

PROJECT	DESIGNATION
1600539	1600539
CONTRACT	BRIDGE FILE
R-39881	N/A

# INDIANA DEPARTMENT OF TRANSPORTATION



CULVERT ASSETS	
Des No.	Culvert Asset ID
1600539	CV 046-015-151.82

NOTE: THE CULVERT ASSET IS LISTED SINCE IT EXISTS WITHIN THE PROJECT LIMITS, BUT WILL NOT BE MODIFIED OR REPLACED AS PART OF THE SCOPE OF THIS PROJECT.

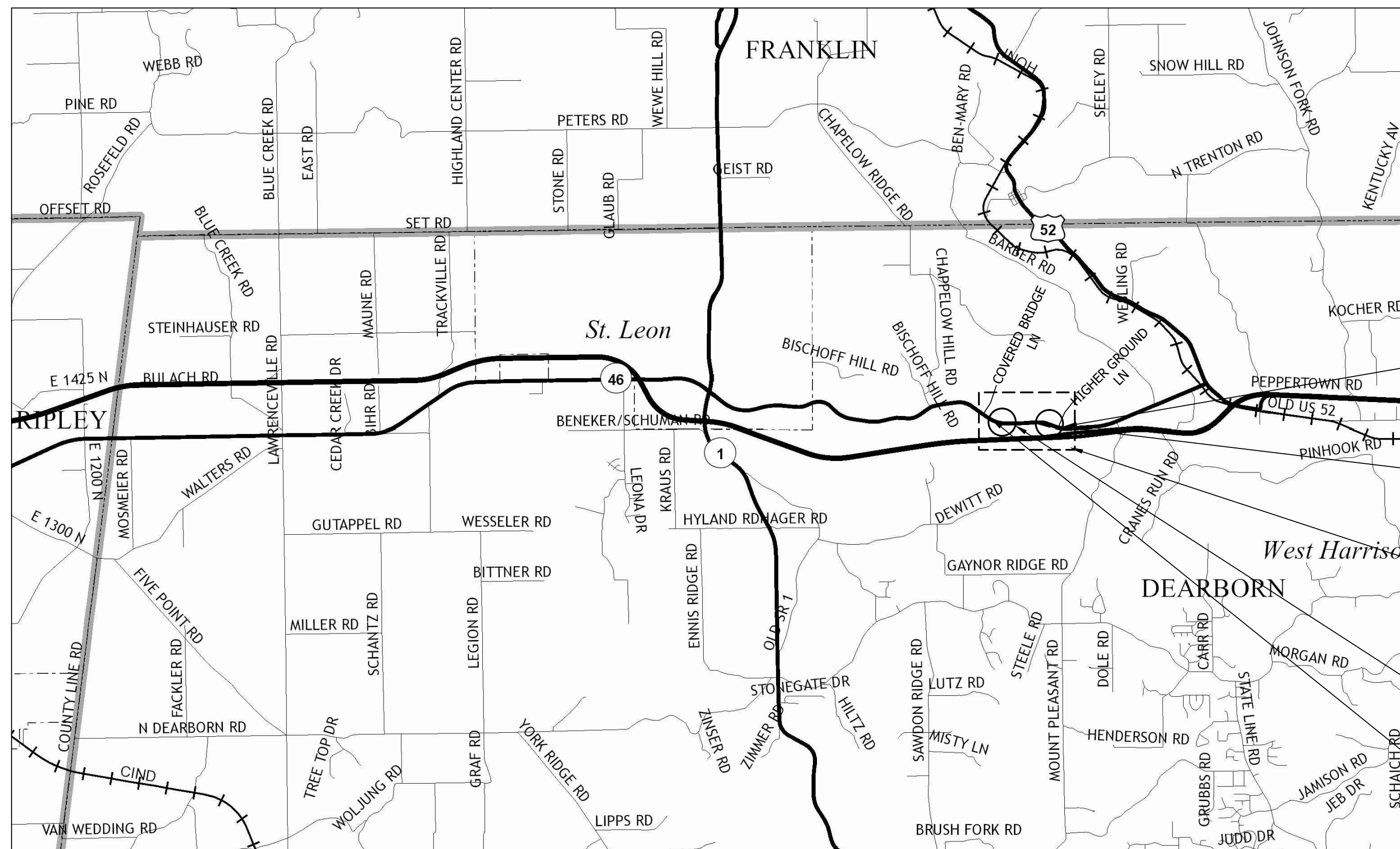
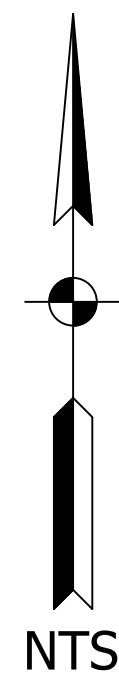
TRAFFIC DATA		
A.A.D.T.	(2021)	2130 V.P.D.
A.A.D.T.	(2041)	3060 V.P.D.
D.H.V.	(2041)	12.41% - 380 V.P.H.
DIRECTIONAL DISTRIBUTION		47.61 %
TRUCKS		10% A.A.D.T. 5% D.H.V.
DESIGN DATA		
DESIGN SPEED		55 M.P.H.
PROJECT DESIGN CRITERIA		3R(NON-FREEWAY)
FUNCTIONAL CLASSIFICATION		STATE COLLECTOR
RURAL/URBAN		RURAL
TERRAIN		ROLLING
ACCESS CONTROL		NONE

## ROAD PLANS

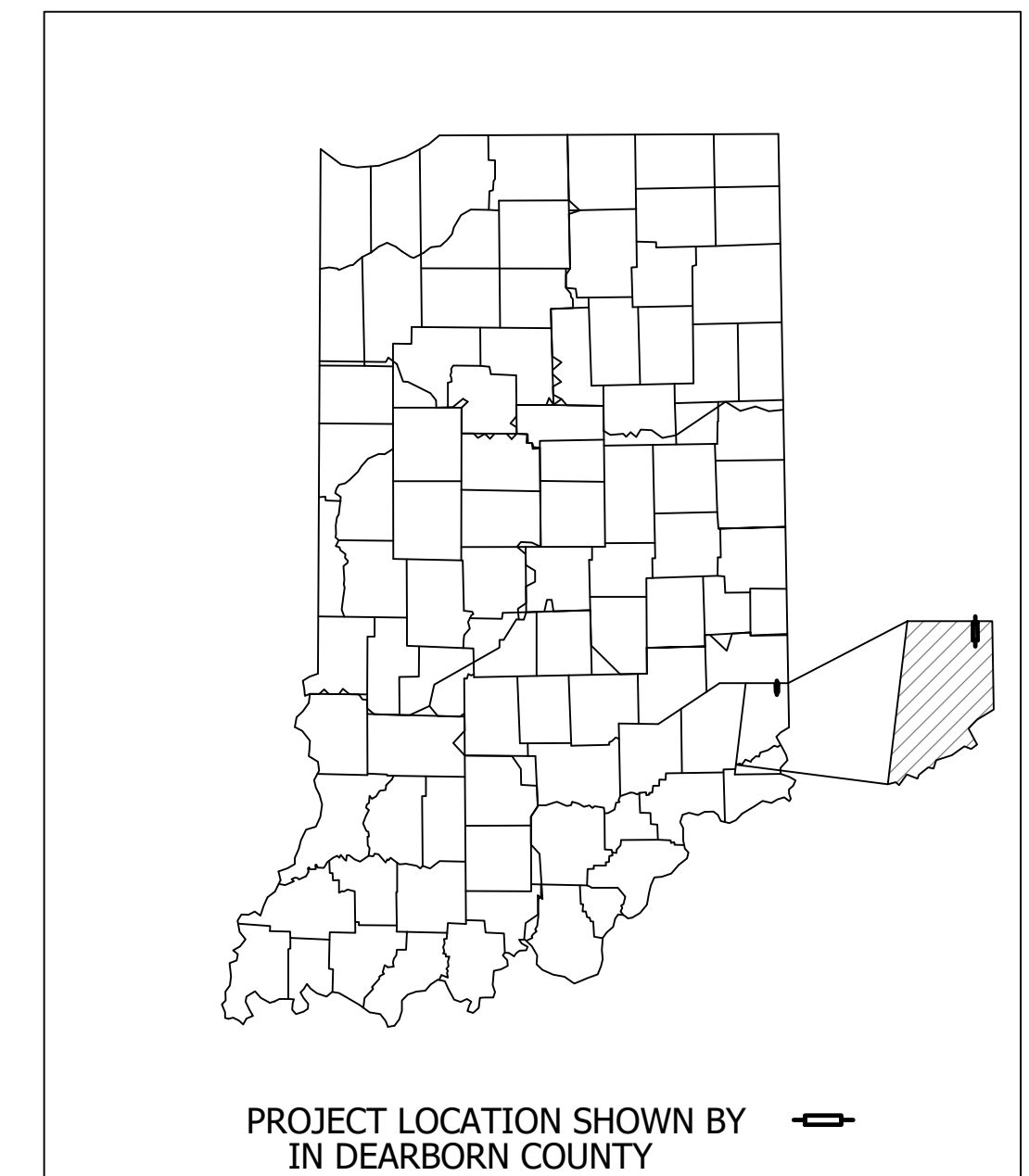
ROUTE: SR46 AT: RP 151+80 AND 152+20  
 PROJECT NO. 1600539 P.E.  
 1600539 R/W  
 1600539 CONST.

EROSION / LANDSLIDE CONTROL ON SR. 46, LOCATED 3.2 MILES EAST OF SR. 1.  
 SITE NO.1 IS LOCATED IN SECTIONS 8 & 17 AND SITE NO.2 IS LOCATED IN SECTIONS 8, 9, 17 & 16, BOTH SITES BEING IN TOWNSHIP 7N, RANGE 1W IN LOGAN TOWNSHIP, DEARBORN COUNTY, INDIANA.

Gross Length: 0.219 MI.  
 Net Length: 0.219 MI.  
 Maximum Grade: +3.70 %



END PROJECT SITE NO. 2  
48+40 LINE "A"  
 BEGIN PROJECT SITE NO. 2  
42+60 LINE "A"  
 PROJECT NO. 1600539  
EROSION /LANDSLIDE CONTROL  
- SITE NO.1 RP 151+80  
- SITE NO.2 RP 152+20  
 END PROJECT SITE NO. 1  
23+12 LINE "A"  
 BEGIN PROJECT SITE NO. 1  
17+37 LINE "A"



LATITUDE: N 39° 16' 37.8" LONGITUDE: W 84° 54' 12.0"

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



72 Henry Street  
North Vernon, IN 47265  
P: (812) 346-2045  
www.fpbhonline.com

1431 Corporate Way  
Seymour, IN 47274  
P: 812-522-6707

**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

INDIANA DEPARTMENT OF TRANSPORTATION

TITLE SHEET

HORIZONTAL SCALE	BRIDGE FILE
N/A	
VERTICAL SCALE	DESIGNATION
N/A	1600539
SURVEY BOOK	
SHEETS	
1	OF 34
CONTRACT	
PROJECT	
R-39881	1600539



## UTILITIES

**CINCINNATI BELL - TELEPHONE**

221 E. 4TH ST. - BLDG. 343  
 CINCINNATI, OH 45202  
 CONTACT: MARK CONNER  
 PHONE: (513) 565-7043

SOUTHEAST INDIANA REMC  
 712 S. BUCKEYE ST., OSGOOD, IN 47037  
 CONTACT: PERRY HARDY  
 PHONE: (812) 689-4111

**LEVEL 3 COMMUNICATIONS**

1025 ELDORA BLVD, BROOMFIELD, CO 80021  
 CONTACT: TIM BOYKIN  
 PHONE: NOT AVAILABLE

TRI-TOWNSHIP WATER CORP.  
 24192 STATE LINE ROAD, LAWRENCEBURG, IN 47025  
 CONTACT: JODY BLASDEL  
 PHONE: (812) 637-1039

**CENTURY LINK**

SOUTH CENTRAL AVE., LIMA, OH 45804  
 CONTACT: JOHN UNVERFERTH  
 PHONE: (419) 226-6342

ZAYO BANDWIDTH  
 9209 CASTLEGATE DR., INDIANAPOLIS, IN 46219  
 CONTACT: WAYLON HIGGINS  
 PHONE: (765) 341-1199

**ENHANCED TELECOMMUNICATIONS CORP**

123 NIEMAN STREET, SUNMAN, IN 47041  
 CONTACT: DUSTIN NOBBE  
 PHONE: (812) 623-4432

INDOT ITS TECHNOLOGY DEPLOYMENT DIVISION  
 8620 E. 21ST STREET, INDIANAPOLIS, IN 46219  
 CONTACT: KONSTANTIN VEYGMAN  
 PHONE: (317) 899-8601

**ST. LEON WASTEWATER UTILITY**

3059 STATE ROAD 46, WEST HARRISON, IN 47060  
 CONTACT: STEVE CLARK  
 PHONE: (812) 637-2150

INDOT SEYMOUR TRAFFIC DEPARTMENT  
 185 AGRICO LANE, SEYMOUR, IN 47274  
 CONTACT: KEN PRUITT  
 PHONE: (812) 524-3777

**SYCAMORE GAS COMPANY**

370 INDUSTRIAL DRIVE, LAWRENCEBURG, IN 47025  
 CONTACT: AARON LAMBERT  
 PHONE: (812) 537-1921

US GEOLOGY SURVEY  
 5957 LAKESIDE BLVD., INDIANAPOLIS, IN 46278  
 CONTACT: JEFF WOODS  
 PHONE: 317-600-2762

INDIANA UNDERGROUND PLANT PROTECTION SERVICES, INC.



**Know what's below. Call before you dig.**

Per Indiana State Law IC-8-1-26-16, It is against the law to excavate without notifying the underground location service two full working days before commencing work.

INDIANA UNDERGROUND  
 1-800-382-5544 OR CALL 811  
 24 HOURS A DAY, 7 DAYS A WEEK

Note: Utility Locations are shown based upon information (maps and paint marks) supplied by others, and there is no guarantee of the accuracy or completeness of said locations.

## GENERAL NOTES

1. All earth cut and fill slopes shall be mulched seeded unless noted otherwise in the plans.

## INDEX

SHEET NO.	DRAWINGS INDEX
1	TITLE SHEET
2	INDEX SHEET
3	TYPICAL SECTIONS
4	SUPERELEVATION DETAILS
5-6	PLAT NO. 1
7-9	MAINTENANCE OF TRAFFIC
10-13	PLAN & PROFILE SHEETS
14-15	SOIL BORINGS
16-19	CONSTRUCTION DETAILS
20-21	SUMMARY TABLES
22-34	CROSS SECTIONS

## REVISIONS

SHEET NO.	DATE	REVISED

**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____	9/11/2019 DATE
DESIGNED: CLK/SJG	DRAWN: SJG/CLK
CHECKED: BAH	CHECKED: BAH

**INDIANA DEPARTMENT OF TRANSPORTATION**

**INDEX SHEET**

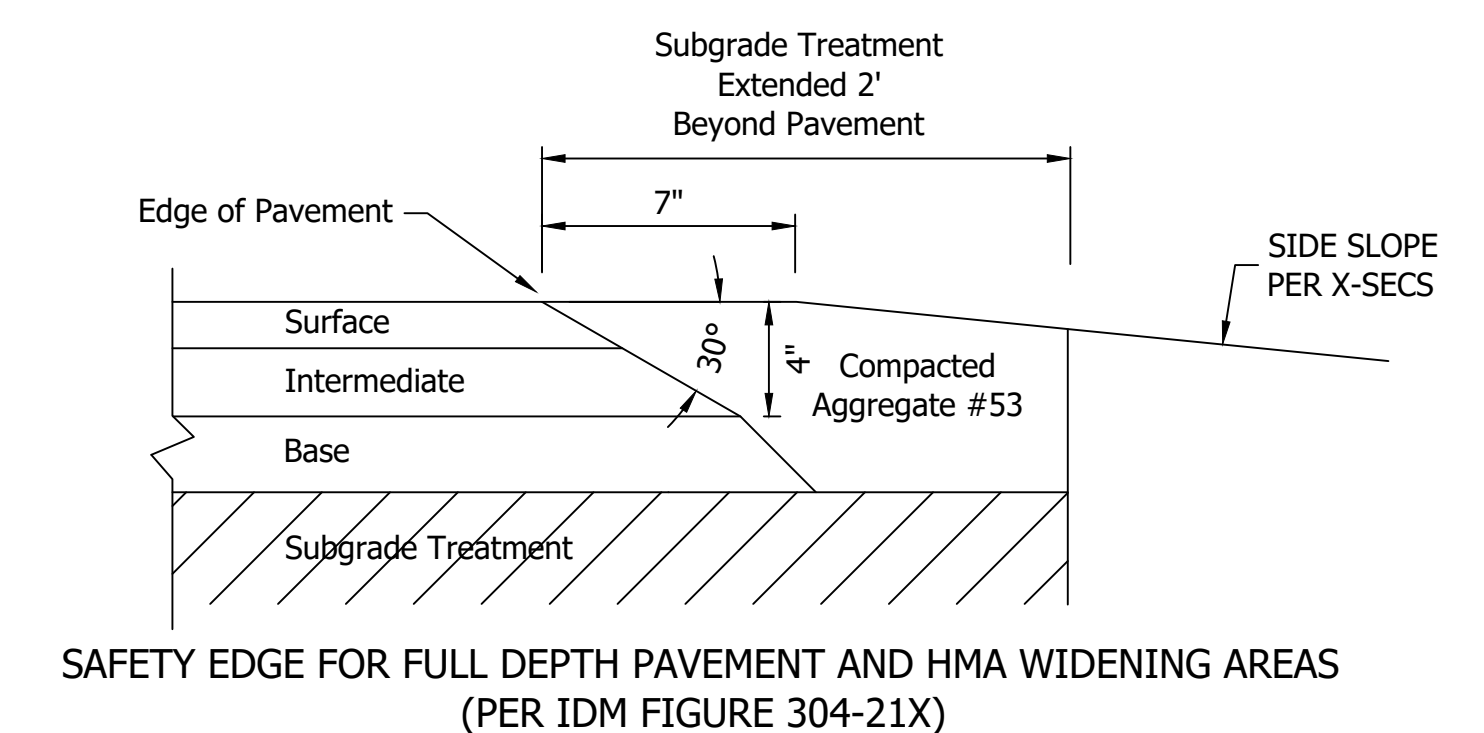
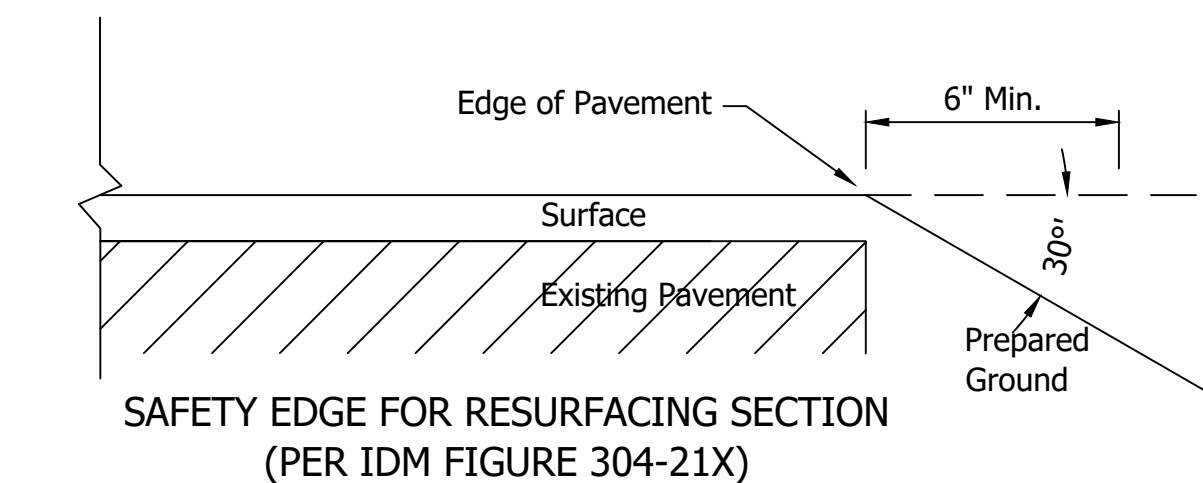
HORIZONTAL SCALE N/A	BRIDGE FILE
VERTICAL SCALE N/A	DESIGNATION 1600539
SURVEY BOOK	SHEETS 2 OF 34
CONTRACT R-39881	PROJECT 1600539

**LEGEND**

- (J2) 2' Wide 10" Thick Compacted Aggregate #53
- (K) 165 LB/SYS QC/QA-HMA, 3, 64, Surface 9.5 mm on 275 LB/SYS QC/QA-HMA, 2, 64, Intermediate 19mm on 660 LB/SYS QC/QA-HMA, 2, 64, Base 19mm on Subgrade Treatment Type IC
- (R) 165 LB/SYS QC/QA-HMA, 3, 64, Surface, 9.5 mm
- (S) Mulch Seeding, Type R

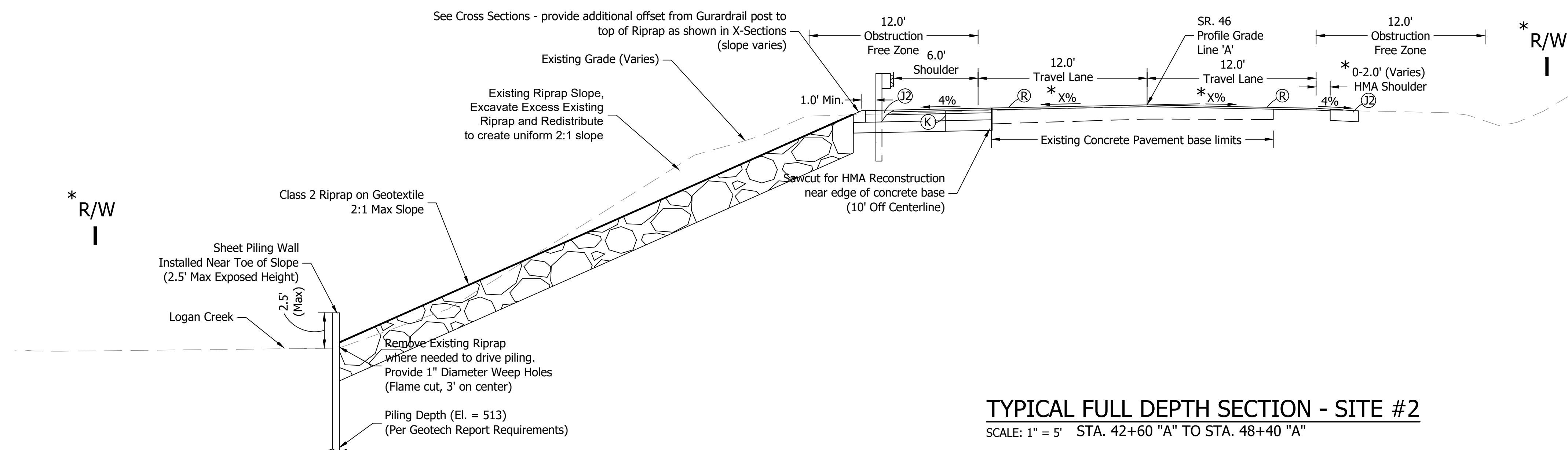
**\*NOTES:**

1. The surface layer for the resurface and full depth pavement sections shall be constructed at the same time to ensure a continuous final pavement surface throughout the project limits.
2. All fill slopes shall be protected against erosion via Mulch Seeding Type 'R' in accordance with current INDOT specification sections 621 and respective pay items in the contract.
3. After milling the existing pavement surface, any cracks that remain visible with 0.25 inch width or greater shall be sealed before applying tack coat to the milled surface. The materials used to fill the cracks shall be PG-22 only; no emulsion should be used. The sealed cracks should not be overbanded.
4. HMA pavements shall have joint adhesive installed at all longitudinal joints in the surface layer per Standard Specification 401.15. A 24-inch-wide liquid asphalt sealant shall be centered on longitudinal joints that have joint adhesive installed, as per Standard Specification 401.15.
5. Right of Way Width Varies - See Plan and Profiles for Right of Way Offsets. Right of Way is not being purchased Right of Centerline (Line 'A').
7. Eastbound Shoulder Width Varies - 0' to 2' on average. Contractor shall resurface and match existing Eastbound travel lane and shoulder width.
8. Refer to superelevation diagrams for required roadway cross slopes and normal crown sections.

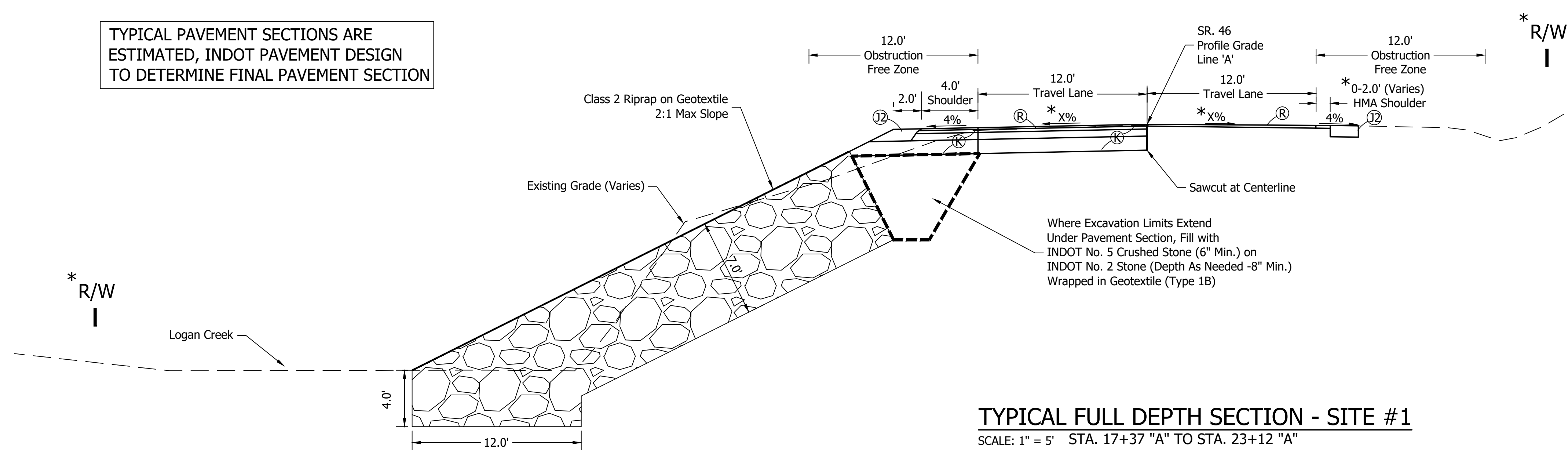


**HMA SAFETY EDGE**

SCALE: NOT TO SCALE

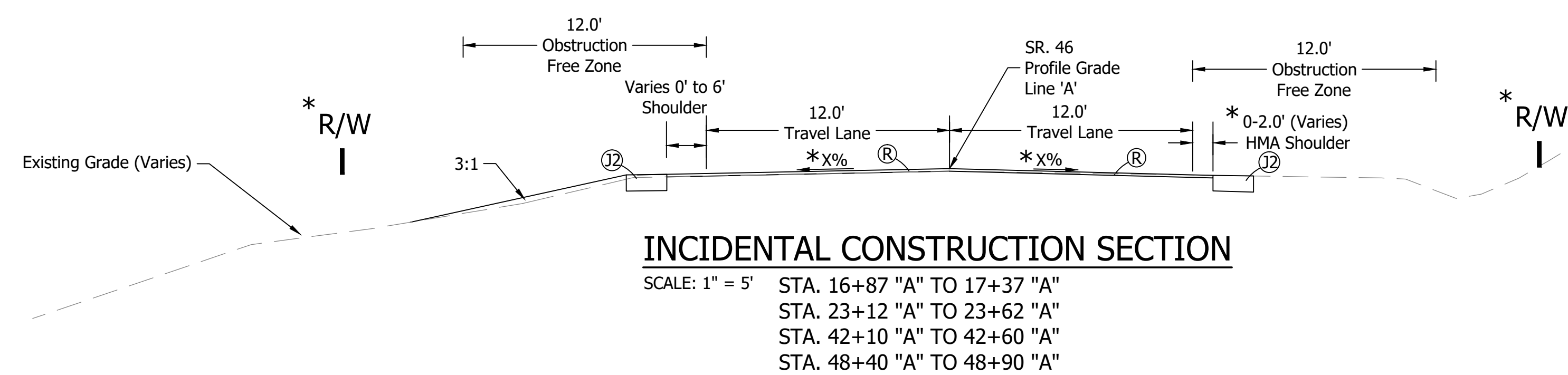


TYPICAL PAVEMENT SECTIONS ARE ESTIMATED, INDOT PAVEMENT DESIGN TO DETERMINE FINAL PAVEMENT SECTION



**TYPICAL FULL DEPTH SECTION - SITE #1**

SCALE: 1" = 5' STA. 17+37 "A" TO STA. 23+12 "A"



**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

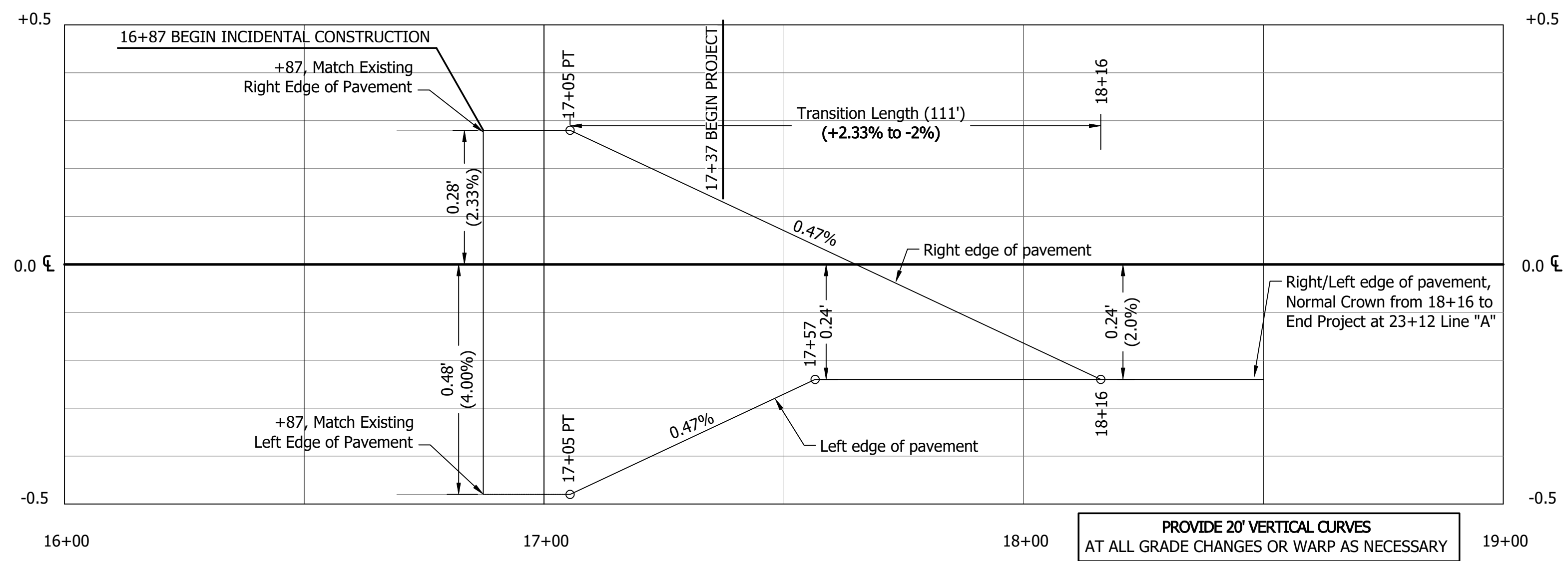
**INDIANA DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTION**

HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	
VERTICAL SCALE	DESIGNATION
1" = 5'	1600539

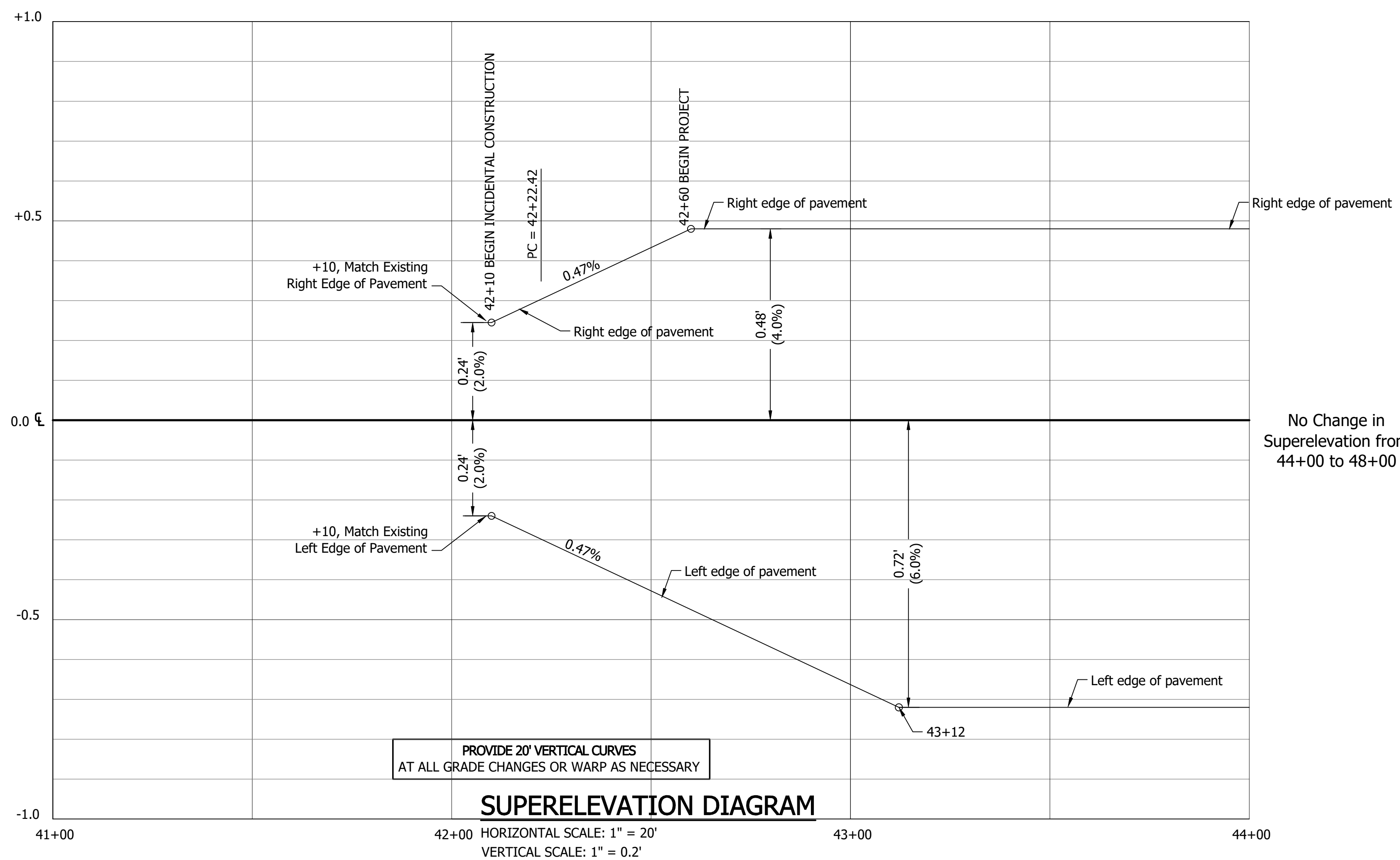
SURVEY BOOK	SHEETS		
	3	OF	34
CONTRACT	PROJECT		
R-39881	1600539		

STAGE 2 SUBMITTAL



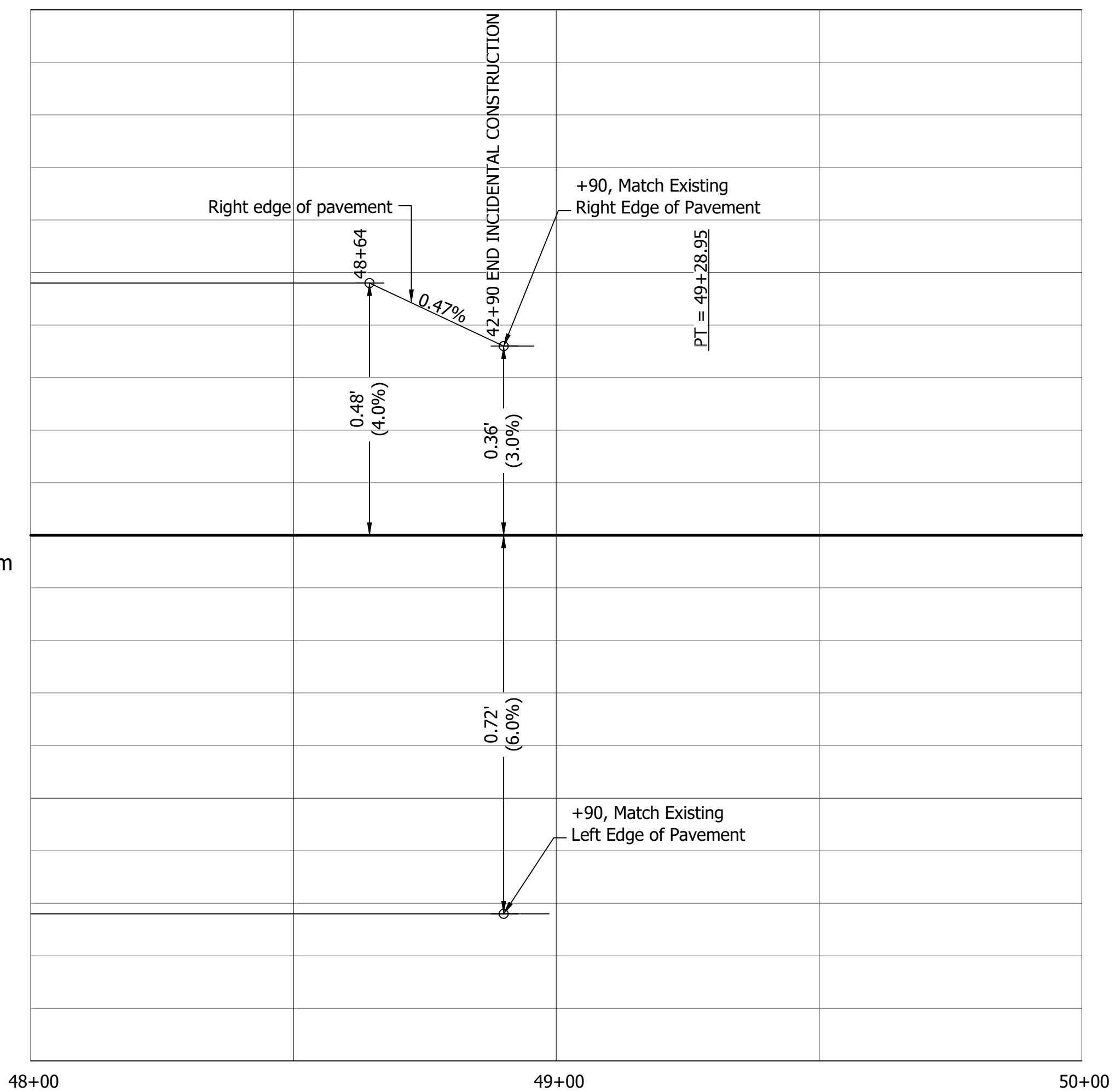
**SUPERELEVATION DIAGRAM**

HORIZONTAL SCALE: 1" = 20'  
VERTICAL SCALE: 1" = 0.2'



**SUPERELEVATION DIAGRAM**

HORIZONTAL SCALE: 1" = 20'  
VERTICAL SCALE: 1" = 0.2'



No Change in  
Superelevation from  
44+00 to 48+00

**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

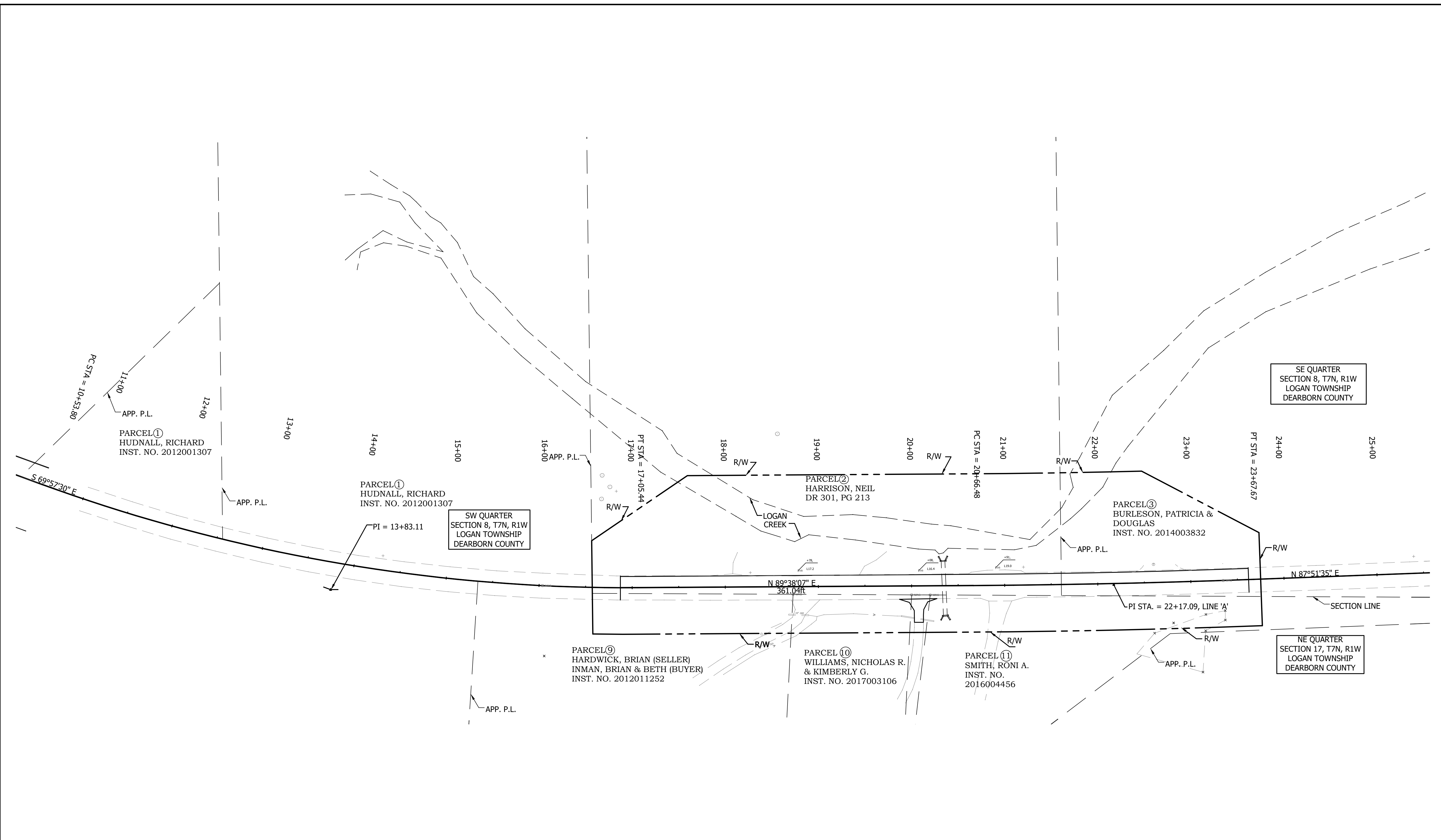
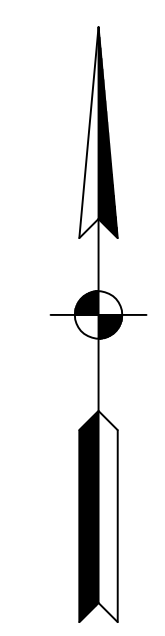
DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

INDIANA  
DEPARTMENT OF TRANSPORTATION

SUPERELEVATION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	
VERTICAL SCALE	DESIGNATION
AS NOTED	1600539
SURVEY BOOK	SHEETS
	4 OF 34
CONTRACT	PROJECT
R-39881	1600539





**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

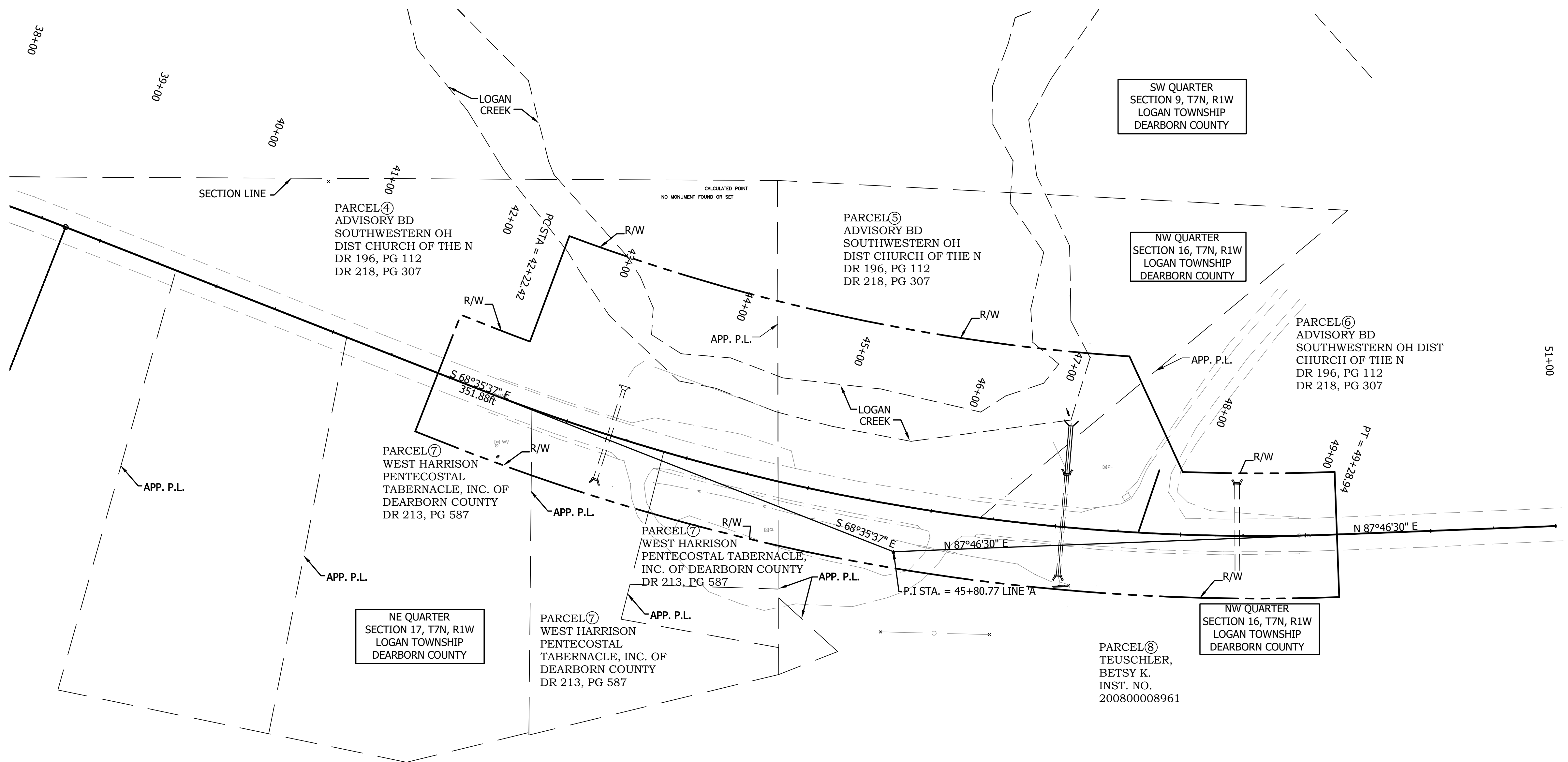
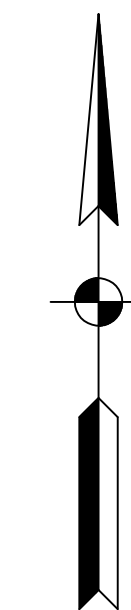
DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

INDIANA  
DEPARTMENT OF TRANSPORTATION

PLAT NO. 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
N/A	1600539

SURVEY BOOK	SHEETS
	5 OF 34
CONTRACT	PROJECT
R-39881	1600539



**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

INDIANA  
DEPARTMENT OF TRANSPORTATION

PLAT NO. 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	
VERTICAL SCALE	DESIGNATION
N/A	1600539

SURVEY BOOK	SHEETS
	6 OF 34
CONTRACT	PROJECT
R-39881	1600539

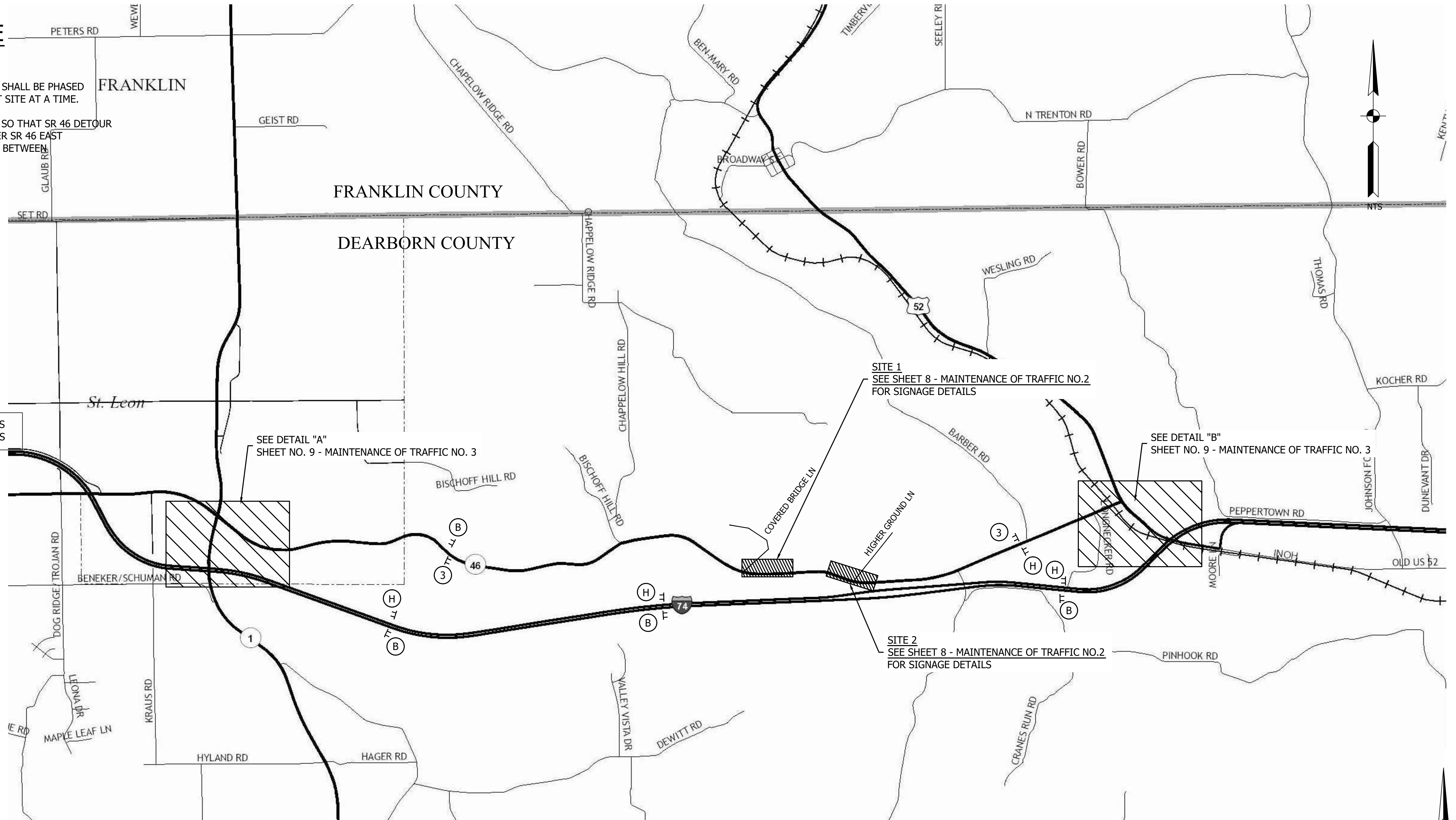


# DETOUR ROUTE

## NOTES

- PROJECT MAINTENANCE OF TRAFFIC SHALL BE PHASED BY CONSTRUCTING ONLY ONE PROJECT SITE AT A TIME.
- ENSURE PHASING OF INSTALLATION SO THAT SR 46 DETOUR ACCESS CAN BE MAINTAINED TO EITHER SR 46 EAST OR WEST FOR RESIDENCES THAT REST BETWEEN AND WITHIN THE 2 PROJECT SITES.

LENGTH OF CLOSURE: 5.3 MILES  
LENGTH OF DETOUR: 6.7 MILES



## LEGEND

- CMS** PORTABLE CHANGEABLE MESSAGE SIGN  
-Place as directed by the Engineer
- A** CONSTRUCTION SIGN  
(See Maintenance of Traffic No. 3 sheet for sign code legend )

## SIGN SUMMARY SUBTOTAL (THIS SHEET ONLY)

DETOUR ROUTE MARKER ASSEMBLY - 8 EACH  
CONSTRUCTION SIGN TYPE 'A' - 2 EACH

1" = 1,500'

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

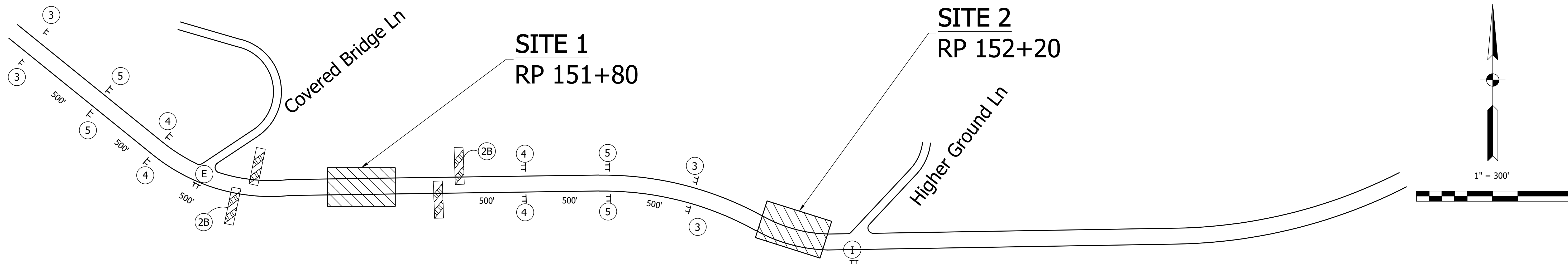
INDIANA  
DEPARTMENT OF TRANSPORTATION

S.R. 46 EROSION CONTROL - DEARBORN COUNTY  
MAINTENANCE OF TRAFFIC NO. 1

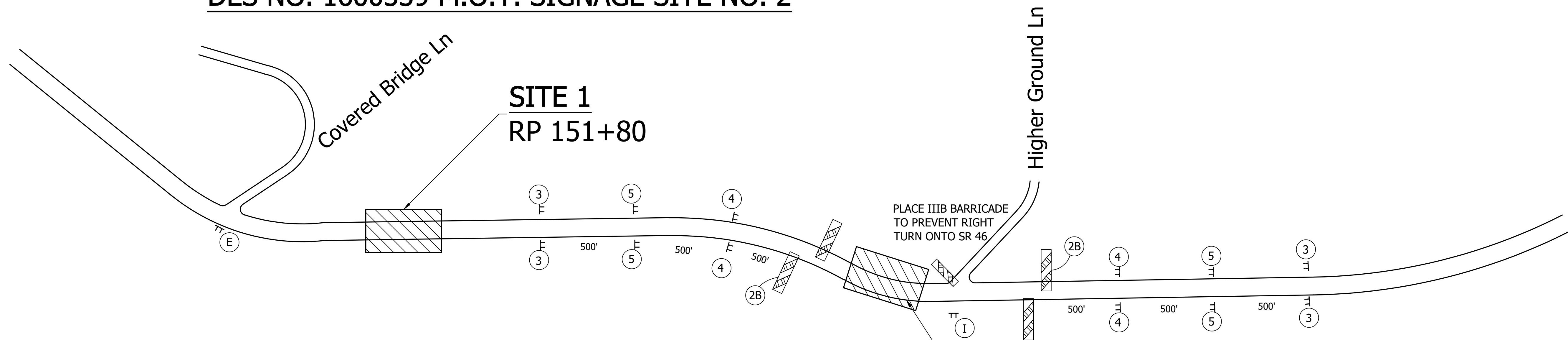
HORIZONTAL SCALE	BRIDGE FILE
NTS	
VERTICAL SCALE	DESIGNATION
NTS	1600539

SURVEY BOOK	SHEETS
1600539	7 of 34
CONTRACT	PROJECT
R-39881	1600539

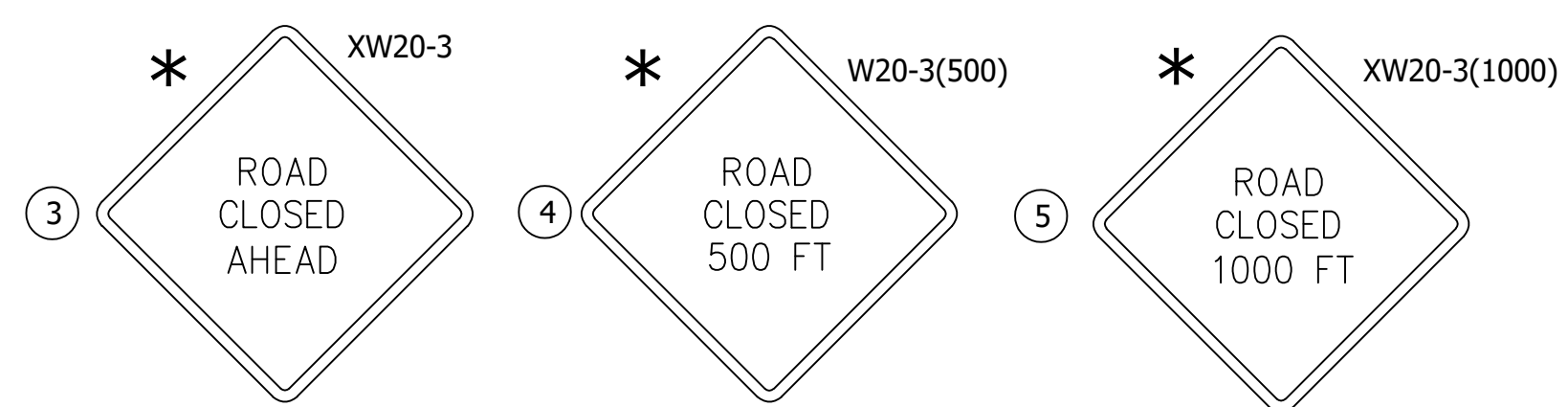
**DES NO. 1600539 M.O.T. SIGNAGE SITE NO. 1**



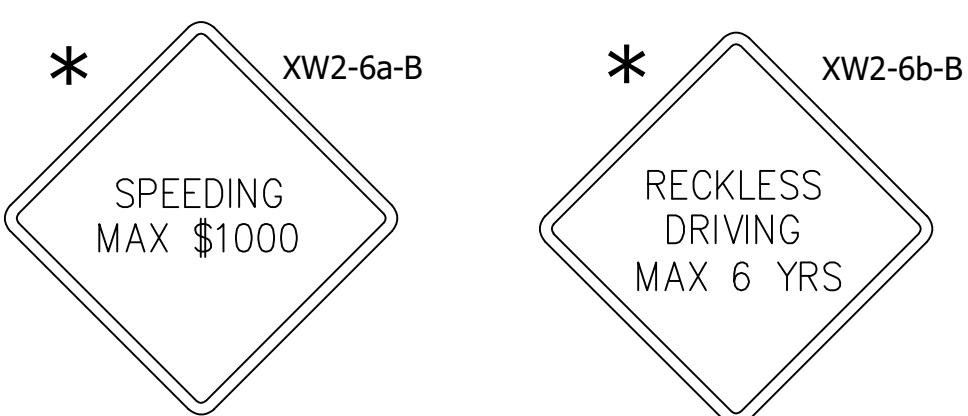
**DES NO. 1600539 M.O.T. SIGNAGE SITE NO. 2**



**CONSTRUCTION SIGN TYPE A**



NOTE: \* ALL TYPE A SIGNS TO BE EQUIPPED WITH LOW INTENSITY FLASHING YELLOW LIGHT - TYPE A.



NOTE: WORKSITE ADDED PENALTY SIGNS SHALL BE PLACED AS DIRECTED BY ENGINEER. A QUANTITY OF 2 OF EACH SIGN IS INCLUDED IN THE QTY'S.

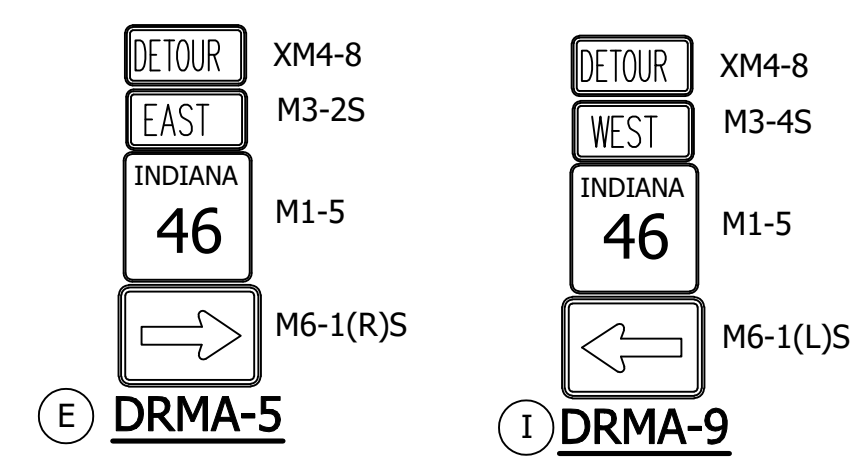
**SIGN SUMMARY SUBTOTAL (THIS SHEET ONLY)**

DETOUR ROUTE MARKER ASSEMBLY - 2 EACH  
 ROAD CLOSURE SIGN ASSEMBLY - 2 EACH (REUSE AND RELOCATE FOR EACH SITE)  
 CONSTRUCTION SIGN TYPE 'A' - 16 EACH (REUSE AND RELOCATE FOR EACH SITE) (INCLUDES PENALTY SIGNS)  
 BARRICADE IIIB # - 56 LFT (REUSE AND RELOCATE FOR EACH SITE)

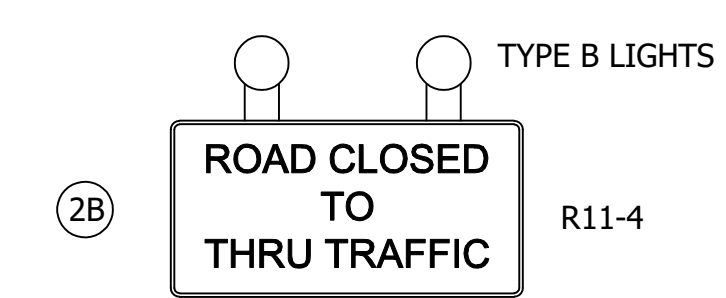
NOTE: ONLY ONE SITE IS TO BE CONSTRUCTED AT A TIME TO ALLOW THE RESIDENCES BETWEEN THE SITES ACCESS TO THE DETOUR ROUTE.

# NOTE: STAGGER SPACE THE TYPE IIIIB BARRICADES FOR THE RESPECTIVE SITE CLOSURES BASED ON FIELD CONDITIONS AND THE GUIDELINES OF 801-TCDV-06.

**DETOUR ROUTE MARKER ASSEMBLIES**



**ROAD CLOSURE SIGN ASSEMBLY**



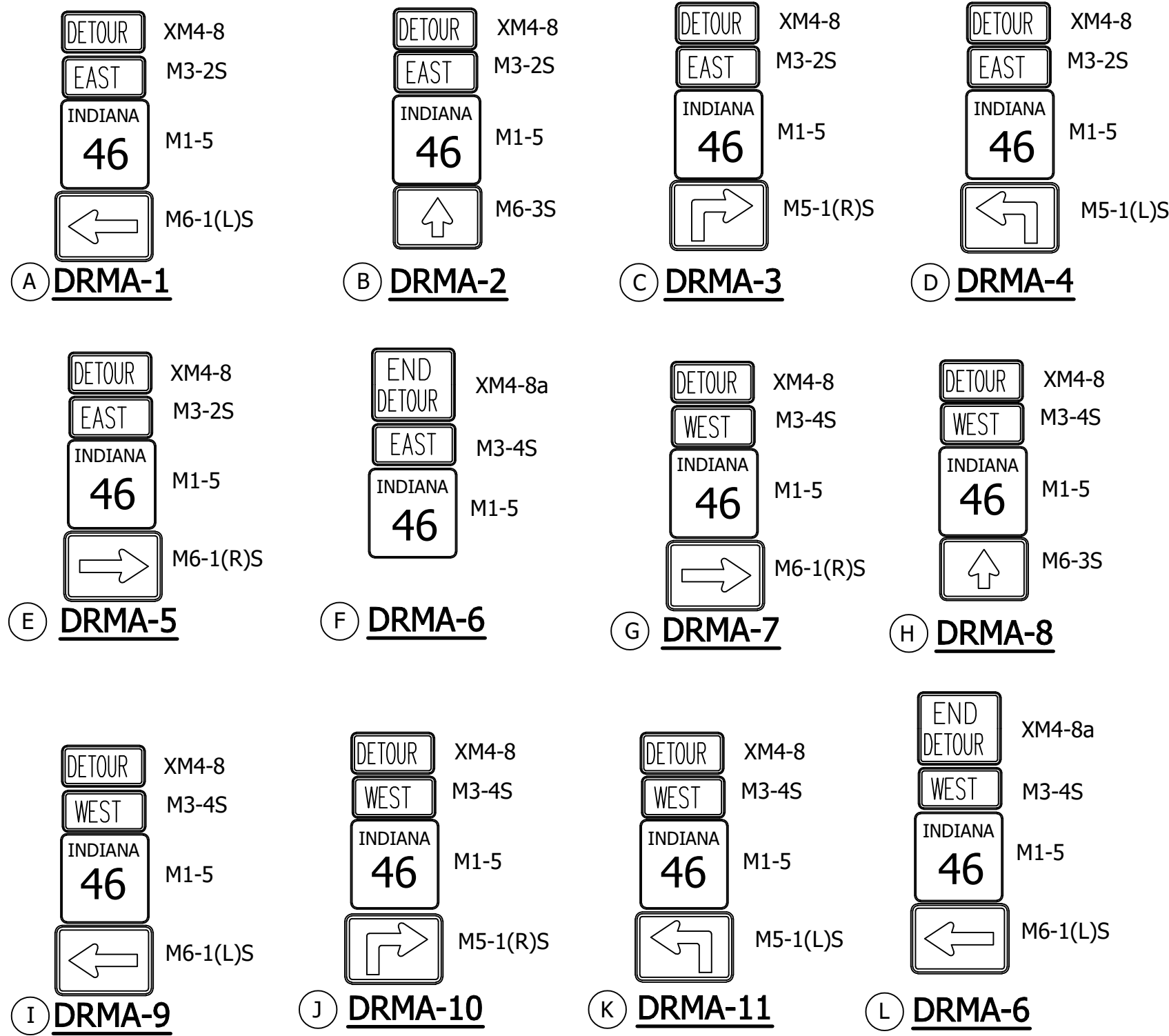
**LEGEND**

- ⊣ CONSTRUCTION SIGN (See Maintenance of Traffic No. 3 sheet for sign code legend)
- ▨ BARRICADE, IIIA
- ▩ BARRICADE, IIIB

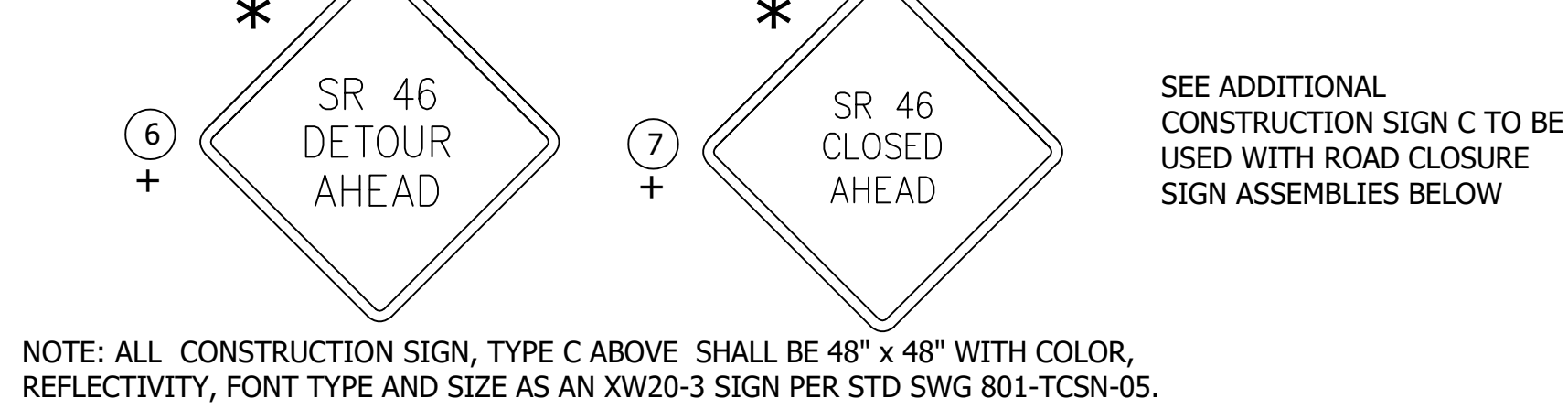
	RECOMMENDED FOR APPROVAL _____ 9/11/2019 DESIGN ENGINEER DATE	<b>INDIANA DEPARTMENT OF TRANSPORTATION</b>	HORIZONTAL SCALE: BRIDGE FILE NTS VERTICAL SCALE: DESIGNATION NTS: 1600539
DESIGNED: CLK/SJG      DRAWN: SJG/CLK CHECKED: BAH          CHECKED: BAH	S.R. 46 EROSION CONTROL - DEARBORN COUNTY MAINTENANCE OF TRAFFIC NO.2	SURVEY BOOK: SHEETS 1600539      8 of 34 CONTRACT: PROJECT R-39881      1600539	



**DETOUR ROUTE MARKER ASSEMBLIES**



**CONSTRUCTION SIGN TYPE C**



**LEGEND**

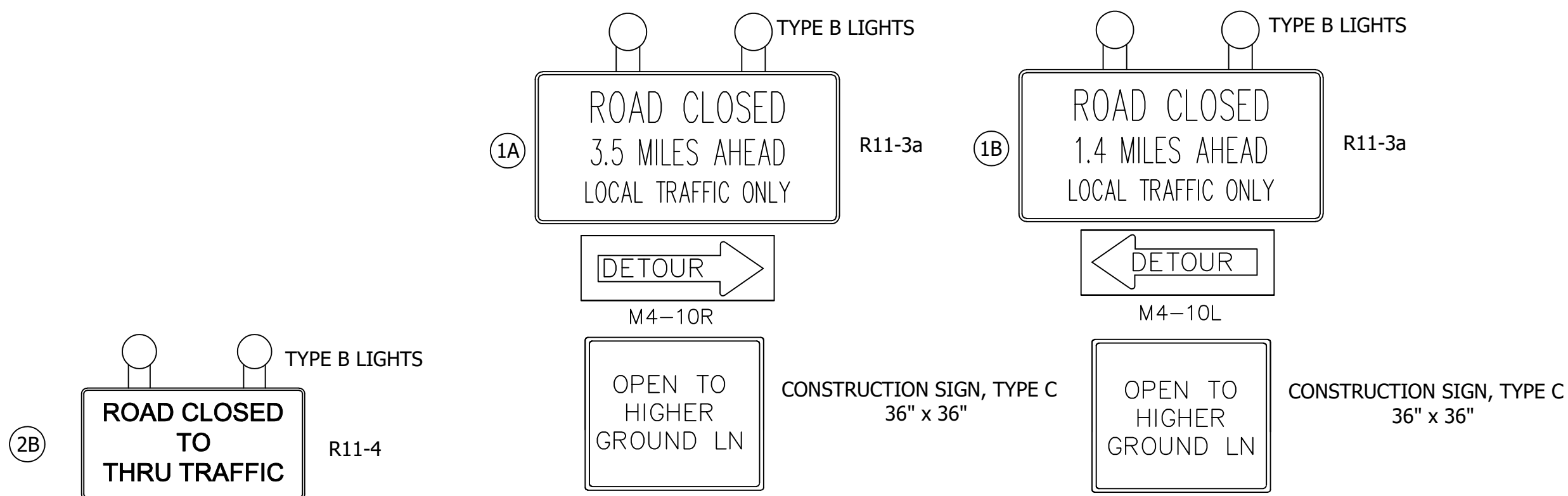
- CMS PORTABLE CHANGEABLE MESSAGE SIGN - Place as directed by the Engineer
- CONSTRUCTION SIGN
- BARRICADE, IIIA
- BARRICADE, IIIB

**SIGN SUMMARY SUBTOTAL (THIS SHEET ONLY)**

DETOUR ROUTE MARKER ASSEMBLY - 29 EACH  
 ROAD CLOSURE SIGN ASSEMBLY - 4 EACH  
 CONSTRUCTION SIGN TYPE 'A' - 2 EACH  
 CONSTRUCTION SIGN TYPE 'C' - 12 EACH  
 BARRICADE IIIB # - 48 LFT  
 CHANGEABLE MESSAGE SIGN - 2 EACH

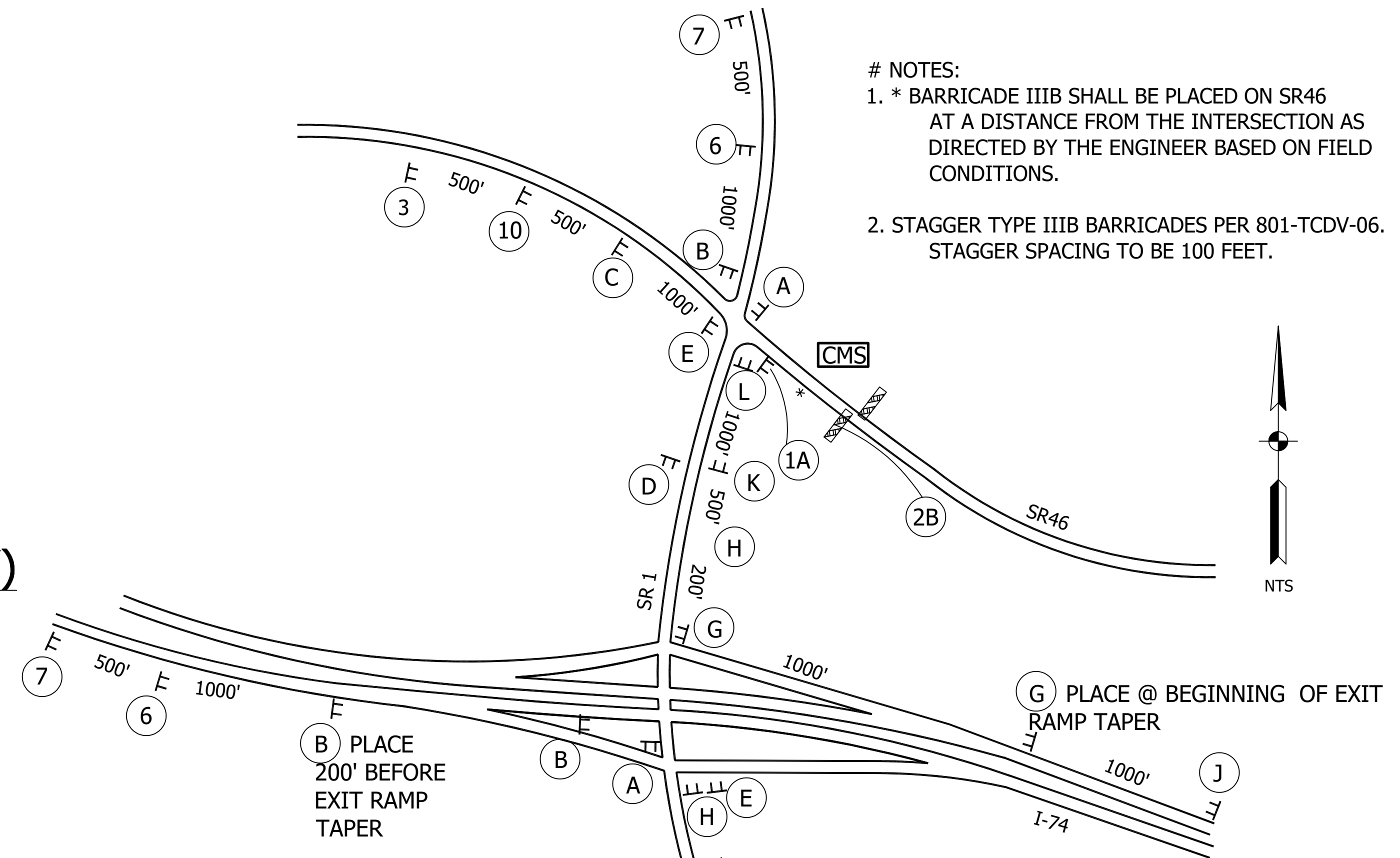
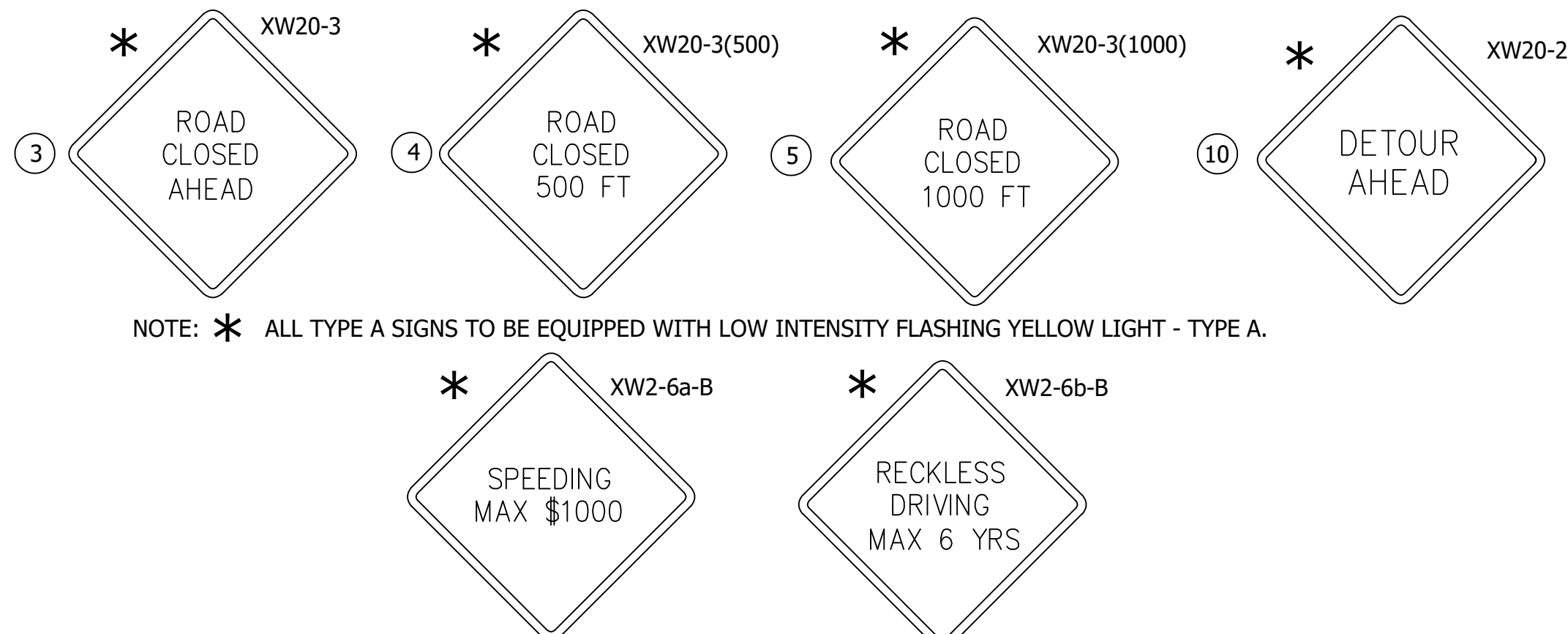
NOTE: CONTRACTOR SHALL REUSE SIGNS WHEN POSSIBLE TO LIMIT TOTAL SIGN QUANTITY

**ROAD CLOSURE SIGN ASSEMBLIES**

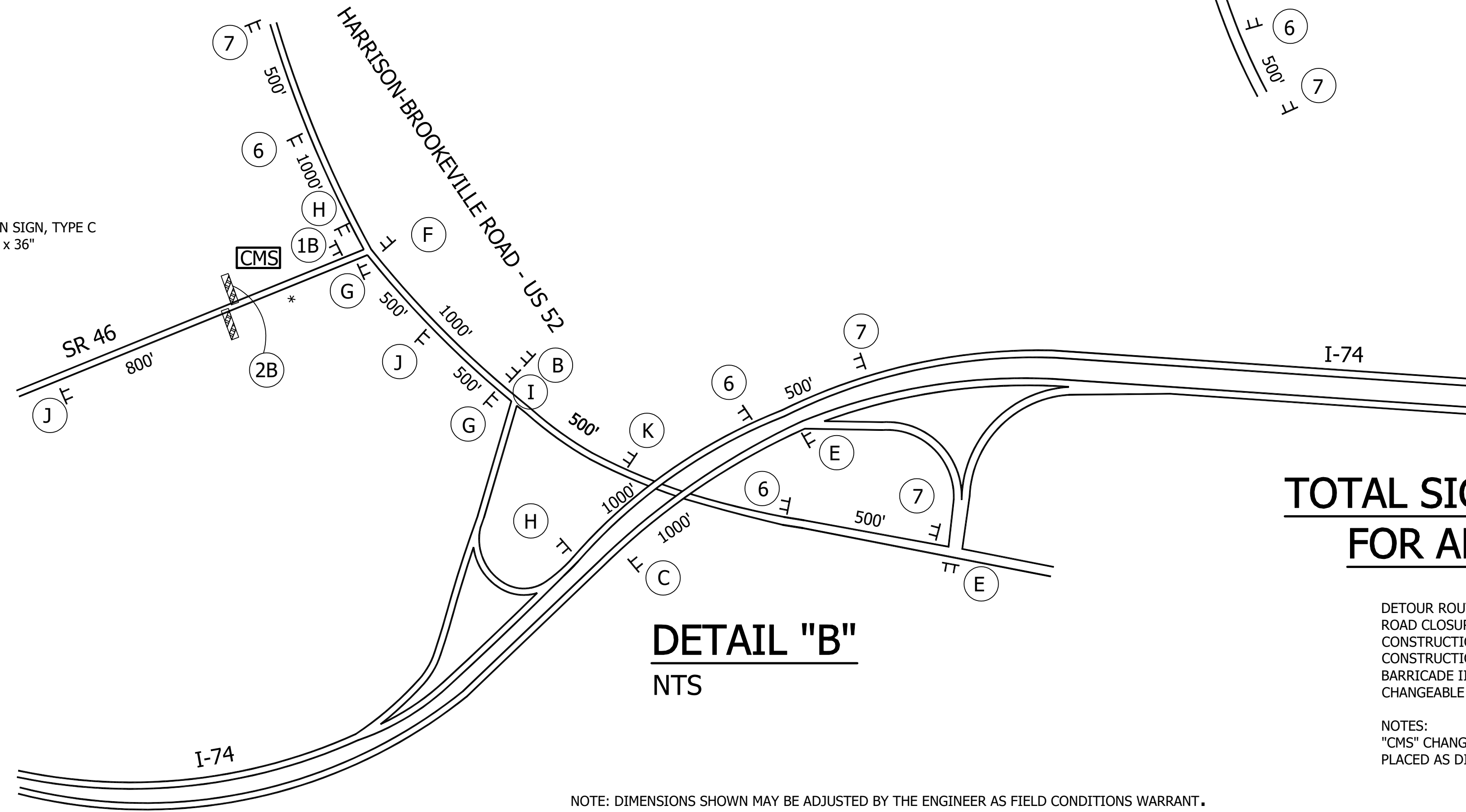


NOTE: ALL ROAD CLOSURE SIGN ASSEMBLIES TO BE EQUIPPED WITH FLASHING YELLOW LIGHT - TYPE B.

**CONSTRUCTION SIGN TYPE A**



**DETAIL "A"**  
NTS



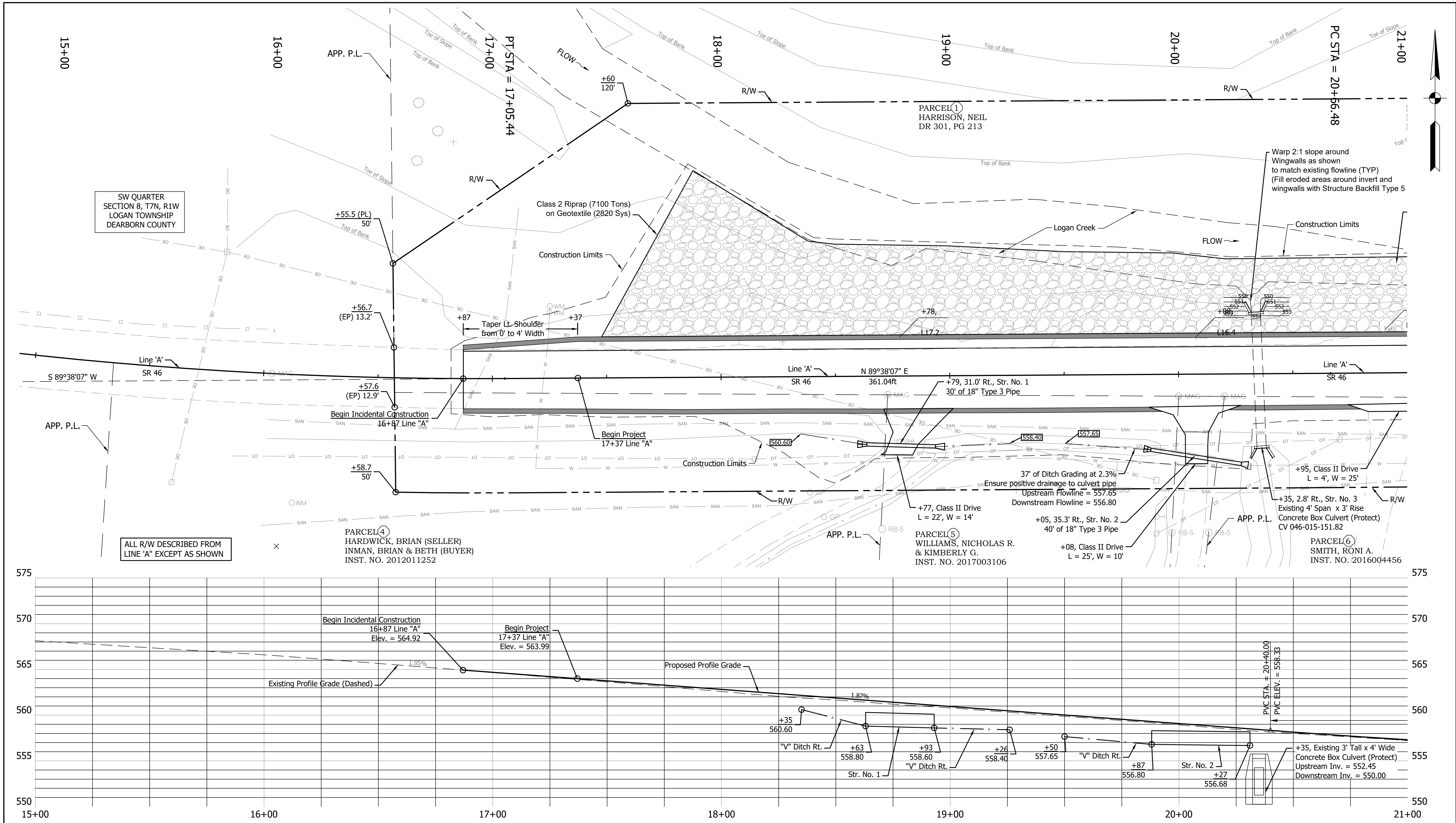
**DETAIL "B"**  
NTS

**TOTAL SIGN QUANTITIES FOR ALL 3 SHEETS**

DETOUR ROUTE MARKER ASSEMBLY - 39 EACH  
 ROAD CLOSURE SIGN ASSEMBLY - 6 EACH  
 CONSTRUCTION SIGN TYPE 'A' - 20 EACH  
 CONSTRUCTION SIGN TYPE 'C' - 14 EACH  
 BARRICADE IIIB # - 104 Lft  
 CHANGEABLE MESSAGE SIGN - 2 EACH

NOTES:  
"CMS" CHANGEABLE MESSAGE SIGNS SHALL BE PLACED AS DIRECTED BY THE ENGINEER.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE 7/19/2019	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE	BRIDGE FILE
			VERTICAL SCALE	DESIGNATION
DESIGNED: CLK/SJG	DRAWN: SJG/CLK	S.R. 46 EROSION CONTROL - DEARBORN COUNTY		SURVEY BOOK
CHECKED: BAH	CHECKED: BAH	MAINTENANCE OF TRAFFIC NO. 3		SHEETS
				1600539
				9 of 34
				CONTRACT PROJECT
				R-39881 1600539



SW QUARTER SECTION 8, T7N, R1W LOGAN TOWNSHIP DEARBORN COUNTY

ALL R/W DESCRIBED FROM LINE 'A' EXCEPT AS SHOWN

PARCEL 4 HARDWICK, BRIAN (SELLER) INMAN, BRIAN & BETH (BUYER) INST. NO. 2012011252

PARCEL 1 HARRISON, NEIL DR 301, PG 213

PARCEL 5 WILLIAMS, NICHOLAS R. & KIMBERLY G. INST. NO. 2017003106

PARCEL 6 SMITH, RONI A. INST. NO. 2016004456

**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

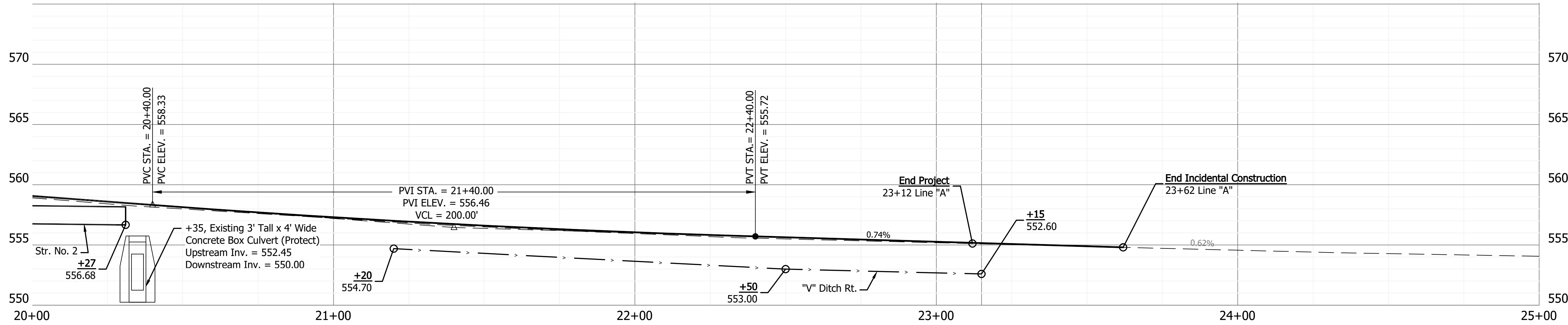
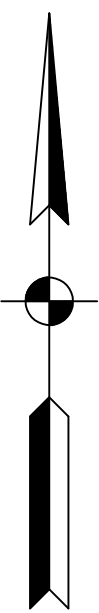
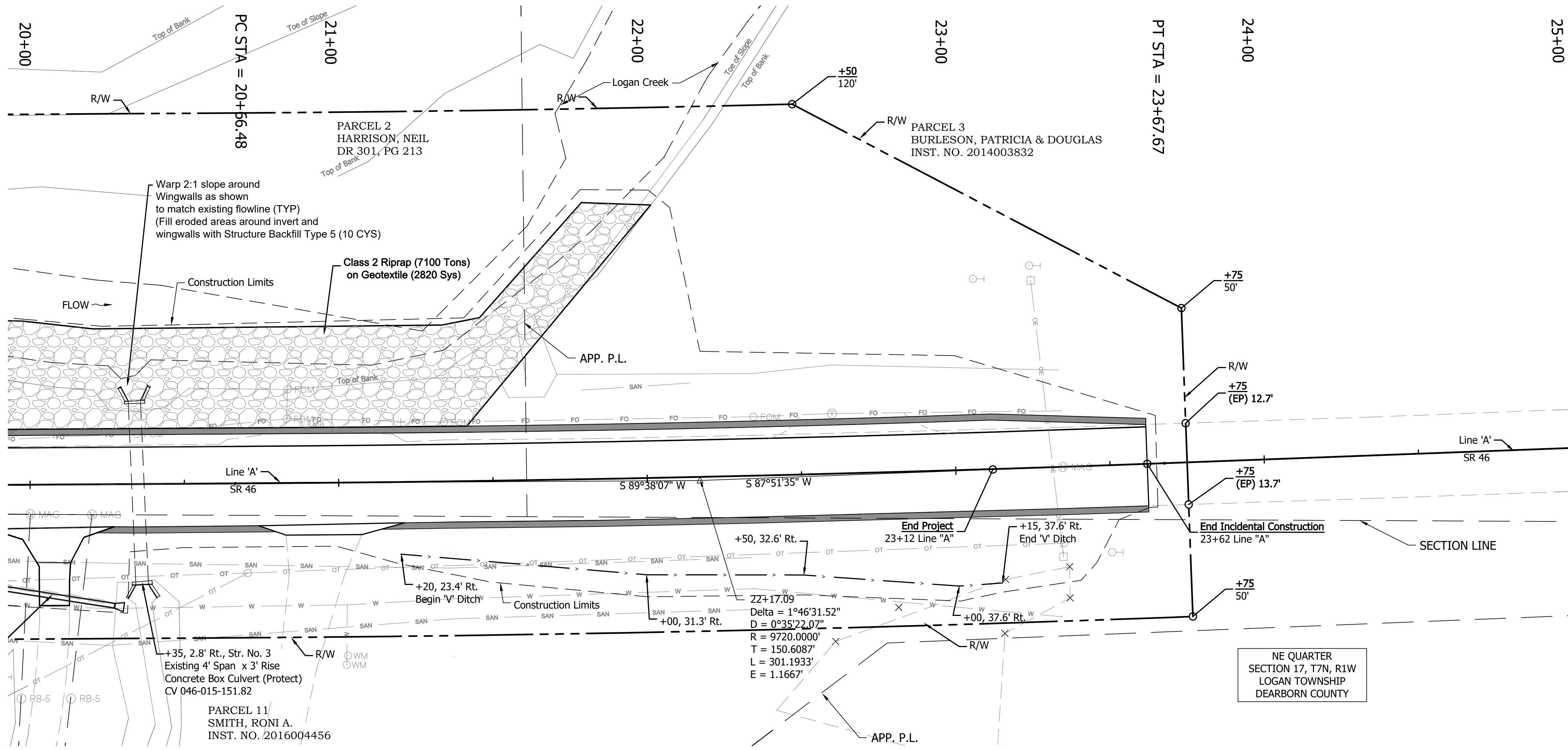
INDIANA DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
1" = 5'	1600539

SURVEY BOOK	SHEETS	
	10	OF 34
CONTRACT	PROJECT	
R-39881	1600539	





**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

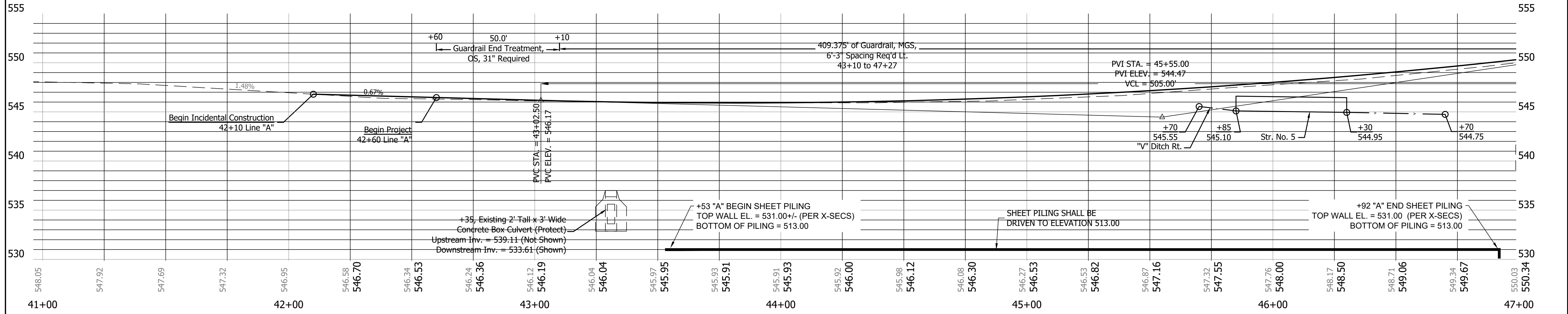
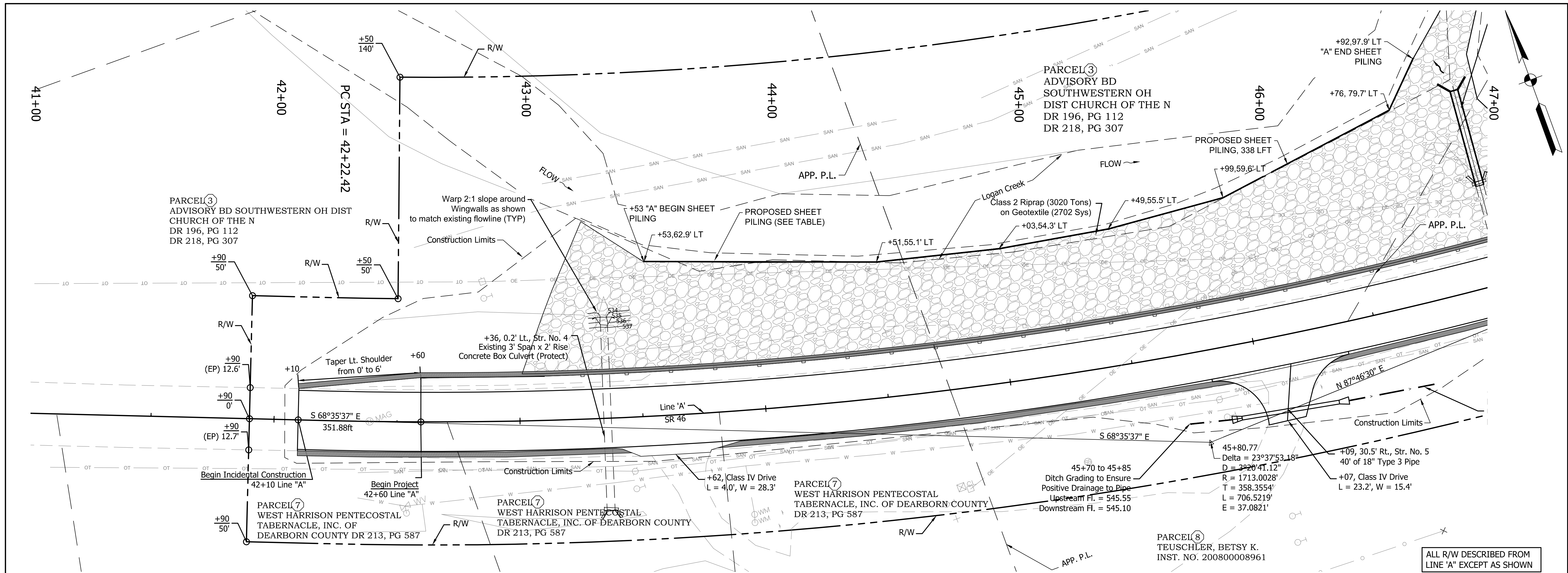
DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

INDIANA  
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE

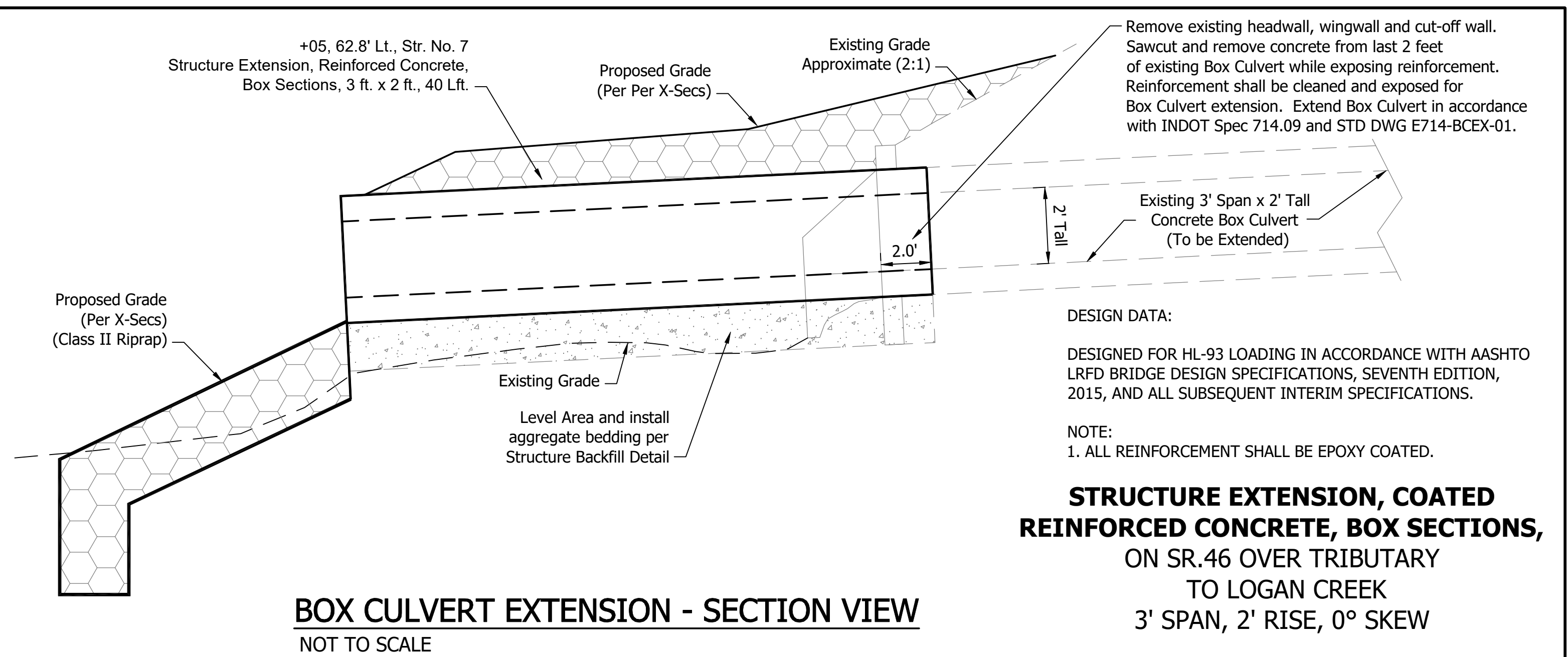
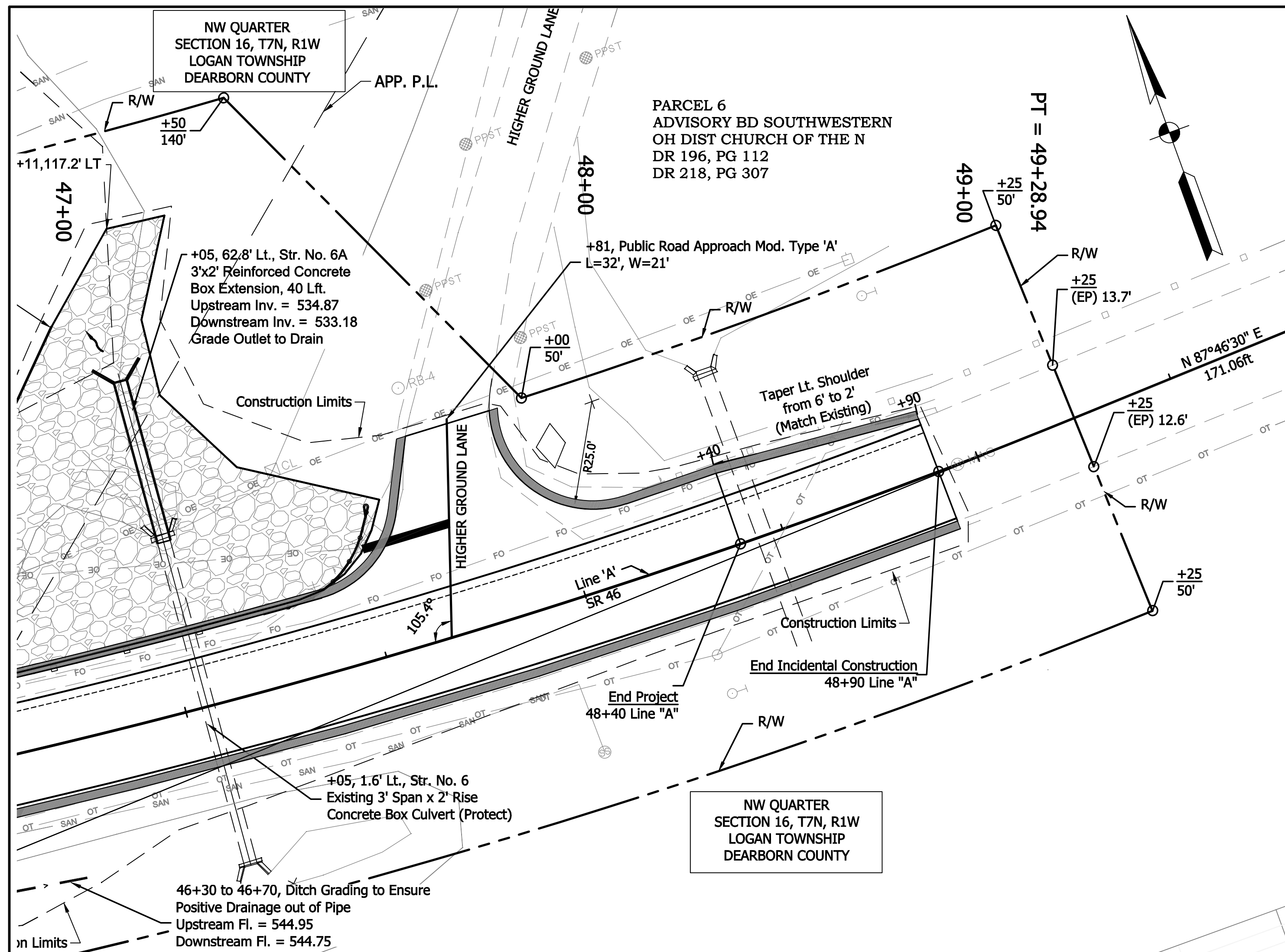
HORIZONTAL SCALE 1" = 20'	BRIDGE FILE
VERTICAL SCALE 1" = 5'	DESIGNATION 1600539

SURVEY BOOK	SHEETS
CONTRACT R-39881	11 OF 34 PROJECT 1600539



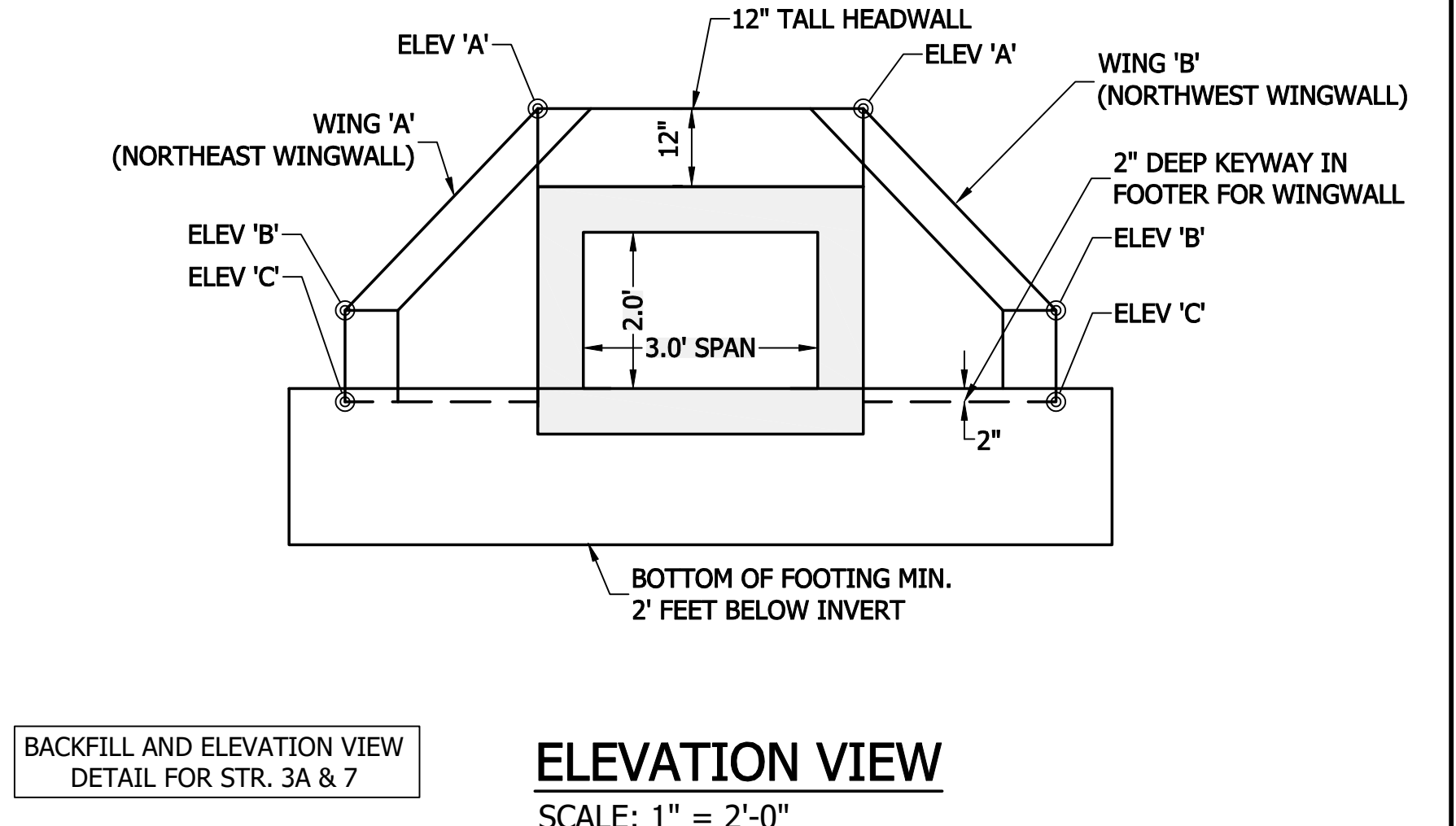
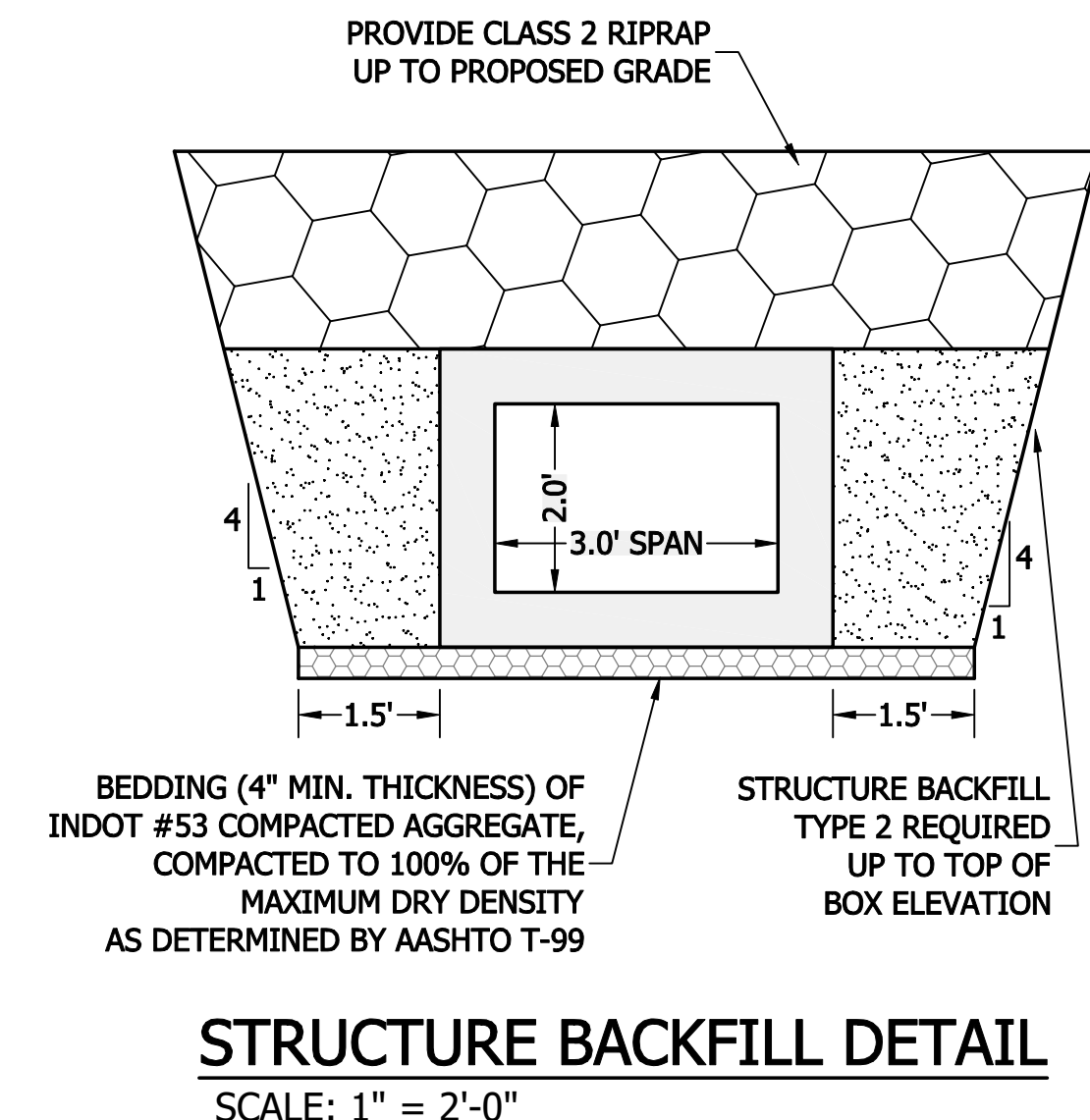
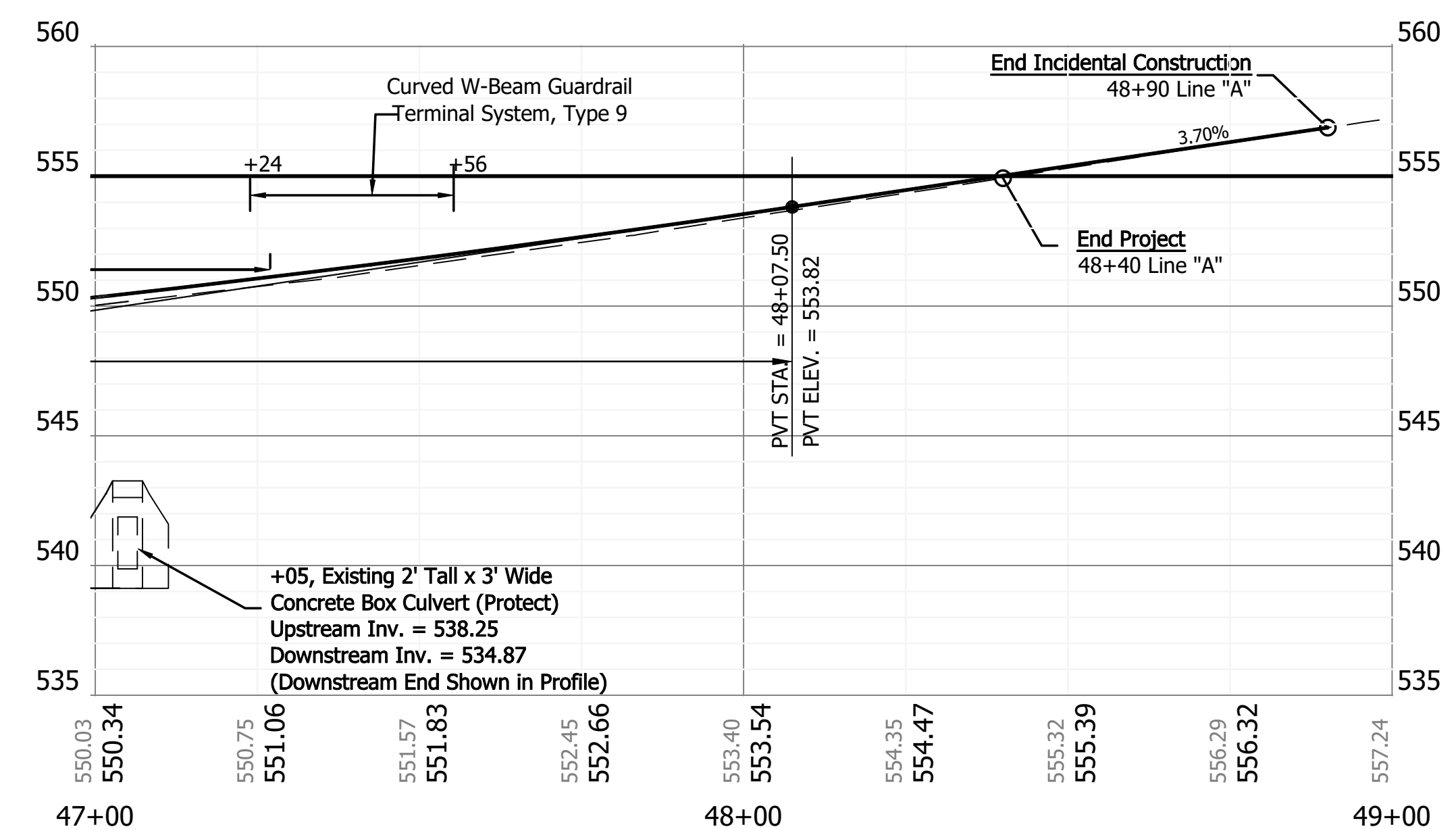
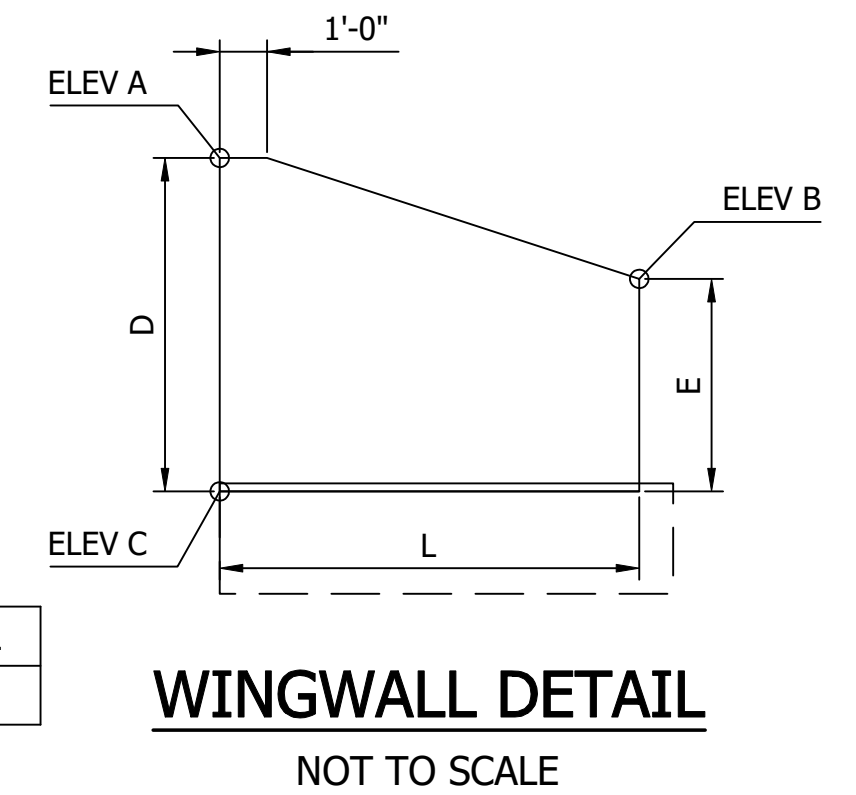
<b>PRELIMINARY</b> NOT FOR CONSTRUCTION	RECOMMENDED FOR APPROVAL _____ 9/11/2019 DESIGN ENGINEER DATE	<b>INDIANA DEPARTMENT OF TRANSPORTATION</b>		HORIZONTAL SCALE 1" = 20'	BRIDGE FILE
	DESIGNED: CLK/SJG DRAWN: SJG/CLK	<b>PLAN &amp; PROFILE</b>		VERTICAL SCALE 1" = 5'	DESIGNATION 1600539
	CHECKED: BAH CHECKED: BAH			SURVEY BOOK	SHEETS 12 OF 34
				CONTRACT R-39881	PROJECT 1600539





#### WINGWALL TABLE STR. 6A

LOCATION	WING A	WING B	
ELEVATION A	536.76	536.76	
ELEVATION B	534.20	534.20	
ELEVATION C	533.01	533.01	
DIMENSION D	3.75	3.75	
DIMENSION E	1.19	1.19	
DIMENSION L	6.00	6.00	TOTAL
AREA (SFT.)	16.10	16.10	32.20



**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED  
FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

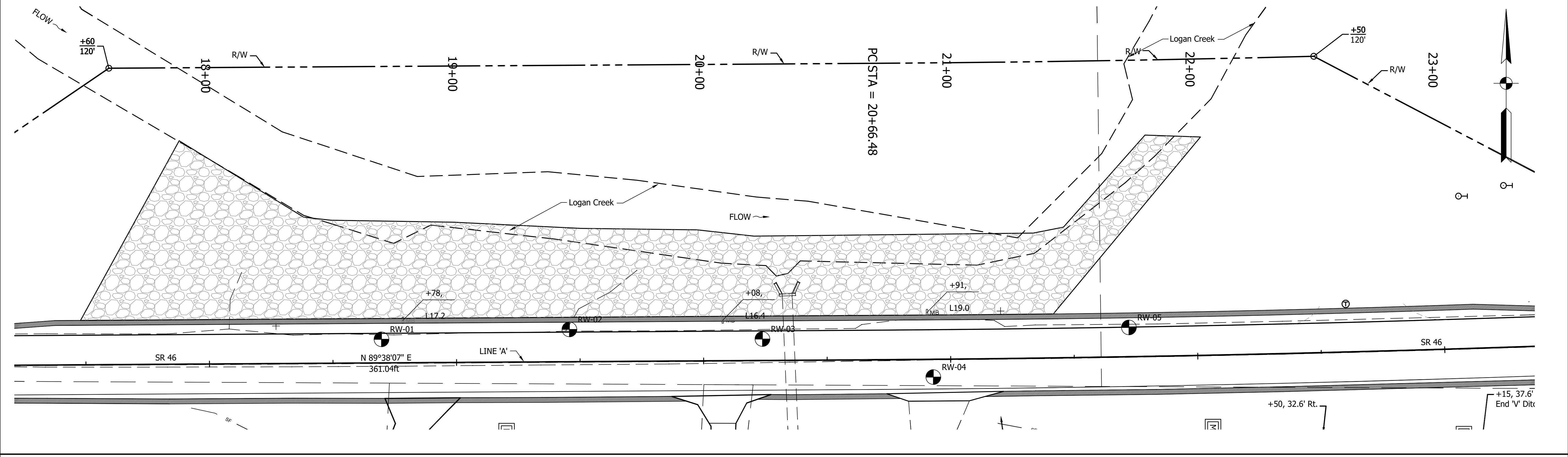
INDIANA  
DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	DESIGNATION
VERTICAL SCALE	1600539
1" = 5'	SURVEY BOOK
	13 OF 34
CONTRACT	PROJECT
R-39881	1600539



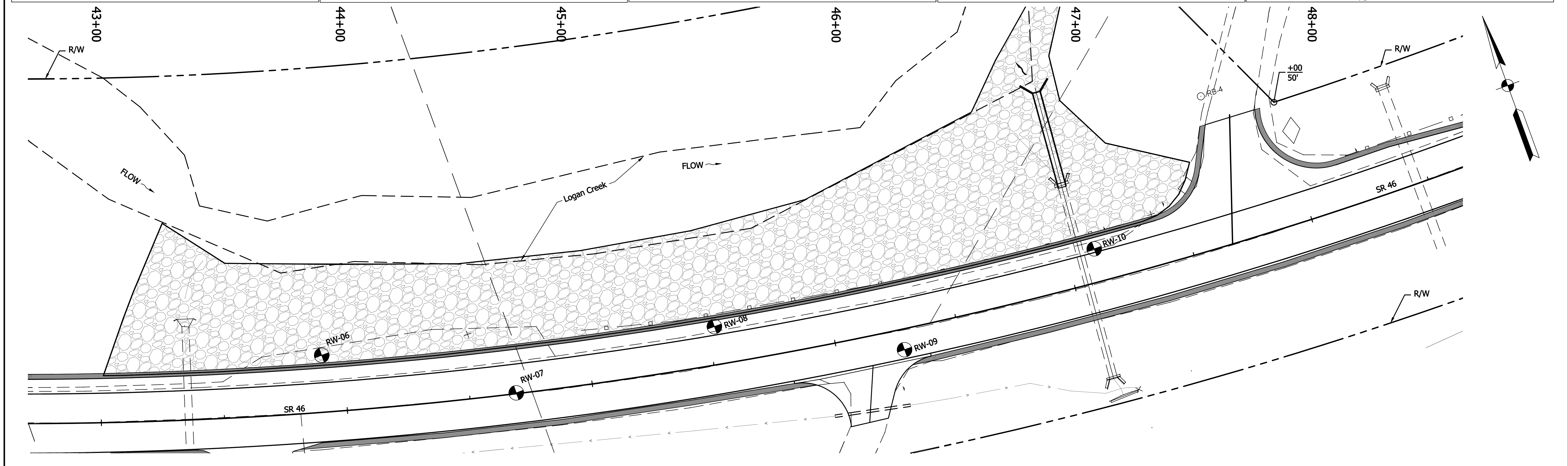
LOG OF TEST BORING												LOG OF TEST BORING												LOG OF TEST BORING												LOG OF TEST BORING												LOG OF TEST BORING											
BORING NO.: RW-01												BORING NO.: RW-02												BORING NO.: RW-03												BORING NO.: RW-04												BORING NO.: RW-05											
SHEET 1 OF 1												SHEET 1 OF 1												SHEET 1 OF 1												SHEET 1 OF 1												SHEET 1 OF 1											
CLIENT: FPBH, Inc.												CLIENT: FPBH, Inc.												CLIENT: FPBH, Inc.												CLIENT: FPBH, Inc.												CLIENT: FPBH, Inc.											
DESIGN NO.: 1600539												DESIGN NO.: 1600539												DESIGN NO.: 1600539												DESIGN NO.: 1600539												DESIGN NO.: 1600539											
STRUCTURE #:												STRUCTURE #:												STRUCTURE #:												STRUCTURE #:												STRUCTURE #:											
PROJECT TYPE: Erosion Control												PROJECT TYPE: Erosion Control												PROJECT TYPE: Erosion Control												PROJECT TYPE: Erosion Control												PROJECT TYPE: Erosion Control											
LOCATION: SR 46												LOCATION: SR 46												LOCATION: SR 46												LOCATION: SR 46												LOCATION: SR 46											
COUNTY: Dearborn												COUNTY: Dearborn												COUNTY: Dearborn												COUNTY: Dearborn												COUNTY: Dearborn											
PROJECT NO.: CJ185633												PROJECT NO.: CJ185633												PROJECT NO.: CJ185633												PROJECT NO.: CJ185633												PROJECT NO.: CJ185633											
DATE STARTED: 01-03-19												DATE STARTED: 01-03-19												DATE STARTED: 01-03-19												DATE STARTED: 01-03-19												DATE STARTED: 01-03-19											
DATE COMPLETED: 01-03-19												DATE COMPLETED: 01-03-19												DATE COMPLETED: 01-03-19												DATE COMPLETED: 01-03-19												DATE COMPLETED: 01-03-19											
BORING METHOD: Hollow Stem Auger												BORING METHOD: Hollow Stem Auger												BORING METHOD: Hollow Stem Auger												BORING METHOD: Hollow Stem Auger												BORING METHOD: Hollow Stem Auger											
RIG TYPE: CME 55 Truck												RIG TYPE: CME 55 Truck												RIG TYPE: CME 55 Truck												RIG TYPE: CME 55 Truck												RIG TYPE: CME 55 Truck											
HAMMER: Auto												HAMMER: Auto												HAMMER: Auto												HAMMER: Auto												HAMMER: Auto											
DRILLER/INSP: D.C.												DRILLER/INSP: D.C.												DRILLER/INSP: D.C.												DRILLER/INSP: D.C.												DRILLER/INSP: D.C.											
TEMPERATURE: 32 °F												TEMPERATURE: 32 °F												TEMPERATURE: 32 °F												TEMPERATURE: 32 °F												TEMPERATURE: 32 °F											
WEATHER: Cloudy												WEATHER: Cloudy												WEATHER: Cloudy												WEATHER: Cloudy												WEATHER: Sunny											
GROUNDWATER: Encountered at NW												GROUNDWATER: Encountered at NW												GROUNDWATER: Encountered at NW												GROUNDWATER: Encountered at NW												GROUNDWATER: Encountered at NW											
At completion NW												At completion NW												At completion NW												At completion NW												At completion NW											
Caved in at 2.0 ft												Caved in at 19.0 ft												Caved in at 19.0 ft												Caved in at 27.0 ft												Caved in at 8.0 ft											
ELEVATION	SAMPLE DEPTH	SOIL/MATERIAL DESCRIPTION	SAMPLE NUMBER	SPT per ft	RECOVERY %	MOISTURE CONTENT	DRY DENSITY	POCKET PEN. (lb/in)	UNCONF. COMP. (hr)	ATTERBERG LIMITS	REMARKS	ELEVATION	SAMPLE DEPTH	SOIL/MATERIAL DESCRIPTION	SAMPLE NUMBER	SPT per ft	RECOVERY %	MOISTURE CONTENT	DRY DENSITY	POCKET PEN. (lb/in)	UNCONF. COMP. (hr)	ATTERBERG LIMITS	REMARKS	ELEVATION	SAMPLE DEPTH	SOIL/MATERIAL DESCRIPTION	SAMPLE NUMBER	SPT per ft	RECOVERY %	MOISTURE CONTENT	DRY DENSITY	POCKET PEN. (lb/in)	UNCONF. COMP. (hr)	ATTERBERG LIMITS	REMARKS	ELEVATION	SAMPLE DEPTH	SOIL/MATERIAL DESCRIPTION	SAMPLE NUMBER	SPT per ft	RECOVERY %	MOISTURE CONTENT	DRY DENSITY	POCKET PEN. (lb/in)	UNCONF. COMP. (hr)	ATTERBERG LIMITS	REMARKS	ELEVATION	SAMPLE DEPTH	SOIL/MATERIAL DESCRIPTION	SAMPLE NUMBER	SPT per ft	RECOVERY %	MOISTURE CONTENT	DRY DENSITY	POCKET PEN. (lb/in)	UNCONF. COMP. (hr)	ATTERBERG LIMITS	REMARKS



<b>PRELIMINARY</b> NOT FOR CONSTRUCTION	RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER	9/11/2019	DATE	<b>INDIANA</b> <b>DEPARTMENT OF TRANSPORTATION</b>	HORIZONTAL SCALE	BRIDGE FILE	
	DESIGNED: CLK/SJG	DRAWN: SJG/CLK				VERTICAL SCALE	DESIGNATION	
					<b>SOIL BORINGS</b>	N/A	1600539	
CHECKED: BAH	CHECKED: BAH			SURVEY BOOK		SHEETS		
						R-39881	14 OF 34	
							PROJECT	1600539

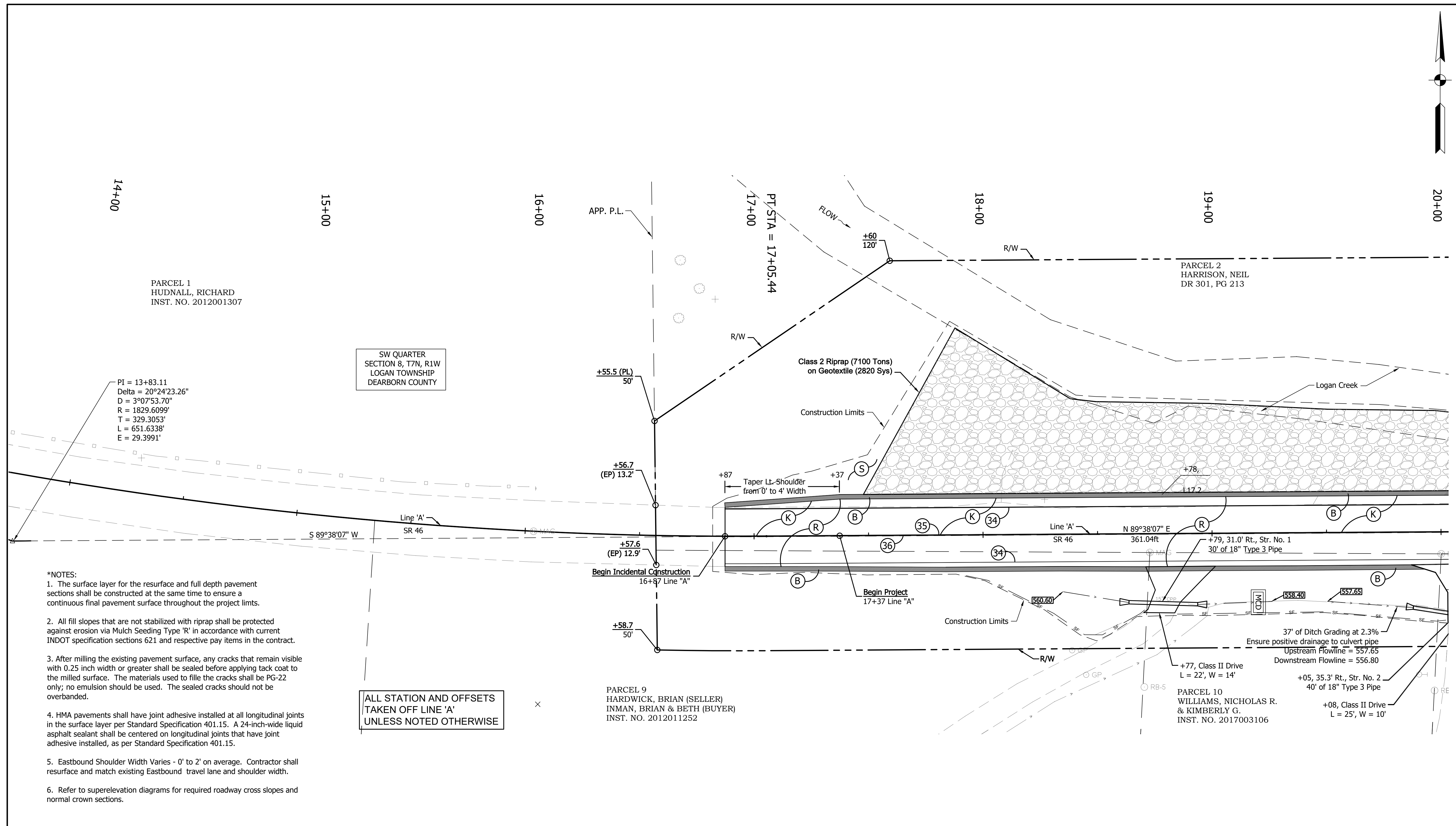
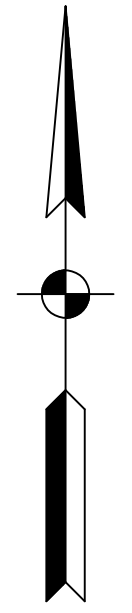


LOG OF TEST BORING														LOG OF TEST BORING														LOG OF TEST BORING														LOG OF TEST BORING														LOG OF TEST BORING													
BORING NO.: RW-06														BORING NO.: RW-07														BORING NO.: RW-08														BORING NO.: RW-09														BORING NO.: RW-10													
SHEET 2 OF 2														SHEET 2 OF 2														SHEET 2 OF 2														SHEET 2 OF 2														SHEET 1 OF 2													
CLIENT: FFBH, Inc.														CLIENT: FFBH, Inc.														CLIENT: FFBH, Inc.														CLIENT: FFBH, Inc.														CLIENT: FFBH, Inc.													
DES NO.: 1600539														DES NO.: 1600539														DES NO.: 1600539														DES NO.: 1600539														DES NO.: 1600539													
STRUCTURE #:														STRUCTURE #:														STRUCTURE #:														STRUCTURE #:														STRUCTURE #:													
PROJECT TYPE: Erosion Control														PROJECT TYPE: Erosion Control														PROJECT TYPE: Erosion Control														PROJECT TYPE: Erosion Control														PROJECT TYPE: Erosion Control													
NORTHING: 546839														NORTHING: 546707														NORTHING: 546791														NORTHING: 546860														NORTHING: 546941													
EASTING: 1468100														EASTING: 1468057														EASTING: 1468057														EASTING: 1468020														EASTING: 1468034													
DATUM: NAVD 88														DATUM: NAVD 88														DATUM: NAVD 88														DATUM: NAVD 88														DATUM: NAVD 88													
SOIL MATERIAL DESCRIPTION														SOIL MATERIAL DESCRIPTION														SOIL MATERIAL DESCRIPTION														SOIL MATERIAL DESCRIPTION														SOIL MATERIAL DESCRIPTION													
SAMPLE DEPTH														SAMPLE DEPTH														SAMPLE DEPTH														SAMPLE DEPTH														SAMPLE DEPTH													
SOIL MATERIAL DESCRIPTION														SOIL MATERIAL DESCRIPTION														SOIL MATERIAL DESCRIPTION														SOIL MATERIAL DESCRIPTION														SOIL MATERIAL DESCRIPTION													
SAMPLE NUMBER														SAMPLE NUMBER														SAMPLE NUMBER														SAMPLE NUMBER														SAMPLE NUMBER													
SPT per ft														SPT per ft														SPT per ft														SPT per ft														SPT per ft													
RECOVERY %														RECOVERY %														RECOVERY %														RECOVERY %														RECOVERY %													
MOISTURE %														MOISTURE %														MOISTURE %														MOISTURE %														MOISTURE %													
DRY DENSITY pcf														DRY DENSITY pcf														DRY DENSITY pcf														DRY DENSITY pcf														DRY DENSITY pcf													
POCKET PEN. lbf														POCKET PEN. lbf														POCKET PEN. lbf														POCKET PEN. lbf														POCKET PEN. lbf													
UNCONF. COMP. %														UNCONF. COMP. %														UNCONF. COMP. %														UNCONF. COMP. %														UNCONF. COMP. %													
LL														LL														LL														LL														LL													
PL														PL														PL														PL														PL													
PI														PI														PI														PI														PI													
REMARKS														REMARKS														REMARKS														REMARKS														REMARKS													
Silty Clay, very stiff, moist, brown to gray, (residual soil), A-7-6, Lab No. 25130														Weathered Shale, soft, gray, highly fractured, (visual)														Silty Clay, stiff to hard, moist, brown, with limestone bands below 30 ft (residual soil), A-6, Lab No. 25131														Silty Clay, stiff to very stiff, moist, gray, with frequent limestone bands below 28.5 ft, (residual soil), A-6, Lab No. 25131														Aphalitic Concrete													
SS 10														SS 10														SS 10														SS 10														SS 1													
7-9-10														21-21-20														5-5-7														11-13-10														7-7-8													
61														0														39														50														50													
23.2																												21.4														103.8														16.7													
24.1																												15.5														15.5														21.7													
1.25																												3.0														3.35														2.25													
>4.5														2.5														0.5														>4.5														2.25													
														72														18.1														>4.5														2.75													
														77														1.75														63														2.5													
38.5, SPT refusal at 38.9 ft, HSA refusal at 39 ft														38.5, SPT refusal at 38.9 ft, HSA refusal at 39 ft														43.5, SPT refusal at 43.8 ft, HSA refusal at 44 ft														43.5, SPT refusal at 44.4 ft, HSA refusal at 45 ft														3.5, pH = 8.1, SG = 2.74													
Bottom of Boring at 39.0 ft														Bottom of Boring at 49.0 ft														Bottom of Boring at 44.0 ft														Bottom of Boring at 50.0 ft																											
																																																								Continued on next page													



<b>PRELIMINARY</b> NOT FOR CONSTRUCTION	RECOMMENDED FOR APPROVAL _____ 9/11/2019 DESIGN ENGINEER DATE	<b>INDIANA</b> <b>DEPARTMENT OF TRANSPORTATION</b>	HORIZONTAL SCALE 1" = 20'	BRIDGE FILE
	DESIGNED: CLK/SJG DRAWN: SJG/CLK CHECKED: BAH CHECKED: BAH		VERTICAL SCALE N/A	DESIGNATION 1600539
		<b>SOIL BORINGS</b>	SURVEY BOOK	SHEETS 15 OF 34
			CONTRACT R-39881	PROJECT 1600539





14+00

15+00

16+00

17+00

18+00

19+00

20+00

PARCEL 1  
HUDNALL, RICHARD  
INST. NO. 2012001307

SW QUARTER  
SECTION 8, T7N, R1W  
LOGAN TOWNSHIP  
DEARBORN COUNTY

PARCEL 2  
HARRISON, NEIL  
DR 301, PG 213

APP. P.L.

PT. STA = 17+05.44

PI = 13+83.11  
Delta = 20°24'23.26"  
D = 3°07'53.70"  
R = 1829.6099'  
T = 329.3053'  
L = 651.6338'  
E = 29.3991'

+55.5 (PL)  
50'

Class 2 Riprap (7100 Tons)  
on Geotextile (2820 Sys)

+56.7  
(EP) 13.2'

+87  
Taper Lt. Shoulder  
from 0' to 4' Width

+57.6  
(EP) 12.9'

Begin Incidental Construction  
16+87 Line "A"

+58.7  
50'

PARCEL 9  
HARDWICK, BRIAN (SELLER)  
INMAN, BRIAN & BETH (BUYER)  
INST. NO. 2012011252

PARCEL 10  
WILLIAMS, NICHOLAS R.  
& KIMBERLY G.  
INST. NO. 2017003106

- \*NOTES:**
- The surface layer for the resurface and full depth pavement sections shall be constructed at the same time to ensure a continuous final pavement surface throughout the project limits.
  - All fill slopes that are not stabilized with riprap shall be protected against erosion via Mulch Seeding Type 'R' in accordance with current INDOT specification sections 621 and respective pay items in the contract.
  - After milling the existing pavement surface, any cracks that remain visible with 0.25 inch width or greater shall be sealed before applying tack coat to the milled surface. The materials used to fill the cracks shall be PG-22 only; no emulsion should be used. The sealed cracks should not be overbanded.
  - HMA pavements shall have joint adhesive installed at all longitudinal joints in the surface layer per Standard Specification 401.15. A 24-inch-wide liquid asphalt sealant shall be centered on longitudinal joints that have joint adhesive installed, as per Standard Specification 401.15.
  - Eastbound Shoulder Width Varies - 0' to 2' on average. Contractor shall resurface and match existing Eastbound travel lane and shoulder width.
  - Refer to superelevation diagrams for required roadway cross slopes and normal crown sections.

ALL STATION AND OFFSETS  
TAKEN OFF LINE 'A'  
UNLESS NOTED OTHERWISE

**LEGEND**

- (B) 2' Wide 10" Thick Compacted Aggregate #53
- (K) 165 LB/SYS QC/QA-HMA, 3, 64, Surface 9.5 mm on 275 LB/SYS QC/QA-HMA, 2, 64, Intermediate 19mm on 660 LB/SYS QC/QA-HMA, 2, 64, Base 19mm on Subgrade Treatment Type IC
- (R) 165 LB/SYS QC/QA-HMA, 3, 64, Surface, 9.5 mm
- (S) Mulch Seeding, Type R

**EROSION CONTROL LEGEND**

- sf SILT FENCE
- MCD TEMPORARY CHECK DAM (MODIFIED), REVETMENT RIPRAP

**PAVEMENT MARKINGS LEGEND & PROJECT TOTALS**

- (34) LINE, PAINT, SOLID, WHITE, 4 IN. = 675+675+675+685 = 2,705 Lft.
- (35) LINE, PAINT, BROKEN, YELLOW, 4 IN. = 675 Lft
- (36) LINE, THERMOPLASTIC, SOLID, YELLOW, 4 IN. = 675+680+680 = 2,035 Lft.

**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

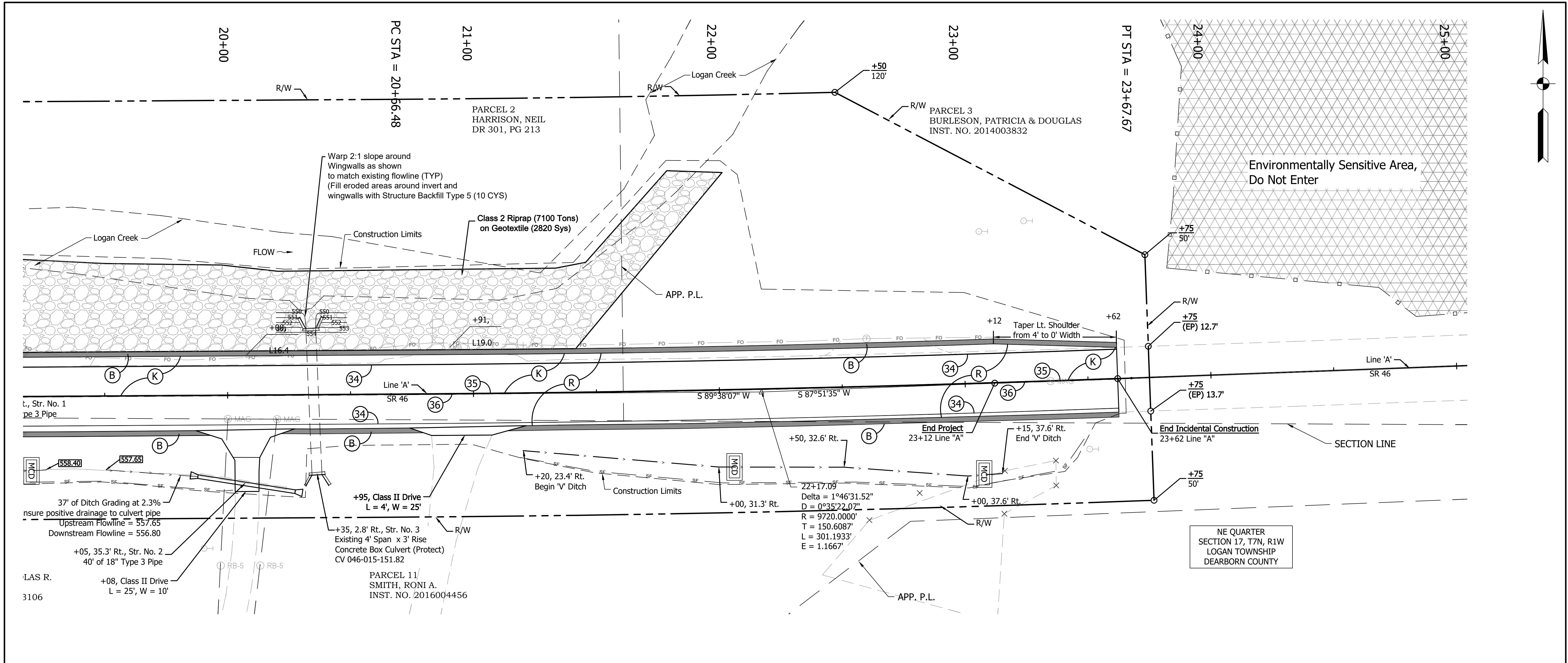
DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

INDIANA  
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
1" = 5'	1600539

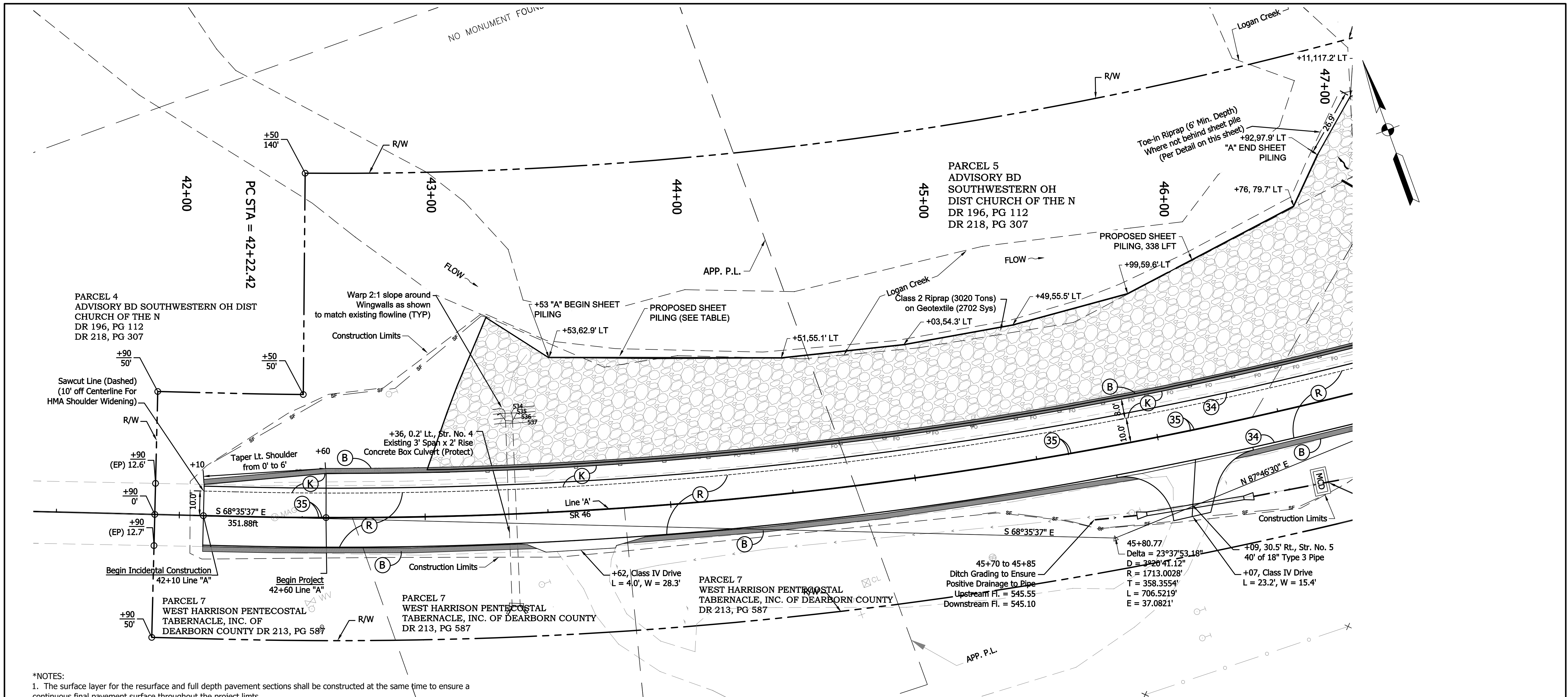
SURVEY BOOK	SHEETS
	16 OF 34
CONTRACT	PROJECT
R-39881	1600539



- \*NOTES:
1. The surface layer for the resurface and full depth pavement sections shall be constructed at the same time to ensure a continuous final pavement surface throughout the project limits.
  2. All fill slopes that are not stabilized with riprap shall be protected against erosion via Mulch Seeding Type 'R' in accordance with current INDOT specification sections 621 and respective pay items in the contract.
  3. After milling the existing pavement surface, any cracks that remain visible with 0.25 inch width or greater shall be sealed before applying tack coat to the milled surface. The materials used to fill the cracks shall be PG-22 only; no emulsion should be used. The sealed cracks should not be overbanded.
  4. HMA pavements shall have joint adhesive installed at all longitudinal joints in the surface layer per Standard Specification 401.15. A 24-inch-wide liquid asphalt sealant shall be centered on longitudinal joints that have joint adhesive installed, as per Standard Specification 401.15.
  5. Eastbound Shoulder Width Varies - 0' to 2' on average. Contractor shall resurface and match existing Eastbound travel lane and shoulder width.
  6. Refer to superelevation diagrams for required roadway cross slopes and normal crown sections.

ALL STATION AND OFFSETS  
TAKEN OFF LINE 'A'  
UNLESS NOTED OTHERWISE

<p><b>LEGEND</b></p> <p>(B) 2' Wide 10" Thick Compacted Aggregate #53</p> <p>(K) 165 LB/SYS QC/QA-HMA, 3, 64, Surface 9.5 mm on 275 LB/SYS QC/QA-HMA, 2, 64, Intermediate 19mm on 660 LB/SYS QC/QA-HMA, 2, 64, Base 19mm on Subgrade Treatment Type IC</p> <p>(R) 165 LB/SYS QC/QA-HMA, 3, 64, Surface, 9.5 mm</p> <p>(S) Mulch Seeding, Type R</p>	<p><b>EROSION CONTROL LEGEND</b></p> <p>SF SILT FENCE</p> <p>MCD TEMPORARY CHECK DAM (MODIFIED), REVEMENT RIPRAP</p>	<p><b>PAVEMENT MARKINGS LEGEND &amp; PROJECT TOTALS</b></p> <p>(34) LINE, PAINT, SOLID, WHITE, 4 IN. = 675+675+675+685 = 2,705 Lft.</p> <p>(35) LINE, PAINT, BROKEN, YELLOW, 4 IN. = 675 Lft.</p> <p>(36) LINE, THERMOPLASTIC, SOLID, YELLOW, 4 IN. = 675+680+680 = 2,035 Lft.</p>	<p><b>PRELIMINARY</b> NOT FOR CONSTRUCTION</p>	<p>RECOMMENDED FOR APPROVAL _____ 9/11/2019 DESIGN ENGINEER DATE</p>	<p><b>INDIANA</b> <b>DEPARTMENT OF TRANSPORTATION</b></p>	<p>HORIZONTAL SCALE 1" = 20'</p> <p>VERTICAL SCALE 1" = 5'</p>	<p>BRIDGE FILE DESIGNATION 1600539</p>
<p><b>CONSTRUCTION DETAILS</b></p>					<p>SURVEY BOOK</p>	<p>SHEETS 17 OF 34</p>	
					<p>CONTRACT R-39881</p>	<p>PROJECT 1600539</p>	



- \*NOTES:**
1. The surface layer for the resurface and full depth pavement sections shall be constructed at the same time to ensure a continuous final pavement surface throughout the project limits.
  2. All fill slopes that are not stabilized with riprap shall be protected against erosion via Mulch Seeding Type 'R' in accordance with current INDOT specification sections 621 and respective pay items in the contract.
  3. After milling the existing pavement surface, any cracks that remain visible with 0.25 inch width or greater shall be sealed before applying tack coat to the milled surface. The materials used to fill the cracks shall be PG-22 only; no emulsion should be used. The sealed cracks should not be overbanded.
  4. HMA pavements shall have joint adhesive installed at all longitudinal joints in the surface layer per Standard Specification 401.15. A 24-inch-wide liquid asphalt sealant shall be centered on longitudinal joints that have joint adhesive installed, as per Standard Specification 401.15.
  5. Eastbound Shoulder Width Varies - 0' to 2' on average. Contractor shall resurface and match existing Eastbound travel lane and shoulder width.
  6. Refer to superelevation diagrams for required roadway cross slopes and normal crown sections.

ALL STATION AND OFFSETS  
TAKEN OFF LINE 'A'  
UNLESS NOTED OTHERWISE

LEGEND		EROSION CONTROL LEGEND	
(B) 2' Wide 10" Thick Compacted Aggregate #53	(SF) SILT FENCE	(MCD) TEMPORARY CHECK DAM (MODIFIED), REVETMENT RIPRAP	
(K) 165 LB/SYS QC/QA-HMA, 3, 64, Surface 9.5 mm on 275 LB/SYS QC/QA-HMA, 2, 64, Intermediate 19mm on 660 LB/SYS QC/QA-HMA, 2, 64, Base 19mm on Subgrade Treatment Type IC			
(R) 165 LB/SYS QC/QA-HMA, 3, 64, Surface, 9.5 mm			
(S) Mulch Seeding, Type R			
PAVEMENT MARKINGS LEGEND & PROJECT TOTALS			
(34) LINE, PAINT, SOLID, WHITE, 4 IN. = 675+675+675+685 = 2,705 Lft.			
(35) LINE, PAINT, BROKEN, YELLOW, 4 IN. = 675 Lft.			
(36) LINE, THERMOPLASTIC, SOLID, YELLOW, 4 IN. = 675+680+680 = 2,035 Lft.			

**PRELIMINARY**  
NOT FOR CONSTRUCTION

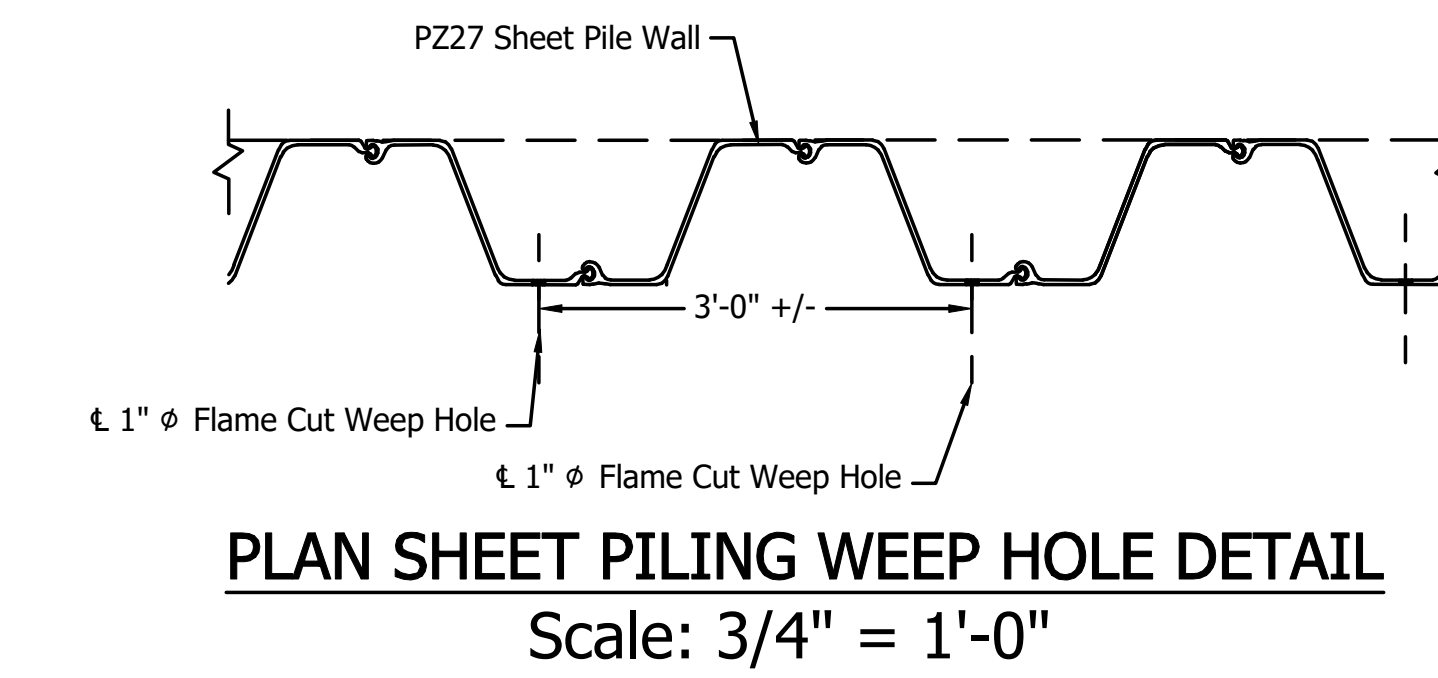
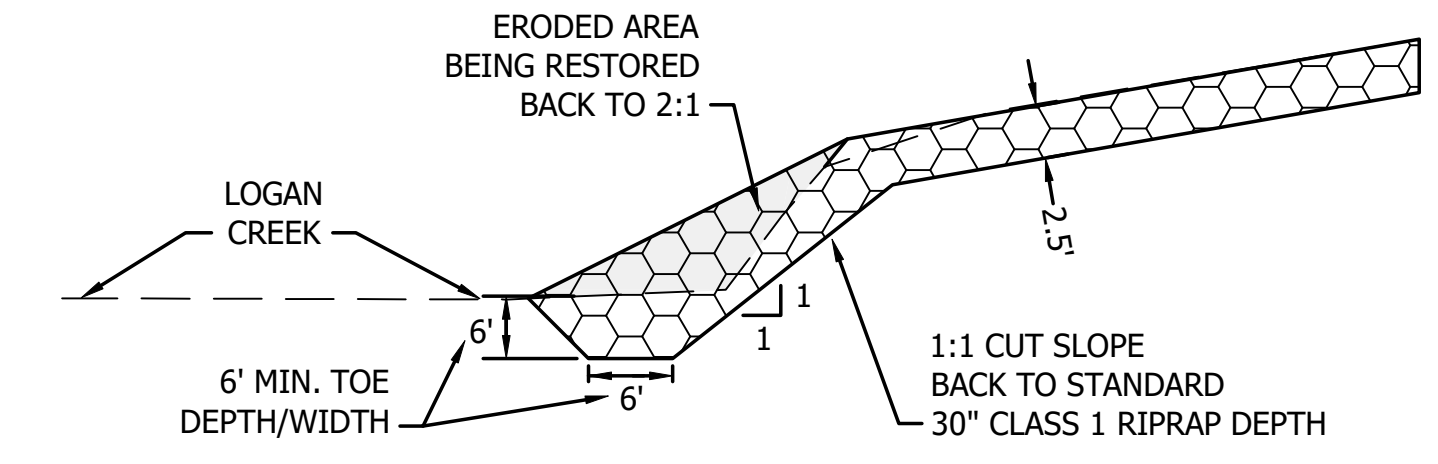
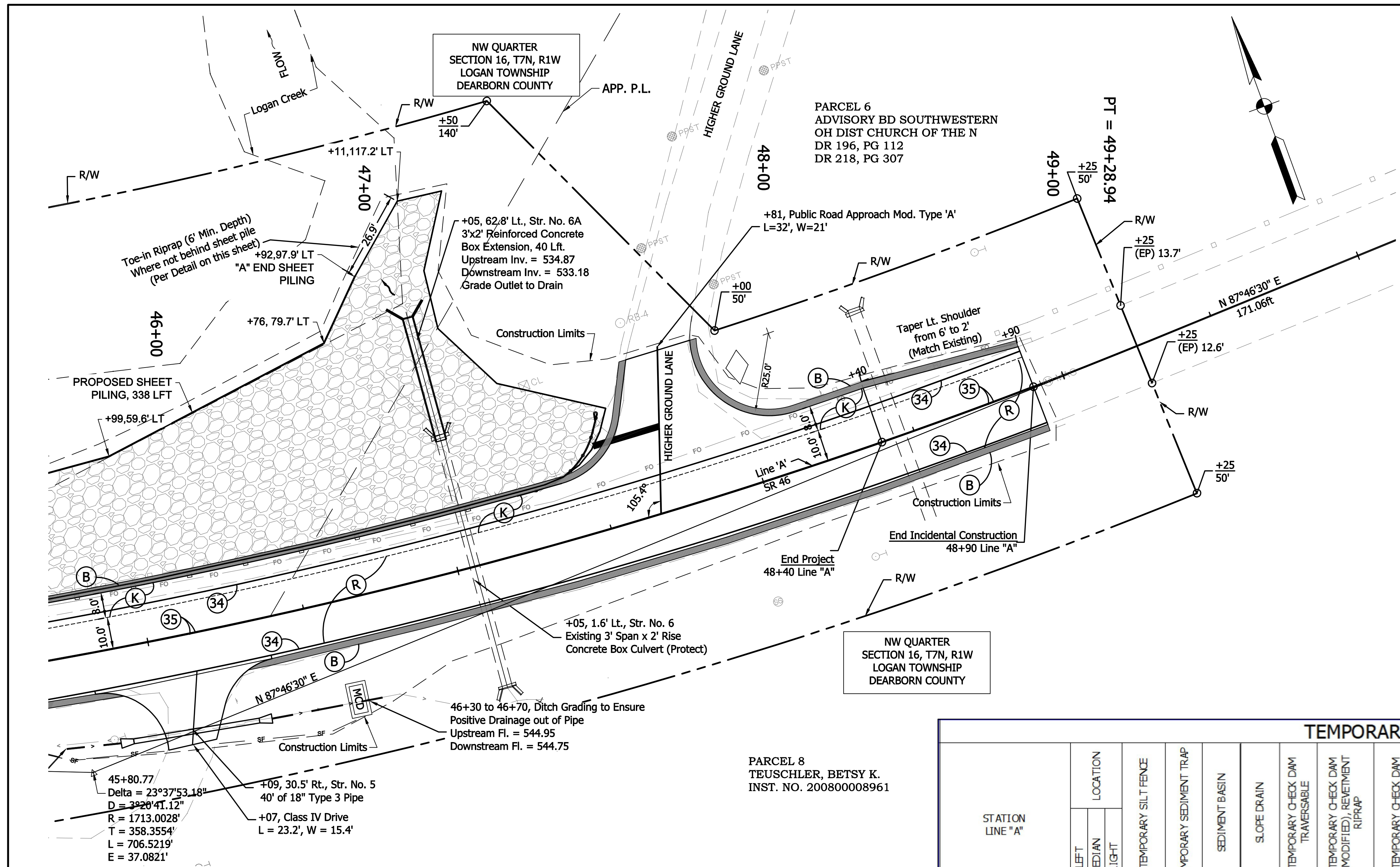
RECOMMENDED FOR APPROVAL	9/11/2019	DESIGN ENGINEER	DATE
DESIGNED: CLK/SJG	DRAWN: SJG/CLK	CHECKED: BAH	CHECKED: BAH

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

**CONSTRUCTION DETAILS**

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
1" = 5'	1600539
SURVEY BOOK	SHEETS
	18 OF 34
CONTRACT	PROJECT
R-39881	1600539





- \*NOTES:**
- The surface layer for the resurface and full depth pavement sections shall be constructed at the same time to ensure a continuous final pavement surface throughout the project limits.
  - All fill slopes that are not stabilized with riprap shall be protected against erosion via Mulch Seeding Type 'R' in accordance with current INDOT specification sections 621 and respective pay items in the contract.
  - After milling the existing pavement surface, any cracks that remain visible with 0.25 inch width or greater shall be sealed before applying tack coat to the milled surface. The materials used to fill the cracks shall be PG-22 only; no emulsion should be used. The sealed cracks should not be overbanded.
  - HMA pavements shall have joint adhesive installed at all longitudinal joints in the surface layer per Standard Specification 401.15. A 24-inch-wide liquid asphalt sealant shall be centered on longitudinal joints that have joint adhesive installed, as per Standard Specification 401.15.
  - Eastbound Shoulder Width Varies - 0' to 2' on average. Contractor shall resurface and match existing Eastbound travel lane and shoulder width.
  - Refer to superelevation diagrams for required roadway cross slopes and normal crown sections.

ALL STATION AND OFFSETS TAKEN OFF LINE 'A' UNLESS NOTED OTHERWISE

STATION LINE "A"	TEMPORARY EROSION CONTROL TABLE																	REMARKS		
	LOCATION		TEMPORARY SILT FENCE	TEMPORARY SEDIMENT TRAP	SEDIMENT BASIN	SLOPE DRAIN	TEMPORARY CHECK DAM TRAVERSABLE	TEMPORARY CHECK DAM (MODIFIED), REVETMENT RIPRAP	TEMPORARY CHECK DAM REVETMENT RIPRAP	TEMPORARY FILTER STONE	TEMPORARY GEOTEXTILE	DITCH INLET PROTECTION	SEDIMENT REMOVE	NO. 2 STONE	TEMPORARY SEED	TEMPORARY MULCH	MOD/DEMOLITION FOR SURFACE STABILIZATION		EROSION CONTROL BLANKET	
	LEFT	MEDIAN																		RIGHT
17+90 to 18+70			X	90									2							
18+85 to 20+02			X	118									2							
21+10 to 23+50			X	250									4							
42+10 to 43+25	X			130									2							
45+25 to 46+00			X	77									2							
46+15 to 46+60			X	45									1							
19+20			X					5		1	10		2							
22+05			X					5		1	10		2							
23+05			X					5		1	10		2							
46+60			X					5		1	10		2							
Disturbed Area (0.45 Acre)															135	2.3	2.0			Dewatering secondary containment (2) Disturbances Estimated
<b>TOTALS</b>				710				20	0	4	40	0	21	0	135	2.3	2.0	0.0		

**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
1" = 5'	1600539
SURVEY BOOK	SHEETS
	19 OF 34
CONTRACT	PROJECT
R-39881	1600539



**SHEET SIGN & POST SUMMARY**

SIGN				POST											REMARKS			
PLAN SHEET NO. / LINE	SIGN LOCATION (STA.), (OFFSET)	SIGN CODE	SIGN SIZE (IN x IN)	GROUND - MOUNTED SIGN AREA (ft <sup>2</sup> )			U CHANNEL				SQUARE					SIGN, SHEET, REMOVE	SIGN, SHEET, RELOCATE	SIGN, SHEET ASSEMBLY RELOCATE
				0.080"	0.100"	0.125"	POST LENGTH		POST LENGTH		2" X 2" - 12 GA. (TYPE 2)		2 1/4" X 2 1/4" - 12 GA. (TYPE 1)					
							1	2	TYPE "A"	TYPE "B"	REINFORCED ANCHOR		REINFORCED ANCHOR					
							FT.	FT.	FT.	FT.	POST LENGTH (FT.)		POST LENGTH (FT.)					
						1	2	TOTAL	1	TOTAL								
12 / LINE A	42+60	OM-3L																ENSURE GUARDRAIL END TREATMENT (GRET) INCLUDES RETROREFLECTIVE OM3-L MARKING AS PART OF THE GRET IMPACT HEAD ASSEMBLY FACING EASTBOUND TRAFFIC.
12 / LINE A	147+30, 18.5' Lt	OM3-R	12X36	3.00														FACE WESTBOUND TRAFFIC
				3.00														RESET "HIGHER GROUND" ON TOP OF NEW POST
														0				

**RIPRAP SUMMARY TABLE**

LOCATION					RIPRAP	
FROM STATION	TO STATION	LEFT	MEDIAN	RIGHT	CLASS II RIPRAP	GEOTEXTILE TYPE 3
17+48	22+03	X			7100	2820
43+00	47+60	X			3020	2702
PROJECT TOTAL					10120	5522

**SHEET PILING SUMMARY TABLE**

START STATION	END STATION	START OFFSET (FT.)	END OFFSET (FT.)	LT/RT	PILING LENGTH (FT.)	START STATION TOP OF PILING ELEVATION (FT.)	END STATION TOP OF PILING ELEVATION (FT.)	START STATION BOTTOM OF PILING ELEVATION (FT.)	END STATION BOTTOM OF PILING ELEVATION (FT.)	SHEET PILING, STEEL (SFT)
43+53	44+51	62.9	55.1	LT.	95	531	531	513.0	513.0	1710
44+51	45+03	55.1	54.3	LT.	50	531	531	513.0	513.0	900
45+03	45+49	54.3	55.5	LT.	45	531	531	513.0	513.0	810
45+49	45+99	55.5	59.6	LT.	49	531	531	513.0	513.0	882
45+99	46+76	59.6	79.7	LT.	77	531	531	513.0	513.0	1386
46+76	46+92	79.7	97.9	LT.	24	531	531	513.0	513.0	432
TOTALS:										6120

NOTE: SHEET PILING SHALL BE PZ27, ASTM A572 GRADE 50

**EARTHWORK SUMMARY TABLE**

LOCATION	FILL (+25%) (CYS)	CUT (CYS)	WASTE (CYS)
LINE 'A' MAINLINE	559	7182	6623

**MAILBOX APPROACHES**

LT./RT.	C/L BOX STATION	DESCRIPTION	WIDTH, W(FT)	ASSEMBLY REQ'D		REMARKS
				SINGLE	DOUBLE	
LT	18+78, 17.0'	MAILBOX		1		
LT	20+08, 17.0'	MAILBOX		1		
LT	20+91, 17.0'	MAILBOX		1		
LT	47+54, 24.8'	EXISTING MAILBOX ASSEMBLY				DO NOT DISTURB
		TOTAL		3		

**PAVEMENT QUANTITIES AND APPROACH TABLE**

LOCATION ALL STATIONS ARE LINE "A"	DESCRIPTION (APPROACH TYPE OR CLASS)	WIDTH	LENGTH	RADIUS	DISTANCE BEYOND R/W LINE	SURFACE BEYOND R/W LINE			GRADE	EXCAVATION	PAVEMENT REMOVAL	CLEAR ZONE AT DRIVE	HMA FOR APPROACHES				HMA FOR ROADS				ASPHALT MATERIAL FOR		COMPACTED AGGREGATE NO. 5	COMPACTED AGGREGATE NO. 2	GEOTEXTILES TYPE 1B FOR SUBGRADE STABILIZATION	MILLING, SCARIFICATION	MILLING ASPHALT, 1 1/2 IN.	SUBGRADE TREATMENT TYPE IC	JOINT ADHESIVE, SURFACE	JOINT ADHESIVE, INTERMEDIATE	LIQUID ASPHALT SEALANT	REMARKS																		
						AREA	COMPACTED AGGREGATE BASE	HMA					PCCP	SURFACE TYPE B	INTERMID TYPE B	BASE TYPE B	CC/OA HMA, 3.64 SURFACE, 9.5mm	CC/OA HMA, 2.64 INTERMEDIATE, 19.0mm	CC/OA HMA, 2.64 BASE, 19.0mm	PRIME COAT	TACK COAT																													
						1	2	CUT					FILL	165	275	880	165	275	660	935	6"	8" (MIN.)											DEPTH	DEPTH (VARIES)	6"	8" (MIN.)	DEPTH	DEPTH (VARIES)	6"	8" (MIN.)	DEPTH	DEPTH (VARIES)	6"	8" (MIN.)	DEPTH	DEPTH (VARIES)	6"	8" (MIN.)		
16+87 TO 23+62	MAINLINE RESURFACE	26	675			1950																										WIDTH REFLECTS TRAVEL LANE + RT SHOULDER																		
42+10 TO 48+90	MAINLINE RESURFACE	26	680			1964																									WIDTH REFLECTS TRAVEL LANE + RT SHOULDER																			
17+37 TO 23+12	FULL DEPTH WESTBOUND LANE ONLY	12	575			767																																												
42+60 TO 48+40	FULL DEPTH WESTBOUND LANE ONLY	2	580			129																																												
16+87 TO 17+37	SHOULDER LT.	Varies	50			19																																												
17+37 TO 23+12	SHOULDER LT.	4	575			256																																												
23+12 TO 23+62	SHOULDER LT.	Varies	50			19																																												
42+10 TO 42+60	SHOULDER LT.	Varies	50			19																																												
42+60 TO 48+40	SHOULDER LT.	6	580			387																																												
48+40 TO 48+90	SHOULDER LT.	Varies	50			14																																												
16+87 TO 48+90						241.5																										FOR REMOVAL AND REPLACEMENT OF SOFT SOILS WITHIN PAVEMENT (USE ONLY AS DIRECTED BY ENGINEER)																		
TOTALS														0.0	0.0	0.0																																		

**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

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

**SUMMARY TABLES NO.1**

HORIZONTAL SCALE	BRIDGE FILE
N/A	
VERTICAL SCALE	DESIGNATION
N/A	1600539
SURVEY BOOK	SHEETS
	20 OF 34
CONTRACT	PROJECT
R-39881	1600539



### GUARDRAIL SUMMARY TABLE

LOCATION		MGS W-BEAM GUARDRAIL LENGTH													CURVED W-BEAM GUARDRAIL SYSTEM							REMARKS						
FROM STATION	TO STATION	LEFT	MEDIAN LEFT	MEDIAN RIGHT	RIGHT	STANDARD POST AT 6 FT 3 IN. SPA	STANDARD POST AT 3 FT 1.5 IN. SPA	DOUBLE FACED AT 6 FT 3 IN. SPA	DOUBLE FACED AT 3 FT 1.5 IN. SPA	HEIGHT TRANSITION	GUARDRAIL TRANSITION WITH CURB	GUARDRAIL TRANSITION WITH-OUT CURB	STRUCTURE TOP-MOUNTED POST	CABLE TERMINAL AND/OR	SHOP CURVED AT _____ FT. SPA	LONG-SPAN GUARDRAIL	GUARDRAIL FLARE RATE	GUARDRAIL END TREATMENT TYPE OS	GUARDRAIL END TREATMENT TYPE MS	GUARDRAIL TRANSITION TYPE TB	W-BEAM STANDARD POST AT _____ SPA		TERMINAL SYSTEM	CONNECTOR SYSTEM	GUARDRAIL REMOVE	GUARDRAIL RESET	IMPACT ATTENUATOR TYPE	
42+60 'A'	47+56 'A'	X				409.375												1				9	1					6 FT. OFFSET FROM EDGE OF TRAVEL LANE FIELD CUT LAST SECTION OF W-BEAM TO 3.125' LENGTH AT 47+24
<b>TOTALS</b>						<b>409.375</b>												<b>1</b>					<b>1</b>					

### STRUCTURE DATA

STRUCTURE NUMBER	LOCATION				DESCRIPTION	LENGTH	VIDEO INSPECTION LENGTH	SKEW	COVER		FLOW LINE		SUMP DEPTH	TOP OF CASTING	SERVICE LIFE	SITE DESIGNATION	PH	BACKFILL METHOD	STRUCTURE BACKFILL TYPE 1	STRUCTURE BACKFILL TYPE 2	STRUCTURE BACKFILL TYPE 5	EXCAVATION	COMPACTED AGGREGATE #5		REVETMENT RIPRAP	SCOUR PROTECTION			PIPE END SECTION	SAFETY METAL END SECTION				CONNECT TO STR.	CULVERT ASSET ID	REMARKS		
	STATION	LEFT	RIGHT	CROSS					PIPE TYPE	MIN	MAX	UP STREAM											DOWN STREAM	IN.		ELEV.	ELEV.	TONS		TONS	TONS	EA.	TYPE				SLOPE	EA.
1	18+79	x			31	18	3								50	NA	7	2	9.6								1	SMES	6:1	1								
2	20+05	x			35.3	18	3								50	NA	7	2	6.4									1	SMES	6:1	1							
3	20+35		x		2.8 Rt.	48x36														10															EXISTING - PROTECT, FILL EROSION/VOIDS AROUND WINGWALLS/INVERT WITH TYPE 5 BACKFILL			
4	43+36		x		0.2 Lt.	36x24																													EXISTING - PROTECT			
5	46+09	x			30.5	18	3								50	NA	7	2										1	SMES	6:1	1							
6	47+05		x		1.6 Lt.	36x24																													EXISTING - PROTECT			
6A	47+05	x			62.8 Lt.	36x24									50	NA	7	2		17.8			3.6															
<b>TOTALS</b>																			15.9	17.8	10.0		3.6					3										

INT. DES.	STRUCTURE NUMBER			
	1	2	5	
PIPE TYPE / SHAPE (CIR or DEF)	3 / CIR	3 / CIR	3 / CIR	
SMOOTH PIPE SIZE	18 in.	18 in.	18 in.	
CORRUGATED PIPE SIZE	18 in.	18 in.	18 in.	
SEMI-SMOOTH PIPE SIZE	18 in.	18 in.	18 in.	
CONC.	CLASS	II	II	
	D <sub>0.01</sub> RATING	1000	1000	
PLASTIC PIPE	NON-REINFORCED CONCRETE PIPE, CLASS 3 (S)			
	CORRUGATED PE PIPE, TYPE S (S)*			
	PROFILE WALL (RIBBED) PE PIPE (S)*			
	PROFILE WALL (CLOSED) PE PIPE (S)*			
	SMOOTH WALL PE PIPE (S)* / MAXIMUM DR			
	CORRUGATED PP PIPE (S)			
	PROFILE WALL PVC PIPE (S)			
	SMOOTH WALL PVC PIPE (S)*			
	CLAY	VITRIFIED CLAY PIPE, EXTRA STRENGTH (S)		
	CORRUGATED STEEL PIPE / PIPE-ARCH	FULLY RIT. PAVFD & INFD (S)		
ZINC COATED (C)				
ALUM. COATED TYPE 2 W/ BPI (C)				
POLYMER PRECOATED GALVANIZED (C)				
POLYMER PRECOATED GALVANIZED CORRUGATED STEEL PIPE TYPE 1A (S)				
CORRUGATED ALUM. ALLOY (C)				
CORRUGATED ALUM. ALLOY W/ BPI (C)				
SPIRAL RIB STEEL PIPE		ZINC COATED (SS)		
		ZINC COATED W/ BPI (SS)		
		ALUM. COATED TYPE 2 (SS)		
	POLYMER PRECOATED GALVANIZED (SS)			
	STRUCTURAL PLATE PIPE / PIPE-ARCH	STR. PLATE ALUMINUM ALLOY (C)		
STR. PLATE ALUMINUM ALLOY W/ CFP (C)				
STR. PLATE STEEL (C)				
STR. PLATE STEEL W/ CFP (C)				

#### LEGEND

<b>PIPE MATERIAL</b>	RCP	Reinforced Concrete Pipe
	RCHPE	Reinforced Concrete Horizontal Elliptical Pipe
	PE	Polyethylene
	DR	Dimension Ratio
	PVC	Polyvinyl Chloride
	PP	Polypropylene
	CORR	Corrugation
	ALUM	Aluminum
	STR	Structural
	(LS)	Lock Seam Pipe Required
<b>PIPE PROTECTION</b>	BPI	Bituminous Paved Invert
	CFP	Concrete Field Paving
	BIT	Bituminous
<b>SHAPE</b>	CIR	Circular Pipe
	DEF	Deformed Pipe
<b>INTERIOR DESIGNATION</b>	(S)	Smooth Pipe Material
	(C)	Corrugated Pipe Material
	(SS)	Semi-Smooth Pipe Material
<b>PIPE SIZE</b>	Circular pipe is shown as diameter in inches Deformed pipe is shown as area in square feet	

\* Refer to Standard Drawings 715-PHCL-20 through -22 for nominal diameter appropriate for pay item diameter.

\*\* Tabulated thickness refers to top and side plates. For pipes and pipe-arches with a thickness less than .280 in., bottom plates shall be of next greater available thickness.

R/W MARKER TABLE			
STATION LINE 'A'	OFFSET		RIGHT-OF-WAY MARKER
	LEFT	RIGHT	
16+55.5	50'		1
16+58.7		50'	1
17+60	120'		1
22+50	120'		1
23+75	50'		1
23+75		50'	1
41+90	50'		1
41+90		50'	1
42+50	50'		1
42+50	140'		1
47+50	140'		1
48+00	50'		1
49+25	50'		1
49+25		50'	1
<b>TOTAL</b>			<b>14</b>

MONUMENT TABLE							
POINT TO MARK	STATION	LT.	CL	RT.	TYPE		
					A	B	C
P.T.	17+05.44		X			X	
P.C.	20+66.48		X			X	
P.I.	22+17.09			X		X	
P.T.	23+67.67		X			X	
P.C.	42+22.42		X			X	
P.I.	45+80.77			X			X
P.T.	49+28.94			X		X	
<b>TOTAL</b>						<b>6</b>	<b>1</b>

DELINEATOR POST SUMMARY				
STA - LINE A	RT	LT	DELINEATOR POST, FLEXIBLE, TYPE 1	POST COLOR
18+20		X	1	WHITE
19+40		X	1	WHITE
20+60		X	1	WHITE
21+80		X	1	WHITE
23+00		X	1	WHITE
<b>TOTAL</b>			<b>5</b>	

**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

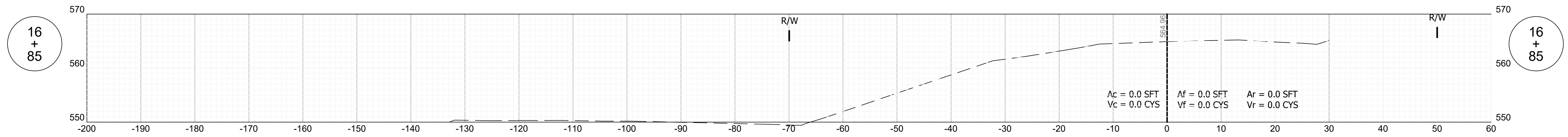
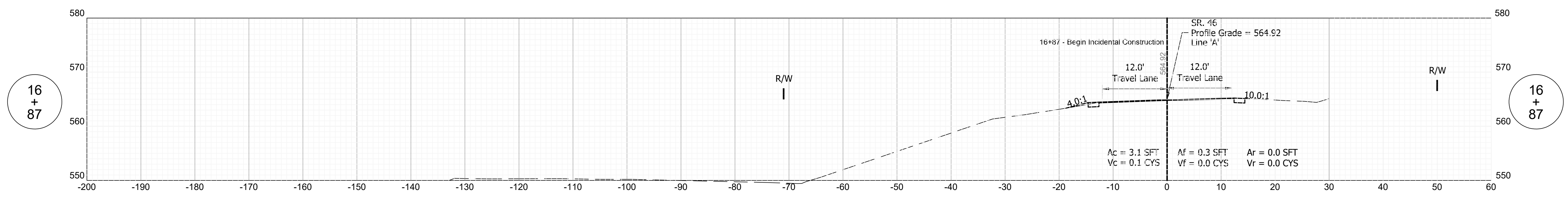
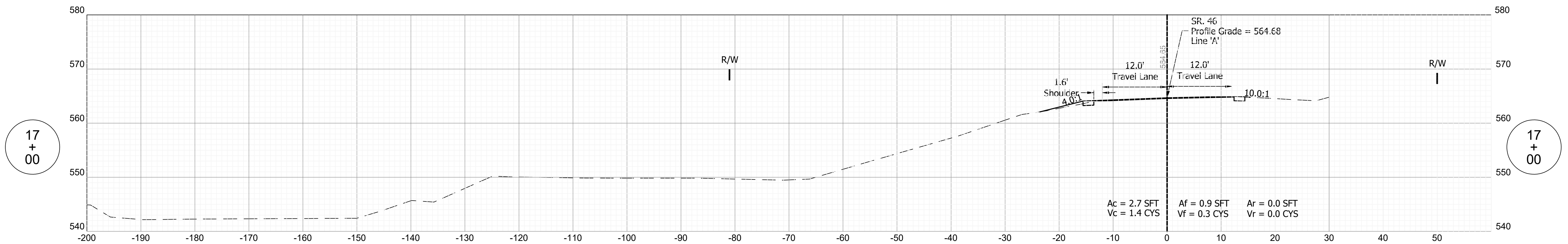
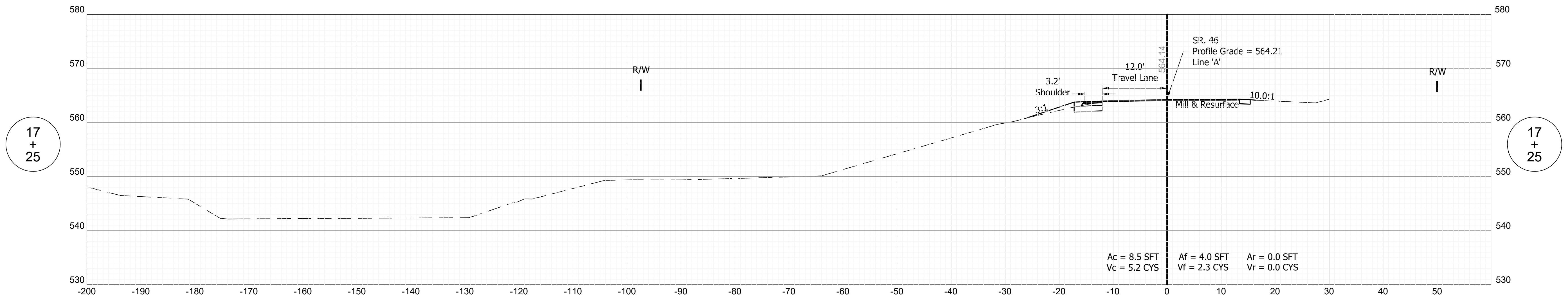
DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

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

**SUMMARY TABLES NO. 2**

HORIZONTAL SCALE	BRIDGE FILE
N/A	
VERTICAL SCALE	DESIGNATION
N/A	1600539
SURVEY BOOK	SHEETS
	21 OF 34
CONTRACT	PROJECT
R-39881	1600539





**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019 DATE  
DESIGN ENGINEER

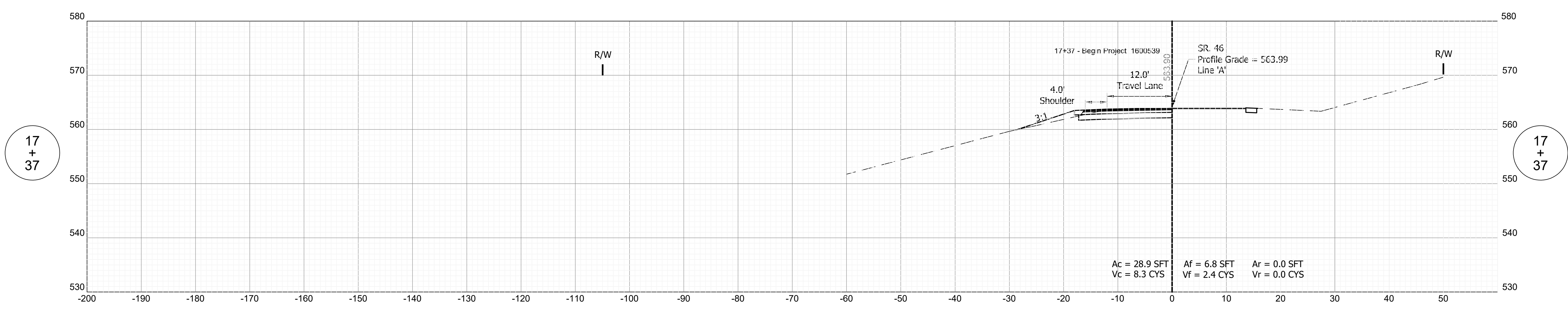
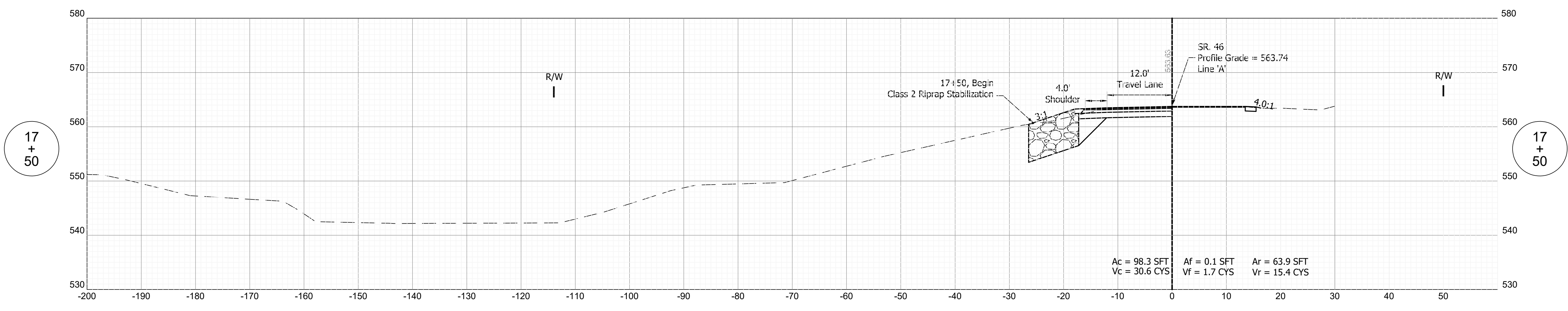
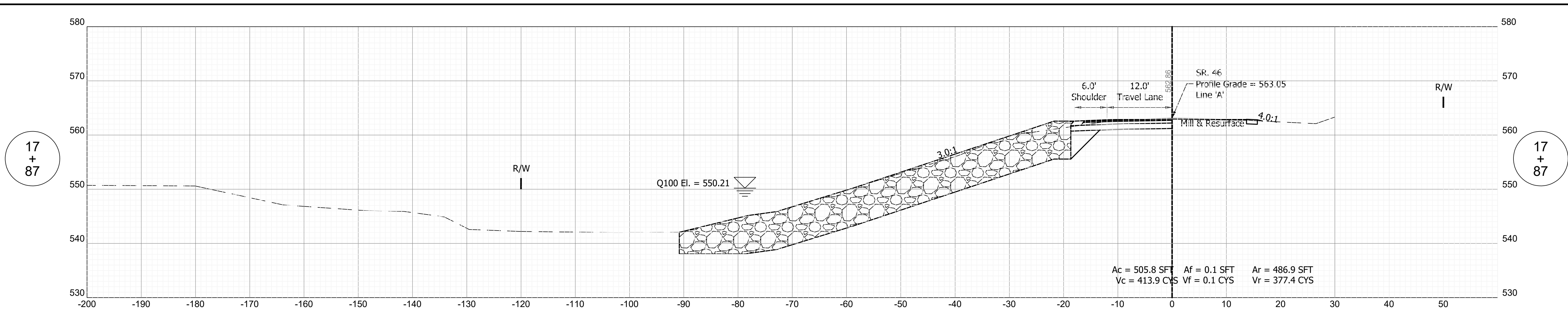
DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

INDIANA DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS  
S.R. 46, LINE 'A'

HORIZONTAL SCALE 1" = 10'	BRIDGE FILE
VERTICAL SCALE 1" = 10'	DESIGNATION 1600539

SURVEY BOOK	SHEETS
CONTRACT R-39881	22 OF 34 PROJECT 1600539



**PRELIMINARY**  
NOT FOR CONSTRUCTION

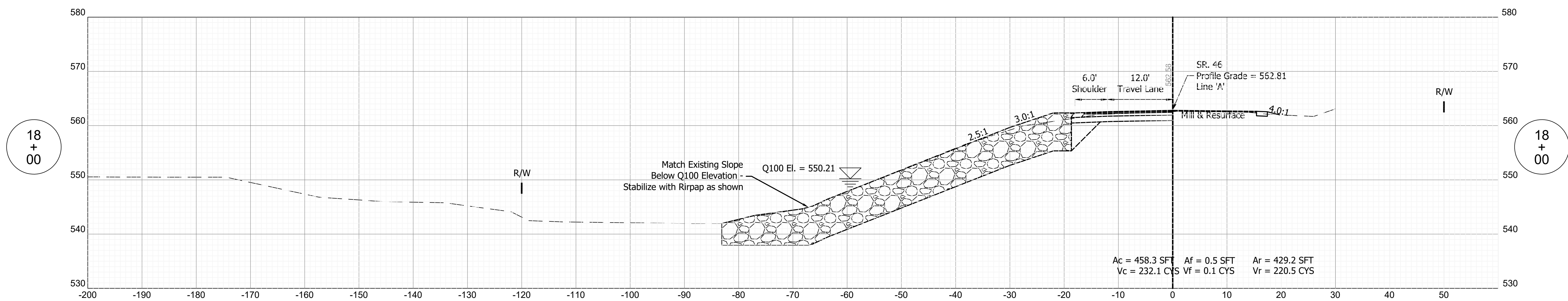
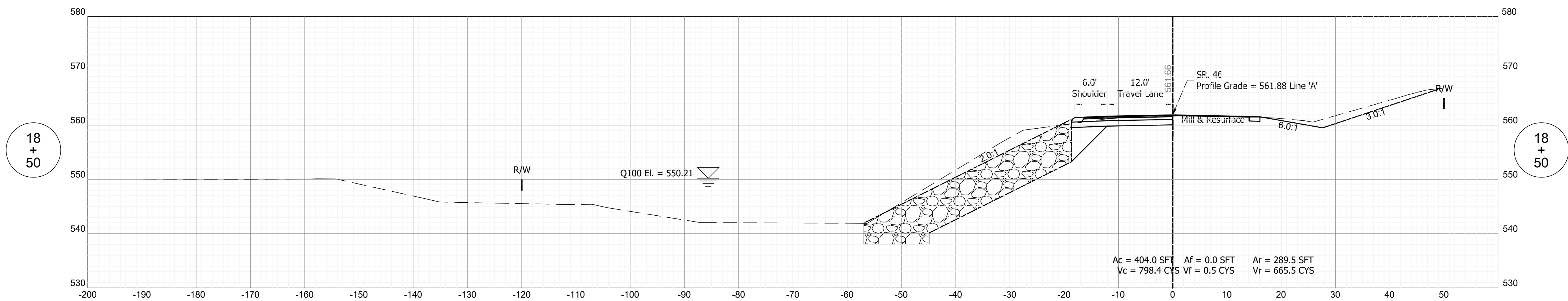
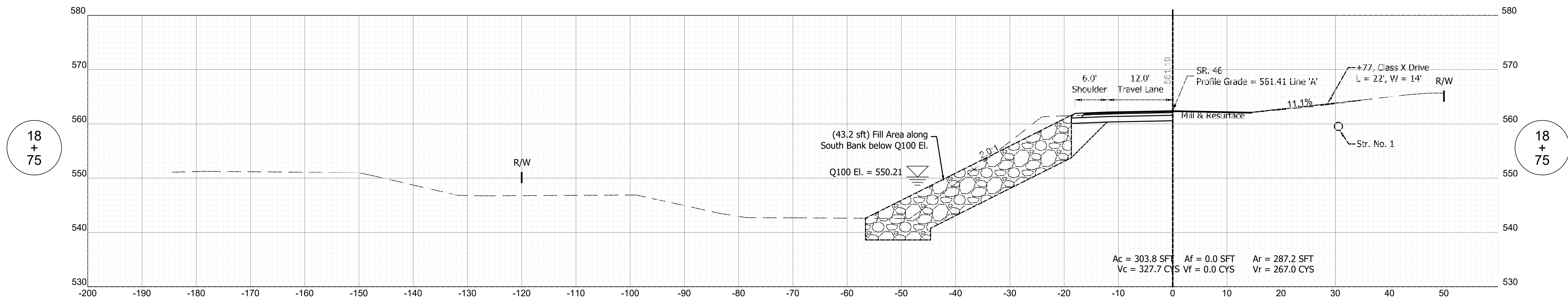
RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

DESIGNED: \_\_\_\_\_ CLK/SJG DRAWN: \_\_\_\_\_ SJG/CLK  
CHECKED: \_\_\_\_\_ BAH CHECKED: \_\_\_\_\_ BAH

INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS S.R. 46, LINE 'A'

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	1600539
SURVEY BOOK	SHEETS
	23 OF 34
CONTRACT	PROJECT
R-39881	1600539



**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

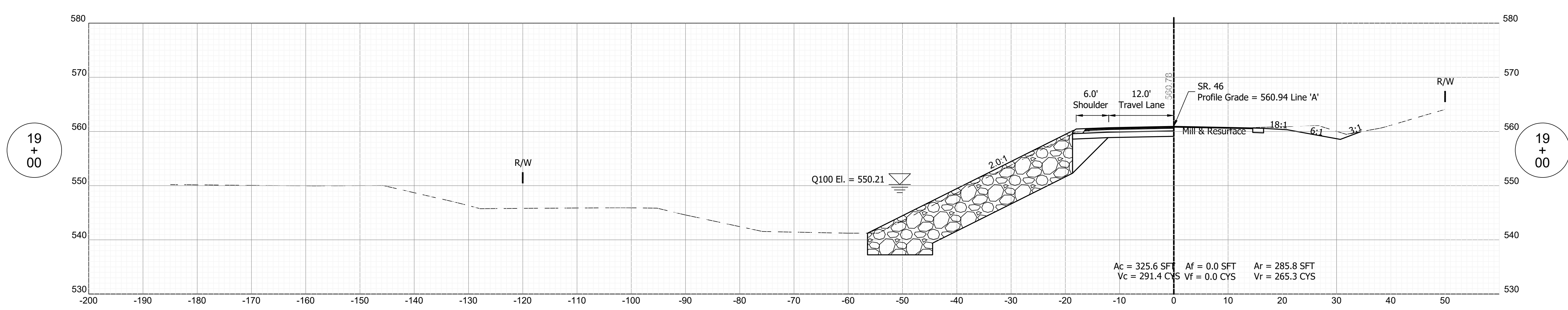
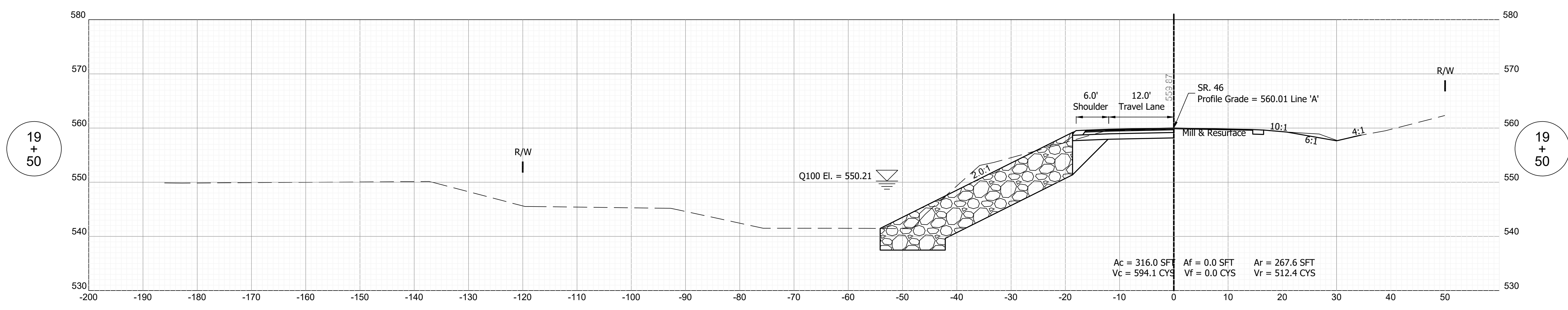
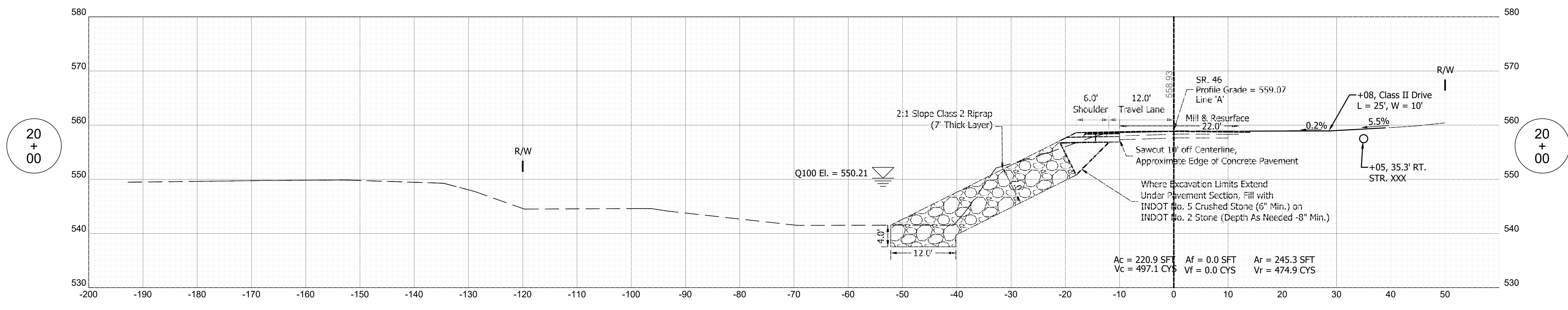
INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS S.R. 46, LINE 'A'

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	1600539

SURVEY BOOK	SHEETS
	24 OF 34
CONTRACT	PROJECT
R-39881	1600539





**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

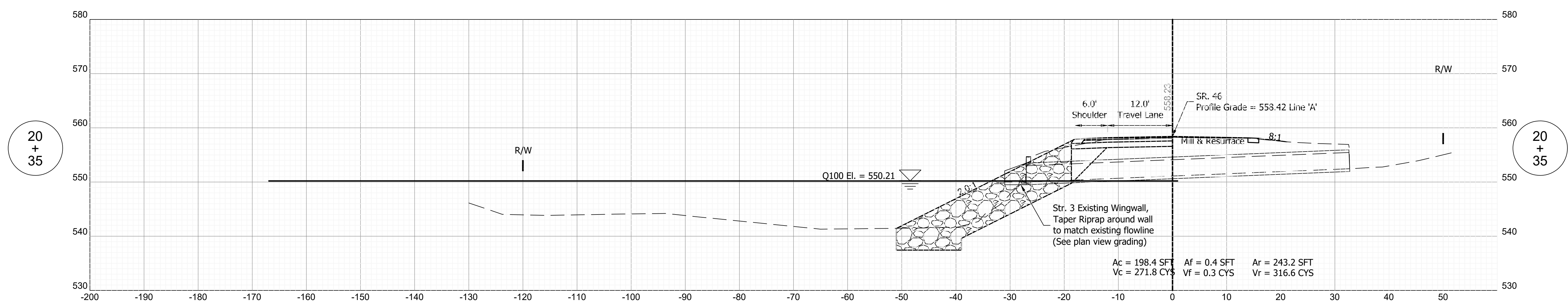
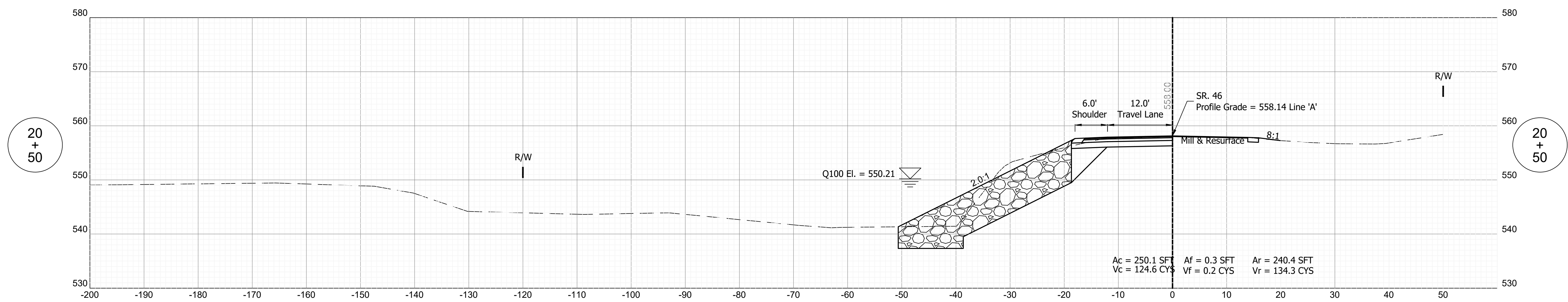
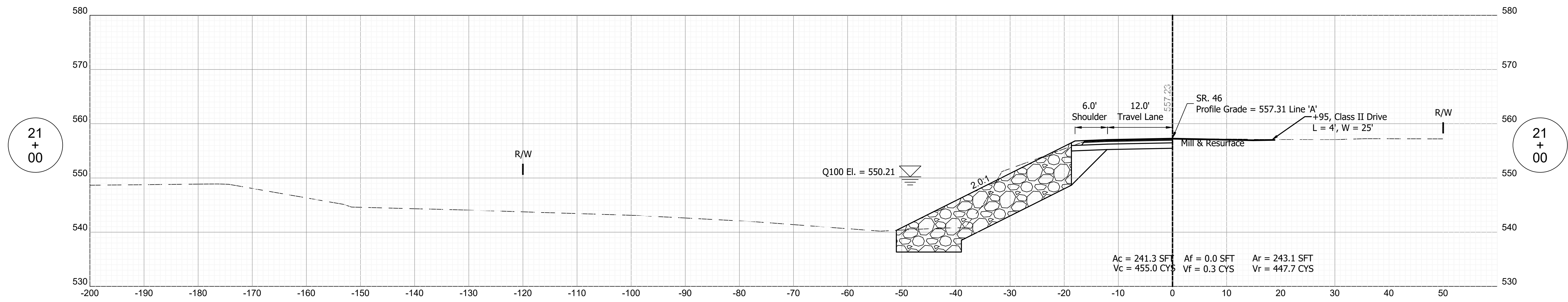
DESIGNED: \_\_\_\_\_ CLK/SJG DRAWN: \_\_\_\_\_ SJG/CLK  
CHECKED: \_\_\_\_\_ BAH CHECKED: \_\_\_\_\_ BAH

INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS S.R. 46, LINE 'A'

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	1600539

SURVEY BOOK	SHEETS
	25 OF 34
CONTRACT	PROJECT
R-39881	1600539



**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

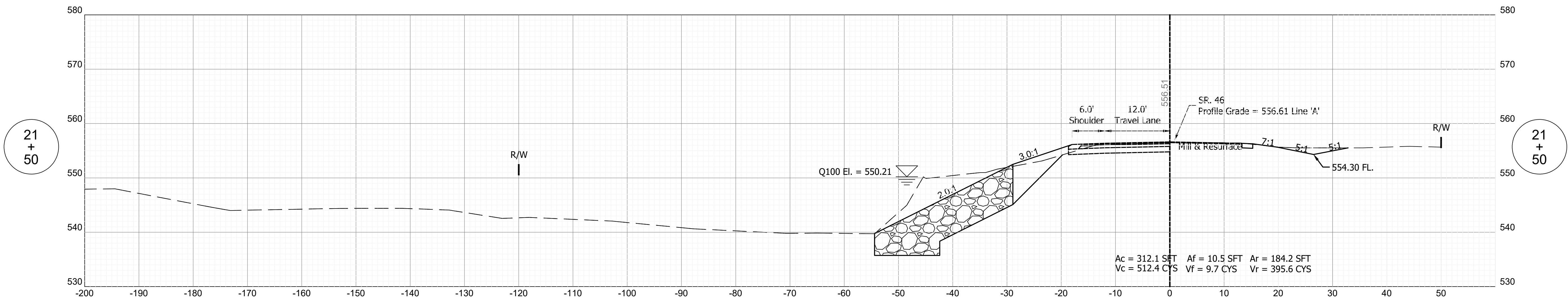
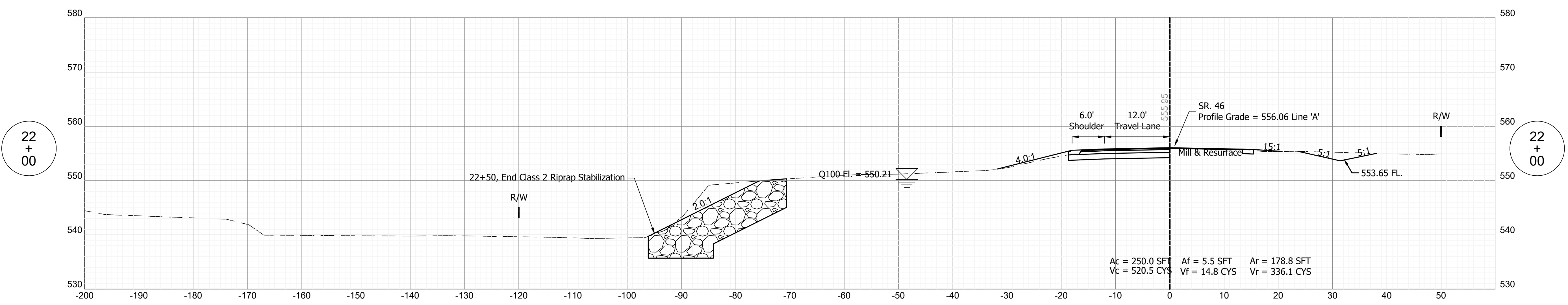
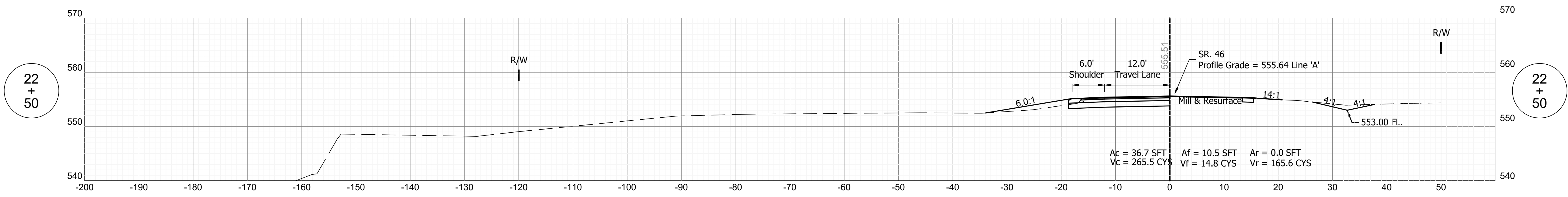
DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS S.R. 46, LINE 'A'

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	1600539

SURVEY BOOK	SHEETS
	26 OF 34
CONTRACT	PROJECT
R-39881	1600539



**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

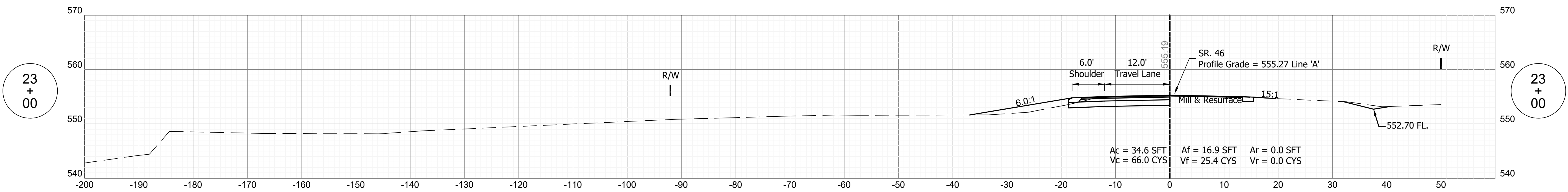
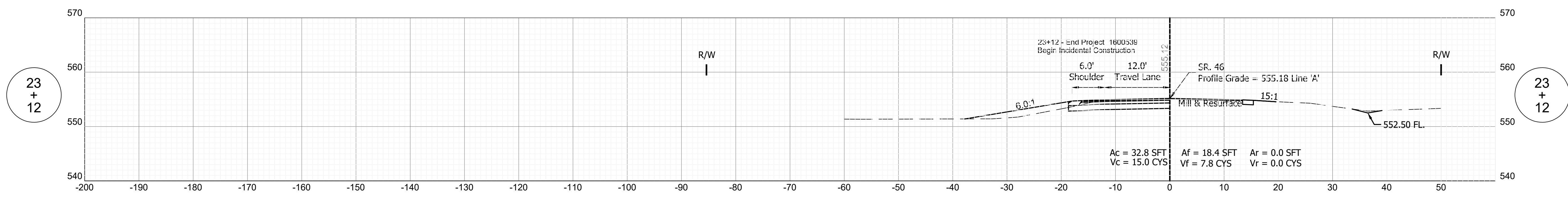
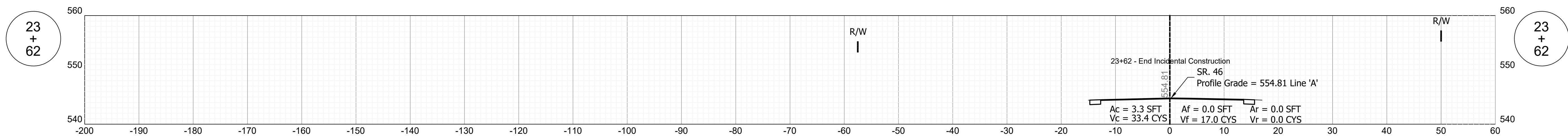
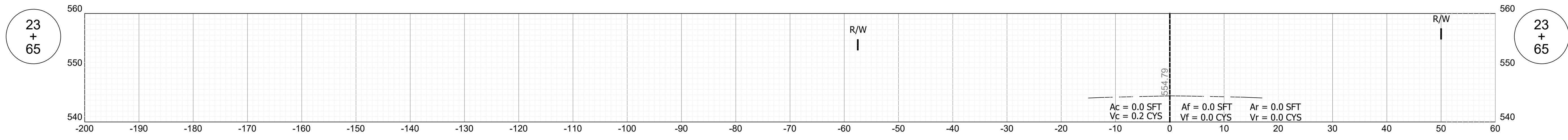
INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS S.R. 46, LINE 'A'

HORIZONTAL SCALE 1" = 10'	BRIDGE FILE
VERTICAL SCALE 1" = 10'	DESIGNATION 1600539

SURVEY BOOK	SHEETS
CONTRACT R-39881	27 OF 34 PROJECT 1600539





**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

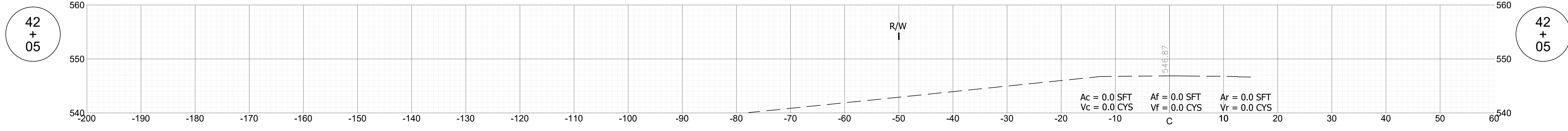
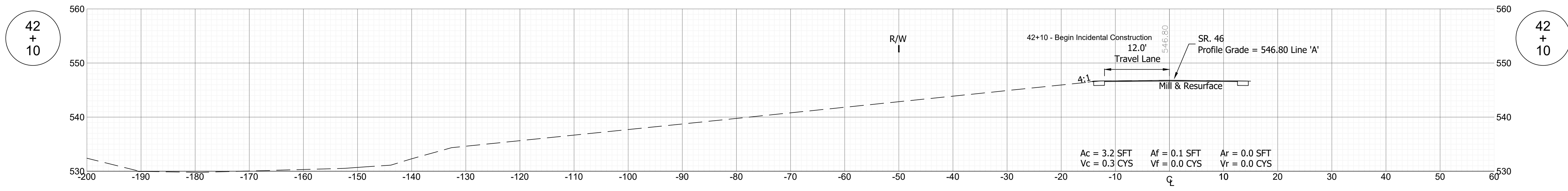
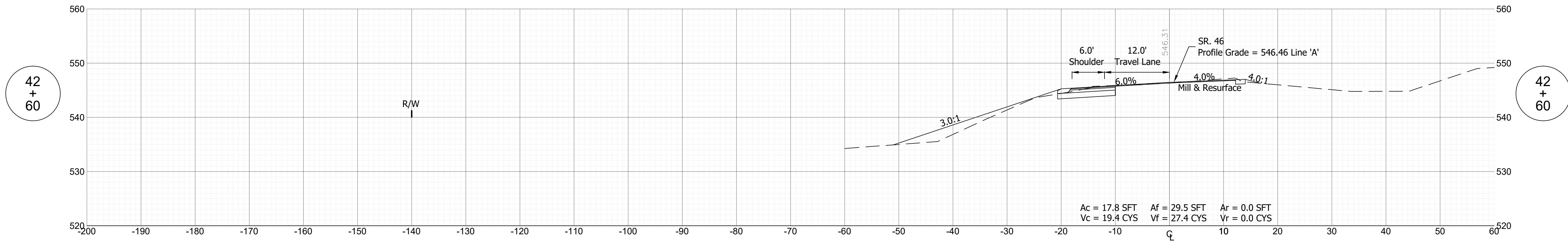
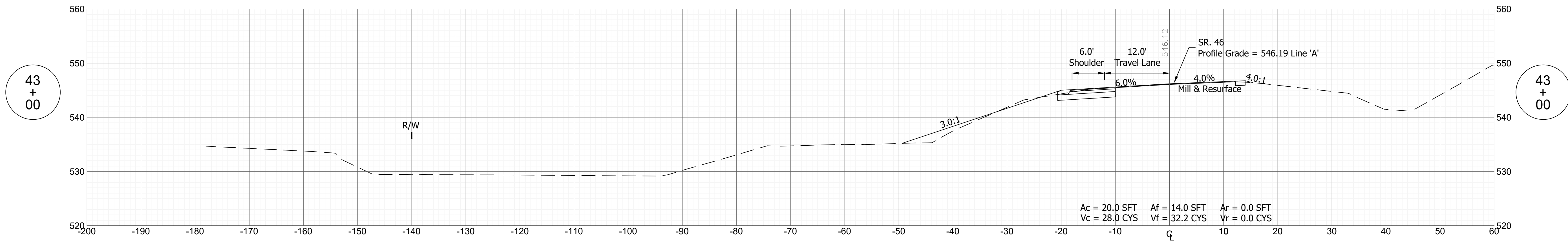
DESIGNED: \_\_\_\_\_ CLK/SJG DRAWN: \_\_\_\_\_ SJG/CLK  
CHECKED: \_\_\_\_\_ BAH CHECKED: \_\_\_\_\_ BAH

INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS S.R. 46, LINE 'A'

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	1600539

SURVEY BOOK	SHEETS
	28 OF 34
CONTRACT	PROJECT
R-39881	1600539



**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

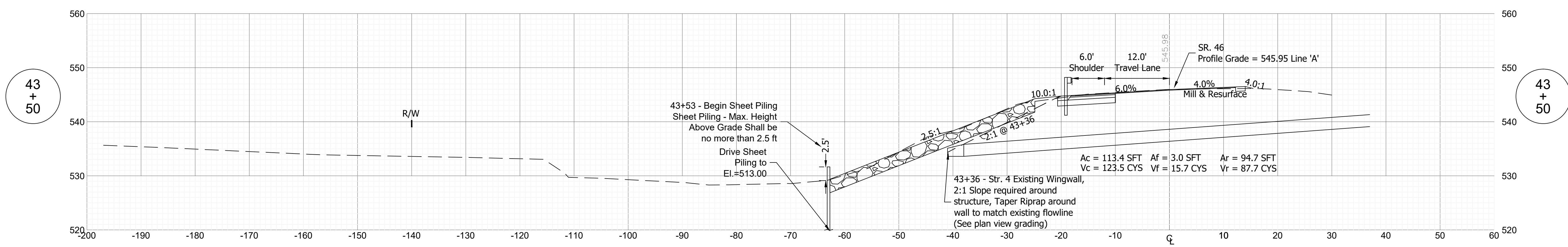
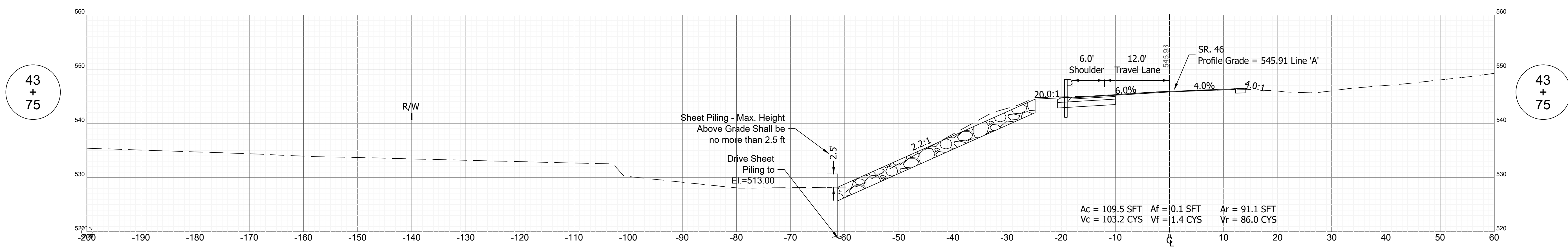
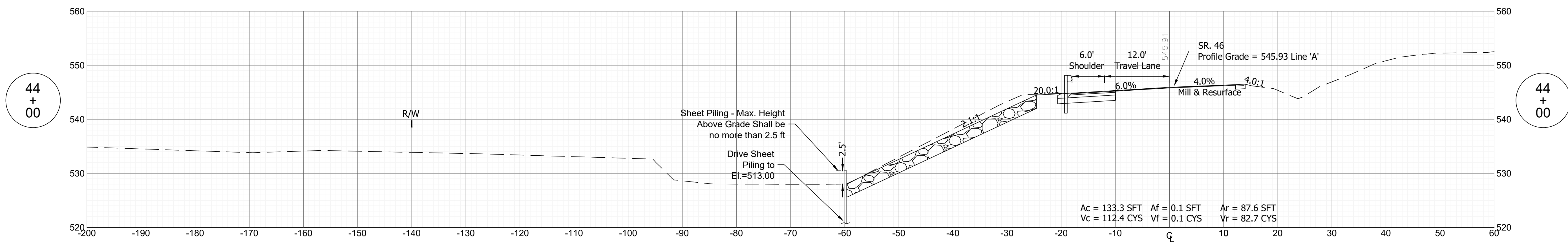
DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS S.R. 46, LINE 'A'

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	1600539

SURVEY BOOK	SHEETS
	29 OF 34
CONTRACT	PROJECT
R-39881	1600539



**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

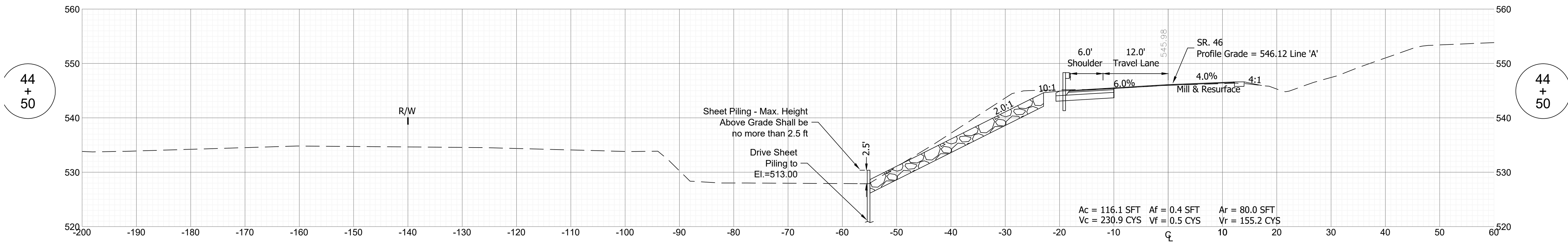
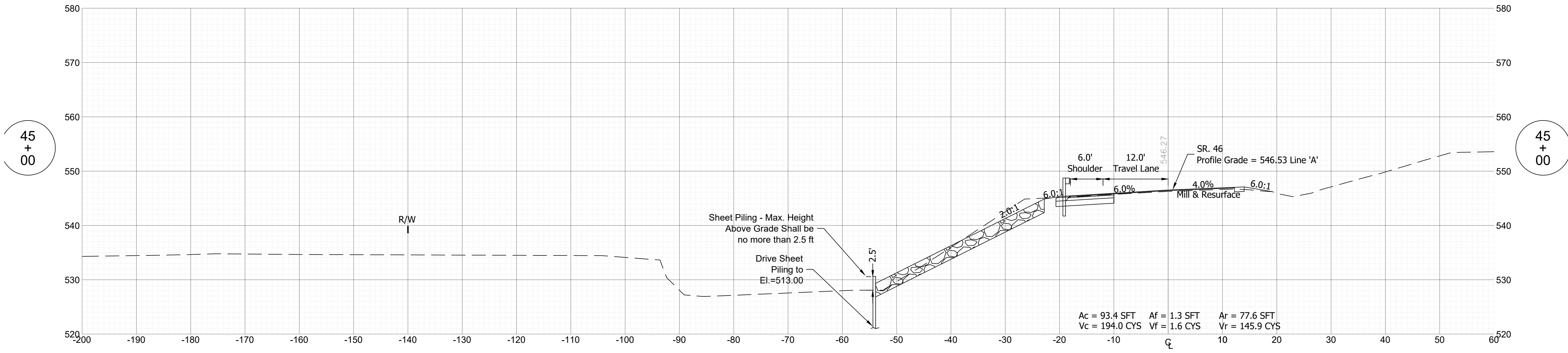
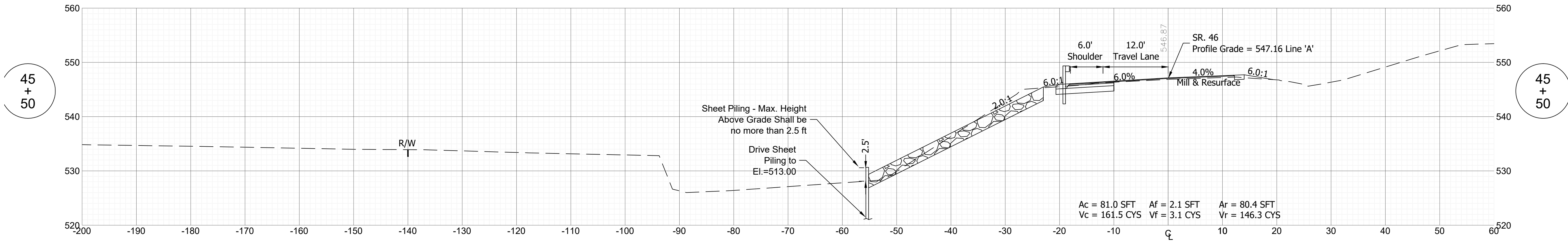
INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS S.R. 46, LINE 'A'

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	1600539

SURVEY BOOK	SHEETS
	30 OF 34
CONTRACT	PROJECT
R-39881	1600539





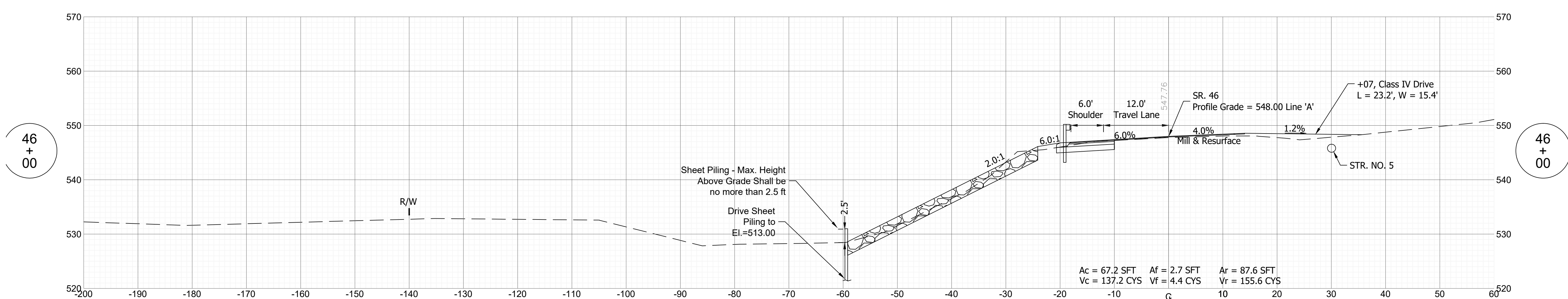
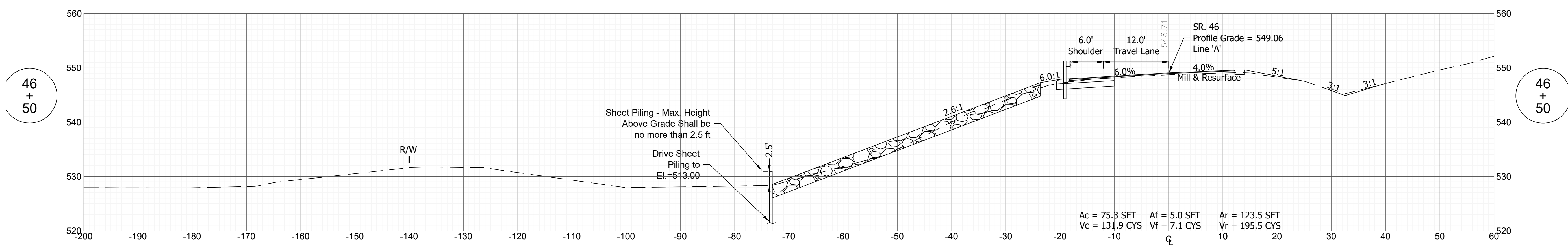
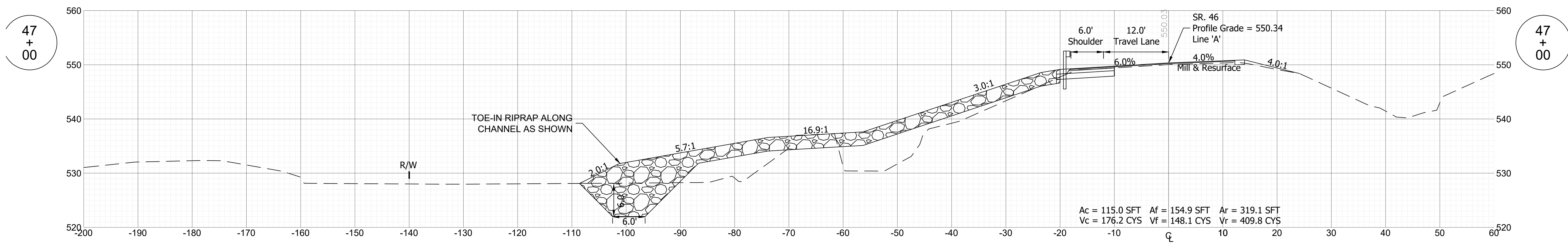
**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
		9/11/2019
DESIGNED:	CLK/SJG	DRAWN:
		SJG/CLK
CHECKED:	BAH	CHECKED:
		BAH

INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS S.R. 46, LINE 'A'

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	1600539
SURVEY BOOK	SHEETS
	31 OF 34
CONTRACT	PROJECT
R-39881	1600539



**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

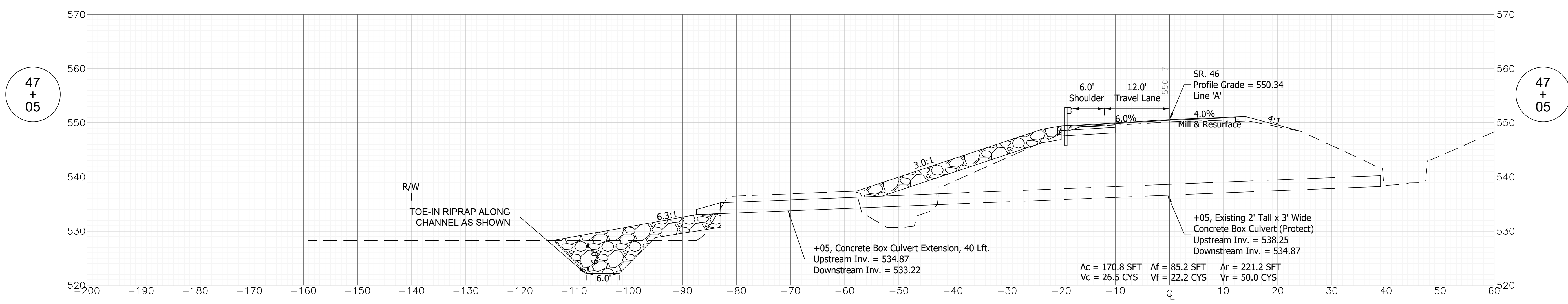
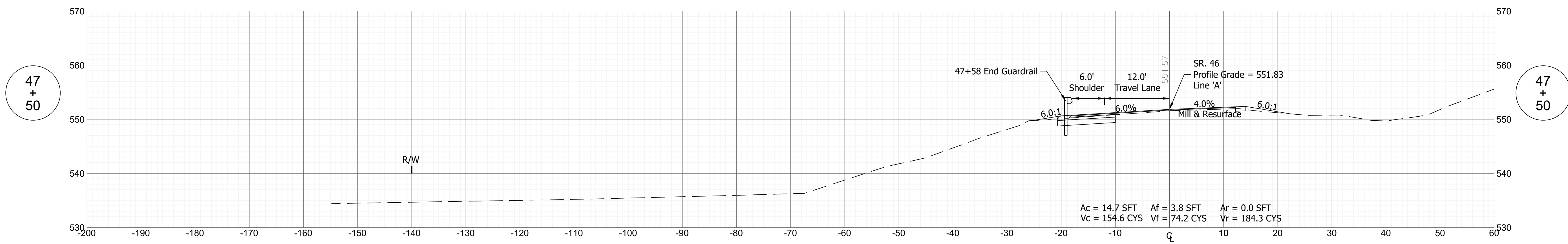
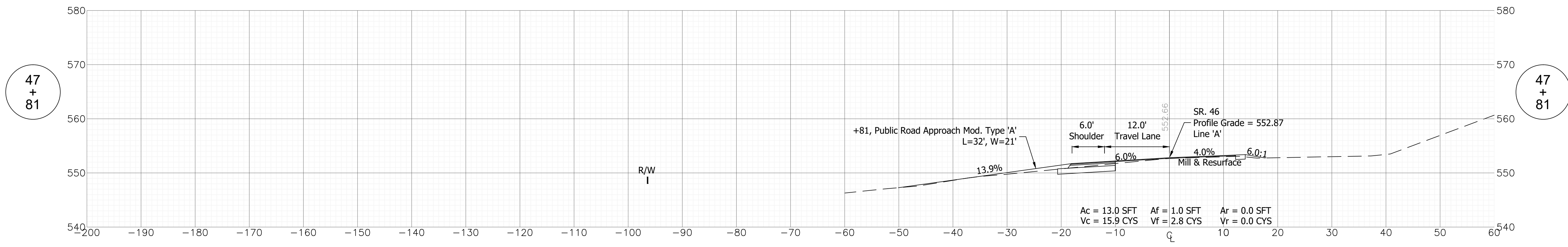
INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS S.R. 46, LINE 'A'

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	1600539

SURVEY BOOK	SHEETS
	32 OF 34
CONTRACT	PROJECT
R-39881	1600539





**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

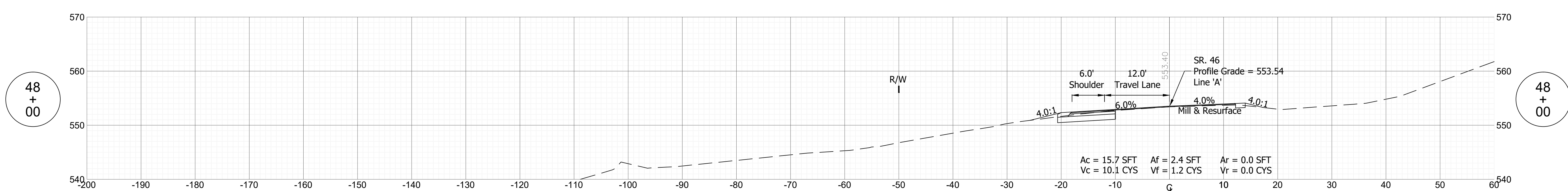
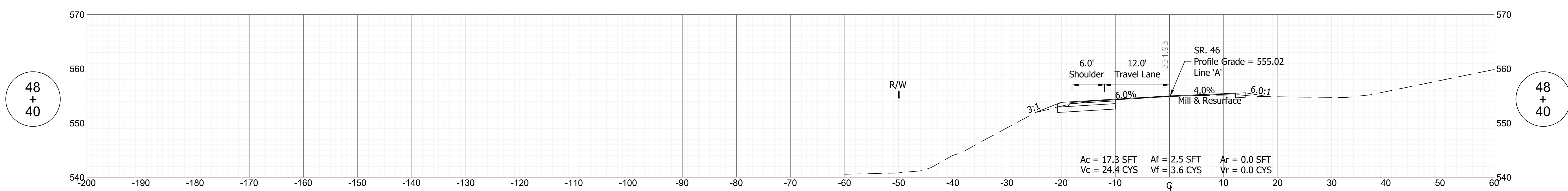
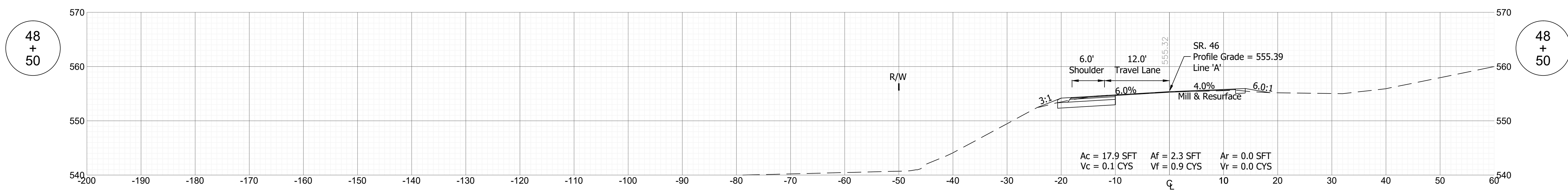
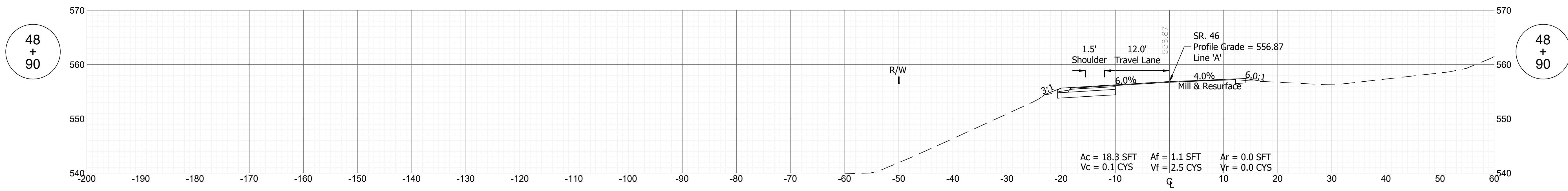
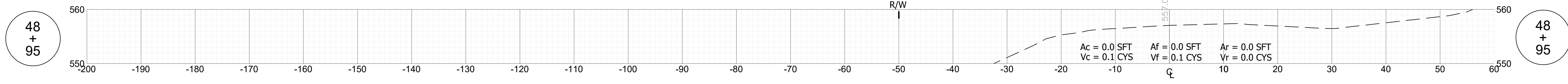
DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS S.R. 46, LINE 'A'

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	1600539

SURVEY BOOK	SHEETS
	33 OF 34
CONTRACT	PROJECT
R-39881	1600539



**PRELIMINARY**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL \_\_\_\_\_ 9/11/2019  
DESIGN ENGINEER DATE

DESIGNED: CLK/SJG DRAWN: SJG/CLK  
CHECKED: BAH CHECKED: BAH

INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS S.R. 46, LINE 'A'

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	
VERTICAL SCALE	DESIGNATION
1" = 10'	1600539

SURVEY BOOK	SHEETS
	34 OF 34
CONTRACT	PROJECT
R-39881	1600539