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STATE OF FLORIDA

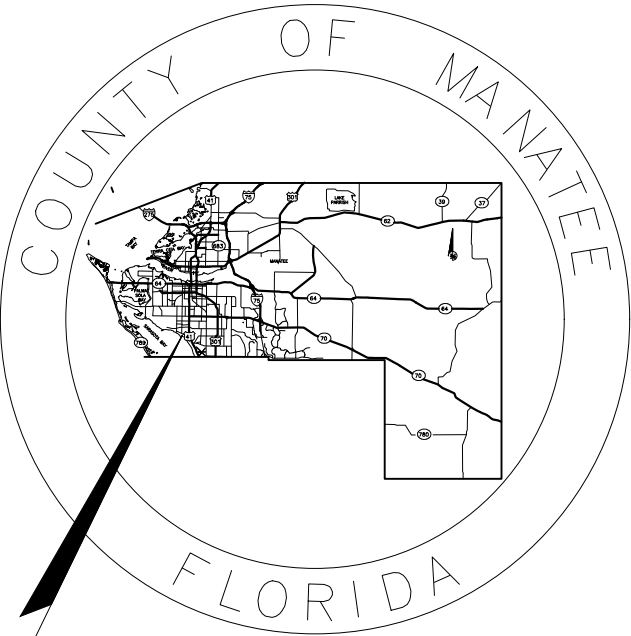
COUNTY OF MANATEE

PLANS OF PROPOSED

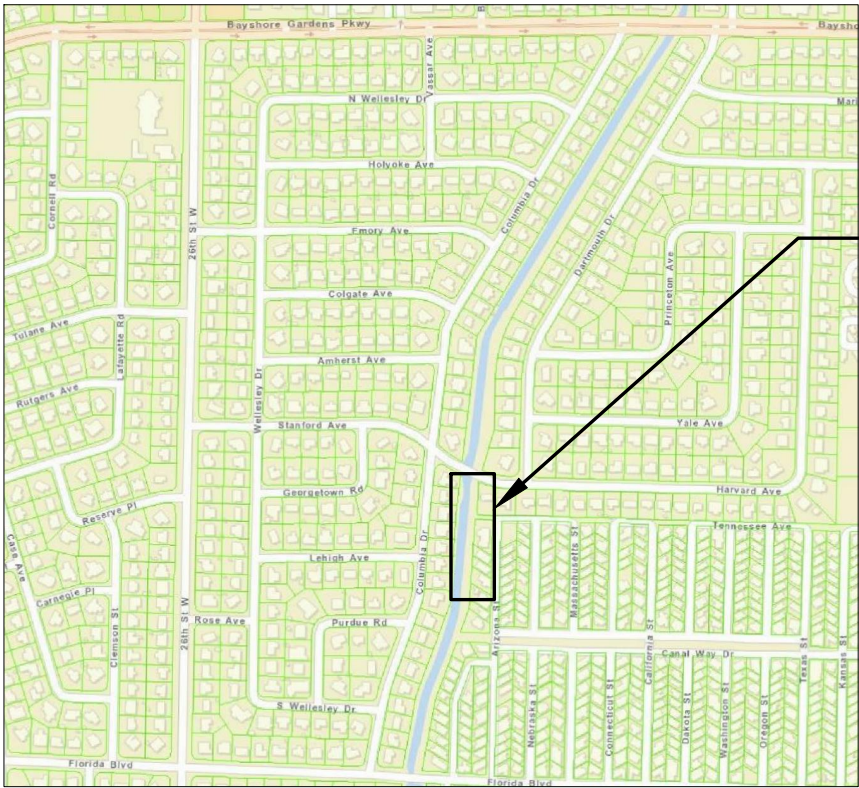
HARVARD AVENUE SEAWALL REPLACEMENT

BAYSHORE GARDENS, FLORIDA

PROJECT NO.6096660



LOCATION OF PROJECT



PROJECT SITE

M.T.S

PROJECT LENGTH IS BASED ON $\frac{1}{8}$ SURVEY

FINAL PLANS

NAVD 88 DATUM

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN ENLARGED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.



GOVERNING STANDARD PLANS:

FLORIDA DEPARTMENT OF TRANSPORTATION, FY 2020-21 STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION AND APPLICABLE INTERIM REVISIONS (IRs). STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION AND ASSOCIATED IRs ARE AVAILABLE AT THE FOLLOWING WEBSITE: <http://www.fdot.gov/design/standardplans>

GOVERNING STANDARD SPECIFICATIONS:

FLORIDA DEPARTMENT OF TRANSPORTATION, JULY 2020 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AT THE FOLLOWING WEBSITE: <http://www.fdot.gov/programmanagement/implemented/specbooks>

STRUCTURE PLANS
PROFESSIONAL OF RECORD: SCOTT A. BETZ, P.E.

FLORIDA P.E. # 81282

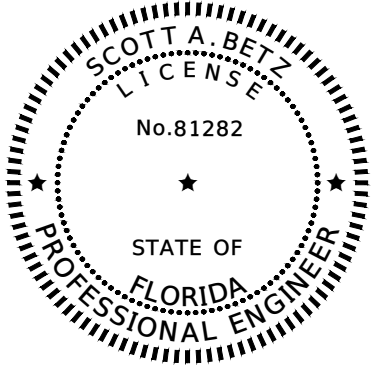
MANATEE COUNTY
PROJECT MANAGER: STEVEN LANEY, P.E.

SHEET
NO.

1

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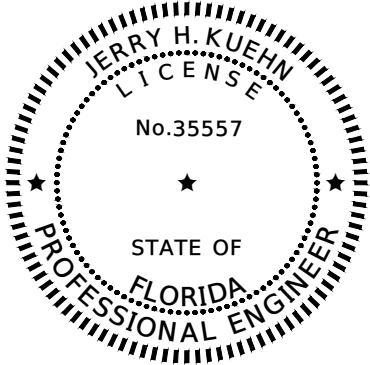
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Kisinger Campo & Associates Corp.
201 N. Franklin Street
Suite 400
Tampa, FL 33602
Florida C.O.A. No. 02317
Scott A. Betz, P.E. No. 81282

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR
THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

SHEET NO.	SHEET DESCRIPTION
1	KEYSHEET
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Ardaman & Associates, Inc.
78 Sarasota Center Blvd.
Sarasota, FL 34950
Florida C.O.A. No. 05950
Jerry H. Kuehn, P.E. No. 35557

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SHEET NO.	SHEET DESCRIPTION
2	SIGNATURE SHEET
6	REPORT OF CORE BORINGS

DATE	DESCRIPTION	DATE	PROJECT #		SURVEYED		
			SURVEY #		DESIGNED	SAB	08/2019
			SEC./TWN./RGE		DRAWN	ARF	08/2019
			SCALE		CHECKED	DBT	08/2019

Kisinger Campo & Associates Corp.
201 N. Franklin Street
Suite 400
Tampa, FL 33602
Florida C.O.A. No. 02317




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

SIGNATURE SHEET

SHEET NO.
2

M:\6201601.00 Manatee County Transportation Services\WO 4 - Harvard Avenue Seawall Repair\Structures\SumOfPayItems01.dwg Sep 30 20 3:37 PM

SUMMARY OF PAY ITEMS				
ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	
0101 1	MOBILIZATION	LS	1	
0102 1	MAINTENANCE OF TRAFFIC	LS	1	
0104 11	FLOATING TURBIDITY BARRIER	LF	295	
0104 10 3	SEDIMENT BARRIER	LF	295	
0108 1	MONITOR EXISTING STRUCTURES- INSPECTION AND SETTLEMENT MONITORING	LS	1	
0108 2	MONITOR EXISTING STRUCTURES- VIBRATION MONITORING	LS	1	
0110 1 1	CLEARING & GRUBBING	AC	0.40	
0110 4 10	REMOVAL OF EXISTING CONCRETE	SY	143	
0110 73	REMOVE EXISTING BULKHEAD	LF	266	
0120 1	REGULAR EXCAVATION	CY	197.9	
0121 70	FLOWABLE FILL	CY	5.6	
0400 3 20	CONC CLASS III, SEAL	CY	1.6	
0400 4 8	CONC CLASS IV, BULKHEAD	CY	42.7	
0415 1 8	REINFORCING STEEL- BULKHEAD	LB	4230	
0455 87	ANCHOR BAR, STEEL	EA	85	
0455133 3	SHEET PILING STEEL, F&I PERMANENT	SF	7762	
0522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6" THICK	SY	156	
0530 1	RIPRAP, SAND-CEMENT	CY	3.6	
0530 3 4	RIPRAP, RUBBLE, F&I, DITCH LINING	TN	79.1	
0536 1 1	GUARDRAIL -ROADWAY, GENERAL TL-3	LF	160	
0536 8122	GUARDRAIL TRANSITION CONNECTION TO RIGID BARRIER, FURNISH AND INSTALL, EXISTING BRIDGE APPROACH TL-3	EA	1	
0536 7 1	SPECIAL GUARDRAIL POST- DEEP POST FOR SLOPE BREAK CONDITION- TIMBER OR STEEL	EA	26	
0536 85 20	GUARDRAIL END TREATMENT- TRAILING ANCHORAGE	EA	1	
0570 1 2	PERFORMANCE TURF, SOD	SY	884	

DATE	DESCRIPTION	DATE	PROJECT #		SURVEYED			Kisinger Campo & Associates Corp. 201 N. Franklin Street Suite 400 Tampa, FL 33602 Florida C.O.A. No. 02317	 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	SUMMARY OF PAY ITEMS		
			SURVEY #		DESIGNED	SAB	08/2019					
			SEC./TWN./RGE		DRAWN	ARF	08/2019					SHEET NO.
			SCALE		CHECKED	DBT	08/2019					3

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GENERAL NOTES

1. ALL CONSTRUCTION ACTIVITIES SHALL BE COORDINATED WITH THE PROJECT MANAGEMENT DIVISION. THE PROJECT MANAGER IS STEVE LANEY, P.E. AND CAN BE REACHED AT (941) 708-7450.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEETING ALL CONDITIONS AND REQUIREMENTS OF ALL PERMITS AND ALL GOVERNING FEDERAL, STATE, AND LOCAL AGENCIES. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS THAT ARE NOT PROVIDED IN THE BID DOCUMENTS, AT NO ADDITIONAL COST TO THE OWNER.

3. THE CONTRACTOR IS DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATION THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.

4. THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS ON THE PLANS AND REVIEW ALL FIELD CONDITIONS THAT MAY AFFECT CONSTRUCTION. SHOULD DISCREPANCIES OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO OBTAIN THE ENGINEER'S CLARIFICATION BEFORE COMMENCING WITH CONSTRUCTION.

5. NO WORK, EXCEPT FOR EMERGENCY TYPE, SHALL BE PERFORMED AFTER 7:00 PM AND BEFORE 7:00 AM. FOR ADDITIONAL PROJECT RESTRAINTS, REFER TO THE SPECIFICATIONS.

6. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL NECESSARY STORMWATER, EROSION, AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH THE FDEP "FLORIDA STORMWATER, 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. REFER TO THE STORMWATER POLLUTION PREVENTION PLAN FOR DETAILS.

7. ALL CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO WITHIN THE MANATEE COUNTY RIGHT-OF-WAY AND/OR EASEMENTS SHOWN ON THE DRAWINGS.

8. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, WATER AND SEWER LINES, STORM DRAINS, UTILITIES, DRIVEWAYS, SIDEWALKS, SIGNS, MAIL BOXES, FENCES, TREES, LANDSCAPING, AND ANY OTHER IMPROVEMENT OR FACILITY IN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DAMAGED ITEM DUE TO THEIR CONSTRUCTION ACTIVITIES TO EQUAL OR BETTER THAN PRE-CONSTRUCTION CONDITIONS AT NO ADDITIONAL COST TO THE OWNER.

9. 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-SIGHT FROM THE NOISE SOURCE TO AFFECTED RESIDENCES, AS APPROVED BY THE ENGINEER.

10. THE CONTRACTOR IS TO CONTROL ALL FUGITIVE DUST ORIGINATING ON THIS PROJECT BY WATERING OR OTHER METHODS AS REQUIRED.
11. INGRESS AND EGRESS TO ALL PROPERTIES IN THE CONSTRUCTION AREA SHALL BE MAINTAINED AT ALL TIMES.


12. PRIOR APPROVAL WILL BE REQUIRED FOR REMOVAL OF ANY TREE WITHIN THE CONSTRUCTION AREA.

13. SAFETY:

13.1. 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.

13.2. THE CONTRACTOR SHALL USE ALL NECESSARY SAFETY PRECAUTIONS TO AVOID CONTACT WITH OVERHEAD AND UNDERGROUND POWER LINES, UTILITIES, ETC.

13.3. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. THIS EXCLUSION DOES NOT ALLEVIATE THE CONTRACTOR FROM RESPONSIBILITY FOR PROVIDING A CONTINUOUS SAFE WORKSPACE.

DATE	DESCRIPTION	DATE	PROJECT #		SURVEYED			Kisinger Campo & Associates Corp. 201 N. Franklin Street Suite 400 Tampa, FL 33602 Florida C.O.A. No. 02317	 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	GENERAL NOTES (1 OF 2)	
			SURVEY #		DESIGNED	SAB	08/2019				
			SEC./TWN./RGE		DRAWN	ARF	08/2019				SHEET NO.
			SCALE		CHECKED	DBT	08/2019				4

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DESIGN SPECIFICATIONS

- 1. FDOT STRUCTURES MANUAL, DATED JANUARY 2020.
- 2. AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LOAD AND RESISTANCE FACTOR (LRFD) BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION.
- 3. FDOT DESIGN MANUAL (TOPIC 625-000-002), DATED JANUARY 2020.

GENERAL SPECIFICATIONS

- 1. FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, JULY 2020 EDITION.
- 2. FDOT FY 2020-21 STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION.

PRIMARY SCOPE OF WORK

- 1. REMOVE AND REPLACE EXISTING SHEET PILE WALL.
- 2. REGRADE UPLAND CHANNEL BANKS.
- 3. REPAIR VOID AT WEIR.

DRAWINGS AND DIMENSIONS

- 1. DO NOT SCALE DRAWINGS FOR DIMENSIONS NOT GIVEN.
- 2. ALL DIMENSIONS ARE IN FEET AND INCHES, EITHER HORIZONTALLY OR VERTICALLY, UNLESS NOTED OTHERWISE.

EXISTING CONDITIONS

THE CONTRACTOR SHALL BE AWARE THAT PORTIONS OF THE EXISTING SHEET PILE WALL HAVE FAILED SUBSEQUENT TO THE FIELD SURVEY FOR THESE PLANS. VERIFY EXISTING FIELD CONDITIONS AND DIMENSIONS PRIOR TO COMMENCING REPAIRS OR ORDERING ANY MATERIALS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES FOUND.

DATUM

UNLESS NOTED OTHERWISE, ALL ELEVATIONS REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) AND REFERENCE PROJECTION OF THE FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE NAD 1983/2011 ADJUSTMENT).

ENVIRONMENT

SUBSTRUCTURE: MODERATELY AGGRESSIVE

CONCRETE

ALL CONCRETE SHALL BE IN ACCORDANCE WITH SECTION 346 OF THE STANDARD SPECIFICATIONS.

CONCRETE STRENGTH		
CLASS	LOCATION	MINIMUM 28 DAY COMPRESSIVE STRENGTH (PSI)
IV	BULKHEAD CAP	5,500
III (SEAL)	WEIR CONNECTION	3,000

CONCRETE COVER

CONCRETE COVER SHOWN IN THE PLANS DOES NOT INCLUDE PLACEMENT OR FABRICATION TOLERANCES UNLESS SHOWN AS "MINIMUM COVER". SEE FDOT STANDARD SPECIFICATIONS FOR ALLOWABLE TOLERANCES. UNLESS NOTED OTHERWISE, THE FOLLOWING CONCRETE COVERS SHALL BE USED:

CONCRETE COVER	
LOCATION	MODERATELY AGGRESSIVE
SURFACES CAST AGAINST EARTH AND IN CONTACT WITH WATER	4"

JOINTS IN CONCRETE

CONSTRUCTION JOINTS WILL BE PERMITTED ONLY AT LOCATIONS INDICATED ON THE PLANS. ADDITIONAL CONSTRUCTION JOINTS OR ALTERATIONS TO THOSE SHOWN SHALL REQUIRE APPROVAL BY THE ENGINEER.

DEMOLITION

THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT DEBRIS FROM FALLING INTO THE WATERWAY DURING DEMOLITION, EXCAVATION, AND CONSTRUCTION. ANY FALLEN DEBRIS SHALL BE PROMPTLY REMOVED.

MONITORING

1. MONITOR EXISTING STRUCTURES IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION NUMBER 108 AND NOTIFY THE ENGINEER AS NECESSARY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF EXISTING AND PROPOSED STRUCTURES DURING CONSTRUCTION OPERATIONS.

2. AN EXISTING 15" GRAVITY MAIN SOUTH OF THE BRIDGE HAS BEEN IDENTIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND MONITORING THE GRAVITY MAIN DURING ALL CONSTRUCTION ACTIVITIES.

STAGING AREA

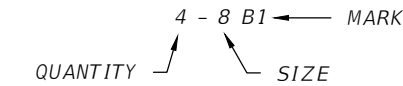
THE CONTRACTOR MAY UTILIZE COUNTY PROPERTY AT THE NORTHEAST CORNER OF HARVARD AVENUE AND BAYSHORE CANAL FOR PROJECT STAGING. CONSTRUCTION EQUIPMENT SHALL NOT BE ALLOWED WITHIN 10FT OF THE EXISTING RETAINING WALL.

TEMPORARY TRAFFIC CONTROL PLAN

PERFORM MAINTENANCE OF TRAFFIC AS NECESSARY, IN ACCORDANCE WITH STANDARD PLANS 102 LEVEL INDICES. FOR NECESSARY MAINTENANCE OF TRAFFIC NOT MEETING THE REQUIREMENTS OF THE STANDARD PLANS, SUBMIT A MAINTENANCE OF TRAFFIC PLAN, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA, FOR APPROVAL BY THE COUNTY.

REINFORCING STEEL

- 1. ALL REINFORCING STEEL SHALL BE ASTM A615-96, GRADE 60.
- 2. ALL DIMENSIONS PERTAINING TO LOCATION OF REINFORCEMENT ARE TO CENTERLINE OF BARS EXCEPT WHERE THE CLEAR DIMENSION IS SHOWN TO FACE OF CONCRETE.
- 3. REINFORCEMENT DETAIL DIMENSIONS ARE OUT-TO-OUT OF BARS.
- 4. TYPICAL REINFORCING BARS ARE DESIGNATED THUS:



INCIDENTAL ITEMS

- 1. PAYMENT FOR INCIDENTAL ITEMS NOT SPECIFICALLY COVERED IN THE INDIVIDUAL BID ITEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR BID ITEMS CONTAINED IN THIS CONTRACT.
- 2. THE COST OF FILLING HOLES RESULTING FROM THE REMOVAL OF THE EXISTING CONCRETE SHEET PILE WALLS IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS SECTION 110-10.2 SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PAY ITEM NO. 110-73 REMOVE EXISTING BULKHEAD.
- 3. THE COST OF ALL LABOR, EQUIPMENT, MATERIALS, AND OTHER INCIDENTAL ITEMS RELATED TO THE INSTALLATION OF MECHANICAL ANCHORS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PAY ITEM 455-87 ANCHOR BAR, STEEL.
- 4. THE COST OF ALL LABOR, EQUIPMENT, MATERIALS, AND OTHER INCIDENTAL ITEMS RELATED TO THE CONSTRUCTION OF THE NORTH END SEAWALL CONNECTION SHALL BE IN THE CONTRACT UNIT PRICE FOR PAY ITEM 455-133-3 SHEET PILING, STEEL, F&I, PERMANENT.

SHEET PILE WALL NOTES

PROVIDE STEEL SHEET PILING WHICH MEET OR EXCEED THE PROPERTIES NOTED BELOW:

SECTION MODULUS (ELASTIC):	30.2 IN3/FT
MOMENT OF INERTIA:	184.2 IN4/FT
FLANGE THICKNESS:	0.375"
WEB THICKNESS:	0.375"
STRUCTURAL STEEL:	HOT FORMED, A572 GRADE 50

- 1. THE SHEET PILE WALL SECTIONS SHOWN IN THE PLANS ARE FOR INFORMATIONAL PURPOSES, BUT MEET THE MINIMUM REQUIREMENTS NOTED ABOVE.
- 2. SUBMIT SHEET PILE WALL SHOP DRAWINGS TO THE ENGINEER PRIOR TO CONSTRUCTION.
- 3. THE CONTRACTOR SHALL ANTICIPATE THAT DIFFICULT INSTALLATION OF SHEET PILES MAY BE ENCOUNTERED WITHIN THE PROJECT LIMITS. CONCRETE AND RUBBLE RIPRAP EXISTS WITHIN THE CHANNEL LIMITS. LAYERS OF STIFF CLAYS AND CEMENTED SILTS ARE PRESENT AT APPROXIMATE ELEVATION -8FT. SPECIAL EQUIPMENT AND/OR INSTALLATION METHODS INCLUDING THE USE OF PREFORMED HOLES, PUNCHING, ETC. MAY BE REQUIRED TO INSTALL THE SHEET PILES TO THE REQUIRED MINIMUM TIP ELEVATION. INSTALLATION, INCLUDING THE COST OF SPECIAL INSTALLATION METHODS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PAY ITEM NO. 455-133-3 STEEL SHEET PILING, F&I PERMANENT.
- 4. THE CONTRACTOR SHALL ANTICIPATE THE PRESENCE OF DEADMAN ANCHORS AT THE EXISTING WALL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF THE EXISTING WALL DURING CONSTRUCTION. DISCONNECTION AND REMOVAL OF THE EXISTING DEADMAN ANCHORS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR PAY ITEM NO. 110-73 REMOVE EXISTING BULKHEAD.

INSTALLATION NOTES

INSTALL NEW SHEET PILE WALL CAP TO ELEVATIONS EQUIVALENT OR GREATER THAN THE EXISTING CONCRETE SHEET PILE WALL CAP, AS SHOWN IN THE WALL CONTROL DRAWINGS. FINAL WALL ELEVATIONS SHALL NOT DEVIATE GREATER THAN 2" FROM THE ELEVATIONS SHOWN IN THE PLANS.

EXISTING WEIR


THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF THE EXISTING WEIR WITHIN BAYSHORE CANAL, WITHIN THE PROJECT LIMITS, DURING ALL CONSTRUCTION OPERATIONS.

UTILITIES

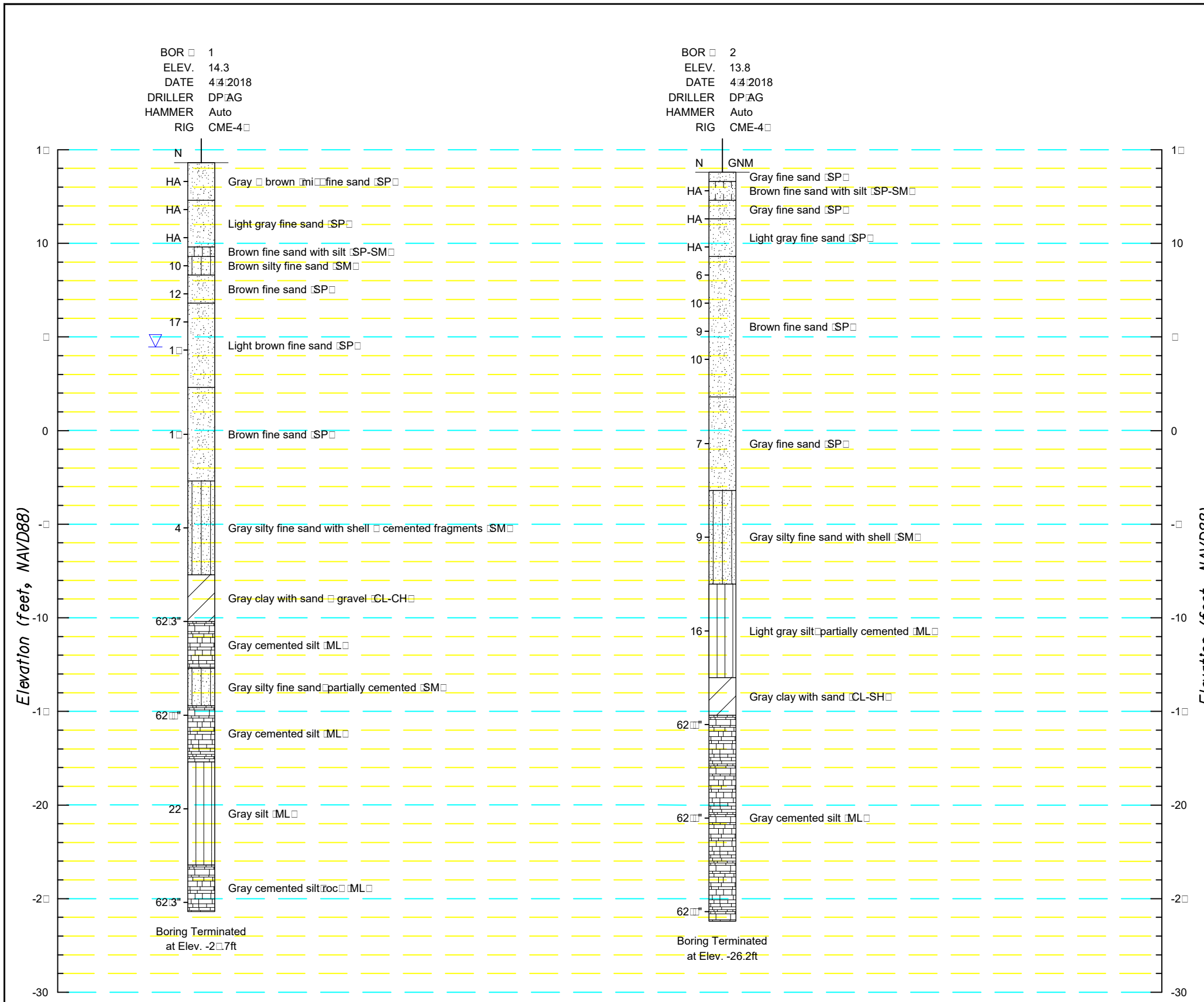
THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UTILITIES PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL CONTACT SUNSHINE AT (800) 432-4770 AND ANY OTHER LOCAL UTILITIES NOT LESS THAN 48 HOURS PRIOR TO ANY EXCAVATIONS IN ORDER TO VERIFY EXISTING UTILITIES AT SITE OF CONSTRUCTION. IF ANY EXISTING UTILITIES CONFLICT WITH PROPOSED CONSTRUCTION METHODS, MATERIALS, OR EQUIPMENT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH ALL UTILITIES FOR THE POSSIBLE TEMPORARY OR PERMANENT RELOCATION OF ANY EXISTING UTILITIES WITHIN THE RIGHT-OF-WAY.

UTILITY/AGENCY OWNERS:

COMPANY	CONTACT	TELEPHONE NUMBER
SPECTRUM COMMUNICATION	JAMES CRUZAN	727-329-2846
FRONTIER COMMUNICATION	DENIS HUTTON	941-906-6722
FLORIDA POWER & LIGHT - DISTRIBUTION	GREG COKER	941-723-4430
FLORIDA POWER & LIGHT - TRANSMISSION	GARY PETERSON	561-904-3665
MANATEE COUNTY UTILITIES - WATER	ROBBY PHILLIPS	941-792-8811
MANATEE COUNTY UTILITIES - SEWER	JOE BURNS	941-792-8811

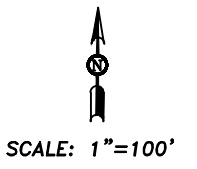
DATE	DESCRIPTION	DATE	PROJECT #		SURVEYED			Kisinger Campo & Associates Corp. 201 N. Franklin Street Suite 400 Tampa, FL 33602 Florida C.O.A. No. 02317	 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	GENERAL NOTES (2 OF 2)		
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Base Aerial From Google Earth Pro

TEST BORING LOCATIONS



LEGEND

- ▽ GROUNDWATER LEVEL MEASURED ON DATE DRILLED
- GNM GROUND WATER NOT MEASURED
- N SPT N-VALUE IN BLOWS PER FOOT (UNLESS OTHERWISE NOTED)
- SPT N VALUES CONVERTED TO EQUIVALENT SAFETY HAMMER
- HA HAND AUGER
- ⇌ LOSS OF DRILLING FLUID (%)

GRANULAR MATERIALS- RELATIVE DENSITY	SPT (BLOWS/FOOT)
VERY LOOSE	LESS THAN 4
LOOSE	4-10
MEDIUM DENSE	10-30
DENSE	30-50
VERY DENSE	GREATER THAN 50

SILTS AND CLAYS CONSISTENCY	SPT (BLOWS/FOOT)
VERY SOFT	LESS THAN 2
SOFT	2-4
FIRM	4-8
STIFF	8-15
VERY STIFF	15-30
HARD	GREATER THAN 30

NOTES:

- Cemented or calcareous soils were encountered within the borings. This material may behave as rock and may contain rock inclusions. Excavations into or through cemented or calcareous soils may be difficult and may require non-conventional construction techniques and specialized equipment.
- Ground surface elevations at the test boring locations were provided by Kisinger Campo & Associates

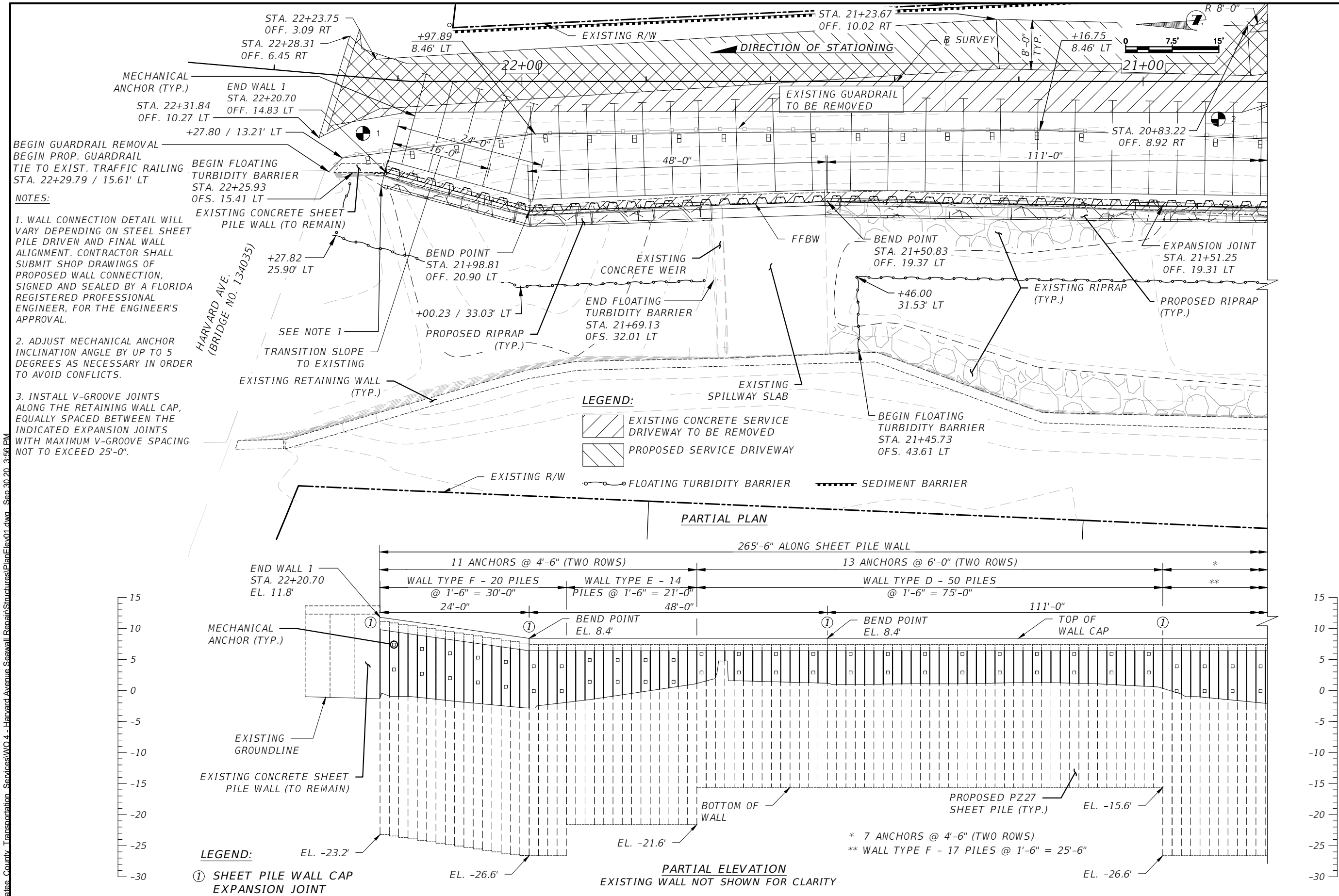
REVISED: 5/24/18


Ardaman & Associates, Inc.
Geotechnical, Environmental and
Materials Consultants

Test Locations/Soil Boring Logs
Retaining Wall Repair/Replace
Bayshore Canal at Harvard Ave.
Bradenton, Manatee County, Florida

DRAWN BY: KGS	CHECKED BY:	DATE: 4/5/18
FILE NO. 18-7015	APPROVED BY:	SHEET NO. 6

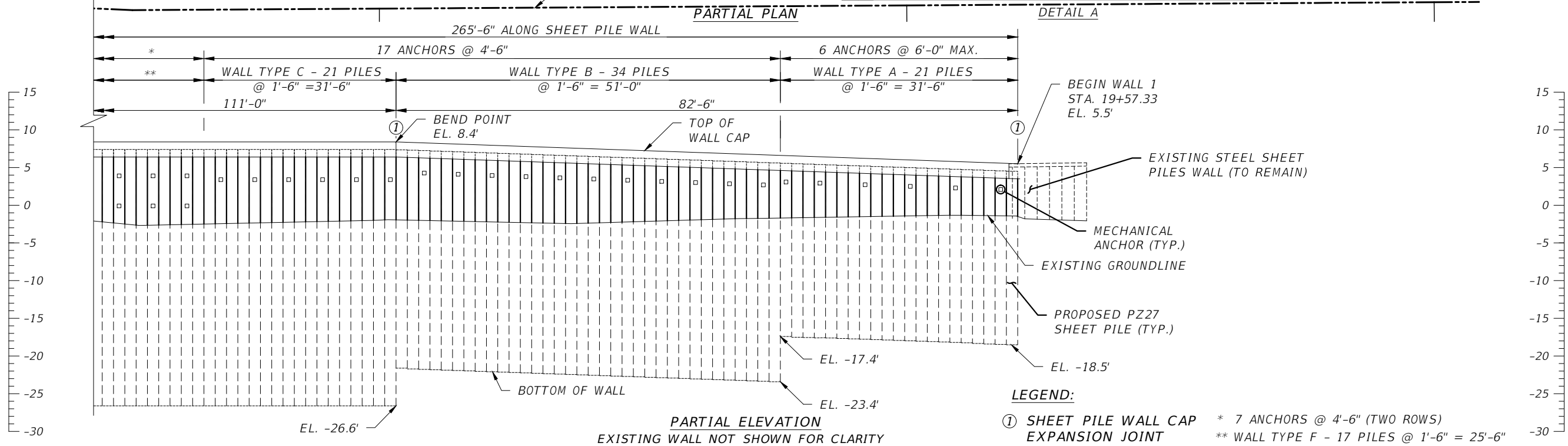
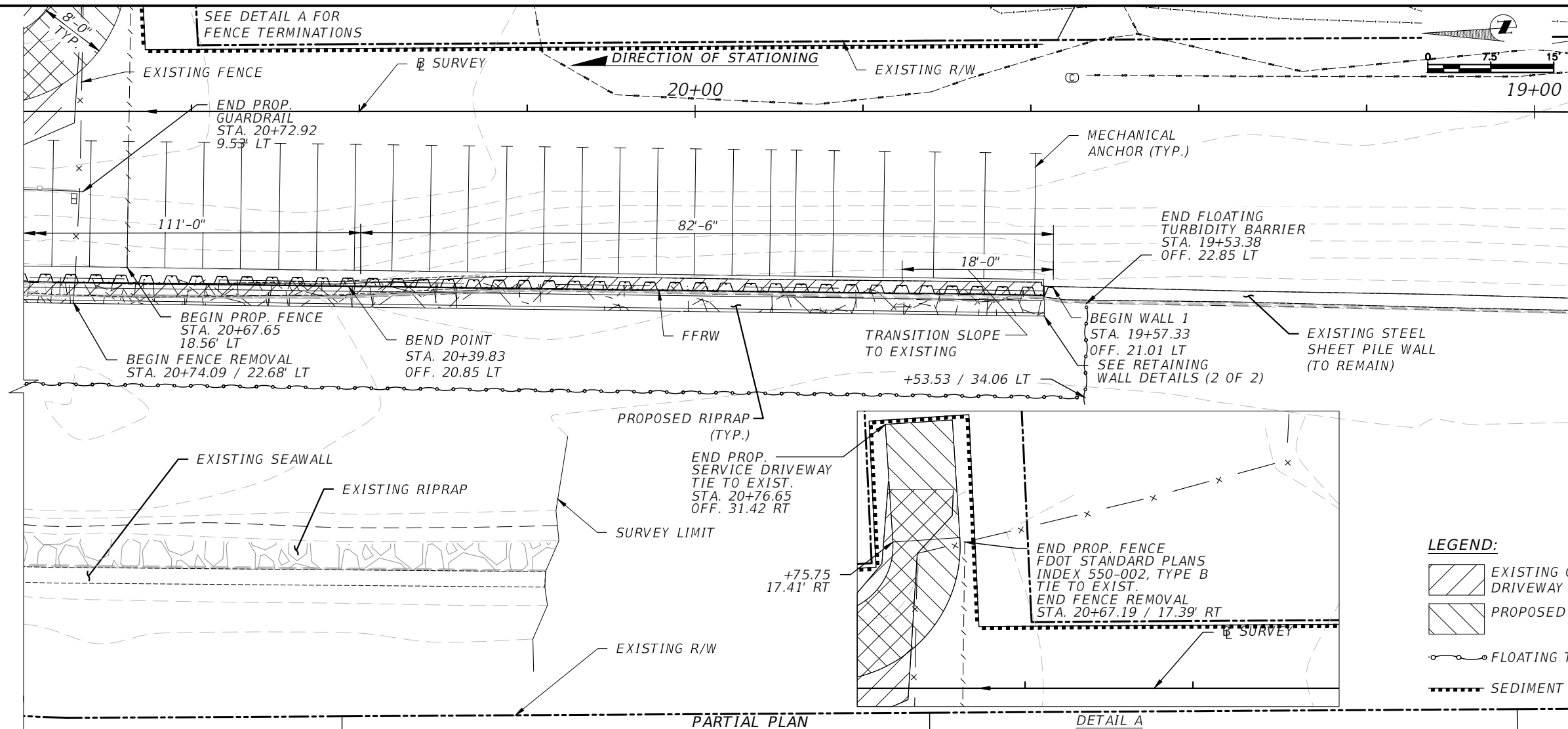
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DATE	DESCRIPTION	DATE	PROJECT #	SURVEYED	HYATT	07/2019	Kisinger Campo & Associates Corp. 201 N. Franklin Street Suite 400 Tampa, FL 33602 Florida C.O.A. No. 02317	 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	WALL CONTROL DRAWINGS (1 OF 2)	SHEET NO. 7
			SURVEY #	DESIGNED	SAB	08/2019				
			SEC./TWN./RGE	DRAWN	ARF	08/2019				
			SCALE	CHECKED	DBT	08/2019				

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DATE	DESCRIPTION	DATE	PROJECT #	SURVEYED	HYATT	07/2019
			SURVEY #	DESIGNED	SAB	08/2019
			SEC./TWN./RGE	DRAWN	ARF	08/2019
			SCALE	CHECKED	DBT	08/2019

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Florida C.O.A. No. 02317



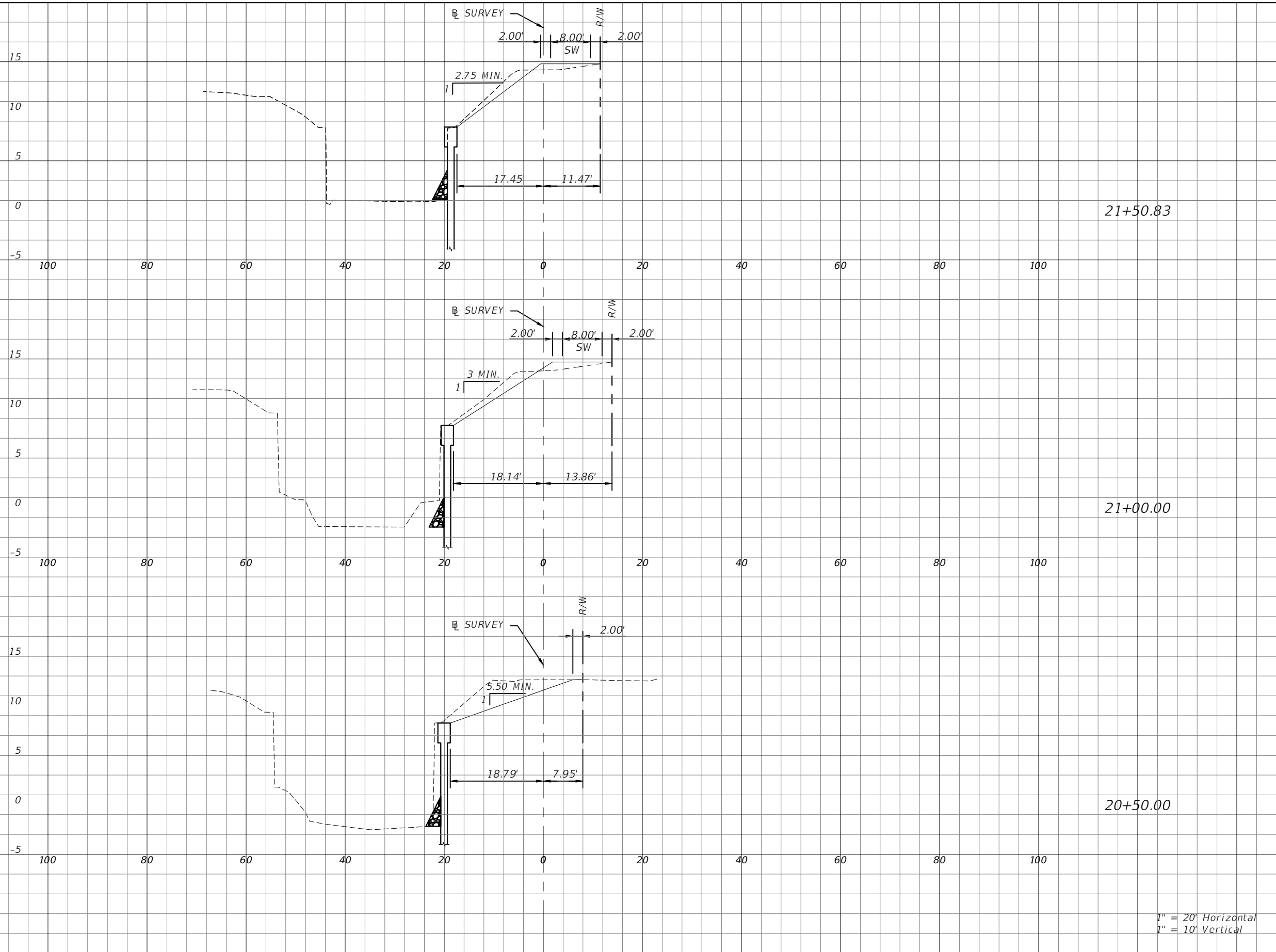
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

WALL CONTROL DRAWINGS (2 OF 2)

SHEET NO.
8

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1" = 20' Horizontal
1" = 10' Vertical

Regular		Exc.	Embankment	
A		V	A	V

DATE	DESCRIPTION	DATE	PROJECT #		SURVEYED	HYATT	07/2019
			SURVEY #		DESIGNED	SAB	08/2019
			SEC./TWN./RGE		DRAWN	ARF	08/2019
			SCALE		CHECKED	DBT	08/2019

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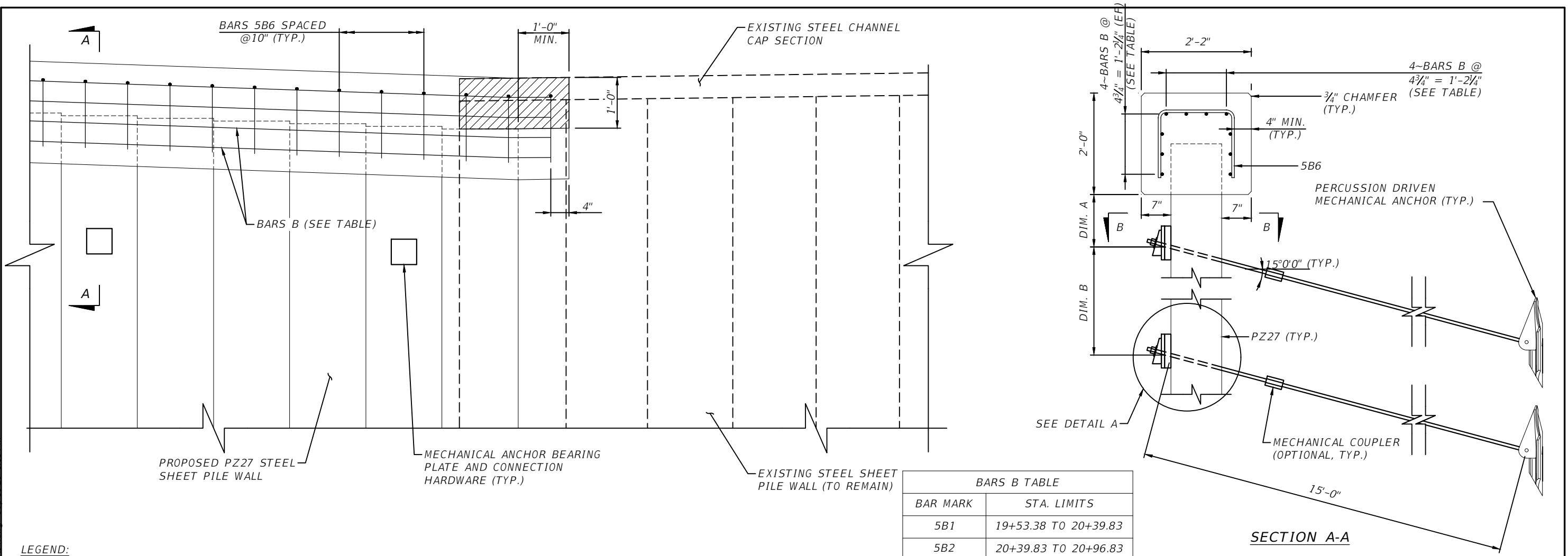
PUBLIC WORKS DEPARTMENT
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1022 26th Avenue East, Bradenton, FL 34208

CROSS SECTIONS
STA. 20+50.00 TO 21+51.25

SHEET NO.
10

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LEGEND:



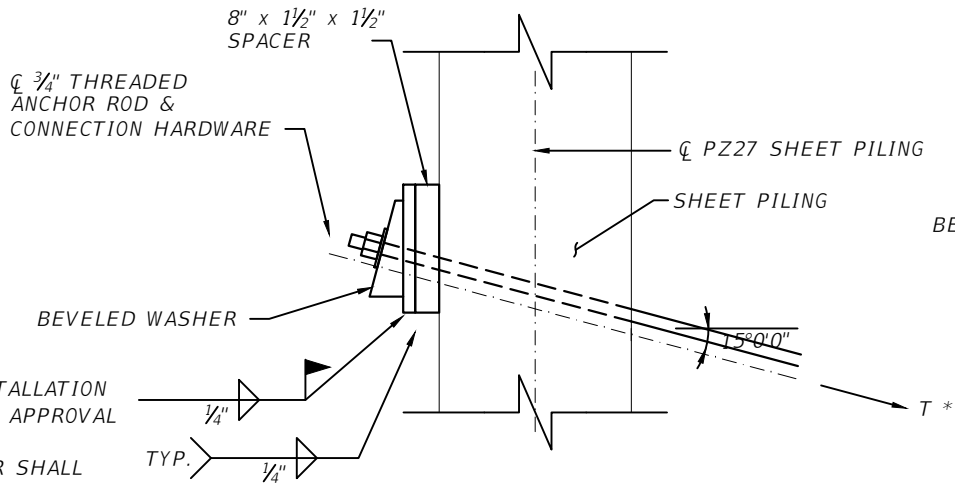
PARTIAL SEAWALL ELEVATION
(SOUTH PROJECT LIMITS SHOWN)

MECHANICAL ANCHOR DATA TABLE					
WALL TYPE	DIM. A	DIM. B	ULTIMATE LOAD T (KIPS)	THREADED ANCHOR ROD DIAMETER (IN.)	MIN. ANCHOR BEARING AREA (SF)
A	1'-6"	N/A	9.1	3/4	1.24
B	2'-0"	N/A	10.4	3/4	1.24
C	3'-0"	N/A	12.4	3/4	1.24
D	1'-6"	3'-0"	9.4	3/4	1.24
E	1'-6"	3'-6"	11.6	3/4	1.24
F	2'-0"	4'-0"	13.6	3/4	1.24

NOTES:

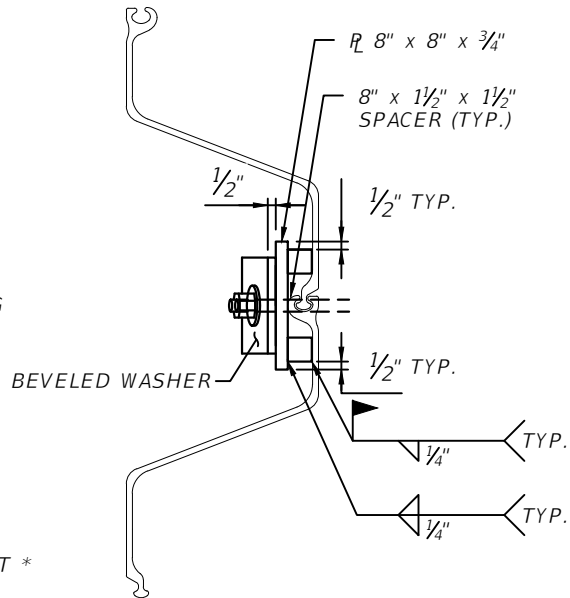
1. DETAILS PROVIDED ARE FOR MECHANICAL ANCHOR DRIVING PRIOR TO SHEET PILE INSTALLATION. FOR OTHER INSTALLATION METHODS PROPOSED BY THE CONTRACTOR, SUBMIT INSTALLATION PLAN AND SHOP DRAWINGS FOR THE ENGINEERS APPROVAL PRIOR TO BEGINNING INSTALLATION.
2. PLATIPUS EARTH ANCHORING SYSTEM B10 BAT ANCHORS SHOWN FOR INFORMATIONAL PURPOSES. THE CONTRACTOR SHALL UTILIZE EQUIVALENT OR GREATER PERCUSSION DRIVEN MECHANICAL ANCHOR MEETING THE MINIMUM REQUIREMENTS SHOWN IN THE MECHANICAL ANCHOR DATA TABLE. ALL MECHANICAL ANCHOR HEADS SHALL BE GALVANIZED CAST IRON IN ACCORDANCE WITH ISO 9001 AND THE SPECIFICATIONS.
3. MECHANICAL ANCHOR BEARING ASSEMBLIES SHALL PROVIDE BEARING SURFACES NOT LESS THAN 1 1/2" FROM ACCESS HOLES CUT INTO THE SHEET PILE WALLS FOR ANCHOR ACCESS. BEARING PLATES SHALL BE SIZED IN ACCORDANCE WITH THE PERCUSSION DRIVEN MECHANICAL ANCHOR INSTALLATION METHOD UTILIZED.

BARS B TABLE	
BAR MARK	STA. LIMITS
5B1	19+53.38 TO 20+39.83
5B2	20+39.83 TO 20+96.83
5B3	20+96.83 TO 21+50.83
5B4	21+50.83 TO 21+98.81
5B5	21+98.81 TO 22+20.70



DETAIL A

* REQUIRED ANCHOR ULTIMATE CAPACITY
(SEE MECHANICAL ANCHOR DATA TABLE)



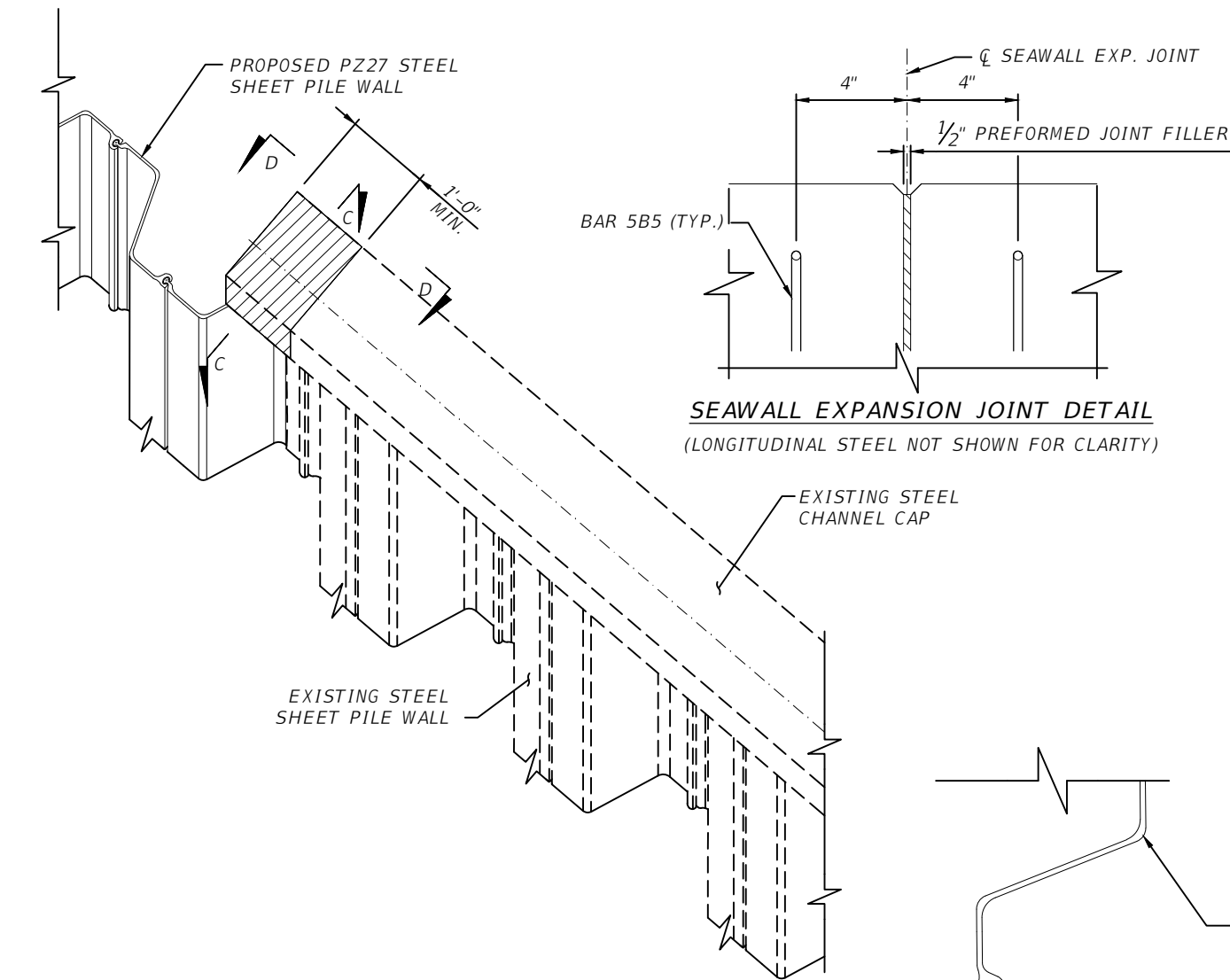
SECTION B-B

(SHEET PILE TROUGH ATTACHMENT SHOWN,
CREST ATTACHMENT SIMILAR)

DATE	DESCRIPTION	DATE	PROJECT #	SURVEYED	DESIGNED	SAB	08/2019	Kisinger Campo & Associates Corp. 201 N. Franklin Street Suite 400 Tampa, FL 33602 Florida C.O.A. No. 02317	 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	RETAINING WALL DETAILS (1 OF 2)	SHEET NO. 12
			SURVEY #								
			SEC./TWN./RGE		DRAWN	ARF	08/2019				
			SCALE		CHECKED	DBT	08/2019				

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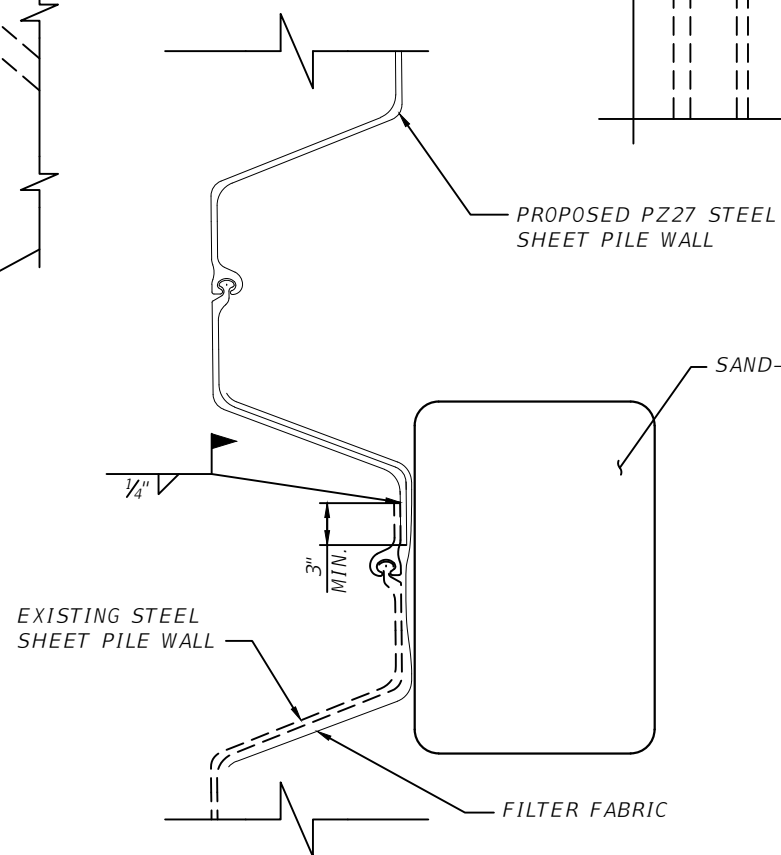


SHEET PILE CONNECTION ISOMETRIC VIEW
(PROPOSED CAP AND MECHANICAL ANCHORS NOT SHOWN FOR CLARITY)

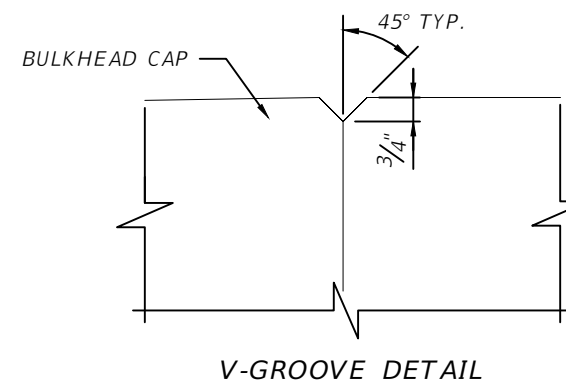
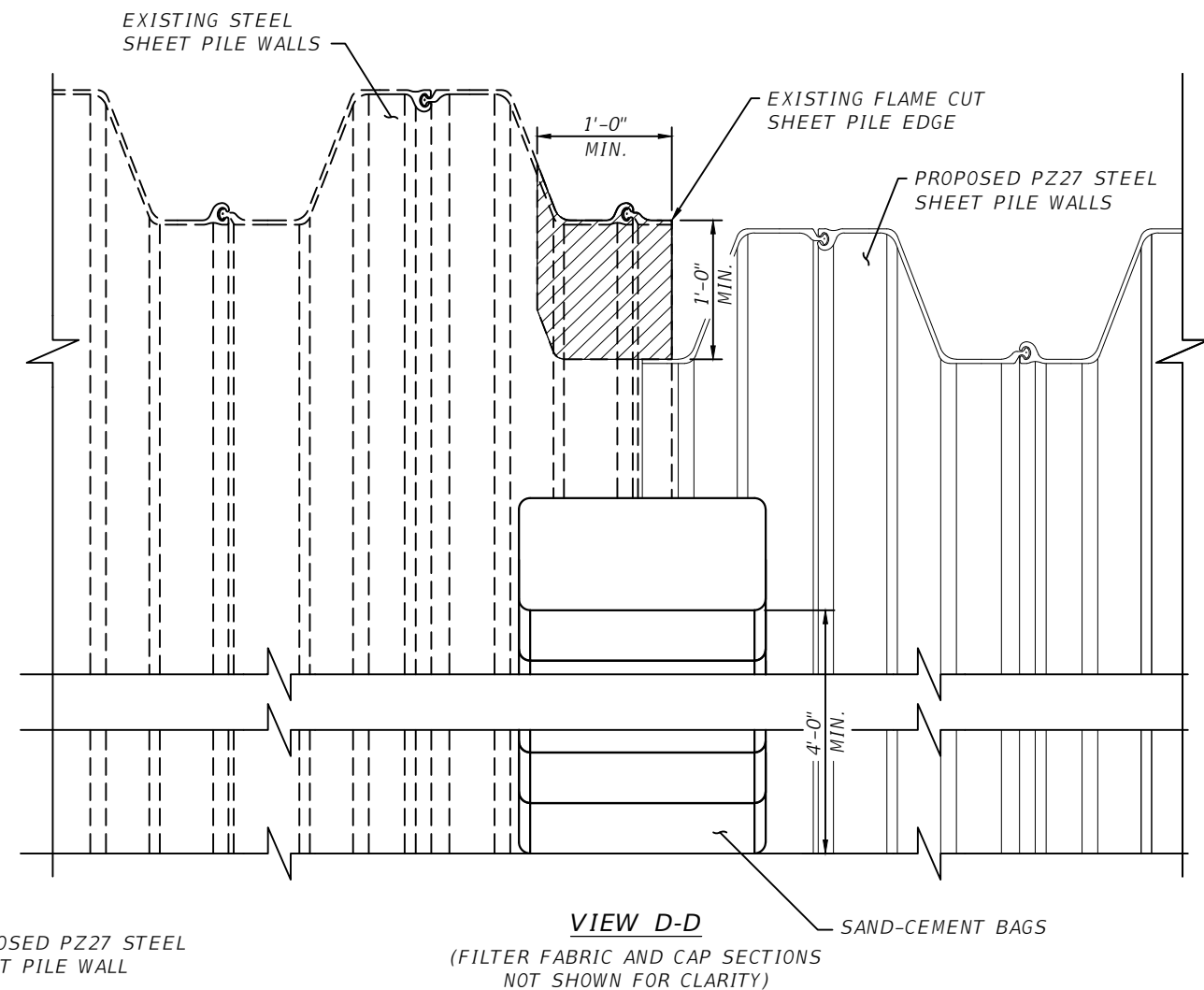
LEGEND:



EXISTING SHEET PILE WALL TO BE REMOVED



SECTION C-C



NOTES:

1. THE DETAILS SHOWN ARE BASED ON FIELD OBSERVATIONS AND MEASUREMENTS. THE CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES IDENTIFIED PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.
2. THE EXISTING STEEL SHEET PILING AND STEEL SHEET PILE CAP SHALL BE REMOVED TO THE LIMITS SHOWN ON THESE RETAINING WALL DETAILS SHEETS AND SHALL CONFORM TO THE CLEARANCES SHOWN FOR INSTALLATION OF THE CONCRETE CAP.
3. PERFORM FIELD WELDING AT STEEL SHEET PILE JOINT AS SHOWN IN SECTION C-C ALONG THE EXPOSED LIMITS OF THE STEEL SHEET PILES.

DATE	DESCRIPTION	DATE	PROJECT #	SURVEYED		
			SURVEY #	DESIGNED	SAB	08/2019
			SEC./TWN./RGE	DRAWN	ARF	08/2019
			SCALE	CHECKED	DBT	08/2019

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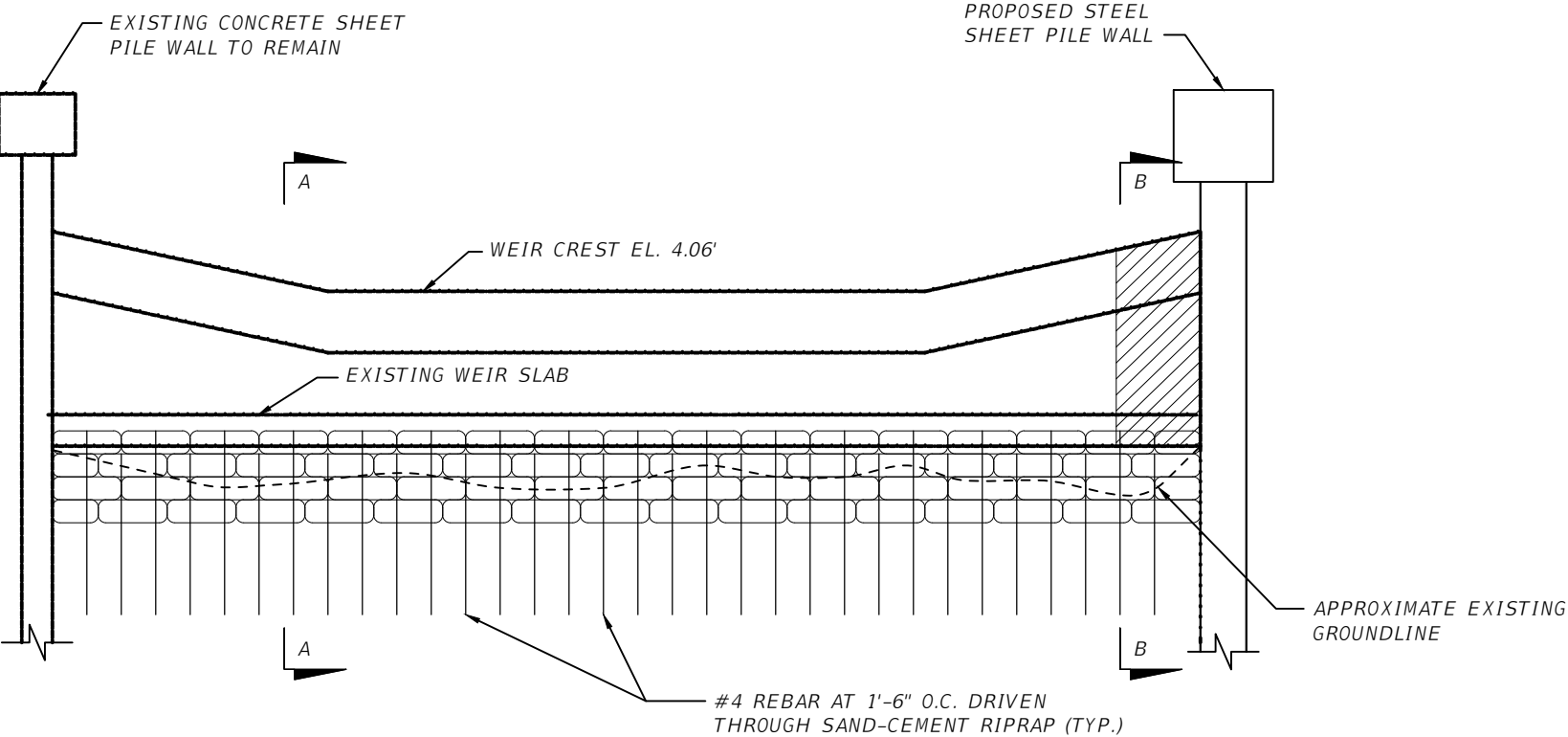
PUBLIC WORKS DEPARTMENT
ENGINEERING SERVICES
1022 26th Avenue East, Bradenton, FL 34208

RETAINING WALL DETAILS (2 OF 2)

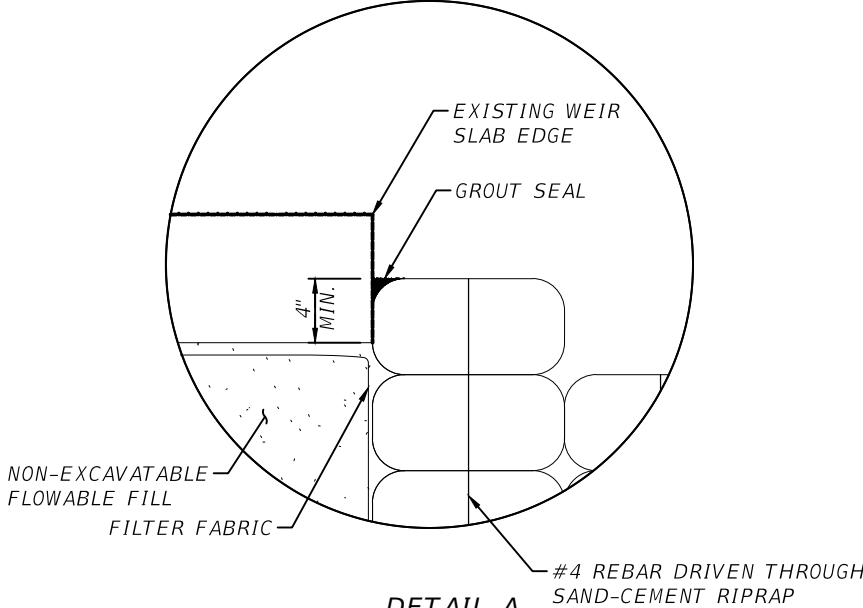
SHEET NO.
13

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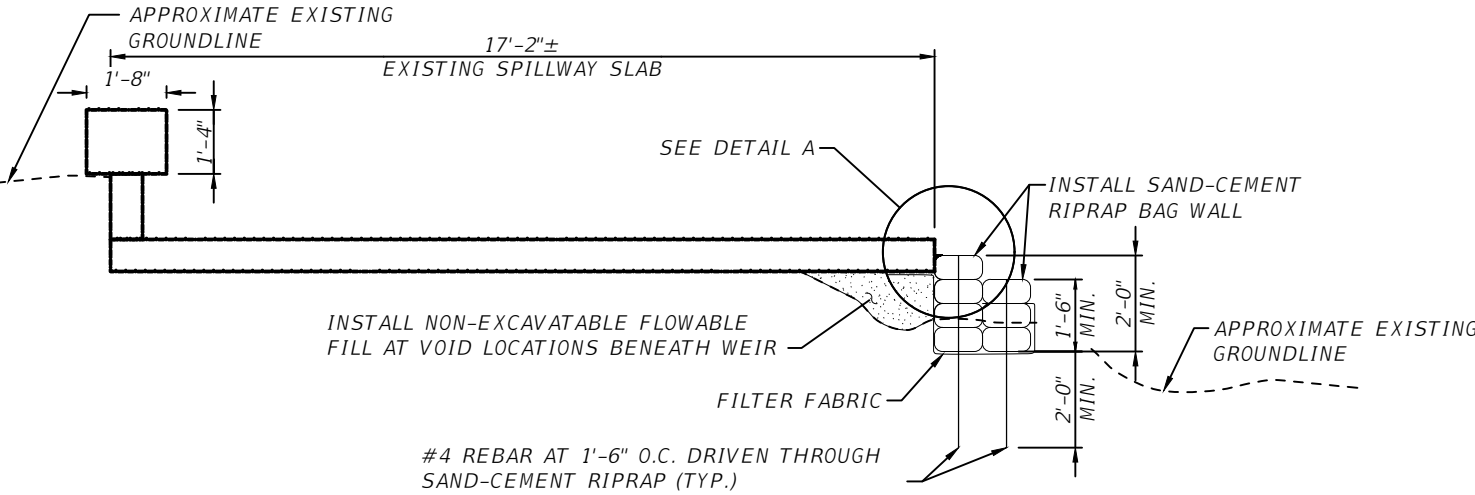
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WEIR ELEVATION



DETAIL A



SECTION A-A

LEGEND:

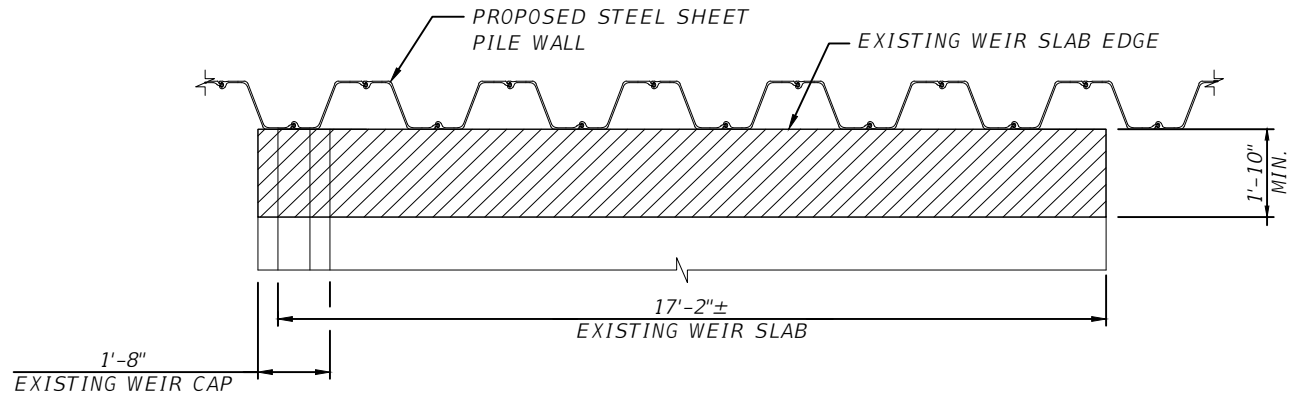
 EXISTING WEIR TO BE DEMOLISHED AND RECONSTRUCTED

NOTE:
STAGGER #4 REBAR DRIVEN THROUGH SAND-CEMENT RIPRAP HORIZONTALLY BETWEEN LAYERS.

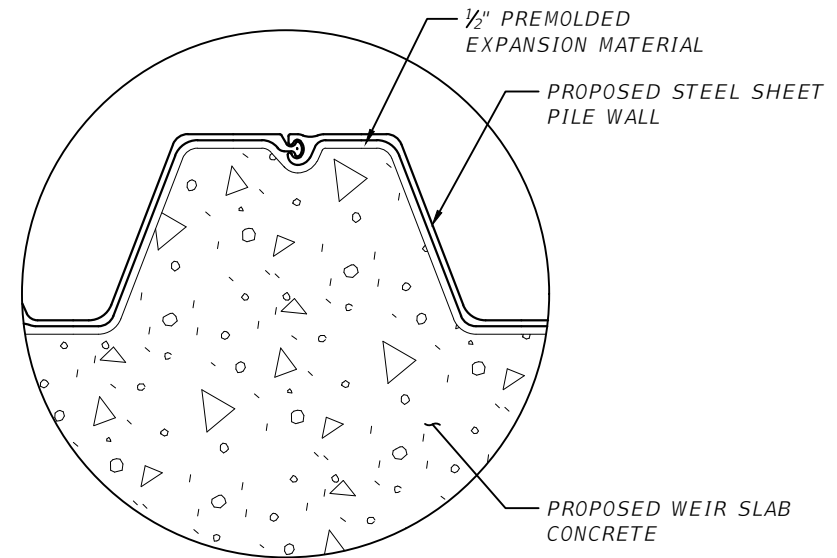
M:\6201601.00_Miscellaneous	DATE		DESCRIPTION		DATE		PROJECT #				SURVEYED				Kisinger Campo & Associates Corp. 201 N. Franklin Street Suite 400 Tampa, FL 33602 Florida C.O.A. No. 02317	 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	<i>MISCELLANEOUS PROJECT DETAILS (1 OF 2)</i>	SHEET NO. 14
							SURVEY #				DESIGNED		SAB 08/2019					
							SEC./TWN./RGE				DRAWN		ARF 08/2019					
							SCALE				CHECKED		DBT 08/2019					

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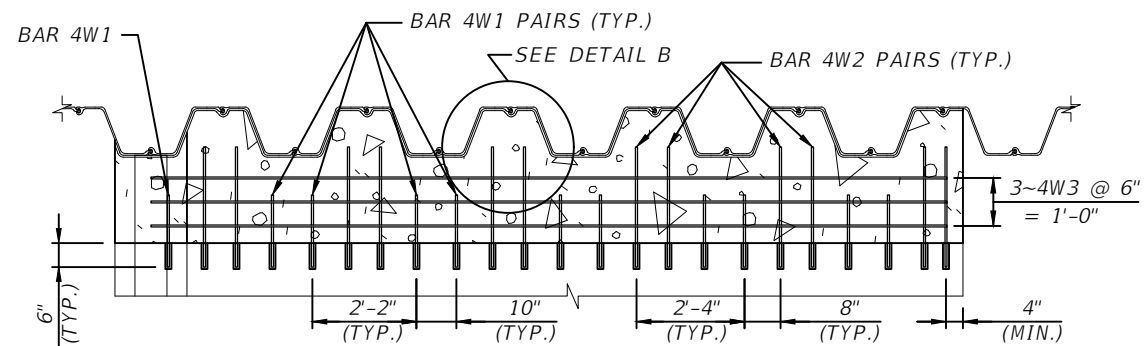
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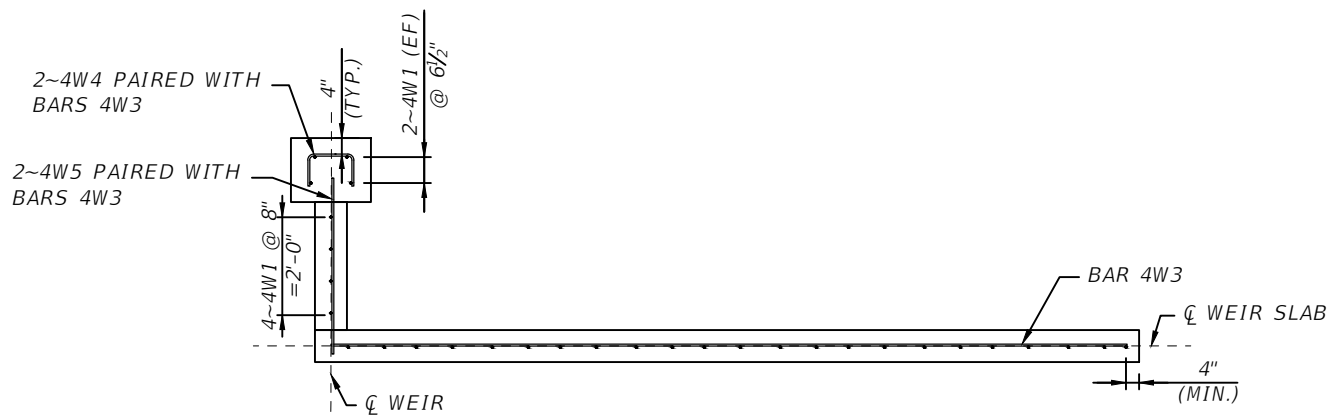
PARTIAL EXISTING WEIR PLAN



DETAIL B
(REINFORCING NOT SHOWN FOR CLARITY)



WEIR REINFORCING PLAN
(CAP REINFORCING NOT SHOWN FOR CLARITY)

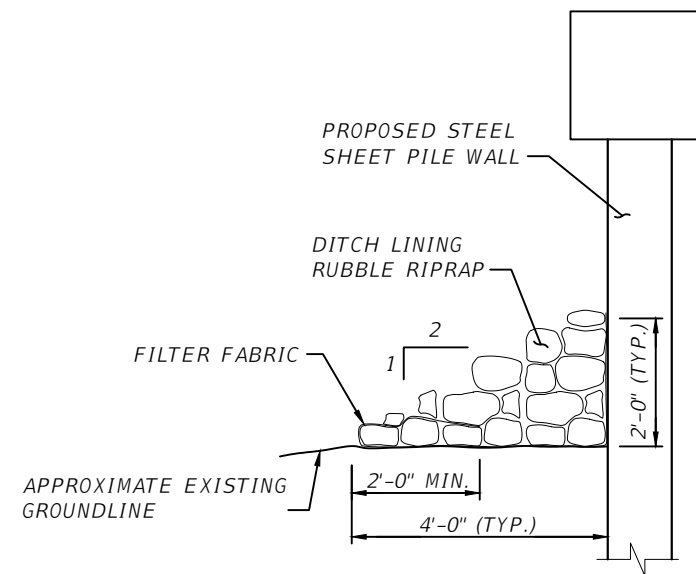


SECTION B-B

LEGEND:



EXISTING WEIR TO BE DEMOLISHED
AND RECONSTRUCTED



CHANNEL PROTECTION SECTION

NOTES:

1. WEIR SLAB REINFORCING LOCATIONS ARE SUBJECT TO CHANGE BASED ON DRIVEN SHEET PILE FINAL LOCATIONS. PROVIDE SHOP DRAWINGS FOR ADJUSTED WEIR SLAB REINFORCING PLAN FOR THE ENGINEER'S APPROVAL.
2. SHIFT WEIR SLAB REINFORCING ±1" VERTICALLY AND/OR HORIZONTALLY TO AVOID CONFLICTS WITH EXISTING WEIR REINFORCING. NOTIFY THE ENGINEER OF ANY LOCATIONS WHERE EXCESSIVE REINFORCING ADJUSTMENTS ARE NECESSARY.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF THE WEIR AT ALL TIMES DURING CONSTRUCTION OPERATIONS.

DATE	DESCRIPTION	DATE	PROJECT #	SURVEYED	DESIGNED	SAB	08/2019
			SURVEY #	DRAWN	ARF	08/2019	
			SEC./TWN./RGE	CHECKED	DBT	08/2019	
			SCALE				

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Florida C.O.A. No. 02317



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


MISCELLANEOUS PROJECT DETAILS
(2 OF 2)

SHEET NO.
15

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MARK		LENGTH		NO	TYP	STY	B			C			D			E			F			H			J			K			N	I					
SIZE	DES	FT	IN	BARS	BAR	A	G	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	FT	IN	FR	NO	ANG				
LOCATION										SEAWALL CAP										NO. REQUIRED = 1																	
5	B1	83-10		10	2			2- 0			81-10																								1		
5	B2	56- 4		10	1			56- 4																													
5	B3	53- 4		10	1			53- 4																													
5	B4	47- 4		10	1			47- 4																													
5	B5	23- 4		10	1			23- 4																													
5	B6	4- 2		321	11			1- 6			1- 4			1- 4																							
LOCATION										WEIR EXTENSION										NO. REQUIRED = 1																	
4	W1	1- 6		15	1			1- 6																													
4	W2	2- 6		12	1			2- 6																													
4	W3	16- 6		3	1			16- 6																													
4	W4	2- 4		3	11			1- 0			0- 8			0- 8																							
4	W5	3- 8		3	1			3- 8																													
END OF LIST																																					

DATE	DESCRIPTION	DATE	PROJECT #		SURVEYED	N/A	N/A	<div>Kisinger Campo & Associates Corp. 201 N. Franklin Street Suite 400 Tampa, FL 33602 Florida C.O.A. No. 02317</div>	<div>PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208</div>	REINFORCING BAR LIST	
			SURVEY #		DESIGNED	SAB	08/2020				
			SEC./TWN./RGE		DRAWN	AJS	08/2020				
			SCALE		CHECKED	DBT	08/2020				SHEET NO. 16

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I. SITE DESCRIPTION			B. EROSION AND SEDIMENT CONTROL CONSTRUCTION ACTIVITIES				G. OFFSITE VEHICLE TRACKING			
A. CONSTRUCTION ACTIVITY			THE CONTRACTOR IS REQUIRED TO REVIEW THE SITE SPECIFIC EROSION CONTROL PLAN. THE CONTRACTOR MAY ALSO BE REQUIRED TO MODIFY THE PLAN OR MATERIALS TO ADAPT TO SEASONAL VARIATIONS OR SITE CONDITIONS. CONTRACTOR WILL COMPLY WITH E & S PLAN. ANY MODIFICATIONS TO THIS PLAN MUST BE SIGNED BY A PROFESSIONAL ENGINEER REPRESENTING THE CONTRACTOR. THE EROSION CONTROL DEVICES, DETAILS, AND NOTES APPLICABLE TO THESE ACTIVITIES ARE SPECIFIED IN THE PLANS. THE PROJECT ENGINEER IS RESPONSIBLE FOR DETERMINING IF ADDITIONAL CONTROLS ARE THE PROJECT ENGINEER MAY REQUIRE ADDITIONAL CONTROLS TO MEET STANDARDS AND REGULATIONS.				STABILIZED CONSTRUCTION ENTRANCES SHALL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREETS WILL BE CLEANED AS DIRECTED BY THE CONSTRUCTION INSPECTOR AND ENGINEER TO REMOVE ANY EXCESS MUD, DIRT OR ROCK TRACKED FROM THE SITE. DUMP TRUCKS HAULING MATERIAL FROM OR TO THE SITE WILL BE COVERED WITH A TARPAULIN AT ALL TIMES.			
B. PROJECT LIMITS							H. SANITARY WASTE			
C. PROJECT DESCRIPTION							I. HAZARDOUS WASTE			
D. MAJOR SOIL DISTURBING ACTIVITIES										
E. TOTAL PROJECT AREA: .50 ACRES TOTAL AREA TO BE DISTURBED: 0.18 ACRES			C. STABILIZATION PRACTICES				THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE COUNTY IN WRITING IF ANY HAZARDOUS WASTE MATERIAL IS ENCOUNTERED DURING SITE INVESTIGATION OR CONSTRUCTION.			
F. RUNOFF DATA			DURING CONSTRUCTION THE CONTRACTOR WILL PROVIDE STABILIZATION FOR AREAS WHICH HAVE BEEN CLEARED AND NOT REWORKED WITHIN FOURTEEN (14) CALENDAR DAYS. THE CONTRACTOR MAY UTILIZE TEMPORARY SEEDING OR TEMPORARY SODDING IN ACCORDANCE WITH SECTION 570 OF THE "FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION".				THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR NOTIFYING THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) WITHIN 24 HOURS OF THE DISCOVERY.			
G. SOIL DATA			PRE-CONSTRUCTION: CN = 80.0 POST-CONSTRUCTION: CN = 80.0				ALL HAZARDOUS WASTE MATERIALS, IF ENCOUNTERED, WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL, STATE, AND FEDERAL REGULATIONS. THE CONTRACTOR WILL BE RESPONSIBLE FOR SEEING THAT THESE PRACTICES ARE FOLLOWED.			
H. DRAINAGE AREA			D. STRUCTURAL PRACTICES				IN CASE OF DISPOSING ANY HAZARDOUS WASTE MATERIAL FOLLOWING LOCAL, STATE, AND FEDERAL REGULATIONS, A COPY OF DISPOSAL MANIFEST HAS TO BE PROVIDED TO THE COUNTY IN TIMELY FASHION.			
I. RECEIVING WATERS			E. DESCRIPTION OF STORM WATER MANAGEMENT							
J. WETLANDS AREAS			F. WASTE DISPOSAL							
II. CONTROLS										
ALL CONTROLS SHALL BE CONSISTENT WITH PERFORMANCE STANDARDS FOR EROSION AND SEDIMENT CONTROL AND STORM-WATER TREATMENT SET FORTH IN s.62-40.432, F.A.C., THE APPLICABLE STORM-WATER OR ENVIRONMENTAL RESOURCE PERMITTING REQUIREMENTS OF THE DEPARTMENT OR A WATER MANAGEMENT DISTRICT AND THE GUIDELINES CONTAINED IN THE FLORIDA DEVELOPMENT MANUAL: A GUIDE TO SOUND LAND AND WATER MANAGEMENT (DEP, 1988) AND ANY SUBSEQUENT AMENDMENTS.										
A. SEQUENCE OF MAJOR ACTIVITIES										
1. INSTALL STAKED SILT FENCE ALONG THE RIGHT OF WAY LINE PRIOR TO COMMENCEMENT OF CONSTRUCTION.										
2. INSTALL FLOATING TURBIDITY BARRIER IN THE CANAL.										
3. STABILIZE, MAINTAIN, AND REPLACE E&S AS DIRECTED BY THE ENGINEER.										
4. PERFORM WEEKLY INSPECTION OF E&S AND AFTER EVERY 1/2" RAINFALL.										
5. REMOVE ALL SEDIMENTS THAT HAVE MIGRATED OFF SITE AS DIRECTED BY THE ENGINEER.										
6. WHEN CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE EROSION PROTECTION DEVICES AS REQUIRED.										

DATE	DESCRIPTION	DATE	PROJECT #		SURVEYED	N/A	N/A	Kisinger Campo & Associates Corp. 201 N. Franklin Street Suite 400 Tampa, FL 33602 Florida C.O.A. No. 02317	 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	STORMWATER POLLUTION PREVENTION PLAN (1)	
			SURVEY #		DESIGNED	N/A	N/A				
			SEC./TWN./RGE		DRAWN	AJS	08/2020				SHEET NO.
			SCALE		CHECKED	SAB	08/2020				17

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J. WATER QUALITY MONITORING (MIXING ZONES)

THE WATER THAT WILL BE SAMPLED FOR STATE WATER QUALITY STANDARDS FOR CONSTRUCTION ACTIVITIES PROHIBIT A TURBIDITY INCREASE OF GREATER THAN 29 NTU'S ABOVE AMBIENT CONDITIONS AT THE COMPLIANCE LOCATION OF THE MIXING ZONES. TO MAINTAIN THIS STANDARD, TURBIDITY MONITORING SHALL OCCUR DURING ALL IN-WATER CONSTRUCTION ACTIVITIES AT EACH COMPLIANCE AND BACKGROUND STATION. THE FOLLOWING PROCEDURE SHALL BE USED:

FREQUENCY: TWICE A DAY, AT LEAST 4 HOURS APART DURING FREQUENCY OF ACTUAL CONSTRUCTION OPERATIONS.

LOCATIONS: ALL STATIONS SHALL BE SAMPLED AT 2 FEET ABOVE LOCATIONS THE BOTTOM, AT MID-DEPTH, AND AT THE SURFACE, OR AS DIRECTED BY PERMITTING AGENCIES. IF WATER IS LESS THAN THREE FEET DEEP, ONLY MID-DEPTH SAMPLES ARE REQUIRED.

BACKGROUND: 500 FEET UP-CURRENT FROM THE CONSTRUCTION BACKGROUND ACTIVITY AND OUTSIDE OF ANY TURBIDITY PLUME FROM THE CONSTRUCTION ACTIVITY.

COMPLIANCE: 300 FEET DOWN CURRENT FROM THE CONSTRUCTION COMPLIANCE ACTIVITY WITHIN ANY VISIBLE TURBIDITY PLUME, OR AS DIRECTED BY PERMITTING AGENCIES.

METHOD: ALL SAMPLES SHALL BE COLLECTED WITH A KEMMERER, VAN DORN METHOD, OR SIMILAR SAMPLER WHICH IS DESIGNED TO COLLECT IN SITU WATER SAMPLES.

REPORTING: ALL MONITORING DATA SHALL BE SUBMITTED WITHIN ONE REPORTING WEEK OF ANALYSIS WITH DOCUMENTS CONTAINING THE FOLLOWING INFORMATION:

1. PERMIT NUMBER
2. DATES OF SAMPLING AND ANALYSIS
3. LOCATION OF SAMPLE (I.E., STATION AND WATER COLUMN LOCATION)
4. A STATEMENT DESCRIBING THE METHODS USED IN COLLECTION, HANDLING,
5. STORAGE, AND ANALYSIS OF THE SAMPLES
6. A MAP INDICATING THE SAMPLING LOCATIONS
7. STATEMENT, BY THE INDIVIDUAL RESPONSIBLE FOR IMPLEMENTATION OF THE SAMPLING PROGRAM, CONCERNING THE AUTHENTICITY, PRECISION, LIMITS OF DETECTION AND ACCURACY OF DATA.

MONITORING REPORTS SHALL INCLUDE INFORMATION ON THE GENERAL ANTECEDENT WEATHER CONDITIONS.

IF MONITORING REVEALS VIOLATIONS OF THE STATE WATER QUALITY STANDARD FOR TURBIDITY, CONSTRUCTION ACTIVITIES SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL CORRECTIVE MEASURES HAVE BEEN TAKEN AND TURBIDITY HAS RETURNED TO ACCEPTABLE LEVELS. ANY SUCH OCCURRENCE SHALL ALSO BE IMMEDIATELY REPORTED TO THE REGULATORY AGENCIES. IN THE EVENT THAT STATE WATER QUALITY STANDARDS ARE NOT ATTAINED, THE CONTRACTOR SHALL IMPLEMENT A CONTINGENCY PLAN WHICH COMPLIES WITH THE PROJECT SWFWMD/FDEP ERP AND PINELLAS COUNTY NPDES REQUIREMENTS AT NO ADDITIONAL COST TO THE COUNTY. ANY FINES SHALL BE RESPONSIBILITY OF THE CONTRACTORS.

K. APPROVED STATE, LOCAL PLANS, OR STORM WATER PERMITS SWFWMD NOTICE OF EXEMPTION (TO BE APPLIED FOR)

III. MAINTENANCE

A. ALL OF THE CONTROLS SHALL BE MAINTAINED AT ALL TIMES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTION AND MAINTENANCE OF ALL PERMANENT AND TEMPORARY EROSION CONTROL DEVICES THROUGHOUT ALL CONSTRUCTION PHASES OF THE PROJECT. MAINTENANCE SHALL BE IN ACCORDANCE WITH PINELLAS COUNTY D.E.I. "STANDARD TECHNICAL SPECIFICATIONS FOR ROADWAY AND RELATED CONSTRUCTION", AND THE PROJECT CONSTRUCTION CONTRACT.

B. INSPECTION

THE COUNTY INSPECTOR SHALL BE RESPONSIBLE FOR COMPLETING THE NPDES / SWPPP CONSTRUCTION INSPECTION REPORT AFTER ANY 1/2" RAINFALL OR WEEKLY, IF NO RAIN EVENT OCCURRED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN RAIN GAUGES ON THE PROJECT SITE AND RECORD WEEKLY RAIN FALL.

C. NON-STORM WATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORM WATER DISCHARGES MAY OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

- WATER FROM WATER LINE FLUSHING
- PAVEMENT WASH WATERS (WHERE NO SPILL OR LEAKS OF VEHICLE AND HAZARDOUS MATERIALS HAVE OCCURRED)
- UNCONTAMINATED GROUNDWATER FROM DE-WATERING ACTIVITIES

ALL NON-STORM WATER DISCHARGES WILL BE DIRECTED TO THE SEDIMENT BASIN PRIOR TO DISCHARGE OR AS DIRECTED BY THE ENGINEER. IF CONTAMINATED SOIL OR GROUNDWATER IS ENCOUNTERED, DEATERING SHOULD CEASE IMMEDIATELY AND THE ENGINEER WILL BE CONTACTED.

D. MATERIAL MANAGEMENT PRACTICES

THE FOLLOWING ARE THE MATERIAL HANDLING PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORM WATER RUNOFF:

1. THE FOLLOWING GOOD HOUSEKEEPING PRACTICES SHALL BE FOLLOWED ON-SITE DURING THE CONSTRUCTION PROJECT.

- STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB ON SITE.
- ALL MATERIALS STORED ON SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR ORIGINAL MANUFACTURER'S LABELED CONTAINERS UNDER A ROOF OR OTHER CONTAINED ENCLOSURE.
- SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
- WHENEVER POSSIBLE, ALL OF A PRODUCT SHALL BE USED BEFORE DISPOSING OF THE CONTAINER. MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
- THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ON-SITE.

2. THESE PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS.

- PRODUCTS WILL BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RE-SEALABLE.
- SECONDARY CONTAINMENT SHALL BE PROVIDED FOR ALL OPENED CONTAINERS. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE KEPT ON-SITE ON THE CONSTRUCTION OFFICE TRAILER.
- IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS OR LOCAL STATE RECOMMENDED METHODS OF PROPER DISPOSAL SHALL BE FOLLOWED.
- THE CONTRACTOR MUST IDENTIFY A DESIGNATED FUEL TANK STORAGE AREA, AWAY FROM DRAINAGE STRUCTURES, PONDS, BASINS, AND WETLANDS, WITH SECONDARY CONTAINMENT (SPILL COLLECTION).


3. CONCRETE TRUCKS

- CONTRACTOR SHALL DESIGNATE AN AREA AWAY FROM DRAINAGE STRUCTURES, PONDS, BASINS, AND WETLANDS FOR DISCHARGE OF SURPLUS CONCRETE OR DRUM WASH WATER AND SHALL INSTALL A CONTAINMENT BERM AROUND THIS AREA TO PREVENT RUNOFF TO THE REMAINDER OF THE SITE.
- HARD DEBRIS SHALL BE DISPOSED OF BY CONTRACTOR UPON COMPLETION OF THE PROJECT.
- DISPOSAL OF CONCRETE SLURRY DIRECTLY INTO PUBLIC DRAINAGE SYSTEMS IS A VIOLATION OF THE "ILLICIT DISCHARGE" PROVISION.

4. SPILL CONTROL PRACTICES

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIALS MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES WILL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP.

- MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION CLEANUP SUPPLIES.
- ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
- THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
- SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.
- THE SPILL PREVENTION PLAN WILL BE PREPARED BY THE CONTRACTOR AND KEPT IN THE CONSTRUCTION OFFICE TRAILER AND WILL INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE ARE OTHERS. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED. ALL SPILLS AND RESPONSES WILL BE REPORTED TO THE APPROPRIATE AGENCY.
- THE SITE SUPERINTENDENT WILL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. HE WILL DESIGNATE OTHER SITE PERSONNEL WHO WILL RECEIVE SPILL PREVENTION AND CLEANUP TRAINING. THESE INDIVIDUALS WILL EACH BECOME RESPONSIBLE FOR A PARTICULAR PHASE OF PREVENTION AND CLEANUP. THE NAMES OF RESPONSIBLE SPILL PERSONNEL WILL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE OFFICE TRAILER ON SITE.
- USE AND CHARACTERISTICS OF FUEL OR CHEMICAL STORAGE TANK ON SITE SHALL COMPLY WITH ALL RELATED FEDERAL, STATE, AND LOCAL REGULATIONS. STORAGE TANKS MUST BE LOCATED AS FAR AS POSSIBLE FROM ANY DRAINAGE STRUCTURES, DITCHES, AND/OR SURFACE WATERS. IN ADDITION, THE CONTRACTOR MUST PROVIDE A SECONDARY CONTAINMENT WITH A LINER CHEMICALLY RESISTANT TO THE FUEL OR CHEMICAL STORED ON SITE. THE SECONDARY CONTAINMENT MUST BE SIZED TO CONTAIN MINIMUM OF ONE AND A HALF TIME THE TOTAL CAPACITY OF STORAGE TANK BEING USED. CONTRACTOR HAS TO PROVIDE A DAILY INSPECTION LOG FOR THE SECONDARY CONTAINMENT WITH INDICATION OF DATE, INSPECTORS NAME AND INSPECTION REPORT. FURTHERMORE, ANY CONTAMINATION HAS TO BE IMMEDIATELY CONTAINED AND THE COUNTY INSPECTOR MUST BE NOTIFIED OF THE NATURE AND EXTEND OF THE CONTAMINATION.

DATE	DESCRIPTION	DATE	PROJECT #		SURVEYED	N/A	N/A	Kisinger Campo & Associates Corp. 201 N. Franklin Street Suite 400 Tampa, FL 33602 Florida C.O.A. No. 02317	 PUBLIC WORKS DEPARTMENT ENGINEERING SERVICES 1022 26th Avenue East, Bradenton, FL 34208	STORMWATER POLLUTION PREVENTION PLAN (2)	
			SURVEY #		DESIGNED	N/A	N/A				
			SEC./TWN./RGE		DRAWN	AJS	08/2020				SHEET NO.
			SCALE		CHECKED	SAB	08/2020				18

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.