



# MANATEE COUNTY, FLORIDA

## ERIE ROAD - US 301 TO US 301

### SOUTH-NORTH PHASE II UTILITIES

# 307-6082860

APRIL 2020

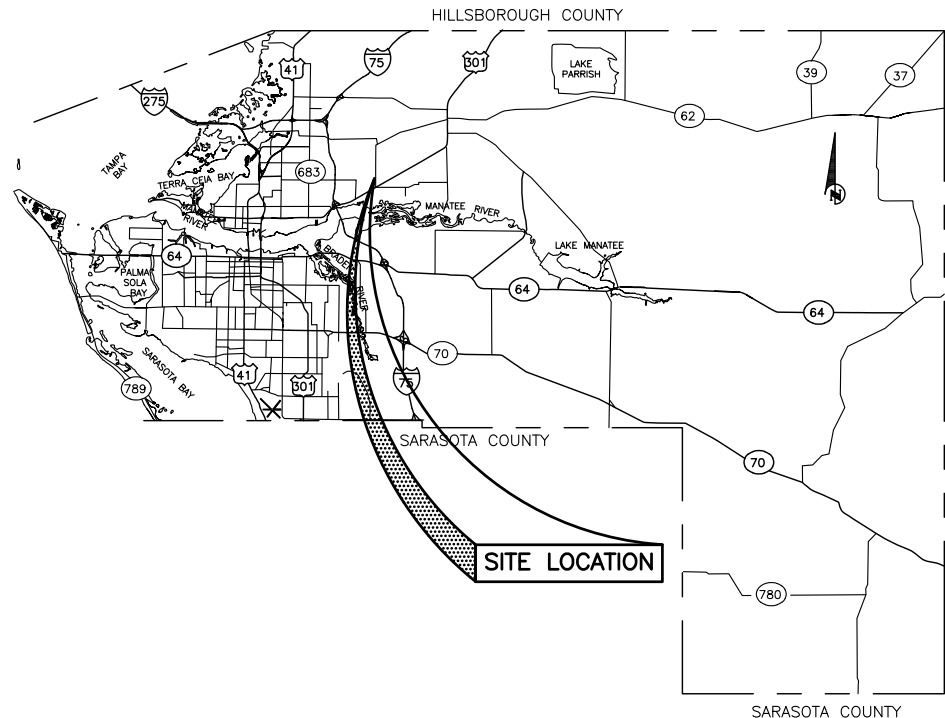
**BID PLANS**

**DATUM NGVD 29**



VICINITY MAP  
N.T.S.

PROJECT SITE



SITE LOCATION

NO.	INDEX OF SHEETS
1	COVER SHEET
2	GENERAL NOTES & LEGEND
3-20	PLAN AND PROFILE
21-23	GENERAL DETAILS
24	SOFT DIGS
25	BASELINE LAYOUT
26	EROSION CONTROL DETAILS

**PROJECT DESCRIPTION**

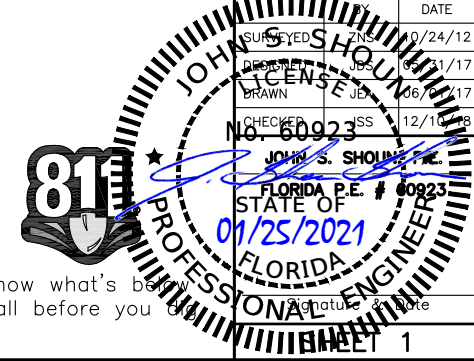
PROJECT CONSISTS OF UTILITY MODIFICATIONS TO THE EXISTING 16" DUCTILE IRON PIPE WATER MAIN AND VARIOUS SIZED BRANCH MAINS, PRIOR TO WIDENING THE EXISTING ROAD FROM 22'± TO 24', ADDING TURN LANES, WIDENING THE EXISTING SHOULDERS AND RELOCATING EXISTING ROADSIDE DITCHES.

THESE PLANS ARE A SUPPLEMENT TO THE HIGHWAY DEPARTMENT'S CONSTRUCTION PLANS, PROJECT NAME "ERIE ROAD - US 301 TO US 301 SOUTH NORTH PHASE II" PROJ NO.: 307-6082860. THE HIGHWAY PLANS WERE USED AS A BASE FOR THE CREATION OF THIS PLAN SET AND SHALL BE REFERENCED FOR ALL HORIZONTAL AND VERTICAL CONTROL, SHEETS 07-14.

**ERIE ROAD- US301 TO US 301**  
**SOUTH-NORTH PHASE II UTILITIES**  
**COVER**

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-6082860
SURVEY #	00-43133
SEC./TWN./RGE	2,35/33,34S/18E
SCALE	N.T.S.
DATE	
SURVEYED	10/24/12
DRAWN	01/17/17
CHECKED	06/06/17
DATE	12/10/18

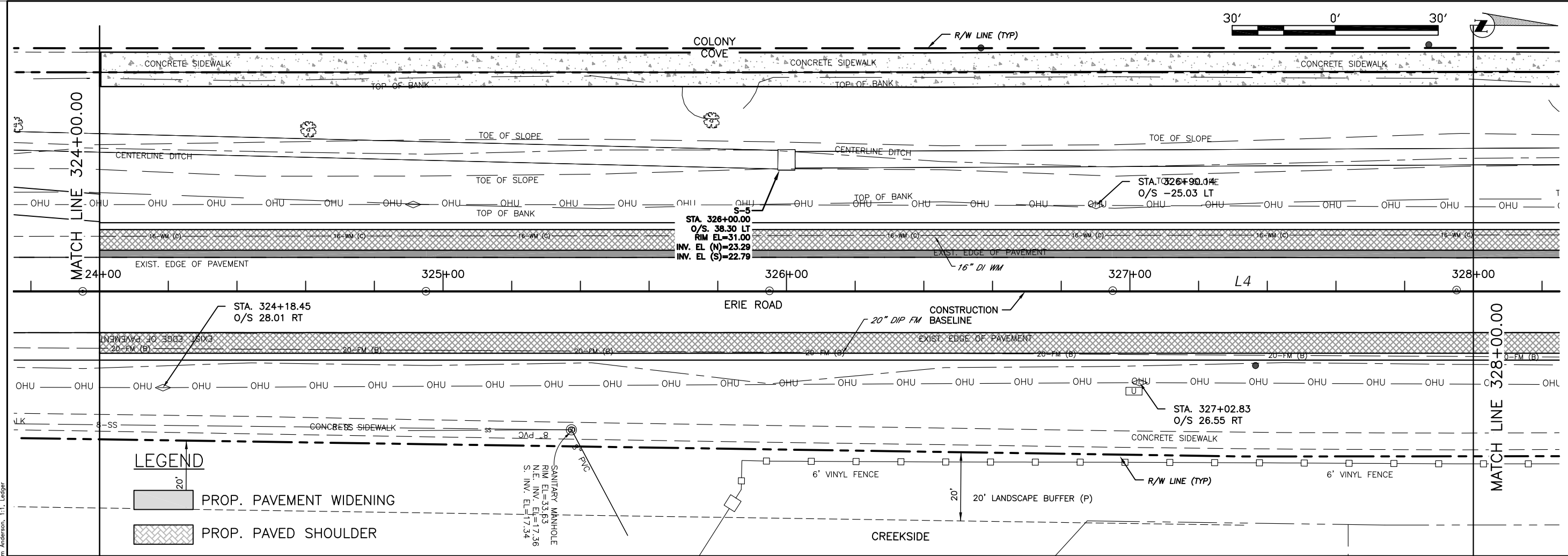


Know what's best for your community. Call before you dig.

H:\Util Eng Design\PROJ\Utility Relocations\Erie Road NS.dwg, 1/25/2021 8:56 AM Jim Anderson, 1:1, Ledger



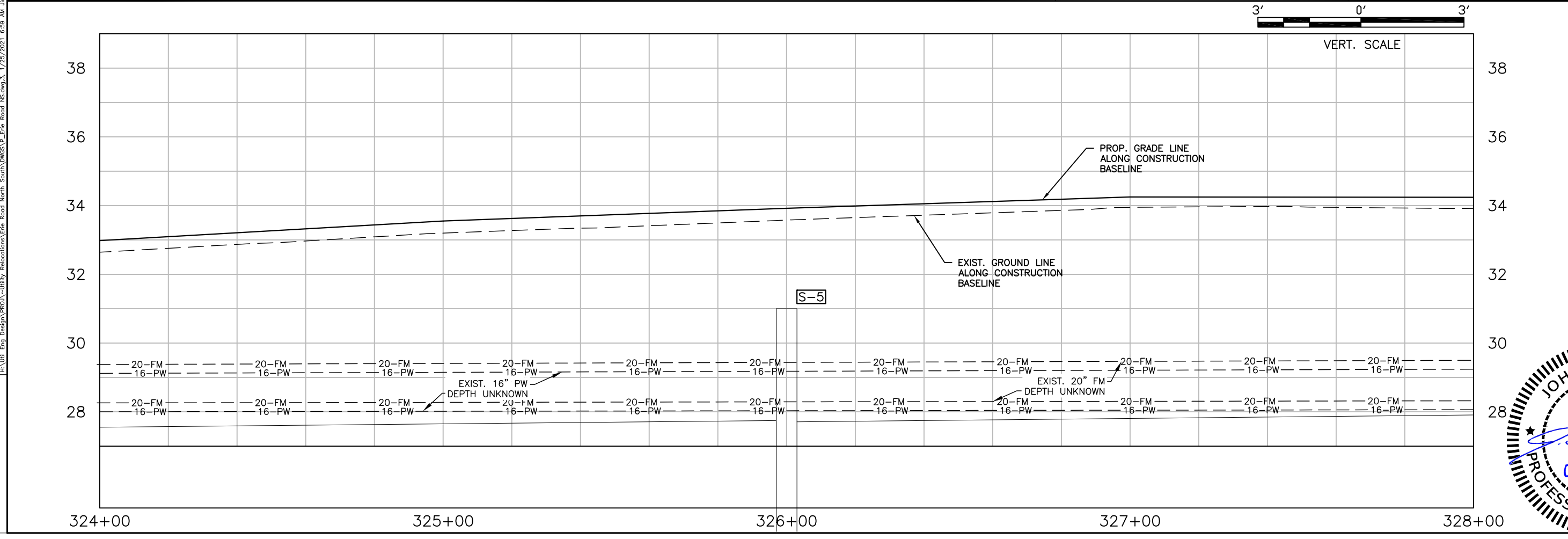
**ERIE ROAD- US301 TO US 301**  
**SOUTH-NORTH PHASE II UTILITIES**  
**PLAN AND PROFILE STA. 312+00 TO 316+00**



**LEGEND**

- PROP. PAVED SHOULDER
- PROP. PAVEMENT WIDENING

SANITARY MANHOLE  
RIM EL.=33.63  
N.E. INV. EL.=17.36  
S. INV. EL.=17.34



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-60828600
SURVEY #	00-43133
SEC./TWN./RGE	2,3S/33,34S/18E
SCALE	AS NOTED

BY	DATE
SURVEYED	10/24/12
DESIGNED	11/31/17
DRAWN	06/27/17
CHECKED	JSS 12/11/18

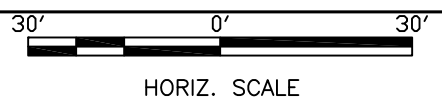
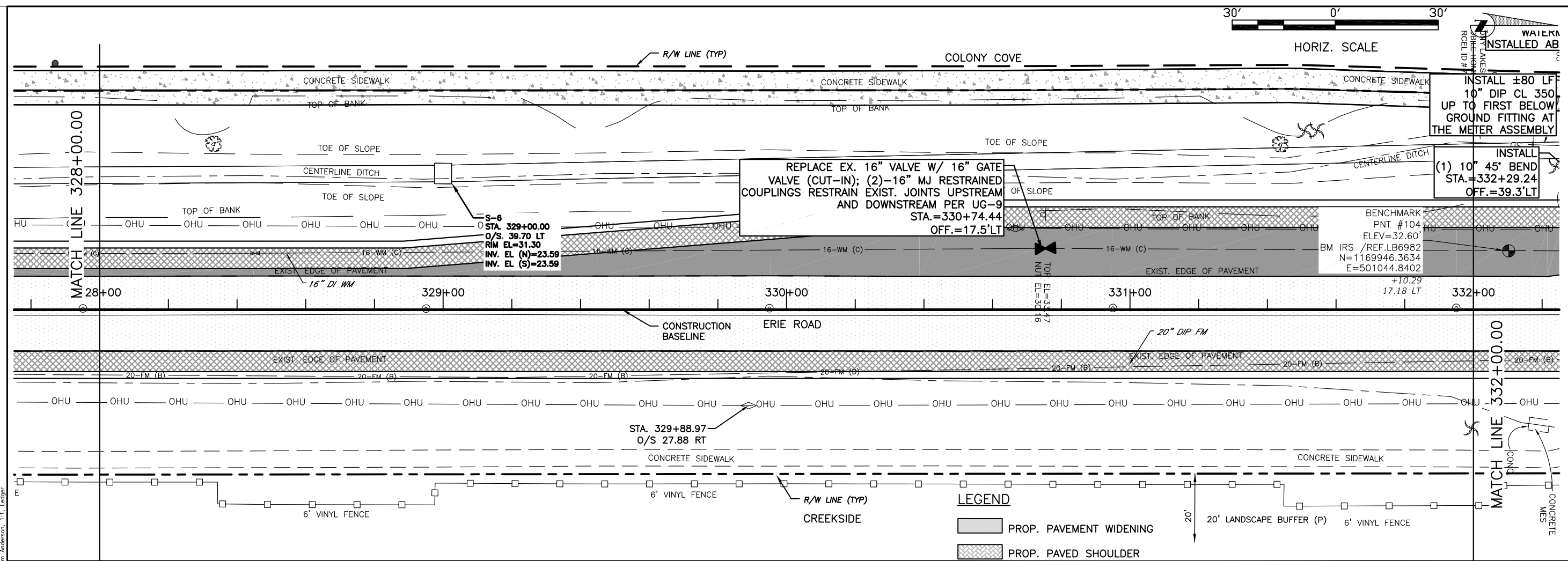
NO. 60923  
JOHN S. SHOUN, P.E.  
FLORIDA P.E. # 68823  
STATE OF FLORIDA  
01/25/2021  
PROFESSIONAL ENGINEER

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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 UTILITIES**  
**PLAN AND PROFILE STA. 316+00 TO 320+00**



INSTALL ±80 LF  
10" DIP CL 350  
UP TO FIRST BELOW  
GROUND FITTING AT  
THE METER ASSEMBLY

REPLACE EX. 16" VALVE W/ 16" GATE  
VALVE (CUT-IN); (2)-16" MJ RESTRAINED  
COUPLINGS RESTRAIN EXIST. JOINTS UPSTREAM  
AND DOWNSTREAM PER UG-9  
STA.=330+74.44  
OFF.=17.5'LT

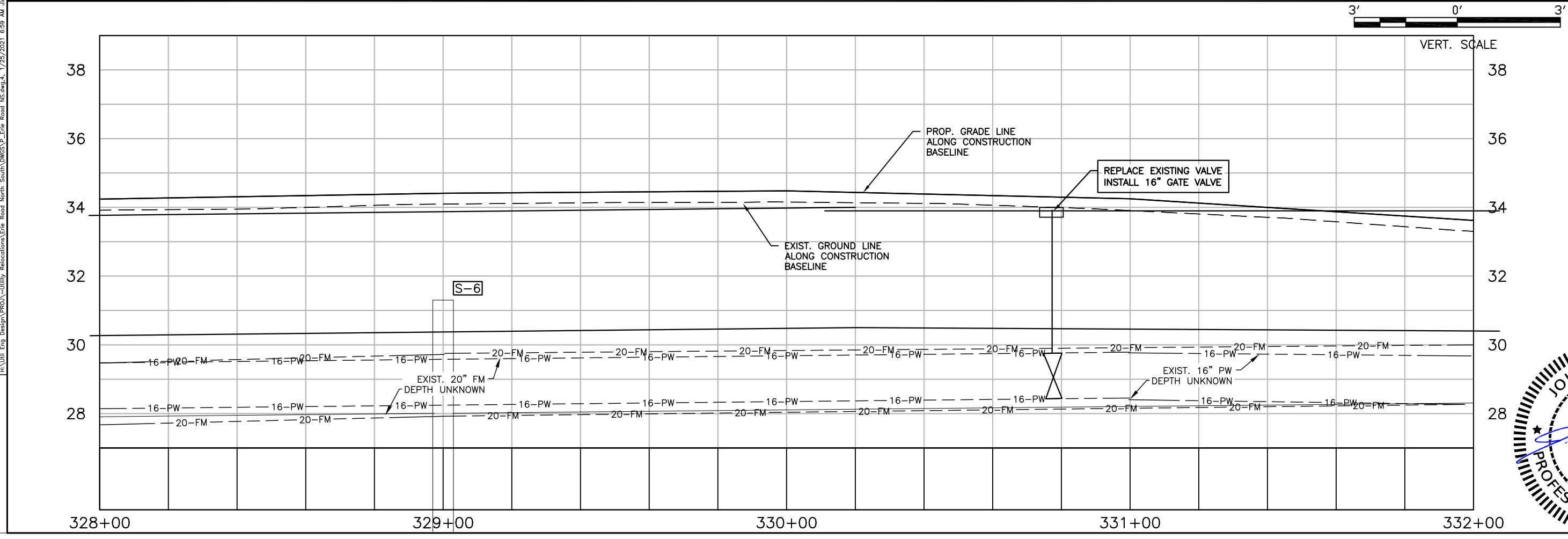
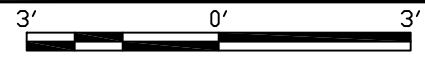
INSTALL  
(1) 10" 45° BEND  
STA.=332+29.24  
OFF.=39.3'LT

BENCHMARK  
PNT #104  
ELEV=32.60'  
BM IRS /REF.LB6982  
N=1169946.3634  
E=501044.8402  
+10.29  
17.18 LT

S-6  
STA. 329+00.00  
O/S. 39.70 LT  
RIM EL.=31.30  
INV. EL (N)=23.59  
INV. EL (S)=23.59

STA. 329+88.97  
O/S 27.88 RT

**LEGEND**  
PROP. PAVEMENT WIDENING  
PROP. PAVED SHOULDER



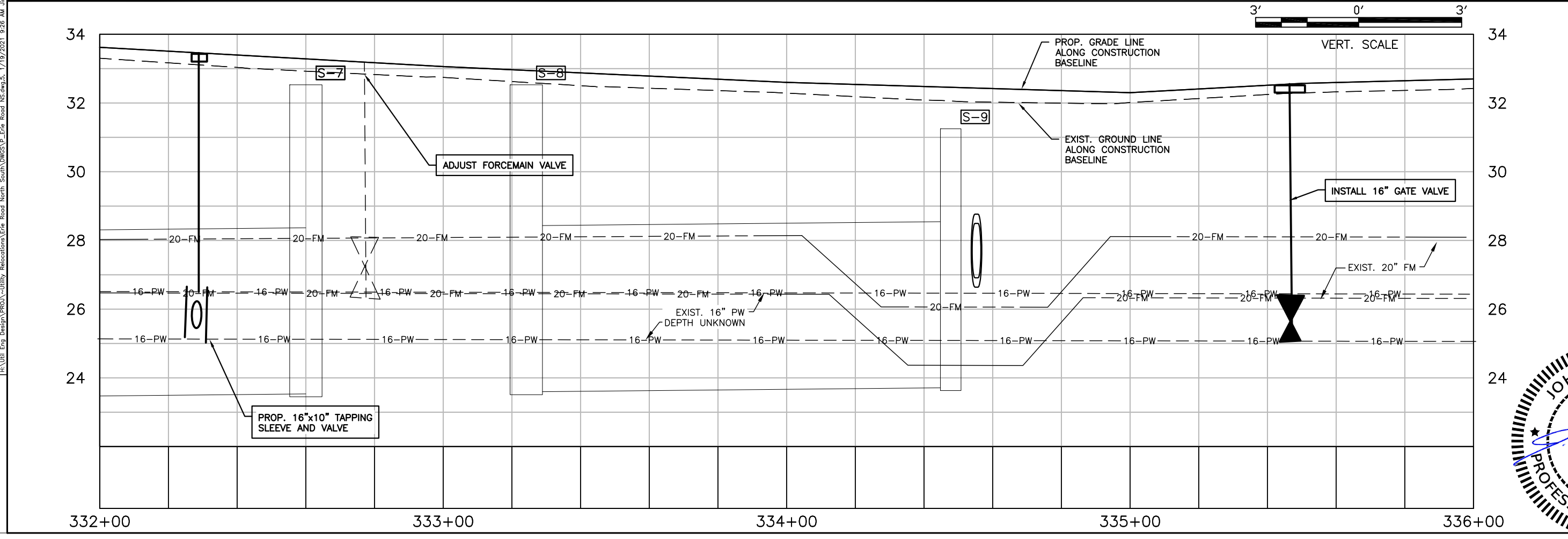
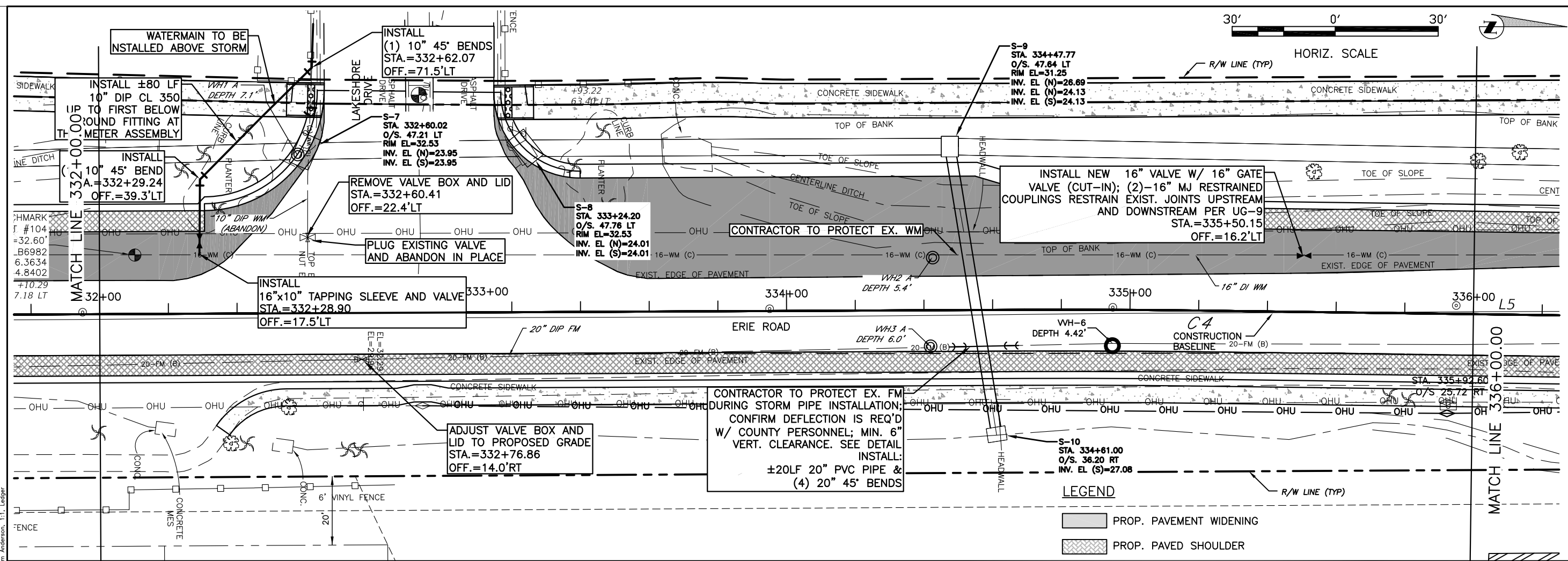
NO.	DATE	BY	REVISION DESCRIPTION

PROJECT #	307-60828600
SURVEY #	00-43133
SEC./TWN./RGE	2,3S/33,34S/18E
SCALE	AS NOTED

JOHN S. SHOUN, P.E.  
No. 60923  
FLORIDA P.E. # 60923  
STATE OF FLORIDA  
01/25/2021  
PROFESSIONAL ENGINEER

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



NO.	REVISION DESCRIPTION	BY	DATE

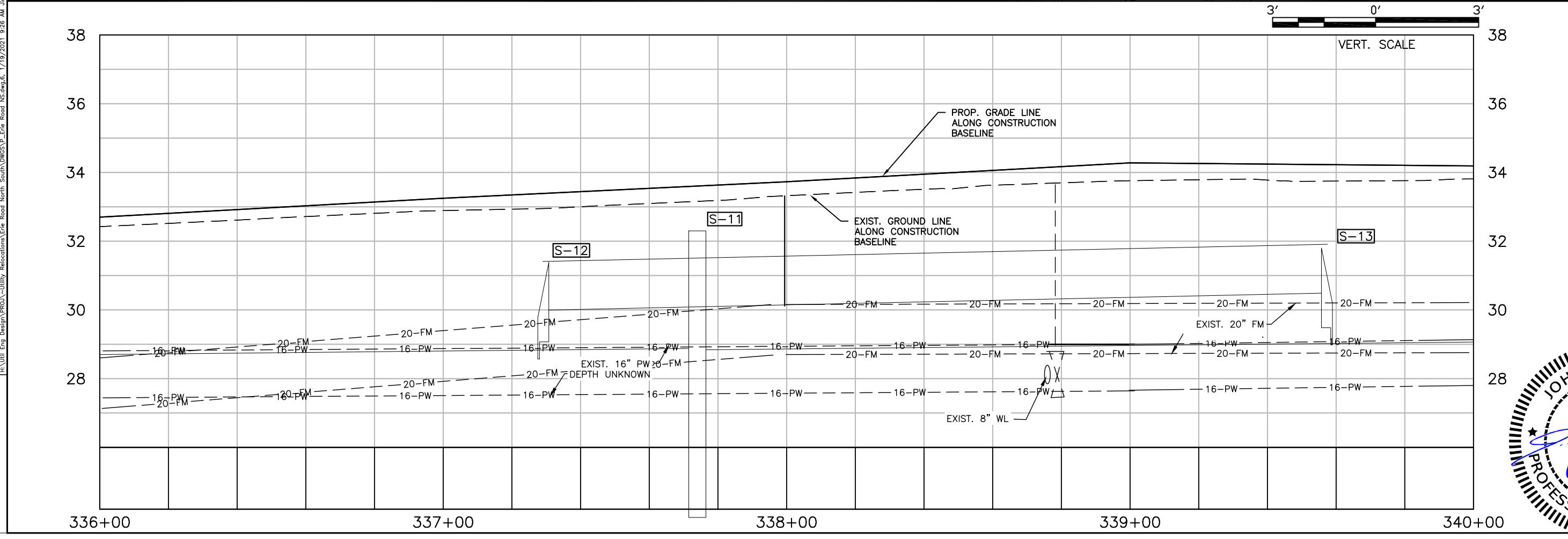
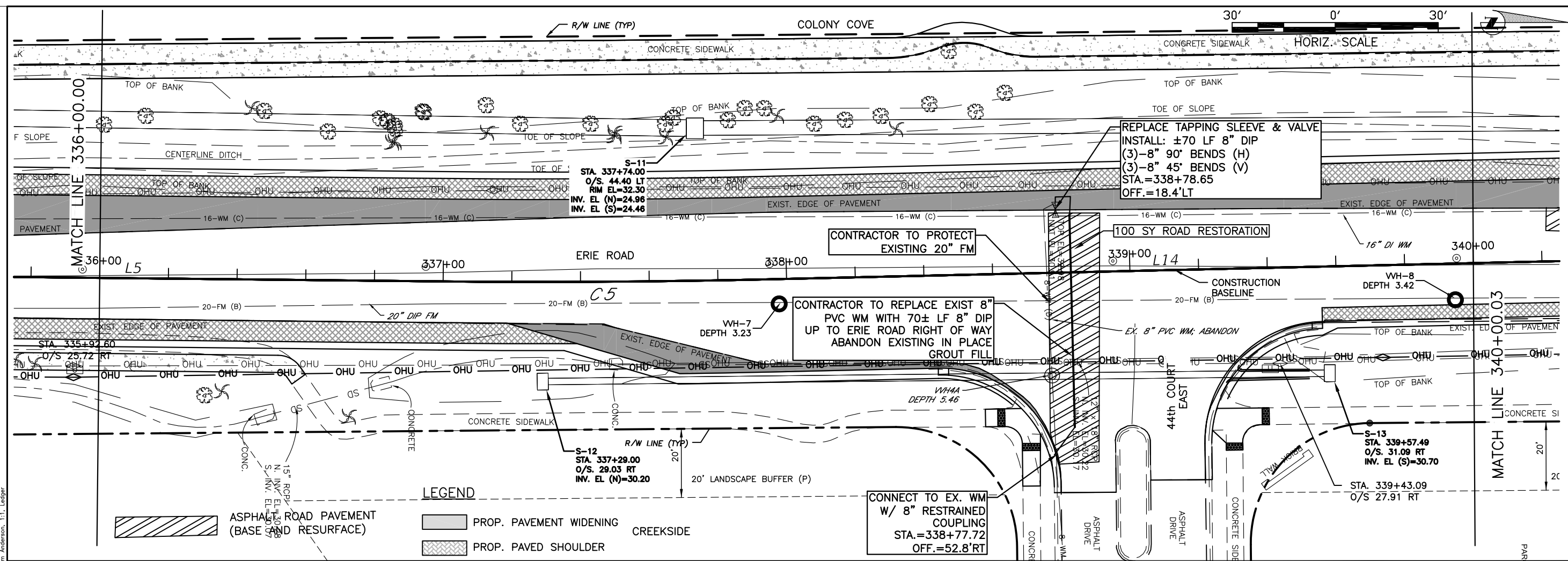
PROJECT #	307-60828600
SURVEY #	00-43133
SEC./TWN./RGE	2,3S/33,34S/18E
SCALE	AS NOTED

BY	DATE
SURVEYED	10/24/12
DRAWN	11/17
CHECKED	12/10

No. 60923  
 JOHN S. SHOUN, P.E.  
 FLORIDA P.E. # 06823  
 STATE OF FLORIDA  
 01/25/2021  
 PROFESSIONAL ENGINEER

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



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NO.	REVISION DESCRIPTION	BY	DATE

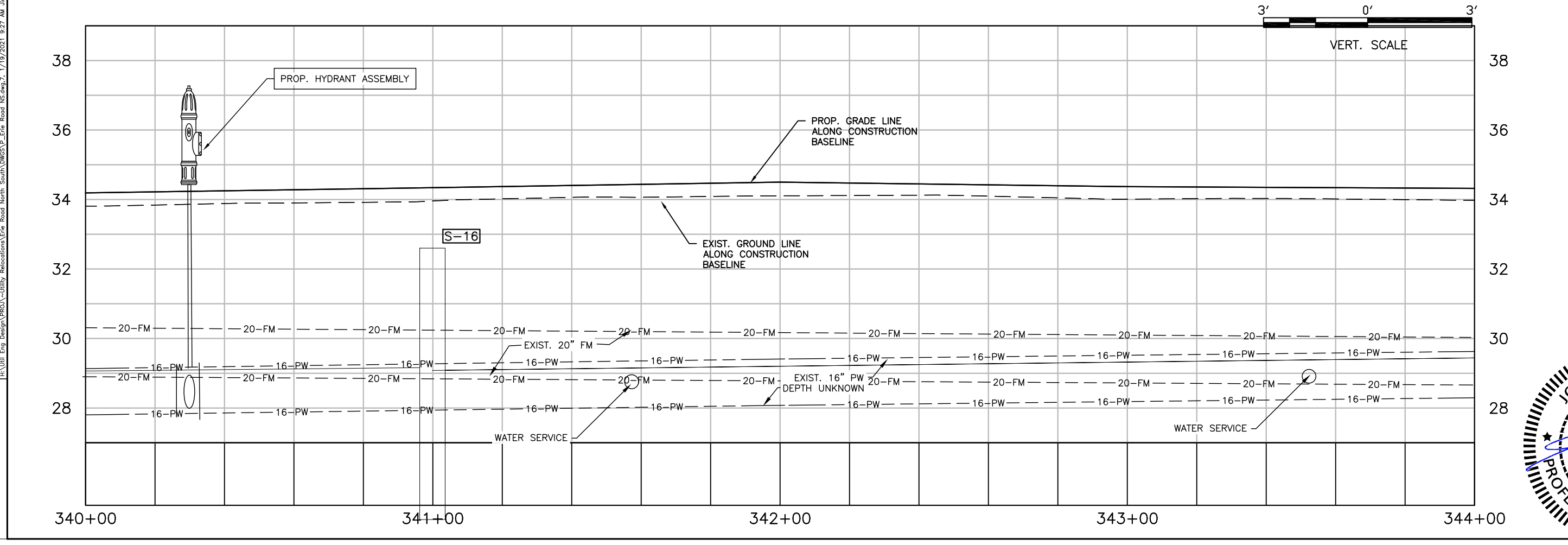
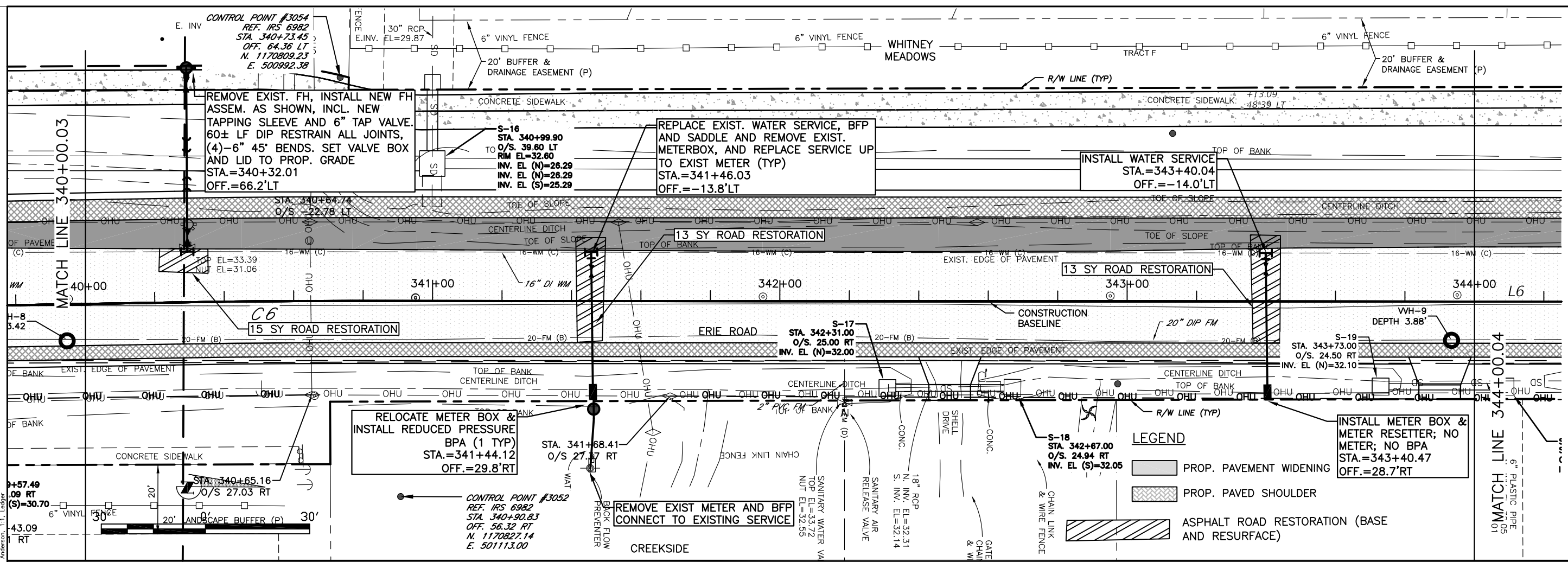
PROJECT #	307-60828600
SURVEY #	00-43133
SEC./TWN./RGE	2,3S/33,34S/18E
SCALE	AS NOTED

DESIGNED	10/24/12
APPROVED	11/17
CHECKED	12/10
DATE	

No. 60923  
 JOHN S. SHOUN, P.E.  
 FLORIDA P.E. # 60923  
 STATE OF FLORIDA  
 01/25/2021  
 PROFESSIONAL ENGINEER

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



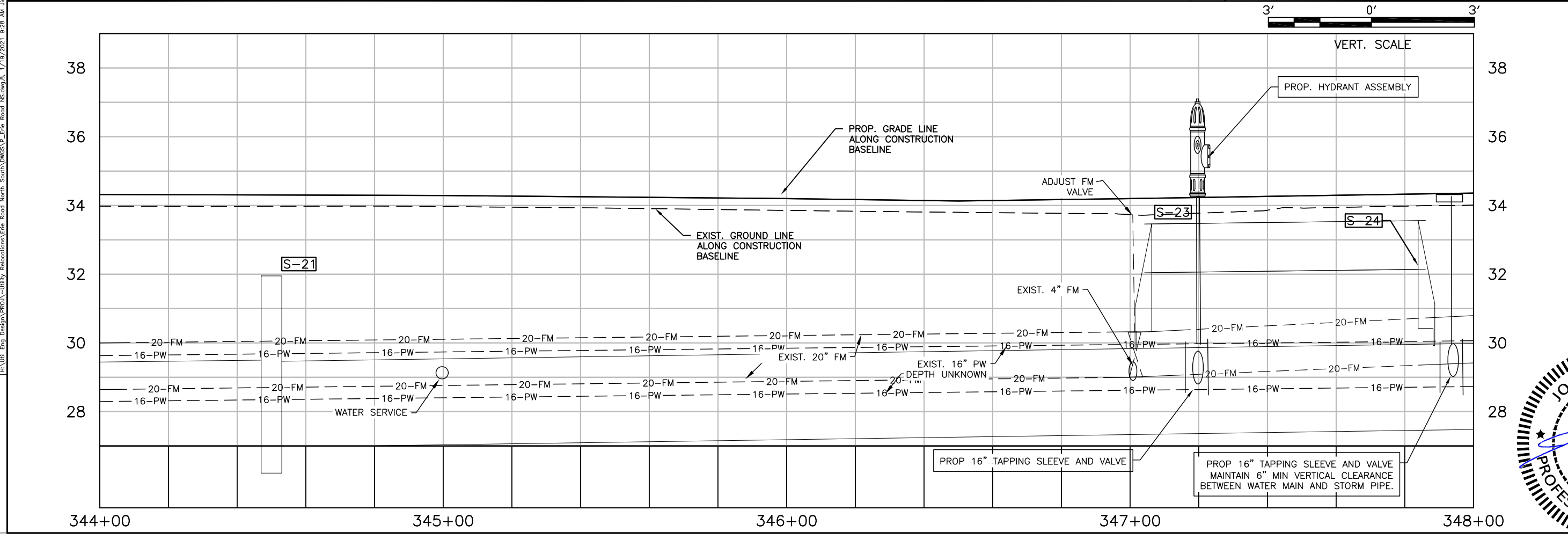
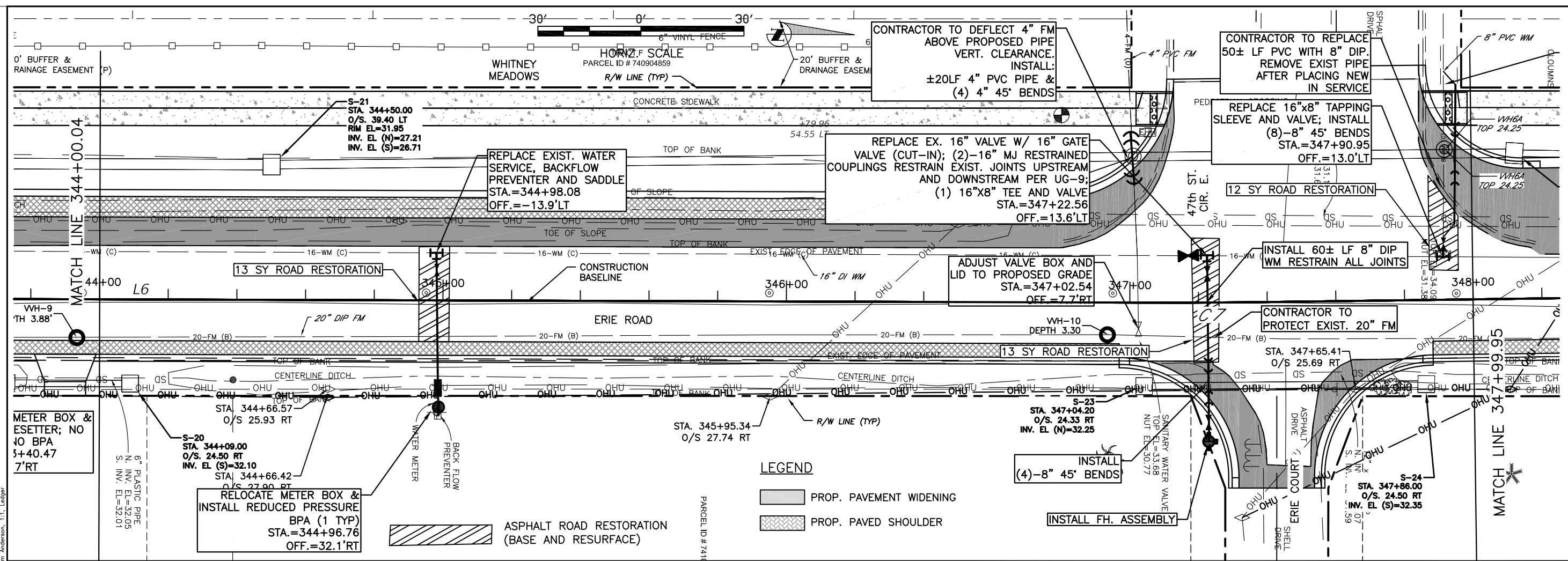
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-60828600
SURVEY #	00-43133
SEC./TWN./RGE	2,3S/33,34S/18E
SCALE	AS NOTED

BY: [Signature] DATE: 10/24/12  
 DESIGNED: [Signature] DATE: 10/31/17  
 CHECKED: JSS DATE: 12/11/18  
 No. 60923  
 JOHN S. SHOUN, P.E.  
 FLORIDA P.E. # 60923  
 STATE OF FLORIDA  
 PROFESSIONAL ENGINEER  
 01/25/2021  
 SIGNATURE: [Signature]

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



NO.	DATE	REVISION DESCRIPTION

PROJECT #	307-60828600
SURVEY #	00-43133
SEC./TWN./RGE	2,3S/33,34S/18E
SCALE	AS NOTED

BY	DATE
DESIGNED	10/24/12
DRAWN	06/07/17
CHECKED	02/10/17

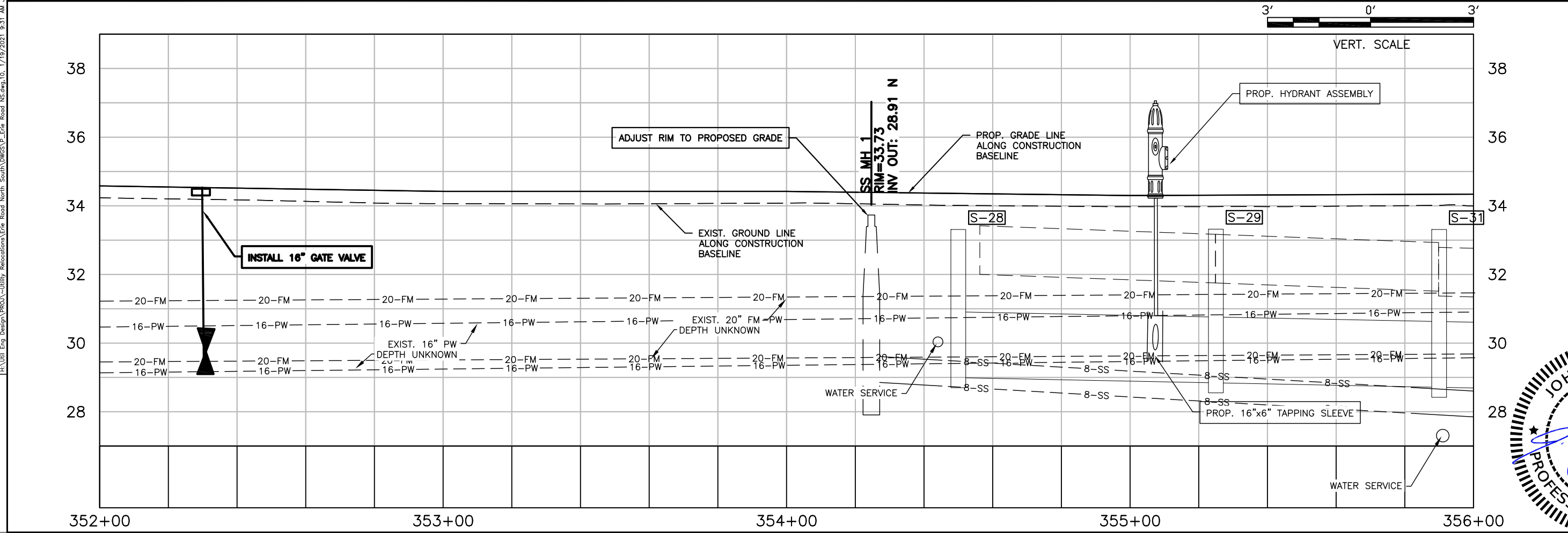
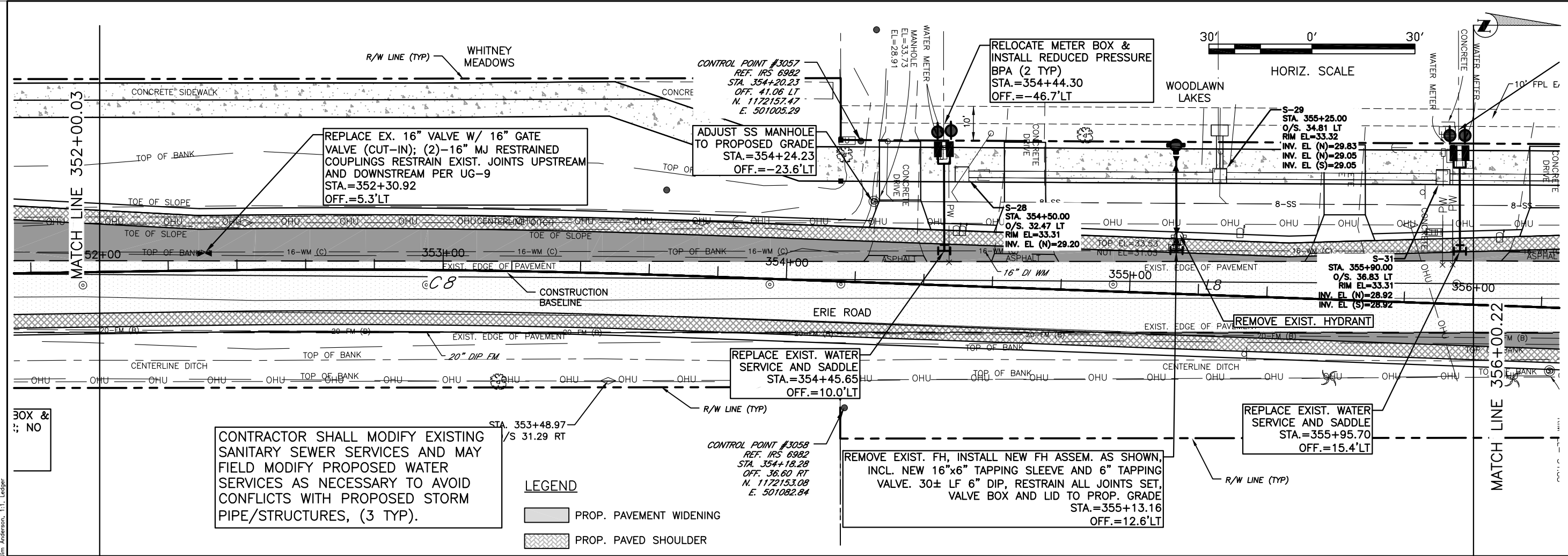
JOHN S. SHOWN  
Professional Engineer  
No. 69923  
FLORIDA P.E. # 69923  
STATE OF FLORIDA  
01/25/2021  
SHEET 18

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



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-60828600
SURVEY #	00-43133
SEC./TWN./RGE	2,3S/33,34S/18E
SCALE	AS NOTED

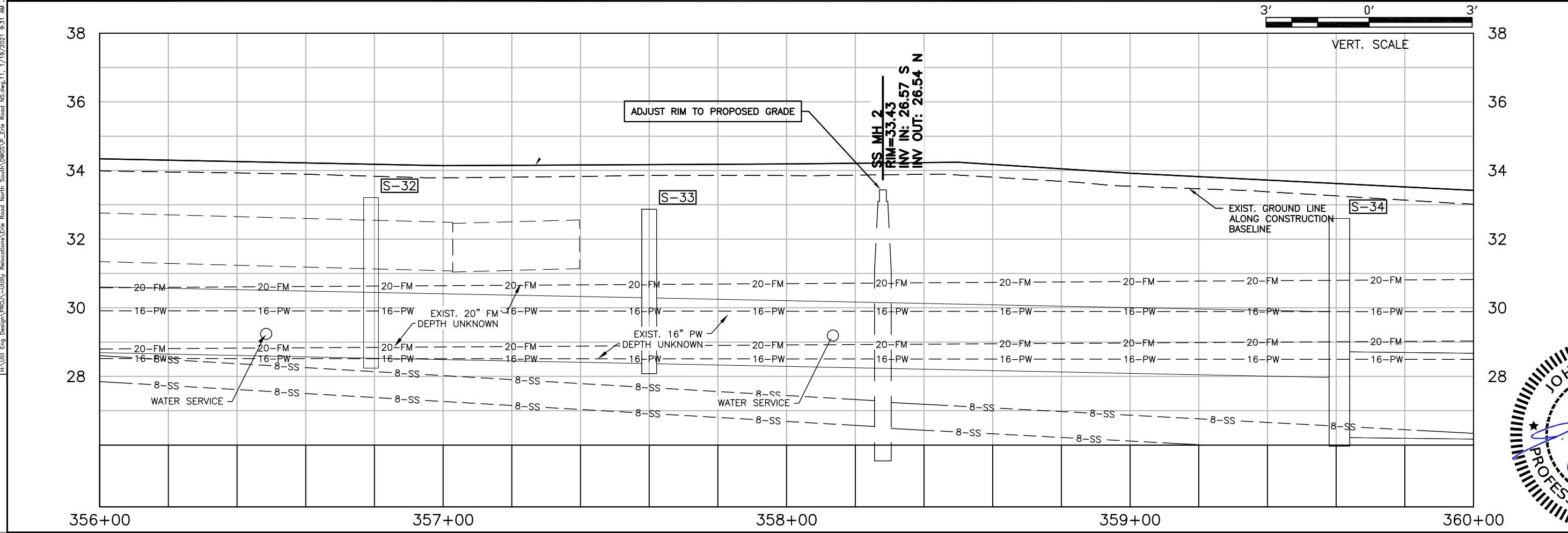
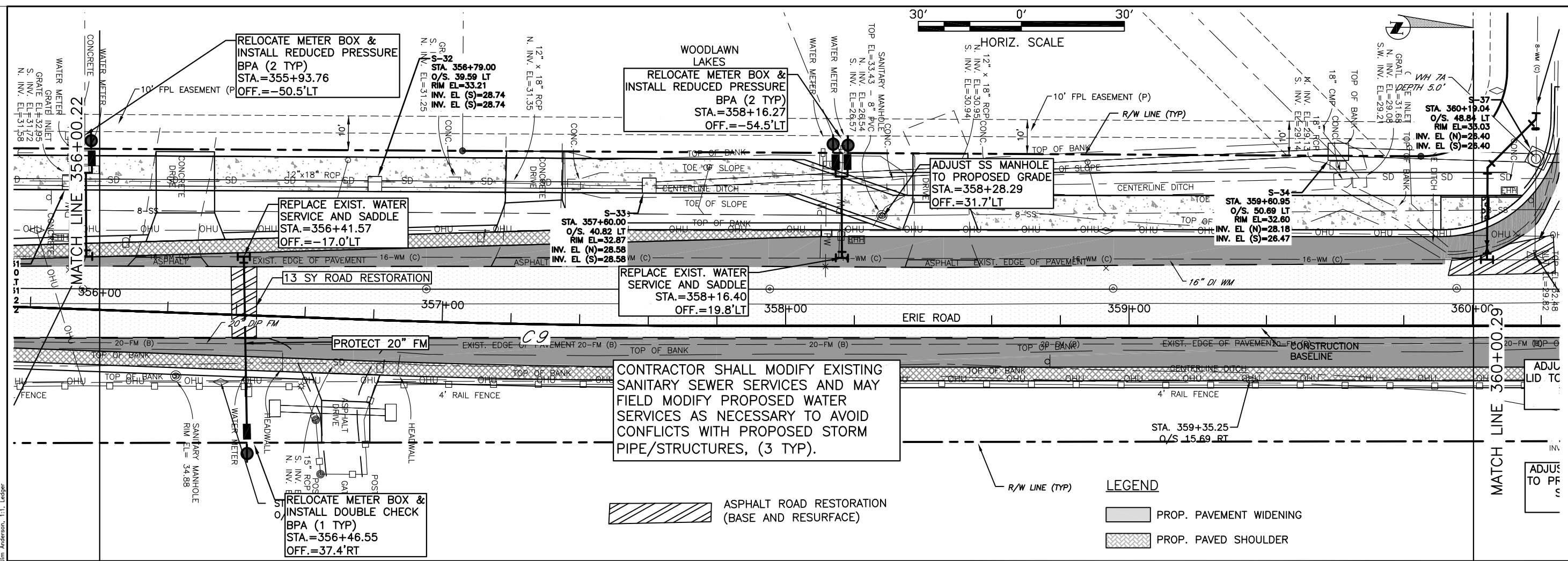
  

BY	DATE
DESIGNED	10/24/12
DRAWN	11/17
CHECKED	12/10

NO. 60923  
JOHN S. SHOUN, P.E.  
FLORIDA P.E. # 60923  
STATE OF FLORIDA  
01/25/2021  
PROFESSIONAL ENGINEER

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



**LEGEND**

- PROP. PAVEMENT WIDENING
- PROP. PAVED SHOULDER

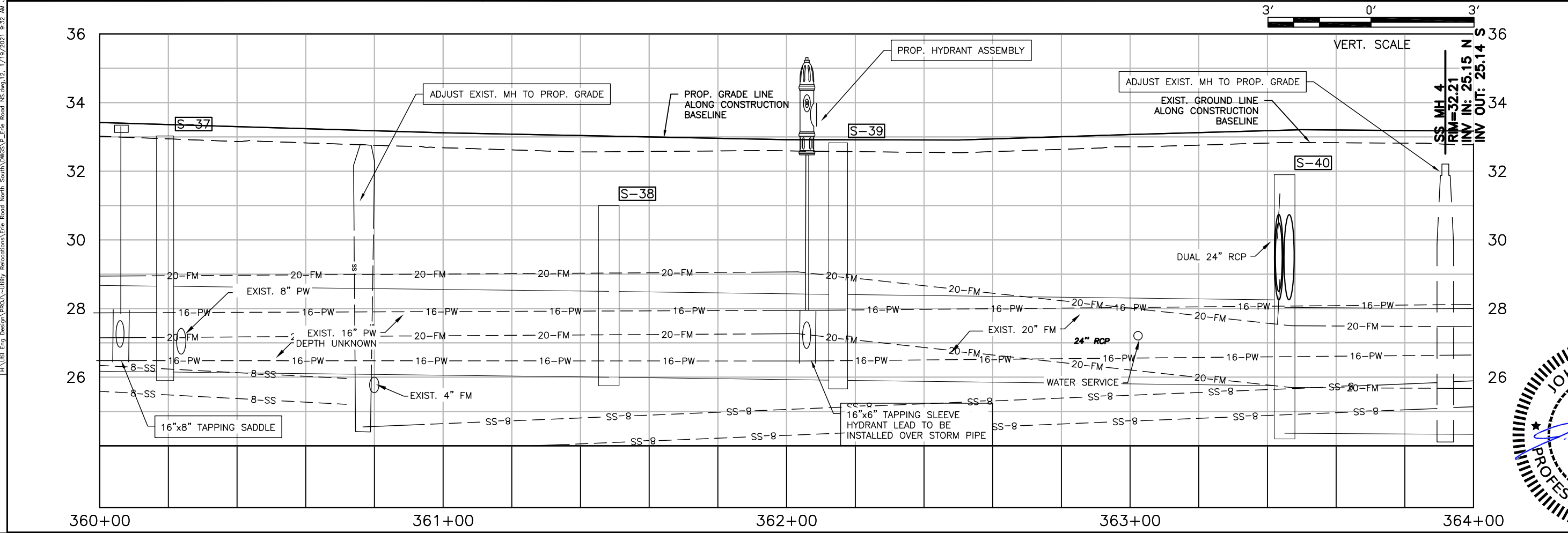
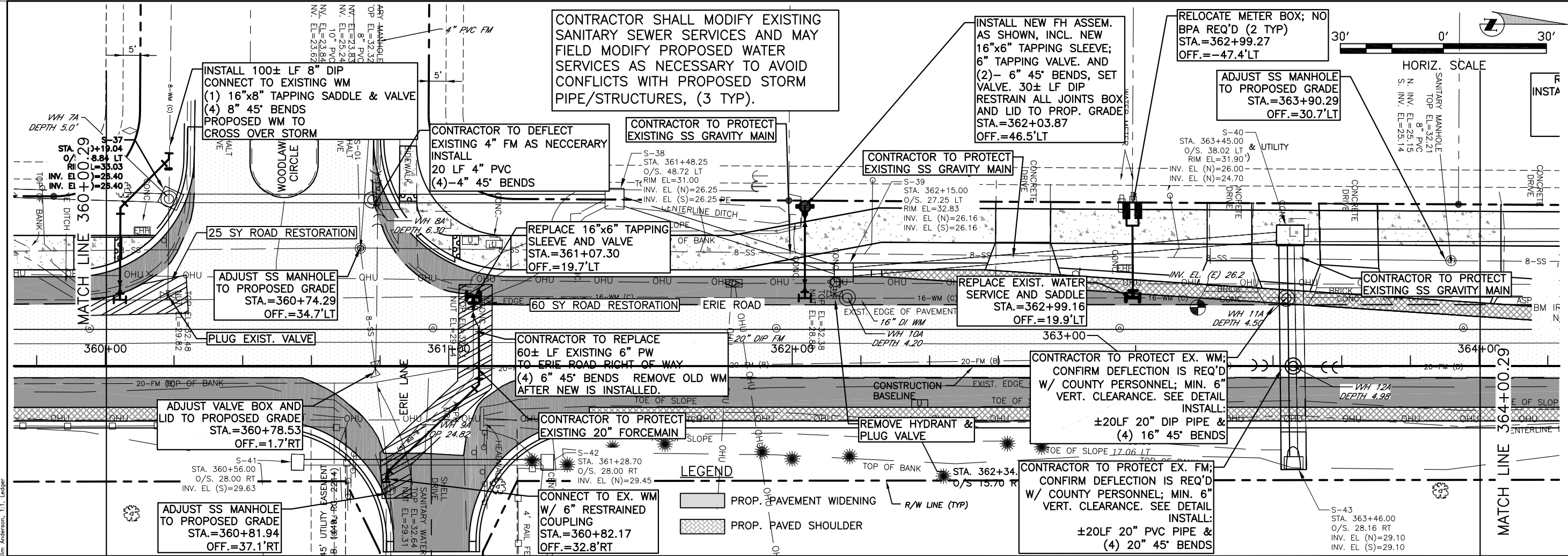
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-60828600
SURVEY #	00-43133
SEC./TWN./RGE	2,3S/33,34S/18E
SCALE	AS NOTED
DATE	02/24/12
DESIGNED	05/24/17
DRAWN	05/06/17
CHECKED	12/10/17
NO. 60923	JOHN S. SHOUN
FLORIDA P.E. # 60923	STATE OF FLORIDA
01/25/2021	PROFESSIONAL ENGINEER

H:\Utility Eng Design\PROJ\Utility Relocations\Erie Road South\DWGS\VP - Erie Road - South-North Phase II - 1/19/2021 9:31 AM Jim Anderson, I.T. Ledger

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



NO.	REVISION DESCRIPTION	DATE

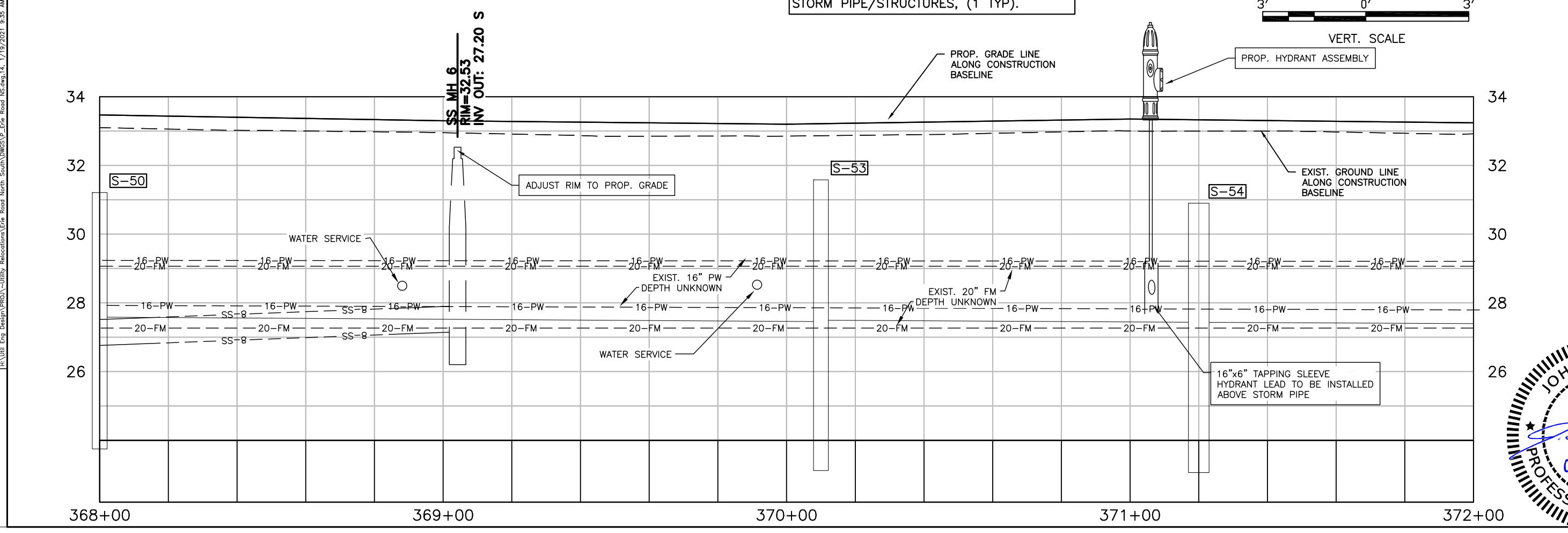
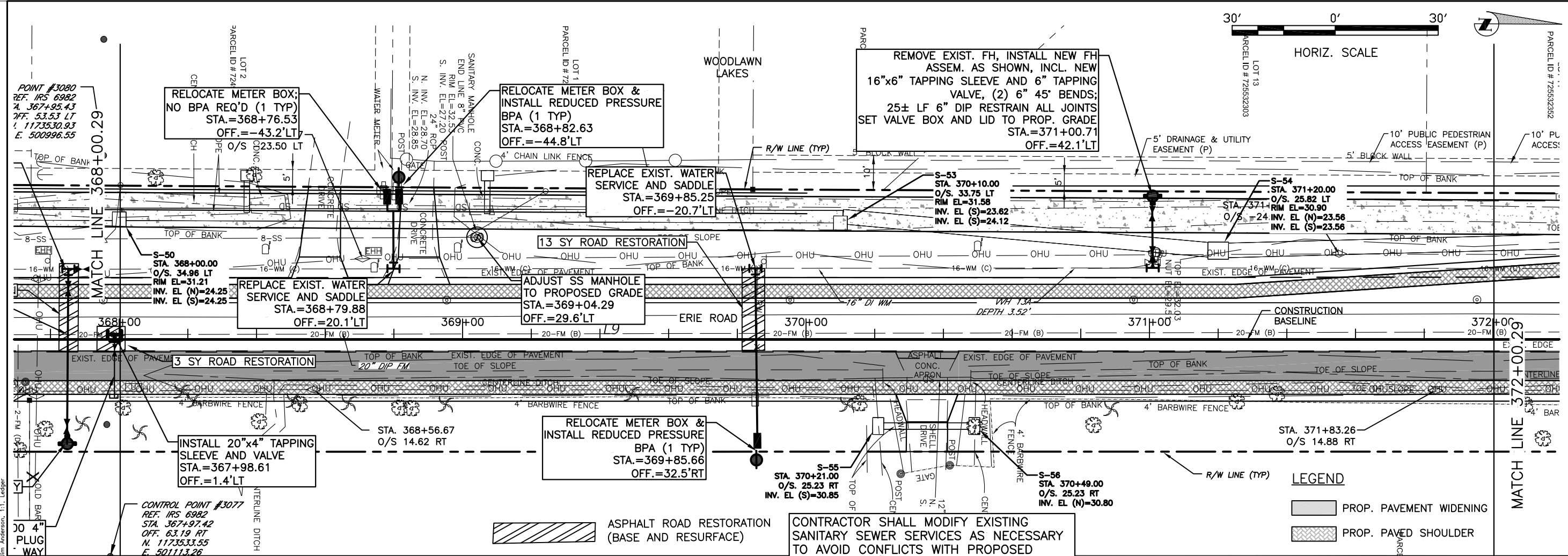
  

PROJECT #	307-60828600
SURVEY #	00-43133
SEC./TWN./RGE	2,3S/33,34S/18E
SCALE	AS NOTED
DATE	02/24/12
DESIGNED	03/21/17
DRAWN	07/01/17
CHECKED	12/10/17
NO. 60923	JOHN S. SHOUN
FLORIDA P.E. # 60923	STATE OF FLORIDA
01/25/2021	PROFESSIONAL ENGINEER

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



NO.	REVISION DESCRIPTION	BY	DATE

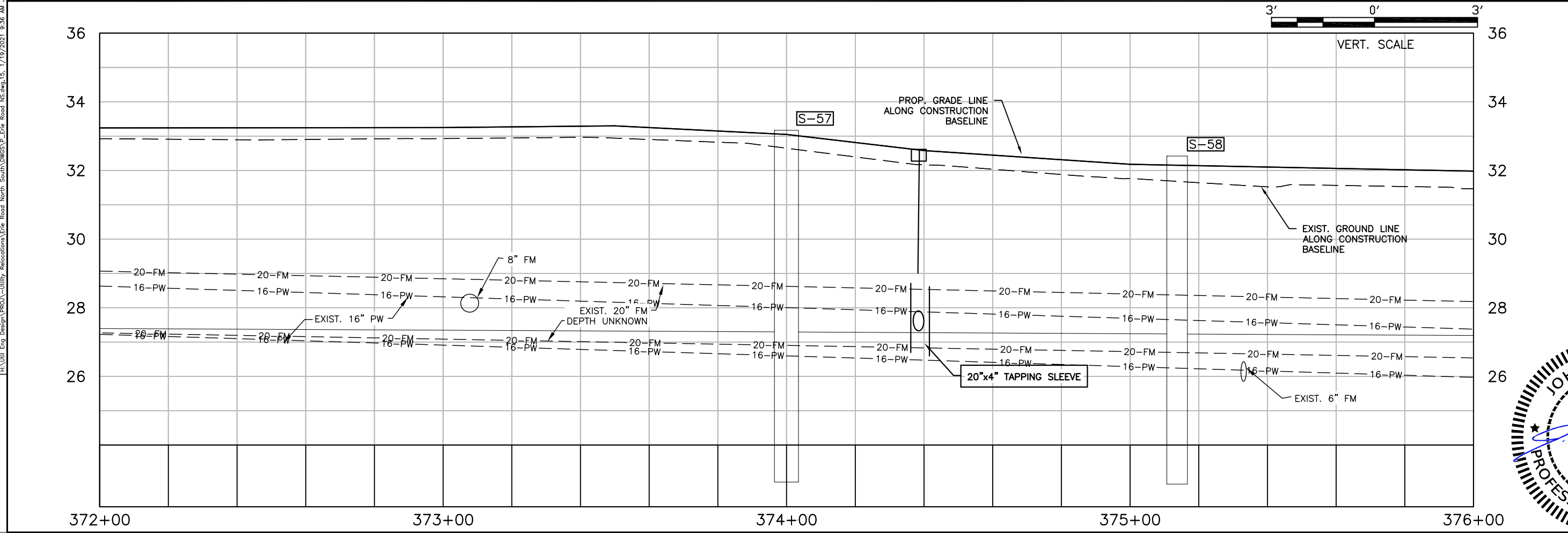
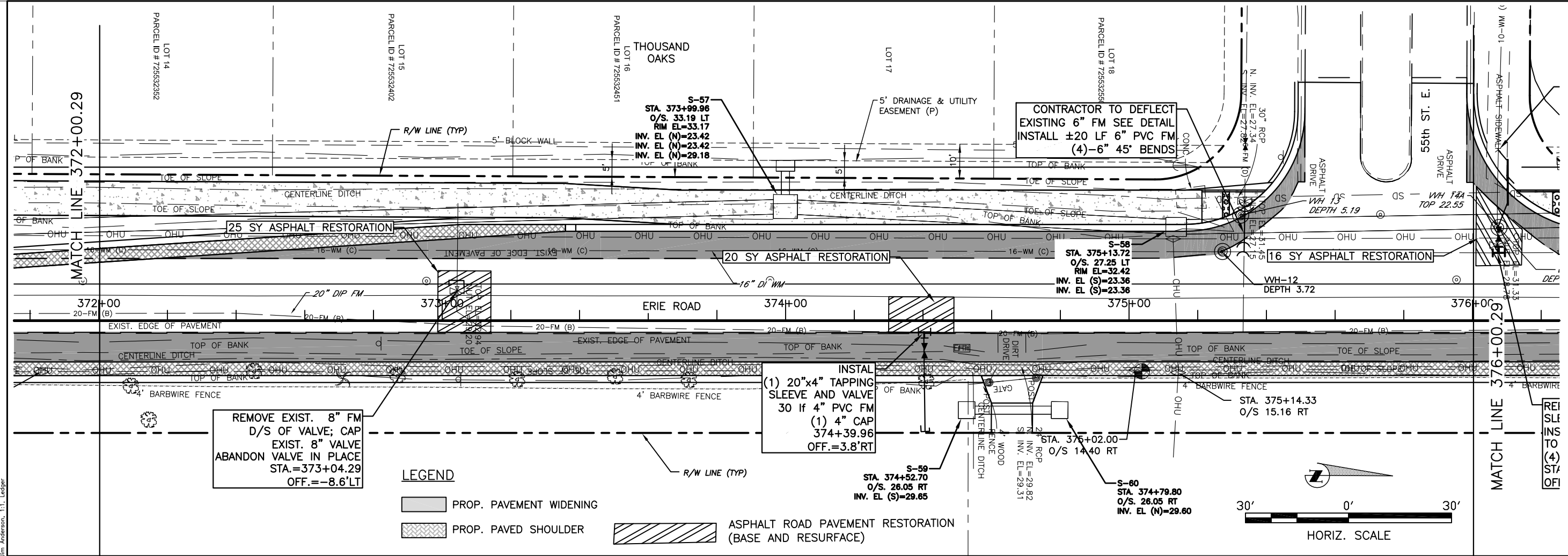
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SURVEY #	00-43133
SEC./TWN./RGE	2,3S/33,34S/18E
SCALE	AS NOTED

DESIGNED	JSS	DATE	10/24/12
DRAWN	JSS	DATE	11/31/17
CHECKED	JSS	DATE	12/11/18

No. 60923  
JOHN S. SHOUN, P.E.  
FLORIDA P.E. # 60923  
STATE OF FLORIDA  
01/25/2021  
PROFESSIONAL ENGINEER

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



NO.	REVISION DESCRIPTION	BY	DATE

PROJECT # 307-60828600  
 SURVEY # 00-43133  
 SEC./TWN./RGE 2,3S/33,34S/18E  
 SCALE AS NOTED

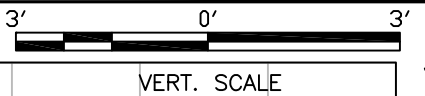
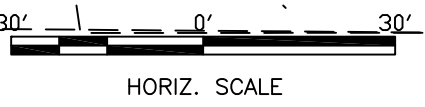
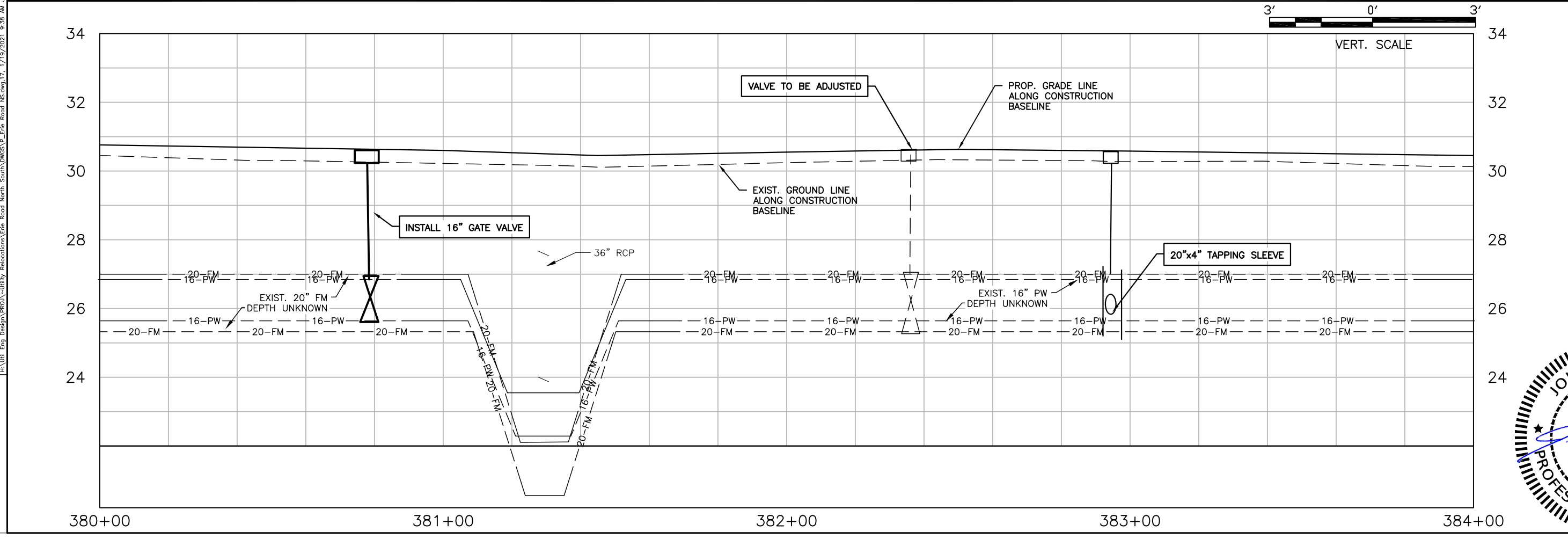
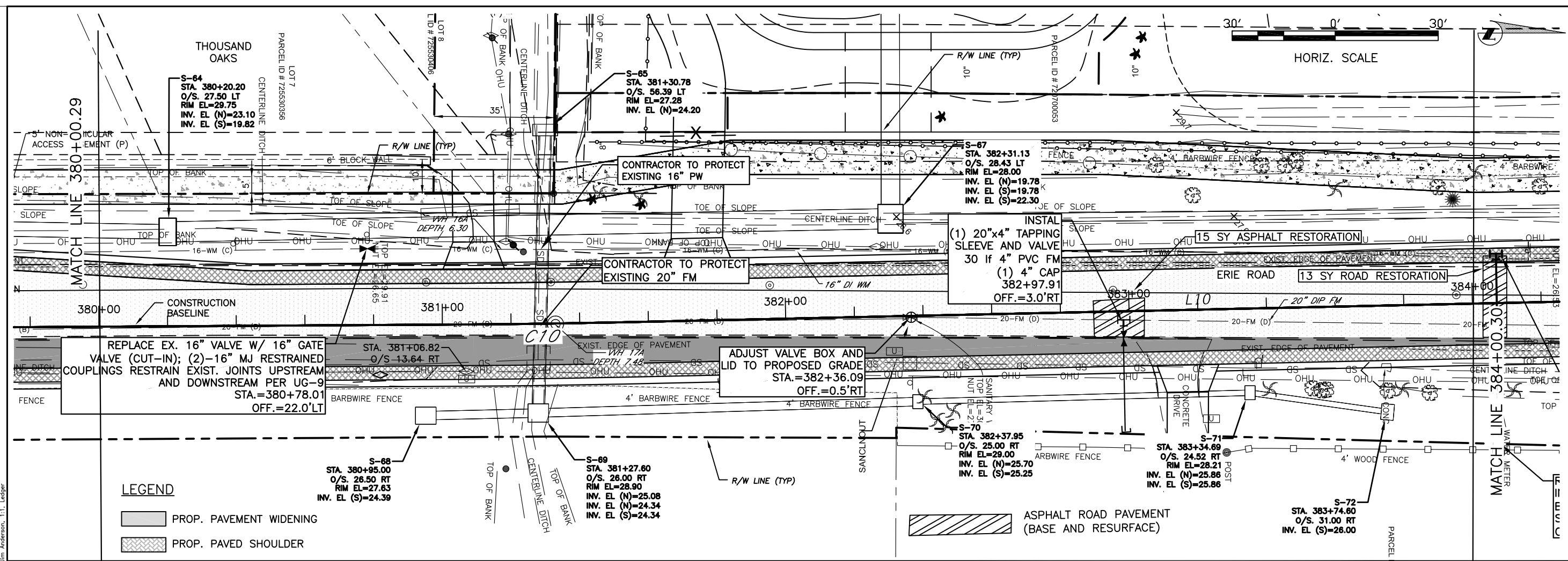
SURVEYED BY JOHN S. SHOUN 10/24/12  
 DESIGNED BY JOHN S. SHOUN 11/17/12  
 DRAWN BY JOHN S. SHOUN 11/17/12  
 CHECKED BY JSS 12/10/12  
 No. 60923  
 JOHN S. SHOUN, P.E.  
 FLORIDA P.E. # 60923  
 STATE OF FLORIDA  
 01/25/2021  
 PROFESSIONAL ENGINEER

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



**LEGEND**

- PROP. PAVEMENT WIDENING
- PROP. PAVED SHOULDER

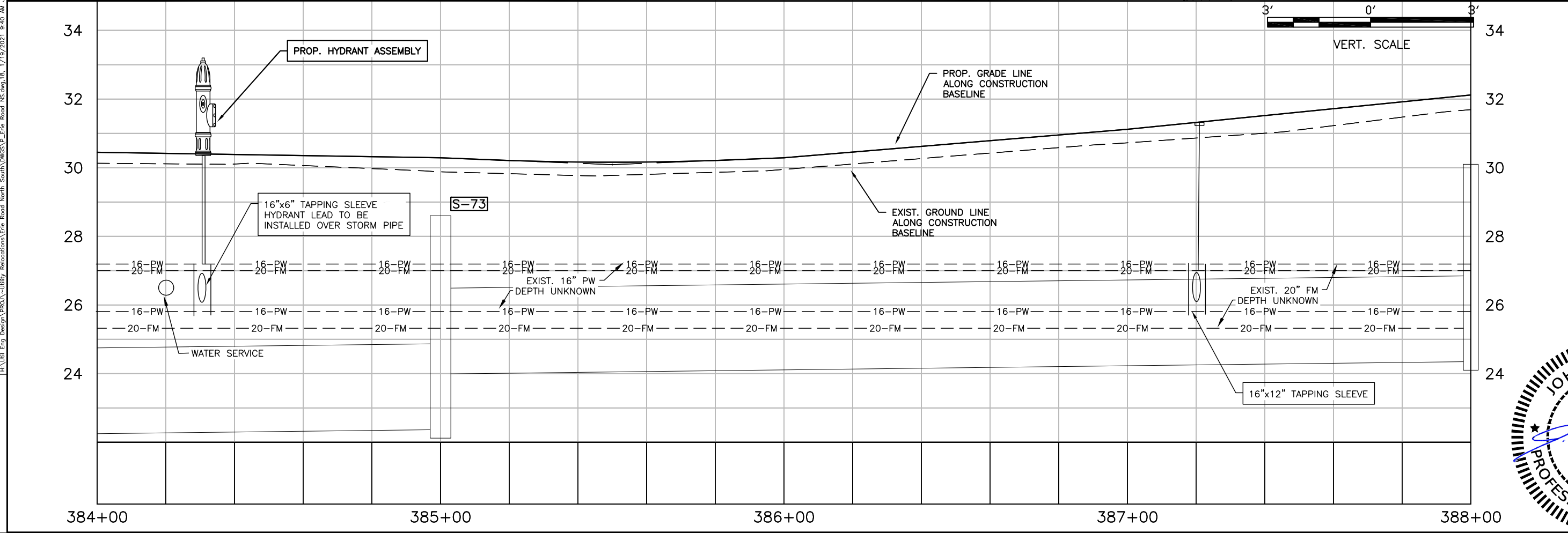
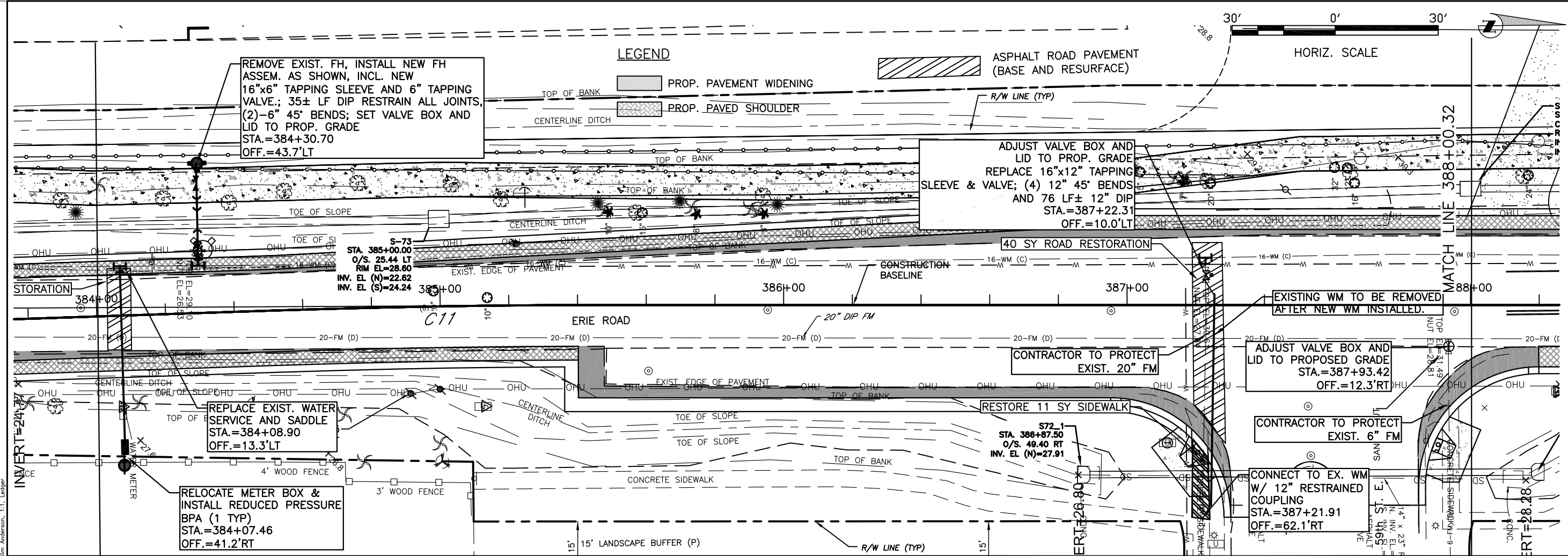
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT # 307-60828600  
 SURVEY # 00-43133  
 SEC./TWN./RGE 2,3S/33,34S/18E  
 SCALE AS NOTED

DESIGNED BY: JSS 05/24/12  
 DRAWN BY: JSS 05/17/17  
 CHECKED BY: JSS 12/10/17  
**No. 60923**  
**JOHN S. SHOUN, P.E.**  
 FLORIDA P.E. # 60923  
 STATE OF FLORIDA  
 01/25/2021  
 PROFESSIONAL ENGINEER

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



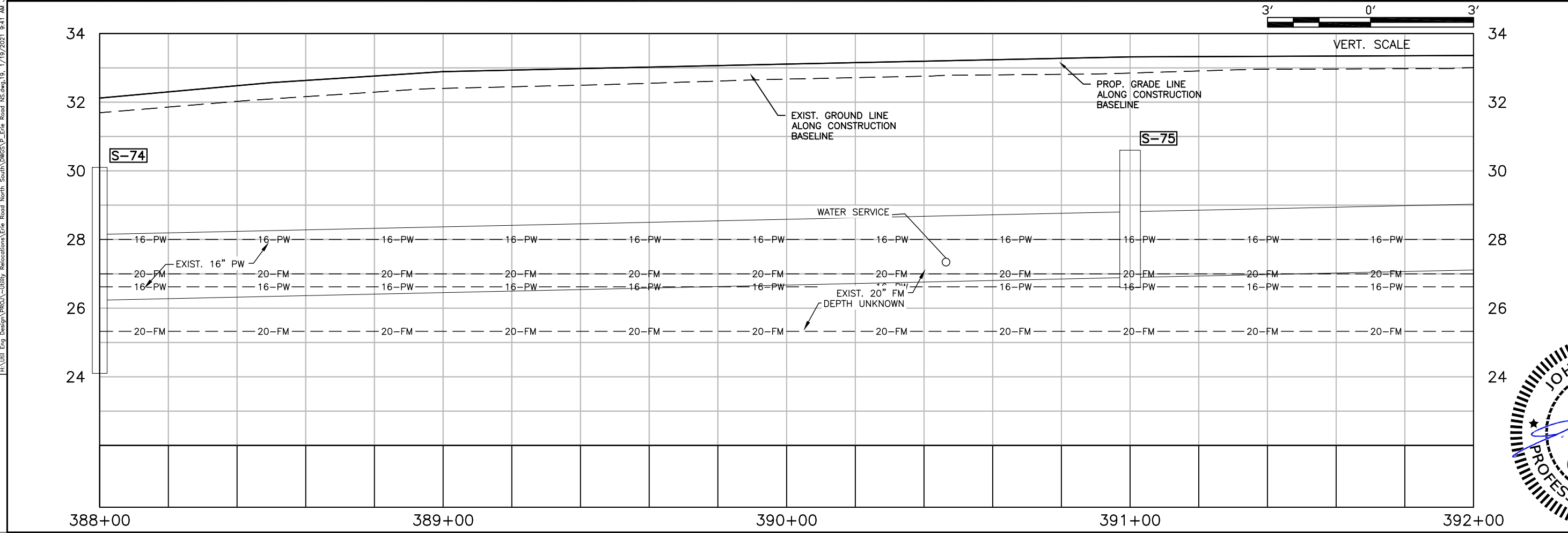
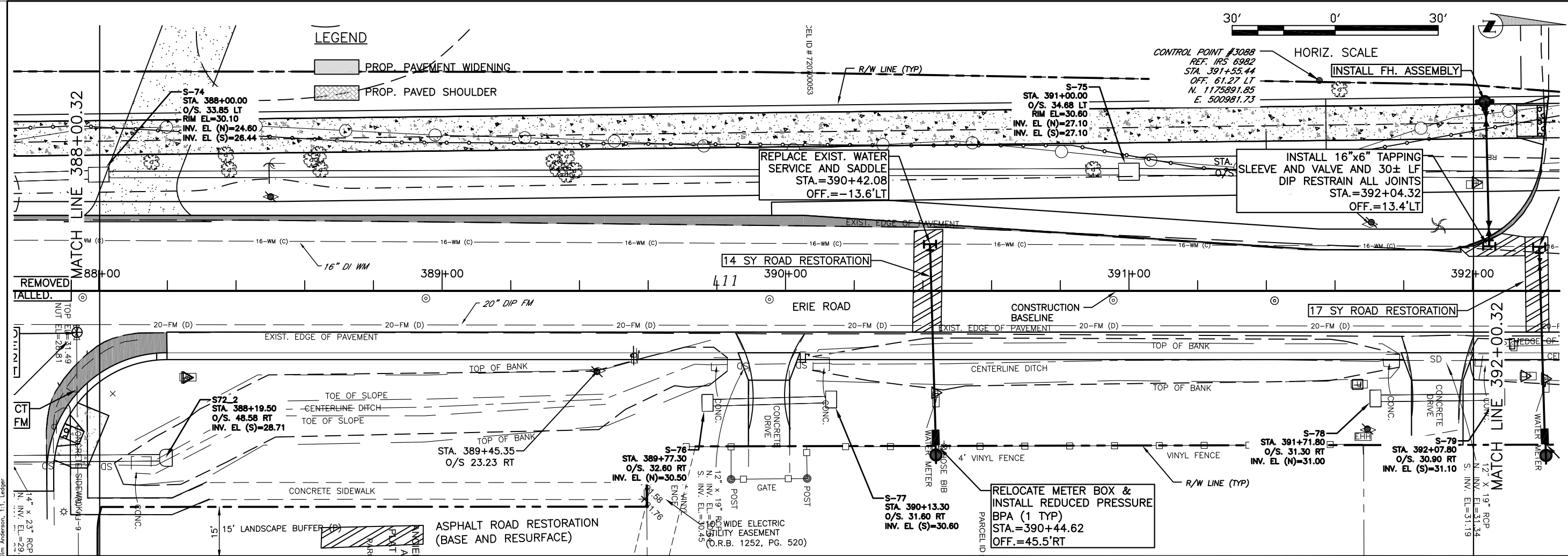
14:00:00 PM 1/19/2021 9:40 AM Jim Anderson, I.T. Leader

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-60828600
SURVEY #	00-43133
SEC./TWN./RGE	2,3S/33,34S/18E
SCALE	AS NOTED

DESIGNED: JSS 10/24/12  
 DRAWN: JSS 11/17/17  
 CHECKED: JSS 12/10/17  
 No. 60923  
 JOHN S. SHOUN, P.E.  
 FLORIDA P.E. # 60923  
 STATE OF FLORIDA  
 01/25/2021  
 PROFESSIONAL ENGINEER

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



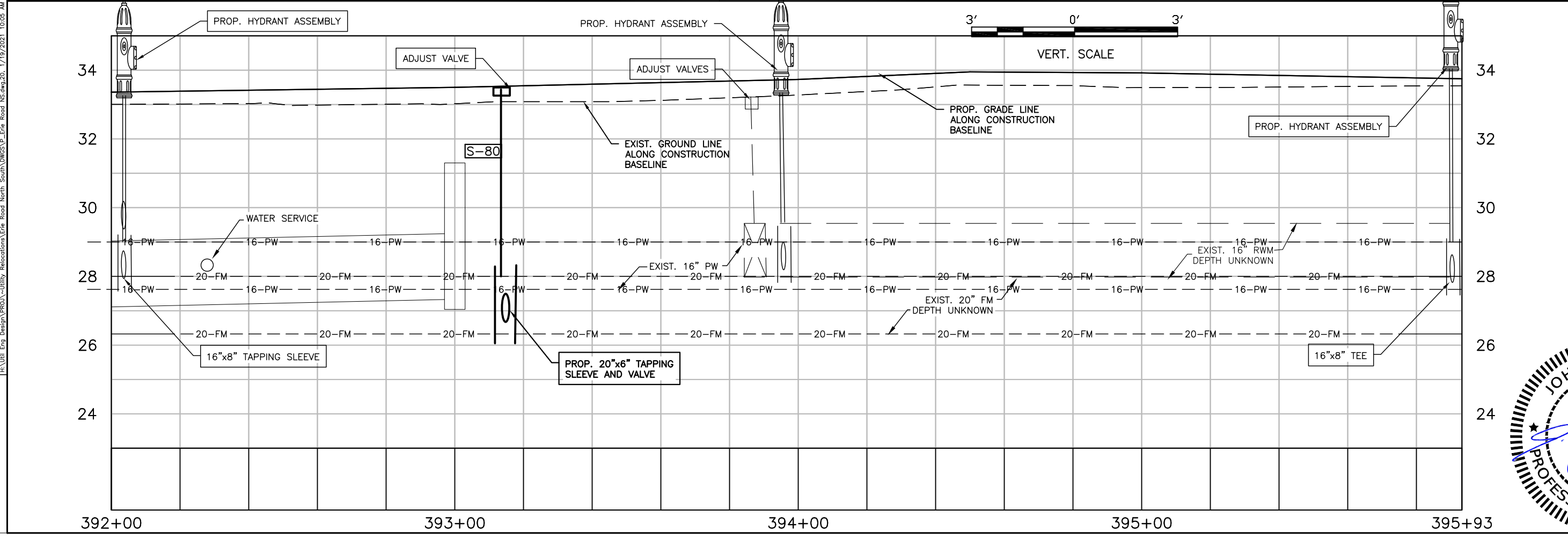
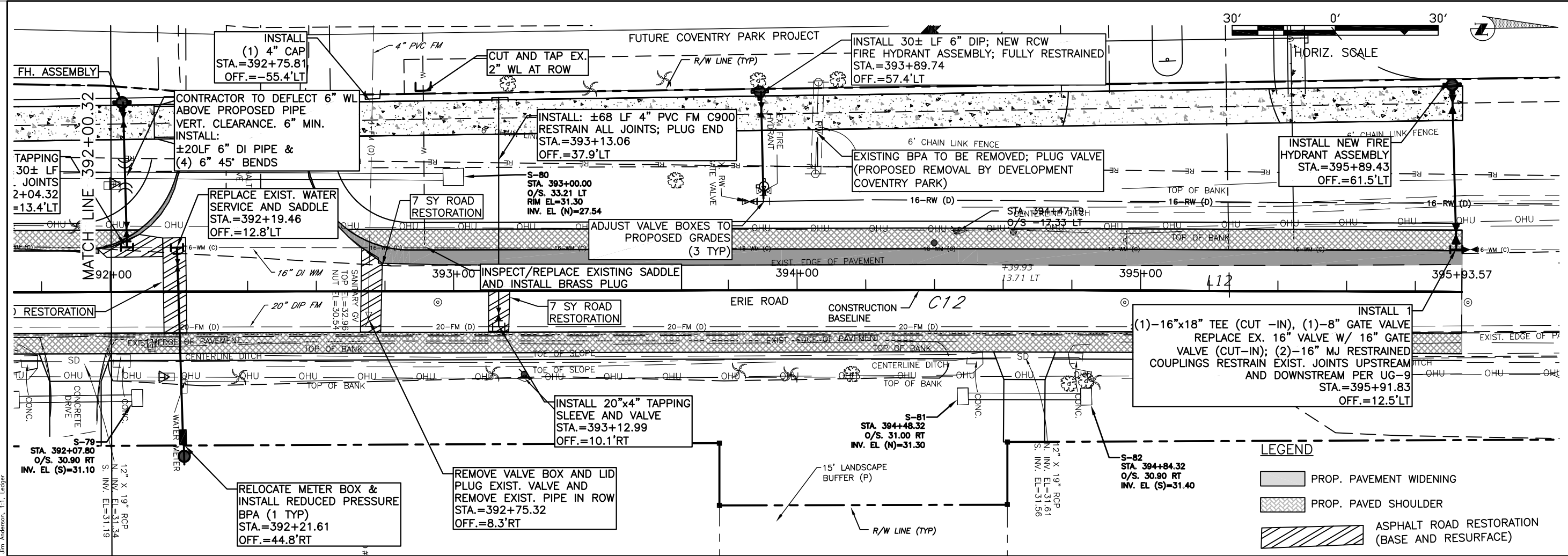
NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	307-60828600
SURVEY #	00-43133
SEC./TWN./RGE	2,3S/33,34S/18E
SCALE	AS NOTED

DATE: 05/24/12  
 SURVEYED BY: J.S. SHOUN  
 DESIGNED BY: J.S. SHOUN  
 DRAWN BY: J.S. SHOUN  
 CHECKED BY: J.S. SHOUN  
 NO. 60923  
 JOHN S. SHOUN  
 FLORIDA P.E. # 60923  
 STATE OF FLORIDA  
 01/25/2021  
 PROFESSIONAL ENGINEER

H:\Util Eng Design\PROJ\Utility Relocations\Erie Road North South\DWGS\Plan\Utility Relocations\Erie Road North South.dwg, 19:17/19/2021 9:41 AM Jim Anderson, L1, Ledger

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



**LEGEND**

- PROP. PAVEMENT WIDENING
- PROP. PAVED SHOULDER
- ASPHALT ROAD RESTORATION (BASE AND RESURFACE)

NO.	REVISION DESCRIPTION	DATE

PROJECT #	307-60828600
SURVEY #	00-43133
SEC./TWN./RGE	2,3S/33,34S/18E
SCALE	AS NOTED

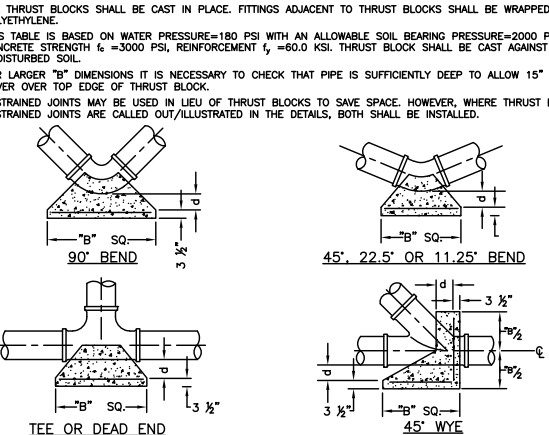
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 DESIGNED BY: JSS 11/17/12  
 DRAWN BY: JSS 11/17/12  
 CHECKED BY: JSS 12/10/12  
 No. 60923  
 JOHN SHOUN  
 FLORIDA P.E. # 60923  
 STATE OF FLORIDA  
 01/25/2021  
 PROFESSIONAL ENGINEER

H:\Utility Eng Design\PROJ\Utility Relocations\Erie Road\North South\US301 to US301\1005.dwg 1/19/2021 10:05 AM Jim Anderson, T.L. Ledger

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

PIPE SIZE (IN.)	90° BEND		45° BEND		22.5° BEND		11.25° BEND		DEAD END & TEE		45° WYE	
	B	d	B	d	B	d	B	d	B	d	B	d
4	1.5	3 1/2	1.1	3 1/2	0.8	3 1/2	0.6	3 1/2	1.3	3 1/2	1.1	3 1/2
6	2.2	5 1/4	1.6	3 3/4	1.2	3 3/4	0.8	3 3/4	1.9	4 1/4	1.6	3 3/4
8	2.9	7	2.1	5	1.5	3 3/4	1.1	3 3/4	2.4	5 3/4	2.0	4 3/4
10	3.5	8 1/2	2.6	6 1/4	1.9	4 1/2	1.3	3 3/4	3.0	7 1/4	2.5	6
12	4.2	10	3.1	7 1/2	2.2	5 1/4	1.6	3 3/4	3.5	8 1/4	3.0	7 1/4
14	4.9	11 3/4	3.6	8 3/4	2.6	6 1/4	1.8	4 1/4	4.1	9 3/4	3.4	8 1/4
16	5.5	13 1/4	4.1	9 3/4	2.9	7	2.1	5	4.7	11 1/4	3.9	9 1/4
18	6.2	15	4.6	11	3.3	8	2.3	5 1/2	5.2	12 1/2	4.4	10 1/2
20	6.9	16 1/2	5.0	12	3.6	8 3/4	2.6	6 1/4	5.8	14	4.9	11 1/4
24	8.2	19 3/4	6.0	14 1/2	4.3	10 1/4	3.1	7 1/2	6.9	16 1/2	5.8	14
30	10.1	24 1/4	7.5	18	5.3	12 1/4	3.8	9	8.5	20 1/2	7.2	17 1/4
36	12.1	29	8.9	21 1/4	6.4	15 1/4	4.5	10 3/4	10.2	24 1/4	8.6	20 3/4

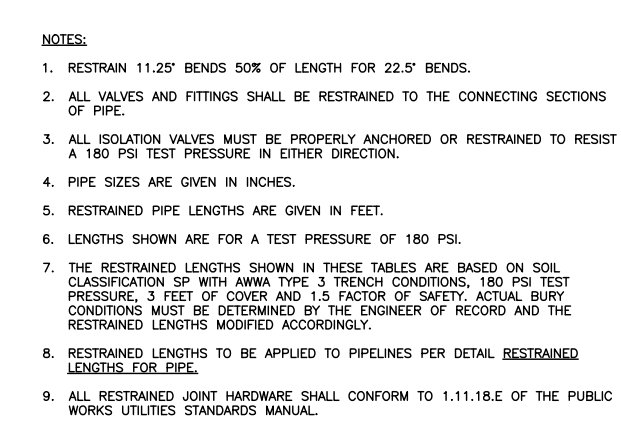
REINFORCEMENT MAT SCHEDULE  
FOR DIM. "B" BETWEEN 5.75" & 12.5" USE #4 @ 8" EACH WAY  
FOR DIM. "B" LESS THAN 5.75" USE #3 @ 8" EACH WAY



MANATEE COUNTY PUBLIC WORKS DEPARTMENT	CONCRETE THRUST BLOCKS	UG-7
REV. BY DATE		
	February 25, 2020	
	DATE OF APPROVAL	

MAIN PIPE SIZE	HORIZ. BENDS			TEES		REDUCERS		PLUGS & VALVES	
	90°	45°	22.5°	SIZE	LENGTH	SIZE	LENGTH		
24	90	38	18	X24	169	X20	132	X10	6
20	78	32	16	X20	141	X16	101	X8	1
16	66	27	13	X16	111	X12	87	X6	1
12	52	22	10	X12	80	X10	66	X6	1
10	44	18	9	X10	63	X8	49	X4	1
8	37	15	7	X8	49	X6	35	X4	1
6	29	12	6	X6	29	X4	1		
4	21	8	4	X4	12				

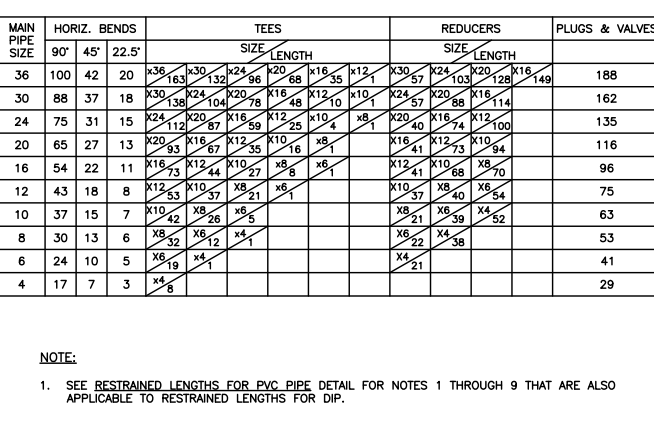
REINFORCEMENT MAT SCHEDULE  
FOR DIM. "B" BETWEEN 5.75" & 12.5" USE #4 @ 8" EACH WAY  
FOR DIM. "B" LESS THAN 5.75" USE #3 @ 8" EACH WAY



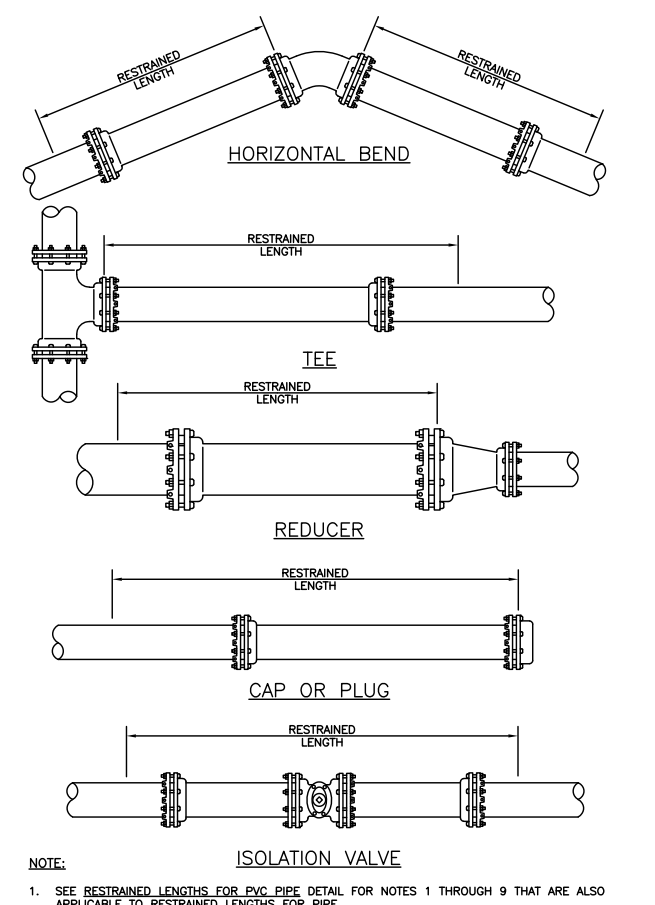
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	RESTRAINED LENGTHS FOR PVC PIPE	UG-8
REV. BY DATE		
	February 25, 2020	
	DATE OF APPROVAL	

MAIN PIPE SIZE	HORIZ. BENDS			TEES		REDUCERS		PLUGS & VALVES	
	90°	45°	22.5°	SIZE	LENGTH	SIZE	LENGTH		
36	142	59	28	X36	393	X30	270	X16	358
30	124	51	25	X30	333	X24	252	X16	309
24	106	44	21	X24	270	X20	211	X10	241
20	92	38	18	X20	228	X16	178	X8	227
16	77	32	15	X16	177	X12	137	X6	169
12	61	25	12	X12	127	X10	98	X6	131
10	52	22	10	X10	101	X8	74	X4	125
8	44	18	9	X8	78	X6	54	X4	92
6	34	14	7	X6	46	X4	1		
4	24	10	5	X4	19				

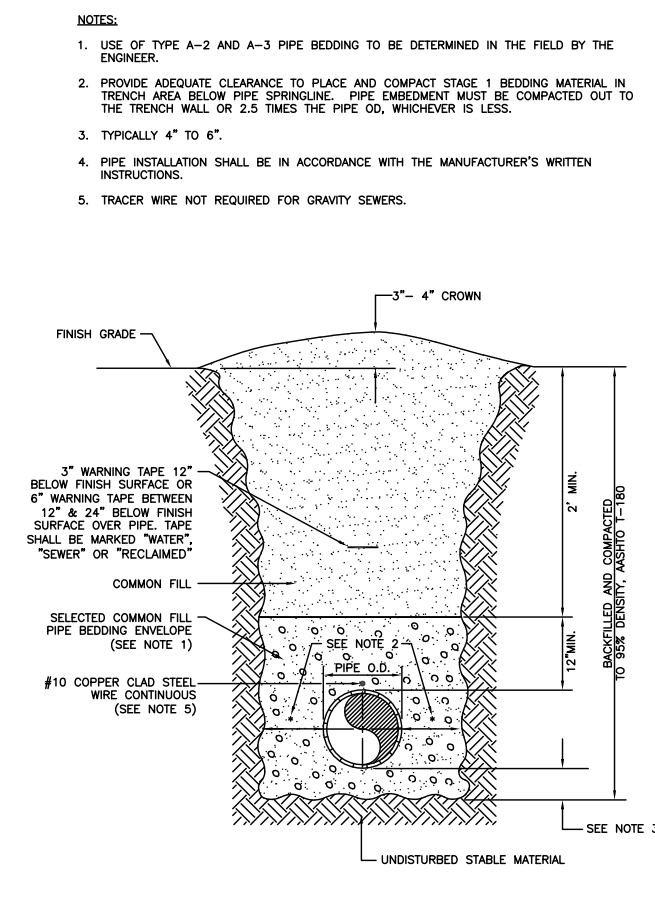
REINFORCEMENT MAT SCHEDULE  
FOR DIM. "B" BETWEEN 5.75" & 12.5" USE #4 @ 8" EACH WAY  
FOR DIM. "B" LESS THAN 5.75" USE #3 @ 8" EACH WAY



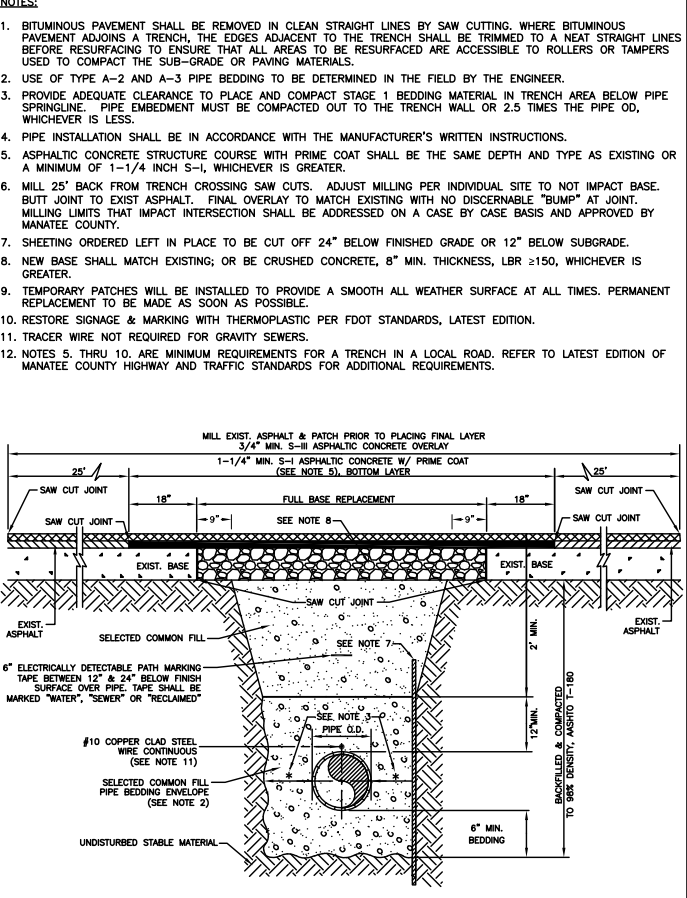
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	RESTRAINED LENGTHS FOR DIP	UG-9
REV. BY DATE		
	February 25, 2020	
	DATE OF APPROVAL	



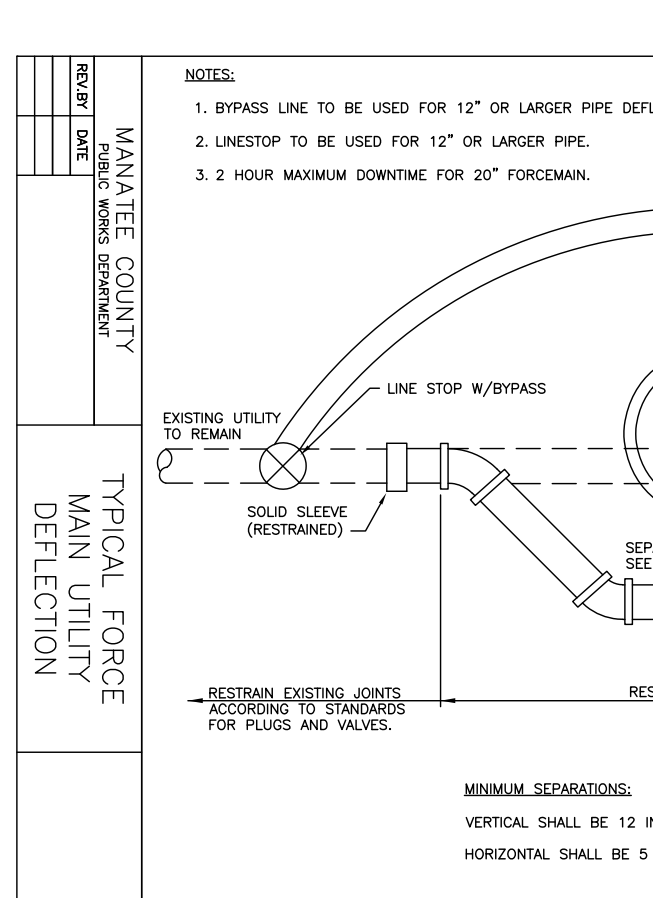
MANATEE COUNTY PUBLIC WORKS DEPARTMENT	RESTRAINED LENGTHS FOR PIPE	UG-10
REV. BY DATE		
	February 25, 2020	
	DATE OF APPROVAL	



MANATEE COUNTY PUBLIC WORKS DEPARTMENT	TRENCH WITH UNIMPROVED SURFACE TYPE A-1 PIPE BEDDING	UG-11
REV. BY DATE		
	February 25, 2020	
	DATE OF APPROVAL	



MANATEE COUNTY PUBLIC WORKS DEPARTMENT	TRENCH WITH ASPHALT PAVEMENT SURFACE TYPE A-1 PIPE BEDDING (CROSSING)	UG-12
REV. BY DATE		

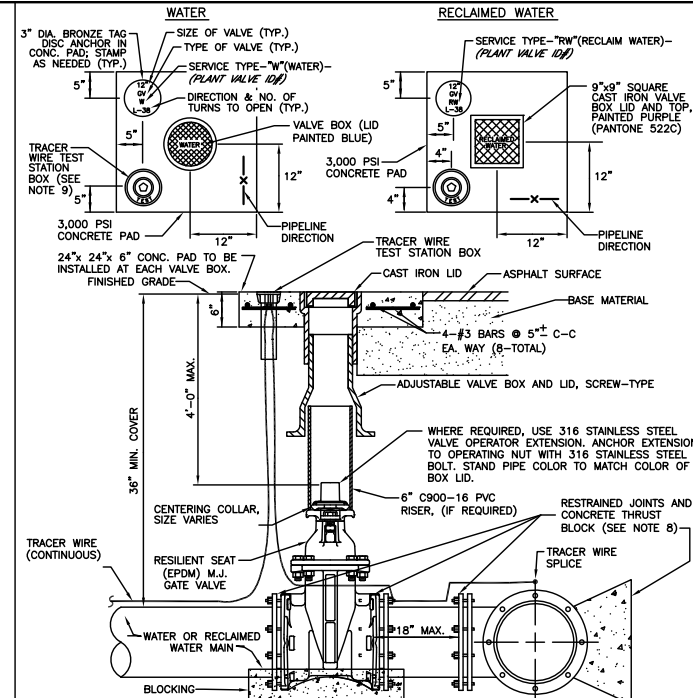


MANATEE COUNTY PUBLIC WORKS DEPARTMENT		
REV. BY DATE		

NO.	REVISION DESCRIPTION	BY	DATE
PROJECT #	307-6082860		
SURVEY #	----		
SEC./TWN./RGE	2,35/33,34S/18E		
SCALE	N.T.S.		
DESIGNED	DATE	BY	DATE
DESIGNED	06/01/17	SS	
CHECKED	12/10/17	JSS	
NO. 60923	JOHN S. SHOWN, P.E.		
FLORIDA P.E. # 00823			
STATE OF FLORIDA	01/25/2021		
PROFESSIONAL ENGINEER			

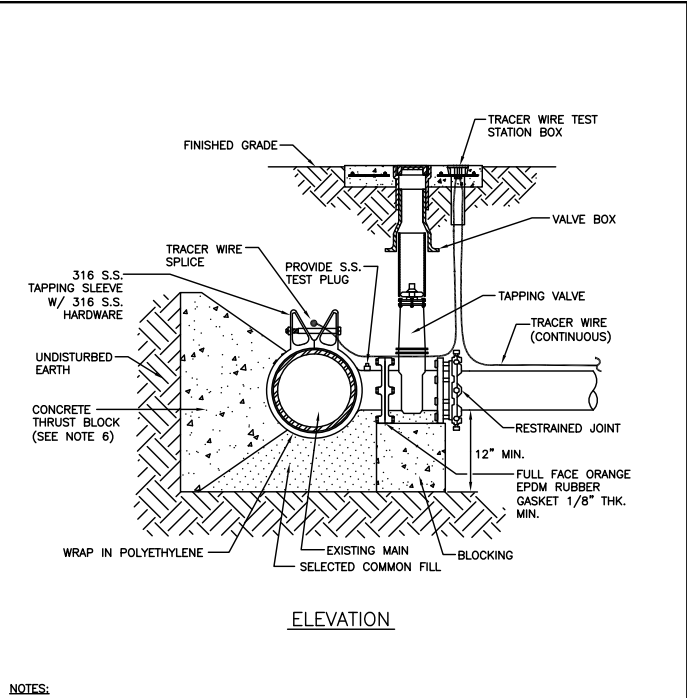
HA:Util Eng Design (PROJ) - Utility Relocations (Erie Road North South DWS) Details Erie Road US.dwg, 21, 1/14/2021 4:50 PM Jim Anderson, 1:1, Ledger

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



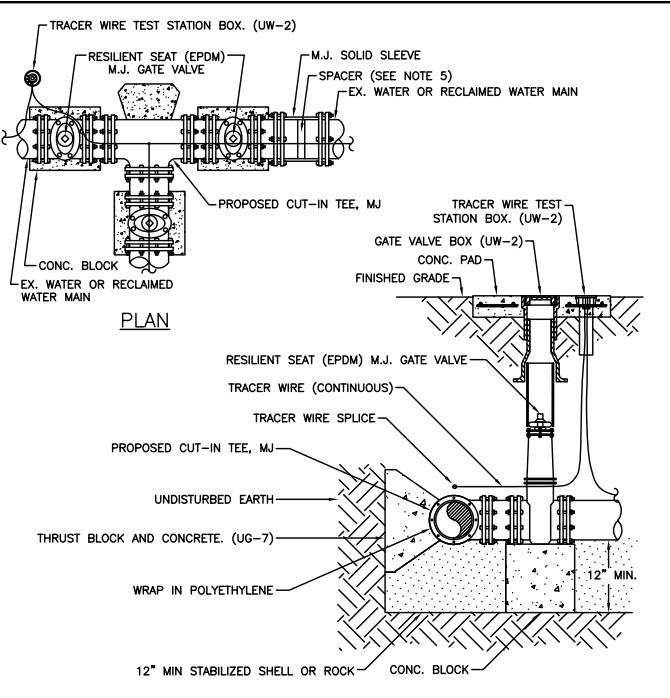
- NOTES:**
- "W" or "RW" TO BE IMPRESSED INTO THE NEWLY-POURED CONCRETE CURB, ALONG WITH DISTANCE IN FEET TO THE VALVE. IF NO CURB, INSTALL A BLUE DISC WITH "W" OR PURPLE DISC WITH "RW" USING A 1/4" x 1" GALVANIZED STEEL SCREW IN THE EDGE OF PAVEMENT WITH THE FOOTAGE FROM THE DISC TO THE VALVE.
  - ALL EXISTING AND PROPOSED VALVE BOXES SHALL BE ADJUSTED TO FINISHED GRADES AS DETERMINED IN THE FIELD.
  - VALVES SHALL NOT BE PLACED IN HANDICAPPED RAMPS, CURBS, OR GUTTERS.
  - PRECAST CONCRETE PADS SHALL NOT BE USED.
  - ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1/2".
  - PIPELINE DIRECTION TO BE IMPRESSED INTO NEWLY POURED CONCRETE PAD.
  - TRACER WIRE TEST STATION BOX IS NOT REQUIRED IN VALVE BOX PAD IF THE GATE VALVE IS LOCATED WITHIN 200 FEET OF A WATER SERVICE, BLOW-OFF, BACKFLOW PREVENTER OR FIRE HYDRANT THAT HAS A TRACER WIRE BOX.
  - WHERE THRUST BLOCK NOT USED, RESTRAINED JOINTS MUST EXTEND FROM THE FULL LENGTH SPECIFIED FOR TEES.
  - USE NON-TRAFFIC RATED BOXES FOR NORMAL YARD SERVICE, WHERE VALVE WILL BE IN STREET OR PARKING UNDER VEHICLE TRAFFIC, USE TRAFFIC RATED BOXES. WHERE POSSIBLE, LOCATE TRACER WIRE TESTING STATION OUTSIDE OF TRAVEL LANE OR IN MEDIAN, CENTERED IN SEPARATE CONCRETE PAD SIMILAR TO STANDARD VALVE BOX PAD.
  - THE BRASS TAG SHALL HAVE A "PLANT VALVE" IF WHEN VALVES ARE INSTALLED WITHIN THE COUNTY TREATMENT PLANT LIMITS. THE PLANT VALVE IF SHALL BE SHOWN ON THE CONSTRUCTION PLANS AND RECORD DRAWINGS.
  - REFER TO SECTION 1.11 GATE VALVES FOR FURTHER DETAILS.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		
REV. BY	DATE	DESCRIPTION
	February 25, 2020	GATE VALVE, BOX, LID AND TAG
		UW-2
DATE OF APPROVAL		



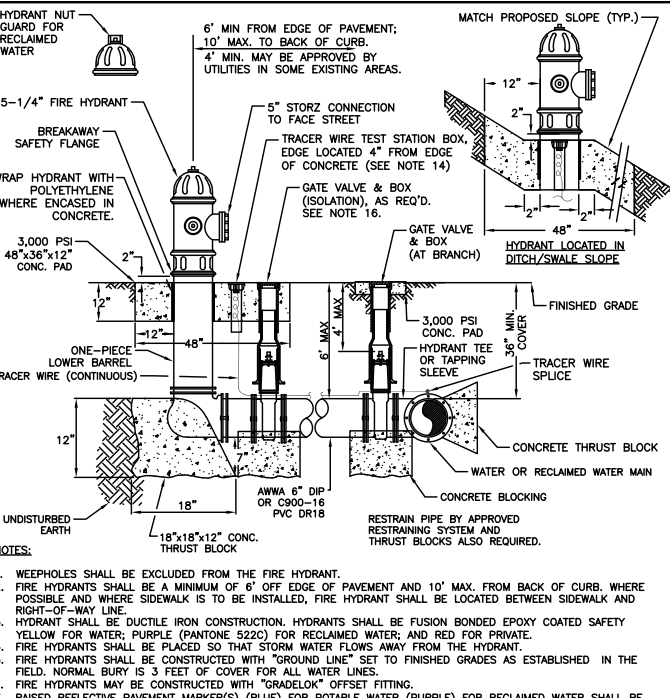
- NOTES:**
- PRIOR TO TAPPING, CONTRACTOR TO DEMONSTRATE 60 MINUTE HYDROSTATIC TEST OF THE TAPPING SLEEVE AND VALVE WITH NO LOSS OF 180 PSI PRESSURE FOR WATER AND RECLAIMED WATER.
  - ALL FITTINGS TO BE WRAPPED WITH 20 MIL POLYETHYLENE WRAP AT THRUST BLOCK.
  - ALL TAPS ON CONCRETE WATER MAINS AND LARGER THAN 12" ARE TO BE MADE BY A MANATEE COUNTY APPROVED TAPPING COMPANY. ALL MATERIALS TO BE SUPPLIED BY THE CONTRACTOR.
  - ALL TAPS MUST BE OF A SMALLER SIZE THAN THE MAIN BEING TAPPED & PLACED NO CLOSER THAN 30" OR A DISTANCE EQUAL TO (1) MAIN PIPE DIAMETER PLUS (2) TAP PIPE DIAMETERS (WHICHEVER IS GREATER) FROM A JOINT OR FITTING.
  - CONTRACTOR TO SUPPLY A DRY HOLE FOR TAPPING CREW TO WORK IN AND A BACK-HOE TO LOWER TAPPING MACHINE INTO THE HOLE.
  - WHERE THRUST BLOCK NOT USED, RESTRAINED JOINTS MUST THEN EXTEND FROM THE FULL LENGTH SPECIFIED FOR TEES.
  - TRACER WIRE TEST STATION BOX IS REQUIRED AT CONNECTIONS TO EXISTING MAINS.
  - SEE SECTION 1.11 TAPPING SLEEVES AND VALVES FOR FURTHER DETAILS.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		
REV. BY	DATE	DESCRIPTION
		TAPPING SLEEVE AND VALVE (WATER/RECLAIM)
		UW-3
DATE OF APPROVAL		



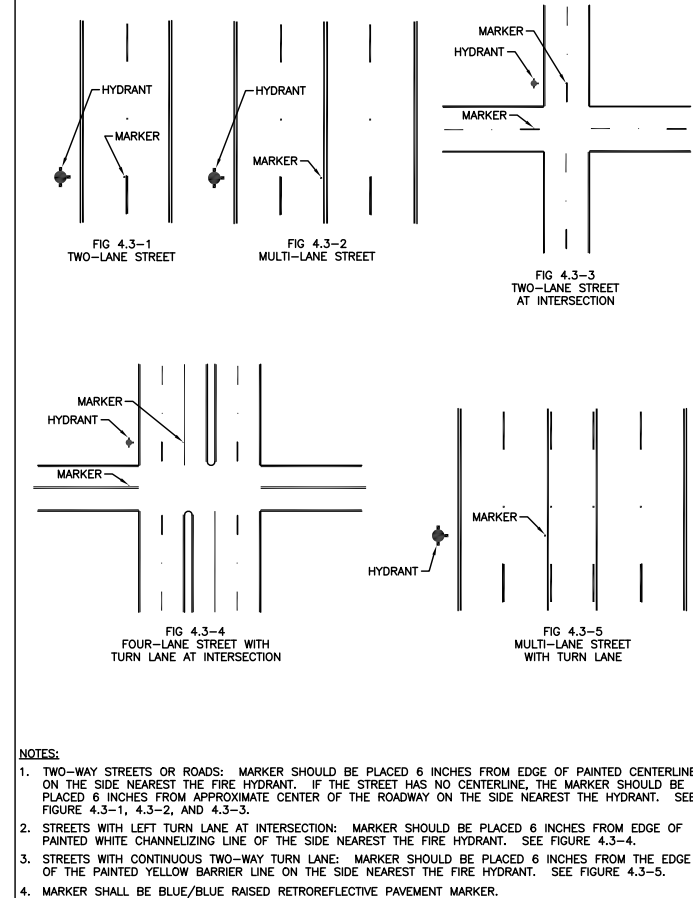
- NOTES:**
- ALL FITTINGS TO BE WRAPPED WITH 20 MIL POLYETHYLENE WRAP AT THRUST BLOCK.
  - TRACER WIRE TEST STATION BOX IS REQUIRED AT CONNECTIONS TO EXISTING MAINS.
  - WATER VALVES SHALL BE INSTALLED ON ALL SIDES OF TEES AND CROSSES, UNLESS INLINE VALVES ON THAT LEG WITHIN 200 FEET.
  - RESTRAINED JOINTS MUST EXTEND FROM TEE FULL LENGTH SPECIFIED FOR VALVES. (UG-8)
  - SPACER IS REQUIRED IF A GAP EXISTS. SPACER NOT TO EXCEED OVER 30% OF SLEEVE WIDTH.
  - IN ASBESTOS CONCRETE PIPE (AC) APPLICATIONS: TWO COUPLINGS ARE REQUIRED. ALL FITTINGS INCLUDING COUPLINGS SHALL BE SUPPORTED WITH CONCRETE BLOCKING TO PREVENT SETTLEMENT.
  - ALL EXISTING RESTRAINING SHALL BE MODIFIED AND OR RE-INSTALLED AS NECESSARY, TO MEET THE REQUIREMENT OF UG-8 FOR VALVES.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT		
REV. BY	DATE	DESCRIPTION
	February 25, 2020	CUT-IN TEE
		UW-4
DATE OF APPROVAL		

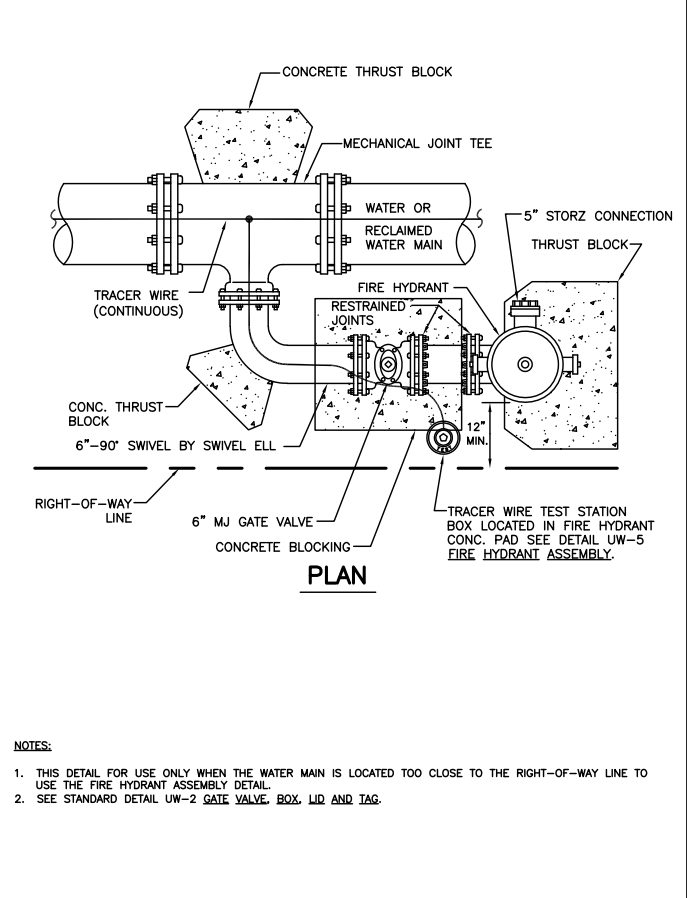


- NOTES:**
- WEEPHOLES SHALL BE EXCLUDED FROM THE FIRE HYDRANT.
  - FIRE HYDRANTS SHALL BE A MINIMUM OF 6" OFF EDGE OF PAVEMENT AND 10" MAX. FROM BACK OF CURB. WHERE POSSIBLE AND WHERE SIDEWALK IS TO BE INSTALLED, FIRE HYDRANT SHALL BE LOCATED BETWEEN SIDEWALK AND RIGHT-OF-WAY LINE.
  - HYDRANT SHALL BE DUCTILE IRON CONSTRUCTION. HYDRANTS SHALL BE FUSION BONDED EPOXY COATED SAFETY YELLOW FOR WATER; PURPLE (PANTONE 522C) FOR RECLAIMED WATER; AND RED FOR PRIVATE.
  - FIRE HYDRANTS SHALL BE CONSTRUCTED WITH "GROUND LINE" SET TO FINISHED GRADES AS ESTABLISHED IN THE FIELD. NORMAL BURY IS 3 FEET OF COVER FOR ALL WATER LINES.
  - FIRE HYDRANTS MAY BE CONSTRUCTED WITH "GRADELOK" OFFSET FITTING.
  - RAISED REFLECTIVE PAVEMENT MARKERS (BLUE) FOR POTABLE WATER (PURPLE) FOR RECLAIMED WATER SHALL BE INSTALLED ON THE PAVEMENT DIRECTLY ACROSS FROM THE HYDRANT IN ACCORDANCE WITH THE FDOT TRAFFIC ENGINEERING MANUAL, CHAPTER 4, SECTION 4.3 OR MOST CURRENT EDITION.
  - ALL EXPOSED EDGES OF CONCRETE SHALL HAVE 1/2" CHAMFER.
  - FIRE HYDRANT VALVE SHALL BE FASTENED DIRECTLY TO TEE.
  - IN-LINE VALVES SHALL BE LOCATED AT HYDRANT TEES.
  - HYDRANTS SHALL BE LOCATED ON SAME SIDE OF ROAD AS WATER OR RECLAIMED MAIN.
  - THERE MUST BE A CLEARANCE OF 1/2 FEET FROM FRONT AND BOTH SIDES, AND FOUR FEET TO THE REAR OF THE HYDRANT, TO ALL GRADE OBSTRUCTIONS INCLUDING POSTS, FENCES, TREES, ETC. PER THE FLORIDA FIRE PREVENTION CODE.
  - SEE STANDARD DETAIL UW-2 GATE VALVE, BOX, LID AND TAG.
  - SHOULD THE FIRE HYDRANT'S CONCRETE PAD OVERLAP A SIDEWALK, THE TRACER WIRE TEST STATION BOX SHALL NOT BE LOCATED WITHIN THE SIDEWALK.
  - IF A HYDRANT IS LOCATED ON THE SLOPE OF A DITCH OR SLOPE, THE CONCRETE PAD SHALL CONFORM TO THE FINISH GRADE/SLOPE. THE CONCRETE PAD SHALL BE LEVEL 2-INCHES BEHIND & IN FRONT OF THE HYDRANT.
  - AT THE DISCRETION OF THE COUNTY AN ADDITIONAL ISOLATION GATE VALVE SHALL BE ADDED, WHEN A PHYSICAL BARRIER IS PRESENT, (I.E. ROADWAY, FENCE, WALL, BERM ETC), BETWEEN THE BRANCH GATE VALVE AND THE HYDRANT.
  - SEE SECTION 1.11 HYDRANTS IN THE PUBLIC WORKS UTILITY STANDARDS MANUAL FOR FURTHER DETAILS.

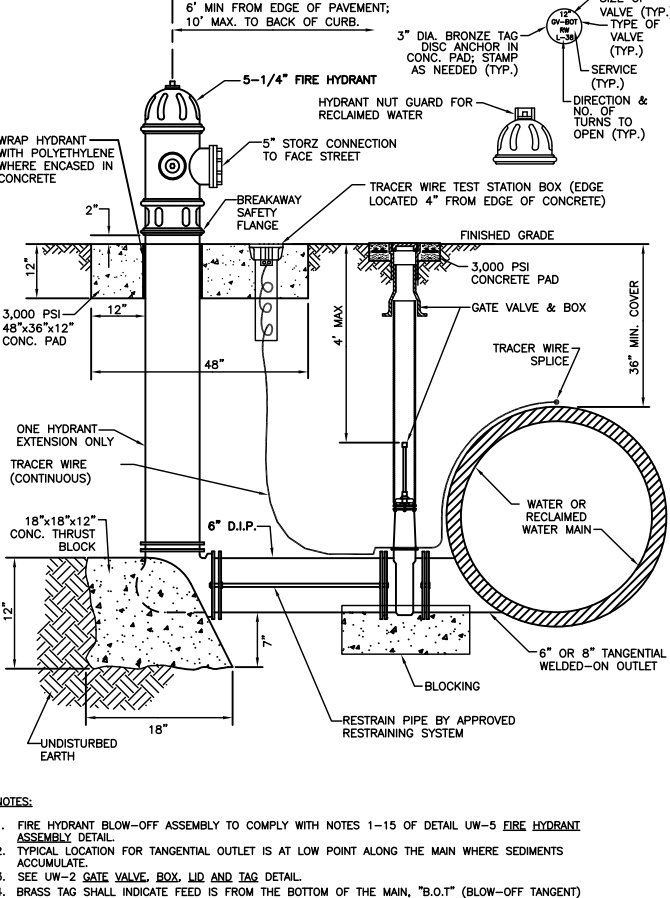
MANATEE COUNTY PUBLIC WORKS DEPARTMENT		
REV. BY	DATE	DESCRIPTION
	February 25, 2020	FIRE HYDRANT ASSEMBLY
		UW-5
DATE OF APPROVAL		



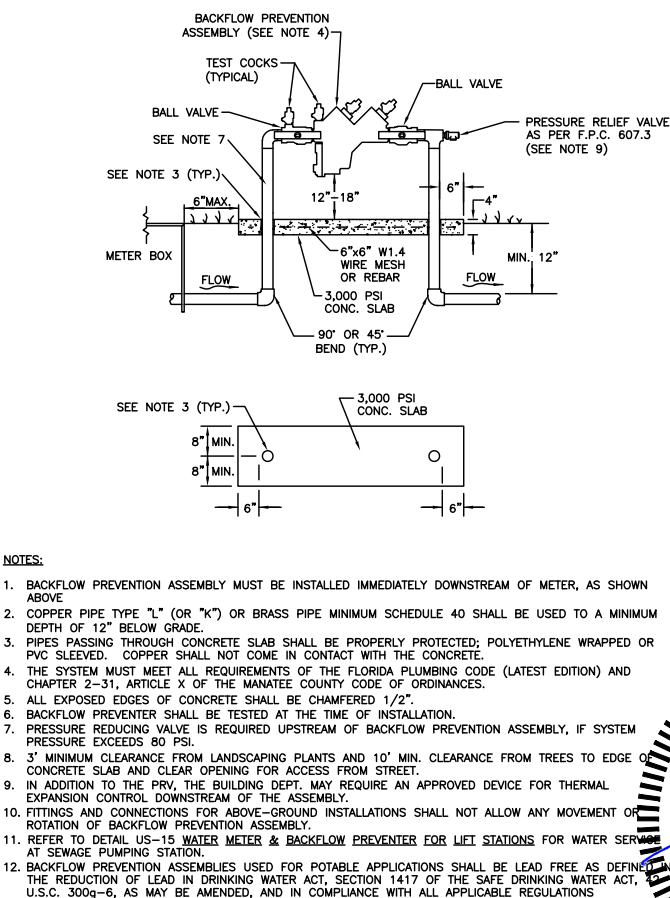
MANATEE COUNTY PUBLIC WORKS DEPARTMENT		
REV. BY	DATE	DESCRIPTION
	February 25, 2020	HYDRANT LOCATION MARKERS - BLUE (RPMs)
		UW-6
DATE OF APPROVAL		



MANATEE COUNTY PUBLIC WORKS DEPARTMENT		
REV. BY	DATE	DESCRIPTION
	February 25, 2020	FIRE HYDRANT WITH LOCKED 90° BEND
		UW-7
DATE OF APPROVAL		

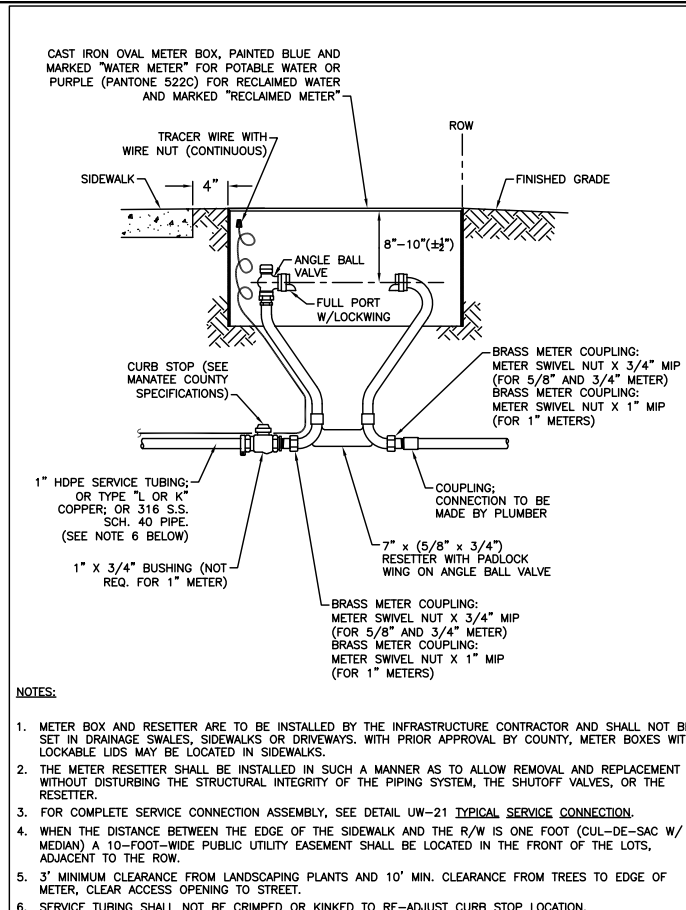


MANATEE COUNTY PUBLIC WORKS DEPARTMENT		
REV. BY	DATE	DESCRIPTION
	February 25, 2020	FIRE HYDRANT BLOW-OFF ASSEMBLY FOR 12" MAINS AND LARGER
		UW-9
DATE OF APPROVAL		

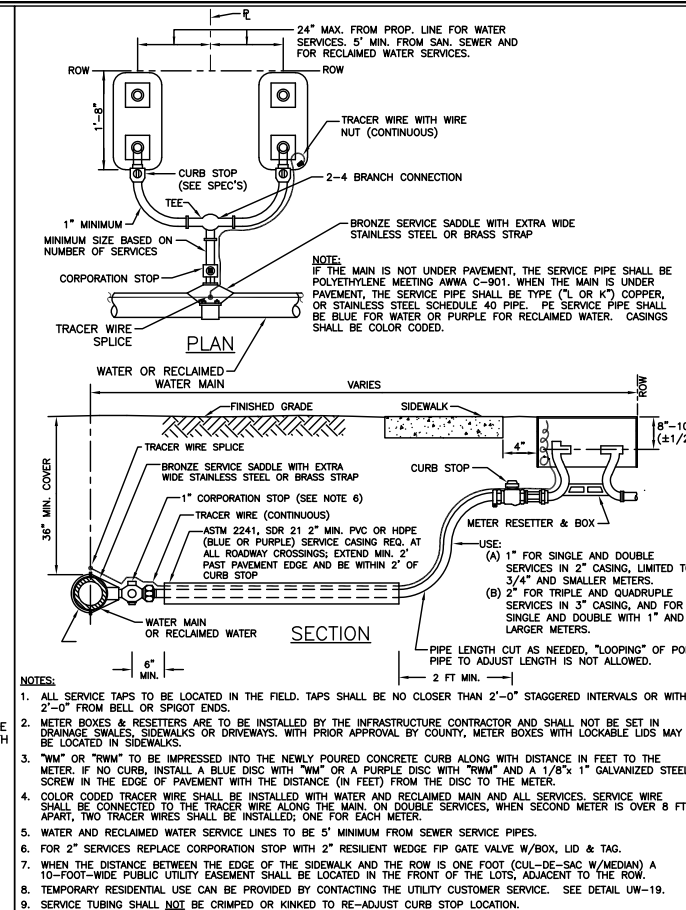


MANATEE COUNTY PUBLIC WORKS DEPARTMENT		
REV. BY	DATE	DESCRIPTION
	February 25, 2020	3/4" & 1" BACKFLOW PREVENTION ASSEMBLY
		UW-13
DATE OF APPROVAL		

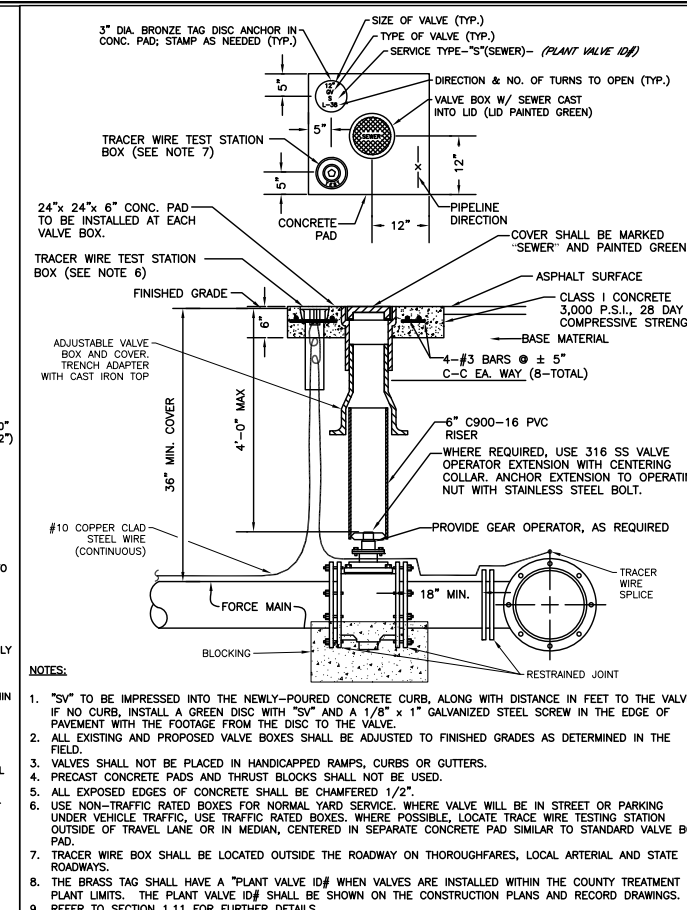
NO.	REVISION DESCRIPTION	BY	DATE
PROJECT #	307-6082860		
SURVEY #	----		
SEC./TWN./RGE	2,35/33,34S/18E		
SCALE	N.T.S.		
			DATE
			01/17/21
			06/01/17
			12/10/16
CHECKED	No. 60923		
	JOHN S. SHOUN		
	FLORIDA P.E. # 60923		
	STATE OF FLORIDA		
	01/25/2021		
	PROFESSIONAL ENGINEER		
	SHEET 22		



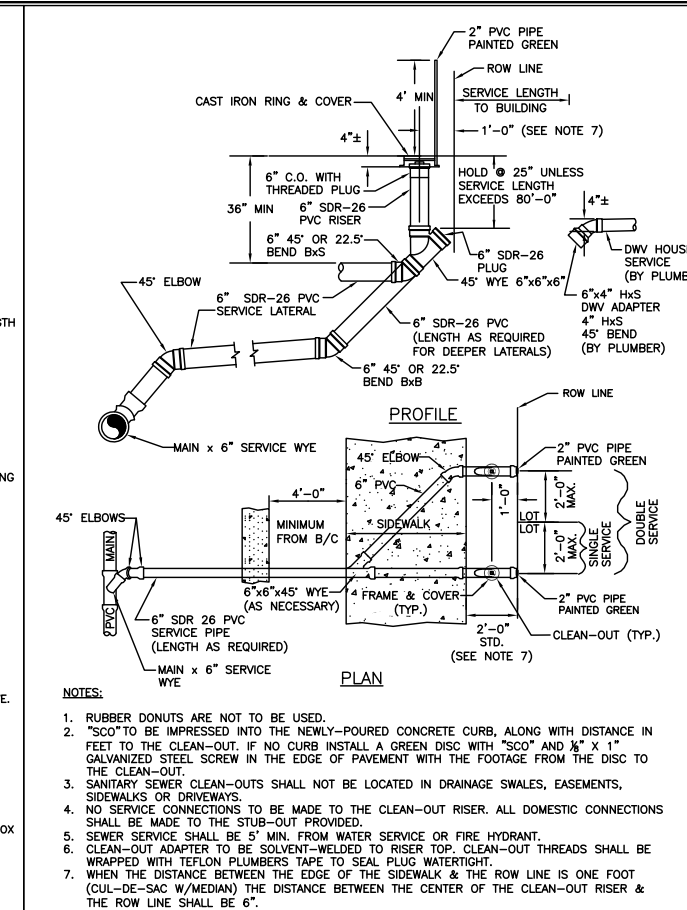
MANATEE COUNTY PUBLIC WORKS DEPARTMENT		METER BOX ASSEMBLY FOR 5/8" x 3/4", 3/4", AND 1" METERS	UW-18
REV. BY	DATE		
	February 25, 2020		
DATE OF APPROVAL			



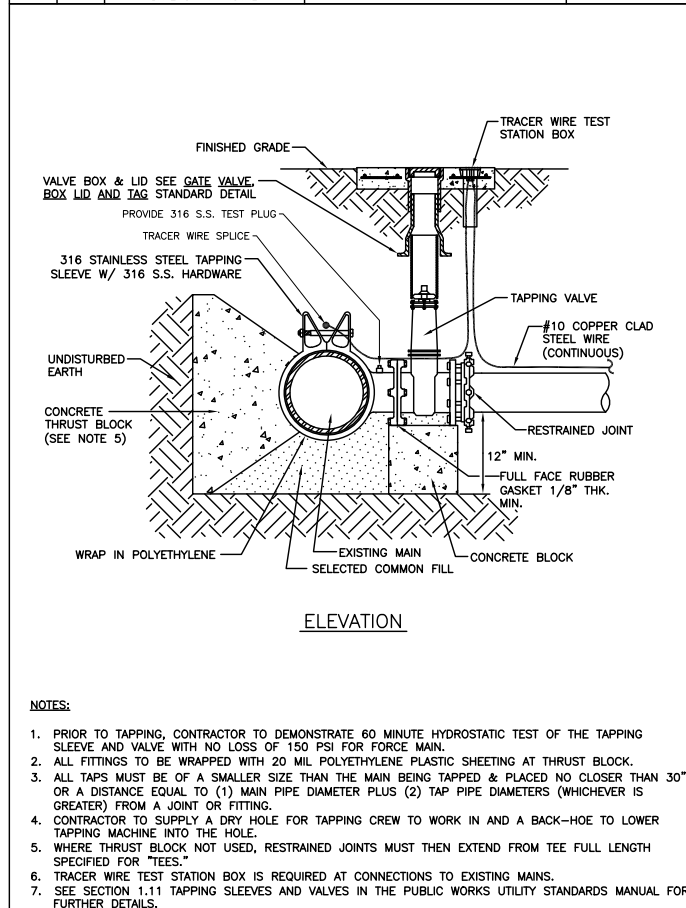
MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TYPICAL SERVICE CONNECTION	UW-21
REV. BY	DATE		
	February 25, 2020		
DATE OF APPROVAL			



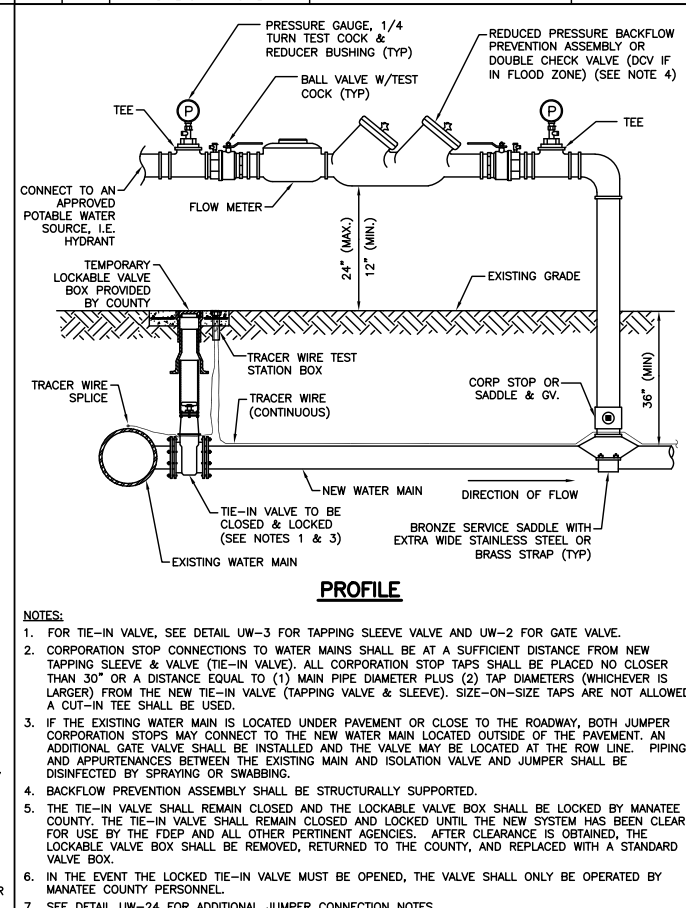
MANATEE COUNTY PUBLIC WORKS DEPARTMENT		VALVE, BOX, COVER AND TAG	US-11
REV. BY	DATE		
	February 25, 2020		
DATE OF APPROVAL			



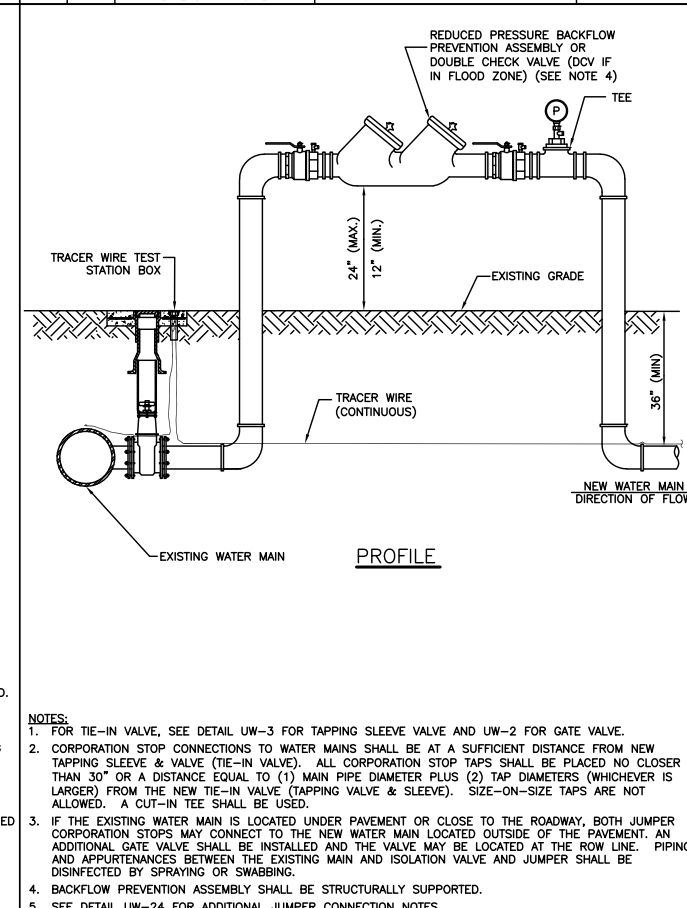
MANATEE COUNTY PUBLIC WORKS DEPARTMENT		SINGLE AND DOUBLE SERVICE CONNECTION	US-13A
REV. BY	DATE		
	February 25, 2020		
DATE OF APPROVAL			



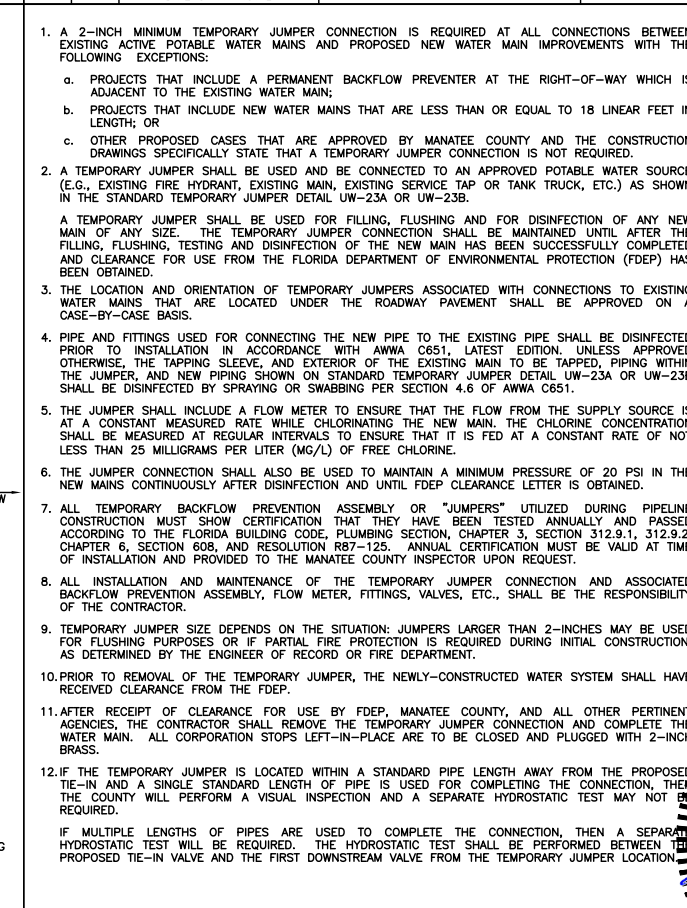
MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TAPPING SLEEVE AND VALVE (FORCE MAINS)	US-12
REV. BY	DATE		
	February 25, 2020		
DATE OF APPROVAL			



MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TEMPORARY JUMPER CONNECTION-HYDRANT AVAILABLE	UW-23A
REV. BY	DATE		
	February 25, 2020		
DATE OF APPROVAL			



MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TEMPORARY JUMPER CONNECTION - NO HYDRANT AVAILABLE	UW-23B
REV. BY	DATE		
	February 25, 2020		
DATE OF APPROVAL			



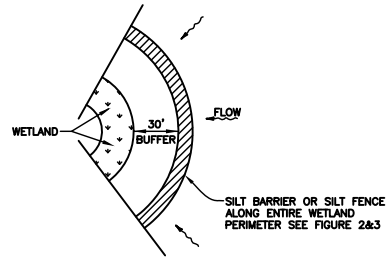
MANATEE COUNTY PUBLIC WORKS DEPARTMENT		TEMPORARY JUMPER CONNECTION NOTES	UW-24
REV. BY	DATE		
	February 25, 2020		
DATE OF APPROVAL			

JOHN S. SHOUN, P.E.  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
LICENSE NO. 60923  
DATE: 01/25/2021

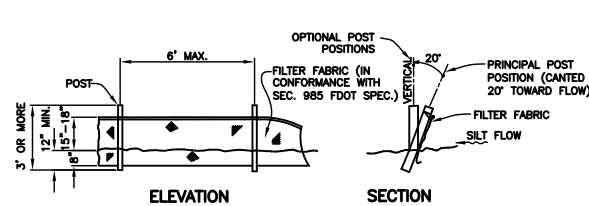




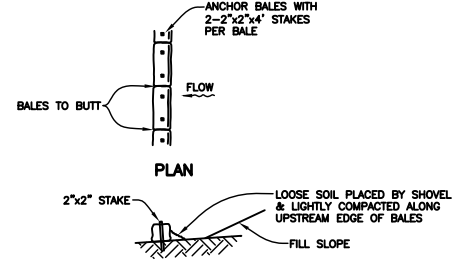




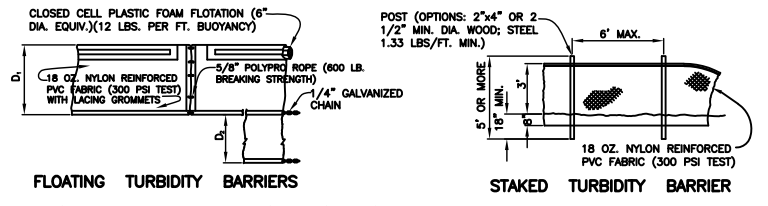
**WETLAND BUFFER**  
FIGURE 1



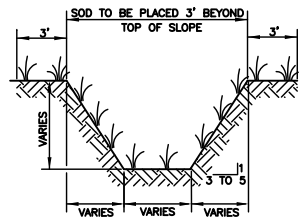
**TYPICAL SILT FENCE**  
FIGURE 2



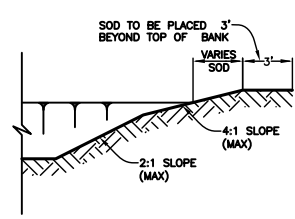
**TYPICAL BALE SILT BARRIER**  
FIGURE 3



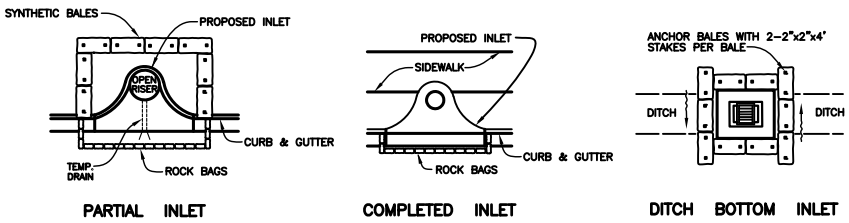
**TURBIDITY BARRIERS**  
FIGURE 4



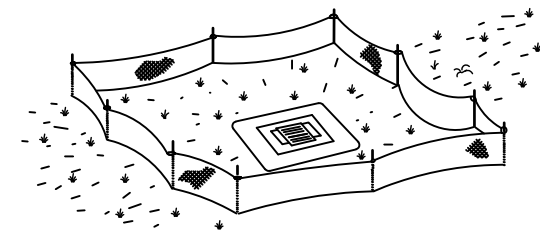
**TYPICAL SWALE SECTION**  
FIGURE 5



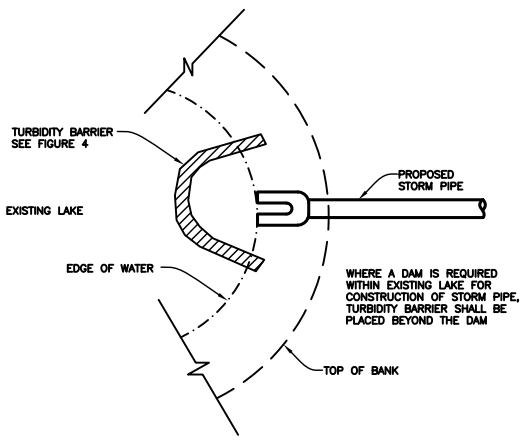
**TYPICAL RETENTION/DETENTION POND SECTION**  
FIGURE 6



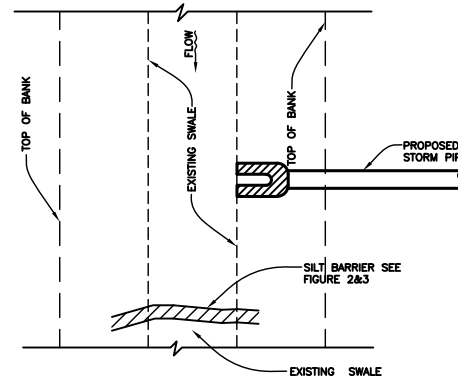
**SYNTHETIC BALE PROTECTION AROUND INLETS OR SIMILAR STRUCTURES**  
FIGURE 7



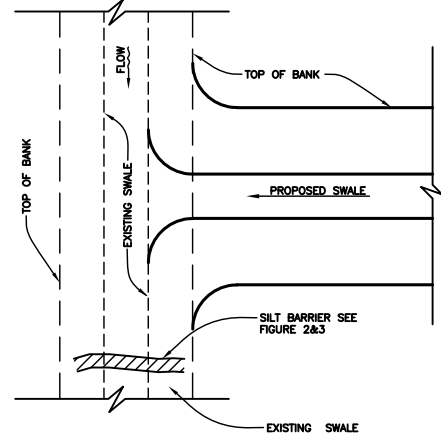
**TYPE III SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS**  
**STAKED SILT BARRIER OR SILT FENCE PROTECTION AROUND DITCH BOTTOM INLETS**  
FIGURE 8



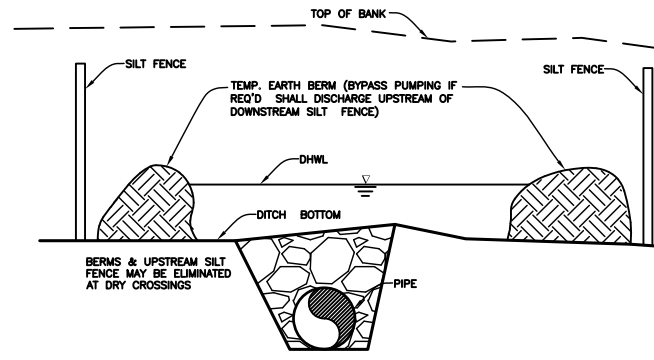
**TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE**  
FIGURE 9



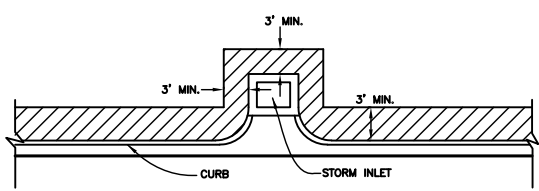
**SILT BARRIER AT CONNECTION OF STORM PIPE TO EXISTING SWALE**  
FIGURE 10



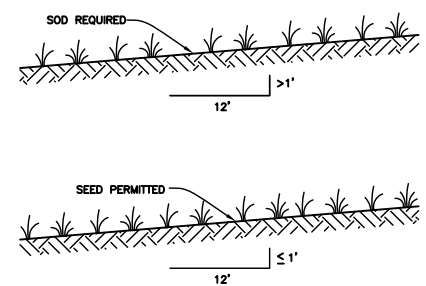
**SILT BARRIER AT CONNECTION OF SWALE TO EXISTING SWALE**  
FIGURE 11



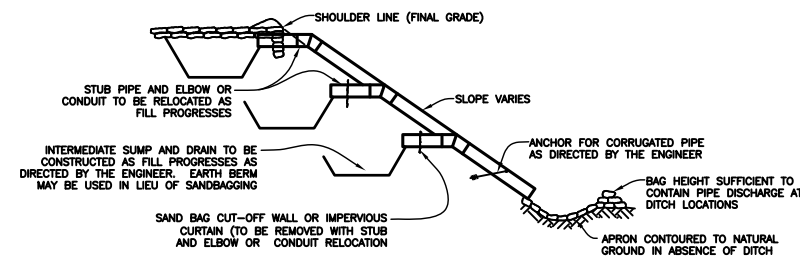
**UNDERGROUND PIPE CROSSING**  
FIGURE 12



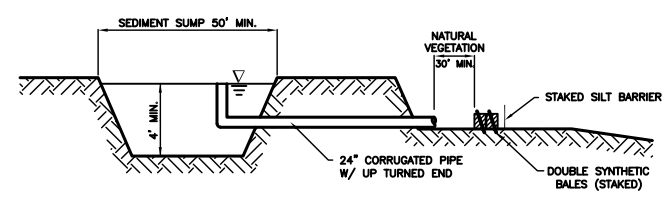
**SOD ALONG CURB AND AROUND INLET**  
FIGURE 14



**GRASS SLOPES**  
FIGURE 13



**SECTION AA**  
**TEMPORARY SLOPE DRAIN**  
FIGURE 15



**SEDIMENT SUMP SECTION**  
FIGURE 16

**NOTE:**  
REFERENCE THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, LATEST EDITION, FOR ALL TEMPORARY EROSION CONTROL MEASURES

NO.	REVISION DESCRIPTION	BY	DATE

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

BY DATE  
DESIGNED 10/24/12  
CHECKED JSS 12/10/12  
NO. 60923  
JOHN C. SHROUN, P.E.  
FLORIDA P.E. # 60823  
STATE OF FLORIDA  
01/25/2021  
PROFESSIONAL ENGINEER  
SHEET 26

H:\Util Eng Design\PROJ\Utility Relocations\Erie Road North South\DWGS\Cover Erie Road NS.dwg, 26, 1/25/2021 7:01 AM Jim Anderson, 1:1, Ledger