PROJECT	PRIMARY DESIGNATION
1296427	0710215
CONTRACT	BRIDGE FILE
IR-35600	31-29-09850

INDIANA DEPARTMENT OF TRANSPORTATION

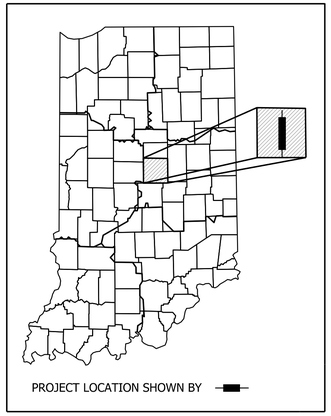
NOTE:
FOR TRAFFIC AND DESIGN DATA SEE INDEX AND GENERAL NOTES SHEET.

RIGHT-OF-WAY PLANS (L.A. CODE 5312)

136TH STREET INTERCHANGE PLANS
PROJECT NO. 0900267 (0710215) R/W
U.S. 31 HAMILTON CO.

RP 127+22 TO RP 128+11

US 31 road reconstruction from a point approximately 2,510 feet south of the intersection with 136th Street on the centerline of existing US 31 thence north 1.14 miles to a point approximately 475 feet north of the intersection with the Monon Trail. In Sections 24, 25, and 26, Township 18 North, Range 3 East, Clay Township; all in Hamilton County, Indiana.

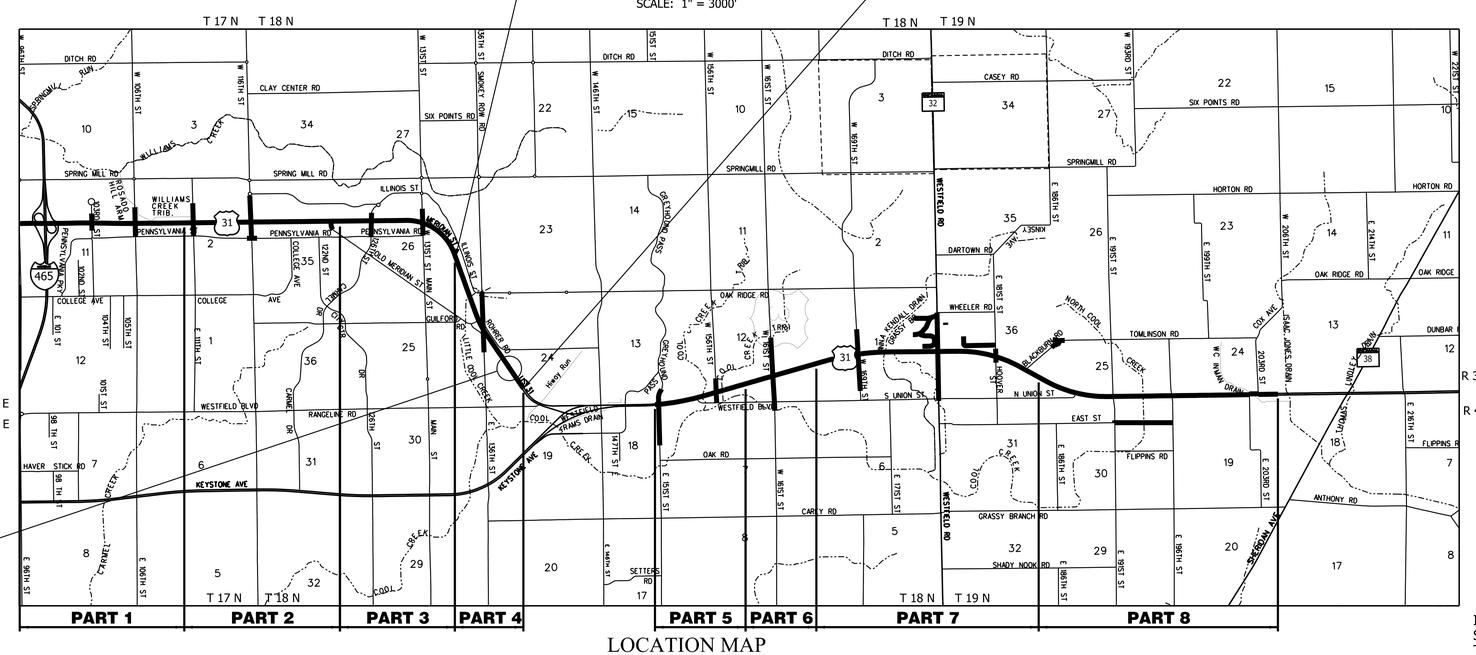


KIN DESIGNATION NUMBERS			
ROAD			
1296427	US 31 FROM 96TH STREET TO 136TH STREET		
BRIDGE			
0900790	PART 1	101	FLYOVER ASE OVER ANW, I-465 AND AEN
1297478	PART 1	102	FLYOVER ASE OVER US 31 AND ANE
0900789	PART 1	103	FLYOVER AEN OVER US 31 AND ANE
1297479	PART 1	104	FLYOVER AEN OVER ANE, I-465 AND AWS
0900768	PART 1	105	WB I-465 TO NB US 31 OVER NB US 31 TO 106TH ST. RAMP
0710302	PART 1	106	NB US 31 OVER 106TH STREET
0710306	PART 1	107	SB US 31 OVER 106TH STREET
0900788	PART 1	108	SB US 31 TO WB I-465 OVER RAMP
1297475	PART 1	109	I-465 DRE OVER US 31
1297475	PART 1	110	I-465 MAINLINE OVER US 31
1297475	PART 1	111	I-465 DRW OVER US 31
0600459	PART 2	201	111TH STREET OVER US 31
0710803	PART 2	202	NB US 31 OVER 116TH STREET
0710804	PART 2	203	SB US 31 OVER 116TH STREET
0710805	PART 3	301	126TH STREET/CARMEL DRIVE OVER US 31
0710807	PART 3	302	131ST STREET OVER US 31
0900733	PART 4	401	NB US 31 OVER 136TH STREET
0900732	PART 4	402	SB US 31 OVER 136TH STREET
1297476	PART 4	403	US 31 OVER MONON TRAIL
TRAFFIC			
1297226	TRAFFIC ELEMENTS - US 31 FROM 96TH STREET TO 136TH STREET		
ITS			
1297225	ITS ELEMENTS - US 31 FROM 96TH STREET TO 136TH STREET		

BEGIN CONSTRUCTION "PART 4"
STA. 475+00.00 "PR-K2" AHEAD =
STA 475+00.00 "PR-K1" BACK

END CONSTRUCTION "PART 4"
STA. 535+00.00 "PR-K2"

SCALE: 1" = 3000'



STR. NO. 31-29-09850
PRECAST REINFORCED CONCRETE
THREE - SIDED STRUCTURE
1 SPAN: 20' - 0"
SKEW: 00° 00' 07" LT.

LOCATION MAP
HAMILTON COUNTY

PARTS 1 THRU 4

GROSS LENGTH:	5.179 MI.
NET LENGTH:	5.061 MI.
MAXIMUM GRADE:	3.46 %
PROJECT LATITUDE:	39°55'37" N
PROJECT LONGITUDE:	86°09'29" W

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2012
TO BE USED WITH THESE PLANS

PART 4 OF 8

By: RWA_LEGACY

MAJOR MOVES
THE NEW US 31
HAMILTON COUNTY

RWARMSTRONG
Union Station / 300 S. Meridian St.
Indianapolis, IN 46225
PH 317.786.0461 // FX 317.788.0957
rwArmstrong.com

APPROVED: _____
REAL ESTATE MANAGER, GREENFIELD DISTRICT DATE

BRIDGE FILE
31-29-09850
DESIGNATION
0900267
SHEET
1 of 144

CONTRACT	PROJECT
IR-35600	0710215

UTILITIES

UTILITY TYPE:

AT&T-INDIANA
5858 N. COLLEGE AVE.
INDIANAPOLIS, IN 46220
Attn: DAVE MUSALL
PHONE: 317-252-5003
EMAIL: dm1835@att.com
Attn: BRIAN CRAVENS
PHONE: 317-445-5699
EMAIL: bc3785@att.com

AT&T - Long Distance
Attn: LUKE DILLOW
PHONE: 317-361-0594
EMAIL: LDillow@JMCEAinc.com
Attn: CARL DONAHUE
PHONE: 630-552-9785
EMAIL: cd8729@att.com

City of Carmel
3450 W. 131st St.
WESTFIELD, IN 46074
Attn: STEVE COOK
PHONE: 317-733-2855
EMAIL: SCook@Carmel.in.gov
Attn: DAVID HAMMONS
PHONE: 317-502-5620
EMAIL: DHammonds
@CrossroadEngineers.com

COMCAST COMMUNICATIONS
9750 E. 150TH ST., SUITE 1600
NOBLESVILLE, IN 46060
Attn: MATTHEW STRINGER
PHONE: 317-774-3384
EMAIL: MATTHEW_STRINGER
@cable.comcast.com
Attn: THOMAS SPENCER
PHONE: 317-752-9426
EMAIL: TSpencer
@telecomplacent.com

Duke Energy
100 S. Mill Creek Rd.
NOBLESVILLE, IN 46062
Attn: CINDY ROWLAND
PHONE: 317-776-5341
EMAIL: Cindy.Rowland
@Duke-Energy.com

tw Telecom
4625 W. 86th St., Suite 500
INDIANAPOLIS, IN 46268
Attn: GLEN HUDSON
PHONE: 317-713-8942
EMAIL: Glen.Hudson
@twTelecom.com
Attn: LARRY BENSON
PHONE: 317-281-3169
EMAIL: LARRY.BENSON
@twTelecom.com

VECTREN
16000 ALISONVILLE ROAD
NOBLESVILLE, IN 46061
Attn: BRIAN HARGER
PHONE: 317-776-5534
EMAIL: BHarger@vectren.com

HOLEY MOLEY SAYS
"DON'T DIG BLIND"
"IT'S THE LAW"
CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-382-5544

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 the existing fills, treatment by removal, or treatment by displacement, where each treatment applies.
**	This set of plans shall not be construed to be a property retracement survey. Where apparent property lines, owners, or section corner information is shown it is based upon physical evidence or testimony.
**	The topography information for this project was supplied by combining INDOT aerial mapping with supplemental ground survey from Parson, Cunningham & Shartle Engineers and is based upon the original survey. Attempts have been made to periodically update portions of this project. However, the design consultant (RW Armstrong) does not warrant the accuracy of this data and advises the contractor to field verify all information.
**	All existing drainage structures within construction limits shall be removed unless otherwise noted.
**	The Vertical datum used for the project is N.A.V.D. of 1988. For additional information on the vertical and horizontal datums, refer to the survey field books on file with the INDOT records section and provided to the contractor through the contract services.

** REPRESENTS GENERAL NOTES REQUIRED

REVISIONS

SHEET NO.	DATE	REVISED

INDEX

SHEET NO.	DESIGNATION
1	TITLE SHEET
2	INDEX & GENERAL NOTES
3-91	LOCATION CONTROL ROUTE SURVEY
92-101	TYPICAL CROSS SECTIONS
102-103	PLAT NO. 1
104-116	PLAN & PROFILES
117-133	CONSTRUCTION DETAILS
134	INTERCHANGE PLAN DETAILS LINE "PR-S-136", "ESR" & "ESREGL"
135	INTERCHANGE PLAN DETAILS LINE "NER" & PR-S-OMS"
136	INTERCHANGE PLAN DETAILS LINE "WNR" & "PR-S-10-K2"
137	INTERCHANGE PLAN DETAILS LINE "PR-FR-1" & "SWR"
138	EXISTING INTERCHANGE GEOMETRICS
139-140	PROPOSED INTERCHANGE GEOMETRICS
141-142	INTERCHANGE RIGHT-OF-WAY DETAILS
143-144	PAVEMENT QUANTITIES AND APPROACH TABLE

INTERCHANGE RAMPS

TRAFFIC DATA	LINE "NER"	LINE "WNR"	LINE "SWR"	LINE "ESR"	LINE "ESREGL"
A.A.D.T (2015)	6,737 V.P.D	5,759 V.P.D	5,829 V.P.D	4,244 V.P.D	8,146 V.P.D
A.A.D.T (2035)	10,593 V.P.D	8,762 V.P.D	10,766 V.P.D	5,426 V.P.D	10,797 V.P.D
D.H.V (2035)	1,142 V.P.H	768 V.P.H	627 V.P.H	737 V.P.H	1,455 V.P.H
TRUCKS	5% A.A.D.T.	6% A.A.D.T.	7% A.A.D.T.	11% A.A.D.T.	7% A.A.D.T.
	0% D.H.V	1% D.H.V	4% D.H.V	0% D.H.V	0% D.H.V
DESIGN DATA					
DESIGN SPEED	30-50 M.P.H	30-50 M.P.H	30-50 M.P.H	30-50 M.P.H	30-50 M.P.H
ACCESS CONTROL	FULL	FULL	FULL	FULL	FULL

S-LINE AND PUBLIC STREET APPROACHES

TRAFFIC DATA	SMOKEY ROW RD/136TH ST., LINE "PR-S10K2"	ROHRER RD, LINE "PR-FR-1"	EGLIN DR, LINE "PR-S-EGL"	OLD MERIDIAN ST, LINE "PR-S-OMS"	136TH STREET, LINE "PR-S-136"	US 31 (131ST -136TH) LINE "PR-K2"	US 31 (136TH -146TH) LINE "PR-K2"
A.A.D.T (2015)	10,448 V.P.D	9,636 V.P.D	5,117 V.P.D	17,894 V.P.D	23,466 V.P.D	54,780 V.P.D	51,485 V.P.D
A.A.D.T (2035)	17,080 V.P.D	13,476 V.P.D	7,015 V.P.D	26,802 V.P.D	30,610 V.P.D	82,343 V.P.D	80,481 V.P.D
D.H.V (2035)	1,343 V.P.H	1,076 V.P.H	521 V.P.H	2,209 V.P.H	2,582 V.P.H	6,306 V.P.H	5,341 V.P.H
DIRECTIONAL DISTRIBUTION	52% EAST BOUND	61% SOUTH BOUND	76% NORTH BOUND	45% NORTH BOUND	53% WEST BOUND	53% NORTH BOUND	52% NORTH BOUND
TRUCKS	5% A.A.D.T.	3% A.A.D.T.	0% A.A.D.T.	2% A.A.D.T.	7% A.A.D.T.	8% A.A.D.T.	7% A.A.D.T.
	0% D.H.V	0% D.H.V	0% D.H.V	0% D.H.V	1% D.H.V	3% D.H.V	4% D.H.V
DESIGN DATA							
DESIGN SPEED	40 M.P.H	30 M.P.H	30 M.P.H	40 M.P.H	30 M.P.H	60 M.P.H	60 M.P.H
PROJECT DESIGN CRITERIA	RECONSTRUCTION (NON-FREEWAY)	RECONSTRUCTION (NON-FREEWAY)	RECONSTRUCTION (NON-FREEWAY)	RECONSTRUCTION (NON-FREEWAY)	RECONSTRUCTION (NON-FREEWAY)	COMPLETE RECONSTRUCTION (FREEWAY)	COMPLETE RECONSTRUCTION (FREEWAY)
FUNCTIONAL CLASSIFICATION	LOCAL AGENCY COLLECTOR	LOCAL STREET	LOCAL STREET	LOCAL STREET	LOCAL AGENCY COLLECTOR	PRINCIPAL ARTERIAL	PRINCIPAL ARTERIAL
RURAL/URBAN	URBAN (INTERMEDIATE)	URBAN (BUILT UP)	URBAN (INTERMEDIATE)	URBAN (INTERMEDIATE)	URBAN (INTERMEDIATE)	URBAN (INTERMEDIATE)	URBAN (INTERMEDIATE)
TERRAIN	LEVEL	LEVEL	LEVEL	LEVEL	LEVEL	LEVEL	LEVEL
ACCESS CONTROL	NONE	NONE	NONE	NONE	NONE	FULL	FULL

By: RWA_LEGACY

5/6/2013

RECOMMENDED FOR APPROVAL _____ 11/15/2012
DESIGN ENGINEER DATE

DESIGNED: VA DRAWN: RBA
CHECKED: CSW CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX & GENERAL NOTES

HORIZONTAL SCALE	BRIDGE FILE
NONE	
VERTICAL SCALE	DESIGNATION
NONE	0900267
SURVEY BOOK	SHEET
	2 of 144
CONTRACT	PROJECT
IR-34750	0710215

Model: INDEX SHEET 01 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11R-IND-ROW.dgn

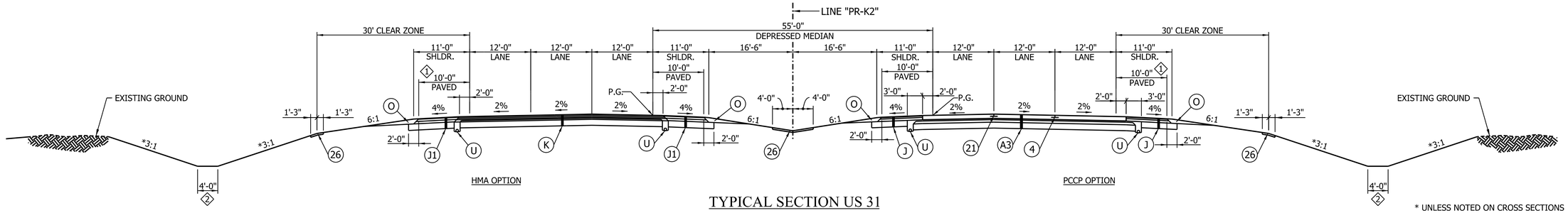
THE US 31 HAMILTON COUNTY MAJOR MOVES PROJECT STARTS FROM APPROXIMATELY 96TH STREET AND PROCEEDS NORTH ALONG THE US 31 CORRIDOR TO APPROXIMATELY 216TH STREET IN HAMILTON COUNTY, INDIANA.

THE LOCATION CONTROL ROUTE SURVEY PLAT (LCRSP) FOR THE US 31 HAMILTON COUNTY MAJOR MOVES PROJECT WAS COMPLETED BY PARSONS & SHARTLE ENGINEER, INC. AND RECORDED ON 9/3/2009. THE LCRSP WAS UPLOADED TO ERMS AND IS AVAILABLE WITH THE US 31 PLANS UNDER THE PRIMARY CORRIDOR DESIGNATION NUMBER 0710215 AND CONTRACT NUMBER IR-34750, WITH THE FOLLOWING FILE NAME: "FT PLAN LCRSP 0710215 FOR CONTRACT SERVICES". ALIGNMENT REFERENCE POINT INFORMATION AND CONTROL POINTS ARE ALSO FOUND IN THE LCRSP.

THE SURVEY WAS DONE IN 6 SEGMENTS AND THE ASSOCIATED FIELD BOOKS FOR THE 6 SEGMENTS HAVE BEEN UPLOADED TO ERMS UNDER THE PRIMARY CORRIDOR DESIGNATION NUMBER 0710215 AND CONTRACT NUMBER IR-00000, AND ARE AVAILABLE FOR REVIEW UNDER THE ADDITIONAL INFORMATION FOLDER WITH THE FOLLOWING FILE NAMES:

DESCRIPTION	EXISTING US 31 HORIZONTAL ALIGNMENT				FILE NAME
	BEGIN	LINE	END	LINE	
Survey Book, Segment 1, from 196th to 216th 816+50 PR-N	816+50	PR-N	929+86	PR-N	FT SvyBookSeg1 0710215 for Contract Services.pdf
Survey Book, Segment 2, from Monon Trail to 156th	532+83	K	611+26	NN	FT SvyBookSeg2 0710215 for Contract Services.pdf
Survey Book, Segment 3, from 96th to 111th	260+94.45	K	352+50	K	FT SvyBookSeg3 0710215 for Contract Services.pdf
Survey Book, Segment 4, from 111th to Monon Trail	352+50	K	532+83	K	FT SvyBookSeg4 0710215 for Contract Services.pdf
Survey Book, Segment 5, from 156th to 176th	611+26	NN	722+71	NN	FT SvyBookSeg5 0710215 for Contract Services.pdf
Survey Book, Segment 6, from 176th to 196th	722+71	NN	816+50	NN	FT SvyBookSeg6 0710215 for Contract Services.pdf

THE BENCHMARK DATA FOR THE PROJECT IS INCLUDED WITH SURVEY BOOKS AND IS NOT LISTED WITH THE ROAD PLANS. THE AWARDED CONTRACTOR FOR THIS PROJECT WILL RECEIVE THE EXISTING HORIZONTAL ALIGNMENT FILES AND PROPOSED ALIGNMENT FILES AFTER A LETTER OF AGREEMENT IS EXECUTED BETWEEN THE DESIGNER AND CONTRACTOR FOR SHARING THE ELECTRONIC INFORMATION.



TYPICAL SECTION US 31

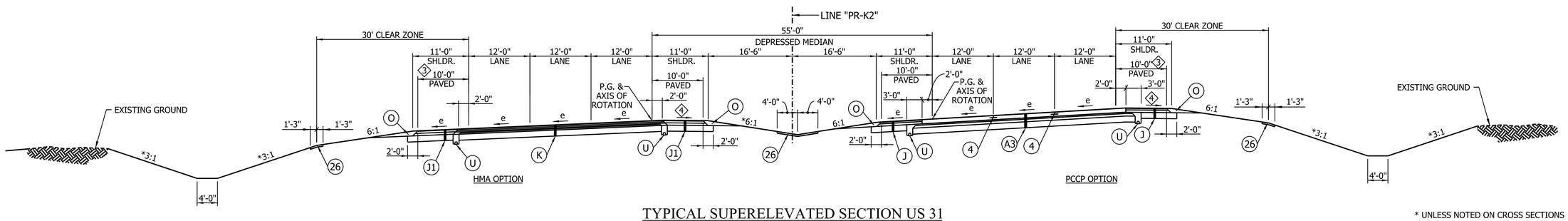
1 SEE TYPICAL AUXILLARY LANE SECTION FOR AUXILLARY LANE ADJACENT TO OUTSIDE TRAVEL LANES
SEE TYPICAL SHOULDER SECTION WITH GUARDRAIL & TYPICAL SHOULDER SECTION WITH MSE WALL

2 12' FLAT BOTTOM DITCH REQ'D. FROM STA. 479+09.00 TO STA. 483+00.00 "PR-K2"

STA. 475+00.00 LT. TO STA. 495+09.00 LT. "PR-K2"
STA. 507+23.00 LT. TO STA. 533+04.00 LT. "PR-K2"

STA. 475+00.00 RT. TO STA. 494+37.00 RT. "PR-K2"
STA. 507+96.00 RT. TO STA. 531+44.00 RT. "PR-K2"

* UNLESS NOTED ON CROSS SECTIONS



TYPICAL SUPERELEVATED SECTION US 31

(SEE SUPERELEVATION DIAGRAMS)

3 SEE TYPICAL SHOULDER SECTION WITH GUARDRAIL & TYPICAL SHOULDER SECTION WITH MSE WALL

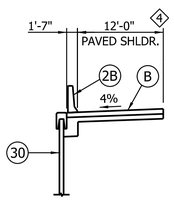
STA. 495+09.00 LT. TO STA. 497+39.53 LT. "PR-K2"
STA. 499+52.66 LT. TO STA. 507+23.00 LT. "PR-K2"
STA. 533+04.00 LT. TO STA. 535+00.00 LT. "PR-K2"

STA. 494+37.00 RT. TO STA. 497+62.85 RT. "PR-K2"
STA. 499+70.67 RT. TO STA. 507+96.00 RT. "PR-K2"
STA. 531+44.00 RT. TO STA. 535+00.00 RT. "PR-K2"

* UNLESS NOTED ON CROSS SECTIONS

4 CROSS-SLOPE OF HIGH SIDE SHOULDERS IN SUPERELEVATION:
IF SHOULDER WIDTH = 4.0', THEN CROSS-SECTION MATCHES ROADWAY SUPERELEVATION (e)
IF SHOULDER WIDTH > 4.0', THEN CROSS-SLOPE IS AS FOLLOWS:
e <= 4.0% SLOPE 4.0% AWAY FROM ROADWAY
4.0% < e <= 6.0% SLOPE 2.0% AWAY FROM ROADWAY
e > 6.0% SLOPE 1.0% TOWARDS ROADWAY

PAVING EXCEPTION:
SB - STA. 497+39.53 TO STA. 499+52.66 "PR-K2"
NB - STA. 497+62.85 TO STA. 499+70.67 "PR-K2"



TYPICAL SHOULDER SECTION WITH MSE WALL

REVERSE AS NECESSARY

STA. 482+98.50 TO STA. 487+03.37 LT. "PR-K2"
STA. 489+50.00 TO STA. 497+39.15 LT. "PR-K2"
STA. 499+52.97 TO STA. 507+00.00 LT. "PR-K2"

STA. 484+18.00 TO STA. 487+99.49 RT. "PR-K2"
STA. 491+00.00 TO STA. 497+62.47 RT. "PR-K2"
STA. 499+70.96 TO STA. 506+75.00 RT. "PR-K2"
STA. 510+09.23 TO STA. 511+50.00 RT. "PR-K2"

4 10' TO 12' FROM STA. 488+50.00 TO STA. 489+50.00 LT. "PR-K2"
12' TO 10' FROM STA. 506+75.00 LT. "PR-K2"

By: RWA, LEGACY

4/22/2013

LEGEND

- A3 10" PLAIN JOINTED QC/QA PCCP MAINLINE D-1 JOINTS SPACED AT 16' WITH 1 1/4" DIAMETER DOWEL BARS ON SUBBASE FOR PCCP, ON SUBGRADE TREATMENT, TYPE IA
- J HMA/COMPOSITE SHOULDERS COMPOSED OF: 165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON 330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON 605 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON SUBBASE FOR PCCP ON SUBGRADE TREATMENT, TYPE IA
- J1 HMA/COMPOSITE SHOULDERS COMPOSED OF: 165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON 1210 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON SUBGRADE TREATMENT, TYPE IA
- K 165 LB/SY QC/QA-HMA, 4, 70, SURFACE 9.5 MM, ON 275 LB/SY QC/QA-HMA, 4, 70, INTERMEDIATE 19.0 MM, ON 330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON 250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON 330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON SUBGRADE TREATMENT, TYPE IA
- O COMPACTED AGGREGATE, NO. 53
- U UNDERDRAIN, TYPE 4, 6"
- B R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8
- 2B BRIDGE RAILING, TYPE FT
- 4 LONGITUDINAL JOINT
- 21 LONGITUDINAL CONSTRUCTION JOINT
- 26 SODDING
- 30 RETAINING WALL

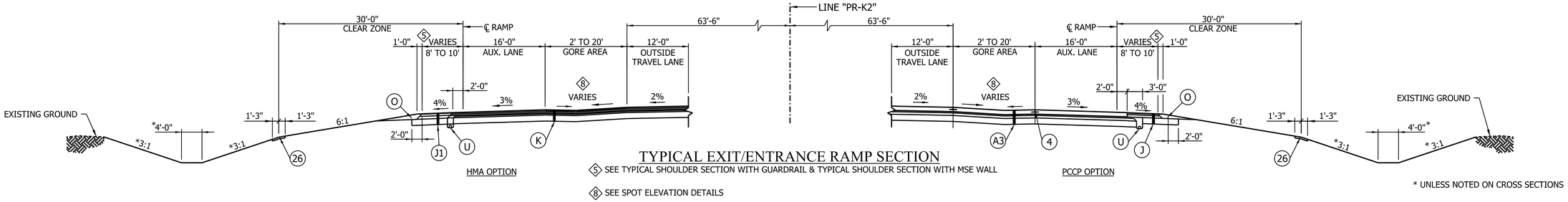
RECOMMENDED FOR APPROVAL _____ 11/15/2012
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	0900267
SURVEY BOOK	SHEET
	92 of 144
CONTRACT	PROJECT
IR-34750	0710215



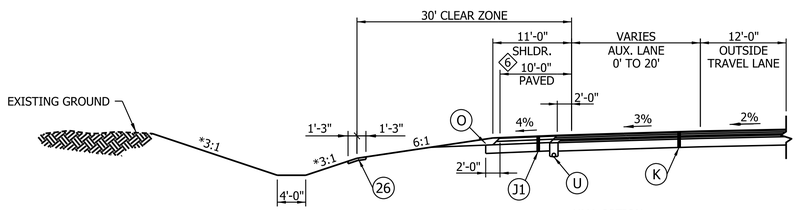
TYPICAL EXIT/ENTRANCE RAMP SECTION

5 SEE TYPICAL SHOULDER SECTION WITH GUARDRAIL & TYPICAL SHOULDER SECTION WITH MSE WALL

8 SEE SPOT ELEVATION DETAILS

ENTRANCE RAMP
STA. 484+54.09 LT. TO STA. 487+03.37 LT. "PR-K2"
STA. 510+09.23 RT. TO STA. 512+57.70 RT. "PR-K2"

EXIT RAMP
STA. 484+00.09 RT. TO STA. 487+99.49 RT. "PR-K2"
STA. 509+93.25 LT. TO STA. 513+93.33 LT. "PR-K2"



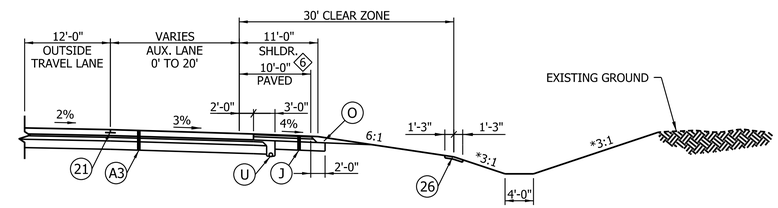
* UNLESS NOTED ON CROSS SECTIONS

TYPICAL AUXILLARY LANE SECTION

REVERSE AS NECESSARY

6 SEE TYPICAL SHOULDER SECTION WITH GUARDRAIL & TYPICAL SHOULDER SECTION WITH MSE WALL

STA. 475+00.00 LT. TO STA. 484+54.90 LT. "PR-K2"
STA. 475+00.00 RT. TO STA. 484+00.09 RT. "PR-K2"
STA. 513+93.33 LT. TO STA. 520+93.33 LT. "PR-K2"
STA. 512+57.70 RT. TO STA. 522+08.40 RT. "PR-K2"
STA. 532+00.00 RT. TO STA. 535+00.00 RT. "PR-K2"

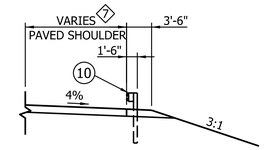


TYPICAL AUXILLARY LANE SECTION

REVERSE AS NECESSARY

6 SEE TYPICAL SHOULDER SECTION WITH GUARDRAIL & TYPICAL SHOULDER SECTION WITH MSE WALL

STA. 475+00.00 LT. TO STA. 484+54.90 LT. "PR-K2"
STA. 475+00.00 RT. TO STA. 484+00.09 RT. "PR-K2"
STA. 513+93.33 LT. TO STA. 520+93.33 LT. "PR-K2"
STA. 512+57.70 RT. TO STA. 522+08.40 RT. "PR-K2"
STA. 532+00.00 RT. TO STA. 535+00.00 RT. "PR-K2"



TYPICAL SHOULDER SECTION WITH GUARDRAIL

REVERSE AS NECESSARY

7 12' FROM STA. 477+36.00 TO STA. 482+98.50 LT. "PR-K2
12' FROM STA. 507+00.00 TO STA. 509+12.50 LT. "PR-K2
VARIES FROM 10' TO 12' FROM STA. 509+93.25 TO STA. 510+93.25 LT. "PR-K2
12' FROM STA. 510+93.25 TO STA. 518+37.62 LT. "PR-K2
12' FROM STA. 529+75.00 TO STA. 535+00.00 LT. "PR-K2
12' FROM STA. 477+99.25 TO STA. 484+18.00 RT. "PR-K2
12' FROM STA. 488+62.50 TO STA. 491+00.00 RT. "PR-K2
10' FROM STA. 511+50.00 TO STA. 512+50.00 RT. "PR-K2"
12' FROM STA. 526+25.00 TO STA. 535+00.00 RT. "PR-K2"
12' FROM STA. 494+43.72 TO STA. 497+62.47 RT. (MEDIAN) "PR-K2"
12' FROM STA. 499+52.96 TO STA. 501+96.71 LT. (MEDIAN) "PR-K2"
12' FROM STA. 481+43.65 TO STA. 484+18.65 RT. (MEDIAN) "PR-K2"
12' FROM STA. 483+90.60 TO STA. 486+90.60 LT. (MEDIAN) "PR-K2"
12' FROM STA. 510+59.40 TO STA. 513+59.40 RT. (MEDIAN) "PR-K2"
12' FROM STA. 513+31.35 TO STA. 516+06.35 LT. (MEDIAN) "PR-K2"

LEGEND

- A3 10" PLAIN JOINTED QC/QA PCCP MAINLINE D-1 JOINTS SPACED AT 16' WITH 1 1/4" DIAMETER DOWEL BARS ON SUBBASE FOR PCCP, ON SUBGRADE TREATMENT, TYPE IA
- J HMA/COMPOSITE SHOULDERS COMPOSED OF: 165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON 330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON 605 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON SUBBASE FOR PCCP ON SUBGRADE TREATMENT, TYPE IA
- J1 HMA/COMPOSITE SHOULDERS COMPOSED OF: 165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON 1210 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON SUBGRADE TREATMENT, TYPE IA
- K 165 LB/SY QC/QA-HMA, 4, 70, SURFACE 9.5 MM, ON 275 LB/SY QC/QA-HMA, 4, 70, INTERMEDIATE 19.0 MM, ON 330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON 250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON 330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON SUBGRADE TREATMENT, TYPE IA
- O COMPACTED AGGREGATE, NO. 53
- U UNDERDRAIN, TYPE 4, 6"
- 4 LONGITUDINAL JOINT
- 10 W-BEAM GUARDRAIL
- 21 LONGITUDINAL CONSTRUCTION JOINT
- 26 SODDING

RECOMMENDED FOR APPROVAL _____ 11/15/2012
DESIGN ENGINEER DATE

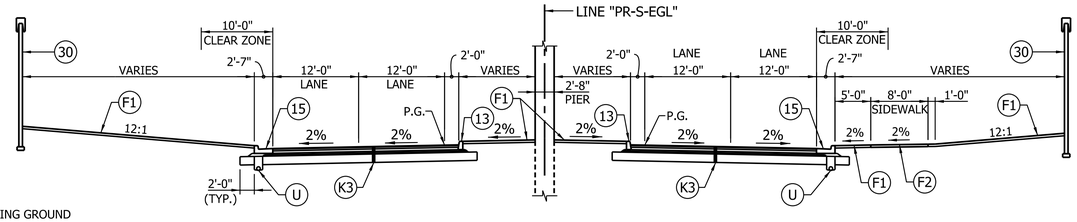
DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
LINE "PR-K2"

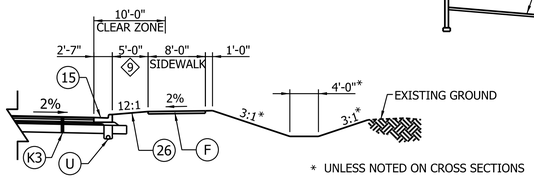
HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	0900267
SURVEY BOOK	SHEET
	93 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY
4/22/2013



TYPICAL SECTION 136TH STREET/EGLIN DRIVE UNDER US 31

STA. 504+93.06 "PR-S-EGL" TO STA. 508+23.52 "PR-S-EGL"

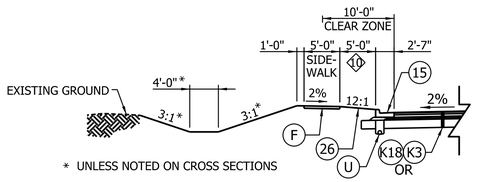


* UNLESS NOTED ON CROSS SECTIONS

8' SIDEWALK OFFSET FROM CURB

(REVERSE AS NECESSARY)
STA. 502+17.17 TO STA. 504+51.00 RT. "PR-S-EGL"
STA. 508+63.79 TO STA. 509+85.32 RT. "PR-S-EGL"
STA. 511+30.18 TO STA. 511+93.76 RT. "PR-S-EGL"

9 4' FROM STA. 505+47.00 TO STA. 506+69.00 RT. "PR-S-EGL"

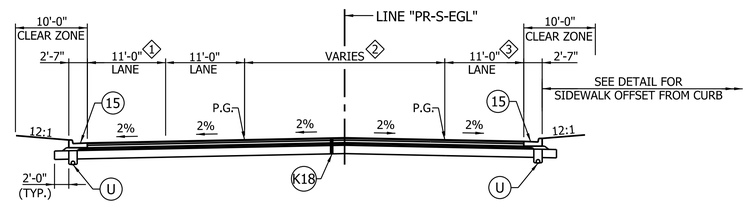


* UNLESS NOTED ON CROSS SECTIONS

5' SIDEWALK OFFSET FROM CURB

REVERSE AS NECESSARY
STA. 511+93.95 TO STA. 514+50.00 RT. "PR-S-EGL"

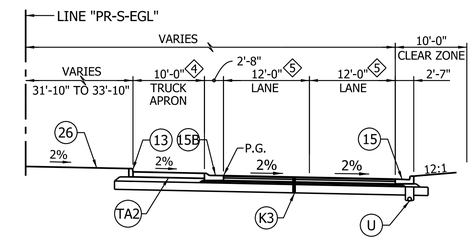
10 VARIES FROM 0' TO 3' STA. 512+92.72 TO STA. 513+08.89 LT. "PR-S-EGL"
3' FROM STA. 513+08.89 TO 513+65.58 LT. "PR-S-EGL"



TYPICAL SECTION 136TH STREET/EGLIN DRIVE

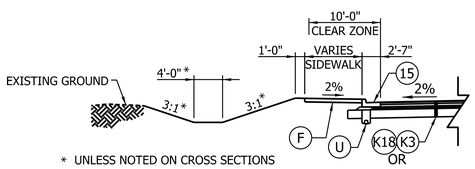
SEE CONSTRUCTION DETAILS FOR LANE AND MEDIAN DIMENSIONS
STA. 512+17.09 "PR-S-EGL" TO STA. 514+90.00 "PR-S-EGL"

1 VARIES FROM 11' TO 0' FROM STA. 512+23.47 TO STA. 513+08.84
2 VARIES FROM 9' TO 0' STA. 512+17.09 TO STA. 512+86.70
3 VARIES FROM 15'-6" TO 11' FROM STA. 512+17.09 TO STA. 512+96.42



TYPICAL SECTION 136TH STREET/EGLIN DRIVE CIRCULATORY ROADWAY DUAL LANE

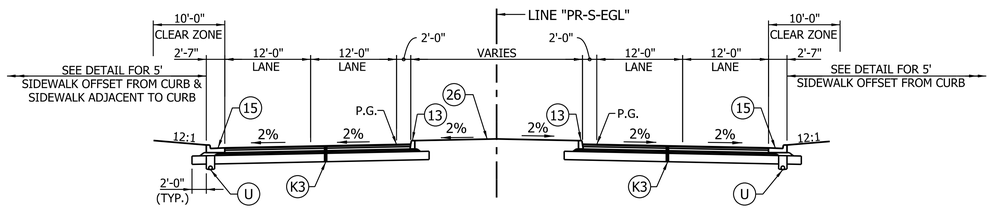
4 TRUCK APRON VARIES 8' TO 20'-8"
5 LANES VARY 12' TO 14'



* UNLESS NOTED ON CROSS SECTIONS

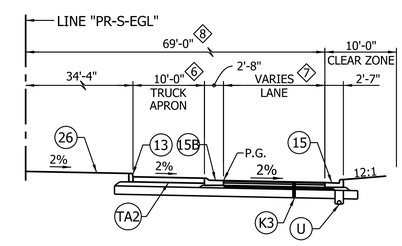
SIDEWALK ADJACENT TO CURB

STA. 511+50.00 TO STA. 512+04.94 LT. "PR-S-EGL" (8' WALK)
STA. 512+23.74 TO STA. 512+92.72 LT. "PR-S-EGL" (5' WALK)



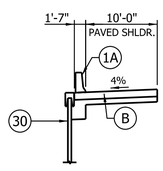
TYPICAL SECTION 136TH STREET/EGLIN DRIVE APPROACH

SEE CONSTRUCTION DETAILS FOR LANE AND MEDIAN DIMENSIONS THROUGH/BETWEEN ROUNDABOUTS



TYPICAL SECTION 136TH STREET/EGLIN DRIVE CIRCULATORY ROADWAY SINGLE LANE

6 VARIES 8' TO 20'-8"
7 VARIES 14'-2" TO 23'-4"
8 VARIES 63' TO 69'



TYPICAL SHOULDER SECTION WITH MSE WALL

REVERSE AS NECESSARY
STA. 503+10.00 TO STA. 504+19.39 LT. "PR-S-EGL"
(FOR CONTINUATION OF WALL SEE RAMP "NER")

TA2 7" PCCP, COLORED AND JOINTED, 2' X 2' SCORE PATTERN WITH D-1 JOINTS SPACED AT 12-15' WITH 1" DIAMETER DOWEL BARS ON 9.5" COMPACTED AGGREGATE BASE, NO. 53, BASE ON SUBGRADE TREATMENT, TYPE IA

LEGEND

K3 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON 275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON 330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON 250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON 330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON SUBGRADE TREATMENT, TYPE IA

K18 165 LB/SY QC/QA-HMA, 2, 70, SURFACE 9.5 MM, ON 275 LB/SY QC/QA-HMA, 2, 70, INTERMEDIATE 19.0 MM, ON 300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON 330 LB/SY QC/QA-HMA, 2, 64, BASE, 19.0 MM, ON SUBGRADE TREATMENT, TYPE IA

F 4" CONCRETE SIDEWALK ON 6" COMPACTED AGGREGATE BASE, NO. 53

F1 4" CONCRETE SIDEWALK, COLORED AND JOINTED, 1' X 1' SCORE PATTERN ON 6" COMPACTED AGGREGATE BASE, NO. 53

F2 4" CONCRETE SIDEWALK, COLORED AND JOINTED, 4' X 4' SCORE PATTERN ON 6" COMPACTED AGGREGATE BASE, NO. 53

U UNDERDRAIN, TYPE 4, 6"

1A BRIDGE RAILING, TYPE FC

13 CONCRETE CURB, (6")

15 CONCRETE CURB AND GUTTER

15B CONCRETE CURB AND GUTTER, TYPE B, MODIFIED

26 SODDING

30 RETAINING WALL

B R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8

RECOMMENDED FOR APPROVAL _____ 11/15/2012
DESIGN ENGINEER DATE

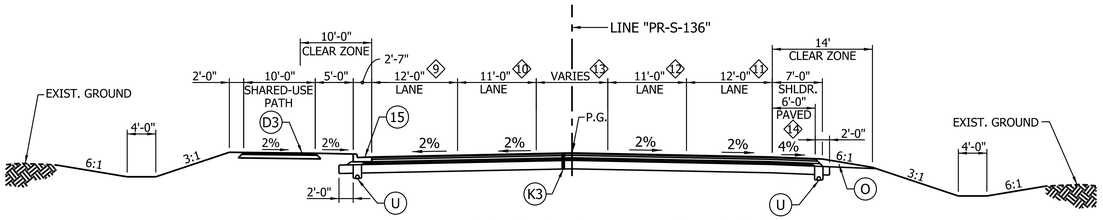
DESIGNED: CSW | DRAWN: RBA
CHECKED: VA | CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
LINE "PR-S-EGL"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	0900267
SURVEY BOOK	SHEET
	94 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY
4/22/2013



TYPICAL SECTION - LINE "PR-S-136"

STA. 12+08.72 TO STA. 16+89.50 "PR-S-136"

9 VARIES 0' TO 12' FROM STA. 14+23.13 TO STA. 16+20.58 "PR-S-136"

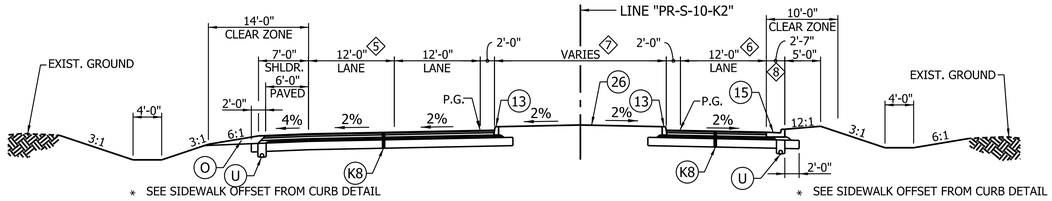
10 VARIES 11' to 12' FROM STA 14+23.13 TO STA 16+20.58 "PR-S-136"

11 VARIES 0' TO 11' FROM STA. 12+77.82 TO STA. 13+86.35 "PR-S-136"
LANE BECOMES ROADWAY "ESR" AT STA 14+23.13
VARIES 0' TO 12' FROM STA. 14+59.37 TO STA. 15+44.87 "PR-S-136"

12 VARIES 11' TO 12' FROM STA. 14+59.37 TO STA. 15+90.55 "PR-S-136"

13 VARIES 0' TO 28' FROM STA. 15+27.26 TO STA. 15+90.55 "PR-S-136"
RAISED MEDIAN FROM STA. 16+35.93 TO STA. 16+89.50 "PR-S-136"

14 VARIES 1'-10" TO 6' FROM STA. 12+08.72 TO STA. 12+47.35 "PR-S-136"



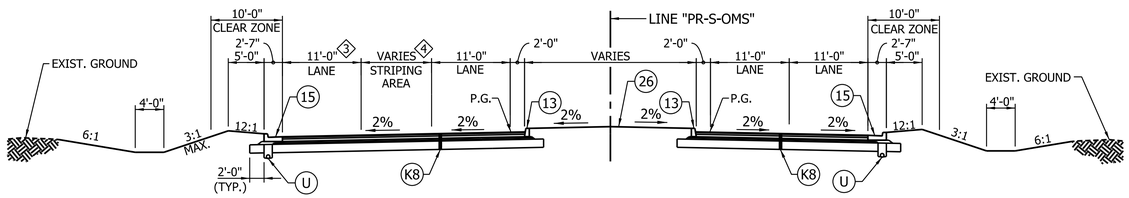
TYPICAL SECTION - LINE "PR-S-10-K2"

STA. 10+73.08 TO STA. 15+96.09 "PR-S-10-K2"

5 VARIES 12' TO 0' FROM STA. 12+02.88 TO STA. 13+42.14 "PR-S-10-K2"
VARIES 14'-4" TO 12' FROM STA. 10+79.41 TO STA. 11+57.10 "PR-S-10-K2"

7 VARIES 28'-6" TO 10' FROM STA. 10+79.41 TO STA. 14+92.00 PR-S-10-K2"
RAISED MEDIAN FROM STA. 10+79.41 TO STA. 14+10.71 PR-S-10-K2"

8 END CURB @ STA. 15+24.74 "PR-S-10-K2"
BEGIN SHOULDER FROM STA. 15+24.74 TO STA. 15+96.09 "PR-S-10-K2"
(SEE LEFT SIDE FOR TYP. SHOULDER SECTION)

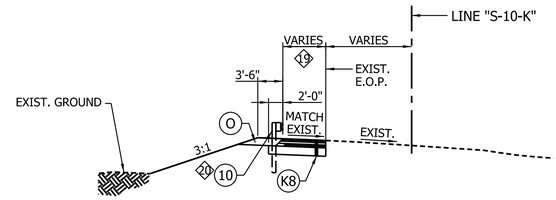


TYPICAL SECTION - LINE "PR-S-OMS"

SEE SIDEWALK OFFSET FROM CURB DETAIL
STA. 11+84.92 TO STA. 14+15.85 "PR-S-OMS"

3 VARIES 11' TO 16' FROM STA. 12+93.86 TO STA. 14+15.85 "PR-S-OMS"

4 VARIES 0' TO 10' FROM STA. 12+93.86 TO STA. 14+15.85 "PR-S-OMS"

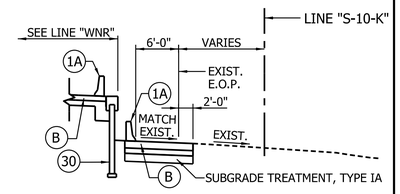


TYPICAL SECTION - LINE "S-10-K"

STA. 7+98.37 TO STA. 9+43.84 "S-10-K"

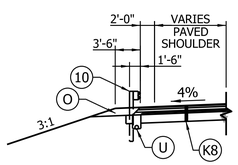
19 6' FROM STA. 7+98.37 TO STA. 8+98.99 "S-10-K"
VARIES 6' TO 2' FROM STA. 8+98.99 TO STA. 9+23.99 "S-10-K"
2' FROM STA. 9+23.99 TO STA. 9+43.74 "S-10-K"

20 FROM STA. 7+98.37 TO STA. 8+98.99 "S-10-K"



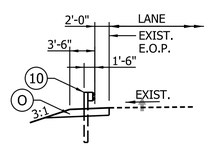
TYPICAL SECTION - LINE "S-10-K"

STA. 5+06.99 TO STA. 7+98.37 "S-10-K"



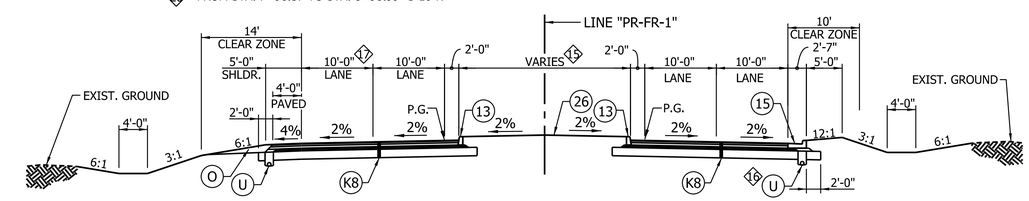
TYPICAL SHOULDER SECTION WITH GUARDRAIL

STA. 13+75.00 TO STA. 16+50.00 LT. "PR-FR-1"



TYPICAL SHOULDER SECTION WITH GUARDRAIL

STA. 10+16.40 TO STA. 11+16.40 LT. "FR-1"



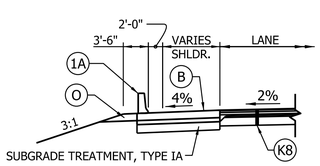
TYPICAL SECTION - LINE "PR-FR-1"

STA. 11+44.35 TO STA. 18+99.32 "PR-FR-1"

15 VARIES 0' TO 23'-6" FROM STA. 13+06.11 TO STA. 18+99.32 "PR-FR-1"
RAISED MEDIAN FROM STA. 16+38.56 TO STA. 18+99.32 "PR-FR-1"

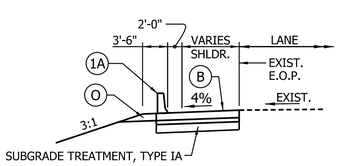
16 UNDERDRAIN FROM STA. 12+53.34 TO STA. 18+99.32 RT. "PR-FR-1"

17 VARIES 10' TO 25'-7" FROM STA. 16+18.84 TO STA. 18+27.18 "PR-FR-1"



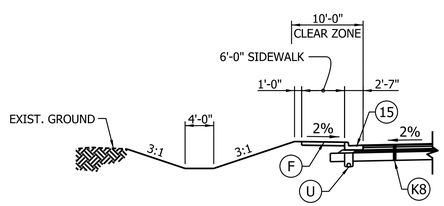
TYPICAL SHOULDER SECTION WITH BARRIER

STA. 11+44.35 TO STA. 13+75.00 LT. "PR-FR-1"



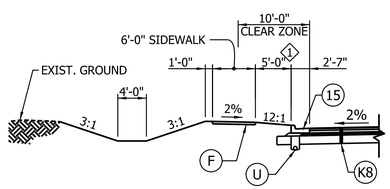
TYPICAL SHOULDER SECTION WITH BARRIER

STA. 10+00.00 TO STA. 11+44.35 LT. "PR-FR-1"



SIDEWALK ADJACENT TO CURB

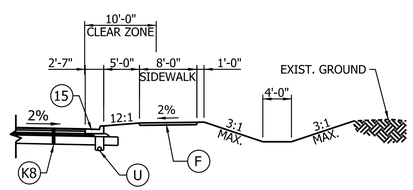
STA. 15+35.00 TO STA. 18+22.96 RT. "PR-FR-1"



SIDEWALK OFFSET FROM CURB

STA. 18+22.96 "PR-FR-1" TO STA. 18+66.10 RT. "PR-FR-1"

1 UTILITY STRIP VARIES FROM 0' TO 5' FROM STA. 18+22.96 TO 18+60.75 RT. "PR-FR-1"



SIDEWALK OFFSET FROM CURB

STA. 11+84.92 TO STA. 14+83.97 RT. "PR-S-OMS"
STA. 10+00.00 TO STA. 14+07.91 RT. "PR-S-10-K2"

LEGEND

K3 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON
330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

K8 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON
300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

B R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8

F 4" CONCRETE SIDEWALK ON
6" COMPACTED AGGREGATE BASE, NO. 53

D3 SHARED USE PATH COMPOSED OF:
140 LB/SY SURFACE, TYPE A, ON
220 LB/SY INTERMEDIATE, TYPE A, ON
6" COMPACTED AGGREGATE NO. 53, BASE, ON
SUBGRADE TREATMENT, TYPE IA

O COMPACTED AGGREGATE, NO. 53

U UNDERDRAIN, TYPE 4, 6"

1A BRIDGE RAILING, TYPE FC

10 W-BEAM GUARDRAIL

13 CONCRETE CURB, (6")

15 CONCRETE CURB AND GUTTER

26 SODDING

RECOMMENDED
FOR APPROVAL _____ 11/15/2012
DESIGN ENGINEER DATE

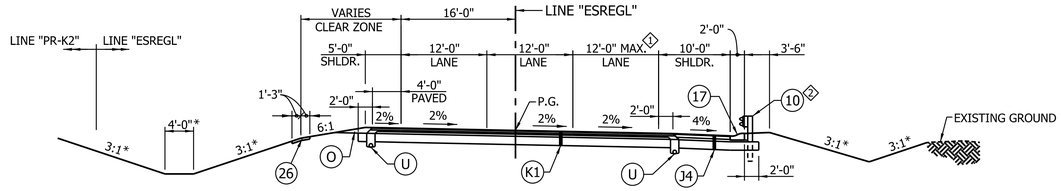
DESIGNED: CSW | DRAWN: RBA
CHECKED: VA | CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
LINES "PR-S-136", "PR-S-OMS",
"PR-S-10-K2" & "PR-FR-1"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	0900267
SURVEY BOOK	SHEET
	95 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY
4/22/2013

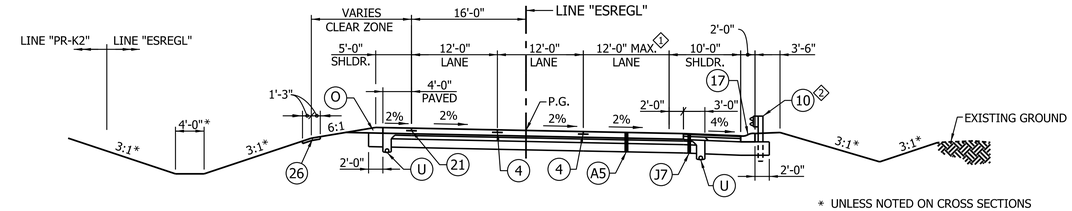


HMA OPTION

* UNLESS NOTED ON CROSS SECTIONS

TYPICAL MULTI-LANE RAMP - LINE "ESREGL"

STA. 13+31.31 TO STA. 19+20.72 "ESREGL"



PCCP OPTION

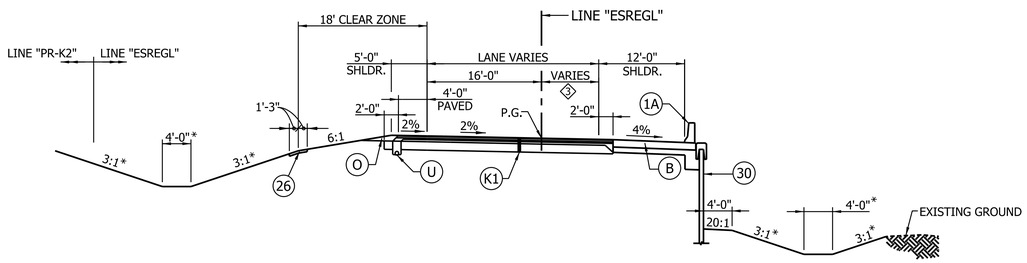
* UNLESS NOTED ON CROSS SECTIONS

TYPICAL MULTI-LANE RAMP - LINE "ESREGL"

STA. 13+31.31 TO STA. 19+20.72 "ESREGL"

1 VARIES 12' TO 0' FROM STA. 13+31.31 TO STA. 15+81.31 "ESREGL"

2 END SHOULDER SECTION WITH GUARDRAIL @ STA. 16+95.00
BEGIN SHOULDER SECTION WITH MOMENT SLAB ASIDE MSE WALL
(SEE TYPICAL SECTION BELOW FOR DETAILS)

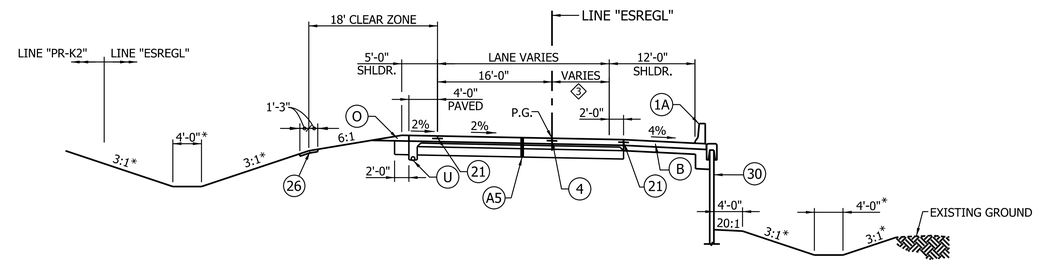


HMA OPTION

* UNLESS NOTED ON CROSS SECTIONS

TYPICAL SINGLE LANE RAMP - LINE "ESREGL"

STA. 19+20.72 TO STA. 21+79.51 "ESREGL"



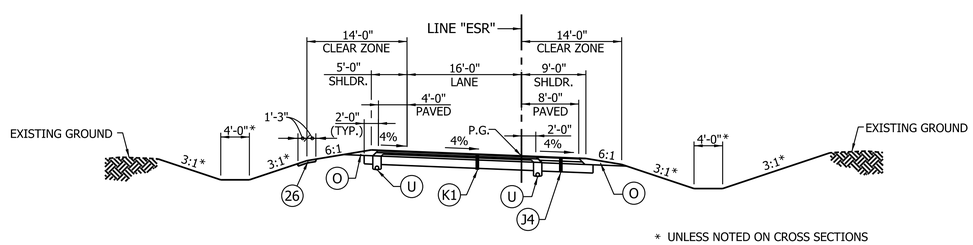
PCCP OPTION

* UNLESS NOTED ON CROSS SECTIONS

TYPICAL SINGLE LANE RAMP - LINE "ESREGL"

STA. 19+20.72 TO STA. 21+79.51 "ESREGL"

3 VARIES FROM 8' TO 0' FROM STA. 19+20.72 TO STA. 21+79.51 "ESREGL"

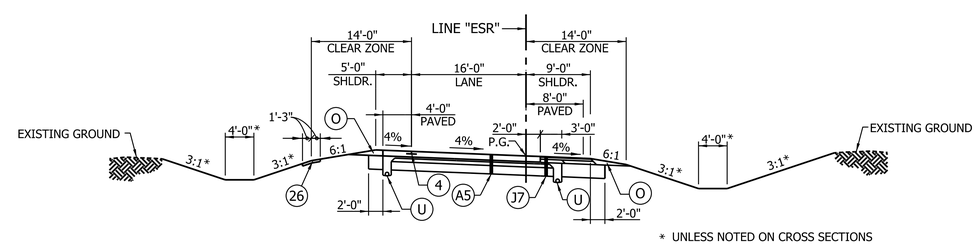


* UNLESS NOTED ON CROSS SECTIONS

HMA OPTION

TYPICAL TURNING ROADWAY - LINE "ESR"

STA. 11+23.39 TO STA. 13+95.36 "ESR"



* UNLESS NOTED ON CROSS SECTIONS

PCCP OPTION

TYPICAL TURNING ROADWAY - LINE "ESR"

STA. 11+23.39 TO STA. 13+95.36 "ESR"

LINE	STATION		ADJUSTED CLEAR ZONE	
	FROM	TO	LT.	RT.
"ESREGL"	13+31.31	18+00.00	14'	14'
"ESREGL"	18+00.00	18+50.00	14'-18'	14'-18'
"ESREGL"	18+50.00	21+79.51	18'	18'

By: RWA_LEGACY

4/22/2013

LEGEND

B R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8

K1 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON
300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

J4 HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
935 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

A5 9.5" PLAIN JOINTED QC/QA PCCP
D-1 JOINTS SPACED AT 15' WITH 1 1/4" DIAMETER DOWEL BARS ON
SUBBASE FOR PCCP ON
SUBGRADE TREATMENT, TYPE IA

J7 HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
550 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

O COMPACTED AGGREGATE, NO. 53

U UNDERDRAIN, TYPE 4, 6"

1A BRIDGE RAILING, TYPE FC

4 LONGITUDINAL JOINT

10 W-BEAM GUARDRAIL

17 ROLLED CURB

21 LONGITUDINAL CONSTRUCTION JOINT

26 SODDING

30 RETAINING WALL

RECOMMENDED
FOR APPROVAL _____ 11/15/2012
DESIGN ENGINEER DATE

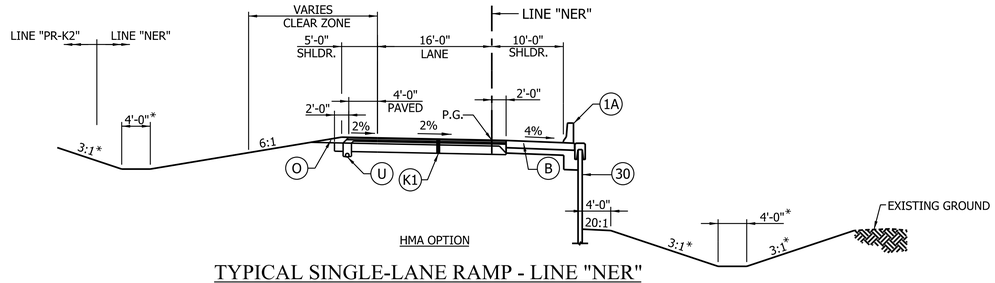
DESIGNED: CSW | DRAWN: RBA

CHECKED: CJS | CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
LINES "ESREGL" & "ESR"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	0900267
SURVEY BOOK	SHEET
	96 of 144
CONTRACT	PROJECT
IR-34750	0710215

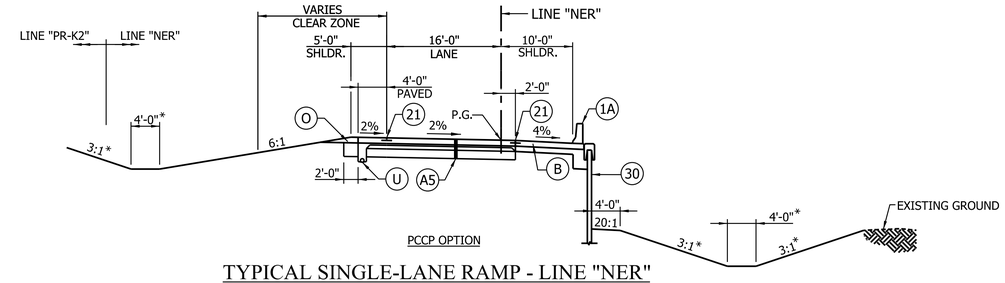


HMA OPTION

TYPICAL SINGLE-LANE RAMP - LINE "NER"

STA. 20+80.94 TO STA. 25+32.82 "NER"

* UNLESS NOTED ON CROSS SECTIONS

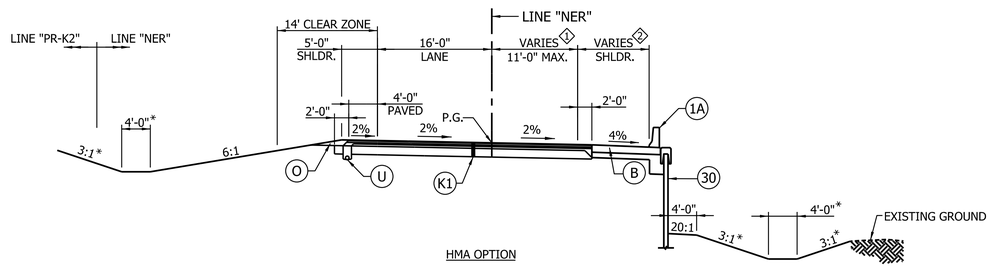


PCCP OPTION

TYPICAL SINGLE-LANE RAMP - LINE "NER"

STA. 20+80.94 TO STA. 25+32.82 "NER"

* UNLESS NOTED ON CROSS SECTIONS

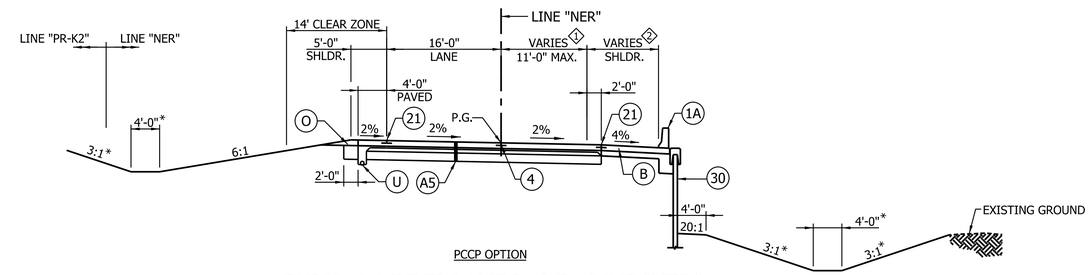


HMA OPTION

TYPICAL MULTI-LANE RAMP - LINE "NER"

STA. 25+32.82 TO STA. 28+90.81 "NER"

* UNLESS NOTED ON CROSS SECTIONS



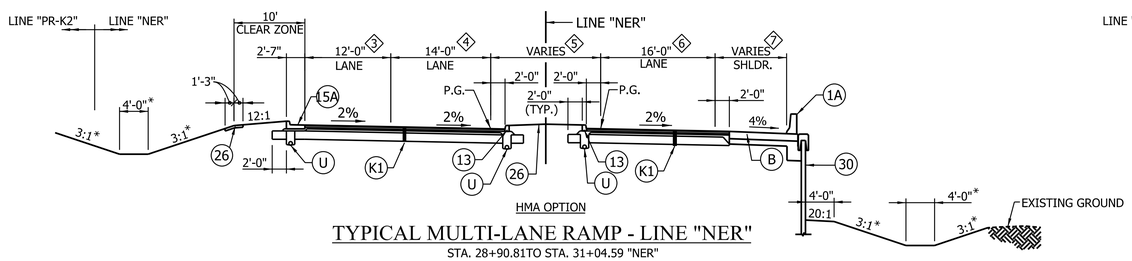
PCCP OPTION

TYPICAL MULTI-LANE RAMP - LINE "NER"

STA. 25+32.82 TO STA. 28+90.81 "NER"

* UNLESS NOTED ON CROSS SECTIONS

1 VARIES 0' TO 11' STA. 25+32.82 TO STA. 26+82.30 "NER"
2 VARIES 10' TO 12' STA. 25+32.82 TO STA. 26+82.30 "NER"
12' FROM STA. 26+82.30 TO STA. 28+90.81 "NER"

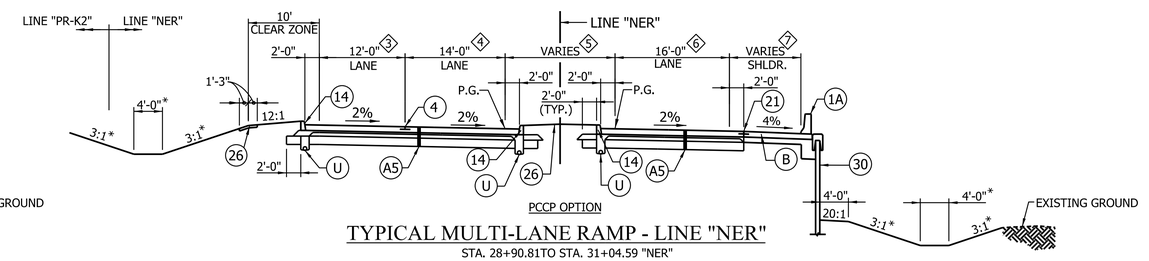


HMA OPTION

TYPICAL MULTI-LANE RAMP - LINE "NER"

STA. 28+90.81TO STA. 31+04.59 "NER"

* UNLESS NOTED ON CROSS SECTIONS



PCCP OPTION

TYPICAL MULTI-LANE RAMP - LINE "NER"

STA. 28+90.81TO STA. 31+04.59 "NER"

* UNLESS NOTED ON CROSS SECTIONS

3 VARIES 0' TO 12' STA. 28+90.81 TO STA. 30+78.37 "NER"
4 VARIES 16' TO 12' STA. 28+90.81 TO STA. 29+54.03 "NER"
VARIES 12' TO 14' STA. 30+04.03 TO STA. 30+90.45 "NER"
5 VARIES 0' TO 18'-6" STA. 29+85.18 TO STA. 31+04.59 "NER"
6 VARIES 12' TO 16' STA. 29+60.23 TO STA. 30+49.79 "NER"
7 VARIES 12' TO 10' STA. 29+60.23 TO STA. 29+81.30 "NER"

LINE	STATION		ADJUSTED CLEAR ZONE	
	FROM	TO	LT.	RT.
"NER"	20+84.94	23+07.24	18'	18'
"NER"	23+07.24	23+66.91	18' - 14'	18' - 14'
"NER"	23+66.91	28+90.81	14'	14'
"NER"	28+90.81	31+04.59	10'	14'

By: RWA_LEGACY

LEGEND

K1 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON
300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

B R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8

A5 9.5" PLAIN JOINTED QC/QA PCCP
D-1 JOINTS SPACED AT 15' WITH 1 1/4" DIAMETER DOWEL BARS ON
SUBBASE FOR PCCP ON
SUBGRADE TREATMENT, TYPE IA

O COMPACTED AGGREGATE, NO. 53

U UNDERDRAIN, TYPE 4, 6"

1A BRIDGE RAILING, TYPE FC

4 LONGITUDINAL JOINT

13 CONCRETE CURB, (6")

14 INTEGRAL CURB

15A CONCRETE CURB AND GUTTER, MODIFIED

21 LONGITUDINAL CONSTRUCTION JOINT

26 SODDING

30 RETAINING WALL

RECOMMENDED
FOR APPROVAL 11/15/2012
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

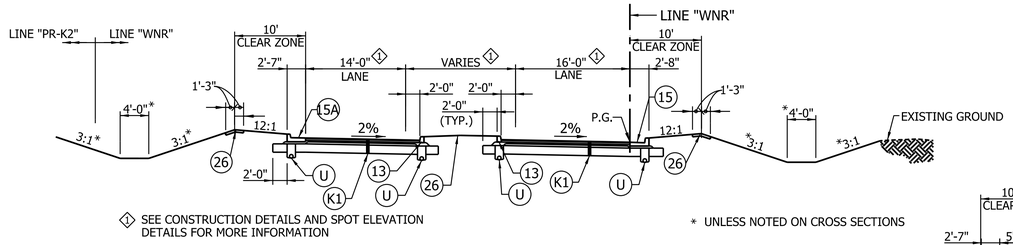
INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
LINE "NER"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	0900267
SURVEY BOOK	SHEET
	97 of 144
CONTRACT	PROJECT
IR-34750	0710215

4/22/2013

Model: R-TYP 06 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11R-TYP_ALL-ROW.dgn



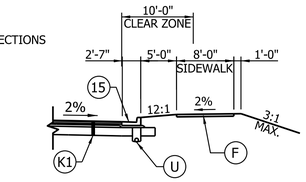
① SEE CONSTRUCTION DETAILS AND SPOT ELEVATION DETAILS FOR MORE INFORMATION

* UNLESS NOTED ON CROSS SECTIONS

HMA OPTION

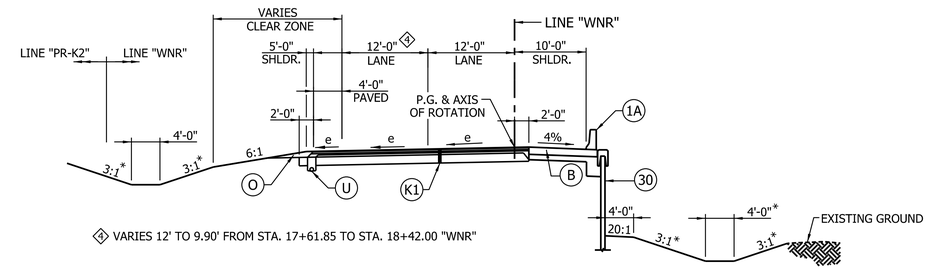
TYPICAL MULTI-LANE RAMP - LINE "WNR"

STA. 10+24.89 TO STA. 11+90.00 "WNR"



SIDEWALK OFFSET FROM CURB

STA. 10+24.89 TO STA. 11+15.00 RT. "WNR"



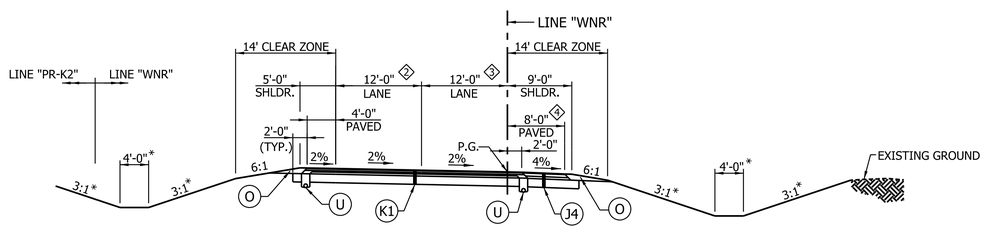
④ VARIES 12' TO 9.90' FROM STA. 17+61.85 TO STA. 18+42.00 "WNR"

* UNLESS NOTED ON CROSS SECTIONS

HMA OPTION

TYPICAL SUPERELEVATED MULTI-LANE RAMP - LINE "WNR"

STA. 12+38.00 TO STA. 18+42.00 "WNR"



② VARIES FROM 14' TO 13.25' FROM STA. 11+90.00 TO STA. 12+38.00 'WNR'

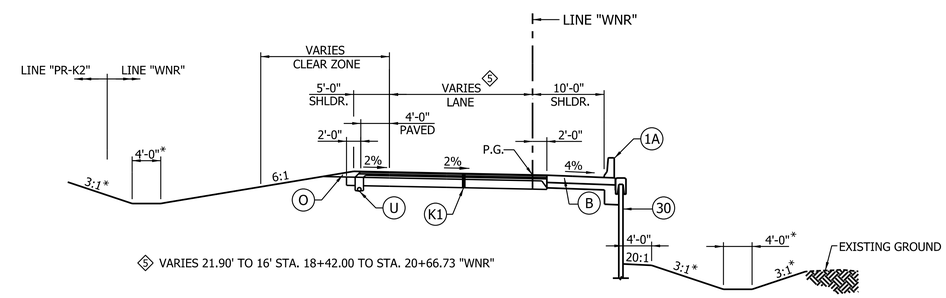
③ VARIES FROM 16' TO 12' FROM STA. 11+90.00 TO STA. 12+38.00 'WNR'

* UNLESS NOTED ON CROSS SECTIONS

HMA OPTION

TYPICAL MULTI-LANE RAMP - LINE "WNR"

STA. 11+90.00 TO STA. 12+38.00 "WNR"



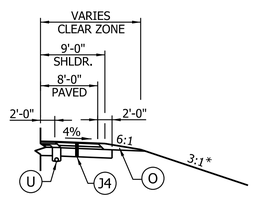
⑤ VARIES 21.90' TO 16' STA. 18+42.00 TO STA. 20+66.73 "WNR"

* UNLESS NOTED ON CROSS SECTIONS

HMA OPTION

TYPICAL SINGLE-LANE RAMP - LINE "WNR"

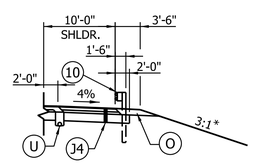
STA. 18+42.00 TO STA. 21+63.47 "WNR"



* UNLESS NOTED ON CROSS SECTIONS

TYPICAL SHOULDER SECTION

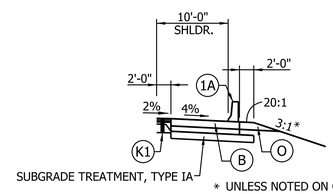
STA. 12+38.00 TO STA. 14+75.08 RT. "WNR"



* UNLESS NOTED ON CROSS SECTIONS

TYPICAL SHOULDER SECTION WITH GUARDRAIL

STA. 14+75.08 TO STA. 16+00.00 RT. "WNR"



* UNLESS NOTED ON CROSS SECTIONS

BARRIER DETAIL

STA. 16+00.00 TO STA. 16+25.00 RT. "WNR"

LINE	STATION		ADJUSTED CLEAR ZONE	
	FROM	TO	LT.	RT.
"WNR"	10+24.89	11+90.00	10'	10'
"WNR"	11+90.00	13+64.67	14'	14'
"WNR"	13+64.67	14+56.79	14'	14'-15.4'
"WNR"	14+56.79	17+61.85	14'	15.4'
"WNR"	17+61.85	19+00.00	14'-18'	15.4'-18'
"WNR"	19+00.00	21+63.47	18'	18'

LEGEND

- (K1) 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON 275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON 300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON 330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON SUBGRADE TREATMENT, TYPE IA
- (J4) HMA/COMPOSITE SHOULDERS COMPOSED OF: 165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON 495 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON 4" COMPACTED AGGREGATE, SIZE NO. 53, BASE ON SUBGRADE TREATMENT, TYPE IA
- (O) COMPACTED AGGREGATE, NO. 53
- (U) UNDERDRAIN, TYPE 4, 6"
- (1A) BRIDGE RAILING, TYPE FC
- (10) W-BEAM GUARDRAIL
- (15) CONCRETE CURB AND GUTTER
- (13) CONCRETE CURB, (6")
- (15A) CONCRETE CURB AND GUTTER, MODIFIED
- (16) CONCRETE CURB, TYPE B
- (26) SODDING
- (30) RETAINING WALL
- (B) R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER 11/15/2012 DATE

DESIGNED: CSW DRAWN: RBA

CHECKED: CJS CHECKED: JLR

INDIANA DEPARTMENT OF TRANSPORTATION

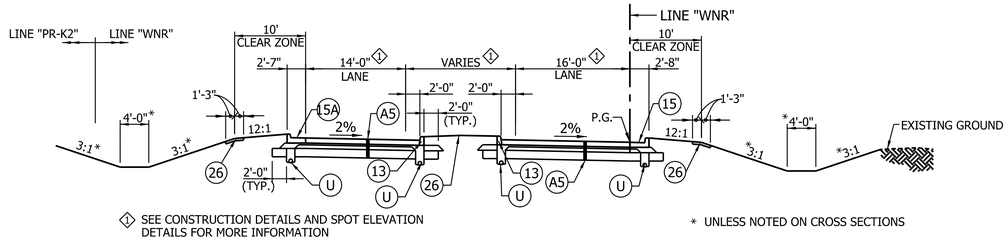
TYPICAL SECTIONS LINE "WNR"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	0900267
SURVEY BOOK	SHEET
	98 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY

4/22/2013

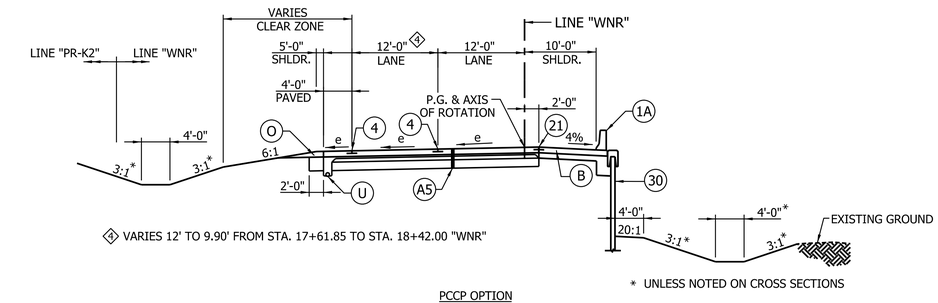
Model: R-TYP 07 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11R-TYP_ALL-ROW.dgn



PCCP OPTION

TYPICAL MULTI-LANE RAMP - LINE "WNR"

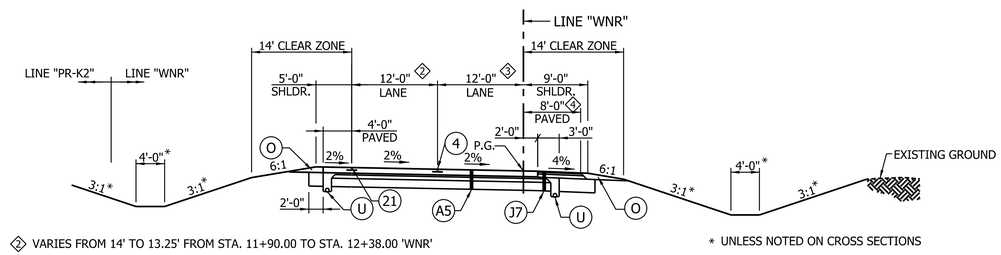
STA. 10+24.89 TO STA. 11+90.00 "WNR"



PCCP OPTION

TYPICAL SUPERELEVATED MULTI-LANE RAMP - LINE "WNR"

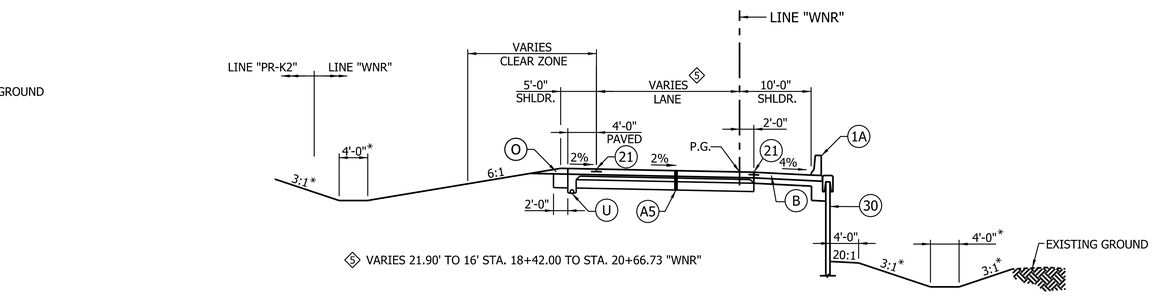
STA. 12+38.00 TO STA. 18+42.00 "WNR"



PCCP OPTION

TYPICAL MULTI-LANE RAMP - LINE "WNR"

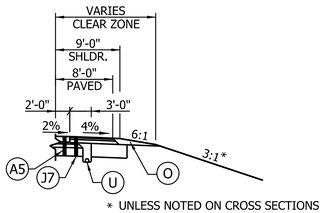
STA. 11+90.00 TO STA. 12+38.00 "WNR"



PCCP OPTION

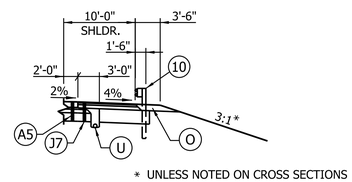
TYPICAL SINGLE-LANE RAMP - LINE "WNR"

STA. 18+42.00 TO STA. 21+63.47 "WNR"



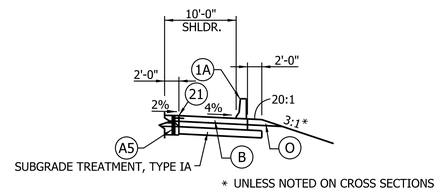
TYPICAL SHOULDER SECTION

STA. 12+38.00 TO STA. 14+75.08 RT. "WNR"



TYPICAL SHOULDER SECTION WITH GUARDRAIL

STA. 14+75.08 TO STA. 16+00.00 RT. "WNR"



BARRIER DETAIL

STA. 16+00.00 TO STA. 16+25.00 RT. "WNR"

LINE	STATION		ADJUSTED CLEAR ZONE	
	FROM	TO	LT.	RT.
"WNR"	10+24.89	11+90.00	10'	10'
"WNR"	11+90.00	13+64.67	14'	14'
"WNR"	13+64.67	14+56.79	14'	14'-15.4'
"WNR"	14+56.79	17+61.85	14'	15.4'
"WNR"	17+61.85	19+00.00	14'-18'	15.4'-18'
"WNR"	19+00.00	21+63.47	18'	18'

LEGEND

- A5 9.5" PLAIN JOINTED QC/QA PCCP D-1 JOINTS SPACED AT 15' WITH 1 1/4" DIAMETER DOWEL BARS ON SUBBASE FOR PCCP ON SUBGRADE TREATMENT, TYPE IA
- J7 HMA/COMPOSITE SHOULDERS COMPOSED OF: 165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON 330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON 550 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON SUBBASE FOR PCCP, ON SUBGRADE TREATMENT, TYPE IA
- O COMPACTED AGGREGATE, NO. 53
- U UNDERDRAIN, TYPE 4, 6"
- 1A BRIDGE RAILING, TYPE FC
- 10 W-BEAM GUARDRAIL
- 4 LONGITUDINAL JOINT
- 13 CONCRETE CURB, (6")
- 15 CONCRETE CURB AND GUTTER
- 15A CONCRETE CURB AND GUTTER, MODIFIED
- 21 LONGITUDINAL CONSTRUCTION JOINT
- B R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8
- 26 SODDING
- 30 RETAINING WALL

RECOMMENDED FOR APPROVAL _____ 11/15/2012
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

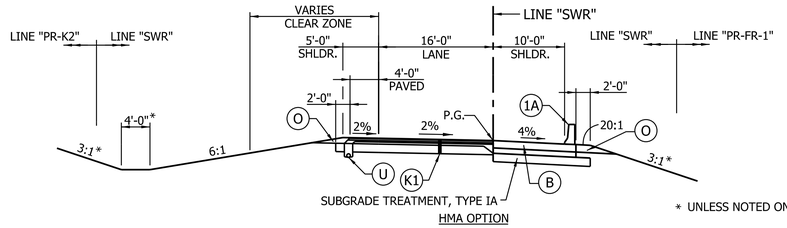
INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS LINE "WNR"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	0900267
SURVEY BOOK	SHEET
	99 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY
4/22/2013

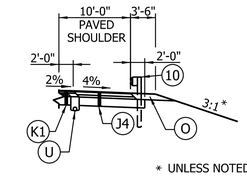
LINE	STATION		ADJUSTED CLEAR ZONE	
	FROM	TO	LT.	RT.
"SWR"	20+55.59	23+11.57	18'	18'
"SWR"	23+11.57	24+66.98	18' - 14'	18' - 15.4'
"SWR"	24+66.98	26+41.04	14' - 16.8'	15.4' - 14'
"SWR"	26+41.04	28+65.23	16.8'	14'
"SWR"	28+65.23	29+58.04	16.8' - 14'	14'
"SWR"	29+58.04	31+25.81	14'	14'



* UNLESS NOTED ON CROSS SECTIONS

TYPICAL SINGLE-LANE RAMP - LINE "SWR"

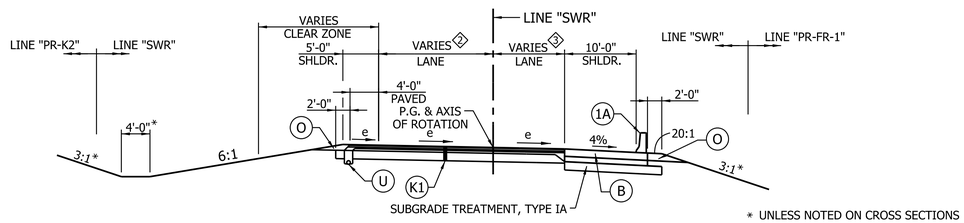
STA. 20+55.59 TO STA. 24+91.00 "SWR"



* UNLESS NOTED ON CROSS SECTIONS

TYPICAL SHOULDER SECTION WITH GUARDRAIL

STA. STA. 20+55.59 TO STA. 21+00.00 RT. "SWR"



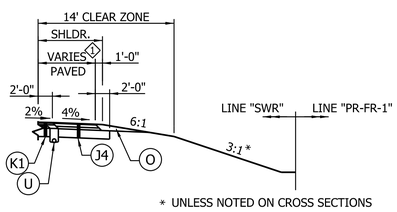
* UNLESS NOTED ON CROSS SECTIONS

TYPICAL SUPERELEVATED MULTI-LANE RAMP - LINE "SWR"

STA. 24+91.00 TO STA. 29+23.00 "SWR"

2 VARIES FROM 16' TO 20'-4" FROM STA. 28+36.02 TO STA. 29+23.00

3 0' FROM STA. 24+91.00 TO STA. 28+36.02
VARIES FROM 0' TO 10'-5" FROM STA. 28+36.02 TO STA. 29+23.00

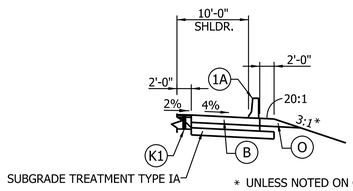


* UNLESS NOTED ON CROSS SECTIONS

TYPCIAL SHOULDER SECTION

STA. 27+00.00 TO STA. 30+88.59 RT. "SWR"

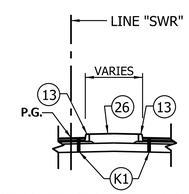
1 10' FROM STA. 27+00.00 TO STA. 28+35.46 RT. "SWR"
VARIES FROM 10' TO 8' FROM STA. 28+35.46 TO STA. 29+35.95 RT. "SWR"
8' FROM STA. 29+35.95 TO STA. 30+21.13 RT. "SWR"
VARIES FROM 8' TO 6' STA. 30+21.13 TO STA. 30+64.66 RT. "SWR"
6' FROM STA. 30+64.66 TO STA. 30+88.59 RT. "SWR"



* UNLESS NOTED ON CROSS SECTIONS

BARRIER DETAIL

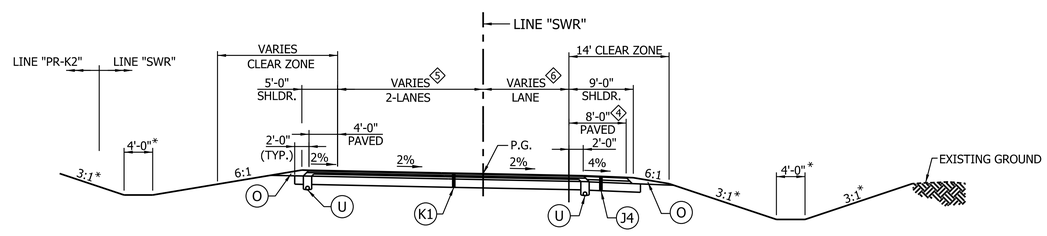
STA. 21+00.00 TO STA. 24+42.77 RT. "SWR"
STA. 26+29.35 TO STA. 27+00.00 RT. "SWR"



SEE CONSTRUCTION DETAILS & SPOT ELEVATION DETAILS FOR MORE INFORMATION

RAISED ISLAND DETAIL

STA. 30+66.05 TO STA. 31+25.81 "SWR"



* UNLESS NOTED ON CROSS SECTIONS

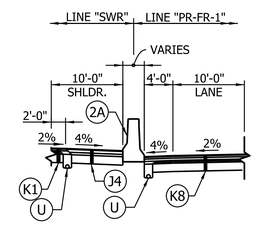
TYPICAL MULTI-LANE RAMP - LINE "SWR"

STA. 29+23.00 TO STA. 31+25.81 "SWR"

4 SEE TYPICAL SHOULDER SECTION

5 VARIES FROM 20'-4" TO 24' STA. 29+23.00 TO STA. 29+95.06 "SWR"

6 VARIES FROM 10'-5" TO 12' STA. 29+23.00 TO 12' STA. 29+36.41 "SWR"
VARIES FROM 12' TO 18' FROM STA. 30+18.57 TO STA. 30+84.00 "SWR"



MODIFIED CONCRETE BARRIER DETAIL

STA. 24+42.77 TO STA. 26+29.35 RT. "SWR"

By: RWA_LEGACY

LEGEND

K1 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON
300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

J4 HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
935 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

K8 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON
300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

B R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8

O COMPACTED AGGREGATE, NO. 53

U UNDERDRAIN, TYPE 4, 6"

1A BRIDGE RAILING, TYPE FC

2A MODIFIED CONCRETE BARRIER

10 W-BEAM GUARDRAIL

26 SODDING

RECOMMENDED
FOR APPROVAL _____ 11/15/2012
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

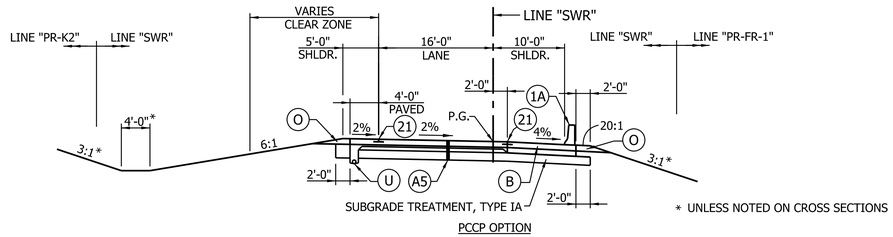
INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
LINE "SWR"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	0900267
SURVEY BOOK	SHEET
	100 of 144
CONTRACT	PROJECT
IR-34750	0710215

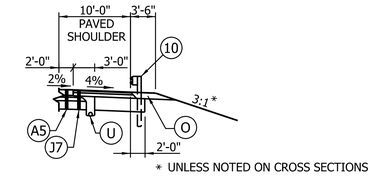
4/22/2013

LINE	STATION		ADJUSTED CLEAR ZONE	
	FROM	TO	LT.	RT.
"SWR"	20+55.59	23+11.57	18'	18'
"SWR"	23+11.57	24+66.98	18' - 14'	18' - 15.4'
"SWR"	24+66.98	26+41.04	14' - 16.8'	15.4' - 14'
"SWR"	26+41.04	28+65.23	16.8'	14'
"SWR"	28+65.23	29+58.04	16.8' - 14'	14'
"SWR"	29+58.04	31+25.81	14'	14'



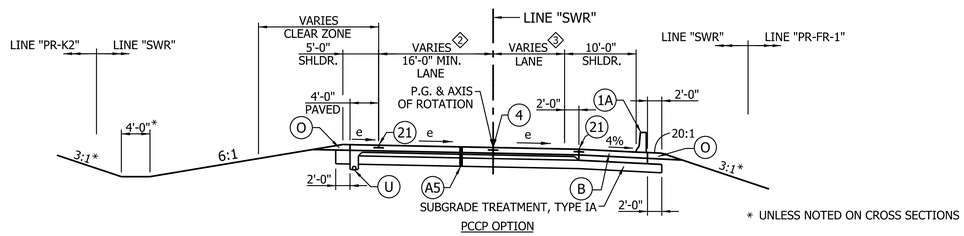
TYPICAL SINGLE-LANE RAMP - LINE "SWR"

STA. 20+55.59 TO STA. 24+91.00 "SWR"



TYPICAL SHOULDER SECTION WITH GUARDRAIL

STA. STA. 20+55.59 TO STA. 21+00.00 RT. "SWR"

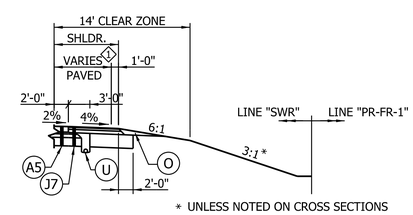


TYPICAL SUPERELEVATED MULTI-LANE RAMP - LINE "SWR"

STA. 24+91.00 TO STA. 29+23.00 "SWR"

2 VARIES FROM 16' TO 20'-4" FROM STA. 28+36.02 TO STA. 29+23.00

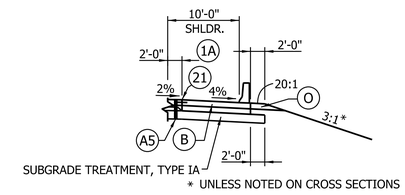
3 0' FROM STA. 24+91.00 TO STA. 28+36.02
VARIES FROM 0' TO 10'-5" FROM STA. 28+36.02 TO STA. 29+23.00



TYPCIAL SHOULDER SECTION

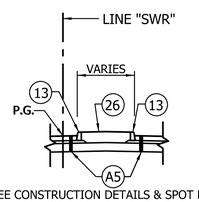
STA. 27+00.00 TO STA. 30+88.59 RT. "SWR"

1 10' FROM STA. 27+00.00 TO STA. 28+35.46 RT. "SWR"
VARIES FROM 10' TO 8' FROM STA. 28+35.46 TO STA. 29+35.95 RT. "SWR"
8' FROM STA. 29+35.95 TO STA. 30+21.13 RT. "SWR"
VARIES FROM 8' TO 6' STA. 30+21.13 TO STA. 30+64.66 RT. "SWR"
6' FROM STA. 30+64.66 TO STA. 30+88.59 RT. "SWR"



BARRIER DETAIL

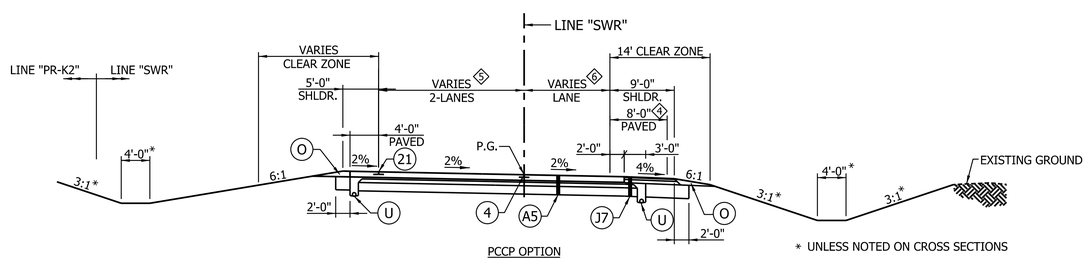
STA. 21+00.00 TO STA. 24+42.77 RT. "SWR"
STA. 26+29.35 TO STA. 27+00.00 RT. "SWR"



SEE CONSTRUCTION DETAILS & SPOT ELEVATION DETAILS FOR MORE INFORMATION

RAISED ISLAND DETAIL

STA. 30+66.05 TO STA. 31+25.81 "SWR"



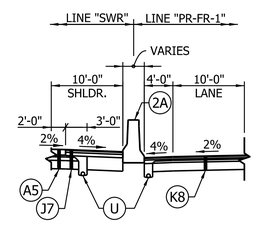
TYPICAL MULTI-LANE RAMP - LINE "SWR"

STA. 29+23.00 TO STA. 31+25.81 "SWR"

4 SEE TYPICAL SHOULDER SECTION

5 VARIES FROM 20'-4" TO 24' STA. 29+23.00 TO STA. 29+95.06 "SWR"

6 VARIES FROM 10'-5" TO 12' STA. 29+23.00 TO 12' STA. 29+36.41 "SWR"
VARIES FROM 12' TO 18' FROM STA. 30+18.57 TO STA. 30+84.00 "SWR"



MODIFIED CONCRETE BARRIER DETAIL

STA. 24+42.77 TO STA. 26+29.35 RT. "SWR"

LEGEND

- A5 9.5" PLAIN JOINTED QC/QA PCCP
  D-1 JOINTS SPACED AT 15' WITH 1 1/4" DIAMETER DOWEL BARS ON
  SUBBASE FOR PCCP ON
  SUBGRADE TREATMENT, TYPE IA
- J7 HMA/COMPOSITE SHOULDERS COMPOSED OF:
  165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
  330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
  550 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
  SUBBASE FOR PCCP, ON
  SUBGRADE TREATMENT, TYPE IA
- K8 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON
  275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON
  300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
  330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
  SUBGRADE TREATMENT, TYPE IA
- B R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8
- O COMPACTED AGGREGATE, NO. 53
- U UNDERDRAIN, TYPE 4, 6"
- 1A BRIDGE RAILING, TYPE FC
- 2A MODIFIED CONCRETE BARRIER
- 4 LONGITUDINAL JOINT
- 10 W-BEAM GUARDRAIL
- 21 LONGITUDINAL CONSTRUCTION JOINT
- 26 SODDING

RECOMMENDED
FOR APPROVAL _____ 11/15/2012
DESIGN ENGINEER DATE

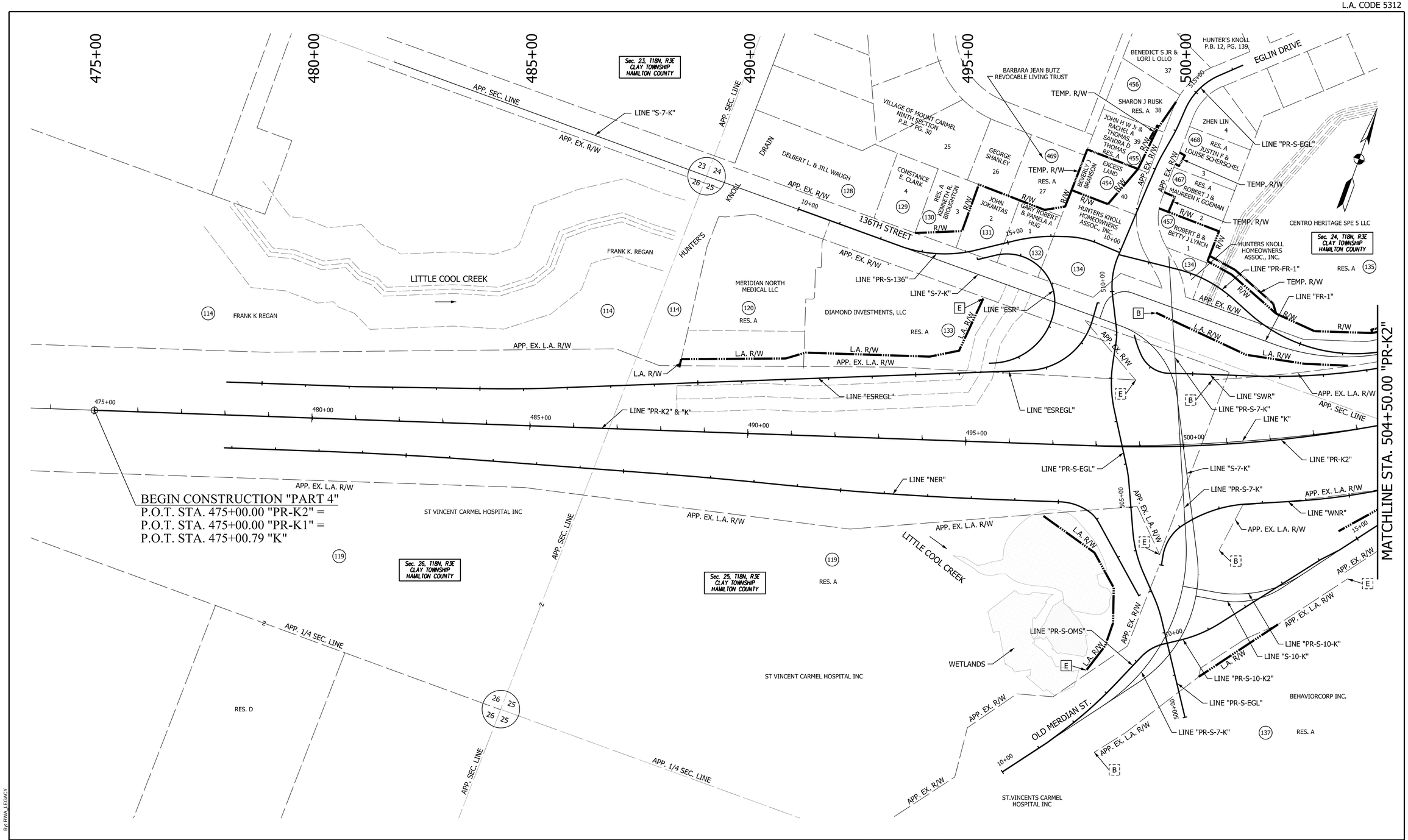
DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
LINE "SWR"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	0900267
SURVEY BOOK	SHEET
	101 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY
4/22/2015
Model: R-TYP 10
Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11R-TYP_ALL-ROW.dgn



B BEGIN LA R/W
E END LA R/W
B BEGIN APP. EX. LA R/W
E END APP. EX. LA R/W

RECOMMENDED FOR APPROVAL _____ 11/15/2012
DESIGN ENGINEER DATE

DESIGNED: CSW | DRAWN: RBA
CHECKED: CJS | CHECKED: JLR

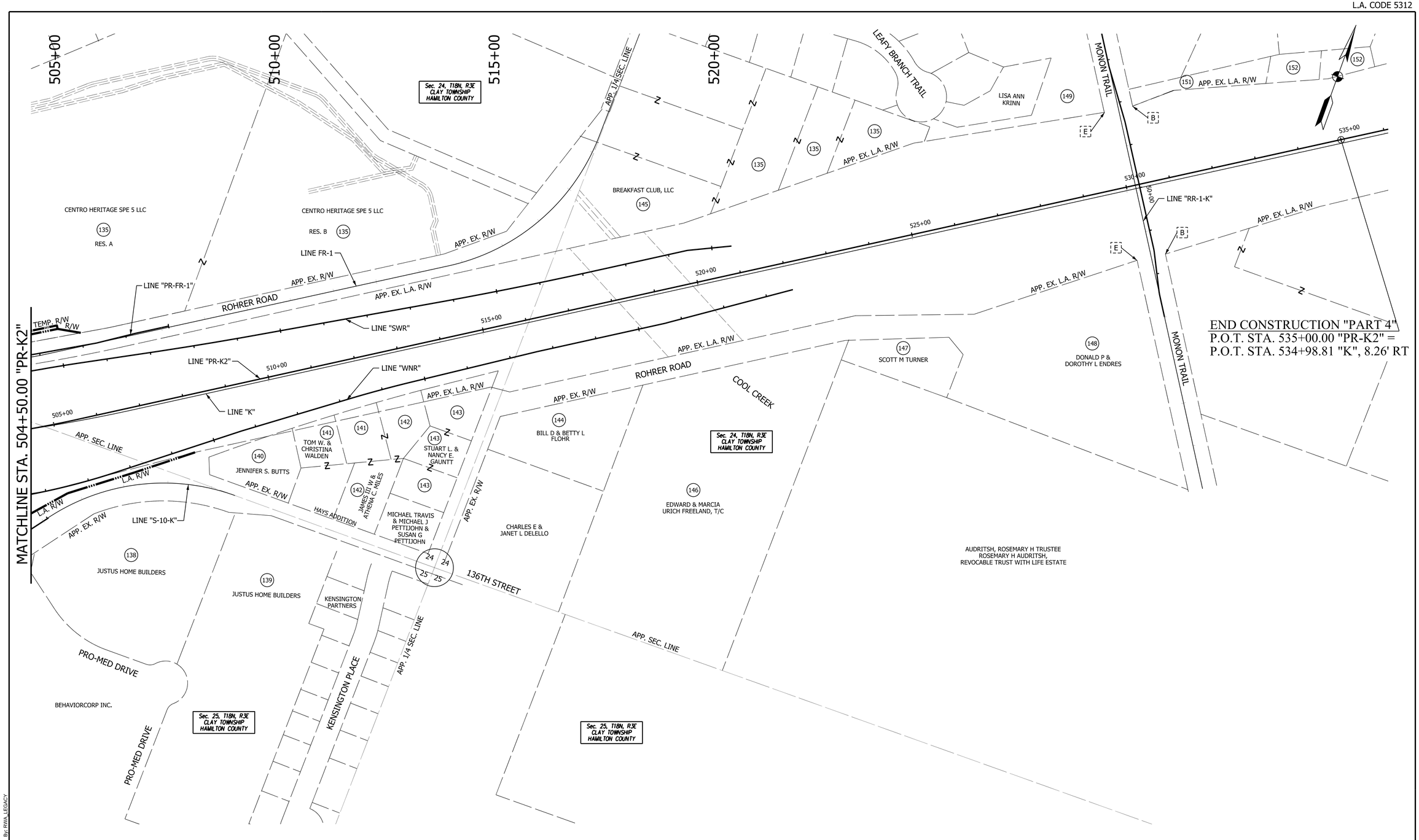
INDIANA
DEPARTMENT OF TRANSPORTATION

PLAT NO. 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 100'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	102 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY
4/22/2013

Model: 136-PLAT1 01 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-136th-PLAT1-ROW.dgn



By: RWA, LEGACY

4/22/2013

B BEGIN LA R/W
E END LA R/W
B BEGIN APP. EX. LA R/W
E END APP. EX. LA R/W

RECOMMENDED FOR APPROVAL _____ 11/15/2012
DESIGN ENGINEER DATE

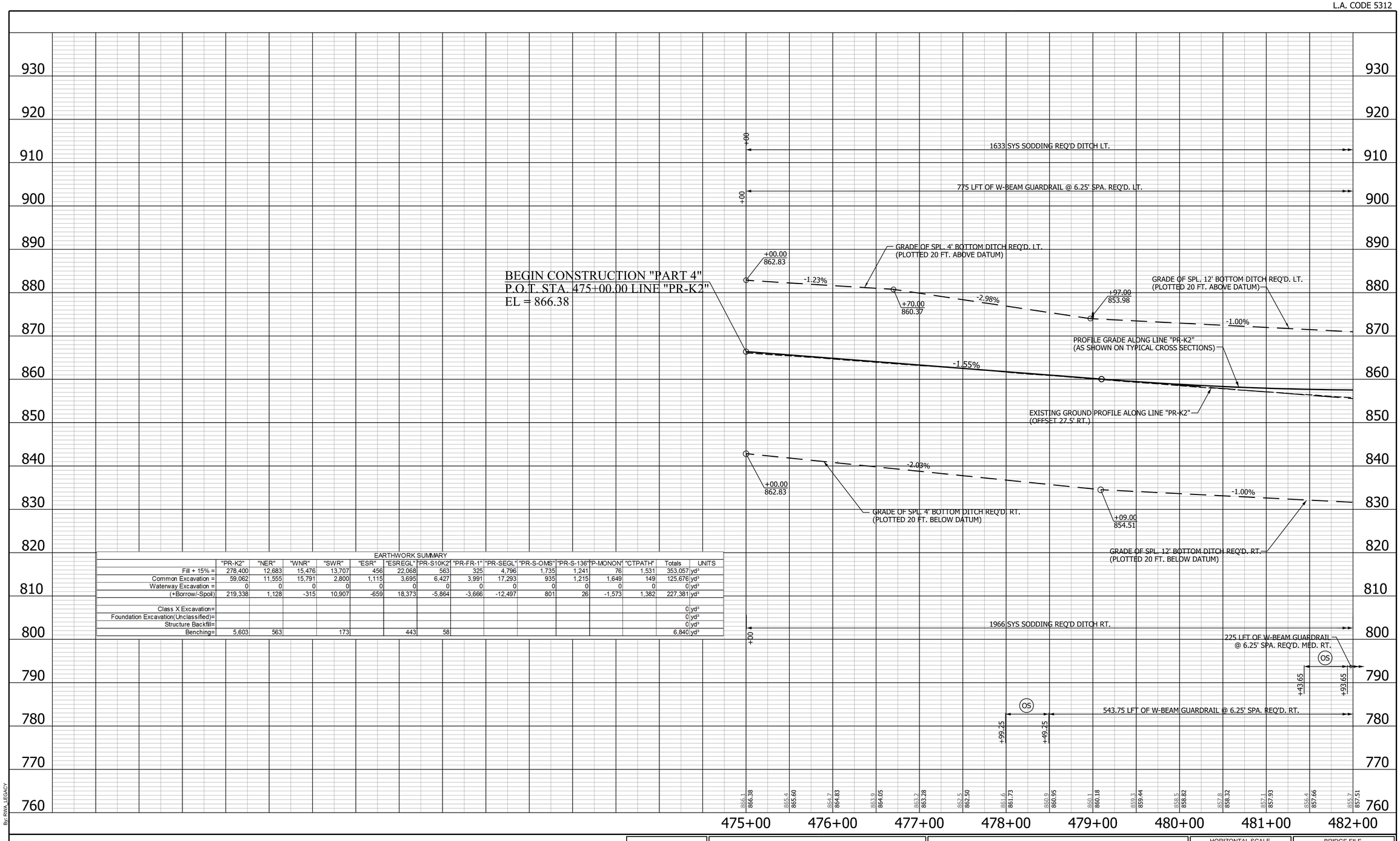
DESIGNED: CSW | DRAWN: RBA
CHECKED: CJS | CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAT NO. 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 100'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	103 of 144
CONTRACT	PROJECT
IR-34750	0710215

Model: 136-PLAT1 02 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-136th-PLAT1-ROW.dgn



EARTHWORK SUMMARY

	"PR-K2"	"NER"	"WNR"	"SWR"	"ESR"	"ESREGL"	"PR-S10K2"	"PR-FR-1"	"PR-SEGL"	"PR-S-OMS"	"PR-S-136"	"P-MONON"	"CTPATH"	Totals	UNITS
Fill + 15% =	278,400	12,683	15,476	13,707	456	22,068	563	325	4,796	1,735	1,241	76	1,531	353,057	yd³
Common Excavation =	59,062	11,555	15,791	2,800	1,115	3,695	6,427	3,991	17,293	935	1,215	1,649	149	125,676	yd³
Waterway Excavation =	0	0	0	0	0	0	0	0	0	0	0	0	0	0	yd³
(+Borrow/-Spoil)	219,338	1,128	-315	10,907	-659	18,373	-5,864	-3,666	-12,497	801	26	-1,573	1,382	227,381	yd³
Class X Excavation=														0	yd³
Foundation Excavation(Unclassified)=														0	yd³
Structure Backfill=														0	yd³
Benching=	5,603	563		173		443	58							6,840	yd³

(MS) GUARDRAIL END TREATMENT, TYPE "MS"

(OS) GUARDRAIL END TREATMENT, TYPE "OS"

(TGB) GUARDRAIL TRANSITION, TYPE "TGB"

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: JH
CHECKED: CJS CHECKED: JLR

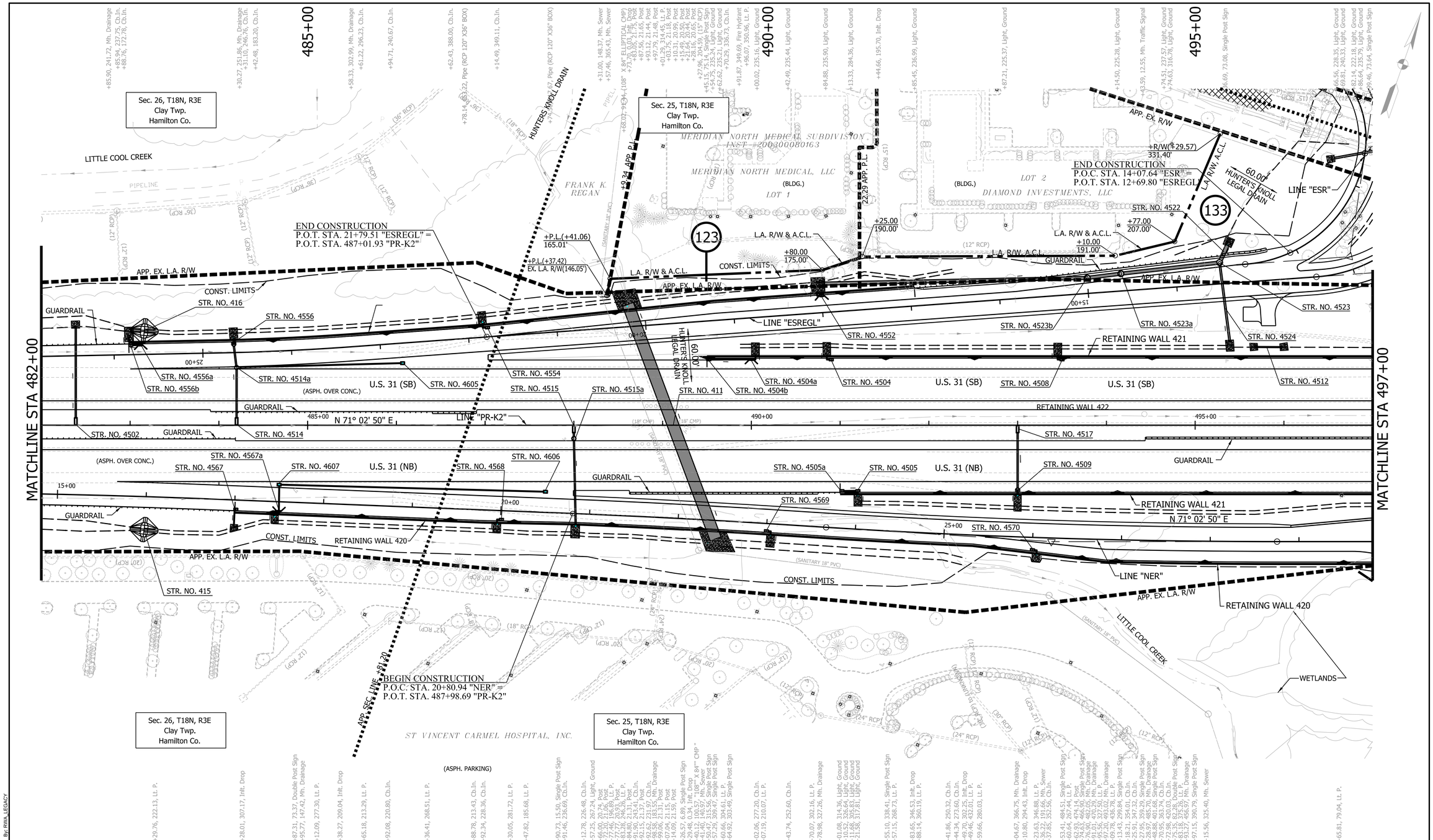
INDIANA
DEPARTMENT OF TRANSPORTATION

PROFILE
LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
1" = 10'	0900267
SURVEY BOOK	SHEET
	104 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY
4/23/2013

Model: R-PROFILE-PRK2-1 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-136th-PROF-ROW.dgn



By: RWA_LEGACY

ALL R/W ON THIS SHEET TO BE AS SHOWN
ALL R/W ON THIS SHEET DESCRIBED FROM LINE "PR-K2" EXCEPT AS NOTED
LIMITED ACCESS R/W TO APPLY WHERE INDICATED

B BEGIN L.A. R/W AND A.C.L.
E END L.A. R/W AND A.C.L.

SEE EXISTING INTERCHANGE GEOMETRICS FOR EXISTING ALIGNMENT INFORMATION.

SEE PROPOSED INTERCHANGE GEOMETRICS FOR PROPOSED ALIGNMENT INFORMATION.

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: JH
CHECKED: CJS CHECKED: JLR

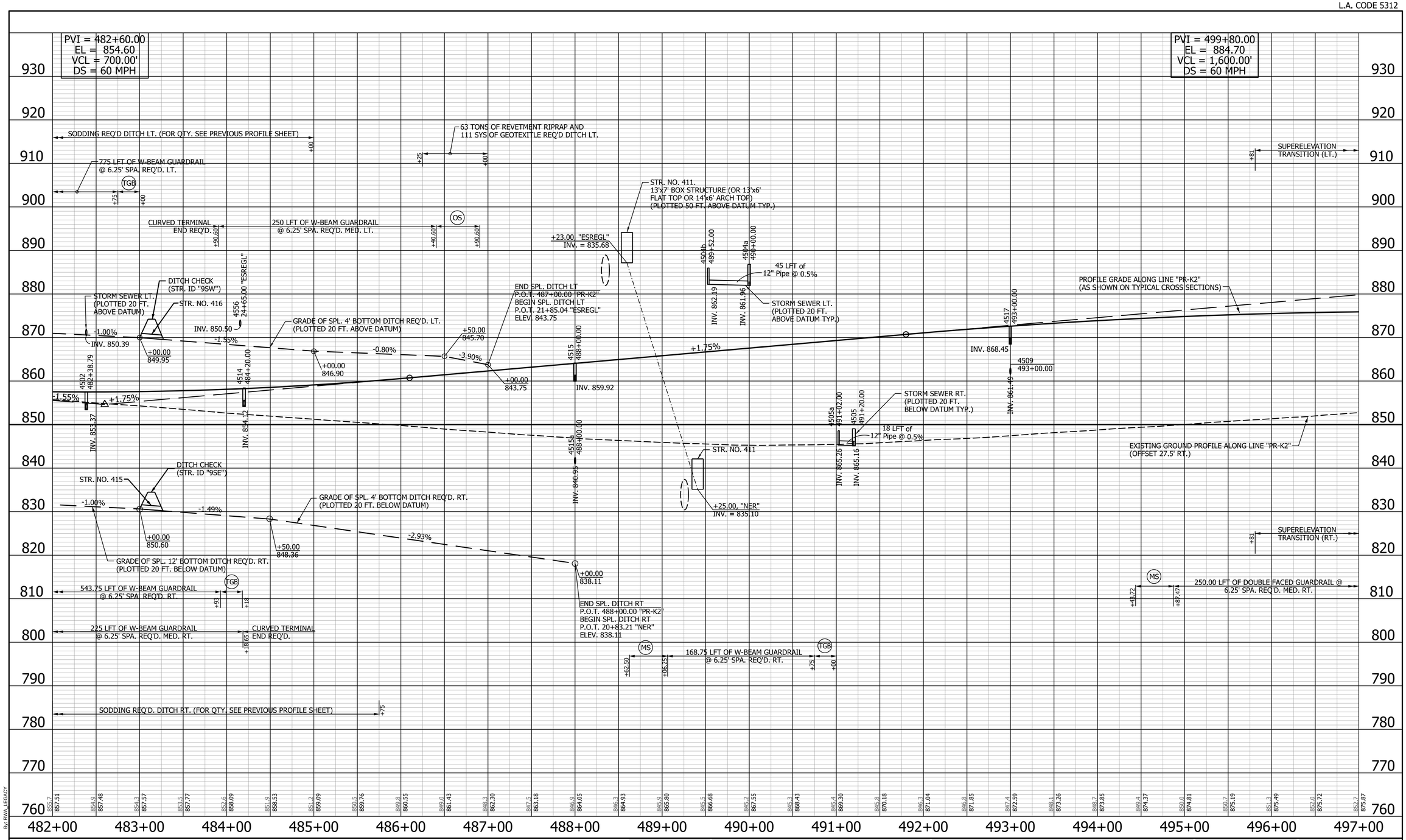
INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN
U.S. HWY 31 - LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	105 of 144
CONTRACT	PROJECT
IR-34750	0710215

4/25/2013

Model: US31 Plan-02 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-US31-PLAN-ROW.dgn



MS GUARDRAIL END TREATMENT, TYPE "MS"

OS GUARDRAIL END TREATMENT, TYPE "OS"

TGB GUARDRAIL TRANSITION, TYPE "TGB"

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: JH
CHECKED: CJS CHECKED: JLR

INDIANA DEPARTMENT OF TRANSPORTATION

PROFILE LINE "PR-K2"

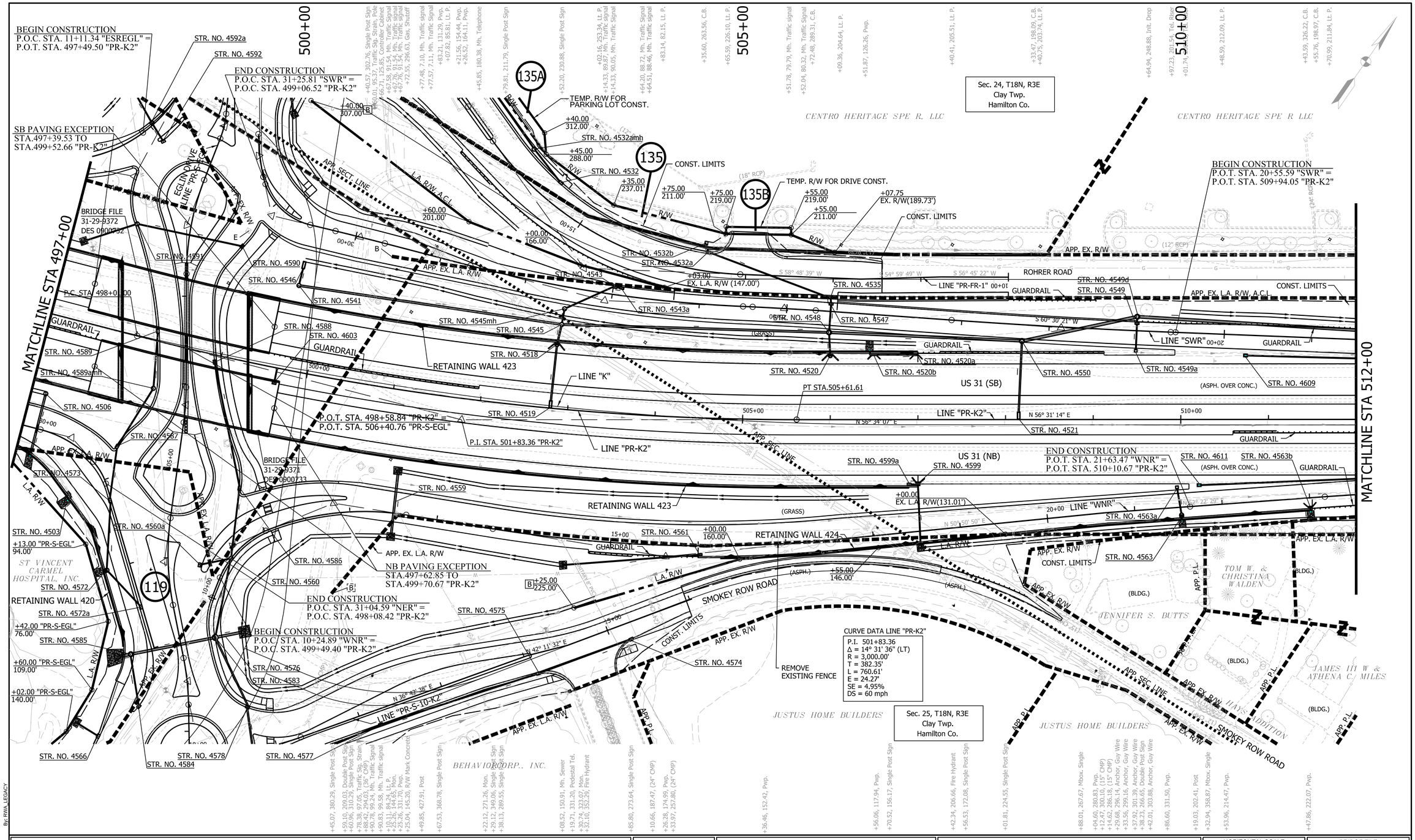
HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
1" = 10'	0900267
SURVEY BOOK	SHEET
	106 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY

4/23/2013

Model: R-PROFILE-PRK2-2 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-136th-PROF-ROW.dgn

L.A. CODE 5312



By: RWA_LEGACY

4/25/2013

ALL R/W ON THIS SHEET TO BE AS SHOWN
ALL R/W ON THIS SHEET DESCRIBED FROM LINE "PR-K2" EXCEPT AS NOTED
LIMITED ACCESS R/W TO APPLY WHERE INDICATED

B BEGIN L.A. R/W AND A.C.L.
E END L.A. R/W AND A.C.L.

SEE EXISTING INTERCHANGE GEOMETRICS FOR EXISTING ALIGNMENT INFORMATION.

SEE PROPOSED INTERCHANGE GEOMETRICS FOR PROPOSED ALIGNMENT INFORMATION.

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

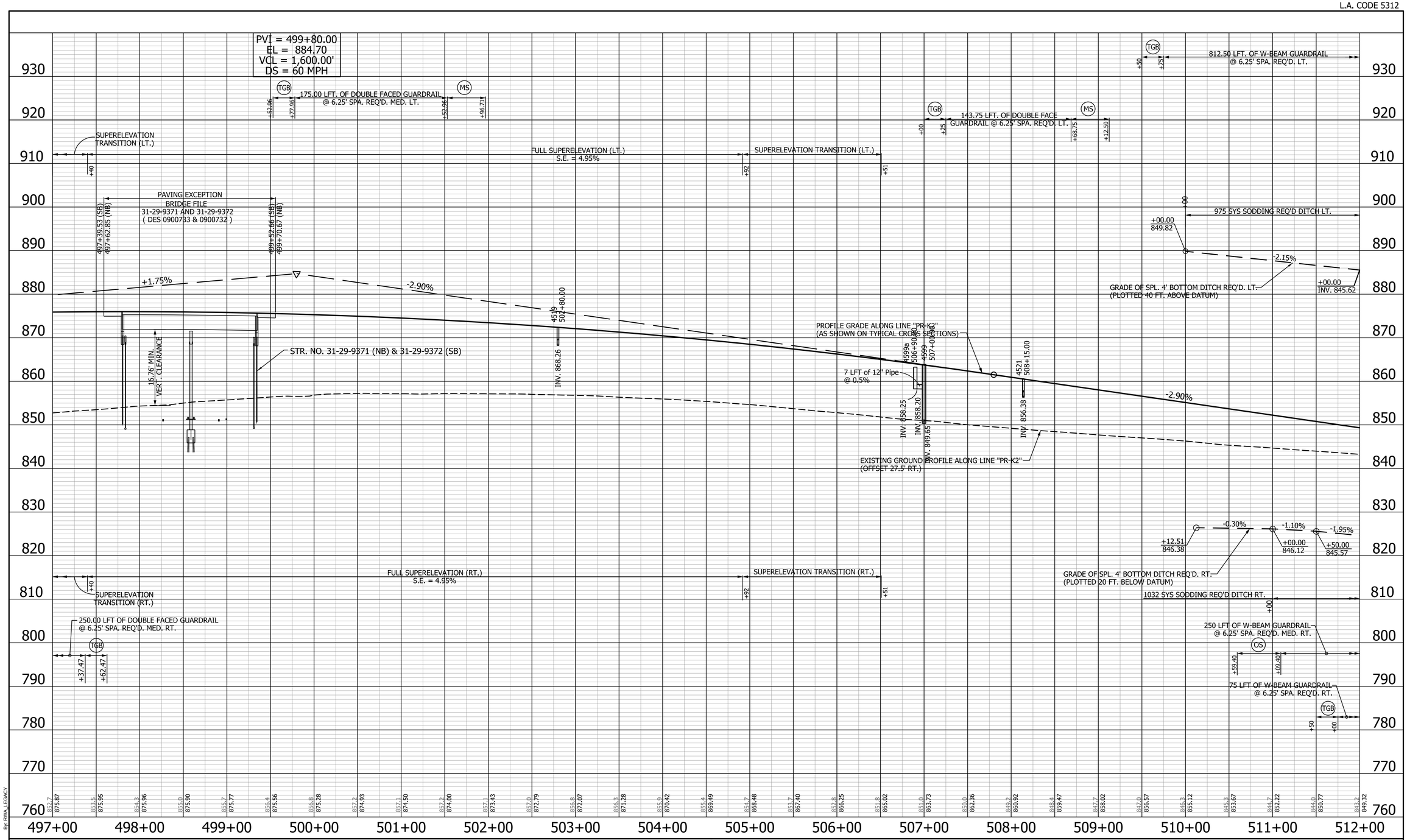
DESIGNED: CSW | DRAWN: JH
CHECKED: CJS | CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN
U.S. HWY 31 - LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
	0900267
SURVEY BOOK	SHEET
	107 of 144
CONTRACT	PROJECT
IR-34750	0710215

Model: US31 Plan-03 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-US31-PLAN-ROW.dgn



(MS) GUARDRAIL END TREATMENT, TYPE "MS"

(OS) GUARDRAIL END TREATMENT, TYPE "OS"

(TGB) GUARDRAIL TRANSITION, TYPE "TGB"

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW | DRAWN: JH
CHECKED: CJS | CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

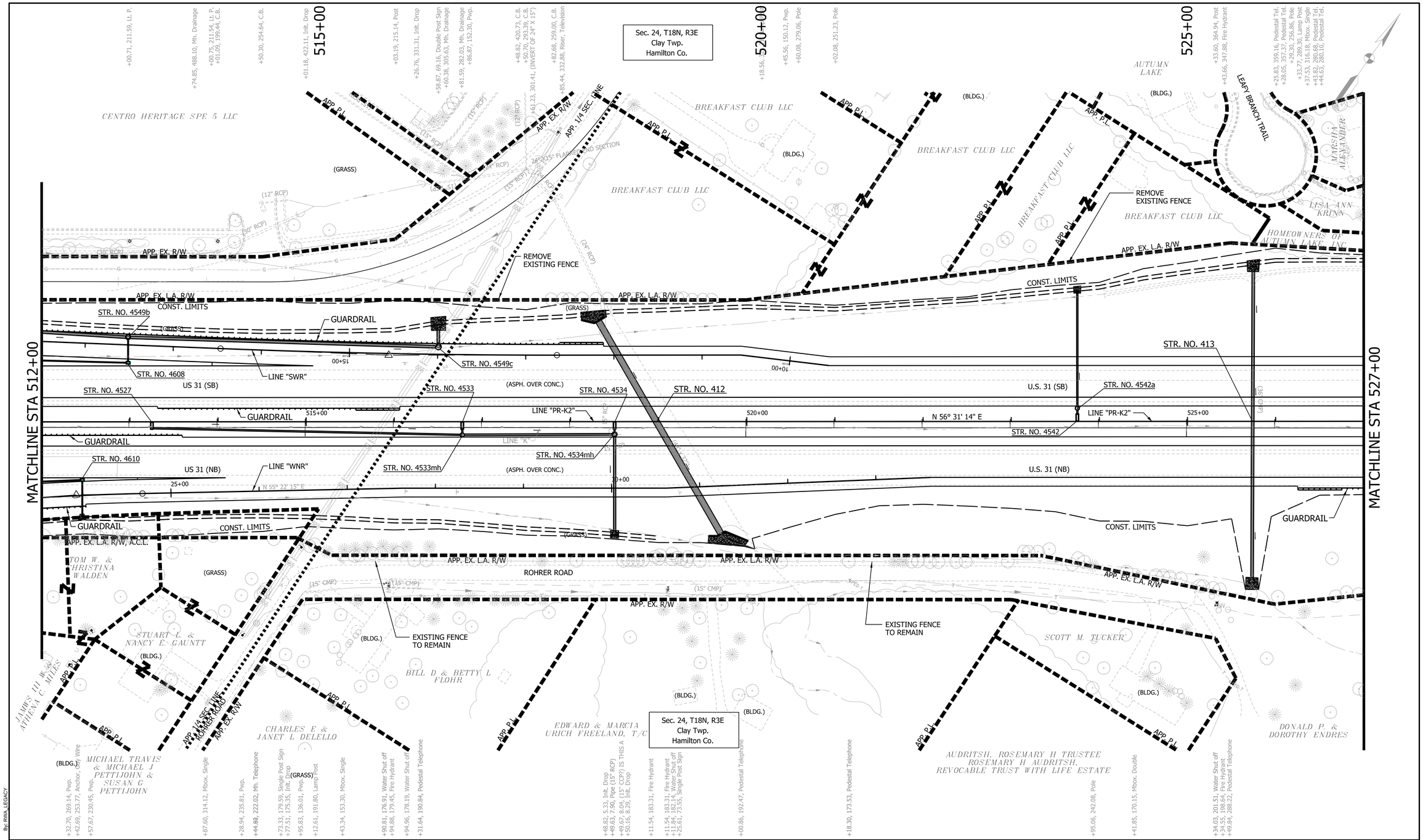
PROFILE
LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
1" = 10'	0900267
SURVEY BOOK	SHEET
	108 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY

4/23/2013

Model: R-PROFILE-PRK2-3 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-136th-PROF-ROW.dgn



By: RWA_LEGACY

ALL R/W ON THIS SHEET TO BE AS SHOWN
ALL R/W ON THIS SHEET DESCRIBED FROM LINE "PR-K2" EXCEPT AS NOTED
LIMITED ACCESS R/W TO APPLY WHERE INDICATED

B BEGIN L.A. R/W AND A.C.L.
E END L.A. R/W AND A.C.L.

SEE DES. NO. 0900269 FOR WORK NORTH OF STA. 517+00

SEE EXISTING INTERCHANGE GEOMETRICS FOR EXISTING ALIGNMENT INFORMATION.

SEE PROPOSED INTERCHANGE GEOMETRICS FOR PROPOSED ALIGNMENT INFORMATION.

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW | DRAWN: JH
CHECKED: CJS | CHECKED: JLR

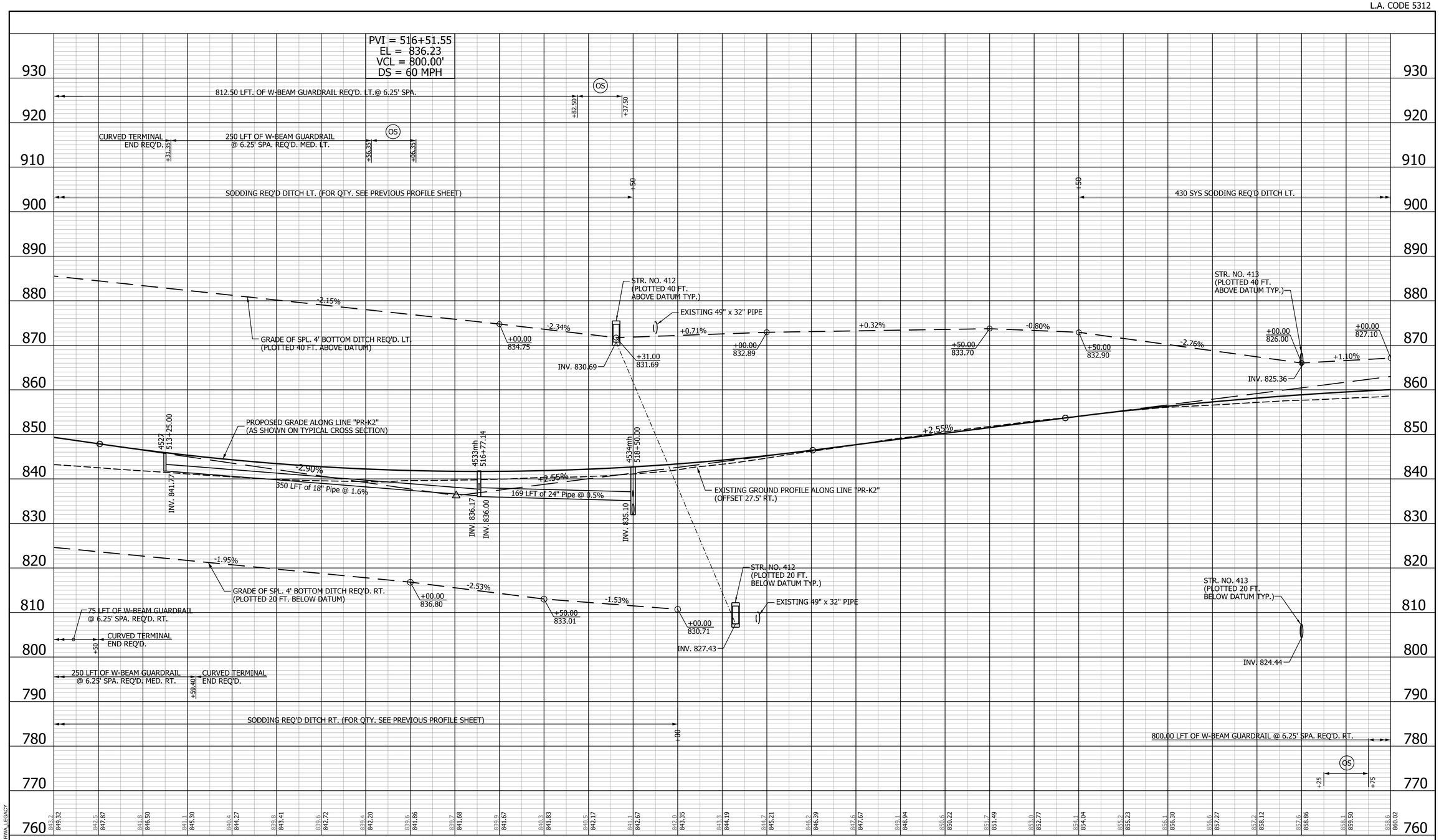
INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN
U.S. HWY 31 - LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	109 of 144
CONTRACT	PROJECT
IR-34750	0710215

4/25/2013

Model: US31 Plan-04 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-US31-PLAN-ROW.dgn



MS GUARDRAIL END TREATMENT, TYPE "MS"

OS GUARDRAIL END TREATMENT, TYPE "OS"

TGB GUARDRAIL TRANSITION, TYPE "TGB"

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: JH
CHECKED: CJS CHECKED: JLR

INDIANA DEPARTMENT OF TRANSPORTATION

PROFILE LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
1" = 10'	0900267
SURVEY BOOK	SHEET
	110 of 144
CONTRACT	PROJECT
IR-34750	0710215

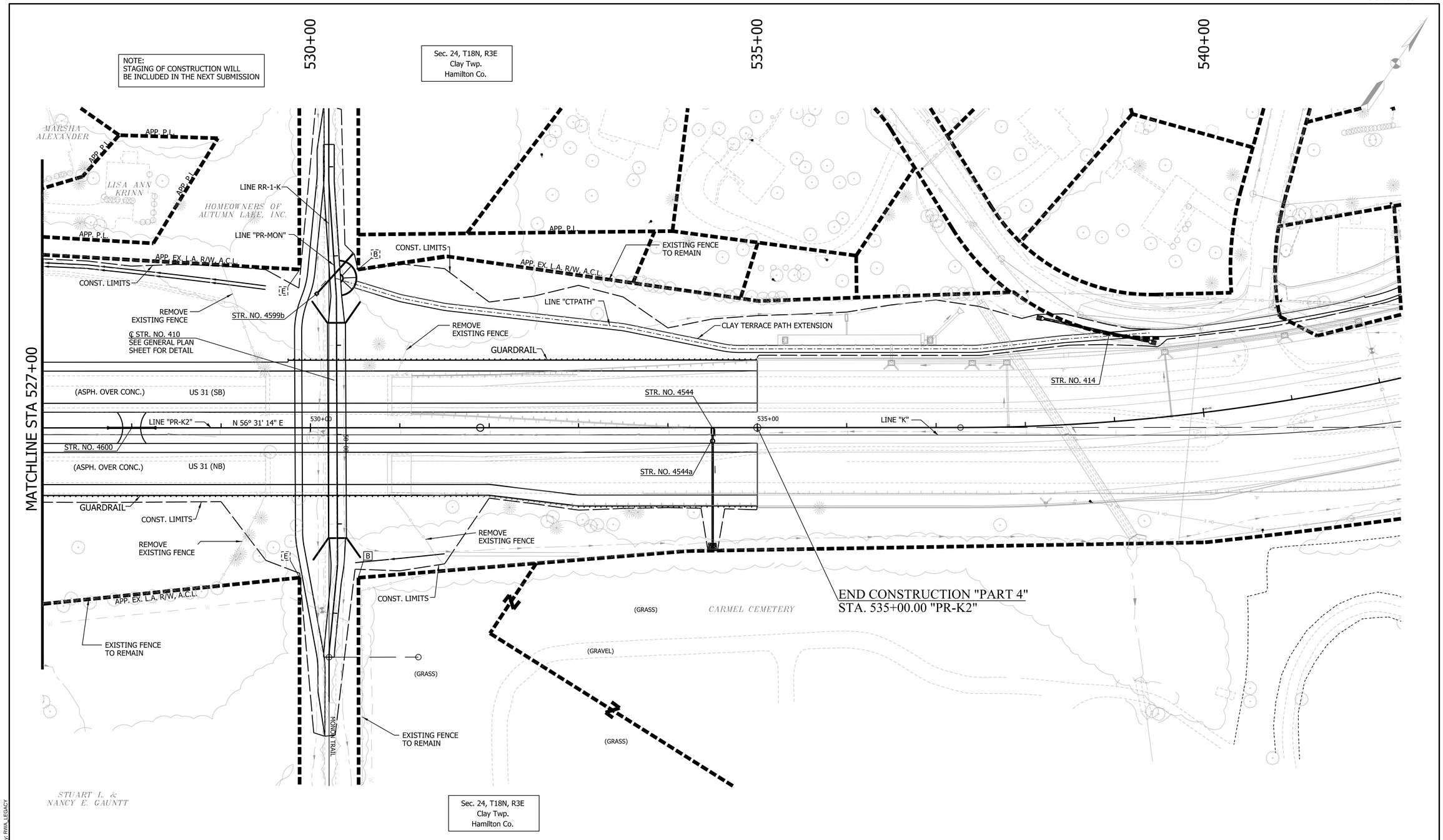
By: RWA_LEGACY

4/23/2013

Model: R-PROFILE-PRK2-4 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-136th-PROF-ROW.dgn

NOTE:
STAGING OF CONSTRUCTION WILL
BE INCLUDED IN THE NEXT SUBMISSION

Sec. 24, T18N, R3E
Clay Twp.
Hamilton Co.



ALL R/W ON THIS SHEET TO BE AS SHOWN
ALL R/W ON THIS SHEET DESCRIBED FROM LINE "PR-K2" EXCEPT AS NOTED
LIMITED ACCESS R/W TO APPLY WHERE INDICATED

B BEGIN LA R/W AND A.C.L.
E END LA R/W AND A.C.L.

SEE DES. NO. 0900269 FOR WORK NORTH OF STA. 517+00

SEE EXISTING INTERCHANGE GEOMETRICS FOR EXISTING ALIGNMENT INFORMATION.

SEE PROPOSED INTERCHANGE GEOMETRICS FOR PROPOSED ALIGNMENT INFORMATION.

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

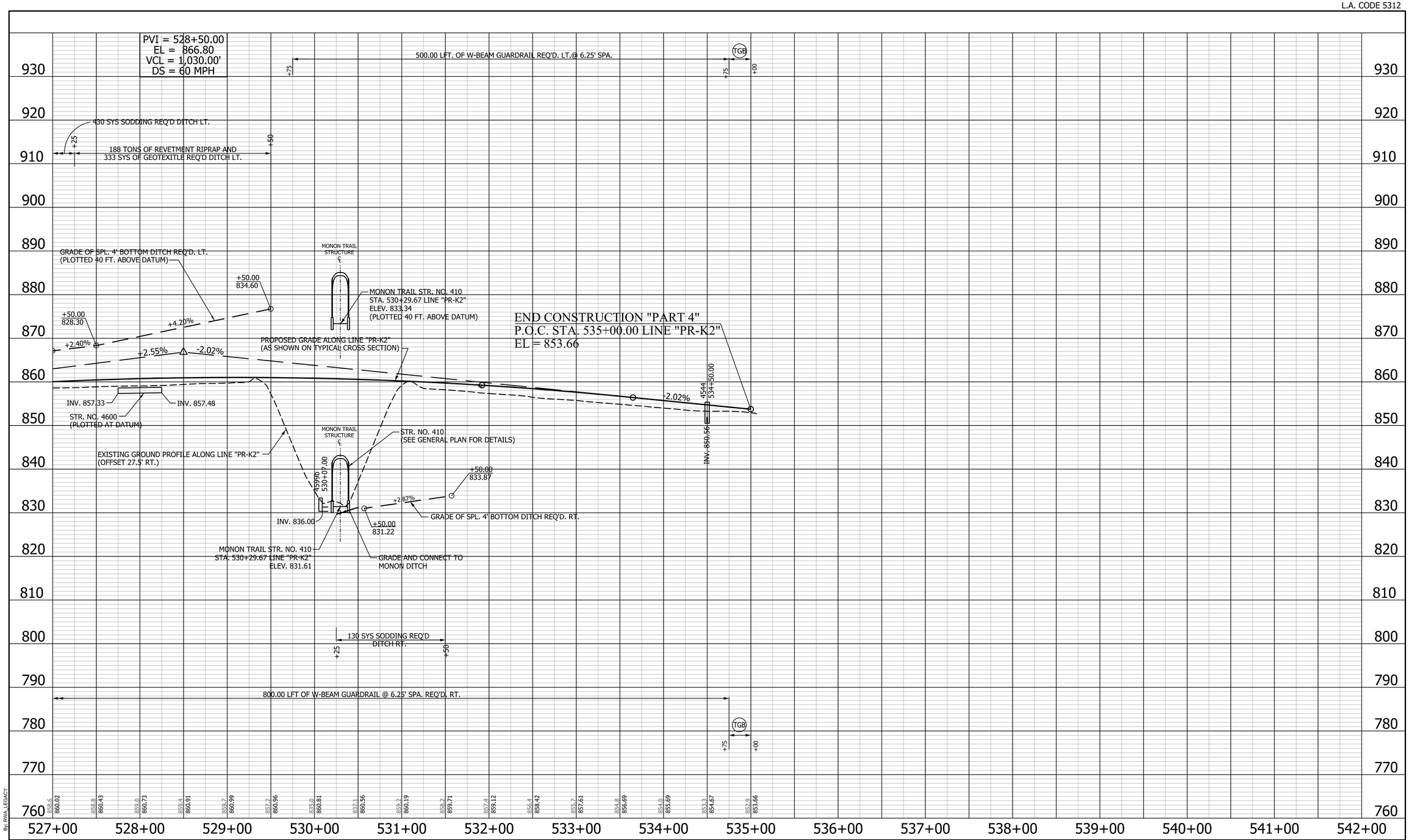
DESIGNED: CSW DRAWN: JH
CHECKED: CJS CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN
U.S. HWY 31 - LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	111 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY
4/25/2013



(MS) GUARDRAIL END TREATMENT, TYPE "MS"

(OS) GUARDRAIL END TREATMENT, TYPE "OS"

(TGB) GUARDRAIL TRANSITION, TYPE "TGB"

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW | DRAWN: JH
CHECKED: CJS | CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

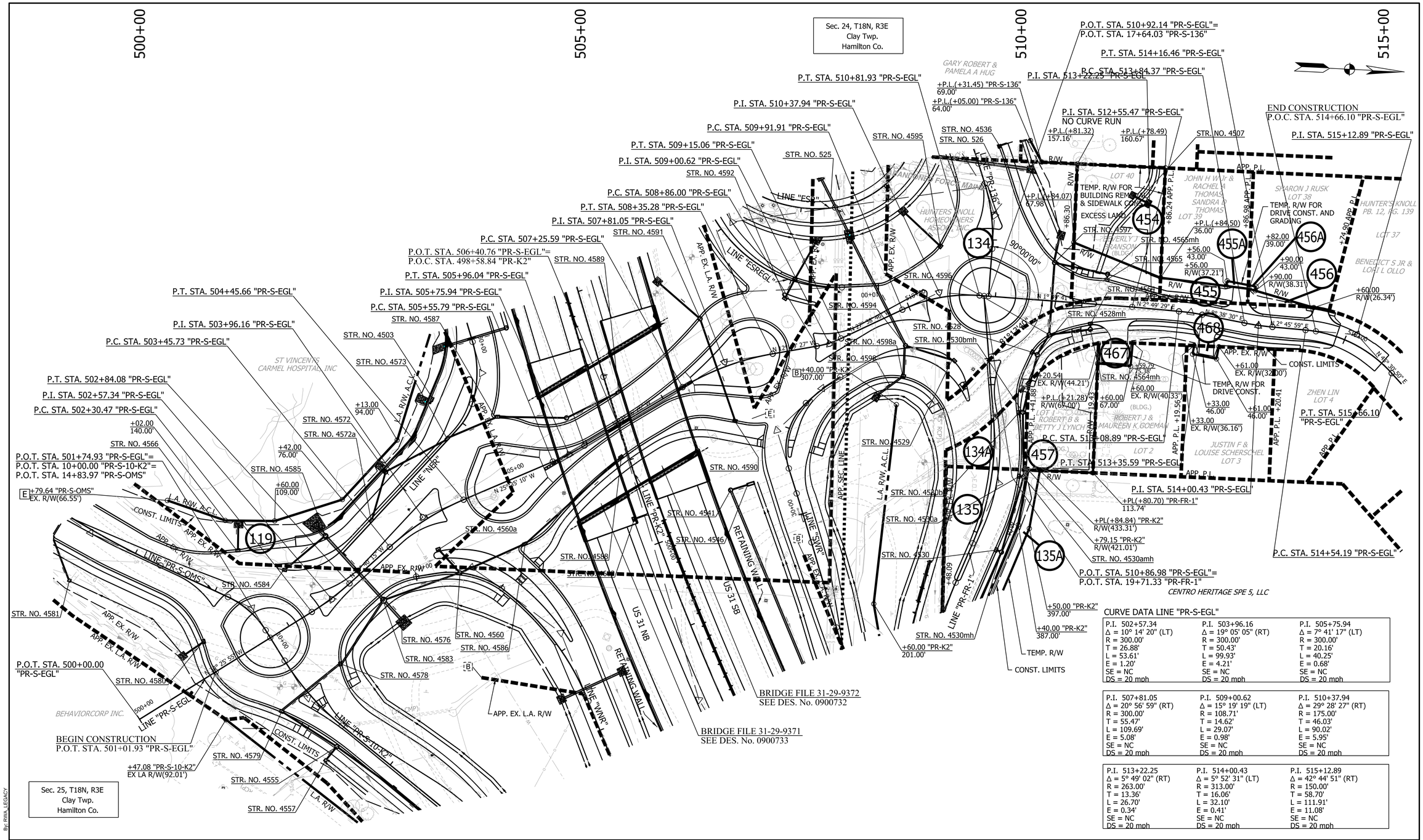
PROFILE
LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
1" = 10'	0900267
SURVEY BOOK	SHEET
	112 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY

4/23/2013

Model: R-PROFILE-PRK2-5 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-136th-PROF-ROW.dgn



CURVE DATA LINE "PR-S-EGL"

P.I. 502+57.34	P.I. 503+96.16	P.I. 505+75.94
Δ = 10° 14' 20" (LT)	Δ = 19° 05' 05" (RT)	Δ = 7° 41' 17" (LT)
R = 300.00'	R = 300.00'	R = 300.00'
T = 26.88'	T = 50.43'	T = 20.16'
L = 53.61'	L = 99.93'	L = 40.25'
E = 1.20'	E = 4.21'	E = 0.68'
SE = NC	SE = NC	SE = NC
DS = 20 mph	DS = 20 mph	DS = 20 mph

P.I. 507+81.05	P.I. 509+00.62	P.I. 510+37.94
Δ = 20° 56' 59" (RT)	Δ = 15° 19' 19" (LT)	Δ = 29° 28' 27" (RT)
R = 300.00'	R = 108.71'	R = 175.00'
T = 55.47'	T = 14.62'	T = 46.03'
L = 109.69'	L = 29.07'	L = 90.02'
E = 5.08'	E = 0.98'	E = 5.95'
SE = NC	SE = NC	SE = NC
DS = 20 mph	DS = 20 mph	DS = 20 mph

P.I. 513+22.25	P.I. 514+00.43	P.I. 515+12.89
Δ = 5° 49' 02" (RT)	Δ = 5° 52' 31" (LT)	Δ = 42° 44' 51" (RT)
R = 263.00'	R = 313.00'	R = 150.00'
T = 13.36'	T = 16.06'	T = 58.70'
L = 26.70'	L = 32.10'	L = 111.91'
E = 0.34'	E = 0.41'	E = 11.08'
SE = NC	SE = NC	SE = NC
DS = 20 mph	DS = 20 mph	DS = 20 mph

By: RWA, LEGACY

ALL R/W ON THIS SHEET TO BE AS SHOWN
ALL R/W ON THIS SHEET DESCRIBED FROM LINE "PR-S-EGL" EXCEPT AS NOTED
LIMITED ACCESS R/W TO APPLY WHERE INDICATED

B BEGIN LA R/W AND A.C.L.
E END LA R/W AND A.C.L.

SEE EXISTING INTERCHANGE GEOMETRICS FOR EXISTING ALIGNMENT INFORMATION.

SEE PROPOSED INTERCHANGE GEOMETRICS FOR PROPOSED ALIGNMENT INFORMATION.

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

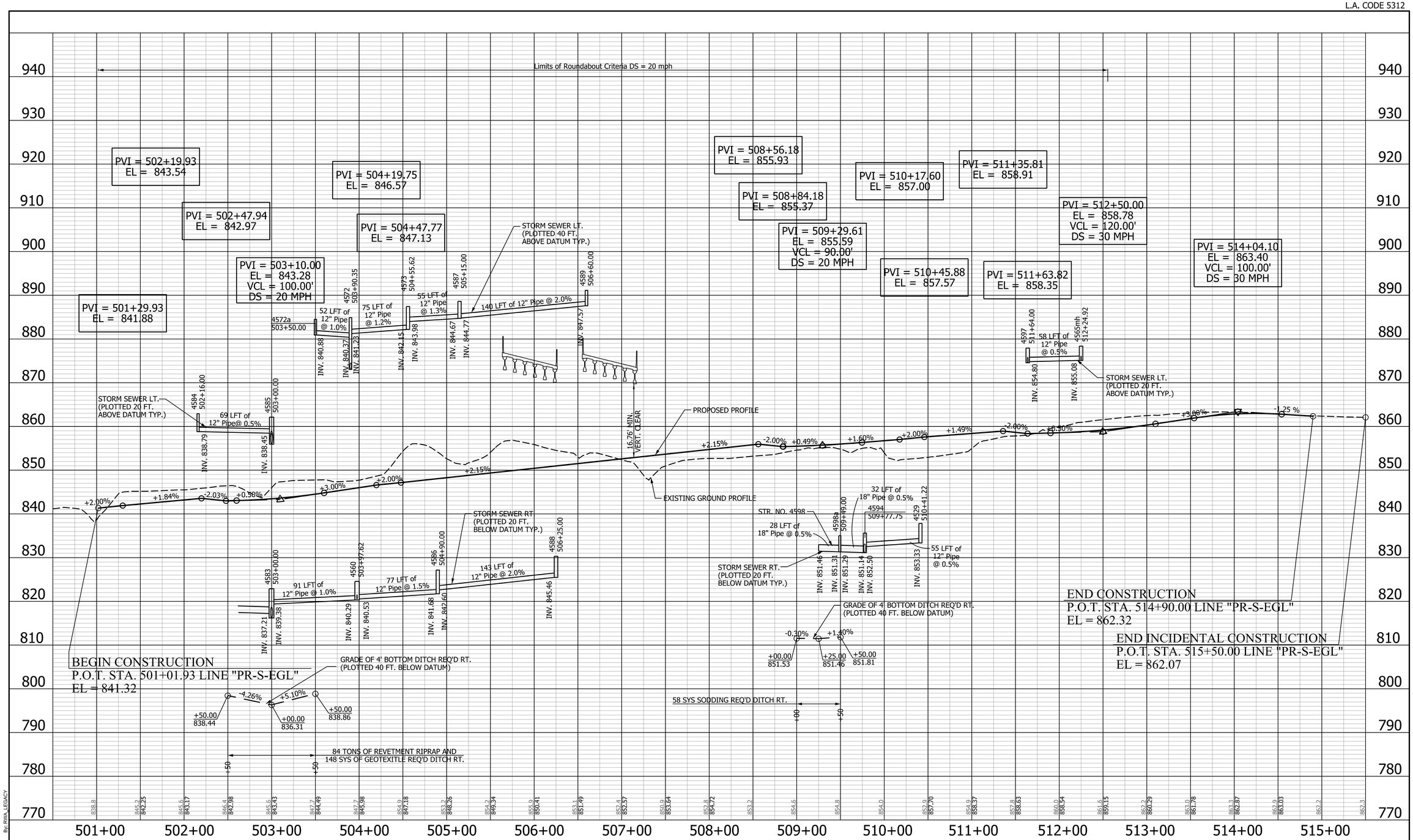
INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN
LINE "PR-S-EGL"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	113 of 144
CONTRACT	PROJECT
IR-34750	0710215

5/3/2013

Model: ELGIN-PLAN-01 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-ELGIN-PLAN-ROW.dgn



(MS) GUARDRAIL END TREATMENT, TYPE "MS"

(OS) GUARDRAIL END TREATMENT, TYPE "OS"

(TGB) GUARDRAIL TRANSITION, TYPE "TGB"

RECOMMENDED
FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW | DRAWN: JH
CHECKED: CJS | CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

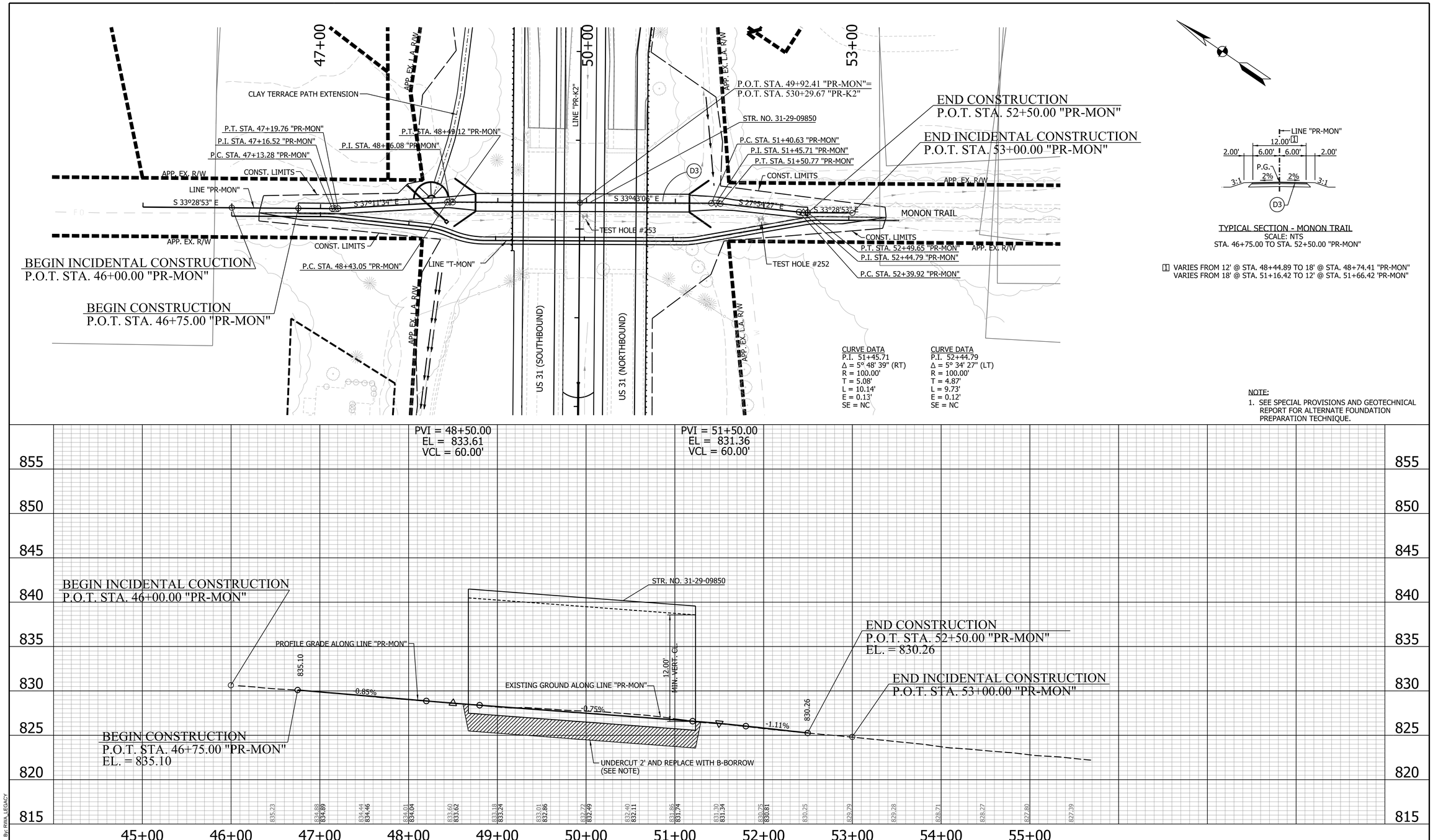
PROFILE
LINE "PR-S-EGL"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
1" = 10'	0900267
SURVEY BOOK	SHEET
	114 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY

4/23/2013

Model: R-PROFILE-PR-S-EGL Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-136th-PROF-ROW.dgn



By: RWA_LEGACY

5/3/2013

LEGEND

(D3) 140 #/SYS HMA SURFACE, TYPE A ON
240 #/SYS HMA INTERMEDIATE, TYPE A ON
6" COMPACTED AGGREGATE, NO. 53, BASE ON
SUBGRADE TREATMENT TYPE IA

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: VA DRAWN: RBA
CHECKED: CJS CHECKED: VA

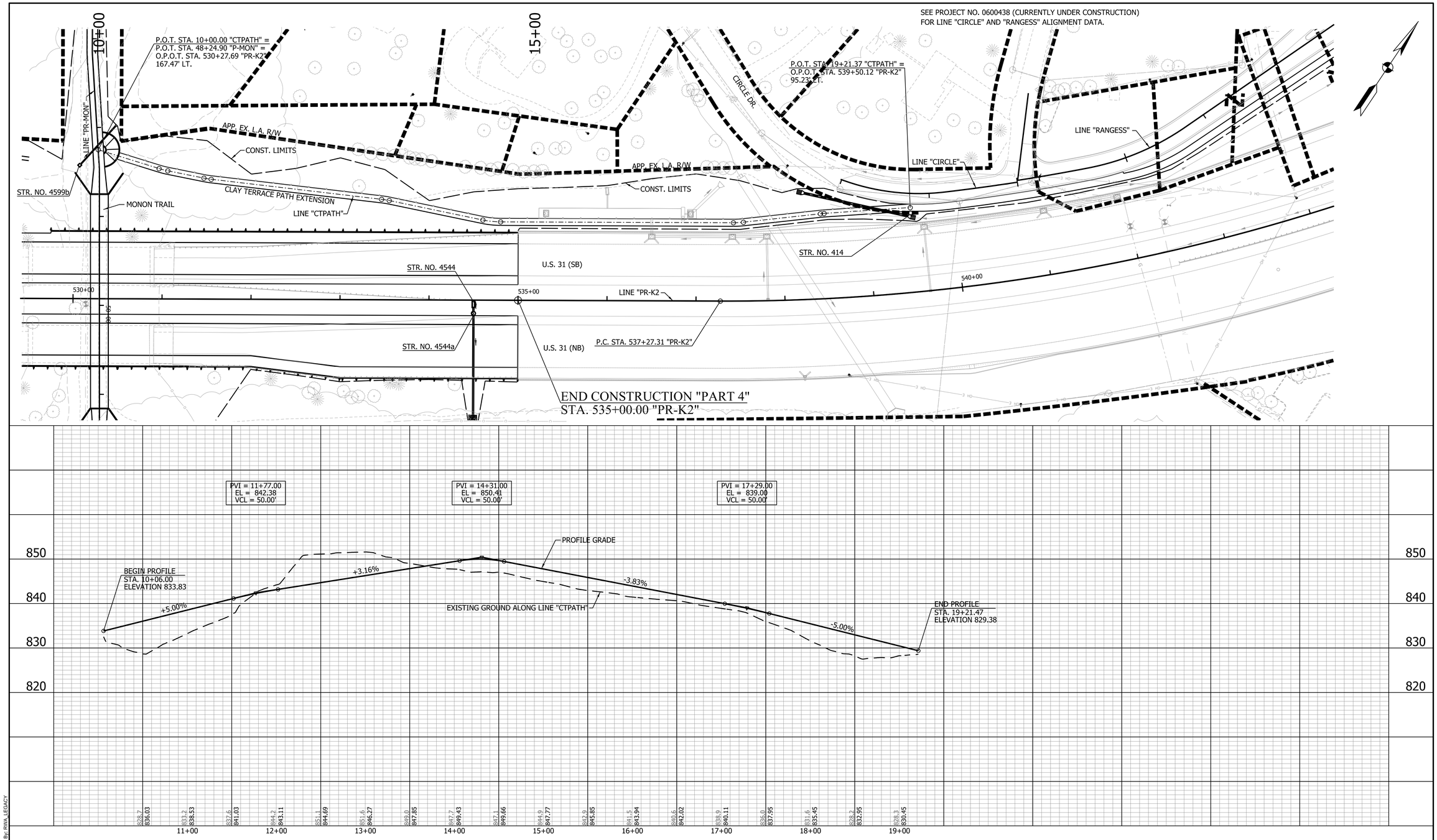
INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
LINE "PR-MON"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
1" = 5'	0900267
SURVEY BOOK	SHEET
	115 of 144
CONTRACT	PROJECT
IR-34750	0710215

Model: Monon Plan-01 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-MONON-PLAN.dgn

L.A. CODE 5312



By: RWA_LEGACY

5/3/2013

SIGNALIZATION LEGEND

- CONTROLLER AND CABINET ON CONTROLLER CABINET FOUNDATION, P1
- 36 FT. STEEL STRAIN POLE
- SPAN MOUNT JUNCTION BOX
- 30" OCTAGONAL LOOP, PREFORMED, 4 TURNS SERIES
- PREFORMED LOOP
- HANDHOLE
- 1-WAY, 3-SECTION (12 IN. RED, 12 IN. AMBER, 12 IN. GREEN) SIGNAL HEAD
- 1-WAY, 3-SECTION (12 IN. RED, 12 IN. AMBER ARROW, 12 IN. GREEN ARROW) SIGNAL HEAD
- 2 IN. GALVANIZED STEEL CONDUIT
- 1-WAY, 5-SECTION (12 IN. RED, 12 IN. AMBER, 12 IN. GREEN, 12 IN. AMBER ARROW) SIGNAL HEAD

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: JH
CHECKED: VA CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE
CLAY TERRACE PATH - LINE "CTPATH"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
1" = 10'	0900267
SURVEY BOOK	SHEET
	116 of 144
CONTRACT	PROJECT
IR-34750	0710215

Model: PNP CTP-1 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-CTPATH-PNP-ROW.dgn

L.A. CODE 5312

475+00

(GRASS)

12" RCP STORM

Sec. 26, T18N, R3E
Clay Twp.
Hamilton Co.

FRANK K. REGAN

12" RCP

12" RCP STORM

480+00

APP. EX. L.A. R/W, A.C.L.

CONST. LIMITS

RETAINING WALL 425

P.O.T. STA. 30+81.93 "ESREGL" =
O.P.O.T. STA. 478+00.14, 75.50' LT. "PR-K2"

SLOPE BREAK

LINE "ESREGL"

30+00

S 71° 02' 50" W

U.S. 31 (SB)

SLOPE BREAK

LINE "PR-K2"

N 71° 02' 50" E

+00, Str. NO. 4501
Inlet Type N-12 &
104 LFT. of 18" Pipe Req'd
& 1 P.E.S.

SLOPE BREAK

U.S. 31 (NB)

LINE "NER"

N 71° 02' 50" E

SLOPE BREAK

+99.25

MATCHLINE STA 480+00

BEGIN CONSTRUCTION "PART 4"
P.O.T. STA. 475+00.00 "PR-K2" AH=
P.O.T. STA. 475+00.00 "~~PR-K1~~" BK
SEE "PART 3" FOR WORK SOUTH OF STA. 475+00.00

P.O.T. STA. 10+81.91 "NER" =
O.P.O.T. STA. 478+00.09, 75.50' RT. "PR-K2"

CONST. LIMITS

APP. EX. L.A. R/W, A.C.L.

Sec. 26, T18N, R3E
Clay Twp.
Hamilton Co.

NORTH MERIDIAN HEIGHTS

ST VINCENT CARMEL HOSPITAL, INC.

STORM

NOTE:
1. ALL STATION AND OFFSETS ARE BASED ON ALIGNMENT "PR-K2" UNLESS OTHERWISE NOTED.
2. FOR TONS RIPRAP AND SYS GEOTEXTILE REQ'D. AT DRAINAGE STRUCTURE SPLASH PADS SEE STRUCTURE DATA TABLE.

LEGEND

- (A3) 10" PLAIN JOINTED QC/QA PCCP MAINLINE D-1 JOINTS SPACED AT 16' WITH 1 1/4" DIAMETER DOWEL BARS ON SUBBASE FOR PCCP, ON SUBGRADE TREATMENT, TYPE IA
- (K) 165 LB/SY QC/QA-HMA, 4, 70, SURFACE 9.5 MM, ON 275 LB/SY QC/QA-HMA, 4, 70, INTERMEDIATE 19.0 MM, ON 330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON 250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON 330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON SUBGRADE TREATMENT, TYPE IA
- (J) HMA/COMPOSITE SHOULDERS COMPOSED OF: 165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON 330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON 605 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON SUBBASE FOR PCCP, ON SUBGRADE TREATMENT, TYPE IA
- (10) W-BEAM GUARDRAIL
- (30) RETAINING WALL
- (J1) HMA/COMPOSITE SHOULDERS COMPOSED OF: 165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON 1210 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON SUBGRADE TREATMENT, TYPE IA
- RIPRAP OVER GEOTEXTILES

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

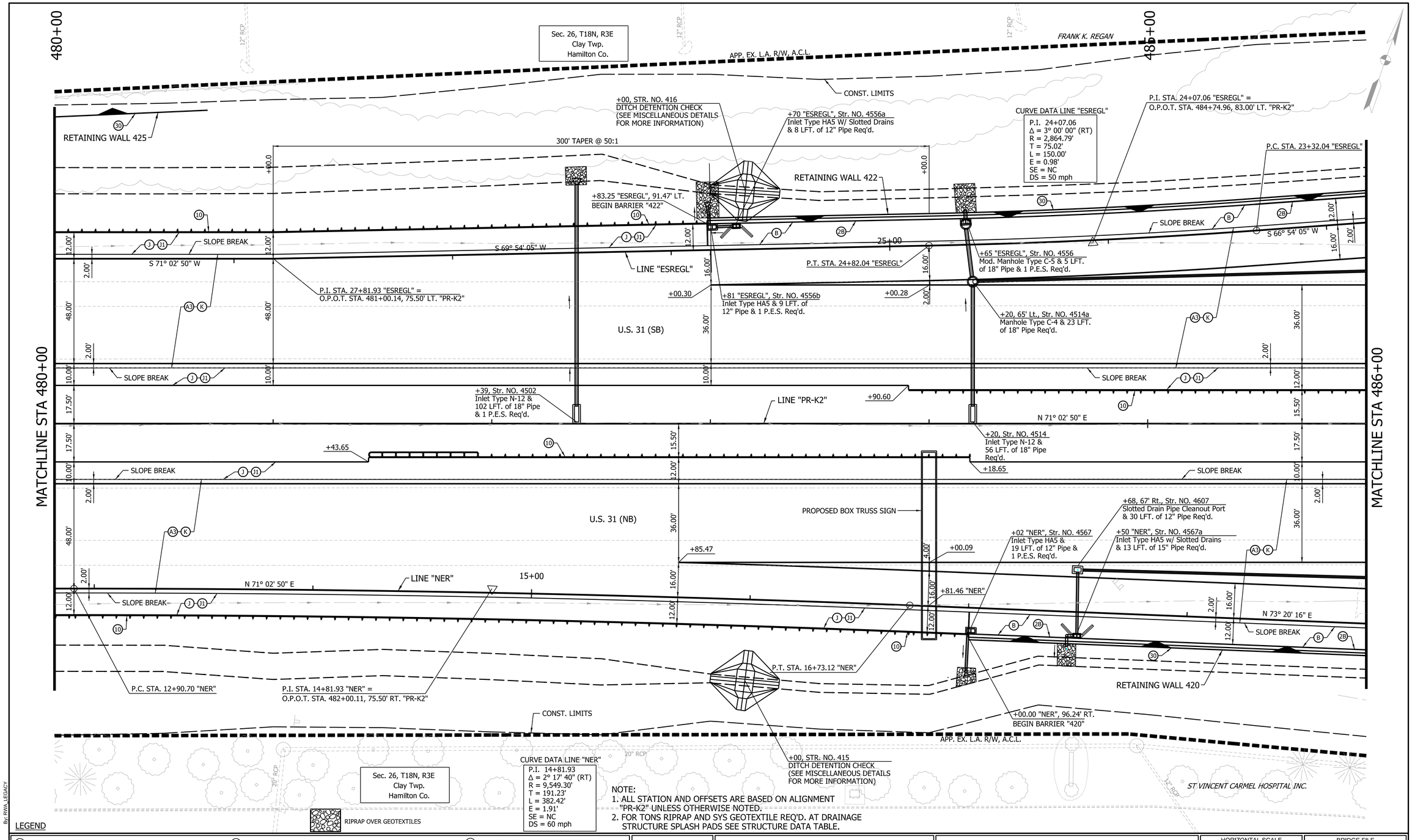
CONSTRUCTION DETAILS
U.S. HWY. 31 - LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	117 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY

5/6/2013

Model: US31 CD-01 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-US31-20-CD-ROW.dgn



NOTE:
1. ALL STATION AND OFFSETS ARE BASED ON ALIGNMENT "PR-K2" UNLESS OTHERWISE NOTED.
2. FOR TONS RIPRAP AND SYS GEOTEXTILE REQ'D. AT DRAINAGE STRUCTURE SPLASH PADS SEE STRUCTURE DATA TABLE.

LEGEND

(A3) 10" PLAIN JOINTED QC/QA PCCP MAINLINE D-1 JOINTS SPACED AT 16' WITH 1 1/4" DIAMETER DOWEL BARS ON SUBBASE FOR PCCP, ON SUBGRADE TREATMENT, TYPE IA

(K) 165 LB/SY QC/QA-HMA, 4, 70, SURFACE 9.5 MM, ON 275 LB/SY QC/QA-HMA, 4, 70, INTERMEDIATE 19.0 MM, ON 330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON 250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON 330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON SUBGRADE TREATMENT, TYPE IA

(J) HMA/COMPOSITE SHOULDERS COMPOSED OF: 165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON 330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON 605 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON SUBBASE FOR PCCP, ON SUBGRADE TREATMENT, TYPE IA

(B) R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8

(2B) BRIDGE RAILING, TYPE FT

(J1) HMA/COMPOSITE SHOULDERS COMPOSED OF: 165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON 1210 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON SUBGRADE TREATMENT, TYPE IA

(10) W-BEAM GUARDRAIL

(30) RETAINING WALL

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

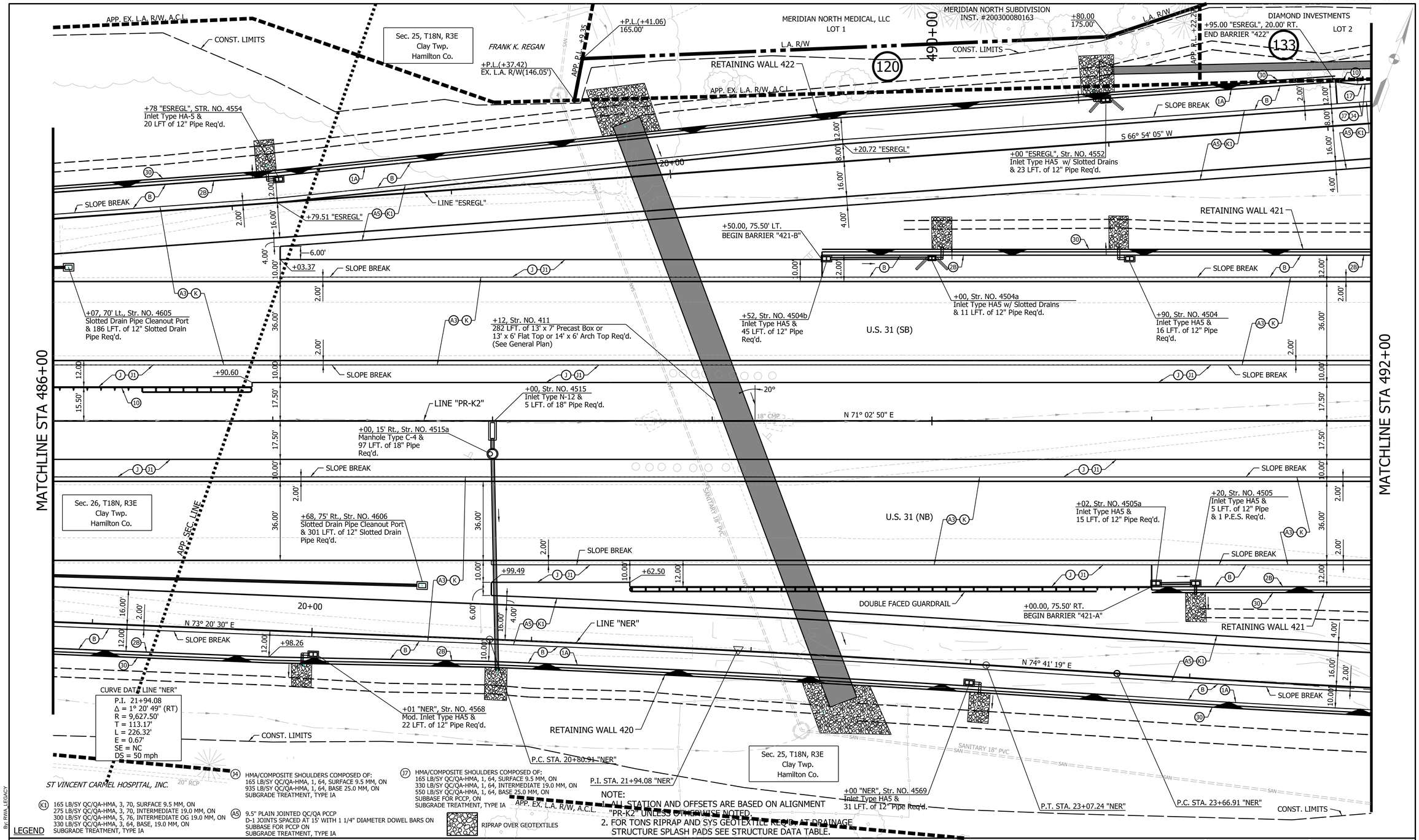
INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
U.S. HWY. 31 - LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	118 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY
5/6/2013
Model: US31 CD-02
Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-US31-20-CD-ROW.dgn

L.A. CODE 5312



LEGEND

- (A3) 10" PLAIN JOINTED QC/QA PCCP MAINLINE
  D-1 JOINTS SPACED AT 16' WITH 1 1/4" DIAMETER DOWEL BARS ON
  SUBBASE FOR PCCP, ON
  SUBGRADE TREATMENT, TYPE IA
- (K) 165 LB/SY QC/QA-HMA, 4, 70, SURFACE 9.5 MM, ON
  275 LB/SY QC/QA-HMA, 4, 70, INTERMEDIATE 19.0 MM, ON
  330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
  250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
  330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
  SUBGRADE TREATMENT, TYPE IA
- (K1) 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON
  275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON
  300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
  330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
  SUBGRADE TREATMENT, TYPE IA
- (A5) 9.5" PLAIN JOINTED QC/QA PCCP
  D-1 JOINTS SPACED AT 15' WITH 1 1/4" DIAMETER DOWEL BARS ON
  SUBBASE FOR PCCP ON
  SUBGRADE TREATMENT, TYPE IA
- (J) HMA/COMPOSITE SHOULDERS COMPOSED OF:
  165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
  330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
  605 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
  SUBBASE FOR PCCP, ON
  SUBGRADE TREATMENT, TYPE IA
- (J1) HMA/COMPOSITE SHOULDERS COMPOSED OF:
  165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
  1210 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
  SUBGRADE TREATMENT, TYPE IA
- (J4) HMA/COMPOSITE SHOULDERS COMPOSED OF:
  165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
  935 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
  SUBGRADE TREATMENT, TYPE IA
- (J7) HMA/COMPOSITE SHOULDERS COMPOSED OF:
  165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
  330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
  550 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
  SUBBASE FOR PCCP, ON
  SUBGRADE TREATMENT, TYPE IA
- RIPRAP OVER GEOTEXTILES
- (B) R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8
- (1A) BRIDGE RAILING, TYPE FC
- (2B) BRIDGE RAILING, TYPE FT
- (10) W-BEAM GUARDRAIL
- (17) ROLLED CURB
- (30) RETAINING WALL

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER 05/01/2013 DATE

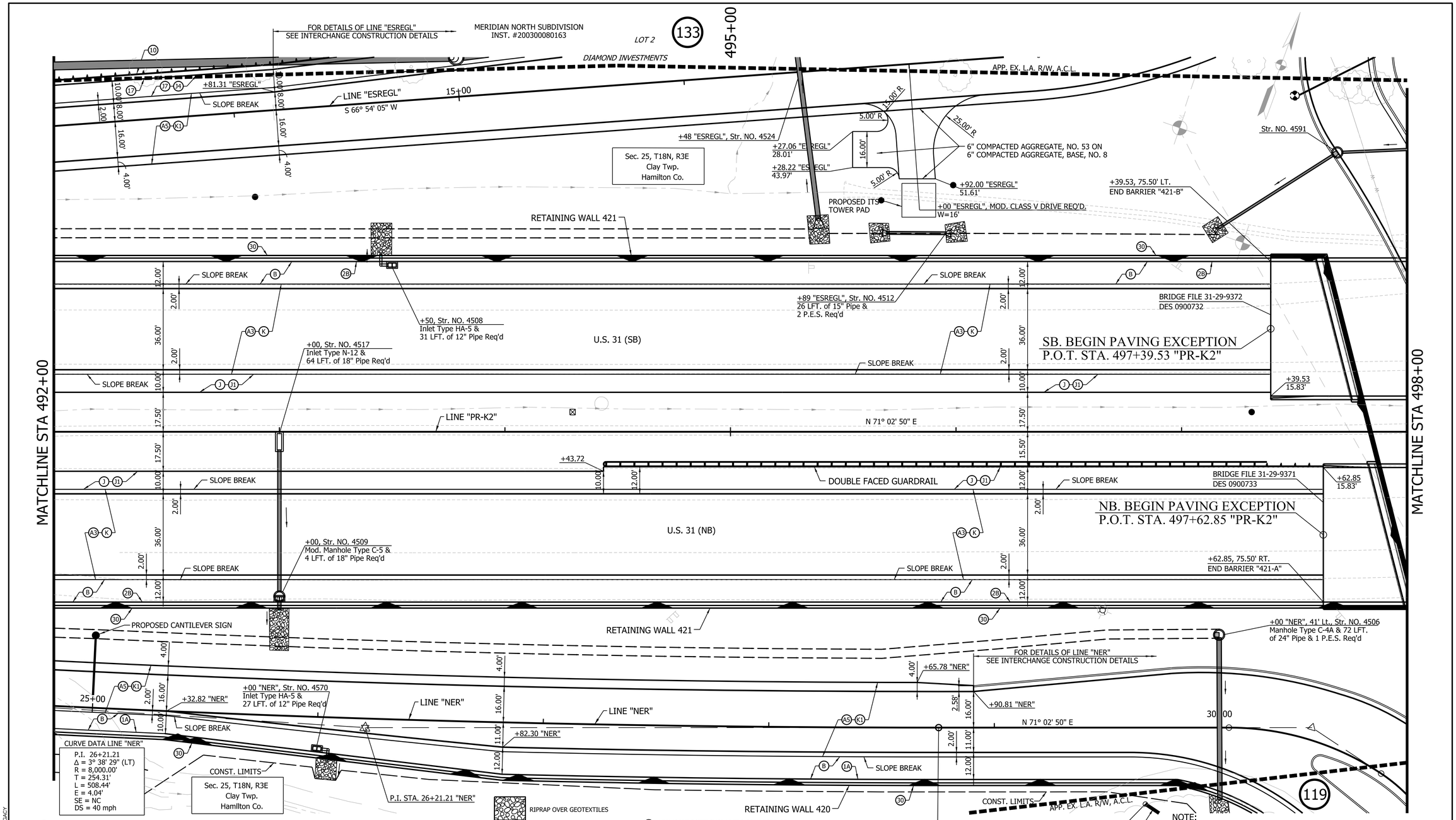
DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
U.S. HWY. 31 - LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	119 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY
5/6/2013
Model: US31 CD-03
Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-US31-20-CD-ROW.dgn



NOTE:
1. ALL STATION AND OFFSETS ARE BASED ON ALIGNMENT "PR-K2" UNLESS OTHERWISE NOTED.
2. FOR TONS RIPRAP AND SYS GEOTEXTILE REQ'D. AT DRAINAGE STRUCTURE SPLASH PADS SEE STRUCTURE DATA TABLE.

LEGEND

(K1) 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON
300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(A5) 9.5" PLAIN JOINTED QC/QA PCCP
D-1 JOINTS SPACED AT 15' WITH 1 1/4" DIAMETER DOWEL BARS ON
SUBBASE FOR PCCP ON
SUBGRADE TREATMENT, TYPE IA

(J4) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
935 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(J7) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
550 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(A3) 10" PLAIN JOINTED QC/QA PCCP MAINLINE
D-1 JOINTS SPACED AT 16' WITH 1 1/4" DIAMETER DOWEL BARS ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(K) 165 LB/SY QC/QA-HMA, 4, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 4, 70, INTERMEDIATE 19.0 MM, ON
330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(J) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
605 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(J1) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
1210 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(B) R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8
(1A) BRIDGE RAILING, TYPE FC
(2B) BRIDGE RAILING, TYPE FT
(10) W-BEAM GUARDRAIL
(17) ROLLED CURB
(30) RETAINING WALL

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

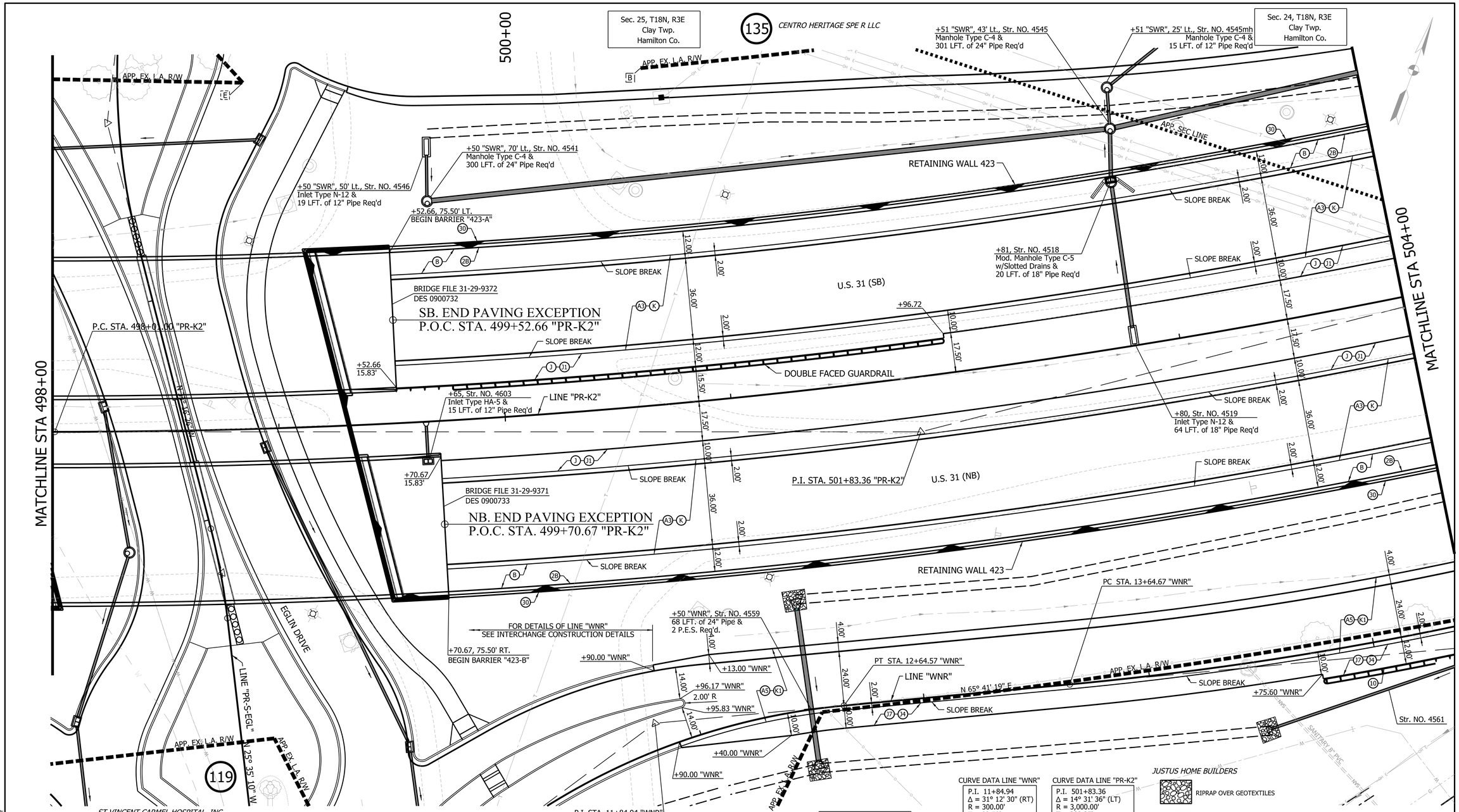
DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
U.S. HWY. 31 - LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	120 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RVA_LEGACY
5/6/2013
Model: US31 CD-04
Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-US31-20-CD-ROW.dgn



CURVE DATA LINE "WNR"

P.I. 11+84.94
Δ = 31° 12' 30" (RT)
R = 300.00'
T = 83.79'
L = 163.41'
E = 11.48'
SE = NC
DS = 20 mph

CURVE DATA LINE "PR-K2"

P.I. 501+83.36
Δ = 14° 31' 36" (LT)
R = 3,000.00'
T = 382.35'
L = 760.61'
E = 24.27'
SE = 4.95%
DS = 60 mph

Sec. 25, T18N, R3E
Clay Twp.
Hamilton Co.

NOTE:
1. ALL STATION AND OFFSETS ARE BASED ON ALIGNMENT "PR-K2" UNLESS OTHERWISE NOTED.
2. FOR TONS RIPRAP AND SYS GEOTEXTILE REQ'D. AT DRAINAGE STRUCTURE SPLASH PADS SEE STRUCTURE DATA TABLE.

LEGEND

(K1) 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON
300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(A5) 9.5" PLAIN JOINTED QC/QA PCCP
D-1 JOINTS SPACED AT 15' WITH 1 1/4" DIAMETER DOWEL BARS ON
SUBBASE FOR PCCP ON
SUBGRADE TREATMENT, TYPE IA

(J4) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
935 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(J7) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
550 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(A3) 10" PLAIN JOINTED QC/QA PCCP MAINLINE
D-1 JOINTS SPACED AT 16' WITH 1 1/4" DIAMETER DOWEL BARS ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(K) 165 LB/SY QC/QA-HMA, 4, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 4, 70, INTERMEDIATE 19.0 MM, ON
330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(J) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
605 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(J1) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
1210 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(B) R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8
(1A) BRIDGE RAILING, TYPE FC
(2B) BRIDGE RAILING, TYPE FT
(10) W-BEAM GUARDRAIL
(30) RETAINING WALL

RECOMMENDED FOR APPROVAL 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
U.S. HWY. 31 - LINE "PR-K2"

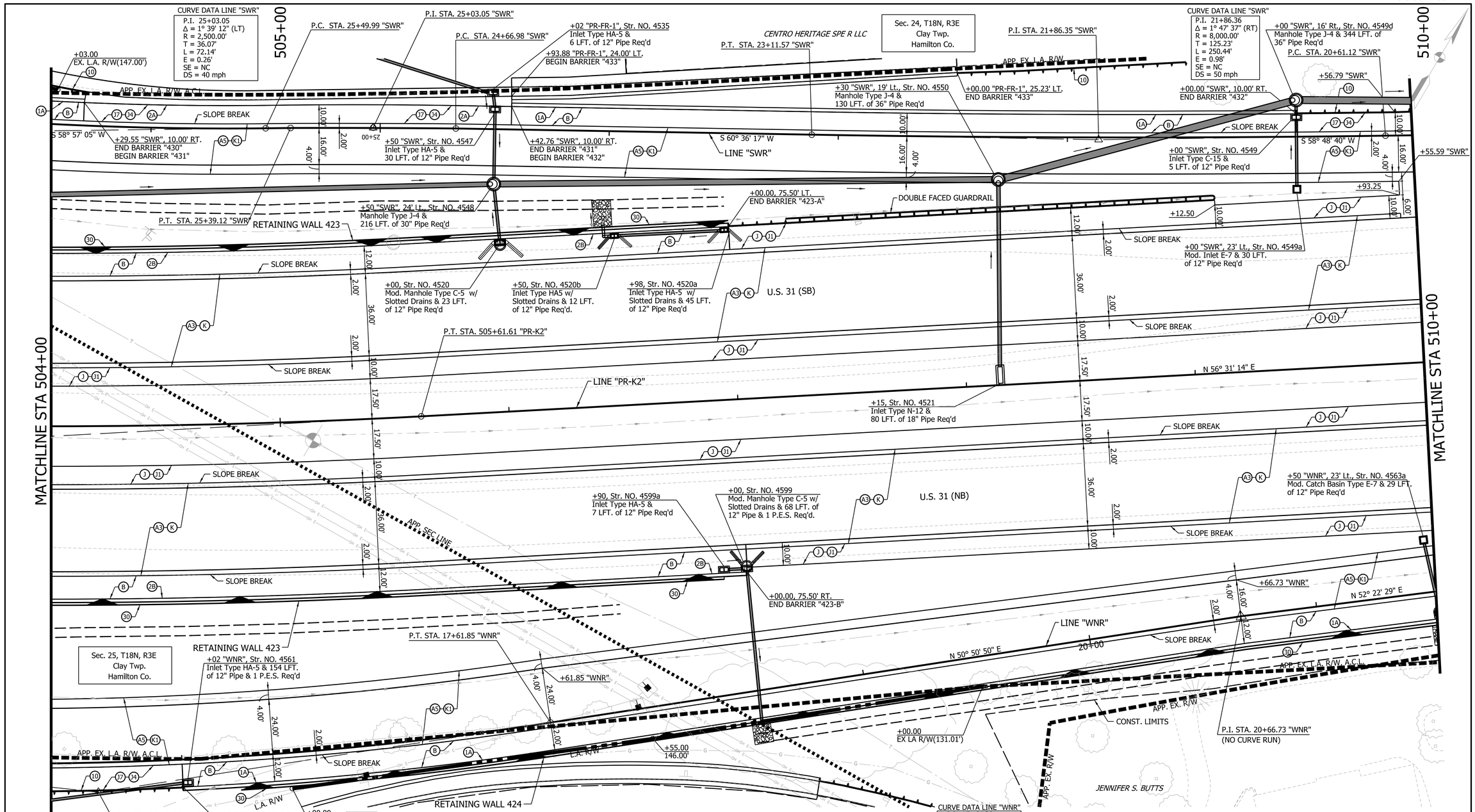
HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	121 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA, LEGACY

05/2013

Model: US31 CD-05 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-US31-20-CD-ROW.dgn

L.A. CODE 5312



RIPRAP OVER GEOTEXTILES

NOTE:
1. ALL STATION AND OFFSETS ARE BASED ON ALIGNMENT "PR-K2" UNLESS OTHERWISE NOTED.
2. FOR TONS RIPRAP AND SYS GEOTEXTILE REQ'D. AT DRAINAGE STRUCTURE SPLASH PADS SEE STRUCTURE DATA TABLE.

LEGEND

(K1) 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON
300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(A5) 9.5" PLAIN JOINTED QC/QA PCCP
D-1 JOINTS SPACED AT 15' WITH 1 1/4" DIAMETER DOWEL BARS ON
SUBBASE FOR PCCP ON
SUBGRADE TREATMENT, TYPE IA

(J4) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
935 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(J7) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
550 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(A3) 10" PLAIN JOINTED QC/QA PCCP MAINLINE
D-1 JOINTS SPACED AT 16' WITH 1 1/4" DIAMETER DOWEL BARS ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(K) 165 LB/SY QC/QA-HMA, 4, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 4, 70, INTERMEDIATE 19.0 MM, ON
330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(J) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
605 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(J1) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
1210 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(B) R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8
(1A) BRIDGE RAILING, TYPE FC
(2A) MODIFIED CONCRETE BARRIER
(2B) BRIDGE RAILING, TYPE FT
(10) W-BEAM GUARDRAIL
(30) RETAINING WALL

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

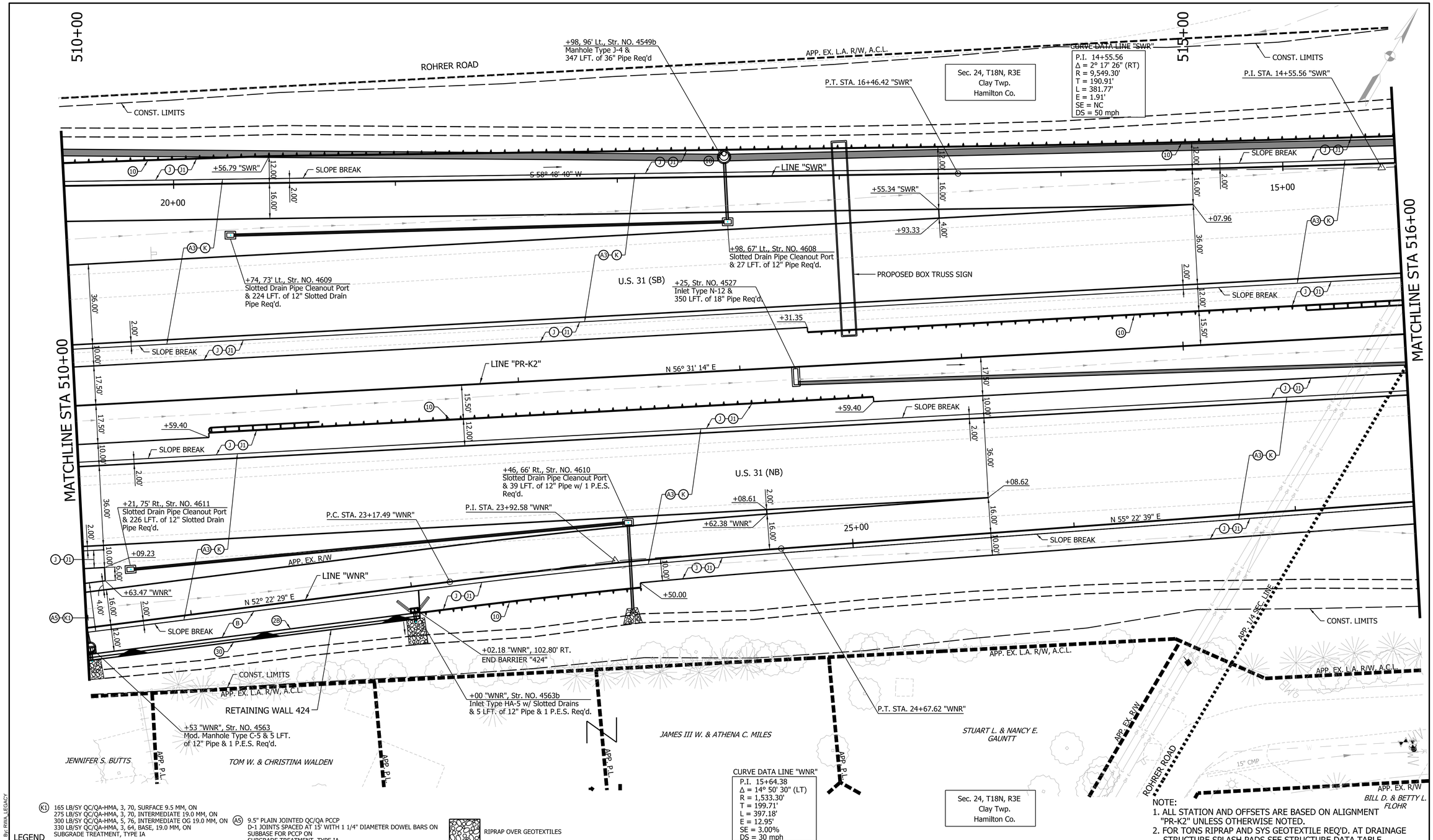
INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
U.S. HWY. 31 - LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	122 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RVA_LEGACY
05/2013
Model: US31 CD-06
Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-US31-20-CD-ROW.dgn

L.A. CODE 5312



NOTE:
1. ALL STATION AND OFFSETS ARE BASED ON ALIGNMENT "PR-K2" UNLESS OTHERWISE NOTED.
2. FOR TONS RIPRAP AND SYS GEOTEXTILE REQ'D. AT DRAINAGE STRUCTURE SPLASH PADS SEE STRUCTURE DATA TABLE.

LEGEND

(K1) 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON
300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(A5) 9.5" PLAIN JOINTED QC/QA PCCP
D-1 JOINTS SPACED AT 15' WITH 1 1/4" DIAMETER DOWEL BARS ON
SUBBASE FOR PCCP ON
SUBGRADE TREATMENT, TYPE IA

RIPRAP OVER GEOTEXTILES

(A3) 10" PLAIN JOINTED QC/QA PCCP MAINLINE
D-1 JOINTS SPACED AT 16' WITH 1 1/4" DIAMETER DOWEL BARS ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(K) 165 LB/SY QC/QA-HMA, 4, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 4, 70, INTERMEDIATE 19.0 MM, ON
330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(J) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
605 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(J1) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
1210 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(B) R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8
(2B) BRIDGE RAILING, TYPE FT
(10) W-BEAM GUARDRAIL
(30) RETAINING WALL

RECOMMENDED
FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

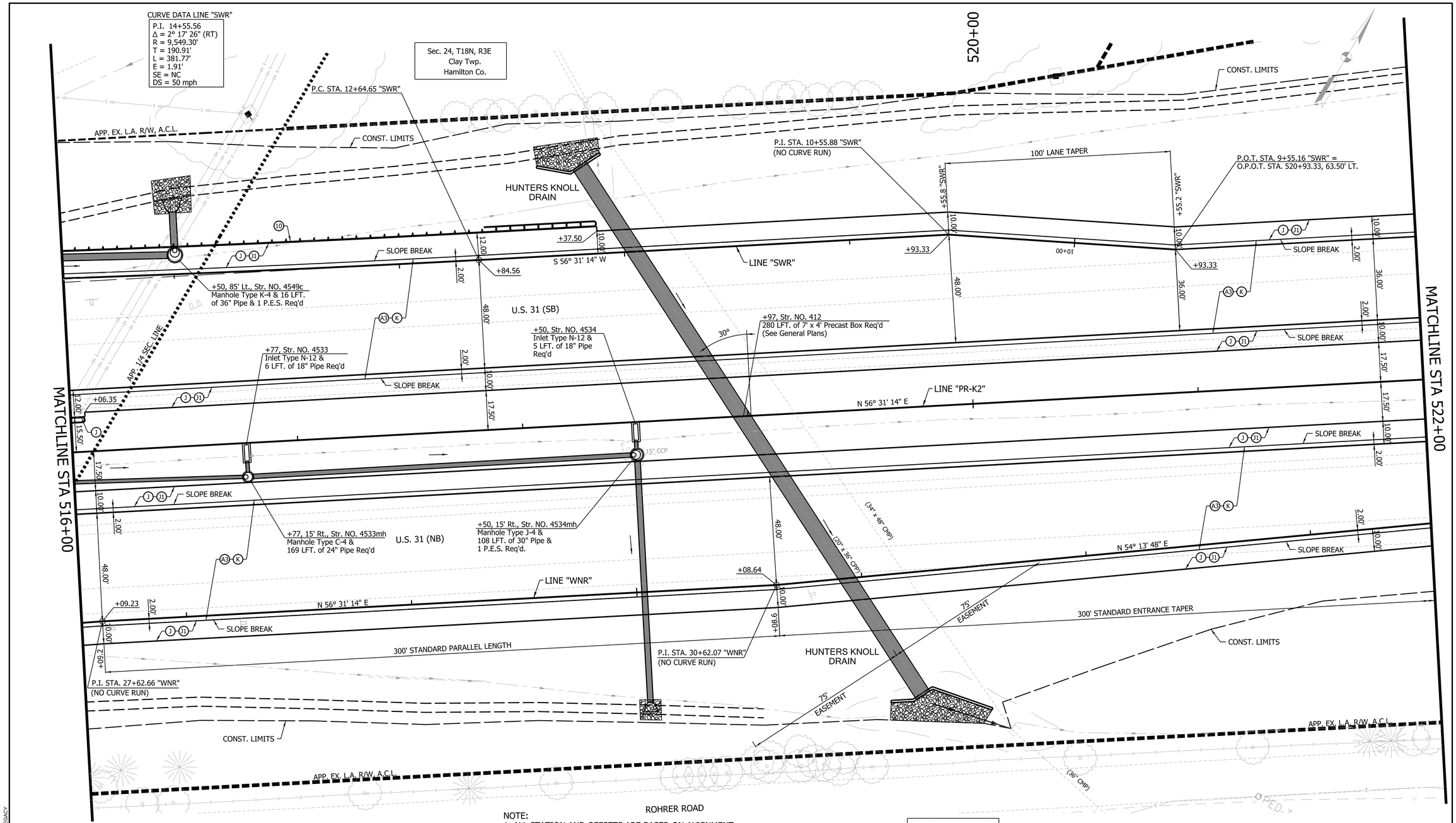
INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
U.S. HWY. 31 - LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	123 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY
5/6/2013
Model: US31 CD-07
Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-US31-20-CD-ROW.dgn

L.A. CODE 5312



NOTE:
1. ALL STATION AND OFFSETS ARE BASED ON ALIGNMENT "PR-K2" UNLESS OTHERWISE NOTED.
2. FOR TONS RIPRAP AND SYS GEOTEXTILE REQ'D. AT DRAINAGE STRUCTURE SPLASH PADS SEE STRUCTURE DATA TABLE.

LEGEND

(A3) 10" PLAIN JOINTED QC/QA PCCP MAINLINE
D-1 JOINTS SPACED AT 16' WITH 1 1/4" DIAMETER DOWEL BARS ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(K) 165 LB/SY QC/QA-HMA, 4, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 4, 70, INTERMEDIATE 19.0 MM, ON
330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(J) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
605 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(J1) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
1210 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(10) W-BEAM GUARDRAIL

RIPRAP OVER GEOTEXTILES

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

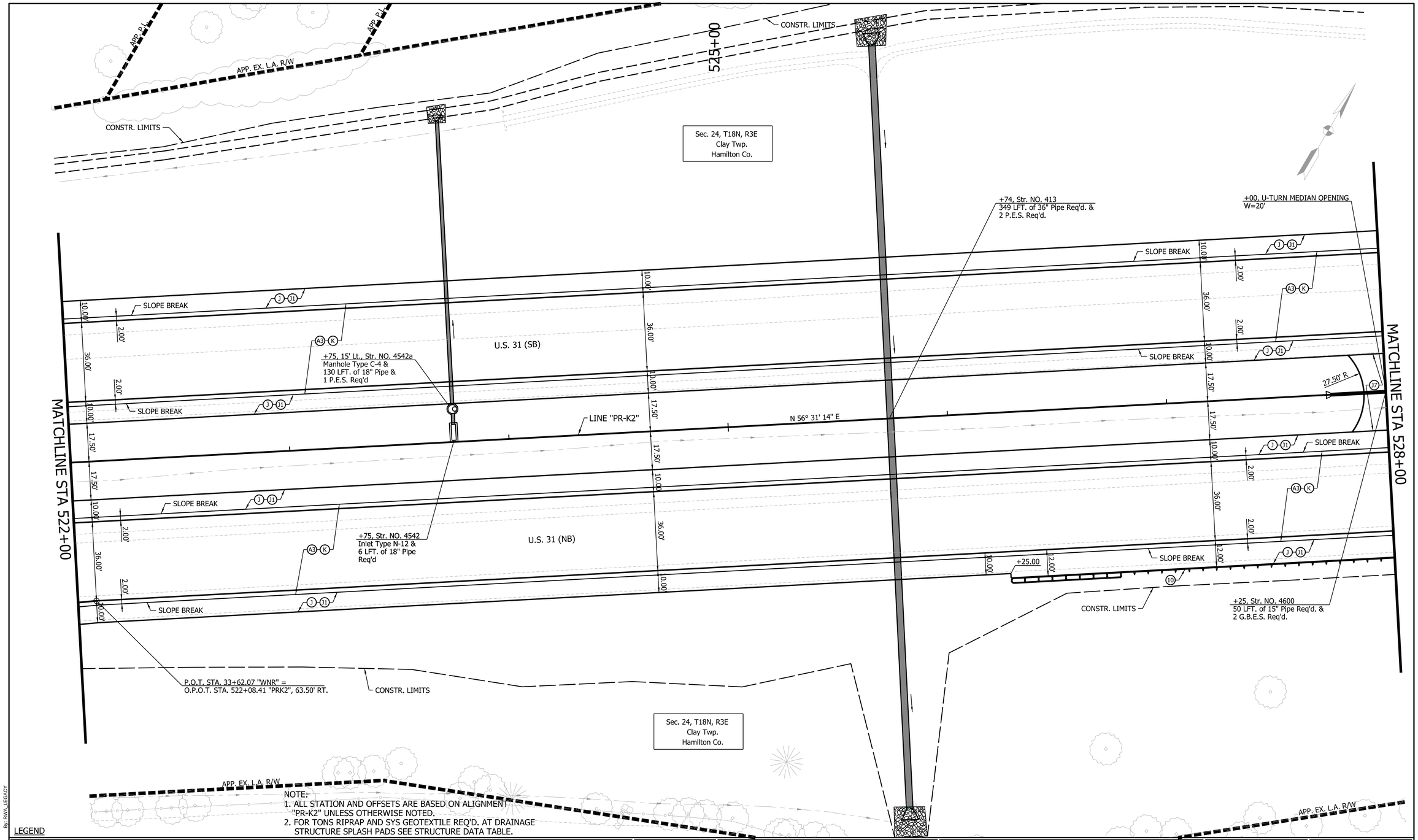
CONSTRUCTION DETAILS
U.S. HWY. 31 - LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	124 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY
5/6/2013

Model: US31 CD-08 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-US31-20-CD-ROW.dgn

L.A. CODE 5312



NOTE:
1. ALL STATION AND OFFSETS ARE BASED ON ALIGNMENT "PR-K2" UNLESS OTHERWISE NOTED.
2. FOR TONS RIPRAP AND SYS GEOTEXTILE REQ'D. AT DRAINAGE STRUCTURE SPLASH PADS SEE STRUCTURE DATA TABLE.

LEGEND

(A3) 10" PLAIN JOINTED QC/QA PCCP MAINLINE
D-1 JOINTS SPACED AT 16' WITH 1 1/4" DIAMETER DOWEL BARS ON SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(K) 165 LB/SY QC/QA-HMA, 4, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 4, 70, INTERMEDIATE 19.0 MM, ON
330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(J) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
605 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(J1) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
1210 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(10) W-BEAM GUARDRAIL

(J7) U-TURN MEDIAN OPENING
165 LB/SY HMA SURFACE, TYPE A ON
495 LB/SY HMA INTERMEDIATE, TYPE A

RIPRAP OVER GEOTEXTILES

RECOMMENDED
FOR APPROVAL 05/01/2013
DESIGN ENGINEER DATE

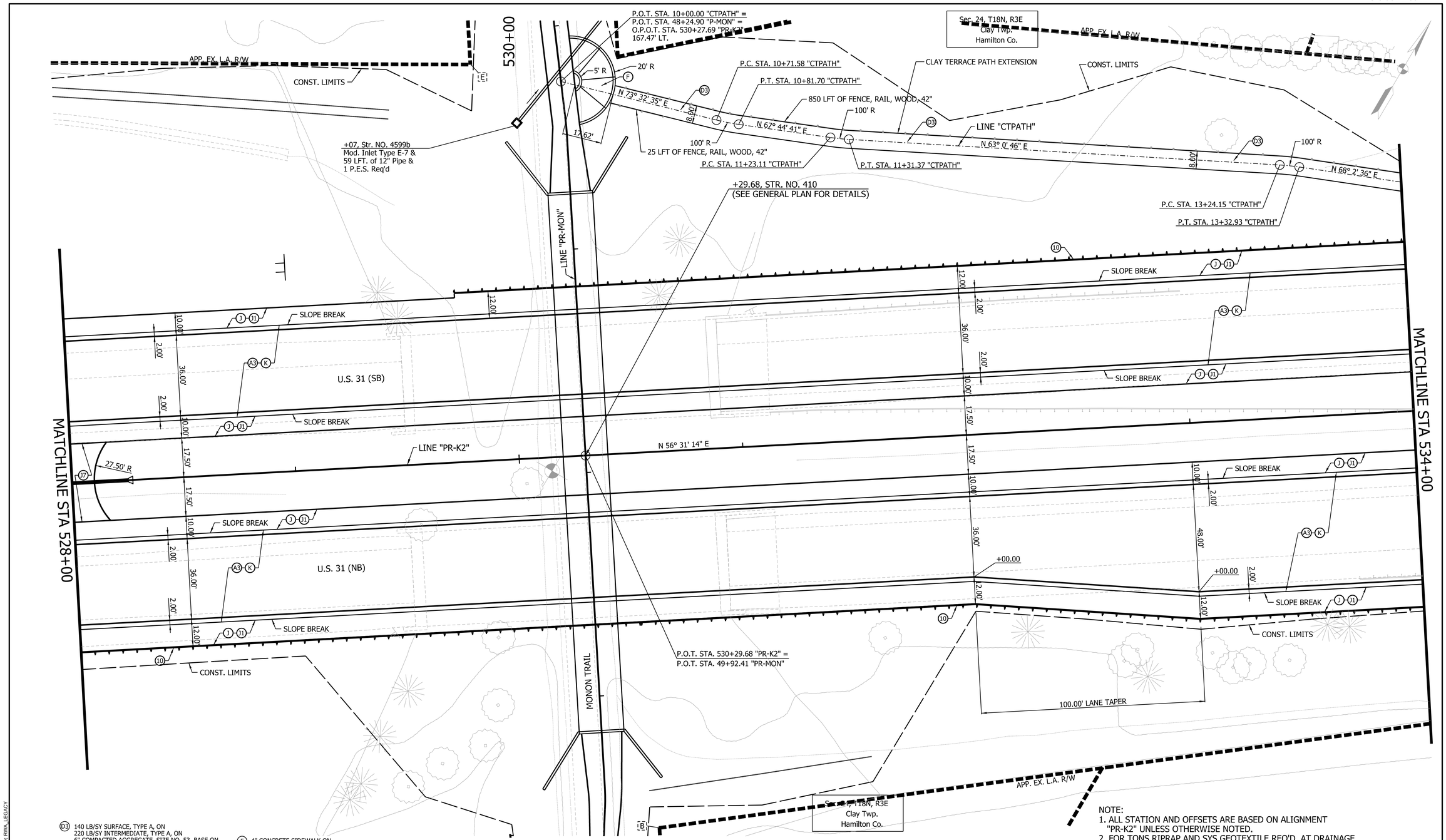
DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
U.S. HWY. 31 - LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	125 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY
5/6/2013
Model: US31 CD-09
Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-US31-20-CD-ROW.dgn



NOTE:
1. ALL STATION AND OFFSETS ARE BASED ON ALIGNMENT "PR-K2" UNLESS OTHERWISE NOTED.
2. FOR TONS RIPRAP AND SYS GEOTEXTILE REQ'D. AT DRAINAGE STRUCTURE SPLASH PADS SEE STRUCTURE DATA TABLE.

LEGEND

- (D3) 140 LB/SY SURFACE, TYPE A, ON 220 LB/SY INTERMEDIATE, TYPE A, ON 6" COMPACTED AGGREGATE, SIZE NO. 53, BASE ON SUBGRADE TREATMENT, TYPE IA
- (F) 4" CONCRETE SIDEWALK ON 6" COMPACTED AGGREGATE, NO. 53
- (A3) 10" PLAIN JOINTED QC/QA PCCP MAINLINE D-1 JOINTS SPACED AT 16' WITH 1 1/4" DIAMETER DOWEL BARS ON SUBBASE FOR PCCP, ON SUBGRADE TREATMENT, TYPE IA
- (K) 165 LB/SY QC/QA-HMA, 4, 70, SURFACE 9.5 MM, ON 275 LB/SY QC/QA-HMA, 4, 70, INTERMEDIATE 19.0 MM, ON 330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON 250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON 330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON SUBGRADE TREATMENT, TYPE IA
- (J) HMA/COMPOSITE SHOULDERS COMPOSED OF: 165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON 330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON 605 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON SUBBASE FOR PCCP, ON SUBGRADE TREATMENT, TYPE IA
- (J1) HMA/COMPOSITE SHOULDERS COMPOSED OF: 165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON 1210 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON SUBGRADE TREATMENT, TYPE IA
- (10) W-BEAM GUARDRAIL
- (J7) U-TURN MEDIAN OPENING 165 LB/SY HMA SURFACE, TYPE A ON 495 LB/SY HMA INTERMEDIATE, TYPE A
- RIPRAP OVER GEOTEXTILES

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW | DRAWN: RBA
CHECKED: CJS | CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

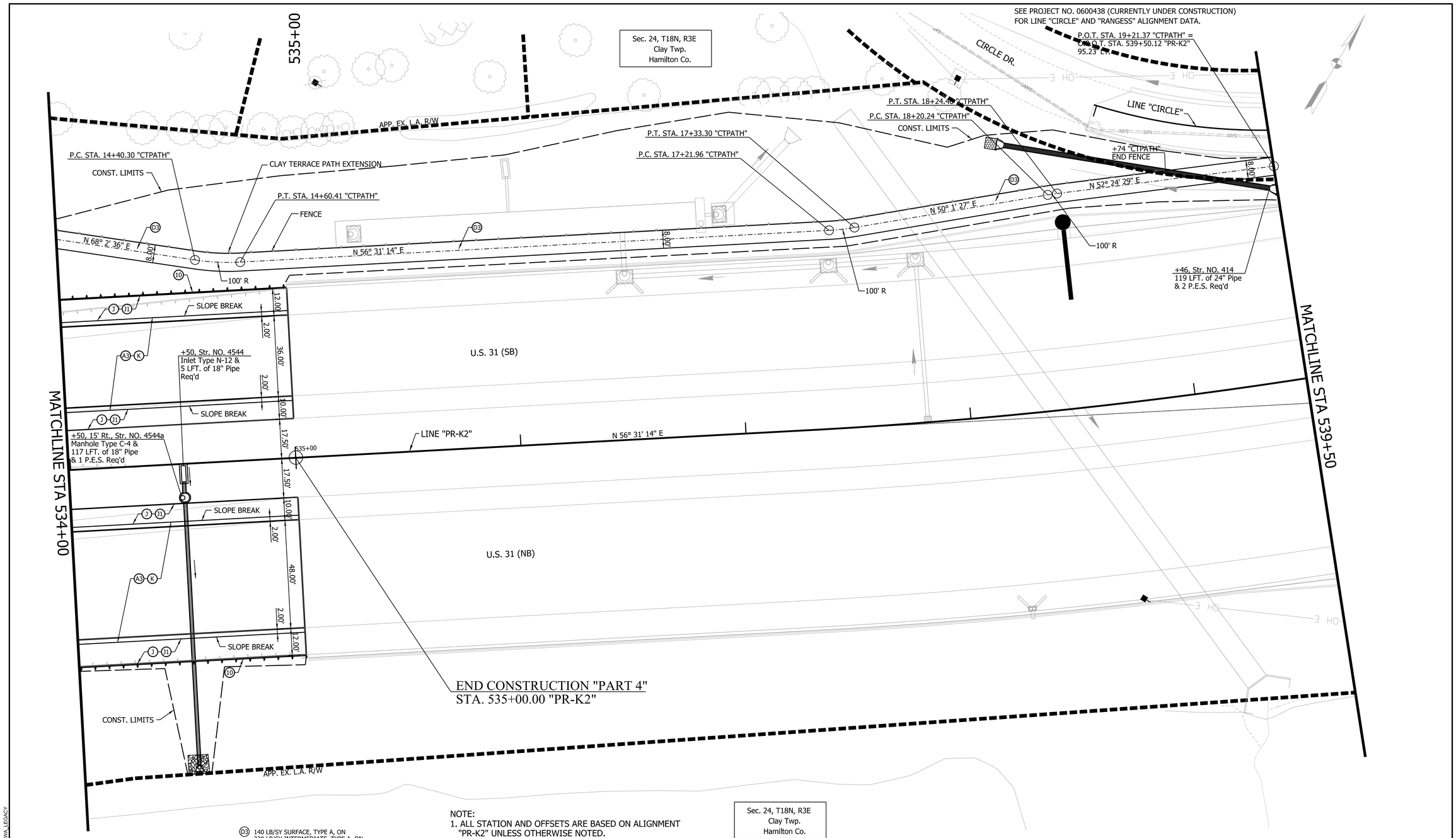
CONSTRUCTION DETAILS
U.S. HWY. 31 - LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	126 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA LEGACY
5/6/2013

Model: US31 CD-10 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-US31-20-CD-ROW.dgn

L.A. CODE 5312



NOTE:
1. ALL STATION AND OFFSETS ARE BASED ON ALIGNMENT "PR-K2" UNLESS OTHERWISE NOTED.
2. FOR TONS RIPRAP AND SYS GEOTEXTILE REQ'D. AT DRAINAGE STRUCTURE SPLASH PADS SEE STRUCTURE DATA TABLE.

Sec. 24, T18N, R3E
Clay Twp.
Hamilton Co.

LEGEND

(A3) 10" PLAIN JOINTED QC/QA PCCP MAINLINE
D-1 JOINTS SPACED AT 16' WITH 1 1/4" DIAMETER DOWEL BARS ON SUBBASE FOR PCCP, ON SUBGRADE TREATMENT, TYPE IA

(K) 165 LB/SY QC/QA-HMA, 4, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 4, 70, INTERMEDIATE 19.0 MM, ON
330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(D3) 140 LB/SY SURFACE, TYPE A, ON
220 LB/SY INTERMEDIATE, TYPE A, ON
6" COMPACTED AGGREGATE, SIZE NO. 53, BASE ON SUBGRADE TREATMENT, TYPE IA

(J) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
605 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(J1) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
1210 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(10) W-BEAM GUARDRAIL

RIPRAP OVER GEOTEXTILES

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER 05/01/2013 DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

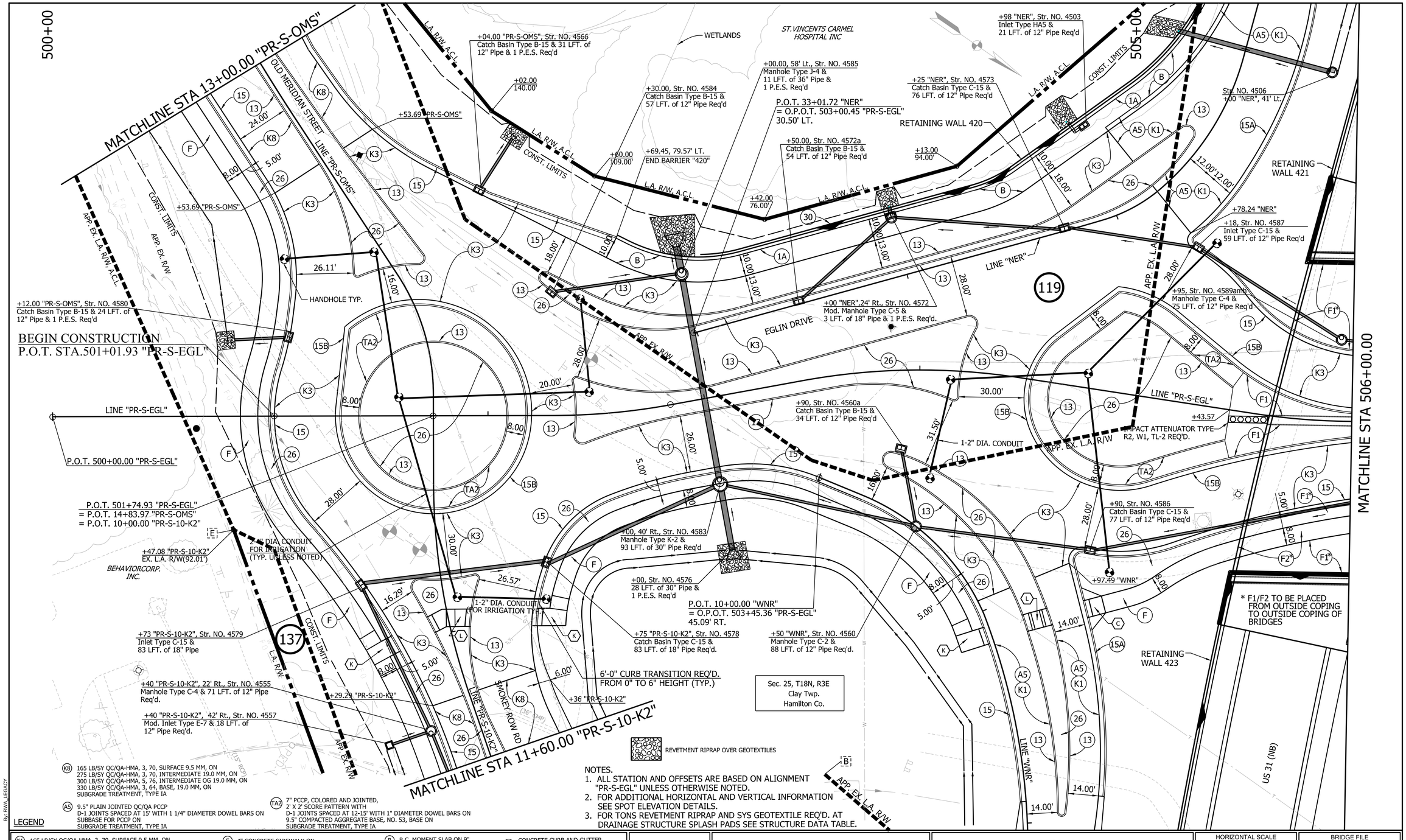
CONSTRUCTION DETAILS
U.S. HWY. 31 - LINE "PR-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	127 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY

5/8/2013

Model: US31 CD-11 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-US31-20-CD-ROW.dgn



NOTES.
1. ALL STATION AND OFFSETS ARE BASED ON ALIGNMENT "PR-S-EGL" UNLESS OTHERWISE NOTED.
2. FOR ADDITIONAL HORIZONTAL AND VERTICAL INFORMATION SEE SPOT ELEVATION DETAILS.
3. FOR TONS REVETMENT RIPRAP AND SYS GEOTEXTILE REQ'D. AT DRAINAGE STRUCTURE SPLASH PADS SEE STRUCTURE DATA TABLE.

LEGEND

(K8) 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON 275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON 300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON 330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON SUBGRADE TREATMENT, TYPE IA

(A5) 9.5" PLAIN JOINTED QC/QA PCCP D-1 JOINTS SPACED AT 15' WITH 1 1/4" DIAMETER DOWEL BARS ON SUBBASE FOR PCCP ON SUBGRADE TREATMENT, TYPE IA

(TA2) 7" PCCP, COLORED AND JOINTED, 2' X 2' SCORE PATTERN WITH D-1 JOINTS SPACED AT 12-15' WITH 1" DIAMETER DOWEL BARS ON 9.5" COMPACTED AGGREGATE BASE, NO. 53, BASE ON SUBGRADE TREATMENT, TYPE IA

(K1) 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON 275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON 300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON 330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON SUBGRADE TREATMENT, TYPE IA

(K3) 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON 275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON 330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON 250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON 330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON SUBGRADE TREATMENT, TYPE IA

(F) 4" CONCRETE SIDEWALK ON 6" COMPACTED AGGREGATE BASE, NO. 53

(F1) 4" CONCRETE SIDEWALK, COLORED AND JOINTED, 1' X 1' SCORE PATTERN ON 6" COMPACTED AGGREGATE BASE, NO. 53

(F2) 4" CONCRETE SIDEWALK, JOINTED, 4' X 4' SCORE PATTERN ON 6" COMPACTED AGGREGATE BASE, NO. 53

(B) R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8

(1A) BRIDGE RAILING, TYPE FC

(13) CONCRETE CURB, (6")

(15) CONCRETE CURB AND GUTTER

(15B) CONCRETE CURB AND GUTTER, TYPE B, MODIFIED

(15A) CONCRETE CURB AND GUTTER, MODIFIED

(26) SODDING

(30) RETAINING WALL

(X) CURB RAMP TYPE

By: RWA_LEGACY

5/7/2013

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

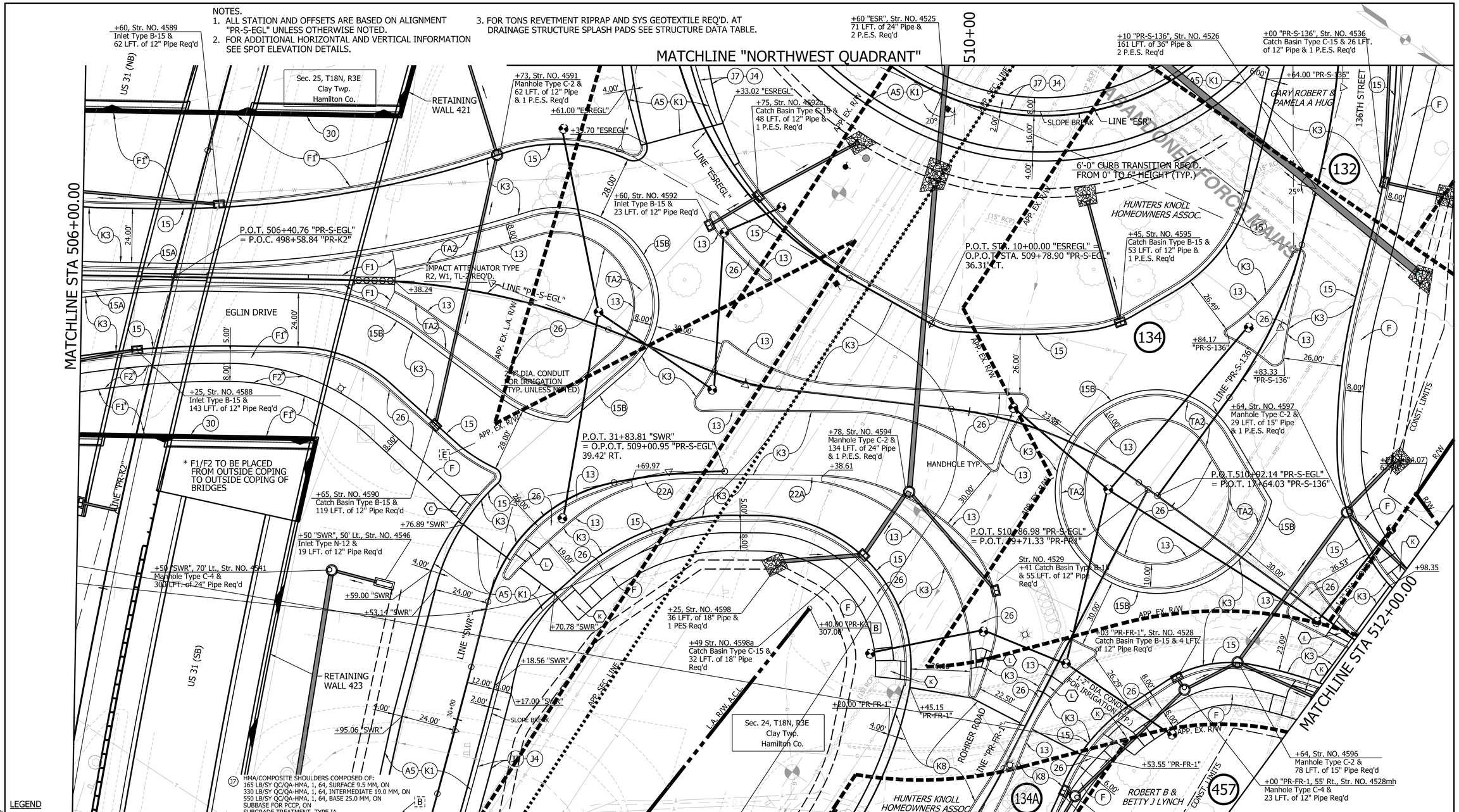
INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
EGLIN DRIVE, LINE "PR-S-EGL"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	128 of 144
CONTRACT	PROJECT
IR-34750	0710215

L.A. CODE 5312

NOTES.
1. ALL STATION AND OFFSETS ARE BASED ON ALIGNMENT "PR-S-EGL" UNLESS OTHERWISE NOTED.
2. FOR ADDITIONAL HORIZONTAL AND VERTICAL INFORMATION SEE SPOT ELEVATION DETAILS.
3. FOR TONS REVETMENT RIPRAP AND SYS GEOTEXTILE REQ'D. AT DRAINAGE STRUCTURE SPLASH PADS SEE STRUCTURE DATA TABLE.



LEGEND

(K8) 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON 275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON 300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON 330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON SUBGRADE TREATMENT, TYPE IA

(K3) 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON 275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON 330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON 250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON 330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON SUBGRADE TREATMENT, TYPE IA

(TA2) 7" PCCP, COLORED AND JOINTED, 2' X 2' SCORE PATTERN WITH D-1 JOINTS SPACED AT 12-15' WITH 1" DIAMETER DOWEL BARS ON 9.5" COMPACTED AGGREGATE BASE, NO. 53, BASE ON SUBGRADE TREATMENT, TYPE IA

(J7) HMA/COMPOSITE SHOULDERS COMPOSED OF: 165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON 330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON 550 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON SUBBASE FOR PCCP, ON SUBGRADE TREATMENT, TYPE IA

REVETMENT RIPRAP OVER GEOTEXTILES

(K1) 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON 275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON 300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON 330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON SUBGRADE TREATMENT, TYPE IA

(A5) 9.5" PLAIN JOINTED QC/QA PCCP D-1 JOINTS SPACED AT 15' WITH 1 1/4" DIAMETER DOWEL BARS ON SUBBASE FOR PCCP ON SUBGRADE TREATMENT, TYPE IA

(J4) HMA/COMPOSITE SHOULDERS COMPOSED OF: 165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON 935 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON SUBGRADE TREATMENT, TYPE IA

(F) 4" CONCRETE SIDEWALK ON 6" COMPACTED AGGREGATE BASE, NO. 53

(F1) 4" CONCRETE SIDEWALK, COLORED AND JOINTED, 1' X 1' SCORE PATTERN ON 6" COMPACTED AGGREGATE BASE, NO. 53

(F2) 4" CONCRETE SIDEWALK, JOINTED, 4' X 4' SCORE PATTERN ON 6" COMPACTED AGGREGATE BASE, NO. 53

(B) R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8

(1A) BRIDGE RAILING, TYPE FC

(13) CONCRETE CURB, (6")

(15) CONCRETE CURB AND GUTTER

(15A) CONCRETE CURB AND GUTTER, MODIFIED

(15B) CONCRETE CURB AND GUTTER, TYPE B, MODIFIED

(22A) CONCRETE CENTER CURB, TYPE D

(26) SODDING

(30) RETAINING WALL

(X) CURB RAMP TYPE

By: RWA_LEGACY

07/2013

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

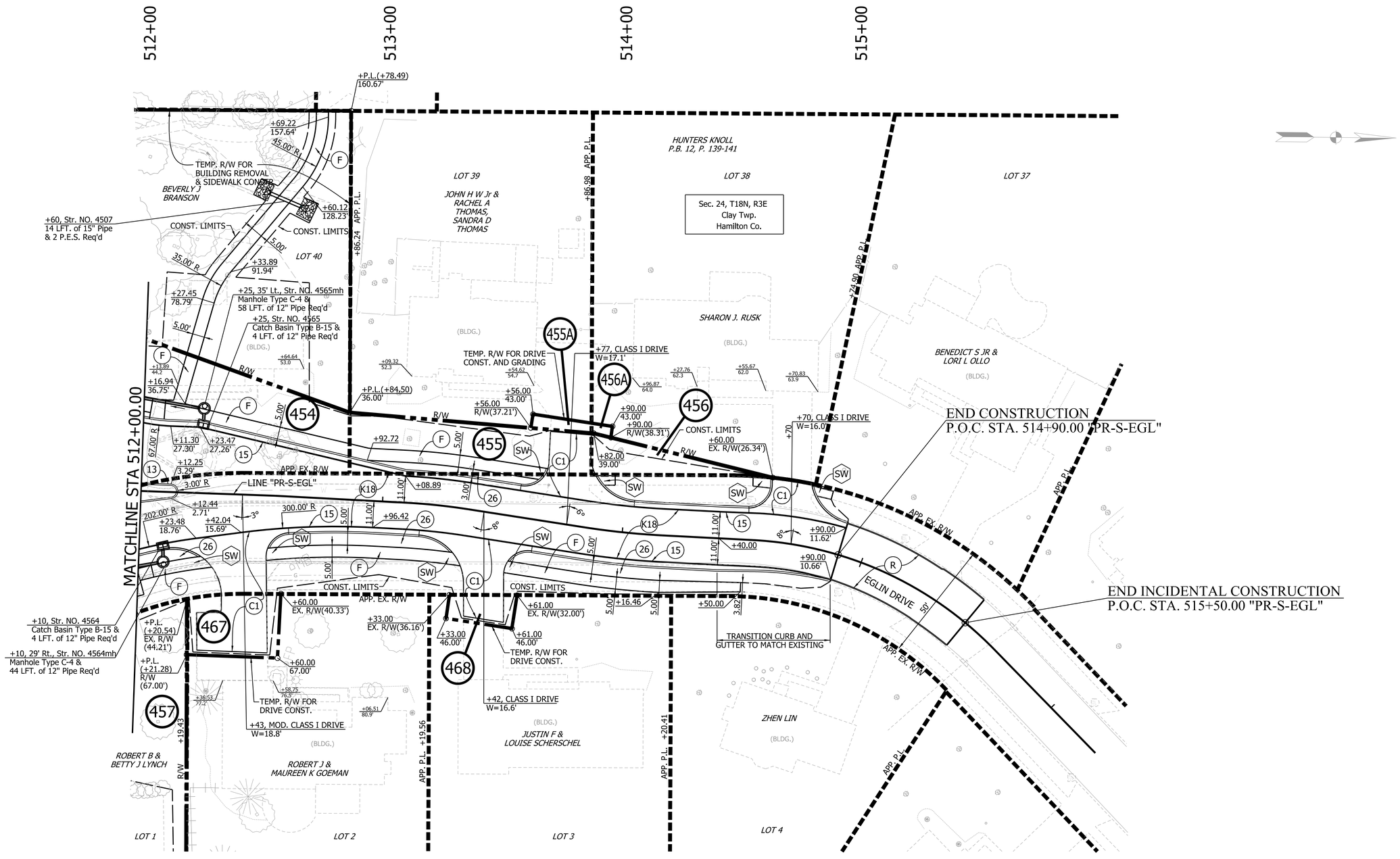
DESIGNED: CSW | DRAWN: RBA
CHECKED: CJS | CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
EGLIN DRIVE, LINE "PR-S-EGL"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	129 of 144
CONTRACT	PROJECT
IR-34750	0710215

Model: EGLIN-CON-2 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\Segment 11\MM11-ELGIN-CD-ROW.dgn



NOTES.
1. ALL STATION AND OFFSETS ARE BASED ON ALIGNMENT "PR-S-EGL" UNLESS OTHERWISE NOTED.
2. FOR ADDITIONAL HORIZONTAL AND VERTICAL INFORMATION SEE SPOT ELEVATION DETAILS.
3. FOR TONS REVETMENT RIPRAP AND SYS GEOTEXTILE REQ'D. AT DRAINAGE STRUCTURE SPLASH PADS SEE STRUCTURE DATA TABLE.

LEGEND

- (K18) 165 LB/SY QC/QA-HMA, 2, 70, SURFACE 9.5 MM, ON 275 LB/SY QC/QA-HMA, 2, 70, INTERMEDIATE 19.0 MM, ON 300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON 330 LB/SY QC/QA-HMA, 2, 64, BASE, 19.0 MM, ON SUBGRADE TREATMENT, TYPE IA
- (C1) 6" PCCP FOR APPROACHES ON SUBGRADE TREATMENT, TYPE IA
- (R) 1 1/2" MILL W/ 165 LB/SYS HMA OVERLAY
- (F) 4" CONCRETE SIDEWALK ON 6" COMPACTED AGGREGATE BASE, NO. 53
- (13) CONCRETE CURB, (6")
- (15) CONCRETE CURB AND GUTTER
- (26) SODDING
- REVETMENT RIPRAP OVER GEOTEXTILES
- (SW) SIDEWALK TRANSITION

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
EGLIN DRIVE, LINE "PR-S-EGL"

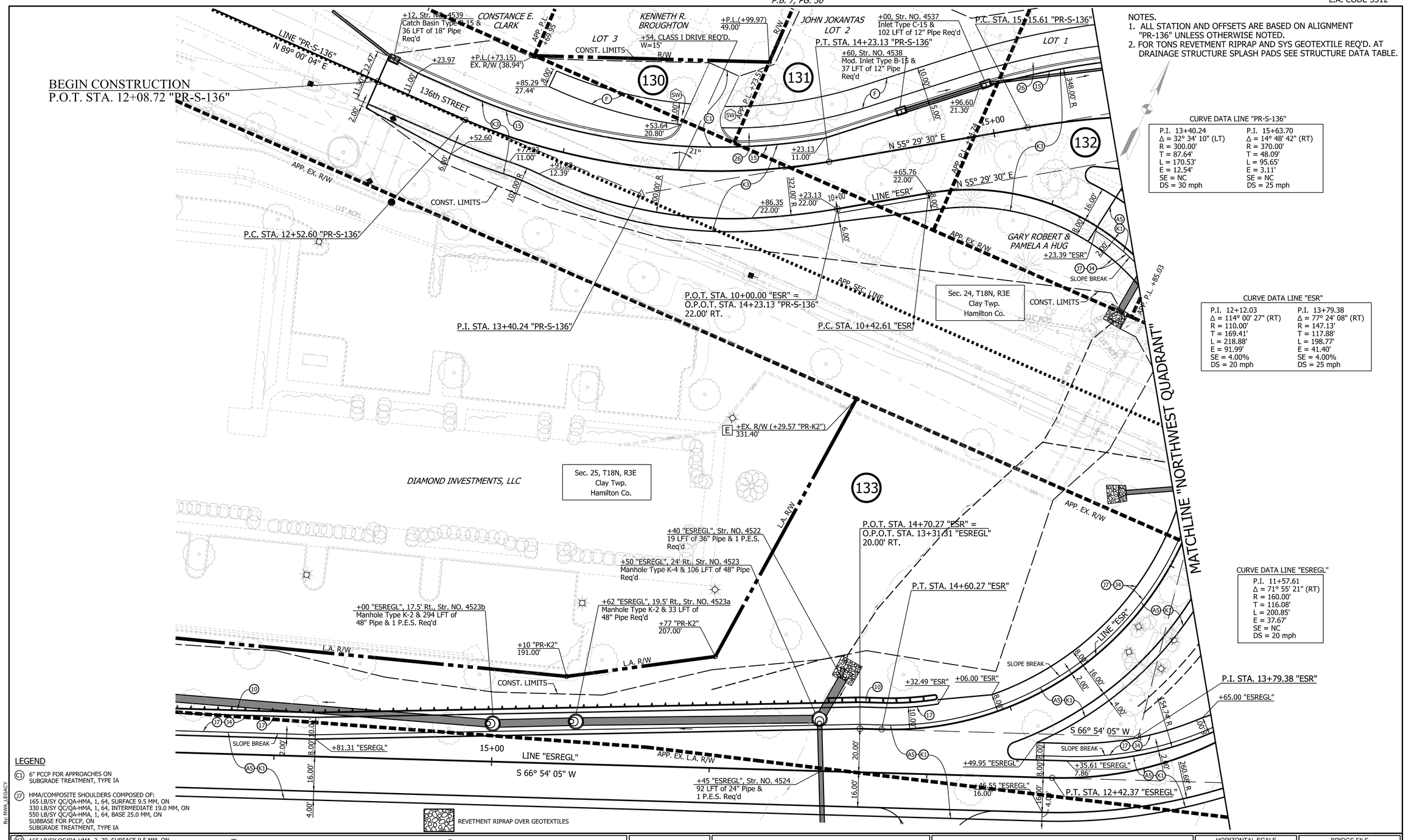
HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	130 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA LEGACY
5/7/2013

VILLAGE OF MT. CARMEL, 9TH SEC.
P.B. 7, PG. 30

L.A. CODE 5312

NOTES.
1. ALL STATION AND OFFSETS ARE BASED ON ALIGNMENT "PR-136" UNLESS OTHERWISE NOTED.
2. FOR TONS REVETMENT RIPRAP AND SYS GEOTEXTILE REQ'D. AT DRAINAGE STRUCTURE SPLASH PADS SEE STRUCTURE DATA TABLE.



LEGEND

(C1) 6" PCCP FOR APPROACHES ON SUBGRADE TREATMENT, TYPE IA

(J7) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
550 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(K3) 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON
330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(J4) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
935 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(K1) 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON
300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(A5) 9.5" PLAIN JOINTED QC/QA PCCP
D-1 JOINTS SPACED AT 15' WITH 1 1/4" DIAMETER DOWEL BARS ON
SUBBASE FOR PCCP ON
SUBGRADE TREATMENT, TYPE IA

(F) 4" CONCRETE SIDEWALK ON
6" COMPACTED AGGREGATE BASE, NO. 53

(10) W-BEAM GUARDRAIL

(17) ROLLED CURB

(26) SODDING

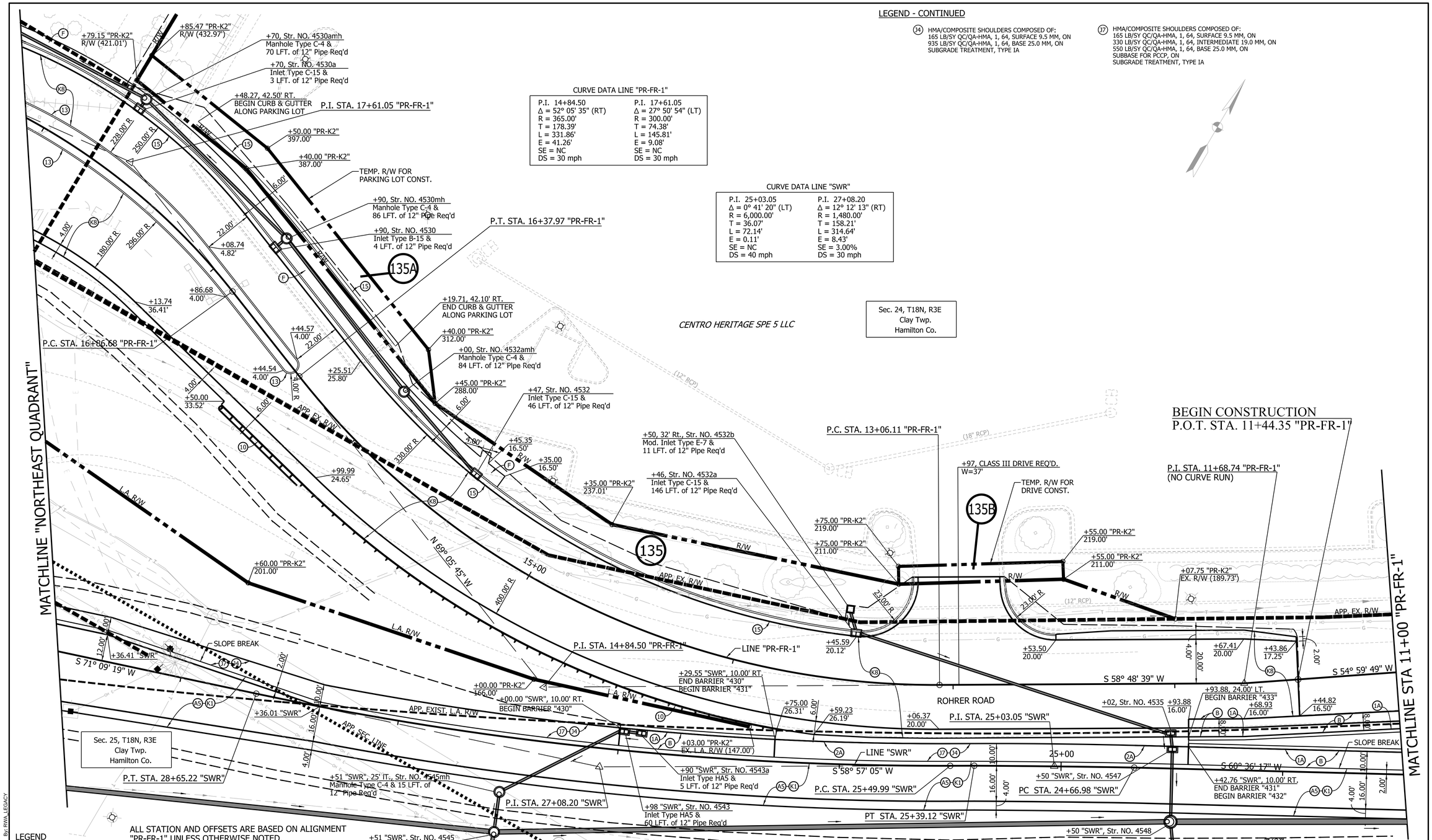
(SW) SIDEWALK TRANSITION

By: RWA_LEGACY

5/9/2013

RECOMMENDED FOR APPROVAL ____ DESIGN ENGINEER ____ 05/01/2013 DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1" = 20'	BRIDGE FILE
		VERTICAL SCALE N/A	DESIGNATION 0900267
DESIGNED: CJS / DRAWN: JWM	CONSTRUCTION DETAILS LINE "ESREGL" & "PR-S-136"	SURVEY BOOK	SHEET 131 of 144
CHECKED: CJS / CHECKED: JLR		CONTRACT IR-34750	PROJECT 0710215

Model: NW QUAD-CON-1 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\P4 Segment 11\MM11-ELGIN-CD-ROW.dgn



LEGEND - CONTINUED

(J4) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
935 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(J7) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
550 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBBASE FOR RCCP, ON
SUBGRADE TREATMENT, TYPE IA

CURVE DATA LINE "PR-FR-1"

P.I. 14+84.50	P.I. 17+61.05
Δ = 52° 05' 35" (RT)	Δ = 27° 50' 54" (LT)
R = 365.00'	R = 300.00'
T = 178.39'	T = 74.38'
L = 331.86'	L = 145.81'
E = 41.26'	E = 9.08'
SE = NC	SE = NC
DS = 30 mph	DS = 30 mph

CURVE DATA LINE "SWR"

P.I. 25+03.05	P.I. 27+08.20
Δ = 0° 41' 20" (LT)	Δ = 12° 12' 13" (RT)
R = 6,000.00'	R = 1,480.00'
T = 36.07'	T = 158.21'
L = 72.14'	L = 314.64'
E = 0.11'	E = 8.43'
SE = NC	SE = 3.00%
DS = 40 mph	DS = 30 mph

LEGEND

(K8) 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON
300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(K1) 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON
300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(1A) BRIDGE RAILING, TYPE FC

(2A) MODIFIED CONCRETE BARRIER

(10) W-BEAM GUARDRAIL

(13) CONCRETE CURB, (6")

(15) CONCRETE CURB AND GUTTER

(A5) 9.5" PLAIN JOINTED QC/QA PCCP
D-1 JOINTS SPACED AT 15' WITH 1 1/4" DIAMETER DOWEL BARS ON
SUBBASE FOR PCCP ON
SUBGRADE TREATMENT, TYPE IA

(B) R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8

(F) 4" CONCRETE SIDEWALK ON
6" COMPACTED AGGREGATE BASE, NO. 53

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

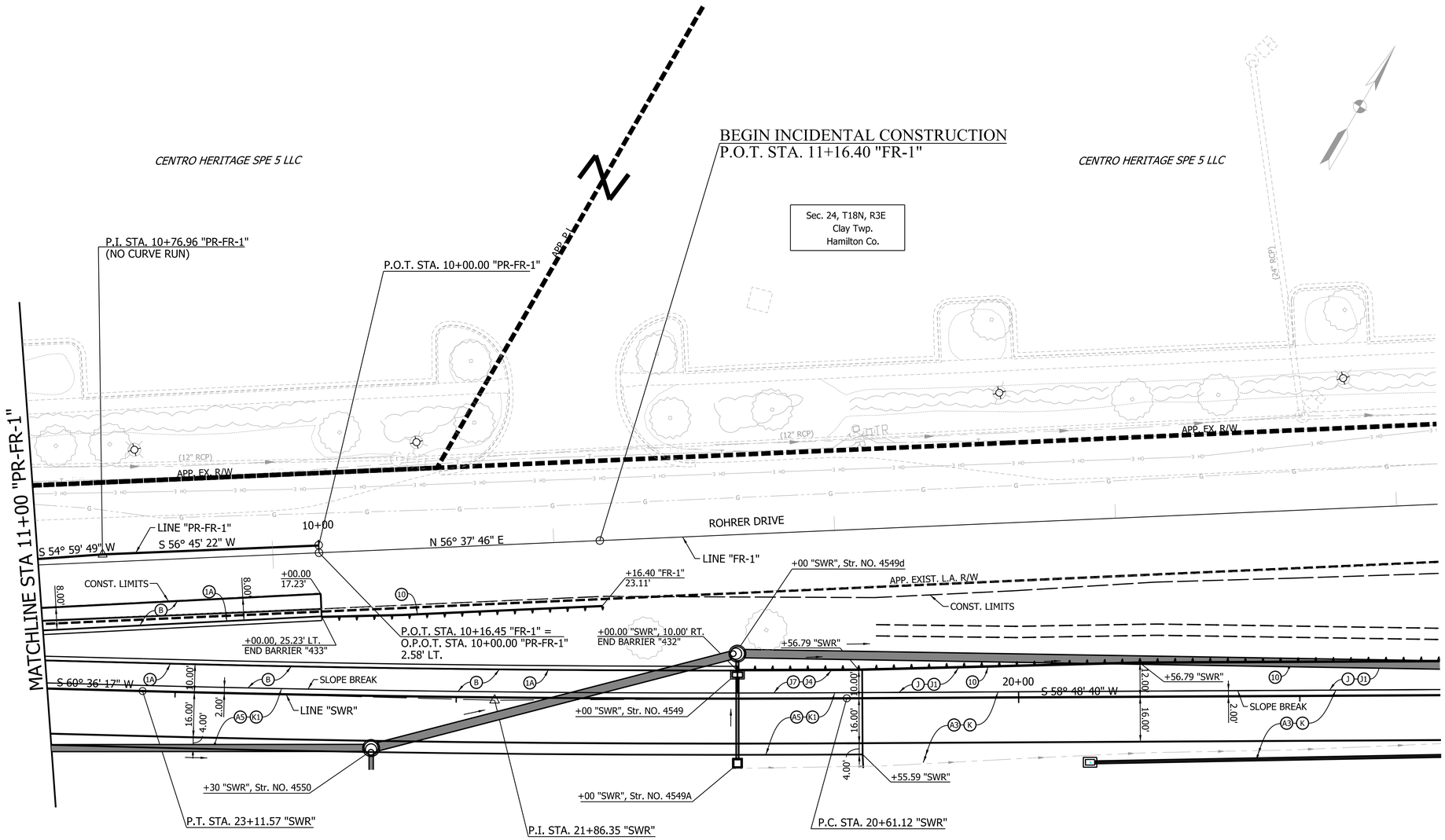
DESIGNED: CJS DRAWN: JWM
CHECKED: CJS CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
LINE "PR-FR-1" & "SWR"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	132 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY
5/9/2013



CURVE DATA LINE "SWR"

P.I. 21+86.35
Δ = 1° 47' 37" (RT)
R = 8,000.00'
T = 125.23'
L = 250.44'
E = 0.98'
SE = NC
DS = 50 mph

ALL STATION AND OFFSETS ARE BASED ON ALIGNMENT "PR-FR-1" UNLESS OTHERWISE NOTED.

LEGEND

(J) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
605 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(J4) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
935 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(J1) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
1210 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(A3) 10" PLAIN JOINTED QC/QA PCCP
D-1 JOINTS SPACED AT 16' WITH 1 1/4" DIAMETER DOWEL BARS ON
SUBBASE FOR PCCP ON
SUBGRADE TREATMENT, TYPE IA

(J7) HMA/COMPOSITE SHOULDERS COMPOSED OF:
165 LB/SY QC/QA-HMA, 1, 64, SURFACE 9.5 MM, ON
330 LB/SY QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM, ON
550 LB/SY QC/QA-HMA, 1, 64, BASE 25.0 MM, ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(K1) 165 LB/SY QC/QA-HMA, 3, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 3, 70, INTERMEDIATE 19.0 MM, ON
300 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 3, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(A5) 9.5" PLAIN JOINTED QC/QA PCCP
D-1 JOINTS SPACED AT 15' WITH 1 1/4" DIAMETER DOWEL BARS ON
SUBBASE FOR PCCP, ON
SUBGRADE TREATMENT, TYPE IA

(K) 165 LB/SY QC/QA-HMA, 4, 70, SURFACE 9.5 MM, ON
275 LB/SY QC/QA-HMA, 4, 70, INTERMEDIATE 19.0 MM, ON
330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
250 LB/SY QC/QA-HMA, 5, 76, INTERMEDIATE OG 19.0 MM, ON
330 LB/SY QC/QA-HMA, 4, 64, BASE, 19.0 MM, ON
SUBGRADE TREATMENT, TYPE IA

(B) R.C. MOMENT SLAB ON 9" COARSE AGGREGATE, NO. 8

(1A) BRIDGE RAILING, TYPE FC

(10) W-BEAM GUARDRAIL

RECOMMENDED FOR APPROVAL 05/01/2013
DESIGN ENGINEER DATE

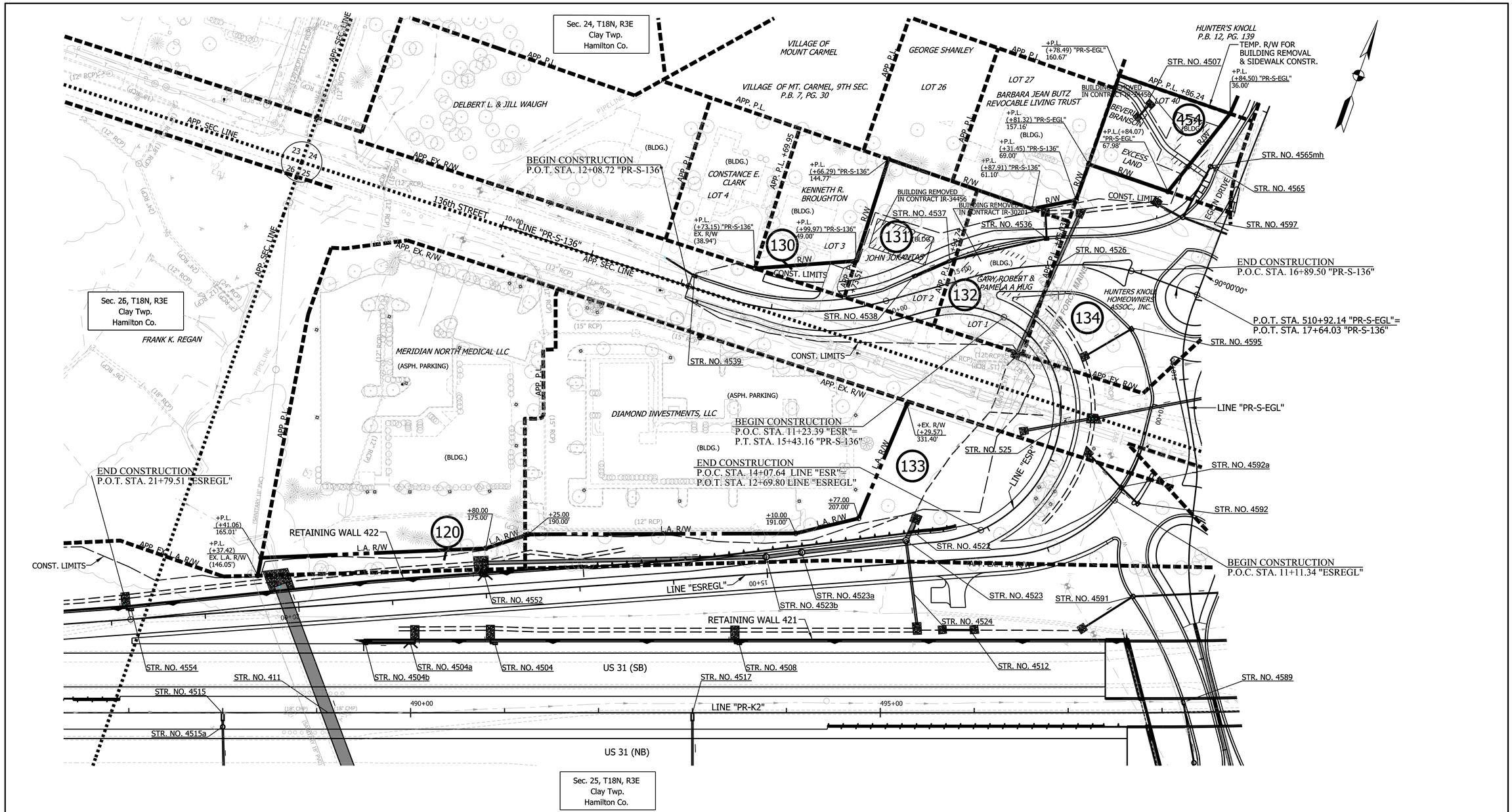
DESIGNED: CJS DRAWN: JWM
CHECKED: CJS CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
LINE "PR-FR-1" & "SWR"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	133 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RVA_LEGACY
5/9/2013



ALL R/W ON THIS SHEET TO BE AS SHOWN
ALL R/W ON THIS SHEET DESCRIBED FROM LINE "PR-K2" EXCEPT AS NOTED
LIMITED ACCESS R/W TO APPLY WHERE INDICATED

B BEGIN LA R/W AND A.C.L.
E END LA R/W AND A.C.L.

SEE EXISTING INTERCHANGE GEOMETRICS FOR EXISTING ALIGNMENT INFORMATION.

SEE PROPOSED INTERCHANGE GEOMETRICS FOR PROPOSED ALIGNMENT INFORMATION.

SEE CONSTRUCTION DETAILS FOR STRUCTURE NOTES.

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

INTERCHANGE PLAN DETAILS
LINE "PR-S-136", "ESR" & "ESREGL"

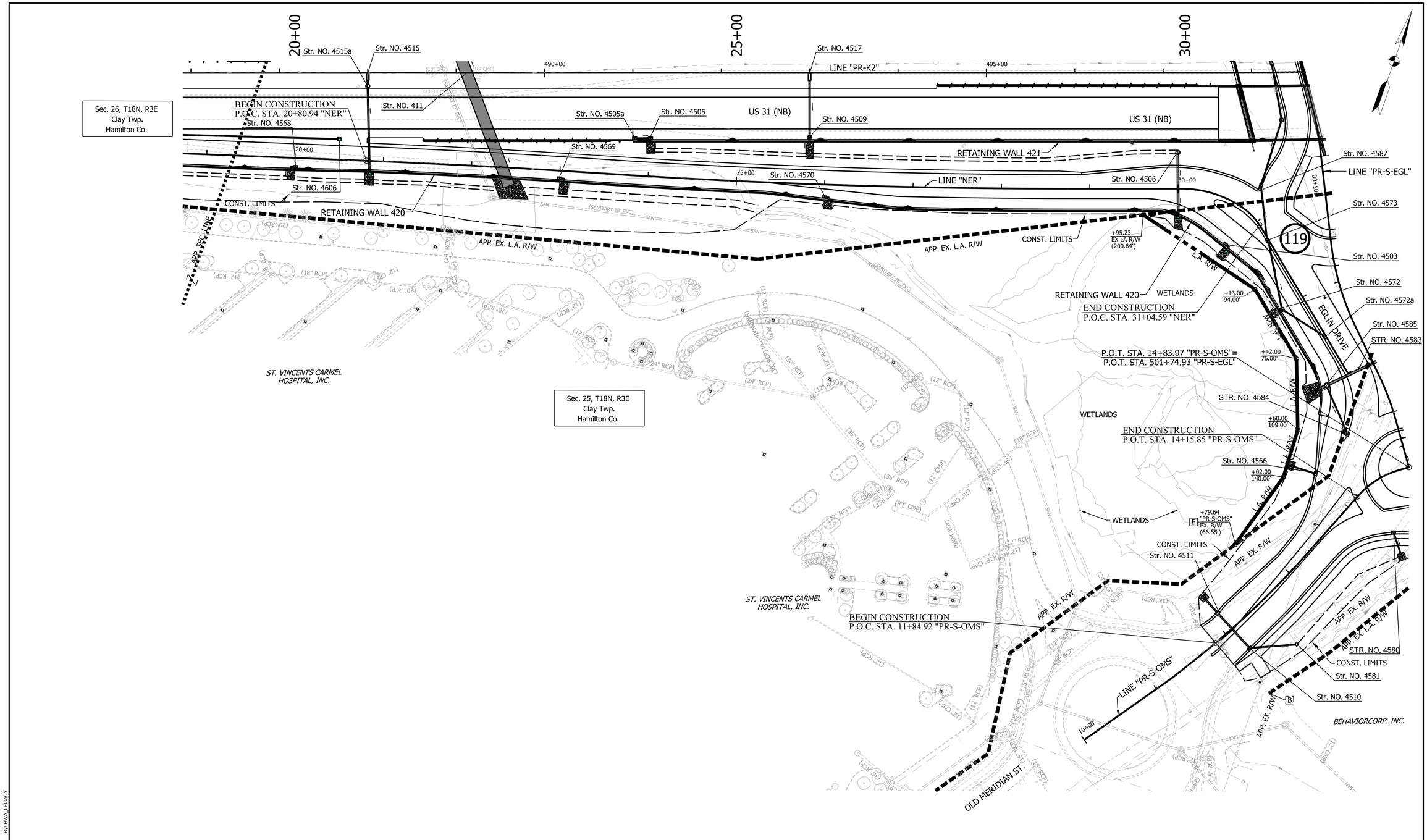
HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	134 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RVA_LEGACY

5/10/2013

Model: 136 Plan-01 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\P4 Segment 11\MM11-136th-PLAN-ROW.dgn

L.A. CODE 5312



ALL R/W ON THIS SHEET TO BE AS SHOWN
ALL R/W ON THIS SHEET DESCRIBED FROM LINE "PR-S-EGL EXCEPT AS NOTED
LIMITED ACCESS R/W TO APPLY WHERE INDICATED

B BEGIN LA R/W AND A.C.L.
E END LA R/W AND A.C.L.

SEE EXISTING INTERCHANGE GEOMETRICS FOR EXISTING ALIGNMENT INFORMATION.

SEE PROPOSED INTERCHANGE GEOMETRICS FOR PROPOSED ALIGNMENT INFORMATION.

SEE CONSTRUCTION DETAILS FOR STRUCTURE NOTES.

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

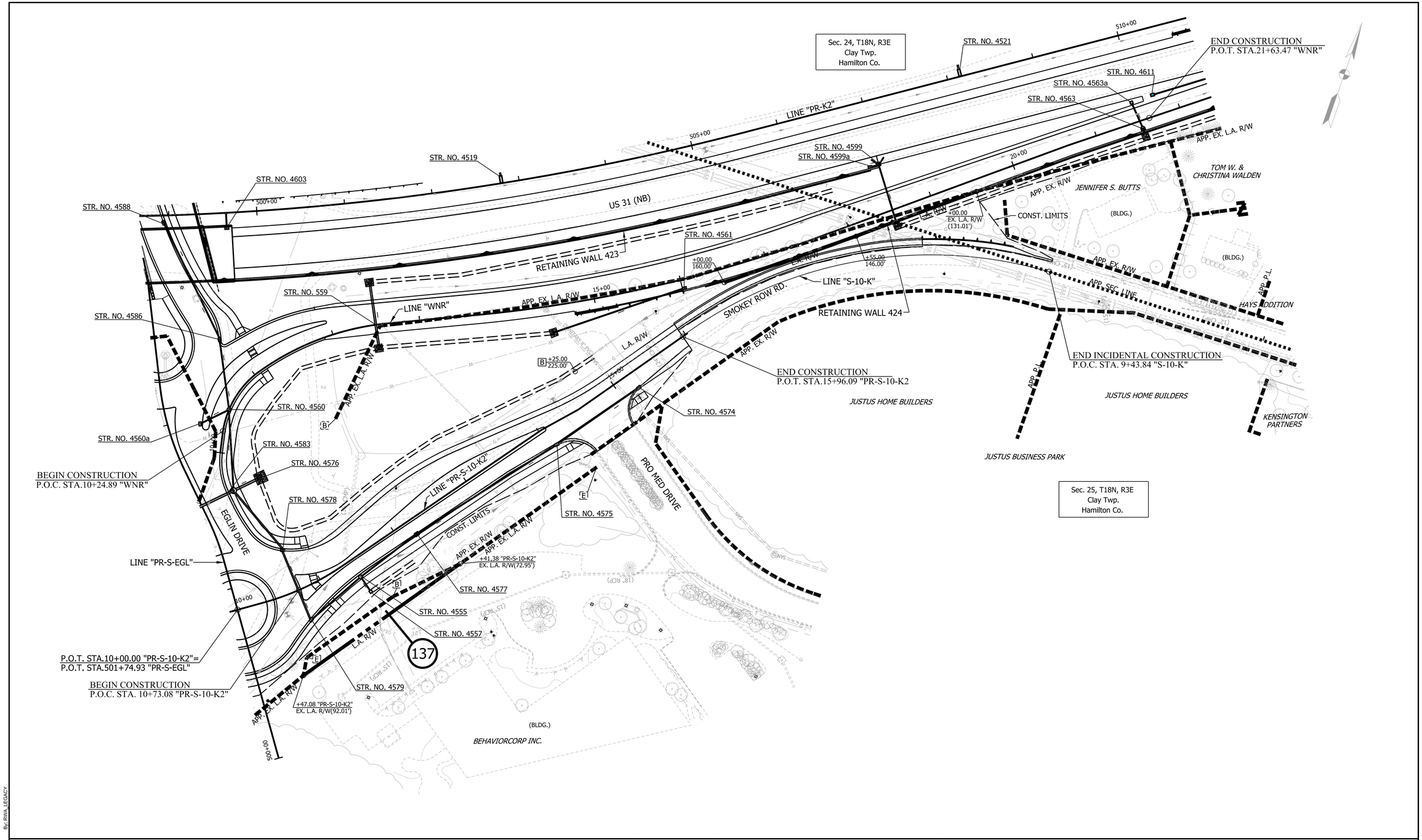
INTERCHANGE PLAN DETAILS
LINE "NER" & "PR-S-OMS"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	135 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY

5/10/2013

Model: 136 Plan-02 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\P4 Segment 11\MM11-136th-PLAN-ROW.dgn



By: RWA_LEGACY

ALL R/W ON THIS SHEET TO BE AS SHOWN
ALL R/W ON THIS SHEET DESCRIBED FROM LINE "PR-K2" EXCEPT AS NOTED
LIMITED ACCESS R/W TO APPLY WHERE INDICATED

B BEGIN LA R/W AND A.C.L.
E END LA R/W AND A.C.L.

SEE EXISTING INTERCHANGE GEOMETRICS FOR EXISTING ALIGNMENT INFORMATION.

SEE PROPOSED INTERCHANGE GEOMETRICS FOR PROPOSED ALIGNMENT INFORMATION.

SEE CONSTRUCTION DETAILS FOR STRUCTURE NOTES.

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

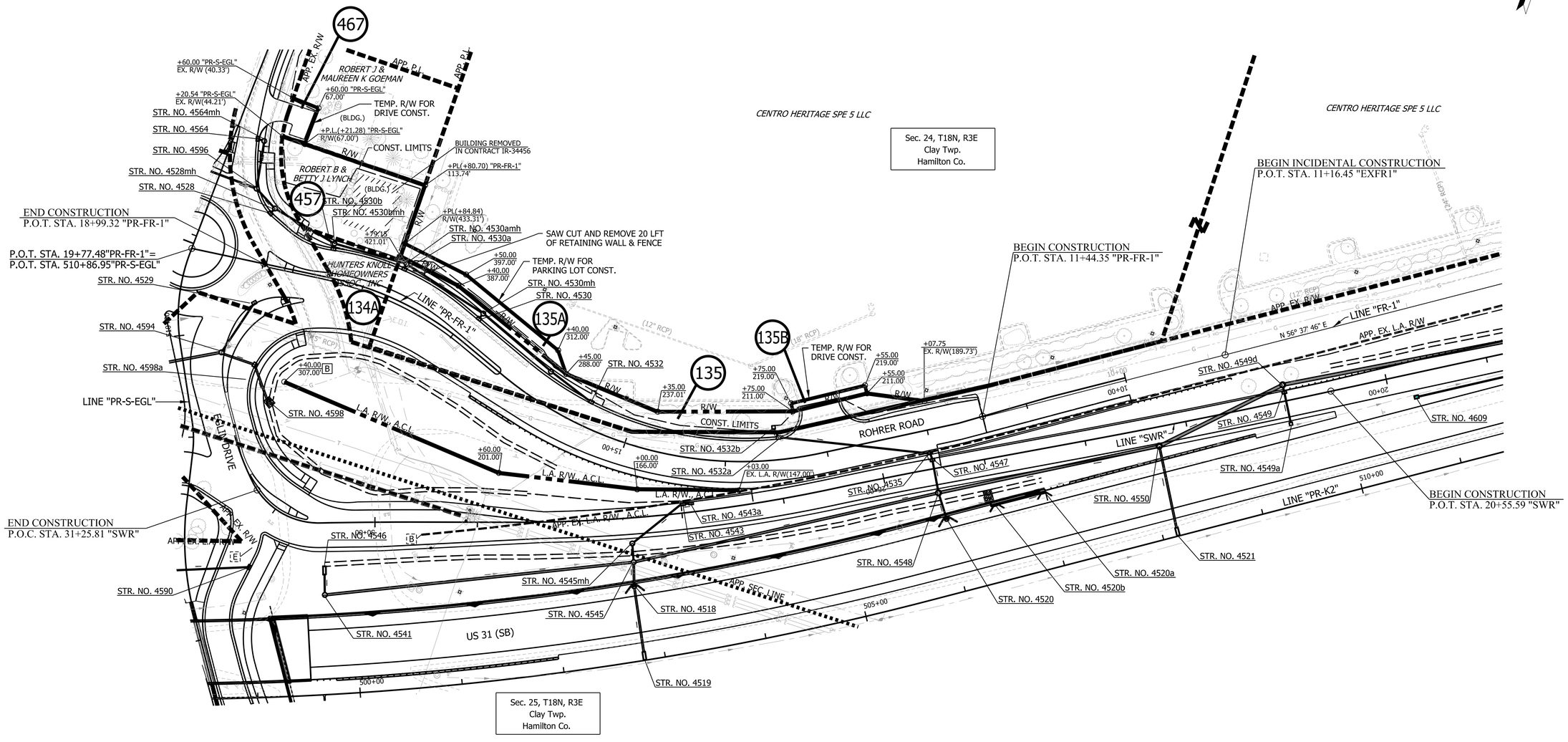
INDIANA
DEPARTMENT OF TRANSPORTATION

INTERCHANGE PLAN DETAILS
LINE "WNR" & "PR-S-10-K2"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	136 of 144
CONTRACT	PROJECT
IR-34750	0710215

5/10/2013

Model: 136 Plan-03 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\P4 Segment 11\MM11-136th-PLAN-ROW.dgn



ALL R/W ON THIS SHEET TO BE AS SHOWN
ALL R/W ON THIS SHEET DESCRIBED FROM LINE "PR-K2" EXCEPT AS NOTED
LIMITED ACCESS R/W TO APPLY WHERE INDICATED

B BEGIN LA R/W AND A.C.L.
E END LA R/W AND A.C.L.

SEE EXISTING INTERCHANGE GEOMETRICS FOR EXISTING ALIGNMENT INFORMATION.

SEE PROPOSED INTERCHANGE GEOMETRICS FOR PROPOSED ALIGNMENT INFORMATION.

SEE CONSTRUCTION DETAILS FOR STRUCTURE NOTES.

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW DRAWN: RBA
CHECKED: CJS CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

INTERCHANGE PLAN DETAILS
LINE "PR-FR-1" & "SWR"

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	137 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA, LEGACY

5/10/2013

Model: 136 Plan-04 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\P4 Segment 11\MM11-136th-PLAN-ROW.dgn

X1 P.I. STA. 502+06.90 "K"
△ = 14°28'43" (LT.)
R = 3812.60'
T = 484.30'
L = 963.44'
E = 30.64'

X2 P.I. STA. 47+94.11 "S-7-K"
△ = 62°58'39" (RT.)
R = 200.11'
T = 122.57'
L = 219.95'
E = 34.56'

X3 P.I. STA. 54+45.19 "S-7-K"
△ = 63°49'01" (RT.)
R = 301.57'
T = 187.77'
L = 335.89'
E = 53.68'

X4 P.I. STA. 54+90.53 "PR-S-7-K"
△ = 60°18'17" (RT.)
R = 426.51'
T = 246.93'
L = 447.67'
E = 66.32'

X5 P.I. STA. 0+80.00 "FR-1"
△ = 90°00'00" (RT.)
R = 50.00'
T = 50.00'
L = 78.54'
E = 20.71'

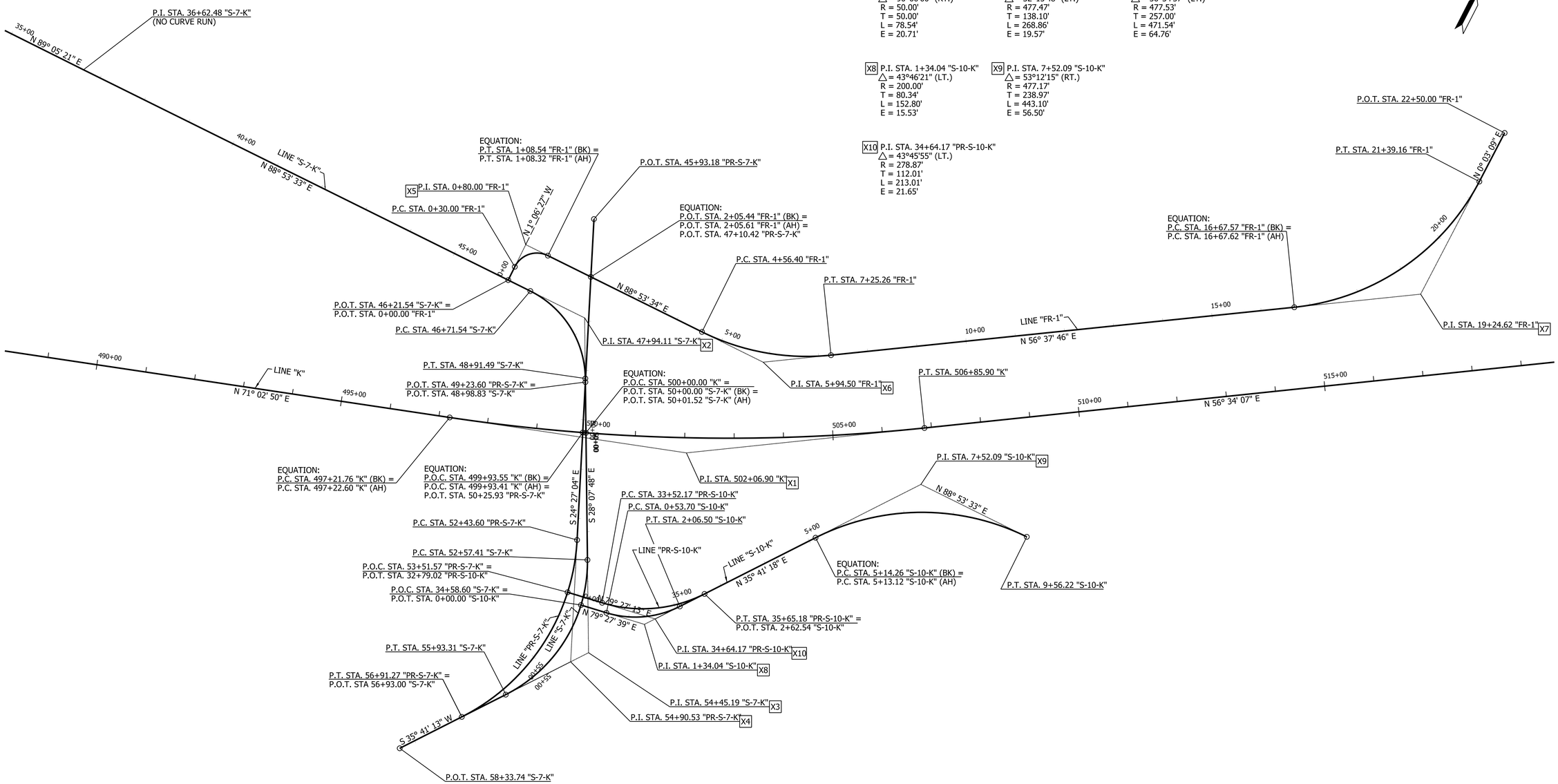
X6 P.I. STA. 5+94.50 "FR-1"
△ = 32°15'48" (LT.)
R = 477.47'
T = 138.10'
L = 268.86'
E = 19.57'

X7 P.I. STA. 19+24.62 "FR-1"
△ = 56°34'37" (LT.)
R = 477.53'
T = 257.00'
L = 471.54'
E = 64.76'

X8 P.I. STA. 1+34.04 "S-10-K"
△ = 43°46'21" (LT.)
R = 200.00'
T = 80.34'
L = 152.80'
E = 15.53'

X9 P.I. STA. 7+52.09 "S-10-K"
△ = 53°12'15" (RT.)
R = 477.17'
T = 238.97'
L = 443.10'
E = 56.50'

X10 P.I. STA. 34+64.17 "PR-S-10-K"
△ = 43°45'55" (LT.)
R = 278.87'
T = 112.01'
L = 213.01'
E = 21.65'



By: RWA_LEGACY

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER 05/01/2013 DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1" = 100'	BRIDGE FILE
		VERTICAL SCALE N/A	DESIGNATION 0900267
DESIGNED: CSW / DRAWN: JWM	EXISTING INTERCHANGE GEOMETRICS	SURVEY BOOK	SHEET 138 of 144
CHECKED: CJS / CHECKED: JLR		CONTRACT IR-34750	PROJECT 0710215

5/10/2013

Model: EX-GEO Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\P4 Segment 11\MM11-EX-GEO-ROW.dgn

1 P.I. 12+12.03
Δ = 114° 00' 27" (RT)
R = 110.00'
T = 169.41'
L = 218.88'
E = 91.99'
SE = 4.00%
DS = 20 mph

2 P.I. 13+79.38
Δ = 77° 24' 08" (RT)
R = 147.13'
T = 117.88'
L = 198.77'
E = 41.40'
SE = 4.00%
DS = 25 mph

3 P.I. 11+57.61
Δ = 71° 55' 21" (RT)
R = 160.00'
T = 116.08'
L = 200.85'
E = 37.67'
SE = NC
DS = 20 mph

4 P.I. 24+07.06
Δ = 3° 00' 00" (RT)
R = 2,864.79'
T = 75.02'
L = 150.00'
E = 0.98'
SE = NC
DS = 50 mph

5 P.I. 14+81.93
Δ = 2° 17' 40" (RT)
R = 9,549.30'
T = 191.23'
L = 382.42'
E = 1.91'
SE = NC
DS = 60 mph

6 P.I. 21+94.08
Δ = 1° 20' 49" (RT)
R = 9,627.50'
T = 113.17'
L = 226.32'
E = 0.67'
SE = NC
DS = 50 mph

7 P.I. 26+21.21
Δ = 3° 38' 29" (LT)
R = 8,000.00'
T = 254.31'
L = 508.44'
E = 4.04'
SE = NC
DS = 40 mph

8 P.I. 30+40.86
Δ = 33° 35' 37" (RT)
R = 122.00'
T = 36.83'
L = 71.53'
E = 5.44'
SE = NC
DS = 20 mph

9 P.I. 30+91.07
Δ = 24° 18' 23" (RT)
R = 72.00'
T = 15.51'
L = 30.54'
E = 1.65'
SE = NC
DS = 20 mph

10 P.I. 31+15.72
Δ = 1° 22' 26" (RT)
R = 802.00'
T = 9.62'
L = 19.23'
E = 0.06'
SE = NC
DS = 20 mph

11 P.I. 25+03.05
Δ = 0° 41' 20" (LT)
R = 6,000.00'
T = 36.07'
L = 72.14'
E = 0.11'
SE = NC
DS = 40 mph

12 P.I. 27+08.20
Δ = 12° 12' 13" (RT)
R = 1,480.00'
T = 158.21'
L = 315.23'
E = 8.43'
SE = 3.00%
DS = 30 mph

13 P.I. 29+95.05
Δ = 1° 00' 28" (LT)
R = 3,300.00'
T = 29.02'
L = 58.04'
E = 0.13'
SE = NC
DS = 20 mph

14 P.I. 30+99.05
Δ = 64° 16' 15" (RT)
R = 72.00'
T = 45.23'
L = 80.77'
E = 13.03'
SE = NC
DS = 20 mph

15 P.I. 31+59.27
Δ = 11° 06' 10" (RT)
R = 254.00'
T = 24.69'
L = 49.22'
E = 1.20'
SE = NC
DS = 20 mph

16 P.I. 10+63.47
Δ = 43° 47' 33" (RT)
R = 104.00'
T = 41.80'
L = 79.49'
E = 8.09'
SE = NC
DS = 20 mph

17 P.I. 11+84.94
Δ = 31° 12' 30" (RT)
R = 300.00'
T = 83.79'
L = 163.41'
E = 11.48'
SE = NC
DS = 20 mph

18 P.I. 15+64.38
Δ = 14° 50' 30" (LT)
R = 1,533.30'
T = 199.71'
L = 397.18'
E = 12.95'
SE = 3.00%
DS = 30 mph

19 P.I. 13+40.24
Δ = 32° 34' 10" (LT)
R = 300.00'
T = 87.64'
L = 170.53'
E = 12.54'
SE = NC
DS = 30 mph

20 P.I. 15+63.70
Δ = 14° 48' 42" (RT)
R = 370.00'
T = 48.09'
L = 95.65'
E = 3.11'
SE = NC
DS = 25 mph

21 P.I. 16+73.03
Δ = 21° 31' 30" (RT)
R = 200.00'
T = 38.02'
L = 75.14'
E = 3.58'
SE = NC
DS = 25 mph

22 P.I. 14+84.50
Δ = 52° 05' 35" (RT)
R = 365.00'
T = 178.39'
L = 331.86'
E = 41.26'
SE = NC
DS = 30 mph

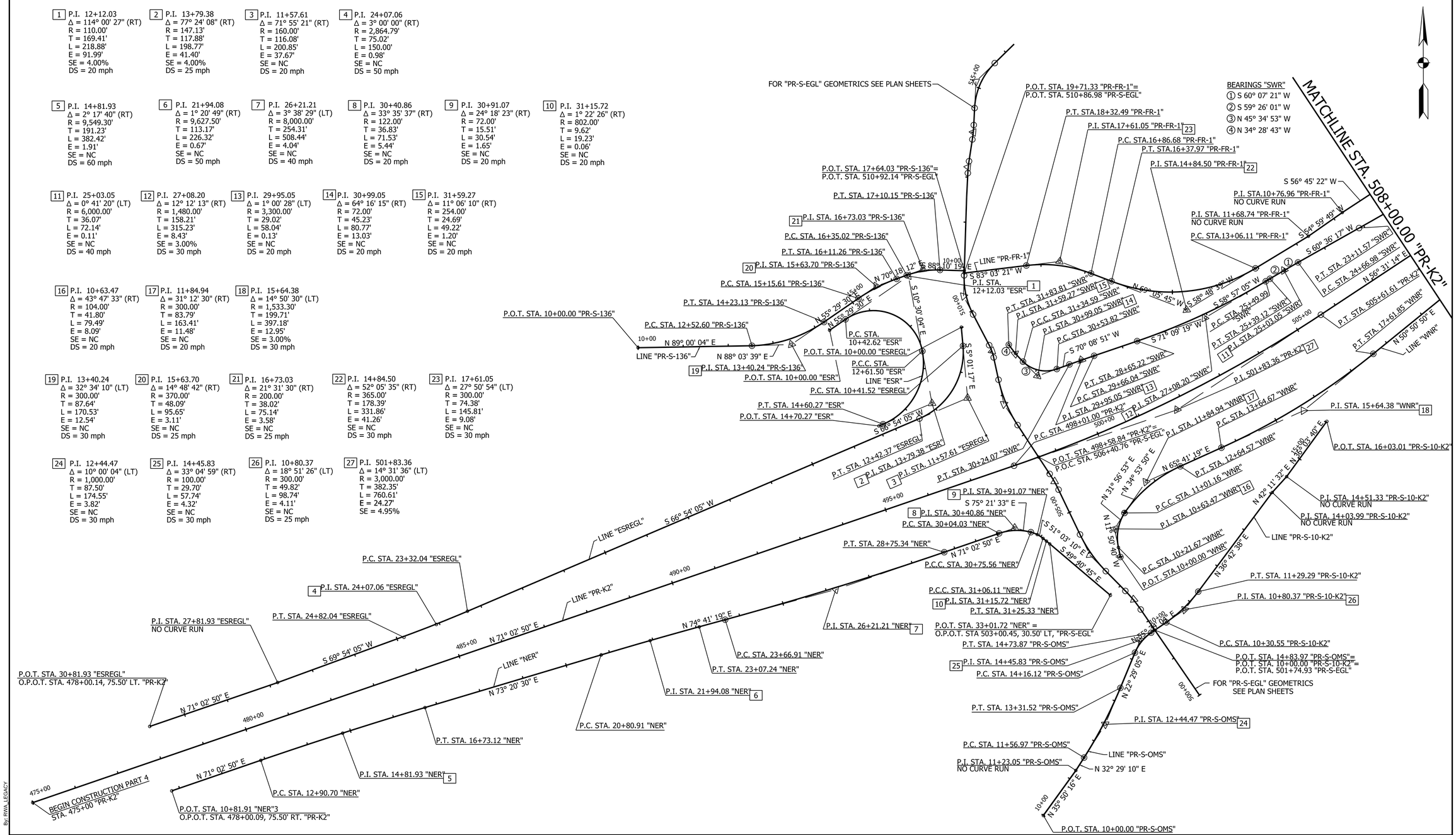
23 P.I. 17+61.05
Δ = 27° 50' 54" (LT)
R = 300.00'
T = 74.38'
L = 145.81'
E = 9.08'
SE = NC
DS = 30 mph

24 P.I. 12+44.47
Δ = 10° 00' 04" (LT)
R = 1,000.00'
T = 87.50'
L = 174.55'
E = 3.82'
SE = NC
DS = 30 mph

25 P.I. 14+45.83
Δ = 33° 04' 59" (RT)
R = 100.00'
T = 29.70'
L = 57.74'
E = 4.32'
SE = NC
DS = 30 mph

26 P.I. 10+80.37
Δ = 18° 51' 26" (LT)
R = 300.00'
T = 49.82'
L = 98.74'
E = 4.11'
SE = NC
DS = 25 mph

27 P.I. 501+83.36
Δ = 14° 31' 36" (LT)
R = 3,000.00'
T = 382.35'
L = 760.61'
E = 24.27'
SE = 4.95%



RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER 07/31/2013 DATE

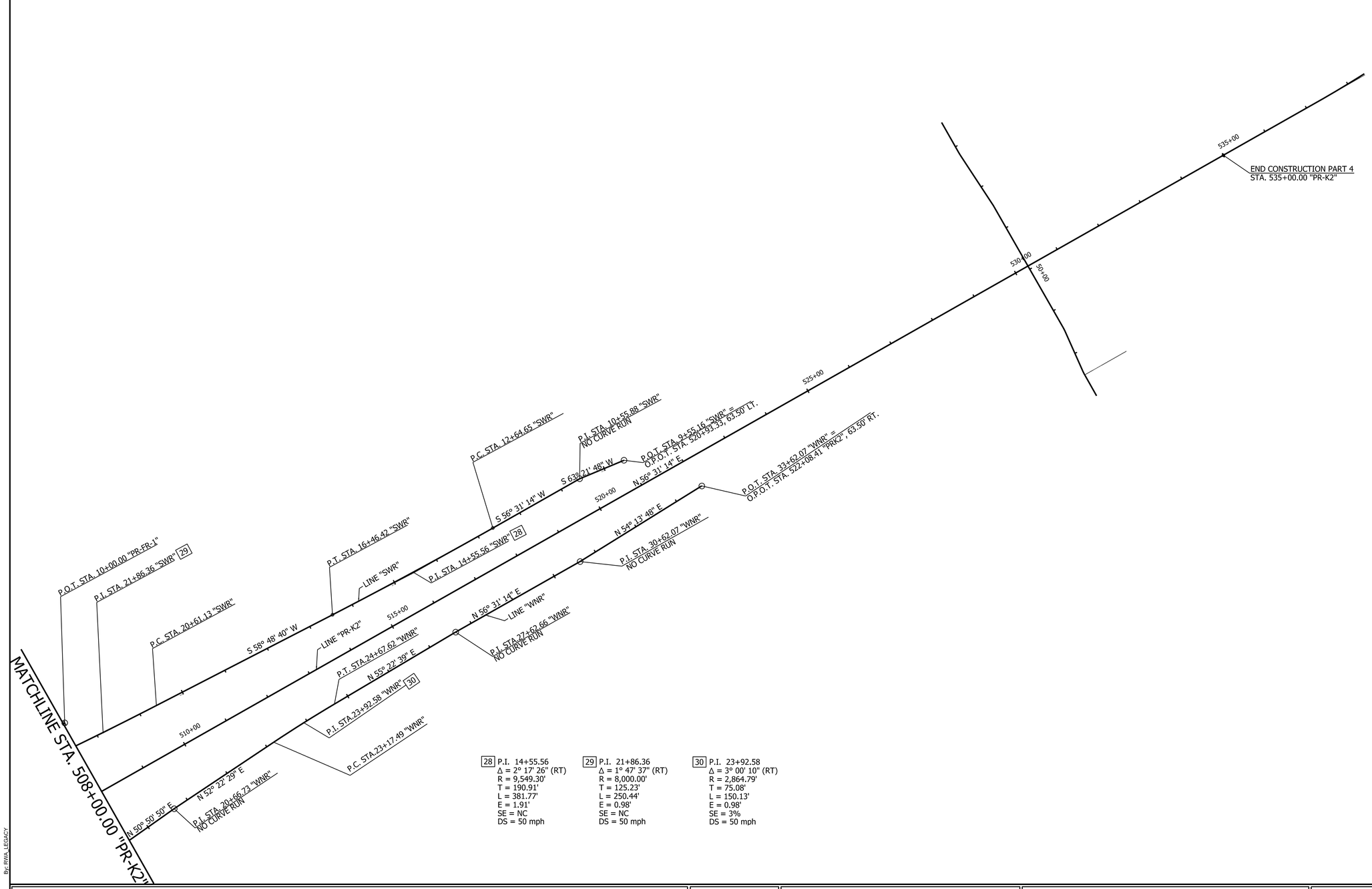
DESIGNED: CSW | DRAWN: RBA
CHECKED: CJS | CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

PROPOSED INTERCHANGE GEOMETRICS

HORIZONTAL SCALE	BRIDGE FILE
1" = 100'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	139 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY
5/10/2013
Model: GEO-1
Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\P4 Segment 11\MM11-PR-GEO-ROW.dgn



28 P.I. 14+55.56
Δ = 2° 17' 26" (RT)
R = 9,549.30'
T = 190.91'
L = 381.77'
E = 1.91'
SE = NC
DS = 50 mph

29 P.I. 21+86.36
Δ = 1° 47' 37" (RT)
R = 8,000.00'
T = 125.23'
L = 250.44'
E = 0.98'
SE = NC
DS = 50 mph

30 P.I. 23+92.58
Δ = 3° 00' 10" (RT)
R = 2,864.79'
T = 75.08'
L = 150.13'
E = 0.98'
SE = 3%
DS = 50 mph

By: RWA_LEGACY

5/10/2013

RECOMMENDED FOR APPROVAL _____ 05/03/2013
DESIGN ENGINEER DATE

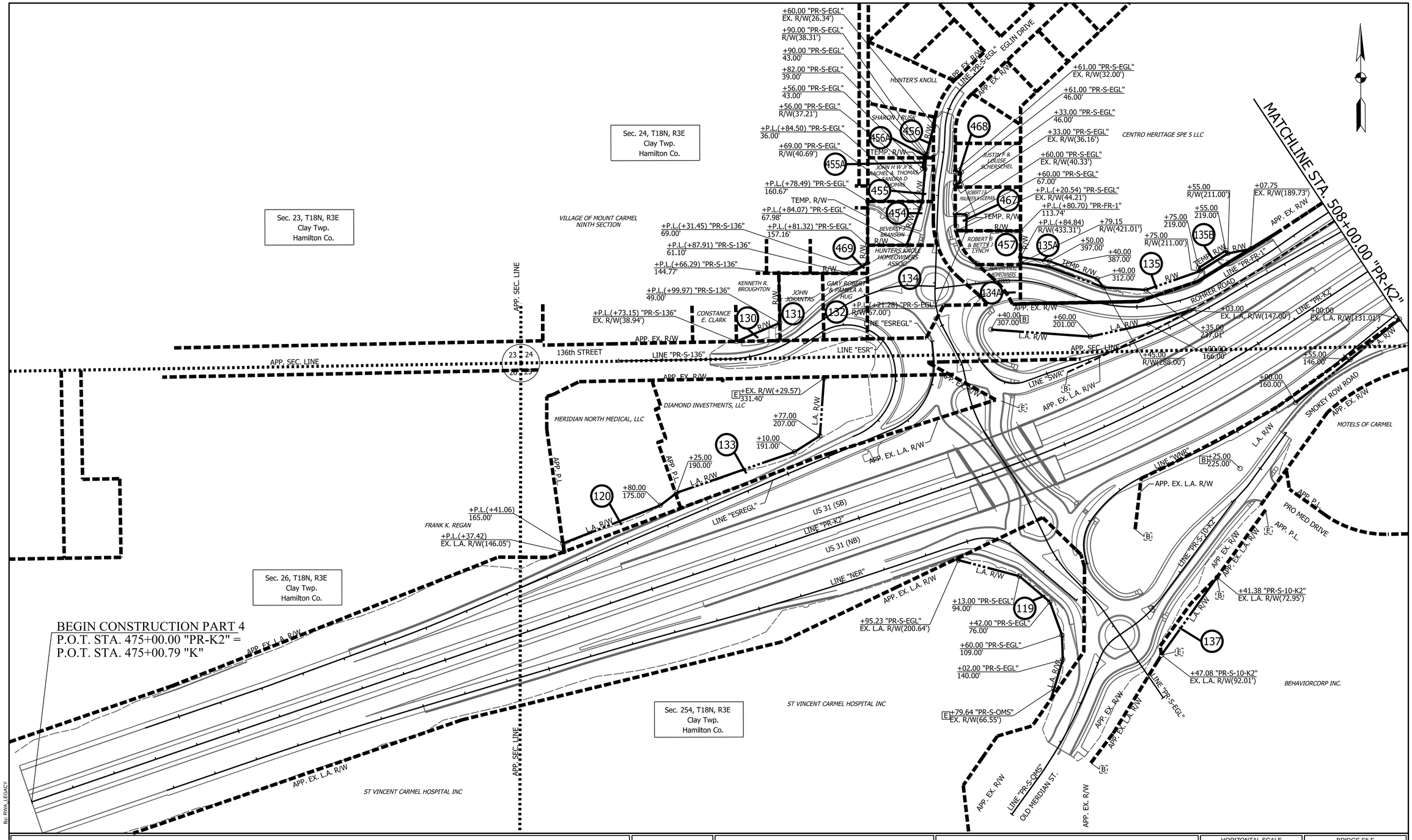
DESIGNED: CSW | DRAWN: RBA
CHECKED: CJS | CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

PROPOSED INTERCHANGE GEOMETRICS

HORIZONTAL SCALE	BRIDGE FILE
1" = 100'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	140 of 144
CONTRACT	PROJECT
IR-34750	0710215

Model: GEO-2 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\P4 Segment 11\MM11-PR-GEO-ROW.dgn



ALL R/W ON THIS SHEET TO BE AS SHOWN
ALL R/W ON THIS SHEET DESCRIBED FROM LINE "PR-K2" EXCEPT AS NOTED
LIMITED ACCESS R/W TO APPLY WHERE INDICATED

B BEGIN LA R/W AND A.C.L.
E END LA R/W AND A.C.L.

SEE LINE "PR-K2 PLAN FOR ADDITIONAL R/W INFORMATION

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

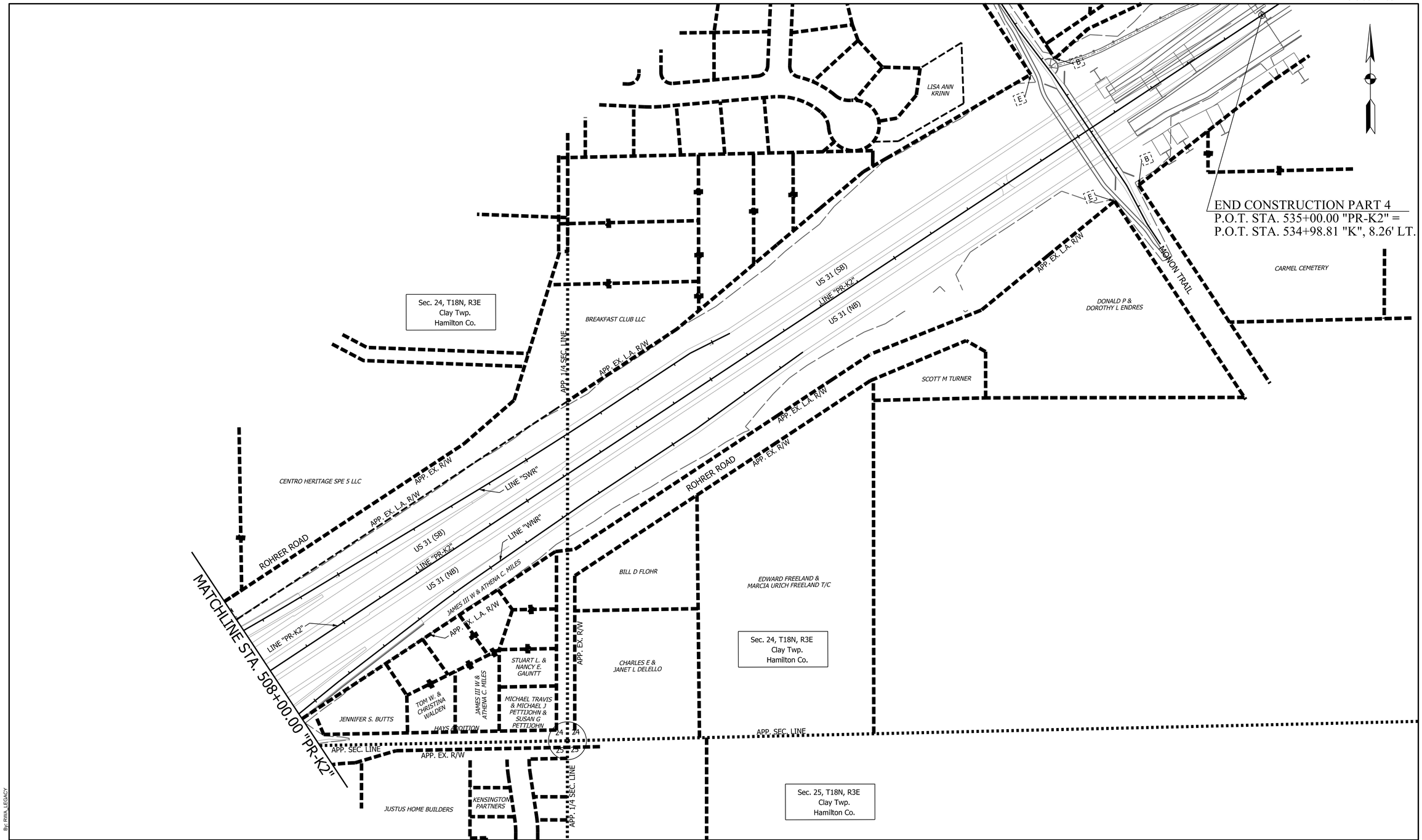
DESIGNED: CSW | DRAWN: RBA
CHECKED: CJS | CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

INTERCHANGE RIGHT-OF-WAY DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 100'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	141 of 144
CONTRACT	PROJECT
IR-34750	0710215

By: RWA_LEGACY
5/12/2013
Model: IRW-1
Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\P4 Segment 11\MM11-136th-IRW-old.dgn



By: RWA_LEGACY

ALL R/W ON THIS SHEET TO BE AS SHOWN
ALL R/W ON THIS SHEET DESCRIBED FROM LINE "PR-K2" EXCEPT AS NOTED
LIMITED ACCESS R/W TO APPLY WHERE INDICATED

B BEGIN LA R/W AND A.C.L.
E END LA R/W AND A.C.L.

SEE LINE "PR-K2 PLAN FOR ADDITIONAL R/W INFORMATION

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: CSW | DRAWN: RBA
CHECKED: CJS | CHECKED: JLR

INDIANA
DEPARTMENT OF TRANSPORTATION

INTERCHANGE RIGHT-OF-WAY DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 100'	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	142 of 144
CONTRACT	PROJECT
IR-34750	0710215

5/13/2013

Model: IRW-2 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\P4 Segment 11\MM11-136th-IRW-old.dgn

PAVEMENT QUANTITIES AND APPROACH TABLE - HMA OPTION

LOCATION	DESCRIPTION (APPROACH TYPE OR CLASS)	WIDTH	LENGTH	RADII	DISTANCE BEYOND R/W LINE	GRADE 1	GRADE 2	GRADE 3	GRADE 4	EXCAVATION CUT	EXCAVATION FILL	CLEAR ZONE AT DRIVE	QC/QA-HMA 4, 70, SURFACE, 9.5MM	QA/QC-HMA, 4, 70, INTERMEDIATE, 19.0 MM	QC/QA-HMA, 4, 64, BASE, 19.0 MM	QC/QA-HMA, 5, 76, INTERMEDIATE, OG 19.0MM	QC/QA-HMA, 1, 64, SURFACE, 9.5 MM	QA/QC-HMA, 1, 64, BASE, 25.0 MM	QC/QA-HMA, 3, 70, SURFACE, 9.5 MM	QC/QA-HMA, 3, 70, INTERMEDIATE, 19.0 MM	QC/QA-HMA, 3, 64, BASE, 19.0 MM	QC/QA-HMA, 2, 70, SURFACE, 9.5 MM, ON	QC/QA-HMA, 2, 70, INTERMEDIATE, 19 MM, ON	QC/QA-HMA, 2, 64, BASE, 19.0 MM, ON	HMA, SURFACE, TYPE A	HMA, INTERMEDIATE, TYPE A	COMPACTED AGGREGATE, NO 53, BASE	SUBGRADE TREATMENT, TYPE 1A	TACK COAT	JOINT ADHESIVE	BASE SEAL	D-1 CONTRACTION JOINT	PCCP FOR APPROACHES, 6IN	PCCP FOR APPROACHES, 9 IN	REMARKS
		FT	FT	FT	FT	%	%	%	%	CYS	CYS	FT	TON	TON	TON	TON	TON	TON	TON	TON	TON	TON	TON	TON	TON	TON	TON	SYS	TON	LFT	TON	SYS	SYS	SYS	
US31 - Line "PR-K2"				TOTAL									5,020	8,420	20,207	8,397	1,522	11,161									6,541	83,864	61	43,875	56				
NB:475+00 to 497+75	Roadway	Varies	2,275	N/A	N/A								*1,041*	*1,735*	*4,163*	*1,577*	*282*	*2,067*																	subtotal only
NB: 499+15 to 535+00	Roadway	Varies	3,585	N/A	N/A								*1,486*	*2,477*	*5,945*	*2,252*	*478*	*3,502*																	subtotal only
SB: 475+00 to 497+95	Roadway	Varies	3,565	N/A	N/A								*1,000*	*1,666*	*3,999*	*1,515*	*261*	*1,914*																	subtotal only
SB: 499+35 to 535+00	Roadway	Varies	1,765	N/A	N/A								*1,481*	*2,468*	*5,923*	*2,492*	*503*	*3,687*																	subtotal only
Clay Terrace Path	Shared Use Path																								104	164	492	1,491		0.4					
Monon Trail	Shared Use Path																								41	65	194	587		0.1					
Line "PR-S-EGL"																																			Excludes Roundabout
511+71.50 to 515+50	Roadway	Varies	282	45	N/A											220						95	159	190				1,377	2		1				
512+42.04 Rt	Mod. Class I	19	50	20\10	24	8	2	14																				144					144		
513+42.16 Rt	Class I	17	33	20\10	10	8	2	14																				79					79		
513+72.78 Lt	Class I	17	27	20\10	N/A	2	3																					69					69		
514+70.01 Lt	Mod. Class I	17	15	20\5	N/A																							40					40		
Line "PR-S-136" and "PR-S-EGL" RAB																																			Includes Roundabout on S-EGL
12+08.72 to 16+99.39 LT	Roadway	Varies	491	N/A	N/A											1,373			903	1,505	3,621							12,423	15	3,932	11				
13+53.68 Lt	Mod. Class I	15	35	10\10	N/A	8	2	7																				76					76		
Line "ESR"					N/A																														
10+00 to 17+09.45	Roadway	Varies	709	N/A	N/A											122	16	88	61	104	122						177	1,183	1	428	1				
					N/A																														
Line "ESREGL"																																			
10+55.20 to 21+57.68	Roadway	Varies	1,102	N/A	N/A											577	38	215	306	513	610						370	4,688	5	1,364	4				
1125.00 to 1165.00	Roadway from RBT	Varies	40	N/A	N/A																														
Line "NER"																																			
21+28.02 to 30+90.62	Roadway	Varies	963	N/A	N/A											500			269	450	537						204	3,546	4	1,988	3				
Line PR-S-OMS"																																			
12+19.05 to 14+19.03	Roadway	Varies	200	N/A	N/A											205			90	150	180							1,288	2	462	1				
Line "WNR"																																			
10+66.86 to 21+82.71	Roadway	Varies	1,116	N/A	N/A											532	31	176	279	469	557						442	4,383	5	1,065	3				
1120 to 1300	Roadway from RBT																																		
Line "PR-S-10-K2"																																			
10+63.00 to 16+02.15	Roadway	Varies	539	N/A	N/A											385			205	341	419							2,870	2	495	3				
14+67.08 Rt	Roadway	50	44	40\32	N/A	2	7																												Pro-Med Lane
Line "PR-FR-1"																																			
12+00.00 to 18+64.83	Roadway	Varies	665	N/A	N/A											673			370	617	751							4,974	4	1,520	5				
18+55.00 to 1900.00	Roadway (turning lane)	Varies	45	N/A	N/A																														
12+97.36 Rt	Class III	37	28	25\25	3	2	0																					143						143	
Line "SWR"																																			
20+85.30 to 31+08.58	Roadway	Varies	1,023	N/A	N/A											496	26	145	259	435	516						462	4,266	3	1,760	3				
Total													**5,020**	**8,420**	**20,207**	**13,480**	**1,632**	**11,784**	**2,742**	**4,583**	**7,313**	**95**	**159**	**190**	**145**	**229**	**8,882**	**125,413**	**103**	**56,889**	**92**	**0**	**408**	**143**	

By: RWA_LEGACY

5/13/2013

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: RWW DRAWN: RBA
CHECKED: CJS CHECKED: VA

INDIANA
DEPARTMENT OF TRANSPORTATION

PAVEMENT QUANTITIES
AND APPROACH TABLE-HMA OPTION

HORIZONTAL SCALE	BRIDGE FILE
N/A	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	143 of 144
CONTRACT	PROJECT
IR-34750	0710215

Model: PAV QUAN-1 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\P4 Segment 11\MM11-TAP-136.dgn

PAVEMENT QUANTITIES AND APPROACH TABLE - PCCP OPTION

LOCATION	DESCRIPTION (APPROACH TYPE OR CLASS)	WIDTH	LENGTH	RADII	DISTANCE BEYOND R/W LINE	GRADE 1	GRADE 2	GRADE 3	GRADE 4	EXCAVATION CUT	EXCAVATION FILL	CLEAR ZONE AT DRIVE	QC/QA-PCCP, 10 IN.	QA/QC-PCCP, 9.5 IN.	SUBBASE FOR PCCP	QC/QA-HMA, 5, 76, INTERMEDIATE, OG 19.0MM	QC/QA-HMA, 1, 64, SURFACE, 9.5 MM	QC/QA-HMA, 1, 64, INTERMEDIATE 19.0 MM	QA/QC-HMA, 1, 64, BASE, 25.0 MM	QC/QA-HMA, 3, 70, SURFACE, 9.5 MM	QC/QA-HMA, 3, 70, INTERMEDIATE, 19.0 MM	QC/QA-HMA, 3, 64, BASE, 19.0 MM	QC/QA-HMA, 2, 70, SURFACE, 9.5 MM	QC/QA-HMA, 2, 70, INTERMEDIATE, 19 MM	QC/QA-HMA, 2, 64, BASE, 19.0 MM	HMA, SURFACE, TYPE A	HMA, INTERMEDIATE, TYPE A	COMPACTED AGGREGATE, NO 53, BASE	SUBGRADE TREATMENT, TYPE 1A	TACK COAT	JOINT ADHESIVE	BASE SEAL	D-1 CONTRACTION JOINT	PCCP FOR APPROACHES, 6IN	PCCP FOR APPROACHES, 9 IN	REMARKS
		FT	FT	FT	FT	%	%	%	%	CYS	CYS	FT	TON	TON	CYS	TON	TON	TON	TON	TON	TON	TON	TON	TON	TON	TON	TON	TON	SYS	TON	LFT	TON	LFT	SYS	SYS	
US31 - Line "PR-K2"				**TOTAL**									**60,697**		**16,249**		**1,522**	**3,044**	**5,580**									13,410	83,864	**9.3**			**30,563**			
NB:475+00 to 497+75	Roadway	Varies	2,275	N/A	N/A								*12,616*				*281*	*561*	*1,029*																	subtotal only
NB: 499+15 to 535+00	Roadway	Varies	3,585	N/A	N/A								*18,016*				*478*	*955*	*1,751*																	subtotal only
SB: 475+00 to 497+95	Roadway	Varies	3,565	N/A	N/A								*12,118*				*261*	*522*	*957*																	subtotal only
SB: 499+35 to 535+00	Roadway	Varies	1,765	N/A	N/A								*17,947*				*503*	*1,006*	*1,844*																	subtotal only
Clay Terrace Path	Shared Use Path																									104	164	492	1,491	0.4						
Monon Trail	Shared Use Path																									41	65	194	587	0.1						
Line "PR-S-EGL"																																				Excludes Roundabout
511+71.50 to 515+50	Roadway	Varies	282	45	N/A											220							95	159	190				1,377	1.6		1				
512+42.04 Rt	Mod. Class I	19	50	20\10	24	8	2	14																					144					144		
513+42.16 Rt	Class I	17	33	20\10	10	8	2	14																					79					79		
513+72.78 Lt	Class I	17	27	20\10	N/A	2	3																						69					69		
514+70.01 Lt	Mod. Class I	17	15	20\5	N/A																								40					40		
Line "PR-S-136" and "PR-S-EGL" RAB																																				Includes Roundabout on S-EGL
12+08.72 to 16+99.39 LT	Roadway	Varies	491	N/A	N/A											1,373				903	1,505	3,621							12,423	15.0	3,932	11				
13+53.68 Lt	Mod. Class I	15	35	10\10	N/A	8	2	7																					76					76		
Line "ESR"					N/A																															
10+00 to 17+09.45	Roadway	Varies	709	N/A	N/A									741	214		16	31	52									237	1,183	0.1			414			
					N/A																															
Line "ESREGL"																																				
10+55.20 to 21+57.68	Roadway	Varies	1,102	N/A	N/A									3,699	985		38	76	126									535	4,688	0.2			1,452			
1125.00 to 1165.00	Roadway from RBT	Varies	40	N/A	N/A																															
Line "NER"																																				
21+28.02 to 30+90.62	Roadway	Varies	963	N/A	N/A									3,253	847													204	3,546				1,397			
Line PR-S-OMS"																																				
12+19.05 to 14+19.03	Roadway	Varies	200	N/A	N/A											205				90	150	180							1,288	1.5	462	1				
Line "WNR"																																				
10+66.86 to 21+82.71	Roadway	Varies	1,116	N/A	N/A									3,374	916		31	62	103									586	4,383	0.2			2,025			
1120 to 1300	Roadway from RBT																																			
Line "PR-S-10-K2"																																				
10+63.00 to 16+02.15	Roadway	Varies	539	N/A	N/A											385				205	341	419							2,870	2.3	495	3				
14+67.08 Rt	Roadway	50	44	40\32	N/A	2	7																													Pro-Med Lane
Line "PR-FR-1"																																				
12+00.00 to 18+64.83	Roadway	Varies	665	N/A	N/A											673				370	617	751							4,974	4.0	1,520	5				
18+55.00 to 1900.00	Roadway (turning lane)	Varies	45	N/A	N/A																															
12+97.36 Rt	Class III	37	28	25\25	3	2	0																						143						143	
Line "SWR"																																				
20+85.30 to 31+08.58	Roadway	Varies	1,023	N/A	N/A									3,128	858		39	79	131									659	4,099	0.2			1,459			
Total													**60,697**	**14,194**	**20,069**	**2,856**	**1,646**	**3,291**	**5,993**	**1,568**	**2,613**	**4,971**	**95**	**159**	**190**	**145**	**229**	**16,317**	**127,325**	**35**	**6,409**	**21**	**37,310**	**408**	**143**	

By: RWA_LEGACY

5/13/2013

RECOMMENDED FOR APPROVAL _____ 05/01/2013
DESIGN ENGINEER DATE

DESIGNED: RWW DRAWN: RBA
CHECKED: CJS CHECKED: VA

INDIANA
DEPARTMENT OF TRANSPORTATION

PAVEMENT QUANTITIES
AND APPROACH TABLE-PCCP OPTION

HORIZONTAL SCALE	BRIDGE FILE
N/A	
VERTICAL SCALE	DESIGNATION
N/A	0900267
SURVEY BOOK	SHEET
	144 of 144
CONTRACT	PROJECT
IR-34750	0710215

Model: PAV QUAN-2 Drawing: P:\Right-Of-Way-Eng\2007\20074350 US31 Hamilton Co\20 Drawings\FatLines\P4 Segment 11\MM11-TAP-136.dgn