

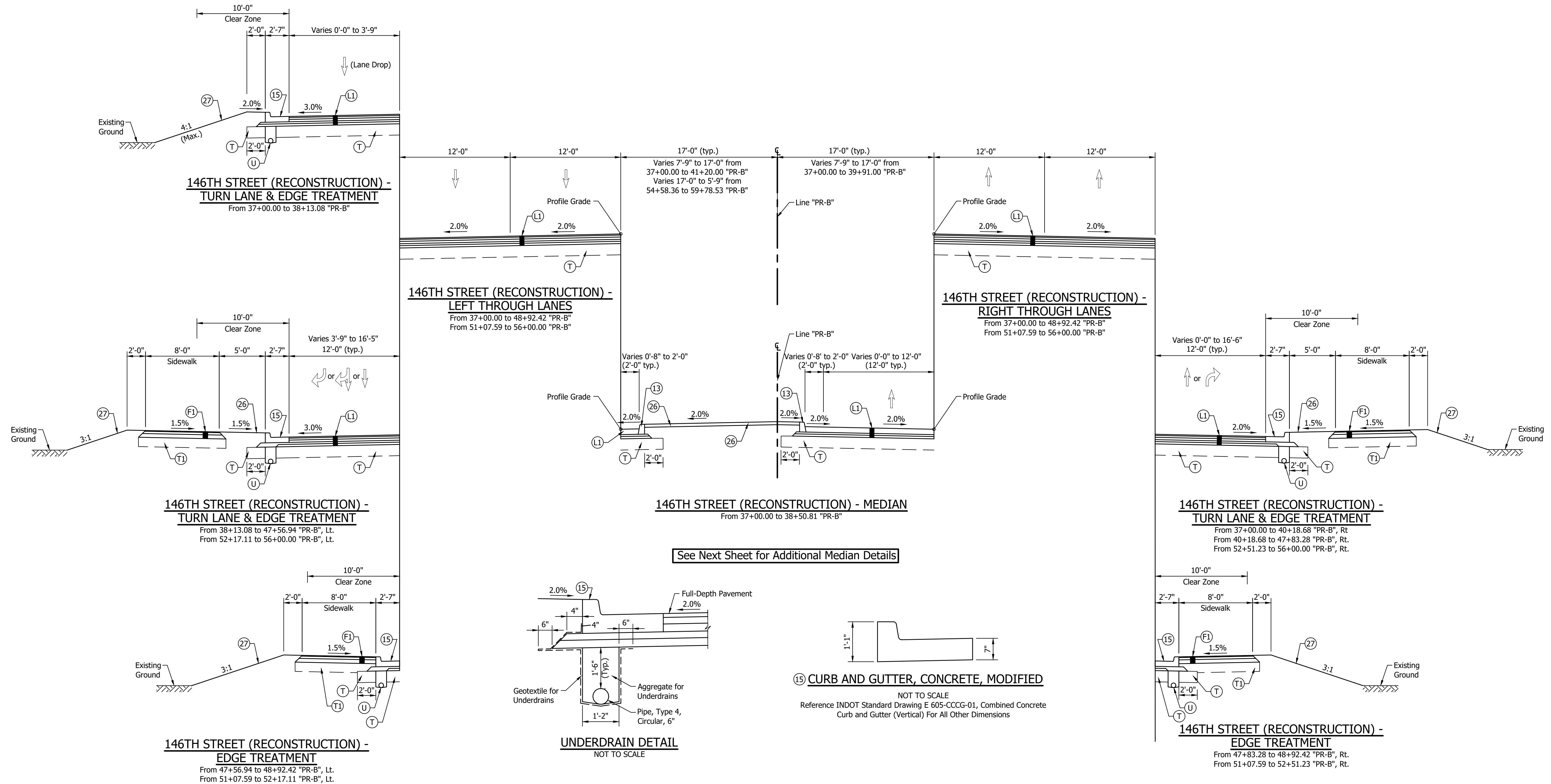
UTILITIES			
<u>ELECTRIC:</u> Duke Energy 100 S. Mill Creek Road Noblesville, IN 46060 Attn: Brynn Streeter Ph: (317) 703-0681 Duke Energy Transmission 1000 E. Main St. Planfield, IN 838-1513 Attn: Jason Keenan Ph: (317) 838-1513 <u>CABLE TV:</u> Comcast Attn: Tom Spencer Ph: (317) 926-9426 AT&T 5858 N. College Ave. Indianapolis, IN 46220 Attn: Brian Cravens Ph: (317) 610-5424 Brighthouse Attn: Joey Burton Ph: (317) 632-9077	<u>FIBER:</u> Zayo Bandwith 9209 Castleton Dr. Indianapolis, IN 46256 Attn: Dan Jones Ph: (317) 508-2807 Windstream Attn: Daniel Leskinen Ph: (812) 759-2833 Level 3 Communications 1902 South East St. Indianapolis, IN 46225 Attn: DeWayne Hamilton Ph: (317) 916-2708 HRS Internet , LLC 731 W. Henry St. Indianapolis, IN 46225 Attn: Ph: (800) 844-8649 First Mile Tech 750 Liberty Dr. Westfield, IN 46074 Attn: Ph: (317) 569-2806	<u>FIBER:</u> Lighttower Attn: George Huff Ph: (317) 430-4575 <u>GAS:</u> Vectren Attn: Kilian Sweet Ph: (317) 776-5561 <u>WATER:</u> CEG-Water 1220 Waterway Blvd. Indianapolis, IN 46206 Attn: Scott Ritter Ph: (317) 927-4434 Indiana-American Water Co. 555 E. County Line Road, Ste 201 Greenwood, IN 46143 Attn: Ezat Nayeris Ph: (317) 885-2447	<u>SANITARY SEWER:</u> City of Fishers-Wastewater Fishers Town Hall One Municipal Dr. Fishers, IN 46038 Attn: Rick Farbhram Ph: (317) 595-3281 City of Noblesville Attn: Andrew Rodewald Ph: (317) 776-6330 Hamilton Southeastern Utilities Attn: Joseph Sharp Ph: (317) 577-1150 ext. 208 <u>INDOT:</u> Indot-PM (317) 232-0911 Contact: Jennifer Beck Indot-PM (317) 899-8606 Contact: Konstantin Veygman Indot-Lighting/Signals (317) 467-3485 Contact: Mike Huffman

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.
	All limited access right-of-way (L.A. R/W) is to be fenced with chain link type fence (CLTF) or farm field type fence (FFTF) where specified in the plans.

[illegible][illegible]

DESIGNED: <u>JDG</u>	DRAWN: <u>RSJ</u>
CHECKED: <u>MRL</u>	CHECKED: <u>MRL</u>

HORIZONTAL SCALE	BRIDGE FILE		
AS NOTED	037-29-10225		
VERTICAL SCALE	DESIGNATION		
AS NOTED	1601826		
SURVEY BOOK		SHEETS	
-	2	of	20
CONTRACT	PROJECT		
B-39504	1601826		



See Next Sheet for Additional Median Details

LEGEND

- (F) HMA For Sidewalk
140 #/Sys HMA Surface, Type B, on
220 #/Sys HMA Intermediate, Type B, on
6" Compacted Aggregate, No. 53
Subgrade Treatment, Type III (6" Compacted Soil)

(K) Full Depth QC/QA-HMA Pavement, SR 37 Mainline

(J) Full Depth QC/QA-HMA Pavement, SR 37 Shoulder
- (L) Full Depth QC/QA-HMA Pavement, 146th Street Ramps, Mainline and Shoulders

(L) Full Depth QC/QA-HMA Pavement, 146th Street & Herriman Blvd.

(R) 165 #/Sys QC/QA-HMA, 4, 70, Surface, 9.5 mm, on
275 #/Sys (Max.) QC/QA-HMA, 4, 70, Intermediate, 12.5 mm (Variable Depth) on
Milling, Asphalt, 1-1/2"
- (O) Compacted Aggregate, No. 53

(T) Subgrade Treatment, IB
(14" Chemical Modification)

(T) Subgrade Treatment, III
(6" Compacted Soil)

(W) Widening with HMA, Type C
- (U) Underdrain, 6"

(2) Barrier, Concrete, 45"

(13) Curb, Concrete

(15) Curb & Gutter, Concrete, Mod.
- (18) Curb & Gutter, B, Concrete,
Modified

(22) Center Curb, D, Concrete

(26) Sodding, Nursery

(27) Seed Mixture, U



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DESIGN ENGINEER DATE

DESIGNED: JDG

DRAWN: RSJ

CHECKED: MRL

CHECKED: MRL

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS - 146TH STREET
146TH STREET OVER S.R. 37

HORIZONTAL SCALE BRIDGE FILE

AS NOTED 037-29-10225

VERTICAL SCALE DESIGNATION

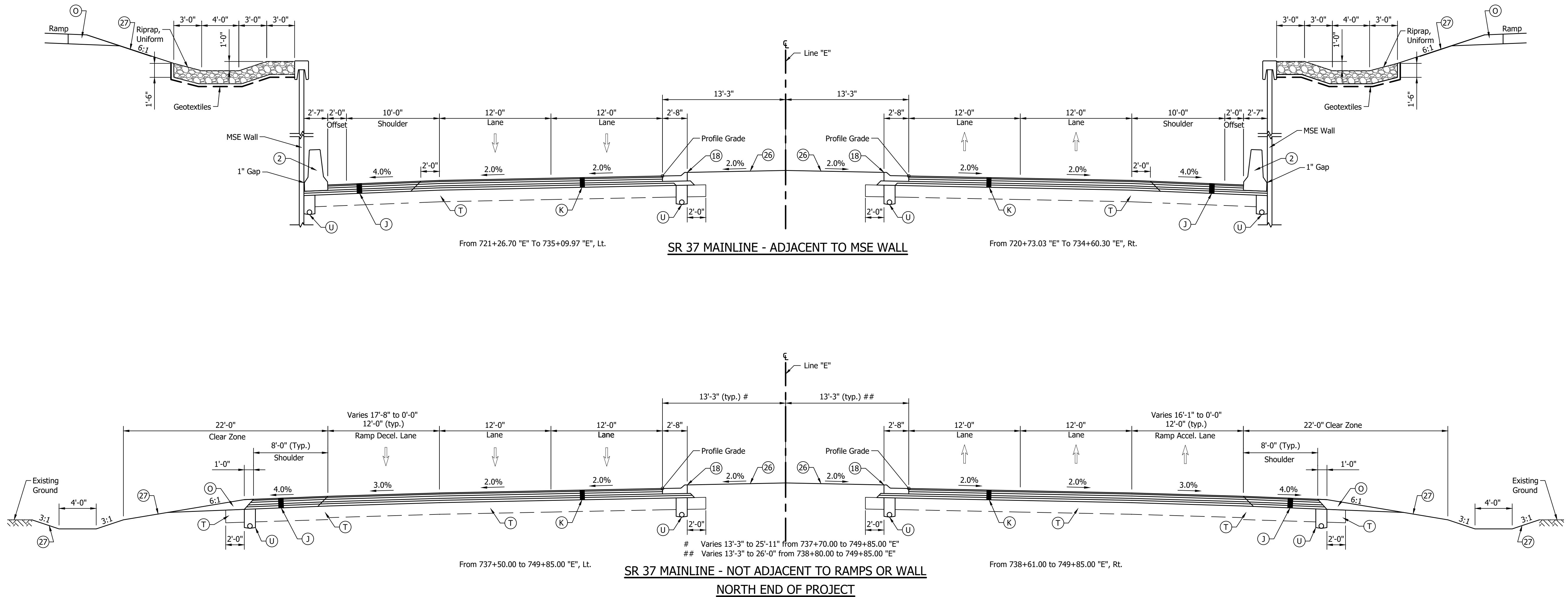
AS NOTED 1601826

SURVEY BOOK SHEETS

- 3 of 20

CONTRACT PROJECT

B-39504 1601826



FOR INFORMATION ONLY

LEGEND

- | | | | | |
|--|---|---|------------------------------------|--|
| (F1) HMA For Sidewalk
140 #/Sys HMA Surface, Type B, on
220 #/Sys HMA Intermediate, Type B, on
6" Compacted Aggregate, No. 53 | (L) Full Depth QC/QA-HMA Pavement, 146th Street Ramps, Mainline and Shoulders | (O) Compacted Aggregate, No. 53 | (U) Underdrain, 6" | (18) Curb & Gutter, B, Concrete,
Modified |
| (K) Full Depth QC/QA-HMA Pavement, SR 37 Mainline | (11) Full Depth QC/QA-HMA Pavement, 146th Street & Herriman Blvd. | (T) Subgrade Treatment, IB
(14" Chemical Modification) | (2) Barrier, Concrete, 45" | (22) Center Curb, D, Concrete |
| (J) Full Depth QC/QA-HMA Pavement, SR 37 Shoulder | (R) 165 #/Sys QC/QA-HMA, 4, 70, Surface, 9.5 mm, on
275 #/Sys (Max.) QC/QA-HMA, 4, 70, Intermediate, 12.5 mm (Variable Depth) on
Milling, Asphalt, 1-1/2" | (T1) Subgrade Treatment, III
(6" Compacted Soil) | (13) Curb, Concrete | (26) Sodding, Nursery |
| | | (W) Widening with HMA, Type C | (15) Curb & Gutter, Concrete, Mod. | (27) Seed Mixture, U |



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DRAWN: RSJ

CHECKED: MRL

CHECKED: MRL

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS - SR 37
146TH STREET OVER S.R. 37

HORIZONTAL SCALE BRIDGE FILE

AS NOTED 037-29-10225

VERTICAL SCALE DESIGNATION

AS NOTED 1601826

SURVEY BOOK SHEETS

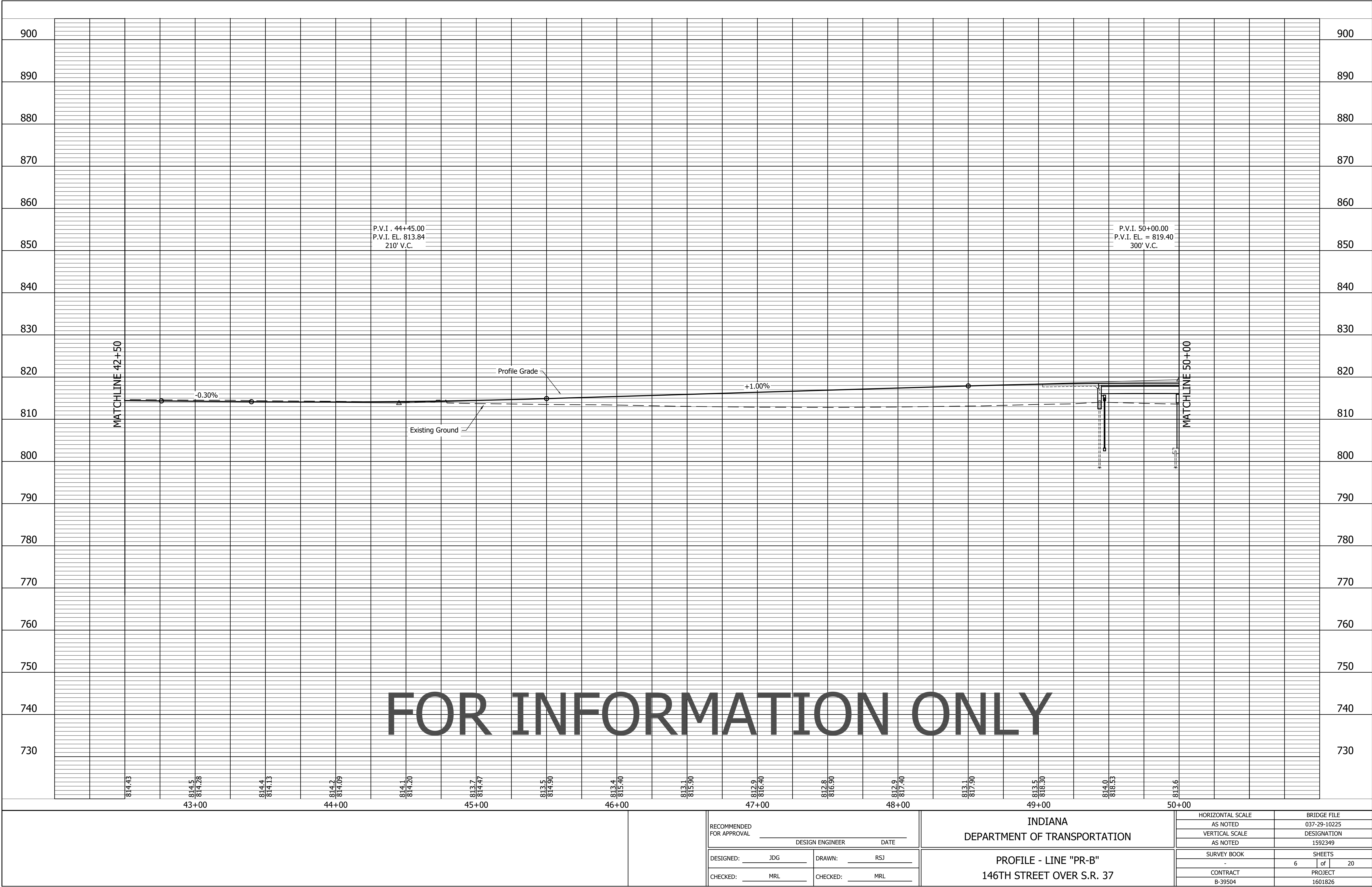
- 4 of 20

CONTRACT PROJECT

B-39504 1601826

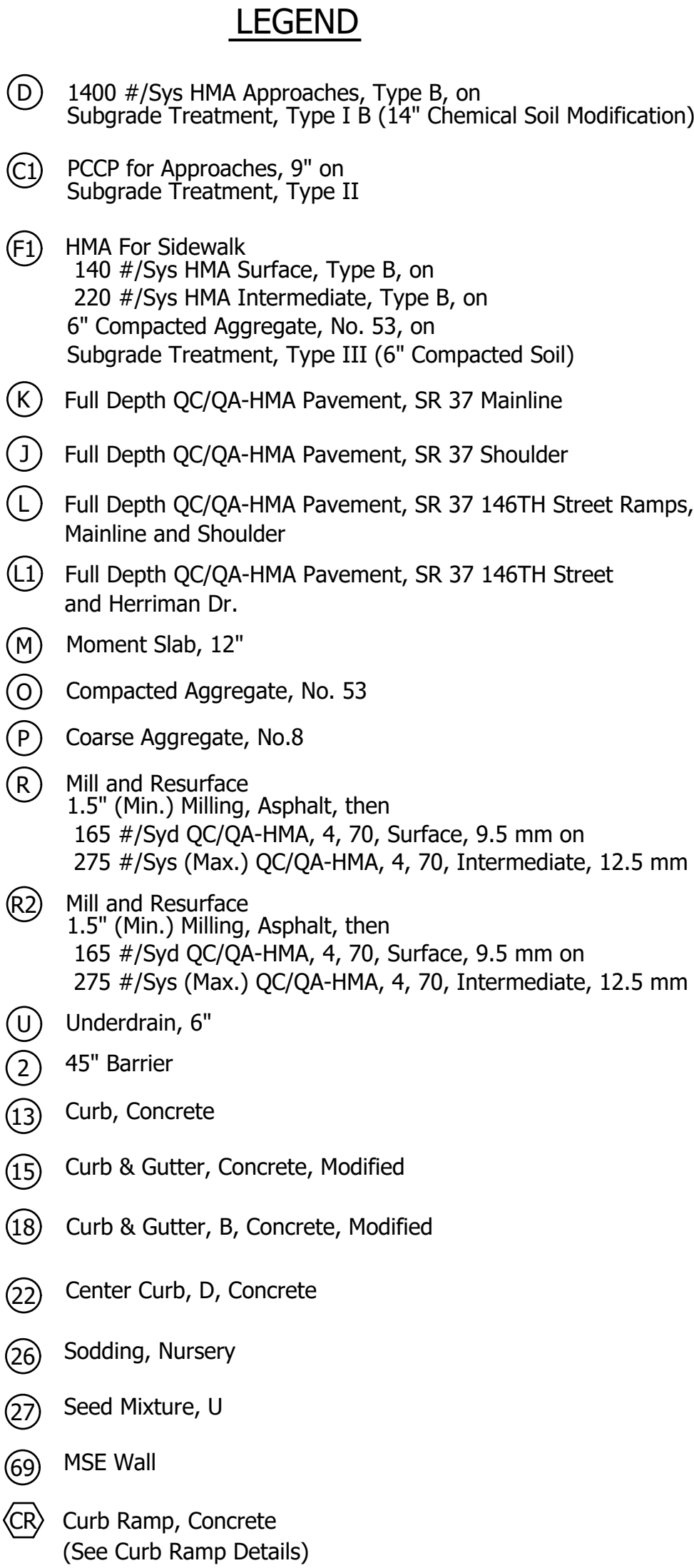
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LEGEND



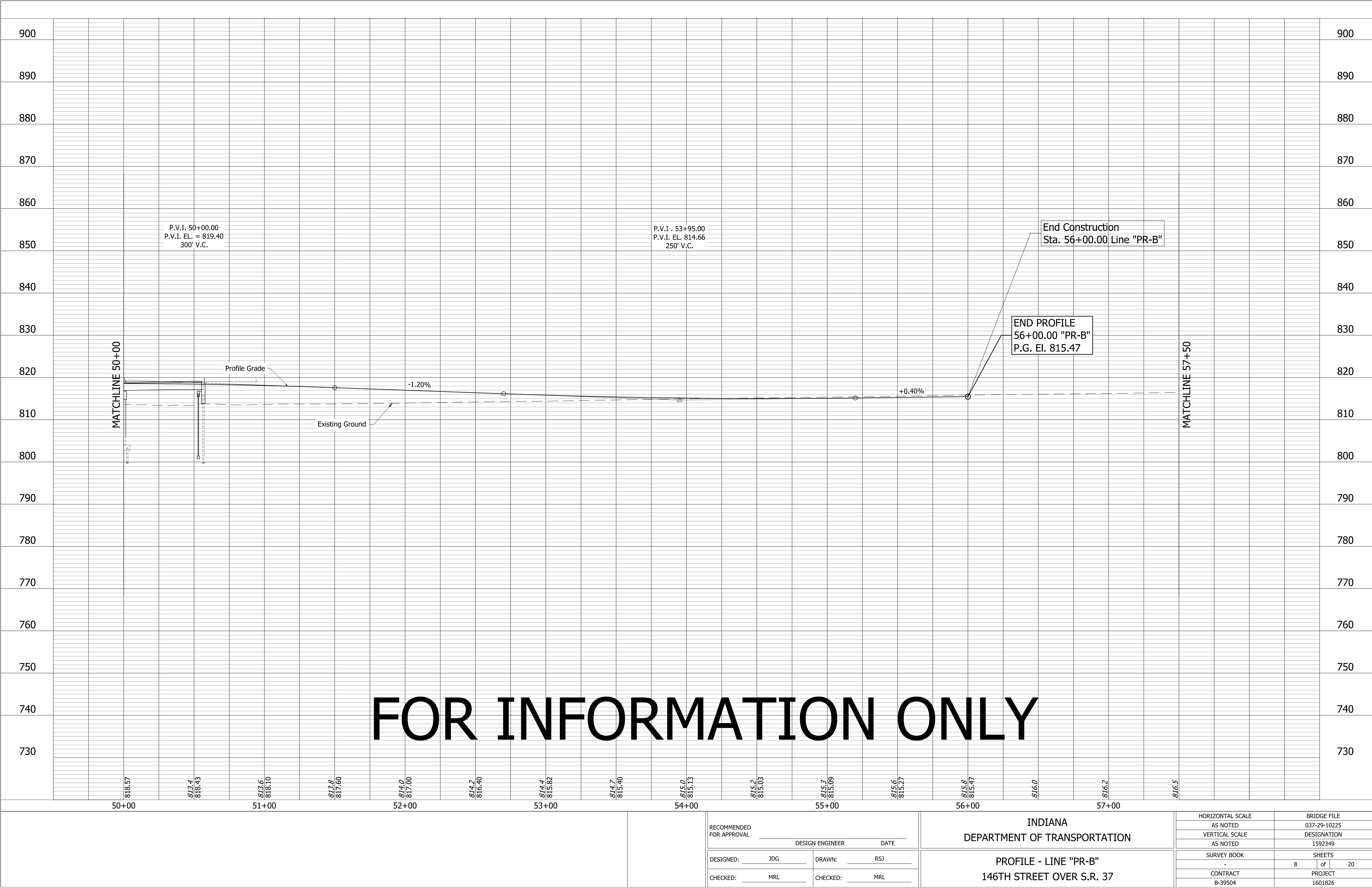
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				AS NOTED	037-29-10225
DESIGNED: JDG		DRAWN: RSJ		VERTICAL SCALE	DESIGNATION
				AS NOTED	1592349
CHECKED: MRL		CHECKED: MRL		SURVEY BOOK	SHEETS
				-	6 of 20
		PROFILE - LINE "PR-B" 146TH STREET OVER S.R. 37		CONTRACT	PROJECT
				B-39504	1601826

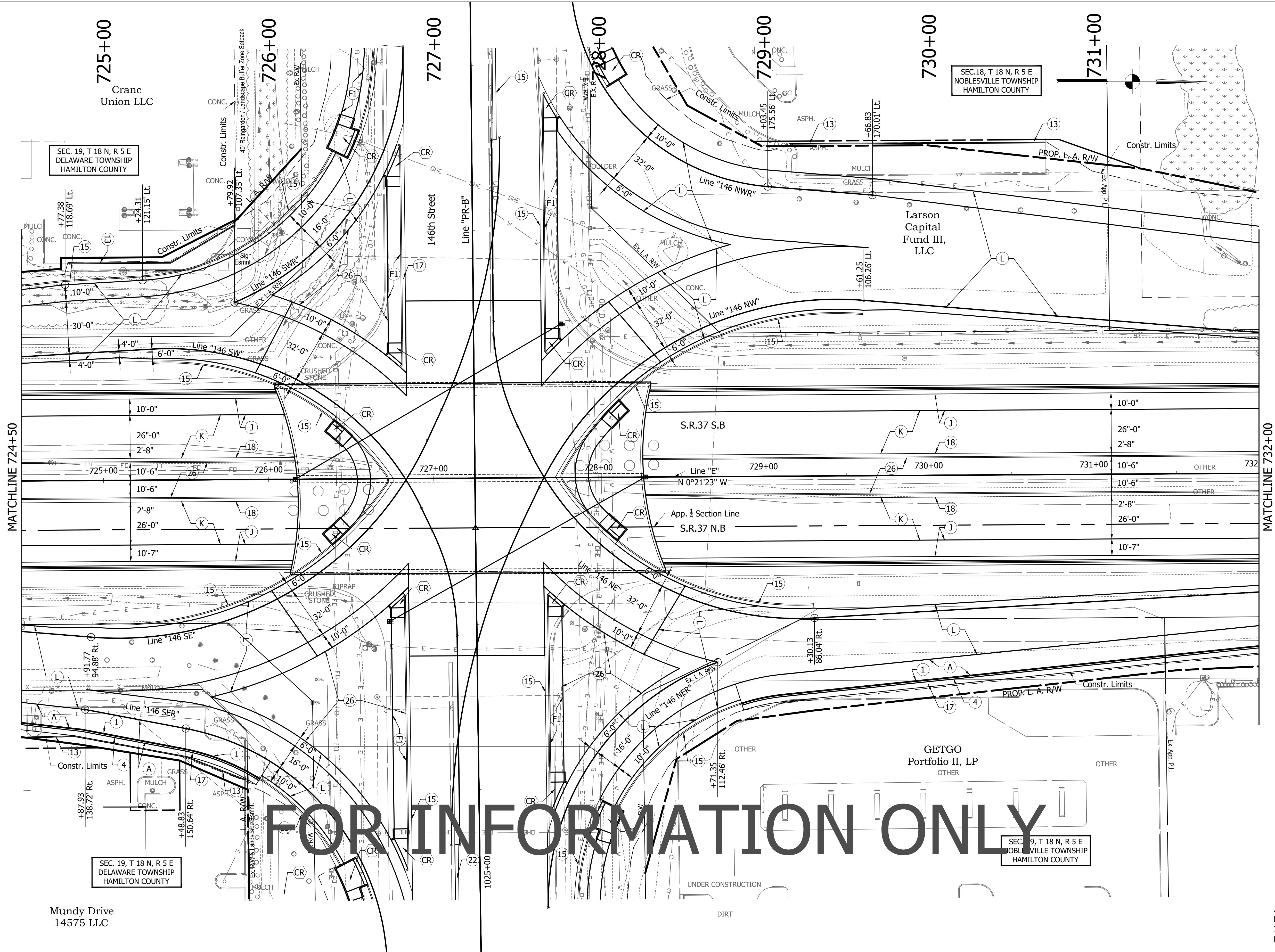


All R/W Described from Line "PR-B" Except as Shown. Line "PR-B" to be Constructed. Limited Access R/W Provisions to Apply Where Indicated. For Additional Alignment Information, See Geometric Tie-Up Sheets. All Topographic Information Described From Line "S-146TH ST-E", Except as Noted.

RECOMMENDED FOR APPROVAL			INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE		BRIDGE FILE			
				AS NOTED		037-29-10225			
				VERTICAL SCALE		DESIGNATION			
				AS NOTED		1592349			
DESIGNED: _____ JDG _____		DRAWN: _____ RSJ _____		PLAN - LINE "PR-B" 146TH STREET OVER S.R. 37		SURVEY BOOK		SHEETS	
						-		7 of 20	
CHECKED: _____ MRL _____		CHECKED: _____ MRL _____				CONTRACT		PROJECT	
						B-39504		1601826	



File Name: R:\CD\16-437\Bridges\Bridges\146th\Drawings\Plans\For Information Only\Plan & Profile SR 37 (146th Street).dwg Plot Date: 4/30/2018 Plotted By: James, Richard S.



- (D) 1400 #/Sys HMA Approaches, Type B, on Subgrade Treatment, Type I B (14" Chemical Soil Modification)
- (C1) PCCP for Approaches, 9" on Subgrade Treatment, Type II
- (F1) HMA For Sidewalk
140 #/Sys HMA Surface, Type B, on
220 #/Sys HMA Intermediate, Type B, on
6" Compacted Aggregate, No. 53, on
Subgrade Treatment, Type III (6" Compacted Soil)
- (K) Full Depth QC/QA-HMA Pavement, SR 37 Mainline
- (J) Full Depth QC/QA-HMA Pavement, SR 37 Shoulder
- (L) Full Depth QC/QA-HMA Pavement, SR 37 146TH Street Ramps, Mainline and Shoulder
- (L1) Full Depth QC/QA-HMA Pavement, SR 37 146TH Street and Herriman Dr.
- (M) Moment Slab, 12"
- (O) Compacted Aggregate, No. 53
- (P) Coarse Aggregate, No.8
- (R) Mill and Resurface
1.5" (Min.) Milling, Asphalt, then
165 #/Syd QC/QA-HMA, 4, 70, Surface, 9.5 mm on
275 #/Sys (Max.) QC/QA-HMA, 4, 70, Intermediate, 12.5 mm
- (R2) Mill and Resurface
1.5" (Min.) Milling, Asphalt, then
165 #/Syd QC/QA-HMA, 4, 70, Surface, 9.5 mm on
275 #/Sys (Max.) QC/QA-HMA, 4, 70, Intermediate, 12.5 mm
- (U) Underdrain, 6"
- (2) 45" Barrier
- (13) Curb, Concrete
- (15) Curb & Gutter, Concrete, Modified
- (18) Curb & Gutter, B, Concrete, Modified
- (22) Center Curb, D, Concrete
- (26) Sodding, Nursery
- (27) Seed Mixture, U
- (69) MSE Wall

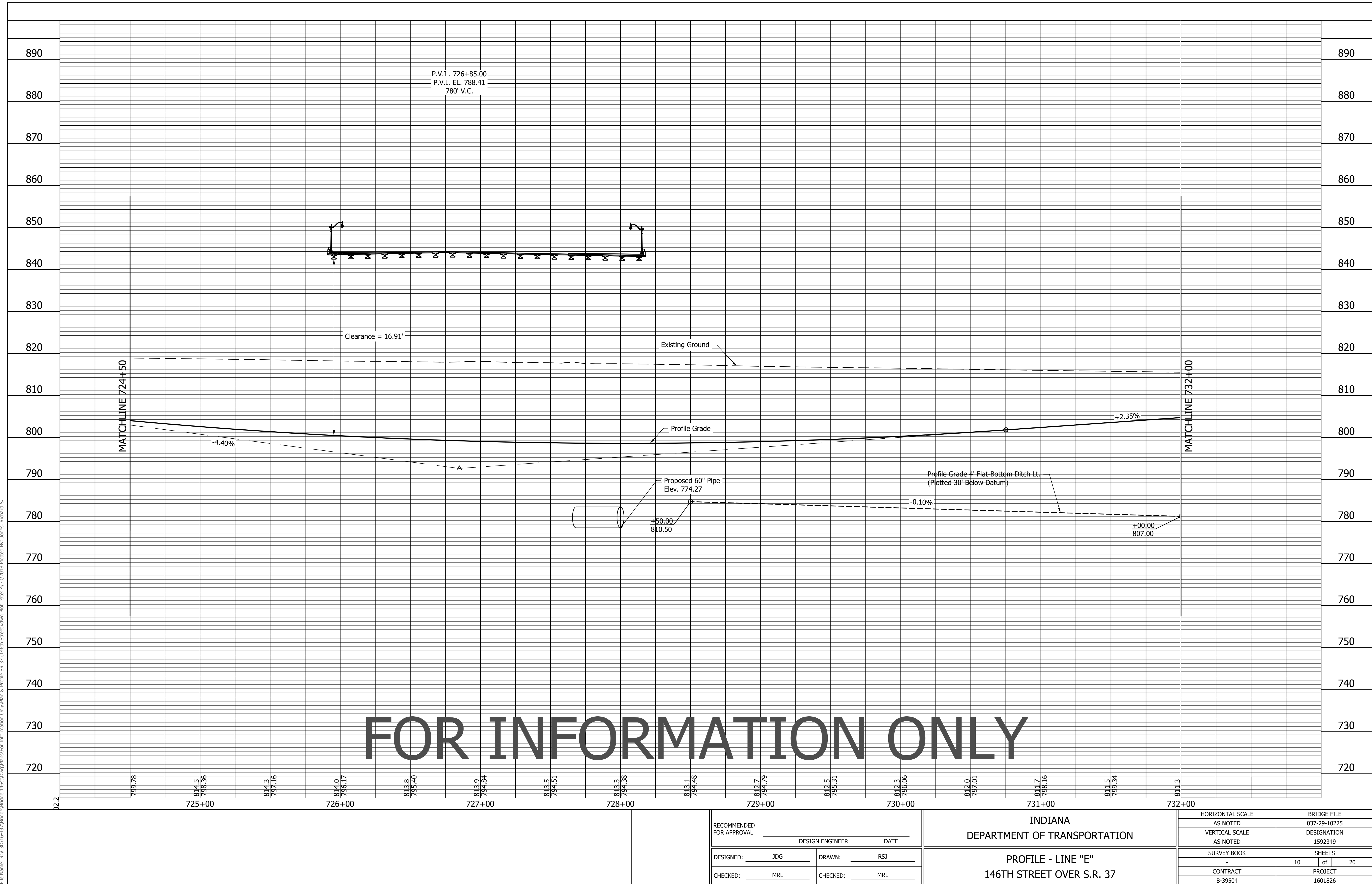
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Limited Access R/W Provisions to Apply Where Indicated. For Additional Alignment
Information, See Geometric Tie-Up Sheets. All Topographic Information Described
From Line "E", Except as Noted.

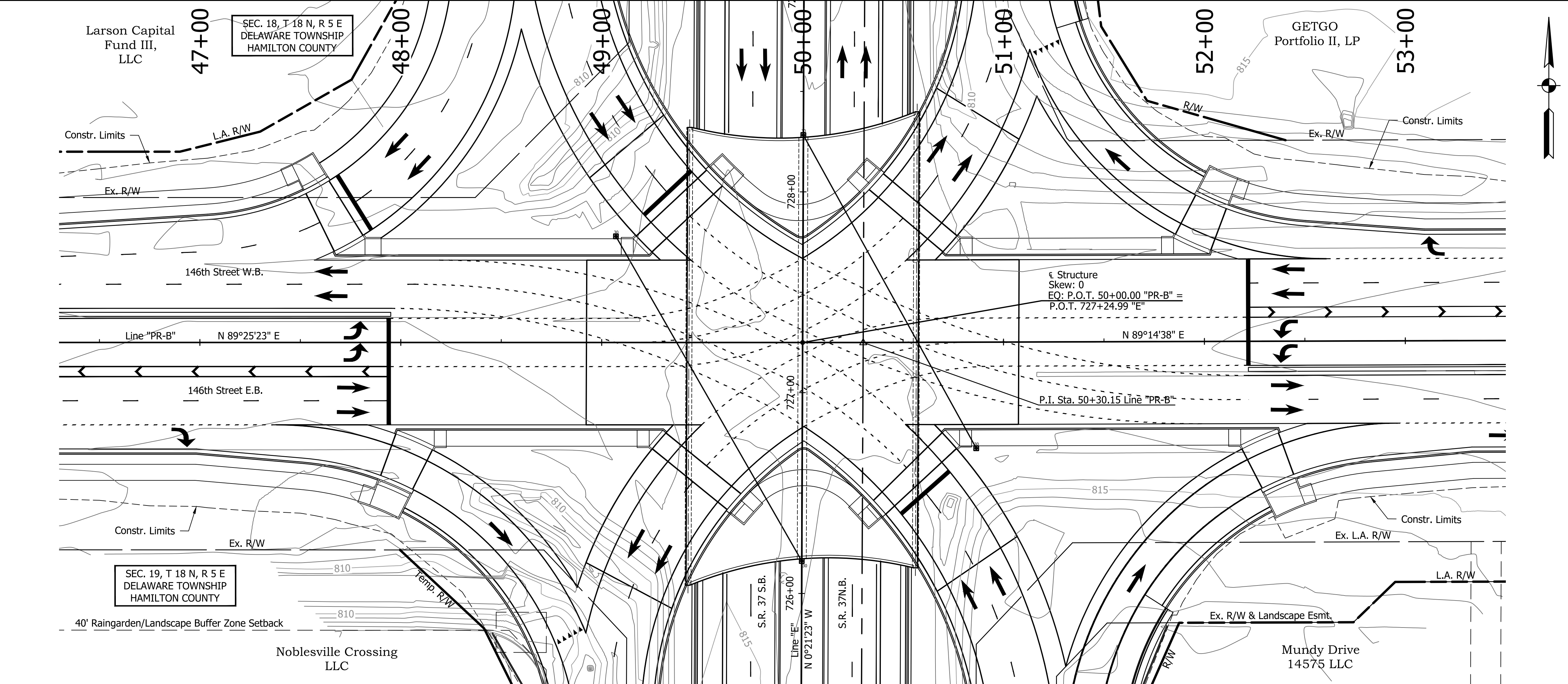
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER		DATE	
DESIGNED:	JDG	DRAWN:	RSJ	
CHECKED:	MRL	CHECKED:	MRL	

INDIANA
DEPARTMENT OF TRANSPORTATION

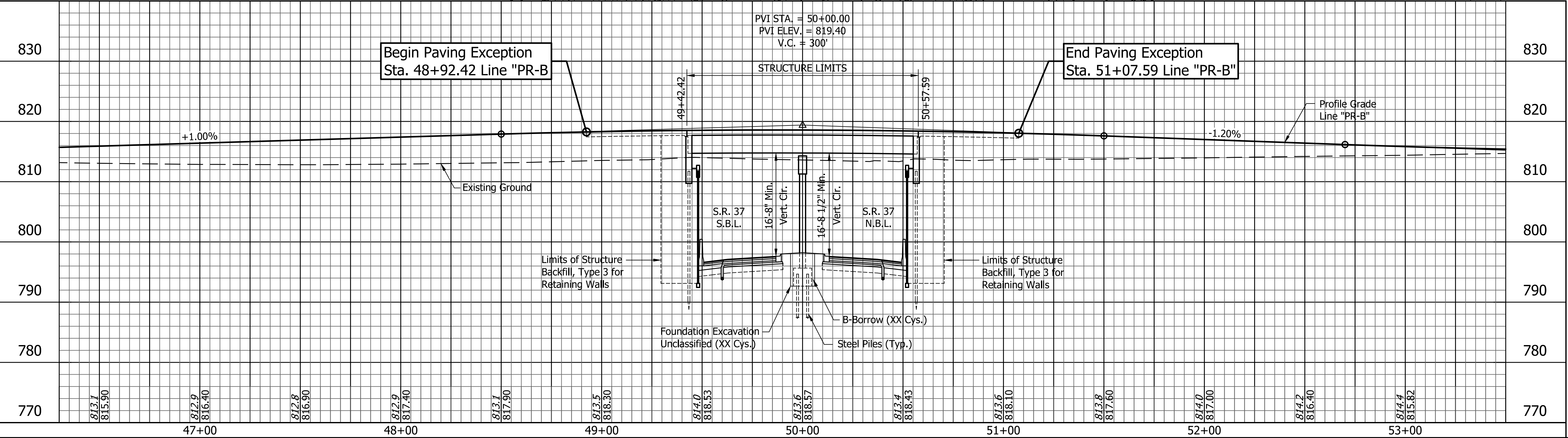
PROFILE - LINE "E"
146TH STREET OVER S.R. 37

HORIZONTAL SCALE	BRIDGE FILE	
AS NOTED	037-29-10225	
VERTICAL SCALE	DESIGNATION	
AS NOTED	1592349	
SURVEY BOOK	SHEETS	
-	9	of 20
CONTRACT	PROJECT	
B-39504	1601826	



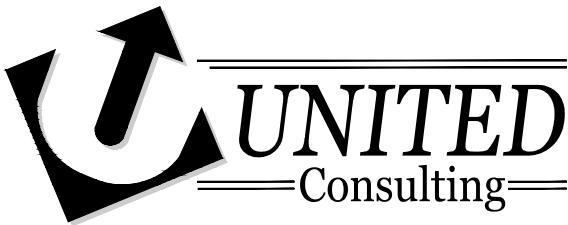


EXISTING STRUCTURE
None



NOTES:
ALL R/W on this sheet is described from Line "PR-B".
Line "PR-B" to be constructed.
See Road Plans, Des. No. 1592349 for additional information.
For topo references, see Road Plans.

CONTINUOUS COMPOSITE PRESTRESSED
CONCRETE BULB-TEE BEAM BRIDGE
2 SPANS: 56'-7", SKEW: 0°00'00"
CLEAR ROADWAY: VARIES
146TH STREET OVER S.R. 37
HAMILTON COUNTY



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Indianapolis, IN 46219
Phone 317-895-2585
Fax 317-895-2596
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DESIGN ENGINEER DATE

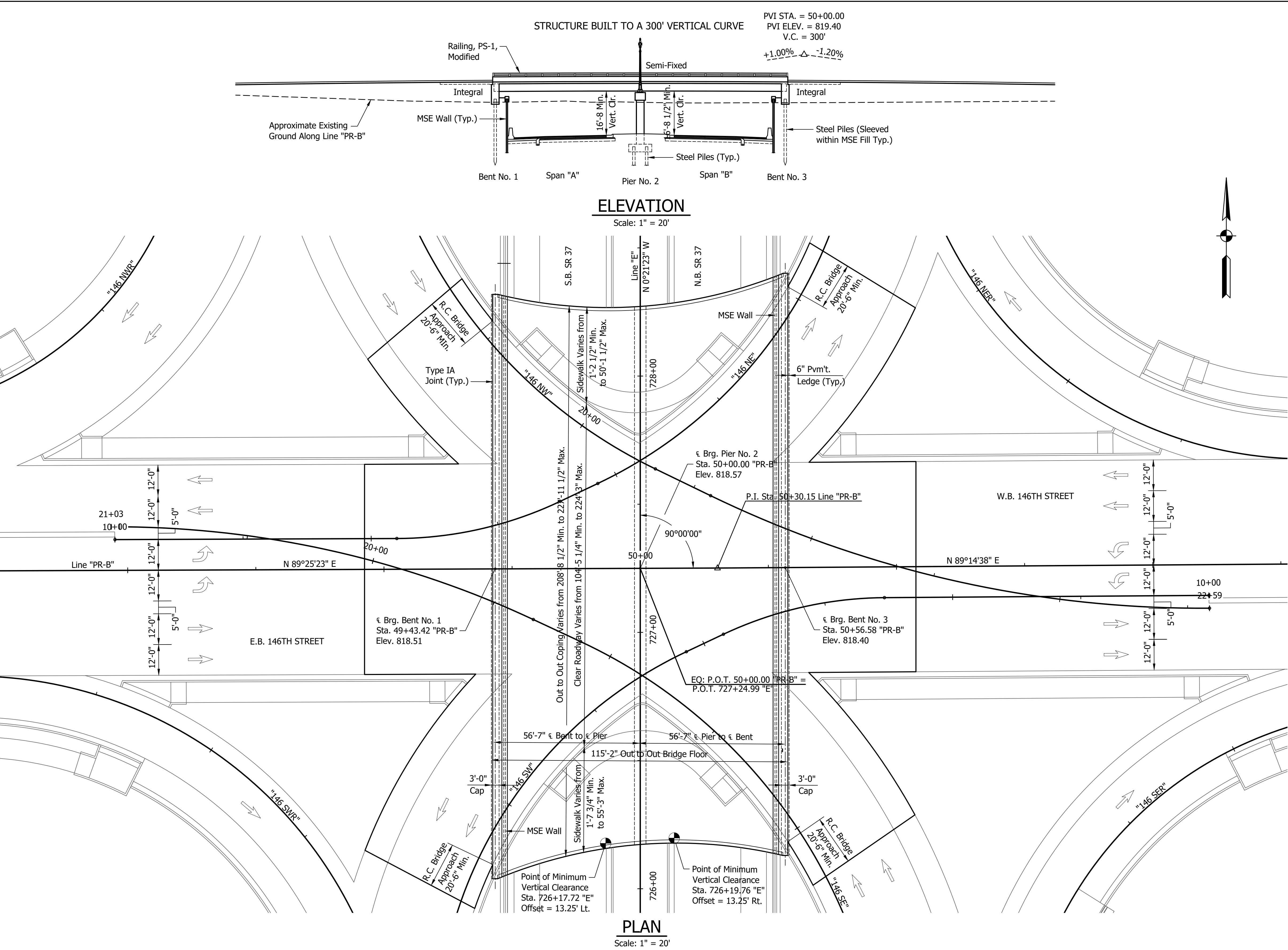
DESIGNED: JDG DRAWN: RSJ

CHECKED: MRL CHECKED: MRL

INDIANA
DEPARTMENT OF TRANSPORTATION

LAYOUT
146TH STREET OVER S.R. 37

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	037-29-10225
VERTICAL SCALE	DESIGNATION
AS NOTED	1601826
SURVEY BOOK	SHEETS
-	11 of 20
CONTRACT	PROJECT
B-39504	1601826



GENERAL NOTES

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

Surface seal top of bridge deck and RCBA's, all surfaces of concrete railing, face of deck coping and underside of deck from outside edge to flange of exterior beams. (Estimated Qnty. = XX Sft.)

DESIGN DATA

Live Load: Superstructure and substructure designed for HL-93 loading and sidewalk live load, in accordance with AASHTO LRFD Bridge Design Specifications, 6th Edition, 2012, and it's subsequent interims.

Substructure foundation designed for HS-25 loading in accordance with the AASHTO Standard Specifications for Highway Bridge, 6th Edition, 2012, and it's subsequent interims.

Dead Load: Designed for actual dead load plus 35#/sft. of future wearing surface.

Slab designed with a 7 1/2" structural slab and a 1/2" integral wearing surface.

ULTIMATE DESIGN STRESSES

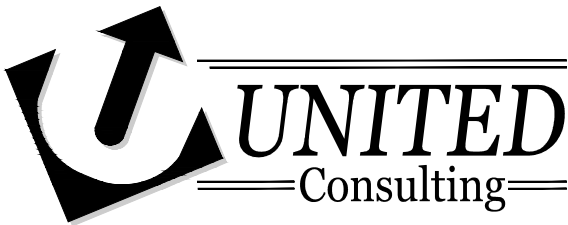
Class "A" Concrete	f _c = 3,500 p.s.i.
Class "B" Concrete	f _c = 3,000 p.s.i.
Class "C" Concrete	f _c = 4,000 p.s.i.
Reinforcing Steel (Grade 60)	f _y = 60,000 p.s.i.

CONSTRUCTION LOADING

The exterior girder has been checked for strength, deflection, and overturning using the constructions loads shown below. Cantilever overhang brackets were assumed for support of the deck overhang past the edge of the exterior girder. The finishing machine was assumed to be supported 6 in. outside the vertical coping form. The top overhang brackets were assumed to be located 6 in. past the edge of the vertical coping form. The bottom overhang brackets were assumed to be braced against the intersection of the girder bottom flange and web.

Deck Falsework Loads:	Designed for 15 lb/ft ² for permanent metal stay-in-place deck forms, removable deck forms, and 2 ft. exterior walkway.
Construction Live Load:	Designed for 20 lb/ft ² 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:	4,500 lb distributed over 10 ft. along the coping.
Wind Load:	Designed for 70 mph horizontal wind loading in accordance with LRFD 3.8.1

CONTINUOUS COMPOSITE PRESTRESSED
CONCRETE BULB-TEE BEAM BRIDGE
2 SPANS: 56'-7", SKEW: 0°00'00"
CLEAR ROADWAY: VARIES
146TH STREET OVER S.R. 37
HAMILTON COUNTY



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DESIGNED: JDG

DRAWN: RSJ

CHECKED: MRL

CHECKED: MRL

INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
146TH STREET OVER S.R. 37

HORIZONTAL SCALE

AS NOTED

VERTICAL SCALE

AS NOTED

BRIDGE FILE

037-29-10225

DESIGNATION

1601826

SURVEY BOOK

-

SHEETS

12

of

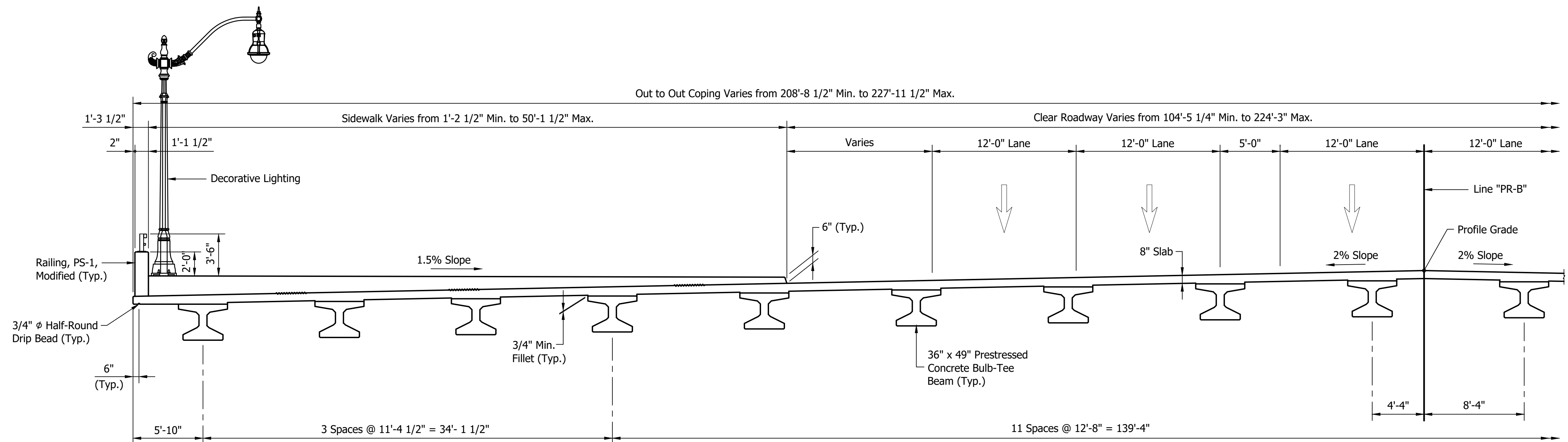
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CONTRACT

B-39504

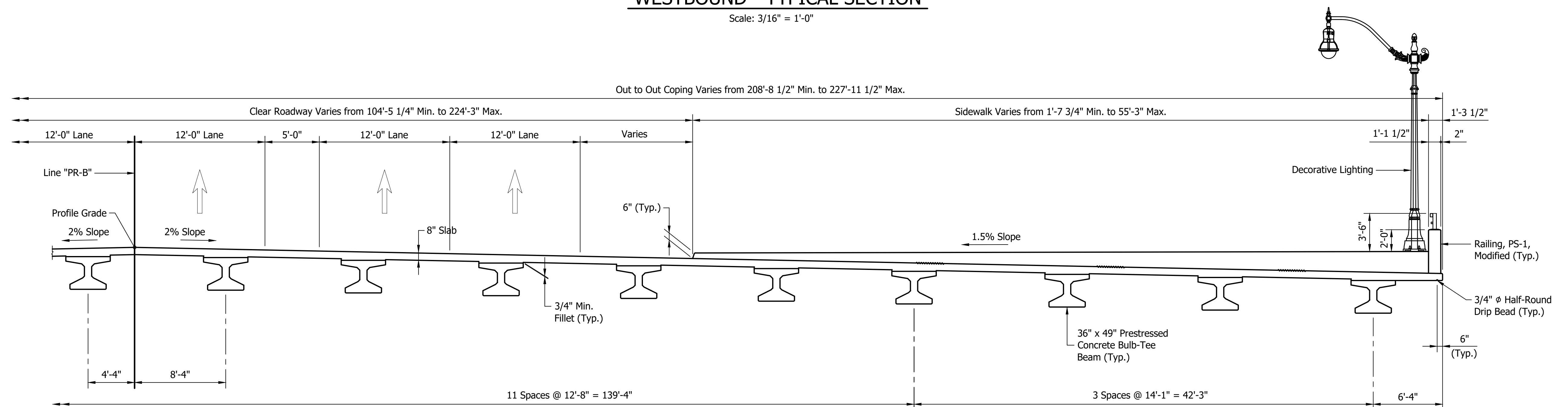
PROJECT

1601826



WESTBOUND - TYPICAL SECTION

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



EASTBOUND - TYPICAL SECTION

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

CONTINUOUS COMPOSITE PRESTRESSED
CONCRETE BULB-TEE BEAM BRIDGE
2 SPANS: 56'-7", SKEW: 0°00'00"
CLEAR ROADWAY: VARIES
146TH STREET OVER S.R. 37
HAMILTON COUNTY



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DESIGN ENGINEER DATE

DESIGNED: JDG DRAWN: RSJ
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INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN
146TH STREET OVER S.R. 37

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	037-29-10225
VERTICAL SCALE	DESIGNATION
AS NOTED	1601826
SURVEY BOOK	SHEETS
-	13 of 20
CONTRACT	PROJECT
B-39504	1601826

SUMMARY OF BRIDGE QUANTITIES

[illegible]

** ESTIMATED QUANTITY



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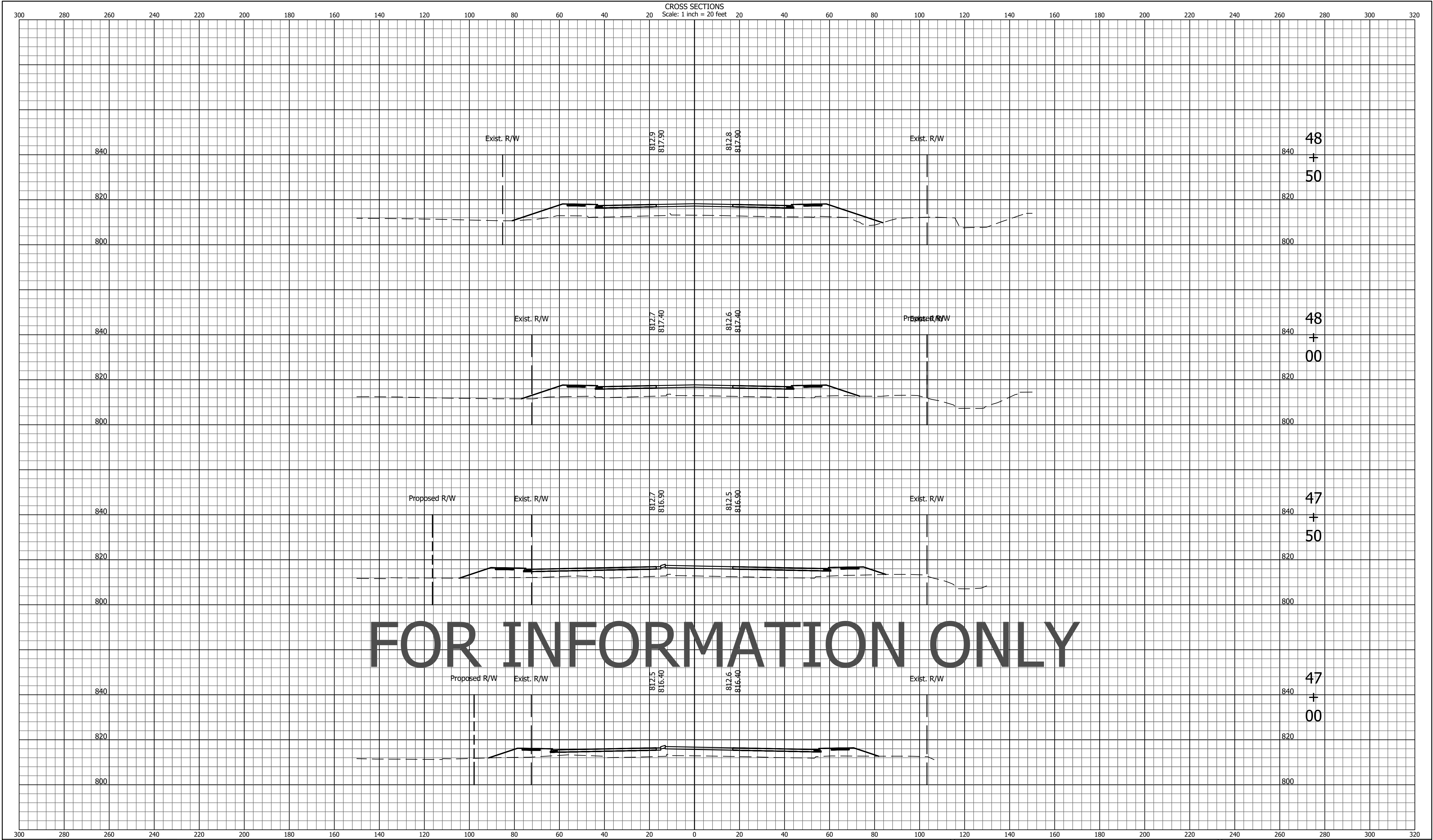
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CHECKED: <u>MRL</u>	CHECKED: <u>MRL</u>

INDIANA
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BRIDGE SUMMARY
146TH STREET OVER S.R. 37

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	037-29-10225
VERTICAL SCALE	DESIGNATION
AS NOTED	1601826

SURVEY BOOK	SHEETS		
-	14	of	20
CONTRACT	PROJECT		
B-39504	1601826		





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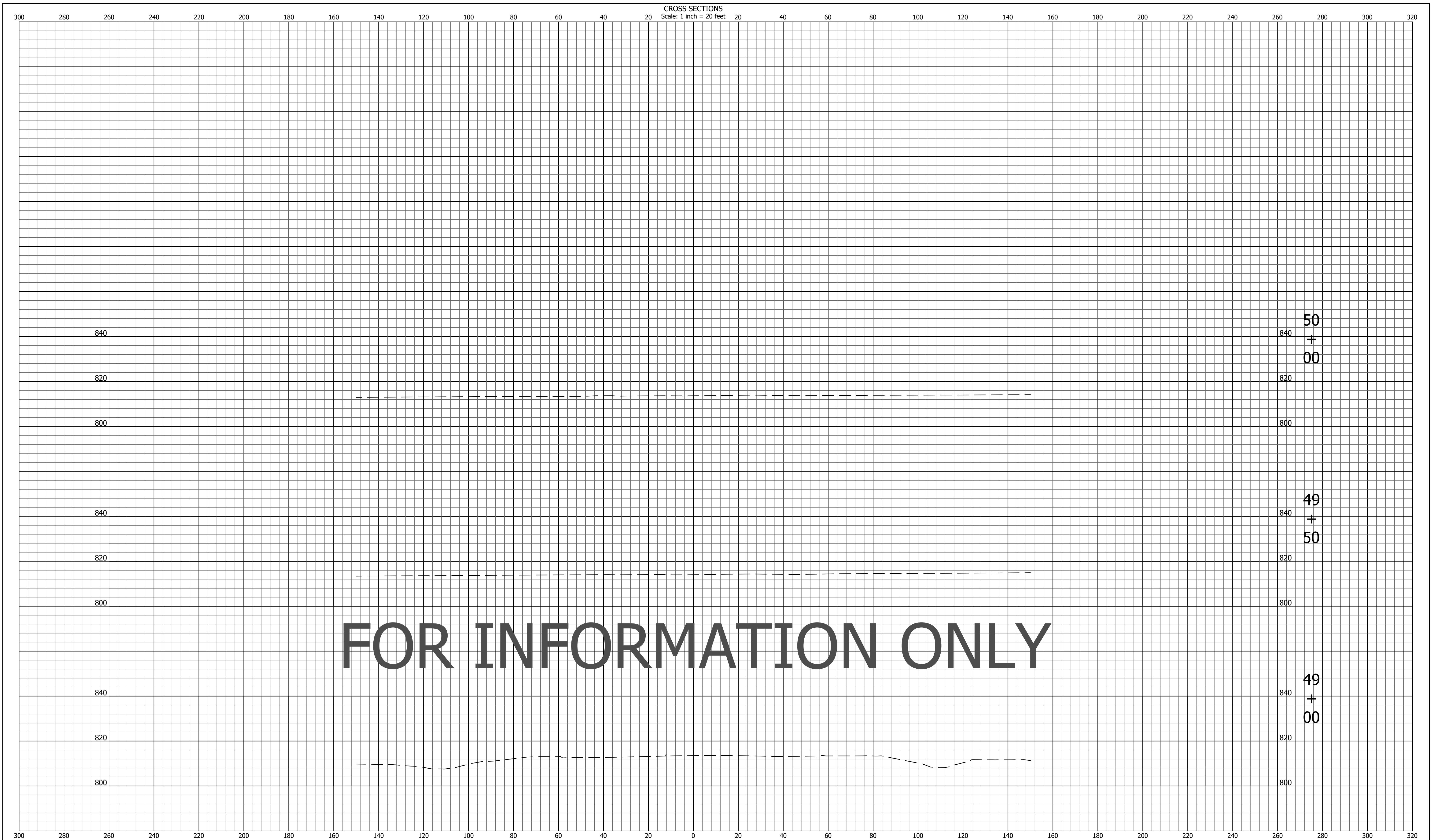
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DESIGNED: JDG DRAWN: RSJ
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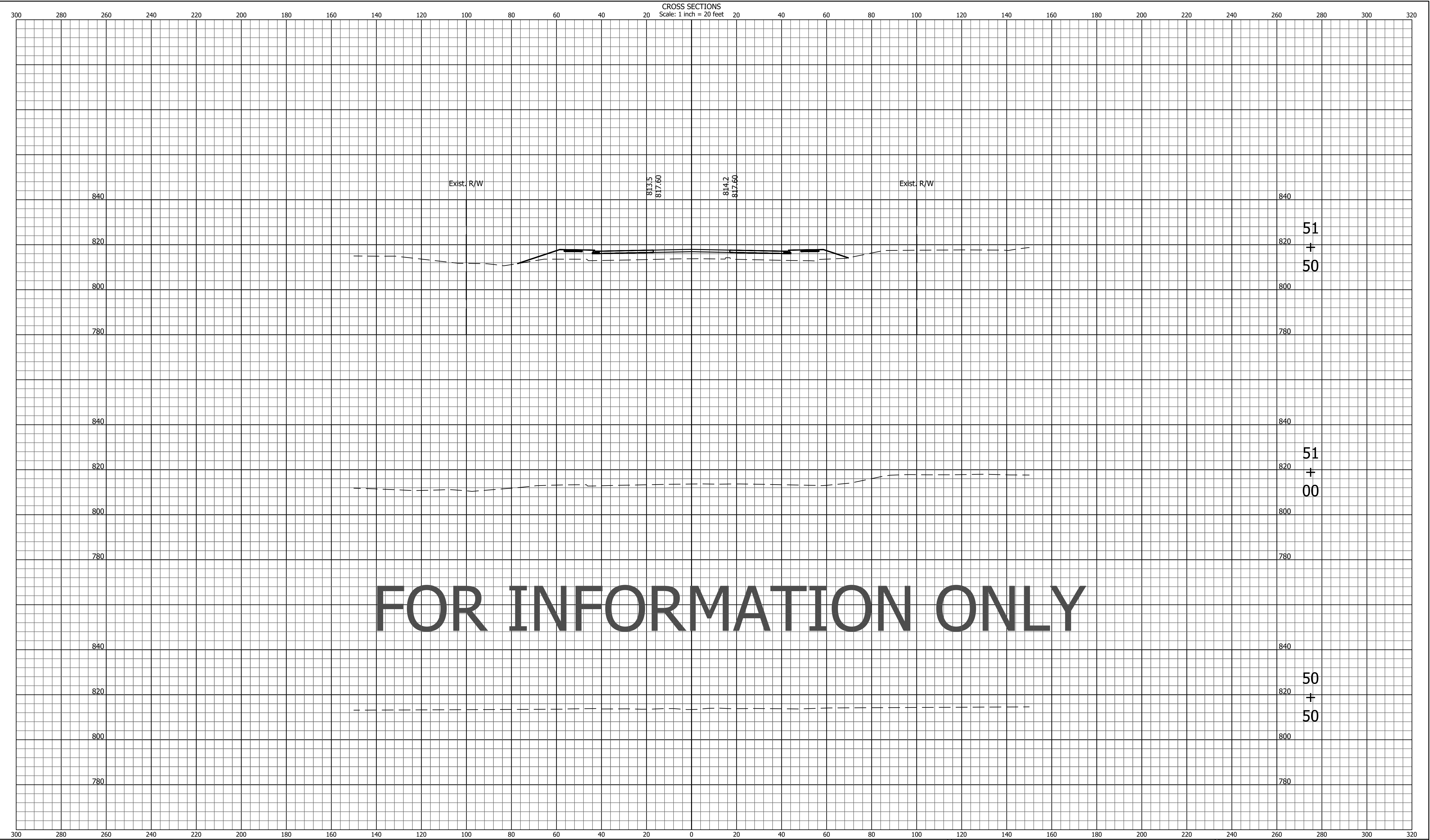
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
146TH STREET - LINE "PR-B"

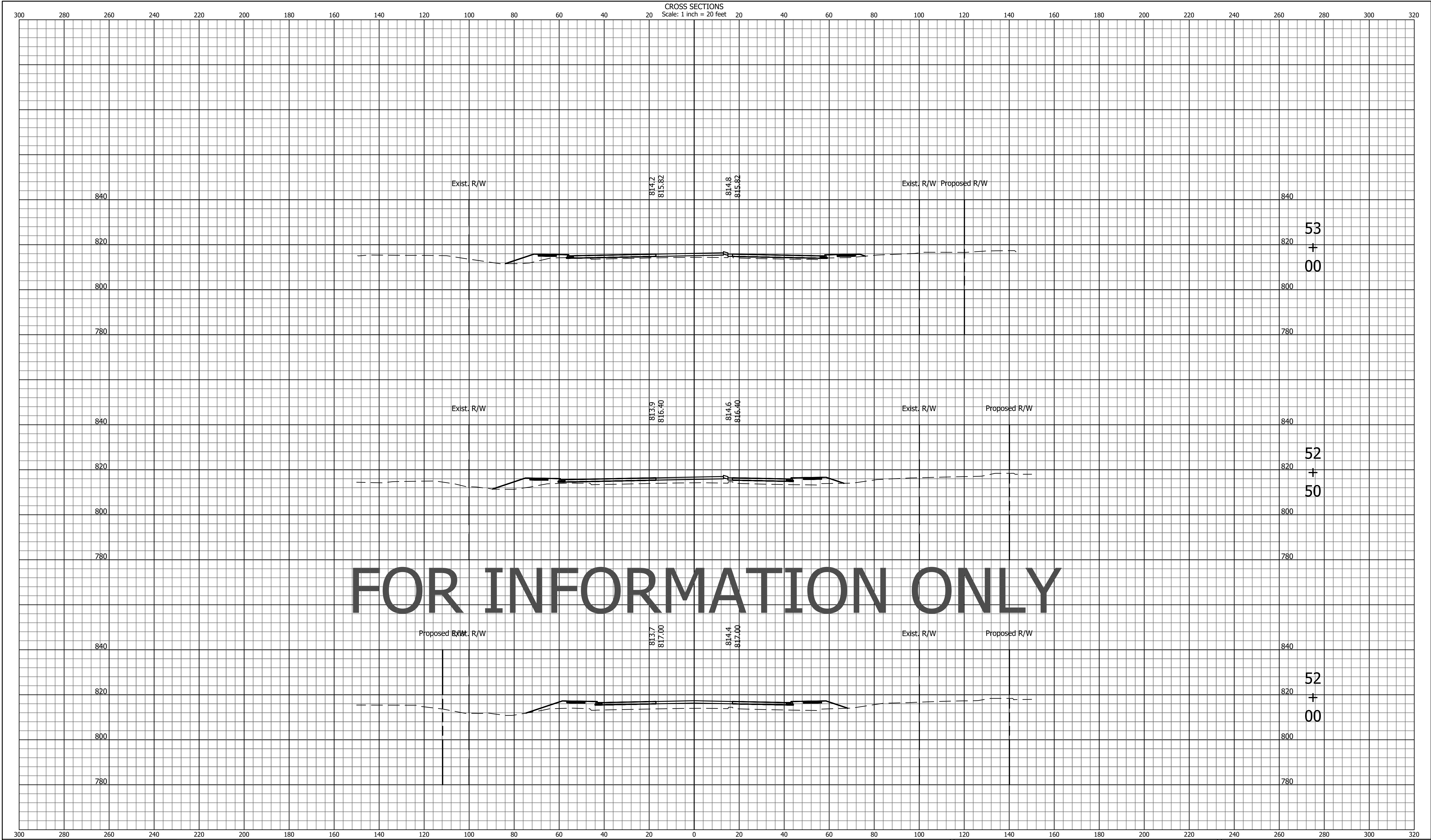
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VERTICAL SCALE 1" = 20'	DESIGNATION 1601826
SURVEY BOOK -	SHEETS 15 of 20
CONTRACT B-39504	PROJECT 1601826



 1625 N. Post Road Indianapolis, IN 46219 Phone 317-895-2585 Fax 317-895-2596 www.ucindy.com	RECOMMENDED FOR APPROVAL	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1" = 20'	BRIDGE FILE 037-29-10225	
	DESIGN ENGINEER	DATE	VERTICAL SCALE 1" = 20'	DESIGNATION 1601826	
	DESIGNED: JDG	DRAWN: RSJ	CROSS SECTIONS 146TH STREET - LINE "PR-B"	SURVEY BOOK -	SHEETS 16 of 20
	CHECKED: MRL	CHECKED: MRL		CONTRACT B-39504	PROJECT 1601826



 1625 N. Post Road Indianapolis, IN 46219 Phone 317-895-2585 Fax 317-895-2596 www.ucindy.com	RECOMMENDED FOR APPROVAL		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 20'		BRIDGE FILE 037-29-10225	
	DESIGNED: <u>JDG</u>		DESIGN ENGINEER		DRAWN: <u>RSJ</u>		DESIGNATION 1601826	
	CHECKED: <u>MRL</u>		DATE		CROSS SECTIONS 146TH STREET - LINE "PR-B"		SURVEY BOOK -	
	CHECKED: <u>MRL</u>		DATE		CONTRACT B-39504		SHEETS 17 of 20	



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DESIGN ENGINEER DATE

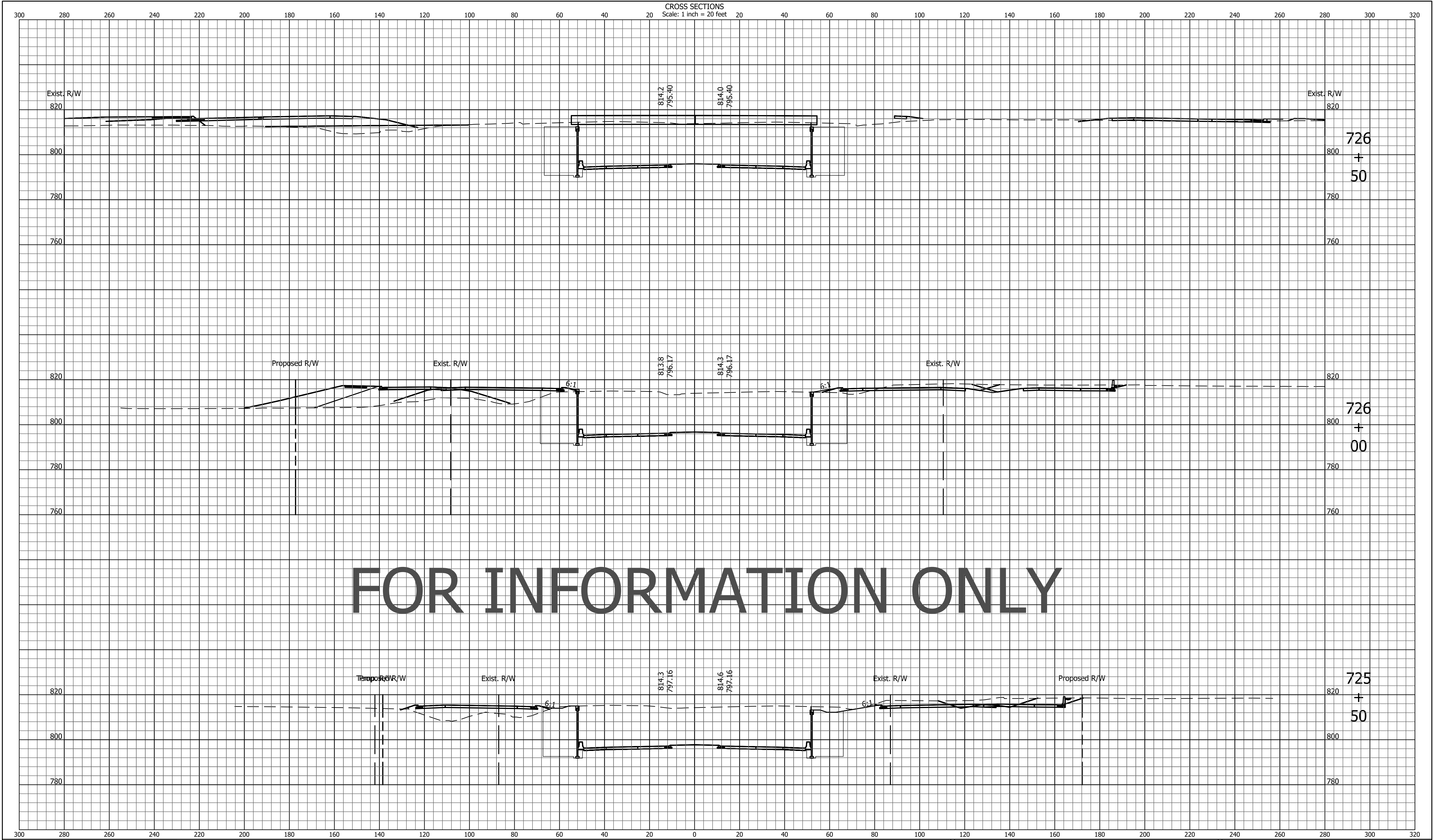
DESIGNED: JDG DRAWN: RSJ

CHECKED: MRL CHECKED: MRL

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
146TH STREET - LINE "PR-B"

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE 037-29-10225
VERTICAL SCALE 1" = 20'	DESIGNATION 1601826
SURVEY BOOK -	SHEETS 18 of 20
CONTRACT B-39504	PROJECT 1601826



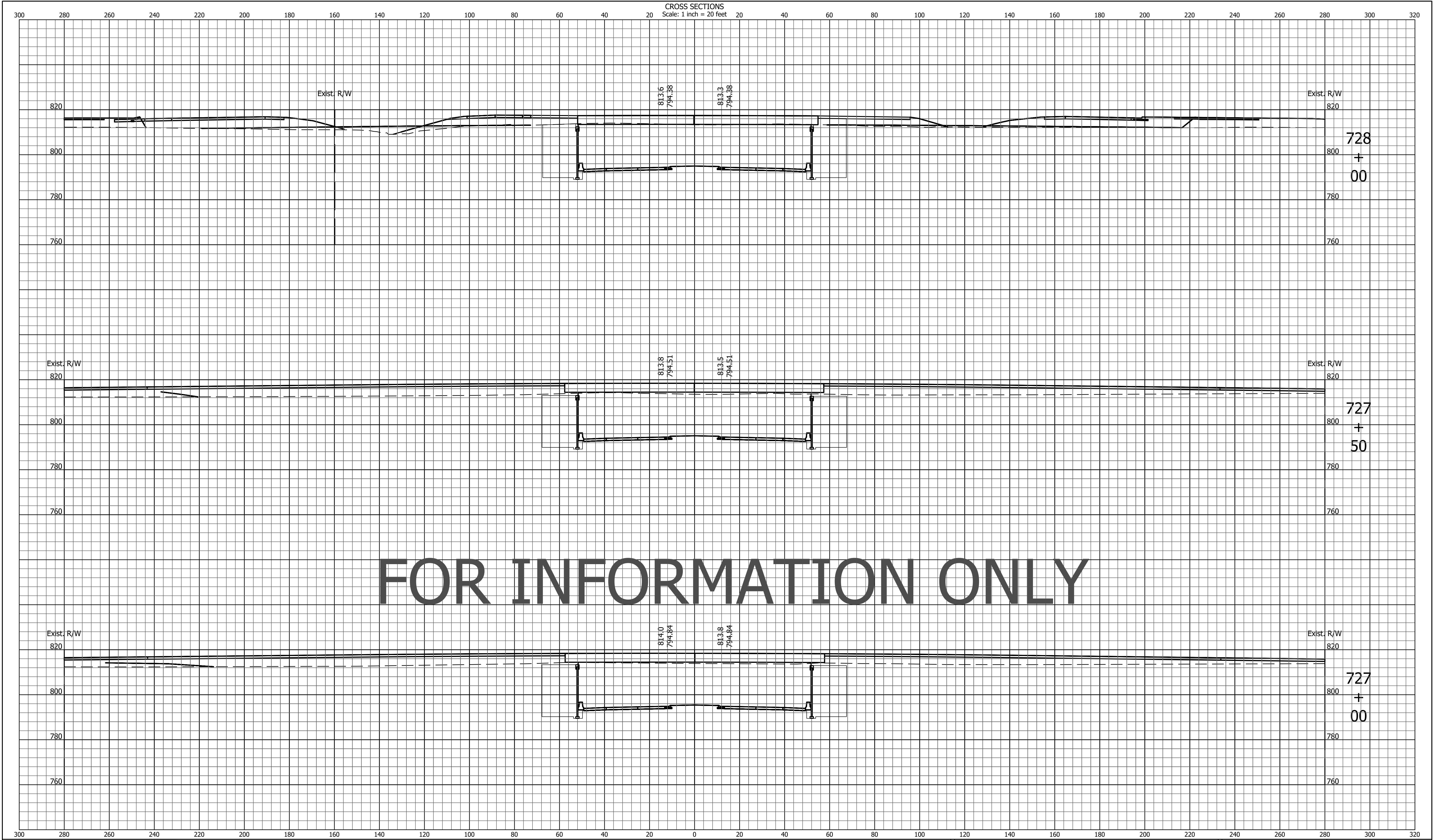
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DESIGNED: <u>JDG</u>	DRAWN: <u>RSJ</u>
CHECKED: <u>MRL</u>	CHECKED: <u>MRL</u>

INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
SR37 - LINE "E"

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE 037-29-10225
VERTICAL SCALE 1" = 20'	DESIGNATION 1601826
SURVEY BOOK -	SHEETS 19 of 20
CONTRACT B-39504	PROJECT 1601826



 1625 N. Post Road Indianapolis, IN 46219 Phone 317-895-2585 Fax 317-895-2596 www.ucindy.com	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 20'		BRIDGE FILE 037-29-10225		
					VERTICAL SCALE 1" = 20'		DESIGNATION 1601826		
	DESIGNED: <u>JDG</u>		DRAWN: <u>RSJ</u>		CROSS SECTIONS SR37 - LINE "E"				
	CHECKED: <u>MRL</u>		CHECKED: <u>MRL</u>						
				SURVEY BOOK -				SHEETS 20 of 20	
				CONTRACT B-39504				PROJECT 1601826	