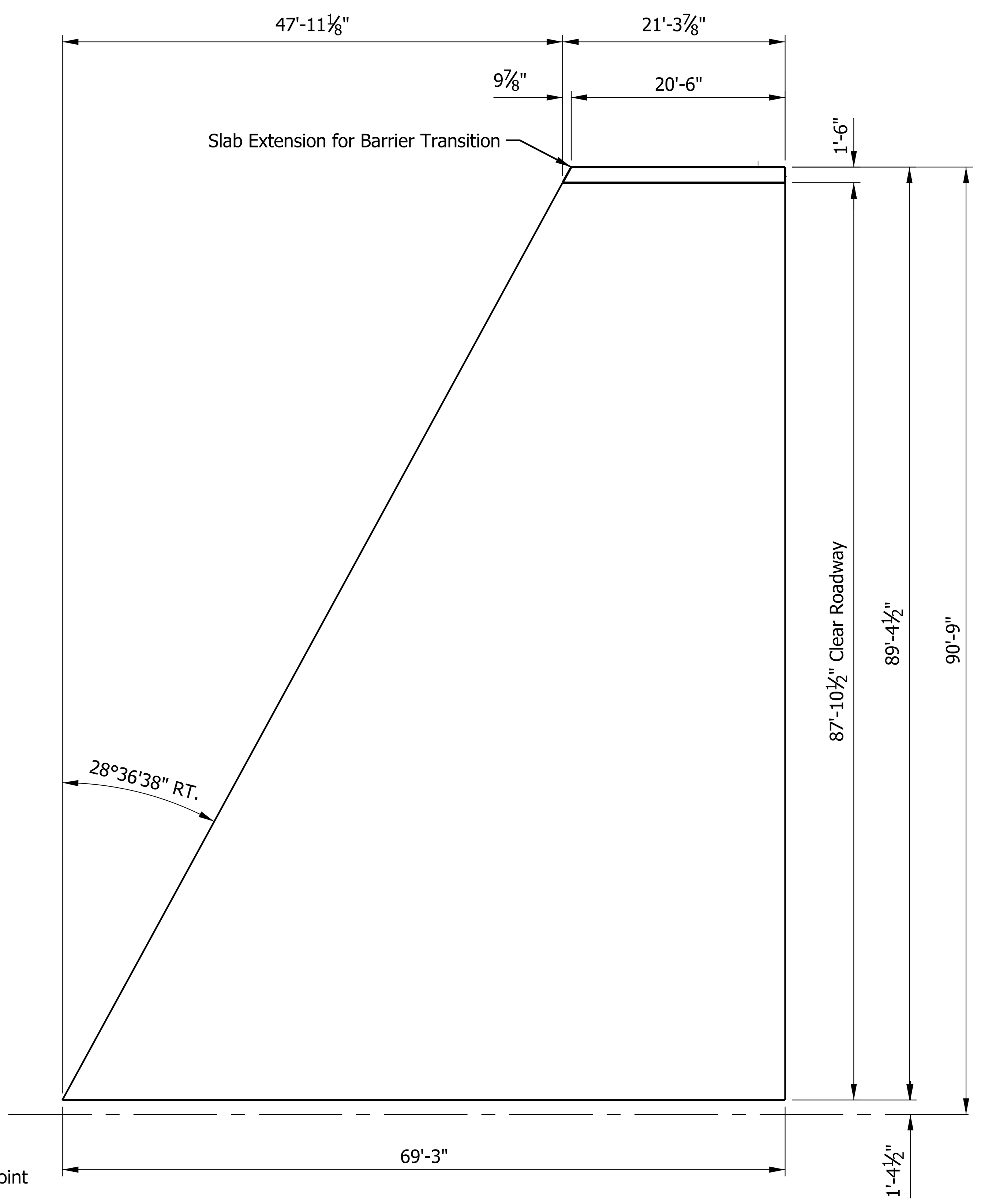
Plot: 2/27/2020 4:08:50 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_16 - EB Deck Plan.dgn



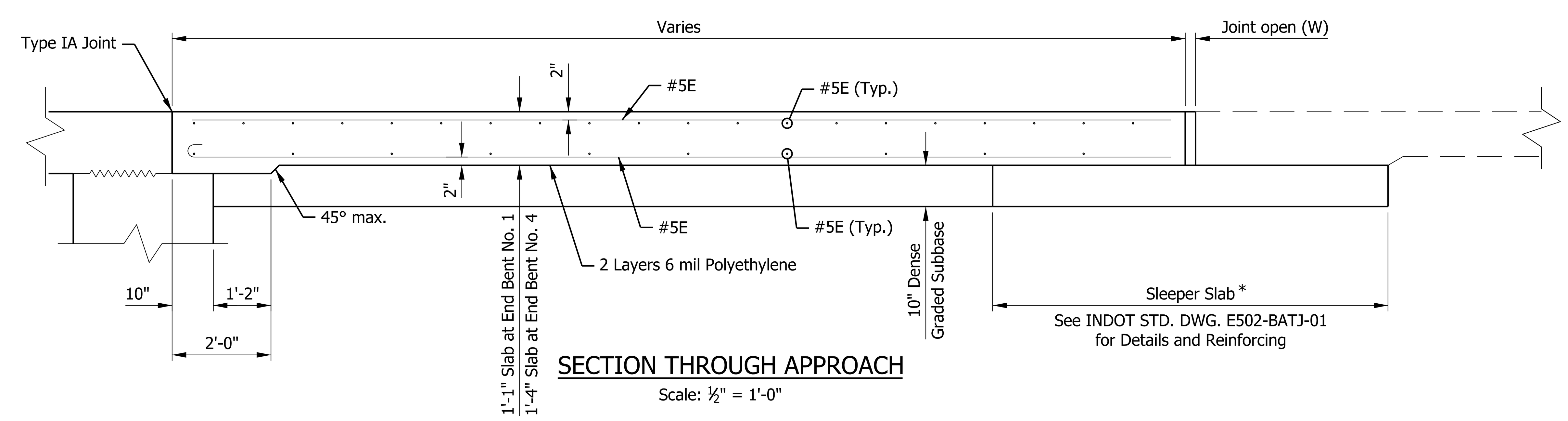
APPROACH SLAB AT END BENT NO. 1

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



APPROACH SLAB AT END BENT NO. 4

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



SECTION THROUGH APPROACH

Scale: ½" = 1'-0"

NOTE:

* Existing Sleeper Slab to remain on East Approach.

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

Plot: 2/27/2020 4:08:53 PM

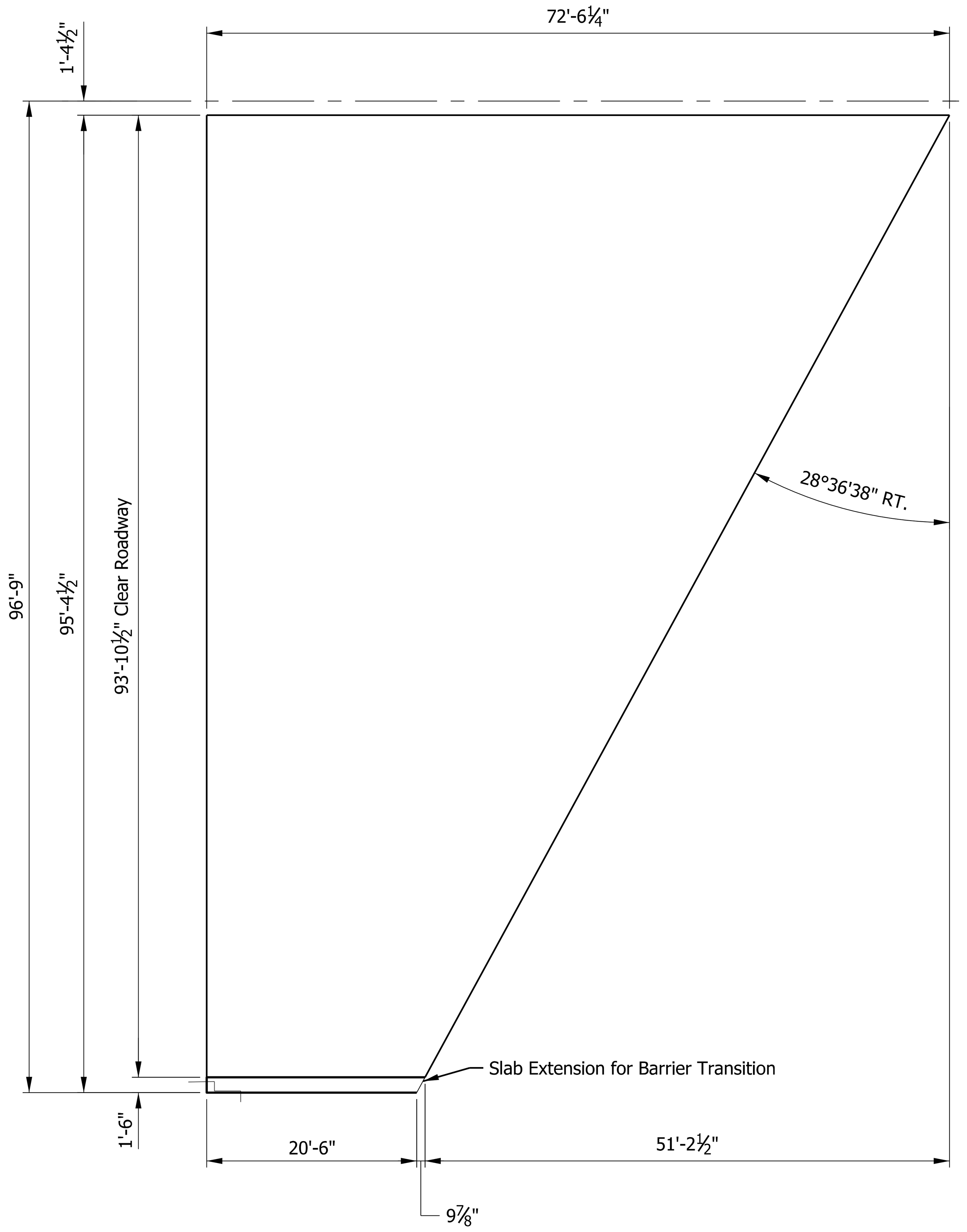
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: SRR		
CHECKED: CML	CHECKED: ZGC		

INDIANA
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS
WESTBOUND BRIDGE

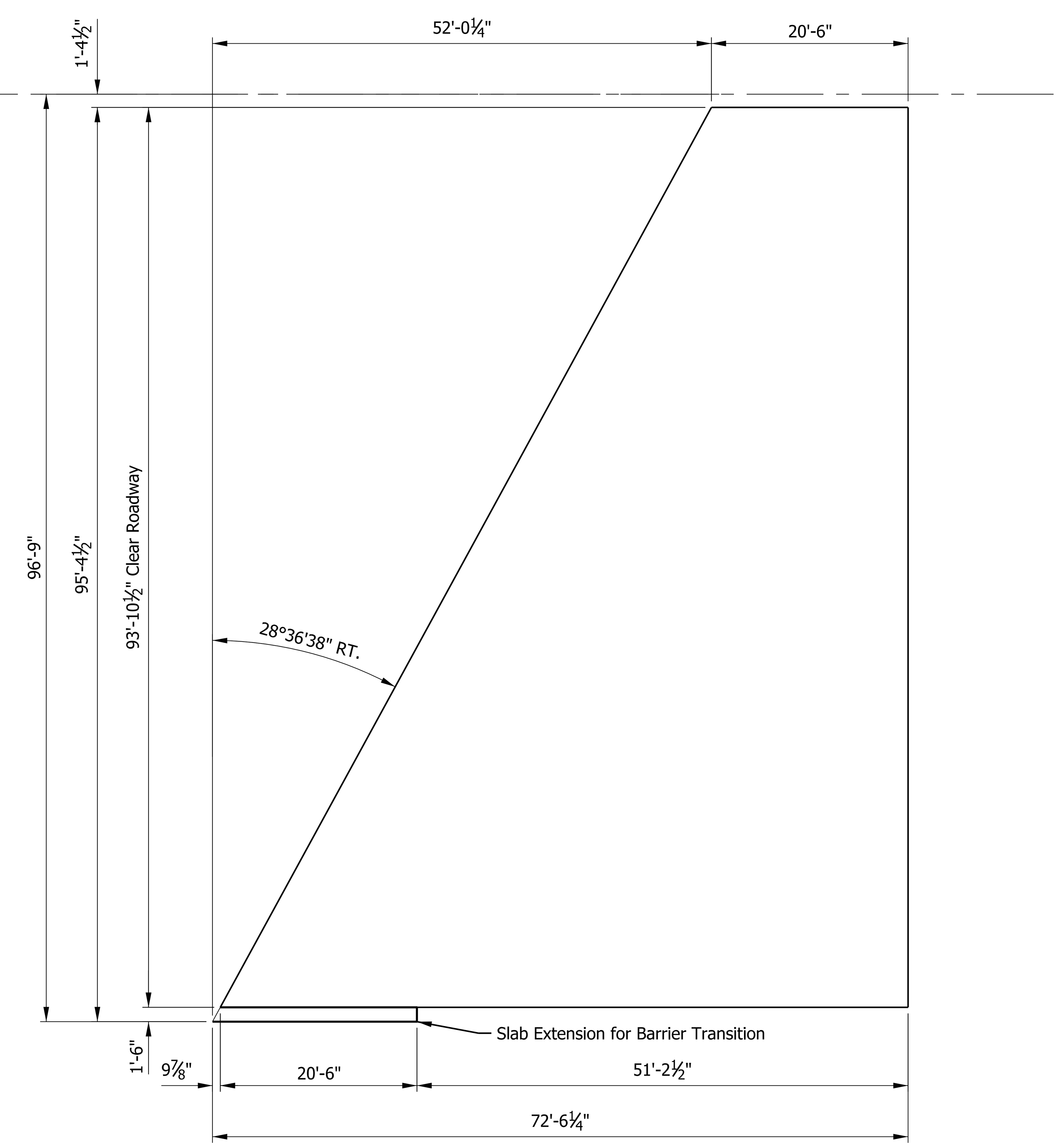
SCALE	BRIDGE FILE
AS NOTED	I70-083-05701 JEWB & EEBL
	DESIGNATION
	1901929 & 1901930
SURVEY BOOK	SHEETS
ELECTRONIC	17 of 18
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_17 - WB Approach Slabs.dgn



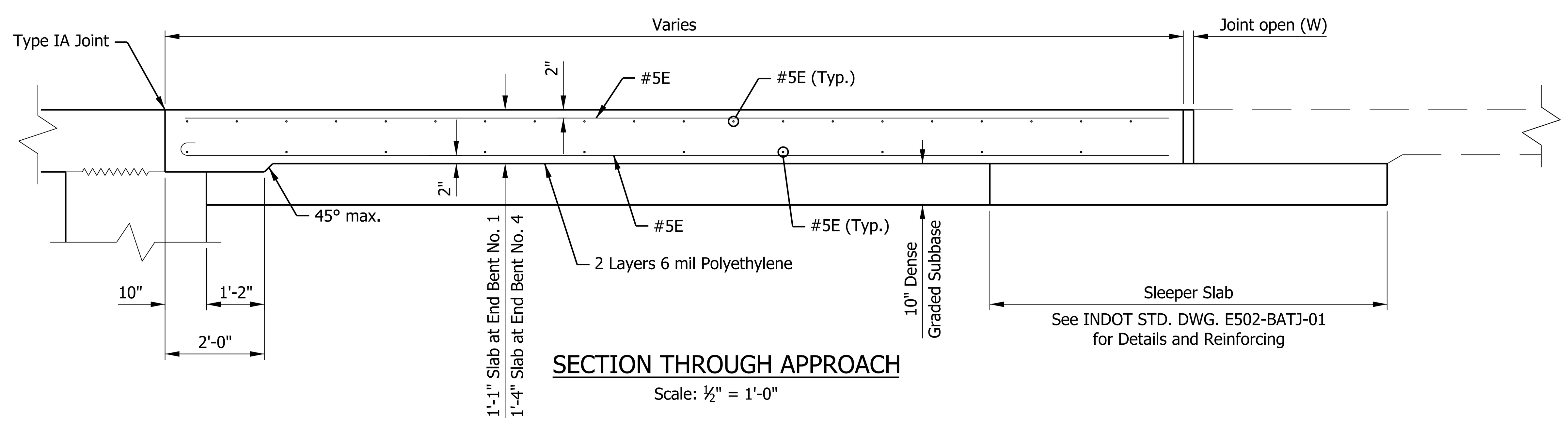
APPROACH SLAB AT END BENT NO. 1

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



APPROACH SLAB AT END BENT NO. 4

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



SECTION THROUGH APPROACH

Scale: ½" = 1'-0"

NOTE:

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

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: SRR		
CHECKED: CML	CHECKED: ZGC		

INDIANA
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS
EASTBOUND BRIDGE

SCALE	BRIDGE FILE
AS NOTED	I70-083-05701 JEWB & EEBL
	DESIGNATION
	1901929 & 1901930
SURVEY BOOK	SHEETS
ELECTRONIC	18 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/27/2020 4:08:57 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 43 & 44 I70 WB & EB over Roosevelt Ave\1901929_18 - EB Approach Slab.dgn

PROJECT	DESIGNATION
1600808	1901931 & 1901932
CONTRACT	BRIDGE FILE
B-36910	I-70-084-05702 JEWB & EWBL

INDIANA DEPARTMENT OF TRANSPORTATION

STRUCTURE INFORMATION

STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I70-084-5702 JEWB & EWBL	CONTINUOUS COMPOSITE STEEL BEAM BRIDGES	3 SPAN: 34'-6", 52'-3", 34'-6" SKEW: 19°44'24" LT. AND 29°12'00" LT.	VALLEY AVENUE	47+87.40

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	
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	
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	

TRAFFIC DATA	I-70 WESTBOUND	I-70 EASTBOUND	VALLEY AVE
A.A.D.T. (2021)	93,737 V.P.D.	100,568 V.P.D.	394 V.P.D.
A.A.D.T. (2041)	99,926 V.P.D.	112,807 V.P.D.	408 V.P.D.
D.H.V (2041)	9,493 V.P.H.	9,927 V.P.H.	49 V.P.H.
DIRECTIONAL DISTRIBUTION	0 %	100 %	39 %
TRUCKS	12 % D.H.V.	13 % D.H.V.	5 % D.H.V.

DESIGN DATA		
DESIGN SPEED	55 M.P.H.	25
PROJECT DESIGN CRITERIA	EXISTING FREEWAY (3R)	N/A
FUNCTIONAL CLASSIFICATION	URBAN FREEWAY	LOCAL ROAD
RURAL/URBAN	URBAN (BUILT-UP)	URBAN (BUILT UP)
TERRAIN	LEVEL	LEVEL
ACCESS CONTROL	FULL	NONE

BRIDGE REHABILITATION PLANS

FOR SPANS OVER 20 FEET

ROUTE: I-70 AT: RP 83+95

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

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

BRIDGE DECK OVERLAY ON I-70 EASTBOUND AND WESTBOUND OVER VALLEY AVENUE LOCATED 0.9 MILES EAST OF I-70 (NORTH SPLIT) INTERCHANGE IN SECTION 31, T-16-N, R-4-E, CENTER TOWNSHIP, MARION COUNTY, INDIANA

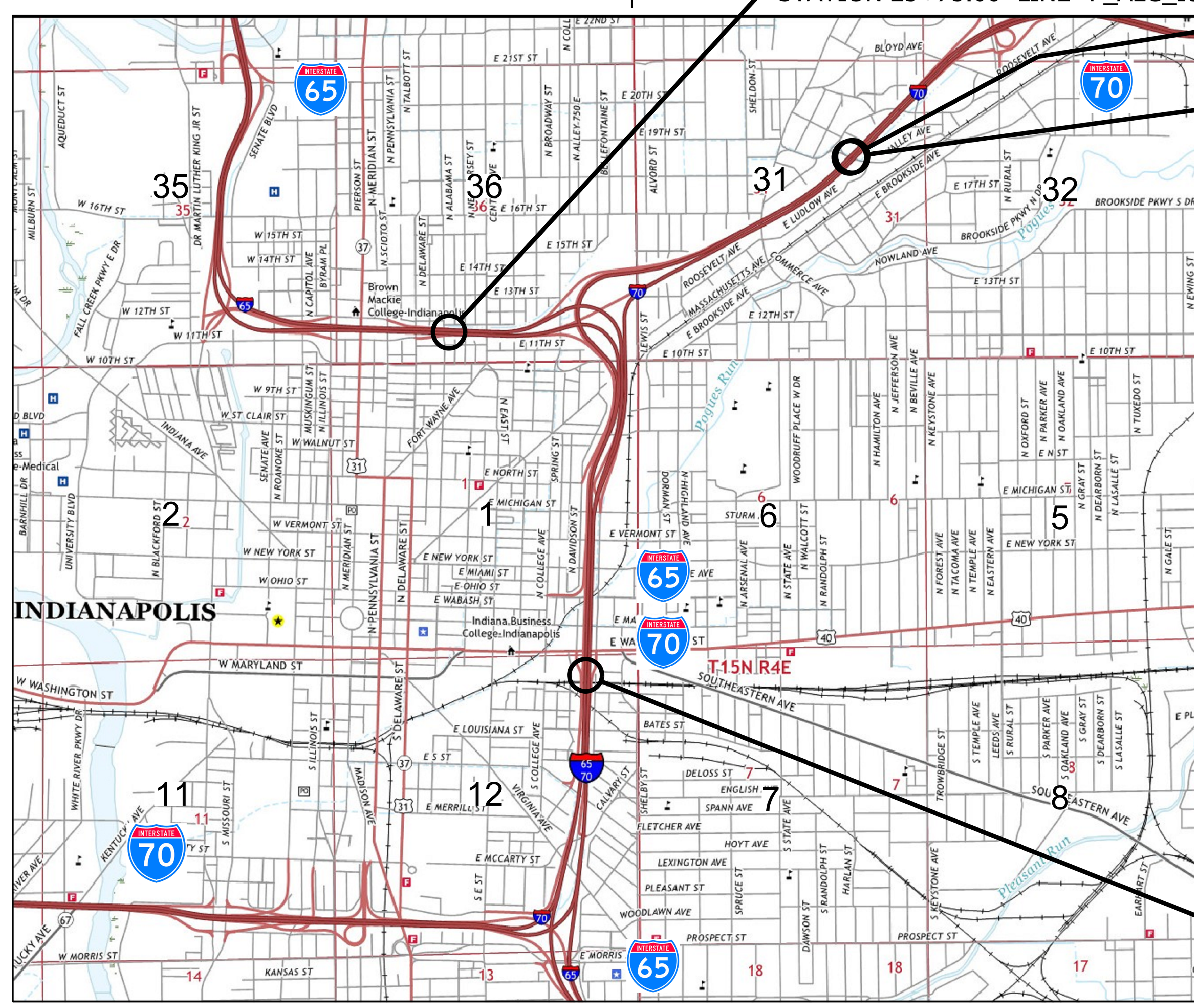
R-3-E | R-4-E

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

BRIDGE FILE NO. I70-084-05702 JEWB & EWBL
I-70 OVER VALLEY AVENUE

END CONSTRUCTION PROJECT NO. 1600808
STATION 43+87.40 LINE "P_ALG_I70"

T-16-N
T-15-N



T-16-N
T-15-N

SCALE: 1" = 2000'

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

LOCATION MAP
(MARION COUNTY)

PROJECT LOCATION SHOWN BY
MARION COUNTY

LATITUDE: 39°47'29" N LONGITUDE: 86°07'34" W

HYDROLOGIC UNIT CODE: 05120201130020

BRIDGE LENGTH:	0.023	MI.
ROADWAY LENGTH:	SEE ROAD PLANS	MI.
TOTAL LENGTH:	SEE ROAD PLANS	MI.
MAX. GRADE:	1.56	%

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

PRELIMINARY PLANS
NOT FOR CONSTRUCTION

JANSSEN & SPAANS ENGINEERING
9120 HARRISON PARK COURT
INDIANAPOLIS, INDIANA 46216
Business (317) 254-9686 Fax (317) 259-8262

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

CERTIFIED BY: SIG_DT DATE

RECOMMENDED FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE	
I70-084-05702 JEWB & EWBL	
DESIGNATION	
1901931 & 1901932	
SURVEY BOOK	SHEETS
ELECTRONIC	1 of 10
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/17/2020 2:30:15 PM

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 45 & 46 I70 WB & EB over Valley Ave\1901931_01 - Title.dgn

UTILITIES

SEE PROJECT UTILITY MATRIX

INDEX

SHEET NO.	SUBJECT
1	TITLE
2	INDEX
3	MAINTENANCE OF TRAFFIC
4	LAYOUT
5	GENERAL PLAN - WESTBOUND BRIDGE
6	GENERAL PLAN - TYPICAL SECTION WESTBOUND BRIDGE
7	GENERAL PLAN - EASTBOUND BRIDGE
8	GENERAL PLAN - TYPICAL SECTION EASTBOUND BRIDGE
9	APPROACH SLAB DETAILS - WESTBOUND BRIDGE
10	APPROACH SLAB DETAILS - EASTBOUND BRIDGE

REVISIONS

SHEET NO.	DATE	REVISED

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		INDIANA DEPARTMENT OF TRANSPORTATION	SCALE	BRIDGE FILE
				I70-084-05702 JEWB & EWBL
				DESIGNATION
				1901931 & 1901932
DESIGNED: ZGC	DRAWN: SRR	INDEX	SURVEY BOOK	SHEETS
			ELECTRONIC	2 of 10
CHECKED: CML	CHECKED: ZGC		CONTRACT	PROJECT
			B-36910	1600808

Plot: 2/17/2020 2:30:18 PM

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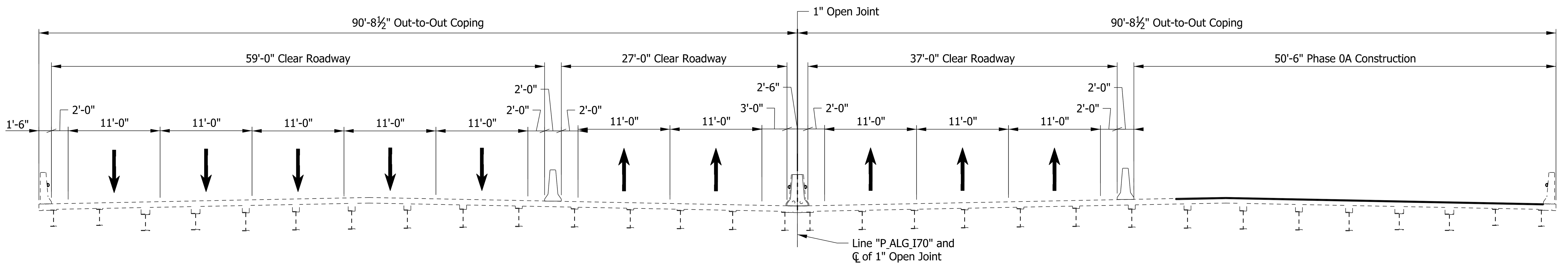

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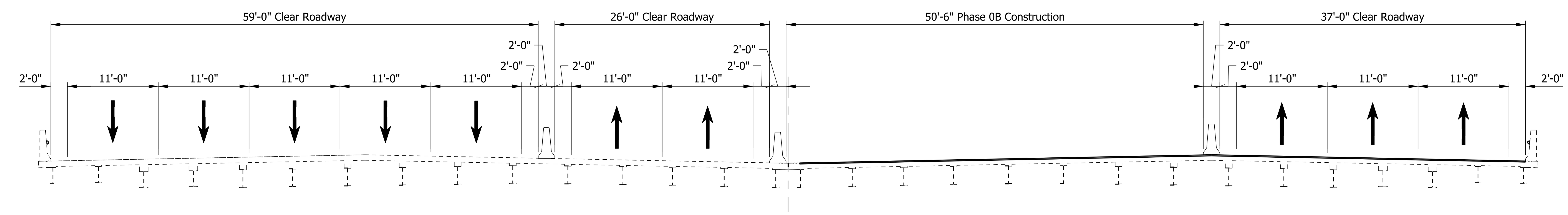

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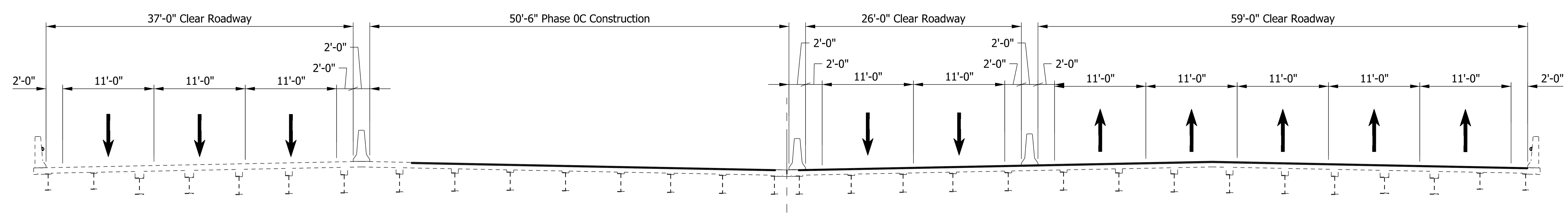

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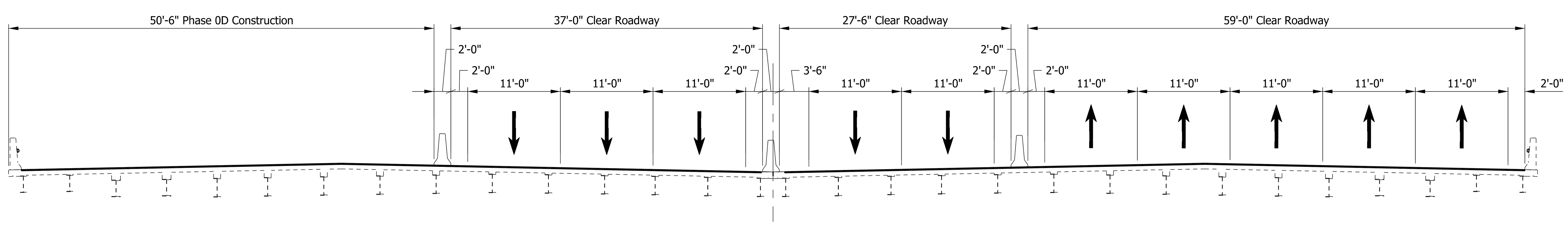


PHASE 0D

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: SRR		
CHECKED: CML	CHECKED: ZGC		

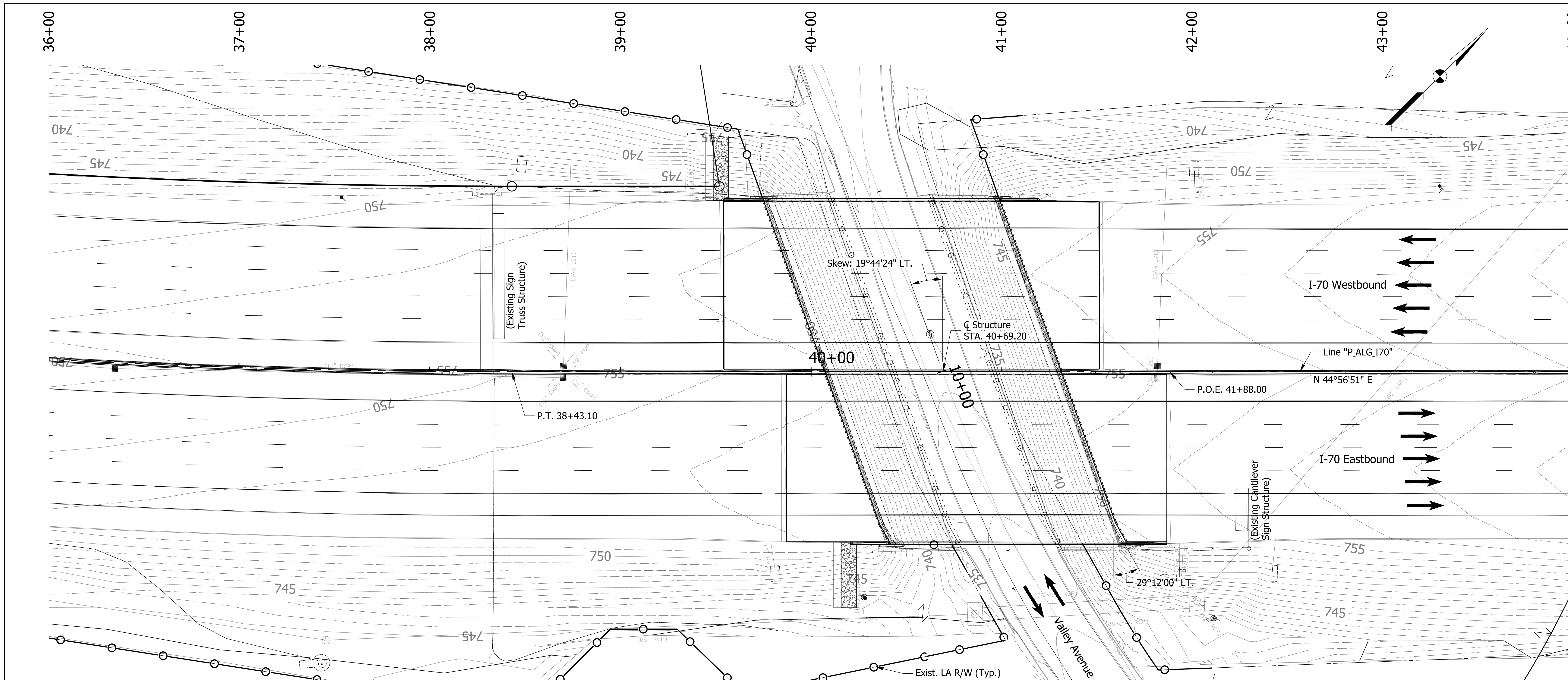
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC

SCALE	BRIDGE FILE
1/8" = 1'-0"	I70-084-05702 JEWB & EWBL
	DESIGNATION
	1901931 & 1901932
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 10
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/17/2020 2:30:20 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 45 & 46 I70 WB & EB over Valley Ave\1901931_03 - MOT.dgn



EXISTING STRUCTURE:

The existing structures were built in 1974 and rehabilitated in 1985, 1986 & 2007. The structures are 3 span continuous composite steel beam bridges, with span lengths of 34'-6", 52'-3", & 34'-6". They each have a clear roadway width of 87'-10½" and a total length of 123'-13¾". The existing structures shall undergo a mill and overlay as shown. Existing plans are on file with the Indiana Department of Transportation under bridge file no. I70-080-05702 CWBL & DEBL.

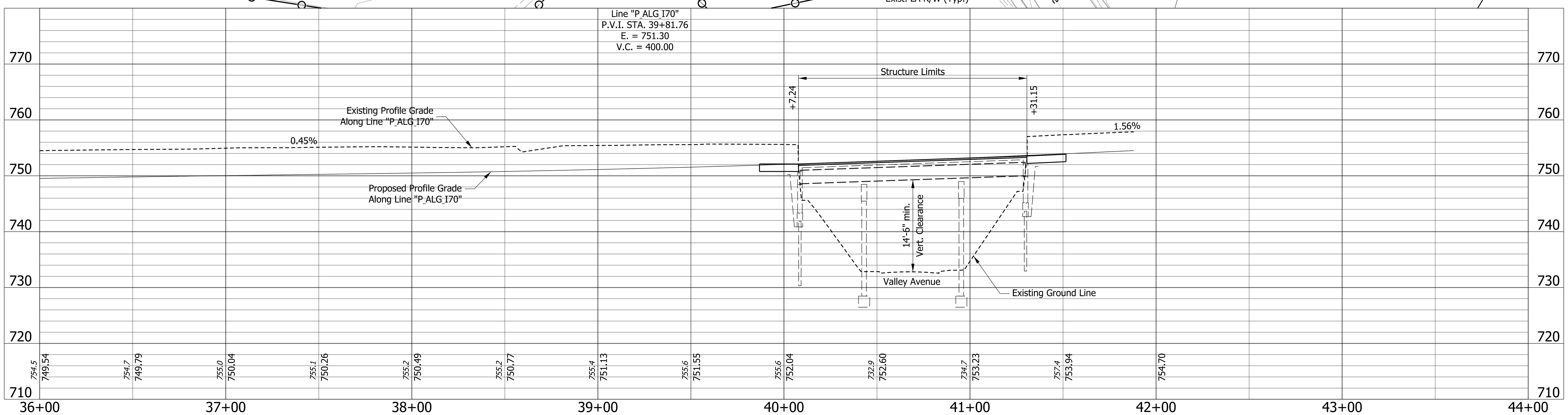
EARTHWORK TABULATION

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: "P_ALG_I70"

P.I STA. = 31+42.52
P.C. STA. = 24+30.65
P.T. STA = 38+43.10
R = 4583.66'
L = 1412.45'
DELTA = 17°39'20" LT.
Dc = 1°15'00"
T = 711.87'



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_I70", except as noted.
6. Proposed lightning, traffic sign structures and drainage not shown and shall be the responsibity of the design-build contractor during final design.

CONTINUOUS COMPOSITE
STEEL BEAM BRIDGE
3 SPAN: 34'-6", 52'-3", 34'-6"
SKEW: 19°44'24" LT.
and 29°12'00" LT.
CLEAR ROADWAY 87'-10½"
I-70 WB AND EB OVER
VALLEY AVENUE
MARION COUNTY

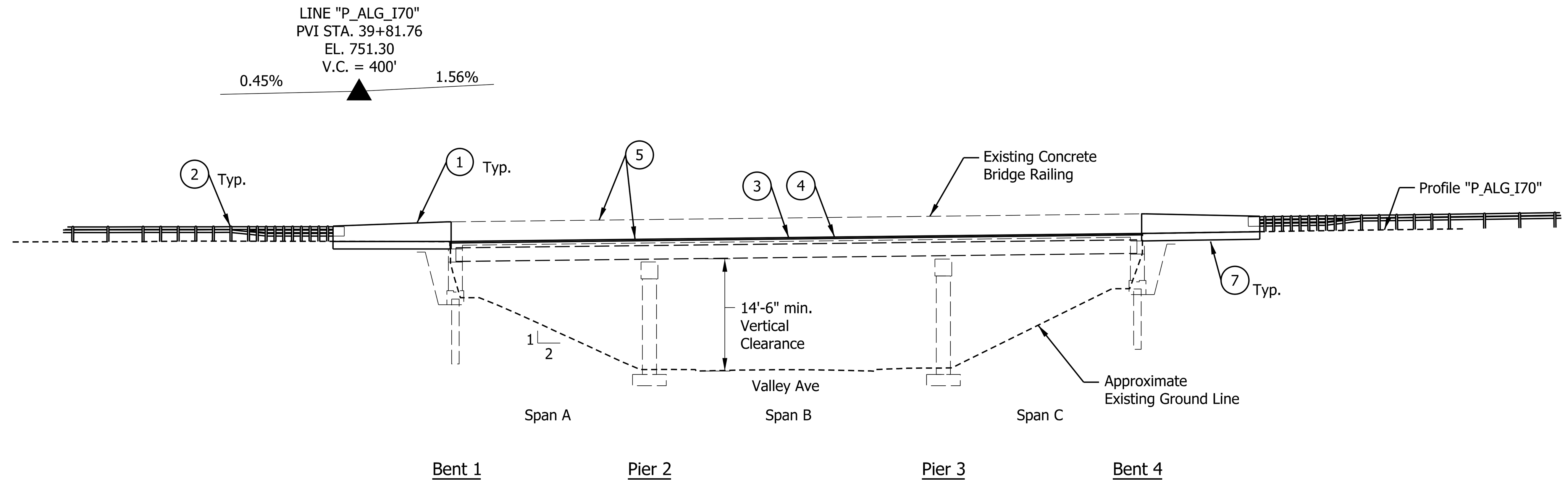
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION
DESIGNED: ZGC	DRAWN: SRR		LAYOUT
CHECKED: CML	CHECKED: ZGC		

SCALE	BRIDGE FILE
1" = 30'-0"	I70-084-05702 JEWB & EWBL
	DESIGNATION
	1901931 & 1901932
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 10
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/17/2020 2:30:27 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 45 & 46 I70 WB & EB over Valley Ave\1901931_04 - Layout.dgn

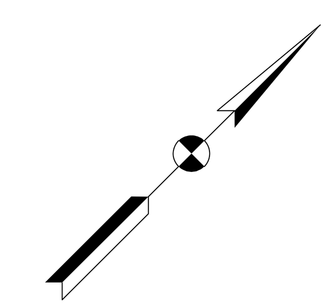
Structure to be built to 400' curve

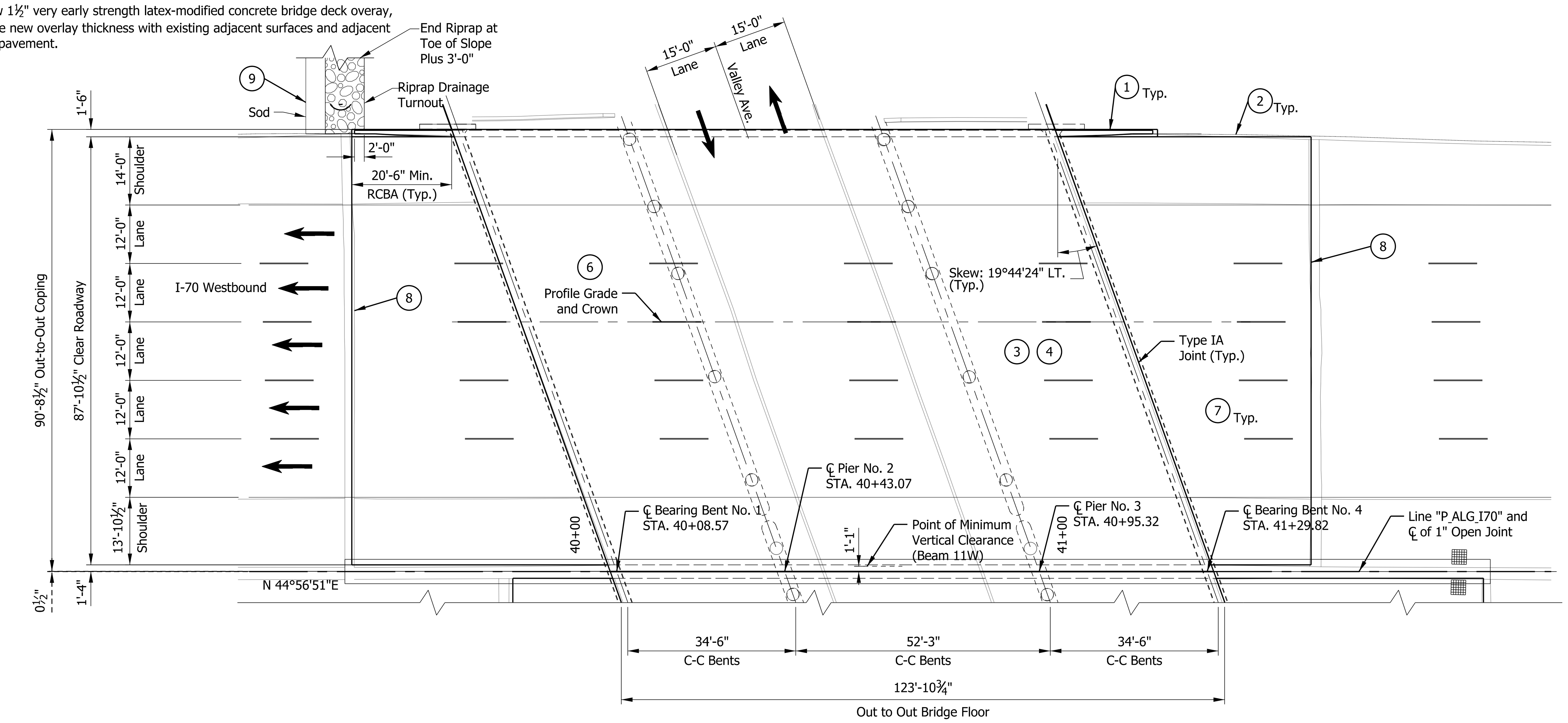


ELEVATION

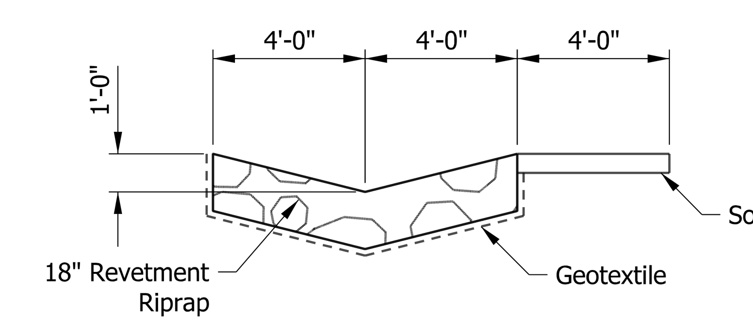
LEGEND

1. Remove existing and construct new concrete barrier transition between existing type FT bridge railing and guardrail transition type TGB, install barrier delineators at 40'-0" max. spacing.
2. Remove and reset existing guardrail, transition type TGB.
3. Surface mill existing deck slab 1½" and perform full and partial depth patching as required.
4. Place new 1½" very early strength latex-modified concrete bridge deck overay, coordinate new overlay thickness with existing adjacent surfaces and adjacent roadway pavement.
5. Surface seal the concrete bridge rail, bridge rail transitions, copings, and approach slabs.
6. Replace pavement markings and snowplowable pavement markers within the project limits.
7. Remove existing approach slabs and construct new 16" reinforced concrete bridge approach slabs.
8. Remove existing terminal joint and construct new polymer modified asphalt terminal joint for PCC Pavement.
9. Remove and Replace Riprap Drainage Turnouts.





PLAN



RIPRAP DRAINAGE TURNOUT
TYPICAL SECTION
Scale: ¼ = 1'-0"

CONTINUOUS COMPOSITE
STEEL BEAM BRIDGE
3 SPAN: 34'-6", 52'-3", 34'-6"
SKEW: 19°44'24" LT
CLEAR ROADWAY 87'-10½"
I-70 WB OVER VALLEY AVENUE
MARION COUNTY

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER ______ DATE

DESIGNED: ZGC | DRAWN: SRR
CHECKED: CML | CHECKED: ZGC

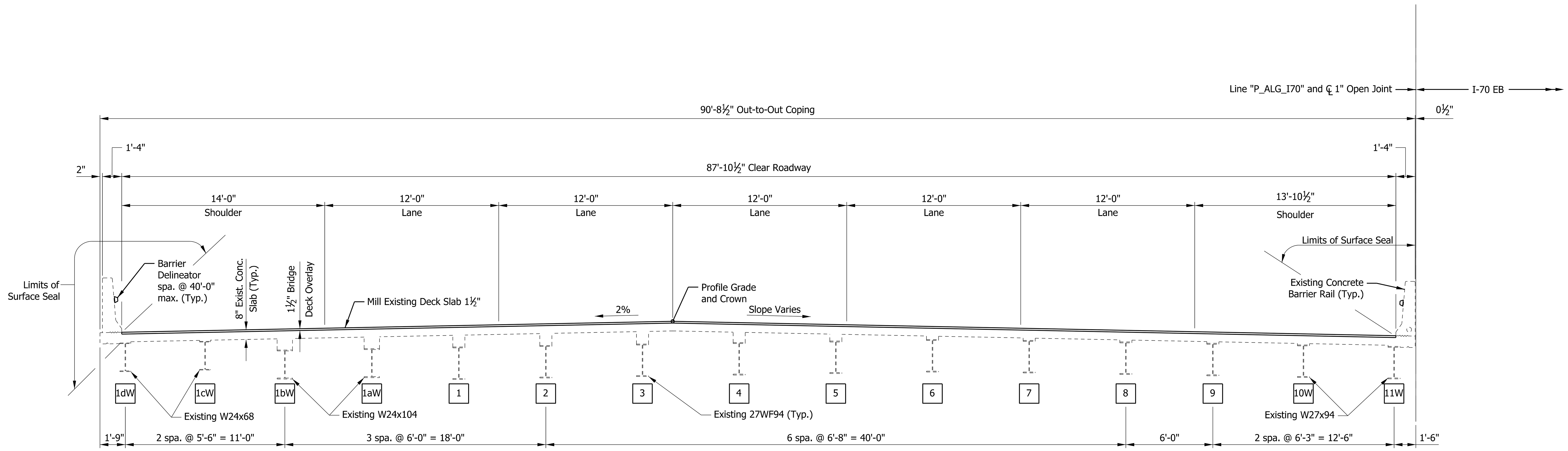
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
WESTBOUND BRIDGE

SCALE	BRIDGE FILE
1/16" = 1'-0"	I70-084-05702 JEWB & EWBL
	DESIGNATION
	1901931 & 1901932
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 10
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/17/2020 2:31:08 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 45 & 46 I70 WB & EB over Valley Ave\1901931_05 - WB General Plan.dgn



TYPICAL SECTION

GENERAL NOTES FOR WESTBOUND AND EASTBOUND

Plans for the existing bridges are on file at the Indiana Department of Transportation as bridge file N o.'s I70-080-5702 CWBL and DEBL

Where new work is to be fitted to old work, the design-build contractor shall check all dimensions and conditions in the field and report all errors or discrepancies to INDOT and assume responsibility for their correctness and fit of the new part to the old.

Existing elevations shown are based on existing plans and the NGBD of 1929 and are for information only. The design-build contractor shall field verify all existing elevations prior to construction.

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

Reinforcing bar cover shall be 2" min. unless noted.

All the exposed faces of the barriers, the face of the deck coping, the underside of the deck from the coping to the face of the exterior beam, and the reinforced concrete bridge approach slabs shall receive surface seal.

All pavement markings disturbed during construction shall be replaced in kind.

Coordinate new overlay thickness with existing adjacent surfaces and adjacent roadway pavement.

DESIGN DATA

LIVE LOAD

Existing bridge was built in 1974 and designed for HS20-44 loading in accordance with 1973 AASHTO standard specifications for highway bridges. Existing bridge checked for special loading of two 24,000 pound axles spaced at 4'-0" centers.

DESIGN STRENGTHS

Class "A" Concrete	f'c = 3,500 psi
Class "B" Concrete	f'c = 3,000 psi
Class "C" Concrete	f'c = 4,000 psi
Reinforcing Bars	fy = 60,000 psi

LEGEND

X Existing Beam Number

CONTINUOUS COMPOSITE
STEEL BEAM BRIDGE
3 SPAN: 34'-6", 52'-3", 34'-6"
SKEW: 19°44'24" LT
CLEAR ROADWAY 87'-10½"
I-70 WB OVER VALLEY AVENUE
MARION COUNTY

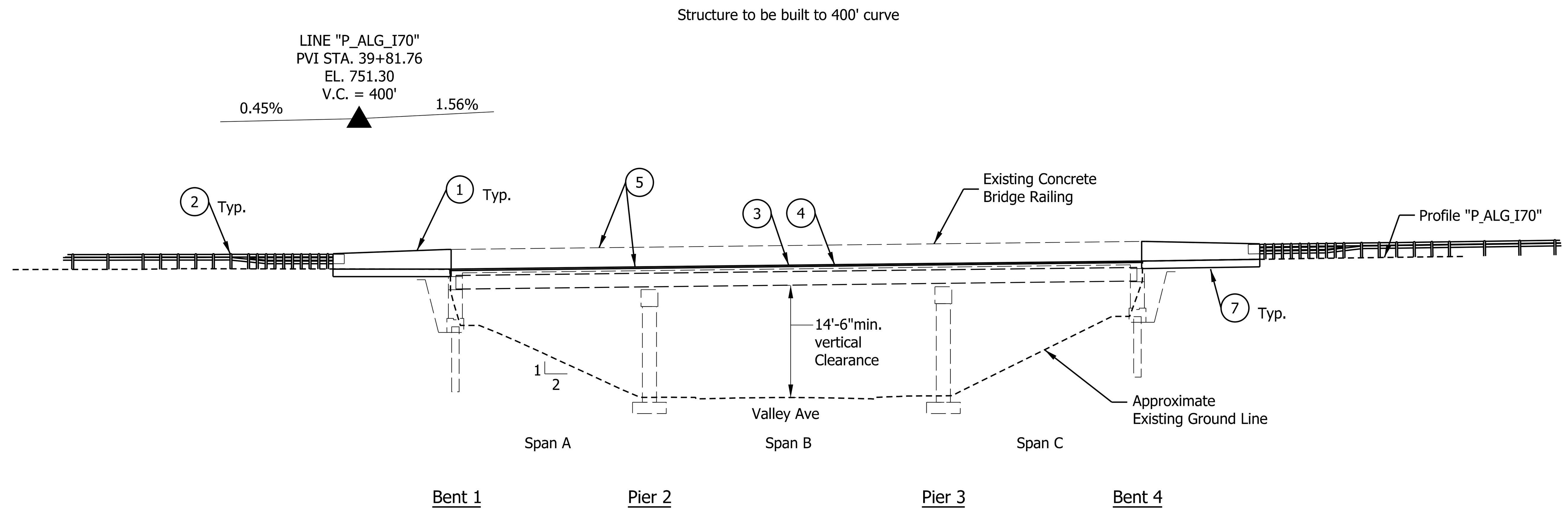
RECOMMENDED FOR APPROVAL ____ DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: SRR
CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
TYPICAL SECTION WESTBOUND BRIDGE

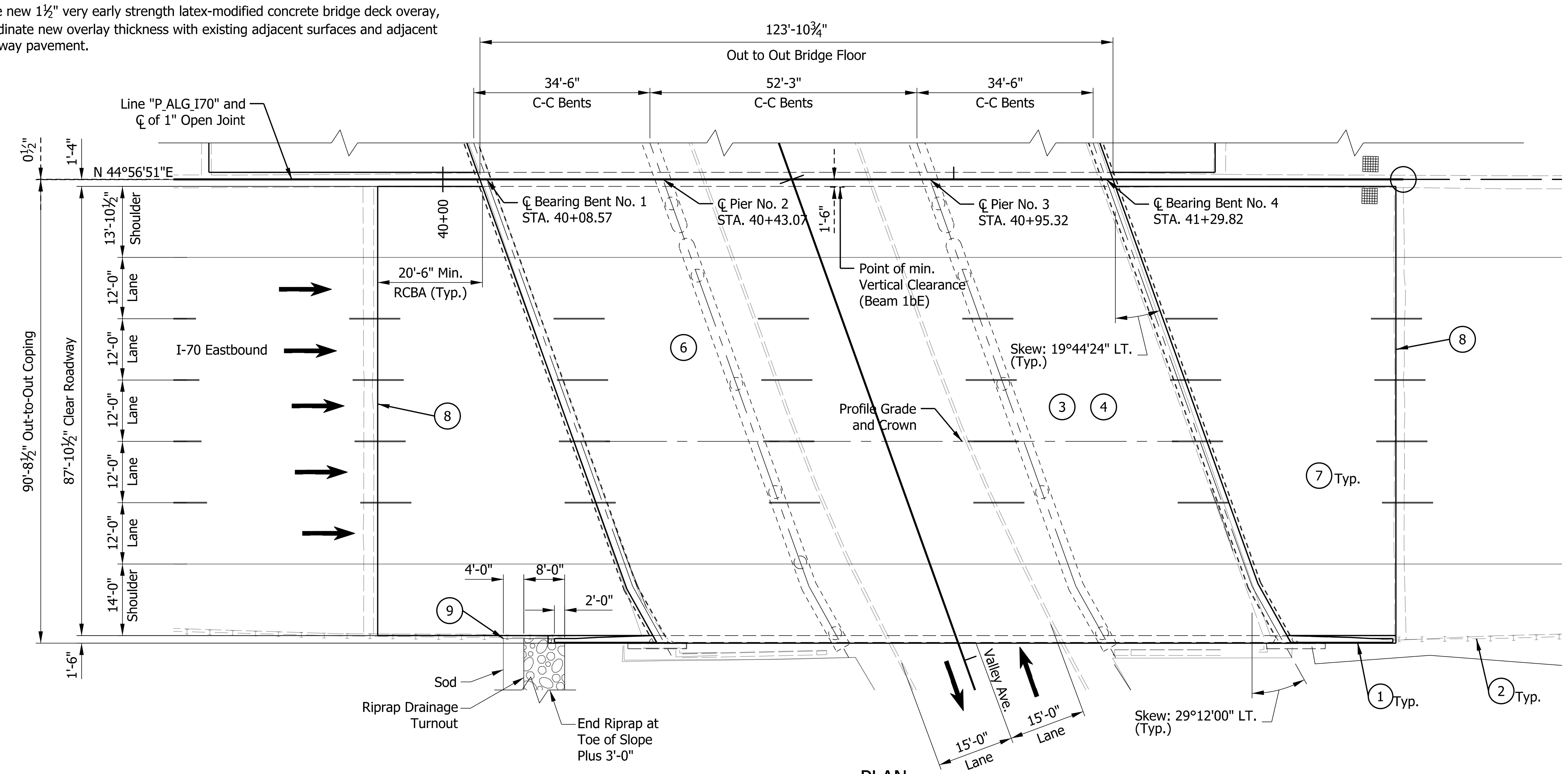
SCALE	BRIDGE FILE
1/4" = 1'-0"	I70-084-05702 JEWB & EWBL
	DESIGNATION
	1901931 & 1901932
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 10
CONTRACT	PROJECT
B-36910	1600808



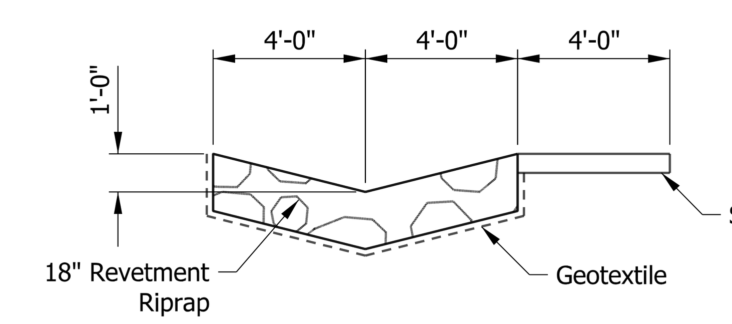
ELEVATION

LEGEND

1. Remove existing and construct new concrete barrier transition between existing type FT bridge railing and guardrail transition type TGB, install barrier delineators at 40'-0" max. spacing.
2. Remove and reset existing guardrail, transition type TGB.
3. Surface mill existing deck slab 1½" and perform full and partial depth patching as required.
4. Place new 1½" very early strength latex-modified concrete bridge deck overay, coordinate new overlay thickness with existing adjacent surfaces and adjacent roadway pavement.
5. Surface seal the concrete bridge rail, bridge rail transitions, copings, and approach slabs.
6. Replace pavement markings and snowplowable pavement markers within the project limits.
7. Remove existing approach slabs and construct new 16" reinforced concrete bridge approach slabs.
8. Remove existing terminal joint and construct new polymer modified asphalt terminal joint for PCC Pavement.
9. Remove and Replace Riprap Drainage Turnout.



PLAN



RIPRAP DRAINAGE TURNOUT TYPICAL SECTION

Scale: ¼ = 1'-0"

CONTINUOUS COMPOSITE
STEEL BEAM BRIDGE
3 SPAN: 34'-6", 52'-3", 34'-6"
SKEW: 19°44'24" LT.
and 29°12'00" LT.
CLEAR ROADWAY 87'-10½"
I-70 EB OVER VALLEY AVENUE
MARION COUNTY

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER		DATE
DESIGNED: ZGC	DRAWN: SRR		
CHECKED: CML	CHECKED: ZGC		

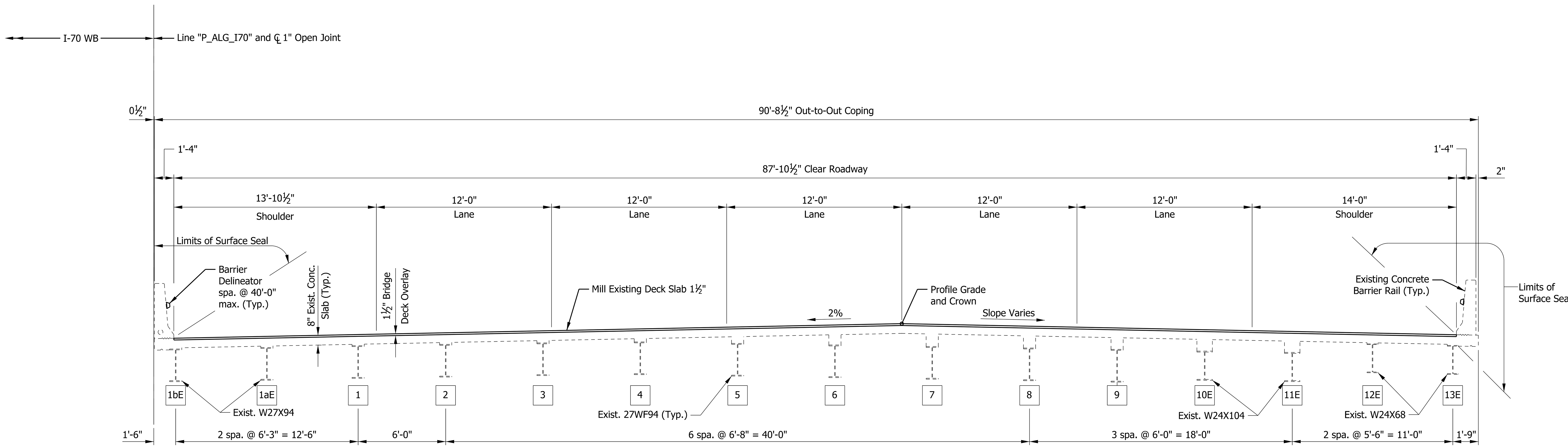
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
EASTBOUND BRIDGE

SCALE	BRIDGE FILE
1/16" = 1'-0"	I70-084-05702 JEWB & EWBL
	DESIGNATION
	1901931 & 1901932
SURVEY BOOK	SHEETS
ELECTRONIC	7 of 10
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/17/2020 2:31:16 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 45 & 46 I70 WB & EB over Valley Ave\1901931_07 - EB General Plan.dgn



TYPICAL SECTION

LEGEND

X	Existing Beam Number

CONTINUOUS COMPOSITE
STEEL BEAM BRIDGE
3 SPAN: 34'-6", 52'-3", 34'-6"
SKEW: 19°44'24" LT.
and 29°12'00" LT.
CLEAR ROADWAY 87'-10½"
I-70 EB OVER VALLEY AVENUE
MARION COUNTY

RECOMMENDED FOR APPROVAL ____ DESIGN ENGINEER ____ DATE

DESIGNED: ZGC | DRAWN: SRR
CHECKED: CML | CHECKED: ZGC

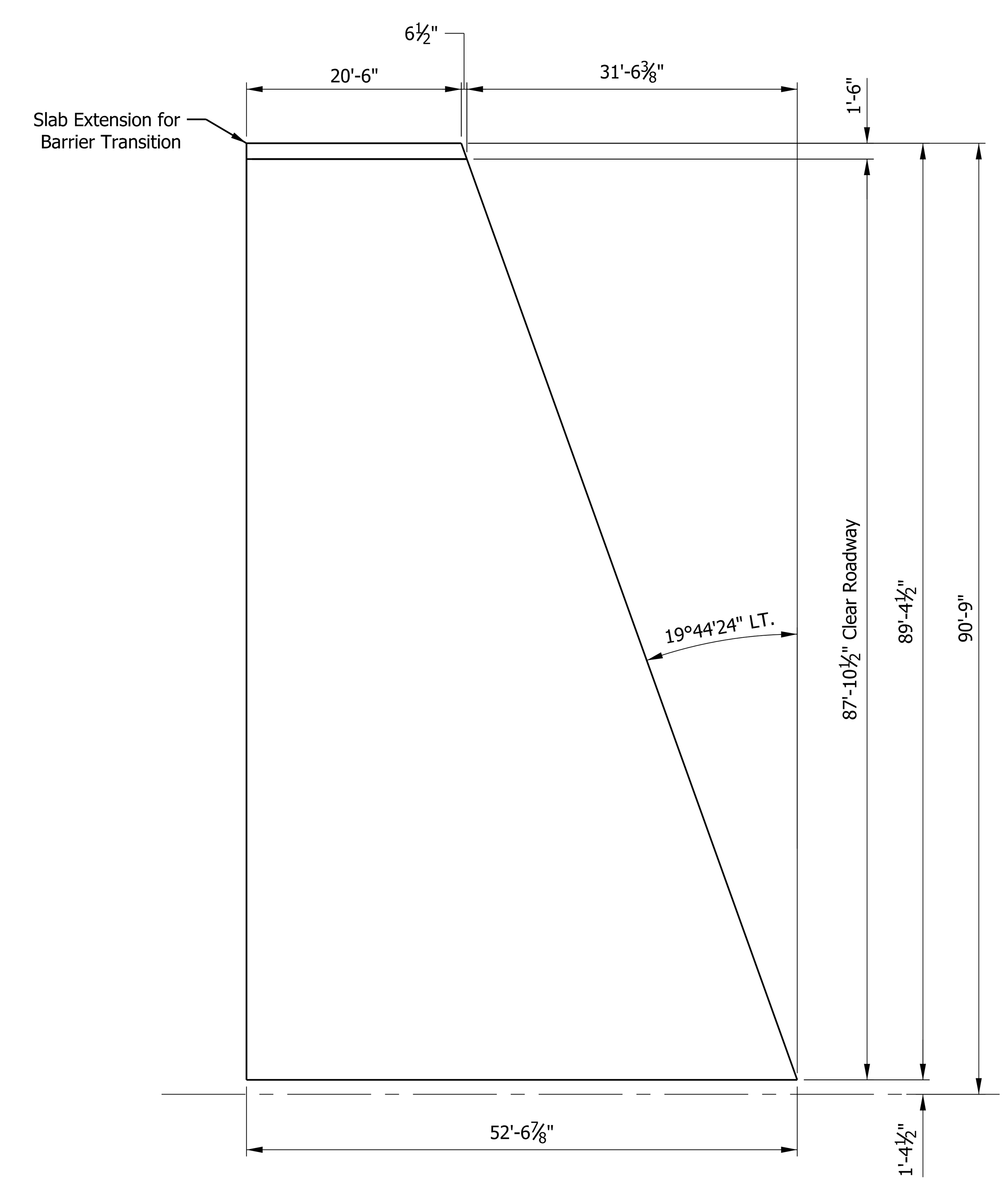
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
TYPICAL SECTION EASTBOUND BRIDGE

SCALE	BRIDGE FILE
1/4" = 1'-0"	I70-084-05702 JEWB & EWBL
	DESIGNATION
	1901931 & 1901932
SURVEY BOOK	SHEETS
ELECTRONIC	8 of 10
CONTRACT	PROJECT
B-36910	1600808

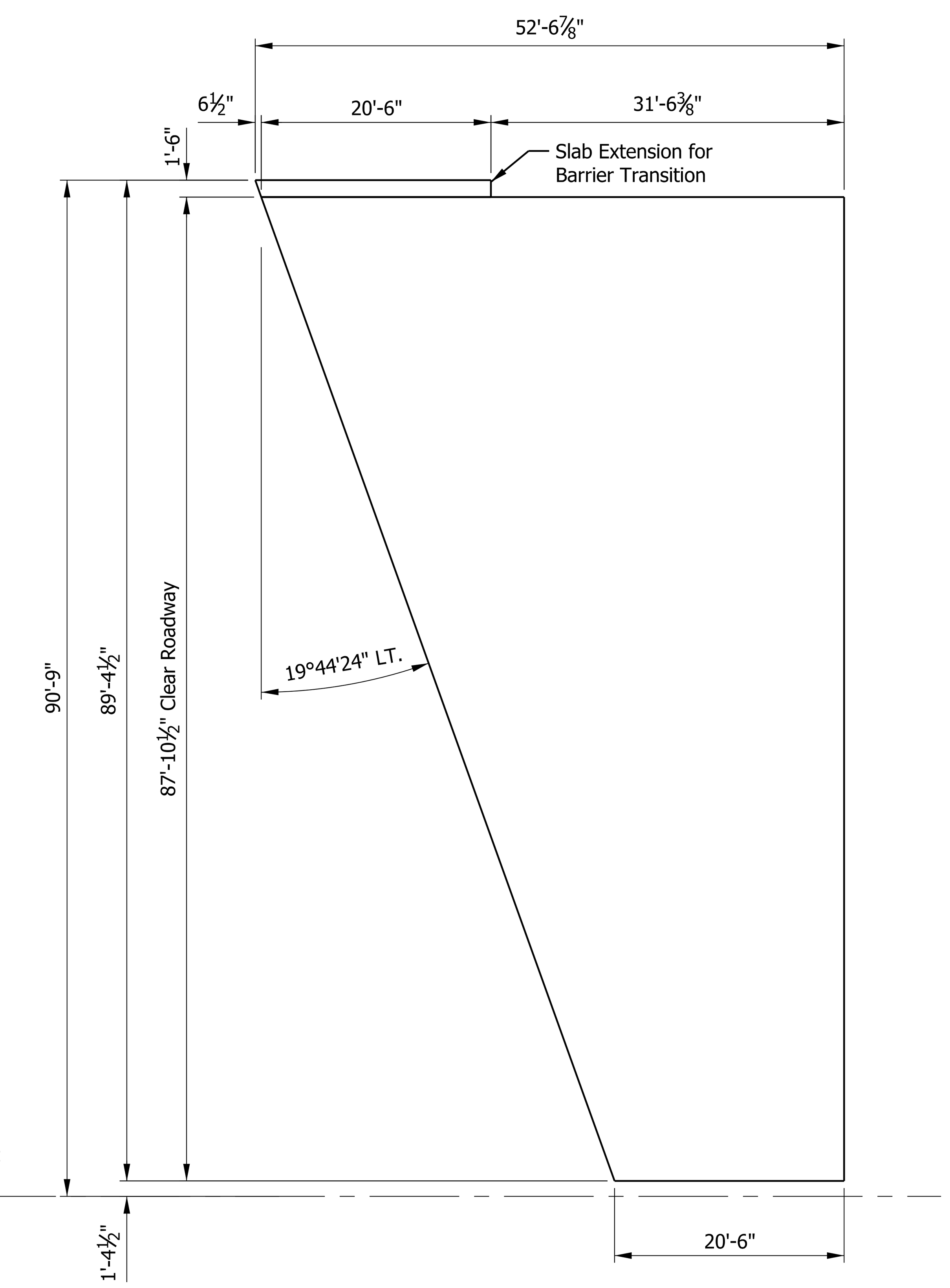
Plot: 2/17/2020 2:31:18 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 45 & 46 I70 WB & EB over Valley Ave\1901931_08 - EB Typical Section.dgn



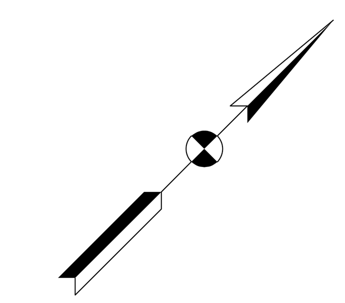
APPROACH SLAB AT ENDBENT NO. 1

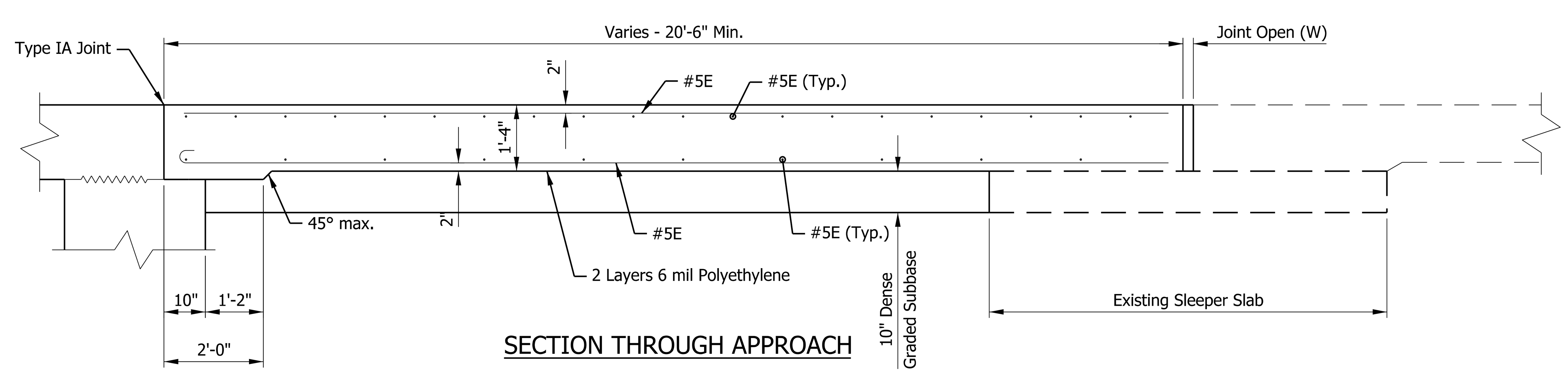
Scale: 3/32" = 1'-0"



APPROACH SLAB AT END BENT NO. 4

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





SECTION THROUGH APPROACH

Scale: ½" = 1'-0"

NOTE:

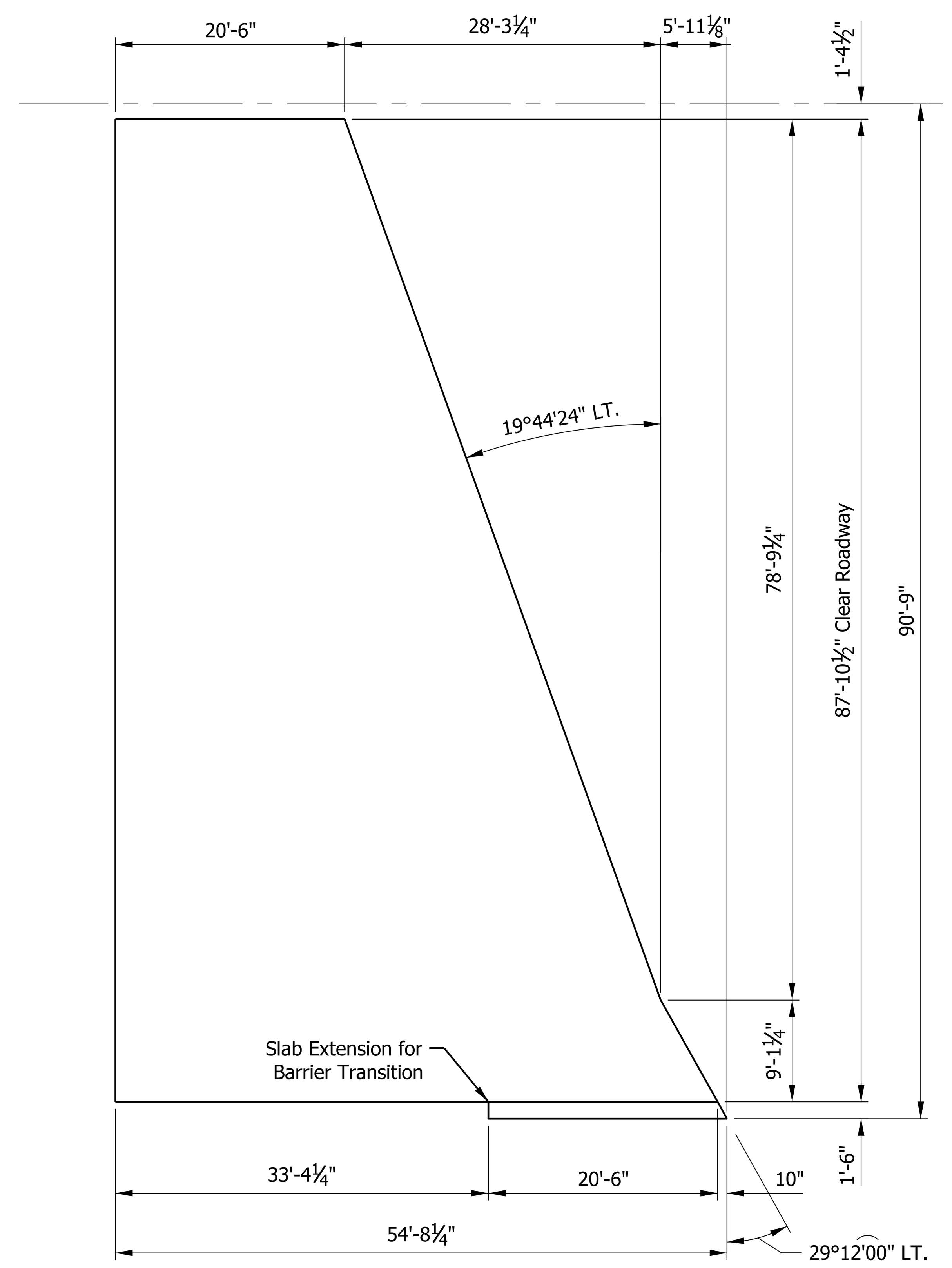
For additional Terminal Joint information, see USP. Terminal Joint Details: Type CRCP

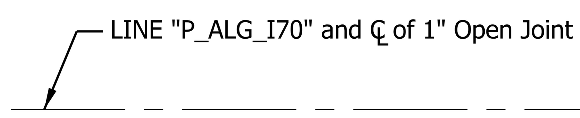
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION
DESIGNED: ZGC	DRAWN: SRR		APPROACH SLAB DETAILS WESTBOUND BRIDGE
CHECKED: CML	CHECKED: ZGC		

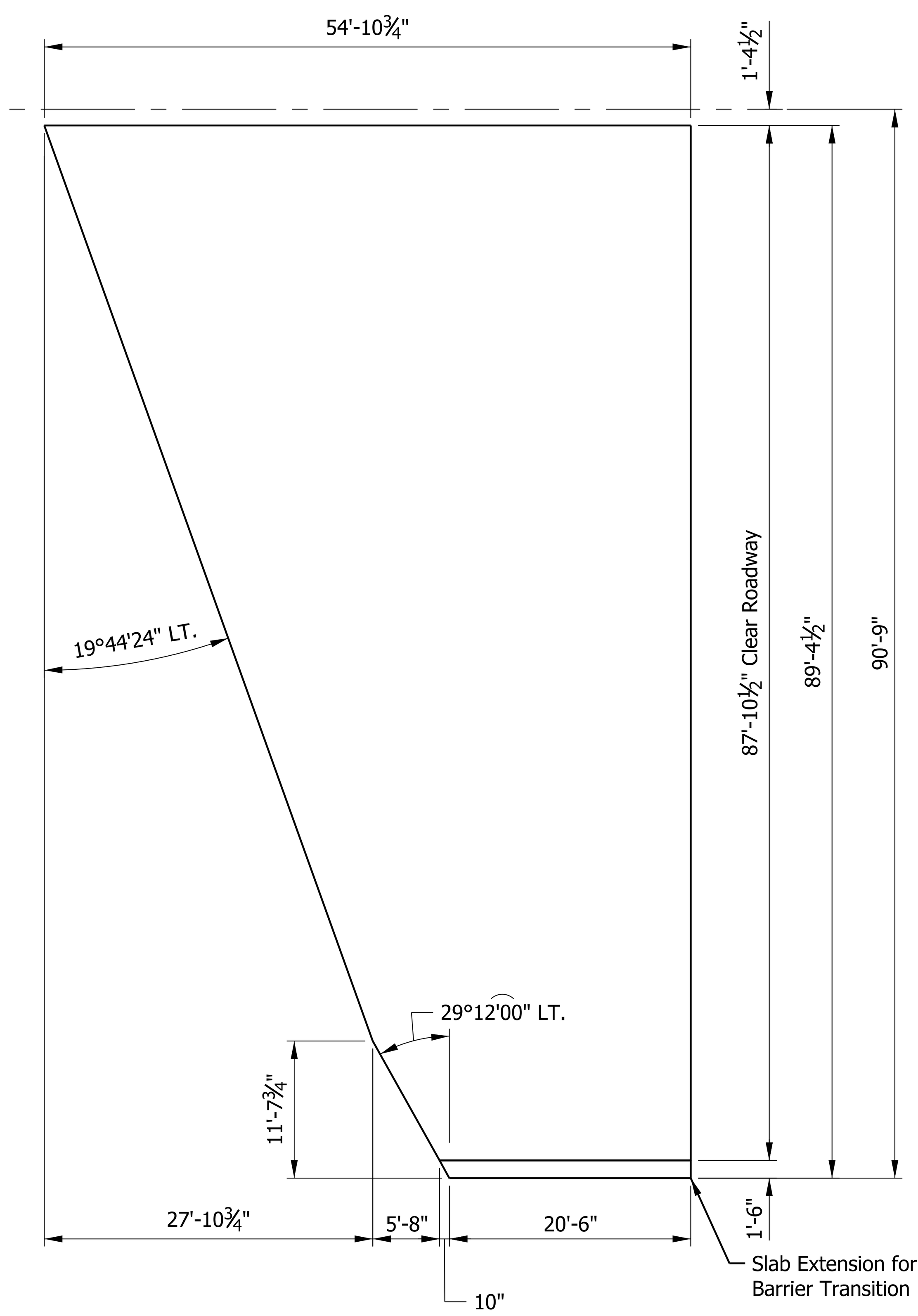
SCALE	BRIDGE FILE
AS NOTED	I70-084-05702 JEWB & EWBL
	DESIGNATION
	1901931 & 1901932
SURVEY BOOK	SHEETS
ELECTRONIC	9 of 10
CONTRACT	PROJECT
B-36910	1600808

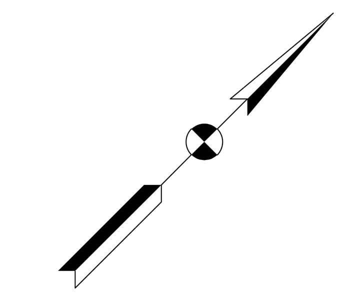
Plot: 2/17/2020 2:31:20 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 45 & 46 I70 WB & EB over Valley Ave\1901931_09 - WB Approach Slab Details.dgn







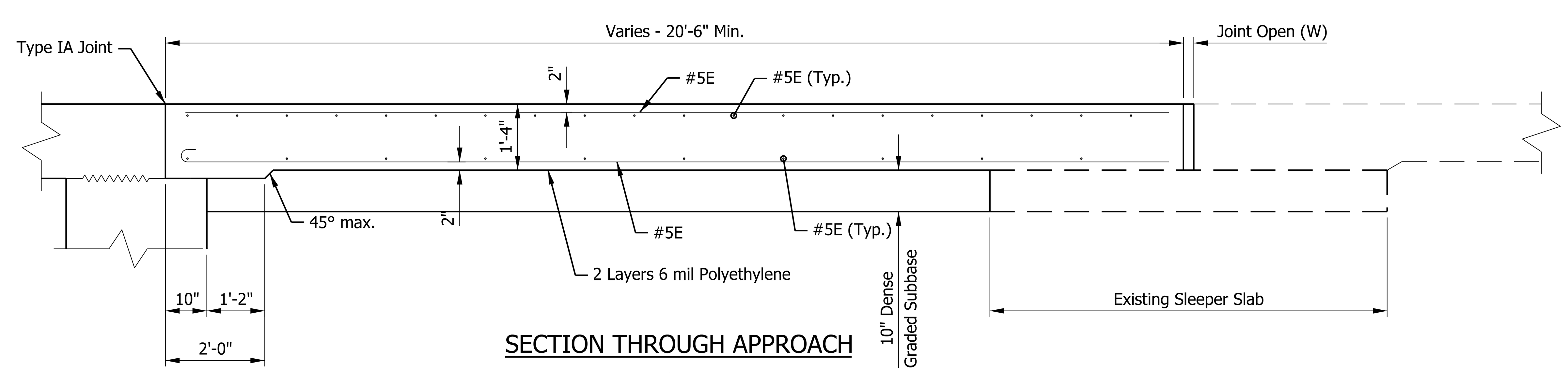


APPROACH SLAB AT END BENT NO. 1

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

APPROACH SLAB AT END BENT NO. 4

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



SECTION THROUGH APPROACH

Scale: ½" = 1'-0"

NOTE:

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

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION
DESIGNED: ZGC	DRAWN: SRR		APPROACH SLAB DETAILS EASTBOUND BRIDGE
CHECKED: CML	CHECKED: ZGC		

SCALE	BRIDGE FILE		
AS NOTED	I70-084-05702 JEWB & EWBL		
	DESIGNATION		
	1901931 & 1901932		
SURVEY BOOK	SHEETS		
ELECTRONIC	10	of	10
CONTRACT	PROJECT		
B-36910	1600808		

Plot: 2/17/2020 2:31:22 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 45 & 46 I70 WB & EB over Valley Ave\1901931_10 - EB Approach Slab Details.dgn

PROJECT	DESIGNATION
1600808	1901933
CONTRACT	BRIDGE FILE
B-36910	I65-112-02419 DWBL

INDIANA DEPARTMENT OF TRANSPORTATION

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I65-112-02419 DWBL	CONTINUOUS COMPOSITE STEEL BEAM BRIDGE	I-65 NB TO 12TH ST. CD: 10 SPANS SKEW: 2°16'50" LT.	DELAWARE STREET AND ALABAMA STREET	22+15.51

TRAFFIC DATA	I-65 NB to 12th St CD	DELAWARE ST	ALABAMA ST
A.A.D.T. (2021)	8,777 V.P.D.	12,529 V.P.D.	2,009 V.P.D.
A.A.D.T. (2041)	9,854 V.P.D.	13,757 V.P.D.	3,145 V.P.D.
D.H.V (2041)	1,281 (AM) V.P.H.	1,875 V.P.H.	364 V.P.H.
DIRECTIONAL DISTRIBUTION	100 %	100 %	43 %
TRUCKS	2 % D.H.V.	1 % D.H.V.	2 % D.H.V.
DESIGN DATA			
DESIGN SPEED	45 M.P.H./25 M.P.H.	35 M.P.H.	30 M.P.H.
PROJECT DESIGN CRITERIA	RECONSTRUCTION (4R)	N/A	N/A
FUNCTIONAL CLASSIFICATION	URBAN FREEWAY	MINOR ARTERIAL	MINOR ARTERIAL
RURAL/URBAN	URBAN	URBAN (BUILT-UP)	URBAN (BUILT-UP)
TERRAIN	LEVEL	LEVEL	LEVEL
ACCESS CONTROL	FULL	NONE	NONE

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	
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	
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	

BRIDGE REHABILITATION PLANS

FOR SPANS OVER 20 FEET

ROUTE: I-65 AT: RP 113+24

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

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

BRIDGE REHABILITATION, WIDENING AND OVERLAY ON I-65 NORTHBOUND RAMP TO 12TH STREET OVER ALABAMA STREET AND DELAWARE STREET LOCATED APPROX. 0.75 MILES WEST OF I-70 INTERCHANGE IN SECTIONS 35 & 36, T-16-N, R-3-E, CENTER TOWNSHIP, MARION COUNTY, INDIANA

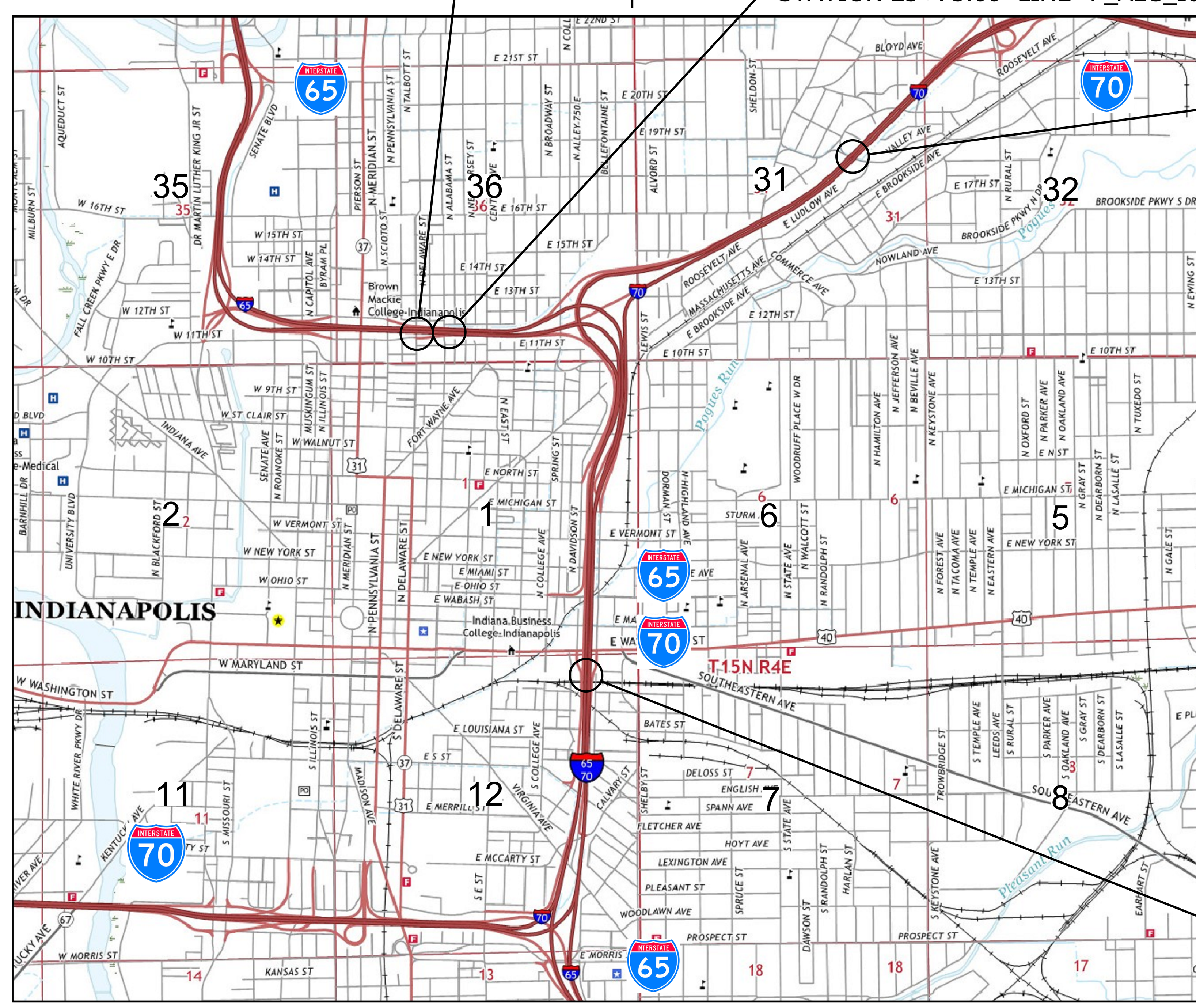
BRIDGE FILE NO. I65-112-02419 DWBL & DEBL
I-65 OVER DELAWARE STREET AND ALABAMA STREET

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

R-3-E R-4-E

END CONSTRUCTION PROJECT NO. 1600808
STATION 43+87.40 LINE "P_ALG_I70"

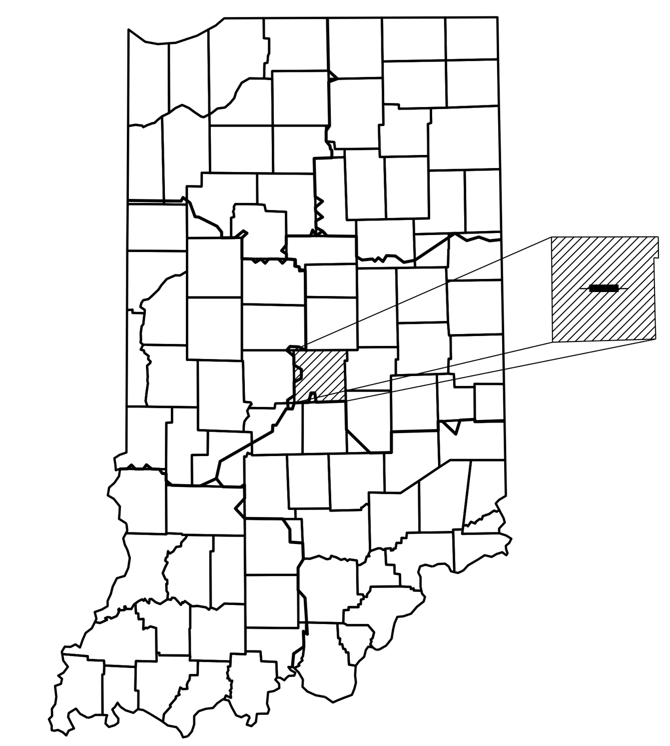
T-16-N T-15-N



SCALE: 1" = 2000'

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

LOCATION MAP
(MARION COUNTY)



PROJECT LOCATION SHOWN BY ━ MARION COUNTY

LATITUDE: 39°46'58"N LONGITUDE: 86°09'29"W

HYDROLOGIC UNIT CODE: 05120201130020

BRIDGE LENGTH:	0.664	MI.
ROADWAY LENGTH:	SEE ROAD PLANS	MI.
TOTAL LENGTH:	SEE ROAD PLANS	MI.
MAX. GRADE:	-5.63	%

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

DATE

APPROVED FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE		
I65-112-02419 DWBL		
DESIGNATION		
1901933		
SURVEY BOOK	SHEETS	
ELECTRONIC	1 of	24
CONTRACT	PROJECT	
B-36910	1600808	

Plot: 2/21/2020 1:37:53 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 47 I65 WB over Alabama St\1901933_01 - Title - B47.dgn

UTILITIES

INDEX

SHEET NO.	SUBJECT
1	TITLE
2	INDEX
3	MAINTAINANCE OF TRAFFIC 12TH ST. CD
4	LAYOUT
5	GENERAL PLAN SHEET 1 OF 3
6	GENERAL PLAN SHEET 2 OF 3
7	GENERAL PLAN SHEET 3 OF 3
8	SUPERSTRUCTURE REMOVAL DETAILS
9	BENT NO.46 REMOVAL DETAILS
10	BENT NO.46 RECONSTRUCTION DETAILS
11	BENT NO.45 DETAILS
12	BENT NO.44 DETAILS
13	BENT NO.43 DETAILS
14	BENT NO.42 DETAILS
15	BENT NO.41 DETAILS
16	FRAMING PLAN SHEET 1 OF 2
17	FRAMING PLAN SHEET 2 OF 2
18	BEAM DETAILS SHEET 1 OF 3
19	BEAM DETAILS SHEET 2 OF 3
20	BEAM DETAILS SHEET 3 OF 3
21	SUPERSTRUCTURE DETAILS SHEET 1 OF 3
22	SUPERSTRUCTURE DETAILS SHEET 2 OF 3
23	SUPERSTRUCTURE DETAILS SHEET 3 OF 3
24	APPROACH SLAB DETAILS

REVISIONS

SHEET NO.	DATE	REVISED

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

Plot: 2/21/2020 1:37:56 PM

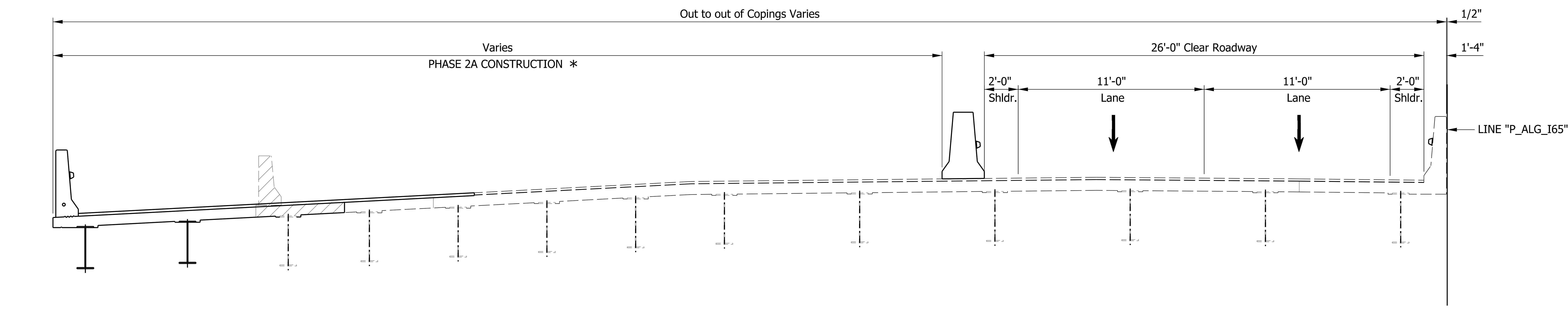
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER		DATE
DESIGNED: ZGC	DRAWN: TLH		
CHECKED: CML	CHECKED: CML		

INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX

HORIZONTAL SCALE	BRIDGE FILE
NA	I65-112-02419 DWBL
VERTICAL SCALE	DESIGNATION
NA	1901933
SURVEY BOOK	SHEETS
ELECTRONIC	2 of 24
CONTRACT	PROJECT
B-36910	1600808

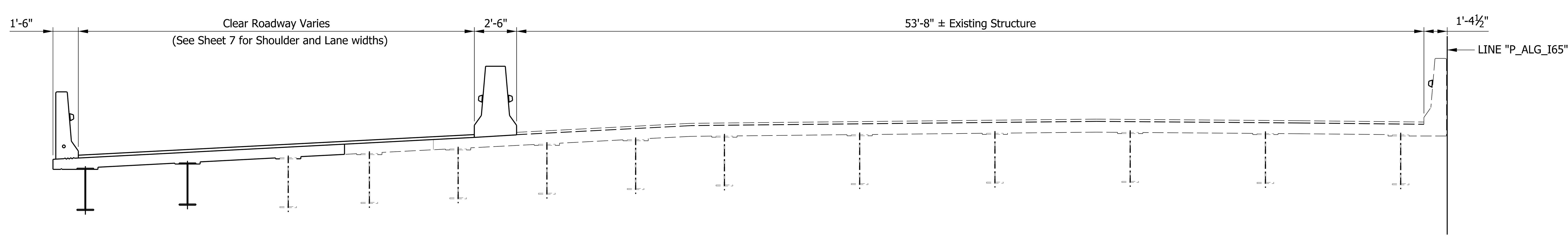
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 47 I65 WB over Alabama St\1901933_02 - Index.dgn



TYPICAL SECTION OF WB I-65 AND RAMP STRUCTURE - PHASE 2A

AT UNIT M
LOOKING BACKSTATION

* Substructure built in Phase 1



TYPICAL SECTION OF WB I-65 AND RAMP STRUCTURE

AT UNIT M
LOOKING BACKSTATION

LEGEND

Approximate Limits of Removal

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER ______ DATE

DESIGNED: CBS | DRAWN: TLH
CHECKED: CML | CHECKED: CBS

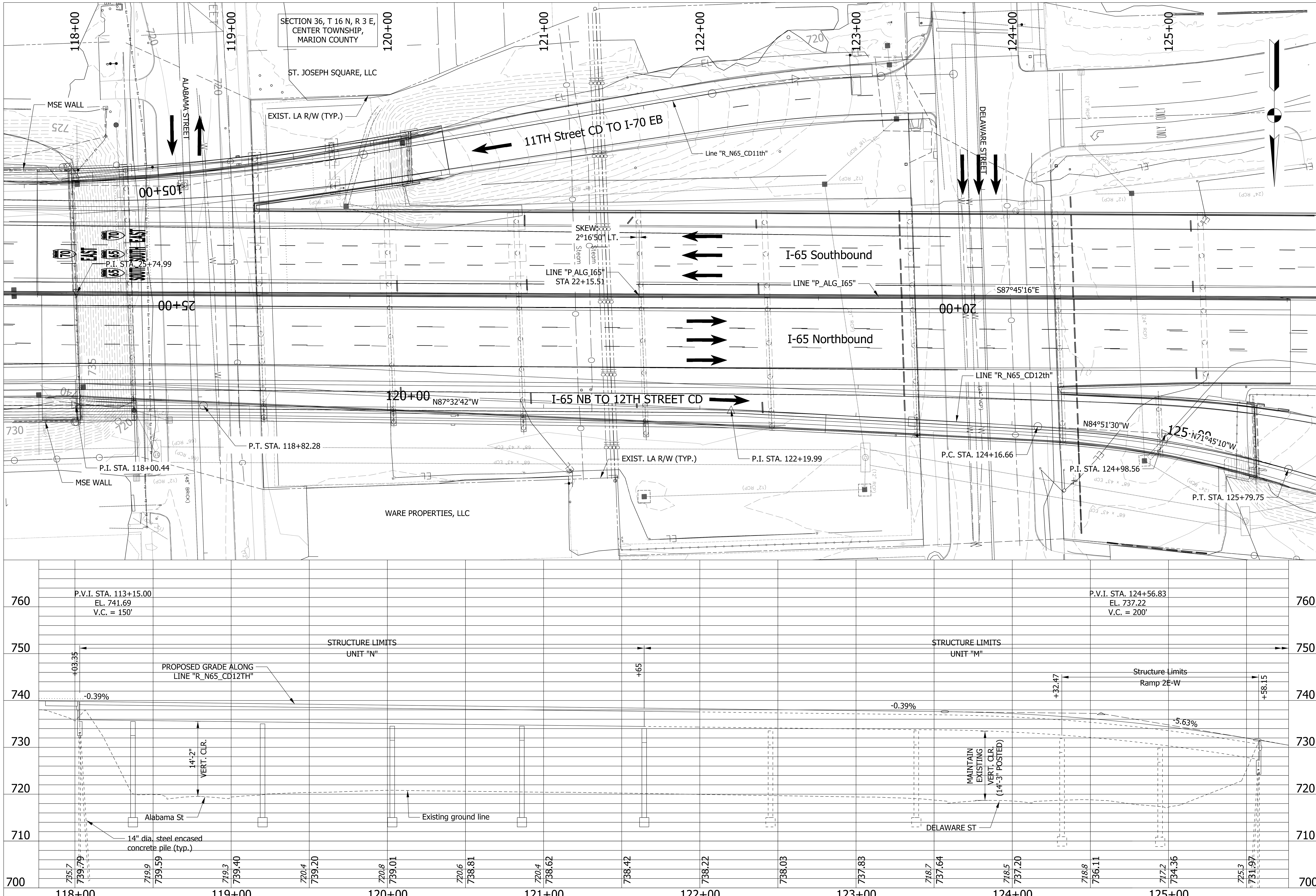
INDIANA
DEPARTMENT OF TRANSPORTATION

TRAFFIC MAINTENANCE

SCALE	BRIDGE FILE
1/16" = 1'-0"	I65-112-02419 DWBL
	DESIGNATION
	1901933
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 24
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/21/2023 8:03 PM AM_PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 47 I65 WB over Alabama St\1901933_03 - Traffic Maintenance - 47.dgn



EXISTING STRUCTURE:

The existing structure was built in 1972. units M and N and Ramp 2E-W of the Structure is a 10 span Continuous Composite Steel Beam Bridge, with a varying clear roadway width. the existing structure shall be widened as shown.

Existing plans are on file with the Indiana Department of Transportation under bridge File No. I65-112-02419C.

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_CD12TH"

PI = 118+00.44
Delta = 1°09'08"Rt.
R = 8140.00 ft.
T = 81.84 ft.
L = 163.68 ft.
E = 0.41 ft.

PI = 122+19.99
Delta = 2°41'12"Rt.

PI = 124+98.56
Delta = 13°06'21"Rt.
R = 713.00 ft.
T = 81.90 ft.
L = 163.09 ft.
E = 4.69 ft.

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 "R_N65_CD12TH", except as noted.

CONTINUOUS COMPOSITE
STEEL BEAM BRIDGE
UNIT N 5 SPANS: 34'-0",83'-0",
83'-0",83'-0",77'-6"
SKEW: 2°16'50" LT.
CLEAR ROADWAY: VARIES
I-65 NB TO 12TH ST CD RAMP OVER
ALABAMA ST & DELAWARE ST
MARION COUNTY

RECOMMENDED FOR APPROVAL		DESIGN ENGINEER	DATE
DESIGNED: ZGC		DRAWN: TLH	
CHECKED: CML		CHECKED: CML	

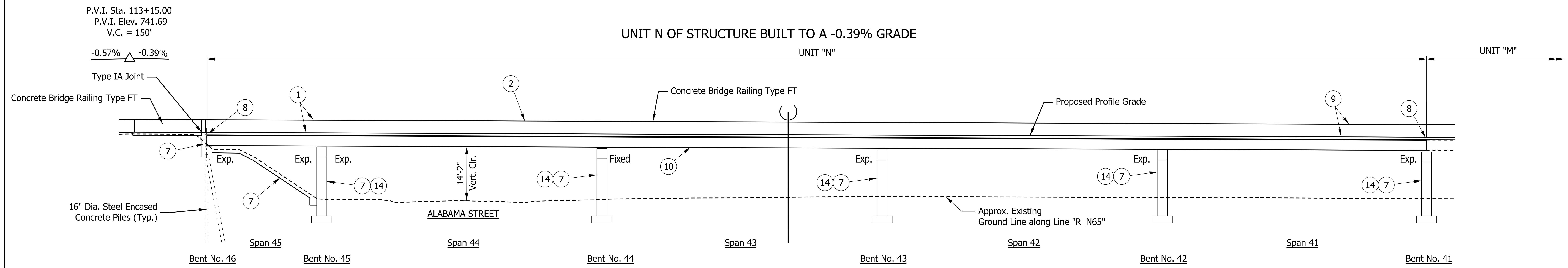
INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1"=30'-0"	I65-112-02419 DWBL
VERTICAL SCALE	DESIGNATION
1"=10'-0"	1901933
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 24
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/21/2020 1:38:14 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 47 I65 WB over Alabama St\1901933_04 - Layout - 47.dgn



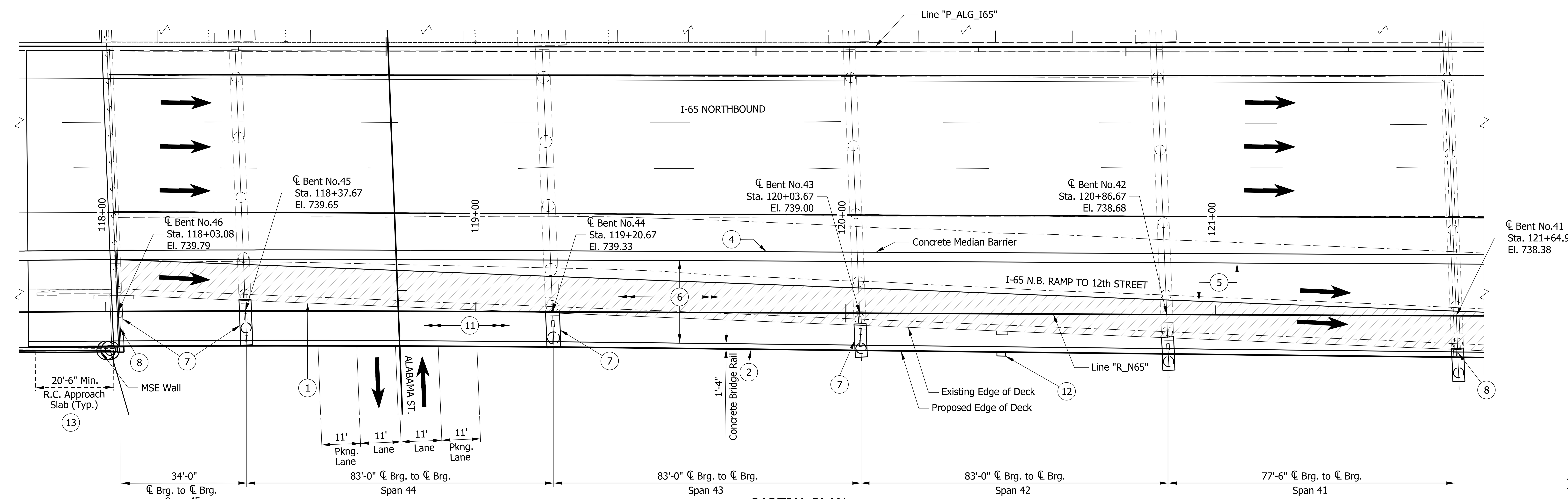
PARTIAL ELEVATION

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

LEGEND

1. Remove portion of northern edge of existing bridge deck including bridge railing. Widen existing superstructure with new steel beams. Construct new portion of 7¼" concrete deck, match existing cross slope. Limits of existing deck removal and proposed longitudinal and transverse joints shall be determined by the design-build contrator in accordance with the techincal provisions.
2. Construct new Type FT concrete bridge railing. Install barrier delineators at 40'-0" max. spacing.
3. Construct a concrete barrier transition between new Type FT bridge railing and existing concrete bridge railing. Install barrier delineators at 40'-0" max. spacing.
4. Construct a concrete barrier anchored to bridge deck between 12th st CD Ramp and I-65 NB Mainline. Install barrier delineators at 40'-0" max. spacing.
5. Remove existing bridge deck overlay from remaining portions of existing deck slab within limits of proposed concrete traffic barrier anchored to deck. Surface mill existing deck slab ¼" and perform full and partial depth patching as required.
6. Place new very early strength latex modified concrete bridge deck overlay between barriers. Coordinate new overlay thickness with existing adjacent surfaces and new adjacent roadway pavement.
7. Widen existing end bent, slopewalls, and piers in-kind. Replace drains and downspouts and clean and paint existing pipes to remain.
8. Extend the existing modular expansion joint through the widened portion of the deck.
9. Surface seal the concrete bridge rail, bridge rail transitions, bridge deck, and copings.
10. Paint the new steel beams used for widening in accordance with the project standards.
11. Replace pavement markings an snowplowable pavement markers within the project limits.
12. Remove and replace light pole and blister.
13. Remove existing approach slabs and construct new 13" reinforced concrete bridge approach slabs.
13. Substructure patching as required.

APPROXIMATE REMOVAL LIMITS.



PARTIAL PLAN

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

CONTINUOUS COMPOSITE
STEEL BEAM BRIDGE
UNIT N 5 SPANS: 34'-0",83'-0",
83'-0",83'-0",77'-6"
SKEW: 2°16'50" LT.
CLEAR ROADWAY: VARIES
I-65 NB TO 12TH ST CD RAMP OVER
ALABAMA ST & DELAWARE ST
MARION COUNTY

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER		DATE
DESIGNED: ZGC		DRAWN: TLH	
CHECKED: CML		CHECKED: CML	

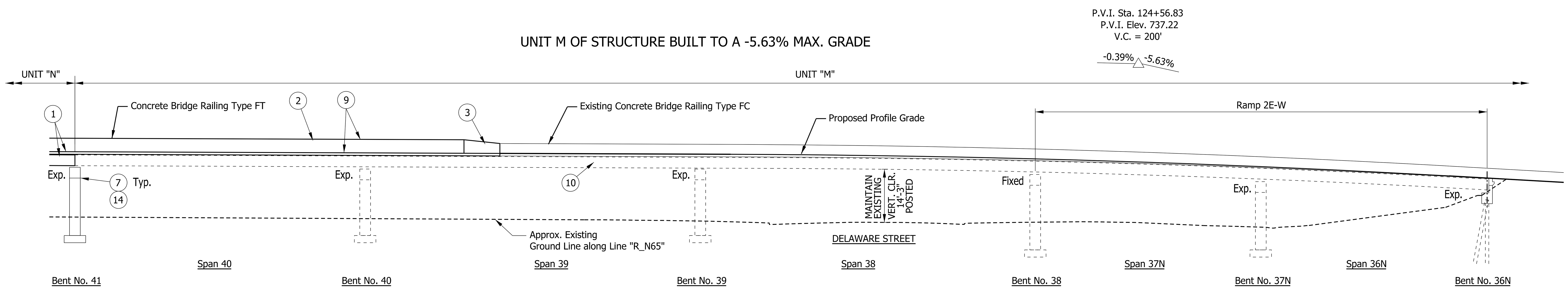
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
SHEET 1 0F 3

SCALE	BRIDGE FILE
1/16" = 1'-0"	I65-112-02419 DWBL
	DESIGNATION
	1901933
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 24
CONTRACT	PROJECT
B-36910	1600808

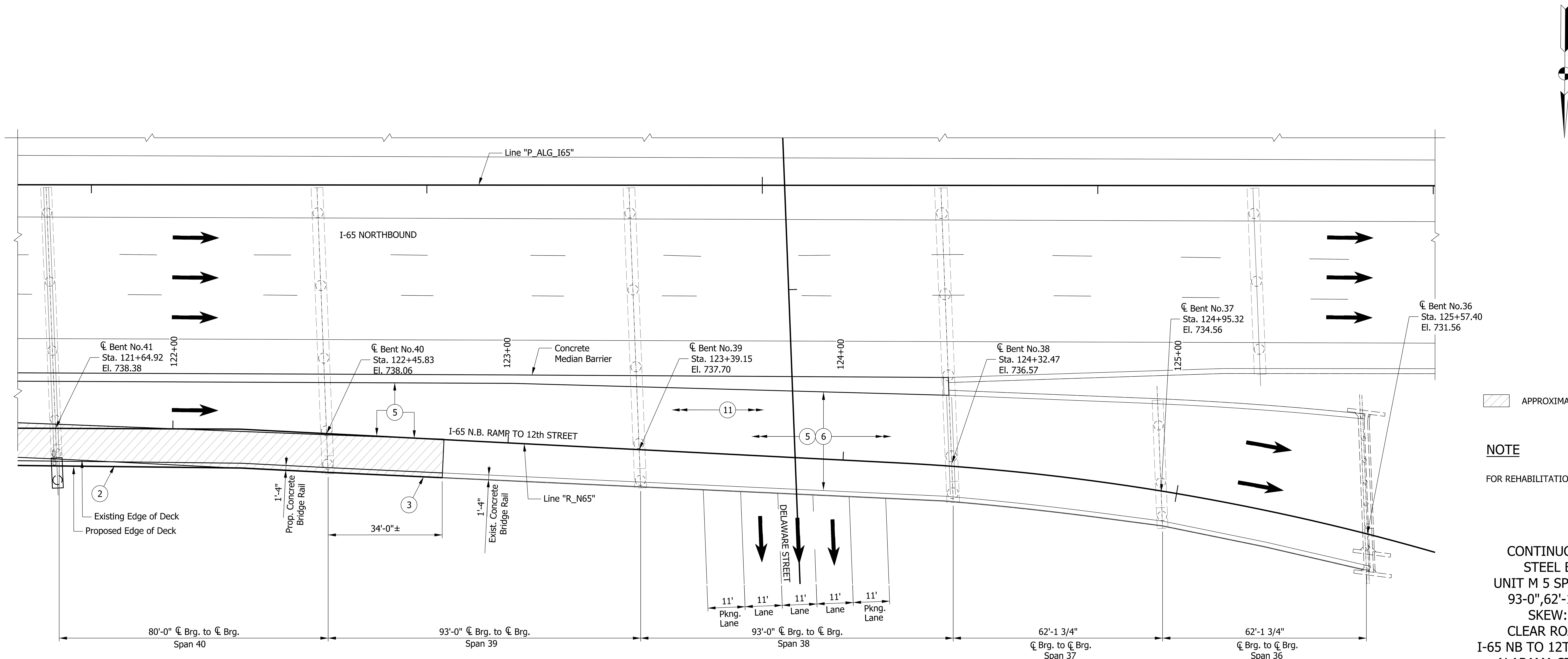
Plot: 2/21/2020 8:20 PM AM_PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 47 I65 WB over Alabama St\1901933_05 - General Plan - 47.dgn



PARTIAL ELEVATION

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



PARTIAL PLAN

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

APPROXIMATE REMOVAL LIMITS.

NOTE

FOR REHABILITATION NOTES SEE SHEET 5.

CONTINUOUS COMPOSITE
STEEL BEAM BRIDGE
UNIT M 5 SPANS: 80'-0",93'-0",
93-0",62'-1 3/4",62'-1 3/4"
SKEW: 2°16'50" LT.
CLEAR ROADWAY: VARIES
I-65 NB TO 12TH ST CD RAMP OVER
ALABAMA ST & DELAWARE ST
MARION COUNTY

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER		DATE
DESIGNED: ZGC		DRAWN: TLH	
CHECKED: CML		CHECKED: CML	

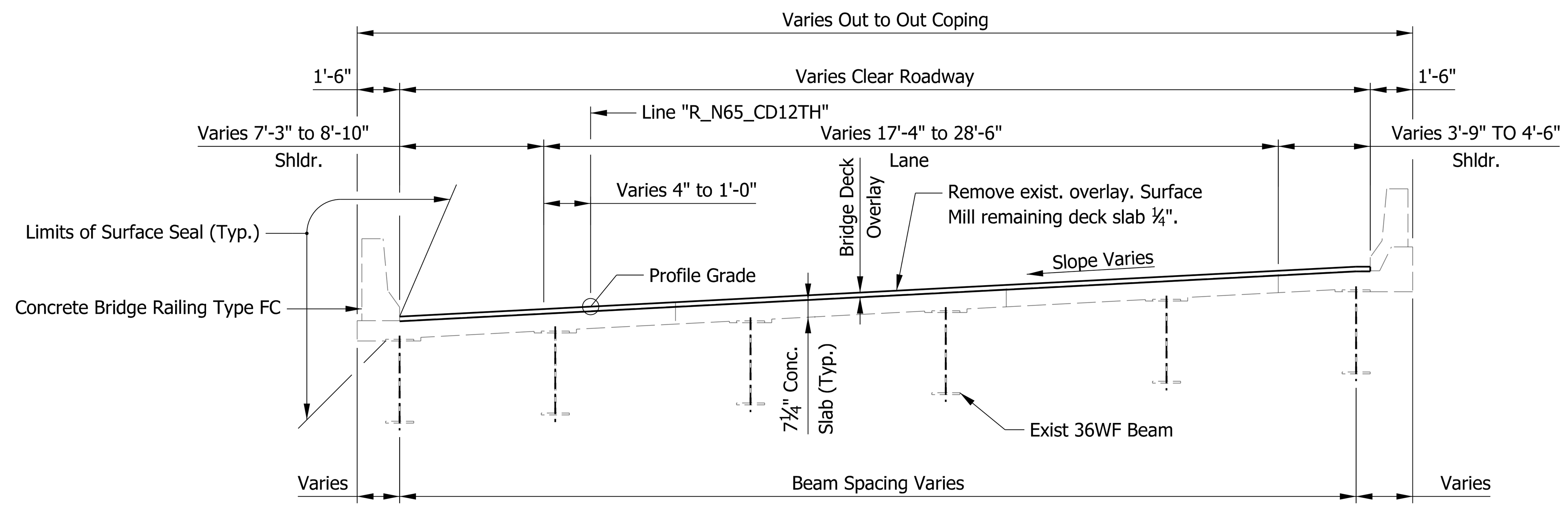
INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
SHEET 2 OF 3

SCALE	BRIDGE FILE
1/16" = 1'-0"	I65-112-02419 DWBL
	DESIGNATION
	1901933
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 24
CONTRACT	PROJECT
B-36910	1600808

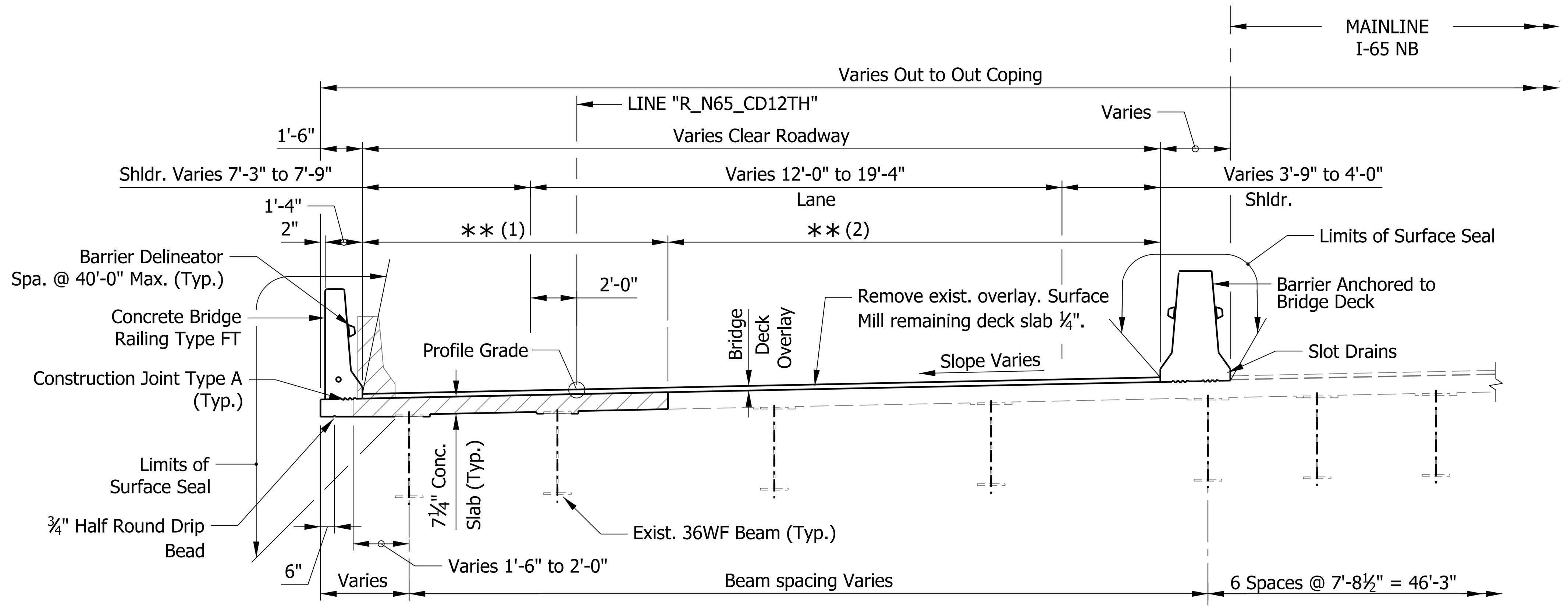
Plot: 2/21/2023 8:22 PM AM_PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 47 I65 WB over Alabama St\1901933_06 - General Plan2 - 47.dgn



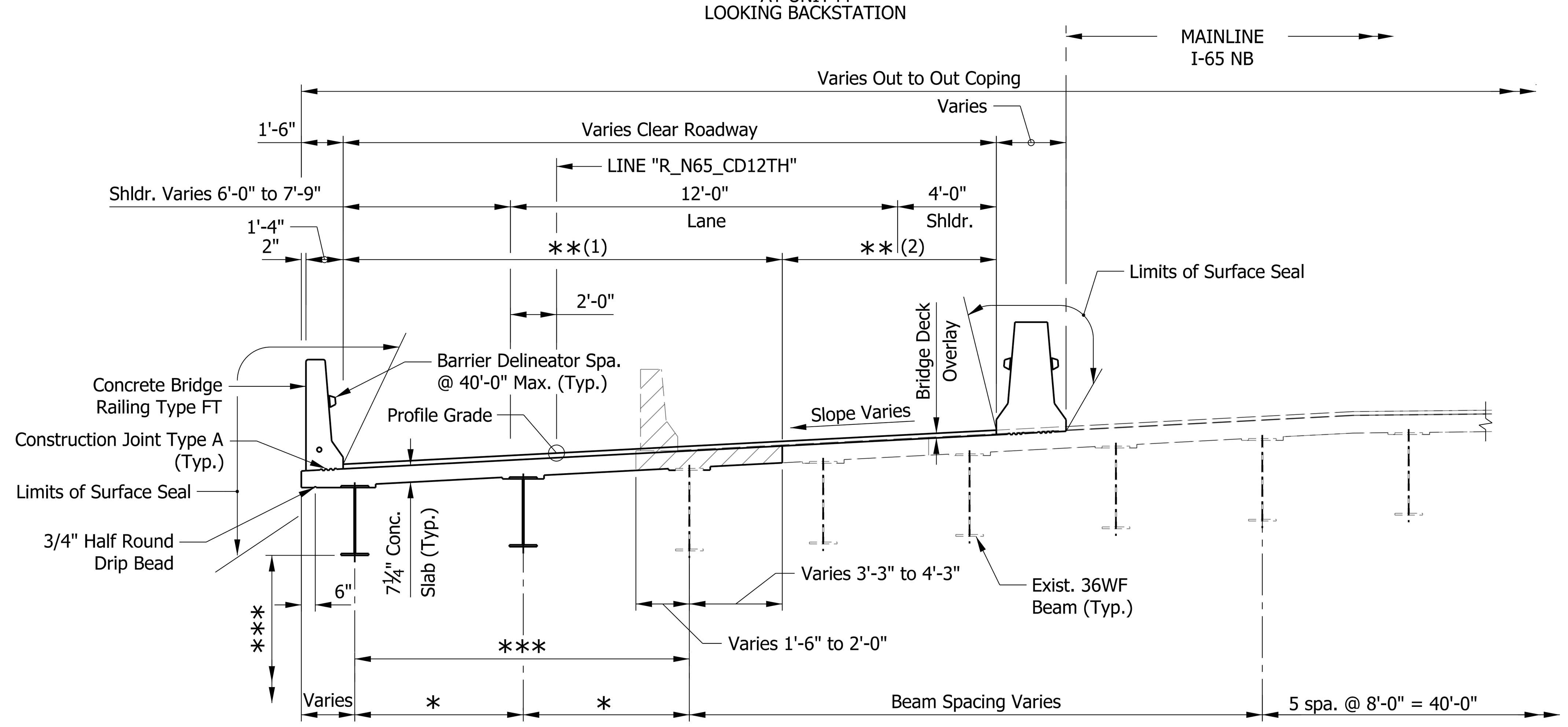
EXISTING AND PROPOSED TYPICAL SECTION

AT RAMP 2E-W
LOOKING BACKSTATION



EXISTING AND PROPOSED TYPICAL SECTION

AT UNIT M
LOOKING BACKSTATION



EXISTING AND PROPOSED TYPICAL SECTION

AT UNIT N
LOOKING DOWNSTATION

GENERAL NOTES

Plans for the existing bridge are on file at the Indiana Department of Transportation as Bridge File I65-112-02419 thru I65-112-02419C.

Where new work is to be fitted to old work, the design-build contractor shall check all dimensions and conditions in the field and report all errors or discrepancies to INDOT and assume responsibility for their correctness and fit of the new part to the old.

Existing elevations shown are based on existing plans and the NGVD of 1929 and are for information only. The design-build contractor shall field verify all existing elevations prior to construction.

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

Reinforcing bar cover shall be 1½" 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.

Epoxy resin adhesive shall be used where new concrete abuts existing concrete.

Concrete in floor slab, diaphragms and barrier shall be Class "C". Concrete in the piers above footing shall be Class "A" and pier footings shall be Class "B". all reinforcing bars shall be epoxy coated.

All the exposed faces of the end bents, piers, wingwalls, barriers, the top of deck when an overlay is not present, the face of the deck coping, the underside of the deck from the coping to the face of the exterior beam, and the reinforced concrete bridge approach slabs shall receive surface seal.

All pavement markings disturbed during construction shall be replaced in kind.

Design-build contractor shall take care not to dammage the existing shear studs on top of the existing beams during deck removal. If any studs are damaged during deck removal as determined by INDOT, design-build contractor to grind off the damaged studs, without damaging the beam, and replace in kind.

Existing wearing surface is assumed to be approximately 1¾" thick modified portland cement overlay, latex concrete overlay, or similar. Remove existing overlay.

Surface mill the remaining existing bridge floor ¼". Remove surface milled dust.

Coordinate new overlay thickness with existing adjacent surfaces and new adjacent roadway pavement.

DESIGN DATA

LIVE LOAD

Existing bridge was built in 1972 and designed for HS20-44 loading in accordance with 1969 AASHTO Standard Specifications for Highway Bridges. existing bridge checked for special loading of two 24,000 pound axles spaced at 4'-0" centers.

Proposed portions of bridge superstructure designed for HS20-44 loading in accordance with AASHTO Bridge Specifications for Highway Bridges, 17th Edition.

DEAD LOAD

Designed for actual dead load including 35 psf for wearing surface overlay and 15 psf for sip metal deck forms.

Slab designed to match existing deck thickness after milling.

SEISMIC DESIGN DATA

Seismic Performance Zone = A
Acceleration Coefficient = 0.0625
Seismic Soil Profile Type = I

DESIGN STRENGTHS

Class "A" Concrete	f'c = 3,500 psi
Class "B" Concrete	f'c = 3,000 psi
Class "C" Concrete	f'c = 4,000 psi
Reinforcing Bars	fy = 60,000 psi
Structural Steel	Fy = 50,000 psi

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 outside the vertical coping form. The top overhang brackets were assumed to be located 6 inches past the edge of the vertical coping form. the bottom overhang brackets were assumed to be braced against the intersection of the 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.

NOTES

Lane and shoulder widths shown are proposed. See roadway plans for complete roadway geometry information.

See Sheet 8 for additional deck removal dimensions.

See Sheets 21 & 22 for additional deck reconstruction and overlay removal dimensions.

LEGEND

(hatch)	Limits of Removal
*	Proposed beam spacing varies 2'-11 1/2" to 6'-8 3/8".
**(1)	Limits of existing deck removal and proposed deck joint varies 9'-7"± to 11'-7"±
**(2)	Limits of existing overlay surface milling and hydrodemolition, varies from 0'-0" to 42'-4 1/2"±.
***	Proposed steel beams. Beam depth sized to maintain minimum vertical clearance.

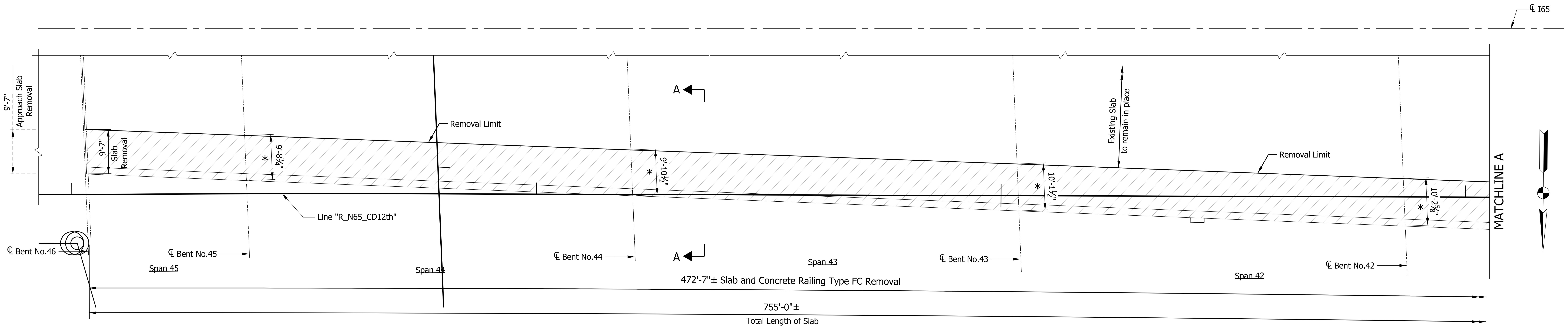
CONTINUOUS COMPOSITE
STEEL BEAM BRIDGE
UNIT M 5 SPANS: 80'-0",93'-0",
93-0",62'-1 3/4",62'-1 3/4"
SKEW: 2°16'50" LT.
CLEAR ROADWAY: VARIES
I-65 NB TO 12TH ST CD RAMP OVER
ALABAMA ST & DELAWARE ST
MARION COUNTY

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: TLH		
CHECKED: CML	CHECKED: CML		

INDIANA
DEPARTMENT OF TRANSPORTATION

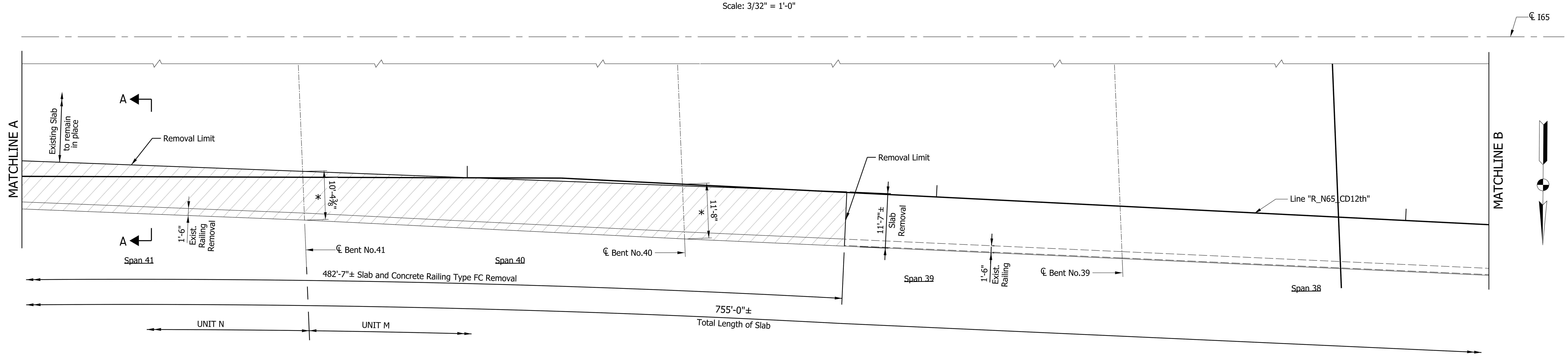
GENERAL PLAN
SHEET 3 OF 3

SCALE	BRIDGE FILE		
1/16" = 1'-0"	I65-112-02419 DWBL		
	DESIGNATION		
	1901933		
SURVEY BOOK	SHEETS		
ELECTRONIC	7	of	24
CONTRACT	PROJECT		
B-36910	1600808		



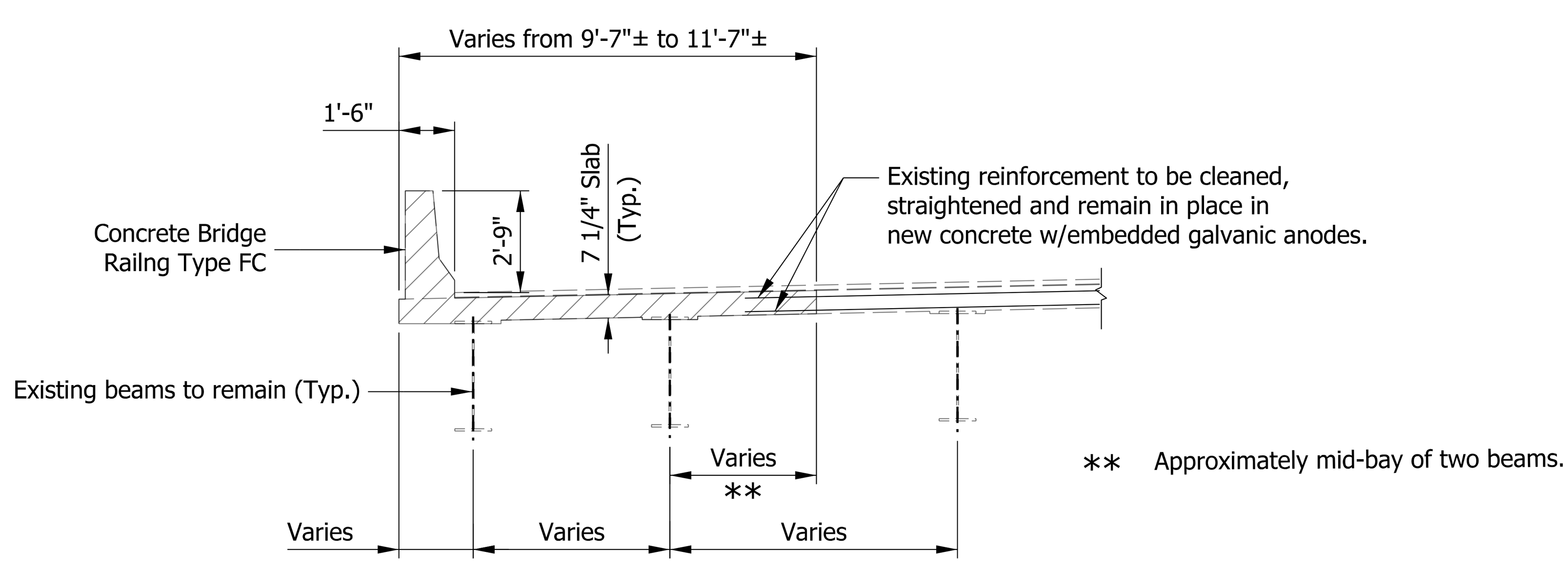
PARTIAL SLAB REMOVAL PLAN

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



PARTIAL SLAB REMOVAL PLAN

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



** Approximately mid-bay of two beams.

SECTION A-A

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

LEGEND

* Dimensions taken along ℄ Bent

Limits of Removal

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER / DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 1/16" = 1'-0" / BRIDGE FILE: I65-112-02419 DWBL / DESIGNATION: 1901933
DESIGNED: ZGC / CHECKED: CML	DRAWN: TLH / CHECKED: CML	SUPERSTRUCTURE REMOVAL DETAILS	SURVEY BOOK: ELECTRONIC / SHEETS: 8 of 24 / CONTRACT: B-36910 / PROJECT: 1600808

Plot: 2/21/2025 8:27 PM AM_PM

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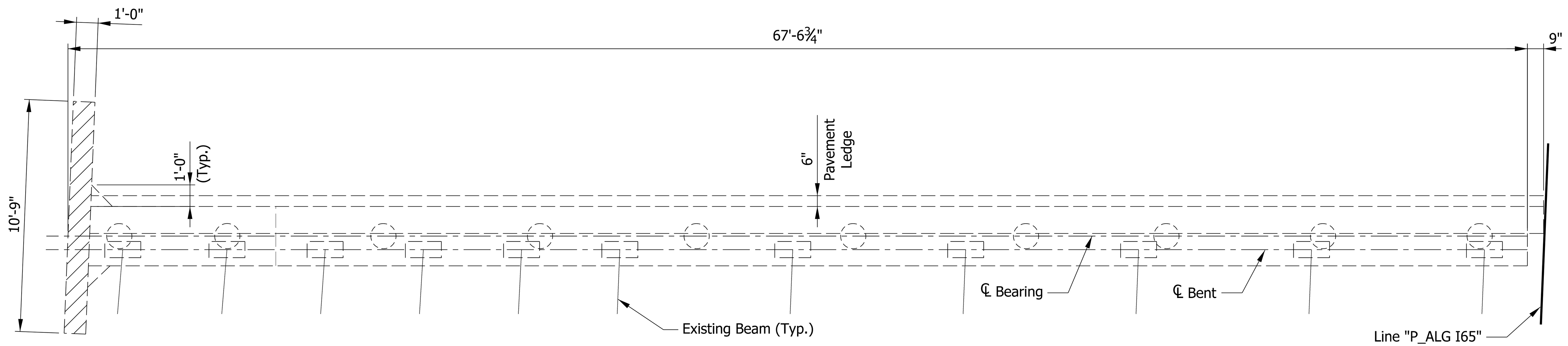
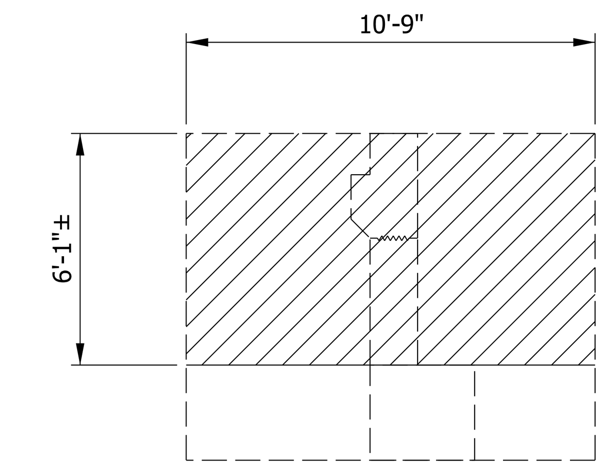
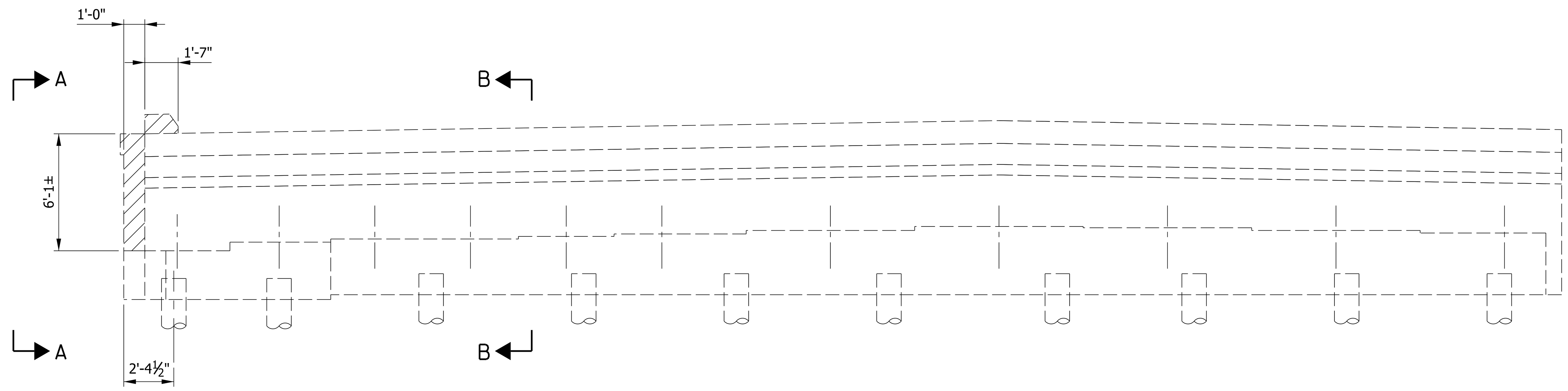


PLAN - BENT NO. 46 NBL



ELEVATION A-A
PARTIAL WINGWALL REMOVAL

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

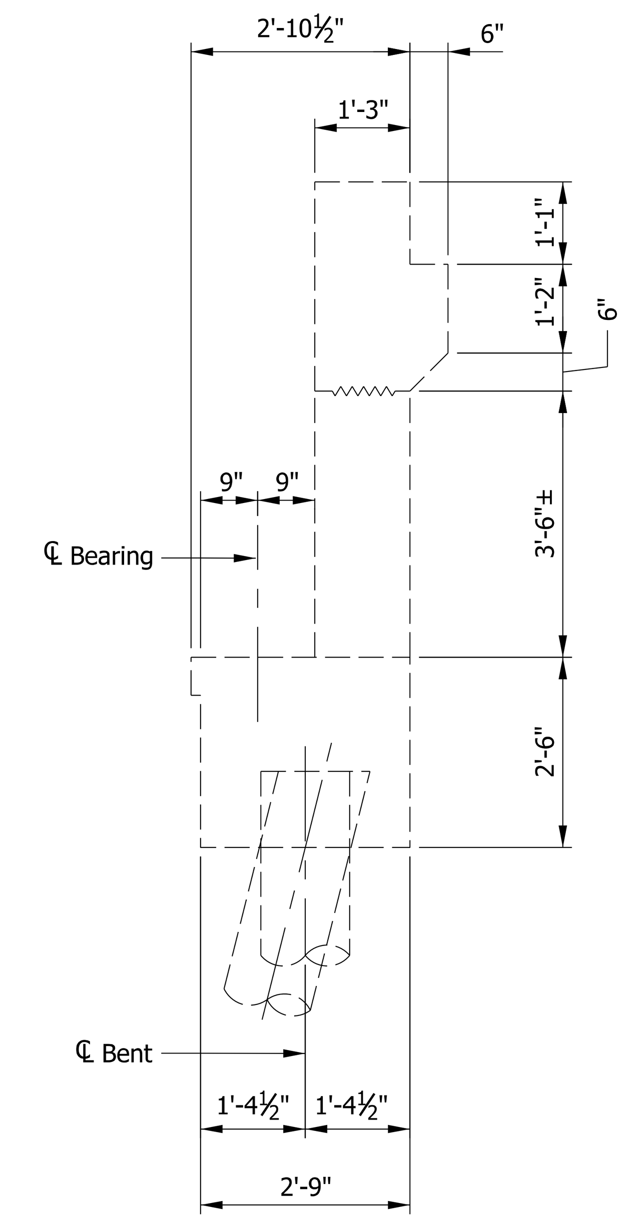


ELEVATION - BENT NO. 46 NBL

LOOKING BACKSTATION

LEGEND

Limits of Removal.



SECTION B-B
EXISTING BENT

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

NOTES:

1. See reinforcing bar notes on next sheet.

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 1/4" = 1'-0"	BRIDGE FILE: I65-112-02419 DWBL
			DESIGNATION: 1901933
DESIGNED: ZGC — DRAWN: TLH	BENT NO. 46 NBL REMOVAL DETAILS	SURVEY BOOK: ELECTRONIC	SHEETS: 9 of 24
CHECKED: CML — CHECKED: ZGC		CONTRACT: B-36910	PROJECT: 1600808

Plot: 2/21/2020 8:29 PM AM_PM

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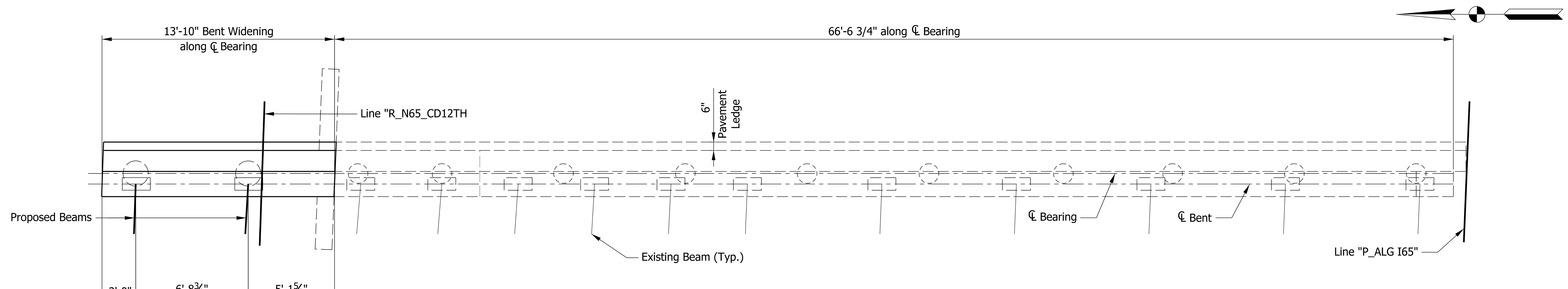
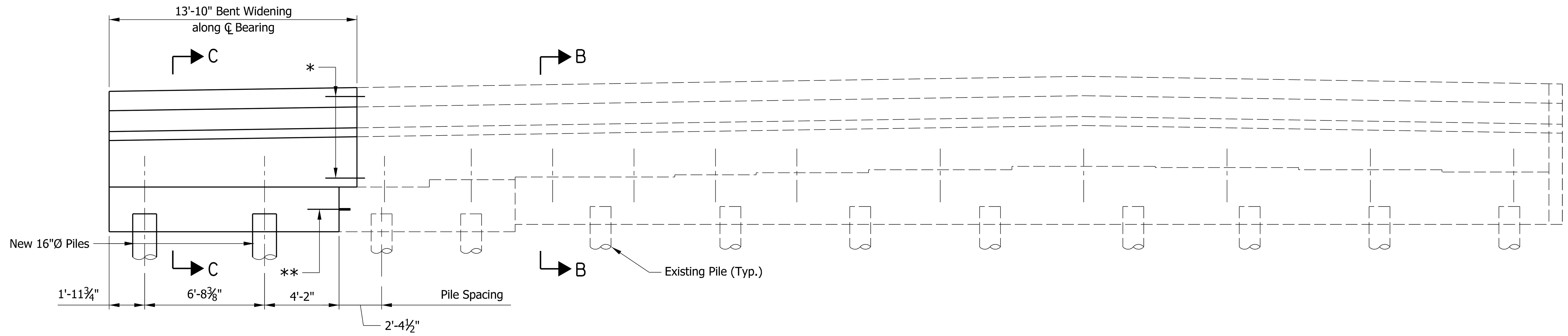


PROPOSED PLAN
BENT NO. 46 NBL

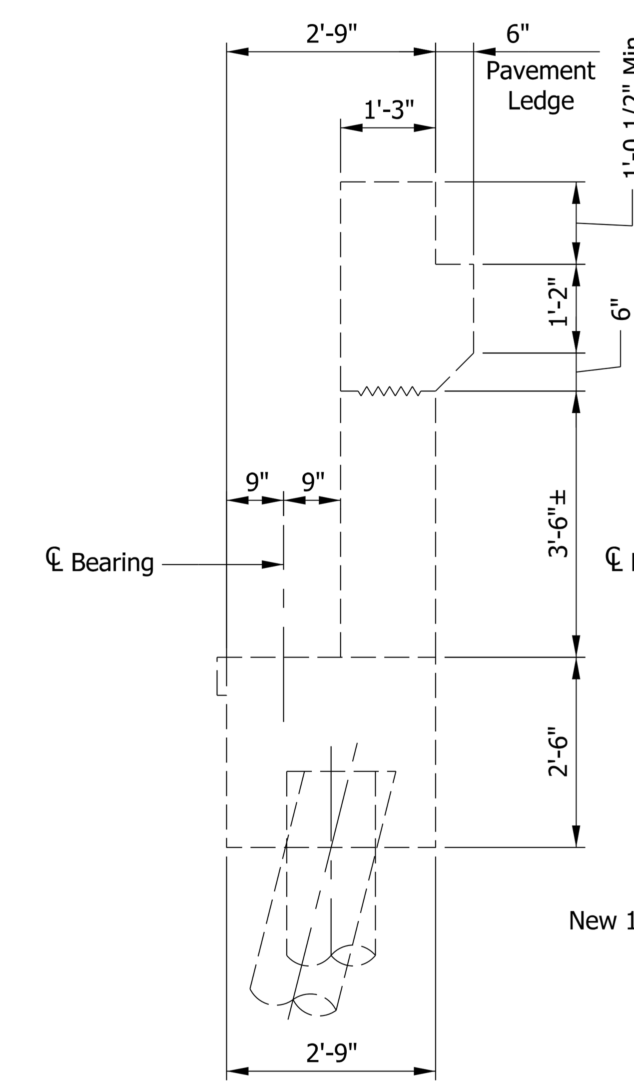


PROPOSED ELEVATION
BENT NO. 46 NBL
LOOKING BACKSTATION

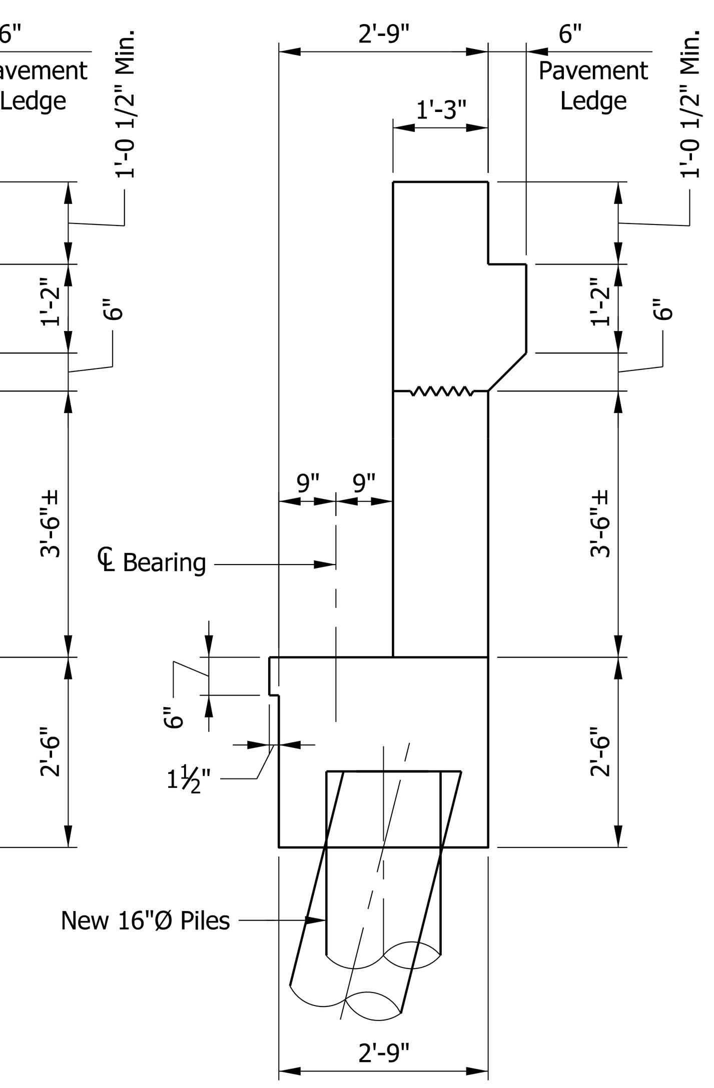
LEGEND

* Existing reinforcing bars to be cleaned, straightened and embedded in new concrete with embedded galvanic anodes (Typ.)

** Reinforced bars in field drilled hole w/ appproved anchor system.



SECTION B-B
EXISTING BENT
Scale: 1/2" = 1'-0"



SECTION C-C
PROPOSED BENT
Scale: 1/2" = 1'-0"

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 1/4" = 1'-0"	BRIDGE FILE: I65-112-02419 DWBL
			DESIGNATION: 1901933
DESIGNED: ZGC — DRAWN: TLH	BENT NO. 46 NBL RECONSTRUCTION DETAILS	SURVEY BOOK: ELECTRONIC	SHEETS: 10 of 24
CHECKED: CML — CHECKED: CML		CONTRACT: B-36910	PROJECT: 1600808

Plot: 2/21/2022 8:31 PM AM_PM

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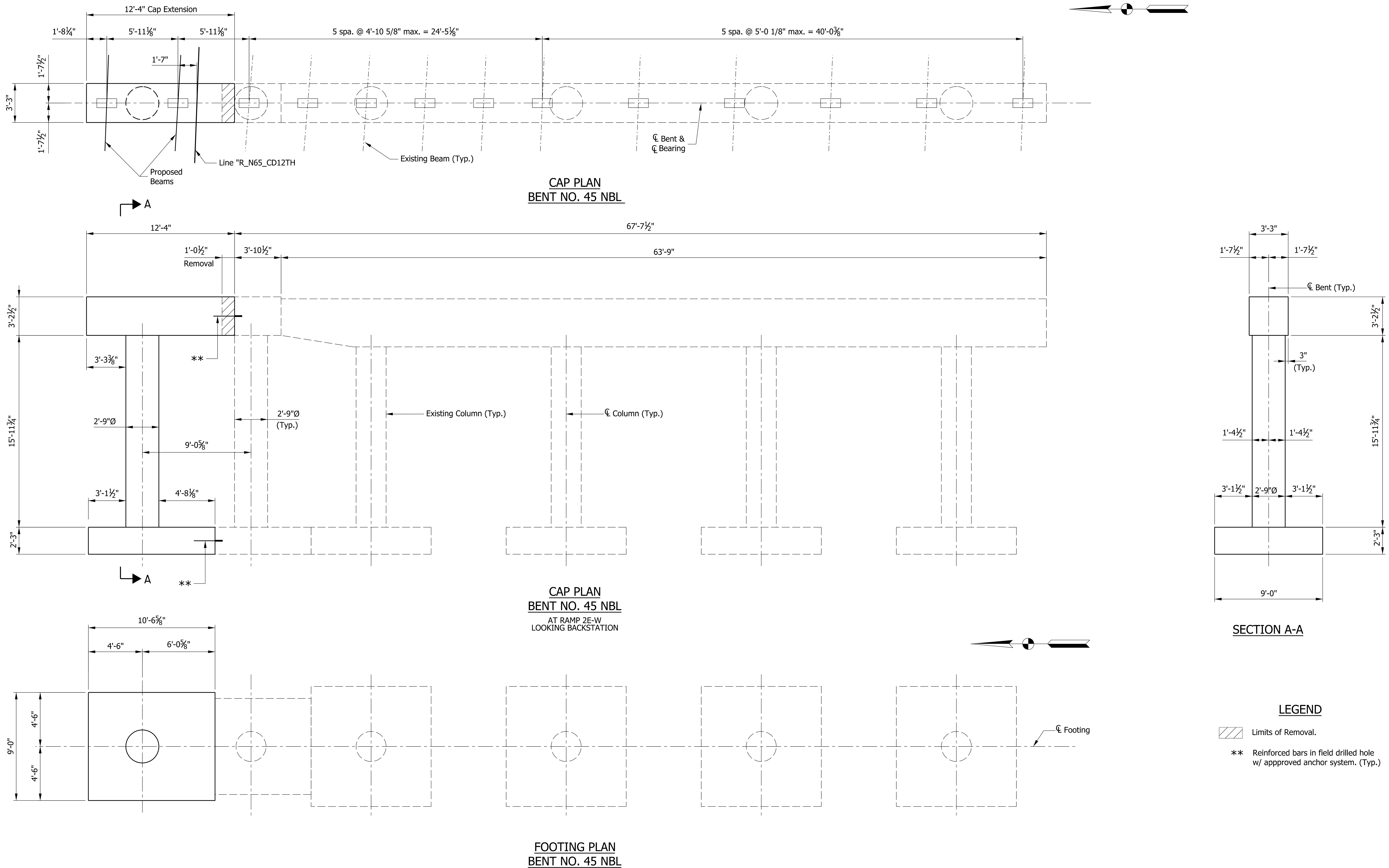

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 1/4" = 1'-0"	BRIDGE FILE: I65-112-02419 DWBL
			DESIGNATION: 1901933
DESIGNED: ZGC — DRAWN: TLH	BENT NO. 45 NBL DETAILS	SURVEY BOOK: ELECTRONIC	SHEETS: 11 of 24
CHECKED: CML — CHECKED: CML		CONTRACT: B-36910	PROJECT: 1600808

Plot: 2/21/2022 8:34 PM AM_PM

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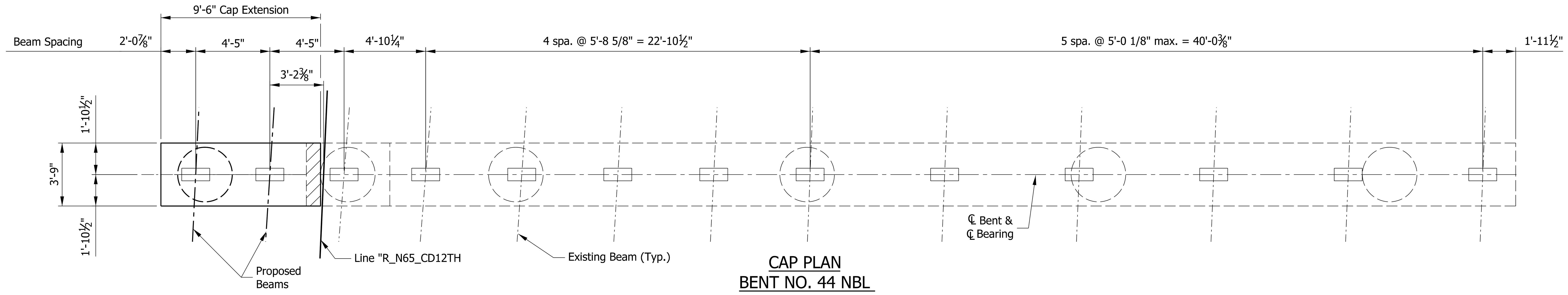
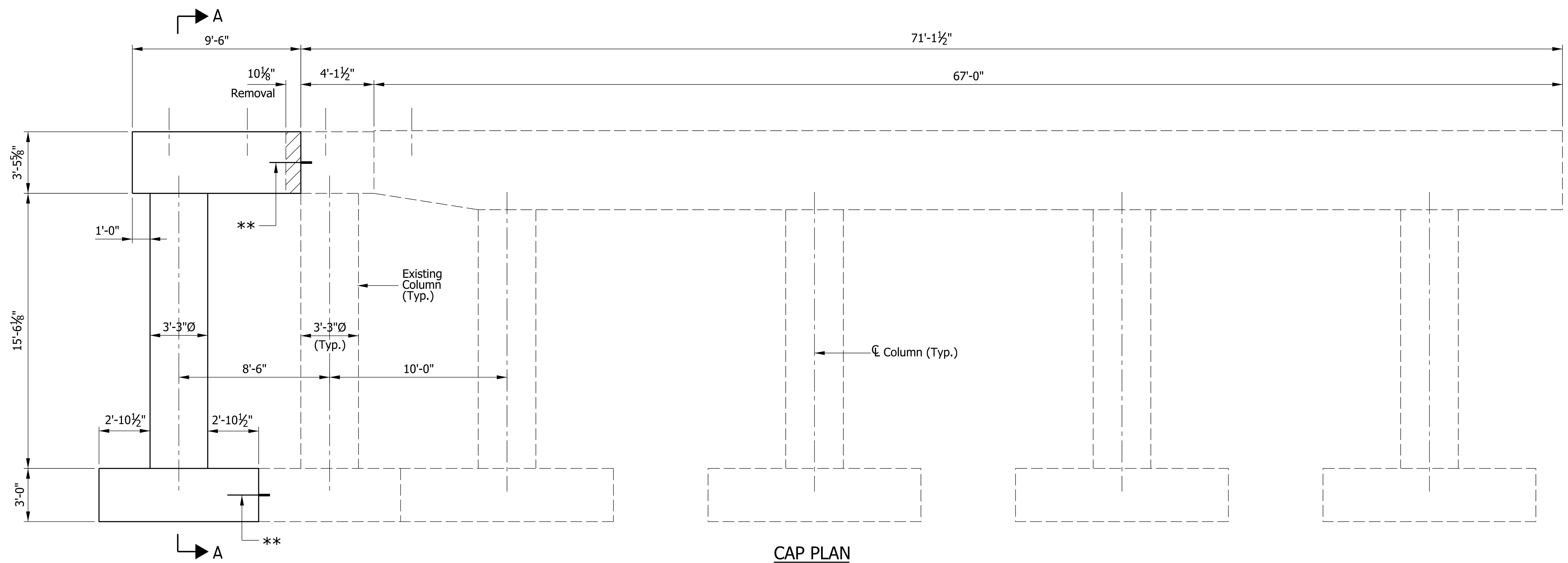
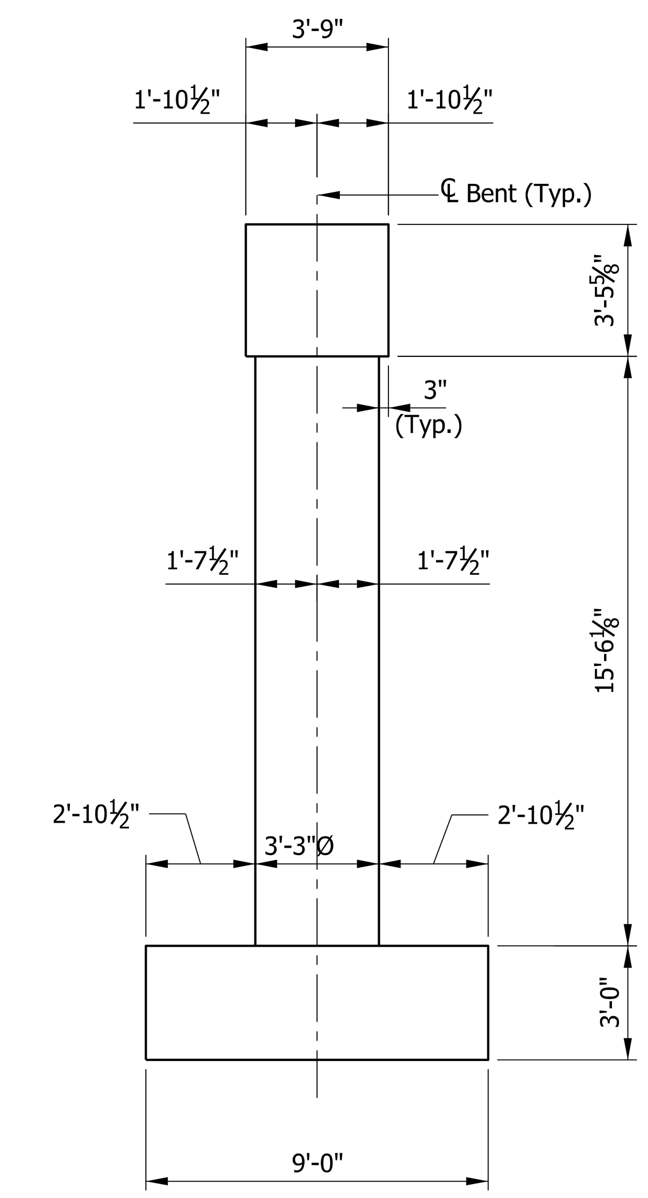


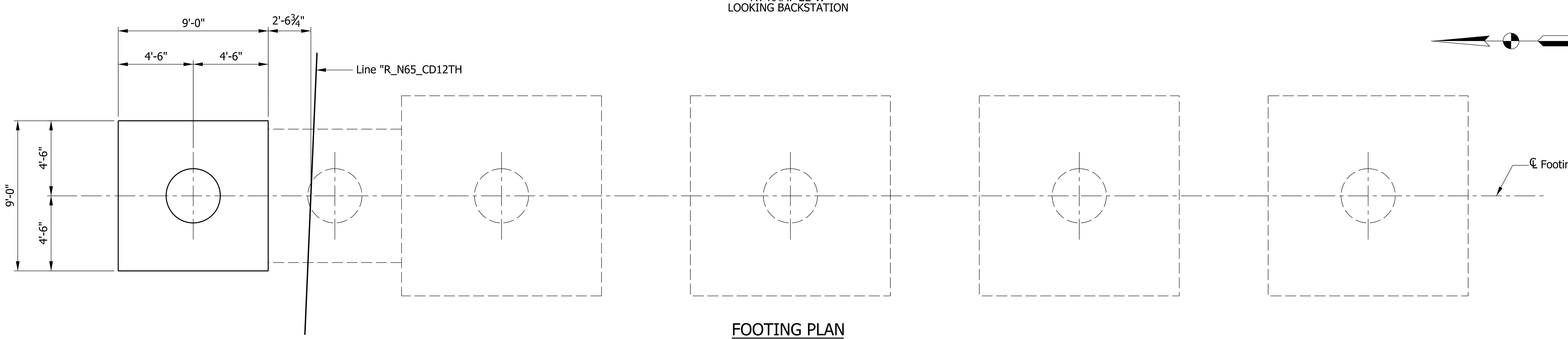
CAP PLAN
BENT NO. 44 NBL



CAP PLAN
BENT NO. 44 NBL
AT RAMP 2E-W
LOOKING BACKSTATION



SECTION A-A



FOOTING PLAN
BENT NO. 44 NBL

LEGEND

Limits of Removal.

** Reinforced bars in field drilled hole w/ appproved anchor system. (Typ.)

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER ______ DATE

DESIGNED: ZGC | DRAWN: TLH
CHECKED: CML | CHECKED: CML

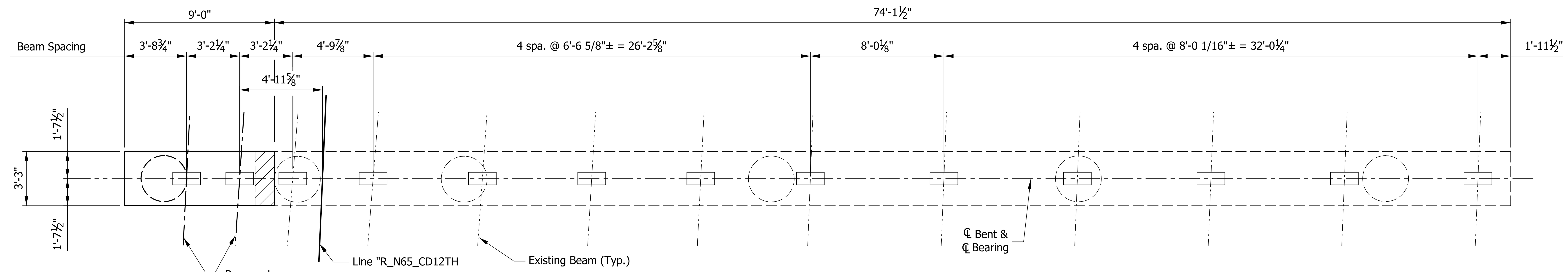
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 44 NBL
DETAILS

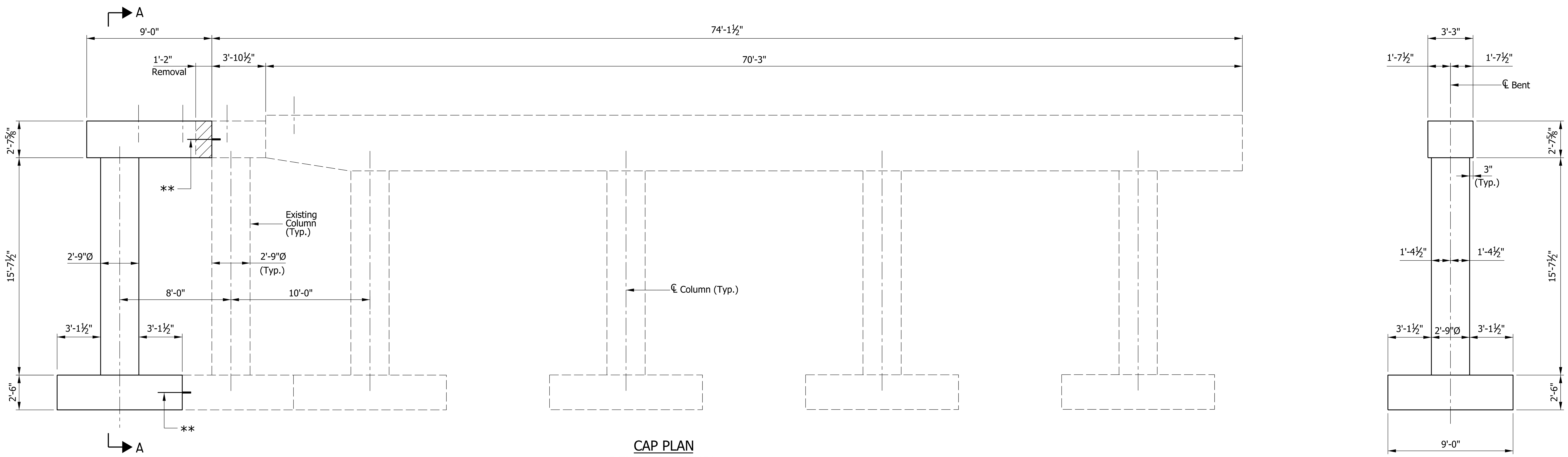
SCALE	BRIDGE FILE
1/4" = 1'-0"	I65-112-02419 DWBL
	DESIGNATION
	1901933
SURVEY BOOK	SHEETS
ELECTRONIC	12 of 24
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/21/2020 8:37 PM AM_PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 47 I65 WB over Alabama St\1901933_12 - Bent 44 - 47.dgn

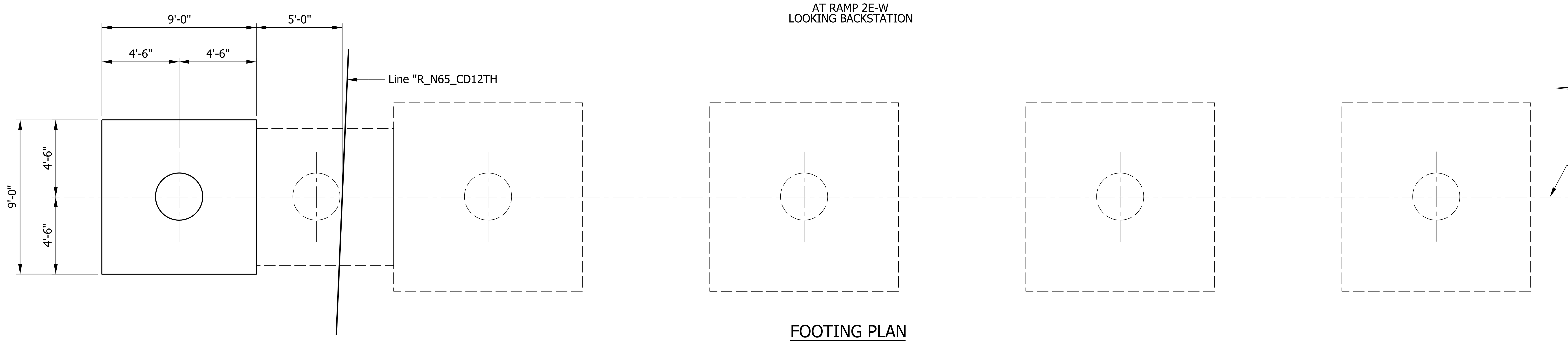


CAP PLAN
BENT NO. 43 NBL



CAP PLAN
BENT NO. 43 NBL
AT RAMP 2E-W
LOOKING BACKSTATION

SECTION A-A



FOOTING PLAN
BENT NO. 43 NBL

LEGEND

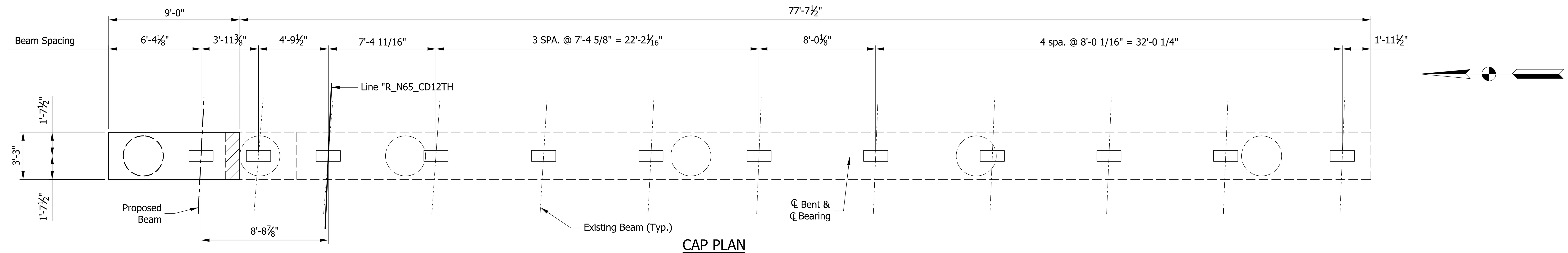
Limits of Removal.

** Reinforced bars in field drilled hole w/ appproved anchor system. (Typ.)

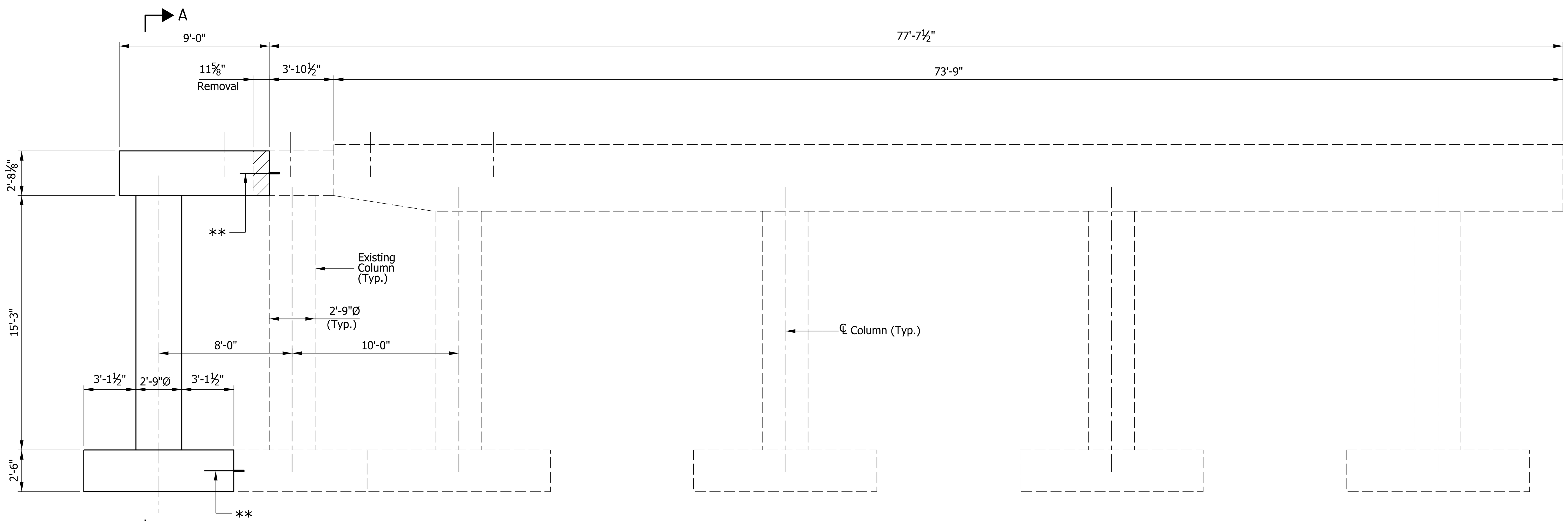
RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE		INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 1/4" = 1'-0"	BRIDGE FILE: I65-112-02419 DWBL
				DESIGNATION: 1901933
DESIGNED: ZGC	DRAWN: TLH	BENT NO. 43 NBL DETAILS	SURVEY BOOK: ELECTRONIC	SHEETS: 13 of 24
CHECKED: CML	CHECKED: TLH		CONTRACT: B-36910	PROJECT: 1600808

Plot: 2/21/2023 8:40 PM AM_PM

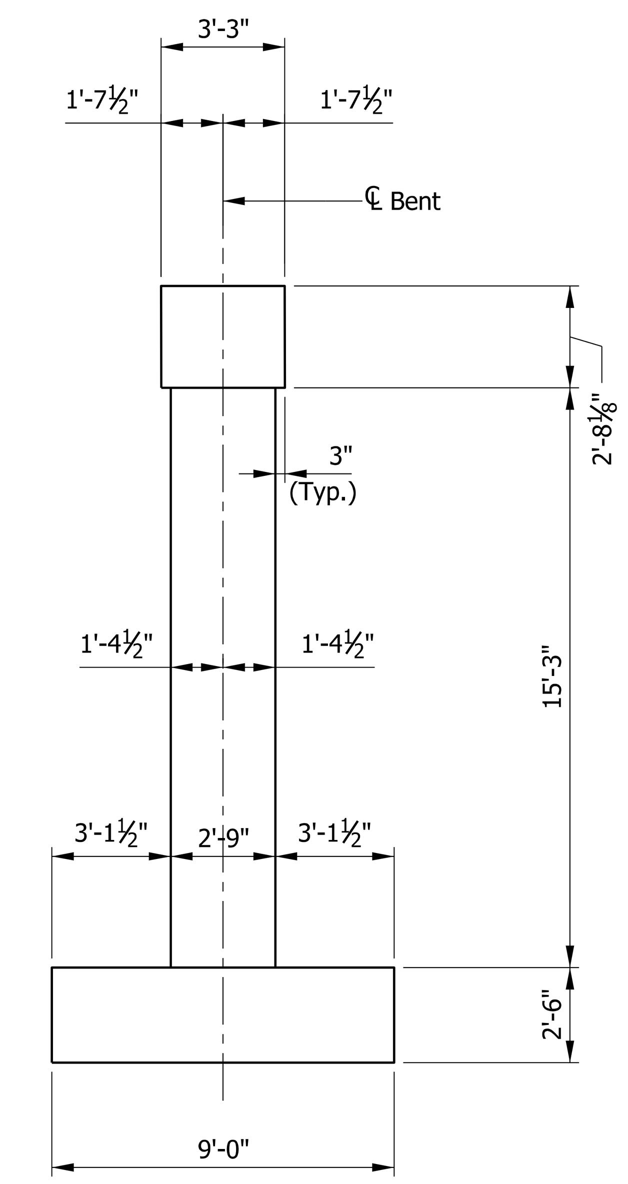
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 47 I65 WB over Alabama St\1901933_13 - Bent 43 - 47.dgn



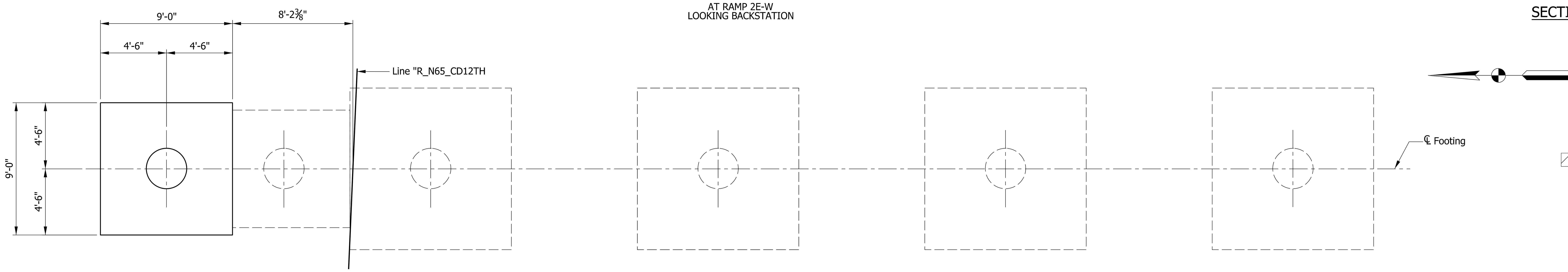
CAP PLAN
BENT NO. 42 NBL



CAP PLAN
BENT NO. 42 NBL
AT RAMP 2E-W
LOOKING BACKSTATION



SECTION A-A



FOOTING PLAN
BENT NO. 42 NBL

LEGEND

Limits of Removal.

** Reinforced bars in field drilled hole w/ appproved anchor system. (Typ.)

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE

DESIGNED: ZGC | DRAWN: TLH
CHECKED: CML | CHECKED: CML

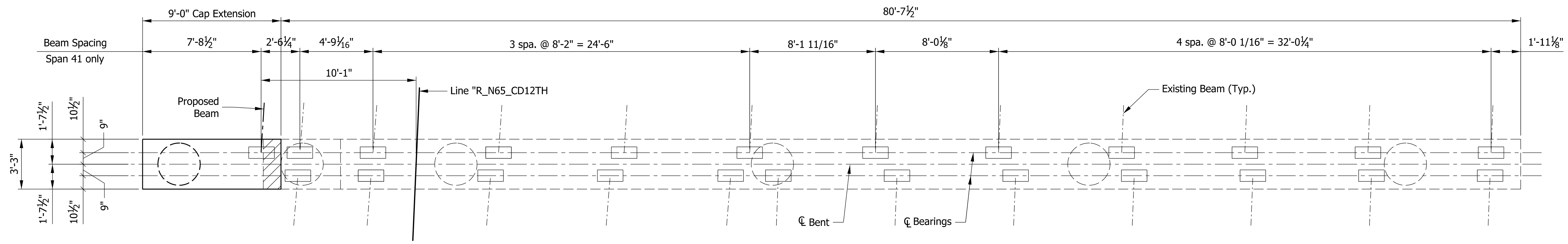
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 42 NBL
DETAILS

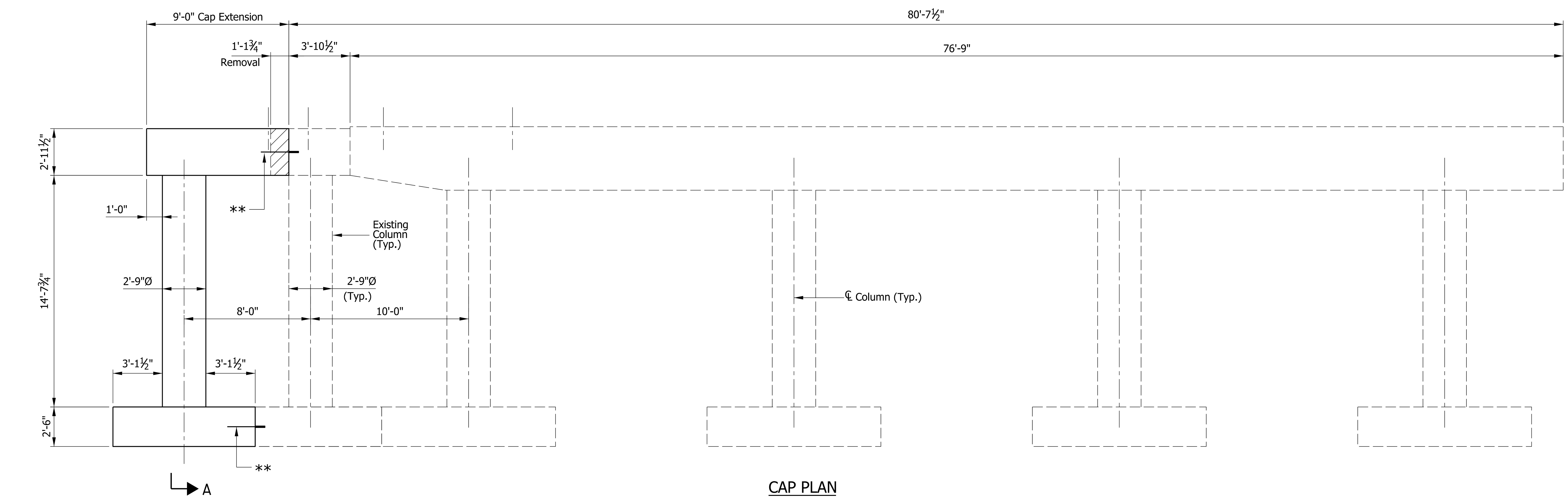
SCALE	BRIDGE FILE
1/4" = 1'-0"	I65-112-02419 DWBL
	DESIGNATION
	1901933
SURVEY BOOK	SHEETS
ELECTRONIC	14 of 24
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/21/2023 8:42 PM AM_PM

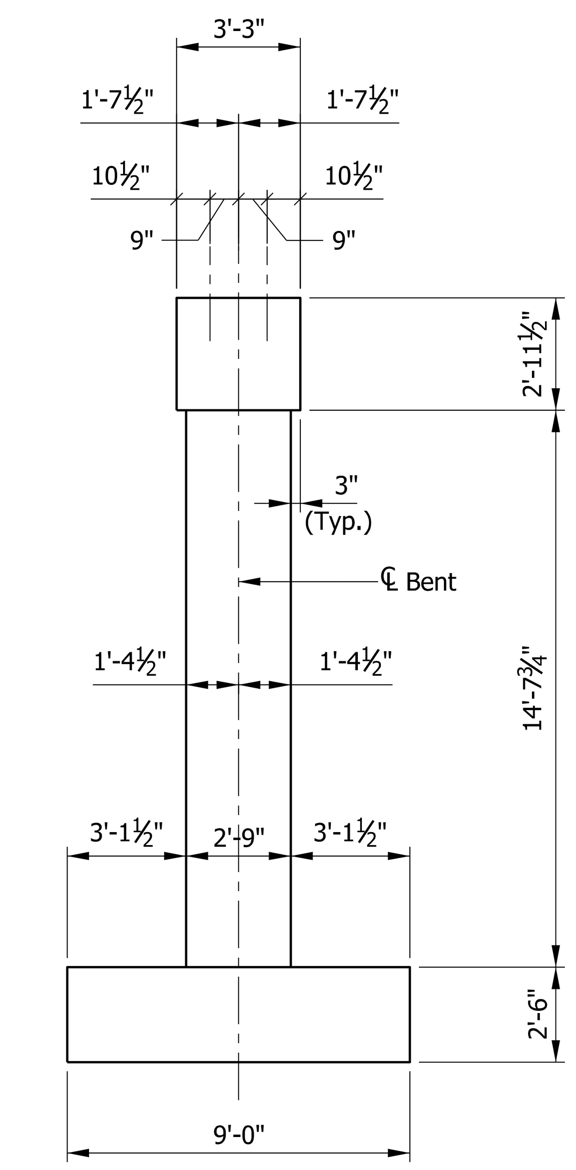
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 47 I65 WB over Alabama St\1901933_14 - Bent 42 - 47.dgn



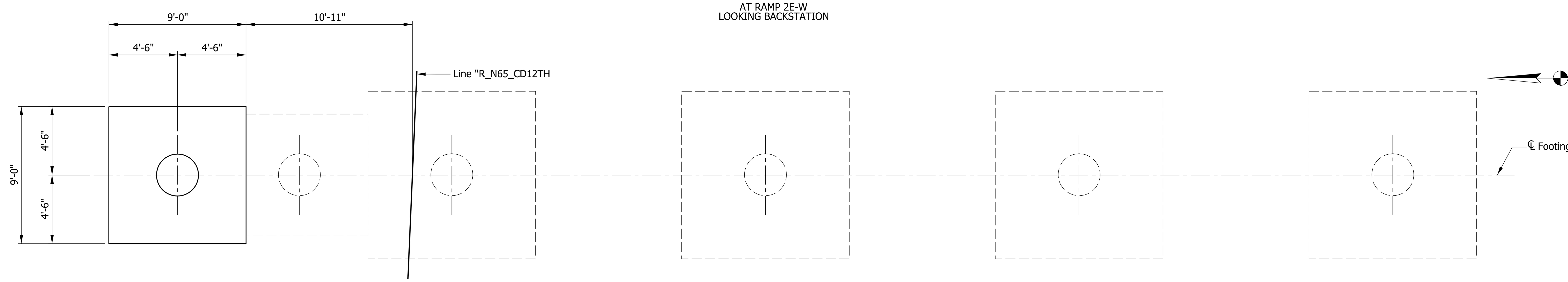
CAP PLAN
BENT NO. 41 NBL



CAP PLAN
BENT NO. 41 NBL
AT RAMP 2E-W
LOOKING BACKSTATION



SECTION A-A



FOOTING PLAN
BENT NO. 41 NBL

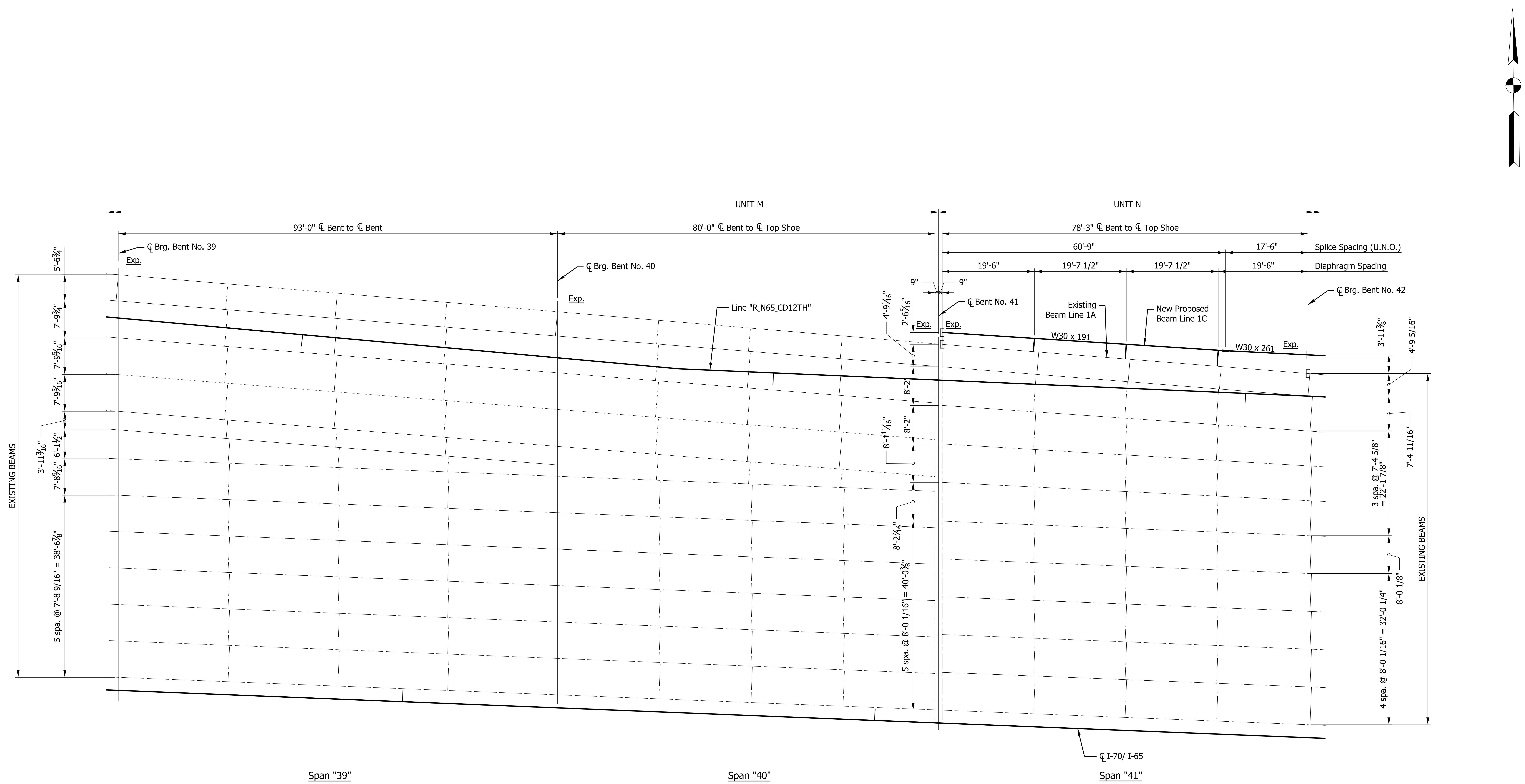
LEGEND

Limits of Removal.

** Reinforced bars in field drilled hole w/ appproved anchor system. (Typ.)

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION
DESIGNED: ZGC	DRAWN: TLH		BENT NO. 41 NBL DETAILS
CHECKED: CML	CHECKED: CML		

SCALE	BRIDGE FILE
1/4" = 1'-0"	I65-112-02419 DWBL
	DESIGNATION
	1901933
SURVEY BOOK	SHEETS
ELECTRONIC	15 of 24
CONTRACT	PROJECT
B-36910	1600808



FRAMING PLAN - PARTIAL UNIT M AND PARTIAL UNIT N

NOTES:

1. See Sheets 18 thru 20 for Beam Details.
2. New Diaphragms shall be C15 x 33.9.
3. New 4 x 4 x 3/8" Connection Angles required on exterior face of Beam Line 1A

DATE	REVISION

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE

DESIGNED: ZGC — DRAWN: TLH
CHECKED: CML — CHECKED: CML

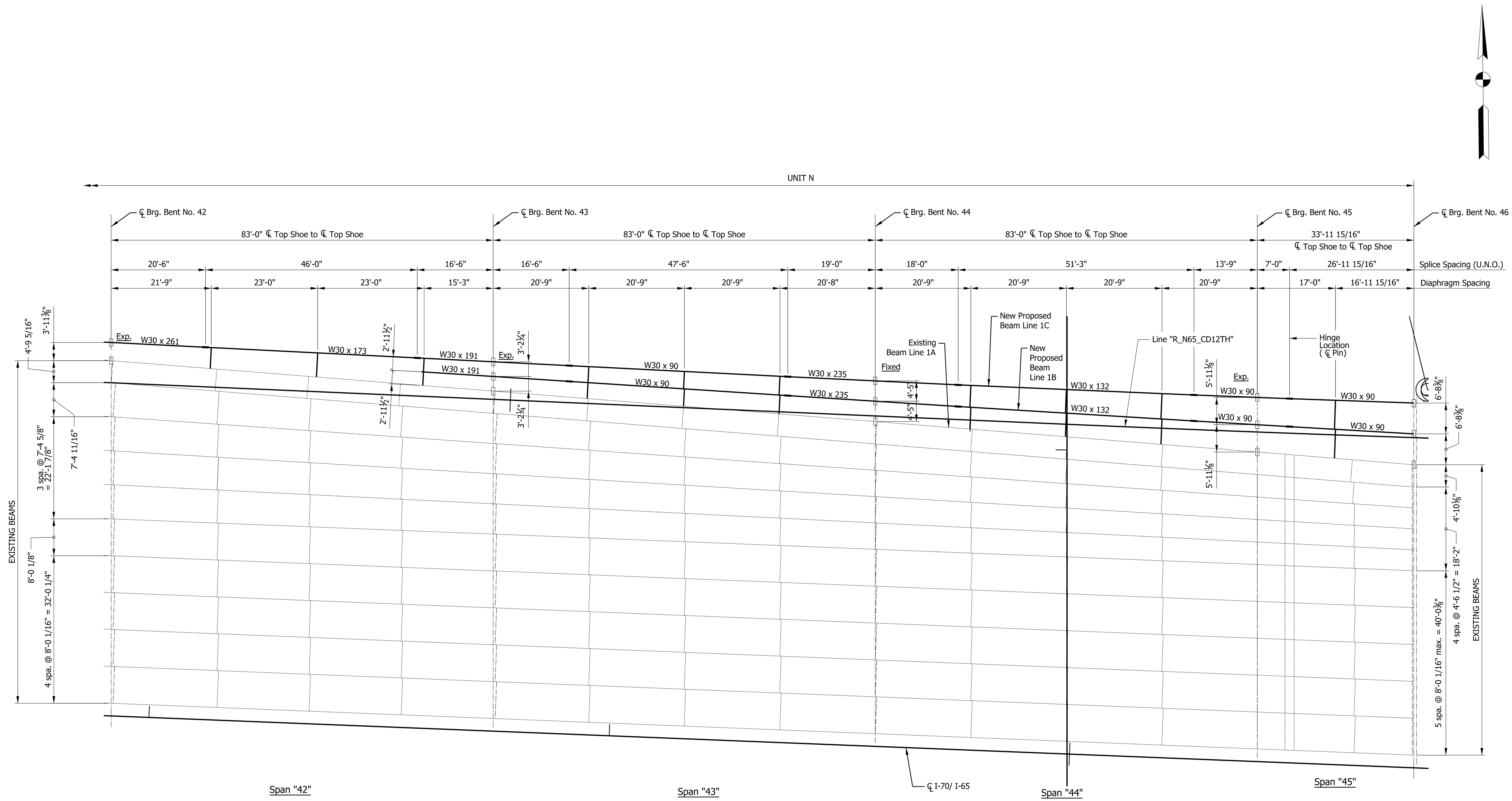
INDIANA DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
SHEET 1 OF 2

SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-02419 DWBL
	DESIGNATION
	1901933
SURVEY BOOK	SHEETS
ELECTRONIC	16 of 24
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/21/2020 8:48 PM AM_PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 47 I65 WB over Alabama St\1901933_16 - Framing Plan1 - 47.dgn



FRAMING PLAN - PARTIAL UNIT N

NOTES:

1. See Sheets 18 thru 20 for Beam Details.
2. New Diaphragms shall be C15 x 33.9.
3. New 4 x 4 x 3/8" Connection Angles required on exterior face of Beam Line 1A

DATE	REVISION

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER ______ DATE

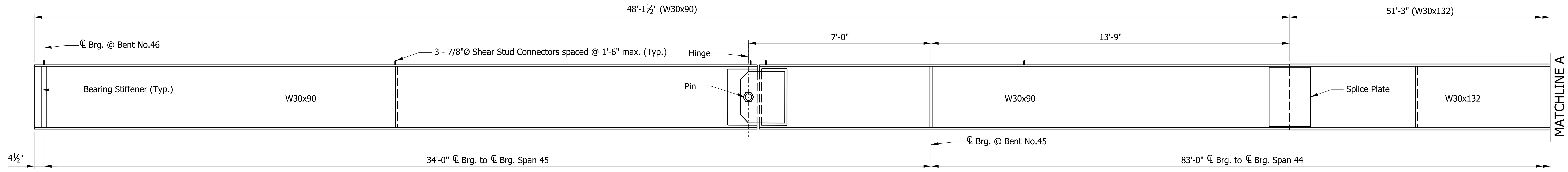
DESIGNED: ZGC DRAWN: TLH
CHECKED: CML CHECKED: CML

INDIANA
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
SHEET 2 OF 2

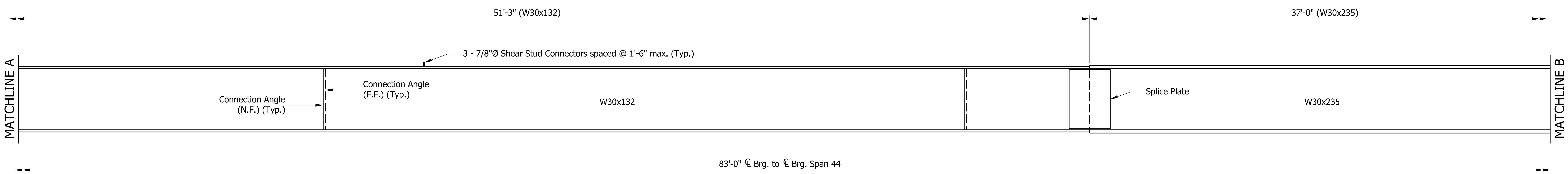
SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-02419 DWBL
	DESIGNATION
	1901933
SURVEY BOOK	SHEETS
ELECTRONIC	17 of 24
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/21/2020 8:50 PM AM_PM
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 47 I65 WB over Alabama St\1901933_17 - Framing Plan2 -47.dgn



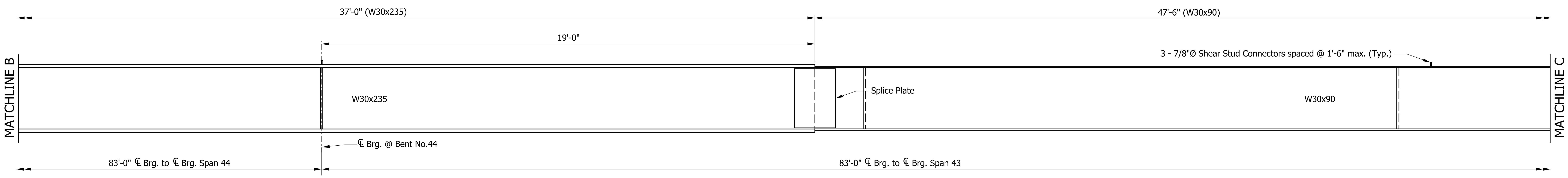
PARTIAL ELEVATION - BEAM LINE 1B

LOOKING SOUTH



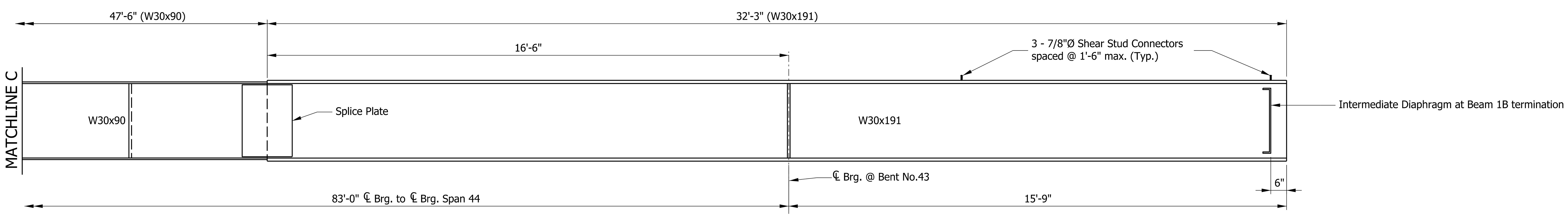
PARTIAL ELEVATION - BEAM LINE 1B

LOOKING SOUTH



PARTIAL ELEVATION - BEAM LINE 1B

LOOKING SOUTH



PARTIAL ELEVATION - BEAM LINE 1B

LOOKING SOUTH

NOTES:

1. See Sheet 20 for more notes.

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: TLH

CHECKED: CML | CHECKED: CML

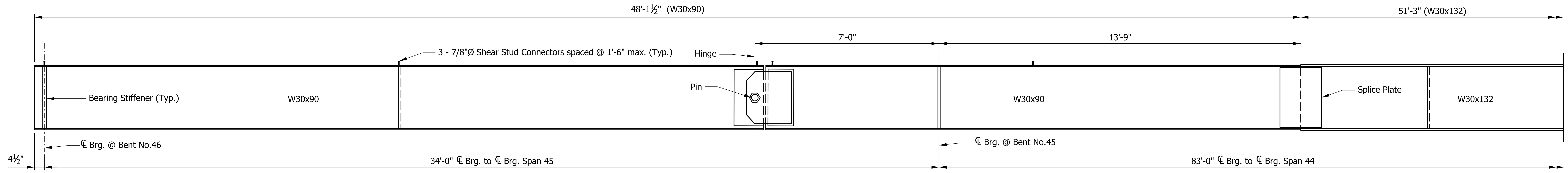
INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS
SHEET 1 OF 2

SCALE	BRIDGE FILE
1/4" = 1'-0"	I65-112-02419 DWBL
	DESIGNATION
	1901933
SURVEY BOOK	SHEETS
ELECTRONIC	18 of 24
CONTRACT	PROJECT
B-36910	1600808

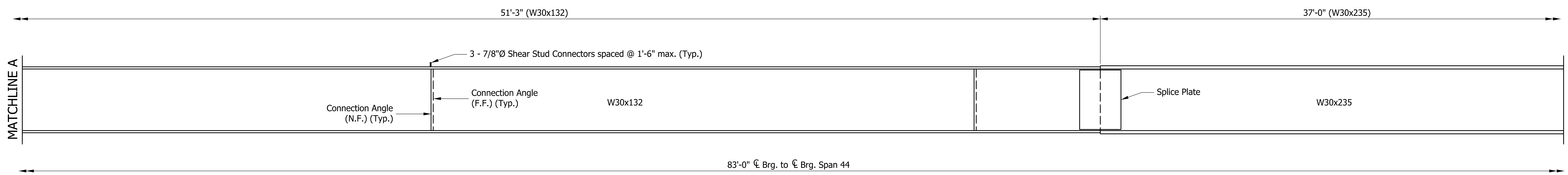
Plot: 2/21/2020 8:55 PM AM_PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 47 I65 WB over Alabama St\1901933_18 - Beam Details-1 - 47.dgn



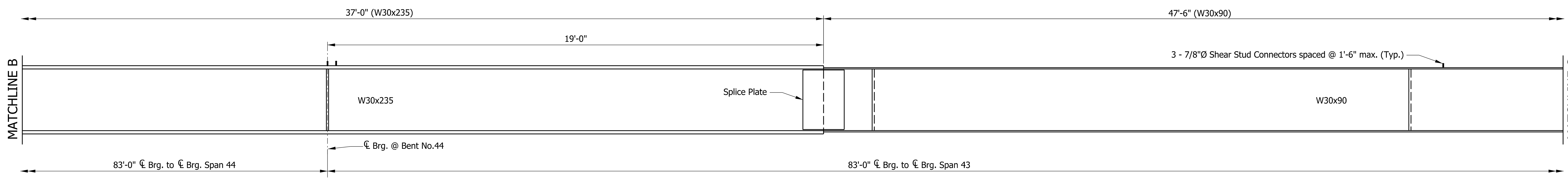
PARTIAL ELEVATION - BEAM LINE 1C

LOOKING SOUTH



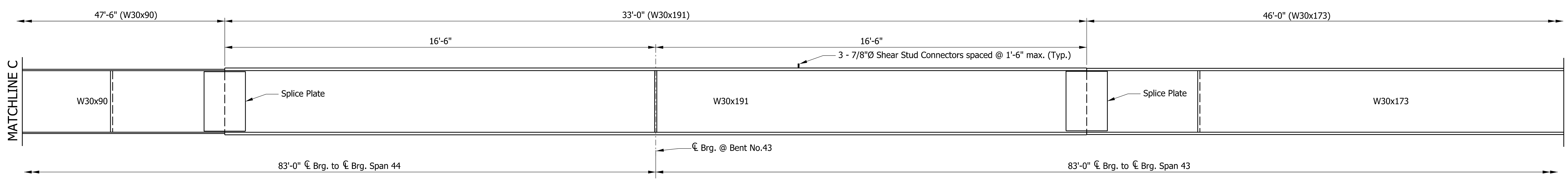
PARTIAL ELEVATION - BEAM LINE 1C

LOOKING SOUTH



PARTIAL ELEVATION - BEAM LINE 1C

LOOKING SOUTH



PARTIAL ELEVATION - BEAM LINE 1C

LOOKING SOUTH

NOTES:

1. See Sheet 20 for more notes.

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: TLH

CHECKED: CML CHECKED: CML

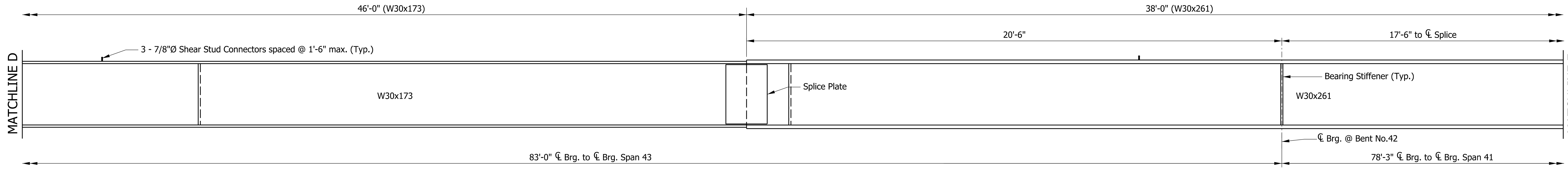
INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS
SHEET 2 OF 3

SCALE	BRIDGE FILE
1/4" = 1'-0"	I65-112-02419 DWBL
	DESIGNATION
	1901933
SURVEY BOOK	SHEETS
ELECTRONIC	19 of 24
CONTRACT	PROJECT
B-36910	1600808

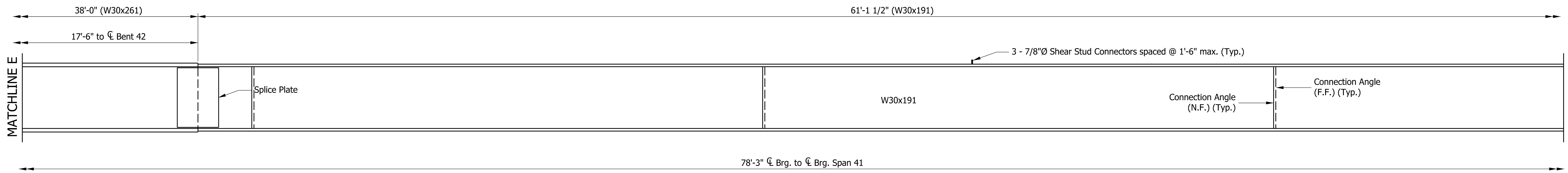
Plot: 2/21/2020 8:59 PM AM_PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 47 I65 WB over Alabama St\1901933_19 - Beam Details-2 - 47.dgn



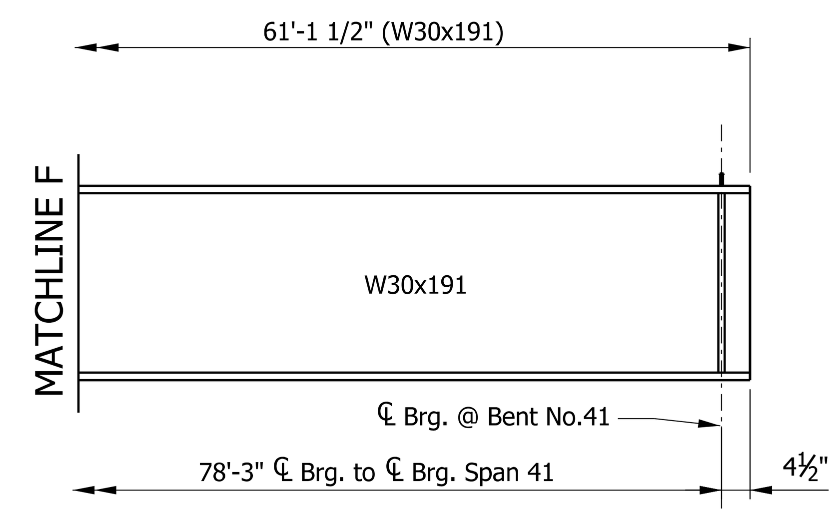
PARTIAL ELEVATION - BEAM LINE 1C

LOOKING SOUTH



PARTIAL ELEVATION - BEAM LINE 1C

LOOKING SOUTH



PARTIAL ELEVATION - BEAM LINE 1C

LOOKING SOUTH

NOTES:

1. All structural steel to be ASTM A709, Grade 50 and to be painted in accordance with INDOT specifications.
2. All bolts to be 7/8"Ø ASTM A325, Type 1 w/ Class B Surface.
3. Bearing assemblies to match the existing.
4. See framing plans for intermediate diaphragm locations.

Plot: 2/21/2020 9:03 PM AM_PM

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE

DESIGNED: ZGC — DRAWN: TLH

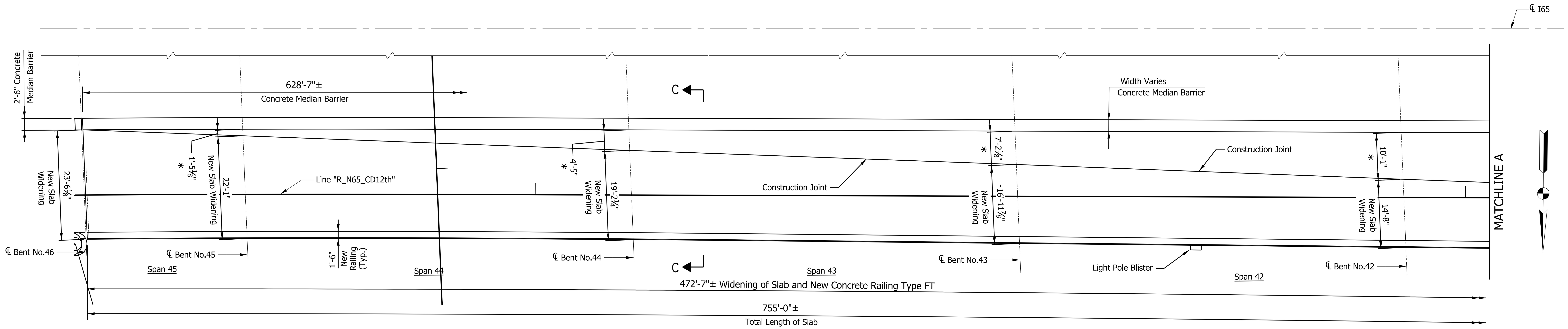
CHECKED: CML — CHECKED: CML

INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS
SHEET 3 OF 3

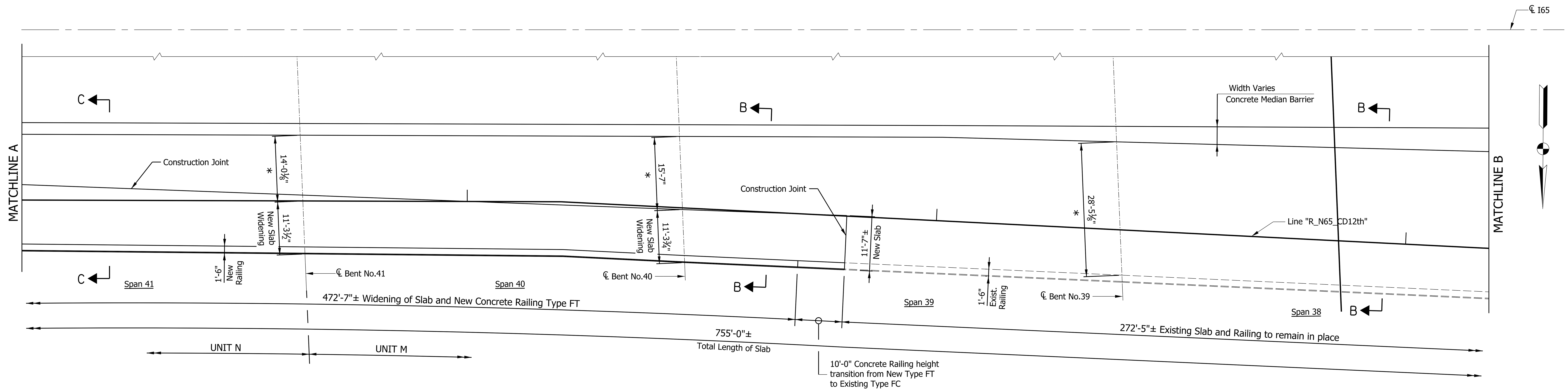
SCALE	BRIDGE FILE
1/4" = 1'-0"	I65-112-02419 DWBL
	DESIGNATION
	1901933
SURVEY BOOK	SHEETS
ELECTRONIC	20 of 24
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 47 I65 WB over Alabama St\1901933_20 - Beam Details-3 - 47.dgn



PARTIAL SLAB PLAN

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



PARTIAL SLAB PLAN

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

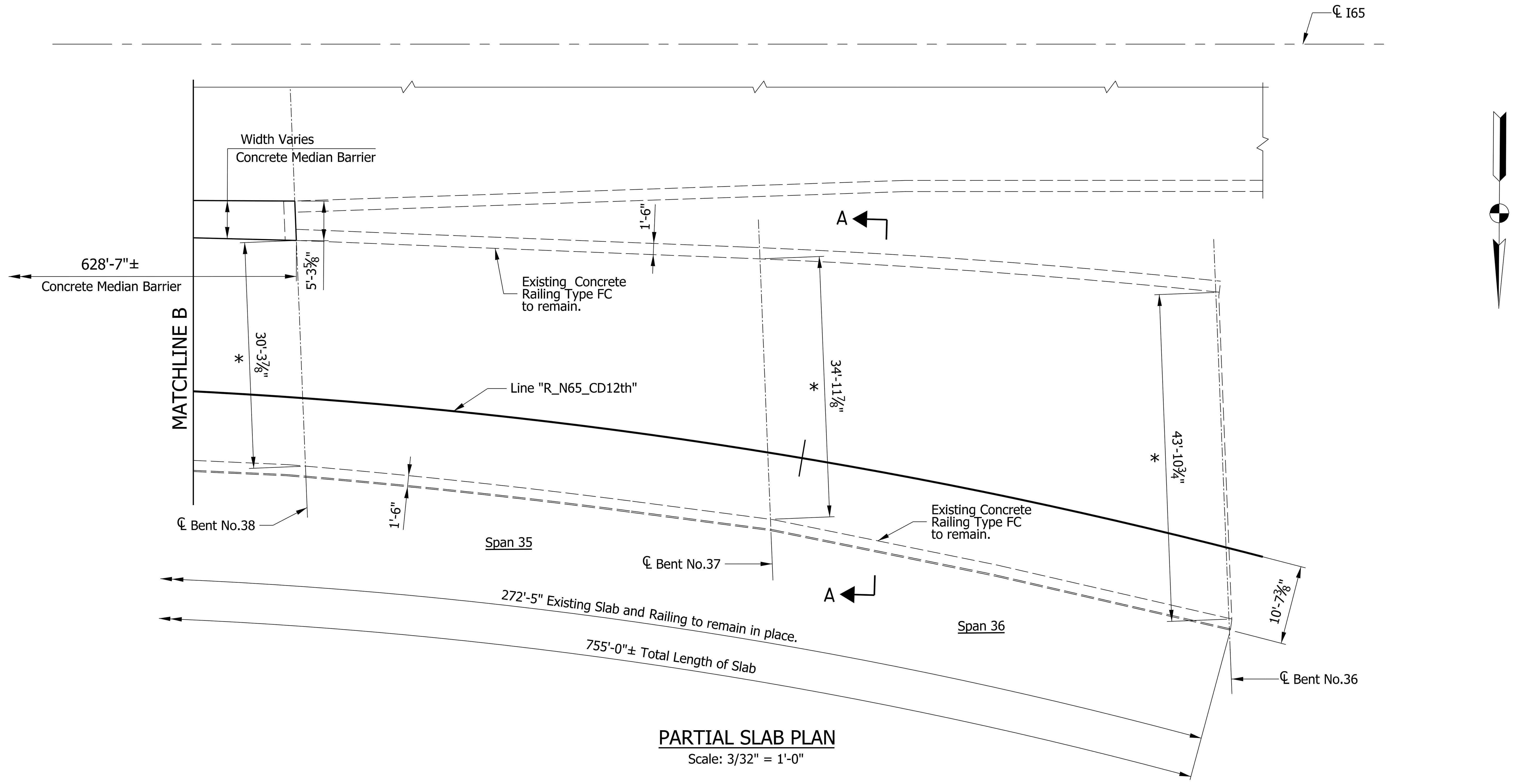
LEGEND

* Indicates limits of existing overlay to be removed & hydrodemolished.

NOTES

1. See Sheet 23 for Sections A-A, B-B & C-C.
2. All transverse dimensions are measured along ℄ Bent.

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 1/16" = 1'-0" / BRIDGE FILE: I65-112-02419 DWBL / DESIGNATION: 1901933
DESIGNED: ZGC	DRAWN: TLH		SUPERSTRUCTURE DETAILS SHEET 1 0F 3	SURVEY BOOK: ELECTRONIC / SHEETS: 21 of 24
CHECKED: CML	CHECKED: CML			CONTRACT: B-36910 / PROJECT: 1600808



PARTIAL SLAB PLAN
Scale: 3/32" = 1'-0"

LEGEND

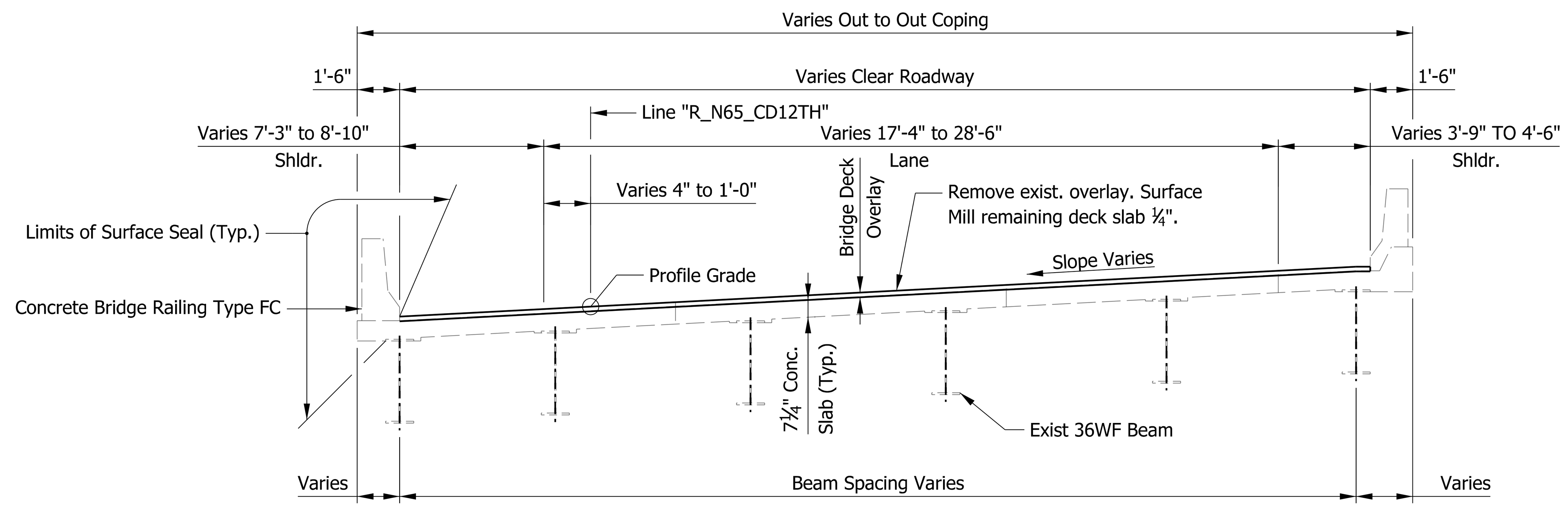
* Indicates limits of existing overlay to be removed & hydrodemolished.

NOTES

1. See Sheet 23 for Section A-A.
2. All transverse dimensions are measured along L Bent.

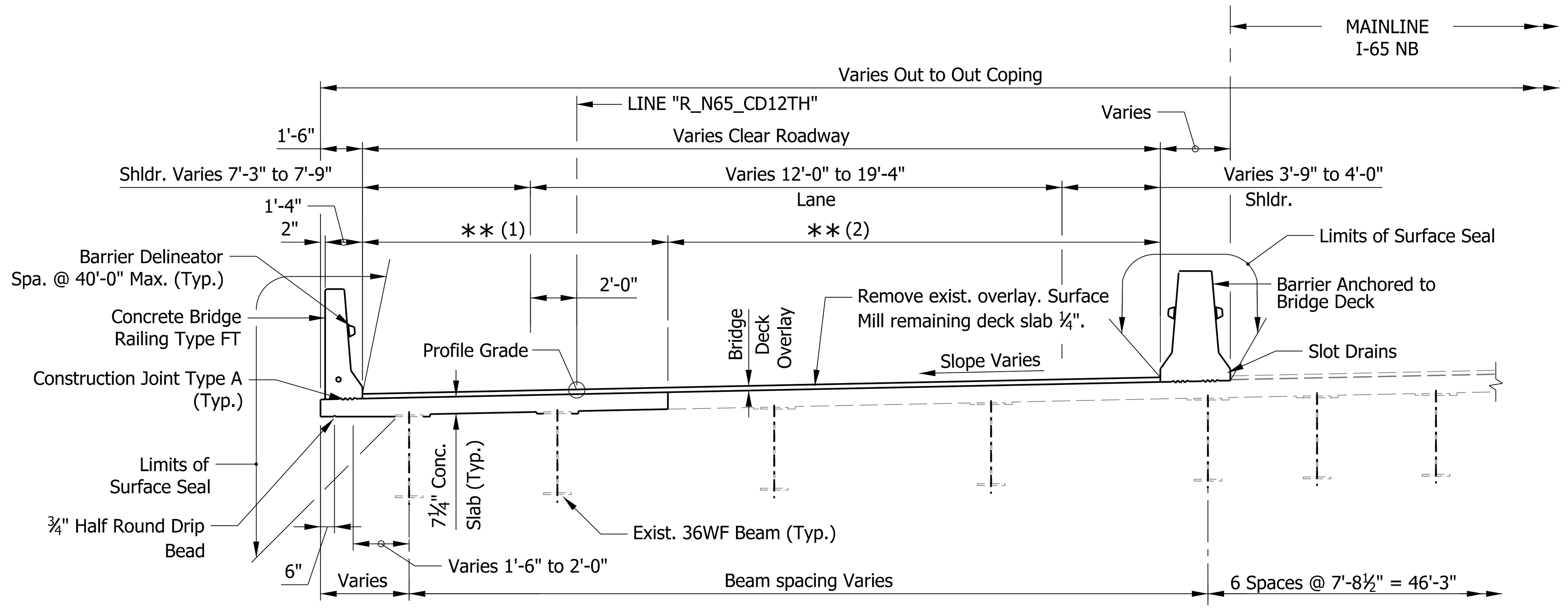
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION
DESIGNED: ZGC	DRAWN: TLH		SUPERSTRUCTURE DETAILS SHEET 2 OF 3
CHECKED: CML	CHECKED: CML		

SCALE	BRIDGE FILE
1/16" = 1'-0"	I65-112-02419 DWBL
	DESIGNATION
	1901933
SURVEY BOOK	SHEETS
ELECTRONIC	22 of 24
CONTRACT	PROJECT
B-36910	1600808



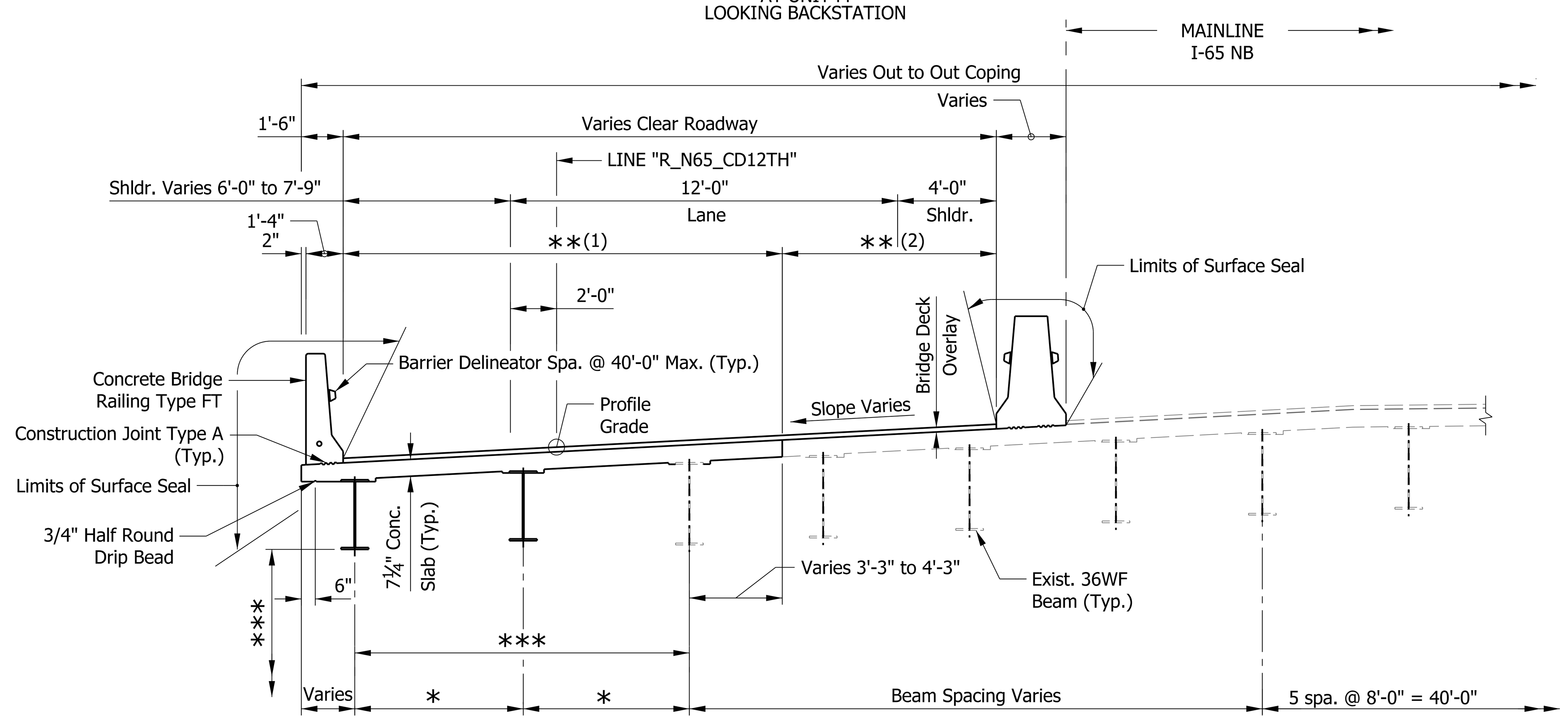
SECTION A-A

AT RAMP 2E-W
LOOKING BACKSTATION



SECTION B-B

AT UNIT M
LOOKING BACKSTATION



SECTION C-C

AT UNIT N
LOOKING DOWNSTATION

LEGEND

∗ Proposed beam spacing varies 2'-11 1/2" to 6'-8 3/8".

∗∗(1) Limits of existing deck removal and proposed deck joint varies. 9'-7"± to 11'-7"±

∗∗(2) Limits of existing overlay surface milling and hydrodemolition varies from 0'-0" to 42'-4 1/2"±.

∗∗∗ Proposed steel beams. Beam depth sized to maintain minimum vertical clearance.

NOTES

Lane and shoulder widths shown are proposed.
See roadway plans for complete roadway geometry information.

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: TLH
CHECKED: CML CHECKED: CML

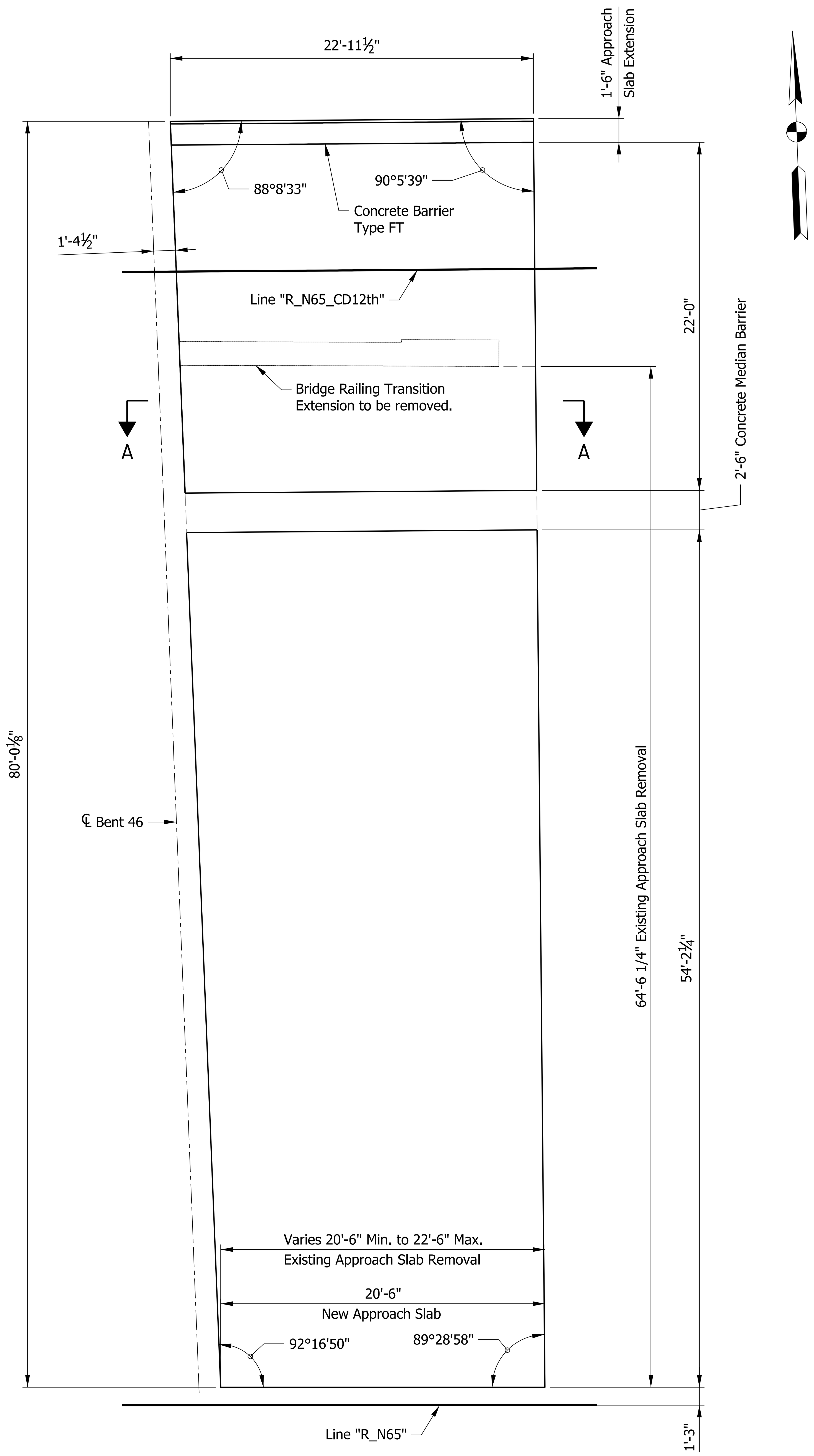
INDIANA
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
SHEET 3 OF 3

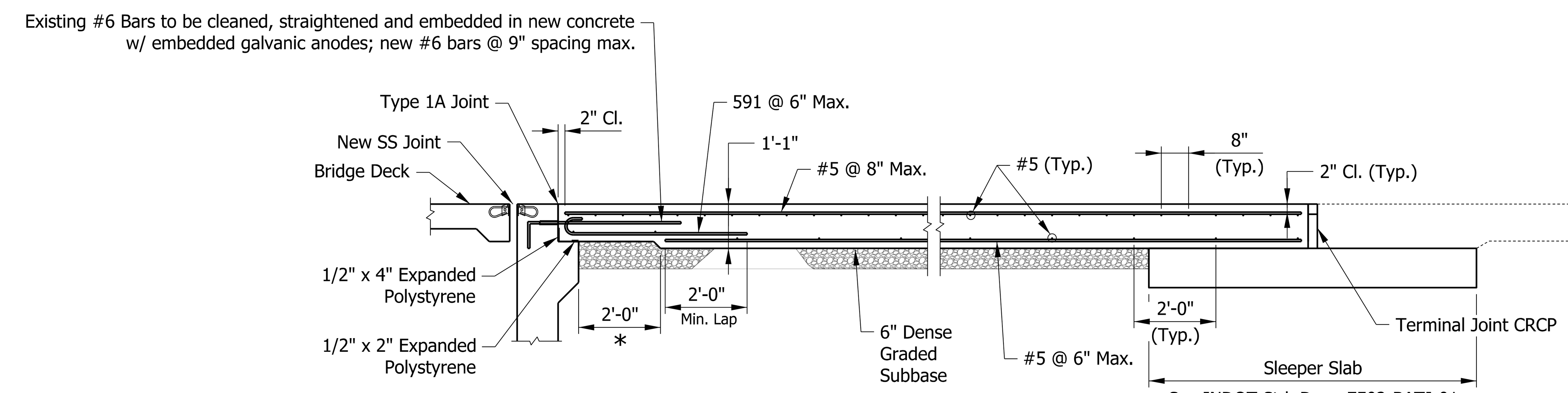
SCALE	BRIDGE FILE
1/16" = 1'-0"	I65-112-02419 DWBL
	DESIGNATION
	1901933
SURVEY BOOK	SHEETS
ELECTRONIC	23 of 24
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/21/2023 9:09 PM AM_PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 47 I65 WB over Alabama St\1901933_23 - Superstructure Details-3 - 47.dgn



APPROACH SLAB PLAN
NORTBOUND LANES I65 AND 12th STREET RAMP
Scale: 3/16" = 1'-0"



* Reduce approach slab thickness to match existing pavement ledge geometry.

SECTION A-A

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.

DATE	REVISION

Plot: 2/21/2020 1:39:11 PM

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: TLH
CHECKED: CML CHECKED: CML

INDIANA
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS

SCALE	BRIDGE FILE
VARIES	I65-112-02419 DWBL
	DESIGNATION
	1901933
SURVEY BOOK	SHEETS
ELECTRONIC	24 of 24
CONTRACT	PROJECT
B-36910	1600808

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 47 I65 WB over Alabama St\1901933_24 - Appr Slab - 47.dgn

PROJECT	DESIGNATION
1600808	1901934
CONTRACT	BRIDGE FILE
B-36910	I65-112-02419 DEBL

INDIANA DEPARTMENT OF TRANSPORTATION

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
I65-112-02419 DEBL	CONTINUOUS COMPOSITE STEEL BEAM BRIDGE	11TH ST. CD TO I-70 EB 4 SPANS SKEW: 2°16'50" LT.	ALABAMA STREET	22+15.51

TRAFFIC DATA	11th St CD to I-70 EB	ALABAMA ST
A.A.D.T. (2021)	14,120 V.P.D.	2,009 V.P.D.
A.A.D.T. (2041)	16,420 V.P.D.	3,145 V.P.D.
D.H.V (2041)	1,642 (PM) V.P.H.	364 V.P.H.
DIRECTIONAL DISTRIBUTION	100 %	43 %
TRUCKS	7 % D.H.V.	2 % D.H.V.
DESIGN DATA		
DESIGN SPEED	45 M.P.H./25 M.P.H.	30 M.P.H.
PROJECT DESIGN CRITERIA	RECONSTRUCTION (4R)	N/A
FUNCTIONAL CLASSIFICATION	URBAN FREEWAY	MINOR ARTERIAL
RURAL/URBAN	URBAN	URBAN (BUILT-UP)
TERRAIN	LEVEL	LEVEL
ACCESS CONTROL	FULL	NONE

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
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

BRIDGE REHABILITATION PLANS

FOR SPANS OVER 20 FEET

ROUTE: I-65 AT: RP 113+24

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

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

BRIDGE DECK SUPERSTRUCTURE WIDENING AND DECK OVERLAY ON I-65 DELAWARE ENTRANCE RAMP OVER ALABAMA STREET LOCATED 0.50 MILES WEST OF I-70 (NORTH SPLIT) INTERCHANGE IN SECTION 36, T-16-N, R-3-E, CENTER TOWNSHIP, MARION COUNTY, INDIANA

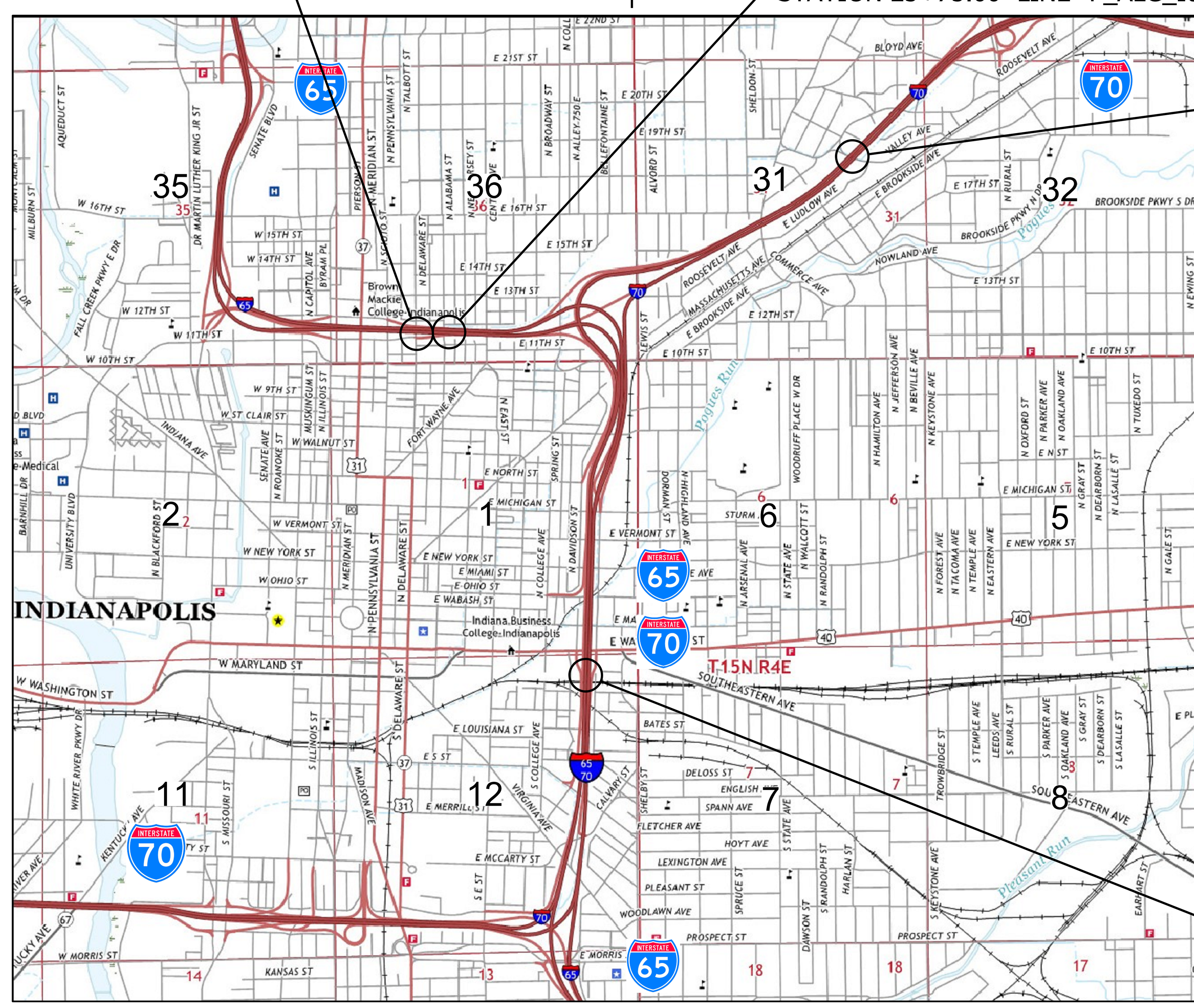
BRIDGE FILE NO. I65-112-02419 DEBL
I-65 OVER ALABAMA STREET

R-3-E R-4-E

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

END CONSTRUCTION PROJECT NO. 1600808
STATION 43+87.40 LINE "P_ALG_I70"

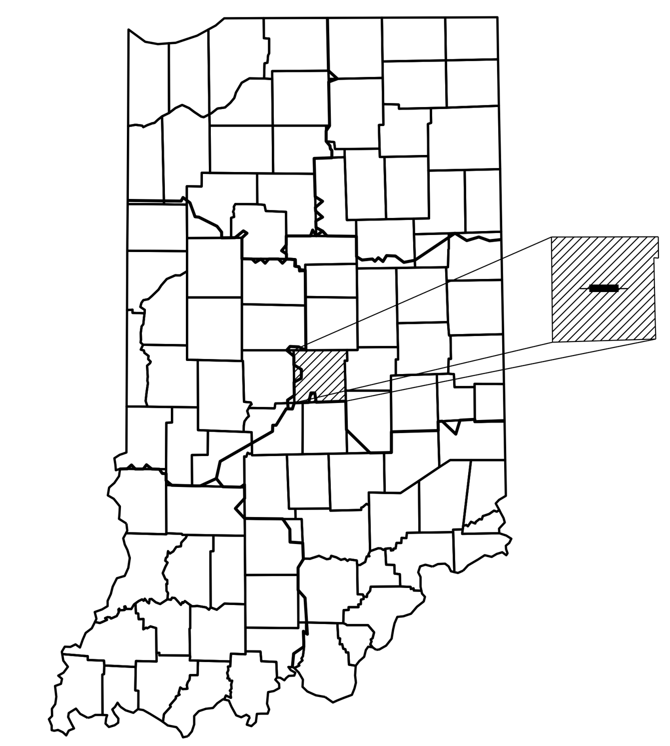
T-16-N
T-15-N



SCALE: 1" = 2000'

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

LOCATION MAP
(MARION COUNTY)



PROJECT LOCATION SHOWN BY — MARION COUNTY

LATITUDE: 39°46'58"N LONGITUDE: 86°09'29"W

HYDROLOGIC UNIT CODE: 05120201130020

BRIDGE LENGTH:	0.664	MI.
ROADWAY LENGTH:	SEE ROAD PLANS	MI.
TOTAL LENGTH:	SEE ROAD PLANS	MI.
MAX. GRADE:	+4.15	%

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

PRELIMINARY PLANS NOT FOR CONSTRUCTION

SUPERIOR CONSTRUCTION

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

DATE

APPROVED FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE

	BRIDGE FILE		
	I65-112-02419 DEBL		
	DESIGNATION		
	1901934		
SURVEY BOOK	SHEETS		
ELECTRONIC	1	of	18
CONTRACT	PROJECT		
B-36910	1600808		

Plot: 2/21/2020 9:46:20 AM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 48 I65 EB over Alabama St\1901934_01 - Title - B48.dgn

UTILITIES

INDEX

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: KNP
CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX

HORIZONTAL SCALE	BRIDGE FILE
NA	I65-112-02419 DEBL
VERTICAL SCALE	DESIGNATION
NA	1901934
SURVEY BOOK	SHEETS
ELECTRONIC	2 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/20/2020 3:35:39 PM

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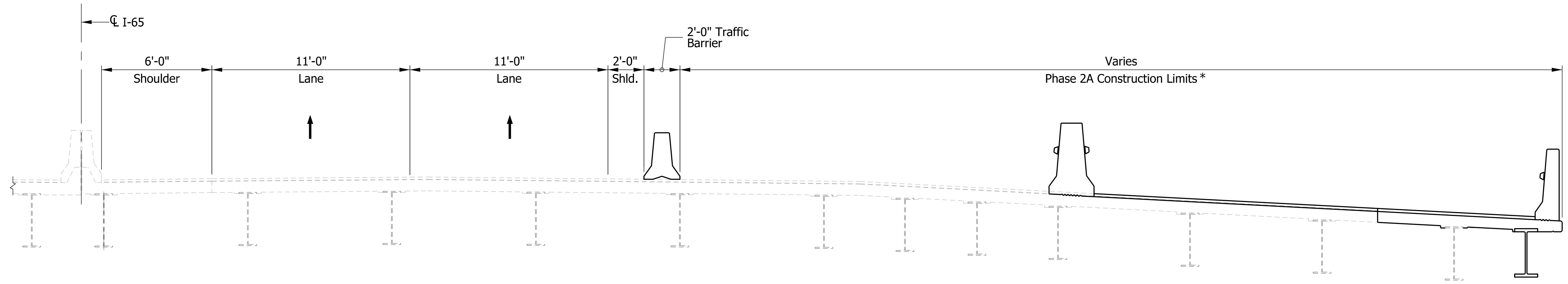

* Substructure niult in Phase 1

PHASE 2A

Eastbound only shown at Unit N
Looking upstation

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	SIG_DT DATE	
DESIGNED: ZGC	DRAWN: KNP		
CHECKED: CML	CHECKED: ZGC		

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINRENANCE OF TRAFFIC

SCALE	BRIDGE FILE
1/16" = 1'-0"	I65-112-02419 DEBL
	DESIGNATION
	1901934
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/20/2025 5:40 PM AM_PM

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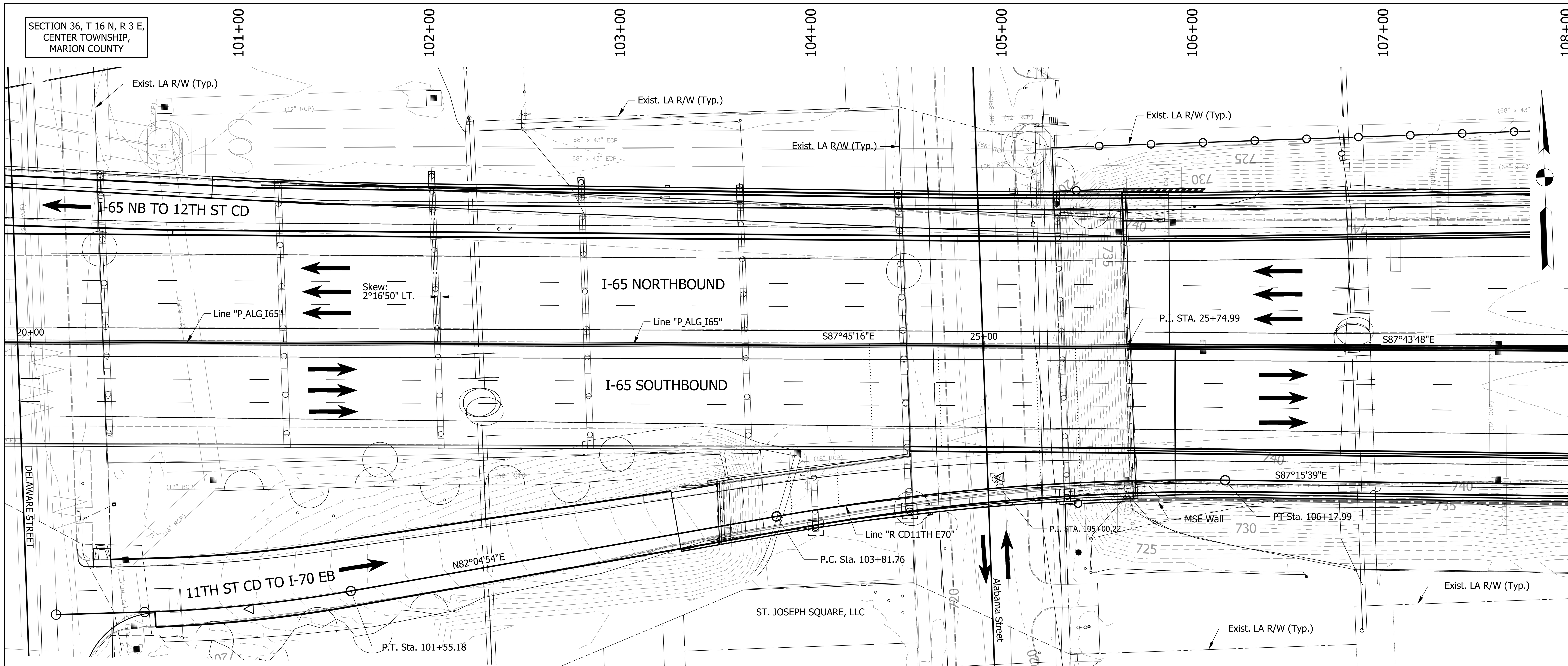
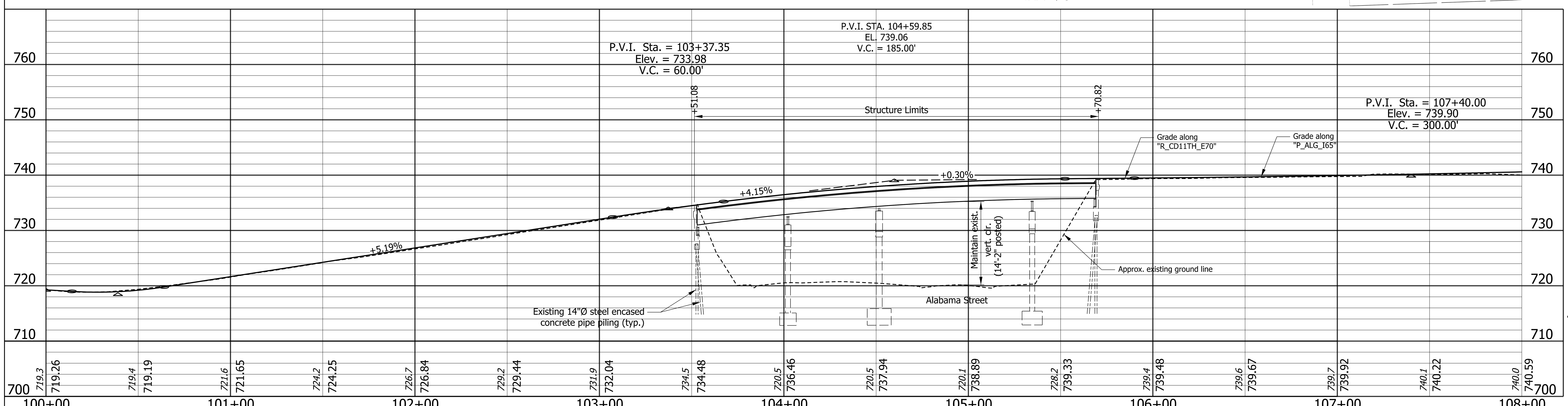




EXISTING STRUCTURE:

The existing structure was built in 1972. RAMP 2W-E is a 2 span continuous composite steel beam bridge, with a varying clear roadway width. Unit N of the structure is a 5 span continuous composite steel beam bridge, with a varying clear roadway width. The existing structure shall be widened as shown.

Existing plans are on file with the Indiana Department of Transportation under bridge File No. I65-112-02419C.

EARTHWORK TABULATION

Fill +20%	see Road Plan
Common Excavation	see Road Plan
Excavation, Foundation, Unclassified (70%)	see Road Plan
Waste	see Road Plan

HORIZONTAL CURVE DATA

LINE: "R_CD11TH_E70"

P.I. STA. = 101+00.87
RADIUS = 754.00'
DELTA = 8°16'07" LT.
Dc = 7°35'56"
L = 108.81'
T = 54.50'
M = 1.96'
E = 1.97'
e = 2%

P.I. STA. = 105+00.22
RADIUS = 1270.00'
DELTA = 10°39'26" RT.
Dc = 04°30'41"
L = 236.23'
T = 118.46'
M = 5.49'
E = 5.51'
e = 2%

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.

CONTINUOUS COMPOSITE
STEEL BEAM RAMP
4 SPANS: 50'-0", 50'-0", 83'-0", 34'-0"
SKEW: 2°16'50" LT.
CLEAR ROADWAY: VARIES
11TH ST. CD RAMP OVER
ALABAMA STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL ____ DESIGN ENGINEER ____ DATE

DESIGNED: ZGC | DRAWN: KNP
CHECKED: CML | CHECKED: ZGC

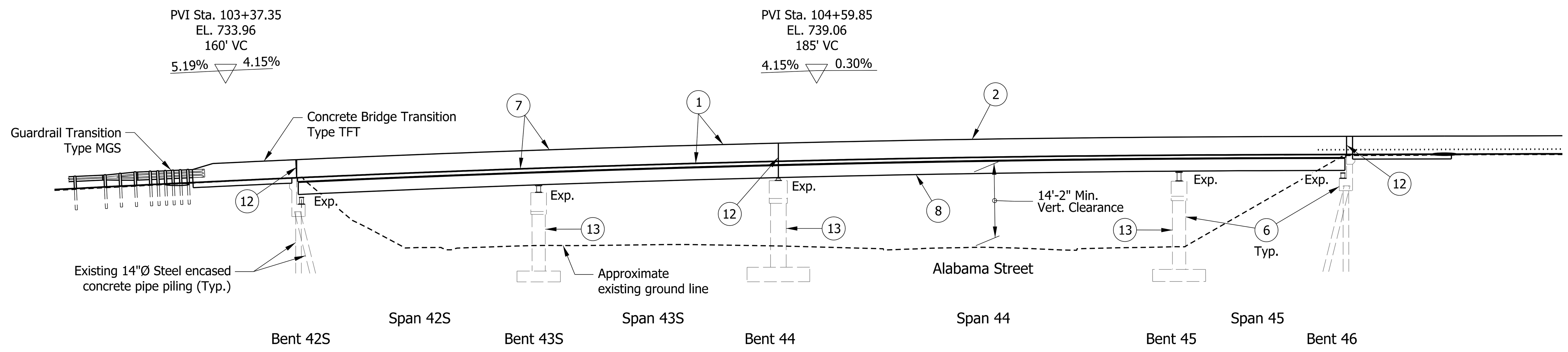
INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT

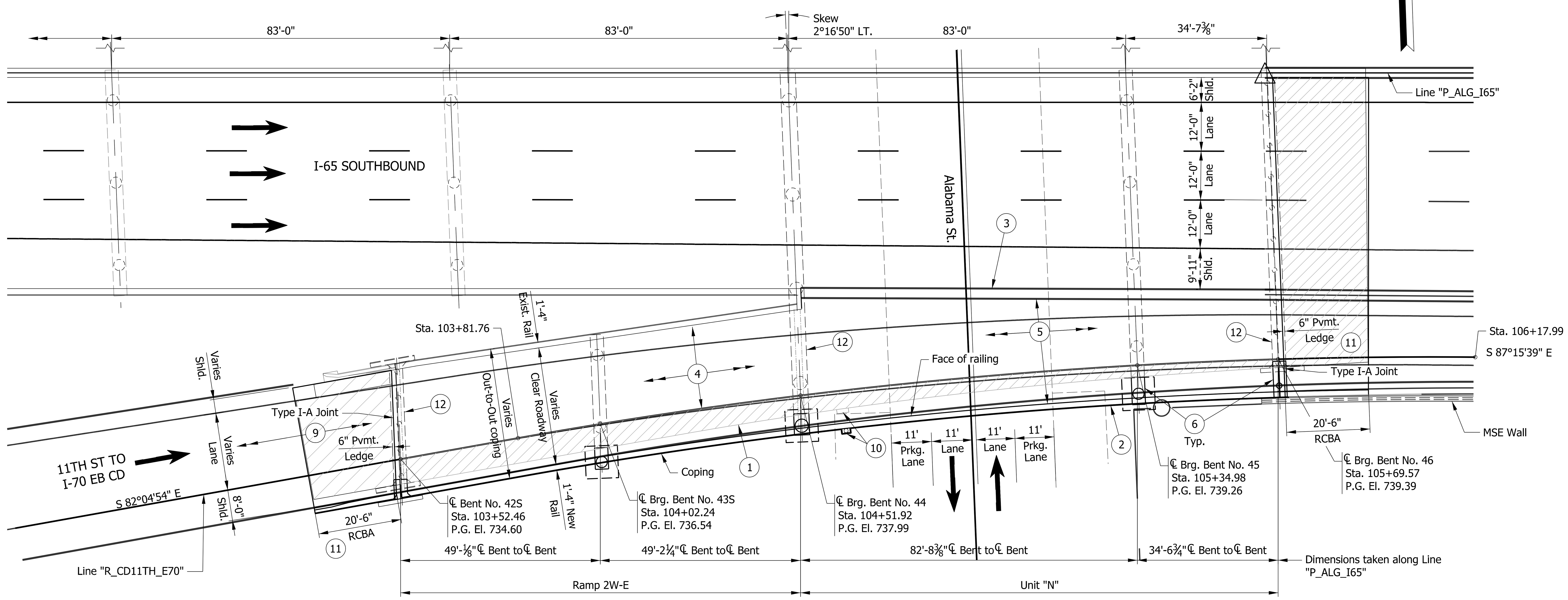
HORIZONTAL SCALE	BRIDGE FILE
1"=30'-0"	I65-112-02419 DEBL
VERTICAL SCALE	DESIGNATION
1"=10'-0"	1901934
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/20/2020 3:35:50 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 48 I65 EB over Alabama St\1901934_04 - Layout - 48.dgn



ELEVATION



PLAN

LEGEND

1. Remove portion of southern edge of existing bridge deck including bridge railing. Construct new portion of concrete deck, match existing cross slope. New deck slab thickness shall be 7½" for Ramp 2W-E and 7¼" for unit N.
2. Construct new Type FT concrete bridge railing. Install barrier delineators at 40'-0" max. spacing.
3. Construct a concrete barrier anchored to bridge deck between 11th st CD Ramp and I-65 SB mainline. Install barrier delineators at 40'-0" max. spacing.
4. Remove existing bridge deck overlay from remaining portions of existing deck slab within limits of proposed concrete traffic barrier anchored to deck. Surface mill existing deck slab ¼" and perform full and partial depth patching as required.
5. Place new very early strength latex modified concrete bridge deck overlay between barriers. Coordinate new overlay thickness with existing adjacent surfaces and new adjacent roadway pavement.
6. Widen existing end bents, slope walls, and piers in -kind as required. Replace drains and downspouts and clean and paint existing pipes to remain.
7. Surface seal the concrete bridge rail, bridge rail transitions, bridge deck, and copings.
8. Paint new steel beams used for widening in accordance with the project standards.
9. Replace pavement markings and snowplowable pavement markers within the project limits (See Road Plans).
10. Remove and replace light pole and blister.
11. Remove existing approach slabs and construct new 13" reinforced concrete bridge approach slabs.
12. Extend the existing strip seal joint with new joint through the widened portion of the deck.
13. Substructure patching as required.

Approximate removal limits

CONTINUOUS COMPOSITE
STEEL BEAM BRIDGE
4 SPANS: 50'-0", 50'-0", 83'-0", 34'-0"
SKEW: 2°16'50" LT.
CLEAR ROADWAY: VARIES
11TH ST CD RAMP OVER
ALABAMA STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL ____ DESIGN ENGINEER ____ DATE

DESIGNED: ZGC DRAWN: KNP
CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

SCALE	BRIDGE FILE
1/16" = 1'-0"	I65-112-02419 DEBL
	DESIGNATION
	1901934
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/20/2025 5:54 PM AM_PM

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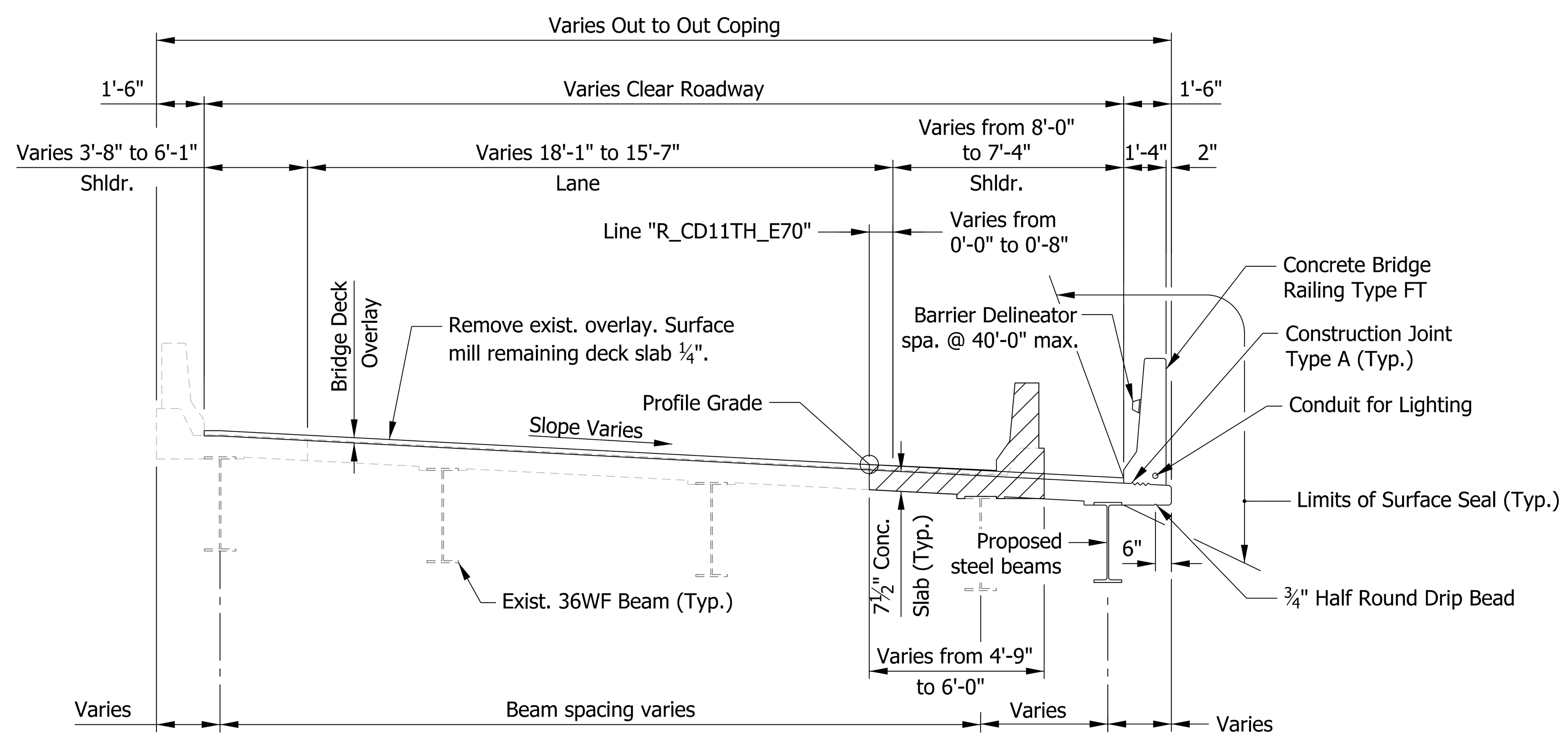
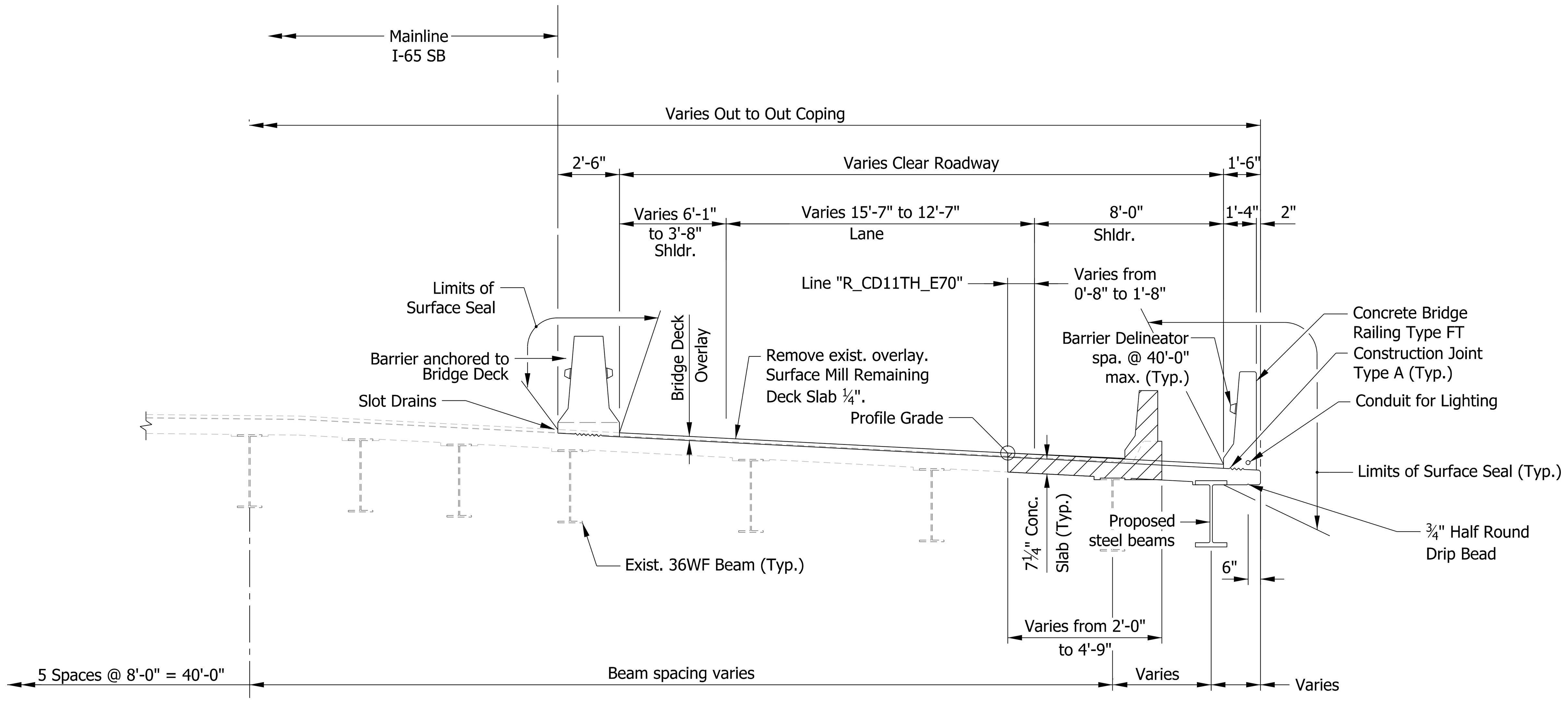


EXISTING AND PROPOSED TYPICAL SECTION

at Ramp 2W-E looking upstation



EXISTING AND PROPOSED TYPICAL SECTION

at Unit N
Looking upstation

LEGEND

Limits of removal

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 outside the vertical coping form. The top overhang brackets were assumed to be located 6 inches past the edge of the vertical coping form. The bottom overhang brackets were assumed to be braced against the intersection of the beam bottom flange and web.

Analysis indicates temporary wood blocking required along bottom of web between beams in the exterior bay and adjacent two interior bays to prevent excessive exterior beam rotation. Temporary wood blocking to have a minimum cross-sectional area of 16 sq. inches, and spaced a maximum of ½ the existing diaphragm spacing. Temporary blocking to be included in superstructure concrete pay item.

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 the 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.

GENERAL NOTES

Plans for the existing bridge are on file at the Indiana Department of Transportation as Bridge File I65-112-02419, I65-112-0219A, I65-112-02419B, and I65-112-02419C.

Where new work is to be fitted to old work, the contractor shall check all dimensions and conditions in the field and report all errors or discrepancies to the engineer and assume responsibility for their correctness and fit of the new part to the old.

Epoxy resin adhesive shall be used where new concrete abuts existing concrete.

Reinforcing bar cover shall be 2½" in top and 1" minimum. In bottom of floor slab and 2" in all other parts, unless noted otherwise.

Clean and surface seal all new faces of the barrier railing, deck, approach slab, abutments, and copings.

Elevations shown are based on existing plans, NGVD of 1929, and are for information only. The contractor shall field verify all existing elevations prior to construction.

All pavement markings disturbed during construction shall be replaced in kind.

Contractor to take care not to damage the existing shear studs on top of the existing beams during deck removal. If any studs are damaged during deck removal as determined by the Engineer, Contractor to grind off the damaged studs, without damaging the beam, and replace in kind at the Contractor's expense.

DESIGN DATA

DESIGN STRENGTHS

Class "C" Concrete	f'c=4,000 psi
Reinforcing Bars	fy=60,000 psi
Structural Steel	Fy=50,000 psi

SEISMIC DESIGN DATA

Seismic Performance Zone = A
Acceleration Coefficient = 0.0625
Seismic Soil Profile Type = I

LIVE LOAD:

Original bridge designed for H20-S16-44 loading in accordance with 1953 AASHTO Standard Specifications for Highway Bridges. Existing bridge checked for special loading of 29,000 pound axles spaced at 4'-0" centers and special Toll Road loading, including Michigan truck-train loadings.

Proposed portions of bridge designed for HS20-44 loading, in accordance with AASHTO Bridge Specifications for Highway Bridges, 17th Edition, 2002, and its subsequent interims. Proposed portions have also been designed for special Toll Road and Michigan truck-train loading.

DEAD LOAD:

Existing and Proposed portions of bridge designed for actual weight plus 15 psf stay-in-place metal forms.

Slab designed with a 7½" structural depth and a ½" wearing surface.

CONTINUOUS COMPOSITE
STEEL BEAM BRIDGE
4 SPANS: 50'-0", 50'-0", 83'-0", 34'-0"
SKEW: 2°16'50" LT.
CLEAR ROADWAY: VARIES
11TH ST CD RAMP OVER
ALABAMA STREET
MARION COUNTY

RECOMMENDED FOR APPROVAL $ENG_SIGNATURE$ DESIGN ENGINEER SIG_DT DATE

DESIGNED: ZGC DRAWN: KNP
CHECKED: CML CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
TYPICAL SECTION

SCALE	BRIDGE FILE
1/16" = 1'-0"	I65-112-02419 DEBL
	DESIGNATION
	1901934
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/20/2020 5:56 PM AM_PM

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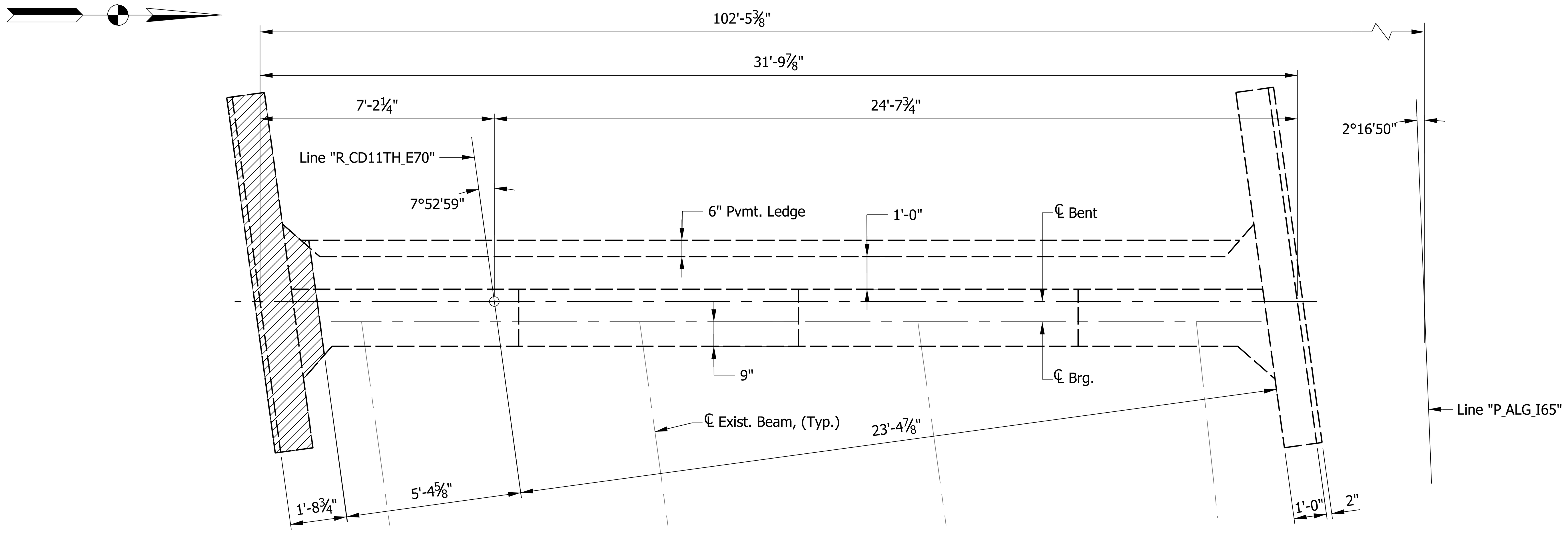

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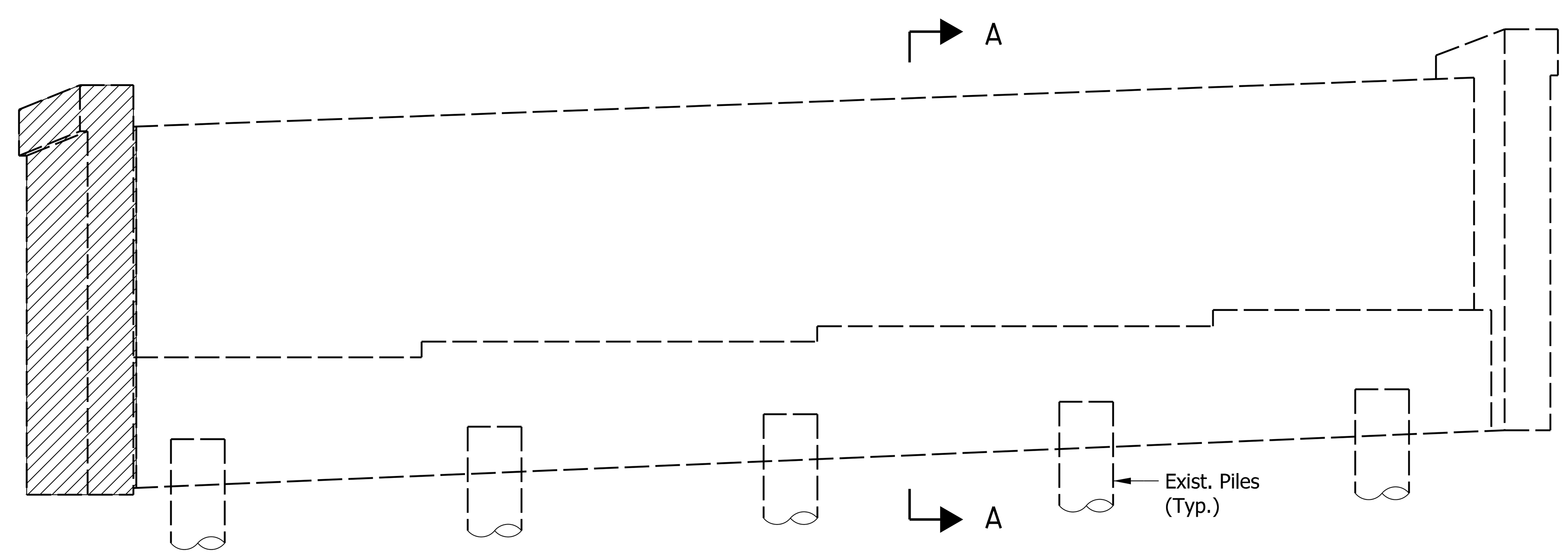

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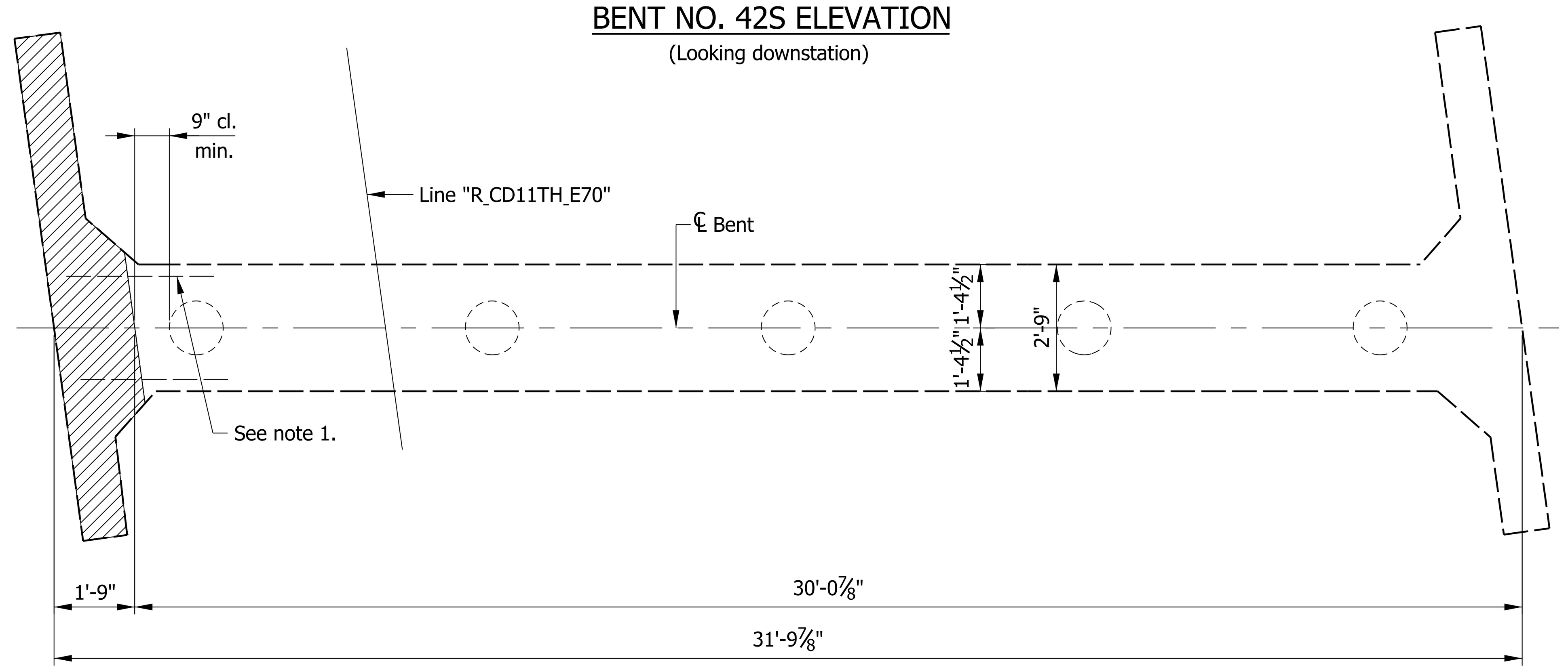
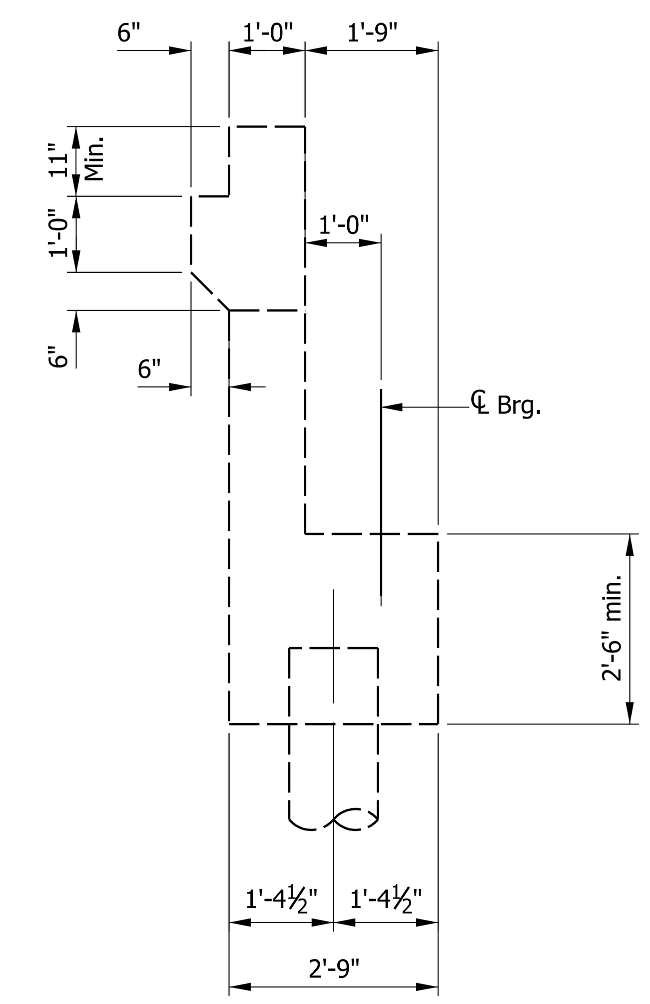
(Looking downstation)



FOOTING PLAN



SECTION A-A

Indicates removal

Note:

1. Existing reinforcement to be cleaned, straightened and embeded in new concrete with galvanic anodes.

Plot: 2/20/2020 3:36:04 PM

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: KNP		
CHECKED: CML	CHECKED: ZGC		

INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 42S
REMOVAL DETAILS

SCALE	BRIDGE FILE
3/8" = 1'-0"	I65-112-02419 DEBL
	DESIGNATION
	1901934
SURVEY BOOK	SHEETS
ELECTRONIC	7 of 18
CONTRACT	PROJECT
B-36910	1600808

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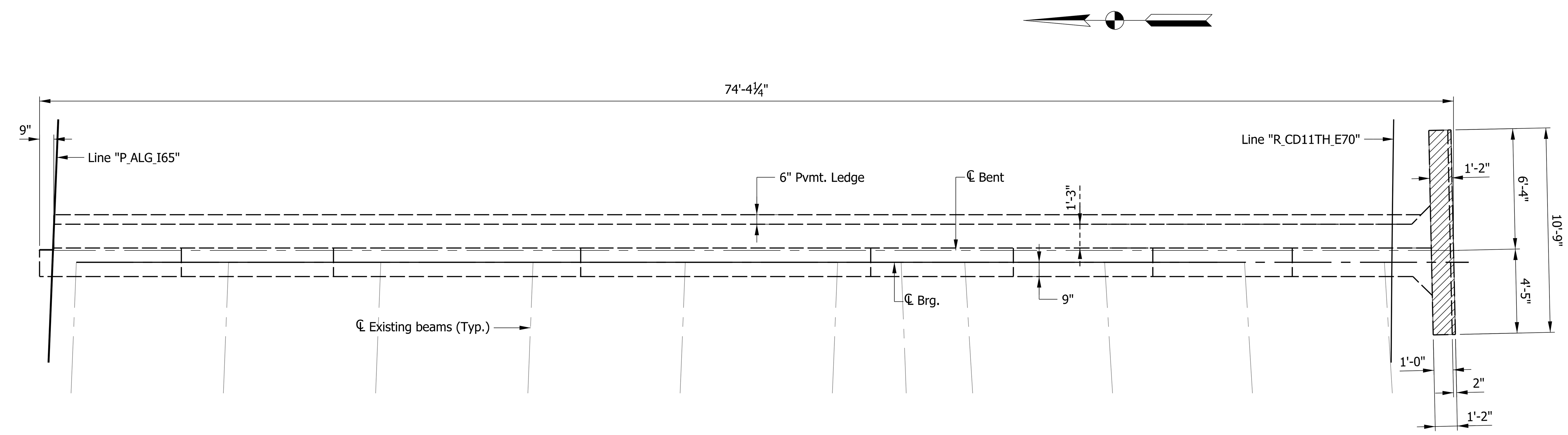

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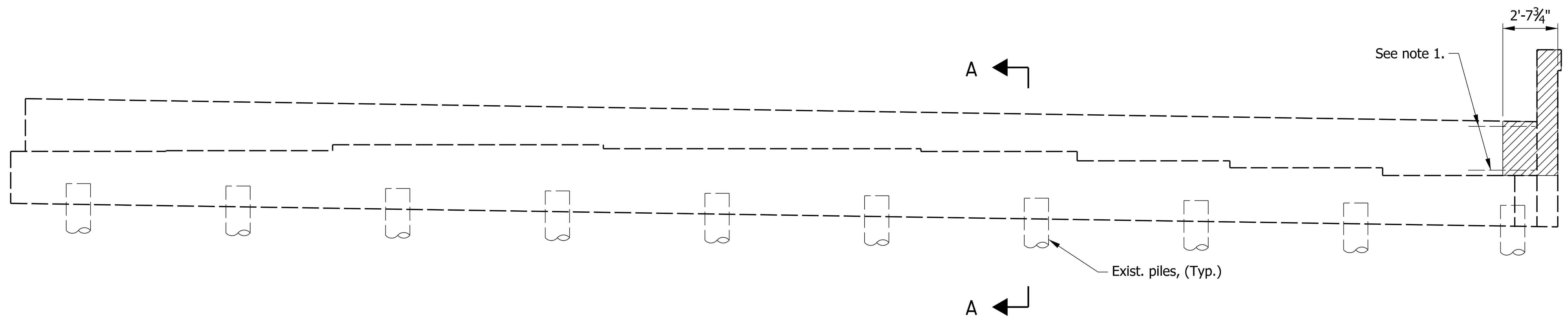

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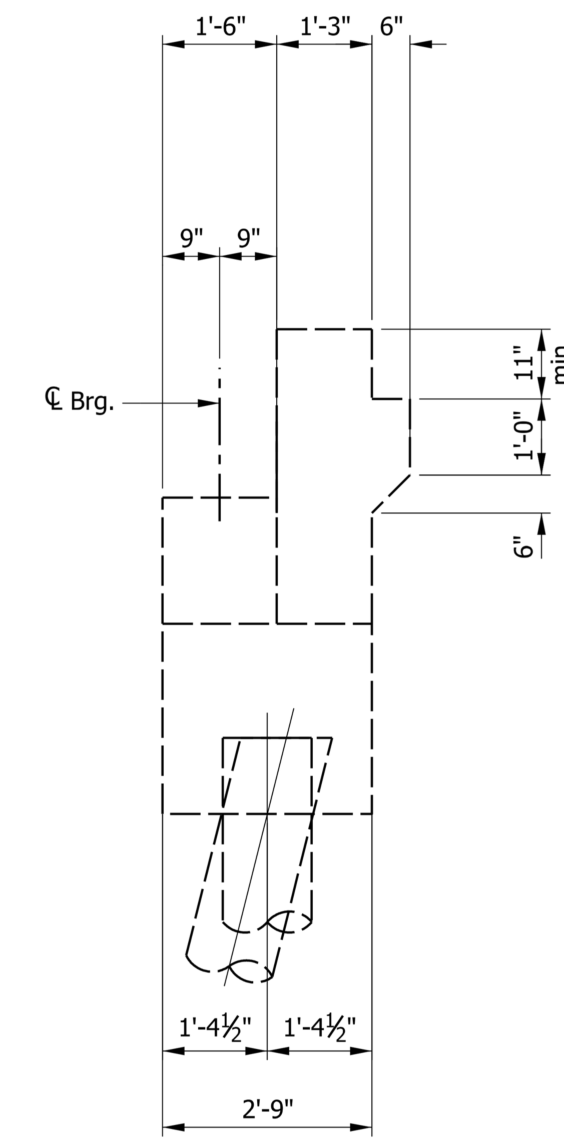
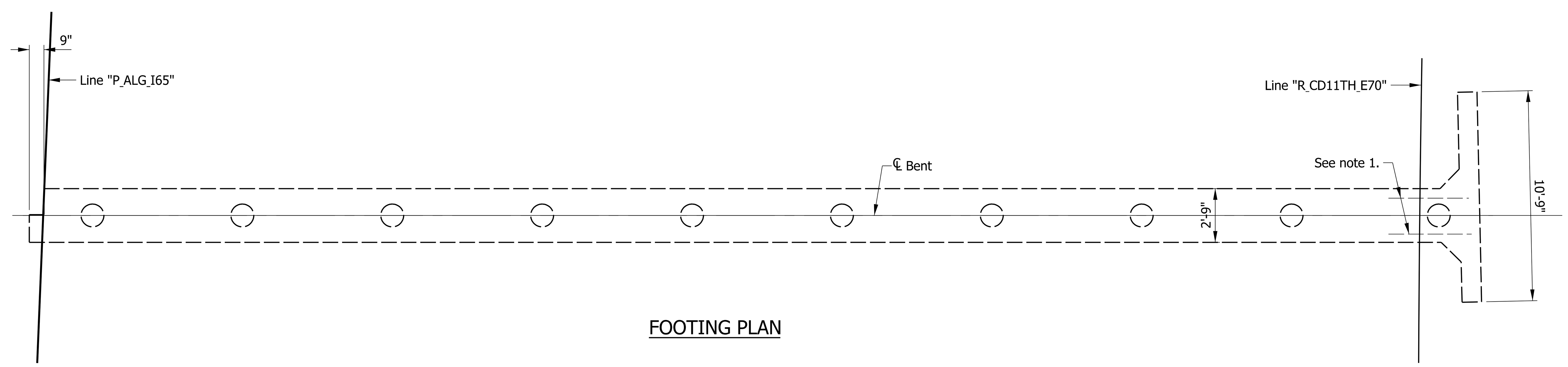
(Looking upstation)



SECTION A-A



FOOTING PLAN

Indicates removal

Note:

1. Existing reinforcement to be cleaned, straightened and embeded in new concrete with galvanic anodes.

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 1/4" = 1'-0"	BRIDGE FILE: I65-112-02419 DEBL
					DESIGNATION: 1901934
DESIGNED: ZGC	DRAWN: KNP		BENT NO. 46 SBL REMOVAL DETAILS	SURVEY BOOK: ELECTRONIC	SHEETS: 8 of 18
CHECKED: CML	CHECKED: ZGC			CONTRACT: B-36910	PROJECT: 1600808

Plot: 2/20/2020 3:36:06 PM

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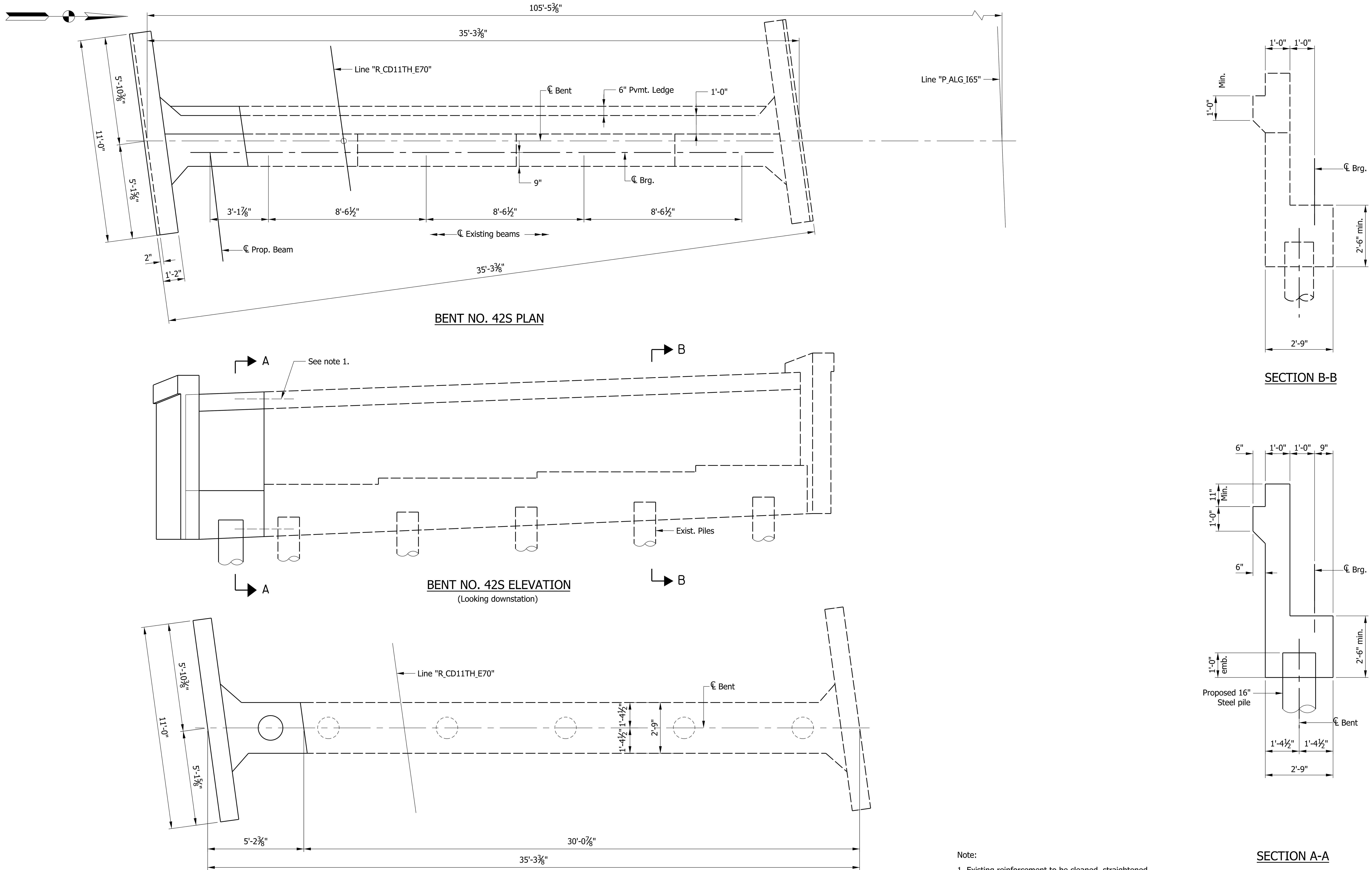

BENT NO. 42S PLAN

BENT NO. 42S ELEVATION
(Looking downstation)

FOOTING PLAN

SECTION B-B

SECTION A-A

Note:

1. Existing reinforcement to be cleaned, straightened and embeded in new concrete with galvanic anodes.

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: KNP		
CHECKED: ZGC	CHECKED: CML		

INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 42S
DETAILS

SCALE	BRIDGE FILE
3/8" = 1'-0"	I65-112-02419 DEBL
	DESIGNATION
	1901934
SURVEY BOOK	SHEETS
ELECTRONIC	9 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/20/2020 3:36:13 PM

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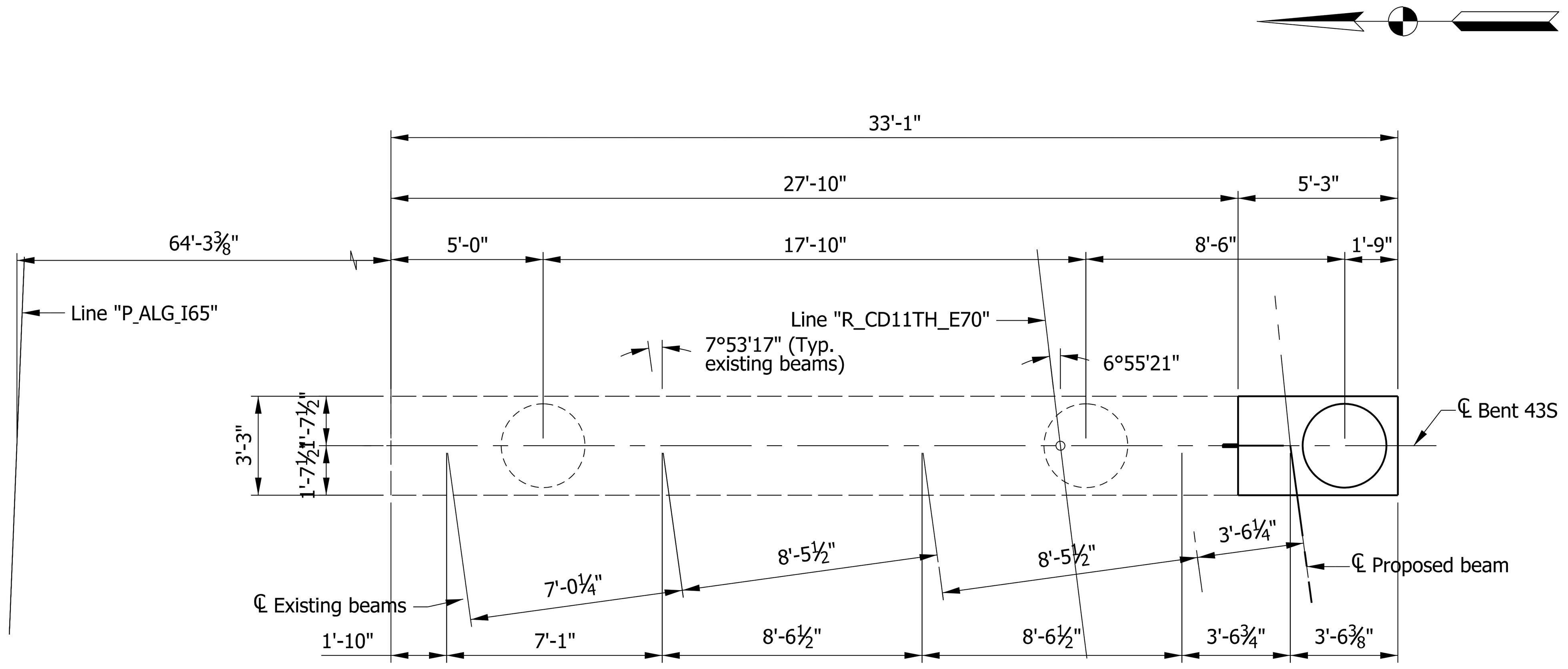

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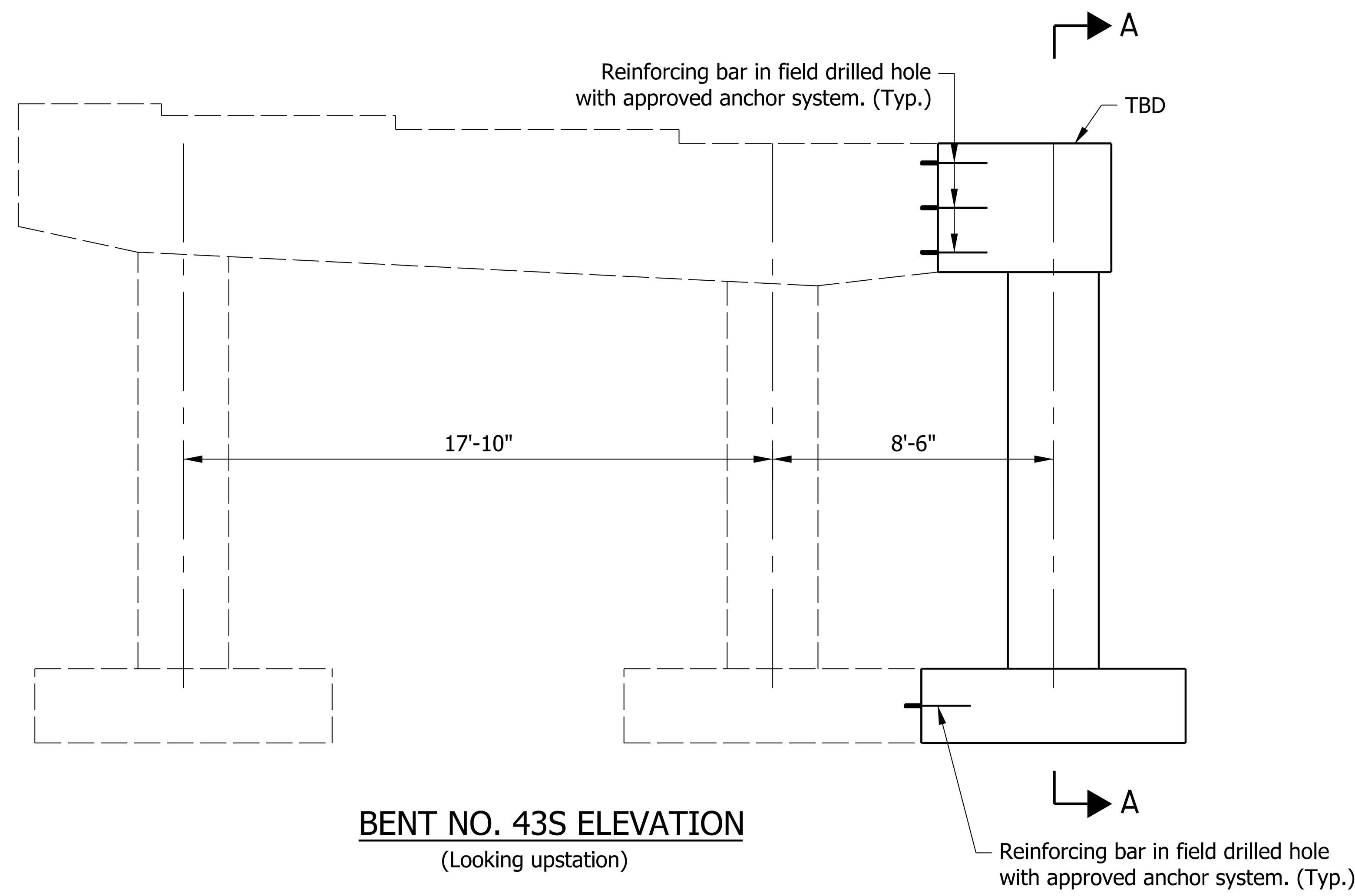

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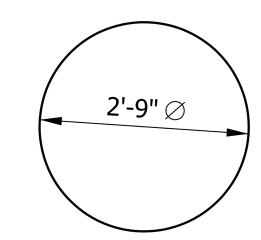
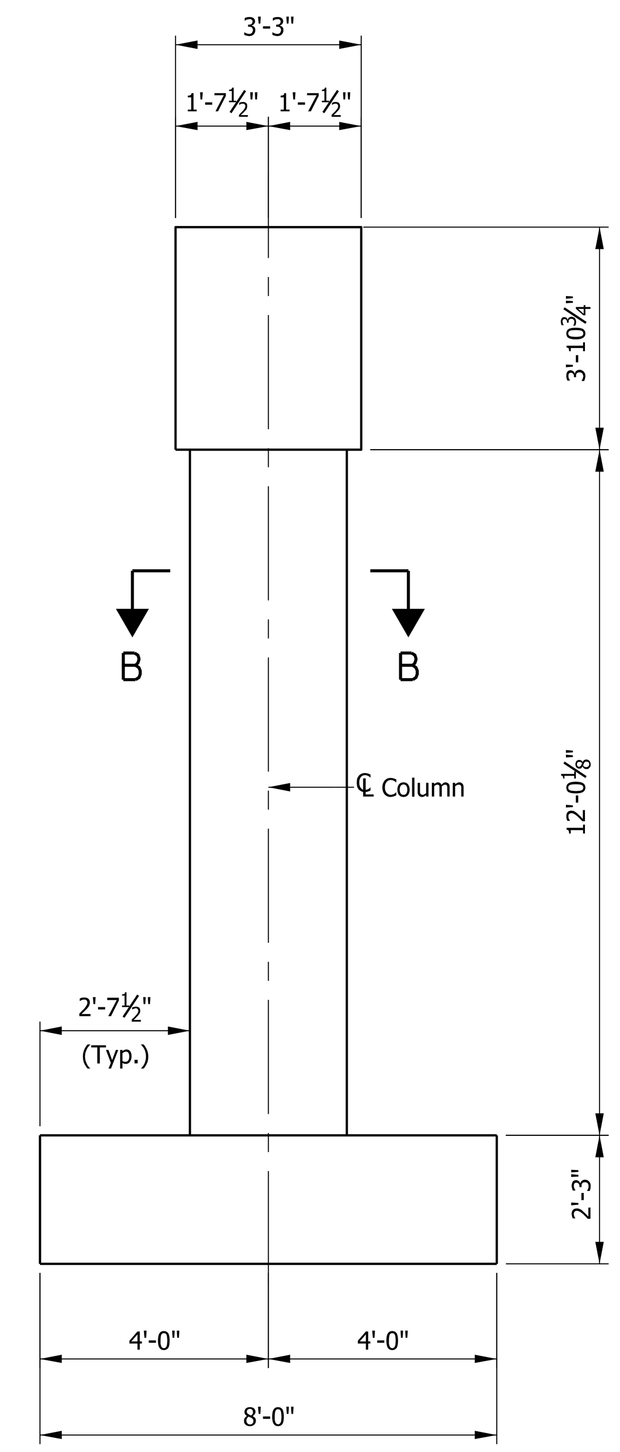


SECTION B-B



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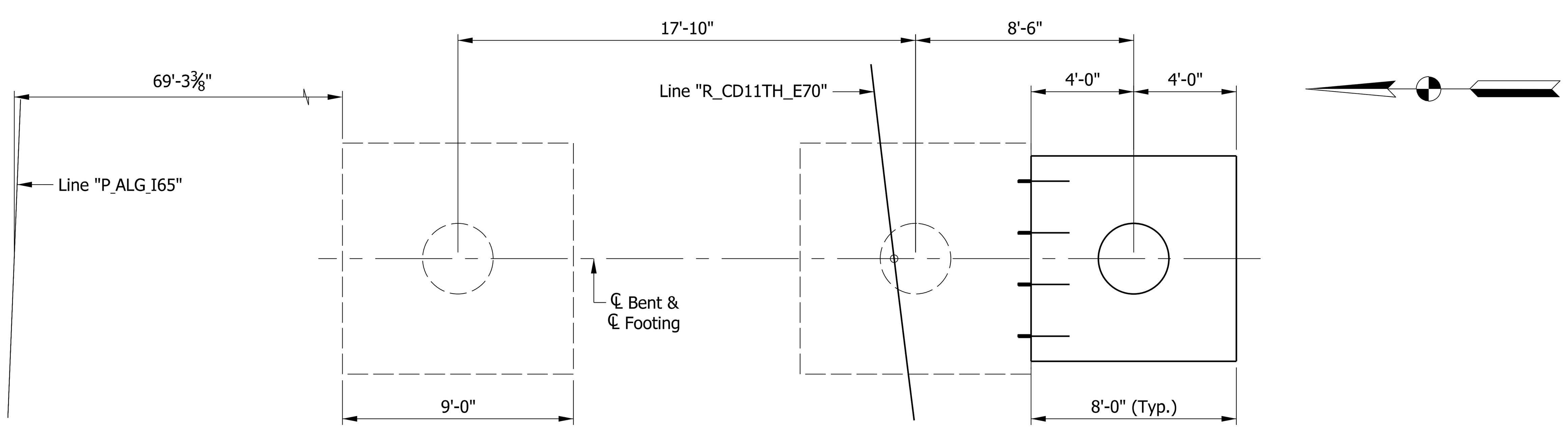


FOOTING PLAN

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER ______ DATE

DESIGNED:	ZGC	DRAWN:	KNP
CHECKED:	CML	CHECKED:	ZGC

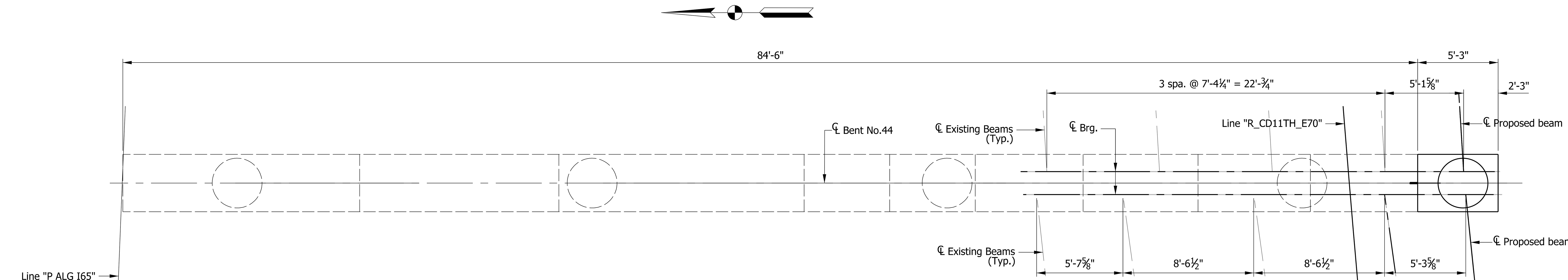
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 43S
DETAILS

SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-02419 DEBL
	DESIGNATION
	1901934
SURVEY BOOK	SHEETS
ELECTRONIC	10 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/20/2020 3:36:18 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 48 I65 EB over Alabama St\1901934_10 - Bent 43S - 48.dgn



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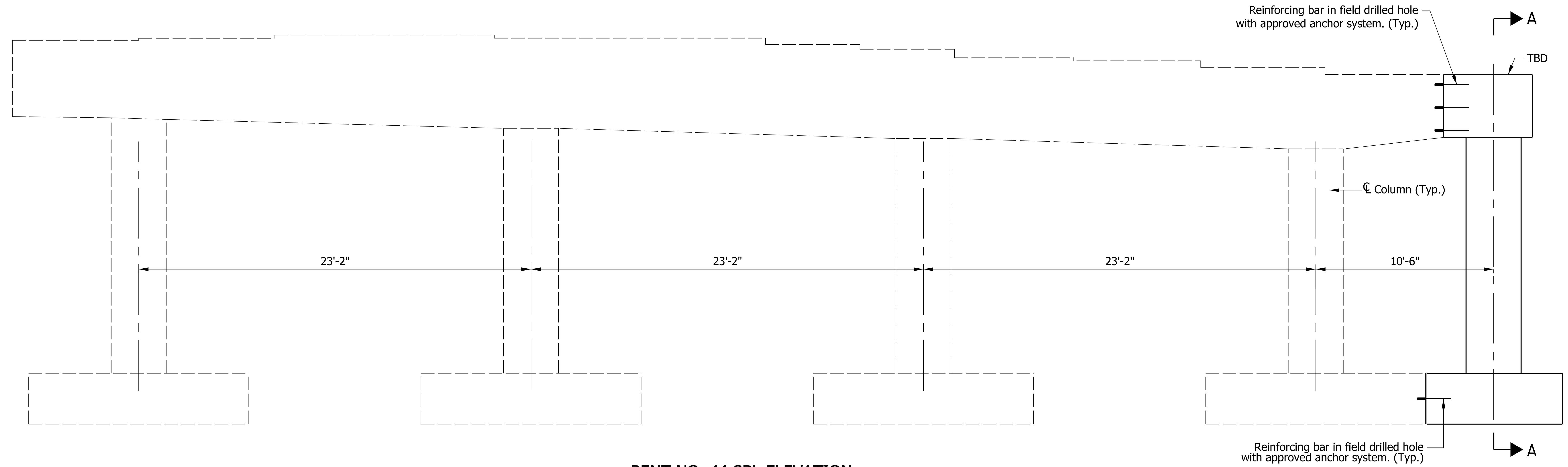

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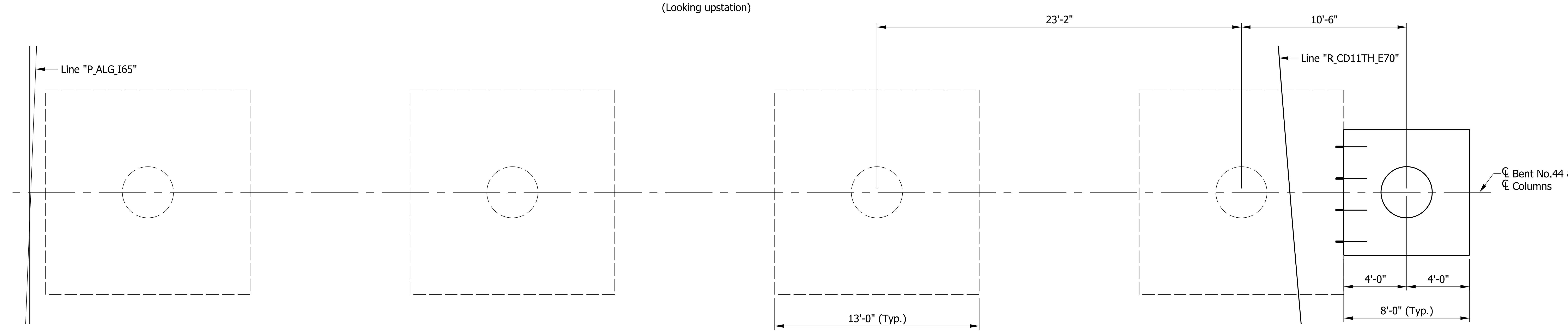
(Looking upstation)



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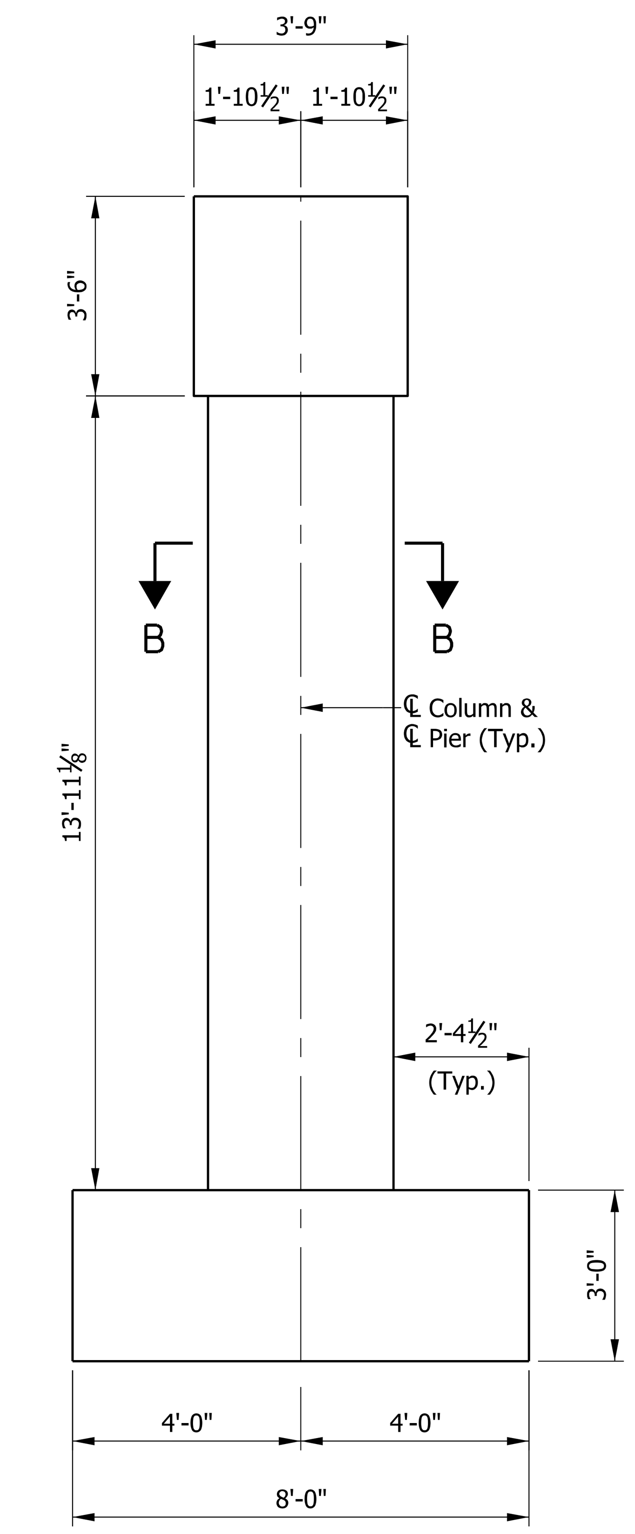
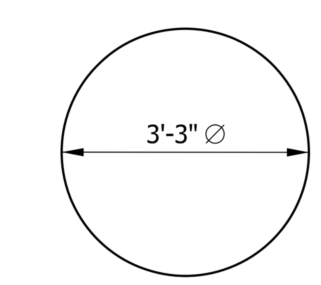


SECTION A-A



SECTION B-B

Plot: 2/20/2020 3:36:22 PM

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: KNP	CHECKED: CML	CHECKED: ZGC

INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 44 SBL
DETAILS

SCALE	BRIDGE FILE
3/32" = 1'-0"	
	DESIGNATION
SURVEY BOOK	SHEETS
	11 of
CONTRACT	PROJECT

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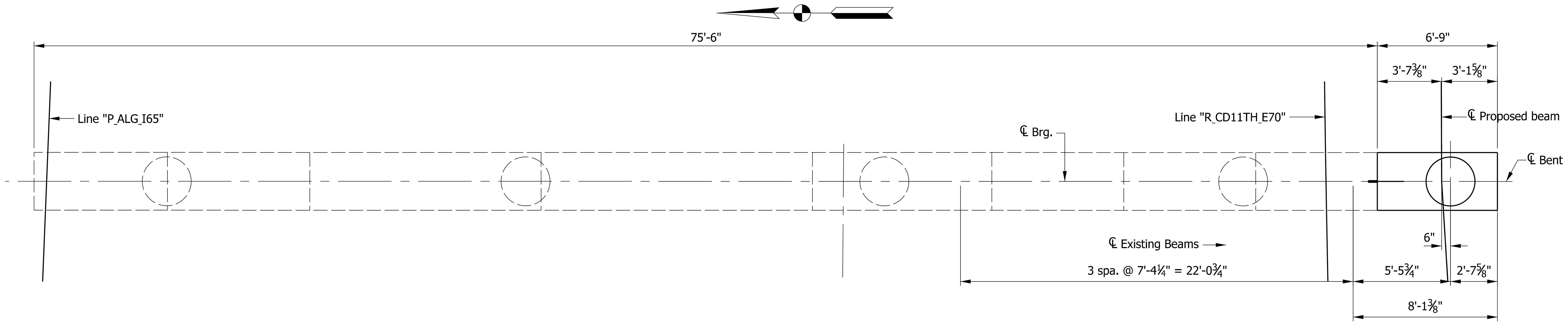

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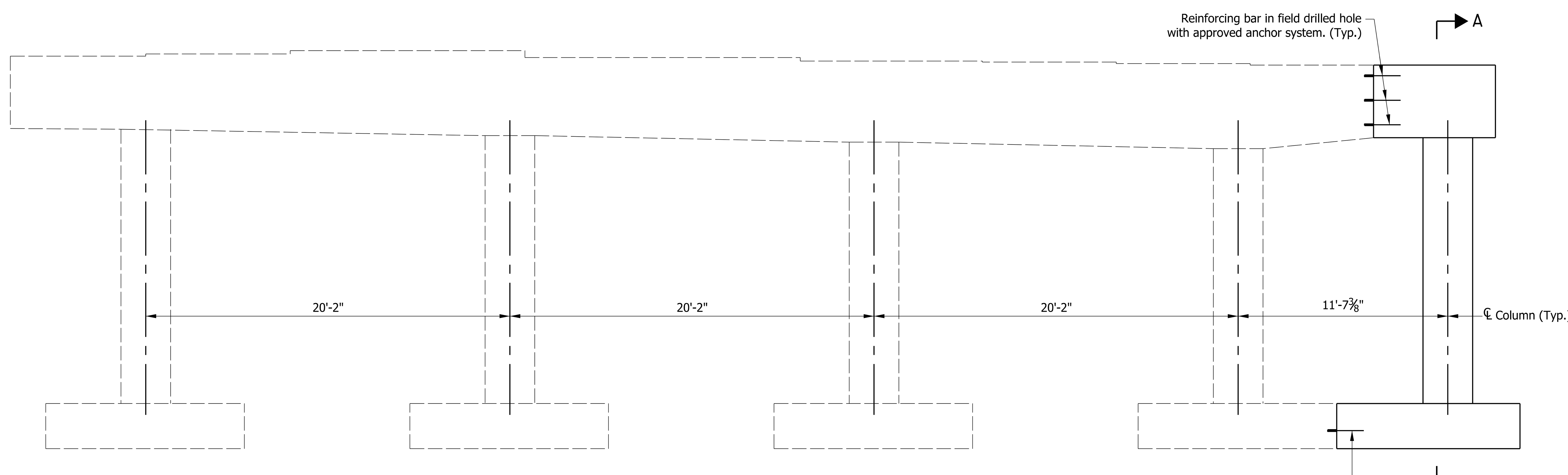
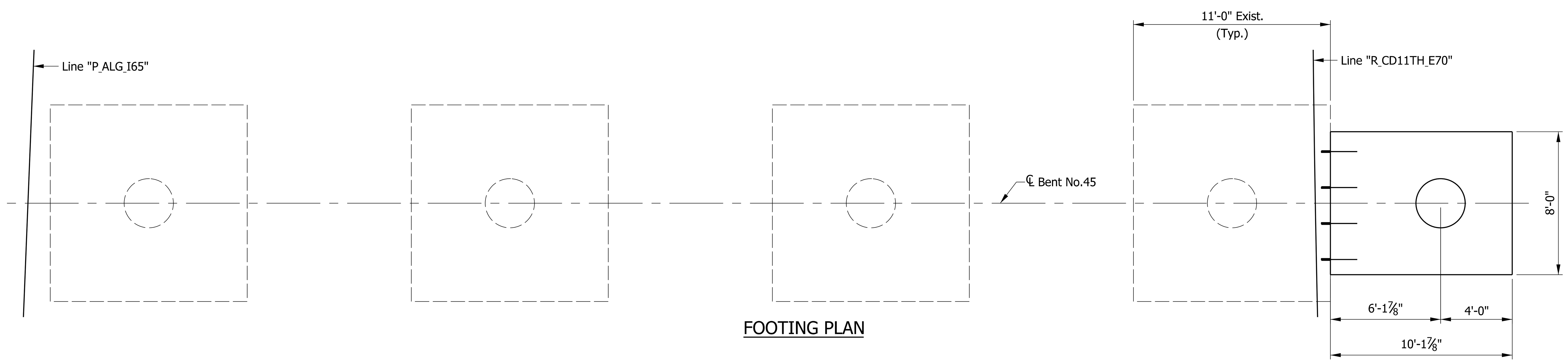
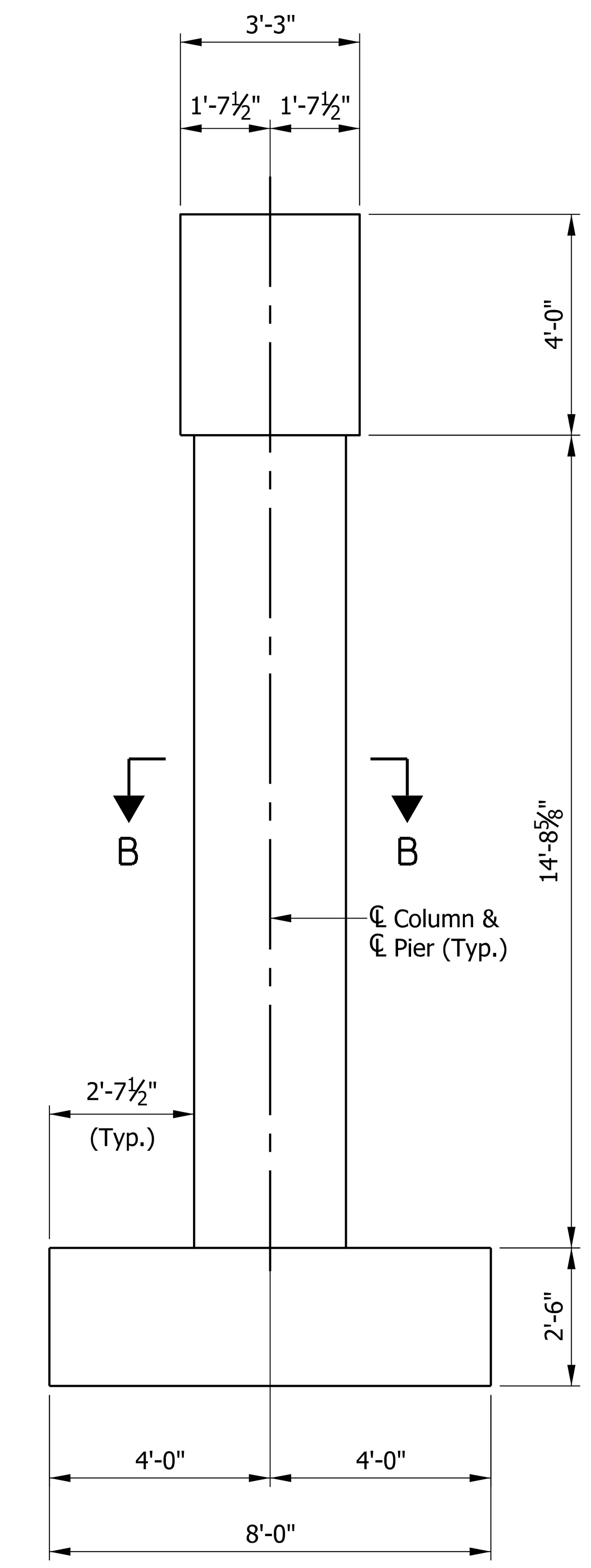


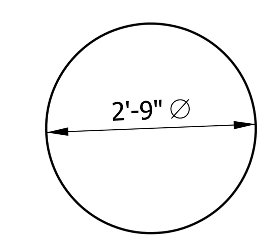
BENT NO. 45 SBL ELEVATION
(Looking upstation)



FOOTING PLAN



SECTION A-A



SECTION B-B

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: KNP
CHECKED: CML CHECKED: ZGC

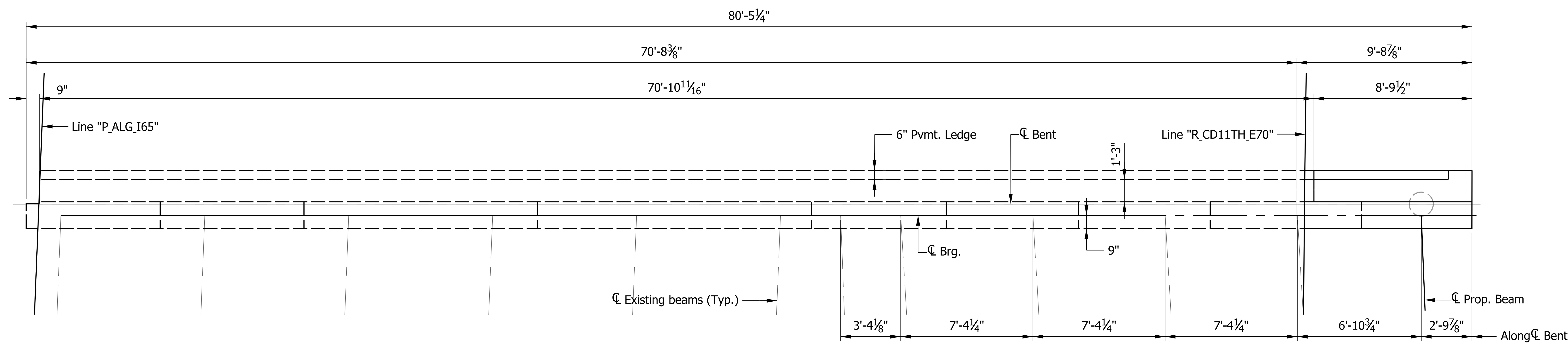
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 45 SBL
DETAILS

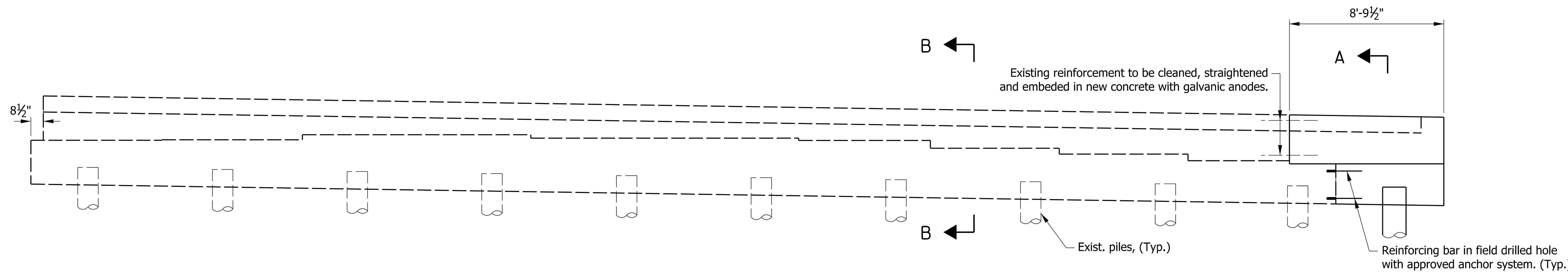
SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-02419 DEBL
	DESIGNATION
	1901934
SURVEY BOOK	SHEETS
ELECTRONIC	12 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/20/2020 3:36:26 PM

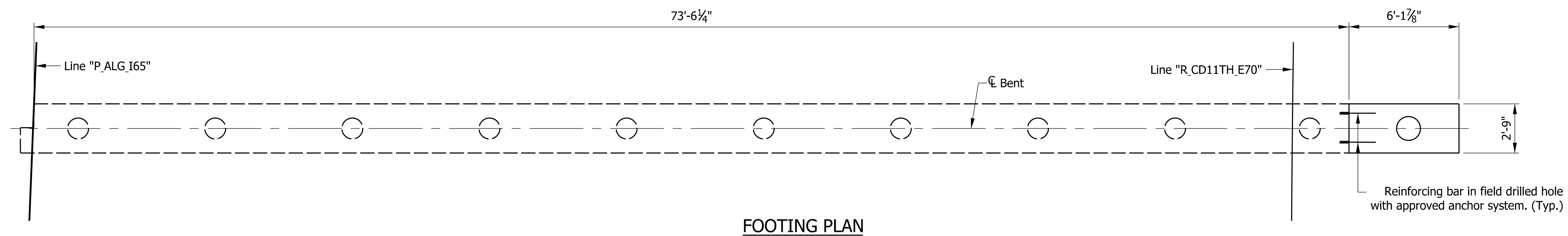
P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 48 I65 EB over Alabama St\1901934_12 - Bent 45 - 48.dgn



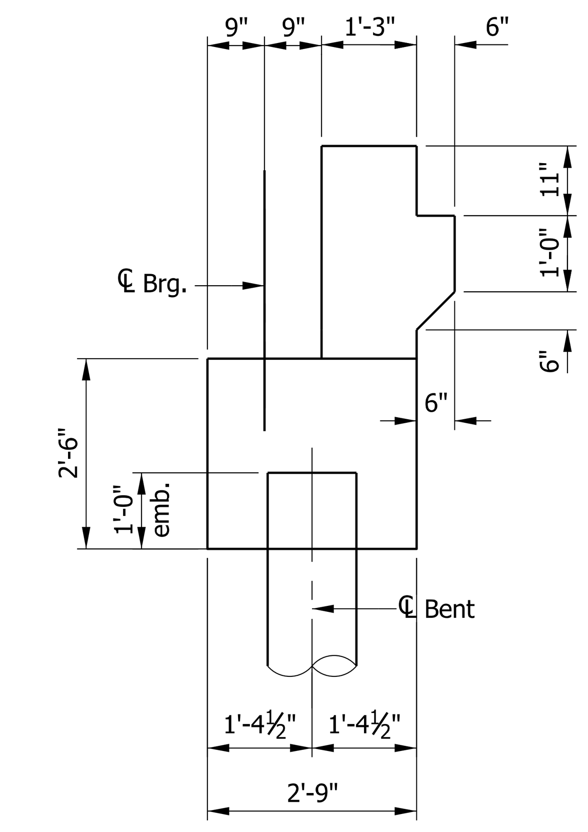
BENT NO. 46 SBL PLAN



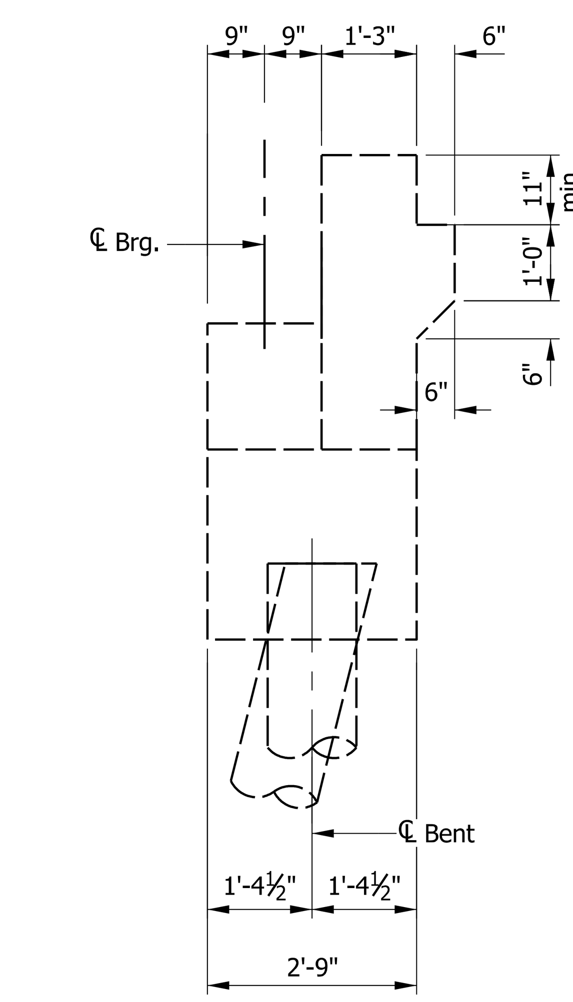
BENT NO. 46 SBL ELEVATION
(Looking upstation)



FOOTING PLAN



SECTION A-A

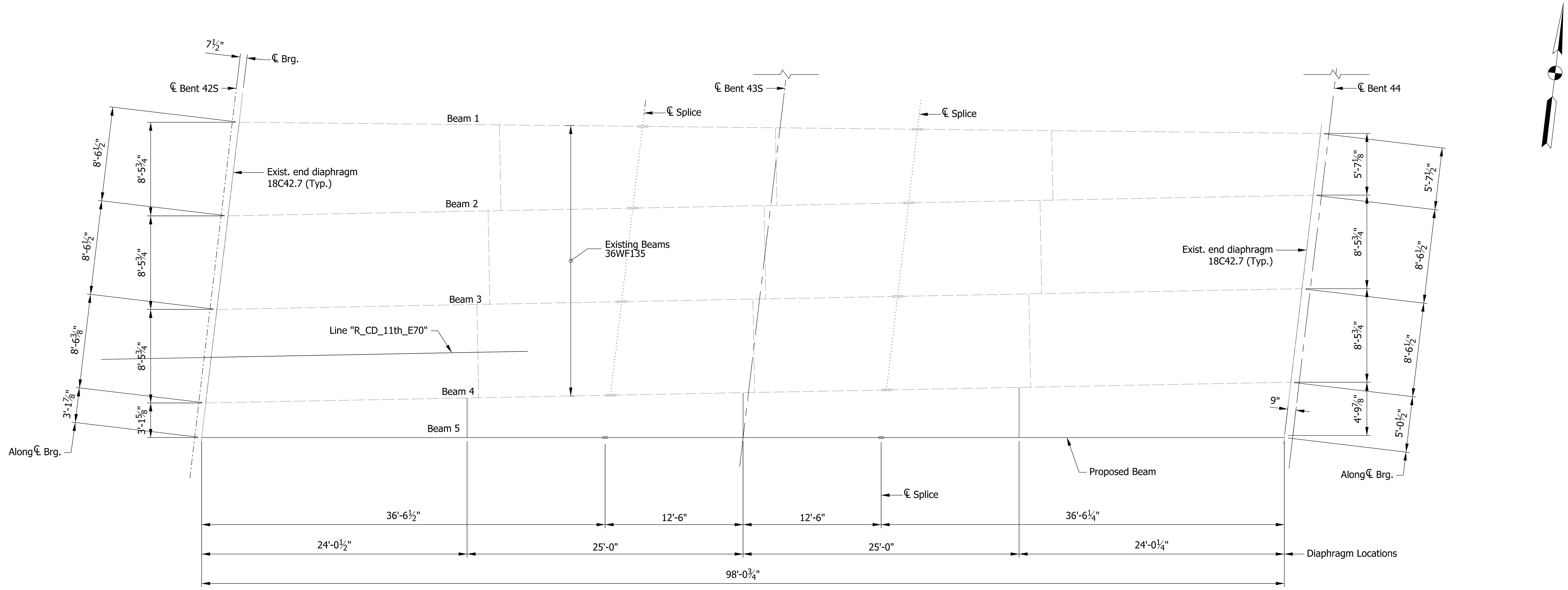


SECTION B-B

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE		INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 1/4" = 1'-0"	BRIDGE FILE: I65-112-02419 DEBL
				DESIGNATION: 1901934
DESIGNED: ZGC	DRAWN: KNP	BENT NO. 46 SBL DETAILS	SURVEY BOOK: ELECTRONIC	SHEETS: 13 of 18
CHECKED: CML	CHECKED: ZGC		CONTRACT: B-36910	PROJECT: 1600808

Plot: 2/20/2020 3:36:28 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 48 I65 EB over Alabama St\1901934_13 - Bent 46 - 48.dgn



RAMP 2W-E FRAMING PLAN

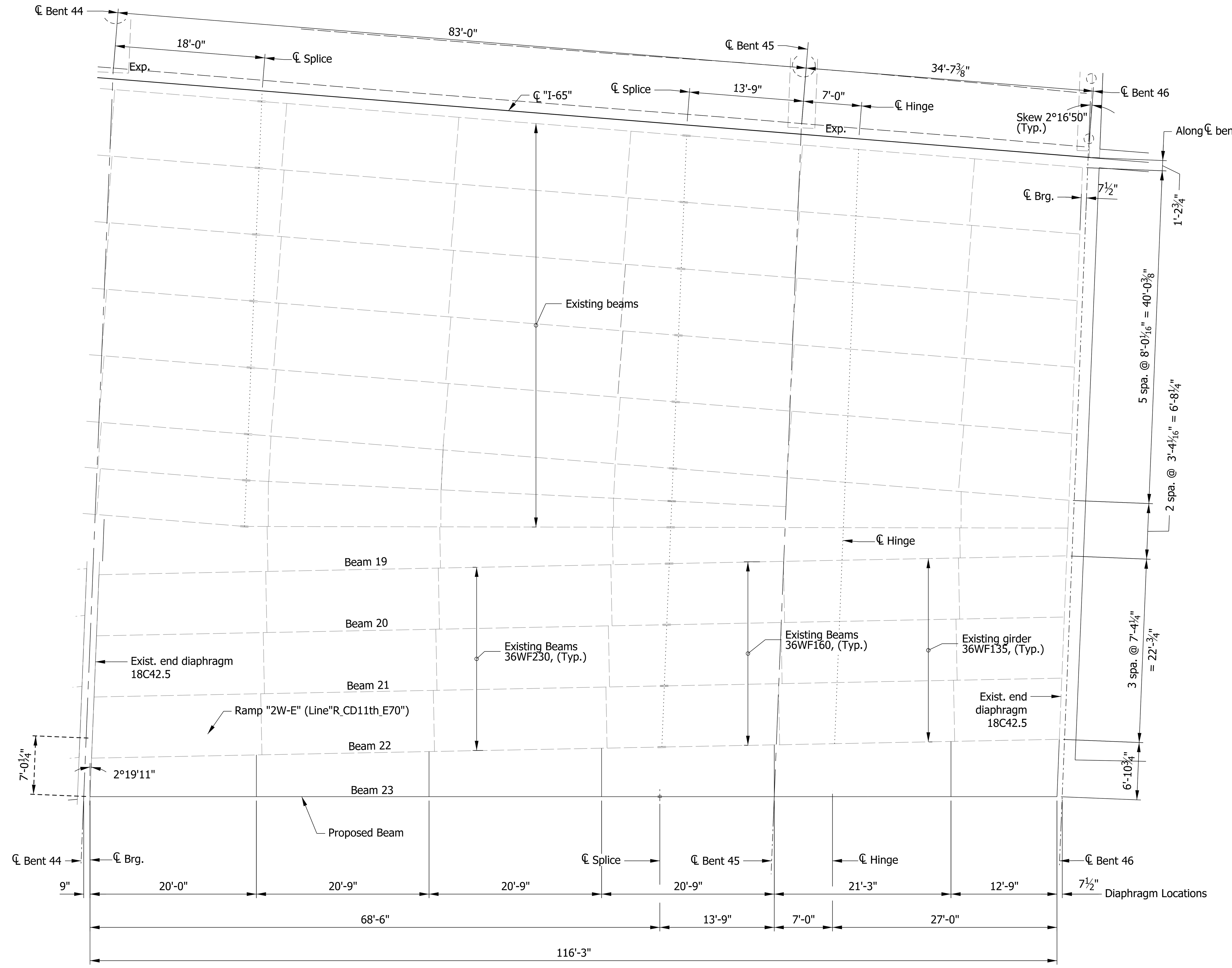
Note:

1. See sheet 16 for Beam Details.
2. New diaphragms to be C15x33.9.
3. New 4 x4 x ¾ connection angles required on exterior face of beam line 4.

RECOMMENDED FOR APPROVAL ___ DESIGN ENGINEER ___ DATE		INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 3/16" = 1'-0"	BRIDGE FILE: I65-112-02419 DEBL
				DESIGNATION: 1901934
DESIGNED: ZGC	DRAWN: KNP	FRAMING PLAN RAMP 2W-E	SURVEY BOOK: ELECTRONIC	SHEETS: 14 of 18
CHECKED: CML	CHECKED: ZGC		CONTRACT: B-36910	PROJECT: 1600808

Plot: 2/20/2020 3:36:35 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 48 I65 EB over Alabama St\1901934_14_15 - Framing Plan - 48.dgn



SBL UNIT N FRAMING PLAN

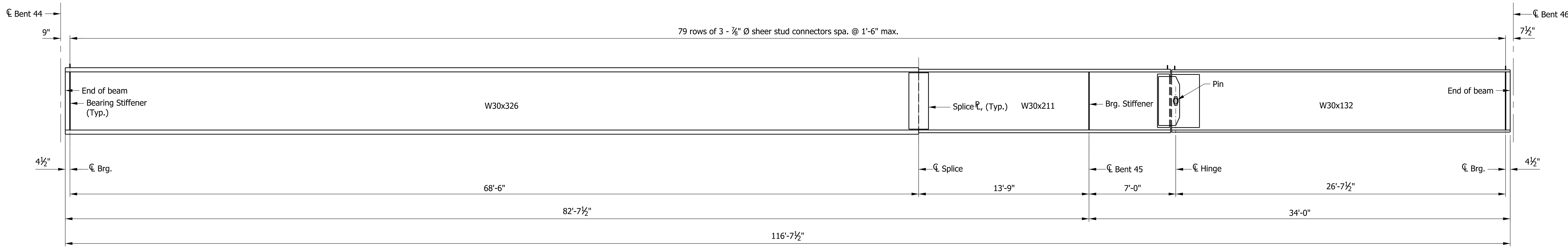
Note:

1. See sheet 16 for Beam Details.
2. New diaphragms to be C15x33.9.
3. New 4 x 4x ¾ connection angles required on exterior face of beam line 4.

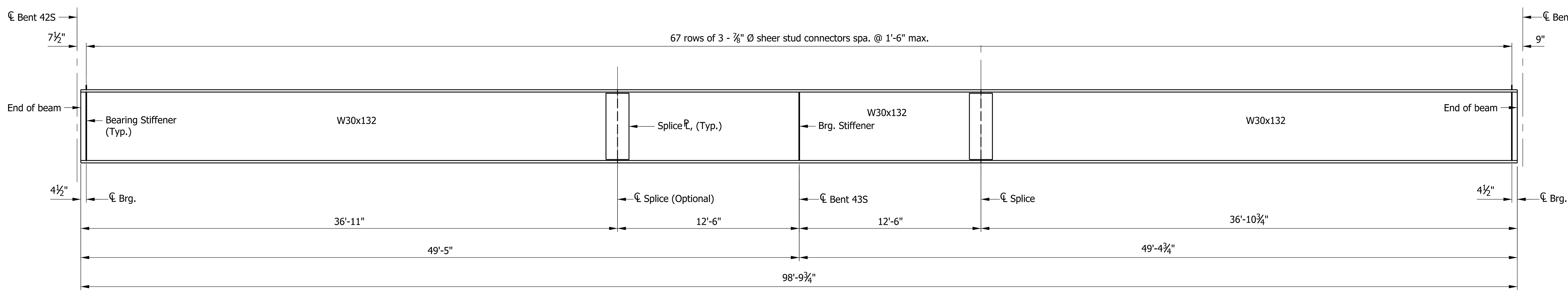
RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE: 1/8" = 1'-0"	BRIDGE FILE: I65-112-02419 DEBL
			DESIGNATION: 1901934
DESIGNED: ZGC / DRAWN: KNP	FRAMING PLAN UNIT N	SURVEY BOOK: ELECTRONIC	SHEETS: 15 of 18
CHECKED: CML / CHECKED: ZGC		CONTRACT: B-36910	PROJECT: 1600808

Plot: 2/20/2020 3:36:36 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 48 I65 EB over Alabama St\1901934_14_15 - Framing Plan - 48.dgn



UNIT N - BEAM 23 ELEVATION



RAMP 2W-E BEAM 5 ELEVATION

Note:
1. All structural steel to be ASTM A709, Grade 50 and to be painted in accordance with INDOT Specifications.
2. All bolts to be ⅞" diameter ASTM A325, Type 1 with Class B surface.
3. Bearing Assemblies to match the existing.
4. See Framing plans for diaphragm locations.
5. Estimated total steel weight to be 1.2 times beam weight to account for miscellaneous components (not including Bearing Assemblies).

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: ZGC DRAWN: KNP

CHECKED: CML CHECKED: ZGC

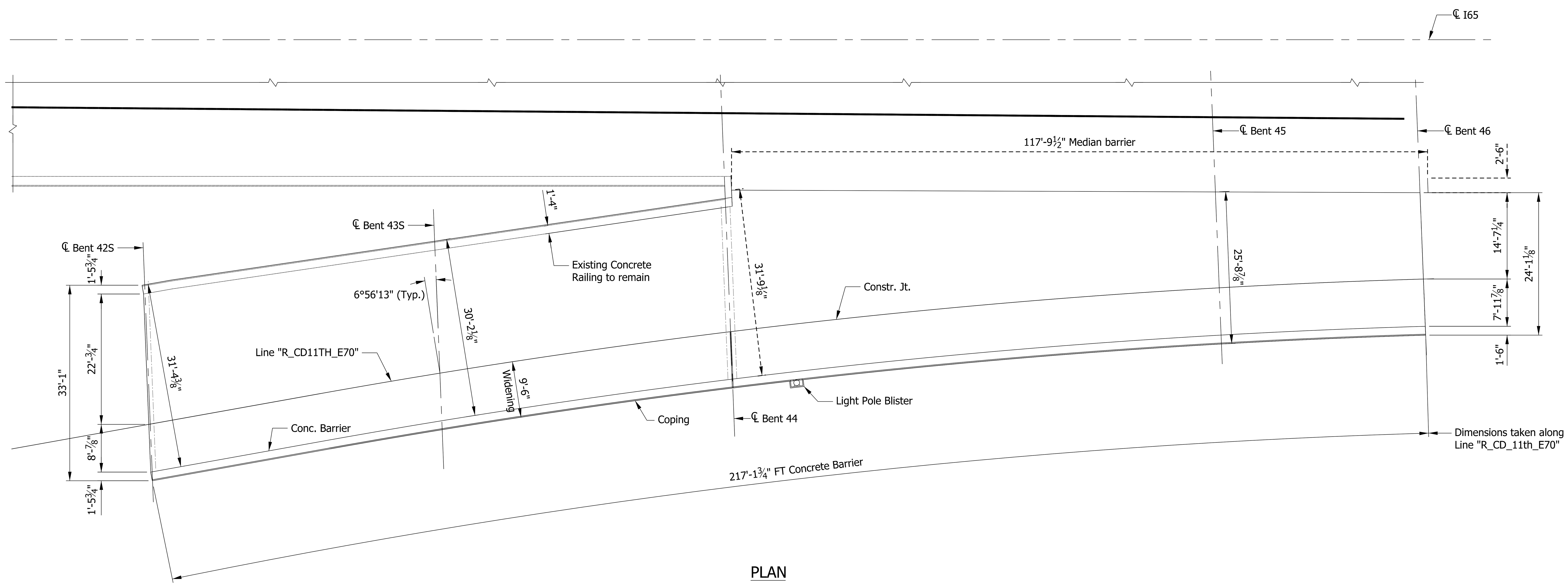
INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS
BEAM 23 AND BEAM 5

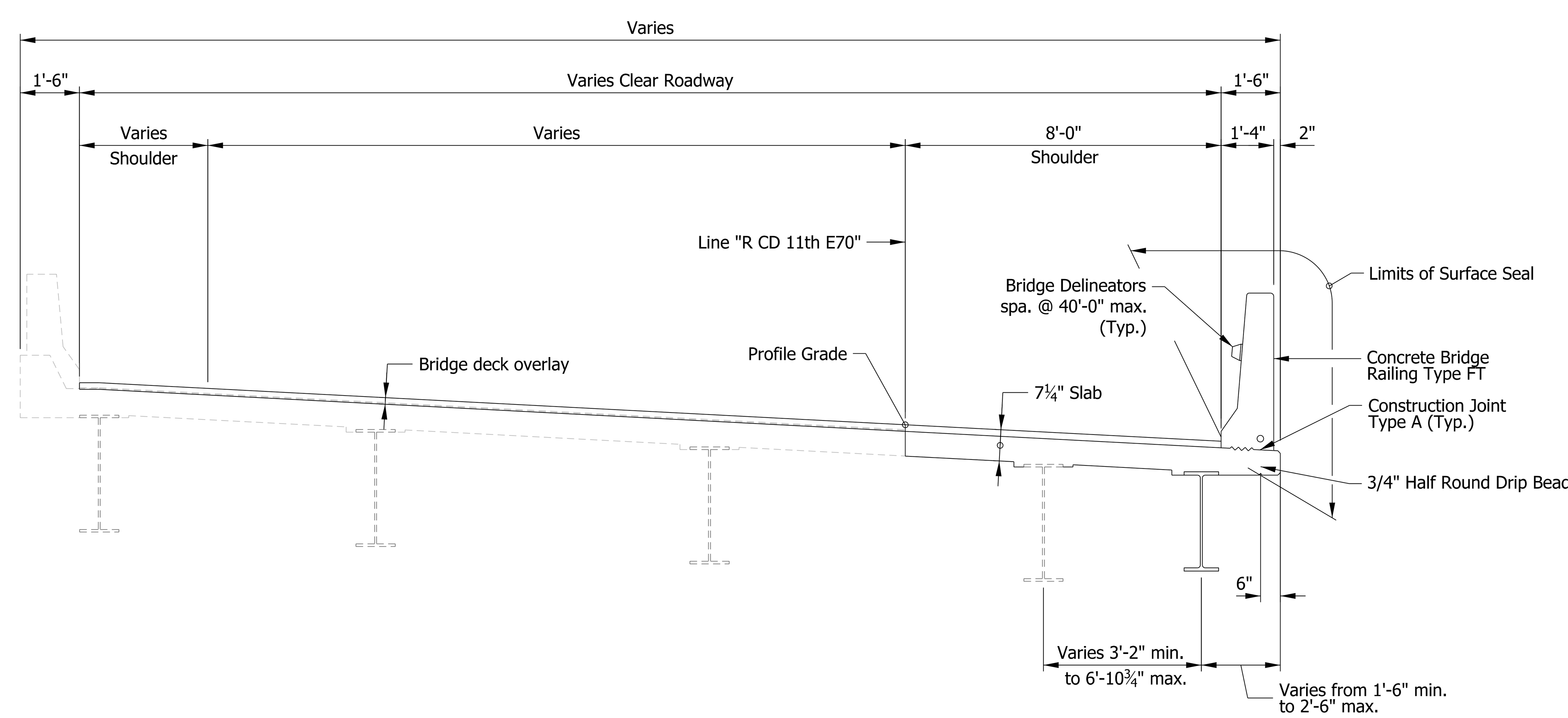
SCALE	BRIDGE FILE
3/32" = 1'-0"	I65-112-02419 DEBL
	DESIGNATION
	1901934
SURVEY BOOK	SHEETS
ELECTRONIC	16 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/20/2020 3:36:38 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 48 I65 EB over Alabama St\1901934_16 - Beam details - 48.dgn



PLAN



TYPICAL SECTION
RAMP 2W-E

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER DATE

DESIGNED: ZGC | DRAWN: KNP
CHECKED: CML | CHECKED: ZGC

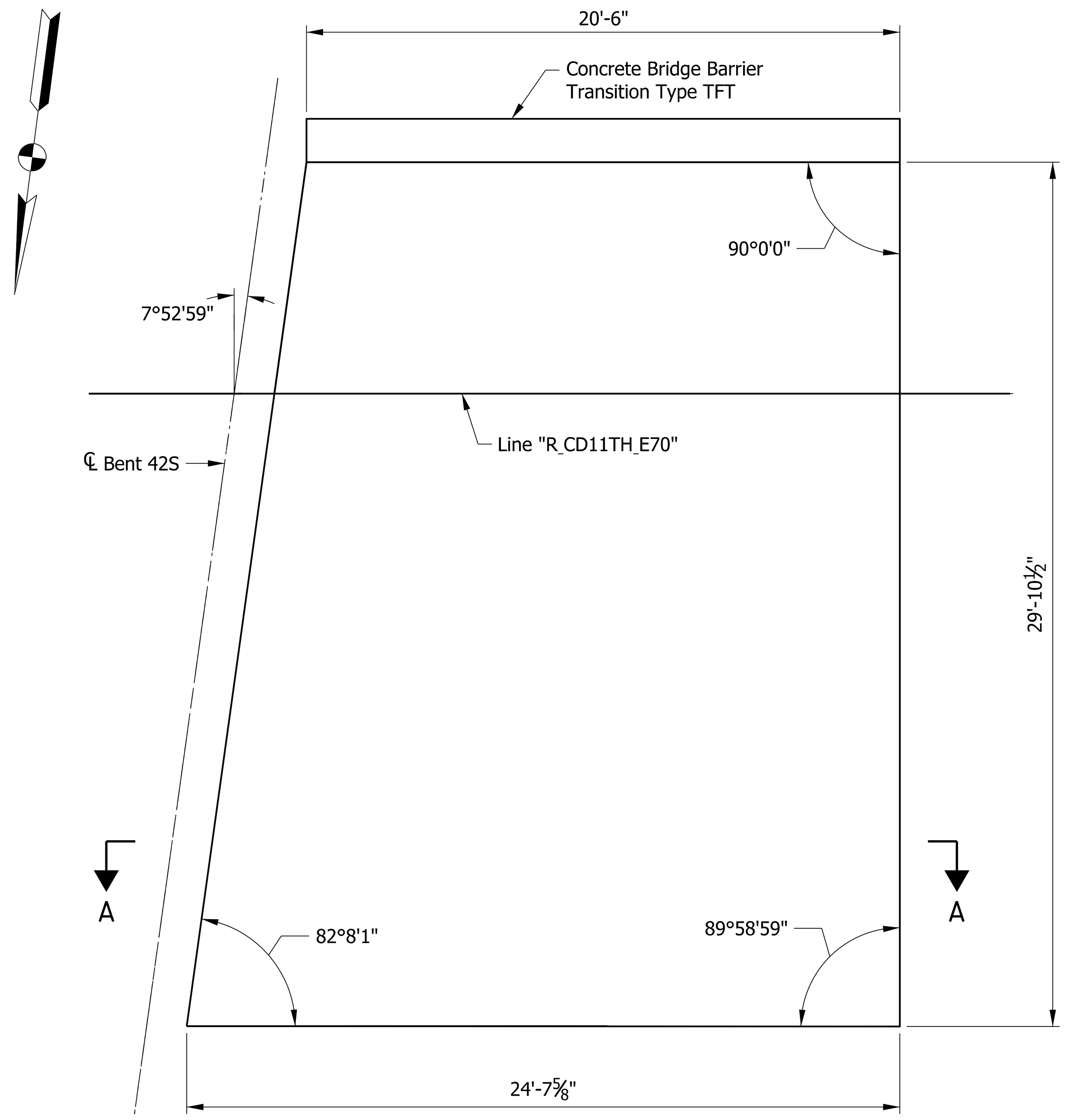
INDIANA
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

SCALE	BRIDGE FILE
1/16" = 1'-0"	I65-112-02419 DEBL
	DESIGNATION
	1901934
SURVEY BOOK	SHEETS
ELECTRONIC	17 of 18
CONTRACT	PROJECT
B-36910	1600808

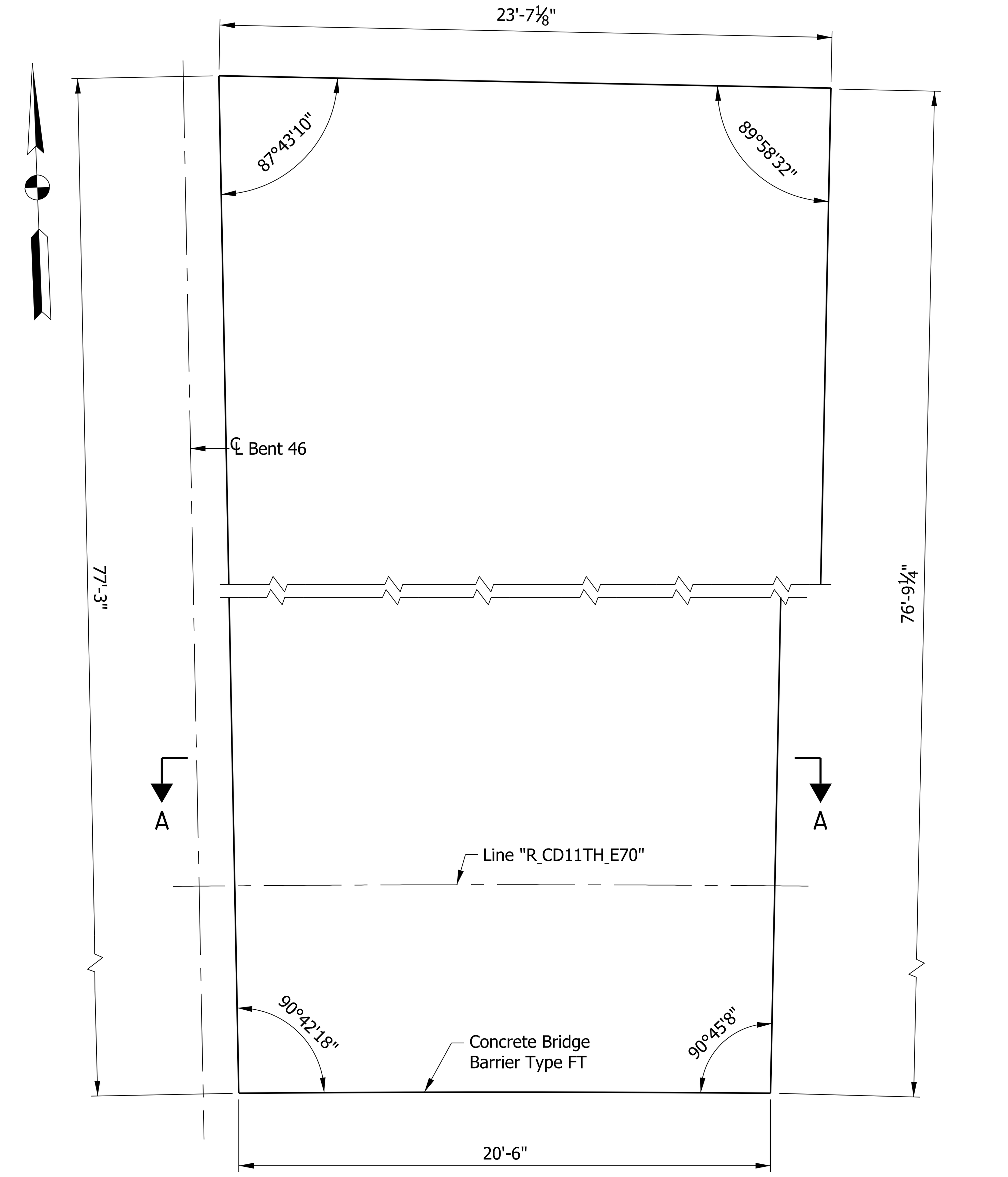
Plot: 2/20/2020

File: P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 48 I65 EB over Alabama St\1901934_17 - Deck Plan A - 48.dgn



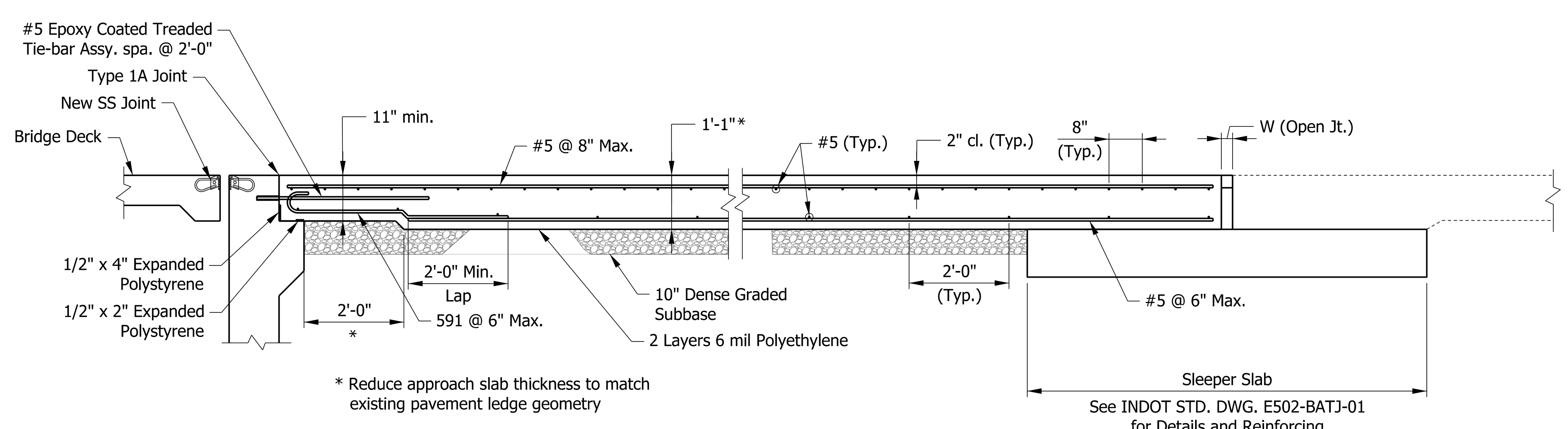
WEST APPROACH SLAB PLAN BENT 42S

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



EAST APPROACH SLAB PLAN BENT 46 SB

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



* Reduce approach slab thickness to match existing pavement ledge geometry

SECTION A-A

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

Existing #6 bars to be cle3ned , straightened and embedded in new concrete with galvanic anodes; new #6 bars to be spaced at 9" max.

Note:
For additional Terminal Joint information, see USP, Terminal Joint Details: Type CRIP

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ZGC	DRAWN: KNP		
CHECKED: CML	CHECKED: ZGC		

INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 42S AND 46 SBL
APPROACH SLAB DETAILS

SCALE	BRIDGE FILE
AS NOTED	I65-112-02419 DEBL
	DESIGNATION
	1901934
SURVEY BOOK	SHEETS
ELECTRONIC	18 of 18
CONTRACT	PROJECT
B-36910	1600808

Plot: 2/20/2020 3:36:43 PM

P:\1297 - I-65 I-70 North Split\DWGS\BRIDGE\B 48 I65 EB over Alabama St\1901934_18 - Appr Slab - 48.dgn

PROJECT	DESIGNATION
1600808	VARIES
CONTRACT	BRIDGE FILE
B-36910	VARIES

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE OPENING AESTHETICS

ROUTE: I-65/I-70

PROJECT NO. 1600808 P.E.
1600808 CONST.

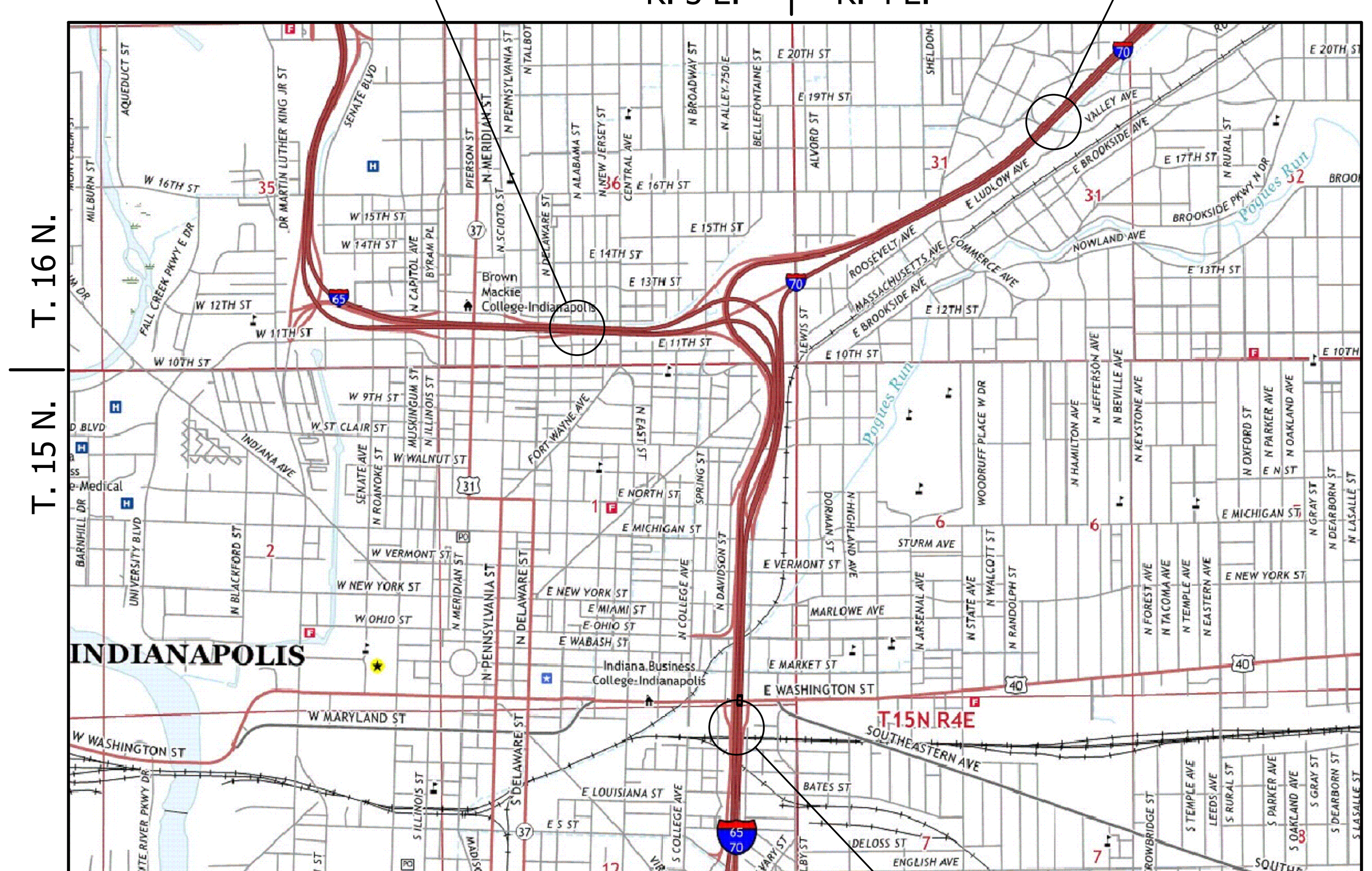
END PROJECT No. 1600808
STATION 25+75.00 LINE "P_ALG_I65"

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

R. 3 E. | R. 4 E.

T. 16 N.

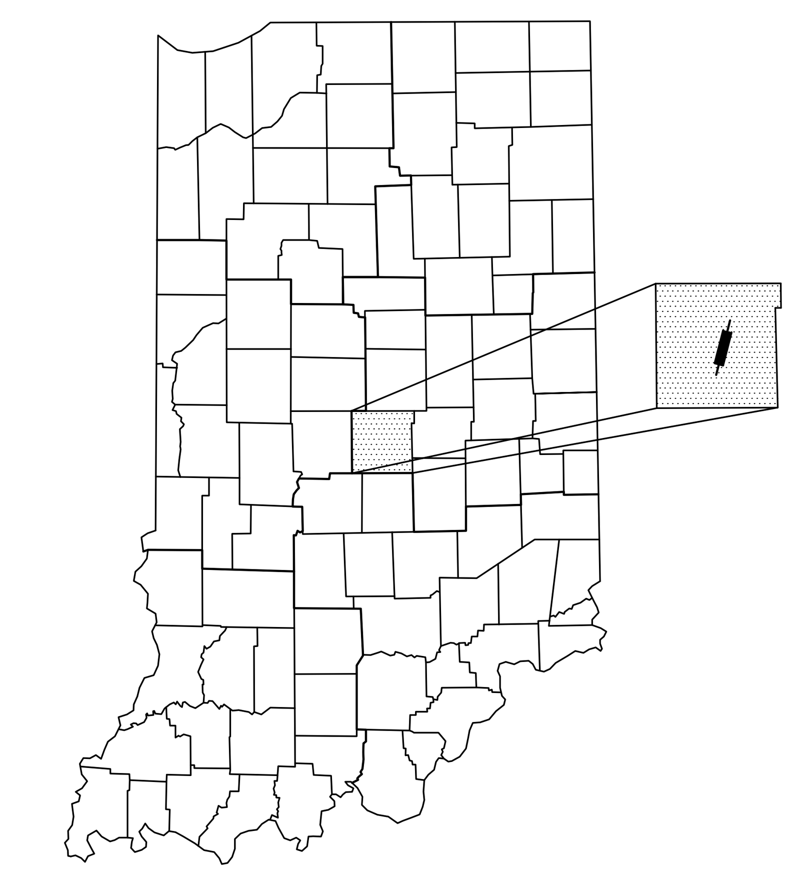
T. 15 N.



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

SCALE: 1" = 2000'

LOCATION MAP
MARION COUNTY



PROJECT LOCATION SHOWN BY

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		
VARIES		
DESIGNATION		
VARIES		
SURVEY BOOK	SHEET	
ELECTRONIC	1 OF	6
CONTRACT	PROJECT	
B-36910	1600808	

6412

\\bfsn1241\Jobs5\641200.0000\ProjDevelopment\Design\Drawings\BRIDGES\09 ARCHITECTURAL\641200A_TITLE.dwg Dylan Piercefield Plot: 2/27/2020 3:32 PM Save: 2/21/2020 10:54 AM

UTILITIES

REVISIONS

SHEET NO.	DATE	REVISED

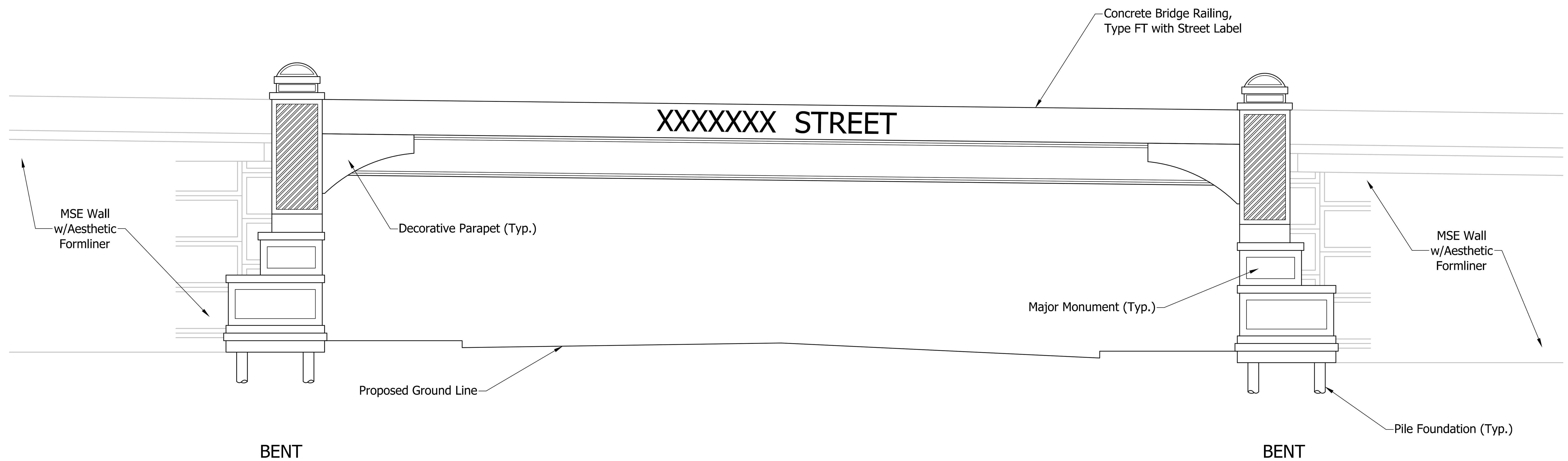
KIN PROJECT INFORMATION

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

RECOMMENDED FOR APPROVAL: ##/##/#### DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE N/A	BRIDGE FILE VARIES
		VERTICAL SCALE N/A	DESIGNATION VARIES
DESIGNED: B. WRIGHT DRAWN: M. SCOTT	INDEX	SURVEY BOOK ELECTRONIC	SHEET 2 OF 6
CHECKED: M. EICHENAUER CHECKED: B. WRIGHT		CONTRACT B-36910	PROJECT 1600808

6412 BFS NO.



TYPICAL ELEVATION

STRUCTURAL AESTHETIC TREATMENT MATRIX - MAJOR GATEWAY BRIDGES			
BRIDGE NO.	DESCRIPTION	NUMBER OF MAJOR MONUMENTS	NUMBER OF DECORATIVE PARAPETS
1	I-65/I-70 NB over Washington Street	2	2
3	I-65/I-70 SB CD over Washington Street	2	2
7	I-65/I-70 NB over CSX Railroad & Ohio Street	2	2
10	I-65/I-70 NB Over New York Street	2	2
12	I-65/I-70 SB CD Over New York Street	2	2
14	I-65 NB & I-70 EB over Michigan Street	2	2
16	I-65/I-70 SB CD over Michigan Street	2	2
22	I-65 NB over East 10th Street	2	2
26	I-65/I-70 SB CD over East 10th Street	2	2
27	I-65 NB CD Exit Ramp over Central Avenue	2	2
30	I-65 SB CD Entrance Ramp over Central Avenue	2	2
32	I-65 NB CD Exit Ramp over College Avenue	2	2
33	I-65 SB & I-65 SB CD Ramp over College Avenue	2	2

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

DESIGNED: M. EICHENAUER DRAWN: M. SCOTT

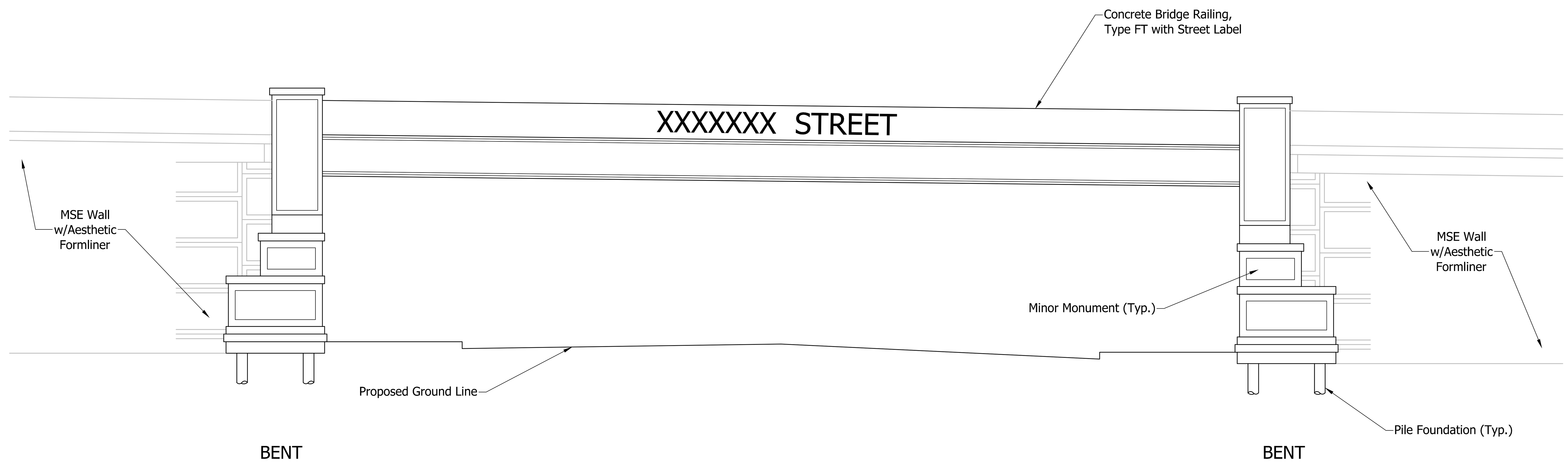
CHECKED: B. WRIGHT CHECKED: B. WRIGHT

INDIANA
DEPARTMENT OF TRANSPORTATION

ELEVATION
MAJOR GATEWAY BRIDGES

HORIZONTAL SCALE	BRIDGE FILE
1/8" = 1'-0"	VARIES
VERTICAL SCALE	DESIGNATION
N/A	VARIES
SURVEY BOOK	SHEET
ELECTRONIC	3 OF 6
CONTRACT	PROJECT
B-36910	1600808

BPS NO. 6412



TYPICAL ELEVATION

STRUCTURAL AESTHETIC TREATMENT MATRIX - MINOR GATEWAY BRIDGES		
BRIDGE NO.	DESCRIPTION	NUMBER OF MINOR MONUMENTS
4	I-65/I-70 NB over Market Street	2
6	I-65/I-70 SB CD over Market Street	2
13A	I-65 NB & I-70 EB over Vermont Street	2
13C	I-65/I-70 SB CD over Vermont Street	2
18	I-65 NB over St. Clair Street	2
21	I-65/I-70 SB CD over St. Clair Street	2
39	I-70 WB & SB CD over Lewis Street & Monon Trail	2
42	I-70 EB over Lewis Street & Monon Trail	2

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

DESIGNED: M. EICHENAUER DRAWN: M. SCOTT

CHECKED: B. WRIGHT CHECKED: B. WRIGHT

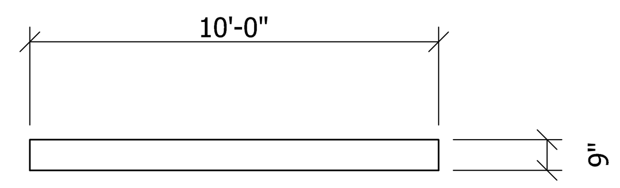
INDIANA
DEPARTMENT OF TRANSPORTATION

ELEVATION
MINOR GATEWAY BRIDGES

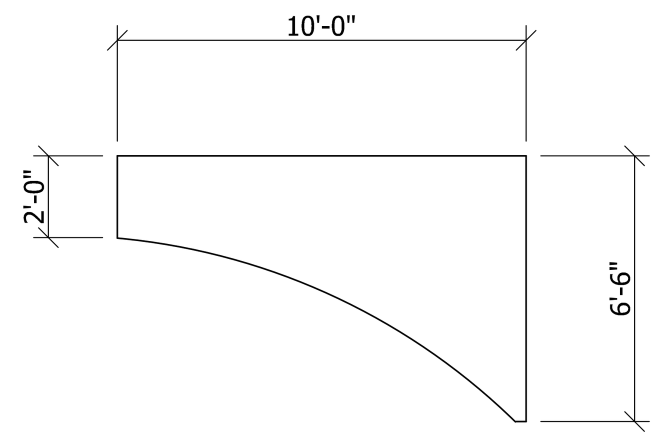
HORIZONTAL SCALE	BRIDGE FILE
1/8" = 1'-0"	VARIES
VERTICAL SCALE	DESIGNATION
N/A	VARIES
SURVEY BOOK	SHEET
ELECTRONIC	4 OF 6
CONTRACT	PROJECT
B-36910	1600808

6412

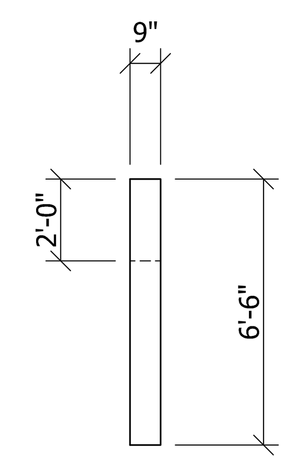
BPS NO.



PLAN (TYPICAL)

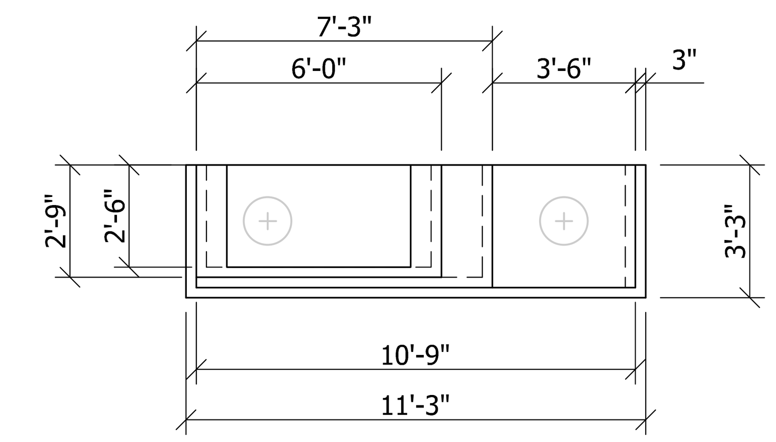


ELEVATION (TYPICAL)

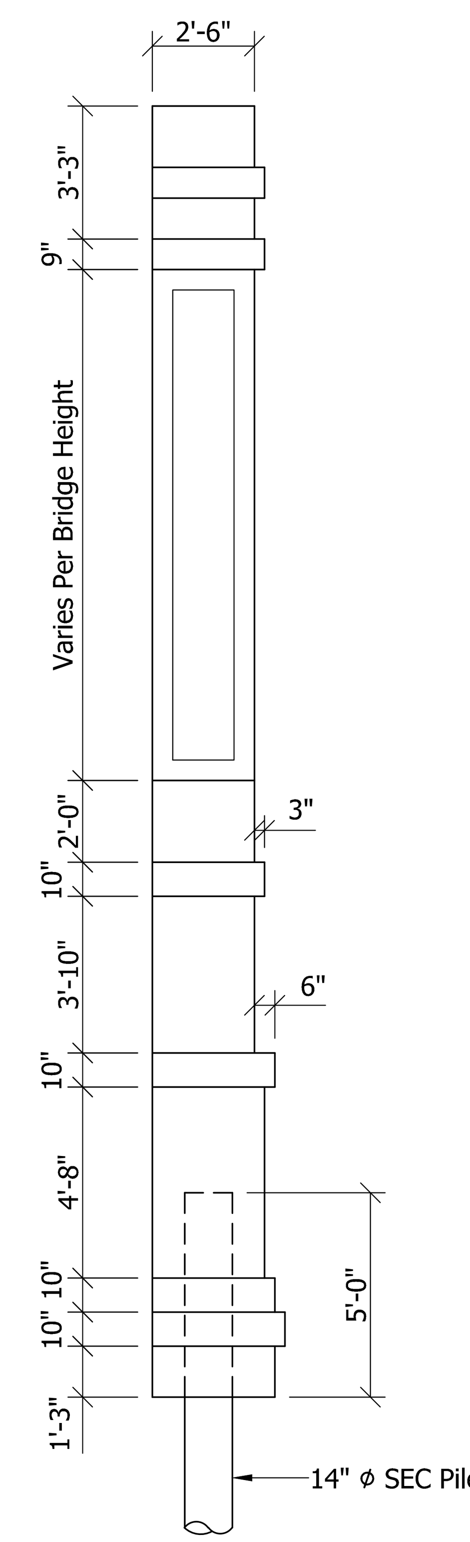


SECTION (TYPICAL)

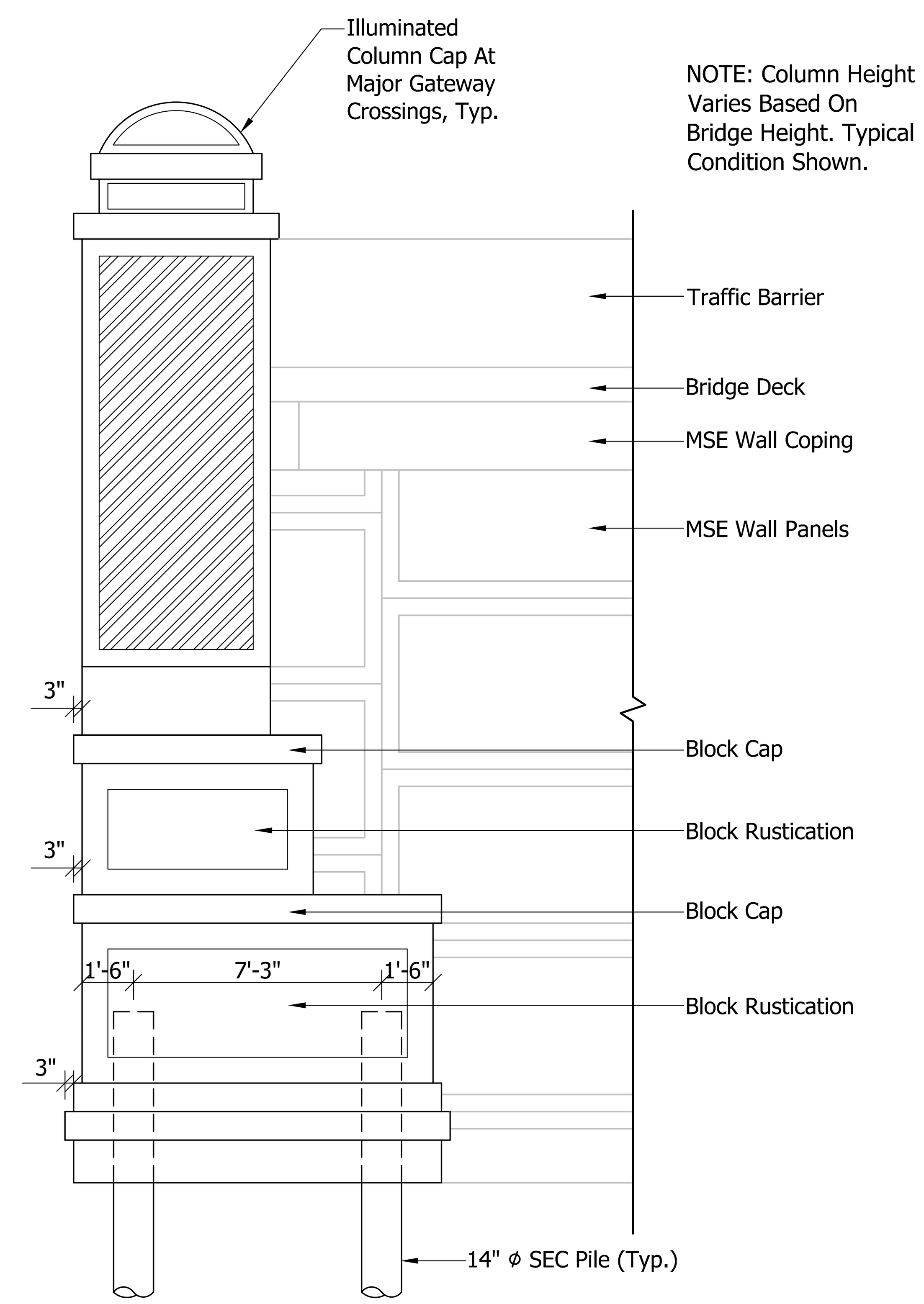
DECORATIVE PARAPET DETAILS
MAJOR MONUMENT ABUTMENT



PLAN (TYPICAL)



SECTION (TYPICAL)



END ELEVATION (TYPICAL)

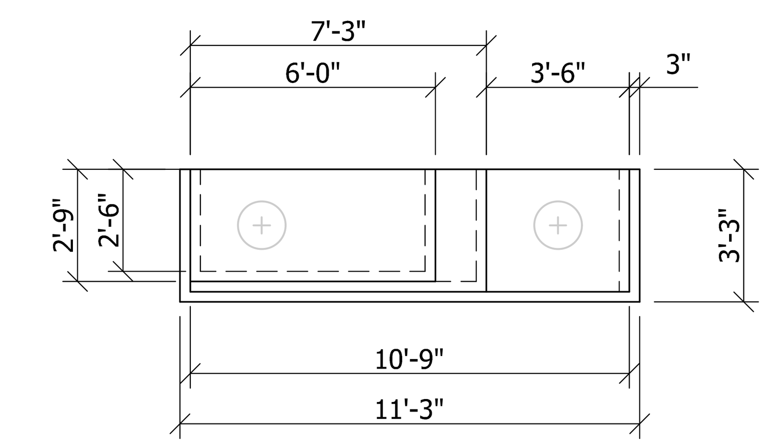
SCHEMATIC DETAILS
MAJOR MONUMENT ABUTMENT

RECOMMENDED FOR APPROVAL: ##/##/#### DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1/4" = 1'-0"	BRIDGE FILE VARIES
			VERTICAL SCALE N/A	DESIGNATION VARIES
DESIGNED: M. EICHENAUER	DRAWN: M. SCOTT	SCHEMATIC DETAILS MAJOR MONUMENT ABUTMENTS	SURVEY BOOK ELECTRONIC	SHEET 5 OF 6
CHECKED: B. WRIGHT	CHECKED: B. WRIGHT		CONTRACT B-36910	PROJECT 1600808

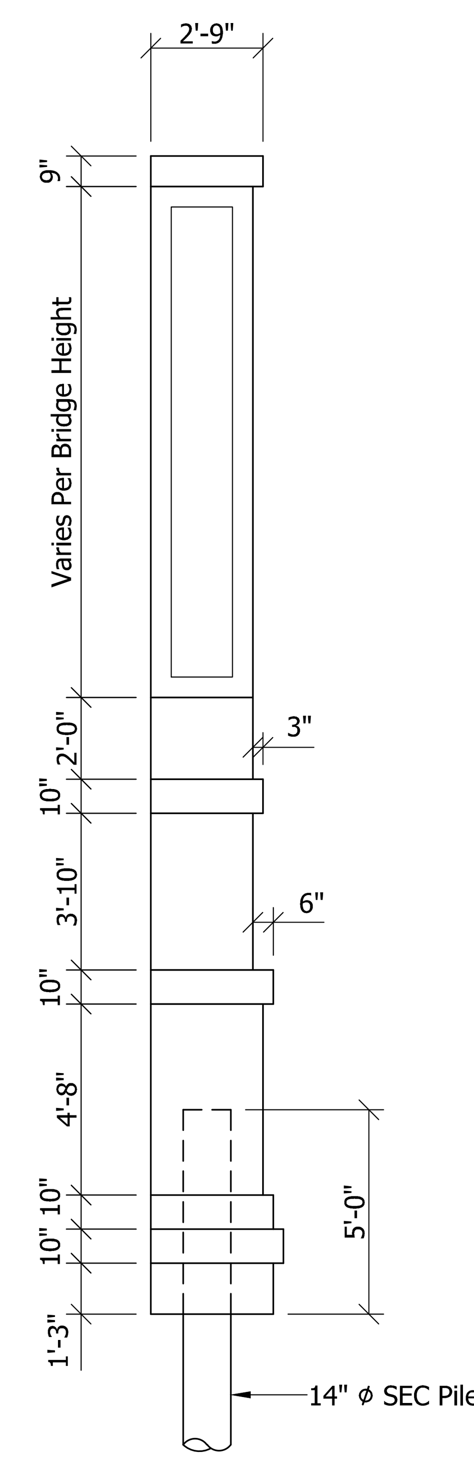
6412

BPS NO.

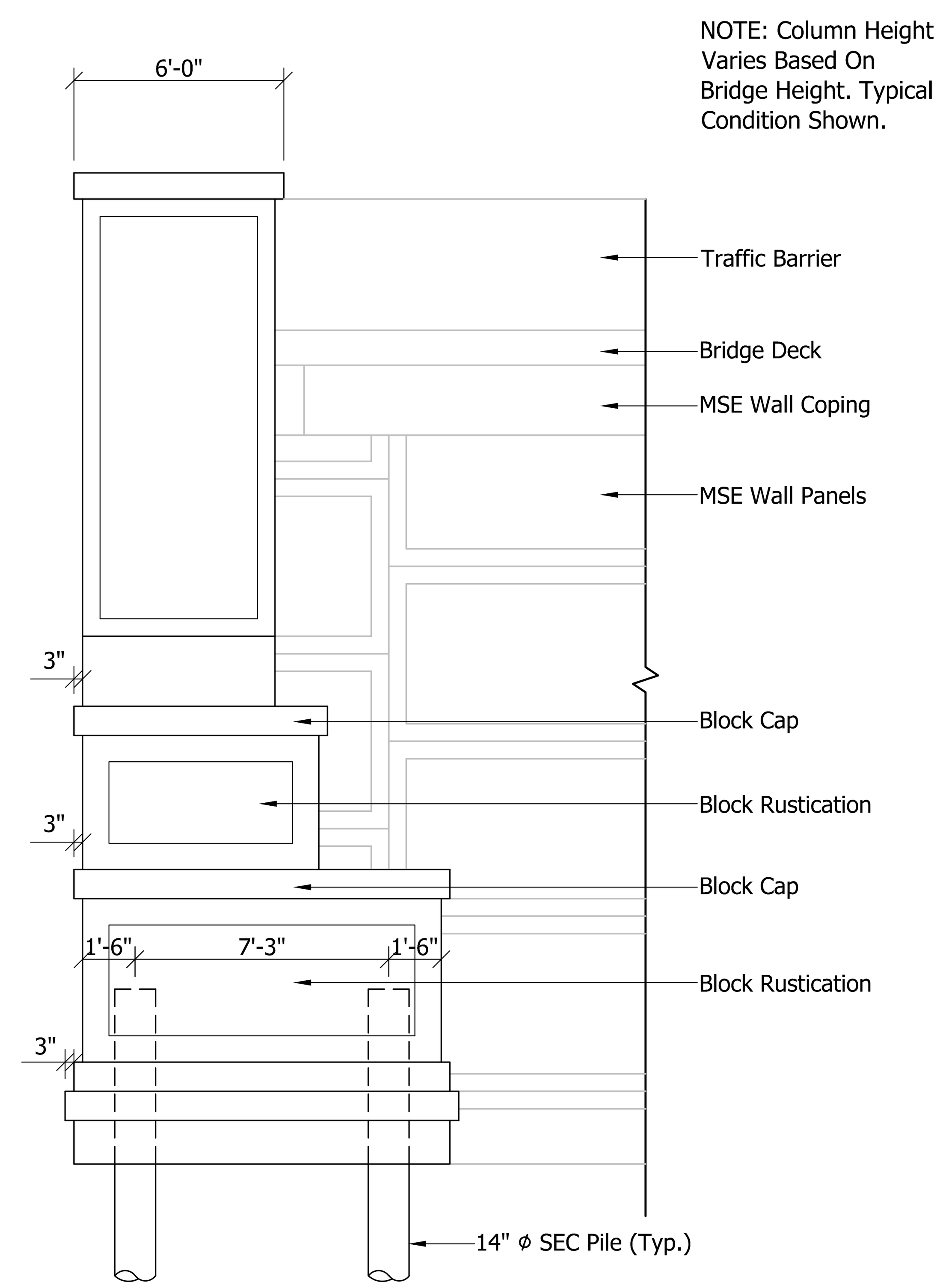
\\bfsn1241\Jobs5\641200.0000\ProjDevelopment\Design\Drawings\BRIDGES\09 ARCHITECTURAL\641200_STRUCTURAL DETAILS02.dwg Dylan Piercefield Plot: 2/27/2020 3:32 PM Save: 1/17/2020 9:34 AM



PLAN (TYPICAL)



SECTION (TYPICAL)



END ELEVATION (TYPICAL)

SCHEMATIC DETAILS
MINOR MONUMENT ABUTMENT

RECOMMENDED FOR APPROVAL: ##/##/#### DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE: 1/4" = 1'-0"	BRIDGE FILE: VARIES
		VERTICAL SCALE: N/A	DESIGNATION: VARIES
DESIGNED: B. WRIGHT DRAWN: M. SCOTT	SCHEMATIC DETAILS MINOR MONUMENT ABUTMENTS	SURVEY BOOK: ELECTRONIC	SHEET 6 OF 6
CHECKED: M. EICHENAUER CHECKED: B. WRIGHT		CONTRACT: B-36910	PROJECT: 1600808

BFS NO. 6412

MOT TECHNICAL / DESIGN
DRAWINGS, GRAPHS, & DATA

PROJECT	DESIGNATION
1600808	1600808
CONTRACT	
B-36910	

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC PLANS

ROUTE: I-65 FROM: RP 111+0.16 TO: RP 112+0.94

I-70 FROM: RP 81+0.72 TO: RP 83+0.67

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

NO ADDITIONAL RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

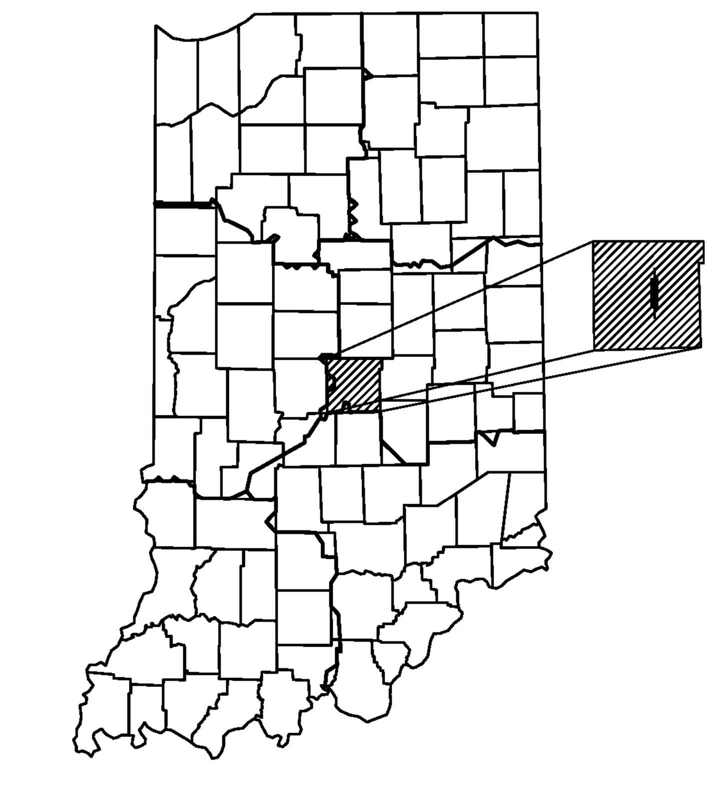
RECONSTRUCTION OF I-65/I-70 (NORTH SPLIT) INTERCHANGE
IN SECTIONS 35 & 36, T-16-N, R-3-E, SECTION 31, T-16-N, R-4-E, SECTIONS 1 & 12, T-15-N, R-3-E,
CENTER TOWNSHIP, MARION COUNTY, INDIANA

SEE INDEX SHEET FOR TRAFFIC AND DESIGN DATA

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 NB, SB, & SB CD OVER VERMONT STREET	
1901862	BRIDGE REPLACEMENT ON I-65 NB & I-70 EB OVER MICHIGAN STREET	
1901863	BRIDGE REPLACEMENT ON I-65/I-70 SB 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/I-70 SB OVER ST. CLAIR STREET	
1901896	NEW BRIDGE CONSTRUCTION ON I-65/I-70 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 I-65/I-70 SB CD 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 CD EXIT RAMP OVER COLLEGE AVENUE	
1901917	BRIDGE REPLACEMENT ON I-65 SB & SB CD OVER COLLEGE AVENUE	
1901918	BRIDGE REPLACEMENT ON I-65 SB TO I-70 EB OVER COLLEGE AVENUE & 5 RAMPS	
1901919	BRIDGE REPLACEMENT ON I-65 NB OVER I-70 WB & SB CD RAMP	
1901920	BRIDGE REPLACEMENT ON I-70 WB TO I-65 NB OVER 3 RAMPS	
1901921	BRIDGE REPLACEMENT ON I-65 SB OVER I-70 WB & SB CD RAMP	
1901922	NEW BRIDGE CONSTRUCTION ON I-65 NB OVER I-70 EB	
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	NEW BRIDGE CONSTRUCTION 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 @ COMMERCE AVE.	
1901930	REHABILITATE AND WIDEN ON I-70 EB OVER ROOSEVELT @ COMMERCE AVE.	
1901931	PREVENTATIVE MAINTENANCE ON I-70 WB OVER VALLEY AVENUE	
1901932	PREVENTATIVE MAINTENANCE ON I-70 EB OVER VALLEY AVENUE	
1901933	REHABILITATE AND WIDEN PENNSYLVANIA ST. EXIT RAMP OVER DELAWARE STREET & ALABAMA STREET	
1901934	REHABILITATE AND WIDEN DELAWARE ST. ENTRANCE RAMP OVER ALABAMA ST.	

TRAFFIC DATA	
A.A.D.T. ( )	
A.A.D.T. ( )	
D.H.V ( )	
DIRECTIONAL DISTRIBUTION	
TRUCKS	

DESIGN DATA	
DESIGN SPEED	
PROJECT DESIGN CRITERIA	
FUNCTIONAL CLASSIFICATION	
RURAL/URBAN	
TERRAIN	
ACCESS CONTROL	



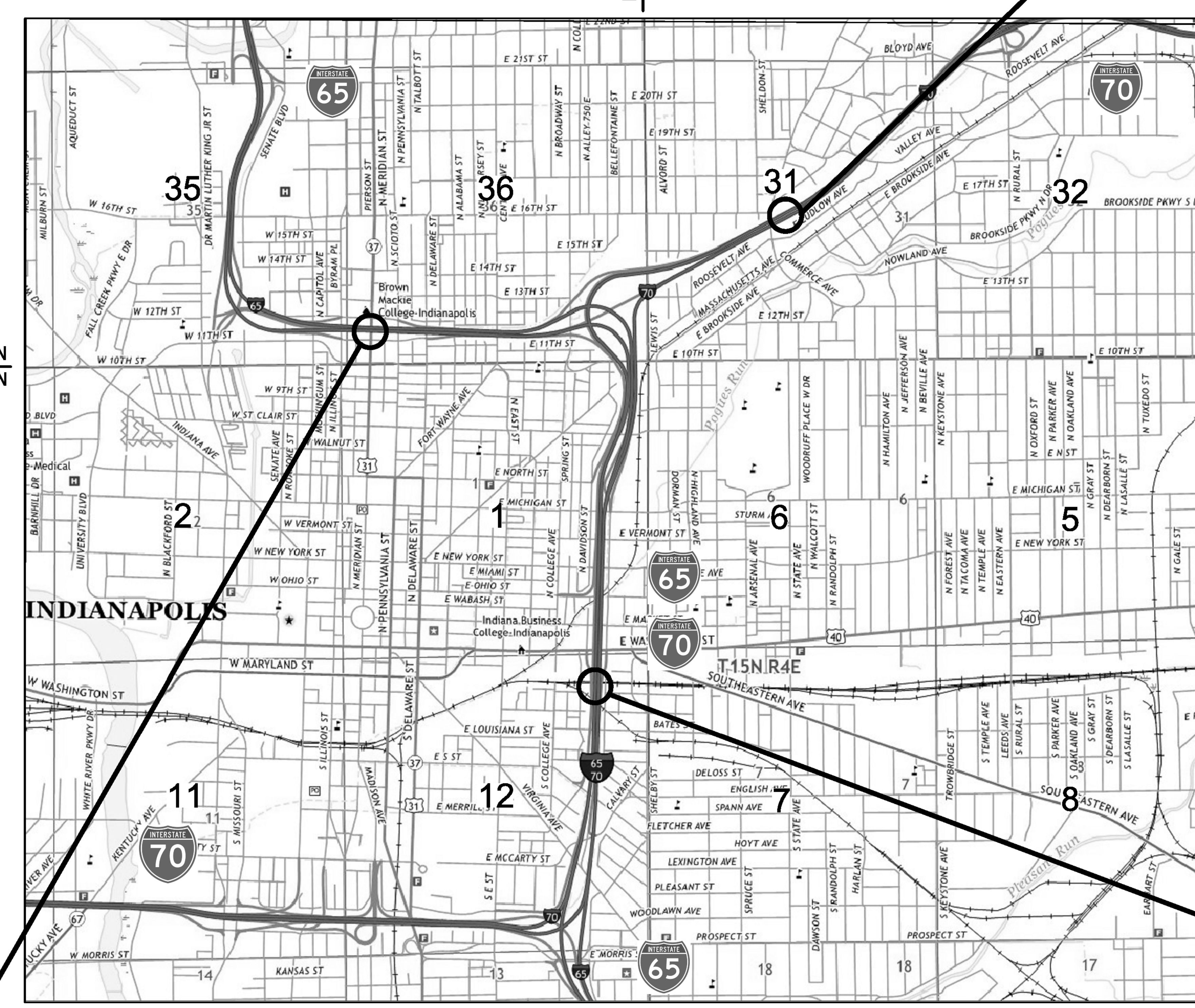
PROJECT LOCATION SHOWN BY MARION COUNTY

LATITUDE: 39°46'01" N LONGITUDE: 86°08'35" W

END CONSTRUCTION PROJECT NO. 1600808
STATION 22+00.83 LINE "P_ALG_I70"

R-3-E R-4-E

T-16-N T-15-N



T-16-N T-15-N

SCALE: 1" = 2000'

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

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

LOCATION MAP
(MARION COUNTY)

GROSS LENGTH	10.8	MI.
NET LENGTH	9.1	MI.
MAX. GRADE:	3.5 %	%

HUC Code: 05/20201130020

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

SUPERIOR CONSTRUCTION

PRELIMINARY PLANS NOT FOR CONSTRUCTION

DRAFT NOT FOR CONSTRUCTION

PLANS PREPARED BY: Beam, Longest and Neff, LLC (317) 849-5832 PHONE NUMBER

CERTIFIED BY: DATE

APPROVED FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE

	DESIGNATION		
	1600808		
SURVEY BOOK	SHEETS		TI-00
ELECTRONIC	1	of	185
CONTRACT	PROJECT		
B-36910	1600808		

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model: Title sheet
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UTILITIES

UTILITY CONTACTS WILL
BE FINALIZED FOR
FUTURE SUBMITTALS

GENERAL NOTES

	All earth shoulders, median areas, and cut and fill slopes shall be plain or mulch seeded except where sodding is specified.
	The final cross sections of the grading contract will be the original cross sections of the paving contract. However, partial or complete cross sections shall be taken if necessary to determine the actual excavation quantities.
	The paper relocation will be cross sectioned by the Engineer before construction.
	Existing asphalt pavement located outside the construction limits, between Sta. ------ and Sta ------, shall be removed as directed.
	The quantity of peat excavation shown on the plans has been estimated on the basis of theoretical cross sections by using treatment of existing fills, treatment by removal, or treatment by displacement, where each treatment applies.

* * REPRESENTS GENERAL NOTES REQUIRED

REVISIONS

SHEET NO.	DATE	REVISED

INDEX

Construction Clear Zone Width

Speed (mph)	Width (ft)
30 to 40	13
45 to 50	16
55	23

Construction Zone Design Speed

The Construction Zone Design Speed for I-65, I-70 and ramps shall be the existing posted speed limit on approaches to the work zone, with a maximum 10 m.p.h. speed reduction within the work zone; all worksite speed limit signs shall conform to Construction Memo 14-06.

For existing ramps with an advisory posted speed limit; the Construction Zone Design Speed within the work zone shall be the advisory posted speed limit with a maximum 5 m.p.h. speed reduction.

The Construction Zone Design Speed for local roads shall be the existing posted speed limit.

Winter Shutdown

TRAFFIC DATA

Alignment Name	P_ALG_I65/I70	P_ALG_I65	P_ALG_I70	R_W70	R_E70	R_N65
Movement Description	I-65/I-70 SB/NB	I-65 SB/NB	I-70 EB/WB	I-70 WB to I-65/I-70 SB	I-65/I-70 NB to I-70 EB	I-65/I-70 NB to I-65 NB
AADT (2021)	58,288 SB | 62,989 NB	53,313 SB | 51,774 NB	93,737 WB | 100,568 EB	36,289	48,680	34,480
AADT (2041)	64,063 SB | 76,198 NB	54,650 SB | 58,376 NB	99,926 WB | 112,807 EB	43,111	57,330	41,090
DHV (2041)	5125 (SB - AM) + 6553 (NB - AM)	4372 (SB - AM) + 5429 (NB - AM)	9493 (WB - AM) + 9927 (EB - PM)	3880 (AM)	5733 (PM)	4109 (AM)
Directional Distribution	46% SB | 54% NB	48% SB | 52% NB	47% WB | 53% EB	N/A	N/A	N/A
Trucks (% DHV)	54%	52%	53%	15%	13%	3%

Alignment Name	R_S65	R_W70_N65	R_S65_E70	R_CDS65	R_W70_CDS65	R_S65_CDS65
Movement Description	I-65 SB to I-65/I-70 SB	I-70 WB to I-65 NB	I-65 SB to I-70 EB	I-65 SB CD to I-65/I-70 SB	I-70 WB to I-65 SB CD	I-65 SB to I-65 SB CD
AADT (2021)	18,925	31,350	32,125	14,430	26,092	7,850
AADT (2041)	19,100	32,513	31,900	23,160	25,100	8,083
DHV (2041)	1528 (PM)	2601 (AM)	2552 (PM)	2316 (AM)	3012 (AM)	970 (AM)
Directional Distribution	N/A	N/A	N/A	N/A	N/A	N/A
Trucks (% DHV)	7%	6%	5%	4%	4%	3%

Alignment Name	R_N65_CD12th	R_CD11th_E70	R_CDS65_CDMichigan	R_CDS65_CDOhio	R_CDMichigan_N65	R_CDMichigan_E70	P_OhioSt
Movement Description	I-65 NB to 12th St CD	11th St CD to I-70 EB	I-65 SB CD to Michigan St	I-65 SB CD to Ohio St	Michigan St to I-65 NB	Michigan St to I-70 EB	Ohio St to Pine St
AADT (2021)	8,777	14,120	15,020	7,353	5,800	7,158	7500
AADT (2041)	9,854	16,420	14,710	7,284	6,267	7,358	7994
DHV (2041)	1281 (AM)	1642 (PM)	1471 (AM)	1384 (AM)	752 (PM)	1398 (PM)	1488 (PM)
Directional Distribution	N/A	N/A	N/A	N/A	N/A	N/A	N/A (One-Way)
Trucks (% DHV)	2%	7%	2%	1%	2%	1%	1%

DESIGN DATA

Alignment Name	P_ALG_I65/I70	P_ALG_I65	P_ALG_I70	R_W70	R_E70	R_N65
Design Speed	55 mph	55 mph	55 mph	55 mph	55 mph	55 mph
Project Design Criteria	Reconstruction (4R)	Reconstruction (4R)	Reconstruction (4R)	Reconstruction (4R)	Reconstruction (4R)	Reconstruction (4R)
Functional Classification	Urban Freeway	Urban Freeway	Urban Freeway	Urban Freeway	Urban Freeway	Urban Freeway
Rural/Urban	Urban	Urban	Urban	Urban	Urban	Urban
Terrain	Level	Level	Level	Level	Level	Level
Access Control	Full Control	Full Control	Full Control	Full Control	Full Control	Full Control

Alignment Name	R_S65	R_W70_N65	R_S65_E70	R_CDS65	R_W70_CDS65	R_S65_CDS65
Design Speed	55 mph	55 mph	55 mph	55 mph	50 mph	45 mph
Project Design Criteria	Reconstruction (4R)	Reconstruction (4R)	Reconstruction (4R)	Reconstruction (4R)	Reconstruction (4R)	Reconstruction (4R)
Functional Classification	Urban Freeway	Urban Freeway	Urban Freeway	Urban Freeway	Urban Freeway	Urban Freeway
Rural/Urban	Urban	Urban	Urban	Urban	Urban	Urban
Terrain	Level	Level	Level	Level	Level	Level
Access Control	Full Control	Full Control	Full Control	Full Control	Full Control	Full Control

Alignment Name	R_N65_CD12th	R_CD11th_E70	R_CDS65_CDMichigan	R_CDS65_CDOhio	R_CDMichigan_N65	R_CDMichigan_E70	P_OhioSt
Design Speed	45 mph / 30 mph	45 mph / 30 mph	40 mph / 30 mph	45 mph / 30 mph	45 mph / 30 mph	45 mph / 30 mph	30 mph
Project Design Criteria	Reconstruction (4R)	Reconstruction (4R)	Reconstruction (4R)	Reconstruction (4R)	Reconstruction (4R)	Reconstruction (4R)	Reconstruction (4R)
Functional Classification	Urban Freeway	Urban Freeway	Urban Freeway	Urban Freeway	Urban Freeway	Urban Freeway	Local Road
Rural/Urban	Urban	Urban	Urban	Urban	Urban	Urban	Urban
Terrain	Level	Level	Level	Level	Level	Level	Level
Access Control	Full Control	Full Control	Full Control	Full Control	Full Control	Full Control	Full Control

Note:
11' minimum travel lane width req'd.
13' lane width req'd. where lane shifts are present.
2' minimum shoulder width req'd.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL ____________ DESIGN ENGINEER ____ DATE

DESIGNED: DJG DRAWN: JJP
CHECKED: RAP CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX AND GENERAL NOTES

HORIZONTAL SCALE	BRIDGE FILE
N/A	N/A
VERTICAL SCALE	DESIGNATION
N/A	1600808
SURVEY BOOK	SHEETS
ELECTRONIC	2 of 185
CONTRACT	PROJECT
B-36910	1600808

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Note:
11' minimum travel lane width req'd.
13' lane width req'd. where lane shifts are present.
2' minimum shoulder width req'd.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: RAP DRAWN: RAP

CHECKED: DJG CHECKED: DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFIC
EXISTING SIGN MODIFICATIONS
I-465

HORIZONTAL SCALE	BRIDGE FILE
N/A	N/A
VERTICAL SCALE	DESIGNATION
N/A	1600808
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 185
CONTRACT	PROJECT
B-36910	1600808

Note:
11' minimum travel lane width req'd.
13' lane width req'd. where lane shifts are present.
2' minimum shoulder width req'd.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER DATE

DESIGNED:	DJG	DRAWN:	JJP
CHECKED:	RAP	CHECKED:	DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFIC
EXISTING SIGN MODIFICATIONS
I-65 NORTH

HORIZONTAL SCALE	BRIDGE FILE
N/A	N/A
VERTICAL SCALE	DESIGNATION
N/A	1600808
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 185
CONTRACT	PROJECT
B-36910	1600808

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DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL		DESIGN ENGINEER	DATE
DESIGNED:	DJG	DRAWN:	JJP
CHECKED:	RAP	CHECKED:	DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFIC
EXISTING SIGN MODIFICATIONS
I-70 WESTBOUND, I-65 SOUTH

HORIZONTAL SCALE	BRIDGE FILE
N/A	N/A
VERTICAL SCALE	DESIGNATION
N/A	1600808
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 185
CONTRACT	PROJECT
B-36910	1600808

Note:
11' minimum travel lane width req'd.
13' lane width req'd. where lane shifts are present.
2' minimum shoulder width req'd.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER | DATE

DESIGNED:	DJG	DRAWN:	JJP
CHECKED:	RAP	CHECKED:	DJG

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFIC
EXISTING SIGN MODIFICATIONS
I-70 EASTBOUND

HORIZONTAL SCALE	BRIDGE FILE
N/A	N/A
VERTICAL SCALE	DESIGNATION
N/A	1600808
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 185
CONTRACT	PROJECT
B-36910	1600808

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