

# Manatee County FLORIDA

## MANATEE COUNTY, FLORIDA ERIE ROAD - US 301 TO US 301 SOUTH-NORTH PHASE II 307-6082860

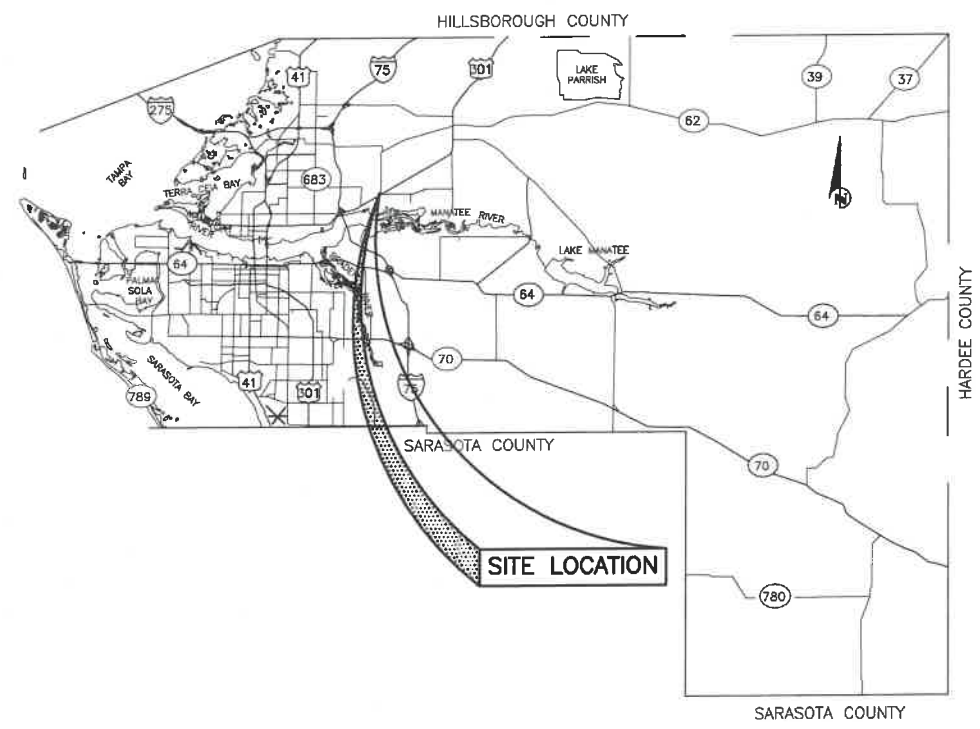
**BID SET**

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
11 X 17 COVER BID**

I:\Highway\_Engineering\ROADS\Erie\_Road\DWG\Phase II\11 X 17 Cover Bid\_17/4/2021 11:54 AM Ken Lothier, 1:1, ANSI full bleed B (11.00 x 17.00 inches)



DECEMBER 2020



NO.	INDEX OF SHEETS
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2	QUANTITY SHEET
3-4	GENERAL NOTES & LEGEND
5-6	TYPICAL SECTIONS
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83	EROSION CONTROL DETAILS
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SC-1-SC-2	SLAUGHTER CANAL PLAN & PROFILE AND CROSS SECTIONS
CD1-CD9	CEDAR DRAIN PLAN AND CROSS SECTIONS
S-1-S-12	EXISTING SURVEY

**PROJECT DESCRIPTION**

PROJECT CONSISTS OF WIDENING THE EXISTING ROAD FROM 22'± TO 24', ADDING TURN LANES, WIDENING THE EXISTING SHOULDERS AND RELOCATING EXISTING ROADSIDE DITCHES.

**GOVERNING DESIGN STANDARDS:**  
FLORIDA DEPARTMENT OF TRANSPORTATION, FY 2017-18 DESIGN STANDARDS eBOOK (DSeB) AND APPLICABLE DESIGN STANDARDS REVISIONS (DSRs) AT THE FOLLOWING WEBSITE:  
<https://www.fdot.gov/design/standardplans/current/default.shtm>

**GOVERNING STANDARD SPECIFICATIONS:**  
FLORIDA DEPARTMENT OF TRANSPORTATION, JULY 2017 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AT THE FOLLOWING WEBSITE:  
<http://www.fdot.gov/programmanagement/Implemented/SpecBooks>

GRIGORY BERIK  
Professional Engineer  
No. 76896  
STATE OF FLORIDA  
2021

Know what's below  
Call before you dig

NO.	REVISION DESCRIPTION	DATE
1	PER SWFMD COMMENTS	07/24/18

PROJECT #	307-6082860
SURVEY #	00-43133
SCALE	RGE 2,35/33,345/18E
DATE	N.T.S.
DESIGNED	04/2015
CHECKED	04/2015
DATE	04/2015
GRIGORY BERIK, P.E.	6896
FLORIDA	6896

Signature & Date

**SHEET 1**



PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES  
1022 26th Avenue East, Bradenton, FL 34208

**ERIE ROAD - US 301 TO US 301  
SOUTH-NORTH PHASE II  
QUANTITY SHEET**

LINE NO.	FDOT ITEM NO.	DESCRIPTION	EST. QTY	U/M
1.	101-1	MOBILIZATION	1.00	LS
2.	102-1	MAINTENANCE OF TRAFFIC	1.00	LS
<b>SUBTOTAL MOBILIZATION AND MOT</b>				
3.	104-10-3	SEDIMENT BARRIER	23,800	LF
4.	104-11	FLOATING TURBIDITY BARRIER	140	LF
5.	104-18	INLET PROTECTION SYSTEM	90	EA
6.	110-2-1	CLEARING & GRUBBING	19.3	AC
7.	110-7-1	MAILBOX, F&I SINGLE	24	EA
8.	120-1	REGULAR EXCAVATION	6,890	CY
9.	120-4	SUBSOIL EXCAVATION	200	CY
10.	120-5	CHANNEL EXCAVATION	4,990	CY
11.	120-6	EMBANKMENT (REGULAR)	11,740	CY
12.	145-MC	GEOSYNTHETIC REINFORCED SOIL SLOPE (PP5-Xtreme™ with Percussion Earth Anchors)	1,250	SY
13.	160-MC	12" TYPE B STABILIZATION (LBR 60)	20,360	SY
14.	285-701	4" OF OPTIONAL BASE GROUP 1	7,460	SY
15.	285-709	10" OF OPTIONAL BASE GROUP 9	9,170	SY
16.	327-70-16	MILLING EXIST ASPH PAVT, 0.5" AVG DEPTH	20,820	SY
17.	327-70-1	MILLING EXIST ASPH PAVT, 1" AVG DEPTH	3,810	SY
18.	334-MC	TYPE S-I ASPHALT CONCRETE (INCL TACK COAT)	4,910	TN
19.	337-MC	TYPE S-III ASPHALT CONCRETE (INCL TACK COAT)	3,110	TN
20.	339-1	MISCELLANEOUS ASPHALT PAVEMENT	11	TN
21.	400-MC	CONCRETE CLASS I (STEEL INCLUDED)	12.00	CY
22.	425-MC	DROP INLET (TRAFFIC BEARING)	2	EA
23.	425-MC	CURB INLET	7	EA
24.	425-1-451	INLETS, CURB, TYPE J-5, <10'	1	EA
25.	425-1-461	INLETS, CURB, TYPE J-6, <10'	1	EA
26.	425-1-531	INLETS, DT BOT, TYPE C MOD, BACK OF SIDEWALK <10'	5	EA
27.	425-1-533	INLETS, DT BOT, TYPE C MOD, BACK OF SIDEWALK J BOT. <10'	5	EA
28.	425-1-541	INLETS, DT BOT, TYPE D, <10'	3	EA
29.	425-1-543	INLETS, DT BOT, TYPE D, J BOT. <10'	7	EA
30.	425-1-551	INLETS, DT BOT, TYPE E, <10'	6	EA
31.	425-1-553	INLETS, DT BOT, TYPE E, J BOT. <10'	1	EA
32.	425-1-561	INLETS, DT BOT, TYPE F, <10'	2	EA
33.	425-1-563	INLETS, DT BOT, TYPE F, J BOT. <10'	2	EA
34.	425-1-581	INLETS, DT BOT, TYPE H MOD, <10'	1	EA
35.	425-2-91	MANHOLE, J-8, <10'	2	EA
36.	425-10	YARD DRAIN	3	EA
37.	430-174-115	PIPE STORM SEWER CULV (RCP)(15")	210	LF
38.	430-174-118	PIPE STORM SEWER CULV (RCP)(18")	1,477	LF
39.	430-174-124	PIPE STORM SEWER CULV (RCP)(24")	1,466	LF
40.	430-174-130	PIPE STORM SEWER CULV (RCP)(30")	373	LF
41.	430-174-136	PIPE STORM SEWER CULV (RCP)(36")	666	LF
42.	430-174-142	PIPE STORM SEWER CULV (RCP)(42")	1,339	LF
43.	430-174-148	PIPE STORM SEWER CULV (RCP)(48")	1,164	LF
44.	430-174-154	PIPE STORM SEWER CULV (RCP)(54")	1,071	LF
45.	430-174-215	PIPE STORM SEWER CULV (ERCP) (12"x18")	644	LF
46.	430-174-218	PIPE STORM SEWER CULV (ERCP) (14"x23")	39	LF
47.	430-174-242	PIPE STORM SEWER CULV (ERCP) (34"x53")	36	LF
48.	430-174-248	PIPE STORM SEWER CULV (ERCP) (38"x60")	210	LF
49.	430-175-115	PIPE STORM SEWER CULV (PVC)(15")	30	LF
50.	430-175-124	PIPE STORM SEWER CULV (RCP)(24")	130	LF
51.	430-175-136	PIPE STORM SEWER CULV (RCP)(36")	82	LF
52.	430-175-224	PIPE STORM SEWER CULV (ERCP) (19"x30")	85	LF
53.	430-982-125	MITERED END SECTION- RCP-ROUND, 18" CD	1	EA
54.	430-982-129	MITERED END SECTION- RCP-ROUND, 24" CD	3	EA
55.	430-982-138	MITERED END SECTION- RCP-ROUND, 36" CD	1	EA
56.	430-982-142	MITERED END SECTION- RCP-ROUND, 54" CD	1	EA
57.	430-982-629	MITERED END SECTION- RCP-ELLIPTICAL, 24" CD	1	EA
58.	430-982-640	MITERED END SECTION- RCP-ELLIPTICAL, 42" CD	1	EA
59.	430-984-123	MITERED END SECTION-RCP- ROUND, 15" SD	3	EA
60.	430-984-125	MITERED END SECTION-RCP- ROUND, 18" SD	4	EA
61.	430-984-623	MITERED END SECTION-RCP-ELLIPTICAL, 15" SD	23	EA
62.	430-984-625	MITERED END SECTION-RCP-ELLIPTICAL, 18" SD	3	EA
63.	515-1-2	PIPE HANDRAIL-GUIDERAIL ALUMINUM	1,044	LF
64.	520-1-10	TYPE F CURB & GUTTER	1,545	LF
65.	522-1	SIDEWALK CONCRETE 4"	8,030	SY
66.	522-2	SIDEWALK CONCRETE 6" THICK (CONC. DRIVEWAYS)	1,158	SY
67.	527-2	DETECTABLE WARNINGS	374	SF
68.	530-3-4	RIP RAP-RUBBLE	250	TN
69.	536-1-1	GUARDRAIL	100	LF
70.	550-MC	EXISTING FENCE TO BE REMOVED AND RELOCATED	2,050	LF
71.	570-1-2	PERFORMANCE TURF (BAHIA SOD)	58,730.00	SY
72.	POND-MC	FP COMP POND #1 CONSTRUCTION	1.00	LS

NO.	REVISION DESCRIPTION	BY	DATE

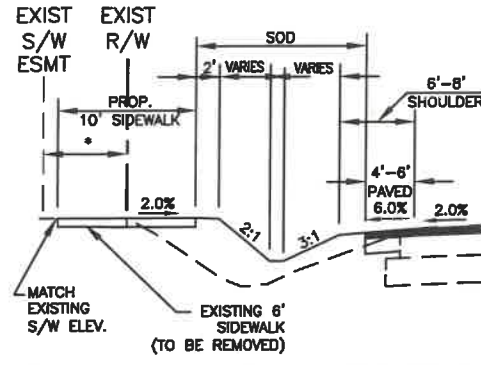
PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWP./RGE	2,35/33,34S/18E
SCALE	1"=XX'
DESIGNED	GB 04/2015
CHECKED	YF 10/2015
DATE	2013
GRIGORY BERIKMAN, P.E. FLORIDA P.E. # 76896 Signature & Date	



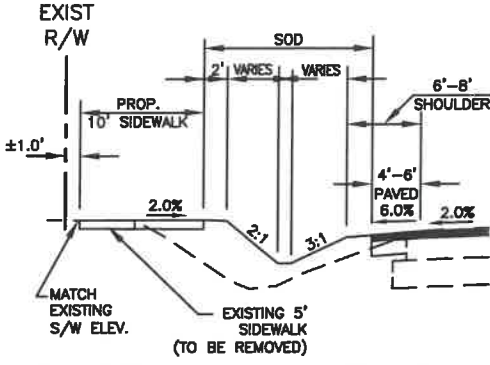
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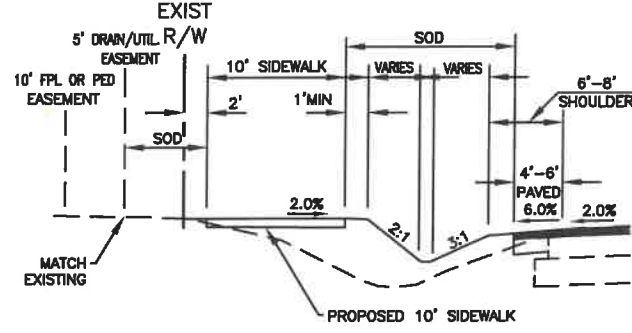




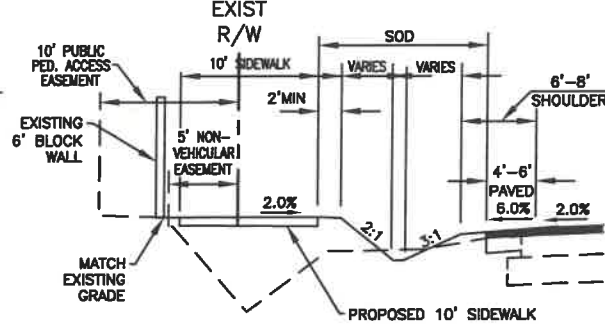
PROP. SIDEWALK DETAIL - ERIE ROAD  
FROM STA: 315+78.22 TO STA: 340+75.81 (WEST SIDE)  
6' SOUTH OF DESOTO DRIVE  
7' NORTH OF DESOTO DRIVE



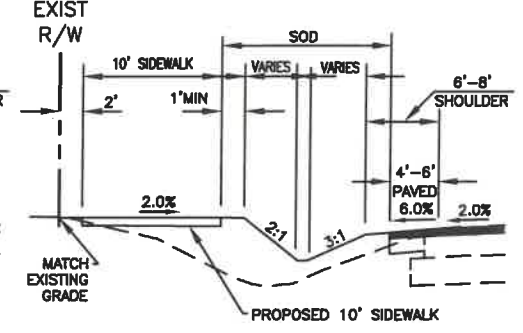
PROP. SIDEWALK DETAIL - ERIE ROAD  
FROM STA: 340+75.81 TO STA: 354+13.47 (WEST SIDE)



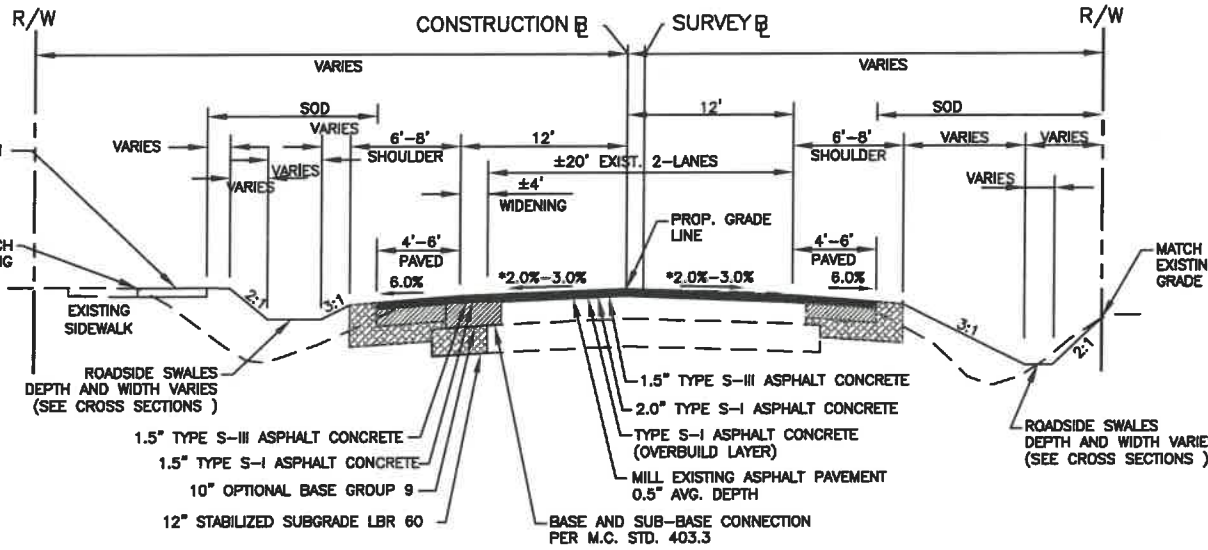
PROP. SIDEWALK DETAIL - ERIE ROAD  
FROM STA: 354+14.35 TO STA: 375+40± (WEST SIDE)



PROP. SIDEWALK DETAIL - ERIE ROAD  
FROM STA: 376+13± TO STA: 381+33.00 (WEST SIDE)



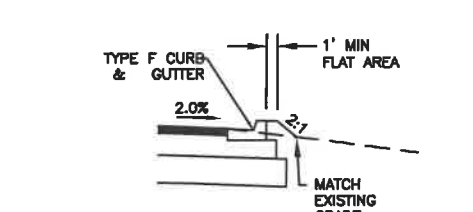
PROP. SIDEWALK DETAIL - ERIE ROAD  
FROM STA: 387+50.00 TO STA: 395+93.25 (WEST SIDE)



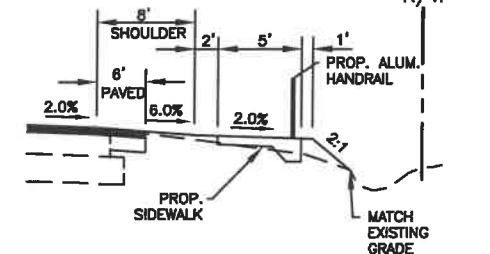
TYPICAL SECTION - ERIE ROAD (WEST SIDE WIDENING)

\* FROM STA. 324+00.00 TO STA. 337+00.00 (3% LT. and RT. sides)  
FROM STA. 337+46.80 TO STA. 344+50.00 (3% LT. and 2% RT. sides)  
FROM STA. 345+00.00 TO STA. 353+50.00 (2% LT. and RT. sides)  
FROM STA. 354+00.00 TO STA. 354+98.02 (3% LT. and RT. sides)  
FROM STA. 384+36.79 TO STA. 395+93.25 (2% LT. and RT. sides)  
NOTE: 1. FOR EXACT SHOULDER WIDTH SEE PLAN AND PROFILE SHEETS  
2. FOR SHOULDER PAVEMENT SEE PROP. SHOULDER DETAIL

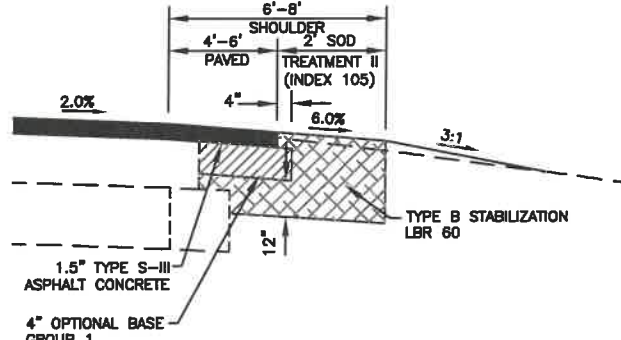
**TRAFFIC DATA:**  
DESIGN SPEED = 40 MPH  
POSTED SPEED = 40 MPH



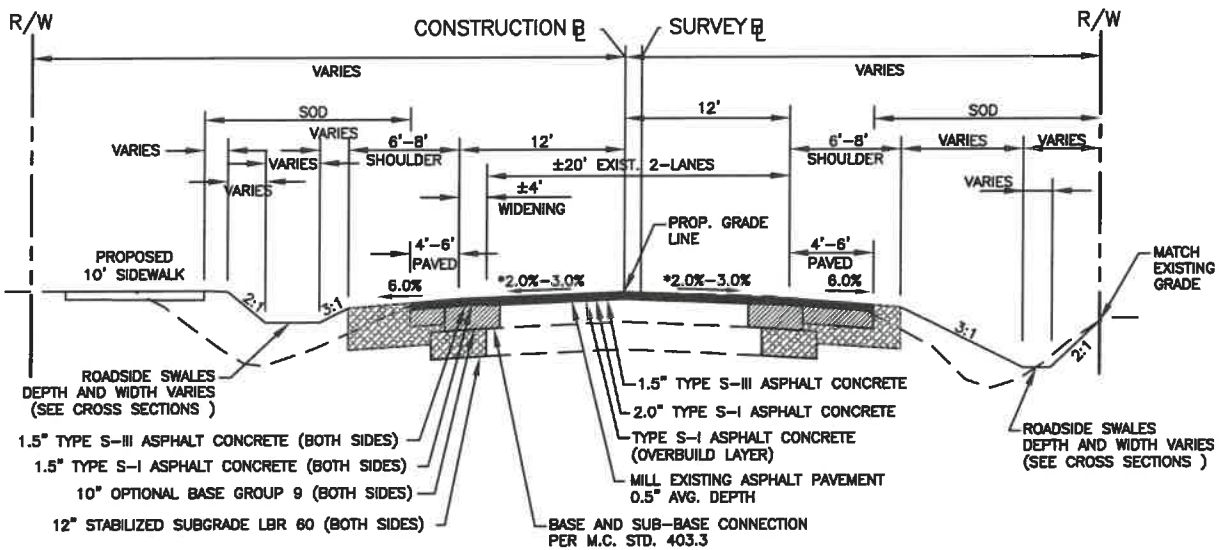
SIDE STREET CURB RETURN DETAIL



PROP. SIDEWALK DETAIL - ERIE ROAD  
FROM STA: 332+33.86 TO STA: 336+60.10 (EAST SIDE)



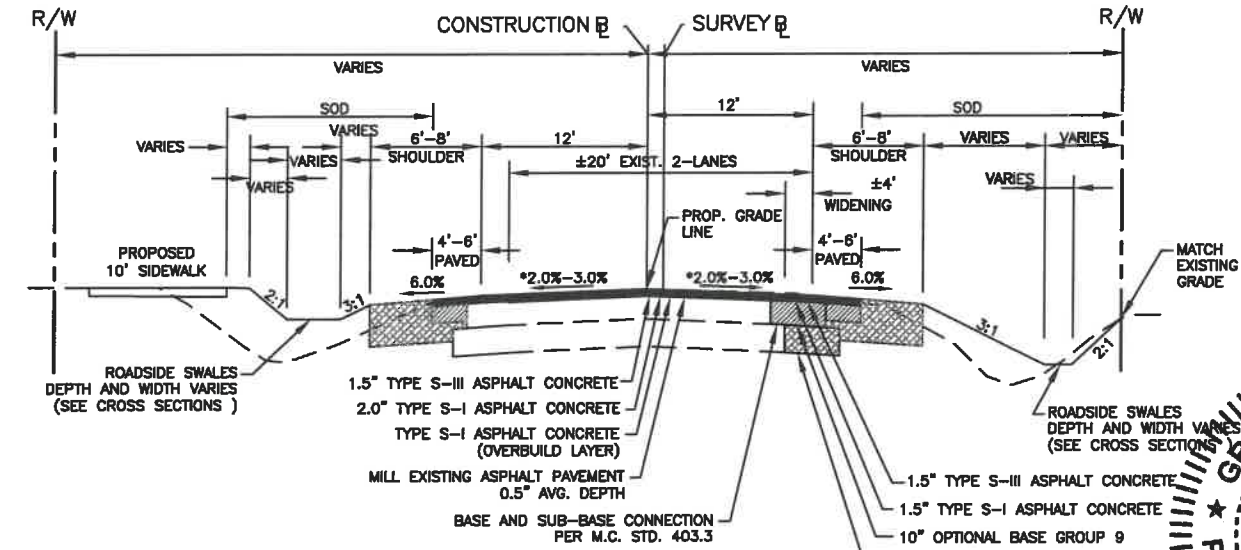
PROP. SHOULDER DETAIL - ERIE ROAD



TYPICAL SECTION - ERIE ROAD (BOTH SIDE WIDENING)

\* FROM STA. 354+98.02 TO STA. 363+48.30 (3% LT. and RT. sides)  
FROM STA. 372+17.16 TO STA. 379+50.61 (2% LT. and RT. sides)  
FROM STA. 383+96.18 TO STA. 384+36.79 (2% LT. and RT. sides)

NOTE: 1. FOR EXACT SHOULDER WIDTH SEE PLAN AND PROFILE SHEETS  
2. FOR SHOULDER PAVEMENT SEE PROP. SHOULDER DETAIL

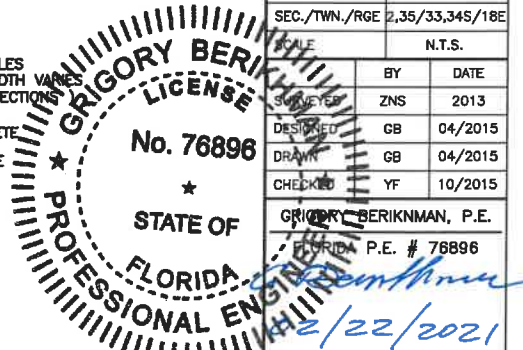


TYPICAL SECTION - ERIE ROAD (EAST SIDE WIDENING)

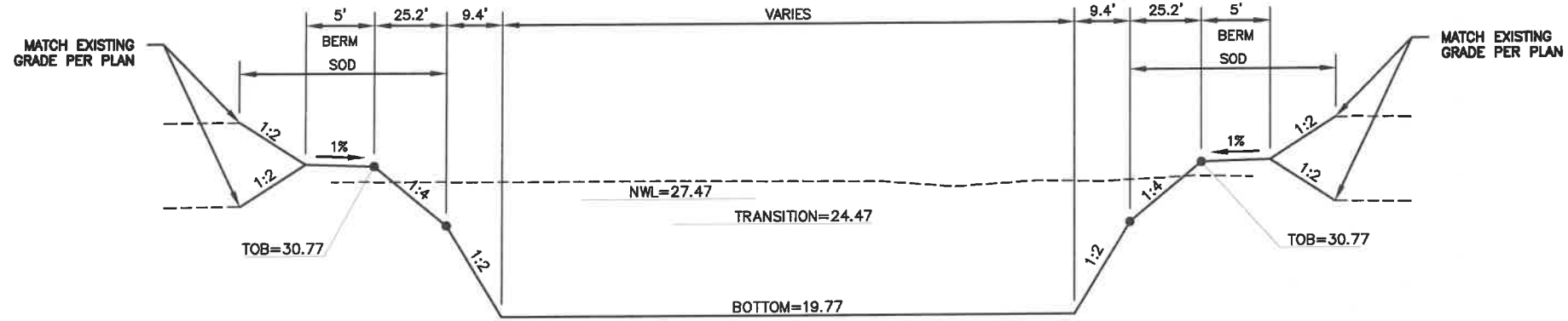
\* FROM STA. 363+48.30 TO STA. 372+17.16 (3% LT. and RT. sides)  
FROM STA. 379+50.61 TO STA. 383+96.18 (2% LT. and RT. sides)

NOTE: 1. FOR EXACT SHOULDER WIDTH SEE PLAN AND PROFILE SHEETS  
2. FOR SHOULDER PAVEMENT SEE PROP. SHOULDER DETAIL

NO.	REVISION DESCRIPTION	BY	DATE
PROJECT #	307-6082860		
SURVEY #	00-43133		
SEC./TWN./RGE	2,35/33,345/18E		
DATE	N.T.S.		
DATE		ZNS	2013
DATE		GB	04/2015
DATE		GB	04/2015
DATE		YF	10/2015
DATE		GRIGORY BERIKNMAN, P.E.	
DATE		P.E. # 76896	
Signature & Date			
SHEET 5			



I:\Highway Engineering\ROADS\Erie Road\DWG\Phase II\DWG\Erie TYP SECTION\Rev031517.dwg,TYP SECTION, 2/22/2021, 2:50 PM, Ken Lashier, 1:1, 11x17



TYPICAL SECTION F.P. COMP POND 1

N.T.S.

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
TYPICAL SECTIONS**

NO.	REVISION DESCRIPTION	BY	DATE

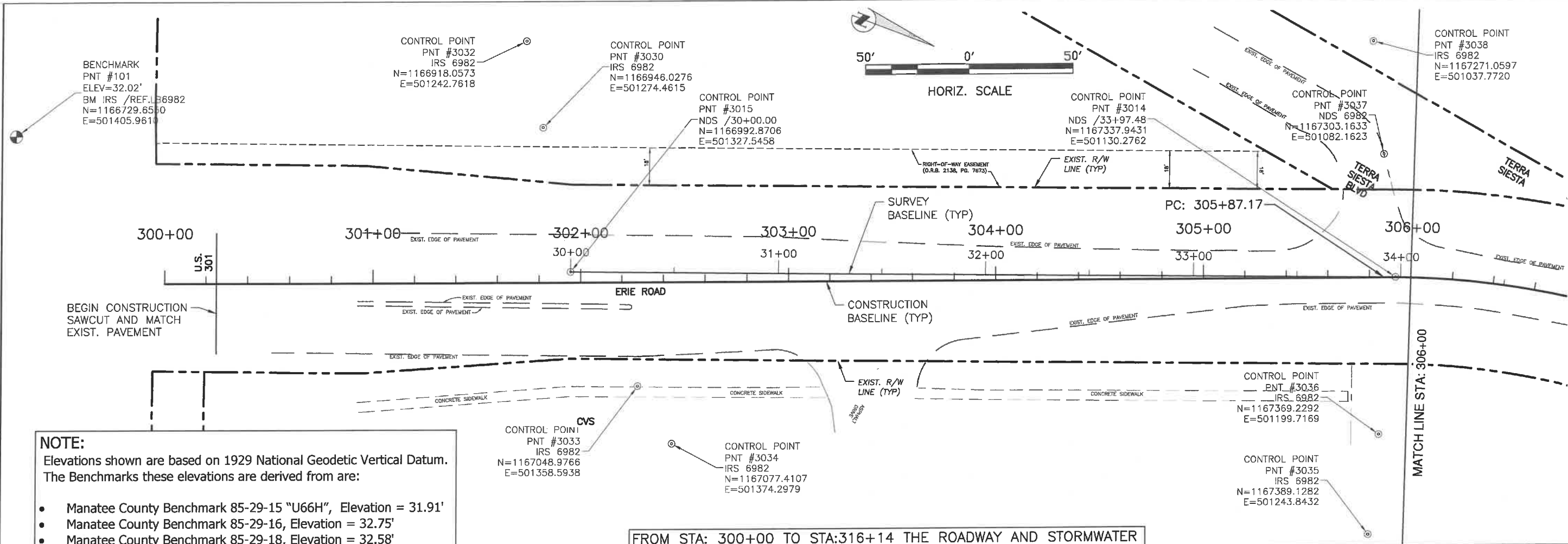
PROJECT # 307-6082860  
SURVEY # 00-43133  
SEC./TWN./RGE 2,35/33,34S/18E  
N.T.S.

BY	DATE
MS	2013
MS	04/2015
MS	04/2015
YF	10/2015

**GRIGORY BERKINMAN**  
LICENSED PROFESSIONAL ENGINEER  
No. 76896  
STATE OF FLORIDA  
GRIGORY BERKINMAN, P.E.  
No. 76896  
Signature & Date  
2021

H:\Highway Engineering\ROADS\Erie Road\DWG\Phase II\DWG\Erie\_Typ\_SECTION.dwg; TYP\_SECTION (2).1/4.2021 11:55 AM Ken Lamber, 1:1, ANSI full bleed B (11.00 x 17.00 inches)

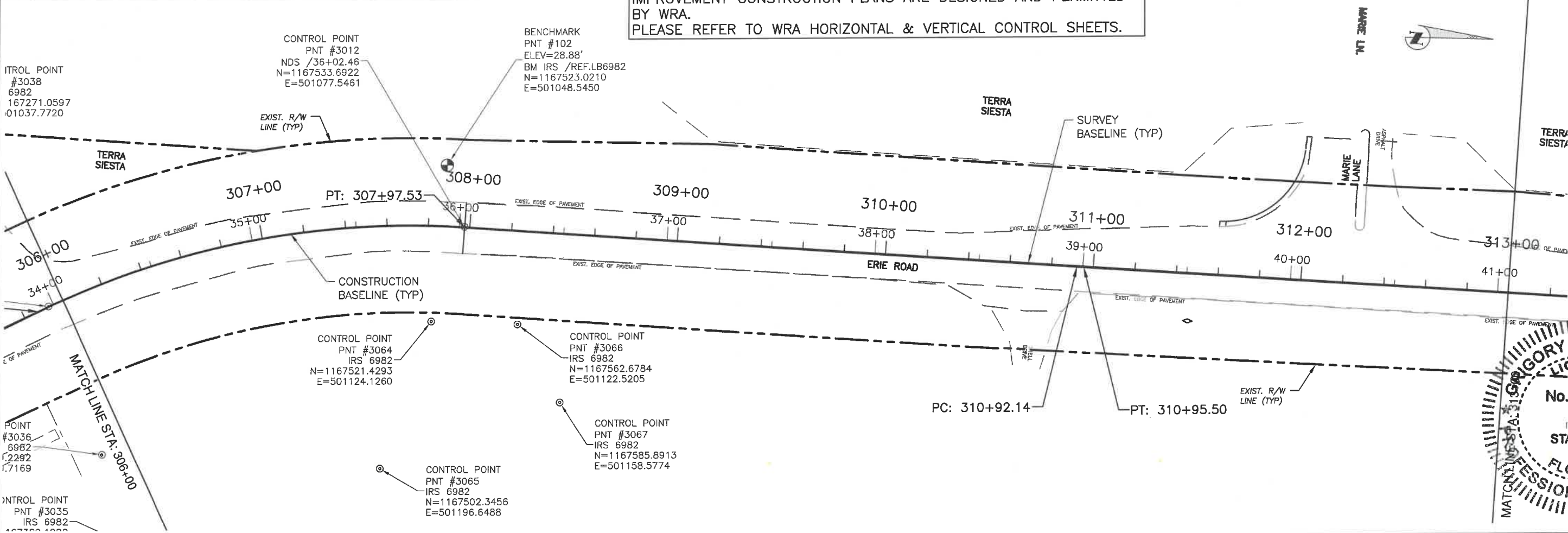
**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
HORIZONTAL & VERTICAL CONTROL**



**NOTE:**  
Elevations shown are based on 1929 National Geodetic Vertical Datum. The Benchmarks these elevations are derived from are:

- Manatee County Benchmark 85-29-15 "U66H", Elevation = 31.91'
- Manatee County Benchmark 85-29-16, Elevation = 32.75'
- Manatee County Benchmark 85-29-18, Elevation = 32.58'

FROM STA: 300+00 TO STA:316+14 THE ROADWAY AND STORMWATER IMPROVEMENT CONSTRUCTION PLANS ARE DESIGNED AND PERMITTED BY WRA. PLEASE REFER TO WRA HORIZONTAL & VERTICAL CONTROL SHEETS.

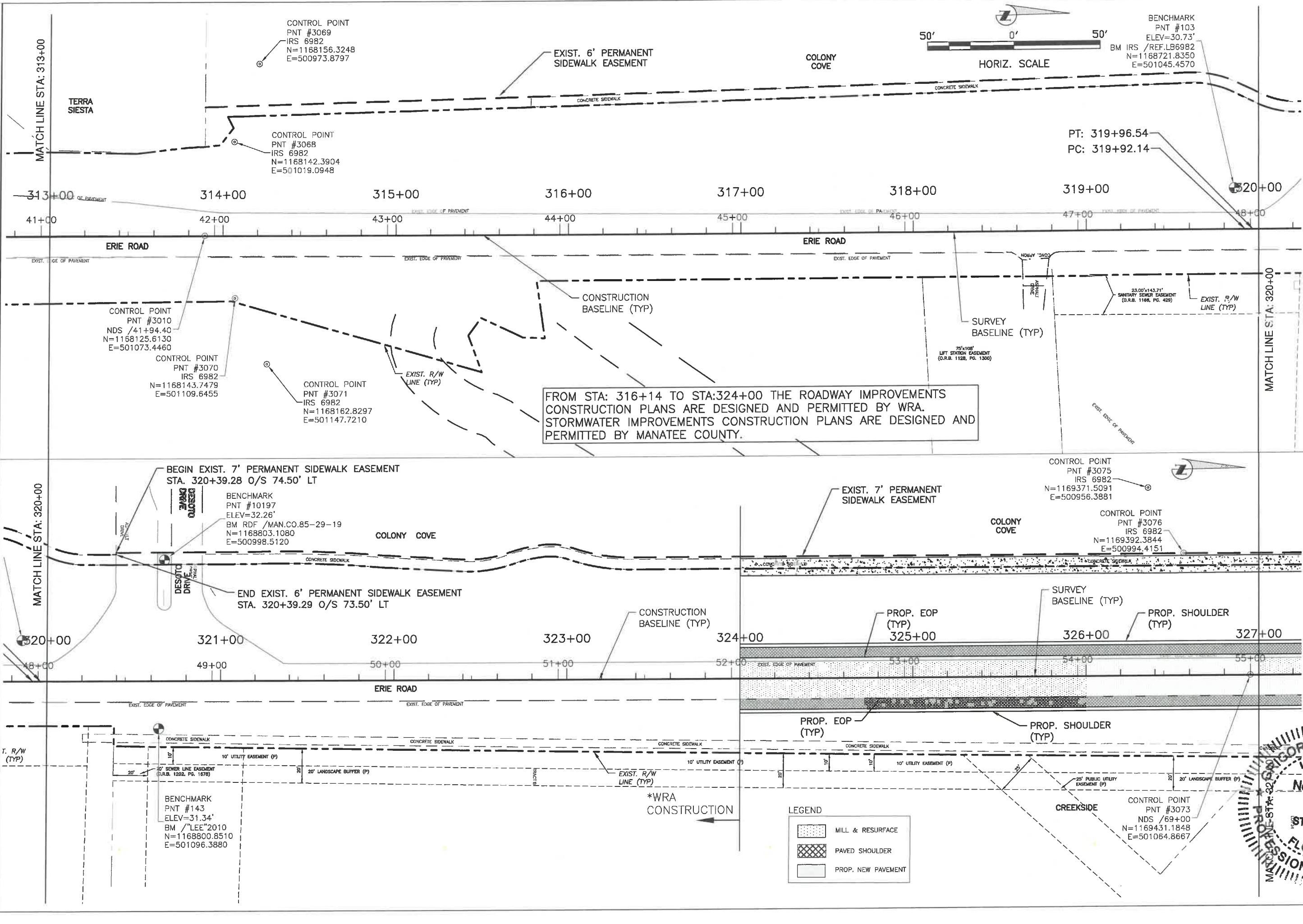


NO.	DATE	BY	REVISION DESCRIPTION

PROJECT #	307-5082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	1"=50'
DATE	2013
DESIGNED	04/2015
DRAWN	04/2015
CHECKED	0/2015
ENGINEER	GRIGORY BERIKHMAN, P.E.
STATE OF FLORIDA	Professional Engineer No. 76896
SIGNATURE & DATE	<i>[Signature]</i> 2021

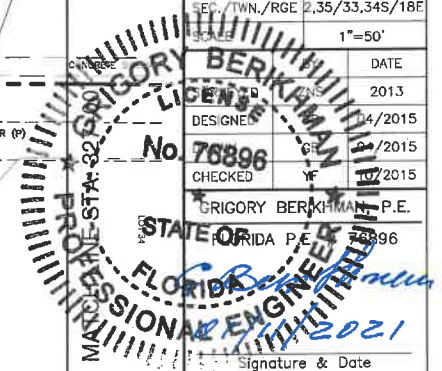
**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
HORIZONTAL & VERTICAL CONTROL**



NO.	REVISION DESCRIPTION	BY	DATE

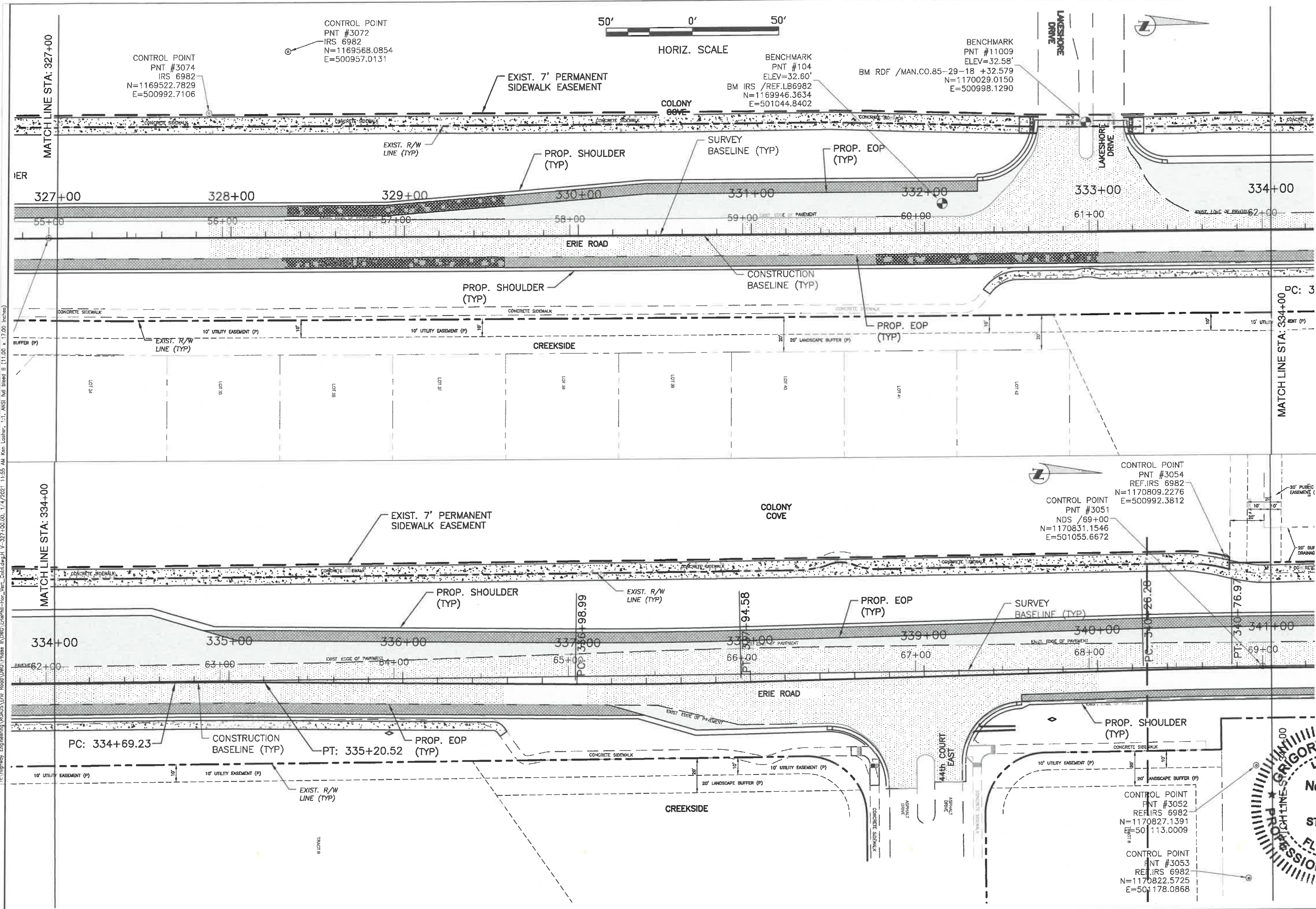
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SURVEY #	00-43133
SEC. /TWN./RGE	2,35/33,34S/18E
SCALE	1"=50'
DATE	2013
DESIGNED	4/2015
CHECKED	6/2015
DATE	10/2015
GRIGORY BERKHAMAN	P.E.
STATE OF FLORIDA	P.E. # 3996
Signature & Date	



I:\Highway Engineering\ROADS\Erie Road\DWG\Phase II\DWG\ErieRoad-US301-Cont.dwg, H:\13-03-00-00\_1-1-2015 AM Ken Leathers, 1:1, ANSI full bleed B (11.00 x 17.00 inches)



**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
HORIZONTAL & VERTICAL CONTROL**



NO.	REVISION DESCRIPTION	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SCALE	1"=50'
DATE	2013
DESIGNED	2015
CHECKED	2015
DATE	2015

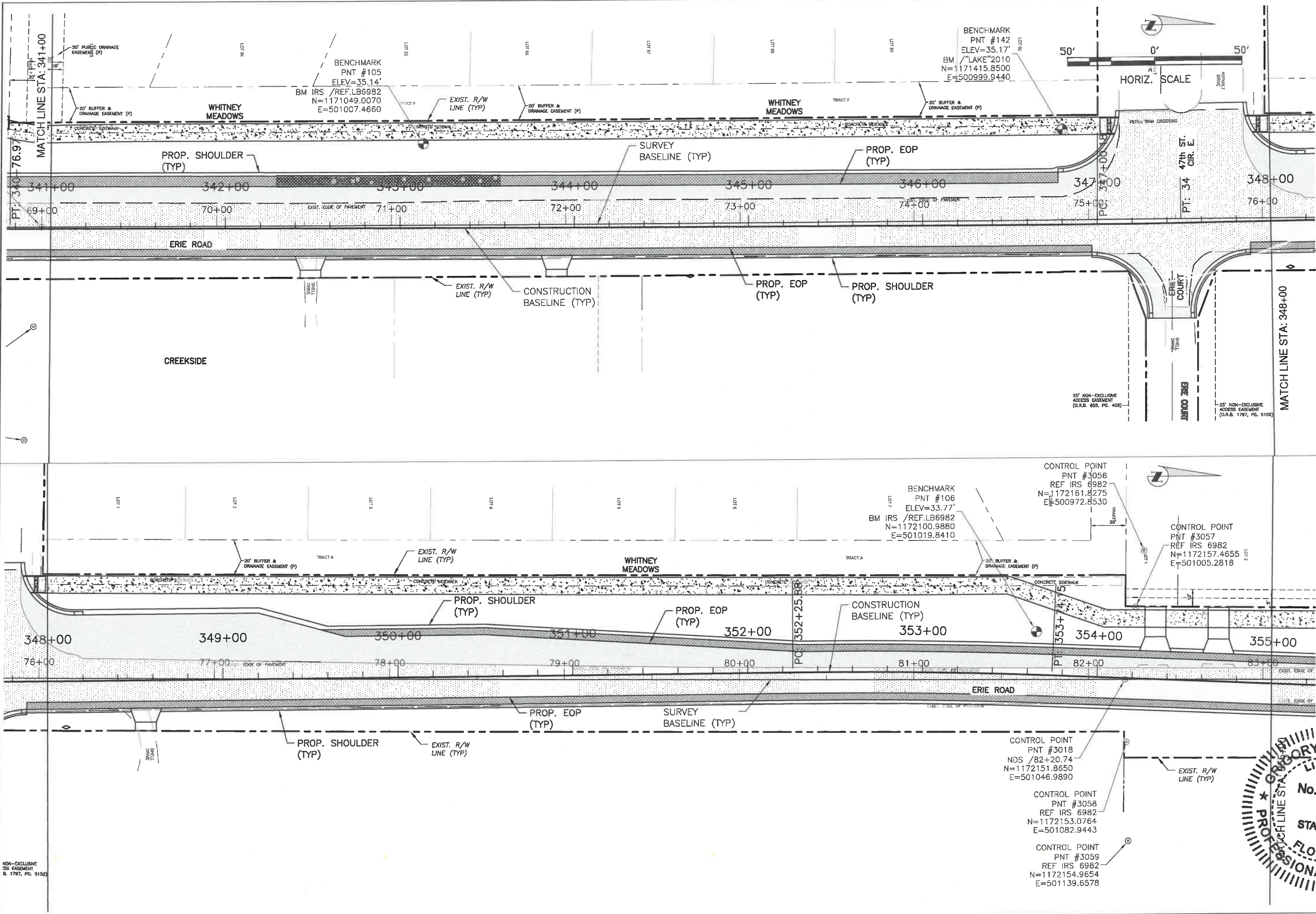
CONTROL POINT PNT #3052 REF. IRS 6982 N=1170827.1391 E=50113.0009	CONTROL POINT PNT #3053 REF. IRS 6982 N=1170822.5725 E=501178.0868
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GRIGORY BERKHMANN  
PROFESSIONAL ENGINEER  
FLORIDA P.E. # 13896  
2021

H:\Highway\_Engineering\ROADS\Erie\_Road\DWG\Phase II\DWG\_EriePH2-1or\_Ver\_Ctrl.dwg, H V-327+00.00, 1/4/2021, 11:55 AM Ken Lushier, 1:1, ANSI full bleed B (11.00 x 17.00 inches)

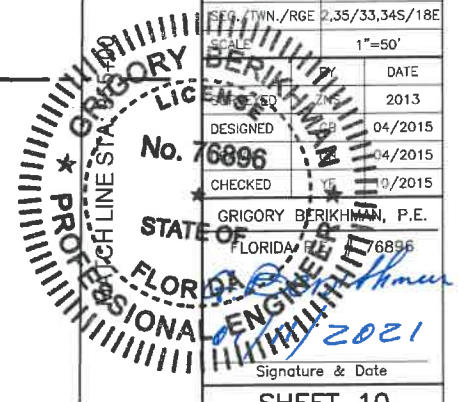
**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
HORIZONTAL & VERTICAL CONTROL**



NO.	DATE	BY	REVISION DESCRIPTION

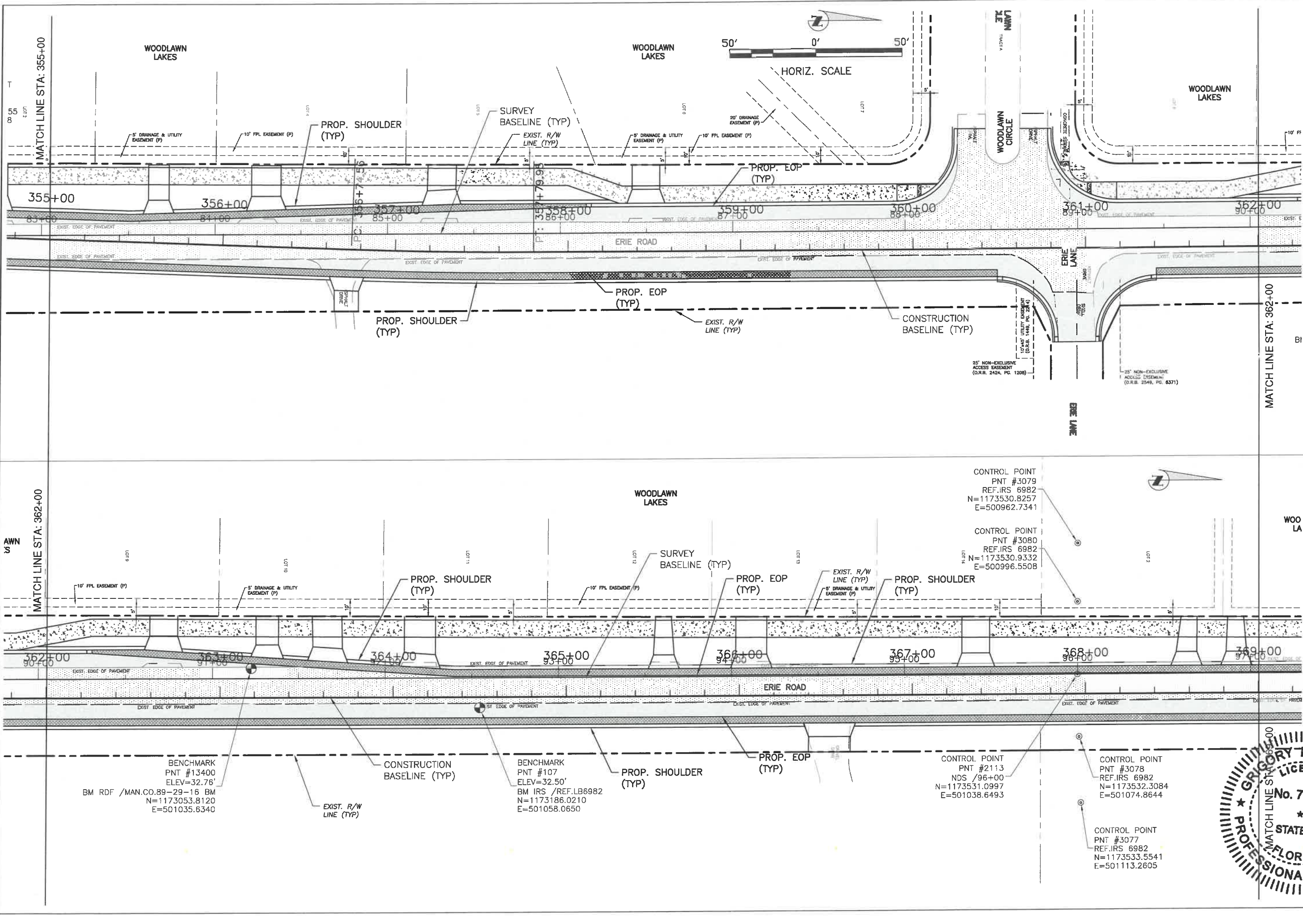
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SURVEY #	00-43133
SCALE	TYP./RGE 2,35/33,345/18E
DATE	2013
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CHECKED	04/2015
GRIGORY BERIKHMAN, P.E.	FLORIDA 68896
Signature & Date	<i>[Signature]</i> 2021



H:\Highway Engineering\ROADS\Erie Road\DWG\Phase II\US301-Phase II-South-North-Engineering-H-341+00.00\_7/4/2021 11:36 AM Ken Lasher, L.S., ANSI full bleed B (11.00 x 17.00 inches)

NON-EXCLUSIVE  
EASEMENT  
B. 1797, PG. 5152

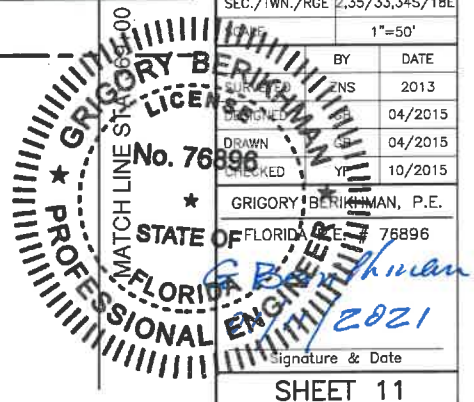
**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
HORIZONTAL & VERTICAL CONTROL**



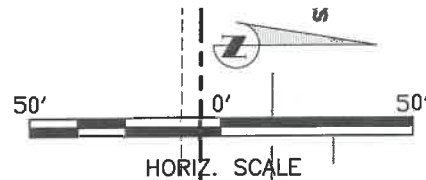
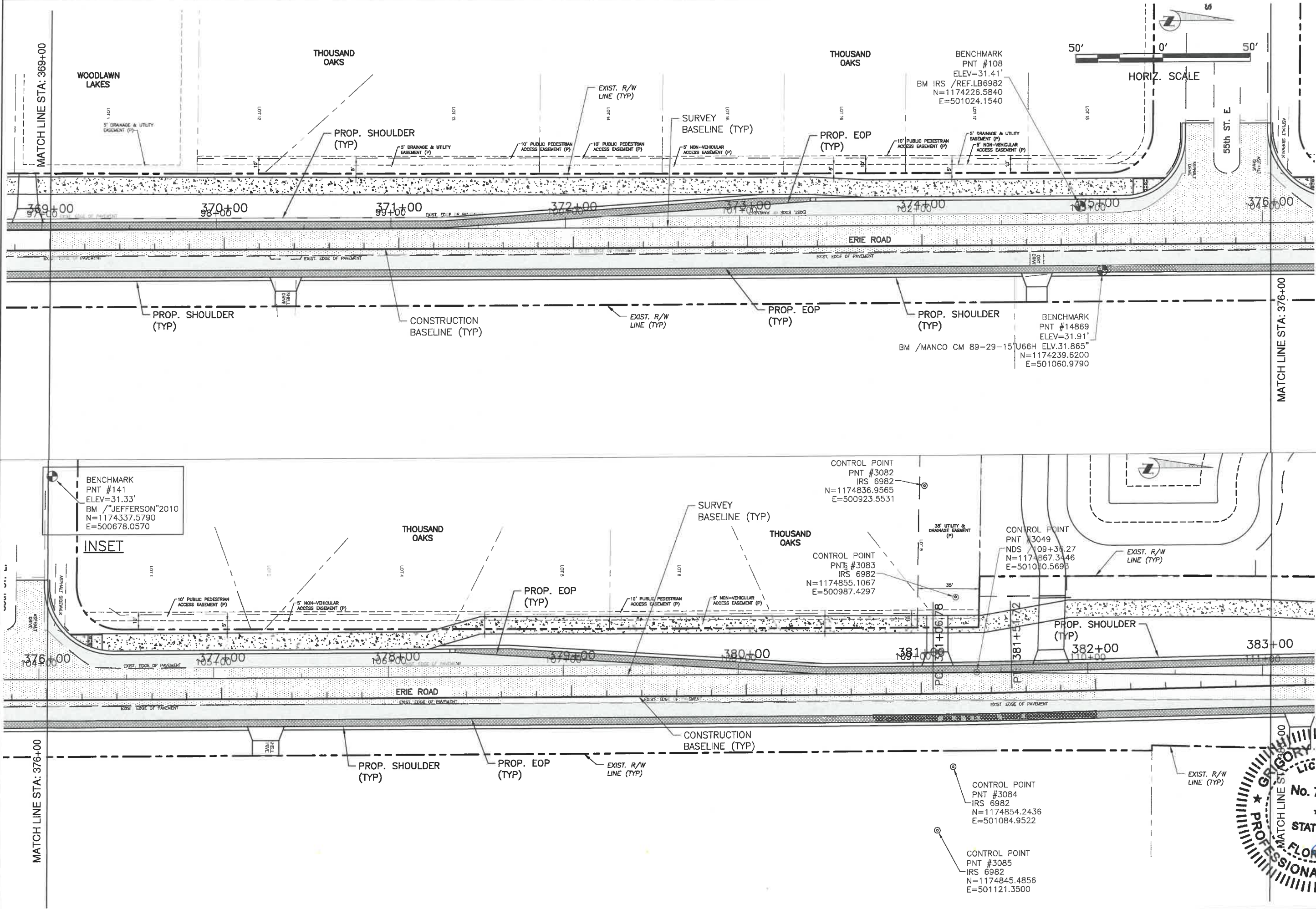
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	1"=50'
BY	
DATE	
DRAWN	
CHECKED	
DATE	
PROJECT ENGINEER	GRIGORY BERIKHMAN, P.E.
PROJECT NO.	76896
DATE	2021
SIGNATURE & DATE	



**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
HORIZONTAL & VERTICAL CONTROL**



**BENCHMARK**  
PNT #141  
ELEV=31.33'  
BM "/>JEFFERSON"2010  
N=1174337.5790  
E=500678.0570

**INSET**

**CONTROL POINT**  
PNT #3082  
IRS 6982  
N=1174836.9565  
E=500923.5531

**CONTROL POINT**  
PNT #3083  
IRS 6982  
N=1174855.1067  
E=500987.4297

**CONTROL POINT**  
PNT #3049  
NDS 109+34.27  
N=1174867.3446  
E=501010.5693

**CONTROL POINT**  
PNT #3084  
IRS 6982  
N=1174854.2436  
E=501084.9522

**CONTROL POINT**  
PNT #3085  
IRS 6982  
N=1174845.4856  
E=501121.3500

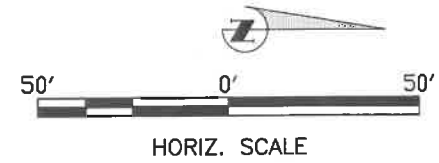
**GRIGORY BERKEMAN**  
No. 76896  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
2021

NO.	REVISION DESCRIPTION	BY	DATE

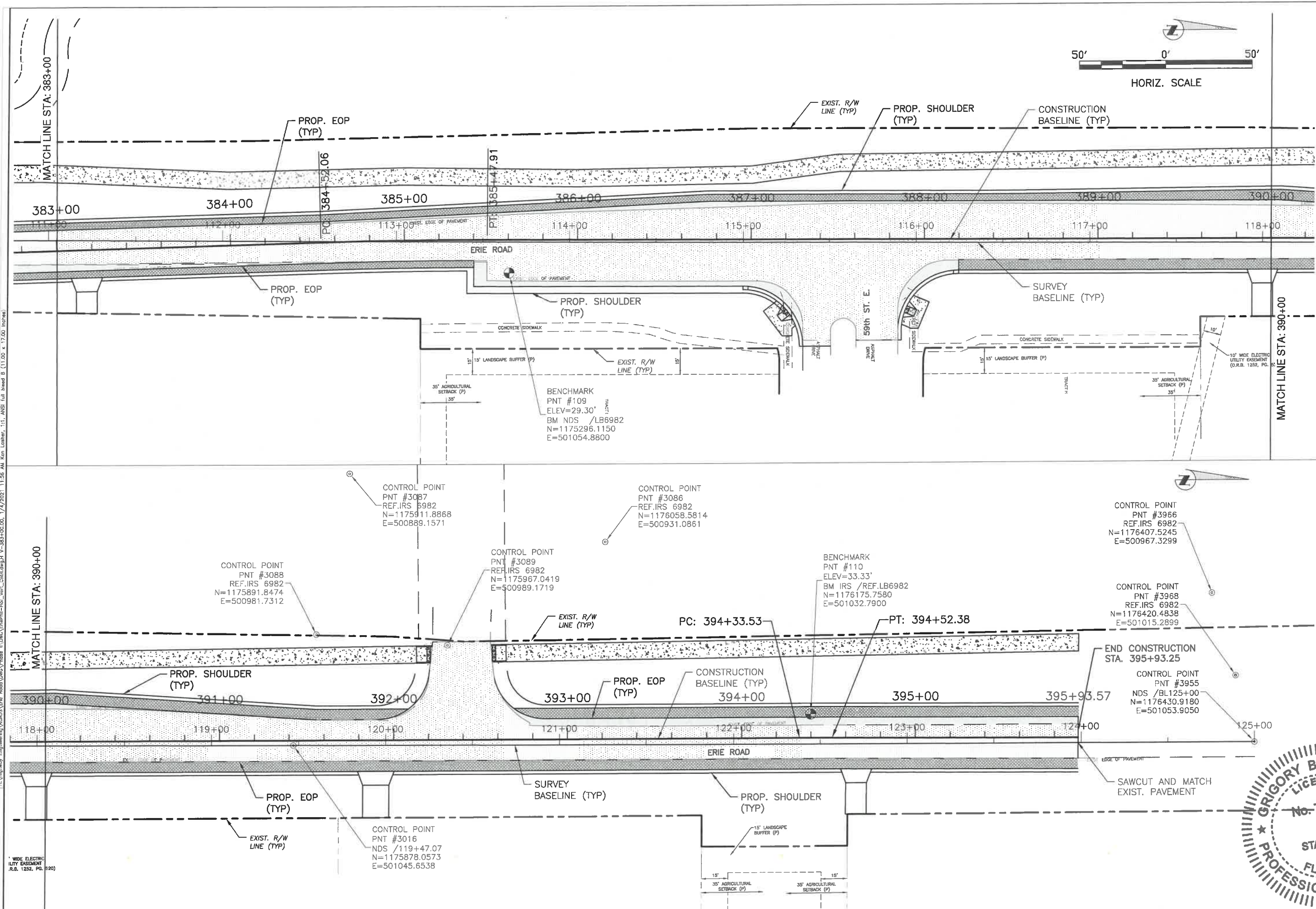
  

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	1"=50'
DESIGNED BY	DATE
DRAWN BY	2013
CHECKED BY	04/2015
APPROVED BY	04/2015
CHECKED BY	10/2015
GRIGORY BERKEMAN, P.E.	No. 76896
STATE OF FLORIDA	No. 76896
PROFESSIONAL ENGINEER	2021
Signature & Date	

H:\Highways\Engineering\ROADS\ERIE Road\DWG\Phase II\DWG\ERIE\_Hor\_Vert\_Control.dwg, 1/4/2021 11:56 AM Ken Loehrer, 1:1, ANSI (full bleed B 11.00 x 17.00 inches)



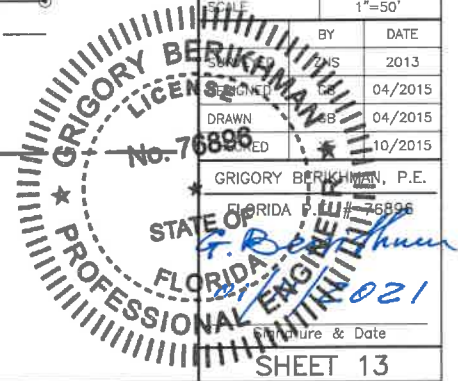
**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
HORIZONTAL & VERTICAL CONTROL**



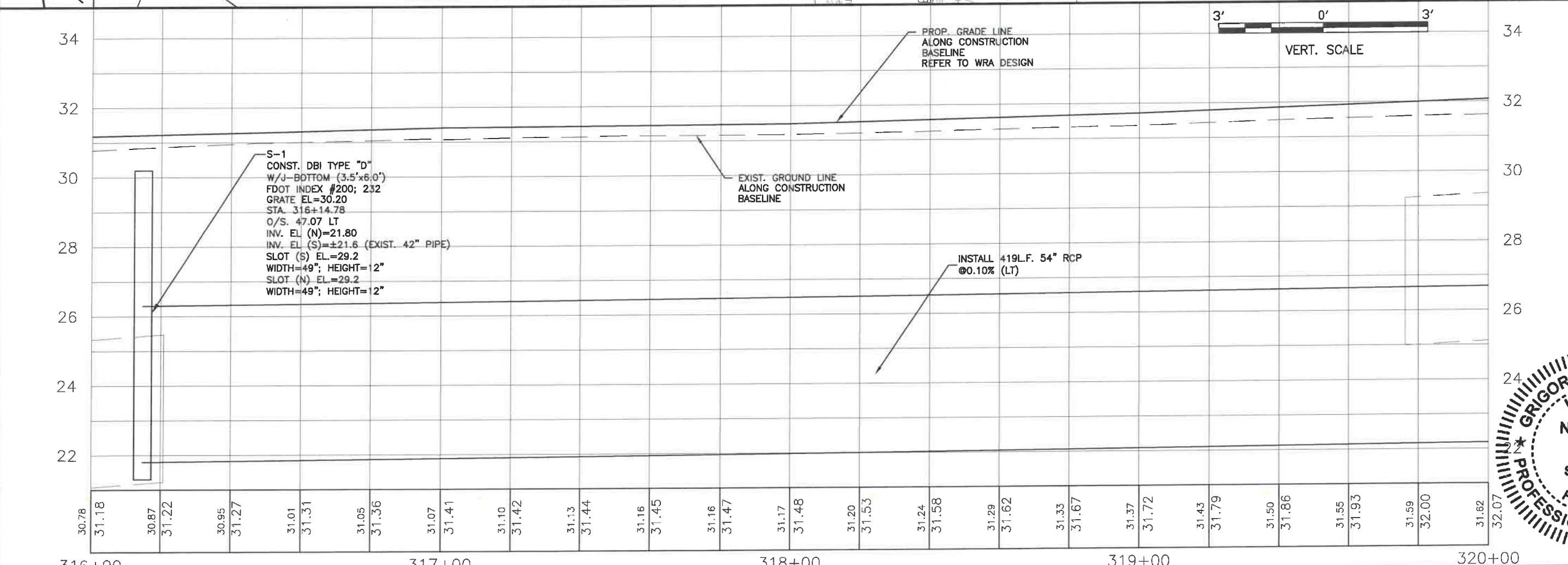
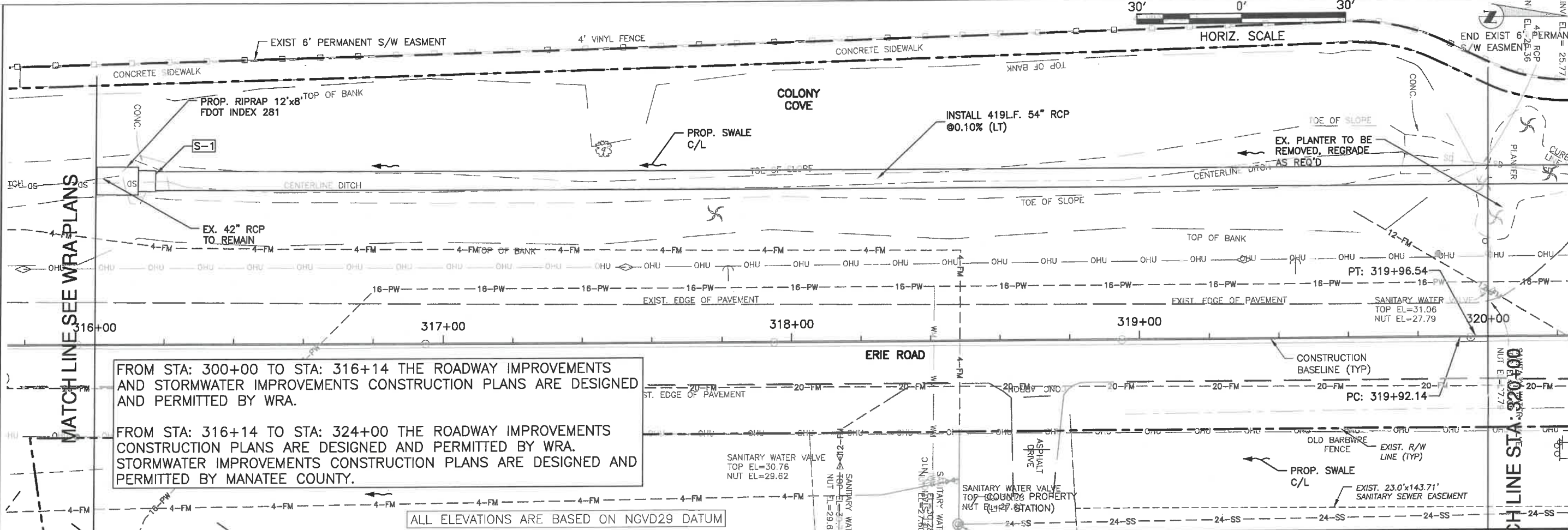
NO.	REVISION DESCRIPTION	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	1"=50'
DRAWN	BY DATE

GRIGORY BERIKHMAN, P.E.  
FLORIDA PROFESSIONAL ENGINEER  
No. 76896  
Signature & Date







H:\Highway Engineering\ROADS\Eric Road\DWG\Phase II\DWG\Grigory-Plan-Prof-CB.dwg PLAN AND PROFILE STA. 316+00 TO 320+00, 7/4/2021 11:37 AM Ken Lanier, I.T., ANSI full bleed B (11.00 x 17.00 inches)

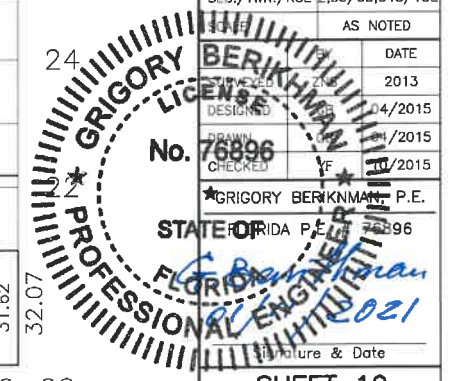
**ERIE ROAD- US301 TO US 301**  
**SOUTH-NORTH PHASE II**  
**PLAN AND PROFILE STA. 316+00 TO 320+00**

NO.	REVISION DESCRIPTION	DATE

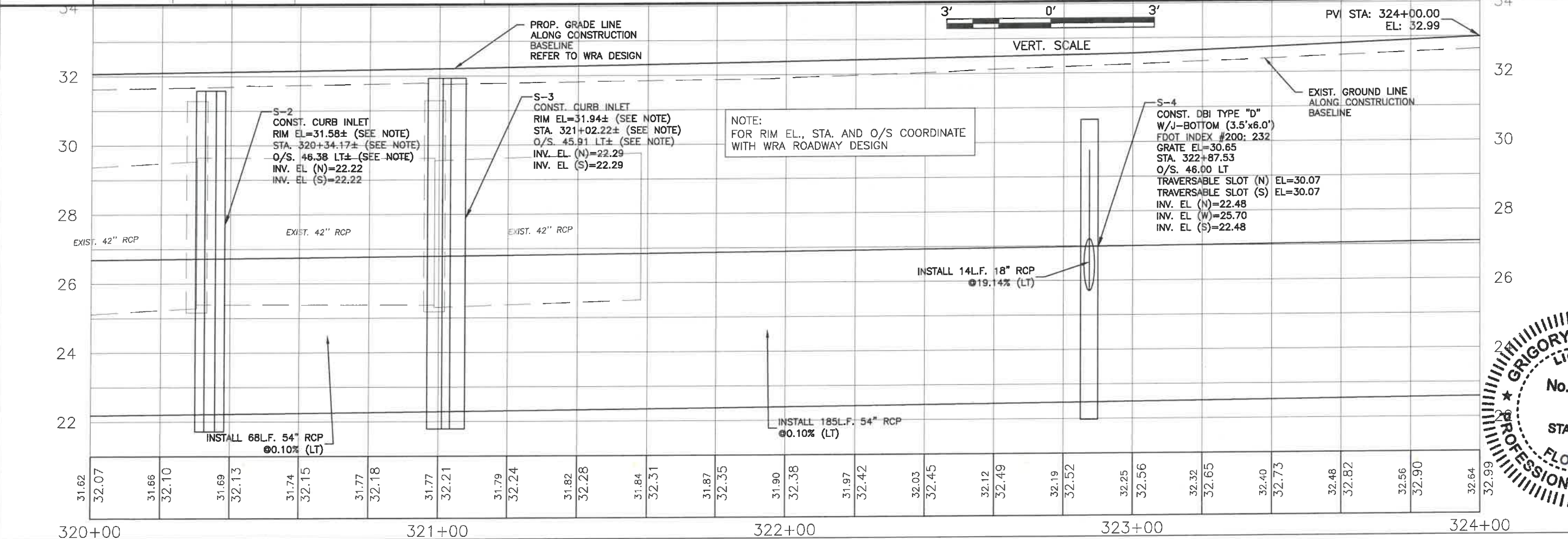
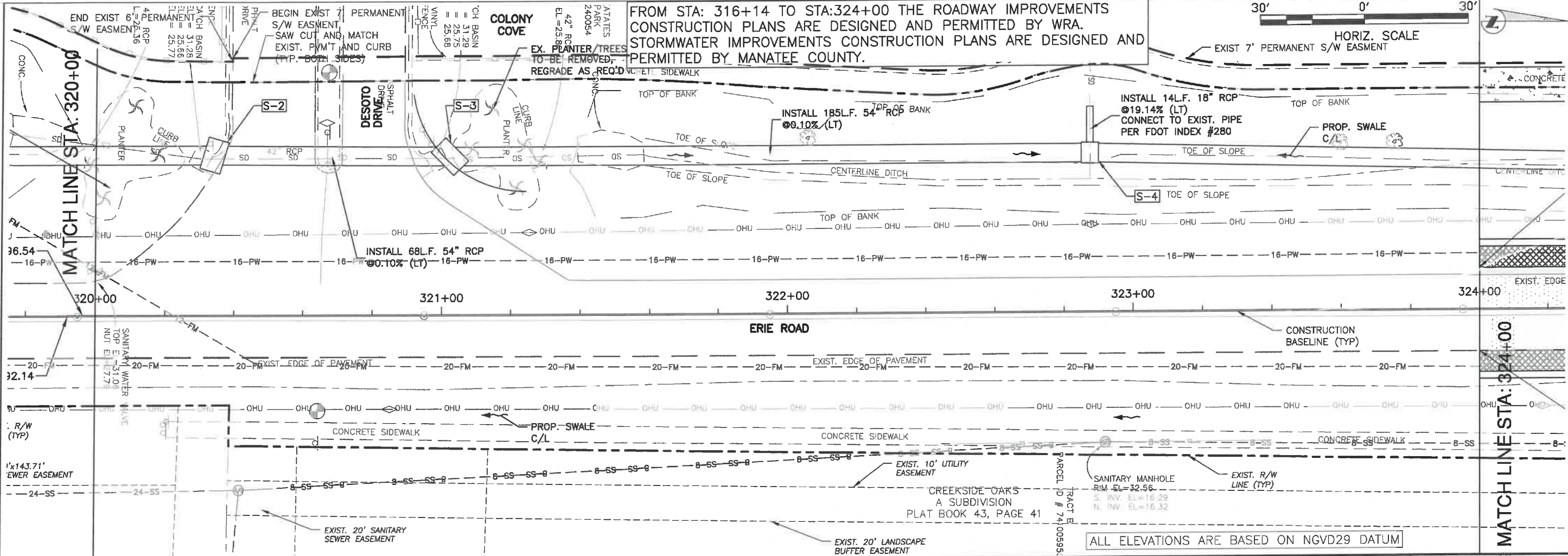
  

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
AS NOTED	
DATE	2015
DESIGNED	04/2015
DRAWN	04/2015
CHECKED	04/2015
GRIGORY BERKINMAN P.E.	
STATE OF FLORIDA P.E. No. 76896	

Signature & Date



**ERIE ROAD - US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 320+00 TO 324+00**

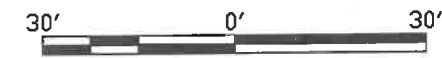


NO.	REVISION DESCRIPTION	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SECTION	TWN./RGE 2,35/33,34S/18E
AS NOTED	DATE
DESIGNED	04/2015
CHECKED	04/2015
CHECKED	07/2015
GRIGORY BERIKHMAN, P.E.	68896
FLORIDA PROFESSIONAL ENGINEER	2021
Signature & Date	

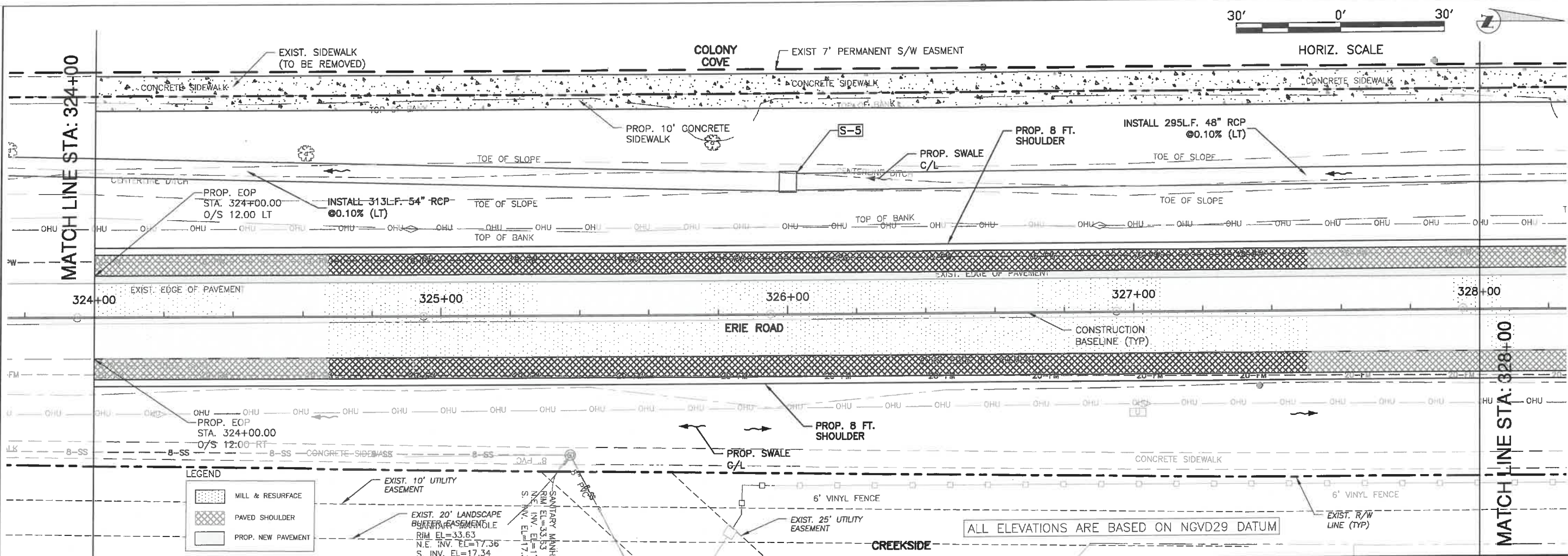




HORIZ. SCALE

MATCH LINE STA: 324+00

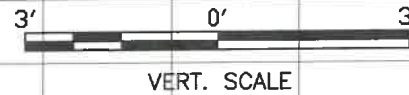
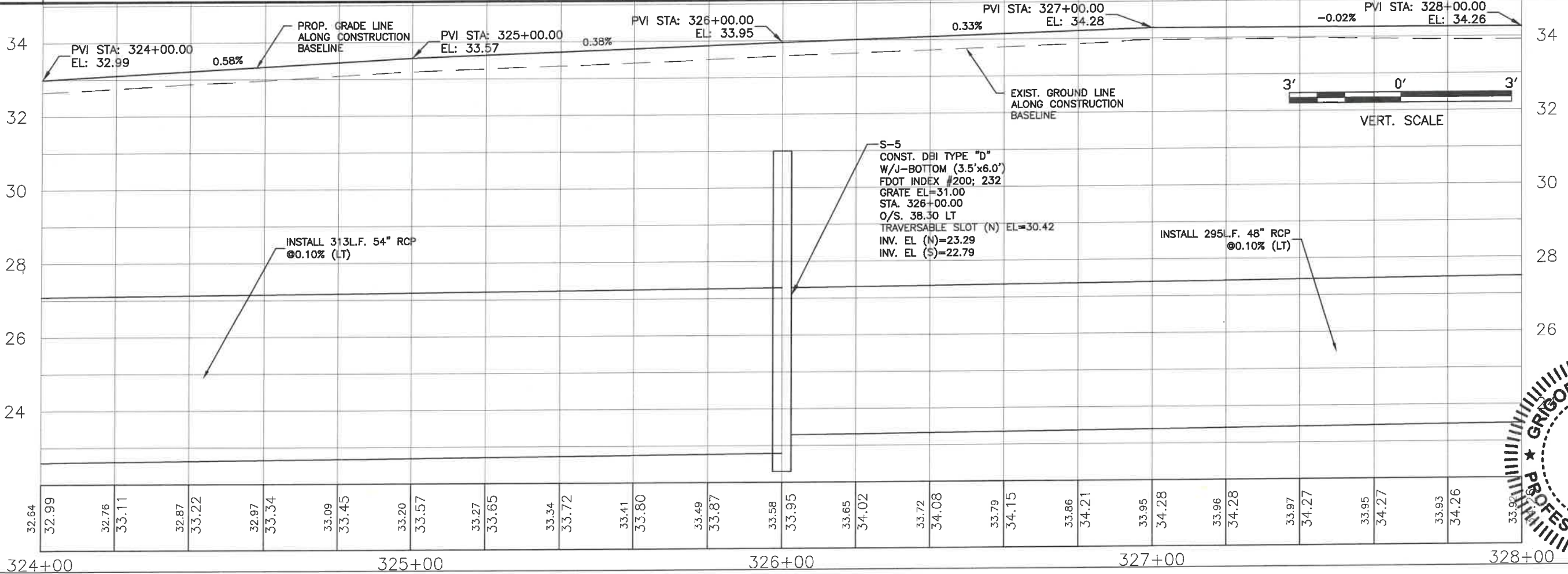
MATCH LINE STA: 328+00



**LEGEND**

	MILL & RESURFACE
	PAVED SHOULDER
	PROP. NEW PAVEMENT

ALL ELEVATIONS ARE BASED ON NGVD29 DATUM



VERT. SCALE

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 324+00 TO 328+00**

NO.	REVISION DESCRIPTION	BY	DATE

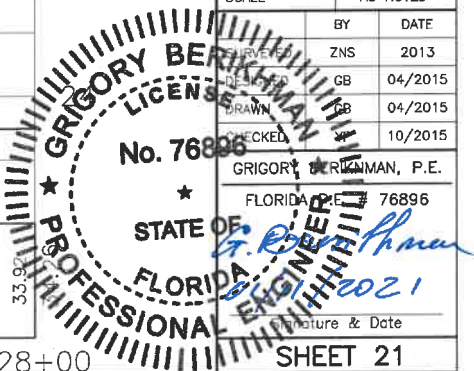
PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2, 35/33, 34S/18E
SCALE	AS NOTED

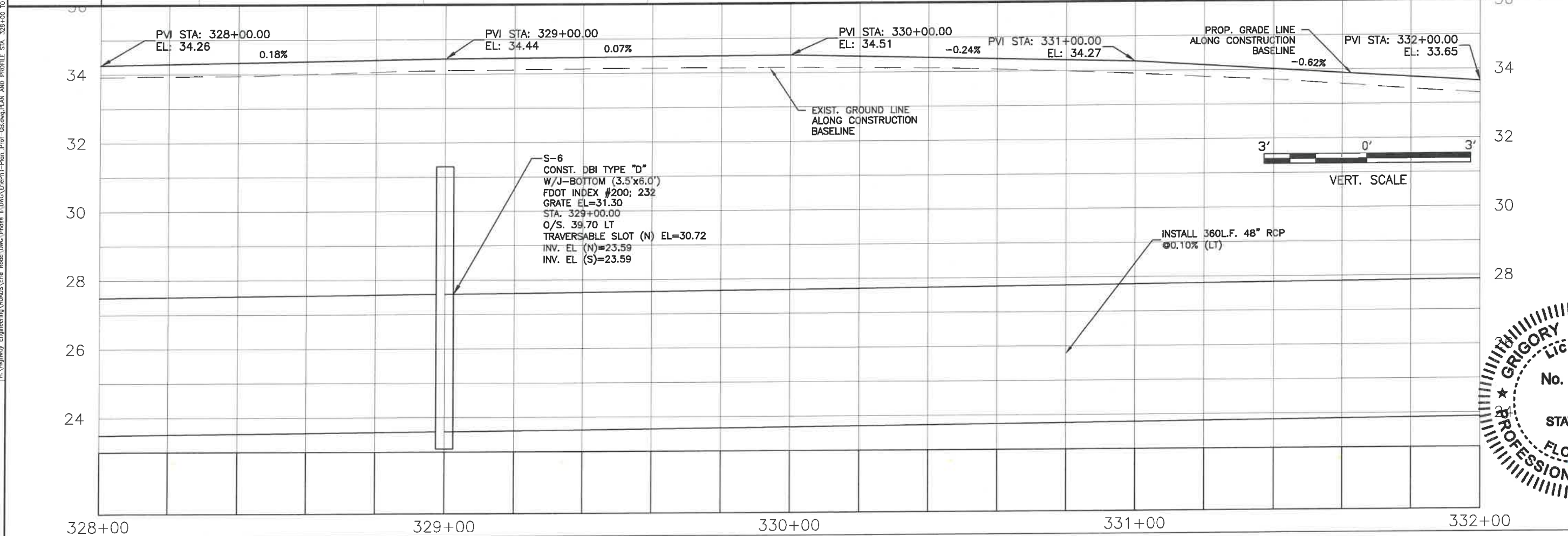
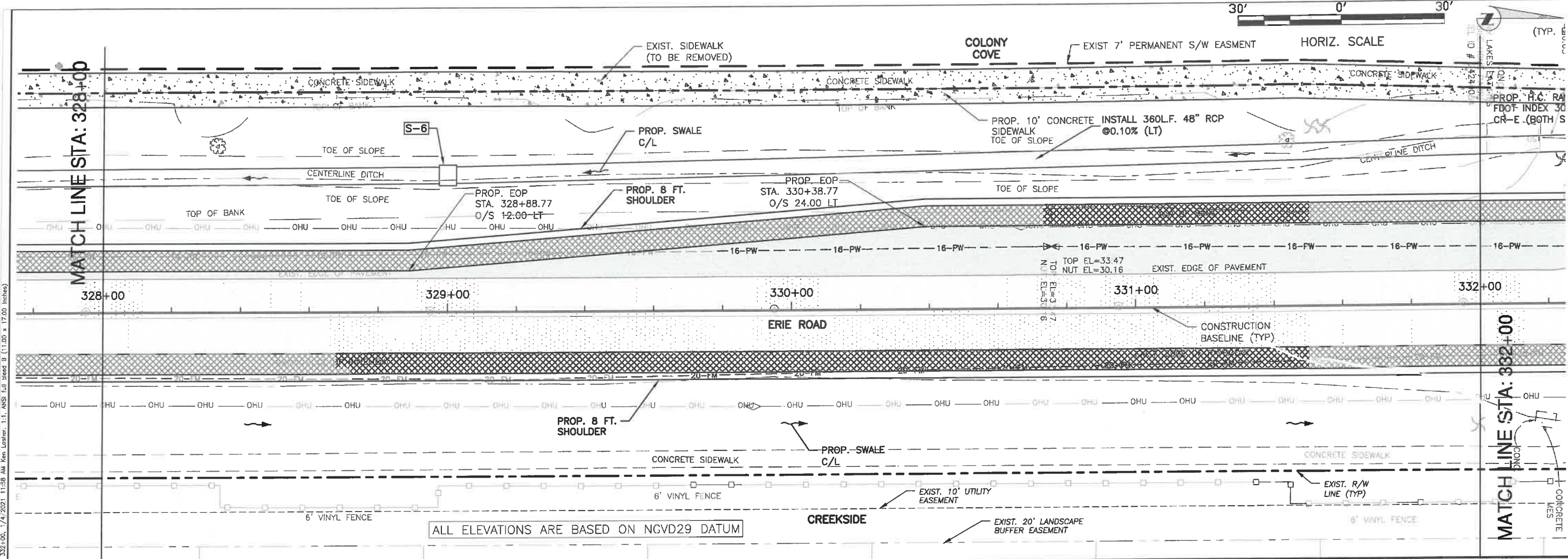
  

BY	DATE
ZNS	2013
GB	04/2015
GB	04/2015
	10/2015

GRIGORY BERKHAMAN, P.E.  
FLORIDA LICENSE NO. 76896

*Grigory Berkhaman*  
2021  
Signature & Date





**ERIE ROAD - US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 328+00 TO 332+00**

NO.	REVISION DESCRIPTION	DATE

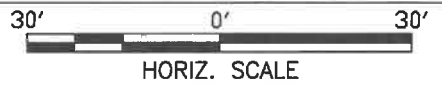
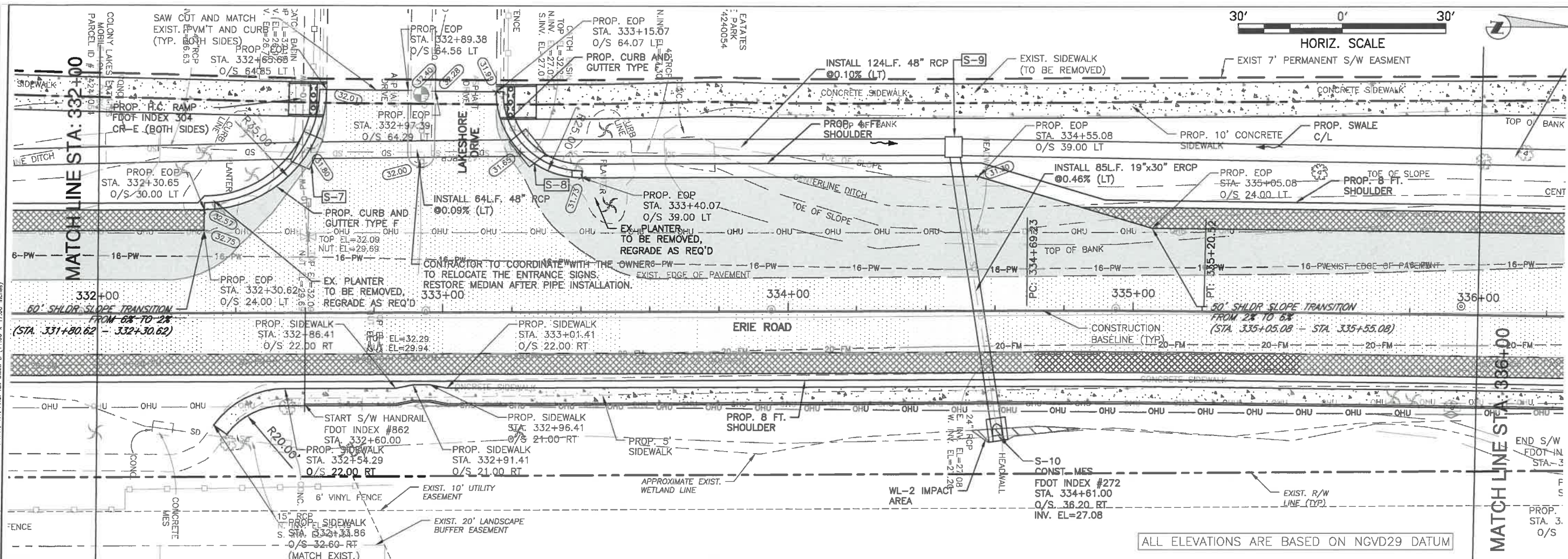
PROJECT #	307-6082860
SURVEY #	00-43133
RCE #	35/33,34S/18E
AS NOTED	
DATE	
SURVEYED	2013
DESIGNED	04/2015
DRAWN	04/2015
CHECKED	10/2015

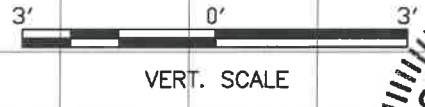
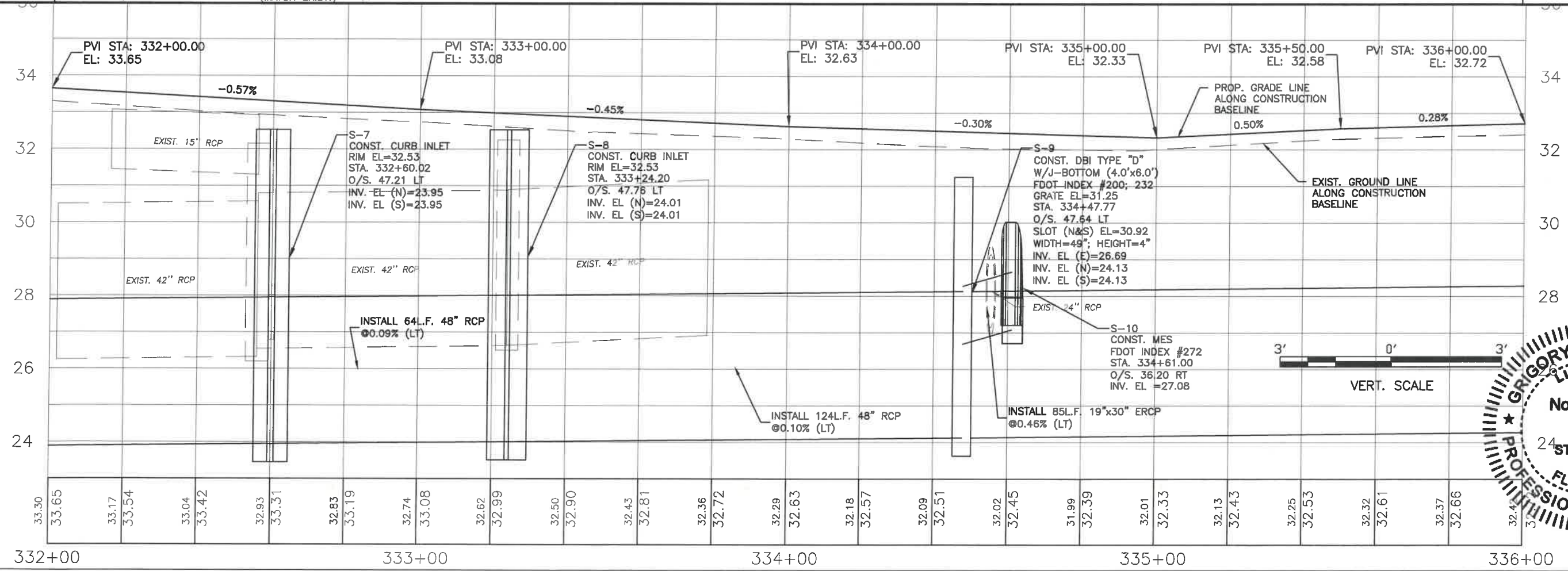
**GRIGORY BERIKHMAN**  
Professional Engineer  
No. 78896  
STATE OF FLORIDA  
2021

Signature & Date

H:\Highway Engineering\ROADS\Erie Road\DWG\Phase II\DWG\EriePhII-Plan\_Prof\_08.dwg, PLAN AND PROFILE STA. 328+00 TO 332+00, 7/4/2021 11:58 AM Ken Loehner, 1:1, ANSI full bleed B (11.00 x 17.00 inches)




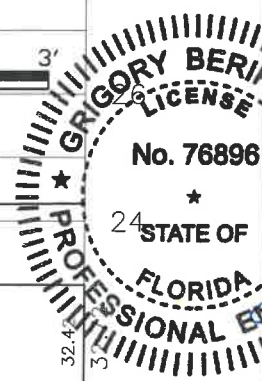
ALL ELEVATIONS ARE BASED ON NGVD29 DATUM



**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 332+00 TO 336+00**

NO.	REVISION DESCRIPTION	DATE

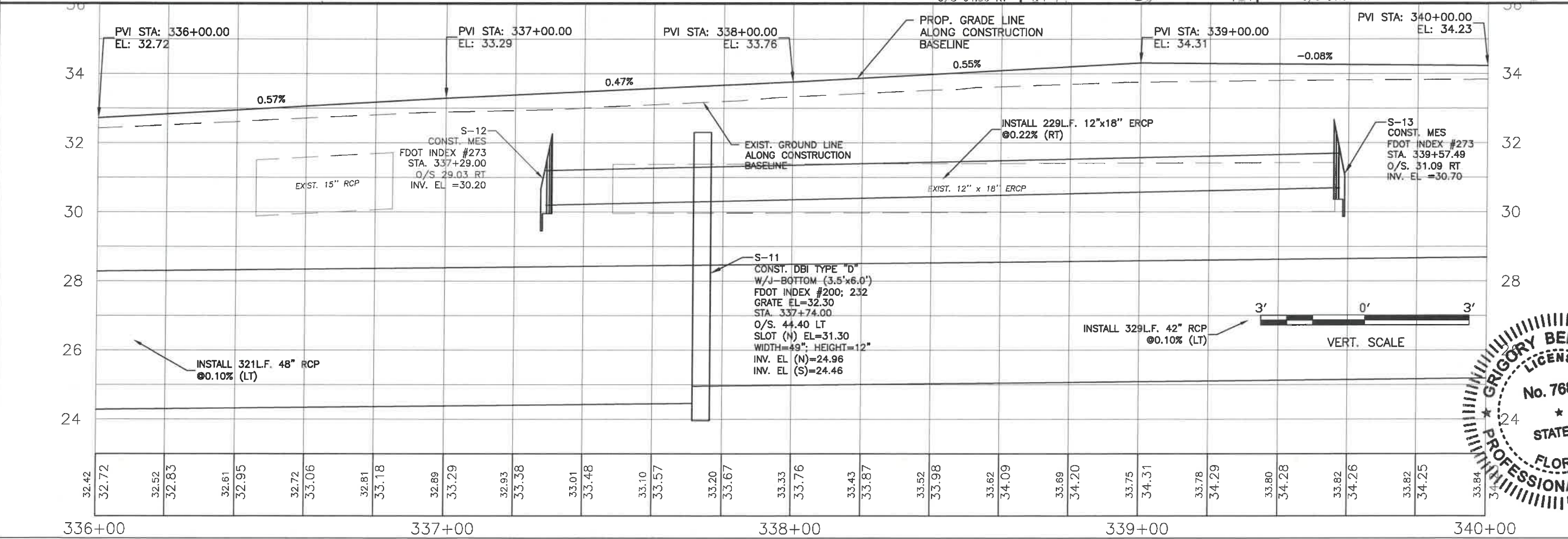
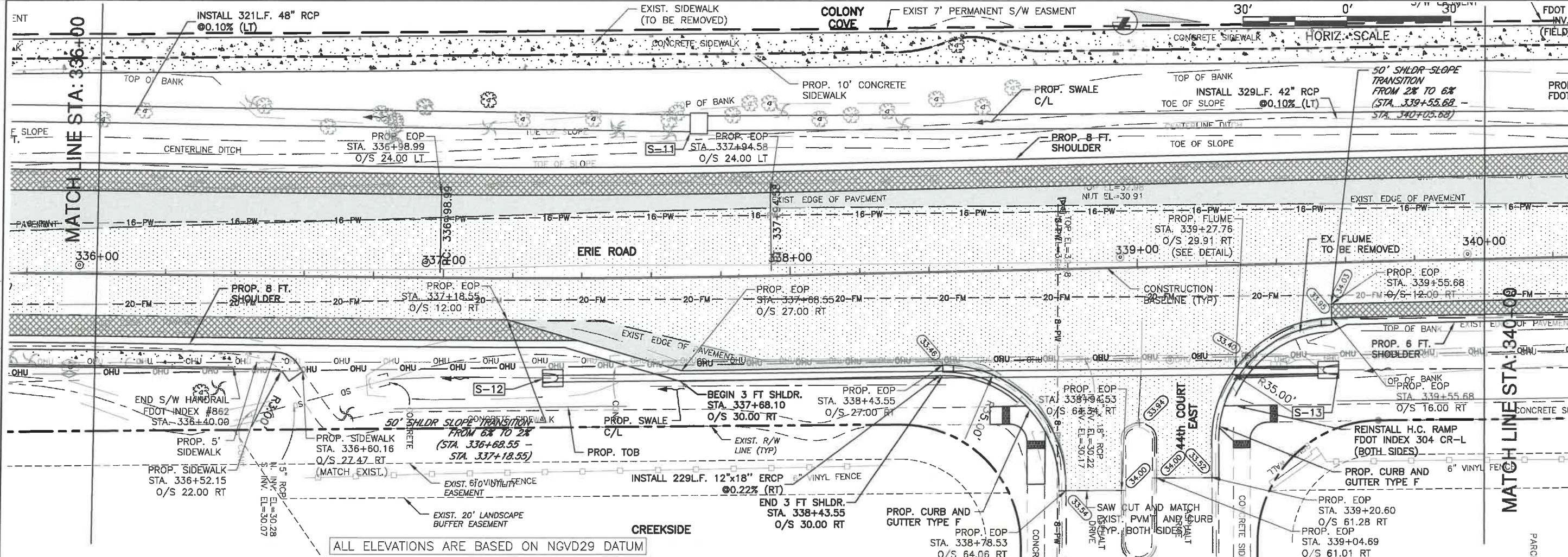
PROJECT #	307-6082860
SURVEY #	00-43133
SECTION/TWN./RGE	23S/33W/18E
SCALE	AS NOTED
BY	DATE
DESIGNED	ZNS 2013
DESIGNED	GB 04/2015
DRAWN	GB 04/2015
CHECKED	YF 10/2015
GRIGORY BERIKMAN, P.E.	P.E. # 76896
 Signature & Date 03/04/2021	





PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES  
1022 26th Avenue East, Bradenton, FL 34208

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 336+00 TO 340+00**



**GRIGORY BERKMAN**  
LICENSED PROFESSIONAL ENGINEER  
No. 76896  
FLORIDA  
04/2021

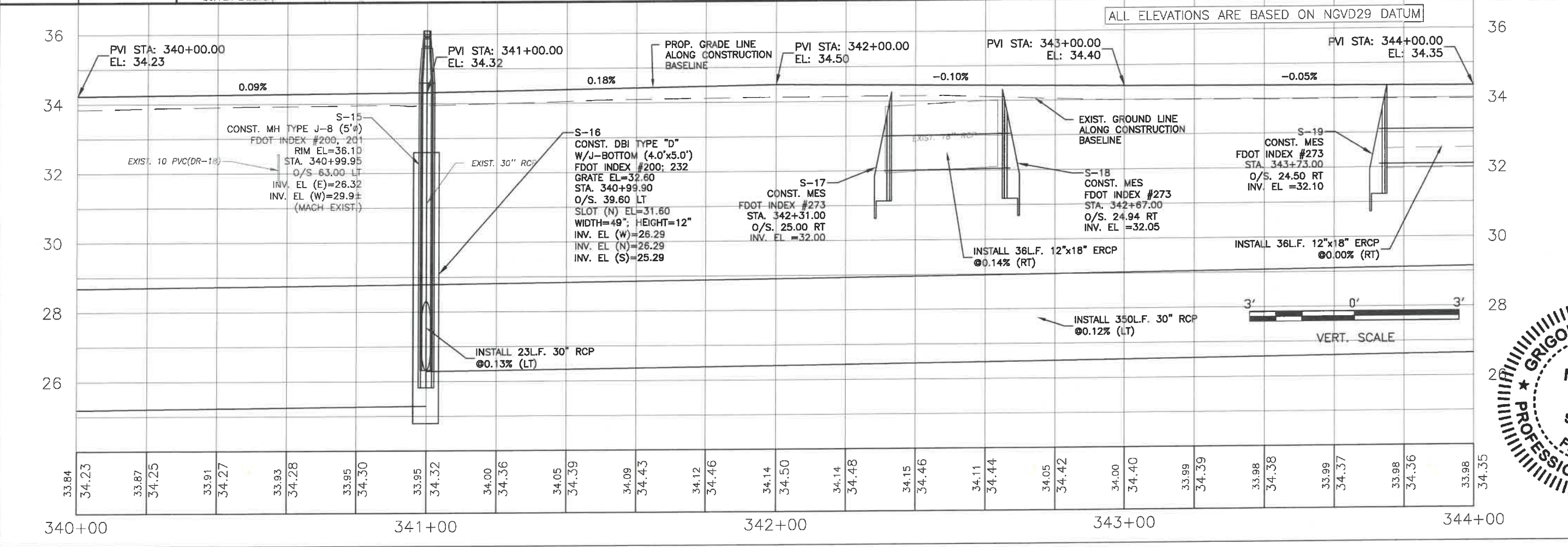
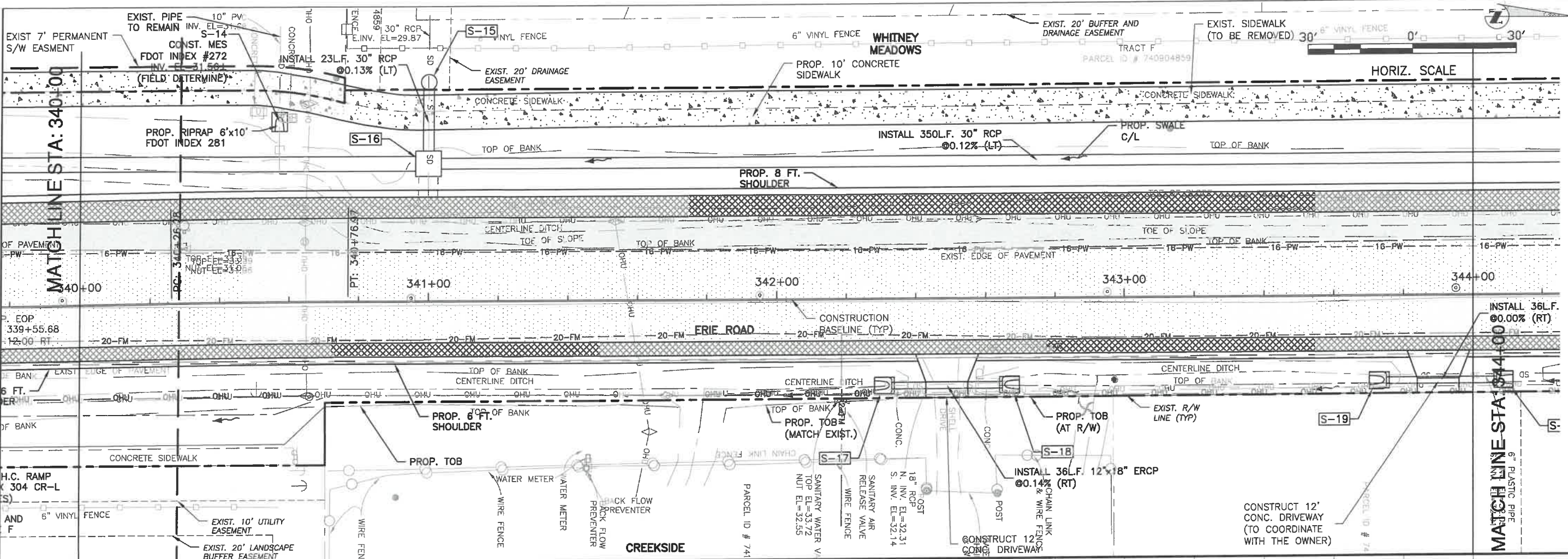
NO.	REVISION DESCRIPTION	BY	DATE

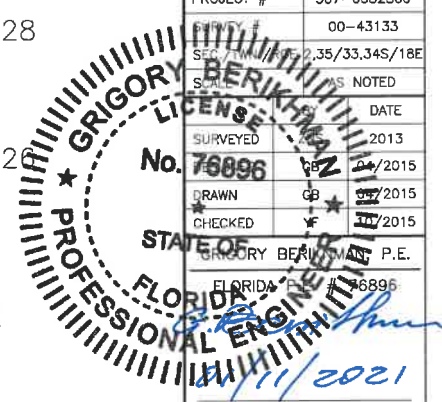
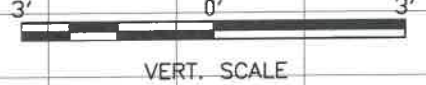
PROJECT #	307-6082860
SURVEY #	00-43133
TWN./RGE	2,35/33,34S/18E
AS NOTED	BY DATE
DRAWN	04/2015
CHECKED	04/2015
DESIGNED	10/2015
BY	GRIGORY BERKMAN, P.E.
FLORIDA	# 76896

Signature & Date

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 340+00 TO 344+00**



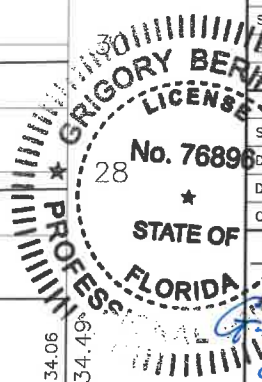
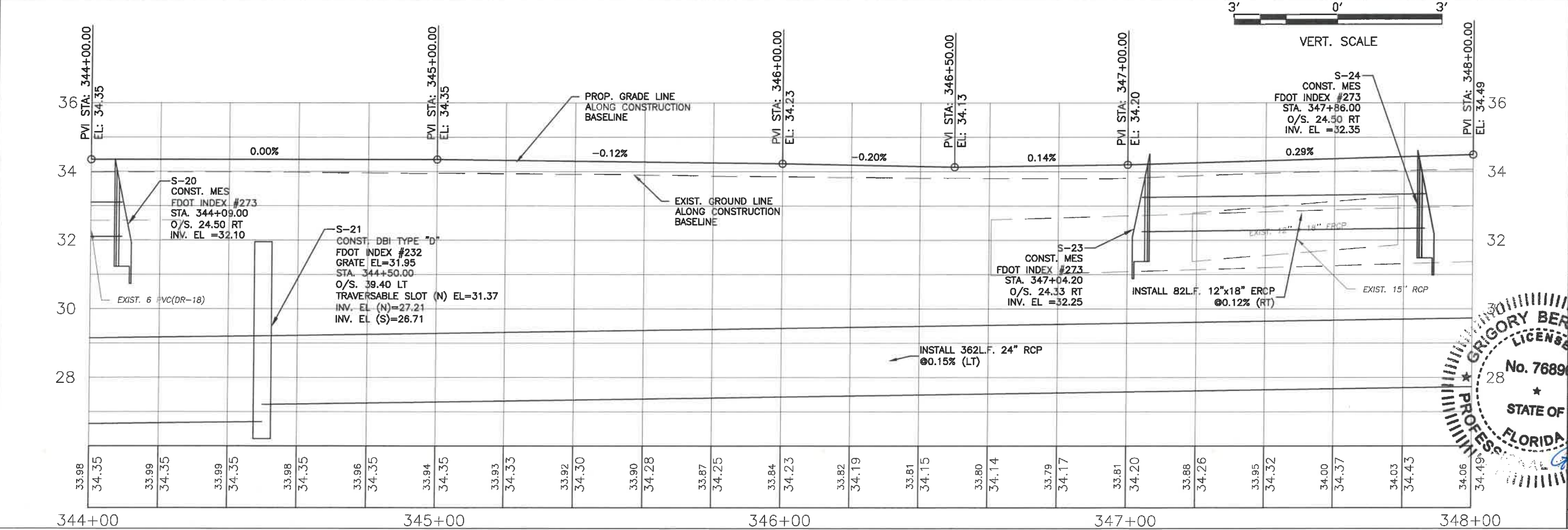
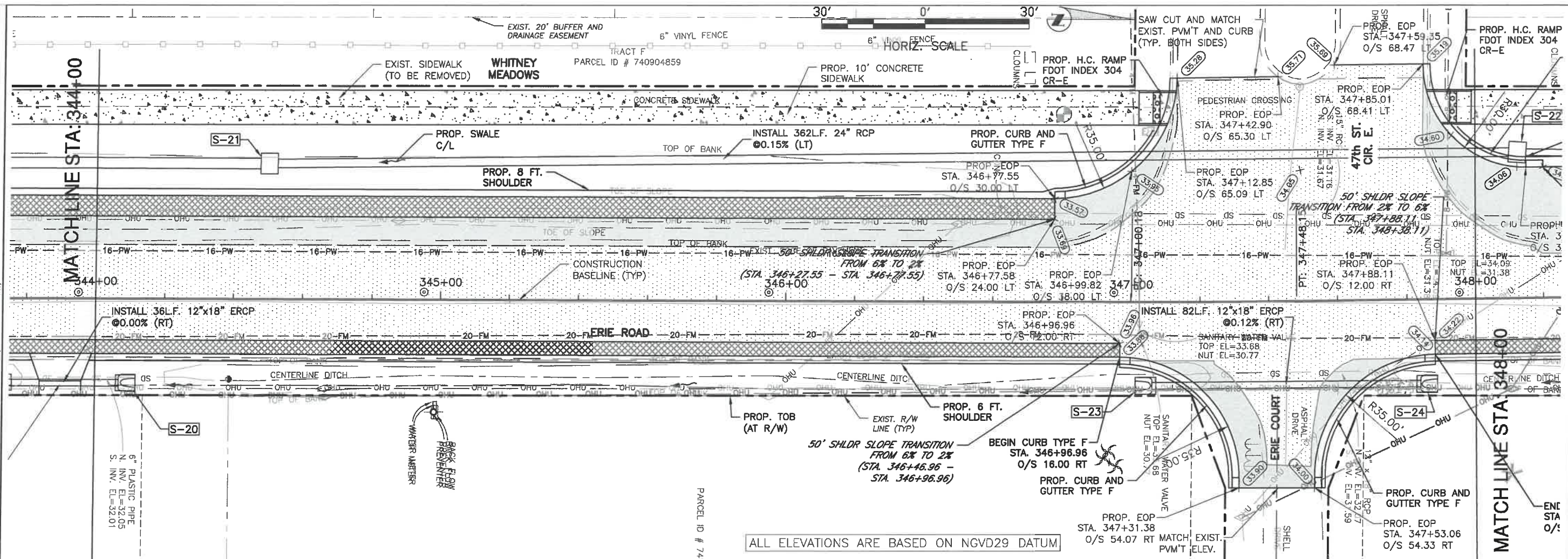
ALL ELEVATIONS ARE BASED ON NGVD29 DATUM



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
	00-43133
SECTION	2, 35/33, 34S/18E
	AS NOTED
SURVEYED	2013
DRAWN	2015
CHECKED	2015
	P.E.
	68896
Signature & Date	
2/11/2021	

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 344+00 TO 348+00**

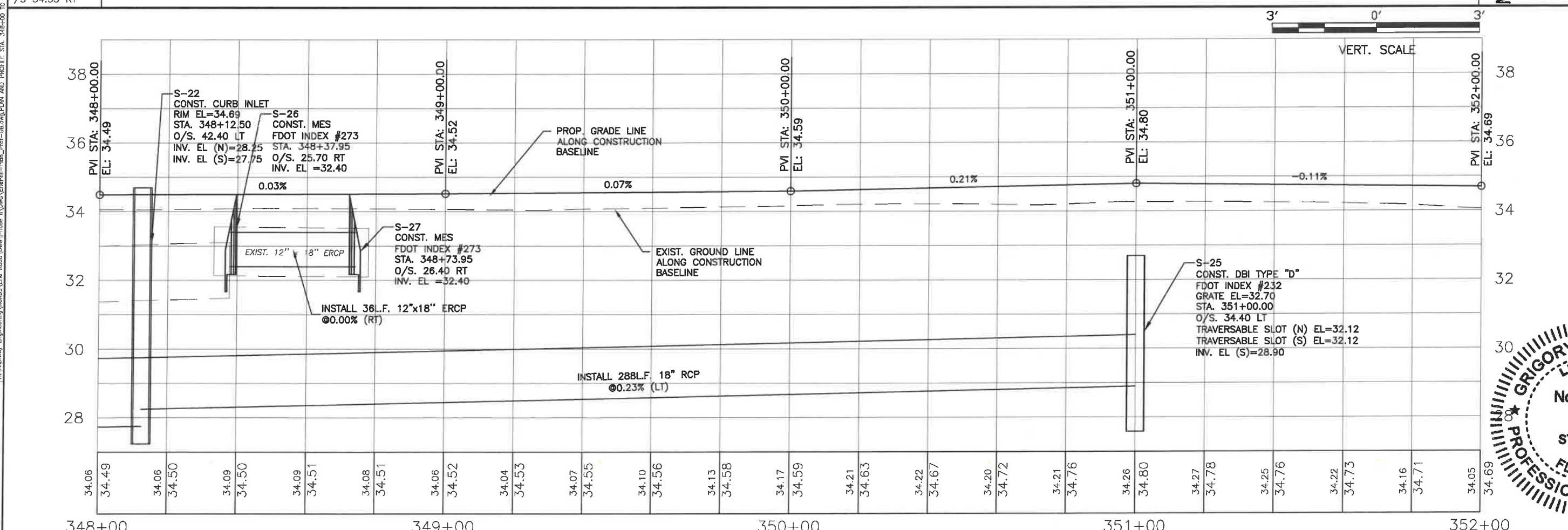
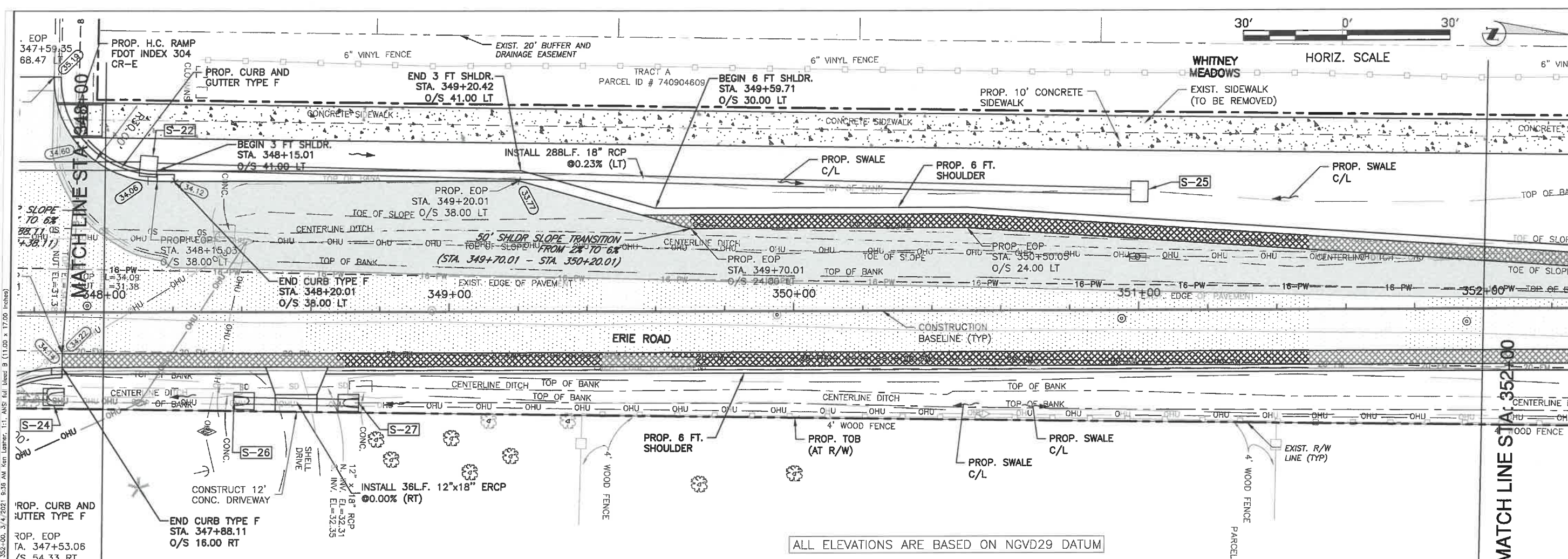


NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
DATE	03/04/2021
DESIGNED BY	GB
DRAWN BY	GB
CHECKED BY	YF
DATE	04/2015
DATE	04/2015
DATE	10/2015
DESIGNER	GRIGORY BERIKMAN, P.E.
DRAWN	GRIGORY BERIKMAN, P.E. # 76896
CHECKED	GRIGORY BERIKMAN, P.E. # 76896

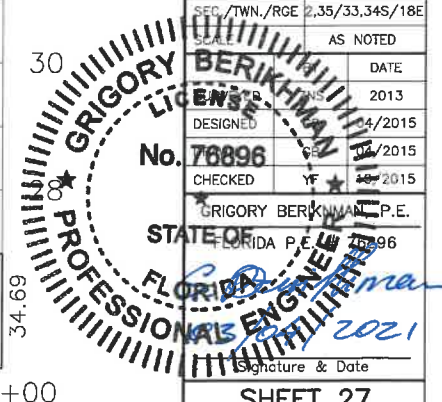
Signature & Date: *Grigory Berikman* 03/04/2021



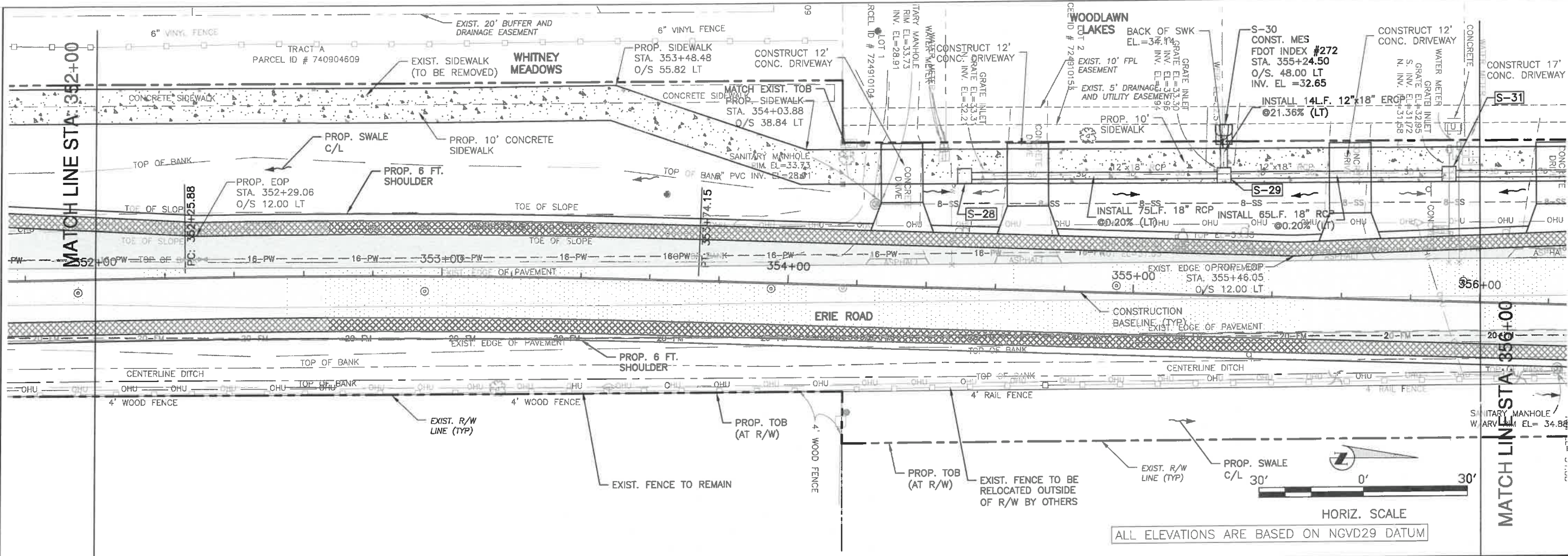
**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 348+00 TO 352+00**

REVISION	
NO.	DESCRIPTION

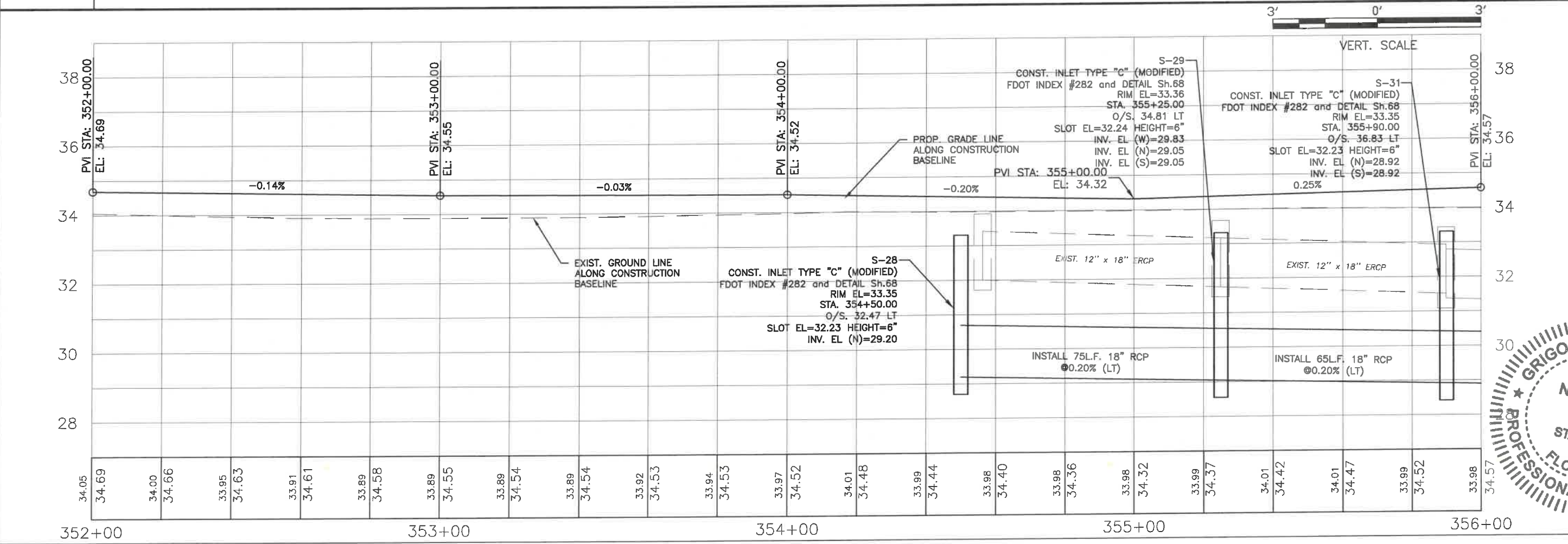
PROJECT #	307-6082860
SURVEY #	00-43133
SEC. TWN./RGE	2,35/33,34S/18E
DATE	AS NOTED
DESIGNED	2013
CHECKED	2015
DATE	2015
DATE	2015
DATE	2015



**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 352+00 TO 356+00**



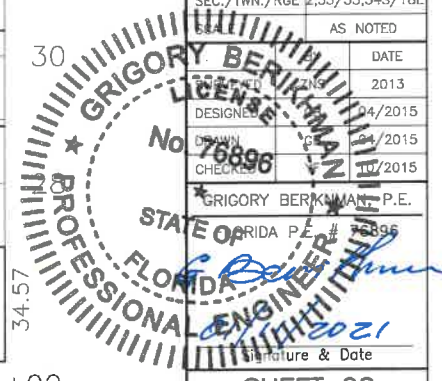
ALL ELEVATIONS ARE BASED ON NGVD29 DATUM



NO.	REVISION DESCRIPTION	BY	DATE
1	PER SWFWD COMMENTS	KHL	07/24/18

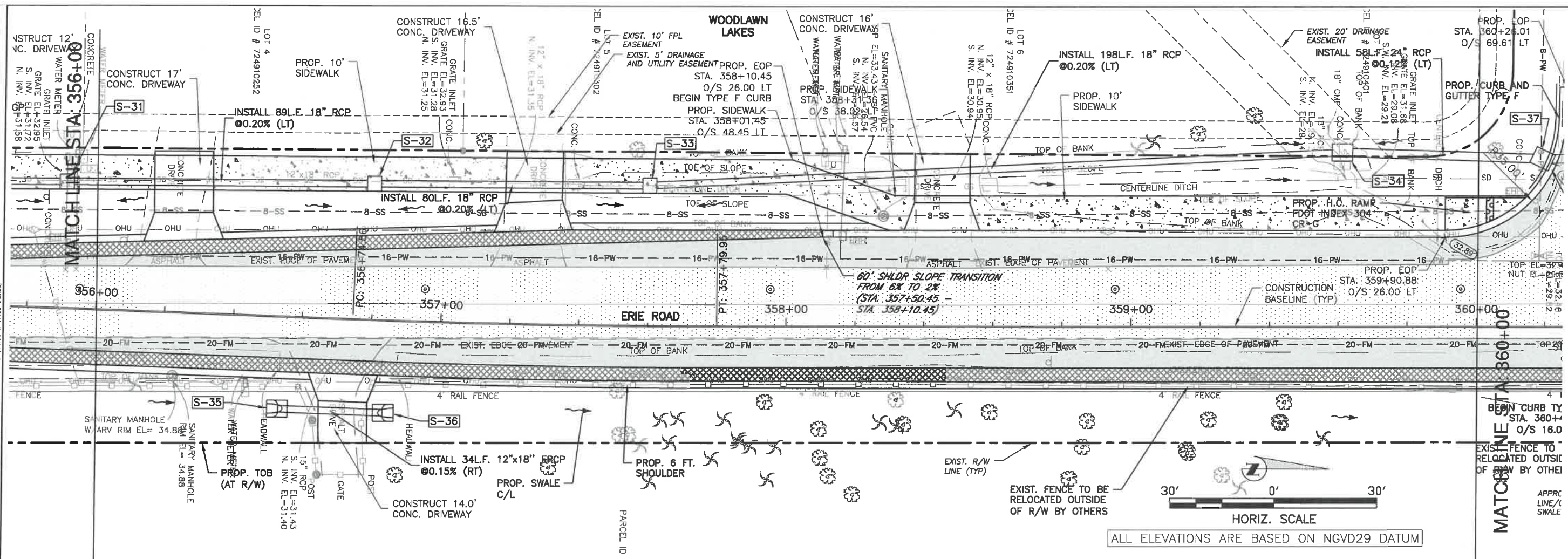
  

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
DATE	AS NOTED
DESIGNED	04/2015
DRAWN	04/2015
CHECKED	04/2015
GRIGORY BERKOWITZ, P.E.	FLORIDA P.E. # 76896

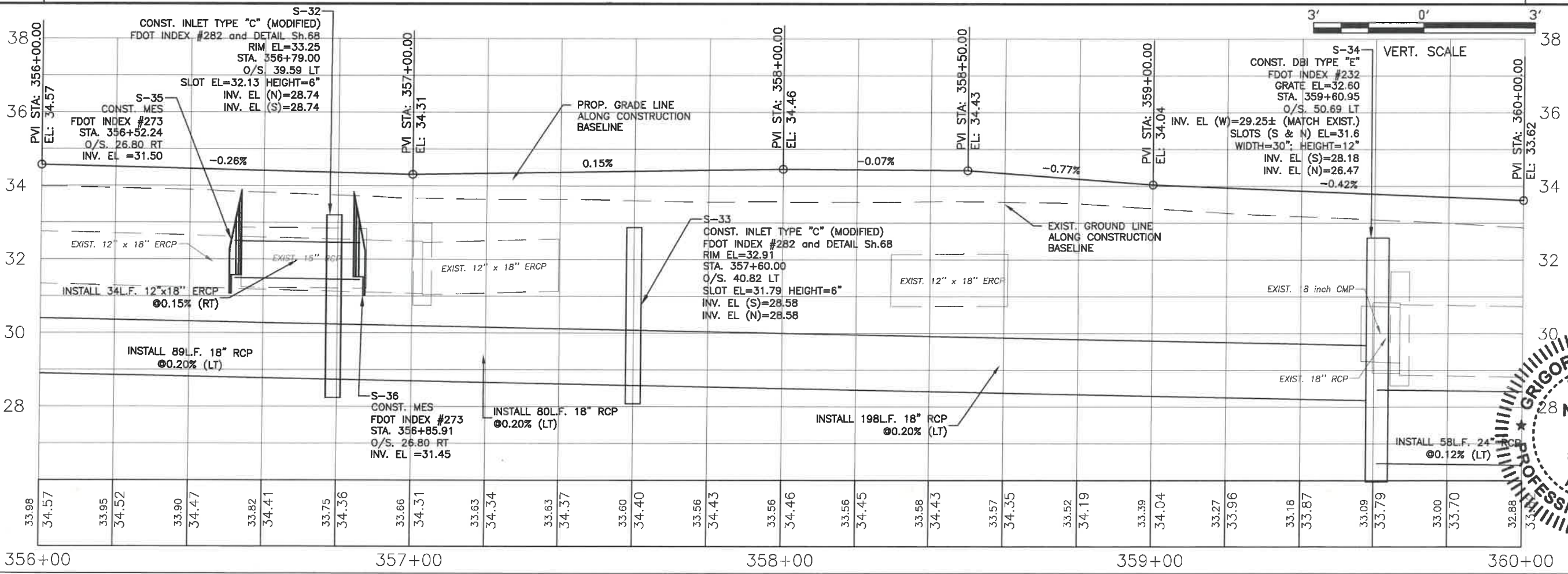




**ERIE ROAD- US301 TO US 301**  
**SOUTH-NORTH PHASE II**  
**PLAN AND PROFILE STA. 356+00 TO 360+00**



ALL ELEVATIONS ARE BASED ON NGVD29 DATUM

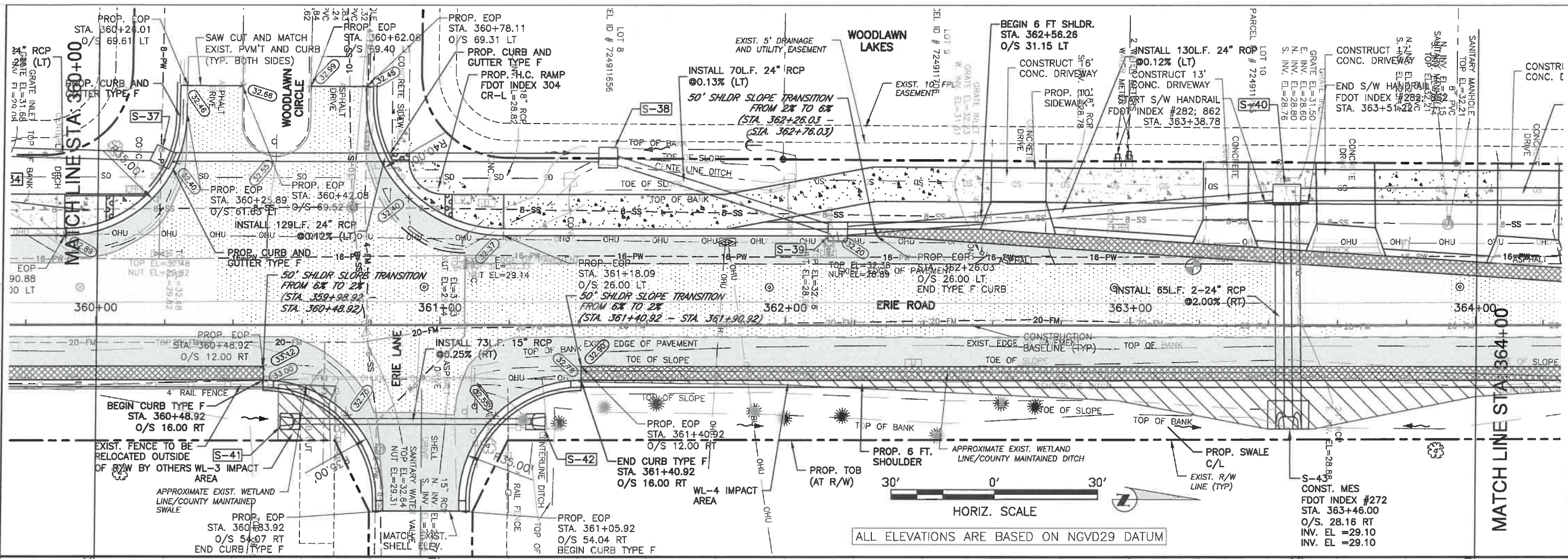


NO.	REVISION DESCRIPTION	DATE
1	PER SWFPM COMMENTS	07/24/18

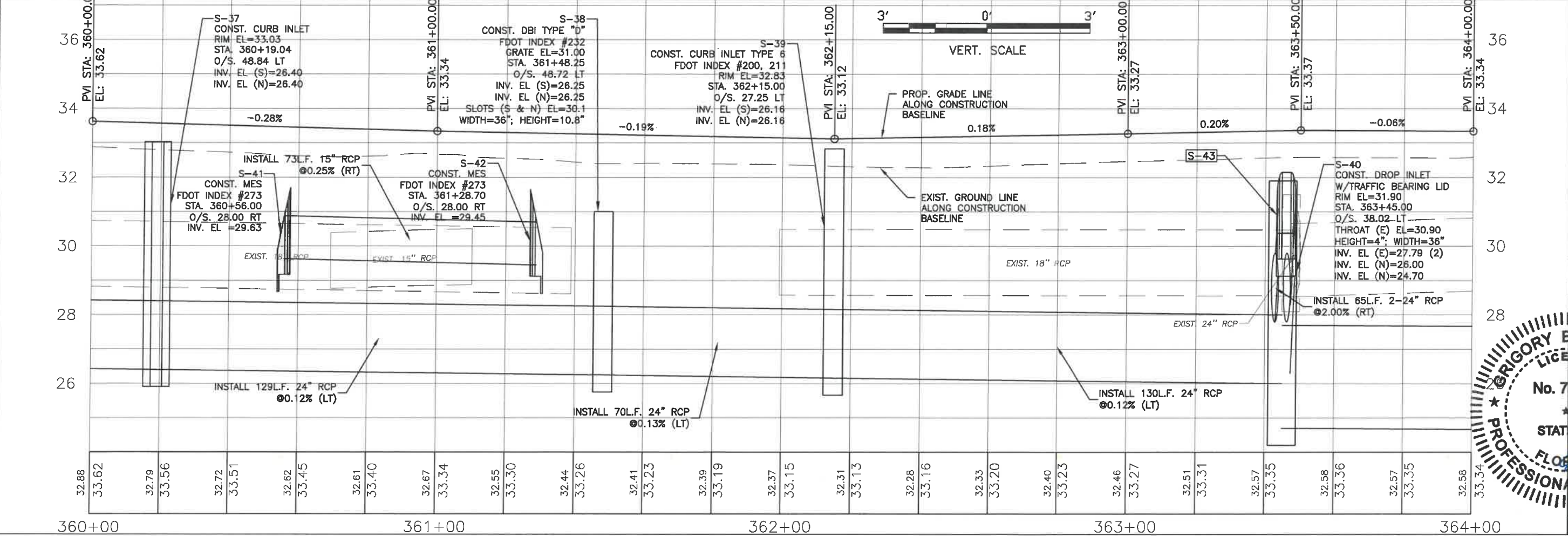
  

PROJECT #	307-6082860
SURVEY #	00-43133
BY	ZNS
DATE	2013
DESIGNED BY	ZNS
DATE	04/2015
DRAWN BY	ZNS
DATE	04/2015
CHECKED BY	ZNS
DATE	10/2015
GRIGORY BERIKHMAN, P.E.	
FLORIDA P.E. # 76896	
Signature & Date	<i>Grigory Berikman</i> 05/04/2021

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 360+00 TO 364+00**



HORIZ. SCALE  
ALL ELEVATIONS ARE BASED ON NGVD29 DATUM



VERT. SCALE

NO.	REVISION DESCRIPTION	BY	DATE
1	PER SWFWD COMMENTS	KHL	07/24/18

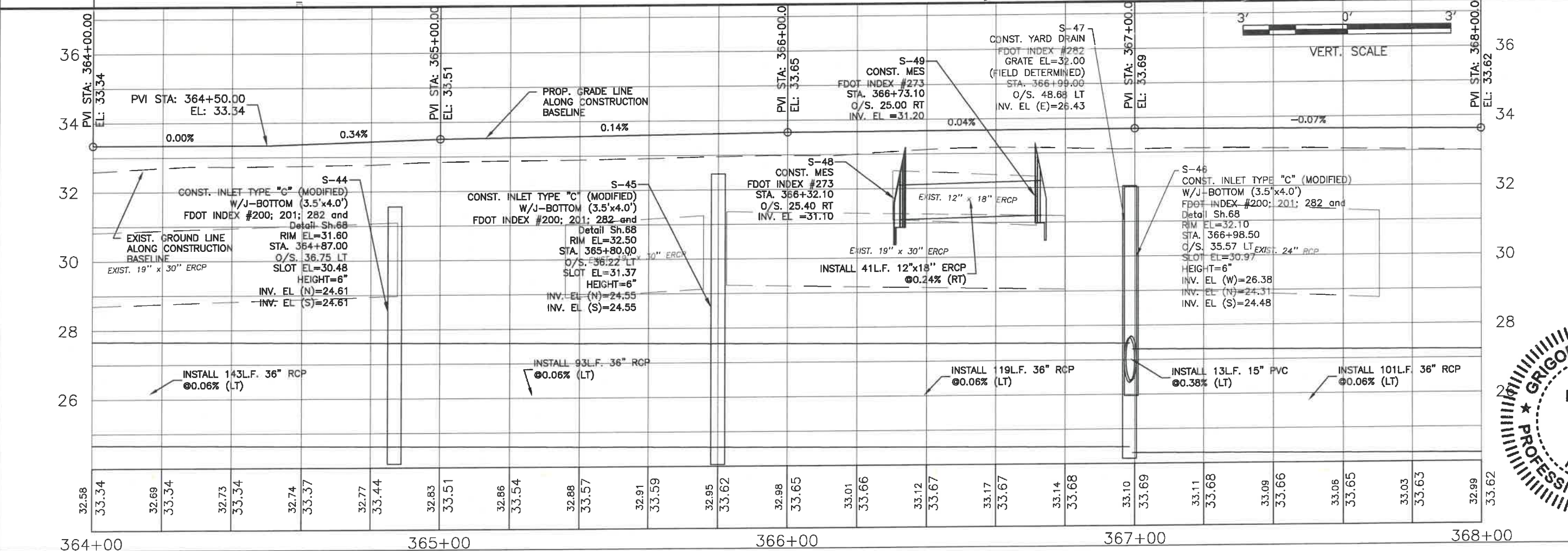
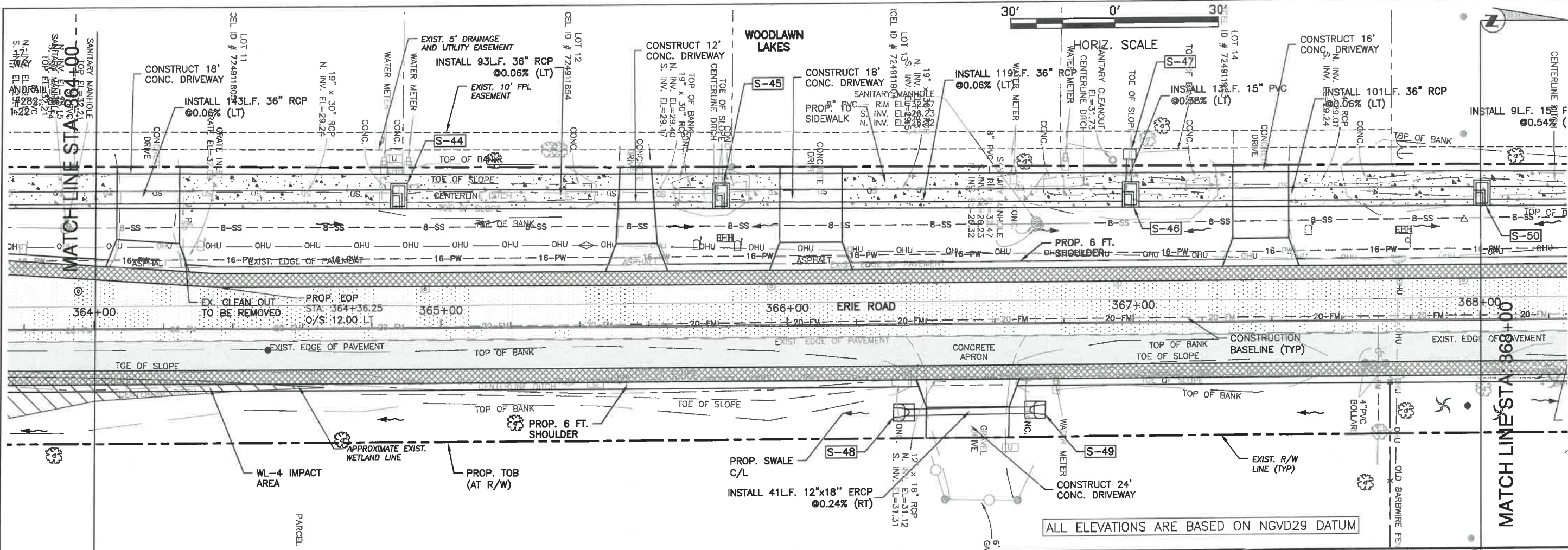
  

PROJECT #	307-6082860
SURVEY #	00-43133
DATE	04/2015
DESIGNED	04/2015
CHECKED	0/2015

GRIGORY BERIKHMAN, P.E.  
FLORIDA PROFESSIONAL ENGINEER  
No. 75896  
4/2021

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 364+00 TO 368+00**



NO.	REVISION DESCRIPTION	DATE
1	PER SW/MD COMMENTS	07/24/18

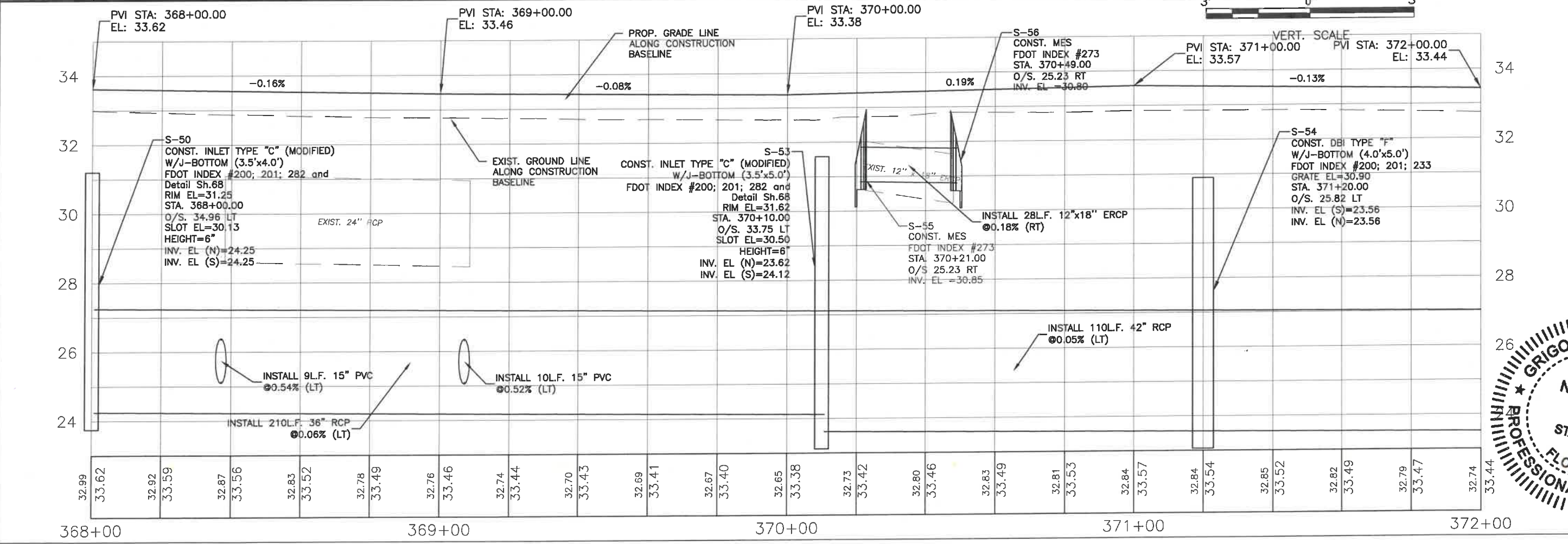
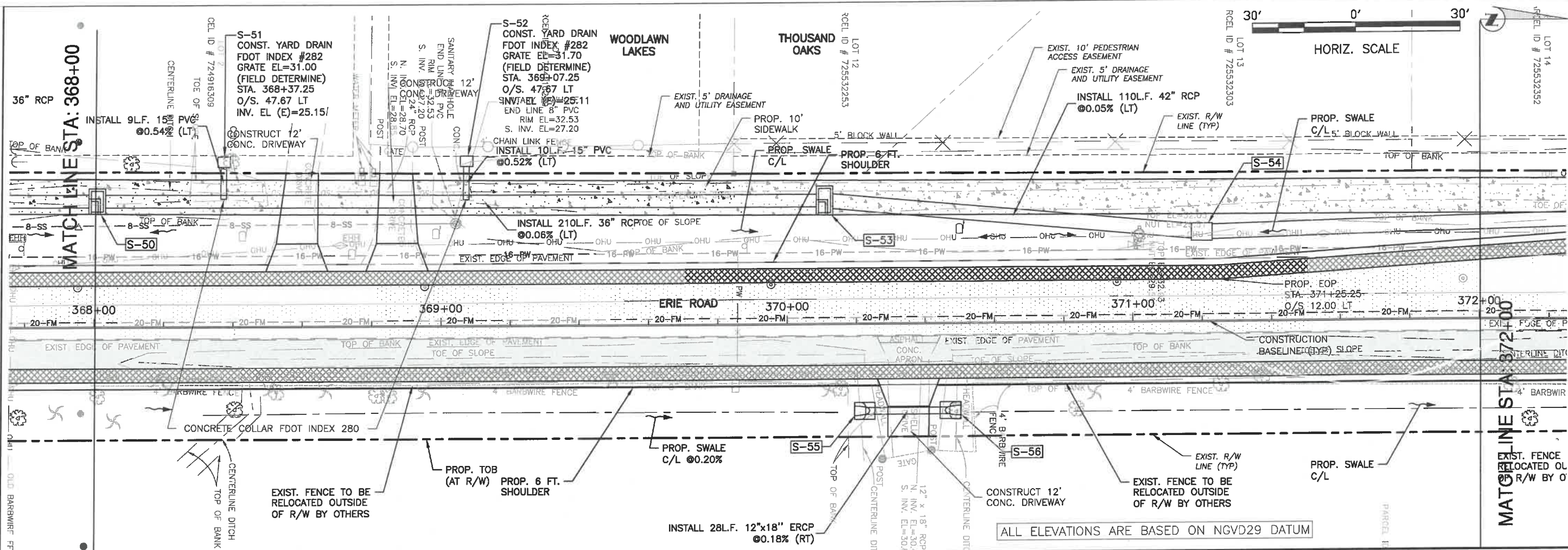
  

PROJECT #	307-6082860
SURVEY #	00-43133
SEQ. TYP./RGE	2,35/33,34S/18E
SCALE	AS NOTED
DESIGNED	DATE
CHECKED	DATE
CHECKED	DATE
CHECKED	DATE
CHECKED	DATE
CHECKED	DATE

GRIGORY BERIKMAN  
PROFESSIONAL ENGINEER  
FLORIDA P.E. # 6896  
Signature & Date

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 368+00 TO 372+00**



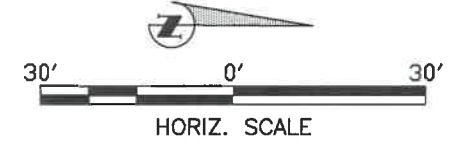
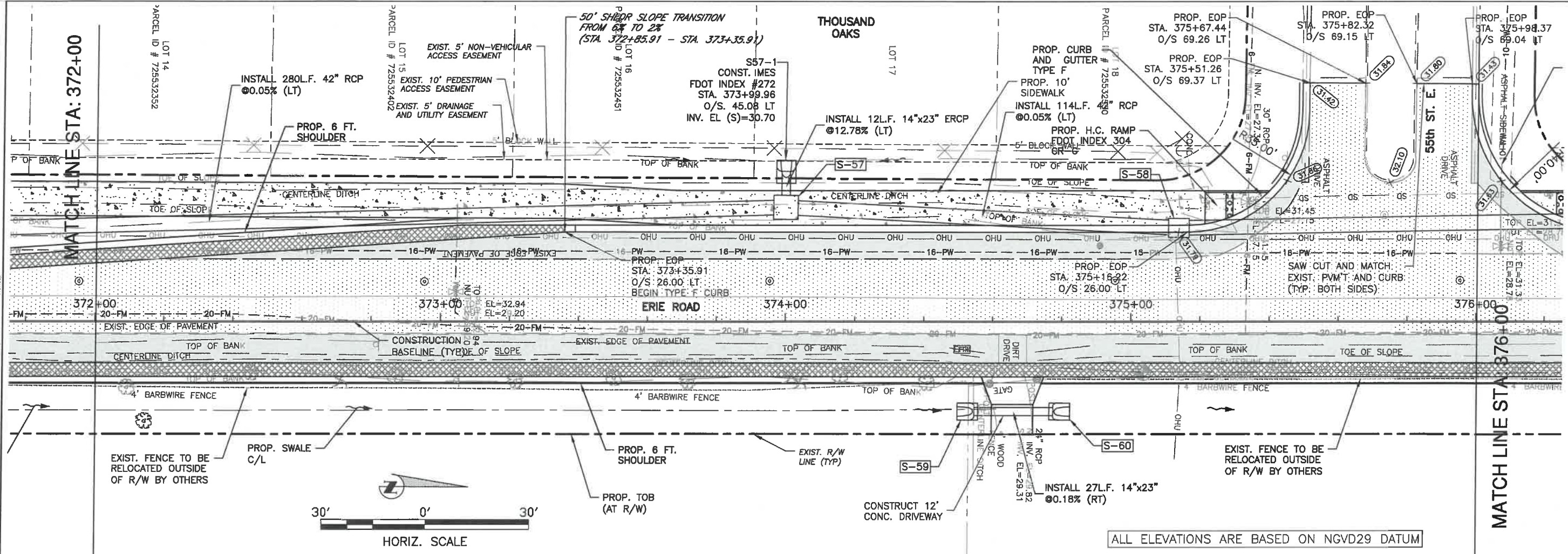
**GRIGORY BERKOVICH**  
LICENSED PROFESSIONAL ENGINEER  
No. 76896  
STATE OF FLORIDA  
Signature & Date

NO.	REVISION DESCRIPTION	DATE
1	PER SWF/MD COMMENTS	07/24/18

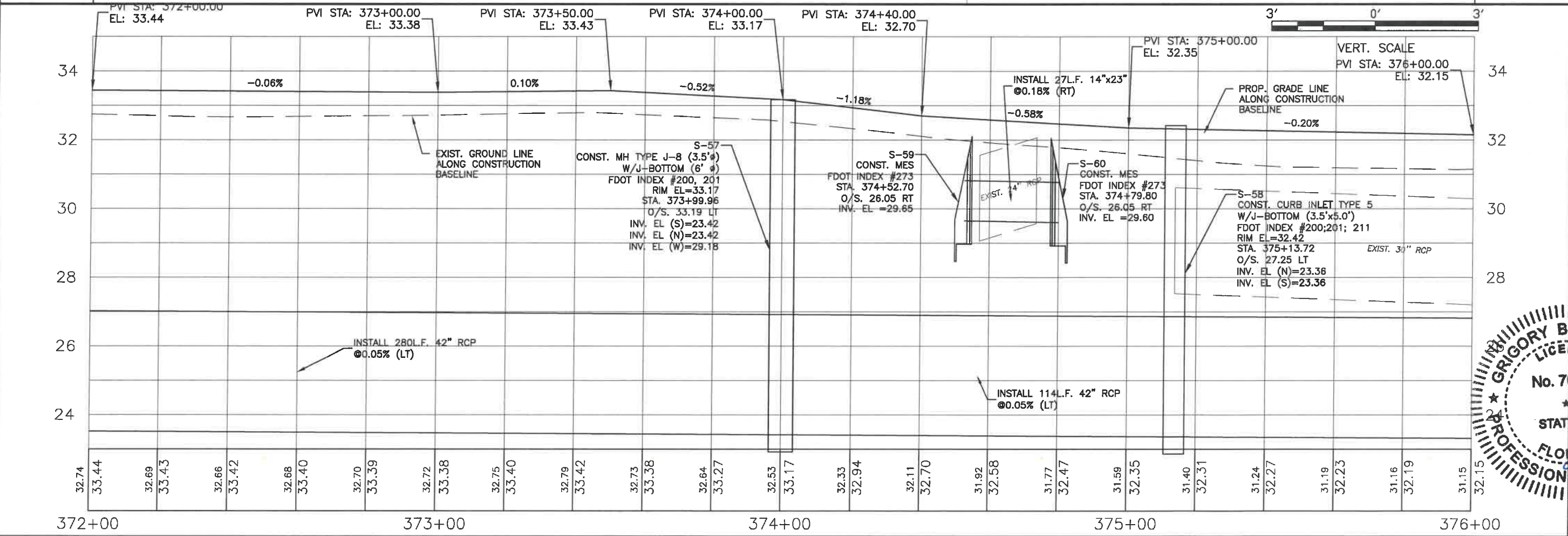
PROJECT # 307-6082860  
SURVEY # 00-43133  
SEC./TWN./RGE. 2,35/33,34S/18E  
SCALE AS NOTED  
DATE 2013  
DESIGNED 2/2015  
CHECKED 8/2015  
GRIGORY BERKOVICH P.E.  
No. 76896

I:\Highway Engineering\ROADS\Erie Road\000 Phase II\DWG\Profile-Plan-Profile.dwg, PLAN AND PROFILE STA. 368+00 TO 372+00, 1/4/2021 12:02 PM Ken Lecher, 11, ANSI full bleed B (11.00 x 17.00 inches)

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 372+00 TO 376+00**



ALL ELEVATIONS ARE BASED ON NGVD29 DATUM



NO.	REVISION DESCRIPTION	DATE
1	PER SWFIRM COMMENTS	07/24/18

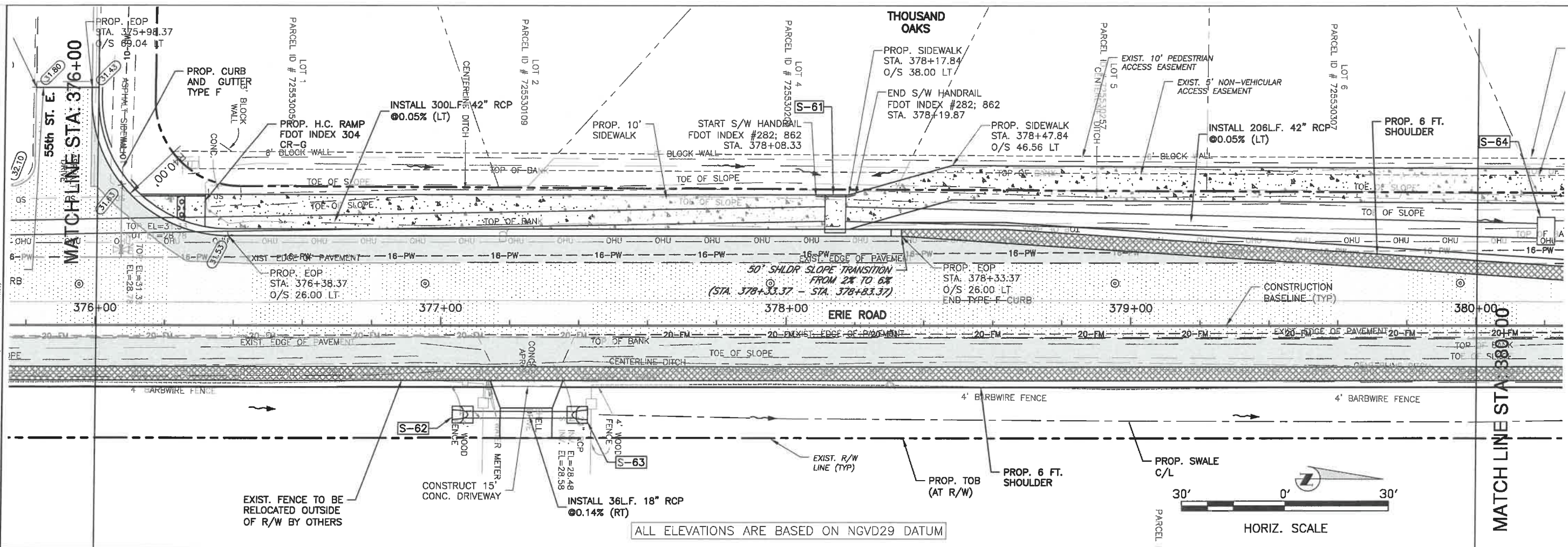
  

PROJECT #	307-6082860
SURVEY #	00-43133
SHEET	2, 35, 33, 34, 5/18E
DATE	AS NOTED
SURVEYED	2013
DRAWN	04/2015
CHECKED	0/2015
STATE OF FLORIDA	GRIGORY BERIKHMAN, P.E.
FLORIDA ENGINEER	No. 76896
SIGNATURE	<i>Grigory Berikman</i>
DATE	04/2021

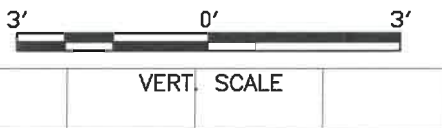
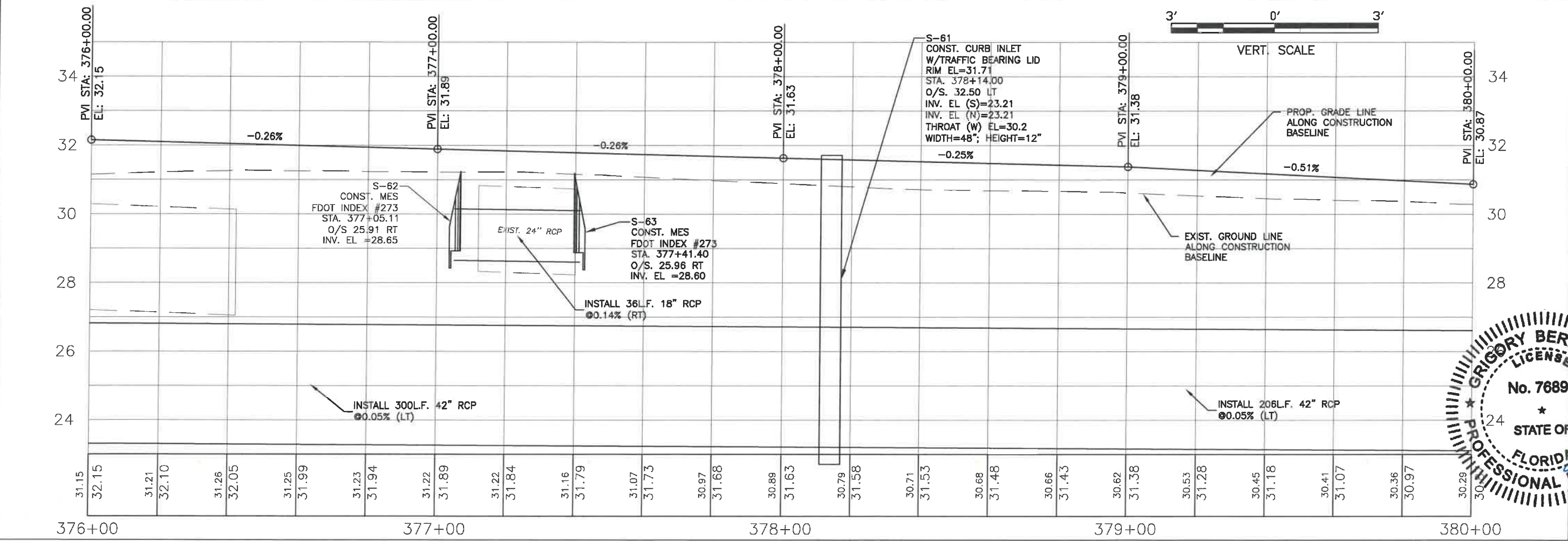
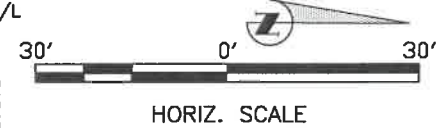
GRIGORY BERIKHMAN  
Professional Engineer  
No. 76896  
04/2021

H:\Highway Engineering\ROADS\Erie Road\DWG\Plan-Profile\Plan-Profile.dwg, PLAN AND PROFILE STA. 372+00 TO 376+00, 3/4/2021 10:56 AM Ken Lecher, 1:1, ANSI full bleed B (11.00 x 17.00 inches)

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 376+00 TO 380+00**



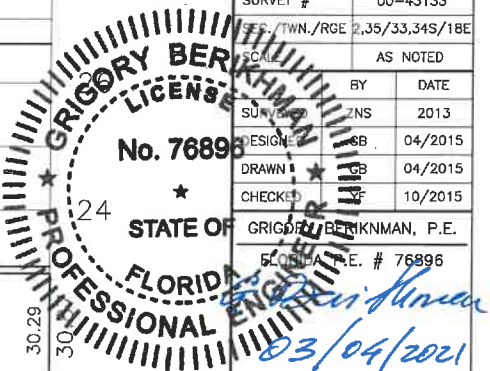
ALL ELEVATIONS ARE BASED ON NGVD29 DATUM



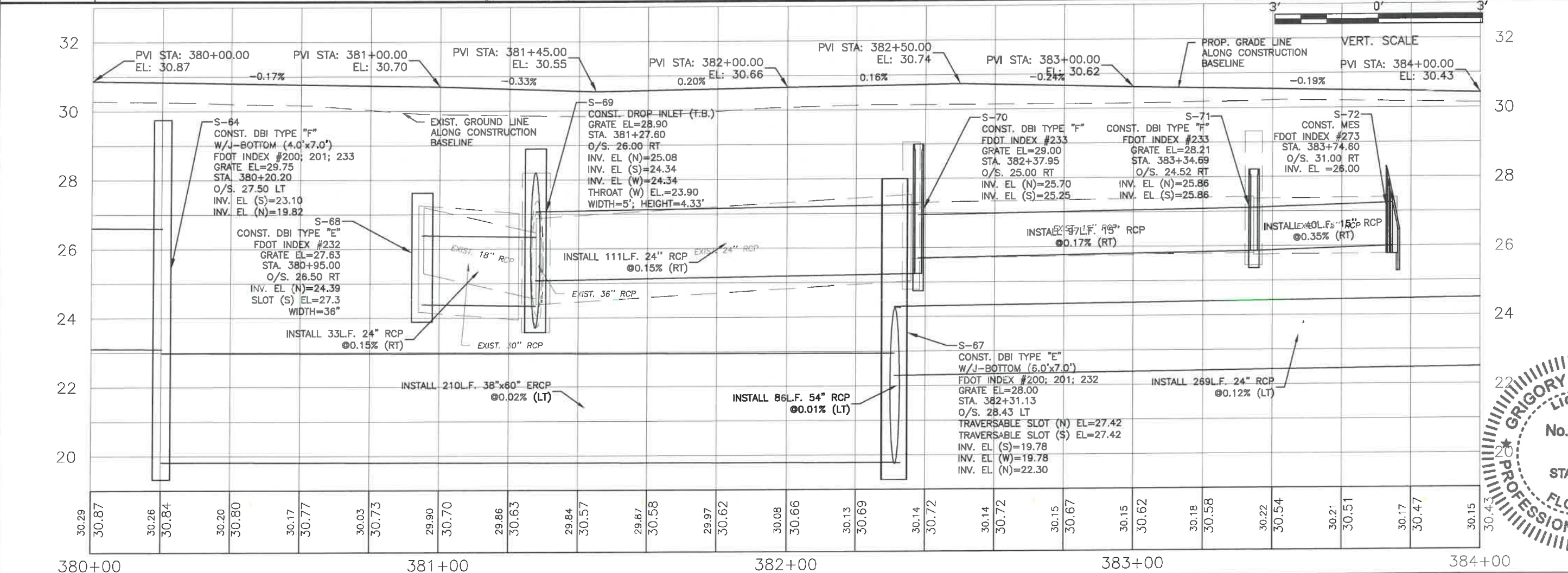
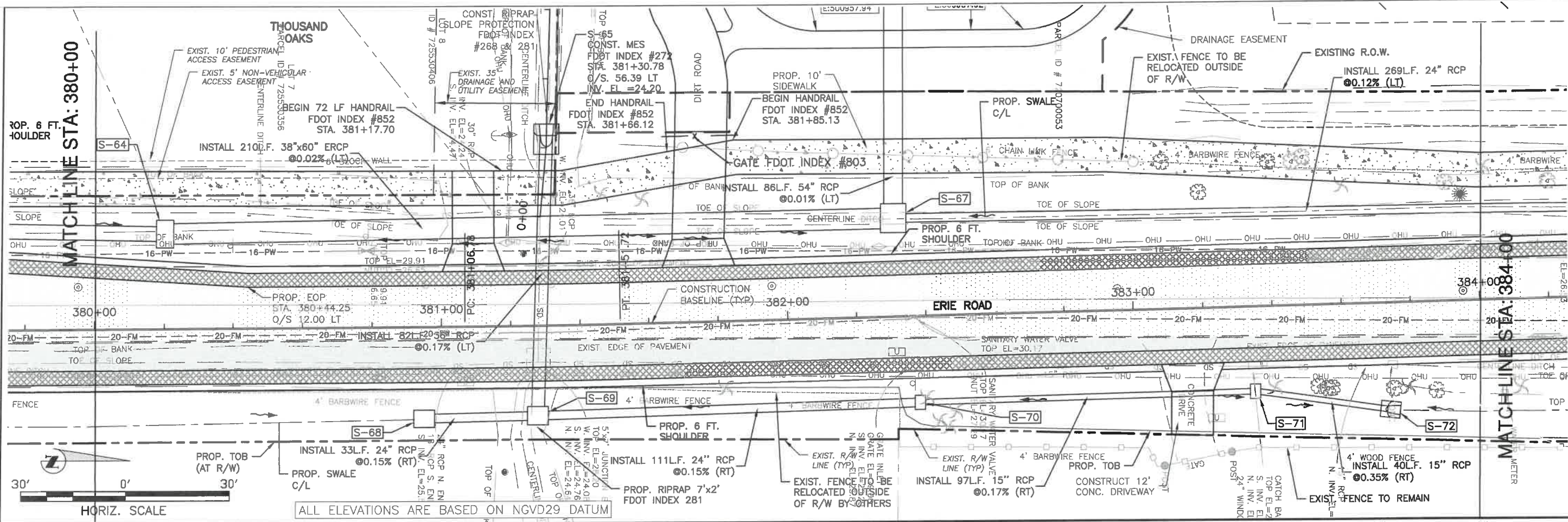
NO.	REVISION DESCRIPTION	BY	DATE
1	PER SWFWD COMMENTS	KHL	07/24/18

PROJECT #	307-6082860
SURVEY #	00-43133
SECTION	TWN./RGE 2,35/33,34S/18E
SCALE	AS NOTED
DESIGNED	INS 2013
DRAWN	SB 04/2015
CHECKED	SB 10/2015
GRIGORY BERKMAN, P.E.	FLORIDA PROFESSIONAL ENGINEER # 76896
Signature & Date	<i>Grigory Berkman</i> 03/04/2021



**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 380+00 TO 384+00**

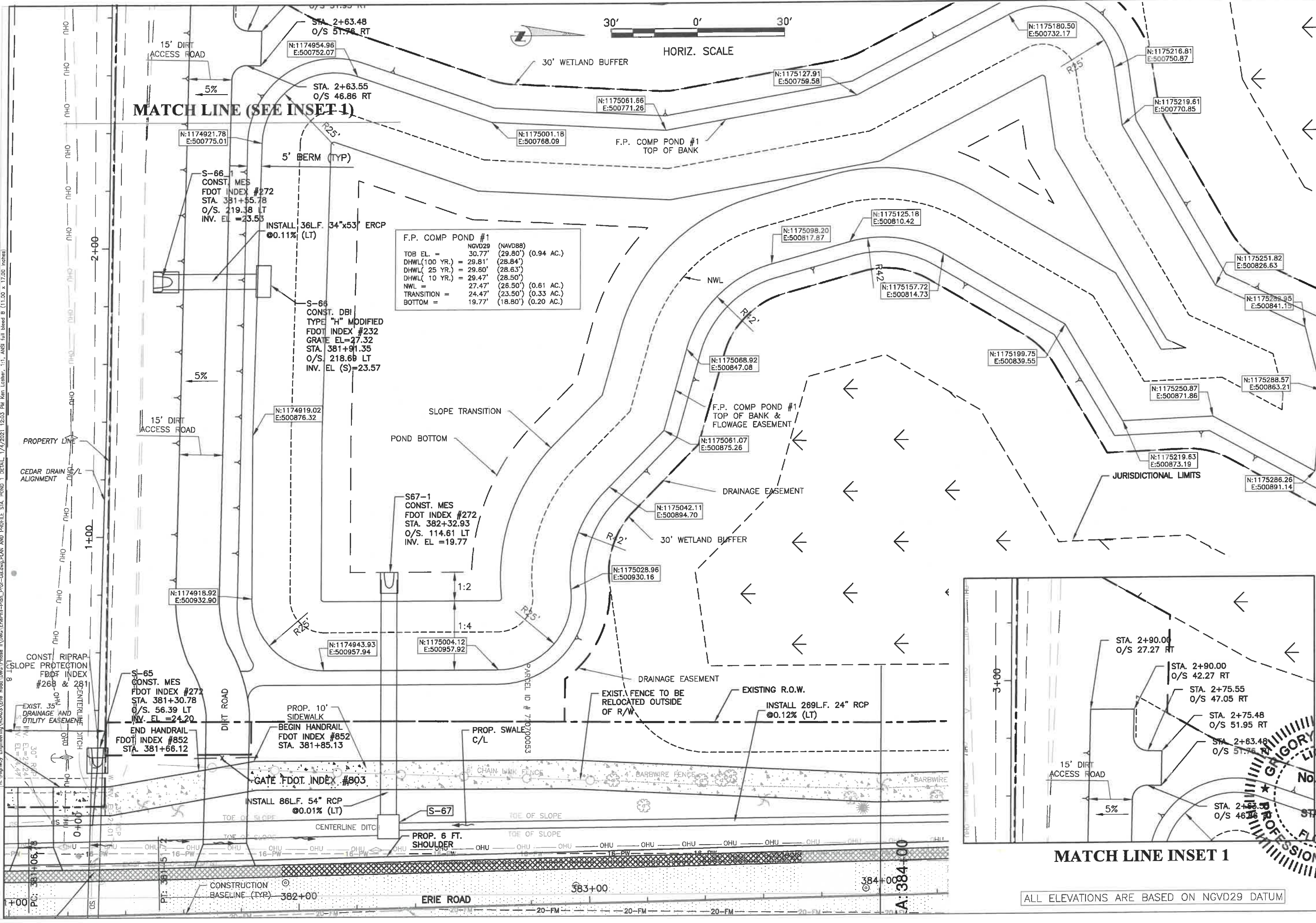
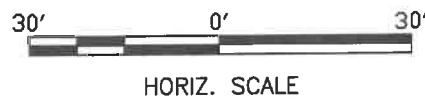


**GRIGORY BERIKHMAN**  
Professional Engineer  
No. 76896  
FLORIDA  
2021  
Signature & Date

NO.	REVISION DESCRIPTION	DATE
1	PER SWFWD COMMENTS	07/24/18

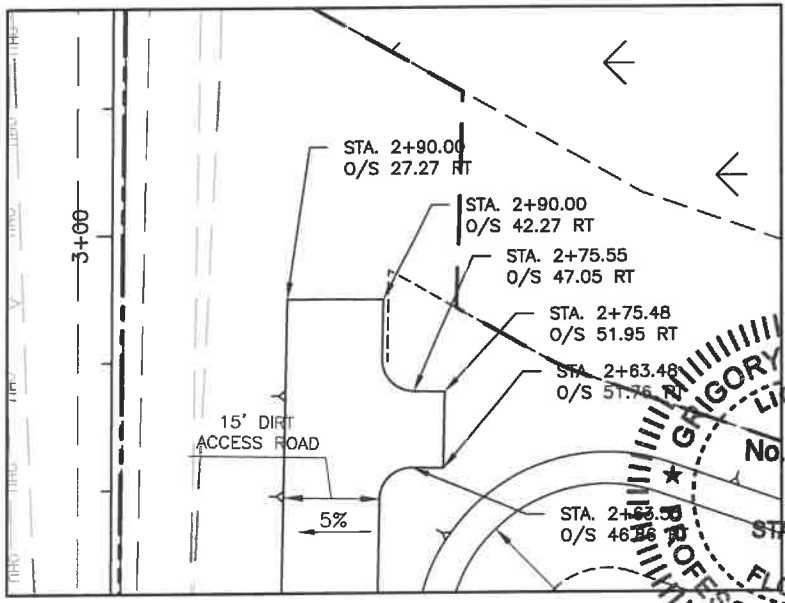
PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
DESIGNED	DATE
CHECKED	DATE
GRIGORY BERIKHMAN, P.E.	DATE
STATE OF FLORIDA	DATE

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
POND DETAIL AT COVENTRY PARK  
DESIGNED BY ZNS PERMIT #**



**F.P. COMP POND #1**

TOB EL. =	30.77'	(29.80')	(0.94 AC.)
DHWL(100 YR.) =	29.81'	(28.84')	
DHWL( 25 YR.) =	29.60'	(28.63')	
DHWL( 10 YR.) =	29.47'	(28.50')	
NWL =	27.47'	(26.50')	(0.61 AC.)
TRANSITION =	24.47'	(23.50')	(0.33 AC.)
BOTTOM =	19.77'	(18.80')	(0.20 AC.)



**MATCH LINE INSET 1**

ALL ELEVATIONS ARE BASED ON NGVD29 DATUM

NO.	REVISION DESCRIPTION	DATE
1	PER SWFMD COMMENTS	07/24/18

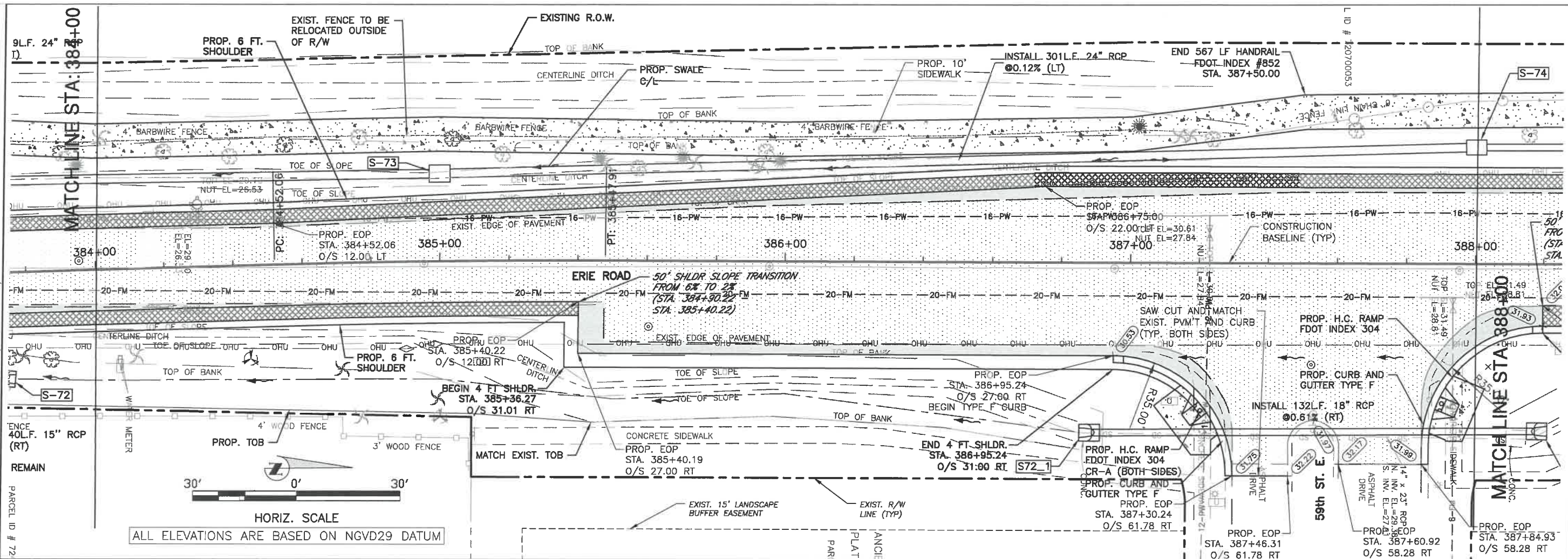
PROJECT #	307-6082860
DRAWN BY	00-43133
CHECKED BY	DATE
SURVEYED BY	DATE
AS NOTED	DATE
DATE	04/2015
DATE	04/2015
DATE	07/2015
DATE	07/2015
DATE	07/2015
DATE	07/2015

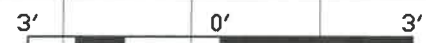
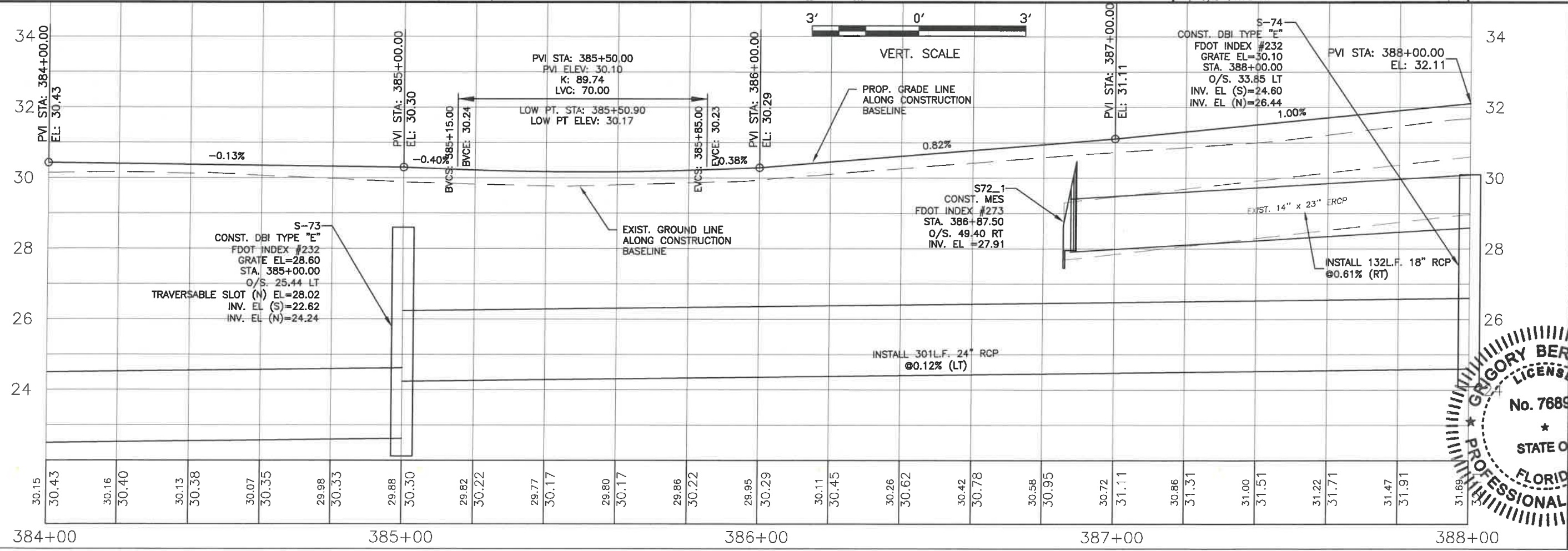
**GRIGORY BERIKHIAN**  
Professional Engineer  
No. 76896  
FLORIDA  
Signature & Date: 11/11/2018



**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 384+00 TO 388+00**



HORIZ. SCALE  
ALL ELEVATIONS ARE BASED ON NGVD29 DATUM



VERT. SCALE

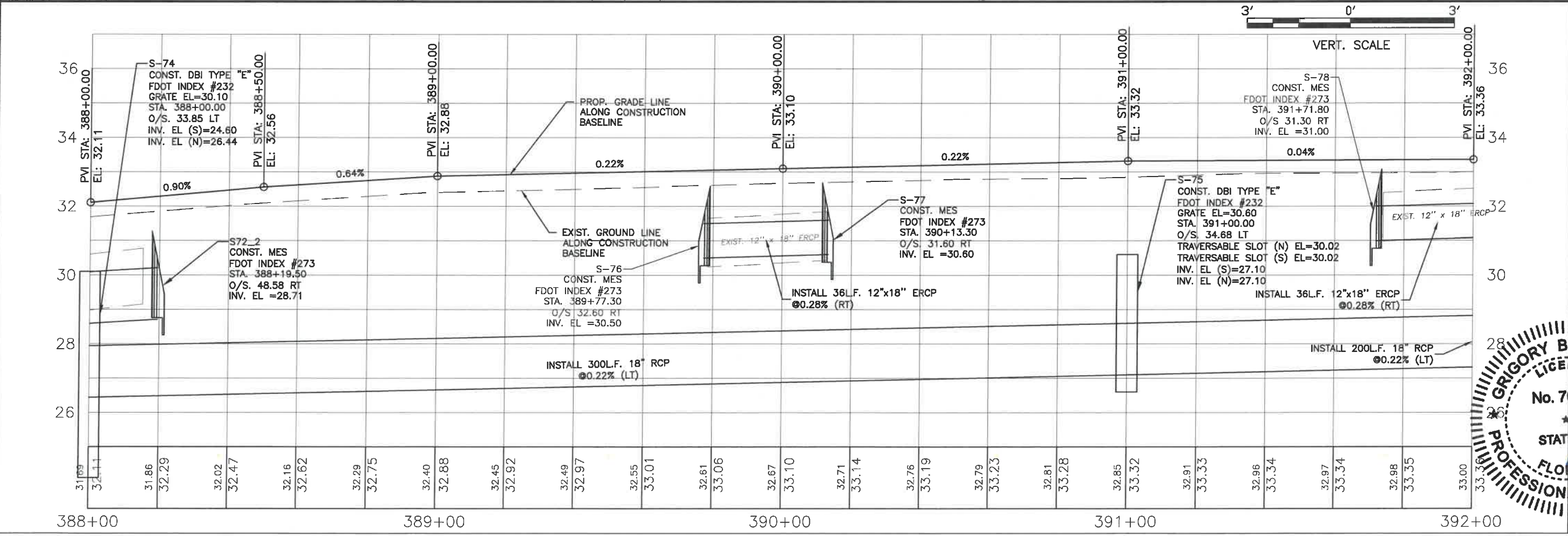
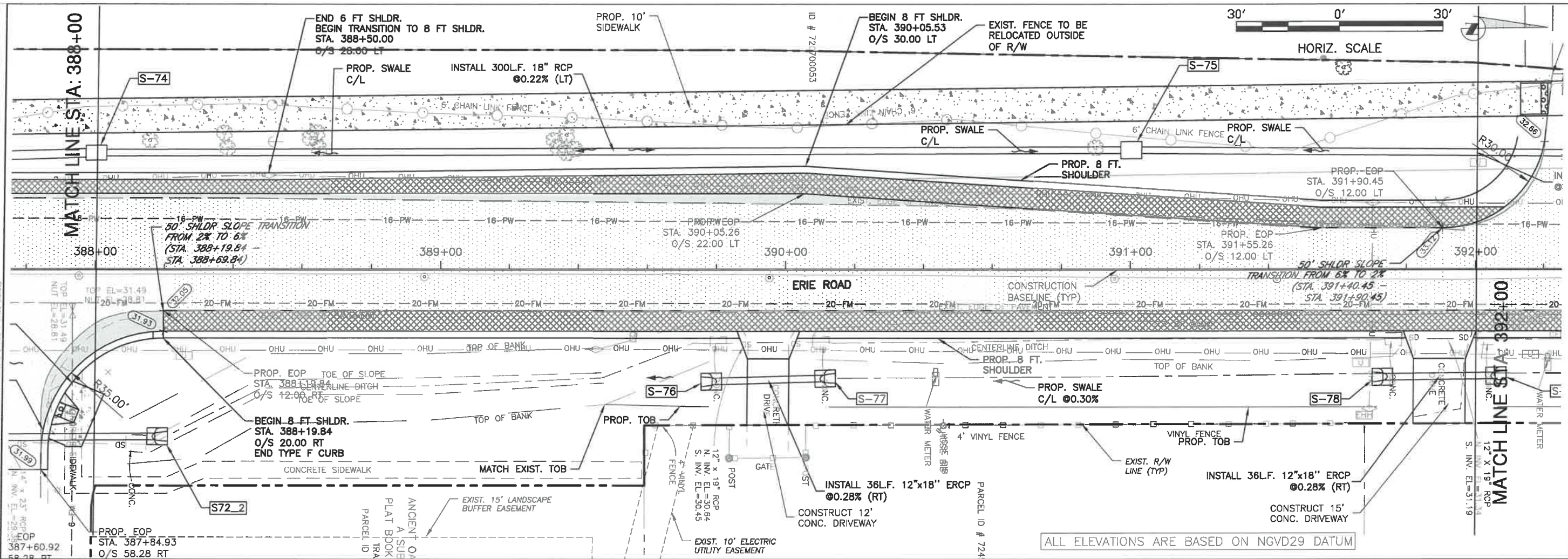
**GRIGORY BERKMAN**  
LICENSE  
No. 76896  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
Signature & Date  
04/2021

NO.	REVISION DESCRIPTION	BY	DATE
1	PER SWFWD COMMENTS	KHL	07/24/18

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
AS NOTED	
DESIGNED BY	ZNS 2013
DRAWN BY	04/2015
CHECKED BY	10/2015
GRIGORY BERKMAN, P.E.	
FLORIDA # 76896	

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 388+00 TO 392+00**



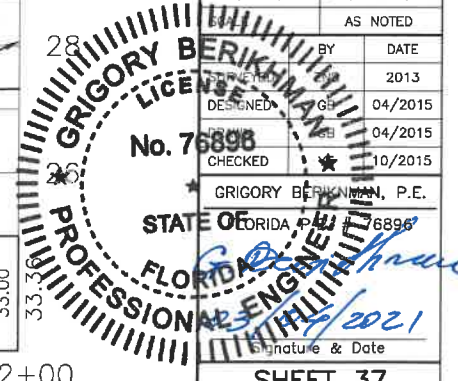
3' 0' 3'  
VERT. SCALE

ALL ELEVATIONS ARE BASED ON NGVD29 DATUM

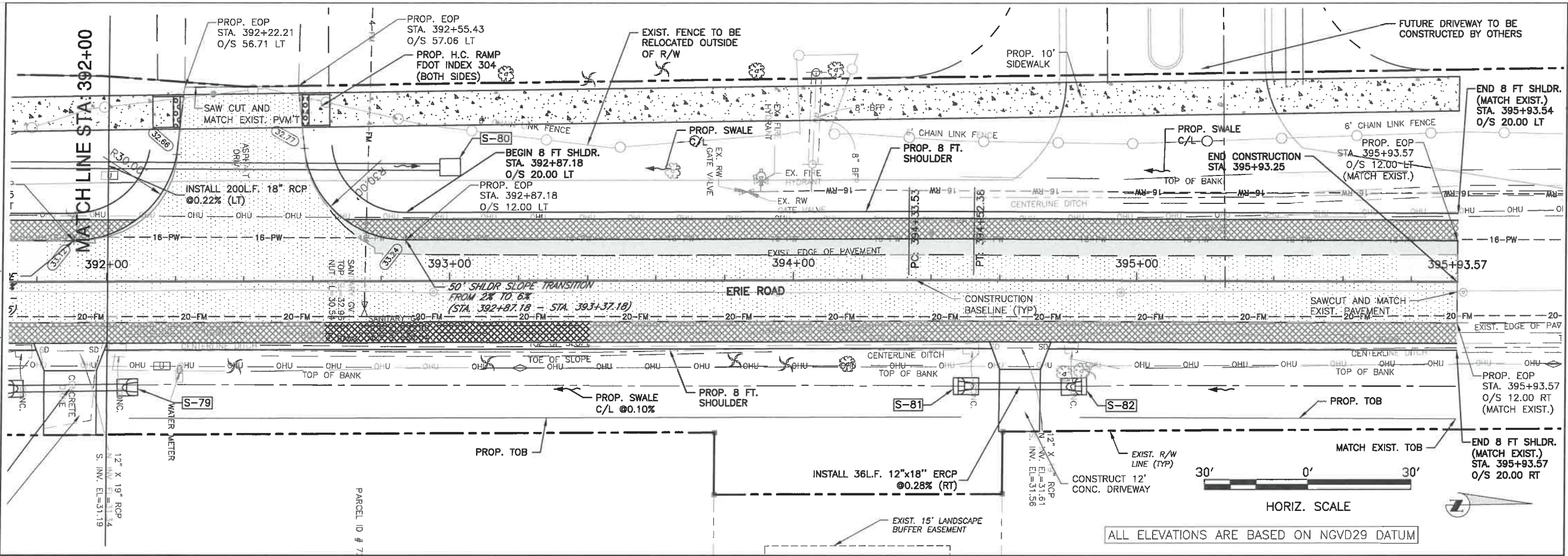
NO.	REVISION DESCRIPTION	BY	DATE
1	PER SWP/MD COMMENTS	KHL	07/24/18

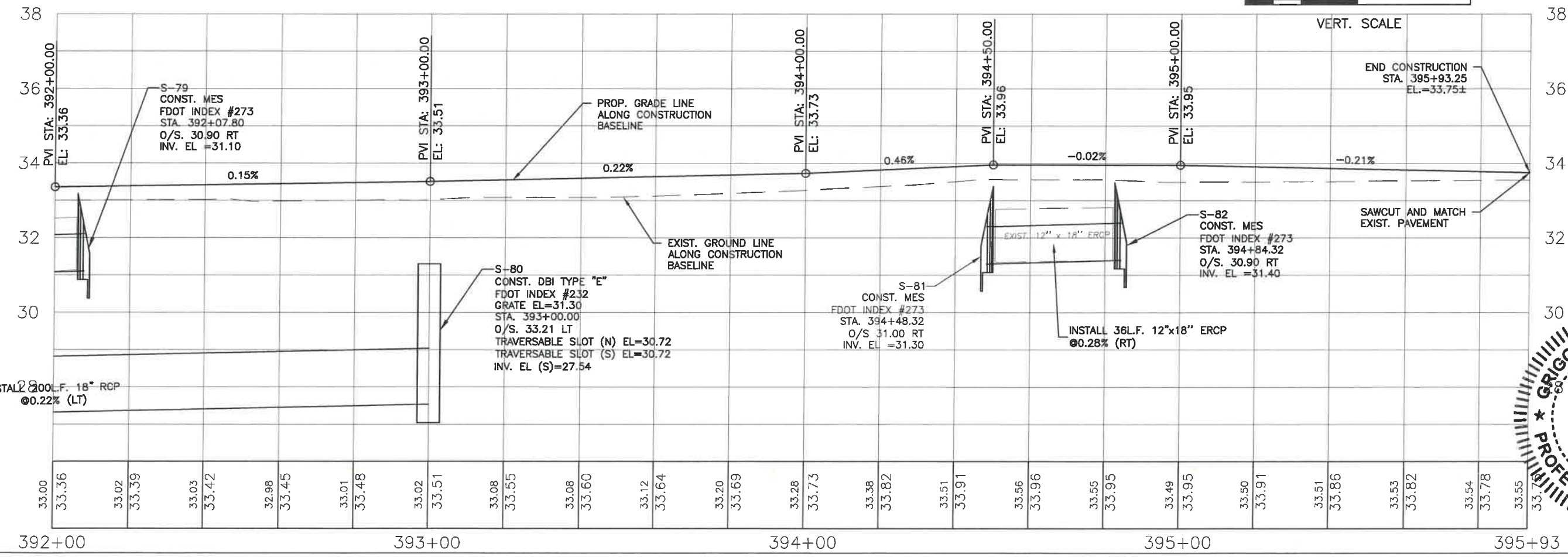
PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
AS NOTED	
DESIGNED	04/2015
CHECKED	04/2015
10/2015	
GRIGORY BERIKMAN, P.E.	
FLORIDA # 6896	
Signature & Date	



**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND PROFILE STA. 392+00 TO 395+93.25**



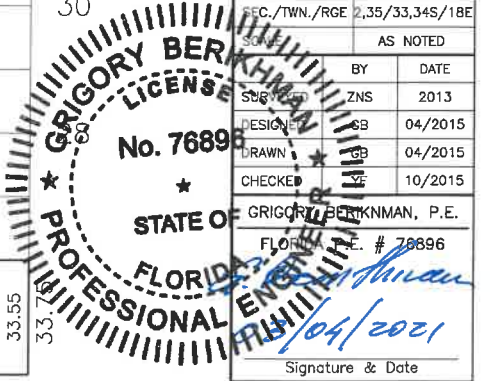
ALL ELEVATIONS ARE BASED ON NGVD29 DATUM



NO.	REVISION DESCRIPTION	BY	DATE

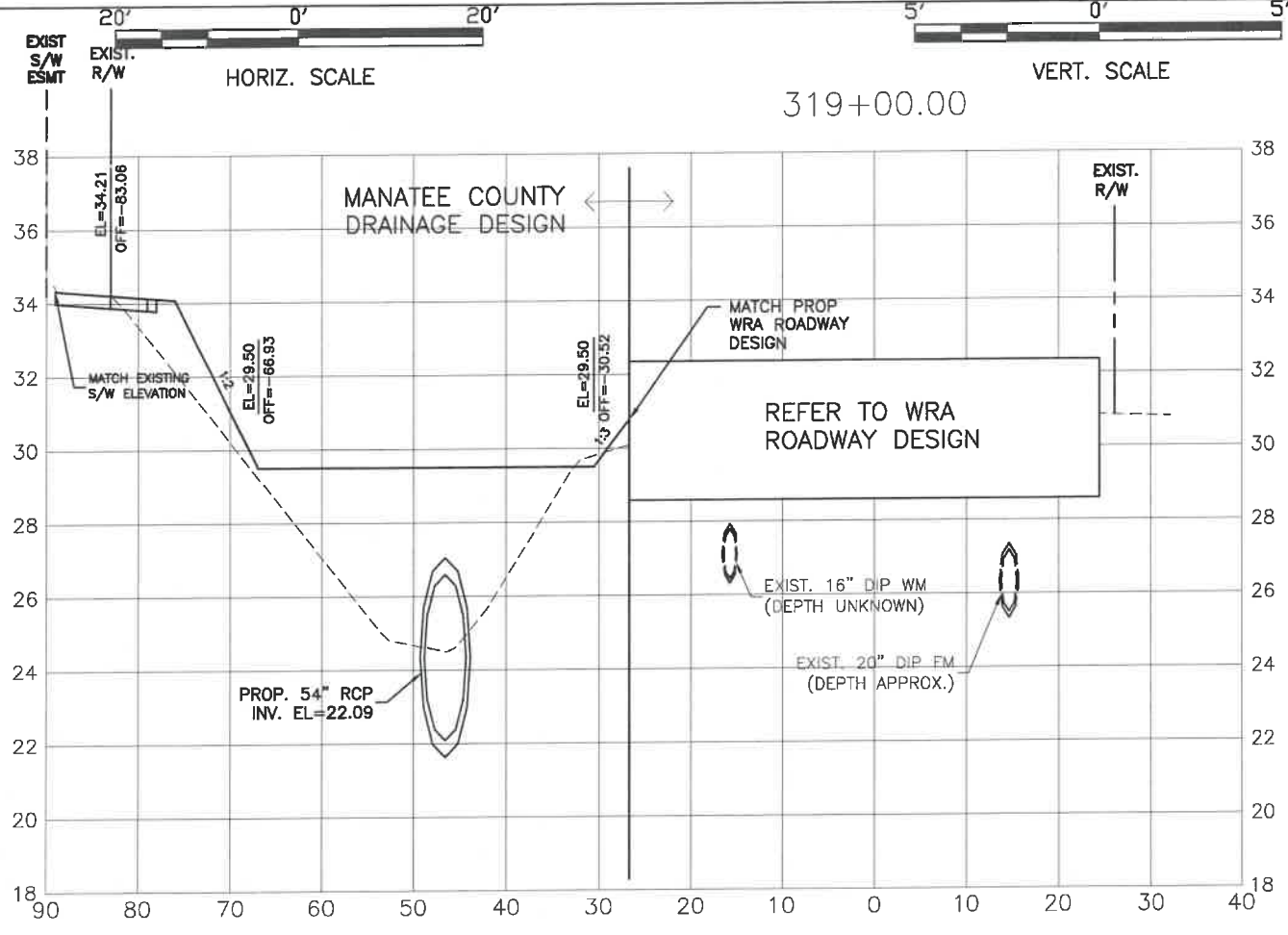
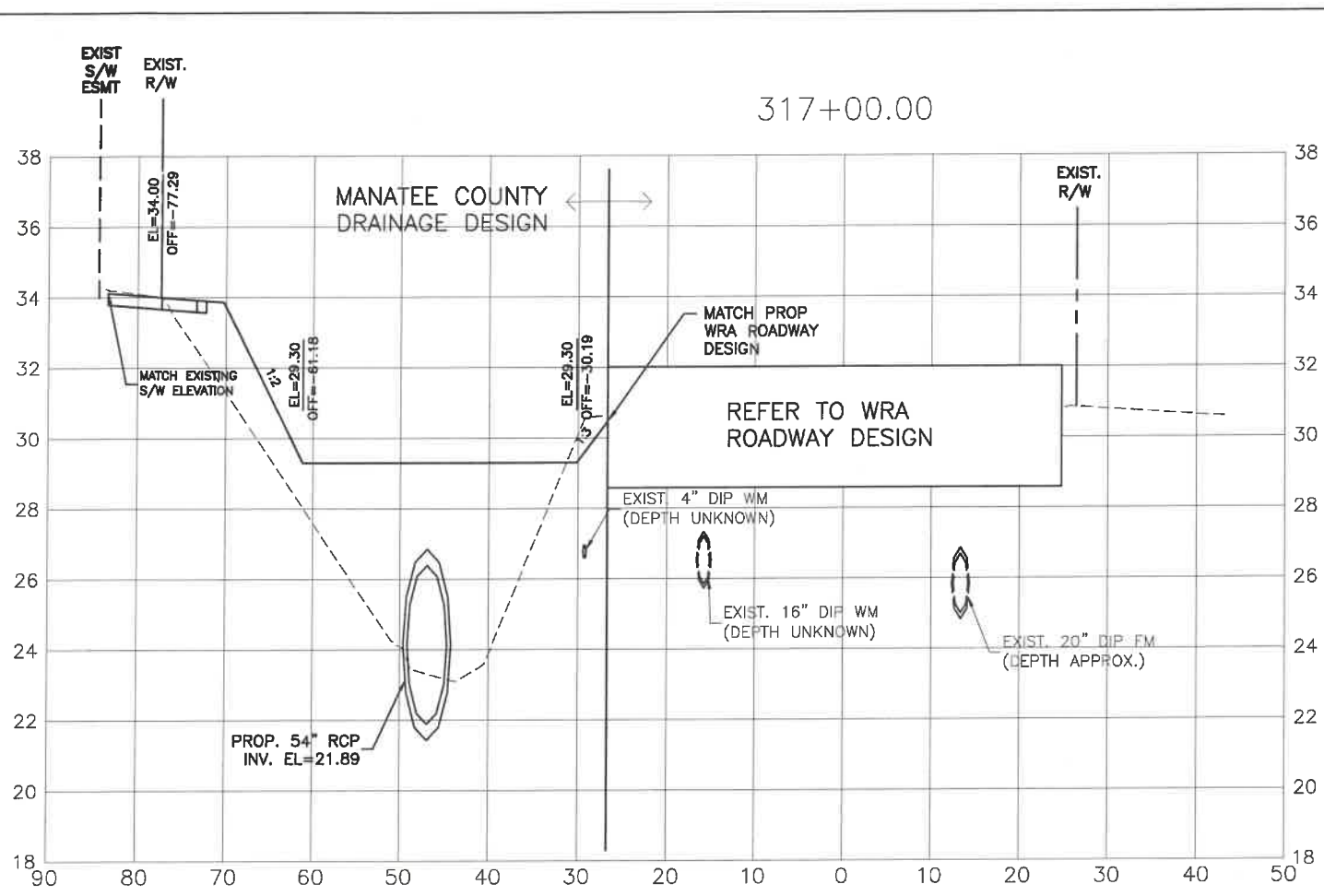
PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
AS NOTED	
DESIGNED BY	ZNS 2013
DRAWN BY	GB 04/2015
CHECKED BY	TH 10/2015
GRIGORY BERKMAN, P.E.	
FLORIDA PROFESSIONAL ENGINEER #	78896
Signature & Date	<i>Grigory Berkman</i> 04/2021



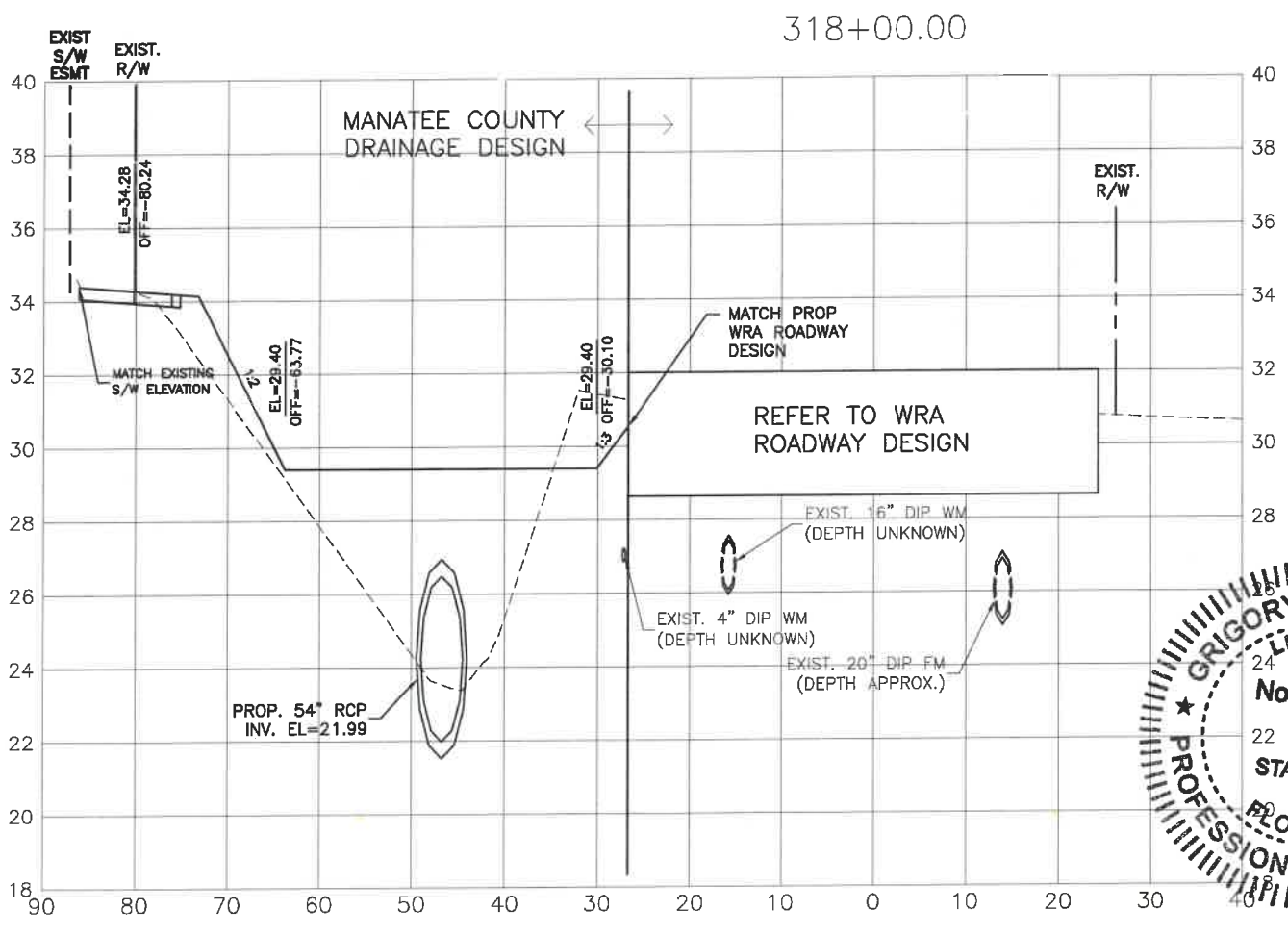
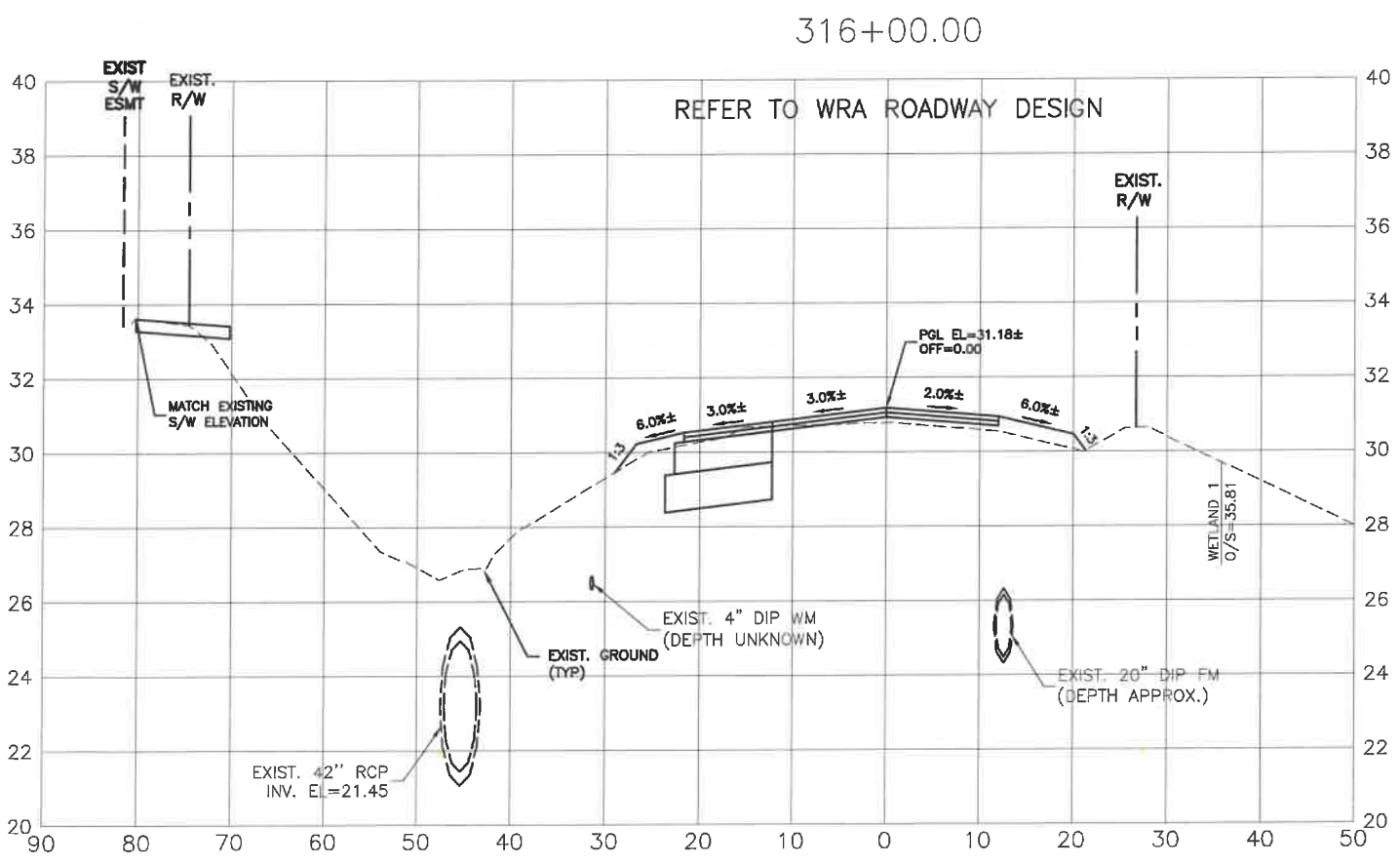


PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES  
1022 26th Avenue East, Bradenton, FL 34208

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**



FROM STA: 316+14 TO STA:324+00 THE ROADWAY IMPROVEMENTS CONSTRUCTION PLANS ARE DESIGNED AND PERMITTED BY WRA. STORMWATER IMPROVEMENTS CONSTRUCTION PLANS ARE DESIGNED AND PERMITTED BY MANATEE COUNTY.



**GRIGORY BERIKMAN**  
No. 76896  
PROFESSIONAL ENGINEER  
STATE OF FLORIDA  
76896

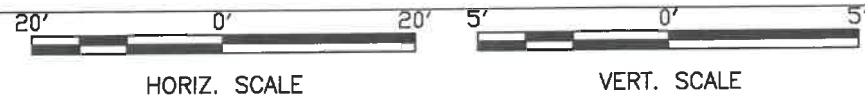
DESIGNED: GB 04/2015  
CHECKED: YF 10/2015  
BY: DATE 2013  
DATE: 04/2015

Signature & Date: *Grigory Berikman* / 2021

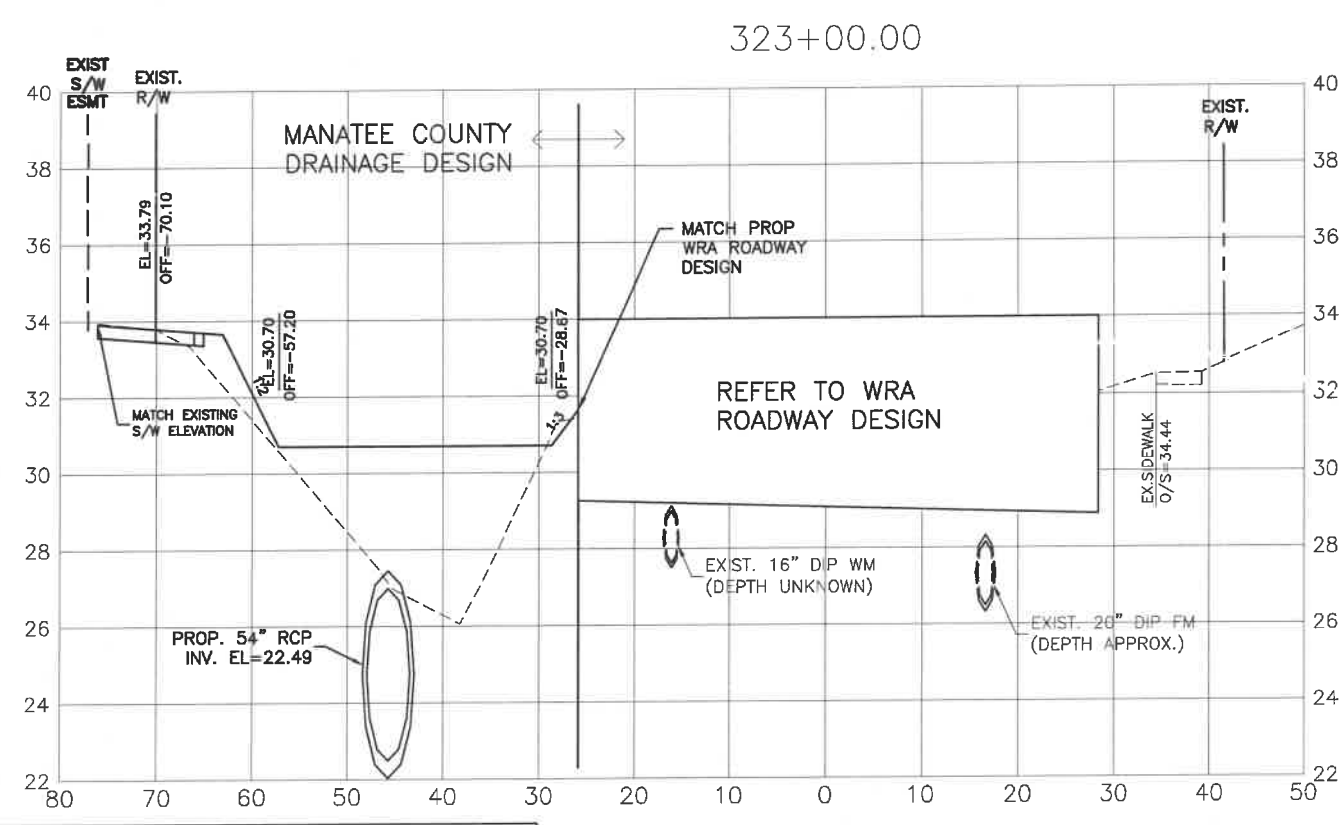
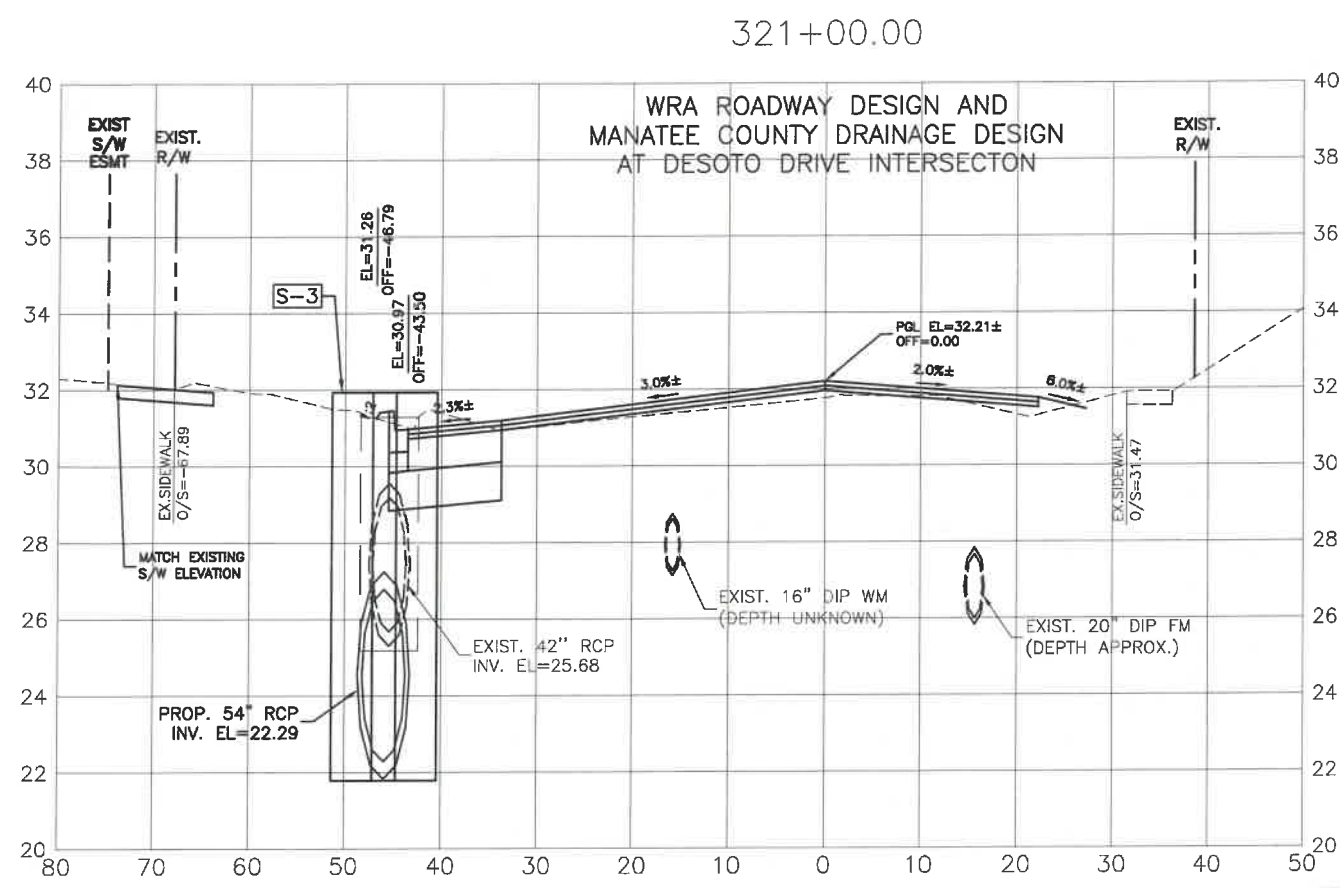
NO.	DATE	BY	REVISION DESCRIPTION

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2, 35/33, 34S/18E
AS NOTED	

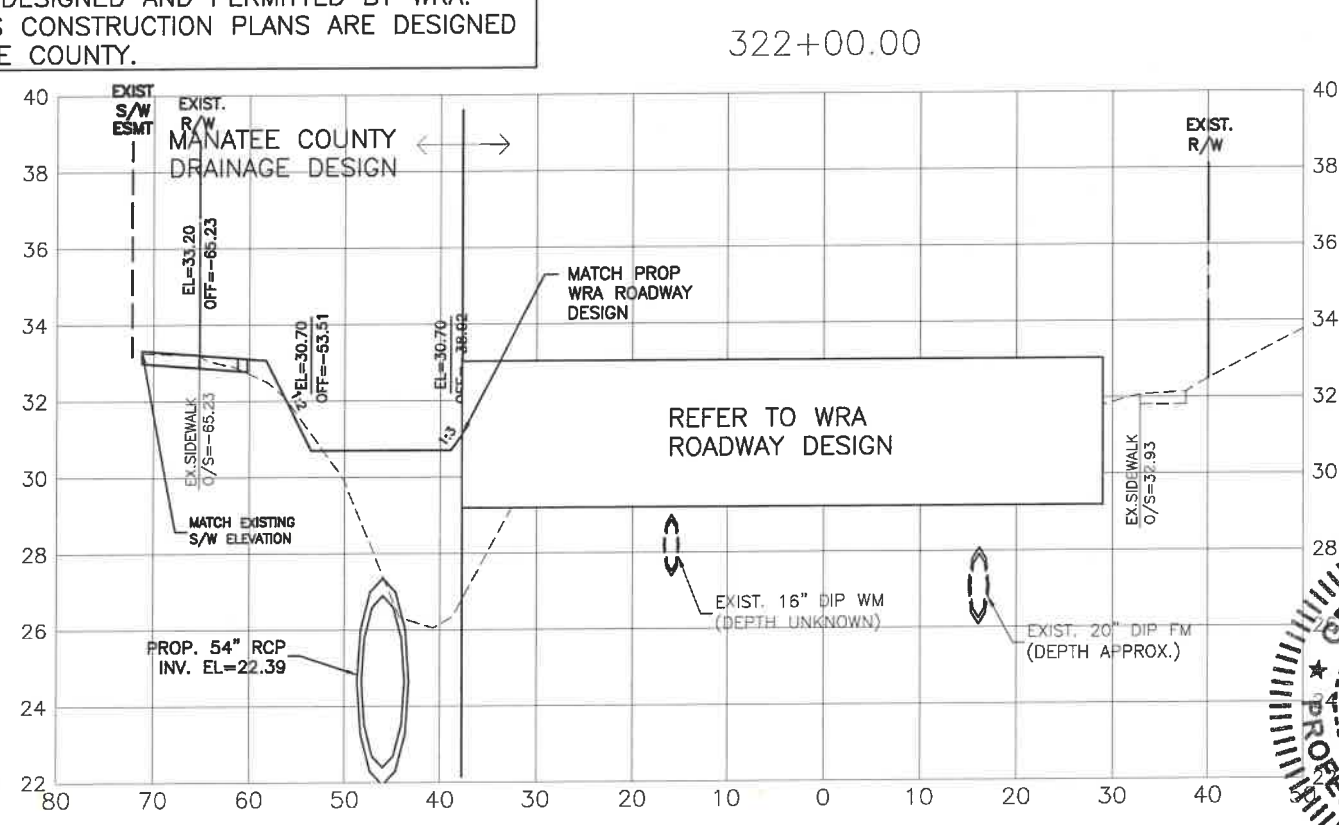
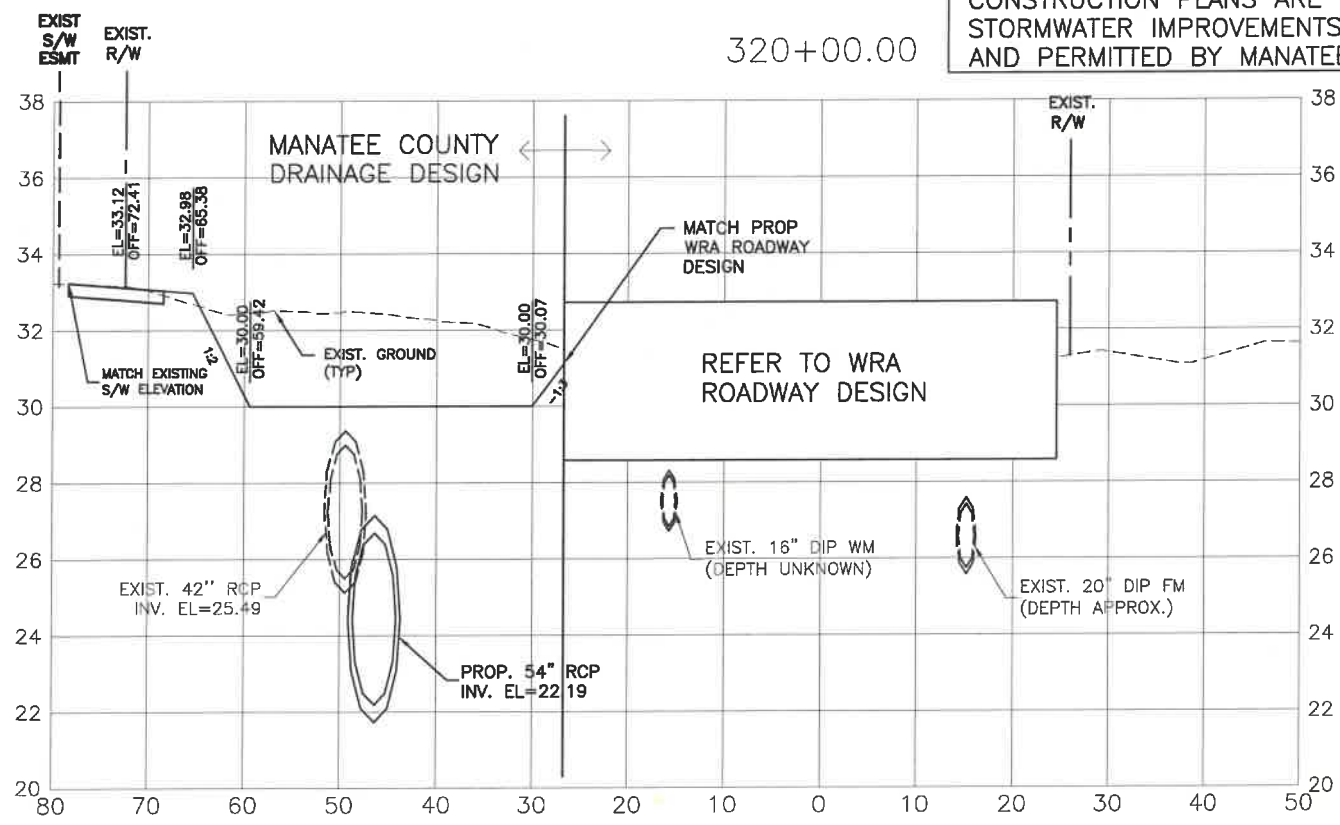
H:\Highway Engineering\ROADS\Phase II\WRA\ERI\PH2-X\Sheeting\_X\_SEC-43\_1\4/2021 12:05 PM Ken Lathan, L1 - ANSI full bleed B (11.00 x 17.00 inches)



**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**



FROM STA: 316+14 TO STA:324+00 THE ROADWAY IMPROVEMENTS CONSTRUCTION PLANS ARE DESIGNED AND PERMITTED BY WRA. STORMWATER IMPROVEMENTS CONSTRUCTION PLANS ARE DESIGNED AND PERMITTED BY MANATEE COUNTY.



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
DESIGNED BY	MS 04/2015
CHECKED BY	YP 10/2015
DATE	2013
BY	MS 04/2015
CHECKED	YP 10/2015
DATE	2015
PROF.	GRIGORY BERIKMAN, P.E.
NO.	76896
STATE OF	FLORIDA
PROFESSIONAL ENGINEER	
Signature & Date	<i>[Signature]</i> /2021

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**

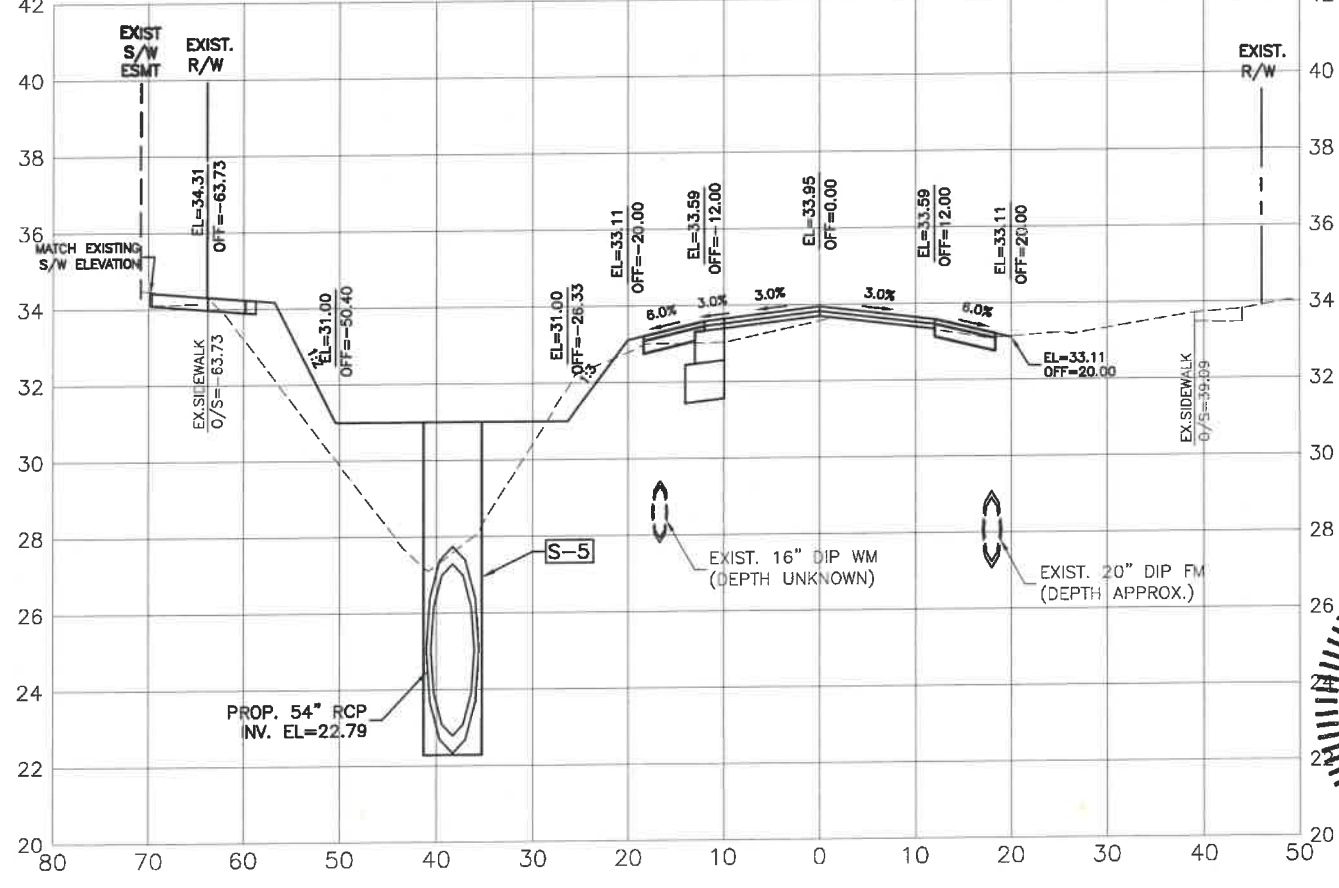
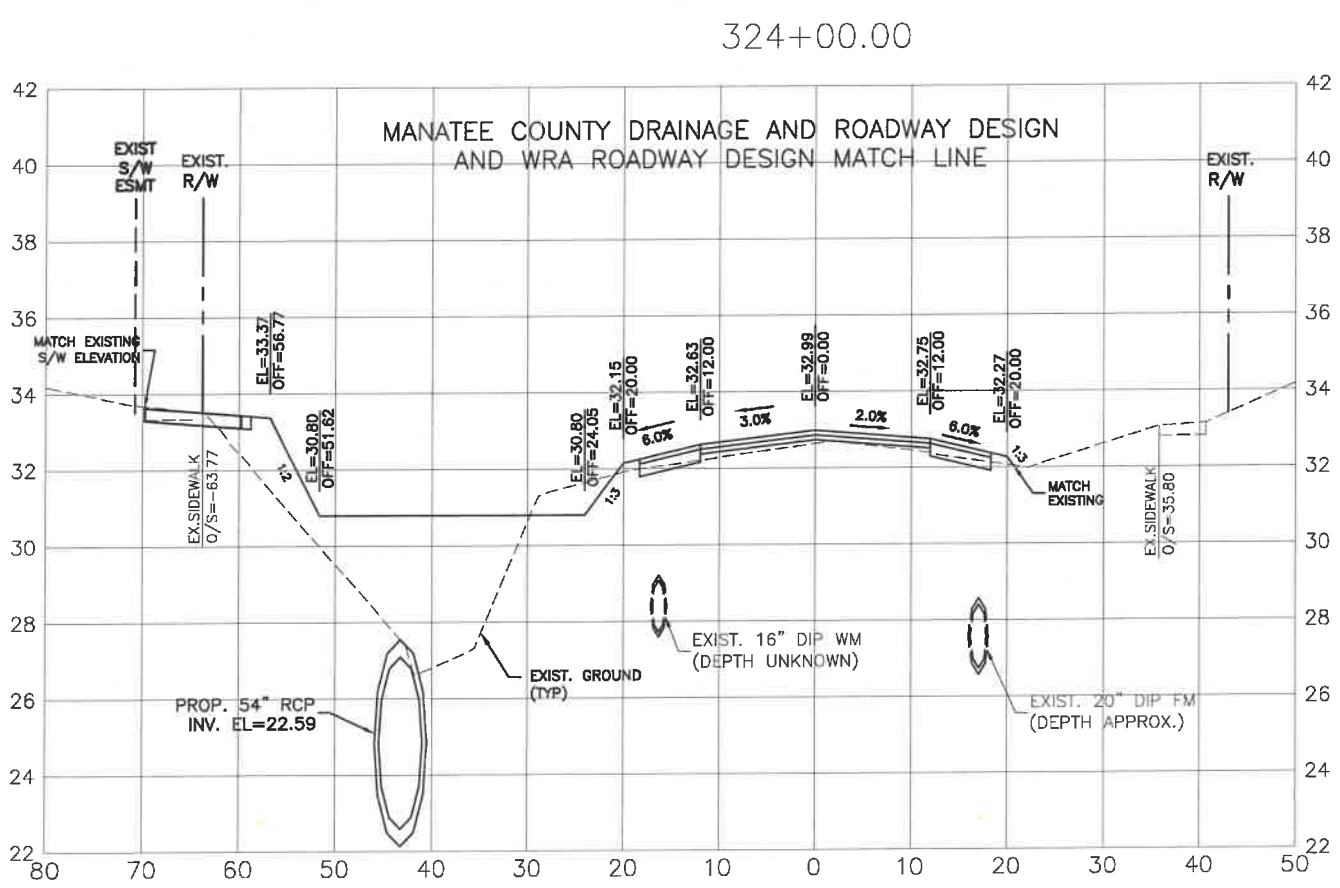
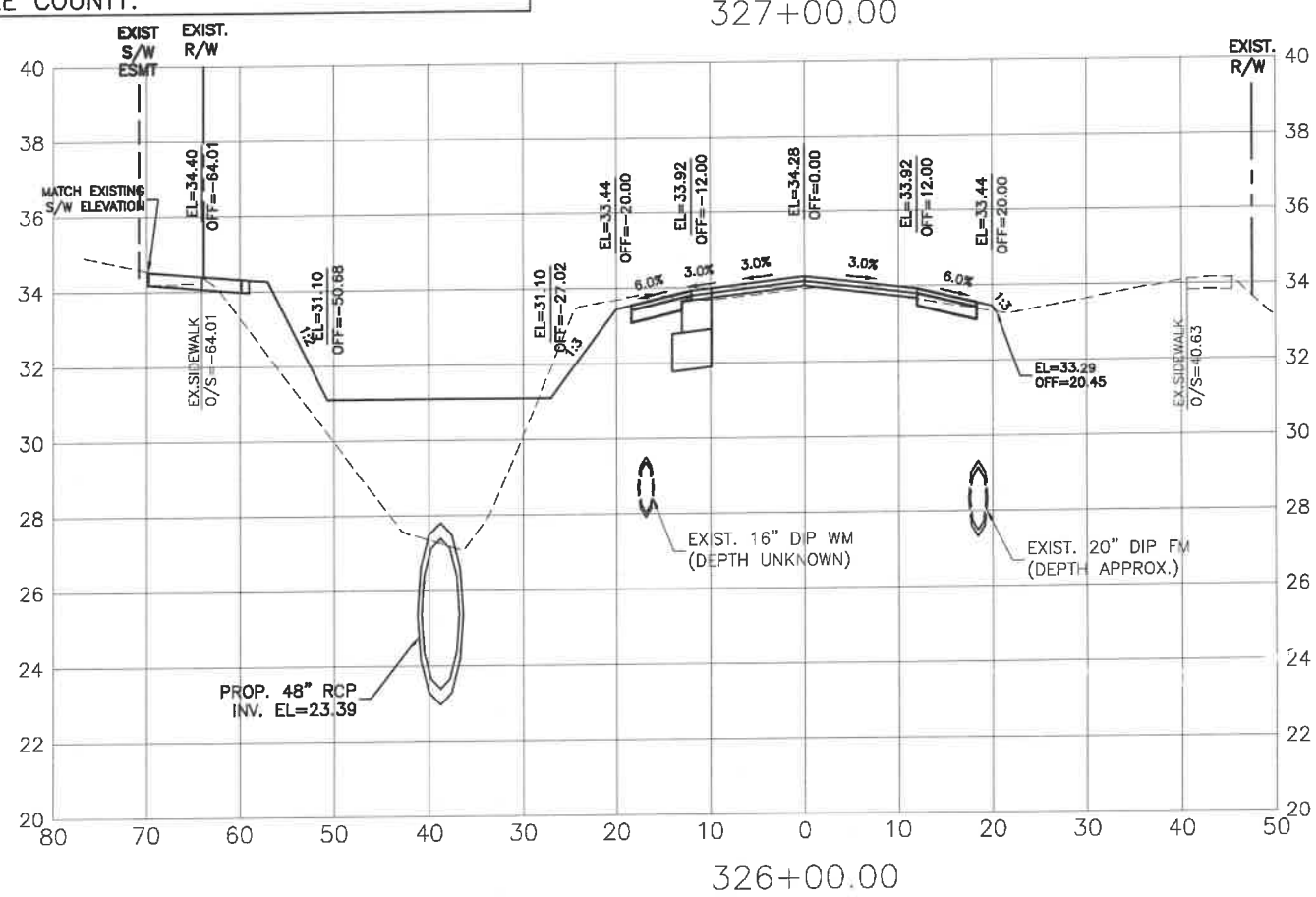
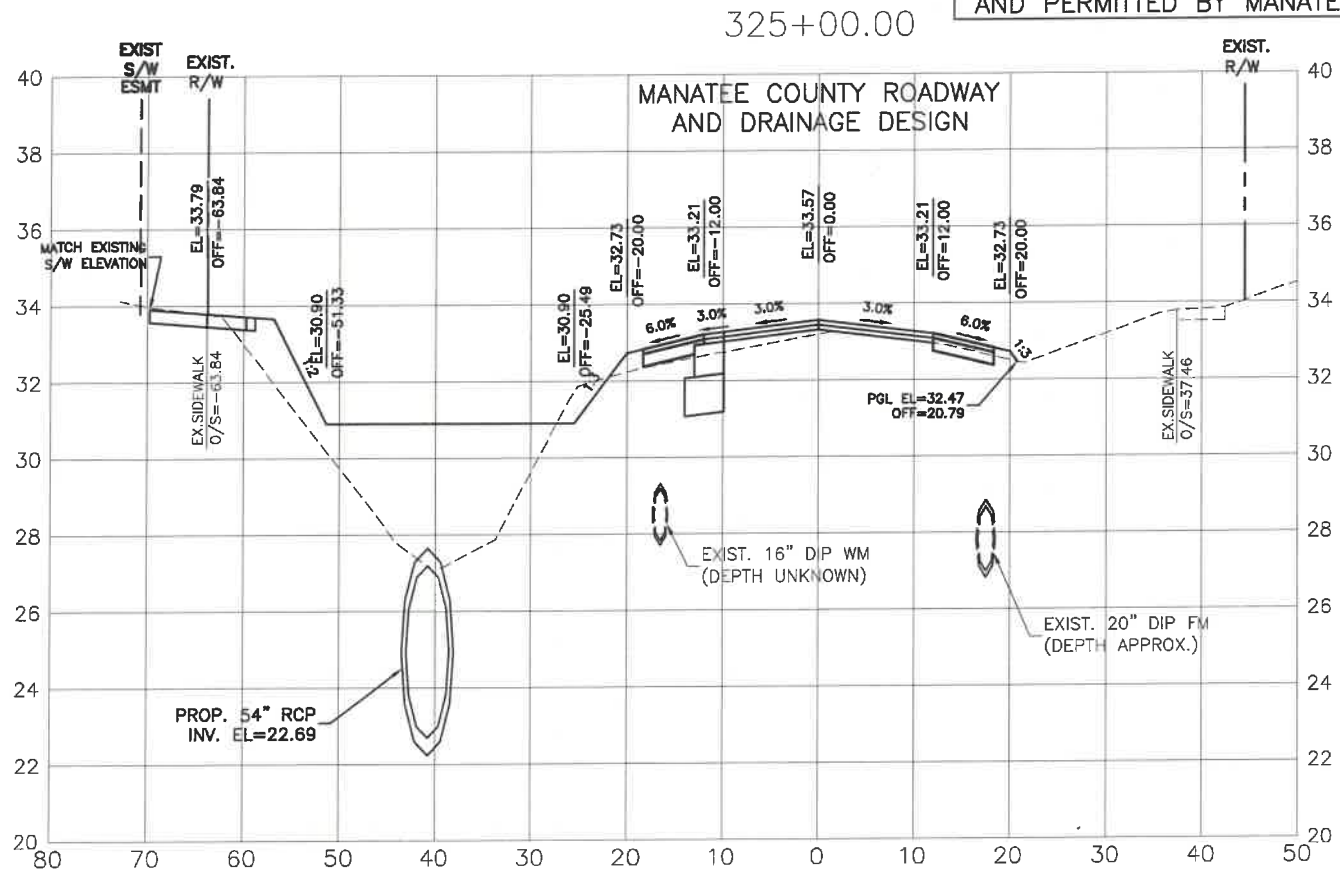


HORIZ. SCALE



VERT. SCALE

FROM STA: 316+14 TO STA:324+00 THE ROADWAY IMPROVEMENTS CONSTRUCTION PLANS ARE DESIGNED AND PERMITTED BY WRA. STORMWATER IMPROVEMENTS CONSTRUCTION PLANS ARE DESIGNED AND PERMITTED BY MANATEE COUNTY.

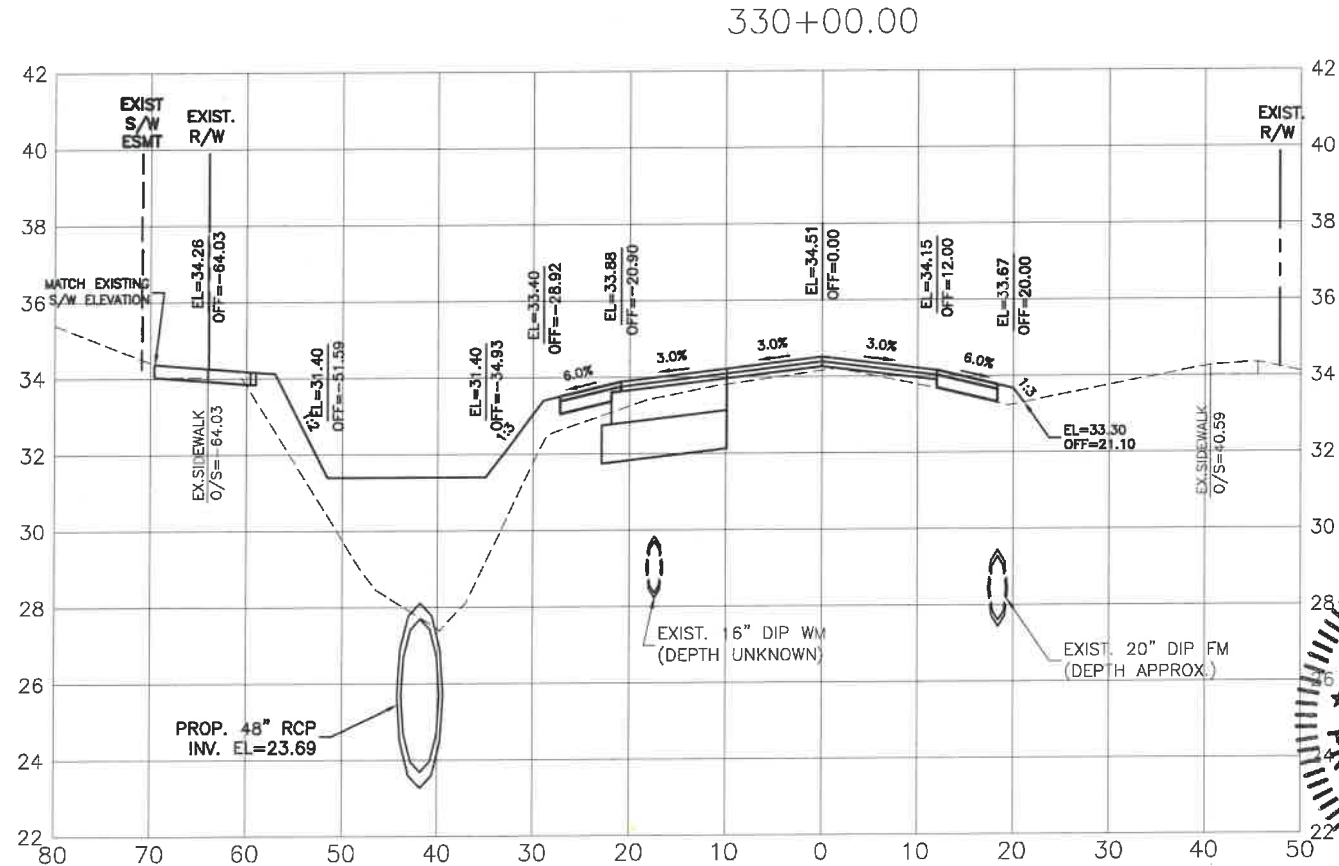
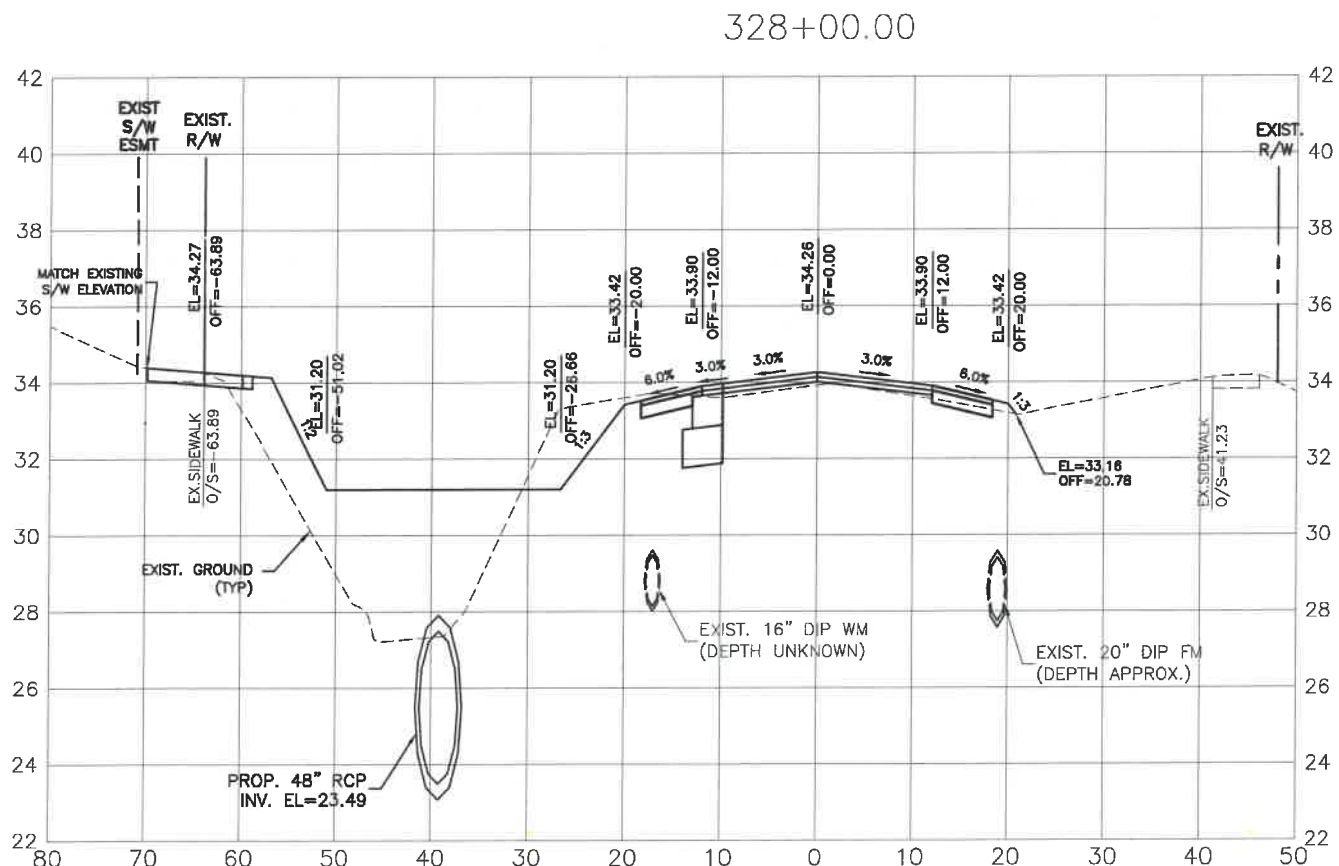
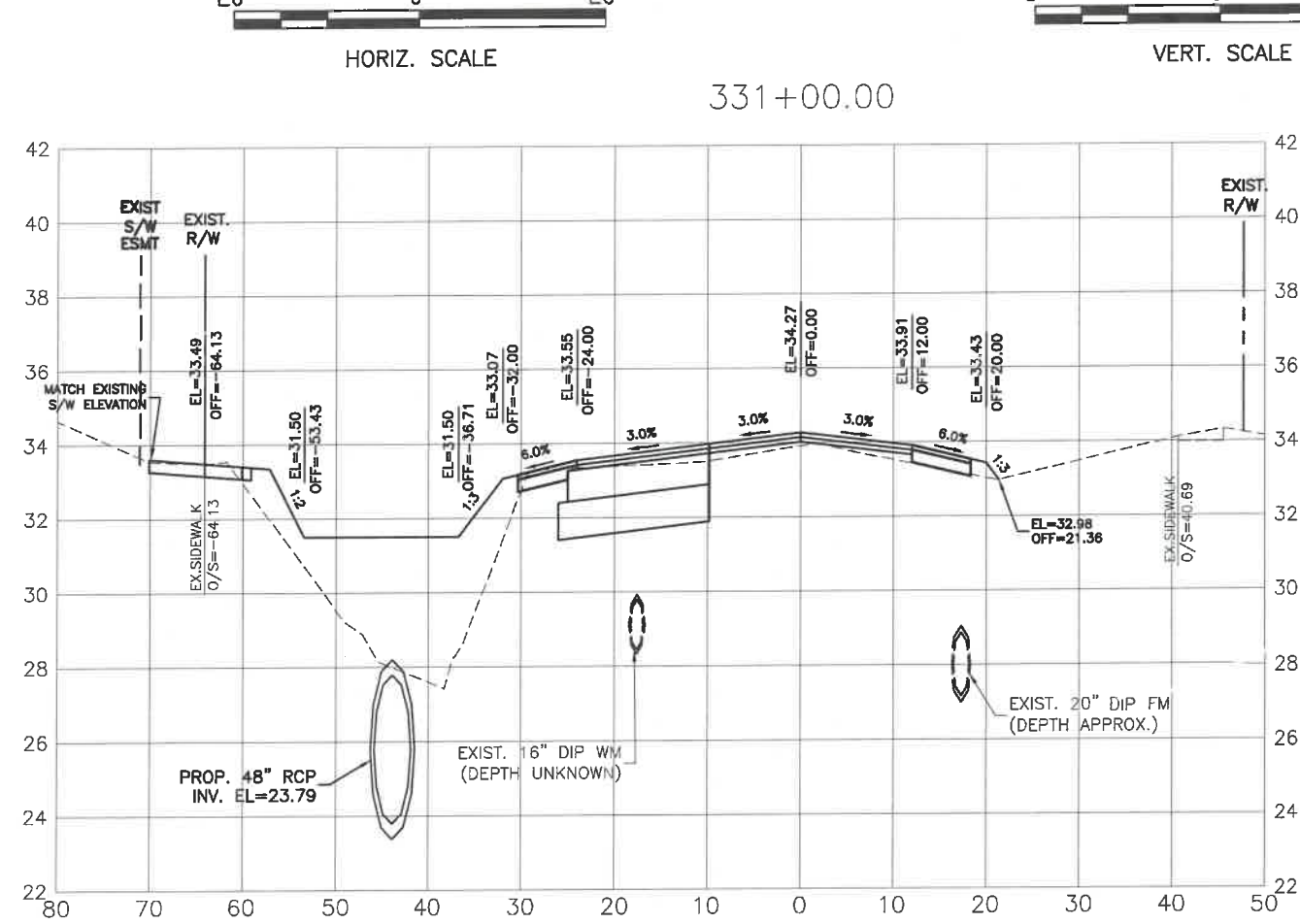
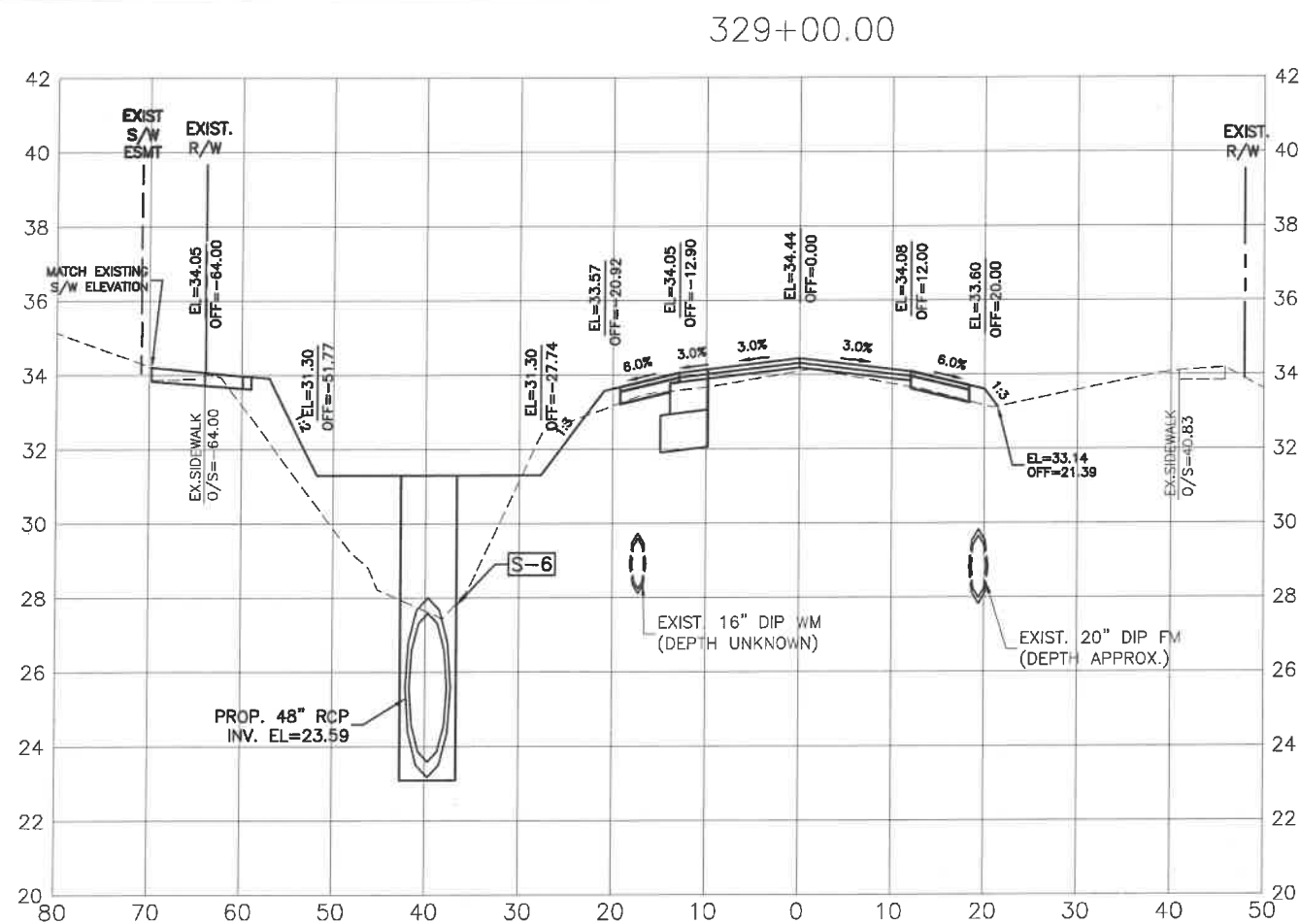


NO.	REVISION DESCRIPTION	DATE	BY

PROJECT #	307-6082860
SURVEY #	00-43133
DESIGNED BY	WRA/RGE 2,35/33,34S/18E
CHECKED BY	AS NOTED
DATE	
DESIGNED	04/2015
CHECKED	04/2015
CHECKED	10/2015
STATE OF FLORIDA	GRIGORY BERIKMAN, P.E.
PROFESSIONAL ENGINEER	FLORIDA LICENSE NO. 76896
Signature & Date	<i>[Signature]</i> 11/11/2021

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**



HORIZ. SCALE

VERT. SCALE

NO.	DATE	BY	REVISION DESCRIPTION

PROJECT #	307-6082860
SURVEY #	00-43133
DATE	04/2015
DRAWN	04/2015
CHECKED	10/2015
DATE	04/2015
AS NOTED	RGE 2,35/33,34S/18E

**GRIGORY BERKMAN**  
 LICENSED PROFESSIONAL ENGINEER  
 No. 76896  
 STATE OF FLORIDA  
 GRIGORY BERKMAN, P.E.  
 FLORIDA ENGINEER 76896  
 Signature & Date  
 11/11/2021

I:\Highway Engineering\ROADS\Erie Road\DWG\Phase II\DWG\ERIEPHI2\_SOUTH\_NORTH\_PHASE\_II\_CROSS\_SECTIONS.dwg, 11/11/2021 12:06 PM Ken Lohmer, L1, ANSI full bleed B (11.00 x 17.00 inches)



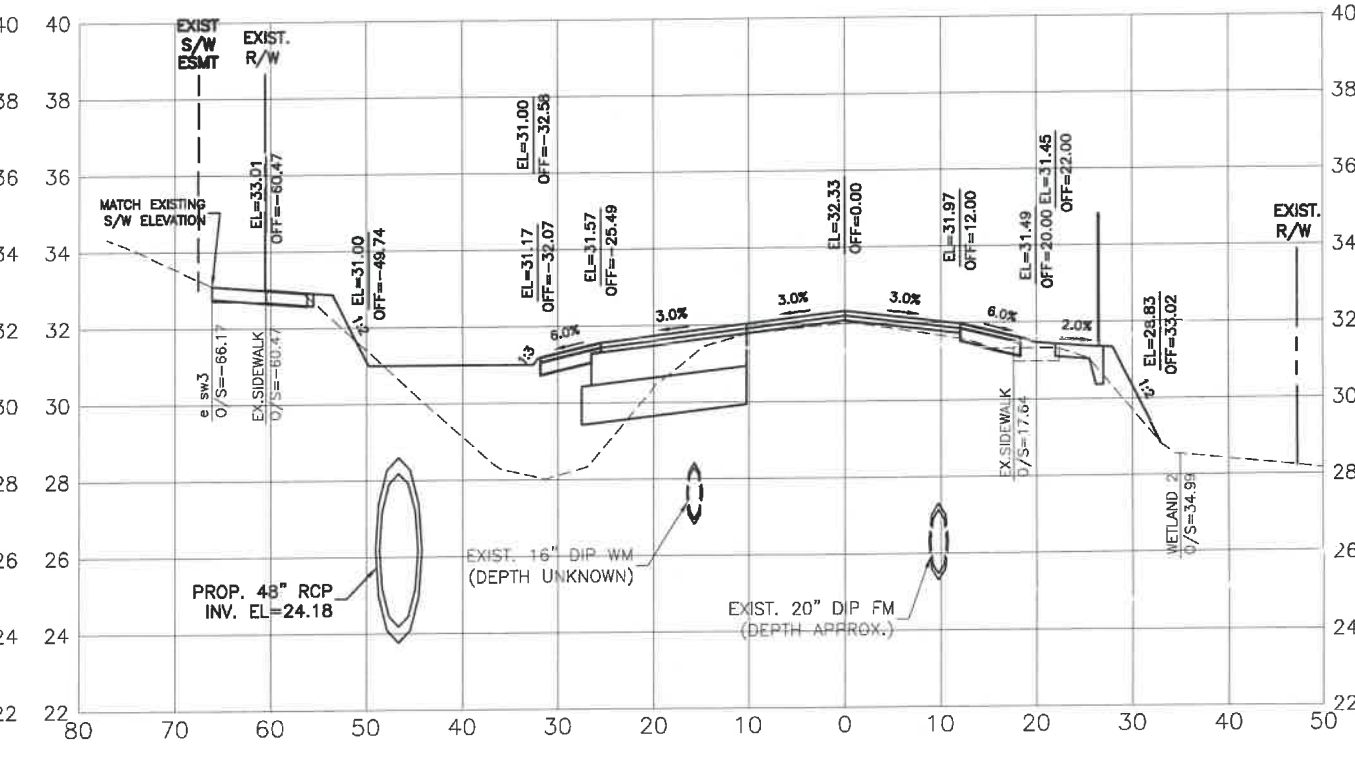
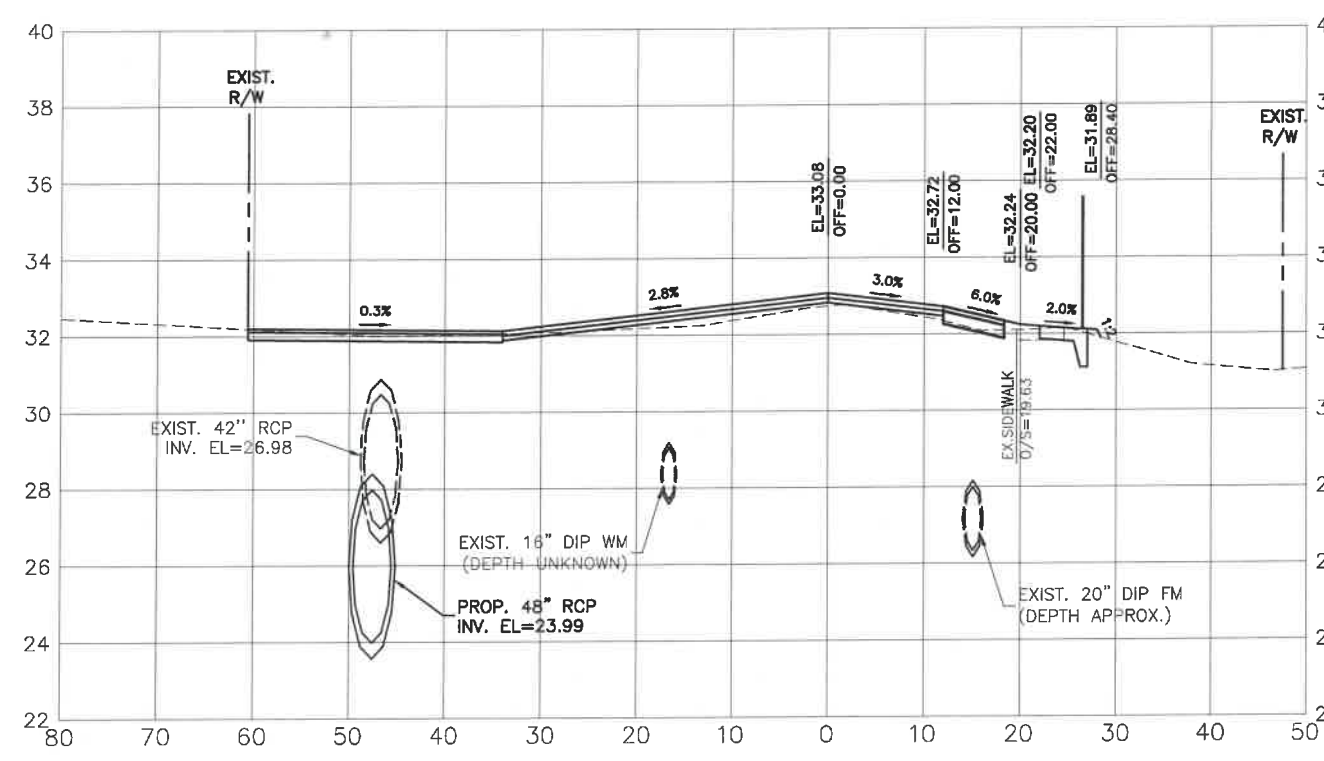
PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES  
1022 26th Avenue East, Bradenton, FL 34208

# ERIE ROAD- US301 TO US 301 SOUTH-NORTH PHASE II CROSS SECTIONS



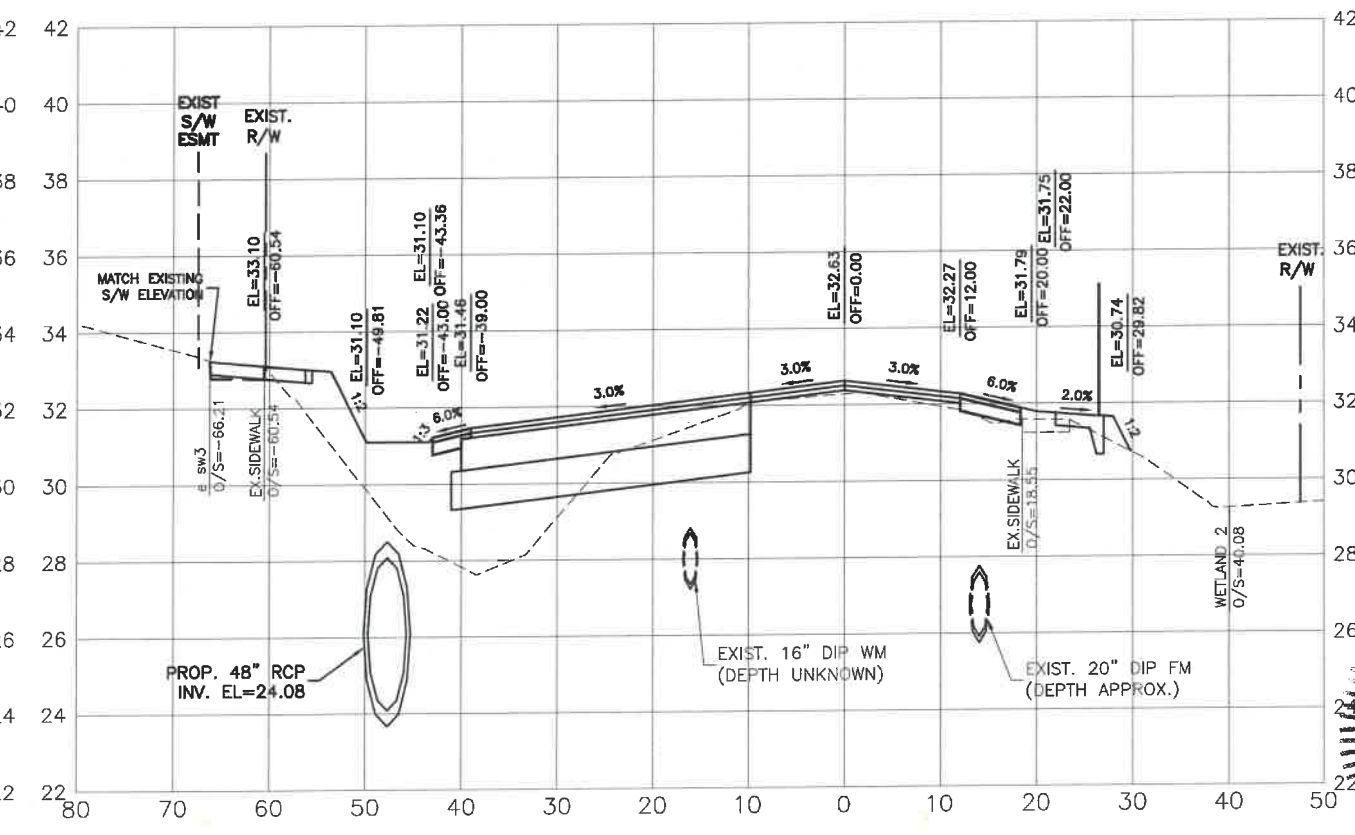
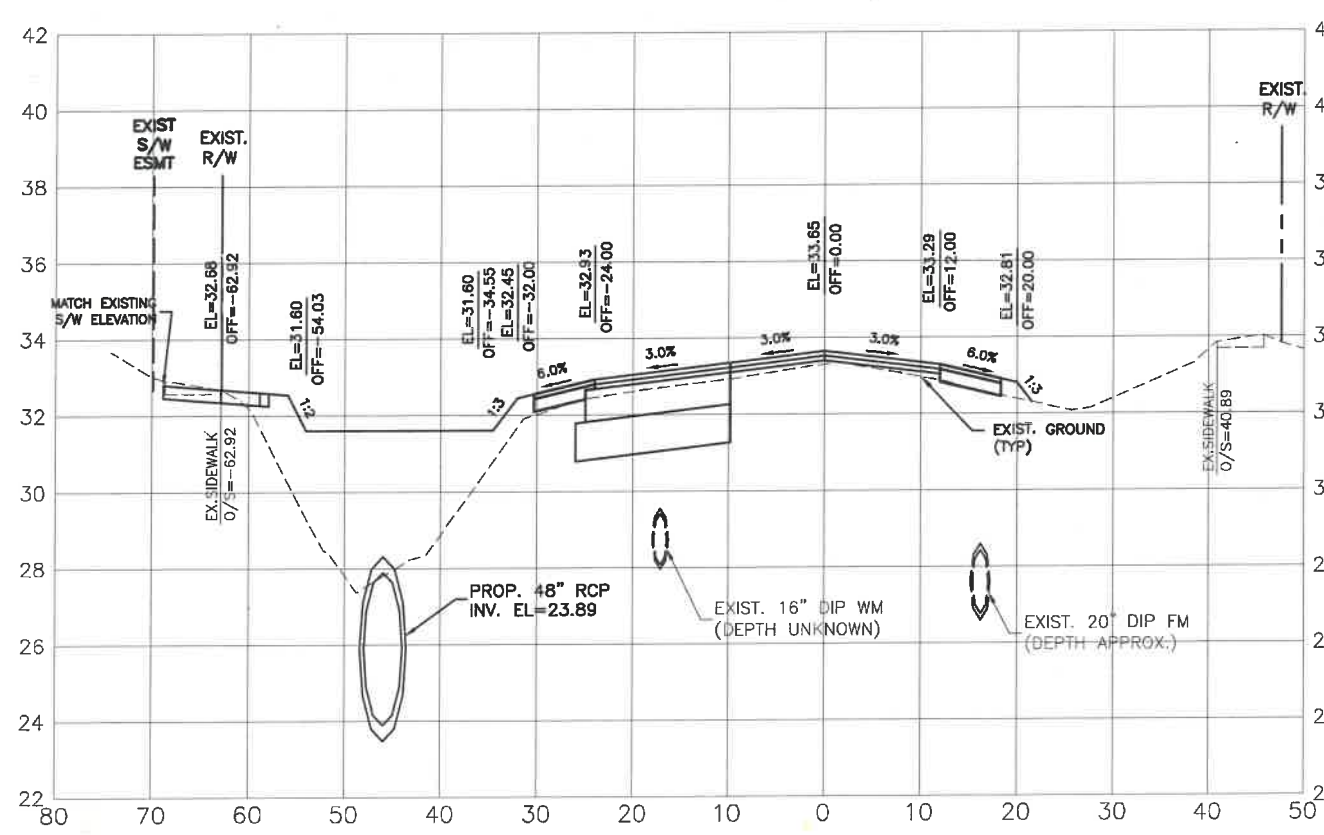
333+00.00

335+00.00



332+00.00

334+00.00



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWP./RGE	2,35/33,34S/18E
SCALE	AS NOTED
DATE	
DESIGNED	04/2015
CHECKED	10/2015
GRIGORY BERIKMAN, P.E.	
FLORIDA P.E. #	6896

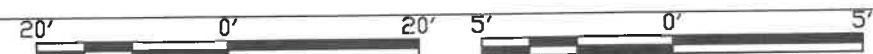
  

**GRIGORY BERIKMAN**  
 LICENSE # 6896  
 No. 76896  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER

Signature & Date

H:\Highway Engineering\ROADS\Erie\_Road\DWG\Phase II\DWG\EriePHI-X\_Sect\ang\_X\_Sect.dwg, 1/4/2021, 12:07 PM, Ken Lashier, 1:1, ANSI full bleed B (11.00 x 17.00 inches)





HORIZ. SCALE

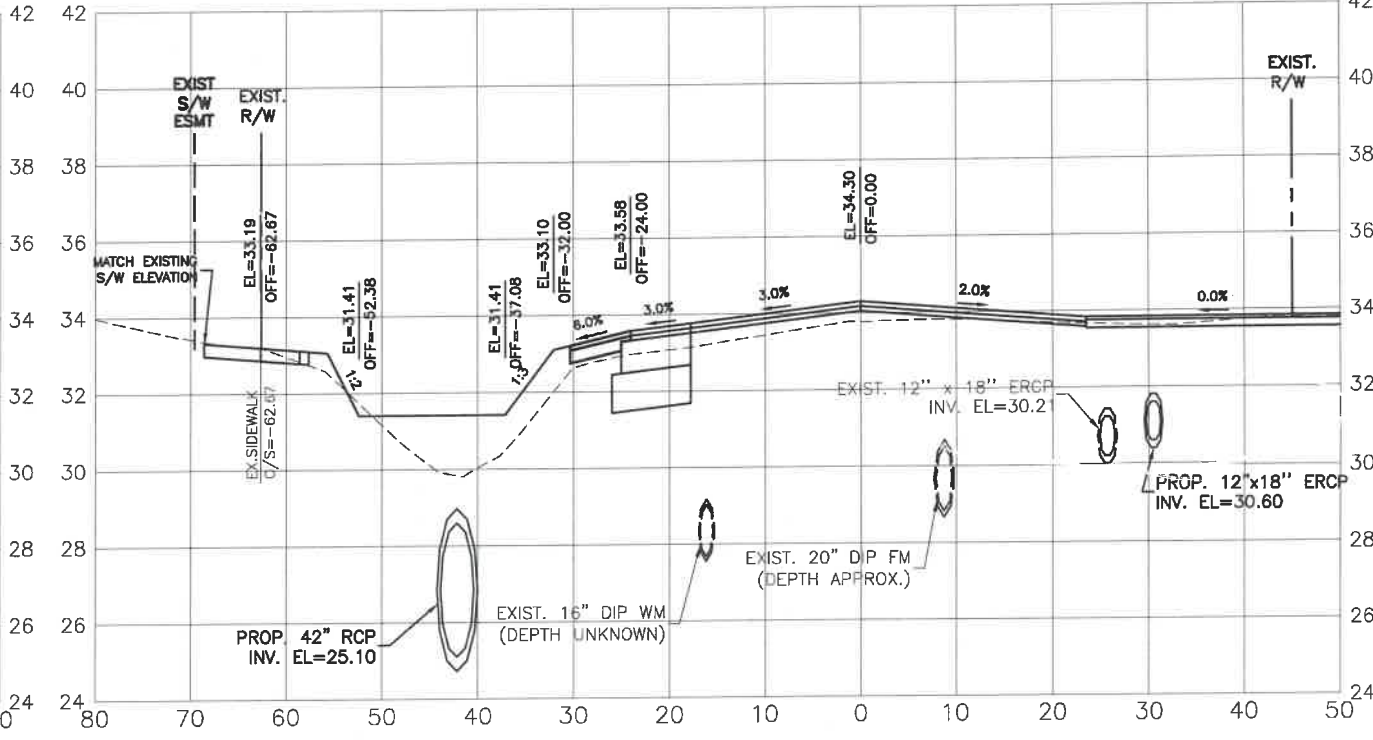
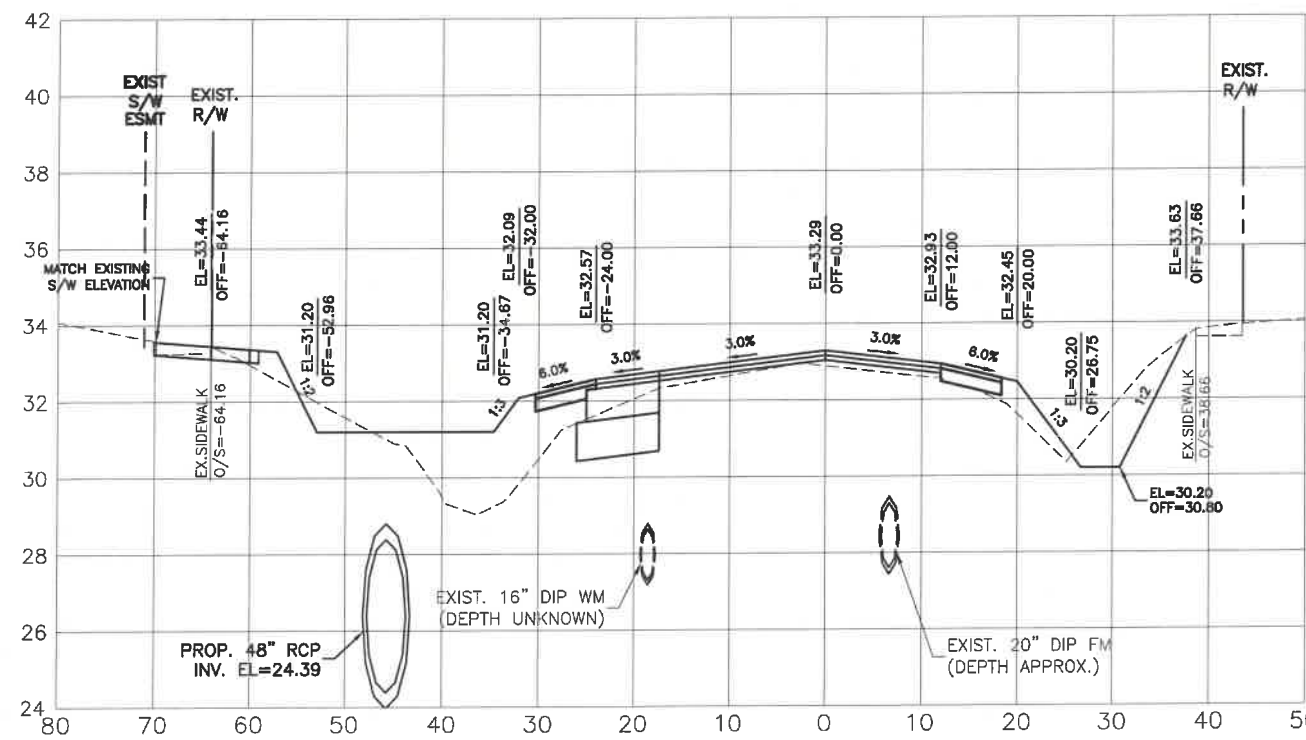
VERT. SCALE



PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES  
1022 26th Avenue East, Bradenton, FL 34208

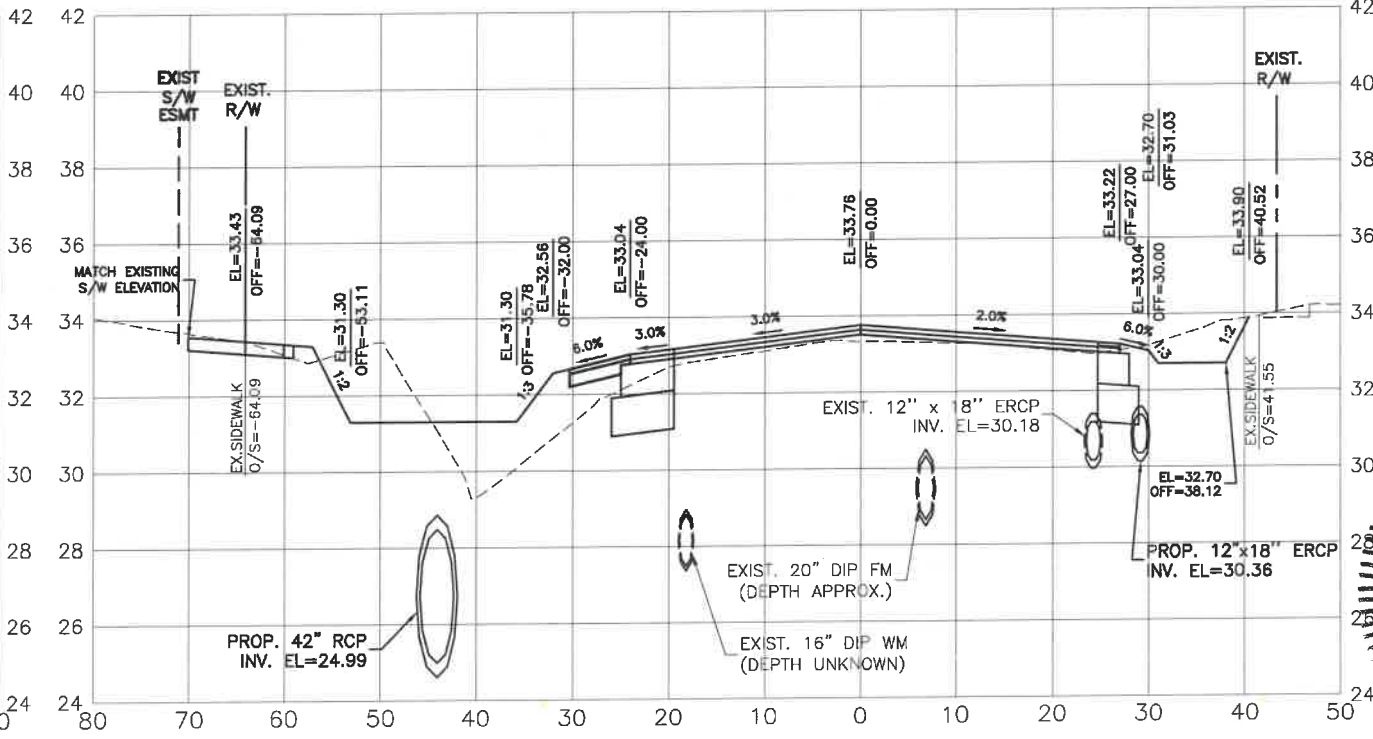
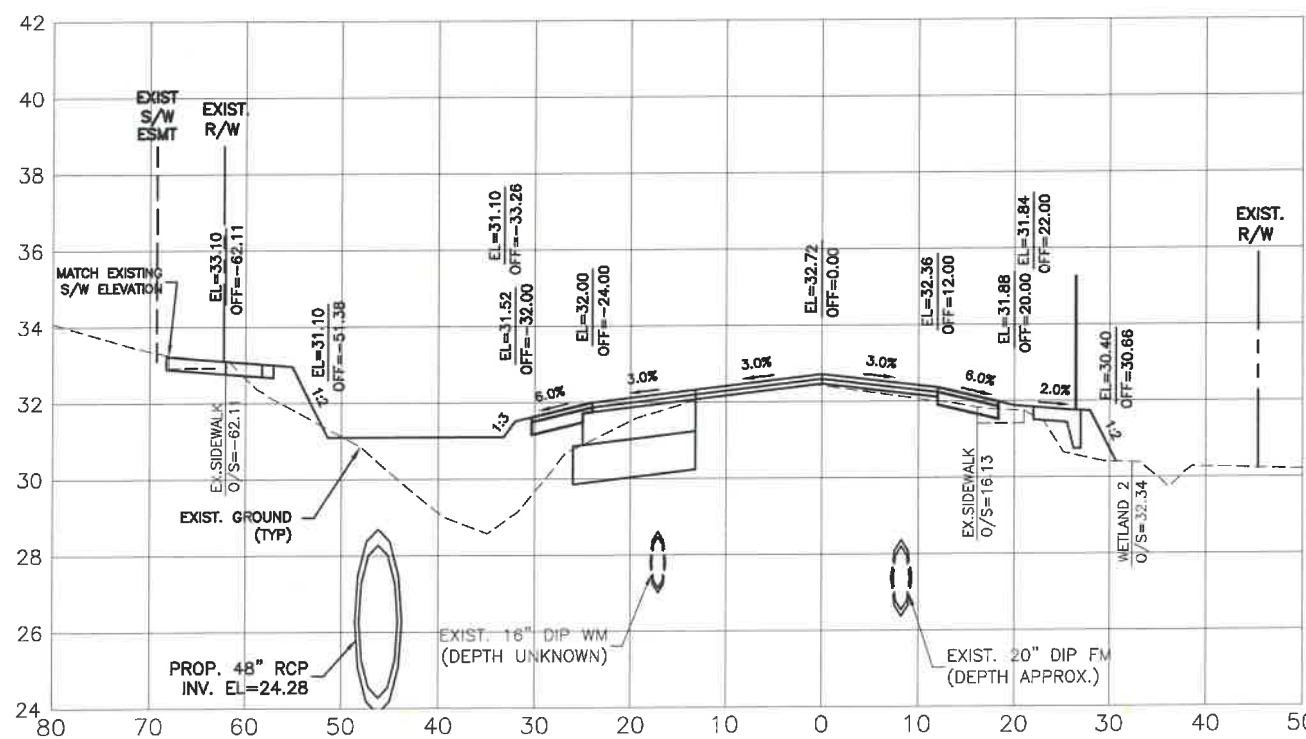
337+00.00

339+00.00



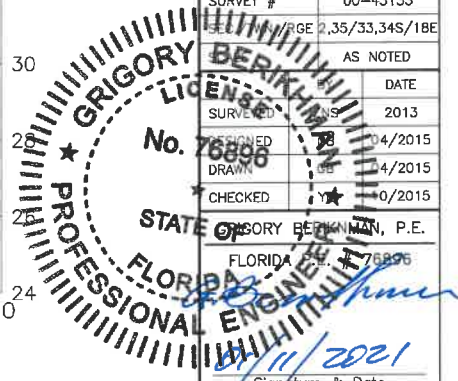
336+00.00

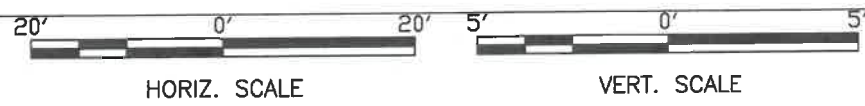
338+00.00



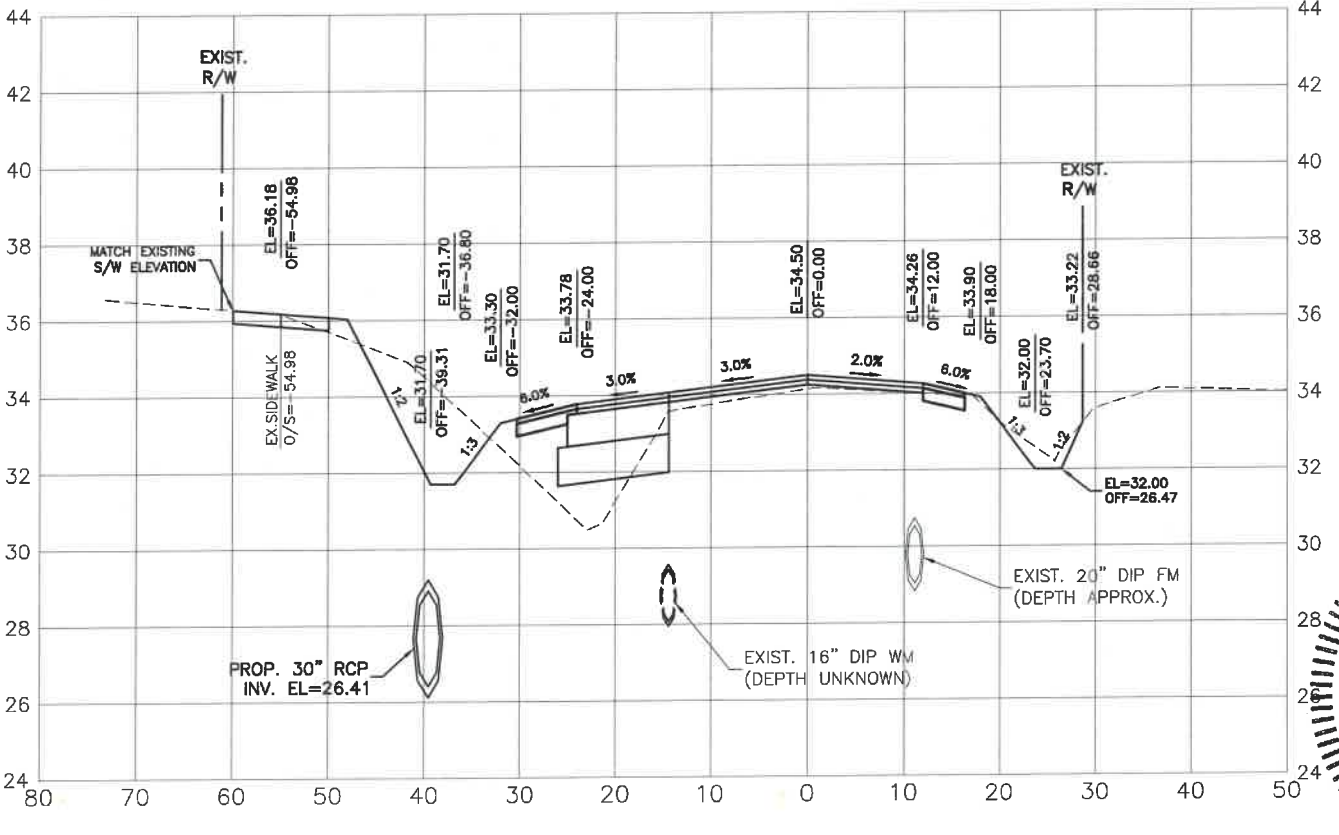
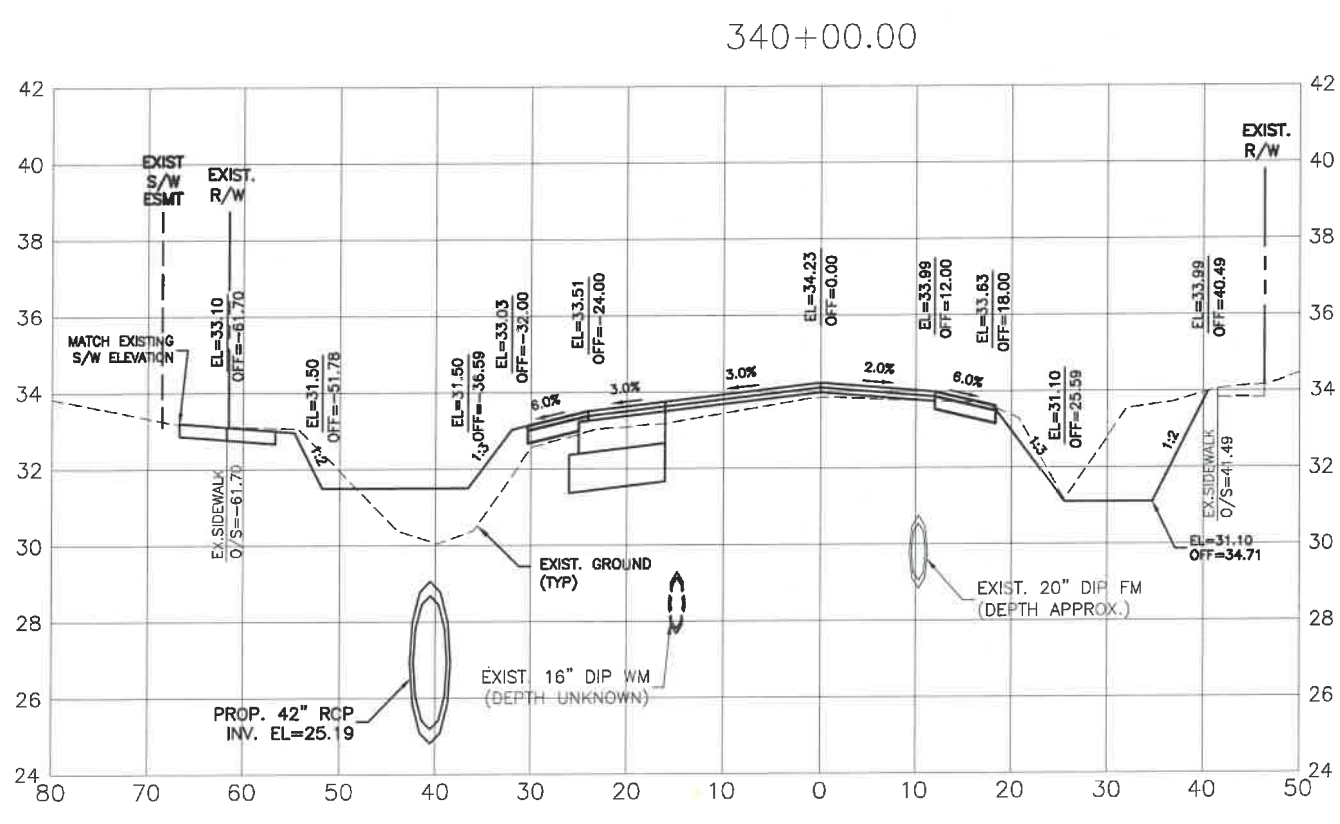
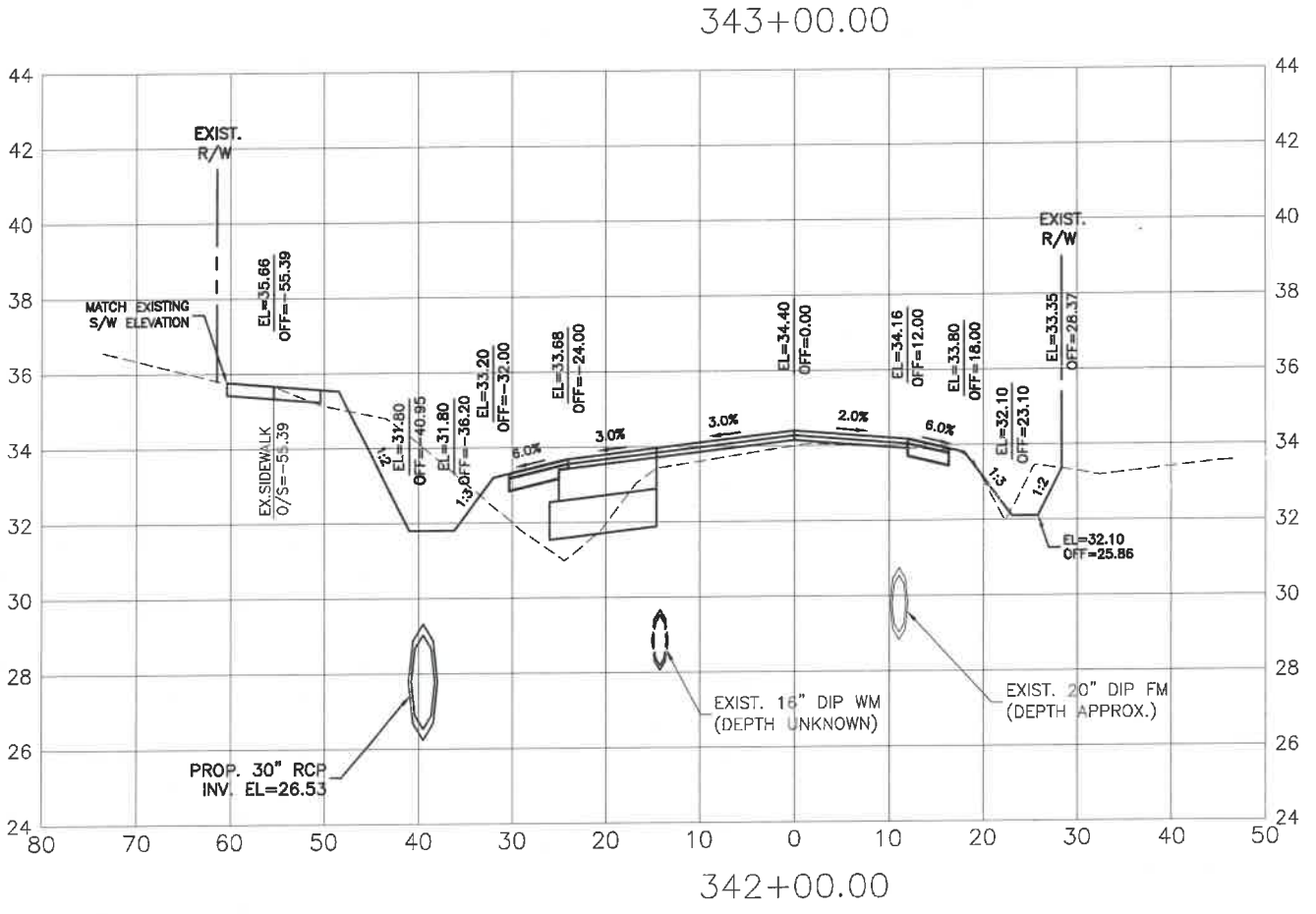
**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**

DATE	
BY	
REVISION DESCRIPTION	
NO.	
PROJECT #	307-6082860
SURVEY #	00-43133
DESIGNED	2013
DRAWN	4/2015
CHECKED	4/2015
DESIGNED BY	AS NOTED
DRAWN BY	
CHECKED BY	
DESIGNED BY	GRIGORY BERKMAN, P.E.
DRAWN BY	
CHECKED BY	
DATE	11/11/2021
SIGNATURE	<i>Grigory Berkman</i>
DATE	





**ERIE ROAD- US301 TO US 301**  
**SOUTH-NORTH PHASE II**  
**CROSS SECTIONS**



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
DATE	AS NOTED
DESIGNED	04/2015
CHECKED	04/2015
DATE	0/2015

**GRIGORY BERIKMAN, P.E.**  
 FLORIDA  
 No. 76896  
 Signature & Date  
 1/2021



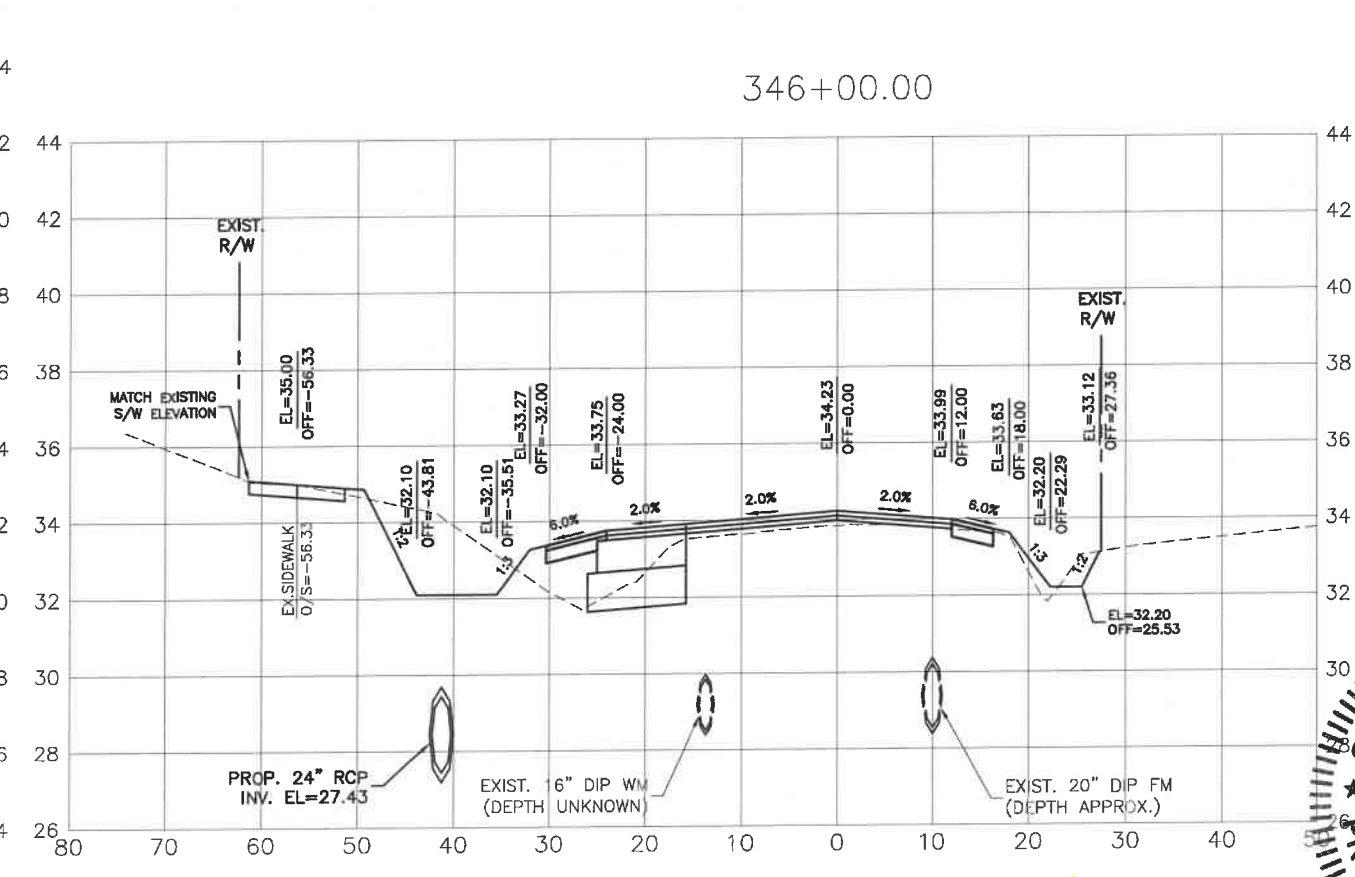
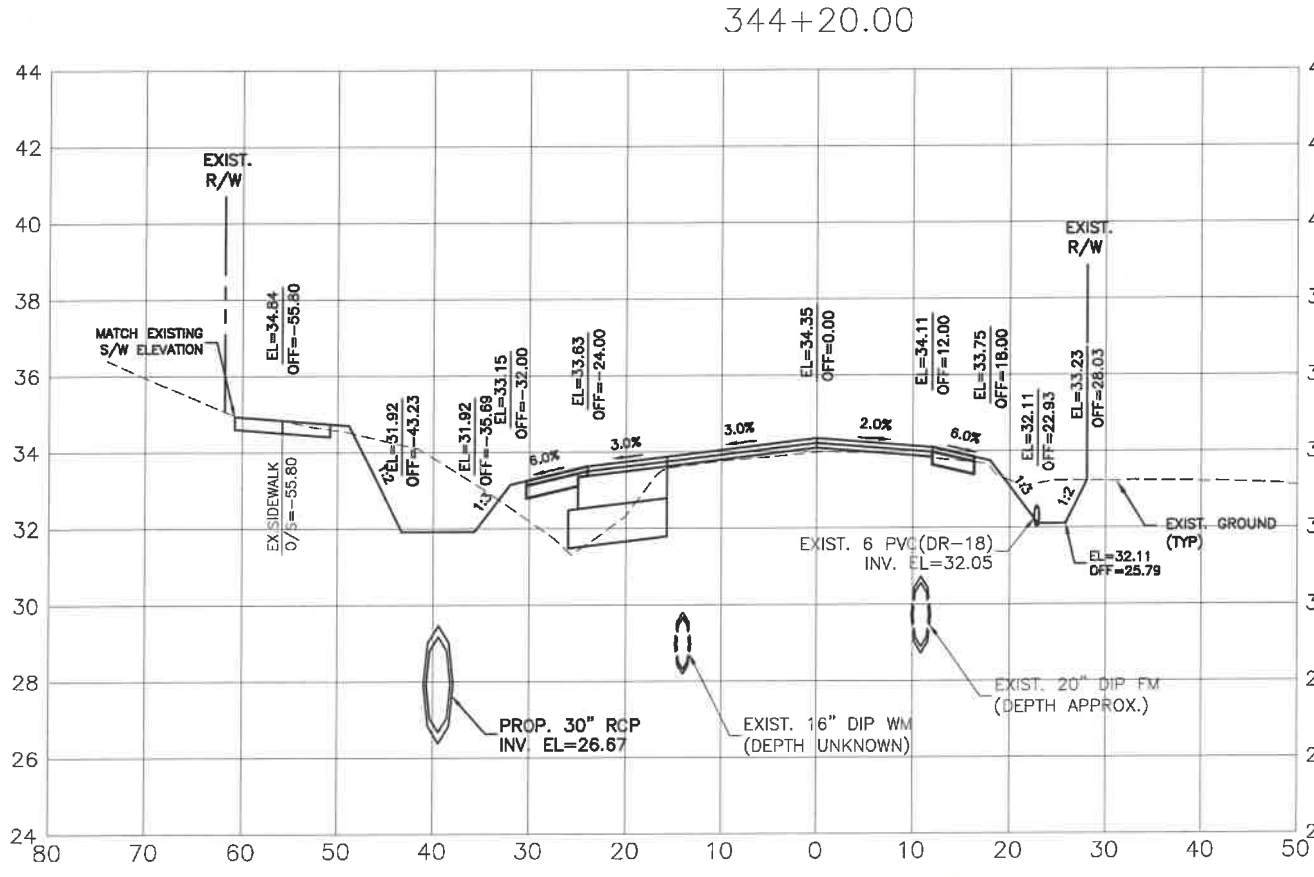
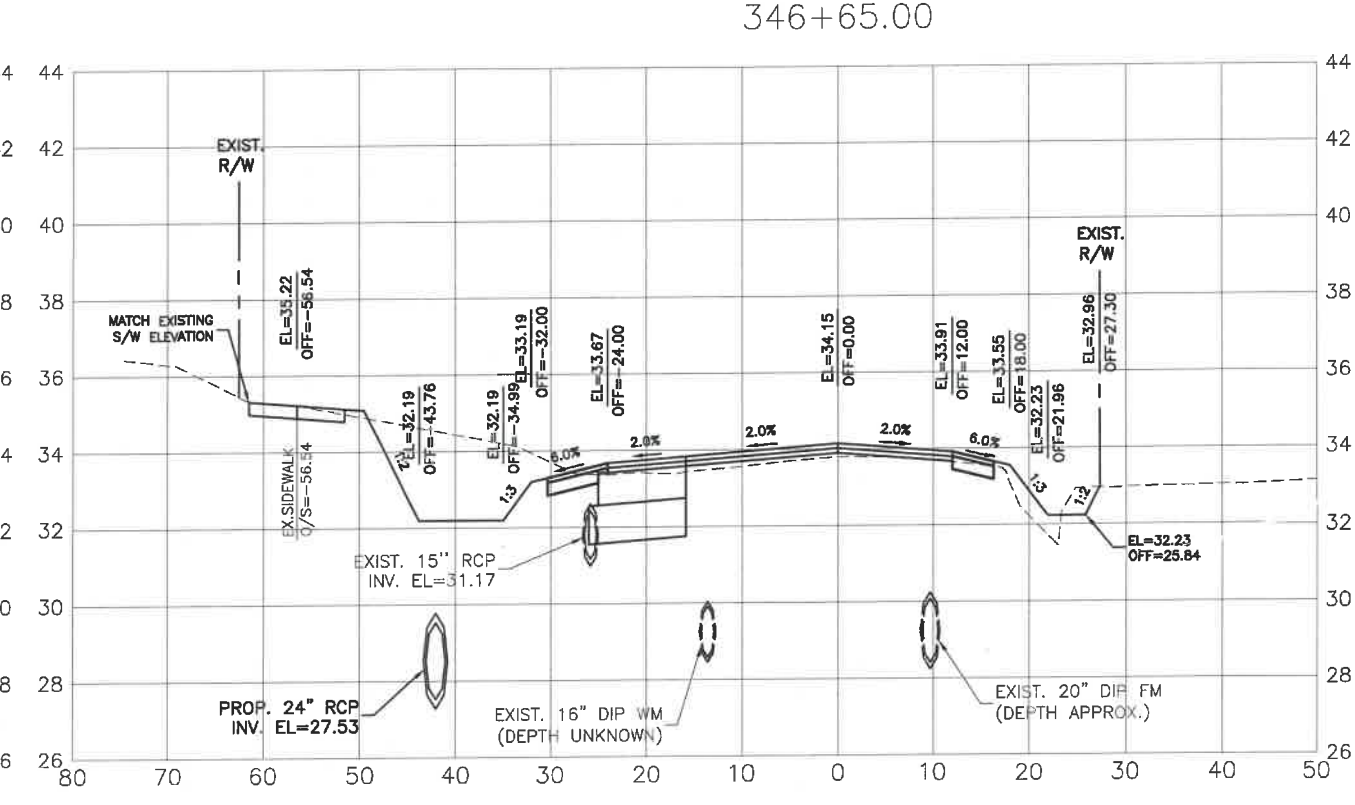
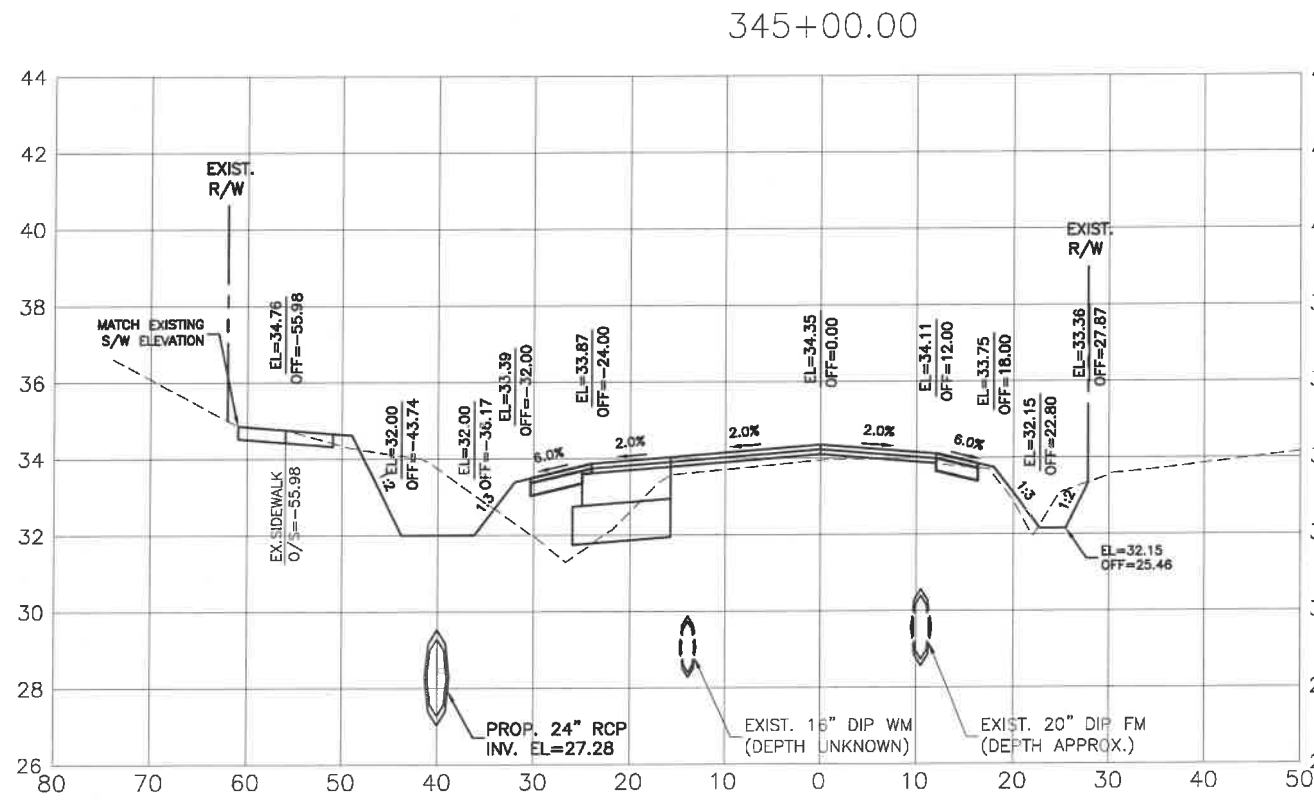
HORIZ. SCALE

VERT. SCALE



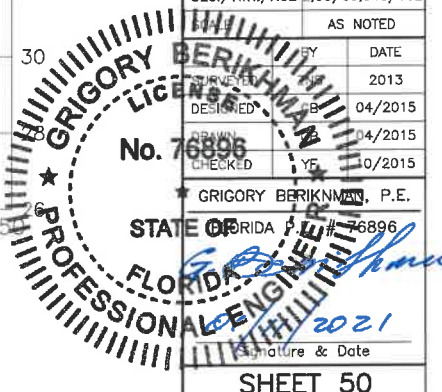
PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES  
1022 26th Avenue East, Bradenton, FL 34208

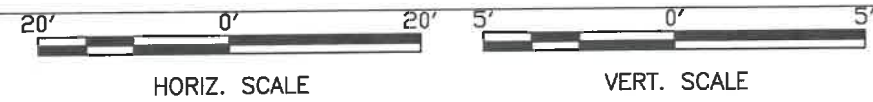
# ERIE ROAD- US301 TO US 301 SOUTH-NORTH PHASE II CROSS SECTIONS



NO.	REVISION DESCRIPTION	BY	DATE

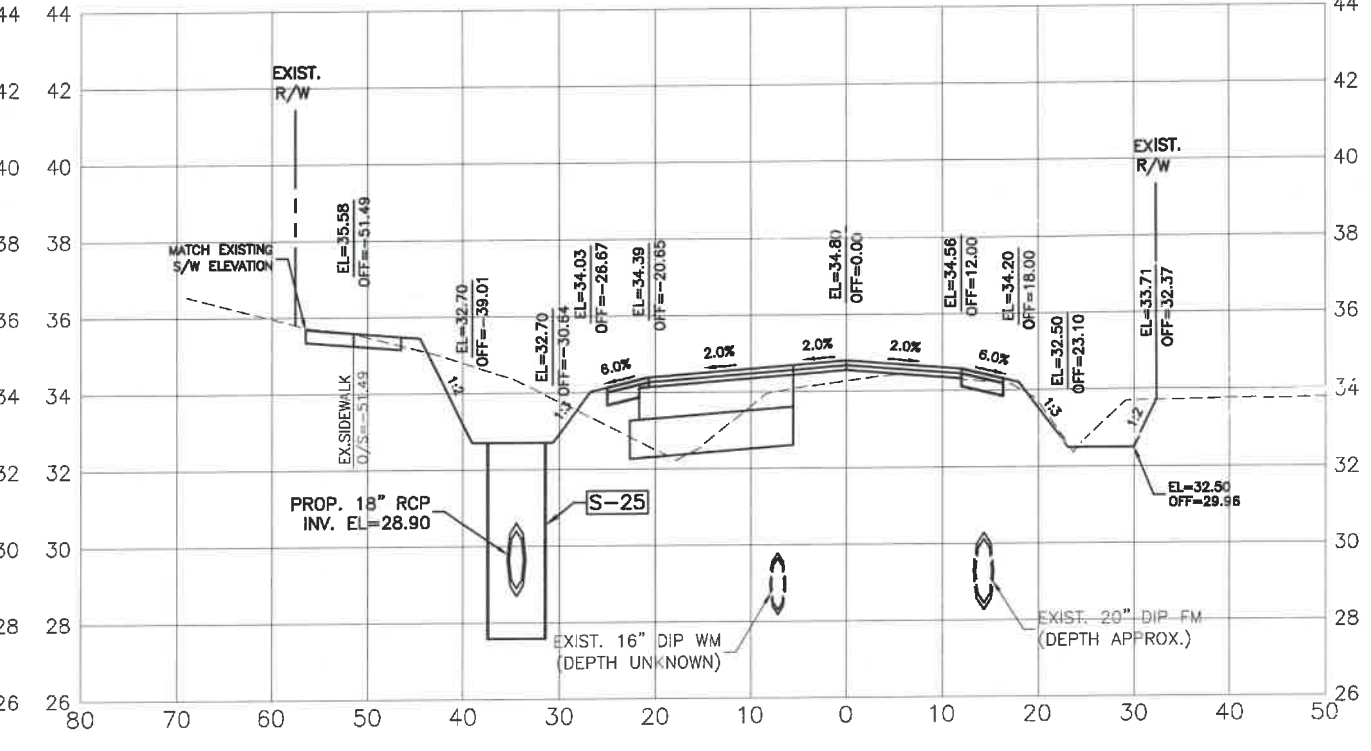
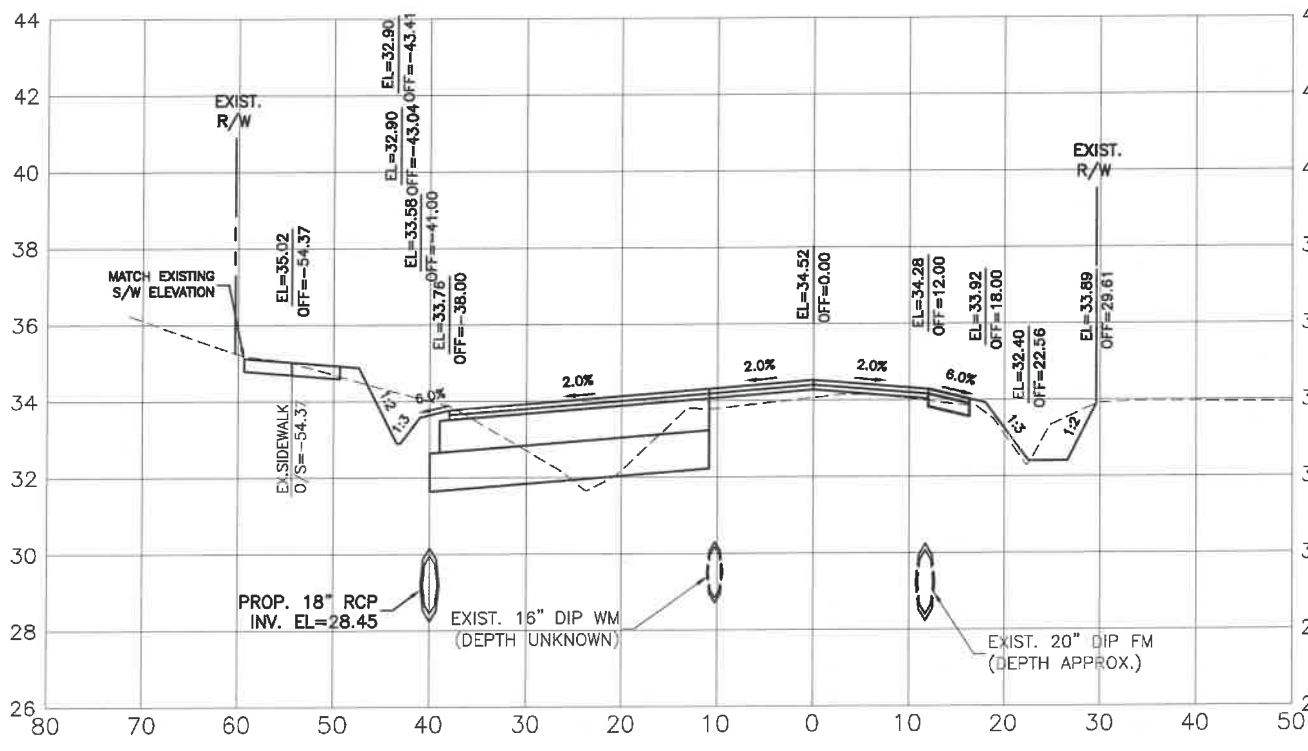
PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2, 35/33, 34S/18E
AS NOTED	
DESIGNED BY	GRIGORY BERIKMAN
CHECKED BY	GRIGORY BERIKMAN
DATE	04/2015
	10/2015
	10/2015
	10/2015
	10/2015
	10/2015





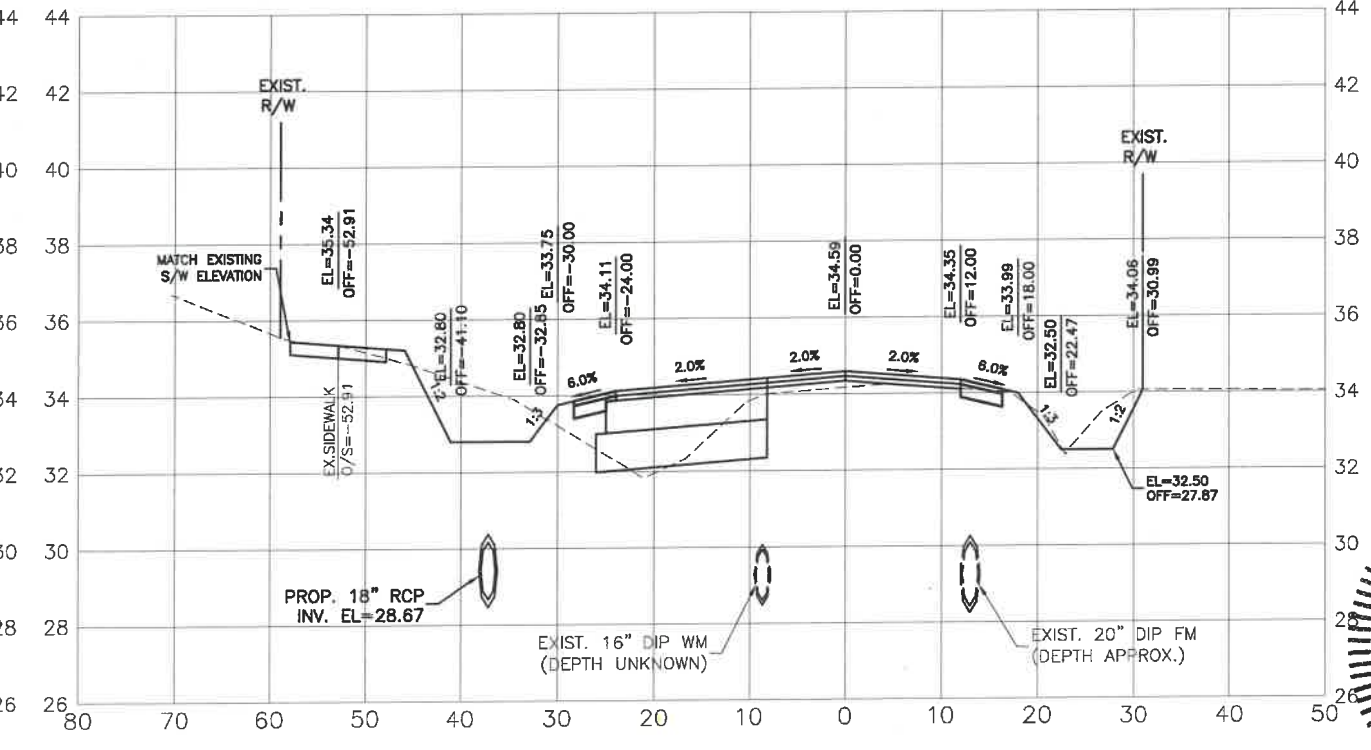
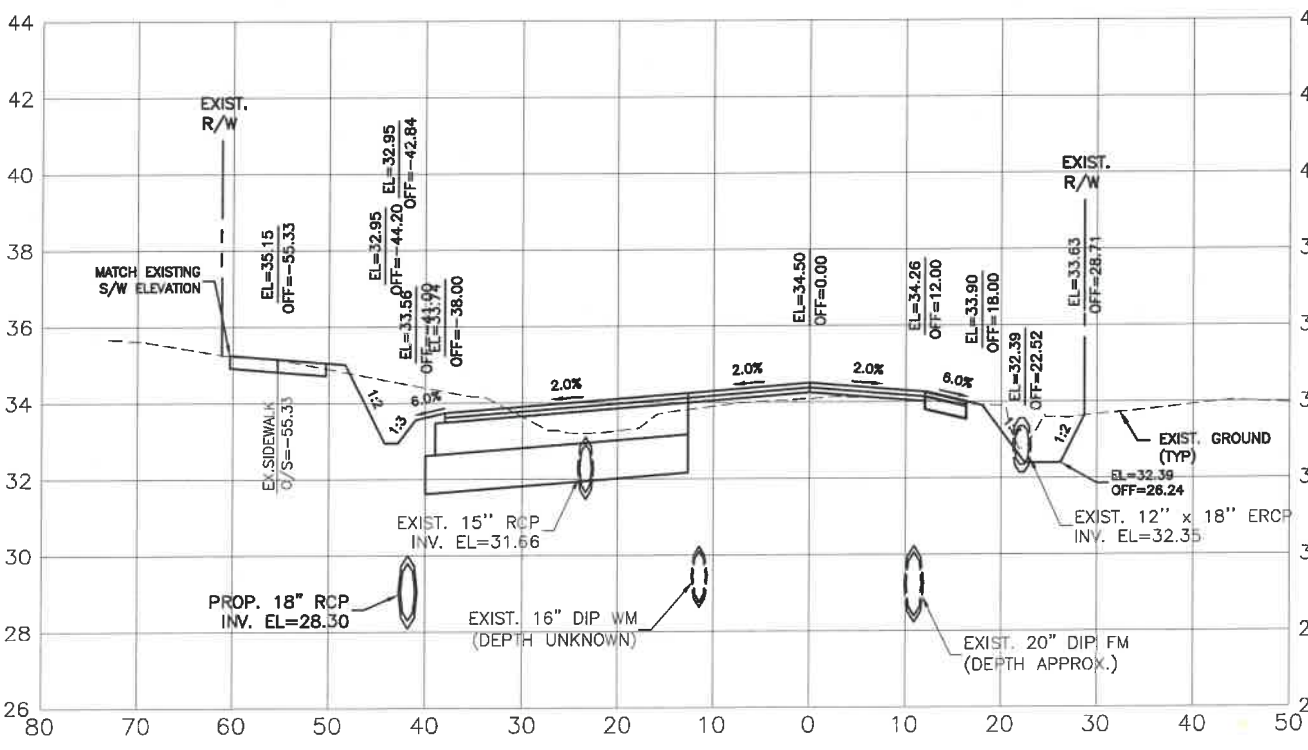
349+00.00

351+00.00



348+35.00

350+00.00

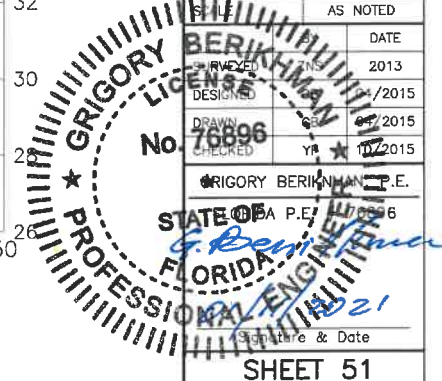


**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**

NO.	DATE	REVISION DESCRIPTION	BY

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
AS NOTED	DATE
DESIGNED	2013
DRAWN	2015
CHECKED	2015
GRIGORY BERIKHMAN, P.E.	2015
STATE OF FLORIDA	2015

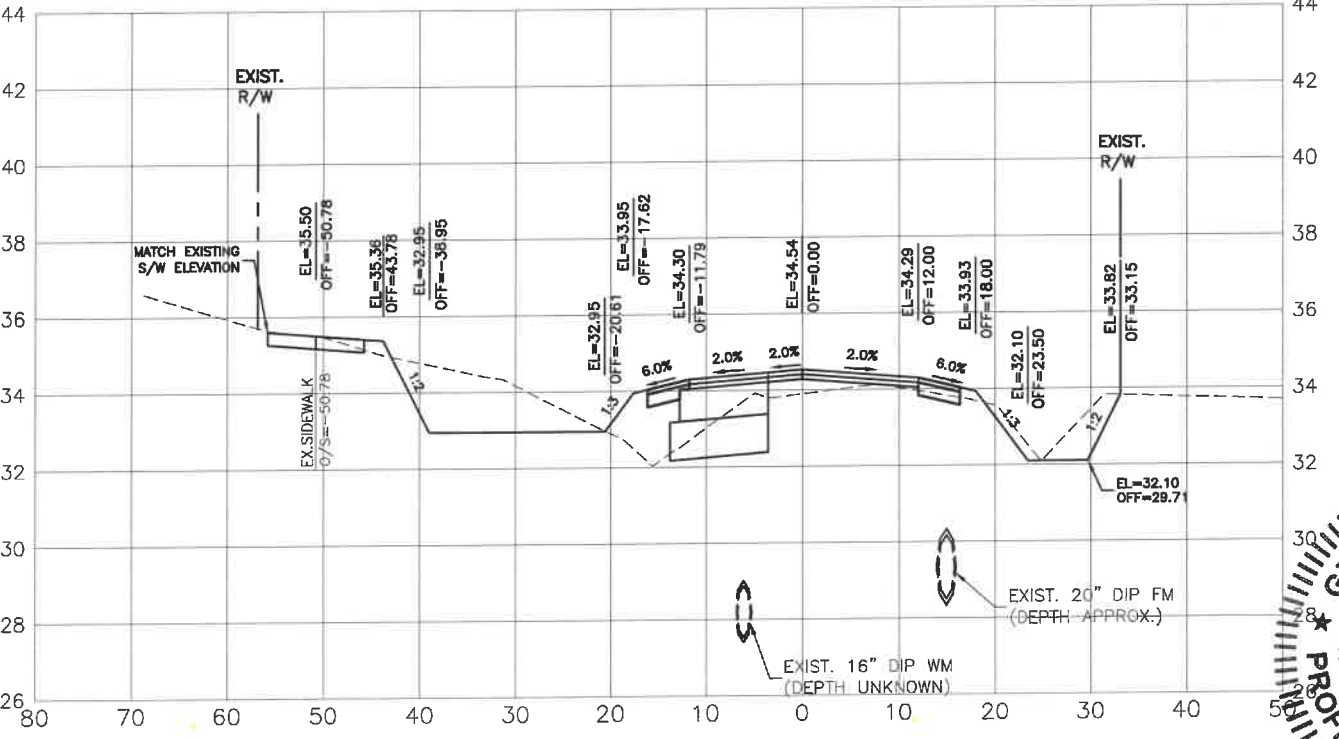
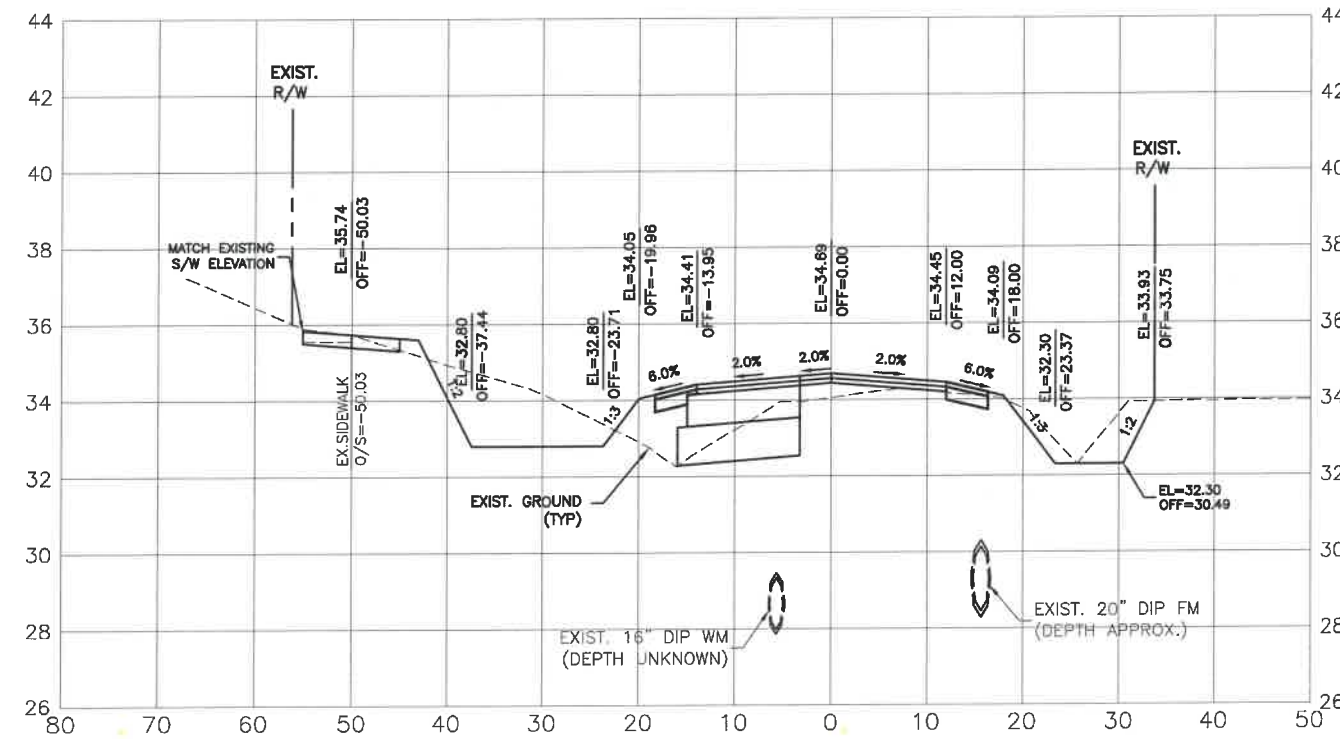
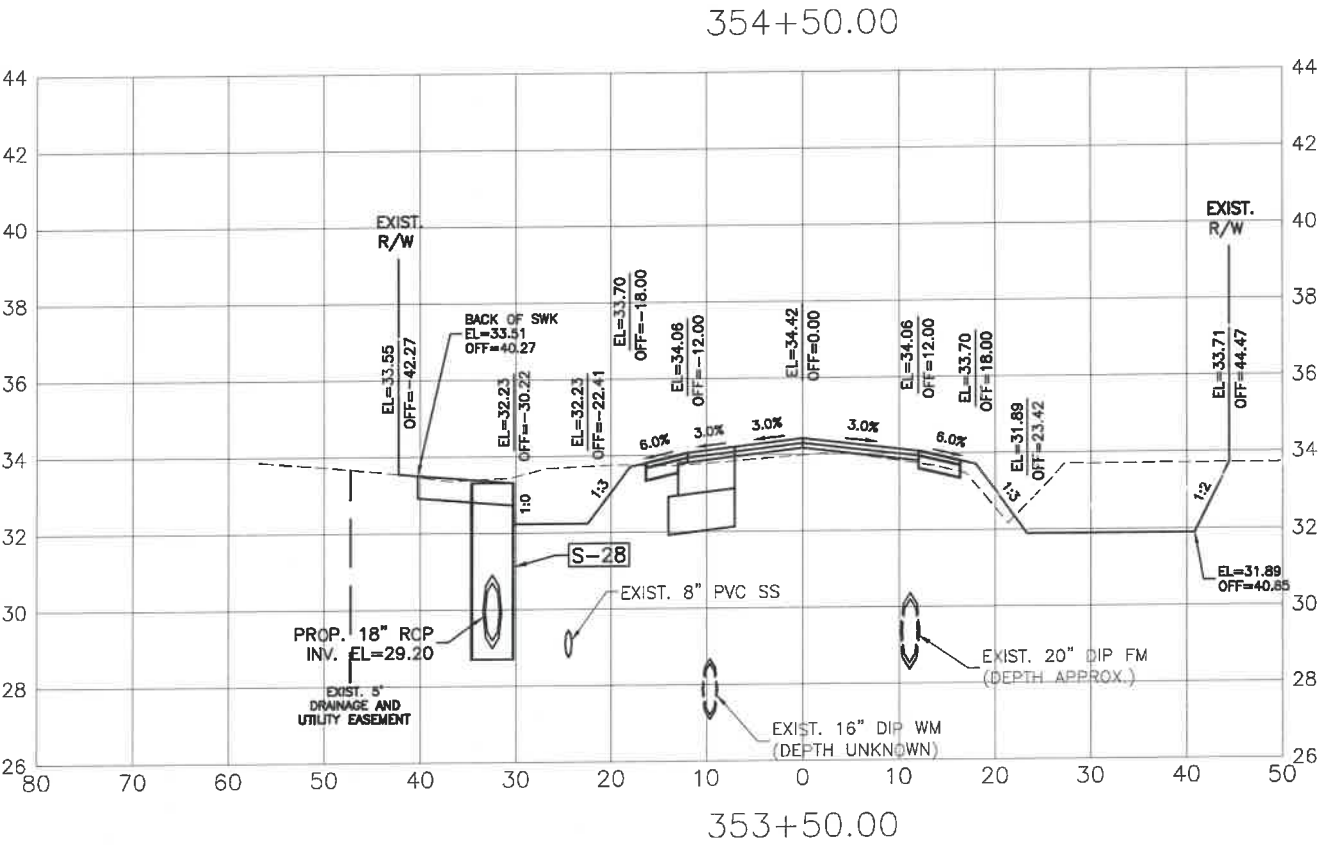
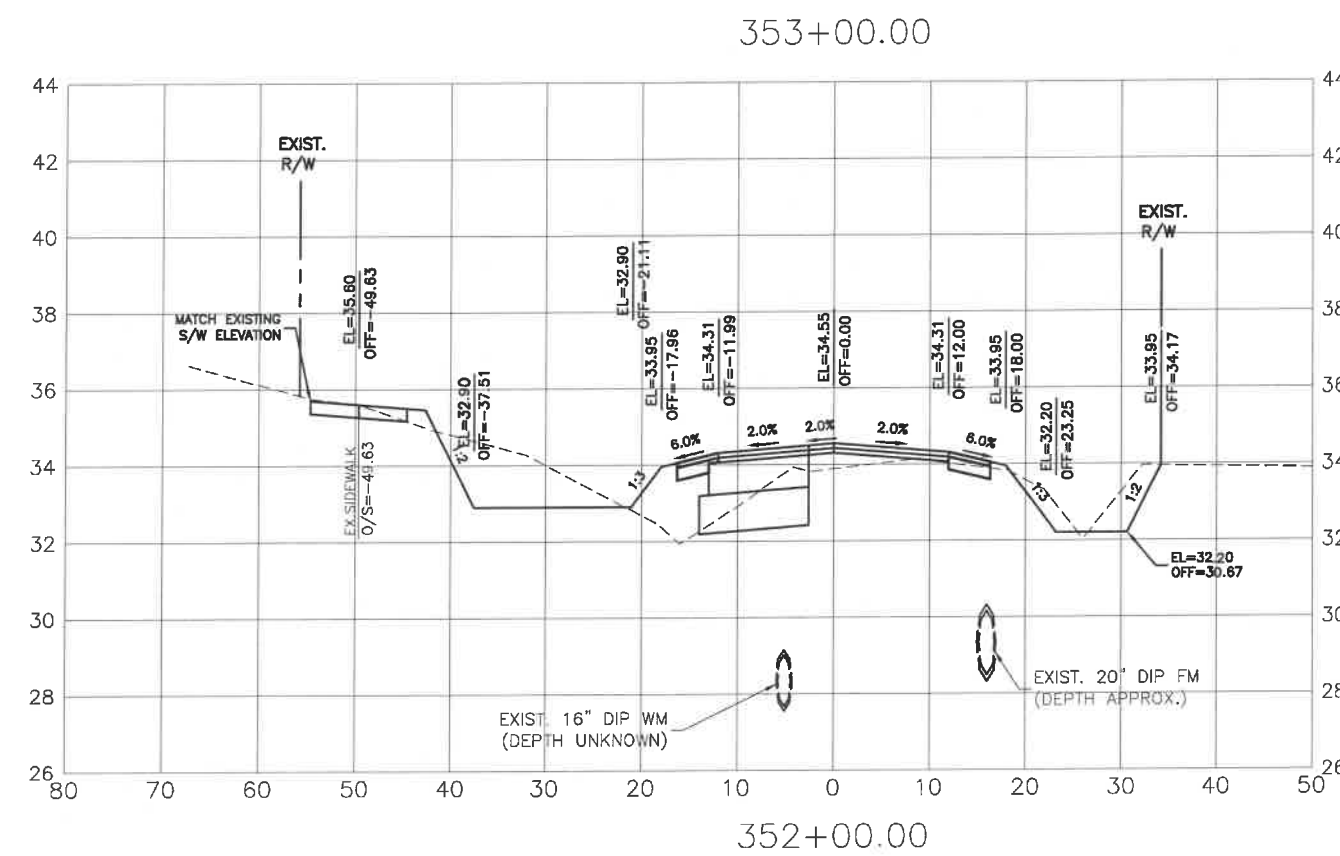
Signature & Date



I:\Highway Engineering\ROADS\Erie Road\DWG\Phase II\DWG\ERIEPHI-Sect.dwg, SEC-51, 7/4/2021 12:08 PM Ken Cahner, 1:1, ANSI full bleed B (11.00 x 17.00 inches)



**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**



NO.	REVISION DESCRIPTION	BY	DATE
1	PER SWFMD COMMENTS	KHL	07/24/18

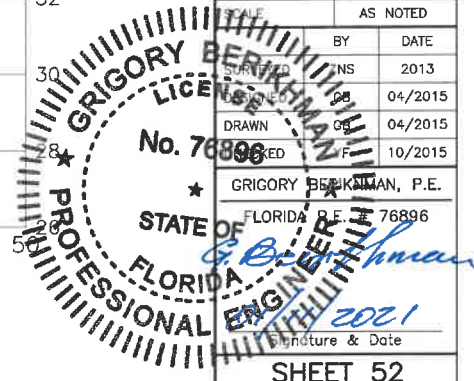
PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
AS NOTED	

BY	DATE
NS	2013
DR	04/2015
DR	04/2015
ED	10/2015

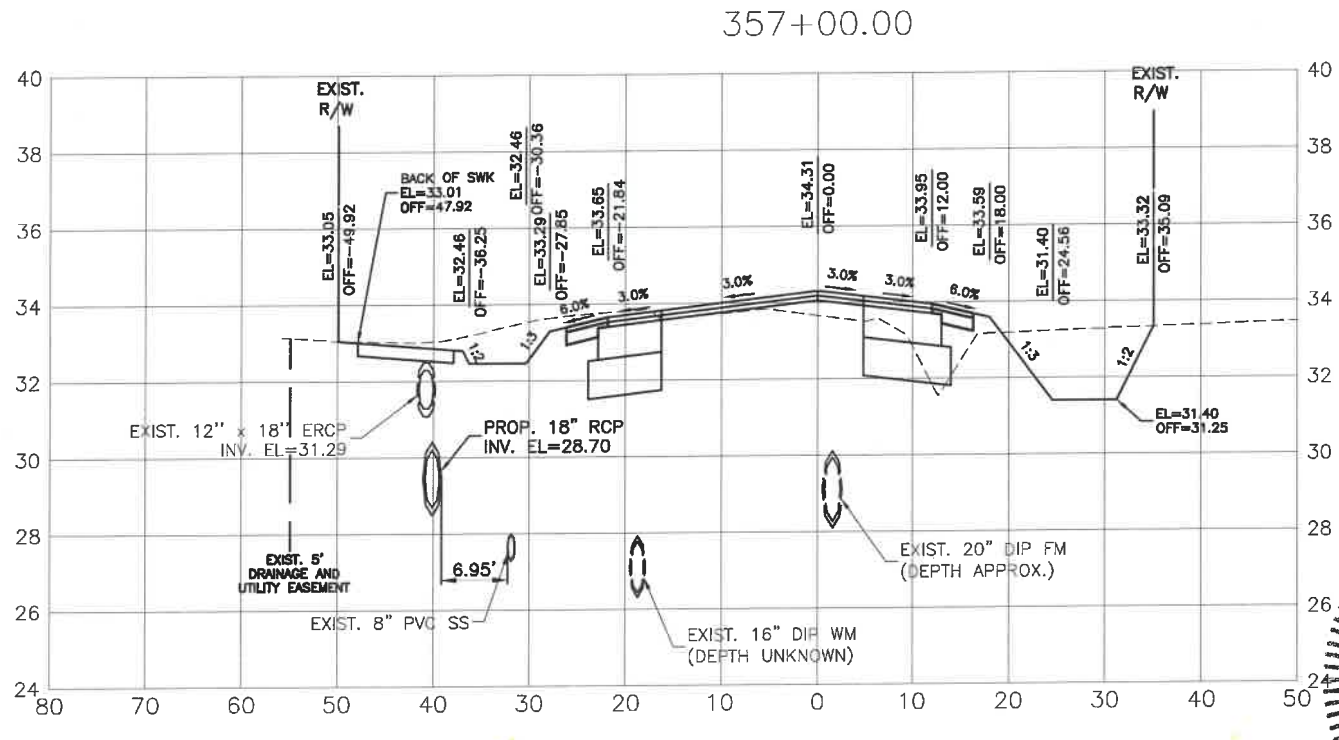
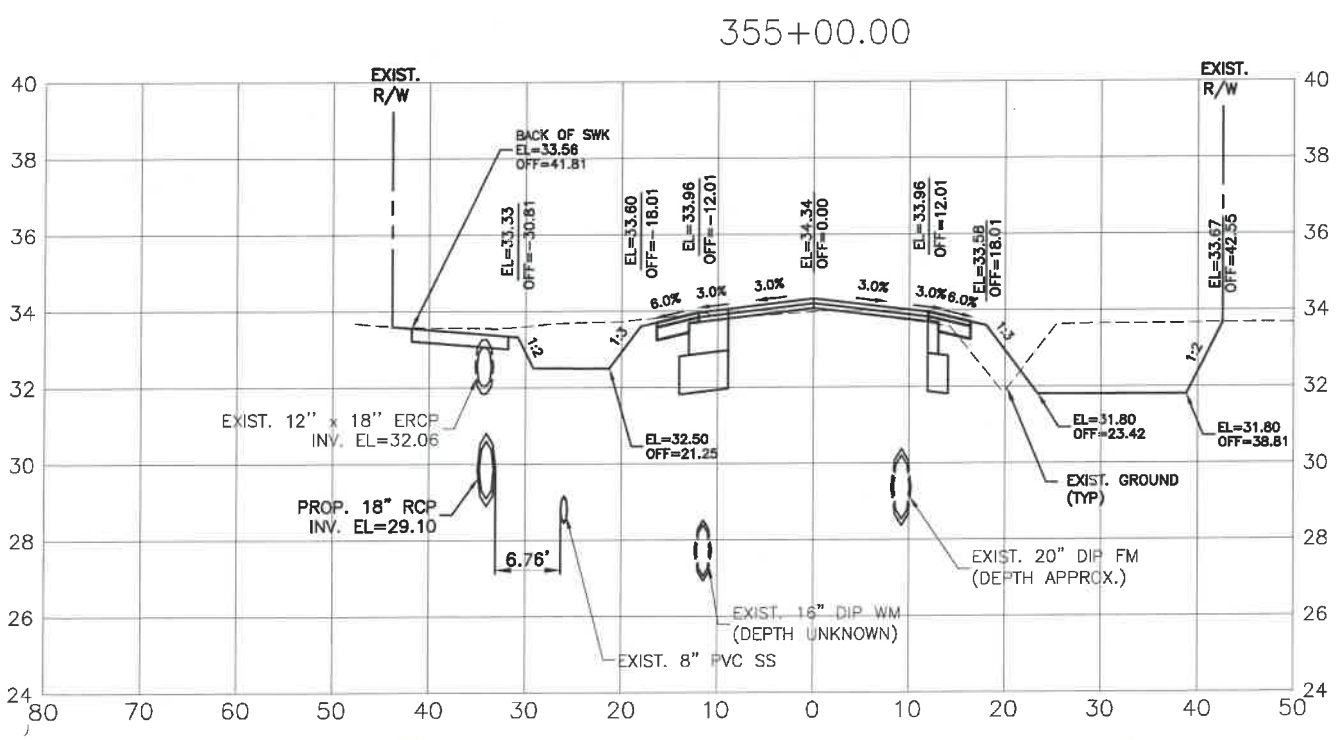
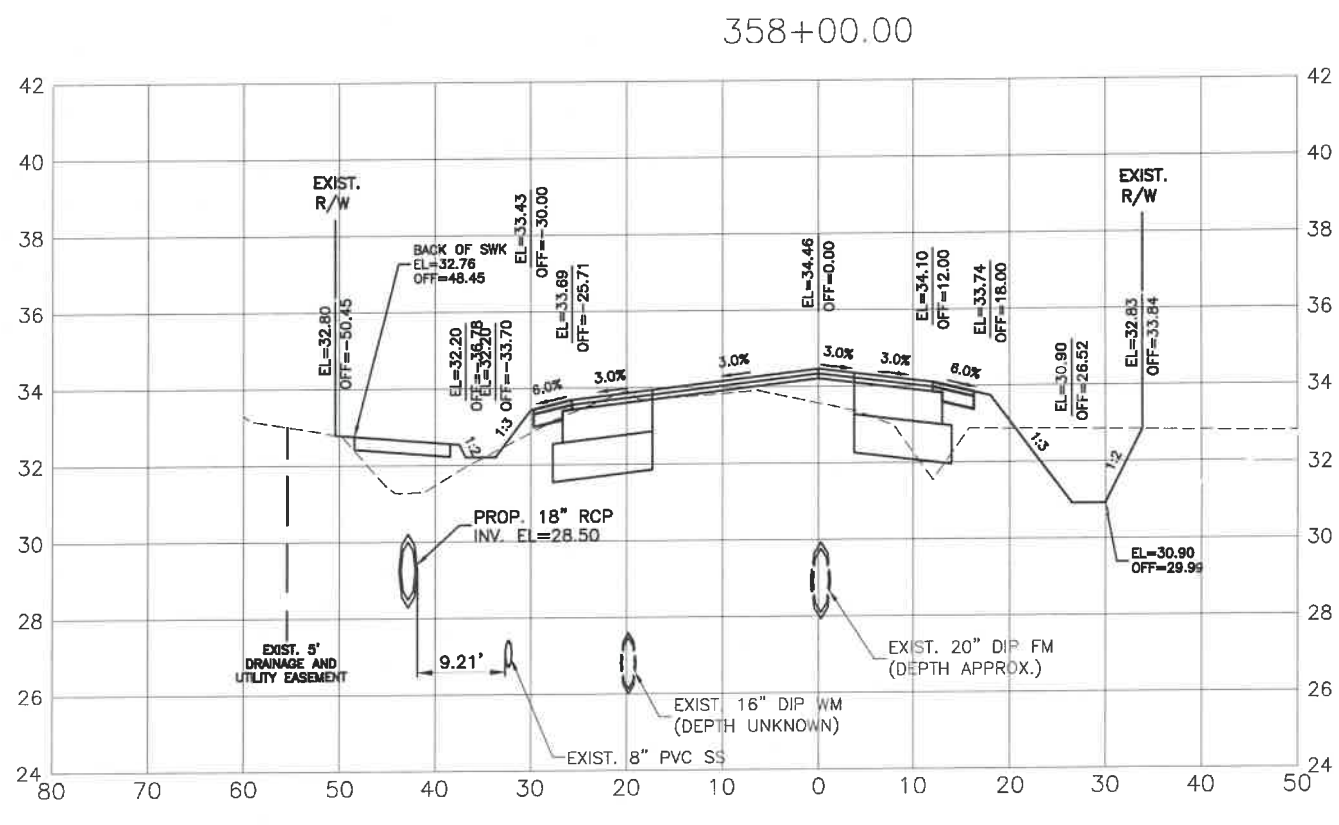
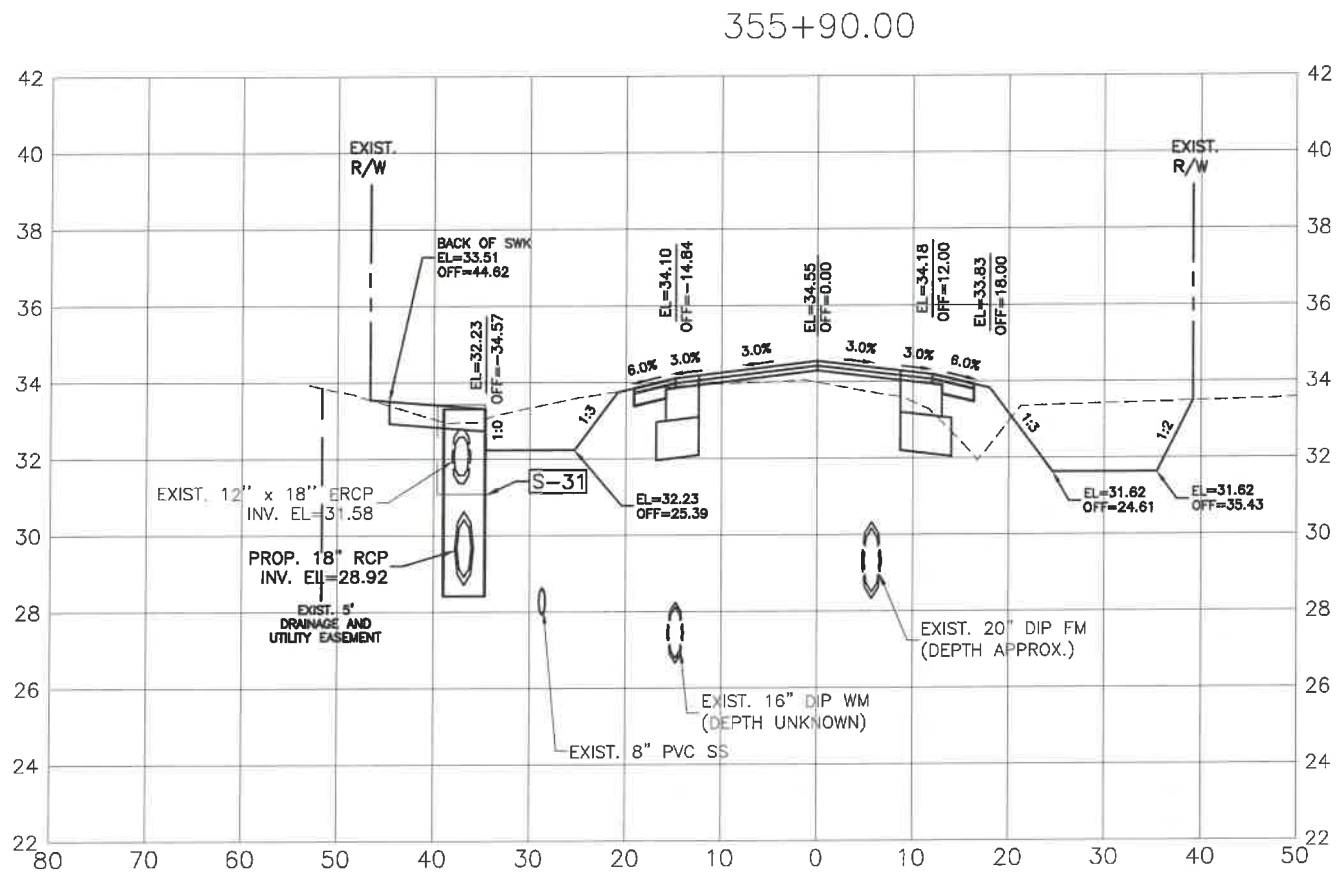
GRIGORY BERKMAN, P.E.  
FLORIDA P.E. 76896  
Signature & Date



I:\Highway Engineering\ROADS\Phase II\DWG\ERIEPHI-X-SEC-LONG-X-SEC-52\_1/4/2021 12:08 PM Ken Lashner:1:1 ANSI full bleed B (11.00 x 17.00 inches)



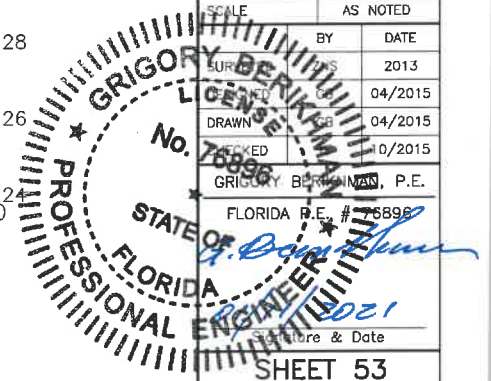
**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**



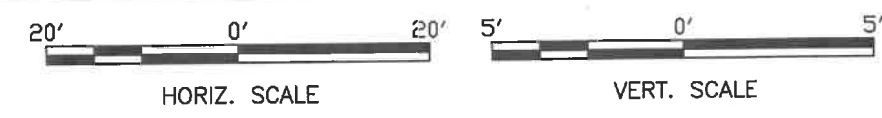
NO.	REVISION DESCRIPTION	BY	DATE
1	PER SWFWD COMMENTS	KHL	07/24/18

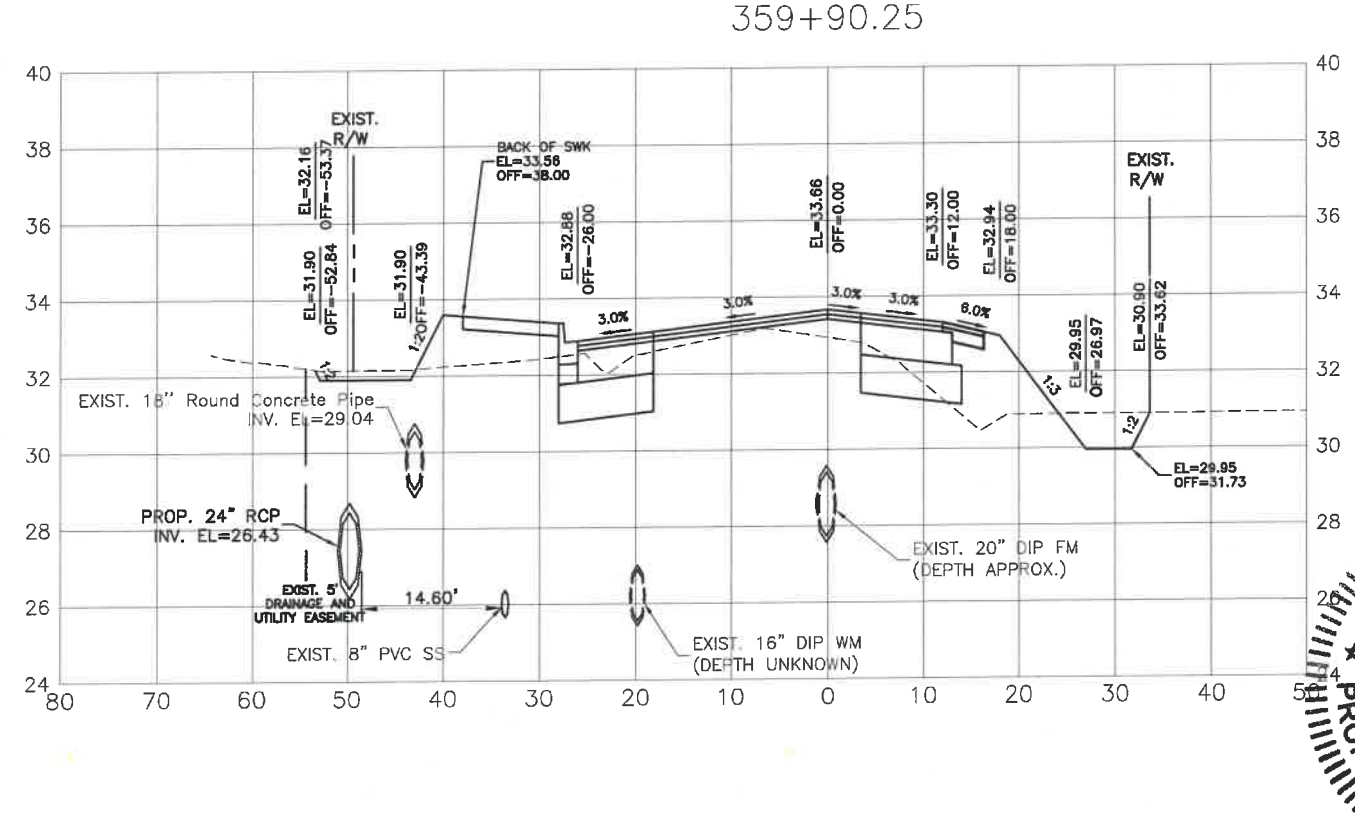
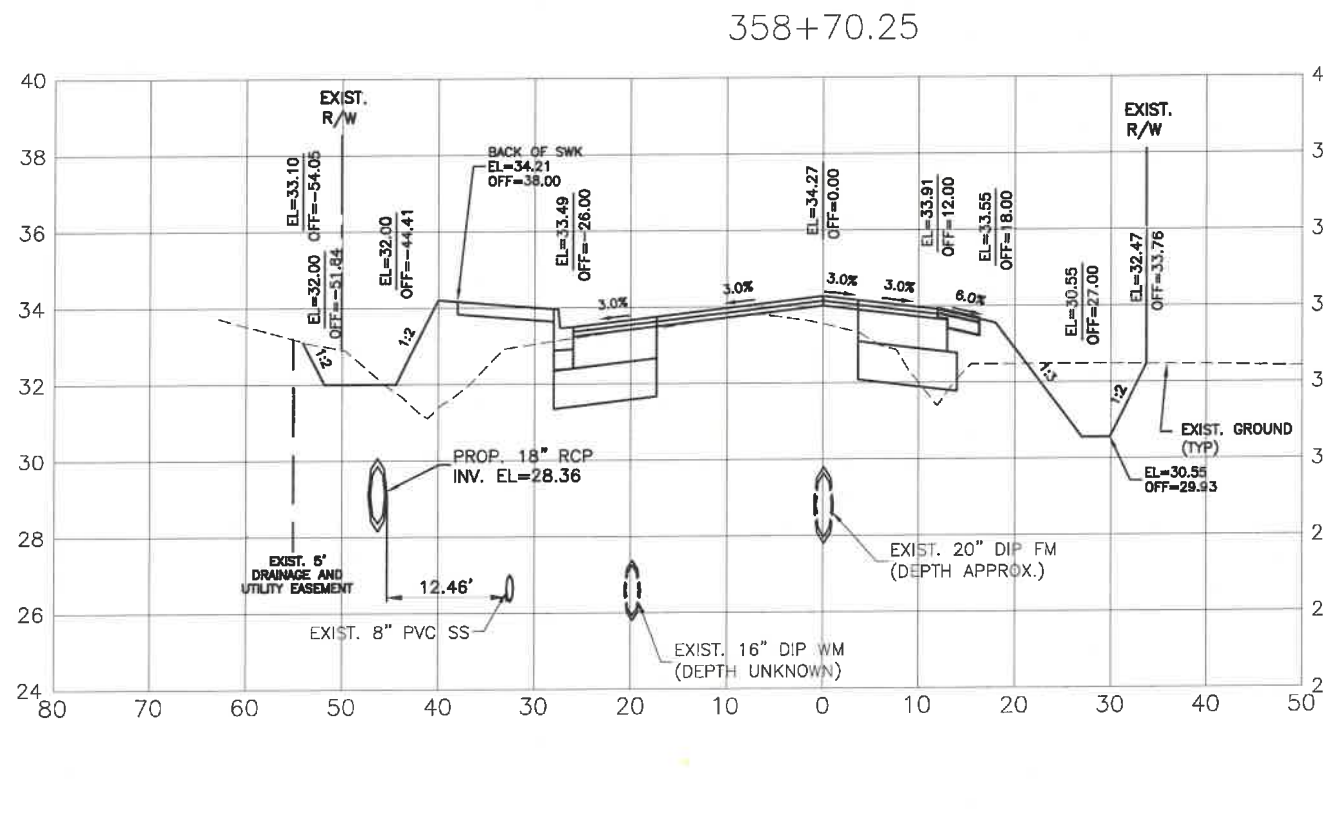
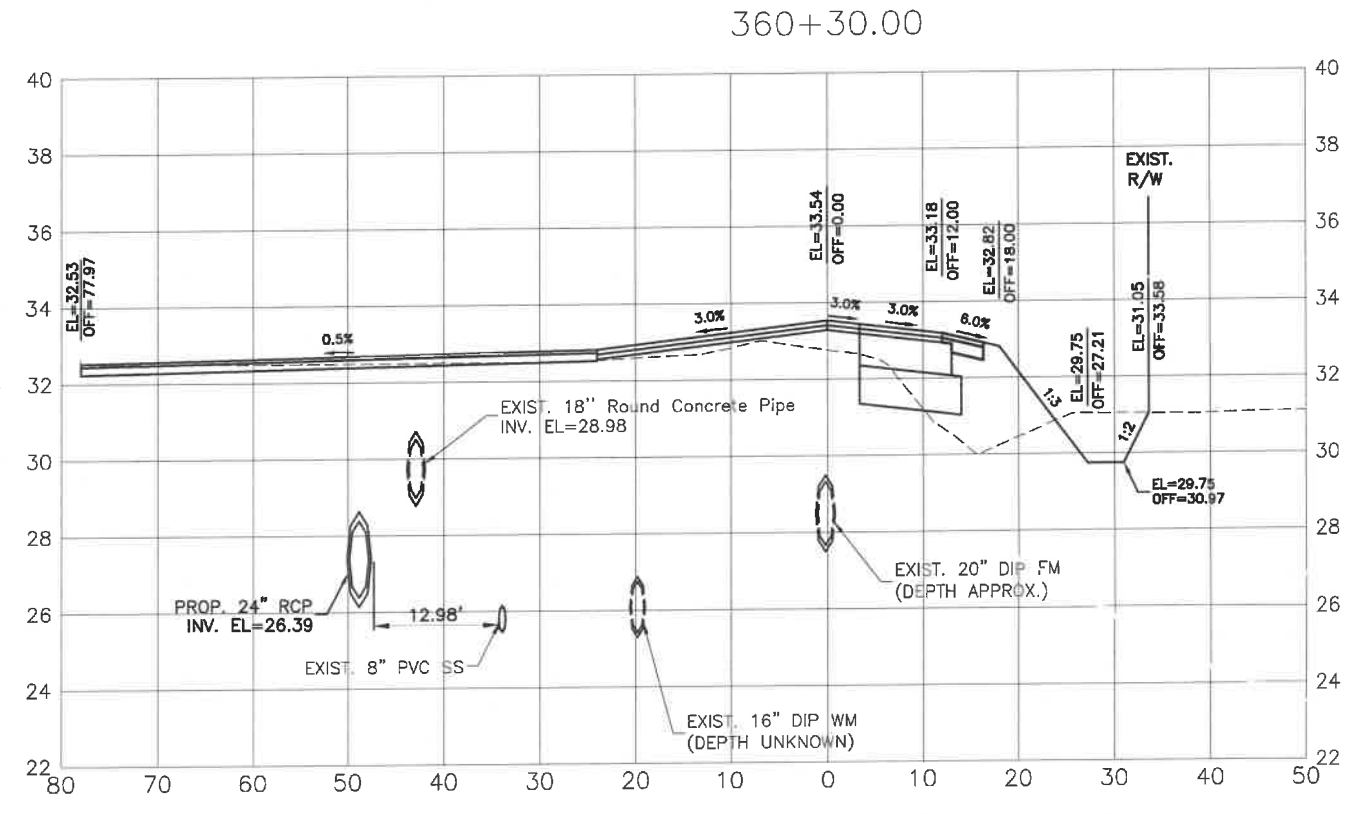
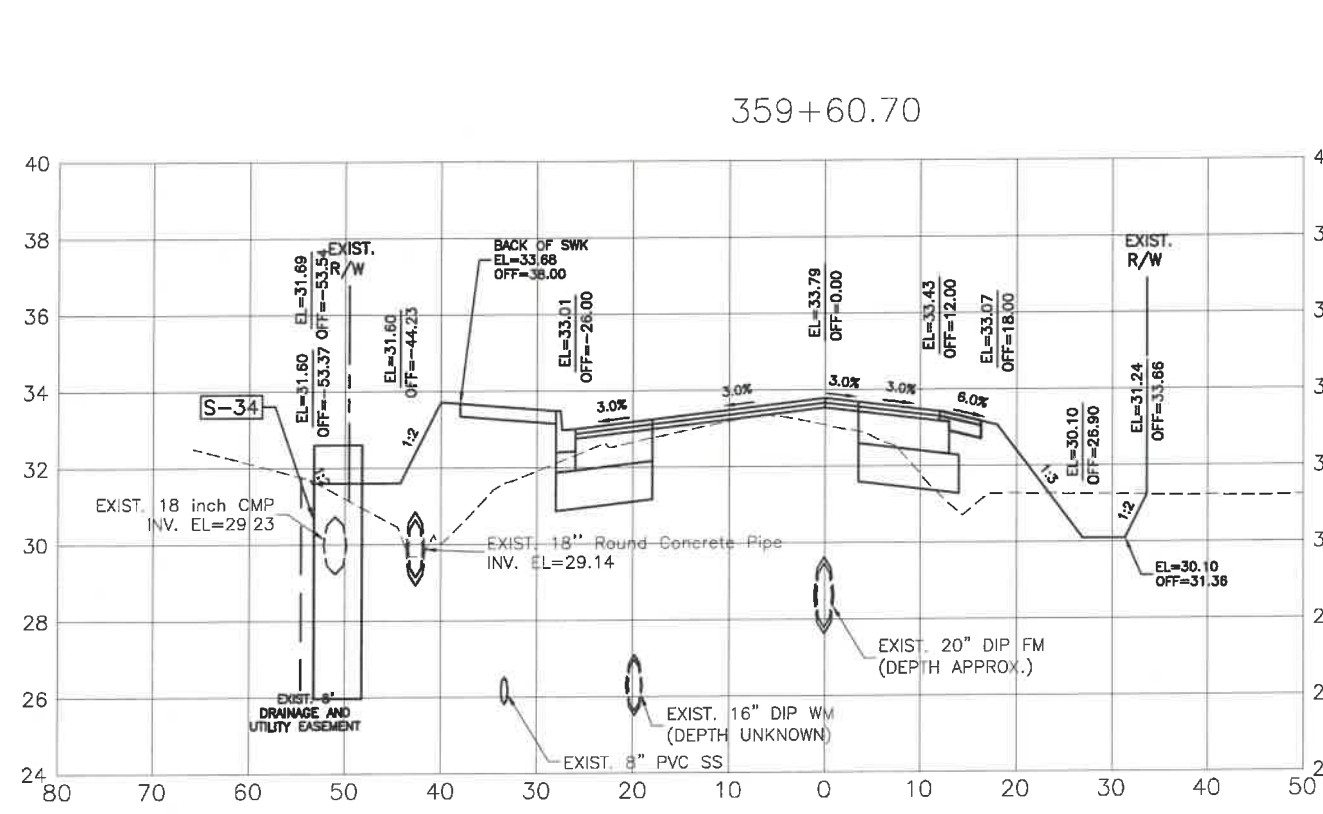
PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
BY	DATE
SURVEYED	04/2015
DRAWN	04/2015
CHECKED	10/2015
GRIGORY BERKININIS, P.E.	
FLORIDA P.E. #	6898
DATE	2021



H:\Highway Engineering\ROADS\Erie Road\DWG\Phase II\DWG\ERIEPHI-X\_Sect.dwg X-SEC-53\_1/4/2021 12:09 PM Ken Canham, 1:1, ANSI full bleed B (11.00 x 17.00 inches)



**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**



NO.	REVISION DESCRIPTION	BY	DATE
1	PER SWFWD COMMENTS	KHL	07/24/18

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
DRAWN	BY DATE
GRIGORY BERKINMAN	GRB 04/2015
GRIGORY BERKINMAN, P.E.	GRB 10/2015
FLORIDA P.E. # 6899	

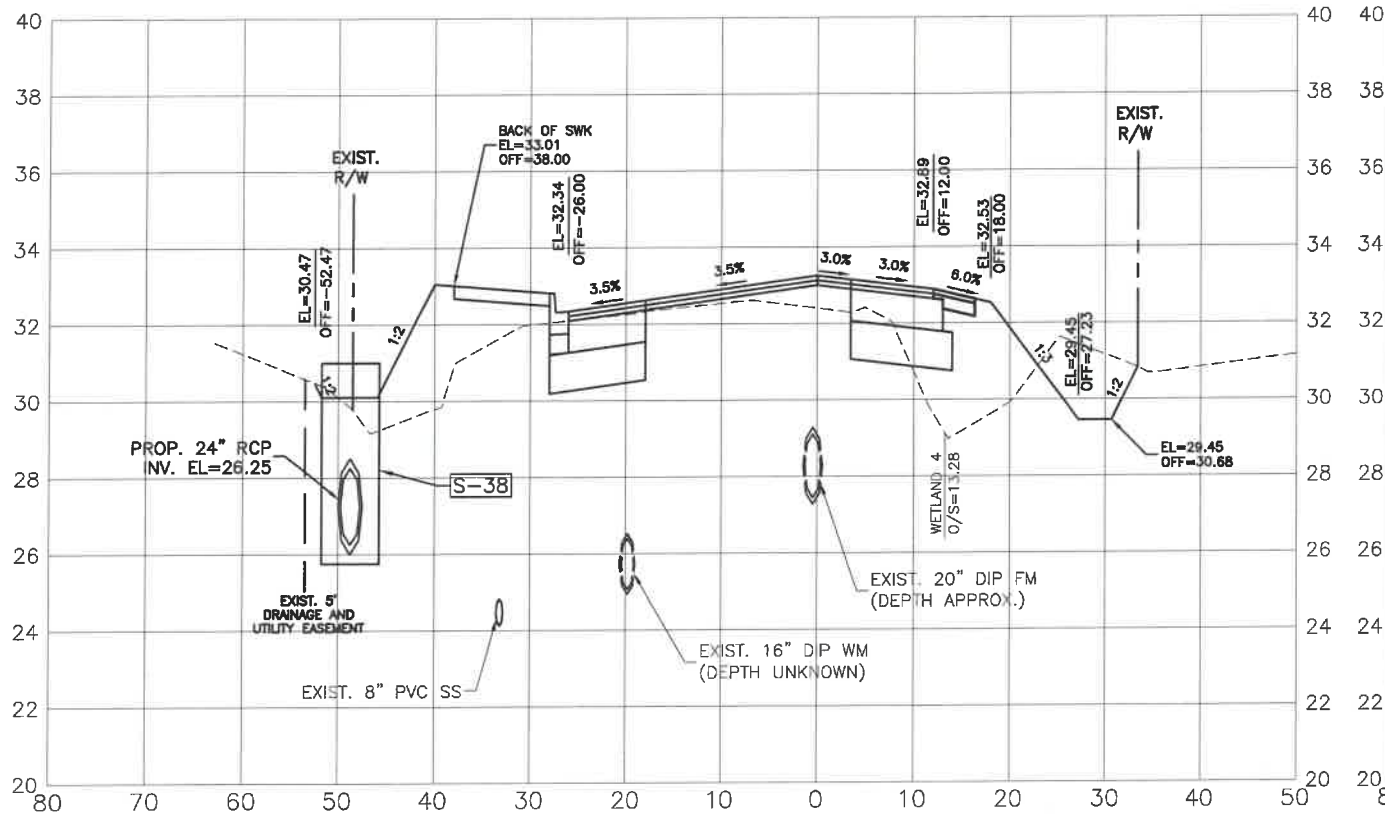
**GRIGORY BERKINMAN**  
Professional Engineer  
No. 76898  
STATE OF FLORIDA  
2021  
Signature & Date

H:\Highway Engineering\ROADS\Erie Road\SWF\Phase II\SWF\EriePH2\X\_Sect.dwg, X-SEC-54, 1/4/2021 12:09 PM Ken Lohrer, L1, ANSI full bleed B (11.00 x 17.00 inches)

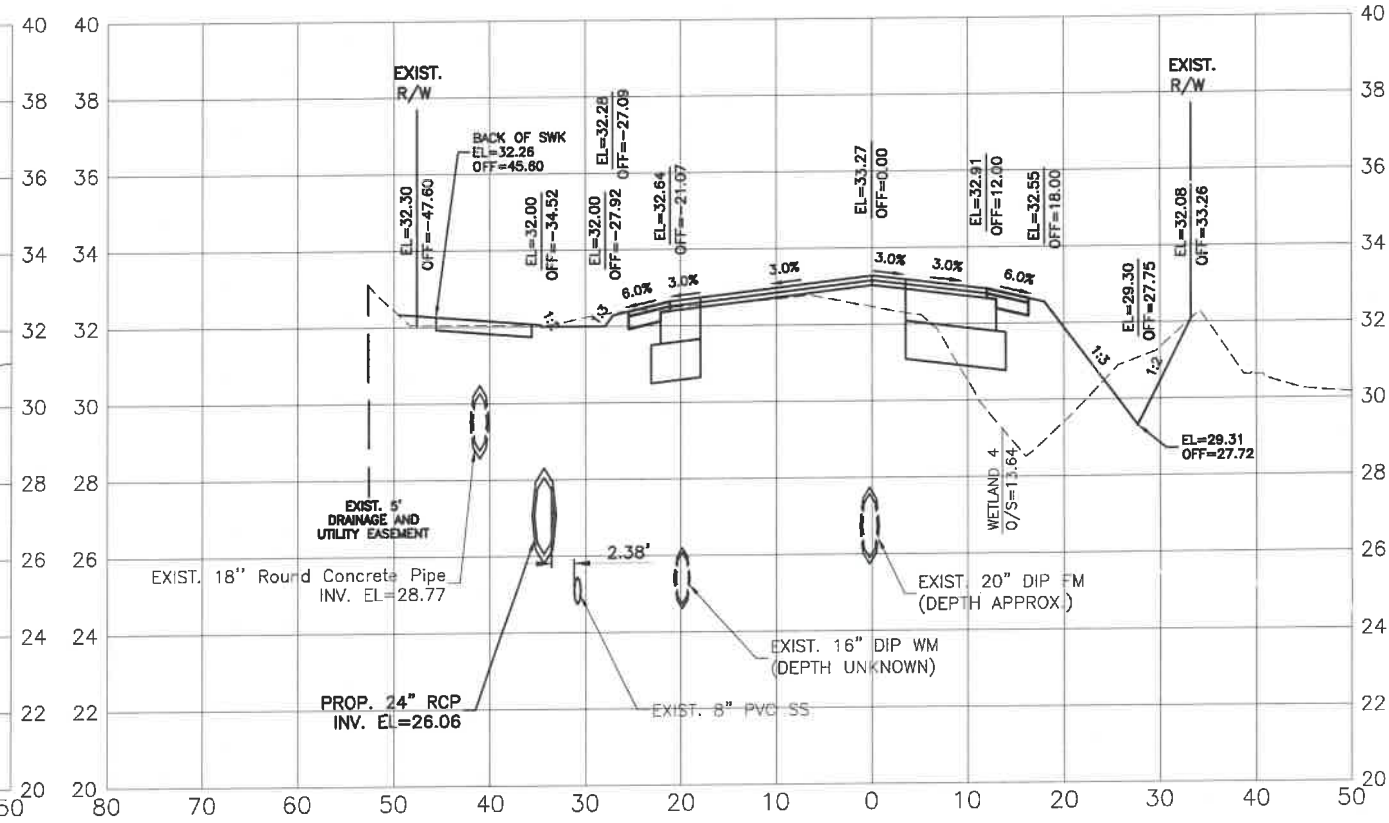


**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**

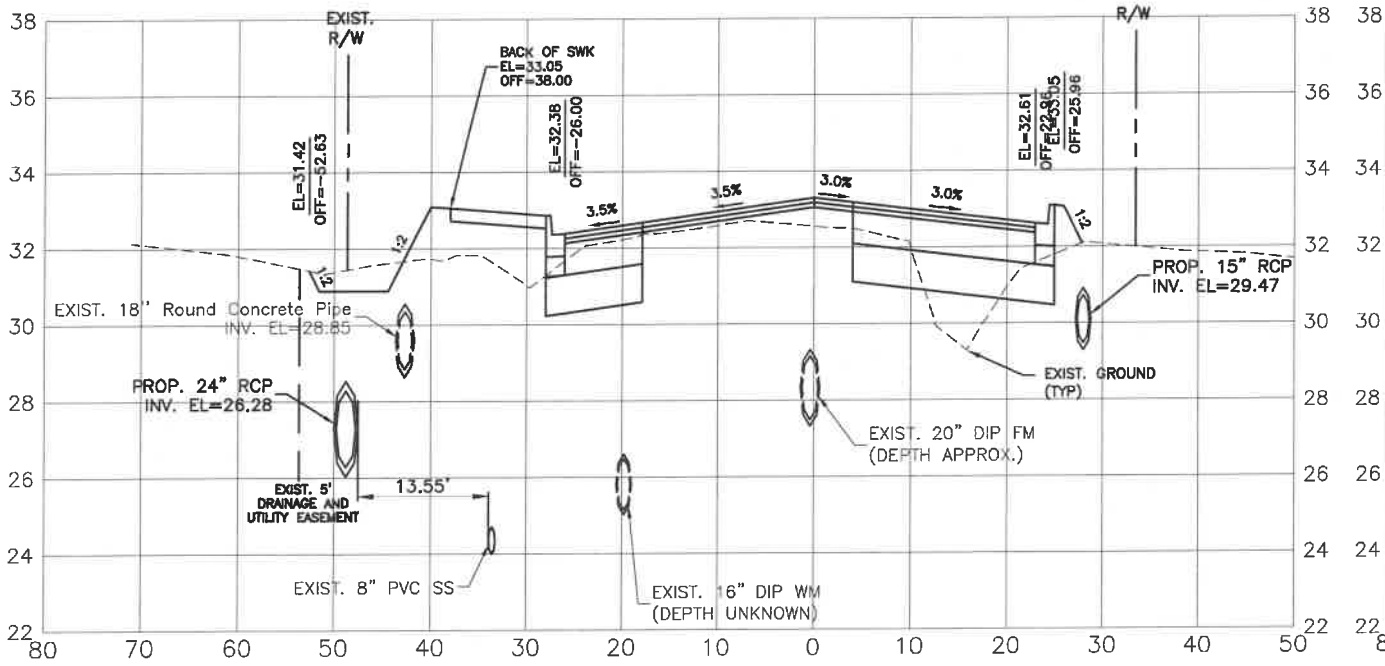
361+48.00



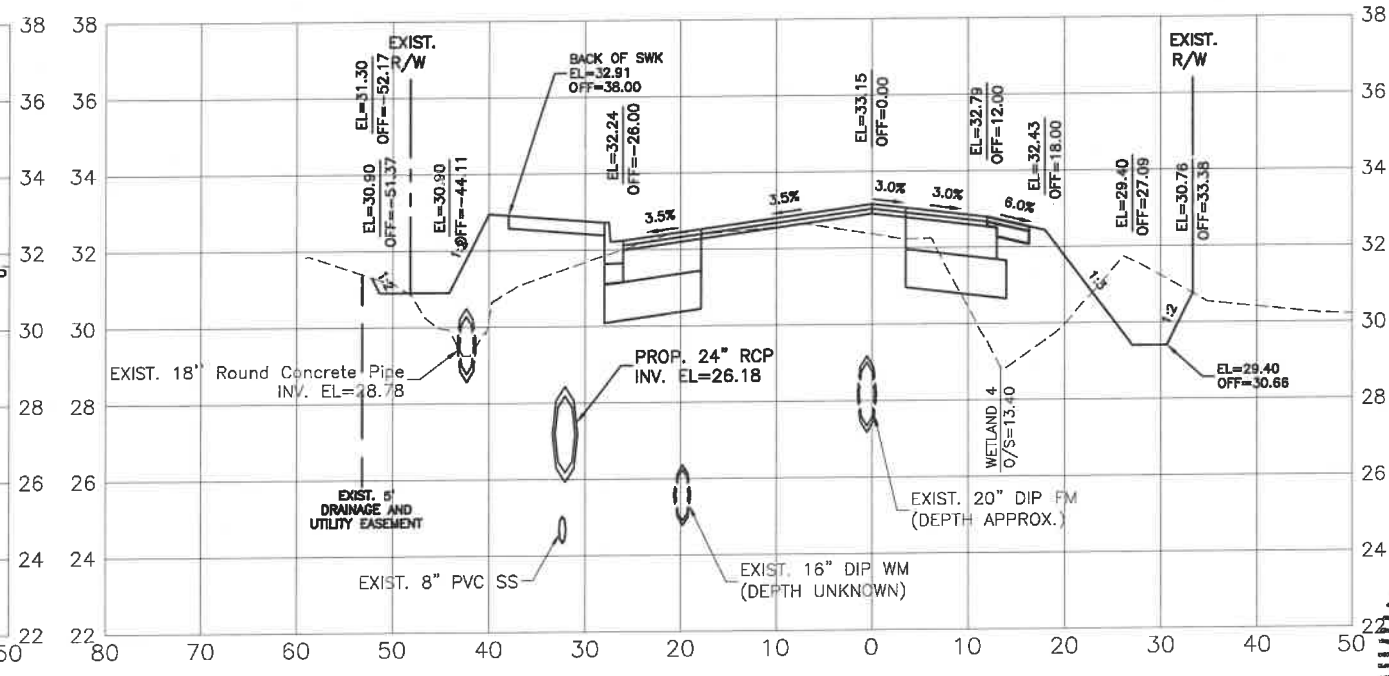
363+00.00



361+20.00



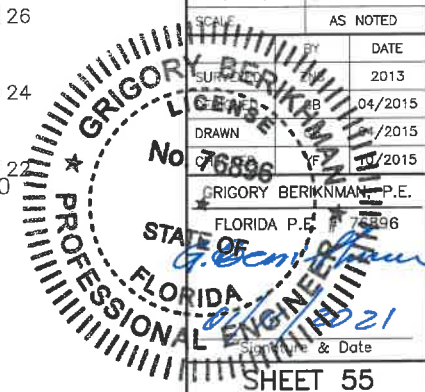
362+00.00



NO.	REVISION DESCRIPTION	BY	DATE
1	PER SWFWD COMMENTS	KHL	07/24/18

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
SUBMITTED BY	DATE
DRAWN BY	04/2015
CHECKED BY	07/2015
APPROVED BY	07/2015
GRIGORY BERIKMAN, P.E.	FLORIDA P.E. # 72896
DATE	
SHEET 55	

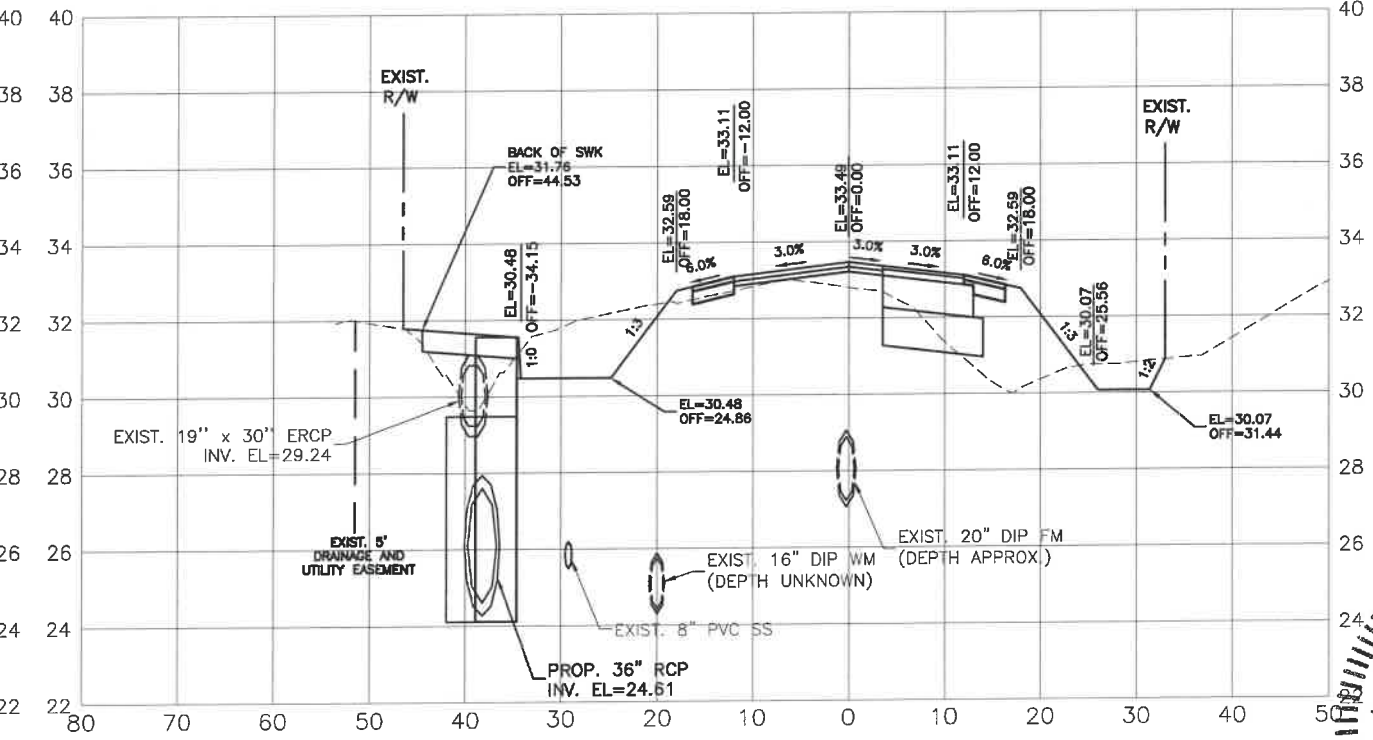
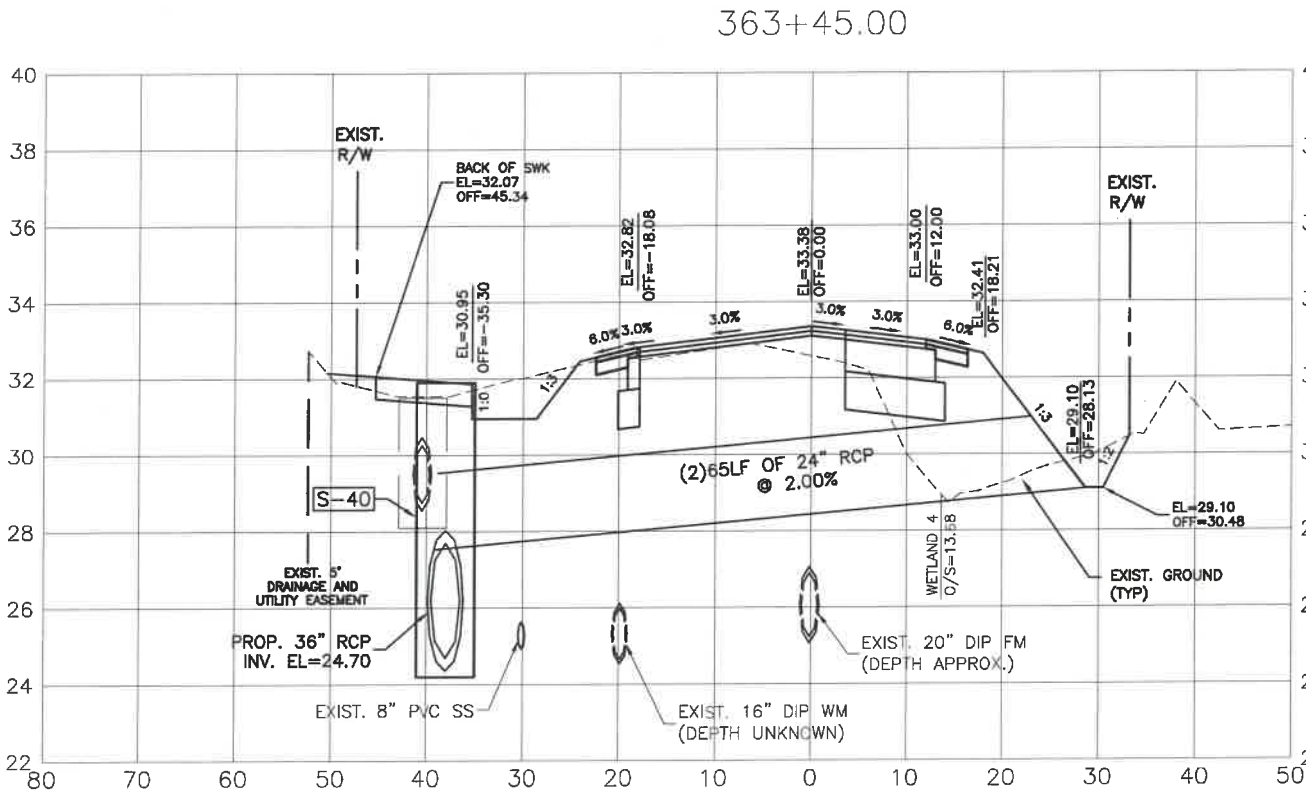
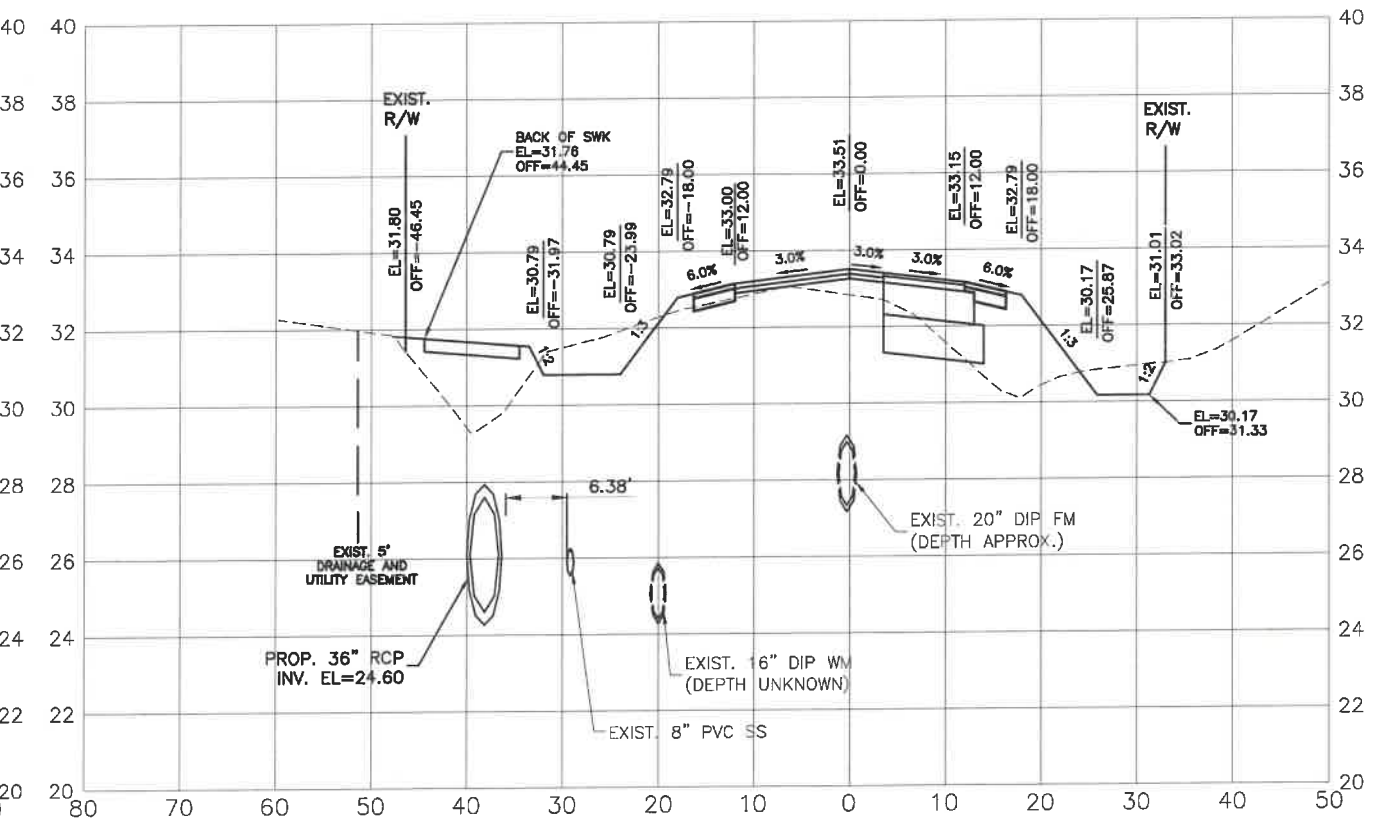
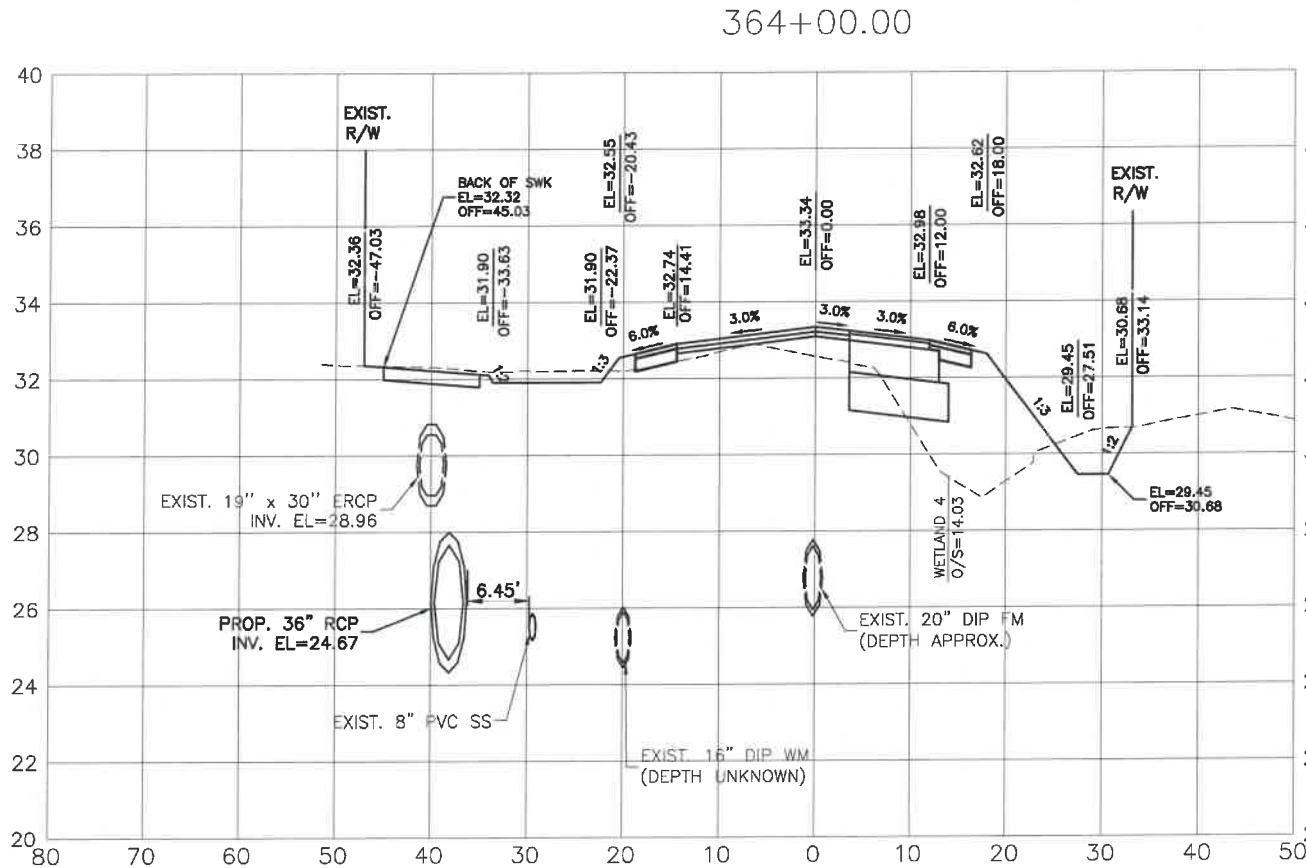


H:\Highway Engineering\ROADS\Erie Road\DWG Phase II\SWFWD\ERIE-II-X\_Section\X\_SEC-35\_174\2018 12:09 PM Ken Lathan, L1, ANSI full bleed B (11.00 x 17.00 inches)





**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**



NO.	DATE	BY	REVISION DESCRIPTION
1	07/24/18	KHL	PER SWFWD COMMENTS

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
AS NOTED	

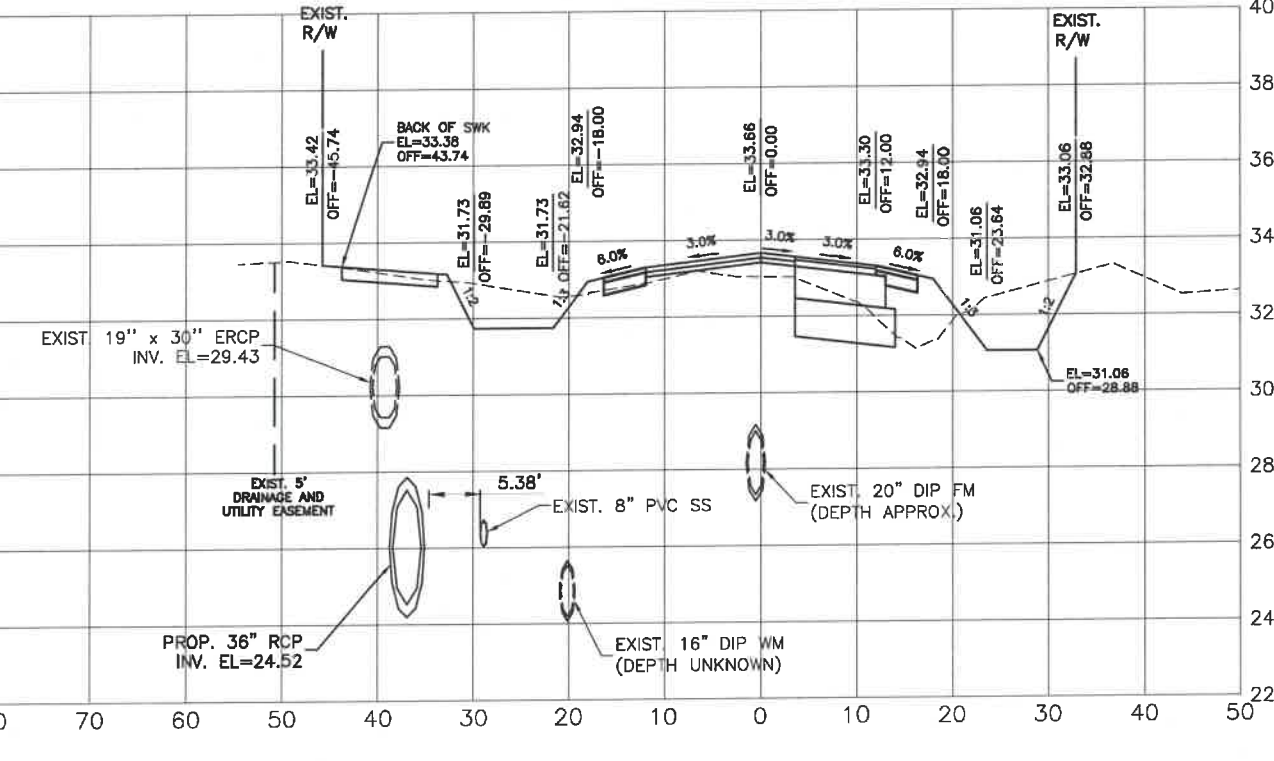
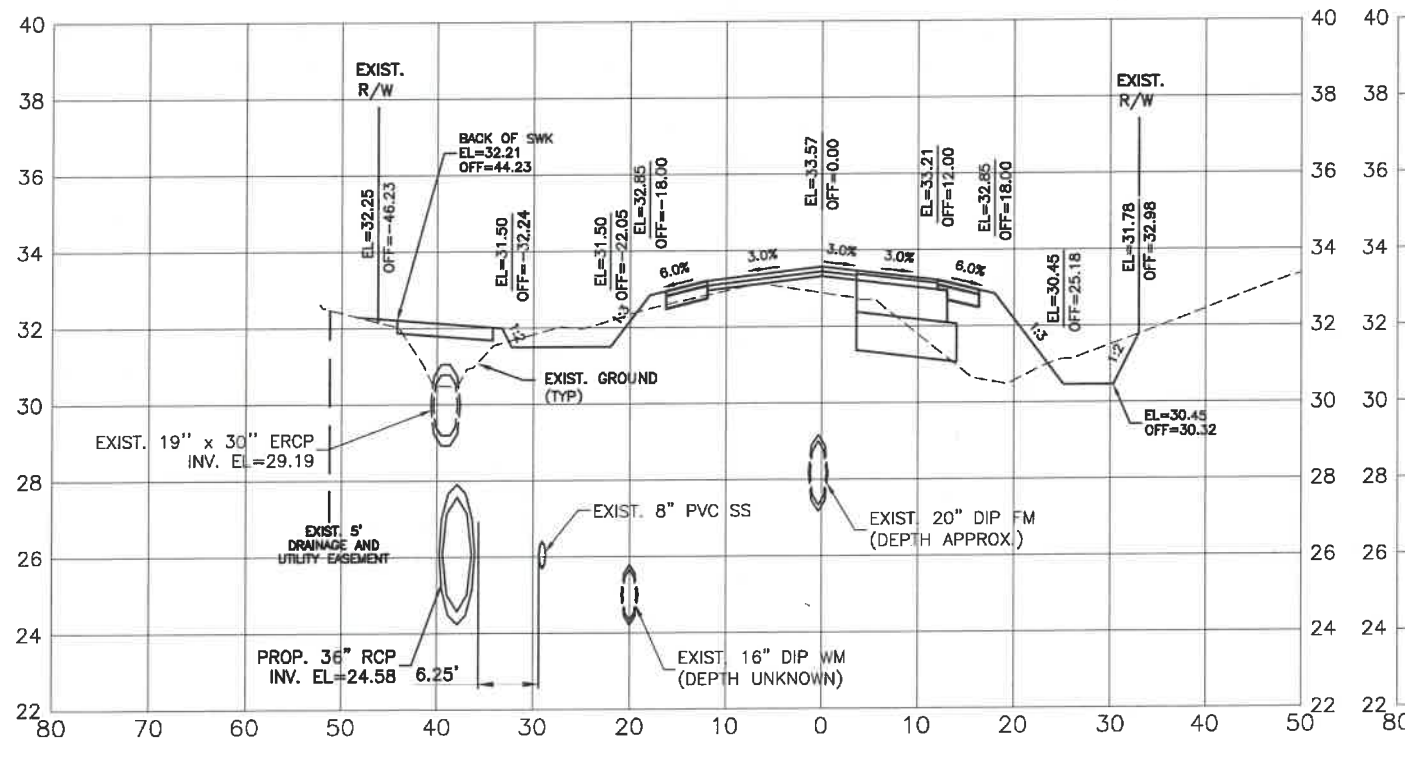
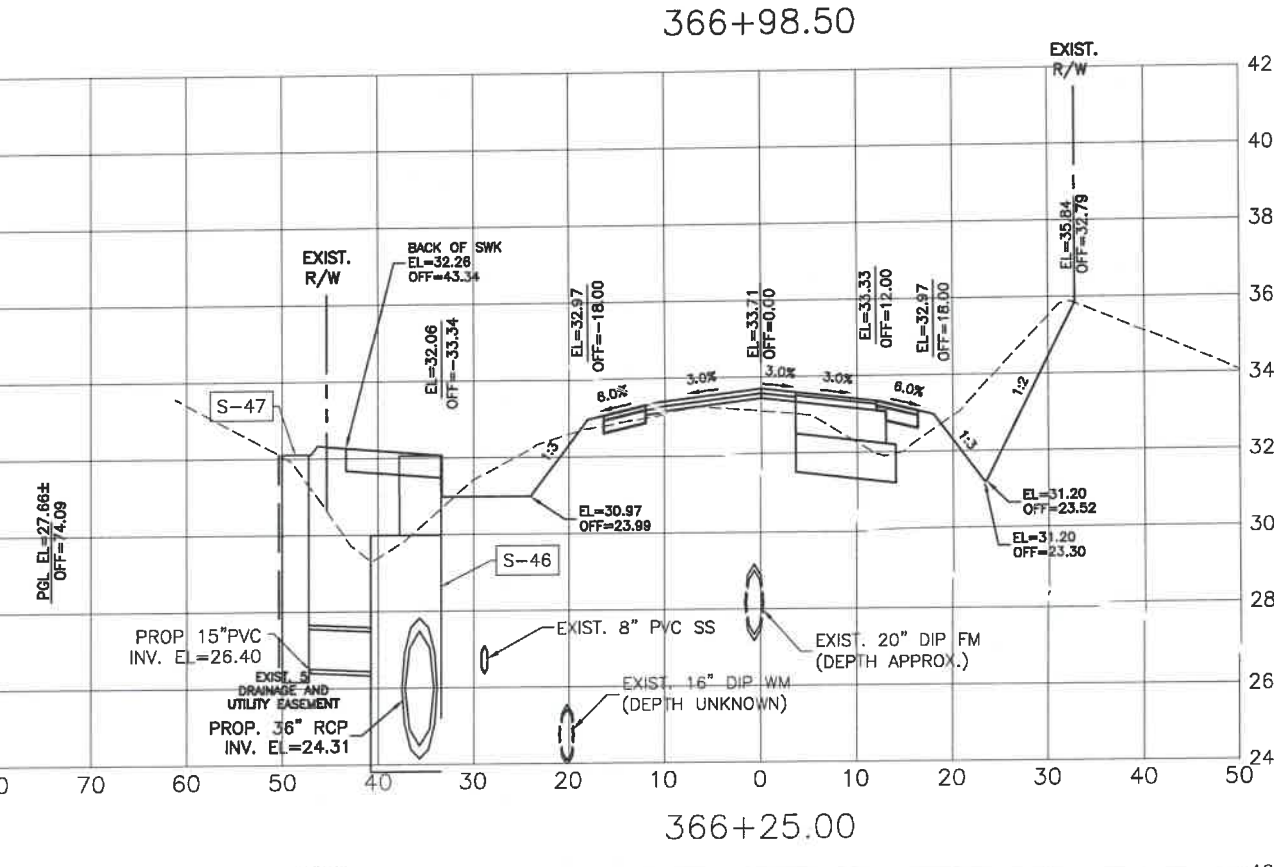
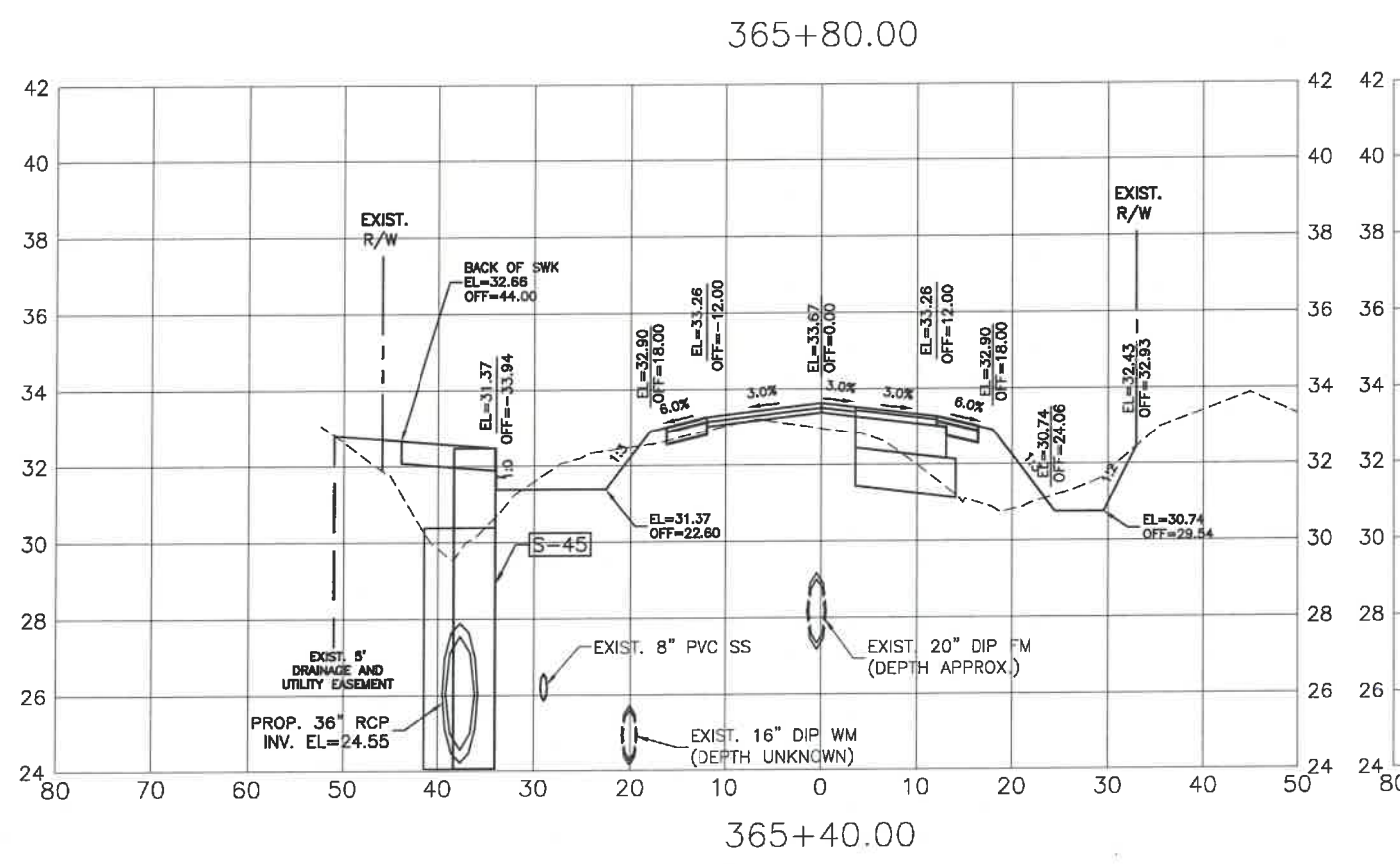
BY	DATE
GRIGORY BERIKMAN	2013
GR	04/2015
YF	04/2015
YF	0/2015

**GRIGORY BERIKMAN**  
No. 76896  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
Signature & Date

I:\Highway Engineering\ROADS\Eric\_Road\DWG\Phase II\DWG\ERIEPHI-X\_Sect.dwg, X\_SEC=56, 1/4/2021 12:10 PM Ken Lerner, 1:1, ANSI full bleed B (11.00 x 17.00 inches)



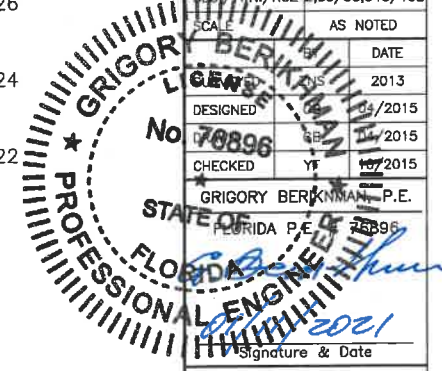
**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**



NO.	REVISION DESCRIPTION	BY	DATE
1	PER SWFMD COMMENTS	KHL	07/24/18

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
DATE	2013
DESIGNED	03/2015
CHECKED	10/2015
GRIGORY BERKINMAN, P.E.	
FLORIDA	
PROFESSIONAL ENGINEER	
No. 78896	
Signature & Date	

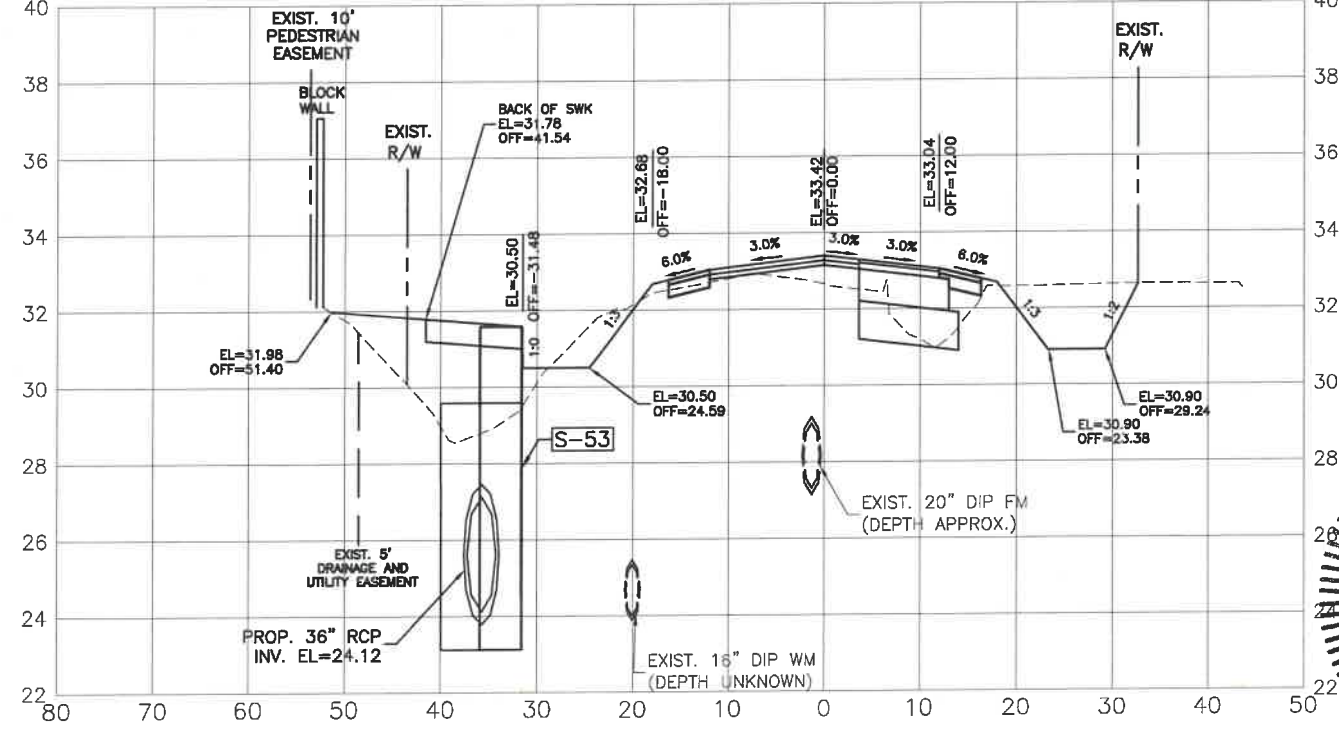
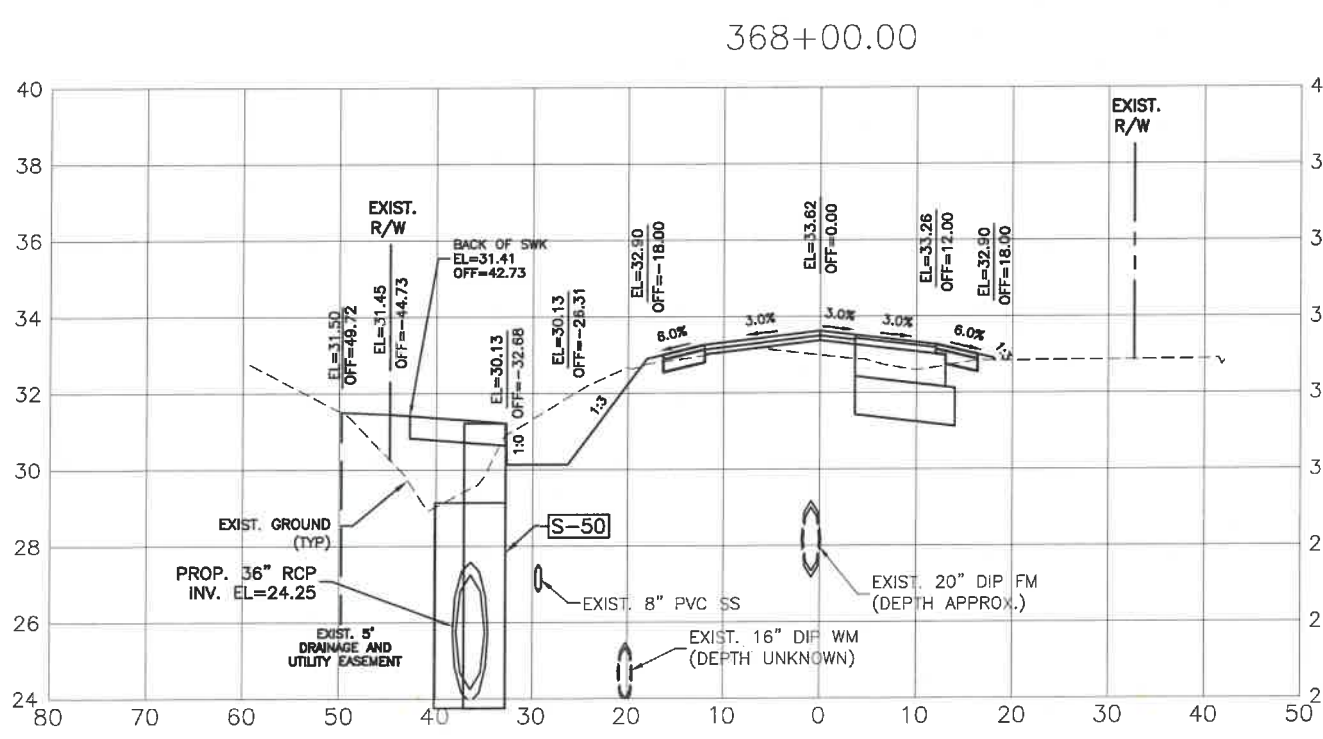
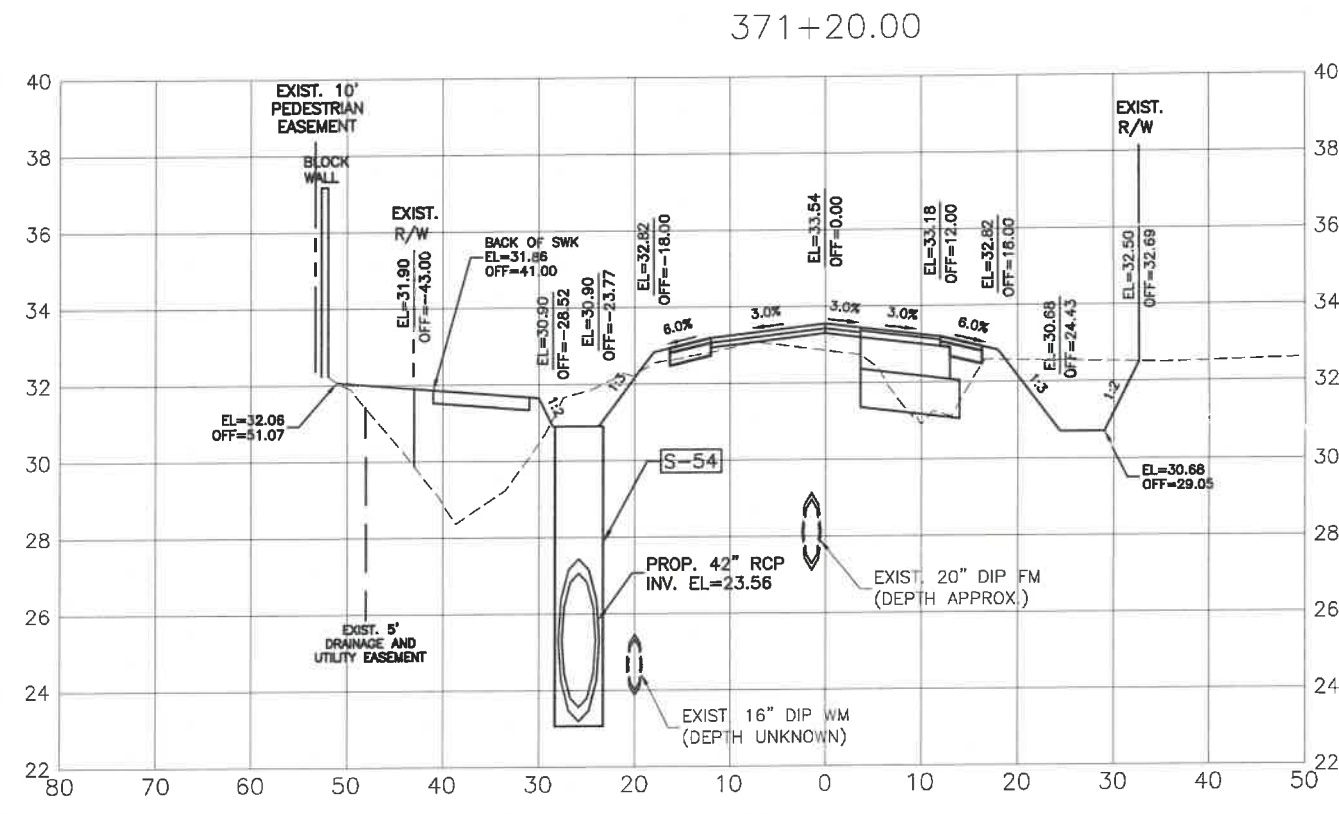
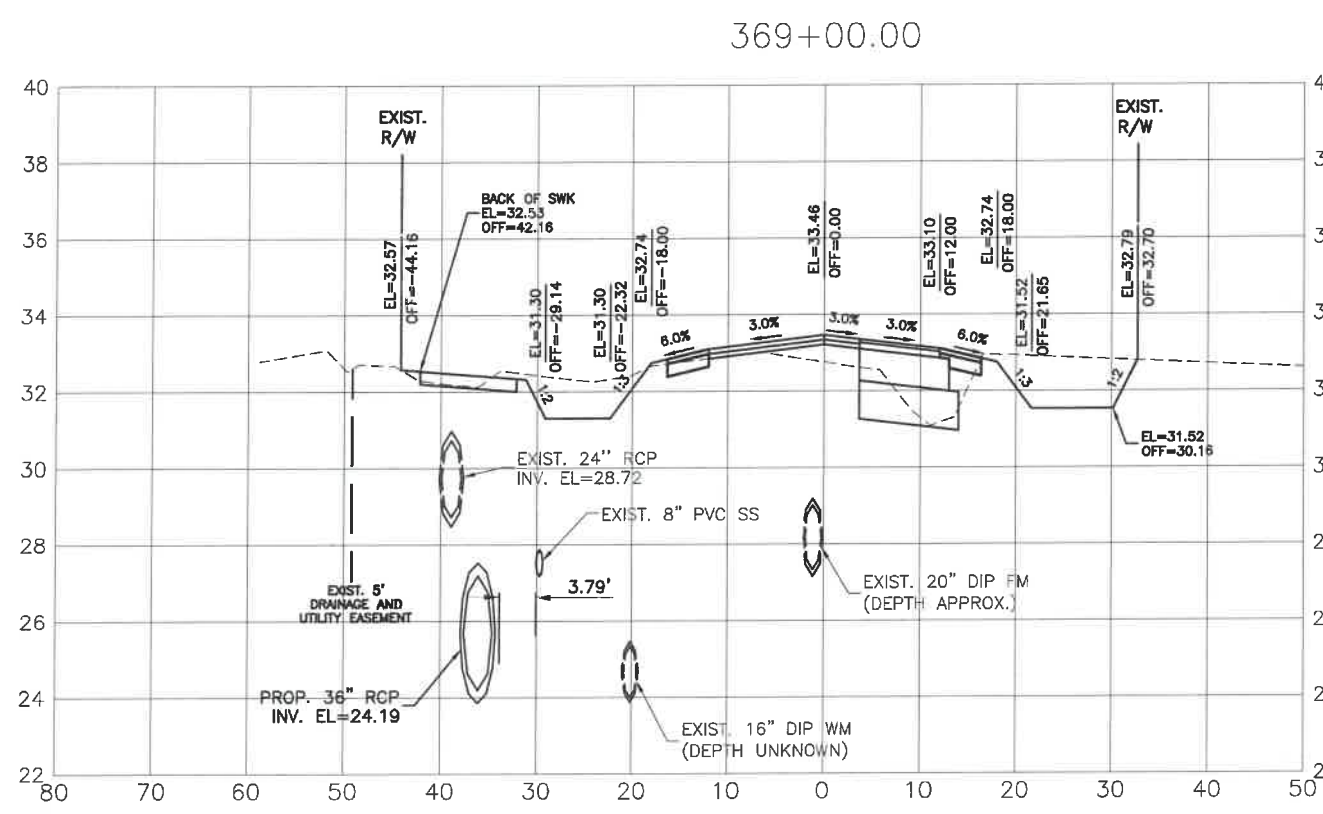


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PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES  
1022 26th Avenue East, Bradenton, FL 34208

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**

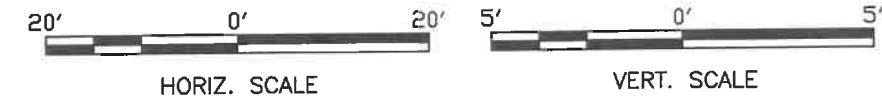


NO.	DATE	REVISION DESCRIPTION
1	07/24/18	PER SWFWD COMMENTS

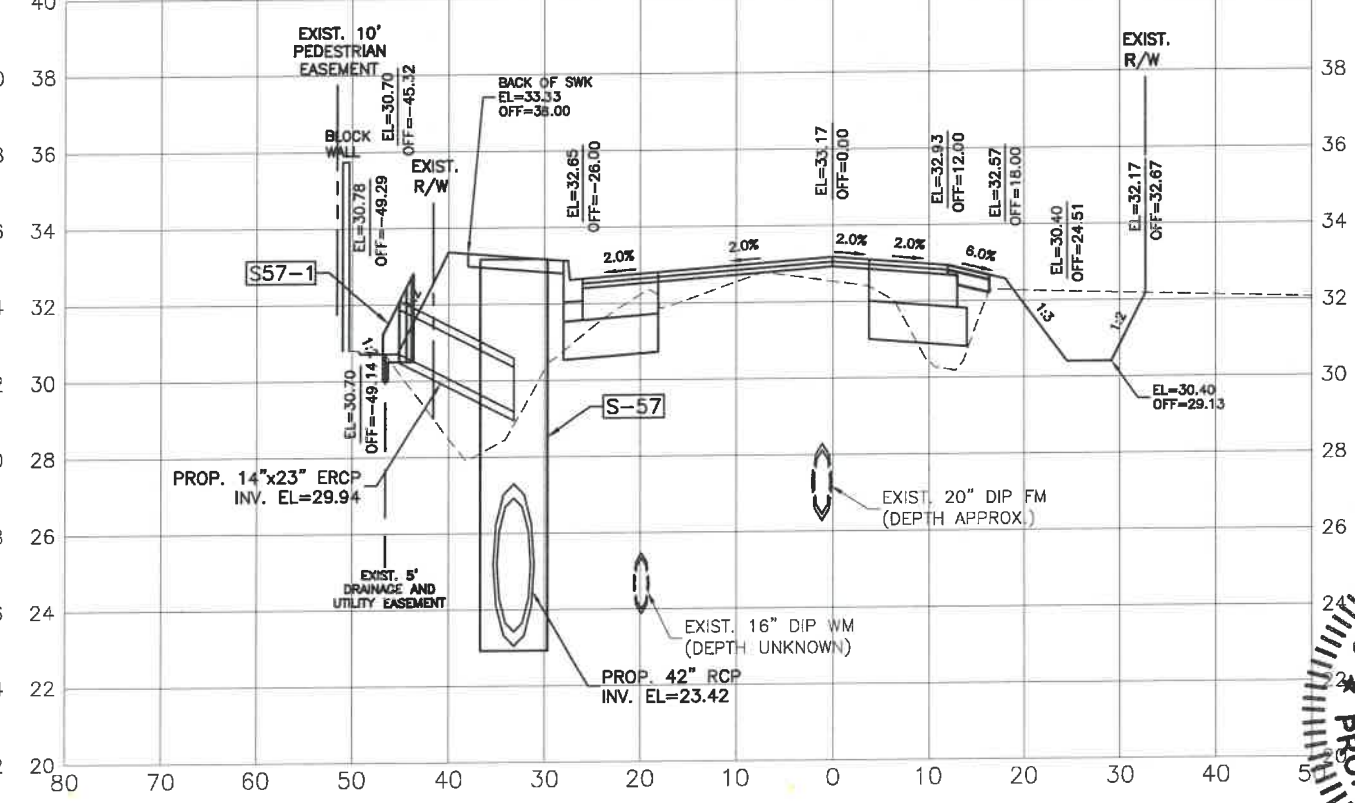
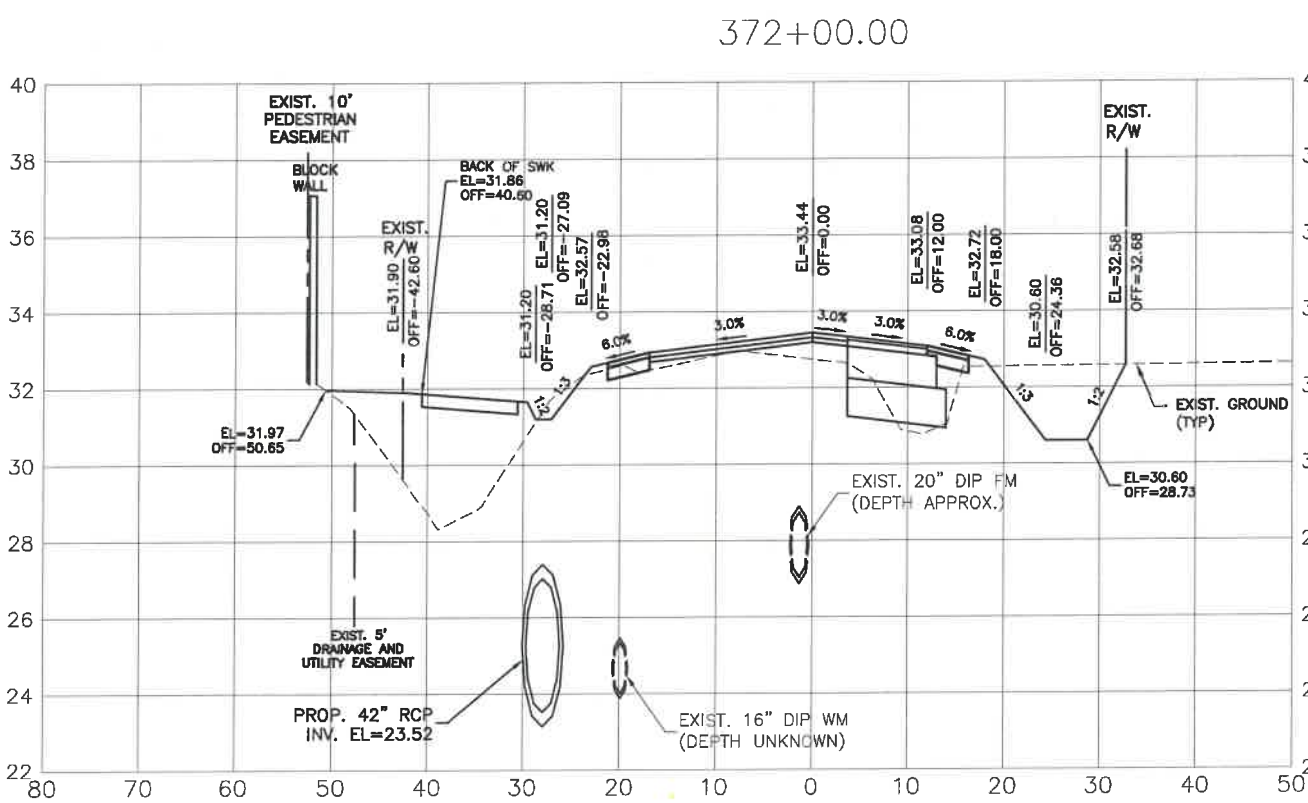
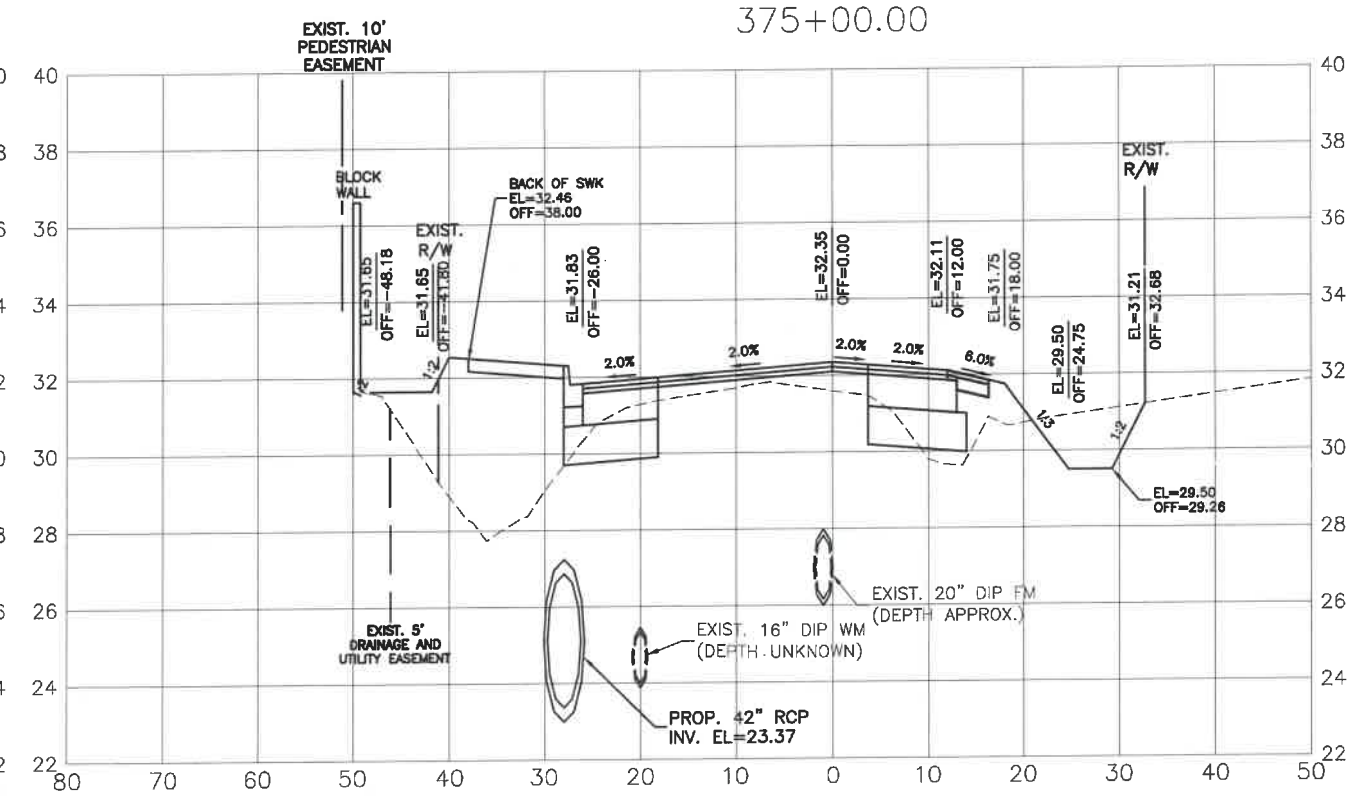
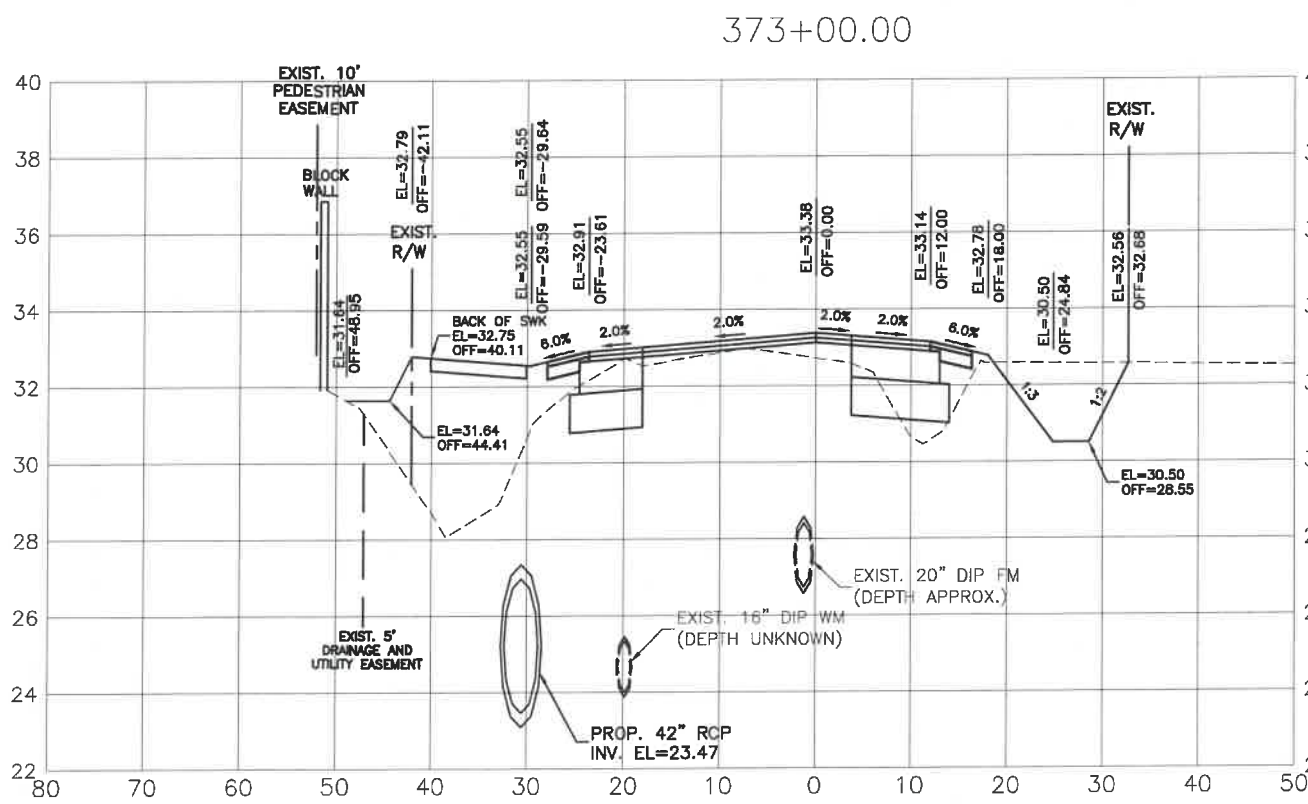
  

PROJECT #	307-6082860
SURVEY #	00-43133
SECTION	2,35/33,34S/18E
DATE	AS NOTED
DESIGNED	04/2015
CHECKED	04/2015
DATE	07/2015
STATE OF FLORIDA	GRIGORY BERIKHMAN, P.E.
PROFESSIONAL ENGINEER	No. 76896
SIGNATURE	<i>[Signature]</i>
DATE	7/2021

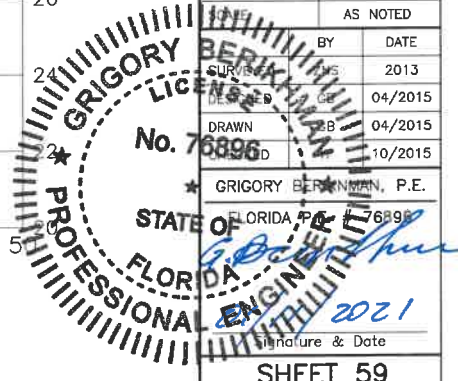
I:\Highways\Engineering\Roads\Phase II\DWG\ERIEPHI\_2\_Sect.dwg, X\_Sect=58, 7/4/2021 12:10 PM Ken Leamer, 1:1, ANSI full bleed B (1.00 x 17.00 inches)



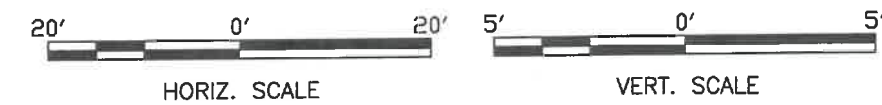
**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**



DATE	07/24/18
BY	KHL
REVISION DESCRIPTION	PER SWFWD COMMENTS
NO.	1
PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
	AS NOTED
BY	DATE
DRAWN	04/2015
DESIGNED	04/2015
NO. 76896	10/2015
GRIGORY BERENSON, P.E.	
FLORIDA P.E. # 76896	
Signature & Date	

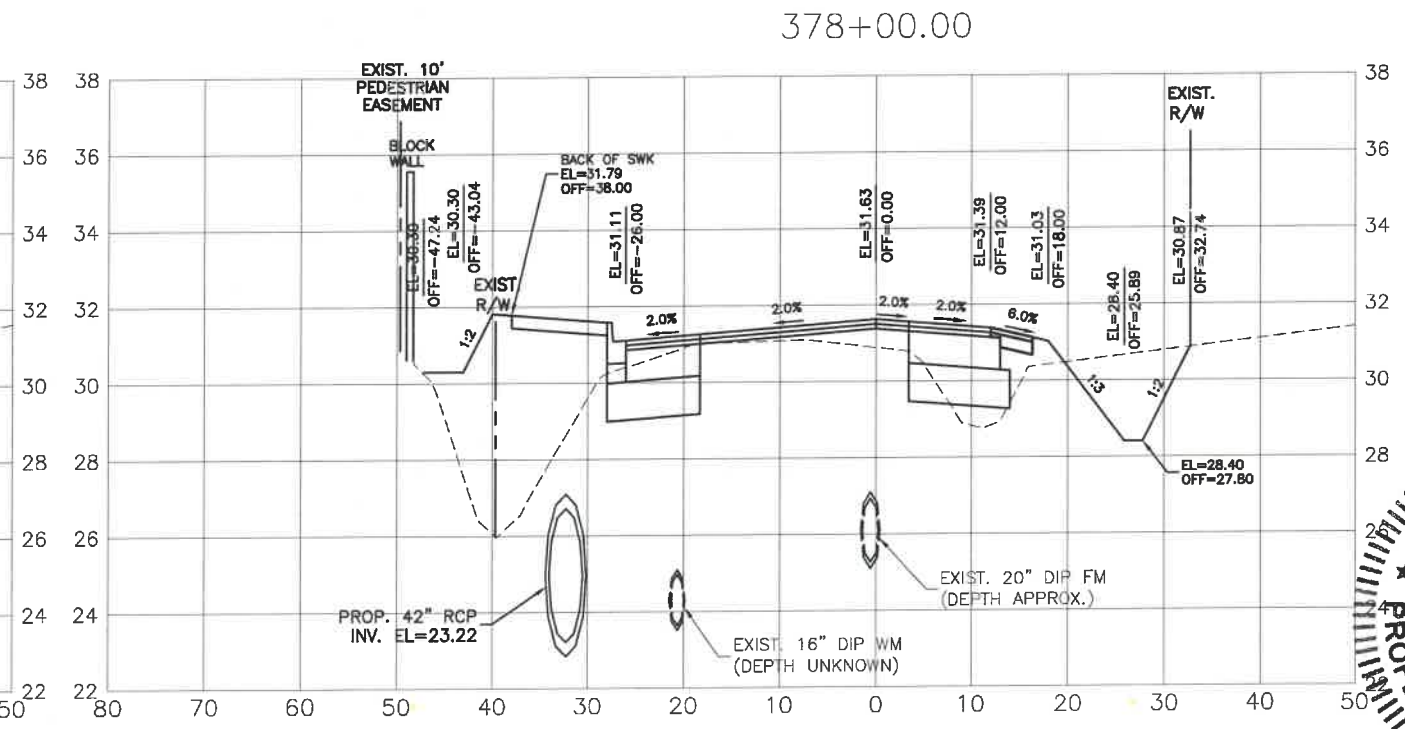
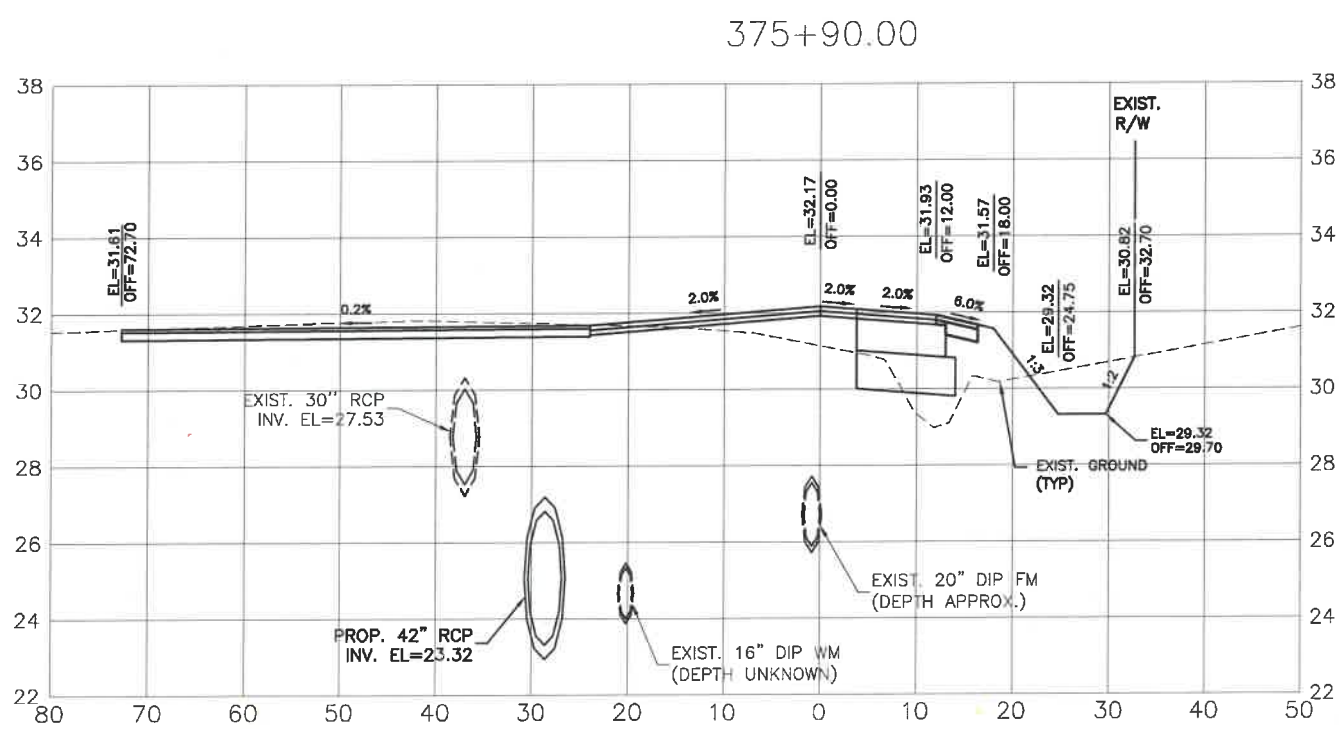
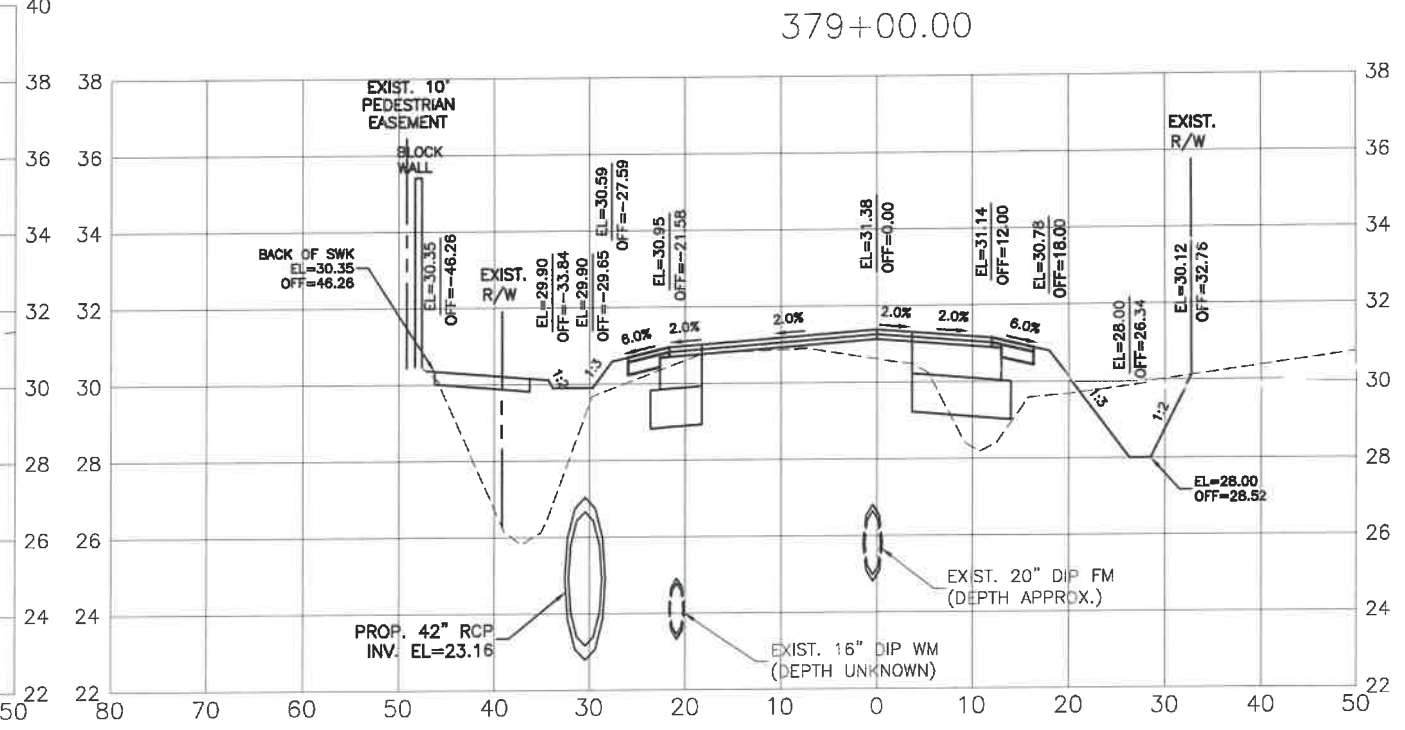
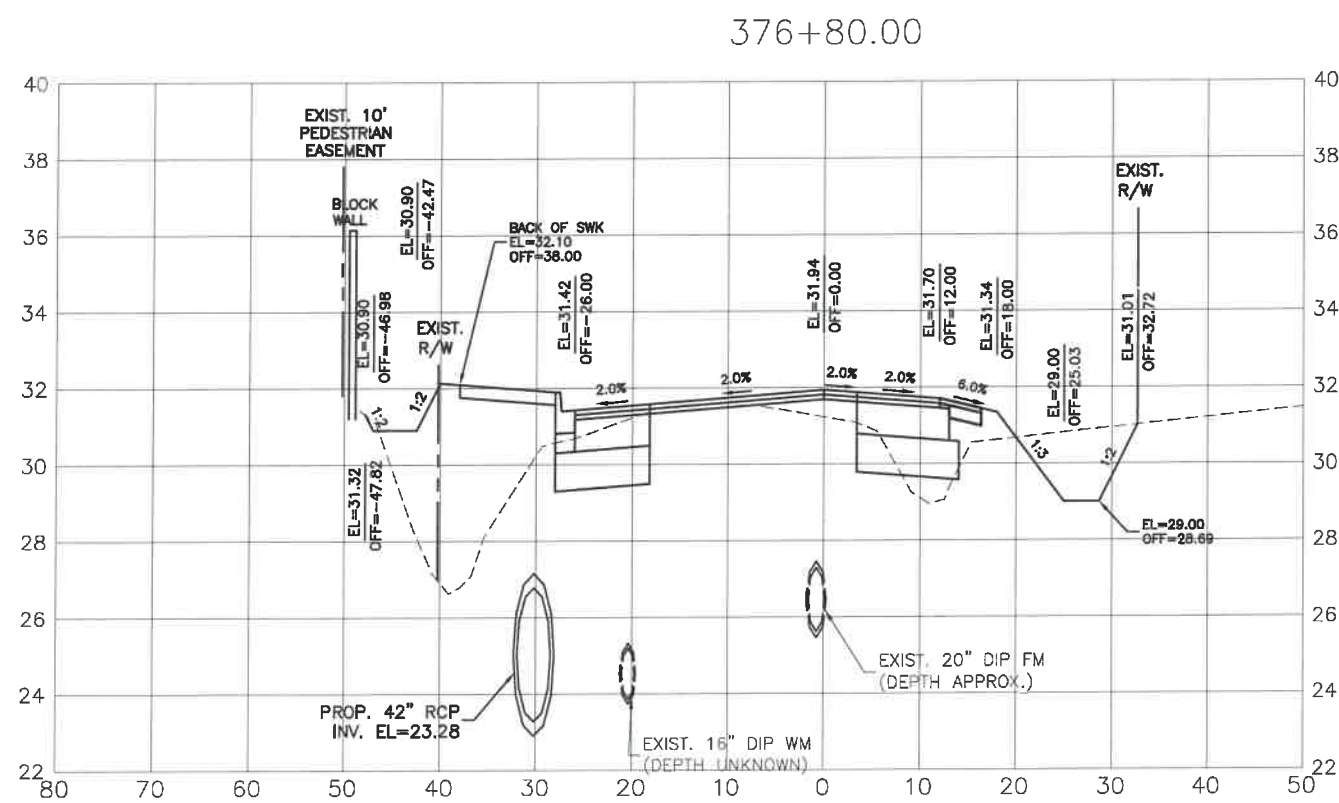


I:\Highway Engineering\ROADS\Erie Road\DWG\Phase II\_South-North\SEC-59\_1742021 12:10 PM Ken Lathier, I.T. ANSI Full bleed B (11.00 x 17.00 inches)



PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES  
1022 26th Avenue East, Bradenton, FL 34108

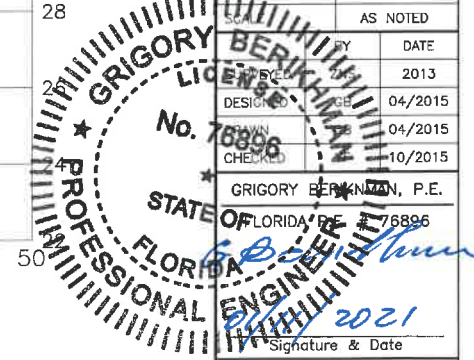
**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**



NO.	REVISION DESCRIPTION	DATE
1	PER SWFWD COMMENTS	07/24/18

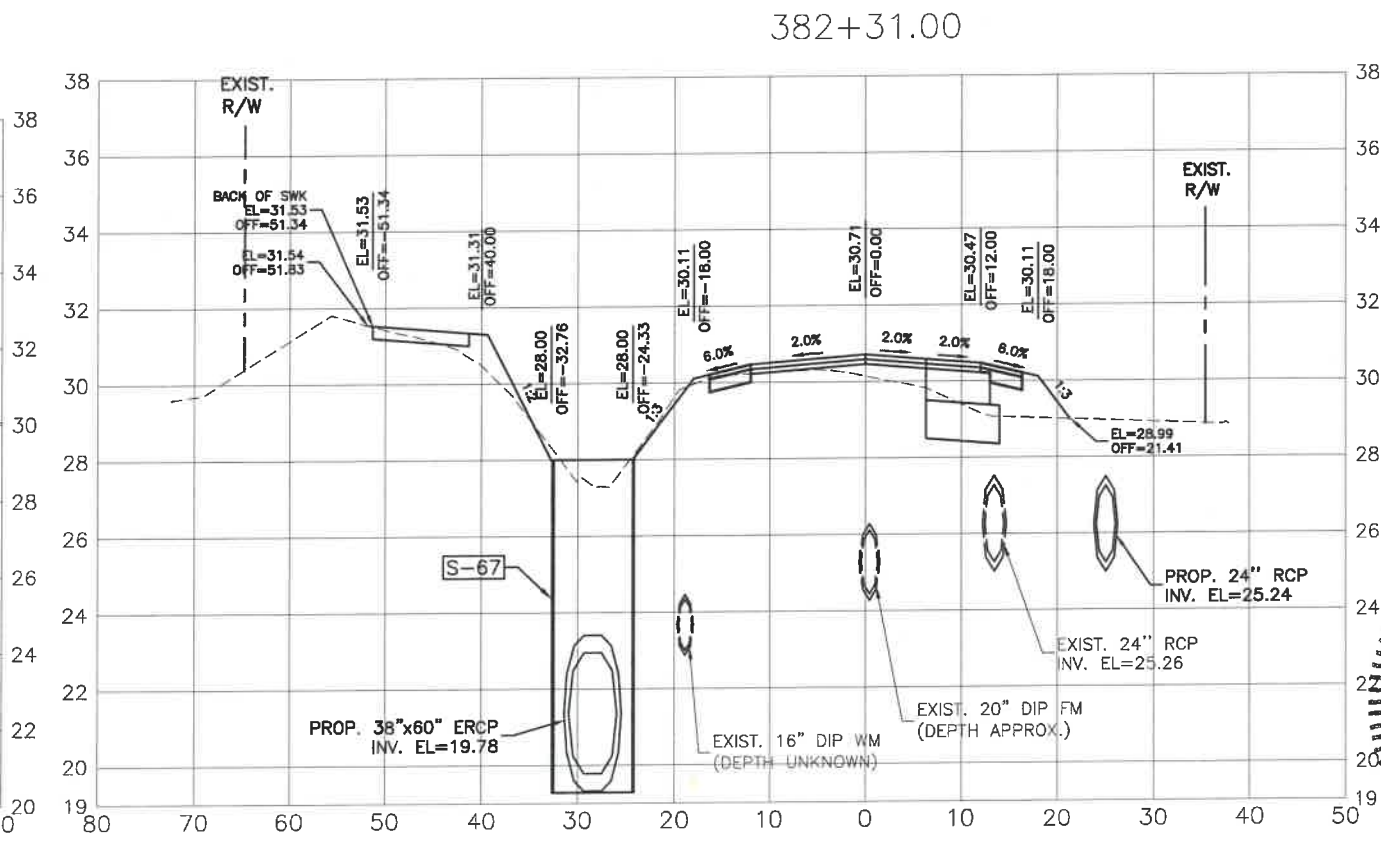
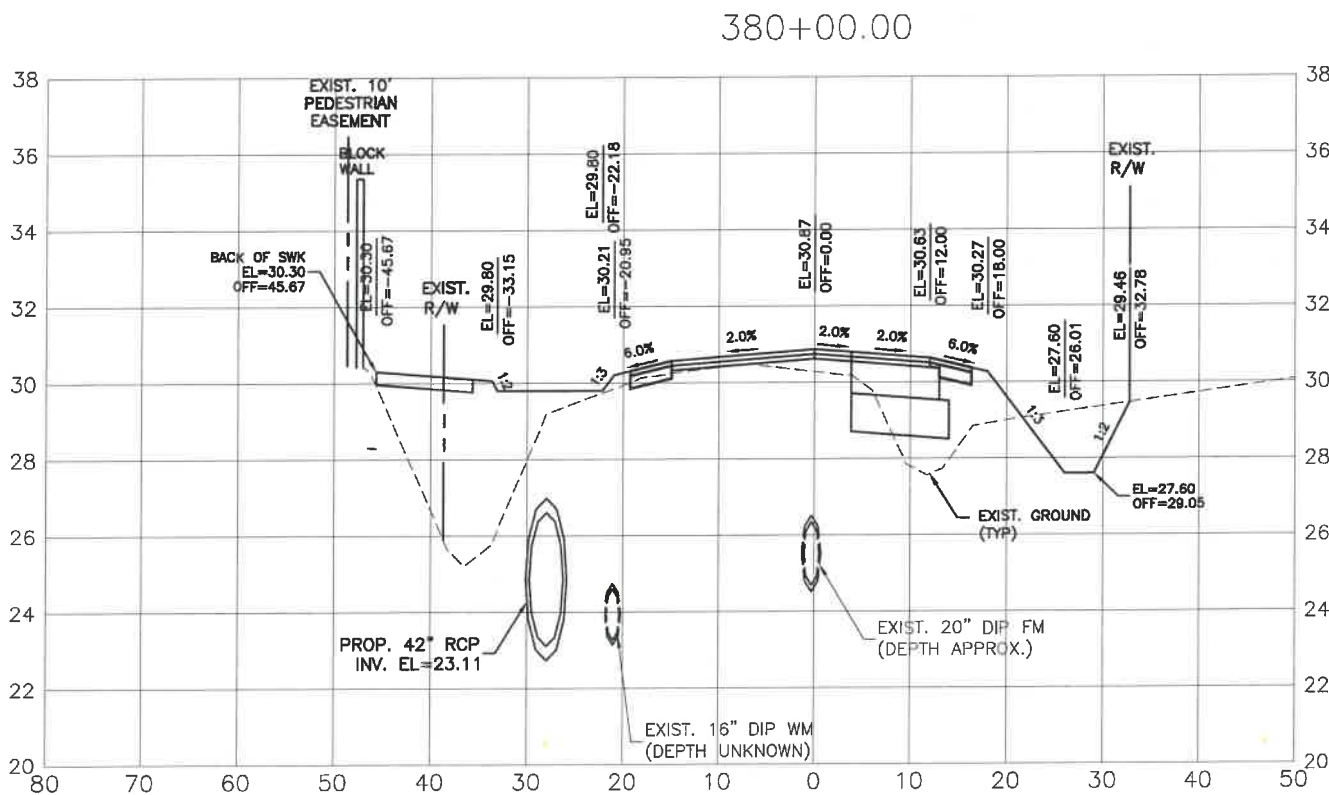
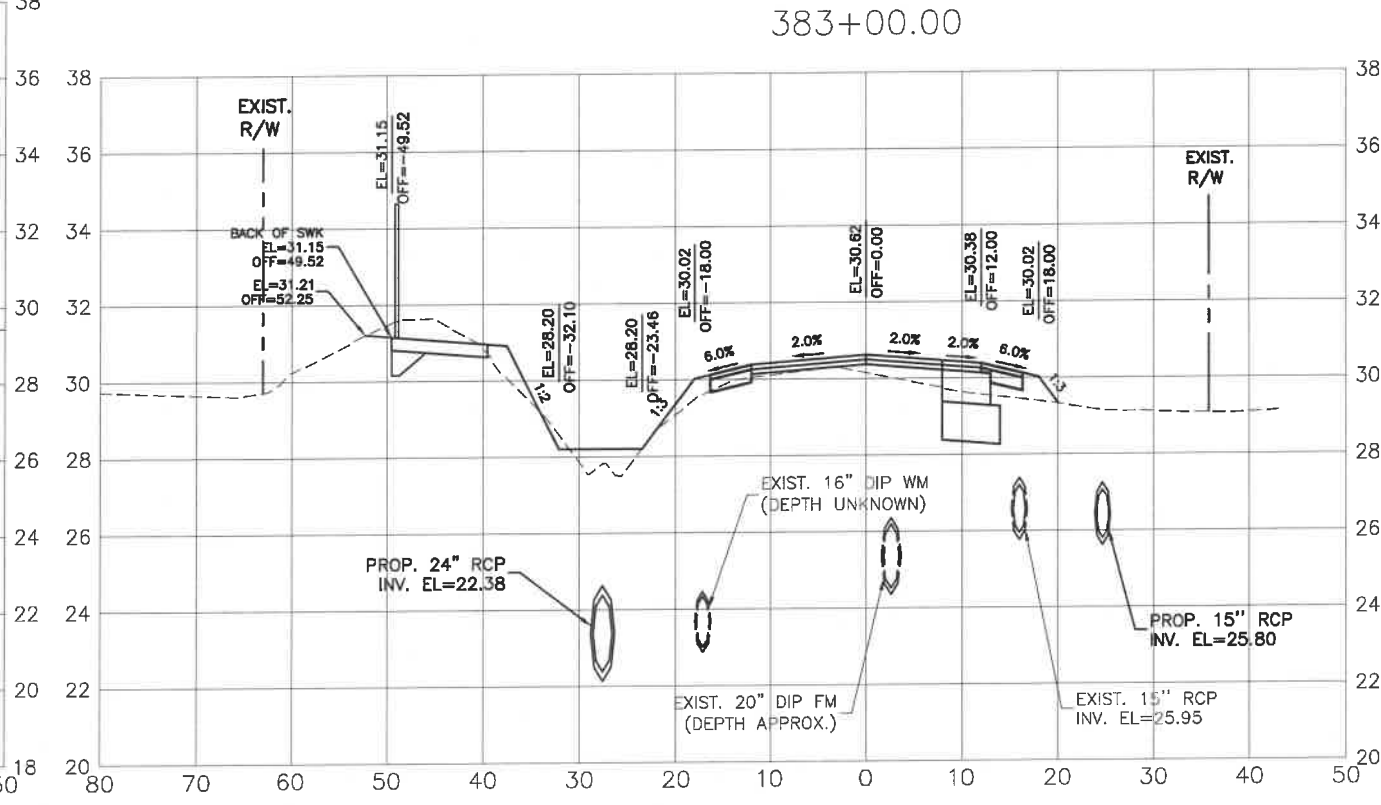
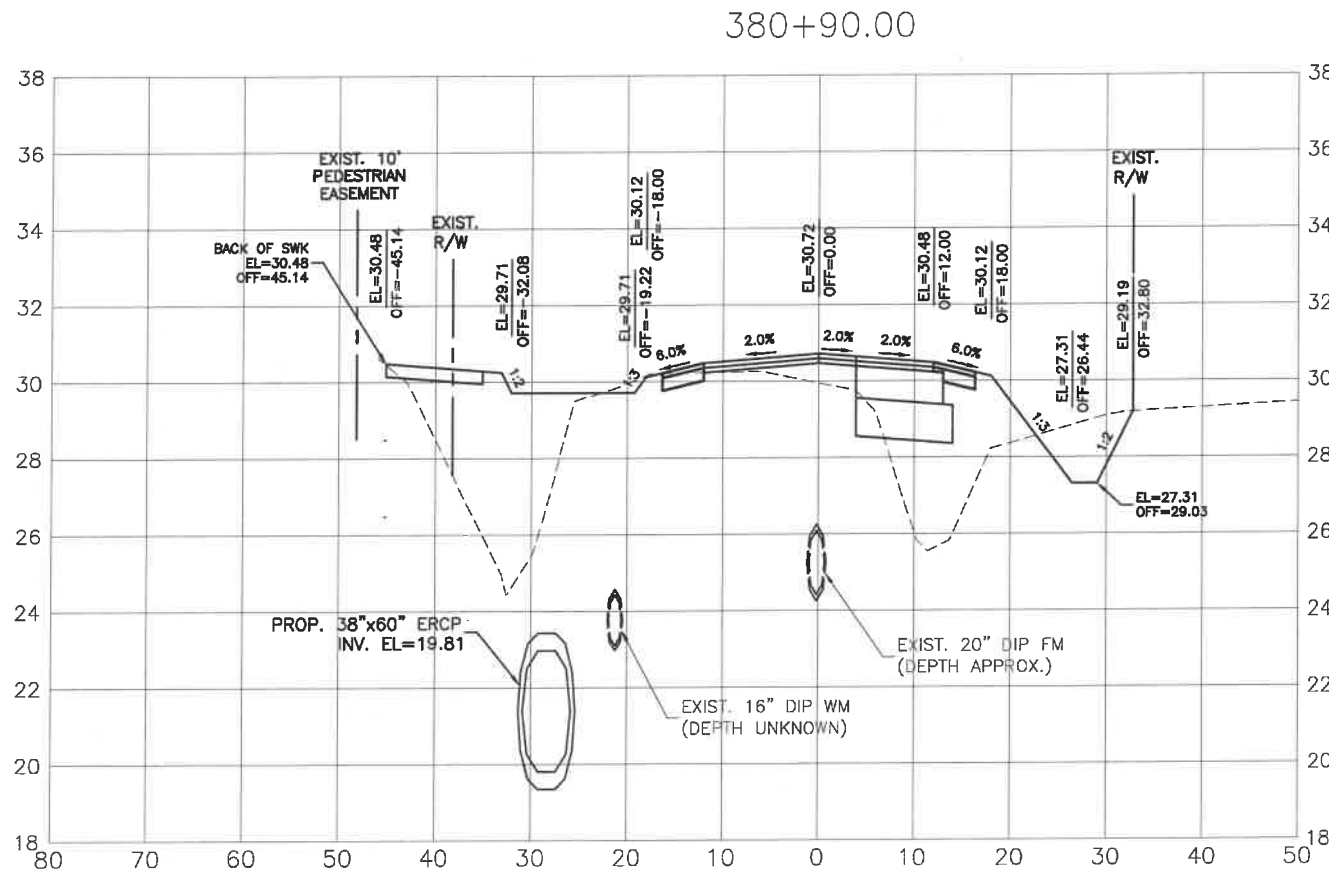
  

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
DESIGNED BY	DATE
DESIGNED	2013
CHECKED	04/2015
CHECKED	10/2015
BY	DATE
BY	2013
CHECKED	04/2015
CHECKED	10/2015
BY	DATE
BY	2013
CHECKED	04/2015
CHECKED	10/2015
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BY	DATE
BY	2013
CHECKED	04/2015
CHECKED	10/2015





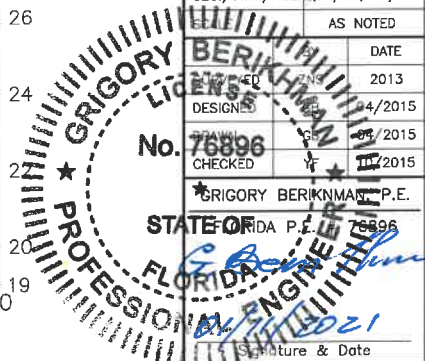
**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**



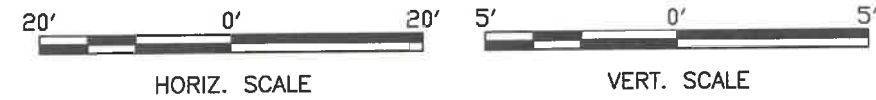
NO.	REVISION DESCRIPTION	BY	DATE
1	PER SWFWD COMMENTS	KHL	07/24/16

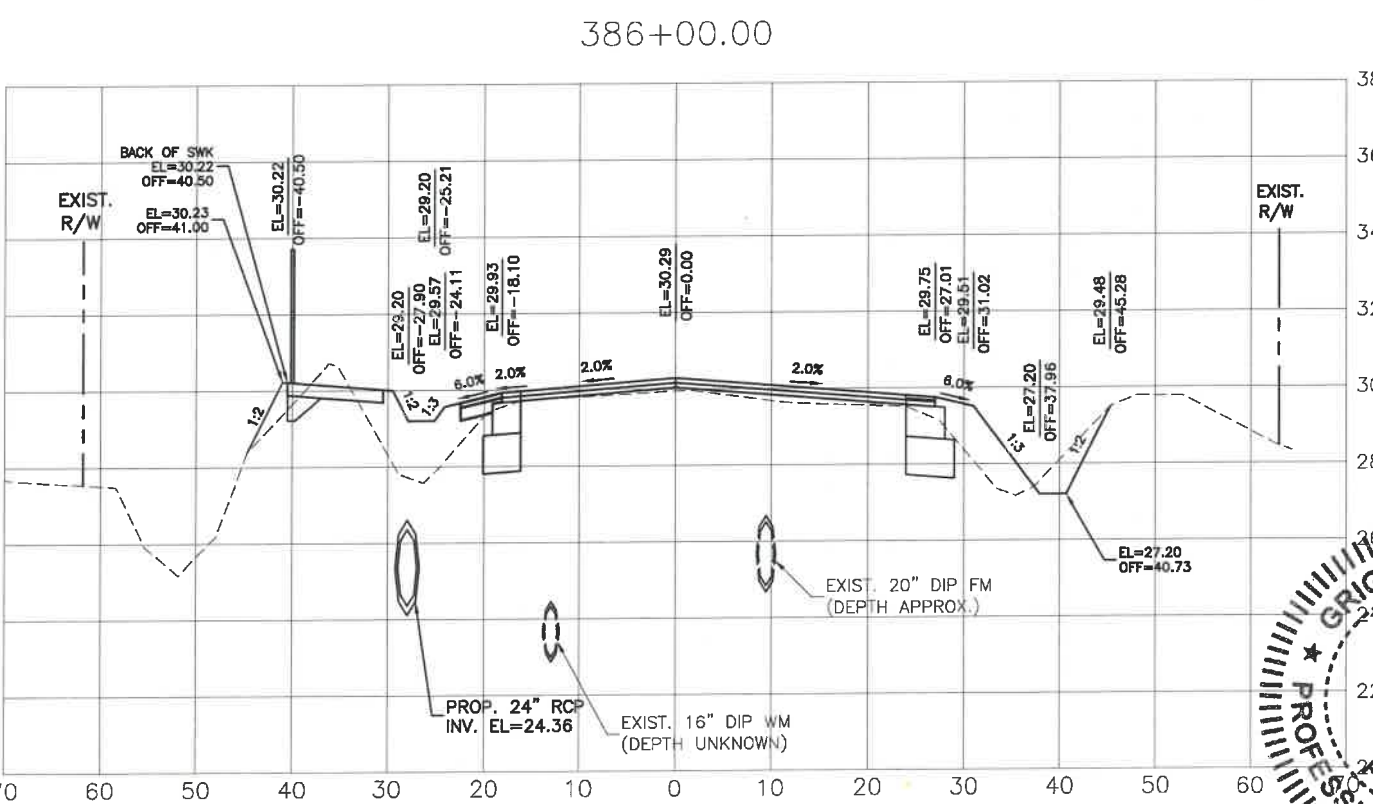
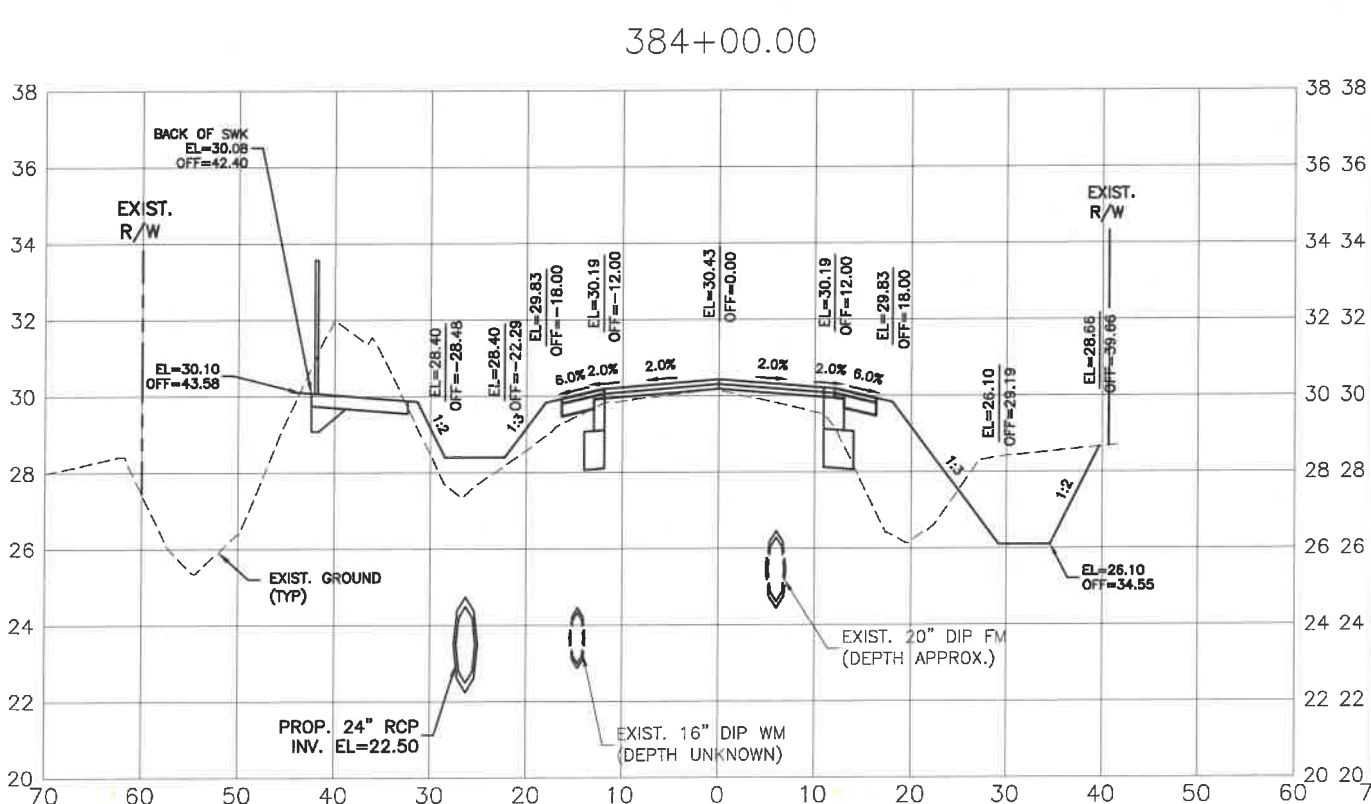
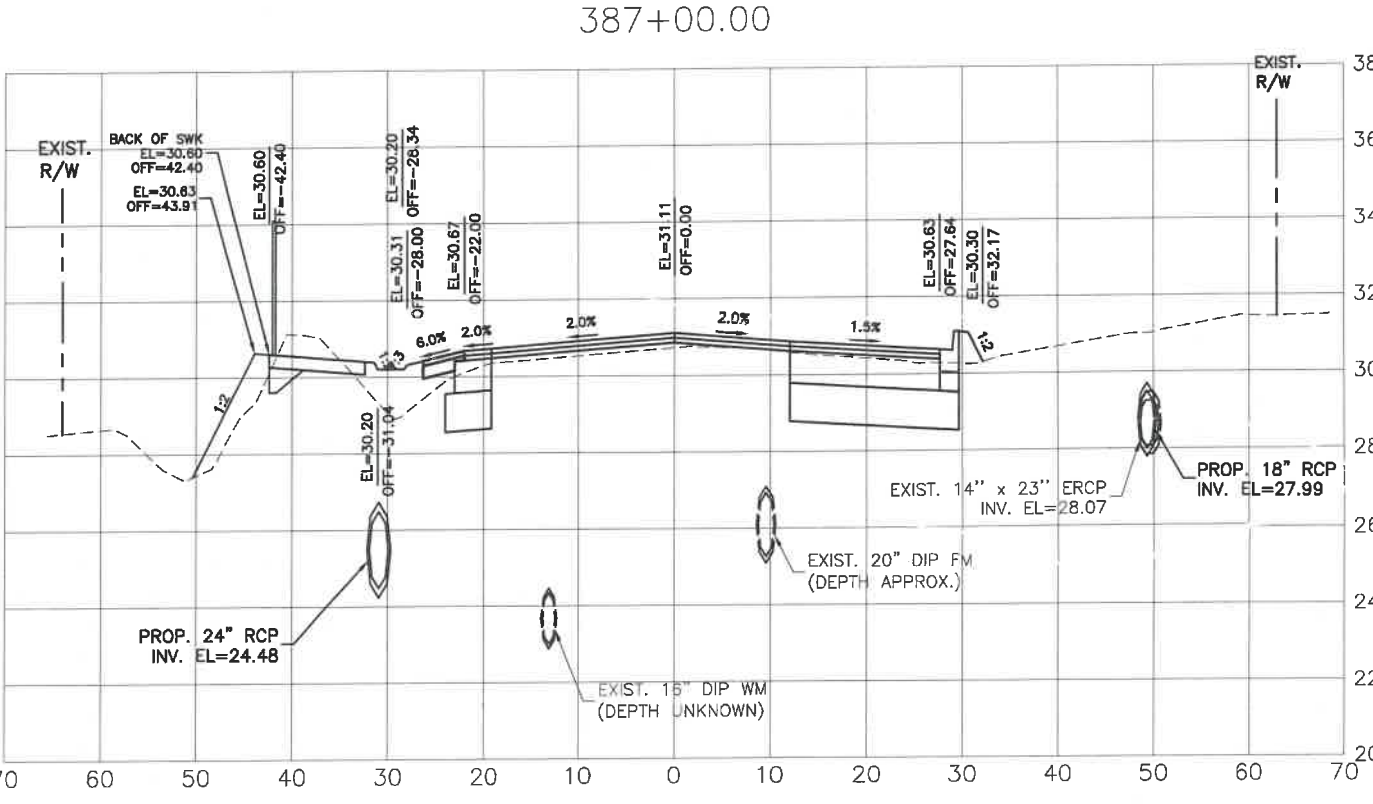
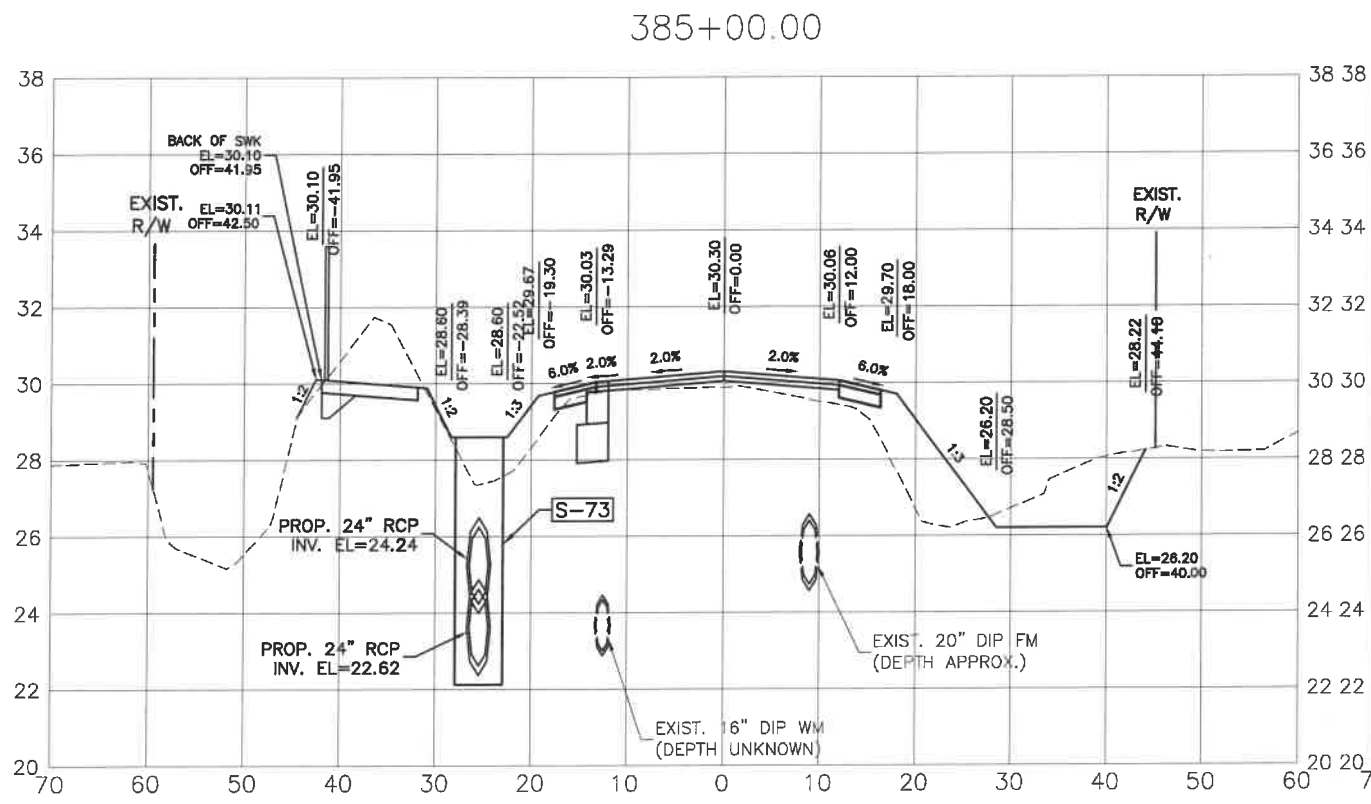
PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
AS NOTED	
DATE	2013
DESIGNED	04/2015
CHECKED	03/2015
DATE	02/2015
PROF. ENGINEER	
STATE OF FLORIDA	
Signature & Date	



H:\Highway Engineering\ROADS\Phase II\DWG\ERIE\PHI-X\_Sect.dwg, X-SEC-61, 7/2/2015 12:11 PM Ken Cochran, 1:1 ANSI full bleed B (11.00 x 17.00 inches)



**ERIE ROAD- US301 TO US 301  
 SOUTH-NORTH PHASE II  
 CROSS SECTIONS**

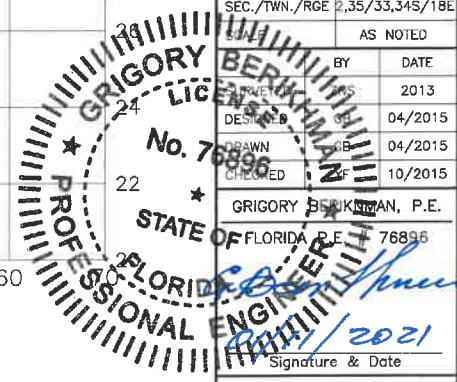


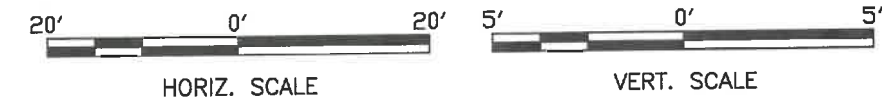
NO.	DATE	BY	REVISION DESCRIPTION
1	07/24/18	KHL	PER SWRWD COMMENTS

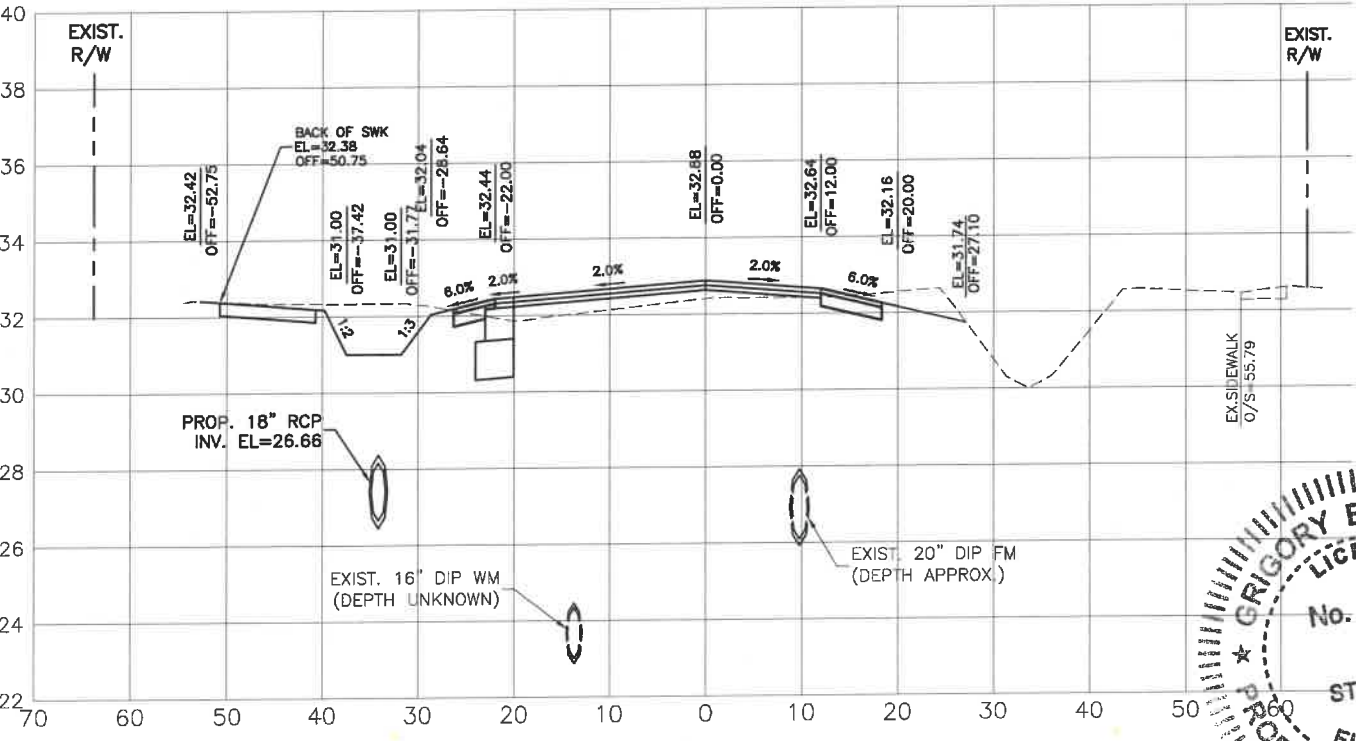
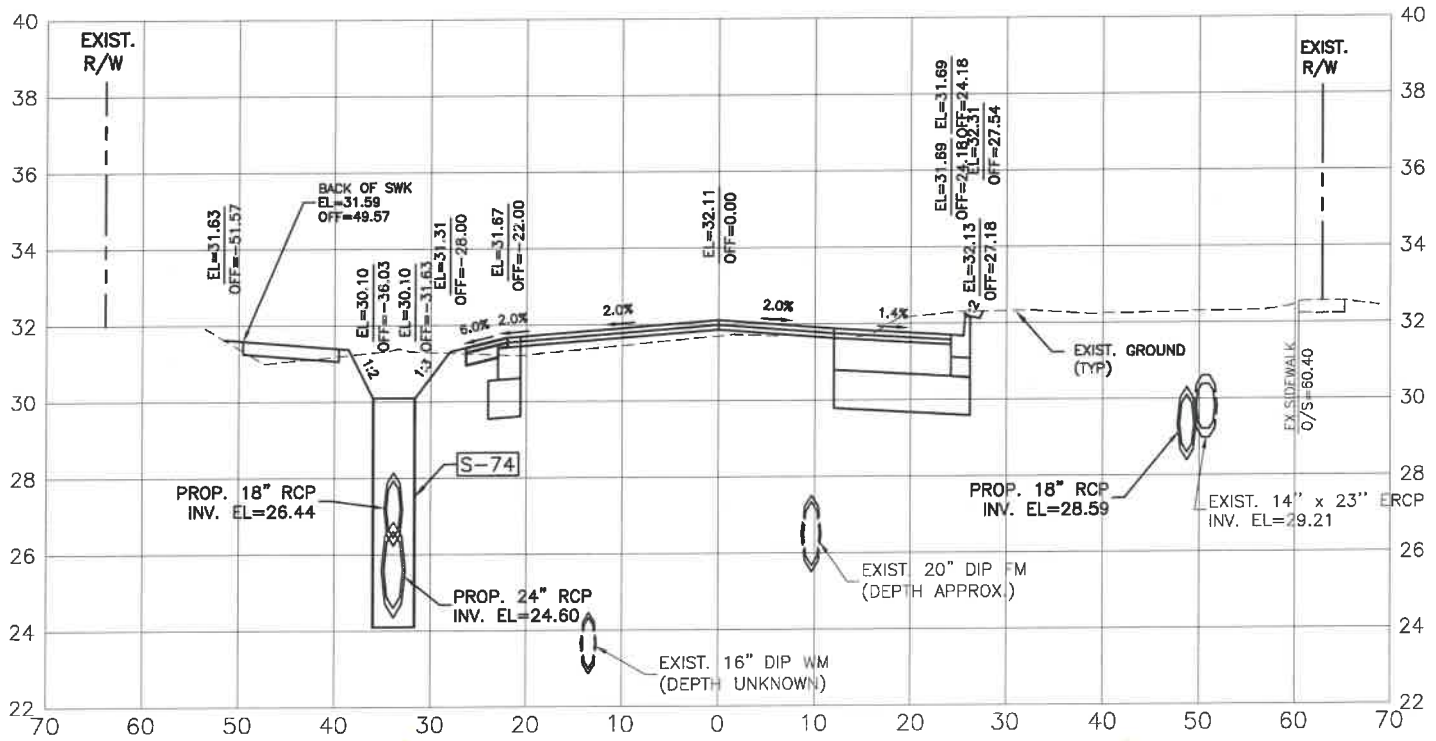
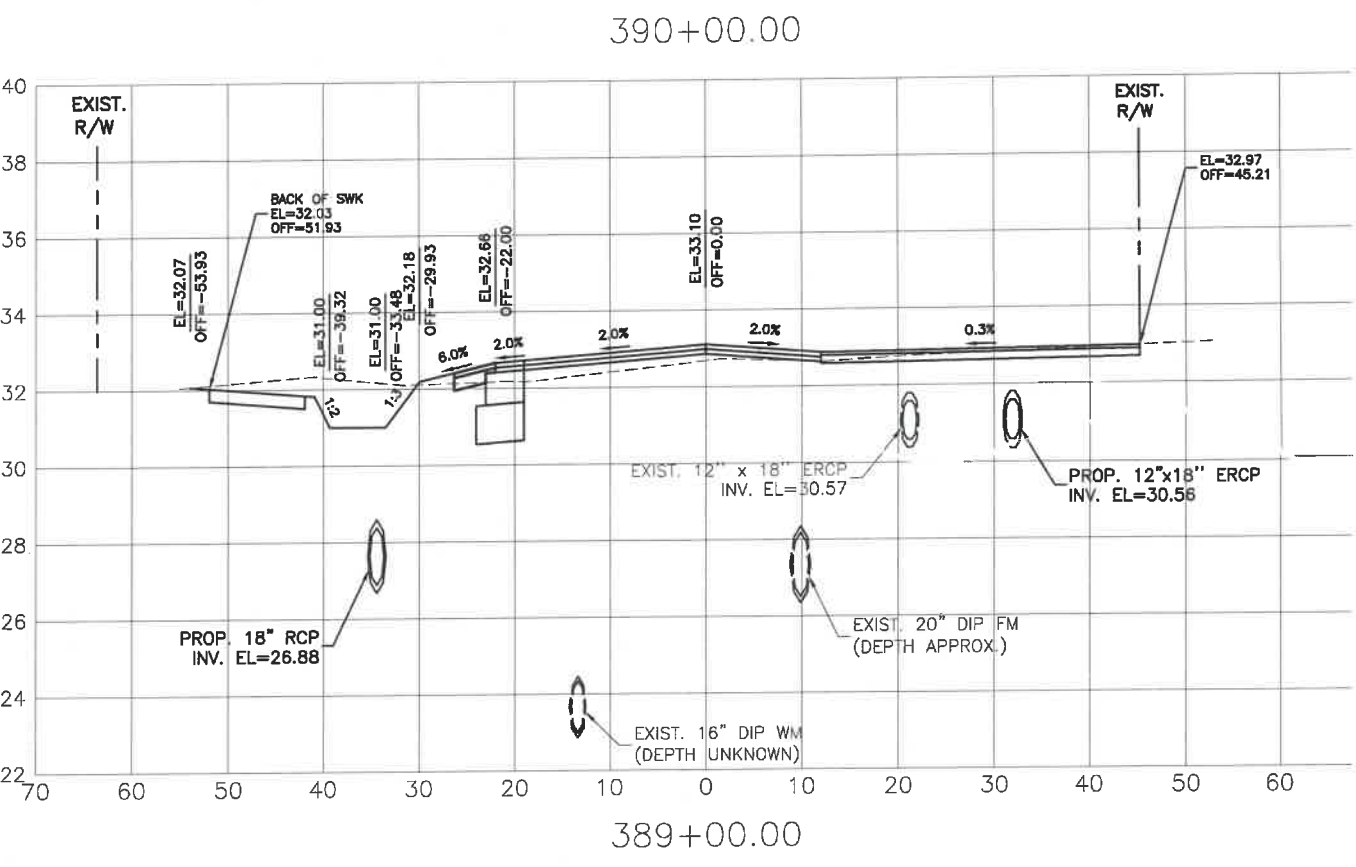
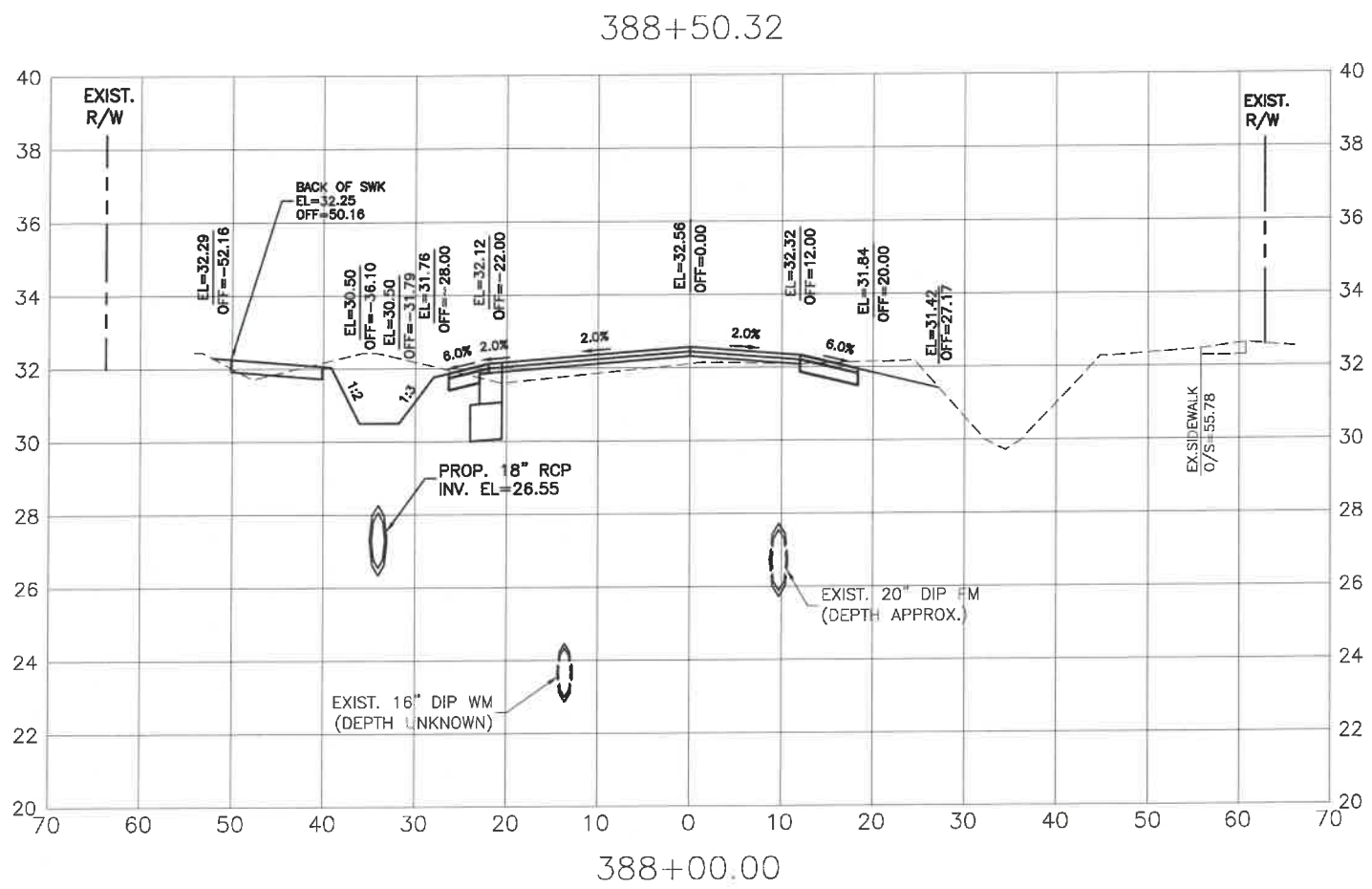
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SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
AS NOTED	
BY	DATE
DESIGNED	04/2015
DRAWN	04/2015
CHECKED	10/2015
GRIGORY BERKMAN, P.E.	76896

Signature & Date: *[Signature]* / 2021



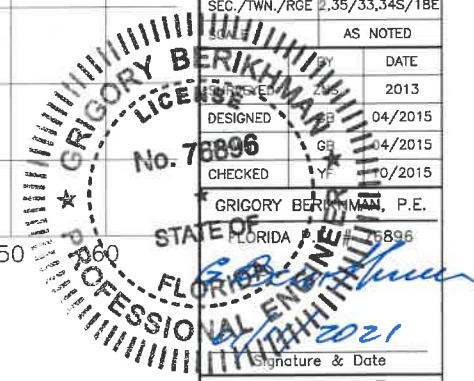


**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**



NO.	DATE	BY	REVISION DESCRIPTION
1	07/24/18	KHL	PER SWFWD COMMENTS

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2.35/33.34S/18E
DATE	AS NOTED
DESIGNED	04/2015
CHECKED	04/2015
DATE	0/2015
GRIGORY BERIKHMAN, P.E.	6896
STATE OF FLORIDA	6896
PROFESSIONAL ENGINEER	
Signature & Date	

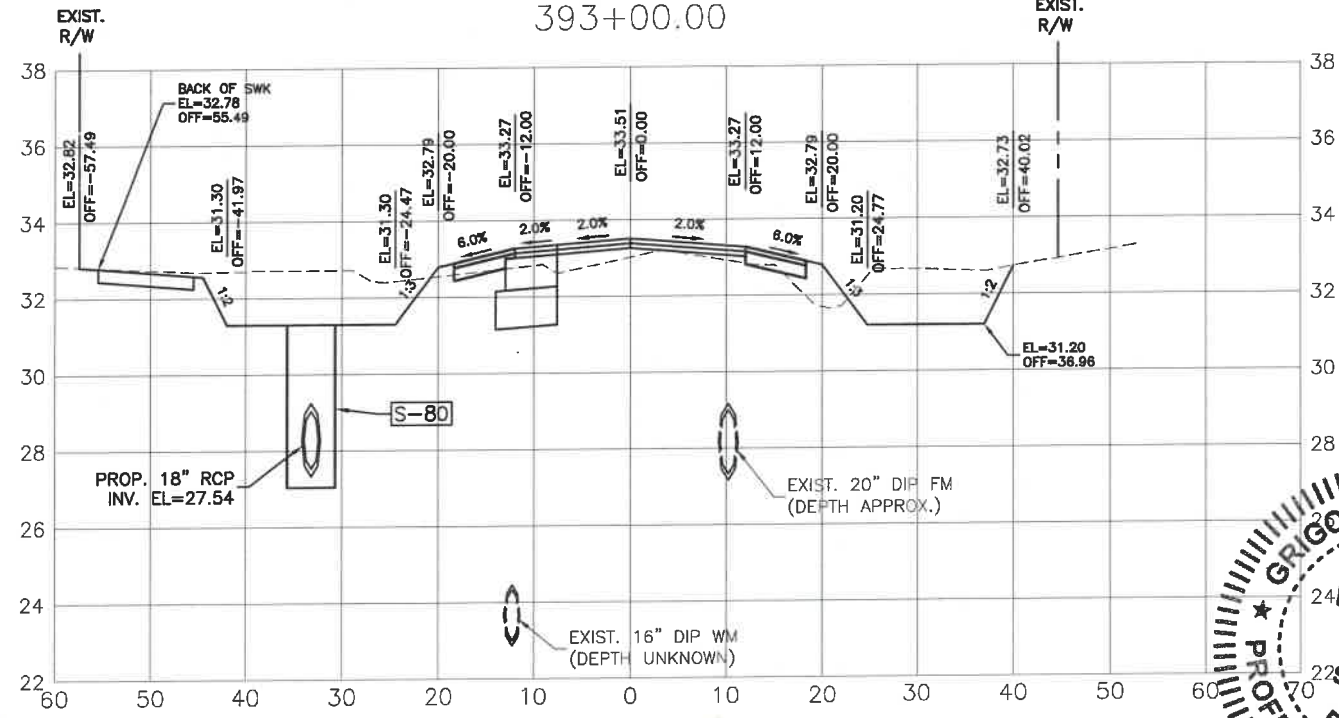
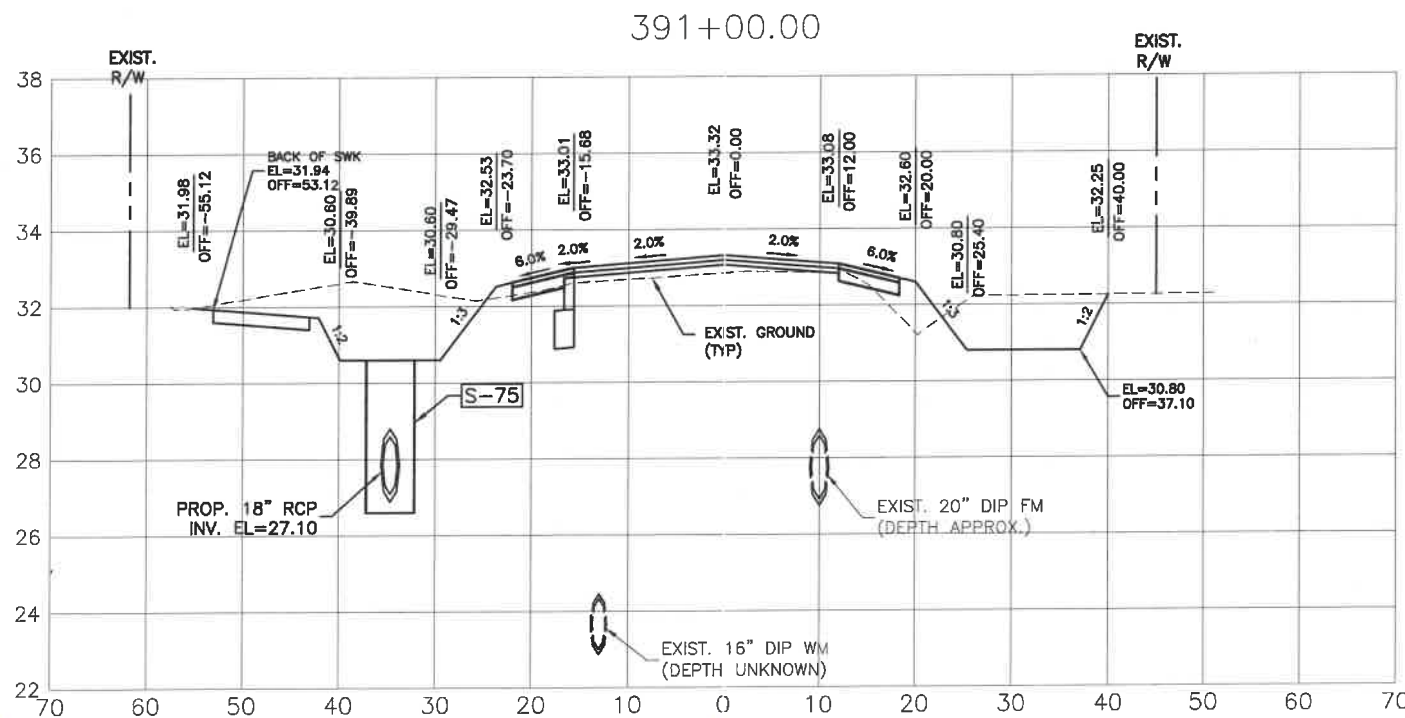
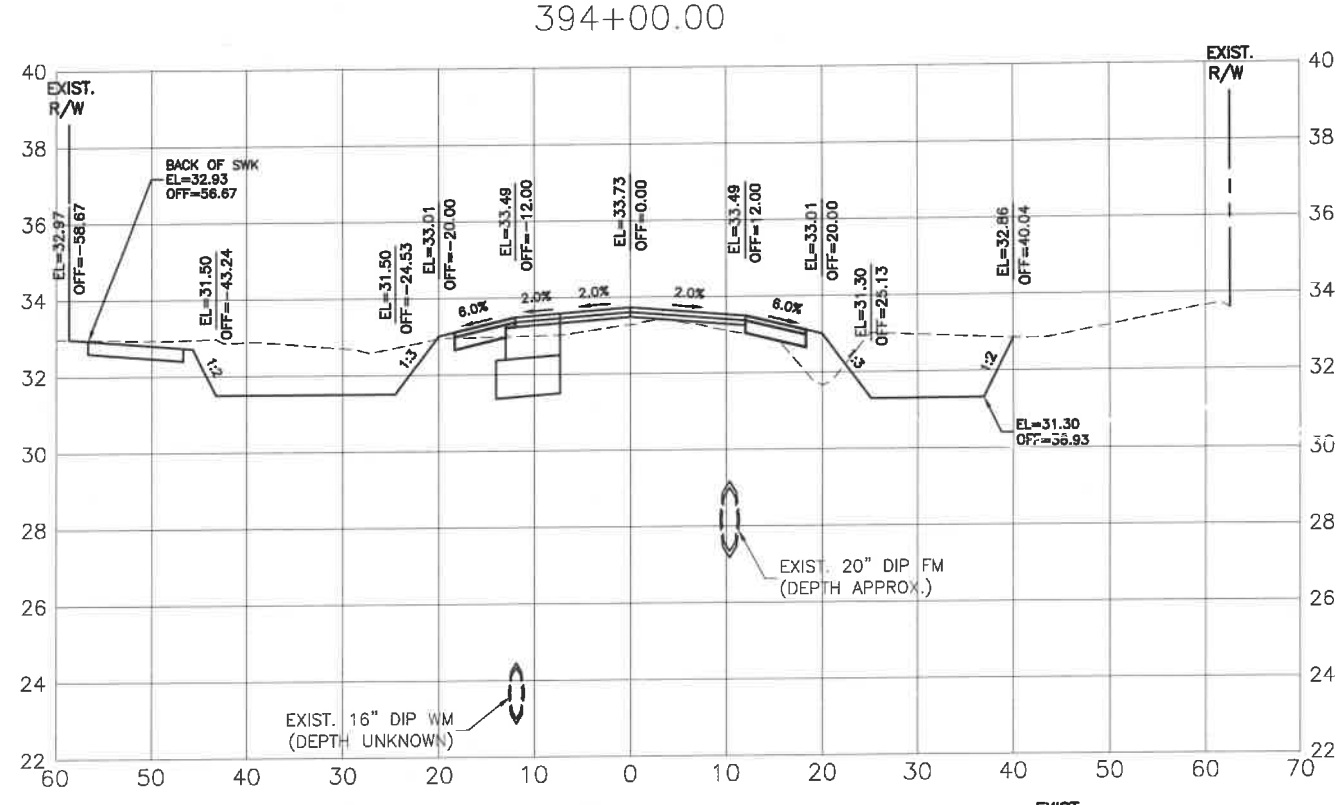
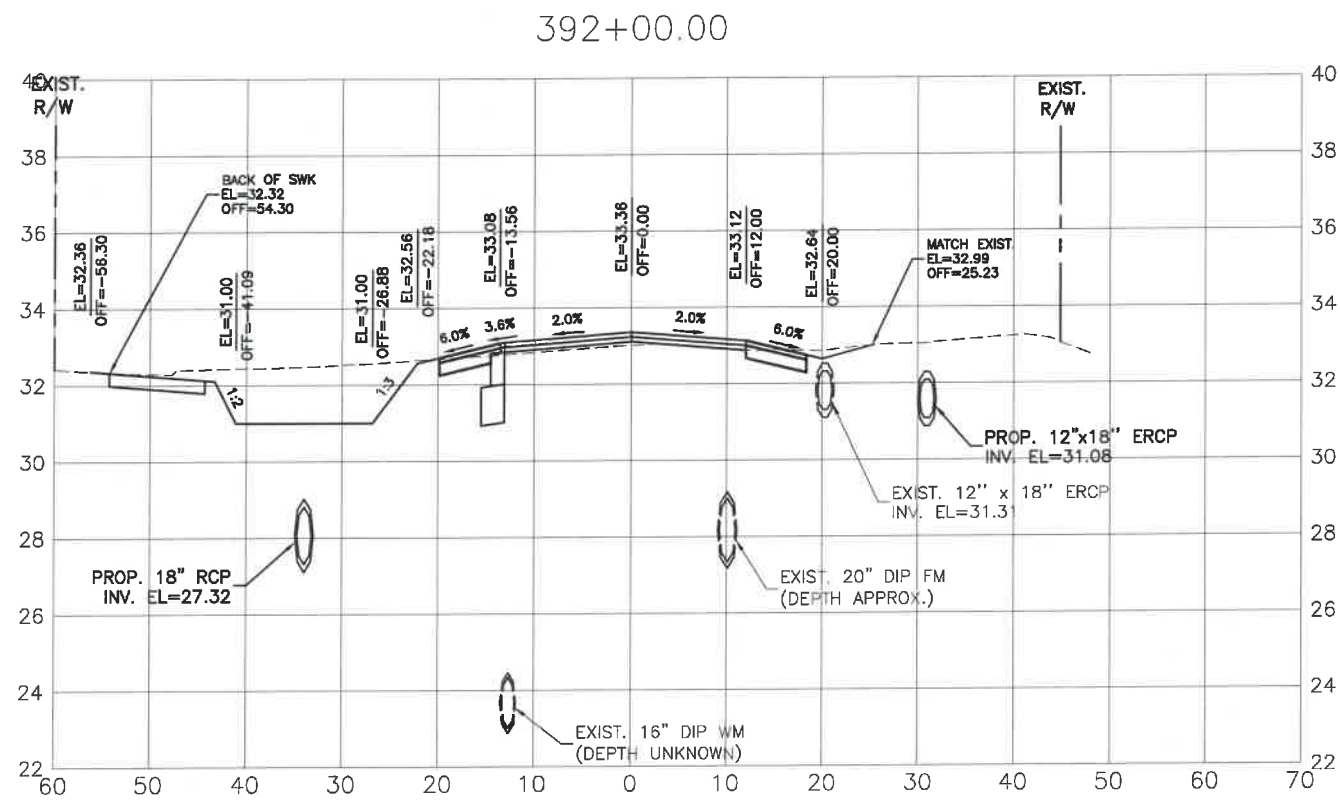


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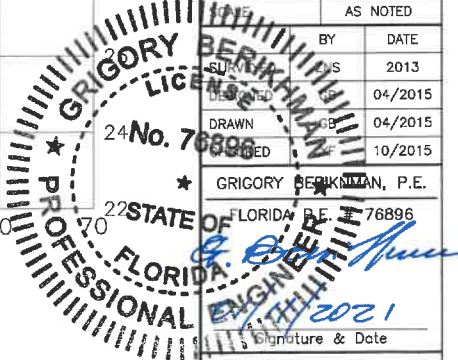




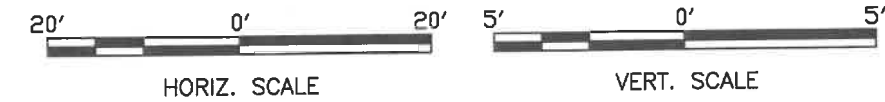
**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**



NO.	1	REVISION DESCRIPTION	PER SWFMD COMMENTS
BY	KHL	DATE	07/24/18
PROJECT #	307-6082860	SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E	AS NOTED	
BY	DATE	BY	DATE
SURVEYED	2013	SURVEYED	04/2015
DRAWN	04/2015	DRAWN	10/2015
CHECKED		CHECKED	
DESIGNED		DESIGNED	
APPROVED		APPROVED	
GRIGORY BERKMAN, P.E.	76896	GRIGORY BERKMAN, P.E.	76896
STATE OF FLORIDA		STATE OF FLORIDA	
PROFESSIONAL ENGINEER		PROFESSIONAL ENGINEER	
Signature & Date		Signature & Date	

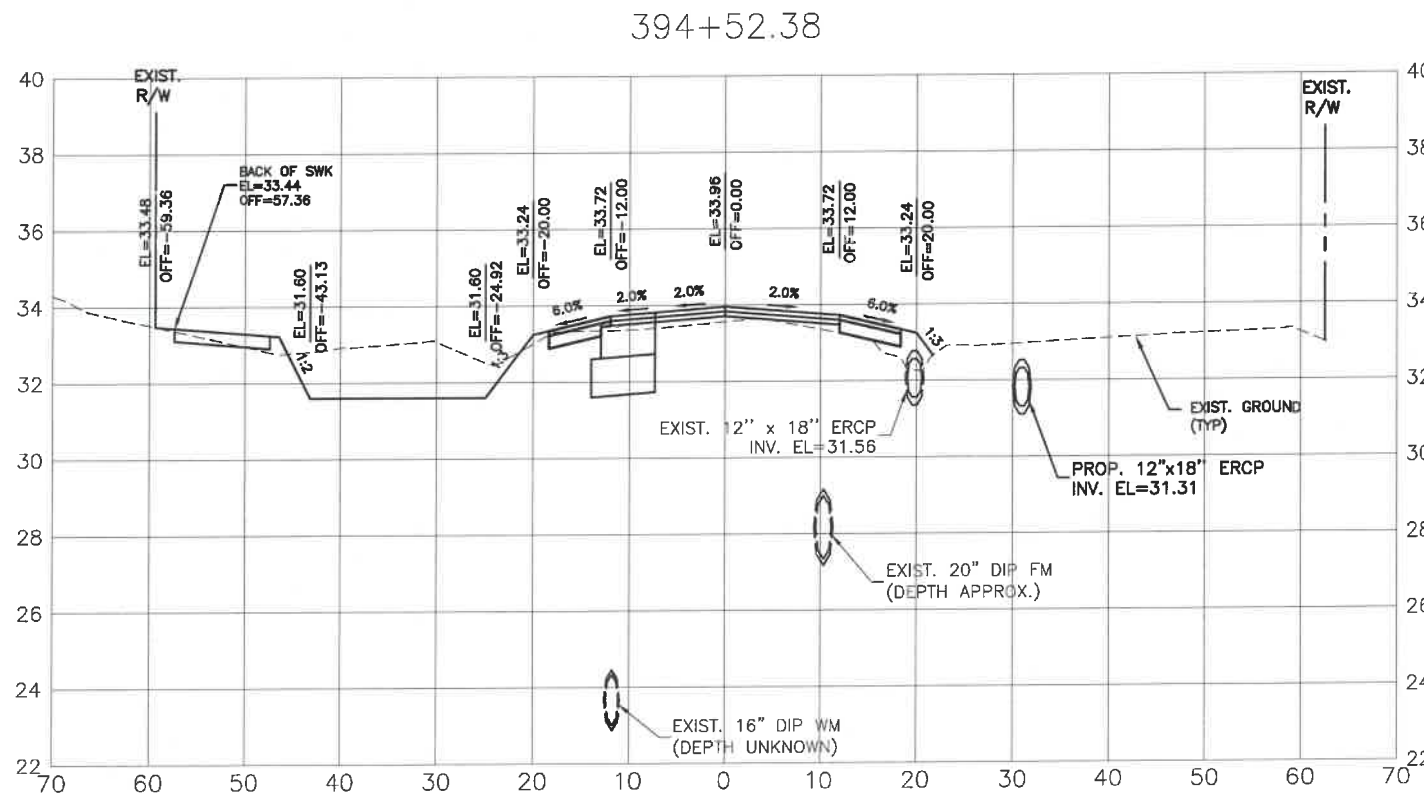
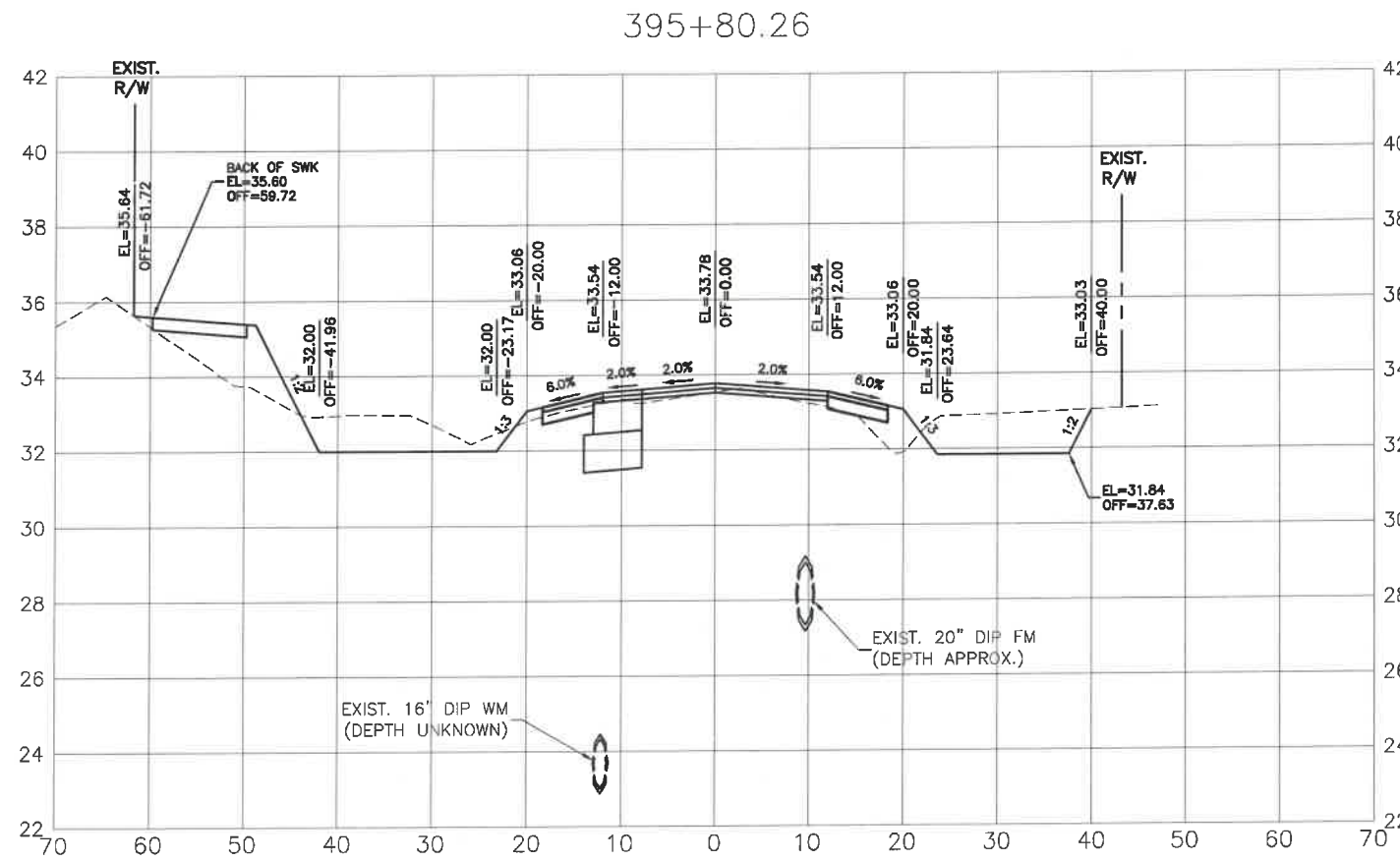


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PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES  
1022 26th Avenue East, Bradenton, FL 34208

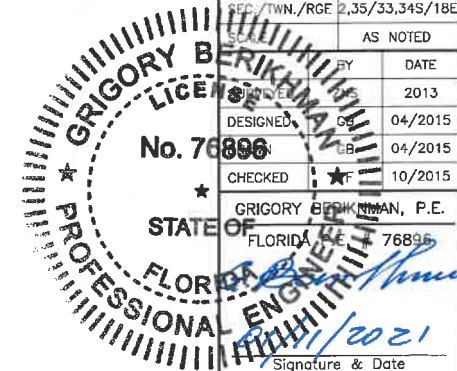
**ERIE ROAD - US301 TO US 301  
SOUTH-NORTH PHASE II  
CROSS SECTIONS**



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT # 307-6082860  
SURVEY # 00-43133  
SEC./TWN./RGE 2,35/33,34S/18E

BY	DATE
DESIGNED	04/2015
CHECKED	10/2015



GRIGORY BERIKMAN, P.E.  
FLORIDA LICENSE NO. 76896  
Signature & Date

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
GENERAL DETAILS**

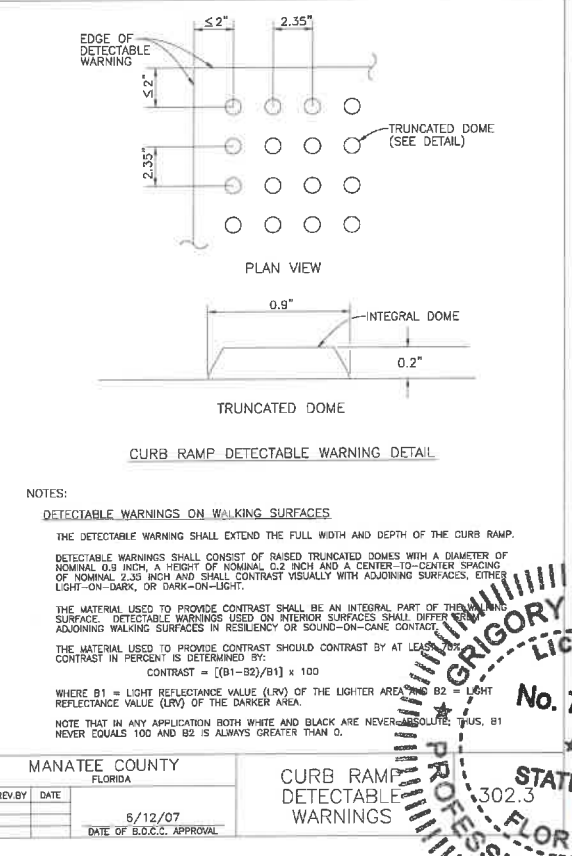
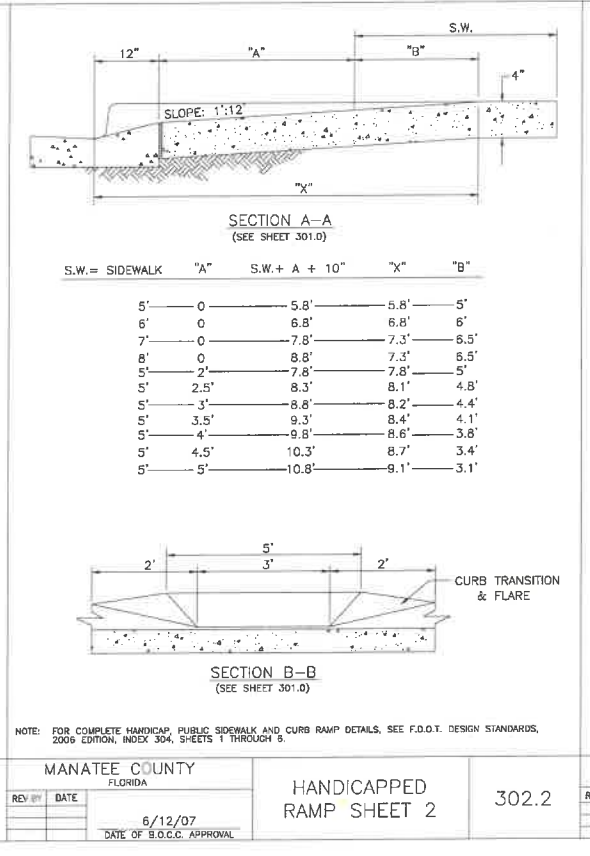
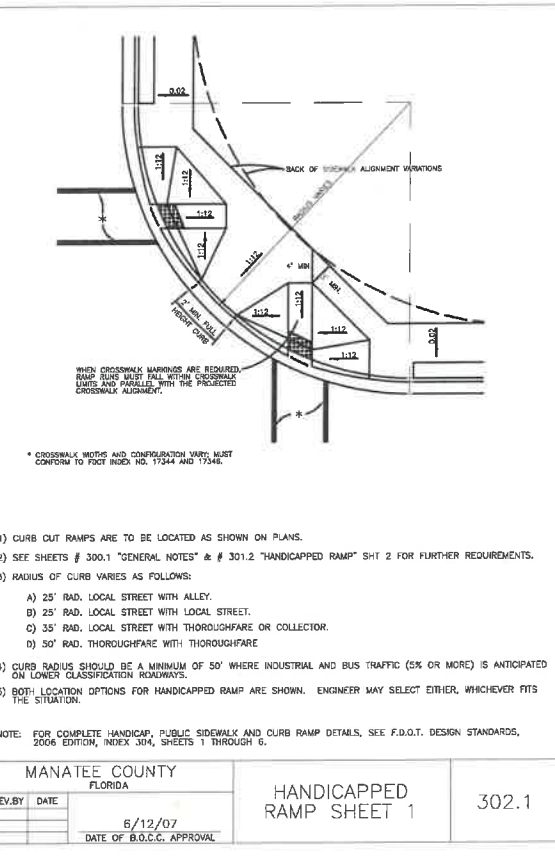
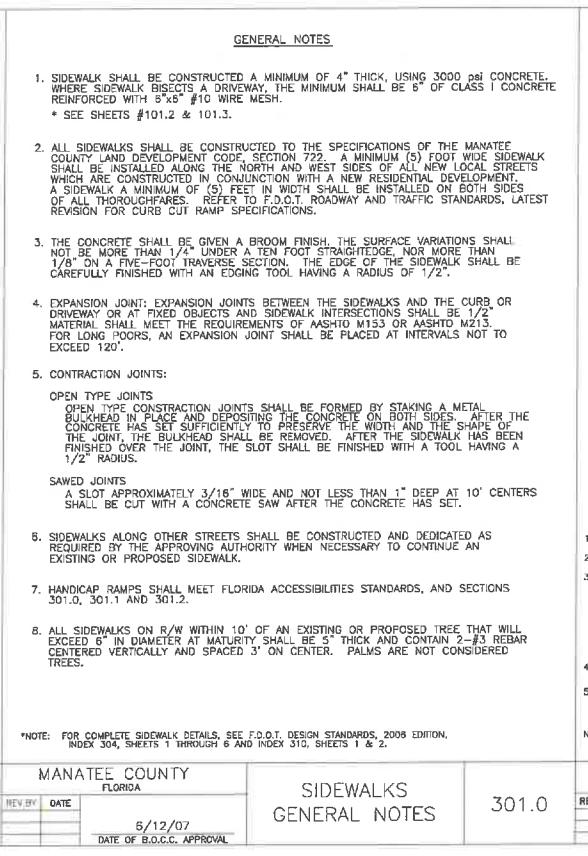
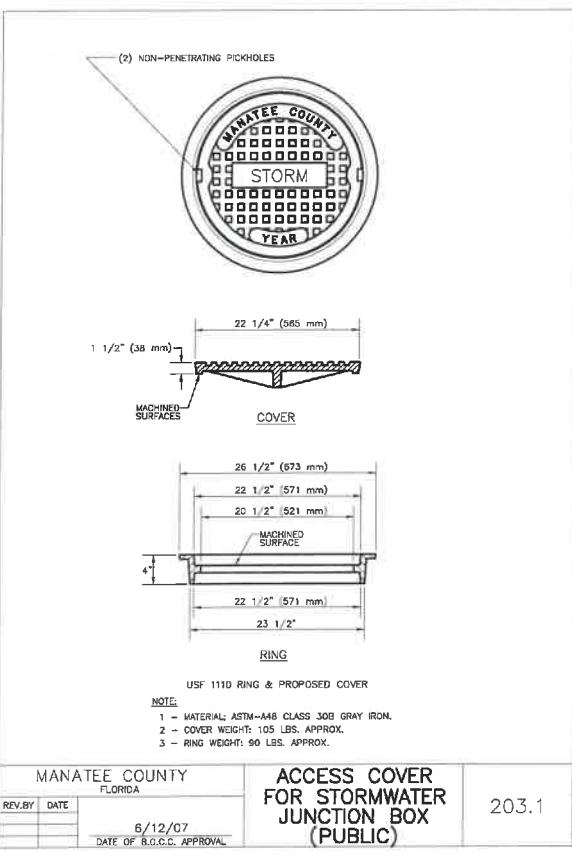
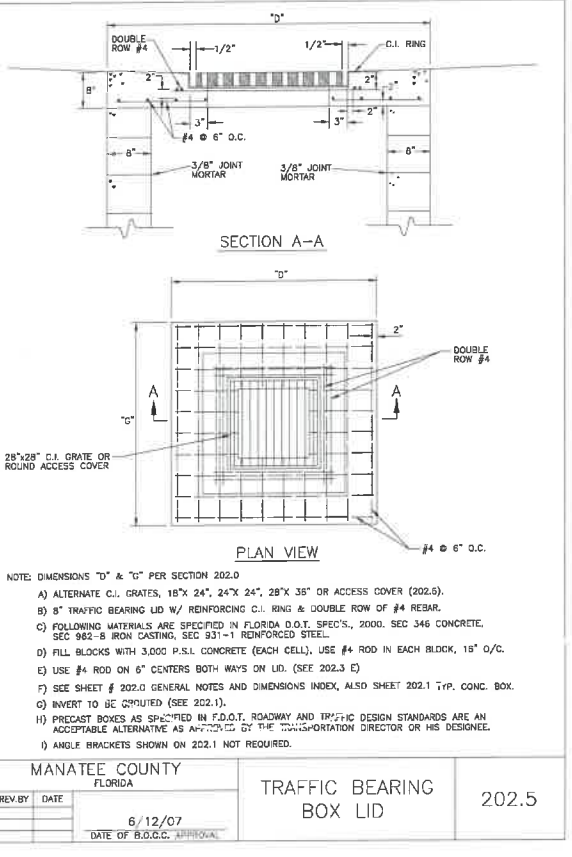
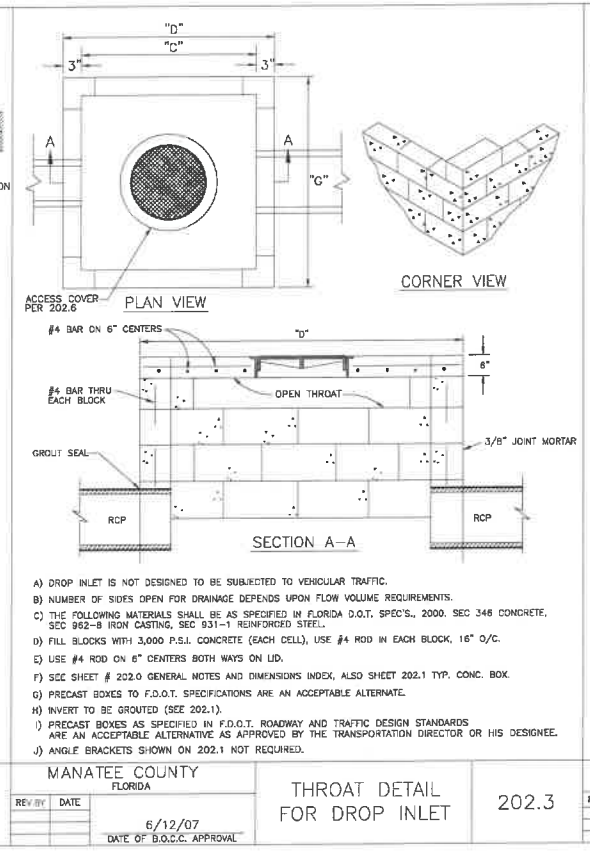
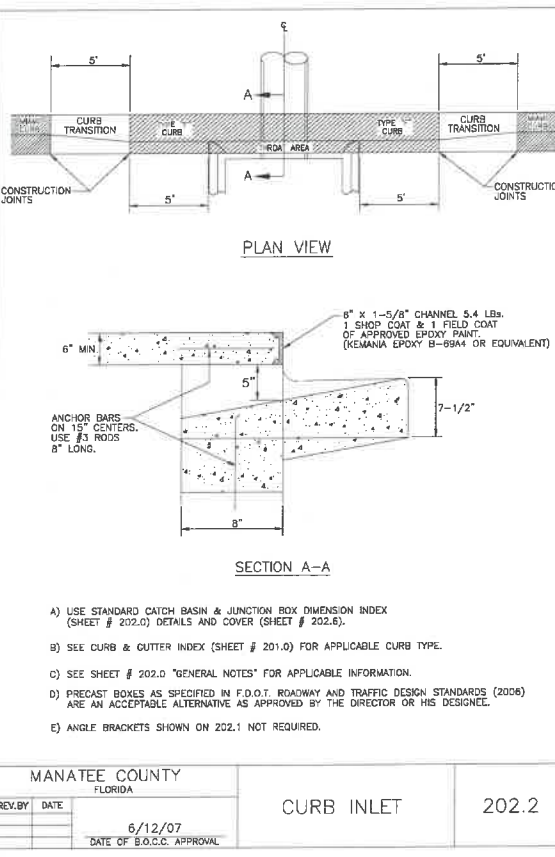
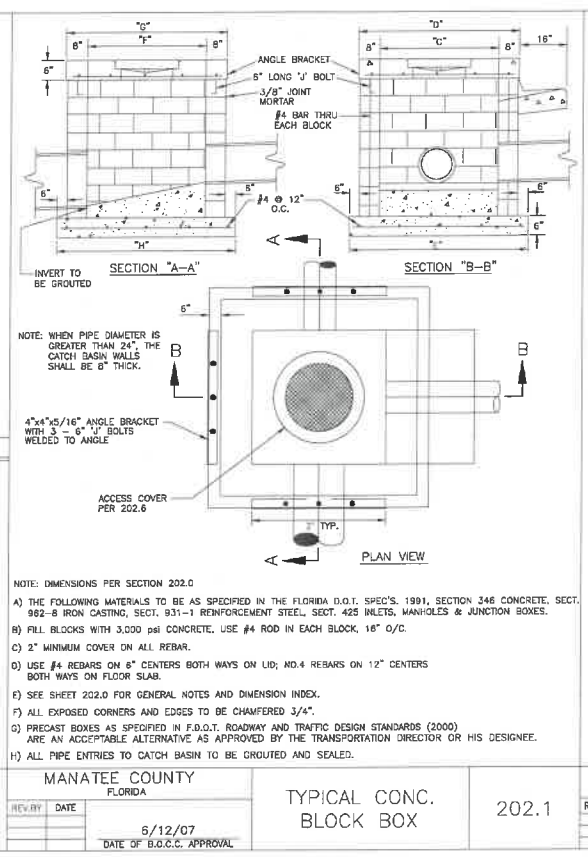
**GENERAL NOTES**

- ALL REFERENCED STANDARDS SHALL BE LATEST REVISION.
- CONCRETE SHALL BE CLASS "1" AS SPECIFIED IN SECTION 345 OF F.D.O.T. SPECIFICATIONS.
- SEE SECTION 425-2.2 "MORTAR" OF FLORIDA D.O.T. SPECIFICATIONS.
- IRON CASTING SHALL BE AS SPECIFIED IN SECTION 982-B OF F.D.O.T. SPECIFICATIONS. SEE SECTION 425-5.
- ALL REINFORCEMENT STEEL SHALL BE AS SPECIFIED IN SECTIONS 415 & 931.1 OF F.D.O.T. SPECIFICATIONS.
- SEE FLORIDA D.O.T. SPECIFICATIONS FOR GRATINGS.
- SEE FLORIDA D.O.T. SPECIFICATIONS FOR SECTION 125 "EXCAVATION FOR STRUCTURES."
- PRECAST TOP AND BOTTOM TO BE F.D.O.T. STANDARDS WITH MINIMUM TRAFFIC BEARING 8" THICKNESS.
- ALL STORMWATER PIPE SHALL BE INSTALLED BELOW THE CURB OR EDGE OF PAVEMENT AND WITHIN THE RIGHT OF WAY AND WITHIN THE DRAINAGE EASEMENTS.
- THE FOLLOWING IS THE DRAINAGE STRUCTURE WALL MINIMUM THICKNESS:

PIPE SIZE	TYPE	"C"	"D"	"E"	"F"	"G"	"H"
15"	RCP	2'8"	4'	5'	4'	5'4"	6'4"
12"x18"	RCP	-	-	-	-	-	-
18"	RCP	-	-	-	-	-	-
14"x23"	RCP	-	-	-	-	-	-
24"	RCP	3'4"	4'8"	5'8"	-	-	-
19"x30"	RCP	4'	5'4"	6'4"	-	-	-
30"	RCP	-	-	-	-	-	-
24"x38"	RCP	5'	6'4"	7'4"	-	-	-
36"	RCP	5'	6'4"	-	-	-	-
66"	RCP	8'5"	9'9"	10'9"	4'8"	6'0"	7'0"

MANATEE COUNTY FLORIDA  
DATE: 6/12/07  
DATE OF B.O.C.C. APPROVAL

**DRAINAGE CONTROL SHEET** 202.0



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT # **307-8082860**  
SURVEY # **00-43133**  
SEC./TWN./RGE **2,35/33,34S/18E**  
SCALE **N.T.S.**

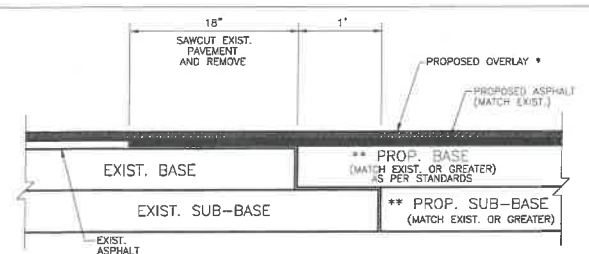
BY: ZNS DATE: 2013  
DRAWN BY: GGR DATE: 05/2015  
CHECKED BY: GGR DATE: 10/2015

FLORIDA P.E. # 76896  
GRIGORY BERIKOV, P.E.  
Signature & Date

**STATE OF FLORIDA PROFESSIONAL ENGINEER**



**ERIE ROAD - US301 TO US 301**  
**SOUTH-NORTH PHASE II**  
**GENERAL DETAILS**

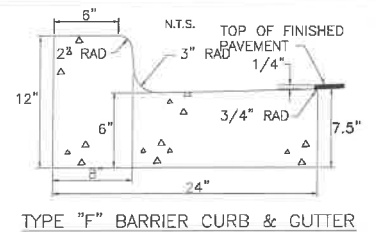


\* NOTE: LIMITS OF OVERLAY - EDGE OF PAVEMENT TO EDGE OF PAVEMENT AND 25' BEYOND LIMITS OF CONSTRUCTION.

\*\* NOTE: CONNECTION TO OLDER (SUBSTANDARD THICKNESS) ROADS MAY REQUIRE THICKER PROPOSED BASE AND SUB-BASE TO MEET CURRENT STANDARDS.

SIGNAGE AND MARKING PLAN SHALL ACCOMPANY CONSTRUCTION PLAN.

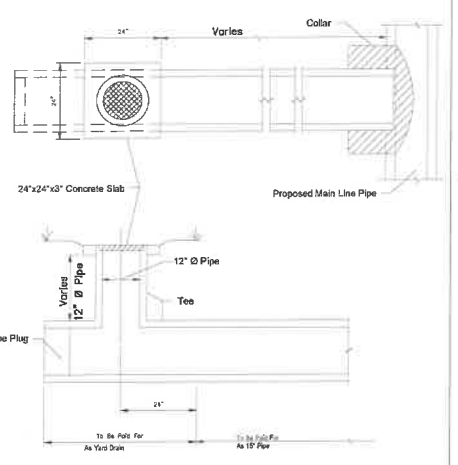
MANATEE COUNTY FLORIDA		<b>ROAD CONNECTION DETAIL</b>	<b>403.3</b>
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		



**TYPE "F" BARRIER CURB & GUTTER**

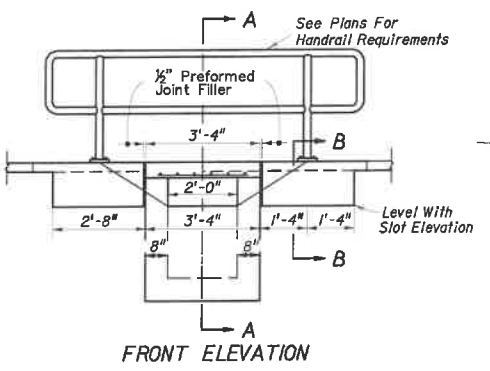
- A) CLASS 1 CONCRETE 3,000 P.S.I. AT 28 DAYS.
- B) CURB AND GUTTER SHALL MEET THE SPECIFICATIONS ESTABLISHED BY FLORIDA D.O.T. STANDARD SPECIFICATIONS PER F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS INDEX NO. 300, LATEST REVISION.

MANATEE COUNTY FLORIDA		<b>TYPE F CURB &amp; GUTTER</b>	<b>201.2</b>
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		

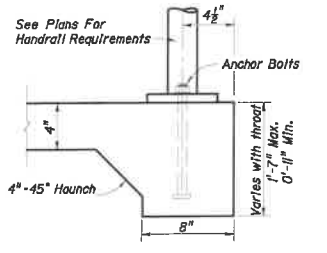


- YARD DRAIN ITEM INCLUDES:**
- 15" x 15" x 12" Concrete or PVC Tee 4' long.
  - Grate diameter = 14-1/4" Thickness = 2-1/2" Flow area = 45 sq in min. Light Duty Cast Iron, see Specification Section 962.
  - 12" pipe as necessary.
  - 0.04 Cubic yards concrete for slab.

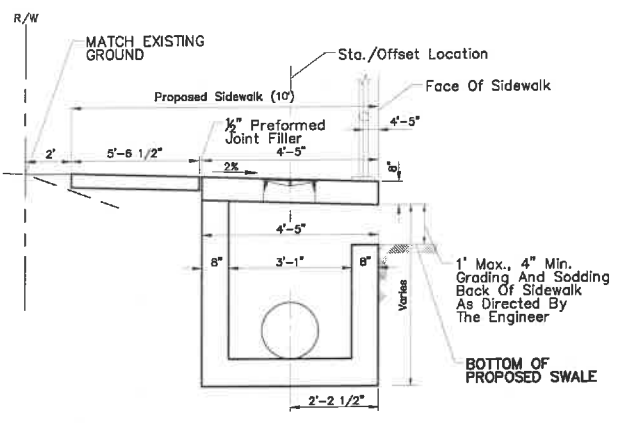
**YARD DRAINS FDOT INDEX #282**



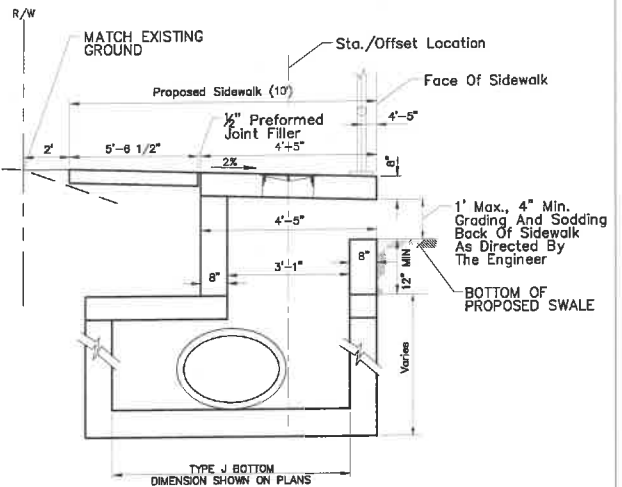
**FRONT ELEVATION**



**SECTION B-B**



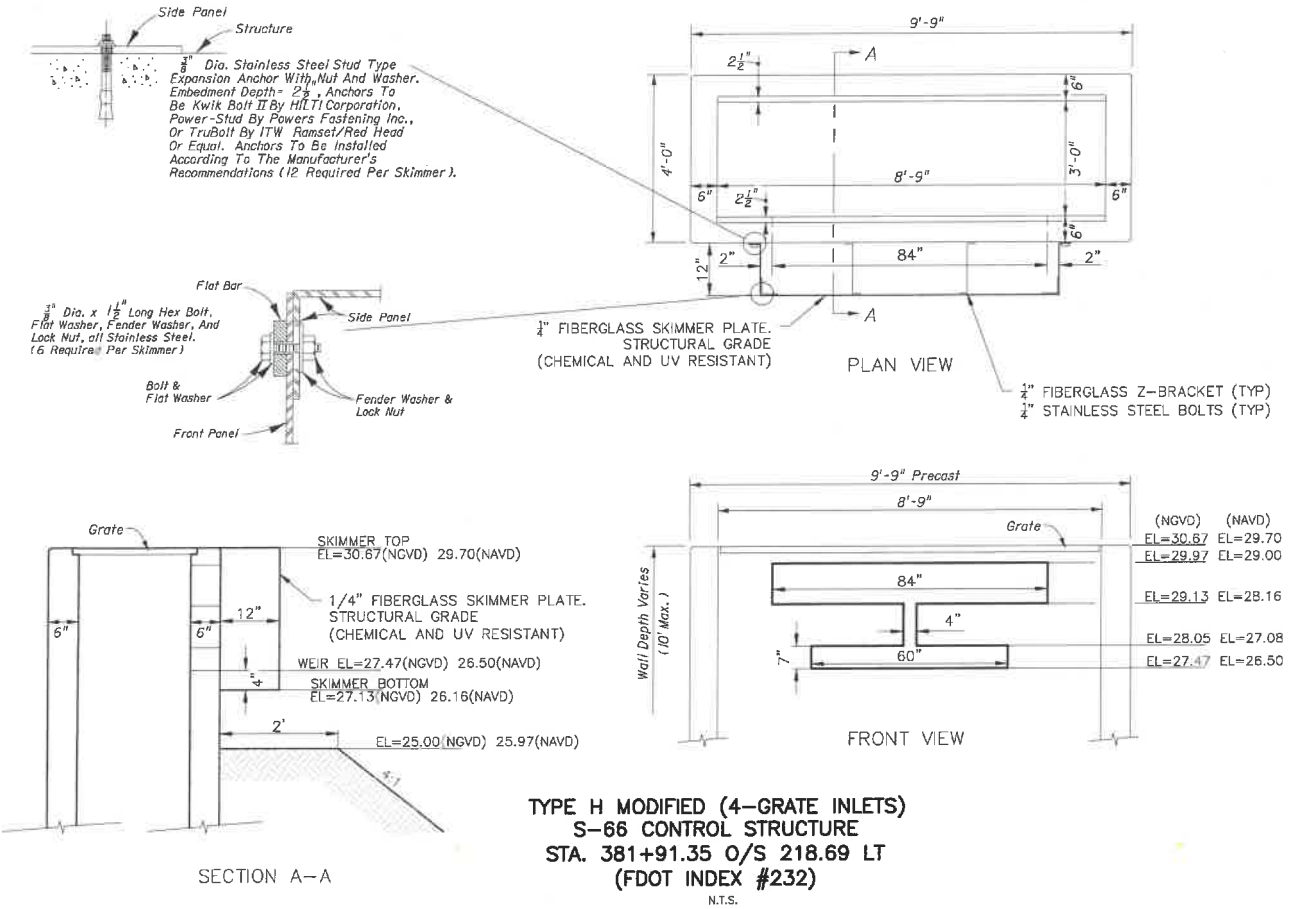
**SECTION A-A**



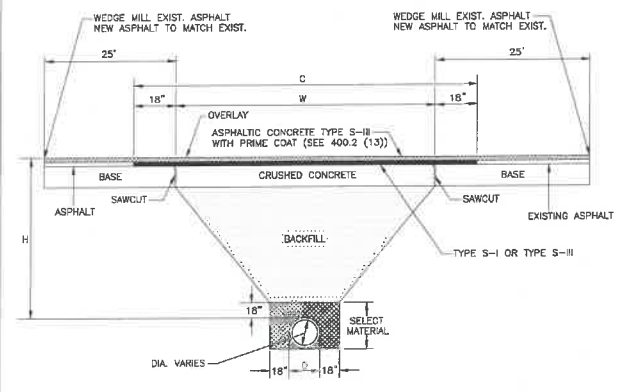
**SECTION A-A W/J-BOTTOM**

- NOTES:**
- FOR ADDITIONAL DETAILS SEE INDEX 232.
  - INLET TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR INLETS (WITH BOTTOM TYPE C MODIFIED); EA. HANDRAIL TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR PIPE HANDRAIL (MATERIAL); LF.
  - FOR STRUCTURE TOP SLAB, REFER TO SHEET 66 DETAIL MANATEE COUNTY STANDARDS #202.5 (DIMENSIONS "D" AND "G" TO MATCH TYPE "C" MODIFIED DIMENSIONS)
  - FOR ACCESS COVER, REFER TO SHEET 66 DETAIL MANATEE COUNTY STANDARDS #203.1.
  - REFER TO FDOT INDEX #201 FOR TOP SLAB TO WALL CONSTRUCTION JOINT.

**INLET TYPE "C" (MODIFIED) FDOT INDEX #282 and TOP SLAB MC STANDARDS #202.5**

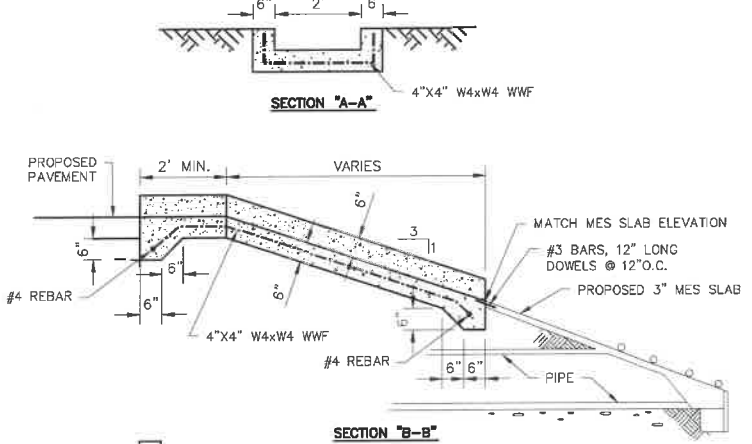


**TYPE H MODIFIED (4-GRADE INLETS)  
S-66 CONTROL STRUCTURE  
STA. 381+91.35 O/S 218.69 LT  
(FDOT INDEX #232)**

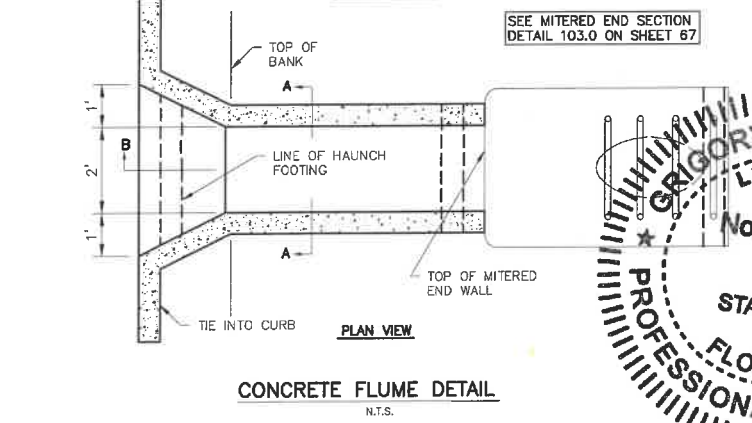


- A. CRUSHED CONCRETE BASE SHALL BE A MINIMUM OF 8" THICK AND A MINIMUM OF "W" IN WIDTH OR GREATER, WHERE DISTURBED AREA IS GREATER THAN "W" FROM EQUATION:  $W=(2 \times H) + D + (2 \times 18")$ . SAND ASPHALT BASE WILL BE AN ACCEPTABLE ALTERNATE.
- B. BACKFILL, ASHTO M145-86 SHALL BE PLACED IN LAYERS NOT TO EXCEED 8", EACH LAYER WILL BE THOROUGHLY TAMPED AND/OR ROLLED TO 98% OF MODIFIED PROCTOR MAXIMUM DENSITY (ASHTO T-180), NON-SHRINK, HIGH SLUMP, 1,500 PSI CONC. BACKFILL MAY BE USED AS AN ALTERNATIVE IF APPROVED BY TRANSPORTATION DEPARTMENT.
- C. SELECT MATERIAL ASHTO M-146-70, SHALL BE PLACED ON BOTH SIDES OF THE PIPE SIMULTANEOUSLY, COMPACT AREA UNDER HAUNCHES OF THE PIPE W/ MECHANICAL TAMPERS, AND THROUGHOUT THE REMAINDER OF THE SELECT MATERIAL.
- D. ASPHALTIC CONCRETE FRICTION COURSE, SHALL BE THE SAME DEPTH AND TYPE AS EXISTING OR A MINIMUM OF ONE INCH, WHICHEVER IS GREATER, C = W+36
- E. "H" = THE DEPTH FROM TOP OF PIPE TO THE CENTERLINE OF THE ROAD (MINIMUM OF 36") MINIMUM OF 30" UNDER FLOWLINE OF SIDE DITCHES.
- F. RESTORE EXISTING SIGNAGE & MARKING WITH THERMOPLASTIC PER F.D.O.T. STANDARDS.

MANATEE COUNTY FLORIDA		<b>UTILITY ROAD CUT REPLACEMENT</b>	<b>403.2</b>
REV. BY	DATE		
	6/12/07		
	DATE OF B.O.C.C. APPROVAL		



**SECTION "B-B"**

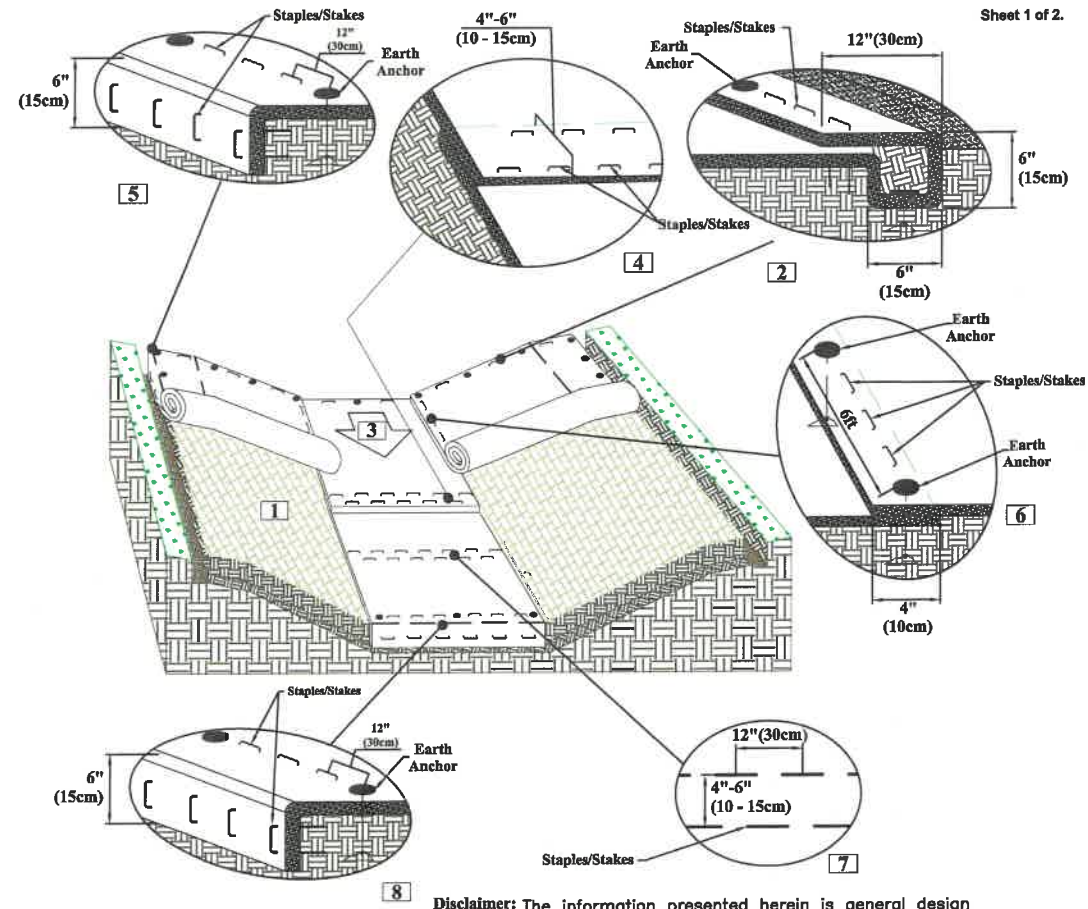


**CONCRETE FLUME DETAIL**

GRIGORY BERKMAN, P.E.  
Professional Engineer  
No. 70806  
STATE OF FLORIDA  
FLORIDA ENGINEERING BOARD  
2021

NO.	1	DATE	07/24/18
BY	KHL		
REVISION DESCRIPTION	PER SWPMD COMMENTS		
PROJECT #	307-6082860		
SURVEY #	00-43133		
SEC./TWN./RGE	2,35/33,34S/18E		
SCALE	N.T.S.		
DESIGNED BY	DATE		
DESIGNED BY	05/2015		
DRAWN BY	DATE		
DRAWN BY	05/2015		
CHECKED BY	DATE		
CHECKED BY	10/2015		
GRIGORY BERKMAN, P.E.	76896		
STATE OF FLORIDA	2021		
Signature & Date			
SHEET	68		

ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
GENERAL DETAILS



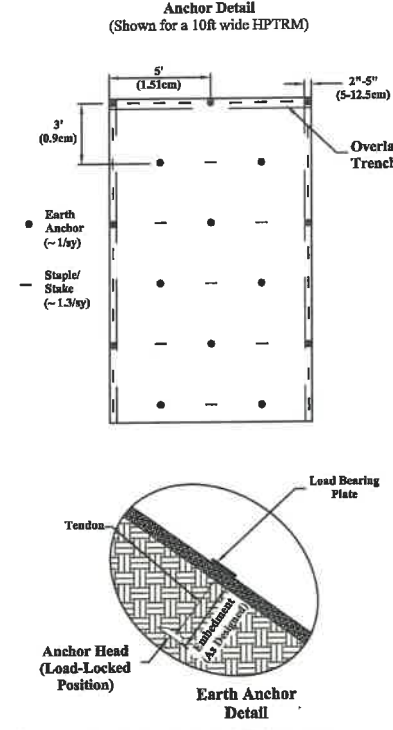
Drawing Not To Scale  
Drawn on 05-04-17

Disclaimer: The information presented herein is general design information only. For specific applications, consult an independent professional for further design guidance.

CHANNEL  
INSTALLATION DETAIL  
TURF/EARTH REINFORCED MAT SYSTEM (TERMS)

General Installation

1. Prepare soil before installing the High-Performance Turf Reinforcement Mat (HPTRM), including any necessary application of soil amendments such as lime or fertilizer. See Seeding and Vegetating section for details regarding preseeding, overseeding, or use with sod.
2. Begin at the top of the channel by anchoring the HPTRM in a 6" (15 cm) deep x 6" (15 cm) wide trench with approximately 12" (30 cm) of HPTRM extended beyond the up-slope portion of the trench. Anchor the HPTRM with a row of anchors/staples/stakes approximately 12" (30 cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Compact soil and fold remaining 12" (30 cm) portion of HPTRM back over compacted soil. Secure HPTRM over soil with a row of anchors/staples/stakes spaced approximately 12" (30 cm) across the width of the HPTRM.
3. Roll center HPTRM in direction of water flow in bottom of channel. HPTRMs will unroll with appropriate side against the soil surface. All HPTRMs must be securely fastened to soil surface by placing anchors/staples/stakes in appropriate locations as shown in the anchoring detail.
4. Place consecutive HPTRMs end over end (shingle style) with a 4" - 6" (10 cm - 15 cm) overlap. Use a double row of staples/stakes staggered 12" (30 cm) apart and 12" (30 cm) on center to secure HPTRMs.
5. Full length edge of HPTRMs at top of side slopes must be anchored with a row of staples/stakes approximately 12" (30 cm) apart in a 6" (15 cm) deep x 6" (15 cm) wide trench. Backfill and compact the trench after stapling.
6. Adjacent HPTRMs must be overlapped approximately 4" (10 cm) and fastened.
7. In high flow channel applications, a staple/stake check slot is recommended at 30 to 40 foot (9 m - 12 m) intervals. Use a double row of staples/stakes staggered 4" (10 cm) apart and 12" (30 cm) on center over entire width of the channel.
8. The terminal end of the HPTRMs must be anchored with a row of staples/stakes approximately 12" (30 cm) apart in a 6" (15 cm) deep x 6" (15 cm) wide trench. Backfill and compact the trench after stapling.



- NOTES:
- \* The performance of ground anchoring devices is highly dependent on numerous site/project specific variables. It is the sole responsibility of the project engineer and/or contractor to select the appropriate anchor type and length. Anchoring shall be selected to hold the mat in intimate contact with the soil subgrade and resist pullout in accordance with the project's design intent.
  - \* Anchor Pattern Guide can vary based on earth anchor and blanket selection.
  - \* Trim excess anchor tendon/cable after securing plate.

Drawing Not To Scale  
Drawn on 05-04-17

CHANNEL  
INSTALLATION DETAIL TURF/EARTH REINFORCED  
MAT SYSTEM (TERMS)

Anchoring Detail

The performance of ground anchoring devices is highly dependent on numerous site/project specific variables. It is the sole responsibility of the project engineer and/or contractor to select the appropriate anchor type and length. Anchoring shall be selected to hold the mat in intimate contact with the soil subgrade and resist pullout in accordance with the project's design intent.

1. Staples and/or stakes should be at least 6" (15 cm) in length and with sufficient ground penetration to resist pullout. Longer staples and/or stakes may be needed in looser soils.
2. The percussion earth anchor assembly consists of an anchor head, a tendon, a faceplate, and an end-piece device. See Tensar North American Green Earth Anchor specification for detailed information on assembly components and associated pull-out strength.

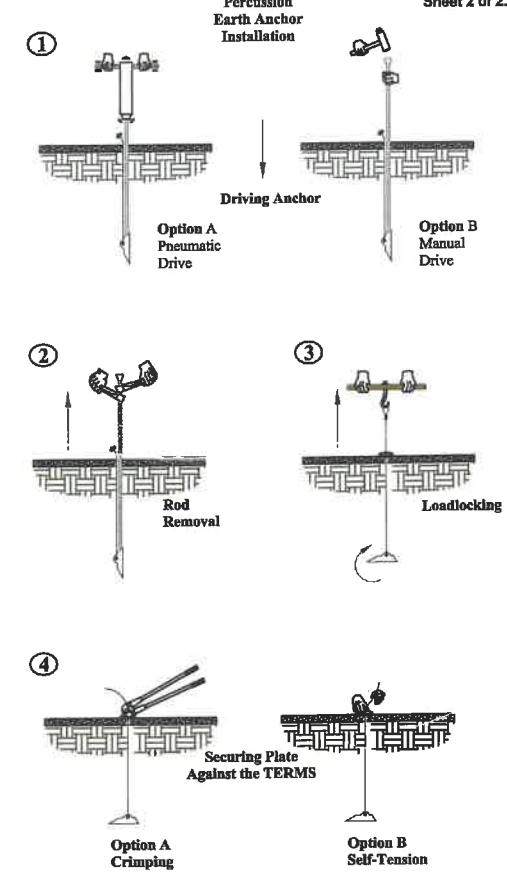
Percussion Earth Anchor Installation

1. Insert the drive rod into the assembly's anchor head then use either a sledge hammer or vibratory hammer to drive the anchor to their desired depth.
2. After the desired anchor depth is achieved, retract the drive rod.
3. Lock the anchor assembly by swiftly pulling the cable upwards until the anchor head rotates as signaled by sudden resistance to pulling. A hooked setting tool may be used to aid in this step. NOTE: Larger anchors may require more force to set the anchor. This can be achieved through using simple mechanical equipment for greater leverage, such as a fulcrum, manual or hydraulic jack, winch, or post puller.
4. Secure the faceplate to the HPTRM surface by locking the end-piece. If using a copper or aluminum stop, crimp the ferrule to secure. If using a self-tensioning end-piece (grip or wedge grip) set by simply tightening the end-piece against the faceplate. If desired, cut the remaining cable assembly, above end-piece, to desired length.

Seeding and Vegetating

- When using a Composite Turf Reinforcement Mat (C-TRM) with fiber components:
1. Pre-seed prepared soils prior to the installation of the C-TRM. Install matting as directed. C-TRM does not require soil infill or a top dressing of seed. Overseeding may be done as a secondary form of seeding.
  2. Sod may be installed in place of seeding on top of the C-TRM. Additional staking of sod is recommended in high-flow conditions. Sodded areas should be irrigated until rooting through the mat and into subgrade occurs.

- When using a woven High-performance Turf Reinforcement Mat (HPTRM):
1. Install the HPTRM as directed prior to seed and soil filling.
  2. Place seed into the installed HPTRM. After seeding, spread a layer of fine soil into the mat. Using the flat side of a rake, broom or other tool, completely fill the voids. Smooth soil-fill in order to just expose the top of the HPTRM matrix. Do not place excessive soil above the mat.
  3. Additional seed, hydraulic mulching or the use of a temporary erosion control blanket can be applied over the soil-filled mat for increased protection.
  4. Sod may be installed in place of seeding. Install HPTRM, and soil-fill as outlined above. Place sod directly onto the soil-filled HPTRM. Additional staking of sod is recommended in high-flow conditions. Sodded areas should be irrigated until rooting through the mat and into subgrade occurs.
  5. Consult with a manufacturer's technical representative for installation assistance if unique conditions apply.



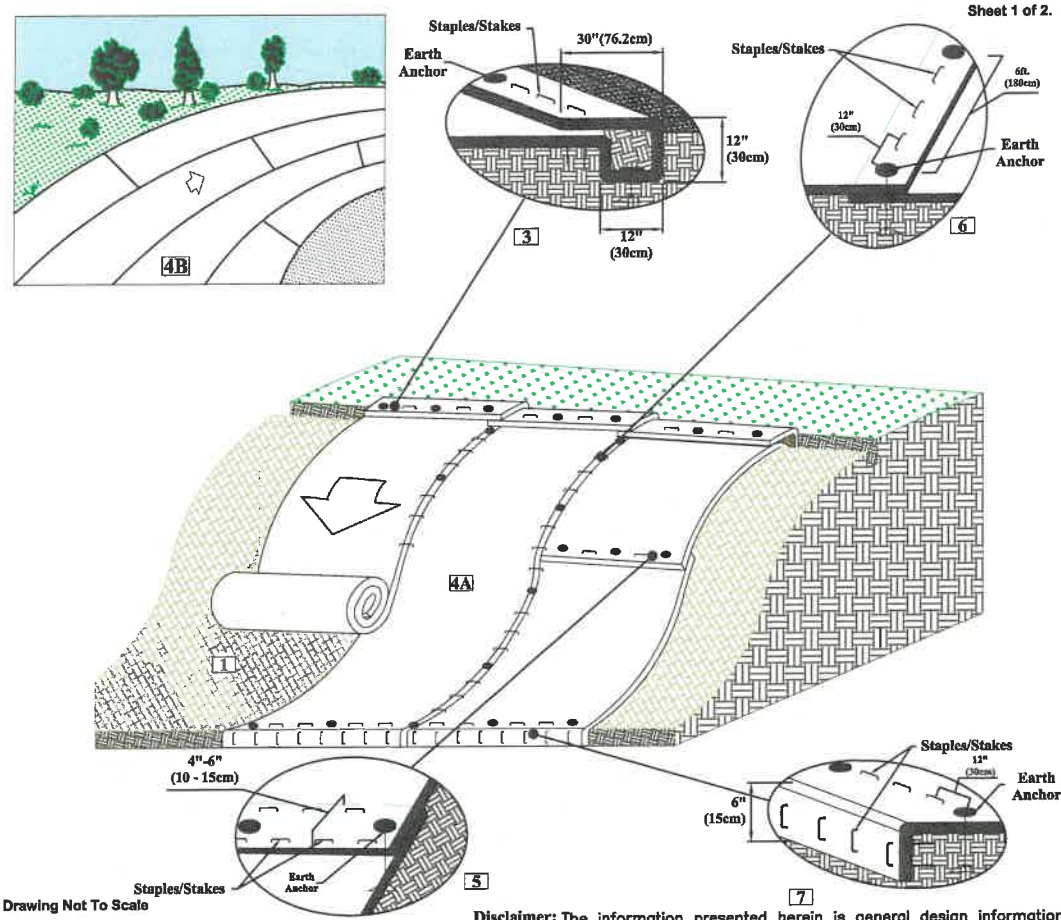
Disclaimer: The information presented herein is general design information only. For specific applications, consult an independent professional for further design guidance.

GRIGORY BERIKMAN  
LICENSED PROFESSIONAL ENGINEER  
No. 76896  
FLORIDA PROFESSIONAL ENGINEERING  
STATE OF FLORIDA  
2021

NO.	REVISION DESCRIPTION	DATE
1	PER SWRWD COMMENTS	07/24/18

PROJECT #	307-6082860
SURVEY #	00-43133
SCALE	RANGE 2,35/33,34S/18E
DATE	N.T.S.
DESIGNED	05/2015
CHECKED	05/2015
DATE	05/2015
BY	GRIGORY BERIKMAN P.E.
DATE	05/2015

Signature & Date

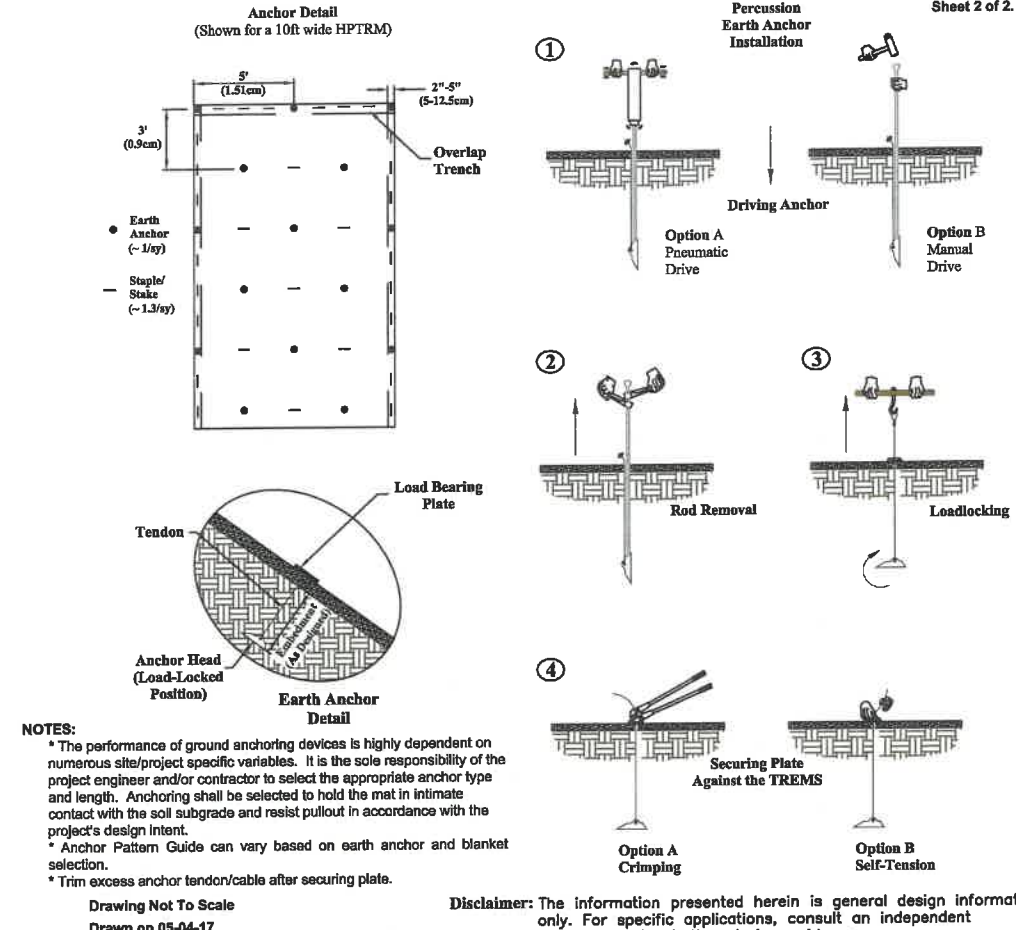


Disclaimer: The information presented herein is general design information only. For specific applications, consult an independent professional for further design guidance.

**SLOPE & LEVEE  
INSTALLATION DETAIL  
TURF/EARTH REINFORCED MAT SYSTEM (TERMS)**

**General Installation**

1. Prepare soil before installing the High-Performance Turf Reinforcement Mat (HPTRM), including any necessary application of soil amendments such as lime or fertilizer.
2. See Seeding and Vegetating section for details regarding pre-seeding, overseeding, or use with sod.
3. Begin at the top of the slope by anchoring the HPTRM in a 12" (30 cm) deep x 12" (30 cm) wide trench with approximately 30" (76.2 cm) of HPTRM extended beyond the up-slope portion of the trench. Anchor the HPTRM with a row of anchors/staples approximately 12" (30 cm) apart in the bottom of the trench. Backfill and compact the trench after stapling. Compact soil and fold remaining 30" (76.2 cm) portion of HPTRM back over compacted soil. Secure HPTRM over soil with a row of staples/stakes spaced approximately 12" (30 cm) across the width of the HPTRMs.
4. Roll the HPTRM (A) down or (B) horizontally across the slope. HPTRM will unroll with appropriate side against the soil surface. All HPTRM must be securely fastened to soil surface by placing anchors/staples/stakes in appropriate locations as shown in the anchoring detail.
5. Place consecutive HPTRMs end over end (shingle style) with a 4" - 6" (10 cm - 15 cm) overlap. Staple/stake through overlapped area, approximately 12" (30 cm) apart across entire HPTRM width.
6. Adjacent HPTRMs must be overlapped approximately 4" (10 cm) and fastened using staples/stakes every 12" (30 cm) between earth anchors. For curved sections, adjust the overlap edges accordingly to accommodate transitional segments.
7. The terminal end of the HPTRM must be anchored with a row of staples/stakes approximately 12" (30 cm) apart in a 6" (15 cm) deep x 6" (15 cm) wide trench. Backfill and compact the trench after stapling.



**NOTES:**  
 \* The performance of ground anchoring devices is highly dependent on numerous site/project specific variables. It is the sole responsibility of the project engineer and/or contractor to select the appropriate anchor type and length. Anchoring shall be selected to hold the mat in intimate contact with the soil subgrade and resist pullout in accordance with the project's design intent.  
 \* Anchor Pattern Guide can vary based on earth anchor and blanket selection.  
 \* Trim excess anchor tendon/cable after securing plate.

Drawing Not To Scale  
Drawn on 05-04-17

Disclaimer: The information presented herein is general design information only. For specific applications, consult an independent professional for further design guidance.

**SLOPE & LEVEE INSTALLATION DETAIL  
TURF/EARTH REINFORCED  
MAT SYSTEM (TERMS)**

**Anchoring Detail**

The performance of ground anchoring devices is highly dependent on numerous site/project specific variables. It is the sole responsibility of the project engineer and/or contractor to select the appropriate anchor type and length. Anchoring shall be selected to hold the mat in intimate contact with the soil subgrade and resist pullout in accordance with the project's design intent.

1. Staples and/or stakes should be at least 6" (15 cm) in length and with sufficient ground penetration to resist pullout. Longer staples and/or stakes may be needed in looser soils.
2. The percussion earth anchor assembly consists of an anchor head, a tendon, a faceplate, and an end-piece device. See Tensar North American Green Earth Anchor specification for detailed information on assembly components and associated pull-out strength.

**Percussion Earth Anchor Installation**

1. Insert the drive rod into the assembly's anchor head then use either a sledge hammer or vibratory hammer to drive the anchor to their desired depth.
2. After the desired anchor depth is achieved, retract the drive rod.
3. Lock the anchor assembly by swiftly pulling the cable upwards until the anchor head rotates as signaled by sudden resistance to pulling. A hooked setting tool may be used to aid in this step. NOTE: Larger anchors may require more force to set the anchor. This can be achieved through using simple mechanical equipment for greater leverage, such as a fulcrum, manual or hydraulic jack, winch, or post puller.
4. Secure the faceplate to the HPTRM surface by locking the end-piece. If using a copper or aluminum stop, crimp the ferrule to secure. If using a self-tensioning end-piece (grip or wedge grip) set by simply tightening the end-piece against the faceplate. If desired, cut the remaining cable assembly, above end-piece, to desired length.

**Seeding and Vegetating**

When using a Composite Turf Reinforcement Mat (C-TRM) with fiber components:  
 1. Pre-seed prepared soils prior to the installation of the C-TRM. Install matting as directed. C-TRM does not require soil infill or a top dressing of seed. Overseeding may be done as a secondary form of seeding.  
 2. Sod may be installed in place of seeding on top of the C-TRM. Additional staking of sod is recommended in high-flow conditions. Sodded areas should be irrigated until rooting through the mat and into subgrade occurs.

When using a woven High-performance Turf Reinforcement Mat (HPTRM):  
 1. Install the HPTRM as directed prior to seed and soil filling  
 2. Place seed into the installed HPTRM. After seeding, spread a layer of fine soil into the mat. Using the flat side of a rake, broom or other tool, completely fill the voids. Smooth soil-fill in order to just expose the top of the HPTRM matrix. Do not place excessive soil above the mat.  
 3. Additional seed, hydraulic mulching or the use of a temporary erosion control blanket can be applied over the soil-filled mat for increased protection.  
 4. Sod may be installed in place of seeding. Install HPTRM, and soil-fill as outlined above. Place sod directly onto the soil-filled HPTRM. Additional staking of sod is recommended in high-flow conditions. Sodded areas should be irrigated until rooting through the mat and into subgrade occurs.  
 5. Consult with a manufacturer's technical representative for installation assistance if unique conditions apply.

NO.	REVISION DESCRIPTION	DATE
1	PER SFWPMD COMMENTS	07/24/18

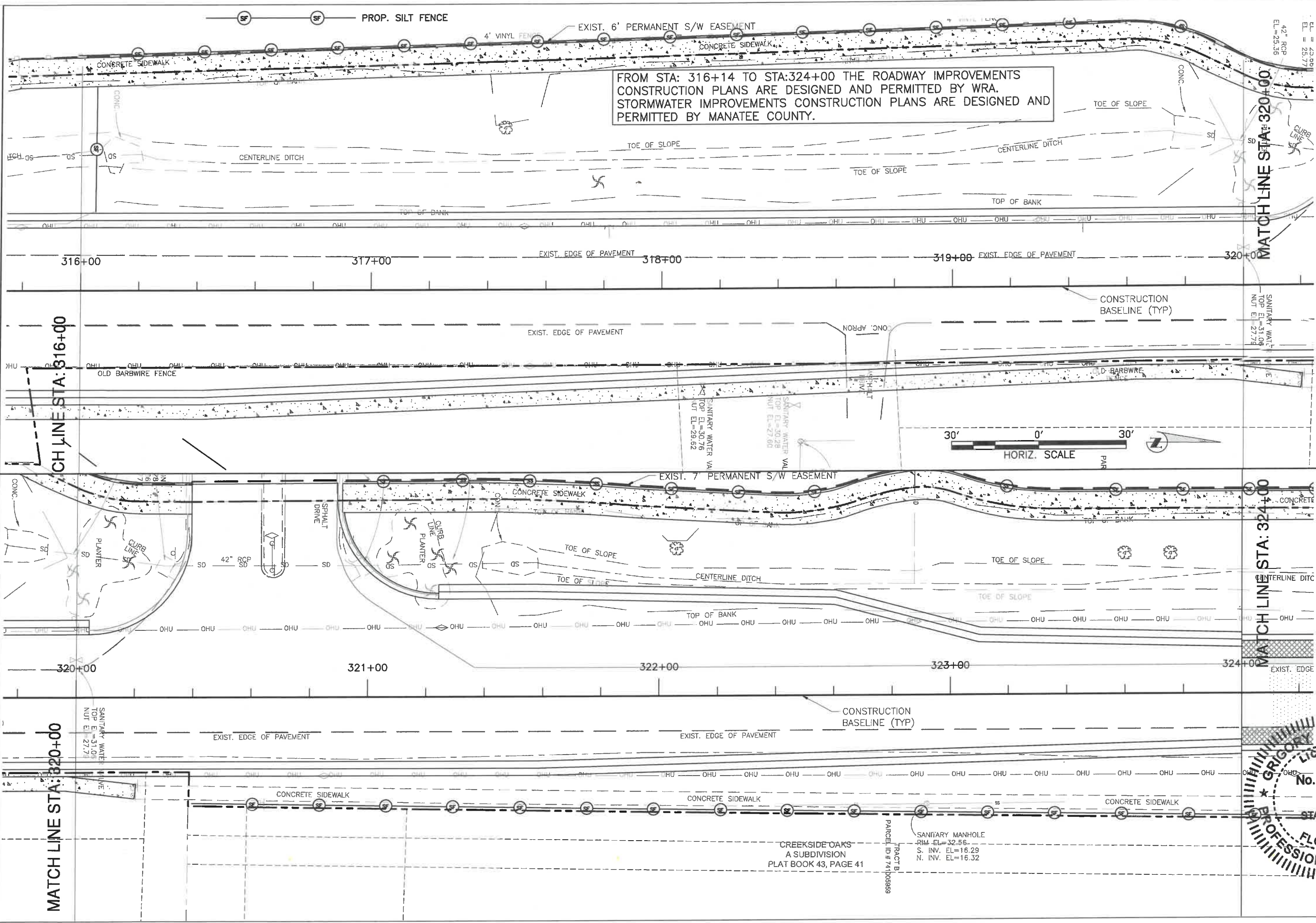
  

PROJECT #	307-6062860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
DATE	N.T.S.
DESIGNED	05/2015
CHECKED	05/2015
DATE	05/2015
DATE	05/2015

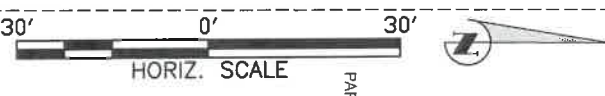
  

GRIGORY BERIKNMAN, P.E.  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER  
 No. 76806  
 Signature & Date

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EROSION CONTROL LOCATION SHEET**



FROM STA: 316+14 TO STA:324+00 THE ROADWAY IMPROVEMENTS CONSTRUCTION PLANS ARE DESIGNED AND PERMITTED BY WRA. STORMWATER IMPROVEMENTS CONSTRUCTION PLANS ARE DESIGNED AND PERMITTED BY MANATEE COUNTY.



**GRIGORY BERIKHMAN**  
PROFESSIONAL ENGINEER  
No. 76896  
STATE OF FLORIDA

12/02/11  
Signature & Date

NO.	REVISION DESCRIPTION	BY	DATE

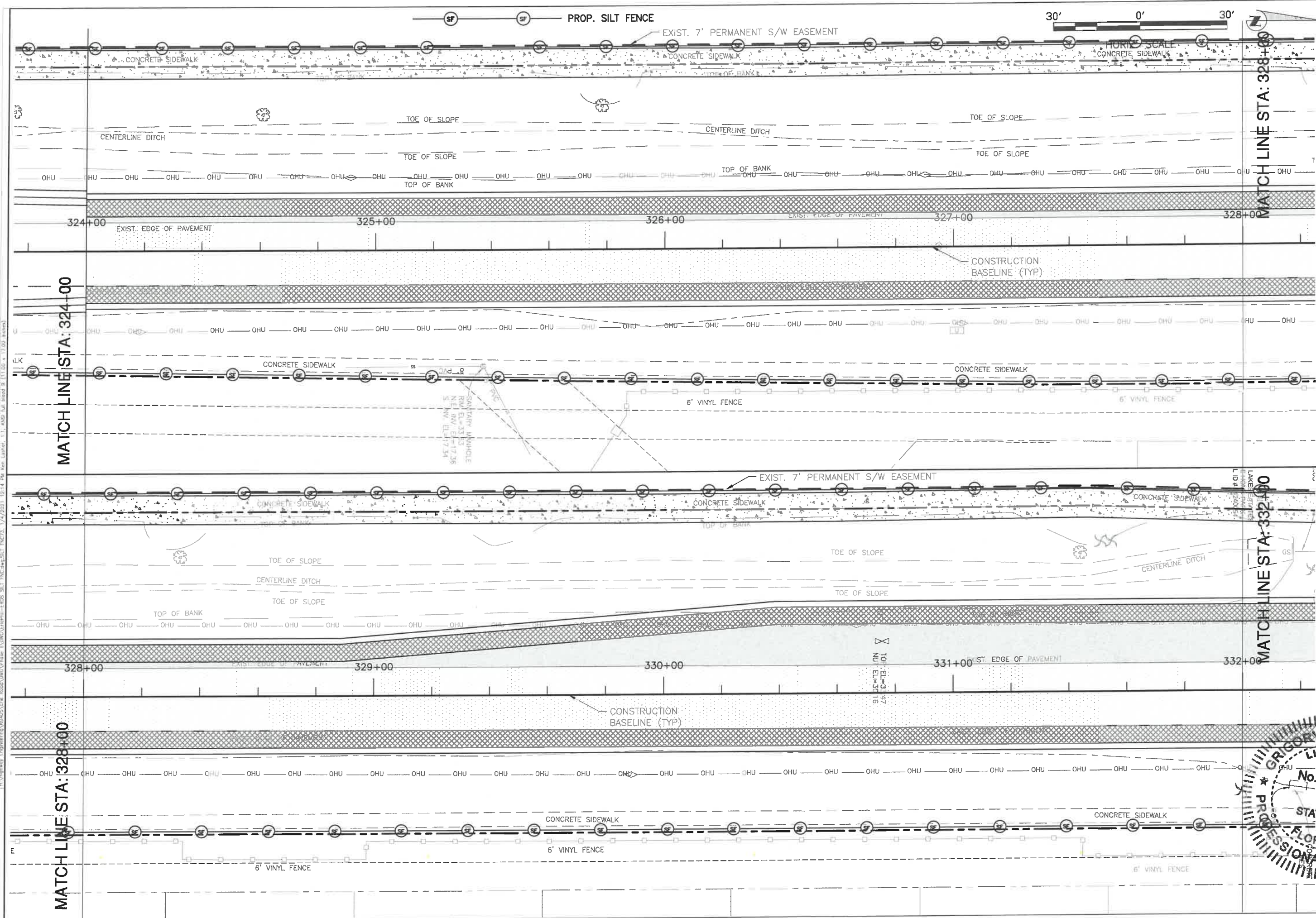
  

PROJECT #	307-6082860
	00-43133
	2,35/33,345/18E
	AS NOTED
	DATE
SURVEYED	2013
DESIGNED	GB 04/2015
DRAWN	GB 04/2015
CHECKED	GB 04/2015
	GRIGORY BERIKHMAN, P.E.
	76896

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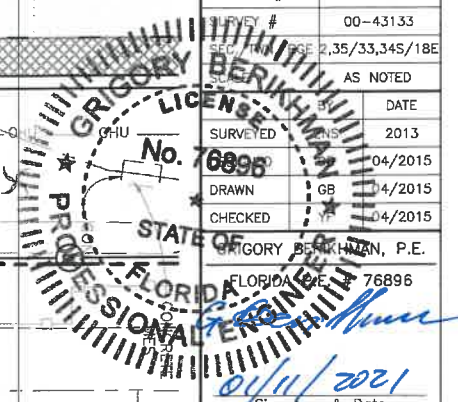
**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EROSION CONTROL LOCATION SHEET**



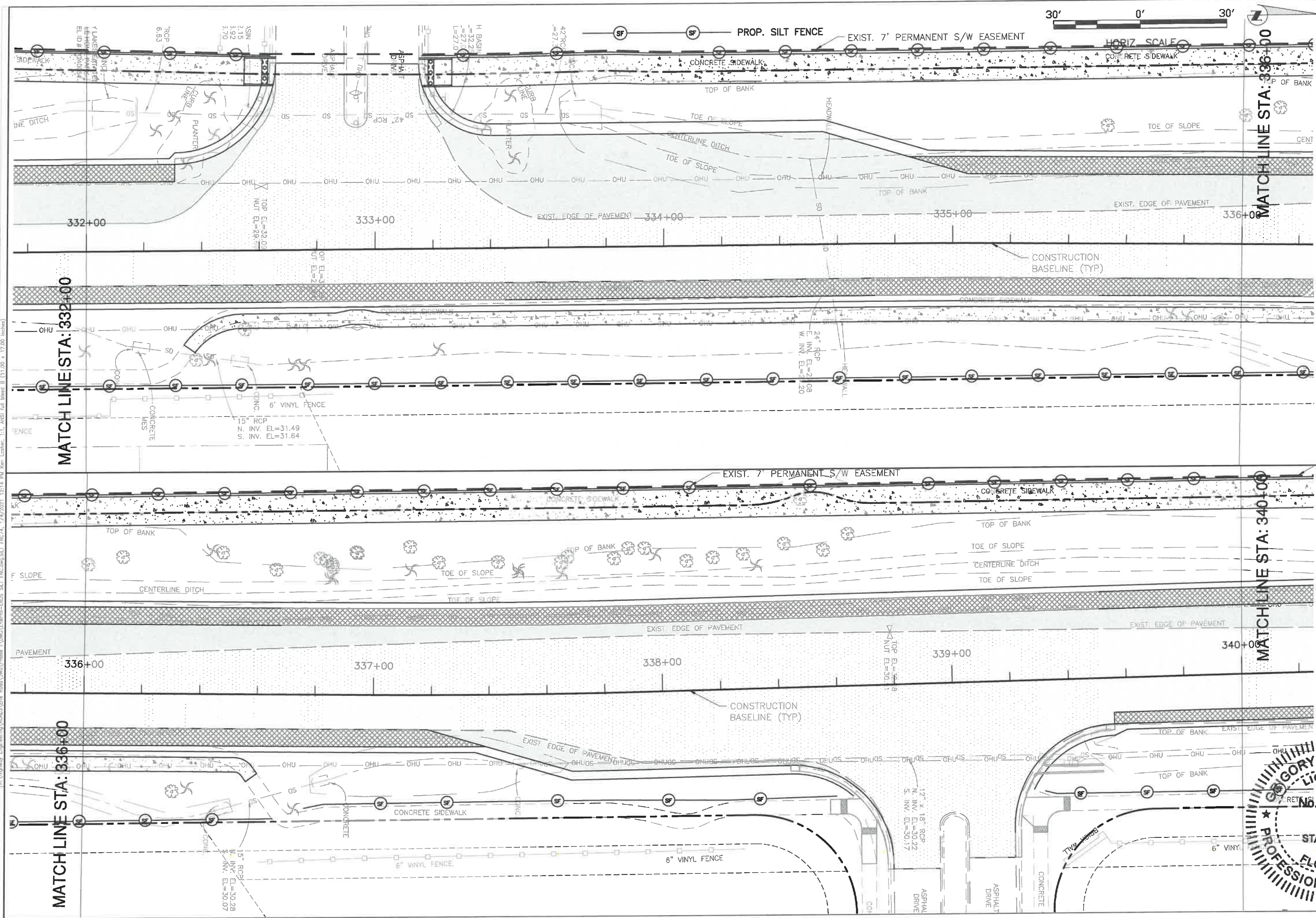
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DIST #	00-43133
SHEET #	2, 35/33,345/18E
AS NOTED	
SURVEYED	2013
DRAWN	04/2015
CHECKED	04/2015
DATE	
PROF. GRIGORY BERIKHMAN, P.E.	76896
FLORIDA ENGINEER	
Signature & Date	04/11/2015



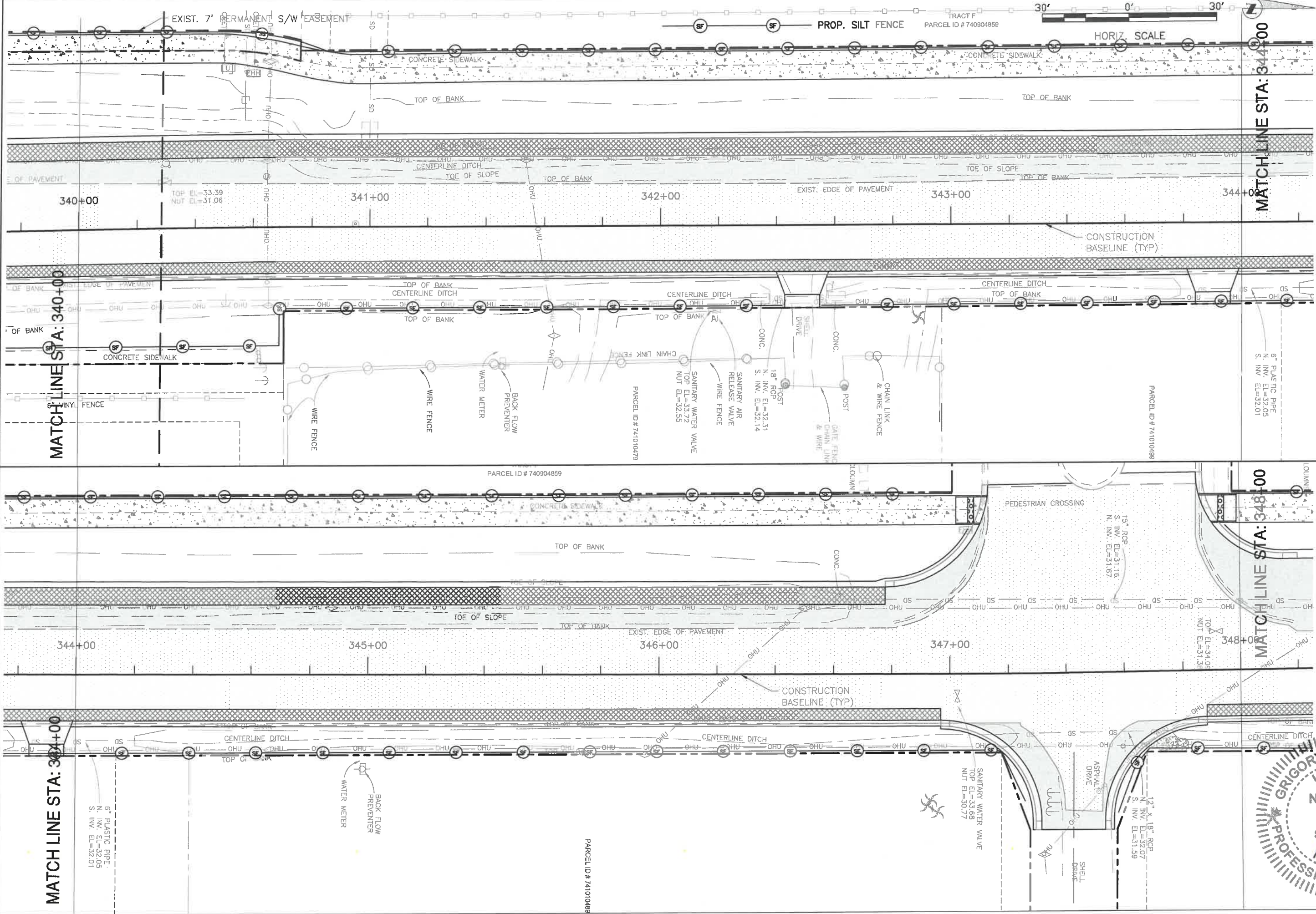
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SOUTH-NORTH PHASE II  
EROSION CONTROL LOCATION SHEET**



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NO.	REVISION DESCRIPTION	BY	DATE
PROJECT #	307-6082860		
SURVEY #	00-43133		
SEC./TWN./RGE	2,35/33,34S/18E		
DATE	AS NOTED		
DRAWN	BY	DATE	
6896	G. BERIKHMAN	04/2015	
DRAWN	BY	DATE	
6896	G. BERIKHMAN	04/2015	
GRIGORY BERIKHMAN, P.E.		FLORIDA P.E. No. 15996	
GRIGORY BERIKHMAN, P.E.		FLORIDA P.E. No. 15996	
STATE OF FLORIDA PROFESSIONAL ENGINEER			
No. 6896			
Signature & Date			
SHEET 74			

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EROSION CONTROL LOCATION SHEET**

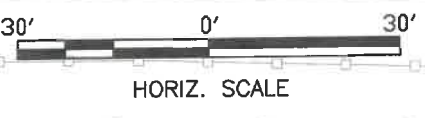
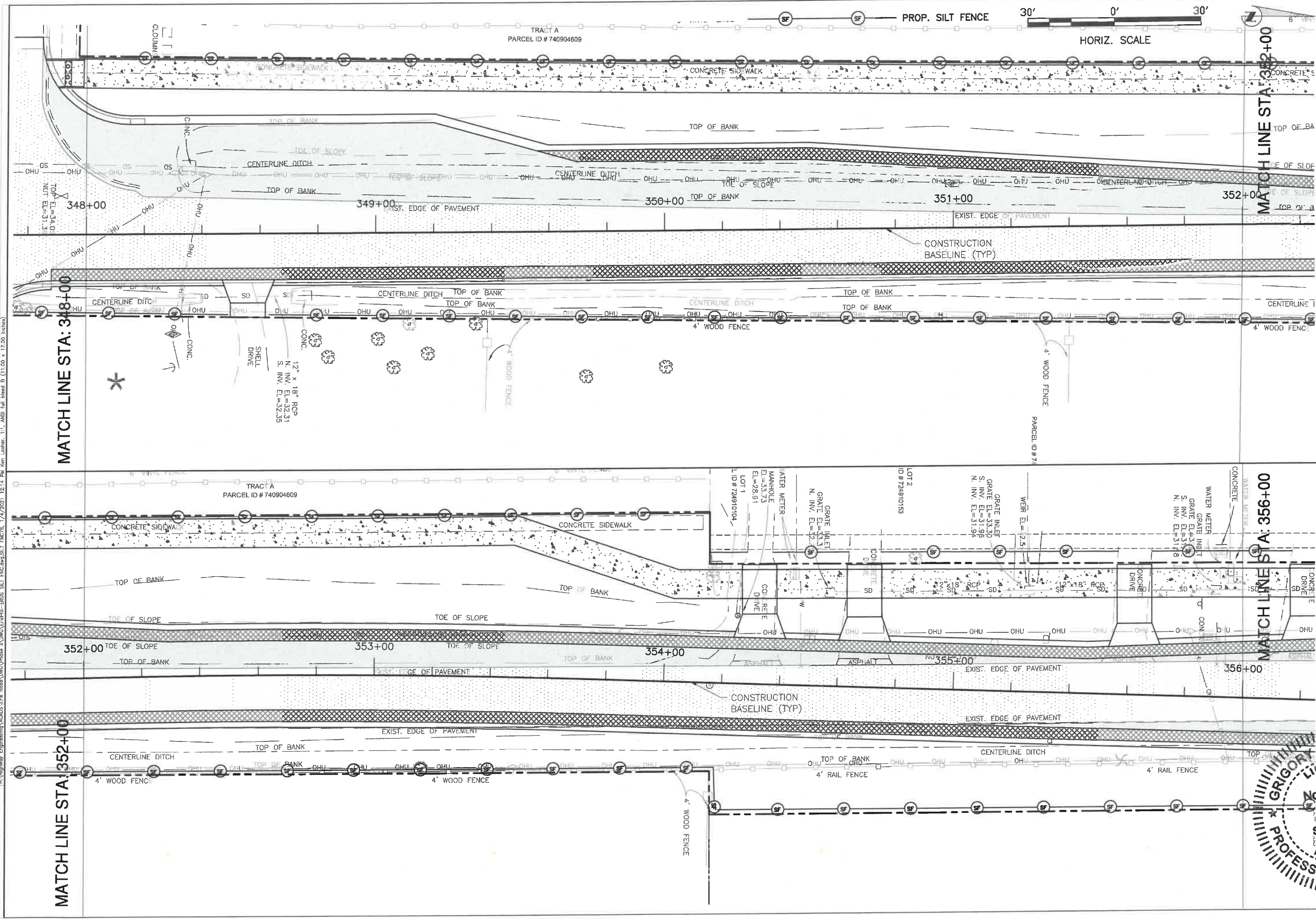


NO.	DATE	BY	REVISION DESCRIPTION

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
AS NOTED	DATE
SURVEYED	2013
DESIGNED	2015
DRAWN	2015
CHECKED	2015
GRIGORY BERIKHMAN, P.E.	2015
FLORIDA P.E. #	3896
DATE	



**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EROSION CONTROL LOCATION SHEET**



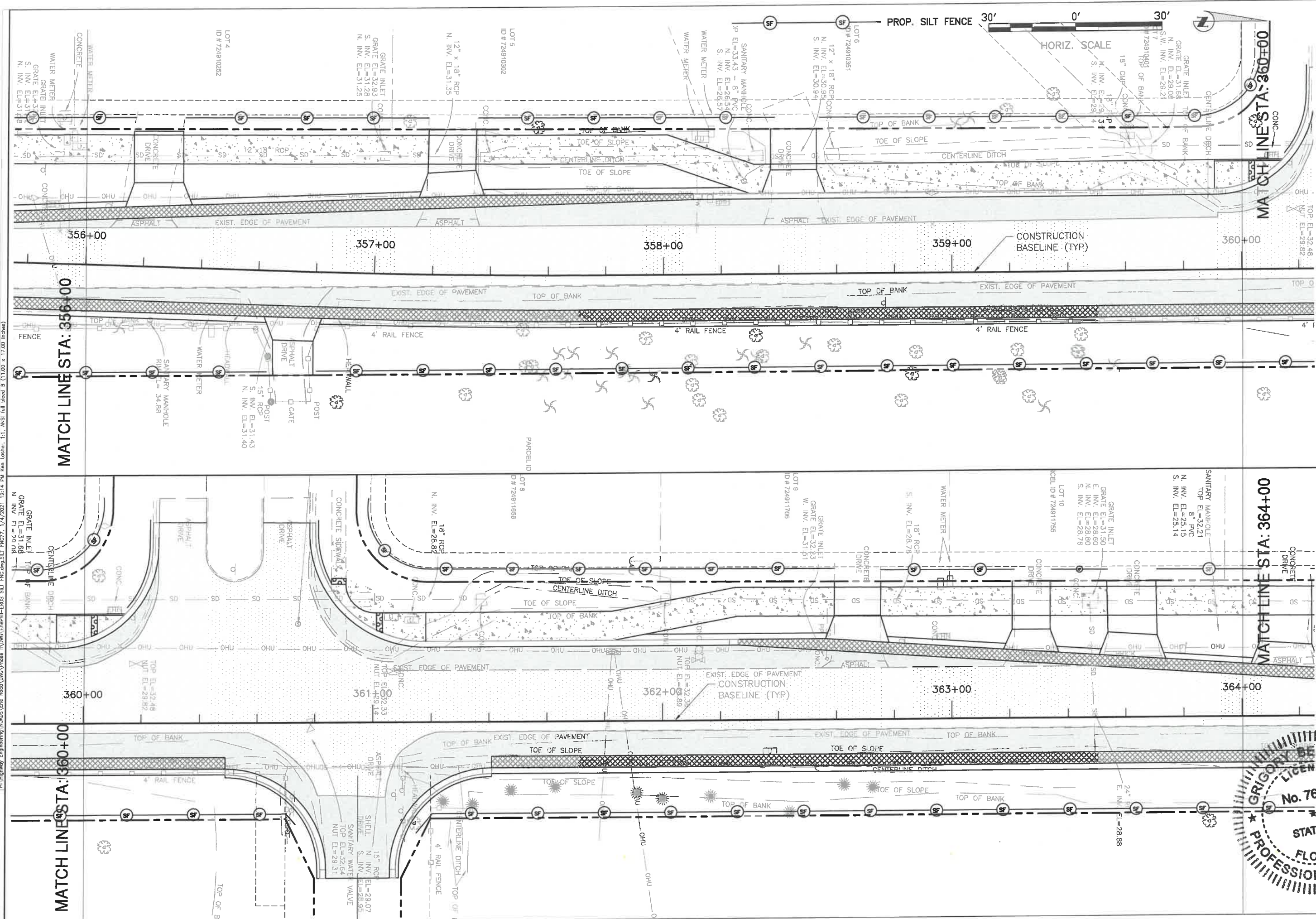
NO.	REVISION DESCRIPTION	DATE	BY

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
AS NOTED	
DESIGNED	DATE
76896	2015
CHECKED	DATE
GRIGORY BERIKMAN	2015
GRIGORY BERIKMAN, P.E.	
STATE OF FLORIDA	
PROFESSIONAL ENGINEER	
2021	
Signature & Date	

H:\Highway\_Engineering\ROADS\Erie\_Road\DWG\Phase II\DWG\ERIE-PHII-EROS\_SILT\_FNC.dwg, SILE, FNC276, 7/4/2021 12:14 PM Ken Leather, 1:1, ANSI Titled B (11.00 x 17.00 inches)

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EROSION CONTROL LOCATION SHEET**



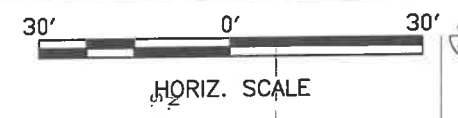
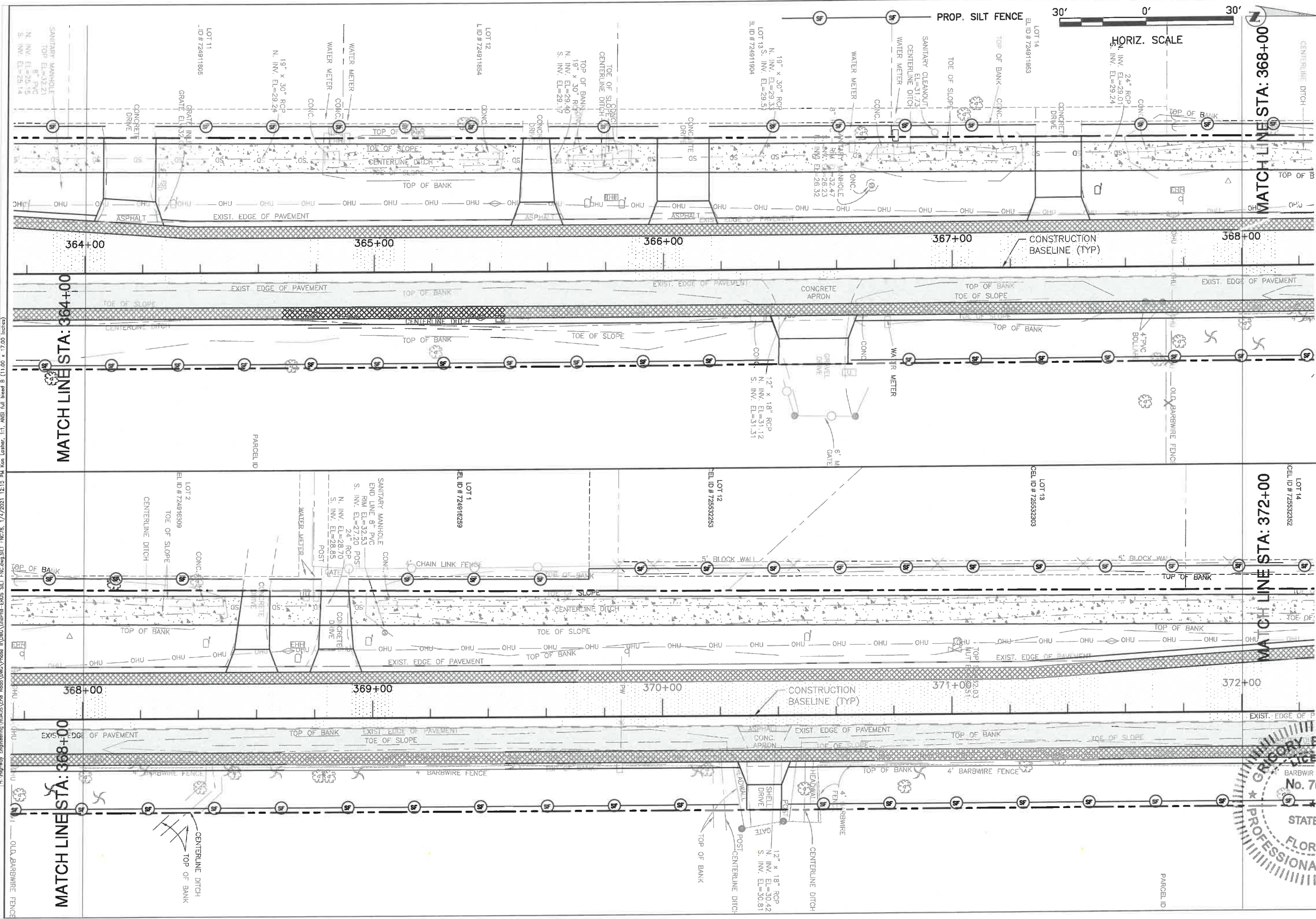
**GRIGORY BERIKHMAN**  
LICENSED PROFESSIONAL ENGINEER  
No. 76896  
STATE OF FLORIDA  
12/21/2021  
Signature & Date

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
DESIGNED	BY DATE
DRAWN	04/2015
CHECKED	04/2015
GRIGORY BERIKHMAN, P.E.	76896
FLORIDA	76896
SHEET 77	

H:\Highway Engineering\ROADS\ERIE Road\CONV\Phase II\DWG\EROSION CONTROL SHEET.dwg, SILENT PLOT, 12:14 PM, Ken Lohmer, E:\ANSI full bleed B (11.00 x 17.00 inches)

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EROSION CONTROL LOCATION SHEET**



MATCH LINE STA: 368+00

MATCH LINE STA: 364+00

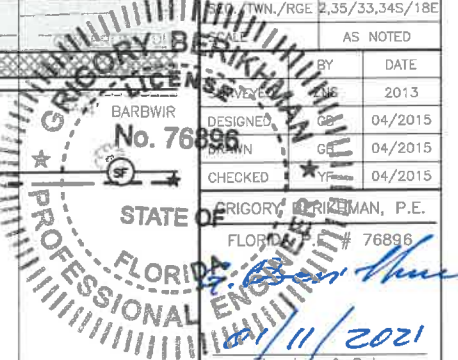
MATCH LINE STA: 372+00

MATCH LINE STA: 368+00

NO.	REVISION DESCRIPTION	BY	DATE

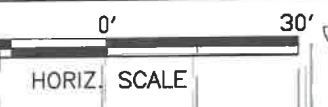
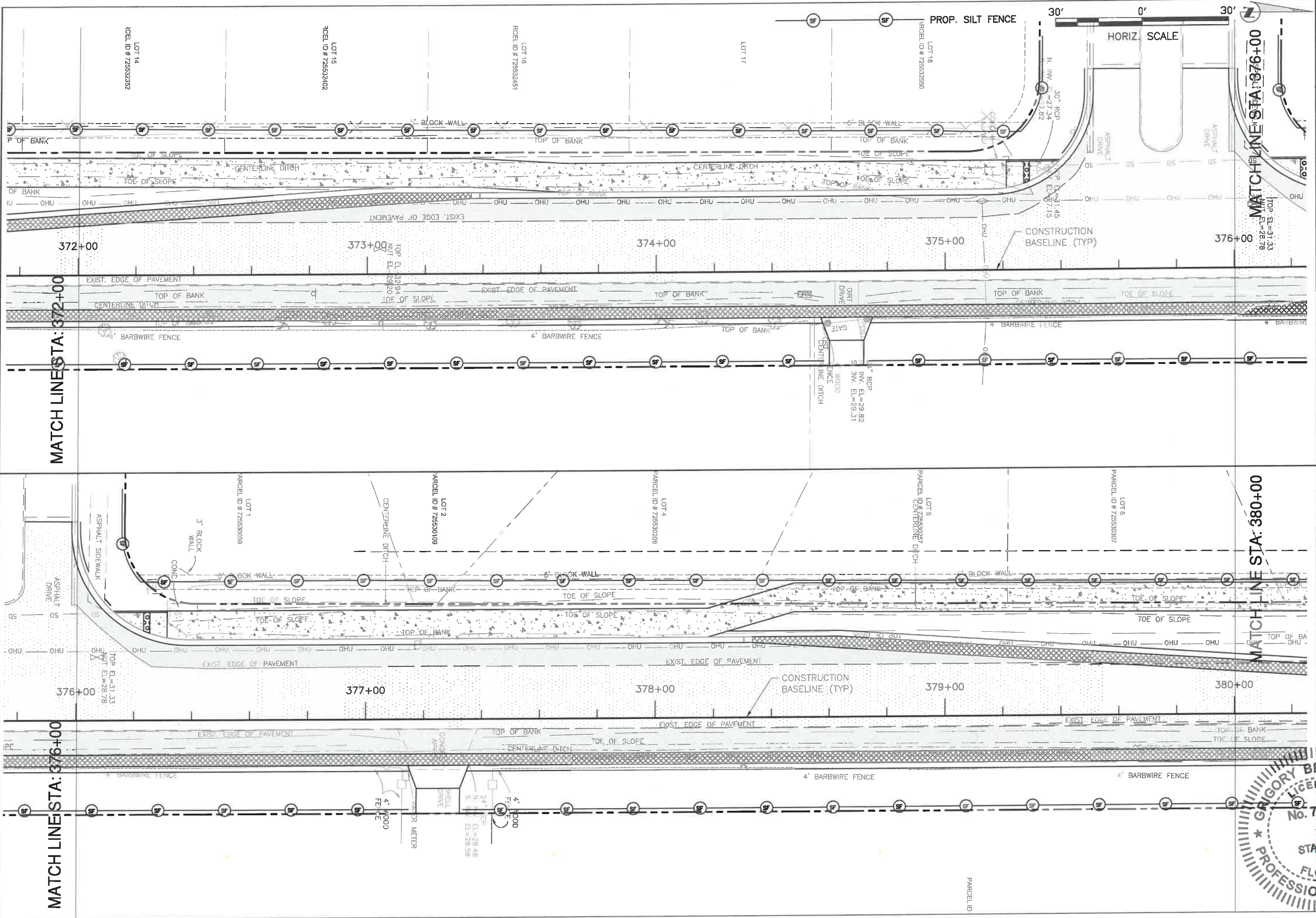
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SURVEY #	00-43133
TOWN/RGE	2,35/33,34S/18E
AS NOTED	
BY	DATE
DESIGNED	04/2015
DRAWN	04/2015
CHECKED	04/2015
GRIGORY BERIKHMAN, P.E.	FLORIDA LICENSE # 76896
Signature & Date	12/11/2015





PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES  
1022 26th Avenue East, Bradenton, FL 34208

# ERIE ROAD- US301 TO US 301 SOUTH-NORTH PHASE II EROSION CONTROL LOCATION SHEET



MATCHLINE STA: 376+00  
TOP EL.=31.33  
BOTTOM EL.=28.78

MATCHLINE STA: 372+00

MATCHLINE STA: 380+00

MATCHLINE STA: 376+00

NO.	REVISION DESCRIPTION	BY	DATE

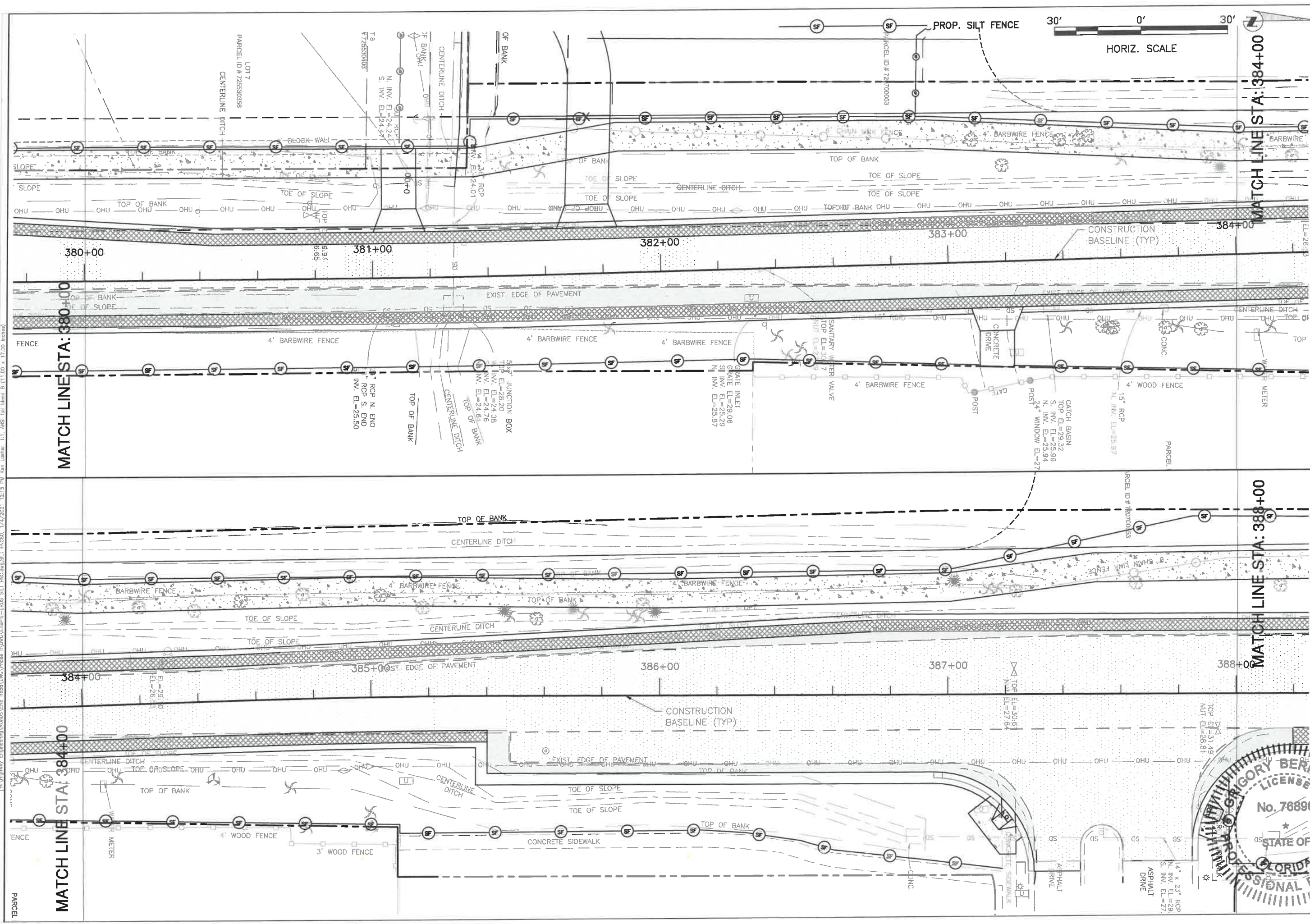
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 SURVEY # 00-43133  
 SEC./TWN./RGE 2,35/33,34S/18E  
 SCALE AS NOTED

BY	DATE
GRIGORY BERIKHMAN	04/2015
GRIGORY BERIKHMAN	04/2015
GRIGORY BERIKHMAN	04/2015

GRIGORY BERIKHMAN, P.E.  
 FLORIDA P.E. # 76896  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER  
 No. 76896  
 12/22/15  
 SHEET 79

H:\Highway Engineering\ROADS\ERIE Road\DWG\ERIE PHASE II SOUTH-NORTH PHASE II EROSION CONTROL LOCATION SHEET.dwg, S:\IT\Projects\12-13 PM Ron Latham, 11, ANSI Full bleed B (11.00 x 17.00 inches)

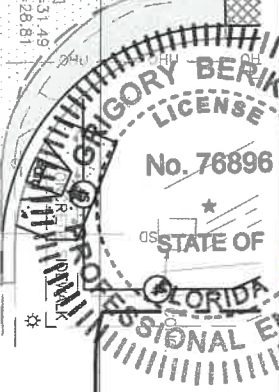
**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EROSION CONTROL LOCATION SHEET**



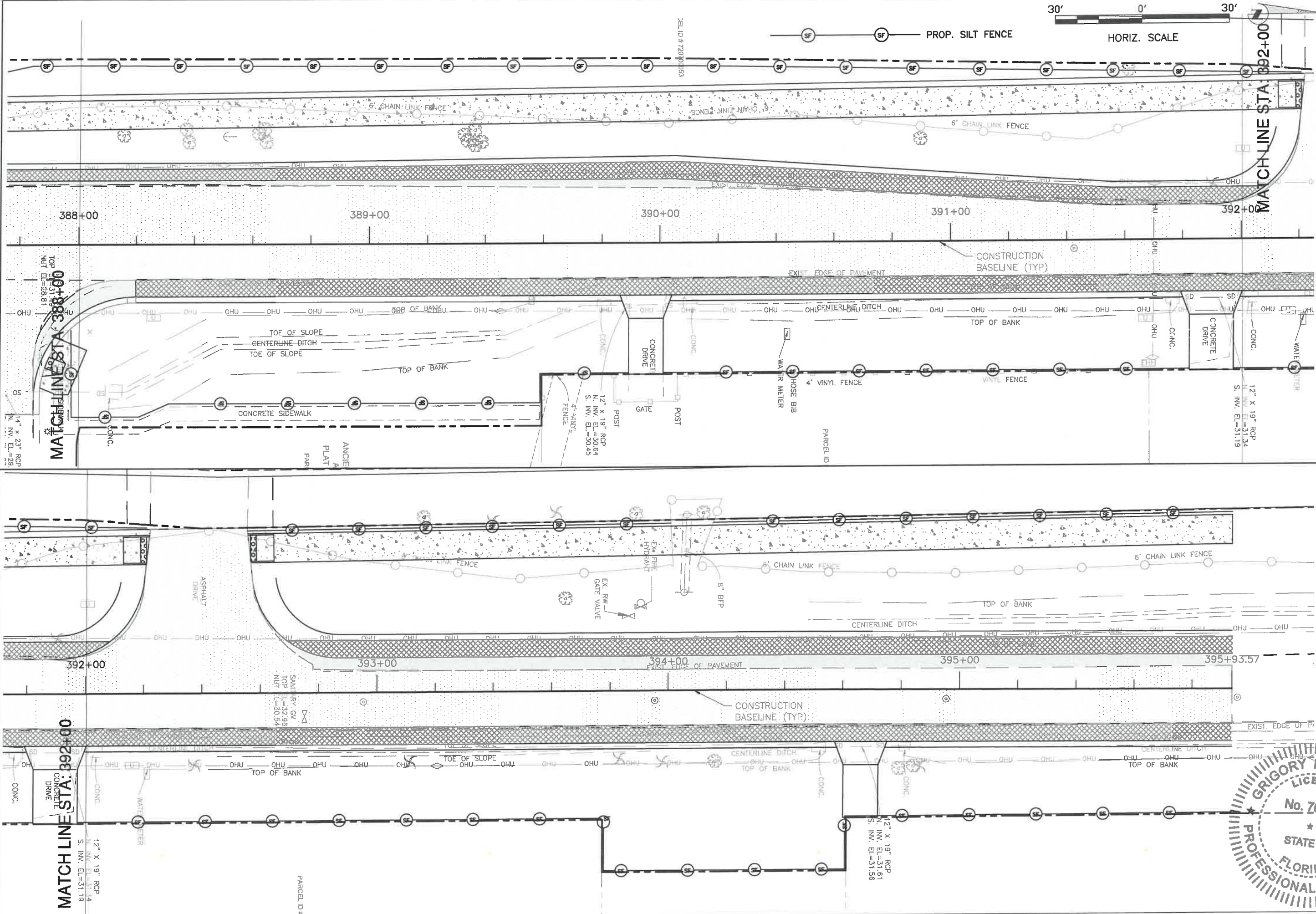
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
BY	DATE
SURVED	ZNS 2013
DRAWN	GB 04/2015
CHECKED	YF 04/2015
GRIGORY BERIKHMAN, P.E.	
FLORIDA P.E. # 76896	
Signature & Date	12/22/11







**ERIE ROAD- US301 TO US 301**  
**SOUTH-NORTH PHASE II**  
**EROSION CONTROL LOCATION SHEET**

NO.	REVISION DESCRIPTION	BY	DATE

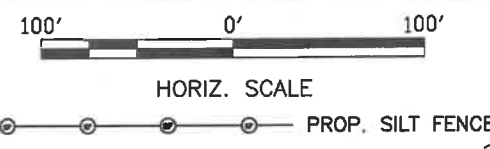
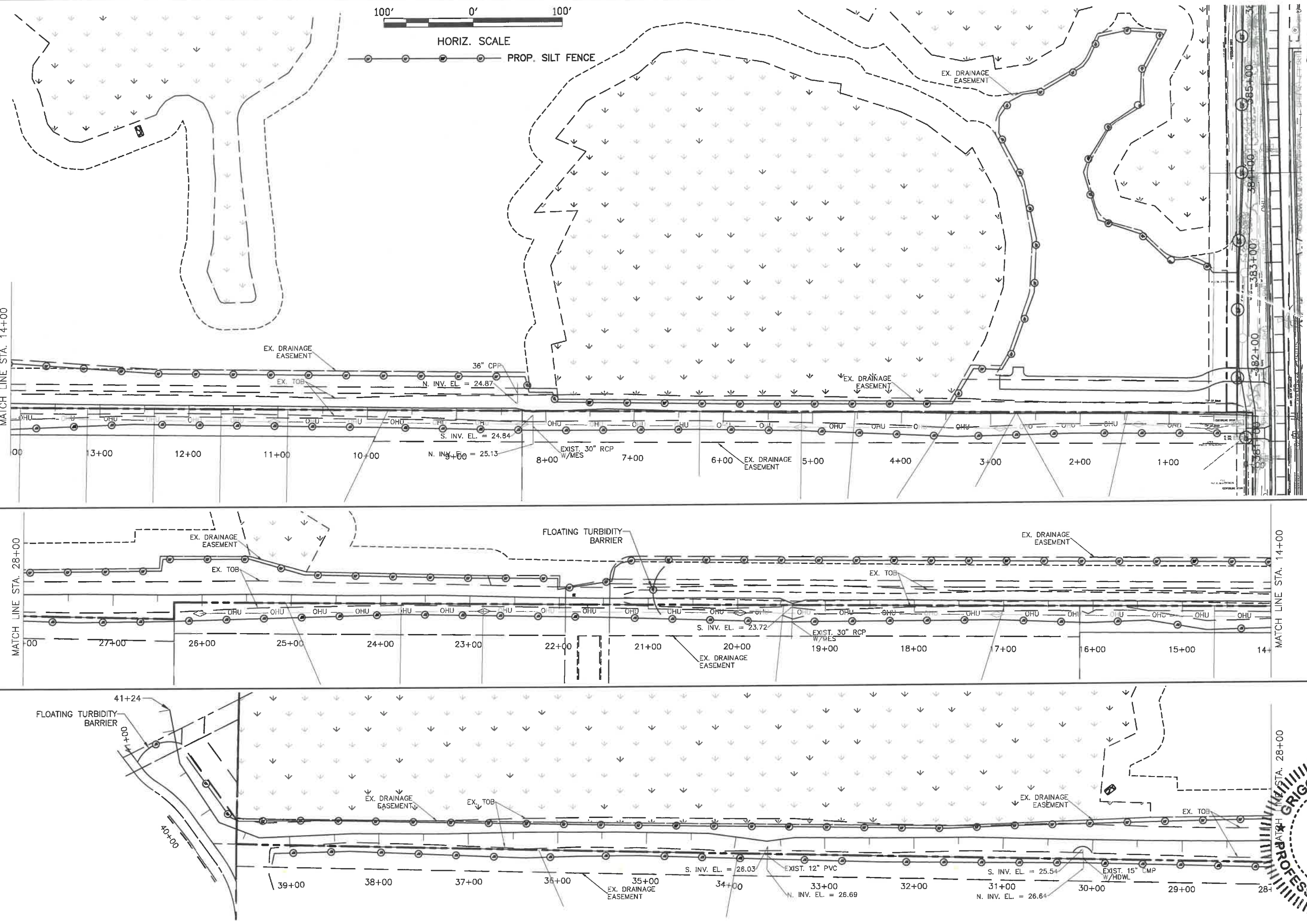
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 SCALE AS NOTED

BY	DATE
ZNS	2013
GB	04/2015
DB	04/2015
DB	04/2015

CHECKED: 04/2015  
 GRIGORY BERKEMAN, P.E.  
 FLORIDA P.E. # 76896

GRIGORY BERKEMAN  
 LICENSED PROFESSIONAL ENGINEER  
 No. 76896  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER  
 Signature & Date: 2021

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EROSION CONTROL ALONG  
BUFFALO CANAL (CEDAR DRAIN)**



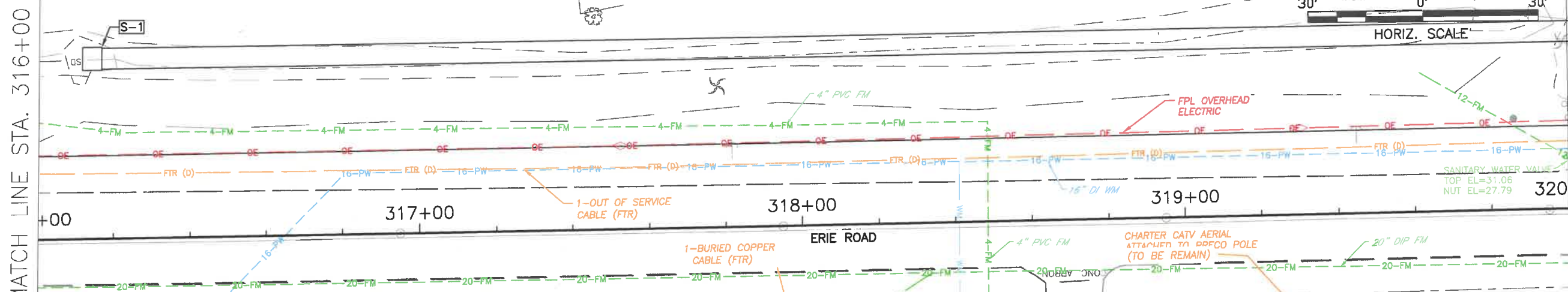
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT # 307-6082860  
 SURVEY # 00-43133  
 SEC./TWN./RGE 2,35/33,34S/18E  
 FILE AS NOTED  
 DRAWN BY DATE  
 No. 76896  
 GRIGORY BERKMAN, P.E.  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER  
 No. 76896  
 SHEET 82

I:\N\Highway Engineering\ROADS\Erie Road\DWG\Phase II\DWG\ERIEPHI-EROS\_SILT\_PNC.dwg/SILT\_PNC82\_1/4/2015 12:15 PM Ken Lashier: 1:1 ANSI Jul bleed B (11.00 x 17.00 inches)



**ERIE ROAD - US 301 TO US 301  
SOUTH-NORTH PHASE II  
UTILITY ADJUSTMENT SHEETS  
STA. 316+00 TO STA. 324+00**

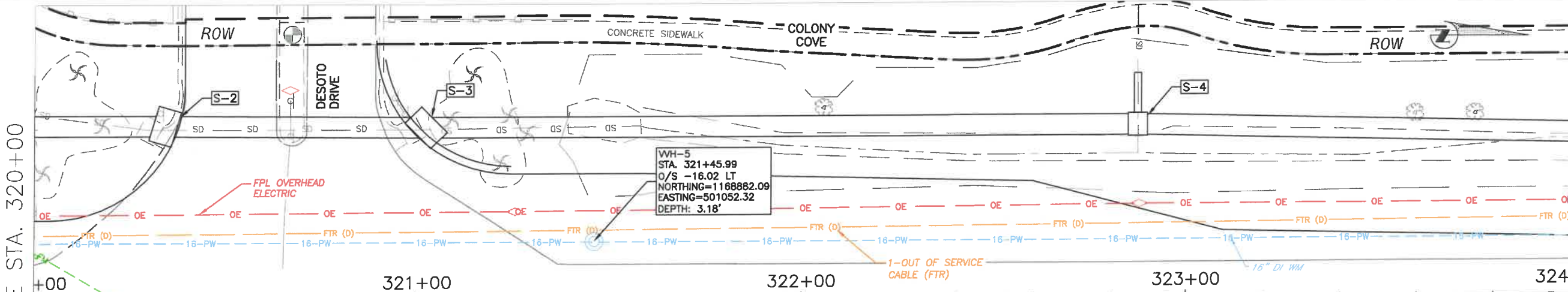


**Erie Road 20" Force Main  
SUBSURFACE UTILITY EXCAVATION (SUE) REPORT**

ID Name Location	Northing*	Easting*	Surface Elevation	Measured Depth	Top of Pipe	Pipe Size	Pipe Material	Type	Surface
WH-1	1167325.56	501096.91	29.45	3.51	25.94	16"	DIP	WATER	GROUND
WH-2	1167325.48	501095.94	29.38	7.45	21.93	20"	DIP	SANITARY	GROUND
WH-3	1167995.07	501095.54	26.43	5.51	20.92	20"	DIP	SANITARY	GROUND
WH-4	1167995.09	501029.15	28.02	3.76	25.16	12"	PVC	WATER	GROUND
WH-5	1168882.09	501052.32	30.99	3.18	27.81	16"	DIP	WATER	GROUND
WH-6	1170231.21	501070.33	31.50	4.42	27.08	20"	DIP	SANITARY	2"PAVE
WH-7	1170534.38	501069.11	33.25	3.23	30.02	20"	DIP	SANITARY	2"PAVE
WH-8	1170730.73	501068.13	33.65	3.42	30.31	20"	DIP	SANITARY	2"PAVE
WH-9	1171129.49	501066.61	33.59	3.88	29.71	20"	DIP	SANITARY	2"PAVE
WH-10	1171429.91	501063.81	33.49	3.30	30.19	20"	DIP	SANITARY	2"PAVE
WH-11	1171654.27	501040.34	33.61	3.77	29.84	16"	DIP	WATER	4"PAVE
WH-12	1174262.69	501026.04	31.21	3.72	27.49	16"	CI	WATER	4"PAVE
WH-13	1174268.25	501015.37	31.22	5.19	26.03	6"	PVC	SANITARY	GROUND
WH-14	1174342.81	501010.93	31.41	8.42	22.99	UNK.	UNKNOWN	WATER	GROUND

WRA DESIGN  
WRA DESIGN  
WRA DESIGN

FROM STA: 316+14 TO STA:324+00 THE ROADWAY IMPROVEMENT CONSTRUCTION PLANS ARE DESIGNED AND PERMITTED BY WRA. STORMWATER IMPROVEMENT CONSTRUCTION PLANS ARE DESIGNED AND PERMITTED BY MANATEE COUNTY. PLEASE REFER TO WRA UTILITY ADJUSTMENT SHEETS.



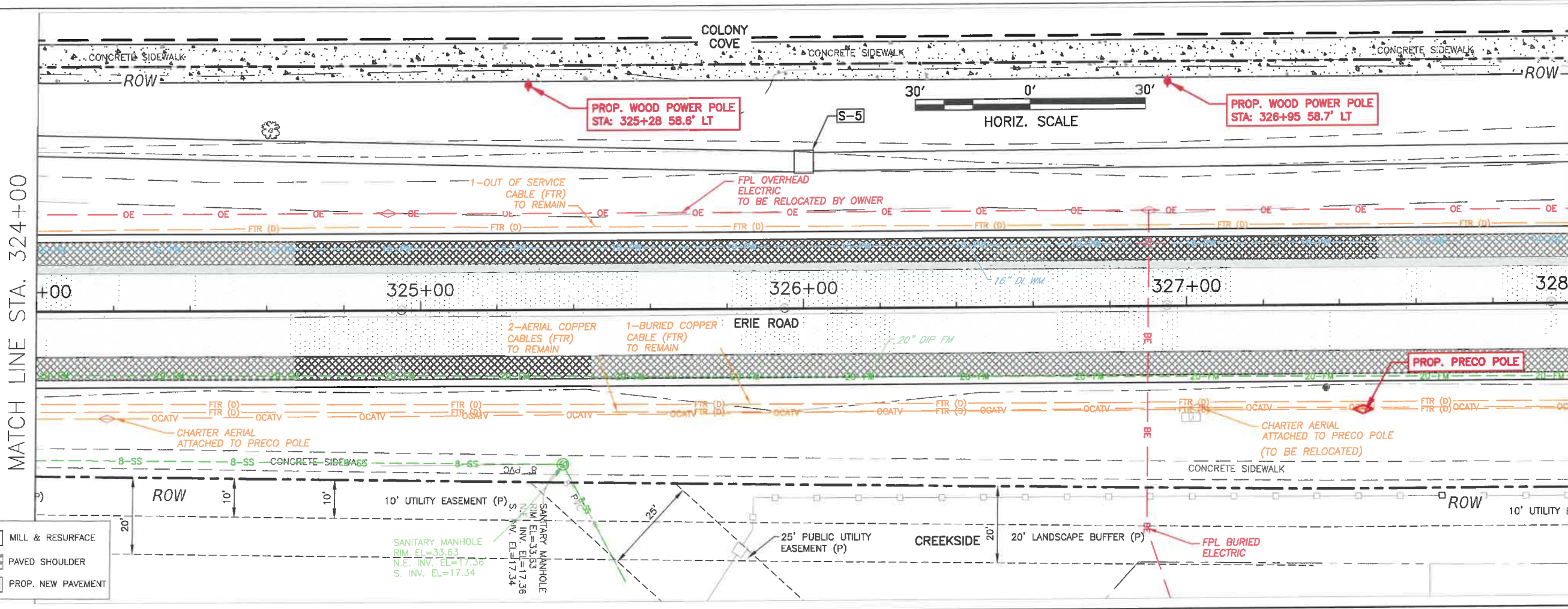
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STA. 321+45.99  
O/S -16.02 LT  
NORTHING=1168882.09  
EASTING=501052.32  
DEPTH: 3.18'

**NOTES:**  
ALL WATER SERVICES (TAPPING SADDLES, VALVES, PIPING CROSSING ERIE ROAD, WATER SERVICES, ECT.) SHALL BE DUG UP WITH COUNTY REPRESENTATIVE TO VERIFY IT MEETS CURRENT COUNTY STANDARDS AND IF IT DOES NOT MEET CURRENT STANDARDS IT WILL NEED TO BE REPLACED TO CURRENT STANDARDS.  
RELOCATE ALL WATER METERS AND FIRE HYDRANTS TO NEW RIGHT OF WAY PER MANATEE COUNTY STANDARD.  
ADJUST ALL VALVES TO FINISHED GRADE

NO.	REVISION DESCRIPTION	BY	DATE

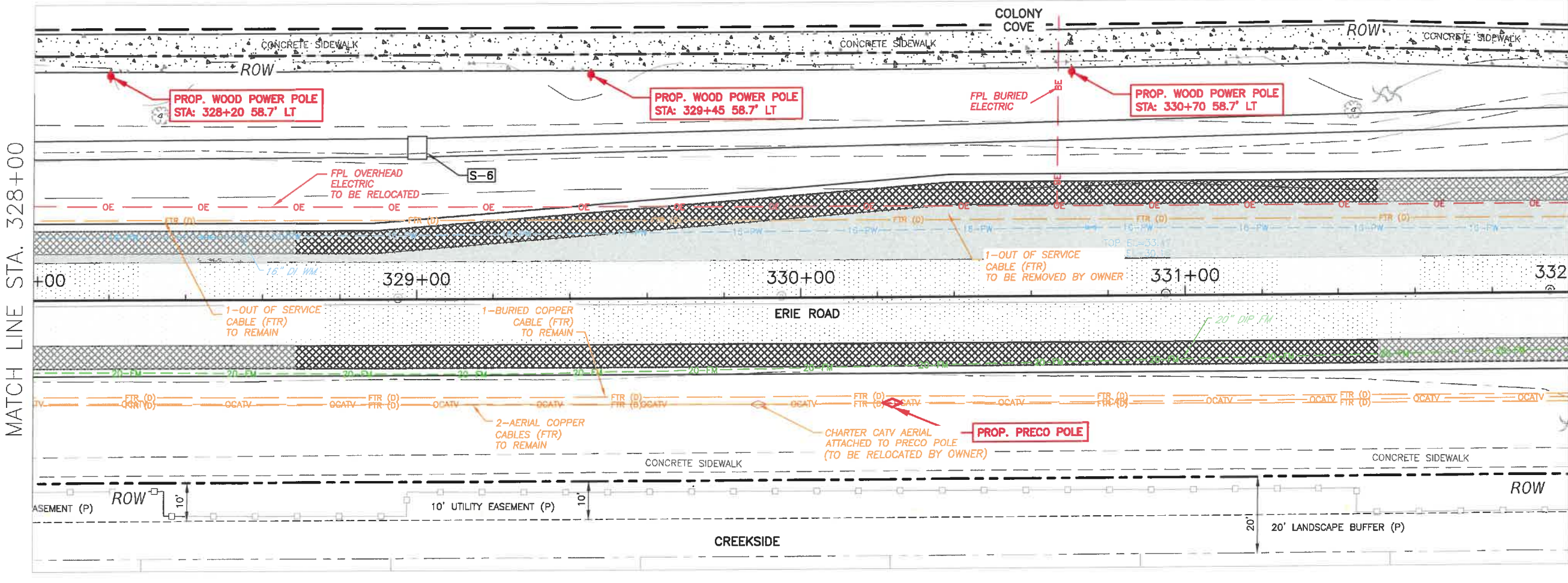
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SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	1"=30'
SURVEYED	ZNS 2013
DESIGNED	GB 04/2015
DRAWN	KR 04/2015
CHECKED	YF 10/2015

**ERIE ROAD - US 301 TO US 301  
SOUTH-NORTH PHASE II  
UTILITY ADJUSTMENT SHEETS  
STA. 324+00 TO 332+00**



**LEGEND**

- MILL & RESURFACE
- PAVED SHOULDER
- PROP. NEW PAVEMENT



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	1"=30'
SURVEYED	ZNS 2013
DESIGNED	GB 04/2015
DRAWN	KR 04/2015
CHECKED	YF 10/2015

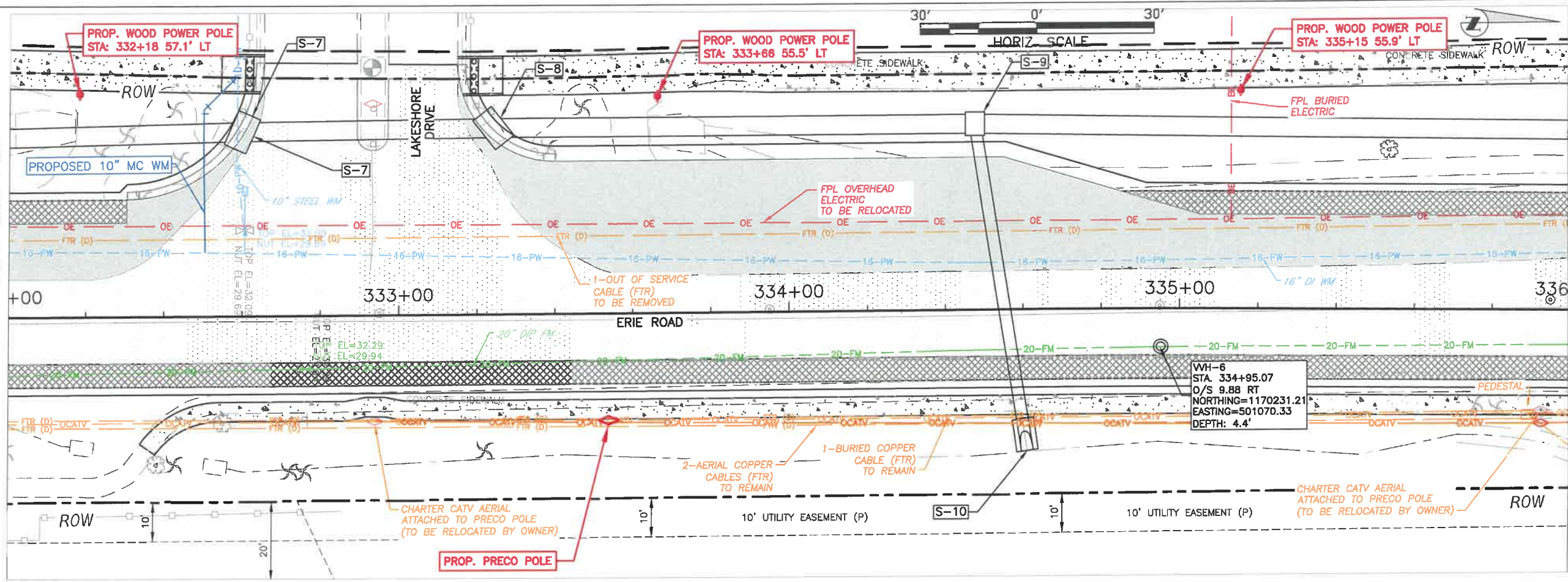
Signature & Date  
**SHEET UAS 4**

H:\Highway Engineering\ROADS\Phase II\DWG\ERIE\UAS-UAS.dwg, 1/11/2021, 11:54 AM Ken Lottner, 1:1, WNSI full bleed B (11.00 x 17.00 inches)

**ERIE ROAD - US 301 TO US 301  
SOUTH-NORTH PHASE II  
UTILITY ADJUSTMENT SHEETS**  
STA. 332+00 TO 340+00

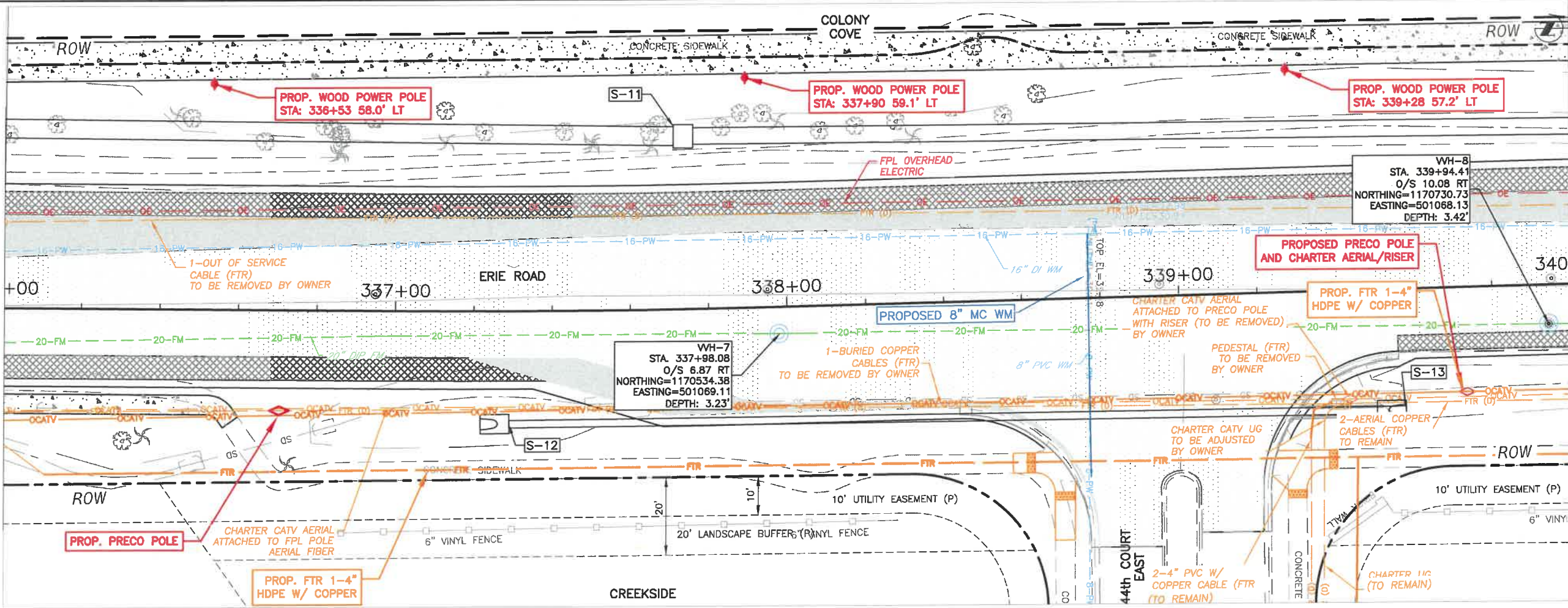
MATCH LINE STA. 332+00

MATCH LINE STA. 336+00



MATCH LINE STA. 336+00

MATCH LINE STA. 340+00



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	1"=30'
SURVEYED	ZNS 2013
DESIGNED	GB 04/2015
DRAWN	KR 04/2015
CHECKED	YF 10/2015

Signature & Date  
**SHEET UAS 5**

H:\Highway Engineering\ROADS\Erie Road\DWG\Phase II\DWG\EriePhII\_UAS.dwg, UAS: 1/17/2015 11:34 AM Ken Lathier, T.T. ANSI full bleed B (11.00 x 17.00 inches)

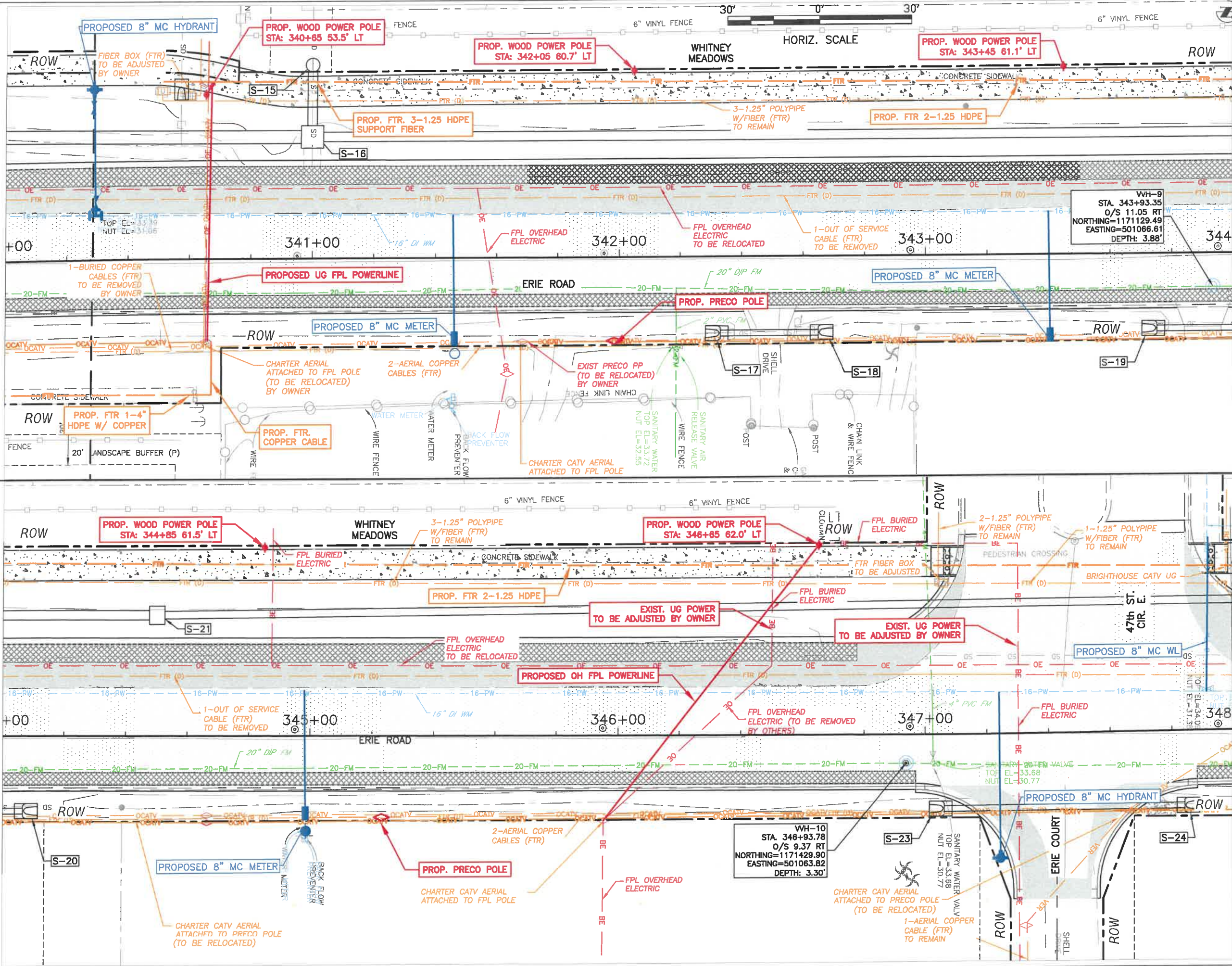
**ERIE ROAD - US 301 TO US 301  
SOUTH-NORTH PHASE II  
UTILITY ADJUSTMENT SHEETS  
STA. 340+00 TO 348+00**

MATCH LINE STA. 340+00

MATCH LINE STA. 344+00

MATCH LINE STA. 344+00

MATCH LINE STA. 348+00



NO.	REVISION DESCRIPTION	BY	DATE

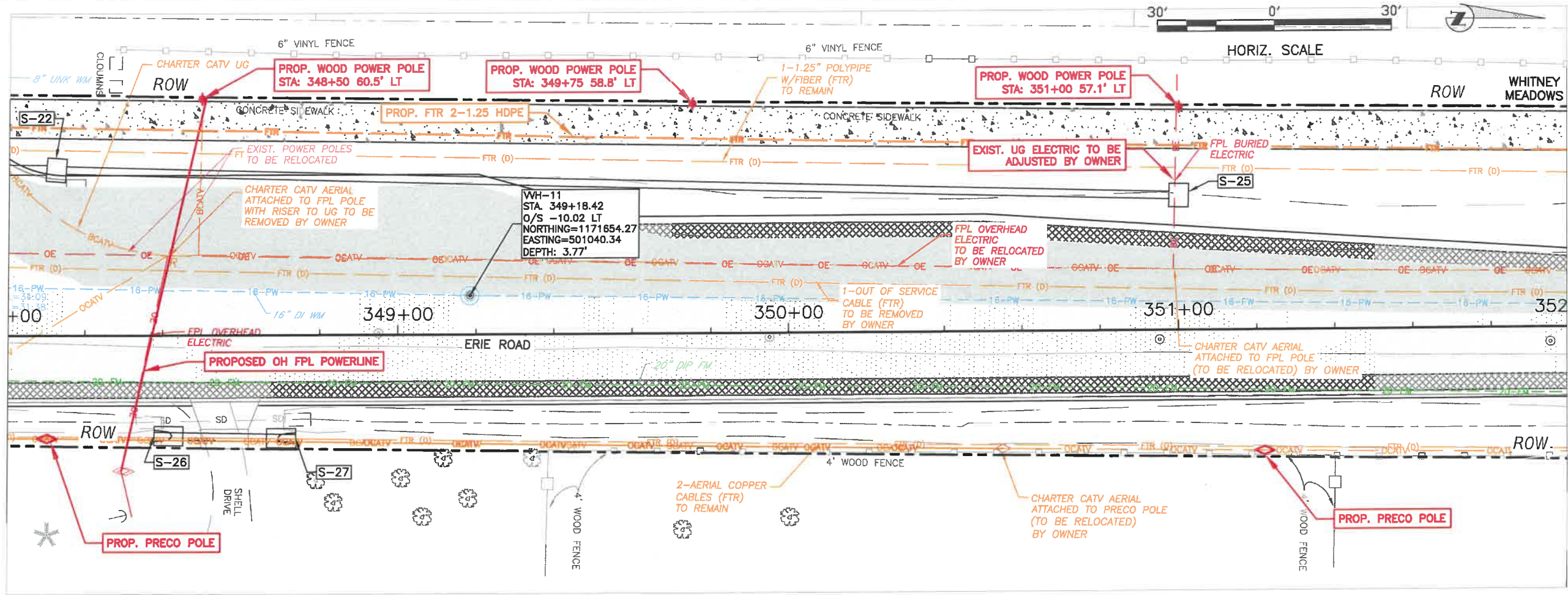
PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	1"=30'
SURVEYED	ZNS 2013
DESIGNED	GB 04/2015
DRAWN	KR 04/2015
CHECKED	YF 10/2015

Signature & Date  
**SHEET UAS 6**

H:\Highway Engineering\ROADS\ERIE Road\DWG\ERIEPHII-UAS.dwg, UAS, 1/11/2021 11:54 AM Ken Lohmer, 1:1, AUST (roll) sheet B (11.00 x 17.00 Inches)

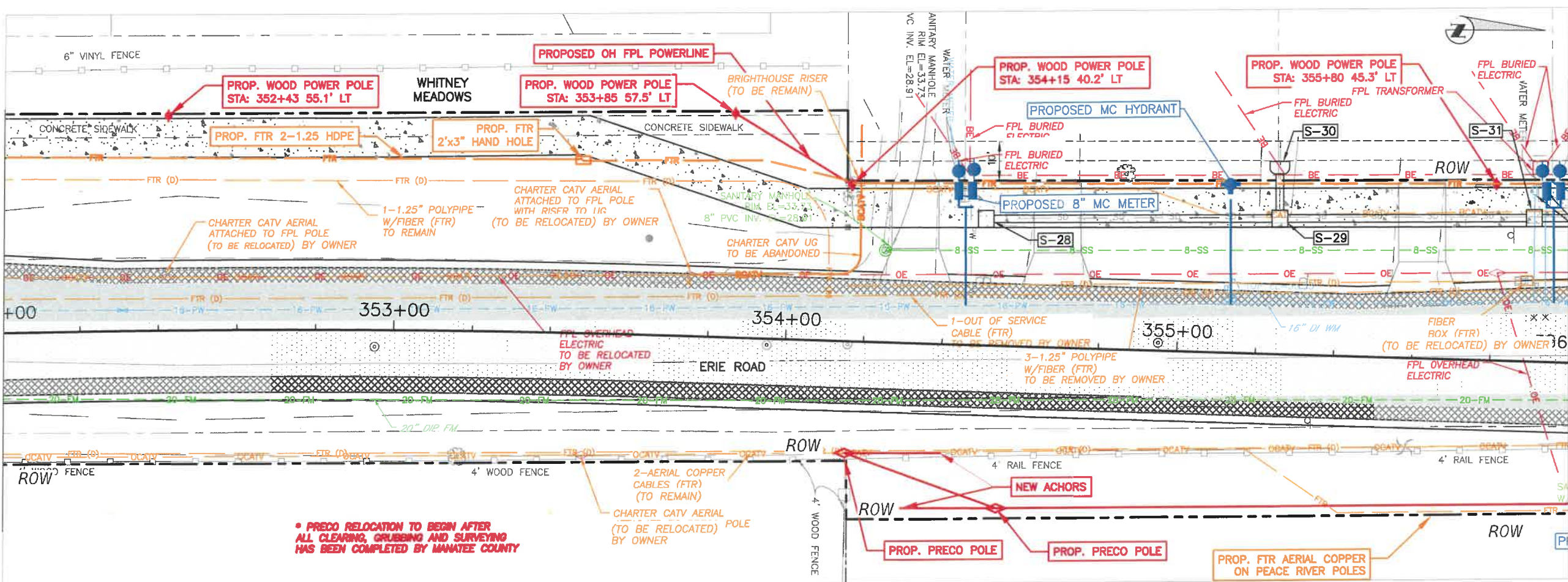
**ERIE ROAD - US 301 TO US 301  
SOUTH-NORTH PHASE II  
UTILITY ADJUSTMENT SHEETS**  
STA. 348+00 TO 356+00

MATCH LINE STA. 348+00



MATCH LINE STA. 352+00

MATCH LINE STA. 352+00



MATCH LINE STA. 356+00

• PRECO RELOCATION TO BEGIN AFTER ALL CLEARING, GRUBBING AND SURVEYING HAS BEEN COMPLETED BY MANATEE COUNTY

NO.	REVISION DESCRIPTION	BY	DATE

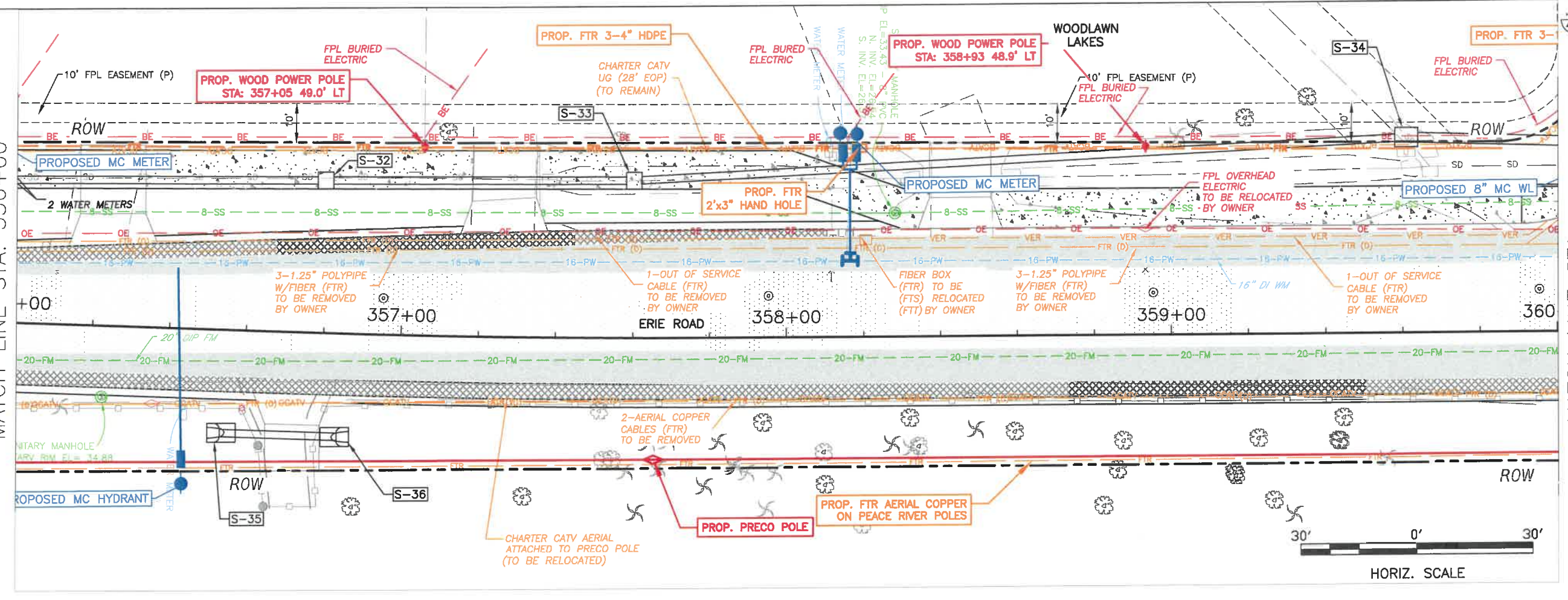
PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	1"=30'
SURVEYED	ZNS 2013
DESIGNED	GB 04/2015
DRAWN	KR 04/2015
CHECKED	YF 10/2015

Signature & Date  
**SHEET UAS 7**

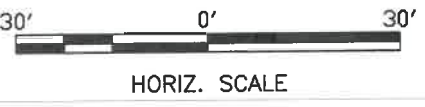


**ERIE ROAD - US 301 TO US 301 SOUTH-NORTH PHASE II  
UTILITY ADJUSTMENT SHEETS  
STA. 356+00 TO 364+00**

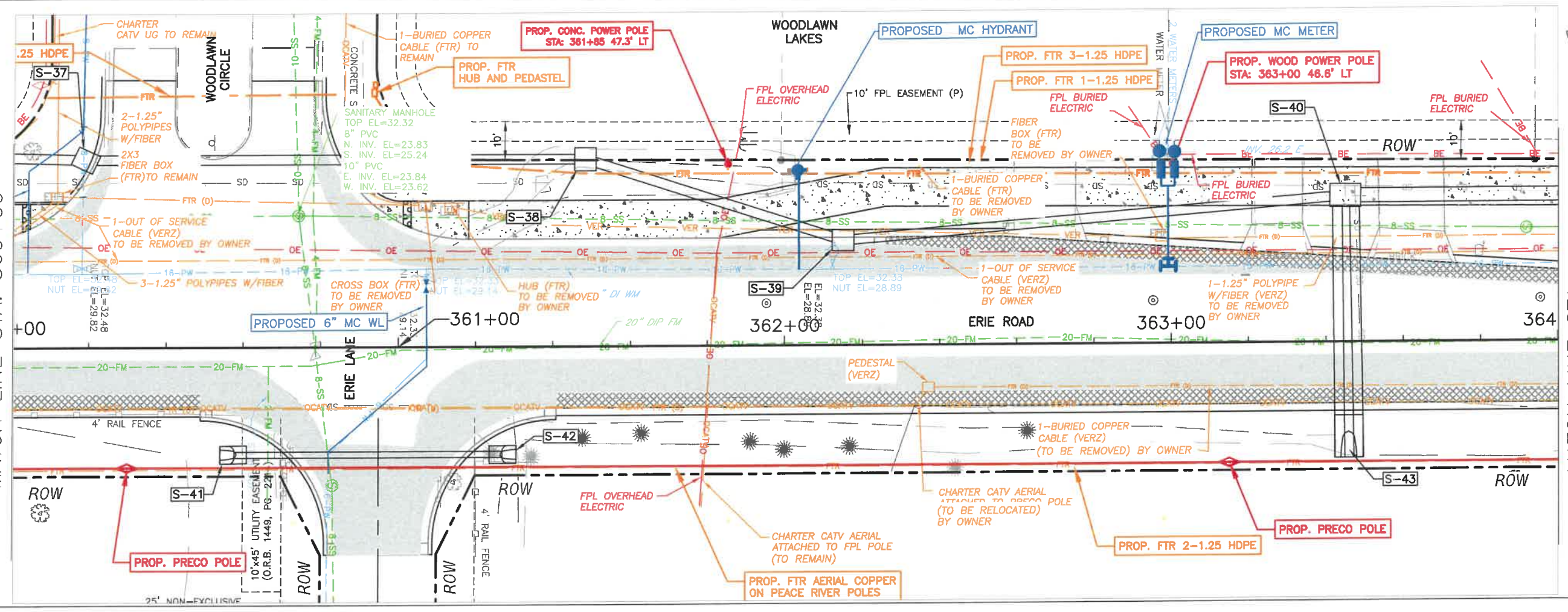
MATCH LINE STA. 356+00



MATCH LINE STA. 360+00



MATCH LINE STA. 360+00



MATCH LINE STA. 364+00

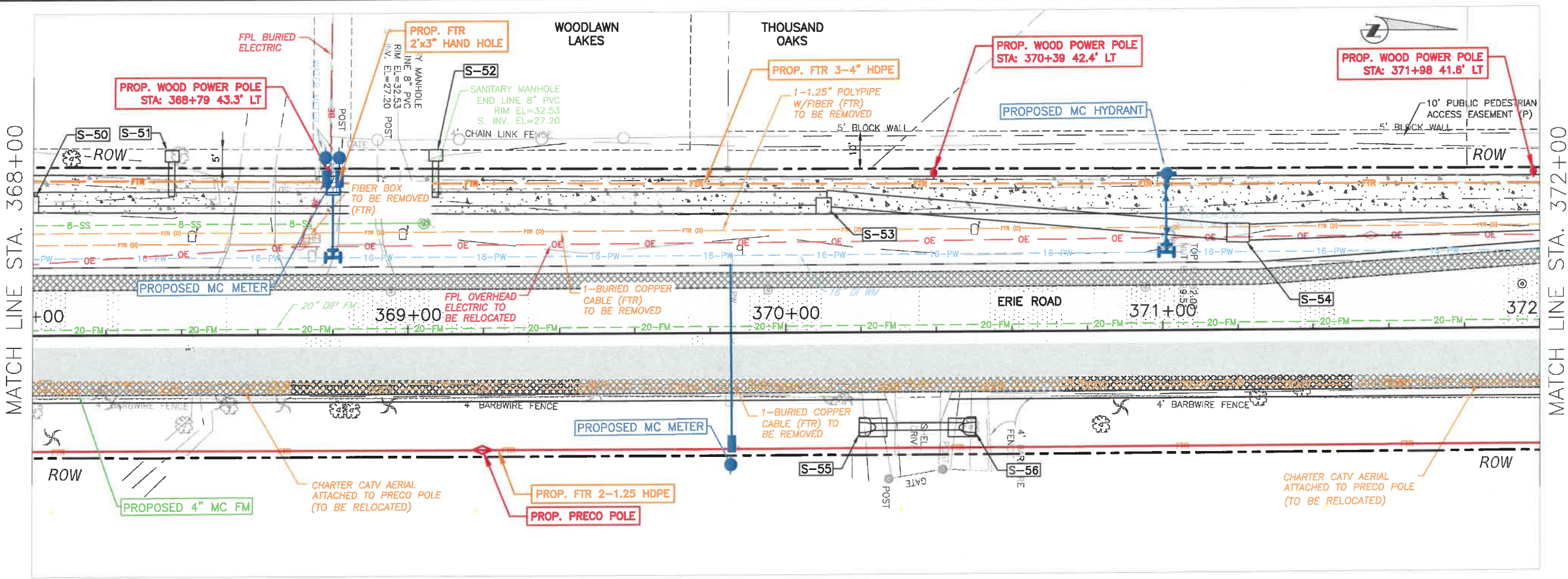
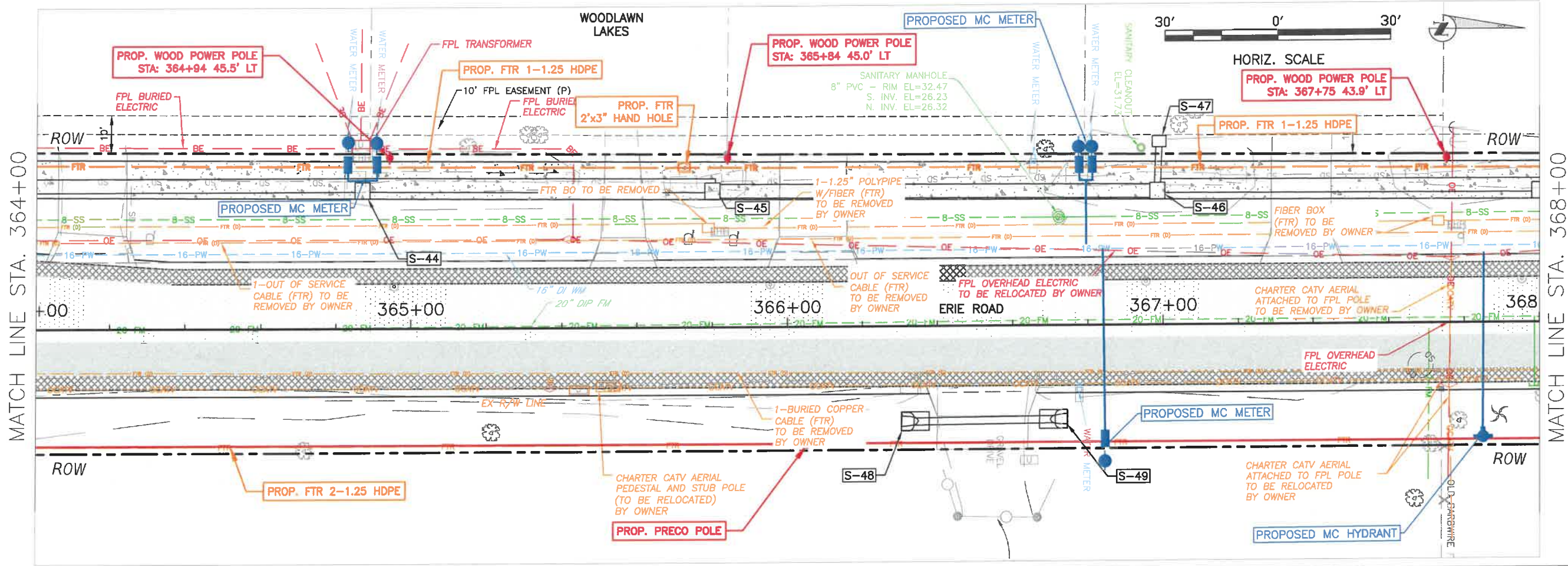
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	1"=30'
SURVEYED	ZNS 2013
DESIGNED	GB 04/2015
DRAWN	KR 04/2015
CHECKED	YF 10/2015

Signature & Date  
**SHEET UAS 8**

I:\Highway\Engineering\Road\UAS\UAS.dwg Phase II (DWG) Eriehill-UAS.dwg, UASB, 1/11/2021, 11:50 AM Ken Lehner, 1:1, WNS, full bleed B (11.00 x 17.00 inches)

**ERIE ROAD - US 301 TO US 301  
SOUTH-NORTH PHASE II  
UTILITY ADJUSTMENT SHEETS  
STA. 364+00 TO 372+00**



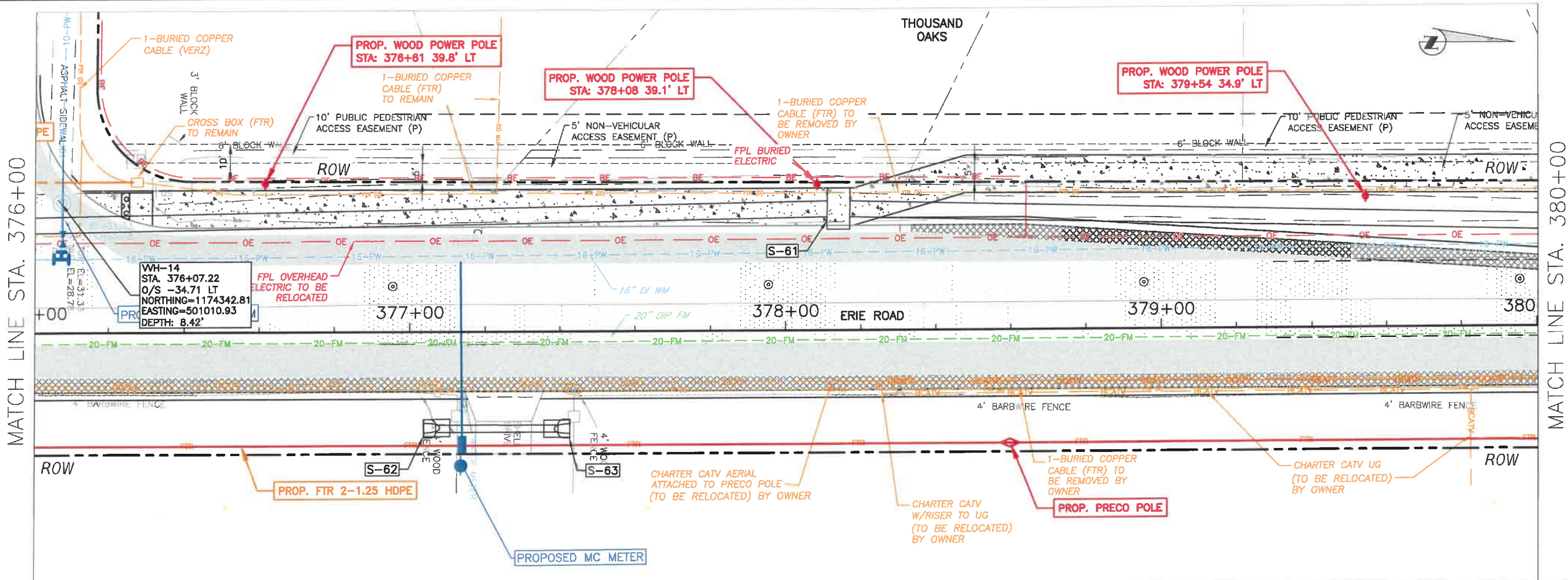
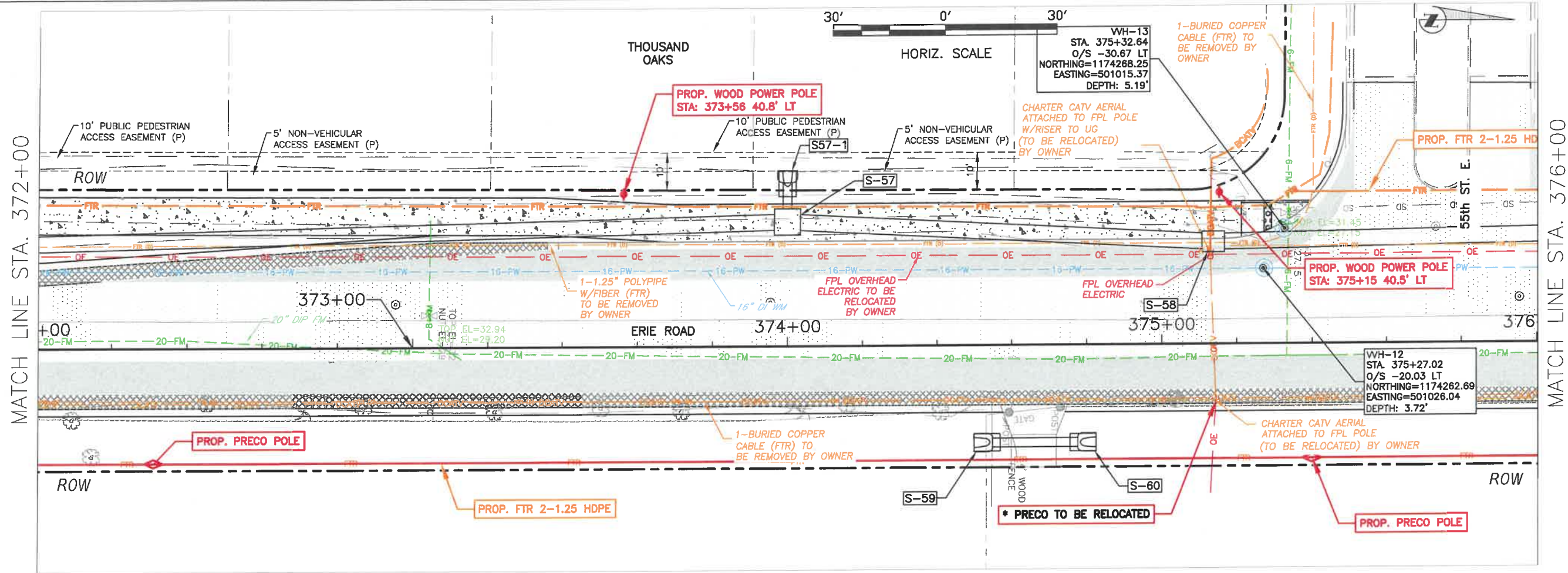
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	1"=30'
SURVEYED	ZNS 2013
DESIGNED	GB 04/2015
DRAWN	KR 04/2015
CHECKED	YF 10/2015

Signature & Date  
**SHEET UAS 9**

I:\Highway\_Engineering\Roads\ERIE Road\DWG\Phase II\DWG\_EriePHII-UAS.dwg, UAS, 1/11/2021 11:25 AM Ken Lanher, 1:1, ANSI Full bleed B (11.00 x 17.00) Incheat

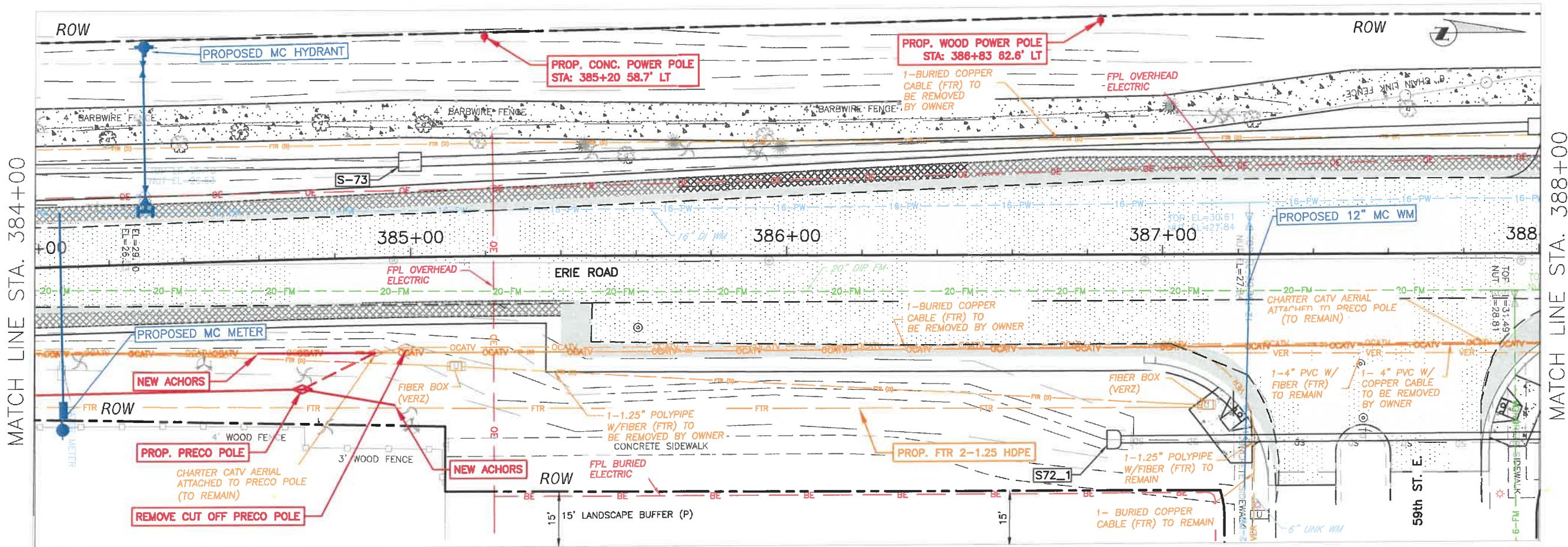
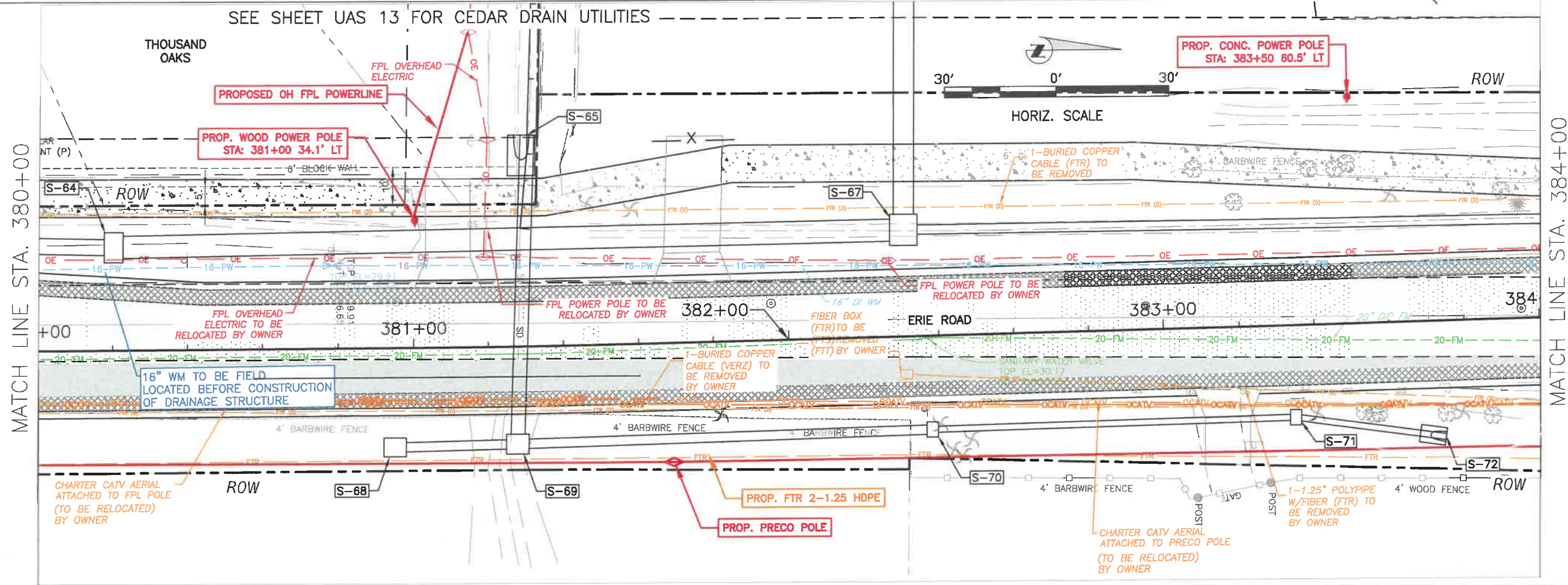
**ERIE ROAD - US 301 TO US 301  
SOUTH-NORTH PHASE II  
UTILITY ADJUSTMENT SHEETS  
STA. 372+00 TO 380+00**



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	1"=30'
SURVEYED	ZNS 2013
DESIGNED	GB 04/2015
DRAWN	KR 04/2015
CHECKED	YF 10/2015

**ERIE ROAD - US 301 TO US 301  
SOUTH-NORTH PHASE II  
UTILITY ADJUSTMENT SHEETS  
STA. 380+00 TO 388+00**



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	1"=30'
SURVEYED	ZNS 2013
DESIGNED	GB 04/2015
DRAWN	KR 04/2015
CHECKED	YF 10/2015

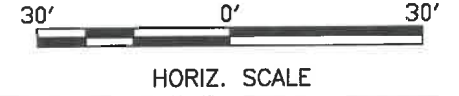
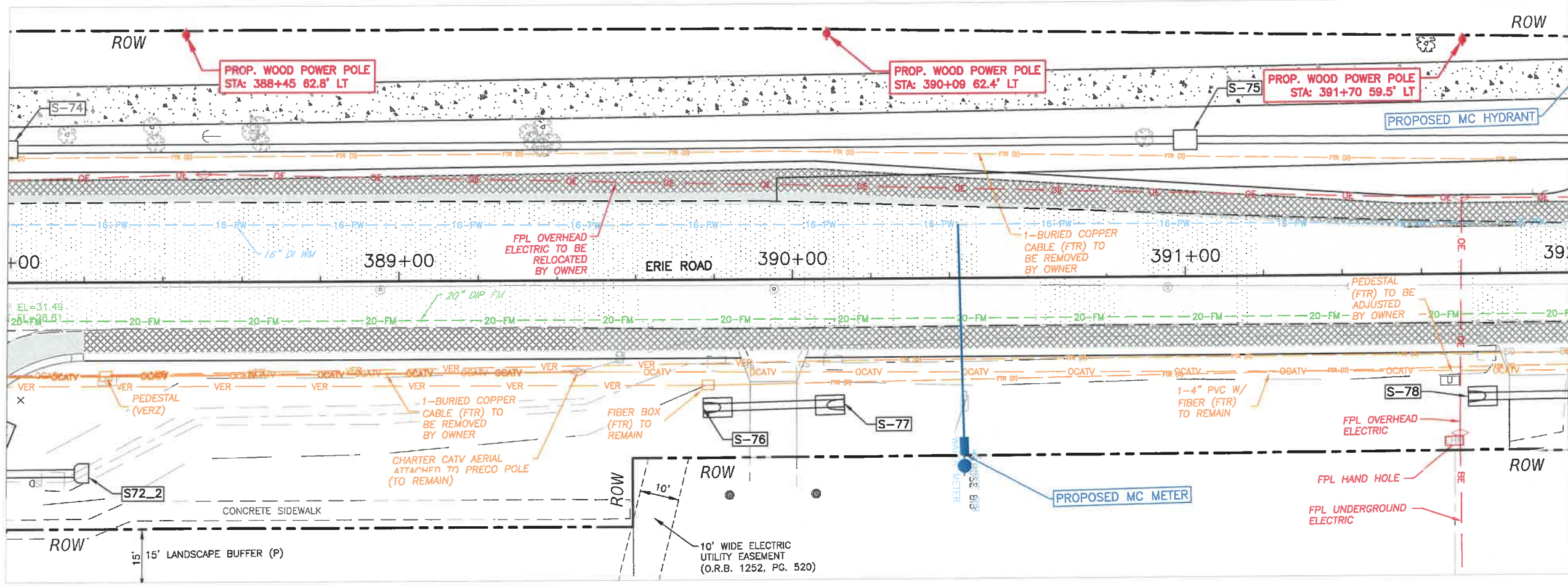
Signature & Date  
**SHEET UAS 11**

H:\Highway Engineering\ROADS\Erie Road\DWG\Phase II\DWG\UAS11 - UAS.dwg, UAS11 - 1/17/2021 11:36 AM Ken Lusher: LT, ANS full bleed B (11.00 x 17.00 inches)

**ERIE ROAD - US 301 TO US 301  
SOUTH-NORTH PHASE II  
UTILITY ADJUSTMENT SHEETS**  
STA. 388+00 TO 395+93.25

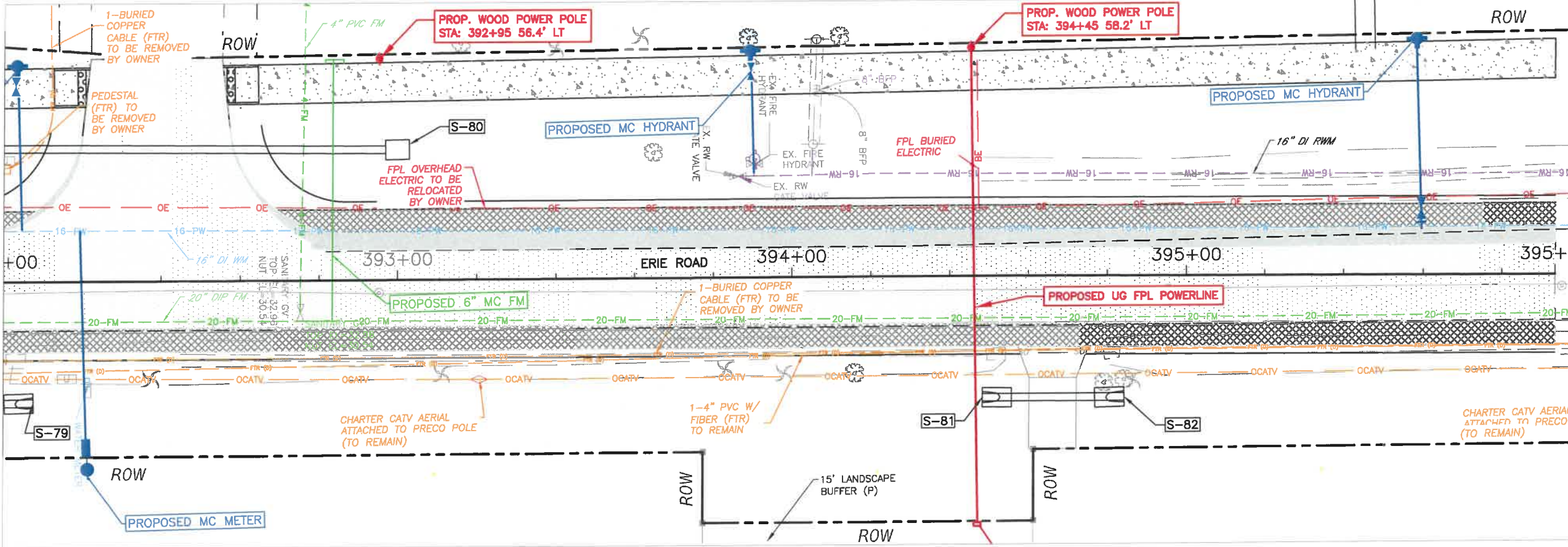
MATCH LINE STA. 388+00

MATCH LINE STA. 392+00



MATCH LINE STA. 392+00

MATCH LINE STA. 395+94



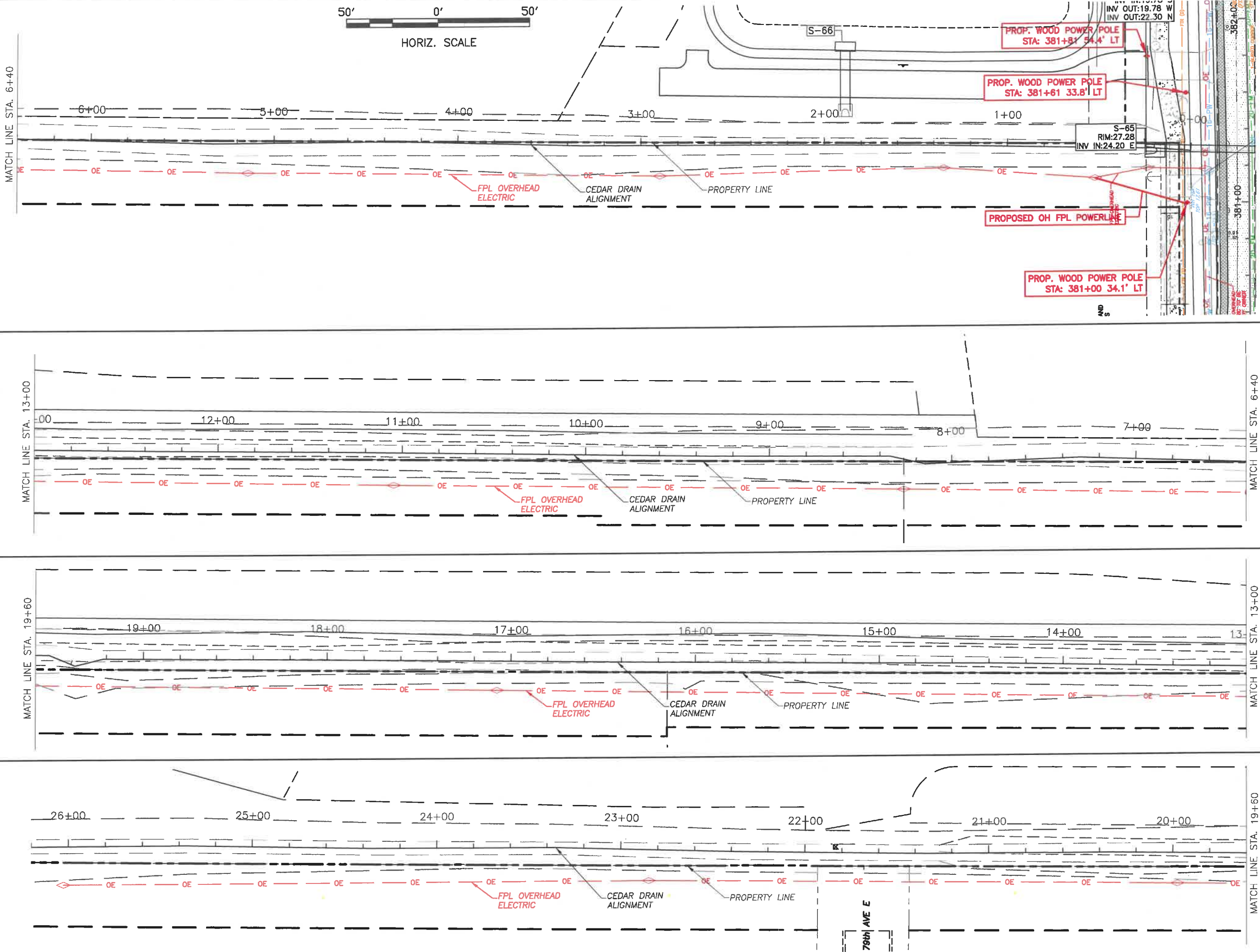
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	1"=30'
SURVEYED	ZNS 2013
DESIGNED	GB 04/2015
DRAWN	KR 04/2015
CHECKED	YF 10/2015

Signature & Date  
**SHEET UAS 12**

H:\Highway Engineering\3005\UAS ERIE Road\DWG\Phase II\DWG\UAS 12 - 1/17/2021 11:36 AM Ken Cooner, 1:1, 1055 (ul) Sheet B (11.00 x 17.00 inches)

**ERIE ROAD - US 301 TO US 301  
SOUTH-NORTH PHASE II  
UTILITY ADJUSTMENT SHEETS  
CEDAR DRAIN**



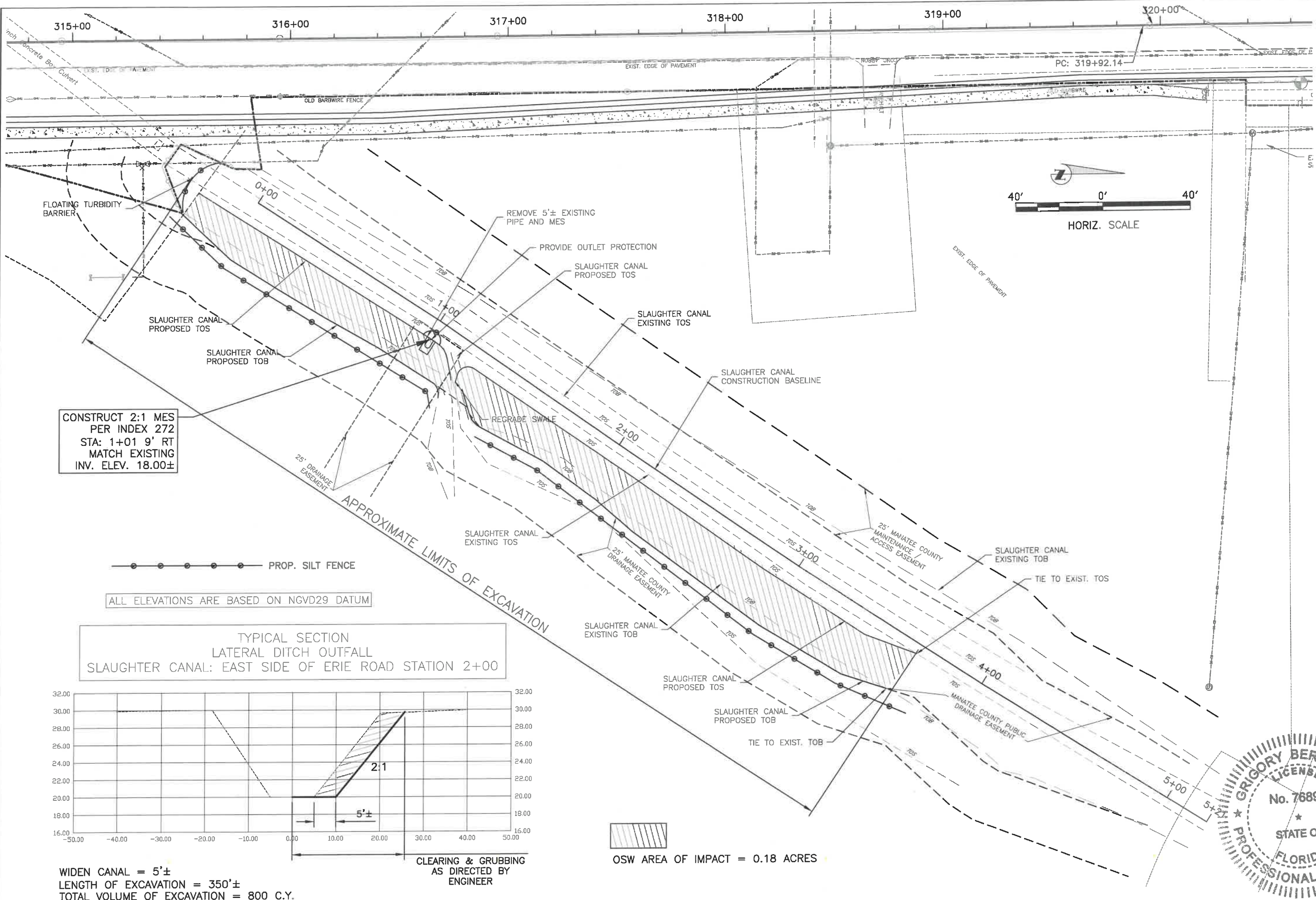
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	1"=50'
SURVEYED	ZNS 2013
DESIGNED	GB 04/2015
DRAWN	KR 04/2015
CHECKED	YF 10/2015

W:\s\04\manateecounty\04\01\Engineering\Share\Highway\_Engineering\ROADS\UAS\UAS\_South-North\_Phase II\DWG\UAS\_South-North\_Phase II\_Cedar\_Drain.dwg  
 11/27/2015 1:27:15 PM  
 User: zns  
 Plot Date: 11/27/2015 1:27:15 PM  
 Plot Scale: 1:1.00 x 17.00 Inches

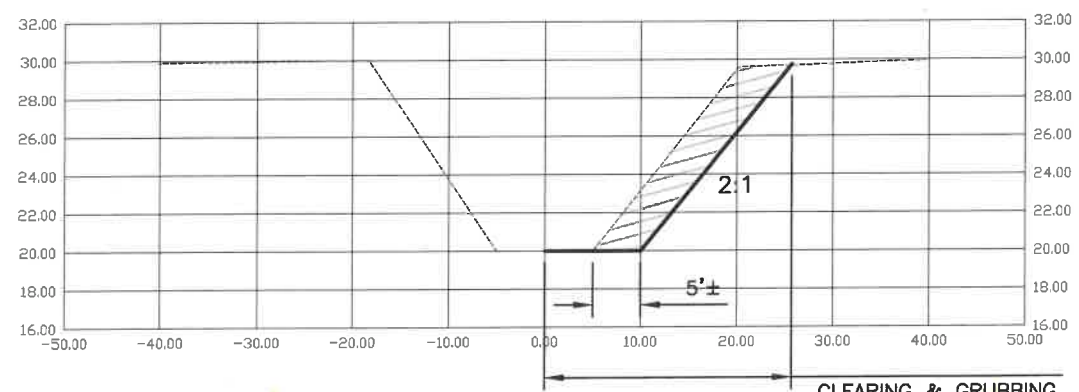
**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
PLAN AND TYP. SECTION STA. 0+00 TO 4+00**



CONSTRUCT 2:1 MES  
PER INDEX 272  
STA: 1+01 9' RT  
MATCH EXISTING  
INV. ELEV. 18.00±

ALL ELEVATIONS ARE BASED ON NGVD29 DATUM

TYPICAL SECTION  
LATERAL DITCH OUTFALL  
SLAUGHTER CANAL: EAST SIDE OF ERIE ROAD STATION 2+00

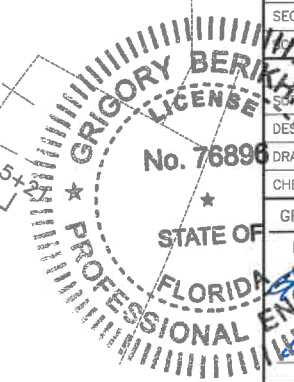


WIDEN CANAL = 5'±  
LENGTH OF EXCAVATION = 350'±  
TOTAL VOLUME OF EXCAVATION = 800 C.Y.

CLEARING & GRUBBING  
AS DIRECTED BY  
ENGINEER

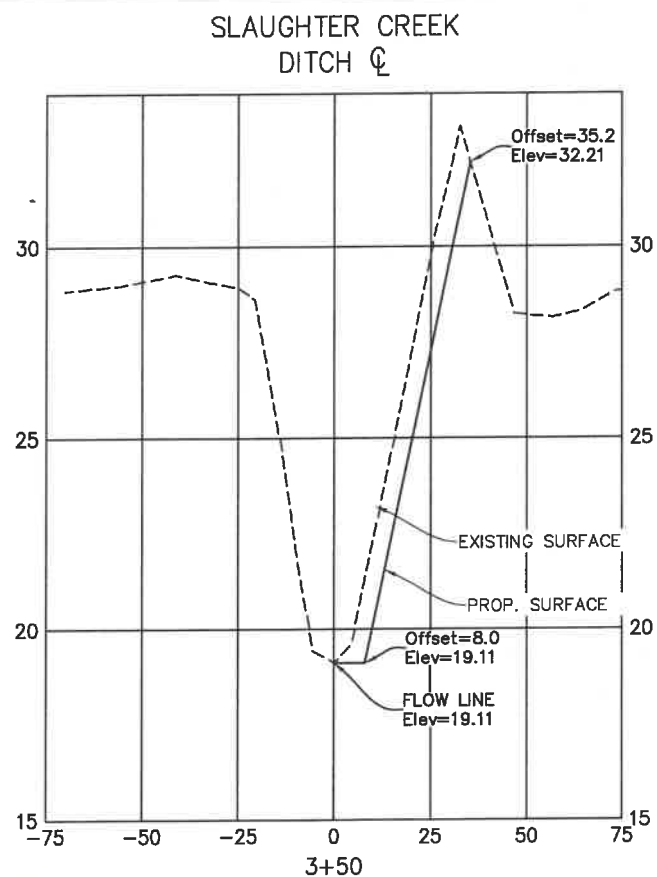
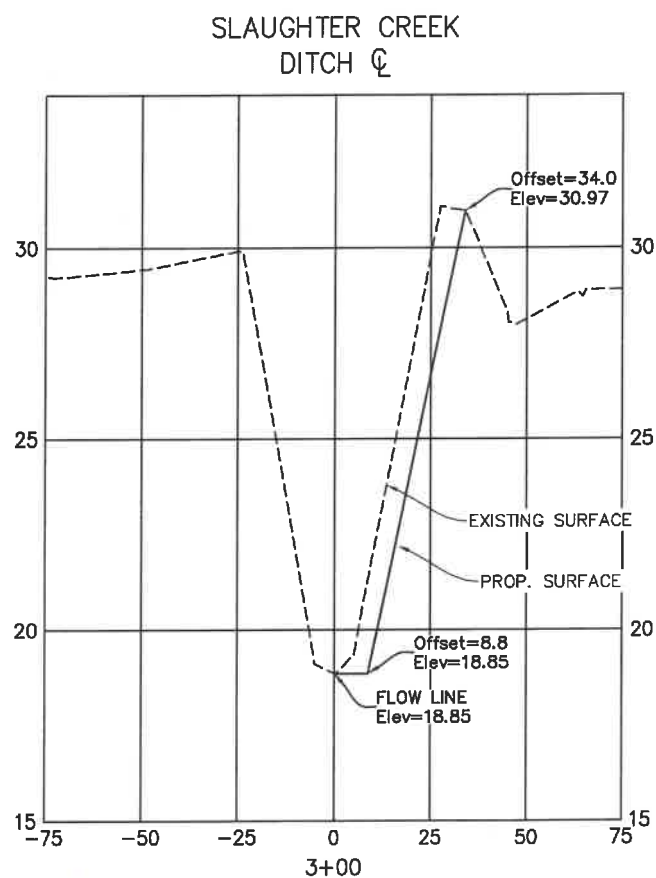
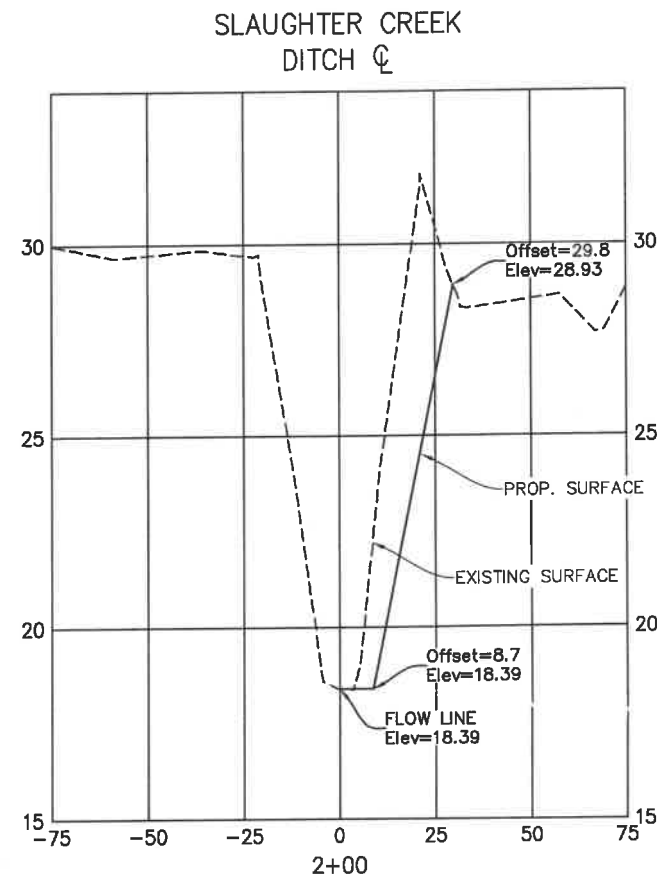
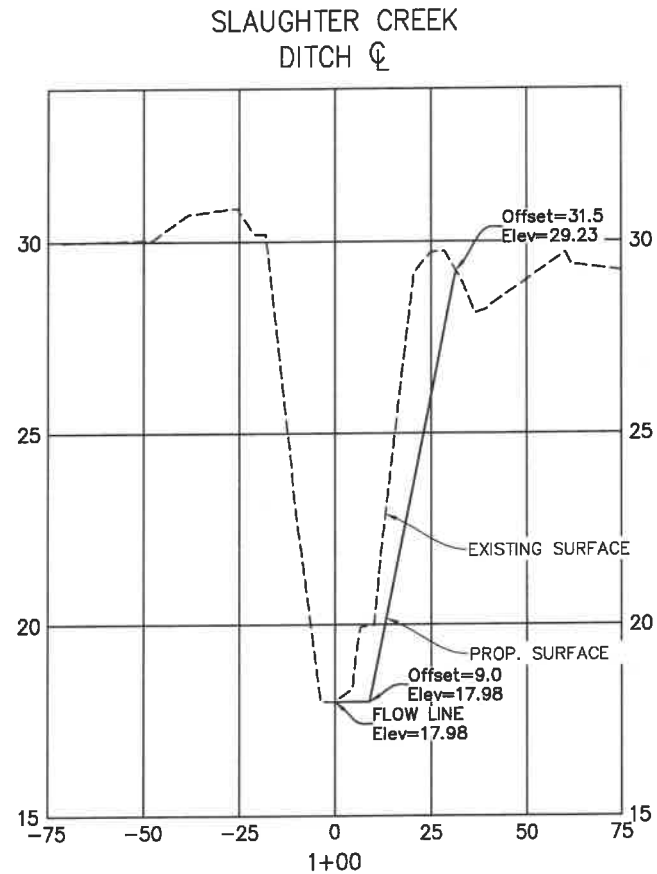
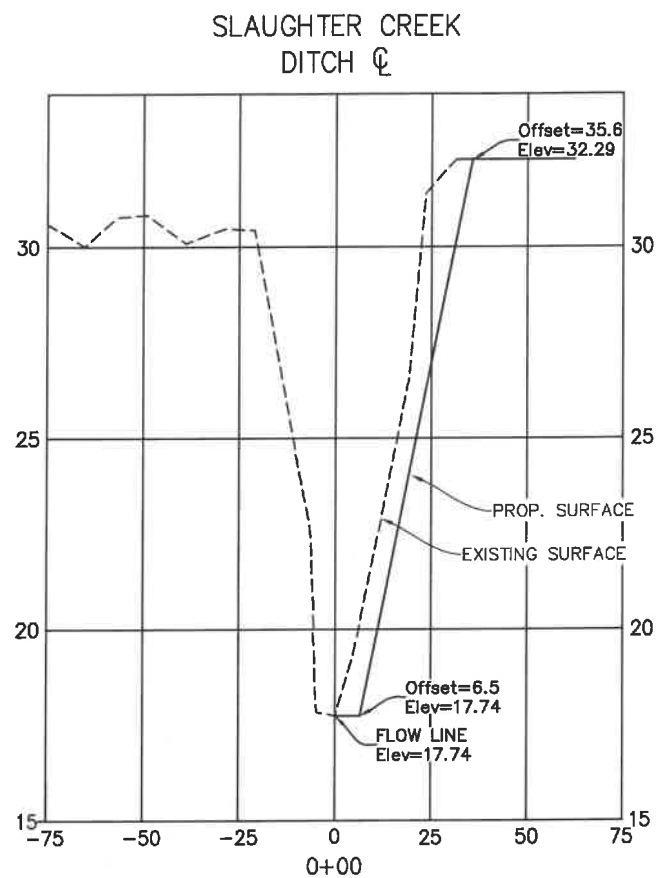


OSW AREA OF IMPACT = 0.18 ACRES



NO.	REVISION DESCRIPTION	BY	DATE
PROJECT #	307-6082860		
SURVEY #	00-43133		
SEC./TWN./RGE	2,35/33,34S/1BE		
DATE	AS NOTED		
BY	DATE	BY	DATE
DESIGNED	ZNS	JP	07/2018
DRAWN	JP	JP	07/2018
CHECKED	JP	JP	07/2018
GRIGORY BERIKMAN, P.E.			
FLORIDA P.E. # 76896			
Signature & Date			
11/11/2021			

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
ERIEPHII-X-SECT\_SC-2 - X SECTIONS**



NOTE: 11"x17" = HORIZONTAL SCALE: 1"=50';  
VERTICAL SCALE: 1"=5'  
22"x34" = HORIZONTAL SCALE: 1"=25';  
VERTICAL SCALE: 1"=2.5'

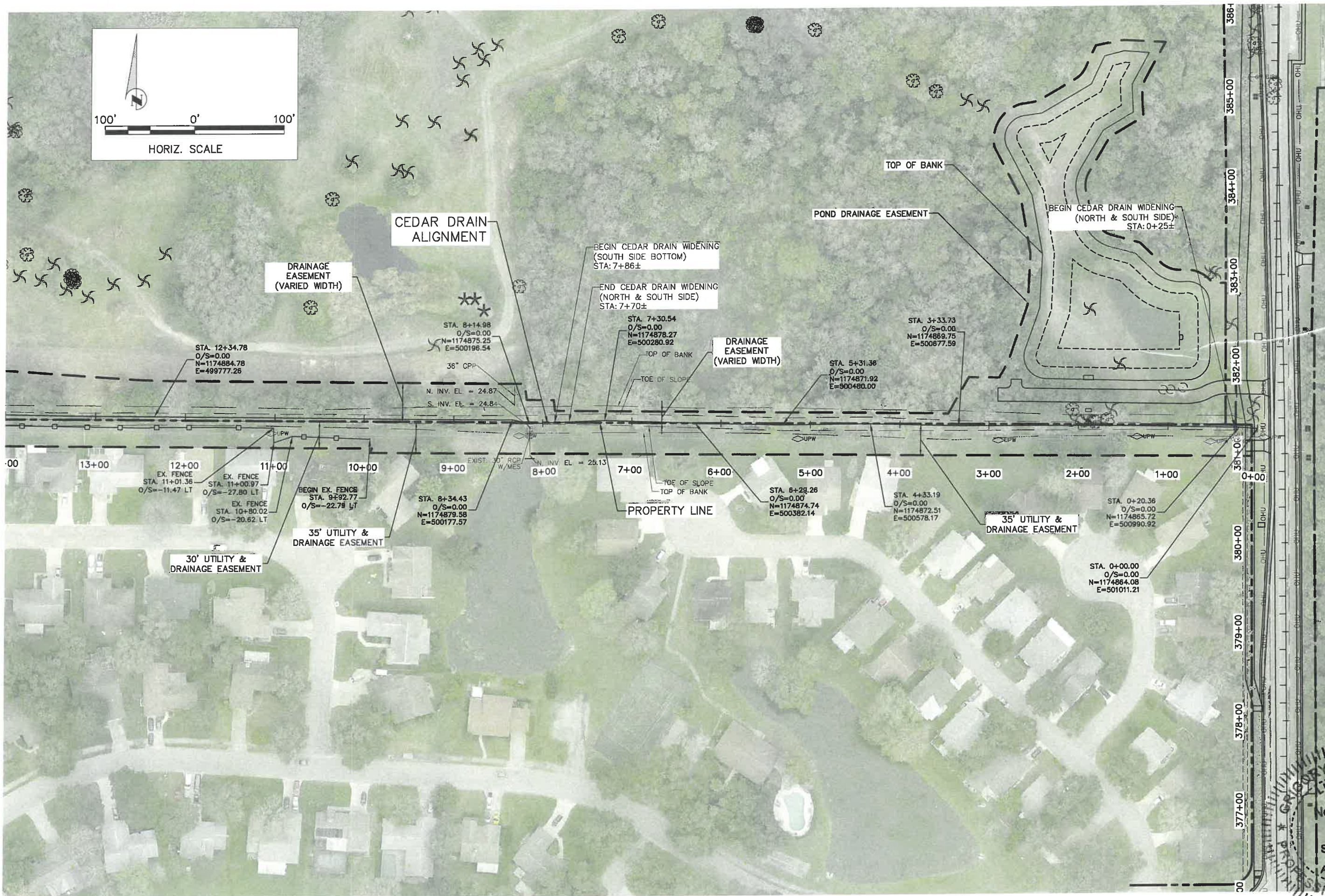
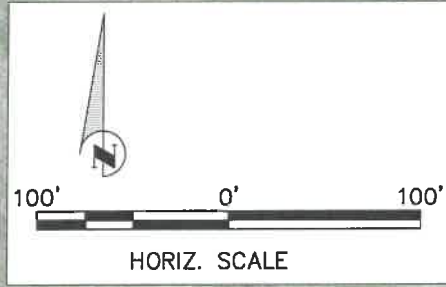
**GRIGORY BERKINMAN**  
Professional Engineer  
No. 76896  
FLORIDA P.E. 76896  
STATE OF FLORIDA  
DATE: 07/2018

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,36/33,345/18E
SCALE	AS NOTED
BY	DATE
SURVEY	07/2018
DESIGNED	07/2018
CHECKED	07/2018
DATE	07/2018
FLORIDA P.E.	76896
DATE	07/2018
SHEET	SC2

H:\Highway Engineering\ROADS\Eric\_Road\_DWG\Phase II\DWG\EriePHII-X-SECT\_SC-2.dwg X SECTIONS, 1/11/2021, 9:01 AM Ken Lechner, 1:1, ANSI full bleed B (11.00 x 17.00 inches)





**ERIE ROAD - US301 TO US 301**  
**SOUTH-NORTH PHASE II**  
**BUFFALO CANAL (CEDAR DRAIN)**  
**PLAN STA 0+00-14+00**

NO.	REVISION DESCRIPTION	DATE
1	PER SWFWD COMMENTS	07/24/18

PROJECT #	307-6082861
SURVEY #	000
SEC./TWN./RGE	00/00S/00E
SCALE	1"=200'

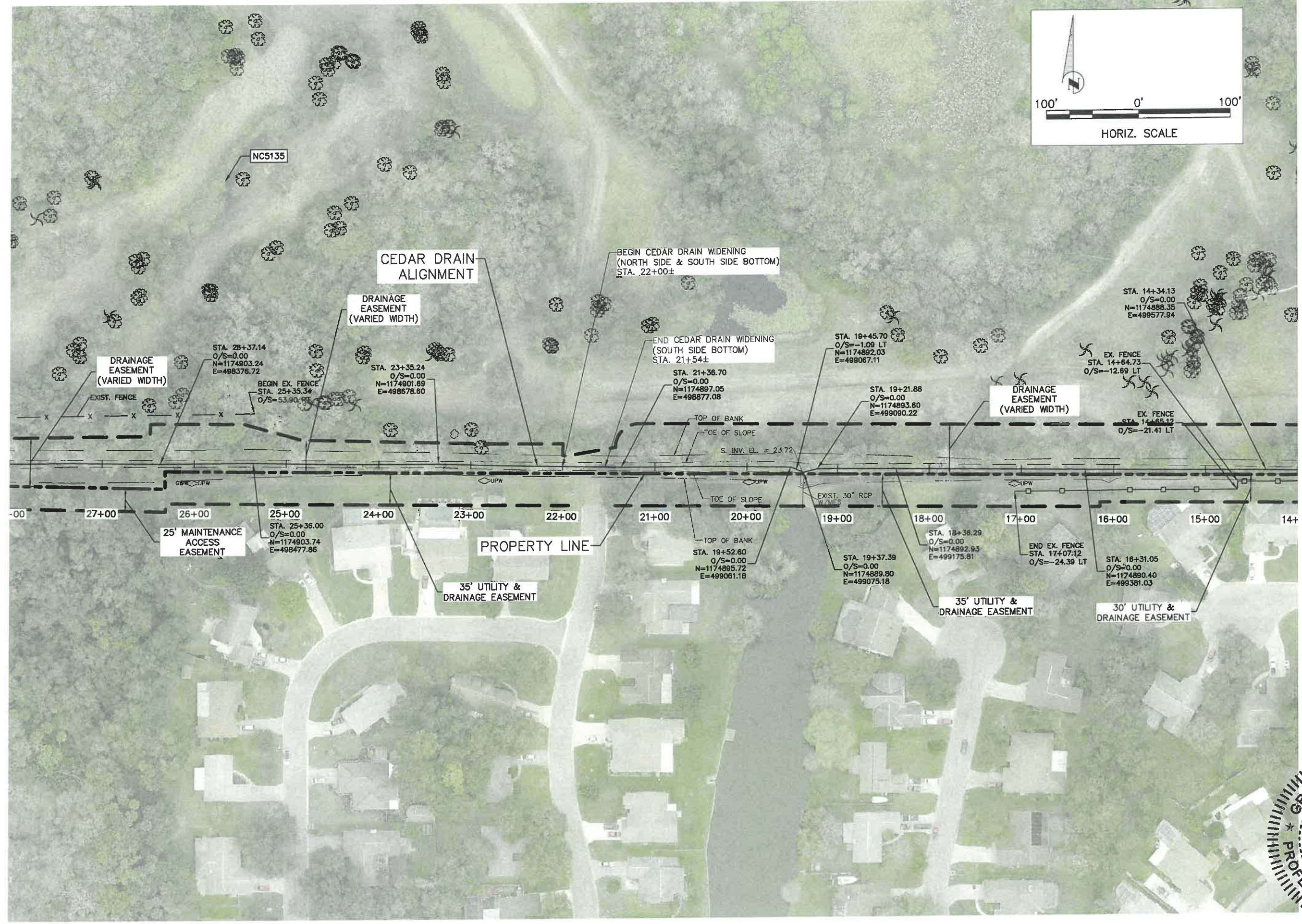
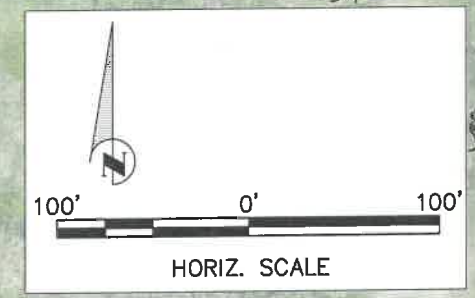
  

BY	DATE
DESIGNED	00/00/00
CHECKED	02/12/15
DRAWN	02/13/15
IN CHARGE	05/06/15

GRIGORY BERIKMAN  
FLORIDA PROFESSIONAL ENGINEER  
No. 76896  
STATE OF FLORIDA  
Signature & Date

\\ussc.sdm.manateecounty.org\Users\KPH\OneDrive\Engineering\Share\Highway Engineering\Roads\Phase II\US301\Phase II\US301\Plan\Drawings\CD1\_Cedar\_Drain\_Plan.dwg, 01/24/2021 12:21 PM, Ken Loether, 1:1, ANSI full bleed B (11.00 x 17.00 inches)



**ERIE ROAD - US301 TO US 301  
SOUTH-NORTH PHASE II  
BUFFALO CANAL (CEDAR DRAIN)  
PLAN STA. 14+00-28+00**

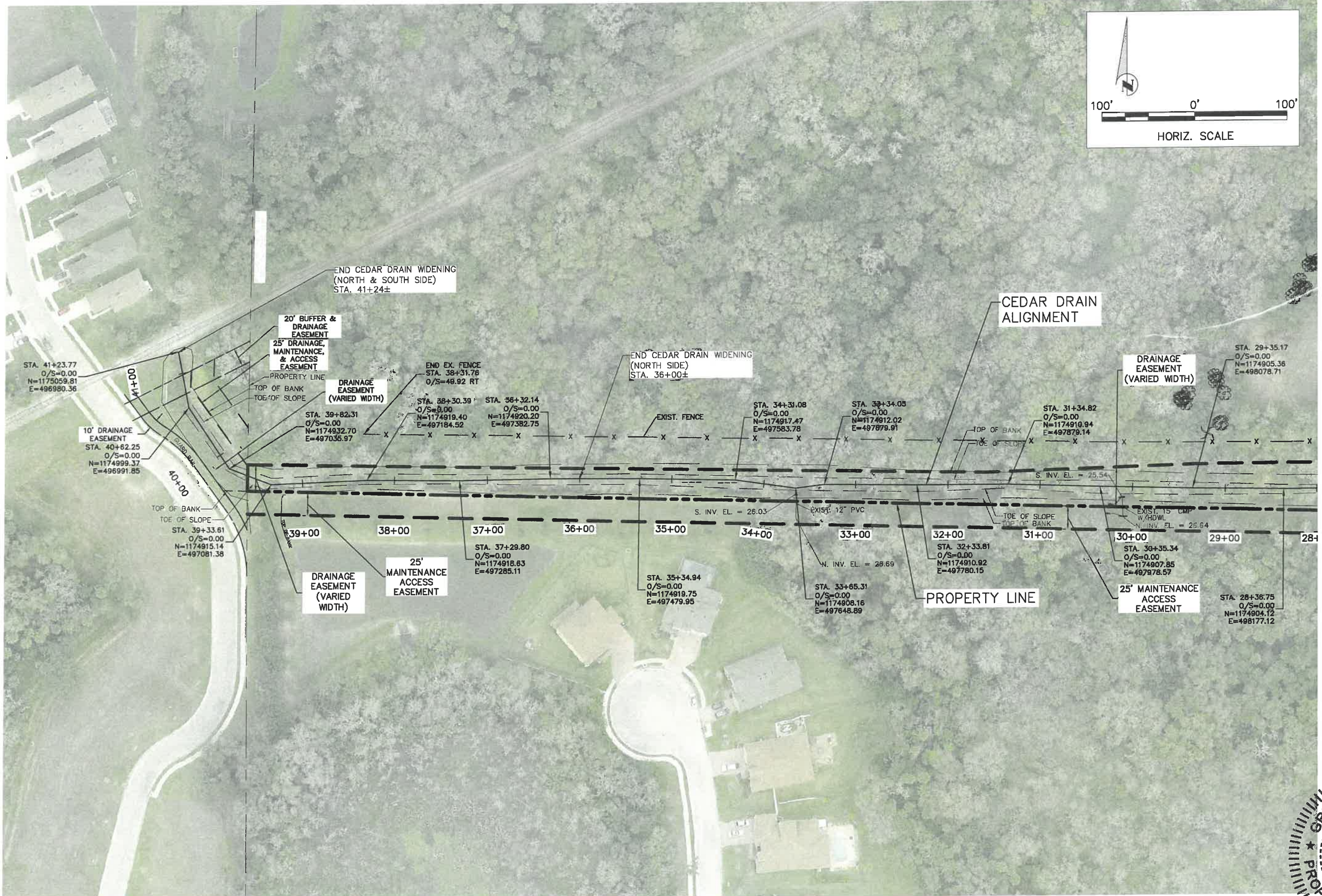
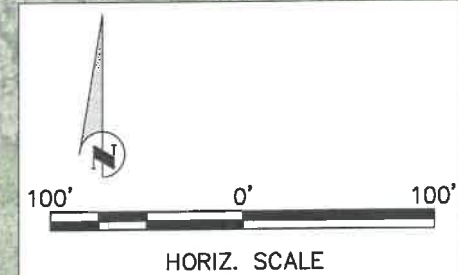
NO.	REVISION DESCRIPTION	DATE
1	PER SWFWMD COMMENTS	07/24/18

PROJECT #	307-6082861
SURVEY #	000
SEC./TWN./RGE	00/00S/00E
SCALE	1"=100'

BY	DATE
DESIGNED	00/00/00
CHECKED	02/12/15
DRAWN	02/13/15
CHECKED	05/06/15
BY	
DATE	

**GRIGORY BERKHOFF**  
LICENSED PROFESSIONAL ENGINEER  
No. 76896  
STATE OF FLORIDA  
Signature & Date  
7/20/21

I:\Data\mymacdata\erf\Via PWD\_Engineering\_Shore\Highway\_Engineering\ROADS\_Erie\_Road\US301\_Phase II\DWG\erf\erf\_PWD\_Cedar\_Drain\_Plan.dwg CD2 Cedar Dr Plan\_PWD\_1/4/2021 12:21 PM Ken Loether, E.I., ANS full bleed B (11.00 x 17.00 inches)



**ERIE ROAD - US301 TO US 301  
SOUTH-NORTH PHASE II  
BUFFALO CANAL (CEDAR DRAIN)  
PLAN STA. 28+00-41+00**

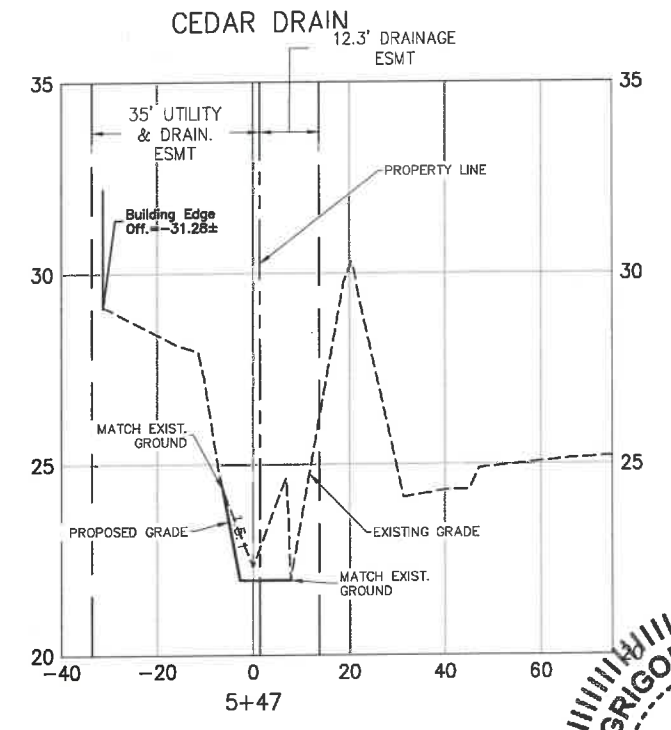
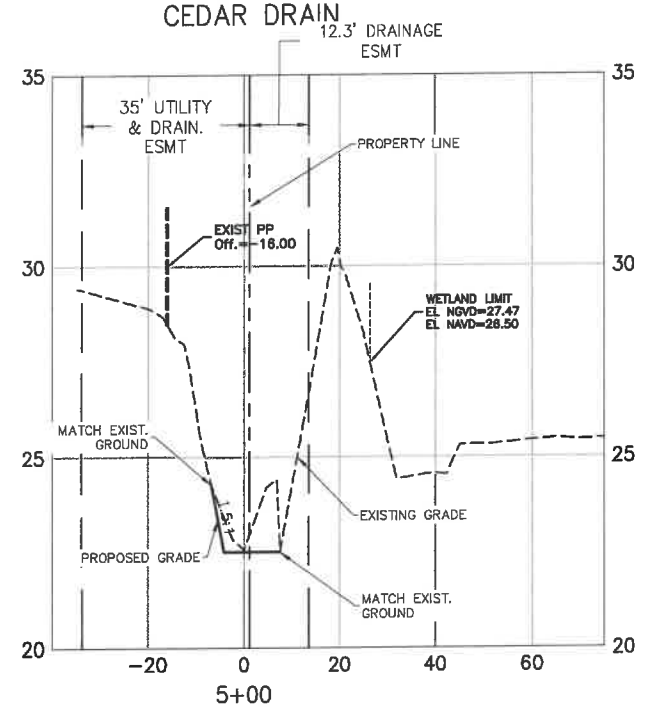
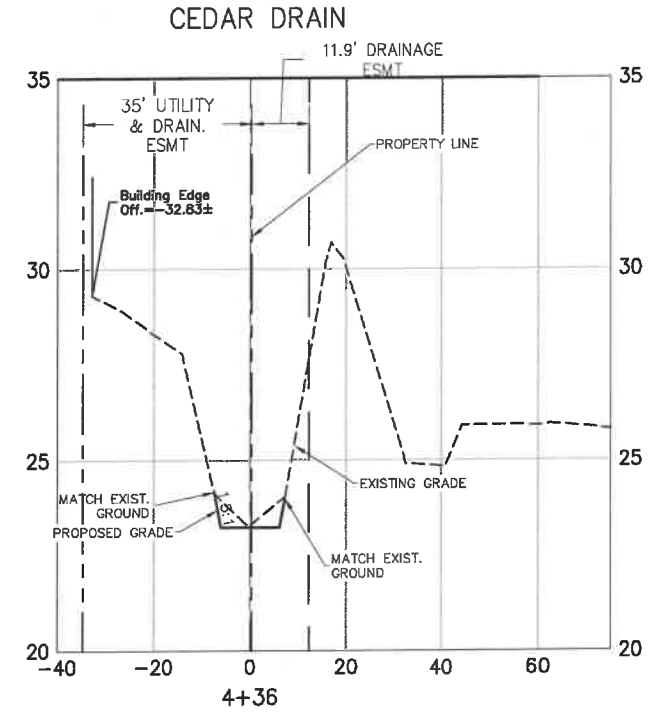
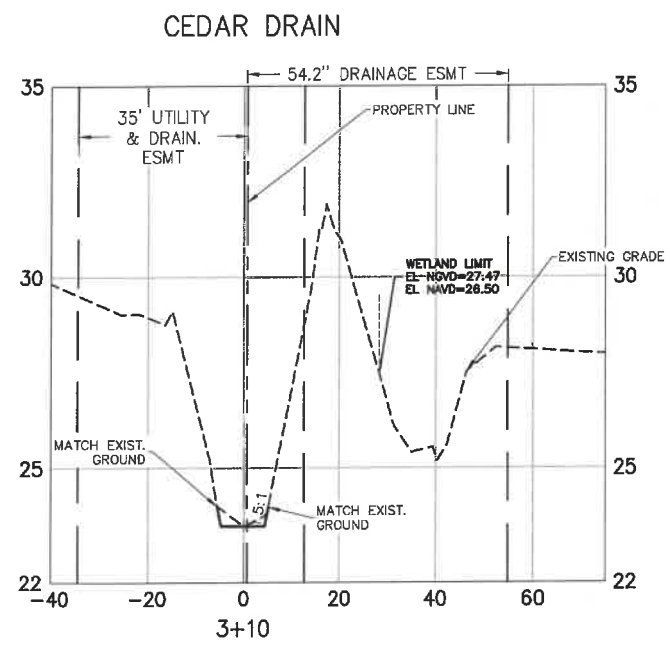
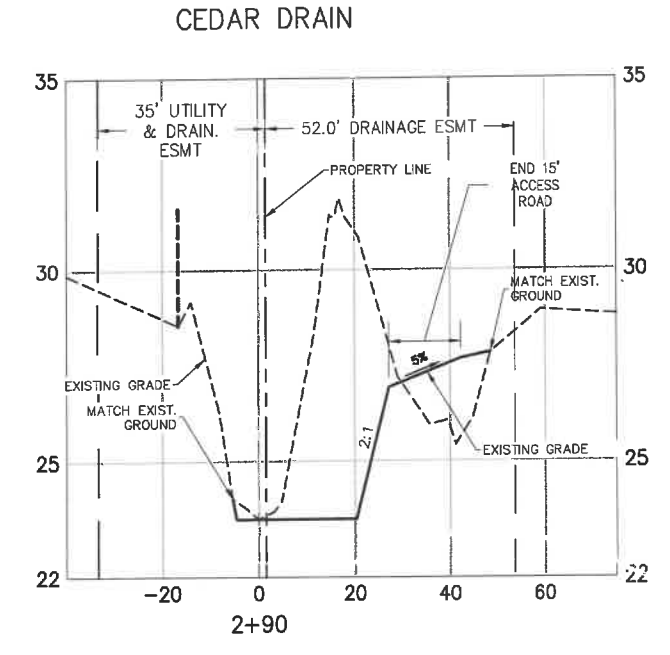
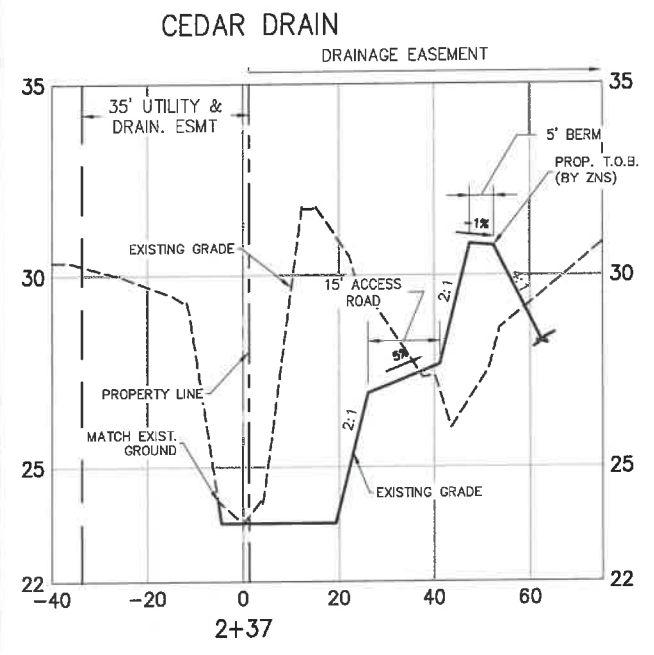
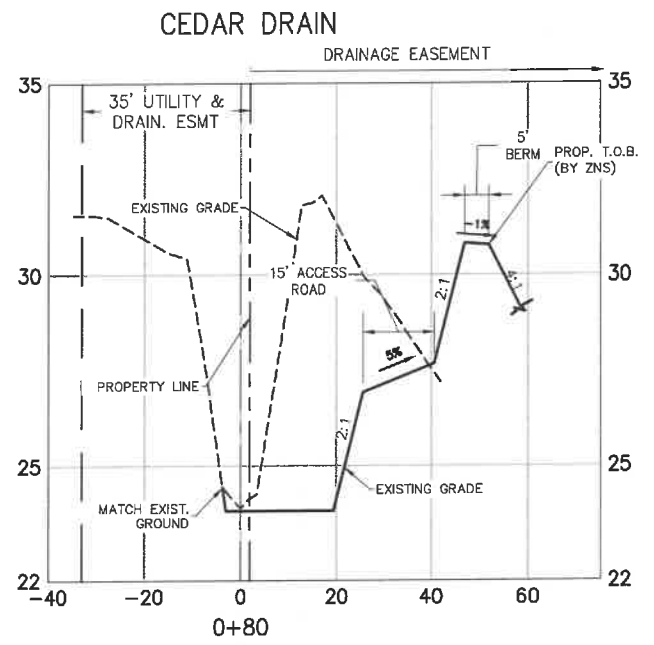
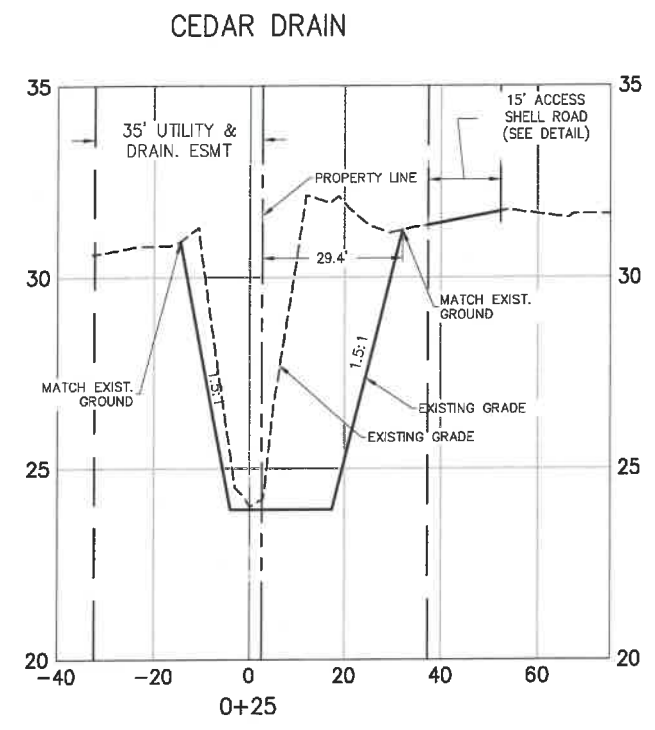
NO.	REVISION DESCRIPTION	BY	DATE
1	PER SWFWD COMMENTS	KHL	07/24/18

PROJECT #	307-6082861
SURVEY #	000
SEC./TWN./RGE	00/00S/00E
SCALE	1"=100'

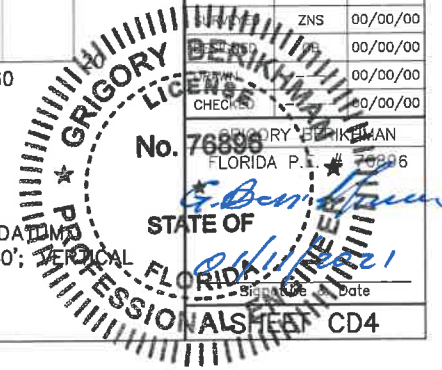
**GRIGORY BERIKHMAN**  
Professional Engineer  
No. 76896  
FLORIDA P.E. # 76896  
DATE: 05/06/15

\\bce.ed.manateecounty.gov\Users\Ker\Projects\174\2021\15:22 PM Ker\Layout\1:1 ANSI full sheet B (11.00 x 17.00 inches)

**ERIE ROAD - US301 TO US 301**  
**SOUTH-NORTH PHASE II**  
**BUFFALO CANAL (CEDAR DRAIN)**  
**CROSS SECTIONS**



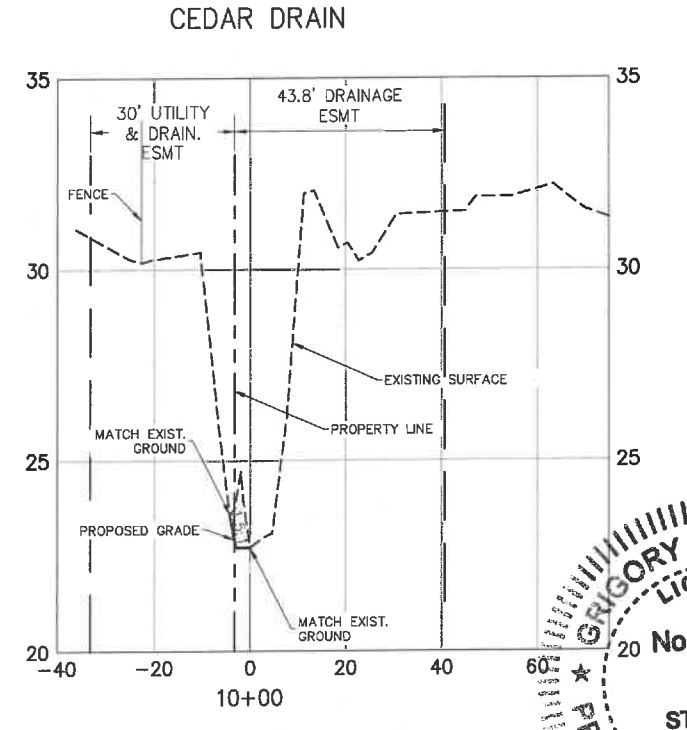
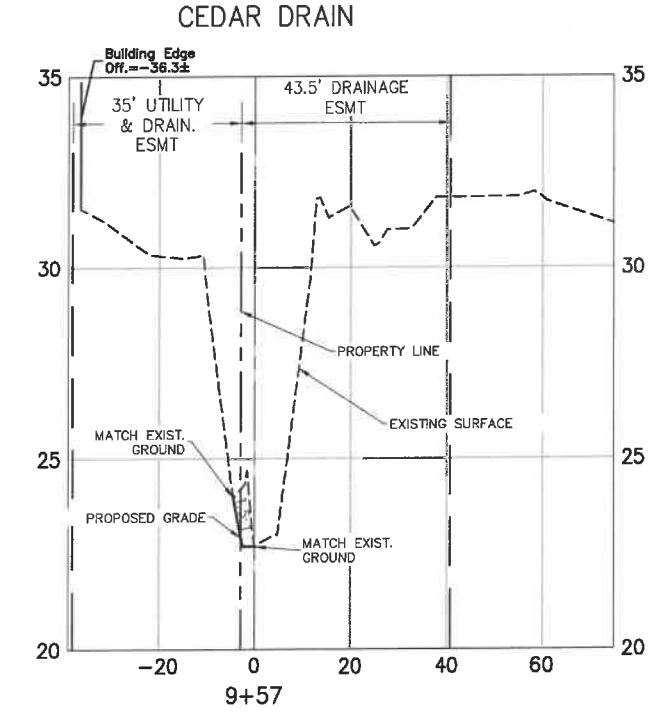
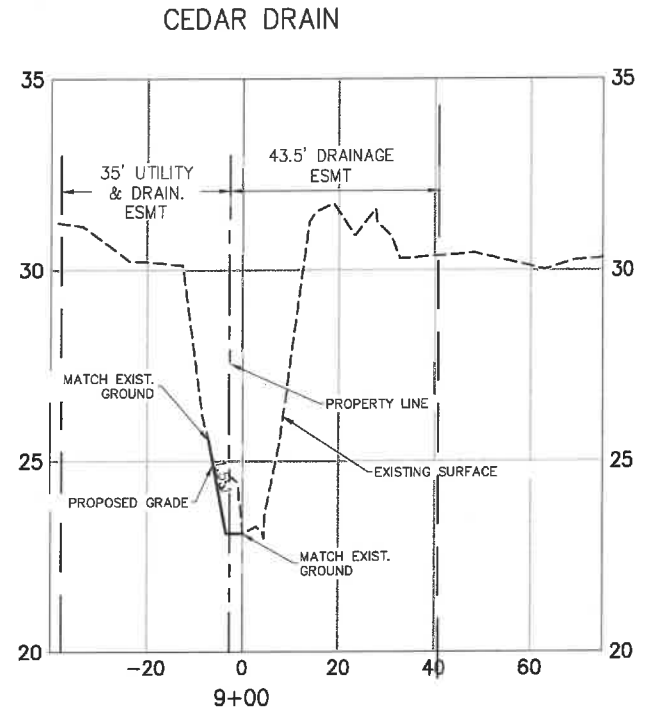
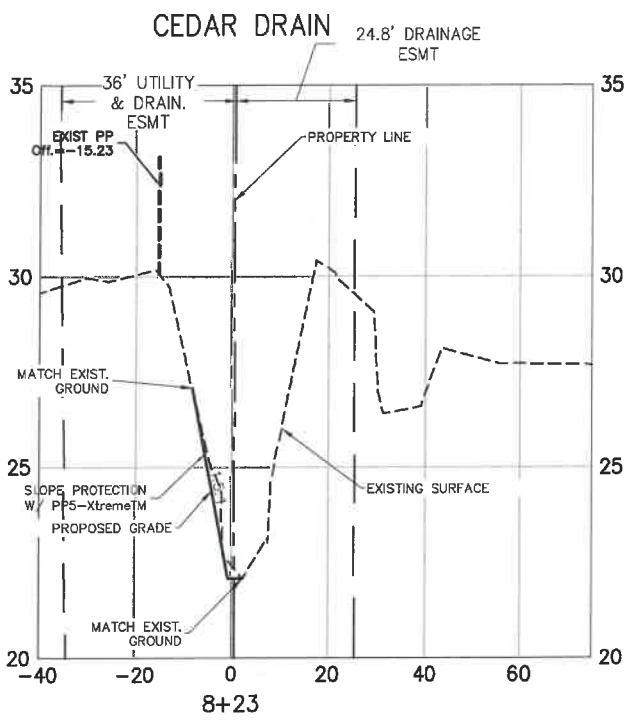
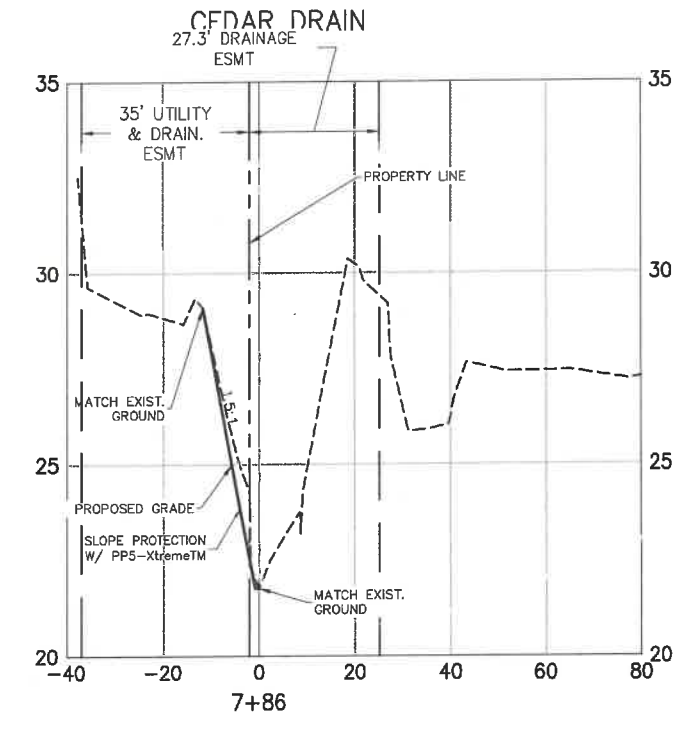
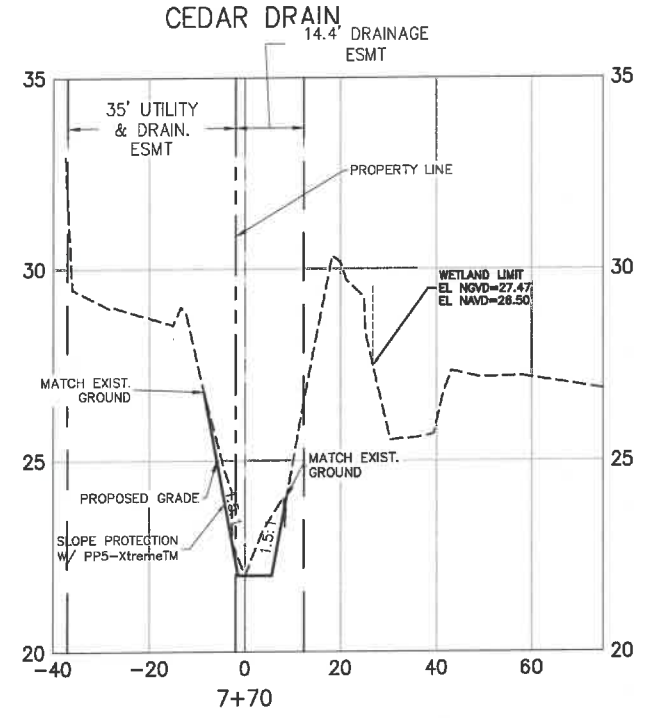
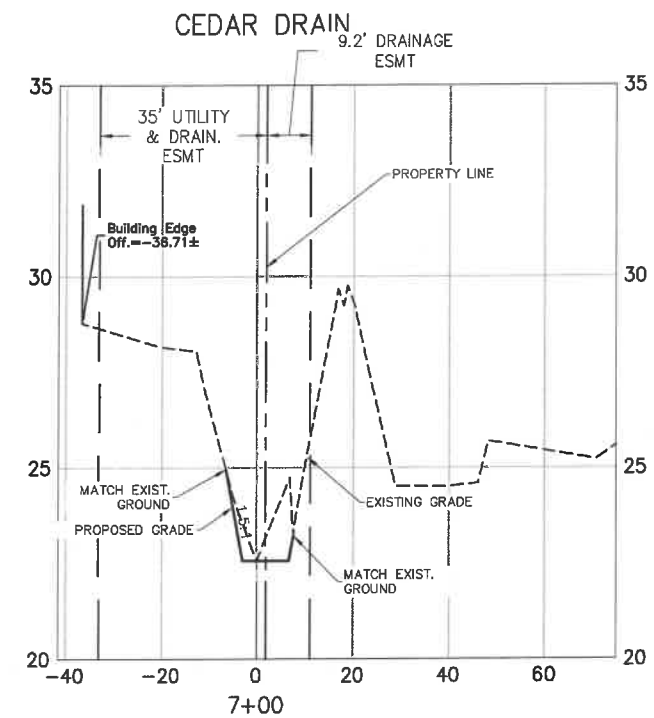
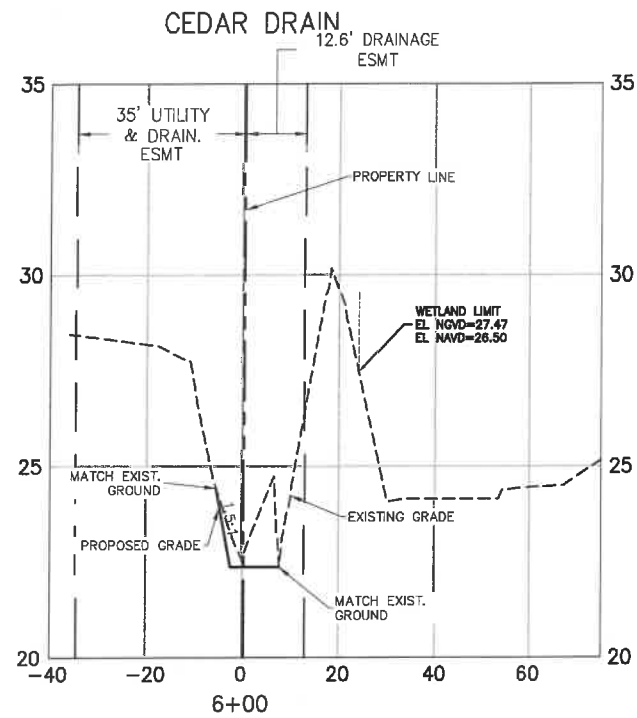
NOTE:  
 1. GRID BASED ON NGVD29 DATUM  
 2. HORIZONTAL SCALE: 1"=40'; VERTICAL SCALE: 1"=5'


  
**GRIGORY BERIKMAN**  
 No. 76899  
 FLORIDA P.E. # 76899

NO.	1
PROJECT #	307-6082860
SURVEY #	000
SEC./TWN./RGE	00/00S/00E
SCALE	AS SHOWN
REVISION DESCRIPTION	PER SWFWD COMMENTS
BY	KFL
DATE	07/24/18

\\bcs01\mymaster\erica\pwp\Engineering\Shore\Highway\_Engineering\ROUSS\Erie\_Road\DWG\Cedar\_Drains\Phase\_II\Cedar\_Drain\_Cross\_Section\_0+25.dwg, 1/1/2021 12:23 PM Ken Leamer, 1:1, ANSI full bleed B (11.00 x 17.00 inches)

**ERIE ROAD - US301 TO US 301  
SOUTH-NORTH PHASE II  
BUFFALO CANAL (CEDAR DRAIN)  
CROSS SECTIONS**



NOTE:  
1. GRID BASED ON NGVD29 DATUM  
2. HORIZONTAL SCALE: 1"=40'; VERTICAL SCALE: 1"=5'

**GRIGORY BERIKHMAN**  
Professional Engineer  
No. 76896  
STATE OF FLORIDA  
2021

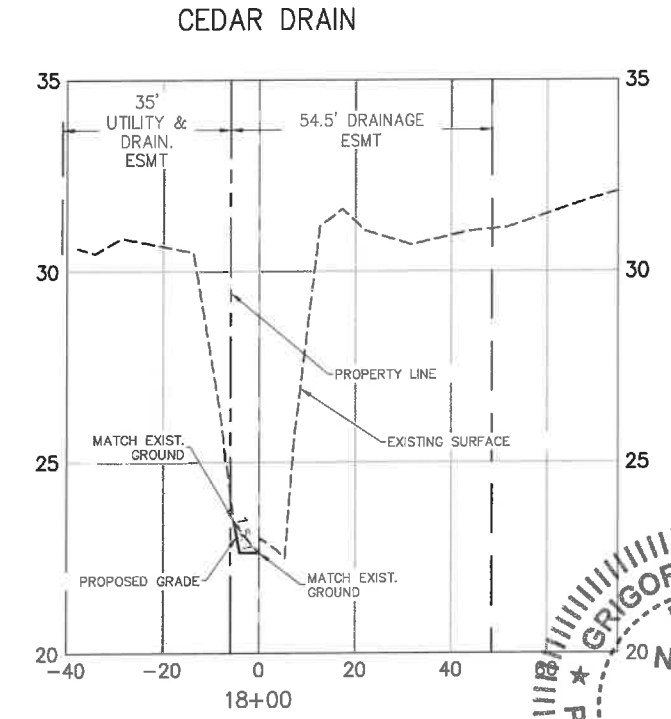
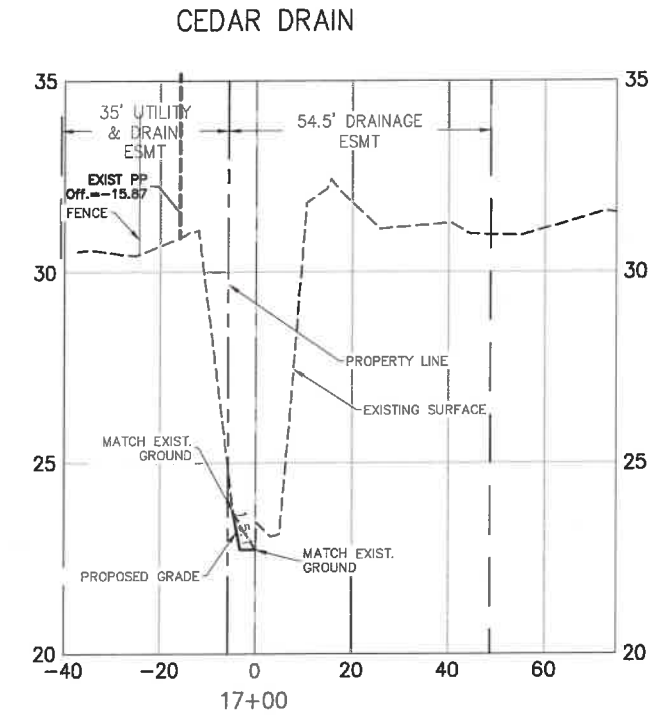
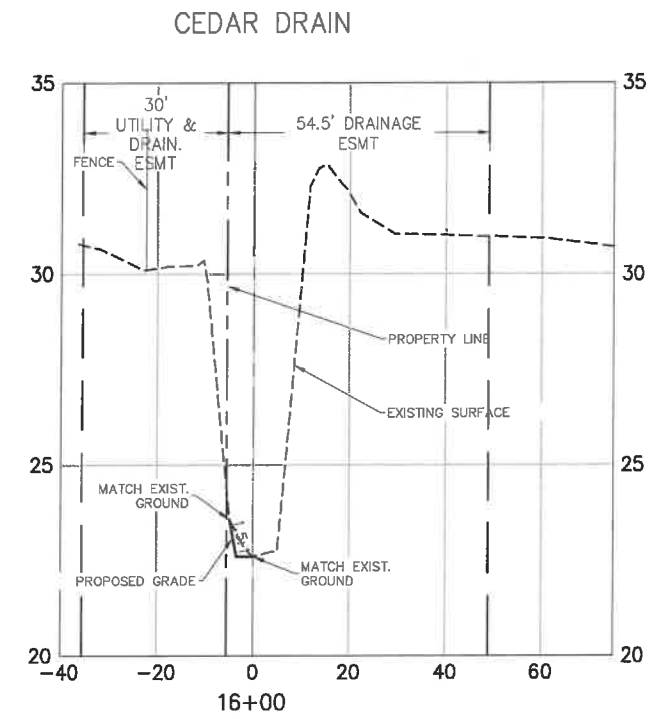
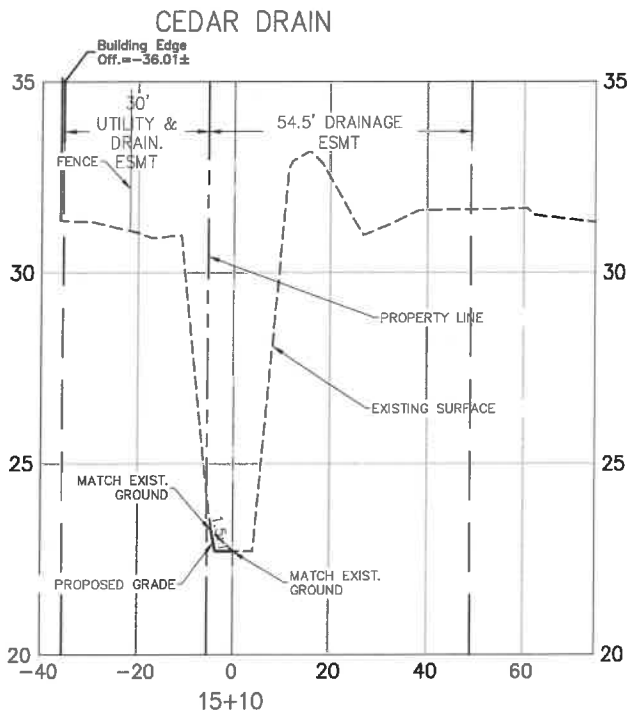
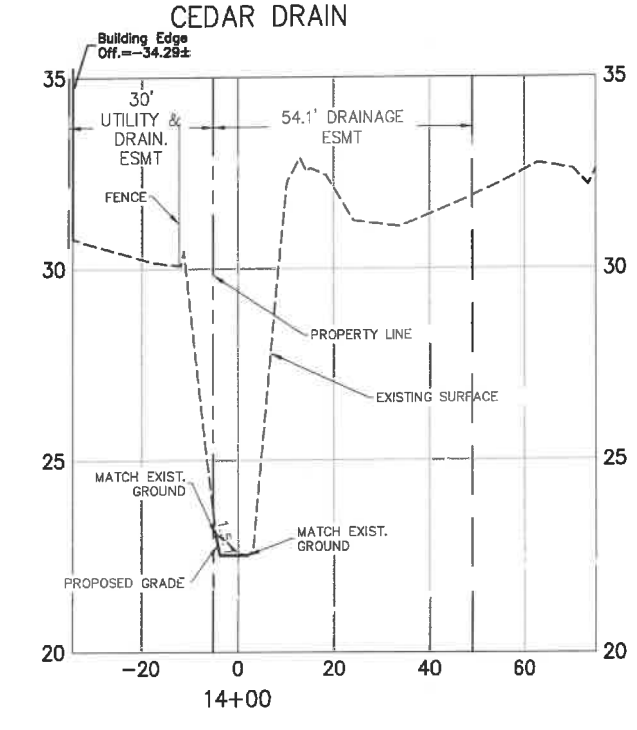
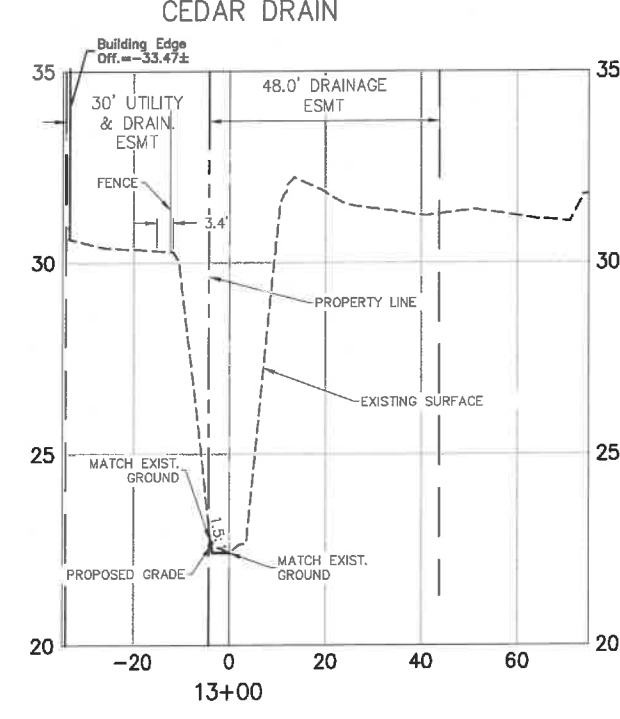
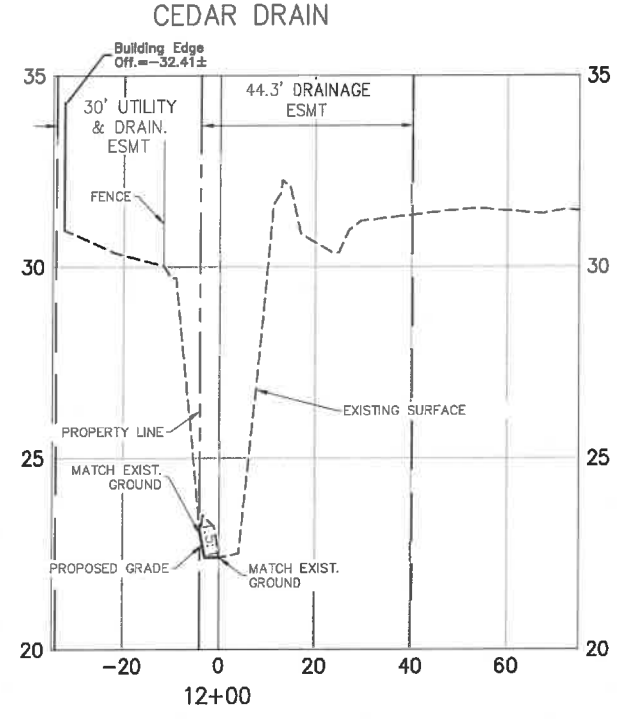
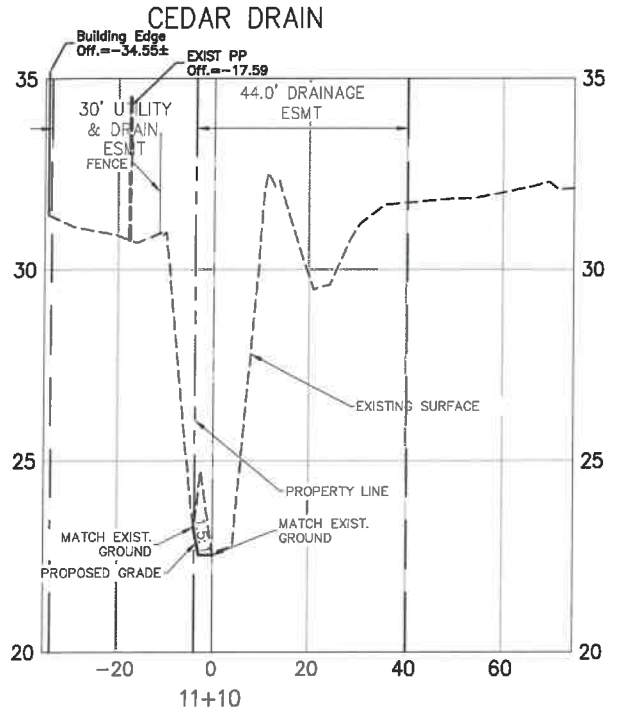
NO.	REVISION DESCRIPTION	DATE
1	PER SWFWD COMMENTS	07/24/18

PROJECT #	307-6082860
SURVEY #	000
SEC./TWN./RGE	00/00S/00E
AS SHOWN	
BY	DATE
DESIGNED	00/00/00
DRAWN	00/00/00
CHECKED	00/00/00

GRIGORY BERIKHMAN  
76896  
Signature & Date  
SHEET CD5

\\bce.ed.manateecounty.com\GIS\FWD\_Engineering\_SouthHighway\_Engineering\ROADS\Eria\_Road\DWG\Phase II\DWG\Cedar\_Dr\_Topo\_Xsect\_NS.Lwg,CDS\_7/4/2021 12:23 PM Ken Lashar, 1:1, ANSI full bleed B (11.00 x 17.00 inches)

**ERIE ROAD - US301 TO US 301  
SOUTH-NORTH PHASE II  
BUFFALO CANAL (CEDAR DRAIN)  
CROSS SECTIONS**



NOTE:  
1. GRID BASED ON NGVD29 DATUM  
2. HORIZONTAL SCALE: 1"=40'; VERTICAL SCALE: 1"=5'

GRIGORY BERKHIMAN  
LICENSED PROFESSIONAL ENGINEER  
No. 76896  
FLORIDA P.E. # 76896  
STATE OF FLORIDA

NO.	1
PROJECT #	307-6082860
SURVEY #	000
SEC./TWN./RGE	00/00S/00E
SCALE	AS SHOWN
REVISION DESCRIPTION	PER SWP/MD COMMENTS
BY	KHL
DATE	07/24/18

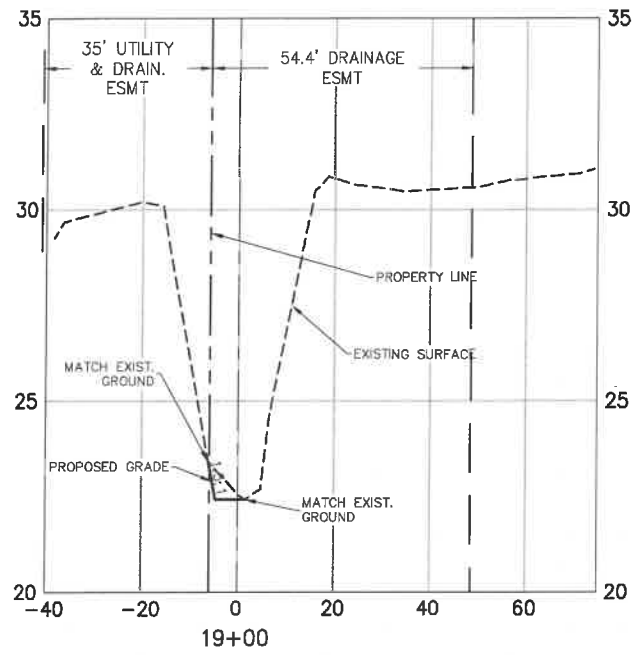
I:\projects\manatee\errie\Phase II\DWG\Cedar\_Dr\_Topog\Exec\_PNS.dwg, 1/4/2021 12:24 PM Ken Leather, 1:1, ANSI full bleed B (11.00 x 17.00 inches)



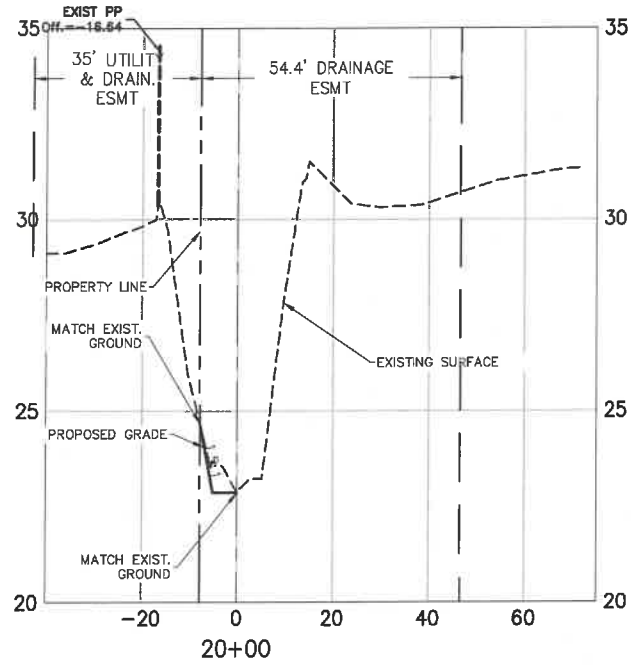
PUBLIC WORKS DEPARTMENT  
ENGINEERING SERVICES  
1022 26th Avenue East, Bradenton, FL 34208

**ERIE ROAD - US301 TO US 301  
SOUTH-NORTH PHASE II  
BUFFALO CANAL (CEDAR DRAIN)  
CROSS SECTIONS**

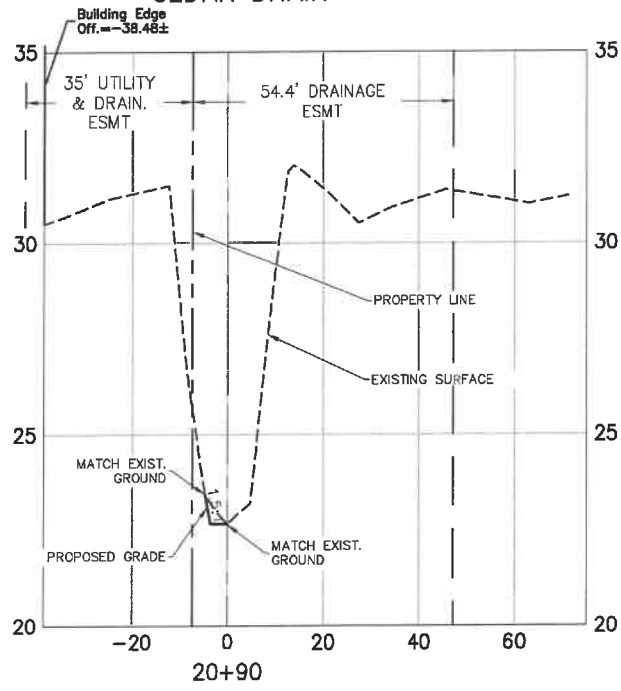
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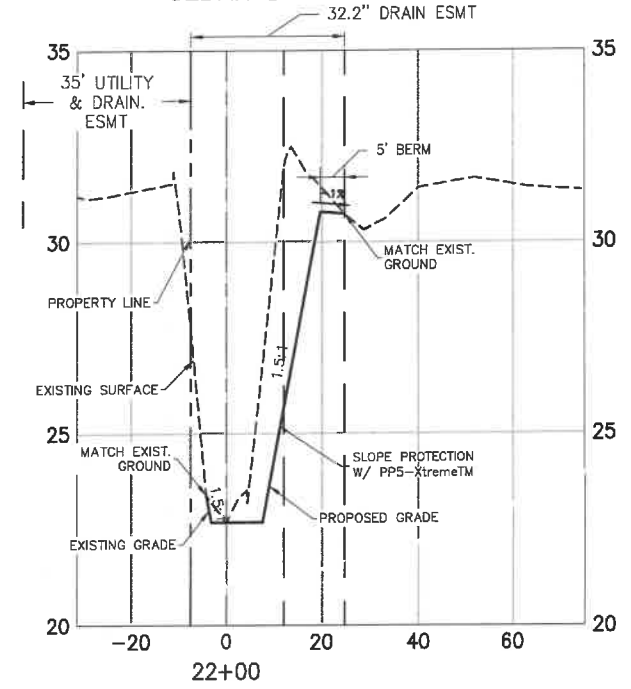
CEDAR DRAIN



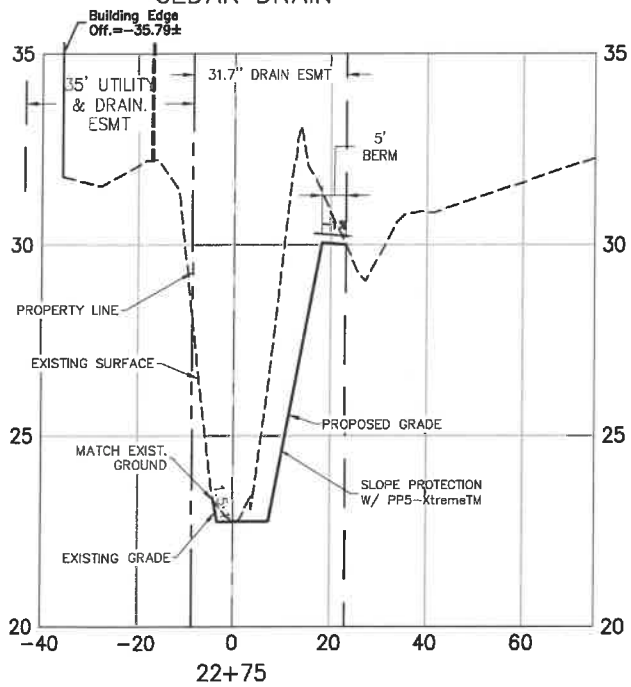
CEDAR DRAIN



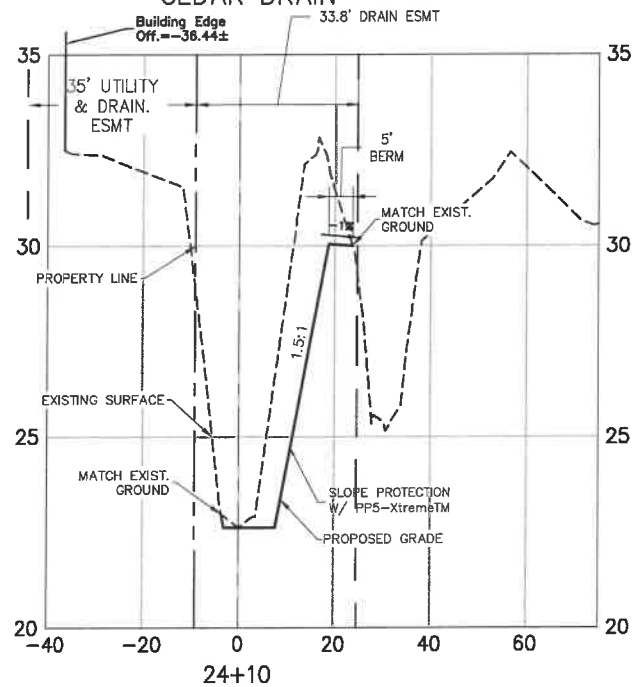
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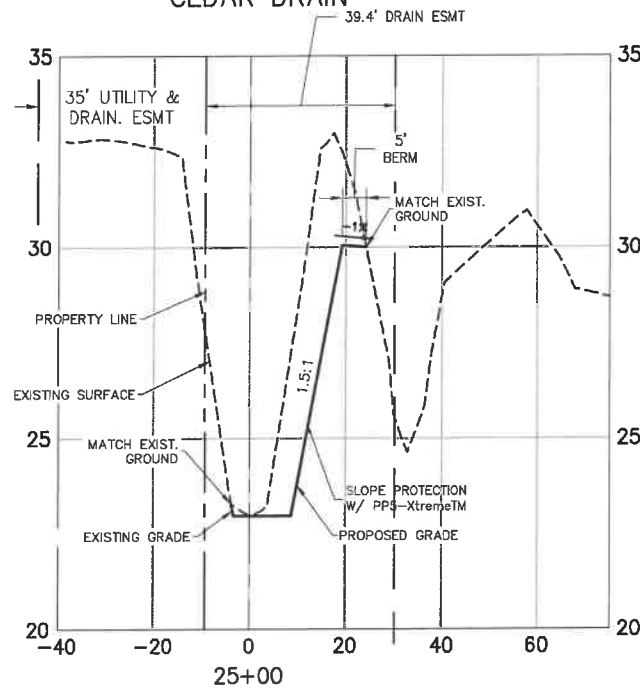
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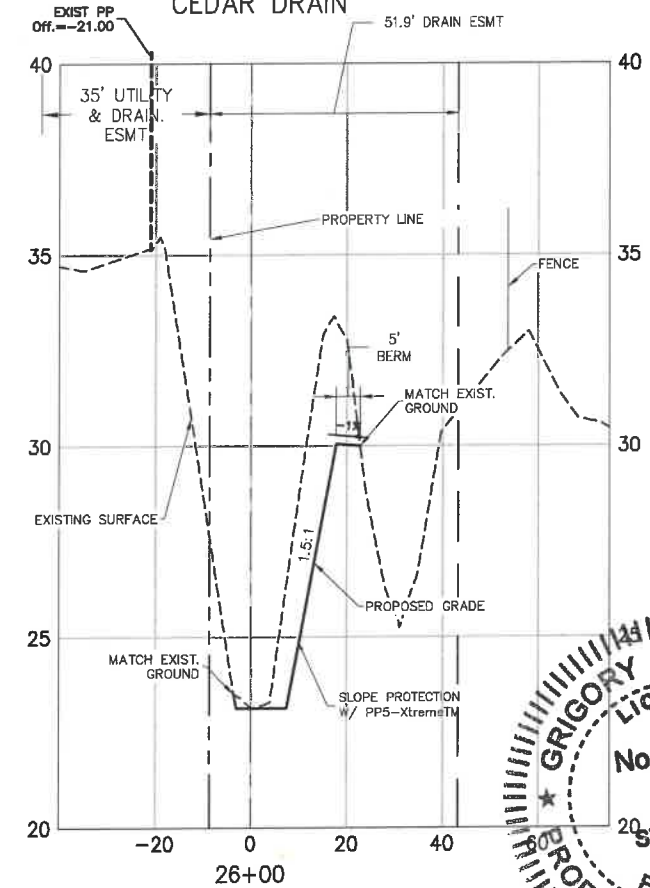
CEDAR DRAIN



CEDAR DRAIN



CEDAR DRAIN



NOTE:

1. GRID BASED ON NGVD29 DATUM
2. HORIZONTAL SCALE: 1"=40'; VERTICAL SCALE: 1"=5'

**GRIGORY BERIKHMAN**  
No. 76835  
PROFESSIONAL ENGINEER  
STATE OF FLORIDA

DATE: 07/24/18  
BY: KHL

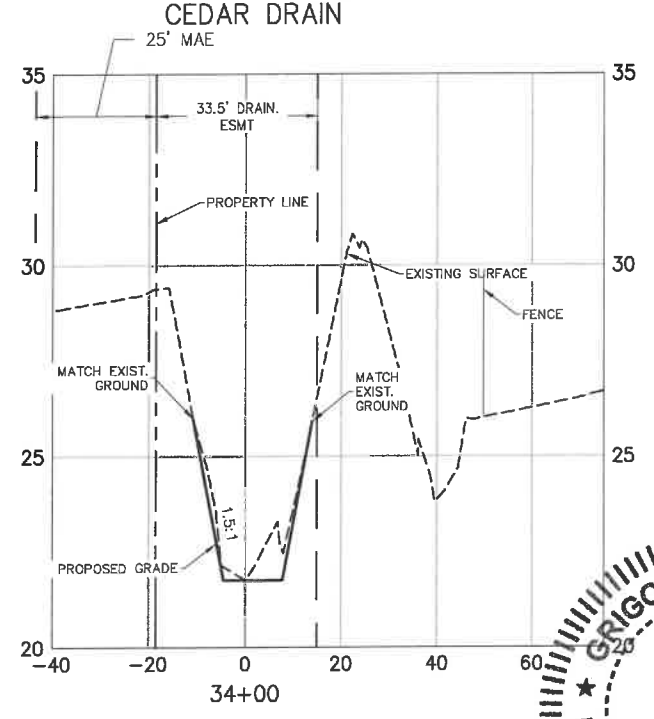
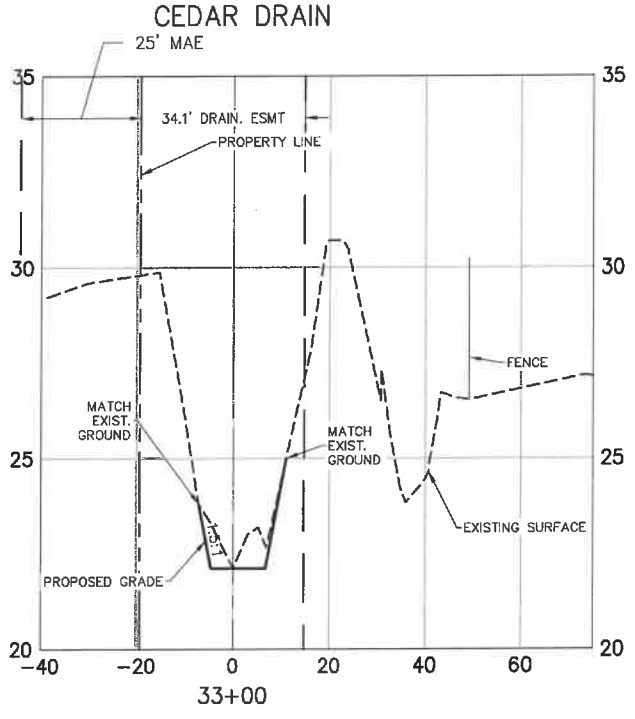
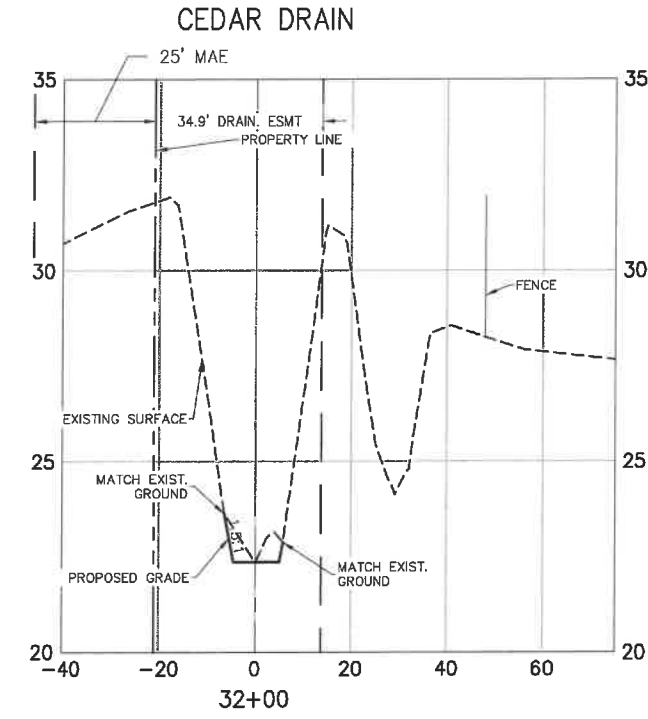
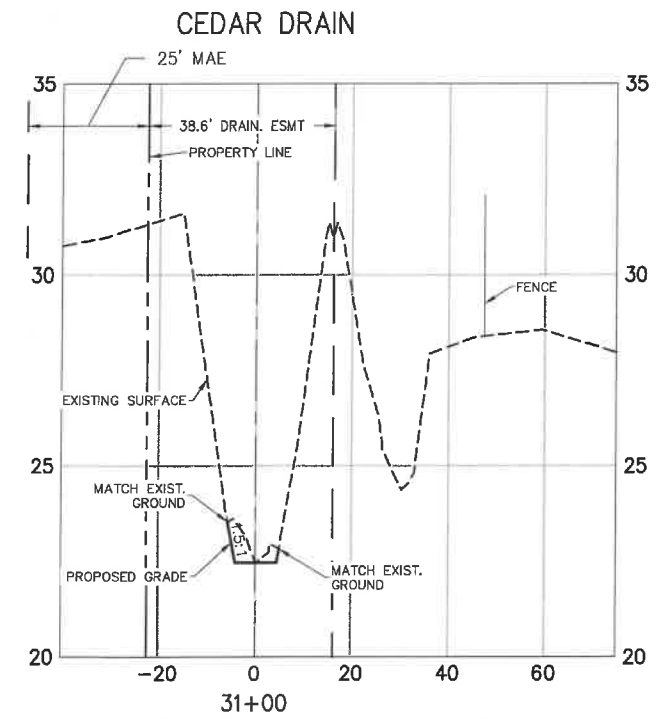
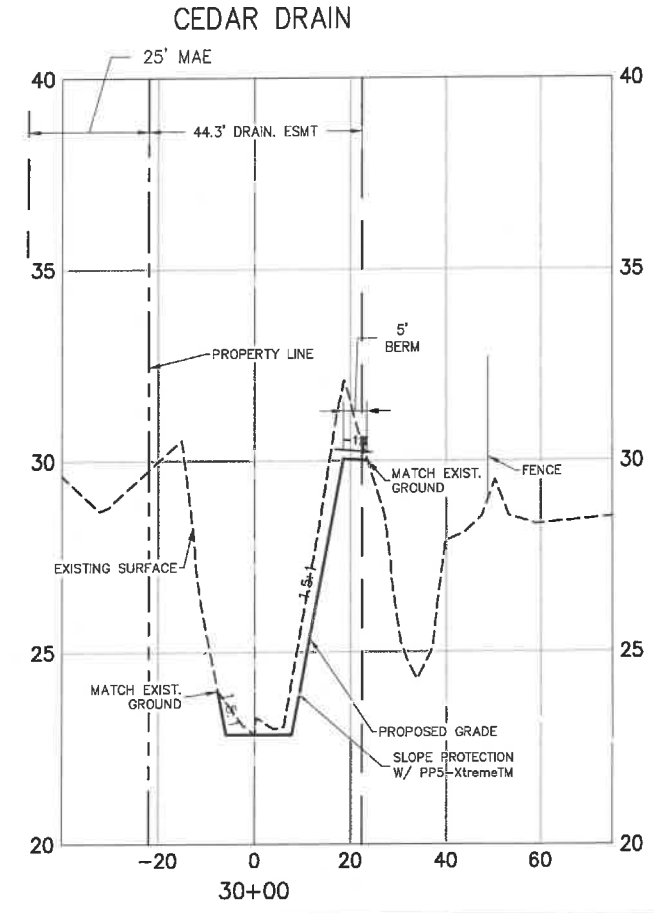
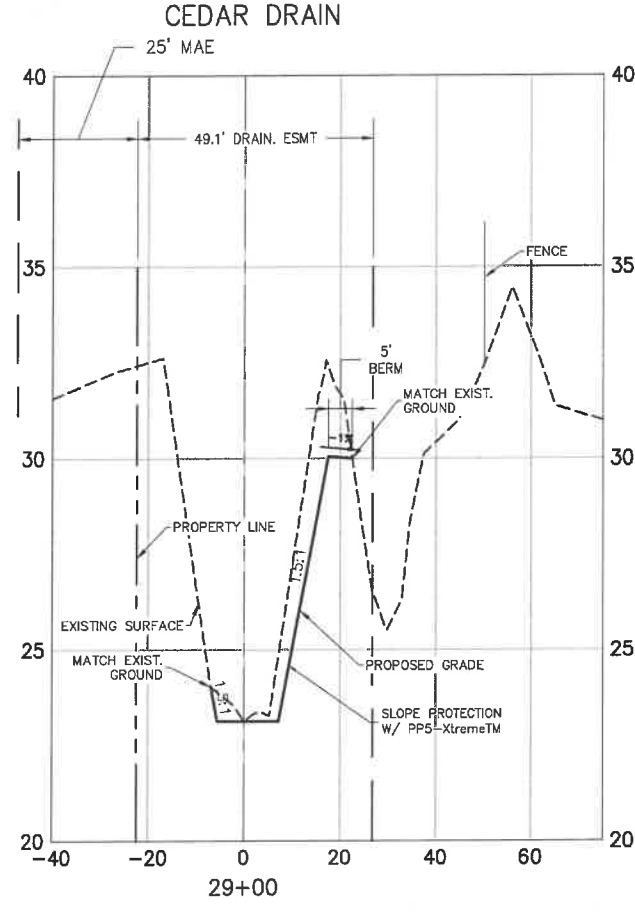
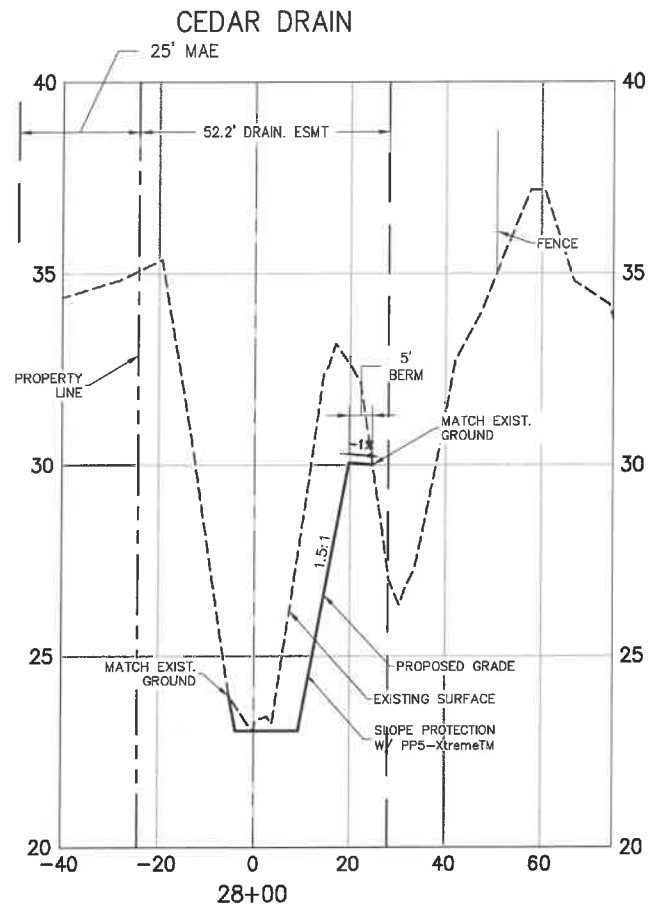
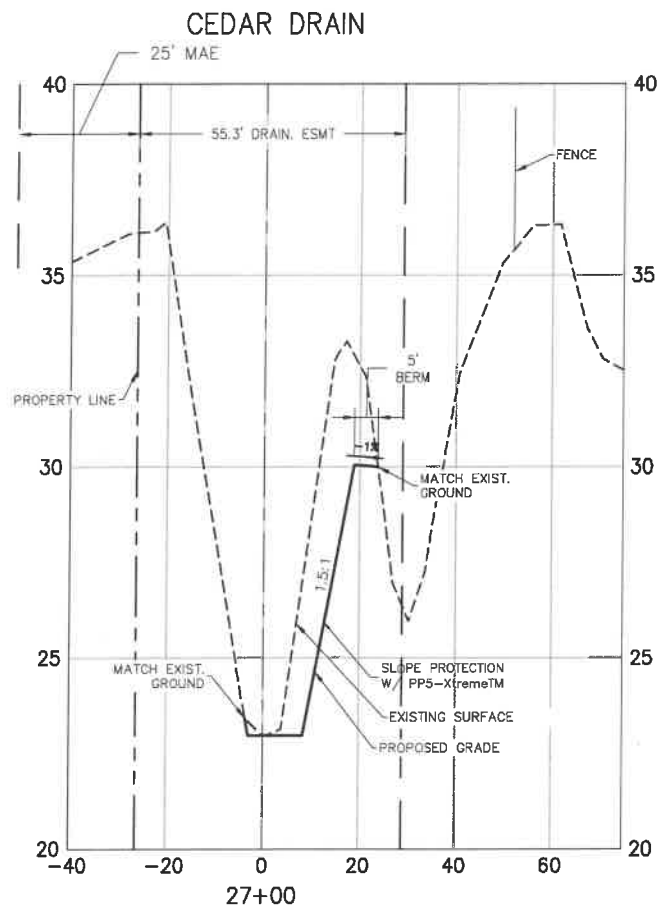
REVISION DESCRIPTION: PER SWFWD COMMENTS

PROJECT #	307-6082860
SURVEY #	000
SEC./TWN./RGE	00/00S/00E
SCALE	AS SHOWN
BY	DATE
DESIGNED	ZNS 00/00/00
CHECKED	SB 00/00/00
DRAWN	00/00/00
CHECKED	00/00/00

GRIGORY BERIKHMAN  
FLORIDA ENGINEER No. 76835

Signature: *G. Berikhman*  
Date: 7/20/21

**ERIE ROAD - US301 TO US 301  
SOUTH-NORTH PHASE II  
BUFFALO CANAL (CEDAR DRAIN)  
CROSS SECTIONS**



NOTE:

- GRID BASED ON NGVD29 DATUM
- HORIZONTAL SCALE: 1"=40'; VERTICAL SCALE: 1"=5'

**GRIGORY BERKHMANN**  
Professional Engineer  
No. 78896  
FLORIDA P.E. 78896

NO.	REVISION DESCRIPTION	BY	DATE
1	PER SWFWD COMMENTS	KHL	07/24/18

PROJECT #	307-6082860	
SURVEY #	000	
SEC./TWN./RGE	00/00S/00E	
SCALE	AS SHOWN	
CHECKED	BY	DATE
DRAWN		
DATE		

DATE: 07/24/18

BY: KHL

PROJECT # 307-6082860

SURVEY # 000

SEC./TWN./RGE 00/00S/00E

SCALE AS SHOWN

CHECKED BY DATE

DRAWN

DATE

PROFESSIONAL ENGINEER

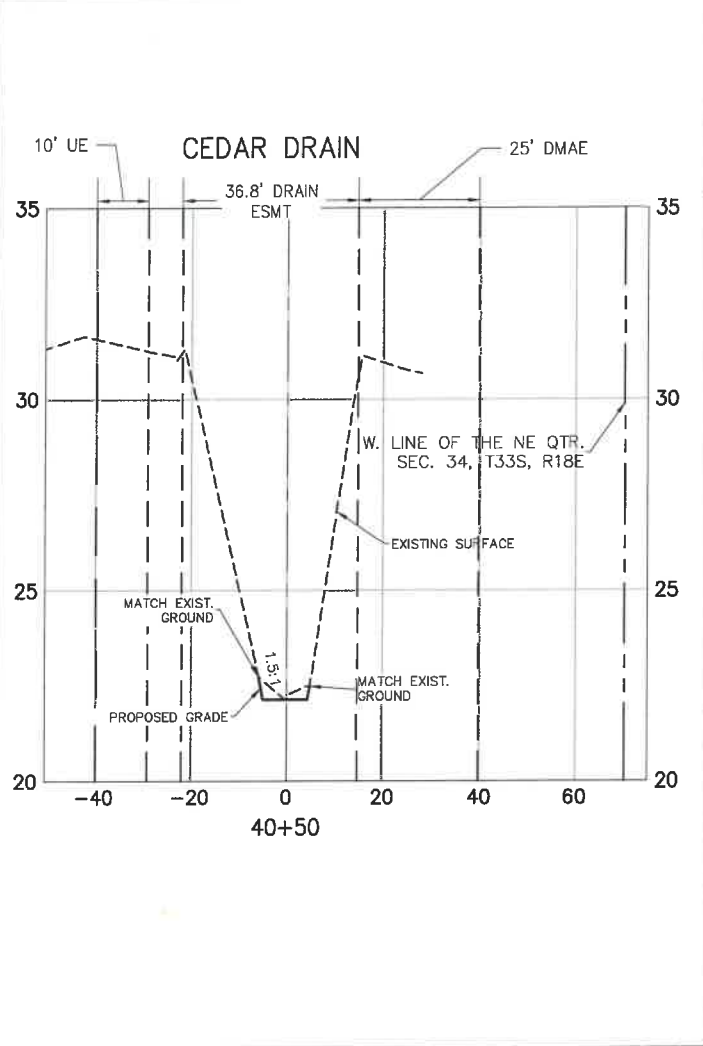
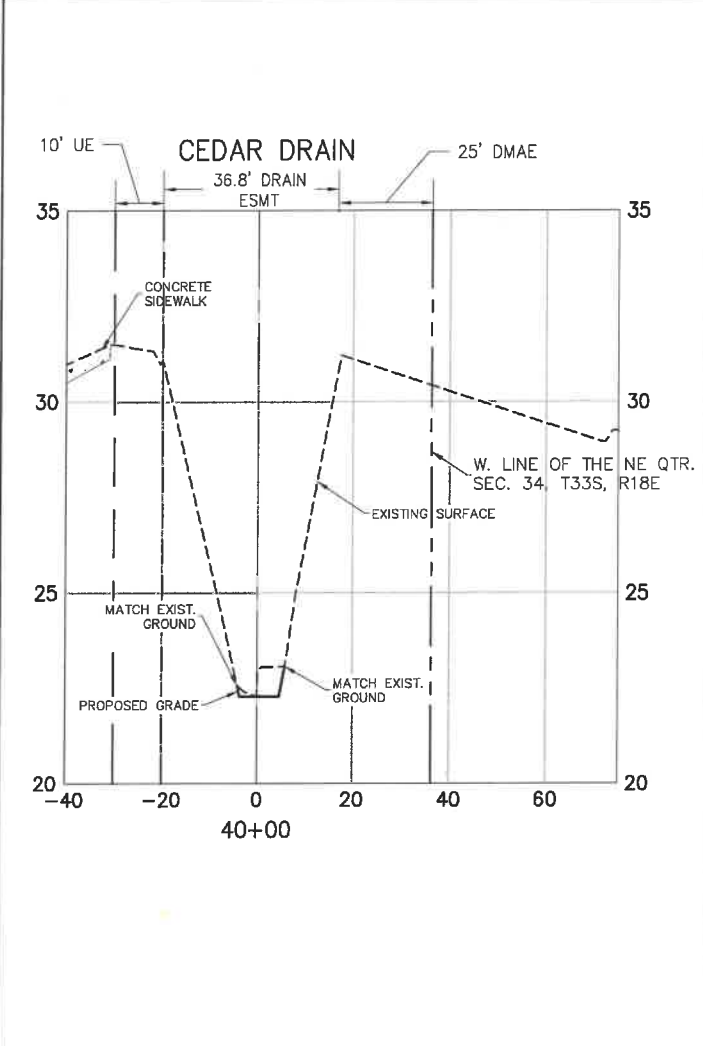
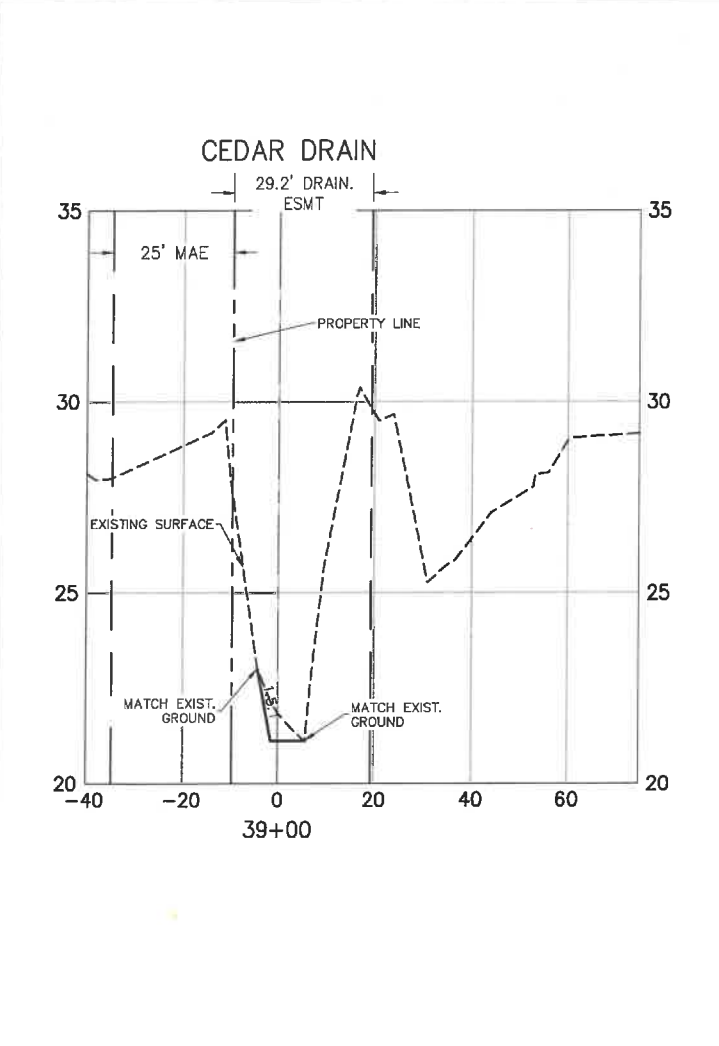
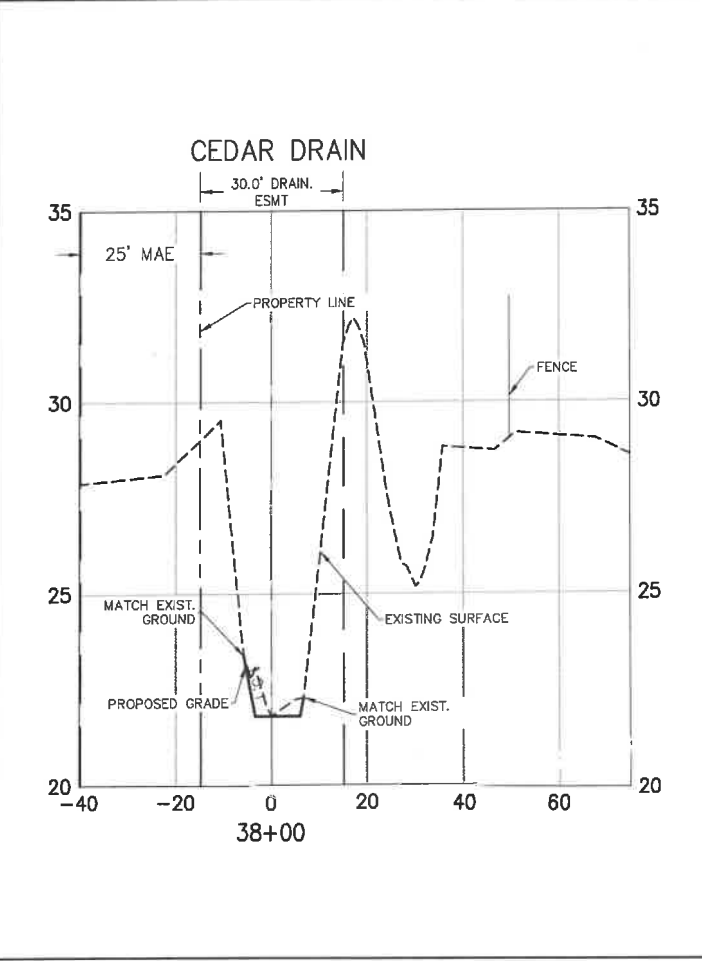
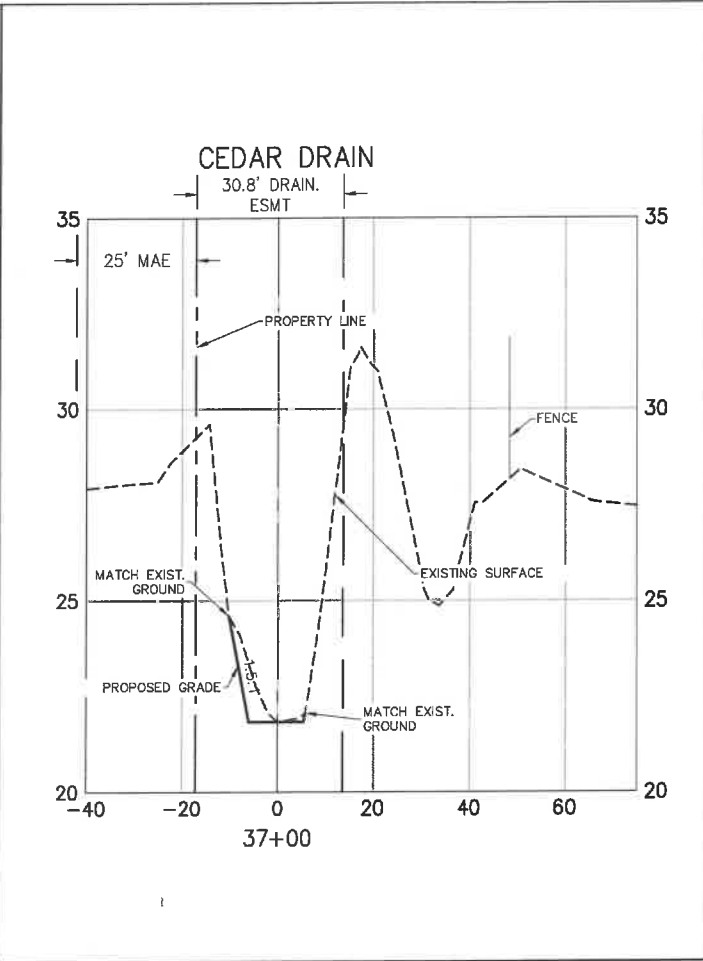
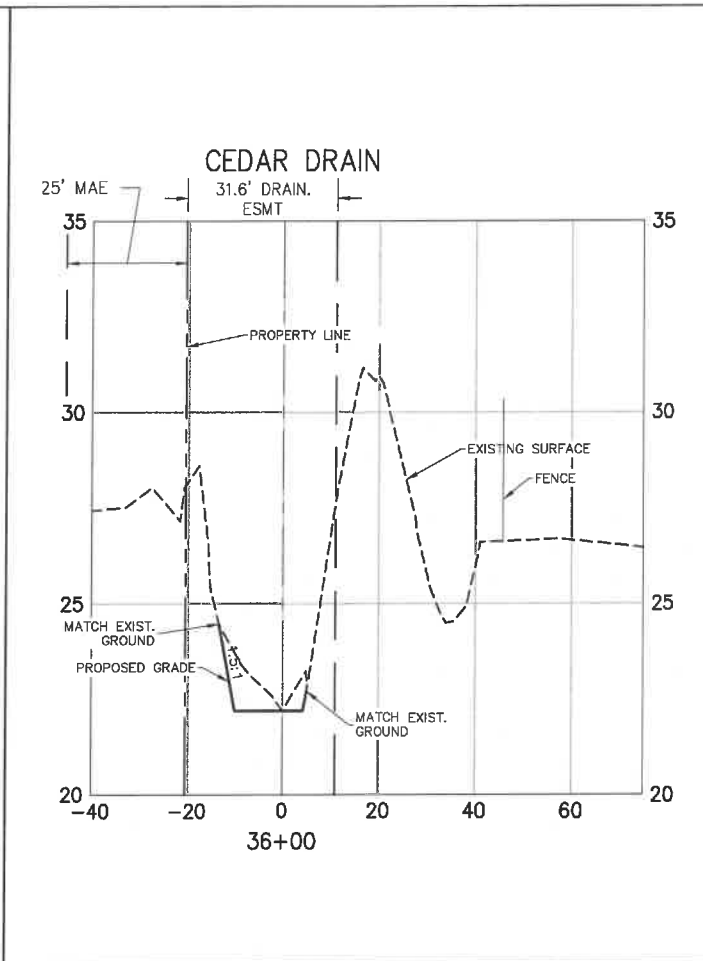
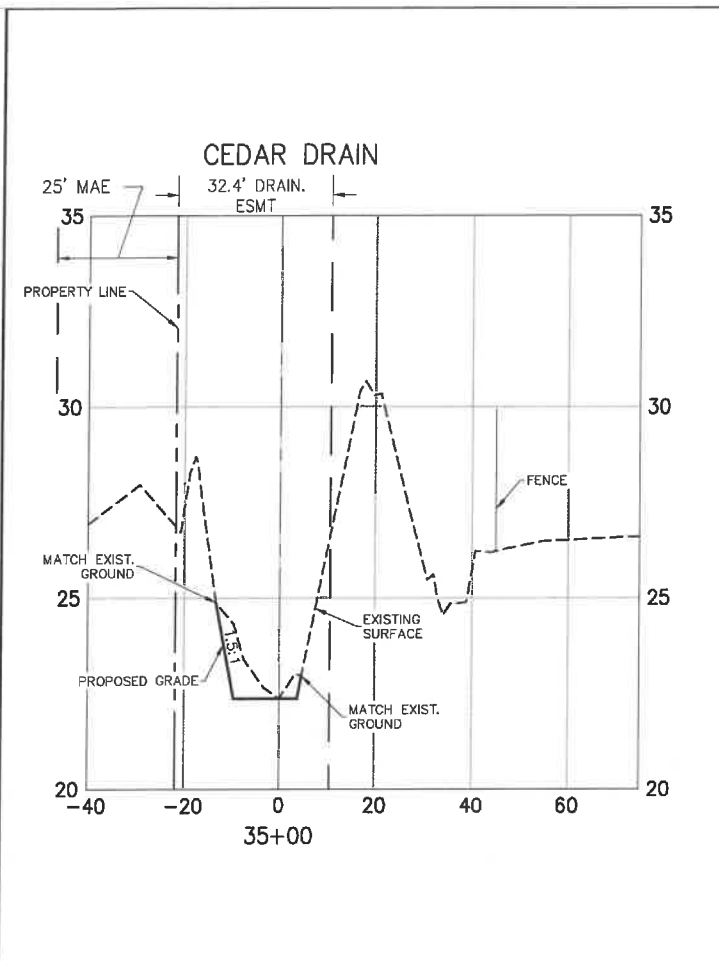
FLORIDA

DATE

SHEET CD8



**ERIE ROAD - US301 TO US 301  
SOUTH-NORTH PHASE II  
BUFFALO CANAL (CEDAR DRAIN)  
CROSS SECTIONS**



NO.	REVISION DESCRIPTION	DATE
1	PER SWP/MD COMMENTS	07/24/18

PROJECT #	307-6082860
SURVEY #	000
SEC./TWN./RGE	00/00S/00E
SCALE	AS SHOWN
BY	DATE
DRAWN	00/00/00
CHECKED	00/00/00
DESIGNED	00/00/00
SUBMITTED	00/00/00

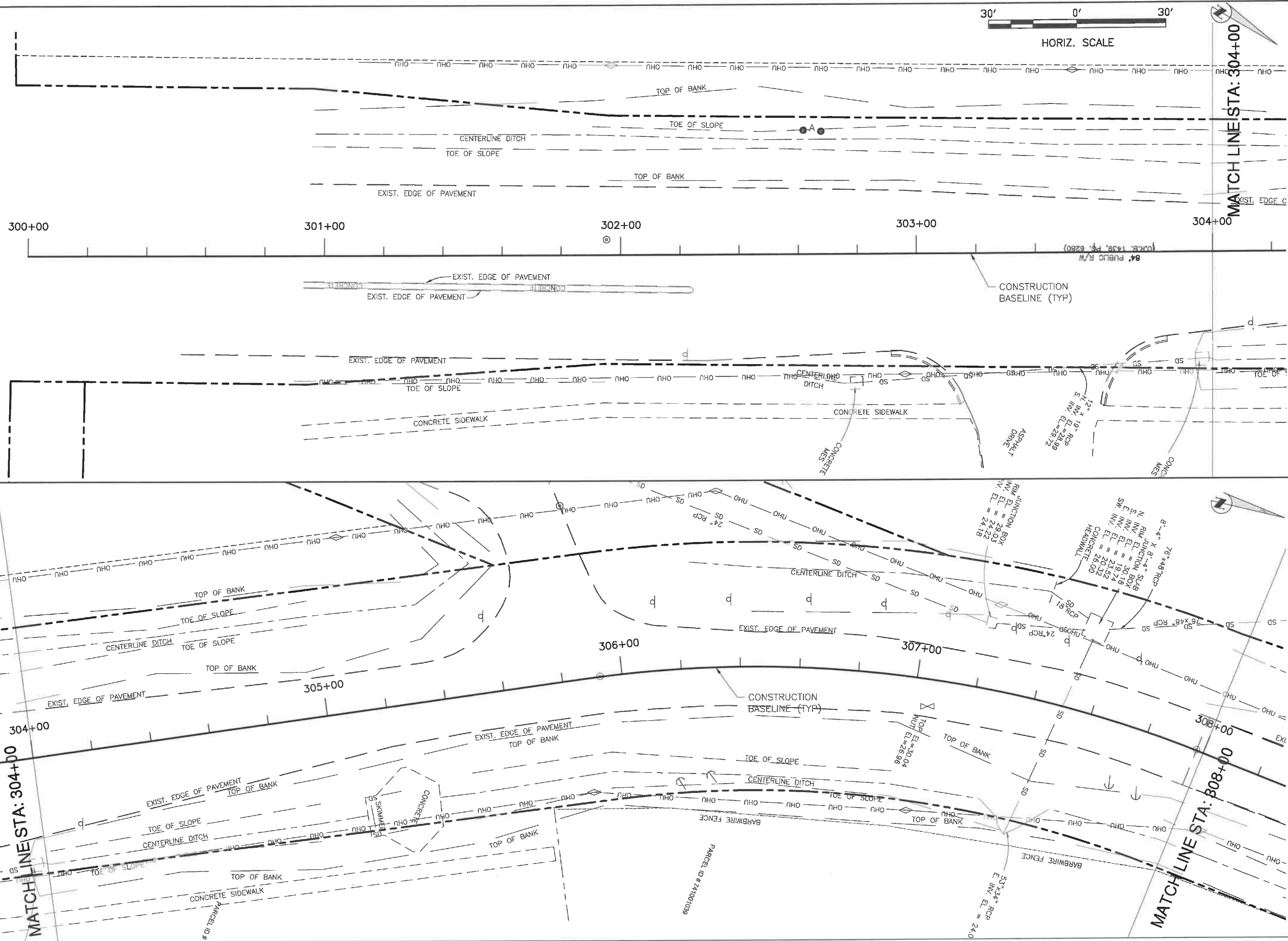
GRIGORY BERKHMANN  
No. 76896  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER

GRIGORY BERKHMANN  
FLORIDA 76896  
Signature & Date  
2021

NOTE:  
1. GRID BASED ON NGVD29 DATA  
2. HORIZONTAL SCALE: 1"=40'; VERTICAL SCALE: 1"=5'

I:\bce.cad\mymacdata.org\pda\pda\Engineering\Shore\Highway\Engineering\Roads\Phase II\DWG\Cedar\_Dr\_Topo\_Xsect\_PWS.dwg, 1/4/2021 12:26 PM Ken Loether, 1:1, ANSI full bleed B (11.00 x 17.00 Inches)

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EXISTING SURVEY**



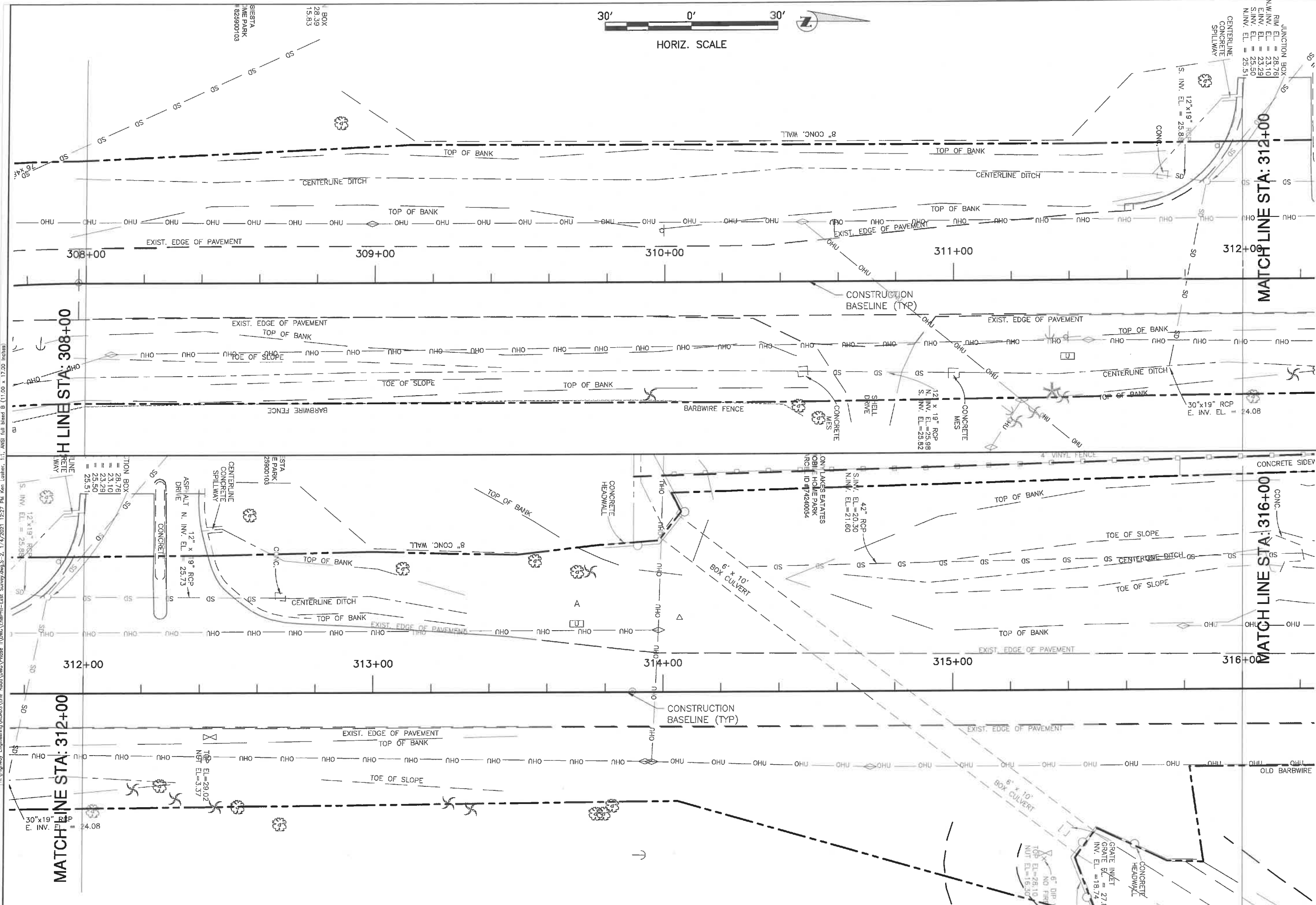
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
SURVEYED	BY ZNS DATE 2013
DESIGNED	-----
DRAWN	-----
CHECKED	-----

Signature & Date  
**SHEET S-1**

H:\Highway Engineering\ROADS\Erie Road\DWG\Phase II\DWG\ErieRoad-Phase II-South-North-Phase II-Existing-Survey.dwg, 1/14/2021 12:27 PM Ken Lashin, T1, ANSI full bleed B (11.00 x 17.00 inches)

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EXISTING SURVEY**



JUNCTION BOX  
 RIM E.L. = 28.76  
 N.W. INV. E.L. = 23.10  
 E. INV. E.L. = 23.29  
 S.W. INV. E.L. = 25.50  
 N.W. INV. E.L. = 25.51

12" x 19" RCP  
 S. INV. E.L. = 25.88

30" x 19" RCP  
 E. INV. E.L. = 24.08

42" RCP  
 S. INV. E.L. = 20.30  
 N.W. INV. E.L. = 21.60

12" x 19" RCP  
 S. INV. E.L. = 25.98  
 N. INV. E.L. = 25.82

ASPHALT N. INV. E.L. = 25.73

STA. E.PARK 25900703  
 CONCRETE SIDEWALK

CONCRETE HEADWALL  
 CONCRETE DRIVE

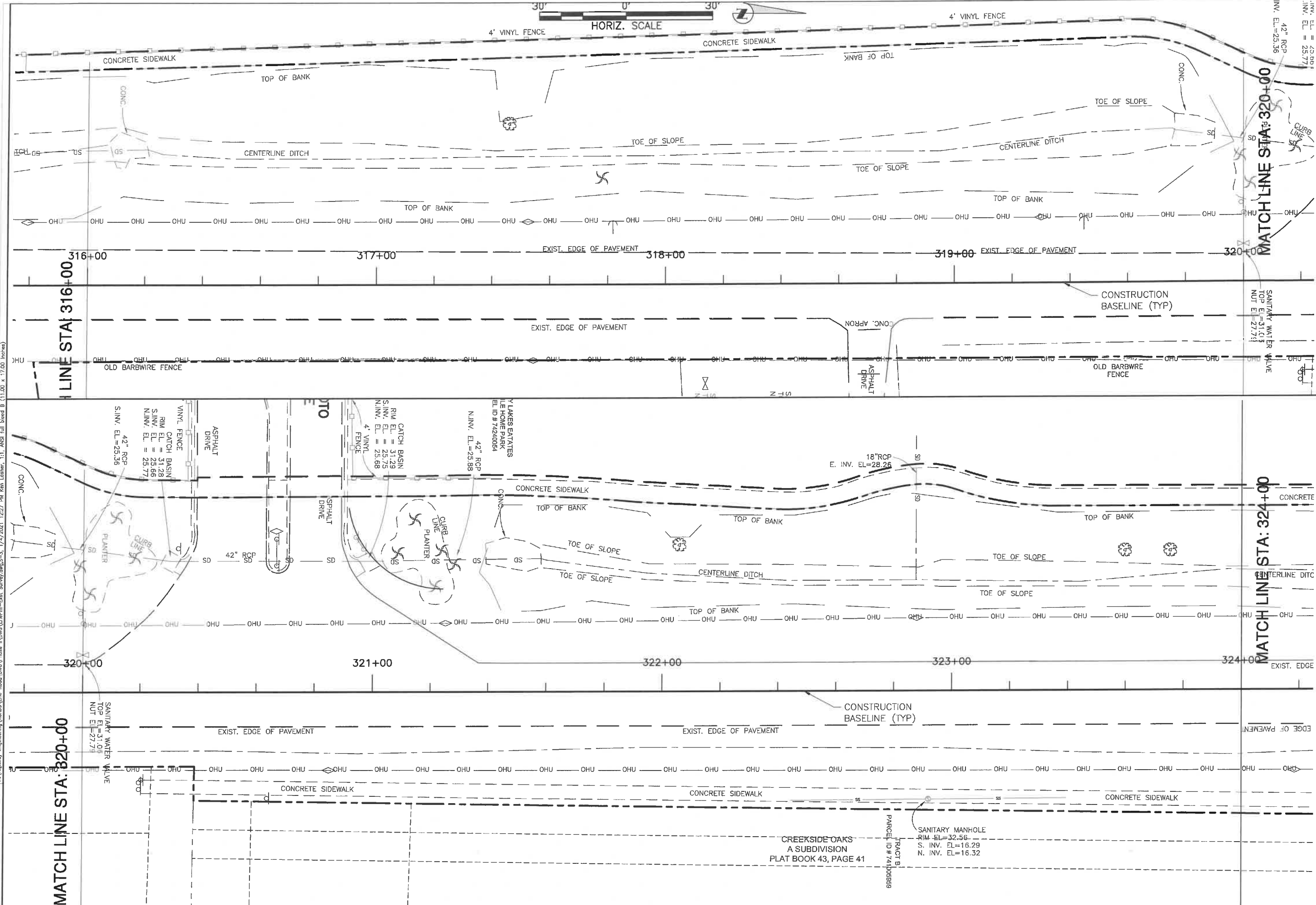
6" x 10" BOX CULVERT  
 CONCRETE HEADWALL

GRATE INLET  
 INV. E.L. = 27.84  
 INV. E.L. = 18.74  
 INV. E.L. = 16.30

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
SURVEYED	ZNS 2013
DESIGNED	
DRAWN	
CHECKED	

**ERIE ROAD - US301 TO US 301**  
**SOUTH-NORTH PHASE II**  
**EXISTING SURVEY**



H:\Highway Engineering\ROADS\Erie Road\DWG\Phase II\DWG\ERIEPHI-Ext\_Survey.dwg-3, 1/17/2013 12:27 PM Ken Leisher, 1:1, NWSI full bleed B (11.00 x 17.00 inches)

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
SURVEYED	ZNS 2013
DESIGNED	-----
DRAWN	-----
CHECKED	-----

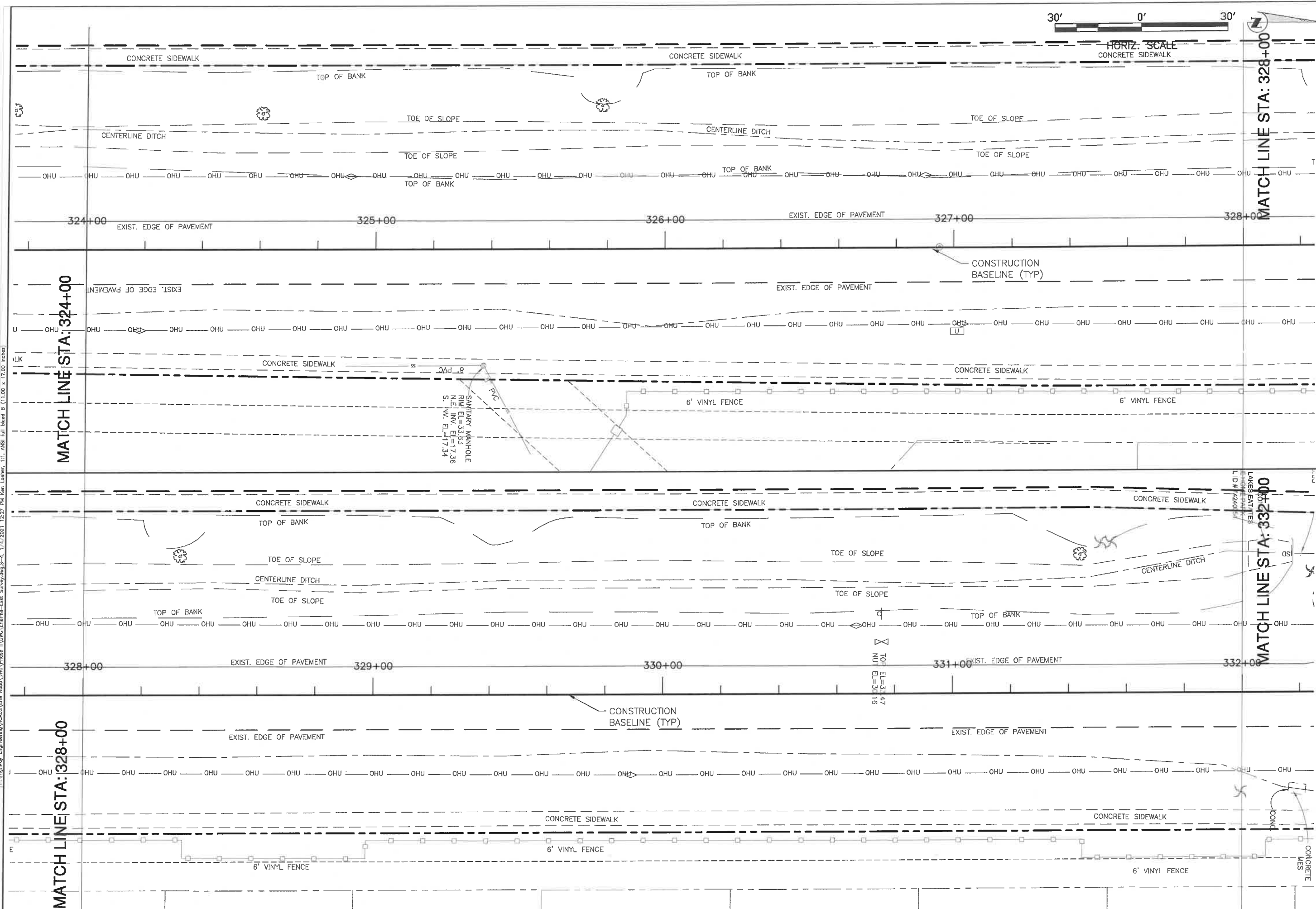
CREEKSIDE OAKS  
 A SUBDIVISION  
 PLAT BOOK 43, PAGE 41

SANITARY MANHOLE  
 RIM EL=32.56  
 S. INV. EL=16.29  
 N. INV. EL=16.32

PARCEL ID # 7410059599 TRACT B

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EXISTING SURVEY**

H:\Highway Engineering\Roads\US301\Phase II\DWG\ERIE\Phase II\Surveys\dwg-3-1-14-2013-1227 PM Ken Luthier.rvt, ANSI Full sized B (11.00 x 17.00 inches)



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED

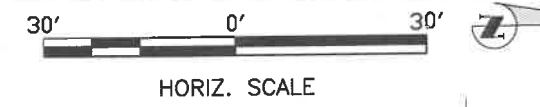
  

	BY	DATE
SURVEYED	ZNS	2013
DESIGNED	-----	-----
DRAWN	-----	-----
CHECKED	-----	-----

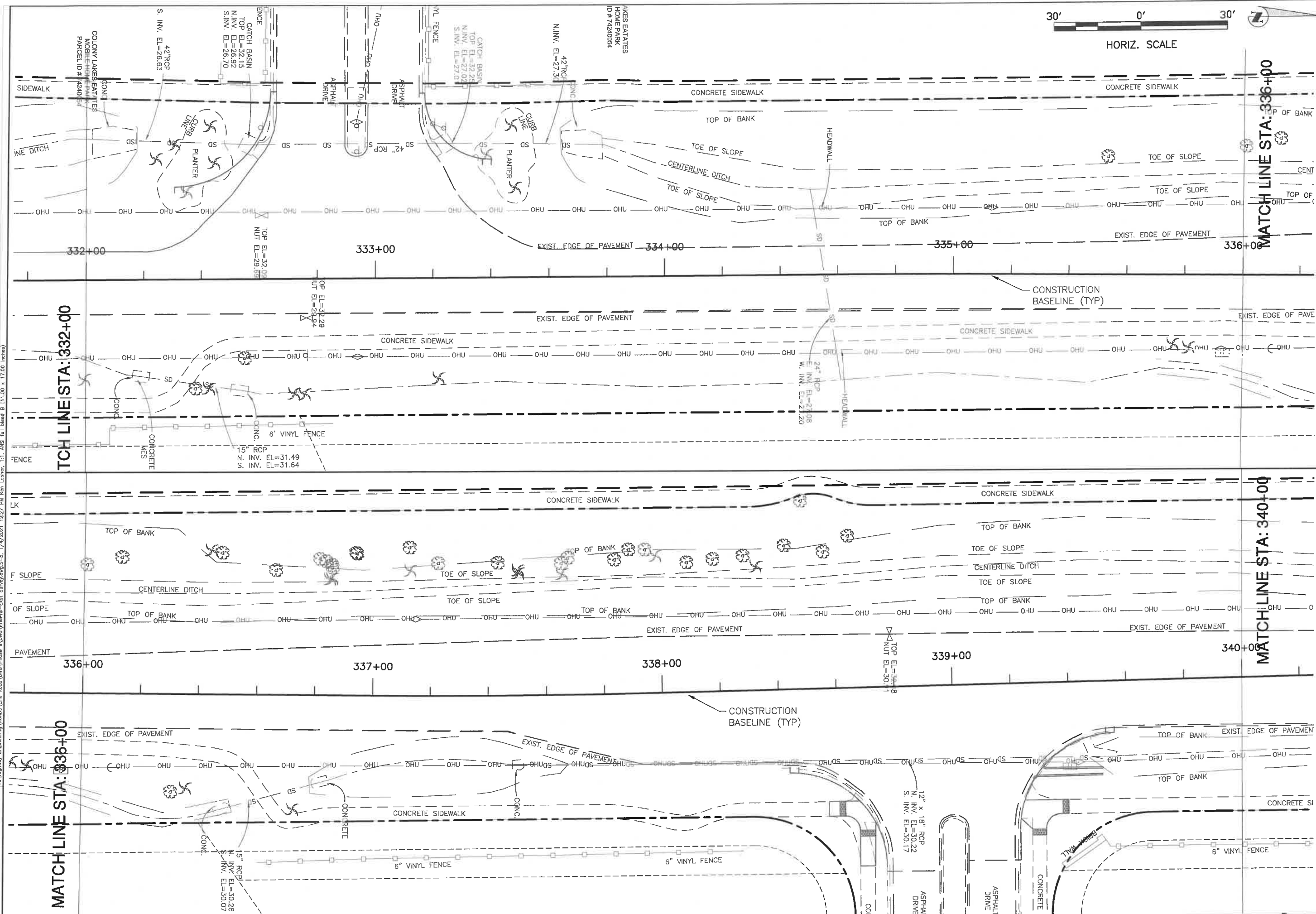
  

Signature & Date

**SHEET S-4**



**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EXISTING SURVEY**



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
SURVEYED	ZNS 2013
DESIGNED	
DRAWN	
CHECKED	

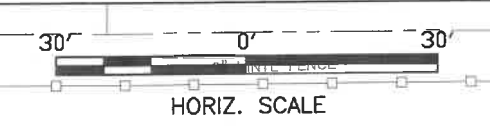
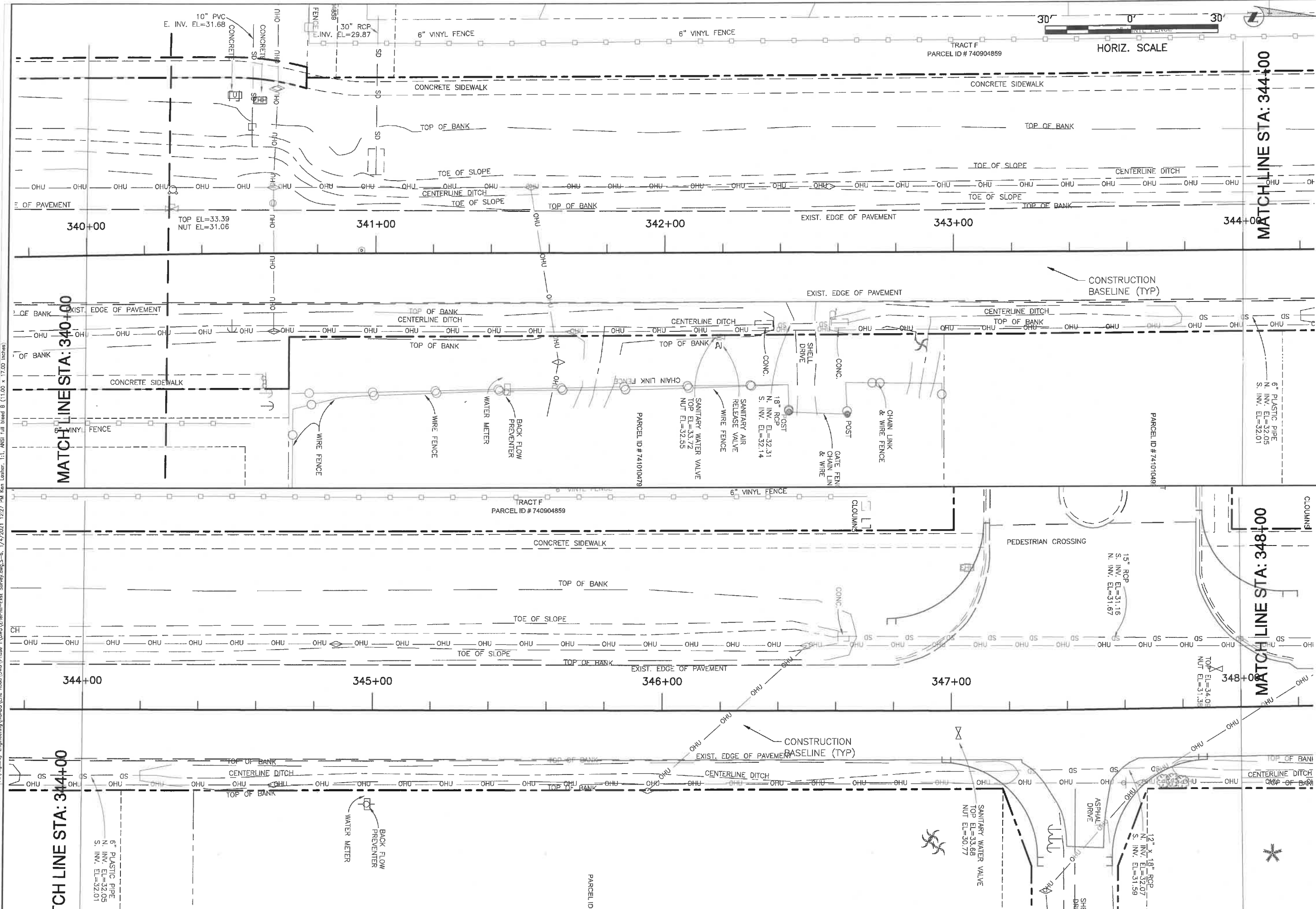
  

Signature & Date

**SHEET S-5**

H:\Highway Engineering\ROADS\Erie Road\DWG\Phase II\DWG\ERIEPHI-Ext\_Survey.dwg-5-17/2021 12:27 PM Ken Lester, IT, ANSI Full bleed B (11.00 x 17.00 inches)

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EXISTING SURVEY**



I:\Highway\_Engineering\ROADS\Elec\_Road\DWG\Phase II\DWG\ERIE\Task\_Survey\Fig\_S-6\_1/2/2013 12:27 PM Ken Gahner, 11, ANSI Full bleed B (11.00 x 17.00 inches)

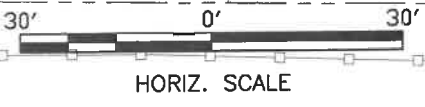
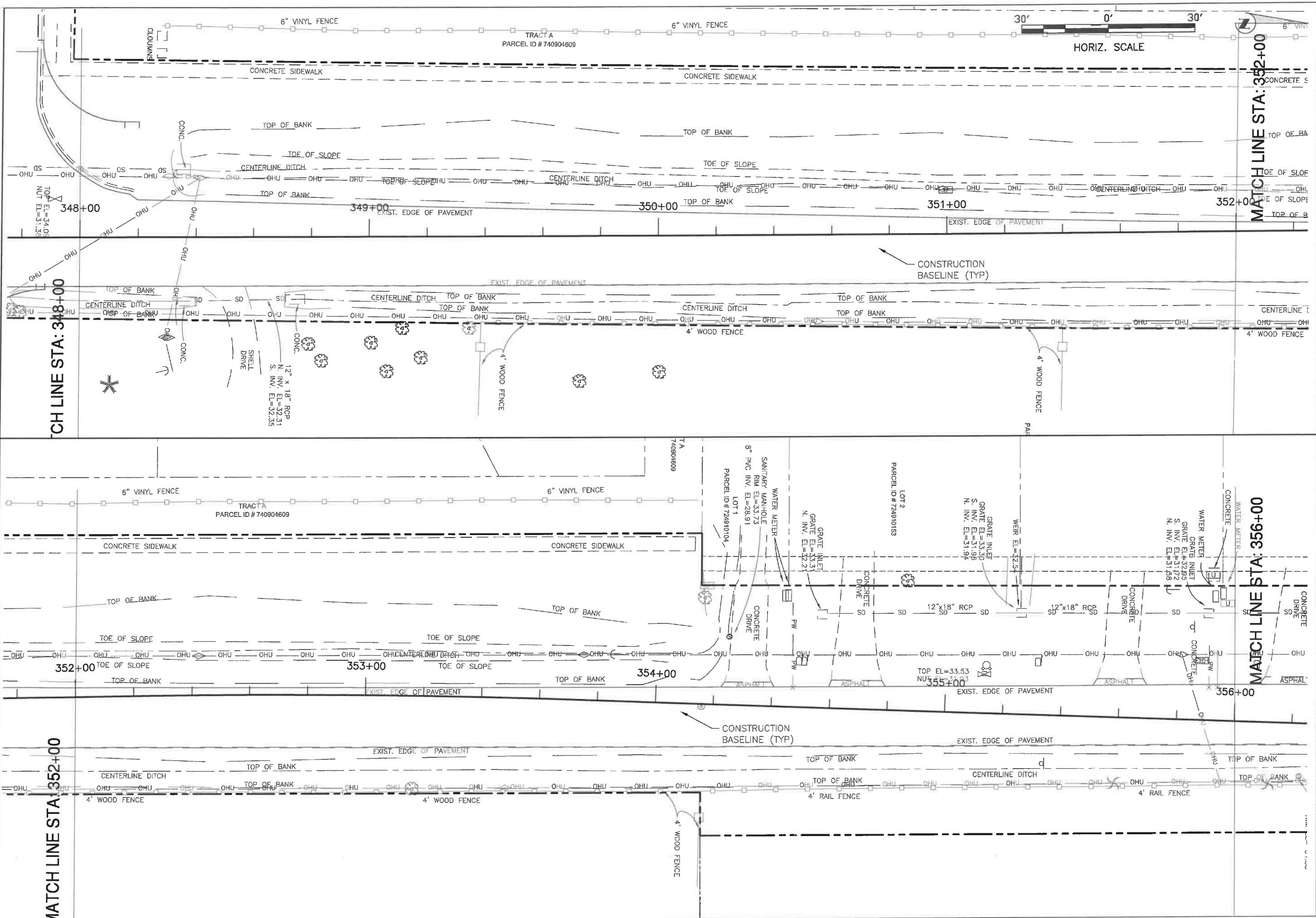
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-602860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
SURVEYED	ZNS 2013
DESIGNED	
DRAWN	
CHECKED	

Signature & Date

**SHEET S-6**

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EXISTING SURVEY**



HX:\Highway\_Engineering\ROADS\Eric\_Road\OHG\Phase II\DWG\EriePhII-Ext\_Survey.dwg-7, 1/4/2013 12:27 PM Ken Cahar, L1, ANSI full bleed B (11.00 x 17.00 inches)

NO.	REVISION DESCRIPTION	BY	DATE

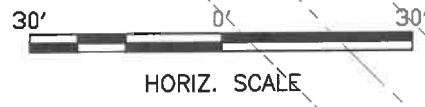
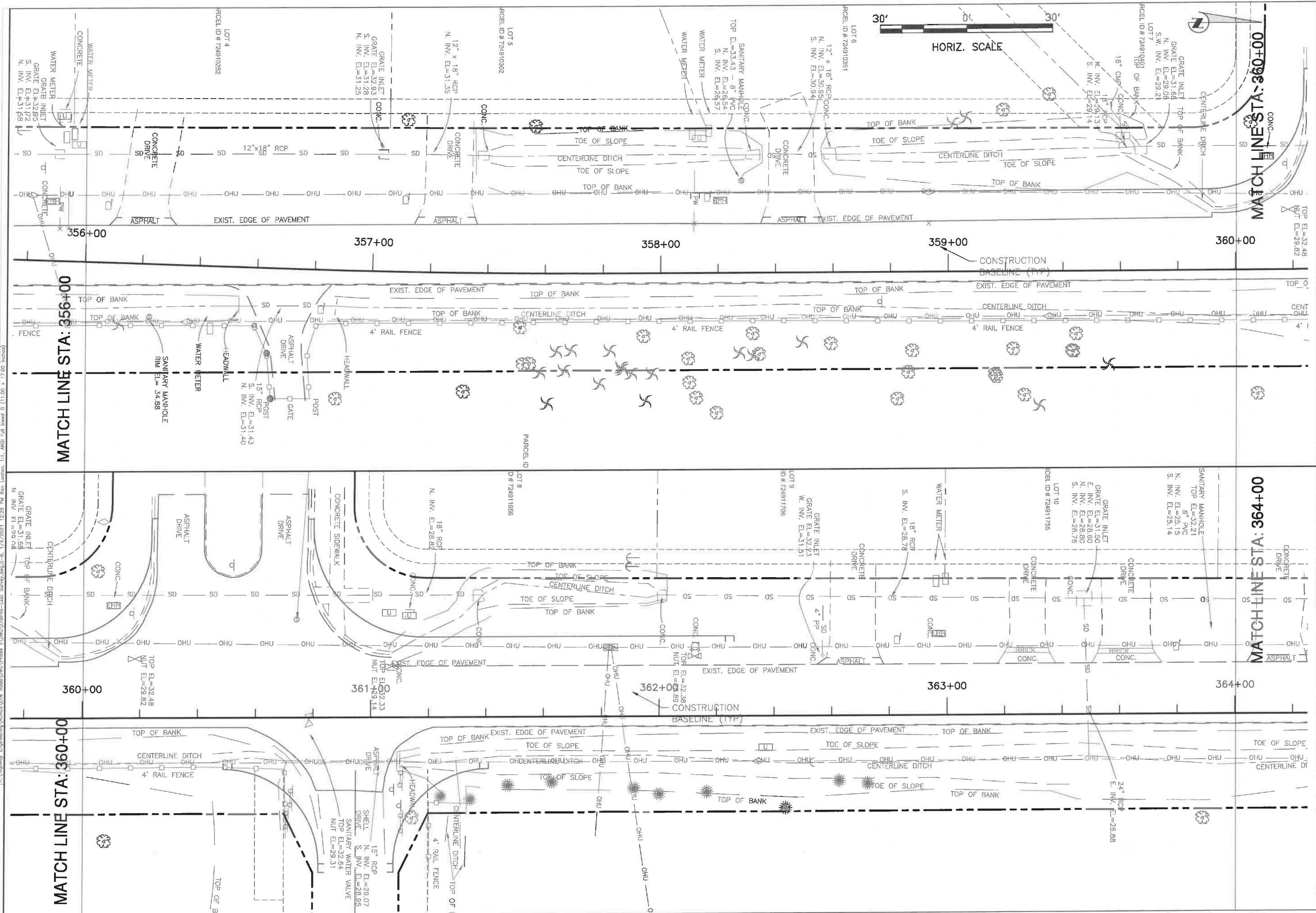
PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED

	BY	DATE
SURVEYED	ZNS	2013
DESIGNED	-----	-----
DRAWN	-----	-----
CHECKED	-----	-----



**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EXISTING SURVEY**



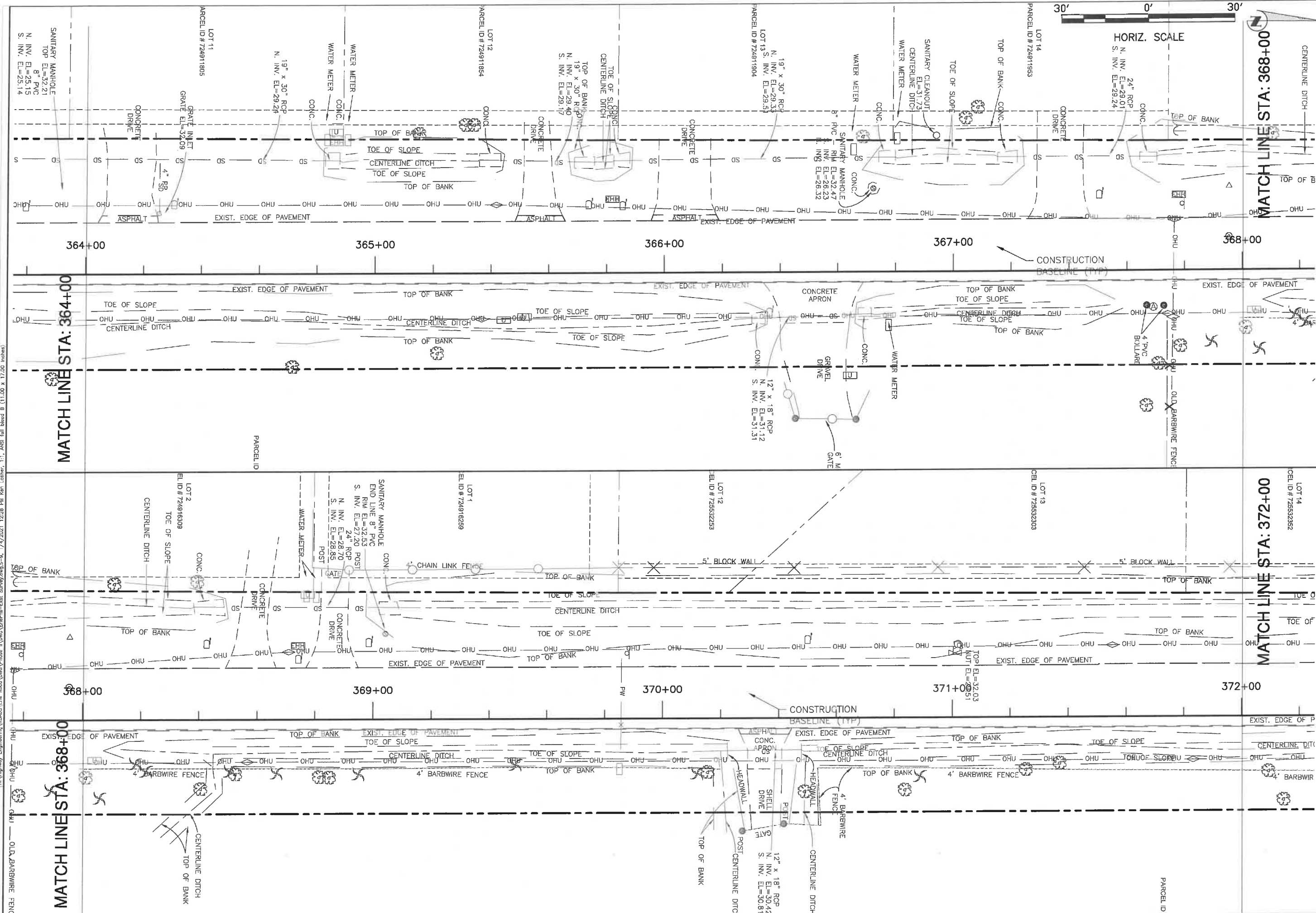
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
SURVEYED	ZNS 2013
DESIGNED	---
DRAWN	---
CHECKED	---

Signature & Date

**SHEET S-8**

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EXISTING SURVEY**



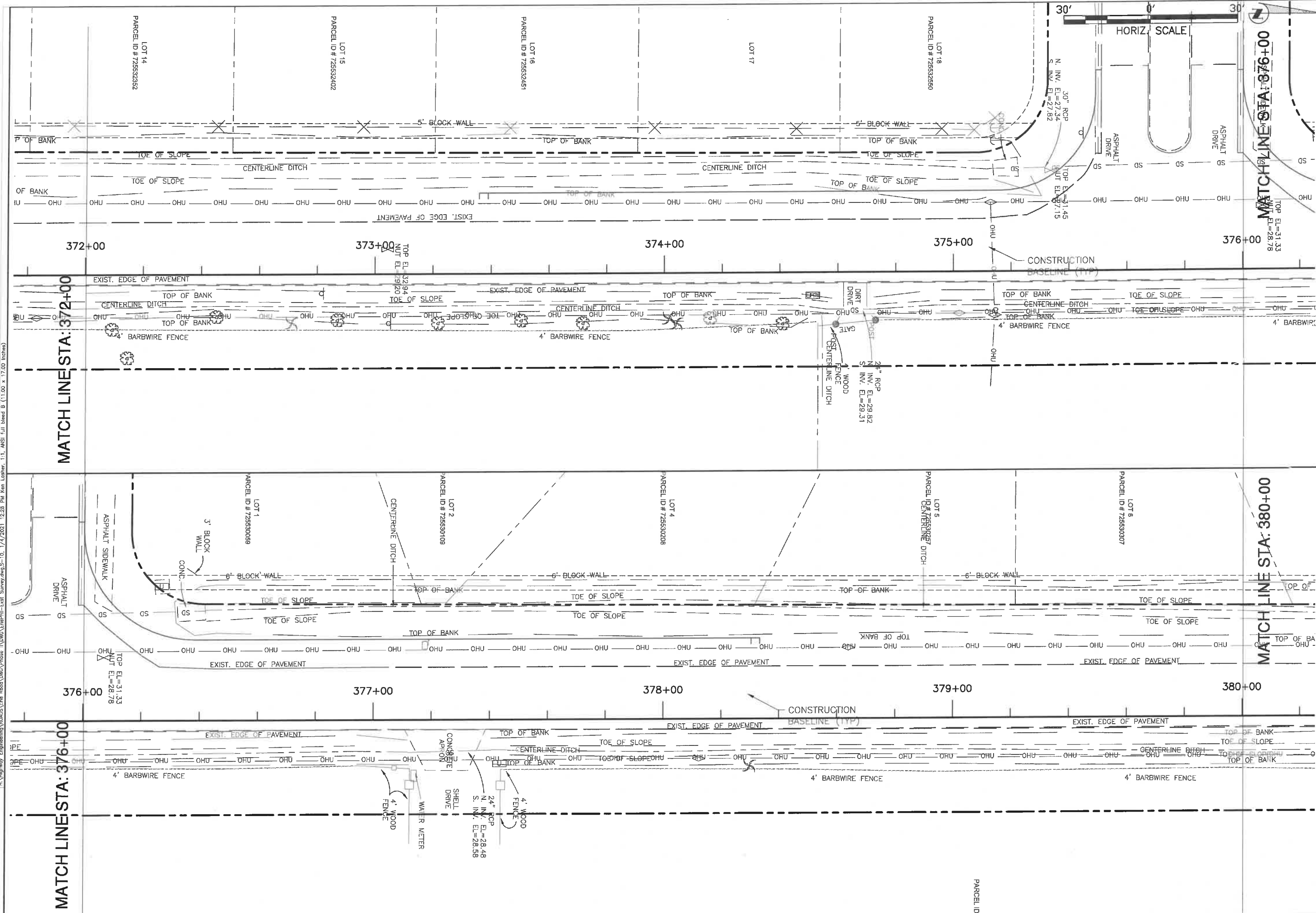
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
SURVEYED	ZNS 2013
DESIGNED	---
DRAWN	---
CHECKED	---

Signature & Date  
**SHEET S-9**

I:\Highway Engineering\ROADS\Eric\_Road\DWG\Phase II\DWG\ERIE-Ph II-Ext\_Survey.dwg, 1/14/2021 12:28 PM Ken Cahner, 1:1, ANSI full bleed B (11.00 x 17.00 inches)

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EXISTING SURVEY**



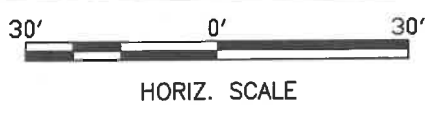
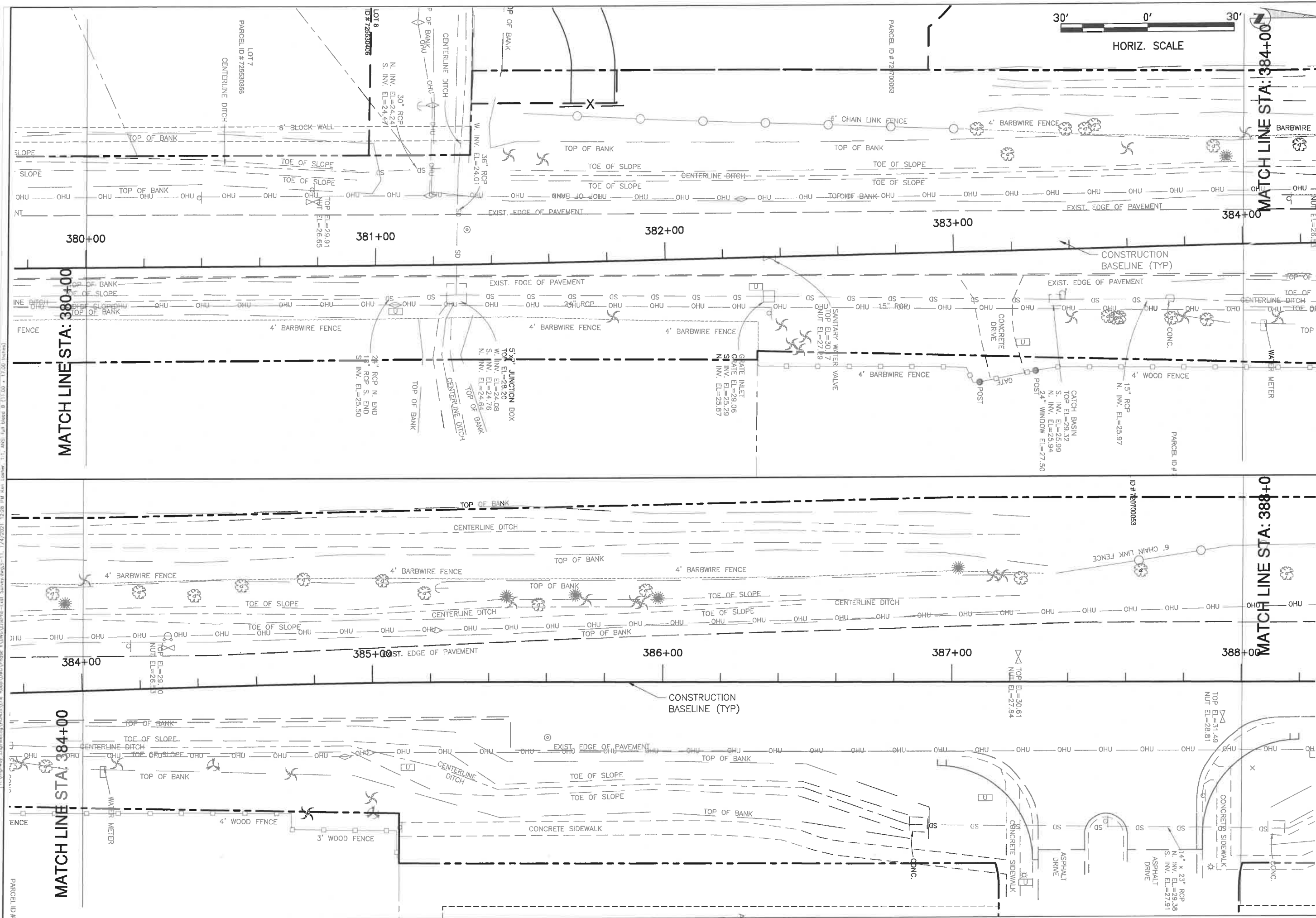
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
SURVEYED	ZNS 2013
DESIGNED	---
DRAWN	---
CHECKED	---

Signature & Date  
**SHEET S-10**

H:\Highway Engineering\ROADS\Eric Road\DWG\Phase II\DWG\ERIE-Phase II-Existing-S-10.dwg 1/4/2021 12:28 PM Ken Loaher, 1:1, AUST full bleed B (11.00 x 17.00 Inches)

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EXISTING SURVEY**



MATCH LINE STA: 380+00

MATCH LINE STA: 384+00

MATCH LINE STA: 388+00

MATCH LINE STA: 384+00

NO.	REVISION DESCRIPTION	BY	DATE

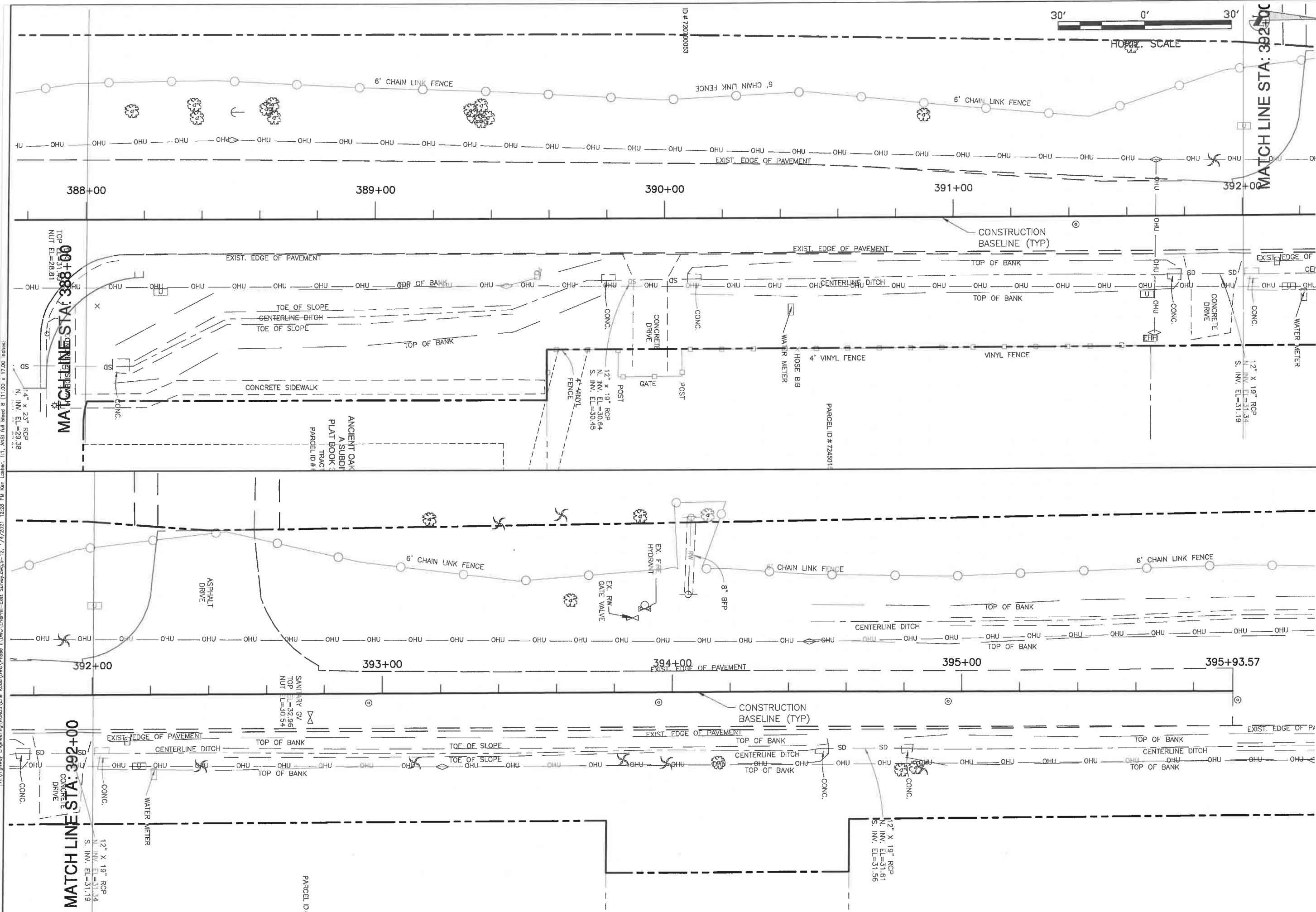
PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
SURVEYED	ZNS 2013
DESIGNED	---
DRAWN	---
CHECKED	---

Signature & Date

**SHEET S-11**

I:\Highway Engineering\Projects\Erie\_Road\Drawings\Phase II\DWG\Existing-1.dwg, Surveyed 11/14/2013 12:26 PM Ken Garner, EIT, AUST Ltd (11.00 x 17.00 Inches)

**ERIE ROAD- US301 TO US 301  
SOUTH-NORTH PHASE II  
EXISTING SURVEY**



I:\A\Highway Engineering\ROADS\Eng\_Road\DWG\Phase II\DWG\ERIEPHI-Ext\_Survey.dwg; S-12, 1/4/2021, 12:28 PM Ken Leathers, 1:1, ANSI Full bleed B (11.00 x 17.00 inches)

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	AS NOTED
SURVEYED	ZNS 2013
DESIGNED	----
DRAWN	----
CHECKED	----

Signature & Date  
**SHEET S-12**