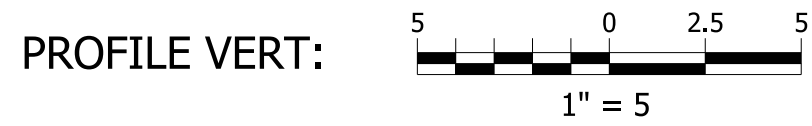
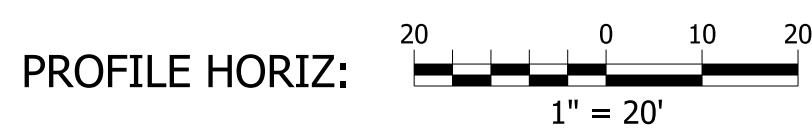
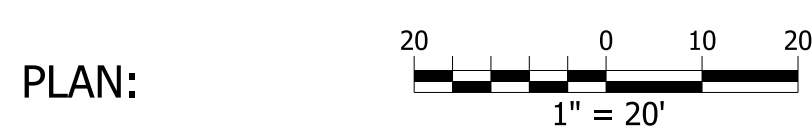


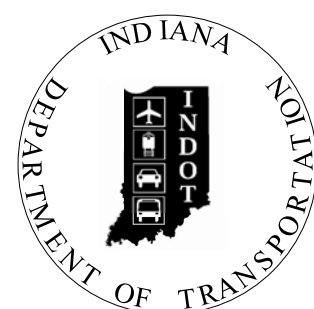
PROJECT	DESIGNATION
1700022	1700022
CONTRACT	
R-42251	

SCALES:



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

# INDIANA DEPARTMENT OF TRANSPORTATION



## ROAD PLANS

LOCATION: U.S. 231 - CLINE AVE INTERSECTION IMPROVEMENT

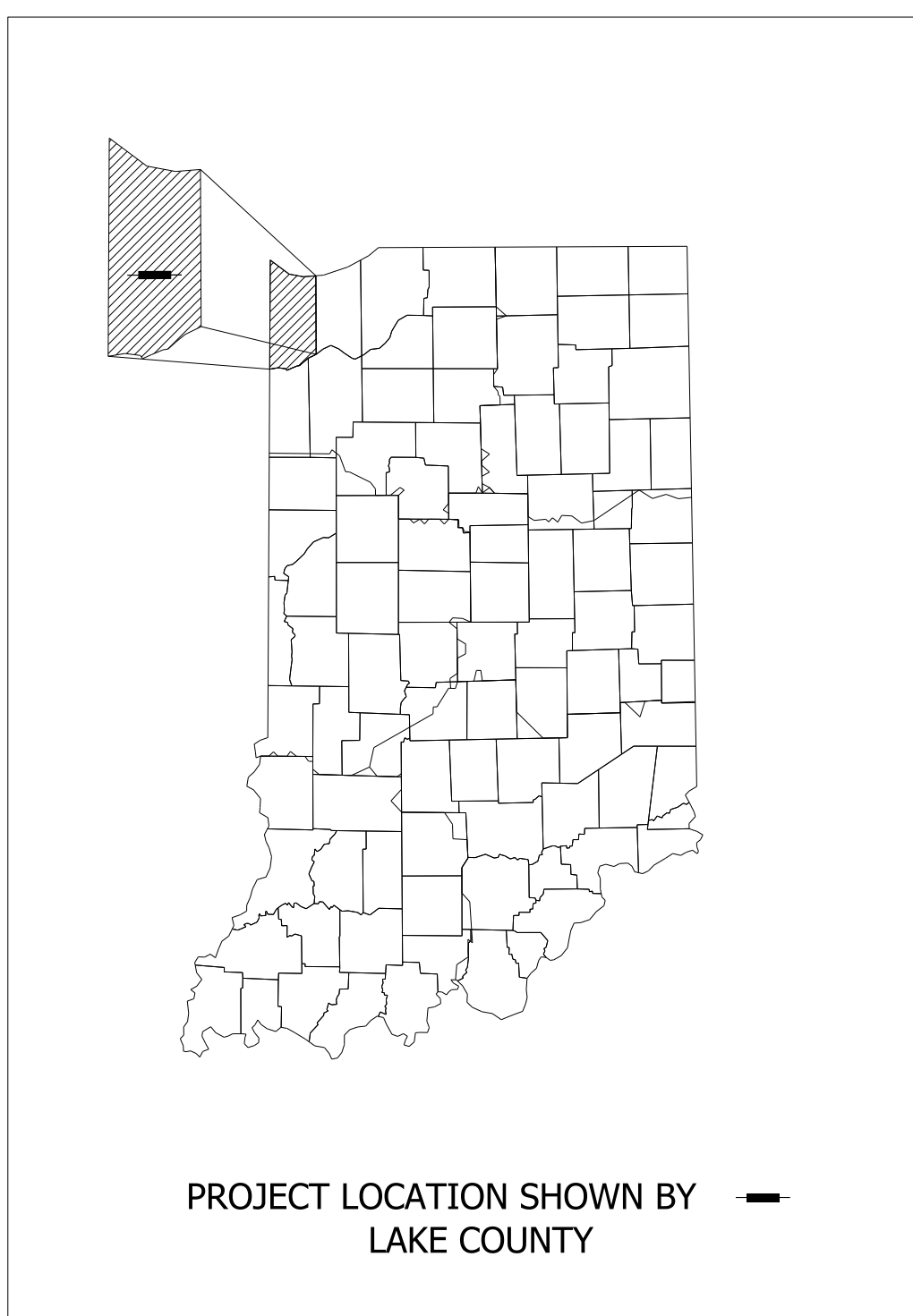
PROJECT NO. 1700022  
1700022  
1700022

P.E.  
R/W  
CONST.

TRAFFIC DATA - US 231		
A.A.D.T. (2022)		16,110 V.P.D.
A.A.D.T. (2042)		17,670 V.P.D.
D.H.V. (2042)		1,626 V.P.H.
DIRECTIONAL DISTRIBUTION		52 % EB
TRUCKS		3.6% A.A.D.T. 3.4% D.H.V.
DESIGN DATA		
DESIGN SPEED		50 M.P.H.
PROJECT DESIGN CRITERIA		RECONSTRUCTION (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION		PRINCIPAL ARTERIAL
RURAL/URBAN		URBAN (SUBURBAN)
TERRAIN		LEVEL
ACCESS CONTROL		NONE

TRAFFIC DATA - CLINE AVE. N		
A.A.D.T. (2022)		6,380 V.P.D.
A.A.D.T. (2042)		6,990 V.P.D.
D.H.V. (2042)		713 V.P.H.
DIRECTIONAL DISTRIBUTION		52 % NB
TRUCKS		2.6% A.A.D.T. 2.6% D.H.V.
DESIGN DATA		
DESIGN SPEED		40 M.P.H.
PROJECT DESIGN CRITERIA		RECONSTRUCTION (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION		MINOR ARTERIAL
RURAL/URBAN		URBAN (4R)
TERRAIN		LEVEL
ACCESS CONTROL		NONE

TRAFFIC DATA - CLINE AVE. S		
A.A.D.T. (2022)		3,300 V.P.D.
A.A.D.T. (2042)		3,620 V.P.D.
D.H.V. (2042)		486 V.P.H.
DIRECTIONAL DISTRIBUTION		49 % NB
TRUCKS		3.3% A.A.D.T. 3.1% D.H.V.
DESIGN DATA		
DESIGN SPEED		30 M.P.H.
PROJECT DESIGN CRITERIA		RECONSTRUCTION (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION		MINOR ARTERIAL
RURAL/URBAN		RURAL
TERRAIN		LEVEL
ACCESS CONTROL		NONE



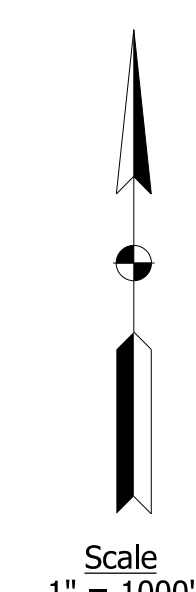
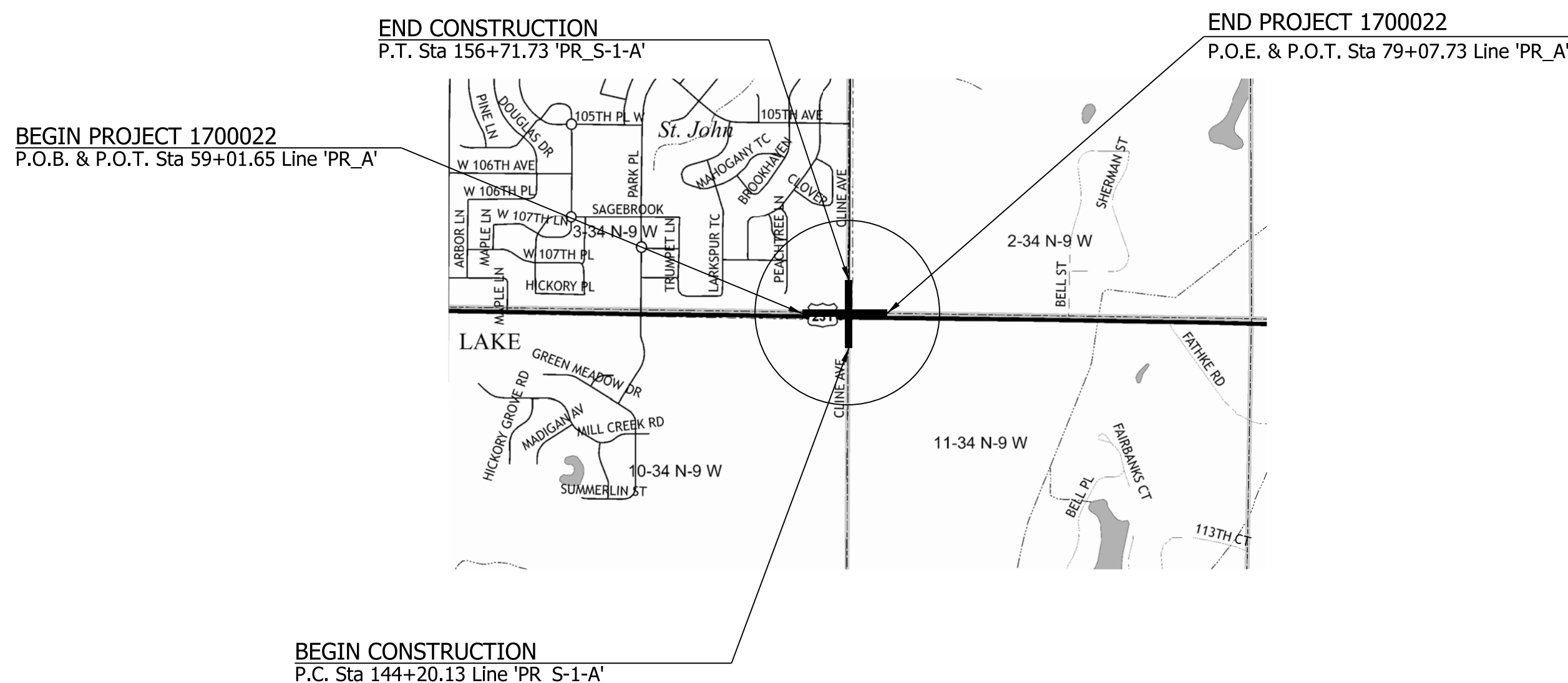
LATITUDE: 41° 25' 15" LONGITUDE: 87° 25' 52"

GROSS LENGTH:	0.38	MI.
NET LENGTH:	0.38	MI.
MAXIMUM GRADE:	2.0	%

HUC 14 # 04040001030030

STAGE 3 SUBMITTAL  
JULY 2022  
INDIANA DEPARTMENT OF TRANSPORTATION  
STANDARD SPECIFICATIONS DATED 2022  
TO BE USED WITH THESE PLANS

INTERSECTION IMPROVEMENT PROJECT ON U.S. 231 AT CLINE AVE  
LOCATED IN SECTIONS  
SEC 3, T-34-N, R-9-W    SEC 2, T-34-N, R-9-W  
SEC 10, T-34-N, R-9-W    SEC 11, T-34-N, R-9-W  
HANOVER TOWNSHIP    CENTER TOWNSHIP  
LAKE COUNTY, INDIANA, RP 295+30



LOCATION MAP  
HANOVER TOWNSHIP    CENTER TOWNSHIP  
SEC 3, T-34-N, R-9-W    SEC 2, T-34-N, R-9-W  
SEC 10, T-34-N, R-9-W    SEC 11, T-34-N, R-9-W  
LAKE COUNTY



PRELIMINARY  
NOT FOR CONSTRUCTION  
DATE: 11/18/2021

PLANS PREPARED BY: TROYER GROUP (574) 259-9976 PHONE NUMBER

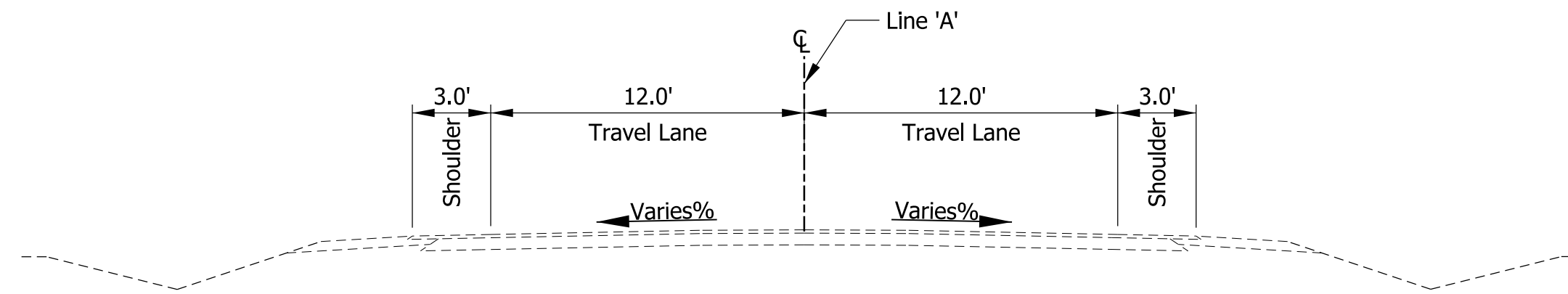
CERTIFIED BY: \_\_\_\_\_ DATE \_\_\_\_\_

APPROVED FOR LETTING: \_\_\_\_\_ DATE \_\_\_\_\_

INDIANA DEPARTMENT OF TRANSPORTATION

DESIGNATION	
1700022	
SURVEY BOOK	SHEETS
CONTRACT	1 of 46
R-42251	PROJECT
	1700022

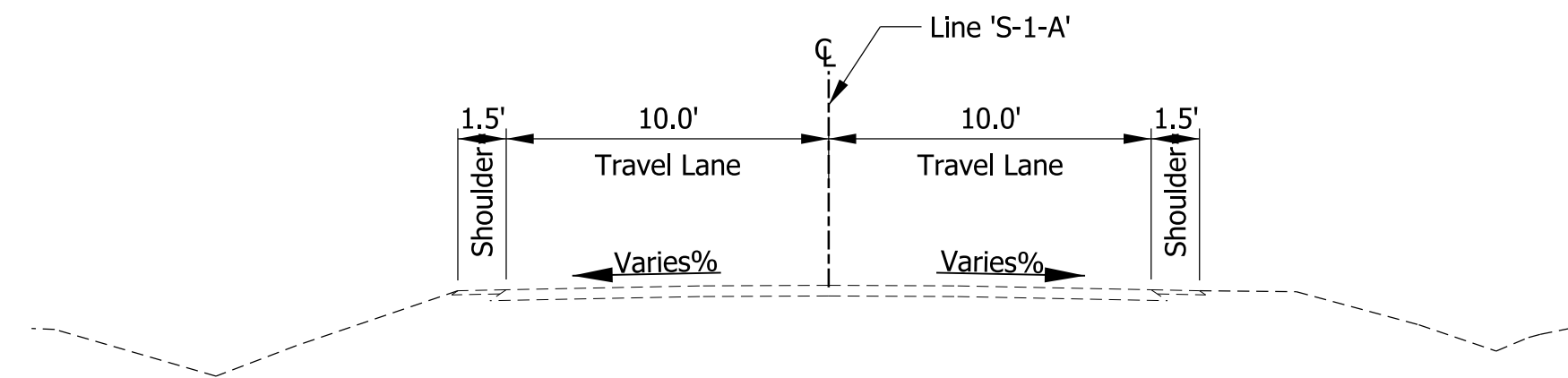




**US 231**  
 Scale: 3/16" = 1'-0"  
 Sta 255+91.61 to Sta 268+46.35 Line 'A'  
 Sta 272+37.45 to Sta 284+13.92 Line 'A'

**Note:**

- Per the Engineer's Report prepared by Lawson-Fisher Associates P.C dated January 30, 2018, the Roadway History indicated that US 231 had composite pavement, with a 20 ft wide concrete section below the asphalt.
- Per the Geotechnical Engineering Investigation performed by K&S Engineers, Inc. on September 8, 2020, the pavement cores taken along the travel lanes of US 231 both east and west of Cline contained an asphalt section ranging from 5.75 inches to 7.5 inches with no concrete present.



**Cline Ave.**  
 Scale: 3/16" = 1'-0"  
 Sta 44+19.66 to Sta 49+01.78 Line 'S-1-A'  
 Sta 50+77.96 to Sta 55+98.98 Line 'S-1-A'

G:\projects\INDOT\1818-00\_US 231-Cline Des\170022\Design\sheet\Tps.dgn 1/18/2021 10:36:35 AM pfr



**PRELIMINARY**  
 NOT FOR CONSTRUCTION  
 DATE: 1/18/2021

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: PFR _____	DRAWN: PFR _____	
CHECKED: CLW _____	CHECKED: LRD _____	

**INDIANA**  
 DEPARTMENT OF TRANSPORTATION

US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
 EXISTING TYPICAL SECTIONS

HORIZONTAL SCALE	FILE
AS NOTED	
VERTICAL SCALE	DESIGNATION
N/A	1700022
SURVEY BOOK	SHEETS
	3 of 46
CONTRACT	PROJECT
R-42251	1700022

LEGEND

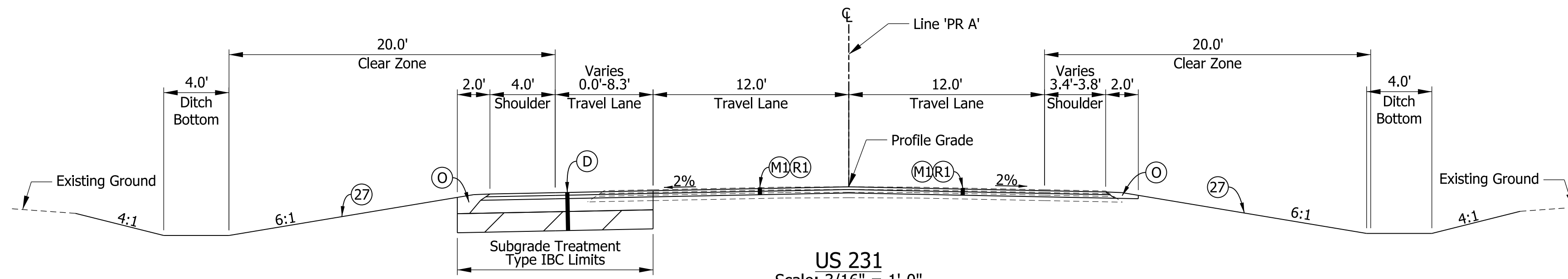
- (M) Milling, Profile
- (O) Variable Depth Compacted Aggregate, No. 53
- (R) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm, on, 275 lb/syd QC/QA HMA, 3, 76, Intermediate 19.0 mm
- (11) Curb and Gutter, Concrete
- (12) Curb and Gutter, B, Concrete
- (13) Curb and Gutter, B, Concrete, Modified (Inverted) (3")
- (14) Curb, Integral, Concrete
- (15) Curb and Gutter, B, Concrete, Modified (Inverted)
- (26) Sodding on 4" of Topsoil
- (27) Mulched Seeding R

HMA ALTERNATE

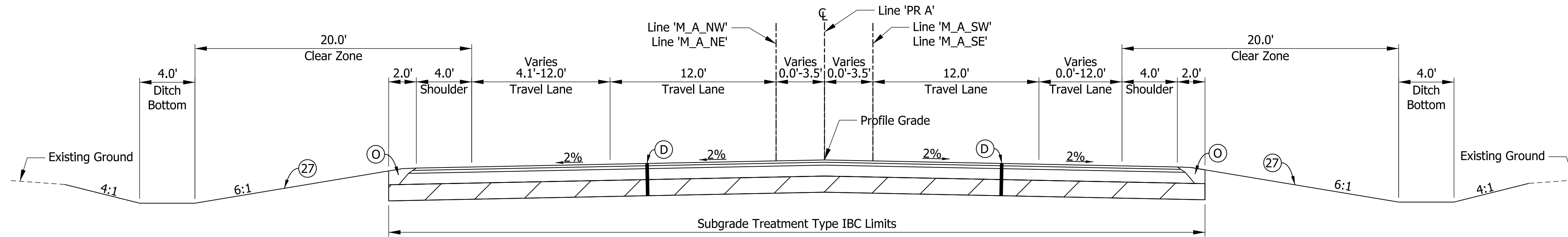
- (A) 8.0 in. PCCP (Colored)  
(17 ft maximum joint spacing, 1 in. diameter dowel bars), on 10 in. Compacted Aggregate No. 53 Subgrade Treatment, Type IBC
- (A1) 6 in. PCCP (Colored), on 12 in. Dense Graded Subbase, on Subgrade Treatment Type IBC
- (D) 220 lb/syd QC/QA HMA, 3, 76, Surface, 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate, 19.0 mm, on 1045 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm (3 lifts), on Subgrade Treatment, Type IBC

PCCP ALTERNATE

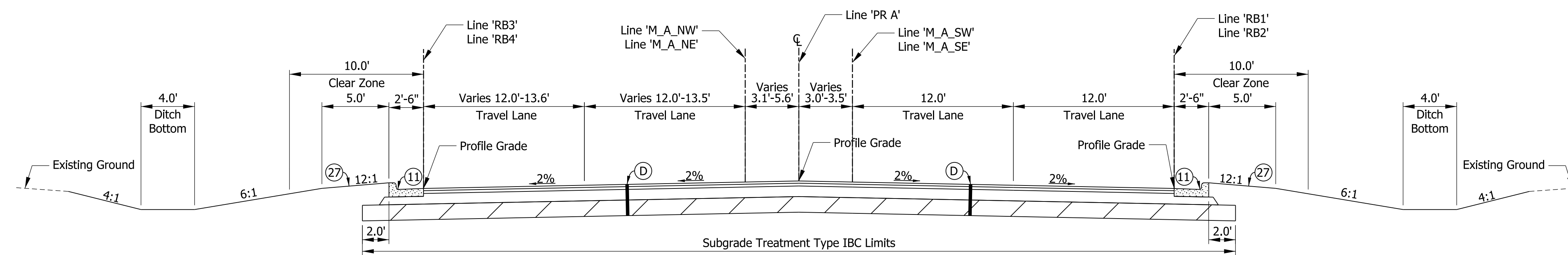
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- (D) QC/QA PCCP, 10 in.  
(17 ft joint spacing for roundabout and 16 ft joint spacing for approaches, 1.5 in. bars at 12 in. spacing), on 6 in. Dense Graded Subbase, on Subgrade Treatment, Type IBC



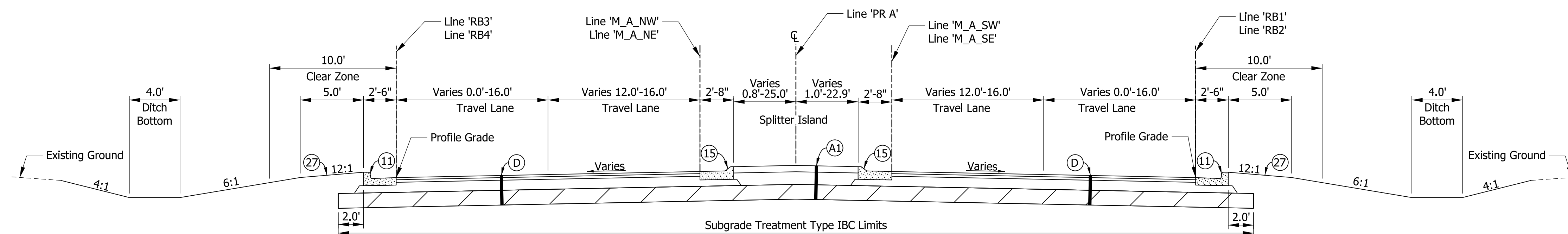
US 231  
Scale: 3/16" = 1'-0"  
Sta 59+01.65 to Sta 63+17.99 Line 'PR\_A'



US 231  
Scale: 3/16" = 1'-0"  
Sta 63+17.99 to Sta 74+10.66 Line 'PR\_A'



US 231  
Scale: 3/16" = 1'-0"  
Sta 65+00.00 to Sta 73+00.00 Line 'PR\_A'



US 231  
Scale: 3/16" = 1'-0"  
Sta 65+96.00 to Sta 72+04.00 Line 'PR\_A'

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**PRELIMINARY**  
NOT FOR CONSTRUCTION  
DATE: 11/18/2021

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

INDIANA  
DEPARTMENT OF TRANSPORTATION

US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
PROPOSED TYPICAL SECTIONS

HORIZONTAL SCALE	FILE
AS NOTED	
VERTICAL SCALE	DESIGNATION
N/A	1700022
SURVEY BOOK	SHEETS
	4 of 46
CONTRACT	PROJECT
R-42251	1700022

LEGEND

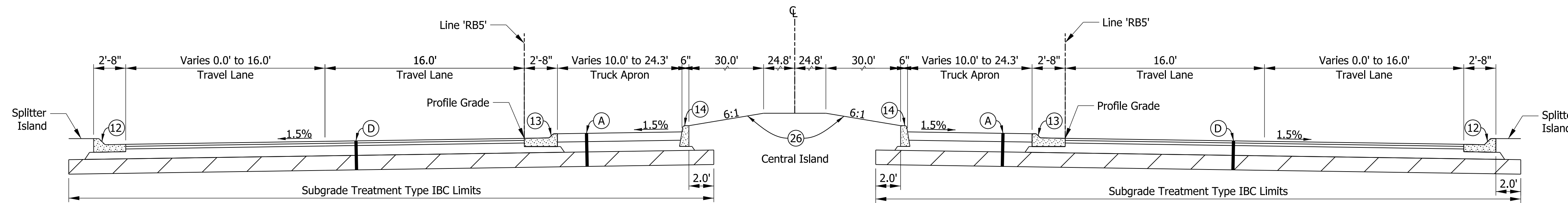
- (M1) Milling, Profile
- (O) Variable Depth Compacted Aggregate, No. 53
- (R1) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm, on, 275 lb/syd QC/QA HMA, 3, 76, Intermediate 19.0 mm
- (11) Curb and Gutter, Concrete
- (12) Curb and Gutter, B, Concrete
- (13) Curb and Gutter, B, Concrete, Modified (Inverted) (3")
- (14) Curb, Integral, Concrete
- (15) Curb and Gutter, B, Concrete, Modified (Inverted)
- (26) Sodding on 4" of Topsoil
- (27) Mulched Seeding R

HMA ALTERNATE

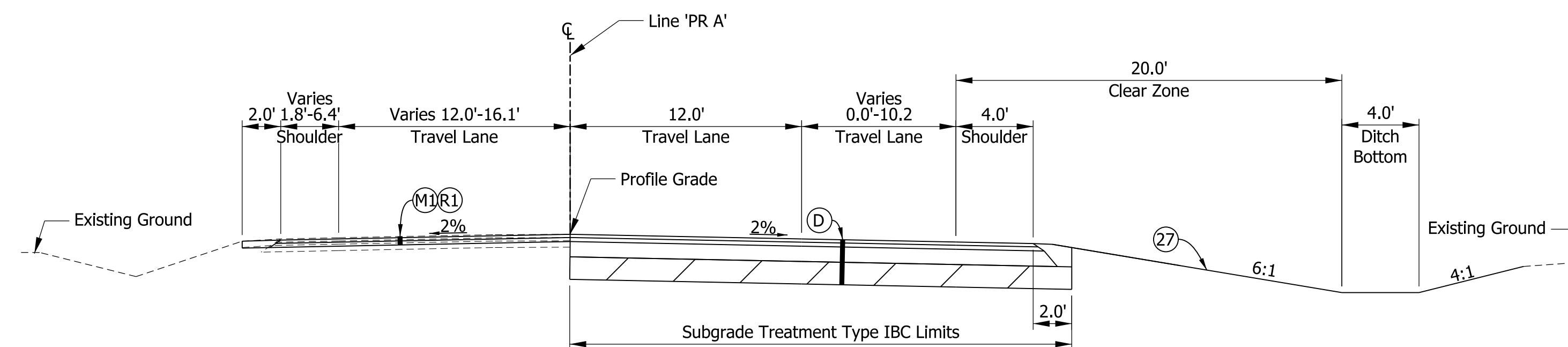
- (A) 8.0 in. PCCP (Colored) (17 ft maximum joint spacing, 1 in. diameter dowel bars), on 10 in. Compacted Aggregate No. 53 Subgrade Treatment, Type IBC
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- (D) 220 lb/syd QC/QA HMA, 3, 76, Surface, 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate, 19.0 mm, on 1045 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm (3 lifts), on Subgrade Treatment, Type IBC

PCCP ALTERNATE

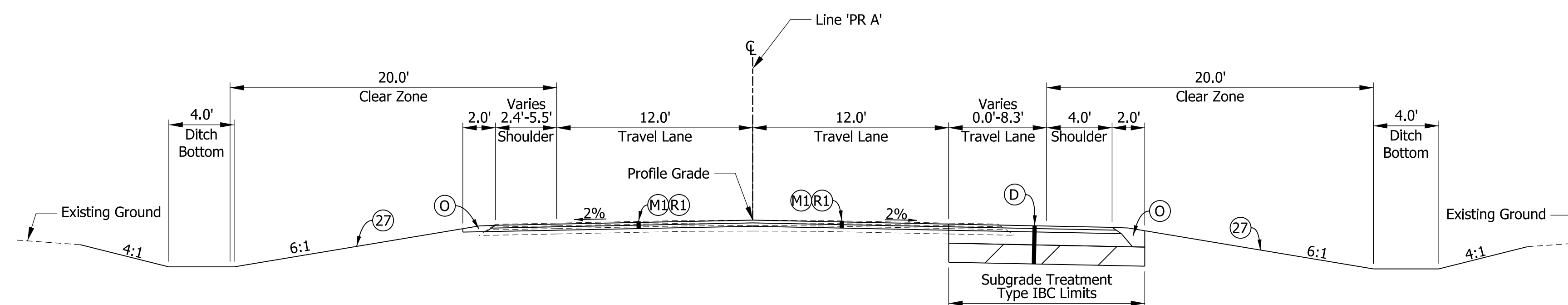
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- (A1) 6 in. PCCP (Colored), on 14 in. Dense Graded Subbase, on Subgrade Treatment Type IBC
- (D) QC/QA PCCP, 10 in. (17 ft joint spacing for roundabout and 16 ft joint spacing for approaches, 1.5 in. bars at 12 in. spacing), on 6 in. Dense Graded Subbase, on Subgrade Treatment, Type IBC



Roundabout Circulatory Roadway at Splitter Island  
Scale: 3/16" = 1'-0"



US 231  
Scale: 3/16" = 1'-0"  
Sta 74+10.66 to Sta 75+20.57 Line 'PR\_A'



US 231  
Scale: 3/16" = 1'-0"  
Sta 75+20.57 to Sta 79+07.73 Line 'PR\_A'

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**PRELIMINARY**  
NOT FOR CONSTRUCTION  
DATE: 1/18/2021

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

INDIANA  
DEPARTMENT OF TRANSPORTATION

US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
PROPOSED TYPICAL SECTIONS

HORIZONTAL SCALE	FILE
AS NOTED	
VERTICAL SCALE	DESIGNATION
N/A	1700022
SURVEY BOOK	SHEETS
	5 of 46
CONTRACT	PROJECT
R-42251	1700022

LEGEND

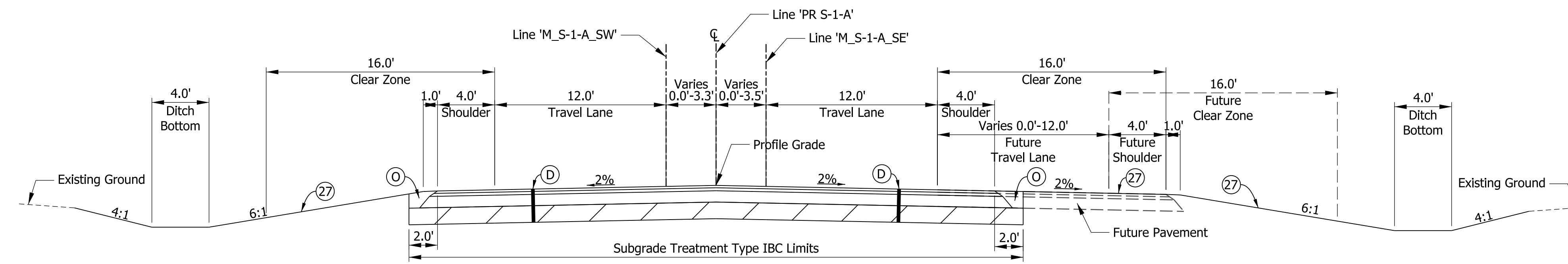
- (M1) Milling, Profile
- (O) Variable Depth Compacted Aggregate, No. 53
- (R1) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm, on, 275 lb/syd QC/QA HMA, 3, 76, Intermediate 19.0 mm
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- (13) Curb and Gutter, B, Concrete, Modified (Inverted) (3")
- (14) Curb, Integral, Concrete
- (15) Curb and Gutter, B, Concrete, Modified (Inverted)
- (26) Sodding on 4" of Topsoil
- (27) Mulched Seeding R

HMA ALTERNATE

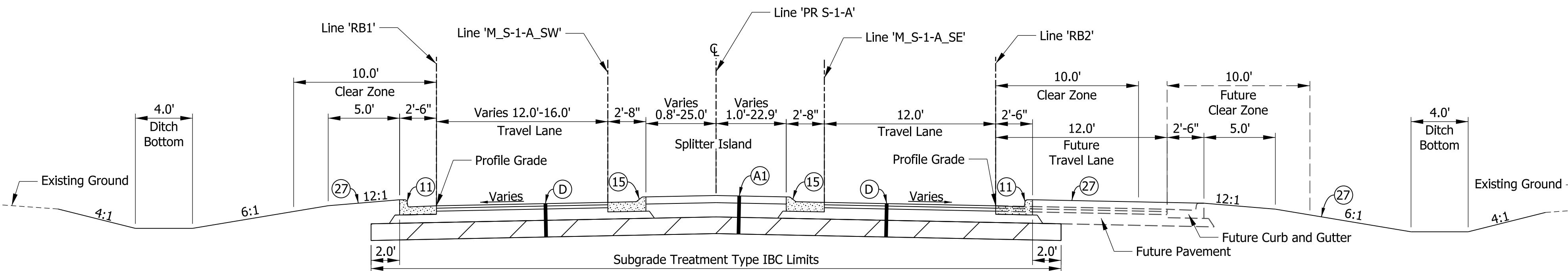
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- (D) 220 lb/syd QC/QA HMA, 3, 76, Surface, 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate, 19.0 mm, on 1045 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm (3 lifts), on Subgrade Treatment, Type IBC

PCCP ALTERNATE

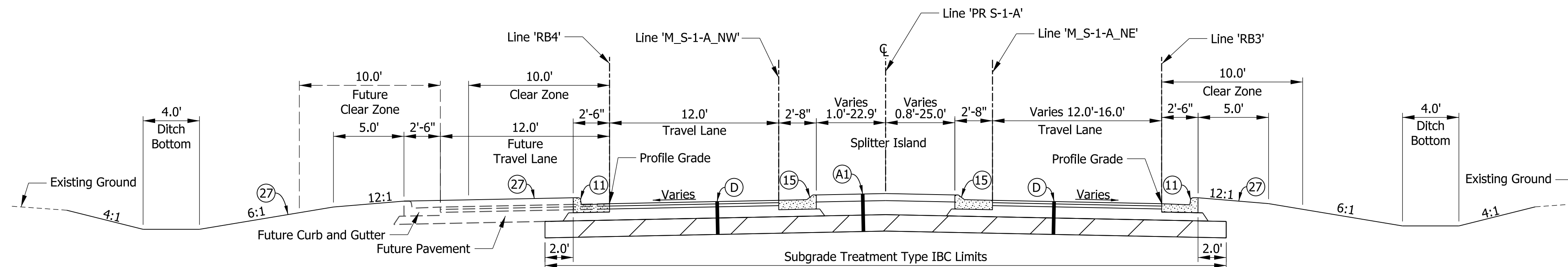
- (A) 8.0 in. PCCP (Colored) (17 ft maximum joint spacing, 1 in. diameter dowel bars), on 12 in. Compacted Aggregate No. 53 Subgrade Treatment, Type IBC
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- (D) QC/QA PCCP, 10 in. (17 ft joint spacing for roundabout and 16 ft joint spacing for approaches, 1.5 in. bars at 12 in. spacing), on 6 in. Dense Graded Subbase, on Subgrade Treatment, Type IBC



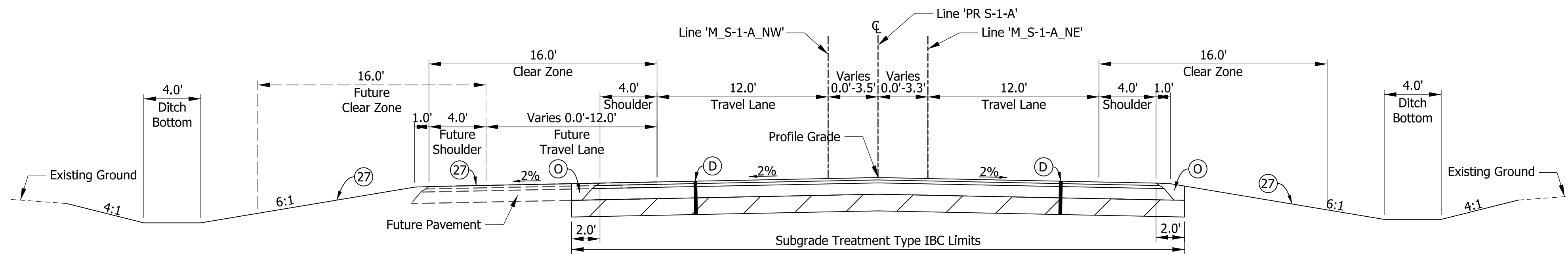
**Cline Ave**  
 Scale: 3/16" = 1'-0"  
 Sta 144+20.13 to Sta 146+96.00 Line 'PR\_S-1-A'



**Cline Ave**  
 Scale: 3/16" = 1'-0"  
 Sta 146+96.00 to Sta 149+01.16 Line 'PR\_S-1-A'



**Cline Ave**  
 Scale: 3/16" = 1'-0"  
 Sta 150+93.95 to Sta 153+04.00 Line 'PR\_S-1-A'



**Cline Ave**  
 Scale: 3/16" = 1'-0"  
 Sta 153+04.00 to Sta 156+71.73 Line 'PR\_S-1-A'

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**PRELIMINARY**  
 NOT FOR CONSTRUCTION  
 DATE: 1/18/2021

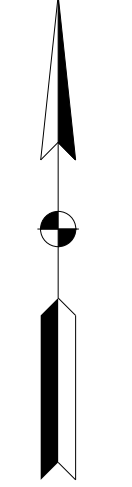
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

**INDIANA DEPARTMENT OF TRANSPORTATION**

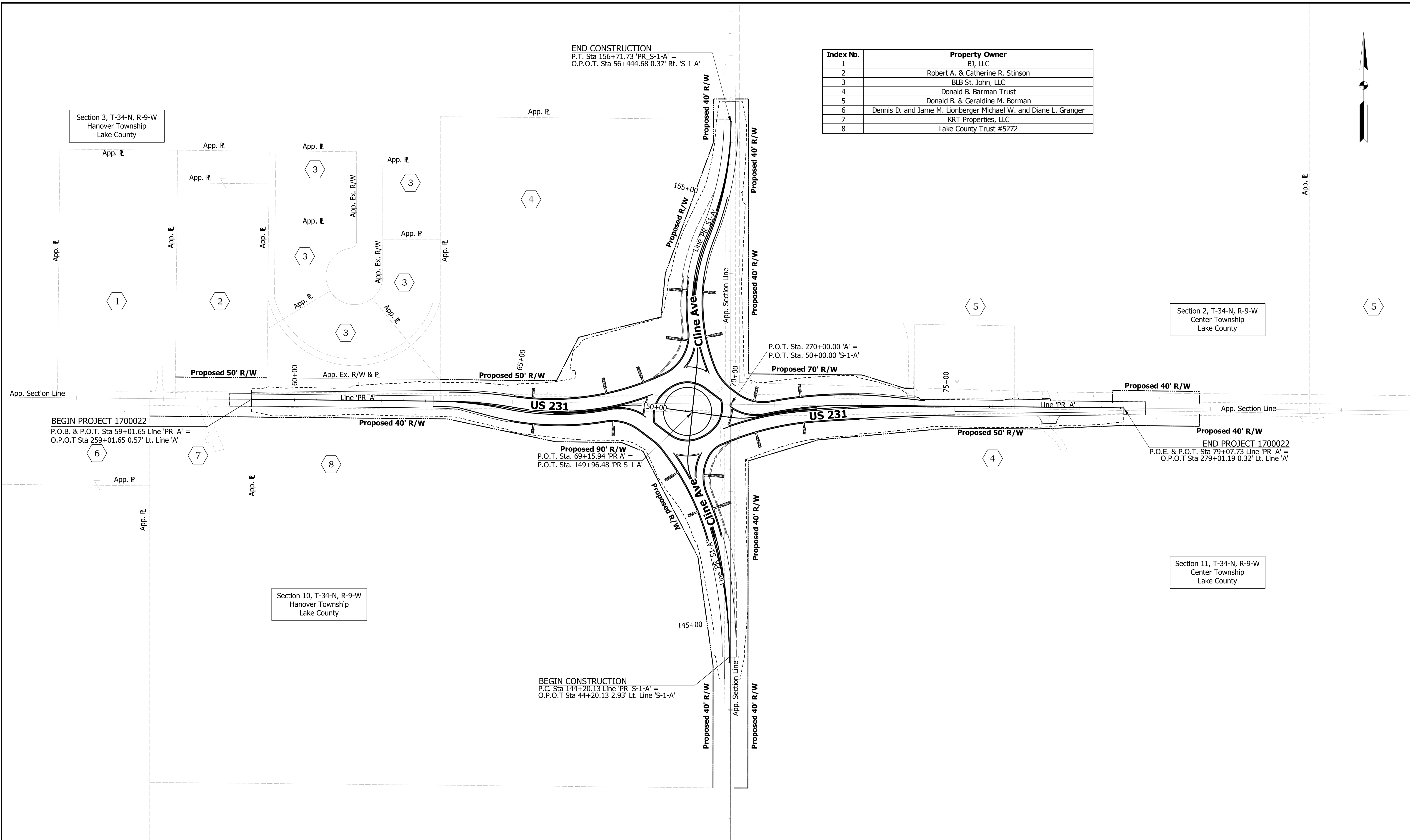
US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
 PROPOSED TYPICAL SECTIONS

HORIZONTAL SCALE	FILE
AS NOTED	
VERTICAL SCALE	DESIGNATION
N/A	1700022
SURVEY BOOK	SHEETS
	6 of 46
CONTRACT	PROJECT
R-42251	1700022





Index No.	Property Owner
1	BJ, LLC
2	Robert A. & Catherine R. Stinson
3	BLB St. John, LLC
4	Donald B. Barman Trust
5	Donald B. & Geraldine M. Borman
6	Dennis D. and Jame M. Lionberger Michael W. and Diane L. Granger
7	KRT Properties, LLC
8	Lake County Trust #5272



11/18/2021 10:34:48 AM pfr  
 G:\projects\1700022\1700022\1700022\US 231-Cline Ave\1700022\Design\Sheets\Plat No. 1.dgn



**PRELIMINARY**  
 NOT FOR CONSTRUCTION  
 DATE: 11/18/2021

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

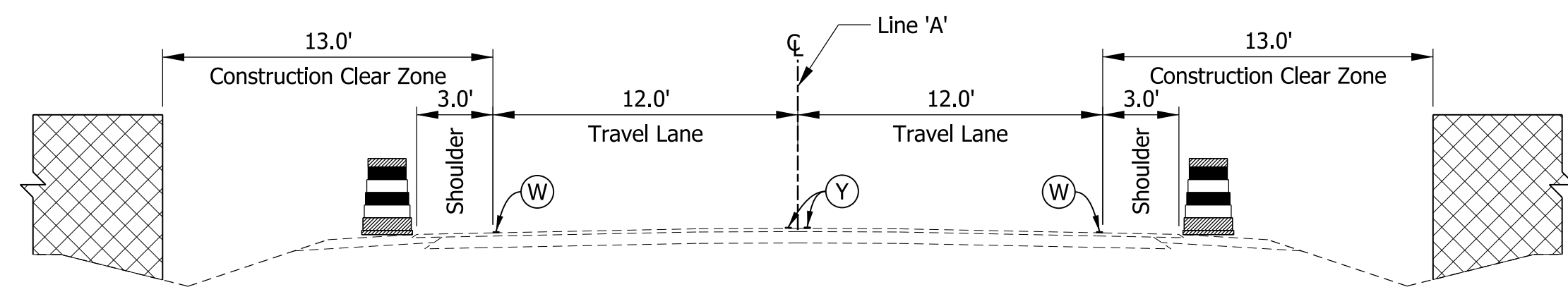
**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**  
 US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
 PLAT NO. 1

HORIZONTAL SCALE	FILE
1" = 100'	
VERTICAL SCALE	DESIGNATION
N/A	1700022
SURVEY BOOK	SHEETS
	8 of 46
CONTRACT	PROJECT
R-42251	1700022

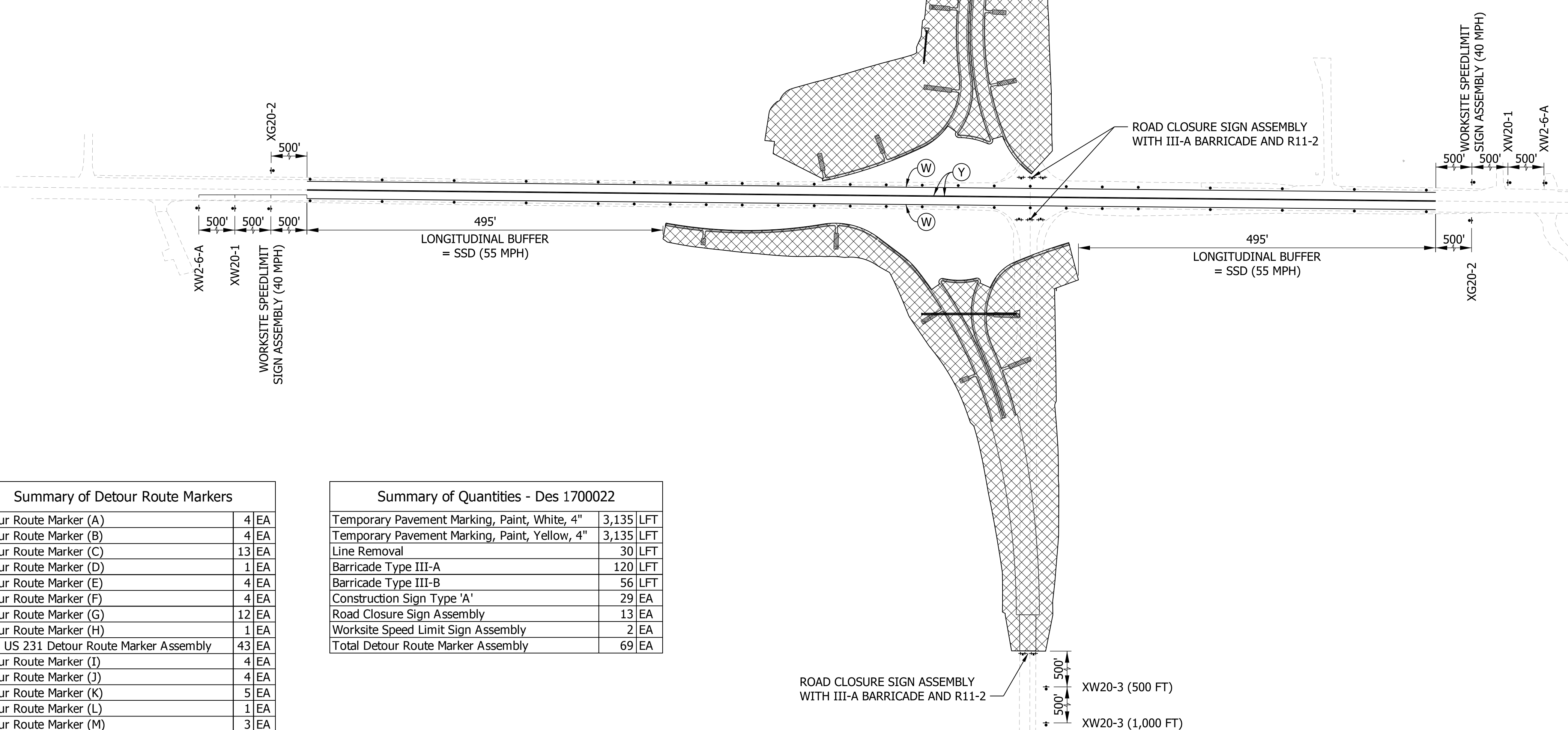


**LEGEND:**

(W)	Temporary Pavement Marking, White 4"		XW20-1
(Y)	Temporary Pavement Marking, Yellow 4"		XW20-3
⊗	Type 'A' Construction Warning Light		XW20-3 (500 FT)
⊗	Type 'B' Construction Warning Light		XW20-3 (1,000 FT)
	Construction Sign		
	Channelizing Device		
	Construction Barrel		
	Barricade Type III-A/III-B		
	Construction Area		
	END CONSTRUCTION XG20-2		XG20-5P R2-1-B
	SPEEDING MAX 2000 RECKLESS DRIVING MAX 6 YRS XW2-6-A		



US 231 Phase 1 Typical Section



**Summary of Detour Route Markers**

Detour Route Marker (A)	4	EA
Detour Route Marker (B)	4	EA
Detour Route Marker (C)	13	EA
Detour Route Marker (D)	1	EA
Detour Route Marker (E)	4	EA
Detour Route Marker (F)	4	EA
Detour Route Marker (G)	12	EA
Detour Route Marker (H)	1	EA
Total US 231 Detour Route Marker Assembly	43	EA
Detour Route Marker (I)	4	EA
Detour Route Marker (J)	4	EA
Detour Route Marker (K)	5	EA
Detour Route Marker (L)	1	EA
Detour Route Marker (M)	3	EA
Detour Route Marker (N)	3	EA
Detour Route Marker (O)	5	EA
Detour Route Marker (P)	1	EA
Total Cline Ave Detour Route Marker Assembly	26	EA

**Summary of Quantities - Des 1700022**

Temporary Pavement Marking, Paint, White, 4"	3,135	LFT
Temporary Pavement Marking, Paint, Yellow, 4"	3,135	LFT
Line Removal	30	LFT
Barricade Type III-A	120	LFT
Barricade Type III-B	56	LFT
Construction Sign Type 'A'	29	EA
Road Closure Sign Assembly	13	EA
Worksite Speed Limit Sign Assembly	2	EA
Total Detour Route Marker Assembly	69	EA

- General Notes:**
- Emergency traffic shall have access to the project area at all times.
  - Type A warning lights required on all type A construction signs.
  - Spacing of channeling devices shall be 50 ft within 100 ft of and including the workzone, otherwise 100 ft spacing should be used.
  - All materials, procedures, signs, marking flashers, and miscellaneous items shall conform to the requirements of the current INDOT Standard Specifications and the Indiana Manual on Uniform Traffic Control Devices.

- Phase 1 Construction Requirements:**
- Traffic shall be maintained on US 231.
  - Traffic on Cline Avenue shall be detoured. See sheet 11 for detour route.
  - Traffic signal heads for Cline Avenue shall be covered or removed. Traffic signal heads for US 231 shall display flashing yellow.
  - Existing Stop Bar pavement markings on US 231 shall be removed.
  - Ditches and basins south of US 231 shall be graded to drain to the existing culverts crossing US 231.

- Phase 1 Construction Items:**
- North and South approaches along Cline Avenue.

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**PRELIMINARY**  
NOT FOR CONSTRUCTION  
DATE: 11/18/2021

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**

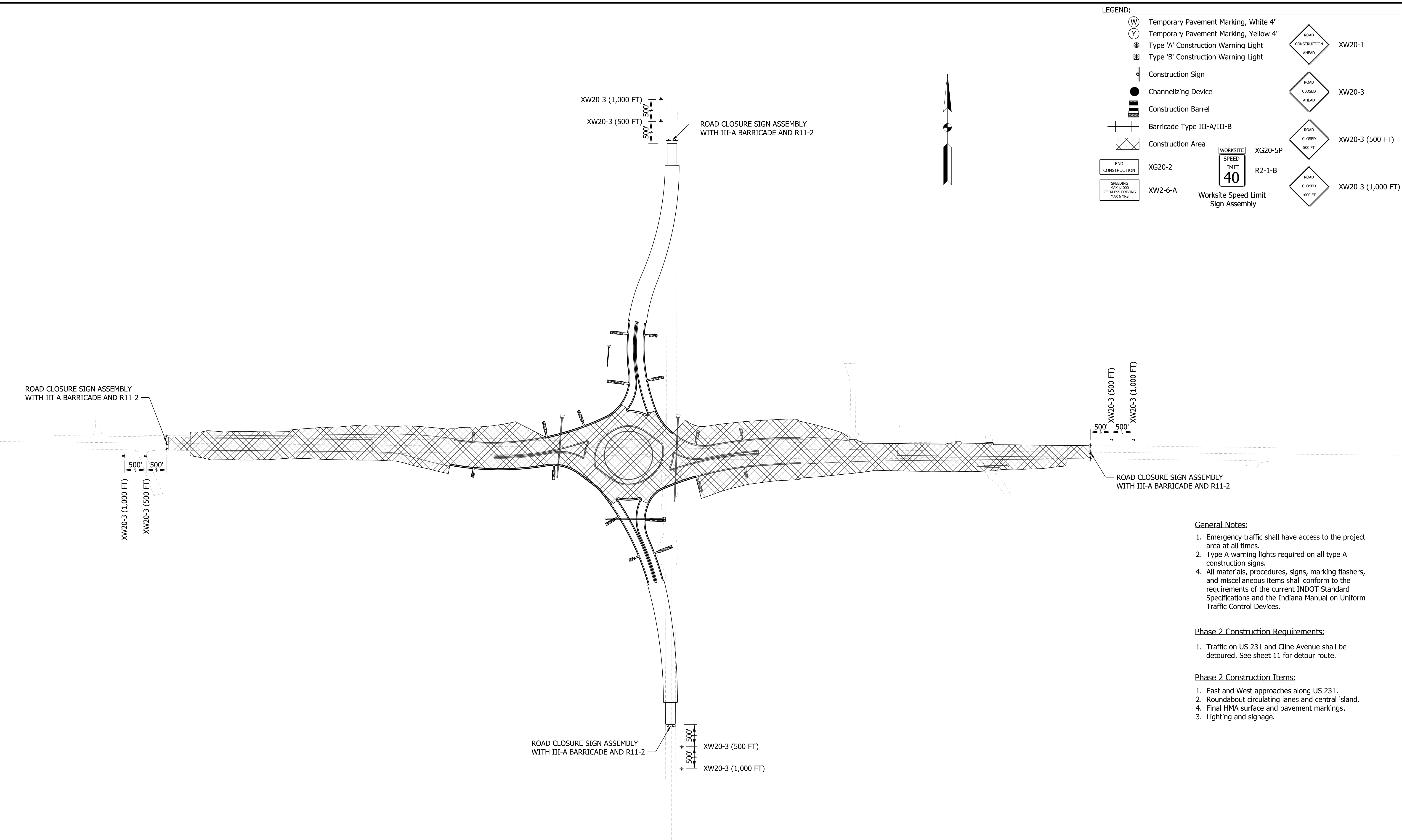
US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
MAINTENANCE OF TRAFFIC - PHASE 1

HORIZONTAL SCALE	FILE
1" = 100'	
VERTICAL SCALE	DESIGNATION
N/A	1700022
SURVEY BOOK	SHEETS
	9 of 46
CONTRACT	PROJECT
R-42251	1700022

1/1/18/2021 10:36:58 AM pfr G:\projects\175\INDOT\1818-00\1818-00\1818-00\1700022\Design\Sheets\MOI\_Phase 2.dgn

**LEGEND:**

(W)	Temporary Pavement Marking, White 4"		XW20-1
(Y)	Temporary Pavement Marking, Yellow 4"		XW20-3
⊗	Type 'A' Construction Warning Light		XW20-3 (500 FT)
⊗	Type 'B' Construction Warning Light		XW20-3 (1,000 FT)
	Construction Sign		
	Channelizing Device		
	Construction Barrel		
	Barricade Type III-A/III-B		
	Construction Area		
	END CONSTRUCTION XG20-2		XG20-5P R2-1-B
	SPEEDING MAX 3000 RECKLESS DRIVING MAX 6 YRS XW2-6-A		



- General Notes:**
- Emergency traffic shall have access to the project area at all times.
  - Type A warning lights required on all type A construction signs.
  - All materials, procedures, signs, marking flashers, and miscellaneous items shall conform to the requirements of the current INDOT Standard Specifications and the Indiana Manual on Uniform Traffic Control Devices.
- Phase 2 Construction Requirements:**
- Traffic on US 231 and Cline Avenue shall be detoured. See sheet 11 for detour route.
- Phase 2 Construction Items:**
- East and West approaches along US 231.
  - Roundabout circulating lanes and central island.
  - Final HMA surface and pavement markings.
  - Lighting and signage.



**PRELIMINARY**  
NOT FOR CONSTRUCTION  
DATE: 1/18/2021

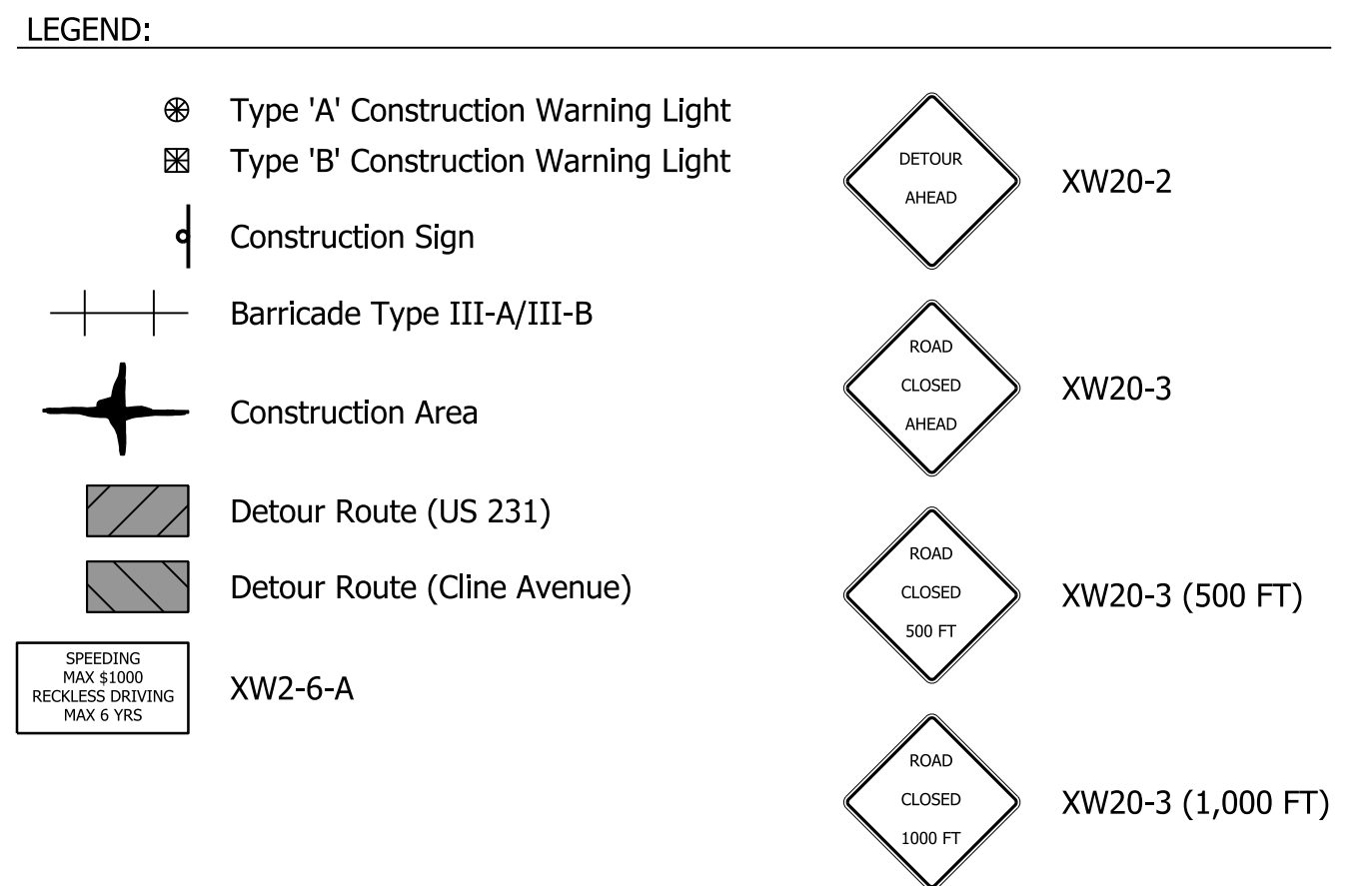
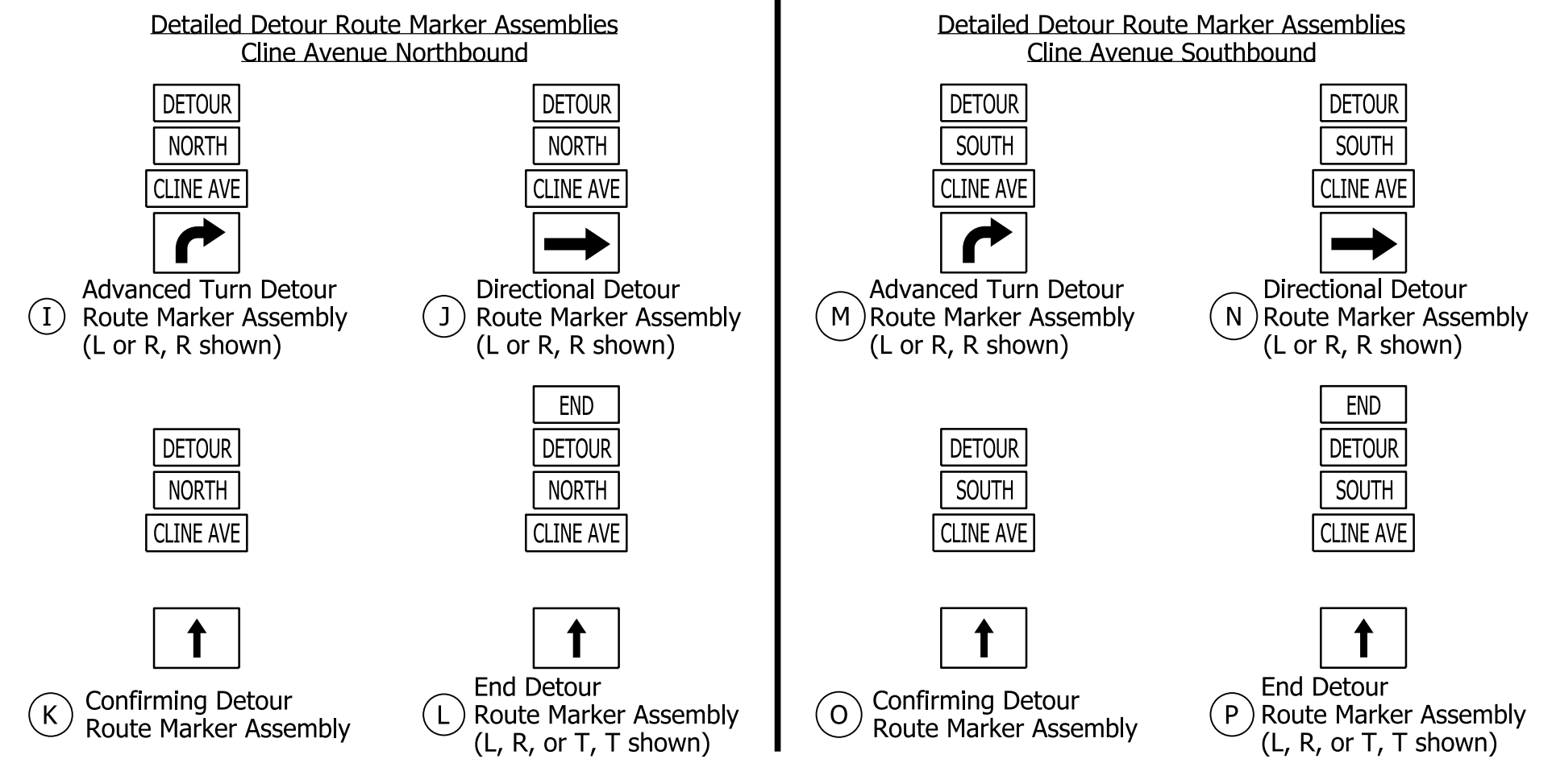
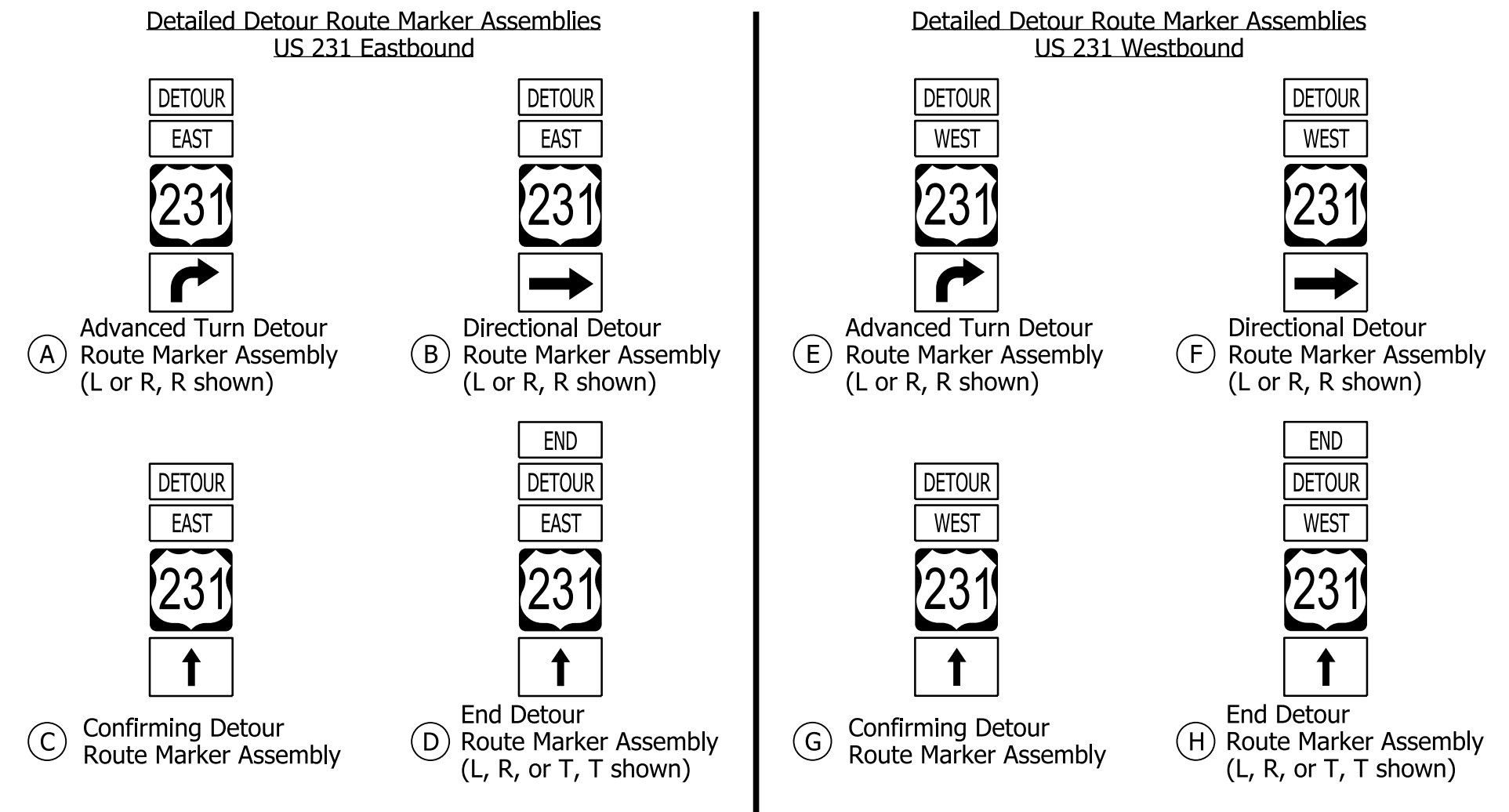
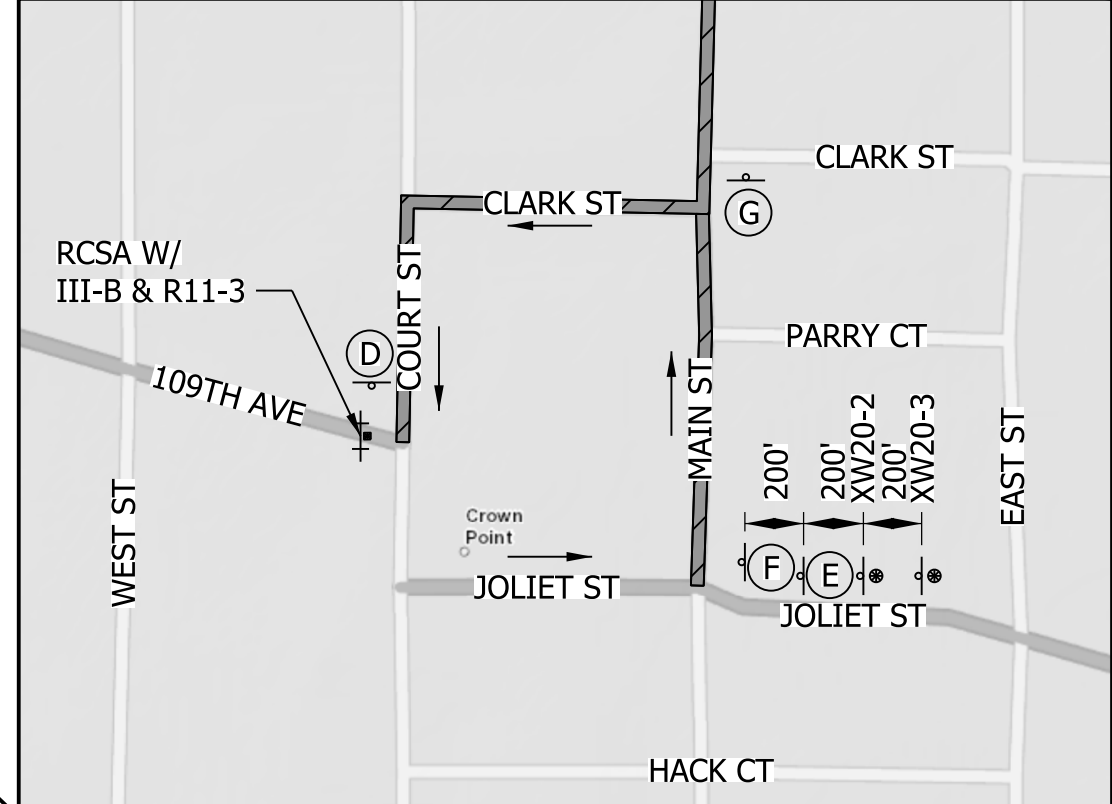
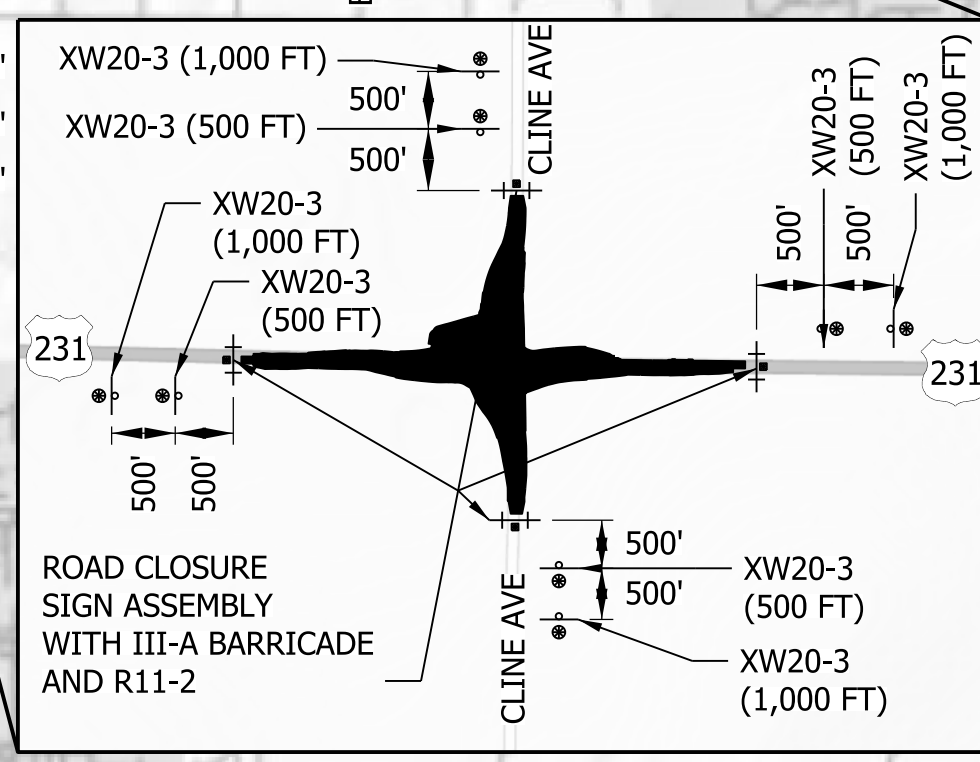
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

**INDIANA DEPARTMENT OF TRANSPORTATION**

US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
MAINTENANCE OF TRAFFIC - PHASE 2

HORIZONTAL SCALE	FILE
1" = 100'	
VERTICAL SCALE	DESIGNATION
N/A	1700022
SURVEY BOOK	SHEETS
	10 of 46
CONTRACT	PROJECT
R-42251	1700022

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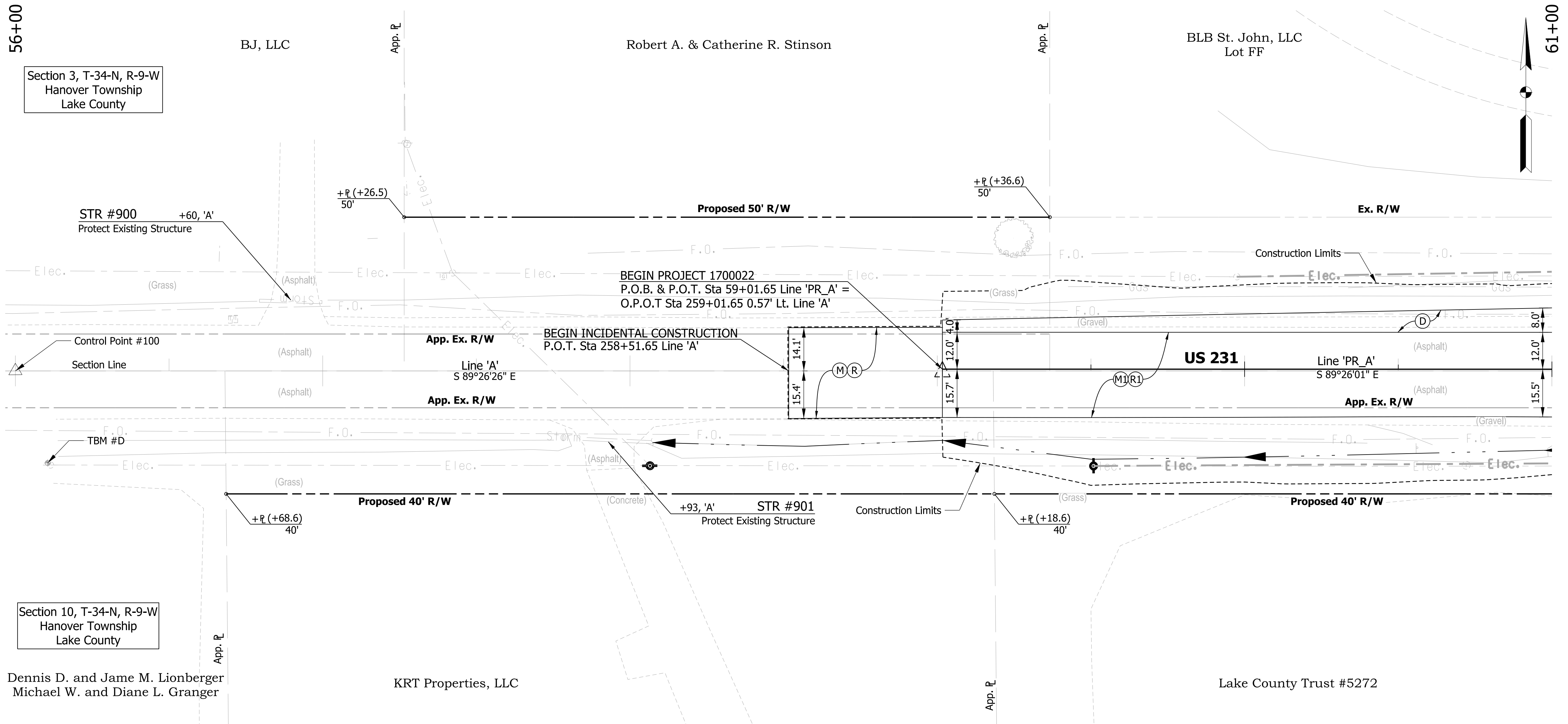
**PRELIMINARY**  
NOT FOR CONSTRUCTION  
DATE: 11/18/2021

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

**INDIANA**  
DEPARTMENT OF TRANSPORTATION

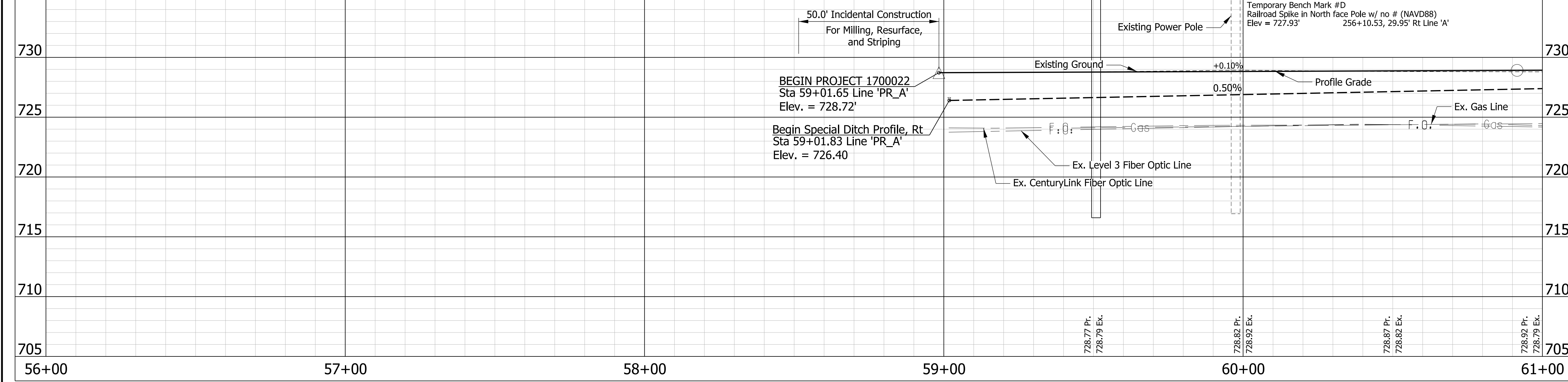
US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
MAINTENANCE OF TRAFFIC - DETOUR ROUTES

HORIZONTAL SCALE	FILE
1" = 300'	
VERTICAL SCALE	DESIGNATION
N/A	1700022
SURVEY BOOK	SHEETS
	11 of 46
CONTRACT	PROJECT
R-42251	1700022



- LEGEND**
- (C) HMA for Approaches, Type B, Consisting of: 165 lb/syd HMA Surface, on 275 lb/syd HMA Intermediate, on 6 in. Compacted Aggregate No. 53, on Subgrade Treatment Type II
  - (C1) 6 in. Compacted Aggregate No. 53
  - (M) Asphalt Milling, Transition, 2.0 in. Maximum
  - (M1) Milling, Profile
  - (R) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm
  - (R1) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate 19.0 mm
  - (11) Curb and Gutter, Concrete
  - (12) Curb and Gutter, B, Concrete
  - (13) Curb and Gutter, B, Concrete, Modified (Inverted) (3")
  - (14) Curb, Integral, Concrete
  - (15) Curb and Gutter, B, Concrete, Modified (Inverted)
  - (18) Curb and Gutter, Turn Out Concrete
  - (26) Sodding on 4" of Topsoil
  - (28) Turf Reinforcement Mat
- HMA ALTERNATE**
- (A) 8.0 in. PCCP (Colored) (17 ft maximum joint spacing, 1 in. diameter dowel bars), on 10 in. Compacted Aggregate No. 53 Subgrade Treatment, Type IBC
  - (A1) 6 in. PCCP (Colored), on 12 in. Dense Graded Subbase, on Subgrade Treatment Type IBC
  - (D) 220 lb/syd QC/QA HMA, 3, 76, Surface, 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate, 19.0 mm, on 1045 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm (3 lifts), on Subgrade Treatment, Type IBC
- PCCP ALTERNATE**
- (A) 8.0 in. PCCP (Colored) (17 ft maximum joint spacing, 1 in. diameter dowel bars), on 12 in. Compacted Aggregate No. 53 Subgrade Treatment, Type IBC
  - (A1) 6 in. PCCP (Colored), on 14 in. Dense Graded Subbase, on Subgrade Treatment Type IBC
  - (D) QC/QA PCCP, 10 in. (17 ft joint spacing for roundabout and 16 ft joint spacing for approaches, 1.5 in. bars at 12 in. spacing), on 6 in. Dense Graded Subbase, on Subgrade Treatment, Type IBC

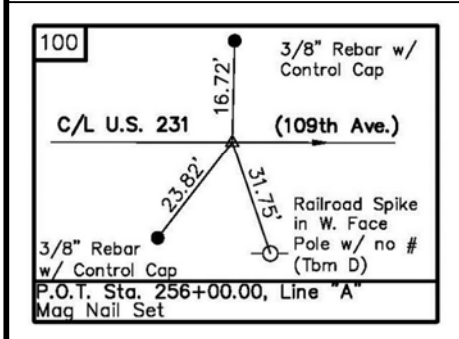
ALL TOPOGRAPHY ON THIS SHEET DESCRIBED FROM LINE 'PR\_A' UNLESS OTHERWISE NOTED. ALL R/W ON THIS SHEET DESCRIBED FROM LINE 'A' UNLESS OTHERWISE NOTED.



EARTHWORK SUMMARY TABLE		
Des #1700022		
Cut (Cross Sections)	10768	CYS
Cut (Cline Ave)	235	CYS
Total Common Excavation	11003	CYS
* Less Unsuitable Material	4328	CYS
Usable Material	6675	CYS
Fill	11853	CYS
+25% Shrinkage	2963	CYS
Total Fill	14816	CYS
Less Useable Common Excavation	6675	CYS
Borrow	8141	CYS

Note to Reviewer:  
Topo Notes have been Requested from the Surveyor

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**PRELIMINARY**  
NOT FOR CONSTRUCTION  
DATE: 11/18/2021

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

**INDIANA DEPARTMENT OF TRANSPORTATION**

US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
PLAN AND PROFILE LINE 'PR\_A'

HORIZONTAL SCALE	FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
1" = 5'	1700022
SURVEY BOOK	SHEETS
	12 of 46
CONTRACT	PROJECT
R-42251	1700022

61+00

66+00

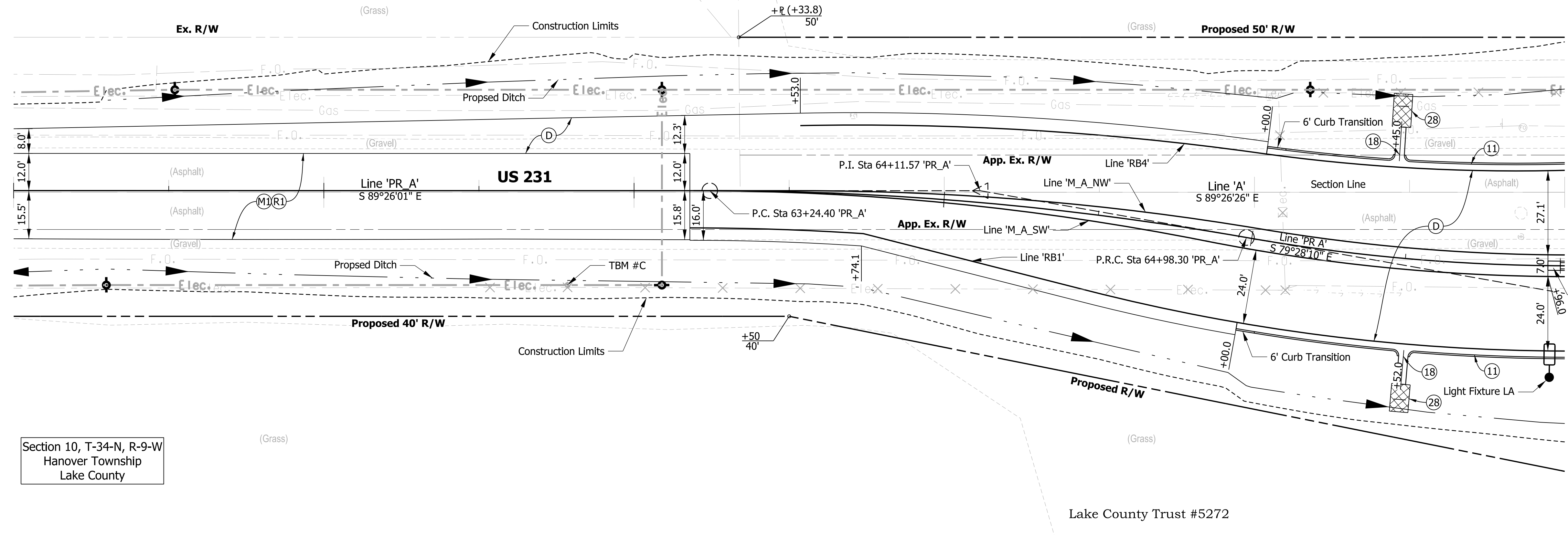
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 R = 1000.00'  
 T = 87.17'  
 L = 173.90'  
 E = 3.79'  
 SE = NC

Section 3, T-34-N, R-9-W  
 Hanover Township  
 Lake County

BLB St. John, LLC  
 Lot FF

BLB St. John, LLC  
 Lot EE

Donald B. Barman  
 Trust

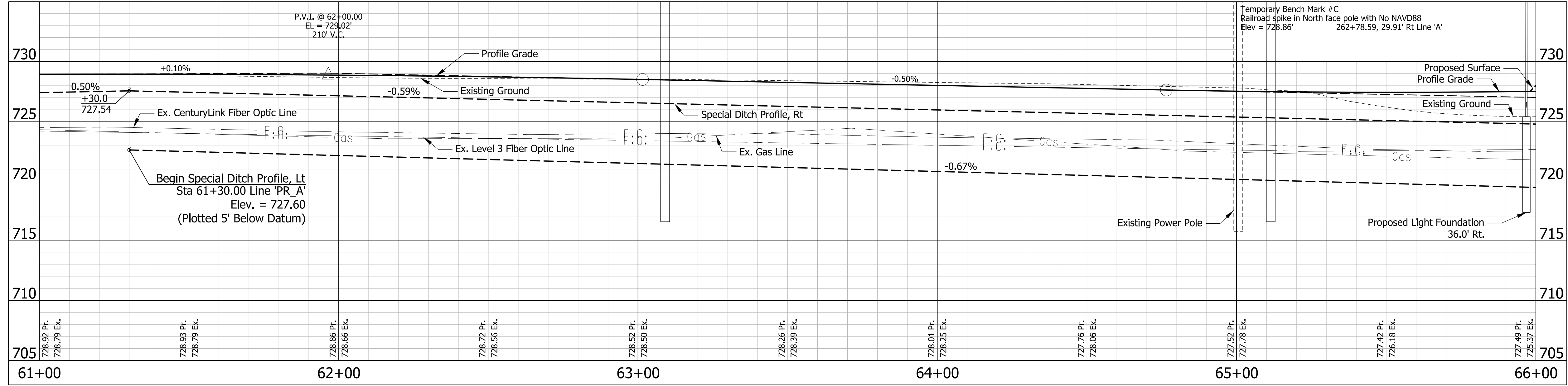


Section 10, T-34-N, R-9-W  
 Hanover Township  
 Lake County

Lake County Trust #5272

- LEGEND
- (C) HMA for Approaches, Type B, Consisting of: 165 lb/syd HMA Surface, on 275 lb/syd HMA Intermediate, on 6 in. Compacted Aggregate No. 53, on Subgrade Treatment Type II
  - (C1) 6 in. Compacted Aggregate No. 53
  - (M) Asphalt Milling, Transition, 2.0 in. Maximum
  - (M1) Milling, Profile
  - (R) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm
  - (R1) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate 19.0 mm
  - (11) Curb and Gutter, Concrete
  - (12) Curb and Gutter, B, Concrete
  - (13) Curb and Gutter, B, Concrete, Modified (Inverted) (3")
  - (14) Curb, Integral, Concrete
  - (15) Curb and Gutter, B, Concrete, Modified (Inverted)
  - (18) Curb and Gutter, Turn Out Concrete
  - (26) Sodding on 4" of Topsoil
  - (28) Turf Reinforcement Mat
- HMA ALTERNATE
- (A) 8.0 in. PCCP (Colored) (17 ft maximum joint spacing, 1 in. diameter dowel bars), on 10 in. Compacted Aggregate No. 53 Subgrade Treatment, Type IBC
  - (A1) 6 in. PCCP (Colored), on 12 in. Dense Graded Subbase, on Subgrade Treatment Type IBC
  - (D) 220 lb/syd QC/QA HMA, 3, 76, Surface, 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate, 19.0 mm, on 1045 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm (3 lifts), on Subgrade Treatment, Type IBC
- PCCP ALTERNATE
- (A) 8.0 in. PCCP (Colored) (17 ft maximum joint spacing, 1 in. diameter dowel bars), on 12 in. Compacted Aggregate No. 53 Subgrade Treatment, Type IBC
  - (A1) 6 in. PCCP (Colored), on 14 in. Dense Graded Subbase, on Subgrade Treatment Type IBC
  - (D) QC/QA PCCP, 10 in. (17 ft joint spacing for roundabout and 16 ft joint spacing for approaches, 1.5 in. bars at 12 in. spacing), on 6 in. Dense Graded Subbase, on Subgrade Treatment, Type IBC

ALL TOPOGRAPHY ON THIS SHEET DESCRIBED FROM LINE 'PR\_A' UNLESS OTHERWISE NOTED. ALL R/W ON THIS SHEET DESCRIBED FROM LINE 'A' UNLESS OTHERWISE NOTED.



Note to Reviewer:  
 Topo Notes have been Requested from the Surveyor

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**troyer group**  
 troyergroup.com | Together, We Will

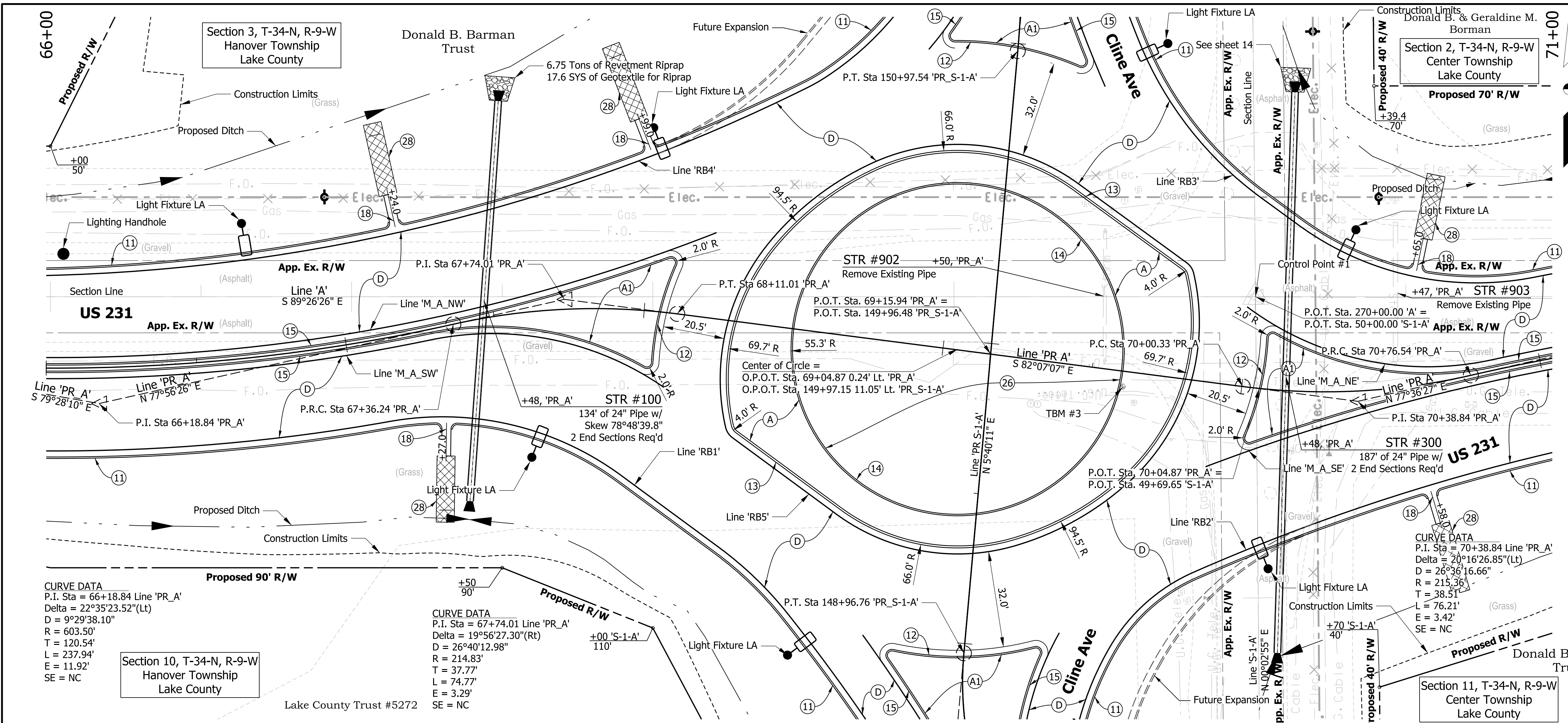
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 NOT FOR CONSTRUCTION  
 DATE: 11/18/2021

RECOMMENDED FOR APPROVAL \_\_\_\_\_ DATE \_\_\_\_\_  
 DESIGN ENGINEER \_\_\_\_\_  
 DESIGNED: PFR DRAWN: PFR  
 CHECKED: CLW CHECKED: LRD

INDIANA  
 DEPARTMENT OF TRANSPORTATION

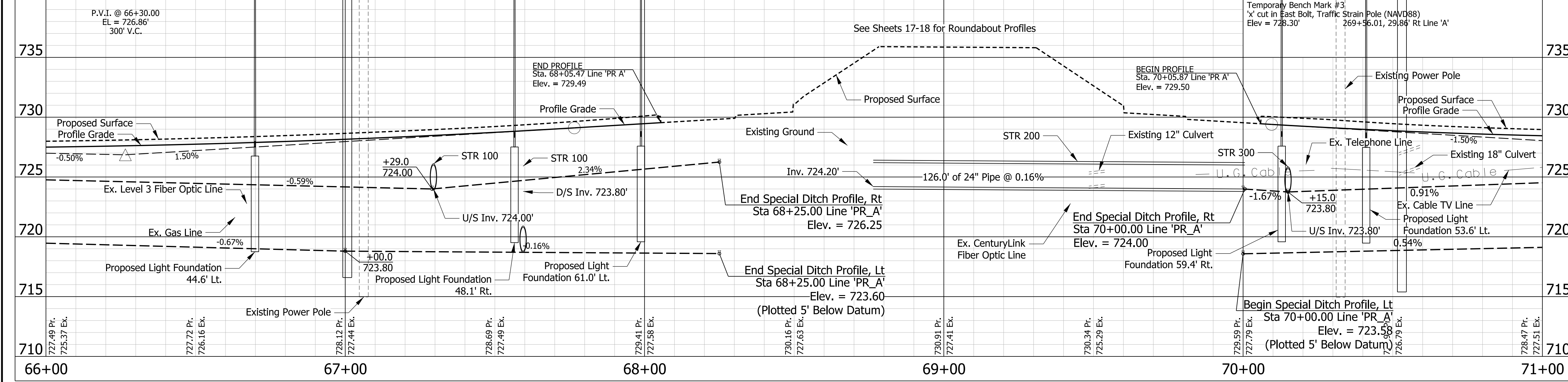
US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
 PLAN AND PROFILE LINE 'PR\_A'

HORIZONTAL SCALE	FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
1" = 5'	1700022
SURVEY BOOK	SHEETS
	13 of 46
CONTRACT	PROJECT
R-42251	1700022

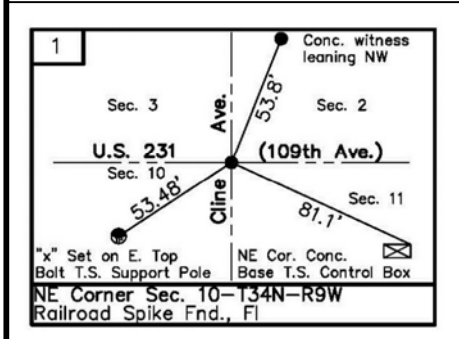


- LEGEND**
- (C) HMA for Approaches, Type B, Consisting of: 165 lb/syd HMA Surface, on 275 lb/syd HMA Intermediate, on 6 in. Compacted Aggregate No. 53, on Subgrade Treatment Type II
  - (C1) 6 in. Compacted Aggregate No. 53
  - (M) Asphalt Milling, Transition, 2.0 in. Maximum
  - (R) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm
  - (R1) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate 19.0 mm
  - (11) Curb and Gutter, Concrete
  - (12) Curb and Gutter, B, Concrete
  - (13) Curb and Gutter, B, Concrete, Modified (Inverted) (3")
  - (14) Curb, Integral, Concrete
  - (15) Curb and Gutter, B, Concrete, Modified (Inverted)
  - (18) Curb and Gutter, Turn Out Concrete
  - (26) Sodding on 4" of Topsoil
  - (28) Turf Reinforcement Mat
- HMA ALTERNATE**
- (A) 8.0 in. PCCP (Colored) (17 ft maximum joint spacing, 1 in. diameter dowel bars), on 10 in. Compacted Aggregate No. 53 Subgrade Treatment, Type IBC
  - (A1) 6 in. PCCP (Colored), on 12 in. Dense Graded Subbase, on Subgrade Treatment Type IBC
  - (D) 220 lb/syd QC/QA HMA, 3, 76, Surface, 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate, 19.0 mm, on 1045 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm (3 lifts), on Subgrade Treatment, Type IBC
- PCCP ALTERNATE**
- (A) 8.0 in. PCCP (Colored) (17 ft maximum joint spacing, 1 in. diameter dowel bars), on 12 in. Compacted Aggregate No. 53 Subgrade Treatment, Type IBC
  - (A1) 6 in. PCCP (Colored), on 14 in. Dense Graded Subbase, on Subgrade Treatment Type IBC
  - (D) QC/QA PCCP, 10 in. (17 ft joint spacing for roundabout and 16 ft joint spacing for approaches, 1.5 in. bars at 12 in. spacing), on 6 in. Dense Graded Subbase, on Subgrade Treatment, Type IBC

ALL TOPOGRAPHY ON THIS SHEET DESCRIBED FROM LINE 'PR\_A' UNLESS OTHERWISE NOTED. ALL R/W ON THIS SHEET DESCRIBED FROM LINE 'A' UNLESS OTHERWISE NOTED.



Note to Reviewer:  
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**PRELIMINARY**  
NOT FOR CONSTRUCTION  
DATE: 11/18/2021

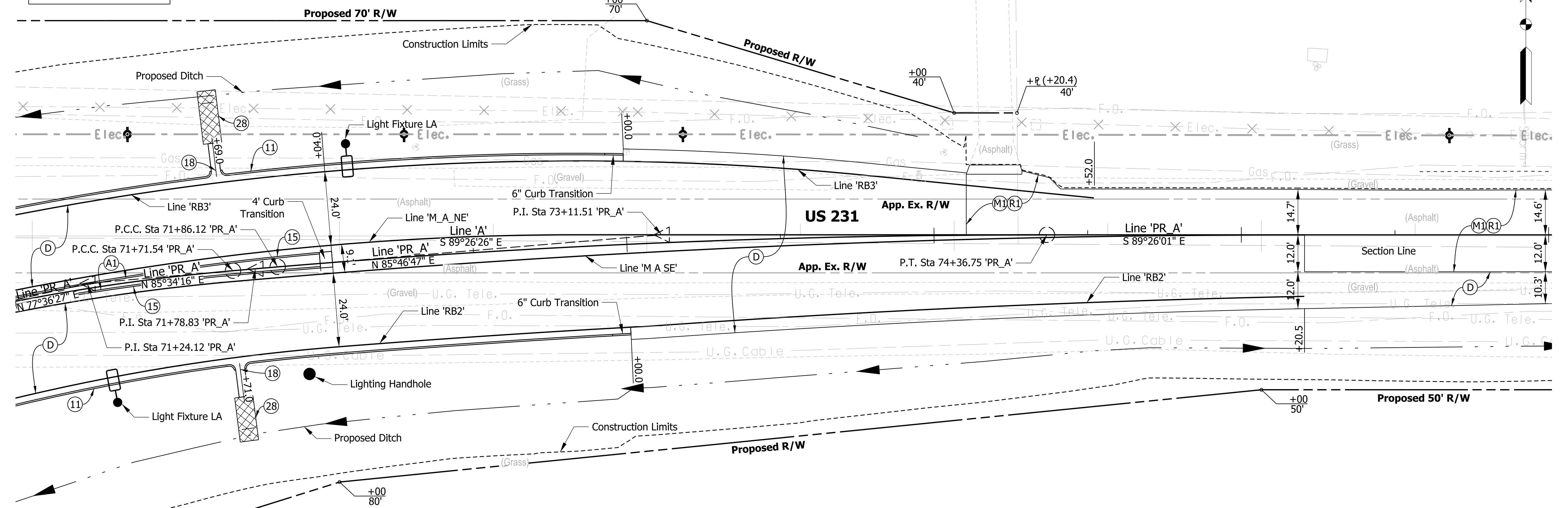
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DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

INDIANA  
DEPARTMENT OF TRANSPORTATION

US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
PLAN AND PROFILE LINE 'PR\_A'

HORIZONTAL SCALE	FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
1" = 5'	1700022
SURVEY BOOK	SHEETS
	14 of 46
CONTRACT	PROJECT
R-42251	1700022

Section 2, T-34-N, R-9-W  
Center Township  
Lake County



Section 11, T-34-N, R-9-W  
Center Township  
Lake County

**CURVE DATA**  
 P.I. Sta = 71+24.12 Line 'PR\_A'  
 Delta = 7°57'49.70"(Rt)  
 D = 8°22'57.73"  
 R = 683.50'  
 T = 47.58'  
 L = 95.00'  
 E = 1.65'  
 SE = NC

**CURVE DATA**  
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 R = 4003.50'  
 T = 7.29'  
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 E = 0.01'  
 SE = NC

**CURVE DATA**  
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 Delta = 4°47'12.24"(Rt)  
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 R = 3000.00'  
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 E = 2.62'  
 SE = NC

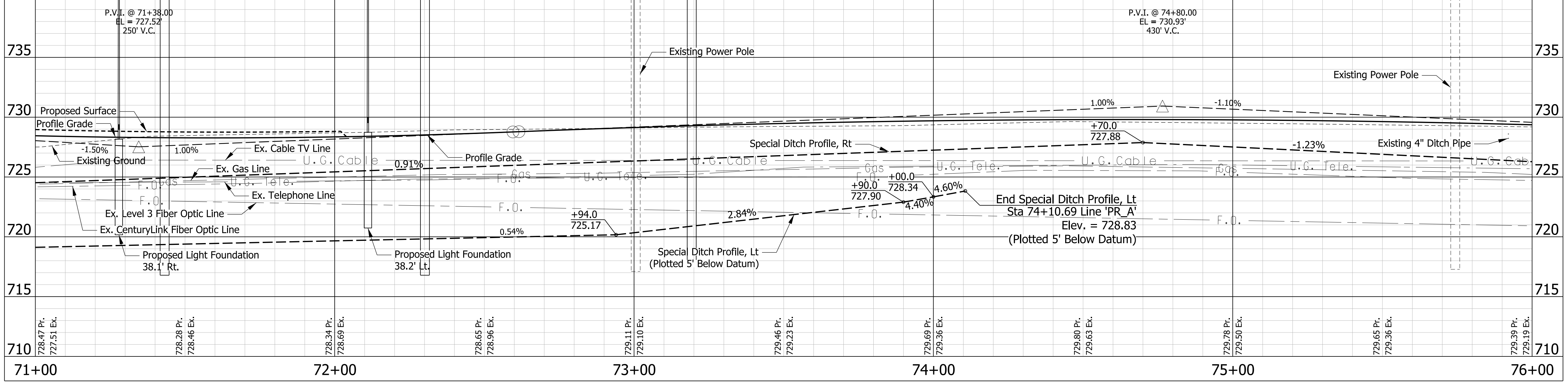
Donald B. Barman Trust

- LEGEND**
- (C) HMA for Approaches, Type B, Consisting of: 165 lb/syd HMA Surface, on 275 lb/syd HMA Intermediate, on 6 in. Compacted Aggregate No. 53, on Subgrade Treatment Type II
  - (C1) 6 in. Compacted Aggregate No. 53
  - (M) Asphalt Milling, Transition, 2.0 in. Maximum
  - (M1) Milling, Profile
  - (R) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm
  - (R1) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate 19.0 mm
  - (11) Curb and Gutter, Concrete
  - (12) Curb and Gutter, B, Concrete
  - (13) Curb and Gutter, B, Concrete, Modified (Inverted) (3")
  - (14) Curb, Integral, Concrete
  - (15) Curb and Gutter, B, Concrete, Modified (Inverted)
  - (18) Curb and Gutter, Turn Out Concrete
  - (26) Sodding on 4" of Topsoil
  - (28) Turf Reinforcement Mat

- HMA ALTERNATE**
- (A) 8.0 in. PCCP (Colored) (17 ft maximum joint spacing, 1 in. diameter dowel bars), on 10 in. Compacted Aggregate No. 53 Subgrade Treatment, Type IBC
  - (A1) 6 in. PCCP (Colored), on 12 in. Dense Graded Subbase, on Subgrade Treatment Type IBC
  - (D) 220 lb/syd QC/QA HMA, 3, 76, Surface, 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm (3 lifts), on 1045 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm (3 lifts), on Subgrade Treatment, Type IBC

- PCCP ALTERNATE**
- (A) 8.0 in. PCCP (Colored) (17 ft maximum joint spacing, 1 in. diameter dowel bars), on 12 in. Compacted Aggregate No. 53 Subgrade Treatment, Type IBC
  - (A1) 6 in. PCCP (Colored), on 14 in. Dense Graded Subbase, on Subgrade Treatment Type IBC
  - (D) QC/QA PCCP, 10 in. (17 ft joint spacing for roundabout and 16 ft joint spacing for approaches, 1.5 in. bars at 12 in. spacing), on 6 in. Dense Graded Subbase, on Subgrade Treatment, Type IBC

ALL TOPOGRAPHY ON THIS SHEET DESCRIBED FROM LINE 'PR\_A' UNLESS OTHERWISE NOTED. ALL R/W ON THIS SHEET DESCRIBED FROM LINE 'A' UNLESS OTHERWISE NOTED.



Note to Reviewer:  
Topo Notes have been Requested from the Surveyor

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PRELIMINARY  
NOT FOR CONSTRUCTION  
DATE: 11/18/2021

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

**INDIANA**  
DEPARTMENT OF TRANSPORTATION

US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
PLAN AND PROFILE LINE 'PR\_A'

HORIZONTAL SCALE	FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
1" = 5'	1700022
SURVEY BOOK	SHEETS
	15 of 46
CONTRACT	PROJECT
R-42251	1700022

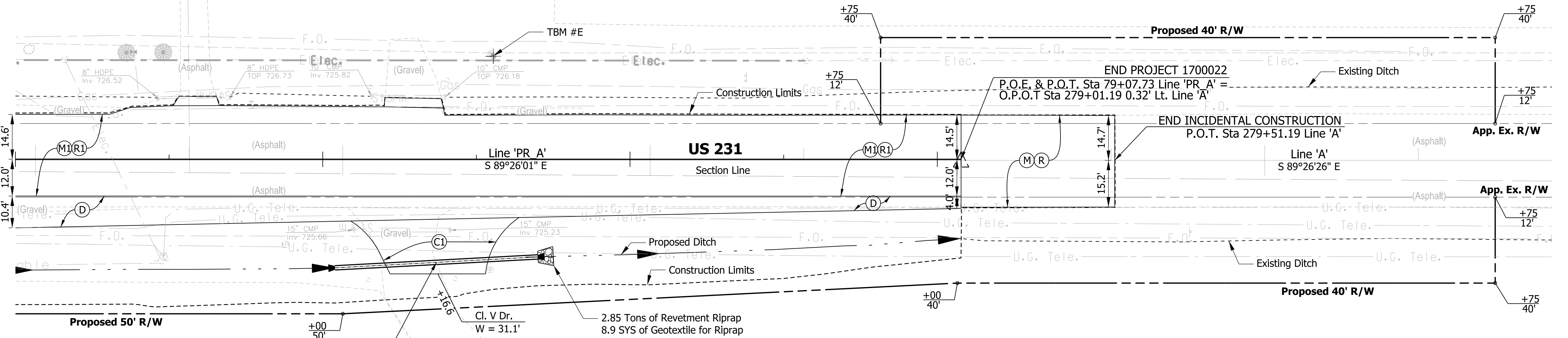
76+00

81+00

Section 2, T-34-N, R-9-W  
Center Township  
Lake County

Donald B. Geraldine M.  
Barman

Donald B. Geraldine M.  
Barman



STR #603 +31, 33.6' Rt 'PR\_A'  
67' of 15" Pipe w/  
2 End Sections Req'd

Section 11, T-34-N, R-9-W  
Center Township  
Lake County

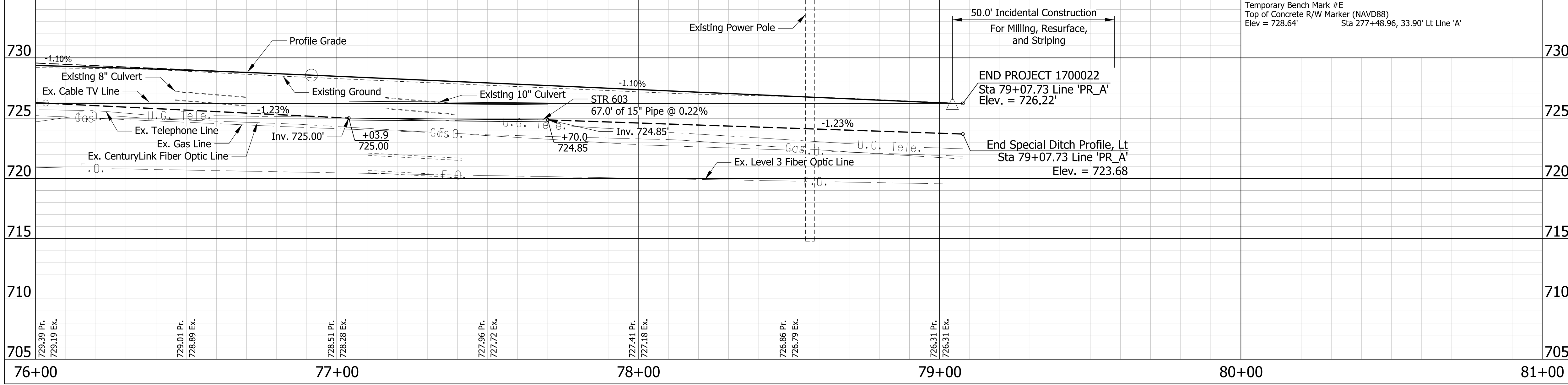
Donald B. Barman Trust

- LEGEND**
- (C) HMA for Approaches, Type B, Consisting of: 165 lb/syd HMA Surface, on 275 lb/syd HMA Intermediate, on 6 in. Compacted Aggregate No. 53, on Subgrade Treatment Type II
  - (Cl) 6 in. Compacted Aggregate No. 53
  - (M) Asphalt Milling, Transition, 2.0 in. Maximum
  - (M1) Milling, Profile
  - (R) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm
  - (R1) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate 19.0 mm
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  - (14) Curb, Integral, Concrete
  - (15) Curb and Gutter, B, Concrete, Modified (Inverted)
  - (18) Curb and Gutter, Turn Out Concrete
  - (26) Sodding on 4" of Topsoil
  - (28) Turf Reinforcement Mat

- HMA ALTERNATE**
- (A) 8.0 in. PCCP (Colored) (17 ft maximum joint spacing, 1 in. diameter dowel bars), on 10 in. Compacted Aggregate No. 53 Subgrade Treatment, Type IBC
  - (A1) 6 in. PCCP (Colored), on 12 in. Dense Graded Subbase, on Subgrade Treatment Type IBC
  - (D) 220 lb/syd QC/QA HMA, 3, 76, Surface, 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate, 19.0 mm, on 1045 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm (3 lifts), on Subgrade Treatment, Type IBC

- PCCP ALTERNATE**
- (A) 8.0 in. PCCP (Colored) (17 ft maximum joint spacing, 1 in. diameter dowel bars), on 12 in. Compacted Aggregate No. 53 Subgrade Treatment, Type IBC
  - (A1) 6 in. PCCP (Colored), on 14 in. Dense Graded Subbase, on Subgrade Treatment Type IBC
  - (D) QC/QA PCCP, 10 in. (17 ft joint spacing for roundabout and 16 ft joint spacing for approaches, 1.5 in. bars at 12 in. spacing), on 6 in. Dense Graded Subbase, on Subgrade Treatment, Type IBC

ALL TOPOGRAPHY ON THIS SHEET DESCRIBED FROM LINE 'PR\_A' UNLESS OTHERWISE NOTED. ALL R/W ON THIS SHEET DESCRIBED FROM LINE 'A' UNLESS OTHERWISE NOTED.



Note to Reviewer:  
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Requested from the Surveyor

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**PRELIMINARY**  
NOT FOR CONSTRUCTION  
DATE: 11/18/2021

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

INDIANA  
DEPARTMENT OF TRANSPORTATION

US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
PLAN AND PROFILE LINE 'PR\_A'

HORIZONTAL SCALE	FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
1" = 5'	1700022
SURVEY BOOK	SHEETS
	16 of 46
CONTRACT	PROJECT
R-42251	1700022



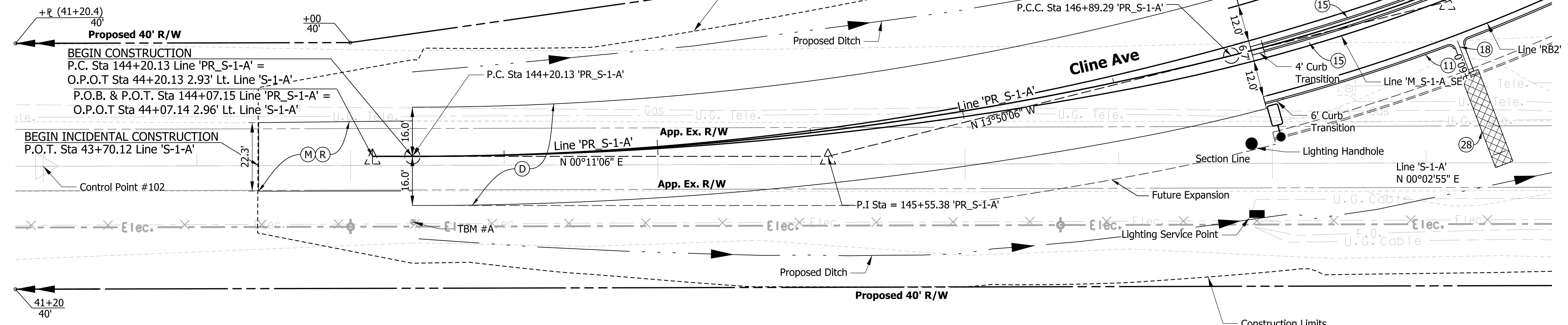
143+00

Section 10, T-34-N, R-9-W  
Hanover Township  
Lake County

Lake County Trust #5272

CURVE DATA  
P.I. Sta = 147+61.76 Line 'PR\_S-1-A'  
Delta = 13°41'42.49"(Lt)  
D = 9°29'38.10"  
R = 603.50'  
T = 72.47'  
L = 144.25'  
E = 4.34'  
SE = NC

CURVE DATA  
P.I. Sta = 145+55.38 Line 'PR\_S-1-A'  
Delta = 14°01'11.91"(Lt)  
D = 5°12'31.35"  
R = 1100.00'  
T = 135.26'  
L = 269.16'  
E = 8.28'  
SE = NC



Section 11, T-34-N, R-9-W  
Center Township  
Lake County

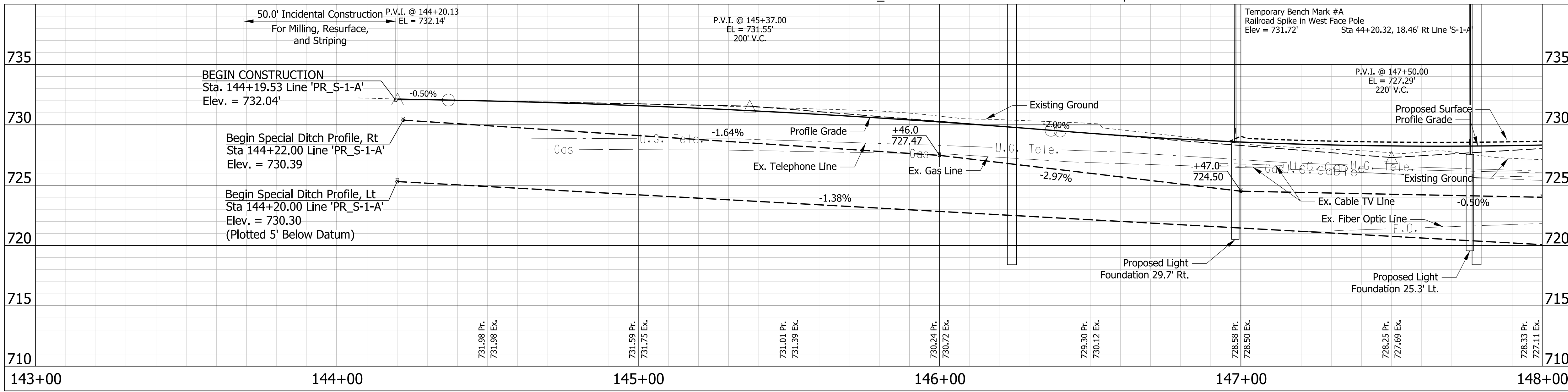
Donald B. Barman Trust

- LEGEND**
- (C) HMA for Approaches, Type B, Consisting of:  
165 lb/syd HMA Surface, on  
275 lb/syd HMA Intermediate, on  
6 in. Compacted Aggregate No. 53, on  
Subgrade Treatment Type II
  - (C1) 6 in. Compacted Aggregate No. 53
  - (M) Asphalt Milling, Transition, 2.0 in. Maximum
  - (M1) Milling, Profile
  - (R) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm
  - (R1) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm, on,  
275 lb/syd QC/QA HMA, 3, 76, Intermediate 19.0 mm
  - (11) Curb and Gutter, Concrete
  - (12) Curb and Gutter, B, Concrete
  - (13) Curb and Gutter, B, Concrete, Modified (Inverted) (3")
  - (14) Curb, Integral, Concrete
  - (15) Curb and Gutter, B, Concrete, Modified (Inverted)
  - (18) Curb and Gutter, Turn Out Concrete
  - (26) Sodding on 4" of Topsoil
  - (28) Turf Reinforcement Mat

- HMA ALTERNATE**
- (A) 8.0 in. PCCP (Colored)  
(17 ft maximum joint spacing,  
1 in. diameter dowel bars), on  
10 in. Compacted Aggregate No. 53  
Subgrade Treatment, Type IBC
  - (A1) 6 in. PCCP (Colored), on  
12 in. Dense Graded Subbase, on  
Subgrade Treatment Type IBC
  - (D) 220 lb/syd QC/QA HMA, 3, 76, Surface, 9.5 mm, on  
275 lb/syd QC/QA HMA, 3, 76, Intermediate, 19.0 mm, on  
1045 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm (3 lifts), on  
Subgrade Treatment, Type IBC

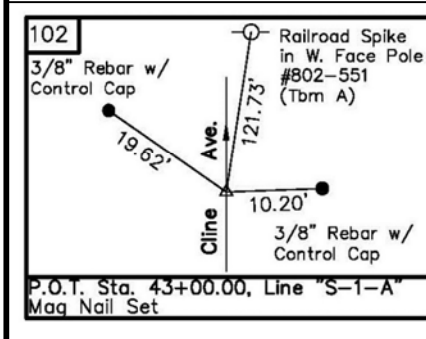
- PCCP ALTERNATE**
- (A) 8.0 in. PCCP (Colored)  
(17 ft maximum joint spacing,  
1 in. diameter dowel bars), on  
12 in. Compacted Aggregate No. 53  
Subgrade Treatment, Type IBC
  - (A1) 6 in. PCCP (Colored), on  
14 in. Dense Graded Subbase, on  
Subgrade Treatment Type IBC
  - (D) QC/QA PCCP, 10 in.  
(17 ft joint spacing for roundabout and  
16 ft joint spacing for approaches,  
1.5 in. bars at 12 in. spacing), on  
6 in. Dense Graded Subbase, on  
Subgrade Treatment, Type IBC

ALL TOPOGRAPHY ON THIS SHEET DESCRIBED FROM LINE 'PR\_S-1-A' UNLESS OTHERWISE NOTED. ALL R/W ON THIS SHEET DESCRIBED FROM LINE 'S-1-A' UNLESS OTHERWISE NOTED.



Note to Reviewer:  
Topo Notes have been  
Requested from the Surveyor

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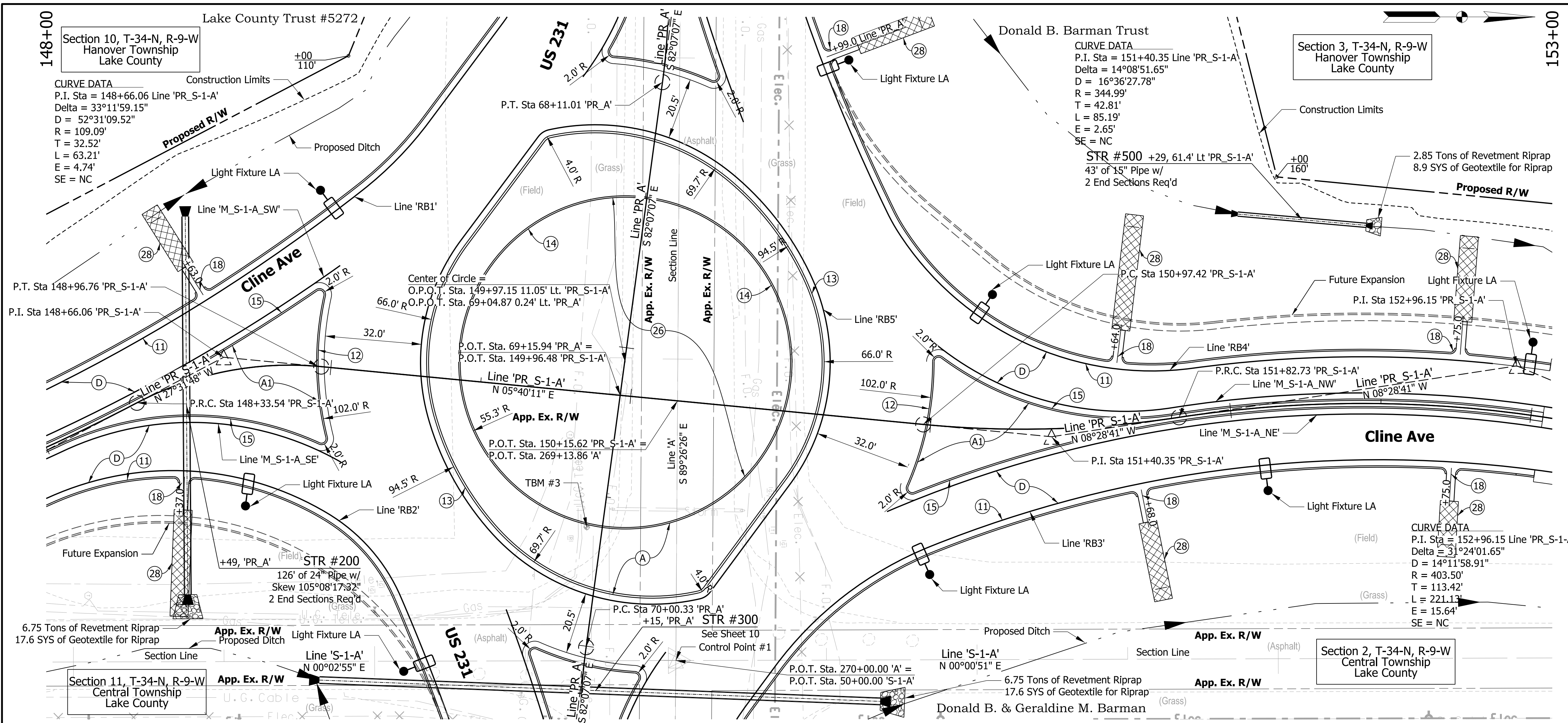
**PRELIMINARY**  
NOT FOR CONSTRUCTION  
DATE: 11/18/2021

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**

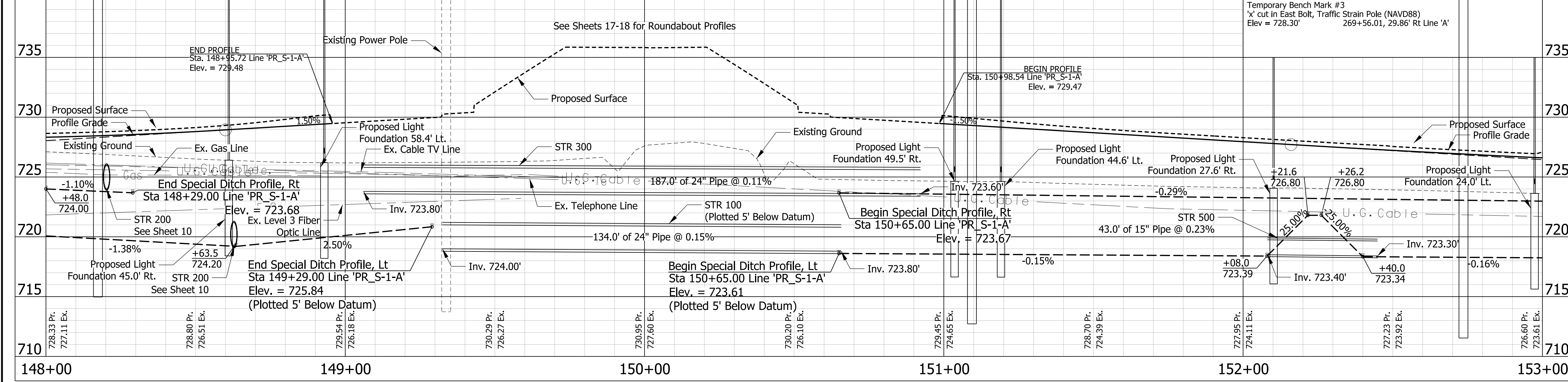
US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
PLAN AND PROFILE LINE 'PR\_S-1-A'

HORIZONTAL SCALE	FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
1" = 5'	1700022
SURVEY BOOK	SHEETS
	17 of 46
CONTRACT	PROJECT
R-42251	1700022

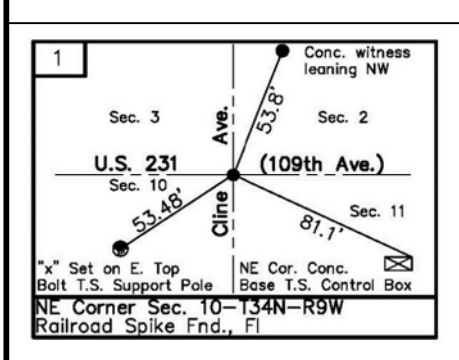


- LEGEND**
- (C) HMA for Approaches, Type B, Consisting of:
    - 165 lb/syd HMA Surface, on
    - 275 lb/syd HMA Intermediate, on
    - 6 in. Compacted Aggregate No. 53, on
    - Subgrade Treatment Type II
  - (C1) 6 in. Compacted Aggregate No. 53
  - (M) Asphalt Milling, Transition, 2.0 in. Maximum
  - (M1) Milling, Profile
  - (R) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm
  - (R1) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm, on, 275 lb/syd QC/QA HMA, 3, 76, Intermediate 19.0 mm
  - (11) Curb and Gutter, Concrete
  - (12) Curb and Gutter, B, Concrete
  - (13) Curb and Gutter, B, Concrete, Modified (Inverted) (3")
  - (14) Curb, Integral, Concrete
  - (15) Curb and Gutter, B, Concrete, Modified (Inverted)
  - (18) Curb and Gutter, Turn Out Concrete
  - (26) Sodding on 4" of Topsoil
  - (28) Turf Reinforcement Mat
- HMA ALTERNATE**
- (A) 8.0 in. PCCP (Colored)
    - (17 ft maximum joint spacing, 1 in. diameter dowel bars), on
    - 10 in. Compacted Aggregate No. 53
    - Subgrade Treatment, Type IBC
  - (A1) 6 in. PCCP (Colored), on 12 in. Dense Graded Subbase, on Subgrade Treatment Type IBC
  - (D) 220 lb/syd QC/QA HMA, 3, 76, Surface, 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate, 19.0 mm, on 1045 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm (3 lifts), on Subgrade Treatment, Type IBC
- PCCP ALTERNATE**
- (A) 8.0 in. PCCP (Colored)
    - (17 ft maximum joint spacing, 1 in. diameter dowel bars), on
    - 12 in. Compacted Aggregate No. 53
    - Subgrade Treatment, Type IBC
  - (A1) 6 in. PCCP (Colored), on 14 in. Dense Graded Subbase, on Subgrade Treatment Type IBC
  - (D) QC/QA PCCP, 10 in.
    - (17 ft joint spacing for roundabout and 16 ft joint spacing for approaches, 1.5 in. bars at 12 in. spacing), on
    - 6 in. Dense Graded Subbase, on
    - Subgrade Treatment, Type IBC

ALL TOPOGRAPHY ON THIS SHEET DESCRIBED FROM LINE 'PR\_S-1-A' UNLESS OTHERWISE NOTED. ALL R/W ON THIS SHEET DESCRIBED FROM LINE 'S-1-A' UNLESS OTHERWISE NOTED.



Note to Reviewer:  
Topo Notes have been Requested from the Surveyor



**PRELIMINARY**  
NOT FOR CONSTRUCTION  
DATE: 11/18/2021

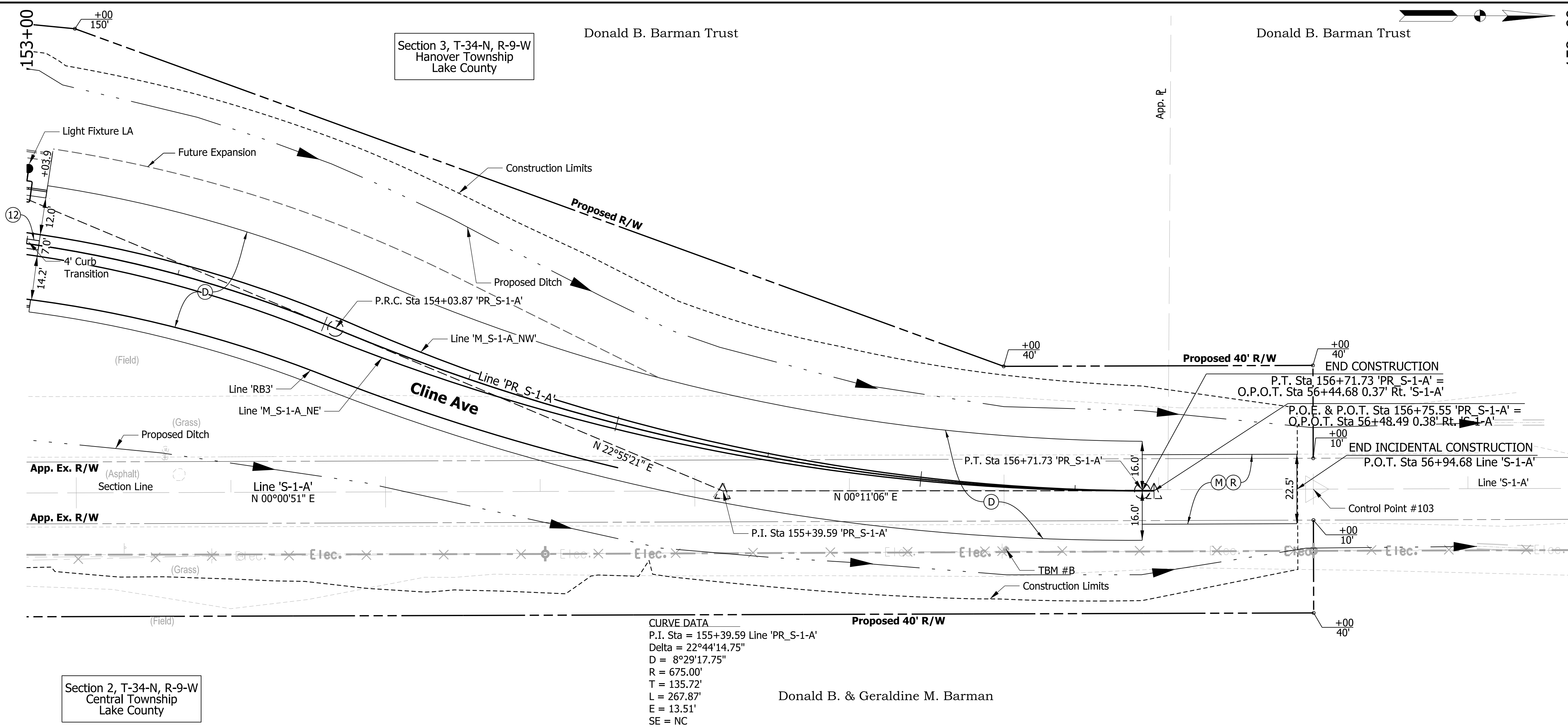
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

INDIANA  
DEPARTMENT OF TRANSPORTATION

US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
PLAN AND PROFILE LINE 'PR\_S-1-A'

HORIZONTAL SCALE	FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
1" = 5'	1700022
SURVEY BOOK	SHEETS
	18 of 46
CONTRACT	PROJECT
R-42251	1700022

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**LEGEND**

- (C) HMA for Approaches, Type B, Consisting of:  
165 lb/syd HMA Surface, on  
275 lb/syd HMA Intermediate, on  
6 in. Compacted Aggregate No. 53, on  
Subgrade Treatment Type II
- (CI) 6 in. Compacted Aggregate No. 53
- (M) Asphalt Milling, Transition, 2.0 in. Maximum
- (M1) Milling, Profile
- (R) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm
- (R1) 220 lb/syd QC/QA HMA, 3, 76, Surface 9.5 mm, on,  
275 lb/syd QC/QA HMA, 3, 76, Intermediate 19.0 mm
- (11) Curb and Gutter, Concrete
- (12) Curb and Gutter, B, Concrete
- (13) Curb and Gutter, B, Concrete, Modified (Inverted) (3")
- (14) Curb, Integral, Concrete
- (15) Curb and Gutter, B, Concrete, Modified (Inverted)
- (18) Curb and Gutter, Turn Out Concrete
- (26) Sodding on 4" of Topsoil
- (28) Turf Reinforcement Mat

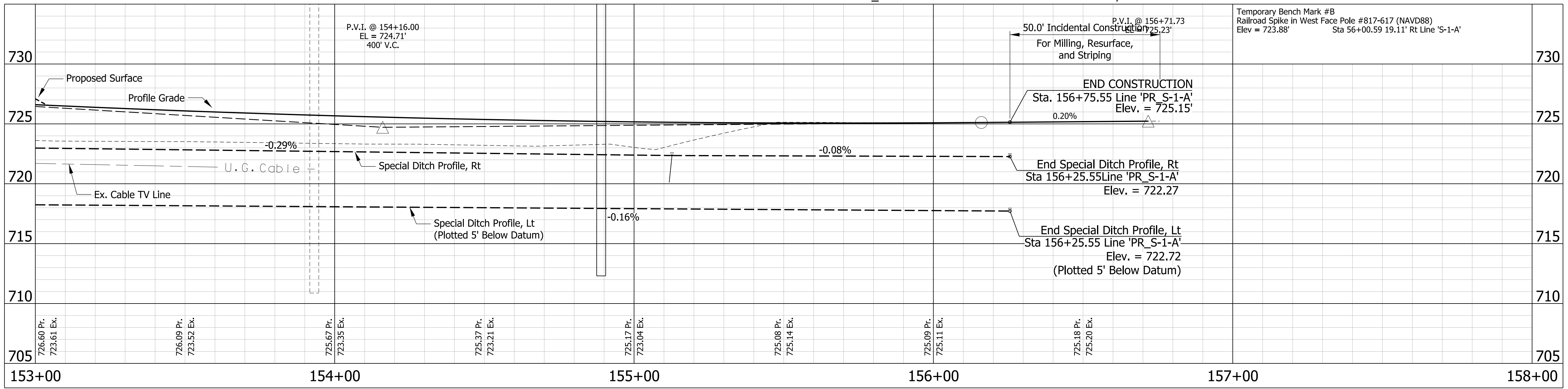
**HMA ALTERNATE**

- (A) 8.0 in. PCCP (Colored)  
(17 ft maximum joint spacing,  
1 in. diameter dowel bars), on  
10 in. Compacted Aggregate No. 53  
Subgrade Treatment, Type IBC
- (A1) 6 in. PCCP (Colored), on  
12 in. Dense Graded Subbase, on  
Subgrade Treatment Type IBC
- (D) 220 lb/syd QC/QA HMA, 3, 76, Surface, 9.5 mm, on  
275 lb/syd QC/QA HMA, 3, 76, Intermediate, 19.0 mm, on  
1045 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm (3 lifts), on  
Subgrade Treatment, Type IBC

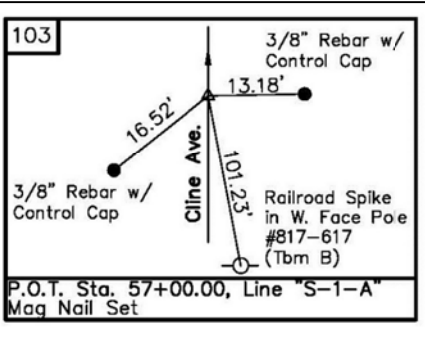
**PCCP ALTERNATE**

- (A) 8.0 in. PCCP (Colored)  
(17 ft maximum joint spacing,  
1 in. diameter dowel bars), on  
12 in. Compacted Aggregate No. 53  
Subgrade Treatment, Type IBC
- (A1) 6 in. PCCP (Colored), on  
14 in. Dense Graded Subbase, on  
Subgrade Treatment Type IBC
- (D) QC/QA PCCP, 10 in.  
(17 ft joint spacing for roundabout and  
16 ft joint spacing for approaches,  
1.5 in. bars at 12 in. spacing), on  
6 in. Dense Graded Subbase, on  
Subgrade Treatment, Type IBC

ALL TOPOGRAPHY ON THIS SHEET DESCRIBED FROM LINE 'PR\_S-1-A' UNLESS OTHERWISE NOTED. ALL R/W ON THIS SHEET DESCRIBED FROM LINE 'S-1-A' UNLESS OTHERWISE NOTED.



**Note to Reviewer:**  
Topo Notes have been  
Requested from the Surveyor



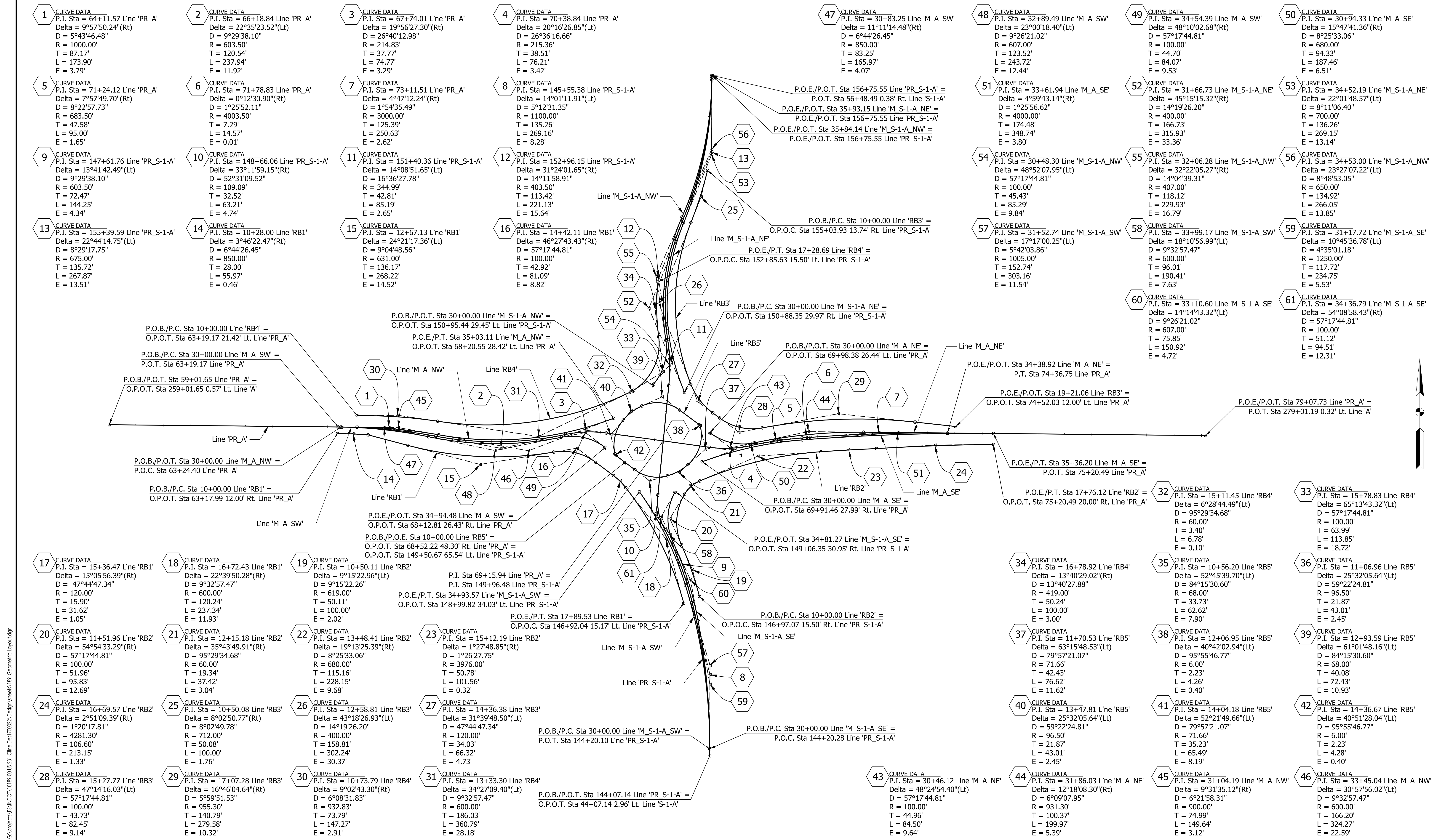
**PRELIMINARY**  
NOT FOR CONSTRUCTION  
DATE: 11/18/2021

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**

US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
PLAN AND PROFILE LINE 'PR\_S-1-A'

HORIZONTAL SCALE 1" = 20'	FILE
VERTICAL SCALE 1" = 5'	DESIGNATION 1700022
SURVEY BOOK	SHEETS
CONTRACT R-42251	19 of 46 PROJECT 1700022



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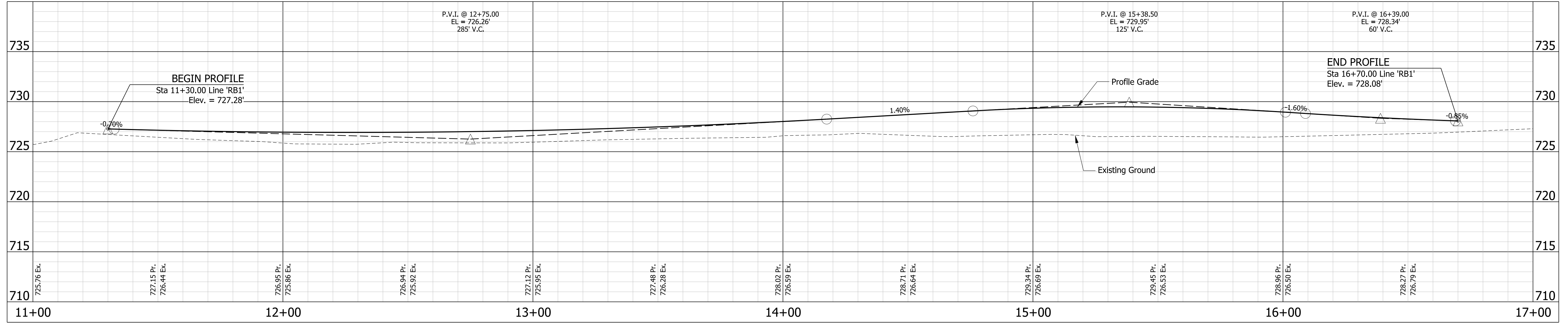
**PRELIMINARY**  
NOT FOR CONSTRUCTION  
DATE: 11/18/2021

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

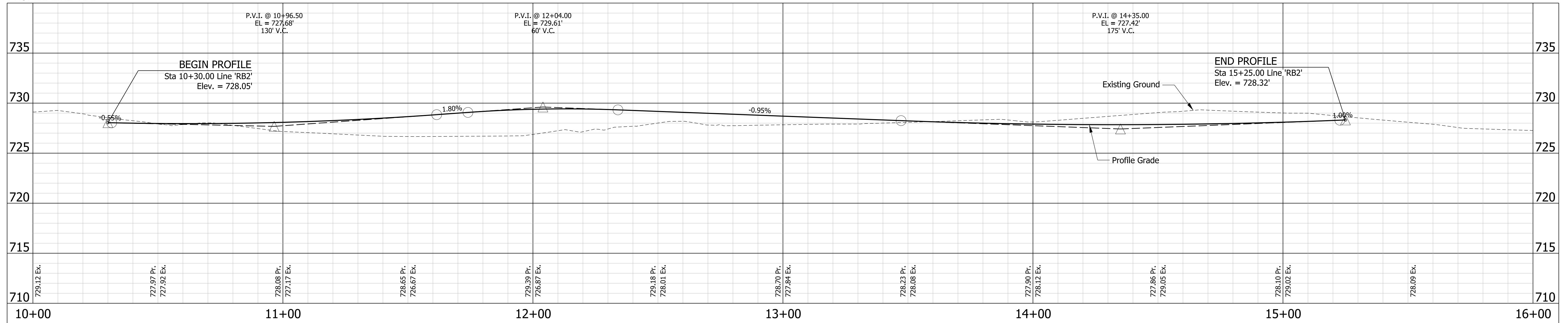
**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**  
 US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
 GEOMETRIC LAYOUT

HORIZONTAL SCALE	FILE
1" = 80'	
VERTICAL SCALE	DESIGNATION
N/A	1700022
SURVEY BOOK	SHEETS
	20 of 46
CONTRACT	PROJECT
R-42251	1700022

PROFILE LINE 'RB1'



PROFILE LINE 'RB2'



PRELIMINARY  
NOT FOR CONSTRUCTION  
DATE: 1/18/2021

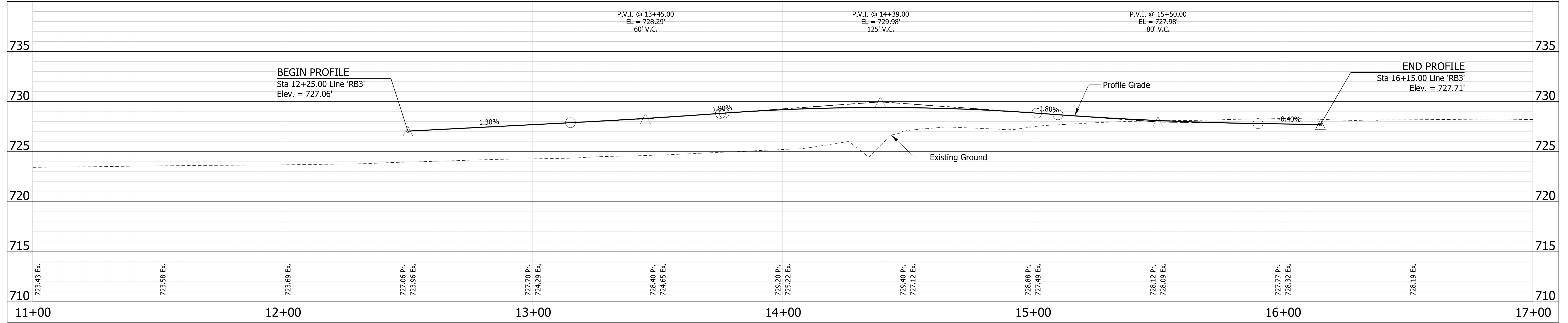
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

INDIANA DEPARTMENT OF TRANSPORTATION

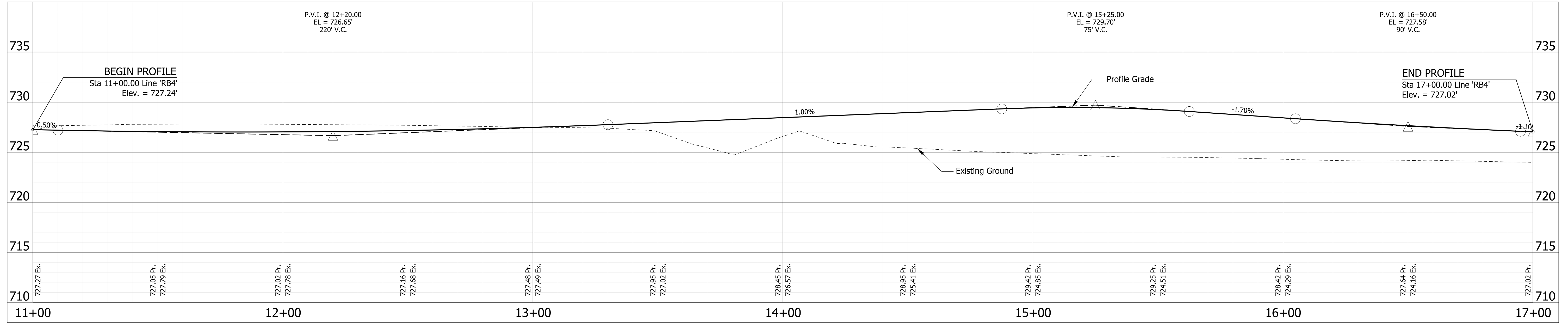
US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
PROFILES LINE 'RB1' AND LINE 'RB2'

HORIZONTAL SCALE	FILE	
1" = 20'		
VERTICAL SCALE	DESIGNATION	
1" = 5'	1700022	
SURVEY BOOK	SHEETS	
	21 of	46
CONTRACT	PROJECT	
R-42251	1700022	

PROFILE LINE 'RB3'



PROFILE LINE 'RB4'



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**PRELIMINARY**  
NOT FOR CONSTRUCTION  
DATE: 11/18/2021

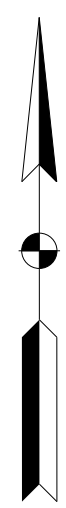
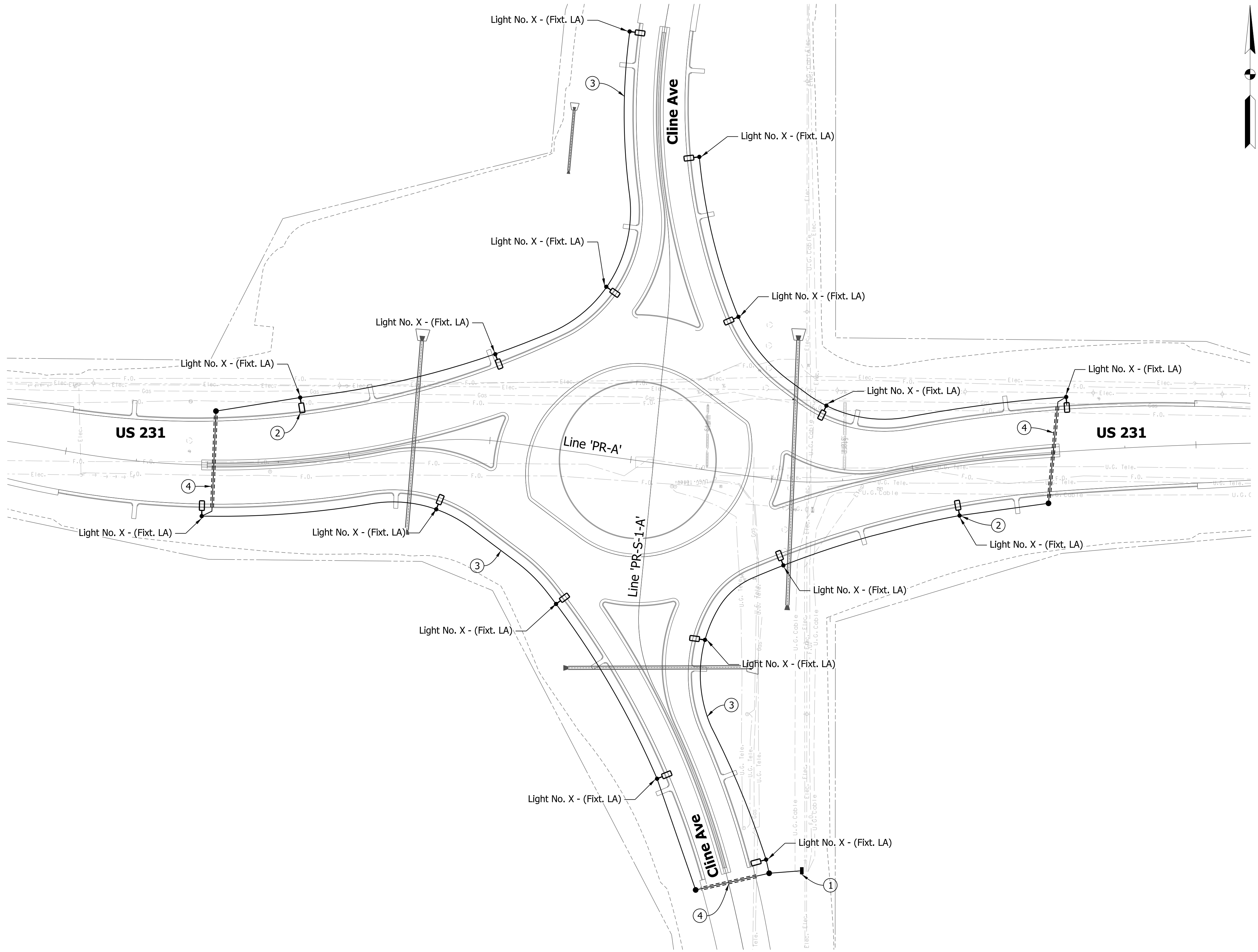
RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: PFR _____	DRAWN: PFR _____	
CHECKED: CLW _____	CHECKED: LRD _____	

INDIANA  
DEPARTMENT OF TRANSPORTATION

US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
PROFILES LINE 'RB3' AND LINE 'RB4'

HORIZONTAL SCALE	FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
1" = 5'	1700022
SURVEY BOOK	SHEETS
	22 of 46
CONTRACT	PROJECT
R-42251	1700022

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**KEYNOTES**

- ① Electric Service Point Type I, 120/240V. Mount on Existing Utility Pole. Refer to INDOT Light Service Point Standard Drawings E807-LTSP.
- ② Roadway Light Fixture (Typ).
- ③ Cable Duct Wire #4 Cu in Plastic Duct 4-1/C (Typ).
- ④ Provide 3" Galvanized Rigid Conduit Sleeve Under Road for Cable Duct.

**LEGEND**

- ◻ LED Luminaire and Pole
- Service Point Type I
- Cable Duct Wire #4 Cu in Plastic Duct 4-1/C
- ≡≡≡ 3" Galvanized Rigid Conduit
- Handhole

**LUMINAIRE STATISTICS**

AVERAGE	-	FC
MINIMUM	-	FC
AVG/MIN	-	-

Note to Reviewer:  
 - Preliminary Lighting Design provided.  
 - Final Lighting Design will be provided with the next submission.



**PRELIMINARY**  
 NOT FOR CONSTRUCTION  
 DATE: 1/18/2021

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

**INDIANA**  
 DEPARTMENT OF TRANSPORTATION

US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
 LIGHTING PLAN

HORIZONTAL SCALE	FILE
1" = 40'	
VERTICAL SCALE	DESIGNATION
N/A	1700022
SURVEY BOOK	SHEETS
	23 of 46
CONTRACT	PROJECT
R-42251	1700022

LUMINAIRE AND POLE INFORMATION SCHEDULE																
LUMINAIRE NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
CIRCUIT NO.	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
CIRCUIT CONNECTION (R=RED, B=BLACK)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CONNECTION TYPE (1, 2, 3)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
STATION	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OFFSET SIDE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FOUNDATION SETBACK FROM FACE OF CURB	6'	6'	6'	6'	6'	6'	6'	6'	6'	6'	6'	6'	6'	6'	6'	6'

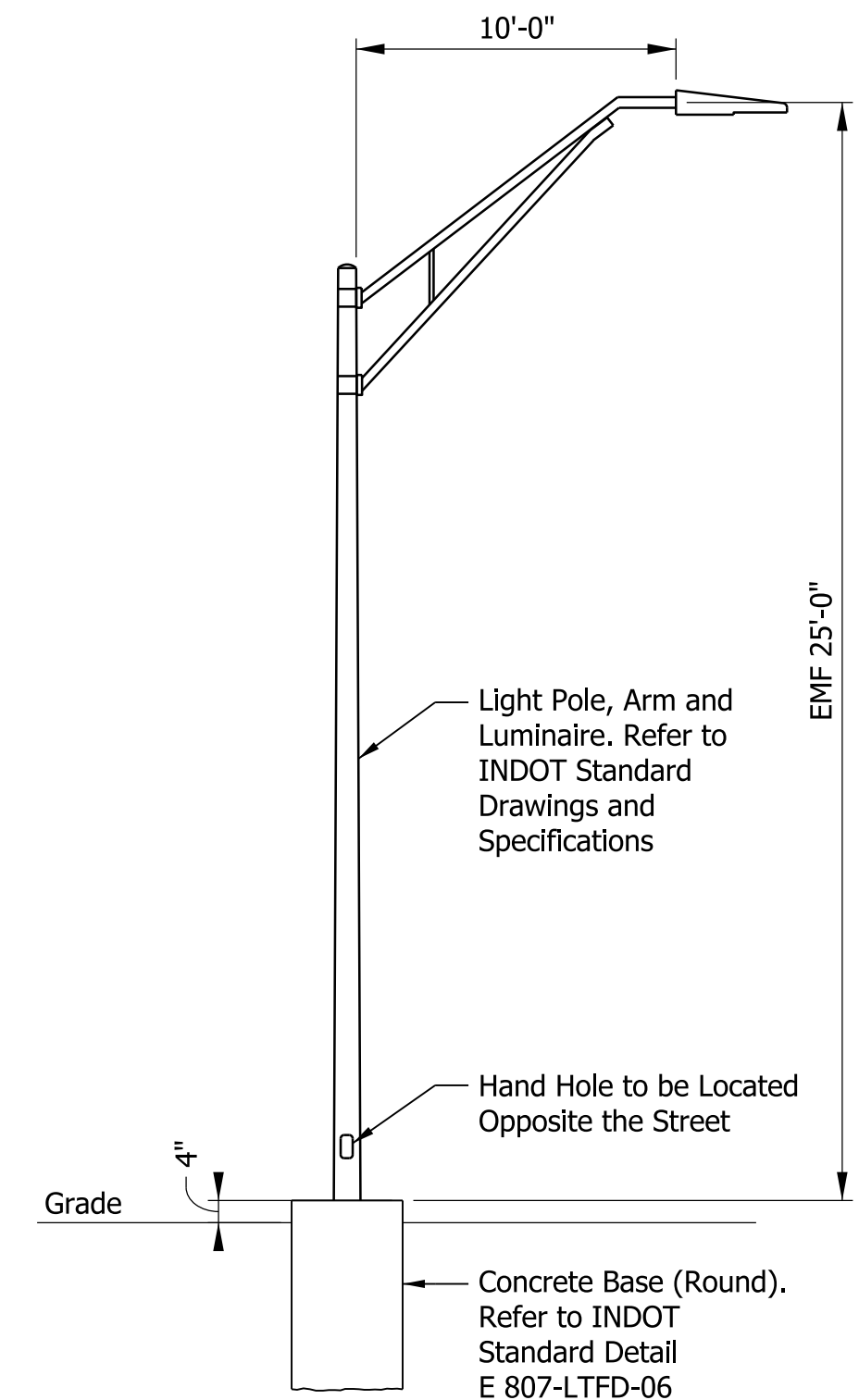
\* Coordinate with Gas Line

SERVICE AMPERAGE TABLE							
SERVICE POINT	SERVICE TYPE	VOLTAGE	MAIN BREAKER	CIRCUIT	BRANCH CIRCUIT COLOR	BRANCH CIRCUIT DESIGN LOAD	BRANCH CIRCUIT BREAKER
A	TYPE I	120/240V	100 AMP	A-1	BLACK	- A	30A
					RED	- A	30A

LUMINAIRE DESIGN DATA TABLE	
LUMINAIRE STYLE	INDOT STANDARD
LAMP TYPE	-
DESIGN SAMPLE PHOTOMETRIC CURVE	-
NOMINAL MOUNTING HEIGHT (MH)	25
LUMINAIRE CLASSIFICATION (IES)	-
VOLTAGE	120/240 V
LUMINAIRE LOAD OPERATING AMPS (VARIES DEPENDING ON MANUFACTURER)	- AMPS
INITIAL LAMP LUMENS (LL)	- K
DESIGN SOFTWARE	VISUAL
AVERAGE MAINTAINED ILLUMINATION (Eh)	- : 1

Note to Reviewer:

- Preliminary Lighting Design provided.
- Final Lighting Design will be provided with the next submission.



**PRELIMINARY**  
NOT FOR CONSTRUCTION  
DATE: 11/18/2021

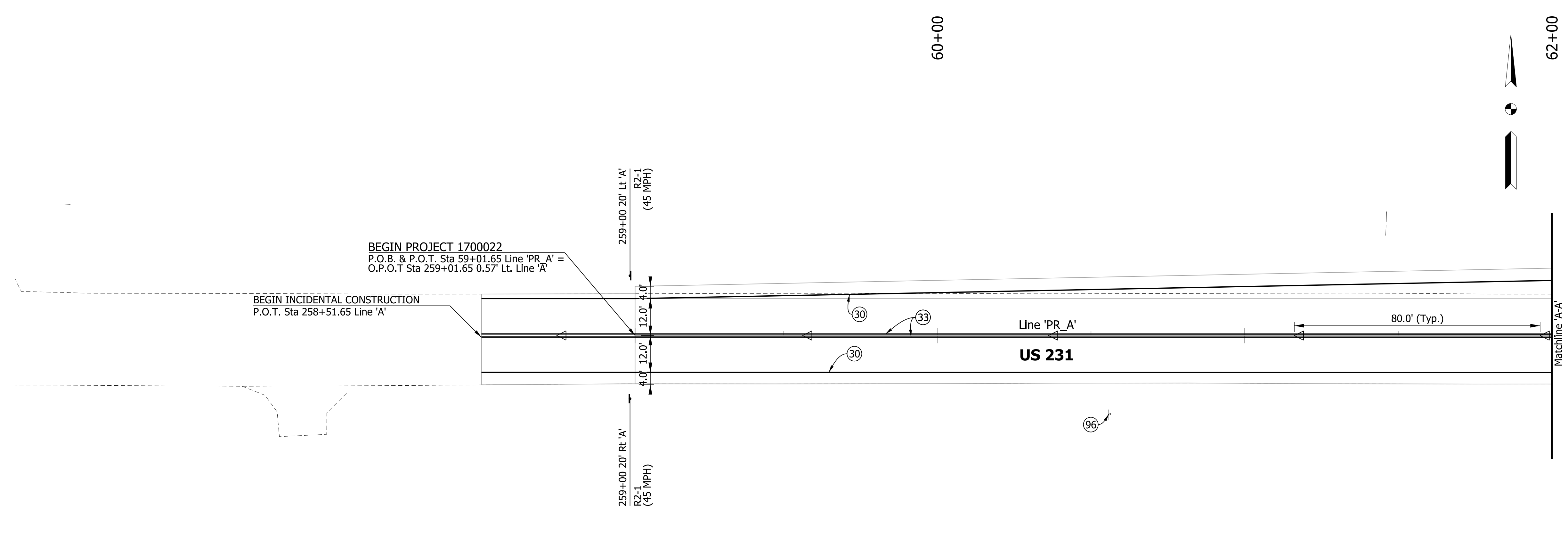
RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____ DATE _____
DESIGNED: PFR _____	DRAWN: PFR _____
CHECKED: CLW _____	CHECKED: LRD _____

INDIANA  
DEPARTMENT OF TRANSPORTATION  
US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
LIGHTING DETAILS

HORIZONTAL SCALE	FILE		
N/A			
VERTICAL SCALE	DESIGNATION		
N/A	1700022		
SURVEY BOOK	SHEETS		
	24	of	46
CONTRACT	PROJECT		
R-42251	1700022		



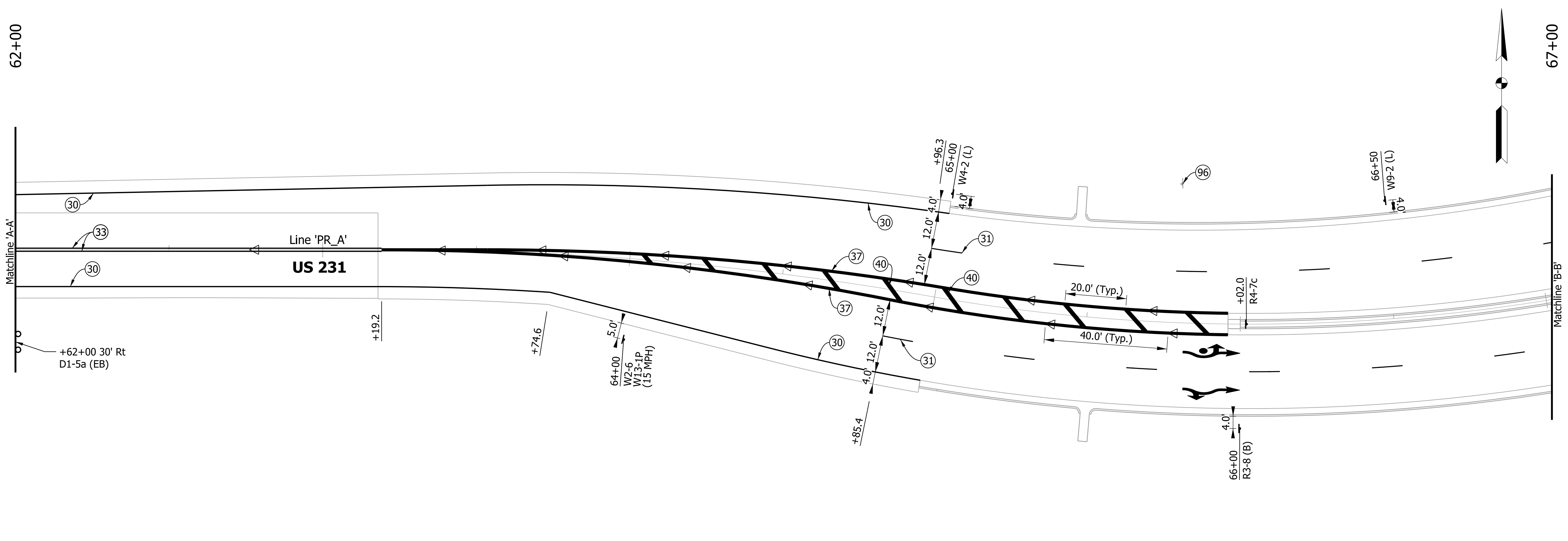
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**LEGEND**

③①	Line, Multi-Component, Solid, White, 4 in.
③②	Line, Multi-Component, Broken, White, 4 in.
③③	Line, Multi-Component, Dotted, White, 4 in.
③④	Line, Multi-Component, Solid, Yellow, 4 in.
③⑤	Line, Multi-Component, Dotted, White, 8 in.
③⑥	Line, Multi-Component, Solid, Yellow, 8 in.
④⑦	Transverse Marking, Thermoplastic, Crosshatch Line, Yellow, 12 in.
④⑧	Pavement Message Marking, Thermoplastic, Lane Indication Arrow
④⑨	Transverse Marking, Thermoplastic, Yield Line, White, 24 in.
④⑩	Sign, Remove
④⑪	Two-Way Yellow R.P.M.

Sign	Description	Size
D1-1d	Destination Sign (Cline Ave.)	*
D1-5a	Directional Panel Sign	*
M1-4	U.S. Route Sign (231)	30 x 24
M3-1	Cardinal Direction (North)	24 x 12
M3-3	Cardinal Direction (South)	24 x 12
M6-2	Directional Arrow (Diagonal)	21 x 15
R1-2	Yield	36 x 36 x 36
R2-1	Speed Limit	24 x 30
R3-8 (B)	Intersection Lane Control	30 x 30
R4-7	Keep Right	24 x 30
R4-7c	Narrow Keep Right	18 x 30
R6-1	One Way (Right)	36 x 12
R6-4a	Roundabout Directional (3 Chevrons)	48 x 24
W2-6	Roundabout Warning	30 x 30
W4-2	Lane Ends	36 x 36
W9-2	Lane Ends Merge Left	36 x 36
W13-1P	Advisory Speed Plaque	18 x 18



**PRELIMINARY**  
NOT FOR CONSTRUCTION  
DATE: 1/18/2021

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: PFR _____	DRAWN: PFR _____	
CHECKED: CLW _____	CHECKED: LRD _____	

**INDIANA DEPARTMENT OF TRANSPORTATION**

US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
PAVEMENT MARKINGS AND SIGNAGE LINE 'PR\_A'

HORIZONTAL SCALE	FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	1700022
SURVEY BOOK	SHEETS
	25 of 46
CONTRACT	PROJECT
R-42251	1700022

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67+00

Matchline 'B-B'

US 231

Matchline 'F-F'

152+00 'PR\_S-1-A'

Cline Ave

71+00

Matchline 'C-C'

US 231

Matchline 'E-E'

148+50 'PR\_S-1-A'



**PRELIMINARY**  
NOT FOR CONSTRUCTION  
DATE: 1/18/2021

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: PFR	DRAWN: PFR	
CHECKED: CLW	CHECKED: LRD	

INDIANA  
DEPARTMENT OF TRANSPORTATION

US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
PAVEMENT MARKINGS AND SIGNAGE LINE 'PR\_A'

LEGEND

- ③① Line, Multi-Component, Solid, White, 4 in.
- ③② Line, Multi-Component, Broken, White, 4 in.
- ③③ Line, Multi-Component, Dotted, White, 4 in.
- ③④ Line, Multi-Component, Solid, Yellow, 8 in.
- ③⑤ Line, Multi-Component, Dotted, White, 8 in.
- ③⑥ Line, Multi-Component, Solid, Yellow, 8 in.
- ④① Transverse Marking, Thermoplastic, Crosshatch Line, Yellow, 12 in.
- ④② Pavement Message Marking, Thermoplastic, Lane Indication Arrow
- ④③ Transverse Marking, Thermoplastic, Yield Line, White, 24 in.
- ⑨⑥ Sign, Remove
- ▽ Two-Way Yellow R.P.M.

Sign	Description	Size
D1-1d	Destination Sign (Cline Ave.)	*
D1-5a	Directional Panel Sign	*
M1-4	U.S. Route Sign (231)	30 x 24
M3-1	Cardinal Direction (North)	24 x 12
M3-3	Cardinal Direction (South)	24 x 12
M6-2	Directional Arrow (Diagonal)	21 x 15
R1-2	Yield	36 x 36 x 36
R2-1	Speed Limit	24 x 30
R3-8 (B)	Intersection Lane Control	30 x 30
R4-7	Keep Right	24 x 30
R4-7c	Narrow Keep Right	18 x 30
R6-1	One Way (Right)	36 x 12
R6-4a	Roundabout Directional (3 Chevrons)	48 x 24
W2-6	Roundabout Warning	30 x 30
W4-2	Lane Ends	36 x 36
W9-2	Lane Ends Merge Left	36 x 36
W13-1P	Advisory Speed Plaque	18 x 18

HORIZONTAL SCALE	FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	1700022
SURVEY BOOK	SHEETS
	26 of 46
CONTRACT	PROJECT
R-42251	1700022

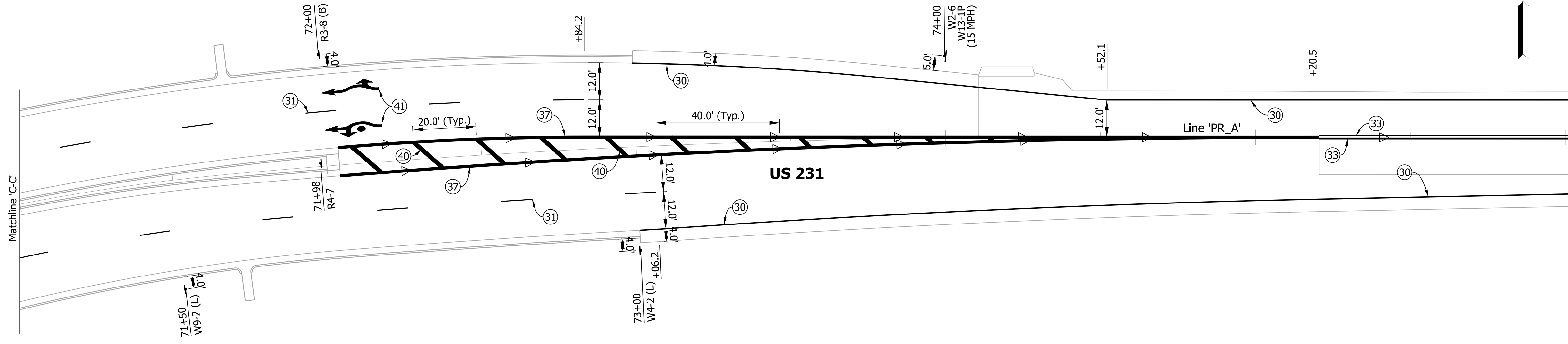
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71+00

Matchline 'C-C'

76+00

Matchline 'D-D'



**LEGEND**

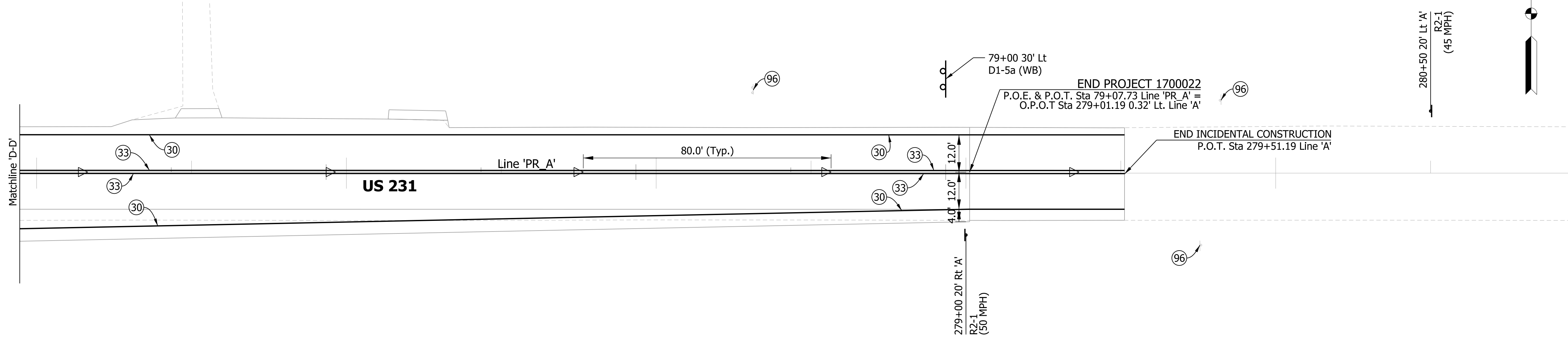
- ③① Line, Multi-Component, Solid, White, 4 in.
- ③② Line, Multi-Component, Broken, White, 4 in.
- ③③ Line, Multi-Component, Dotted, White, 4 in.
- ③④ Line, Multi-Component, Solid, Yellow, 4 in.
- ③⑤ Line, Multi-Component, Dotted, White, 8 in.
- ③⑥ Line, Multi-Component, Solid, Yellow, 8 in.
- ④⑦ Transverse Marking, Thermoplastic, Crosshatch Line, Yellow, 12 in.
- ④⑧ Pavement Message Marking, Thermoplastic, Lane Indication Arrow
- ④⑨ Transverse Marking, Thermoplastic, Yield Line, White, 24 in.
- ④⑩ Sign, Remove
- ④⑪ Two-Way Yellow R.P.M.

Sign	Description	Size
D1-1d	Destination Sign (Cline Ave.)	*
D1-5a	Directional Panel Sign	*
M1-4	U.S. Route Sign (231)	30 x 24
M3-1	Cardinal Direction (North)	24 x 12
M3-3	Cardinal Direction (South)	24 x 12
M6-2	Directional Arrow (Diagonal)	21 x 15
R1-2	Yield	36 x 36 x 36
R2-1	Speed Limit	24 x 30
R3-8 (B)	Intersection Lane Control	30 x 30
R4-7	Keep Right	24 x 30
R4-7c	Narrow Keep Right	18 x 30
R6-1	One Way (Right)	36 x 12
R6-4a	Roundabout Directional (3 Chevrons)	48 x 24
W2-6	Roundabout Warning	30 x 30
W4-2	Lane Ends	36 x 36
W9-2	Lane Ends Merge Left	36 x 36
W13-1P	Advisory Speed Plaque	18 x 18

76+00

Matchline 'D-D'

79+00



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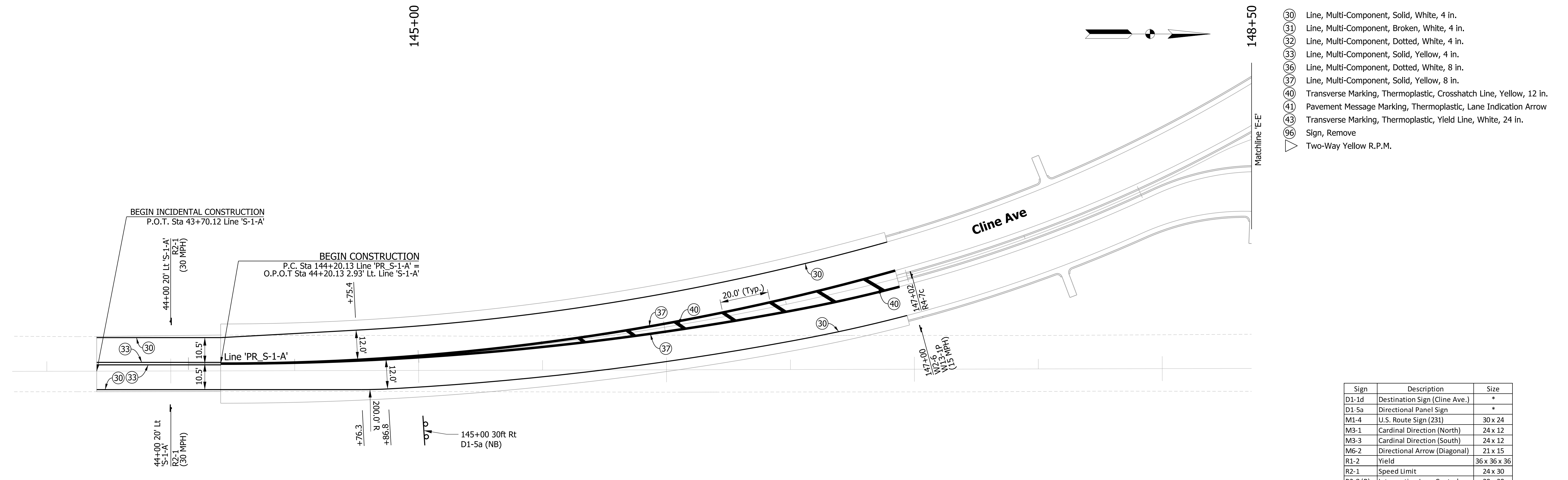
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CHECKED: CLW	CHECKED: LRD	

**INDIANA**  
**DEPARTMENT OF TRANSPORTATION**

US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
PAVEMENT MARKINGS AND SIGNAGE LINE 'PR\_A'

HORIZONTAL SCALE	FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	1700022
SURVEY BOOK	SHEETS
	27 of 46
CONTRACT	PROJECT
R-42251	1700022

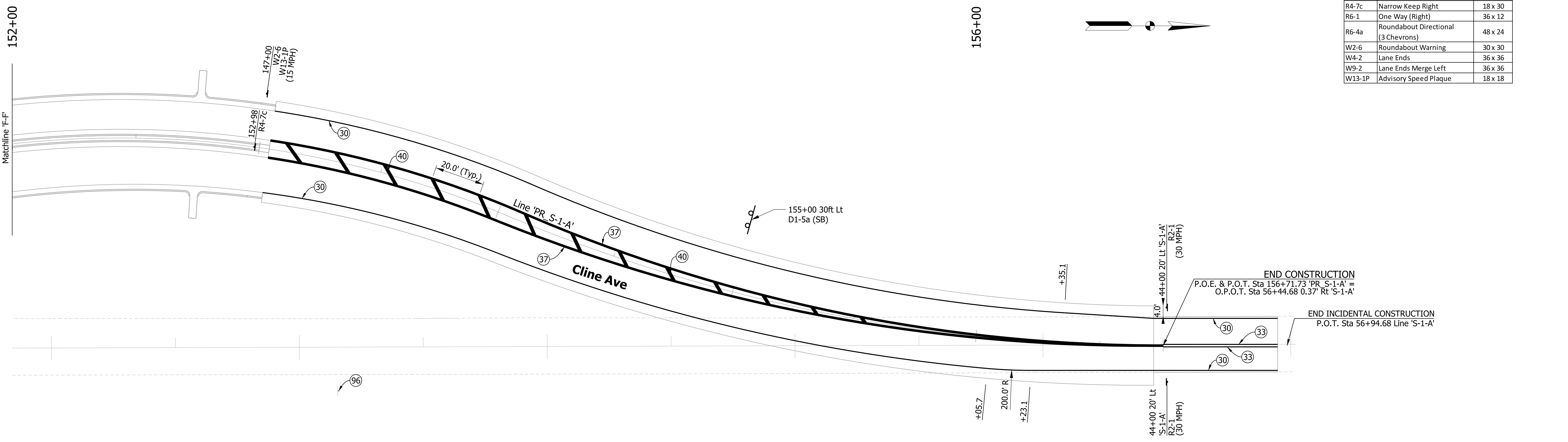
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**LEGEND**

(30)	Line, Multi-Component, Solid, White, 4 in.
(31)	Line, Multi-Component, Broken, White, 4 in.
(32)	Line, Multi-Component, Dotted, White, 4 in.
(33)	Line, Multi-Component, Solid, Yellow, 4 in.
(36)	Line, Multi-Component, Dotted, White, 8 in.
(37)	Line, Multi-Component, Solid, Yellow, 8 in.
(40)	Transverse Marking, Thermoplastic, Crosshatch Line, Yellow, 12 in.
(41)	Pavement Message Marking, Thermoplastic, Lane Indication Arrow
(43)	Transverse Marking, Thermoplastic, Yield Line, White, 24 in.
(96)	Sign, Remove
▽	Two-Way Yellow R.P.M.

Sign	Description	Size
D1-1d	Destination Sign (Cline Ave.)	*
D1-5a	Directional Panel Sign	*
M1-4	U.S. Route Sign (231)	30 x 24
M3-1	Cardinal Direction (North)	24 x 12
M3-3	Cardinal Direction (South)	24 x 12
M6-2	Directional Arrow (Diagonal)	21 x 15
R1-2	Yield	36 x 36 x 36
R2-1	Speed Limit	24 x 30
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R4-7c	Narrow Keep Right	18 x 30
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R6-4a	Roundabout Directional (3 Chevrons)	48 x 24
W2-6	Roundabout Warning	30 x 30
W4-2	Lane Ends	36 x 36
W9-2	Lane Ends Merge Left	36 x 36
W13-1P	Advisory Speed Plaque	18 x 18



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INDIANA  
DEPARTMENT OF TRANSPORTATION  
US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
PAVEMENT MARKINGS AND SIGNAGE LINE 'PR S-1-A'

HORIZONTAL SCALE	FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	1700022
SURVEY BOOK	SHEETS
	28 of 46
CONTRACT	PROJECT
R-42251	1700022

PAVEMENT QUANTITIES AND APPROACH TABLE

LOCATION	DESCRIPTION (APPROACH TYPE OR CLASS)	SKEW	WIDTH	LENGTH	RADIUS FRONT	RADIUS BACK	GRADE		EXCAVATION		CLEAR ZONE AT DRIVE	HMA FOR APPROACHES		ASPHALT MILLING	HMA FOR ROADS			ASPHALT FOR TACK COAT	JOINT ADHESIVE SURFACE	JOINT ADHESIVE INTERMEDIATE	LIQUID ASPHALT SEALANT	PCCP		COMPACTED AGGREGATE NO. 53	SUBGRADE TREATMENT TYPE II	SUBGRADE TREATMENT TYPE IC	REMARKS		
							1	2	CUT	FILL		LBS PER SYD	DEPTH		LBS PER SYD	220	330					550	DEPTH 6"					DEPTH 9"	DEPTH 6"
							%	%	CYS	CYS																			
							0°0'0"	LFT	LFT	LFT		LFT																	
<b>Line 'PR_A'</b>																													
258+51.65 'A' to 59+01.65																													
59+01.65 to 65+00.00																													
65+00.00 to 73+00.00																													
73+00.00 to 79+07.73																													
79+07.73 to 279+51.19 'A'																													
<b>Line 'PR_S-1-A'</b>																													
43+57.13 'S-1-A' to 144+07.15																													
144+07.15 to 146+95.90																													
146+95.90 to 149+04.00																													
150+90.00 to 153+04.00																													
153+04.00 to 156+75.55																													
156+75.55 to 56+98.49 'S-1-A'																													
<b>Drives</b>																													
74+20.2 'PR_A' LT Class II 12.0 28.5 25.0 15.0 46.2 46.2																													
76+58.4 'PR_A' LT Class II 12.0 31.7 25.0 15.0 51.7 51.7																													
77+30.0 'PR_A' LT Class V 24.0 33.7 25.0 25.0																													
77+33.0 'PR_A' RT Class V 79°50'33" 27.0 31.8 25.0 25.0																													
<b>CONTRACT TOTALS (SYS OR LFT)</b>																													
<b>CONTRACT TOTALS (CYS OR TONS)</b>																													

PAVEMENT MARKINGS SUMMARY OF QUANTITIES

LOCATION	MULTI-COMPONENT						GROOVING FOR PAVEMENT MARKINGS	TRANSVERSE MARKING THERMOPLASTIC YIELD LINE		TRANSVERSE MARKING THERMOPLASTIC CROSSHATCH LINE		PAVEMENT MESSAGE THERMOPLASTIC LANE INDICATION ARROW	SNOWPLOWABLE RAISED PAVEMENT MARKER, TWO-WAY YELLOW
	SOLID WHITE 4 in	BROKEN WHITE 4 in	DOTTED WHITE 4 in	DOTTED WHITE 8 in	SOLID YELLOW 4 in	SOLID YELLOW 8 in		SOLID WHITE 12 in	SOLID WHITE 24 in	SOLID YELLOW 12 in	SOLID YELLOW 24 in		
	LFT	LFT	LFT	LFT	LFT	LFT		LFT	LFT	LFT	LFT		
<b>Line 'PR_A'</b>													
Sta. 258+51.65 'A' to 63+19.17													
Sta. 63+19.17 to 65+96.03													
Sta. 65+96.03 to 72+03.97													
Sta. 72+03.97 to 75+20.49													
Sta. 75+20.49 to 279+51.19 'A'													
<b>Line 'PR_S-1-A'</b>													
Sta. 43+57.14 'S-1-A' to 144+20.25													
Sta. 144+20.25 to 146+96.02													
Sta. 146+96.02 to 149+30.33													
Sta. 150+79.20 to 153+04.03													
Sta. 153+04.03 to 156+75.55													
Sta. 156+75.55 to 56+98.49 'S-1-A'													
<b>Totals</b>													
<b>Totals (LFT or EA)</b>													

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**INDIANA DEPARTMENT OF TRANSPORTATION**  
US 231 - CLINE AVE INTERSECTION IMPROVEMENT  
PAVEMENT QUANTITIES AND APPROACH TABLE AND  
PAVEMENT MARKINGS TABLE

HORIZONTAL SCALE	FILE
N/A	
VERTICAL SCALE	DESIGNATION
N/A	1700022
SURVEY BOOK	SHEETS
	29 of 46
CONTRACT	PROJECT
R-42251	1700022

