

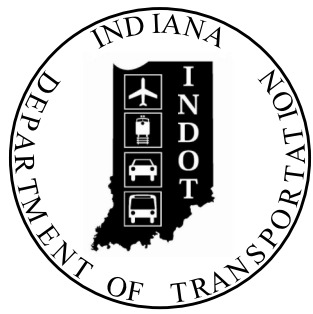
PROJECT	DESIGNATION
1801913	1801913
CONTRACT	
B-41846	

KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	TYPE
1801913	Sunnyside Avenue/ Mall Drive at US 33 (Main Street) over Norfolk Southern Railroad	Road/Traffic
1900836	County Bridge 148 - Sunnyside Avenue/Mall Drive at US 33 over Norfolk Southern Railroad	Bridge
2001723	County Bridge 151 - Concord Mall Drive over Yellow Creek	Bridge
2001724	County Bridge 150 - Sunnyside Avenue over Yellow Creek	Bridge
2100065	Sunnyside Avenue/County Road 13 Re-Alignment	Roadway

Note to Reviewer:
Project Split and Addition of new Des No. 2100065 is
Being Coordinated with INDOT and County.
Plan Split will be Finalized for Next Submittal

ELKHART COUNTY COMMISSIONERS	
Frank Luchese	Date
Mike Yoder	Date
Suzanne Welrick	Date
ELKHART COUNTY AUDITOR	
Patricia A. Pickens	Date
ELKHART COUNTY HIGHWAY DIRECTOR	
Charlie McKenzie	Date
INDOT LPA PROGRAMS	
Jason Holder	Date
INDOT LPA ENGINEERING	
Andrew J. Wortkoetter	Date

INDIANA DEPARTMENT OF TRANSPORTATION



Excerpts

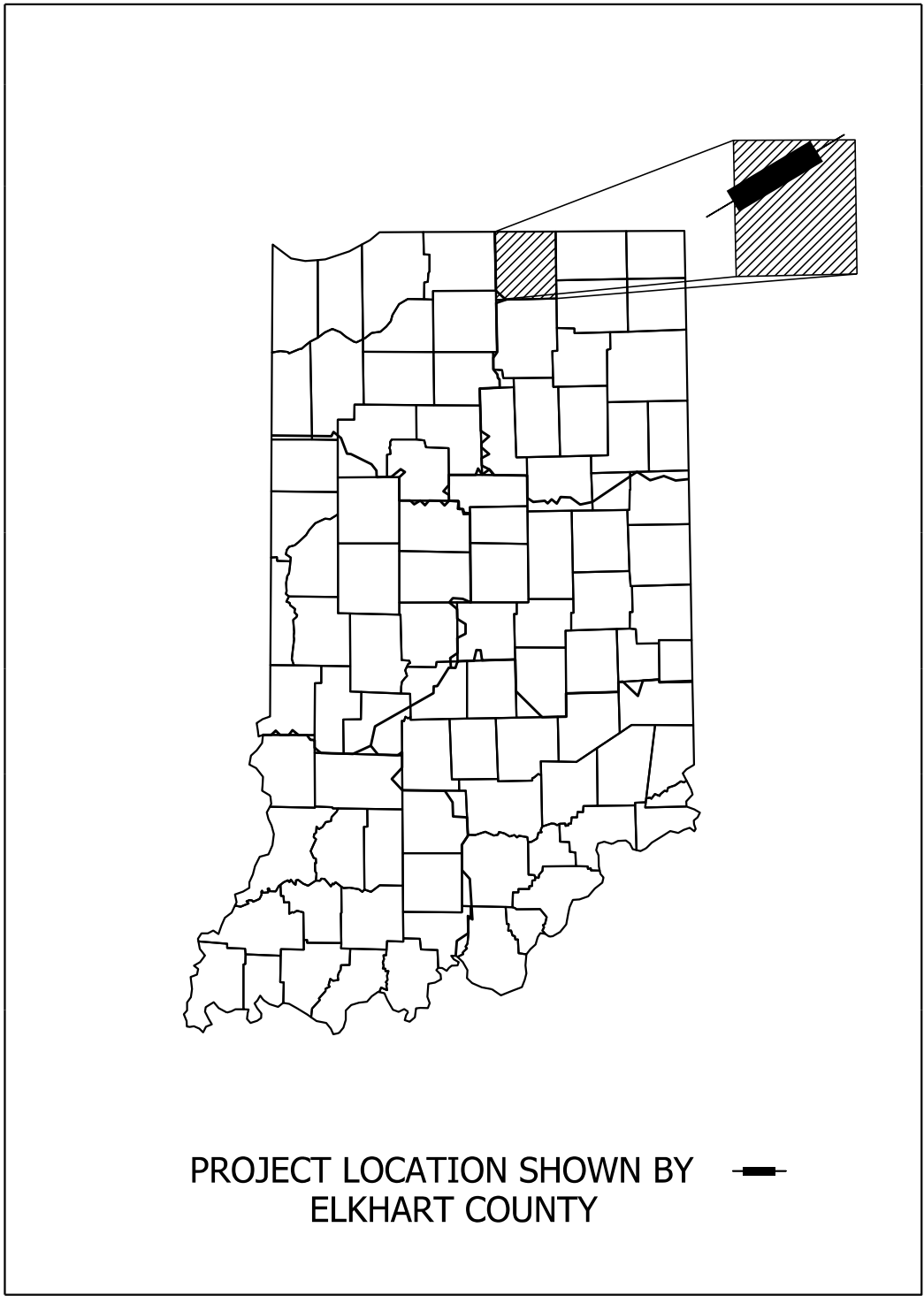
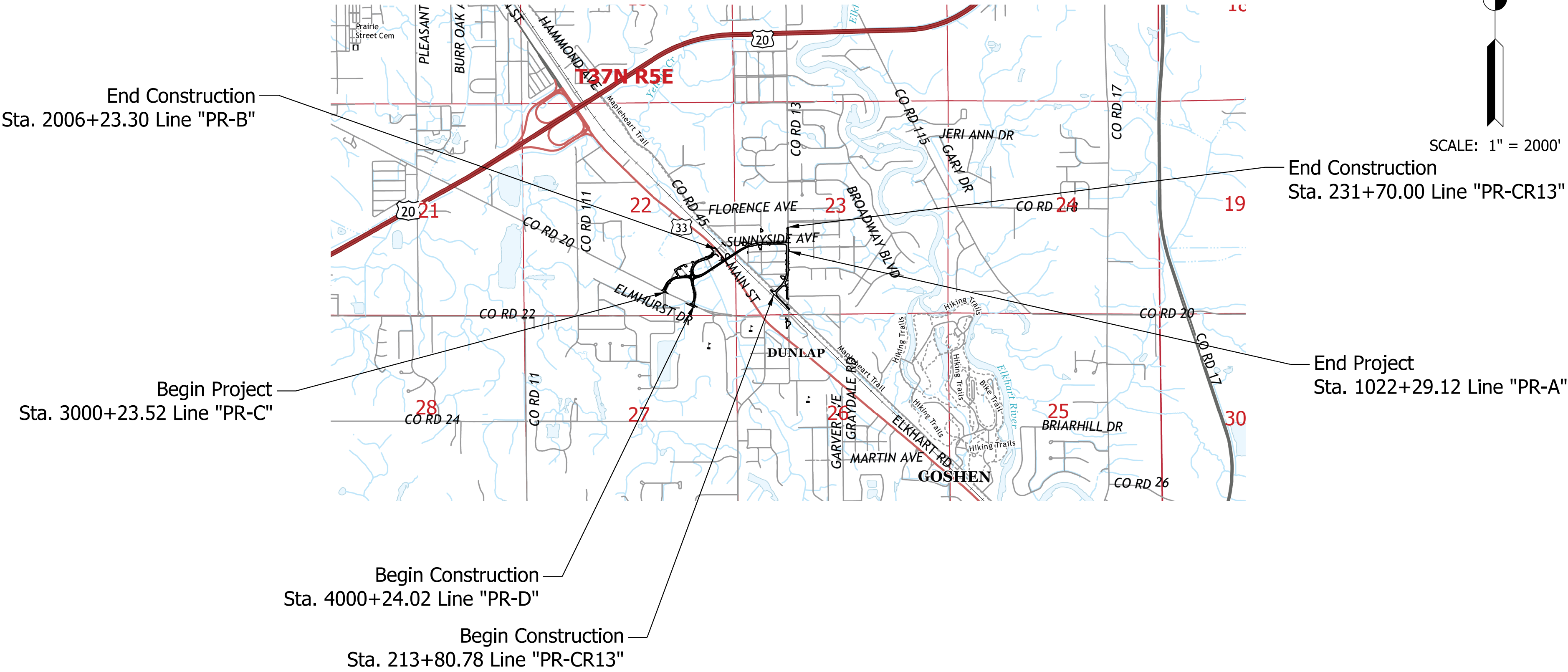
Note:
See Index Sheet for
Traffic and Design Data

ROAD PLANS

ROUTE: SUNNYSIDE AVE/CONCORD MALL DR AT US 33 (MAIN STREET) OVER NORFOLK SOUTHERN RAILROAD

PROJECT NO. 1801913 P.E.
1801913 R/W
1801913 CONST.

New Construction on Sunnyside Avenue from CR 20/
Mishawaka Road to CR 13, and on Concord Mall
Drive from CR 20/Mishawaka Road to US 33
Sections 22, 23, and 26, T-37-N, R-5-E, Concord Township, Elkhart County, Indiana



LATITUDE: 41°38'30" LONGITUDE: 85°55'37"

GROSS LENGTH: 0.979 MI.
NET LENGTH: 0.866 MI.
MAX. GRADE: 4.90 %

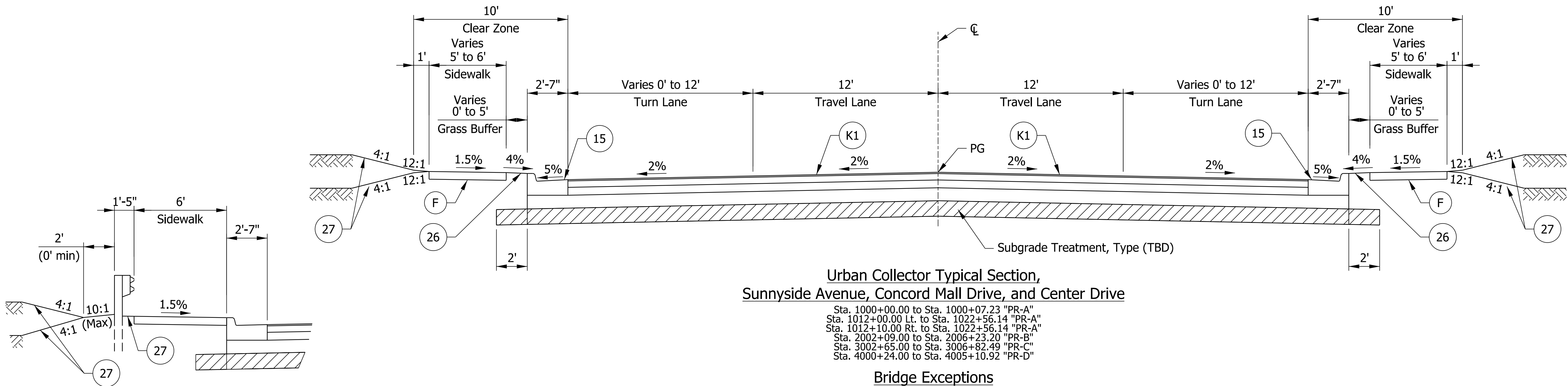
Stage 2
March 11, 2021

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

PARSONS
101 W. Ohio St., Suite 2121
Indianapolis, IN 46204
Bus (317) 616-1000
Fax (317) 616-1033

PLANS
PREPARED BY: _____ PHONE NUMBER _____
CERTIFIED BY: _____ DATE _____
APPROVED FOR LETTING: _____ DATE _____
INDIANA DEPARTMENT OF TRANSPORTATION

DESIGNATION 1801913	
SURVEY BOOK	SHEETS 1 of 270
CONTRACT B-41846	PROJECT 1801913

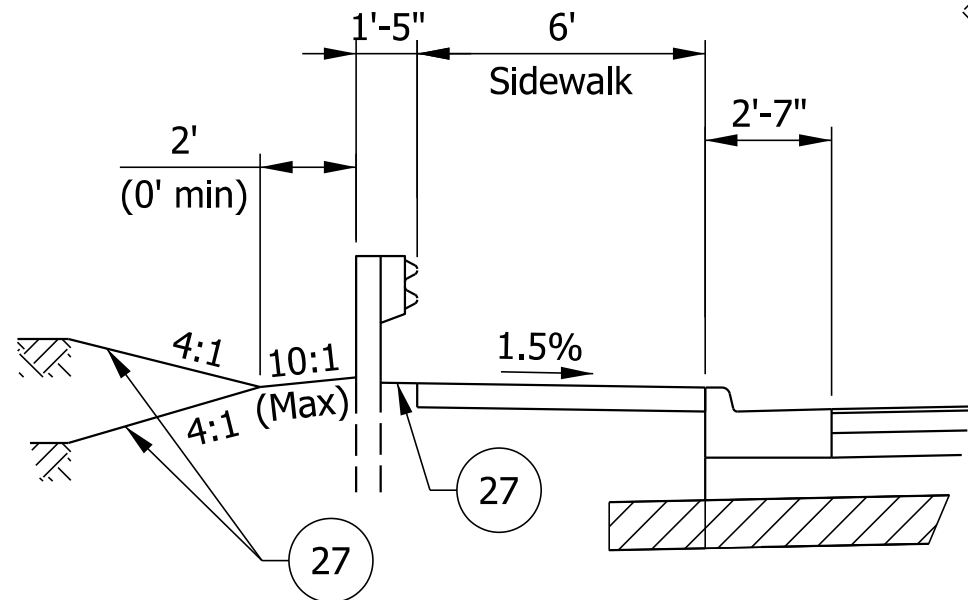


Urban Collector Typical Section,
Sunnyside Avenue, Concord Mall Drive, and Center Drive

Sta. 1000+00.00 to Sta. 1000+07.23 "PR-A"
Sta. 1012+00.00 Lt. to Sta. 1022+56.14 "PR-A"
Sta. 1012+10.00 Rt. to Sta. 1022+56.14 "PR-A"
Sta. 2002+09.00 to Sta. 2006+23.20 "PR-B"
Sta. 3002+65.00 to Sta. 3006+82.49 "PR-C"
Sta. 4000+24.00 to Sta. 4005+10.92 "PR-D"

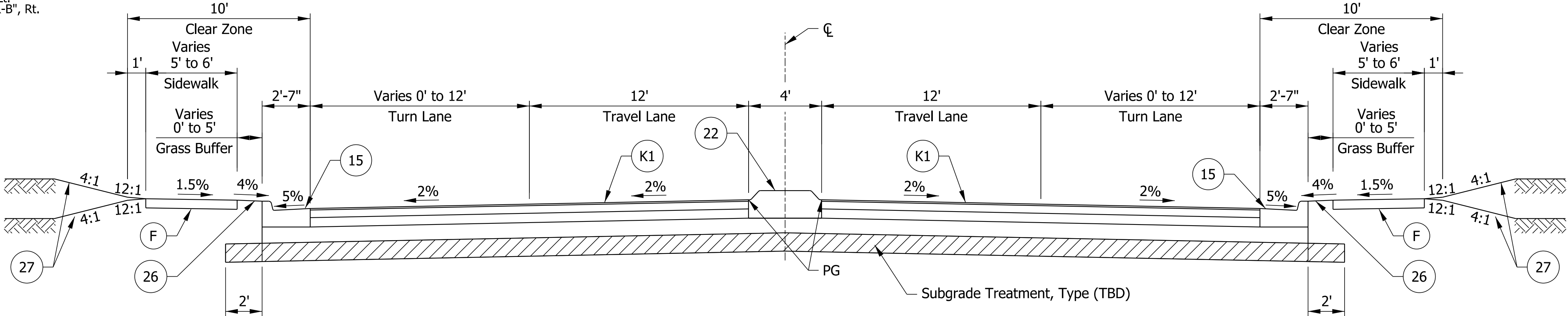
Bridge Exceptions

Sta. 1000+07.23 to Sta. 1001+83.52 "PR-A"
Sta. 1004+71.93 to Sta. 1009+26.79 "PR-A"
Sta. 2002+09.82 to Sta. 2003+32.32 "PR-B"



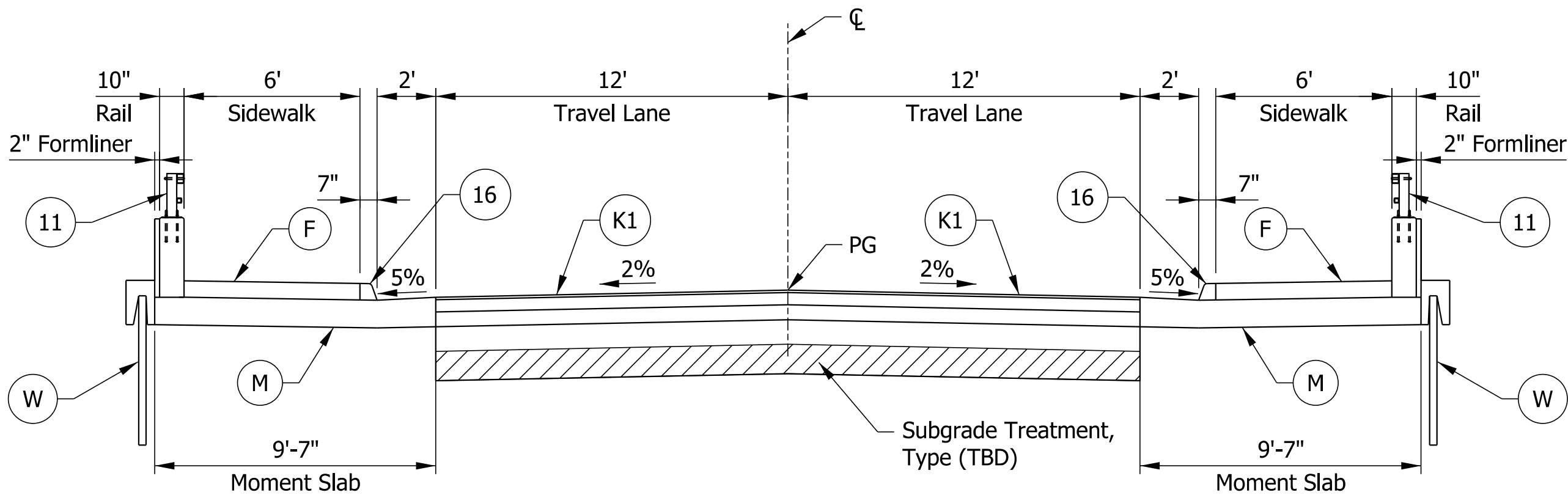
Guardrail Typical Section

Sta. 1202+51.82 "PR-A-EB" to Sta. 1000+12.25 "PR-A", Rt.
Sta. 1012+00.00 to Sta. 1012+88.63 "PR-A", Lt.
Sta. 2204+14.23 "PR-B-SB" to Sta. 2002+14.65 "PR-B", Rt.



Urban Collector With Raised Median Typical Section, Concord Mall Drive

Sta. 2004+00.00 to Sta. 2005+70.00 "PR-B"
Sta. 3000+23.52 to Sta. 3002+65.00 "PR-C"



Urban Collector With Retaining Wall Typical Section, Sunnyside Avenue

Sta. 1001+83.52 to Sta. 1004+71.93 "PR-A"
Sta. 1009+26.79 to Sta. 1012+00.00 Lt. "PR-A"
Sta. 1009+26.79 to Sta. 1012+10.00 Rt. "PR-A"

LEGEND

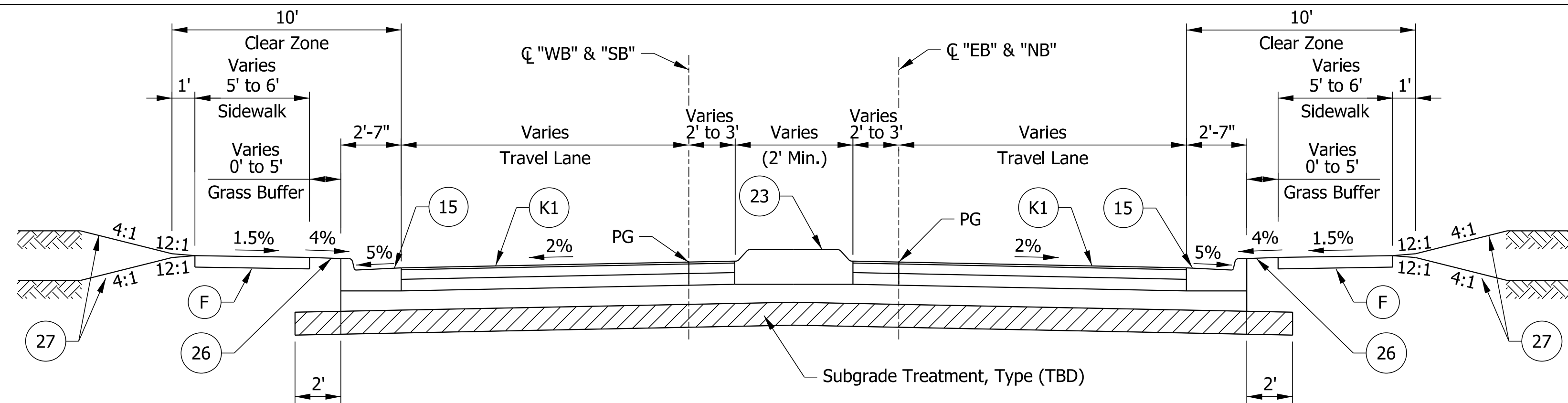
(A) Full Depth PCCP Pavement (TBD)	(R) HMA Mill & Overlay	(11) Concrete Bridge Railing, Type PS-1, Modified	(22) Concrete Center Curb, Type B
(K1) Full Depth HMA Pavement (TBD)	(S) Sawcut	(15) Concrete Curb and Gutter	(23) Concrete Center Curb, Type C
(F) Concrete Sidewalk	(W) MSE Retaining Wall	(16) Integral Concrete Curb	(26) Sodding
(M) Moment Slab	(CR) Curb Ramp	(17) Rolled Curb	(27) Mulched Seeding, U

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: ALH	DRAWN: DH	
CHECKED: CWB	CHECKED: CWB	

INDIANA
DEPARTMENT OF TRANSPORTATION

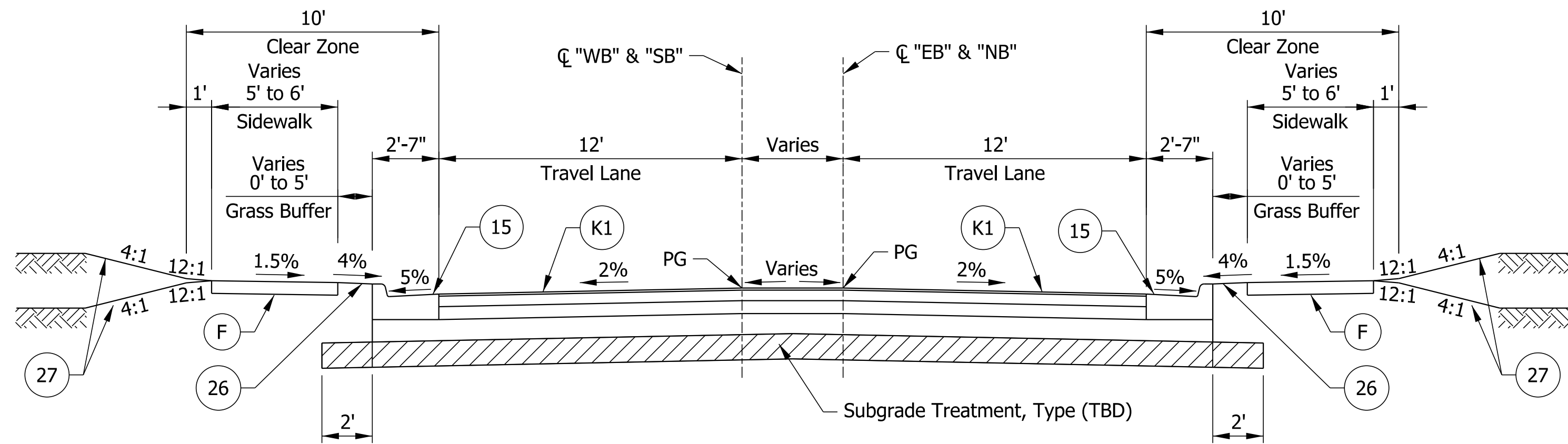
TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
1" = 4'	N/A
VERTICAL SCALE	DESIGNATION
1" = 4'	1801913
SURVEY BOOK	SHEETS
ELECTRONIC	3 of 270
CONTRACT	PROJECT
B-41846	1801913



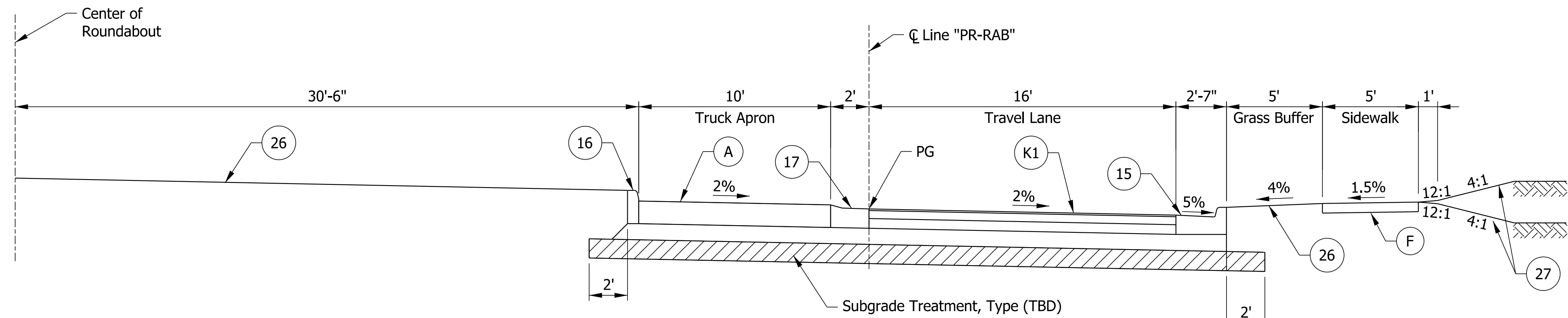
Roundabout Entry/Exit Typical Section

Sta. 1100+33.73 to Sta. 1101+61.32 "PR-A-WB"
Sta. 1200+37.12 to Sta. 1201+71.45 "PR-A-EB"
Sta. 2100+33.42 to Sta. 2101+65.75 "PR-B-SB"
Sta. 2200+37.12 to Sta. 2201+69.95 "PR-B-NB"
Sta. 3101+08.44 to Sta. 3101+70.05 "PR-C-EB"
Sta. 3201+08.55 to Sta. 3201+73.67 "PR-C-WB"
Sta. 4101+10.66 to Sta. 4101+72.50 "PR-D-NB"
Sta. 4201+10.98 to Sta. 4201+76.69 "PR-D-SB"



Roundabout Entry/Exit Typical Section

Sta. 1101+61.32 to Sta. 1103+16.85 "PR-A-WB"
Sta. 1201+71.45 to Sta. 1203+27.64 "PR-A-EB"
Sta. 2101+65.75 to Sta. 2105+05.82 "PR-B-SB"
Sta. 2201+69.95 to Sta. 2205+07.03 "PR-B-NB"
Sta. 3100+00.00 to Sta. 3101+65.73 "PR-C-EB"
Sta. 3200+00.00 to Sta. 3201+08.55 "PR-C-WB"
Sta. 4100+00.00 to Sta. 4101+10.66 "PR-D-NB"
Sta. 4200+00.00 to Sta. 4201+10.98 "PR-D-SB"



Roundabout Circulating Roadway Typical Section

Sta. 0+00.00 to Sta. 2+79.58 "PR-RAB"

LEGEND

(A) Full Depth PCCP Pavement (TBD)	(R) HMA Mill & Overlay	(11) Concrete Bridge Railing, Type PS-1, Modified	(22) Concrete Center Curb, Type B
(K1) Full Depth HMA Pavement (TBD)	(S) Sawcut	(15) Concrete Curb and Gutter	(23) Concrete Center Curb, Type C
(F) Concrete Sidewalk	(W) MSE Retaining Wall	(16) Integral Concrete Curb	(26) Sodding
(M) Moment Slab	(CR) Curb Ramp	(17) Rolled Curb	(27) Mulched Seeding, U

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: ALH	DRAWN: DH	
CHECKED: CWB	CHECKED: CWB	

INDIANA
DEPARTMENT OF TRANSPORTATION

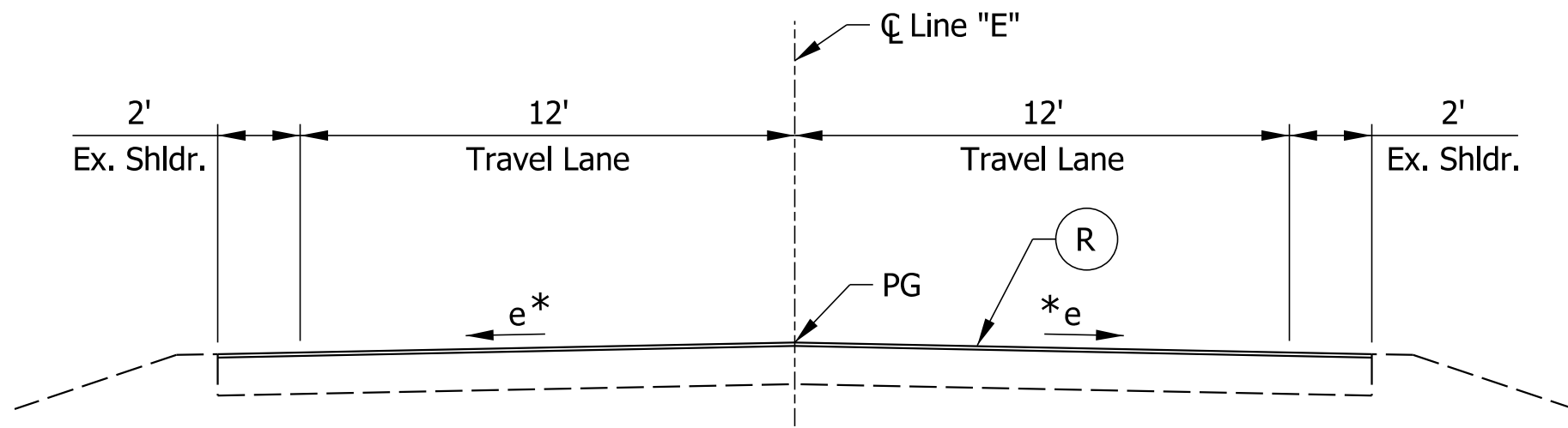
TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
1" = 4'	N/A
VERTICAL SCALE	DESIGNATION
1" = 4'	1801913
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 270
CONTRACT	PROJECT
B-41846	1801913

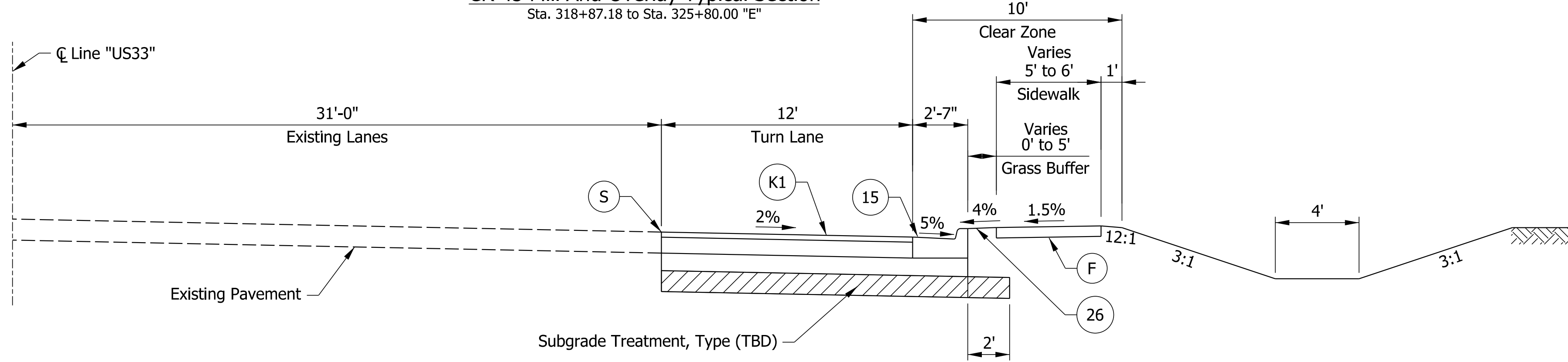
pww://ANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Roadway/Sheets/Elkhart Co_RD_Sht_Typ_02.dgn
3-MAY-2021

1 15'
Sta. 0+00.00 to Sta. 2+30.00 "DR-Mall"
16.5'
Sta. 0+48.66 to Sta. 1+19.75 "DR-Chase"
16'
Sta. 1+19.75 to Sta. 2+44.71 "DR-Chase"
16' to 21.92'
Sta. 2+44.71 to Sta. 3+28.64 "DR-Chase"
16.34' to 17.25'
Sta. 310+33.51 to Sta. 310+84.56 "S-1-M"

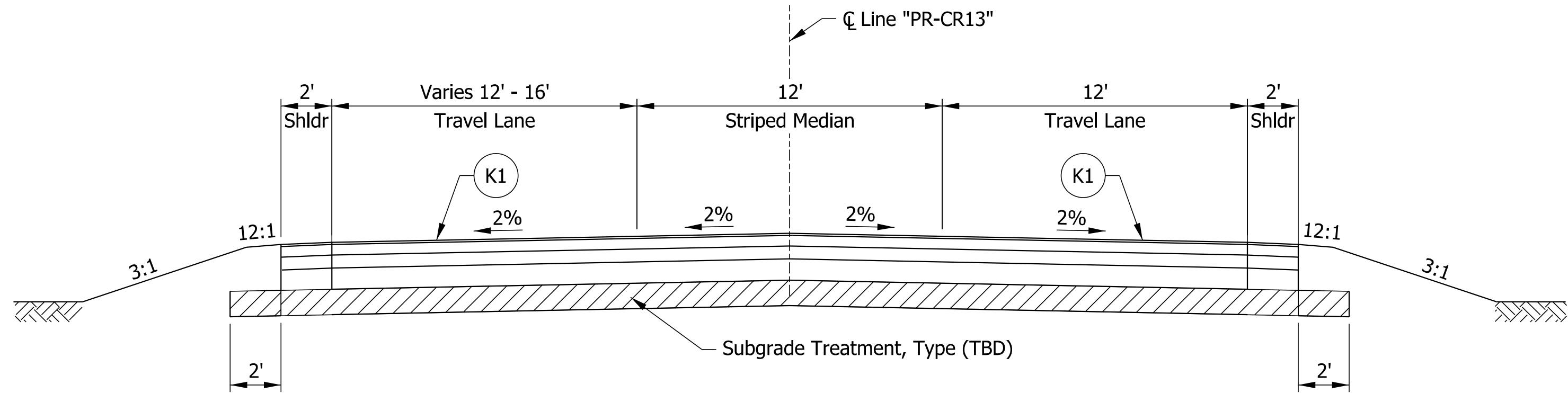
2 15'
Sta. 0+00.00 to Sta. 2+30.00 "DR-Mall"
16.5'
Sta. 0+48.66 to Sta. 1+19.75 "DR-Chase"
0'
Sta. 1+19.75 to Sta. 2+19.34 "DR-Chase"
0' to 24'
Sta. 2+19.34 to Sta. 3+28.64 "DR-Chase"
16.34' to 17.25'
Sta. 310+33.51 to Sta. 310+84.56 "S-1-M"



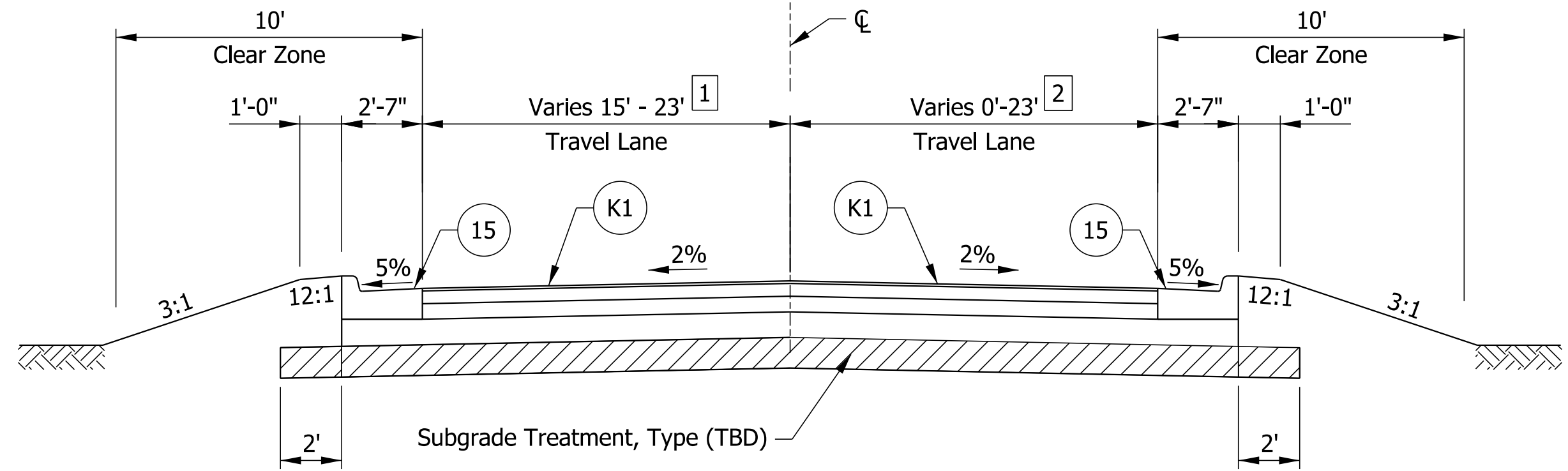
CR 45 Mill And Overlay Typical Section
Sta. 318+87.18 to Sta. 325+80.00 "E"



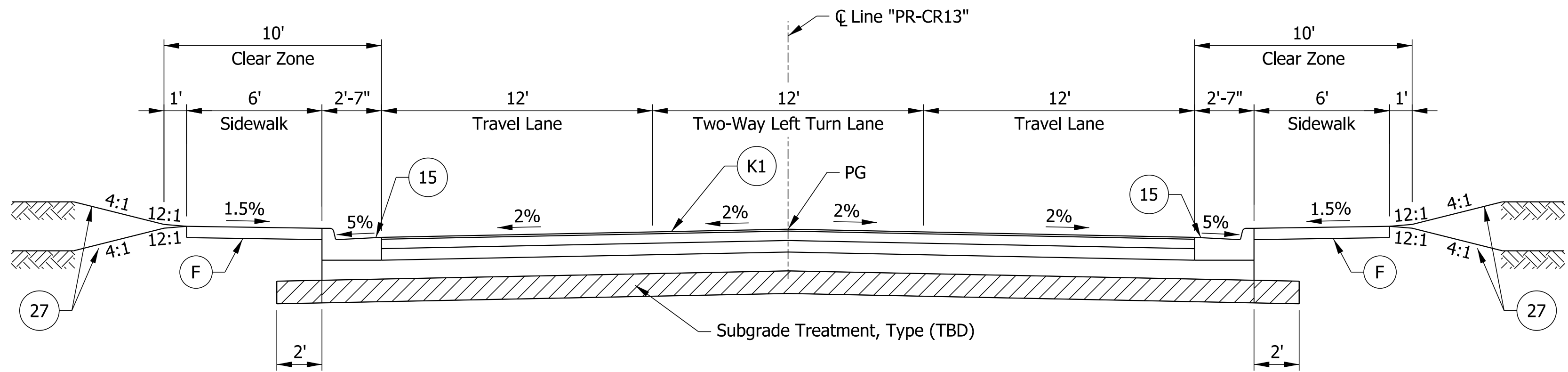
US 33 Added Turn Lane Typical Section
Sta. 144+19.00 to Sta. 148+52.25 "US33"



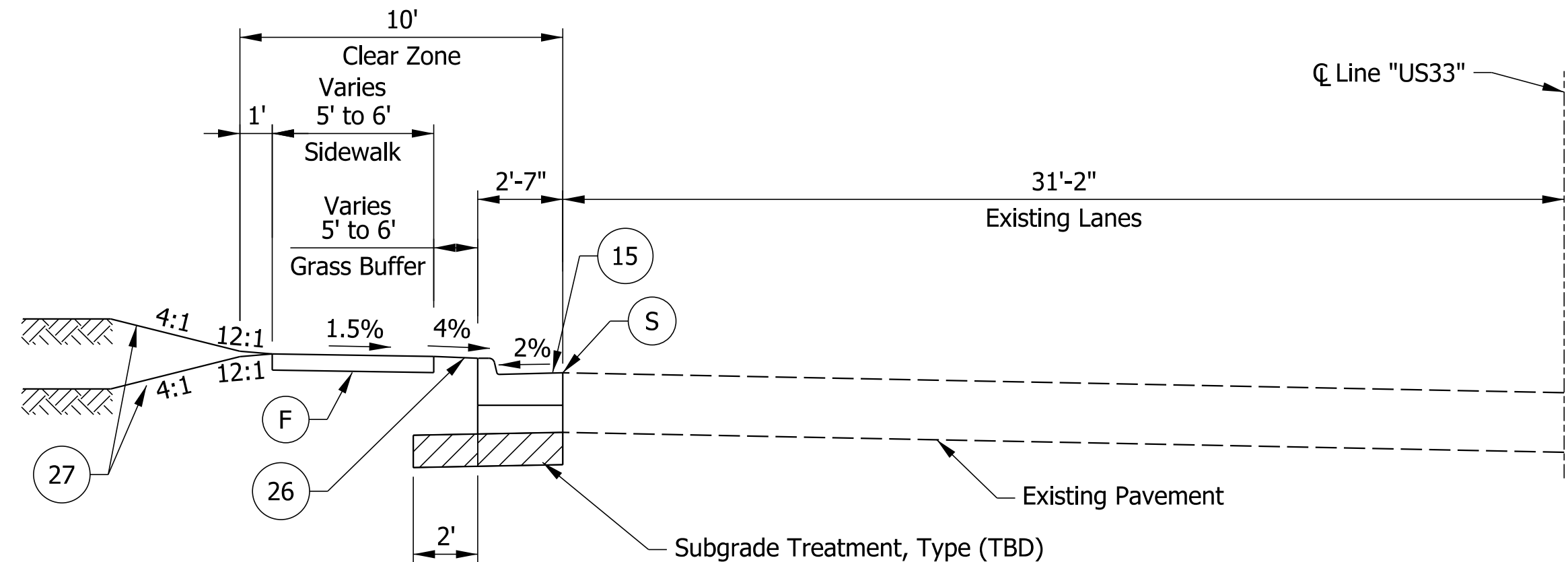
CR 13 Typical Section
Sta. 227+49.45 to Sta. 231+40.00 "PR-CR13"



Driveway Typical Section
Sta. 0+00.00 to Sta. 2+30.00 "DR-Mall"
Sta. 0+00.00 to 3+28.64 "DR-Chase"
Sta. 310+33.51 to Sta. 310+84.56 "S-1-M"



CR13 Typical Section
Sta. 213+68.79 to Sta. 227+49.45 "PR-CR13"



US 33 Turn Lane Removal Typical Section
Sta. 145+95.00 to Sta. 151+77.00 "US33"

LEGEND

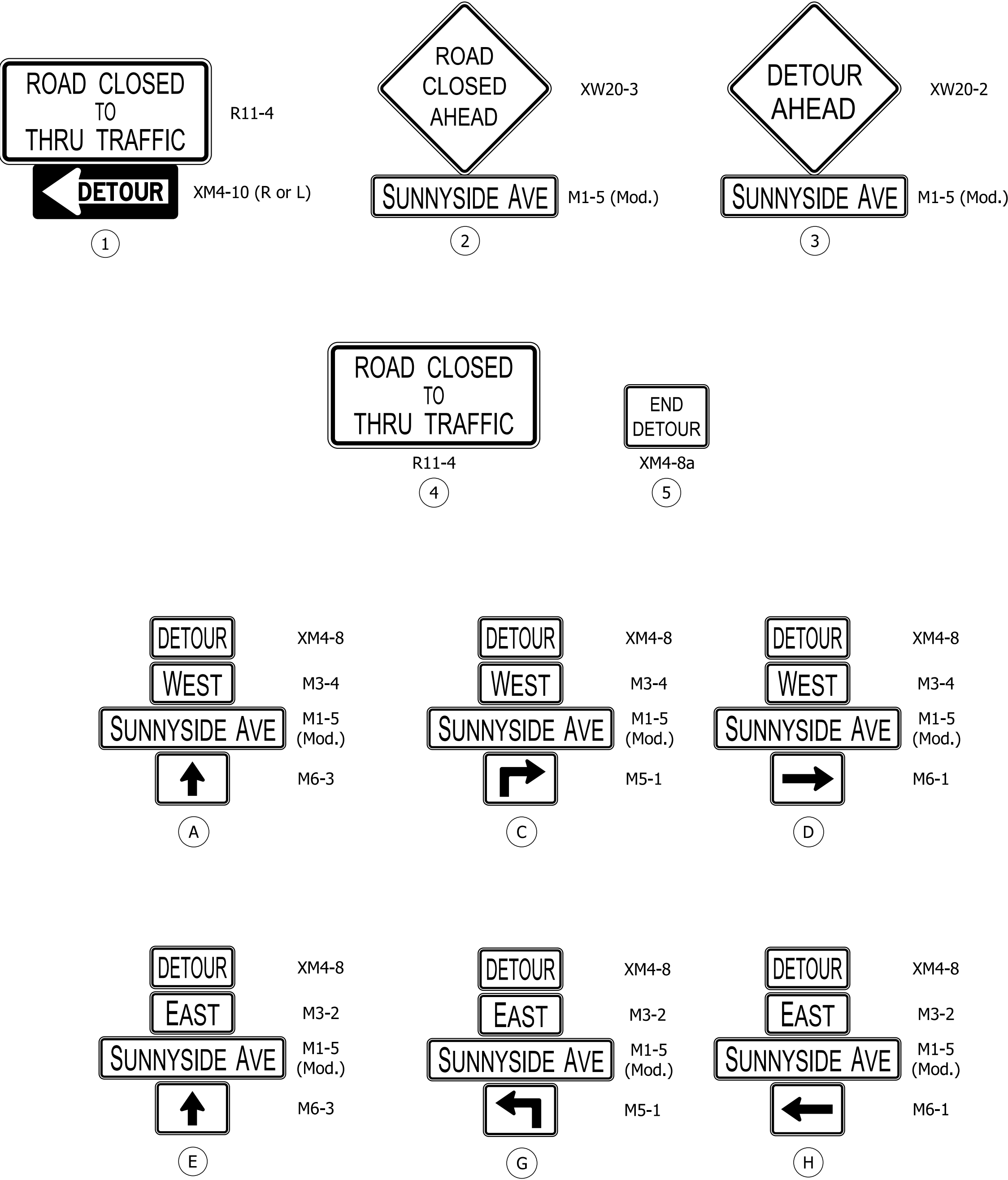
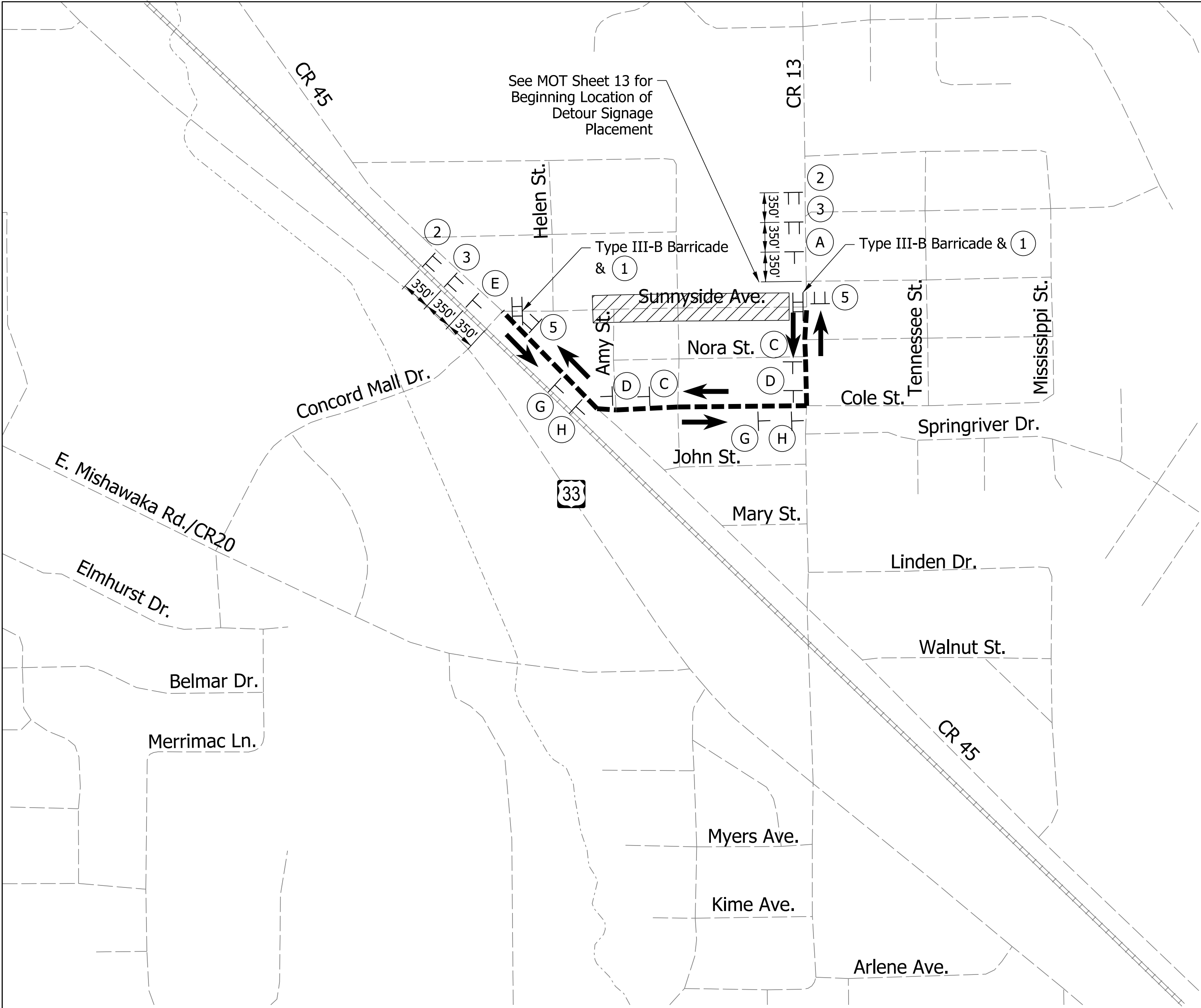
(A) Full Depth PCCP Pavement (TBD)	(R) HMA Mill & Overlay	(11) Concrete Bridge Railing, Type PS-1, Modified	(22) Concrete Center Curb, Type B
(K1) Full Depth HMA Pavement (TBD)	(S) Sawcut	(15) Concrete Curb and Gutter	(23) Concrete Center Curb, Type C
(F) Concrete Sidewalk	(W) MSE Retaining Wall	(16) Integral Concrete Curb	(26) Sodding
(M) Moment Slab	(CR) Curb Ramp	(17) Rolled Curb	(27) Mulched Seeding, U

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: ALH	DRAWN: DH	
CHECKED: CWB	CHECKED: CWB	

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
1" = 4'	N/A
VERTICAL SCALE	DESIGNATION
1" = 4'	1801913
SURVEY BOOK	SHEETS
ELECTRONIC	5 of 270
CONTRACT	PROJECT
B-41846	1801913



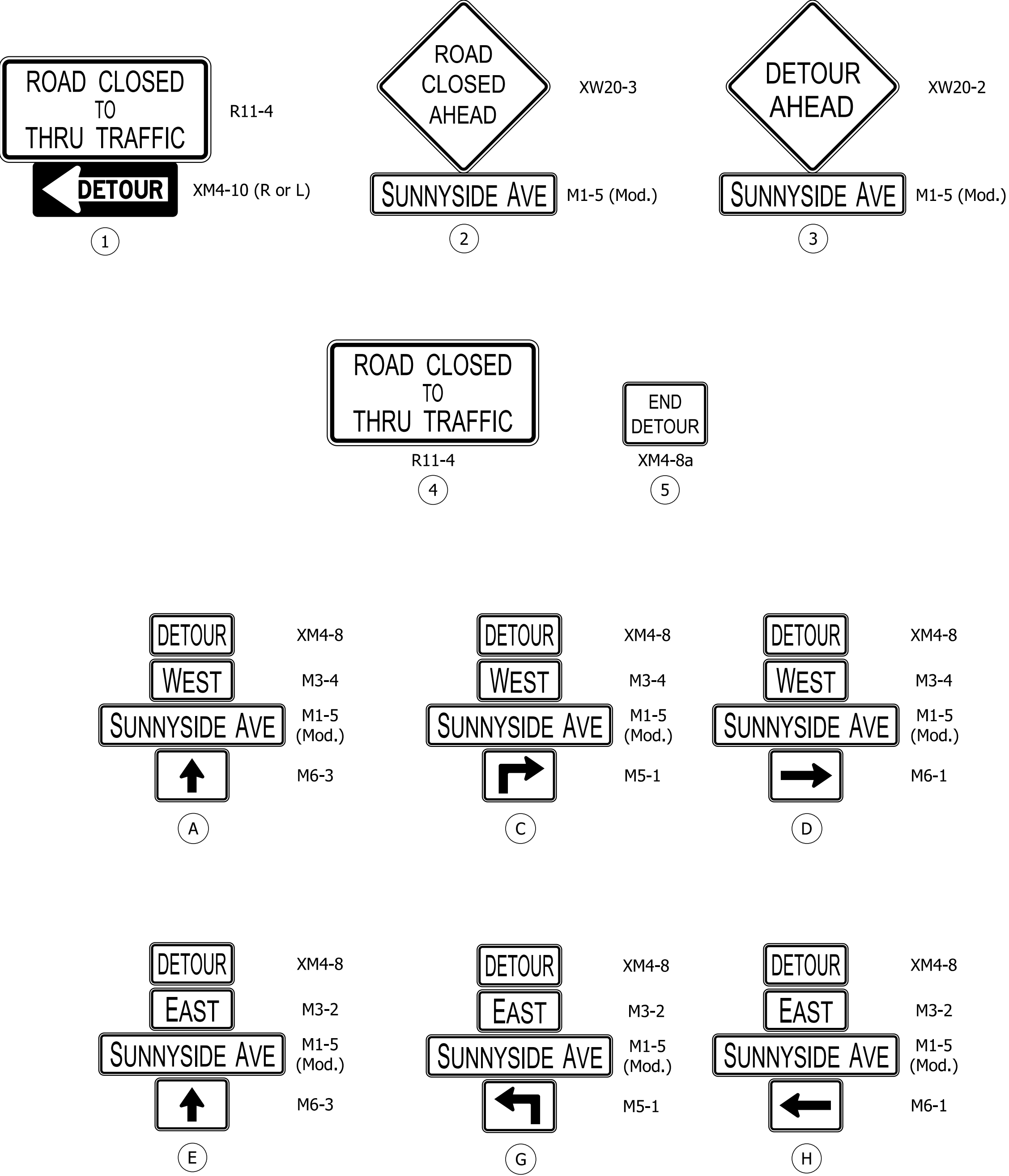
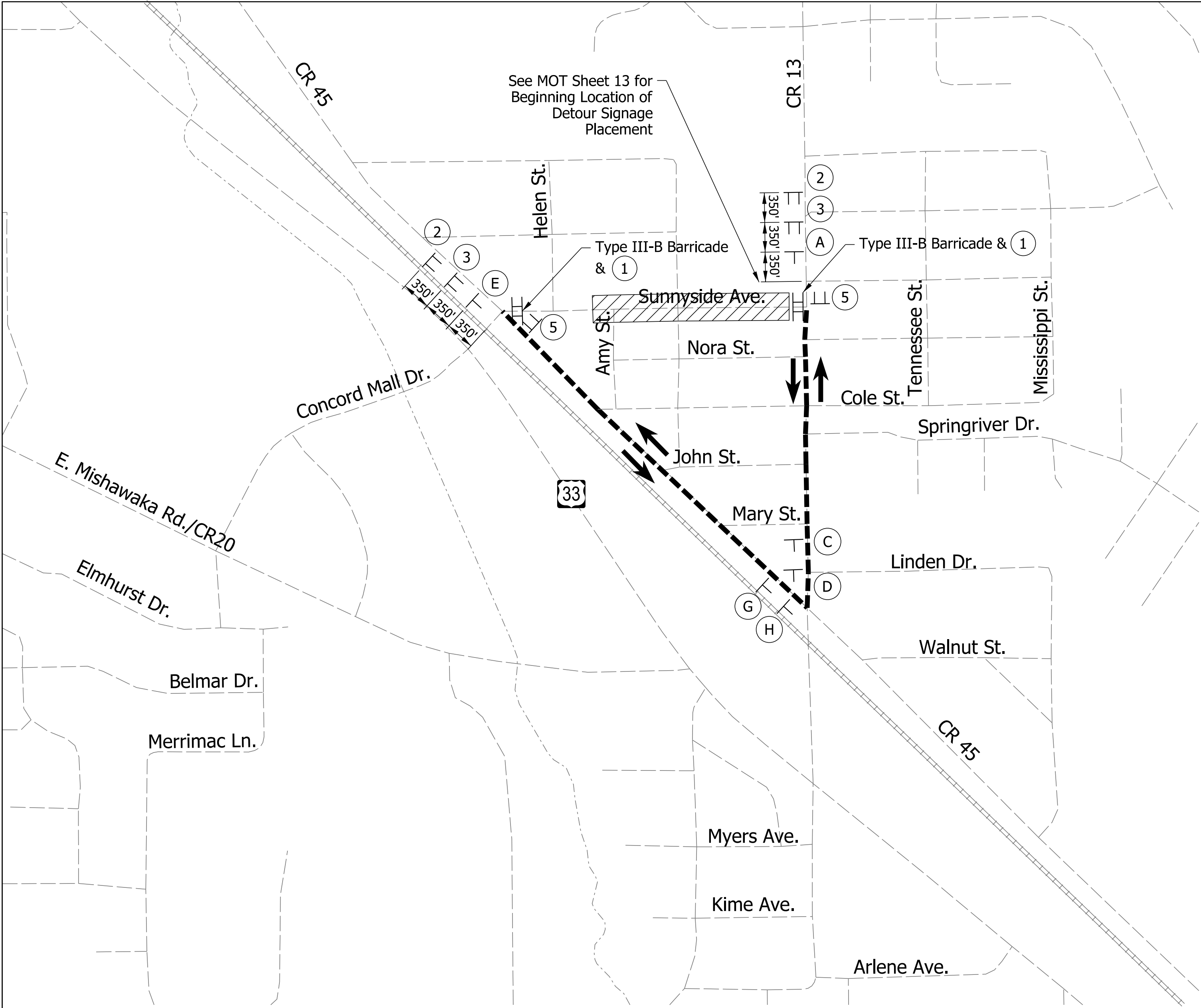
Note:
Maintain access to drives at all times.

Detour is only Applicable During Phase 1
Construction Activities.

- Closure Area
- Traffic Flow Arrows
- Detour Route
- Detour Route Marker Assembly
- Construction Sign

RECOMMENDED FOR APPROVAL			INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE		BRIDGE FILE	
				1" = 400'		N/A	
				VERTICAL SCALE		DESIGNATION	
DESIGN ENGINEER			DATE			1801913	
DESIGNED: ALH	DRAWN: SJC		DETOUR ROUTE PHASE 1 SUNNYSIDE AVE.	SURVEY BOOK		SHEETS	
		ELECTRONIC		9	of	270	
CHECKED: CWB	CHECKED: CWB			CONTRACT		PROJECT	
		B-41846		1801913			

pww://VANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Roadway/Sheets/Elkhart Co_RD_Sht_Detour_01.dgn
3-MAY-2021



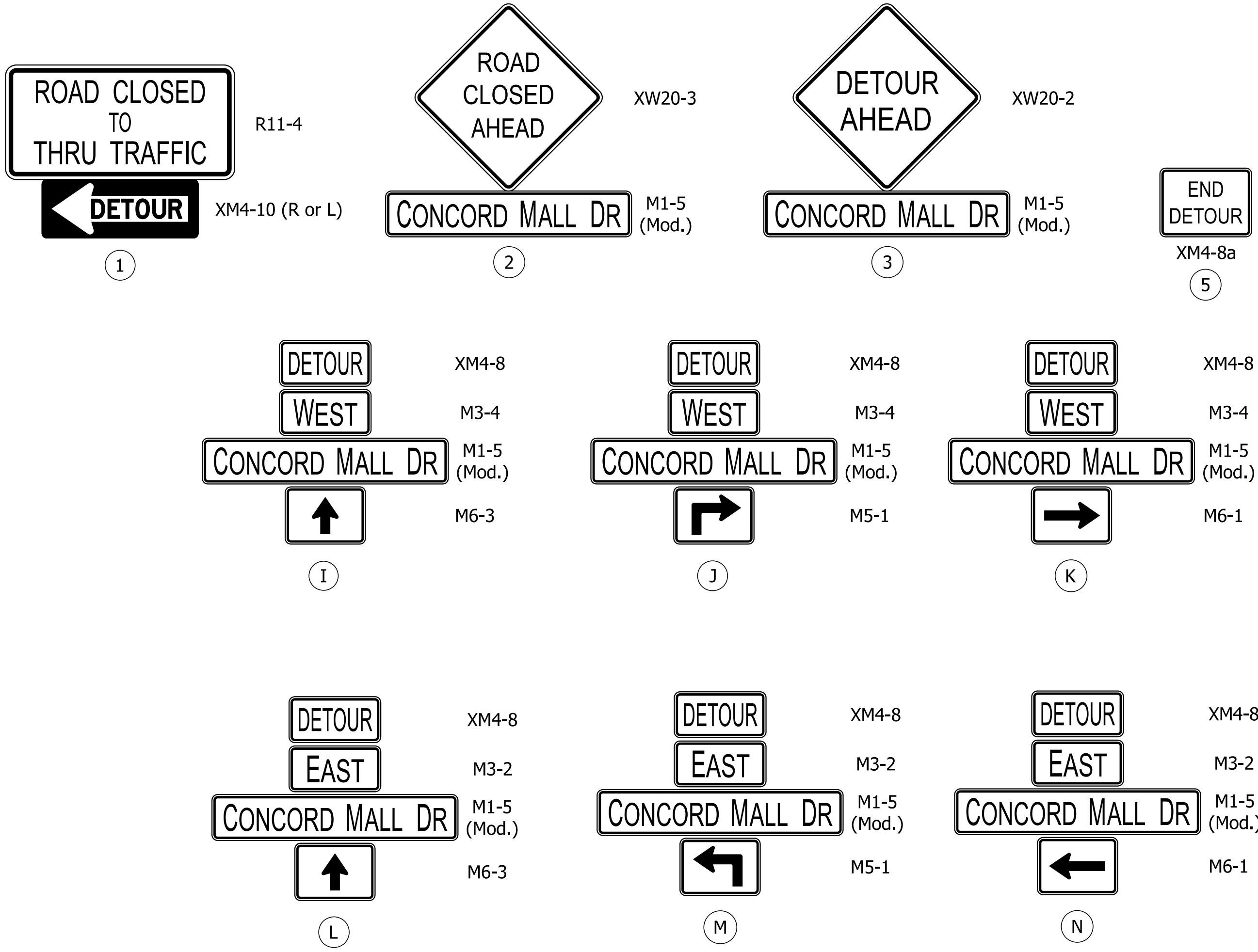
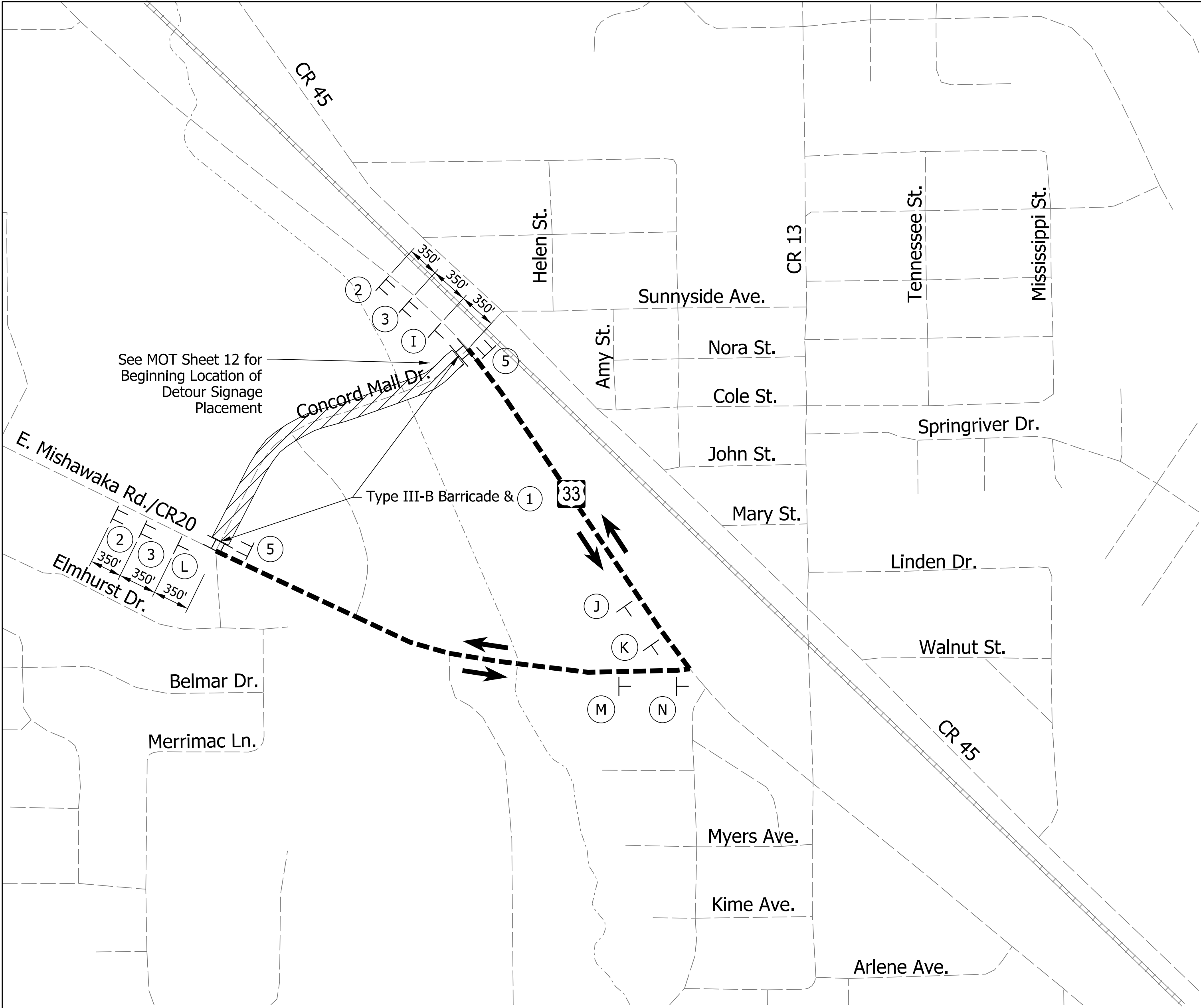
Note:
Maintain access to drives at all times.

Detour is only Applicable During Phase 2
Construction Activities.

- Closure Area
- Traffic Flow Arrows
- Detour Route
- Detour Route Marker Assembly
- Construction Sign

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE	BRIDGE FILE
			1" = 400'	N/A
DESIGNED: _____ ALH	DRAWN: _____ SJC		VERTICAL SCALE	DESIGNATION
CHECKED: _____ CWB	CHECKED: _____ CWB		N/A	1801913
		DETOUR ROUTE PHASE 2 SUNNYSIDE AVE.	SURVEY BOOK	SHEETS
			ELECTRONIC	10 of 270
			CONTRACT	PROJECT
			B-41846	1801913

pww://\ANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Roadway/Sheets/Elkhart Co_RD_Sht_Detour_02.dgn
3-MAY-2021

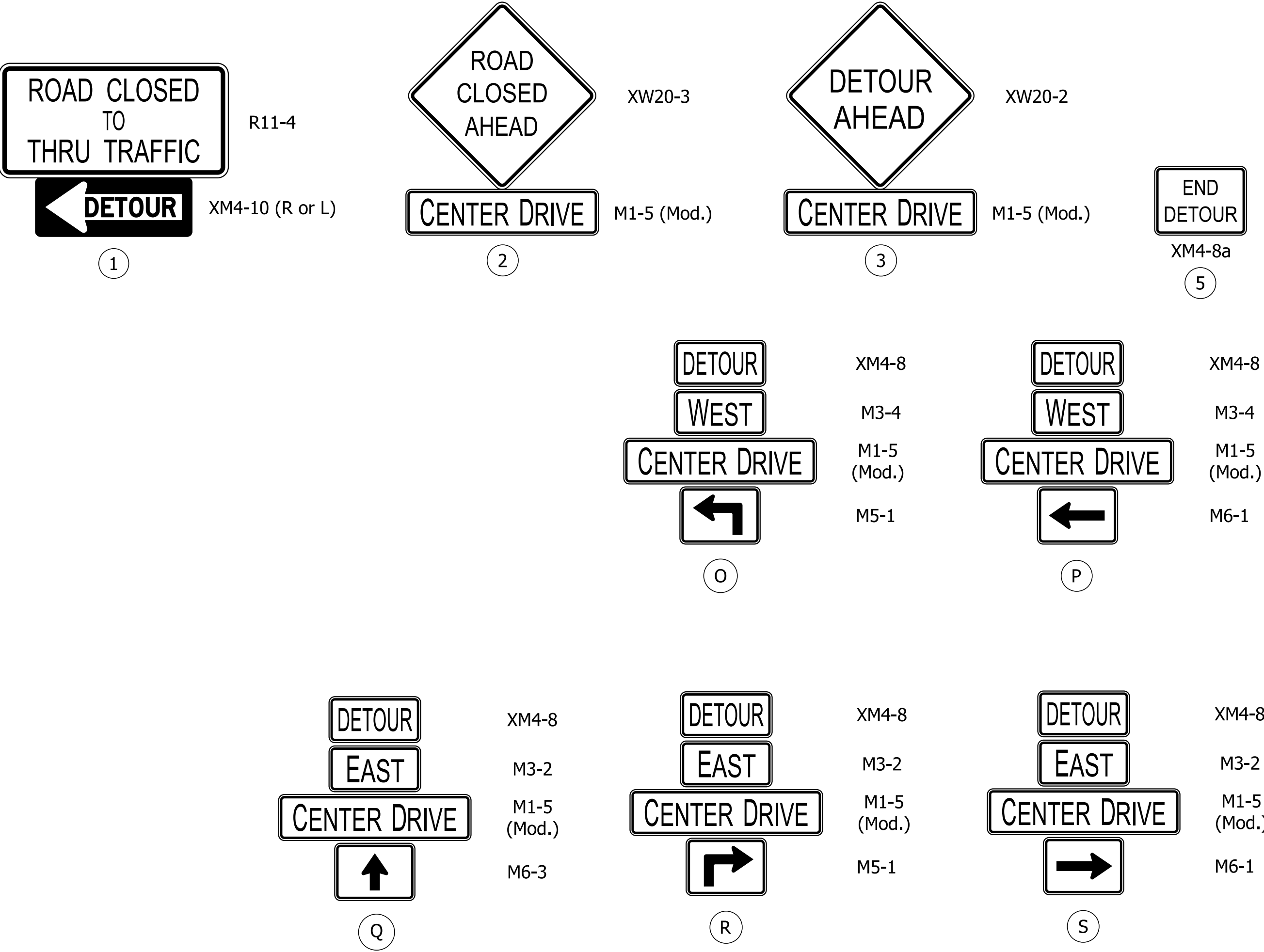
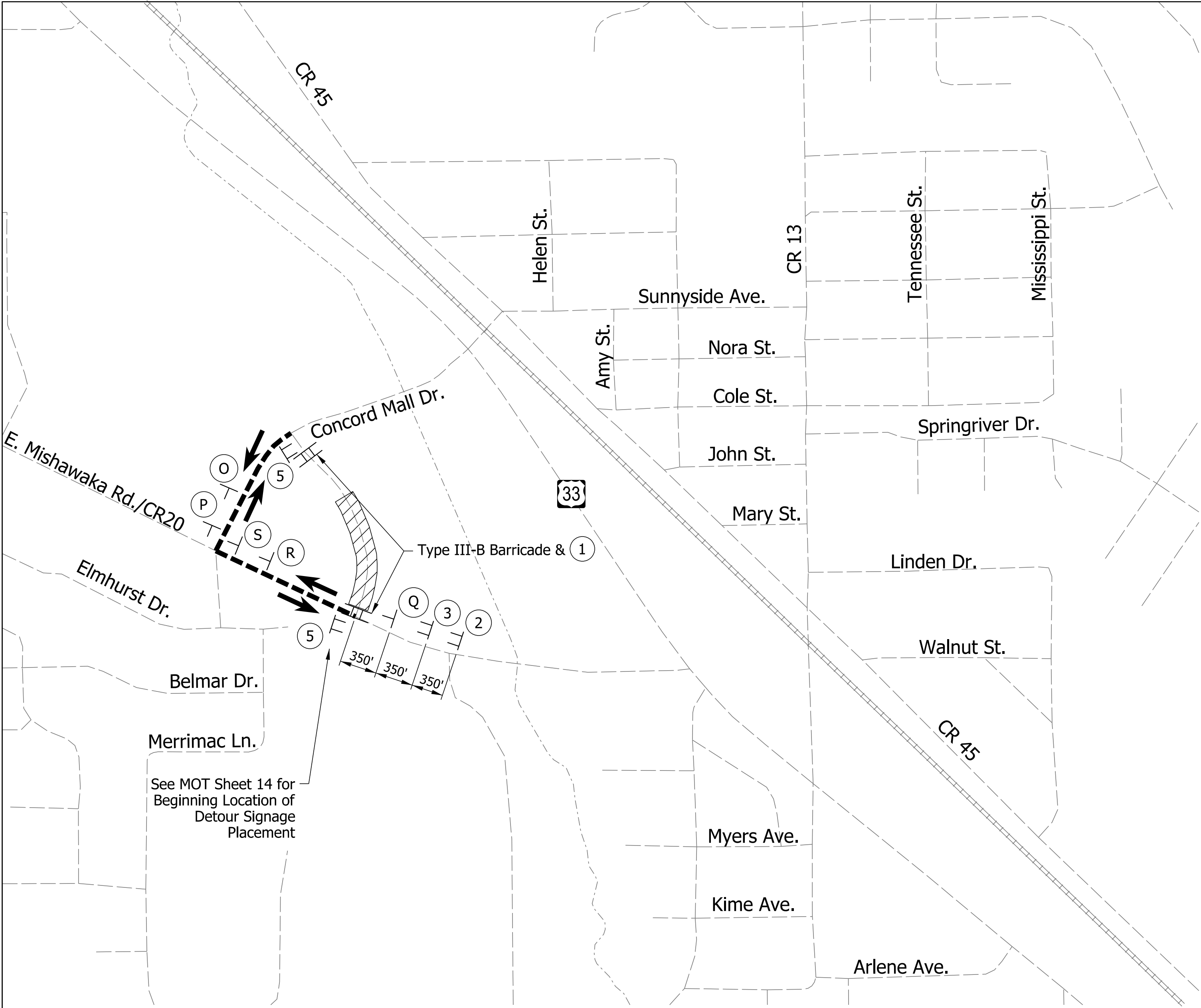


Note:
Maintain access to drives at all times.

See Maintenance of Traffic Phase 1 and 3
Sheets for Additional Barricade and
Construction Sign Placement.

- Closure Area - Detour Route Marker Assembly - Traffic Flow Arrows - Detour Route - Construction Sign	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 400'		BRIDGE FILE N/A		
					VERTICAL SCALE N/A		DESIGNATION 1801913		
	DESIGNED: ALH		DRAWN: SJC		SURVEY BOOK ELECTRONIC		SHEETS 11 of 270		
	CHECKED: CWB		CHECKED: CWB		CONTRACT B-41846		PROJECT 1801913		
				DETOUR ROUTE PHASES 1 & 3 CONCORD MALL DR.					

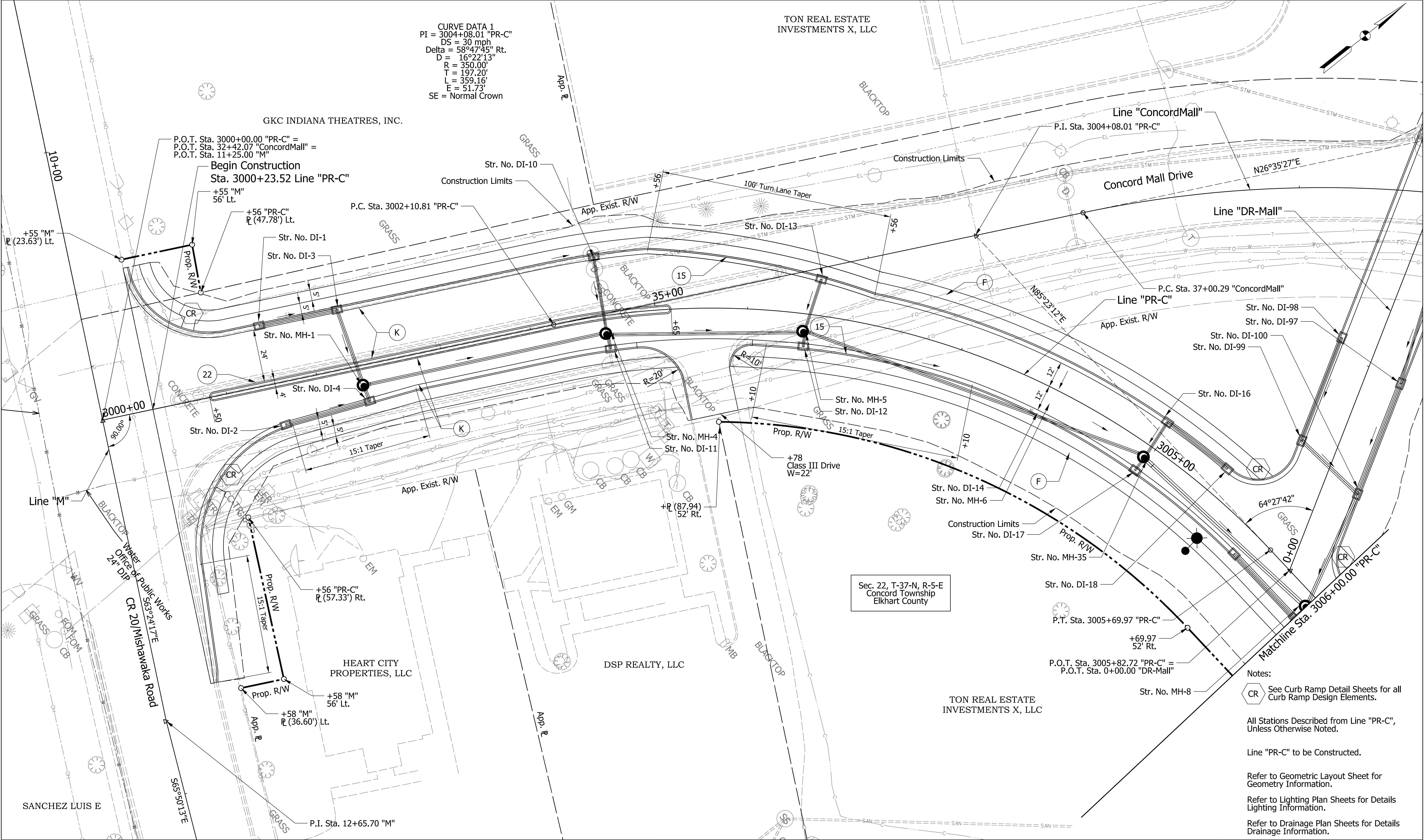
pww://VANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Roadway/Sheets/Elkhart Co_RD_Sht_Detour_03.dgn
3-MAY-2021



Notes:
Maintain access to drives at all times.
See Maintenance of Traffic Phase 2 Sheets
for Additional Barricade and Construction Sign Placement.

- Closure Area - Detour Route Marker Assembly - Traffic Flow Arrows - Detour Route - Construction Sign	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 400'	BRIDGE FILE N/A
	DESIGNED: _____ ALH _____ DRAWN: _____ SJC _____		DETOUR ROUTE PHASE 2 CENTER DRIVE		VERTICAL SCALE N/A	DESIGNATION 1801913
	CHECKED: _____ CWB _____ CHECKED: _____ CWB _____				SURVEY BOOK ELECTRONIC	SHEETS 12 of 270
					CONTRACT B-41846	PROJECT 1801913

pww://VANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Roadway/Sheets/Elkhart Co_RD_Sht_Detour_04.dgn
3-MAY-2021



CURVE DATA 1
PI = 3004+08.01 "PR-C"
DS = 30 mph
Delta = 58°27'45" Rt.
D = 16°22'13"
R = 350.00'
T = 197.20'
L = 359.16'
E = 51.73'
SE = Normal Crown

GKC INDIANA THEATRES, INC.

TON REAL ESTATE
INVESTMENTS X, LLC

Line "ConcordMall"

P.I. Sta. 3004+08.01 "PR-C"

Concord Mall Drive

Line "DR-Mall"

P.C. Sta. 37+00.29 "ConcordMall"

Line "PR-C"

App. Exist. R/W

Str. No. DI-98

Str. No. DI-97

Str. No. DI-100

Str. No. DI-99

Str. No. DI-16

Sec. 22, T-37-N, R-5-E
Concord Township
Elkhart County

DSP REALTY, LLC

TON REAL ESTATE
INVESTMENTS X, LLC

HEART CITY
PROPERTIES, LLC

Notes:
CR See Curb Ramp Detail Sheets for all
Curb Ramp Design Elements.

All Stations Described from Line "PR-C",
Unless Otherwise Noted.

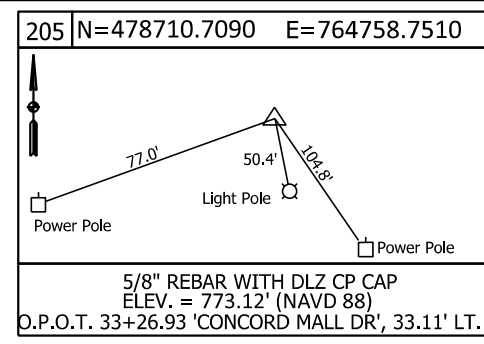
Line "PR-C" to be Constructed.

Refer to Geometric Layout Sheet for
Geometry Information.

Refer to Lighting Plan Sheets for Details
Lighting Information.

Refer to Drainage Plan Sheets for Details
Drainage Information.

See Typical Sections For Legend Items

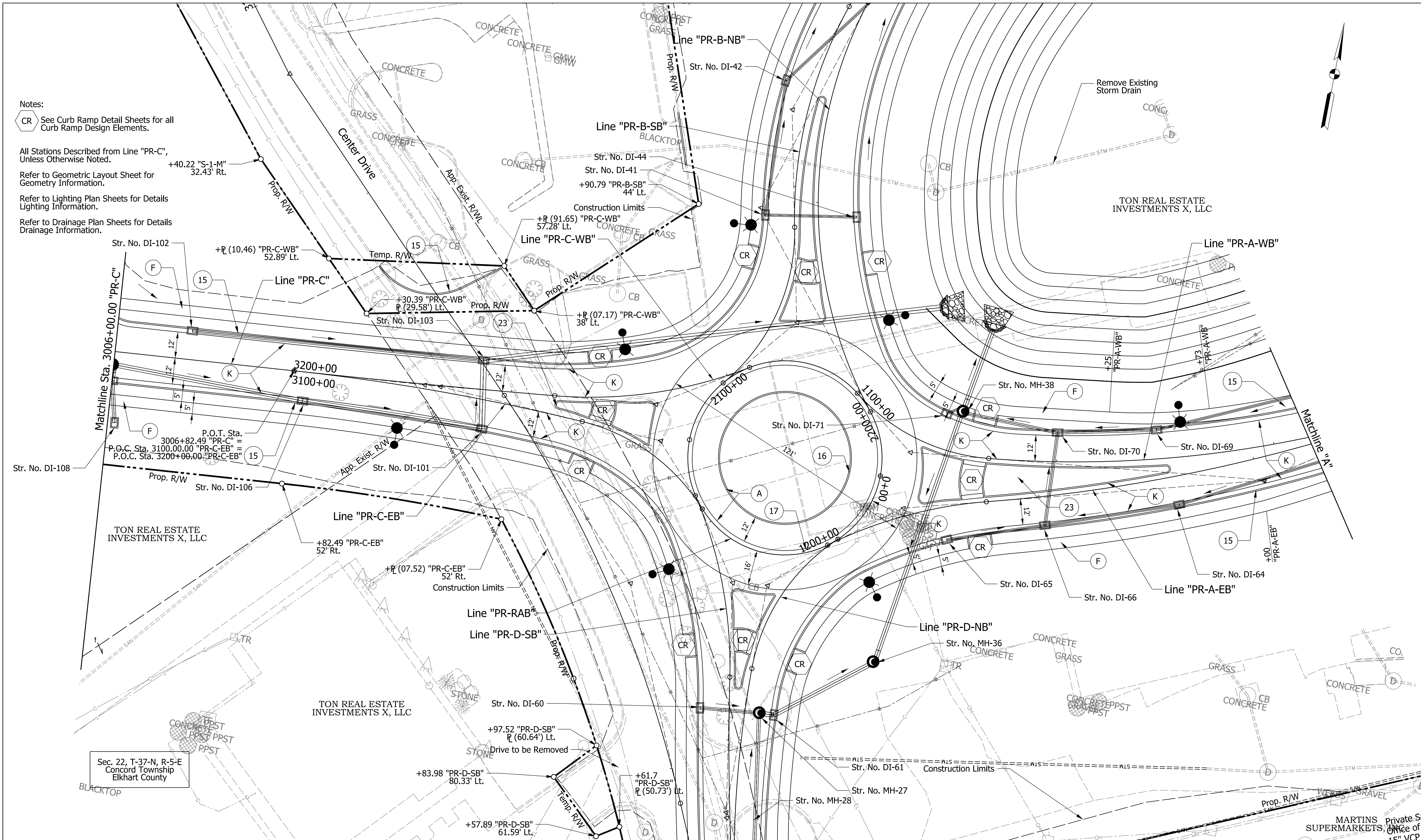


RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: ALH	DRAWN: DH	
CHECKED: CWB	CHECKED: CWB	

INDIANA
DEPARTMENT OF TRANSPORTATION

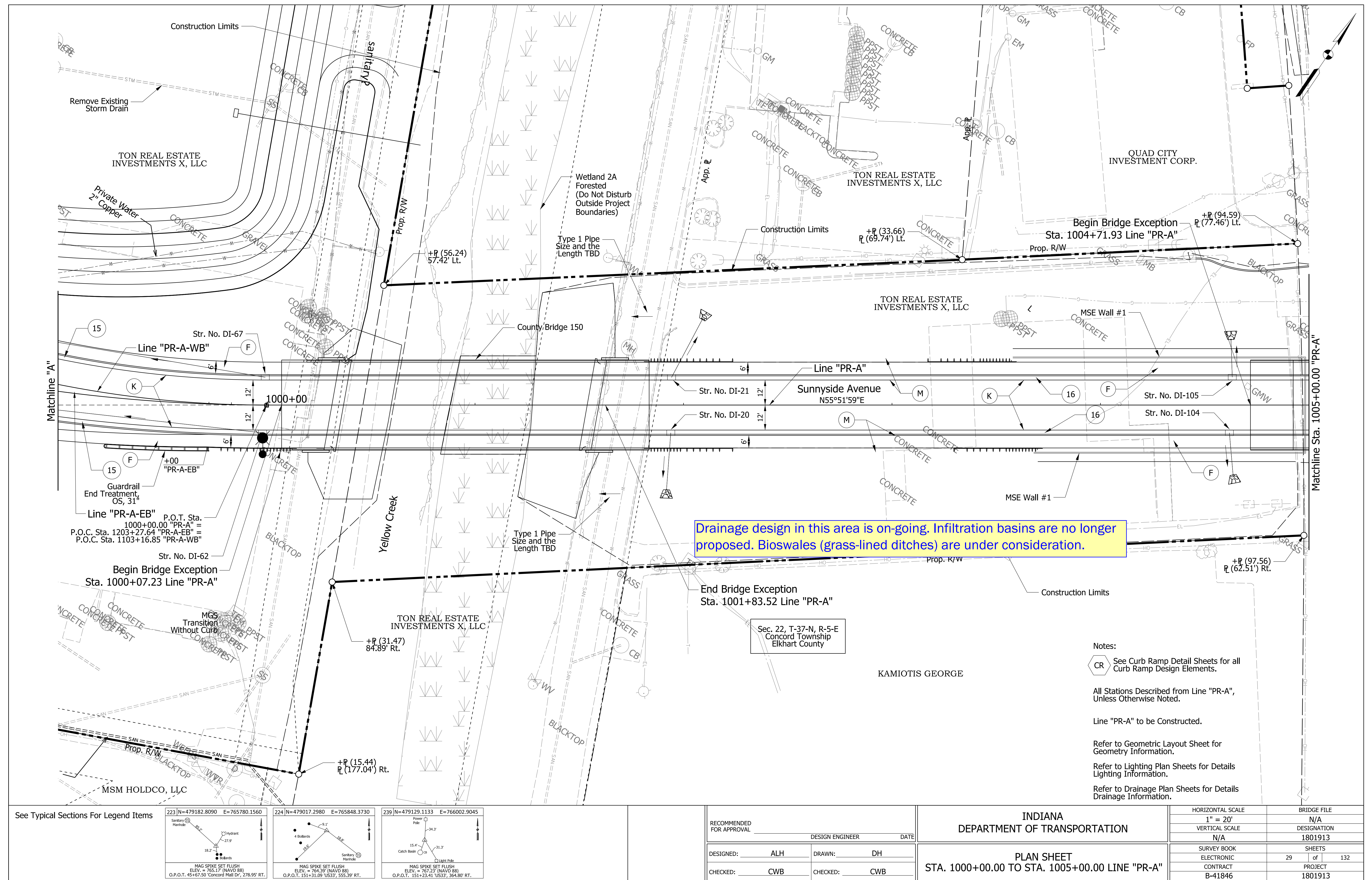
PLAN SHEET
STA. 3000+23.52 TO STA. 3006+00.00 "PR-C"

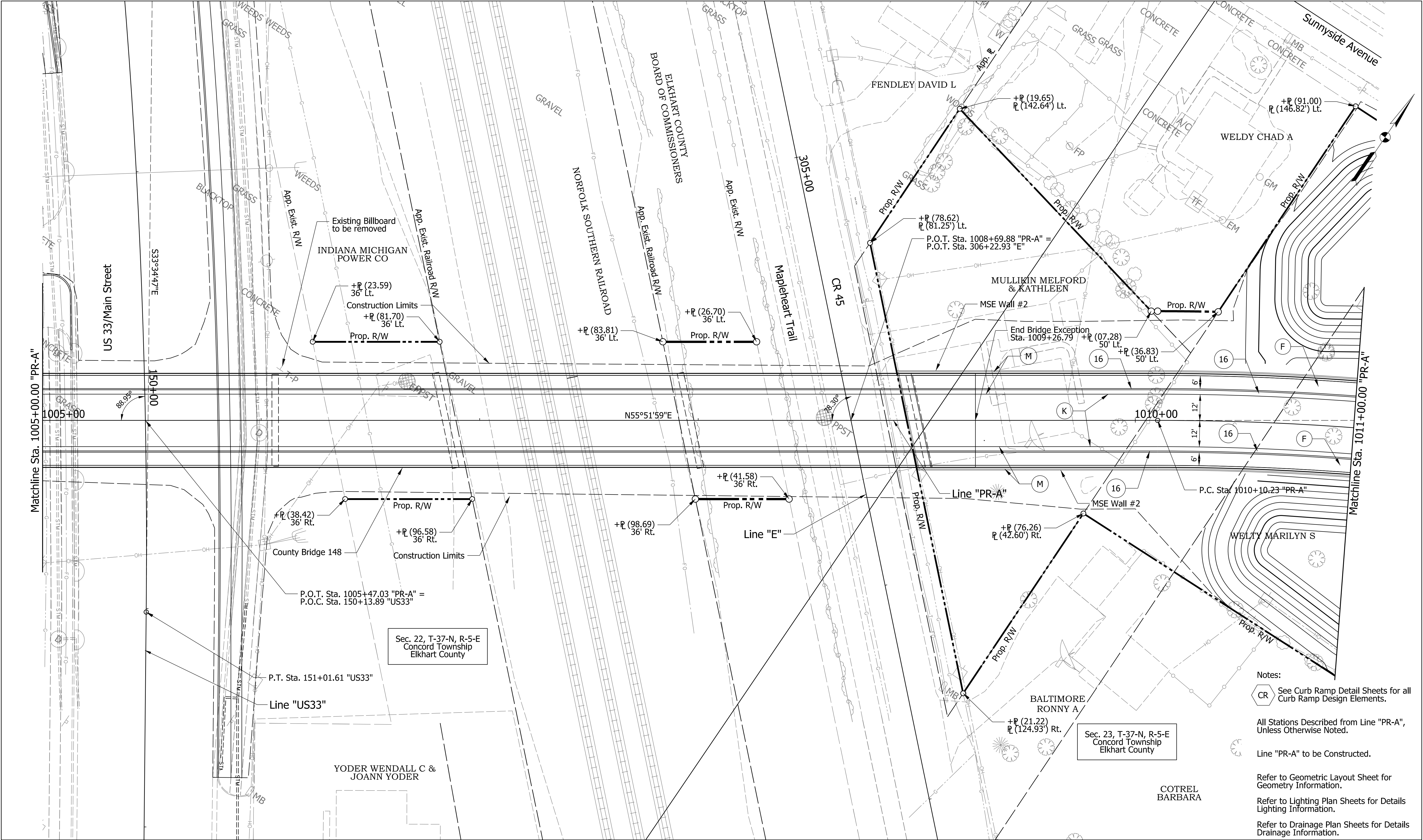
HORIZONTAL SCALE 1" = 20'	BRIDGE FILE N/A
VERTICAL SCALE N/A	DESIGNATION 1801913
SURVEY BOOK ELECTRONIC	SHEETS 26 of 270
CONTRACT B-41846	PROJECT 1801913



See Typical Sections For Legend Items		RECOMMENDED FOR APPROVAL		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 20'		BRIDGE FILE	
		DESIGN ENGINEER		PLAN SHEET		VERTICAL SCALE N/A		DESIGNATION	
		DATE		LINES "PR-C", "PR-RAB", & "PR-A"		N/A		1801913	
		DESIGNED: ALH		DRAWN: DH		SURVEY BOOK		SHEETS	
		CHECKED: CWB		CHECKED: CWB		ELECTRONIC		28 of 270	
						CONTRACT		PROJECT	
						B-41846		1801913	

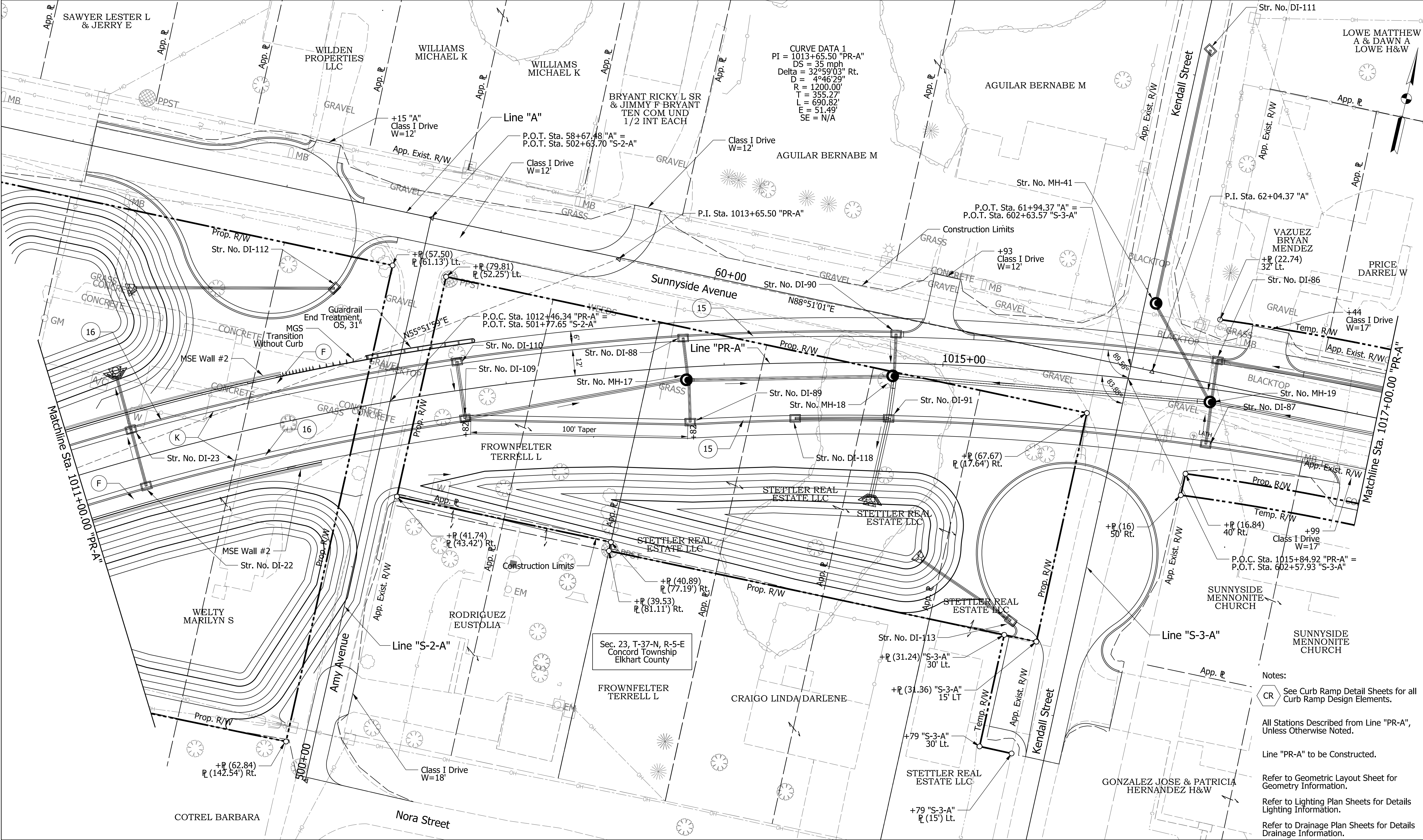
pww://ANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Roadway/Sheets/Elkhart Co_RD_Sht_Plan_02.dgn
6-MAY-2021





See Typical Sections For Legend Items	225 N=479471.2878 E=766615.5203
---------------------------------------	--

pww://ANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Roadway/Sheets/Elkhart Co_RD_Sht_Plan_04.dgn
6-MAY-2021



Notes:

CR See Curb Ramp Detail Sheets for all Curb Ramp Design Elements.

All Stations Described from Line "PR-A", Unless Otherwise Noted.

Line "PR-A" to be Constructed.

Refer to Geometric Layout Sheet for Geometry Information.

Refer to Lighting Plan Sheets for Details Lighting Information.

Refer to Drainage Plan Sheets for Details Drainage Information.

See Typical Sections For Legend Items			INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 20'		BRIDGE FILE N/A	
			RECOMMENDED FOR APPROVAL		DESIGN ENGINEER		DATE	
			DESIGNED: ALH		DRAWN: DH		PLAN SHEET	
			CHECKED: CWB		CHECKED: CWB		STA. 1011+00.00 TO STA. 1017+00.00 LINE "PR-A"	
							SURVEY BOOK ELECTRONIC	
							SHEETS 38 of 270	
							PROJECT B-41846	
							1801913	

pww://ANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Roadway/Sheets/Elkhart Co_RD_Sht_Plan_05.dgn
6-MAY-2021

Notes:

CR See Curb Ramp Detail Sheets for all Curb Ramp Design Elements.

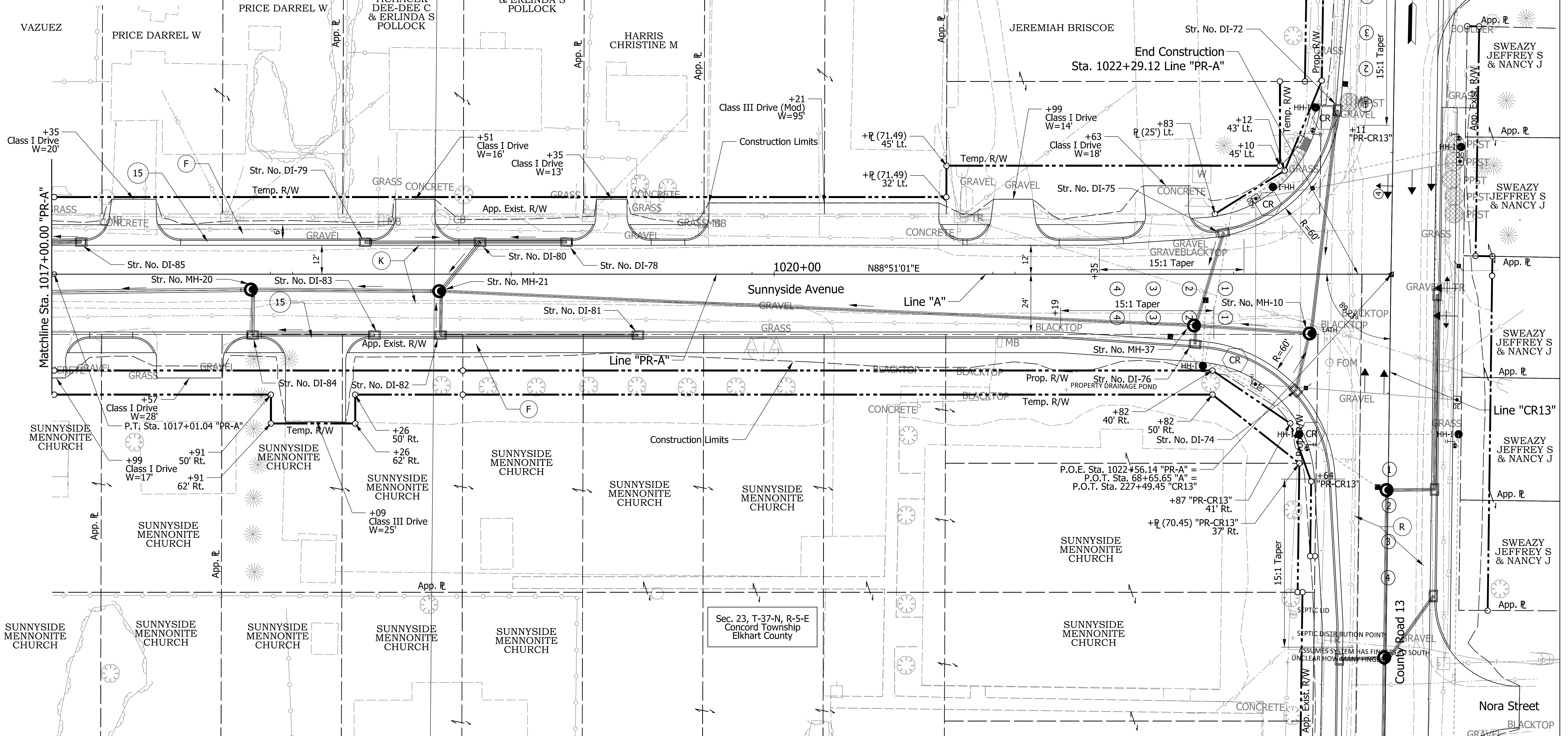
All Stations Described from Line "PR-A", Unless Otherwise Noted.

Line "PR-A" to be Constructed.

Refer to Geometric Layout Sheet for Geometry Information.

Refer to Lighting Plan Sheets for Details Lighting Information.

Refer to Drainage Plan Sheets for Details Drainage Information.



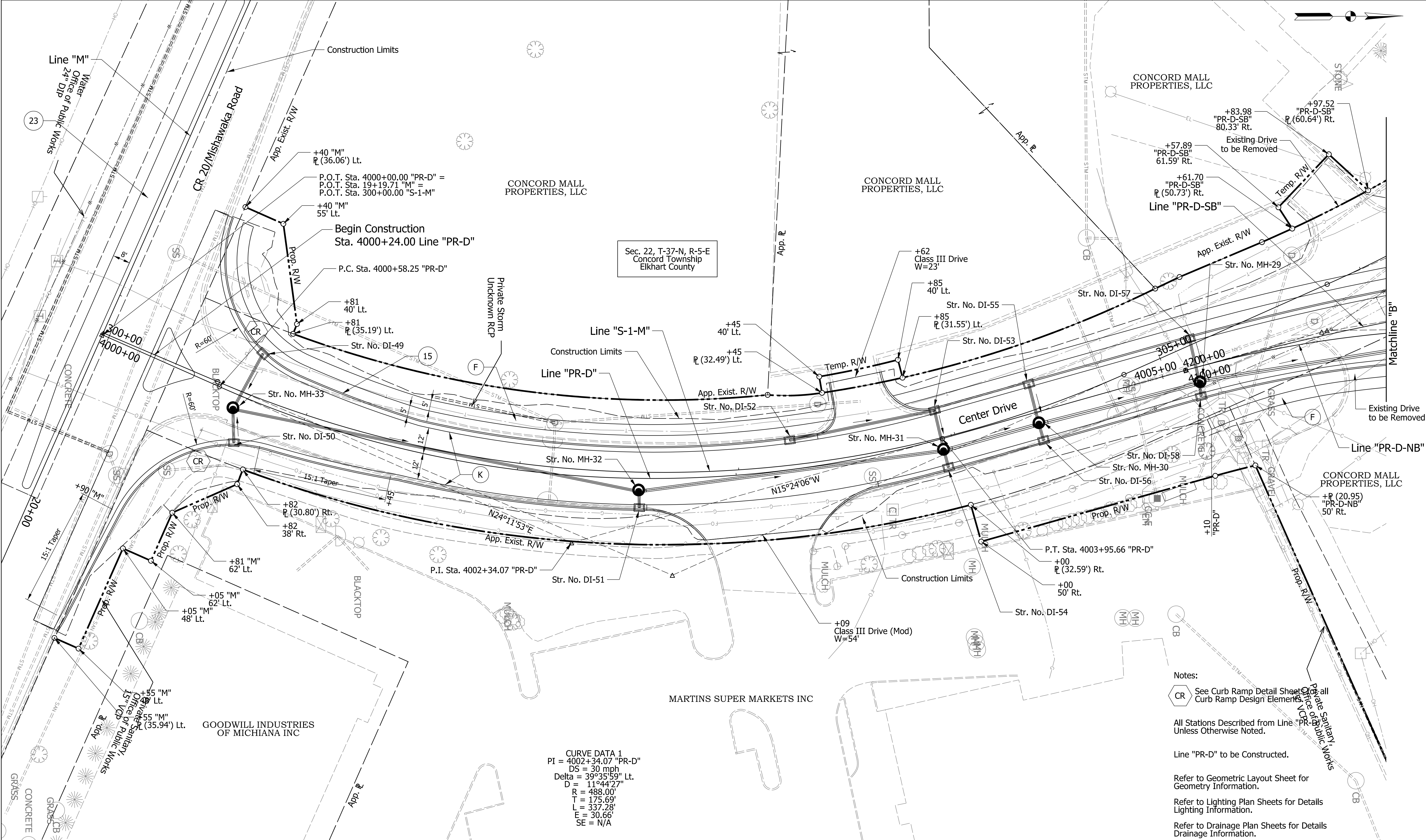
See Typical Sections For Legend Items

RECOMMENDED FOR APPROVAL	
DESIGNED: ALH	DRAWN: DH
CHECKED: CWB	CHECKED: CWB

INDIANA DEPARTMENT OF TRANSPORTATION	
PLAN SHEET STA. 1017+00.00 TO STA. 1022+29.12 LINE "PR-A"	

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE N/A
VERTICAL SCALE N/A	DESIGNATION 1801913
SURVEY BOOK ELECTRONIC CONTRACT B-41846	SHEETS 40 of 270 PROJECT 1801913

p:\NANVA01PWINT01.parsons.com\Indiana State\Documents\Multiple District\Local Trax\Elkhart Co\CADD\Roadway\Sheets\Elkhart Co_RD_Sht_Plan_06.dgn 6-MAY-2021



See Typical Sections For Legend Items

234 N=478803.1125 E=765508.3453

235 N=478592.5524 E=765501.7439

236 N=478330.0392 E=765525.4529

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER

DATE

DESIGNED: ALH

DRAWN: DH

CHECKED: CWB

CHECKED: CWB

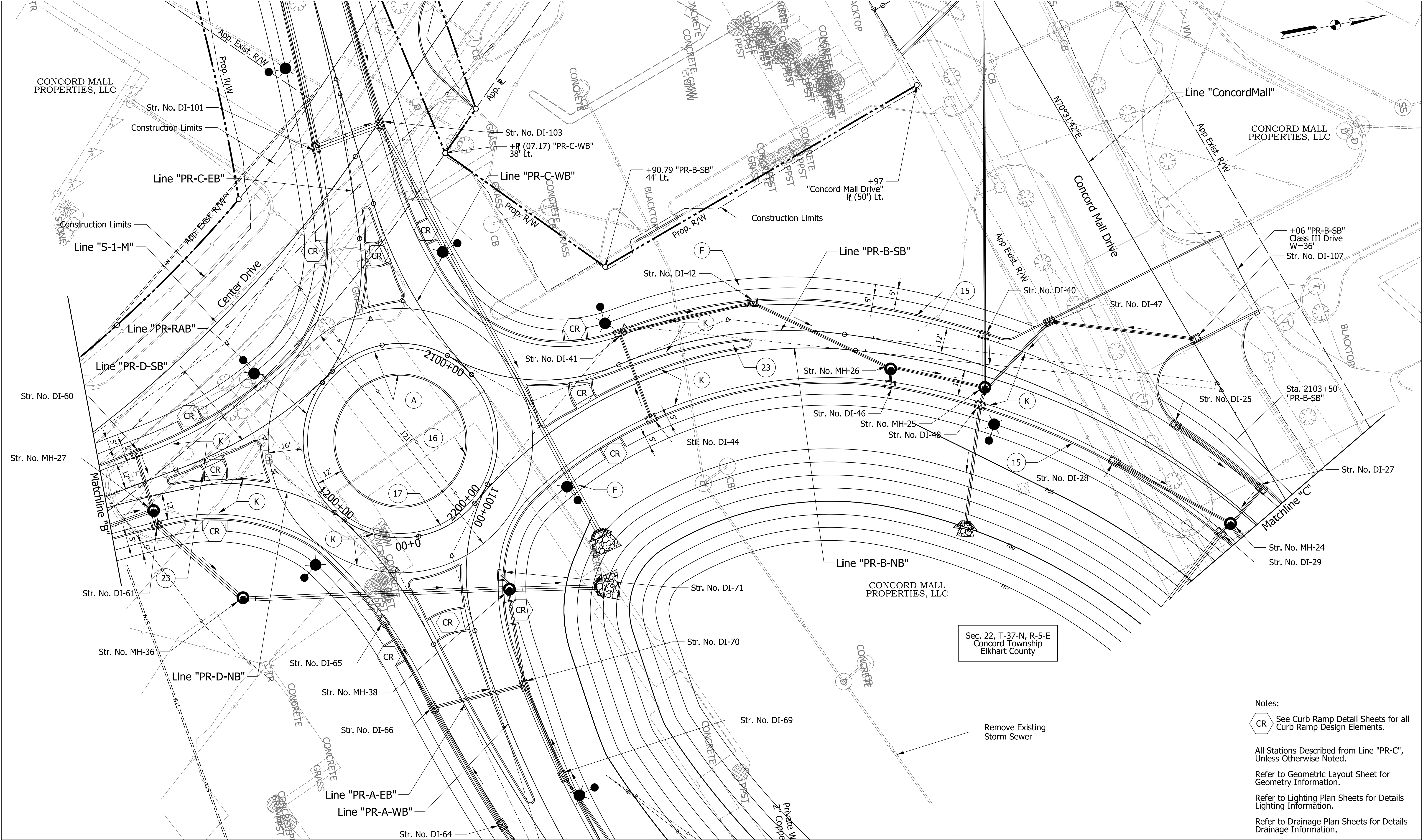
INDIANA DEPARTMENT OF TRANSPORTATION

PLAN SHEET

STA. 4000+24.00 TO STA. 4005+10.91 LINE "PR-D"

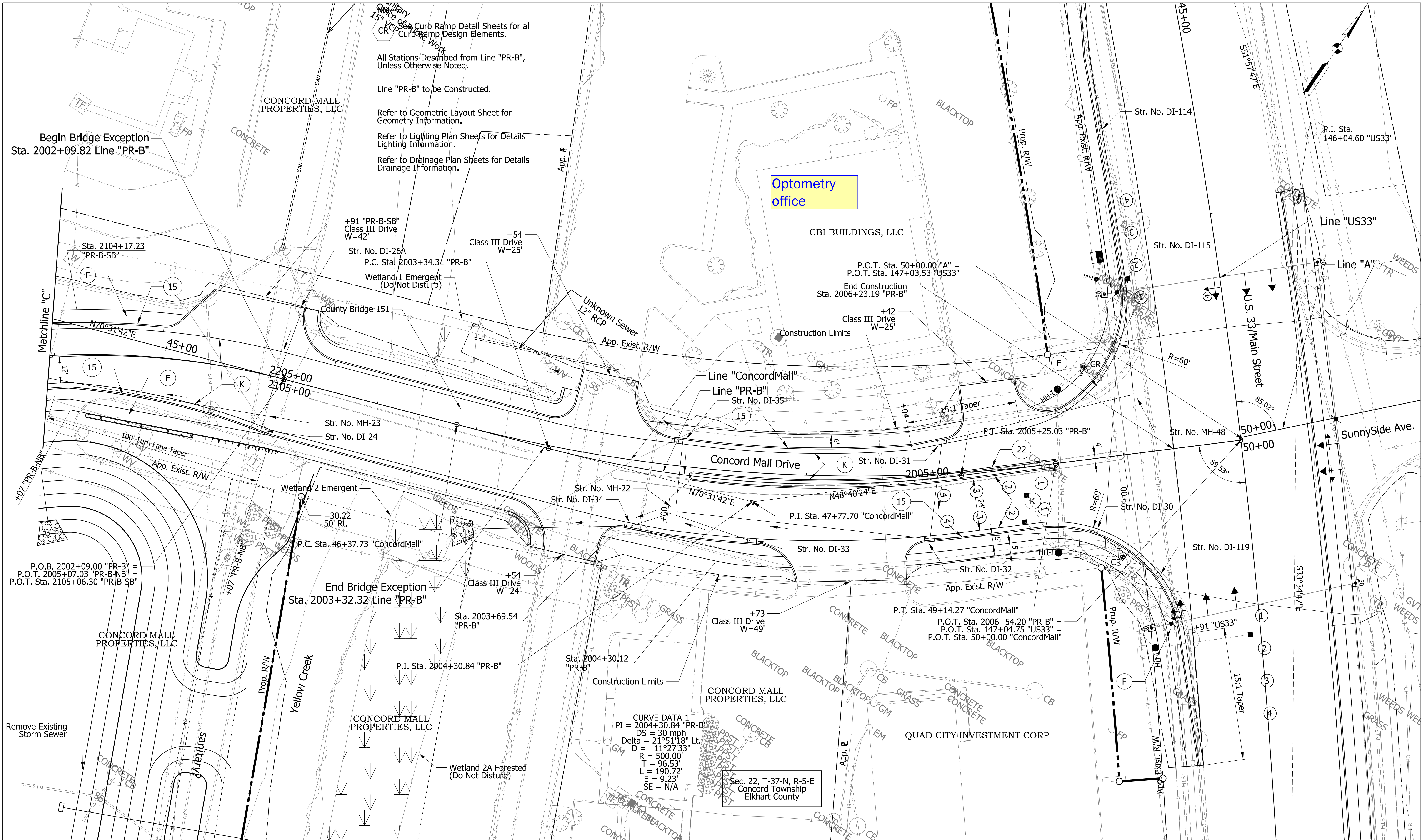
HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1801913
SURVEY BOOK	SHEETS
ELECTRONIC	42 of 270
CONTRACT	PROJECT
B-41846	1801913

pww://VANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Roadway/Sheets/Elkhart Co_RD_Sht_Plan_07.dgn
6-MAY-2021



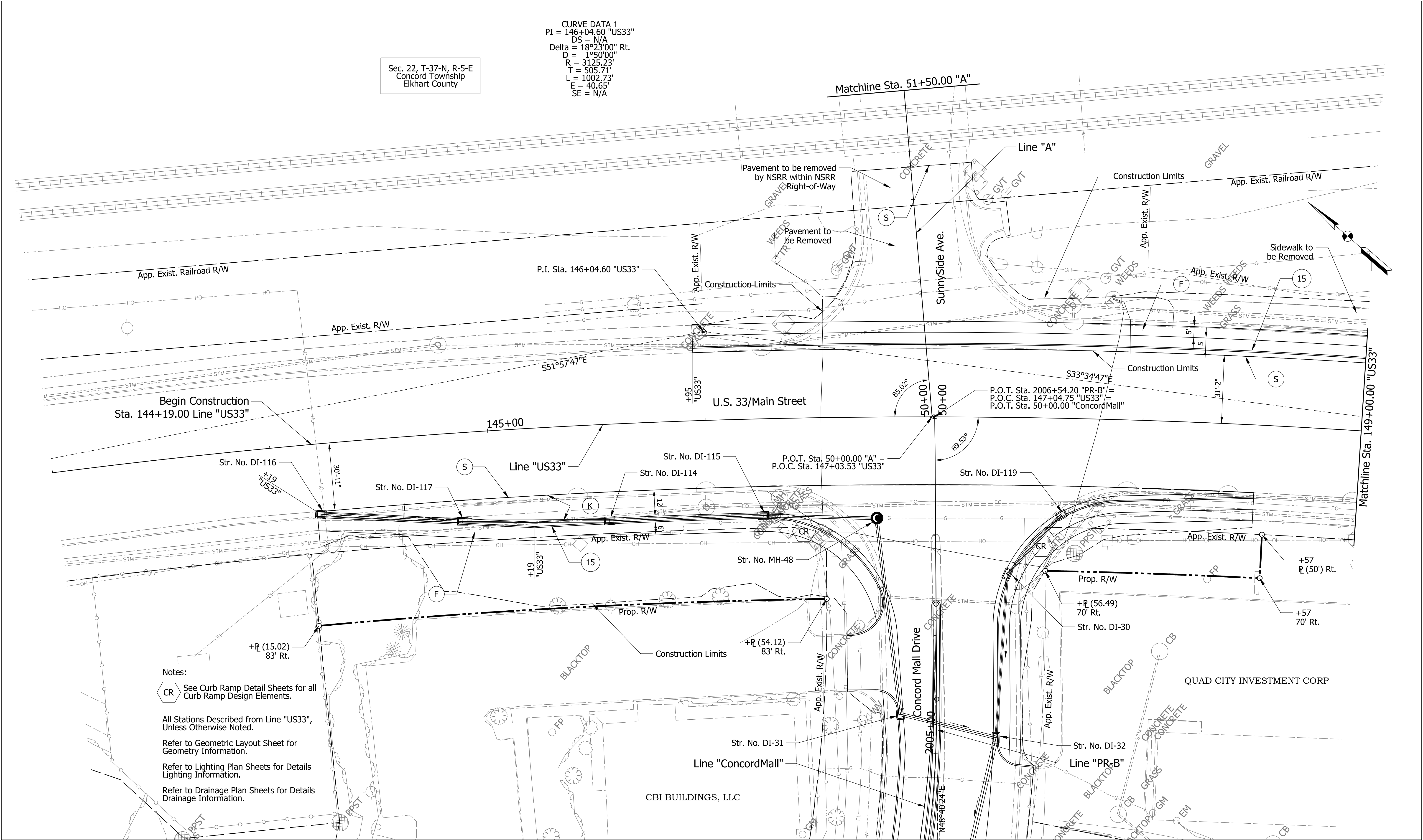
See Typical Sections For Legend Items	RECOMMENDED FOR APPROVAL _____		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE		BRIDGE FILE	
	DESIGN ENGINEER _____		DATE _____		1" = 20'		N/A	
	DESIGNED: _____ ALH _____		DRAWN: _____ DH _____		VERTICAL SCALE		DESIGNATION	
	CHECKED: _____ CWB _____		CHECKED: _____ CWB _____		N/A		1801913	
	PLAN SHEET LINES "PR-D", "PR-RAB", & "PR-B"				SURVEY BOOK		SHEETS	
					ELECTRONIC		44 of 270	
				CONTRACT		PROJECT		
				B-41846		1801913		

pww://ANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Roadway/Sheets/Elkhart Co_RD_Sht_Plan_08.dgn
6-MAY-2021



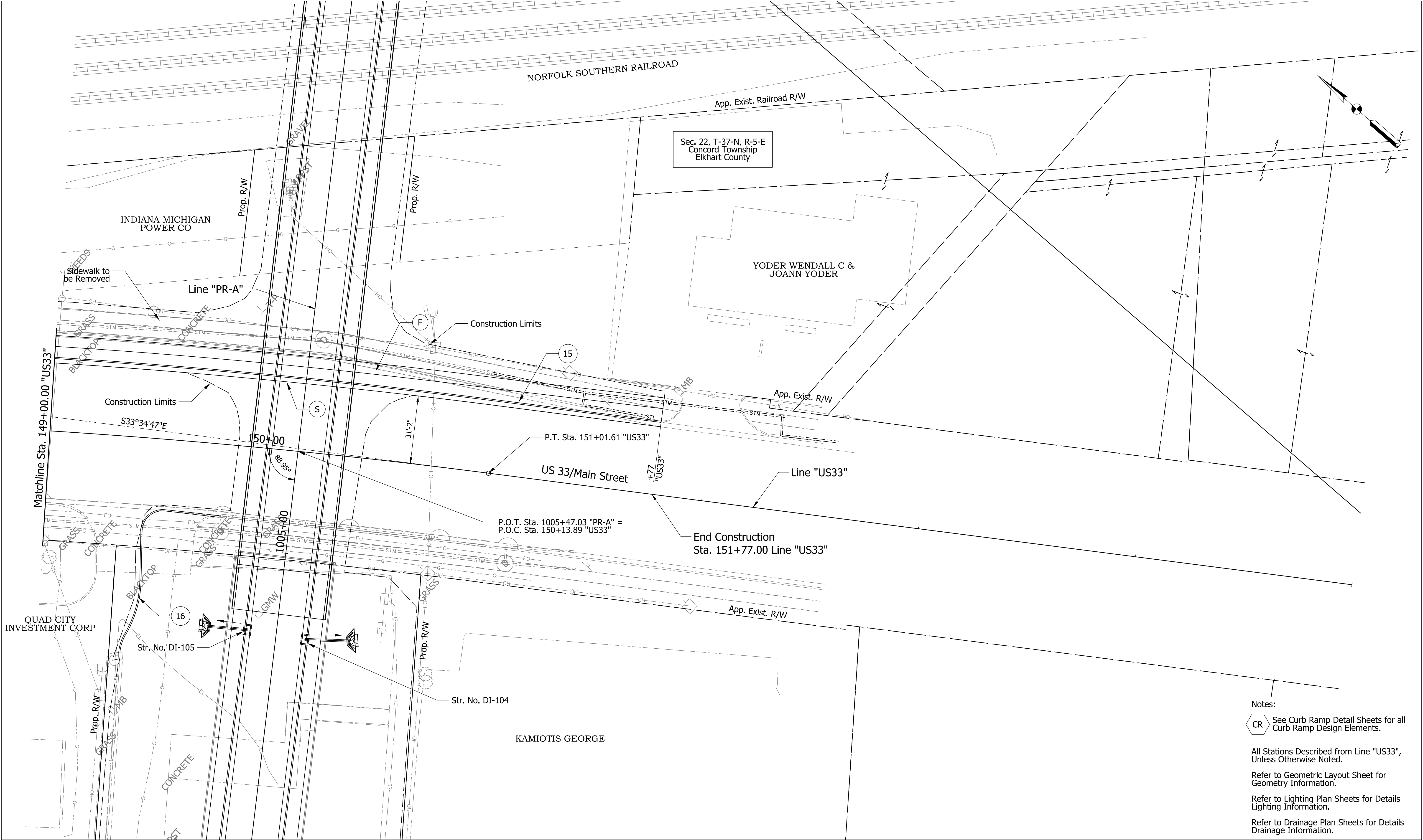
See Typical Sections For Legend Items		209 N=479409.7160 E=765668.0330		210 N=479455.1950 E=765807.3100		RECOMMENDED FOR APPROVAL		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 20'		BRIDGE FILE N/A	
						DESIGN ENGINEER		DATE		VERTICAL SCALE N/A		DESIGNATION 1801913	
MAG NAIL SET FLUSH ELEV. = 766.11' (NAVD 88) O.P.O.T. 45+37.43 "Concord Mall Dr", 27.65' RT.		MAG NAIL SET FLUSH ELEV. = 766.92' (NAVD 88) O.P.O.C. 46+81.94 "Concord Mall Dr", 32.60' RT.		DESIGNED: ALH		DRAWN: DH		PLAN SHEET		SURVEY BOOK		SHEETS	
				CHECKED: CWB		CHECKED: CWB		STA. 2002+09.00 TO STA. 2006+01.31 LINE "PR-B"		ELECTRONIC		45 of 132	
										CONTRACT		PROJECT	
										B-41846		1801913	

IP_PWP:dms32979\Elkhart Co_RD_Sht_Plan_09.dgn
26-JUL-2021



See Typical Sections For Legend Items		202 N=479767.2310 E=766205.4440 Traffic Signal 15.0' Fiber Optic Marker 16.0'		211 N=479587.2140 E=766040.6370 Center of Traffic Manhole 8.0' Power Pole 8.0'		212 N=479898.3480 E=765885.1030 Power Pole 15.0' Center of Storm Manhole 8.0'		MAG SPIKE SET FLUSH ELEV. = 775.28' (NAVD 88) O.P.O.T. 51+78.20 'Sunnyside Ave', 38.03' RT.		5/8" REBAR WITH DLZ CP CAP ELEV. = 770.56' (NAVD 88) O.P.O.T. 49+38.02 'Concord Mall Dr', 48.97' RT.		5/8" REBAR WITH DLZ CP CAP ELEV. = 769.66' (NAVD 88) O.P.O.C. 144+20.12 'US33', 37.45' LT.		RECOMMENDED FOR APPROVAL		DESIGN ENGINEER		DATE		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 20'		BRIDGE FILE N/A	
Note To Reviewer: Sunnyside Avenue at Grade Intersection to be Removed. Coordination with Norfolk Southern Railroad is On-Going.														DESIGNED: ALH		DRAWN: DH				PLAN SHEET STA. 143+00.00 TO STA. 149+00.00 "US33"		VERTICAL SCALE N/A		DESIGNATION 1801913	
CHECKED: CWB														SHEET 51 of 270								SURVEY BOOK ELECTRONIC		PROJECT B-41846	

pw://ANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Roadway/Sheets/Elkhart Co_RD_Sht_Plan_13.dgn
6-MAY-2021



Notes:

CR See Curb Ramp Detail Sheets for all Curb Ramp Design Elements.

All Stations Described from Line "US33", Unless Otherwise Noted.

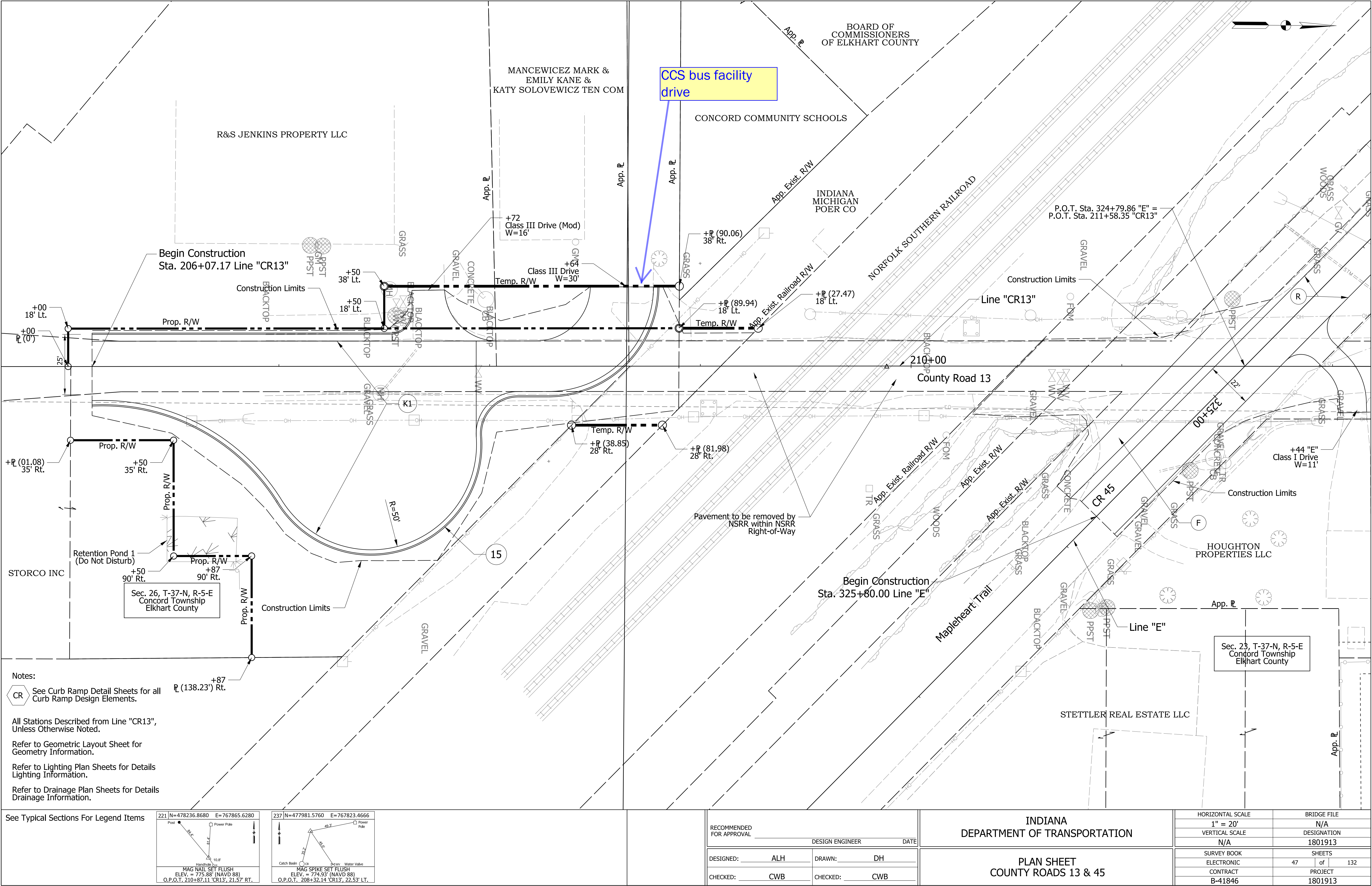
Refer to Geometric Layout Sheet for Geometry Information.

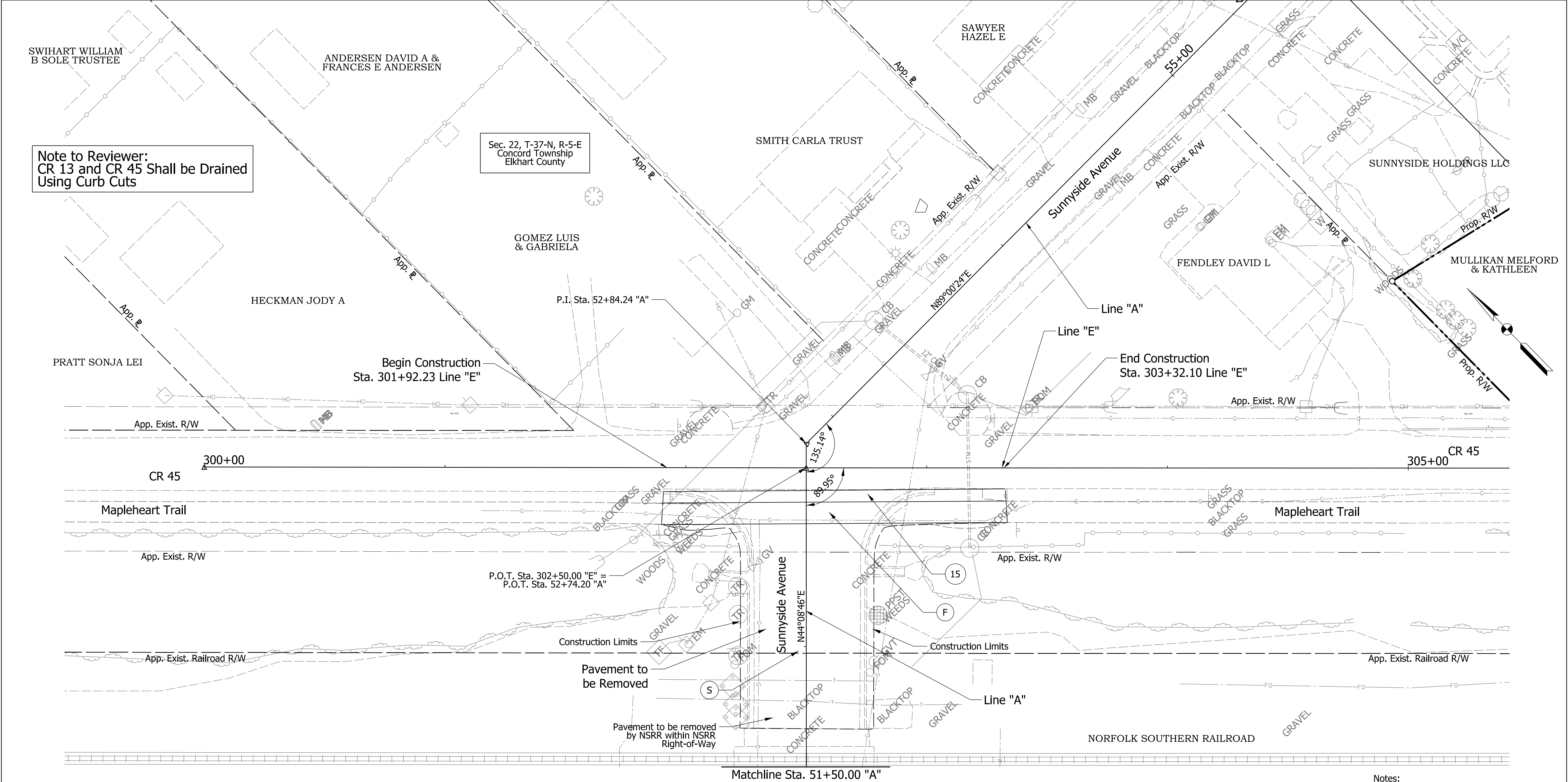
Refer to Lighting Plan Sheets for Details Lighting Information.

Refer to Drainage Plan Sheets for Details Drainage Information.

See Typical Sections For Legend Items	238 N=479329.0062 E=766256.2224			INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 20'	BRIDGE FILE N/A
				DESIGNED: ALH CHECKED: CWB	DRAWN: DH CHECKED: CWB	VERTICAL SCALE N/A	DESIGNATION 1801913
						SURVEY BOOK ELECTRONIC	SHEETS 52 of 270
						CONTRACT B-41846	PROJECT 1801913

pww://ANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Roadway/Sheets/Elkhart Co_RD_Sht_Plan_14.dgn
6-MAY-2021





Note to Reviewer:
CR 13 and CR 45 Shall be Drained
Using Curb Cuts

Sec. 22, T-37-N, R-5-E
Concord Township
Elkhart County

- Notes:
- CR See Curb Ramp Detail Sheets for all Curb Ramp Design Elements.
 - All Stations Described from Line "CR45", Unless Otherwise Noted.
 - Refer to Geometric Layout Sheet for Geometry Information.
 - Refer to Lighting Plan Sheets for Details Lighting Information.
 - Refer to Drainage Plan Sheets for Details Drainage Information.

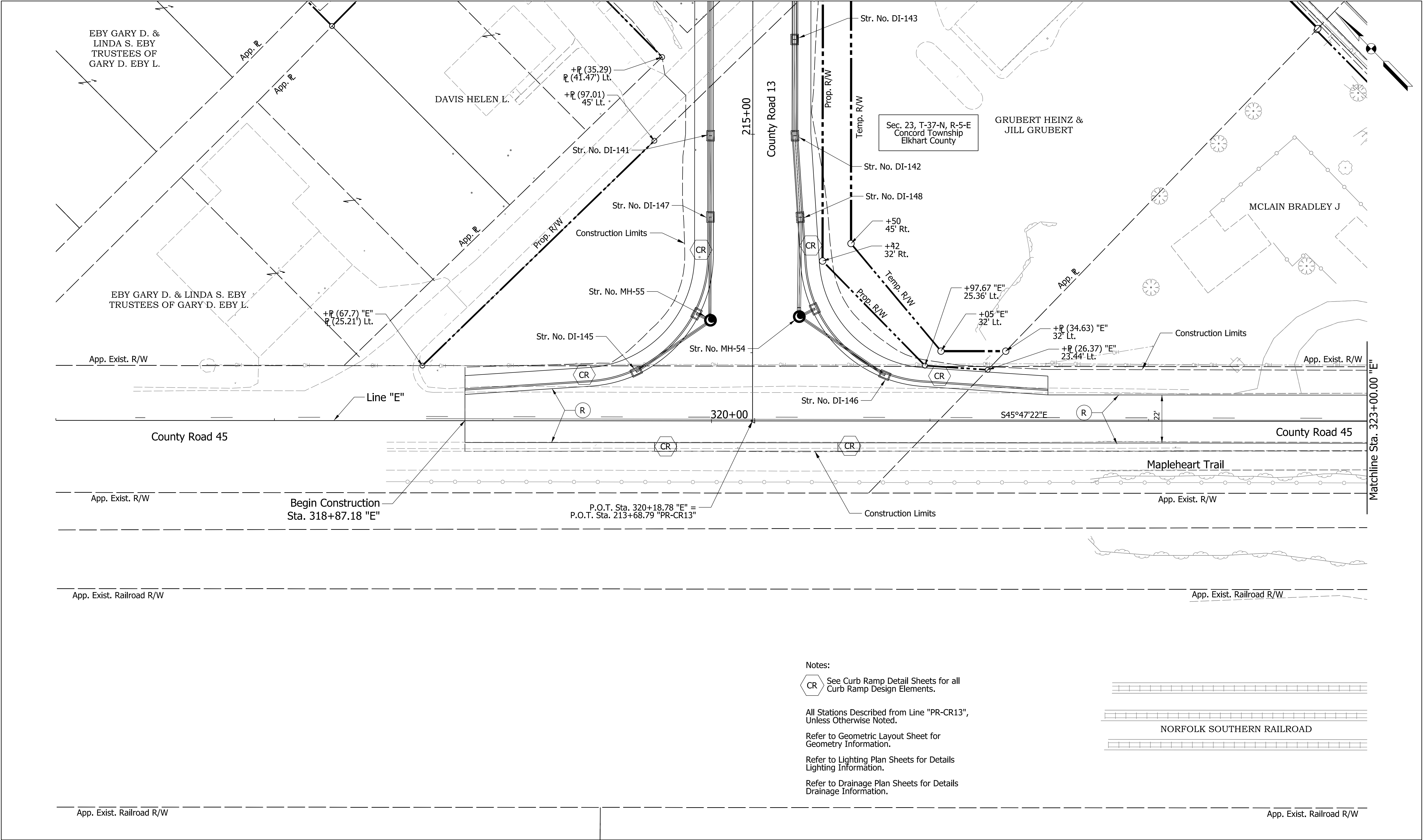
See Typical Sections For Legend Items	
214 N=479875.2590 E=766198.8800 MAG NAIL SET FLUSH ELEV. = 774.22' (NAVD 88) O.P.O.T. 52+51.15 'Sunnyside Ave', 41.93' LT.	215 N=479645.2250 E=766447.8770 MAG NAIL SET FLUSH ELEV. = 773.32' (NAVD 88) O.P.O.T. 54+76.18 'Sunnyside Ave', 227.94' RT.

RECOMMENDED FOR APPROVAL	
DESIGN ENGINEER	
DATE	
DESIGNED: ALH	DRAWN: DH
CHECKED: CWB	CHECKED: CWB

INDIANA DEPARTMENT OF TRANSPORTATION	
PLAN SHEET STA. 301+92.23 TO STA. 303+03.97 LINE "E"	

HORIZONTAL SCALE		BRIDGE FILE	
1" = 20'		N/A	
VERTICAL SCALE		DESIGNATION	
N/A		1801913	
SURVEY BOOK		SHEETS	
ELECTRONIC		54	of 270
CONTRACT		PROJECT	
B-41846		1801913	

pwr://ANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Roadway/Sheets/Elkhart Co_RD_Sht_Plan_15.dgn
6-MAY-2021



Notes:

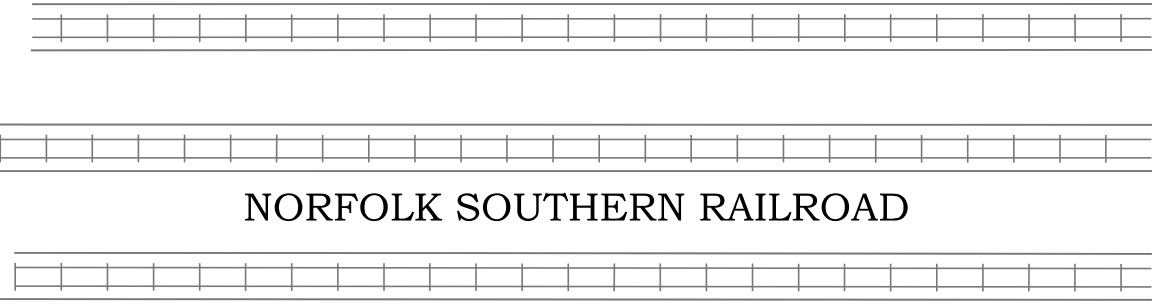
CR See Curb Ramp Detail Sheets for all Curb Ramp Design Elements.

All Stations Described from Line "PR-CR13", Unless Otherwise Noted.

Refer to Geometric Layout Sheet for Geometry Information.

Refer to Lighting Plan Sheets for Details Lighting Information.

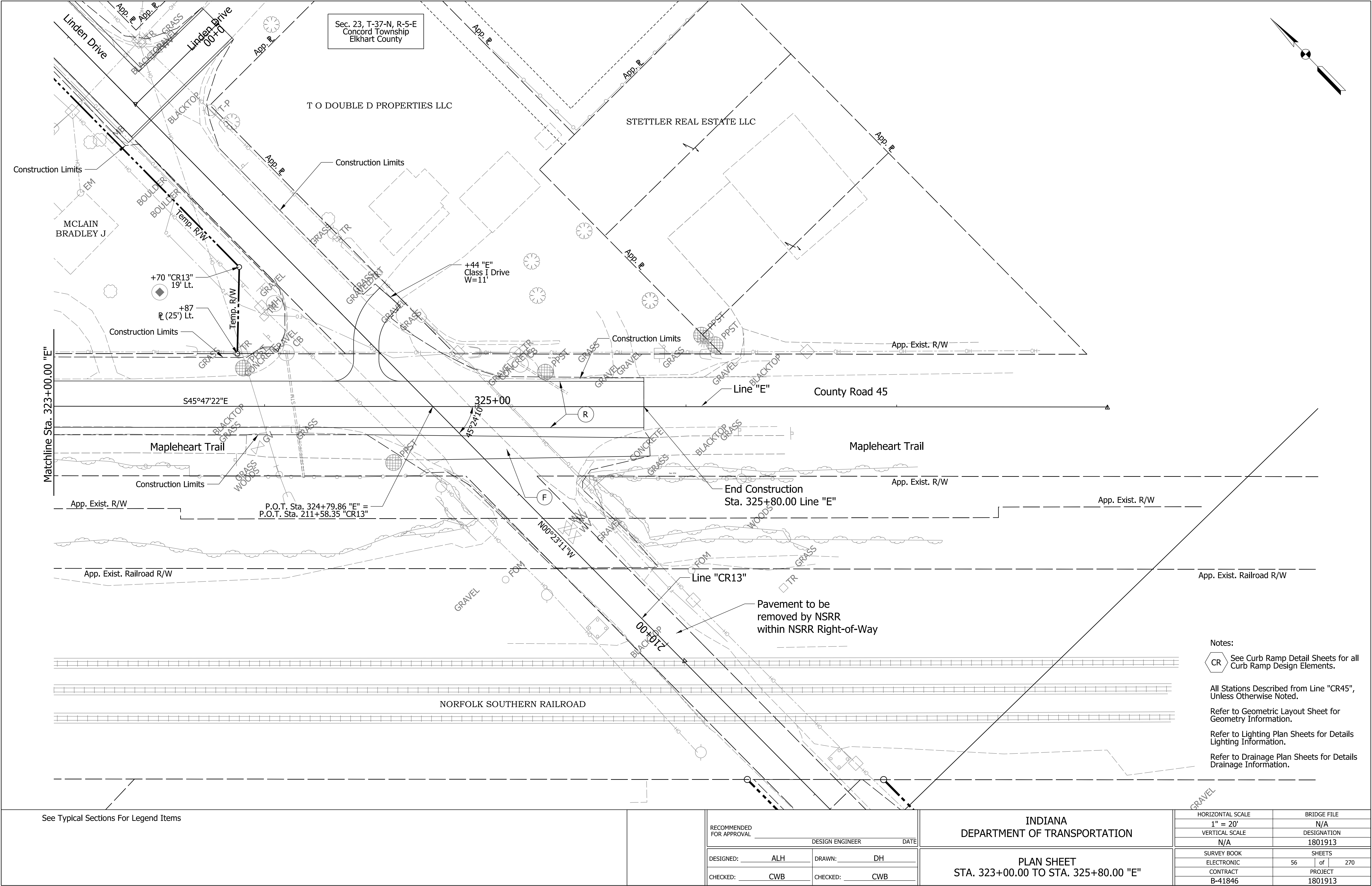
Refer to Drainage Plan Sheets for Details Drainage Information.



See Typical Sections For Legend Items

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1" = 20'	BRIDGE FILE N/A	
			VERTICAL SCALE N/A	DESIGNATION 1801913	
DESIGNED: ALH	DRAWN: DH	PLAN SHEET STA. 318+87.18 TO STA. 323+00.00 "E"	SURVEY BOOK ELECTRONIC	55	of 270
CHECKED: CWB	CHECKED: CWB		CONTRACT B-41846	PROJECT 1801913	

pww://ANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Roadway/Sheets/Elkhart Co_RD_Sht_Plan_16.dgn
6-MAY-2021

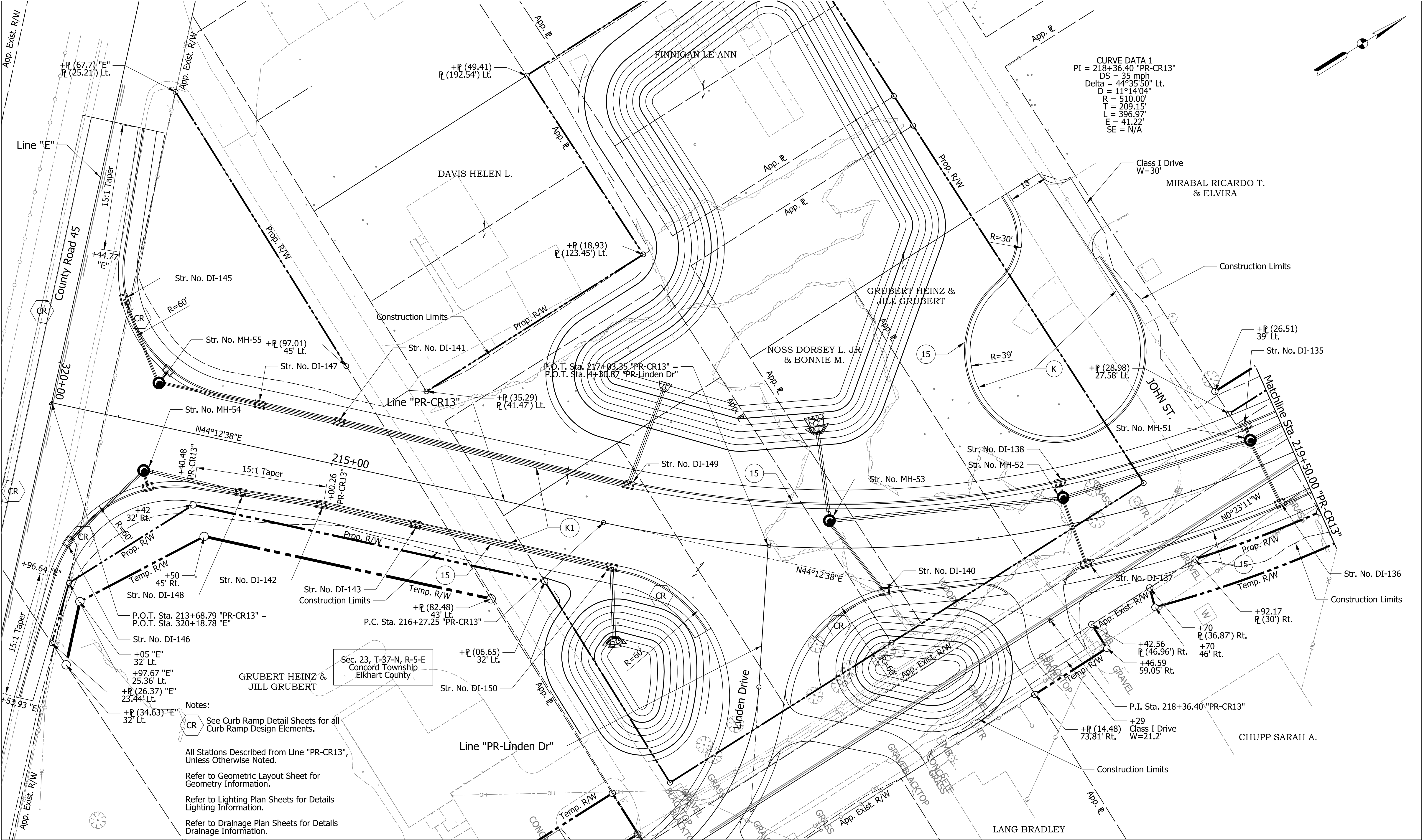


pww://VANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Roadway/Sheets/Elkhart Co_RD_Sht_Plan_17.dgn
6-MAY-2021

- Notes:
- CR See Curb Ramp Detail Sheets for all Curb Ramp Design Elements.
 - All Stations Described from Line "CR45", Unless Otherwise Noted.
 - Refer to Geometric Layout Sheet for Geometry Information.
 - Refer to Lighting Plan Sheets for Details Lighting Information.
 - Refer to Drainage Plan Sheets for Details Drainage Information.

See Typical Sections For Legend Items

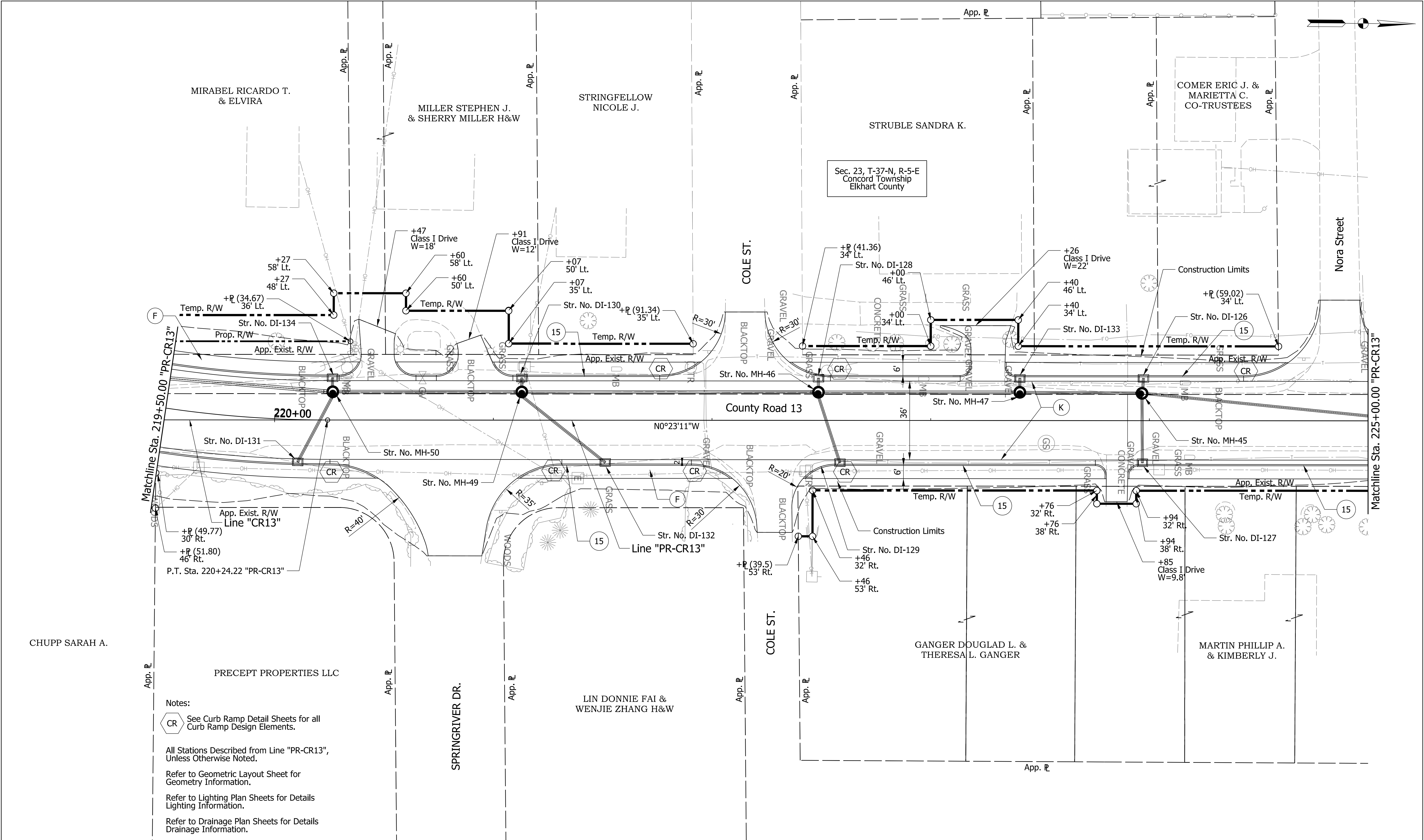
RECOMMENDED FOR APPROVAL			INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE		BRIDGE FILE			
					1" = 20'		N/A			
					VERTICAL SCALE		DESIGNATION			
					N/A		1801913			
DESIGNED: _____	ALH	DRAWN: _____	DH	PLAN SHEET STA. 323+00.00 TO STA. 325+80.00 "E"		SURVEY BOOK		SHEETS		
						ELECTRONIC		56	of	270
CHECKED: _____	CWB	CHECKED: _____				CWB	CONTRACT		PROJECT	
						B-41846		1801913		



See Typical Sections For Legend Items

RECOMMENDED FOR APPROVAL	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE		BRIDGE FILE			
			1" = 20'		N/A			
			VERTICAL SCALE		DESIGNATION			
DESIGN ENGINEER		DATE		N/A		1801913		
DESIGNED: ALH		DRAWN: DH		PLAN SHEET STA. 213+80.78 TO STA. 219+50.00 "PR-CR13"				
CHECKED: CWB		CHECKED: CWB						
				SURVEY BOOK		SHEETS		
				ELECTRONIC		57	of	270
				CONTRACT		PROJECT		
				B-41846		1801913		

pww://VANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Roadway/Sheets/Elkhart Co_RD_Sht_Plan_18.dgn
6-MAY-2021



Notes:

CR See Curb Ramp Detail Sheets for all Curb Ramp Design Elements.

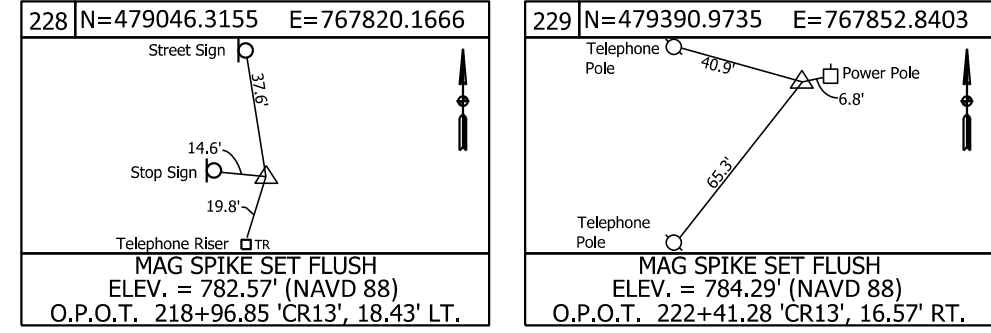
All Stations Described from Line "PR-CR13", Unless Otherwise Noted.

Refer to Geometric Layout Sheet for Geometry Information.

Refer to Lighting Plan Sheets for Details Lighting Information.

Refer to Drainage Plan Sheets for Details Drainage Information.

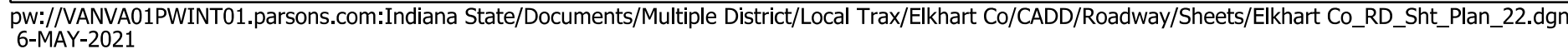
See Typical Sections For Legend Items



RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: ALH	DRAWN: DH	
CHECKED: CWB	CHECKED: CWB	

INDIANA DEPARTMENT OF TRANSPORTATION
PLAN SHEET STA. 219+50.00 TO STA. 225+00.00 "PR-CR13"

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE N/A
VERTICAL SCALE N/A	DESIGNATION 1801913
SURVEY BOOK ELECTRONIC	SHEETS 59 of 270
CONTRACT B-41846	PROJECT 1801913



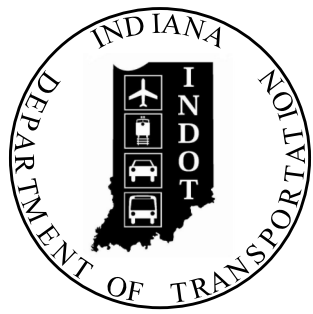
PROJECT	DESIGNATION
1801913	1900836
CONTRACT	BRIDGE FILE
B-41846	Elkhart County Bridge No. 148

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
ELKHART COUNTY BRIDGE NO. 148	PRESTRESSED CONCRETE BULB-TEE BEAM BRIDGE	4 Spans: 113'-0", 78'-0", 112'-0" & 104'-6" Skew: Varies	US 33/ MAIN ST, NSRR, & CR 45	1006+97.18 "PR-A"

KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	TYPE
* 1801913	Sunnyside Avenue/ Mall Drive at US 33 (Main Street) over Norfolk Southern Railroad	Road/Traffic
2001724	County Bridge 150 - Sunnyside Avenue over Yellow Creek	Bridge
2001723	County Bridge 151 - Concord Mall Drive over Yellow Creek	Bridge

* Indicates Lead Des. No.

INDIANA DEPARTMENT OF TRANSPORTATION



BRIDGE PLANS

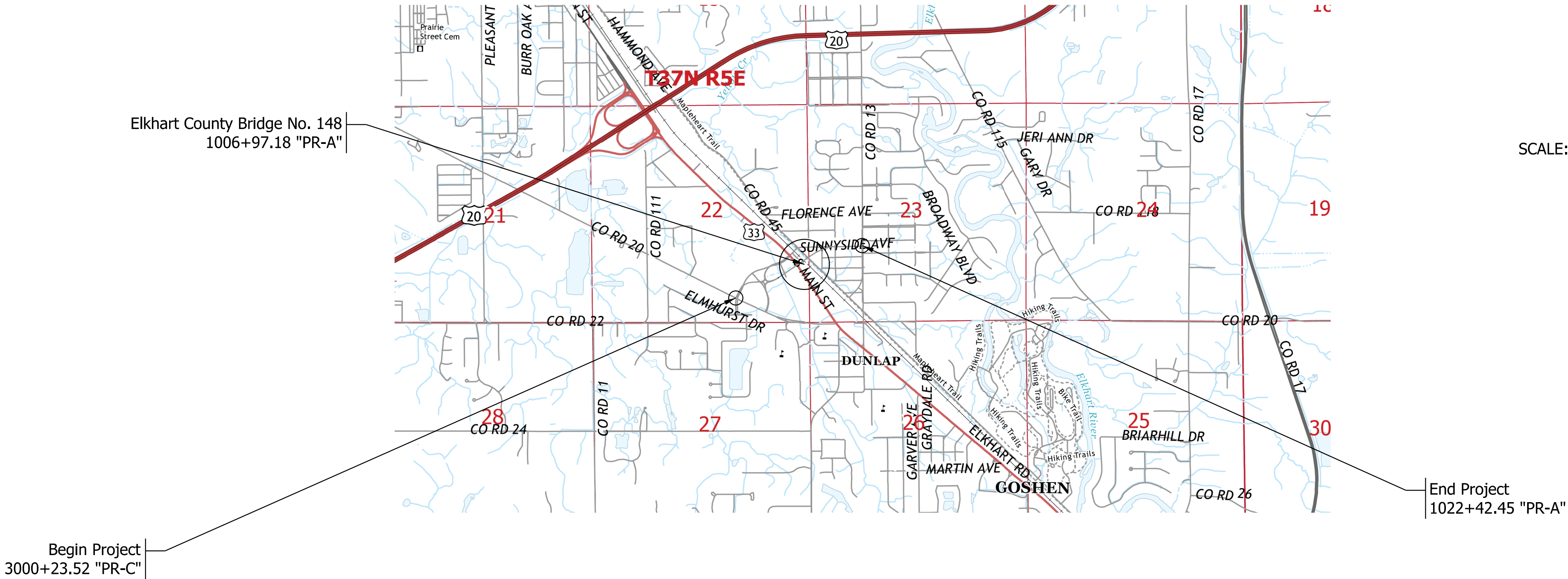
FOR SPANS OVER 20 FEET

County Bridge 148
Excerpts

PROJECT NO. 1801913 P.E.
1801913 R/W
1900836 CONST.

New Bridge Construction on Sunnyside Avenue over US 33/ Main St., Norfolk Southern Railroad, & CR 45
Located 0.37 Miles Northeast of CR 20
Section 22&23, T-37-N, R-5-E, Concord Township, Elkhart County, Indiana

ELKHART COUNTY COMMISSIONERS	
Frank Luchese	Date
Mike Yoder	Date
Suzanne Weirick	Date
ELKHART COUNTY AUDITOR	
Patricia A. Pickens	Date
ELKHART COUNTY HIGHWAY DIRECTOR	
Charlie McKenzie	Date
INDOT LPA PROGRAMS	
Jason Holder	Date
INDOT LPA ENGINEERING	
Jason Springer	Date



STRUCTURE TO BE BUILT TO A +4.90% GRADE, 300.00' V.C., & A -4.90% GRADE

GENERAL NOTES

Reinforcing steel covering shall be 2½" in Top and 1" min. In bottom of floor slabs, 3" in footing except bottom steel which shall be 4", and 2" in all other parts, unless noted.

For use of falsework and formwork, the contractor shall comply with Norfolk Southern Railway Company Public Projects Manual Appendix H1, Overhead Grade Separation Design Criteria, regarding temporary minimum vertical and horizontal clearances.

DESIGN DATA

Superstructure & Substructure Designed for HL-93 Loading in accordance with AASHTO LRFD Bridge Design Specifications, Eighth Edition, 2017, and its subsequent interims.

DEAD LOAD

Actual weight plus 35 psf. of future wearing surface and 15 psf for SIP Metal deck forms.

FLOOR SLAB

Designed with a 7½" structural depth, and a ½" integral wearing surface.

DESIGN STRESSES

CONCRETE

Prestressed Concrete f'c = 8,000 p.s.i.
Class "A" Concrete f'c = 3,500 p.s.i.
Class "B" Concrete f'c = 3,000 p.s.i.
Class "C" Concrete f'c = 4,000 p.s.i.

REINFORCING STEEL

Grade 60 fy = 60,000 p.s.i.

CONSTRUCTION LOADING

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

DECK FALSEWORK LOADS

Designed for 15 lb/Sft for permanent metal stay-in-place deck forms, removable deck forms, and 2-ft exterior walkway.

CONSTRUCTION LIVE LOAD

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

FINISHING MACHINE LOAD

4500 lb distributed over 10-ft along the coping.

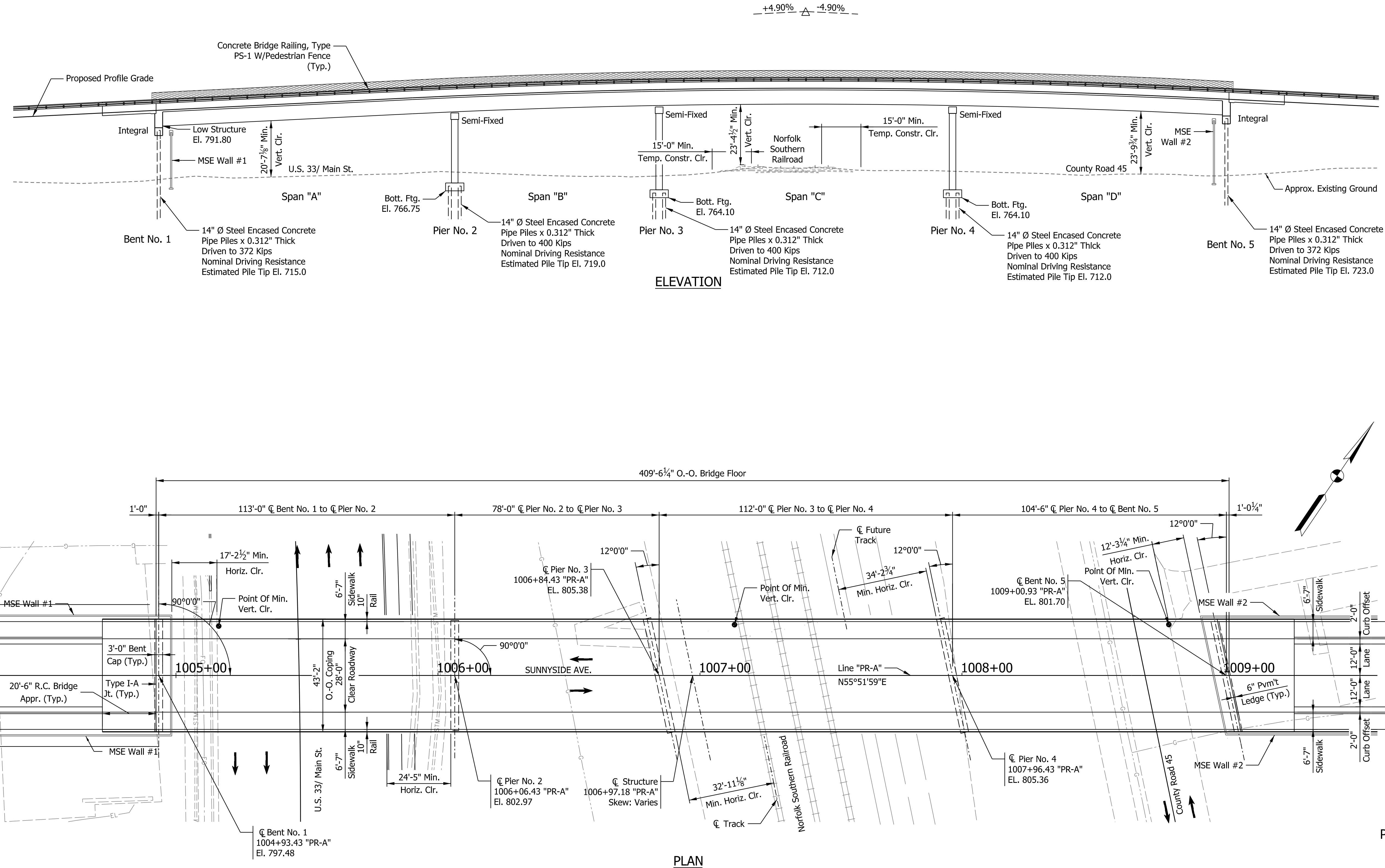
WIND LOAD

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

SEISMIC DESIGN DATA

Seismic Performance Zone Zone x
Acceleration Coefficient (SD1) 0.xxx
Seismic Soil Profile Type Site Class x

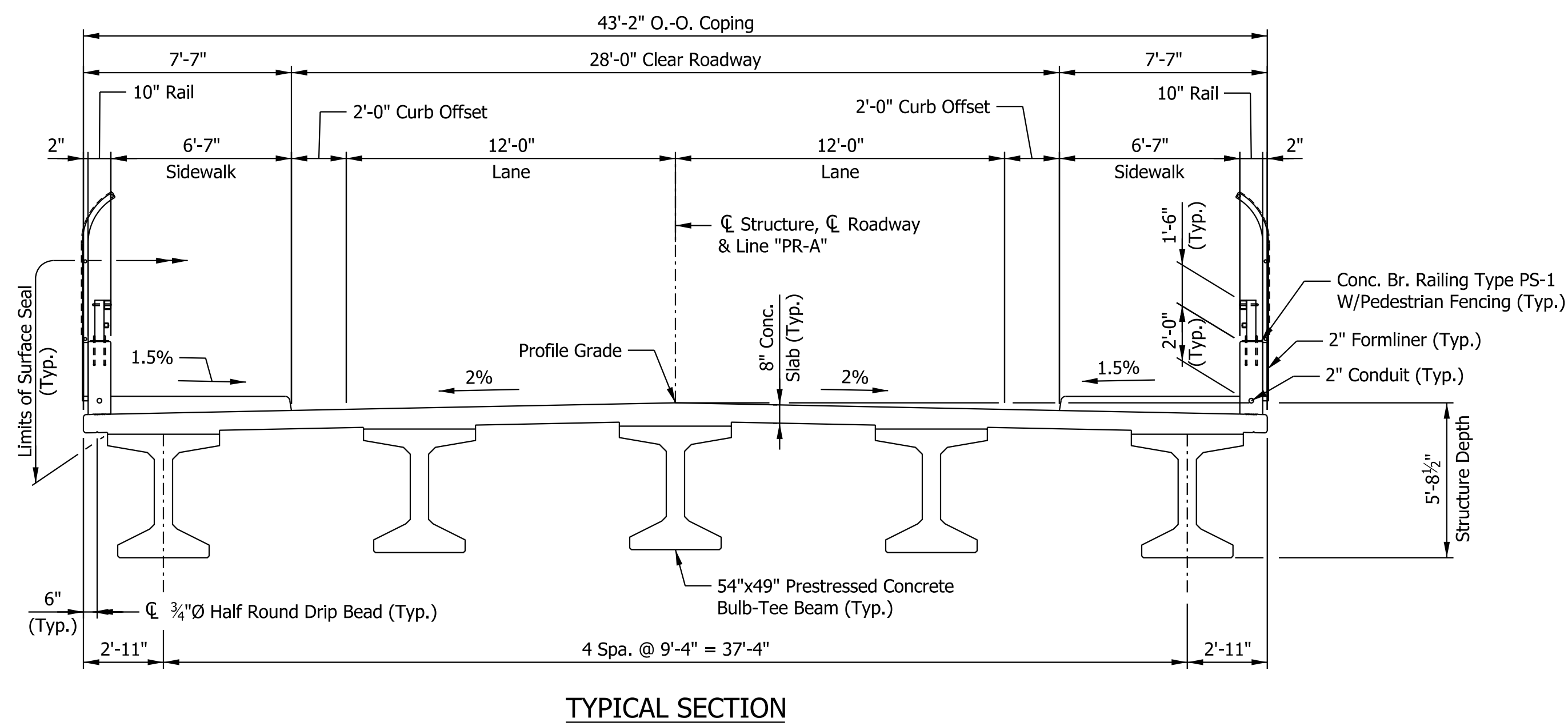
PRESTRESSED CONCRETE BULB-TEE BEAM BRIDGE
4 SPANS: 113'-0", 78'-0", 112'-0", & 104'-6"
28'-0" CLEAR ROADWAY; SKEW: VARIES
SUNNYSIDE AVE. OVER U.S. 33/ MAIN ST.,
NORFOLK SOUTHERN RAILROAD & C.R. 45
ELKHART COUNTY



PLAN

RECOMMENDED FOR APPROVAL			INDIANA DEPARTMENT OF TRANSPORTATION			HORIZONTAL SCALE		BRIDGE FILE			
						1"=20'		Elkhart County Bridge No. 148			
						VERTICAL SCALE		DESIGNATION			
						1"=20'		1900836			
DESIGNED:	BFK	DRAWN:	JEW	GENERAL PLAN			SURVEY BOOK		SHEETS		
							ELECTRONIC		11	of	15
							CONTRACT		PROJECT		
							B-41846		1801913		
CHECKED:	KRM	CHECKED:	BFK								

pwr://VANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Bridge/Sheets/1900836_B_BR_SHT_GENERAL PLAN.01.dgn
27-JUL-2021



PRESTRESSED CONCRETE BULB-TEE BEAM BRIDGE
4 SPANS: 113'-0", 78'-0", 112'-0", & 104'-6"
28'-0" CLEAR ROADWAY; SKEW: VARIES
SUNNYSIDE AVE. OVER U.S. 33/ MAIN ST.,
NORFOLK SOUTHERN RAILROAD & C.R. 45
ELKHART COUNTY

		RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE		BRIDGE FILE	
						1/4"=1'-0"		Elkhart County Bridge No. 148	
						VERTICAL SCALE		DESIGNATION	
						1/4"=1'-0"		1900836	
		DESIGNED: BFK	DRAWN: JEW		GENERAL PLAN	SURVEY BOOK		SHEETS	
						ELECTRONIC		12 of 15	
						CONTRACT		PROJECT	
						B-41846		1801913	

pw://VANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Bridge/Sheets/1900836 B_BR_SHT_GENERAL PLAN.02.dgn
27-JUL-2021

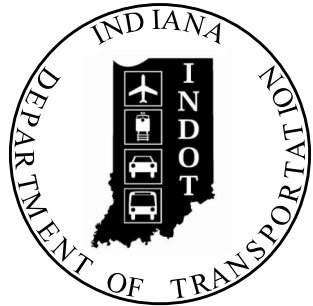
PROJECT	DESIGNATION
1801913	2001723
CONTRACT	BRIDGE FILE
B-41846	Elkhart County Bridge No. 151

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
ELKHART COUNTY BRIDGE NO. 151	CONTINUOUS REINFORCED CONCRETE SLAB BRIDGE	3 Spans: 21'-0", 38'-0", & 21'-0" Skew: Square	YELLOW CREEK	2002+71.07 "PR-B"

KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	TYPE
* 1801913	Sunnyside Avenue/ Mall Drive at US 33 (Main Street) over Norfolk Southern Railroad	Road/Traffic
2001724	County Bridge No. 150 - Sunnyside Avenue over Yellow Creek	Bridge
1900836	County Bridge No. 148 - Sunnyside Avenue/ Mall Drive at US 33 over Norfolk Southern Railroad	Bridge

* Indicates Lead Des. No.

INDIANA DEPARTMENT OF TRANSPORTATION



BRIDGE PLANS FOR SPANS OVER 20 FEET

County Bridge 151
Excerpts

PROJECT NO. 1801913 P.E.
1801913 R/W
2001723 CONST.

Bridge Replacement on Concord Mall Drive over Yellow Creek
Located 0.07 Miles Southwest of US 33
Section 22, T-37-N, R-5-E, Concord Township, Elkhart County, Indiana

ELKHART COUNTY COMMISSIONERS

Frank Luchese

Date

Mike Yoder

Date

Suzanne Weirick

Date

ELKHART COUNTY AUDITOR

Patricia A. Pickens

Date

ELKHART COUNTY HIGHWAY DIRECTOR

Charlie McKenzie

Date

INDOT LPA PROGRAMS

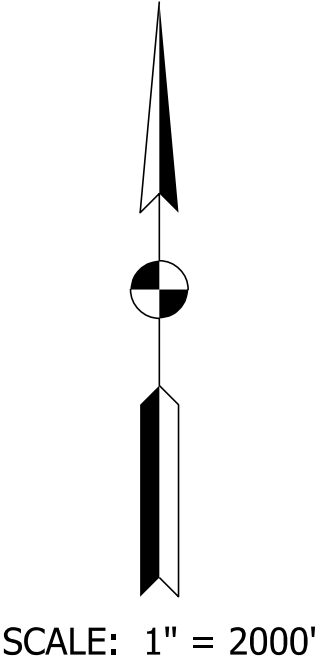
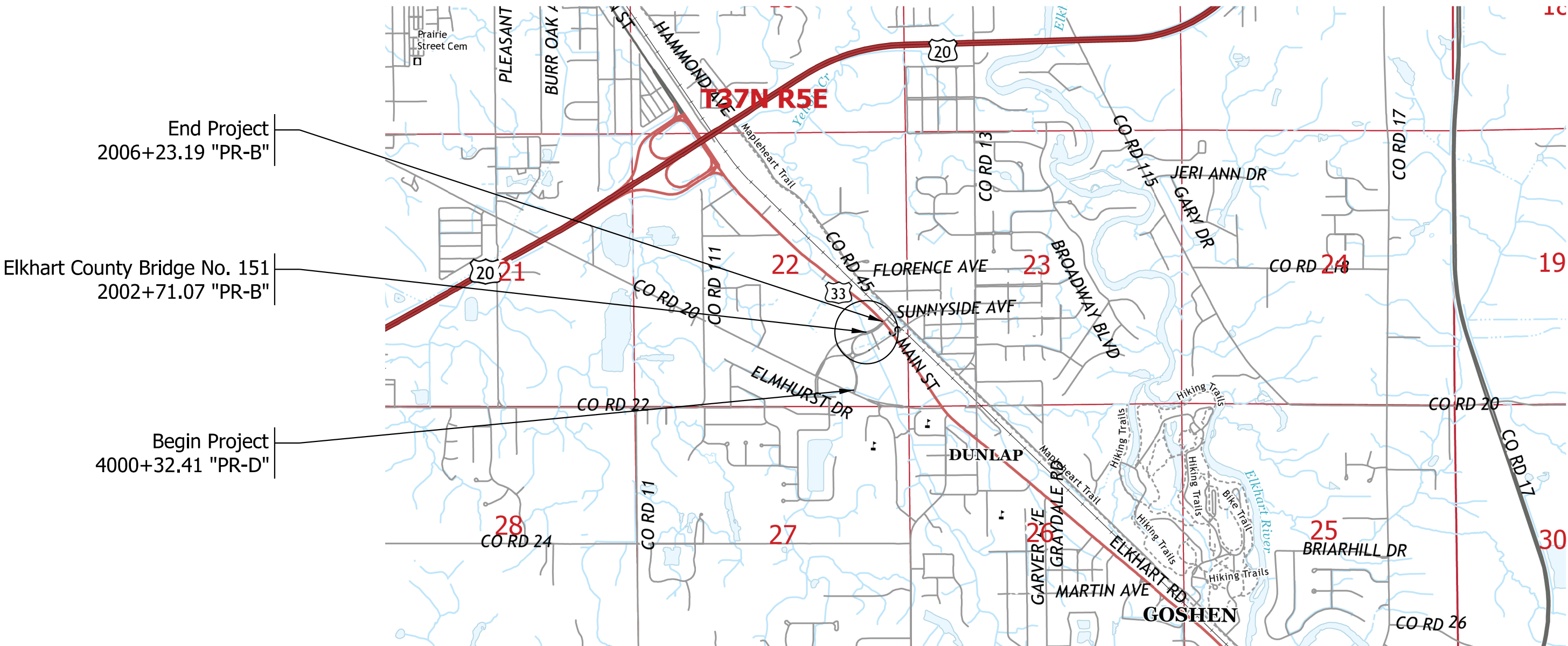
Jason Holder

Date

INDOT LPA ENGINEERING

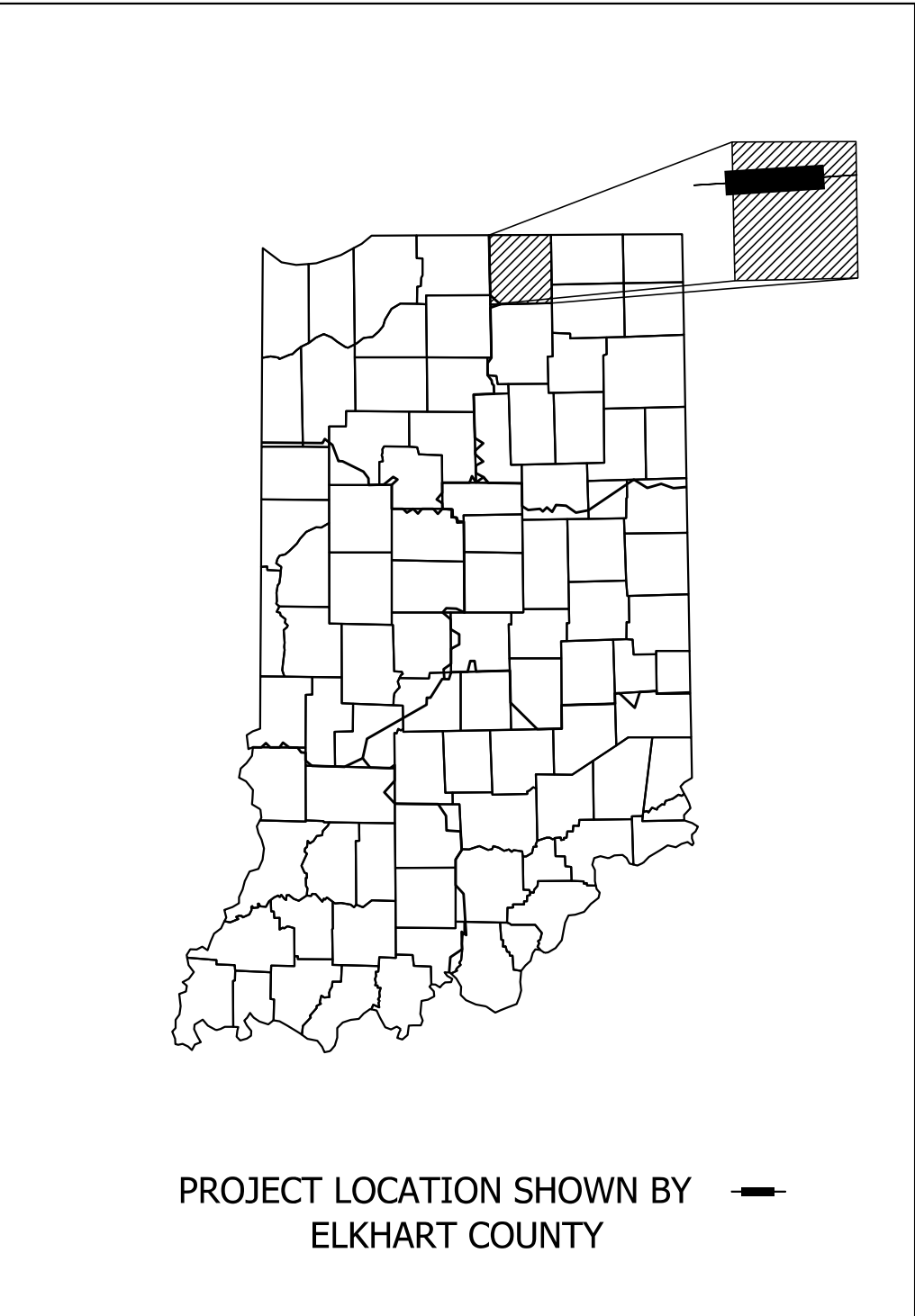
Jason Springer

Date



TRAFFIC DATA		
A.A.D.T.	(2023)	1700 V.P.D.
A.A.D.T.	(2043)	1900 V.P.D.
D.H.V	(2043)	800 V.P.H.
DIRECTIONAL DISTRIBUTION	51% (WB)	
TRUCKS	2% A.A.D.T.	
	1% D.H.V.	

DESIGN DATA	
DESIGN SPEED	30 M.P.H.
PROJECT DESIGN CRITERIA	4R (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	LOCAL AGENCY COLLECTOR
RURAL/URBAN	URBAN
TERRAIN	LEVEL
ACCESS CONTROL	NONE



LATITUDE: 41° 38' 30" LONGITUDE: 85° 55' 45"

BRIDGE LENGTH:	0.015	MI.
ROADWAY LENGTH:	0.159	MI.
TOTAL LENGTH:	0.174	MI.
MAX. GRADE:	0.50	%

HUC No. 040500012100

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

PARSONS
101 W. Ohio St., Suite 2121
Indianapolis, IN 46204
Bus (317) 616-1000
Fax (317) 616-1033

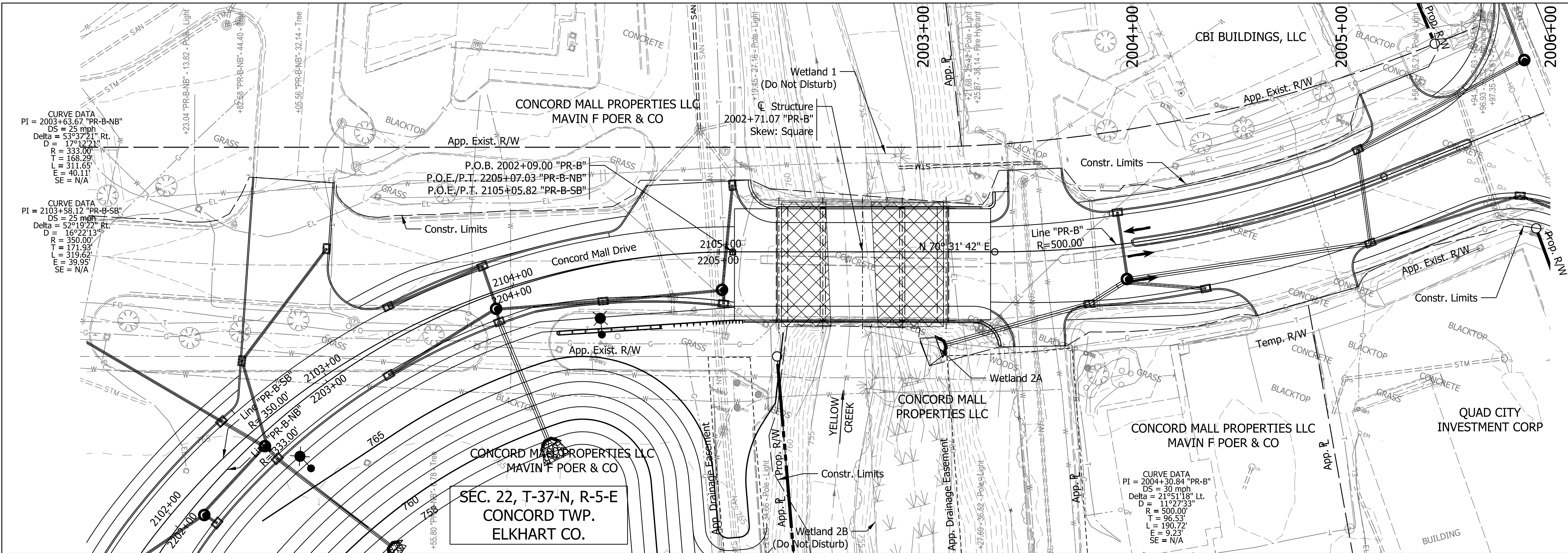
pw:/V\ANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Bridge/Sheets/2001723_C_BR_SHT_TITLE.dgn
27-JUL-2021

PLANS
PREPARED BY: PARSONS 317-616-1000
PHONE NUMBER

CERTIFIED BY: DATE

APPROVED
FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE	
Elkhart County Bridge No. 151	
DESIGNATION	
2001723	
SURVEY BOOK	SHEETS
ELECTRONIC	1 of 13
CONTRACT	PROJECT
B-41846	1801913



HYDRAULIC DATA

Waterway Opening Provided	= 408 Sq. Ft.
Waterway Opening Existing	= 407 Sq. Ft.
Drainage Area	= 32.2 Sq. Mi.
Design Discharge (Q100)	= 1950 Cfs.
Velocity (Q100)	= 5.00 Ft./Sec.
Q100 Elev.	= 761.62 Ft.
Q100 Headwater (proposed)	= 761.80 Ft.
Backwater (Q100)	= 0.12 Ft.
Existing Backwater	= 0.07 Ft.
Low Structure Elev.	= 764.70 Ft.
Existing Low Structure Elev.	= 764.70 Ft.

HYDRAULIC SCOUR DATA

Q100 Discharge	= 1950 Cfs.
Q100 Low scour Elev.	= 749.94 Ft.
Max. Velocity (Q100)	= 6.21 Ft./Sec.
Scour Depth (Contraction)	= 0.21 Ft.
Scour Depth (Total)	= 4.26 Ft.
Q500 Discharge	= 2340 Cfs.
Q500 Low Scour Elev.	= 749.70 Ft.
Max. Velocity (Q500)	= 6.59 Ft./Sec.
Scour Depth (Contraction)	= 0.30 Ft.
Scour Depth (Total)	= 4.50 Ft.

Scour Elevations based on Flowline El. 754.20

EXISTING STRUCTURE

The existing structure (Elkhart No. 151) is an adjacent box beam bridge built in 1971 with 2 spans: 40'-0" and 40'-0" with a 52'-0" clear roadway reinforced concrete deck. Existing structure to be removed.

EARTHWORK TABULATION

Fill + 20%	= TBD Cys
Common Excavation	= TBD Cys
Usable Waterway Excavation (70%)	= TBD Cys
Surplus Foundation Excavation (70%)	= TBD Cys
Borrow	= TBD Cys

Total Waterway Excavation	= TBD Cys
Excavation Unclassified	= TBD Cys
Benching (Estimated)	= TBD Cys

No direct payment for Benching. Benching will not be paid for as Common Excavation.

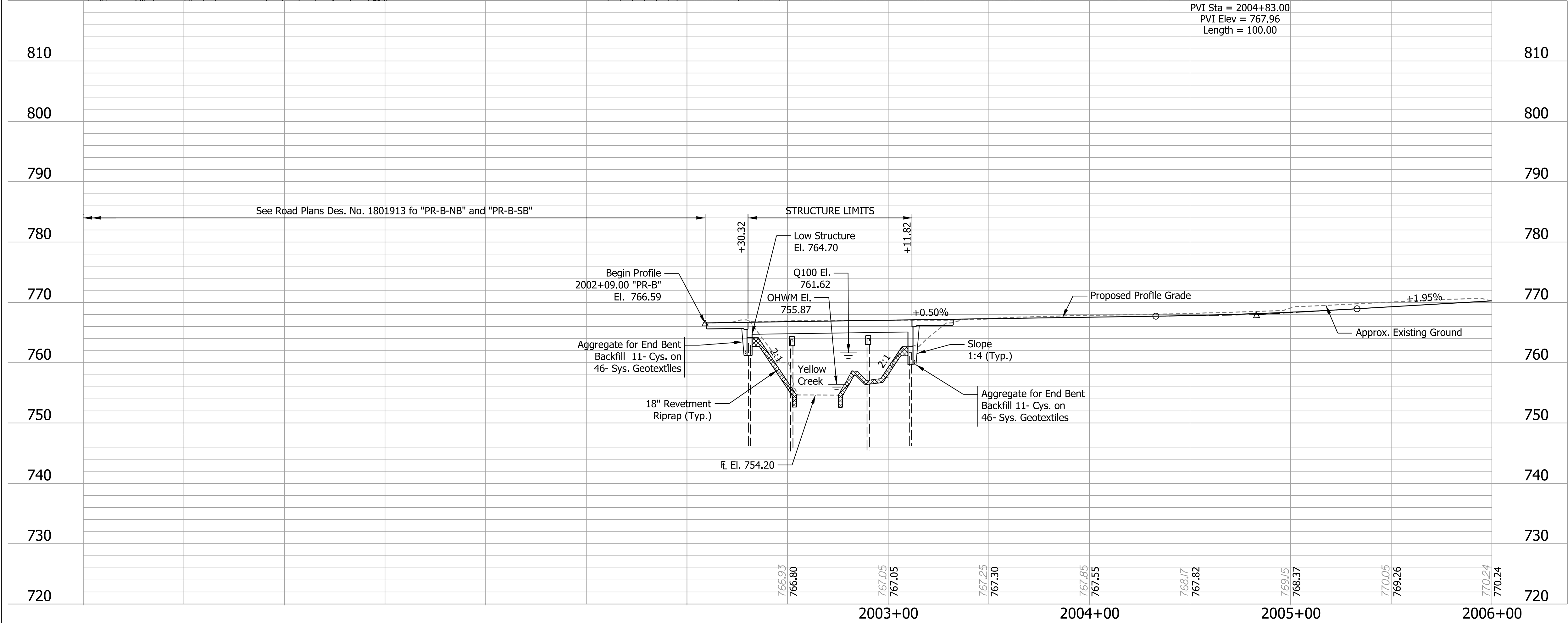
NOTES:

For R/W, Reference points, and Additional information see Roadway Plan & Profile sheets.

For Utility Contacts see Index Sheet No.2.

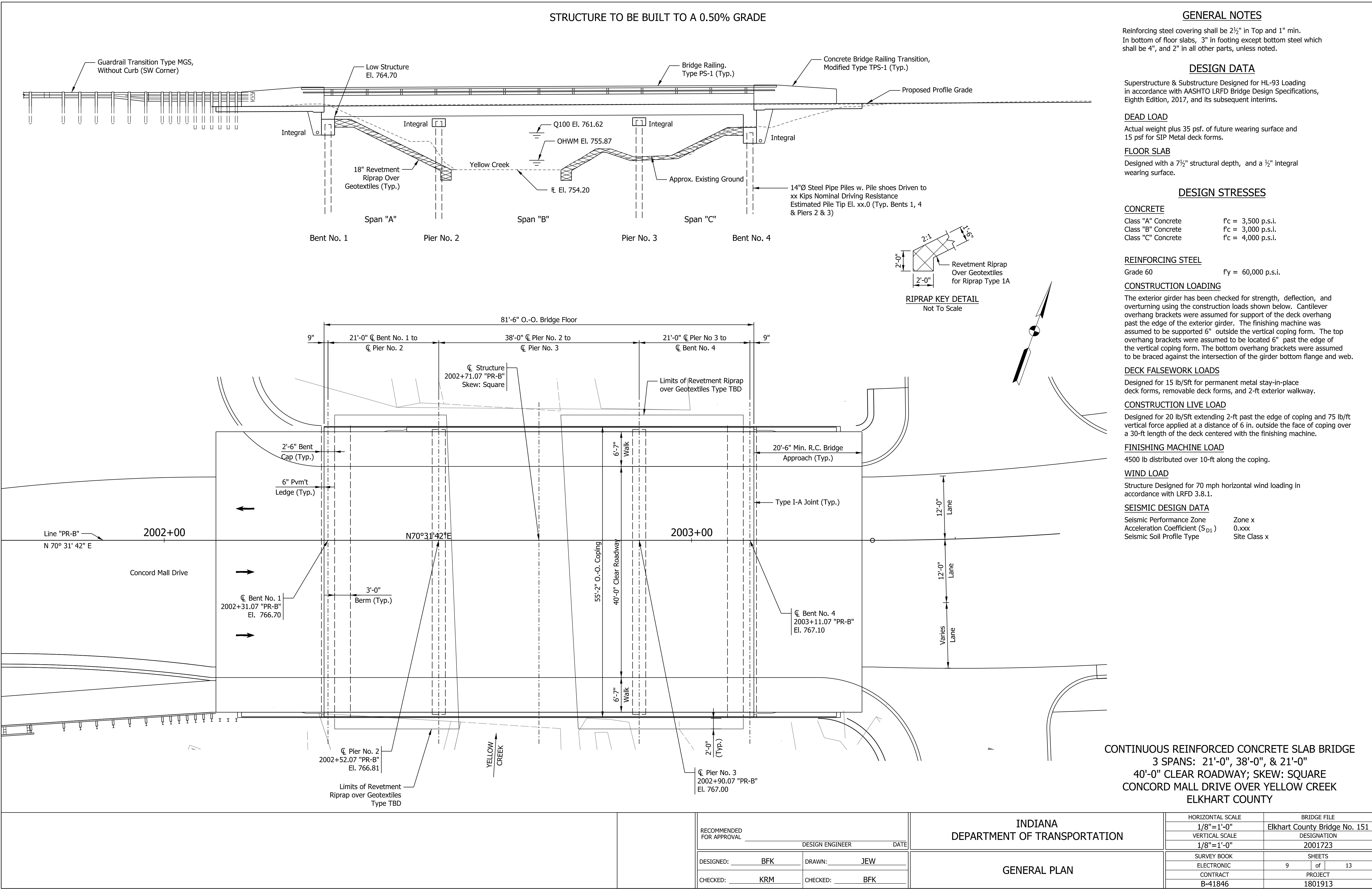
Cross-Hatched areas indicate limits of revetment riprap over geotextile for riprap type 1A.
(TBD Tons revetment riprap over TBD Sys. geotextile for riprap type 1A)

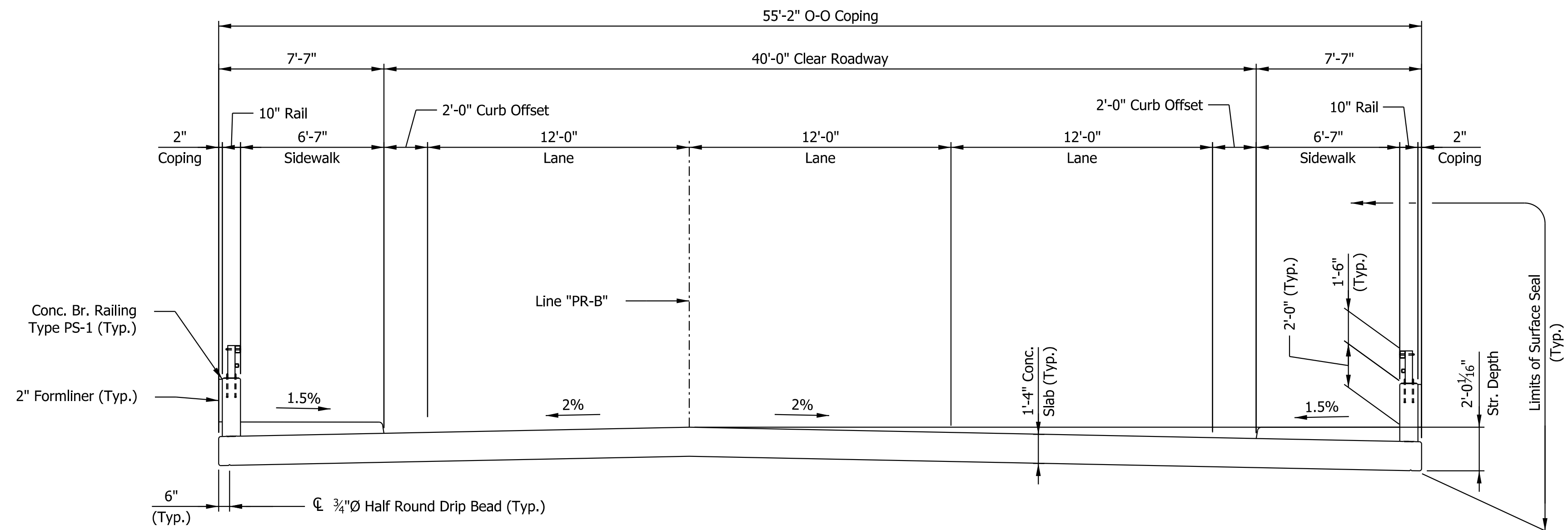
CONTINUOUS REINFORCED CONCRETE SLAB BRIDGE
3 SPANS: 21'-0", 38'-0", & 21'-0"
40'-0" CLEAR ROADWAY; SKEW: SQUARE
CONCORD MALL DRIVE OVER YELLOW CREEK
ELKHART COUNTY



			RECOMMENDED FOR APPROVAL _____		DESIGN ENGINEER _____		DATE _____		INDIANA DEPARTMENT OF TRANSPORTATION			HORIZONTAL SCALE		BRIDGE FILE		
			DESIGNED: _____ BFK _____		DRAWN: _____ ALF _____		1" = 30'					Elkhart County Bridge No. 151				
			CHECKED: _____ KRM _____		CHECKED: _____ BFK _____		VERTICAL SCALE		DESIGNATION							
							1" = 10'		2001723							
								LAYOUT			SURVEY BOOK			SHEETS		
											ELECTRONIC			8 of 13		
											CONTRACT			PROJECT		
											B-41846			1801913		

pw://VANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Bridge/Sheets/2001723 C_BR_SHT_LAYOUT.dgn
27-JUL-2021





PROPOSED TYPICAL SECTION

CONTINUOUS REINFORCED CONCRETE SLAB BRIDGE
3 SPANS: 21'-0", 38'-0", & 21'-0"
40'-0" CLEAR ROADWAY; SKEW: SQUARE
CONCORD MALL DRIVE OVER YELLOW CREEK
ELKHART COUNTY

		RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE		BRIDGE FILE			
						1/4"=1'-0"		Elkhart County Bridge No. 151			
						VERTICAL SCALE		DESIGNATION			
						1/4"=1'-0"		2001723			
		DESIGNED: _____ BFK		DRAWN: _____ JEJ		GENERAL PLAN		SURVEY BOOK		SHEETS	
								ELECTRONIC		10 of 13	
		CHECKED: _____ KRM		CHECKED: _____ BFK				CONTRACT		PROJECT	
								B-41846		1801913	

pwr://VANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Bridge/Sheets/2001723 C_BR_SHT_GENERAL PLAN_02.dgn
27-JUL-2021

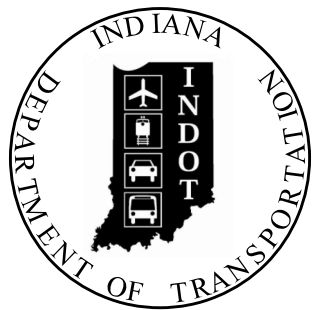
PROJECT	DESIGNATION
1801913	2001724
CONTRACT	BRIDGE FILE
B-41846	Elkhart County Bridge No. 150

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
ELKHART COUNTY BRIDGE NO. 150	PRESTRESSED CONCRETE BULB-TEE BEAM BRIDGE	1 Span: 126'-0" Skew: 10°00'00" RT.	YELLOW CREEK	1000+95.37 "PR-A"

KIN PROJECT INFORMATION		
DESIGNATION	PROJECT DESCRIPTION	TYPE
* 1801913	Sunnyside Avenue/ Mall Drive at US 33 (Main Street) over Norfolk Southern Railroad	Road/Traffic
1900836	County Bridge No. 148 - Sunnyside Avenue/ Mall Drive at US 33 over Norfolk Southern Railroad	Bridge
2001723	County Bridge No. 151 - Concord Mall Drive over Yellow Creek	Bridge

* Indicates Lead Des. No.

INDIANA DEPARTMENT OF TRANSPORTATION



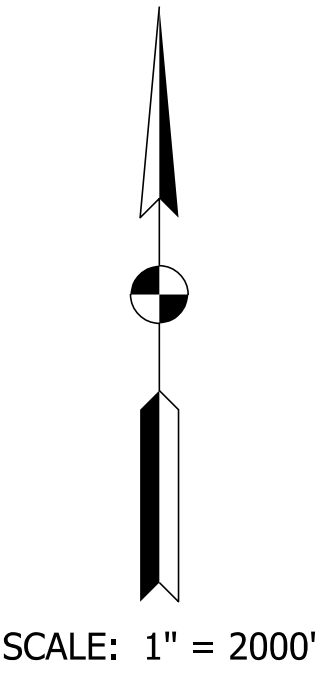
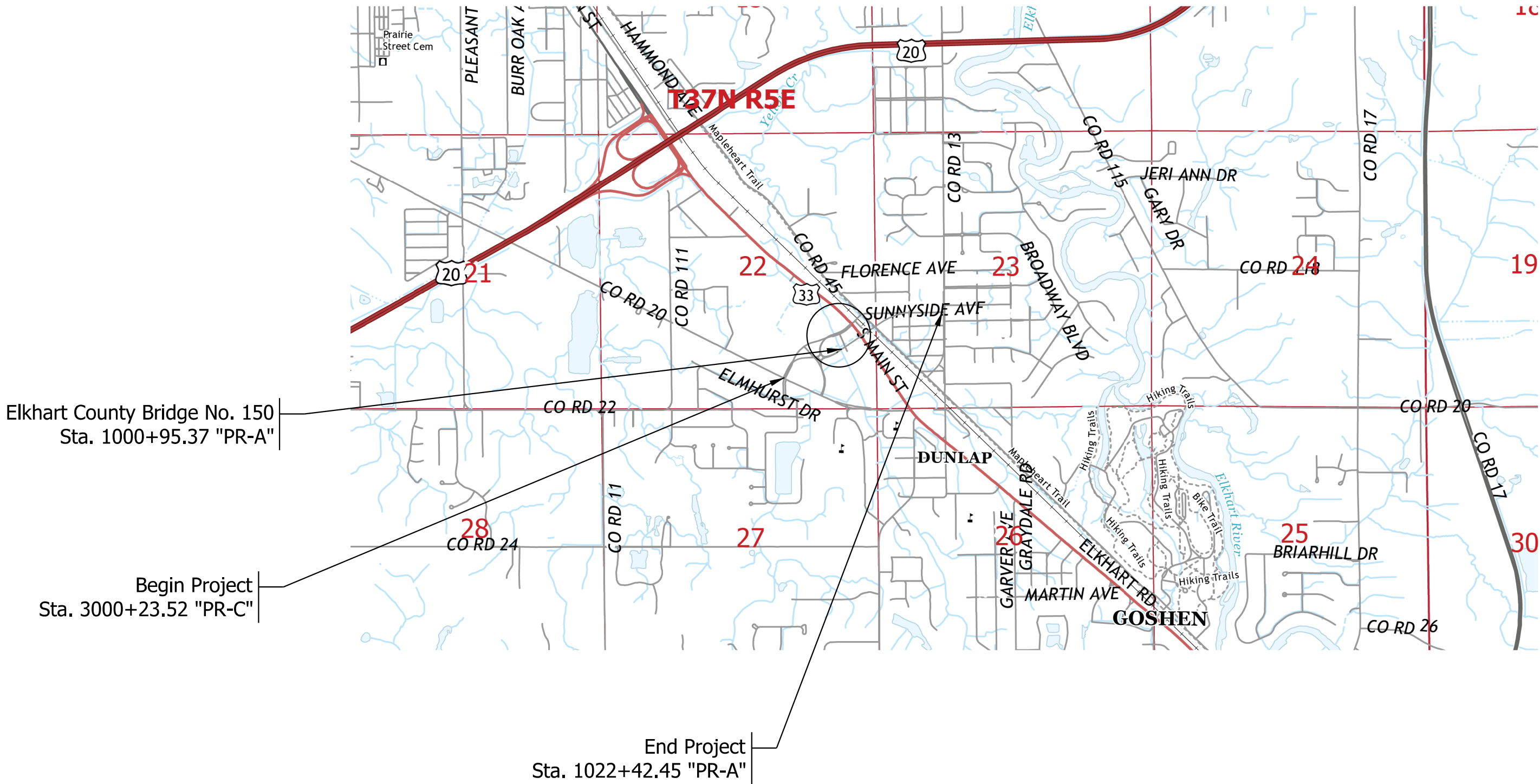
BRIDGE PLANS FOR SPANS OVER 20 FEET

County Bridge 150
Excerpts

PROJECT NO. 1801913 P.E.
1801913 R/W
2001724 CONST.

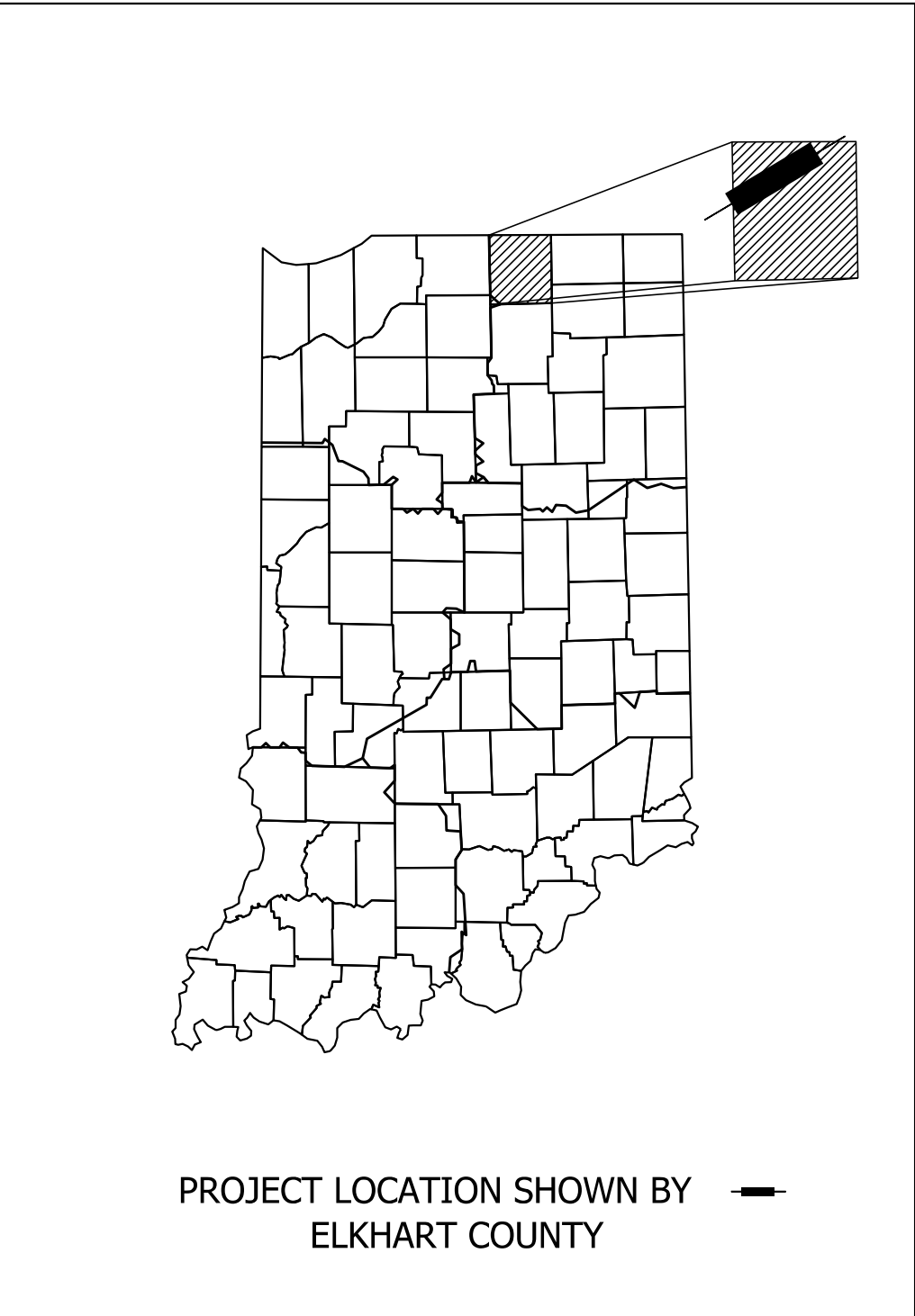
New Construction on Sunnyside Avenue over Yellow Creek
Located 0.25 Miles Northeast of CR 20.
Section 22, T-37-N, R-5-E, Concord Township, Elkhart County, Indiana

ELKHART COUNTY COMMISSIONERS	
Frank Luchese	Date
Mike Yoder	Date
Suzanne Welrick	Date
ELKHART COUNTY AUDITOR	
Patricia A. Pickens	Date
ELKHART COUNTY HIGHWAY DIRECTOR	
Charlie McKenzie	Date
INDOT LPA PROGRAMS	
Jason Holder	Date
INDOT LPA ENGINEERING	
Jason Springer	Date



TRAFFIC DATA		
A.A.D.T.	(2023)	9000 V.P.D.
A.A.D.T.	(2043)	9900 V.P.D.
D.H.V	(2043)	1190 V.P.H.
DIRECTIONAL DISTRIBUTION		52% (SB)
TRUCKS		3% A.A.D.T. 1% D.H.V.

DESIGN DATA	
DESIGN SPEED	35 M.P.H.
PROJECT DESIGN CRITERIA	4R (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	LOCAL AGENCY COLLECTOR
RURAL/URBAN	URBAN (SUBURBAN)
TERRAIN	LEVEL
ACCESS CONTROL	NONE



LATITUDE: 41° 38' 27" N LONGITUDE: 85° 55' 44" E

BRIDGE LENGTH Elkhart County No. 150: 0.024 MI.
ROADWAY LENGTH: 0.566 MI.
TOTAL LENGTH: 0.667* MI.
MAX. GRADE: 4.90 %

HUC No. : 040500012100

NOTE:
* Total Length includes the bridge length of County Bridge No. 148.

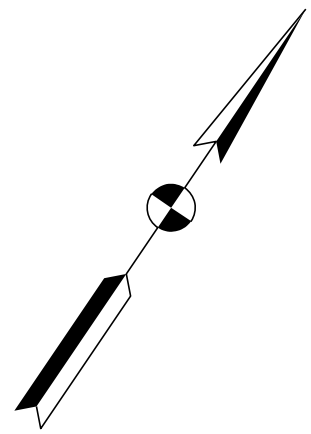
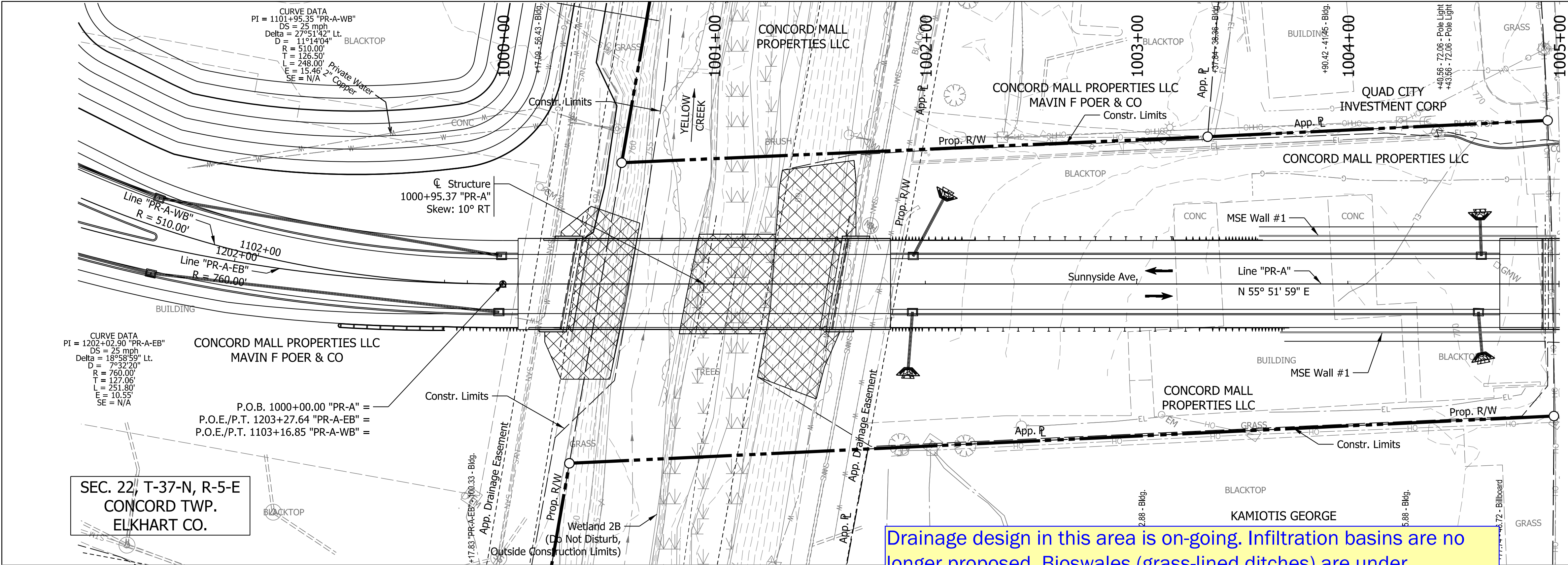
INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2020
TO BE USED WITH THESE PLANS.

PARSONS
101 W. Ohio St., Suite 2121
Indianapolis, IN 46204
Bus (317) 616-1000
Fax (317) 616-1033

pw:/V\ANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Bridge/Sheets/2001724 A_BR_SHT_TITLE.dgn
27-JUL-2021

PLANS PREPARED BY:	PARSONS	317-616-1000 PHONE NUMBER
CERTIFIED BY:		DATE
APPROVED FOR LETTING:	INDIANA DEPARTMENT OF TRANSPORTATION	DATE

BRIDGE FILE	
Elkhart County Bridge No. 150	
DESIGNATION	
2001724	
SURVEY BOOK	SHEETS
ELECTRONIC	1 of 13
CONTRACT	PROJECT
B-41846	1801913



HYDRAULIC DATA

Waterway Opening Provided	= 423 Sq. Ft.
Waterway Opening Required	= 423 Sq. Ft.
Drainage Area	= 32.2 Sq. Mi.
Design Discharge (Q100)	= 1870 Cfs.
Velocity (Q100)	= 4.35 Ft./Sec.
Q100 Elev.	= 761.91 Ft.
Q100 Headwater Elev.	= 762.16 Ft.
Backwater (Q100)	= 0.14 Ft.
Waterway Opening Existing	= N/A
Existing Backwater	= N/A
Low Structure Elev.	= 769.16 Ft.
Existing Low Structure Elev.	= N/A

HYDRAULIC SCOUR DATA

Q100 Discharge	= 1870 Cfs.
Q100 Low Scour Elev.	= 753.14 Ft.
Max. Velocity (Q100)	= 6.10 Ft./Sec.
Scour Depth (Contraction)	= 0.86 Ft.
Scour Depth (Total)	= 0.86 Ft.

Q500 Discharge	= 2244 Cfs.
Q500 Low Scour Elev.	= 753.10 Ft.
Max. Velocity (Q500)	= 6.46 Ft./Sec.
Scour Depth (Contraction)	= 0.90 Ft.
Scour Depth (Total)	= 0.90 Ft.

Scour Elevations based on Flowline El. 754.0

EXISTING STRUCTURE

No Existing Structure.

EARTHWORK TABULATION

Fill + 20%	= TBD Cys
Common Excavation	= TBD Cys
Usable Waterway Excavation (70%)	= TBD Cys
Surplus Foundation Excavation (70%)	= TBD Cys
Borrow	= TBD Cys

Total Waterway Excavation	= TBD Cys
Excavation Unclassified	= TBD Cys
Benching (Estimated)	= TBD Cys

No direct payment for Benching. Benching will not be paid for as Common Excavation.

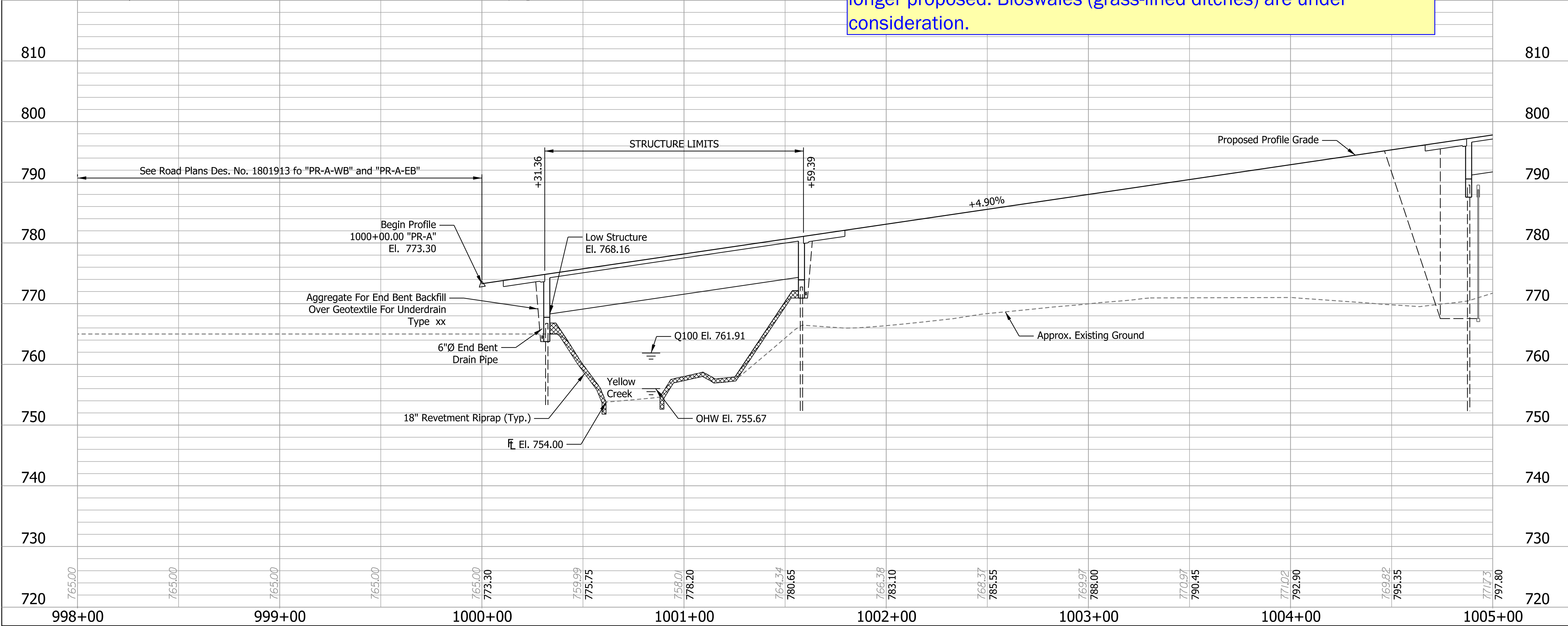
NOTES:

For R/W, Reference Points and Additional information see Roadway Plan & Profile sheets.

For Utility Contacts see Index Sheet No.2.

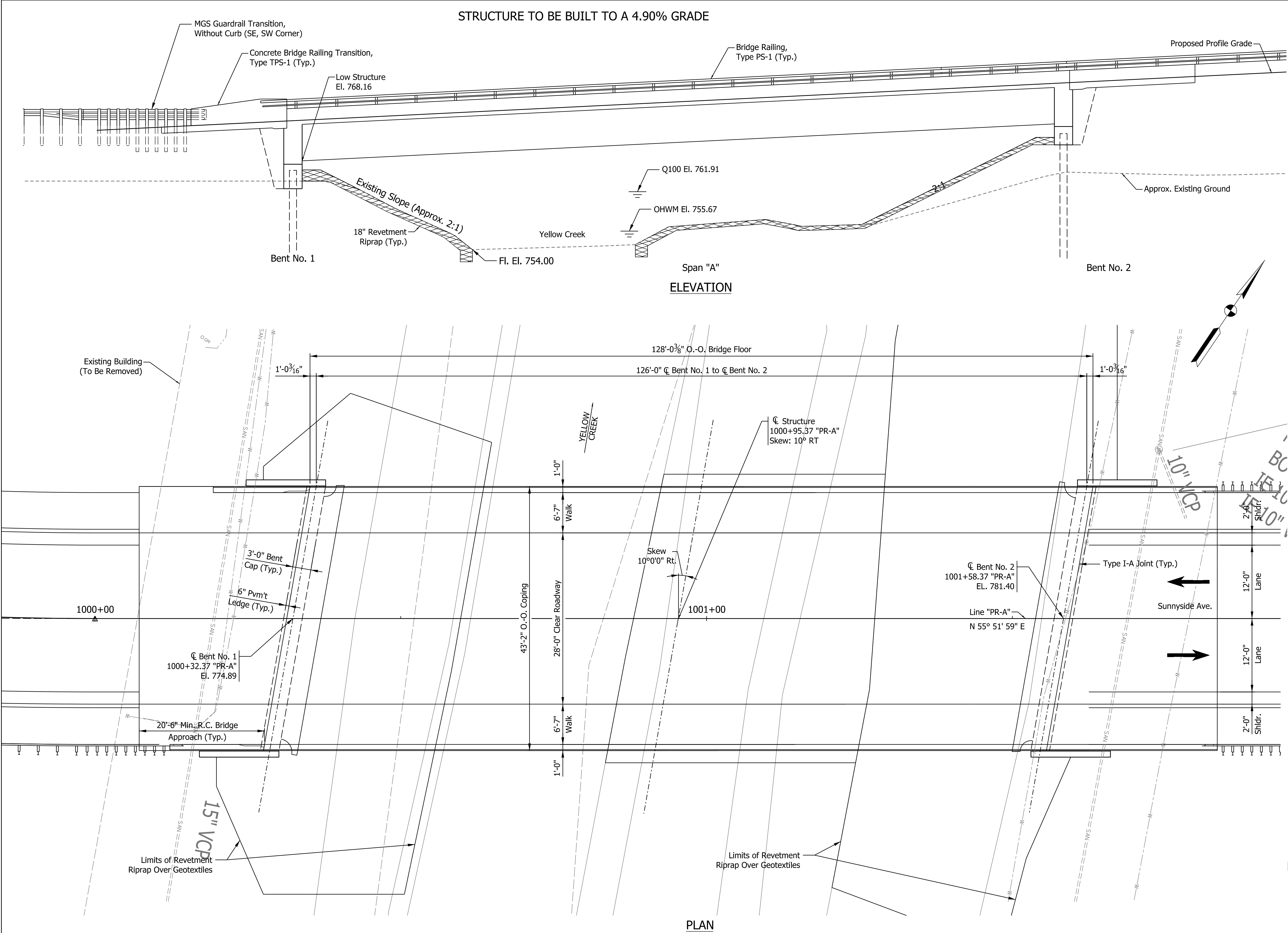
Cross-Hatched areas indicate limits of revetment riprap over geotextile for riprap type 1A.
(TBD Tons revetment riprap over TBD Sys. geotextile for riprap type 1A)

PRESTRESSED CONCRETE BULB-TEE BEAM BRIDGE
SPAN: 126'-0"
28'-0" CLEAR ROADWAY; SKEW: 10° 00' 00" RT.
SUNNYSIDE AVE. OVER YELLOW CREEK
ELKHART COUNTY



RECOMMENDED FOR APPROVAL		DESIGN ENGINEER		DATE		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE	BRIDGE FILE
DESIGNED: BFK		DRAWN: ALF						1" = 30'	Elkhart County Bridge No. 150
CHECKED: KRM		CHECKED: BFK						VERTICAL SCALE	DESIGNATION
								1" = 10'	2001724
								SURVEY BOOK	SHEETS
								ELECTRONIC	8 of 13
								CONTRACT	PROJECT
								B-41846	1801913

pwc://VANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Bridge/Sheets/2001724 A_BR_SHT_LAYOUT.dgn
27-JUL-2021



GENERAL NOTES

Reinforcing steel covering shall be 2½" in Top and 1" min. In bottom of floor slabs, 3" in footing except bottom steel which shall be 4", and 2" in all other parts, unless noted.

DESIGN DATA

Superstructure & Substructure Designed for HL-93 Loading in accordance with AASHTO LRFD Bridge Design Specifications, Eighth Edition, 2017, and its subsequent interims.

DEAD LOAD

Actual weight plus 35 psf. of future wearing surface and 15 psf for SIP Metal deck forms.

FLOOR SLAB

Designed with a 7½" structural depth, and a ½" integral wearing surface.

DESIGN STRESSES

CONCRETE

Prestressed Concrete f'c = 8,000 p.s.i.
Class "A" Concrete f'c = 3,500 p.s.i.
Class "B" Concrete f'c = 3,000 p.s.i.
Class "C" Concrete f'c = 4,000 p.s.i.

REINFORCING STEEL

Grade 60 fy = 60,000 p.s.i.

CONSTRUCTION LOADING

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

DECK FALSEWORK LOADS

Designed for 15 lb/Sft for permanent metal stay-in-place deck forms, removable deck forms, and 2-ft exterior walkway.

CONSTRUCTION LIVE LOAD

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

FINISHING MACHINE LOAD

4500 lb distributed over 10-ft along the coping.

WIND LOAD

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

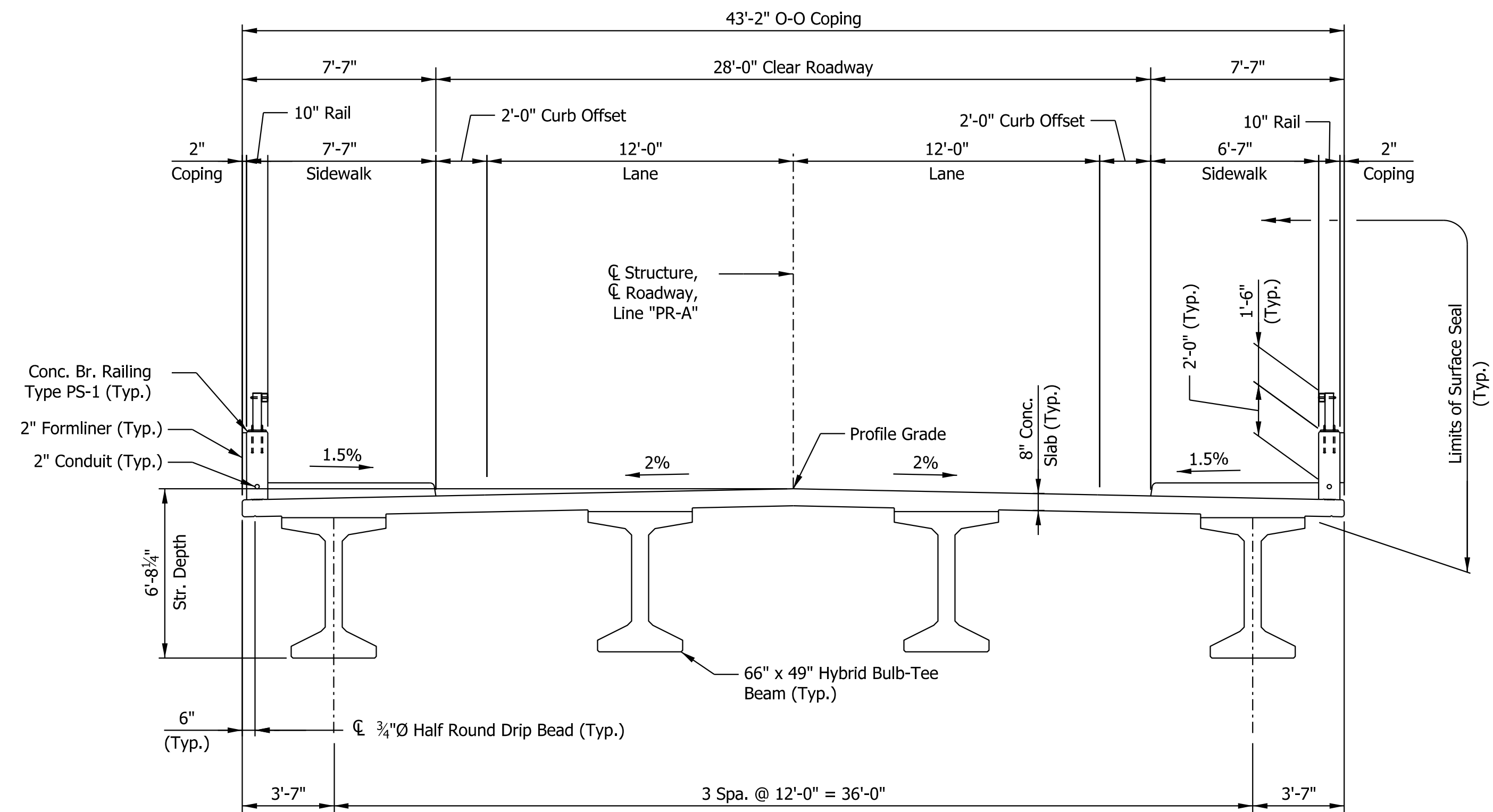
SEISMIC DESIGN DATA

Seismic Performance Zone Zone x
Acceleration Coefficient (SD1) 0.xxx
Seismic Soil Profile Type Site Class x

PRESTRESSED CONCRETE BULB-TEE BEAM BRIDGE
SPAN: 126'-0"
28'-0" CLEAR ROADWAY; SKEW: 10° 00' 00" RT.
SUNNYSIDE AVE. OVER YELLOW CREEK
ELKHART COUNTY

																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									</
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	----

pwr://VANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Bridge/Sheets/2001724 A_BR_SHT_GENERAL PLAN.01.dgn
27-JUL-2021



PROPOSED TYPICAL SECTION

PRESTRESSED CONCRETE BULB-TEE BEAM BRIDGE
 SPAN: 126'-0"
 28'-0" CLEAR ROADWAY; SKEW: 10° 00' 00" RT.
 SUNNYSIDE AVE. OVER YELLOW CREEK
 ELKHART COUNTY

		RECOMMENDED FOR APPROVAL _____		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE		BRIDGE FILE	
		DESIGN ENGINEER _____			1/4"=1'-0"		Elkhart County Bridge No. 150	
		DATE _____			VERTICAL SCALE		DESIGNATION	
					1/4"=1'-0"		2001724	
		DESIGNED: _____ BFK	DRAWN: _____ JEJ	GENERAL PLAN	SURVEY BOOK		SHEETS	
					ELECTRONIC		10 of 13	
		CHECKED: _____ KRM	CHECKED: _____ BFK		CONTRACT		PROJECT	
					B-41846		1801913	

pwr://VANVA01PWINT01.parsons.com:Indiana State/Documents/Multiple District/Local Trax/Elkhart Co/CADD/Bridge/Sheets/2001724 A_BR_SHT_GENERAL PLAN_02.dgn
 27-JUL-2021