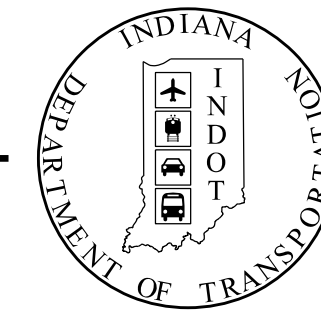


PROJECT	DESIGNATION
1900012	1900012
CONTRACT	BRIDGE FILE
B-42442	(6)51-45-10466-B

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
(6)51-45-10466-B	REINFORCED CONCRETE SLAB BRIDGE	UNIT 1 3 SPANS: 20'-0", 25'-0" & 20'-0" SKEW: 0°  UNIT 2 THRU 7 3 SPANS: 23'-9", 31'-0" & 23'-9" SKEW: 0°	MUCK POCKET	74+52.50 LINE "C2"

# INDIANA DEPARTMENT OF TRANSPORTATION



## BRIDGE PLANS

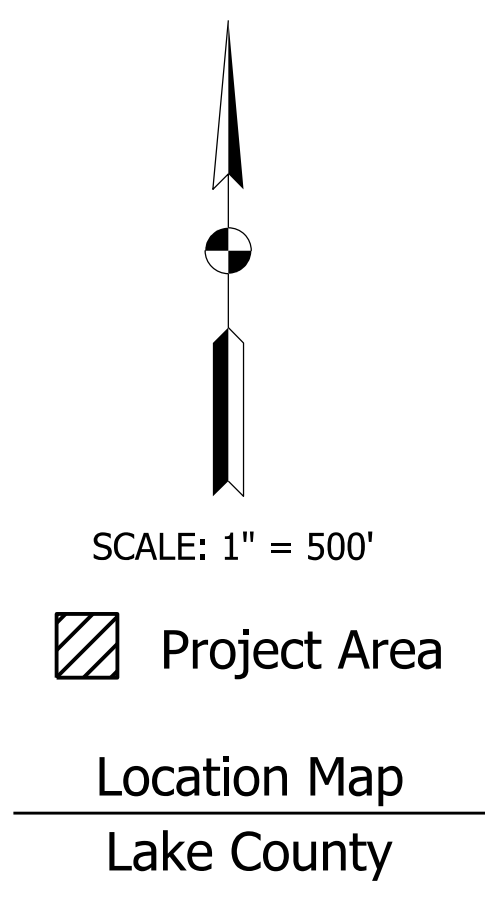
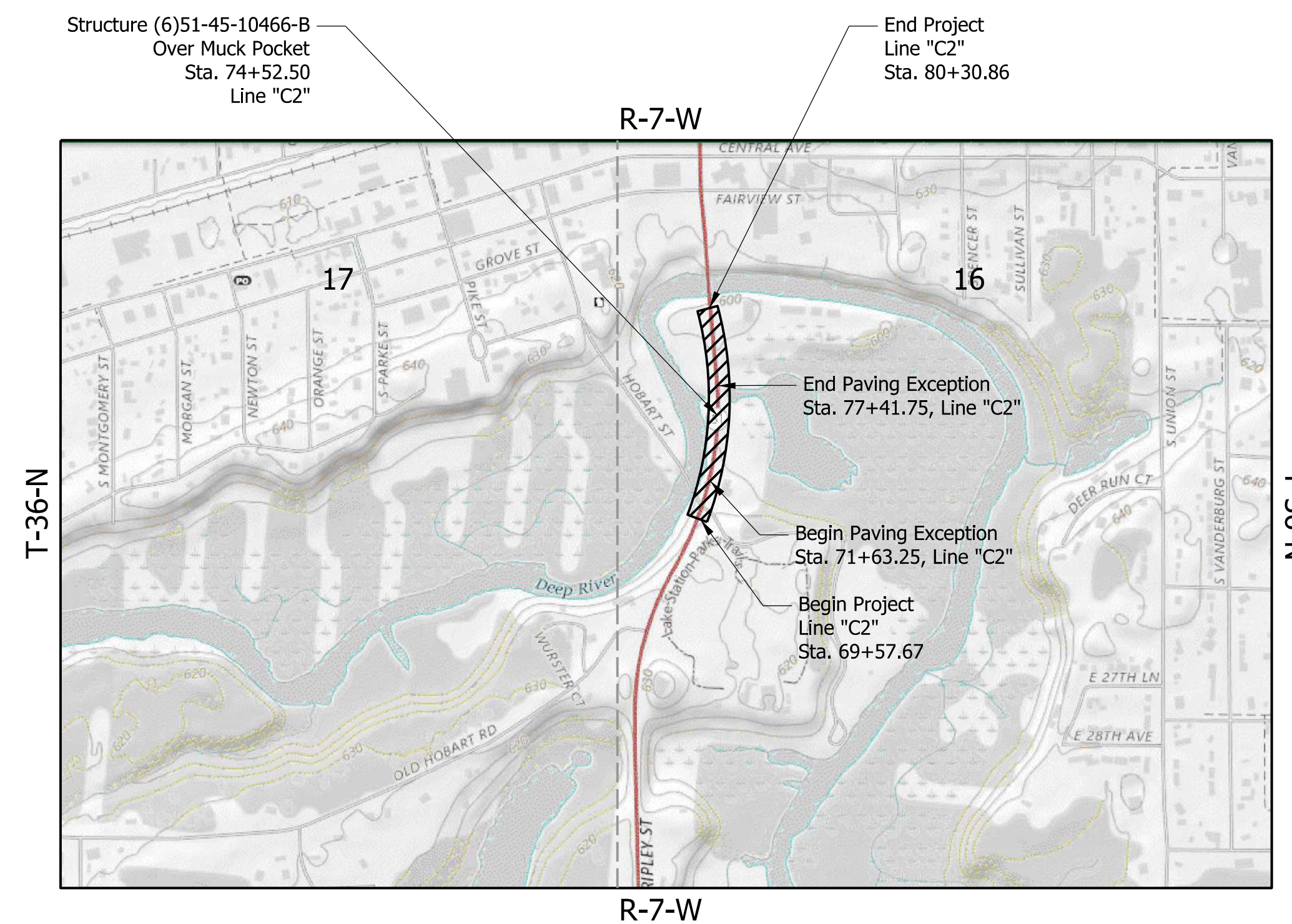
FOR SPANS OVER 20 FEET

ROUTE: US 6 / SR 51 OVER MUCK POCKET AT: RP 16 - 13

PROJECT NO. 1900012 P.E.  
1900012 R/W  
1900012 CONST.

Project Description: Bridge replacement on US 6/ SR 51 over Muck Pocket  
Located 0.84 miles South of SR 51/I-80/94  
Section 16, T-36-N, R-7-W, Hobart Township, Lake County, Indiana

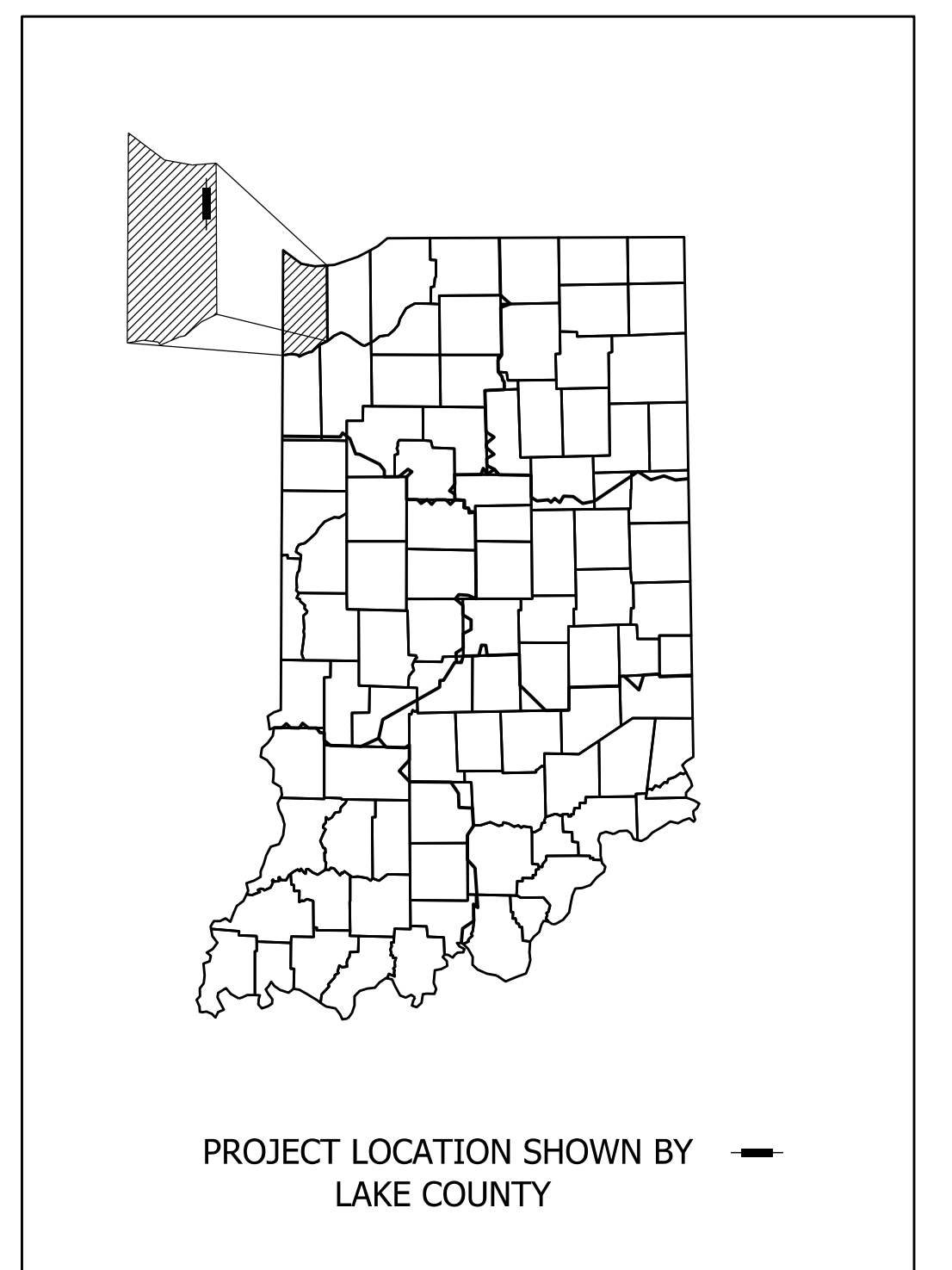
Stage 2 Plans  
August 26, 2022



TRAFFIC DATA		
A.A.D.T.	(2021)	16,398 V.P.D.
A.A.D.T.	(2044)	17,303 V.P.D.
D.H.V	(2044)	1,601 V.P.H.
DIRECTIONAL DISTRIBUTION		50 %
TRUCKS		4 % A.A.D.T. 8 % D.H.V.

DESIGN DATA		
DESIGN SPEED		35 M.P.H.
PROJECT DESIGN CRITERIA		4R (Non-Freeway)
FUNCTIONAL CLASSIFICATION		PRINCIPAL ARTERIAL - OTHER
RURAL/URBAN		URBAN
TERRAIN		LEVEL
ACCESS CONTROL		NONE



LATITUDE: 41°34'14"	LONGITUDE: -87°14'23"
BRIDGE LENGTH: 0.102 MI.	ROADWAY LENGTH: 0.101 MI.
TOTAL LENGTH: 0.203 MI.	MAX. GRADE: 2.75 %
HUC 12: 040400010508	

INDIANA DEPARTMENT OF TRANSPORTATION  
STANDARD SPECIFICATIONS DATED 2022  
TO BE USED WITH THESE PLANS.

**HDR**  
HDR ENGINEERING, INC.  
10401 NORTH MERIDIAN STREET  
INDIANAPOLIS, IN 46290-0900  
PHONE: (317) 558-4920

NOT FOR CONSTRUCTION

PLANS PREPARED BY: HDR ENGINEERING INC. (317) 558-4920  
PHONE NUMBER  
CERTIFIED BY: [Signature] \$SIG DATE\$  
DATE  
APPROVED FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE	
(6)51-45-10466-B	
DESIGNATION	
1900012	
SURVEY BOOK	SHEETS
Electronic	1 of 52
CONTRACT	PROJECT
B-42442	1900012

### UTILITIES

UTILITY	ADDRESS	CITY/STATE/ZIP	CONTACT NAME	PHONE	EMAIL
City of Lake Station (Sanitary Sewer)	1969 Central Avenue	Lake Station, IN 46405	Frank Krebs	219-406-1402	fkrebs@lakestation-in.gov
Frontier Communications (Telephone)	2401 Chicago St.	Valparaiso, IN 46383	Charles Mckean	219-531-6947	Chuck.McKean@ftr.com
Indiana DOT (Traffic Signals)	315 E. Boyd Blvd.	LaPorte, IN 46350	Adam Banks	219-352-7581	ABanks1@indot.IN.gov
Indiana American Water	153 N Emerson Avenue	Greenwood, IN 46143	Ellen Hohl	317-504-9419	inutilitycoordination@amwater.com
NIPSCO Electric	801 E 86th Ave.	Merrillville, IN 46410	Dean Garrett	219-647-6260	DAGarrett@NISource.com
NIPSCO Gas	801 E 86th Ave.	Merrillville, IN 46410	Dean Garrett	219-647-6260	DAGarrett@NISource.com
Town of New Chicago	122 Huber Blvd.	Hobart, IN 46342	Alicia Barber	219-484-3460	watermanager@frontier.com

### GENERAL NOTES

All earth shoulders and cut and fill slopes shall be plain or mulch seeded except where sodding is specified.

All removal items not paid for directly will be included in the lump sum cost of "Clearing Right of Way."

It is the Contractor's responsibility to contact any and all utility companies within the limits of the project three weeks prior to any construction.

When re-shaping cross section, all existing slopes steeper than 4:1 shall be benched before establishing the proposed flattened slope.

All borrow used on this job shall be obtained within the right of way limits, unless approved by the Project Engineer.

The Contractor shall ensure that safe access is maintained to all residences and businesses during all phases of construction.

All concrete curbing including modified or special curbs as shown on the plans shall be in accordance with Section 605.

Existing curb types may vary at streets. The Contractor shall inspect curb prior to beginning work to assure proper fit and transition.

The Contractor shall ensure that positive drainage is maintained along curb and gutter flowlines and at intersections after the completion of curb ramp construction.

Sidewalks and curb ramps have been designed to a cross slope of 1.5% or as specified otherwise herein. If field conditions differ, the Contractor shall ensure sidewalk and curb ramp cross slope is no greater than 2.00% in final constructed condition.

### INDEX

SHEET NO.	DRAWINGS INDEX
1	TITLE
2	GENERAL NOTES & INDEX
3	TYPICAL CROSS SECTIONS
4	PLAT NO. 1
5	MAINTENANCE OF TRAFFIC DETOUR ROUTE
6	ALIGNMENT GEOMETRIC DETAILS
7 - 8	PLAN AND PROFILE SHEETS
9	SUPERELEVATION DETAILS
10 - 12	CONSTRUCTION DETAILS
13	ADA RAMP DETAILS
14 - 16	TEMPORARY EROSION AND SEDIMENT CONTROL PLAN
17	PAVEMENT MARKINGS AND SIGNINGS
18 - 34	SOIL BORINGS
35	LAYOUT
36 - 38	GENERAL PLAN
39	BRIDGE SUMMARY
40	APPROACH TABLE
41 - 52	CROSS SECTIONS

### REVISIONS

SHEET NO.	DATE	REVISED



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

Plot: 8/26/2022 7:04:01 PM

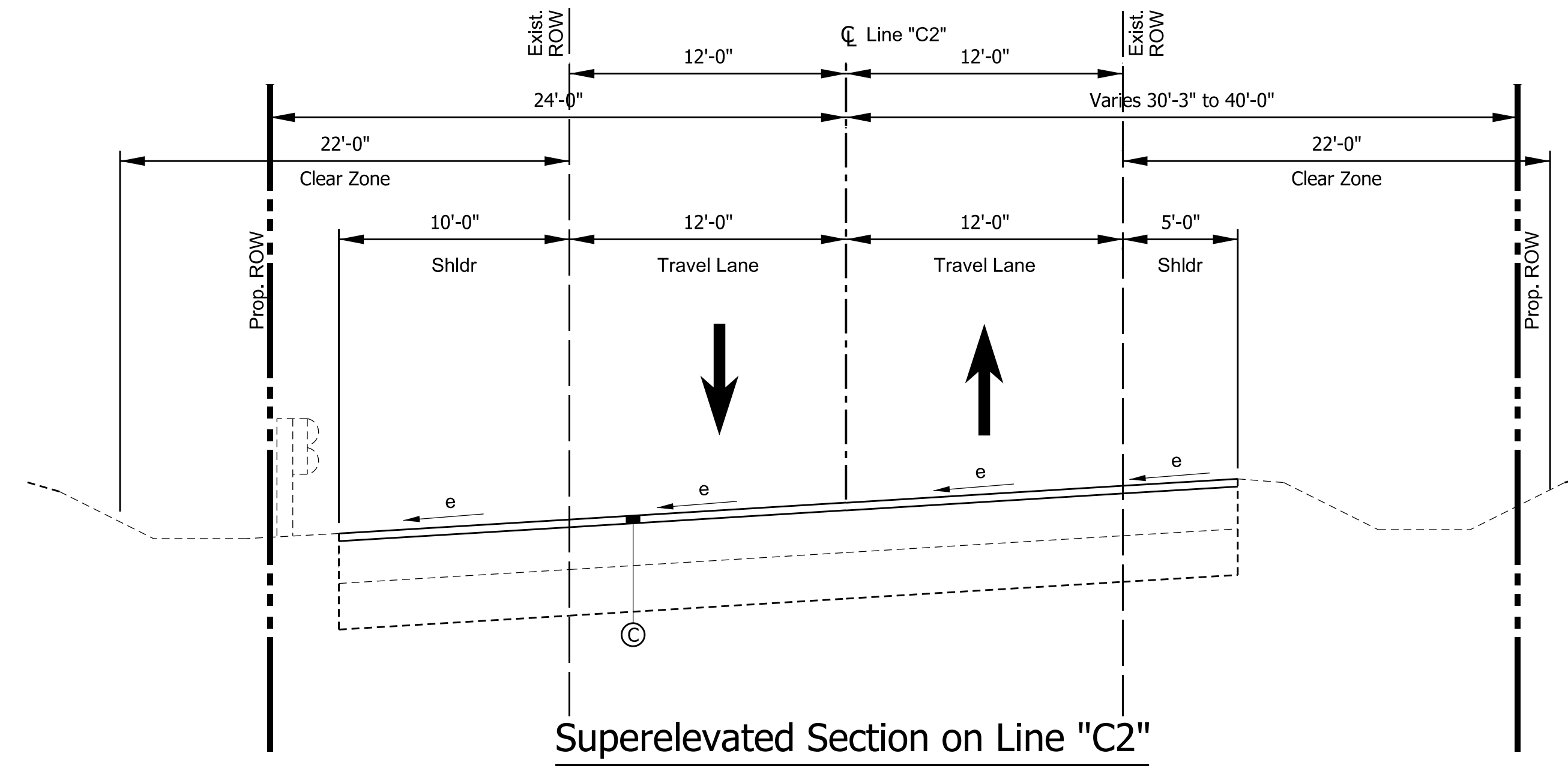
**NOT FOR CONSTRUCTION**

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
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CHECKED: <u>JLP</u> 08/26/2022	CHECKED: <u>JLP</u> 08/26/2022	

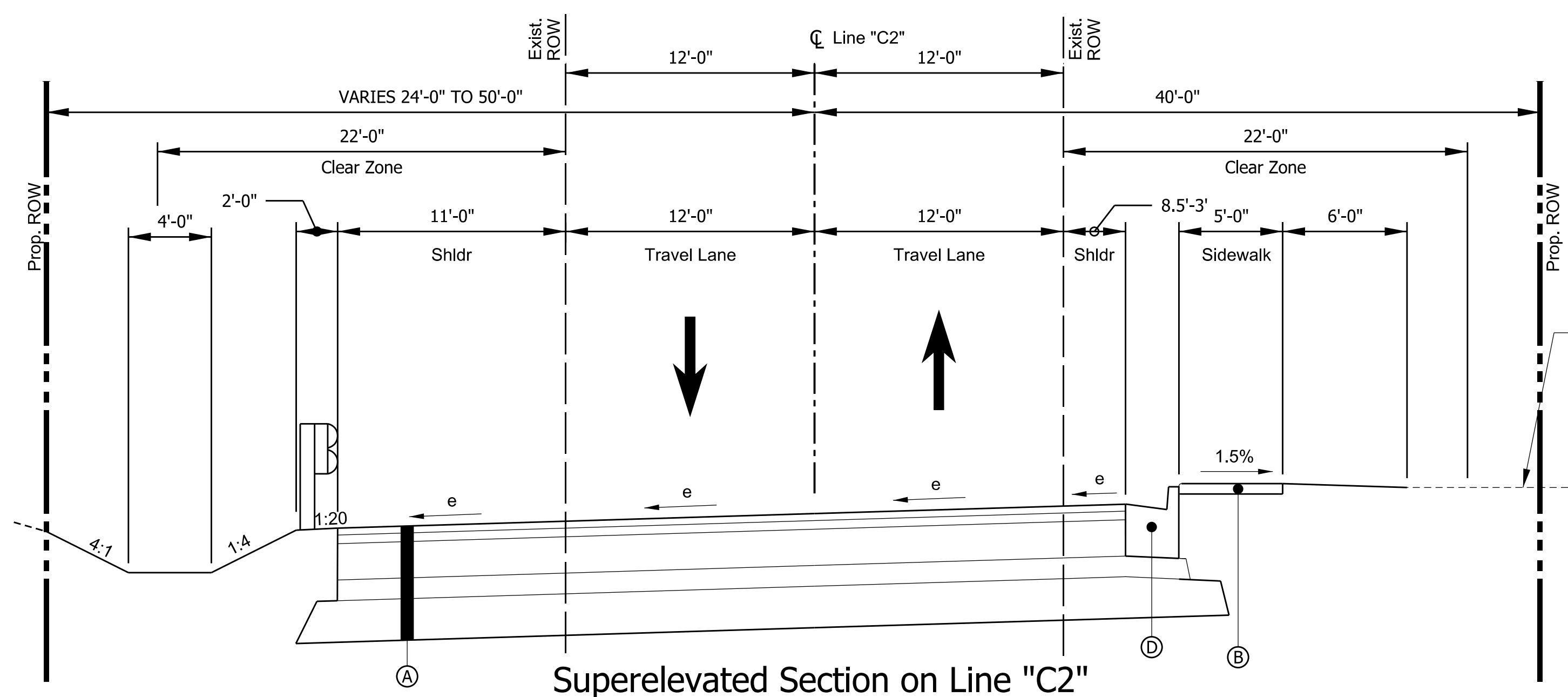
**INDIANA DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES & INDEX**

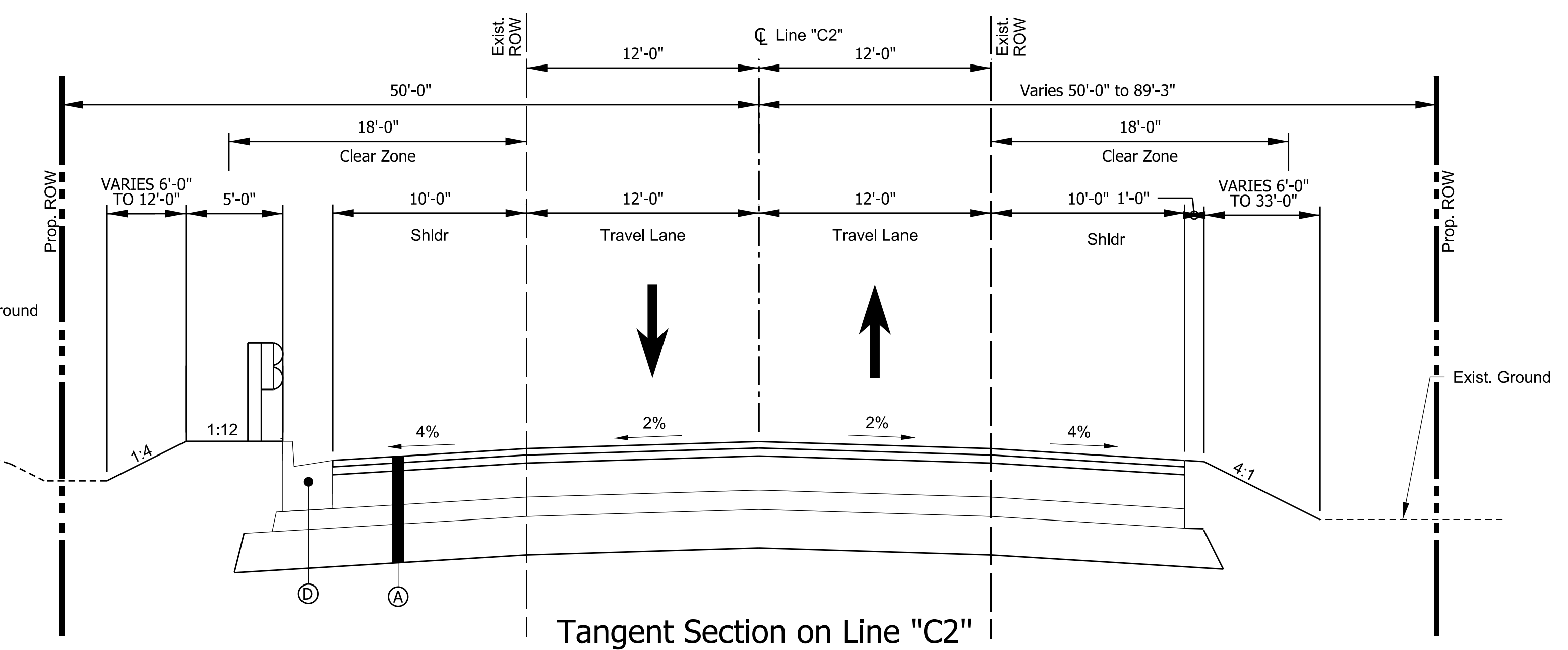
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N/A	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
N/A	1900012
	SHEETS
	2 of 52
CONTRACT	PROJECT
B-42442	1900012



Superelevated Section on Line "C2"  
Sta 69+57.67 to Sta 71+00.00



Superelevated Section on Line "C2"  
Sta 71+00.00 to Sta 71+63.25  
Sta 77+41.75 to Sta 78+36.75



Tangent Section on Line "C2"  
Sta 78+36.75 to Sta 80+30.86

Paving Exception: Sta 71+63.25 to Sta 77+41.75  
(Superelevated)

**PROPOSED LEGEND**

- (A) FULL DEPTH HMA:  
220 lbs/sy QC/QA-HMA, 3, 76, SURFACE, 12.5 mm  
275 lbs/sy QC/QA-HMA, 3, 70, INTERMEDIATE, 19.0 mm  
1,155 lbs/sy QC/QA-HMA, 3, 64, BASE, 25.0 mm  
6 in COURSE AGGREGATE NO. 53  
SUBGRADE TREATMENT, TYPE IC
- (B) CONCRETE, SIDEWALK
- (C) MILLING, ASPHALT, 2 IN. then  
220 lbs/sy QC/QA-HMA, 3, 76, SURFACE, 12.5 mm
- (D) CURB AND GUTTER, CONCRETE

Plot: 8/26/2022 7:04:03 PM

**NOT FOR CONSTRUCTION**

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CMD	08/26/2022	DRAWN: CMD
CHECKED: EN	08/26/2022	CHECKED: EN

INDIANA  
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS  
Line "C2"

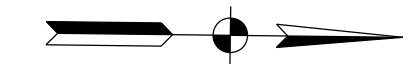
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N/A	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
N/A	1900012
SHEETS	
3 of 52	
CONTRACT	PROJECT
B-42442	1900012

SEC. 17, T-36-N, R-7-W  
HOBART TOWNSHIP  
LAKE COUNTY

SEC. 16, T-36-N, R-7-W  
HOBART TOWNSHIP  
LAKE COUNTY

APP. SECTION LINE

APP. SECTION LINE



69+99

POB = 66+99.14  
"C2"  
N = 434780.73  
E = 831053.40

P.C. = 67+87.44  
"C2"  
N = 434858.60  
E = 831095.02

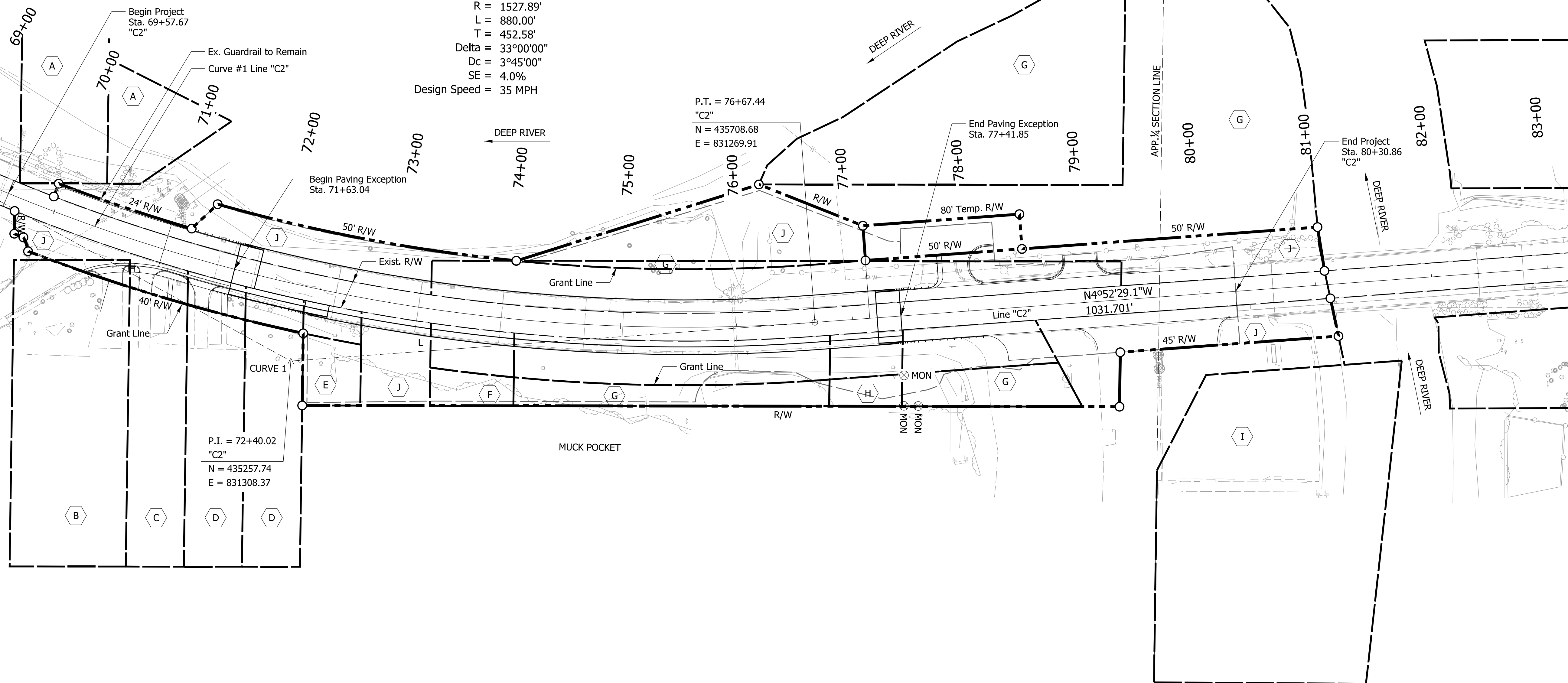
CURVE #1  
R = 1527.89'  
L = 880.00'  
T = 452.58'  
Delta = 33°00'00"  
Dc = 3°45'00"  
SE = 4.0%  
Design Speed = 35 MPH

P.T. = 76+67.44  
"C2"  
N = 435708.68  
E = 831269.91

End Paving Exception  
Sta. 77+41.85

End Project  
Sta. 80+30.86  
"C2"

Index No.	Owner
A	ADELE & ANDREW J. KOPKO
B	FELIX VERA
C	BOBBY & JULIA WILLIAMS
D	KENNETH R. DAVIS, JR.
E	GEORGE T. TEDESCHI
F	QUENTON CURTIS & TRACEY Y. BEY
G	FRANKLIN D. & KATHLEEN ROGERS
H	DANIEL JOHN ROSZKOWSKI
I	DEJA VU OF HAMMOND, INCORPORATED
J	CITY OF LAKE STATION



P.I. = 72+40.02  
"C2"  
N = 435257.74  
E = 831308.37

Note: All R/W described from Line "C2", except as shown.

Plot: 8/29/2022 2:25:32 PM

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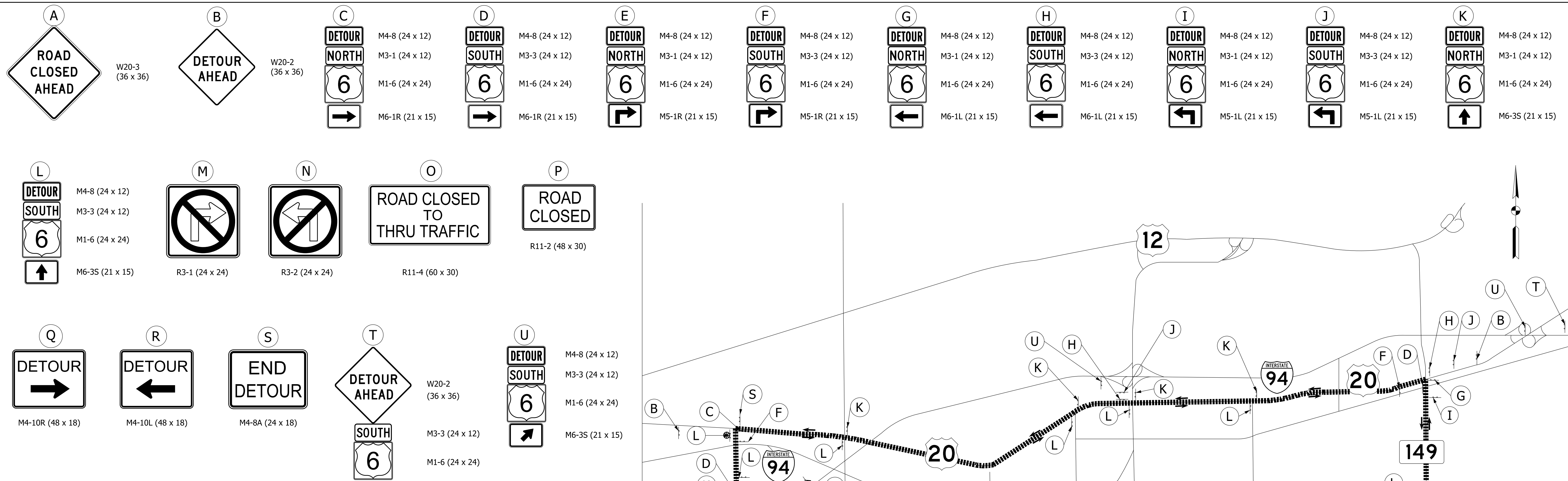
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RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CMD	08/26/2022	DRAWN: CMD
CHECKED: EN	08/26/2022	CHECKED: EN
	08/26/2022	

**INDIANA DEPARTMENT OF TRANSPORTATION**

Plat No. 1

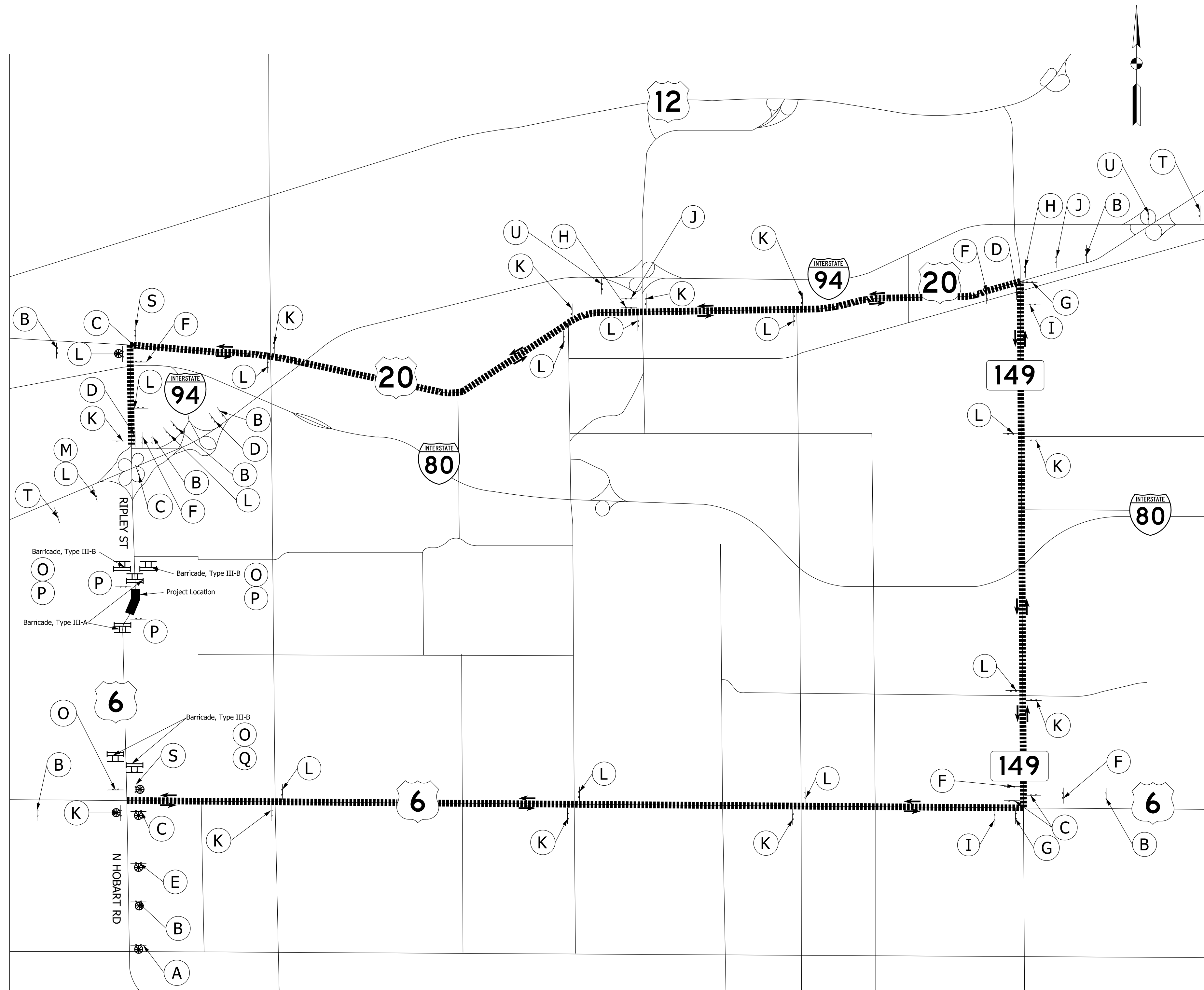
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1" = 50'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
N/A	1900012
	SHEETS
	4 of 52
CONTRACT	PROJECT
B-42442	1900012



CONSTRUCTION SIGN SCHEDULE		
SIGN CODE	SIZE (IN.)	EST. QTY.
W20-3	36 x 36	1
W20-2	36 x 36	8
M4-8	24 x 12	45
M3-1	24 x 12	20
M1-6	24 x 12	47
M6-1R	21 x 15	6
M3-3	24 x 12	6
M5-1R	21 x 15	6
M6-1L	21 x 15	4
M5-1L	21 x 15	4
M6-3S	21 x 15	23
R3-1	24 x 24	1
R3-2	24 x 24	0
R11-4	60 x 30	4
R11-2	48 x 30	4
M4-10R	48 x 18	1
M4-10L	48 x 18	0
M4-8A	28 x 18	1
M6-3S2	21 x 15	2

DETOUR ROUTE MARKER ASSEMBLY	
SIGN	EST. QTY.
B	8
C	4
D	3
E	1
F	5
G	2
H	2
I	2
J	2
K	11
L	13
M	1
S	2
T	2
U	2
TOTAL	61

Type III-A Barricades: 90 Lft.  
 Type III-B Barricades: 122 Lft.  
 Detour Route Marker Assembly: 61 Req'd  
 Road Closure Sign Assembly: 9 Req'd



Note: Refer to standard E-801-TCDDT for sign spacing

**Legend:**

- Detour Route Direction
- ⊥ Construction Sign
- ⊙ Low Intensity Construction Warning Light

NOT FOR CONSTRUCTION

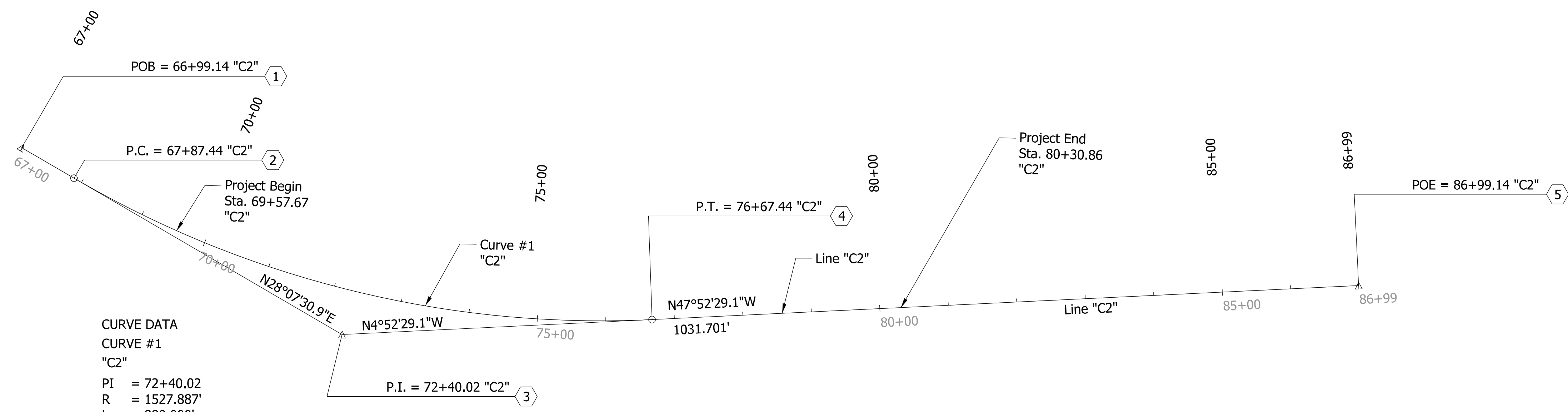
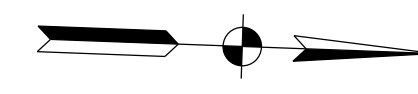
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DESIGNED: CMD	08/26/2022	DRAWN: CMD
CHECKED: EN	08/26/2022	CHECKED: EN

INDIANA  
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC  
DETOUR ROUTE

HORIZONTAL SCALE	BRIDGE FILE
N/A	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
N/A	1900012
SHEETS	
5 of 52	
CONTRACT	PROJECT
B-42442	1900012

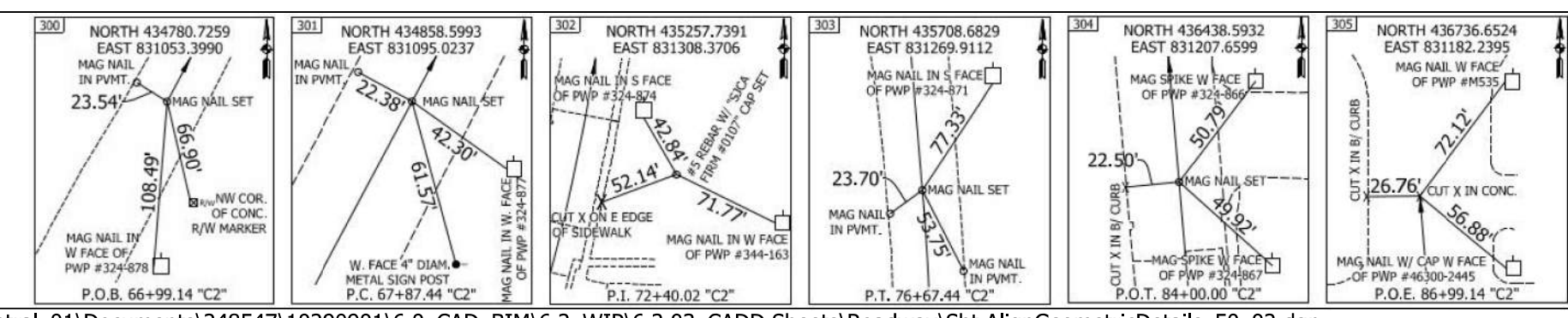
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**CURVE DATA**  
**CURVE #1**  
**"C2"**  
 PI = 72+40.02  
 R = 1527.887'  
 L = 880.000'  
 T = 452.581'  
 Δ = 33°00'00.0"  
 Dc = 3°45'00.0"  
 SE = 4%  
 DS = 35 MPH

ALIGNMENT DATA (Line "C2")			
Number	Northing	Easting	Stationing
1	434,780.7259	831,053.3990	P.O.B. 66+99.14
2	434,858.5993	831,095.0237	P.C. 67+87.44
3	435,257.7391	831,308.3706	P.I. 72+40.02
4	435,708.6829	831,269.9112	P.T. 76+67.44
5	436,736.6524	831,182.2395	P.O.E. 86+99.14

Plot: 8/26/2022 7:04:11 PM



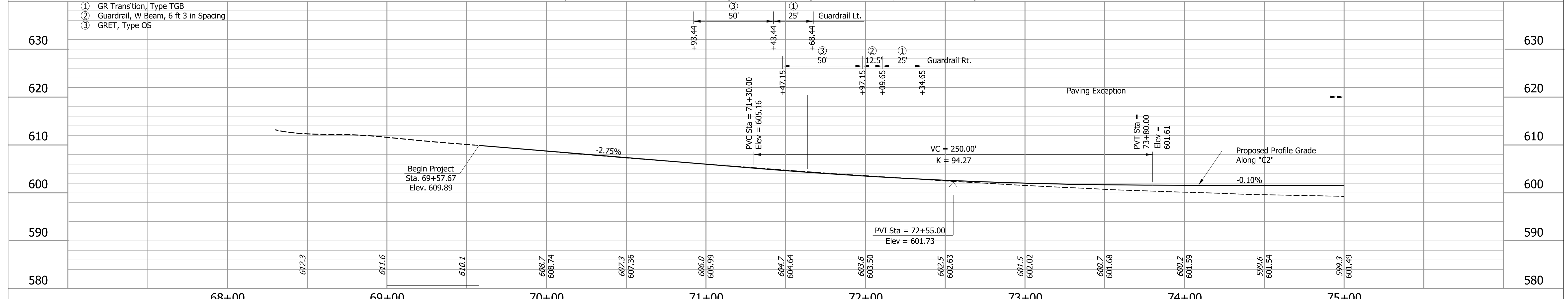
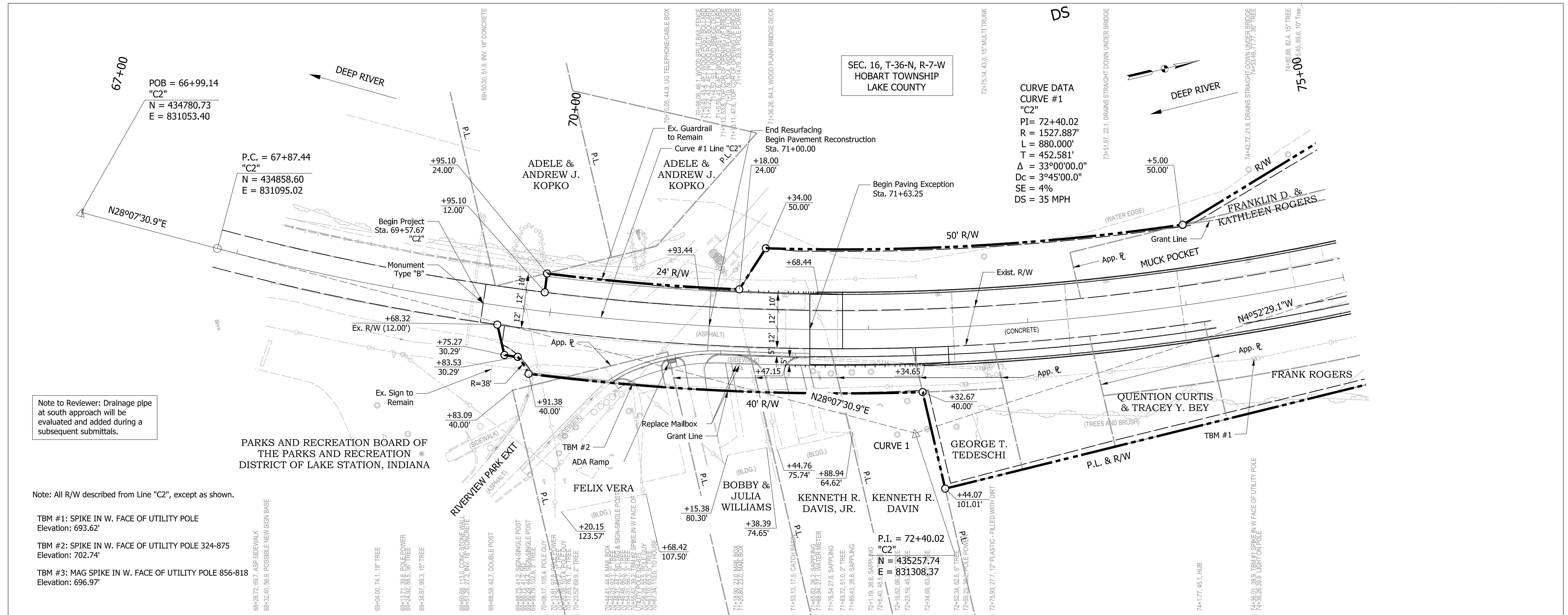
**NOT FOR CONSTRUCTION**

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CMD	08/26/2022	DRAWN: CMD 08/26/2022
CHECKED: EN	08/26/2022	CHECKED: EN 08/26/2022

**INDIANA DEPARTMENT OF TRANSPORTATION**

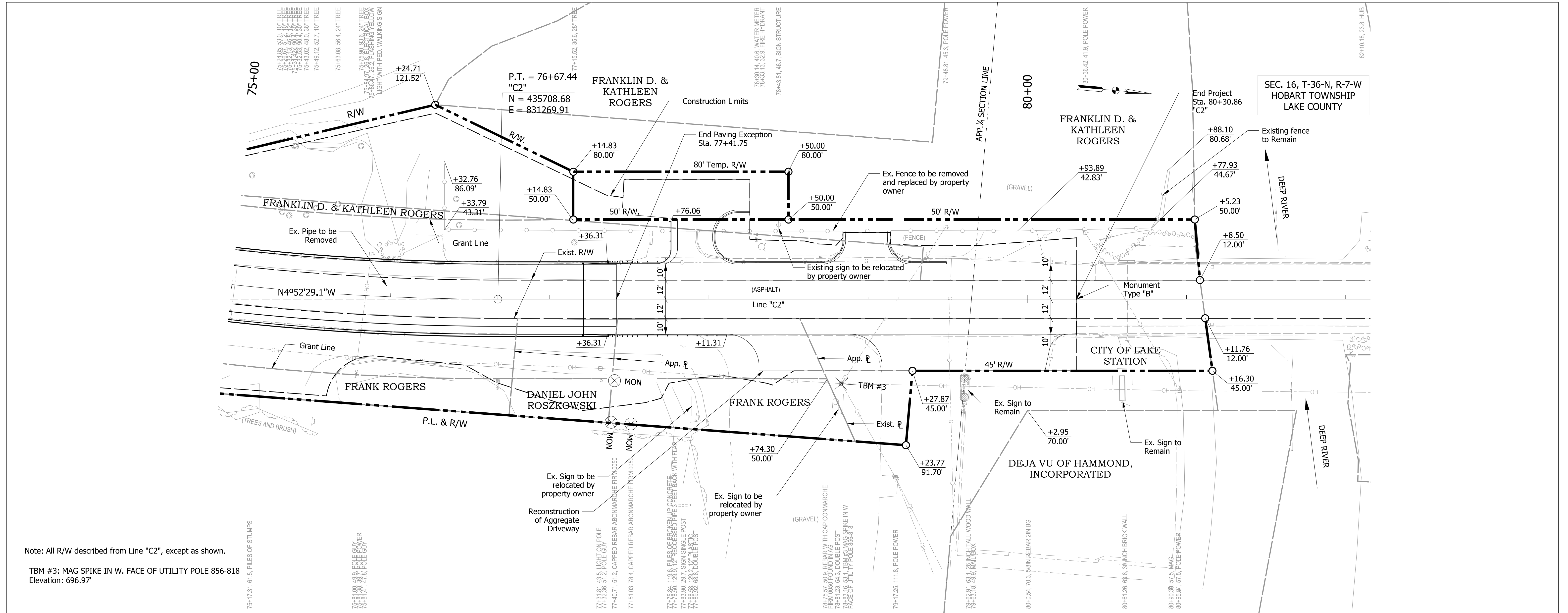
**ALIGNMENT GEOMETRIC DETAILS**  
**LINE "C2"**

HORIZONTAL SCALE	BRIDGE FILE
1" = 100'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
N/A	1900012
	SHEETS
	6 of 52
CONTRACT	PROJECT
B-42442	1900012



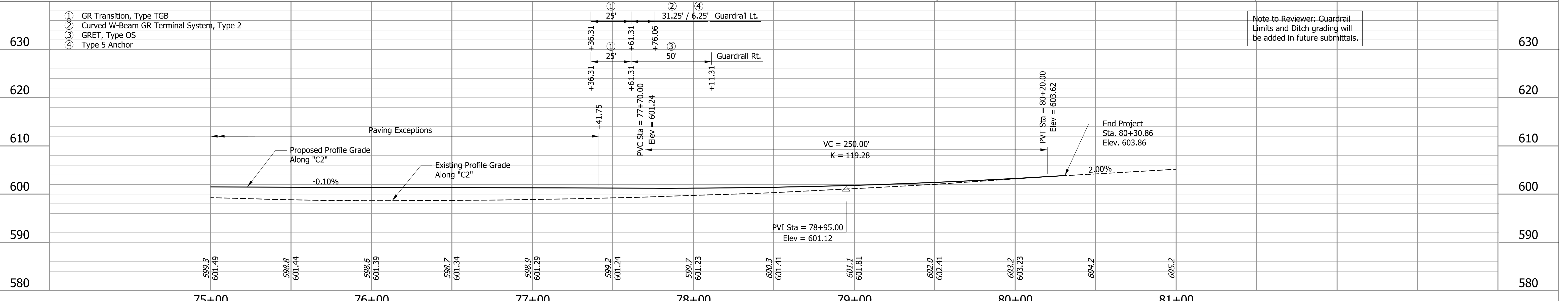
<b>NOT FOR CONSTRUCTION</b>	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE _____	<b>INDIANA DEPARTMENT OF TRANSPORTATION</b>  <b>ROADWAY PLAN AND PROFILE LINE "C2"</b>	HORIZONTAL SCALE 1" = 30' BRIDGE FILE (6)51-45-10466-B
	DESIGNED: CMD 08/26/2022 DRAWN: CMD 08/26/2022 CHECKED: EN 08/26/2022 CHECKED: EN 08/26/2022		VERTICAL SCALE 1" = 10' DESIGNATION 1900012
	SHEETS 7 of 52		CONTRACT B-42442 PROJECT 1900012

Plot: 8/29/2022 2:25:35 PM



Note: All R/W described from Line "C2", except as shown.

TBM #3: MAG SPIKE IN W. FACE OF UTILITY POLE 856-818  
Elevation: 696.97'



Plot: 8/26/2022 7:04:22 PM

**NOT FOR CONSTRUCTION**

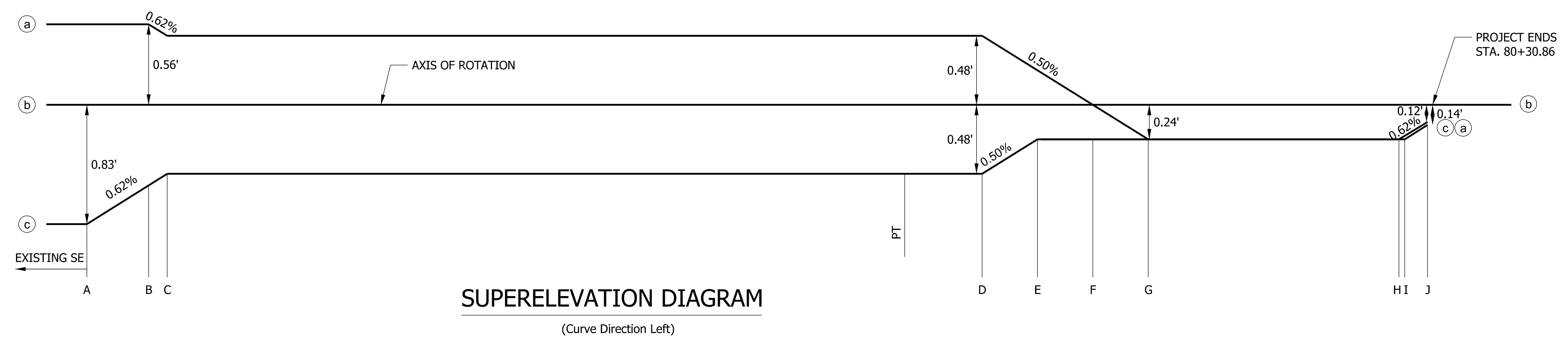
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DESIGNED: CMD	08/26/2022	DRAWN: CMD 08/26/2022
CHECKED: EN	08/26/2022	CHECKED: EN 08/26/2022

**INDIANA DEPARTMENT OF TRANSPORTATION**

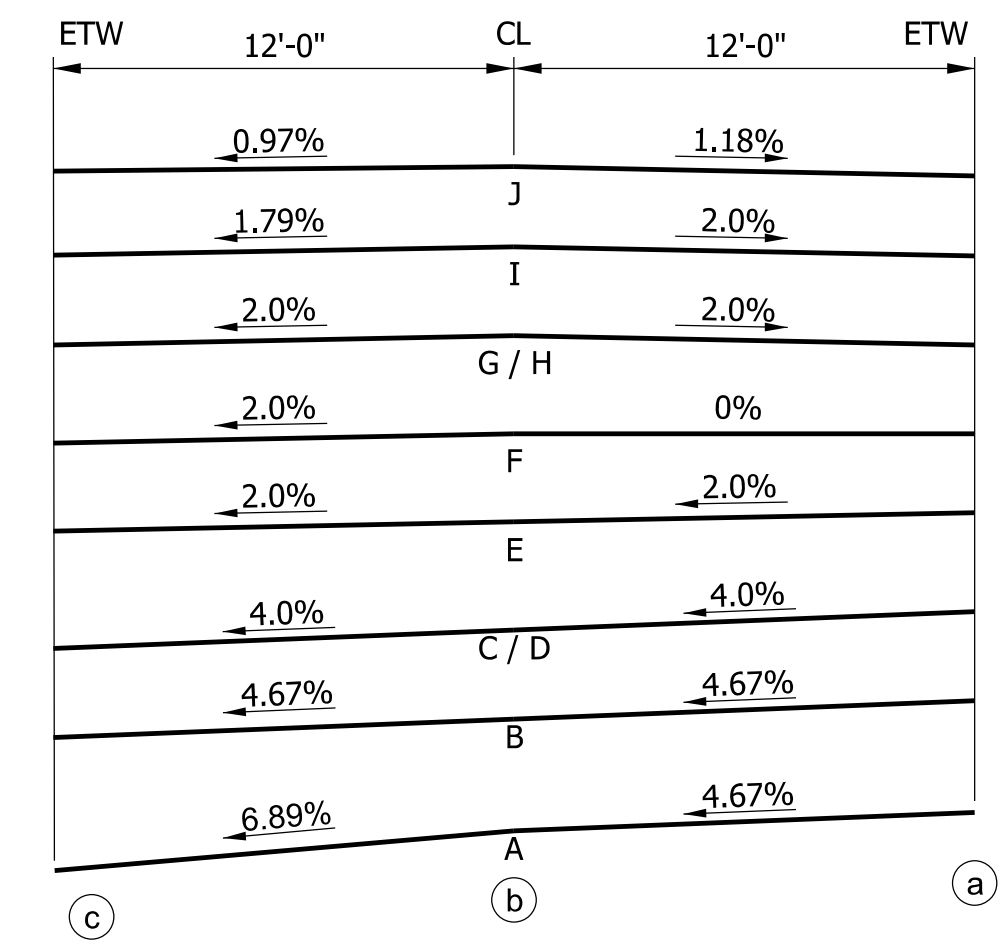
**ROADWAY PLAN AND PROFILE LINE "C2"**

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
1" = 10'	1900012
SHEETS	
8 of 52	
CONTRACT	PROJECT
B-42442	1900012





SUPERELEVATION Line "C2"	
Curve	1
Curve Radius	1527.89
Super (e)	4%
PC	67+87.44
PI	72+40.02
PT	76+67.44
A	70+99.14
B	71+42.03
C	71+54.97
D	77+21.25
E	77+59.75
F	77+98.25
G	78+36.75
H	80+11.00
I	80+15.04
J	80+30.86



Plot: 8/26/2022 7:04:25 PM

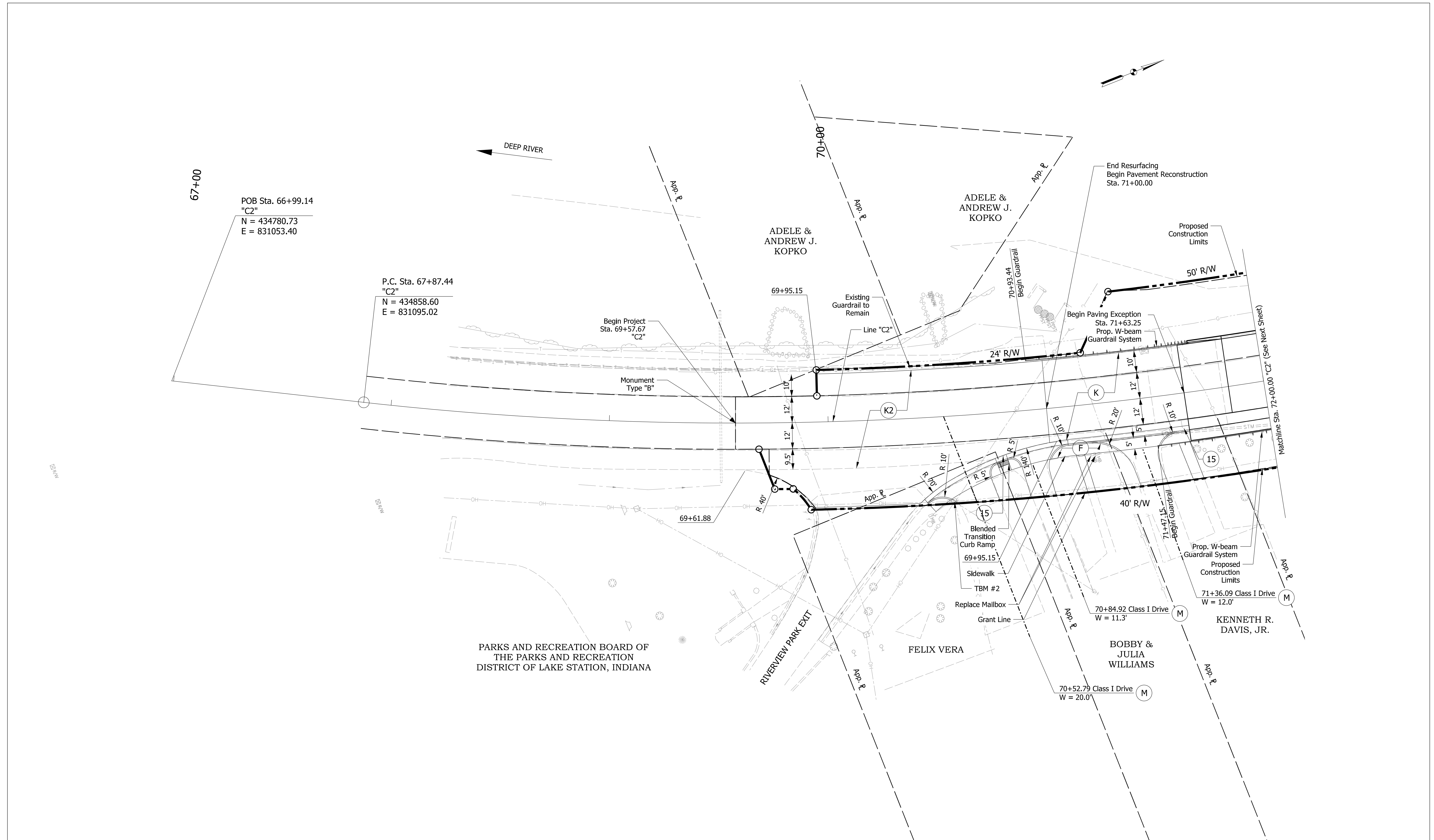
**NOT FOR  
CONSTRUCTION**

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CMD	08/26/2022	DRAWN: CMD
CHECKED: EN	08/26/2022	CHECKED: EN

**INDIANA  
DEPARTMENT OF TRANSPORTATION**

**SUPERELEVATION DETAILS  
Line "C2"**

HORIZONTAL SCALE	BRIDGE FILE
N/A	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
N/A	1900012
SHEETS	
9 of 52	
CONTRACT	PROJECT
B-42442	1900012

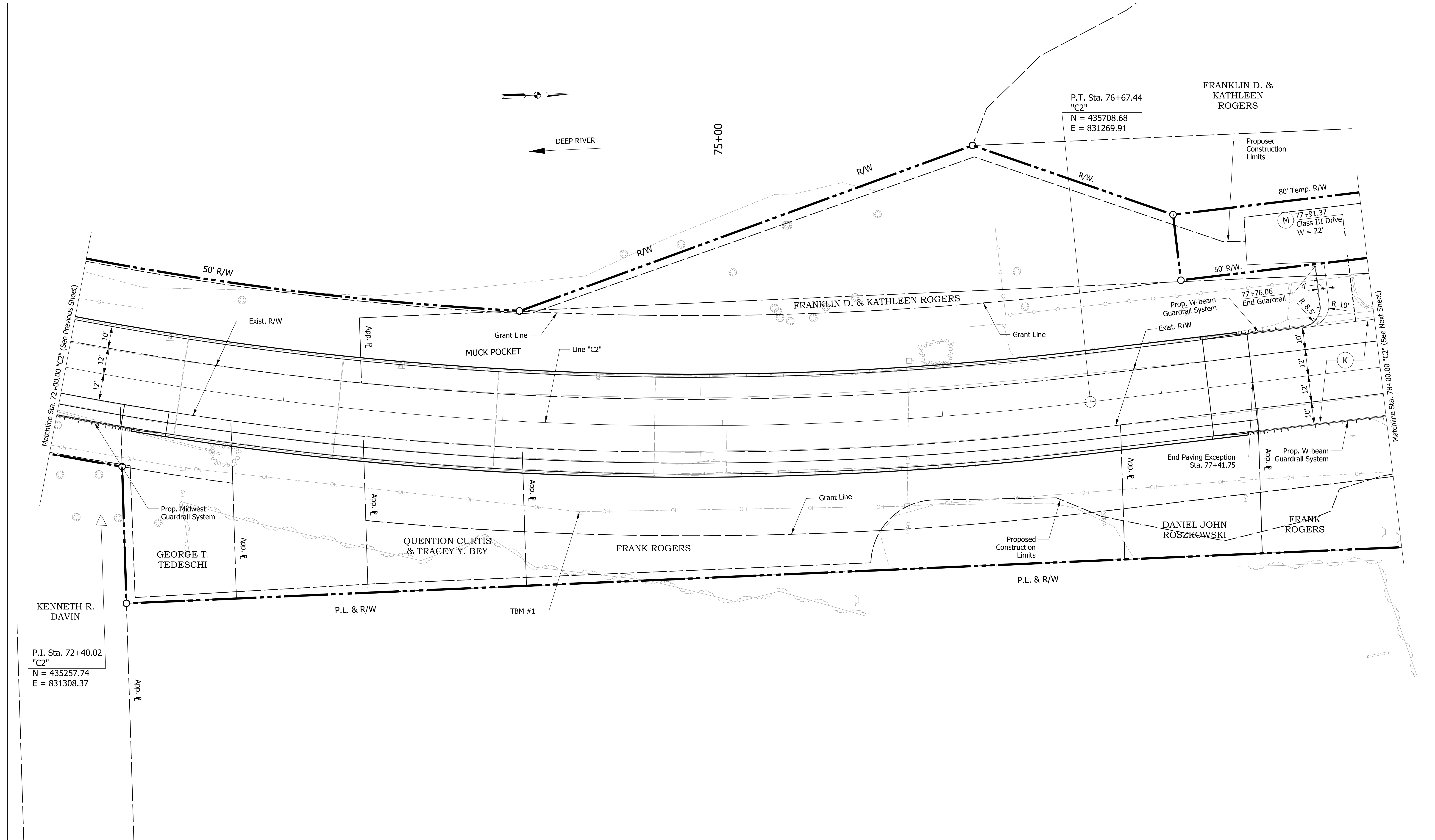


NOT FOR CONSTRUCTION	RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION  CONSTRUCTION DETAIL LINE "C2" STA. 72+00.00 TO STA. 78+00.00	HORIZONTAL SCALE	BRIDGE FILE	
	DESIGNED: MSM	08/26/2022	DRAWN: AMN		08/26/2022	1" = 20'	(6)51-45-10466-B
	CHECKED: EN	08/26/2022	CHECKED: EN		08/26/2022	VERTICAL SCALE	DESIGNATION
							1900012
						SHEETS	
						10 of 52	
					CONTRACT	PROJECT	
					B-42442	1900012	

LEGEND	
(F)	Concrete Sidewalk
(K)	Full Depth HMA: 220 lbs/sy QC/QA-HMA, 3, 76, Surface, 12.5 mm 275 lbs/sy QC/QA-HMA, 3, 70, Intermediate, 19.0 mm 1,155 lbs/sy QC/QA-HMA, 3, 64, Base, 25.0 mm 6" Course Aggregate No. 53 Subgrade Treatment, Type IC

(K2)	HMA Milling and Resurfacing: 220 lbs/sy QC/QA-HMA, 3, 76, Surface, 12.5 mm
(M)	PCC for Approaches, 6 in., on Dense Graded Subbase on Subgrade Treatment Type II (6 in. Coarse Aggregate No. 53)
(15)	Curb and Gutter, Concrete

Plot: 8/29/2022 2:25:38 PM



LEGEND

(F)	Concrete Sidewalk
(K)	Full Depth HMA: 220 lbs/sy QC/QA-HMA, 3, 76, Surface, 12.5 mm 275 lbs/sy QC/QA-HMA, 3, 70, Intermediate, 19.0 mm 1,155 lbs/sy QC/QA-HMA, 3, 64, Base, 25.0 mm 6" Course Aggregate No. 53 Subgrade Treatment, Type IC

(K2)	HMA Milling and Resurfacing: 220 lbs/sy QC/QA-HMA, 3, 76, Surface, 12.5 mm
(M)	PCC for Approaches, 6 in., on Dense Graded Subbase on Subgrade Treatment Type II (6 in. Coarse Aggregate No. 53)
(15)	Curb and Gutter, Concrete

**NOT FOR CONSTRUCTION**

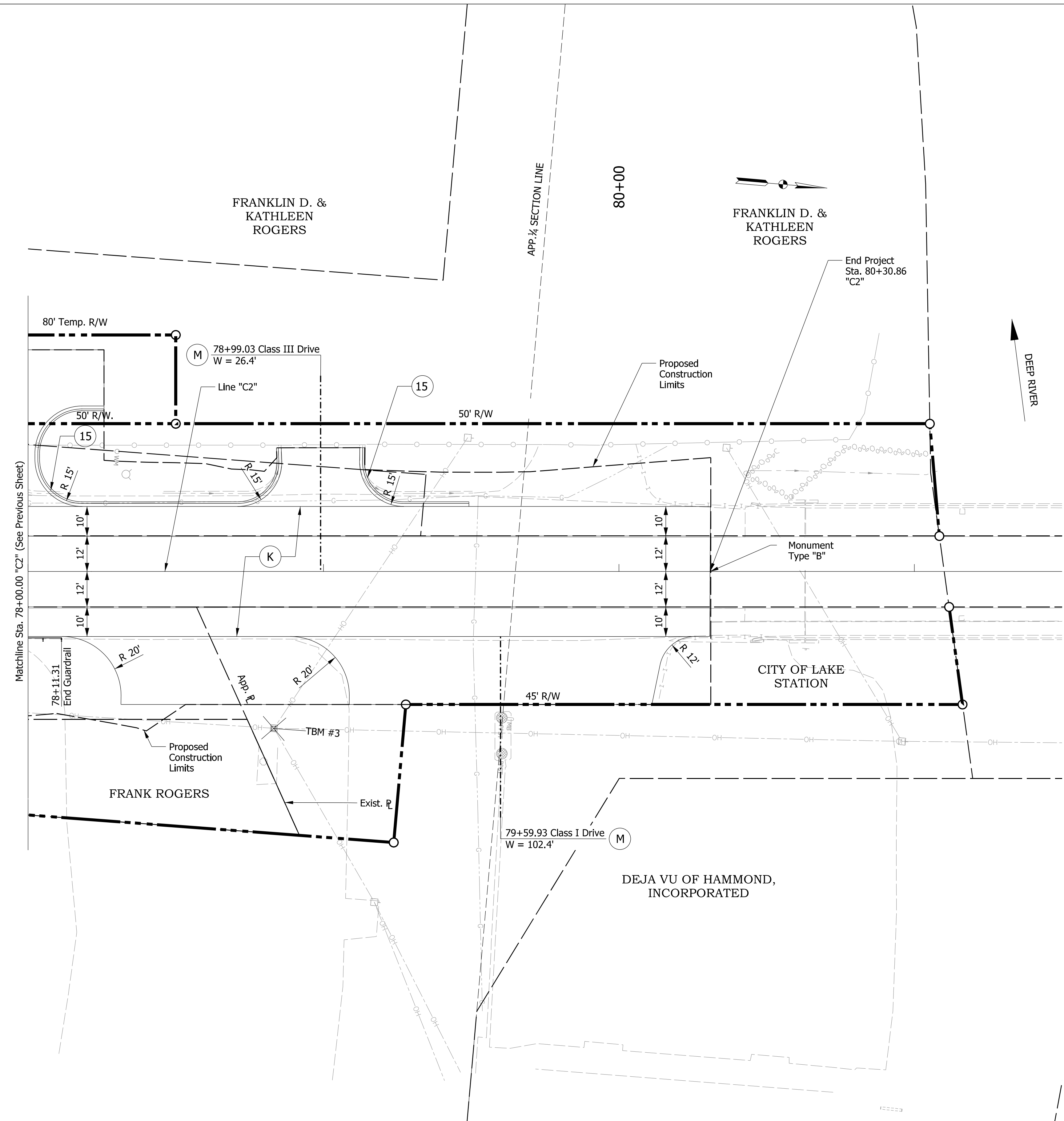
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: MSM	08/26/2022	DRAWN: AMN
CHECKED: EN	08/26/2022	CHECKED: EN

INDIANA  
DEPARTMENT OF TRANSPORTATION

**CONSTRUCTION DETAIL**  
**LINE "C2"**  
**STA. 66+99.14 TO STA. 72+00.00**

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
	11 of 52
CONTRACT	PROJECT
B-42442	1900012

Plot: 8/26/2022 7:04:30 PM



Plot: 8/26/2022 7:04:32 PM

LEGEND	
(F)	Concrete Sidewalk
(K)	Full Depth HMA: 220 lbs/sy QC/QA-HMA, 3, 76, Surface, 12.5 mm 275 lbs/sy QC/QA-HMA, 3, 70, Intermediate, 19.0 mm 1,155 lbs/sy QC/QA-HMA, 3, 64, Base, 25.0 mm 6" Course Aggregate No. 53 Subgrade Treatment, Type IC
(K2)	HMA Milling and Resurfacing: 220 lbs/sy QC/QA-HMA, 3, 76, Surface, 12.5 mm
(M)	PCC for Approaches, 6 in., on Dense Graded Subbase on Subgrade Treatment Type II (6 in. Coarse Aggregate No. 53)
(15)	Curb and Gutter, Concrete

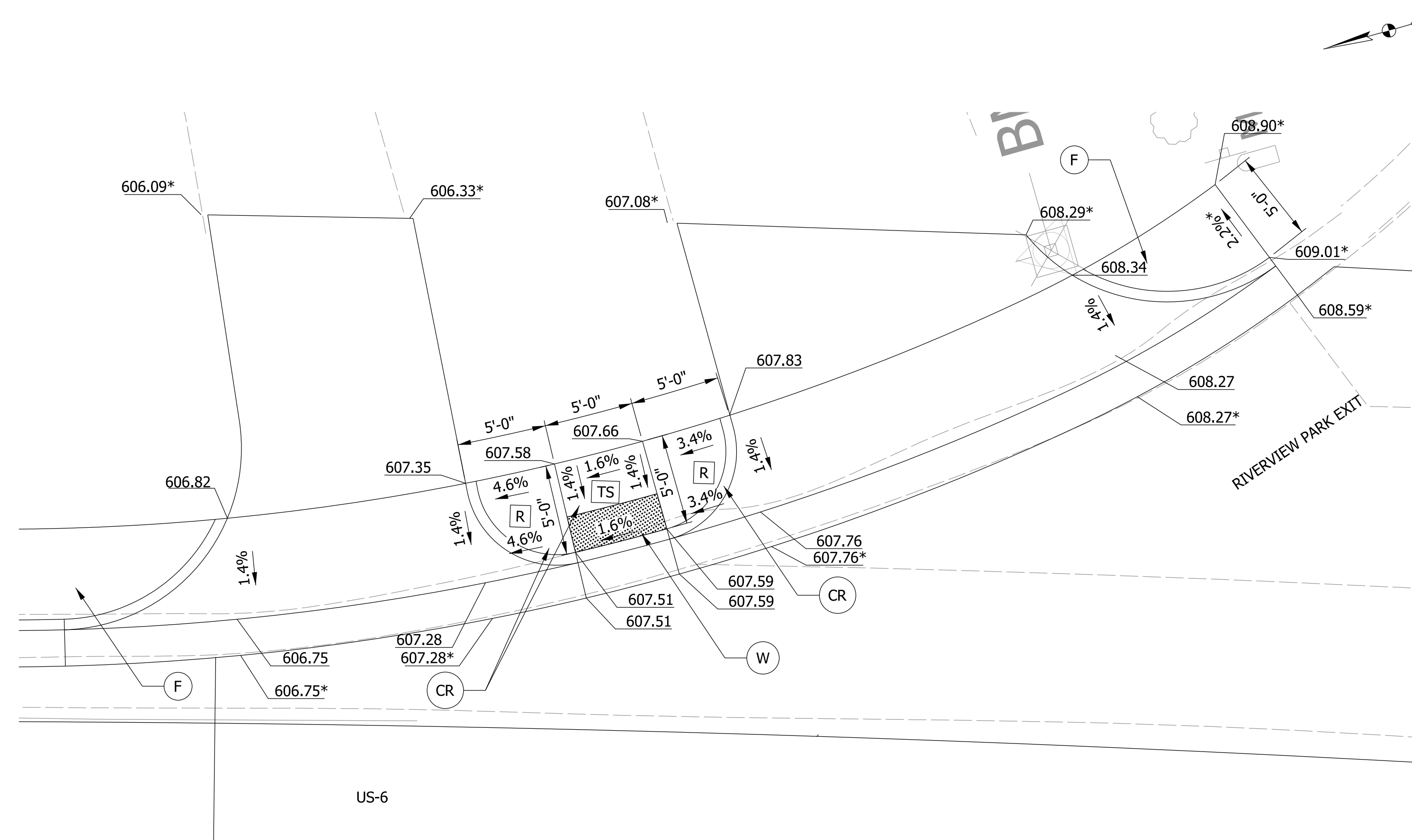
**NOT FOR CONSTRUCTION**

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: MSM	08/26/2022	DRAWN: AMN
CHECKED: EN	08/26/2022	CHECKED: EN

INDIANA  
DEPARTMENT OF TRANSPORTATION

**CONSTRUCTION DETAIL**  
**LINE "C2"**  
**STA. 78+00.00 TO STA. 81+50.00**

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
	12 of 52
CONTRACT	PROJECT
B-42442	1900012



BLENDED TRANSITION CURB RAMP  
NE CORNER US-6 AND RIVERVIEW PARK EXIT

Plot: 8/26/2022 7:04:35 PM

LEGEND		
→	Direction of Slope	
▤▤▤▤	Detectable Warning Surface	
*	Existing Elevation / Slope	
TS	Turning Space	F Sidewalk Concrete
R	Ramp	CR Curb Ramp, Concrete
FS	Flared Side	W Detectable Warning Tile

**NOT FOR CONSTRUCTION**

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CMD	08/26/2022	DRAWN: AMN
CHECKED: EN	08/26/2022	CHECKED: EN

INDIANA DEPARTMENT OF TRANSPORTATION	
ADA RAMP	

HORIZONTAL SCALE	BRIDGE FILE
1" = 3'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
	13 of 52
CONTRACT	PROJECT
B-42442	1900012



Plot: 8/26/2022 7:04:37 PM

Erosion Control Legend	
	Temporary Inlet Protection
	Temporary Seeding
	Silt Fence
	Fiber Roll

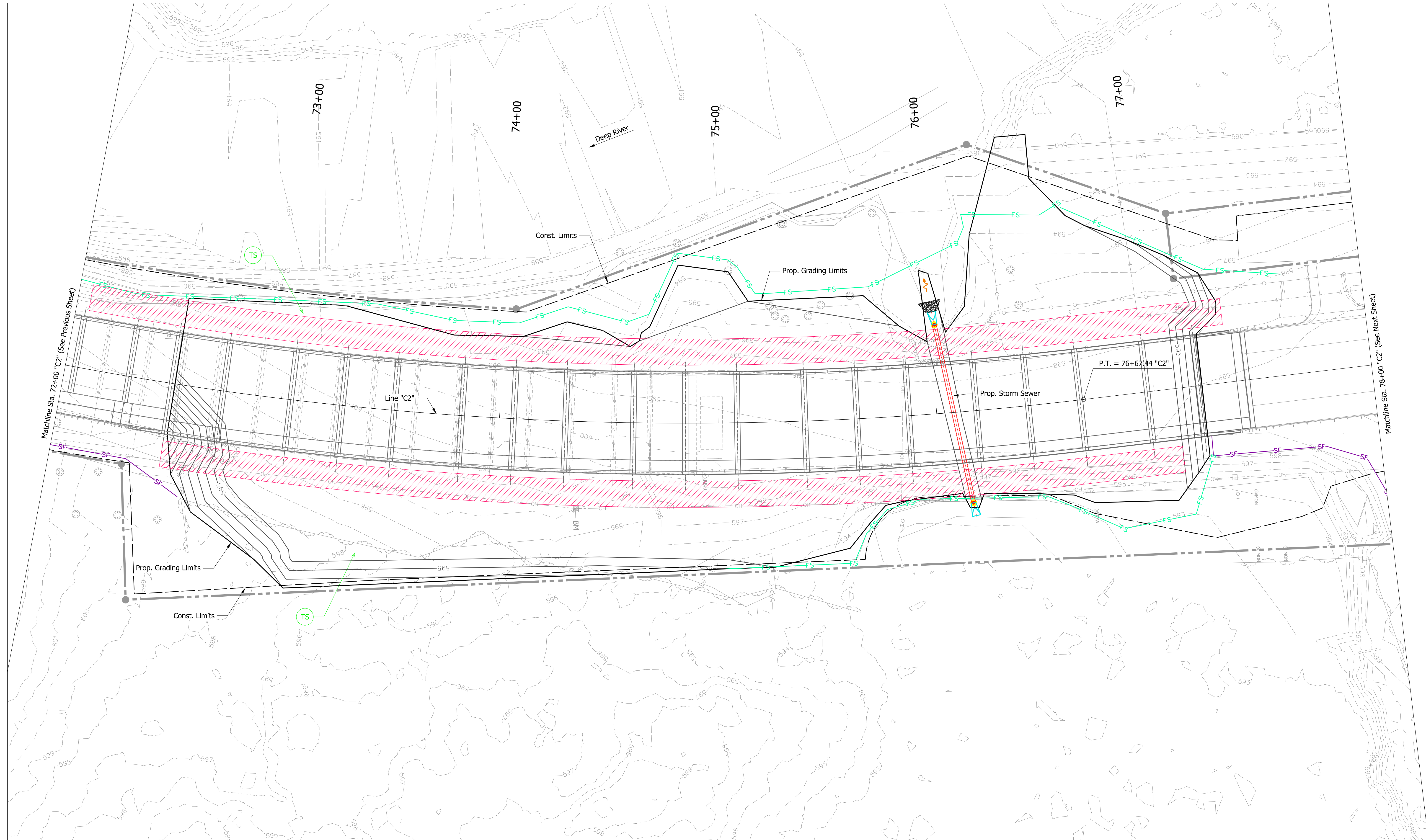
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RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: BJZ	08/26/2022	DRAWN: CHP
CHECKED: EN	08/26/2022	CHECKED: EN
	08/26/2022	


**INDIANA DEPARTMENT OF TRANSPORTATION**

**TEMPORARY EROSION AND SEDIMENT CONTROL PLANS**

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
1" = 20'	1900012
	SHEETS
	14 of 52
CONTRACT	PROJECT
B-42442	1900012



**Erosion Control Legend**

	Temporary Seeding		Temporary Causeway
	Silt Fence		Water Leaving the Site
	Fiber Roll		

**NOT FOR CONSTRUCTION**

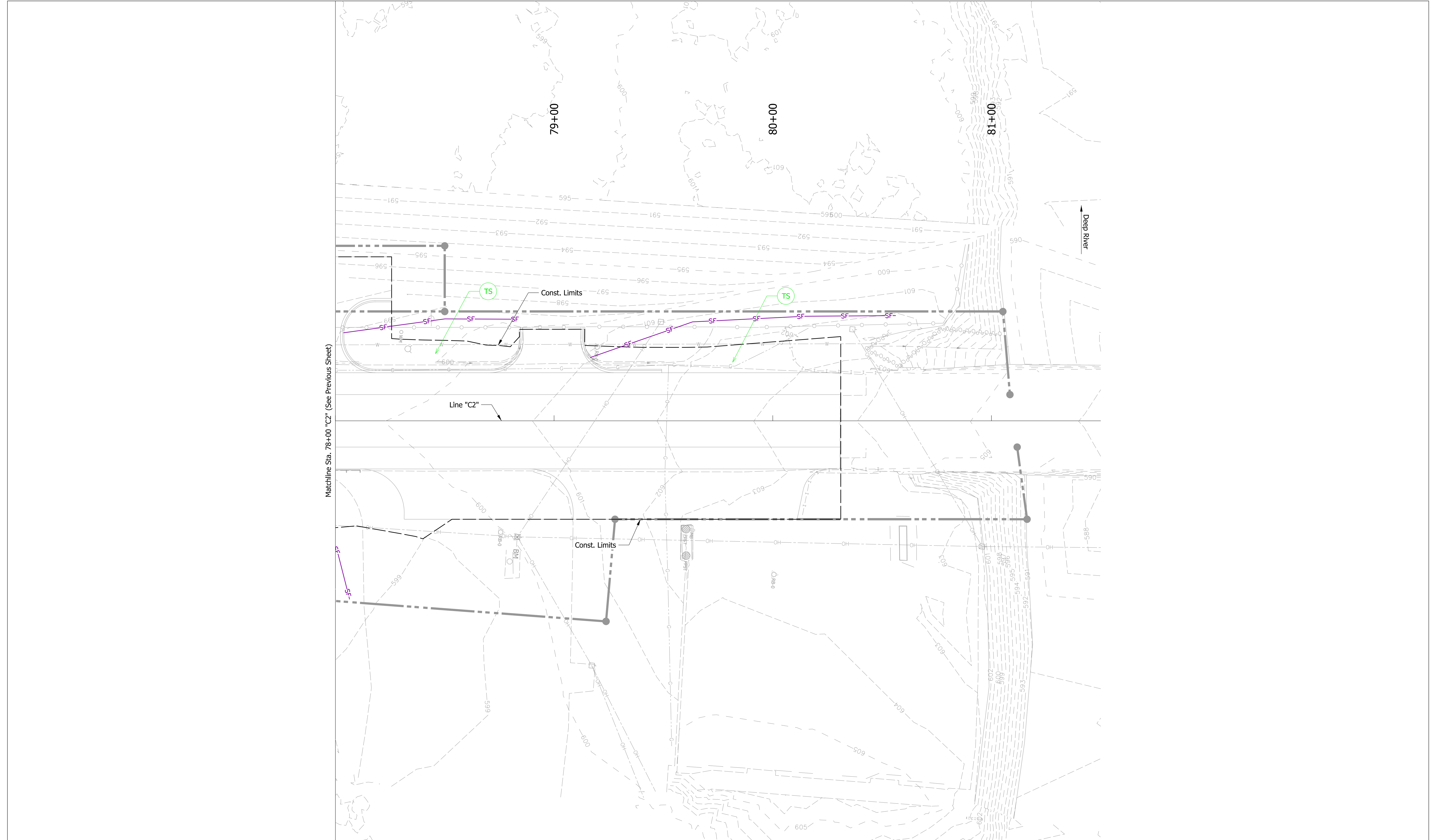
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DESIGNED: BJZ	08/26/2022	DRAWN: CHP
CHECKED: EN	08/26/2022	CHECKED: EN

**INDIANA DEPARTMENT OF TRANSPORTATION**

**TEMPORARY EROSION AND SEDIMENT CONTROL PLANS**

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
1" = 20'	1900012
CONTRACT	SHEETS
B-42442	15 of 52
	PROJECT
	1900012

Plot: 8/26/2022 7:04:40 PM



Plot: 8/26/2022 7:04:43 PM

**Erosion Control Legend**

- TS Temporary Seeding
- SF — Silt Fence

**NOT FOR CONSTRUCTION**

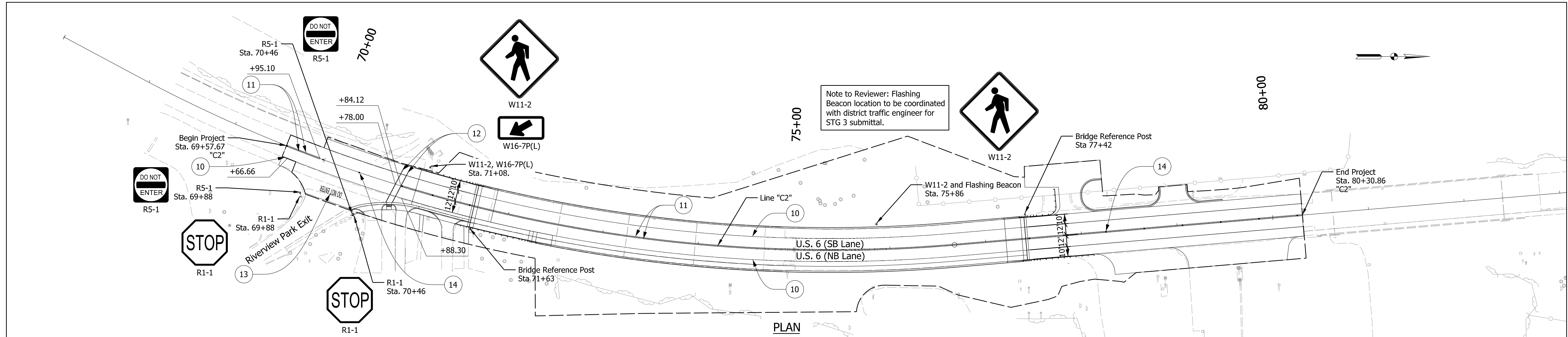
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DESIGNED: BJZ	08/26/2022	DRAWN: CHP
CHECKED: EN	08/26/2022	CHECKED: EN
	08/26/2022	08/26/2022

**INDIANA DEPARTMENT OF TRANSPORTATION**

**TEMPORARY EROSION AND SEDIMENT CONTROL PLANS**

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
1" = 20'	1900012
	SHEETS
	16 of 52
CONTRACT	PROJECT
B-42442	1900012





SHEET SIGN & POST SUMMARY													REMARKS	
PLAN SHEET NO. / LINE	SIGN LOCATION (Sta.)	SIGN CODE	SIGN SIZE (in. x in.)	GROUND-MOUNTED SIGN AREA (ft²)			MOUNTED ON PANEL SIGN, AREA (ft²)	POST						
				SQUARE						TOTAL				
				UNREINFORCED ANCHOR		REINFORCED ANCHOR		REINFORCED ANCHOR						
POST LENGTH (FT)		POST LENGTH (FT)		POST LENGTH (FT)										
1	2	TOTAL	1	2	TOTAL	1	TOTAL	TOTAL				TOTAL		
Line "C2"	69+88, Rt.	R1-1	30 x 30	6.25	9.00								12.0	
Line "C2"	70+46, Rt.	R1-1	30 x 30	6.25	9.00								12.0	
Line "C2"	71+08, Lt.	W11-2	36 x 36		9.00								13.0	Fluorescent yellow-green background
Line "C2"	75+86, Lt.	W11-2	36 x 36		9.00									Fluorescent yellow-green background Sign Mounted on Utility Pole with Flashing Beacon

LINE	LOCATION	SIGN CODE	SIZE (IN. x IN.)	POST LENGTH (FT)	REFERENCE POST (EACH)
C2	71+63, Rt.	16	6 x 12	6	1
C2	71+63, Rt.	-13	4 x 12		1
C2	77+42, Lt.	16	6 x 12	6	1
C2	77+42, Lt.	-13	4 x 12		1

LOCATION	LINE, MULTI-COMPONENT								LINE, PAINT		LINE, THERMOPLASTIC				TRANSVERSE MARKING, PREFORMED PLASTIC		PAVEMENT MESSAGE MARKINGS, THERMOPLASTIC		PAVEMENT MESSAGE MARKINGS, PREFORMED PLASTIC			SNOWPLOWABLE RAISED PAVEMENT MARKER			DELINEATOR POST FLEXIBLE	DELINEATOR W/POST D3 3 IN. DIA.			
	BROKEN WHITE 6 IN. FT	BROKEN YELLOW 6 IN. FT	BROKEN WHITE 5 IN. FT	SOLID YELLOW 6 IN. FT	SOLID WHITE 6 IN. FT	SOLID WHITE 10 IN. FT	SOLID WHITE 12 IN. FT	SOLID WHITE 16 IN. FT	SOLID WHITE 6 IN. FT	SOLID YELLOW 6 IN. FT	SOLID WHITE 6 IN. FT	SOLID YELLOW 6 IN. FT	SOLID WHITE 24 IN. FT	BROKEN WHITE 6 IN. FT	BROKEN YELLOW 6 IN. FT	STOP LINE 24 IN. FT	CROSS WALK 8 IN. FT	DO NOT ENTER EACH	LANE ARROW EACH	WORN ONLY EACH	LANE ARROW EACH	ONE WAY WHITE EACH	TWO WAY YELLOW / RED EACH	TWO WAY WHITE / RED EACH	DELINEATOR POST FLEXIBLE EACH	DELINEATOR W/POST D3 3 IN. DIA. EACH			
Sta. 69+57.67 to 80+30.88 Lt.																1067.6													
Sta. 69+57.67 to 69+95.10																74.9													
Sta. 70+81.65 to 80+30.87																1898.4													
Sta. 69+57.67 to 69+63.48 Rt.																5.9													
Sta. 70+88.30 to 80+30.87 Rt.																947.0													
Sta. 70+78.00																													
Sta. 70+84.12																	43.6												
Sta. 69+57.67 to 71+63.03																	41.8												
Sta. 77+41.75 to 80+30.87																													
Sta. 70+17.28																			1										

<b>Legend</b>	<ul style="list-style-type: none"> <li>□ Proposed Ground Mounted Sheet Sign, Both Sides</li> <li>□ Proposed Ground Mounted Sheet Sign, Single Sides</li> </ul>	<ul style="list-style-type: none"> <li>10 Line, Thermoplastic, Solid, White, 6 in.</li> <li>11 Line, Thermoplastic, Solid, Yellow, 6 in.</li> <li>12 Transverse Marking, Paint, Crosswalk, 8 in.</li> </ul>	<ul style="list-style-type: none"> <li>13 Pavement Message Marking, Thermoplastic, DO NOT ENTER</li> <li>14 Snowplowable Raised Pavement Marker</li> </ul>
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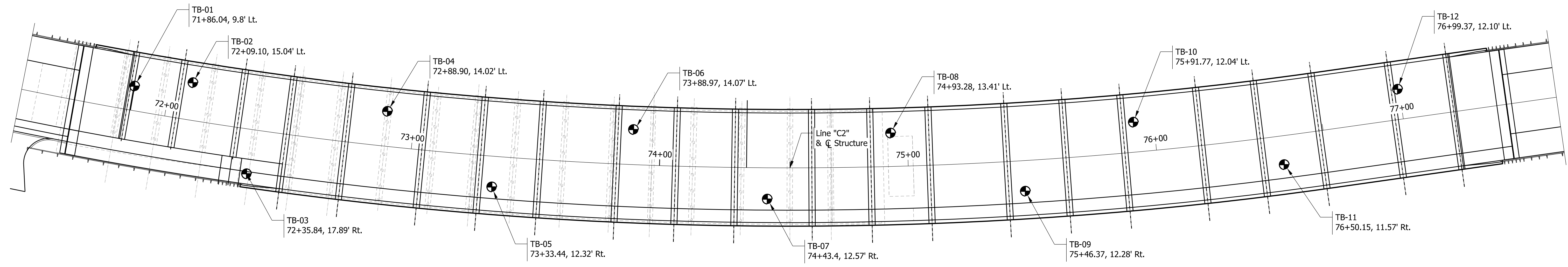
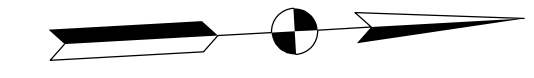
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RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CMD	08/26/2022	DRAWN: CHP
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DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS AND SIGNINGS

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
N/A	1900012
SHEETS	
17 of 52	
CONTRACT	PROJECT
B-42442	1900012



**BORING PLAN**  
Scale: 1" = 20'-0"

PILE LOADING FOR GEOTECHNICAL TESTING											
	Bent No. 1 & Pier No. 2	Pier No. 3 & 4	Pier No. 5 & 6	Bent No. 7 & 8	Pier No. 9 & 10	Pier No. 11 & 12	Pier No. 13 & 14	Pier No. 15 & 16	Pier No. 17 & 18	Pier No. 19 & 20	Pier No. 21 & 22
Pile Size, Type, and Grade	16" Dia. x 0.375" Steel Pipe Piles A252, Grade 3 Steel, 45 ksi										
Factored Design Load, $Q_f$ (kip)	221	221	221	221	221	221	221	221	221	221	221
Factored Design Soil Resistance, $R_f$ (kips)	223	227	224	221	222	222	222	224	223	225	225
Resistance Factor for Axial Compression, $\phi_{DM}$	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Drag Force at Neutral Plane, DF (kips)	-	-	-	-	-	-	-	-	-	-	-
Nominal Soil Resistance, $R_n$ (kips)	319	324	320	316	317	317	317	319	318	321	321
Scour Zone Friction, $R_{scour}$ (kips)	0	0	0	4	4	5	10	15	10	7	0
Nominal Driving Resistance, $R_{ndr}$ (kips)	319	324	320	320	321	322	327	334	328	328	321
Minimum Pile Tip Elevation	-	-	-	-	-	-	-	-	-	-	-
Estimated Pile Tip Elevation	513.7	521.8	505.1	503.8	509.6	502.5	504.7	499.2	501.1	502.6	508.6
Testing Method	Standard Specifications Section 701.05(b)										

Plot: 8/26/2022 7:04:56 PM

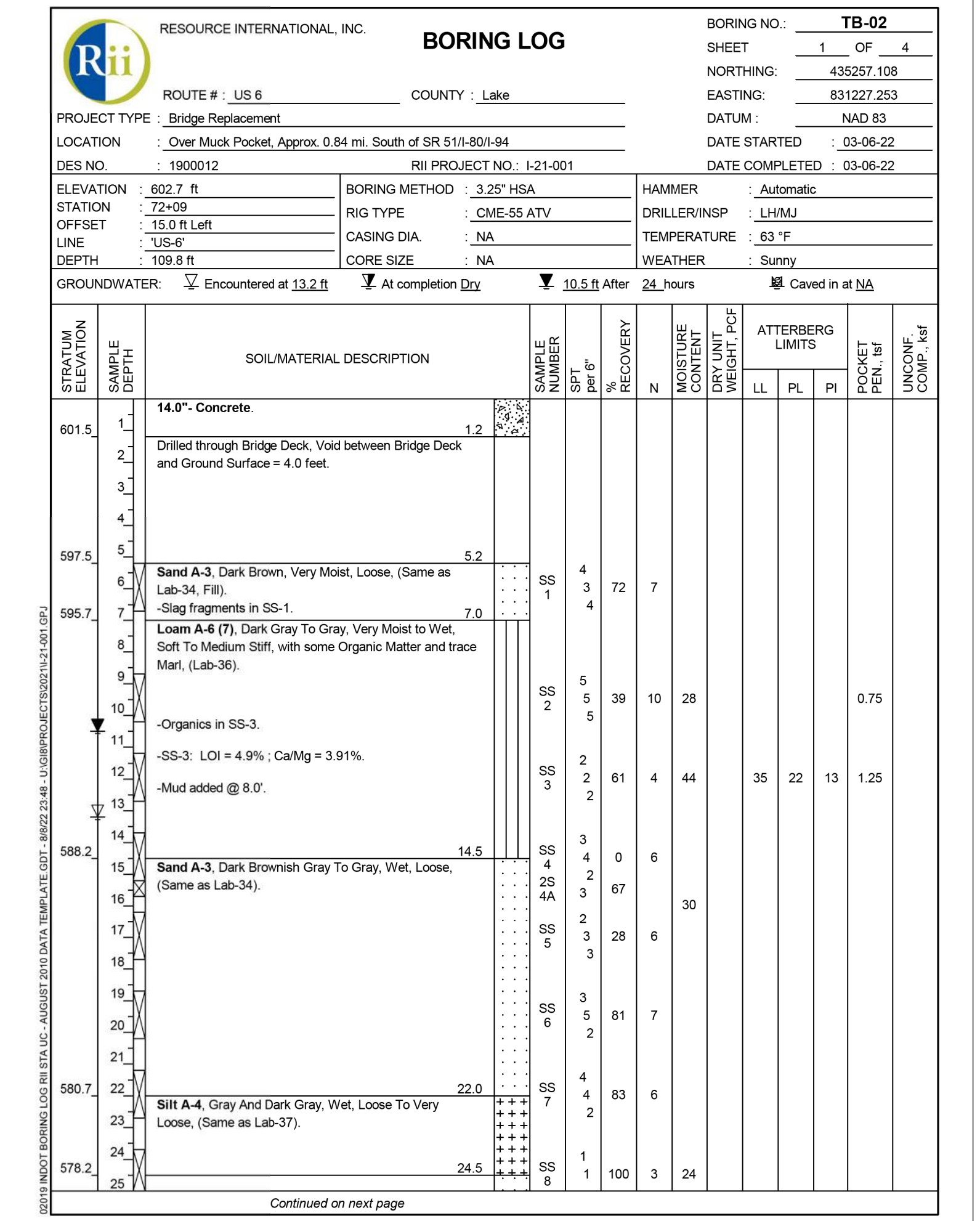
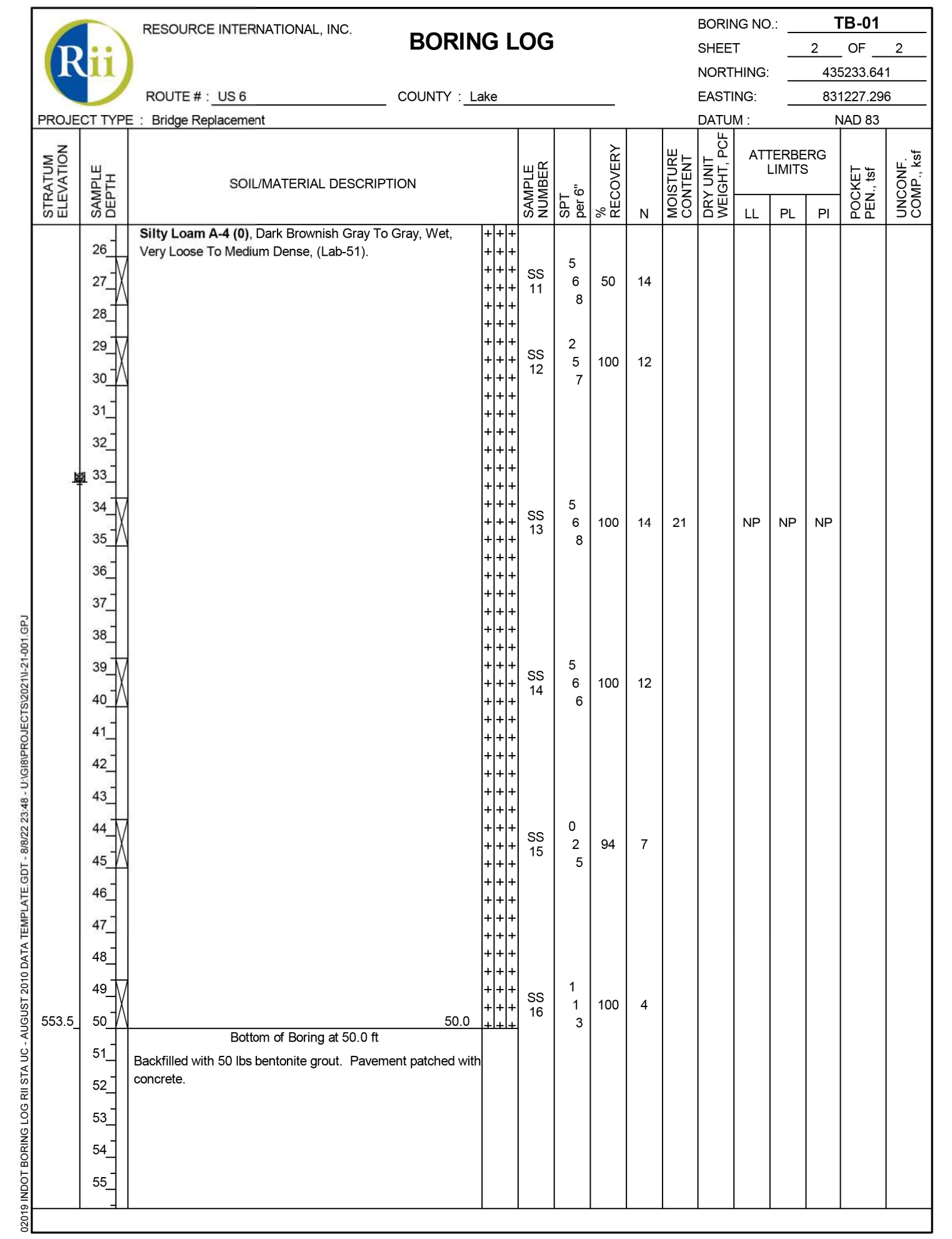
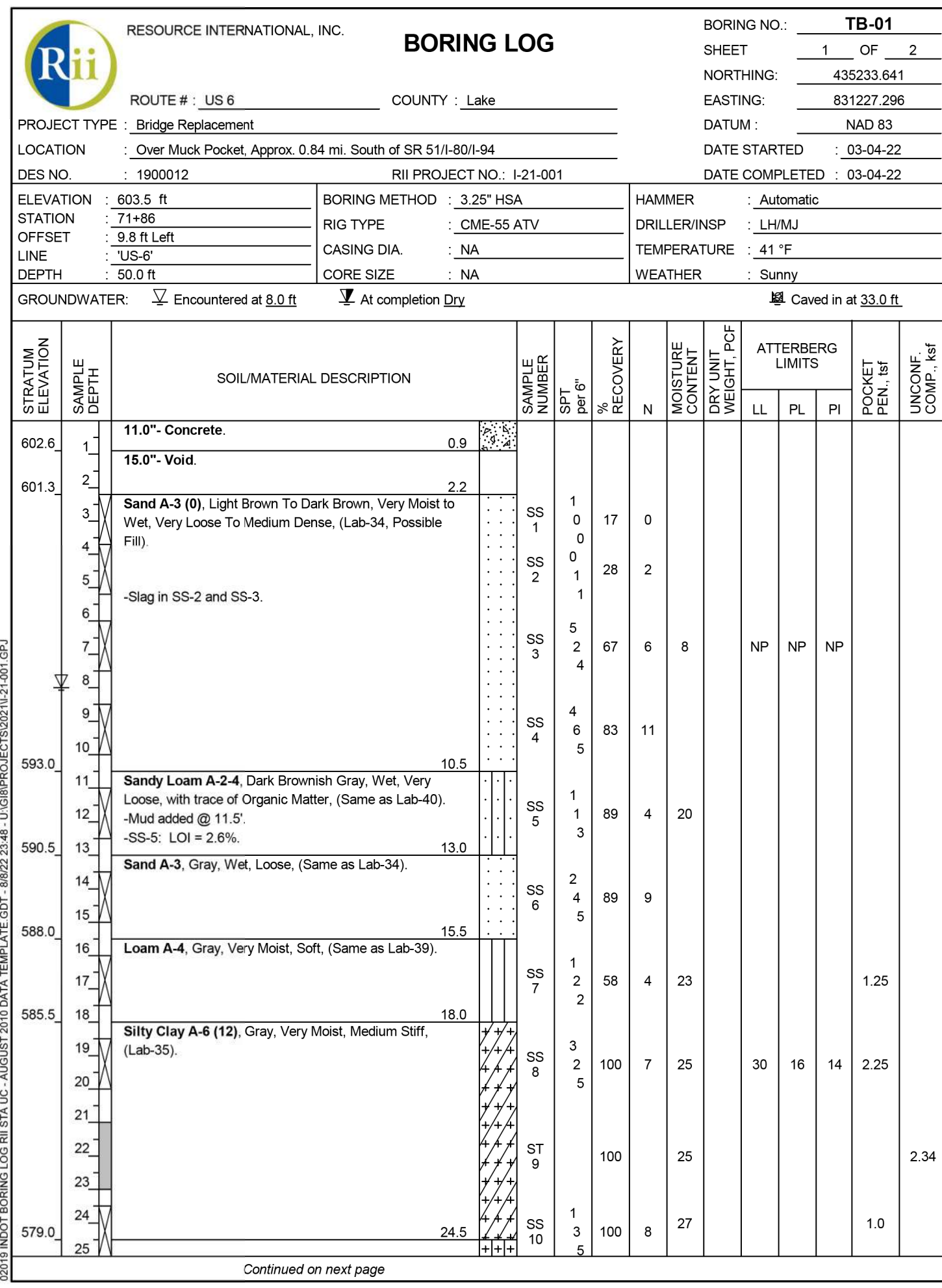
**NOT FOR CONSTRUCTION**

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: CHP 08/26/2022	DRAWN: CHP 08/26/2022	
CHECKED: JLP 08/26/2022	CHECKED: JLP 08/26/2022	

**INDIANA DEPARTMENT OF TRANSPORTATION**

**SOIL BORINGS**

HORIZONTAL SCALE	BRIDGE FILE
NTS	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
NTS	1900012
	SHEETS
	18 of 52
CONTRACT	PROJECT
B-42442	1900012



Plot: 8/26/2022 7:04:56 PM

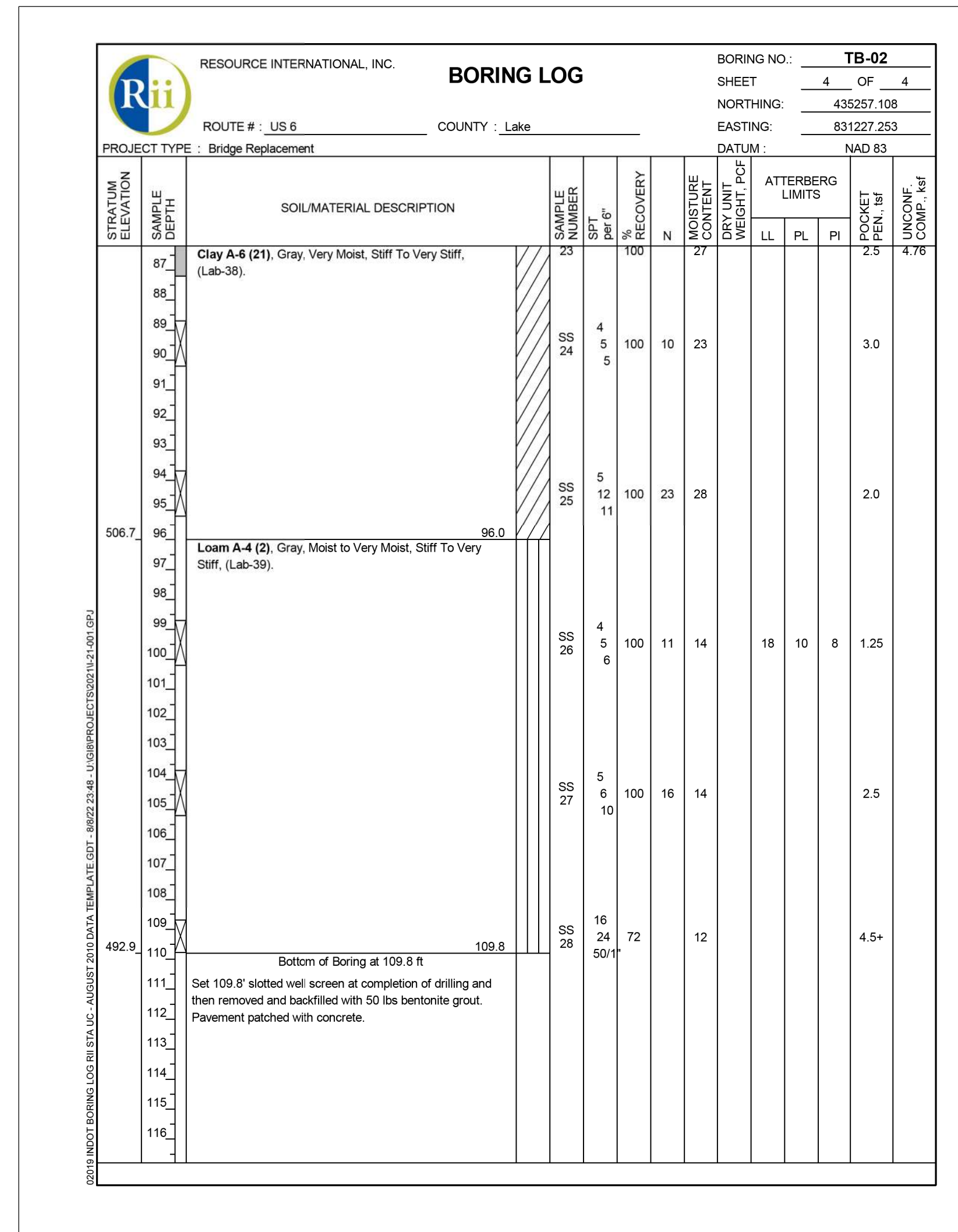
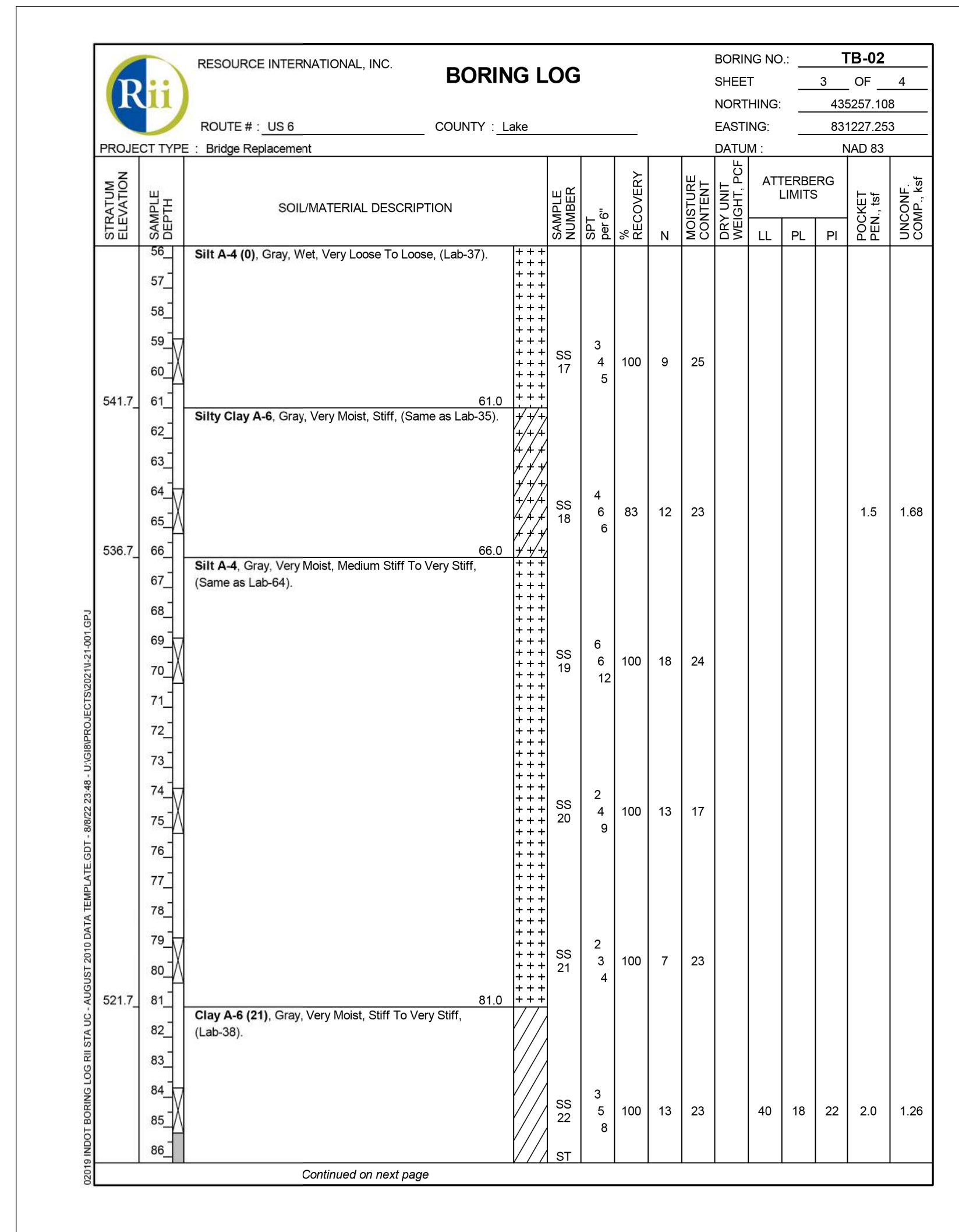
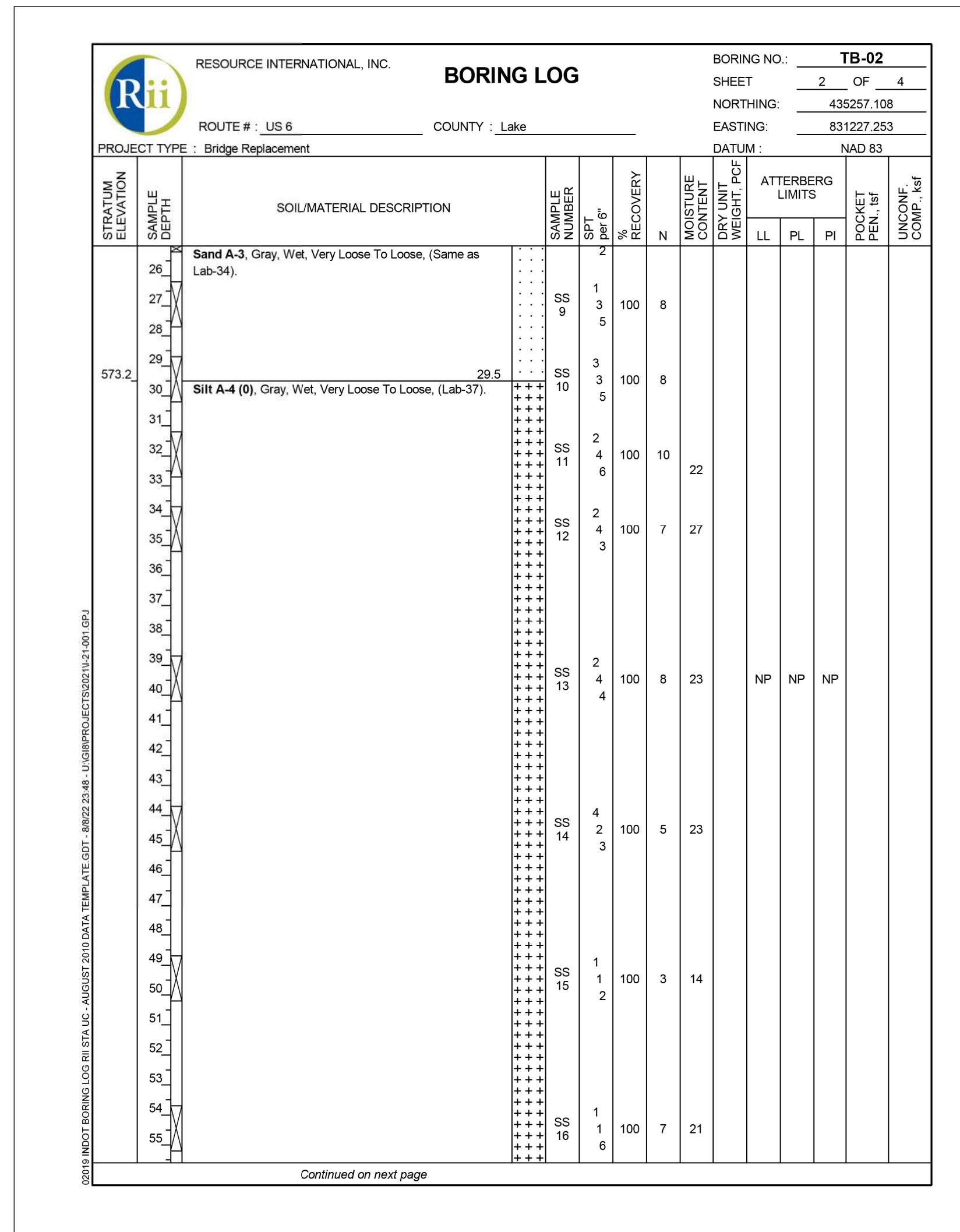
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CHP	08/26/2022	DRAWN: CHP
CHECKED: JLP	08/26/2022	CHECKED: JLP

INDIANA  
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NTS	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
NTS	1900012
SHEETS	
19 of 52	
CONTRACT	PROJECT
B-42442	1900012



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RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CHP	08/26/2022	DRAWN: CHP
CHECKED: JLP	08/26/2022	CHECKED: JLP

INDIANA DEPARTMENT OF TRANSPORTATION  
SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NTS	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
NTS	1900012
	SHEETS
	20 of 52
CONTRACT	PROJECT
B-42442	1900012

STRATUM ELEVATION		SAMPLE DEPTH		SOIL/MATERIAL DESCRIPTION		SAMPLE NUMBER		SPT		RECOVERY		N		MOISTURE		ATTERBERG		POCKET		UNCONF.	
						per ft		per ft		%		LL		PL		PI		PEN. (in)		COMP. (ksi)	
<p>RESOURCE INTERNATIONAL, INC. BORING LOG BORING NO.: TB-03 SHEET 1 OF 4</p> <p>ROUTE #: US 6 COUNTY: Lake NORTHING: 435276.564</p> <p>PROJECT TYPE: Bridge Replacement EASTING: 831264.98 DATUM: NAD 83</p> <p>LOCATION: Over Muck Pocket, Approx. 0.84 mi. South of SR 51/I-80/I-94 DATE STARTED: 03-01-22</p> <p>DES. NO.: 1900012 RII PROJECT NO.: L21-001 DATE COMPLETED: 03-01-22</p> <p>ELEVATION: 603.8 ft BORING METHOD: 3.25" HSA HAMMER: Automatic</p> <p>STATION: 72+36 RIG TYPE: CME-SS-ATV DRILLER/INSP: LH/MJ</p> <p>OFFSET: 17.9 ft Right CASING DIA.: NA TEMPERATURE: 46 °F</p> <p>LINE: US-6 CORE SIZE: NA WEATHER: Clear</p> <p>DEPTH: 105.0 ft</p> <p>GROUNDWATER: Encountered at 15.0 ft At completion Dry Caved in at NA</p>																					
<p>12.5" Concrete.</p> <p>Sandy Loam A-2.4 (0), Brown To Dark Brown, Wet, Very Loose To Medium Dense, (Lab-40). Asphalt and slag fragments in SS-1.</p> <p>Loam A-4, Dark Gray, Very Moist, Very Soft, with some Organic Matter and trace Marl, (Same as Lab-39). SS-5: LOI = 5.8%; Ca/Mg = 1.9%.</p> <p>Sandy Loam A-2.4 (0), Gray To Dark Gray, Wet, Very Loose To Loose, (Lab-41). Mud added @ 15.0'.</p> <p>Silty Clay A-6, Gray, Moist, Medium Stiff, (Same as Lab-35).</p>																					

STRATUM ELEVATION		SAMPLE DEPTH		SOIL/MATERIAL DESCRIPTION		SAMPLE NUMBER		SPT		RECOVERY		N		MOISTURE		ATTERBERG		POCKET		UNCONF.	
						per ft		per ft		%		LL		PL		PI		PEN. (in)		COMP. (ksi)	
<p>RESOURCE INTERNATIONAL, INC. BORING LOG BORING NO.: TB-03 SHEET 2 OF 4</p> <p>ROUTE #: US 6 COUNTY: Lake NORTHING: 435276.564</p> <p>PROJECT TYPE: Bridge Replacement EASTING: 831264.98 DATUM: NAD 83</p>																					
<p>Sand A-3, Gray To Brownish Gray, Wet, Loose To Medium Dense, (Same as Lab-34).</p> <p>Silty Loam A-4 (0), Grayish Brown To Gray, Wet, Very Loose To Loose, (Lab-52).</p>																					

STRATUM ELEVATION		SAMPLE DEPTH		SOIL/MATERIAL DESCRIPTION		SAMPLE NUMBER		SPT		RECOVERY		N		MOISTURE		ATTERBERG		POCKET		UNCONF.	
						per ft		per ft		%		LL		PL		PI		PEN. (in)		COMP. (ksi)	
<p>RESOURCE INTERNATIONAL, INC. BORING LOG BORING NO.: TB-03 SHEET 3 OF 4</p> <p>ROUTE #: US 6 COUNTY: Lake NORTHING: 435276.564</p> <p>PROJECT TYPE: Bridge Replacement EASTING: 831264.98 DATUM: NAD 83</p>																					
<p>Silty Loam A-4 (0), Grayish Brown To Gray, Wet, Very Loose To Loose, (Lab-52).</p> <p>Silt A-4, Gray, Wet, Medium Stiff, (Same as Lab-64).</p> <p>Clay A-6, Gray, Very Moist to Moist, Medium Stiff To Stiff, (Same as Lab-38).</p> <p>Silty Clay Loam A-4 (4), Gray, Very Moist, Soft, (Lab-42).</p> <p>Silty Clay A-6 (16), Gray, Moist, Medium Stiff To Very Stiff, (Lab-53).</p>																					

Plot: 8/26/2022 7:05:03 PM

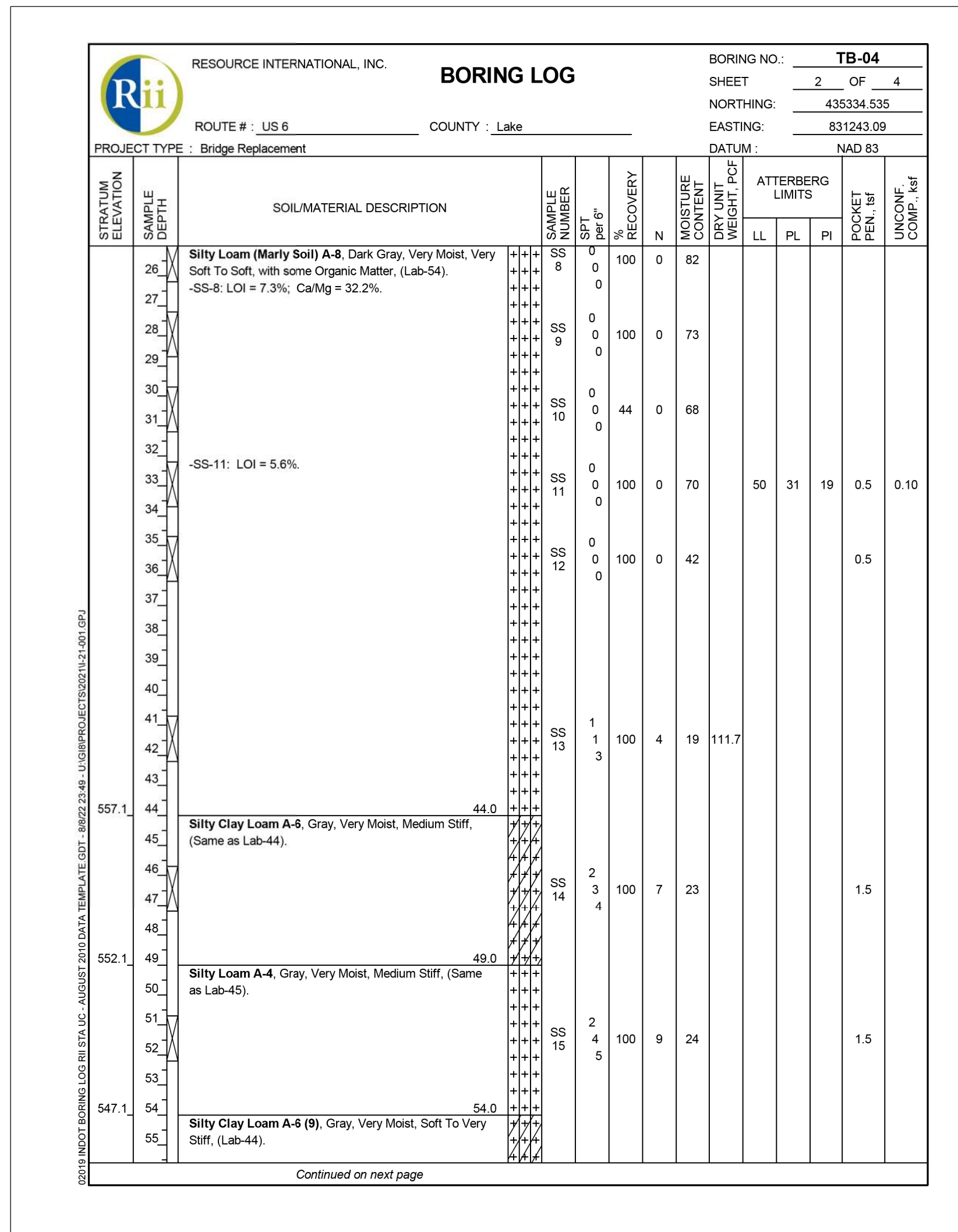
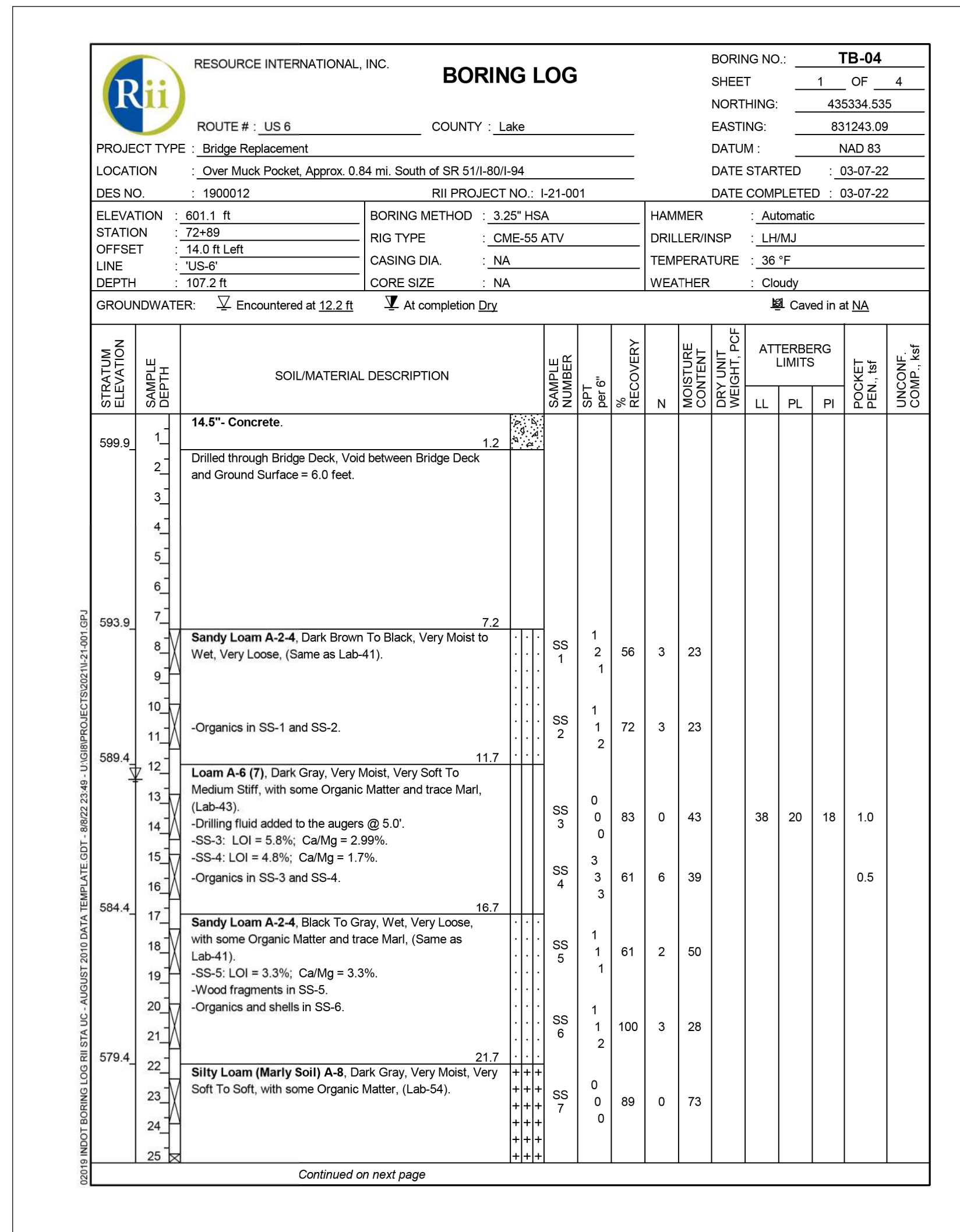
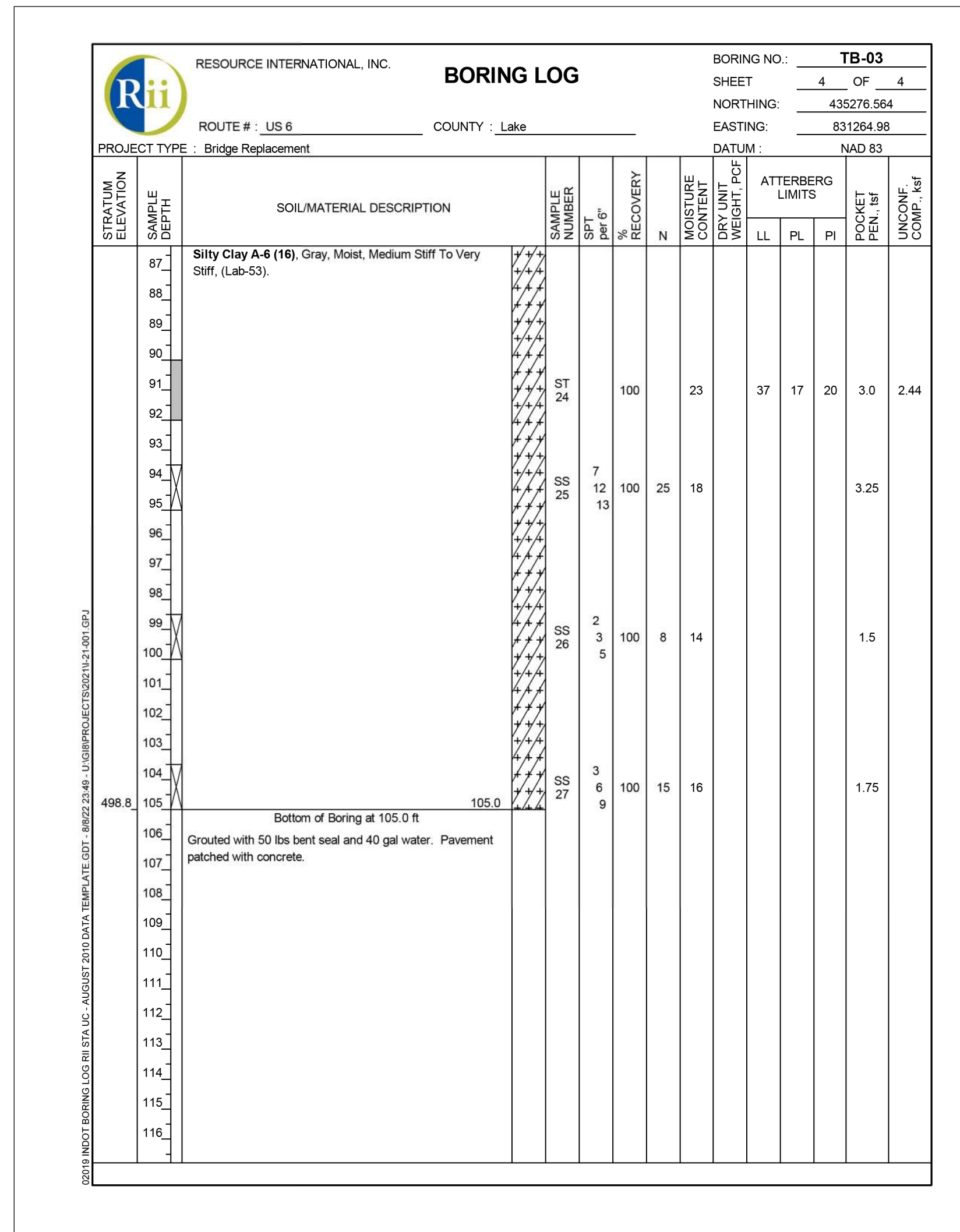
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RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CHP	08/26/2022	DRAWN: CHP
CHECKED: JLP	08/26/2022	CHECKED: JLP

INDIANA DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NTS	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
NTS	1900012
	SHEETS
	21 of 52
CONTRACT	PROJECT
B-42442	1900012



Plot: 8/26/2022 7:05:06 PM

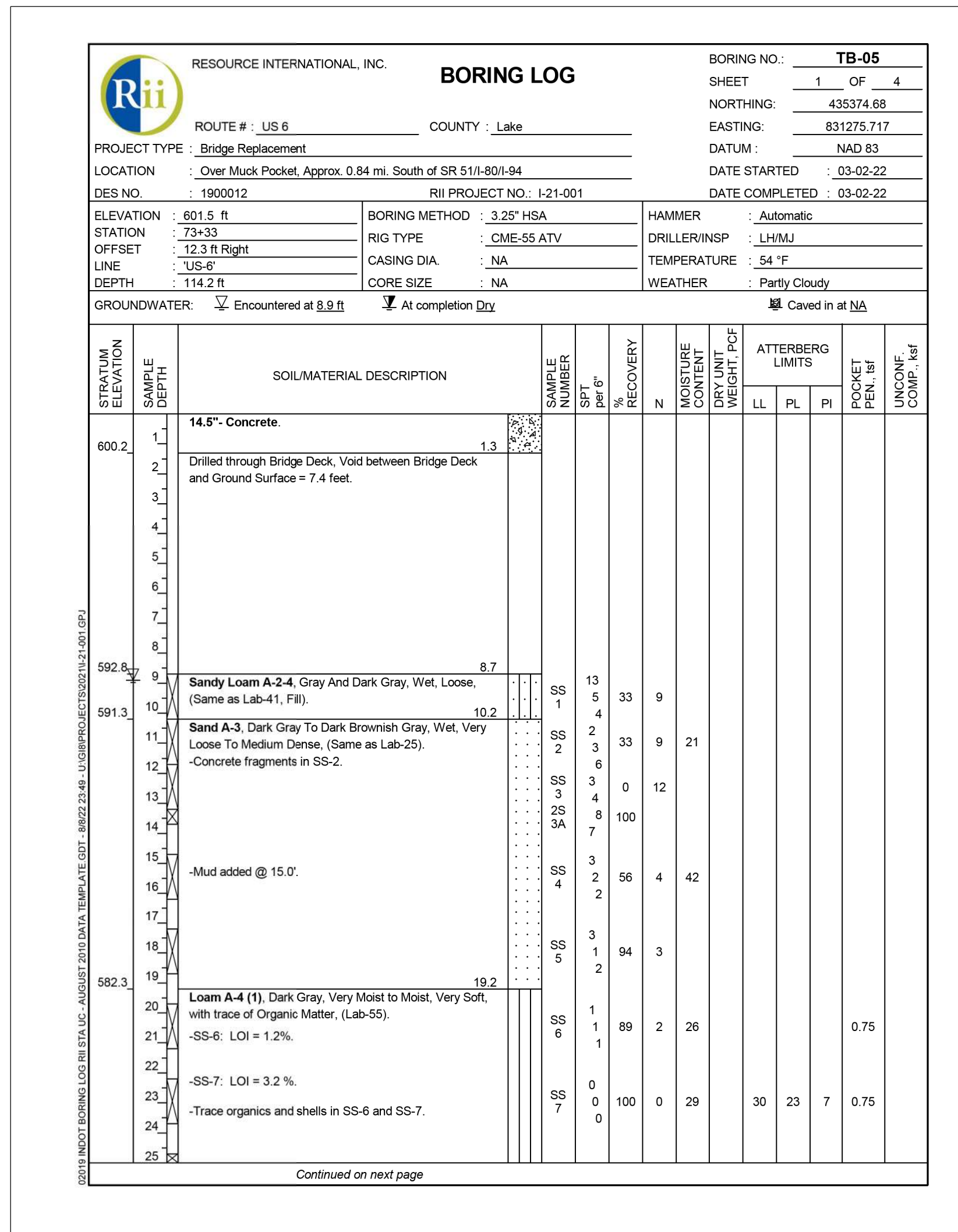
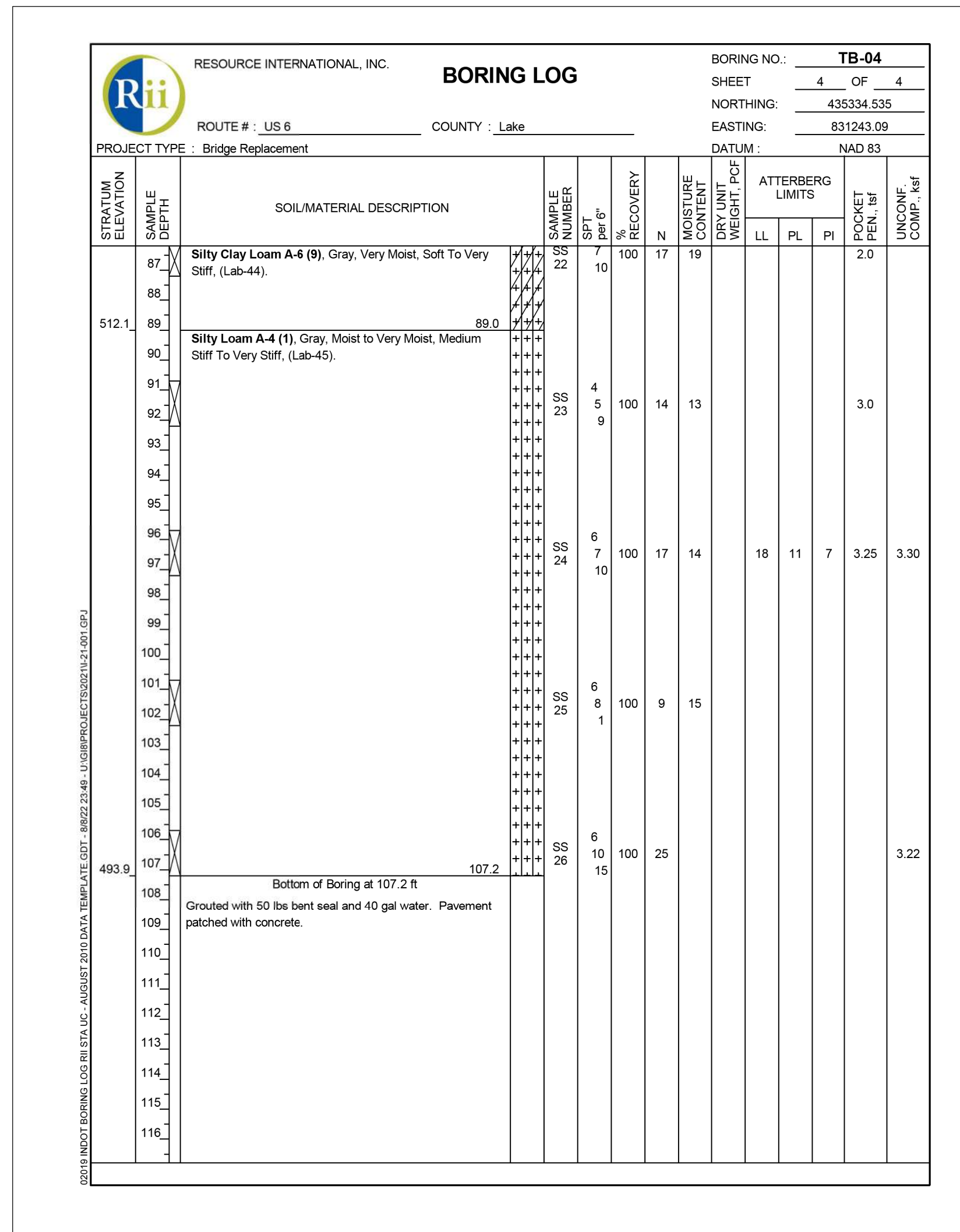
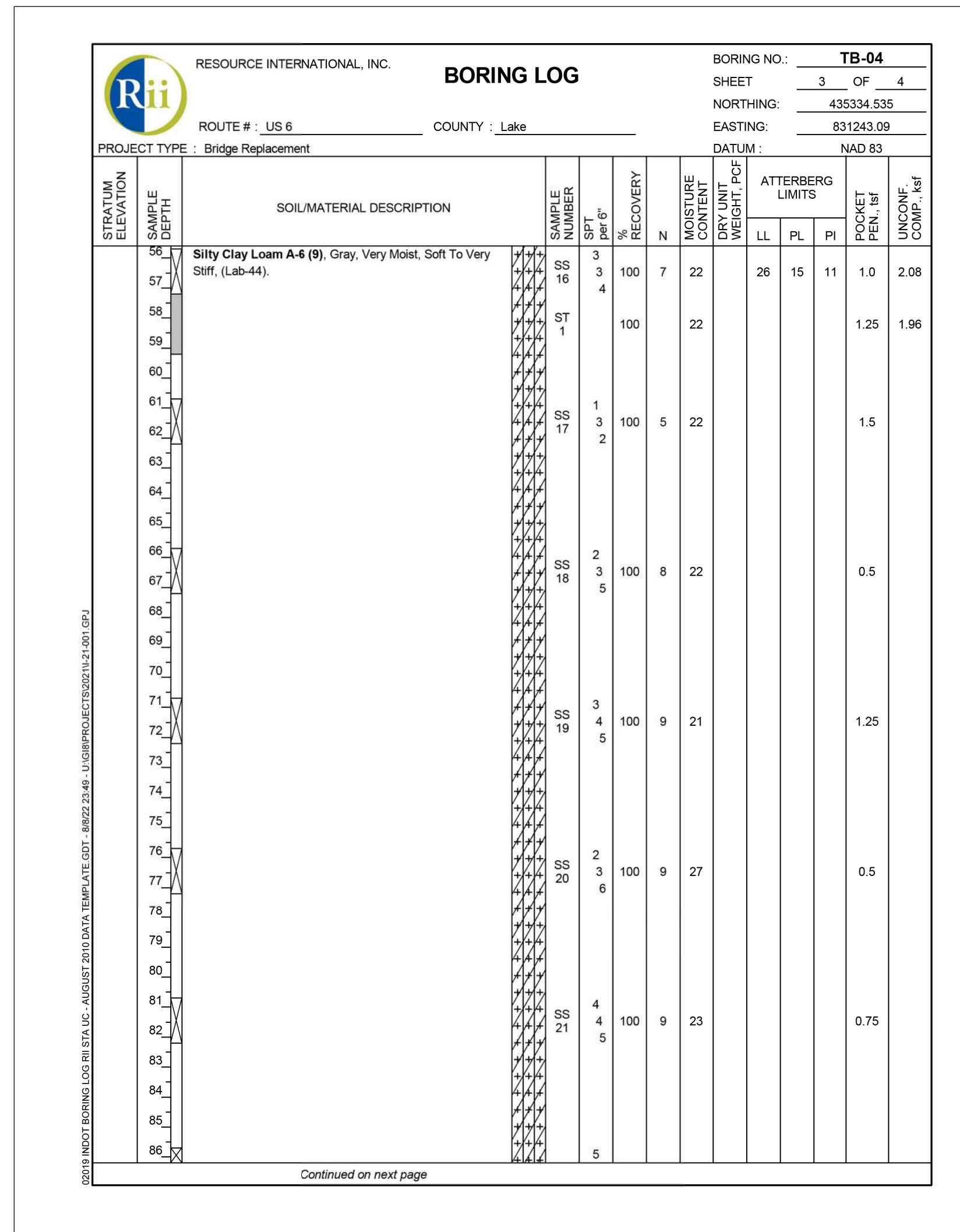
**NOT FOR CONSTRUCTION**

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: CHP	08/26/2022	DRAWN: CHP
CHECKED: JLP	08/26/2022	CHECKED: JLP

INDIANA  
DEPARTMENT OF TRANSPORTATION

**SOIL BORINGS**

HORIZONTAL SCALE	BRIDGE FILE
NTS	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
NTS	1900012
	SHEETS
	22 of 52
CONTRACT	PROJECT
B-42442	1900012



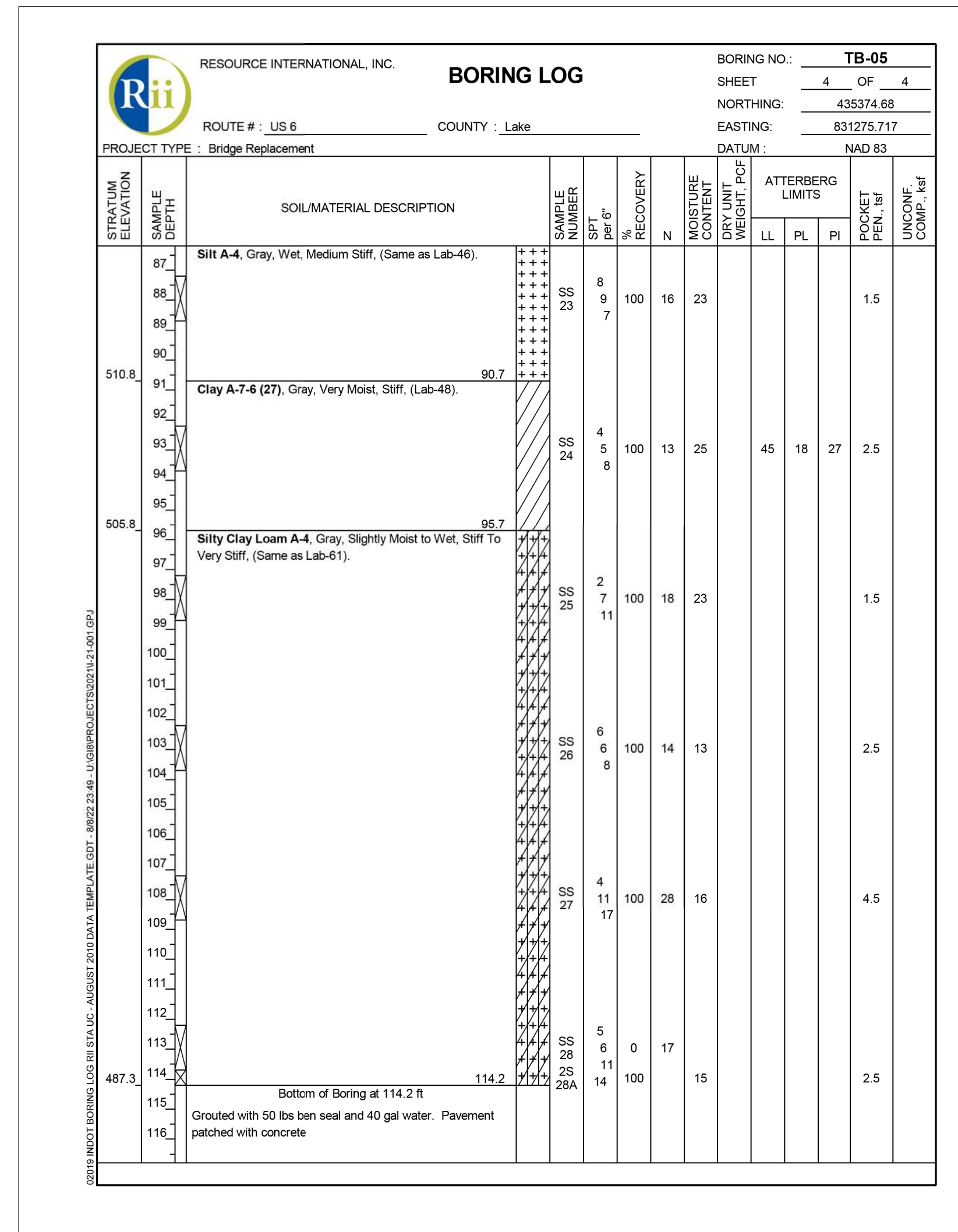
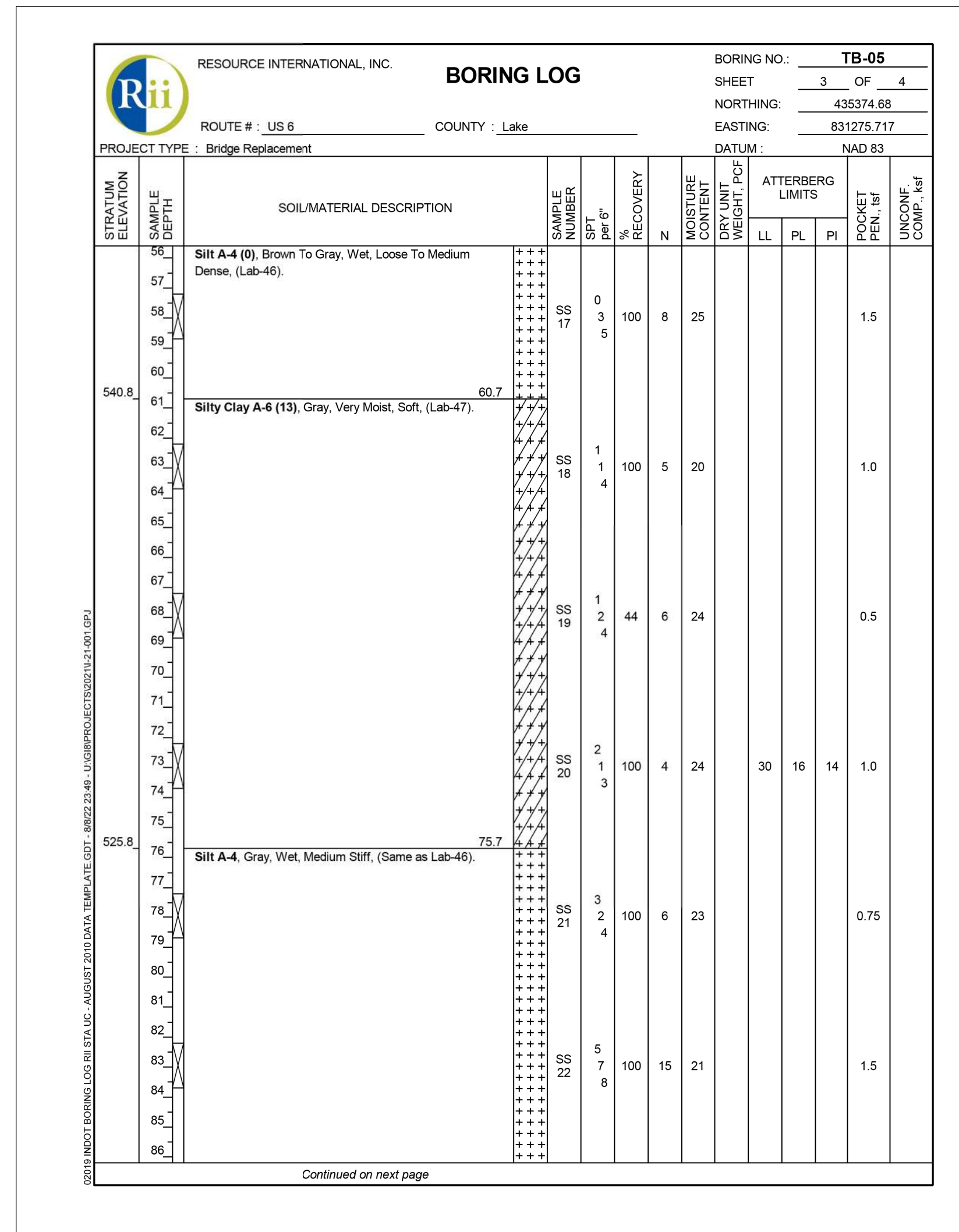
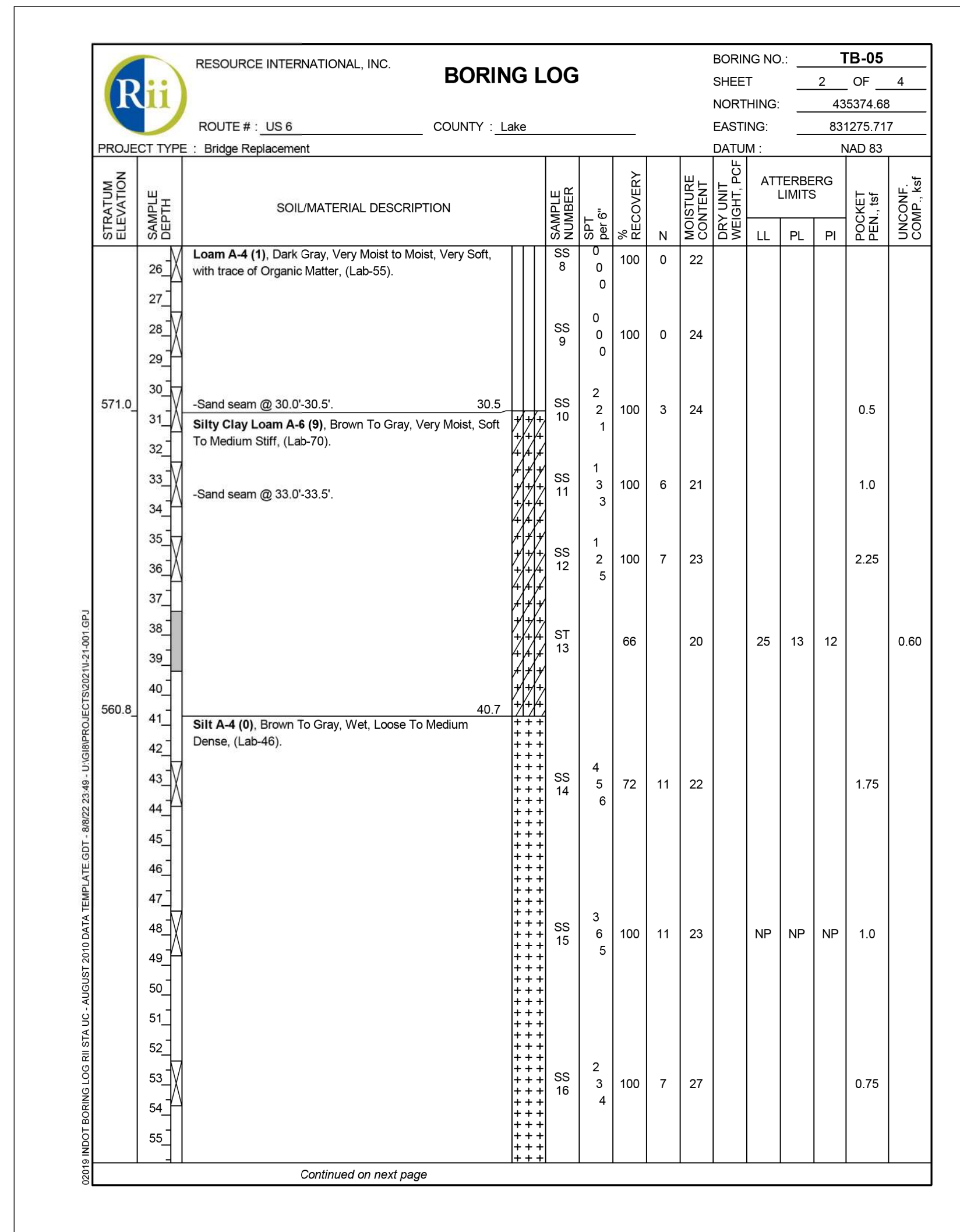
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NOT FOR CONSTRUCTION

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INDIANA DEPARTMENT OF TRANSPORTATION  
SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NTS	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
NTS	1900012
	SHEETS
	23 of 52
CONTRACT	PROJECT
B-42442	1900012



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NOT FOR CONSTRUCTION

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INDIANA DEPARTMENT OF TRANSPORTATION  
SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NTS	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
NTS	1900012
	SHEETS
	24 of 52
CONTRACT	PROJECT
B-42442	1900012



STRAIUM ELEVATION		SAMPLE DEPTH		SOIL/MATERIAL DESCRIPTION		SAMPLE NUMBER	SPT per ft	RECOVERY	N	MOISTURE DRY UNIT WEIGHT, Pcf	ATTEBERG LIMITS	POCKET PEN, lbf	UNCONF. COMP. %sf
STATION	OFFSET	LINE	DEPTH							LL	PL	PI	
598.3	1.3		1	14.5" Concrete.									
			2	Drilled through Bridge Deck, Void between Bridge Deck and Ground Surface = 6.0 feet.									
592.4	7.2		7	Sand A-2-4 (0), Dark Gray And Black, Wet, Very Loose, with trace of Organic Matter, (Lab-56).	SS 1	4	39	13	35				
			9	Trace organics in SS-2.	SS 2	2	56	2	26				
			11		SS 3	1	83	7	26				
			13		SS 4	2	89	2					
			15		SS 5	1	94	1	48	NP	NP	NP	
			17	Trace organics and shells in SS-5.									
			19	Drilling fluid added to the augers @ 17.2.									
580.4	19.2		19	Loam A-8 Dark Gray, Wet, Very Loose, with some Organic Matter, some Marl to Marly Soil, (Lab-57).	SS 6	1	61	1	59				
			21	SS-6: LOI = 5.4%; Ca/Mg = 15.8%.									
			23	Organics and shells present throughout.	SS 7	0	0	0	69				
			24	SS-7A: LOI = 5.5%; Ca/Mg = 22.8%.	SS 7A	0	100	0	78				

STRAIUM ELEVATION		SAMPLE DEPTH		SOIL/MATERIAL DESCRIPTION		SAMPLE NUMBER	SPT per ft	RECOVERY	N	MOISTURE DRY UNIT WEIGHT, Pcf	ATTEBERG LIMITS	POCKET PEN, lbf	UNCONF. COMP. %sf
STATION	OFFSET	LINE	DEPTH							LL	PL	PI	
570.1	29.5		29	Silt A-4, Gray, Wet, Very Loose, (Same as Lab-59).	SS 9	0	100	0	51	NP	NP	NP	
			31		SS 10	0	100	0	22				
			33		SS 11	0	100	0	18				
			35		SS 12	0	100	0	20				1.5
			37										
561.6	38.0		38	Silty Clay Loam A-4 (5), Dark Gray To Brownish Gray, Moist, Very Soft, (Lab-61).	SS 13	1	83	6	18				1.5
			41		SS 14	3	100	9	23	26	15	11	1.5
			43										
			45										
			47										
			49										
			51										
548.2	51.4		51	Silt A-4 (0), Gray, Wet, Loose To Medium Dense, (Lab-59).	SS 15	2	100	8	21				

STRAIUM ELEVATION		SAMPLE DEPTH		SOIL/MATERIAL DESCRIPTION		SAMPLE NUMBER	SPT per ft	RECOVERY	N	MOISTURE DRY UNIT WEIGHT, Pcf	ATTEBERG LIMITS	POCKET PEN, lbf	UNCONF. COMP. %sf
STATION	OFFSET	LINE	DEPTH							LL	PL	PI	
520.6	79.0		79	Clay A-7-6 (27), Gray, Moist, Medium Stiff To Stiff, (Lab-60).	SS 16	4	100	13	23				
			81		SS 17	1	94	7	22	NP	NP	NP	
			83		SS 18	2	100	8	20				
			85		SS 19	2	100	8	23				
			87		SS 20	2	83	6	21				
			89		SS 21	2	100	8	31				2.0

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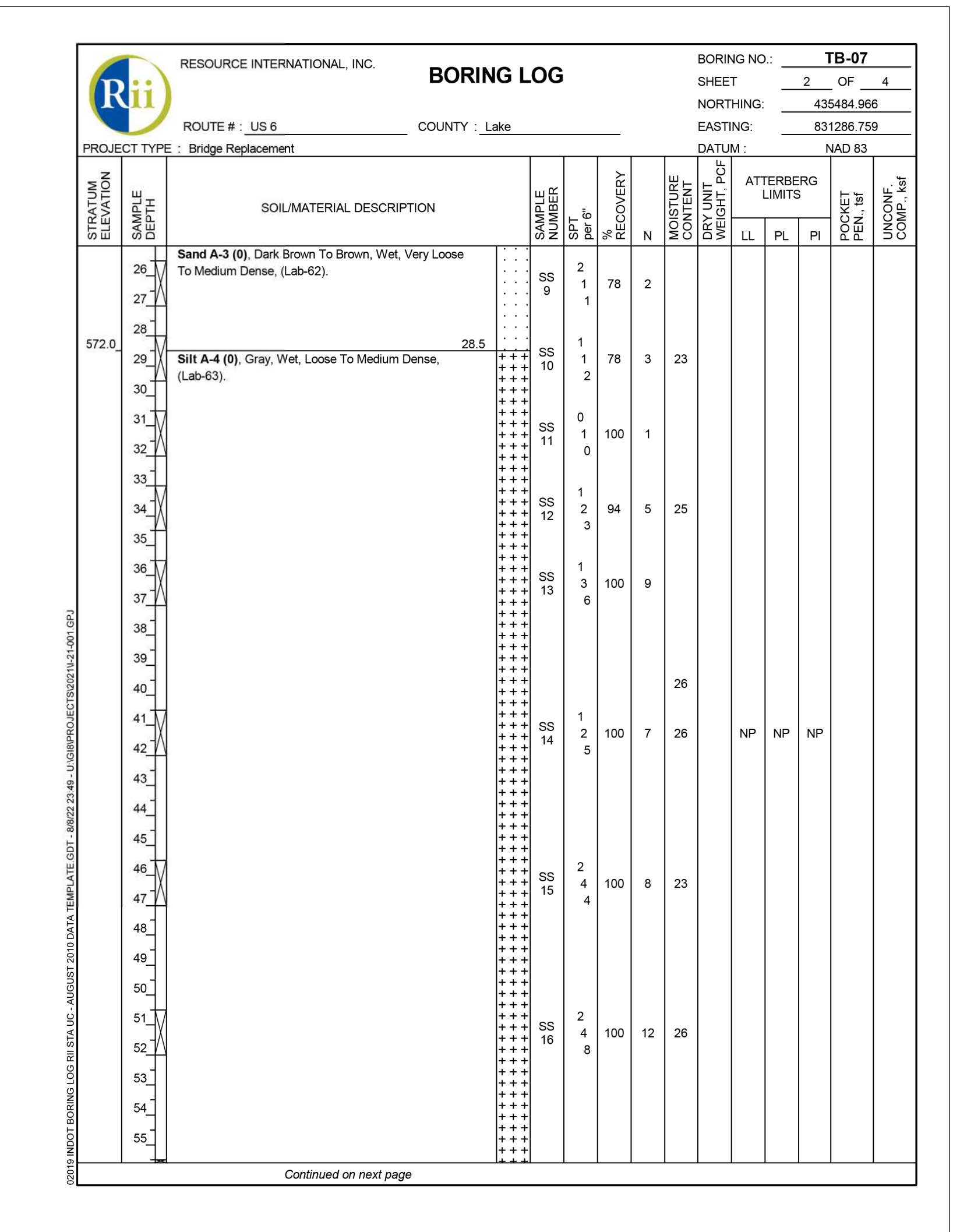
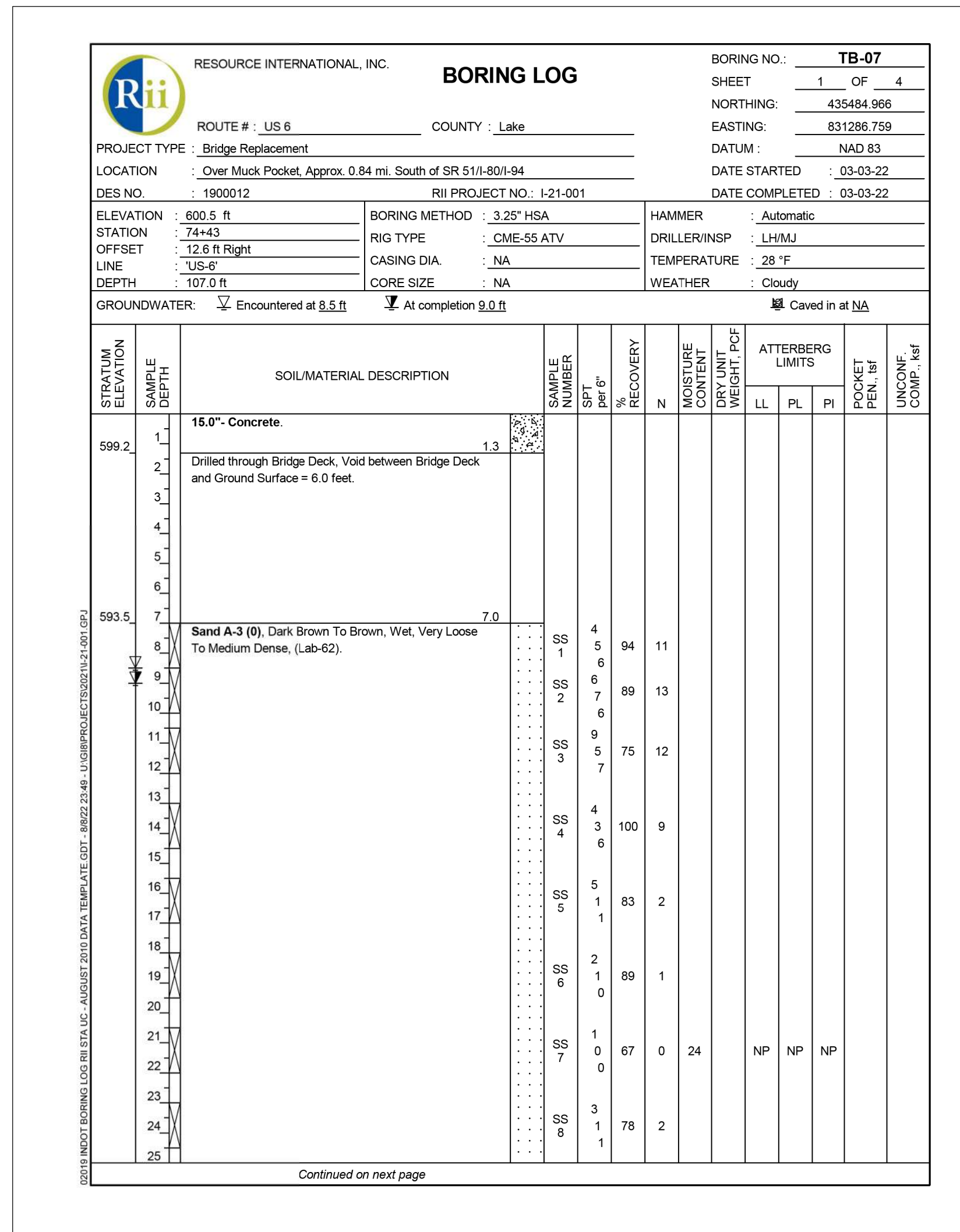
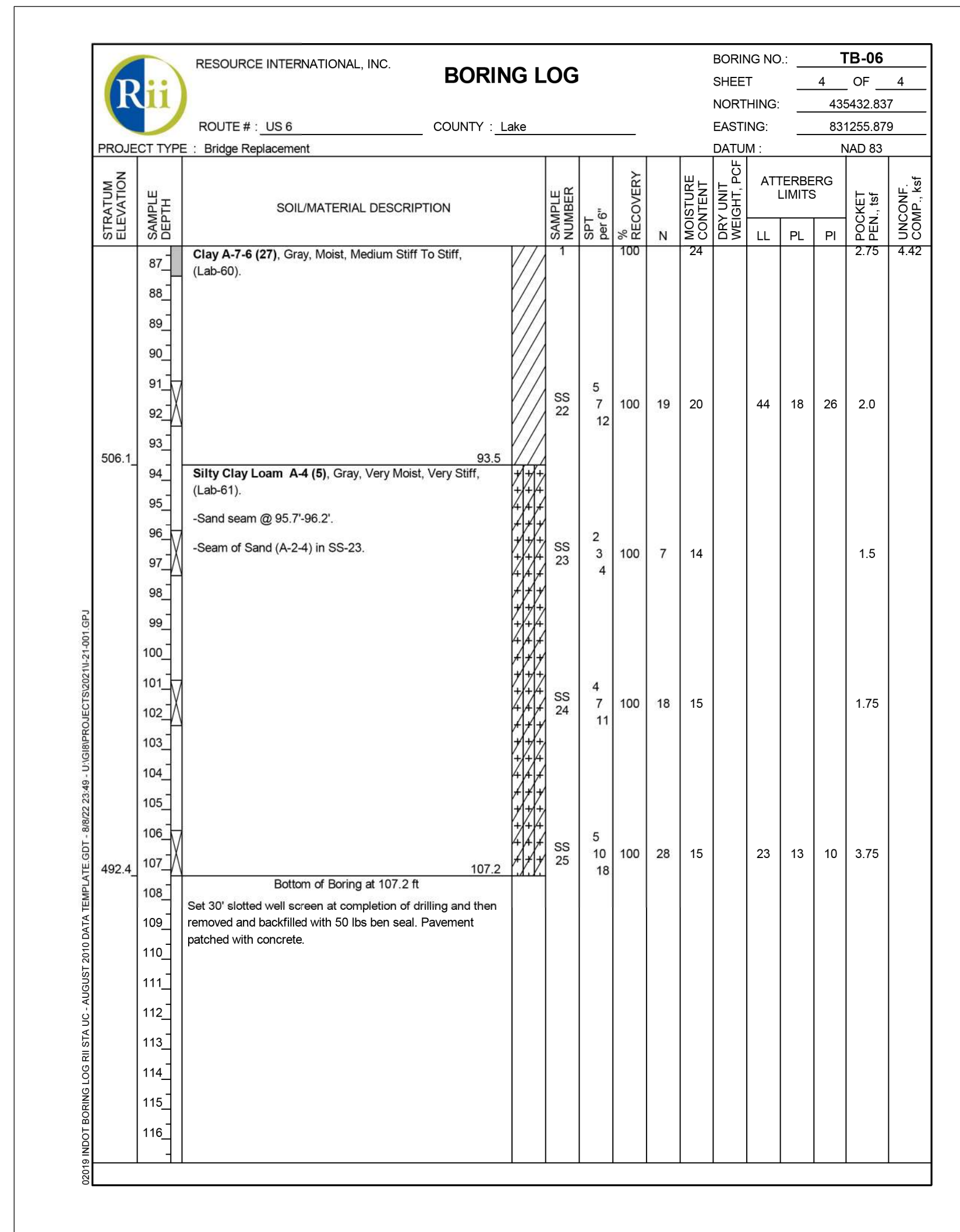
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INDIANA  
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NTS	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
	25 of 52
CONTRACT	PROJECT
B-42442	1900012



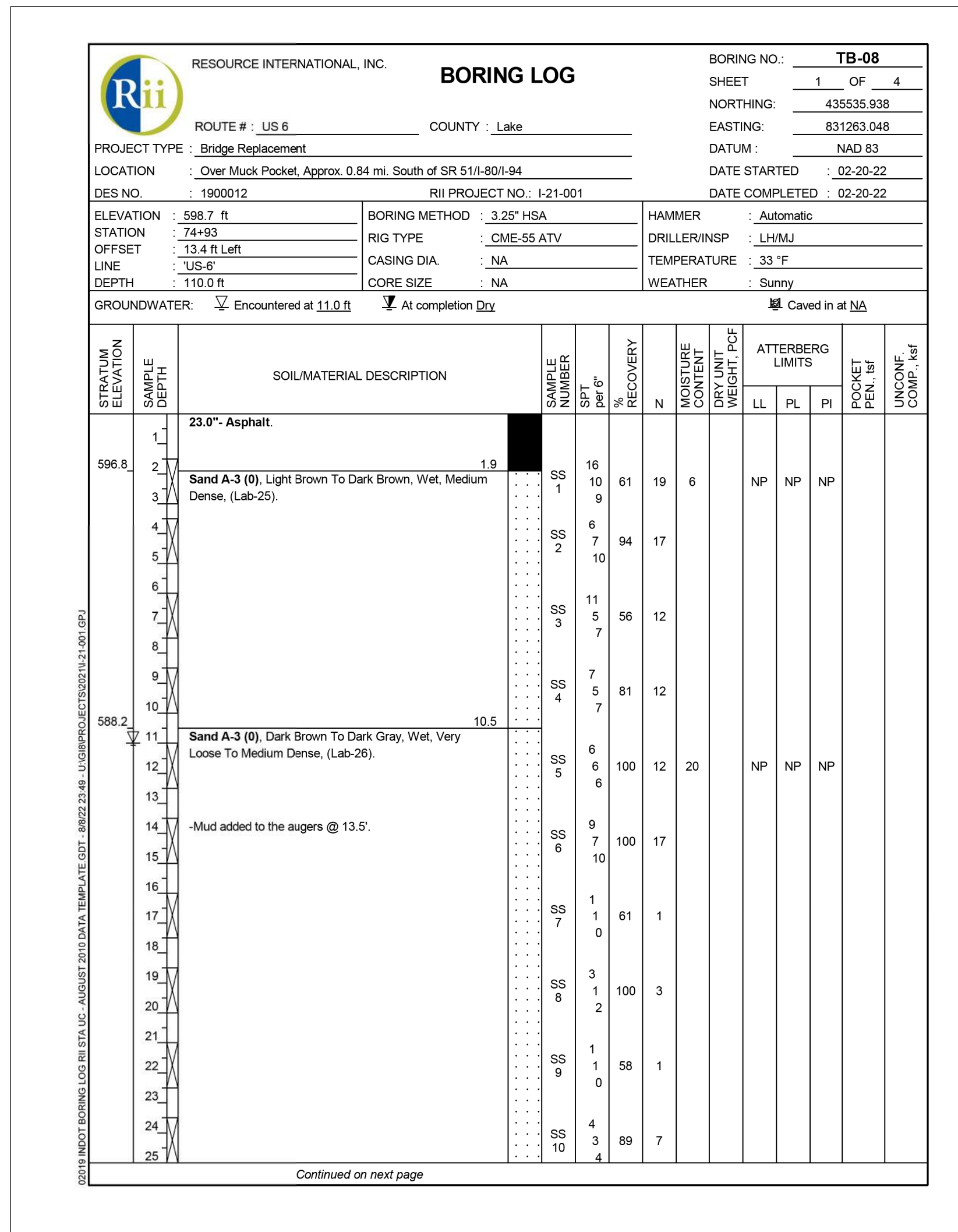
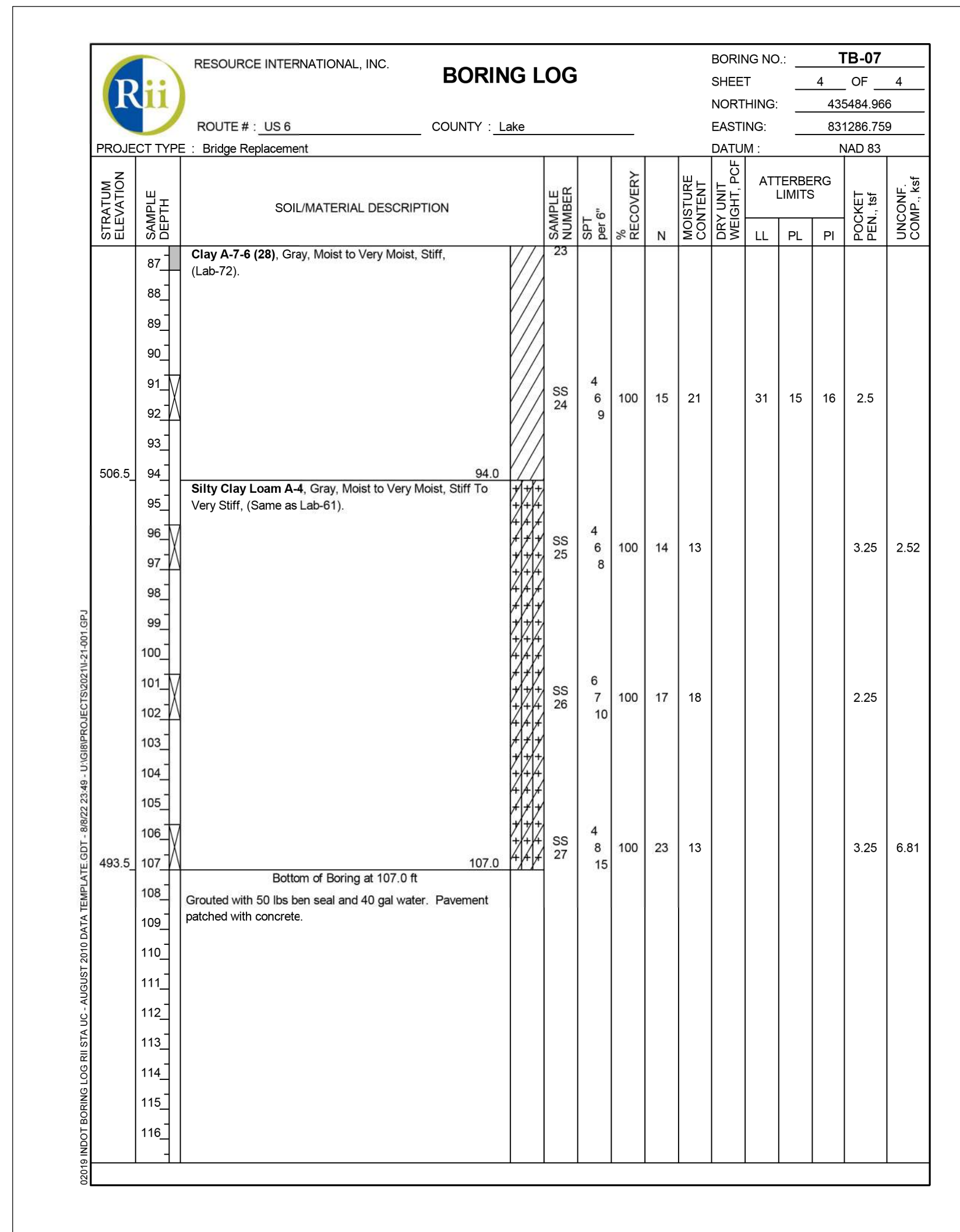
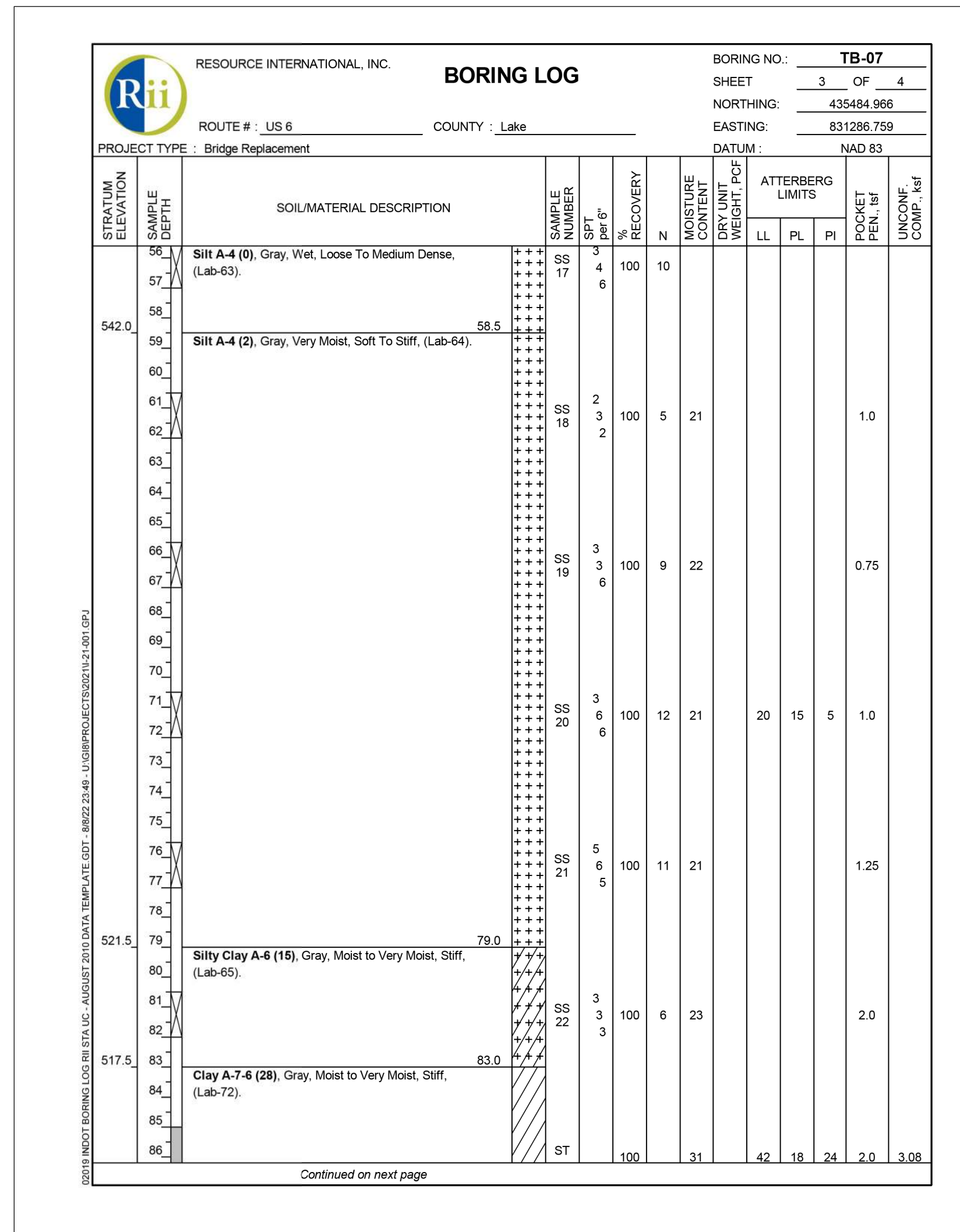
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SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NTS	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
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CONTRACT	PROJECT
B-42442	1900012



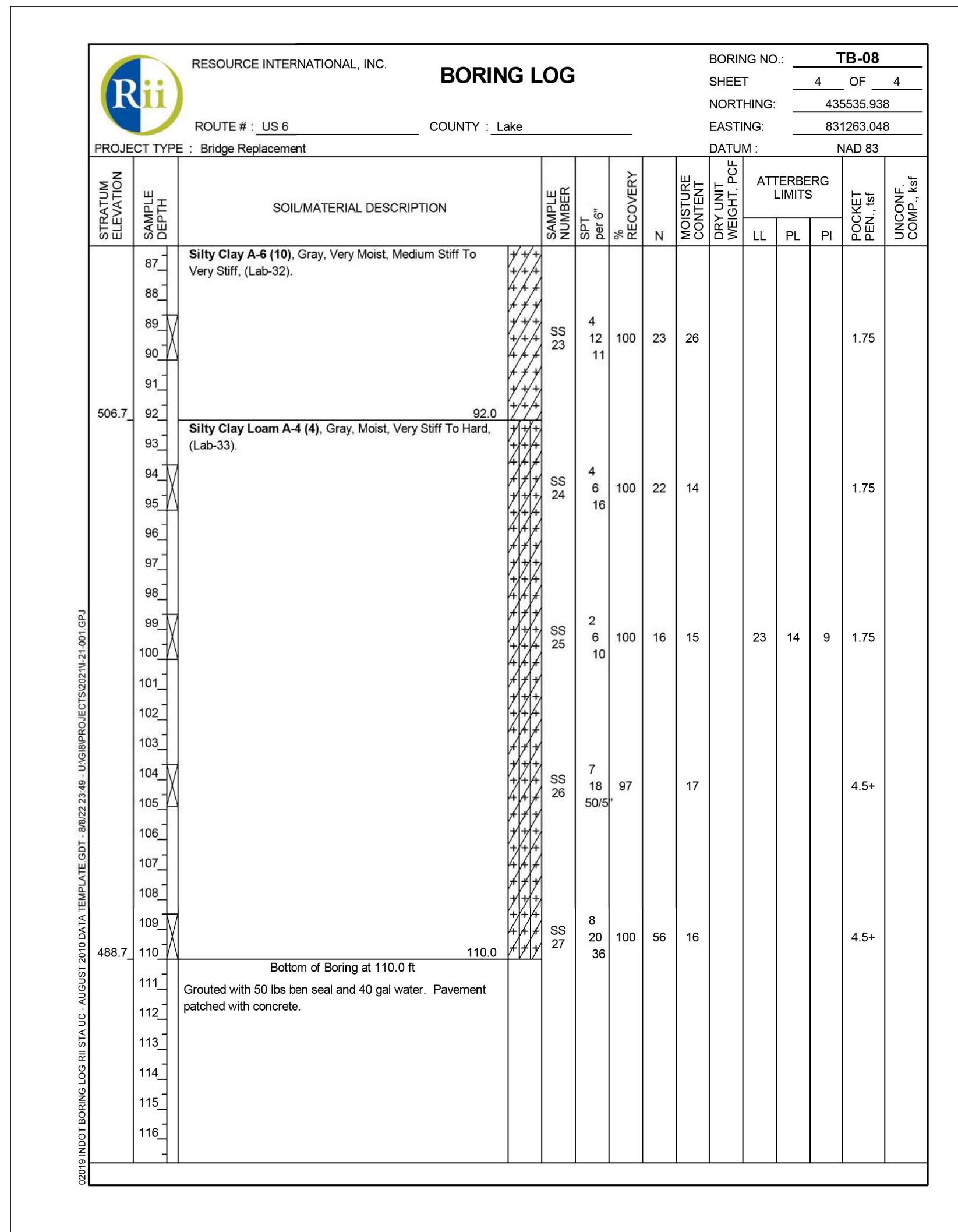
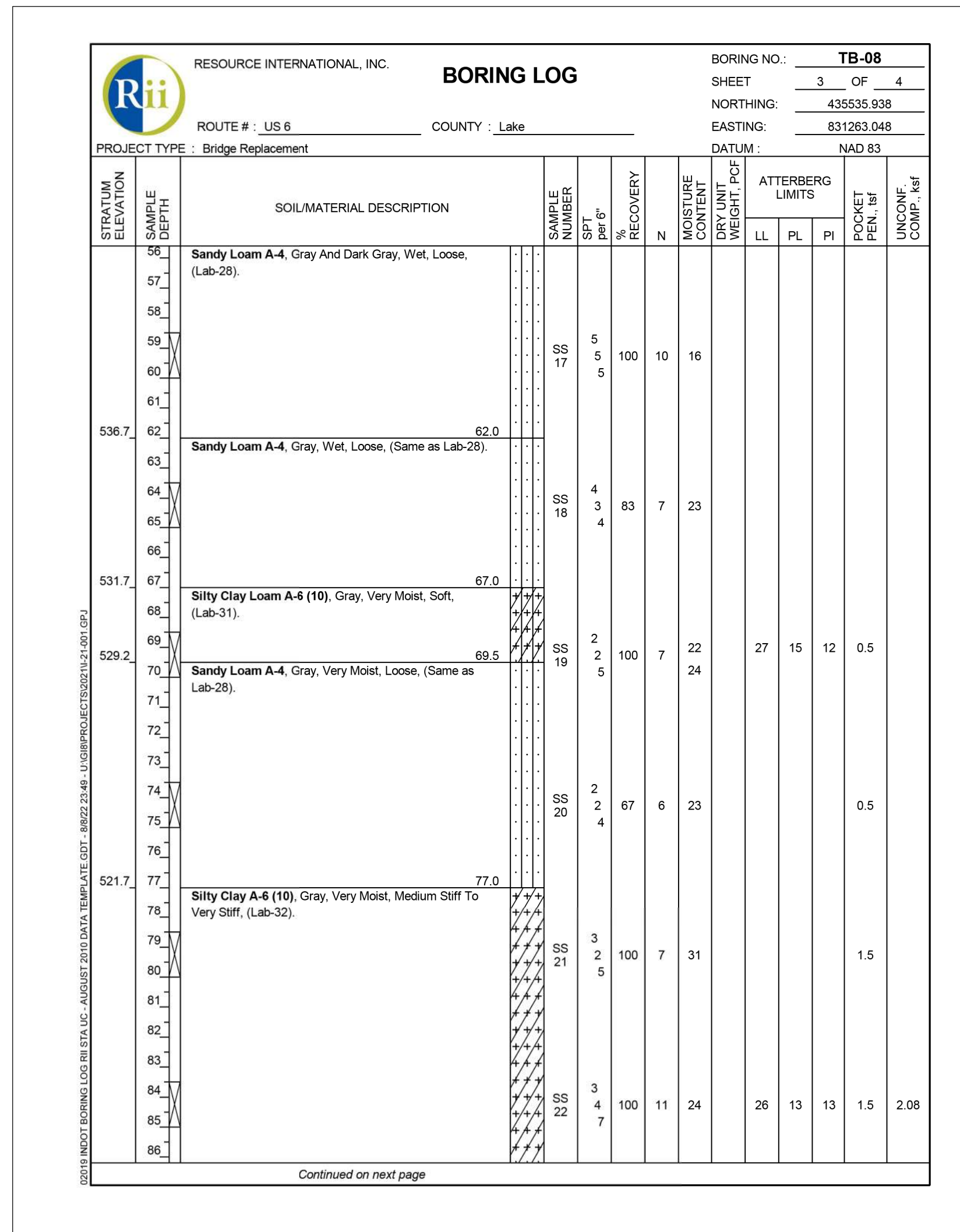
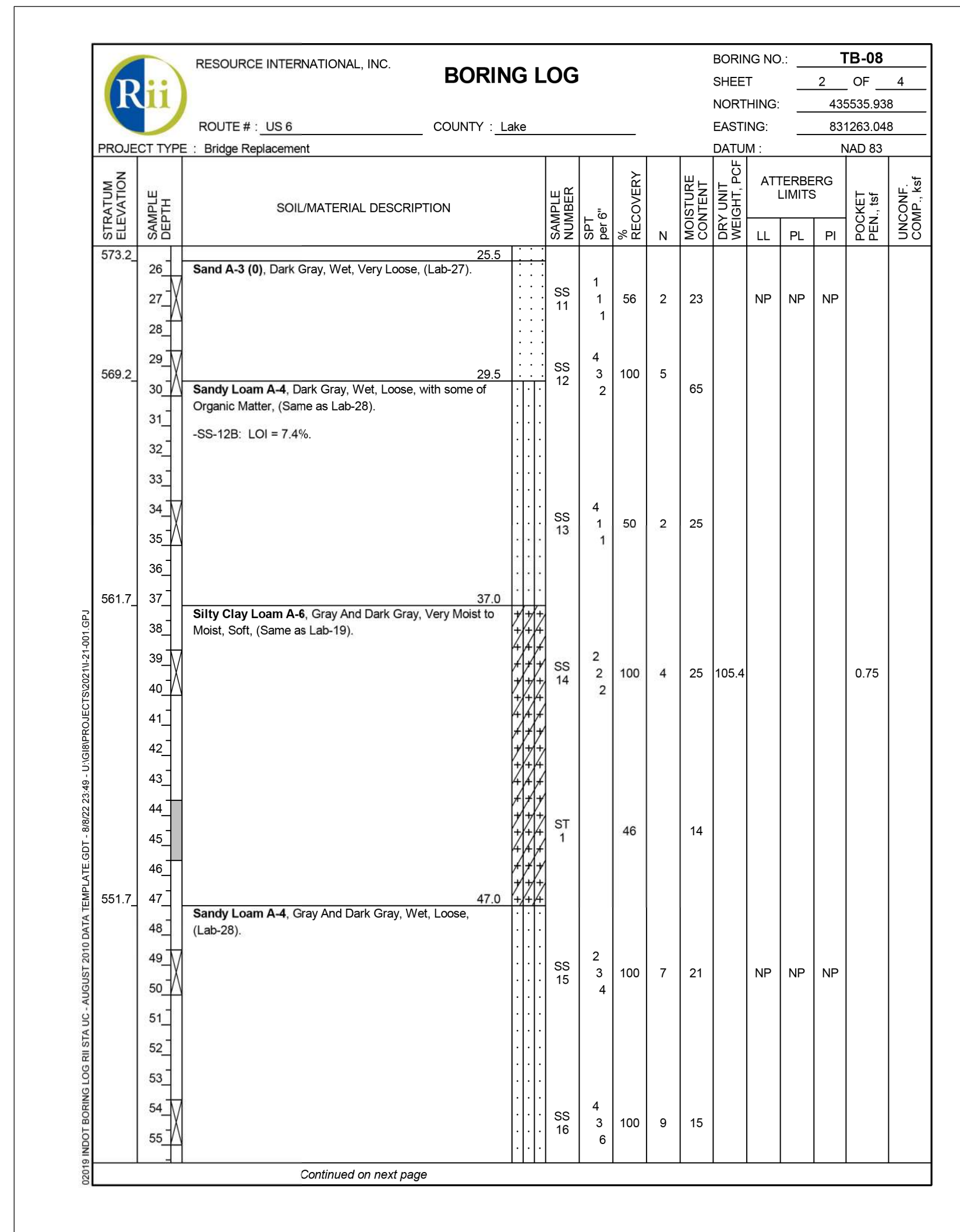
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**SOIL BORINGS**

HORIZONTAL SCALE	BRIDGE FILE
NTS	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
	27 of 52
CONTRACT	PROJECT
B-42442	1900012



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SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NTS	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
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CONTRACT	PROJECT
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STRAIUM ELEVATION		SAMPLE DEPTH		SOIL/MATERIAL DESCRIPTION		SAMPLE NUMBER		SPT		RECOVERY		MOISTURE		ATTEMBERG		POCKET		UNCONF.	
						per ft		%		N		LL		PL		PI		Comp. %sf	
15.5" Asphalt																			
Sand A-3 (0), Dark Brown To Brown, Wet, Medium Dense To Dense, (Lab-15)																			
Sand A-3 (0), Brown, Wet, Very Loose To Medium Dense, (Lab-16)																			
Sand A-3 (0), Brownish Gray To Gray, Wet, Very Loose, (Lab-17)																			

STRAIUM ELEVATION		SAMPLE DEPTH		SOIL/MATERIAL DESCRIPTION		SAMPLE NUMBER		SPT		RECOVERY		MOISTURE		ATTEMBERG		POCKET		UNCONF.	
						per ft		%		N		LL		PL		PI		Comp. %sf	
Sand A-3 (0), Brownish Gray To Gray, Wet, Very Loose, (Lab-17)																			
Silty Loam A-4, Gray, Very Moist, Soft, (Same as Lab-18)																			
Sand A-2-4, Gray And Dark Gray, Wet, Loose, (Same as Lab-21)																			
Silty Loam A-4 (1), Gray, Very Moist, Very Soft To Medium Stiff, (Lab-18)																			
Silty Clay Loam A-6 (11), Gray, Moist to Very Moist, Medium Stiff To Very Stiff, (Lab-19)																			

STRAIUM ELEVATION		SAMPLE DEPTH		SOIL/MATERIAL DESCRIPTION		SAMPLE NUMBER		SPT		RECOVERY		MOISTURE		ATTEMBERG		POCKET		UNCONF.	
						per ft		%		N		LL		PL		PI		Comp. %sf	
Silty Clay Loam A-6 (11), Gray, Moist to Very Moist, Medium Stiff To Very Stiff, (Lab-19)																			

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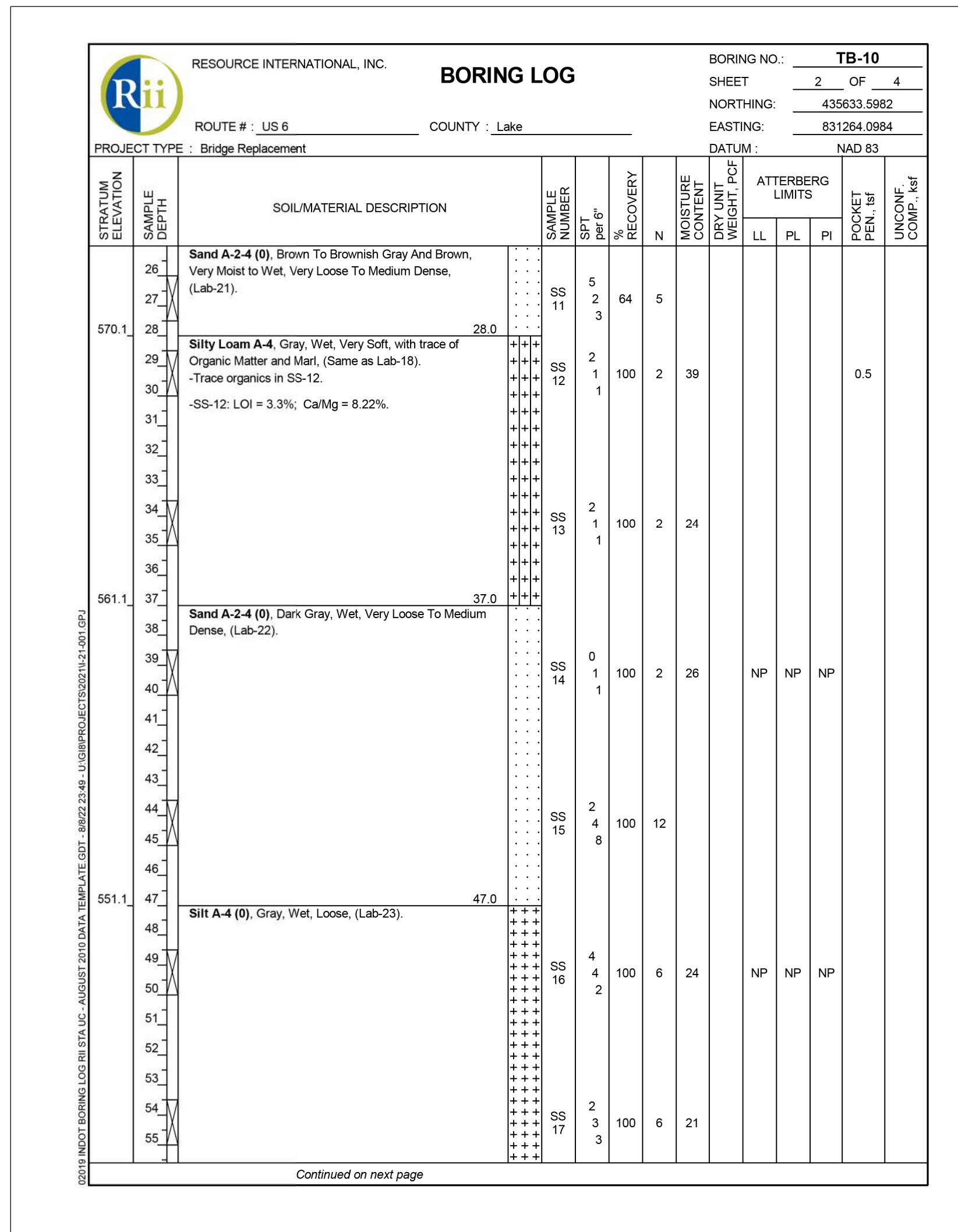
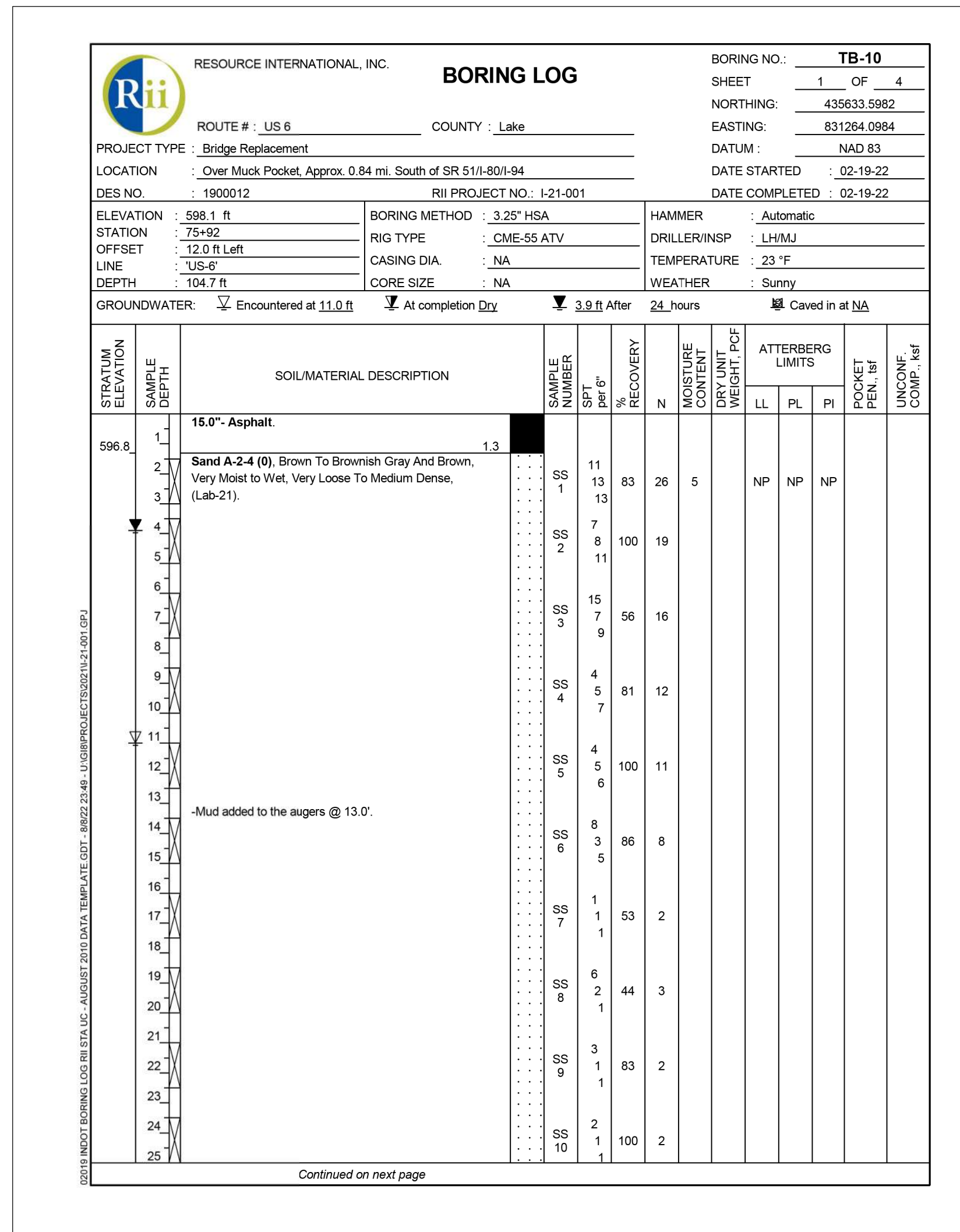
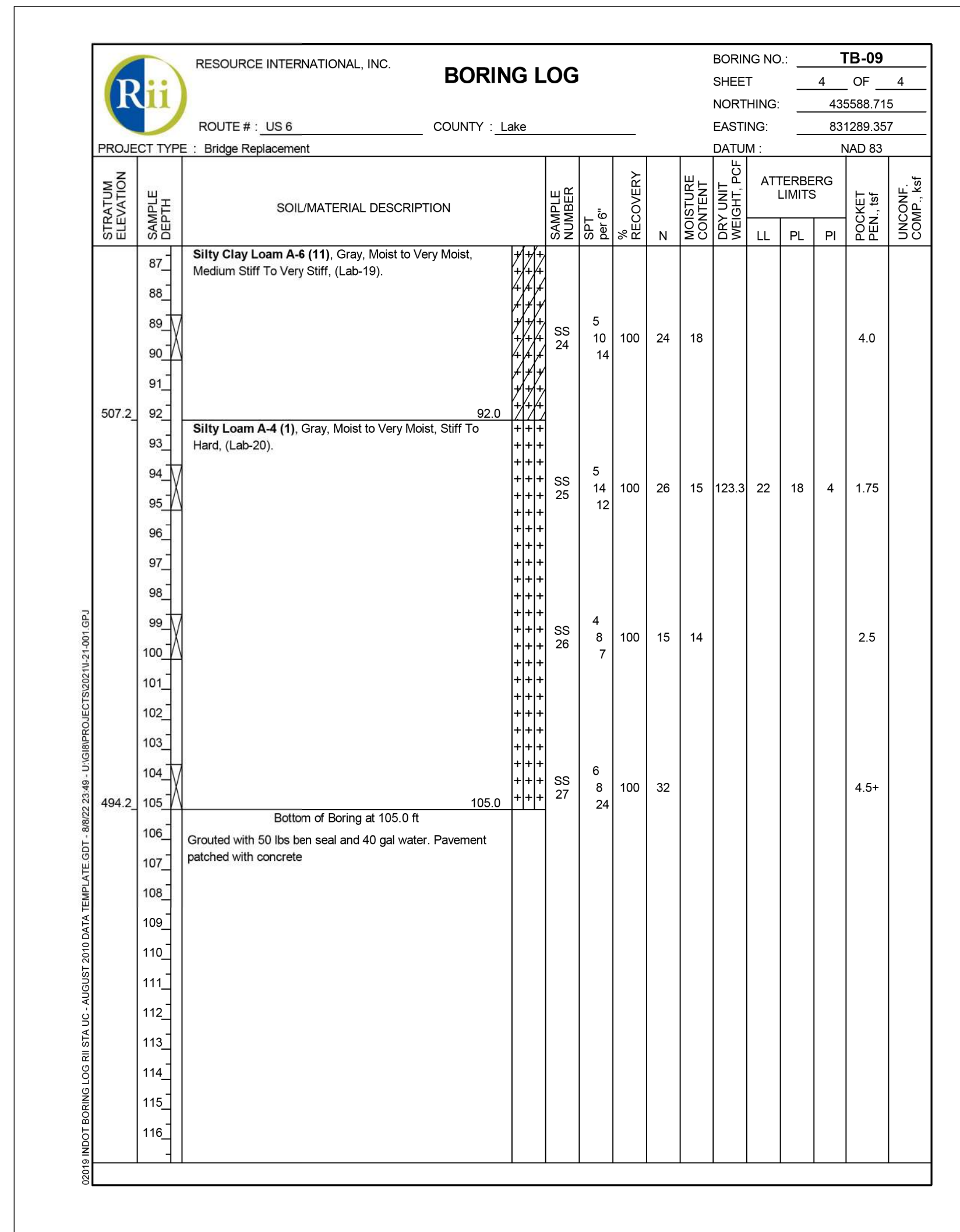
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SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NTS	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
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CONTRACT	PROJECT
B-42442	1900012



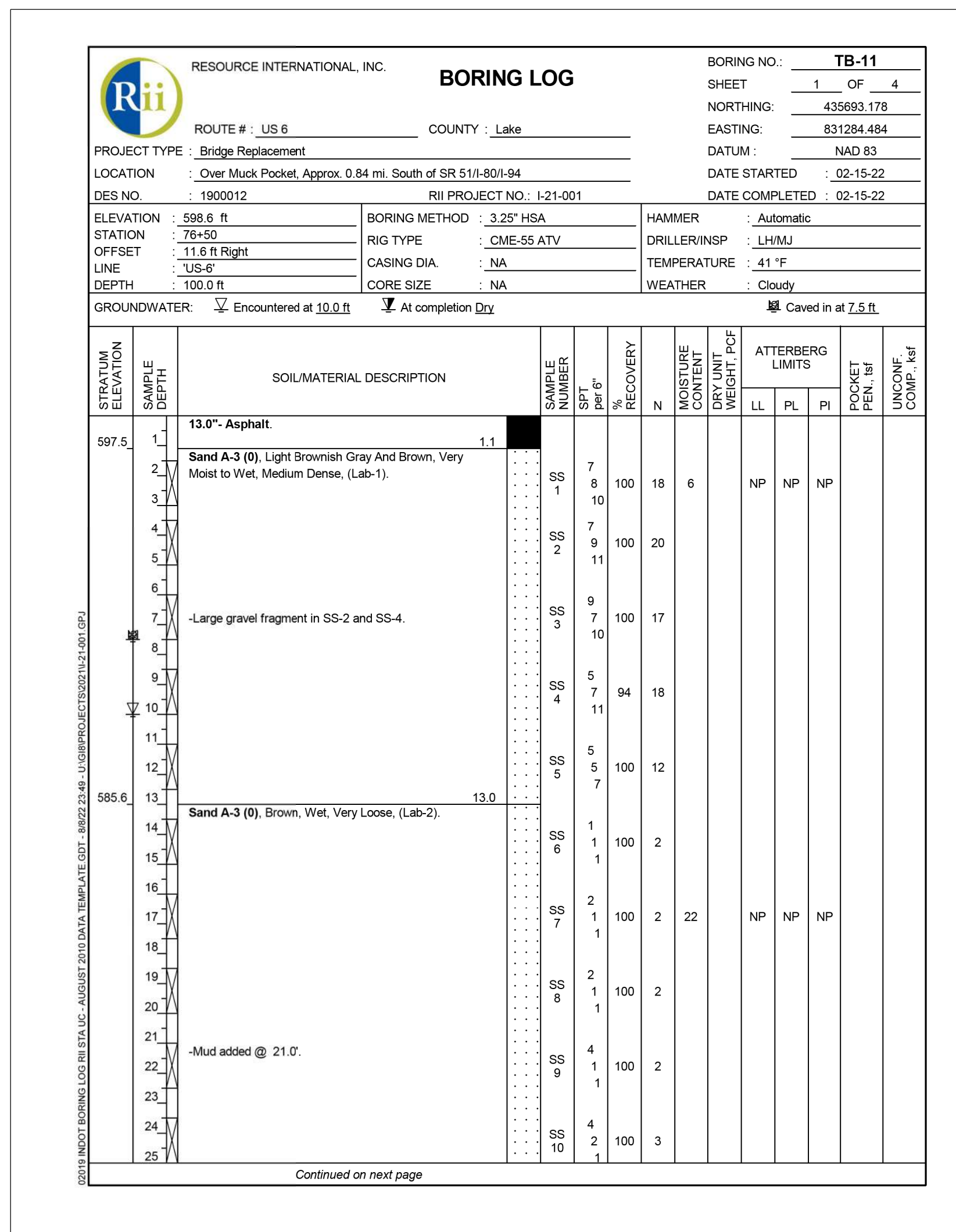
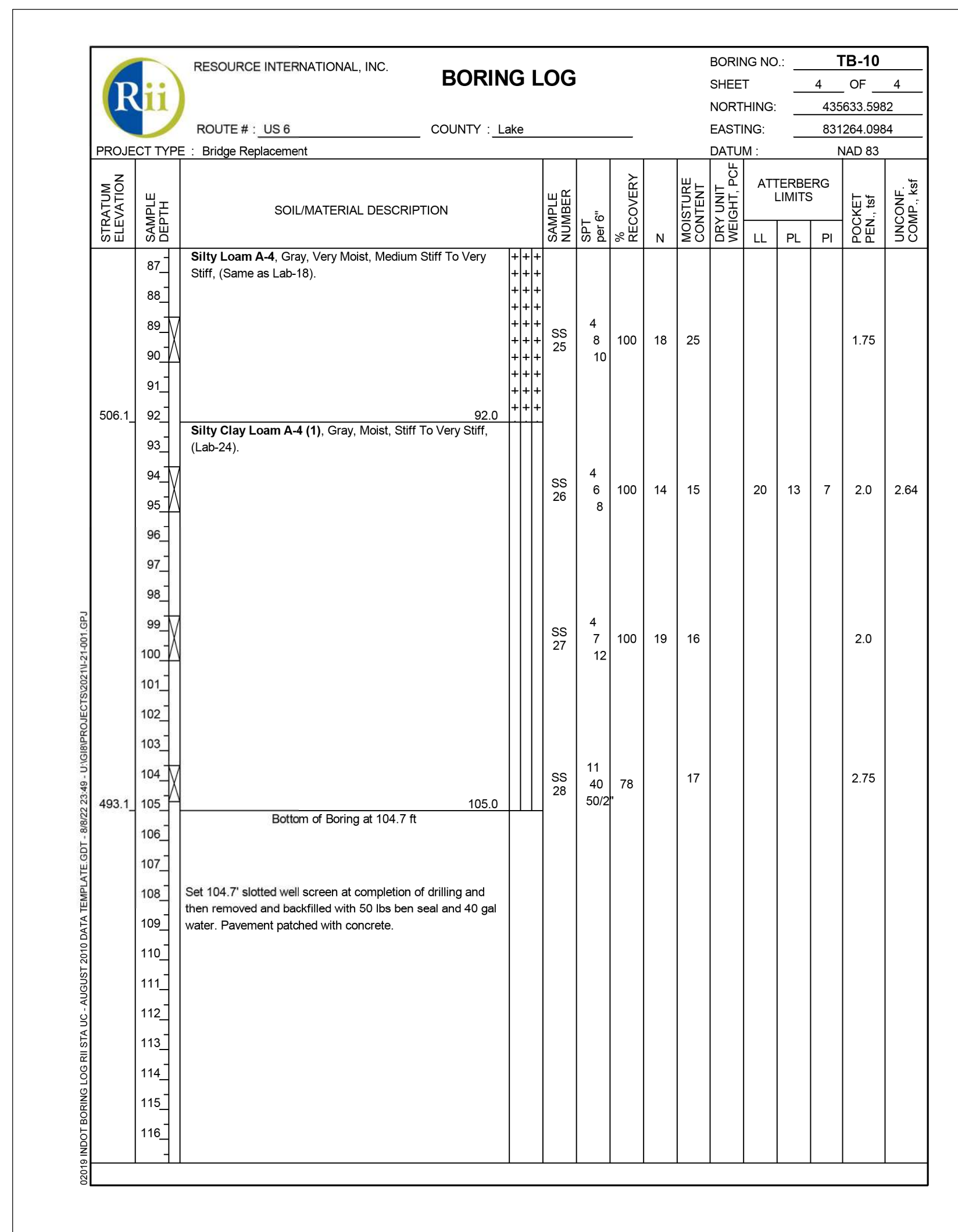
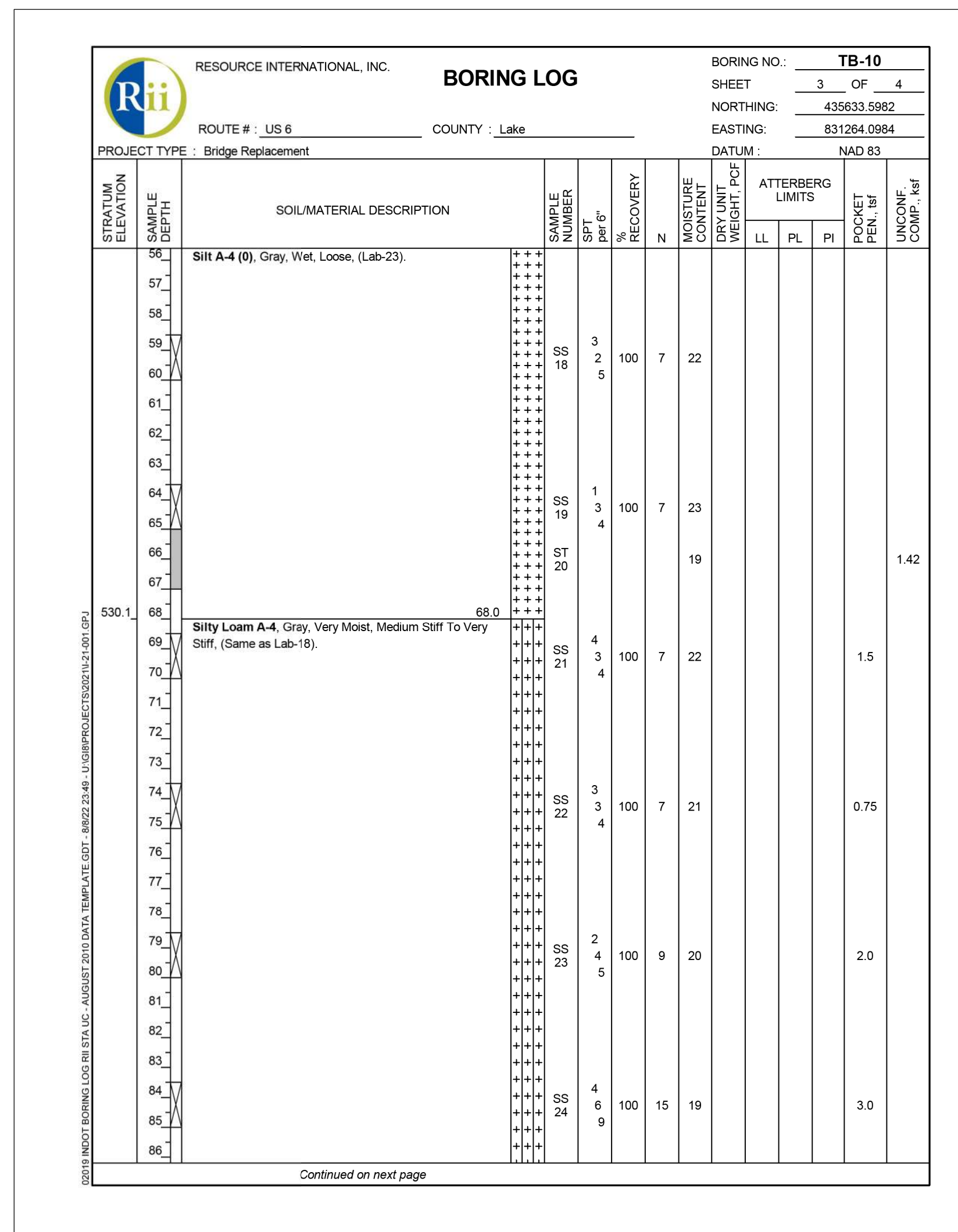
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INDIANA DEPARTMENT OF TRANSPORTATION  
SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NTS	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
	30 of 52
CONTRACT	PROJECT
B-42442	1900012



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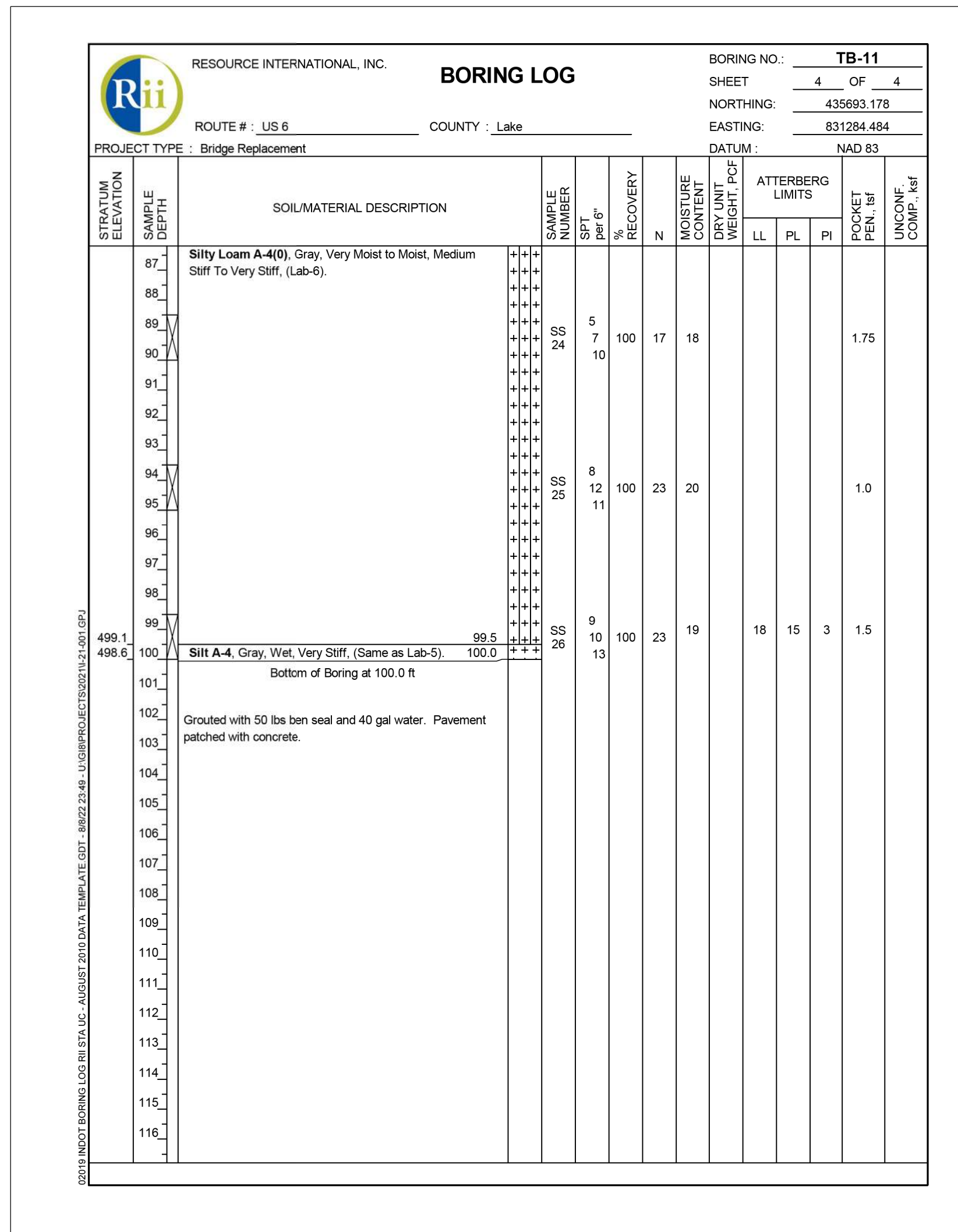
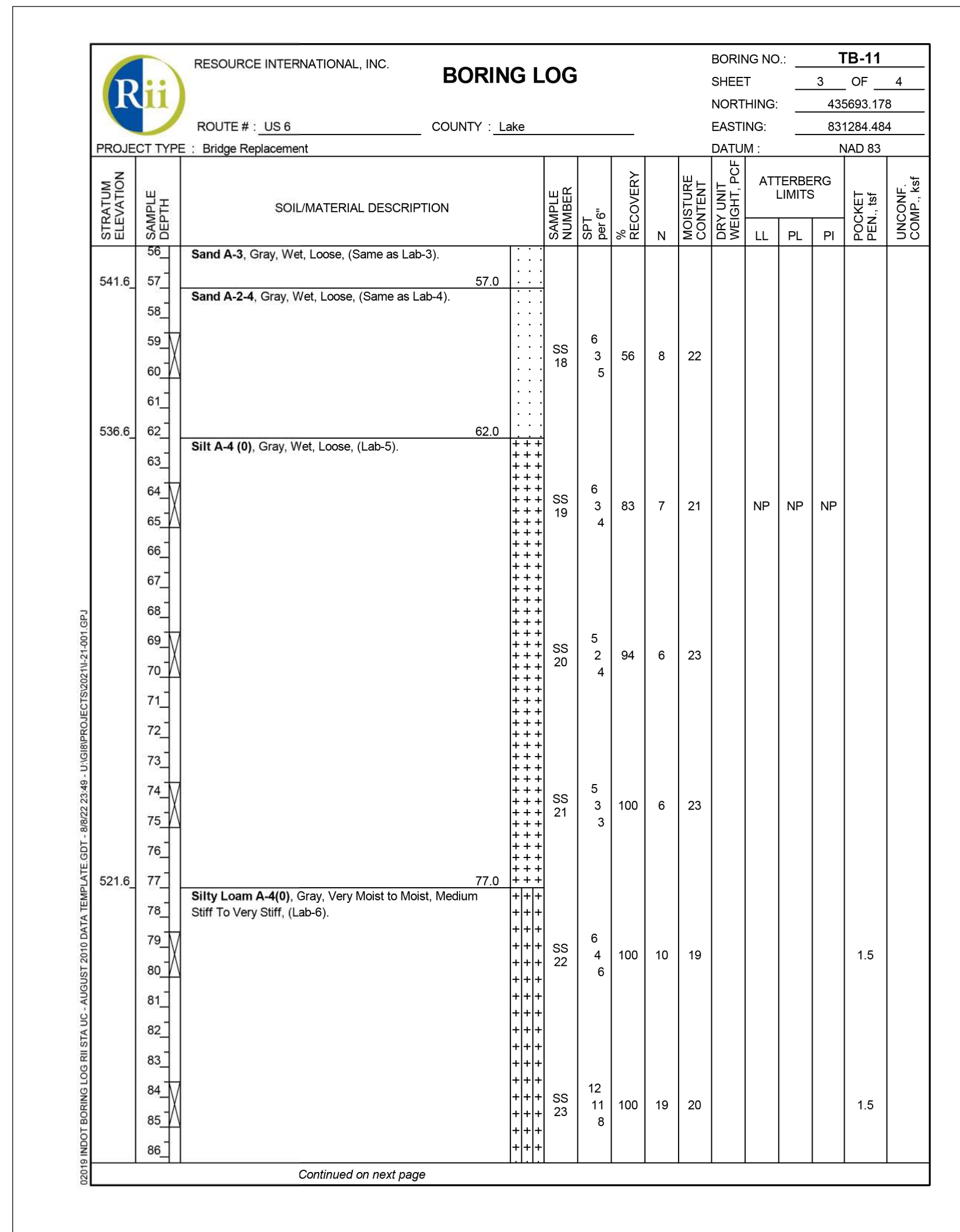
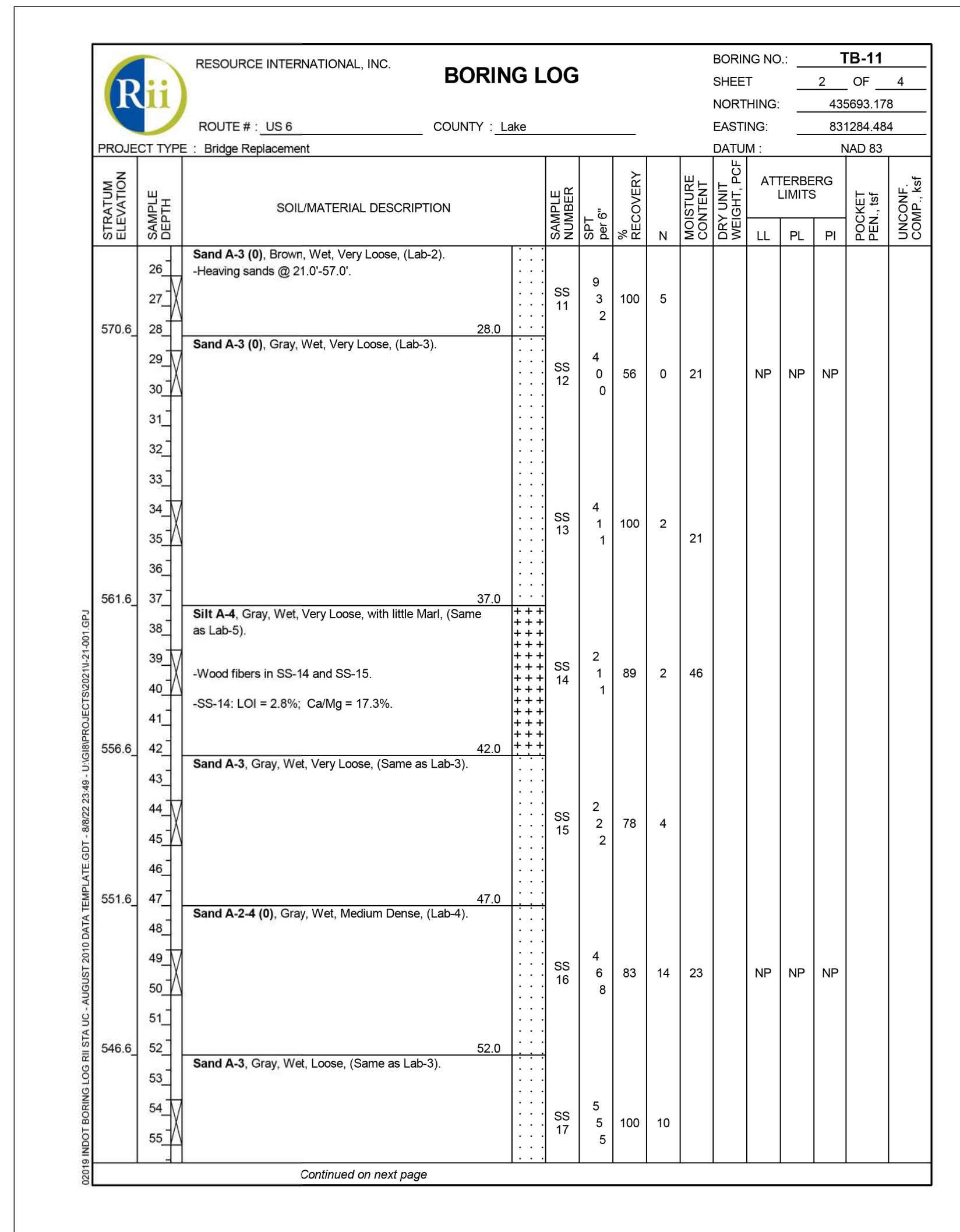
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DESIGNED: CHP	08/26/2022	DRAWN: CHP
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DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NTS	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
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CONTRACT	PROJECT
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**INDIANA DEPARTMENT OF TRANSPORTATION**

**SOIL BORINGS**

HORIZONTAL SCALE	BRIDGE FILE
NTS	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
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CONTRACT	PROJECT
B-42442	1900012



RESOURCE INTERNATIONAL, INC.		BORING LOG		BORING NO.: TB-12						
PROJECT TYPE: Bridge Replacement		ROUTE #: US 6		COUNTY: Lake						
LOCATION: Over Muck Pocket, Approx. 0.84 mi. South of SR 511/801-84		DESIGN NO.: 1900012		RI PROJECT NO.: L21-001						
ELEVATION: 598.3 ft		BORING METHOD: 3.25" HSA		HAMMER: Automatic						
STATION: 76+99		RIG TYPE: CME-55 ATV		DRILLER/INSP: LHMJ						
OFFSET: 12.1 ft Left		CASING DIA.: NA		TEMPERATURE: 52°F						
LINE: US-6		CORE SIZE: NA		WEATHER: Cloudy						
DEPTH: 100.0 ft		DATE STARTED: 02-16-22		DATE COMPLETED: 02-16-22						
GROUNDWATER: Encountered at 10.0 ft		At completion		Caved in at NA						
STRAIUM ELEVATION	SAMPLE DEPTH	SOIL/MATERIAL DESCRIPTION	SAMPLE NUMBER	SPT per ft	RECOVERY	N	MOISTURE DRY UNIT WEIGHT, Pcf	ATTERBERG LIMITS	POCKET PEN. lbf	UNCONF. COMP. ksf
597.2	1	13.0" Asphalt	SS 1	1.1						
	2	Sand A-3 (0), Light Brownish Gray And Brown, Wet, Loose To Medium Dense, (Lab-7).	SS 1	9	7	100	16	6	NP	NP
	3		SS 2	6	8	100	17			
	4		SS 3	9	6	56	16			
	5		SS 4	7	5	100	12			
	6		SS 5	4	4	94	10			
	7		SS 6	1	1	100	4	22	NP	NP
	8		SS 7	1	1	61	2			
	9		SS 8	0	1	67	1			
	10		SS 9	0	0	61	0			
	11		SS 10	0	0	72	0			

RESOURCE INTERNATIONAL, INC.		BORING LOG		BORING NO.: TB-12						
PROJECT TYPE: Bridge Replacement		ROUTE #: US 6		COUNTY: Lake						
LOCATION: Over Muck Pocket, Approx. 0.84 mi. South of SR 511/801-84		DESIGN NO.: 1900012		RI PROJECT NO.: L21-001						
ELEVATION: 598.3 ft		BORING METHOD: 3.25" HSA		HAMMER: Automatic						
STATION: 76+99		RIG TYPE: CME-55 ATV		DRILLER/INSP: LHMJ						
OFFSET: 12.1 ft Left		CASING DIA.: NA		TEMPERATURE: 52°F						
LINE: US-6		CORE SIZE: NA		WEATHER: Cloudy						
DEPTH: 100.0 ft		DATE STARTED: 02-16-22		DATE COMPLETED: 02-16-22						
GROUNDWATER: Encountered at 10.0 ft		At completion		Caved in at NA						
STRAIUM ELEVATION	SAMPLE DEPTH	SOIL/MATERIAL DESCRIPTION	SAMPLE NUMBER	SPT per ft	RECOVERY	N	MOISTURE DRY UNIT WEIGHT, Pcf	ATTERBERG LIMITS	POCKET PEN. lbf	UNCONF. COMP. ksf
570.3	26	Sand A-3 (0), Brown To Brownish Gray And Gray, Wet, Very Loose, (Lab-8).	SS 11	2	1	100	2			
	27		SS 12	1	2	67	8	22	NP	NP
	28	Sand A-3 (0), Gray, Wet, Loose, (Lab-9).	SS 13	0	0	33	0	58		
	29		SS 14	0	0	100	2	24		
	30		SS 15	1	4	100	8	30	NP	NP
	31		SS 16	10	8	100	18			
	32		SS 17	3	2	89	4	22		

RESOURCE INTERNATIONAL, INC.		BORING LOG		BORING NO.: TB-12						
PROJECT TYPE: Bridge Replacement		ROUTE #: US 6		COUNTY: Lake						
LOCATION: Over Muck Pocket, Approx. 0.84 mi. South of SR 511/801-84		DESIGN NO.: 1900012		RI PROJECT NO.: L21-001						
ELEVATION: 598.3 ft		BORING METHOD: 3.25" HSA		HAMMER: Automatic						
STATION: 76+99		RIG TYPE: CME-55 ATV		DRILLER/INSP: LHMJ						
OFFSET: 12.1 ft Left		CASING DIA.: NA		TEMPERATURE: 52°F						
LINE: US-6		CORE SIZE: NA		WEATHER: Cloudy						
DEPTH: 100.0 ft		DATE STARTED: 02-16-22		DATE COMPLETED: 02-16-22						
GROUNDWATER: Encountered at 10.0 ft		At completion		Caved in at NA						
STRAIUM ELEVATION	SAMPLE DEPTH	SOIL/MATERIAL DESCRIPTION	SAMPLE NUMBER	SPT per ft	RECOVERY	N	MOISTURE DRY UNIT WEIGHT, Pcf	ATTERBERG LIMITS	POCKET PEN. lbf	UNCONF. COMP. ksf
531.3	56	Silt A-4 (0), Gray, Most to Very Moist, Very Soft To Medium Stiff, (Lab-11).	SS 18	4	5	83	9	23	19	17
	57		SS 19	3	5	100	10	23		
	58		SS 20	5	4	100	10	22		
	59		SS 21	5	5	100	11	24	NP	NP
	60		SS 22	5	3	100	8	22		
	61		SS 23	2	6	100	14	24	42	18

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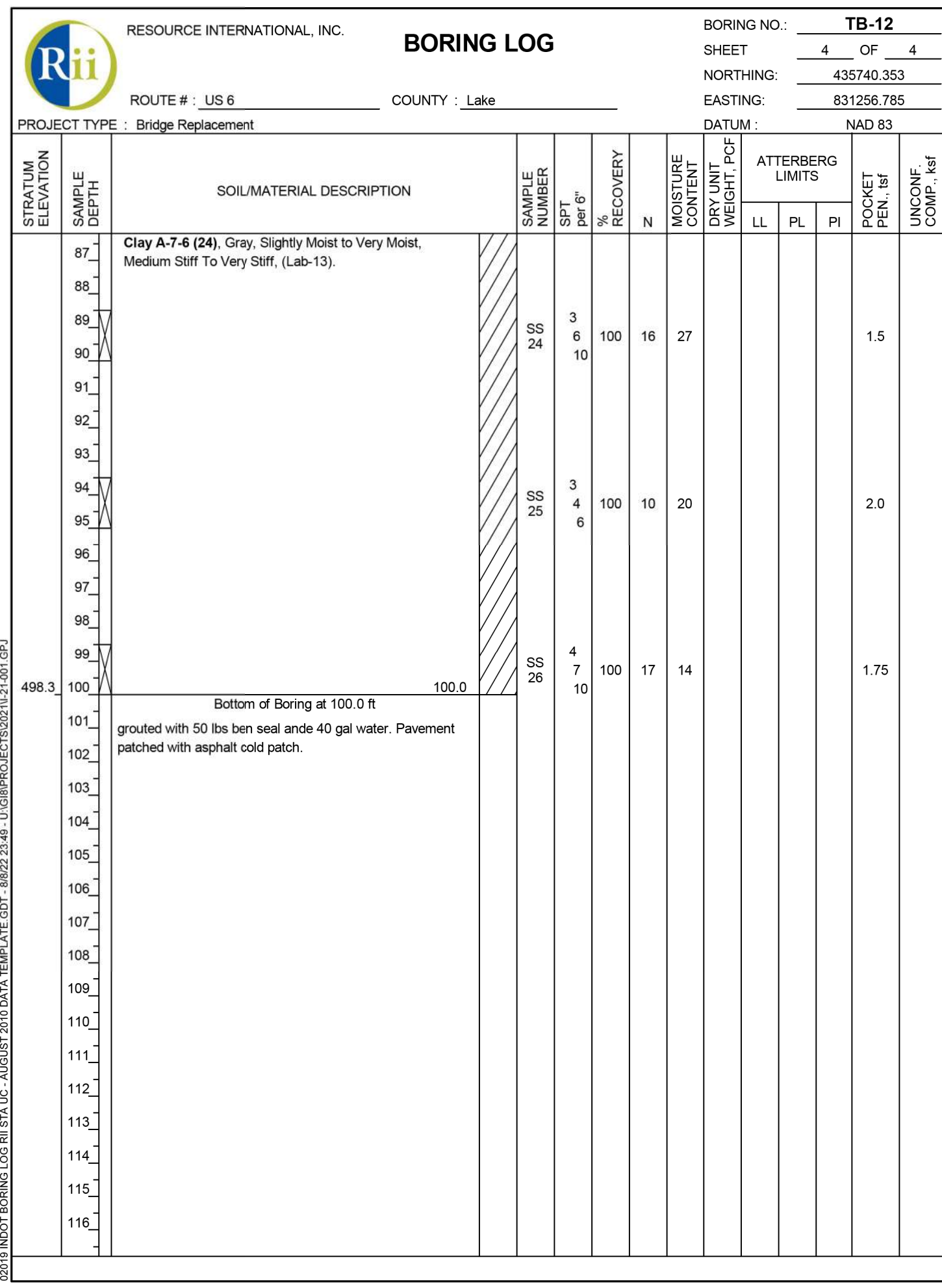
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INDIANA  
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
NTS	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
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CONTRACT	PROJECT
B-42442	1900012



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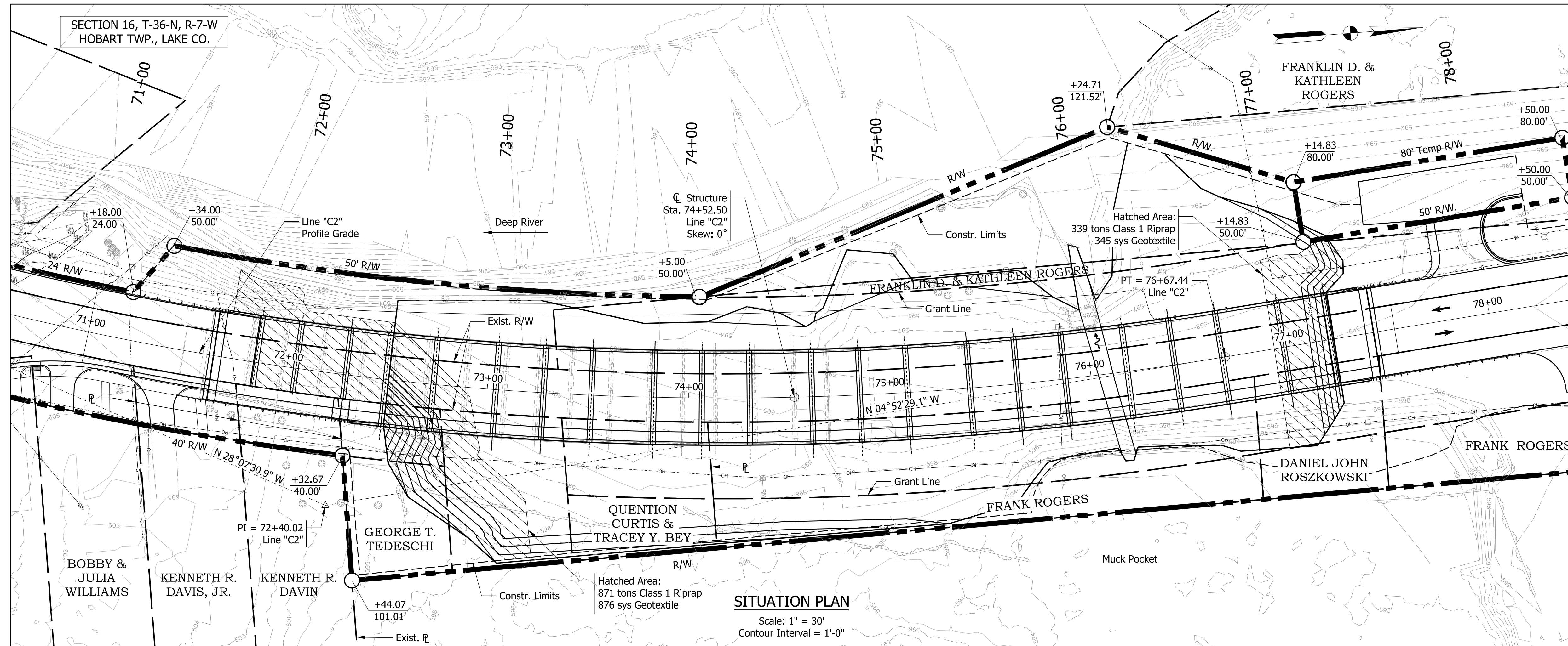
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CHECKED: JLP	08/26/2022	CHECKED: JLP

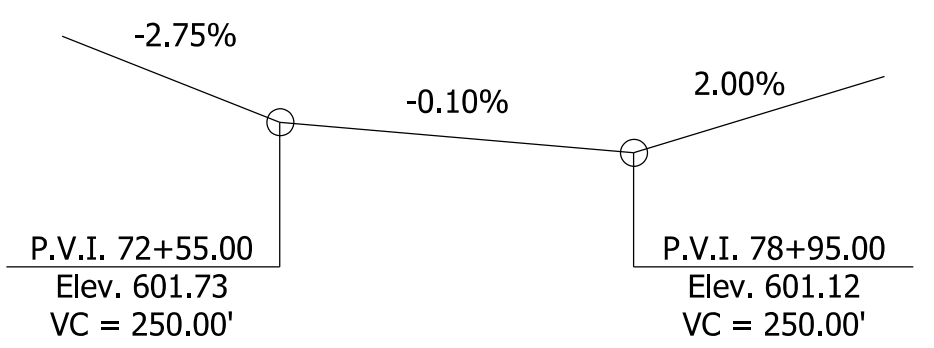
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**SOIL BORINGS**

HORIZONTAL SCALE	BRIDGE FILE
NTS	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
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**EXISTING STRUCTURE**  
 The existing structure ((6)51-45-01943 B) is a 16 span reinforced concrete slab bridge built in 1941 with a 19.7 ft. maximum span length and 47 ft. out-to-out coping width. Existing structure to be removed.



**PROFILE GRADE DATA**  
ALONG LINE "C2"

**HYDRAULIC DATA**

Water Opening Required	N/A	sq ft
Water Opening Provided	2620	sq ft
Drainage Area	148.0	sq mi
Design Discharge, Q100	5,400	cfs
Velocity	1.36	ft/s
Q100 Elev.	601.64	ft
Estimated Scour Elev.	581.77	ft
Backwater at Q100	0.04	ft
Existing Waterway Opening	1,059	sq ft
Existing Backwater	0.10	ft
Low Structure Elev.	599.29	ft
Existing Low Structure Elev.	597.01	ft

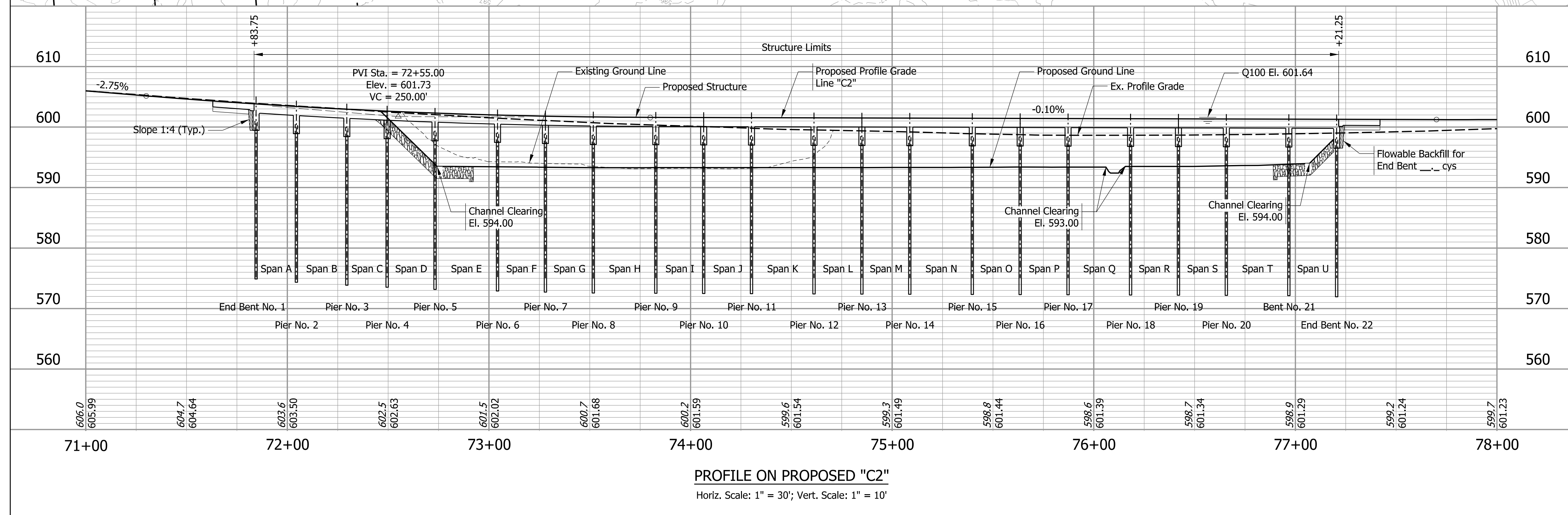
**HYDRAULIC SCOUR DATA**

Q100 Discharge	5,400	cfs
Q100 Elev.	601.64	ft
Velocity at Q100	1.36	ft/s
Scour Depth (Contraction)	6.07	ft
Scour Depth (Total)	7.91	ft
Low Scour Elev.	583.90	ft
Q500 Discharge	7180	cfs
Q500 Elev.	604.11	ft
Velocity at Q500	1.55	ft/s
Scour Depth (Contraction)	8.46	ft
Scour Depth (Total)	10.04	ft
Low Scour Elev.	581.77	ft

**EARTHWORK TABULATION**

Fill +20%	445	cys
Common Excavation	995	cys
Total Waterway Excavation	5093	cys
Usable Waterway Excavation (70%)	3570	cys
Unusable Waterway Excavation (30%)	1523	cys
Surplus Foundation Excavation	0	cys
Waste	4120	cys
Benching (Estimated)	0	cys

**REINFORCED CONCRETE SLAB BRIDGE**  
 UNIT 1 - 3 SPANS: 20'-0", 25'-0" & 20'-0"  
 UNIT 2 THRU 7 - 3 SPANS: 23'-9", 31'-0" & 23'-9"  
 39'-0" CLEAR ROADWAY; 0 deg. Skew  
 US6 OVER MUCK POCKET  
 LAKE COUNTY



**INDIANA DEPARTMENT OF TRANSPORTATION**

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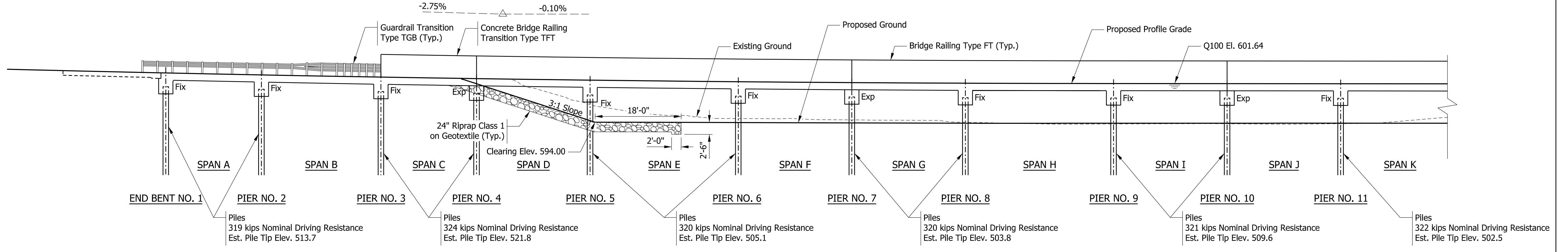
**LAYOUT**

BRIDGE FILE (6)51-45-10466-B  
 DESIGNATION 1900012  
 SHEETS 35 of 52  
 PROJECT 1900012

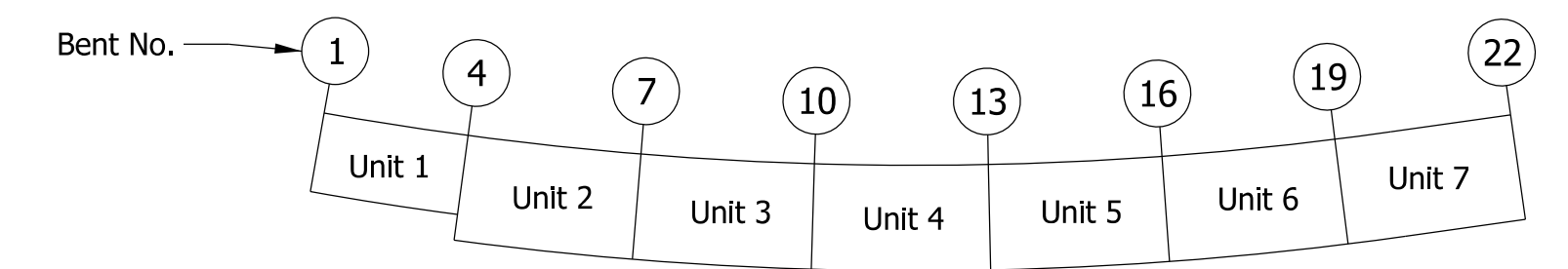
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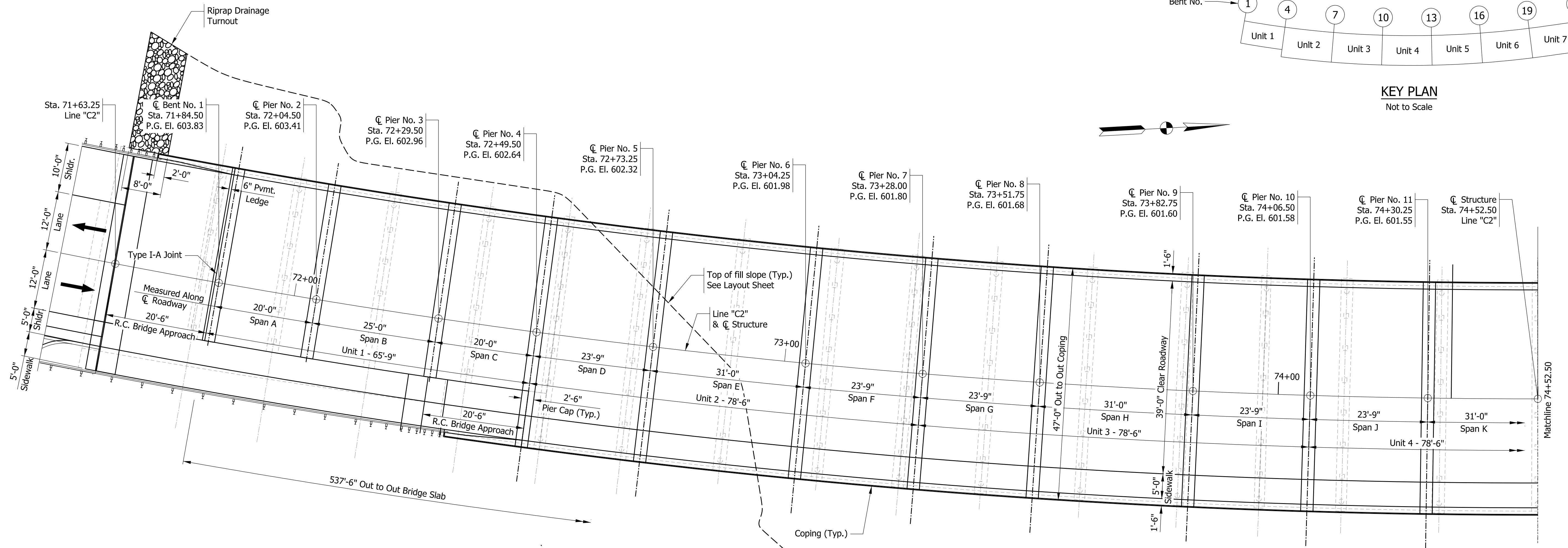
STRUCTURE TO BE BUILT ON A 250' VERTICAL CURVE, -0.10% GRADE AND 1527.89' HORIZONTAL CURVE



ELEVATION  
Scale: 3/32" = 1'-0"



KEY PLAN  
Not to Scale



PLAN  
Scale: 3/32" = 1'-0"

REINFORCED CONCRETE SLAB BRIDGE  
UNIT 1 - 3 SPANS: 20'-0", 25'-0" & 20'-0"  
UNIT 2 THRU 7 - 3 SPANS: 23'-9", 31'-0" & 23'-9"  
39'-0" CLEAR ROADWAY; 0° SKEW  
US6 OVER MUCK POCKET  
LAKE COUNTY

Plot: 8/26/2022 7:06:01 PM

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08/26/2022	CHECKED: JLP	08/26/2022

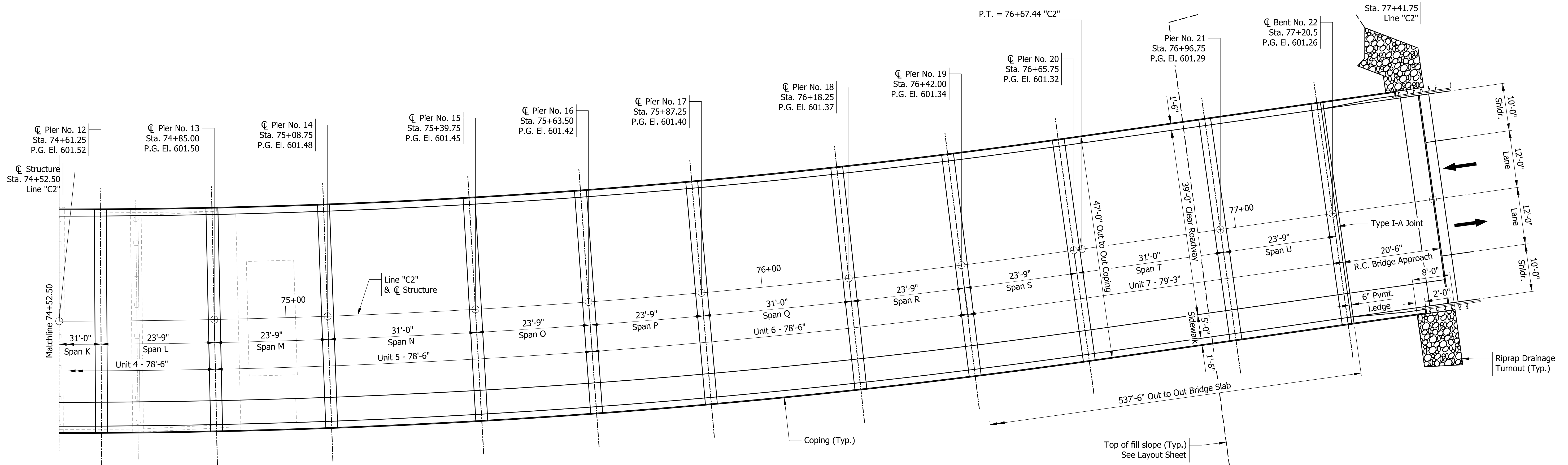
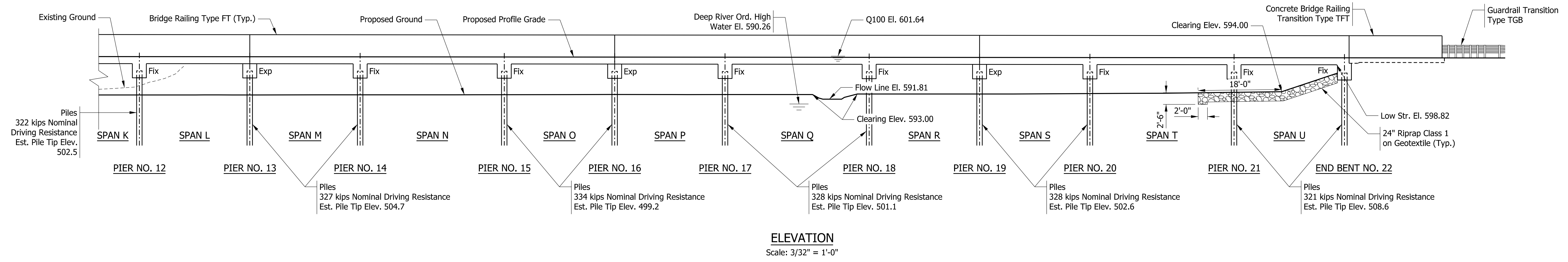
INDIANA DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
AS SHOWN	1900012
SHEETS	
36	of 52
CONTRACT	PROJECT
B-42442	1900012

STRUCTURE TO BE BUILT ON A 250' VERTICAL CURVE, -0.10% GRADE AND 1527.89' HORIZONTAL CURVE

Note to Reviewer: The Muck Pocket bridge conveys relief flow for Deep River. Therefore the OHWM is shown for the main channel of Deep River.



REINFORCED CONCRETE SLAB BRIDGE  
UNIT 1 - 3 SPANS: 20'-0", 25'-0" & 20'-0"  
UNIT 2 THRU 7 - 3 SPANS: 23'-9", 31'-0" & 23'-9"  
39'-0" CLEAR ROADWAY; 0° Skew  
US6 OVER MUCK POCKET  
LAKE COUNTY

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CHP	08/26/2022	DRAWN: CHP
CHECKED: JLP	08/26/2022	CHECKED: JLP

INDIANA DEPARTMENT OF TRANSPORTATION  
**GENERAL PLAN**

HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
AS SHOWN	1900012
SHEETS	
37	of 52
CONTRACT	PROJECT
B-42442	1900012

Plot: 8/26/2022 7:06:04 PM

**GENERAL NOTES**

Reinforcing steel cover shall be 2½" in top and 1" minimum in bottom of floor slab, 3" in footings, except bottom steel which shall be 4", and 2" in all other parts, unless noted.

Surface seal all exposed surfaces of concrete railing. Surface seal to be paid as a lump sum item. Estimated quantity is 8,863 sft.

**DESIGN DATA**

**LIVE LOAD**

Superstructure and Substructure designed for HL-93 loading, in accordance with AASHTO LRFD Bridge Design Specifications, Ninth Edition, 2020.

**DEAD LOAD**

Actual weight plus 35 lb/ft<sup>2</sup> for future wearing surface

**FLOOR SLAB**

Designed with a 17½" structural depth plus ½" sacrificial wearing surface.

**DESIGN STRESSES**

**CONCRETE**

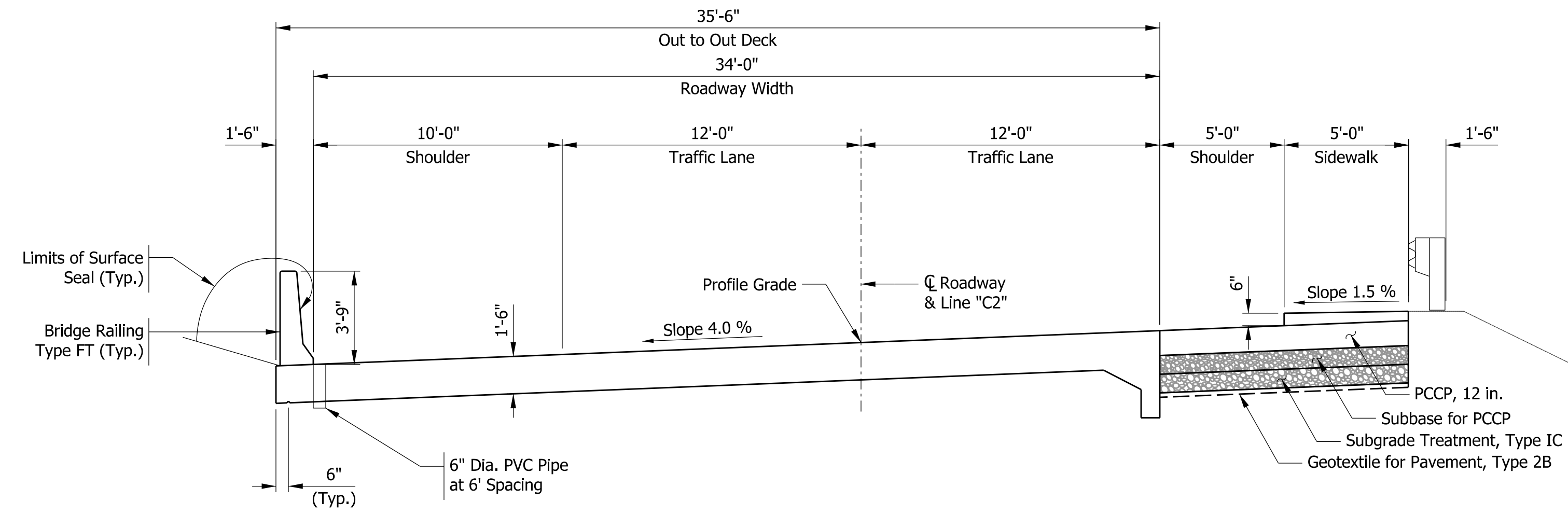
Class C f<sub>c</sub> = 4,000 psi  
Class A f<sub>c</sub> = 3,500 psi

**REINFORCING STEEL**

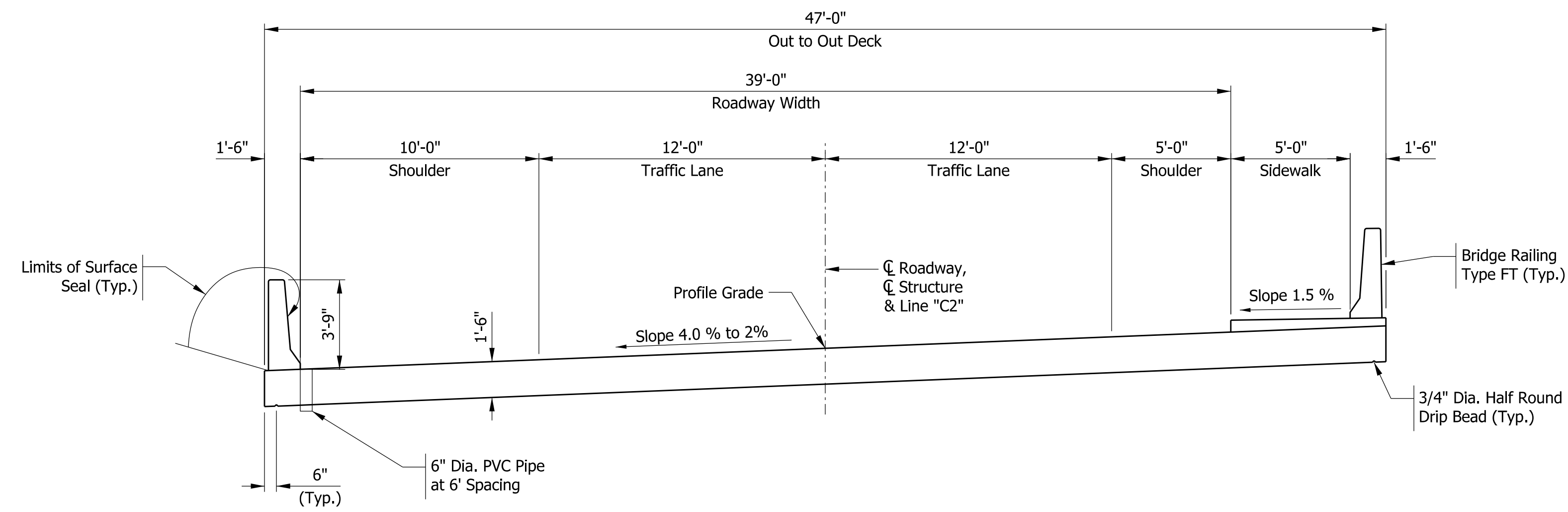
Grade 60 f<sub>y</sub> = 60,000 psi

**SEISMIC DESIGN DATA**

Seismic Performance Zone Zone 1  
Seismic Soil Profile Type Class E  
Modified PGA 0.098  
S<sub>DS</sub> 0.220  
S<sub>D1</sub> 0.130



**TYPICAL SECTION**  
UNIT 1  
Scale: ¼" = 1'-0"



**TYPICAL SECTION**  
UNIT 2 THRU UNIT 7  
Scale: ¼" = 1'-0"

**REINFORCED CONCRETE SLAB BRIDGE**  
UNIT 1 - 3 SPANS: 20'-0", 25'-0" & 20'-0"  
UNIT 2 THRU 7 - 3 SPANS: 23'-9", 31'-0" & 23'-9"  
39'-0" CLEAR ROADWAY; 0° Skew  
US6 OVER MUCK POCKET  
LAKE COUNTY

Plot: 8/26/2022 7:06:06 PM

File: pw:\pwhdrusen01:HDR\_US\_Central\_01\Documents\248547\10290901\6.0\_CAD\_BIM\6.2\_WIP\6.2.03\_CADD Sheets\Structures\Sht Typical section  
Model: Default

**NOT FOR CONSTRUCTION**

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CHP	08/26/2022	DRAWN: CHP
CHECKED: JLP	08/26/2022	CHECKED: JLP

INDIANA  
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
AS SHOWN	1900012
	SHEETS
	38 of 52
CONTRACT	PROJECT
B-42442	1900012

**SUMMARY OF BRIDGE QUANTITIES**

ITEM	CONCRETE					CONCRETE RAILING CLASS C	REINF. BARS, EPOXY COATED	REINF. BRIDGE APPROACH, 12 IN.	SUBBASE FOR PCCP	SUBGRADE TREATMENT, TYPE IC	GEOTEXTILE FOR PAVEMENT, TYPE 2B	THREADED TIE BAR ASSEMBLY	PILES					FLOWABLE BACKFILL, NON-REMOVABLE	TERMINAL JOINT, TYPE HMA	TERMINAL JOINT, TYPE PCCP	CONC. BRIDGE RAILING TRANSITION, TFT	BRIDGE EXP. JOINT SS	LONGITUDINAL GROOVING	EXCAVATION, COMMON	PCCP, 12 IN.	RIPRAP CLASS 1	GEOTEXTILE FOR RIPRAP TYPE 1A	SURFACE SEAL**																	
	CLASS C		CLASS A	CLASS B									LBS	SYS	CYS	SYS	SYS												EACH	PILE, STEEL PIPE, 0.375 IN., 16 IN.	PILE, STEEL PIPE EPOXY COATED 0.375 IN., 16 IN.	TEST PILE, DYNAMIC, PRODUCTION	DYNAMIC PILE LOAD TEST	TEST PILE, DYNAMIC, RESTRIKE	CYS	LFT	LFT	CYS	LFT	SYS	CYS	SYS	TON	SYS	SFT
	SUPERSTR	SUBSTR	SUBSTR	ABOVE FTG.	IN FTG.																																								
Superstructure	1,427.3					401,070					48											283	2,091																						
End Bent No. 1		13.8				3,772						352.6		98.0	1	1	9										871	876																	
Pier No. 2		13.8				3,772						396.5	47.1																																
Pier No. 3		13.8				3,772						356.0	44.9																																
Pier No. 4			18.3			3,772						498.4	60.5						10																										
Pier No. 5		18.3				3,772						527.4	50.0	118.5	1	1																													
Pier No. 6		18.3				3,772						615.3	55.9																																
Pier No. 7			18.3			3,772						624.4	54.6																																
Pier No. 8		18.3				3,772						624.4	53.8																																
Pier No. 9		18.3				3,772						583.8	53.3																																
Pier No. 10			18.3			3,772						583.8	53.1																																
Pier No. 11		18.3				3,772						543.0	45.3	118.1	1	1																													
Pier No. 12		18.3				3,772						633.5	52.7																																
Pier No. 13			18.3			3,772						618.1	52.5																																
Pier No. 14		18.3				3,772						618.1	52.4																																
Pier No. 15		18.3				3,772						562.8	44.8	117.3	1	1																													
Pier No. 16			18.3			3,772						656.6	52.0																																
Pier No. 17		18.3				3,772						643.3	51.8																																
Pier No. 18		18.3				3,772						643.3	51.6																																
Pier No. 19			18.3			3,772						542.4	44.1	112.8	1	1																													
Pier No. 20		18.3				3,772						632.8	51.3																																
Pier No. 21		18.3				3,772						590.8	51.1																																
End Bent No. 22		18.3				3,772						544.0		113.0	1	1	11										339	345																	
R.C. Bridge Approach (12") at End Bent No. 1							5,706	107	27	107	107									44				80																					
R.C. Bridge Approach (12") at End Bent No. 22							5,706	107	27	107	107									44				80																					
Concrete Bridge Railing, Type FT						122.9	43,780																							8,863															
PCCP, 12 IN.									19	74	74																			74															
<b>TOTALS</b>	<b>1,427.3</b>	<b>279.3</b>	<b>109.8</b>			<b>122.9</b>	<b>539,246</b>	<b>214</b>	<b>73</b>	<b>288</b>	<b>288</b>	<b>48</b>	<b>12,391.3</b>	<b>1,022.8</b>	<b>677.7</b>	<b>6</b>	<b>6</b>	<b>20</b>	<b>78</b>	<b>10</b>	<b>4</b>		<b>2,251</b>		<b>74</b>	<b>1,210</b>	<b>1,221</b>	<b>8,863</b>																	

\*\* For information only. Estimated quantity paid for as Lump Sum

Plot: 8/26/2022 7:06:08 PM

**NOT FOR CONSTRUCTION**

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: CHP 08/26/2022	DRAWN: CHP 08/26/2022	
CHECKED: JLP 08/26/2022	CHECKED: JLP 08/26/2022	

**INDIANA DEPARTMENT OF TRANSPORTATION**

**BRIDGE SUMMARY OF QUANTITIES**

HORIZONTAL SCALE	BRIDGE FILE
VERTICAL SCALE	(6)51-45-10466-B
	DESIGNATION
	1900012
	SHEETS
	39 of 52
CONTRACT	PROJECT
B-42442	1900012

APPROACH SUMMARY TABLE

LOCATION (STATION)	DESCRIPTION (APPROACH TYPE OR CLASS)	WIDTH (FT)	LENGTH (FT)	RADIUS (FT)	DISTANCE BEYOND R/W LINE (FT)	GRADE				EXCAVATION		QC/QA-HMA, 10 IN. (SYS)	D-1 CONTRACTION JOINT (LFT)	SUBBASE FOR PCP (CYS)	QC/QA-HMA, 1, 64, SURFACE, 9.5 mm (TON)	QC/QA-HMA, 1, 64, INTERMEDIATE, 19.0 mm (TON)	QC/QA-HMA, 1, 64, BASE, 25.0 mm (TON)	QC/QA-HMA, 3, 70, SURFACE, 9.5 mm (TON)	QC/QA-HMA, 3, 70, INTERMEDIATE, 19.0 mm (TON)	QC/QA-HMA, 3, 64, BASE, 19.0 mm (TON)	HMA SURFACE, TYPE A (TON)	HMA INTERMEDIATE, TYPE A (TON)	SUBGRADE TREATMENT, TYPE IA (SYS)	SUBGRADE TREATMENT, TYPE IIA (SYS)	COMPACTED AGGREGATE, NO. 53 (TON)	COMPACTED AGGREGATE, NO. 53 BASE (TON)	COMPACTED CRUSHED AGGREGATE, 8 (TON)	4 IN. CONCRETE SIDEWALK (SYS)	CONCRETE CURB AND GUTTER, TYPE B (LFT)	CONCRETE CURB AND GUTTER (LFT)	CONCRETE CURB AND GUTTER, MODIFIED (LFT)	CONCRETE CURB (LFT)	CONCRETE CENTER CURB, TYPE D (LFT)	PCP FOR APPROACHES, 6 IN. (SYS)	PCP FOR APPROACHES, 9 IN. (SYS)	HMA FOR APPROACHES (SYS)																
						1%	2%	3%	4%	CUT (CYS)	FILL (CYS)																																									
LINE "US-6"																																																				
70+55.04 to 70+72.86	CONCRETE	17.33	10.4	24.55																																									X							
70+86.47 to 70+98.03	CONCRETE	11.4	16.85	19.11																																										X						
71+31.08 to 71+50.00	CONCRETE	11.6	14.45	27.08																																												X				
69+57.67 to 70+93.74	ASPHALT	18.77	74.53	91.00																																																X
77+48.64 to 78+10.26	ASPHALT	29.07	22.65	26.50																																														X		
78+68.84 to 79+29.24	ASPHALT	28.59	13.59	16.00																																															X	
77+93.49 to 78+89.30	ASPHALT	95.74	61.5	28.66																																																X
TOTALS																																																				

MONUMENT TABLE

STATION LOCATIONS	OFFSET	TYPE			
		A	B	C	D
LINE "US-6"					
69+57.67			1		
80+30.86			1		

NOTE: TABLES WILL BE COMPLETED AT A LATER DATE

**NOT FOR CONSTRUCTION**

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER	DATE
DESIGNED: EN 08/26/2022	DRAWN: CMD	08/26/2022
CHECKED: JLP 08/26/2022	CHECKED: JLP	08/26/2022

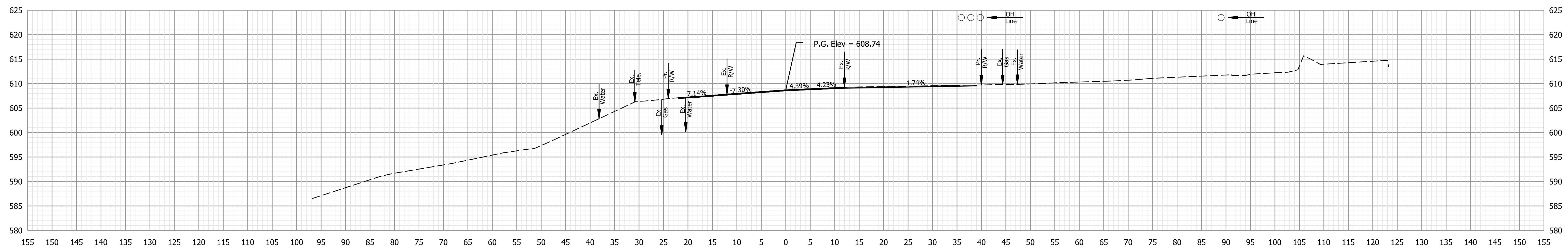
INDIANA DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

HORIZONTAL SCALE	BRIDGE FILE
VERTICAL SCALE	(6)51-45-10466-B
N/A	DESIGNATION
	1900012
	SHEETS
	40 of 52
CONTRACT	PROJECT
B-42442	1900012

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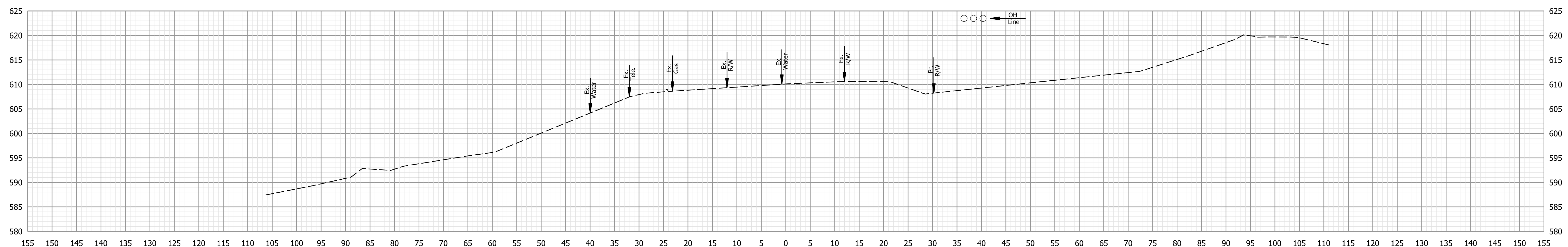


Ac = 0.0 SFT  
Vc = 0 CYS

Af = 0.0 SFT  
Vf = 0 CYS

Ab = 0.0 SFT  
Vb = 0 CYS

70+00



Ac = 0.0 SFT  
Vc = 0 CYS

Af = 0.0 SFT  
Vf = 0 CYS

Ab = 0.0 SFT  
Vb = 0 CYS

69+50

Note to Reviewer: Offset and depth information for the utilities shown will be coordinated throughout project development and the utility verification process.

**NOT FOR CONSTRUCTION**

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: MSM	08/26/2022	DRAWN: MSM
CHECKED: EN	08/26/2022	CHECKED: EN

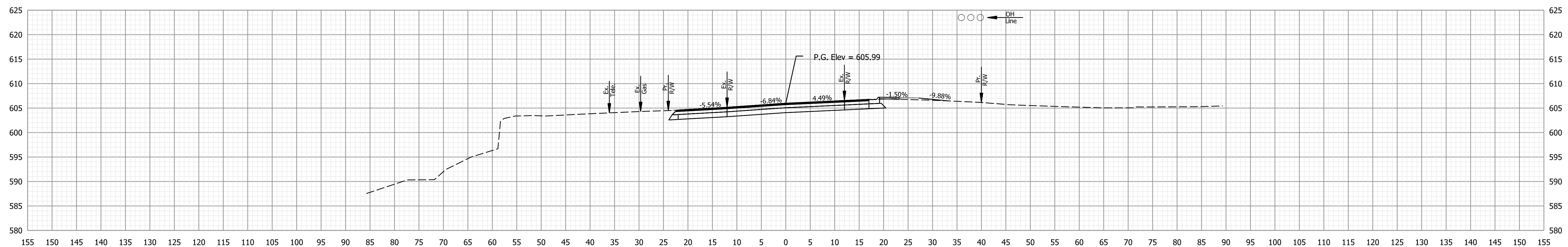
**INDIANA DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS - US-6**

HORIZONTAL SCALE	BRIDGE FILE
1"=10'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
	41 of 52
CONTRACT	PROJECT
B-42442	1900012

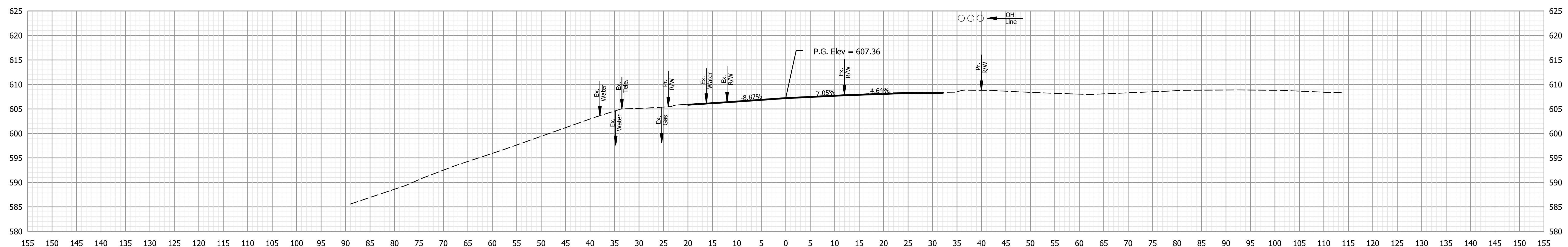
Plot: 8/26/2022 7:06:11 PM

STA. 69+50 TO STA. 70+00



Ac = 77.6 SFT    Af = 1.5 SFT    Ab = 0.0 SFT  
 Vc = 0 CYS    Vf = 0 CYS    Vb = 0 CYS

71+00



Ac = 0.0 SFT    Af = 0.0 SFT    Ab = 0.0 SFT  
 Vc = 0 CYS    Vf = 0 CYS    Vb = 0 CYS

70+50

Note to Reviewer: Offset and depth information for the utilities shown will be coordinated throughout project development and the utility verification process.

**NOT FOR CONSTRUCTION**

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: MSM	08/26/2022	DRAWN: MSM 08/26/2022
CHECKED: EN	08/26/2022	CHECKED: EN 08/26/2022

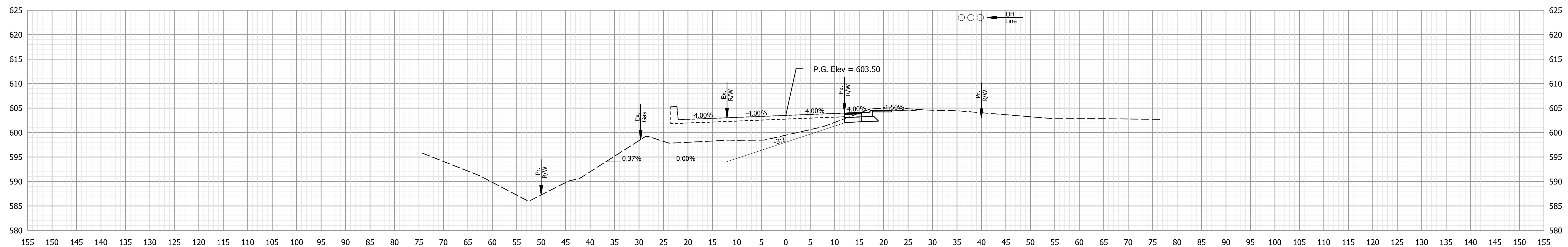
**INDIANA DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS - US-6**

HORIZONTAL SCALE	BRIDGE FILE
1"=10'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
	42 of 52
CONTRACT	PROJECT
B-42442	1900012

Plot: 8/26/2022 7:06:11 PM

STA. 70+50 TO STA. 71+00

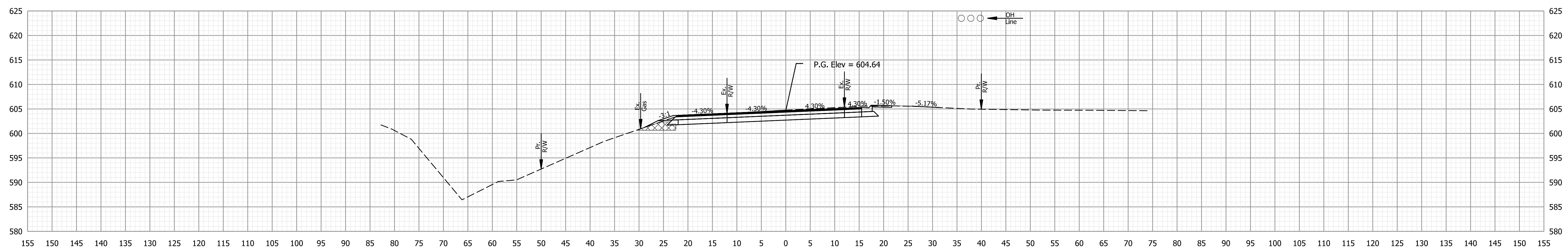


Ac = 15.2 SFT  
Vc = 85 CYS

Af = 0.0 SFT  
Vf = 1 CYS

Ab = 0.0 SFT  
Vb = 0 CYS

**PAVING EXCEPTION 72+00**



Ac = 76.7 SFT  
Vc = 143 CYS

Af = 1.5 SFT  
Vf = 3 CYS

Ab = 8.8 SFT  
Vb = 8 CYS

**71+50**

Note to Reviewer: Offset and depth information for the utilities shown will be coordinated throughout project development and the utility verification process.

**NOT FOR CONSTRUCTION**

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: MSM	08/26/2022	DRAWN: MSM
08/26/2022		08/26/2022
CHECKED: EN	08/26/2022	CHECKED: EN
		08/26/2022

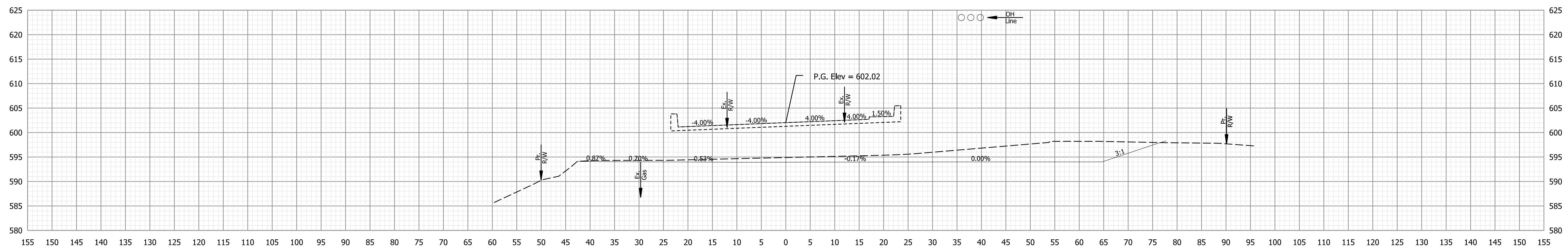
INDIANA DEPARTMENT OF TRANSPORTATION

**CROSS SECTIONS - US-6**

HORIZONTAL SCALE	BRIDGE FILE
1"=10'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
	43 of 52
CONTRACT	PROJECT
B-42442	1900012

Plot: 8/26/2022 7:06:12 PM

STA. 71+50 TO STA. 72+00

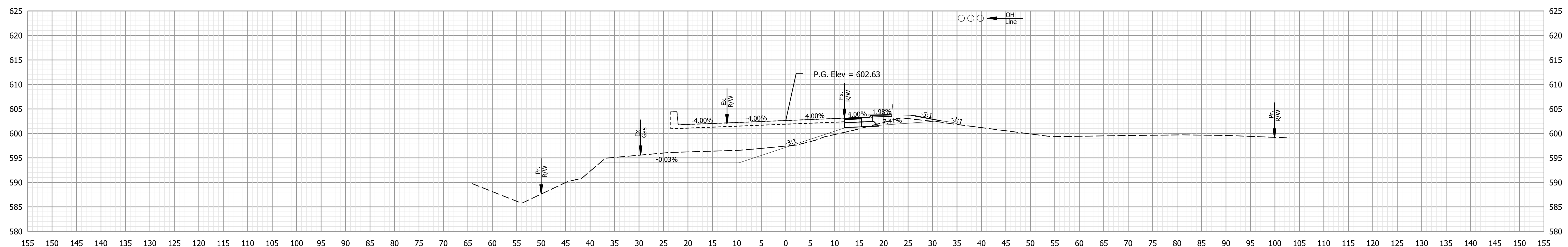


Ac = 0.0 SFT  
Vc = 0 CYS

Af = 0.0 SFT  
Vf = 0 CYS

Ab = 0.0 SFT  
Vb = 0 CYS

**PAVING EXCEPTION** **73+00**



Ac = 0.0 SFT  
Vc = 14 CYS

Af = 0.0 SFT  
Vf = 0 CYS

Ab = 0.0 SFT  
Vb = 0 CYS

**PAVING EXCEPTION** **72+50**

Note to Reviewer: Offset and depth information for the utilities shown will be coordinated throughout project development and the utility verification process.

Plot: 8/26/2022 7:06:12 PM

**NOT FOR CONSTRUCTION**

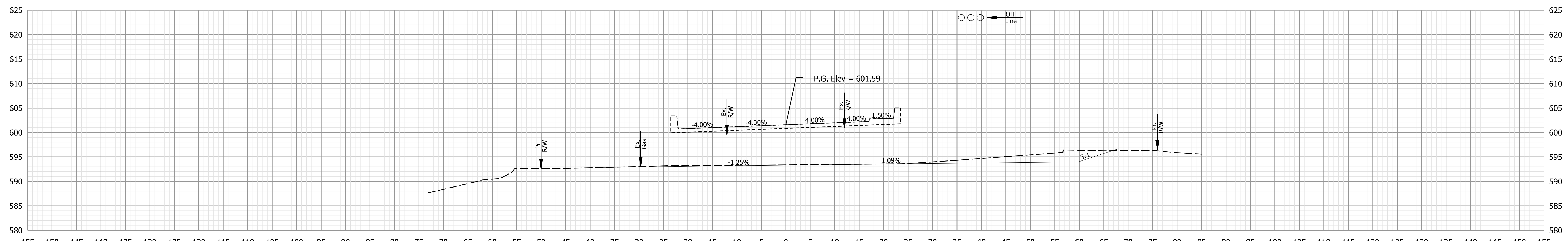
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: MSM	08/26/2022	DRAWN: MSM
08/26/2022		08/26/2022
CHECKED: EN	08/26/2022	CHECKED: EN
		08/26/2022

**INDIANA DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS - US-6**

HORIZONTAL SCALE	BRIDGE FILE
1"=10'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
	44 of 52
CONTRACT	PROJECT
B-42442	1900012

STA. 72+50 TO STA. 73+00

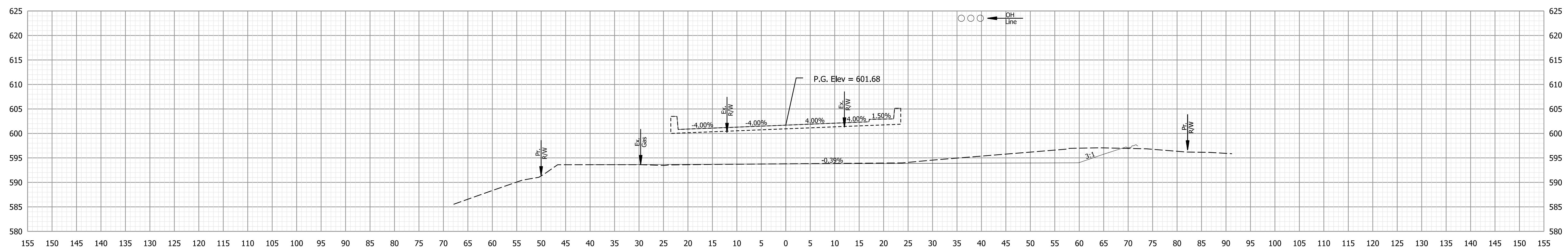


Ac = 0.0 SFT  
Vc = 0 CYS

Af = 0.0 SFT  
Vf = 0 CYS

Ab = 0.0 SFT  
Vb = 0 CYS

PAVING EXCEPTION 74+00



Ac = 0.0 SFT  
Vc = 0 CYS

Af = 0.0 SFT  
Vf = 0 CYS

Ab = 0.0 SFT  
Vb = 0 CYS

PAVING EXCEPTION 73+50

Note to Reviewer: Offset and depth information for the utilities shown will be coordinated throughout project development and the utility verification process.

Plot: 8/26/2022 7:06:12 PM

**NOT FOR CONSTRUCTION**

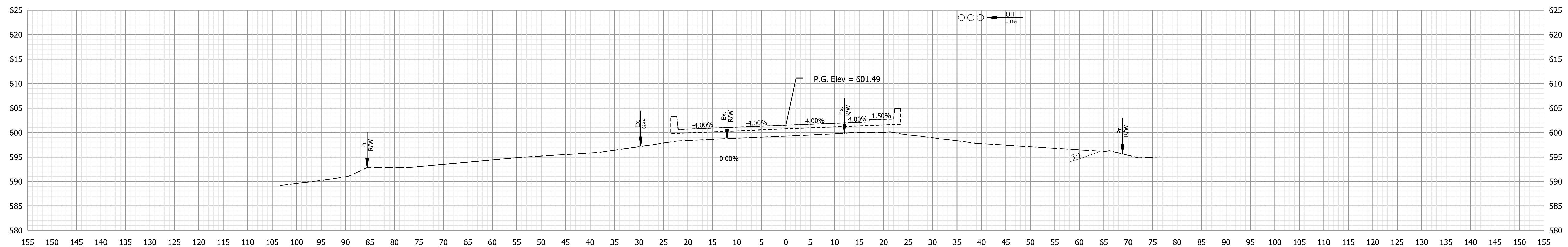
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: MSM	08/26/2022	DRAWN: MSM
08/26/2022		08/26/2022
CHECKED: EN	08/26/2022	CHECKED: EN
		08/26/2022

INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - US-6

HORIZONTAL SCALE	BRIDGE FILE
1"=10'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
	45 of 52
CONTRACT	PROJECT
B-42442	1900012

STA. 73+50 TO STA. 74+00

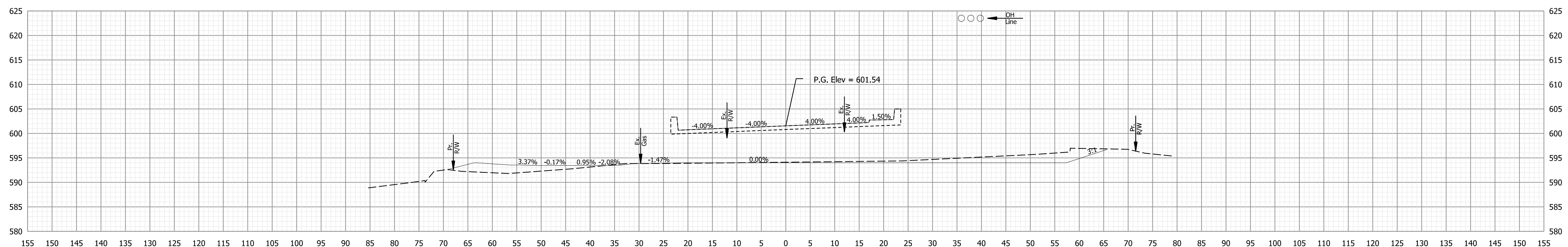


Ac = 0.0 SFT  
Vc = 0 CYS

Af = 0.0 SFT  
Vf = 0 CYS

Ab = 0.0 SFT  
Vb = 0 CYS

**PAVING EXCEPTION 75+00**



Ac = 0.0 SFT  
Vc = 0 CYS

Af = 0.0 SFT  
Vf = 0 CYS

Ab = 0.0 SFT  
Vb = 0 CYS

**PAVING EXCEPTION 74+50**

Note to Reviewer: Offset and depth information for the utilities shown will be coordinated throughout project development and the utility verification process.

Plot: 8/26/2022 7:06:12 PM

**NOT FOR CONSTRUCTION**

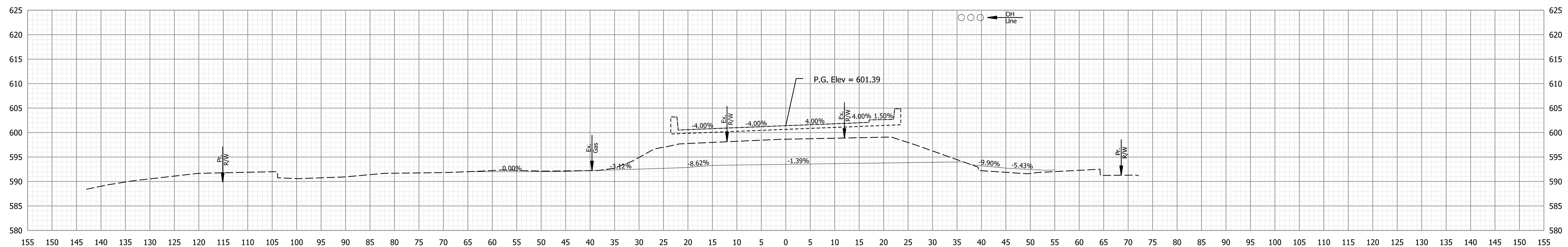
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: MSM	08/26/2022	DRAWN: MSM
08/26/2022		08/26/2022
CHECKED: EN	08/26/2022	CHECKED: EN
		08/26/2022

**INDIANA DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS - US-6**

HORIZONTAL SCALE	BRIDGE FILE
1"=10'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
	46 of 52
CONTRACT	PROJECT
B-42442	1900012

STA. 74+50 TO STA. 75+00

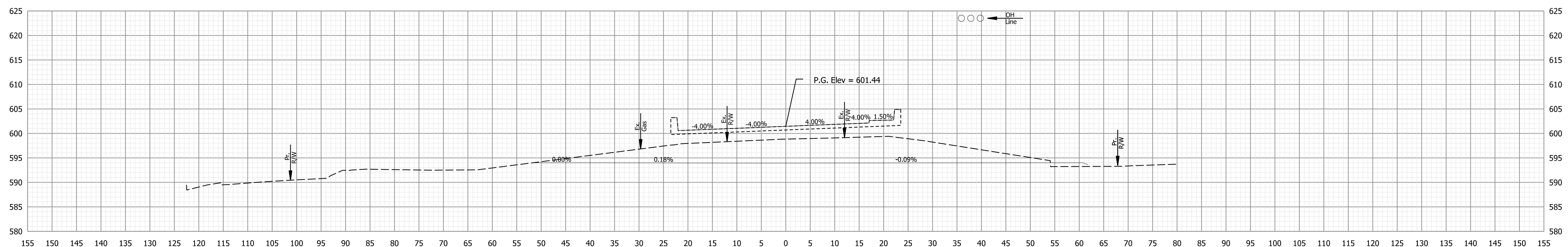


Ac = 0.0 SFT  
Vc = 0 CYS

Af = 0.0 SFT  
Vf = 0 CYS

Ab = 0.0 SFT  
Vb = 0 CYS

PAVING EXCEPTION 76+00



Ac = 0.0 SFT  
Vc = 0 CYS

Af = 0.0 SFT  
Vf = 0 CYS

Ab = 0.0 SFT  
Vb = 0 CYS

PAVING EXCEPTION 75+50

Note to Reviewer: Offset and depth information for the utilities shown will be coordinated throughout project development and the utility verification process.

STA. 75+50 TO STA. 76+00

PLOT: 8/26/2022 7:06:13 PM

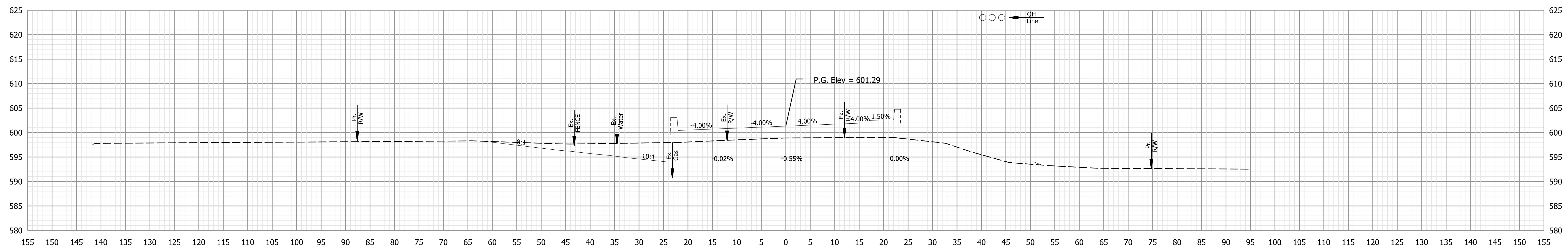
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: MSM	08/26/2022	DRAWN: MSM
08/26/2022		08/26/2022
CHECKED: EN	08/26/2022	CHECKED: EN
		08/26/2022

INDIANA DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - US-6

HORIZONTAL SCALE	BRIDGE FILE
1"=10'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
	47 of 52
CONTRACT	PROJECT
B-42442	1900012

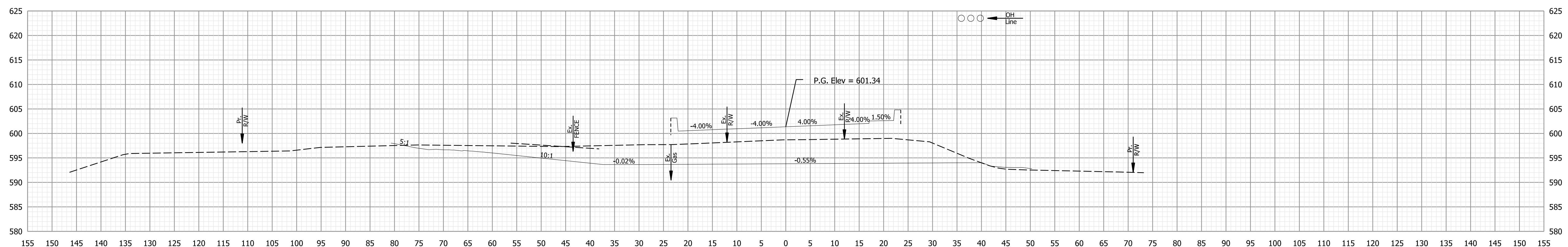


Ac = 0.0 SFT  
Vc = 0 CYS

Af = 0.0 SFT  
Vf = 0 CYS

Ab = 0.0 SFT  
Vb = 0 CYS

PAVING EXCEPTION 77+00



Ac = 0.0 SFT  
Vc = 0 CYS

Af = 0.0 SFT  
Vf = 0 CYS

Ab = 0.0 SFT  
Vb = 0 CYS

PAVING EXCEPTION 76+50

Note to Reviewer: Offset and depth information for the utilities shown will be coordinated throughout project development and the utility verification process.

**NOT FOR CONSTRUCTION**

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: MSM	08/26/2022	DRAWN: MSM
08/26/2022		08/26/2022
CHECKED: EN	08/26/2022	CHECKED: EN
		08/26/2022

INDIANA  
DEPARTMENT OF TRANSPORTATION

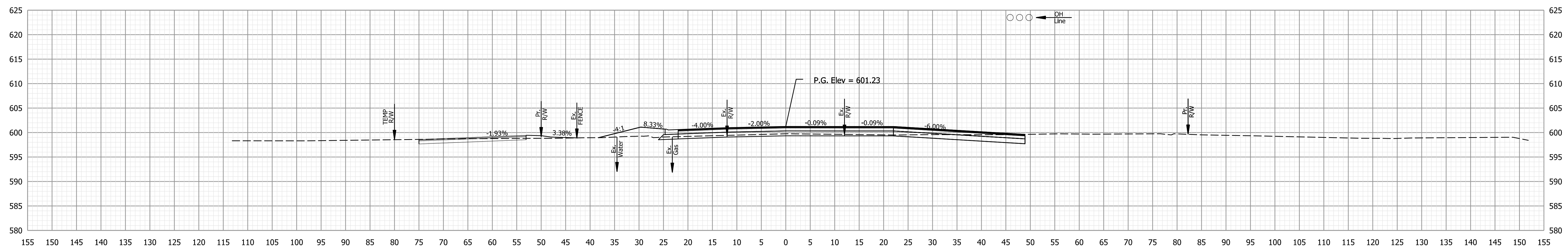
CROSS SECTIONS - US-6

HORIZONTAL SCALE	BRIDGE FILE
1"=10'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
	48 of 52
CONTRACT	PROJECT
B-42442	1900012

Plot: 8/26/2022 7:06:13 PM

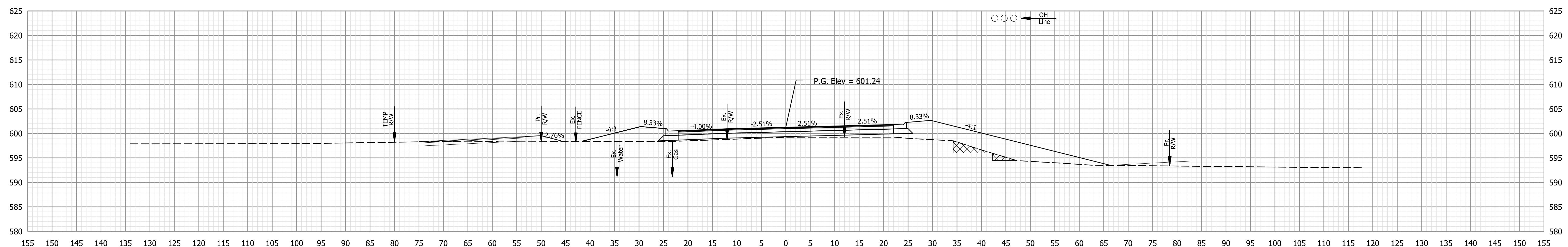
STA. 76+50 TO STA. 77+00





Ac = 63.8 SFT    Af = 0.0 SFT    Ab = 0.0 SFT  
 Vc = 59 CYS    Vf = 158 CYS    Vb = 0 CYS

78+00



Ac = 0.0 SFT    Af = 170.8 SFT    Ab = 13.8 SFT  
 Vc = 0 CYS    Vf = 158 CYS    Vb = 13 CYS

77+50

Note to Reviewer: Offset and depth information for the utilities shown will be coordinated throughout project development and the utility verification process.

Plot: 8/26/2022 7:06:13 PM

File: pw:\pwhdrscen01:HDR\_US\_Central\_01\Documents\248547\10290901\6.0\_CAD\_BIM\6.2.03\_CADD Sheets\Roadway\Sh CrossSections.dgn  
 Model: Default

**NOT FOR CONSTRUCTION**

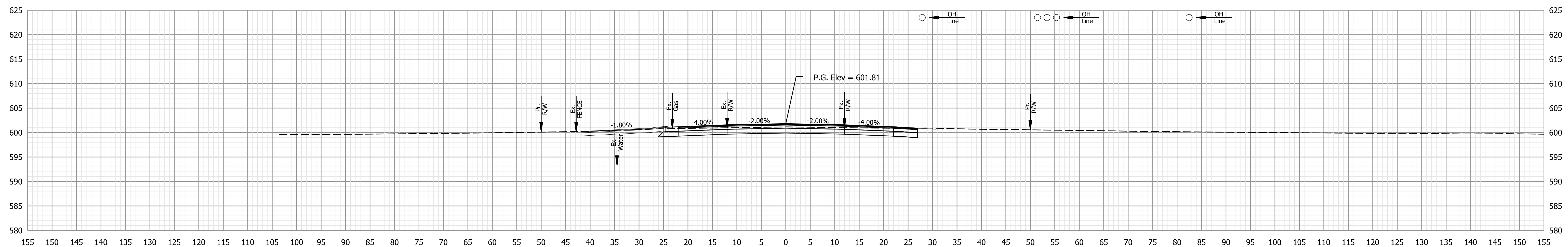
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: MSM	08/26/2022	DRAWN: MSM
CHECKED: EN	08/26/2022	CHECKED: EN

**INDIANA DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS - US-6**

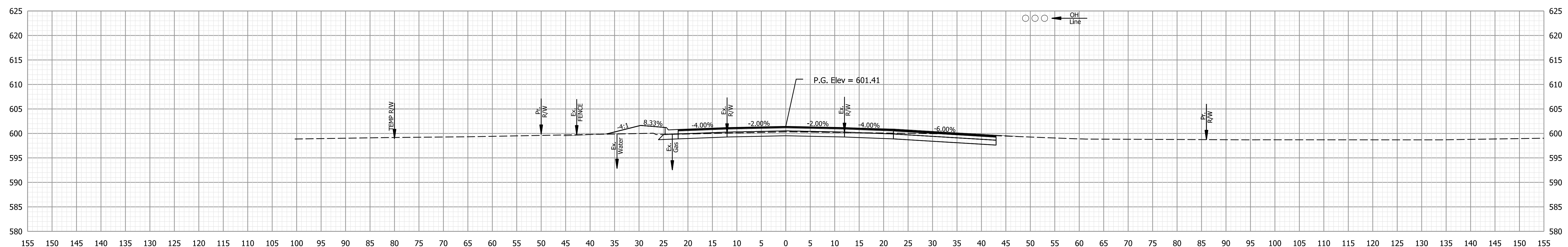
HORIZONTAL SCALE	BRIDGE FILE
1"=10'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
	49 of 52
CONTRACT	PROJECT
B-42442	1900012

STA. 77+50 TO STA. 78+00



Ac = 78.7 SFT    Af = 0.0 SFT    Ab = 0.0 SFT  
 Vc = 138 CYS    Vf = 12 CYS    Vb = 8 CYS

79+00



Ac = 70.9 SFT    Af = 13.4 SFT    Ab = 0.0 SFT  
 Vc = 125 CYS    Vf = 12 CYS    Vb = 0 CYS

78+50

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08/26/2022		08/26/2022
CHECKED: EN	08/26/2022	CHECKED: EN
		08/26/2022

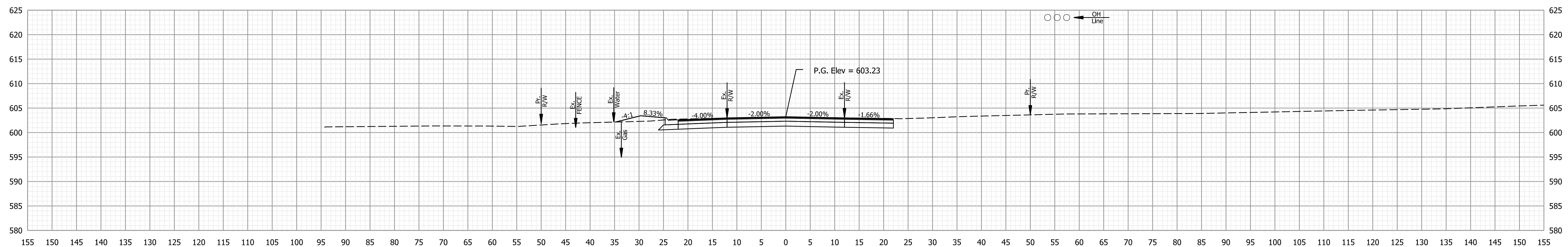
INDIANA  
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - US-6

HORIZONTAL SCALE	BRIDGE FILE
1"=10'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
SHEETS	
50 of 52	
CONTRACT	PROJECT
B-42442	1900012

Plot: 8/26/2022 7:06:13 PM

STA. 78+50 TO STA. 79+00

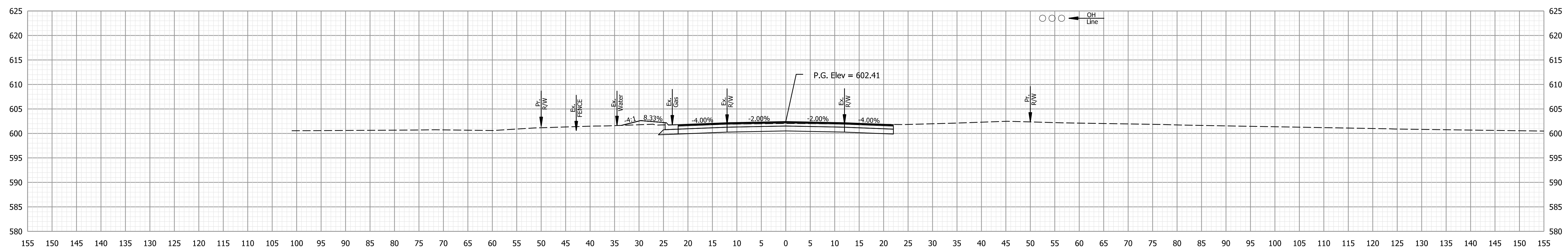


Ac = 82.4 SFT  
Vc = 143 CYS

Af = 7.1 SFT  
Vf = 11 CYS

Ab = 0.0 SFT  
Vb = 0 CYS

80+00



Ac = 71.8 SFT  
Vc = 139 CYS

Af = 4.8 SFT  
Vf = 4 CYS

Ab = 0.0 SFT  
Vb = 0 CYS

79+50

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08/26/2022		08/26/2022
CHECKED: EN	08/26/2022	CHECKED: EN
		08/26/2022

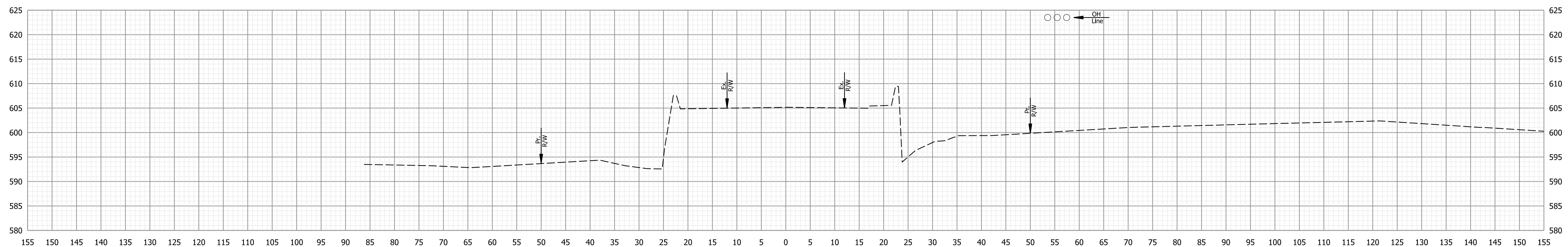
INDIANA DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - US-6

HORIZONTAL SCALE	BRIDGE FILE
1"=10'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
	SHEETS
	51 of 52
CONTRACT	PROJECT
B-42442	1900012

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STA. 79+50 TO STA. 80+00

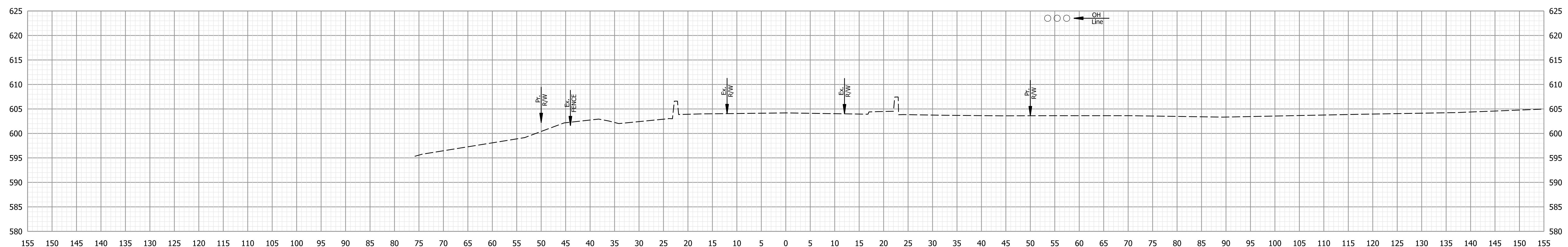


Ac = 0.0 SFT  
Vc = 0 CYS

Af = 0.0 SFT  
Vf = 0 CYS

Ab = 0.0 SFT  
Vb = 0 CYS

81+00



Ac = 0.0 SFT  
Vc = 76 CYS

Af = 0.0 SFT  
Vf = 7 CYS

Ab = 0.0 SFT  
Vb = 0 CYS

80+50

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**NOT FOR CONSTRUCTION**

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DESIGNED: MSM	08/26/2022	DRAWN: MSM
CHECKED: EN	08/26/2022	CHECKED: EN

INDIANA DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS - US-6

HORIZONTAL SCALE	BRIDGE FILE
1"=10'	(6)51-45-10466-B
VERTICAL SCALE	DESIGNATION
	1900012
SHEETS	
CONTRACT	PROJECT
B-42442	1900012

Plot: 8/26/2022 7:06:14 PM

STA. 80+50 TO STA. 81+00