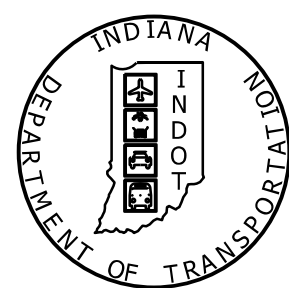


PROJECT	DESIGNATION
2101754	2101754
CONTRACT	BRIDGE FILE
B-44287	26-00073

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
26-00073	CONTINUOUS REINFORCED CONCRETE SLAB BRIDGE	3 SPANS @ 44'-6", 60'-0", 44'-6" SKEW: 10° RT.	PATOKA RIVER	1100+00 "PR-A"

# INDIANA DEPARTMENT OF TRANSPORTATION



## BRIDGE PLANS

### FOR SPANS OVER 20 FEET

### ROUTE: CR 400 N OVER PATOKA RIVER

### PROJECT NO. 2101754 P.E.

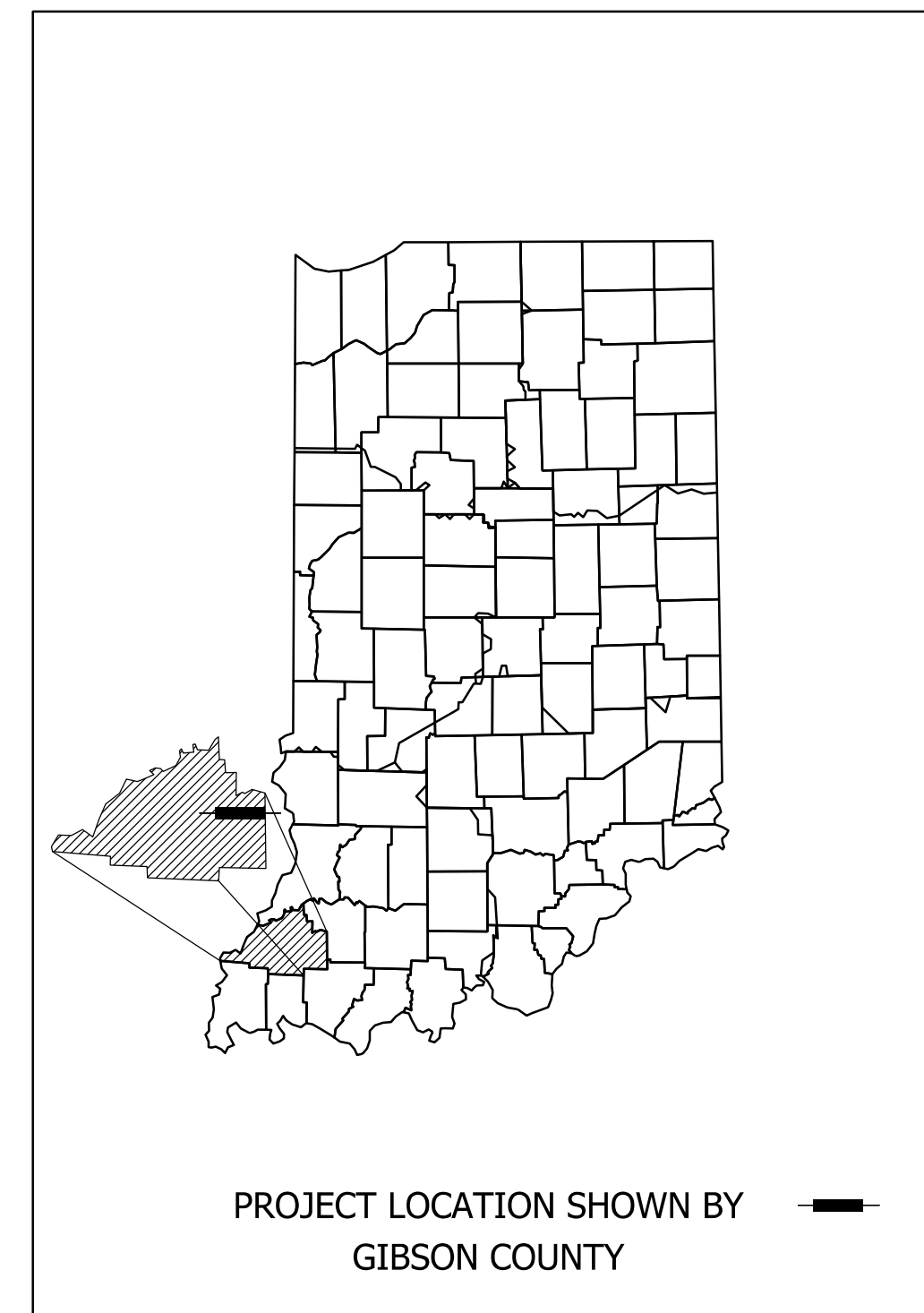
### 2101754 R/W

### 2101754 CONST.

Bridge Replacement on CR 400 N over Patoka River  
 Located 0.40 Miles West of CR 350 E in  
 Section 22, T-1-S, R-10-W, Washington Township, Gibson County, Indiana.

TRAFFIC DATA		
A.A.D.T. (2026)		256 V.P.D.
A.A.D.T. (2046)		324 V.P.D.
D.H.V (2046)		- V.P.H.
DIRECTIONAL DISTRIBUTION		- %
TRUCKS		2.0 % A.A.D.T.
		+ % D.H.V.

DESIGN DATA	
DESIGN SPEED	40 MPH
PROJECT DESIGN CRITERIA	3R (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	MINOR COLLECTOR
RURAL/URBAN	RURAL
TERRAIN	LEVEL
ACCESS CONTROL	NONE



LATITUDE: 38°24'50" N LONGITUDE: 87°30'28" W

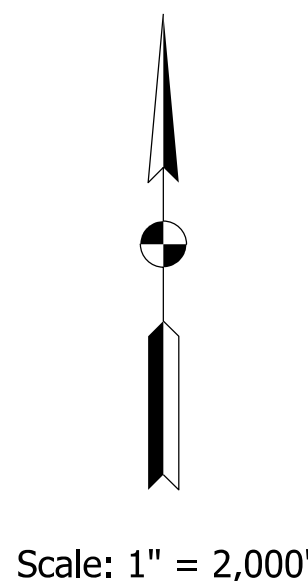
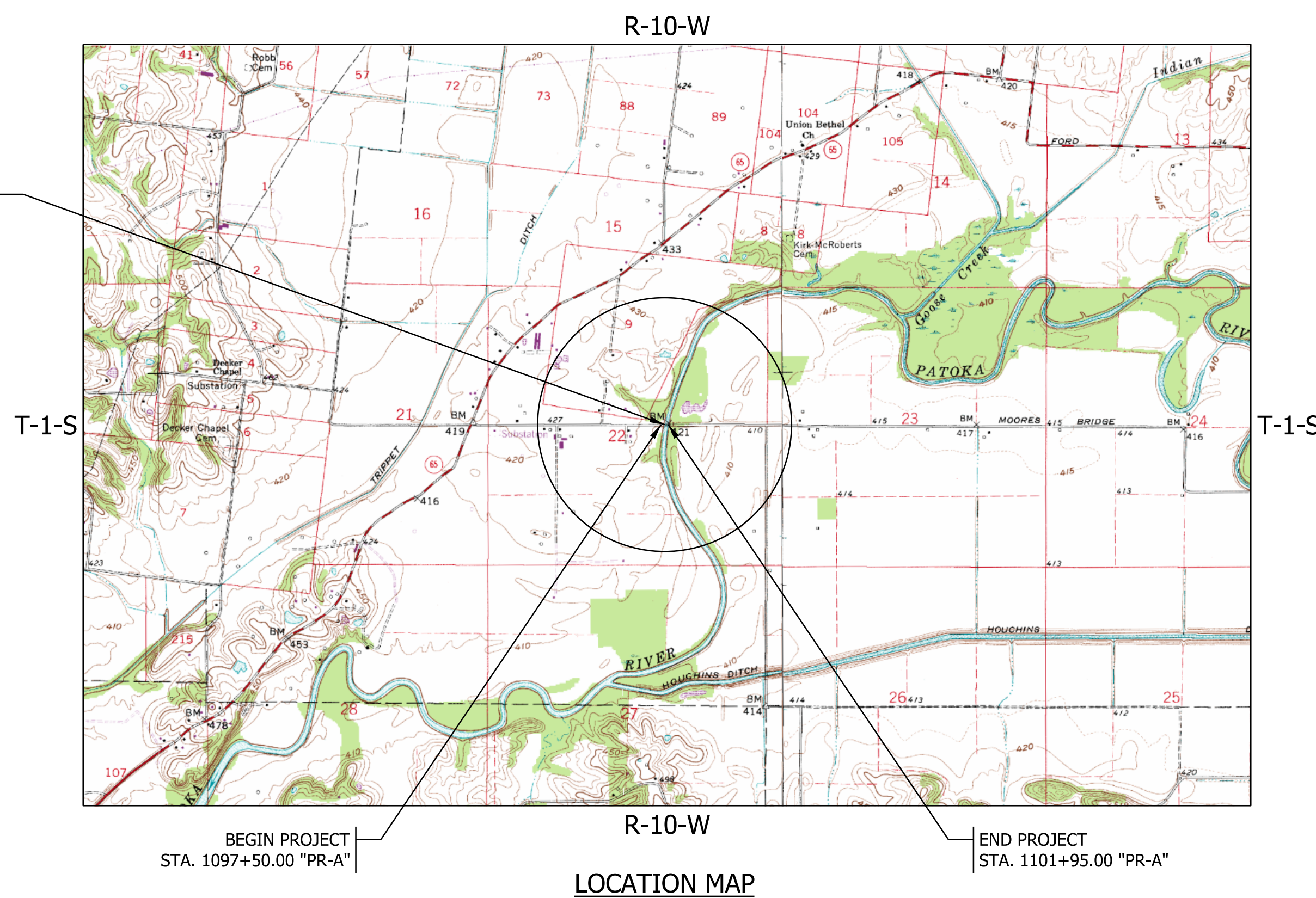
BRIDGE LENGTH:	0.028	MI.
ROADWAY LENGTH:	0.056	MI.
TOTAL LENGTH:	0.084	MI.
MAX. GRADE:	4.60	%

HUC: 051202090805



9102 North Meridian Street, Suite 200, Indianapolis, IN 46260  
 Phone: (317) 566-0629

INDIANA DEPARTMENT OF TRANSPORTATION  
 STANDARD SPECIFICATIONS DATED 2024  
 TO BE USED WITH THESE PLANS.



PROJECT LOCATION  
 STRUCTURE NO. 26-00073  
 CR 400 N OVER PATOKA RIVER  
 STA. 1100+00.00 "PR-A"

#### GIBSON COUNTY BOARD OF COMMISSIONERS

APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

WARREN FLEETWOOD, PRESIDENT

KENNETH MONTGOMERY, VICE-PRESIDENT

MARY B. KEY, MEMBER

RECOMMEND FOR APPROVAL \_\_\_\_\_ DATE \_\_\_\_\_

MATTHEW L. HOLDEN, P.E., COUNTY ENGINEER

ATTESTED BY \_\_\_\_\_ DATE \_\_\_\_\_

MICHAEL A. WATKINS, AUDITOR

STAGE 2  
 SUBMITTAL

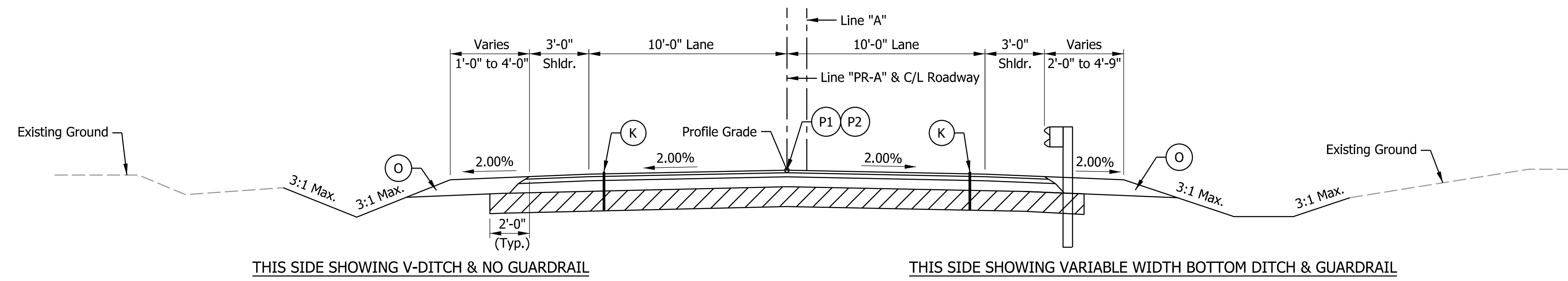
PLANS PREPARED BY: SJCA Inc. (317) 566-0629 PHONE NUMBER

CERTIFIED BY: \_\_\_\_\_ DATE

RECOMMENDED FOR LETTING: \_\_\_\_\_ DATE

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE FILE	
26-00073	
DESIGNATION	
2101754	
SHEETS	
SURVEY BOOK	1 of 15
ELECTRONIC	PROJECT
CONTRACT	2101754
B-44287	

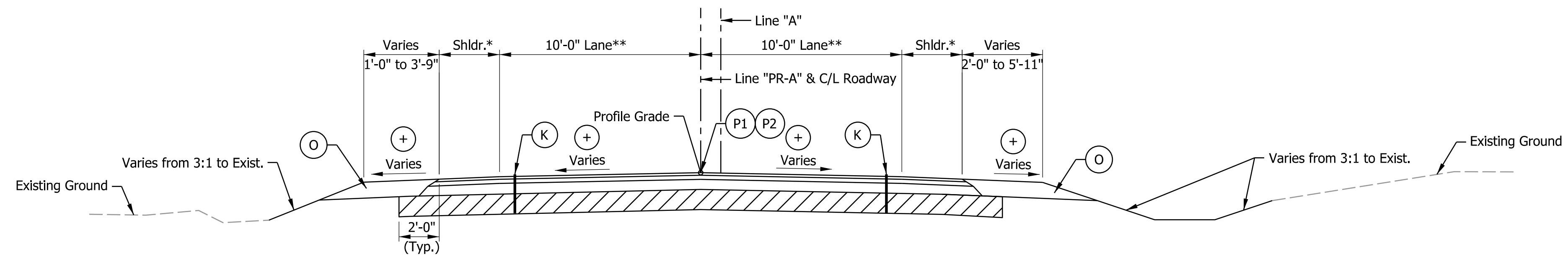


THIS SIDE SHOWING V-DITCH & NO GUARDRAIL

THIS SIDE SHOWING VARIABLE WIDTH BOTTOM DITCH & GUARDRAIL

**TYPICAL FULL DEPTH PAVEMENT SECTION**

Sta. 1097+50.00 "PR-A" to 1099+01.78 "PR-A"  
 Sta. 1100+98.22 "PR-A" to 1101+95.00 "PR-A"  
 Scale: 1/4" = 1'-0"



**TYPICAL FULL DEPTH INCIDENTAL SECTION**

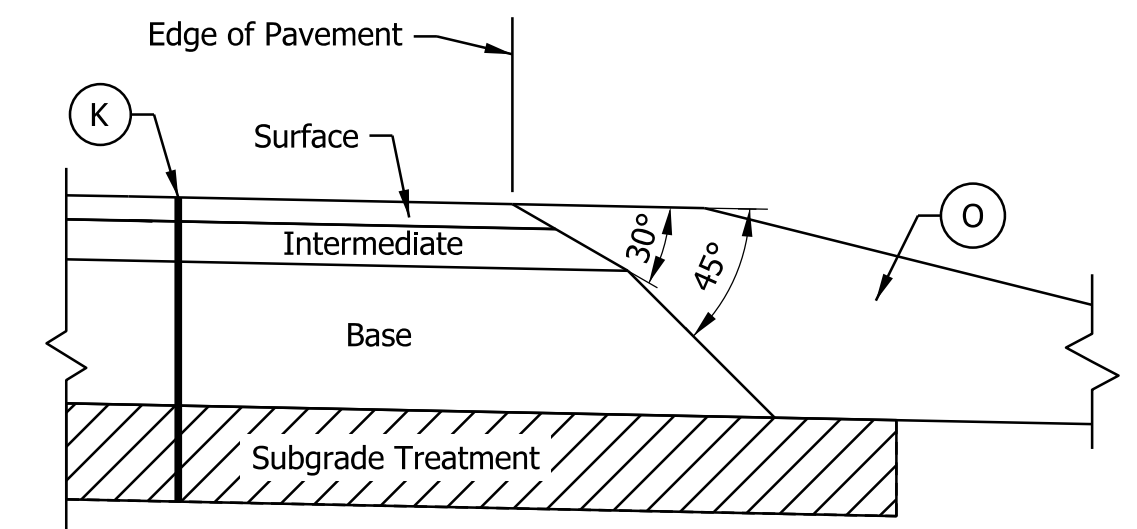
Sta. 1097+00.00 "PR-A" to 1097+50.00 "PR-A"  
 Sta. 1101+95.00 "PR-A" to 1102+45.00 "PR-A"  
 Scale: 1/4" = 1'-0"

\* Shoulders Vary from Existing to 3'-0" (SE Shoulder remains 3'-0" throughout)

\*\* Lanes Vary from Existing to 10'-0"

(+) Cross Slope varies from Existing to 2.00%

PAVING EXCEPTION  
 Sta. 1099+01.78 to Sta. 1100+98.22



**SAFETY EDGE DETAIL**

Not to Scale

**LEGEND**

- (K) 165 #/SYS QC/QA-HMA, 3, 64, Surface, 9.5mm on  
275 #/SYS QC/QA-HMA, 3, 64, Intermediate, 19.0mm on  
660 #/SYS QC/QA-HMA, 3, 64, Base, 25.0mm on  
Subgrade Treatment, Type IC on  
Geotextile for Pavement, Type 2B
- (O) Compacted Aggregate Base No. 53 (Variable depth, 10" max.)
- ▨ Limits of Subgrade Treatment
- (P1) Joint Adhesive Required for Surface and  
Intermediate Layers at Longitudinal Joints
- (P2) Liquid Asphalt Sealant Required on Surface  
Layer over Longitudinal Joint, 24" Width

**NOTE**

East Existing Approach consists of all gravel  
 Provided Erosion Control Blanket for Slopes Steeper than 3:1.

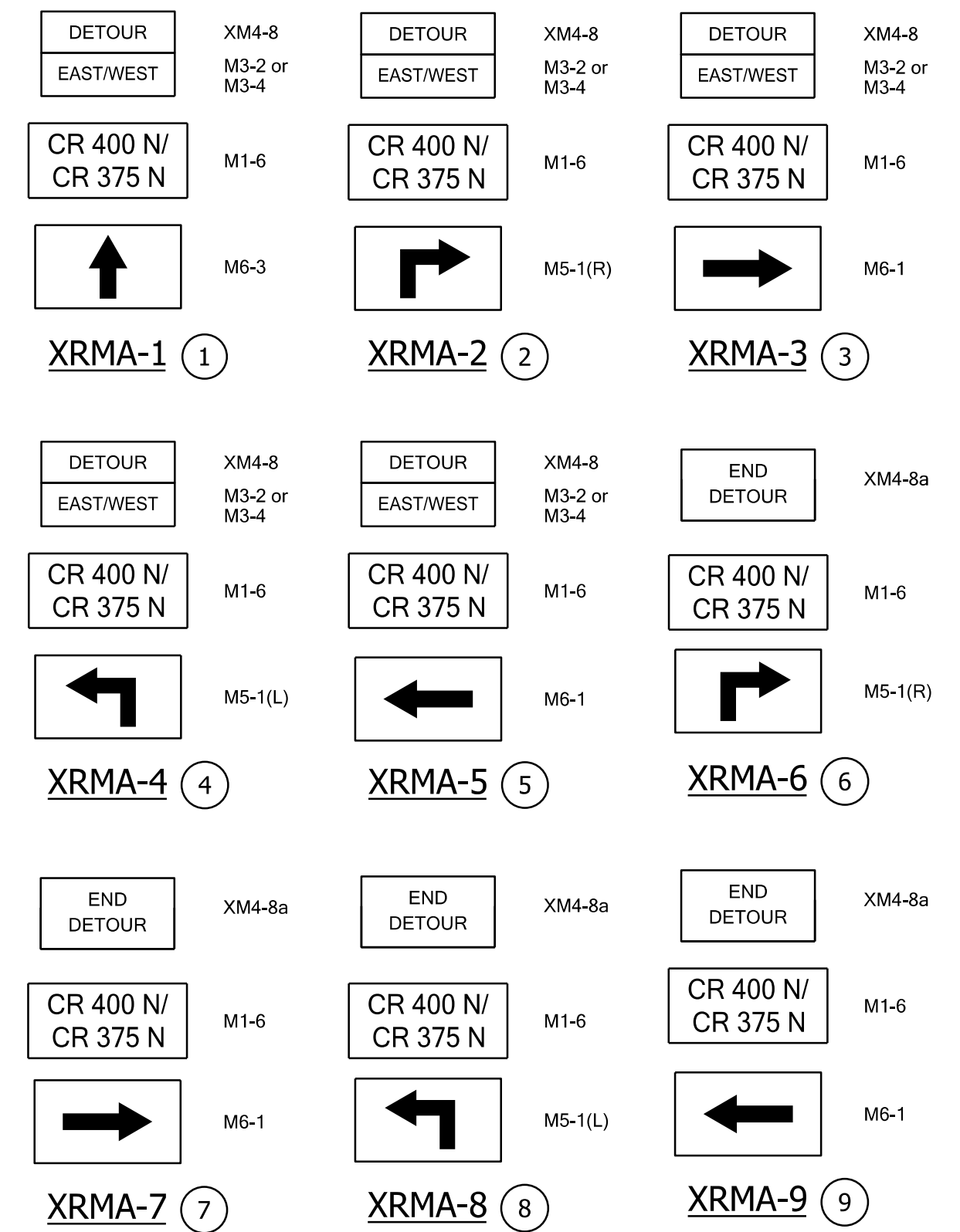
**NOTE TO REVIEWER**

Additional details about the roadway variations will be included in the Construction Details, which will be provided at the next submittal.

Plot: 11/21/2023 8:55:22 AM

<b>STAGE 2 SUBMITTAL</b>	RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE AS NOTED	BRIDGE FILE 26-00073
	DESIGNED: _____ JBL _____	DRAWN: _____ JBL _____	TYPICAL SECTIONS		VERTICAL SCALE AS NOTED	DESIGNATION 2101754
	CHECKED: _____ RK _____	CHECKED: _____ RK _____			SURVEY BOOK ELECTRONIC	SHEETS 3 of 15
					CONTRACT B-44287	PROJECT 2101754

**DETOUR ROUTE MARKER ASSEMBLY LEGEND**



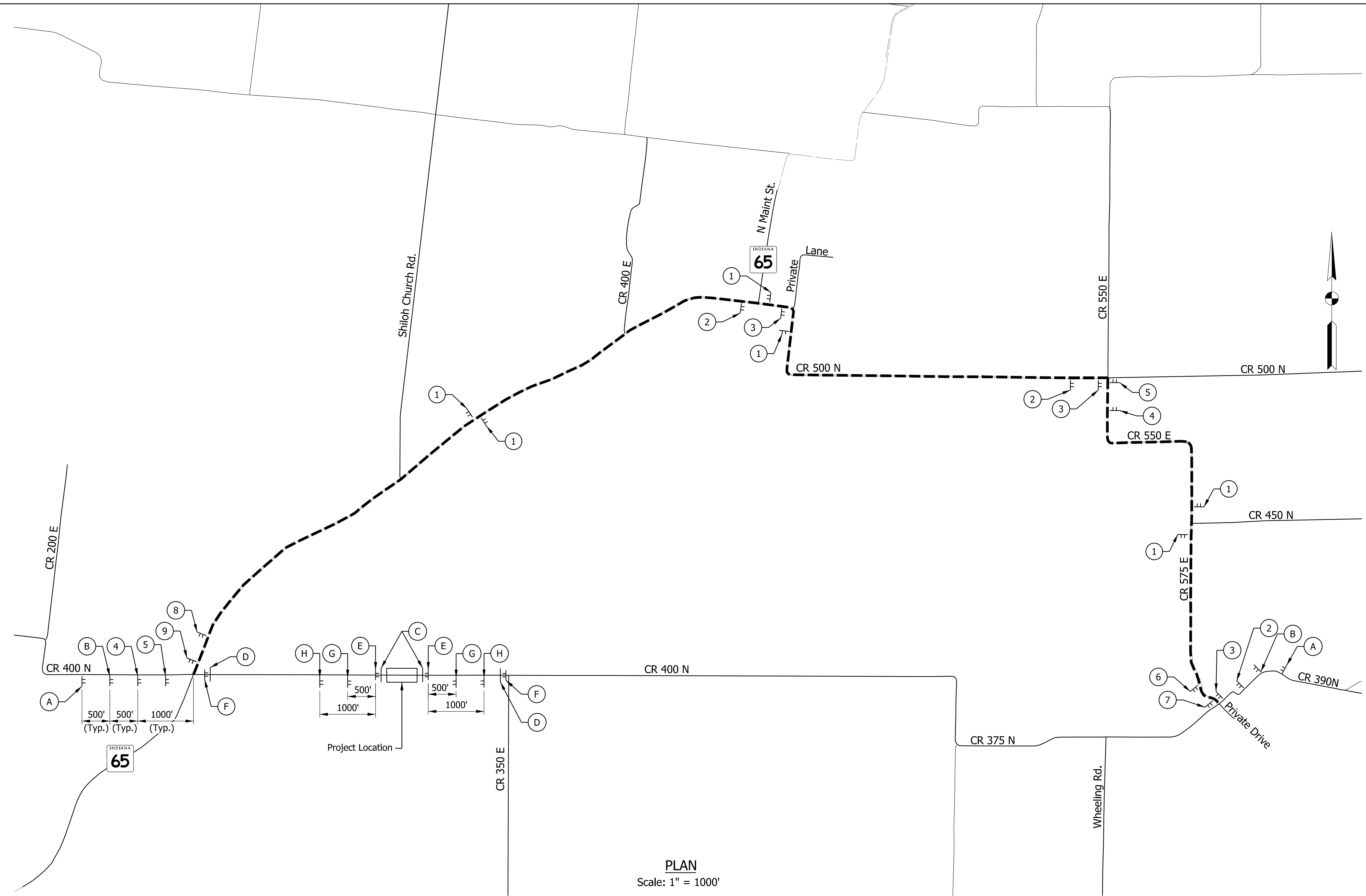
**TWO ROAD CLOSURE NOTICE SIGNS XG20-5 REQUIRED (ONE AT EACH END) PLACED AT SITE A MINIMUM OF 14 DAYS PRIOR TO ROAD CLOSURE**

**LEGEND**

- (A) "ROAD CLOSED AHEAD" - XW20-3
- (B) "DETOUR AHEAD" - XW20-2
- (C) Type III-A Barricades - 36 Lft Required
- (D) Type III-B Barricades Staggered - 24 Lft Required
- (E) Road Closure Sign Assembly with "ROAD CLOSED" - R11-2
- (F) Road Closure Sign Assembly with "ROAD CLOSED "X" MILES AHEAD LOCAL TRAFFIC ONLY" - R11-3
- (G) "ROAD CLOSED 500 FT." - XW20-3
- (H) "ROAD CLOSED 1000 FT." - XW20-3
- TT Construction Sign
- Detour Route

**NOTES**

1. Detour Route Marker Assemblies shall be in accordance with Standard Drawing 801-TCDDT-04. Sign spacing shall be in accordance with Standard Drawing 801-TCDDT-01.
2. Type B Construction Warning Lights shall be used with all signs located on barricades. Type A Construction Warning Lights shall be used on all other construction signs.
3. Access to all drives and field entrances shall be maintained during construction.

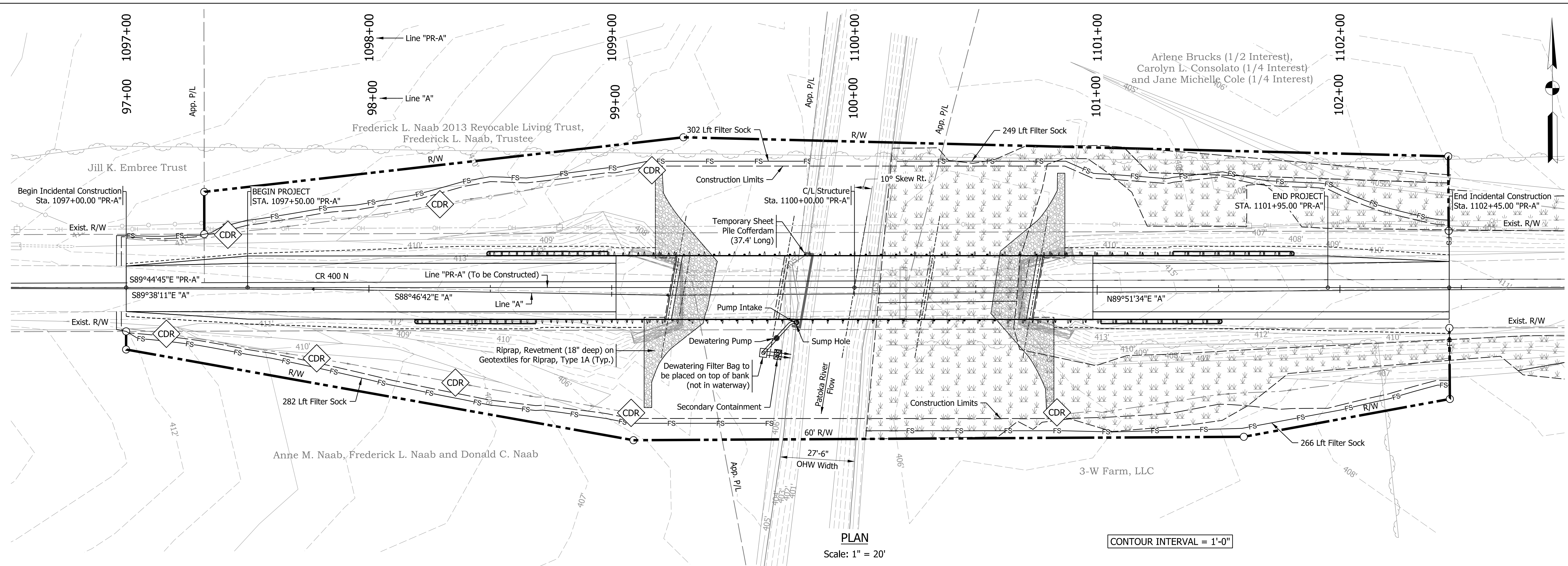


**PLAN**  
Scale: 1" = 1000'

ESTIMATED QUANTITIES		
DESCRIPTION	UNIT	TOTAL
CONSTRUCTION SIGN, A	EACH	10
DETOUR ROUTE MARKER ASSEMBLY	EACH	20
ROAD CLOSURE SIGN ASSEMBLY	EACH	4
TYPE III-A BARRICADES	LFT	72
TYPE III-B BARRICADES	LFT	48

Plot: 11/21/2023 8:55:23 AM

<b>STAGE 2 SUBMITTAL</b>	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	<b>INDIANA DEPARTMENT OF TRANSPORTATION</b>	HORIZONTAL SCALE 1" = 1000'	BRIDGE FILE 26-00073
	DESIGNED: _____ JBL _____ DRAWN: _____ JBL _____	<b>DETOUR ROUTE</b>	VERTICAL SCALE N/A	DESIGNATION 2101754
CHECKED: _____ RK _____ CHECKED: _____ RK _____			SURVEY BOOK ELECTRONIC	SHEETS 4 of 15
			CONTRACT B-44287	PROJECT 2101754



PLAN  
Scale: 1" = 20'

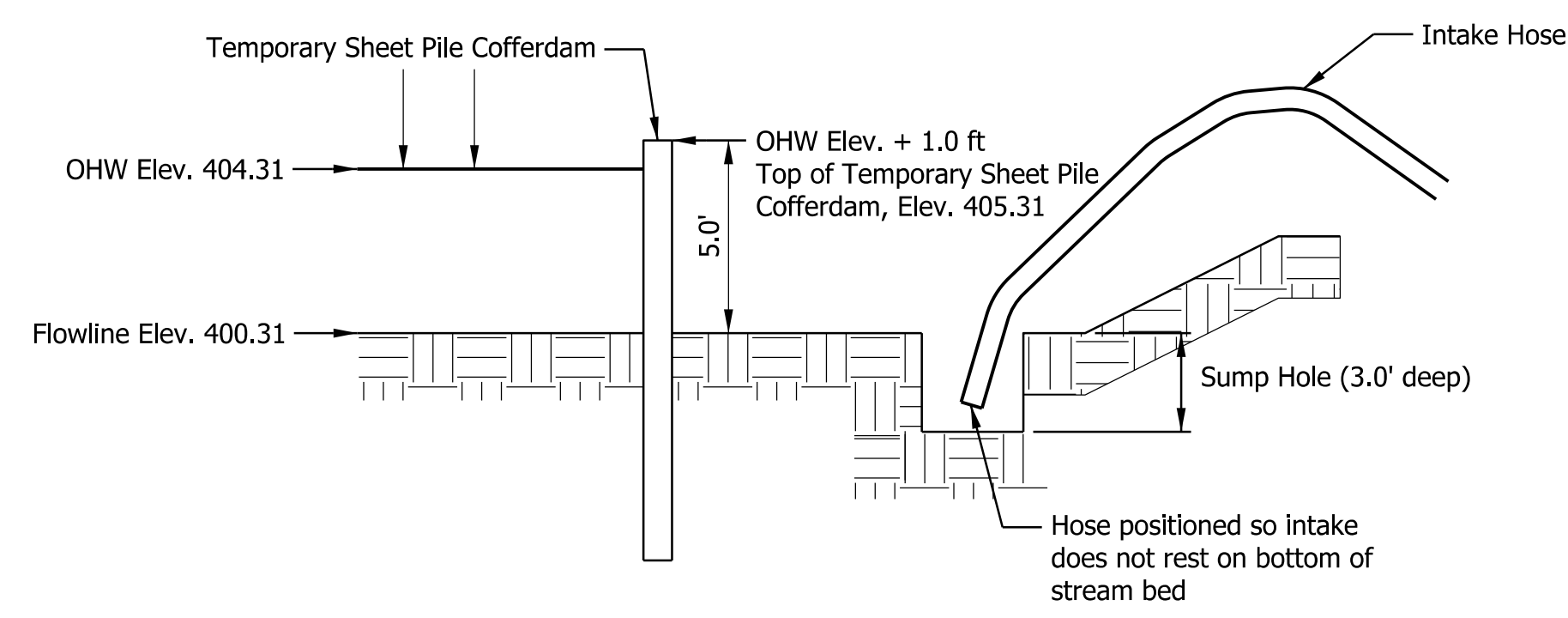
CONTOUR INTERVAL = 1'-0"

LEGEND

- Temporary Sheet Pile Cofferdam
- Filter Sock
- Limits of Wetland
- Temporary Check Dam, Revetment Riprap

NOTES

1. Any areas in addition to those called out, left undisturbed for a period exceeding 7 days shall be required to have Temporary Seeding.
2. All disturbed areas shall be permanently Seeded in accordance with INDOT Standard Specifications as soon as possible upon completion of work in that area.
3. Upon completion of Ditch Grading, permanent Erosion Control measures specified on road plans shall be implemented.
4. Erosion Control Blankets will be used on all slopes steeper than 3:1.
5. Pump Around operation shall remain in place until all work in the channel is complete including Channel Stabilization.
6. Refer to Standard Drawing 205-TECD for Erosion Control measures.
7. See General Plan sheet for limits of permanent riprap scour protection.



COFFERDAM/SUMP HOLE  
WORK AREA

Not to Scale

TEMPORARY EROSION CONTROL TABLE													
STATION	LOCATION			TEMPORARY FILTER SOCK	TEMPORARY SEED MIXTURE	TEMPORARY NO. 2 STONE	FERTILIZER	SEDIMENT, REMOVE	MOBILIZATION & DEMOBILIZATION	TEMPORARY CHECK DAM, REVETMENT RIPRAP	TEMPORARY GEOTEXTILE	EROSTON CONTROL BLANKET	REMARKS
	LEFT	SLOPE	RIGHT										
<b>LINE "PR-A"</b>													
STA. 1096+96.00 TO STA. 1099+66.55			X	282				5.6		32	68		
STA. 1096+96.00 TO STA. 1099+81.72	X			302				6.0		24	51		
STA. 1100+04.60 TO STA. 1102+45.00			X	266				5.3		8	17		
STA. 1100+17.43 TO STA. 1102+45.00	X			249				5.0					
UNDISTRIBUTED					90	100			1				
<b>TOTALS</b>				<b>1099</b>	<b>90</b>	<b>100</b>		<b>22.0</b>	<b>1</b>	<b>64</b>	<b>136</b>		

Plot: 11/21/2023 8:55:27 AM

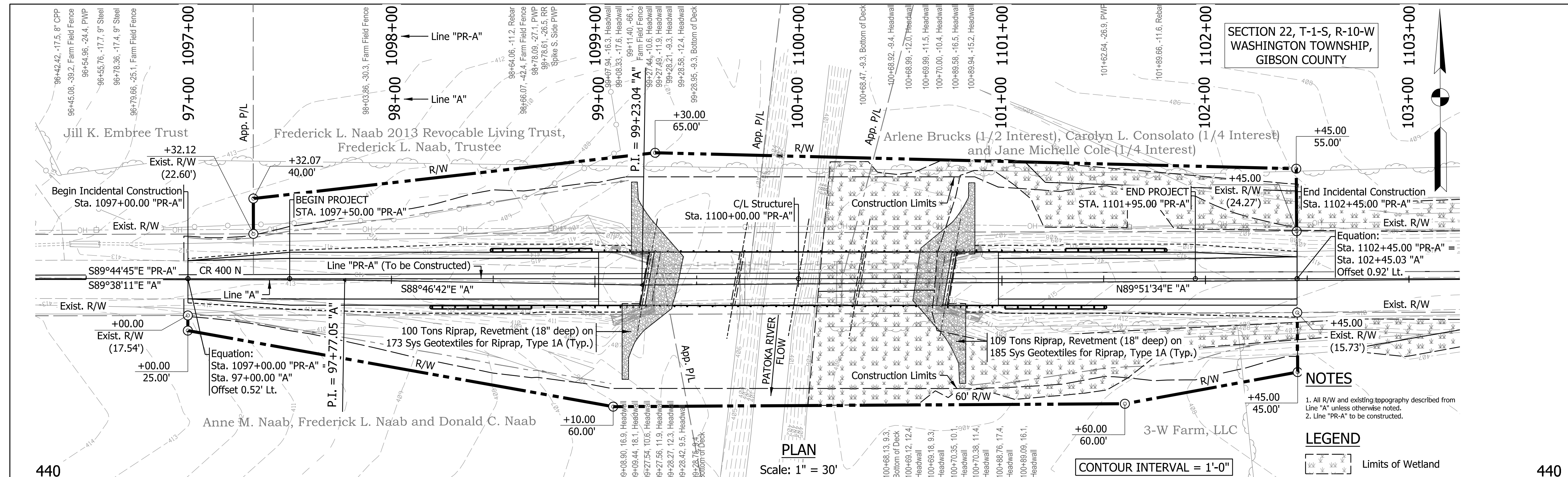
STAGE 2  
SUBMITTAL

RECOMMENDED FOR APPROVAL \_\_\_\_\_  
DESIGNED: JBL DRAWN: JBL  
CHECKED: MJF CHECKED: MJF

INDIANA  
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	26-00073
VERTICAL SCALE	DESIGNATION
AS NOTED	2101754
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 15
CONTRACT	PROJECT
B-44287	2101754



**UTILITIES**  
See Index Sheet For Information

**EXISTING STRUCTURE**  
Existing structure is a three-span Steel Beam Bridge built in 1979. It is 145' in total length with a maximum span of 49' and no skew (Existing structure to be removed).

**HYDRAULIC DATA**

Drainage Area	806.14 sq miles
Design Discharge (Q100)	21,680 cfs
Natural Q100 Elevation	413.96 ft
Backwater @ Q100	2.29 ft
Velocity @ Q100	0.38 ft/sec
Headwater @ Q100	416.25 ft
Waterway Opening Provided Below Q100 (Structure)	1206.52 sq ft
Existing Waterway Opening Below Q100	1,179.01 sq ft
Existing Waterway Opening over Road @ Q100	75,768 sq ft
Existing Low Structure Elevation	415.49 ft
Existing Backwater @ Q100	2.29 ft
Existing Velocity @ Q100	0.32 ft/sec
Existing Headwater Elevation @ Q100	416.25 ft
Outlet Flowline Elevation	400.31 ft
Minimum Low Structure Elevation	415.50 ft
Skew	10° Skew Rt

**NOTES**  
1. All R/W and existing topography described from Line "A" unless otherwise noted.  
2. Line "PR-A" to be constructed.

**LEGEND**  
Limits of Wetland

**SCOUR DATA**

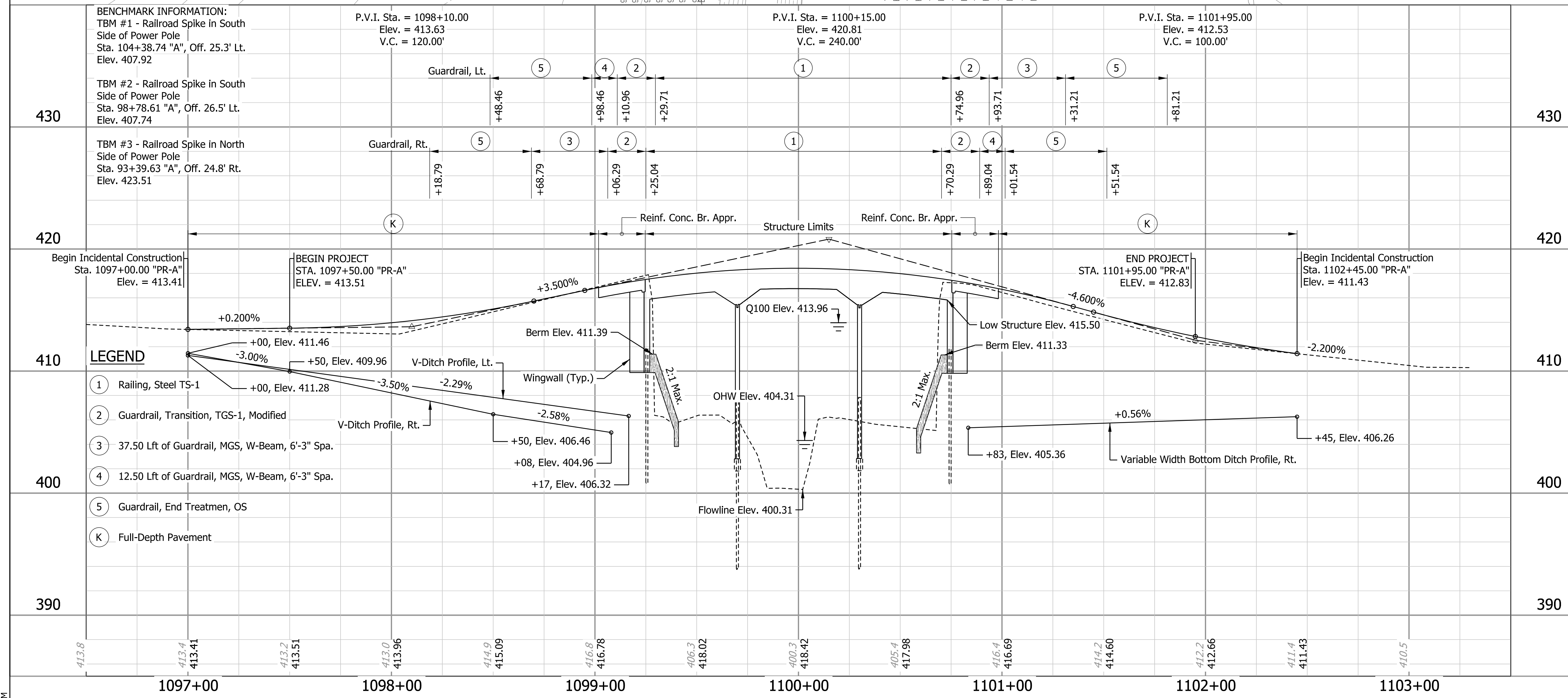
QMax Scour	2,900 cfs
Contraction Scour Depth (Q100)	1.28 ft
Total Scour Depth (Q100)	3.36 ft
Low Scour Elevation	396.95 ft

**EARTHWORK SUMMARY**

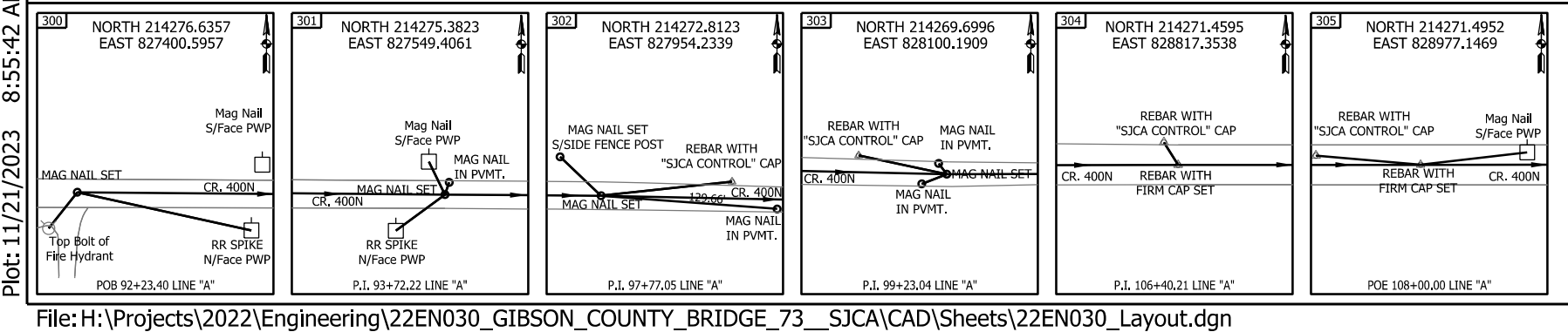
Fill +25%	x - CYS
Common Excavation	x - CYS
Usable Waterway Excavation (70%)	x - CYS
Surplus Foundation Excavation (70%)	x - CYS
Borrow	x - CYS
Total Waterway Excavation	x - CYS
Excavation Unclassified	x - CYS
Benching (Estimated)	x - CYS

NOTE: No direct payment will be made for Benching. Benching will not be included in the quantity of common excavation.

**NOTE TO REVIEWER**  
FINAL EARTHWORK QUANTITIES TO BE PROVIDED FOR STAGE 3 PLAN SUBMITTAL



**CONTINUOUS REINFORCED CONCRETE HAUNCHED SLAB**  
3 SPANS: 44'-6", 60'-0", 44'-6"  
26'-0" CLEAR ROADWAY; 10° SKEW RT.  
CR 400 N OVER PATOKA RIVER  
GIBSON COUNTY



**STAGE 2 SUBMITTAL**

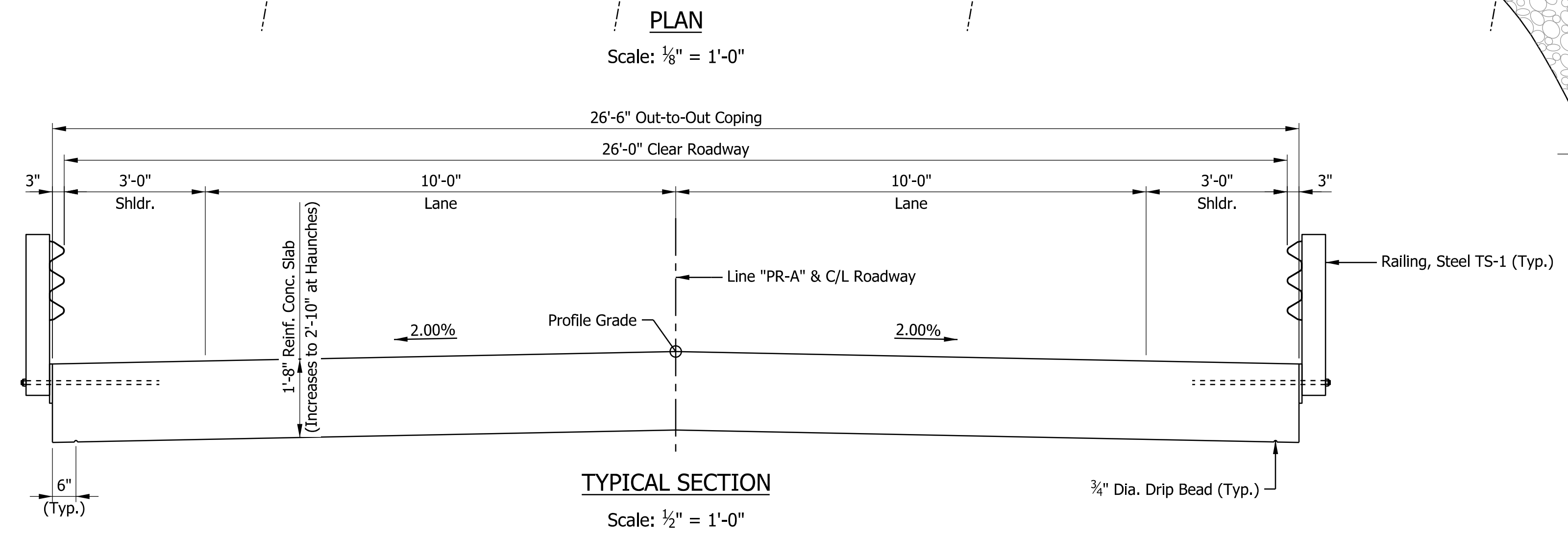
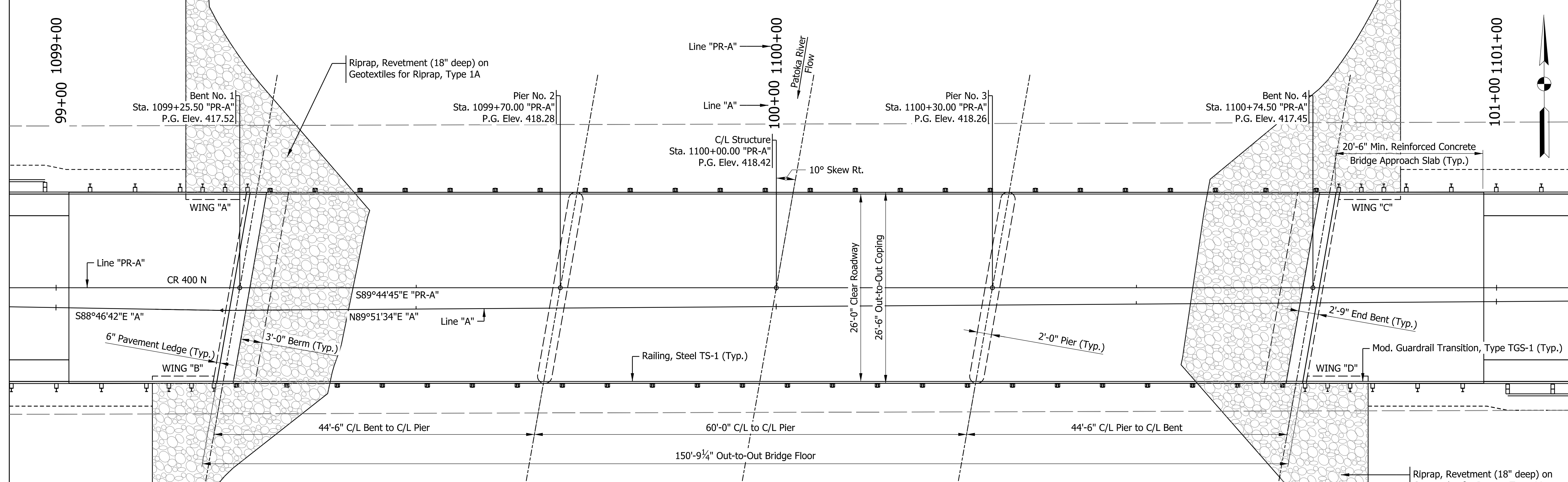
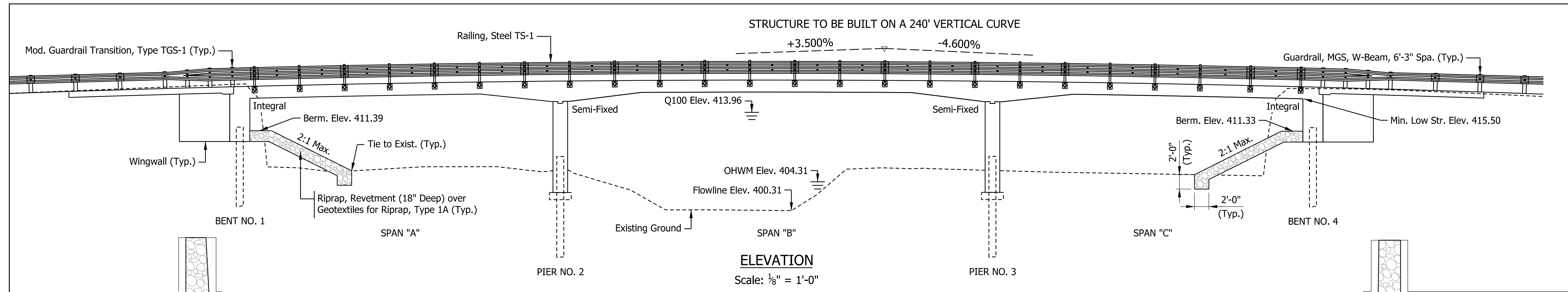
RECOMMENDED FOR APPROVAL

DESIGNED:	JBL	DRAWN:	JBL
CHECKED:	RK	CHECKED:	RK

INDIANA DEPARTMENT OF TRANSPORTATION  
LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	26-00073
VERTICAL SCALE	DESIGNATION
1" = 5'	2101754
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 15
CONTRACT	PROJECT
B-44287	2101754

Plot: 11/21/2023 8:55:42 AM



**GENERAL NOTES**

Reinforcing Steel Cover Shall be 2 1/2" in Top, 1 1/2" Min. in Bottom of Slabs, and 2" in All Other Parts Unless Noted.

**DESIGN DATA**

LIVE LOAD:  
 Designed for HL-93 Loading with Impact and Distribution in Accordance with the 2020 AASHTO LRFD Specifications, 9th Edition and Subsequent Interims.

DEAD LOAD:  
 Floor Slab considering a 1/2" Integral Wearing Surface.

Actual Weight Plus 35 Psf (Composite) for Future Wearing Surface.

**DESIGN STRENGTHS**

Class "C" Concrete      f<sub>c</sub> = 4,000 PSI  
 Reinforcing Steel      f<sub>y</sub> = 60,000 PSI

**SEISMIC DESIGN DATA**

Seismic Performance Zone -  
 Acceleration Coefficient -  
 Seismic Soil Profile Type -

CONTINUOUS REINFORCED CONCRETE HAUNCHED SLAB  
 3 SPANS: 44'-6", 60'-0", 44'-6"  
 26'-0" CLEAR ROADWAY; 10° SKEW RT.  
 CR 400 N OVER PATOKA RIVER  
 GIBSON COUNTY

Plot: 11/21/2023 8:55:46 AM

<b>STAGE 2 SUBMITTAL</b>	RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____	<b>INDIANA DEPARTMENT OF TRANSPORTATION</b>	HORIZONTAL SCALE	BRIDGE FILE
	DESIGNED: _____ JBL _____	DRAWN: _____ JBL _____			AS NOTED	26-00073
	CHECKED: _____ RK _____	CHECKED: _____ RK _____		VERTICAL SCALE	DESIGNATION	
				AS NOTED	2101754	
				<b>GENERAL PLAN</b>	SURVEY BOOK	SHEETS
					ELECTRONIC	7 of 15
					CONTRACT	PROJECT
					B-44287	2101754