

Manatee County FLORIDA

BAYWEST CANAL BRADENTON, FLORIDA 465-6044500

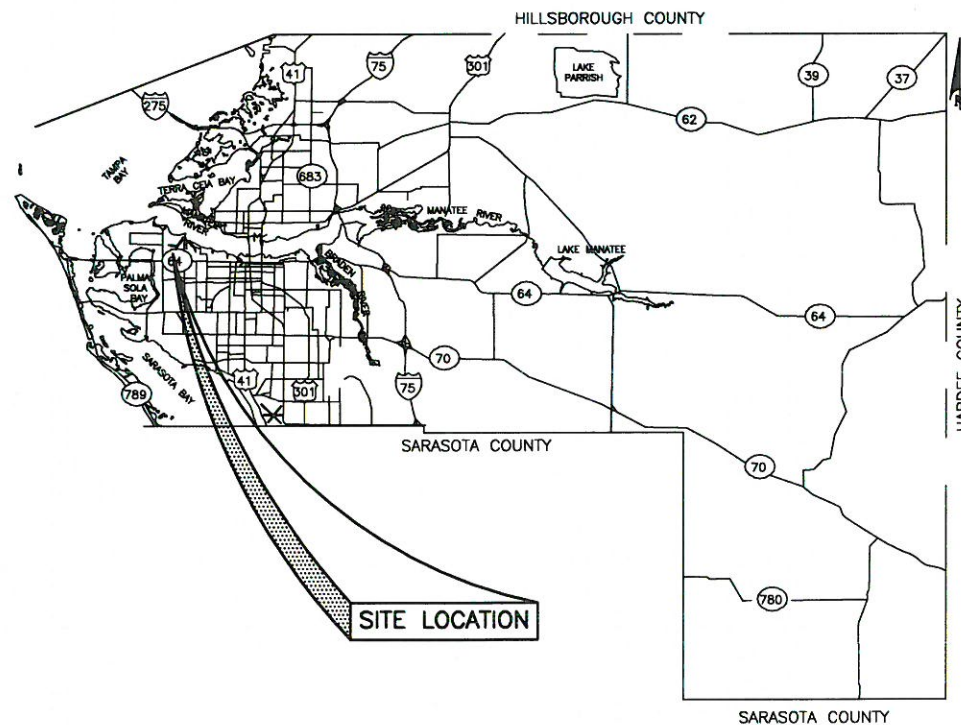
JUNE 2017

BAYWEST CANAL
BRADENTON, FLORIDA
COVER SHEET



VICINITY MAP
N.T.S.

PROJECT SITE



SITE LOCATION



NO.	INDEX OF SHEETS
1	COVER SHEET
2.-3.	TOPOGRAPHIC SURVEY
4.	GENERAL NOTES
5	QUANTITIES
8-8A	PLAN & PROFILE
9.-13.	CROSS SECTIONS
14-14A	CONSTRUCTION DETAILS
15-16	RETAINING WALL DETAILS
17.	EROSION DETAILS

PROJECT DESCRIPTION
PIPING 1,100 LF OF CANAL.



Know what's below
Call before you dig

NO.	REVISION DESCRIPTION	DATE
1	ADDENDUM # 1	06/02/17

PROJECT #	465-6044500
SURVEY #	000
SEC./TWN./RGE	30/34S/17E
SCALE	1"=30'
BY	DATE
SLIWEYER	GFY 07/20/15
DESIGNED	JKP 09/15/15
DR'W'G	JKP 10/20/15
CHECKED	BL 11/10/15

JOHN PARI, P.E.
FLORIDA P.E. # 56368
John Pari
7/5/17
Signature & Date

S:\PMD_Engineering\Shara\Stormwater_Engineering\Van\CR-675 and Bowwest Ditch\Plan\Bay West_Plan_recover.dwg, 11 x 17 Coor. 6/4/2017 2:28 PM John Pari, 1:1, ANSI Full Size B (17.00 x 11.00 inches)

CONTRACTOR SHALL REFERENCE SECTION 14 IN THE CURRENT MANATEE COUNTY UTILITY STANDARDS FOR RECORD DRAWING REQUIREMENTS.

Topographic Survey

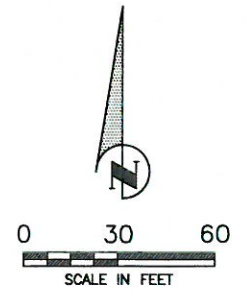
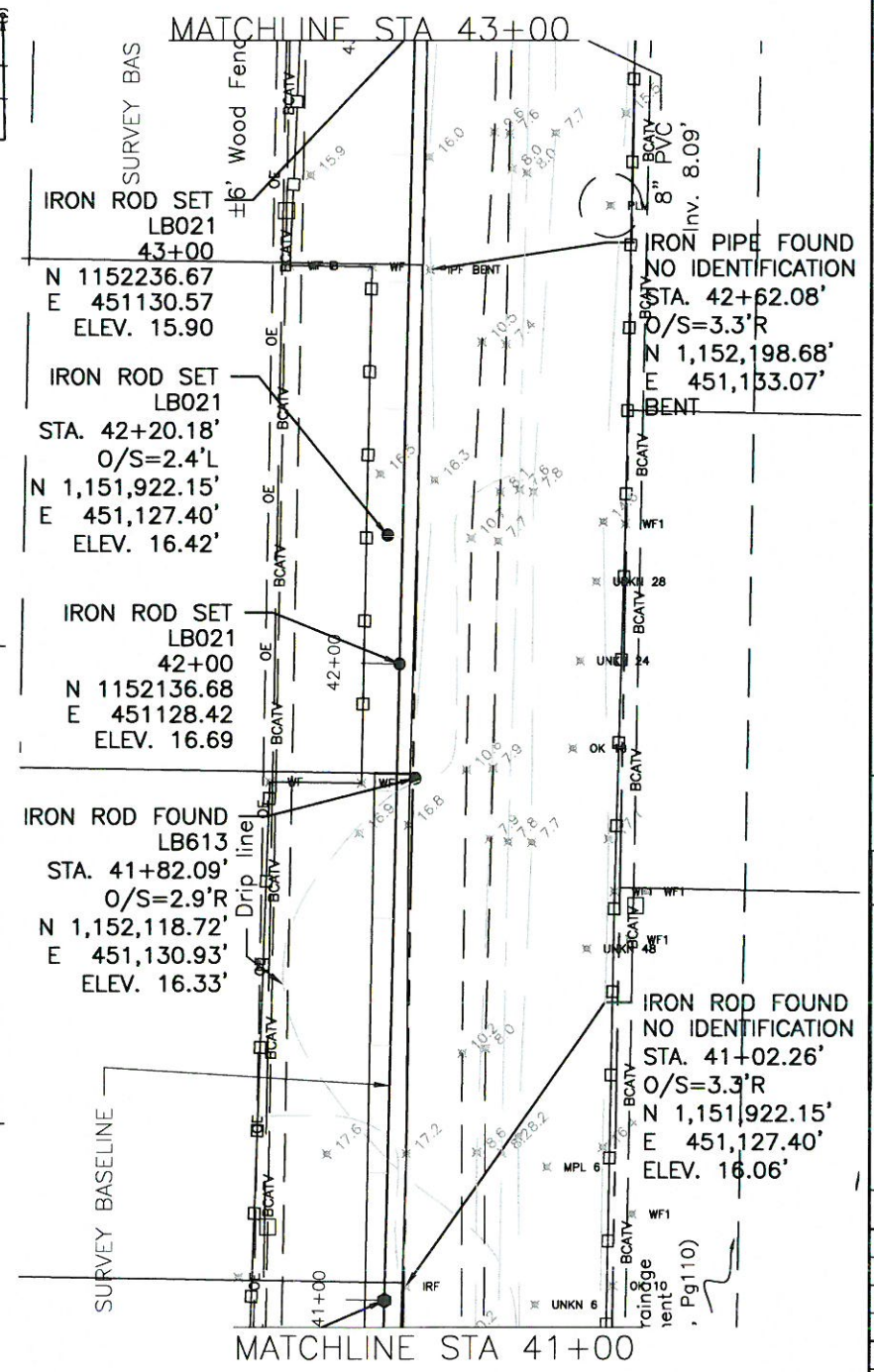
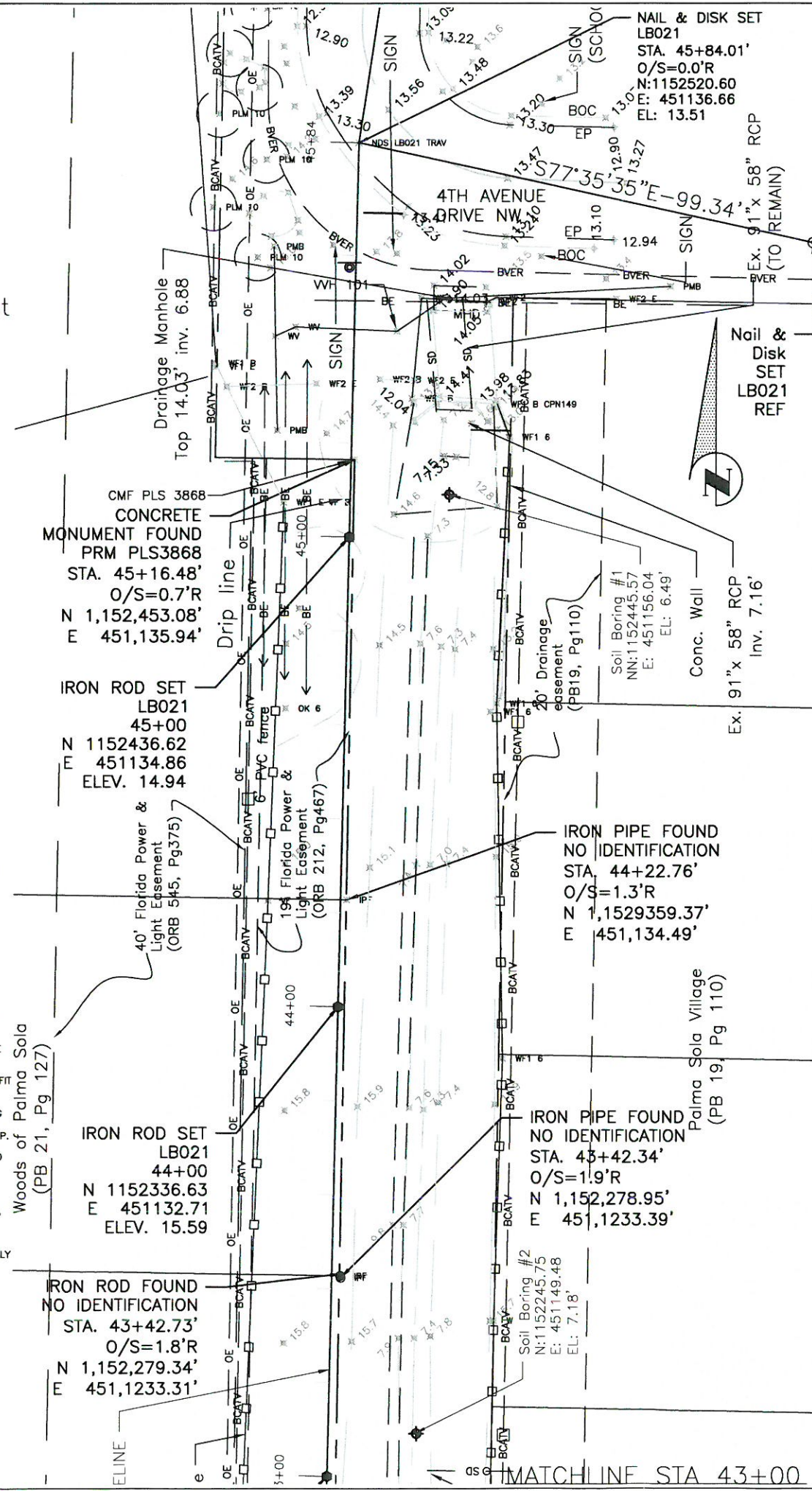
of
In Section 30, Township 34 South, Range 17 East
Manatee County, Florida

SURVEYOR'S REPORT

- Unless noted, locations limited to - observable, above ground improvements, no underground improvements have been located except those shown hereon. Some features may be exaggerated for clarity, dimensions shown supersede scaled dimensions.
- This survey does not certify or warranty: title, zoning, easements, or freedom of encumbrances.
- There are no visible encroachments except as shown. The location and existence of underground utilities and underground foundations or any other pertinent attributes to subject property (if any) not abstracted as part of this survey, except as shown.
- No instruments of record reflecting easements, rights-of-way and/or ownership are known by, or were furnished to this surveyor except as shown hereon.
- This drawing is not valid without the original raised seal and signature of the Florida Registered Surveyor & Mapper shown hereon.
- Parcel information shown hereon was gathered from the Manatee County Geographic Information Systems property locator web site.
- This survey does not reflect or determine ownership.
- Bearings shown are based on State Plane Coordinates, Florida West zone-NAD '83, and were based on GPS observations of survey monument COB1052 (PID #D06936) with published coordinates of (N)1,148,020.42, (E)450,328.94 and survey monument Trent Bottles (PID #BBCJ31) with published coordinates of (N)1,154,110.14, (E)447,284.58.
- The elevations shown hereon are based on MAN 4 (A 2" brass disk) (NGS PID#AG7656), elevation 25.23' feet, North American Vertical Datum of 1988 (NAVD88), and Manatee County benchmark Trent Bottles, elevation 17.19' feet NAVD88.
- Subject to all restrictions, rights of way and easements of record, if any.
- Reuse of documents: this document is an instrument of service in respect of the project to which it applies and any reuse without written verification or adoption by George F. Young, Inc. (GFY) for the specific purposes intended will be at the user's sole risk and without liability or legal exposure to GFY and user shall indemnify and hold harmless GFY from all claims, damages, losses and expenses including attorneys fees arising out of or resulting therefrom. Any such verification or adoption will entitle GFY to further compensation at rates to be agreed upon by user and GFY.
- The expected use of the land, as classified in the Standards of Practice for Surveyors and Mappers (5J-17-F.A.C.), is suburban.
- The purpose of this topographic survey was to obtain existing conditions for the design of the "Bay West Canal" piping project. Substantial visible improvements were located and shown hereon only in the proximity of the design area.
- Soil borings shown hereon were marked in the field by a representative of Driggers Engineering Services Inc, and located by GFY.
- The dates of field survey were 07/08/15 through 07/29/15.

SUE RELATED NOTES:

- THIS REPORT CONTAINS SUBSURFACE UTILITIES PHYSICALLY EXPOSED BY VACUUM EXCAVATION (VW). ELECTRONICALLY DESIGNATED LINES AS SHOWN IN THE MAP OF SURVEY MAY DEVIATE FROM THE ACTUAL UTILITY LOCATION AND SHOULD BE CONSIDERED APPROXIMATE.
- SUBSURFACE STORM DRAIN AND GRAVITY SANITARY SEWER STRUCTURES AND THEIR ASSOCIATED PIPING ARE EXCLUDED FROM THIS SURVEY, EXCEPT AT SPECIFIC LOCATIONS REQUESTED BY THE CLIENT.
- SURFACE ELEVATIONS AND MEASURE DOWNS (DEPTH OF COVER) ARE VALID AT THE DATE OF THIS SURVEY ONLY AS SURFACE GRADE CONDITIONS MAY CHANGE OVER TIME.
- SUBSURFACE UTILITIES WERE LOCATED BY UTILIZING THE VACMASTER SYSTEM 2000 FOR VACUUM EXCAVATION WITH THE BENEFIT OF ELECTRONIC DESIGNATION AND GROUND PENETRATING RADAR (GPR).
- UTILIZATION OF THE ABOVE EQUIPMENT AND METHODS IS THE INDUSTRY RECOGNIZED PROCEDURE FOR FINDING AND LOCATING UNDERGROUND UTILITIES. ALTHOUGH EFFECTIVE AND RELIABLE, THERE IS THE POSSIBILITY THAT ALL UTILITIES MAY NOT BE DETECTED DUE TO ENVIRONMENTAL CONDITIONS, SOIL CONDITIONS, WATER TABLE, EXCESSIVE DEPTH, AND/OR FEATURE MAKEUP.
- UTILITY SIZE AND MATERIAL COMPOSITION WERE COLLECTED BY FIELD OBSERVATION UNDER ADVERSE CONDITIONS AND SHOULD BE CONSIDERED APPROXIMATE.
- UTILITY SIZE REFLECTS THE APPROXIMATE OUTSIDE DIAMETER UNLESS OTHERWISE SPECIFIED.
- UTILITY OWNER'S NAMES USED IN THIS REPORT REFLECT INFORMATION OBTAINED FROM FIELD OBSERVATIONS, FIELD MEETINGS, AND UTILITY RESEARCH AND MAY NOT REFLECT ACTUAL OWNERSHIP.
- MEASUREMENTS DESCRIBED AS ELECTRONIC DESIGNATION ONLY/DEPTH METER, IF ANY, HAVE BEEN OBTAINED BY ELECTRONIC DESIGNATING EQUIPMENT. THE 3-DIMENSIONAL POSITION OF ELECTRONICALLY DESIGNATED UTILITIES HAS NOT BEEN PHYSICALLY MEASURED AND SHOULD BE CONSIDERED APPROXIMATE.
- HORIZONTAL VALUES (NORTHING/EASTING) ARE RELATIVE TO THE STATE PLANE COORDINATE SYSTEM, FLORIDA WEST ZONE, NORTH AMERICAN DATUM OF 1983-1990 ADJUSTMENT (NAD 1983-1990) AND WERE ESTABLISHED BY GLOBAL POSITIONING SYSTEM (GPS) SURVEY.
- VERTICAL VALUES, ELEVATIONS, (LISTED AS "SURFACE OR TOP" IN THE VW TABLE) ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).



SUE TABLE:

VW NUMBER	UTILITY TYPE	TOP UTILITY ELEVATION	UTILITY	NORTHING	EASTING	VW NUMBER
101	6" PVC WM (MANATEE COUNTY)	11.4	WATER MAIN	1152480.41	451144.83	101
102	16" DIP FM (MANATEE COUNTY)	21.7	FORCED MAIN	1151363.27	451097.22	102
103	16" DIP FM (MANATEE COUNTY)	20.9	FORCED MAIN	1151364.18	451135.29	103
104	16" DIP FM (MANATEE COUNTY)	20.8	FORCED MAIN	1151363.92	451162.11	104
105	16" DIP WM (MANATEE COUNTY)	19.4	WATER MAIN	1151345.19	451114.60	105
106	16" DIP WM (MANATEE COUNTY)	19.0	WATER MAIN	1151344.08	451159.19	106

BAYWEST CANAL BRADENTON, FLORIDA TOPOGRAPHICAL SURVEY

NO.	REVISION DESCRIPTION	BY	DATE

PROJECT #	465-6044500
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SEC./TWN./RGE	30/34S/17E
SCALE	1"=30'

	BY	DATE
SURVEYED	GFY	07/20/15
DESIGNED	JKP	09/15/15
DRAWN	JKP	10/20/15
CHECKED	BL	11/10/15

Signature & Date
SHEET 2

S:\MID_Engineering\Shawn\Water\Engineering\Bay West Plans\recover.dwg\Survey1_07/20/15 3:15 PM John Poff, L.S., ANS; full bleed B (17.00 x 11.00 inches)

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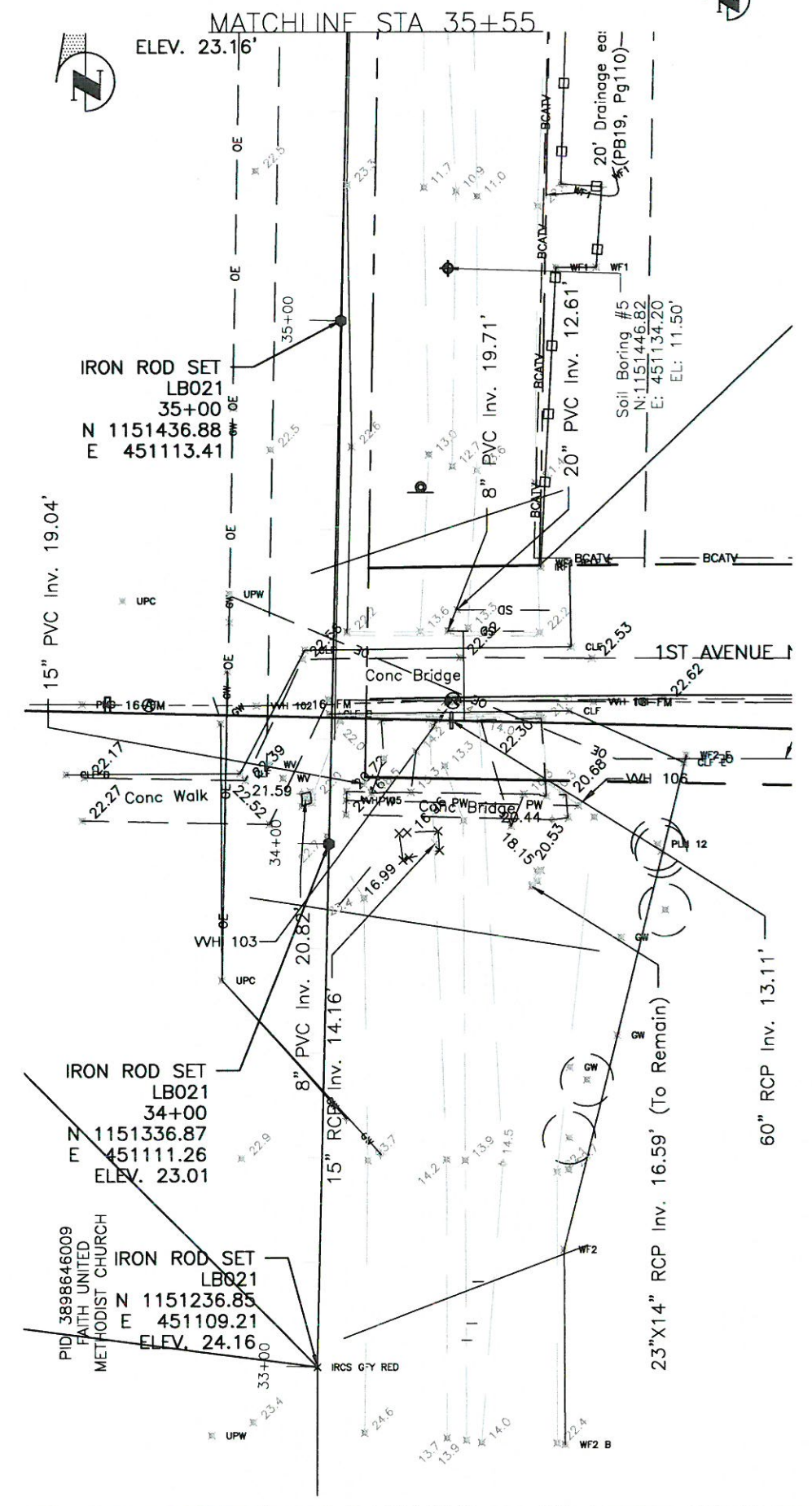
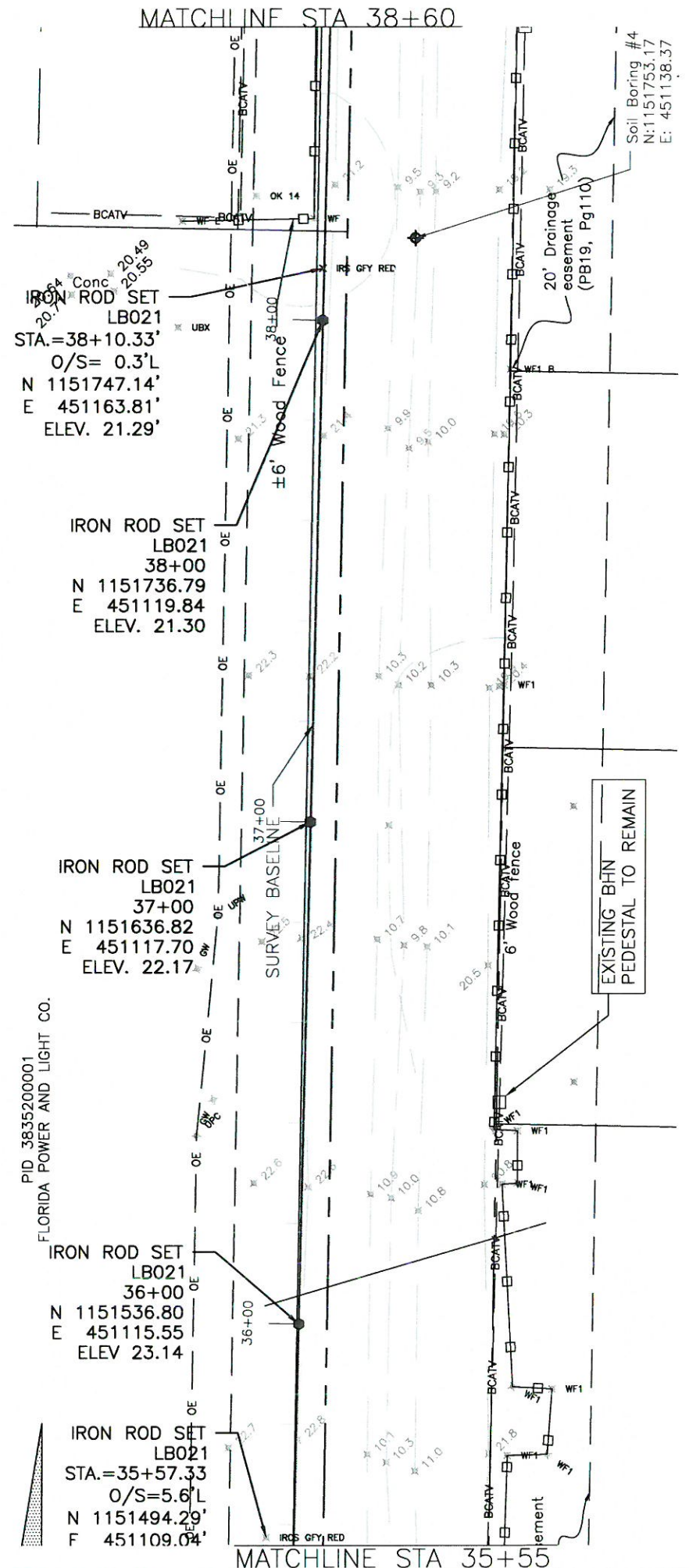
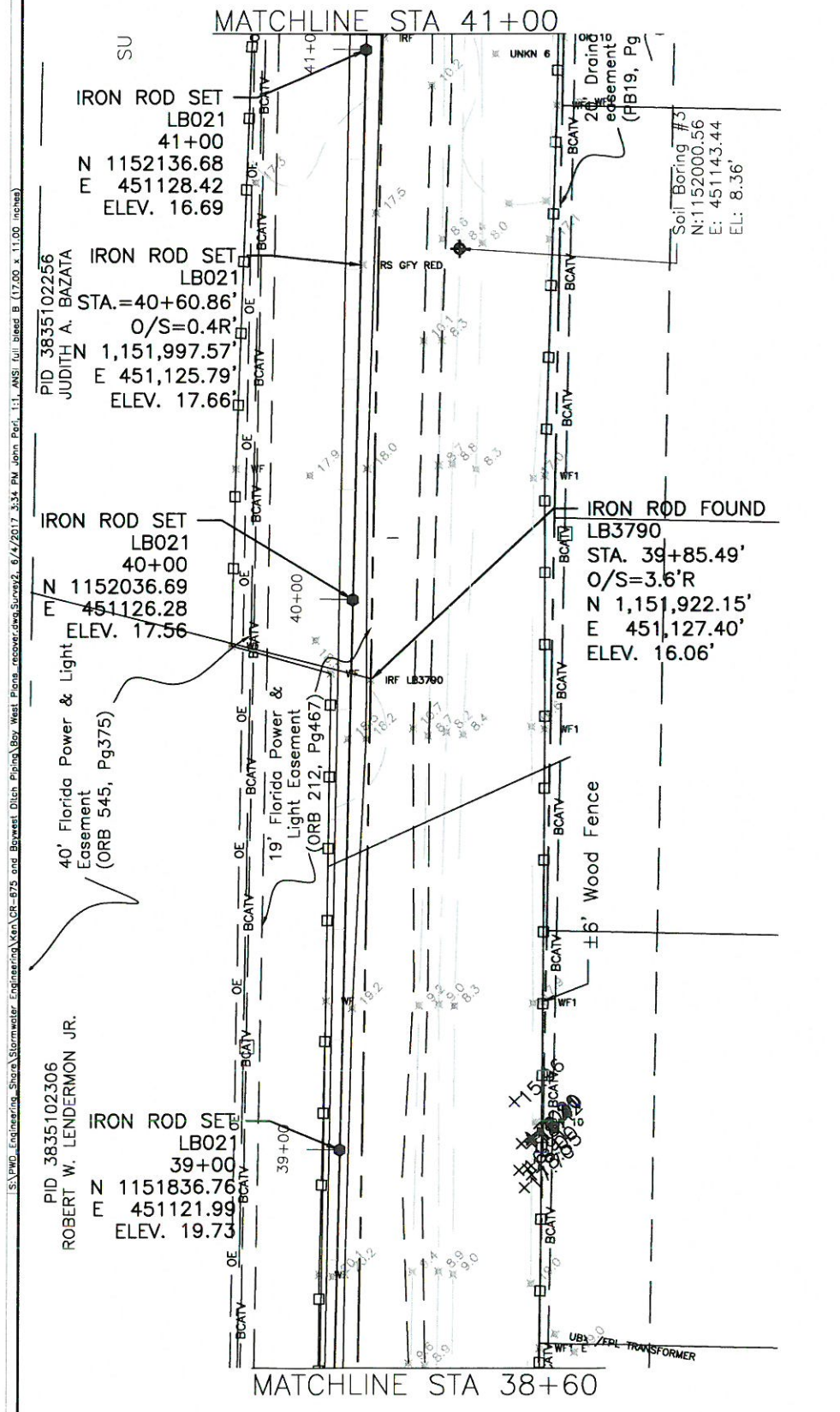
Topographic Survey

of
In Section 30, Township 34 South, Range 17 East
Manatee County, Florida



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

BAYWEST CANAL BRADENTON, FLORIDA TOPOGRAPHICAL SURVEY



S:\P\01 - Engineering - Stormwater - Engineering\Van\CR-275 and Baywest-Ditch-Plan\Bay West-Plan-revised-Survey2_6/4/2017_8:54 PM.dwg Plot: L1 - ANSI - full sheet B (17.00 x 11.00 inches)

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PROJECT #	465-6044500
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Signature & Date
SHEET 3

GENERAL

- 1. ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PROJECT MANAGEMENT DIVISION. THE PROJECT MANAGER IS: MICHAEL STURM AND CAN BE REACHED AT 941- 708-7450 EXT. 7332.
2. SITE VISITS ARE MANDATORY FOR ALL BIDDERS. THESE SITE VISITS CAN BE ARRANGED THROUGH THE PROJECT MANAGER.
3. ALL CONSTRUCTION ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF MANATEE COUNTY UTILITY AND TRANSPORTATION STANDARDS AND/OR FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" UNLESS OTHERWISE INDICATED ON THE PLANS.

SAFETY

- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE FLORIDA TRENCH SAFETY ACT, 90-96, LAWS OF FLORIDA EFFECTIVE OCTOBER 1, 1990 AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION EXCAVATION SAFETY STANDARDS, 29 CFR 1926.650, SUBPART P, AS AMENDED. THE CONTRACTOR SHALL INCLUDE IN THE TOTAL BID PRICE ALL COSTS FOR COMPLIANCE WITH THESE REGULATIONS.
16. THE CONTRACTOR SHALL USE SHEET PILING, SHEETING, BRACING, ETC., AS REQUIRED IN ALL EXCAVATION AREAS AND CONFORM TO ALL OSHA REQUIREMENTS.

ENVIRONMENTAL

- 19. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY STORM WATER, EROSION, AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH THE FDEP "FLORIDA STORM WATER, EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL". IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT TO SURFACE DRAINS AND TO DITCHES DURING CONSTRUCTION.
20. STOCKPILES SHALL BE PROTECTED AT ALL TIMES BY ON-SITE DRAINAGE CONTROLS WHICH PREVENT EROSION OF THE STOCKPILED MATERIAL. CONTROL OF DUST FROM SUCH STOCKPILES IS REQUIRED, DEPENDING UPON THEIR LOCATION AND THE EXPECTED LENGTH OF TIME THE STOCKPILES WILL BE PRESENT. IN NO CASE SHALL ANY STOCKPILED MATERIAL REMAIN AFTER THIRTY (30) CALENDAR DAYS.

RIGHT-OF-WAY

- 28. ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO WITHIN THE MANATEE COUNTY RIGHT-OF-WAY.
29. THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA TO REFERENCE AND RESTORE PROPERTY CORNER MONUMENTS, PINS, AND LANDMARKS THAT MAY BE DISTURBED BY CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.

UTILITIES

- 33. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC. WHICH ARE WITHIN THE PROJECT AREA AND WHICH HAVE NOT BEEN LOCATED OR IDENTIFIED, MAY NOT BE IN THE EXACT LOCATION SHOWN OR RELOCATED SINCE THE PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THE PLANS) THAT MAY AFFECT HIS WORK. ALL EXISTING UTILITIES TO BE EXTENDED, CROSSED OR CONNECTION POINTS SHALL BE EXPOSED PRIOR TO CONSTRUCTION TO VERIFY LOCATION AND ELEVATION. ANY DISCREPANCIES OR CONFLICTS FOUND SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR RESOLUTION.

RESTORATION

- 37. ALL RESTORATION WORK PERFORMED THROUGHOUT THE PROJECT SHALL CONFORM TO EXISTING LINES AND GRADES UNLESS SHOWN OTHERWISE.
38. ALL DISTURBED GRASSED AREAS SHALL BE SODDED OR SEEDED UNLESS OTHERWISE INDICATED. THE TYPE OF SOD USED TO REPLACE OWNER MAINTAINED AREAS IN RIGHT-OF-WAY SHALL BE COORDINATED WITH THE PROPERTY OWNER.

CONSTRUCTION

- 42. THE EXHAUST SYSTEM OF ALL GASOLINE AND DIESEL ENGINES SHALL BE EQUIPPED WITH MUFFLERS THAT MEET THE EQUIPMENT MANUFACTURER'S REQUIREMENTS FOR NOISE SUPPRESSION. THE CONTRACTOR SHALL INSTALL NOISE ABATEMENT BAFFLES POSITIONED TO BREAK LINE-OF-SITE FROM THE NOISE SOURCE TO AFFECTED RESIDENCES, AS APPROVED BY THE ENGINEER.
43. NO MATERIAL SHALL BE STOCKPILED IN ROADWAYS. ALL DIRT AND DEBRIS SHALL BE REMOVED FROM THE JOB SITE DAILY. ROADS SHALL BE SWEEPED DAILY AS PART OF DAILY CLEAN UP.
44. THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED.

DRAINAGE AND GRADING

- 65. ALL CONSTRUCTION IS TO BE STAKED IN THE FIELD BY OR UNDER THE SUPERVISION OF A FLORIDA REGISTERED LAND SURVEYOR.
66. THE CONTRACTOR IS TO PROVIDE THE ENGINEER OF RECORD WITH REPRODUCIBLE RECORD DRAWINGS SHOWING ALL IMPROVEMENT LOCATIONS AND ELEVATIONS IN ACCORDANCE WITH LATEST MANATEE COUNTY PUBLIC WORKS DEPARTMENT STANDARDS AND SWFWMD STANDARDS. THE CONTRACTOR SHALL PROVIDE FIVE SETS OF PRINTS, SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR, OF THE RECORD DRAWING TO THE ENGINEER OF RECORD. RECORD DRAWINGS SHALL INCLUDE TOP OF BANK AND STORM STRUCTURES AND BE REVIEWED BY THE ENGINEER OF RECORD PRIOR TO ACCEPTANCE AND PAYMENT.

EMERGENCY CONTACTS

MANATEE COUNTY PUBLIC WORKS DEPT. UTILITIES ENGINEERING DIV. MGR. SCOTT MAY, P.E. 1022 26TH AVENUE EAST BRADENTON, FL 34208 (941) 708-7450 EXT. 7650 FAX: (941) 708-7507 scott.may@mymanatee.org
TECO/PEOPLES GAS CO. DAN SHANAHAN 8261 VICO COURT SARASOTA, FL 34240 (941) 342-4030 FAX: (941) 342-4011 EMERGENCY: 1-877-832-6911
FRONTIER DENISE HUTTON 1701 RINGLING BLVD. SARASOTA, FL 34236 (941) 906-6722 FAX: (941) 906-6706 Denise.Hutton@verizon.com
FLORIDA POWER & LIGHT GREG COKER 1253 12TH AVENUE EAST PALMETTO, FL 34221 (941) 723-4430 FAX: (941) 723-4444 EMERGENCY: 1-800-4-OUTAGE Greg.Coker@fpl.com
MANATEE COUNTY HEALTH DEPT. HARRY MESSICK 410 6TH AVENUE EAST BRADENTON, FL 34208 (941) 748-0747 EXT. 1355 FAX: (941) 750-9364
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT SARASOTA SERVICE OFFICE STEVE LOPES, P.E.

LEGEND section with symbols for EXISTING and PROPOSED features. Includes symbols for BENCH MARK, CONCRETE MONUMENT, IRON PIPE, IRON ROD, HUB, NAIL & DISK, ELEVATION, LOT NO., GUY WIRE, POWER POLE, LIGHT POLE, MAIL BOX, SIGN, REFLECTOR, SPRINKLER, GAS MARKER, BACKFLOW PREVENTER, BLOW OFF VALVE, FIRE HYDRANT, WATER VALVE, AIR RELEASE VALVE, WATER METER, SANITARY SEWER MANHOLE, SANITARY SEWER CLEAN OUT, SOIL BORING LOCATION, TELEPHONE SERVICE BOX, FLOW DIRECTION, GRATE INLET, MITERED END SECTION, SPOT ELEVATION, BUSH, TREE, OAK TREE, PALM TREE (W/ DRIP LINE), PINE TREE, EDGE OF VEGETATION, CHAIN LINK FENCE, WOOD FENCE, BARBED WIRE FENCE, FORCE MAIN, POTABLE WATER, RECLAIMED WATER, SANITARY SEWER, STORM DRAIN, GAS LINE, OVERHEAD_CABLE_TV, BURIED_CABLE_TV, OVERHEAD ELECTRIC, BURIED ELECTRIC, OVERHEAD VERIZON, BURIED VERIZON, VERIZON, BURIED UTILITY, OVERHEAD UTILITY, RAIL ROAD TRACKS, EDGE OF CONCRETE, JAMIE HARRISON, TOE OF SLOPE, TOP OF BANK, PROPERTY LINE, RIGHT OF WAY, R/W, CONC, ASPH, DRWAY, SIDEWALK, EP, BOC, FIRE HYDRANT, VALVE, SANITARY SEWER MANHOLE, BLOW OFF ASSEMBLY, REDUCER, TEE, HORIZONTAL BEND, VERTICAL BEND, PLUG, MASTER METER ASSEMBLY, SERVICE LINE & METER, DOUBLE SERVICE.



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

BAYWEST CANAL BRADENTON, FLORIDA GENERAL NOTES

Table with columns: REVISION DESCRIPTION, DATE, BY, NO., PROJECT #, SURVEY #, SEC./TWN./RGE, SCALE, SURVEYED, DESIGNED, DRAWN, CHECKED, and signature/DATE area.

BAY WEST CANAL PIPING 100% Quantities

LINE NO.	LINE NO.	ITEM NO.	DESCRIPTION	EST. QTY	U/M	UNIT PRICE	EXTENDED PRICE
1.		101-1	Mobilization	1.00	LS		
2.		102-1	Maintenance of Traffic (Incl. Temp. Pedestrian Sidewalk)	1.00	LS		
3.		104-10-3	Sediment Barrier	2,500.00	LF		
4.		104-15	Soil Tracking Prevention Device	2.00	EA		
5.		104-18	Inlet Protection System	3.00	EA		
6.		110-1-1	Clearing & Grubbing, incl. riprap, trees, pipes, structures, 60" Rcp, endwalls, sidewalk, tree protection & ditch cleaning	0.75	AC		
7.		120-1	Regular Excavation	300.00	CY		
8.		120-2-2	Borrow Excavation, Truck Measure	5,270.00	CY		
9.		120-4	Subsoil Excavation	75.00	CY		
10.		120-6	Embankment (Regular)	5,270.00	CY		
11.		400-4-11	Class IV (Retaining Wall), Incl. Reinforcing Steel & footings	19.10	CY		
12.		425-1- 543	Inlet, DT Bot, Type D, J Bot, < 10'.	1.00	EA		
13.		425-1- 544	Inlet, DT Bot, Type D, J Bot, > 10'.	1.00	EA		
14.		425-1- 901	Inlet, Special, < 10'.	1.00	EA		
15.		430-175-166	Pipe Storm Sewer Culv (RCP) (66")	621.00	LF		
16.		430-175-272	Pipe Storm Sewer Culv (ERCP) (58"x91")	483.00	LF		
17.		430-MC1	Connect Existing 20" PVC to Storm Sewer	1.00	LS		
18.		430-MC2	Connect Existing 8" PVC to Storm Sewer (Incl. clean out)	1.00	LS		
19.		515-2-311	PED / Bicycle Railing, Alum., 42", Type I	40.00	LF		
20.		519-78	Concrete Pipe Bollard	4.00	EA		
21.		522-2	4" Concrete Sidewalk	130.00	SY		
22.		530-3-4	RipRap - Rubble, F & I Ditch Lining	22.00	TN		
23.		570-1-2	Sodding (Performance Turf, Bahia) (Includes Mowing)	3,670.00	SY		
24.			Connect to Existing Force Main	2.00	EA		
25.			16" D.I Restrained Joint Force Main	108.00	LF		
26.			16" D.I. 45° Bend, Wastewater	4.00	EA		
27.			16" D.I. M.J. Restraints	8.00	EA		
28.			16" Plug Valve, MJ	2.00	EA		
29.			Remove existing 16" D.I. Force main	108.00	LF		
30.			Misc. Concrete	4.00	CY		
TEMPORARY BYPASS ITEMS							
31.			16" D.I. Plug, Wastewater	2.00	EA		
32.			16" D.I. M.J. Restraints	4.00	EA		
33.			16" x 12" Stainless Steel Tapping Sleeve w/ Valve	2.00	EA		
34.			Temporary 12" HDPE Pipe (includes all pumping, hauling, monitoring, welded thrust collar)	195.00	LF		
35.			Misc. Concrete	4.00	CY		

ALTERNATE BID A (8' BIKE PATH)

LINE NO.	LINE NO.	ITEM NO.	DESCRIPTION	EST. QTY	U/M	UNIT PRICE	EXTENDED PRICE
1.		160-4	6" Stabilization Subbase (LBR 60)	1,257.00	SY		
2.		285-701	Optional Base Group 1	1,257.00	SY		
3.		334-1-MC1	1 1/2" Type S-I Asphalt Concrete (Incl. Prime Coat)	90.00	TON		
4.		700-MC1	Signs - Misc.	1.00	LS		
5.		710-MC1	Painted pavement markings (Incl. Messages & Arrows)	1.00	LS		
6.		999-MC1	Stainless Steel H.C. Ramp (8' wide)	1.00	EA		

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ENGINEERING SERVICES
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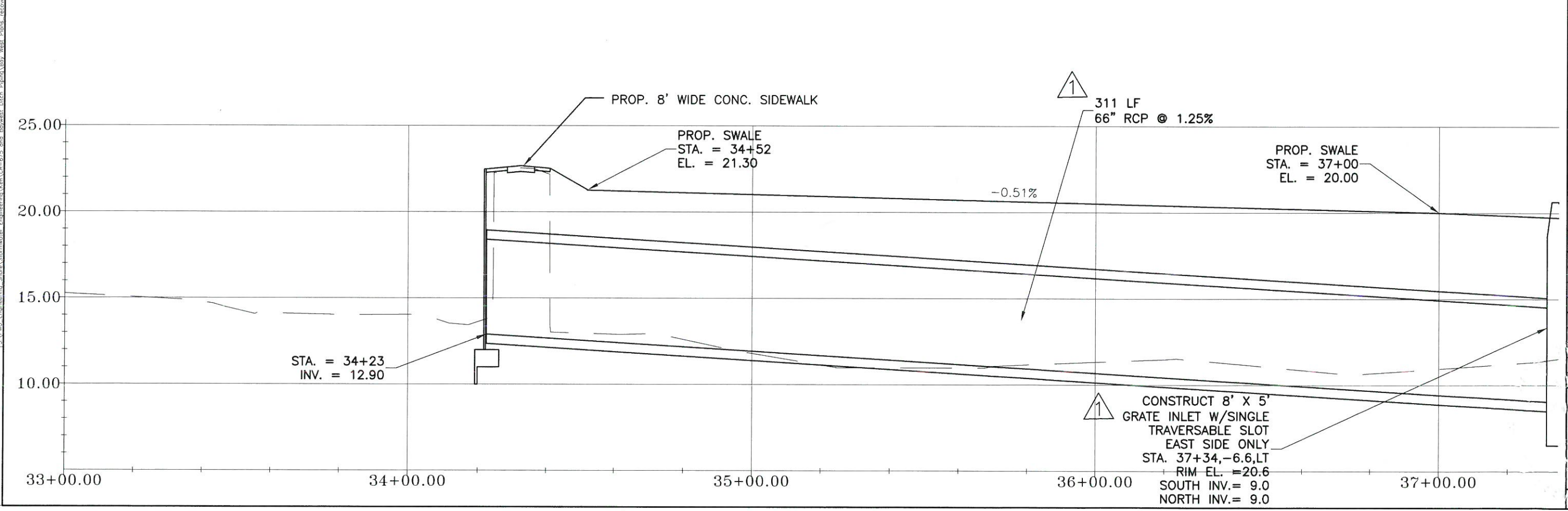
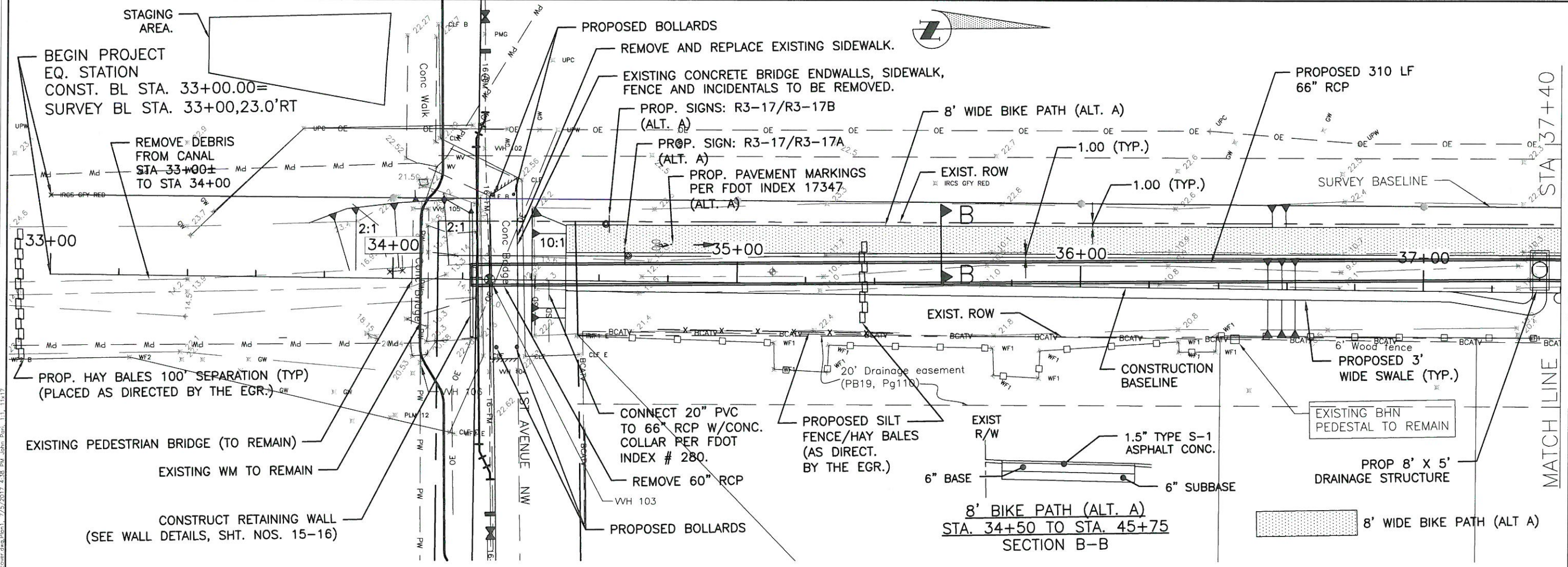
**BAYWEST CANAL
BRADENTON, FLORIDA
QUANTITIES**

NO.	1	REVISION DESCRIPTION	ADDENDUM # 1
DATE	06/02/17	BY	JKP
PROJECT #	465-6044500	SURVEY #	000
SEC./TWN./RGE	30/34S/17E	SCALE	N/A
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JOHN PARI, P.E.
FLORIDA P.E. # 56368
John Pari
7/5/17
Signature & Date

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**BAYWEST CANAL
BRADENTON, FLORIDA
PLAN AND PROFILE**



DATE	06/02/17
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FLORIDA P.E. # 56368	
<i>John Pari</i> 7/5/17	
Signature & Date	
SHEET 6	

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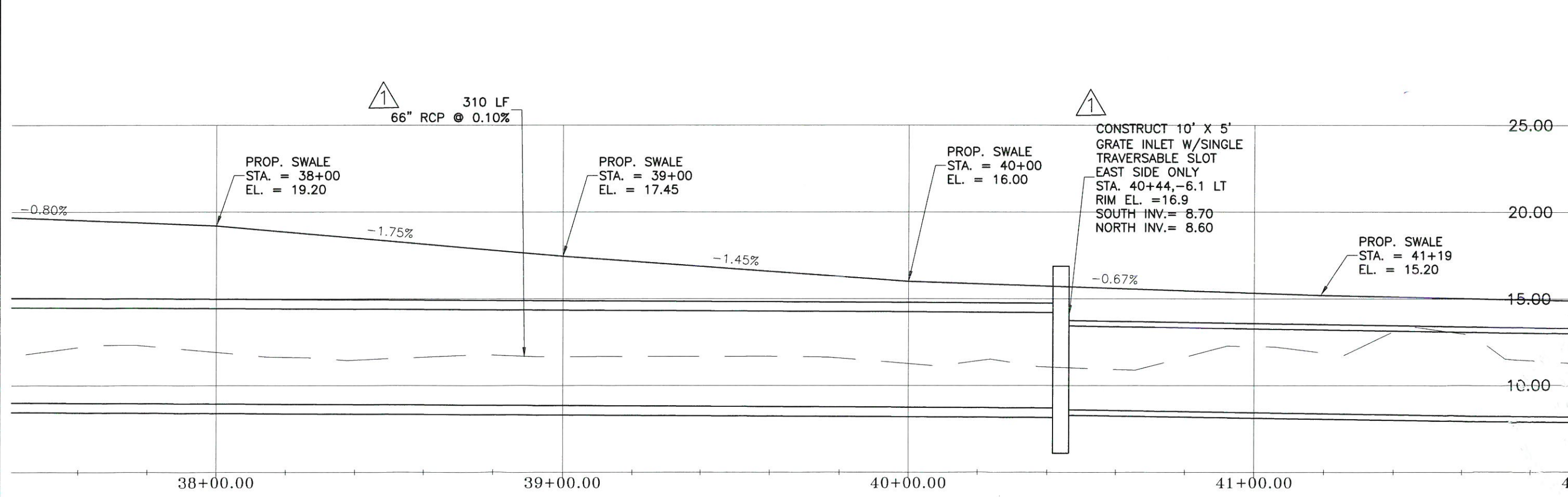
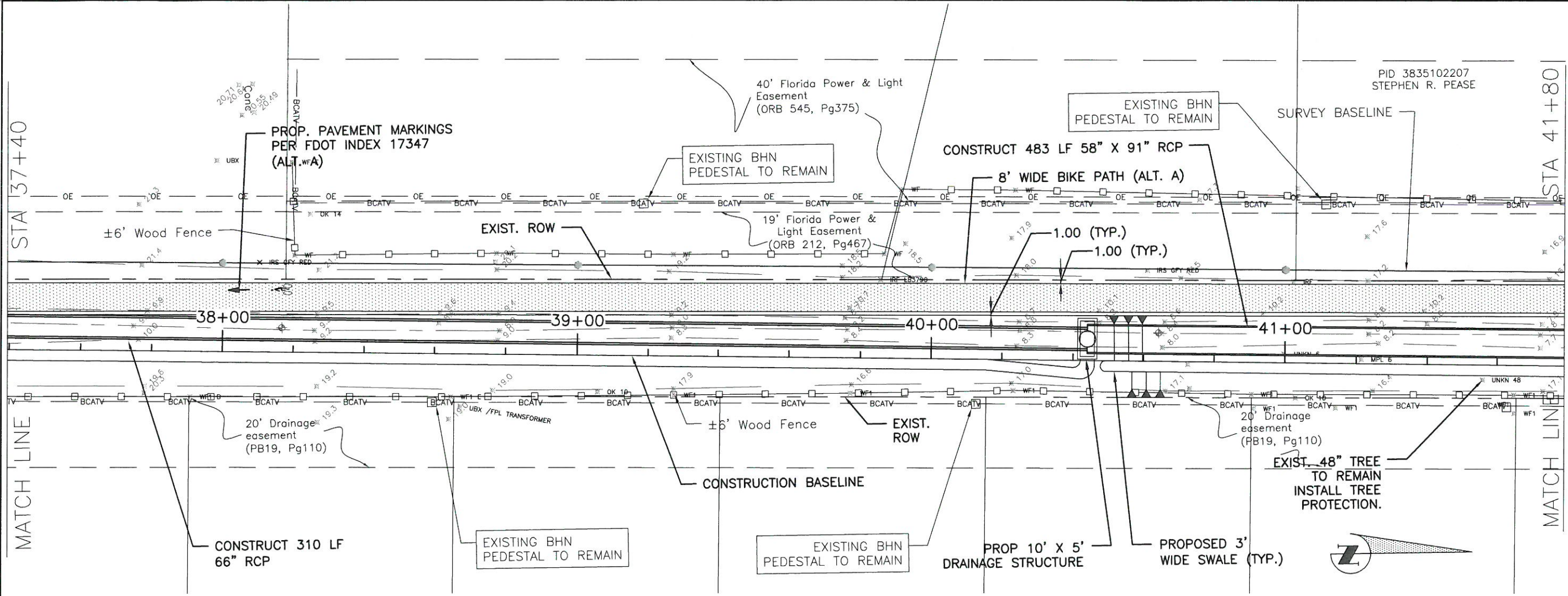
**BAYWEST CANAL
BRADENTON, FLORIDA
PLAN AND PROFILE**

STA 37+40

STA 41+80

MATCH LINE

MATCH LINE



DATE	06/02/17
BY	SML
REVISION DESCRIPTION	ADDENDUM # 1
NO.	-
PROJECT #	465-6044500
SURVEY #	000
SEC./TWN./RGE	30/34S/17E
SCALE	1"=30'
SURVEYED	GFY 07/20/15
DESIGNED	JKP 09/15/15
DRAWN	JKP 10/20/15
CHECKED	BL 11/10/15

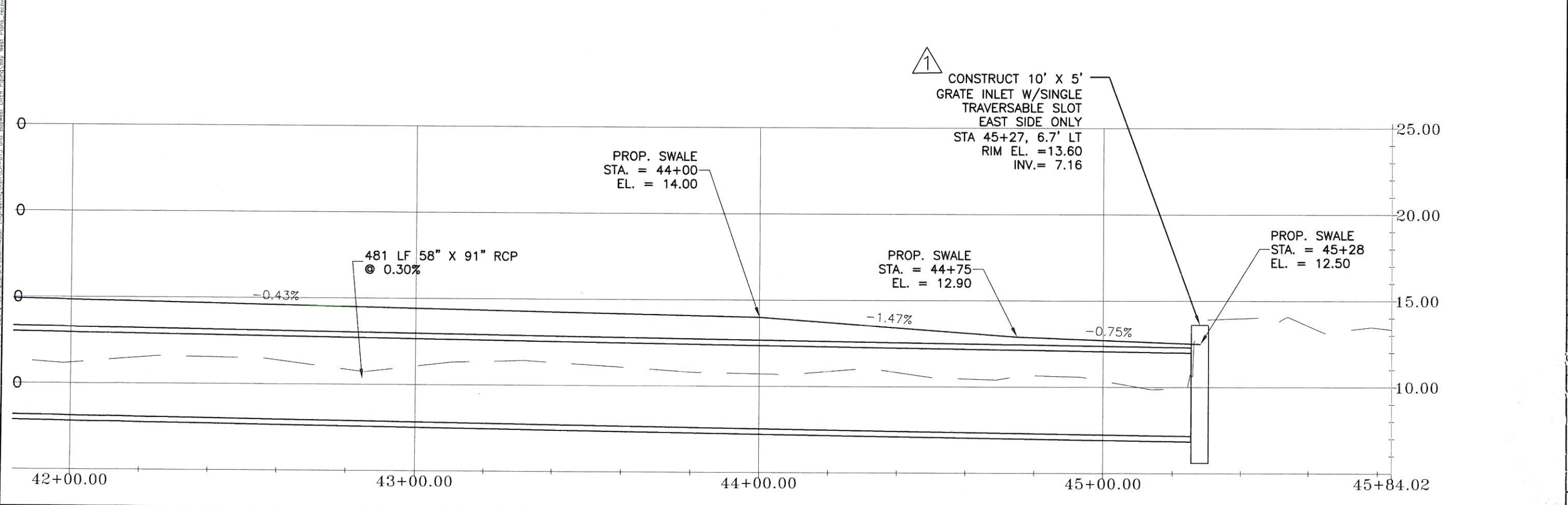
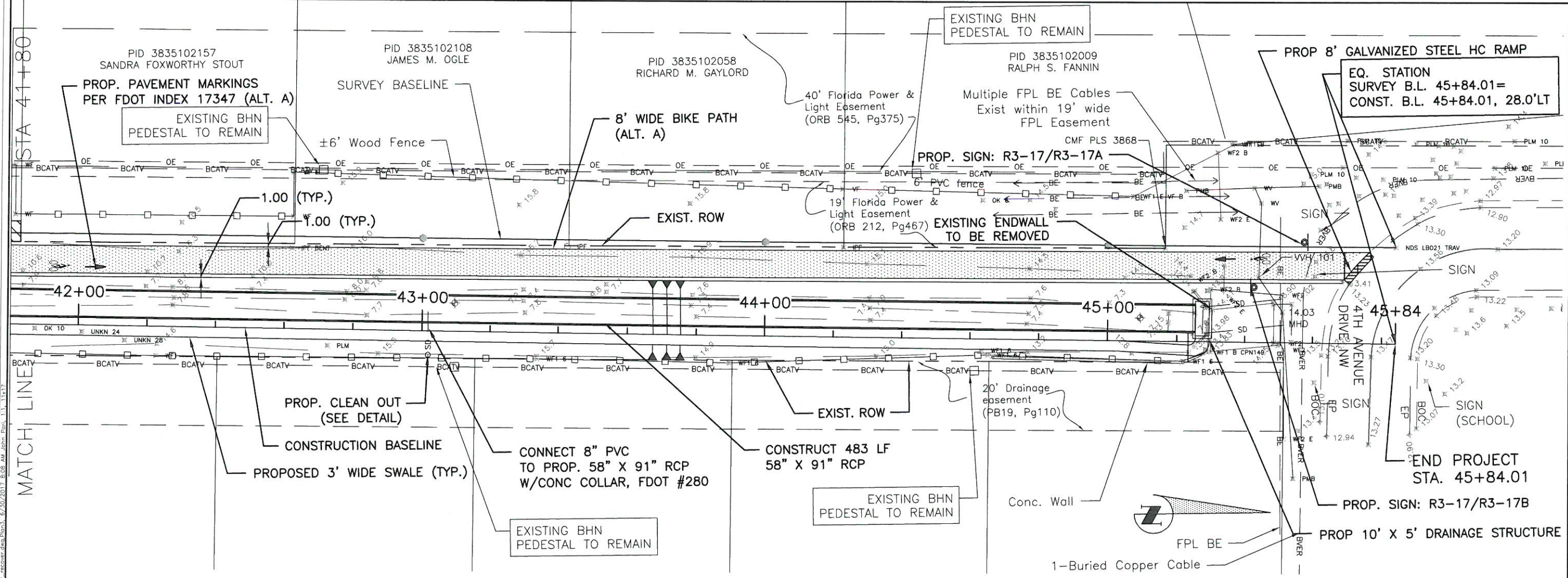
JOHN PARI, P.E.
FLORIDA P.E. # 56368
John Pari
7/5/17
Signature & Date

I:_P\W\Engineering\Stormwater_Engineering\Kpn\CR-675_and_Baywest_Ditch_Pignola\Bay_West_Plans_recover.dwg, 6/5/2017 1:10 PM, John Pari, 1:1, 11x17



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

**BAYWEST CANAL
BRADENTON, FLORIDA
PLAN AND PROFILE**



NO.	REVISION DESCRIPTION	DATE
1	ADDENDUM # 1	06/02/17

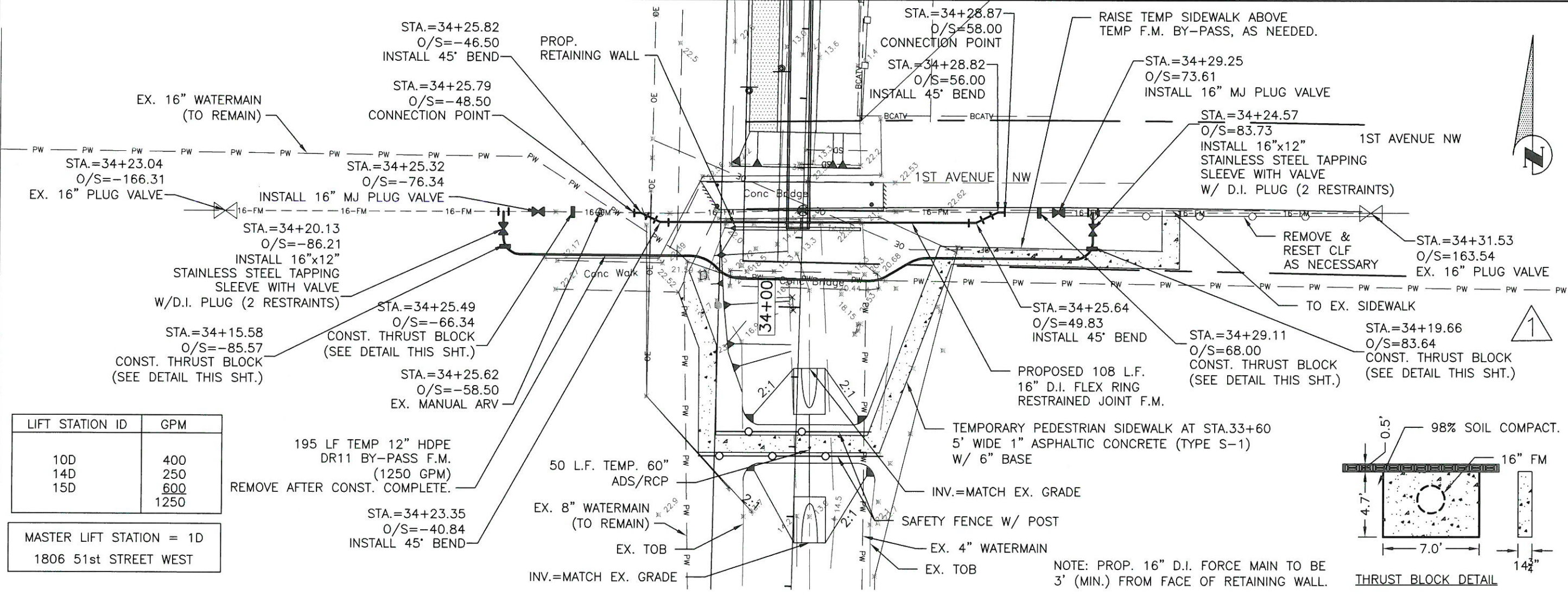
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SURVEY #	000
SEC./TWN./RGE	30/34S/17E
SCALE	1"=30'

	BY	DATE
SURVEYED	GFY	07/20/15
DESIGNED	JKP	09/15/15
DRAWN	JKP	10/20/15
CHECKED	BL	11/10/15

JOHN PARI, P.E.
FLORIDA P.E. # 66368
John Pari
7/5/17
Signature & Date

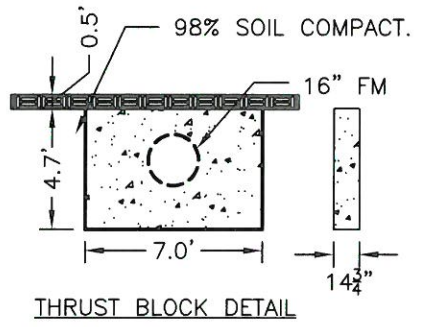
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**BAYWEST CANAL
BRADENTON, FLORIDA
16" D.I. FORCE MAIN REPLACEMENT**

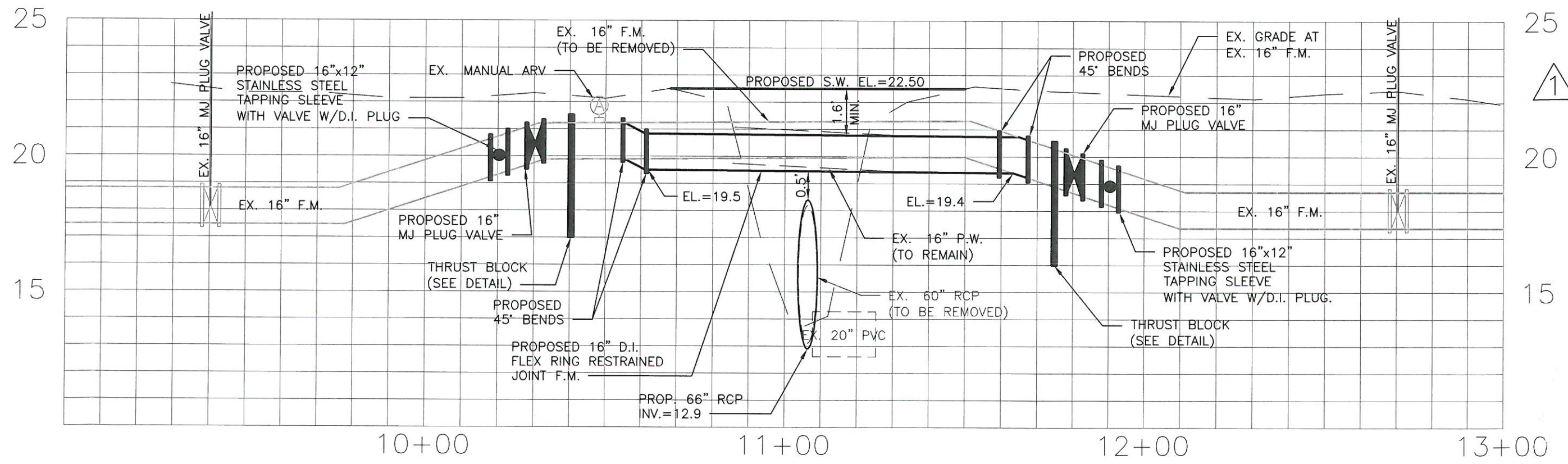


LIFT STATION ID	GPM
10D	400
14D	250
15D	600
	1250

MASTER LIFT STATION = 1D
1806 51st STREET WEST

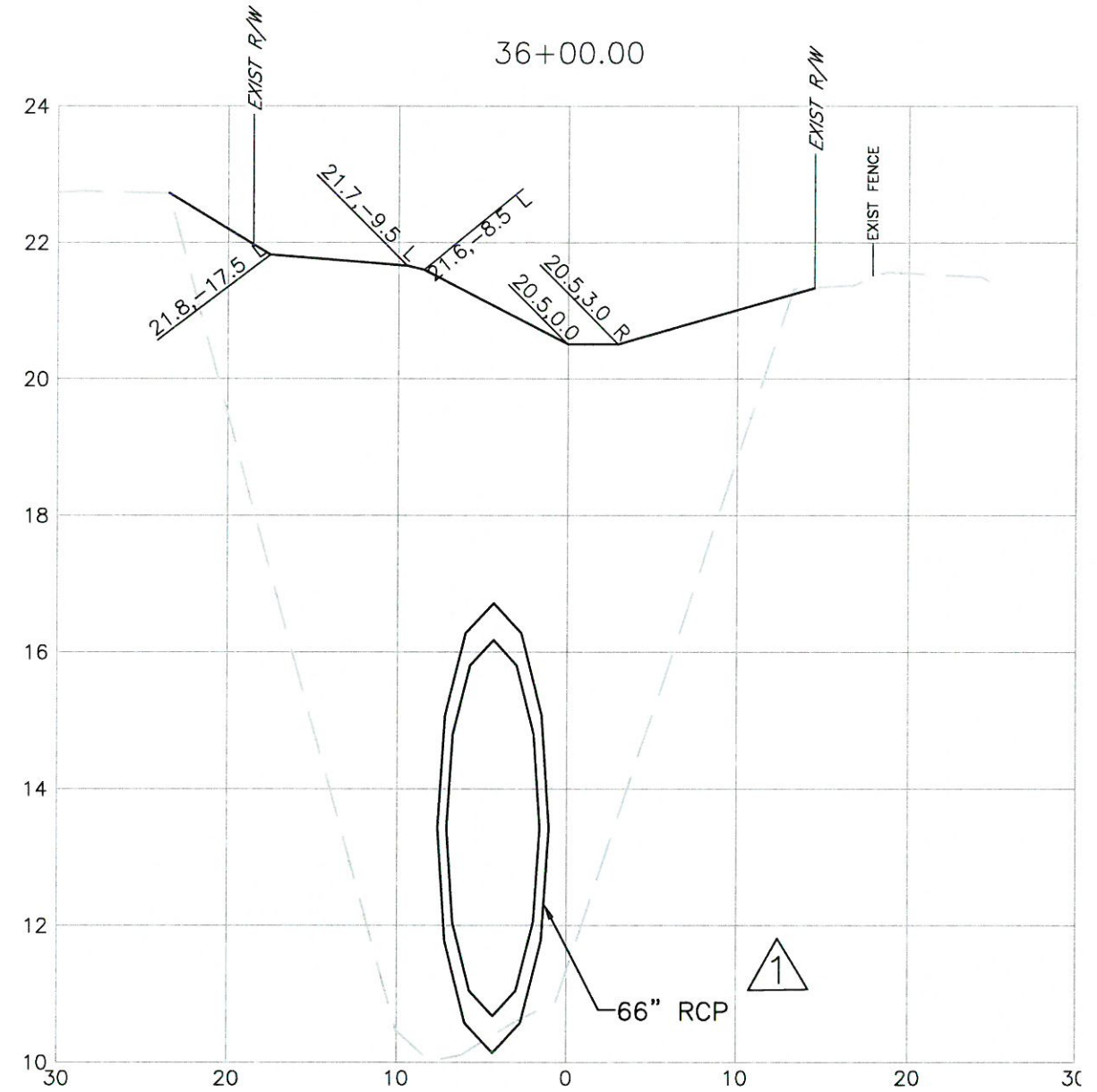
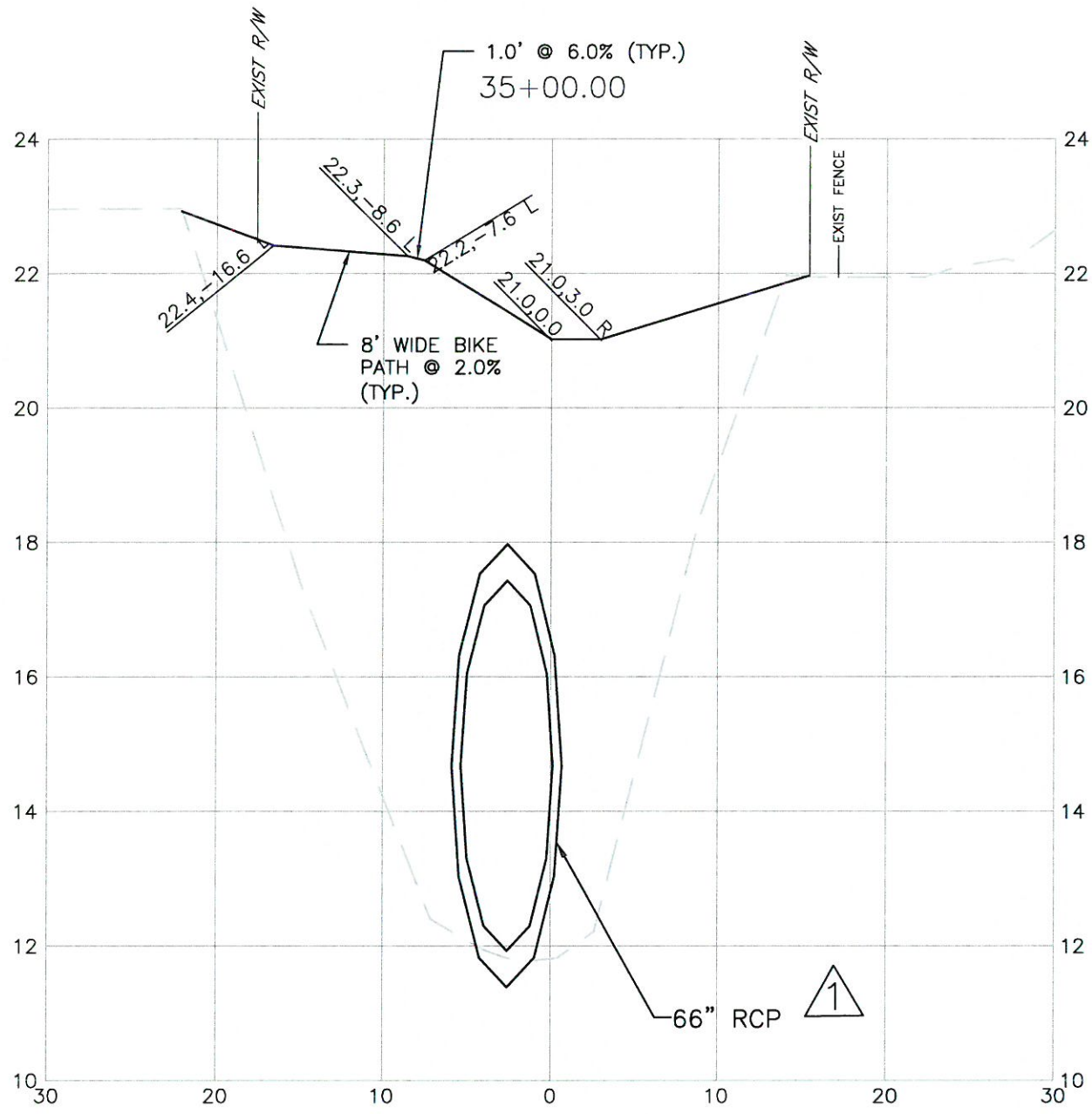


NOTE: PROP. 16" D.I. FORCE MAIN TO BE 3' (MIN.) FROM FACE OF RETAINING WALL.



DATE	6/17
BY	JP
REVISION DESCRIPTION	ADDENDUM #1
NO.	1
PROJECT #	465-6044500
SURVEY #	000
SEC./TWN./RGE	30/34S/17E
SCALE	1"=30'
	BY DATE
SURVEYED	GFY 07/20/15
DESIGNED	JKP 09/15/15
DRAWN	JKP 10/20/15
CHECKED	BL 11/10/15
JOHN PARI, P.E. FLORIDA P.E. # 56368	
Signature & Date 7/5/17	
SHEET 8A	

**BAYWEST CANAL
BRADENTON, FLORIDA
CROSS SECTIONS**



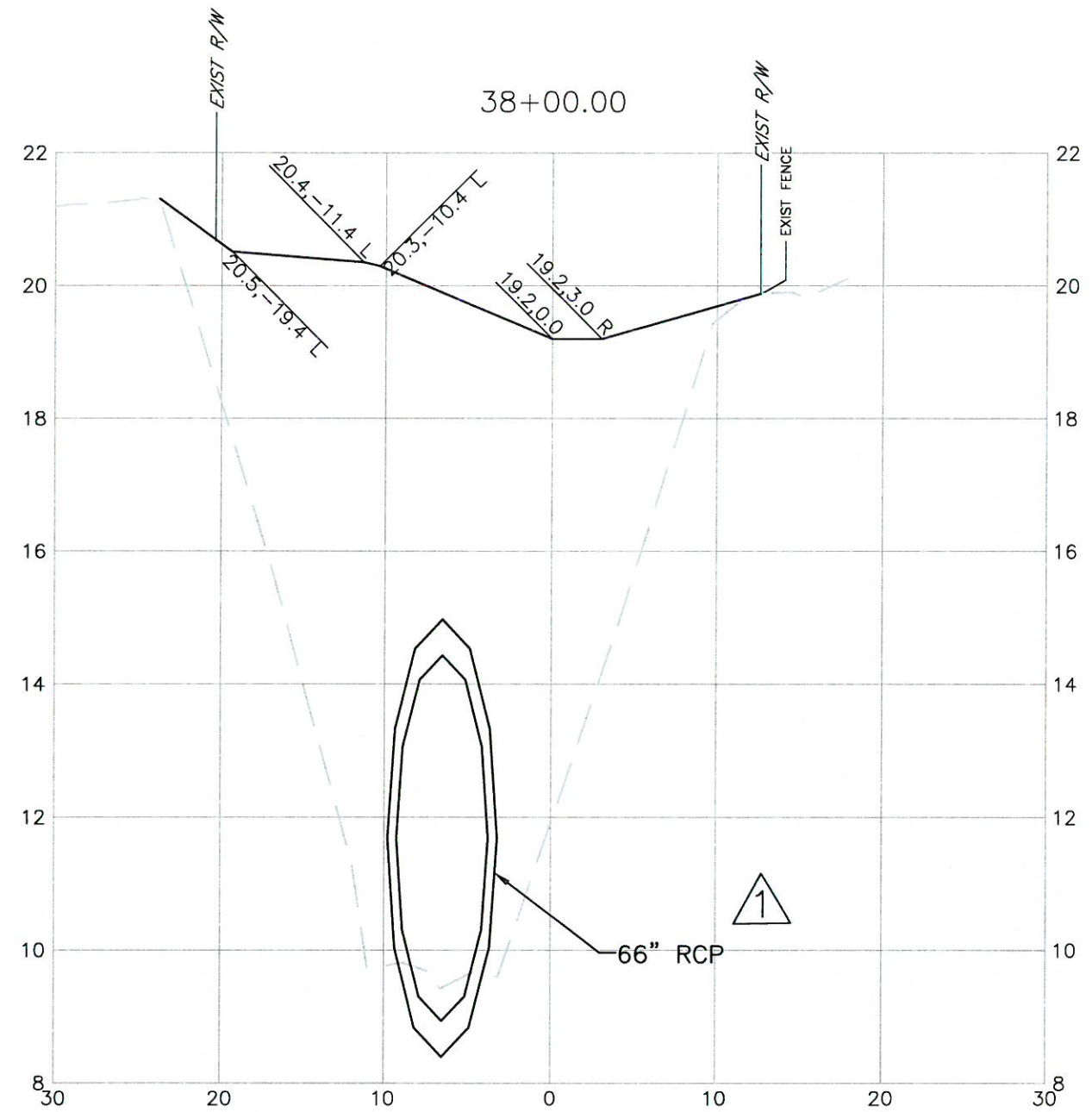
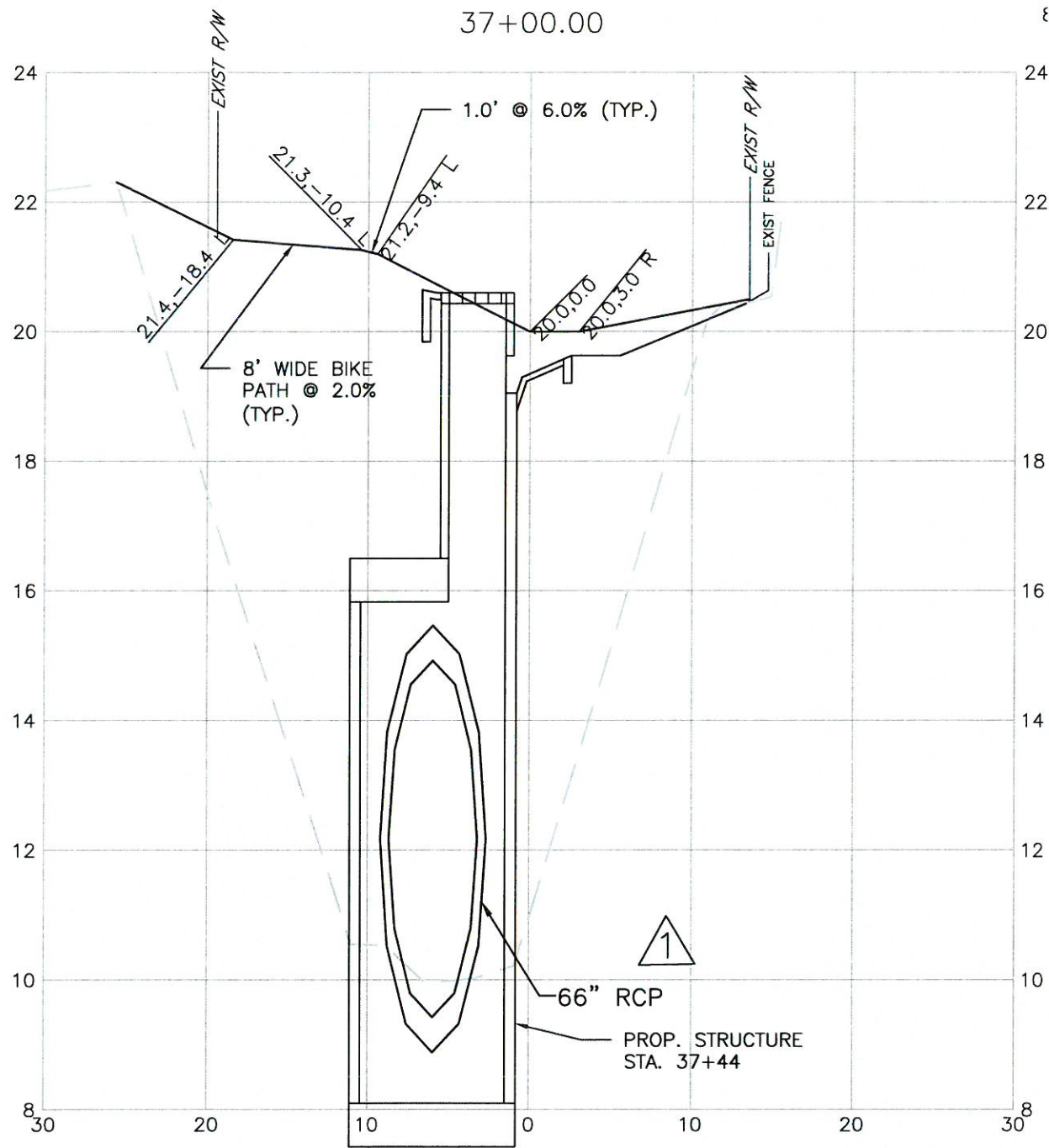
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VERT.: 1"= 2.5'

NO.	1	REVISION DESCRIPTION	ADDENDUM # 1	DATE	06/02/17
BY	JKP				
PROJECT #	465-6044500	SURVEY #	000	SEC./TWN./RGE	30/34S/17E
SCALE	AS SHOWN	BY	DATE		
SURVEYED	GFY	07/20/15			
DESIGNED	JKP	09/15/15			
DRAWN	JKP	10/20/15			
CHECKED	BL	11/10/15			

JOHN PARI, P.E.
FLORIDA P.E. # 56368
[Signature]
7/5/17
Signature & Date

S:\PMD_Engineering\Shore Stormwater_Engineering\Ken\CR-875 and Baywest Ditch Piping\Bay West Plans_revised.dwg, Section 1, 6/1/2017 4:58 PM John Pari, 11, ANSI full bleed B (17.00 x 11.00 inches)

**BAYWEST CANAL
BRADENTON, FLORIDA
CROSS SECTIONS**



SCALE: HORZ: 1"=10'
VERT.: 1"= 2.5'

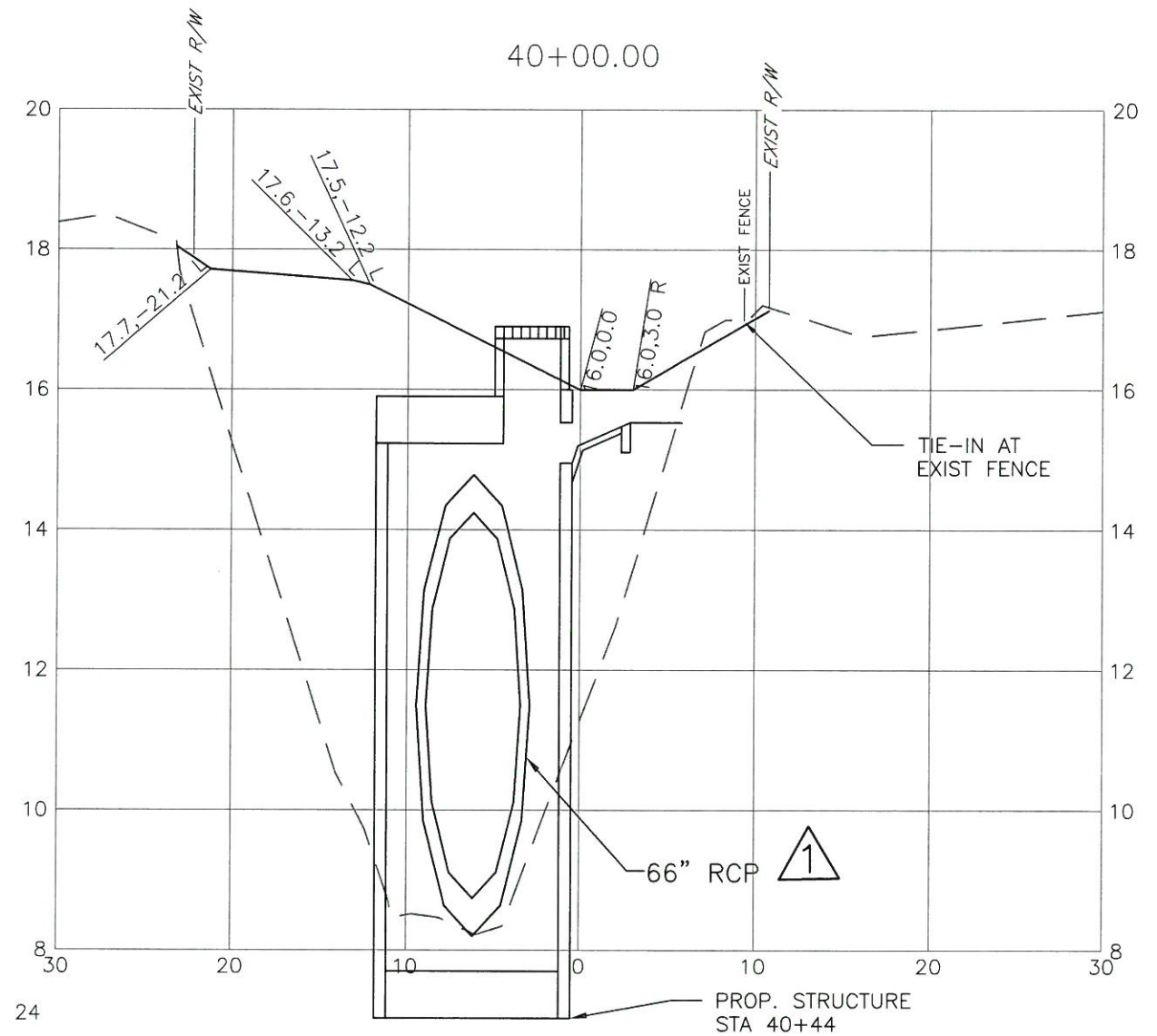
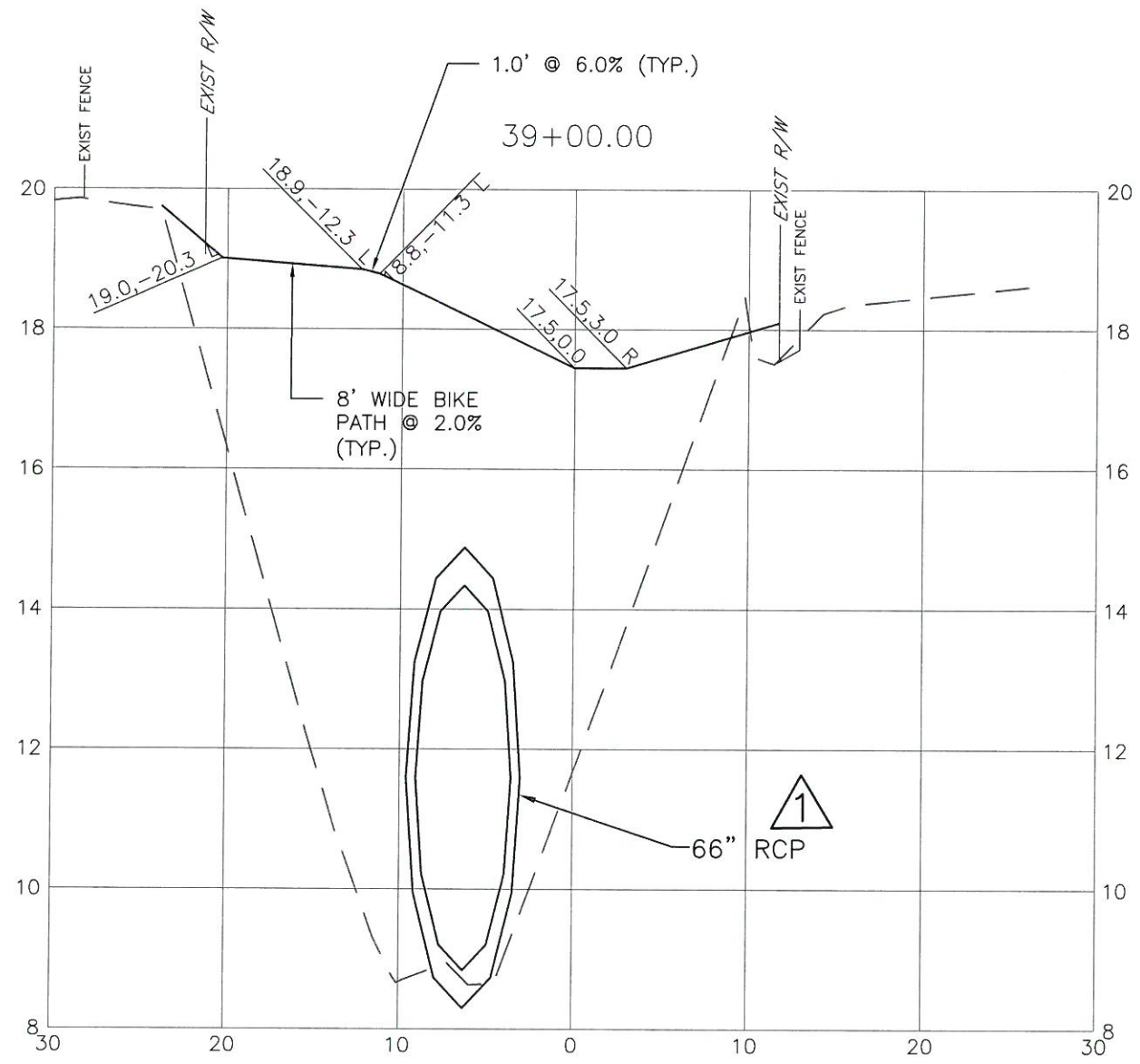
NO.	REVISION DESCRIPTION	BY	DATE
1	ADDENDUM # 1	JKP	06/02/17

PROJECT #	465-6044500
SURVEY #	000
SEC./TWN./RGE	30/34S/17E
SCALE	AS SHOWN
SURVEYED	GFY 07/20/15
DESIGNED	JKP 09/15/15
DRAWN	JKP 10/20/15
CHECKED	BL 11/10/15

JOHN PARI, P.E.
FLORIDA P.E. # 56368
[Signature]
7/5/17
Signature & Date
SHEET 10

S:\PWD_Engineering_Shera\Stormwater_Engineering\Man\CB-875 and Baywest Ditch\Plan\Bay West_Plan_reserve.dwg Section 2_6/4/2017 1:59 PM John Pari, P.E. ANSI full bleed B (7.00 x 11.00 inches)

**BAYWEST CANAL
BRADENTON, FLORIDA
CROSS SECTIONS**

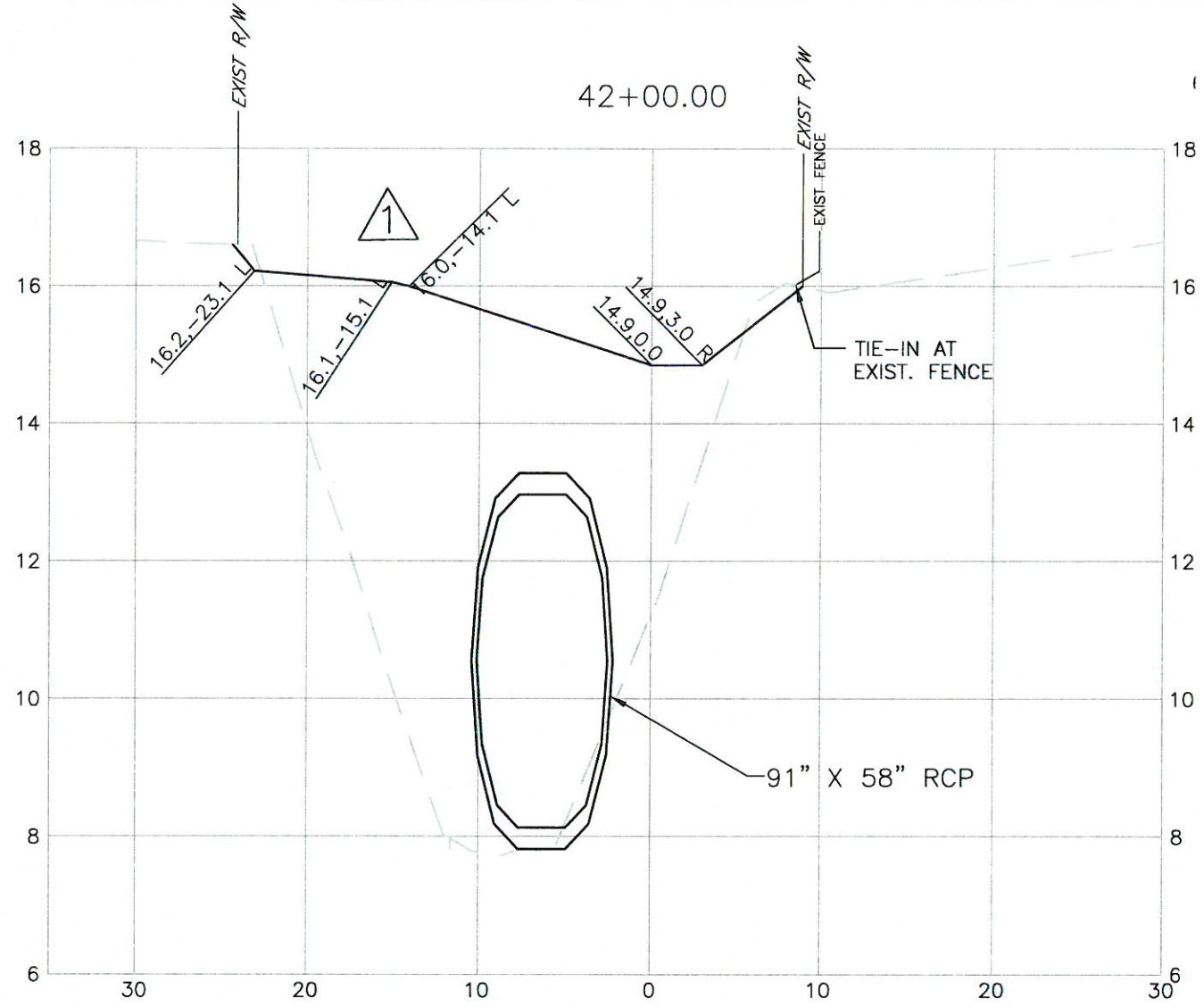
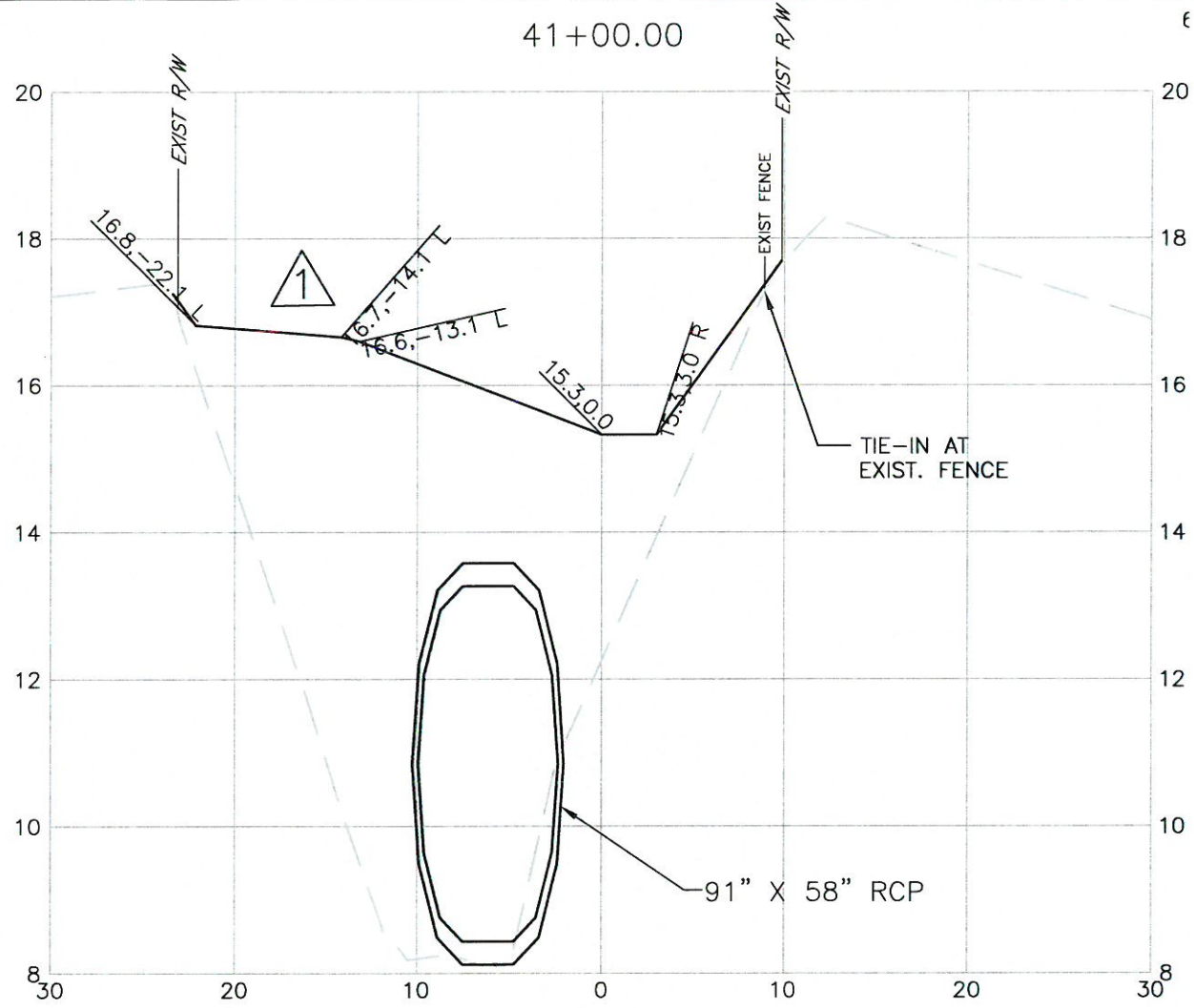


SCALE: HORZ: 1"=10'
VERT.: 1"= 2.5'

DATE	06/02/17
BY	JKP
REVISION DESCRIPTION	ADDENDUM # 1
NO.	1
PROJECT #	465-6044500
SURVEY #	000
SEC./TWN./RGE	30/34S/17E
SCALE	AS SHOWN
	BY DATE
SURVEYED	GFY 07/20/15
DESIGNED	JKP 09/15/15
DRAWN	JKP 10/20/15
CHECKED	BL 11/10/15
JOHN PARI, P.E. FLORIDA P.E. # 56368	
 7/5/17 Signature & Date	
SHEET 11	

S:\P\0 - Engineering - Stormwater Engineering\Ken\CR-675 and Baywest Canal\Bay West Piping - recover.dwg Section 3, 6/29/2017 5:29 PM John Pari 1:1 - 11x17

**BAYWEST CANAL
BRADENTON, FLORIDA
CROSS SECTIONS**



SCALE: HORZ: 1"=10'
VERT.: 1"= 2.5'

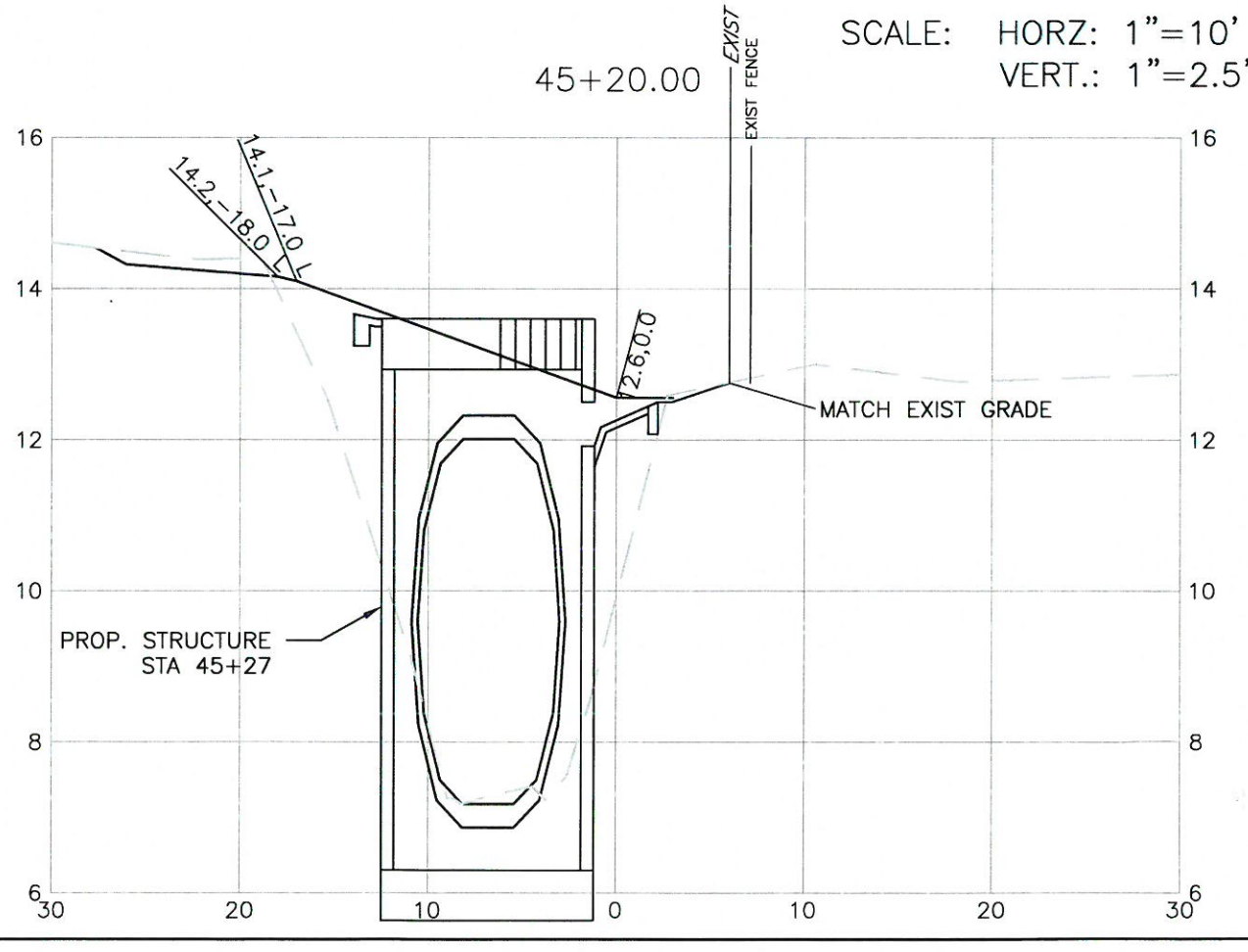
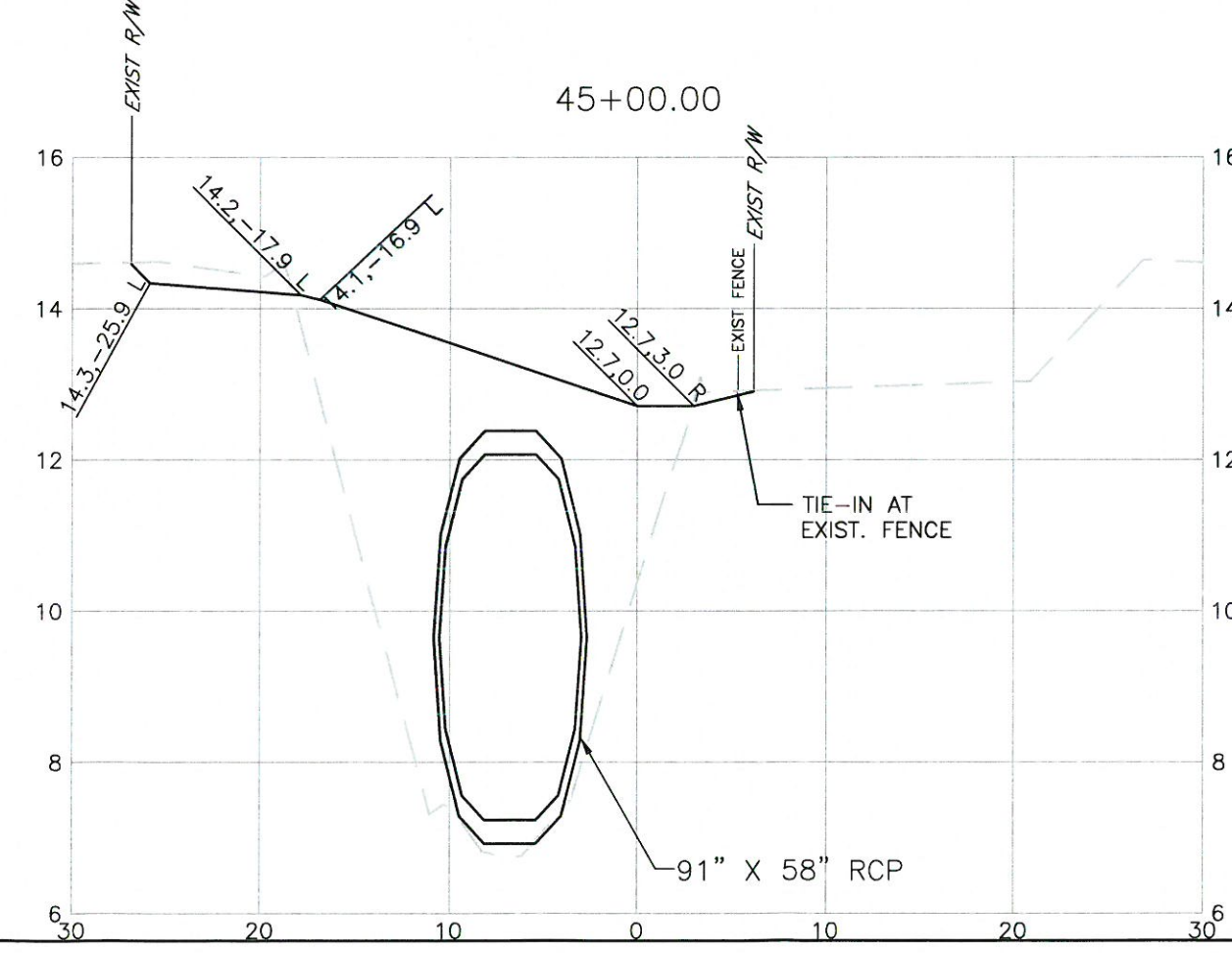
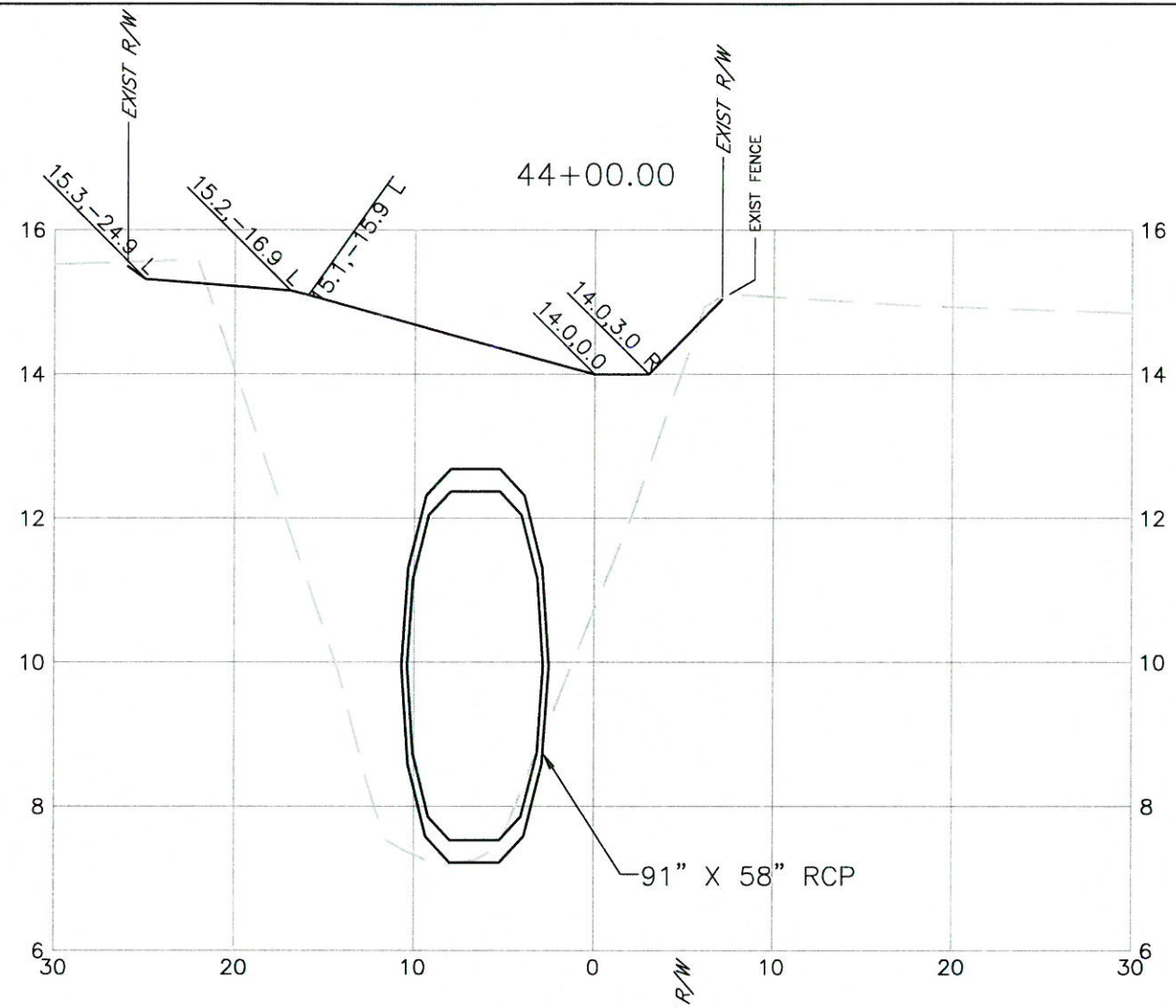
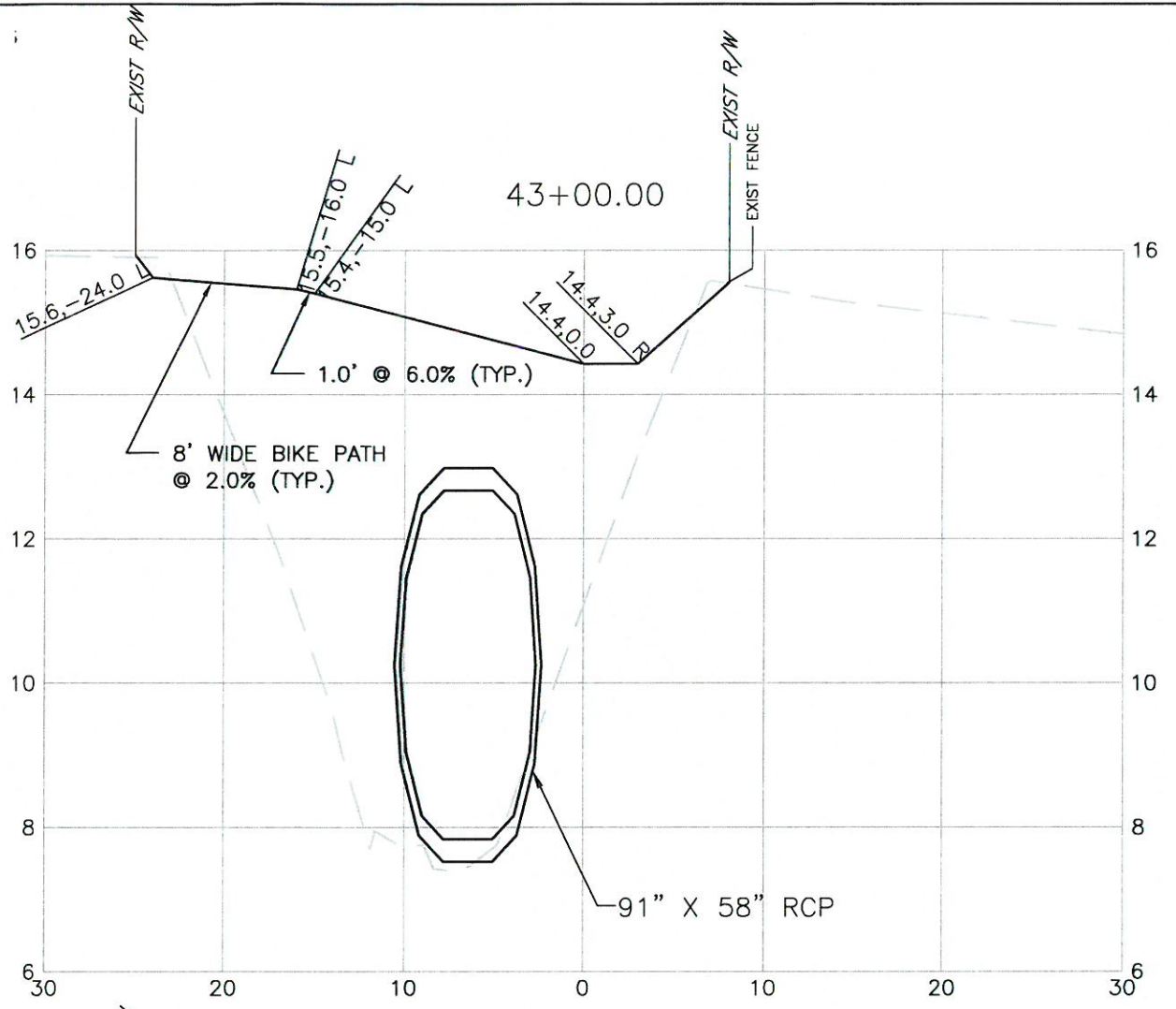
NO.	REVISION DESCRIPTION	BY	DATE
1	ADDED ELEV./OFFSET TO FINAL GRADE	JKP	06/02/17

PROJECT #	465-6044500
SURVEY #	000
SEC./TWN./RGE	30/34S/17E
SCALE	AS SHOWN
SURVEYED	GFY 07/20/15
DESIGNED	JKP 08/15/15
DRAWN	JKP 10/20/15
CHECKED	BL 11/10/15

JOHN PARI, P.E.
FLORIDA P.E. # 56368
John Pari
7/5/17
Signature & Date

S:\P\O_Engineering_Shop\Stormwater_Engineering\Canal_CB-275_and_Baywest_Canal_Plan\By West Plans_revised\Baywest_Section4_6/4/2017 1:48 PM John Pari, P.E., MSJ full sheet B (17.00 x 11.00 inches)

**BAYWEST CANAL
BRADENTON, FLORIDA
CROSS SECTIONS**



SCALE: HORZ: 1"=10'
VERT.: 1"=2.5'

S:\P\0_Engineering_Shaoh\Stormwater_Engineering\Man\CR-675 and Baywest Ditch\Plan\Bay West Plans_revised.dwg, Sec5, 6/4/2017 1:57 PM, John Pori, 1:1, ANSI, full bleed, B (17.00 x 11.00 inches)

NO.	REVISION DESCRIPTION	BY	DATE
1	ADDED ELEV./OFFSET TO FINAL GRADE	JKP	06/02/17

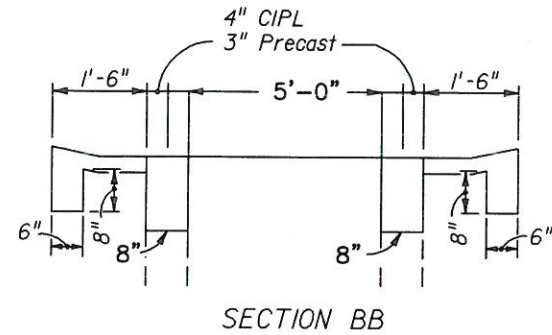
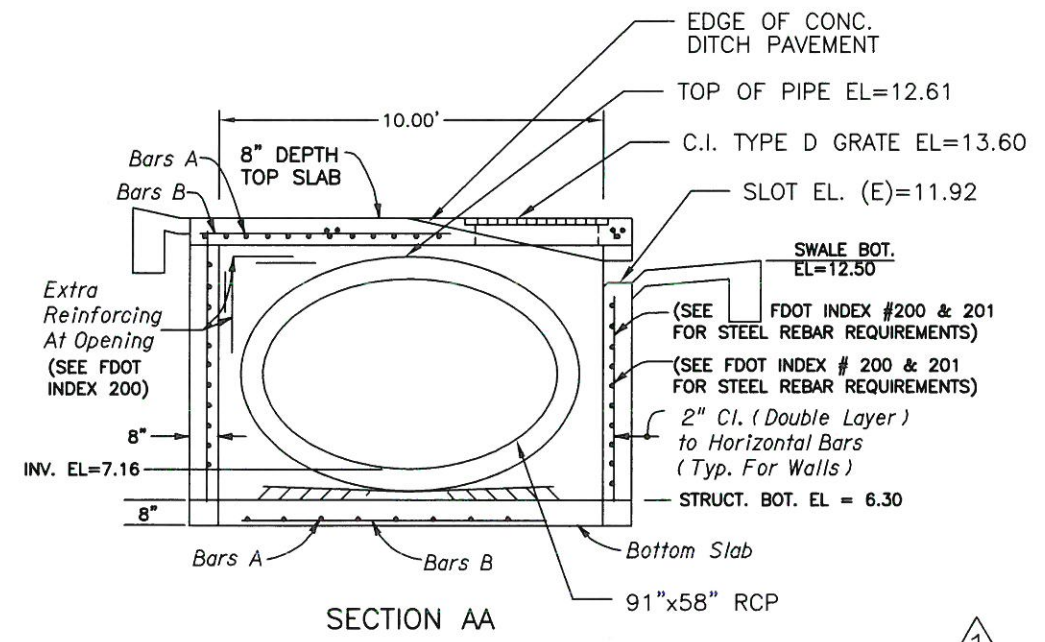
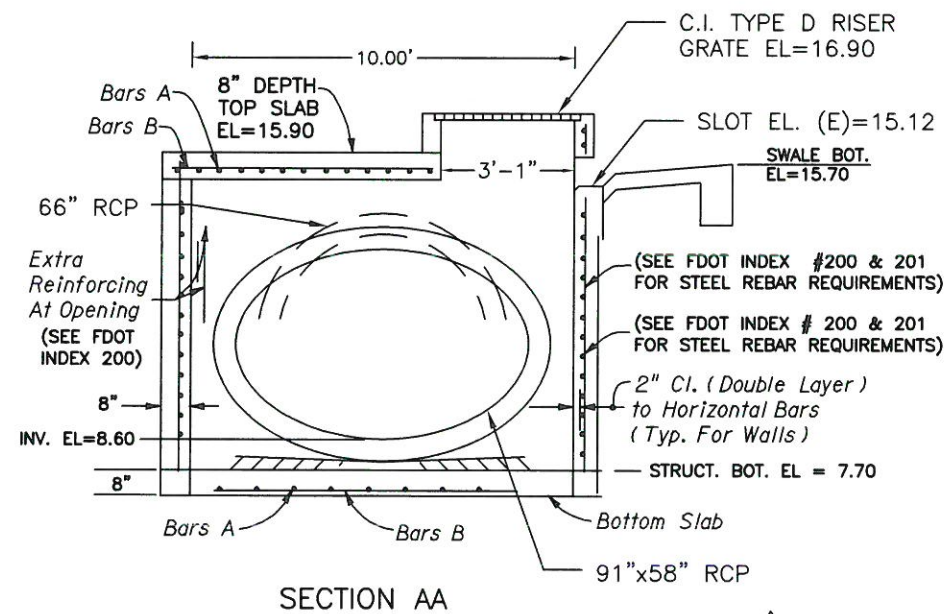
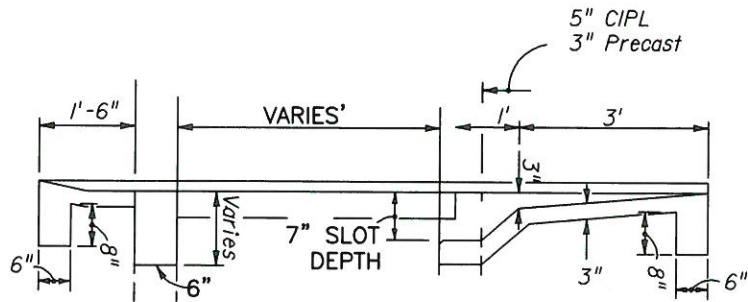
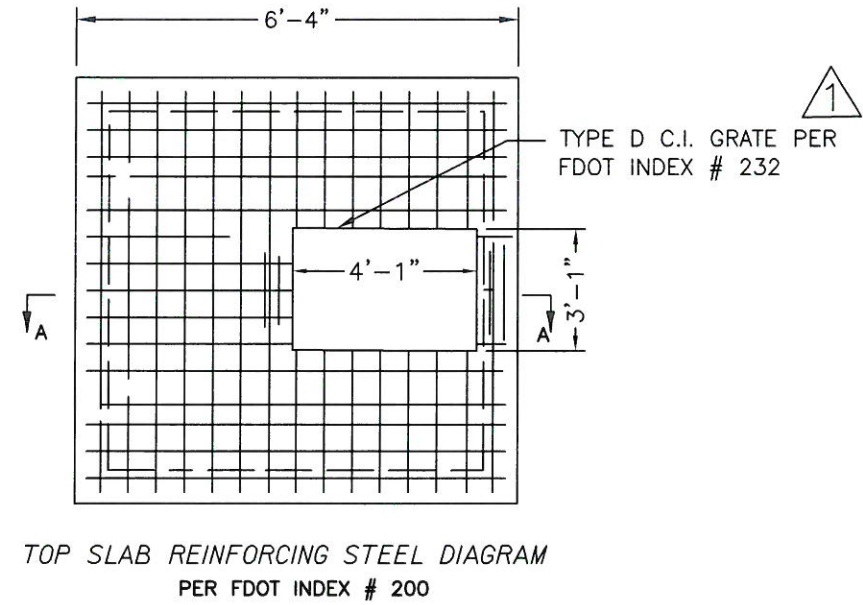
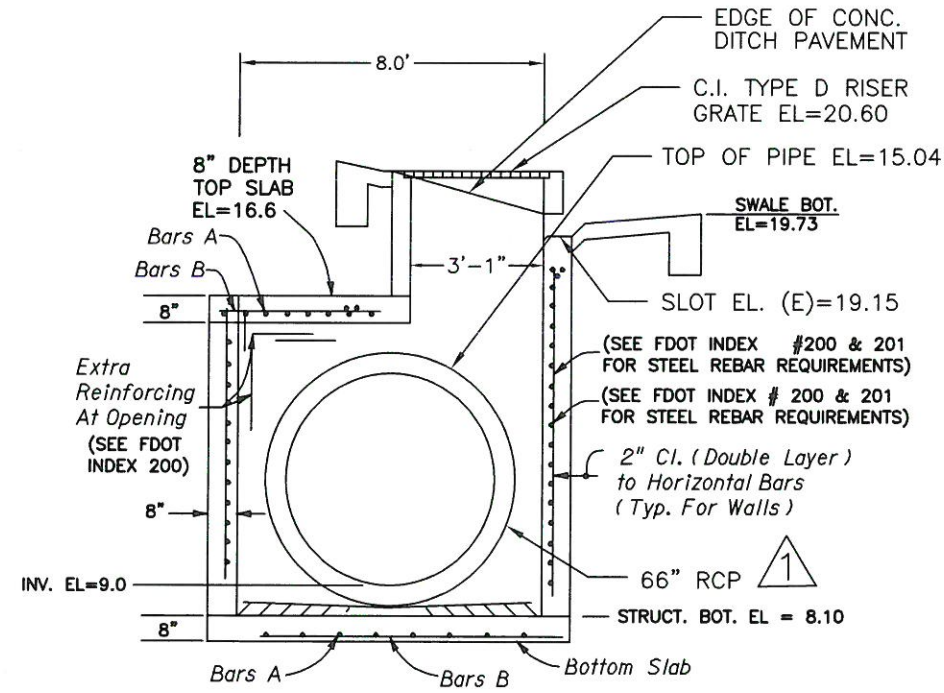
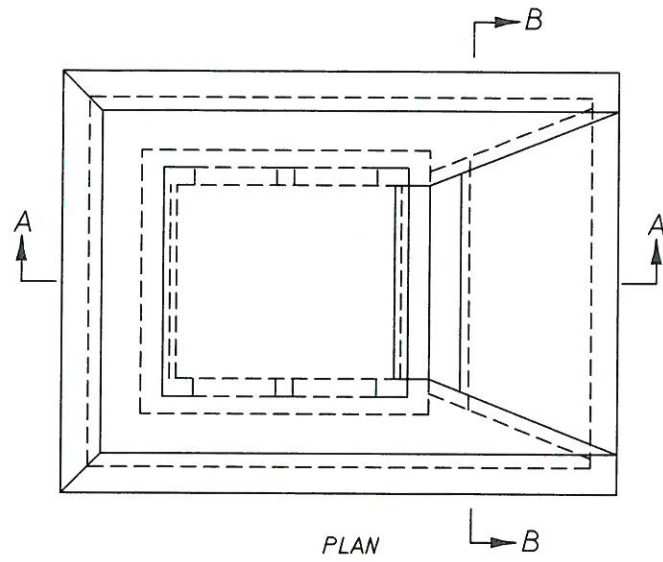
PROJECT #	465-6044500
SURVEY #	000
SEC./TWN./RGE	30/34S/17E
SCALE	AS SHOWN

	BY	DATE
SURVEYED	GFY	07/20/15
DESIGNED	JKP	09/15/15
DRAWN	JKP	10/20/15
CHECKED	BL	11/10/15

JOHN PARI, P.E.
FLORIDA P.E. # 56368

John Pari
7/5/17
Signature & Date

SHEET 13



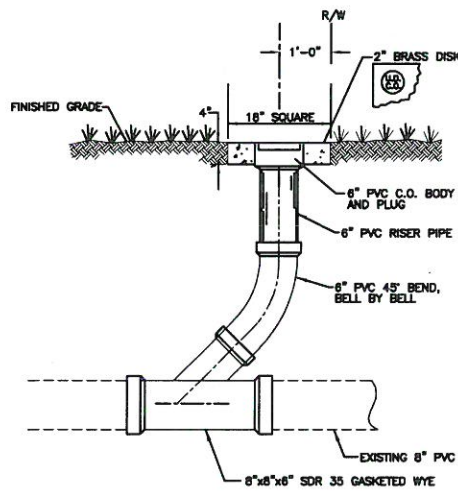
NO.	REVISION DESCRIPTION	BY	DATE
1	ADDENDUM # 1	JKP	06/02/17

PROJECT #	465-6044500
SURVEY #	000
SEC./TWN./RGE	30/34S/17E
SCALE	1"=30'
SURVEYED	GFY 07/20/15
DESIGNED	JKP 09/15/15
DRAWN	JKP 10/20/15
CHECKED	BL 11/10/15

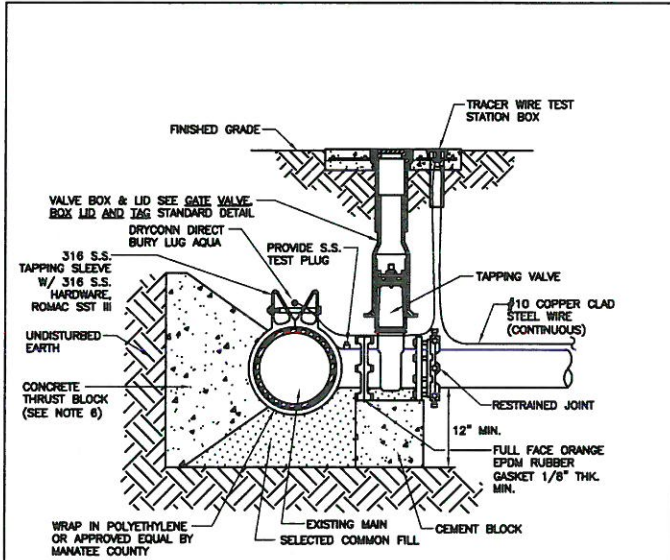
JOHN FARI, P.E.
FLORIDA P.E. # 56368
[Signature]
7/5/17
Signature & Date

S:\P\0 - Engineering - Stormwater Engineering\K\K\CB-675 and Baywest Canal Stormwater Engineering\K\K\CB-675 and Baywest Canal Stormwater Engineering.dwg, 6/28/2017 5:28 PM John Fari, P.E. 11x17

BAYWEST CANAL
BRADENTON, FLORIDA
CONSTRUCTION DETAILS



CLEAN-OUT DETAIL



ELEVATION

- NOTES:
- PRIOR TO TAPPING CONTRACTOR TO DEMONSTRATE 60 MINUTE HYDROSTATIC TEST OF THE TAPPING SLEEVE AND VALVE WITH NO LOSS OF 150 PSI PRESSURE FOR WATER AND RECLAIMED WATER.
 - ALL FITTINGS TO BE WRAPPED WITH 20 MIL VISQUEEN 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.
 - FOR HOPE MAINS, USE ROMAC SST-H STAINLESS STEEL TAPPING SADDLE AND HARDWARE.
 - SEE SECTION 1.10 FOR FURTHER DETAILS.

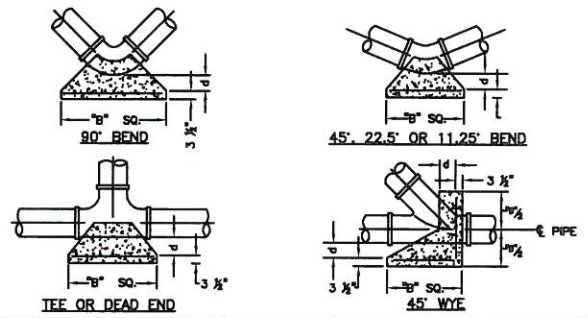
TAPPING SLEEVE AND VALVE (WATER/RECLAIM)

PIPE SIZE (IN.)	THRUST BLOCK DIMENSIONS B ft. x d inches											
	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	0.8	3 1/2	1.3	3 1/2	1.1	3 1/2
6	2.2	5 1/2	1.6	5 1/2	1.2	5 1/2	0.8	5 1/2	1.9	4 1/2	1.6	3 1/2
8	2.9	7	2.1	5	1.5	3 1/2	1.1	3 1/2	2.4	5 1/2	2.0	4 1/2
10	3.5	8 1/2	2.6	6 1/2	1.9	4 1/2	1.3	3 1/2	3.0	7 1/2	2.5	6
12	4.2	10	3.1	7 1/2	2.2	5 1/2	1.6	3 1/2	3.5	8 1/2	3.0	7 1/2
14	4.9	11 1/2	3.6	8 1/2	2.6	6 1/2	1.8	4 1/2	4.1	9 1/2	3.4	8 1/2
18	5.5	13 1/2	4.1	9 1/2	2.9	7	2.1	5	4.7	11 1/2	3.9	9 1/2
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 1/2	2.6	6 1/2	5.8	14	4.9	11 1/2
24	8.2	19 1/2	6.0	14 1/2	4.3	10 1/2	3.1	7 1/2	6.8	16 1/2	5.8	14
30	10.1	24 1/2	7.5	18	5.3	12 1/2	3.8	9	8.5	20 1/2	7.2	17 1/2
36	12.1	29	8.9	21 1/2	6.4	15 1/2	4.5	10 1/2	10.2	24 1/2	8.6	20 1/2

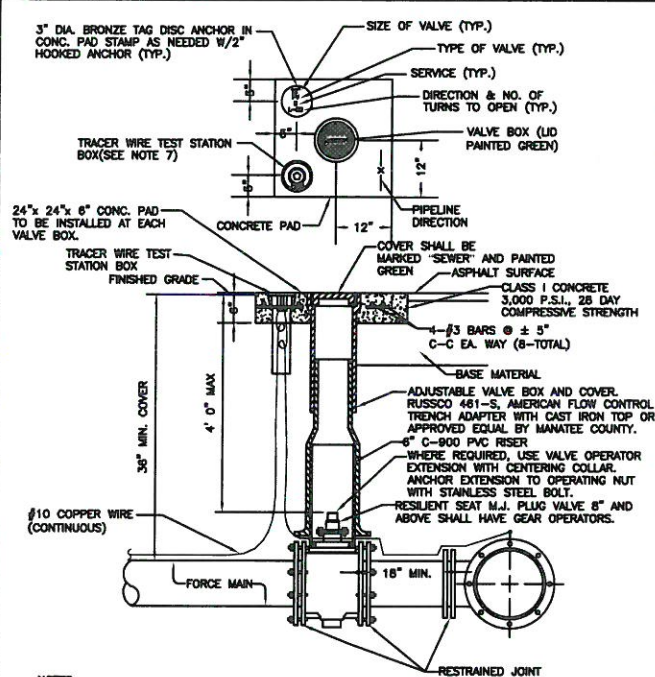
REINFORCEMENT MAT SCHEDULE

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
MAY 10, 2011
DATE OF APPROVAL
PAGE 107



- NOTES:
- "SV" TO BE IMPRESSED INTO THE NEWLY-POURED CONCRETE CURB, ALONG WITH DISTANCE IN FEET TO THE VALVE. IF NO CURB, INSTALL A GREEN DISC WITH "SV" AND A 1/8"x1" GALVANIZED STEEL SCREW IN THE EDGE OF PAVEMENT WITH THE DISTANCE (FT.) FROM THE DISC TO THE VALVE.
 - ALL EXISTING AND PROPOSED VALVE BOXES SHALL BE ADJUSTED TO FINISHED GRADES AS ESTABLISHED IN THE FIELD.
 - SEWER VALVES SHALL NOT BE PLACED IN HANDICAPPED RAMPS.
 - PRECAST CONCRETE PADS SHALL NOT BE USED.
 - ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1/2".
 - PLUG VALVES SHALL NOT BE USED AS A TAPPING VALVE. WHERE AN EXISTING FORCE MAIN IS TO BE TAPPED, USE A TAPPING GATE VALVE PER THE TAPPING SLEEVE AND VALVE DETAIL.
 - TEST BOX TO BE BINGHAM & TAYLOR P200NFG OR EQUAL FOR NORMAL YARD SERVICE. WHERE VALVE WILL BE IN STREET OR UNDER VEHICLE TRAFFIC, USE P525RD CENTERED IN SEPARATE CONCRETE PAD SIMILAR TO STANDARD VALVE BOX PAD.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT
PLUG VALVE, BOX, COVER AND TAG
US-12
MAY 10, 2011
DATE OF APPROVAL
PAGE 152

REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DIP (POLY-WRAPPED)

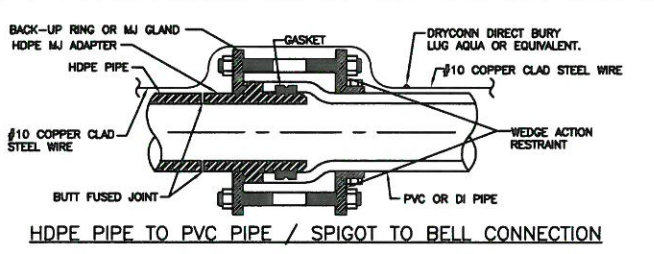
MAIN PIPE SIZE	HORIZ. BENDS			TEES		REDUCERS		PLUGS & VALVES
	90°	45°	22.5°	SIZE	LENGTH	SIZE	LENGTH	
36	142	59	28	36	137	36	137	453
30	124	51	23	30	118	30	118	391
24	106	44	21	24	100	24	100	327
20	92	38	18	20	88	20	88	280
18	77	32	15	18	75	18	75	231
12	61	25	12	12	61	12	61	181
10	52	22	10	10	52	10	52	153
8	44	18	9	8	44	8	44	128
6	34	14	7	6	34	6	34	98
4	24	10	5	4	24	4	24	69

REQUIRED LENGTH OF RESTRAINED JOINT PIPE FOR DIP (NON-WRAPPED)

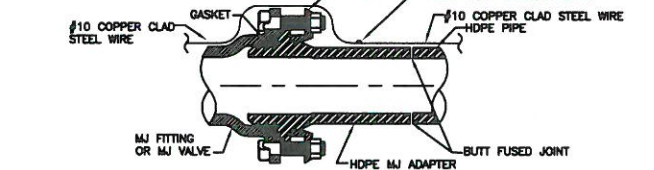
MAIN PIPE SIZE	HORIZ. BENDS			TEES		REDUCERS		PLUGS & VALVES
	90°	45°	22.5°	SIZE	LENGTH	SIZE	LENGTH	
36	100	42	20	36	137	36	137	188
30	88	37	18	30	118	30	118	162
24	75	31	15	24	100	24	100	135
20	65	27	13	20	88	20	88	118
18	54	22	11	18	75	18	75	98
12	43	18	8	12	61	12	61	78
10	37	15	7	10	52	10	52	63
8	30	13	6	8	44	8	44	53
6	24	10	5	6	34	6	34	41
4	17	7	3	4	24	4	24	29

NOTE:
SEE RESTRAINED LENGTHS FOR PVC PIPE DETAIL FOR NOTES 1 THROUGH 8 THAT ARE ALSO APPLICABLE TO RESTRAINED LENGTHS FOR DIP.

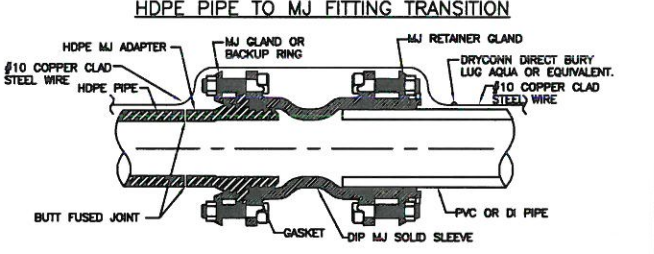
MANATEE COUNTY PUBLIC WORKS DEPARTMENT
RESTRAINED LENGTHS FOR DIP
UG-9
MAY 10, 2011
DATE OF APPROVAL
PAGE 108



HDPE PIPE TO PVC PIPE / SPIGOT TO BELL CONNECTION



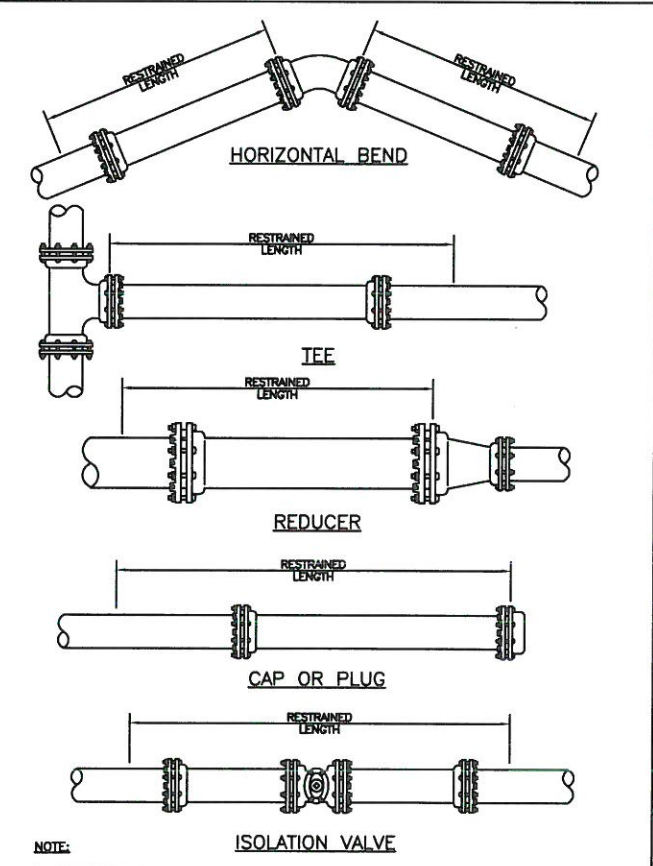
HDPE PIPE TO MJ FITTING TRANSITION



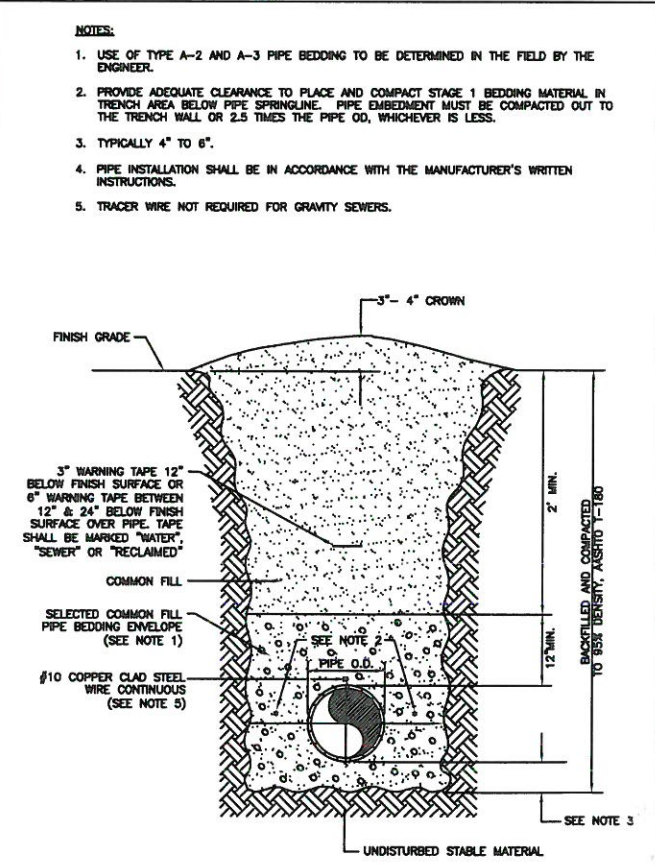
HDPE PIPE TO PVC PIPE SPIGOT TO SPIGOT CONNECTION

- NOTE:
- ONE #10 GAUGE EXTRA HIGH STRENGTH COPPER CLAD STEEL TRACER WIRE SHALL BE SECURED TO THE PIPE FOR ALL TYPES OF PIPELINE INSTALLATIONS. THE TRACE WIRE SHALL HAVE A MINIMUM 30-MILS OF POLYETHYLENE INSULATION.

MANATEE COUNTY PUBLIC WORKS DEPARTMENT
HDPE TO PVC OR DI PIPE ADAPTER
UG-6
DATE OF APPROVAL



MANATEE COUNTY PUBLIC WORKS DEPARTMENT
RESTRAINED LENGTHS FOR PIPE
UG-10
DATE OF APPROVAL



MANATEE COUNTY PUBLIC WORKS DEPARTMENT
TRENCH WITH UNIMPROVED SURFACE TYPE A-1 PIPE BEDDING
UG-11
DATE OF APPROVAL

NO.	REVISION DESCRIPTION	DATE
1	ADDENDUM # 1	06/02/17

PROJECT # 465-6044500
SURVEY # 000
SEC./TWN./RGE 30/34S/17E
SCALE N/A

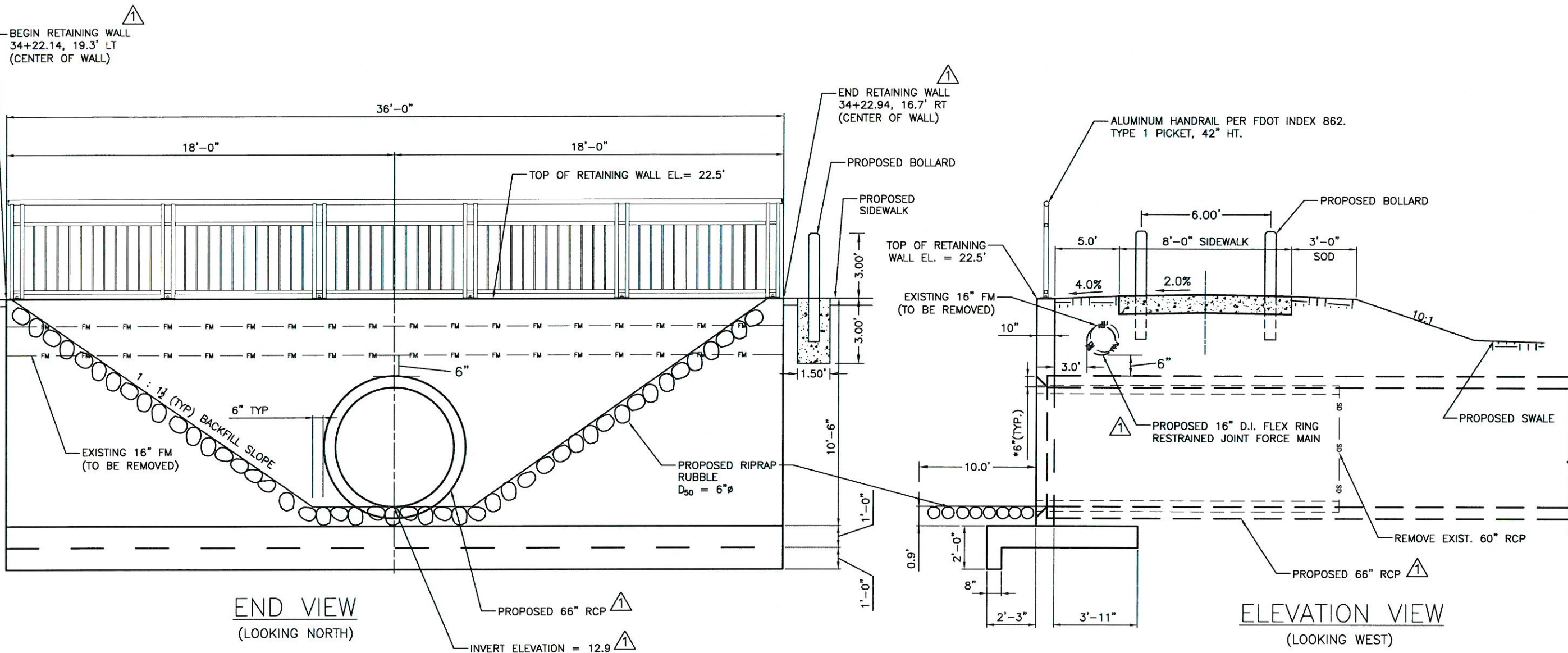
SURVEYED BY DATE
DESIGNED JKP 03/15/16
DRAWN JKP 04/01/16
CHECKED JS 06/02/17

JOHN K. PARI, P.E.
FLORIDA P.E. # 56366
7/5/17
Signature & Date

SHEET 14A

S:\P\01 - Engineering - Shiva\Stormwater Engineering\Man 08-675 and Baywest Canal - recover - recover.dwg (06/02/17) 5:08 PM John Pari, 1:1:17

**BAYWEST CANAL
BRADENTON, FLORIDA
RETAINING WALL DETAILS**



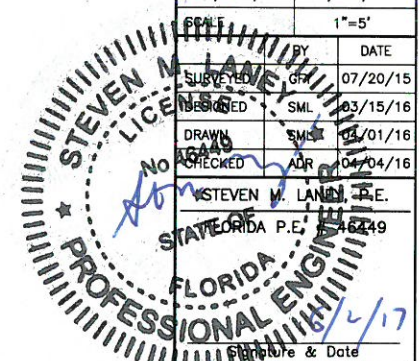
END VIEW
(LOOKING NORTH)

ELEVATION VIEW
(LOOKING WEST)

RETAINING WALL DETAILS

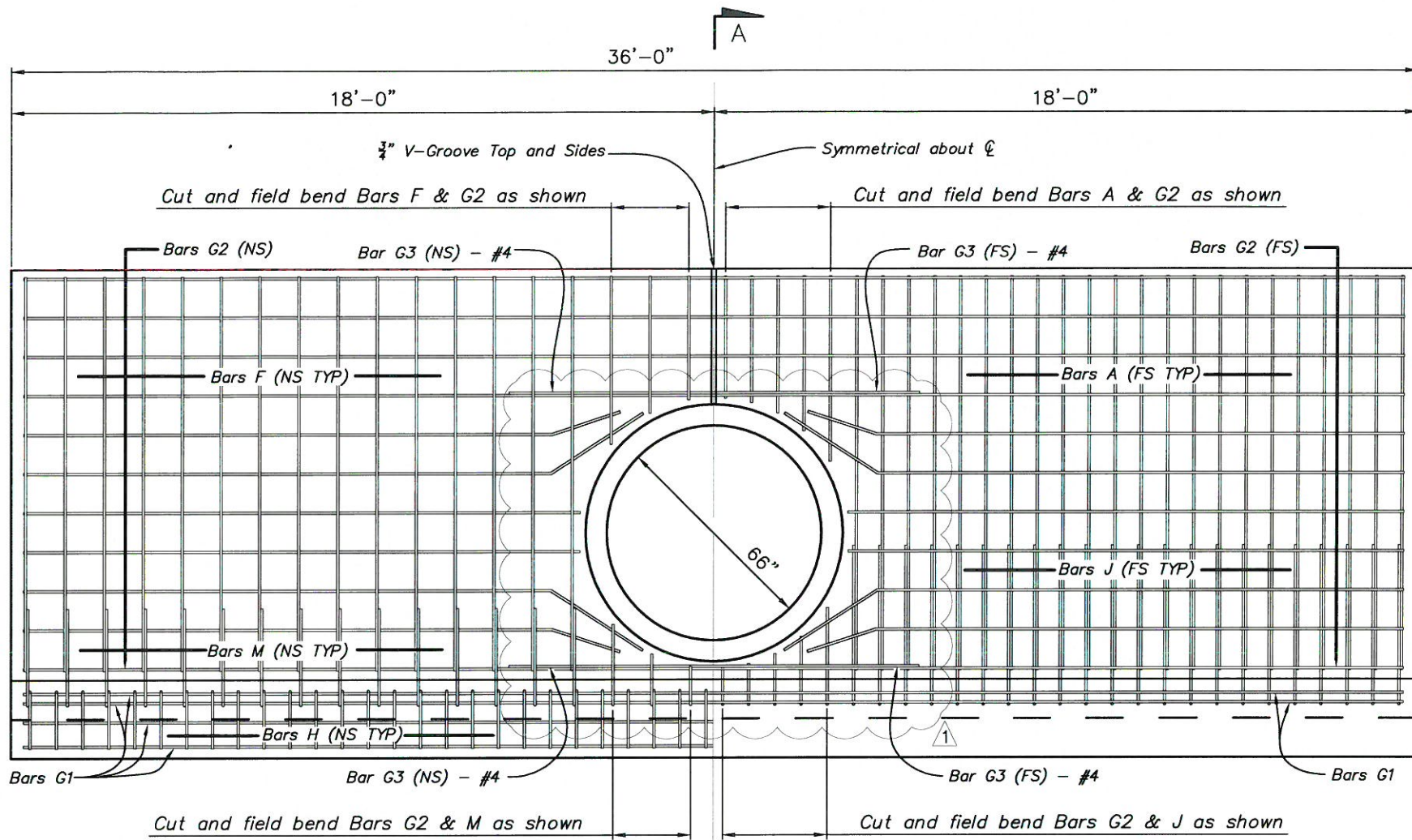
NOTE:
CONTRACTOR TO CONSTRUCT 16" D.I. FORCE MAIN A
MINIMUM OF 3.0' FROM FACE OF RETAINING WALL.

NO.	1	DATE	06/02/17
BY	SML		
REVISION DESCRIPTION	ADDENDUM # 1		
PROJECT #	465-6044500		
SURVEY #	000		
SEC./TWN./RGE	30/34S/17E		
SCALE	1"=5'		
DATE			
SUBMITTED	GF	07/20/15	
DESIGNED	SML	03/15/16	
DRAWN	SML	01/01/16	
CHECKED	ADR	04/04/16	
DESIGNED BY	STEVEN W. LANI, P.E.		
CHECKED BY	STEVEN W. LANI, P.E.		
DATE	6/2/17		

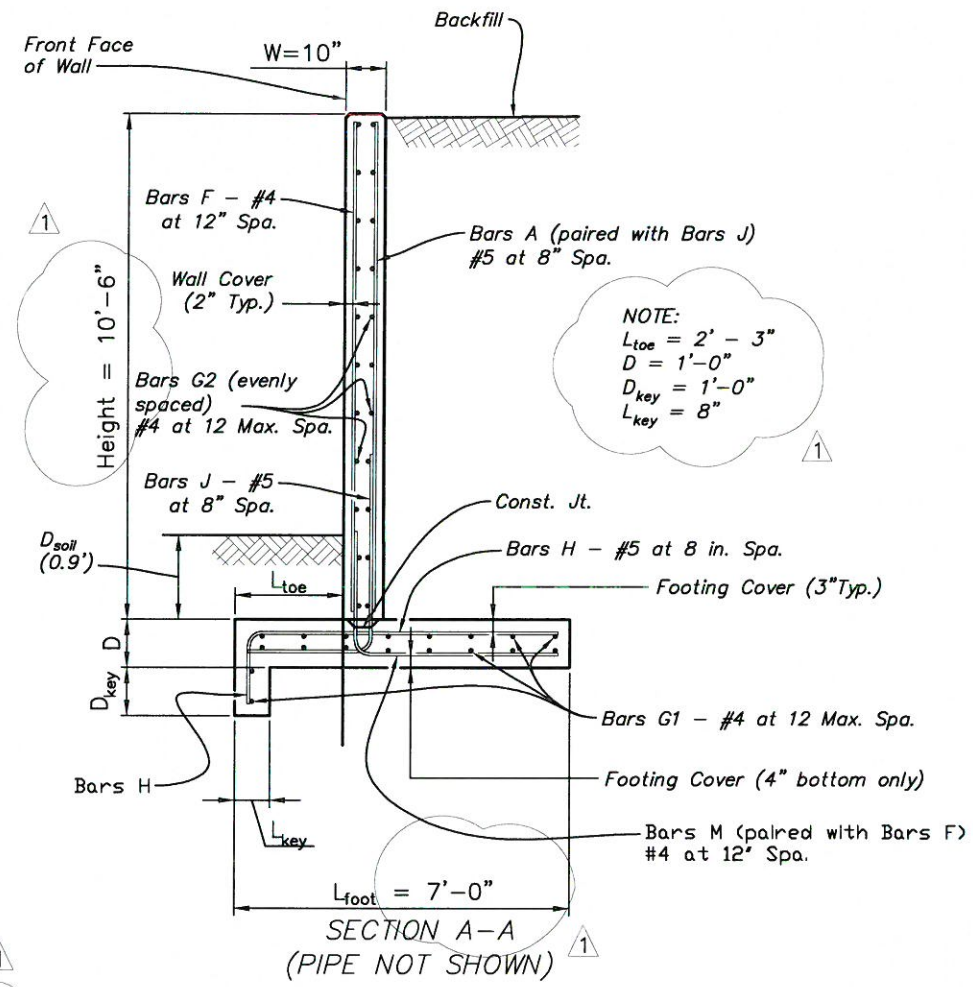


S:\P\10_Engineering\Shore\Stormwater_Engineering\Van\CR-675 and Baywest Canal\Plan\Retain Wall\01_6/2/2017_5:44 PM\Job_Plan_1.dwg, Retain Wall (17.00 x 11.00 inches)

**BAYWEST CANAL
BRADENTON, FLORIDA
RETAINING WALL DETAILS**



HALF ELEVATION
(Showing Bars In Near Side - NS)



HALF ELEVATION
(Showing Bars In Far Side - FS)

SECTION A-A
(PIPE NOT SHOWN)

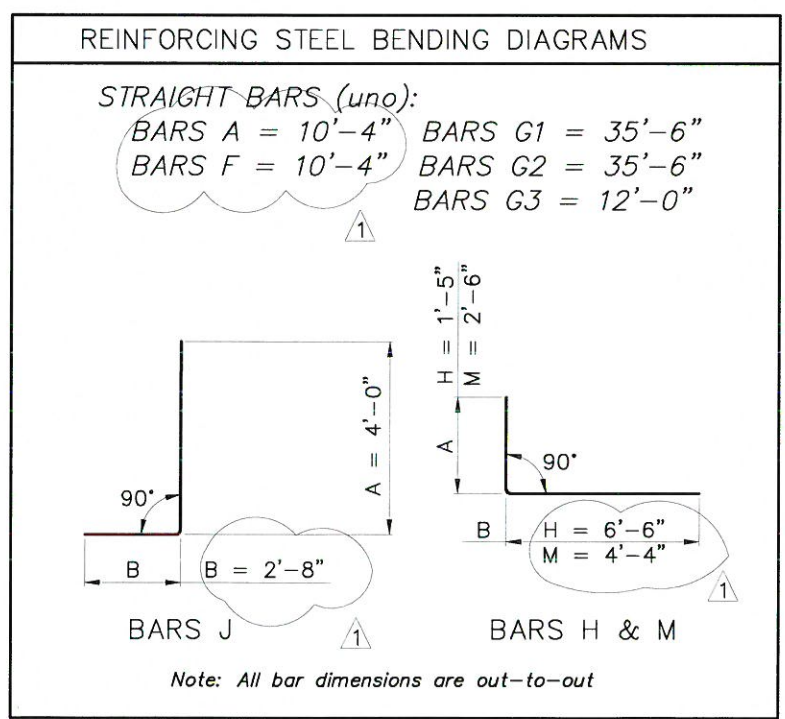
GENERAL NOTES:

1. Designed according to FDOT Structures Manual (current edition).
2. Design includes 1.5' surcharge for pedestrian and vehicle live load effects.
3. Work this sheet with Index Nos. 255 and 6010.
4. Concrete Class IV ($f'_c = 5500$ psi) without silica fume, metakaolin or ultrafine fly ash.
5. Reinforcing steel to be ASTM A615 Grade 60 steel.
6. Chamfer: All exposed edges and corners to be chamfered 3/4" unless otherwise shown.
7. Wall exposed face surface texture shall be Smooth.
8. Environmental Classification is Moderately Aggressive.
9. Minimum Soil Nominal Bearing Resistance = 3000 psf.
10. Foundation - Prepare the soil below the footing in accordance with the requirements for spread footings in Specification Section 455.
11. D_{soil} is typical depth of soil and is used for design purposes only.
12. Basis of payment for cast-in-place construction shall be the estimated quantities tabulated. Concrete and reinforcing steel shall be paid for under the contract unit prices for Class IV Concrete (Retaining Wall), CY and Reinforcing Steel (Roadway), LB.

BILL OF REINFORCING STEEL			
MARK	SIZE	NO. REQD	LENGTH
A	5	44	10'-4"
A*	5	10	3'-9" AVG
J	5	44	6'-8"
J*	5	10	4'-2" AVG
F	4	30	10'-4"
F*	4	6	3'-8" AVG
M	4	30	6'-10"
M*	4	6	5'-10" AVG
H	5	54	7'-11"
G1	4	18	35'-6"
G2	4	10	35'-6"
G2*	4	24	15'-3" AVG
G3	4	4	12'-0"

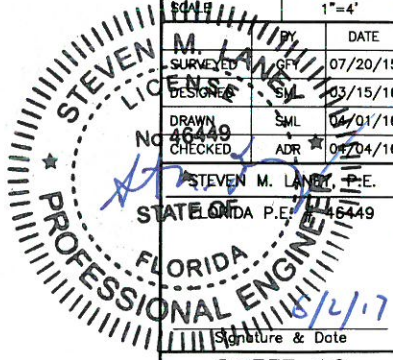
* BARS TO BE FIELD CUT OR BENT

ESTIMATED QUANTITIES		
ITEM	UNIT	RCP
Class IV Concrete	CY	21.2
Reinforcing Steel	LBS	2631

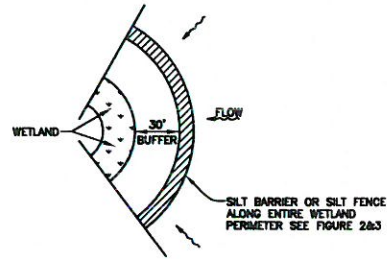


NO.	REVISION DESCRIPTION	DATE
1	MODIFY TO 66" RCP AND ADJ HEIGHT	05/24/17

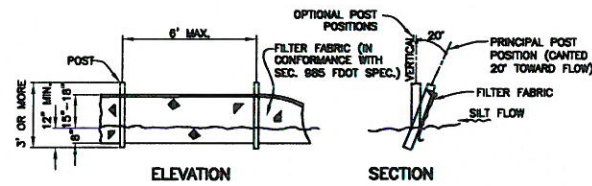
PROJECT #	465-6044500
SURVEY #	000
SEC./TWN./RGE	30/34S/17E
SCALE	1"=4'
DATE	
SURVEYED BY	07/20/15
DESIGNED BY	03/15/16
DRAWN BY	04/01/16
CHECKED BY	07/04/16
STATE OF FLORIDA P.E. #	46449
Signature & Date	



S:\PMD_Engineering\Shara\Stormwater_Engineering\BayWest_Plans_receiver - Copy.dwg Retain wall details (2) - 8/2/2017 1:58 PM John Parr, 1:1 - ANS: full bleed B (17.00 x 11.00 inches)

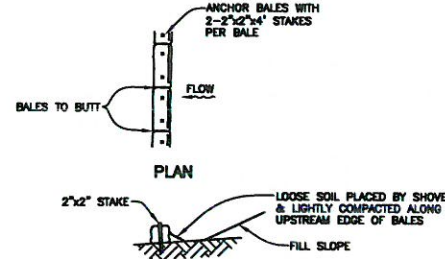


WETLAND BUFFER
FIGURE 1

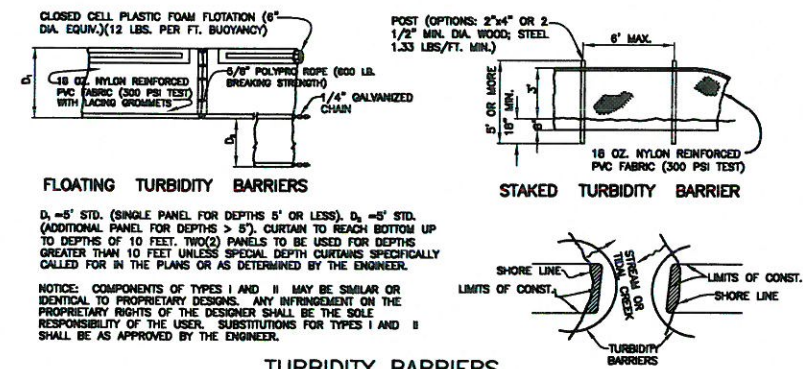


TYPICAL SILT FENCE
FIGURE 2

NOTE: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (LF).

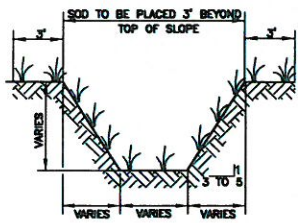


TYPICAL BALE SILT BARRIER
FIGURE 3

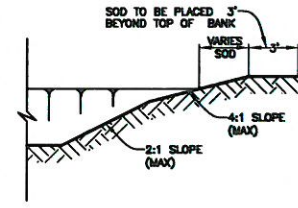


TURBIDITY BARRIERS
FIGURE 4

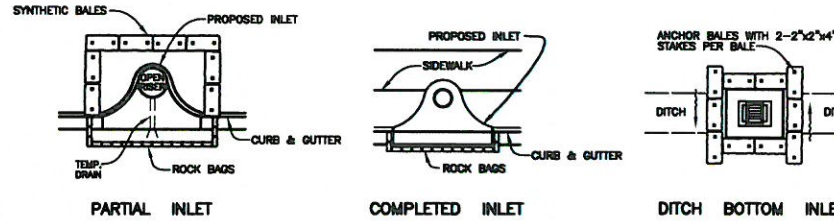
NOTE: COMPONENTS OF TYPES I AND II MAY BE SIMILAR OR IDENTICAL TO PROPRIETARY DESIGNS. ANY INFRINGEMENT ON THE PROPRIETARY RIGHTS OF THE DESIGNER SHALL BE THE SOLE RESPONSIBILITY OF THE USER. SUBSTITUTIONS FOR TYPES I AND II SHALL BE AS APPROVED BY THE ENGINEER.



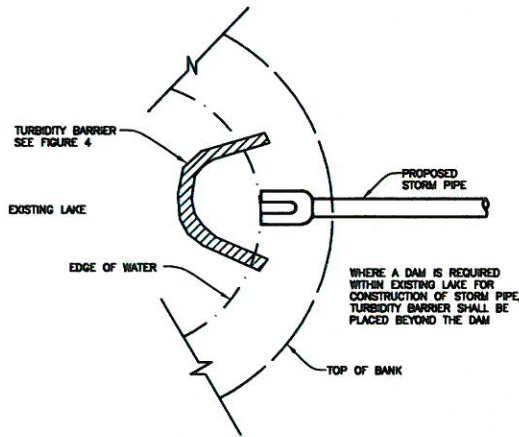
TYPICAL SWALE SECTION
FIGURE 5



TYPICAL RETENTION/DETENTION POND SECTION
FIGURE 6

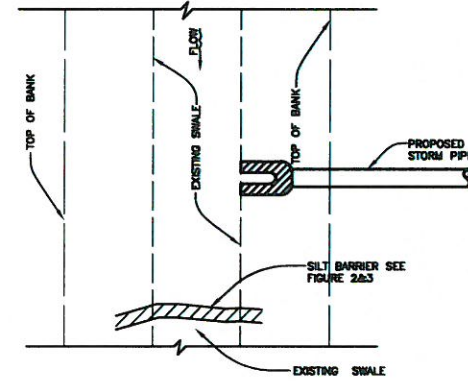


SYNTHETIC BALE PROTECTION AROUND INLETS OR SIMILAR STRUCTURES
FIGURE 7

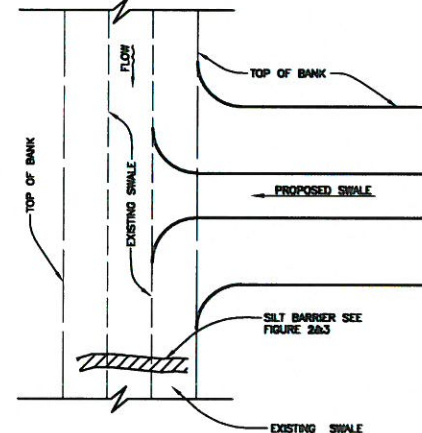


TURBIDITY BARRIER AT CONNECTION OF STORM PIPE TO EXISTING LAKE
FIGURE 9

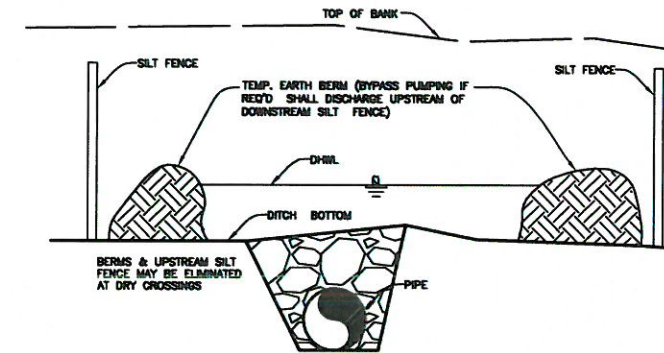
WHERE A DAM IS REQUIRED WITHIN EXISTING LAKE FOR CONSTRUCTION OF STORM PIPE, TURBIDITY BARRIER SHALL BE PLACED BEYOND THE DAM



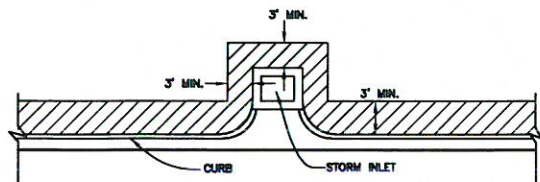
SILT BARRIER AT CONNECTION OF STORM PIPE TO EXISTING SWALE
FIGURE 10



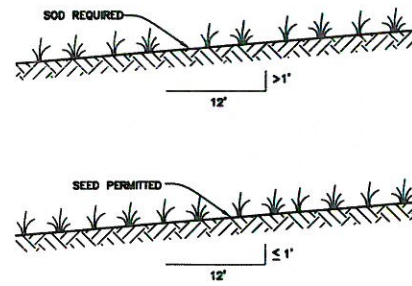
SILT BARRIER AT CONNECTION OF SWALE TO EXISTING SWALE
FIGURE 11



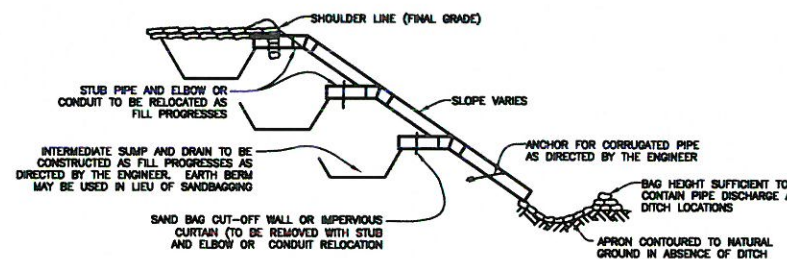
UNDERGROUND PIPE CROSSING
FIGURE 12



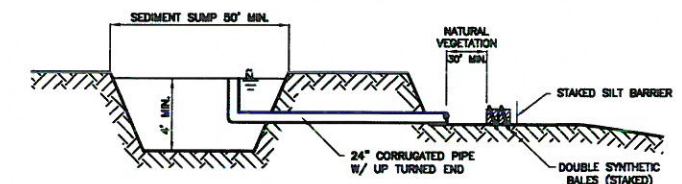
SOD ALONG CURB AND AROUND INLET
FIGURE 14



GRASS SLOPES
FIGURE 13



**SECTION AA
TEMPORARY SLOPE DRAIN**
FIGURE 15



SEDIMENT SUMP SECTION
FIGURE 16

NOTE:
REFERENCE THE FDOT DESIGN STANDARDS LATEST EDITION FOR ALL TEMPORARY EROSION CONTROL MEASURES.

NO.	REVISION DESCRIPTION	BY	DATE
PROJECT #	465-6044500		
SURVEY #	000		
SEC./TWN./RGE	30/34S/17E		
SCALE	N/A		
SURVEYED	GFY	07/20/15	
DESIGNED	JKP	09/15/15	
DRAWN	JKP	10/20/15	
CHECKED	BL	11/10/15	
JOHN KARI, P.E. FLORIDA P.E. # 56368 Signature & Date 7/5/17			
SHEET 17			

S:\PWO_Engineering\Shore\Stormwater_Engineering\Man-CR-675 and Baywest Canal\Plan\Bay West Plans_recover.dwg, 6/4/2017 5:55 PM John Papi, 1:1, ANSI, full bleed B (17.00 x 11.00 inches)