CITY OF SAFETY HARBOR (THE CITY)
SAFETY HARBOR, FLORIDA

SOLICITATION, OFFER AND AWARD FORM
INVITATION FOR BID (IFB)- 2025-PW-02

1. SOLICITATION NUMBER: IFB 2025-PW-02

2. ISSUE DATE: MARCH 28, 2025

3. FOR INFORMATION CONTACT:

NAME: Jamie Ahrens
Assistant Public Works Director

PHONE: 727-724-1550, **FAX:** 727-724-1510

E-MAIL: cahrens@cityofsafetyharbor.com

4. CAPITAL IMPROVEMENT PROJECTS:

PROJECT A: PR0057 – 032-3058-500-63.00 – Safety Harbor Pier Replacement

PROJECT B: MAR006 – 032-3058-500-63.00 – Safety Harbor Marina Replacement

5. CONFERENCE: There will be a MANDATORY PRE-BID Conference for this project on MONDAY APRIL 7, 2025, starting promptly at 9:30 AM, located at the City of Safety Harbor, Commission Chambers at 750 Main Street, Safety Harbor, FL 34695.

6. SUBMIT OFFER TO THE FOLLOWING ADDRESS:

IFB 2025-PW-02
City of Safety Harbor
Attn: Public Works Department
750 Main Street
Safety Harbor, Florida 34695

7. OFFER SUBMISSION DUE DATE AND TIME:
Sealed Bids will be received up to 2:00 PM, Eastern Standard Time, on Monday May 5, 2024, and will be publicly opened, and read aloud in the Commission Chambers in City Hall at 750 Main Street, Safety Harbor, FL 34695

8. SUBMIT WITH OFFER: Original offer including the exhibits and attachments listed on Page 2 of this form.

9. Offers will be publicly opened on Monday May 5, 2025, at 2 PM, Eastern Standard Time.

10. FIRM OFFER PERIOD: Offers shall remain firm for a period of 180 calendar days from the date specified in Block 7, above.

11. This solicitation and any resulting contract, respectively, consists of this Form and the exhibits and documents designated with a symbol ● on Page 2 of this form.

OFFER - (To be completed by Offeror)

12. DISCOUNT FOR PROMPT PAYMENT: NOT APPLICABLE

13. If this offer is accepted within the period specified in Block 10, above, the offeror agrees to fully provide the goods and/or services covered by this solicitation at the prices and timelines specified in the solicitation.

14. ACKNOWLEDGEMENT OF AMENDMENTS: The offeror acknowledges receipt of the following solicitation amendments (write in all amendment numbers and amendment dates.

Amendment Number and Date		Amendment Number and Date		Amendment Number and Date	

15. OFFEROR'S NAME AND ADDRESS: (Type or Print)

16. NAME AND TITLE OF OFFEROR'S REPRESENTATIVE (PERSON AUTHORIZED TO EXECUTE CONTRACTS): (Type or Print)

TELEPHONE:

CELL PHONE:

E-MAIL:

FAX:

17. OFFEROR'S REPRESENTATIVE SIGNATURE & DATE:

AWARD - (To be completed by City)

18. ACCEPTED AS TO:	19. TOTAL AMOUNT OF AWARD:	20. CONTRACT NUMBER:
Schedule – Bid Forms		IFB 2025-PW-02

21. SIGNATURE & CONTRACT AWARD DATE:

Signature: _____ Attest: _____ Date ___/___/___
Joe Ayoub, Mayor — Rachel Telesca, City Clerk

Approved As to Form: _____ City Attorney

	NAME	FORM DESCRIPTION	FORM #	SUBMIT WITH OFFER
●	Cover Sheet	Solicitation, Offer and Award Form	IFB 2025-PW-02	YES
●	Schedule	Schedule – Project A - Bid Form for IFB 2025-PW-02	BID FORM 'PROJECT A'	YES
●	Attachment '1' to Project A - Schedule Bid Form	Attachment '1' to Schedule Bid Form		YES
●	Schedule	Schedule – Project B -Bid Form for IFB 2025-PW-02	BID FORM 'PROJECT B'	YES
●	Attachment '2' to Project B - Schedule Bid Form	Attachment '2' to Schedule Bid Form		YES
●	Exhibit A	Representations and Certifications	A	YES
	NPDES Attachment to Exhibit A – National Pollutant Discharge Elimination System (NPDES) Document			YES
●	Exhibit B	Special Solicitation Instructions and Conditions	B	NO
●	Exhibit C	Solicitation Instructions and Conditions	C	NO
	Attachment '1' to Exhibit 'C'			YES
●	Exhibit D	Special Provisions	D	NO
●	Exhibit E	General Provisions	E	NO
●	Exhibit F	Specifications	F	NO
●	Exhibit G	Bid Bond		YES
●	Exhibit H	Payment Bond		WITHIN 10 DAYS OF AWARD
●	Exhibit I	Performance Bond		WITHIN 10 DAYS OF AWARD
		Definitions		
		PERMITS AS FOLLOWS: PROJECT A		
		Pinellas County Water & Navigation: Number WND-23-00124		Issued Date: 04/24/2023 Attached
		Florida Department of Environmental Protection :Number 29-0431248-001-EE		Issued Date: 02/28/2023 Attached
		United States Army Corps of Engineers Nation Wide Permit: Number SAJ-2013-00334 (NWP-RSS)		Issued Date: 06/06/2023 Attached
		Pinellas County Building Permit:		In progress
		PLANS – BID SET		Attached
		SPECIFICATIONS – BID SET		Attached
		GEOTECH REPORT - 03-2023		Attached
		BENTHIC RESOURCE SURVEY REPORT – 01-2023		Attached

		PERMITS AS FOLLOWS: PROJECT B		
		Florida Department of Environmental Protection :Number 52-022448-006-EE		Issued Date: 06/26/2024 Attached
		PLANS – BID SET		Attached
		SPECIFICATIONS – BID SET		Attached
		GEOTECH REPORT - 02-2024		Attached
				Attached

CITY OF SAFETY HARBOR (THE CITY)

SCHEDULE – BID FORM
Capital Improvement Project
PROJECT A: Safety Harbor Pier Replacement

CAUTION: A false statement in any offer submitted to the City may be a criminal OFFENSE.

NOTE: For Invitations for Bids the terms "Offer" and "Offeror" shall mean "Bid" and "Bidder", respectively; and for Request for Proposals the terms "Bid" and "Bidder" shall mean "Offer" and "Offeror", respectively, in this solicitation and any associated exhibits.

THE OFFEROR MUST SIGN AND DATE THIS SCHEDULE WHERE PROVIDED AND SUBMIT ALL PAGES WITH THE OFFER.
REFERENCE ATTACHMENT '1' TO THE SCHEDULE BID FORM

The line item unit price(s) must include all costs that the offeror intends to recover, such as, but not limited to: supervision, labor, equipment, materials, vehicle licensing, vehicle title, warehousing, freight, pick-up, financing, carrying charges, and all other such charges to accommodate the supplies/services and delivery requirements. No price adjustments will be made, unless specifically provided for by an additional provision included in this contract.

PROJECT A - Safety Harbor Pier Replacement						
BID ITEM NO.	**PAY ITEM NO.**	**DESCRIPTION**	**QTY**	**UNIT**	**UNIT PRICE**	**EXTENDED PRICE**
1	101-1	MOBILIZATION (10%)	1	LS	$	$
2	104-10	SEDIMENT BARRIER	200	LF	$	$
3	104-11	FLOATING TURBIDITY BARRIER	1000	LF	$	$
4	104-18	INLET PROTECTION BARRIER	2	EA	$	$
5	110-3	REMOVAL OF EXISTING STRUCTURE	1	LS	$	$
6	110-21	TREE PROTECTION BARRIER	5	EA	$	$
7	455-2-1	8" TREATED TIMBER PILES	2200	LF	$	$
8	455-2-2	10" TREATED TIMBER PILES	948	LF	$	$
9	470-1	TREATED TIMBER, STRUCTURAL (FRAMING AND ROOFING)	20.8	MB	$	$
10	470-2	COMPOSITE LUMBER (DECKING AND RAILING)	7.0	MB	$	$
11	570-1-2	PERFORMANCE TURF, SOD	11	SY	$	$
12		ALUMINUM ROOFING FOR SHADE STRUCTURE	630	SF	$	$

13		LIGHTING & ELECTRICAL	1	LS	$	$
14		FIRE-SUPPRESSION STANDPIPE	1	LS	$	$
15		INFORMATION SIGNS	1	LS	$	$

TOTAL BASE BID = $_____

FAILURE OF THE OFFERER TO PROVIDE PRICES FOR ALL LINE ITEMS LISTED ON BASE BID FORM SHALL BE CAUSE OF REJECTION OF THE ENTIRE OFFER.

NAME & TITLE OF OFFEROR'S REPRESENTATIVE: (Print or type)

_____
(Name & Title)

_____
(Offeror's Name)

SIGNATURE & DATE:

_____ __/___/___
(Signature of Offeror's Representative)

Capital Improvement Project
PROJECT A: Safety Harbor Pier Replacement

Pay Items identified below directly correspond Item Numbers identified on the **Schedule – Bid Form for PROJECT A: Safety Harbor Pier Replacement Attachment '1' to the Schedule Bid Form**

(a)

(b) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the Work and that it has investigated and satisfied itself as to the general and local conditions which can affect the Contract Work or its cost, including, but not limited to; (1) conditions bearing upon transportation, disposal, handling, and storage of materials; (2) the availability of labor, water, electric power, roads rights of way access to the work site and other lands made available by the City for this Project; (3) uncertainties of weather, flooding patterns and water drainage, or similar physical conditions at the site; (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed prior to and during work performance. The Contractor acknowledges that its undertaking to complete the Contract within the Contract Schedule includes an allowance for the normal number of days in which contract work may be partially or totally delayed because of weather during the season and at the location the Contract will be performed and that the Contractor shall not be entitled to excusable delays or compensation for such delays. The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, access to the site, and territory surrounding the site, including all exploratory work done by the City as well as from the drawings and specifications made a part of this Contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work or for proceeding to perform the work successfully without additional expense to the City.

(c) The City assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the City. Nor does the City assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers, employees, engineers or agents before the execution of this Contract, unless that understanding or representation is expressly stated in this contract.

THE FOLLOWING ARE PAY ITEM DESCRIPTIONS FOR THE BASE BID.

PART I - GENERAL

1.01 REQUIREMENTS INCLUDED

A. The scope of this section of the Contract Documents is to further define the items included in each Bid Item in the Bid Proposal section of these specifications. Payment will be made based on the specified items supplied and delivered in the description in this section for each bid item.

1.02 GENERAL

A. The total Bid Price shall cover all Work required by the Contract Documents. All costs in connection with the proper and successful completion of the Work, including furnishing all materials, equipment, supplies, and appurtenances; providing all construction equipment and tools; and performing all necessary labor and supervision to fully complete the Work, shall be included in the lump sum and unit prices bid. All Work not specifically set forth as a pay item in the Bid Form but necessary to complete the intent of the construction documents shall be considered a subsidiary obligation of Contractor and all costs in connection therewith shall be included in the prices bid.

1.03 ESTIMATED QUANTITIES

A. All estimated quantities stipulated in the Bid Form or other Contract Documents are approximate and are to be used only (a) as a basis for estimating the probable cost of the Work and (b) for the purpose of comparing the bids submitted for the Work. The actual amounts of work done and materials furnished under unit price items may differ from the estimated quantities. The basis of payment for work and materials will be the actual amount of work done and materials furnished. Contractor agrees that he will make no claim for damages, anticipated profits, or otherwise on account of any difference between the amounts of work actually performed and materials actually furnished and the estimated amounts thereof, as described in the supplementary conditions.

1.04 TAXES AND PERMITS

A. The Bidder’s attention is directed to the fact that the tax laws of the State of Florida, including but not limited to Chapter 212, Florida Statutes, apply to this bid matter and that all applicable taxes and fees shall be deemed to have been included in Bidder’s proposal.

1.05 RETAINAGE

A. Refer to General Conditions.

1.06 WORK OUTSIDE AUTHORIZED LIMITS

A. No payment will be made for work constructed outside the authorized limits of work.

1.07 PAYMENT

A. Lump Sum Items: Where payment for bid items is shown to be paid for on a lump sum basis, no separate payment will be made for any item of work required to complete the lump sum item within the limits of work shown or specified.

1. Payment shall be made at the lump sum price stated in the Bid for each item and shall be pro-rated for the actual work completed based on an approved schedule of values detailing work to be completed under the specific item.

2. Each lump sum price shall include all of the contractors' costs to complete the construction exclusive of payment items provided for elsewhere in the bid form.

B. Unit Price Bid Items: The work for each Unit Cost bid item shall be constructed as shown and described on the Drawings and Specifications.

1. Payment for Unit Cost bid items shall be paid for each unit installed and accepted by the Owner.

2. The Contractor shall not make a claim for an item not identified within the bid item descriptions but should include this cost within the most appropriate Bid Item

1.08 DESCRIPTION OF BID ITEMS

A. These payments will be subject to the standard retainage provided in the agreement. Payment of the retainage will be made after completion of the work and demobilization.

1.09 INCIDENTAL WORK

A. No separate payment will be made for the following items and the cost of such work shall be included in the applicable pay items of work.

1. Shop Drawings, Working Drawings.
2. Clearing, grubbing and grading except as hereinafter specified.
3. Cleanup and miscellaneous work

4. Testing and placing system in operation.
5. Any material and equipment required to be installed and utilized for tests.
6. Maintaining the existing quality of service during construction.
7. As-Built Record Drawings.

PROJECT A: SAFETY HARBOR PIER REPLACEMENT

BID ITEM NO.1 - MOBILIZATION

Mobilization shall be the preparatory work and operations in mobilizing for beginning work on the project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site, and for the establishment of temporary offices, storage buildings, staging areas, maintaining traffic, safety equipment and first aid supplies, sanitary and other facilities, and installation of tree protection measures as required by the Contract Documents and applicable laws and regulations. The costs of submittals, bonds, required insurance, permits and any other preconstruction expense necessary for the start of the work, excluding the cost of construction materials, shall also be included in this item. Demobilization shall be the work of removing temporary facilities from the site, cleanup and restoration. Mobilization/Demobilization shall be limited to a maximum of ten percent (10%) of the total Bid Price.

Payment for mobilization/demobilization will be made on an incremental basis in accordance with the following:

Percent of Original Contract Amount Earned	Allowable Percent of the Lump Sum Price for the Item
5	25
10	50
25	75
50	90
100	100

BID ITEM NO. 2 – SEDIMENT BARRIER

Payment for all work included in this Bid Items including furnishing, installing and routine maintenance of temporary erosion control devices. Any additional costs resulting from compliance with the requirements of this Section, other than construction, routine maintenance, and removal of temporary erosion control devices, will be included in the Contract unit prices for the item or items to which such costs are related. Payment shall represent full compensation

for all labor, materials, necessary equipment, coordination, and incidentals necessary to safely complete the work while complying to FDOT Standard Specifications Section 104, ready for approval and acceptance by the City.

BID ITEM NO. 3 – FLOATING TURBIDITY BARRIER

Payment for all work included in this Bid Items including furnishing, installing and routine maintenance of temporary erosion control devices. Any additional costs resulting from compliance with the requirements of this Section, other than construction, routine maintenance, and removal of temporary erosion control devices, will be included in the Contract unit prices for the item or items to which such costs are related. Payment shall represent full compensation for all labor, materials, necessary equipment, coordination, and incidentals necessary to safely complete the work while complying to FDOT Standard Specifications Section 104, ready for approval and acceptance by the City.

BID ITEM NO. 4 – INLET PROTECTION SYSTEM

Payment for all work included in this Bid Items including furnishing, installing and routine maintenance of temporary erosion control devices. Any additional costs resulting from compliance with the requirements of this Section, other than construction, routine maintenance, and removal of temporary erosion control devices, will be included in the Contract unit prices for the item or items to which such costs are related. Payment shall represent full compensation for all labor, materials, necessary equipment, coordination, and incidentals necessary to safely complete the work while complying to FDOT Standard Specifications Section 104, ready for approval and acceptance by the City.

BID ITEM NO. 5 – REMOVAL OF EXISTING STRUCTURE

Payment for all work included in this Bid Items will be made at the applicable Contract lump sum bid for removal and disposal of existing structure. Price and payment will be full compensation for all work of removal and disposal of the designated structure, while complying to FDOT Standard Specifications Section 110, ready for approval and acceptance by the City.

BID ITEM NO. 6 – TREE PROTECTION BARRIER

Payment for all work included, but is not limited to, under this Bid Item shall represent full compensation including all necessary hauling, furnishing equipment, Certified Arborist, equipment operation, furnishing any areas required for disposal of debris,

leveling of terrain, root pruning and tree protection.

Measurement for this bid item will be in accordance with FDOT Standard Specifications Section 110. All items are subject to approval by the Engineer and the City.

BID ITEM NO. 7 – 8" TIMBER PILES

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid per the schedule of prices for furnishing, preforming, installing, and wrappingpressure treated timber piles in accordance with FDOT Standard Specifications Section 455 asamended and modified within Tech Specs **(EXHIBIT F)** The quantity to be paid for will be per linear foot of pile installed from the elevation ofthe tip to the elevation of the cut-off.No additional allowance will be made for cut-offs.

Price and payment will be full compensation for all design, labor, equipment, and materials required for furnishing, preforming,installing, and wrapping timber piles,as well asany incidentals necessary to complete the work. Preforming pile holes, cutend treatments, pile wrapping, and fasteners shall be incidentaland included in the unit cost for this Item.

BID ITEM NO. 8 – 10" TIMBER PILES

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid per the schedule of prices for furnishing, preforming, installing, and wrapping pressure treated timber piles in accordance with FDOT Standard Specifications Section 455 as amended and modified within Tech Specs **(EXHIBIT F)** The quantity to be paid for will beper linear foot of pile installed from the elevation ofthe tip to the elevation of the cut-off. No additional allowance will be made for cut-offs.

Price and payment will be full compensation for all design, labor, equipment, and materials required for furnishing, preforming,installing, and wrapping timber piles,as well asany incidentals necessary to complete the work. Preforming pile holes, cutend treatments, pile wrapping, and fasteners shall be incidental and included in the unit cost for this Item.

BID ITEM 9 – TREATED TIMBER, STRUCTURAL (FRAMING AND ROOFING)

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid of such timber actually incorporated in and forming a part of the completed structure as listed on the Bid

Form. Prices and payments will be full compensation for all the work specified in this Section, all hardware except such plates, lag screws, and other metal parts as may be shown in the Plans to be paid for as structural steel and all paint materials and all excavation, painting, and incidentals necessary to complete the work.

Measurement for this bid item will be in accordance with FDOT Standard Specifications Section 470. All items are subject to approval by the Engineer and the City

BID ITEM NO. 10 – COMPOSITE LUMBER (DECKING AND RAILING)

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid of such timber actually incorporated in and forming a part of the completed structure as listed on the Bid Form. Prices and payments will be full compensation for all the work specified in this Section, all hardware except such plates, lag screws, and other metal parts as may be shown in the Plans to be paid for as structural steel and all paint materials and all excavation, painting, and incidentals necessary to complete the work.

Measurement for this bid item will be in accordance with FDOT Standard Specifications Section 470. All items are subject to approval by the Engineer and the City

BID ITEM NO. 11 – PERFORMANCE TURF, SOD

Payment will be full compensation for all work and materials specified in this FDOT Sandard Specifications Section 570 and as shown on the Contract Drawings and listed on the Bid Form. All items are subject to approval by the Engineer and the City

BID ITEM NO. 12 – ALUMINUM ROOFING FOR SHADE STRUCTURE

Payment will be full compensation for all work included in this Bid Items including all design, labor, equipment, and materials required for furnishing and installing pre-finished standing seem aluminum roof system for the shade structure on the pier as shown on the Contract Drawings and listed on the Bid Form as well as any incidentals necessary to complete the work in accordance with Tech Specs **(EXHIBIT F).** All items are subject to approval by the Engineer and the City.

BID ITEM NO. 13 – LIGHTING AND ELECTRICAL

Payment will be full compensation for all work included in this Bid Item shall be made at the applicable Contract unit price for all design, labor, equipment, and materials required for furnishing and installing

the lighting and electrical system, as well as any incidentals necessary to complete the work in accordance with Contract Drawings and Tech Specs **(EXHIBIT F).** All items are subject to approval by the Engineer and the City.

BID ITEM NO. 14 – FIRE-SUPPRESSION STANDPIPE

Payment for all work included in these Bid Items will be made at the applicable Contract unit price bid will be full compensation for furnishing and installing all components of the fire-suppression manual wet Class I standpipe system. All design, labor, equipment, materials, and testing required for furnishing and installing the fire-suppression standpipe system, as well as any incidentals necessary to complete the work in accordance with Contract Drawings and Tech Specs **(EXHIBIT F).** All items are subject to approval by the Engineer and the City.

BID ITEM NO. 15 – INFORMATIONAL SIGNS

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price will be full compensation for all design, labor, equipment, and materials required for furnishing and installing the informational signs, as well as any incidentals necessary to complete the work in accordance with Contract Drawings and Tech Specs **(EXHIBIT F).** All items are subject to approval by the Engineer and the City.

END OF SECTION

NAME & TITLE OF OFFEROR'S REPRESENTATIVE: (Print or type)

SIGNATURE & DATE:

_____/___/___

(Name & Title)

(Signature of Offeror's Representative)

_____

(Offeror's Name)

CITY OF SAFETY HARBOR (THE CITY)

SCHEDULE – BID FORM
Capital Improvement Project
PROJECT B: Safety Harbor Marina Replacement

CAUTION: A false statement in any offer submitted to the City may be a criminal OFFENSE.

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THE OFFEROR MUST SIGN AND DATE THIS SCHEDULE WHERE PROVIDED AND SUBMIT ALL PAGES WITH THE OFFER.
REFERENCE ATTACHMENT '2' TO THE SCHEDULE BID FORM

The line item unit price(s) must include all costs that the offeror intends to recover, such as, but not limited to: supervision, labor, equipment, materials, vehicle licensing, vehicle title, warehousing, freight, pick-up, financing, carrying charges, and all other such charges to accommodate the supplies/services and delivery requirements. No price adjustments will be made, unless specifically provided for by an additional provision included in this contract.

PROJECT B - Safety Harbor Marina Replacement						
BID ITEM NO.	**PAY ITEM NO.**	**DESCRIPTION**	**QTY**	**UNIT**	**UNIT PRICE**	**EXTENDED PRICE**
1	101-1	MOBILIZATION (10%)	1	LS	$	$
2	102-1	MAINTENANCE OF TRAFFIC	1	LS	$	$
3	104-10	SEDIMENT BARRIER	340	LF	$	$
4	104-11	FLOATING TURBIDITY BARRIER	255	LF	$	$
5	110-1-1	CLEARING & GRUBBING	1	LS	$	$
6	110-82	REMOVAL & DISPOSE OF STRUCTURAL TIMBER	20.9	MB	$	$
7	110-82	REMOVAL & DISPOSE OF STRUCTURAL TIMBER – STORM DAMAGE	7.8	MB	$	$
8	350-5	CLEANING & SEALING JOINT – CONCRETE PAVEMENT	30	LF	$	$
9	515-2-311	PEDESTRIAN/BICYCLE RAILING, ALUMINUM ONLY, 42" TYPE 1	21	LF	$	$
10	550-10-222	FENCING, TYPE B, 5.1'-6.0', W/ VINYL COATING	340	LF	$	$
11	550-60-222	FENCE GATE, TYPE B, DOUBLE, 6.1'-12.0' OPENING	1	EA	$	$

12	700-1-11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF	4	EA	$	$
13	700-1-50	SINGLE POST SIGN, RELOCATE	1	EA	$	$
14	999-90	SECURITY GATE, 6-FT	1	EA	$	$
15	999-91	CLEATS	56	EA	$	$
16	999-92	SAFETY LADDER	20	EA	$	$
17	470-1	TREATED STRUCTURAL TIMBER (FRAMING)	7.3	MB	$	$
18	999-93	8” TREATED TIMBER PILING	5680	LF	$	$
19	999-94	10” TREATED TIMBER PILING	1239	LF	$	$
20	999-95	PILE WRAPS	288	EA	$	$
21	999-96	PILE CAPS	220	EA	$	$
22	999-97	COMPOSITE DECKING (ALTERNATIVE 1)	4263	SF	$	$
23	470-1-9	TIMBER DECKING (ALTERNATIVE 2)	6.4	MB	$	$
24		WATER SERVICE	1014	LF	$	$
25		UTILITY PEDESTAL	23	EA	$	$
26		FIRE PROTECTION	672	LF	$	$
27		PANELBOARDS	4	EA	$	$
28		SUBFEED CIRCUIT BREAKERS	2	EA	$	$
29		GROUND FAULT PROTECTION PANELS	3	EA	$	$
30		SURGE PROTECTION DEVICES	3	EA	$	$
31		CONDUIT AND CONDUCTORS	1	LS	$	$
32		MISC. ELECTRICAL ITEMS (I.E. JUNCTION BOXES, FITTINGS, BUSHINGS, STRUT CHANNEL)	1	LS	$	$

33		DEMOLITION LABOR	1	LS	$	$

TOTAL BASE BID = $_____

FAILURE OF THE OFFERER TO PROVIDE PRICES FOR ALL LINE ITEMS LISTED ON BASE BID FORM SHALL BE CAUSE OF REJECTION OF THE ENTIRE OFFER.

NAME & TITLE OF OFFEROR'S REPRESENTATIVE:
(Print or type)

_____
(Name & Title)

_____
(Offeror's Name)

SIGNATURE & DATE:

_____ __/___/___
(Signature of Offeror's Representative)

Capital Improvement Project
PROJECT B: Safety Harbor Marina Replacement

Pay Items identified below directly correspond Item Numbers identified on the **Schedule – Bid Form for PROJECT B: Safety Harbor Marina Replacement Attachment '2' to the Schedule Bid Form**

(a)

(b) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the Work and that it has investigated and satisfied itself as to the general and local conditions which can affect the Contract Work or its cost, including, but not limited to; (1) conditions bearing upon transportation, disposal, handling, and storage of materials; (2) the availability of labor, water, electric power, roads rights of way access to the work site and other lands made available by the City for this Project; (3) uncertainties of weather, flooding patterns and water drainage, or similar physical conditions at the site; (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed prior to and during work performance. The Contractor acknowledges that its undertaking to complete the Contract within the Contract Schedule includes an allowance for the normal number of days in which contract work may be partially or totally delayed because of weather during the season and at the location the Contract will be performed and that the Contractor shall not be entitled to excusable delays or compensation for such delays. The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, access to the site, and territory surrounding the site, including all exploratory work done by the City as well as from the drawings and specifications made a part of this Contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work or for proceeding to perform the work successfully without additional expense to the City.

(c) The City assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the City. Nor does the City assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers, employees, engineers or agents before the execution of this Contract, unless that understanding or representation is expressly stated in this contract.

THE FOLLOWING ARE PAY ITEM DESCRIPTIONS FOR THE BASE BID.

PART I - GENERAL

1.01 REQUIREMENTS INCLUDED

A. The scope of this section of the Contract Documents is to further define the items included in each Bid Item in the Bid Proposal section of these specifications. Payment will be made based on the specified items supplied and delivered in the description in this section for each bid item.

1.02 GENERAL

A. The total Bid Price shall cover all Work required by the Contract Documents. All costs in connection with the proper and successful completion of the Work, including furnishing all materials, equipment, supplies, and appurtenances; providing all construction equipment and tools; and performing all necessary labor and supervision to fully complete the Work, shall be included in the lump sum and unit prices bid. All Work not specifically set forth as a pay item in the Bid Form but necessary to complete the intent of the construction documents shall be considered a subsidiary obligation of Contractor and all costs in connection therewith shall be included in the prices bid.

1.03 ESTIMATED QUANTITIES

A. All estimated quantities stipulated in the Bid Form or other Contract Documents are approximate and are to be used only (a) as a basis for estimating the probable cost of the Work and (b) for the purpose of comparing the bids submitted for the Work. The actual amounts of work done and materials furnished under unit price items may differ from the estimated quantities. The basis of payment for work and materials will be the actual amount of work done and materials furnished. Contractor agrees that he will make no claim for damages, anticipated profits, or otherwise on account of any difference between the amounts of work actually performed and materials actually furnished and the estimated amounts thereof, as described in the supplementary conditions.

1.04 TAXES AND PERMITS

A. The Bidder’s attention is directed to the fact that the tax laws of the State of Florida, including but not limited to Chapter 212, Florida Statutes, apply to this bid matter and that all applicable taxes and fees shall be deemed to have been included in Bidder’s proposal.

1.05 RETAINAGE

A. Refer to General Conditions.

1.06 WORK OUTSIDE AUTHORIZED LIMITS

A. No payment will be made for work constructed outside the authorized limits of work.

1.07 PAYMENT

A. Lump Sum Items: Where payment for bid items is shown to be paid for on a lump sum basis, no separate payment will be made for any item of work required to complete the lump sum item within the limits of work shown or specified.

1. Payment shall be made at the lump sum price stated in the Bid for each item and shall be pro-rated for the actual work completed based on an approved schedule of values detailing work to be completed under the specific item.

2. Each lump sum price shall include all of the contractors' costs to complete the construction exclusive of payment items provided for elsewhere in the bid form.

B. Unit Price Bid Items: The work for each Unit Cost bid item shall be constructed as shown and described on the Drawings and Specifications.

1. Payment for Unit Cost bid items shall be paid for each unit installed and accepted by the Owner.

2. The Contractor shall not make a claim for an item not identified within the bid item descriptions but should include this cost within the most appropriate Bid Item

1.08 DESCRIPTION OF BID ITEMS

A. These payments will be subject to the standard retainage provided in the agreement. Payment of the retainage will be made after completion of the work and demobilization.

1.09 INCIDENTAL WORK

A. No separate payment will be made for the following items and the cost of such work shall be included in the applicable pay items of work.

1. Shop Drawings, Working Drawings.
2. Clearing, grubbing and grading except as hereinafter specified.
3. Cleanup and miscellaneous work

4. Testing and placing system in operation.
5. Any material and equipment required to be installed and utilized for tests.
6. Maintaining the existing quality of service during construction.
7. As-Built Record Drawings.

PROJECT B: SAFETY HARBOR MARINA REPLACEMENT

BID ITEM NO.1 - MOBILIZATION

Mobilization shall be the preparatory work and operations in mobilizing for beginning work on the project, including, but not limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site, and for the establishment of temporary offices, storage buildings, staging areas, maintaining traffic, safety equipment and first aid supplies, sanitary and other facilities, and installation of tree protection measures as required by the Contract Documents and applicable laws and regulations. The costs of submittals, bonds, required insurance, permits and any other preconstruction expense necessary for the start of the work, excluding the cost of construction materials, shall also be included in this item. Demobilization shall be the work of removing temporary facilities from the site, cleanup and restoration. Mobilization/Demobilization shall be limited to a maximum of ten percent (10%) of the total Bid Price.

Payment for mobilization/demobilization will be made on an incremental basis in accordance with the following:

Percent of Original Contract Amount Earned	Allowable Percent of the Lump Sum Price for the Item
5	25
10	50
25	75
50	90
100	100

BID ITEM NO.2 – MAINTENANCE OF TRAFFIC

Payment for all work included in this Bid Items will be made at the applicable Contract lump sum bid for the maintenance of traffic during the construction of the proposed improvements. Payment shall represent full compensation for all labor, materials, necessary equipment, coordination, and incidentals necessary to safely complete the work while complying to FDOT Design Standards Index 102-600 Series, ready for approval and acceptance by the City.

Measurement for periodic payments of this lump sum bid item will be in accordance with the approved Schedule of Values, to be supplied by the Contractor In accordance with the Contract Documents.

BID ITEM NO. 3 – SEDIMENT BARRIER

Payment for all work included in this Bid Items including furnishing, installing and routine maintenance of temporary erosion control devices. Any additional costs resulting from compliance with the requirements of this Section, other than construction, routine maintenance, and removal of temporary erosion control devices, will be included in the Contract unit prices for the item or items to which such costs are related. Payment shall represent full compensation for all labor, materials, necessary equipment, coordination, and incidentals necessary to safely complete the work while complying to FDOT Standard Specifications Section 104, ready for approval and acceptance by the City.

BID ITEM NO. 4 – FLOATING TURBIDITY BARRIER

Payment for all work included in this Bid Items including furnishing, installing and routine maintenance of temporary erosion control devices. Any additional costs resulting from compliance with the requirements of this Section, other than construction, routine maintenance, and removal of temporary erosion control devices, will be included in the Contract unit prices for the item or items to which such costs are related. Payment shall represent full compensation for all labor, materials, necessary equipment, coordination, and incidentals necessary to safely complete the work while complying to FDOT Standard Specifications Section 104, ready for approval and acceptance by the City.

BID ITEM NO. 5 – CLEARING AND GRUBBING

Payment for all work included under this Bid Item shall be quantified by the Contractor and paid for as a lump sum amount for all of the areas that will require clearing and grubbing for the pipe installation and in accordance with the plans and specifications. Clearing and grubbing shall include the removal and disposal of trees, tree roots, rock, abandoned pipe and other features not part of the proposed improvements. The Contractor shall include the cost of any and all permitting required for the burning or disposal of removed trees and vegetation.

The Contractor will be responsible for making their own determination as to the quantity of clearing and grubbing.

BID ITEM NO. 6 – REMOVAL & DISPOSE OF STRUCTURAL TIMBER

Payment for all work included in this Bid Items will be made at the applicable Contract unit bid price for removal and disposal of existing Structural timber. Price and payment will be full compensation for all work of removal and disposal of the designated structure, while complying to FDOT Standard Specifications Section 110, ready for approval and acceptance by the City.

BID ITEM NO. 7 – REMOVAL & DISPOSE OF STRUCTURAL TIMBER-STORM DAMAGE

Payment for all work included in this Bid Items will be made at the applicable Contract unit bid price for removal and disposal of existing Structural timber. Price and payment will be full compensation for all work of removal and disposal of the designated structure, while complying to FDOT Standard Specifications Section 110, ready for approval and acceptance by the City.

BID ITEM NO. 8 – CLEANING & SEALING JOINT – CONCRETE PAVEMENT

Payment for all work included, but is not limited to, under this Bid Item shall represent full compensation including any preparation of he subgrade not included in the work to be paid for under another Contract item

Measurement for this bid item will be in accordance with FDOT Standard Specifications Section 350. All items are subject to approval by the Engineer and the City.

BID ITEM NO. 9 – PEDESTRIAN/BICYBLE RAILING, ALUMINUM ONLY, 42" TYPE 1

Payment for all work included in this Bid Items will be the plan quantity, in linear feet, installed and accepted. The quantity will be measured along the centerline of the top rail, while complying to FDOT Standard Specifications Section 515, ready for approval and acceptance by the City.

BID ITEM NO. 10 – FENCING, TYPE B, 5.1'-6.0', W/ VINYL COATING

Payment for all work included in this Bid Items will be the The length of fence to be paid for will be plan quantity completed and accepted. Measurement for resetting fence will be the actual length of existing fence reset, including gates when applicable. while complying to

FDOT Standard Specifications Section 550, ready for approval and acceptance by the City.

BID ITEM NO. 11 – FENCE GATE, TYPE B, DOUBLE 6.1'-12.0' OPENING

Payment for all work included in this Bid Items will be the The length of fence to be paid for will be plan quantity completed and accepted. Measurement for resetting fence will be the actual length of existing fence reset, including gates when applicable. while complying to FDOT Standard Specifications Section 550, ready for approval and acceptance by the City.

BID ITEM NO. 12 – SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price will be full compensation for all design, labor, equipment, and materials required for furnishing and installing the informational signs, as well as any incidentals necessary to complete the work while complying to FDOT Standard Specifications Section 700, ready for approval and acceptance by the City.

BID ITEM NO. 13 – SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12 SF

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price will be full compensation for all design, labor, equipment, and materials required for relocating the informational signs, as well as any incidentals necessary to complete the work while complying to FDOT Standard Specifications Section 700, ready for approval and acceptance by the City.

BID ITEM NO. 14 – SECURITY GATE, 6-FT

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price will be full compensation for all labor and material required for installing security gate as noted in Contract Drawings. All items are subject to approval by the Engineer and the City

BID ITEM NO. 15 – CLEATS

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price will be full compensation for all labor and material required for installing cleats as noted in Contract Drawings. All items are subject to approval by the Engineer and the City

BID ITEM NO. 16 – SAFETY LADDER

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price will be full compensation for all labor and material required for installing safety ladder as noted in Contract Drawings. All items are subject to approval by the Engineer and the City

BID ITEM NO. 17 – TREATED STRUCTURAL TIMBER (FRAMING)

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid of such timber actually incorporated in and forming a part of the completed structure as listed on the Bid Form. Prices and payments will be full compensation for all the work specified in this Section, all hardware except such plates, lag screws, and other metal parts as may be shown in the Plans to be paid for as structural steel and all paint materials and all excavation, painting, and incidentals necessary to complete the work.

Measurement for this bid item will be in accordance with FDOT Standard Specifications Section 470. All items are subject to approval by the Engineer and the City

BID ITEM NO. 18 – 8” TIMBER PILES

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid per the schedule of prices for furnishing, preforming and installing,treated timber piles in accordance with the Contract Drawings. The quantity to be paid for will be per linear foot of pile installed from the elevation ofthe tip to the elevation of the cut-off. No additional allowance will be made for cut-offs.

BID ITEM NO. 19 – 10” TIMBER PILES

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid per the schedule of prices for furnishing, preforming and installing,treated timber piles in accordance with the Contract Drawings. The quantity to be paid for will be per linear foot of pile installed from the elevation ofthe tip to the elevation of the cut-off. No additional allowance will be made for cut-offs.

BID ITEM NO. 20 – PILE WRAPS

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price will be full compensation for all labor and material required for installing pile wraps as noted in Contract Drawings. All items are subject to approval by the Engineer and the City

BID ITEM NO. 21 – PILE CAPS

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price will be full compensation for all labor and material required for installing pile caps as noted in Contract Drawings. All items are subject to approval by the Engineer and the City

BID ITEM NO. 22 – COMPOSITE DECKING (ALTERNATIVE 1)

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price will be full compensation for all labor and material required for installing composite decking as noted in Contract Drawings. All items are subject to approval by the Engineer and the City

BID ITEM NO. 23 – TIMBER DECKING (ALTERNATIVE 2)

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price bid of such timber actually incorporated in and forming a part of the completed structure as listed on the Bid Form. Prices and payments will be full compensation for all the work specified in this Section, and incidentals necessary to complete the work. Measurement for this bid item will be in accordance with FDOT Standard Specifications Section 470. All items are subject to approval by the Engineer and the City

BID ITEM NO. 24 – WATER SERVICE

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price will be full compensation for all labor and material required for installing water service as noted in Contract Drawings or according to City Details. All items are subject to approval by the Engineer and the City

BID ITEM NO. 25 – UTILITY PEDESTAL

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price will be full compensation for all labor and material required for installing utility pedestal as noted in Contract Drawings. All items are subject to approval by the Engineer and the City

BID ITEM NO. 26 –FIRE PROTECTION

Payment for all work included in these Bid Items will be made at the applicable Contract unit price bid will be full compensation for furnishing and installing all components of the fire-suppression system. All design, labor, equipment, materials, and testing required for furnishing and installing the fire-suppression standpipe system, as well as any incidentals necessary to complete the work in accordance with Contract Drawing**.** All items are subject to approval by the Engineer and the City.

BID ITEM NO. 27 – PANEL BOARDS

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price will be full compensation for all labor and material required for installing panel boards as noted in Contract Drawings. All items are subject to approval by the Engineer and the City

BID ITEM NO. 28 – SUBFEED CIRCUIT BREAKERS

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price will be full compensation for all labor and material required for installing subfeed circuit breakers as noted in Contract Drawings. All items are subject to approval by the Engineer and the City

BID ITEM NO. 29 – GROUND FAULT PROTECTION PANELS

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price will be full compensation for all labor and material required for installing ground fault protection panels as noted in Contract Drawings. All items are subject to approval by the Engineer and the City

BID ITEM NO. 30 – SURGE PROTECTION DEVICES

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price will be full compensation for all labor and material required for installing surge protection devices as noted

in Contract Drawings. All items are subject to approval by the Engineer and the City

BID ITEM NO. 31 – CONDUIT AND CONDUCTORS

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price will be full compensation for all labor and material required for installing conduit and conductors as noted in Contract Drawings. All items are subject to approval by the Engineer and the City

BID ITEM NO. 32 – MISC ELECTRICAL ITEMS

Payment for all work included in this Bid Item shall be made at the applicable Contract unit price will be full compensation for all labor and material required for installing subfeed circuit breakers as noted in Contract Drawings. All items are subject to approval by the Engineer and the City

BID ITEM NO. 33 – DEMOLITION LABOR

Payment for all work included under this Bid Item shall be quantified by the Contractor and paid for as a lump sum amount for all of the for removal and disposal of existing MEP components. Price and payment will be full compensation for all work of removal and disposal of the designated components.

END OF SECTION

NAME & TITLE OF OFFEROR'S REPRESENTATIVE: (Print or type)

SIGNATURE & DATE:

_____/___/___

(Name & Title)

(Signature of Offeror's Representative)

_____

(Offeror's Name)

CITY OF SAFETY HARBOR (THE CITY)

EXHIBIT A
REPRESENTATIONS AND CERTIFICATIONS

** NOTE: THIS FORM MUST BE COMPLETED AND RETURNED WITH THE OFFER **

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REPRESENTATIONS

1. Prohibition Against Contingent Fee

Except for full-time bona fide employees working solely for the Offeror, the Offeror represents as part of its offer that it (Mark one with an "X"):

☐ has ☐ has not

been employed or retained any company or persons to solicit or obtain this contract, and (Mark one with an "X"):

☐ has ☐ has not

paid or agreed to pay any person or company employed or retained to solicit or obtain this contract any commission, percentage, brokerage, or other fee contingent upon or resulting from the award of this contract.

2. Interest of Public Officers/Covenant against Gratuities

The Offeror represents as part of its offer that no employee, official, or City Commissioner is or will be pecuniarily interested or benefited directly or indirectly in this contract. The Offeror further represents and warrants that it has not offered or given gratuities (in the form of entertainment, gifts, or otherwise) to any employee, official, or City Commissioner with a view toward securing favorable treatment in the awarding, amending, or evaluating the performance of any contract resulting from the solicitation. For breach of any representation or warranty in this clause, the City shall have the right to terminate this contract without liability and/or have recourse to any other remedy it may have at law.

3. Parent Company and Identifying Data

(a) The Offeror represents as part of its offer that it (Mark one with an "X"):

☐ is ☐ is not

owned or controlled by a parent company. A parent company, for the purpose of this provision, is one that owns or controls

the activities and basic business policies of the Offeror. To own the Offeror means that the parent company must own more than 50 percent of the voting rights in the Offeror. A company may control an Offeror as a parent even though not meeting the requirements for such ownership if the company is able to formulate, determine, or veto basic policy decisions of the Offeror through the use of dominant minority voting rights, use of proxy voting, or otherwise.

(b) If the Offeror is not owned or controlled by a parent company, it shall insert its own Employer's Identification Number below:

(c) If the Offeror is owned or controlled by a parent company, it shall enter in the blocks below the name and main office address of the parent company, and the parent company's Employer's Identification Number.

NAME OF PARENT COMPANY AND MAIN OFFICE ADDRESS (INCLUDE ZIP AND PHONE):

PARENT COMPANY'S EMPLOYER'S IDENTIFICATION #:

4. Type of Business

(a) The Offeror represents as part of its offer that it operates as (Mark one with an "X"):

□ an individual □ a sole proprietorship

□ a partnership □ a corporation

□ another entity _____.

(b) If incorporated, under the laws of the State of:

(c) Age of the Offeror: __ years, __ months

(d) Previous year's annual gross receipts:

□ less than $500K □ $500K - $2 mil. □ $2 mil. - $5 mil. □ more than $5 mil.

CERTIFICATIONS

5. Certification of Independent Price Determination

(a) By submission of this offer, the Offeror certifies, and in the case of a joint offer, each party thereto certifies as to its own organization, that in connection with this procurement:

(1) The prices in this offer have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other Offeror or with any competitor.

(2) Unless otherwise required by law, the prices which have been quoted in this offer have not been knowingly disclosed by the Offeror and will not knowingly be disclosed by the Offeror prior to the opening (in the case of an

advertised procurement) or prior to award (in the case of a negotiated procurement), directly or indirectly to any other Offeror or to any competitor; and

(3) No attempt has been made or will be made by the Offeror to induce any other person or firm to submit or not to submit an offer for the purpose of restricting competition.

(b) Each person signing this offer certifies that:

(1) He/she is the person in the Offeror's organization responsible within that organization for the decision as to the prices being offered herein and that he has not participated, and will not participate, in any action contrary to (a)(1) through (a)(3) above; or

(2) He/she: (i) is not the person in the Offeror's organization responsible within that organization for the decision as to the prices being offered herein but that he has been authorized in writing to act as an agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to (a)(1) through (a)(3) above, and as their agent does hereby so certify; and (ii) has not participated, and will not participate, in any action contrary to (a)(1) through (a)(3) above.

6. Collusion & Interest of Offeror

By offering a submission to this request the Offeror certifies:

(a) No attempt has been made or will be made by the Offeror to induce any other person or entity to submit or not to submit an offer for the purpose of restricting competition;

(b) The only person interested in this contract as principal or principals is/are named therein and that no person other than therein mentioned has any interest in this contract to be entered into; and

(c) The Offeror warrants that he or she has not employed or retained any company or person, other than a bona fide employee working solely for the Offeror, to solicit or secure this agreement and that it has not paid or agreed to pay any person, company, corporation, individual, or firm, other than a bona fide employee working solely for the Offeror, any fee, commission, percentage, gift or other consideration contingent upon or resulting from the award or making of this agreement.

7. Communication Policy and Certification

(a) All oral and written communications with the City regarding this solicitation should be exclusively with the Contracting Officer identified in this solicitation, or with his or her designee. Discussions or communications with any other person could result in disclosure of proprietary or other competitive sensitive information or otherwise create the appearance of impropriety or unfair competition and, thereby, compromise the integrity of the City's procurement system.

(b) By submission of this offer, the Offeror certifies that it has not, and will not prior to contract award, communicate orally or in writing with any City employee or other representative (including contractors, or consultants) other than the Contracting Officer listed in the solicitation or his or her designee, except as described below: (CHECK "NONE" IF NONE EXISTS.)

☐ **NONE**

Name of City Representative	Date and Subject of Communication

(c) This certification concerns a material representation of fact upon which reliance will be placed in awarding a contract. If it is later determined that the Offeror knowingly rendered an erroneous certification, in addition to any other remedies the City may have, the City may terminate the contract resulting from this solicitation for default and/or recommend that the Offeror be debarred or suspended from doing business with the City and/or have recourse to any other remedy it may have at law.

(d) The Offeror shall provide immediate written notice to the City if, at any time prior to contract award, he/she learns that its certification was, or a subsequent communication makes, the certification erroneous.

8. Conflict of Interest Certification

By submission of this offer, I certify that:

(a) I have read and understand the Solicitation Instructions and Conditions clause entitled "Code of Ethics." that will be incorporated into any contract resulting from this solicitation. I further understand that the pecuniary interest in that clause includes employment relationships.

(b) The requirements of this certification have been passed through to all first-tier subcontractors or subconsultants anticipated to be used at the time of the submission of my offer.

9. Non-Discrimination Assurance

The Offeror certifies that it will not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The Offeror understands that it is required to insert such a certification in all subcontracts and purchase orders. Failure by the Offeror to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the City deems appropriate. The Offeror further agrees by submitting this offer that it will include this certificate, without modification, in all subcontracts and purchase orders.

10. Drug-Free Workplace

(a) Equal preference shall be given to vendors submitting a certification with their offer certifying that they have a drug-free workplace program in accordance with Section 287.087, Florida Statute.

(b) Whenever two or more offers are equal with respect to price, quality and services are received, an offer received from a business that certifies that it has implemented a Drug-Free Workplace Program shall:

(i) Publish a statement notifying employees that the unlawful manufacturer, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(ii) Inform employees about the dangers of drug abuse in the workplace, the business' policy of maintaining a drug-free workplace, and any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations;

(iii) Give each employee engaged in providing the commodities or contractual services that are under solicitation, a copy of the statement specified in paragraph (a);

(iv) In the statement specified in paragraph (a), notifying the employees that, as a condition of working on the commodities or contractual services that are under solicitation, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction;

(v) Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by an employee who is so convicted; and

(vi) Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

(c) As the person authorized to sign this statement, I certify and state under oath that this firm complies fully with the above requirements.

11. The Offeror affirms and declares:

(a) That the Offeror is licensed to do business within the State of Florida and the City of Safety Harbor, Florida.

(b) That the Offeror is registered with the Pinellas County Construction Licensing Board in the areas required to construct the project.

(c) That the Offeror has the capability to assure completion of the required services within the time specified under this contract.

(d) That the Offeror presently has necessary facilities, financial resources and licenses to complete the work in a satisfactory manner and within the required time.

(e) The Offeror will perform a minimum of fifty percent (50%) of the contracted work with its own workforce.

(f) That the Offeror is of lawful age and that no other person, firm or corporation has any interest in this solicitation or any impending contract thereof.

(g) That the Offeror is not in arrears to the City upon debt or contract and is not defaulting as surety or otherwise upon any obligation to the City.

(h) Upon award of this solicitation, the Offeror acknowledges and agrees that its signature on all required forms constitutes a binding contract on the terms stated herein effective upon award.

12. Compliance with Occupational Safety and Health Act (O.S.H.A.)

In instances where such is applicable due to the nature of the work with which this Contract is concerned, all material, equipment, etc., as proposed, offered, and utilized in performance of the contract by the Offeror must meet and conform to all O.S.H.A. requirements; the Offeror's signature upon the bid form submitted is hereby considered a certification of such fact.

13. National Pollutant Discharge Elimination System (NPDES).

The Offeror represents and warrants that it has received and agrees to be bound by the NPDES best management practices contractor education and training as set forth and distributed by the City, which may be amended by the City from time to time. Refer to NPDES Attachment to Exhibit 'A'. Must be signed by Contractor.

14. Florida Trench Safety Act

The undersigned acknowledges the requirements of the Florida TRENCH Safety Act, Section 553.60 *et. seq.* and hereby commits the Offeror to the following in the performance of the work in the event that the subject contract involves dredging a trench of more than five (5) feet.
(a) The Offeror further acknowledges that the Florida Trench Safety Act establishes the federal excavation safety standards set forth at 29 CFT Part 1926, Subpart P, as the state standard.

(b) The Offeror shall comply with all applicable excavation/trench safety standards.

(c) The Offeror shall consider the geotechnical data available from the City, if any, the Offeror's own sources, and all other relevant information in its design of the trench safety system to be employed on the subject project. The Offeror acknowledges sole responsibility for the selection of the data on which it relies in designing the safety system, as well as for the system itself.

(d) The amount that the Offeror has set forth for pipe installation includes the following excavation/trench safety measures and the linear feet of trench excavated under each safety measure. These units, costs, and unit prices shall be disclosed solely for the purpose of compliance with procedural requirements of the Act. No adjustment to the Contract time or price shall be made for any difference in the number of linear feet of trench excavation, except as may be otherwise provided in this Contract.

	Trench Safety Measure (Description)	Units of Measure (LF, SF)	Unit (Quantity)	Unit Cost	Extended Cost
(i)					
(ii)					
(iii)					
(iv)					

(e) For Information Only, Not for Payment Purposes $_____. Failure to complete the above may result in the bid being declared non-responsive. This cost disclosure may be supplemented as necessary.

(f) The amount disclosed as the cost of compliance with the applicable trench safety requirements does not constitute the extent of the Offeror's obligation to comply with said standards. Offeror shall expend additional sums at no additional cost to the City, if necessary, to comply with the Florida TRENCH Safety Act (except as may otherwise be provided).

(g) Acceptance of the offer to which this certification and disclosure applies in no way represents that the City or its representatives have evaluated and thereby determined that the above costs are adequate to comply with the applicable trench safety requirements nor does it in any way relieve the Offeror of its sole responsibility to comply with the applicable trench safety requirements.

15. U.S. Department of Homeland Security Employment Eligibility

Effective January 1, 2021, the Contractor shall use the U.S. Department of Homeland Security's E-verify system to verify the employment eligibility of all new employees hired by offeror during the contract term who perform employment duties under any resulting contract to this solicitation and that any subcontracts will include an express requirement that subcontractors performing work or providing services pursuant to any resulting contract to this solicitation utilize the E-verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term.

16. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion

(1) The offeror certifies to the best of its knowledge and belief that it and its principals:

(i) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any governmental department or agency;

(ii) have not within a three-year period preceding this offer been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes, or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(iii) are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission of any of the offenses enumerated in paragraph (1)(ii) of this certification; and

(iv) have not within a three-year period preceding this offer had one or more public transactions (federal, state, or local) terminated for cause or default.

(2) Where the offeror is unable to certify to any of the statements in this certification, the offeror shall attach an explanation.

17. Scrutinized Companies Certification

By executing this certification, the contract associated with this solicitation and each and every renewal thereof (if renewal is separately provided for herein), pursuant to section 287.135, Florida Statutes, the offeror certifies, represents, and warrants that: (a) it is not on the Scrutinized Companies with Activities in Sudan List, (b) it is not on the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, (c) that it does not have business operations in Cuba or Syria, and (d) that it is not participating in a boycott of Israel, and that all such certifications are true as of the time offeror submitted its bid or proposal and as of the effective date of any renewal. Notwithstanding anything contained in this solicitation to the contrary, the City may terminate the contract resulting from this solicitation immediately if: (1) the offeror is found to have submitted a false certification regarding (a) – (d) above in accordance with section 287.135(5), Florida Statutes, or (2) the offeror is found to have been placed on the Scrutinized Companies that Boycott Israel List as that term is defined and such list is maintained pursuant to Section 287.135, Florida Statutes, or is otherwise engaged in a boycott of Israel. Such termination shall be in addition to any and all remedies available to the City at law. The provisions of this section shall only apply if the contract total is in excess of one million U.S. dollars ($1,000,000.00).

18. Foreign Country of Concern

Pursuant to Section 286.101, Florida Statutes, Offeror shall disclose any current or prior interest of, any contract with, or any grant or gift received from a Foreign Country of Concern, as defined below, if such interest, contract, or grant or gift has a value of $50,000 or more and such interest existed at any time or such contract or grant or gift was received or in force at any time during the previous five (5) years. For purposes of this section, "Foreign Country of Concern" means the People's Republic of China, the Russian Federation, the Islamic Republic of Iran, the Democratic People's Republic of Korea, the Republic of Cuba, the Venezuelan regime of Nicolas Maduro, or the Syrian Arab Republic, including any agency of or any other entity under significant control of such foreign country of concern. Offeror's disclosure shall include the name and mailing address of the disclosing entity, the amount of the contract or grant or gift or the value of the interest disclosed, the applicable foreign country of concern and, if applicable, the date of termination of the contract or interest, the date of receipt of the grant or gift, and the name of the agent or controlled entity that is the source or interest holder. Offeror represents that within one (1) year before proposing any contract to the City, Offeror provided a copy of such disclosure to the Florida Department of Financial Services.

****

SIGNATURE BLOCK FOR ALL REPRESENTATIONS & CERTIFICATIONS

****

NAME OF OFFEROR & ADDRESS (INCLUDE ZIP & PHONE)

Signature:

TYPE NAME:

DATE:

OFFERORS MUST SET FORTH FULL, ACCURATE AND COMPLETE INFORMATION AS REQUIRED BY THIS SOLICITATION (INCLUDING THIS ATTACHMENT). FAILURE TO DO SO MAY RENDER THE OFFER NONRESPONSIVE OR UNACCEPTABLE.

(Acknowledgement of Offeror, if a Corporation)

STATE OF _____)
SS:
_____ COUNTY)

On this ____ day of _____,20____, the undersigned personally appeared before me, by means of (check one) □ physical presence or □ online notarization, who is personally known to me or who has produced _____as identification.

WITNESS my hand and official stamp the date aforesaid._____
Notary Public, State of _____ at

Large: _____

No._____

My Commission Expires: _____

(Acknowledgement of Offeror, if a Partnership)

STATE OF _____)
SS:
_____ COUNTY)

On this ____day of_____, 20____, the undersigned personally appeared before me, by means of (check one) □ physical presence or □ online notarization, unknown to me but identified by _____. The individual who executed the foregoing instrument as one of the members of the firm of _____, and he acknowledged to me that he executed the same, as and for the act and deed of said firm, for the uses and purposes therein expressed.

WITNESS my hand and official stamp the date aforesaid._____
Notary Public, State of _____ at

Large: _____

No._____

My Commission Expires: _____

(Acknowledgement of Offeror, if an Individual)

STATE OF _____)
SS:
PINELLAS _____)

On this____ day of_____, 20____, the undersigned personally appeared before me, by means of □ physical presence or □ online notarization, unknown to me but identified by _____. The person who executed the foregoing instrument and acknowledged that he executed the same for the uses and purposes therein expressed.

WITNESS my hand and official stamp the date aforesaid._____
Notary Public, State of _____ at

Large: _____

No._____

My Commission Expires: _____

National Pollutant Discharge Elimination System (NPDES)

Best Management Practices

CONTRACTOR EDUCATION & TRAINING

In concurrence with the National Pollutant Discharge Elimination System (NPDES), Municipal Separate Storm Systems (MS4) requirements, the City of Safety Harbor is providing the contractor, within this document, information and training materials on the topic of erosion and sediment control, illicit discharges, along with spill prevention and response.

All Contractor's working for the City of Safety Harbor shall be trained and become familiar with the Florida Department of Environmental Protection's Best Management Practices for Stormwater.

All site inspection and site operators must be certified through the Florida Stormwater, Erosion and Sedimentation Control Inspector Training and certification program or an equivalent program approved by the Florida Department of Environmental Protection (FDEP). All certification documents and copies of licenses must be provided to the City of Safety Harbor prior to issuance of Notice to Proceed.

Florida's stormwater regulatory program requires the use of Best Management Practices (BMPs) during and after construction to minimize erosion and sedimentation, and to properly manage runoff for both stormwater quantity and quality. BMPs are control practices that are used for a given set of conditions to achieve satisfactory water quality and quantity enhancement at a minimal cost. Each BMP has specific application, installation, and maintenance requirements that should be followed to control erosion and sedimentation effectively.

Illicit discharges include any discharge into a storm drain system that is not entirely composed of stormwater. The exceptions include water from firefighting activities and discharges from facilities already under an NPDES permit. Illicit discharges are a problem because, unlike wastewater, which flows to a treatment plant, stormwater generally flows to waterways without any additional treatment. Illicit discharges often contain pathogens, nutrients, surfactants, and various toxic pollutants.

An effective illicit discharge program needs to be both reactive and proactive. The program is reactive in addressing spills and other illicit discharges to the storm drain system that are found. The program must also be proactive in preventing and eliminating illicit discharges through education, training, and enforcement.

According to the Florida Department of Environmental Protection (FDEP) Phase II Rule, small municipal separate storm systems (MS4s) owners and operators must reduce pollutants in storm water to the maximum extent practicable (MEP) to protect water quality.

This primarily includes developing:

- a storm sewer system map,
- an ordinance prohibiting illicit discharges,
- a plan to detect and address these illicit discharges, and
- an education program on the hazards associated with illicit discharges.

All Contractors shall become familiar with the following websites and video links:

Illicit Discharges:

Illicit Discharges Training Video - Part 1 : https://www.youtube.com/watch?v=Z09Yz_qS1f4
Illicit Discharge Training Video - Part 2 : https://www.youtube.com/watch?v=Qmyh_rL4Ks0

Construction Activities & BMPs:

Construction Site Stormwater Runoff Control :
https://www.epa.gov/sites/production/files/2015-11/documents/fact2-6_0.pdf
Construction BMP Inspection and Maintenance :
https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater#ill

Erosion and Sedimentation Control:
http://www.dep.state.fl.us/water/nonpoint/docs/erosion/erosion-inspectors-manual.pdf

Spill Prevention and Control:
http://www.dep.state.fl.us/water/stormwater/npdes/docs/Construction_Site_Storm_Water_Runoff_Control.pdf

Local resources:
Pinellas County Watershed Management - Stormwater Runoff
http://www.pinellascounty.org/environment/watershed/stormwater.htm

Pinellas County Watershed Management
http://www.pinellascounty.org/environment/watershed/default.htm

For additional information and questions, contact:

City of Safety Harbor
Public Works Department
1200 Railroad Avenue
City of Safety Harbor, Florida 34695
Phone: 727-724-1550 * Fax 727-724-1510
http://www.cityofsafetyharbor.com/50/Public-Works

Acknowledgment and Acceptance of Document

Company Name: _____

Signature: _____

Name/Title: _____

Date: _____

ADDITIONAL INFORMATION:

What is Stormwater?

Stormwater runoff occurs when precipitation from rain flows over the ground. Impervious surfaces like driveways, sidewalks, and streets prevent stormwater from naturally soaking into the ground.

Why is there a concern about Stormwater quality?

Stormwater can pick up debris, chemicals, dirt and other pollutants and flow into a storm sewer system that discharges to local waterbodies. The City is mandated to annually report to the Florida Department of Environmental Protection on Stormwater protection, treatment, and water quality.

What does lawn care and pet waste have to do with Stormwater pollution?

Excess fertilizers and pesticides applied to lawns and gardens wash off, are carried through the storm sewer system, and pollute the waterbodies. Yard clippings (grass, brush, etc.) and leaves can wash into storm drains and can choke, suffocate, or disable aquatic life. Be sure to cover piles of dirt or mulch being used in landscaping projects. Do not over fertilize or use pesticides during a forecasted rain event. Leaving pet waste on the ground increase public health risks by allowing harmful bacteria and nutrients to wash into the storm drain and eventually into local waterbodies. Pinellas County does have a Fertilizer Ordinance that bans the sale and use of certain fertilizers from June 1st – September 30th.

I am a commercial property owner and only have concrete sidewalks and an asphalt parking lot; do any of the Stormwater issues really affect me?

Dirt, oil, and debris that collect in parking lots and paved areas can be washed into the storm sewer system and enter local waterbodies. Sweep up litter and debris from sidewalks, driveways and parking lots, especially around storm drains. Cover grease storage and dumpsters and keep them clean to avoid leaks. Do not wash off floors or decks, kitchen equipment, or dump mop buckets or other chemicals onto paved surfaces as this contaminates water is washed into the storm sewer system and enters local waterbodies.

How can washing my car affect Stormwater runoff?

Washing your car on an impervious surface (i.e. concrete and asphalt) can send detergents and other contaminants through the storm sewer system. Use a commercial car wash as their water is drained to a waste water treatment facility, or wash your car on your yard so the water infiltrates into the ground.

Why can't I drain my pool into the street?

The chemicals in chlorinated and saltwater pools can kill fish and pollute the water. Drain treated pool water onto a grassy or planted area where the water can be absorbed by the soil and dechlorinate the water. Any pool care company can test and neutralize the pool water.

What is an illicit discharge and what are the consequences?

An illicit discharge is the discharge of pollutants or non-storm water materials into a storm sewer system via overland flow, direct dumping, or illicit connections. This means that pollutants of any kind, including leaves, grass clippings, tree trimmings and other yard waste may not be blown or swept to the street, gutter or storm drain. There are exceptions, such as water used for firefighting. City of Safety Harbor Code of Ordinances, Chapter 24, Article VII, Section 24.69, 24.70 & 24.72 and Chapter I, Section 1.12 provides for definitions of illicit discharge and states fines may be incurred up to $500 per day. The City also falls under Pinellas County Stormwater Regulation. Pinellas County's Stormwater ordinance, Article VI, Chapter 58, is intended to protect water quality and natural habitats. Under the County's ordinance, violators may be fined up to $10,000 per day, and payment for cleanup costs may be required.

Who can I call to report an illicit discharge?

Contact City of Safety Harbor Code Enforcement at 727.724.1555. You may also call Pinellas County's Watershed Management automated stormwater watch line at 727.464.5060.

Where can I find more information?

Information can be found at the following websites:

City of Safety Harbor - Stormwater Information
Pinellas County - Watershed
Pinellas County - Fertilizer FAQs
FDEP - Stormwater
EPA - NPDES Information
Tampa Bay Estuary
SWFWMD
Florida Friendly Landscaping
Bay Soundings

Always Remember…..**When it Rains, It Drains.**

CITY OF SAFETY HARBOR (THE CITY)

EXHIBIT B
SPECIAL SOLICITATION INSTRUCTIONS and CONDITIONS

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2. Evaluation and Basis for Award 1
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1. Introduction

(a) The City of Safety Harbor is requesting offers for the Capital Improvement Project, PROJECT A: City of Safety Harbor Pier Replacement, which include, but not limited to, in general the following work as set forth more fully in the scope of work and specifications in this solicitation:

- Removal of existing timber pier structure
- Construction of new timber pier structure
- Installation of pier lighting
- Installation of fire protection stand pipe
- Installation of appropriate erosion and sediment control devices, turbidity barriers, tree protection barricades, and temporary fencing.

PROJECT B: City of Safety Harbor Marina Replacement, which includes, but not limited to, in general the following work as set forth more fully in the scope of work and specifications in this solicitation:

- Removal of existing timber marina docks
- Construction of new timber marina docks
- Installation of electrical components
- Installaion of fire protection and stand pipe
- Installation of appropriate erosioin and sediment control devices, turbidity barriers, tree protection barricades, and temporary fencing.

(b) PROJECT A: The estimated cost for the Capital Improvement Project, Project A: City of Safety Harbor Pier Replacement, including all pay item descriptions is $1,520,100.

PROJECT B: The estimated cost for the Capital Improvement Project, Project B: City of Safety Harbor Marina Replacement, including all pay item descriptions is $1,350,079.

(c) The City was incorporated on June 17, 1917 and is located in the Tampa Bay area. The City currently occupies approximately five (5) square miles and serves a population of approximately 17,000. The City provides a full range of municipal services normally associated with a municipality including fire protection, street construction and maintenance, planning, zoning and redevelopment, recreation and parks, library services, storm water management and general administrative services.

2. Evaluation and Basis for Award

(a) **Number of Awards.**

In the event the City elects to award this contract, only one contract award may be made for this project. The intent to award one contract shall not be construed as a waiver of the City's discretion to accept or reject any or all offers.

(b) **All or None Pricing**

i. The line item unit price(s) must include all costs that the Offeror intends to recover, such as, but not limited to supervision, labor, equipment, materials, vehicle pickup and return, financing, carrying charges, and all other such charges to accommodate the services and delivery requirements.

ii. Failure of the Offeror to provide prices for all line items listed on the Schedule shall be cause for rejection of the entire offer. However, the Offeror may enter “No Cost” in the unit price and extended amount columns to indicate that the item is being offered at “No Cost.”

iii. Offers are required to state exactly what they intend to furnish, otherwise they shall be required to furnish the items as specified.

iv. Evaluation of Offers Inclusive of Options. The City shall evaluate offers for award purposes by including the total price for the basic requirement together with any option pricing, i.e., option pricing will be included in the evaluation for award purposes. The City is under no obligation to purchase optional items, and reserves the right to refuse purchase of any options offered.

(c) **Detailed Description of Supplies/Services Not in Schedule.**

Item descriptions in the Schedule are not intended as complete descriptions of the required supplies and/or services to be purchased under this solicitation. Complete descriptions are provided in the Specifications and/or Statement of Work exhibits in this solicitation document.

(d) **Description of Supplies.**

i. Any manufacturer’s names, trade names, brand name, or catalog used in the specifications are for the purpose of describing and establishing general quality levels. Such references are not intended to be restrictive. Offers will be considered for any brand which meets the quality of the Specifications listed for any items. No substitutions will be permitted after opening of offers.

ii. Offerors will submit, with their offers, data necessary to evaluate and determine the quality of the items(s) they are offering.

iii. If required by the specifications, Offerors must submit with their offer cut sheets, sketches, descriptive literature and/or complete specifications relative to the items proposed and offered. Reference to previously submitted materials on prior offers are not be acceptable.

(e) **Right to Reject Offers.**

The City reserves the right to reject any and all offers in its sole and absolute discretion.

3. <u>Brand Name, Equal Brand Name and Generic Specifications.</u>

Some items called for in this solicitation are specified by brand name only; or by brand name(s) with a listing of salient characteristics (brand name or equal brand name); or by generic description without mention of a brand name.

(1) Offers for items specified as "Brand Name Only" shall be accepted only for the brand names and part number specified by the City.

(2) The brand name identifications associated with items described as "Brand Name or Equal Brand Name" are not intended to be restrictive. The salient characteristics provided for each item are the minimum criteria that shall be acceptable to the City. Items offered must be the same brand names specified or different brand names that meet or exceed the salient characteristics listed. Offers for items that do not satisfy the required salient characteristics shall not be considered for award. The City reserves the right, in its sole and absolute discretion, to determine if items meet or exceed the salient characteristics. Offers for "Equal Brand Name" items shall be considered for award if such items are clearly identified in the offer, and are determined by the City to satisfy the stipulated salient characteristics.

(3) Other items called for in this solicitation are identified by generic description without mention of a brand name. Throughout the specifications, all described features and other requirements are the minimum criteria that shall be acceptable to the City for these generic items. Items offered must meet or exceed the minimum criteria. Offers for items that do not satisfy the minimum criteria shall not be considered for award. The City reserves the right to determine if items offered meet or exceed the minimum criteria.

4. Bid Bond

(a) A Bid Bond on the form accompanying this solicitation (or a certified check or cashier's check payable to the City from a bank acceptable to the City) in an amount equal to 5% of the total offer/bid price must be submitted by each Offeror prior to the deadline set by the City for bid submission. The Bid Bond must be executed strictly in accordance with the instructions printed thereon. Failure to comply with the requirements for a Bid Bond may render an Offeror ineligible for further consideration for award.

(b) The Bid Bond must be submitted to the City in duplicate. The duplicate copy must be a photographic reproduction of the completed form set forth in the Contract Documents and clearly marked "Copy". Certified checks or cashier's checks shall be drawn on a solvent bank or trust company to the order of the City of Safety Harbor and shall have all necessary documentary revenue stamps attached, if required by law.

(c) The surety on all Bid Bonds shall be a duly authorized surety company authorized to do business in the State of Florida; all such bonds being issued or countersigned by a local producing agent who is a resident of the State of Florida and satisfactory evidence of the authority of the person or persons executing such bond being submitted with the bond. Personal checks shall not be acceptable to the City.

5. Payment and Performance Bonds

When required, the Offeror shall include only the actual costs of payment and performance bonds in the line item on the Schedule. The City will not consider any amount in excess of the actual costs of these bonds. The City reserves the right to request documentation from the Offeror as to the amount actually paid for these bonds.

CITY OF SAFETY HARBOR (THE CITY)

EXHIBIT C
SOLICITATION INSTRUCTIONS AND CONDITIONS

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1. Heading and Section References

The headings and section references in the Contract Documents are inserted only for the purpose of convenience and shall not be construed to expand or limit the provisions contained in such sections.

2. Acknowledgment of Addenda

This solicitation shall only be amended by written addendum issued by the City.

(a) If this Solicitation is amended through the issuance of an addendum, then all terms and conditions which are not modified remain unchanged.

(b) No interpretation of the meaning of the plans, specifications, or other Contract Documents will be valid unless set forth in writing by the City. All requests for such interpretation must be in writing addressed to the Contracts Specialist. The Offeror submitting the request will be responsible for the prompt delivery of any such requests. To be given consideration, such request must be received at least five (5) working days prior to the date and time established for receipt of offers. Any and all such interpretations and any supplemental instructions will be in the form of an addendum. The City will endeavor to provide any such addendum to Offerors no later than three (3) days prior to the date and time established for receipt of offers.

(c) The City will not be responsible for any other explanation or interpretation of this Solicitation made or given prior to the award of the contract. Failure of any Offeror to receive any such addendum shall not relieve said Offeror from any obligation under his submitted offer.

(d) Offerors shall acknowledge receipt of any addendum to this Solicitation: (1) by signing and returning the addendum; or (2) by identifying the addendum number and date in the space provided for this purpose on the Solicitation, Offer and Award Form. The City must receive the acknowledgment by the time and at the place specified for receipt of offers.

(e) All addenda so issued shall become a part of the Contract Documents. Any objections to this Solicitation or any addenda thereto must be filed in writing with the City prior to the date and time set for receipt of offers.

3. City-Furnished Property

No material, labor, or facilities will be furnished by the City unless otherwise provided for in this Solicitation.

4. Exceptions/Deviations

Exceptions to, or variances from, any portion of the Solicitation, including but not limited to the Statement of Work/Specification, contract terms and conditions, contained in a submitted offer shall not be considered. Offerors are strongly encouraged to contact the person identified in Block 3 of the Solicitation, Offer and Award Form well in advance of the deadline for receipt of offers with any proposed changes to the City's terms and conditions.

5. Bid Opening and Public Review

Every bid properly delivered within the time fixed for receiving bids will be opened and the name of each bidder and bid amount shall be publicly read aloud. The public may attend the bid opening, but may not immediately review any bids submitted until the City provides a notice of intended decision or thirty (30) days after the opening of the bids, whichever occurs first. After such time, all bids submitted are public records subject to production unless specifically exempted by Florida Statutes. Bids which contain information that is "trade secret" as defined in Section 812.081, Florida Statutes, or that is otherwise confidential or exempt by Florida Statutes shall be designated as such by the Offeror and the trade secret, confidential, or exempt information shall be specifically identified by the Offeror. However, any information marked as "trade secret," "confidential," or "exempt" may be produced by the City in response to a public records request if the City determines that the information does not meet the definition of "trade secret" in Section 119.0715, Florida Statutes, or is not otherwise confidential or exempt under Florida Statutes.

6. Award of Contract

(a) The contract will be awarded to the Offeror whose offer, conforming to the Solicitation requirements is most advantageous to the City, price and other factors considered. Nothing contained herein shall be construed as creating any entitlement to award or property interest to the low-bidder. The City shall have the sole discretion to determine which Offeror, if any shall be awarded the contract.

(b) The contract will be awarded to the Offeror who submitted the most responsive and responsible offer for the City which conforms to the requirements imposed by this Solicitation, provided said request is considered (within the sole discretion of the City) reasonable and in the best interest of the City to accept. A responsible Offeror is one who affirmatively demonstrates to the City that the Offeror has adequate financial resources and the requisite capacity, capability, and facilities to perform the contract within the delivery period or period of performance, has a satisfactory record of performance on other comparable projects, has a satisfactory record of integrity and business ethics, and is otherwise qualified and eligible to receive award under the solicitation and laws or regulations applicable to the procurement. The City in its sole discretion, will determine whether or not an Offeror is a responsible Offeror.

(c) The contract will be awarded by the City to the Offeror submitting the best offer for the City, as determined solely by the City, and in compliance with the Specifications, and other requirements imposed by this Solicitation, provided said offer is considered (within the sole discretion of said City) reasonable and in the best interest of the City to accept.

(d) The City reserves the right to reject any or all offers in part or in total for any reason, with or without cause, to accept any offer if considered best for its interest, and to waive informalities and minor irregularities in offers received.

(e) The City may accept any item or group of items of any offer, unless the Offeror qualifies the offer by specific limitations. Unless otherwise provided in this Solicitation, offers may be submitted for any quantities less than those specified, and the City reserves the right to make an award on any item for a unit quantity less than the quantity offered at the unit prices offered unless the Offeror specifies otherwise in the offer.

(f) A written award (or acceptance of offer) which is mailed, e-mailed or otherwise furnished to the successful Offeror within the time for acceptance specified in the Solicitation shall be deemed to result in a binding contract without further action by either party.

(g) The City may, within the time specified therein, accept any offer or part thereof, as provided in (c) above, whether or not there are negotiations subsequent to its receipt, unless the offer is withdrawn by written notice received by the City prior to award. If subsequent negotiations are conducted, they shall not constitute a rejection or counter offer on

the part of the City.

(h) The City may award a contract based on the initial price received from the highest evaluated Offeror without discussion.

(i) Any financial data submitted with any offer hereunder or any representation concerning facilities or financing will not form a part of any resulting contract; provided, however, that if the resulting contract contains a clause providing for price reduction for defective cost or pricing data, the contract price will be subject to reduction if cost or pricing data furnished hereunder is incomplete, inaccurate, or not current.

7. Rights of the City in Invitation for Bid Process

The City may investigate the qualifications of any Offer under consideration. The City may require confirmation of information furnished by a Offeror, and require additional evidence of qualifications to perform the work described in this solicitation. In addition to any rights conveyed by Florida law, the City specifically reserves the right to:

- Disqualify any Offeror
- Reject any or all of the Offers, in its sole and absolute discretion
- Remedy errors in this solicitation
- Cancel the entire solicitation
- Issue subsequent solicitations
- Rank firms and negotiate with the highest ranking firms
- Select the offer(s) it believes will serve the best interest of the City
- Appoint evaluation committees to review offers
- Seek the assistance of outside technical experts to review offers
- Approve or disapprove the use of particular Subcontractors and Suppliers
- Establish a short list of Offerors eligible for discussions after review of written offers
- Solicit best and final offers (BAFO) from all or some of the Offerors
- Determine whether or not a Offeror is a responsible offeror
- Reject any part of a bid
- Negotiate with any, all, or none of the Offerors
- Award a contract to one or more Offerors
- Accept other than the lowest priced offer
- Request any necessary clarifications or offer data without changing the terms
- Disqualify the Offeror upon evidence of collusion with intent to defraud or other illegal practices on the part of the Offerors
- Waive any informalities or irregularities in any offer, to the extent permitted by law
- Make selection of the Offeror to perform the services required on the basis of the original bids without negotiation

This solicitation does not bind or commit the City to enter into a contract with any of the Offerors and does not create any property interest or expectation of any award.

8. Qualification of Subcontractors, Material Men, and Suppliers

(a) Each Offeror shall submit to the City an executed Summary of Subcontractor(s)/Subconsultant(s)/Supplier(s) (Attachment 1 to Exhibit C) form listing each proposed subcontractor when the initial offer to the City's solicitation is due. The submission of this information is considered an issue of responsibility, and the City will not award a contract to any Offeror who has not supplied this documentation. The City will notify the Offeror in writing if the City, after due investigation, has reasonable objection to any subcontractor, person or organization on such list. Acceptance of any

such subcontractor, person or organization shall not constitute a waiver of any right of the City to reject defective work, material or equipment, or work, material or equipment not in conformance with the requirements of the contract.

(b) The Summary of Subcontractor(s)/Subconsultant(s)/Supplier(s) (Attachment 1 to Exhibit C) form listing each proposed subcontractor shall constitute a representation by the Offeror to the City that it believes such firm is ready, willing, and able to perform the work indicated. It shall also represent a commitment by the Offeror that if it is awarded the contract, it will enter into a subcontract with such subcontractor for the work described at the approximate price set forth in the Summary of Subcontractor(s)/Subconsultant(s)/Supplier(s) (Attachment 1 to Exhibit C) form.

(c) Except as authorized by the City, the successful Offeror shall enter into formal agreements with the subcontracting firms shown in the submitted Summary of Subcontractor(s)/Subconsultant(s)/Supplier(s) form(s) within ten (10) business days after receipt of a contract executed by the City.

(d) The subcontractor listed on the Summary of Subcontractor(s)/Subconsultant(s)/Supplier(s) form is required to perform the work indicated with its own work force.

(e) The Offeror shall be required to perform or exercise responsibility for at least fifty (50) percent of the total cost of its contract with its own workforce. No qualification of subcontractors shall be construed to alter this requirement.

9. Cancellation of Solicitation

This Solicitation may be cancelled by the City at any time prior to award, whether before or after receipt of offers.

10. Discounts

Prompt payment discounts will not be considered in evaluating offers for award.

11. Late Submissions, Modifications, and Withdrawals of Offers

(a) Under no circumstances will offers or modification of offers delivered after the delivery time and date specified for receipt of offers be considered. Late offers will be returned to the Offeror unopened with the notation: “This offer was received after the delivery time and date designated for receipt of offers for this solicitation.”

Any offer received at the office designated in the solicitation after the exact time specified for receipt will not be considered unless it is received before award is made, and it was timely delivered to the City in accordance with delivery instructions in this Solicitation and it is determined by the City that the late receipt was due solely to mishandling by the City after receipt at the City's offices.

(b) The only acceptable evidence to establish the time of receipt at the City is the time-date stamp of the City on the wrapper or other documentary evidence of receipt maintained by the City.

(c) Offers may be withdrawn by written or telegraphic notice received at any time before the exact time set for receipt of offers. An offer may be withdrawn in person by an Offeror or the Offeror's authorized representative before the exact time set for receipt of offers, provided the identity of the person requesting withdrawal is established and the person signs a receipt for the offer.

(d) Negligence on the part of the Offeror in preparing his offer confers no right of withdrawal or modification of his offer after such offer has been opened by the City at the appointed time and place. Offers must remain open for a period of sixty (60) days after the time and date set for receipt of offers. Offerors may not assign or otherwise transfer their offer prior to or after the time and date set for receipt of offers.

12. Multiple or Alternate Offers Not Accepted

(a) Definitions.

(1) “Multiple offers” means more than one offer submitted, each satisfying the specific stated requirements of the solicitation.

(2) “Alternate offers” means an offer submitted that may depart from the specific stated requirements of the solicitation.

(b) Unless otherwise specified in this solicitation, multiple or alternate offers shall not be accepted in response to this

solicitation. All multiple or alternate offers shall be rejected; provided however, that if the Offeror clearly identifies a primary offer, it shall be evaluated and considered for award as though it were the only offer submitted.

13. Pre-Submission Conference and Questions Concerning the Solicitation

A pre-submission conference, if desired by the City, is scheduled for all interested parties to discuss the solicitation requirements at a date, time and location as identified on the Solicitation, Offer and Award Form.

14. Preparation of Offers

(a) Any potential Offeror that is presently engaged in litigation with the City or has made a claim that is unresolved where the claim or the litigation involves a prior project with the City will be ineligible to receive this solicitation. No offer will be received from any such Offeror.

(b) Prior to submission of offer, Offerors shall carefully examine the site of the proposed work and make all necessary examinations and investigations to inform themselves thoroughly as to all difficulties involved in the completing of all work required pursuant to the mandates of this solicitation with its requirements. No plea of ignorance or condition or difficulties that may be encountered in the execution of the work under this Contract as a result of failure to make the necessary examinations and investigations, will be accepted as an excuse for any failure or omission on the part of the Offeror to fulfill, in every detail, all of the requirements of the Contract Documents, nor will they be accepted as a basis for any claims whatsoever for extra compensation or for an extension of time

(c) Offerors are expected to examine the Schedule, Solicitation Instructions, Special Provisions, General Provisions, all drawings, specifications, the statement of work, and all other provisions of, and Exhibits to, the solicitation, whether incorporated by reference or otherwise, prior to the submission of offers. Failure to do so will be at the Offeror's risk.

(d) Each Offeror shall furnish the information required by the Solicitation. Offers shall be submitted on the bid form contained in the Solicitation. Offeror shall sign and print or type their name on the bid form and each continuation sheet on which they make an entry. Erasures or other changes must be initialed in ink by the person signing the offer. Offers signed by an agent of the Offeror (other than an officer or a partner of the Offeror) are to be accompanied by evidence of the agent's authority (unless such evidence has been previously furnished to the City).

(e) All blanks on the bid form shall be filled in by typewriter or printed in ink with a firm fixed unit price for items offered. Unit prices shall include packing unless otherwise specified. In case of any discrepancy between a unit price and any extended or total price required by the bid form, the unit price will be presumed to be correct, subject, however, to correction to the same extent and in the same manner as any other mistake.

(f) The City, as a Florida municipal corporation, is exempt from the payment of Florida sales tax to its vendors under Chapter 212, Florida Statutes. Corporations, individuals, and other entities may be impacted by Chapter 212, Florida Statutes, according to the type of service, sale of commodity or other contractual arrangement with the City. By submitting an offer, the Offeror is acknowledging that he is aware of his statutory responsibility for sales tax under Chapter 212, Florida Statutes.

(g) Offers for property or services other than those specified in the Schedule will not be considered unless specifically authorized in the solicitation. Any condition, qualification, or limitation of the offer will be a basis for rejection of the offer as nonresponsive.

(h) The Offeror must state a definite time for delivery of property or for performance of services unless otherwise specified in the solicitation. All measurements shall be in the system of weights and measures in common usage in the United States, and pricing shall be in U.S. dollars.

15. Computation of Time

In computing any period of time for the solicitation or any resulting contract, "days" means calendar days, and the day of the event from which the designated period of time begins to run shall not be included, but the last day shall be included unless it is a Saturday, Sunday, or federal or State of Florida holiday, in which event the period shall run to the end of the next business day.

16. Contact with Offeror

(a) Offerors are cautioned that until this solicitation is either awarded or cancelled, they may have contact only with the Contracts Specialist or his or her designee. Discussions or communications regarding this solicitation with any other

personnel associated in any capacity with the City, its consultants, and contractors are strictly prohibited, unless otherwise approved in writing by the City.

(b) Any violation of this restriction may result in the disqualification of the Offeror from further participation in this procurement, and from award of any contract or subcontract under this solicitation.

17. Code of Ethics

With respect to this offer, if any Offeror violates or is a party to a violation of Chapter 112, Part III, Florida Statutes, such Offeror may be disqualified from performing the work described in this solicitation or from furnishing the goods or services for which the offer is submitted and shall be further disqualified from submitting any future offers for work or for goods or services.

18. Submission of Offers

(a) Offers and modifications thereof shall be enclosed in sealed envelopes or sealed cartons and submitted to the City Clerk's Office, City of Safety Harbor, 750 Main Street, Florida 34695, prior to the time and date established for receipt of offers. Delivery of said offers to the City prior to the time and date stated in this Solicitation is solely and strictly the responsibility of the Offeror. The Offerors shall show the hour and date specified in the solicitation for receipt of offers, the solicitation number, and the Offeror's name, address, and telephone number on the face of the envelope or carton. All offers must be manually and duly signed by an authorized corporate officer, principal, or partner (as applicable). Attorneys-in-fact who sign bonds or other surety instruments must attach with each bond or surety instruments, if required.

(b) The City is not responsible for mail sent through the United States Postal Service, private couriers or messengers in regard to offers being delivered by the specified date and time so that they can be considered.

(c) Telegraphic or electronic (including but not limited to email and facsimile) offers will not be considered unless authorized by the Solicitation; however, offers may be modified or withdrawn by written, telegraphic or electronic notice, provided such notice is received prior to the hour and date specified for receipt of offers.

(d) Samples of items, when required, must be submitted within the time specified and, unless otherwise specified in the solicitation, at no expense to the City. If not destroyed by testing, samples will be returned at the Offeror's request and expense, unless otherwise specified in the solicitation.

(e) Each copy of the offer shall include the legal name of the Offeror and a statement whether the Offeror is a sole proprietorship, a corporation, or any other legal entity. An offer for a corporation shall further give the state of incorporation.

19. Omission

Notwithstanding the provision of drawings, technical specifications or other data by the City, the Offeror shall have the responsibility of supplying all details required to make an accurate proposal of services offered even though such details may not be specifically mentioned in the specifications.

20. Public Entity Crimes

(a) In accordance with Section 287.133, Florida Statutes, a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit an offer on a contract to provide any goods or services to a public entity, may not submit an offer on a contract with a public entity for the construction or repair of a public building or public work, may not submit offers on leases or real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, subproposer, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017 for Category Two for a period of 36 months from the date of being placed on the convicted vendor list.

(b) The City may make inquiries regarding alleged convictions of public entity crimes. The unreasonable failure of an Offeror to promptly supply information in connection with an inquiry may be grounds for rejection of the offer. Additionally, a conviction of a public entity crime may cause the rejection of the offer.

(c) Offers must be signed by the Offeror with his signature in full. When a firm submits an offer, the offer shall be signed by one or more of the firm's partners. When a corporation submits an offer, the officer signing shall set out the corporate name in full beneath which he shall sign his name and give title of his office. The offer shall also bear the seal of the

corporation. Anyone signing the offer as agent must file with it legal evidence of his authority to do so. Offeror's who are nonresident corporations shall furnish to the City a duly certified copy of their permit to transact business in the State of Florida along with the Offer. Failure to promptly submit this evidence of qualification to do business in the State of Florida may be basis for rejection of the offer.

21. Legal Requirements

The Offeror's attention is directed to the fact that all applicable provisions of all federal, state, county, and local laws, ordinances, rules and regulations shall govern development, submittal, and evaluation of all offers received in response hereto and lack of knowledge by any Offeror shall not constitute a cognizable defense against compliance with all such laws, rules, and regulations in the submission of any offer or the legal effect thereof.

22. Prohibition pursuant to Section 287.05701, Florida Statutes

The City may not request documentation of or consider any of Respondent's social, political, or ideological interests when determining if Respondent is a responsible Respondent, nor may the City give preference to any Respondent based on Respondent's social, political, or ideological beliefs.

23. Unauthorized Aliens

The City will consider the employment by the Offeror of unauthorized aliens a violation of Section 274A of the Immigration and Nationality Act. Such violation will be cause for unilateral termination of this Contract.

24. Contract Documents

Except for Titles, Subtitles, Headings, Running Headlines, Table of Contents, and Indexes (all of which are printed herein, merely for convenience), the following except for such portions thereof as may be specifically excluded, constitute the "Contract Documents":

(a) Solicitation, Offer and Award Form
(b) Schedule – Bid Form and any attachments thereto
(c) Exhibit A – Representations and Certifications
(d) Exhibit B – Special Solicitation Instructions and Conditions
(e) Exhibit C – Solicitation Instructions and Conditions
(f) Exhibit D – Special Provisions
(g) Exhibit E – General Provisions
(h) Exhibit F – Statement of Work/Specifications
(i) Exhibit G – Bid Bond Form
(j) Exhibit H – Payment Bond Form
(k) Exhibit I – Performance Bond Form
(l) Offeror's response
(m) Addenda

25. Order of Precedence

In the event of any inconsistency between the provisions of the resulting contract, the inconsistency shall be resolved by giving precedence in the following order:

(a) Schedule – Bid Form and any attachments thereto
(b) Solicitation Offer and Award Form;
(c) Addenda
(d) Exhibit A – Representation and Certifications
(e) Exhibit F - Statement of Work/Specifications
(f) Exhibit B - Special Solicitation Instructions and Conditions;
(g) Exhibit D - Special Provisions
(h) Exhibit E - General Provisions
(i) Exhibit C - Solicitation Instructions and Conditions
(j) Exhibit G – Bid Bond Form
(k) Exhibit H – Payment Bond Form
(l) Exhibit I – Performance Bond Form
(m) Offeror's response

CITY OF SAFETY HARBOR (CITY)

ATTACHMENT 1 TO EXHIBIT C
(SUMMARY OF SUBCONTRACTOR/SUBCONSULTANT/SUPPLIERS)

Offerors should provide information on **all** of their prospective subcontractor(s)/subconsultant(s)/suppliers who submit offers in support of this solicitation. Use additional sheets as necessary.

Capital Improvement Project Name: PROJECT A: City of Safety Harbor Pier Replacement PROJECT B: City of Safety Harbor Marina Replacement IFB 2025-PW-02

Name of Prime Contractor: _____

NAMES AND ADDRESSES OF SUBCONTRACTOR(S)/SUBCONSULTANT(S)	TYPE OF WORK TO BE PERFORMED	PREVIOUS YEAR'S ANNUAL GROSS RECEIPTS	$ AMOUNT ON CONTRACT
NAME: ADDRESS: PHONE: FAX: E-MAIL: CONTACT PERSON:	TYPE OF WORK: AGE OF FIRM: IS THE FIRM A CERTIFIED MINORITY BUSINESS IN THE STATE OF FLORIDA? YES □ NO □	□ less than $500K □ $500K - $2 mil. □ $2 mil. - $5 mil. □ more than $5 mil.	
NAME: ADDRESS: PHONE: FAX: E-MAIL: CONTACT PERSON:	TYPE OF WORK: AGE OF FIRM: IS THE FIRM A CERTIFIED MINORITY BUSINESS IN THE STATE OF FLORIDA? YES □ NO □	□ less than $500K □ $500K - $2 mil. □ $2 mil. - $5 mil. □ more than $5 mil.	
NAME: ADDRESS: PHONE: FAX: E-MAIL: CONTACT PERSON:	TYPE OF WORK: AGE OF FIRM: IS THE FIRM A CERTIFIED MINORITY BUSINESS IN THE STATE OF FLORIDA? YES □ NO □	□ less than $500K □ $500K - $2 mil. □ $2 mil. - $5 mil. □ more than $5 mil.	

Print Name/Title of Person completing this form: _____

Signature_____Date_____

CITY OF SAFETY HARBOR (THE CITY)

EXHIBIT D
SPECIAL PROVISIONS

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1. Indefinite Quantity/Indefinite Delivery (Measurement and Payment) / Definite Quantity/Definite Delivery (Fixed-Firm-Price or Lump Sum)

Portions of this contract are Indefinite Quantity/Indefinite Delivery (Measurement and Payment).
Other portions of this contract are Definite Quantity/Definite Delivery (Firm-Fixed-Price or Lump Sum).
REFER TO SCHEDULE BID FORM, ATTACHMENT '1' and ATTACHEMENT '2' TO SCHEDULE BID FORMS AND SPECIFICATIONS.

a.) Indefinite Quantity/Indefinite Delivery (Measurement and Payment): All Line Items listed on the Schedule Bid Form with the exception of Lump Sum (LS) items shall be Indefinite Quantity/Indefinite Delivery (Measurement and Payment). The quantities of services specified in the Schedule are estimates only and are not purchased by this contract.

b.) Definite Quantity/Definite Delivery (Firm-Fixed-Price or Lump Sum): The quantities of supplies and services specified under all line items listed on the Schedule Bid Form with the exception of Measurement and Payment Items, shall be firm-fixed-price (lump sum) and shall be purchased under this contract. The City shall purchase the services specified under the Specifications and the Contractor shall deliver them in accordance with the terms and conditions stipulated in this contract. The City shall pay the exact fees specified in the Schedule upon the City's acceptance of the work. No additional amounts shall be paid to the Contractor, regardless of the effort/costs incurred by the Contractor.

2. Period of Performance

All work must be completed under the terms and conditions stated herein and the facilities ready for use within the "Contract Time" which shall be no later than 540 days from Notice to Proceed.

3. Notice to Proceed

The Contractor shall not proceed with any Contract Work without a written Notice to Proceed from the City. Any work performed or expenses incurred by the Contractor prior to the Contractor's receipt of Notice to Proceed shall be entirely at the Contractor's risk. The Contract shall start Work within ten (10) days following the date stated in the Notice to Proceed.

4. Installation

(a) The Contractor shall completely install, ready for use, all items covered by this contract.

(b) The Contractor shall deliver, assemble and install items in accordance with the manufacturer's recommendations and best commercial practices.

5. Hours of Construction Operation

(a) Section 15.03 (b) of the City Code provides the no construction shall be permitted between the hours of 6:00 p.m. and 7:00 a.m. Monday through Saturday and all day on Sunday.

(b) The normal work week shall be Monday through Friday, exclusive of City holidays. The normal work day shall be between the hours of 7:00 a.m. and 6:00 p.m. It is the Contractor's responsibility to schedule all work within these parameters. Any request for variation must be made to the City in writing 48 hours in advance. The Contractor must receive written approval from the City prior to varying the schedule. No response from the City shall be deemed a denial of the request. Only emergency work shall be performed between the hours of 6:00 p.m. and 7:00 a.m. Monday through Friday, on Saturdays, Sundays, and City Holidays.

(c) Delivery F.O.B. Destination. All deliveries shall be made F.O.B. destination to the City's premises. The term "F.O.B. destination, within the City's premises," as used in this clause, means free of expense or risk of loss to the City until delivered to and/or installed on the City's premises, including delivery to specific rooms within a building if so specified.

(d) All work performed during other than normal work hours and days, including emergency work, may be inspected by the City. The Contractor shall reimburse the City for the additional costs for the City's Project Representative to observe work during these periods. The costs shall be assessed against the contract, and shall include the normal over-time base salary rate plus sick leave, incentive and holiday pay applicable thereto, plus unemployment excise and payroll taxes, and contributions for social security, worker's compensation insurance, retirement benefits, and medical and other insurance benefits, company overhead, and profit as applicable.

6. New Material

Unless this contract specifies otherwise, the Contractor represents that the supplies and components (including any former property of the City identified in this contract) are new, including recycled (not used or reconditioned) and are not of such age or so deteriorated as to impair their usefulness or safety. If the Contractor believes that furnishing used or reconditioned supplies or components will be in the City's interest, the Contractor shall so notify the City in writing. The Contractor's notice shall include the reasons for the request along with a proposal for any consideration to the City for the use of used or reconditioned supplies or components.

7. Manufacturer's Warranty

Any and all standard manufacturer's warranties shall accrue to the benefit of the City. The manufacturer's warranties referenced herein shall be in addition to any contractual remedies set forth in this contract, and in addition to any and all other statutory remedies or warranties imposed on the Contractor for the benefit of the City.

8. Warranty of Supplies

(a) Definitions. "Acceptance," as used in this clause, means the act of an authorized representative of the City by which the City assumes for itself, or as an agent of another, ownership of existing supplies, or approves specific services as partial or complete performance of the contract.

"Correction," as used in this clause, means the elimination of a defect.

"Supplies," as used in this clause, means the end item furnished by the Contractor and related services required under the contract. The word does not include "data."

(b) Contractor's Obligations.

(1) Notwithstanding inspection and acceptance by the City of supplies furnished under this contract, or any condition of this contract concerning the conclusiveness thereof, the Contractor warrants that for two (2) years:

(i) all supplies furnished under this Contract will be free from defects in material or workmanship and will conform with all requirements of this Contract; and

(ii) the preservation, packaging, packing, and marking, and the preparation for and method of, shipment of such supplies will conform with the requirements of this Contract.

(2) When return, correction, or replacement is required, transportation charges and responsibility for the supplies while in transit shall be borne by the Contractor. However, the Contractor's liability for the transportation charges shall not exceed an amount equal to the cost of transportation by the usual commercial method of shipment between the place of delivery specified in this Contract and the Contractor's plant, and return.

(3) Any supplies or parts thereof, corrected or furnished in replacement under this clause, shall also be subject to the terms of this clause to the same extent as supplies initially delivered. The warranty, with respect to supplies or parts thereof, shall be equal in duration to that in paragraph (b) (1) of this clause and shall run from the date of delivery of the corrected or replaced supplies.

(c) Remedies Available to the City.

(1) The City shall give written notice to the Contractor of any breach of warranties in paragraph (b) of this clause.

(2) Within a reasonable time after the notice, the City may exercise one or more of the following options --

(i) require, by written notice, the prompt correction or replacement of any supplies or parts thereof (including preservation, packaging, packing, and marking) that do not conform with the requirements of this Contract within the meaning of paragraph (b) of this clause; or

(i) screen the supplies grouped for warranty action under this clause at the Contractor's expense and return all nonconforming supplies to the Contractor for correction or replacement;

(ii) require the Contractor to screen the supplies at locations designated by the City within the State of Florida and to correct or replace all nonconforming supplies;
(iii) return the supplies grouped for warranty action under this clause to the Contractor (irrespective of the f.o.b. point or the point of acceptance) for screening and correction or replacement; or

(i) retain such supplies and reduce the Contract Price by an amount equitable under the circumstances.

(3) If the Contract requires inspection of supplies by sampling procedures, conforming of supplies or components subject to warranty action shall be determined by the applicable sampling procedures in the Contract.

(4) The City may correct or replace the nonconforming supplies with similar supplies from another source and charge to the Contractor the cost occasioned to the City thereby if the Contractor --

(i) fails to make redelivery of the corrected or replaced supplies within the time established for their return; or

(ii) fails either to accept return of the nonconforming supplies or fails to make progress after their return to correct or replace them so as to endanger performance of the delivery schedule, and in either of these circumstances does not cure such failure within a period of 10 days (or such longer period as the Contracting Officer may authorize in writing) after receipt of notice from the Contracting Officer specifying such failure.

(5) Instead of correction or replacement by the City, the City may require an equitable adjustment of the Contract Price. In addition, if the Contractor fails to furnish timely disposition instructions, the Contracting Officer may dispose of the nonconforming supplies for the Contractor's account in a reasonable manner. The City is entitled to reimbursement from the Contractor, or from the proceeds of such disposal, for the reasonable expenses of the care and disposition of the nonconforming supplies, as well as for excess costs incurred or to be incurred.

(6) The rights and remedies of the City provided in this clause are in addition to and do not limit any rights afforded to the City by law, equity, or any other clause of this Contract.

(d) The provisions of this section shall survive the termination of the Contract, however terminated.

9. Non-Appropriation

In the event the City, in its sole discretion, determines that sufficient budgeted funds are not available to appropriate for the Contract Work, the City shall notify the Contractor of such occurrence and this Contract shall terminate as of the last day of the current fiscal year without any penalty to the City.

10. Contractor's Liability Insurance

(a) The Contractor shall purchase and maintain such insurance for claims under workmen's compensation laws, disability benefit laws or other similar worker's employee benefit laws; from claims for damages because of bodily injury, occupational sickness or disease, or death of his employee including claims insured by usual personal injury liability coverage from claims for injury to or destruction of tangible property including loss of use resulting there from any or all of which may arise out of or result from the Contractor's operations under the Contract Documents, whether such operations be by himself or by any subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be legally liable. This insurance shall be written for not less than any limits or liability specified below in the Contract Documents or required by law, whichever is greater, and shall include contractual liability insurance. Before starting the Work, the Contractor will fill with the City certificates of such insurance, acceptable to the City; these certificates shall contain a provision for cancellation as found in paragraph 5 of Section B immediately below.

(b) The Contractor shall provide the required certificates of insurance within (7) calendar days from Notice of Award.

11. Insurance Required

A. General

Before starting and until acceptance of the Work by the City, the Contractor shall procure and maintain insurance of the types and to the limits specified in paragraphs (1) through (4) inclusive below.

The Contractor shall require each of its subcontractors to procure and maintain, until the completion of that Subcontractor's work insurance of the types and to the limits specified in paragraphs (1) through (4) inclusive below. It shall be the responsibility of the Contractor to insure that all its subcontractors comply with all of the insurance requirements contained herein relating to such subcontractors.

B. Coverage

The amount and type of insurance shall conform to the following minimum requirements:

1) Worker's Compensation – Coverage to apply for all employees for statutory limits in compliance with the applicable state and federal laws. In addition, the policy must include the following:

(a) Employer's Liability with a limit of $100,000 each accident.

(b) Notice of Cancellation and/or Restriction – The policy must be endorsed to provide the City with thirty (30) days notice of cancellation and/or restriction.

2) Comprehensive General Liability – Coverage must be afforded on a form no more restrictive than the latest edition of the Comprehensive General Liability Policy filed by the insurance Services Office and must include:

(a) Minimum limits of $500,000 occurrence and $1,000,000 aggregate for Bodily Liability and Minimum limits of $500,000 per occurrence and $1,000,000 aggregate for Property Damage Liability.

(b) Premises and/or Operations.

(c) Independent Contractors.

(d) Products and/or Completed Operations.

(e) XCU Coverage.

(f) Broad Form Property Damage including Completed Operations.

(g) Contractual Coverage applicable to this specific contract including any hold harmless and/or indemnification agreement.

(h) Additional Insured – The City is to be specifically included as additional insureds.

(i) Notice of Cancellation and/or Restriction – The policy must be endorsed to provide the City with thirty (30) days' notice of cancellation and/or restriction.

3) Comprehensive Automobile Liability – Coverage must be afforded on a form no more restrictive than the latest edition of the Comprehensive Automobile Liability Policy filed by the Insurance Services Office and must include:

(a) Minimum limit of $1,000,000 per occurrence for Bodily Injury Liability and minimum limit of $1,000,000 per occurrence for Property Damage Liability.

(b) Owned Vehicles.

(c) Hired and Non-Owned Vehicles.

(d) Employee Non-Ownership.

(e) Notice of Cancellation and/or Restriction – The policy must be endorsed to provide the City with the thirty (30) days' notice of cancellation and/or restriction.

4) Certificates of Insurance and Copies of Policies – Certificates of Insurance in triplicate evidencing the insurance coverage specified in the previous paragraphs (1) through (3) inclusive, and shall be filed with the City before operations begin. The required Certificates of Insurance shall name the types of policies provided, refer specifically to this Contract, shall state that such insurance is required by such paragraphs of this Contract, shall reflect that the City is an Additional Insured, that the Contractor's policies are primary to the City's insurance policies, if any, and that any reduction of the policy limits increase in deductibles or cancellation of any said policies shall not be effective without first providing the City with thirty (30) days written notice. The certificates shall provide that the City will be given prior written notice of at least thirty (30) day of the cancellation of the respective policy.

If the initial insurance expires prior to the completion of the Contract, renewal Certificates of Insurance and required copies of policies shall be furnished thirty (30) days prior to the date of their expiration.

12. Dewatering

Dewatering is the responsibility of the Contractor. All costs associated with ground dewatering and surface water pumping shall be included in the appropriate contract price for items to which dewatering is incidental, as applicable, and no separate payment shall be made therefor.

Before commencing any excavation at the site of the work, the Contractor shall submit to the Engineer and obtain his approval of the methods and equipment and arrangement of facilities proposed for the removal and disposal of water at the site and of all water entering any excavation or other part of the work from any source whatsoever. Adequate standby facilities shall be provided to ensure that the excavation will be kept dry and bypass waters flow in the event of power failure or mechanical breakdown. Facilities for removal and disposal of water shall be of sufficient capacity to keep the excavation dry under all circumstances with one-half of the facilities out of service. If well points are used, provision shall be made for removing and resetting individual well points without taking the system of which they are a part out of service.

Contractor shall prepare several hundred feet ahead of construction area of well point dewatering to incrementally move pipe installation and prepare for open cuts on a timely schedule to minimize the time frame of any closures to residents. Contractor may utilize FDOT type sediment removal box system to treat water prior to discharge to manage turbidity.

13. Measurement and Payment

A. All work completed under the terms of this contract shall be measured according to United States Standard Measures.

B. No payment will be made for construction over a greater area than authorized, nor for material moved from outside of stakes and data shown on the plans, except when such work is performed upon instructions of the Engineer.

C. The Contractor shall accept compensation provided under the terms of this contract as full payment for furnishing all materials and for performing all work contemplated and embraced under this contract. Such compensation shall also be for any and all loss or damage arising out of the nature of the work or from the action of the elements, or from any unforeseen difficulties or obstructions encountered during the contract period until final acceptance by the City.

D. Whenever any change, or combination of changes, on the plans results in an increase or decrease in the original contract quantities, and the work added or decreased/eliminated is of the same general character as that called for on the plans, the Contractor shall accept payment in full at the original contract unit prices for the actual quantity of work performed, with no allowance for any loss of anticipated profits.

E. Any quantity item not indicated in the Bid Proposal List but shown on the Plans shall be included as part of the Lump Sum (LS) quantity for Mobilization.

F. It is the Contractor's responsibility to perform a detailed quantity take-off from the plans to determine actual quantities for ordering and delivery purposes. The City will not be responsible for quantities ordered in excess of those installed and constructed. The Contractor should be aware that some of the pay items may have contingency quantities. Payment shall be made only for final in-place quantities.

G. No payment shall be made for contingency quantities or additional work unless otherwise directed and approved in writing by the City.

14. Sheeting and Bracing

No separate payment shall be made for sheeting and bracing and the cost of such work shall be included in the applicable pay item unless otherwise provided under separate section of these Specifications.

15. Underground Utility Locations

The Contractor shall field verify by means of subsurface locating or other approved method all existing utilities to remain and conditions as may be required for the work area. This shall include all areas of potential conflicts with proposed storm, sanitary, force main and water main. The Contractor shall locate all existing utilities to remain at potential conflict locations prior to construction activities and before ordering any proposed structures.

The Contractor shall contact and coordinate with "Sunshine" as well the individual utilities prior to and during construction for utility locations, relocation and assistance while installing in potential conflict areas. All utility coordination and relocations shall be factored into the Contractor's construction schedule at no additional cost to the City.

It shall be the Contractor's responsibility to avoid conflicts with other utilities. The Owner will not be responsible for additional costs incurred by the Contractor for incorrect installations, relocations and breaks due to service conflicts.

The cost of all labor, materials and incidentals required for the performance of any survey and utility location work shall be included under the pay item for Mobilization. A Florida registered land surveyor shall perform all survey work.

16. Survey and Layout by Contractor

The Contractor shall provide all lines, grades, boundaries and required survey and/or layout necessary to construct and inspect the project including before and after construction surveys. All right-of-way and easement boundaries and center-line control points shall be established and maintained through the Contract period by the Contractor as required for the construction.

The Contractor shall employ or retain the services of a Florida registered Professional Land Surveyor for the survey and layout.

Payment for this item shall be included under the pay item for Mobilization or under other applicable pay items.

17. Restoration

Payment for restoration shall be covered under the applicable restoration Pay Items as specified in the proposal. If a specific restoration Pay Item is not listed in the proposal, the cost of such work shall be included in the applicable Pay Item unless otherwise provided under separate restoration section or pay quantity of these Specifications.

18. Site Investigation

The Contractor acknowledges that it has satisfied itself as to the nature and location of the work; the general and local conditions, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials; availability of labor, water, electric power, roads; and uncertainties of weather, water stages, tides or similar physical conditions at the site; the conformation and conditions of the ground; the character of equipment and facilities needed preliminary to and during prosecution of the work.

The Contractor further acknowledges that it has satisfied himself as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered, insofar as this information presented by the drawings and Specifications made a part of this contract.

The Contractor shall carefully review and adhere to conditions and recommendations made in the project geotechnical report for the project.

Any failure by the Contractor to acquaint himself with the available information will not relieve him from responsibility for estimating properly the difficulty or cost of successfully performing the work.

The City assumes no responsibility for any conclusions or interpretations made by the Contractor on the basis of the information made available by the City. The City also assumes no responsibility for any understanding or representations

made by its officers or agents during or prior to the execution of this Contract, unless (1) such understanding or interpretations are made in writing by the Engineer or are expressly stated in the Contract and (2) the Contract expressly provides that the responsibility therefore is assumed by the City.

19. Contractor/Subcontractor Work Experience and Qualifications

The Contractor or subcontractors shall have a minimum of five years' experience in their particular trade and shall provide a minimum of three references relating specifically to the type of work that shall be performed for this project.

The Contractor shall assure that all superintendents, foremen and workmen are competent, careful and reliable. All workmen must have sufficient skill and experience to properly perform the work assigned them. All workmen engaged on special concrete bases, pavements or structures, or in any trade, shall have had sufficient experience in such work to perform it properly and satisfactorily and to operate the equipment involved, and shall make due and proper effort to execute the work in the manner prescribed in the Specifications, or the Engineer may take action as prescribed below.

Whenever the Engineer has determined that any person is incompetent, unfaithful, intemperate, disorderly or insubordinate, such person shall upon notice, be discharged from the work and shall not again be employed on it except with the written consent of the Engineer. Should the Contractor fail to remove such person or persons the Engineer may withhold all estimates, which are or may become due, or may suspend the work until such orders are complied with.

Within ten days after the award of any subcontract, either by himself or a subcontractor, the Contractor shall deliver to the Engineer a statement setting forth the name and address of the subcontractor and a summary description of the work subcontracted.

The Contractor shall be as fully responsible to the City for acts and omissions of his subcontractor and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

20. Salvage

All existing material and appurtenances removed by the Contractor and which are not designated to be salvaged shall become the property of the Contractor and shall be removed from the site of the work to the Contractor's own place of disposal.

21. Protection of Trees and Shrubs

All trees and shrubs, except where otherwise shown or ordered, shall be adequately protected by boxes, fences, or otherwise carefully supported, as necessary, by the Contractor. Protective barricades shall be placed around all protected trees and shall remain in place until all potentially damaging construction activities are completed.

Beneath trees within the limits of the excavation, and where possible, pipelines shall be built in short tunnels, except as otherwise shown or specified. When the tree is outside the limits of the excavation but, where the distance from the centerline of the new pipeline to the trunk of any tree is such that, in the opinion of the Engineer, the excavation would result in serious damage to the tree, the pipeline shall be constructed in short tunnel or the root system shall be pruned, as ordered in writing by the Engineer. The Contractor shall be responsible for all damage to trees and shrubs as a result of his operations, whether the pipeline is placed on trench, tunnel, or other excavation.

The Contractor shall provide the services of an approved licensed tree professional when it is necessary to trim or cut a branch from a tree, or for required root pruning. The City's approved arborist shall be present for all activities associated with trees. The contractor shall trim necessary tree canopies and root prune within excavation areas the trees that are to remain to allow for construction activities with the City's approved arborist present during such activities.

The cost of protection of trees and shrubs, replacement or repair of trees or shrubs destroyed by the Contractor, short tunnels, cutting or trimming of tree branches, and root pruning shall be included in the various classified unit price Contract Items for pipelines, tree and root pruning, as applicable, and no separate payment will be made therefor.

22. Existing Sprinkler System

Existing sprinkler systems for lawns and/or shrubbery within the City right-of-way shall be protected or, if disturbed, replaced by the Contractor. All sprinkler systems shall be replaced with those of equal or better quality as approved by the Engineer. The replacement of sprinkler systems shall include all necessary parts, labor, equipment, etc., to complete the existing sprinkler system in operating condition.

All costs associated with any sprinkler system repaired or replaced within the described construction area shall be included under Mobilization or in various unit price items and no additional payment shall be made, thereof.

23. Indemnification Provision

To the fullest extent permitted by law, Contractor shall indemnify and hold harmless the City, its elected officials, officers and employees, from any and all liabilities, any and all claims, including claims for equitable or injunctive relief, damages, losses and costs, including but not limited to reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of Contractor, its employees, agents, officers, subcontractors and other persons employed or utilized by Contractor in the performance of this agreement. It is the specific intent of the parties hereto that the foregoing indemnification provision comply with section 725.08, Florida Statutes. It is further the specific intent and agreement of the parties that all the contract documents of any project for which Contractor provided services be hereby amended to include the foregoing indemnification. Contractor expressly agrees that it will not claim, and waives any claim, that this article violates section 725.08 Florida Statutes, or is unenforceable pursuant to section 725.08, Florida Statutes. This indemnification obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this section, including but not limited to any immunity from or limitation of liability to which the City is entitled to pursuant to the doctrine of sovereign immunity or section 768.28, Florida Statutes. This indemnification provision shall include claims made by an employee of Contractor against the City and Contractor waives any entitlement to immunity under section 440.11, Florida Statutes. This indemnification provision shall survive the termination of this agreement however terminated.

Subject to the limitations set forth in this paragraph and any other provision of law, Contractor shall assume control of the defense of any claim asserted by a third party against the City and, in connection with such defense, shall appoint lead counsel, in each case at the Contractor's expense. The City shall have the right, at its option to participate in the defense of any suit, without relieving Contractor of any of its obligations hereunder. If the Contractor assumes control of the defense of any third party claim in accordance with this paragraph, the Contractor shall obtain prior written consent of the City before entering into any settlement of such claim. Notwithstanding anything to the contrary in this Section, the Contractor shall not assume or maintain control of the defense of any third party claim, but shall pay the fees of counsel retained by the City and all expenses, including experts' fees, if (i) an adverse determination with respect to the third party claim would, in the good faith judgment of the City, be detrimental in any material respect to the City's reputation; (ii) the third party claim seeks an injunction or equitable relief against the City; or (iii) the Contractor has failed or is failing to prosecute or defend vigorously the third party claim. Each party shall cooperate, and cause its agents to cooperate, in the defense or prosecution of any third party claim and shall furnish or cause to be furnished such records and information, and attend such conferences, discovery proceedings, hearings, trials, or appeals, as may be reasonably requested in connection therewith.

CITY OF SAFETY HARBOR (THE CITY)

EXHIBIT E
GENERAL PROVISIONS
(CONSTRUCTION CONTRACT)

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1. Access to the Work

The City and its representatives shall at all times have access to the Work. The Contractor shall provide proper facilities for such access and observation of the Work and also for any inspection or testing thereof by others.

2. Accident Prevention

In performing the Work, the Contractor shall be responsible for protecting the lives and heath of all persons; preventing damage to property, materials, supplies, and equipment; and avoiding Work interruptions. For these purposes, the Contractor shall (a) designate a project superintendent who shall ensure the prevention of the occurrences listed in this paragraph; (b) provide appropriate safety barricades, signs and signal lights; and (c) ensure compliance with all safety standards required by federal, state, or local law and all ordinances, rules, and regulation as well as any additional safety standards customarily employed in connection with the type of Work being performed under this Contract or requested by the City. The City and the City's Project Manager will communicate directly with the Contractor's project superintendent and shall have no authority to direct, oversee, or instruct the Contractor's employees, subcontractors, or materialmen, or any other individuals performing the Work.

3. Administrative Control of Documents

(a) All notices, correspondence, transmittal letters, requests, demands, deliveries and other communications which are required or permitted under this Contract shall be forwarded in writing to the City and associated with this Contract. All communications shall be sequentially numbered by the Contractor prior to submission to the City for ease of control and cross referencing. Correspondence shall also refer to the Contract number identified on the cover sheet of this Contract. All notices required or made pursuant to this Contract shall be made in writing and shall be either hand delivered to the parties as listed below or and sent by certified U.S. mail, return receipt requested, addressed to the following:

To City:

City of Safety Harbor
Attn: Josh Stefancic, City Manager
750 Main Street
Safety Harbor, FL 34695

To Contractor:

_____
_____
_____
_____

With required copy to:

Sarah Johnston.
Bryant Miller Olive P.A.
400 N Tampa Street, Suite 1600
Tampa, Florida 33602

(b) Either party may change its above noted address by giving written notice to the other party in accordance with the requirements of this paragraph.

4. Approval of Payments

The City shall appoint a "City Representative" to review and approve all payments requested in an application for payment. The approval shall constitute a representation by them to the City based on their on-site observations of the Work in progress as experienced and qualified professionals and on their review of the application for payment and supporting data, that the Work has progressed to the point indicated; that, to the best of their knowledge, information, and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning project upon substantial completion, and to the results of any subsequent tests called for in its approval); and that the Contractor is entitled to payment of the amount approved. However, by approving any such payment the City shall not thereby be deemed to have represented that it has made exhaustive or continuous on-site inspections to check the quality or the quantity of the Work, that it has reviewed the means, methods, techniques, sequences, and procedures of construction or that it has made any examination to ascertain how or for what purpose the Contractor has used the monies paid or to be paid under the Contract.

5. Availability of Lands

The City will provide the Contractor access to the lands owned by the City shown on the specifications and the Contract Documents. All other lands not depicted in the specifications or the Contract Documents necessary for completion of the Work shall be the sole responsibility of the Contractor to obtain access or any easements necessary for access.

6. Assignment

The terms and provisions of this Contract shall be binding upon the Parties and their respective partners, successors, heirs, executors, administrators, assigns and legal representatives. Notwithstanding the forgoing, Contractor's rights and obligations under this Contract, including entitlement to any monies due or to become due hereunder, may not be transferred, assigned, sublet, mortgaged, pledged or otherwise disposed of or encumbered in any way without the City's prior written consent. The City may assign its rights and obligations under this Contract to any successor to the rights and functions of the City or to any governmental agency to the extent required by applicable laws or governmental regulations or to the extent the City deems necessary or advisable under the circumstances.

7. Attorney's Fees

In the event of legal action or other proceeding arising under this Contract, the City shall be entitled to recover from the Contractor all its reasonable attorneys' fees and cost incurred by the City in the prosecution or defense of such action, or in any post-judgment or collection proceedings and whether incurred before suit, at the trial level or at the appellate level. This shall include any bankruptcy proceedings filed by or against the Contractor. The City shall also be entitled to recover any reasonable attorneys' fees and costs incurred in litigating the entitlement to attorneys' fees and costs, as well as in determining the amount of attorneys' fees and cost due to the City. The reasonable costs to which the City will be entitled include costs that are taxable under any applicable statute, rule, or guideline, as well as costs of investigation, copying costs, electronic discovery costs, mailing and delivery charges, costs of conducting legal research, consultant and expert witness fees, travel expenses, court reporter fees, and mediator fees, regardless of whether such costs are taxable under ay applicable stature, rule or guideline.

8. Business Tax Receipt Requirement

All contractors working in the City must be registered with the City. Businesses inside the City must pay a business tax to work within the City, unless such business falls within a statutory defined exception.

9. City's Right to Carry Out the Work

If the Contractor fails or refuses to carry out all or any part of the Work in accordance with the Contract requirements or within the Contract schedule and fails or refuses to correct such deficiency within seven (7) days of receipt of written notice thereof from the City, the City, in its sole discretion and without waiving any other rights it may have, may elect to correct such deficiencies and charge the Contractor the cost of such corrections. A Contract Modification shall be issued incorporating the necessary revisions in the Contract Documents, including an appropriate reduction in the Contract Price. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the City within seven (7) days of receipt of written notice thereof from the City. Nothing in this clause shall relieve the Contractor of its obligation to perform the remainder of the Work in accordance with the Contract.

10. Change Orders

(a) Notwithstanding anything contained in the Contract Documents, the City's Project Manager may at any time, by written order, make changes within the scope of the Work to be performed by Contractor under the Contract Documents. However, no such written order shall serve to increase the Contract Price, increase the Contract Time, or give the Contractor any claim for any compensation in addition to the Contract Price. If any such change would cause an increase in the Contract Price or increase the Contract Time, whether or not requested by the City or initiated by Contractor, such change shall only be authorized if approved by the City Commission at a duly noticed public meeting. In the event any change in the Work would result in any increase in the Contract Price or Contract Time, Contractor shall notify the City within seven (7) days in writing. The written notice shall state in all capital, bold letters that the change order would result in an increase in the Contract Price and/or Contract Time and shall include a statement outlining the reasons for the change, a complete description of the change, and detailed description of products to be purchased and any back-up detail and documentation supporting the request. Such notice must be submitted and approved by the City Commission at a duly noticed public meeting prior to performing any Work contemplated by the

change order. If Contractor proceeds with additional Work prior to such approval, Contractor shall not receive any additional compensation for such Work.

(b) No Stoppage of Work. Notwithstanding the foregoing, nothing in this clause shall excuse Contractor from proceeding with the Work as changed except for those changes which would increase the Contract Price or Contract Time.

(c) No Increase in Costs. No services for which an additional cost or fee will be charged by Contractor shall be furnished without the prior express written authorization of the City.

11. Clarification and Interpretations

The Contracting Officer will issue with reasonable promptness such written clarification or interpretation of the Contact Documents (in the form of Drawings or otherwise) as he or she may determine necessary, which shall be consistent with or reasonably inferable form the overall intent of the Contract Documents. It shall be deemed reasonable if the Contracting Officer responds to a request for written clarifications or interpretations of Contract Documents within fourteen (14) days of his or her receipt of the request from the Contractor. If the Contractor believes that a written clarification and interpretation entitles him to an increase in the Contract Price, he may make a claim therefore as provided in paragraph 10 above. However, the Contractor recognizes and acknowledges that the Contracting Officer has no authority to approve a change order or extra Work or to vary the Contract Documents. The Contractor must obtain a change order approved by the City Commission prior to performing any extra Work or Work for which the Contractor claims it is entitled to extra compensation.

12. Cleaning Up

(a) The Contractor shall at all times keep the Site, including storage areas, free from accumulations of waste materials. Before completing the Work, the Contractor shall remove from the Work and Site any rubbish, tools, scaffolding, equipment, and materials that are not the property of the City. The burning of rubbish on Site will not be permitted.

(b) The Contractor shall restore to their original condition those portions of the Site not designated for alteration by the Contract Documents. All clean dirt (as determined by the City) remaining after completion of the Work shall become the sole property of the City and the Contractor shall deliver it to a Site as directed by the City. Upon completing the Work, the Contractor shall leave the Site in a clean, neat, and orderly condition satisfactory to the City.

13. Compliance with all Law

The Contractor shall perform all Work hereunder in compliance with all applicable federal, state, and local laws, rules, regulations, and ordinances. Contractor shall also be solely responsible for compliance with the required contractor provisions per the Federal Emergency Management Agency (FEMA) contract requirements as per 2 C.F.R 200.326 and 2 C.F.R. Part 200, Appendix II, which includes Equal Opportunity Employment, Davis-Bacon Act, Copeland Anti-Kickback Act, Clean Air Act and Federal Water Pollution Control Act, Debarment and Suspension, Byrd Anti-Lobbying Amendment, etc. Omission of any applicable laws, ordinances, rules, regulations, standards or orders from the Contract Documents shall not relieve Contractor of its obligations to comply with all laws fully and completely. The Contractor shall use only licensed personnel to perform Work required by law to be performed by such personnel. All such compliance shall be at the Contractor's sole expense.

14. Composition of Contractor

If the Contractor hereunder is comprised of more than one legal entity, each such entity shall be jointly and severally liable hereunder.

15. Construction Schedule and Schedule of Values

(a) Within seven (7) days from Contract award, the Contractor shall meet with the City's Project Manager to discuss project scheduling and, at that meeting, shall submit a practicable construction schedule showing the order in which the Contractor proposes to perform the Work and the dates on which the Contractor contemplates starting and completing the several salient features of the Work (including acquiring materials, plant, and equipment). The schedule shall be in the form of a network analysis of suitable scale to indicate appropriately the percentage of the Contractor's Work breakdown schedule which will be completed by any given date during the period. If the Contractor fails to submit a schedule within the time prescribed, the City may withhold approval of progress payments until the Contractor submits the required schedule or may terminate this Contract immediately upon written notice to the Contractor.

(b) The Contractor shall enter the actual progress on the schedule as directed by the City and, upon doing so, immediately shall deliver a copy of the annotated schedule to the City. If, in the opinion of the City, the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to improve its progress, including those that may be required by the City, without additional cost to the City. In this circumstance, the City may require the Contractor to increase the number of shifts, overtime operations, days of Work, and/or the amount of construction plans, and to submit for approval any supplementary schedule or schedules in chart form as the City deems necessary to demonstrate how the approved rate of progress will be regained.

(c) Within ten (10) days from Contract award, the Contractor shall submit a schedule of values of the Work including quantities and unit prices totaling the Contract Price. This schedule shall be satisfactory in form and substance to the City and shall subdivide the Work into component parts in sufficient detail to serve as the basis for progress payment during construction. Upon approval of the schedule of values by the City, it shall be incorporated into the form of application for payment prescribed by the City.

(d) Failure of the Contractor to comply with the requirements under this clause shall be grounds for a determination by the City that the Contractor is not prosecuting the Work with sufficient diligence to ensure completion within the time specified in the Contract. Upon making this determination, the City may terminate this Contract immediately upon written notice.

16. Differing Site Conditions

(a) The Contractor shall promptly, and before the conditions are disturbed, give written notice to the City of: (1) subsurface or latent physical conditions at the Site which differ materially from those indicated in this Contract; or (2) unknown physical conditions at the Site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as interfering in Work of the character provided for in the Contract.

(b) The City will endeavor to investigate the Site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the Work under this Contract, whether or not changed as a result of the conditions, the Contractor and the City may agree to a written equitable adjustment.

(c) No request by the Contractor for an equitable adjustment to the Contract under this clause shall be allowed unless the Contractor has given the written notice required prior to performing any Work on the Site after discovering the Site conditions

(d) No request by the Contractor for an equitable adjustment to the Contract Price or Time for differing Site conditions shall be allowed if made after final payment under this Contract or if additional Work has been performed after the Contractor knew or should have known that the Site condition differed.

17. Disputes

(a) Resolution of Disputes - In the event the Contractor has any controversy, claim or dispute arising out of or related to this Contract, whether such claim or dispute involves a claim by the Contractor for additional time or compensation, for a Change Order, or otherwise, the Contractor shall present a written Notice of Claim to the City within ten (10) days of the Contractor’s knowledge, whether actual knowledge or whether the Contractor should have known of the controversy, claim or dispute, or the facts out of which the controversy, claim, or dispute arises. This written Notice of Claim must specifically include, in bold type on the face of the notice that it is a “Notice of Claim” and whether the Contractor is seeking additional time, compensation or both. Additionally, the Contractor shall set forth in the Notice of Claim the nature of the controversy, claim or dispute, including all necessary facts. The Contractor shall waive any claim which the Contractor fails to present to the City within the time and in the manner provided herein. Disputes raised by Contractor, which are not resolved amicably by the Parties, shall be decided in writing by the City. If Contractor disagrees with the decision of the City, within ten (10) days from the date of the City’s decision, Contractor shall furnish a written appeal to the City Manager. In connection with any such appeal, Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its position. The decision of the City Manager shall be binding upon Contractor and Contractor shall abide by the decision.

(b) Performance during Dispute - Unless otherwise directed by the City in writing, Contractor shall continue performance under the Contract while matters in dispute are being resolved.

(c) Claims for Damages - Should either party suffer injury or damage to person or property because of any act or omission of the other party or of any of its employees, agents or others for whose acts it is legally liable, a claim for damages therefore shall be made in writing to such other party within ten (10) days of when the party knew or should

have known of such injury or damage, otherwise the party suffering the injury or damage will have waived its right to seek damages against the other party.

(d) Rights and Remedies -The duties and obligations imposed by the Contract Documents and the rights and remedies available hereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law. No action or failure to act by the City or Contractor shall constitute a waiver of any right or duty afforded any of them under the Contract, nor shall any such action or failure to act constitute an approval of or acquiescence of any breach hereunder except as may be specifically set forth in writing by the party to be charged.

18. Drug-Free Workplace Program

(a) As used in this clause:

(1) "Alcohol" means ethyl alcohol and any beverage containing ethyl alcohol.

(2) "Controlled substance(s)" means any substance defined as such under Florida Statutes, including but not limited to, marijuana, heroin, LSD, concentrated cannabis or cannabinoids, hashish or hash oil, morphine or its derivatives, mescaline, peyote, phencyclidine (PCP, Angel Dust), opium, opiates, methadone, cocaine, qualudes, amphetamines, "exotic/designer" drugs, benzodiazepines, Seconal, codeine, barbiturates, phenobarbital, or Valium.

(3) "Safety sensitive task" means each category of Work performed at a construction workplace which, if performed by a person impaired by the effects of alcohol or a controlled substance would pose a serious risk of death or personal injury to the employee or others in the vicinity.

(4) "Drug-free workplace" means a Site for the performance of Work done in connection with this Contract at which employees are prohibited from using alcohol or from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

(5) "Employee" means an employee of a Contractor or subcontractor who may be directly engaged in the performance of Work under this Contract.

(6) "Reasonable suspicion" means the presence or absence of specific criteria identified in the Contractor's drug-free workplace program (indicating the possibility that a person is under the influence of alcohol or a controlled substance) as observed by the Contractor's supervisory personnel with reasonable training in the identification of such criteria.

(b) The program shall provide for mandatory drug testing of employees who are to perform safety sensitive tasks under the following circumstances:

(1) All employees will be tested prior to assignment to this Contract to ascertain the use of controlled substances if the employee will be performing safety sensitive tasks; and

(2) When there is a reasonable suspicion that an employee is under the influence of alcohol or a controlled substance at the workplace; and

(3) When an employee has been involved in an accident or unsafe practice (as defined in the Contractor's safety program) at the workplace.

(c) The program may, at the Contractor's discretion, include mandatory employee drug testing under the following circumstances:

(1) As part of or as a follow-up to counseling or rehabilitation for controlled substance use; or

(2) As part of a voluntary employee drug testing program.

(d) A random testing procedure to detect the use of alcohol or a controlled substance by employees performing safety sensitive tasks is required as part of the Contractor's program for the purpose of preventing or deterring hazardous performance. The procedure shall require that, at a minimum, five percent (5%) of the Contractor's employees will be randomly tested within the Contract Time or within each year of the Contract Time, whichever period is shorter.

(e) All testing by or on behalf of the Contractor because of a requirement in this Contract shall be conducted only for employees engaged (or to be engaged) in safety sensitive tasks and only for use of alcohol or a controlled substance and shall be conducted in a manner and under written policies that minimize the intrusion on the employee's privacy and personal dignity. This provision shall not preclude the Contractor from adding its own additional testing requirements.

(f) The Contractor shall publish a statement notifying employees that the use of alcohol at the workplace or the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance by employees at any time is prohibited and specifying the actions that will be taken against employees for violations of such prohibition.

(g) The program must require each employee who will perform a safety sensitive task, prior to working under this Contract to:

(1) Acknowledge in writing the Contractor's drug-free workplace program; and

(2) Give advance written consent to any drug testing that may be conducted under the Contractor's program and the use of test results for decisions related to employment, disciplinary action, or continued employment. The Contractor will agree, in connection with the employee's consent, that the results of testing for alcohol and controlled substances will not be voluntarily referred to any law enforcement agency. If the Contractor is subject to a collective bargaining agreement:

(i) the procedure for obtaining the individual employee's acknowledgment and consent must be consistent with the Contractor's obligations under the collective bargaining agreement; and

(ii) employees shall have the right to be accompanied by a union representative when any specimen is obtained for testing.

(h) The Contractor will establish a drug-free awareness program to inform its employees about:

(1) The dangers of drug abuse in the workplace;

(2) The Contractor's policy of maintaining a drug-free workplace;

(3) Any available drug counseling, rehabilitation, and employee assistance programs; and

(4) The penalties that may be imposed upon employees who refuse to submit to required testing and for other violations of the drug-free workplace program including, but not limited to, being unable to remain employed at the Site until approval to return is obtained from the City.

(i) The Contractor's drug-free workplace program shall, at a minimum, include:

(1) Policies and procedures for specimen collection, chain of custody for specimens, laboratory qualification standards, laboratory analysis procedures, quality control requirements, and test result reporting procedures which substantially conform to the material requirements of the Mandatory Guidelines for Federal Workplace Drug Testing Programs promulgated by the U.S. Department of Health and Human Services in effect on the date of award of this Contract.

(2) Procedures for the Contractor's employees to report their use of prescription drugs used in the course of medical treatment or which have been prescribed and authorized for use by a licensed medical practitioner.

(3) The criteria the Contractor will use for "reasonable suspicion" testing.

(4) The levels of alcohol or controlled substances which will be used in conjunction with a determination that an employee is "under the influence" or is "impaired by the effects of" alcohol or controlled substance(s).

(j) The Contractor shall display a notice, prominently placed near each entrance to the workplace, stating that, by entering the premises, persons are consenting to an inspection of themselves and their property including, but not limited to, their clothing, vehicles, briefcases, lunch boxes, tool boxes, purses, and packages.

(k) The Contractor agrees to use its best efforts to establish and maintain a work environment free of use by employees of alcohol or controlled substances through implementation of paragraphs (b) through (j) of this clause. The Contractor shall prepare and maintain records in sufficient detail to demonstrate compliance with the requirements of this clause including, but not limited to, certifications from subcontractors and records of drug or alcohol tests conducted during performance of this Contract. Such records shall be subject to inspection and audit by the City, and

the Contractor's noncompliance may authorize the City to withhold all or any portion of any payments due the Contractor until the Contractor demonstrates compliance or to terminate this Contract upon written notice to the Contractor.

(l) A Drug-Free Workplace Program clause identical to this clause (except for changes appropriate for designation of the parties), including this subparagraph (l), will be included in every subcontract entered into in connection with this Contract.

19. Emergencies

In emergencies affecting the safety of persons, the Work, or other property at the Site or adjacent thereto, the Contractor may act in his discretion to prevent threatened damage, injury or loss to the Work, the City's property or property of others. However, nothing contained herein shall relieve the Contractor from complying with Paragraph 10, Change Orders and subparagraph 17 (c), Disputes.

20. Entire Agreement; Amendment and Waiver

The Contract Documents constitute the entire agreement of the parties relating to the subject matter hereof. The Contract Documents, together with all exhibits hereto, supersede any and all prior negotiations and oral or written agreements heretofore made, relating to the subject matter hereof and, except for written agreements, if any, executed and delivered simultaneously with or subsequent to the date of this Contract. This Contract may not be altered or amended except by a Contract Modification signed by the parties hereto. No waiver of any of the terms or conditions of this Contract shall be effective unless in writing and executed by the party to be charged therewith. No waiver of any condition or of the breach of any term, covenant, representation, warranty or other provision hereof shall be deemed to be construed as a further or continuing waiver of any such condition or breach or a waiver of any other condition or of any breach of any other term, covenant, representation, warranty or other provision contained in this Contract.

21. Examination and Retention of Records

(a) The City shall have the audit and inspection rights described in the applicable paragraphs (b) and (c), below.

(b) If this is a cost reimbursement, incentive, time and materials, labor hour, or price redeterminable contract, or any combination thereof, the Contractor shall maintain, and the City and its representatives shall have the right to examine, all books, records, documents, and other evidence and accounting procedures and practices sufficient to reflect properly all direct and indirect costs of whatever nature claimed to have been incurred and anticipated to be incurred for the performance of this Contract. Such right of examination shall include inspection at all reasonable times at the Contractor's plants, or such parts thereof, as may be engaged in or maintain records in connection with the performance of this Contract.

(c) If the Contractor submitted certified cost or pricing data in connection with the pricing of this Contract or if the Contractor's cost of performance is relevant to any change or modification to this Contract, the City shall have the right to examine all books, records, documents, and other data of the Contractor related to the negotiation, pricing, or performance of such Contract, change, or modification for the purpose of evaluating the costs incurred and the accuracy, completeness, and currency of the cost or pricing data submitted. The right of examination shall extend to all documents necessary to permit adequate evaluation of the costs incurred and the cost or pricing data submitted, along with the computations and projections used therein.

(d) The materials described in (b) and (c), above, shall be made available at the office of the Contractor at all reasonable times for inspection, audit, or reproduction until the expiration of five (5) years from the date of final payment under this Contract, except that: (1)if this Contract is completely or partially terminated, the records relating to the Work terminated shall be made available for a period of five (5) years from the date of any final settlement; and (2) records which relate to appeals under the Disputes Clause of this Contract or litigation, or the settlement of claims arising out of the performance of this Contract, shall be made available until such appeals, litigation, or claims have been resolved.

(e) The Contractor shall insert a clause containing all the provisions of this clause, including this paragraph (e), in all subcontracts exceeding $10,000 hereunder, altered to reflect the proper identification of the contracting parties.

22. Facilities

The City reserves the right to inspect the Contractor's facilities at any reasonable time with prior notice.

23. Force Majeure

Neither party shall be liable for its non-performance or delayed performance if caused by Force Majeure. Force Majeure shall be defined as a fire, flood, act of God, war, terrorism, riot, national emergency, sabotage, civil disturbance, strike, labor dispute, governmental act, law, ordinance, rule or regulation, or events which are not the fault or are beyond the control of the party.

24. Governing Law; Consent to Jurisdiction

This Contract shall be governed by, construed and interpreted in accordance with the laws of the State of Florida. Contractor and the City consent to jurisdiction over them and agree that venue for any state action shall lie solely in the Sixth Judicial Circuit in and for Pinellas County, Florida, and for any federal actions shall lie solely in the U.S. District Court, Middle District of Florida, Tampa Division.

25. Independent Contractor

The Contractor at all times shall be an independent contractor. The Contractor shall be fully responsible for all acts and omissions of its employees, subcontractors, and their suppliers, and shall be specifically responsible for sufficient supervision and inspection to ensure compliance in every respect with the requirements of the Contract Documents. There shall be no contractual relationship between any subcontractor or supplier of the Contractor and the City by virtue of this Contract. No provision of this Contract shall be for the benefit of any party other than the City and the Contractor.

26. Inspection of Construction

(a) All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturer, fabricator or processors except as otherwise provided in this Contract.

(b) The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the Work called for by this Contract conforms to all requirements of the Contract Documents. The Contractor shall maintain complete inspection records and make them available to the City or any public authority having jurisdiction. All Work shall be conducted under the general direction of the City and is subject to inspection and testing by the City or any public authority having jurisdiction at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of this Contract.

(c) Inspections and tests by the City are for the sole benefit of the City and do not: (1) relieve the Contractor of responsibility for providing adequate quality control measures; (2) relieve the Contractor of responsibility for damage to or loss of the material before acceptance; (3) constitute or imply acceptance; or (4) affect the continuing rights of the City after acceptance of the completed Work under paragraph (i) below.

(d) The presence or absence of an inspector from the City or any public authority having jurisdiction does not relieve the Contractor from any Contract requirement, nor is the inspector authorized to change any term or condition of the Contract Documents without the City's written authorization.

(e) The Contractor shall promptly furnish, without additional charge, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the City or any public authority having jurisdiction. The City or any public authority having jurisdiction may charge the Contractor any additional cost of inspection or test when Work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes reinspection or retest necessary. The City shall perform all inspections and tests in a manner that will not unnecessarily delay the Work. Special, full size and performance tests shall be performed as described in this Contract.

(f) The Contractor warrants and guarantees to the City that all Work will be of good quality, free from faults or defects and in accordance with the requirements of the Contract Documents and any inspections, tests or approvals shall be considered defective. Prompt notice of all defects shall be given to the Contractor. All defective Work whether or not in place, may be rejected, corrected or accepted as provided in this Exhibit.

(g) The Contracting Officer will have authority to disapprove or reject Work which is “defective” (which term is hereinafter used to describe Work that is unsatisfactory, faulty or defective; does not conform to the requirements of the Contract Documents; or does not conform to the requirements of any inspection, test or approval referred to under paragraph (f) herein.

(h) The City may reject any and all Contract Work that it deems in its sole discretion to be unsatisfactory, faulty or not in compliance with the Contract Documents.

(i) The Contractor shall, without charge, replace or correct Work found by the City not to conform to the requirements of the Contract Documents, unless in the public interest the City consents to accept the Work with an appropriate downward adjustment in Contract Price. The Contractor shall promptly segregate and remove rejected material from the premises.

(j) If the Contractor does not promptly replace or correct rejected Work, the City may (1) by contract or otherwise, replace or correct the Work and charge the cost to the Contractor or (2) terminate this Contract for default.

(k) If any Work is covered contrary to the request of the City it must, if requested by the City be uncovered for observation and replaced at the Contractors expense. If any Work has been covered which the City has not specifically requested to observe prior to its being covered, or if the City considers it necessary or advisable that covered Work be inspected or tested by others, the Contractor, at the City’s request will uncover, expose or otherwise make available for observation, inspection or testing as the City may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is defective, the Contractor will bear all expense of such uncovering, exposure, observation, inspection, and testing, and of satisfactory reconstruction.

(l) Unless otherwise specified in this Contract, the City will endeavor to accept, as promptly as practicable after completion and inspection, all Contract Work. Subject to the provisions of the "Warranty of Construction" clause hereof, acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the City's rights under any warranty or guarantee.

(m) Neither observations by the City nor inspections, tests or approvals by persons other than the Contractor shall relieve the Contractor from his obligations to perform the Contract Work in accordance with the requirements of the Contract Documents.

(n) The Contractor’s obligation to perform the Contract Work and complete the Project in accordance with the Contract Documents shall be absolute. Neither approval of any progress or final payment by the City, the issuance of a Certificate of Substantial Completion, any payment the City to the Contractor under the Contract Documents, any use or occupancy of the Project or any part thereof by the City, any act of acceptance by the City, any failure to do so nor any correction of defective Work by the City shall constitute any acceptance of Work not in accordance with the Contract Documents.

27. Layout of Work

The Contractor is solely responsible for the means and methods of completing the Work. The Contractor shall provide the City with its plans for the Project based on the City-established base lines and bench marks indicated on the drawings (if applicable) and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the Work. The Contractor shall be responsible for executing the Work to the lines and grades that may be established or indicated by the City. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the City until authorized to remove them. If such marks are destroyed by the Contractor or through its negligence before their removal is authorized, the City may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.

28. Material and Workmanship

(a) The Contractor shall obtain the City's approval of the machinery and mechanical and other equipment to be incorporated into the Project. When requesting approval, the Contractor shall furnish to the City the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the machinery and mechanical and other equipment. When required by this Contract or by the City, the Contractor also shall obtain the City’s approval of the material or articles which the Contractor contemplates incorporating into the Project. When requesting approval, the Contractor shall provide full information concerning the material or articles. When directed to do so, the Contractor shall submit samples for approval at the Contractor's expense, with all shipping

charges prepaid. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.

(b) All Contract Work under this Contract shall be performed in a skillful and Workmanlike manner. The City may require, in writing that the Contractor remove from the Work the City deems incompetent, careless, or otherwise objectionable.

29. No Damages for Delay

Unless otherwise specifically provided for by the Contract, the Contractor shall not be entitled to any damages of any type resulting from any hindrances, delays, or any other cause under this Contract even if caused by the acts of the City except when the Work is stopped or suspended by a written order signed by the City. The Contractor's only remedy for any delay addressed in this subsection shall be an extension of the Contract Time.

30. No Third Party Beneficiaries

Nothing contained in the Contract Documents shall be construed as creating any personal liability on the part of any elected official, officer, employee or agent of the City, nor shall it be construed as giving any rights or benefits to any thid party, including the general public or other entity other than the Parties hereto, nor shall it be construed as enforceable by any third parties.

31. Notice of Labor Disputes

(a) If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this Contract, the Contractor immediately shall give notice, including all relevant information, to the City.

(b) The Contractor agrees to insert the substance of this clause, including this paragraph (b), in any subcontract under which a labor dispute may delay the timely performance of this Contract; except that each subcontract shall provide that in the event its timely performance is delayed or threatened by delay by any actual or potential labor dispute, the Subcontractor shall immediately notify the next higher tier Subcontractor or the Contractor, as the case may be, of all relevant information concerning the dispute.

32. Operations and Storage Areas

(a) The Contractor shall confine his equipment, the storage of materials and equipment, and the operations of his Workmen to the areas permitted by law, ordinances, permit or the requirements of this Contract Documents and shall not unreasonably encumber the Site with materials or equipment.

(b) The Contractor shall confine all operations including but not limited to, storage of materials on City premises to areas authorized or approved by the City. The Contractor shall indemnify, defend, hold and save the City, and its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.

(c) Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the City and shall be built with labor and materials furnished by the Contractor without expense to the City. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the Work.

(d) The Contractor shall, under regulations prescribed by the City, use only established roadways or use temporary roadways constructed by the Contractor when and as authorized by the City. When materials are transported in prosecuting the Work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any federal, state, county or local law and of all ordinances, rules and regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

33. Other Contracts

(a) The City may undertake, or award other contracts for, additional Work at or near the Site of the Work under this Contract. The Contractor shall fully cooperate with the other contractors and with employees of the City and shall carefully adapt scheduling and performing the Work under this Contract to accommodate the additional Work, heeding any direction that may be provided by the City. The Contractor shall not commit or permit any act that will interfere with the performance of any Work by any other contractor or by employees of the City.

(b) The Contractor shall afford the other contractors who are parties to such direct contracts with the City, if it is performing the additional Work itself, reasonable opportunity for the introduction and storage of materials and equipment and execution of Work, and shall properly connect and coordinate the Contract Work with other Work.

(c) If any part of the Work depends upon the Work of any such other contractor or the City, the Contractor will inspect and promptly report to the City in writing any defects or deficiencies in such Work that render it unsuitable for such proper execution and results. The Contractor's failure to report shall constitute an acceptance of the other Work.

34. Ownership of Information

(a) All data, technical information, materials gathered, originated, developed, prepared, used or obtained in the performance of this Contract, including, but not limited to, all reports, surveys, plans, charts, literature, brochures, mailings, recordings (video and/or audio), pictures, drawings, analyses, graphic representations, software computer programs and accompanying documentation and print-outs, notes and memoranda, written procedures and documents, regardless of the state of completion, which are prepared for or are a result of the services required under this Contract shall be and remain the property of the City and shall be delivered to the City upon thirty (30) days written notice from the City or upon termination of this Contract, however terminated, whichever occurs sooner. With respect to software computer programs and/or source codes developed for the City, the Work shall be considered "Work for hire", i.e., the City, not the Contractor or Subcontractor, shall have full and complete ownership of all software computer programs and/or source codes developed. To the extent that any of such materials may not, by operation of law, be a Work made for hire in accordance with the terms of this Contract, contractor or subcontractor hereby assigns to the City all right, title and interest in and to any copyright, and the City shall have the right to obtain and hold in its own name any copyrights, registrations and any other proprietary rights that may be available.

(b) Should the Offeror anticipate bringing pre-existing intellectual property into the project, the intellectual property must be identified in the offer. Otherwise, the language in the first paragraph of this section prevails. If the proposer identifies such intellectual property ("Background IP") in its proposal, then the Background IP owned by the proposer on the date of the contract, as well as any modifications or adaptations thereto, remain the property of the proposer. Upon contract award, the proposer or contractor shall grant the City a non-exclusive, royalty free license to use any of the proposer's/contractor's Background IP delivered to the City for the purposes contemplated by the contract.

(c) The Contractor shall pay all royalties and license fees related to the completion of the Project. The Contractor shall defend all suits or claims for infringement of any patent rights, copy rights or other intellectual property rights and shall indemnify, defend, and save the City harmless from loss on account thereof, except when a particular invention, design, process, device or product of a particular manufacturer is specified by the City; provided, that, if the Contractor has reason to believe that the invention, design, process, device or product specified by the City infringes a patent, the Contractor shall be responsible for such loss unless it promptly gives such information to the City.

35. Payments

(a) The City shall pay the Contractor the Contract Price as provided in this Contract and in accordance with the Florida Prompt Payment Act, Section 218.70, Florida Statutes, et. Seq. In the event there is a conflict between this Contract and the Florida Prompt Payment Act, the Florida Prompt Payment Act shall control.

(b)Invoices shall be submitted once per month and shall conform to policies or regulations adopted from time to time by the City. Invoices shall be legible and shall contain, as a minimum, the following information: (1) the contract and order number (if any); (2) a complete itemization of all costs including quantities ordered and delivery order numbers (if any); (3) any discounts offered to the City under the terms of the Contract; (4) evidence of the acceptance of the supplies or services by the City; (5) unique traceable invoice number(s); and (6) any other information required by the Florida Prompt Payment Act, Section 218.70, Florida Statutes, et Seq., or other information necessary to demonstrate entitlement to payment under the terms of the Contract. Failure to provide the above critical information may result in the rejection and return of the invoice for resubmission with complete data.
To ensure timely processing of payments, all invoices must be sent to the following address:

For City of Safety Harbor:
Attention: Accounts Payable
750 Main Street
Safety Harbor, Florida 34695

(c) The City shall make progress payments monthly in accordance with paragraph (b) above as the Work proceeds, or at more frequent intervals as determined by the City, on estimates approved by the City upon the provision of receipt of a proper invoice. In the preparation of estimates, the City may authorize material delivered on the Site and

preparatory Work done to be taken into consideration. Material delivered to the Contractor at locations other than the Site may also be taken into consideration if consideration is specifically authorized by this Contract and the Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this Contract.

(d) In making progress payments, the City may retain up to ten (10) percent of each payment as retainage until final completion and acceptance of the Work by the City. Nothing contained in this paragraph shall be construed to require the City to pay or release any payment that is the subject of a good faith dispute, claim or demand by the City or the Contractor.

(e) All materials and Work covered by progress payment shall, at the time of the payment, become the sole property of the City, but this shall not be construed as relieving the Contractor from the sole responsibility for all material and Work upon which payments have been made or the restoration of any damaged Work, or waiving the right of the City to require the fulfillment of all of the terms of the Contract.

(f) The City shall, upon request, reimburse the Contractor for the entire amount of premiums paid for performance and payment bonds (including coinsurance and reinsurance agreements) when applicable after the Contractor furnishes evidence of full payment to the surety. Such reimbursement shall be part of, and not in addition to, the Contract Price.

(g) The City shall pay the amount due the Contractor under this Contract after: (1) completion and acceptance of all Work; (2) presentation of a properly executed voucher in the form prescribed by the City; and (3) presentation of a release of all claims against the City arising by virtue of this Contract.

(h) Concurrently with the submission of each invoice for a progress payment under this Contract, the Contractor shall certify that all due and payable bills with respect to the Contract Work either have been paid or will be paid with the proceeds of the current request for progress payment.

(i) The Contractor agrees to pay each subcontractor under this Contract for satisfactory performance of its contract no later than ten 10 calendar days from receipt of each payment the Contractor receives from the City. The Contractor agrees further to release retainage payments (if applicable) to each subcontractor within ten (10) calendar days after the subcontractor's work is satisfactorily completed and final payment has been made to the subcontractor. Any delay or postponement of payment from the above referenced time frames may occur only for good cause following written approval from the City.

(j) The City may withhold all or part of any progress payment otherwise due the Contractor if any one or more of the following conditions exist: (1) the Contractor fails to prosecute the Work to completion in a diligent, efficient, timely, and Workmanlike manner and in strict accordance with the provisions of the Contract; (2) the Contractor fails to use an adequate amount or quality of personnel or equipment to complete the Work without undue delay; (3) the Contractor fails to make prompt payments to its subcontractors, suppliers, materialmen, or laborers, as required in paragraph (i) above; (4) any part of such payment to the Contractor is attributable to Work which is defective or not performed in accordance with the Contract requirements; provided, however, such payment shall be made as to the part thereof attributable to Work which is performed in accordance with the requirements of the Contract Documents and is not defective; or (5) the Contractor is otherwise in default of any of its obligations under this Contract.

(k) Prior to final payment, the Contractor shall certify in writing that the entire Project is substantially complete and request that the City issue a Certificate of Substantial Completion. Within a reasonable time thereafter, the City and Contractor will make an inspection of the Project to determine the status of completion. If the City does not consider the Project substantially complete, it will notify the Contractor in writing giving the reasons therefore. If the City considers the Project substantially complete, a tentative Certificate of Substantial Completion will be issued. This certificate shall fix the date of substantial completion and the responsibilities between the City and the Contractor for maintenance, heat and utilities. There shall be attached to the certificate a tentative list of items to be completed or corrected within the Contract Period of Performance. The City shall have the right to exclude the Contractor from the Project after the date of substantial completion but the City will allow the Contractor reasonable access to complete or correct items on the list of items to be completed or corrected.

(l) After the Contractor has completed any such corrections to the satisfaction of the City and delivered all maintenance and operating instructions, schedules, guarantees, bonds, Certificates of Inspection and other documents as required by the Contract Documents, he may make application for final payment following the procedures for progress payments. The final application for payment shall be accompanied by legally effective final releases or waivers of claims from the Contractor and all Subcontractors, sub-subcontractors, suppliers or materialmen which performed services for the Contractor pursuant to the Contract Documents and the Consent of Surety, if applicable, to final payment. These releases and waivers of claims are conditions precedent to final payment. The City may

withhold amounts it deems necessary to cover any claims of which it has been notified, including but not limited to claims of Subcontractors, sub-subcontractors, materialmen, suppliers and others from final payment.

(m) If on the basis of observations and review of the Work during construction, the City's final inspection, and review of the final application for payment (all as required by the Contract Documents), the City is satisfied that the Work has been completed and the Contractor has fulfilled all of his obligations under the Contract Documents, the City will, within ten (10) days after receipt of the final application for payment, indicate in writing its approval. Otherwise, it will return the application to the Contractor, indicating in writing its reason for refusing to approve final payment, in which case the Contractor will make the necessary corrections and resubmit the application of payment.

(n) The Contractor warrants and guarantees that title to all Work, materials and equipment covered by an application for payment, whether incorporated in the Project or not, will have passed to the City prior to the making of the application for payment, free and clear of all liens, claims, security interests and encumbrances; and that no Work, materials or equipment covered by an application for payment will have been acquired by the Contractor or by any other person performing the Work at the Site or furnishing materials and equipment for the Project subject to an agreement under which an interest therein or encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person.

36. Performance and Payment Bonds

(a) A Performance and Payment Bond satisfactory to the City, executed by a surety company authorized to do business in the State of Florida or otherwise secured in a manner satisfactory to the City, in an amount equal to one hundred (100) percent of the Contract Price, as awarded, will be required from the Contractor insuring the faithful performance of the Contract and protecting the City from suits for non-payment of debts which might be incurred by a contractor's performance for the City.

(b) All required bonds shall be provided on the forms accompanying the City's Solicitation. The surety company shall be approved for the amount of the bonds and, either hold a certificate of authority from the U.S. Department of Treasury or have obtained reinsurance from a Treasury listed insurer.

(c) The Contractor shall be required to submit all required bonds within ten (10) days from the date of Notice of Award.

37. Permits and Responsibilities

(a) The Contractor shall, without additional expense to the City, be responsible for obtaining any necessary licenses, permits, and approvals for complying with any federal, state, county, and municipal laws, codes, and regulations applicable to the performance of the Work, including, but not limited to, any laws or regulations requiring the use of licensed contractors to perform parts of the Work. The Contractor shall be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence and shall take proper safety and health precautions to protect the Work, the Workers, the public, and the property of others. The Contractor shall be responsible for all materials delivered and Work performed until completion and acceptance of the entire Project, except for any completed unit of Work which may have been accepted under the Contract.

(b) If the Contractor observes that the specifications or drawings are at variance with applicable laws, rules, regulation or ordinances the Contractor shall give the City prompt written notice thereof, and any necessary changes may be adjusted by a written amendment to the Contract. If the Contractor performs any Work knowing it to be contrary to such laws, ordinances, rules and regulations and without such notice to the City, the Contractor shall bear all costs and liability arising there from.

(c) Pursuant to House Bill 279/Chapter 2020-154, the following other governmental entities may have additional permits or fees generated by the project:

- Southwest Florida Water Management District (SWFWMD)
- Florida Department of Environmental Protection
- U.S. Army Corp. of Engineers
- Pinellas County
- Pinellas County Health Dept.
- Florida Department of State Division of Historical Resources
- City of St. Petersburg – Potable Water Line Easement
- City of Safety Harbor Building Department
- U.S. Coast Guard
- Tampa Bay Mitigation
- Duke Energy

- CSX

38. Protection of City Property

The Contractor shall use reasonable care to avoid damaging existing buildings, equipment, and vegetation on or about Sites owned by, or under the control of the City. If the Contractor's failure to use reasonable care causes damage to any of this property, the Contractor shall replace or repair the damage at no expense to the City as the City directs. If the Contractor fails or refuses to make such repair or replacement, the City shall have the right to make the necessary repairs and the Contractor shall be liable for the cost, which may be deducted from the Contract Price.

39. Protection of Existing Site Conditions

(a) The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the Work Site which are not to be removed and which do not unreasonably interfere with the Work required under this Contract. The Contractor shall remove trees only when specifically authorized to do so and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during Contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the City.

(b) The Contractor shall protect from damage all existing improvements and utilities (1) at or near the Work Site and (2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this Contract or failure to exercise reasonable care in performing the Contract Work. If the Contractor fails or refuses to repair the damage promptly, the City may have the necessary Work performed and charge the cost to the Contractor.

40. Publicity Releases

All publicity releases or releases of reports, papers, articles, maps, or other documents in any way concerning this Contract or the Work hereunder which the Contractor or any of its Subcontractors desires to make for purposes of publication in whole or in part, shall be subject to approval by the City prior to release.

41. Public Records Requirement

Pursuant to section 119.0701, Florida Statutes, for any tasks performed by Contractor on behalf of the City, Contractor shall: (a) keep and maintain all public records, as that term is defined in chapter 119, Florida Statutes ("Public Records"), required by the City to perform the work contemplated by this Contract; (b) upon request from the City's custodian of public records, provide the City with a copy of the requested Public Records or allow the Public Records to be inspected or copied within a reasonable time at a cost that does not exceed the costs provided in chapter 119, Florida Statutes, or as otherwise provided by law; (c) ensure that Public Records that are exempt or confidential and exempt from Public Records disclosure requirements are not disclosed except as authorized by law for the duration of the term of this Contract and following completion of this Contract, if Contractor does not transfer the records to the City in accordance with (d) below; and (d) upon completion of this Contract, (i) if the City, in its sole and absolute discretion, requests that all Public Records in possession of Contractor be transferred to the City, Contractor shall transfer, at no cost, to the City, all Public Records in possession of Contractor within thirty (30) days of such request or(ii) if no such request is made by the City, Contractor shall keep and maintain Public Records required by the City to perform the work contemplated by this Contract. If Contractor transfers all Public Records to the City upon completion of this Contract pursuant to (d)(i) above, Contractor shall destroy any duplicate Public Records that are exempt or confidential and exempt from Public Records disclosure requirements within thirty (30) days of the termination of this Contract and provide the City with a letter confirming that this has been done within thirty (30) days of completion of this Contract. If Contractor keeps and maintains Public Records upon completion of this Contract pursuant to (d)(ii) above, Contractor shall meet all applicable requirements for retaining Public Records. All Public Records stored electronically must be provided to the City, upon request from the City's custodian of public records, in a format that is compatible with the information technology of the City. If Contractor does not comply with a public records request, or does not comply with a public records request within a reasonable amount of time, the City may pursue any and all remedies available in law or equity including, but not limited to, specific performance. The provisions of this section only apply to those tasks in which Contractor is acting on behalf of the City.

IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO

PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS, RACHAEL TELESCA, CITY CLERK AT (727)-724-1555, rtelesca@cityofsafetyharbor.com, 750 Main Street, Safety Harbor, Florida 34695.

42. Removal of Contract Personnel

(a) The Contractor and any subcontractor acknowledge that any person assigned to Work under this Contract must perform their duties so as to not unduly impair performance under this Contract and completion of the Project. By assigning a person to Work under this Contract, the Contractor agrees to be responsible for the behavior of that person during the term of this Contract.

(b) The Contractor acknowledges that the City has the right to require the removal of any Contractor or Subcontractor or employee thereof that the City determines, at its sole discretion, to be negatively effecting performance of Contract Work. Examples of such behavior includes but is not limited to: (1) conduct which poses a threat to the safety of anyone Working under the Contract; (2) conduct which is disruptive to Contract performance; (3) careless Work performance; and (4) other behavior determined by the City to be objectionable or unduly hindering Contract performance.

(c) Upon receipt of written notice from the City that a person's behavior is unduly impairing Contract performance, the Contractor agrees to remove that person from doing any further Work on the Project, and to cause that person to be removed from the WorkSite. The Contractor agrees that it is not entitled to any additional costs it may incur as a result of the removal of the person named by the City.

43. Seasonal Weather Conditions

Seasonal weather conditions shall be considered and included in the planning and scheduling of all Work influenced by high and low ambient temperatures, precipitation and/or saturated soil to ensure completion of all Work within the Contract Time. Contract Time extensions for abnormal weather will be granted only to the extent that the actual time lost during a particular month exceeds the Contract Time. Time extensions granted for abnormal weather shall not result in an increase in the Contract Price.

44. Severability

(a) If any provision of the Contract Documents, or the application thereof to any person or circumstances is rendered or declared illegal for any reason or shall be invalid or unenforceable by a court of competent jurisdiction, the remainder of the Contract Documents and the application of such provision to other persons or circumstances shall not be affected thereby but shall be enforced to the greatest extent permitted.

(b) If any one or more of the provisions of the Contract Documents shall be held to be invalid, illegal, or unenforceable in any respect by a court of competent jurisdiction, the validity, legality, and enforceable in any respect by a court of competent jurisdiction, the validity, legality, and enforceability of the remaining provisions hereof shall not in any way be affected or impaired thereby and the Contract Documents shall be treated as through that portion had never been a pert thereof.

45. Site Investigation and Conditions Affecting the Work

(a) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the Work and that it has investigated and satisfied itself as to the general and local conditions which can affect the Contract Work or its cost, including, but not limited to; (1) conditions bearing upon transportation, disposal, handling, and storage of materials; (2) the availability of labor, water, electric power, roads rights of way access to the Work Site and other lands made available by the City for this Project; (3) uncertainties of weather, flooding patterns and water drainage, or similar physical conditions at the Site; (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed prior to and during Work performance. The Contractor acknowledges that its undertaking to complete the Contract within the Contract Schedule includes an allowance for the normal number of days in which Contract Work may be partially or totally delayed because of weather during the season and at the location the Contract will be performed and that the Contractor shall not be entitled to excusable delays or compensation for such delays. The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the Site, access to the Site, and territory surrounding the

Site, including all exploratory Work done by the City as well as from the drawings and specifications made a part of this Contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the Work or for proceeding to perform the Work successfully without additional expense to the City.

(b) The City assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the City. Nor does the City assume responsibility for any understanding reached or representation made concerning conditions which can affect the Work by any of its officers, employees, engineers or agents before the execution of this Contract, unless that understanding or representation is expressly stated in this Contract.

46. Specifications and Drawings

(a) After award of Contract, the Contractor will be furnished one (1) complete set of plans. Additional plans may be furnished at the Contractor's request and at the Contractor's sole expense.

(b) The Contractor shall keep on the Work Site a copy of the drawings and specifications and shall at all times give the City access thereto. Anything mentioned in the Specifications and not shown on the drawings, or shown on the drawings and not mentioned in the Specifications, shall be of like effect as if shown or mentioned in both. In case of differences between drawings and specifications, the Specifications shall govern. In case of a discrepancy in the figures, in the drawings, or in the Specifications, the matter shall be promptly submitted to the City, which shall make a determination in writing. Any action or adjustment by the Contractor without such a determination shall be at its own risk and expense.

(c) Wherever in the specifications or upon the drawings the words "directed", "required", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the "direction", "requirement", "order", " designation", or "prescription", of the City is intended; and similarly the words "approved", "acceptable", "satisfactory", or words of like import shall mean "approved by", or "acceptable to", or "satisfactory to" the City, unless otherwise expressly stated.

(d) Where "as shown", "as indicated", "as detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this Contract unless stated otherwise. The word "provided" as used herein shall be understood to mean "provide complete in place" (that is, "furnished and installed").

(e) Shop drawings means drawings submitted to the City by the Contractor, Subcontractor, or any lower tier subcontractor pursuant to this Contract, showing in detail (1) the proposed fabrication and assembly of structural elements and (2) the installation (i.e., form, fit, and attachment details) of materials or equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the Contractor to explain in detail specific portions of the Work required by the Contract. The City may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this Contract.

(f) If this Contract requires plans and specifications, the Contractor shall coordinate all such drawings and review them for accuracy, completeness, and compliance with the Contract Documents and shall indicate its approval thereon as evidence of such coordination and review. Shop drawings submitted to the City without evidence of the Contractor's approval may be returned for resubmission. The City will indicate an approval or disapproval of the shop drawings and, if not approved as submitted, shall indicate the City's reasons therefore. Any Work done before such approval shall be at the Contractor's risk. Approval by the City shall not relieve the Contractor from responsibility for any errors or omissions in such drawings or from responsibility for complying with the requirements of this Contract, except with respect to variations described and approved in accordance with (g) below.

(g) If shop drawings show variations from the Contract requirements, the Contractor shall describe such variations in writing, separate from the drawings, at the time of submission. If the City approves any such variation, the City shall do so by appropriate Contract Modification.

(h) The Contractor shall submit to the City for approval four copies (unless otherwise indicated) of all shop drawings as called for under the various headings of the Specifications. Three sets (unless otherwise indicated) of all shop drawings will be retained by the City, and one set will be returned to the Contractor.

(i) This clause shall be included in all subcontracts at any tier.

47. Superintendence by Contractor

At all times during performance of this Contract and until the Work is completed and accepted, the Contractor shall directly superintend the Work or assign and have on the Work Site a competent superintendent who is satisfactory to the City and has authority to act for the Contractor.

48. Subcontractors and Outside Consultants

(a) All subcontractors, outside associates, or consultants shall be subject to the City's written approval before such subcontractors, associates or consultants may perform any Work under this Contract. Such subcontractors shall be limited to such individuals or firms as were specifically identified in the Contractor's offer and agreed to by the City in connection with the award of this Contract. Any substitution in such subcontractors, associates or consultants shall be subject to the prior written approval by the City. Acceptance of any subcontractor shall not be deemed a waiver of any right of the City, including the right to reject defective Work.

(b) No subcontractor shall be permitted to perform Work associated with the subcontract until the subcontractor (or the Contractor on the subcontractor's behalf) is in compliance with the insurance requirements specified elsewhere in the Contract Documents, and has furnished satisfactory evidence of insurance to the City.

(c) The Contractor shall not employ any Subcontractor (including those who are to furnish the principal items of materials for the Work), except as approved by prior written approval by the City. The City may revoke its approval of a subcontractor at any time during the term of this Contract in its sole discretion.

(d) The Contractor shall be fully responsible for all acts and omissions of his subcontractors and of persons and organizations directly or indirectly employed by them and of persons and organizations for whose acts any of them may be liable to the same extent that Contractor is responsible for the acts and omissions of persons directly employed by Contractor. Nothing in the Contract Documents shall create any contractual relationship between the City and any Subcontractor or other person or organization having a direct contract with Contractor, nor shall it create any obligation on the part of the City to pay or to see to the payment of any monies. The City may furnish to any Subcontractor or other person or organization, to the extent practicable, evidence of amounts paid to Contractor on account of specific Work done.

(e) All Work performed by a Subcontractor will be pursuant to an appropriate agreement between the Contractor and the Subcontractor which specifically binds the subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the City.

49. Suspension of Work

The City may order the Contractor in writing to suspend all or any part of the Work for such period of time as the City may determine, in its sole discretion, to be appropriate for the convenience of the City.

50. Termination

(a) Termination for Convenience: Notwithstanding any provision herein, the City may terminate this Contract without cause by written notice, in whole or in part, when it is in the City's interest, in its sole discretion, upon seven (7) days written notice to the Contractor. Where the Contractor's services have been so terminated by the City, said termination shall not affect any rights of the City against the Contractor then existing or which may thereafter accrue. Any retention or payment of monies by the City due to the Contractor will not release the Contractor from liability. Upon such termination, the City shall be liable only for payment under the payment provisions of this Contract for services rendered before the date the notice was given.

(b) Termination for Default: If the Contractor does not deliver supplies in accordance with the Contract delivery schedule, the Contractor fails to perform in the manner called for in the Contract, or if the Contractor fails to comply with any other provisions of the Contract, the City may terminate this Contract for default immediately upon written notice. The Contractor will only be paid for supplies delivered and accepted, or services performed in accordance with the manner of performance set forth in the Contract. If the Contractor defaults in performance of this Contract, the City has the right to withhold the disputed amounts.

(c) Opportunity to Cure: The City, in its sole discretion may, in the case of a termination for default, allow the Contractor ten (10) days in which to cure the defect. In such case, the notice of termination will state the time period in which cure is permitted and any other appropriate conditions.

(d) If Contractor fails to remedy to City's satisfaction the default of any of the terms, covenants, or conditions of this Contract within ten (10) days after receipt by Contractor of written notice from the City, the City shall have the right to terminate the Contract without any further obligation to Contractor. Any such termination for default shall not in any way operate to preclude the City from also pursuing all available remedies against Contractor and its sureties for said breach.

(e) If it is later determined by the City that the Contractor had an excusable reason for not performing, such as a strike, fire, or flood, events which are not the fault of or are beyond the control of the Contractor, the City, in its sole discretion, after setting up a new delivery of performance schedule, may allow the Contractor to continue Work, or treat the termination as a termination for convenience.

(f) Excess Reprocurement Liability: The Contractor shall be liable to the City for all expenses incurred by the City in reprocuring elsewhere the same or similar items or services offered by the contractor hereunder, should the Contractor fail to perform.

By executing this Contract and each and every renewal (if renewal is separately provided for herein), pursuant to section 287.135, Florida Statutes, the Contractor certifies, represents, and warrants that: (a) it is not on the Scrutinized Companies with Activities in Sudan List, (b) it is not on the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, (c) that it does not have business operations in Cuba or Syria, and (d) that it is not participating in a boycott of Israel, and that all such certifications were true at the time it submitted its bid or proposal for this Agreement and as of the effective date of any renewal. Notwithstanding anything contained in this Agreement to the contrary, the City may terminate this Agreement immediately if: (1) the Contractor is found to have submitted a false certification regarding (a) – (d) above in accordance with section 287.135(5), Florida Statutes, or (2) the Contractor is found to have been placed on the Scrutinized Companies that Boycott Israel List as that term is defined and such list is maintained pursuant to Section 287.135, Florida Statutes, or is otherwise engaged in a boycott of Israel. Such termination shall be in addition to any and all remedies available to the City at law. The provisions of this section shall only apply if the Contract Price is in excess of one million U.S. dollars ($1,000,000.00).

51. Time Extensions

Notwithstanding any other provisions of this Contract, the time extensions for changes in the Work will depend upon the extent, if any, by which the changes cause delay in the completion of the various elements of construction. A Contract Modification granting the time extension may provide that the Project completion date will be extended only for those specific elements so delayed and that the remaining Project completion dates for all other portions of the Project will not be altered and may further provide for an equitable readjustment under the new completion schedule.

52. Time of Completion and Liquidated Damages

(a) The Contractor agrees that the Project shall be shall be completed within the Contract Time. Time is of the essence for the completion of the Work. Since time is of the essence for this Contract, the Contractor recognizes that the City will suffer financial loss if the Work is not substantially completed within the time specified herein, as said time may be adjusted only as provided for herein. In such event, the total amount of the City's damages, will be difficult, if not impossible, to definitely ascertain and quantity, because this is a public construction project that will, when completed, benefit the public and enhance the delivery of valuable services to the public. It is hereby agreed that it is appropriate and fair that the City receive liquidated damages from the Contractor, if the Contractor fails to achieve completion of the Work within the required Contract Time. Should the Contractor fail to substantially complete the Work within the Contract Time, Owner shall be entitled to assess, as liquidated damages, but not as a penalty, $500 for each calendar day thereafter until completion is achieved with no cap on this assessment. The Contractor hereby expressly waives and relinquishes any right which it may have to seek to characterize the above noted liquidated damages as a penalty, which the parties agree represents a fair and reasonable estimate of the City's actual damages at the time of contracting if Contractor fails to substantially complete the Work within the Contract Time.

(b) In the event of delay in the completion of this Work, beyond the agreed upon dates by the Contractor and the City, the City shall assess as liquidated damages $500 per calendar day.

53. Use and Possession Prior to Completion

The City shall have the right to take possession of or use any completed or partially completed part of the Contract Work. Before taking possession of or using any Work, the City shall furnish the Contractor a list of items of Work remaining to be performed or corrected on those portions of the Work that the City intends to take possession of or use. However, failure of the City to list any item of Work shall not relieve the Contractor of responsibility for complying with the terms of the Contract. The City's possession or use shall not be deemed an acceptance of any Work under the Contract.

54. Variation in Estimated Quantity

If the quantity of a unit-priced item in this Contract is an estimated quantity and the actual quantity of the unit-priced item varies more than 15 percent above or below the estimated quantity, an equitable adjustment in the Contract Price may be resubmitted for the City's consideration. If the quantity variation is such as to cause an increase in the Contract Time necessary for completion, the Contractor may request in writing a Contract Modification. Either request must be received by the City within ten (10) days of when the Contractor know or should have known that the estimated quantity varied. Upon the receipt of a written request, the City shall ascertain the facts and make a determination of the request.

55. Warranty of Construction

(a) In addition to any other warranties provided in this Contract, the Contractor warrants, except as provided in paragraph (j) of this clause, that Work performed under this Contract conforms to the Contract Documents, Specifications, and is free of any defect in equipment, material, or design furnished, or workmanship performed, by the Contractor or any Subcontractor or supplier at any tier.

(b) This warranty shall continue for a period of one year from the date of final acceptance as amended by Change Orders. If the City takes possession of any part of the Work before final acceptance, this warranty for such part of the Work shall continue for a period of one year from the date the City takes possession.

(c) The Contractor shall remedy at the Contractor's expense (i) any failure to conform to the Contract Documents or Specifications (ii) any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to real or personal property owned or controlled by the City, when the damage is the result of: (1) the Contractor's failure to conform to Contract requirements; or (2) any defect of equipment, material, workmanship, or design furnished.

(d) The Contractor shall restore any Work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to Work repaired or replaced will run for one year from the date of repair or replacement.

(e) The City shall notify the Contractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.

(f) If the Contractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, the City shall have the right to replace, remove, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

(g) With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for Work performed and materials furnished under this Contract, the Contractor shall: (1) obtain all warranties that would be given in normal commercial practice; (2) require all warranties to be executed, in writing, for the benefit of the City, if directed by the City; and (3) enforce all warranties for the benefit of the City, if directed by the City.

(h) In the event the Contractor's warranty under paragraph (b) of this clause has expired, the City may bring suit at its expense to enforce a Subcontractor's, manufacturers, or supplier's warranty.

(i) Unless a defect is caused by the negligence of the Contractor or subcontractor or supplier at any tier, the Contractor shall not be liable for the repair of any defects of material or design furnished by the City or for the repair of any damage that result from any defect in material or designs furnished by the City.

(j) This warranty shall not limit the City's rights under the "Inspection of Construction" clause of this Contract with respect to latent defects, gross mistakes, or fraud.

56. Electronic Signature

This Contract may be executed by electronic signature technology and such electronic signature shall act as the Parties' legal signatures on this Contract and shall be treated in all respects as an original handwritten signature.

EXHIBIT 'F'

TECHNICAL SPECIFICATIONS

for

PROJECT A – SAFETY HARBOR PIER REPLACEMENT

Technical Specifications

for

Safety Harbor Pier Replacement

Unless otherwise specified, all applicable Articles and Subarticles of the FY 2023-24 edition of the Florida Department of Transportation (FDOT) Standard Specifications for Road and Bridge Construction Division I, Sections 4 & 5 (Scope of Work & Control of Work) and Divisions II & III (Construction Details & Materials) shall be adhered to, except where revised or amended herein.

In the event that there is an instance where the FDOT Standard Specifications mentioned above conflicts with the City of Safety Harbor contract language, the City of Safety Harbor contract language shall take precedence.

GENERAL **3**
8” TIMBER PILES & 10” TIMBER PILES **4**
ALUMINUM ROOFING FOR SHADE STRUCTURE **5**
LIGHTING AND ELECTRICAL **6**
FIRE-SUPPRESSION STANDPIPE **7**
INFORMATIONAL SIGNS **8**

GENERAL

Scope of Work.

The scope of work for this project includes the removal and replacement of the Safety Harbor Pier, as shown in the Plans and described in these Specifications. The improvement work includes the removal of the existing timber pier structure, the construction of a new timber pier structure with associated lighting and standpipe, and associated sediment barriers, turbidity barriers, tree protections, temporary fencing, etc. necessary for the completion of work.

Applications for environmental permitting have been submitted by the City.

The application for building permits has been initiated by the City shall be assumed by the the Contractor for coordination, compliance, inpsections, and fees.

Contractor Submittals.

The Contractor shall submit shop drawings, design drawings, material specifications, catalog cuts, certifications, product documentation, construction procedures, testing results, and delivery tickets as specified in the Contract Documents. The following pre-construction submittals, which may not be all inclusive, are required by this project.

Material Specifications

- Connection fasteners and hardware
- Lumber & piles
- Preservative treatment
- HDPE pile wrap
- Timber pile cut end treatment
- Composite lumber
- Roofing system
- Roofing underlayment
- Electrical and lighting components
- Standpipe components

Procedures & Certifications

- Pile installation plan
- Florida product approval for roofing material
- Standpipe hydraulic calculations
- Standpipe testing report

8" TIMBER PILES & 10" TIMBER PILES
PAY ITEMS 7 & 8

7 & 8-1 Description.

The work under this item includes furnishing, preforming, installing, and wrapping pressure treated timber piles in accordance with FDOT Standard Specifications Section 455 as amended and modified herein.

7 & 8-2 Materials.

Timber piles shall be southern pine and meet the requirements of FDOT Standard Specifications Section 953 and ASTM D25. Pile dimensions shown in the plans represent the minimum tip diameter.

Pressure treatment shall meet AWPA Standard U1, Use Category UC5C.

Cut end treatment shall be in accordance with AWPA Standard M4 using copper naphthenate.

Pile wrapping shall consist of 0.030" thick UV stabilized high density polyethylene.

All associated fasteners shall be stainless steel Type 316.

7 & 8-3 Installation.

Boring information is available in the project's "Report of The Geotechnical Investigation" as prepared by Driggers Engineeering Services, Inc., dated March 27, 2023.

Prepare a pile installation plan with the following information.

1. List and size of proposed equipment including cranes, barges, driving equipment, templates, and preformed pile hole equipment. Include manufacturer's data sheets on hammers.
2. Sequence of driving piles.
3. Required shop drawings for piles.
4. If the hammer is different than the hammer listed in the plans, provide equivalent criteria for practical refusal.

Piles shall be marked in accordance with FDOT Standard Specifications Section 455-3 prior to installation.

Preform holes at the locations, depths, and size shown in the Plans.

The installation tolerances of FDOT Standard Specifications Section 455-5.16 shall apply with the exception that the tolerance for the cutoff elevation shall be +/- 0.5 inches.

Field treat cut ends of piles prior to installing framing.

7 & 8-4 Method of Measurement.

The quantity to be paid for will be per linear foot of pile installed from the elevation of the tip to the elevation of the cut-off. No additional allowance will be made for cut-offs.

7 & 8-5 Basis of Payment.

Price and payment will be full compensation for all design, labor, equipment, and materials required for furnishing, preforming, installing, and wrapping timber piles, as well as any incidentals necessary to complete the work.

Preforming pile holes, cut end treatments, pile wrapping, and fasteners shall be incidental and included in the unit cost for this Item.

ALUMINUM ROOFING FOR SHADE STRUCTURE
PAY ITEM 12

12-1 Description.

The work under this item includes furnishing and installing a pre-finished standing seem aluminum roof system for the shade structure on the pier.

12-2 Materials.

Roofing system shall be Snap-Clad by Petersen Aluminum Corporation or approved equivalent.

Aluminum shall be factory formed, 0.032" thick, and meeting the standards of ASTM B209. Trim shall be fabricated from the same material as the panels.

Finish Kynar 500 or approved equivalent. The coating shall be factory applied 70% PVDF with a top side film thickness of 0.70 to 0.90 mil over a 0.25 to 0.3 mil prime coat to provide a total dry film thickness of 0.95 to 1.25 mil, to meet AAMA 621. Bottom side shall be coated with a primer with a dry film thickness of 0.25 mil.

Underlayments shall be self-adhering, high-temperature, 30 to 40 mils thick, and approved by the manufacturer.

Screws and clips shall be stainless steel Type 316.

Sealants shall be furnished and applied per the manufacturer's recommendations.

12-3 Design.

The roof system must carry a Florida product approval number that includes a comprehensive engineering analysis by a qualified professional engineer registered in the State of Florida.

Provide factory-formed metal roof panels designed to be installed by lapping and interconnecting raised side edges of adjacent panels with joint type indicated and mechanically attaching panels to supports using concealed clips inside laps. Include clips, cleats, pressure plates and accessories required for a weathertight installation.

Underlayment shall be laid in horixontal layers with joints lapped toward the eaves a minimum of 6 inches. Laps at hips and ridges shall be at least 12 inches. Edges and laps shall be secured per manufacturer's recommendations.

12-4 Method of Measurement.

The quantity to be paid for will be per lump sum.

12-5 Basis of Payment.

Price and payment will be full compensation for all design, labor, equipment, and materials required for furnishing and installing the roofng system, as well as any incidentals necessary to complete the work.

LIGHTING AND ELECTRICAL
PAY ITEM 13

13-1 Description.

The work under this item includes furnishing and installing lighting, wiring, conduit, electrical panels, controllers, and associated components.

13-2 Components.

Materials and components shall be furnished and installed in accordance with the details and specifications in the Plans.

13-3 Method of Measurement.

The quantity to be paid for will be per lump sum.

13-4 Basis of Payment.

Price and payment will be full compensation for all design, labor, equipment, and materials required for furnishing and installing the lighting and electrical system, as well as any incidentals necessary to complete the work.

FIRE-SUPPRESSION STANDPIPE
PAY ITEM 14

14-1 Description.

The work under this item includes furnishing and installing all components of the fire-suppression manual wet Class I standpipe system.

14-2 Materials.

Materials and components shall be furnished and installed in accordance with the details and specifications in the Plans.

Notice signs associated with the standpipe system shall be suitable for outdoor use and applied to an aluminum backing with a minimum 10-guage thickness. Signs shall meet OHSA standards for notice signs with the wording shown in the Plans.

14-3 Design.

Install the wet standpipe system as indicated in the plans and in accordance with applicable requirements of NFPA 14.

Prepare hydraulic calculations and documentation as required by the building permit.

14-4 Installation.

Install the wet standpipe system as indicated in the plans and in accordance with applicable requirements of NFPA 14.

Test the installed system hydrostatically and prepare reports in accordance with NFPA 14. Provide 48 hour notice prior to testing.

14-5 Method of Measurement.

The quantity to be paid for will be per lump sum.

14-6 Basis of Payment.

Price and payment will be full compensation for all design, labor, equipment, materials, and testing required for furnishing and installing the fire-suppression standpipe system, as well as any incidentals necessary to complete the work.

INFORMATIONAL SIGNS
PAY ITEM 15

15-1 Description.

The work under this item includes furnishing and installing informational signs as shown in the Plans.

15-2 Components.

Signs dimensions shall be as indicted on the Plans. Signs shall be suitable for outdoor use and applied to on an aluminum backing with a minimum 10-guage thickness.

Sign designs shall include FWC “Do Not Feed the Birds!”, FWC “Prevent Seabird Entanglement!”, and NOAA Fisheries “Help Save Protected Marine Live”.

Information on FWC signs can be obtained at https://myfwc.com/contact/signs/

Information o NOAA Fisheries signs can be obtained at https://www.fisheries.noaa.gov/southeast/consultations/protected-species-educational-signs

15-3 Method of Measurement.

The quantity to be paid for will be per lump sum.

15-4 Basis of Payment.

Price and payment will be full compensation for all design, labor, equipment, materials, and testing required for furnishing and installing the informational signs, as well as any incidentals necessary to complete the work.

EXHIBIT 'F'

TECHNICAL SPECIFICATIONS

for

PROJECT B – SAFETY HARBOR MARINA REPLACEMENT

Technical Specifications

for

Safety Harbor Marina Replacement

Unless otherwise specified, all applicable Articles and Subarticles of the FY 2024-25 edition of the Florida Department of Transportation (FDOT) Standard Specifications for Road and Bridge Construction Division I, Sections 4 & 5 (Scope of Work & Control of Work) and Divisions II & III (Construction Details & Materials) shall be adhered to, except where revised or amended herein.

Perform all MEP work in compliance with the latest edition of all applicable, federal, state, and local codes, regulations and standards, to include those listed below, adopted by the authority having jurisdiction. Where differences may occur the more stringent requirements shall govern. In case of conflict provide written notification and obtain a decision from the engineer/owner.

- NFPA 70: National Electrical Code (2020)
- NFPA 70E: Standard for Electrical Safety in the Workplace (2024)
- NFPA 101: Life Safety Code (2021)
- NFPA 241: Standard for Safeguarding Construction, Alteration and Demolition Operations (2022)
- FBC: Florida Building Code (2023)
- OSHA Part 1910: Occupational Safety and Health Standards
- OSHA Part 1926: Safety and Health Regulations for Construction

In the event that there is an instance where the codes and standards mentioned above conflicts with the City of Safety Harbor contract language, the City of Safety Harbor contract language shall take precedence.

CITY OF SAFETY HARBOR (THE CITY)

EXHIBIT G

BID BOND

PRINCIPAL (Legal name, business address and telephone number)	**Date Bond Executed:** **(must not be later than bid opening date)**
	Type Of Organization ("X" one) ❒ Individual ❒ Partnership ❒ Joint Venture
	State of Incorporation:

SURETY(IES) (Name(s), business address(es) and telephone number)

PROJECT (Address and description)

PENAL SUM OF BOND	**BID IDENTIFICATION**	
PERCENT OF BID PRICE	**BID DUE DATE:**	**SOLICITATION #**
%	FOR ("X" one) ❒ Construction ❒ Supplies ❒ Services	

KNOW ALL MEN BY THESE PRESENTS,
that we, the Principal and Surety(ies) hereto, are firmly bound to the City of Safety Harbor (hereinafter called the City) in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally; provided, that, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or action against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sums only as it is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

THE CONDITION OF THIS OBLIGATION IS SUCH,
that whereas the Principal has submitted the offer identified above, if the Principal, upon acceptance by the City of his offer identified above, within the period specified therein for acceptance, shall execute such further contractual documents, if any, and give such bond(s) as may be required by the terms of the offer as accepted within the time specified (ten 10) days if no period is specified) after receipt of the forms by him, or in the event of failure so to execute such further contractual documents and give such bonds, if the Principal shall pay the City for any cost of procuring the work (including administrative costs) which exceeds the amount of his offer, then the above obligation shall be void and of no effect.

Each surety executing this instrument hereby agrees that its obligation shall not be impaired by any extension(s) of the time for acceptance of the offer that the Principal may grant to the City, notice of which extension(s) to the Surety(ies) being hereby waived; provided, that such waiver of notice shall apply only with respect to extensions aggregating not more than sixty (60) calendar days in addition to the period originally allowed for acceptance of the offer; provided further, that if any legal action be filed upon this bond, venue shall lie exclusively in Pinellas County, Florida.

The entity identified as the RESIDENT AGENT of the Surety is hereby designated by the Surety as the Resident Agent in the State of Florida to whom any requisite notices may be delivered and on whom service of process may be had in matters arising out of such suretyship as required pursuant to Florida State Statute 624.422.

IN WITNESS WHEREOF,

the Principal and Surety(ies) have executed this bid bond and have affixed their seals on the date set forth above.

PRINCIPAL

Signature(s)	**Typed Names and Titles**	
1. (seal)	1.	**Corporate Seal**
2. (seal)	2.	

INDIVIDUAL SURETIES

Signature(s)	Typed Names and Titles	
1. (seal)	1.	**Corporate Seal**
2. (seal)	2.	

CORPORATE SURETY(IES)

(Surety A) Name & Address		State of Incorporation	**Corporate Seal**
		Liability Limit $	
Signature(s)	1. (seal)	2. (seal)	
Name(s) & Title(s) (Typed)	1.	2.	

The RESIDENT AGENT of the surety in the State of Florida, for the delivery of notice and service of process is:

Name: _____ Address: _____

_____

(Surety B) Name & Address		State of Incorporation	**Corporate Seal**
		Liability Limit $	
Signature(s)	1. (seal)	2. (seal)	
Name(s) & Title(s) (Typed)	1.	2.	

The RESIDENT AGENT of the surety in the State of Florida, for the delivery of notice and service of process is:

Name: _____ Address: _____

_____

(Surety C) Name & Address		State of Incorporation	**Corporate Seal**
Signature(s)	1. (seal)	2. (seal)	
Name(s) & Title(s) (Typed)	1.	2.	

The RESIDENT AGENT of the surety in the State of Florida, for the delivery of notice and service of process is:

Name: _____ Address: _____

_____

INSTRUCTIONS

1. This form is authorized for use whenever a bid guaranty is required in connection with construction work or the furnishing of supplies or services. There shall be no deviation from this form without approval by the City.

2. The full legal name and business address of the Principal shall be inserted in the space designated "Principal" on the face of this form. The bond shall be signed by an authorized person. When such person is signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, evidence of his authority must be furnished.

3. (a) Corporations executing the bond as sureties must be authorized to act as sureties on bonds for principals in the State of Florida. Where more than a single corporate surety in involved, their names and addresses (city and state) shall be inserted in the spaces (Surety A, Surety B, etc.) Headed "CORPORATE SURETY(IES)." In the space designated "SURETY(IES)" on the face of this form, only the letter identification of the Sureties shall be inserted.

(b) Where individual sureties execute the bond, they shall be two or more fiscally responsible persons. A completed Affidavit of Individual Surety, for each individual surety, shall accompany the bond. Such sureties may be required to furnish additional substantiating information concerning their assets and financial capability as the City may require.

4. Corporations executing the bond shall affix their corporate seals. Individuals shall execute the bond opposite the word "Seal".

5. The name and title of each person signing this bid bond should be typed in the space provided.

CITY OF SAFETY HARBOR (THE CITY)

EXHIBIT H
PAYMENT BOND

PRINCIPAL (Legal name, business address and telephone number)	**Date Bond Executed: (must be same as or later than contract date)**	
	Type Of Organization ("X" one) ❒ Individual ❒ Partnership ❒ Joint Venture ❒ Corporation	
	State of Incorporation	
SURETY(IES) (Name(s, business address(es) and telephone number)	PENAL SUM OF BOND	
	$	
	CONTRACT DATE	CONTRACT NO.

PROJECT (Address and description)

KNOW ALL MEN BY THESE PRESENTS,
that we, the Principal and Surety(ies) hereto, are firmly bound to the City of Safety Harbor (hereinafter called the City) and to all persons, firms, and corporations who may furnish materials for, and perform labor under the contract referred to above, in the above penal sum for the payment of which we bind ourselves, heirs, executors, administrators, and successors, jointly and severally; provided, that, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or action against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sums only as it is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT,
whereas the Principal has entered into the contract identified above,

NOW, THEREFORE,
if the Principal shall promptly make payment to all persons supplying labor and/or material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of said contract that may hereafter be made, notice of which modification(s) to the Surety(ies) being hereby waived, then this obligation shall be void and of no effect; otherwise, it shall remain in full force and effect. This bond is given to pursuant to the provisions of Florida State law. If any legal action be filed upon this bond, venue shall lie exclusively in Pinellas County, Florida.

The entity identified as the RESIDENT AGENT of the Surety is hereby designated by the Surety as the Resident Agent in the State of Florida to whom any requisite notices may be delivered and on whom service of process may be had in matters arising out of such suretyship as required pursuant to Florida Statute 624.422..

IN WITNESS WHEREOF,
the Principal and Surety(ies) have executed this payment bond and have affixed their seals on the date set forth above.

PRINCIPAL

Signature(s)	Typed Names and Titles	Corporate Seal
1. (seal)	1.	
2. (seal)	2.	

CORPORATE SURETY(IES)

(Surety A) Name & Address		State of Incorporation Liability Limit $	Corporate Seal
Signature(s)	1. (seal)	2. (seal)	
Name(s) & Title(s) (Typed)	1.	2.	

The RESIDENT AGENT of the surety in the State of Florida, for the delivery of notice and service of process is:

Name: _____ Address:_____

_____

CORPORATE SURETY(IES)

(Surety B) Name & Address		State of Incorporation Liability Limit $	Corporate Seal
Signature(s)	1. (seal)	2. (seal)	
Name(s) & Title(s) (Typed)	1.	2.	

The RESIDENT AGENT of the surety in the State of Florida, for the delivery of notice and service of process is:

Name: _____ Address: _____

_____

(Surety C) Name & Address		State of Incorporation Liability Limit $	Corporate Seal
Signature(s)	1. (seal)	2. (seal)	
Name(s) & Title(s) (Typed)	1.	2.	

The RESIDENT AGENT of the surety in the State of Florida, for the delivery of notice and service of process is:

Name: _____ Address: _____

_____

(Surety D) Name & Address		State of Incorporation Liability Limit $	Corporate Seal
Signature(s)	1. (seal)	2. (seal)	
Name(s) & Title(s) (Typed)	1.	2.	

The RESIDENT AGENT of the surety in the State of Florida, for the delivery of notice and service of process is:

Name: _____ Address: _____

_____

INSTRUCTIONS

1. This form is authorized for use in connection with construction work or the furnishing of supplies or services. There shall be no deviation from this form without approval by the City.

2. The full legal name and business address of the Principal shall be inserted in the space designated "Principal" on the face of this form. The bond shall be signed by an authorized person. When such person is signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, a certified copy of the Power of Attorney must be attached . If the amount of the bond exceeds $100,000, the surety(ies) shall be approved for the amount of the bonds, and must hold a certificate of authority from the U.S. Secretary of the Treasury or have obtained reinsurance from a Treasury listed insurer, in accordance with the requirements of Florida.

3. The bond shall be executed by a corporate surety or corporate sureties duly authorized to do business in the State of Florida and licensed by the State of Florida to issue surety bonds. All payment bonds shall comply with Florida Statute 255.05 and comply with the notice and time limitations contained in Florida Statute 255.05(2).

4. Where more than a single corporate surety in involved, their names and addresses (City and State) shall be inserted in the spaces (Surety A, Surety B, etc.) headed "CORPORATE SURETY(IES)." In the space designated "SURETY(IES)" on the face of this form, only the letter identification of the Sureties shall be inserted.

5. Corporations executing the bond shall affix their corporate seals. Individuals shall execute the bond opposite the word "Seal".

6. The name and title of each person signing this payment bond should be typed in the space provided.

CITY OF SAFETY HARBOR (THE CITY)

EXHIBIT I

PERFORMANCE BOND

PRINCIPAL (Legal name, business address and telephone number)	**Date Bond Executed: (must be same as or later than contract date)**
	Type Of Organization ("X" one) ❒ Individual ❒ Partnership ❒ Joint Venture ❒ Corporation
	State of Incorporation
SURETY(IES) (Name(s), business address(es) and telephone number(s))	PENAL SUM OF BOND $
	CONTRACT DATE / CONTRACT NO.

PROJECT (Address and description)

KNOW ALL MEN BY THESE PRESENTS,
that we, the Principal and Surety(ies) hereto, are firmly bound to the City of Safety Harbor (hereinafter called the City) in the above penal sum for the payment of which we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally; provided, that, where the Sureties are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly and severally" as well as "severally" only for the purpose of allowing a joint action or action against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sums only as it is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sum.

THE CONDITION OF THIS OBLIGATION IS SUCH,
whereas the Principal has entered into the contract identified above,

if the Principal shall faithfully perform and fulfill all the undertakings, covenants, terms, conditions, and agreement of said contract, in accordance with the plans, specifications and contract documents, during the original term of said contract and any extensions thereof that may be granted by the City, with or without notice to the Surety(ies), and during the life of any guaranty required under the contract, and shall also faithfully perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the Surety(ies) being hereby waived, then this Obligation shall be void; otherwise, it shall remain in full force and effect. This bond is given pursuant to the provisions of Florida State law. If any legal action be filed upon this bond, venue shall lie exclusively in Pinellas, Florida.

The entity identified as the RESIDENT AGENT of the Surety is hereby designated by the Surety as the Resident Agent in the State of Florida to whom any requisite notices may be delivered and on whom service of process may be had in matters arising out of such suretyship as required pursuant to Florida Statute 624.422

IN WITNESS WHEREOF,
the Principal and Surety(ies) have executed this performance bond and have affixed their seals on the date set forth above.

PRINCIPAL

Signature(s)	Typed Names and Titles	
1. (seal)	1.	Corporate Seal
2. (seal)	2.	

CORPORATE SURETY(IES)

(Surety A) Name & Address		State of Incorporation	Corporate Seal
		Liability Limit $	
Signature(s)	1. (seal)	2. (seal)	
Name(s) & Title(s) (Typed)	1.	2.	

The RESIDENT AGENT of the surety in the State of Florida, for the delivery of notice and service of process is:

Name: _____ Address: _____

_____

CORPORATE SURETY(IES)

(Surety B) Name & Address		State of Incorporation	Corporate Seal
		Liability Limit $	
Signature(s)	1. (seal)	2. (seal)	
Name(s) & Title(s) (Typed)	1.	2.	

The RESIDENT AGENT of the surety in the State of Florida, for the delivery of notice and service of process is:

Name: _____ Address: _____

_____

(Surety C) Name & Address		State of Incorporation	Corporate Seal
Signature(s)	1. (seal)	2. (seal)	
Name(s) & Title(s) (Typed)	1.	2.	

The RESIDENT AGENT of the surety in the State of Florida, for the delivery of notice and service of process is:

Name: _____ Address: _____

_____

INSTRUCTIONS

1. This form is authorized for use in contracts with construction work or the furnishing of supplies or services. There shall be no deviation from this form without approval by the City.

2. The full legal name and business address of the Principal shall be inserted in the space designated "Principal" on the face of this form. The bond shall be signed by an authorized person. When such person is signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, a certified copy of the Power of Attorney must be attached.

3. The bond shall be executed by a corporate surety or corporate sureties duly authorized to do business in the State of Florida and licensed by the State of Florida to insure surety bonds. All payment bonds shall comply with the Florida Statute 255.05 and comply with the notice and time limitations contained in Florida Statute 255.05(2). If the amount of the bond exceeds $100,000, the surety(ies) shall be approved for the amount of the bonds, and must hold either a certificate of authority from the U.S. Secretary of the Treasury or have obtained reinsurance from a Treasury listed insurer.

4. Where more than a single corporate surety is involved, their names and addresses (City and State) shall be inserted in the spaces (Surety A, Surety B, etc.) headed “CORPORATE SURETY(IES) “ on the face of this form, only the letter identification of the Sureties shall be inserted.

5. Corporations executing the bond shall affix their corporate seals. Individuals shall execute the bond opposite the word "Seal".

6. The name and title of each person signing this performance bond should be typed in the space provided.

DEFINITIONS

The following words and expressions (or pronouns used in their stead) shall, wherever they appear in the Contract Documents, be construed as follows unless a different meaning is clear from the context.

"Addendum" shall mean the additional contract provisions issued in writing by the City, prior to the receipt of Offers.

"City Commissioners" shall mean the City Commissioners of the City of Safety Harbor.

"Bonds" shall mean Bid, Performance and Payment bonds and other instruments of security furnished by the Contractor and his surety in accordance with the Contract documents.

"Change Order" shall mean a written order to the Contractor signed by the City authorizing an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time issued after execution of the Agreement.

"City" shall mean the City of Safety Harbor, Florida, a Florida municipal corporation.

“Contract” or “Contract Documents” shall mean and refer to the collection of the agreement between the parties in its entirety, including this Agreement, the Solicitation Offer and Award Form, Schedule, Representations and Certifications, Special Solicitation Instructions and Conditions, Solicitation Instructions and Conditions, Special Provisions, General Provisions, Statement of Work and this Definitions section, together with any addenda thereto.

“Contract Modification” shall mean a changes or alterations made to the contract.

“Contracting Officer” shall have authority to enter into, administer, or terminate contracts, and make related determinations and findings. Contracting Officers may bind the City only to the extent of the authority delegated to them (See Certificate of Appointment). Contracting Officers shall receive from the appointing authority (City Manager) clear instructions in writing regarding the limits of their authority. Information on the limits of the contracting officers’ authority shall be readily available to the public and agency personnel.

"Contractor" shall mean the Offeror who is awarded the contract by the City.

"Contract Price" shall mean the total monies payable to the Contractor under the Contract Documents.

"Contract Time" shall mean the number of calendar days stated in the Contract for the completion of the work.

"Contract Work" or the “Work” shall mean any and all obligations, duties and responsibilities necessary to the successful completion of the project assigned to or undertaken by the Contractor under the Contract Documents, including the furnishing of all labor, materials, equipment, and other incidentals.

"Day" shall mean one calendar day.

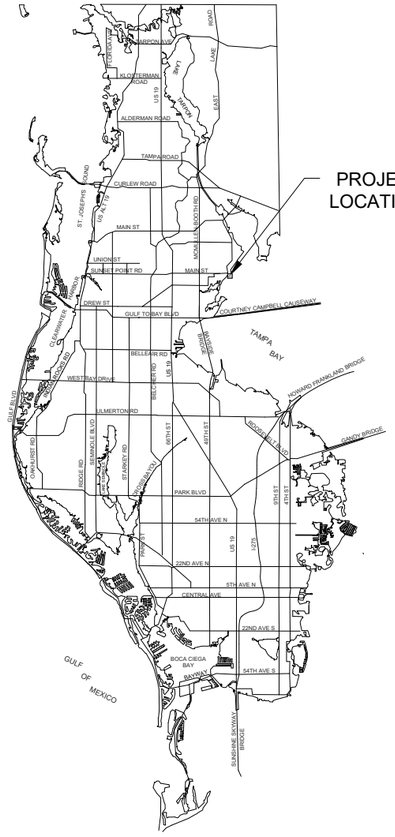
"City Engineer" shall mean the City Engineer of the City of Safety Harbor or Consultant if the Consulting Engineer has been retained to administer the contract.

"Final Acceptance" shall mean acceptance of the Work by the City as evidenced by its signature upon the final Certificate of Completion and approval thereof by the City Commission. Such acceptance shall be deemed to have taken place only if and when such signature is affixed to such certificate as evidenced by final payment. The final Certificate of Completion shall be signed only after the City has assured itself by tests, inspection or otherwise that all of the provisions of the Contract have been carried out to its satisfaction.

"Notice" shall mean written notice. Notice shall be served upon the Contractor either personally or by leaving the said notice at his residence or with his Agent in charge of the Work, or addressed to the Contractor at the residence or place of business given in the Bid and deposited in a postpaid wrapper in any post box regularly maintained by the United States Post Office.

SAFETY HARBOR PIER REPLACEMENT PROJECT

110 VETERANS MEMORIAL LANE PID: 032-3058-500.63-00-PR0057


PROJECT LOCATION
TAMPA BAY
GULF OF MEXICO
BOCA CIEGA BAY
ALDERMAN ROAD
TAMPA ROAD
CURLEW ROAD
MAIN ST
UNION ST
SUNSET POINT RD
MLK ST
DREW ST
GULF TO BAY BLVD
COURTNEY CAMPBELL CAUSEWAY
BELLEAIR RD
WESTBAY DRIVE
ULMERTON RD
PARK BLVD
54TH AVE N.
22ND AVE N.
5TH AVE N.
CENTRAL AVE
22ND AVE S.
54TH AVE S.
HOWARD FRANKLAND BRIDGE
GANDY BRIDGE
SUNSHINE SKYWAY BRIDGE
US 19
I-275
I-375
49TH ST
34TH ST
28TH ST
66TH ST
ENTERPRISE ROAD
KEENE ROAD
MCMULLEN BOOTH ROAD
OLDSMAR ROAD
KLOSTERMAN ROAD
ALT US 19
MAIN ST
MAIN ST
MAIN ST
DRUID RD E
DRUID RD W
CLEARWATER-LARGO ROAD
MISSOURI AVE
MISSOURI AVE
ST. JOSEPHS SOUND
CLEARWATER HARBOR
OLD TAMPA BAY
HIGHLAND LAKE
LAKE
EAST
BAY
BAY
BAY

GENERAL NOTES

1. ALL CONTOURS & ELEVATIONS SHOWN HEREIN ARE IN FEET AND REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
   REFERENCE BENCHMARK NO. 1: COURTNEY M ELEV. = 4.45'
   REFERENCE BENCHMARK NO. 2: SAFETY U ELEV. = 6.99'

2. ALL WORK IN THE VICINITY OF OPEN WATER AND / OR WETLANDS TO BE PERFORMED IN COMPLIANCE WITH THE ENVIRONMENTAL PERMITS FOR THE SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY FINE RESULTING FROM VIOLATIONS OF PERMIT CONDITIONS.

3. SPECIAL CARE SHALL BE TAKEN TO PROTECT EXISTING TREES DESIGNATED TO REMAIN. TREE BARRIERS SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF SAFETY HARBOR STANDARDS.

4. REPLACE / REPAIR ALL IRRIGATION LINES, FITTINGS, VALVES, SPRINKLER HEADS, ETC. THAT MAY BE DAMAGED DURING CONSTRUCTION ACTIVITIES.

5. COORDINATE THE INSTALLATION OF ANY NEW / RELOCATED / MODIFIED UTILITIES WITH APPLICABLE UTILITY COMPANIES.

6. REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION RELATED ACTIVITIES TO AREAS OUTSIDE THE LIMITS OF CONSTRUCTION AND RESTORE TO ORIGINAL CONDITION. RESTORE ALL LANDSCAPE AREAS, GRASSED AREAS AND PAVEMENT AREAS OUTSIDE THE LIMITS OF CONSTRUCTION TO ORIGINAL CONDITION. PAVEMENT RESTORATION SHALL MATCH ORIGINAL ELEVATION TO ENSURE POSITIVE DRAINAGE AND INCLUDE RESTORATION OF PAVEMENT STRIPING / MARKINGS. RESTORATION SHALL BE PERFORMED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY.

7. SOD ALL DISTURBED AREAS AFFECTED BY THEIR WORK WITH A GRASS TYPE THAT MATCHES EXISTING SOD. IN AREAS WHERE THERE IS NOT AN ESTABLISHED GRASS TYPE BAHIA SHALL BE USED.

8. ALL CONSTRUCTION SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, REGULATIONS, AND ORDINANCES. ALL SUCH COMPLIANCE SHALL BE AT THE CONTRACTOR'S SOLE EXPENSE.

9. THE PROJECT AREA LIES WITHIN FLOOD ZONE VE PER FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 12103C0131H, EFFECTIVE DATE 8/24/2021. REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

10. THE OWNER / ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY UNEXPECTED SUBSURFACE CONDITIONS WHICH EFFECT THE WORK ARE ENCOUNTERED.

11. PROVIDE AS-BUILT DRAWINGS SIGNED & SEALED BY A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF FLORIDA. FINAL AS-BUILT DRAWINGS MUST DEPICT ALL KNOWN EXISTING AND NEW UTILITIES INSTALLED IN CONJUNCTION WITH THIS PROJECT & SHALL BE PROVIDED TO OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILT DRAWINGS MUST CONTAIN THE MINIMUM INFORMATION REQUIRED FOR FINAL CERTIFICATIONS TO BE SUBMITTED TO APPLICABLE REVIEWING / PERMITTING AGENCIES.

12. THE RELOCATION OF EXISTING FACILITIES (ABOVEGROUND OR UNDERGROUND) AND RESTORATION TO ORIGINAL CONDITIONS (INCLUDING BUT NOT LIMITED TO EXISTING UTILITIES, SIGNAGE AND MARKING, PAVED SURFACES, AND LANDSCAPE / IRRIGATION) SHALL BE THE CONTRACTOR'S RESPONSIBILITIES IF SUCH ITEMS ARE IMPACTED DURING THE CONSTRUCTION PROCESS.

13. TECHNICAL SPECIFICATIONS HAVE BEEN PREPARED FOR THIS PROJECT BY THE ENGINEER OF RECORD AND ARE INCLUDED WITH THESE PLANS BY REFERENCE. ALL CONSTRUCTION MATERIALS AND ACTIVITIES ARE TO BE IN CONFORMANCE WITH THESE SPECIFICATIONS. PLEASE CONTACT THE CITY OF SAFETY HARBOR'S ENGINEERING DEPARTMENT AT (727) 724-1555 FOR A COPY.

ELECTRICAL NOTES

1. ALL ELECTRICAL SERVICE SHALL BE INSTALLED UNDERGROUND. COORDINATE WITH THE MEP FOR SPECIFICATIONS / DETAILS / ROUTING.

2. ELECTRIC SERVICE TO POINTS OF CONNECTION TO BE PROVIDED BY UTILITY OWNER; COORDINATE WITH THE MEP FOR SPECIFICATIONS / DETAILS / ROUTING.

3. EXERCISE EXTREME CARE IN NEW CONSTRUCTION AREAS TO AVOID IMPACTS TO HIGHLY SENSITIVE UTILITIES. CONTRACTOR TO COORDINATE WITH ALL UTILITY PROVIDERS PRIOR TO CONSTRUCTION COMMENCEMENT TO VERIFY UTILITY LOCATIONS WITHIN PROJECT AREA.

EROSION AND SEDIMENTATION CONTROL MEASURES

1. ALL PRACTICABLE AND NECESSARY EFFORT SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT MATERIAL TO INLETS, SURFACE DRAINS, WETLANDS AND TAMPA BAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION EFFORTS THAT MAY BE REQUIRED.

2. FOR ALL EROSION CONTROL MEASURES REFER TO FDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, SECTION 104 (LATEST EDITION).

3. THE CONTRACTOR IS RESPONSIBLE FOR ANY FINES OR RESTITUTION OR CORRECTIVE MEASURES AS DEEMED NECESSARY BY THE LOCAL AGENCIES AS RESULT OF ANY EROSION CONTROL ISSUES THAT MAY ARISE DURING CONSTRUCTION.

4. THE INSTALLATION OF TEMPORARY EROSION CONTROL BARRIERS SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE PERMANENT EROSION CONTROL FEATURES TO THE EXTENT NECESSARY TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND WATER POLLUTION THROUGHOUT THE LIFE OF THE CONSTRUCTION PHASE.

5. THE TYPE OF EROSION CONTROL BARRIERS USED SHALL BE GOVERNED BY THE NATURE OF THE CONSTRUCTION OPERATION AND SOIL TYPE THAT WILL BE EXPOSED. SILTY AND CLAYEY MATERIAL USUALLY REQUIRE SOLID SEDIMENT BARRIERS TO PREVENT TURBID WATER DISCHARGE, WHILE SANDY MATERIAL MAY NEED ONLY SILT SCREENS TO PREVENT EROSION. DIVERSION DITCHES OR SWALES MAY BE REQUIRED TO PREVENT TURBID STORM WATER RUNOFF FROM BEING DISCHARGED TO OTHER WATER BODIES. IT MAY BE NECESSARY TO EMPLOY A COMBINATION OF BARRIERS, DITCHES, AND OTHER EROSION / TURBIDITY CONTROL MEASURES IF CONDITIONS WARRANT.

6. PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETE AND ALL BARED SOIL STABILIZED. SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE-HALF THE DEPTH OF THE SILTATION CONTROL BARRIER SHALL BE IMMEDIATELY REMOVED AND PLACED IN UPLAND AREAS.

7. SWEEP ALL ADJACENT ROADWAYS AND PARKING AREAS THAT ARE AFFECTED BY THE CONSTRUCTION PROCESS ON A DAILY BASIS OR AS REQUIRED.

8. TAKE ALL REASONABLE MEANS TO ELIMINATE THE TRANSPORT OF DUST FROM THE PROJECT SITE. SPECIAL MEASURES, SUCH AS PERIODICALLY APPLYING WATER TO THE WORK SITE TO PREVENT DUST SHALL BE INCORPORATED INTO THE CONTRACTORS WORK PLAN.

9. INSPECT AND MAINTAIN ALL EROSION CONTROL DEVICES AND KEEP THEM IN GOOD CONDITION. CORRECT AND REPORT TO THE CITY ANY IMPACTS DUE TO EROSION OR FAILURE OF ANY EROSION CONTROL DEVICES IMMEDIATELY.

10. ANY DISCHARGE OF STORM WATER RUNOFF FROM THIS SITE SHALL BE THROUGH A CONTROL DEVICE TO CONTROL TURBIDITY AND SEDIMENT TRANSPORT. THIS INCLUDES THE DISCHARGE FROM ANY DEWATERING OPERATIONS. (IF NECESSARY) OFFSITE DISCHARGE OF PRODUCED GROUNDWATER FROM DEWATERING SHALL COMPLY WITH DEWATERING GUIDELINES FROM FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), F.A.C., 62-621(2).

11. NO DEBRIS SHALL BE ALLOWED TO ENTER THE EXISTING STORM OR SANITARY SEWER SYSTEMS.

12. ONCE CONSTRUCTION IS COMPLETE, ENSURE THE ON-SITE AND ADJACENT OFF-SITE STORM SYSTEMS ARE CLEAN AND CLEAR OF ANY SILTS OR DEBRIS THAT MAY HAVE WASHED OUT DURING THE CONSTRUCTION PROCESS.

13. EROSION CONTROL MEASURES ARE NOT TO BE REMOVED UNTIL ALL CONSTRUCTION IN THE AREA IS COMPLETE, LANDSCAPE HAS BEEN INSTALLED, ALL DISTURBED AREAS HAVE BEEN SODDED (OR SEEDING HAS TAKEN HOLD) AND ALL INSPECTIONS HAVE BEEN FINALIZED.

14. AFTER SITE CONSTRUCTION & LANDSCAPE INSTALLATIONS ARE COMPLETE, INSPECT THE ENTIRE STORM SYSTEM TO ENSURE ALL INLETS / MANHOLES ARE CLEAR OF ANY SILT OR DEBRIS, FABRIC IS REMOVED & STRUCTURES ARE FINISHED. IF NECESSARY, AT THE CONTRACTOR'S EXPENSE THE ENTIRE STORM SYSTEM IS TO BE CLEANED.

SURVEY NOTES

1. THE EXISTING FEATURES SHOWN ON THESE PLANS HAVE BEEN OBTAINED FROM AN ELECTRONIC VERSION OF THE BOUNDARY + TOPOGRPAHIC SURVEY OF SAFETY HARBOR PIER PREPARED BY SUNCOAST LAND SURVEYING, INC. DATED 10-21-2022.

CERTIFICATION NOTES

1. COORDINATE ALL TESTING REQUIRED BY THE GOVERNING MUNICIPALITIES, CONTRACT DOCUMENTS AND / OR TECHNICAL SPECIFICATIONS. NOTIFY THE ENGINEER OF RECORD AND THE LOCAL INSPECTOR AT LEAST 48 HOURS PRIOR CONDUCTING ANY TESTS FOR THEIR ATTENDANCE.

2. SUBMIT AN AS-BUILT SURVEY OF THE PIER AT COMPLETION OF THE PROJECT.

CONSTRUCTION NOTES

1. VERIFY ALL EXISTING DIMENSIONS AND SITE CONDITIONS. NOTIFY THE CITY OF ANY DISCREPANCIES WITH INFORMATION SHOWN ON THE PLANS PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR ALSO ACKNOWLEDGES THAT THEY ARE SATISFIED WITH THE CHARACTER, QUALITY AND QUANTITY OF SURFACE AND SUBSURFACE MATERIALS OR OBSTACLES TO BE ENCOUNTERED INSOFAR AS THIS INFORMATION IS REASONABLY ASCERTAINABLE FROM AN INSPECTION OF THE SITE, ACCESS TO THE SITE, AND TERRITORY SURROUNDING THE SITE, INCLUDING ALL EXPLORATORY WORK DONE BY THE CITY AS WELL AS FROM THE DRAWINGS AND SPECIFICATIONS MADE A PART OF THIS CONTRACT. ANY FAILURE TO TAKE THE ACTIONS DESCRIBED IN THIS PARAGRAPH WILL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR PROPERLY ESTIMATING THE DIFFICULTY AND COST OF SUCCESSFULLY PERFORMING THE WORK OR FOR PROCEEDING TO PERFORM THE WORK SUCCESSFULLY WITHOUT ADDITIONAL EXPENSE TO THE CITY.

2. ALL EROSION CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO BEGINNING WORK.

3. PROVIDE CLEARING AND GRUBBING OF THE ENTIRE PROJECT AREA, WITH THE EXCEPTION OF TREES TO REMAIN, IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, SECTION 110 (LATEST EDITION).

4. TREE RELOCATION/PROTECTION SHALL BE IN ACCORDANCE WITH THE CITY OF SAFETY HARBOR'S STANDARDS.

DEMOLITION NOTES

1. THE LOCATION OF EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE. DETERMINE THE EXACT LOCATION OF THE UTILITIES PRIOR TO WORKING IN THEIR VICINITY. NOTIFY ALL UTILITY COMPANIES IN THE AREA BEFORE BEGINNING WORK.

2. ALL MATERIALS REMOVED SHALL BE DISPOSED OF OFFSITE AND SHALL BE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.

3. THE OWNER RESERVES THE RIGHT TO RETAIN ANY ITEM FROM THE SITE DEMOLITION.

4. CARE SHALL BE TAKEN TO SALVAGE THE EXISTING IPA DECKING. NEATLY STACK DECKING ON SITE FOR COLLECTION AND REMOVAL BY THE CITY.

5. CONTRACTORS ARE REQUIRED BY LAW TO CALL 811 OR THE FLORIDA ONE CALL CENTER (1-800-432-4770) AT LEAST 72 HOURS BEFORE ANY EXCAVATION OR SOIL DISTURBING ACTIVITY. (CALL 10 DAYS BEFORE DIGGING WHEN DIGGING UNDER WATER.) WAIT THE REQUIRED TIME FOR BURIED UTILITIES TO BE LOCATED AND MARKED. PROTECT THE MARKS DURING YOUR PROJECT. IF MARKS ARE DESTROYED, CALL AGAIN. DIG SAFELY, USING EXTREME CAUTION WHEN DIGGING WITHIN 24 INCHES ON EITHER SIDE OF THE MARKS TO AVOID ENCOUNTERING THE BURIED UTILITY LINES.

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's Easy. It's Free. It's The Law.
www.callsunshine.com

STRUCTURE NOTES

1. DESIGN METHOD:
DESIGN IN ACCORDANCE WITH THE FLORIDA BUILDING CODE – 7TH EDITION USING A LOAD AND RESISTANCE FACTOR DESIGN (LRFD) METHOD FOR ALL ELEMENTS UNLESS OTHERWISE NOTED.

2. SPECIFICATIONS:
FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (JANUARY 2023).

3. DESIGN LOADS:
DEAD LOAD:
UNIT WEIGHT OF TIMBER = 50 PCF
UNIT WEIGHT OF COMPOSITE LUMBER = 50 PCF

LIVE LOAD:
DECK PEDESTRIAN LOAD = 100 PSF
ROOF SUPERIMPOSED LOAD = 20 PSF

WIND LOADS:
RISK CATEGORY I, 3-SECOND GUST
ULTIMATE DESIGN WIND SPEED = 135 MPH
EXPOSURE CATEGORY = D

4. ENVIRONMENT:
SUPERSTRUCTURE – EXTREMELY AGGRESSIVE
SUBSTRUCTURE – EXTREMELY AGGRESSIVE

5. LUMBER:
ALL LUMBER SHALL BE SOUTHERN PINE AND MEET THE REQUIREMENTS OF FDOT STANDARD SPECIFICATIONS SECTION 952, GRADE NO 1.

PRESSURE TREATMENT SHALL MEET AWPA STANDARD U1 AS FOLLOWS.

BRACING	UC5C
CAP BEAMS	UC4B
STRINGERS, STRINGER BRACING, RAIL POSTS & HORIZONTAL RAILS	UC3B
ROOF FRAMING	UC3B
ROOF DECKING	UC3B

ALL CUT ENDS OF THE 4x6 BRACING MEMBERS SHALL BE FIELD TREATED IN ACCORDANCE WITH AWPA STANDARD M4.

LUMBER SIZES SHOWN REPRESENT NOMINAL DRESSED SIZES UNLESS OTHERWISE NOTED. DRESSED SIZES SHALL CONFORM TO THE AMERICAN SOFTWOOD LUMBER STANDARD PS 20. LUMBER SIZES NOTED AS ROUGH-SAWN REPRESENT THE ACTUAL DIMENSION.

6. TIMBER PILES:
TIMBER PILES SHALL BE SOUTHERN PINE AND MEET THE REQUIREMENTS OF FDOT STANDARD SPECIFICATIONS SECTION 953 AND ASTM D25.

PRESSURE TREATMENT SHALL MEET AWPA STANDARD U1 AS FOLLOWS.

PILES	UC5C

ALL CUT ENDS OF THE TIMBER PILES SHALL BE FIELD TREATED IN ACCORDANCE WITH AWPA STANDARD M4 PRIOR TO INSTALLATION OF THE BEAMS AND STRINGERS.

TIMBER PILE DIMENSIONS SHOWN REPRESENT THE MINIMUM TIP DIAMETER.

ALL TIMBER PILING WILL BE WRAPPED WITH 0.030" THICK UV STABILIZED HIGH DENSITY POLYETHYLENE. WRAPPING SHALL START A MINIMUM OF 1 FT BELOW THE MUD LINE AND EXTEND A MINIMUM OF 3 FT ABOVE THE MEAN HIGH WATER ELEVATION. WRAPPING SHALL BE SECURED WITH S.S. 1¼" RING SHANK ROOFING NAILS.

7. COMPOSITE LUMBER:
COMPOSITE LUMBER SHALL BE WEARDECK HDPE DECKING, 2x6 NOMINAL (1½"x5½" ACTUAL), IN THE COLOR "SADDLE" OR APPROVED EQUIVALENT.

COMPOSITE LUMBER SHALL BE UTILIZED FOR THE RAIL CAP AND DECKING.

8. STRUCTURAL FASTENERS:
ALL STRUCTURAL BOLTS, WASHERS, NUTS, HURRICANE CLIPS, HANGERS, BRACKETS, ANGLES, OR CONNECTION PLATES SHALL BE STAINLESS STEEL (SS) TYPE 316. BOLTS SHALL MEET THE REQUIREMENTS OF ASTM F593, GROUP 2. THREADED ROD SHALL MEET THE REQUIREMENTS OF ASTM A193 B8M CLASS 1. NUTS SHALL MEET THE REQUIREMENTS OF ASTM F594, GROUP 2.

HEX BOLT ASSEMBLIES SHALL HAVE WASHERS UNDER BOTH THE HEAD AND THE NUT. HEX BOLTS MAY BE SUBSTITUTED WITH THREADED ROD HAVING A WASHER AND NUT ON EACH END. CARRIAGE BOLT ASSEMBLIES SHALL HAVE WASHERS UNDER THE NUT ONLY. ALL BOLTS AND THREADED RODS SHALL BE SIZED SO THAT THE BOLT DOES NOT EXTEND PAST THE NUT BY MORE THAN 1 BOLT DIAMETER.

SCREWS AND NAILS SHALL BE STAINLESS STEEL (SS) TYPE 316.

ALL SCREWS SHALL BE COUNTERSUNK AND INSTALLED IN HOLES DRILLED WITH A COUNTERSUNK DRILL BIT.

HURRICANE CLIPS SHALL BE RATED FOR A MINIMUM ALLOWABLE UPLIFT OF 400 POUNDS.

NAILS USED WITH APPROVED HURRICANE CLIPS AND HANGERS SHALL BE RING SHANK AND SIZED TO MEET THE MANUFACTURER'S SPECIFICATIONS FOR THE HURRICANE CLIP AND HANGER.

ENVIRONMENTAL NOTES

1. ADHERE TO ALL CONSTRUCTION ACTIVITIES TO THE RESTRICTIONS AND LIMITATIONS REQUIRED BY PROJECT PERMITS.

2. COMPLY WITH THE NATIONAL MARINE FISHERIES SERVICE'S "PROTECTED SPECIES CONSTRUCTION CONDITIONS, NOAA FISHERIES SOUTHEAST REGIONAL OFFICE" DATED MAY 2021.

3. COMPLY WITH THE "STANDARD MANATEE CONDITIONS FOR IN-WATER WORK, 2011" PUBLISHED BY THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION.

4. FURNISH AND INSTALL THE FOUR INFORMATIONAL SIGNS SHOWN BELOW TO THE PROPOSED RAILING WITH STAINLESS STEEL SCREWS.

18"x12" 18"x12" 18"x12" 24"x16"

5. FURNISH AND INSTALL 2 MONOFILAMENT RECOVERY AND RECYCLING (MRR) TUBES AND ATTACH IT TO THE PROPOSED RAILING WITH STAINLESS STEEL SCREWS. THE COST OF FURNISHING AND INSTALLING THE MRR TUBE SHALL BE CONSIDERED INCIDENTAL TO THE PEDESTRIAN RAILING PAY ITEM.

THE MRR TUBE SHALL BE CONSTRUCTED OF 6" DIAMETER PVC WITH A 90° ELBOW ON TOP AND A THREADED PLUG ON THE BOTTOM WITH DRILLED DRAIN HOLES. TUBES SHALL INCLUDE IDENTIFICATION AND INSTRUCTIONAL STICKERS FOLLOWING THE FLORIDA WILDLIFE COMMISSION (FWC) FORMAT. EXAMPLES OF ACCEPTABLE MMR TUBES CAN BE FOUND ON THE FWC MRR PROGRAM WEBSITE BELOW.
HTTPS://MRRP.MYFWC.COM

TURBIDITY CONTROL

1. FURNISH, INSTALL, AND MAINTAIN FLOATING TURBIDITY BARRIERS TO SURROUND CONSTRUCTION OPERATIONS AND CONTROL TURBIDITY IN ACCORDANCE WITH PERMIT REQUIREMENTS. TURBIDITY BARRIERS SHALL INCLUDE ANCHORS AS NECESSARY TO MAINTAIN PROPER PLACEMENT.

2. BARRIERS SHALL REMAIN UNTIL CONSTRUCTION OPERATIONS ARE COMPLETE AND TURBIDITY WITHIN THE BARRIERS HAS RETURNED TO BACKGROUND CONDITIONS.

3. EXTEND BARRIERS TO WITHIN 1 FOOT OF THE BOTTOM.

4. BARRIERS SHOULD BE A BRIGHT COLOR (YELLOW OR ORANGE ARE RECOMMENDED) THAT WILL ATTRACT THE ATTENTION OF NEARBY BOATERS.

5. SEAMS IN THE FABRIC SHALL BE EITHER VULCANIZED WELDED OR SEWN, AND SHALL DEVELOP THE FULL STRENGTH OF THE FABRIC.

6. FLOATATION DEVICES SHALL BE FLEXIBLE, BUOYANT UNITS CONTAINED IN AN INDIVIDUAL FLOTATION SLEEVE OR COLLAR ATTACHED TO THE CURTAIN. BUOYANCY PROVIDED BY THE FLOATATION UNITS SHALL BE SUFFICIENT TO SUPPORT THE WEIGHT OF THE CURTAIN AND MAINTAIN A FREEBOARD OF AT LEAST 3 INCHES ABOVE THE WATER SURFACE LEVEL.

7. LOAD LINES MUST BE FABRICATED INTO THE BOTTOM OF ALL FLOATING TURBIDITY CURTAINS. TYPES II AND III MUST HAVE LOAD LINES ALSO FABRICATED INTO THE TOP OF THE FABRIC. THE TOP LOAD LINE SHALL CONSIST OF WOVEN WEBBING OR VINYL-SHEATED STEEL CABLE. THE BOTTOM LOAD-LINE SHALL CONSIST OF A CHAIN INCORPORATED INTO THE BOTTOM HEM OF THE CURTAIN OF SUFFICIENT WEIGHT TO SERVE AS BALLAST TO HOLD THE CURTAIN IN A VERTICAL POSITION.

8. BOTTOM ANCHORS MUST BE SUFFICIENT TO HOLD THE CURTAIN IN THE SAME POSITION RELATIVE TO THE BOTTOM OF THE WATERCOURSE WITHOUT INTERFERING WITH THE ACTION OF THE CURTAIN.

PAY ITEM NOTES

1. THE COSTS ASSOCIATED WITH ALL BUILDING PERMIT FEES AND REQUIRED INSPECTIONS/TESTING SHALL BE INCIDENTAL TO THE RELATED ITEM.

2. THE COSTS ASSOCIATED WITH FURNISHING, INSTALLING, MAINTAINING, AND REMOVING TEMPORARY CONSTRUCTION FENCING, GATES, AND SIGNS SHALL BE INCIDENTAL TO THE ITEM FOR MOBILIZATION.

3. THE COSTS ASSOCIATED WITH FURNISHING AND INSTALLING ALL FASTENERS, CLIPS, STRAPS, HANGERS, BRACKETS, CONNECTIONS PLATES/ANGLES SHALL BE INCIDENTAL TO THE ITEM CONNECTED.

4. THE COST ASSOCIATED WITH FURNISHING AND INSTALLING TIMBER PILE WRAPPING, FIELD TREATMENT OF CUT ENDS, AND PREFORMING PILE HOLES SHALL BE INCIDENTAL TO THE PILE ITEM.

5. THE COST ASSOCIATED WITH FURNISHING AND INSTALLING THE MRR TUBES SHALL BE INCIDENTAL TO THE ITEM FOR TREATED TIMBER.

Stantec
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Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA

SAFETY HARBOR PIER
REPLACEMENT PROJECT

Title
GENERAL NOTES

Permit-Seal

Christopher P. Gamache, PE
Lic. No.: 82122

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

Project Number:	238201804
SCALE:	N/A

MPR	TRH	CPG	8/18/2023
Dwn.	Dsgn.	Chkd.	YY.MM.DD

Drawing No. C1.01

Revision Sheet 2 of 16

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2024/08/19 11:03 PM By: Gamache, Christopher

ORIGINAL SHEET - ANSI D (22x34)

STORMWATER POLLUTION PREVENTION PLAN

PROJECT NAME: SAFETY HARBOR PIER REPLACEMENT

PROJECT ADDRESS:
VETERANS MEMORIAL PARK
110 VETERANS MEMORIAL LN
SAFETY HARBOR, FL 34695

OWNER'S ADDRESS:
CITY OF SAFETY HARBOR
750 MAIN ST.
SAFETY HARBOR, FL 34695

DESCRIPTION OF PURPOSE AND TYPES OF SOIL DISTURBING ACTIVITIES:

PROPERTY AREA APPROXIMATELY = 9.496 ACRES

PROJECT AREA APPROXIMATELY = 0.338 ACRES

CONSTRUCTION PROPOSED: TIMBER PIER AND PAVILION. NO NEW STORMWATER MANAGEMENT IS PROPOSED.

SOIL DISTURBING ACTIVITIES WILL INCLUDE:
CONNECTION TO ONSITE ELECTRIC AND WATER UTILITIES.

WETLAND ACTIVITIES INCLUDE:
NO WETLAND IMPACTS ARE PROPOSED FOR THE PROJECT. ACTIVITIES TO OCCUR ON OPEN WATER WITH APPROPRIATE BEST MANAGEMENT PRACTICES INSTALLED AND MAINTAINED.

CONSTRUCTION REMOVAL ACTIVITIES WILL INCLUDE:
REMOVAL OF THE EXISTING TIMBER PIER AND PAVILION.

STORMWATER DRAINAGE AREA:
BASIN AREA: N/A ACRES
PRE-DEVELOPMENT CURVE NUMBER (CN): N/A
POST DEVELOPMENT CURVE NUMBER (CN): N/A

WATER QUALITY: N/A

WATER QUANTITY: N/A

SEQUENCE OF MAJOR ACTIVITIES

1. INSTALL TURBIDITY BARRIER AND EROSION CONTROL AS SHOWN ON THE DEMOLITION PLAN.

2. INSTALL STABILIZED CONSTRUCTION ENTRANCE.

3. COMPLETE REPLACEMENT PER GENERAL PLAN AND ELEVATION.

4. INSTALL NEW UTILITIES, PER PLAN.

5. REPAIR ANY WASHED OUT AREAS, SOD, SEED, AND MULCH DISTURBED AREAS AS INDICATED ON PLANS.

6. WHEN CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE STABILIZED, REMOVE EROSION PROTECTION DEVICES AND CONSTRUCTION ENTRANCE AS REQUIRED.

NAME OF RECEIVING WATERS:
THE PROPOSED IMPROVEMENTS WILL DISCHARGE STORMWATER ON-SITE SIMILAR TO HISTORIC CONDITIONS. ULTIMATE DISCHARGE TO OLD TAMPA BAY.

CONTROLS

EROSION AND SEDIMENT CONTROLS

USE BEST MANAGEMENT PRACTICES (BMPs) DURING AND AFTER CONSTRUCTION TO MINIMIZE EROSION AND SEDIMENTATION AND TO PROPERLY MANAGE RUNOFF FOR BOTH STORMWATER QUANTITY AND QUALITY. CONTRACTOR TO ADHERE TO FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION EROSION AND SEDIMENTATION CONTROL MANUAL.

BEFORE SITE DISTURBANCE OCCURS, PERIMETER CONTROLS, SEDIMENT TRAPS, BASINS, AND DIVERSIONS MUST BE SET IN PLACE BY THE CONTRACTOR TO CONTROL RUNOFF AND CAPTURE SEDIMENTS. THE CONTRACTOR IS REQUIRED TO REVIEW THE SITE SPECIFIC EROSION CONTROL PLAN AS SHOWN ON THE CONSTRUCTION DOCUMENTS.

THE CONTRACTOR MAY ALSO BE REQUIRED TO MODIFY THE PLAN OR MATERIALS TO ADAPT TO SEASONAL VARIATIONS OR SITE CONDITIONS. CONTRACTOR WILL COMPLY WITH EROSION CONTROL PLAN AND DETAILS. ANY MODIFICATIONS TO THIS PLAN MUST BE SIGNED BY A PROFESSIONAL ENGINEER REPRESENTING THE CONTRACTOR. CONTRACTOR SHALL REMOVE ALL SEDIMENT THAT HAS MIGRATED OFF-SITE. THE EROSION CONTROL DEVISES FOR THESE ACTIVITIES ARE SPECIFIED IN THE PLANS AND ACCORDING TO "DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM (CURRENT EDITION), SECTION 104. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING IF ADDITIONAL CONTROLS ARE NEEDED AND DEPLOYMENT SCHEDULES FOR THE IMPLEMENTATION OF ALL EROSION CONTROL DEVICES.

STABILIZATION PRACTICES:

WIND EROSION STABILIZATION

-THE CONTRACTOR SHALL DENUDE ONLY AREAS WHERE IT IS EXPECTED TO BE GRADED OR ALTERED WITHIN A TWO (2) WEEK TIME- FRAME. FINAL GRADES SHALL BE PERFORMED AND TEMPORARY OR PERMANENT SOIL STABILIZATION SHALL BE APPLIED. AREAS WHERE CONSTRUCTION OPERATIONS WILL BE CONTINUOUS, FUGITIVE DUST SHALL BE MANAGED BY APPLYING A WATER SPRAY TO SATURATE THE SURFACE SOILS CONTINUOUSLY AND ADDITIONAL MEASURES MAY NEED TO BE TAKEN CONTROL OFF-SITE TRANSPORT OF UNACCEPTABLE LEVELS OF DUST.

TEMPORARY STABILIZATION

-TOP OF SOIL STOCK PILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR AT LEAST 21 DAYS WILL BE STABILIZED WITH TEMPORARY GRASS AND MULCH NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY. GRASS SEED SHALL BE A MIXTURE OF 20 PARTS OF BERMUDA SEED AND 80 PARTS OF PENSACOLA BAHIA. THE SEPARATE TYPES OF SEED USED SHALL BE THOROUGHLY DRY MIXED IMMEDIATELY BEFORE SOWING. SEED WHICH HAS BECOME WET SHALL NOT BE USED. THE MULCH MATERIAL USED SHALL NORMALLY BE DRY MULCH. DRY MULCH SHALL BE STRAW OR HAY, CONSISTING OF OAT, RYE OR WHEAT STRAW, OR OF PANGOLA, PEANUT, COASTAL BERMUDA OR BAHIA GRASS HAY. ONLY UNDETERIORATED MULCH, WHICH CAN BE READILY CUT INTO THE SOIL, SHALL BE USED. AREAS OF THE SITE, WHICH ARE TO BE PAVED, WILL BE TEMPORARILY STABILIZED BY APPLYING STABILIZATION AND BASE. TREE BARRICADES WHERE REQUIRED.

PERMANENT STABILIZATION

-DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASES SHALL BE STABILIZED WITH SOD NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY.

SEDIMENT BASINS

-IF APPLICABLE, SEDIMENT BASINS TO BE CONSTRUCTED BY THE CONTRACTOR TO DETAIN SEDIMENT-LADEN RUNOFF FROM DISTURBED AREAS LONG ENOUGH FOR MOST OF THE SEDIMENT TO SETTLE OUT. SEDIMENT BASINS SHOULD BE USED TOGETHER WITH EROSION CONTROL PRACTICES SUCH AS TEMPORARY SEEDING, MULCHING, DIVERSION BERMS, ETC., TO REDUCE THE AMOUNT SEDIMENT FLOWING INTO THE STORM SYSTEM.

DEWATERING

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MATERIALS, EQUIPMENT, LABOR, AND SERVICES NECESSARY FOR CARE OF WATER AND EROSION CONTROL. EXCAVATION WORK SHALL NOT BEGIN BEFORE THE EROSION AND SEDIMENTATION CONTROL PLAN IS IN PLACE. DEWATERING TO BE COMPLETED BY THE CONTRACTOR AND SHALL FOLLOW DEWATERING SPECIFICATION.

STRUCTURAL PRACTICES

STAKED SILT FENCES

-THE STAKED SILT FENCES WILL BE CONSTRUCTED ALONG THE CONSTRUCTION LIMITS OR AS DEPICTED ON THE EROSION CONTROL & DEMOLITION PLANS AND/OR ON OTHER CONSTRUCTION PLANS. THESE DEVICES WILL STOP AND DIVERT RUNOFF FROM THE SITE TO OTHER SURFACE WATERS.

OTHER CONTROLS / WASTE DISPOSAL

OFFSITE VEHICLE TRACKING

STABILIZED CONSTRUCTION ENTRANCES SHALL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREETS WILL BE CLEANED AS NEEDED 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 TARPUALIN AT ALL TIMES.

WASTE MATERIALS

- ALL WASTE MATERIAL WILL BE COLLECTED AND STORED IN DUMPSTERS PER LOCAL SOLID WASTE REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE DUMPED A MINIMUM OF TWICE A WEEK OR MORE OFTEN IF NECESSARY, AND THE TRASH WILL BE HAULED TO THE APPROPRIATE COUNTY LOCATION FOR DUMPING. NO CONSTRUCTION MATERIALS WILL BE BURIED ON-SITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED IN THE ON- SITE OFFICE TRAILER AND THE CONSTRUCTION MANAGER RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

THE CONTRACTOR SHALL PROVIDE LITTER CONTROL AND COLLECTION WITHIN THE PROJECT BOUNDARIES DURING CONSTRUCTION ACTIVITIES. ANY CHEMICAL CONTAINERS SHALL BE DISPOSED OF BY THE CONTRACTOR ACCORDING TO EPA'S STANDARD PRACTICES AS DETAILED BY THE MANUFACTURER. NO SOLID MATERIALS INCLUDING BUILDING & CONSTRUCTION MATERIALS SHALL BE DISCHARGE TO ADJACENT WATERWAYS OR WETLANDS OR BURIED ON SITE.

HAZARDOUS WASTE

THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE PERMITTING AGENCY IN WRITING IF ANY HAZARDOUS WASTE MATERIAL IS ENCOUNTERED DURING SITE INVESTIGATION AND CONSTRUCTION.

THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR NOTIFYING THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) WITHIN 24 HOURS OF DISCOVERY.

IF ENCOUNTERED, HAZARDOUS WASTE MATERIALS 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.

SANITARY WASTE

- ALL SANITARY WASTE WILL BE COLLECTED FROM PORTABLE UNITS A MINIMUM OF THREE TIMES PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR, IN ACCORDANCE WITH FDOT STANDARD SPEC. FOR ROAD AN BRIDGE CONSTRUCTION 2010 EDITION SECTION 7-6, AND AS REQUIRED BY LOCAL REGULATIONS.

TIMING OF CONTROL MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, STAKED SILT BARRIERS, EROSION CONTROL, AND STABILIZED CONSTRUCTION ENTRANCES CONSTRUCTED PRIOR TO GRUBBING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 21 DAYS WILL BE STABILIZED WITH A TEMPORARY GRASS AND MULCH WITHIN 14 DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTED ACTIVITY CEASES PERMANENTLY IN THAT AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SOD. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE TRAPS AND THE STAKED SILT BARRIERS WILL BE REMOVED.

MAINTENANCE INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:

THESE ARE THE INSPECTION AND MAINTENANCE PRACTICES THAT SHALL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROL.

LESS THAN ONE HALF OF THE SITE WILL BE DENUDED AT ONE TIME PRIOR TO ESTABLISHING EROSION CONTROL MANAGEMENT ALL CONTROL MEASURES WILL BE INSPECTED ONCE PER DAY AND FOLLOWING ANY STORM EVENT OF 0.5 INCHES OR GREATER BY A CONTRACTOR'S REPRESENTATIVE.

ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.

BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE. SILT FENCE WILL BE INSPECTED REGULARLY FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.

IF APPLICABLE, THE SEDIMENT BASINS WILL BE INSPECTED FOR DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB.

A MAINTENANCE INSPECTION REPORT SHALL BE MADE AFTER EACH INSPECTION BY THE CONTRACTOR AND SHALL BE KEPT IN AN ACTIVE LOG READILY AVAILABLE AT THE JOB SITE CONSTRUCTION TRAILER. THE SITE SUPERINTENDENT WILL SELECT INDIVIDUALS WHO WILL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES. FILLING OUT THE INSPECTION AND MAINTENANCE REPORT WILL BE BY THE CONTRACTOR. PERSONNEL SELECTED FOR MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. THEY WILL BE TRAINED IN ALL MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ON-SITE IN GOOD WORKING ORDER.

STORM WATER MANAGEMENT

NO STORMWATER MANAGEMENT IS REQUIRED.

WETLAND MITIGATION

WETLAND MITIGATION IS NOT APPLICABLE FOR THE PROPOSED PROJECT.

NON-STORM WATER DISCHARGES

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

1. PAVEMENT WASH WATERS (WHERE NO SPILL OR LEAKS OF TOXIC OR VEHICLE AND HAZARDOUS MATERIALS HAVE OCCURRED.

2. UNCONTAMINATED GROUNDWATER FROM DEWATERING 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, THE CONTRACTOR MUST NOTIFY THE OWNER AND ENGINEER.

MAINTENANCE AND INSPECTION

ALL OF THE CONTROLS SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES THROUGHOUT THE CONSTRUCTION PHASE OF THE PROJECT. MAINTENANCE SHALL BE IN ACCORDANCE WITH LOCAL GOVERNMENT AGENCY TECHNICAL SPECIFICATIONS, AND THE PROJECT CONSTRUCTION CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING THE FDEP NPDES / STORMWATER POLLUTION PREVENTION PLAN (SWPPP) CONSTRUCTION INSPECTION REPORT AFTER ANY 1/2 INCH 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. CONTRACTOR SHALL ALSO COMPLETE THE NPDES COMPLIANCE CHECKLIST FOR CONSTRUCTION SITES.

WATER MANAGEMENT DISTRICT - KEY PROVISIONS

AN ENVIRONMENTAL RESOURCE PERMIT (ERP) IS REQUIRED, THE FOLLOWING KEY PROVISIONS MUST BE MAINTAINED BY THE PERMITTEE AND CONTRACTOR: (IN ACCORDANCE WITH THE BASIS OF REVIEW FOR ENVIRONMENTAL RESOURCE PERMIT (ERP) APPLICATIONS)

THE PERMITTEE AND CONTRACTOR SHALL AMEND THE CONSTRUCTION SURFACE WATER MANAGEMENT PLAN WHENEVER THE PROJECT IS ALTERED OR MODIFIED IN A MANNER THAT WILL RESULT IN:

(1) THE POTENTIAL DISCHARGE OF POLLUTANTS

(2) A CHANGE IN THE AMOUNT OF DISCHARGE

(3) A CHANGE IN THE NUMBER OF LOCATION OF STORM WATER DISCHARGE POINTS, OR

(4) ADVERSE IMPACTS TO WETLANDS, AND SUCH CHANGE(S) HAVE NOT OTHERWISE BEEN PREVIOUSLY ADDRESSED IN THE APPROVED PLAN. THE PERMITTEE AND CONTRACTOR SHALL ALSO AMEND THE PLAN IF ITS IMPLEMENTATION DOES NOT ELIMINATE OR MINIMIZE EROSION AND SEDIMENT DEPOSITION, OFF-SITE FLOODING, ADVERSE IMPACTS TO WETLAND, OR VIOLATIONS OF STATE WATER QUALITY STANDARDS. AMENDMENTS TO THE PLAN SHALL BE PREPARED AND KEPT AS SEPARATE DOCUMENTS ALONG WITH THE ORIGINAL PLAN. ALL ALTERATIONS TO THE SYSTEM MUST BE SHOWN ON THE AMENDED PLAN ALONG WITH THE DOCUMENTATION OR REQUIRED APPROVAL(S).

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

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

GOOD HOUSEKEEPING:

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

AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCTS REQUIRED TO DO THE JOB.

ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER CONTAINED ENCLOSURE.

PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL MANUFACTURER'S LABELED CONTAINERS. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER. WHENEVER POSSIBLE, ALL OF A PRODUCT SHALL BE USED UP 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.

THE CONTRACTOR MUST IDENTIFY A DESIGNATED FUEL TANK STORAGE AREA, AWAY FROM DRAINAGE STRUCTURES, PONDS, BASINS, WATERWAYS, AND WETLANDS, WITH SECONDARY CONTAINMENT (SPILL COLLECTION).

PETROLEUM PRODUCTS:

ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS, WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ON-SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS:

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A SEALABLE PLASTIC BIN TO AVOID SPILLS.

CONCRETE TRUCKS:

CONTRACTOR SHALL DESIGNATE AN AREA AWAY FROM DRAINAGE STRUCTURES, PONDS, BASINS, WATERWAYS, 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. CONTRACTOR TO PREPARE A DETAILED SITE PLAN FOR APPROVAL FOR THE CONCRETE DISCHARGE AND WASH DOWN ACTIVITIES.

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 CONTRACTOR WILL BE RESPONSIBLE FOR SPILL PREVENTION AND CLEANUP COORDINATION. 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 OWNERS, ENGINEER OF RECORD AND PERMITTING AGENT INSPECTOR MUST BE NOTIFIED OF THE NATURE AND EXTEND OF THE CONTAMINATION.

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED, BUT NOT LIMITED, TO BE PRESENT ON-SITE DURING CONSTRUCTION:

CONCRETE	FERTILIZERS
DETERGENTS	PETROLEUM BASED PRODUCTS AND FUELS
TAR	CLEANING SOLVENTS
SAND	WOOD
STONE	

POLLUTION PREVENTION PLAN CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS HAVE BEEN READ BY ME OR MY DESIGNATED REPRESENTATIVE AND UNDERSTAND THAT THIS SYSTEM HAS BEEN PREPARED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OWNER: CITY OF SAFETY HARBOR

APPLICANT AUTHORIZED AGENT: _____

SIGNED: _____

ADDRESS: 750 MAIN STREET
SAFETY HARBOR, FL 34695

DATE: _____

CONTRACTOR'S AND ENGINEER'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION. I UNDERSTAND, AND SHALL COMPLY WITH THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA "GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" (CGP), AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED FOR THE CITY OF SAFETY HARBOR.

SIGNATURE: FOR: RESPONSIBLE FOR: GENERAL CONTRACTOR

NAME: COMPANY:

TITLE: ADDRESS:

DATE: PHONE:

CERTIFIED ENGINEER

NAME: CHRISTOPHER P. GAMACHE, P.E.
FL. REG. NO. 82122
TITLE: PROJECT MANGER

COMPANY: STANTEC
380 PARK PLACE BLVD., SUITE 300
CLEARWATER, FL 33759
PHONE: 727-531-1553

NPDES NOTIFICATION
(NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM)

ATTENTION: FAILURE TO MAINTAIN EROSION AND/OR SEDIMENTATION CONTROLS OR ANY ILLICIT DISCHARGE RESULTING FROM THEIR FAILURE WILL LIKELY RESULT IN FINE CITATIONS. CODE REGULATIONS AUTHORIZES PENALTIES OF UP TO $10,000 FOR EACH OFFENSE.

ALL ACTIVITIES MUST CONFORM WITH FDEP NOTICE OF INTENT TO USE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES. POLLUTION PREVENTION FROM THE PROPOSED CONSTRUCTION ACTIVITIES WILL BE IMPLEMENTED IN ACCORDANCE WITH SWFWMD BASIS OF REVIEW SUBSECTION 2.8.4.

KEY PROVISIONS

1. IMPLEMENTATION OF THIS STORMWATER POLLUTION PREVENTION PLAN (SWPPP).

2. CONDUCTING AND DOCUMENTING ROUTINE INSPECTIONS AS REQUIRED.

3. RETENTION OF RECORDS REQUIRED BY THE PERMIT, INCLUDING RETENTION OF A COPY OF THE SWPPP AT THE CONSTRUCTION SITE, FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL SITE STABILIZATION.

NOTICE OF INTENT (NOI)

A "NOTICE OF INTENT TO USE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" (NOI) IS NOT REQUIRED FOR THIS SITE SINCE THE OVERALL SITE AREA IS LESS THAN ONE ACRE IN SIZE.

Stantec
Stantec Consulting Services Inc.
380 Park Place Blvd, Suite 300
Clearwater, Florida 33759
Tel. 727.531.3505
Fax. 727.431.1777
www.stantec.com

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Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA

SAFETY HARBOR PIER
REPLACEMENT PROJECT

Title
STORMWATER POLLUTION PREVENTION PLAN

Permit-Seal

Christopher P. Gamache, PE
Lic. No.: 82122

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

Project Number: 238201804
SCALE: N/A

MPR	TRH	CPG	8/18/2023
Dwn.	Dsgn.	Chkd.	YY.MM.DD

Drawing No. C1.02
Revision Sheet 3 of 16

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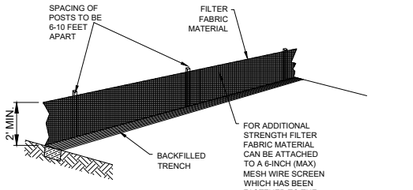
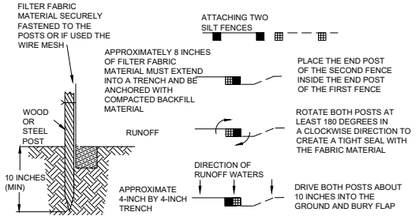
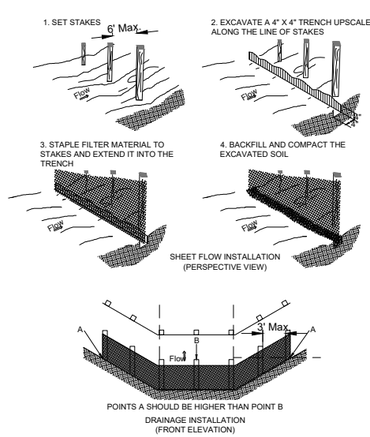
ORIGINAL SHEET - ANSI D (22x34)







INSTALLING A FILTER FABRIC SILT FENCE

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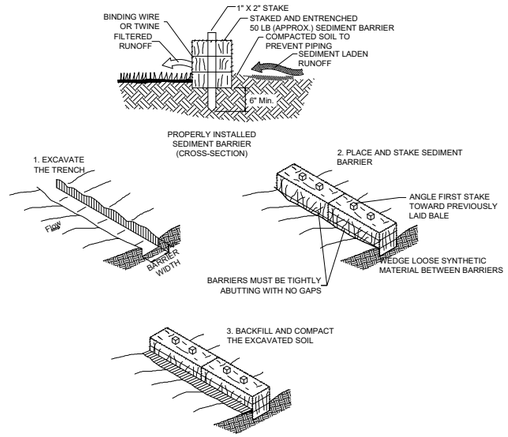

TEMPORARY SYNTHETIC SEDIMENT BARRIER

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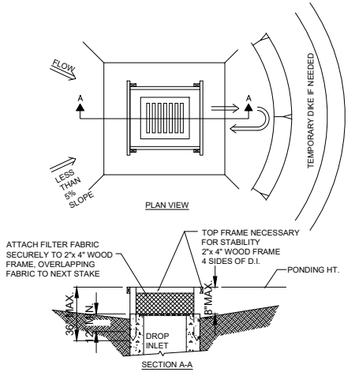
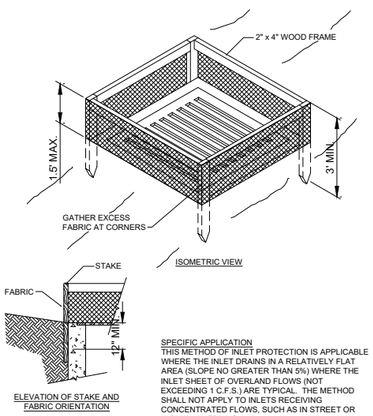


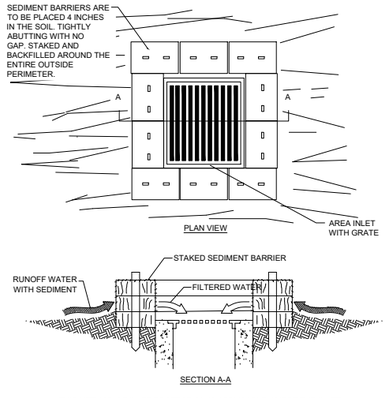
NOTES:
1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%)
2. USE 2"x 4" WOOD OR EQUIVALENT METAL STAKES. (3 FT. MIN. LENGTH)
3. INSTALL 2"x 4" WOOD TOP FRAME TO INSURE STABILITY.
4. THE TOP OF THE FRAME (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.



SPECIFIC APPLICATION
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS IN A RELATIVELY FLAT AREA (SLOPE NO GREATER THAN 5%) WHERE THE INLET SHEET OF OVERLAND FLOWS (NOT EXCEEDING 1 C.F.S.) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

TEMPORARY SEDIMENT BARRIER AT DROP INLET

SCALE: N.T.S.



THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5%) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 CFS) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS STREET OR HIGHWAY MEDIANS.

TEMPORARY SYNTHETIC SEDIMENT BARRIER AT STORM DRAIN DROP INLET

SCALE: N.T.S.

EROSION AND SEDIMENTATION CONTROL NOTES

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL AND PREVENT EROSION AND THE TRANSPORTATION OF SEDIMENT TO SURFACE DRAINS AND OUTFALLS. REFER TO CONSTRUCTION PLANS, DETAILS, SPECIFICATIONS AND APPROVED PERMITS FOR DETAILS. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY REACH SIX INCHES ON AN EROSION DEVICE.
2. DURING THE CONSTRUCTION OF DRAINAGE STRUCTURES, AND OTHER STRUCTURES REQUIRING EXCAVATION, THE CONTRACTOR SHALL PLACE APPROVED BARRIERS OR OTHER APPROVED DEVICES AROUND SUCH STRUCTURES TO PREVENT EROSION AND THE MIGRATION OF SEDIMENT TO POINTS OUTSIDE THE CONSTRUCTION AREA. THE APPROVED BARRIERS OR OTHER APPROVED DEVICES SHALL BE PLACED IN ACCORDANCE WITH REQUIREMENTS OF THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, FDEP, OR AS DIRECTED BY THE ENGINEER.
3. REQUIRED EROSION CONTROL MEASURES MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. FAILURE TO INSTALL OR PROPERLY MAINTAIN REQUIRED EROSION CONTROL WILL RESULT IN ENFORCEMENT ACTION. ALL EROSION CONTROL MEASURES, SAND, SILT, AND DEBRIS SHALL BE REMOVED FROM ALL DRAINAGE PIPES AND STRUCTURES AFTER CONSTRUCTION HAS BEEN COMPLETED AND PRIOR TO COUNTY FINAL WALK-THROUGH.
4. OUTFALL PROTECTION - PROJECT PIPE OR DITCH DISCHARGES INTO OFF-SITE OUTFALLS SHALL BE INSPECTED DAILY FOR POSSIBLE SEDIMENT BUILDUP OR TRANSPORT. OUTFALLS SHALL BE PROTECTED THROUGH USE OF EROSION CONTROL FEATURES AS NECESSARY TO CONTAIN ANY SEDIMENT LOSS TO THE IMMEDIATE AREA OF THE PROJECT. ANY SEDIMENT BUILDUP OR TRANSPORT OFF-SITE SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMEDY. THE CONTRACTOR SHALL USE APPROPRIATE MEASURES AS DIRECTED BY THE PROJECT ENGINEER FOR OUTFALL PROTECTION.
5. APPROVED BARRIERS (OR OTHER APPROVED SEDIMENT CONTROL DEVICES): THESE SHALL BE PLACED AT THE BASE OF ANY SLOPE WHERE A RAINFALL EVENT COULD ERODE A SLOPE AND TRANSPORT SEDIMENTS OFF-SITE. APPROVED BARRIERS SHALL BE DOUBLE STAKED IN ACCORDANCE WITH THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL OR FDEP. IF EROSION DEPOSITS REACH THE TOP ELEVATION OF EXISTING APPROVED BARRIERS, THEN SEDIMENTS SHOULD BE REMOVED. ANY DAMAGED OR INEFFECTIVE APPROVED BARRIERS ARE TO BE REPLACED WITH NEW ONES. THE LOCATION AND INSTALLATION OF APPROVED BARRIERS SHALL BE AS DIRECTED BY THE PROJECT ENGINEER.
6. BACK OF SIDEWALK INLETS OR MEDIAN INLETS: THESE SHALL BE PROTECTED FROM SEDIMENT INTAKE UNTIL PROJECT IS COMPLETE. ELEVATION OF GROUND OUTSIDE INLET TOP SHALL NOT BE HIGHER THAN INLET TOP. APPROVED BARRIERS OR OTHER APPROVED SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AROUND INLET TOP. A SECOND ROW OF APPROVED BARRIERS OR OTHER APPROVED SEDIMENT CONTROL DEVICES SHALL BE PLACED AROUND INLET APPROXIMATELY 4" OUTSIDE FIRST ROW. BETWEEN ROWS THERE SHALL BE A DEPRESSION TO ACT AS A SEDIMENT BASIN. COMPLETED INLETS IN PAVED AREAS SHALL ALSO BE PROTECTED WITH A SINGLE LINE OF APPROVED BARRIERS OR OTHER APPROVED SEDIMENT CONTROL DEVICES TO PREVENT SEDIMENT INTAKE FROM OTHER AREAS.
7. STOCKPILED MATERIALS SHALL BE PROTECTED BY COVER, APPROVED BARRIERS OR OTHER APPROVED SEDIMENT CONTROL DEVICES.
8. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 3 DAYS AFTER 1/2" RAIN EVENT DISTURBANCE.
9. SEDIMENT TRAPPING MEASURES: SEDIMENT BASINS AND TRAPS, PERIMETER BERMS, FILTER FENCES, BERMS, SEDIMENT BARRIERS, VEGETATIVE BUFFERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT AND/OR PREVENT THE TRANSPORT OF SEDIMENT INTO WATERS OF THE STATE OR NEIGHBORING PROPERTIES SHALL BE INSTALLED, CONSTRUCTED OR, IN THE CASE OF VEGETATIVE BUFFERS, PROTECTED FROM DISTURBANCE, AS A FIRST STEP IN THE LAND ALTERATION PROCESS.
10. WHERE PUMPS ARE TO BE USED TO REMOVE TURBID WATER FROM THE CONSTRUCTION AREA, THE WATER SHALL BE TREATED TO REDUCE TURBIDITY TO STATE WATER QUALITY STANDARDS PRIOR TO DISCHARGE TO THE WETLANDS. TREATMENT METHODS INCLUDE, FOR EXAMPLE, TURBID WATER BEING PUMPED INTO GRASSED SWALES OR APPROPRIATE VEGETATED AREAS (OTHER THAN UPLAND PRESERVATION AREAS AND WETLAND BUFFERS), SEDIMENTS BASINS, OR AREAS CONFINED BY AN APPROPRIATE ENCLOSURE SUCH AS TURBIDITY BARRIERS, AND KEPT CONFINED UNTIL ITS TURBIDITY LEVEL MEETS STATE WATER QUALITY STANDARDS.
11. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION, OR OTHER ACCEPTABLE METHODS.
12. THERE IS TO BE NO DISCHARGE (I.E. PUMPING, SHEET FLOW, SWALE, DITCH, ETC.) INTO EXISTING DITCHES OR CANALS WITHOUT THE USE OF SETTLING PONDS OR DEVICES. IF THE CONTRACTOR DESIRES TO DISCHARGE INTO EXISTING DITCHES OR CANALS, A SETTLING PLAN PREPARED BY THE CONTRACTOR MUST BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD AND LOCAL REGULATORY AGENCY PRIOR TO CONSTRUCTION.
13. WHERE APPLICABLE, SOIL TRACKING PREVENTION DEVICES SHALL BE PROVIDED AND MAINTAINED PER THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL OR FDEP.
14. THE EROSION CONTROL DEVICE QUANTITIES SHOWN ON THE BID FORMS ARE ESTIMATES OF THE ACTUAL QUANTITIES THAT MAY BE ENCOUNTERED DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SPECIFY ACTUAL QUANTITIES AND COSTS ASSOCIATED WITH THIS SPECIFIC EROSION CONTROL IMPLEMENTATION SCHEDULE. EROSION CONTROL ITEMS MAY BE ADDED OR DELETED FROM THE PAY ITEM LIST AS THE EROSION CONTROL IMPLEMENTATION SCHEDULE PROVIDED BY THE CONTRACTOR IS MODIFIED TO MEET SITE SPECIFIC CONDITIONS.
15. ALL EROSION CONTROL FENCES, BARRIERS, AND SILTATION DEVICES SHALL BE ERECTED PRIOR TO ANY LAND ALTERATIONS, SHALL BE MAINTAINED IN GOOD WORKING ORDER DURING CONSTRUCTION, AND REMOVED FOLLOWING SOIL STABILIZATION AND FINAL DRESSING. BUILT-UP SEDIMENT WILL BE REMOVED FROM SILT FENCES AND STAKED TURBIDITY BARRIERS WHEN IT HAS REACHED ONE THIRD THE HEIGHT OF THE FENCE/BARRIER. STOCKPILE AREAS SHALL INCLUDE SILT FENCE AROUND THE PERIMETER.
16. THE CONTRACTOR SHALL NOT RESTRICT OR BLOCK THE EXISTING DRAINAGE FLOW OVERLAND OR WITHIN RESHAPED SWALES. FLOW WITHIN EXISTING DRAINAGE PIPES SHALL BE MAINTAINED AT ALL TIMES. STORMWATER WILL BE CONVEYED VIA EXISTING SWALES, DITCHES, OR PROPOSED DITCHES, EXISTING AND PROPOSED STORM SEWERS.
17. DURING DEWATERING OPERATIONS, THE CONTRACTOR SHALL NOT DISCHARGE DIRECTLY TO RECEIVING WATERS, EXISTING CONVEYANCES TO RECEIVING WATERS, OR WETLAND SYSTEMS. TEMPORARY SEDIMENT BASINS, TRAPS, OR SILTATION REDUCTION DEVICES SHALL BE UTILIZED TO COLLECT THE DISCHARGE FROM DEWATERING ACTIVITIES TO ELIMINATE THE POTENTIAL FOR OFF-SITE SEDIMENT TRANSPORT AND TO INSURE THAT DIRECT DISCHARGE DOES NOT OCCUR.
18. BANKS SHALL BE PROTECTED FROM EROSION OR COLLAPSE DURING CONSTRUCTION. BANK PROTECTION MATERIAL SHALL BE CAREFULLY PLACED FROM THE BANK AND NOT DUMPED FROM ABOVE IN AN UNCONTROLLED MANNER. EROSION CONTROL FABRIC SHALL BE USED FOR EROSION PROTECTION WHERE SOD WILL NOT HOLD OR BECOME ESTABLISHED IN TIME TO PROTECT THE BANKS. UNLESS OTHERWISE SPECIFIED IN THE PLANS, UPON COMPLETION OF CONSTRUCTION, ALL BANKS AND WATERWAYS SHALL BE RESTORED TO THEIR PRE- CONSTRUCTION CONFIGURATION AND PROTECTION FROM EROSION.
19. IF APPLICABLE, THE CONTRACTOR SHALL BE RESSPONSIBLE FOR PROTECTING POND FILTRATION SYSTEMS FROM BEING CLOGGED UNTIL SAFETY HARBOR DETERMINES THE CONSTRUCTION IS COMPLETE. IF FILTER MATERIAL IS CONTAMINATED, IT SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
20. CONTRACTOR TO COORDINATE WITH LOCAL MUNICIPALITY REGARDING PREPARATION AND PERMITTING WITHIN THE NPDES PROGRAM.

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Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA
SAFETY HARBOR PIER
REPLACEMENT PROJECT

Title
EROSION CONTROL

Permit-Seal
Christopher P. Gamache, PE
Lic. No.: 82122

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Project Number:	238201804
SCALE:	N/A

MPR	TRH	CPG	8/18/2023
Dwn.	Dsgn.	Chkd.	YY.MM.DD

Drawing No. C1.03
Revision Sheet 4 of 16

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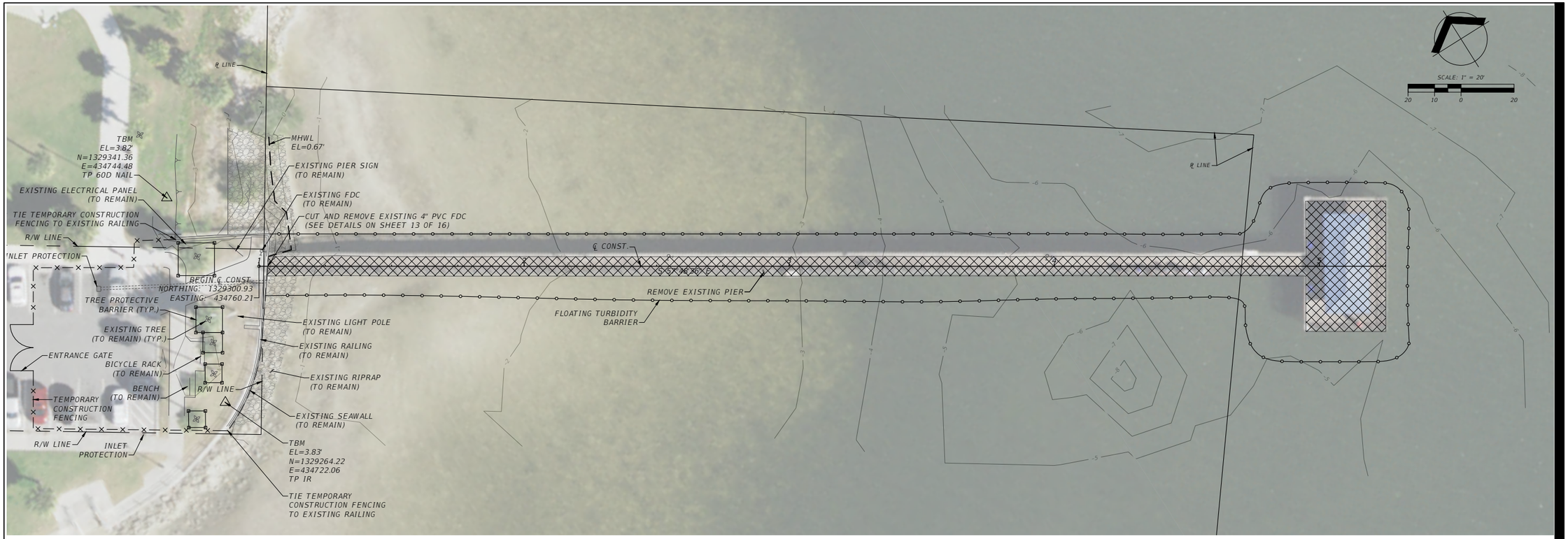
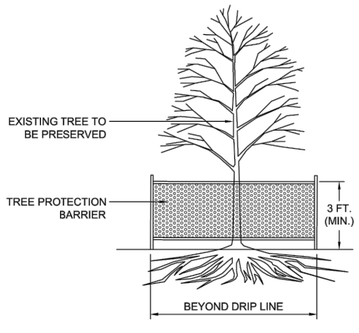
2024/08/19 11:07 PM By: Gamache, Christopher

ORIGINAL SHEET - ANSI D (22x34)



DEMOLITION PLAN

SCALE: 1" = 20'



GENERAL NOTES:

1. A TEMPORARY PROTECTIVE BARRIER SHALL BE PLACED AT THE DRIP LINE OF THE TREE(S) TO BE SAVED. THE PROTECTIVE BARRIER SHALL BE APPROVED BY THE CITY ARBORIST AND REMAIN IN PLACE UNTIL LAND ALTERATION, SITE CLEARING, AND CONSTRUCTION ACTIVITIES ARE COMPLETE.
2. FOR (2) INCH CALIPER TREES OR SMALLER, THE PROTECTIVE RADIUS SHALL BE A MINIMUM OF (6) FOOT DIAMETER.
3. THE TEMPORARY PROTECTIVE BARRIER SHALL COMPLETELY ENCIRCLE THE TREE(S) CREATING A PROTECTIVE RADIUS AROUND THE TREE(S) TO BE SAVED. IF THE DRIP LINE OF THE TREE(S) CANNOT BE BARRICADED DUE TO CONSTRUCTION ACCESS THE PROTECTIVE BARRIER SHALL BE INSTALLED AT THE GREATEST EXTENT POSSIBLE WITH THE REMAINDER OF THE DRIP LINE TO BE MULCHED AT A DEPTH OF (5) TO (6) INCHES TO PREVENT COMPACTION OF THE ROOT SYSTEM DURING CONSTRUCTION ACTIVITIES. MULCH TO BE REMOVED FOLLOWING THE COMPLETION OF CONSTRUCTION ACTIVITIES.
4. AT A MINIMUM, THE TEMPORARY PROTECTIVE BARRIER SHALL BE (3) FEET IN HEIGHT AND BE CONSTRUCTED OF (2) INCH x (2) INCH VERTICAL POSTS INSTALLED (6) INCHES BELOW GRADE. POSTS SHALL BE INSTALLED AT A MAXIMUM OF (10) FEET ON CENTER. AVOID DRIVING POSTS INTO MAJOR ROOTS. ORANGE MESH FENCING SHALL BE SECURELY ATTACHED TO POSTS ENCIRCLING THE TREE(S) AND DEFINING THE PROTECTIVE RADIUS.
5. FOR TREES (12) INCH DBH OR LARGER THE PROTECTIVE BARRIER SHALL BE CONSTRUCTED OF CHAIN LINK FENCING WITH POSTS INSTALLED AT A MAXIMUM OF (10) FEET ON CENTER.
6. DEAD TREES, SCRUB, OR UNDERGROWTH SHALL BE CUT FLUSH WITH ADJACENT GRADE. THERE WILL BE NO SOIL DISTURBANCE WITHIN THE PROTECTIVE BARRIER OF TREES TO BE PRESERVED.
7. TREATMENT OF ROOTS EXPOSED DURING CONSTRUCTION: FOR ROOTS OVER (1) INCH IN DIAMETER DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVE DAMAGED PORTION OF ROOT. ALL EXPOSED ROOTS SHOULD BE TEMPORARILY COVERED WITH (2) INCH MINIMUM DEPTH DAMP MULCH AS SOON AS POSSIBLE TO PREVENT DRYING.
8. NO EQUIPMENT OR MACHINERY SHALL BE USED WITHIN THE PROTECTIVE BARRIER. WORK WITHIN THE PROTECTIVE BARRIER SHALL BE DONE MANUALLY.
9. NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE IS ALLOWED WITHIN THE LIMIT OF THE PROTECTIVE BARRIER.

R:\AUTOCAD\STANDARDS\FLDOT DETAILS\TREE PROTECTIVE BARRIER.DWG

CITY OF SAFETY HARBOR
Engineering Department
750 Main Street, Safety Harbor, FL 34695
Phone (727) 724-1555

TREE PROTECTIVE BARRIER

REVISIONS	
BY	DATE
BD	11/01/2017
BD	12/31/2019
SCALE: N.T.S.	
DATE:	APRIL 2015
DETAIL NUMBER:	LA1

LEGEND

- TEMPORARY CONSTRUCTION FENCE
- TREE PROTECTIVE BARRIER
- FLOATING TURBIDITY BARRIER TYPE
- PROPERTY LINE LINE
- MEAN HIGH WATER ELEVATION (MHWL)
- RIGHT-OF-WAY LINE
- EXISTING RIP RAP
- AREA OF EXISTING PIER REMOVAL

NOTES:

1. EXISTING PIER PLAN AREA = 4332 FT^2
2. FLOATING TURBIDITY BARRIER SHALL BE IN PLACE PRIOR TO ANY IN-WATER WORK.
3. EXISTING TIMBER IS PRESSSURE TREATED AND SHALL BE REMOVED FROM SITE AND DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
4. EXISTING IPA DECKING SHALL BE RETAINED BY THE CITY. REMOVE DECKING WITH CARE AND NEATLY STACK ON WOODEN PALLETS AT THE SITE FOR REMOVAL BY THE CITY.

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Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA
SAFETY HARBOR PIER
REPLACEMENT PROJECT

Title
DEMOLITION PLAN

Permit-Seal
Christopher P. Gamache, PE
Lic. No.: 82122

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Project Number: 238201804
SCALE: N/A

MPR	TRH	CPG	8/18/2023
Dwn.	Dsgn.	Chkd.	YY.MM.DD

Drawing No. C2.00
Revision Sheet
5 of 16

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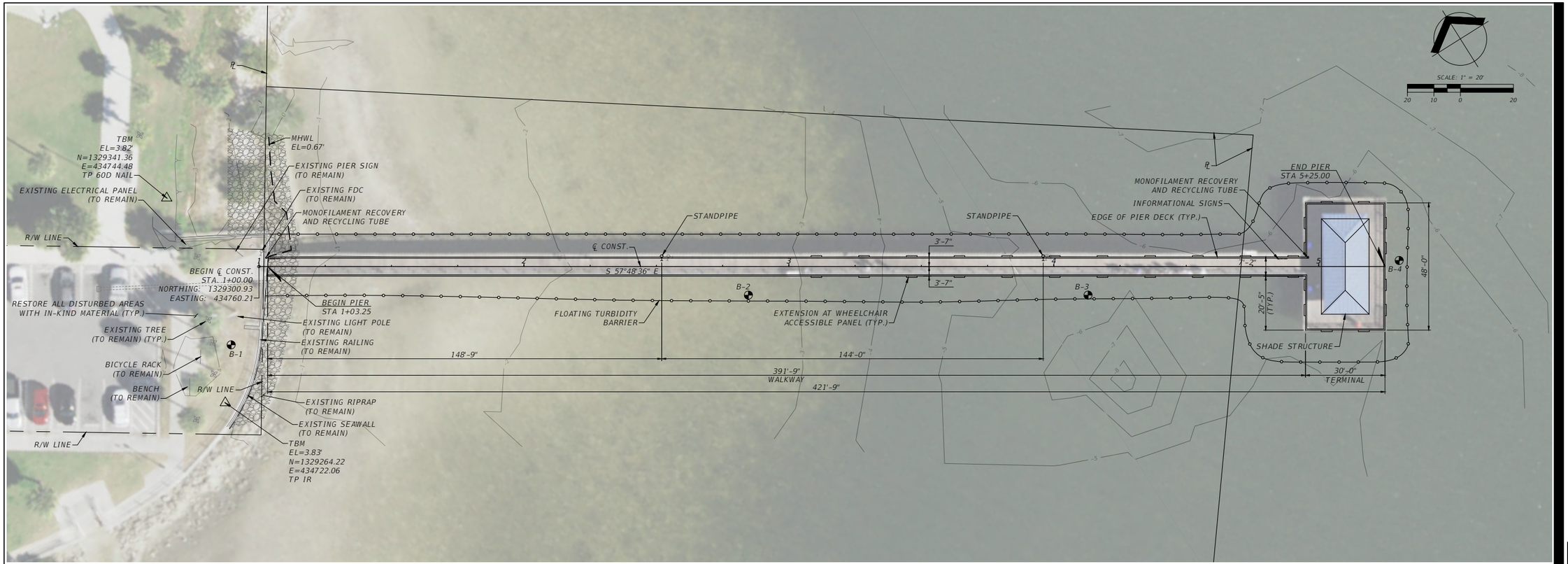
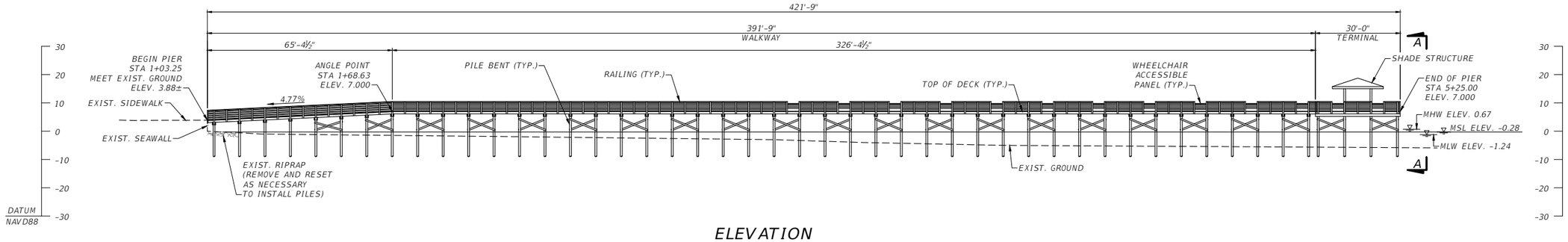
2024/08/19 11:03 PM By: Gamache, Christopher

ORIGINAL SHEET - ANSI D (22x34)



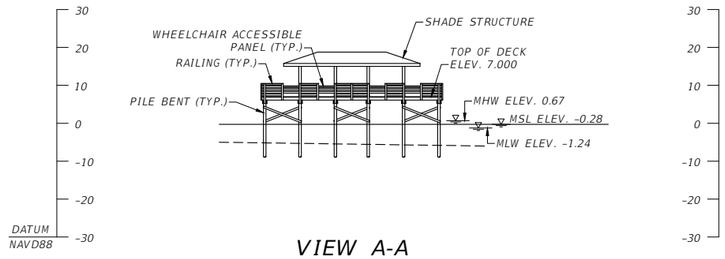
GENERAL PLAN

SCALE: 1" = 20'



ELEVATION

SCALE: 1" = 20'



VIEW A-A

SCALE: 1" = 20'

LEGEND:

- SPT BORING LOCATION
- SURVEY BENCHMARK

NOTES:

1. PROPOSED PIER PLAN AREA = 4323 FT²
2. FLOATING TURBIDITY BARRIER SHALL BE IN PLACE PRIOR TO ANY IN-WATER WORK.
3. SEE SHEET C2.00 FOR LEGEND.
4. EXISTING PIER (TO BE RMOVED) NOT SHOWN FOR CLARITY.

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Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA

SAFETY HARBOR PIER
REPLACEMENT PROJECT

Title
GENERAL PLAN AND ELEVATION

Permit-Seal

Christopher P. Gamache, PE
Lic. No.: 82122

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Project Number:	238201804
SCALE:	AS SHOWN

MPR	TRH	CPG	8/18/2023
Dwn.	Dsgn.	Chkd.	YY.MM.DD

Drawing No. C3.00

Revision Sheet 6 of 16

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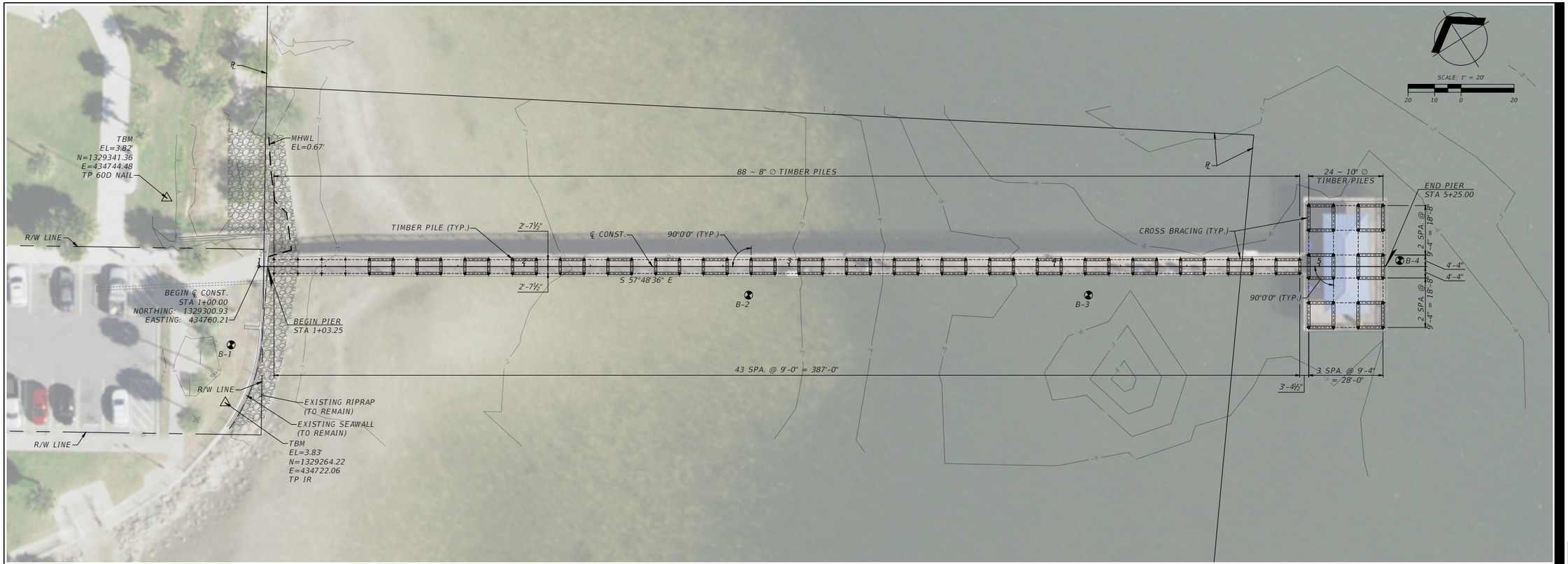
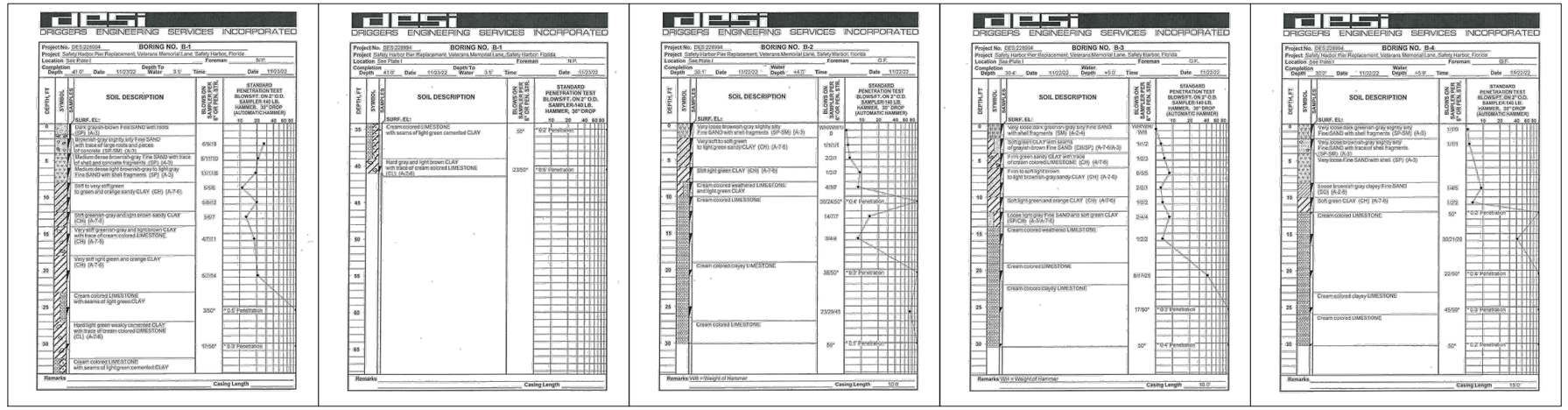


FOUNDATION LAYOUT

SCALE: 1" = 20'



DRIGGERS ENGINEERING SERVICES INCORPORATED

BORING NO. B-1

Project No. DES 228994
Project Safety Harbor Pier Replacement, Veterans Memorial Lane, Safety Harbor, Florida
Location See Plate I — Foreman — N.P.
Completion Depth 41.0' — Date 11/23/22 — Depth To Water 3.5' — Time — Date 11/23/22

DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION	BLOWS ON SAMPLER PER 6 INCHES	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER/140 LB. HAMMER, 30" DROP (AUTOMATIC HAMMER) 10 20 40 60 80
0			SURF. EL: Dark gray to brown Fill/SAND with roots (SP), (A-3)		
			Brownish-gray slightly silty Fine SAND with trace of large roots and pieces of coquina (SP-SM), (A-3)	6/9/18	
5			Medium dense brownish-gray Fine SAND with trace of shell and concrete fragments (SP), (A-3)	8/11/10	
			Medium dense light brownish-gray to light gray Fine SAND with shell fragments (SP), (A-3)	11/11/18	
10			Stiff to very stiff green to green and orange sandy CLAY (CH), (A-7-6)	5/5/6	
				5/8/12	
			Soft greenish-gray and light brown sandy CLAY (CH), (A-7-6)	3/5/7	
15			Very stiff greenish-gray and light brown CLAY with trace of cream colored LIMESTONE (CH), (A-7-6)	4/7/11	
			Very soft light green and orange CLAY (CH), (A-7-6)	5/7/14	
20			Cream colored LIMESTONE with seams of light green CLAY		
				3/50"	* 0.6' Penetration
25			Hard/light green weakly cemented CLAY with trace of cream colored LIMESTONE (CL), (A-4/6)	17/50"	* 0.3' Penetration
30			Cream colored LIMESTONE with seams of light green cemented CLAY		

Remarks — Casing Length —

DRIGGERS ENGINEERING SERVICES INCORPORATED

BORING NO. B-1

Project No. DES 228994
Project Safety Harbor Pier Replacement, Veterans Memorial Lane, Safety Harbor, Florida
Location See Plate I — Foreman — N.P.
Completion Depth 41.0' — Date 11/23/22 — Depth To Water 3.5' — Time — Date 11/23/22

DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION	BLOWS ON SAMPLER PER 6 INCHES	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER/140 LB. HAMMER, 30" DROP (AUTOMATIC HAMMER) 10 20 40 60 80
35			SURF. EL: Cream colored LIMESTONE with seams of light green cemented CLAY	50"	* 0.2' Penetration
40			Hard gray and light brown CLAY with inlaid of cream colored LIMESTONE (CL), (A-7-6)	23/50"	* 0.5' Penetration
45					
50					
55					
60					
65					

Remarks — Casing Length —

DRIGGERS ENGINEERING SERVICES INCORPORATED

BORING NO. B-2

Project No. DES 228994
Project Safety Harbor Pier Replacement, Veterans Memorial Lane, Safety Harbor, Florida
Location See Plate I — Foreman — G.F.
Completion Depth 30.4' — Date 11/22/22 — Water Depth +4.0' — Time — Date 11/22/22

DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION	BLOWS ON SAMPLER PER 6 INCHES	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER/140 LB. HAMMER, 30" DROP (AUTOMATIC HAMMER) 10 20 40 60 80
0			SURF. EL: Very loose brownish-gray slightly silty Fine SAND with shell fragments (SP-SM), (A-3)	WH/WH/WH 0	
			Very soft to soft green to light green sandy CLAY (CH), (A-7-6)	1/1/1/1	
5				2/2/1	
			Stiff light green CLAY (CH), (A-7-6)	1/2/2	
10			Cream colored weathered LIMESTONE and light green CLAY	4/3/7	
			Cream colored LIMESTONE	20/24/50"	*0.4' Penetration
15				14/7/7	
				3/4/6	
20			Cream colored clayey LIMESTONE	38/50"	* 0.3' Penetration
25				23/29/45	
			Cream colored LIMESTONE	50"	* 0.1' Penetration
30					

Remarks WH = Weight of Hammer — Casing Length 30.0'

DRIGGERS ENGINEERING SERVICES INCORPORATED

BORING NO. B-3

Project No. DES 228994
Project Safety Harbor Pier Replacement, Veterans Memorial Lane, Safety Harbor, Florida
Location See Plate I — Foreman — G.F.
Completion Depth 48.0' — Date 11/22/22 — Water Depth +5.0' — Time — Date 11/22/22

DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION	BLOWS ON SAMPLER PER 6 INCHES	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER/140 LB. HAMMER, 30" DROP (AUTOMATIC HAMMER) 10 20 40 60 80
0			SURF. EL: Very loose dark greenish-gray and light gray Fine SAND with shell fragments (SP-SM), (A-3)	WH/WH/WH 1WH	
			Soft/greenish CLAY with seams of grayish-brown Fine SAND (CH/SP) (A-7-6/A-3)	1/1/2	
5			Firm green sandy CLAY with inlaid of cream colored LIMESTONE (CH) (A-7-6)	1/2/3	
			From to soft/light brown to light brown/dk-gray sandy CLAY (CH) (A-7-6)	6/5/5	
10			Soft light green and orange CLAY (CH) (A-7-6)	2/2/1	
			Loose light gray Fine SAND and soft green CLAY (SP/CH) (A-3/A-7-6)	1/1/2	
15			Cream colored weathered LIMESTONE	2/4/4	
				1/2/2	
20			Cream colored LIMESTONE	8/17/25	
			Cream colored clayey LIMESTONE	17/50"	*0.3' Penetration
25					
				50"	*0.4' Penetration
30					

Remarks WH = Weight of Hammer — Casing Length 48.0'

DRIGGERS ENGINEERING SERVICES INCORPORATED

BORING NO. B-4

Project No. DES 228994
Project Safety Harbor Pier Replacement, Veterans Memorial Lane, Safety Harbor, Florida
Location See Plate I — Foreman — G.F.
Completion Depth 30.0' — Date 11/22/22 — Water Depth +5.9' — Time — Date 11/22/22

DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION	BLOWS ON SAMPLER PER 6 INCHES	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER/140 LB. HAMMER, 30" DROP (AUTOMATIC HAMMER) 10 20 40 60 80
0			SURF. EL: Very loose brownish-gray slightly silty Fine SAND with shell fragments (SP-SM), (A-3)	1/1/0	
			Very loose brownish-gray slightly silty Fine SAND with traces of shell fragments (SP-SM), (A-3)	1/1/1	
5			Very loose Fine SAND with shell (SP), (A-3)		
			Loose brownish gray clayey Fine SAND (SC), (A-2-6)	1/4/5	
10			Soft green CLAY (CH), (A-7-6)	1/2/3	
			Cream colored LIMESTONE	50"	*0.2' Penetration
15				30/21/26	
				22/50"	*0.4' Penetration
20			Cream colored clayey LIMESTONE	45/50"	*0.3' Penetration
25			Cream colored LIMESTONE	50"	*0.2' Penetration
30					

Remarks — Casing Length 59.0'

BORING LOGS

(SEE NOTE 2 FOR REFERENCE)

LEGEND:

- SPT BORING LOCATION
- SURVEY BENCHMARK

NOTES:

1. REMOVE OR CUT OFF EXISTING PILES AT THE MUD LINE.
2. EXISTING PIER NOT SHOWN FOR CLARITY.
3. BORING LOGS REFERENCED FROM THE PROJECT'S "REPORT OF THE GEOTECHNICAL INVESTIGATION" AS PREPARED BY DRIGGERS ENGINEERING SERVICES, INC., DATED 3-27-2023.
4. TIMBER PILE DIMENSIONS SHOWN REPRESENT THE MINIMUM TIP DIAMETER.
5. INSTALL TIMBER PILES IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF FDOT STANDARD SPECIFICATIONS SECTION 455.
6. 8" ∅ PILES UNDER THE WALKWAY SHALL BE DRIVEN A MINIMUM OF 10 FEET BELOW EXISTING GROUND AND THEN DRIVEN TO PRACTICAL REFUSAL.
7. 10" ∅ PILES UNDER THE TERMINAL SHALL BE PREFORMED 20 FEET BELOW EXISTING GROUND WITH A PREFORM DIAMETER THAT IS 2" LARGER THAN THE PILE. PILES SHALL BE INSTALLED IN THE PREFORMED HOLES AND DRIVEN TO PRACTICAL REFUSAL.
8. PRACTICAL REFUSAL SHALL BE DEFINED AS THE CONDITION WHERE THE BLOW COUNTS EXCEED EITHER 12 BLOWS FOR A SINGLE FOOT INCREMENT OR 5 BLOWS FOR 3 INCHES OR LESS OF PENETRATION USING A 3,000 POUND HAMMER WITH A DROP HEIGHT OF 6 FEET.
9. A PILE INSTALLATION PLAN SHALL BE PROVIDED FOR REVIEW AND ACCEPTANCE PRIOR TO THE START OF WORK. THE PLAN SHALL INCLUDE A DESCRIPTION OF THE MEANS AND METHODS, EQUIPMENT, AND PILE DRIVING SYSTEM/HAMMER USED. IF THE HAMMER DIFFERS THAN WHAT IS DEFINED IN NOTE 8, AN EQUIVALENT CRITERIA FOR PRACTICAL REFUSAL SHALL BE DEFINED.

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Clearwater, Florida 33759
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Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA

SAFETY HARBOR PIER
REPLACEMENT PROJECT

Title
FOUNDATION LAYOUT

Permit-Seal
Christopher P. Gamache, PE
Lic. No.: 82122

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Project Number: 238201804
SCALE: AS SHOWN

MPR	TRH	CPG	8/18/2023
Dwn.	Dsgn.	Chkd.	YY.MM.DD

Drawing No. C3.01
Revision Sheet
7 of 16

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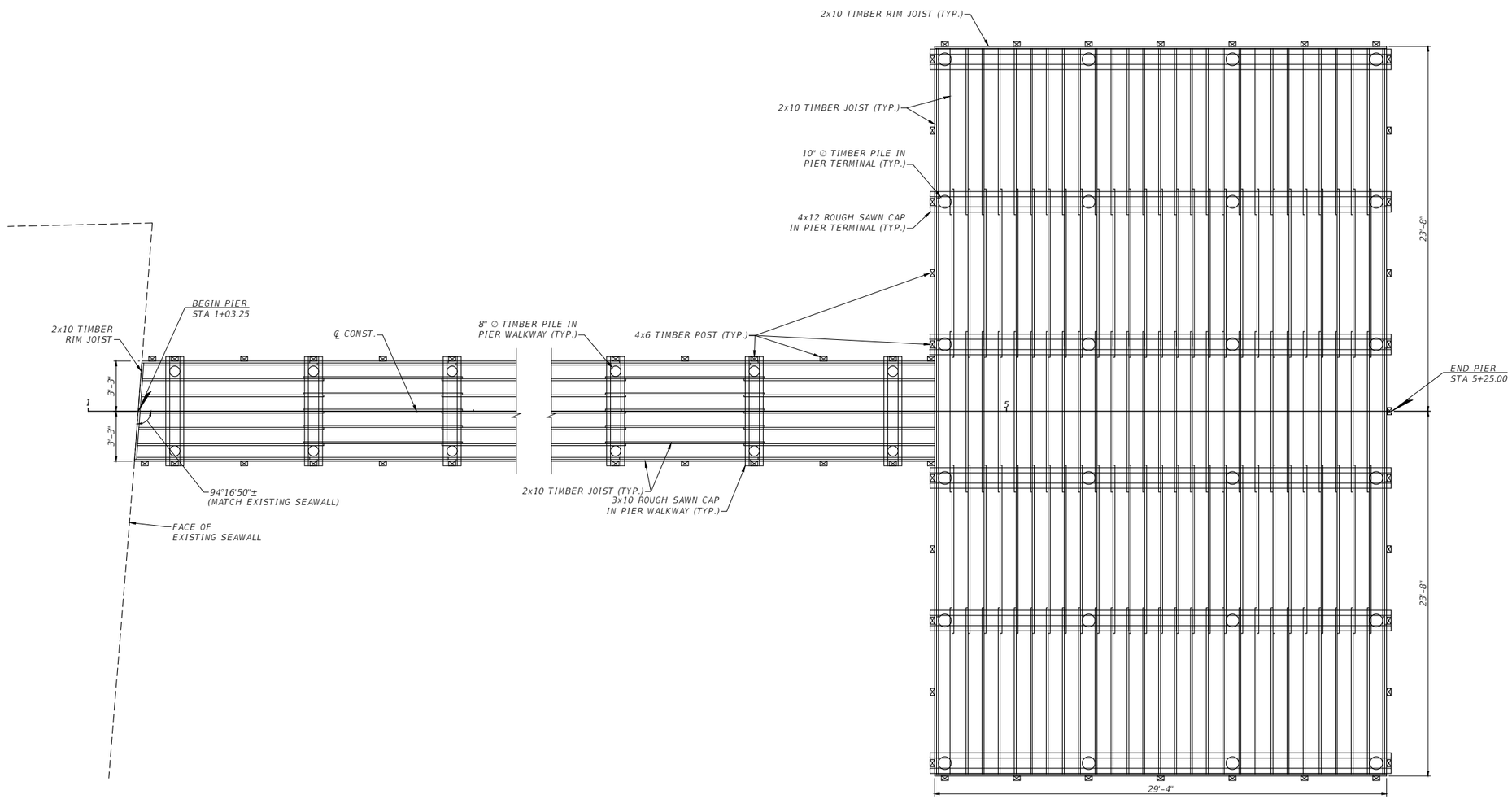

FRAMING PLAN

SCALE: ¼ " = 1'-0"

SCALE: ¼" = 1'-0"

4 2 0 4

NOTES:

1. DECKING AND RAILING NOT SHOWN FOR CLARITY.
2. JOIST BLOCKING NOT SHOWN FOR CLARITY.
3. SEE GENERAL PLAN AND FOUNDATION LAYOUT FOR ADDITIONAL DIMENSIONS NOT SHOWN.

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Revision | By | Appd. | YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA

SAFETY HARBOR PIER
REPLACEMENT PROJECT

Title
FRAMING PLAN

Permit-Seal

Christopher P. Gamache, PE
Lic. No.: 82122

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Project Number: 238201804
SCALE: AS SHOWN

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MPR	TRH	CPG	8/18/2023

Drawing No. C3.02
Revision Sheet
8 of 16

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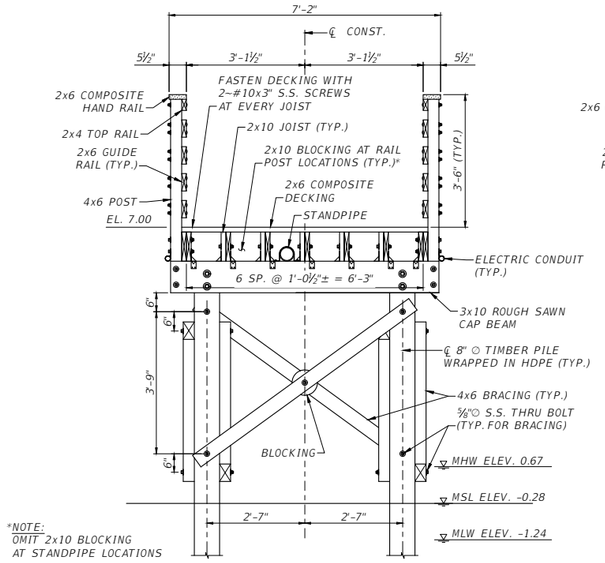
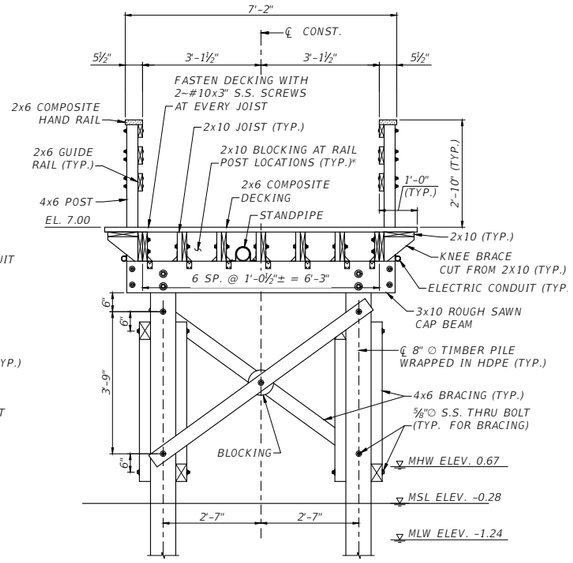
2024/08/19 11:04 PM By: Gamache, Christopher

ORIGINAL SHEET - ANSI D (22x34)



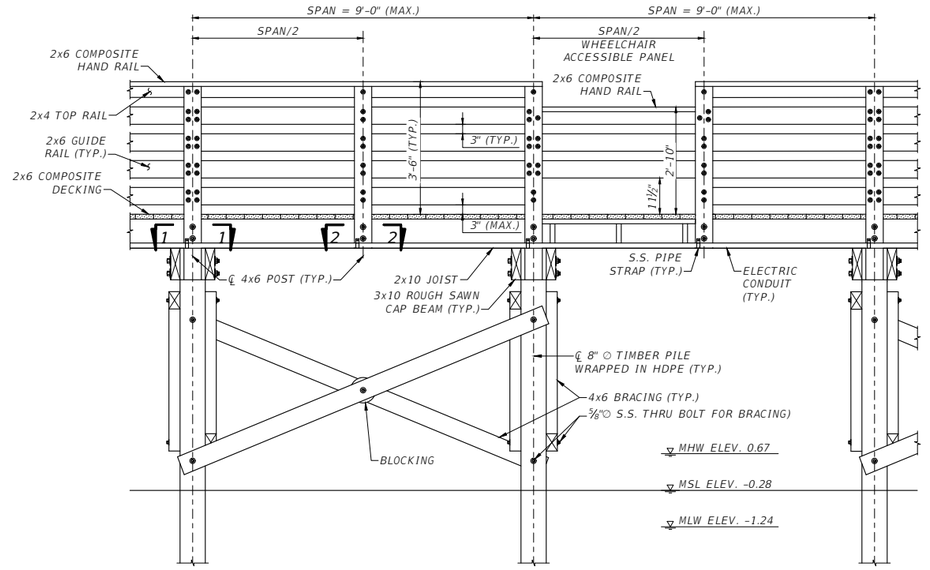
TYPICAL SECTION OF WALKWAY

SCALE: ½" = 1'-0"



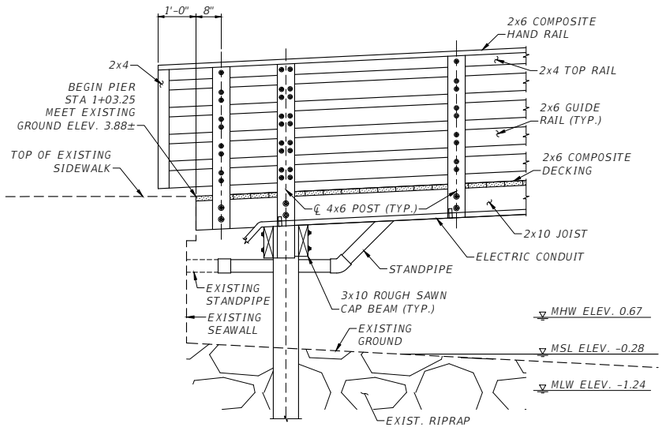
SECTION OF WALKWAY AT WHEELCHAIR ACCESSIBLE PANEL

SCALE: ½" = 1'-0"



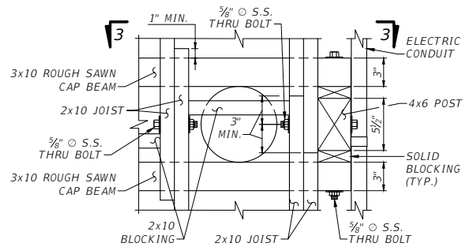
TYPICAL ELEVATION OF APPROACH WALKWAY

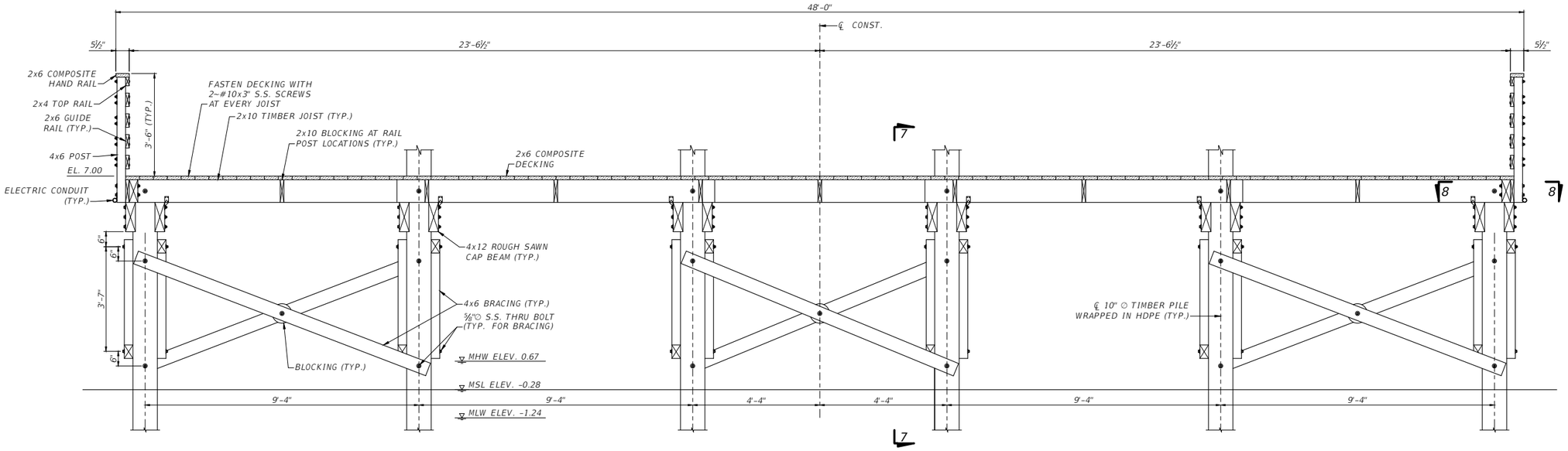
SCALE: ½" = 1'-0"



ELEVATION OF WALKWAY AT SEAWALL

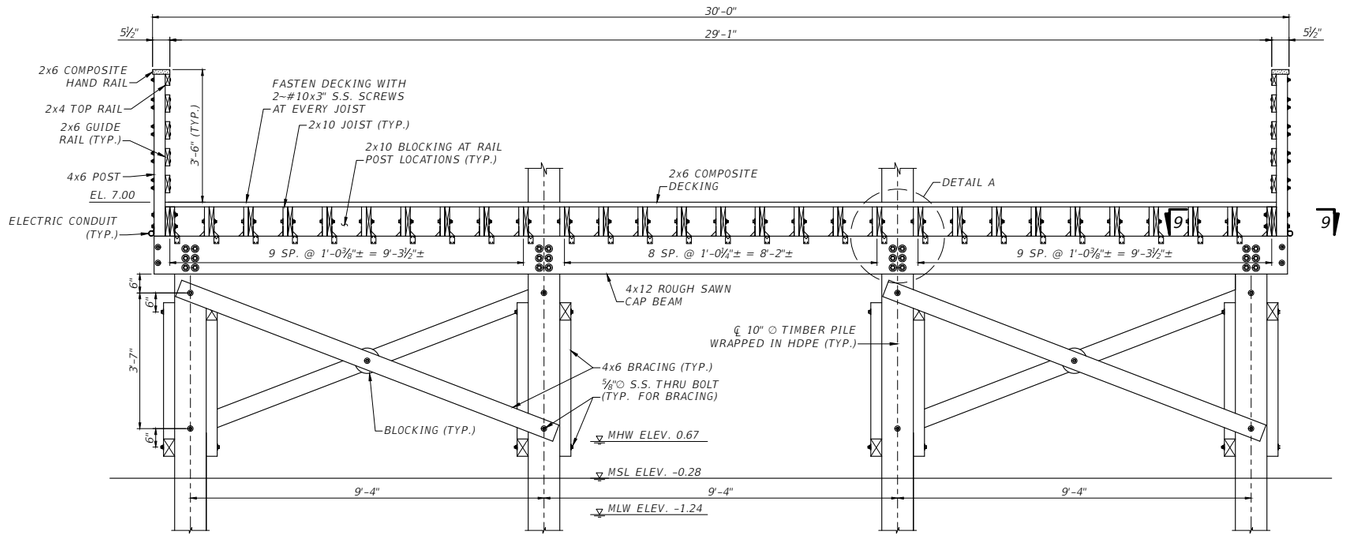
SCALE: ½" = 1'-0"


3
1" MIN.
⅝" ∅ S.S. THRU BOLT
3
ELECTRIC CONDUIT
3x10 ROUGH SAWN CAP BEAM
2x10 JOIST
4x6 POST
3"
3"
3"



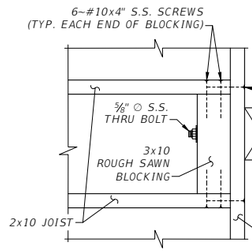
TYPICAL SECTION OF TERMINAL

SCALE: ½" = 1'-0"



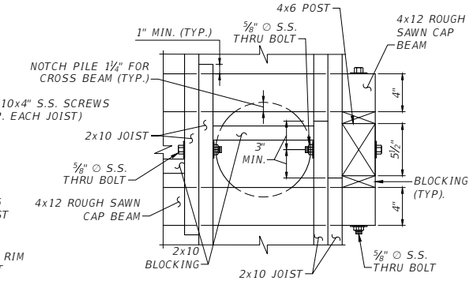
SECTION 7-7

SCALE: ½" = 1'-0"



SECTION 8-8

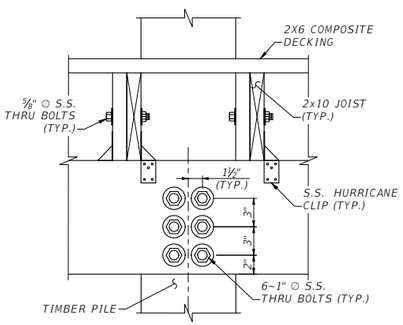
SCALE: 1½" = 1'-0"



SECTION 9-9

SCALE: 1½" = 1'-0"

NOTE: SEE SECTION 2-2 ON SHEET 9 FOR POST CONNECTION MIDWAY BETWEEN BENTS.



DETAIL A

SCALE: 1½" = 1'-0"

NOTES:

1. SEE GENERAL PLAN AND ELEVATION FOR LOCATIONS OF WHEELCHAIR ACCESSIBLE PANELS.
2. SEE FRAMING PLAN AND FOUNDATION LAYOUT FOR ADDITIONAL DETAILS.
3. SEE FRAMING DETAILS (1 OF 2) FOR RAILING DETAILS.

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Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA

SAFETY HARBOR PIER
REPLACEMENT PROJECT

Title
FRAMING DETAILS (2 OF 2)

Permit-Seal

Christopher P. Gamache, PE
Lic. No.: 82122

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Project Number: 238201804
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Drawing No. C3.04
Revision Sheet
10 of 16

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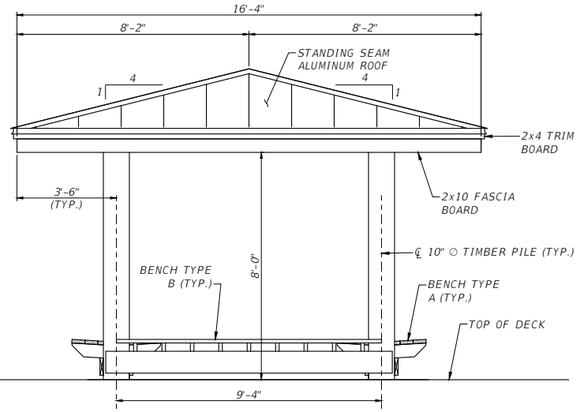
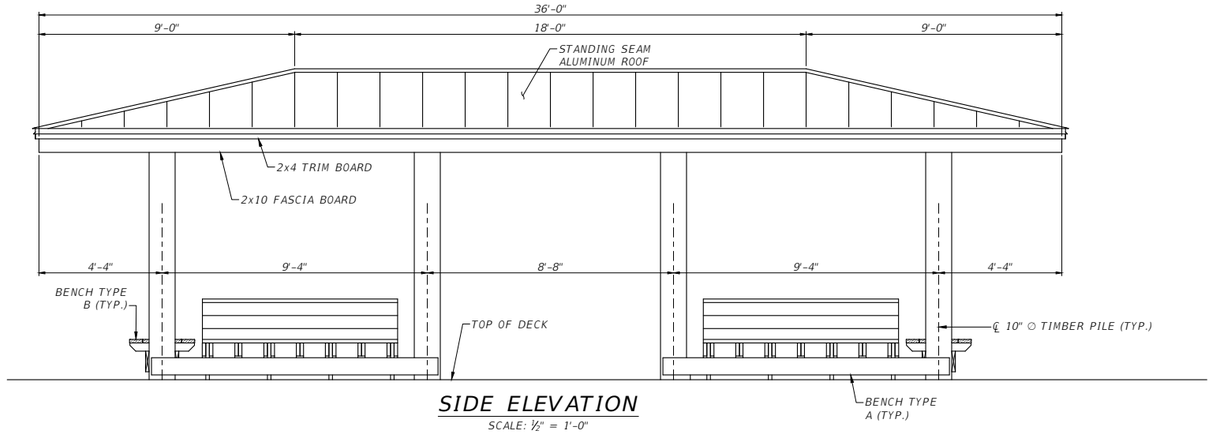
ORIGINAL SHEET - ANSI D (22x34)



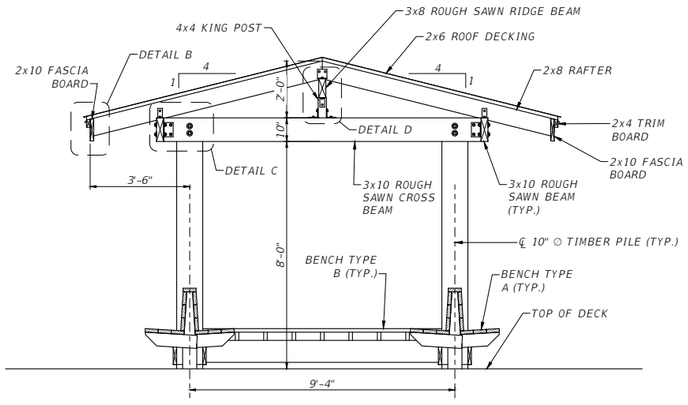
END ELEVATION

SCALE: ½" = 1'-0"



SIDE ELEVATION

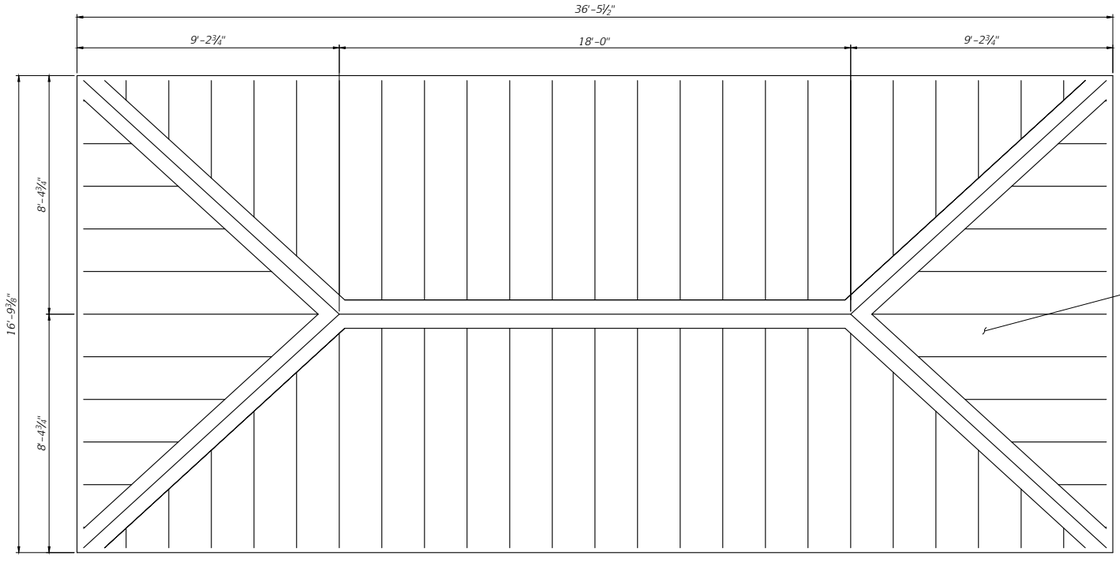
SCALE: ½" = 1'-0"



NOTE: SEE SHEET C3.06 FOR DETAILS A, B & C.

SHADE STRUCTURE SECTION

SCALE: ½" = 1'-0"

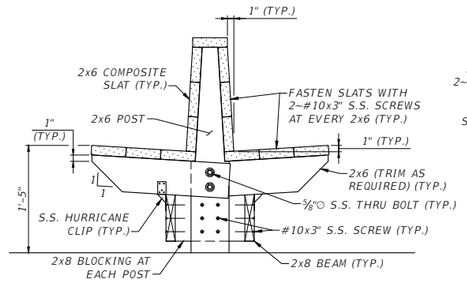


ROOF PLAN

SCALE: ⅜" = 1'-0"

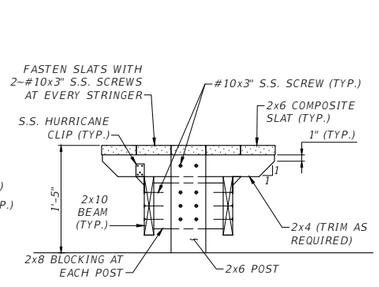
METAL ROOF NOTES:

1. STANDING SEEM METAL ROOF SHALL BE "SNAP CLAD" BY PETERSEN ALUMINUM CORPORATION OR APPROVED EQUAL.
2. ALUMINUM SHEET, 0.032 INCHES THICK.
3. FINISH: METALLIC FLUOROPOLYMER - STANDARD TWO COAT. THERMO CURED, FULL STRENGTH 70 PERCENT "KYNAR 500" COATING.
4. COLOR: BLUE, AS SELECTED BY THE CITY FROM THE MANUFACTURER'S COLOR RANGE.
5. PANEL WIDTH: 12" TO 18" SMOOTH FLAT SURFACE.
6. ROOF PANELS TO BE INSTALLED OVER SELF-ADHERING, HIGH TEMPERATURE UNDERLAYMENT 30-40 MILS THICK APPROVED BY THE METAL ROOF MANUFACTURER.
7. STANDING SEAM METAL ROOF PANELS TO BE FASTENED TO SUBSTRATE WITH CONCEALED STAINLESS STEEL CLIPS AND SCREWS.
8. DELEGATED DESIGN: DESIGN METAL ROOF PANEL ASSEMBLY, INCLUDING COMPREHENSIVE ENGINEERING ANALYSIS BY A QUALIFIED PROFESSIONAL ENGINEER. PANEL ASSEMBLY MUST CARRY A FLORIDA PRODUCT APPROVAL NUMBER.



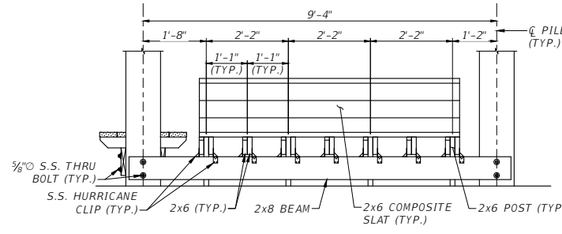
BENCH TYPE A SECTION

SCALE: 1" = 1'-0"



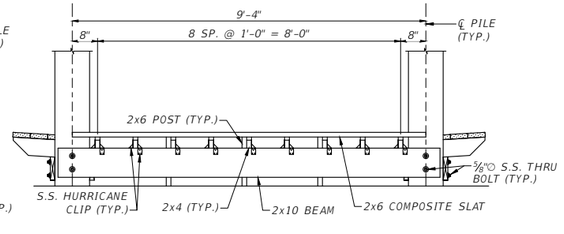
BENCH TYPE B SECTION

SCALE: 1" = 1'-0"



BENCH TYPE A ELEVATION

SCALE: ½" = 1'-0"



BENCH TYPE B ELEVATION

SCALE: ½" = 1'-0"

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Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA

SAFETY HARBOR PIER
REPLACEMENT PROJECT

Title
SHADE STRUCTURE DETAILS

Permit-Seal

Christopher P. Gamache, PE
Lic. No.: 82122

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Project Number: 238201804
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Drawing No. C3.05
Revision Sheet
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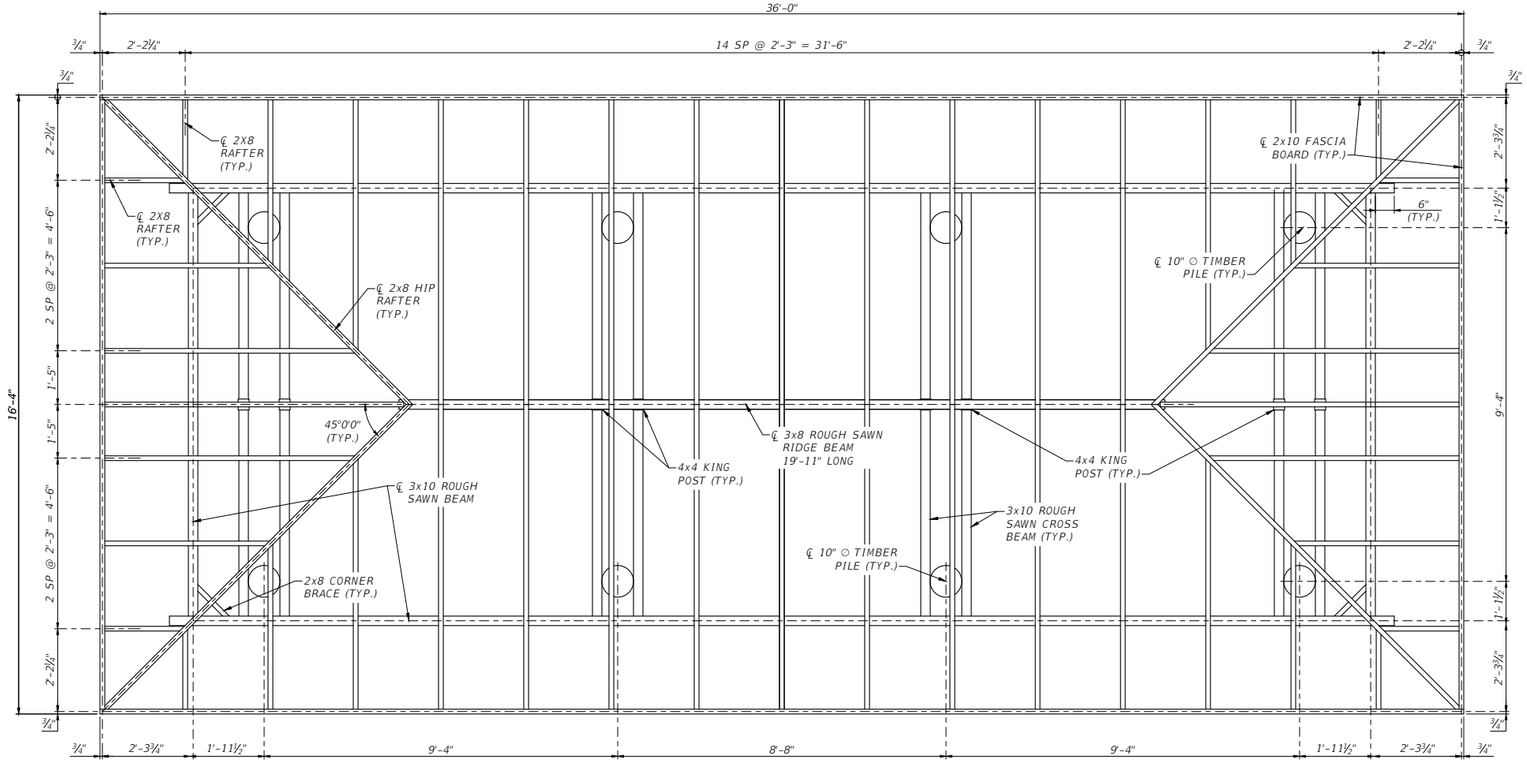
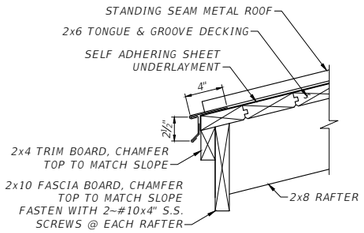
ORIGINAL SHEET - ANSI D (22x34)



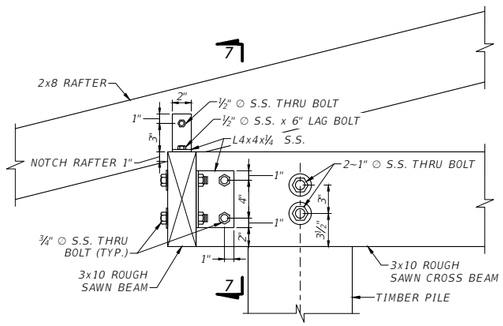
ROOF FRAMING PLAN

SCALE: ½" = 1'-0"



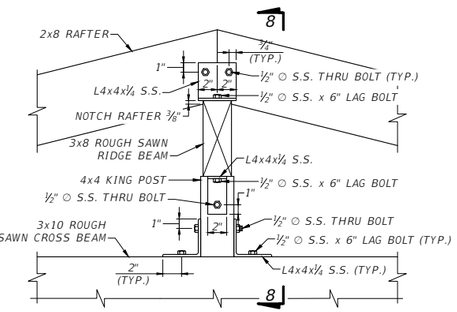
DETAIL A

SCALE: 1½" = 1'-0"



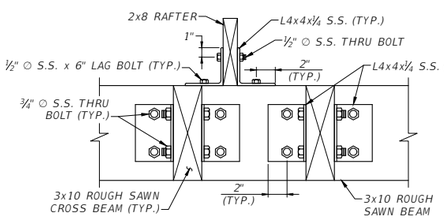
DETAIL B

SCALE: 1½" = 1'-0"



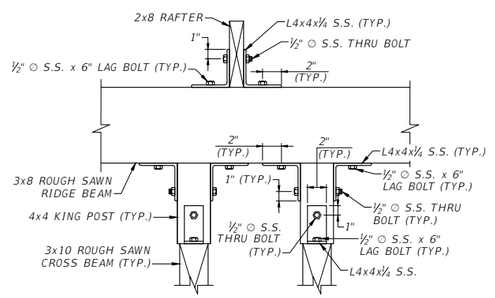
DETAIL C

SCALE: 1½" = 1'-0"



SECTION 7-7

SCALE: 1½" = 1'-0"



SECTION 8-8

SCALE: 1½" = 1'-0"

ROOF DECKING NOTES:

1. IF DECKING IS PLACED IN CONTROLLED RANDOM LAYUP, ODD OR EVEN LENGTHS ARE PERMITTED AND THE MINIMUM LENGTHS BASED ON FBM PERCENTAGES SHALL BE AS FOLLOWS.
   A. NOT LESS THAN 40% TO BE 14'-0" AND LONGER
   B. NOT OVER 10% TO BE LESS THAN 10'-0"
   C. NOT OVER 1% TO BE 4'-0" TO 5'-0"
   D. MINIMUM LENGTH IS LIMITED TO 75% OF THE SPAN LENGTH.
2. TONGUE AND GROOVE WOOD DECKING IS TO BE INSTALLED WITH TONGUES ON THE UPPER EDGE.
3. ATTACH EACH DECK BOARD TO EACH RAFTER WITH 2~20d COMMON S.S. NAILS.
4. TOENAIL DECK BOARD THROUGH THE TONGUE USING 16d COMMON S.S. NAILS.
5. TOENAIL ALONG EACH COURSE AT AS SPACING OF 2'-6". OFFSET ADJACENT COURSES BY 1'-3".
6. END JOINTS SHALL BE TONGUE AND GROOVE AND BE TOENAILED WITHIN 1'-0" EACH SIDE.

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ORIGINAL SHEET - ANSI D (22x34)

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Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA
SAFETY HARBOR PIER
REPLACEMENT PROJECT

Title
SHADE STRUCTURE ROOF FRAMING PLAN

Permit-Seal

Christopher P. Gamache, PE
Lic. No.: 82122

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Drawing No. C3.06
Revision Sheet
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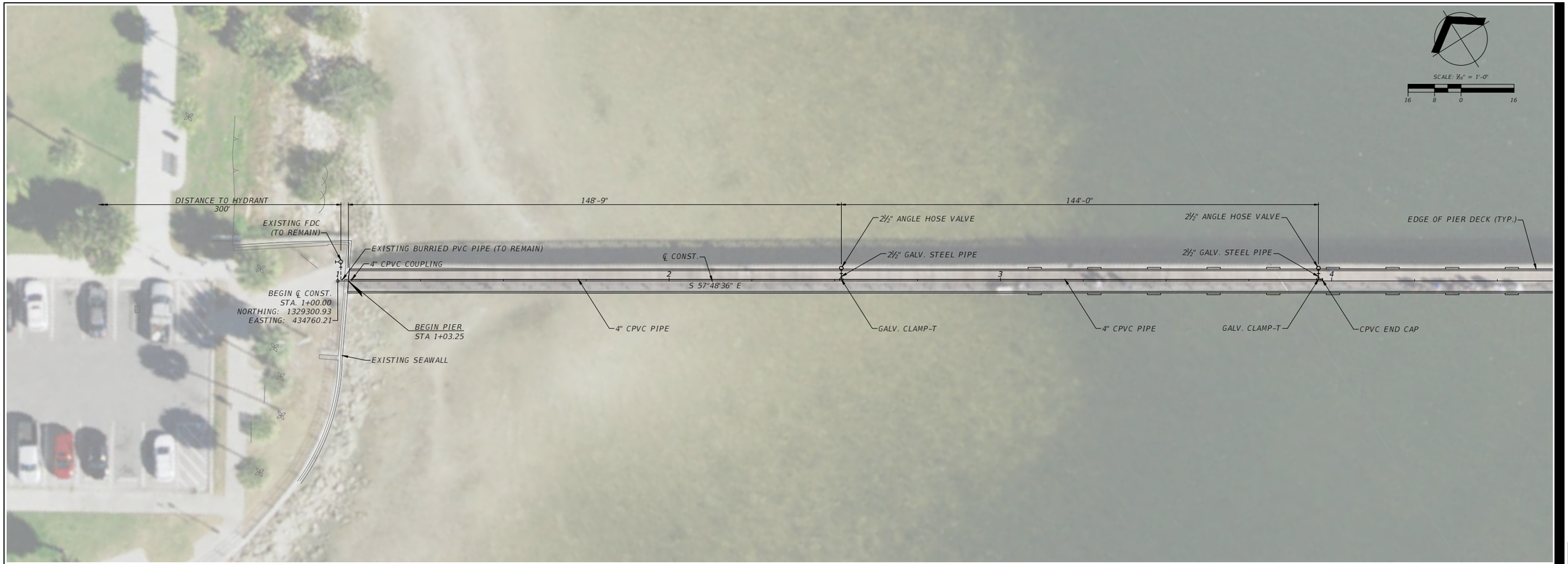
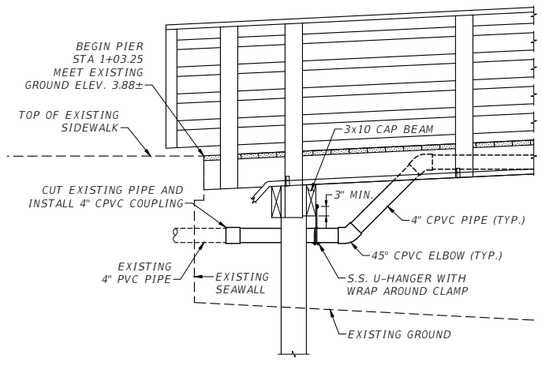


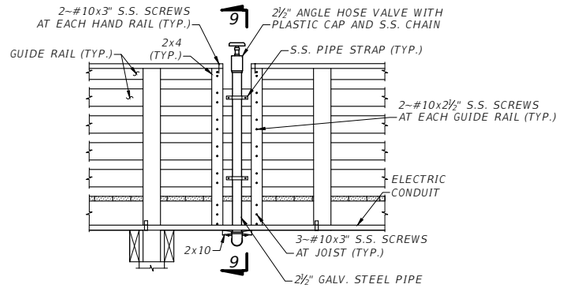
STANDPIPE PLAN

SCALE: 1/16" = 1'-0"



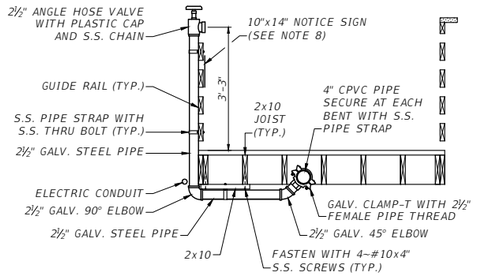
WALKWAY ELEVATION @ FACE OF SEAWALL

SCALE: 1/2" = 1'-0"



WALKWAY ELEVATION @ FIRE DEPT. VALVE

SCALE: 1/2" = 1'-0"



SECTION 9-9

SCALE: 1/2" = 1'-0"

NOTES:

1. CONSTRUCT CLASS I MANUAL WET STANDPIPE SYSTEM IN ACCORDANCE WITH NFPA 14, NFPA 303, AND LOCAL FIRE AUTHORITY REQUIREMENTS.
2. HYDRAULIC CALCULATIONS SHALL BE PREPARED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS AS REQUIRED FOR THE BUILDING PERMIT.
3. MATERIALS UTILIZED SHALL BE UNDERWRITERS LISTED (UL) FM GLOBAL (FM) APPROVED FOR FIRE PROTECTION AND LISTED IN THE MOST CURRENT VERSION OF THE UL OR FM APPROVAL GUIDES.
4. CPVC PIPING SHALL BE ASTM F442, SDR 13.5 WITH FITTINGS PER ASTM F439, SCHEDULE 80. PIPE AND FITTINGS SHALL EITHER CONTAIN TITANIUM DIOXIDE FOR UV RESISTANCE OR BE COATED WITH PAINT THAT ADHERES TO PVC AND PROVIDES SUNLIGHT PROTECTION.
5. PIPES SHALL BE MARKED WITH MANUFACTURER'S IDENTIFICATION. PIPE COLOR, STRIPING, OR IDENTIFICATIONS SHALL COMPLY WITH CITY & COUNTY REQUIREMENTS.
6. CARBON STEEL PIPE SHALL BE HOT-DIPPED GALVANIZED, SEEMLESS ASTM A53 OR A795, SCHEDULE 40. FITTINGS SHALL BE THREADED, FORGED CARBON STEEL PER ASTM A234, ANSI B16.11 AND GALVANIZED. FLANGES SHALL BE ANSI B16.5.
7. USE DIELECTRIC UNIONS BETWEEN DISSIMILAR METAL PIPE MATERIALS.
8. INSTALL 10"x14" NOTICE SIGN AT EACH FIRE DEPARTMENT VALVE.

NOTICE
TAMPERING WITH FIRE EQUIPMENT IS A CRIME

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Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA
SAFETY HARBOR PIER
REPLACEMENT PROJECT

Title
STANDPIPE DETAILS

Permit-Seal
Christopher P. Gamache, PE
Lic. No.: 82122

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Project Number:	238201804
SCALE:	AS SHOWN

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Drawing No. M1.00
Revision Sheet
13 of 16

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ORIGINAL SHEET - ANSI D (22x34)

SYMBOL LIST

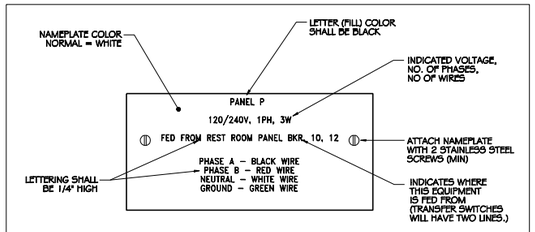
SYMBOL	DESCRIPTION	MOUNTING
A A	CEILING LIGHT FIXTURE (LETTER INDICATES TYPE)	SEE FIXTURE SCHEDULE
A4	WALL BRACKET LIGHT FIXTURE (LETTER INDICATES TYPE)	SEE FIXTURE SCHEDULE
	LAY-IN FIXTURE	SEE FIXTURE SCHEDULE
	SHADED FIXTURES ARE WIRED TO EMERGENCY GENERATOR / BATTERY BACKUP	SEE FIXTURE SCHEDULE
	LED STRIP FIXTURE	SEE FIXTURE SCHEDULE
	EXIT LIGHT FIXTURE (SHADING INDICATES SINGLE / DOUBLE FACE)	SEE FIXTURE SCHEDULE
	POLE WITH TOP FIXTURE	SEE FIXTURE SCHEDULE
	POLE WITH ARM MOUNTED FIXTURE	SEE FIXTURE SCHEDULE
	EMERGENCY BATTERY UNIT	SEE FIXTURE SCHEDULE
S_a	SWITCH, SINGLE POLE-LETTER INDICATES LIGHTS CONTROLLED	48" AFF OR AS NOTED
S_2	SWITCH, TWO POLE	48" AFF OR AS NOTED
S_3	SWITCH, THREE WAY	48" AFF OR AS NOTED
S_4	SWITCH, FOUR WAY	48" AFF OR AS NOTED
S_D	DIMMER SWITCH	48" AFF OR AS NOTED
S_F	SWITCH WITH FAN RELAY	48" AFF OR AS NOTED
S_K	SWITCH, KEY OPERATED	48" AFF OR AS NOTED
S_T	TIME DELAY SWITCH	48" AFF OR AS NOTED
S_P	SWITCH WITH PILOT LIGHT	48" AFF OR AS NOTED
	SINGLE RECEPTACLE, 125V, 15A	18" AFF OR AS NOTED
	DUPLEX RECEPTACLE, 125V, 15A	18" AFF OR AS NOTED
	DUPLEX RECEPTACLE, 125V, 15A	44" AFF OR 6" ABOVE COUNTER
GFI	DUPLEX RECEPTACLE, 125V, 15A GROUND FAULT	18" AFF OR AS NOTED
GFI	DUPLEX RECEPTACLE, 125V, 15A GROUND FAULT	44" AFF OR AS NOTED
	DUPLEX RECEPTACLE, 125V, 15A (ONE-HALF SWITCHED)	18" AFF OR AS NOTED
	EXISTING RECEPTACLE	AS NOTED
	DUPLEX RECEPTACLE, 125V, 15A (PEDESTAL BOX)	CONDUIT AND ON FLOOR SERVICE FITTING
$_F$	DUPLEX RECEPTACLE, 125V, 15A FLUSH FLOOR BOX	FLUSH WITH FLOOR
	DUPLEX RECEPTACLE, 125V, 15A ISOLATED GROUND TYPE	18" AFF OR AS NOTED
	DUPLEX RECEPTACLE, 125V, 15A ISOLATED GROUND TYPE	44" AFF OR AS NOTED
	SPECIAL RECEPTACLE (AS INDICATED IN PLAN)	18" AFF OR AS NOTED
	QUADRAPLEX RECEPTACLE, 125V, 15A	18" AFF OR AS NOTED
	QUADRAPLEX RECEPTACLE, 125V, 15A	44" AFF OR 6" ABOVE COUNTER
	QUADRAPLEX RECEPTACLE, 125V, 15A (PEDESTAL BOX)	CONDUIT AND ON FLOOR SERVICE FITTING
$_F$	QUADRAPLEX RECEPTACLE, 125V, 15A (FLUSH FLOOR BOX)	FLUSH WITH FLOOR
	RECEPTACLE, 1~-125/250V, 30A, 2P4W (DRYER)	18" AFF OR AS NOTED
	RECEPTACLE, 1~-125/250V, 50A, 2P4W (RANGE)	18" AFF OR AS NOTED
	SPECIAL RECEPTACLE AS NOTED	18" AFF OR AS NOTED
	PANELBOARD 120/208V OR 120/240V	SEE PANEL SCHEDULE
	PANELBOARD 277/480V	SEE PANEL SCHEDULE
60 40 3	DISCONNECT SWITCH SIZE/ FUSE/ # OF POLES	TOP 60" AFF OR AS NOTED
	DISCONNECT SWITCH WITH MOTOR STARTER	TOP 60" AFF OR AS NOTED
	MOTOR STARTER	AS NOTED
S_M	MOTOR STARTER SWITCH WITH OVERLOAD RELAYS AS REQUIRED	AS NOTED
	MOTOR	AS NOTED
	ELECTRIC DUCT HEATER	AS NOTED
	OUTLET, JUNCTION OR PULL BOX	AS NOTED OR REQUIRED
	DRIVEN GROUND, UNLESS NOTED OTHERWISE	
	CONDUIT CONCEALED IN CEILING SPACE OR WALL	NUMBER OF WIRES INDICATED AS FOLLOWS
	CONDUIT IN FLOOR SLAB, CEILING SLAB OR UNDERGROUND	TWO WIRES THREE WIRES
	HOME RUN TO PANEL (HASH MARKS INDICATE NUMBER OF WIRES)	FOUR WIRES
	CONDUIT RUN EXPOSED	
	CONDUIT RUN UP / RUN DOWN	AS SHOWN
3 3 3 3 3	REFER TO LIKE NUMBERED NOTES	

ALL MOUNTING HEIGHTS SHOWN ARE TO THE CENTERLINE OF THE DEVICE UNLESS NOTED OTHERWISE

NOTE - THE DEVICE SHALL BE PLACED 80 INCHES ABOVE THE HIGHEST FLOOR LEVEL WITHIN THE SPACE OR 6 INCHES BELOW THE CEILING, WHICHEVER IS LOWER.

ABBREVIATIONS:

AFC	- AVAILABLE FAULT CURRENT	HP	- HORSEPOWER, HEAT PUMP
AFF	- ABOVE FINISHED FLOOR	HVAC	- HEATING, VENTILATING, AIR CONDITIONING
AHU	- AIR HANDLING UNIT	JB	- JUNCTION BOX
BFG	- BELOW FINISHED GRADE	LRA	- LOCKED ROTOR AMPERES
C	- CONDUIT	MCB	- MAIN CIRCUIT BREAKER
CW	- COOL WHITE	MLO	- MAIN LUGS ONLY
DACP	- DOOR ALARM CONTROL PANEL	N	- NEUTRAL
DN	- DOWN	NL	- NIGHT LIGHT
EF	- EXHAUST FAN	OB	- OUTLET BOX
EG	- EQUIPMENT GROUND	PB	- PULL BOX, PUSHBUTTON
ENCL	- ENCLOSURE	PS	- PAY STATION
EWC	- ELECTRIC WATER COOLER	RECEPT	- RECEPTACLE
EWH	- ELECTRIC WATER HEATER	SF	- SUPPLY FAN
WX	- EXPLOSION PROOF	SPEC	- SPECIFICATIONS
FCU	- FAN COIL UNIT	SWECS	- SMOKE WARNING EMERGENCY CALL SYSTEM
FHP	- FRACTIONAL HORSE POWER	TL	- TWISTLOCK
FLA	- FULL LOAD AMPERES	TTB	- TELEPHONE TERMINAL BOARD
G	- GROUND	TVTB	- TELEVISION TERMINAL BOARD
GFI	- GROUND FAULT INTERRUPTER	VERT	- VERTICAL
HID	- HIGH INTENSISTY DISCHARGE	WH	- WATT HESER
HORIZ	- HORIZONTAL	WP	- WEATHERPROOF
IG	- ISOLATED GROUND	WW	- WARM WHITE
LW	- LIGHT WHITE	XFMR	- TRANSFORMER



PANEL 'P' NAMEPLATE
N.T.S.

PROFESSIONAL STATEMENT

To the best of my knowledge said plans and specifications comply with the applicable minimum building codes and the applicable minimum fire safety standards as determined in accordance with Chapters 553 and 633, Laws of the State of Florida (FBC 107.1 & FBC 110.3.7.4.4)

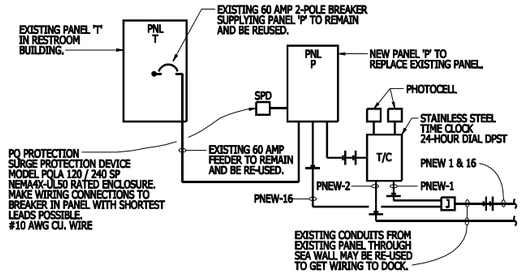
CODE CRITERIA

IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS TO RESULT IN A COMPLETE ELECTRICAL INSTALLATION IN ACCORDANCE WITH ALL STATE/LOCAL CODES/ORDINANCES, THE 2017 NATIONAL ELECTRIC CODE AND THE LANDLORDS/OWNERS MINIMUM REQUIREMENTS. IN THE EVENT ANY PORTION OF THE INSTALLATION SHOWN OR SPECIFIED FAILS TO MEET THESE REQUIREMENTS, IT SHALL BE THE ELECTRICAL CONTRACTORS RESPONSIBILITY TO ALTER THE LAYOUT TO MEET THE REQUIREMENTS OF SAID GOVERNING CODES AND/OR LANDLORDS/OWNERS MINIMUM REQUIREMENTS AND TO NOTIFY THE ARCHITECT OF SUCH CHANGES IN THESE PORTIONS OF THE PLANS AND SPECIFICATIONS. WHERE INSTALLATION, SHOWN OR DESCRIBED EXCEEDS THE REQUIREMENTS OF THE STATE AND LOCAL CODES, THE SPECIFICATIONS AND PLANS SHALL GOVERN.

CODE CRITERIA

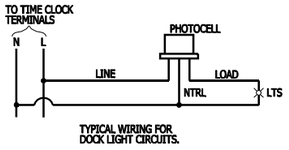
THE INSTALLATION SHALL COMPLY WITH ALL LAWS APPLICABLE TO THE ELECTRICAL INSTALLATIONS WHICH ARE ENFORCED BY THE AUTHORITY HAVING JURISDICTION. THE FOLLOWING CODES SHALL APPLY TO THIS PROJECT:

NFPA - 70 (2017) NATIONAL ELECTRICAL CODE
NFPA - 101 (2018) LIFE SAFETY CODE
FLORIDA BUILDING CODE - 2020 7th EDITION



PARTIAL RISER DIAGRAM

N.T.S.



TYPICAL WIRING FOR DOCK LIGHT CIRCUITS.

LIGHTING SEQUENCE

1. TIME CLOCK IS SET TO ENABLE LIGHTING CIRCUITS TO BECOME ENERGIZED.
2. PHOTOCELL CONTROLS LIGHT ILLUMINATIONS I.E. IF TIME CLOCK IS IN "ON" POSITION PHOTOCELL WILL ENERGIZE LIGHTS WHEN AMBIENT LIGHT IS LOW OR DARK.
3. TIME CLOCK TURNS CIRCUITS OFF AT DESIGNATED TIME TURNING LIGHTS OFF.

GENERAL SPECIFICATIONS

GENERAL - THE ELECTRICAL DRAWINGS WHICH CONSTITUTE A PART OF THE CONTRACT INDICATE THE GENERAL ARRANGEMENT OF CIRCUITS AND OUTLETS, LOCATION OF SWITCHES, PANEL BOARDS, CONDUIT AND OTHER WORK. THE ELECTRICAL CONTRACTOR SHALL OBTAIN EXACT LOCATIONS FROM THE ENGINEER PRIOR TO INSTALLATION AND ARRANGE HIS WORK ACCORDINGLY.

THE ELECTRICAL CONTRACTOR SHALL ALSO REVIEW STRUCTURAL PLANS AND SHALL ADJUST HIS WORK TO CONFORM TO ALL CONDITIONS SHOWN THEREON. DISCREPANCIES SHOWN ON DIFFERENT PLANS AND SPECIFICATIONS SHALL BE PROMPTLY BROUGHT TO THE ATTENTION OF THE ENGINEER FOR A DECISION. ALL ITEMS NOT SPECIFICALLY MENTIONED HEREIN WHICH ARE OBVIOUSLY NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION SHALL BE INCLUDED.

THE ELECTRICAL CONTRACTOR SHALL VISIT THE SITE OF THE WORK, AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING THE WORK AND THE SUBMISSION OF HIS PROPOSAL SHALL PRESUPPOSE HIS KNOWLEDGE OF ALL SUCH CONDITIONS AND PERFORMANCE OF ALL WORK REQUIRED FOR A COMPLETE AND CODE COMPLYING INSTALLATION.

THE ELECTRICAL CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED FOR THE COMPLETION OF THE WORK AND SHALL FURNISH TO THE OWNER, UPON COMPLETION, A CERTIFICATE OF FINAL INSPECTION AND APPROVAL FROM THE LOCAL ELECTRICAL INSPECTION DEPARTMENT.

NO WORK SHALL START UNTIL WORKING DRAWINGS AND OTHER REQUIRED DOCUMENTS HAVE BEEN SUBMITTED TO THE DEPARTMENT HAVING AUTHORITY TO ISSUE CERTIFICATES OF APPROVAL AND HAVE BEEN SIGNED AND APPROVED.

IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS TO RESULT IN A COMPLETE ELECTRICAL INSTALLATION IN ACCORDANCE WITH ALL STATE/LOCAL CODES/ORDINANCES, THE NATIONAL ELECTRICAL CODE AND THE LANDLORDS/OWNERS MINIMUM REQUIREMENTS. IN THE EVENT ANY PORTION OF THE INSTALLATION SHOWN OR SPECIFIED FAILS TO MEET THESE REQUIREMENTS, IT SHALL BE THE ELECTRICAL CONTRACTORS RESPONSIBILITY TO ALTER THE LAYOUT TO MEET THE REQUIREMENTS OF SAID GOVERNING CODES AND/OR LANDLORDS/OWNERS MINIMUM REQUIREMENTS AND TO NOTIFY THE ARCHITECT OF SUCH CHANGES IN THIS PORTION OF THE PLANS AND SPECIFICATIONS. WHERE INSTALLATION, SHOWN OR DESCRIBED EXCEEDS THE REQUIREMENTS OF THE STATE AND LOCAL CODES, THE SPECIFICATIONS AND PLANS SHALL GOVERN.

FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND TOOLS TO PERFORM ELECTRICAL WORK SHOWN, NOTED OR SCHEDULED FOR A COMPLETE AND FINISHED INSTALLATION.

ALL MATERIALS AND EQUIPMENT SHALL BE SPECIFICATION GRADE AND SHALL CARRY A U.L. LABEL.

MATERIALS, PRODUCTS AND EQUIPMENT, INCLUDING ALL COMPONENTS THEREOF, SHALL APPEAR ON THE UNDERWRITERS LABORATORIES LIST OF APPROVED ITEMS AND SHALL MEET REQUIREMENTS OF ASTM, IEEE, IPCE, NEC, NEMA, RLM, CEM AND OTHER RECOGNIZED STANDARDS AND SHALL BE SIZED IN CONFORMITY WITH REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE AND OTHER APPLICABLE CODES, WHICH EVER ARE MORE STRINGENT.

THE WORD "PROVIDE" AS USED HEREIN MEANS TO "FURNISH AND INSTALL" COMPLETE.
SUBMIT SHOP DRAWINGS OF ALL MAJOR ELECTRICAL EQUIPMENT AND FIXTURES FOR APPROVAL IF OTHER THAN THAT SHOWN ON TENANTS DRAWINGS. REFER TO SPECIFICATION SECTION REGARDING SUBSTITUTIONS.

PROVIDE ELECTRICAL SERVICE AS SHOWN ON DRAWINGS. ALL WORK AS NOT SPECIFICALLY NOTED AS BEING BY THE LANDLORD/OWNER SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR. COORDINATE ENTIRE INSTALLATION WITH LANDLORD/OWNER.

ELECTRICAL CONTRACTOR SHALL RECORD ALL FIELD CHANGES IN HIS WORK AS THE JOB PROGRESSES, AND UPON COMPLETION SHALL TURN OVER TO THE OWNER A "RECORD" SET OF PRINTS SHOWING THESE CHANGES.

ALL ELECTRICAL WORK SHALL BE INSTALLED SO AS TO BE READILY ACCESSIBLE FOR OPERATION, SERVICING, MAINTAINING AND REPAIRING. ALL CONDUIT SHALL BE CONCEALED WHERE POSSIBLE. EXPOSED CONDUITS SHALL BE IN STRAIGHT LINES PARALLEL WITH OR AT RIGHT ANGLES TO COLUMN LINES OR BEAMS. ALL CONDUCTORS SHALL BE IN CONDUIT.

GUARANTEE - MATERIALS, EQUIPMENT AND INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR FROM DATE OF ACCEPTANCE. DEFECTS WHICH APPEAR DURING THAT PERIOD SHALL BE CORRECTED AT THIS CONTRACTOR'S EXPENSE.

FOR THE SAME PERIOD, ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PREMISES CAUSED BY DEFECTS IN WORKMANSHIP OR IN THE WORK OR EQUIPMENT FURNISHED AND/OR INSTALLED UNDER THIS CONTRACT. THE FOREGOING WORK SHALL BE COMPLETE IN EVERY RESPECT AND THAT ANY MATERIAL OR WORK NOT SPECIFICALLY MENTIONED OR SHOWN ON SHOP DRAWINGS, BUT NECESSARY TO FULLY COMPLETE THE WORK SHALL BE PROVIDED AS PART OF THIS WORK.

CONDUIT AND WIRE - ALL EXPOSED AND EXTERIOR CONDUIT SHALL BE SCHEDULE 80 PVC.

ALL DISTRIBUTION FEEDERS, SUB-FEEDERS AND BRANCH CIRCUITS SHALL BE COPPER. WIRE SIZE SHALL BE MINIMUM #12 AWG FOR LIGHTS. INSULATION SHALL BE THHN/THWN.

240/120 VOLT SYSTEMS
PHASE A - BLACK
PHASE B - RED
NEUTRAL - WHITE
GROUND - GREEN

COLOR CODE SHALL IDENTIFY THE SAME PHASE THROUGHOUT THE SYSTEM, FROM SERVICE SWITCH OR TRANSFORMER THROUGH ALL BRANCH CIRCUITRY.

ALL CONDUIT RUNS SHALL BE DESIGNED TO PRESENT A NEAT AND ORDERLY APPEARANCE, RUNNING LINES PARALLEL WITH BUILDING STRUCTURE OR WALLS.

PULL AND JUNCTION BOXES - SMALL BE PVC CONSTRUCTION

SHOP DRAWINGS SHALL BE ISSUED TO ENGINEER FOR APPROVAL.

WIRING DEVICES - SWITCHES, RECEPTACLES, PLATES, PLUGS, ETC. SHALL BE OF SPECIFICATION QUALITY HEAVY DUTY AS LISTED BELOW OR FROM STANDARD CROSS REFERENCE OR COMPARATIVE CATALOG NUMBER INDEX LISTINGS.

WIRING DEVICES SHALL BE AS FOLLOWS:

20 AMPERE, 125V, GROUNDING TYPE THREE WIRE DUPLEX RECEPTACLE SHALL BE HUBBELL 5362.

SPECIAL WIRING DEVICES WILL BE INDICATED ON THE DRAWINGS.

PANEL BOARDS - PANEL BOARD SHALL BE CABINET ENCLOSED SAFETY "DEAD FRONT" TYPE, WITH SOLDERLESS LUGS, AND WITH BOLT-ON CIRCUIT BREAKER BRANCHES. COPPER BUS.

TWO AND THREE POLE C/B'S SHALL NOT CONTAIN THE USE OF "TIE BARS" ACROSS HANDLES. PLUG IN TYPE OF C/B'S WILL NOT BE ACCEPTABLE.

DOORS COMPLETE WITH A TYPEWRITTEN DIRECTORY CARD OF THE CIRCUITS, SHALL BE FLUSH WITH THE TRIM, EQUIPPED WITH LOCKS, KEYED ALIKE AND THE OWNER FURNISHED WITH TWO (2) KEYS FOR EACH PANEL.

ACCEPTABLE MANUFACTURERS INCLUDE SQUARE D, SIEMENS OR EATON.

PAINTING OF ELECTRICAL CONDUITS, ETC. IF REQUIRED, WILL BE BY THE CONTRACTOR.

EQUIPMENT IDENTIFICATION OF THE FOLLOWING EQUIPMENT SHALL BE WITH ENGRAVED NAMEPLATES AS TO NAME AND/OR FUNCTION; DISTRIBUTION PANELS AND LIGHTING PANELS.

ROUGH-IN AND CONNECTIONS TO EQUIPMENT SHALL BE MADE IN ACCORDANCE WITH APPROVED SHOP DRAWINGS PREPARED BY THE MANUFACTURER. COORDINATE CONNECTION LOCATIONS AND REQUIREMENTS WITH OWNER BEFORE COMMENCING WITH WORK.

MANUFACTURER: SQUARE D
TYPE: NQ
MOUNTING: SURFACE
LOCATION: EXTERIOR

MLO OR MCB: MLO
FEED: BOTTOM
CU / AL WIRE: CU
AIC RATING: SEE RISER

PANEL: P NEW
VOLTAGE: 120/208V, 3 PH, 4 WIRE
MAIN AMPS: 60 AMP
FEEDER: 60 AMP
SPACES: 24

BREAKER OPTIONS:
GFI PROVIDE GFI BREAKER

NOTES:
SEE RISER DIAGRAM FOR WIRE & CONDUIT SIZES
THIS PANEL IS FED FROM A 60 AMP 2-POLE BREAKER IN RESTROOM BUILDING
STAINLESS STEEL CONSTRUCTION

CKT NO.	LOAD	OPT	CODE	KVA	WIRE	BRKR	PHASE	BRKR	WIRE	KVA	CODE	OPT	LOAD	CKT NO.
1	LEFT SIDE PIER LIGHTS	GFI	L	0.40	12	20	A	20	12	0.28	L	GFI	RIGHT SIDE PIER LIGHTS	2
3	PANEL OUTLETS	GFI	R	1.00	12	20	B	20	12	1.00	R	GFI	PANEL OUTLETS	4
5	PANEL OUTLETS	GFI	R	1.00	12	20	C	20	12	1.00	R	GFI	PANEL OUTLETS	6
7	PANEL OUTLETS	GFI	R	1.00	12	20	A	20	12	1.00	R	GFI	PANEL OUTLETS	8
9	PANEL OUTLETS	GFI	R	1.00	12	20	B	20	12	1.00	R	GFI	PANEL OUTLETS	10
11	PANEL OUTLETS	GFI	R	1.00	12	20	C	20	10	0.10	E		SURGE PROTECTION	12
13	PANEL OUTLETS	GFI	R	1.00	12	20	A	30	10	0.10	E		DEVICE	14
15	SPACE						B			0.90	R	GFI	PIER RECEPTACLES	16
17	SPACE						C	20				GFI	SPARE	18
19	SPACE						A						SPACE	20
21	SPACE						B						SPACE	22
23	SPACE						C						SPACE	24

KVA PER PHASE: BUS A: 3.78, BUS B: 4.90, BUS C: 3.10
TOTAL KVA: 11.78

DEMAND	KVA		FACTOR		DEMAND KVA
(L) LIGHTING:	0.68	X	1.25	=	0.85
(R) RECEPTACLES:	10.00	X	1.00	=	10.00
(R) RECEPTACLES:	0.90	X	0.50	=	0.45
(H) HVAC:	0.00	X	1.00	=	0.00
(E) EQUIPMENT:	0.20	X	1.00	=	0.20
(K) KITCHEN EQUIP:	0.00	X	0.65	=	0.00
(S) SUBFEED:	0.00	X	1.00	=	0.00
LARGEST MOTOR:	0.00	X	0.25	=	0.00
TOTAL DEMAND KVA:					11.50

PANEL CALCULATIONS	
DEMAND KVA:	11.50
TIMES 1000	
DIVIDED BY 208	
DIVIDED BY 1.732	
DEMAND AMPS:	31.02

JOB NAME: Safety Harbor Pier
MPS #: 22099
DATE LAST MODIFIED: 6/21/2023

SHEET INDEX

E0.01	SPECIFICATIONS, SCHEDULES AND RISER DIAGRAM
E1.00	LIGHTING & POWER PLAN
E2.00	DETAIL SHEET

MPS ENGINEERING
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Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA
SAFETY HARBOR PIER
RPLACEMENT PROJECT
60% SUBMITTAL

Title
SPECIFICATIONS, SCHEDULES AND RISER DIAGRAM

Permit-Seal

SCOTT J. ROSEN LICENSE No 74787 STATE OF FLORIDA PROFESSIONAL ENGINEER
8/16/2024
Scott J. Rosen P.E.
Fla PE# 74787
Fla COA# 3967

Project Number: 238201804
SCALE: AS NOTED

MPS	MPS	MPS	8/16/2024
Dwn.	Dsgn.	Chkd.	YY.MM.DD

Drawing No. E0.01
Revision
Sheet 1 of

ORIGINAL SHEET - ANSI D (22x34)

8/16/2024 11:06:48 E:\2022\22099 - Safety Harbor Pier Replacement\Drawings\E01 - SYMBOLS LIST DETAILS SPECS AND RISER DIAGRAM(1-8th).dgn

MPS ENGINEERING
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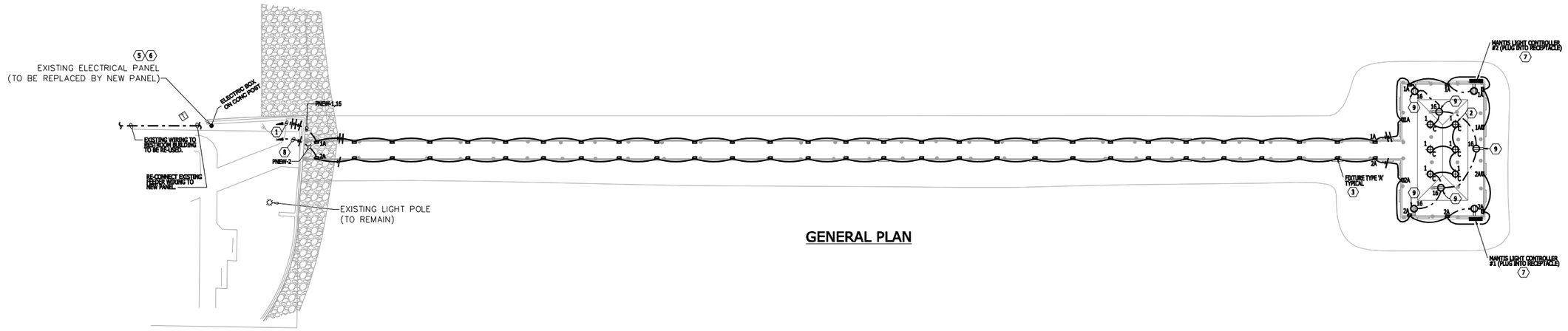
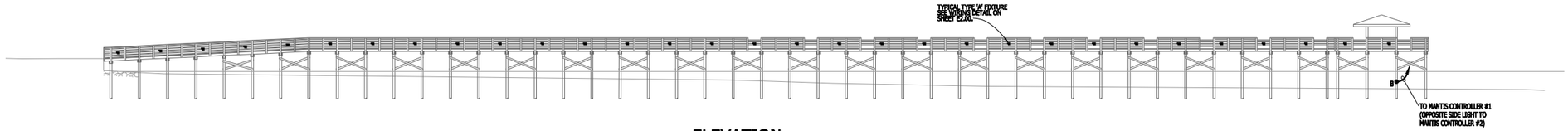


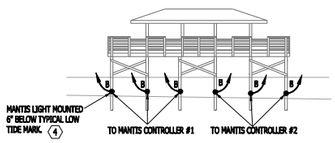
GENERAL PLAN



ELEVATION

NOTES

1. ALL CIRCUITS TO BE PROTECTED BY GFI BREAKERS IN PANEL.
2. MOUNT TYPE 'C' LIGHTS TO ROOF OF SHADE STRUCTURE.
3. TYPE 'A' FIXTURES TO BE MOUNTED ON GUIDE RAILS. SEE DETAIL FOR MOUNTING AND SUGGESTED CONDUIT INSTALLATION ON SHEET E2.00.
4. MANTIS LIGHTS COME FURNISHED WITH CORD TO PLUG INTO CONTROLLER. SECURE THE CORD TO THE STRUCTURE.
5. SEE RISER DIAGRAM AND PANEL SCHEDULE FOR INFORMATION ON NEW PANEL AND ASSOCIATED EQUIPMENT.
6. TYPE 'A', TYPE 'B' AND TYPE 'C' LIGHTS TO BE TIMER/PHOTOCELL CONTROLLED. SEE WIRING DETAIL ON SHEET E0.01.
7. PROVIDE LOCKABLE STAINLESS STEEL BOX TO CONTAIN RECEPTACLE AND CONTROLLER FOR MANTIS LIGHTS. MOUNT INSIDE RAIL AT DECK LEVEL.
8. EXISTING CONDUITS FROM PANEL EXIT SEA WALL AT THIS LOCATION. EXTEND CONDUITS AS REQUIRED TO SUPPLY NEW ELECTRICAL LOADS. ALL NEW CONDUITS ARE TO BE SCHEDULE 80 PVC.
9. RECEPTACLES TO BE WEATHERPROOF CONSTRUCTION WITH LOCKABLE COVERS.



END VIEW

LIGHTING FIXTURE SCHEDULE

Desig.	Type	Finish	Lens	Volt	Watts	Lamps	Manufacturer	Catalog Number	Remarks
A	DECK LIGHT	DIE-CAST BRONZE	TEMPERED FROSTED GLASS	120	3	280 LUMEN LED 30K	C2C LIGHTS	SRD-408LED-120V-3W-30K-120D-SF	SURFACE MOUNT TO RAILING AS DETAILED ON PLANS.
B	UNDERWATER DOCK LIGHTS	BRONZE	GLASS	120/24	25 PER FIXTURE	2000+ LUMEN LED	QUATTRO	101525-101526	UNDERWATER DOCK LIGHTING KIT WITH OPTIONAL FOURTH LIGHT. WITH 150 WATT POWER SUPPLY IN WEATHERPROOF ENCLOSURE. MOUNT LIGHTS UNDER WATER AS SHOWN ON DETAIL ON PLANS.
C	WET LOCATION ROUND SURFACE MOUNTED LIGHT	DARK BRONZE	POLYCARBNATE	120	13	1111 LUMENS LED 35K	KENALL	MR13FFL PP DB-10L35K SA	SURFACE MOUNT TO CEILING OF SHADE STRUCTURE.

LIGHTING FIXTURE SCHEDULE NOTES

1. SUBMITTALS SHALL BE PROVIDED FOR EACH LIGHTING FIXTURE, BALLAST, AND LAMP.
2. NO SUBSTITUTIONS WILL BE JUDGED BEFORE THE BID.
3. THERE ARE NO GUARANTEES THAT ANY SUGGESTED SUBSTITUTIONS WILL BE ACCEPTABLE. THE ENGINEER WILL EVALUATE EACH PROPOSED SUBSTITUTE FIXTURE AND WILL DETERMINE IF THE FIXTURE IS ACCEPTABLE. IF THEY ARE NOT DEEMED ACCEPTABLE, AN EXPLANATION WILL BE PROVIDED TO THE CONTRACTOR. THE CONTRACTOR MAY THEN RESUBMIT THE SPECIFIED FIXTURE.
4. ALL DECISIONS ON ACCEPTABILITY WILL BE MADE BY THE ENGINEER AND ALL DECISIONS WILL BE FINAL.

LIGHTING & POWER PLAN

20' 0 40' 1" = 20'-0"

Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA
SAFETY HARBOR PIER
RPLACEMENT PROJECT
60% SUBMITTAL

Title
LIGHTING & POWER PLAN

Permit-Seal

SCOTT J. ROPER
LICENSE
No 74787
8/16/2024
STATE OF FLORIDA
PROFESSIONAL ENGINEER
Scott J. Roper P.E.
Fla. PE# 74787
Fla. COA# 3967

Project Number: 238201804
SCALE: AS NOTED

MPS	MPS	MPS	8/16/2024
Dwn.	Dsgn.	Chkd.	YY.MM.DD

Drawing No. E1.00
Revision Sheet 2 of

ORIGINAL SHEET - ANSI D (22x34)

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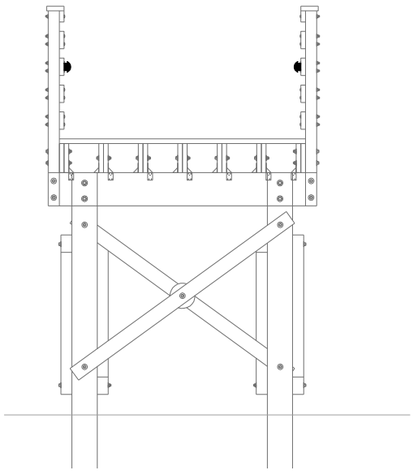
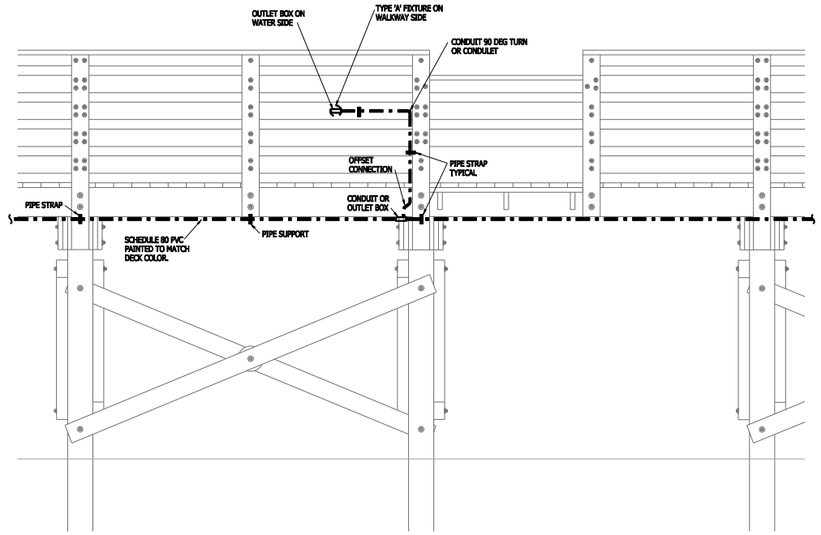


TYPICAL END SECTION OF PIER
1/2" = 1'-0"



TYPICAL ELEVATION OF PIER
1/2" = 1'-0"

MPS ENGINEERING
SINCE 1984
240 Pine Ave. N
Oldsmar, FL 34677
813.855.2721
www.mpseng.com

Stantec
Stantec Consulting Services Inc.
380 Park Place Blvd, Suite 300
Clearwater, Florida 33759
Tel. 727.531.3505
Fax. 727.431.1777
www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay.
The Copyrights to all designs and drawings are the property of Stantec. Reproduction or use for any purpose other than that authorized by Stantec is forbidden.

Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA
SAFETY HARBOR PIER
RPLACEMENT PROJECT
60% SUBMITTAL

Title
DETAIL PLAN

Permit-Seal

SCOTT J. ROPER LICENSE No 74787 ★ 8/16/2024 STATE OF FLORIDA PROFESSIONAL ENGINEER
Scott J. Roper P.E.
Fla PE# 74787
Fla COA# 3967

Project Number: 238201804
SCALE: AS NOTED

MPS	MPS	MPS	8/16/2024
Dwn.	Dsgn.	Chkd.	YY.MM.DD

Drawing No. E2.00
Revision Sheet 3 of

ORIGINAL SHEET - ANSI D (22x34)

8/16/2024 11:08:59 E:\2022\22099 – Safety Harbor Pier Replacement\Drawings\E20 – FRAME LIGHTING DETAILS(1-4th).dgn

Pinellas County Water & Navigation
315 Court Street
Clearwater, Florida 33756

Issued To:	SAFETY HARBOR, CITY OF
Contractor:	
Construction Site:	0 Terminus of Veterans Memorial LN Safety Harbor FL 34695
Parcel No.:	032916000004200100

Permit is valid for 1 year

To report starting date and completion date call: (727) 464-3770

PERMIT NO.

WND-23-00124

Notes:

PERMITS MAY ALSO BE REQUIRED FROM THE FOLLOWING AGENCIES: FL DEP AND U.S. ARMY COE.

THE WATERS OF PINELLAS COUNTY ARE LOCATED WITHIN THE PINELLAS COUNTY AND BOCA CIEGA BAY AQUATIC PRESERVE. SPECIAL REGULATIONS EXIST THAT GOVERN THE CONSTRUCTION WITHIN AN AQUATIC PRESERVE. PLEASE CONTACT THE FL DEP.

THIS PERMIT IS SUBJECT TO A 30-DAY APPEAL PERIOD FROM DATE OF ISSUANCE – SECTION 58-536(A) WATER AND NAVIGATION REGULATIONS.

ADDITIONAL INSTALLATIONS SUCH AS WATER OR ELECTRIC WILL REQUIRE SEPARATE PERMITS FROM THE APPROPRIATE MUNICIPAL OR COUNTY BUILDING DEPARTMENT.

Date of Issuance:

04/24/2023

Final Inspection Date:

/ /

THIS PERMIT IS REQUIRED TO BE POSTED IN A CONSPICUOUS LOCATION AT THE CONSTRUCTION SITE.

ATTENTION APPLICANTS AND AGENTS

Attached is your Pinellas County Water and Navigation permit. Please be advised that the issuance of this permit does not preclude the need for any additional Federal, State, or Local approvals that may be required. This permit also does not preclude the need to comply with any rules of your Homeowner's/Condo's Association, if applicable. It is the applicant's responsibility to obtain all required permits and approvals prior to commencing construction.

NOTES ON STATE APPROVAL:

Please be advised that your project may also require approval from the State of Florida. Information from the Florida Department of Environmental Protection is attached.

PINELLAS COUNTY GENERAL CONDITIONS:

1. This permit shall become final and effective upon expiration of the 30-calendar day appeal period following the date of issuance, unless an appeal has been filed within this timeframe. Any appeal shall stay the effective date of this permit until any and all appeals are resolved.

2. This permit will expire one year from the date of issuance. All construction and permit conditions must be completed prior to the expiration of the permit unless otherwise stated. If an extension is required to complete the work, please contact Water and Navigation staff at (727) 453-3385 for more information.

3. A copy of the permit or placard must be posted in a conspicuous location at the construction address.

4. There shall be no dredging or filling associated with construction of the structure(s) authorized herein, other than that required for installation of structural pilings.

5. All excess lumber, scrap wood, trash, garbage, or other similar material shall be removed from any wetland area and/or surface waters immediately.

6. The County must be notified at (727) 464-3770 upon completion of construction and satisfaction of all permit conditions so that a final inspection can be made.

7. All construction must be conducted by the legal owner of the property or by a licensed and properly insured contractor. The applicant is advised that the hiring of an unlicensed contractor may result in criminal proceedings against the property owner. The applicant is also advised to review the Mechanics' Lien Law prior to hiring a contractor.

8. Subject to the terms and conditions herein, the permittee is hereby authorized to perform or cause to be performed, the impacts shown on the application and approved drawings, plans, and other documents attached hereto or on file with the County. The permittee binds itself and its successors to comply with the provisions and conditions of this permit. If the County determines at any time that activities are not in accordance with the conditions of the permit, work shall cease, and the permit may be revoked immediately by Water and Navigation. Notice of the revocation shall be provided to the permit holder promptly thereafter.

9. All future repairs, additions, or new construction will require a permit from the County.

10. County staff, with proper identification, shall have permission to enter the site at a reasonable time to inspect the dock for conformity with the plans and specifications approved by the

permit.

11. Issuance of this permit does not warrant in any way that the permittee has riparian or property rights to construct any structure permitted herein and any such construction is done at the sole risk of the permittee. In the event that any part of the structure(s) permitted herein is determined by a final adjudication issued by a court of competent jurisdiction to encroach on or interfere with adjacent property owner's riparian or other property rights, the permittee agrees to either obtain written consent or to remove the offending structure or encroachment within 60 days from the date of the adjudication. Failure to comply shall constitute a material breach of this permit and shall be grounds for its immediate revocation.

12. This permit does not convey to the permittee or create in the permittee any property right, or any interest in real property, nor does it authorize any entrance upon or activities upon property which is not owned or controlled by the permittee, or convey any rights or privileges other than those specified in the permit and Chapter 58, Article XV of the Pinellas County Code. If these permit conditions conflict with those of any other regulatory agency the permittee shall comply with the most stringent conditions. The permittee shall immediately notify Pinellas County Water and Navigation of any conflict between the conditions of this permit and any other permit or approval.

13. The permittee is hereby advised that Section 253.77, Florida Statutes (FS), states that a person may not commence any excavation, construction, or other activity involving the use of sovereignty or other lands of the state, the title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund without obtaining the required lease, license, easement or other form of consent authorizing the proposed use. Therefore, the permittee is responsible for obtaining any necessary authorizations from the Board of Trustees prior to commencing activity on sovereignty lands or other state-owned lands.

14. Should any other regulatory agency require changes to the property or permitted activities, the permittee shall provide written notification to Pinellas County Water and Navigation of the change within 30 days of the effective date that authorization so that a determination can be made whether a permit modification is required.

15. The permittee shall indemnify, defend, hold and save the County harmless from any and all damages, claims or liabilities, which may arise by reason of the activities authorized by the permit.

16. All costs, including attorney's fees, incurred by the County in enforcing the terms and conditions of this permit shall be required to be paid by the permittee.

17. The permittee agrees that any dispute arising from matters relating to this permit shall be governed by the laws of Florida and initiated only in Pinellas County.

18. Turbidity and sediments shall be controlled to prevent violations of water quality pursuant to Rules 62- 302.500, 62-302.530(70) and 62-4.242 Florida Administrative Code. Best Management Practices, as specified in the Florida Stormwater, Erosion, and Sedimentation Control Inspector's Manual, shall be installed and maintained at all locations where the possibility of transferring suspended solids into wetlands and/or surface waters may occur due to the permitted activity. If site-specific conditions require additional measures, then the permittee shall implement them as necessary to prevent adverse impacts to wetlands and/or surface waters.

19. Pursuant to Section 125.022, FS, issuance of this permit by the County does not in any way create any rights on the part of the applicant to obtain a permit from a state or federal agency and does not create any liability on the part of the County for issuance of the permit if the applicant fails to obtain requisite approvals or fulfill the obligations imposed by a state or federal agency or undertakes actions that result in a violation of state or federal law.

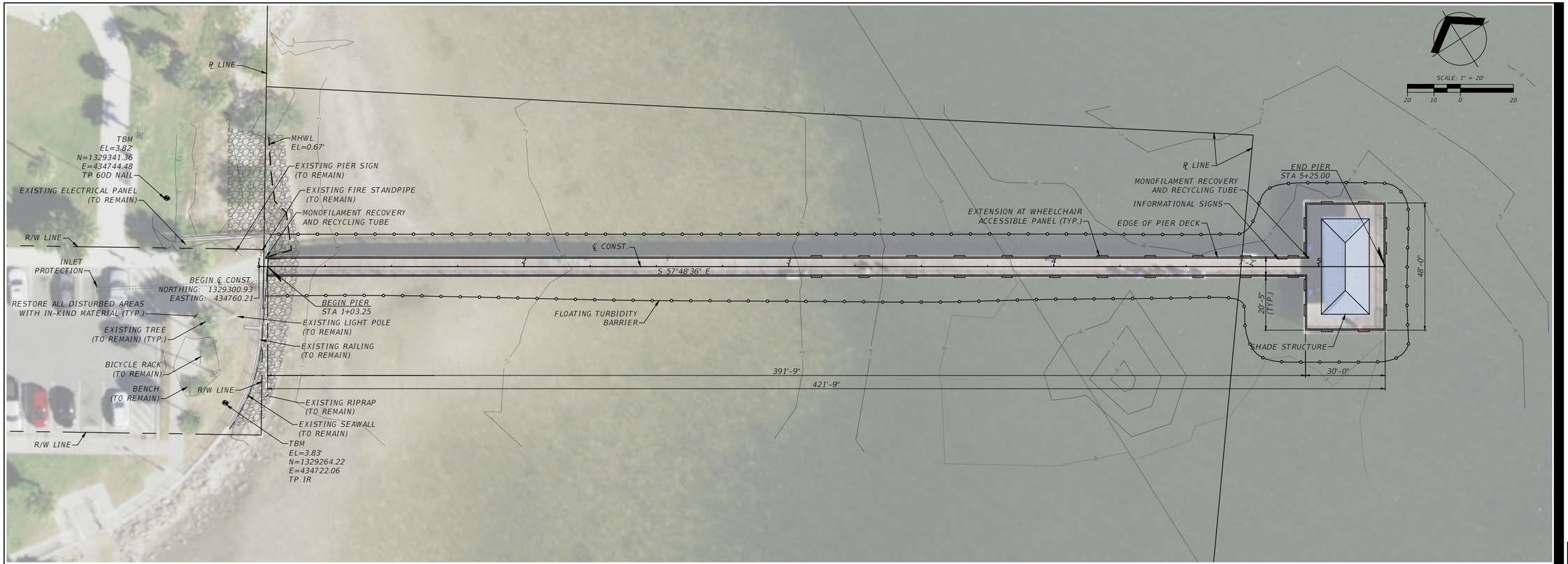
20. Pursuant to Section 125.022, FS, the applicant shall obtain all other applicable state or federal

permits before commencement of the activity authorized herein.

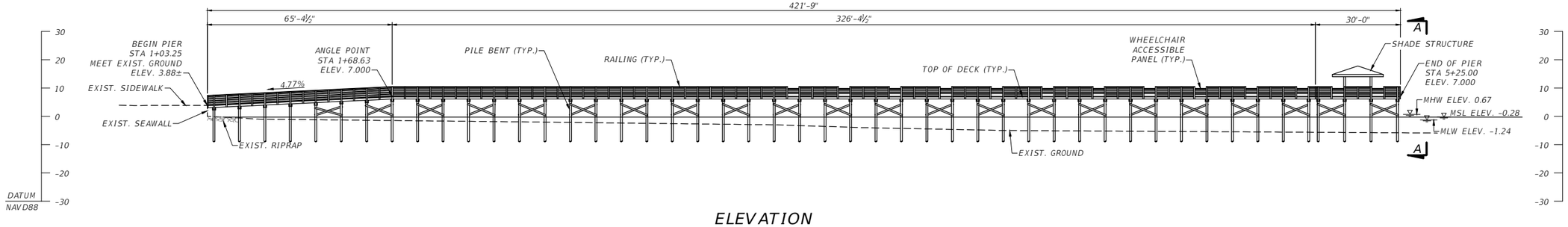
21. **FOR DOCK PERMITS ONLY**: Any clearing of mangroves or marsh vegetation for this project is to be limited to the footprint of the dock unless otherwise specified in any specific conditions attached to the permit.

22. **FOR DOCK PERMITS ONLY**: Dock structures shall be maintained in a functional condition and will be repaired or removed if they become dilapidated to such an extent that they are no longer functional. A Water and Navigation Permit may be required to repair the structure.

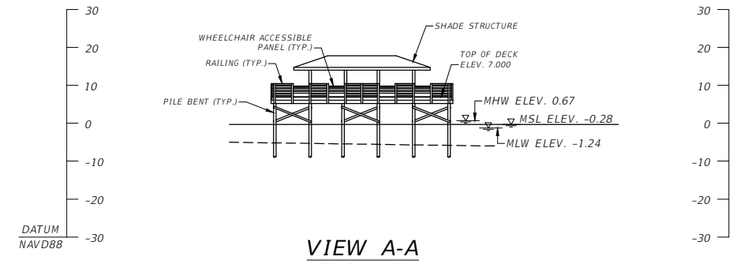
If you have any questions, please contact the Water and Navigation staff at (727) 453-3385.



GENERAL PLAN
SCALE: 1" = 20'



ELEVATION
SCALE: 1" = 20'



VIEW A-A
SCALE: 1" = 20'

Permit No.: WND-23-00124

Date Approved: 04/24/2023

Approved By: Conor J Petren

Pinellas County Water and Navigation

NOTES:

1. PROPOSED PIER PLAN AREA = 4323 FT^2
2. FLOATING TURBIDITY BARRIER SHALL BE IN PLACE PRIOR TO ANY IN-WATER WORK.
3. SEE SHEET C2.00 FOR LEGEND.

Stantec
Stantec Consulting Services Inc.
380 Park Place Blvd, Suite 300
Clearwater, Florida 33759
www.stantec.com
Tel. 727.531.3505
Fax. 727.431.1777

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Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA
SAFETY HARBOR PIER
RPLACEMENT PROJECT

Title
GENERAL PLAN AND ELEVATION

Permit-Seal
Christopher P. Gamache, PE
Lic. No.: 82122

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

Project Number: 238201804
SCALE: AS SHOWN

Dwn.	Chkd.	Dsgn.	YY.MM.DD

Drawing No. C3.00
Revision Sheet
6 of 7

C:\Users\christopher.gamache\OneDrive - Cardno\Desktop\Safety_Harbor\C3.00_Gen Plan And Elev.dwg
2023/02/03 2:17 PM By: Christopher Gamache

ORIGINAL SHEET - ANSI D (22x34)

FLORIDA DEPARTMENT OF Environmental Protection

Southwest District Office
13051 North Telecom Parkway #101
Temple Terrace, Florida 33637-0926

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

February 28, 2023

Jamie Ahrens
1200 Railroad Avenue
Safety Harbor, Florida 34695
cahrens@cityofsafetyharbor.com

File No.: 29-0431248-001-EE, Pinellas County

Dear Mr. Ahrens:

On February 7, 2023, we received your request for verification of exemption to perform the following activities:

Replace an approximately 4,332-square-foot pier with an approximately 4,323-square-foot pier within the same configuration and footprint, within Old Tampa Bay, a Class II Outstanding Florida Waterbody, and part of the Pinellas County Aquatic Preserve. The project is located at Parcel # 03-29-16-00000-420-0100, Florida 34695, Section 03, Township 29 South, Range 16 East, Pinellas County.

Your request has been reviewed to determine whether it qualifies for (1) regulatory exemption, (2) proprietary authorization (related to state-owned submerged lands), and (3) federal approval that may be necessary for work in wetlands or waters of the United States.

Your project did not qualify for the federal review portion of this verification request. Specifically, the activity is not covered by the State Programmatic General Permit. **Additional authorization must be obtained prior to commencement of the proposed activity**. This letter does not relieve you from the responsibility of obtaining other federal, state, or local authorizations that may be required for the activity. Please refer to the specific section(s) dealing with that portion of the review below for advice on how to proceed.

If you change the project from what you submitted, the authorization(s) granted may no longer be valid at the time of commencement of the project. Please contact us prior to beginning your project if you wish to make any changes.

If you have any questions regarding this matter, please contact Casey Smith via email at Casey.A.Smith@FloridaDEP.gov.

1. Regulatory Review – Verified

Based on the information submitted, the Department has verified that the activities as proposed are exempt, under Chapter 62-330.051(5)(d), Florida Administrative Code, from the need to obtain a regulatory permit under Part IV of Chapter 373 of the Florida Statutes.

This exemption verification is based on the information you provided the Department and the statutes and rules in effect when the information was submitted. This verification may not be valid if site conditions materially change, the project design is modified, or the statutes or rules governing the exempt activity are amended. In the event you need to re-verify the exempt status for the activity, a new request and verification fee will be required. Any substantial modifications to the project design should be submitted to the Department for review, as changes may result in a permit being required.

2. Proprietary Review – Granted

The Department acts as staff to the Board of Trustees of the Internal Improvement Trust Fund (Board of Trustees) and issues certain authorizations for the use of sovereign submerged lands. The Department has the authority to review activities on sovereign submerged lands under Chapters 253 and 258 of the Florida Statutes, and Chapters 18-20 and 18-21 of the Florida Administrative Code.

The activity appears to be located on sovereign submerged lands owned by the Board of Trustees. The activity is not exempt from the need to obtain the applicable proprietary authorization. As staff to the Board of Trustees, the Department has reviewed the activity described above, and has determined that the activity qualifies for a letter of consent under Section 253.77, Florida Statutes, to construct and use the activity on the specified sovereign submerged lands, as long as the work performed is located within the boundaries as described herein and is consistent with the terms and conditions herein.

During the term of this Letter of Consent you shall maintain satisfactory evidence of sufficient upland interest as required by paragraph 18-21.004(3)(b), Florida Administrative Code. If such interest is terminated or the Board of Trustees determines that such interest did not exist on the date of issuance of this Letter of Consent, this Letter of Consent may be terminated by the Board of Trustees at its sole option. If the Board of Trustees terminates this Letter of Consent, you agree not to assert a claim or defense against the Board of Trustees arising out of this Letter of Consent.

Special Consent Conditions

1. The applicant agrees to indemnify, defend and hold harmless the Board of Trustees and the State of Florida from all claims, actions, lawsuits and demands in any form arising out of the authorization to use sovereignty submerged lands or the applicant's use and construction of structures on sovereignty submerged lands. This duty to indemnify and hold harmless will include any and all liabilities that are associated with the structure or activity including special assessments or taxes that are now or in the future assessed against the structure or activity during the period of the authorization.

2. Failure by the Board of Trustees to enforce any violation of a provision of the authorization or waiver by the Board of Trustees of any provision of the authorization will not invalidate the provision not enforced or waived, nor will the failure to enforce or a waiver prevent the Board of Trustees from enforcing the unenforced or waived provision in the event of a violation of that provision.

3. Applicant binds itself and its successors and assigns to abide by the provisions and conditions set forth in the authorization. If the applicant or its successors or assigns fails or refuses to comply with the provisions and conditions of the authorization, the authorization may be terminated by the Board of Trustees after written notice to the applicant or its successors or assigns. Upon receipt of such notice, the applicant or its successors or assigns will have thirty (30) days in which to correct the violations. Failure to correct the violations within this period will result in the automatic revocation of this authorization.

4. All costs incurred by the Board of Trustees in enforcing the terms and conditions of the authorization will be paid by the applicant. Any notice required by law will be made by certified mail at the address shown on page one of the authorization. The applicant will notify the Board of Trustees in writing of any change of address at least ten days before the change becomes effective.

5. This authorization does not allow any activity prohibited in a conservation easement or restrictive covenant that prohibits the activity.

General Conditions for Authorizations for Activities

All authorizations granted by rule or in writing under Rule 18-21.005, F.A.C., except those for geophysical testing, shall be subject to the general conditions as set forth in paragraphs (a) through (i) below. The general conditions shall be part of all authorizations under this chapter, shall be binding upon the grantee, and shall be enforceable under Chapter 253 or 258, Part II, F.S.

(a) Authorizations are valid only for the specified activity or use. Any unauthorized deviation from the specified activity or use and the conditions for undertaking that activity or use shall constitute a violation. Violation of the authorization shall result in suspension or revocation of the grantee's use of the sovereignty submerged land unless cured to the satisfaction of the Board.

(b) Authorizations convey no title to sovereignty submerged land or water column, nor do they constitute recognition or acknowledgment of any other person's title to such land or water.

(c) Authorizations may be modified, suspended or revoked in accordance with their terms or the remedies provided in Sections 253.04 and 258.46, F.S., or Chapter 18-14, F.A.C.

(d) Structures or activities shall be constructed and used to avoid or minimize adverse impacts to sovereignty submerged lands and resources.

(e) Construction, use, or operation of the structure or activity shall not adversely affect any species which is endangered, threatened or of special concern, as listed in Rules 68A-27.003, 68A-27.004, and 68A-27.005, F.A.C.

(f) Structures or activities shall not unreasonably interfere with riparian rights. When a court of competent jurisdiction determines that riparian rights have been unlawfully affected, the structure or activity shall be modified in accordance with the court's decision.

(g) Structures or activities shall not create a navigational hazard.

(h) Structures shall be maintained in a functional condition and shall be repaired or removed if they become dilapidated to such an extent that they are no longer functional. This shall not be construed to prohibit the repair or replacement subject to the provisions of Rule 18-21.005, F.A.C., within one year, of a structure damaged in a discrete event such as a storm, flood, accident, or fire.

(i) Structures or activities shall be constructed, operated, and maintained solely for water dependent purposes, or for non-water dependent activities authorized under Paragraph 18-21.004(1)(f), F.A.C., or any other applicable law.

3. Federal Review – SPGP Not Approved

Your proposed activity as outlined on your application and attached drawings **does not qualify** for Federal authorization pursuant to the State Programmatic General Permit and a **SEPARATE permit** or authorization **shall be required** from the Corps. You must apply separately to the Corps using their APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT, ENG FORM 4345 or ENG FORM 6082, or alternative as allowed by their regulations. More information on Corps permitting may be found online in the Jacksonville District Regulatory Division Source Book at: https://www.saj.usace.army.mil/Missions/Regulatory/Source-Book.

Authority for review - an agreement with the USACOE entitled "Coordination Agreement Between the U. S. Army Corps of Engineers (Jacksonville District) and the Florida Department of Environmental Protection (or Duly Authorized Designee), State Programmatic General Permit", Section 10 of the Rivers and Harbor Act of 1899, and Section 404 of the Clean Water Act.

Additional Information

Please retain this letter. The activities may be inspected by authorized state personnel in the future to ensure compliance with appropriate statutes and administrative codes. If the activities are not in compliance, you may be subject to penalties under Chapter 373, F.S., and Chapter 18-14, F.A.C.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice.

Petition for Administrative Hearing
A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rule 28-106.201, F.A.C., a petition for an administrative hearing must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address, any email address, any facsimile number, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;
(c) A statement of when and how the petitioner received notice of the agency decision;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who has asked the Department for notice of agency action may file a petition within 21 days of receipt of such notice, regardless of the date of publication. The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, before the applicable deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

FLAWAC Review

The applicant, or any party within the meaning of Section 373.114(1)(a) or 373.4275, F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1) or 373.4275, F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when the order is filed with the Clerk of the Department.

Judicial Review

Any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, Tallahassee, Florida 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this action is filed with the Clerk of the Department.

EXECUTION AND CLERKING

Executed in Orange County, Florida.
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Sincerely,

Sarah McWilliams
Government Operations Consultant
Permitting & Waste Cleanup Program
Southwest District

Enclosures:
Ch. 62-330.051(5)(d), F.A.C. and Section 403.813(1)(d), F.S.

Attachments:
Project Drawings

cc:
ERP/404 Permitting, Southwest District, sw_erp@floridadep.gov
Casey Smith, Southwest District, Casey.A.Smith@FloridaDEP.gov
U.S. Army Corps of Engineers, tampareg@usace.army.mil
Randy Runnels, Florida Coastal Office, randy.runnels@dep.state.fl.us
Katie Castor, Stantec, Kathleen.Castor@stantec.com

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this document and all attachments were sent on the filing date below to the above listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to 120.52(7), F.S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Clerk

February 28, 2023
Date

62-330.051(5)(d), F.A.C.

(5) Dock, Pier, Boat Ramp and Other Boating-related Work –

(d) Replacement or repair of existing docks and piers, including mooring piles, in accordance with section 403.813(1)(d), F.S., provided the existing structure is still functional or has been rendered non-functional within the last year by a discrete event, such as a storm, flood, accident, or fire.

403.813(1)(d), F.S.

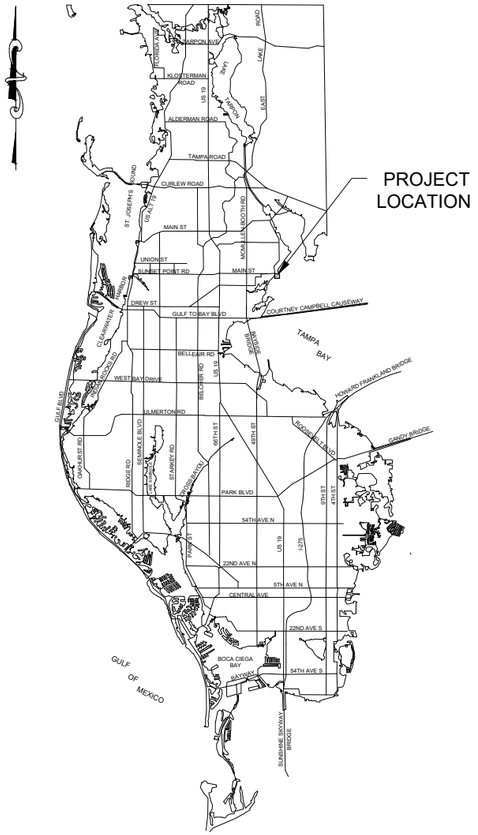
(1) A permit is not required under this chapter, chapter 373, chapter 61-691, Laws of Florida, or chapter 25214 or chapter 25270, 1949, Laws of Florida, for activities associated with the following types of projects; however, except as otherwise provided in this subsection, this subsection does not relieve an applicant from any requirement to obtain permission to use or occupy lands owned by the Board of Trustees of the Internal Improvement Trust Fund or a water management district in its governmental or proprietary capacity or from complying with applicable local pollution control programs authorized under this chapter or other requirements of county and municipal governments:

(d) The replacement or repair of existing docks and piers, except that fill material may not be used and the replacement or repaired dock or pier must be in the same location and of the same configuration and dimensions as the dock or pier being replaced or repaired. This does not preclude the use of different construction materials or minor deviations to allow upgrades to current structural and design standards.

PERMIT PLANS

SAFETY HARBOR PIER REPLACEMENT PROJECT

198 VETERANS MEMORIAL LANE PID: 032-3058-500.63-00-PR0057



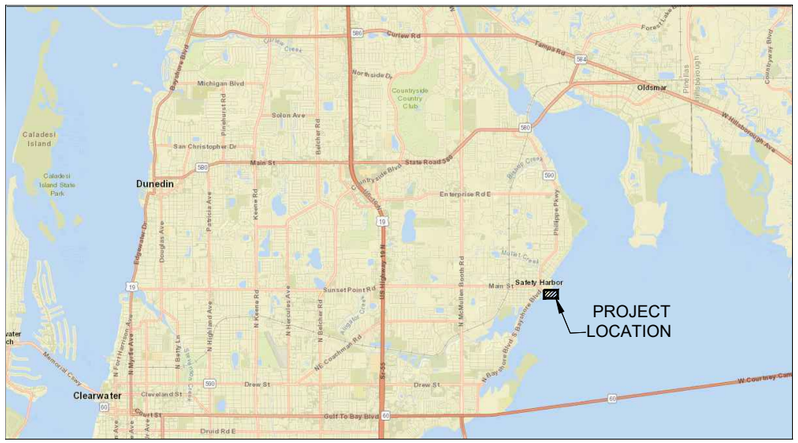
PINELLAS COUNTY MAP

SCALE: N.T.S.

FOR:

CITY OF SAFETY HARBOR

750 MAIN ST
SAFETY HARBOR, FL 34695



SECTION 03 - TOWNSHIP 19 - RANGE 16 EAST
PINELLAS COUNTY, FLORIDA

LOCATION MAP

SCALE: N.T.S.

CITY COMMISSION	
JOE AYOUB	MAYOR
NANCY BESORE	VICE MAYOR
CARLOS DIAZ	COMMISSIONER
CLIFF MERZ	COMMISSIONER
ANDY STEINGOLD	COMMISSIONER
MATT SPOOR	CITY MANAGER

SHEET LIST TABLE		
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REFERENCE PLANS

CONTRACTOR TO REFERENCE THE FOLLOWING FOR CONSTRUCTION OF THIS PROJECT.

- M.E.P. PLANS: MPS ENGINEERING DATED: P: 813-855-2721
- SURVEY: SUNCOAST LAND SURVEYING DATED: OCT. 21,2022 P: 813-854-1342

CHRISTOPHER P. GAMACHE LICENSE No. 82122 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by Christopher P. Gamache, PE on the date adjacent to the seal.

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AGENCY APPROVALS

AGENCY	PERMIT TYPE	DATE SUBMITTED	DATE OF PERMIT	PERMIT No.	EXPIRATION DATE
PINELLAS COUNTY	DREDGE & FILL				
SAFETY HARBOR	BUILDING DEVELOPMENT				
SWFWMD	TBD				
USACE	TBD				

Stantec
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Revision | By | Appd. | YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA

SAFETY HARBOR PIER
RPLACEMENT PROJECT

Title
COVER SHEET

Permit-Seal
Christopher P. Gamache, PE
Lic. No.: 82122

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

Project Number: 238201804
SCALE: N/A

Dwn. | Chkd. | Dsgn. | YY.MM.DD

Drawing No. C1.00
Revision | Sheet
1 of 7

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2023/02/03 2:15 PM By: Christopher Gamache

ORIGINAL SHEET - ANSI D (22x34)

GENERAL NOTES

1. ALL CONTOURS & ELEVATIONS SHOWN HEREIN ARE IN FEET AND REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

2. ALL WORK IN THE VICINITY OF OPEN WATER AND / OR WETLANDS TO BE PERFORMED IN COMPLIANCE WITH THE ENVIRONMENTAL PERMITS FOR THE SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY FINE RESULTING FROM VIOLATIONS OF PERMIT CONDITIONS.

3. SPECIAL CARE SHALL BE TAKEN TO PROTECT EXISTING TREES DESIGNATED TO REMAIN. TREE BARRIERS SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF SAFETY HARBOR STANDARDS.

4. REPLACE / REPAIR ALL IRRIGATION LINES, FITTINGS, VALVES, SPRINKLER HEADS, ETC. THAT MAY BE DAMAGED DURING CONSTRUCTION ACTIVITIES.

5. COORDINATE THE INSTALLATION OF ANY NEW / RELOCATED / MODIFIED UTILITIES WITH APPLICABLE UTILITY COMPANIES.

6. REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION RELATED ACTIVITIES TO AREAS OUTSIDE THE LIMITS OF CONSTRUCTION AND RESTORE TO ORIGINAL CONDITION. RESTORE ALL LANDSCAPE AREAS, GRASSED AREAS AND PAVEMENT AREAS OUTSIDE THE LIMITS OF CONSTRUCTION TO ORIGINAL CONDITION. PAVEMENT RESTORATION SHALL MATCH ORIGINAL ELEVATION TO ENSURE POSITIVE DRAINAGE AND INCLUDE RESTORATION OF PAVEMENT STRIPING / MARKINGS.

7. SOD ALL DISTURBED AREAS AFFECTED BY THEIR WORK WITH A GRASS TYPE THAT MATCHES EXISTING SOD. IN AREAS WHERE THERE IS NOT AN ESTABLISHED GRASS TYPE BAHIA SHALL BE USED.

8. ALL CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE CITY OF SAFETY HARBOR, PINELLAS COUNTY, FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT), AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, REGULATIONS, AND ORDINANCES. ALL SUCH COMPLIANCE SHALL BE AT THE CONTRACTOR'S SOLE EXPENSE.

9. THE PROJECT AREA LIES WITHIN FLOOD ZONE VE PER FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 12103C0131H, EFFECTIVE DATE 8/24/2021. REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

10. THE OWNER / ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY UNEXPECTED SUBSURFACE CONDITIONS ARE ENCOUNTERED WHICH AFFECTS THE WORK.

11. PROVIDE AS-BUILT DRAWINGS SIGNED & SEALED BY A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF FLORIDA. FINAL AS-BUILT DRAWINGS MUST DEPICT ALL KNOWN EXISTING AND NEW UTILITIES INSTALLED IN CONJUNCTION WITH THIS DEVELOPMENT & SHALL BE PROVIDED TO OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILT DRAWINGS MUST CONTAIN THE MINIMUM INFORMATION REQUIRED FOR FINAL CERTIFICATIONS TO BE SUBMITTED TO APPLICABLE REVIEWING / PERMITTING AGENCIES.

12. THE RELOCATION OF EXISTING FACILITIES (ABOVEGROUND OR UNDERGROUND) AND RESTORATION TO ORIGINAL CONDITIONS (INCLUDING BUT NOT LIMITED TO EXISTING UTILITIES, SIGNAGE AND MARKING, PAVED SURFACES, AND LANDSCAPE / IRRIGATION) SHALL BE THE CONTRACTOR'S RESPONSIBILITIES IF SUCH ITEMS ARE IMPACTED DURING THE CONSTRUCTION PROCESS.

13. THE REMOVAL OF EXISTING UTILITIES SHALL BE COORDINATED WITH THE INSTALLATION OF THE PROPOSED UTILITIES TO ENSURE UNINTERRUPTED SERVICE.

14. TECHNICAL SPECIFICATIONS HAVE BEEN PREPARED FOR THIS PROJECT BY THE ENGINEER OF RECORD AND ARE INCLUDED WITH THESE PLANS BY REFERENCE. ALL CONSTRUCTION MATERIALS AND ACTIVITIES ARE TO BE IN CONFORMANCE WITH THESE SPECIFICATIONS. PLEASE CONTACT THE CITY OF SAFETY HARBOR'S ENGINEERING DEPARTMENT AT (727) 724-1555 FOR A COPY.

ELECTRICAL NOTES

1. ALL ELECTRICAL SERVICE SHALL BE INSTALLED UNDERGROUND. COORDINATE WITH THE MEP FOR SPECIFICATIONS / DETAILS / ROUTING.

2. ELECTRIC SERVICE TO POINTS OF CONNECTION TO BE PROVIDED BY UTILITY OWNER; COORDINATE WITH THE MEP FOR SPECIFICATIONS / DETAILS / ROUTING.

3. INSTALL PVC CONDUITS FOR ELECTRICAL AND TELEPHONE SERVICE (TO PROPERTY LINE) AND COORDINATE INSTALLATION OF SERVICES AND LIGHTING DESIGN WITH UTILITY AGENCY. COORDINATE WITH THE MEP FOR SPECIFICATIONS / DETAILS / ROUTING.

4. COORDINATE WITH UTILITY COMPANY FOR RELOCATION OF ANY POWER POLES WITHIN PROJECT AREA AND RIGHT-OF-WAYS.

5. EXERCISE EXTREME CARE IN NEW CONSTRUCTION AREAS TO AVOID IMPACTS TO HIGHLY SENSITIVE UTILITIES. CONTRACTOR TO COORDINATE WITH ALL UTILITY PROVIDERS PRIOR TO CONSTRUCTION COMMENCEMENT TO VERIFY UTILITY LOCATIONS WITHIN PROJECT AREA.

EROSION AND SEDIMENTATION CONTROL MEASURES

1. ALL PRACTICABLE AND NECESSARY EFFORT SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT MATERIAL TO INLETS, SURFACE DRAINS, WETLANDS AND LAKE AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION EFFORTS THAT MAY BE REQUIRED.

2. FOR ALL EROSION CONTROL MEASURES REFER TO FDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, SECTION 104 (LATEST EDITION).

3. THE CONTRACTOR IS RESPONSIBLE FOR ANY FINES OR RESTITUTION OR CORRECTIVE MEASURES AS DEEMED NECESSARY BY THE LOCAL AGENCIES AS RESULT OF ANY EROSION CONTROL ISSUES THAT MAY ARISE DURING CONSTRUCTION.

4. THE INSTALLATION OF TEMPORARY EROSION CONTROL BARRIERS SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE PERMANENT EROSION CONTROL FEATURES TO THE EXTENT NECESSARY TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND WATER POLLUTION THROUGHOUT THE LIFE OF THE CONSTRUCTION PHASE.

5. THE TYPE OF EROSION CONTROL BARRIERS USED SHALL BE GOVERNED BY THE NATURE OF THE CONSTRUCTION OPERATION AND SOIL TYPE THAT WILL BE EXPOSED. SILTY AND CLAYEY MATERIAL USUALLY REQUIRE SOLID SEDIMENT BARRIERS TO PREVENT TURBID WATER DISCHARGE, WHILE SANDY MATERIAL MAY NEED ONLY SILT SCREENS TO PREVENT EROSION. DIVERSION DITCHES OR SWALES MAY BE REQUIRED TO PREVENT TURBID STORM WATER RUNOFF FROM BEING DISCHARGED TO OTHER WATER BODIES. IT MAY BE NECESSARY TO EMPLOY A COMBINATION OF BARRIERS, DITCHES, AND OTHER EROSION / TURBIDITY CONTROL MEASURES IF CONDITIONS WARRANT.

6. PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETE AND ALL BARED SOIL STABILIZED. SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE-HALF THE DEPTH OF THE SILTATION CONTROL BARRIER SHALL BE IMMEDIATELY REMOVED AND PLACED IN UPLAND AREAS.

7. SWEEP ALL ADJACENT ROADWAYS AND PARKING AREAS THAT ARE AFFECTED BY THE CONSTRUCTION PROCESS ON A DAILY BASIS OR AS REQUIRED.

8. TAKE ALL REASONABLE MEANS TO ELIMINATE THE TRANSPORT OF DUST FROM THE PROJECT SITE. SPECIAL MEASURES, SUCH AS PERIODICALLY APPLYING WATER TO THE WORK SITE TO PREVENT DUST SHALL BE INCORPORATED INTO THE CONTRACTORS WORK PLAN.

9. INSPECT AND MAINTAIN ALL EROSION CONTROL DEVICES AND KEEP THEM IN GOOD CONDITION. CORRECT AND REPORT TO THE CITY ANY IMPACTS DUE TO EROSION OR FAILURE OF ANY EROSION CONTROL DEVICES IMMEDIATELY.

10. ANY DISCHARGE OF STORM WATER RUNOFF FROM THIS SITE SHALL BE THROUGH A CONTROL DEVICE TO CONTROL TURBIDITY AND SEDIMENT TRANSPORT. THIS INCLUDES THE DISCHARGE FROM ANY DEWATERING OPERATIONS. (IF NECESSARY) OFFSITE DISCHARGE OF PRODUCED GROUNDWATER FROM DEWATERING SHALL COMPLY WITH DEWATERING GUIDELINES FROM FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), F.A.C., 62-621(2).

11. NO DEBRIS SHALL BE ALLOWED TO ENTER THE EXISTING STORM OR SANITARY SEWER SYSTEMS.

12. ONCE CONSTRUCTION IS COMPLETE, ENSURE THE ON-SITE AND ADJACENT OFF-SITE STORM SYSTEMS ARE CLEAN AND CLEAR OF ANY SILTS OR DEBRIS THAT MAY HAVE WASHED OUT DURING THE CONSTRUCTION PROCESS.

13. EROSION CONTROL MEASURES ARE NOT TO BE REMOVED UNTIL ALL CONSTRUCTION IN THE AREA IS COMPLETE, LANDSCAPE HAS BEEN INSTALLED, ALL DISTURBED AREAS HAVE BEEN SODDED (OR SEEDING HAS TAKEN HOLD) AND ALL INSPECTIONS HAVE BEEN DONE.

SURVEY NOTES

1. THE EXISTING FEATURES SHOWN ON THESE PLANS HAVE BEEN OBTAINED FROM AN ELECTRONIC VERSION OF THE BOUNDARY + TOPOGRPAHIC SURVEY OF SAFETY HARBOR PIER PREPARED BY SUNCOAST LAND SURVEYING, INC. DATED 10-21-2022.

CERTIFICATION NOTES

1. SUBMIT AS-BUILT SURVEYS FOR ALL CIVIL UTILITIES TO THE ENGINEER OF RECORD FOR REVIEW OF CONFORMANCE TO THE APPROVED CONSTRUCTION PLANS. AS-BUILT SURVEYS ARE TO BE SIGNED AND SEALED BY A PROFESSIONAL SURVEYOR REGISTERED IN THE STATE OF FLORIDA.

2. AS-BUILTS ARE TO INCLUDE BUT NOT BE LIMITED TO ALL IMPROVEMENT INCLUDING SANITARY SEWER MANHOLE RIMS AND INVERTS, PIPE SIZES, LENGTHS, MATERIAL AND SLOPES; ALL WATER MAIN LOCATIONS INCLUDING METERS, FIRE HYDRANTS, FITTINGS AND GATE VALVES; ALL STORM INLET GRATE AND STORM MANHOLE RIMS AND INVERTS, PIPE SIZES, LENGTHS AND MATERIAL; ALL POND SLOPES FROM TOP OF BANK TO TOE OF SLOPE (INCLUDING GRADE BREAKS).

3. COORDINATE ALL TESTING REQUIRED BY THE GOVERNING MUNICIPALITIES, CONTRACT DOCUMENTS AND / OR TECHNICAL SPECIFICATIONS. NOTIFY THE ENGINEER OF RECORD AND THE LOCAL INSPECTOR AT LEAST 48 HOURS PRIOR CONDUCTING ANY TESTS FOR THEIR ATTENDANCE.

4. COORDINATE AND SCHEDULE ALL TESTING REQUIRED BY THE LOCAL AGENCIES, CONTRACT DOCUMENTS AND/OR TECHNICAL SPECIFICATIONS. NOTIFY THE ENGINEER AND THE INSPECTOR FOR THEIR ATTENDANCE. PLEASE NOTE THAT SEPARATE TESTS WILL BE REQUIRED FOR MASTER METERED PROJECTS: ONE FROM THE POINT OF CONNECTION TO THE METER ASSEMBLY AND ANOTHER FROM THE BACKSIDE OF THE METER TO WITHIN FIVE FEET OF ALL PROPOSED BUILDINGS.

CONSTRUCTION NOTES

1. VERIFY ALL EXISTING DIMENSIONS AND SITE CONDITIONS. NOTIFY THE CITY OF ANY DISCREPANCIES WITH INFORMATION SHOWN ON THE PLANS PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR ALSO ACKNOWLEDGES THAT THEY ARE SATISFIED WITH THE CHARACTER, QUALITY AND QUANTITY OF SURFACE AND SUBSURFACE MATERIALS OR OBSTACLES TO BE ENCOUNTERED INSOFAR AS THIS INFORMATION IS REASONABLY ASCERTAINABLE FROM AN INSPECTION OF THE SITE, ACCESS TO THE SITE, AND TERRITORY SURROUNDING THE SITE, INCLUDING ALL EXPLORATORY WORK DONE BY THE CITY AS WELL AS FROM THE DRAWINGS AND SPECIFICATIONS MADE A PART OF THIS CONTRACT. ANY FAILURE TO TAKE THE ACTIONS DESCRIBED IN THIS PARAGRAPH WILL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR PROPERLY ESTIMATING THE DIFFICULTY AND COST OF SUCCESSFULLY PERFORMING THE WORK OR FOR PROCEEDING TO PERFORM THE WORK SUCCESSFULLY WITHOUT ADDITIONAL EXPENSE TO THE CITY.

2. ALL EXISTING WATER AND SANITARY SEWER PIPES TO REMAIN UNLESS OTHERWISE NOTED.

3. ALL EROSION CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO BEGINNING WORK.

4. PROVIDE CLEARING AND GRUBBING OF THE ENTIRE PROJECT AREA, WITH THE EXCEPTION OF TREES TO REMAIN, IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, SECTION 110 (LATEST EDITION).

5. COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING ONSITE POWER POLES, LIGHT POLES AND OVERHEAD/UNDERGROUND POWER WITH UTILITY OWNERS.

6. TREE RELOCATION/PROTECTION SHALL BE IN ACCORDANCE WITH THE CITY OF SAFETY HARBOR'S STANDARDS.

DEMOLITION NOTES

1. THE LOCATION OF EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE. DETERMINE THE EXACT LOCATION OF THE UTILITIES PRIOR TO WORKING IN THEIR VICINITY. NOTIFY ALL UTILITY COMPANIES IN THE AREA BEFORE BEGINNING WORK.

2. ALL EXISTING WATER AND SANITARY SEWER PIPES TO REMAIN UNLESS OTHERWISE NOTED.

3. ALL EROSION CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO BEGINNING WORK.

4. ALL MATERIALS REMOVED SHALL BE DISPOSED OF OFFSITE AND SHALL BE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.

5. THE OWNER RESERVES THE RIGHT TO RETAIN ANY ITEM FROM THE SITE DEMOLITION.

6. CONTRACTORS ARE REQUIRED BY LAW TO CALL 811 OR THE FLORIDA ONE CALL CENTER (1-800-432-4770) AT LEAST 72 HOURS BEFORE ANY EXCAVATION OR SOIL DISTURBING ACTIVITY. (CALL 10 DAYS BEFORE DIGGING WHEN DIGGING UNDER WATER.) WAIT THE REQUIRED TIME FOR BURIED UTILITIES TO BE LOCATED AND MARKED. PROTECT THE MARKS DURING YOUR PROJECT. IF MARKS ARE DESTROYED, CALL AGAIN. DIG SAFELY, USING EXTREME CAUTION WHEN DIGGING WITHIN 24 INCHES ON EITHER SIDE OF THE MARKS TO AVOID ENCOUNTERING THE BURIED UTILITY LINES.

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DRAINAGE NOTES

1. ANY AREAS SUBJECT TO HEAVY EROSION DURING CONSTRUCTION ARE TO BE STABILIZED WITH STRAW MATS & STAKED SOD AS NECESSARY TO MINIMIZE RUTTING / WASHOUTS & ALLOW FOR STABILIZATION TO TAKE HOLD. INCLUDE NOT TO EXCEED ALLOWANCE IN BID / CONTRACT PRICE.

2. NO DEBRIS OR SILT SHALL BE ALLOWED TO ENTER THE EXISTING AND PROPOSED STORM SEWER SYSTEM. STORM DRAINS ALONG ROADWAY TO BE PROTECTED WITH TEMPORARY FILTER PROTECTION SOCKS, WHICH ARE TO BE MAINTAINED DAILY.

3. WHERE SODDED SLOPES EXPERIENCE HEAVY RUNOFF, EROSION MATS SHOULD BE INSTALLED AND SOD SHOULD BE PINNED IN PLACE TO ALLOW ROOTS TO TAKE HOLD.

4. AFTER SITE CONSTRUCTION & LANDSCAPE INSTALLATIONS ARE COMPLETE, INSPECT THE ENTIRE STORM SYSTEM TO ENSURE ALL INLETS / MANHOLES ARE CLEAR OF ANY SILT OR DEBRIS, FABRIC IS REMOVED & STRUCTURES ARE FINISHED. IF NECESSARY, AT THE CONTRACTOR'S EXPENSE THE ENTIRE STORM SYSTEM IS TO BE CLEANED.

STRUCTURE NOTES

1. DESIGN METHOD:
DESIGN IN ACCORDANCE WITH THE FLORIDA BUILDING CODE – 7TH EDITION USING A LOAD AND RESISTANCE FACTOR DESIGN (LRFD) METHOD FOR ALL ELEMENTS UNLESS OTHERWISE NOTED.

2. SPECIFICATIONS:
FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (JANUARY 2023).

3. DESIGN LOADS:
DEAD LOAD:
UNIT WEIGHT OF TIMBER = 60 PCF
STRUCTURAL PLASTIC LUMBER = 65 PCF

LIVE LOAD:
DECK PEDESTRIAN LOAD = 100 PSF
ROOF SUPERIMPOSED LOAD = 20 PSF

WIND LOADS:
RISK CATEGORY I, 3-SECOND GUST
ULTIMATE DESIGN WIND SPEED = 145 MPH
EXPOSURE CATEGORY = D

4. ENVIRONMENT:
SUPERSTRUCTURE – EXTREMELY AGGRESSIVE
SUBSTRUCTURE – EXTREMELY AGGRESSIVE

6. LUMBER:
ALL LUMBER SHALL BE SOUTHERN PINE AND MEET THE REQUIREMENTS OF FDOT STANDARD SPECIFICATIONS SECTION 952, GRADE NO 1.

PRESSURE TREATMENT SHALL MEET AWPA STANDARD U1 AS FOLLOWS.

PILE BRACING, PILE CAPS, STRINGERS, & STRINGER BRACING	UC5C
RAIL POSTS	UC4B
HORIZONTAL RAILS	UC4A
ROOF FRAMING	UC3B
ROOF DECKING	UC3B

ALL CUT ENDS OF THE 4x6 BRACING MEMBERS SHALL BE FIELD TREATED IN ACCORDANCE WITH AWPA STANDARD M4.

LUMBER SIZES SHOWN REPRESENT NOMINAL DRESSED SIZES UNLESS OTHERWISE NOTED. DRESSED SIZES SHALL CONFORM TO THE AMERICAN SOFTWOOD LUMBER STANDARD PS 20. LUMBER SIZES NOTED AS ROUGH-SAWN REPRESENT THE ACTUAL DIMENSION.

7. TIMBER PILES:
TIMBER PILES SHALL BE SOUTHERN PINE AND MEET THE REQUIREMENTS OF FDOT STANDARD SPECIFICATIONS SECTION 953 AND ASTM D25.

PRESSURE TREATMENT SHALL MEET AWPA STANDARD U1, USE CATEGORY UC5C.

ALL CUT ENDS OF THE TIMBER PILES SHALL BE FIELD TREATED IN ACCORDANCE WITH AWPA STANDARD M4 PRIOR TO INSTALLATION OF THE BEAMS AND STRINGERS.

TIMBER PILE DIMENSIONS SHOWN REPRESENT THE MINIMUM TIP DIAMETER.

ALL TIMBER PILING WILL BE WRAPPED WITH 0.030" THICK PRIME HIGH DENSITY POLYETHYLENE. WRAPPING SHALL START A MINIMUM OF 1 FT BELOW THE MUD LINE AND EXTEND A MINIMUM OF 2 FT ABOVE THE MEAN HIGHER HIGH TIDE ELEVATION.

8. STRUCTURAL PLASTIC (SP) LUMBER:
STRUCTURAL PLASTIC LUMBER SHALL BE WEARDECK HDPE DECKING IN COLOR "SADDLE" OR APPROVED EQUIVALENT.

STRUCTURAL PLASTIC LUMBER SHALL BE UTILIZED FOR THE RAIL CAP AND DECKING.

9. STRUCTURAL FASTENERS:
ALL STRUCTURAL BOLTS, WASHERS, NUTS, HURRICANE CLIPS, HANGERS, BRACKETS, OR CONNECTION PLATES SHALL BE STAINLESS STEEL (SS) TYPE 316. BOLTS SHALL MEET THE REQUIREMENTS OF ASTM F593, GROUP 2. THREADED ROD SHALL MEET THE REQUIREMENTS OF ASTM A193 B8M CLASS 1. NUTS SHALL MEET THE REQUIREMENTS OF ASTM F594, GROUP 2.

HEX BOLT ASSEMBLIES SHALL HAVE WASHERS UNDER BOTH THE HEAD AND THE NUT. HEX BOLTS MAY BE SUBSTITUTED WITH THREADED ROD HAVING A WASHER AND NUT ON EACH END. CARRIAGE BOLT ASSEMBLIES SHALL HAVE WASHERS UNDER THE NUT ONLY. ALL BOLTS AND THREADED RODS SHALL BE SIZED SO THAT THE BOLT DOES NOT EXTEND PAST THE NUT BY MORE THAN 1 BOLT DIAMETER.

AT THE COMPLETION OF CONSTRUCTION, CHECK ALL NUTS FOR TIGHTNESS AND RE-TORQUE LOOSE CONNECTIONS.

SCREWS AND NAILS SHALL BE STAINLESS STEEL (SS) TYPE 316.

ALL SCREWS SHALL BE COUNTERSUNK AND INSTALLED IN HOLES DRILLED WITH A COUNTERSUNK DRILL BIT.

NAILS USED WITH APPROVED HURRICANE CLIPS AND HANGERS SHALL BE RING SHANK AND SIZED TO MEET THE MANUFACTURER'S SPECIFICATIONS FOR THE HURRICANE CLIP AND HANGER.

UTILITY NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND THE CITY OF SAFETY HARBOR'S STANDARDS AND SPECIFICATIONS.

2. CONTRACTOR SHALL REMOVE AND DISPOSE MUCK, SAND, SILT, CLAY, ROCK, CONCRETE, ANY KIND OF METALS, AND ALL OTHER TYPES OF UNSUITABLE MATERIAL TO 6-INCHES BELOW PIPE BOTTOM FOR ALL WATER AND FORCE MAIN INSTALLATION, AND REPLACE WITH SUITABLE MATERIAL AS DEFINED BY FDOT STANDARD SPECIFICATIONS.

3. CONFLICTS OF WATER, SANITARY AND STORM SEWER TO BE RESOLVED BY ADJUSTING WATER LINES AS NECESSARY.

4. HORIZONTAL AND VERTICAL SEPARATION BETWEEN WATER MAIN AND EXISTING UTILITY LINES SHALL CONFORM TO F.A.C. RULE 62-555.314. REFER TO THE CITY OF SAFETY HARBOR UTILITY SEPARATION REQUIREMENTS DETAIL.

5. EXERCISE EXTREME CAUTION WHILE WORKING IN THE VICINITY OF GAS LINES AND OVERHEAD POWER LINES.

ENVIRONMENTAL NOTES

1. ADHERE ALL CONSTRUCTION ACTIVITIES TO THE RESTRICTIONS AND LIMITATIONS REQUIRED BY PROJECT PERMITS.

2. COMPLY WITH THE "STANDARD MANATEE CONDITIONS FOR IN-WATER WORK, 2011" PUBLISHED BY THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION.

3. FURNISH AND INSTALL THE THREE INFORMATIONAL SIGNS SHOWN BELOW TO THE PROPOSED RAILING WITH STAINLESS STEEL SCREWS.

18"x12" 18"x12" 24"x16"

4. FURNISH AND INSTALL ONE MONOFILAMENT RECOVERY AND RECYCLING (MRR) TUBE AND ATTACH IT TO THE PROPOSED RAILING WITH STAINLESS STEEL SCREWS. THE COST OF FURNISHING AND INSTALLING THE MRR TUBE SHALL BE CONSIDERED INCIDENTAL TO THE PEDESTRIAN RAILING PAY ITEM.

THE MRR TUBE SHALL BE CONSTRUCTED OF 6" DIAMETER PVC WITH A 90° ELBOW ON TOP AND A THREADED PLUG ON THE BOTTOM WITH DRILLED DRAIN HOLES. TUBES SHALL INCLUDE IDENTIFICATION AND INSTRUCTIONAL STICKERS FOLLOWING THE FLORIDA WILDLIFE COMMISSION (FWC) FORMAT. EXAMPLES OF ACCEPTABLE MMR TUBES CAN BE FOUND ON THE FWC MRR PROGRAM WEBSITE BELOW.
HTTPS: //MRRP.MYFWC.COM

TURBIDITY CONTROL

1. FURNISH, INSTALL, AND MAINTAIN FLOATING TURBIDITY BARRIERS TO SURROUND CONSTRUCTION OPERATIONS AND CONTROL TURBIDITY IN ACCORDANCE WITH PERMIT REQUIREMENTS. TURBIDITY BARRIERS SHALL INCLUDE ANCHORS AS NECESSARY TO MAINTAIN PROPER PLACEMENT.

2. BARRIERS SHALL REMAIN UNTIL CONSTRUCTION OPERATIONS ARE COMPLETE AND TURBIDITY WITHIN THE BARRIERS HAS RETURNED TO BACKGROUND CONDITIONS.

3. EXTEND BARRIERS TO WITHIN 1 FOOT OF THE BOTTOM.

4. BARRIERS SHOULD BE A BRIGHT COLOR (YELLOW OR ORANGE ARE RECOMMENDED) THAT WILL ATTRACT THE ATTENTION OF NEARBY BOATERS.

5. SEAMS IN THE FABRIC SHALL BE EITHER VULCANIZED WELDED OR SEWN, AND SHALL DEVELOP THE FULL STRENGTH OF THE FABRIC.

6. FLOATATION DEVICES SHALL BE FLEXIBLE, BUOYANT UNITS CONTAINED IN AN INDIVIDUAL FLOTATION SLEEVE OR COLLAR ATTACHED TO THE CURTAIN. BUOYANCY PROVIDED BY THE FLOATATION UNITS SHALL BE SUFFICIENT TO SUPPORT THE WEIGHT OF THE CURTAIN AND MAINTAIN A FREEBOARD OF AT LEAST 3 INCHES ABOVE THE WATER SURFACE LEVEL.

7. LOAD LINES MUST BE FABRICATED INTO THE BOTTOM OF ALL FLOATING TURBIDITY CURTAINS. TYPES II AND III MUST HAVE LOAD LINES ALSO FABRICATED INTO THE TOP OF THE FABRIC. THE TOP LOAD LINE SHALL CONSIST OF WOVEN WEBBING OR VINYL-SHEATED STEEL CABLE. THE BOTTOM LOAD-LINE SHALL CONSIST OF A CHAIN INCORPORATED INTO THE BOTTOM HEM OF THE CURTAIN OF SUFFICIENT WEIGHT TO SERVE AS BALLAST TO HOLD THE CURTAIN IN A VERTICAL POSITION.

8. BOTTOM ANCHORS MUST BE SUFFICIENT TO HOLD THE CURTAIN IN THE SAME POSITION RELATIVE TO THE BOTTOM OF THE WATERCOURSE WITHOUT INTERFERING WITH THE ACTION OF THE CURTAIN.

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Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA

SAFETY HARBOR PIER
RPLACEMENT PROJECT

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GENERAL NOTES

Permit-Seal
Christopher P. Gamache, PE
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Project Number: 238201804
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Drawing No. C1.01
Revision Sheet
2 of 7

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2023/02/03 2:16 PM By: Christopher.Gamache

ORIGINAL SHEET - ANSI D (22x34)

STORMWATER POLLUTION PREVENTION PLAN

PROJECT NAME: SAFETY HARBOR PIER REPLACEMENT

PROJECT ADDRESS:
VETERANS MEMORIAL PARK
198 VETERANS MEMORIAL LN
SAFETY HARBOR, FL 34695

OWNER'S ADDRESS:
CITY OF SAFETY HARBOR
750 MAIN ST.
SAFETY HARBOR, FL 34695

DESCRIPTION OF PURPOSE AND TYPES OF SOIL DISTURBING ACTIVITIES:

PROPERTY AREA APPROXIMATELY = 9.496 ACRES

PROJECT AREA APPROXIMATELY = 0.338 ACRES

CONSTRUCTION PROPOSED: TIMBER PIER AND PAVILION. NO NEW STORMWATER MANAGEMENT IS PROPOSED.

SOIL DISTURBING ACTIVITIES WILL INCLUDE:
CONNECTION TO ONSITE ELECTRIC AND WATER UTILITIES.

WETLAND ACTIVITIES INCLUDE:
NO WETLAND IMPACTS ARE PROPOSED FOR THE PROJECT. ACTIVITIES TO OCCUR ON OPEN WATER WITH APPROPRIATE BEST MANAGEMENT PRACTICES INSTALLED AND MAINTAINED.

CONSTRUCTION REMOVAL ACTIVITIES WILL INCLUDE:
REMOVAL OF THE EXISTING TIMBER PIER AND PAVILION.

STORMWATER DRAINAGE AREA:
BASIN AREA: N/A ACRES
PRE-DEVELOPMENT CURVE NUMBER (CN): N/A
POST DEVELOPMENT CURVE NUMBER (CN): N/A

WATER QUALITY: N/A

WATER QUANTITY: N/A

SEQUENCE OF MAJOR ACTIVITIES

1. INSTALL STAKED SILT FENCE AND EROSION CONTROL AS SHOWN ON THE DEMOLITION PLAN.

2. INSTALL STABILIZED CONSTRUCTION ENTRANCE.

3. COMPLETE REPLACEMENT PER GENERAL PLAN AND ELEVATION.

4. INSTALL NEW UTILITIES, PER PLAN.

5. REPAIR ANY WASHED OUT AREAS, SOD, SEED, AND MULCH DISTURBED AREAS AS INDICATED ON PLANS.

6. WHEN CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE STABILIZED, REMOVE EROSION PROTECTION DEVICES AND CONSTRUCTION ENTRANCE AS REQUIRED.

NAME OF RECEIVING WATERS:
THE PROPOSED IMPROVEMENTS WILL DISCHARGE STORMWATER ON-SITE SIMILAR TO HISTORIC CONDITIONS. ULTIMATE DISCHARGE TO OLD TAMPA BAY.

CONTROLS

EROSION AND SEDIMENT CONTROLS

USE BEST MANAGEMENT PRACTICES (BMPs) DURING AND AFTER CONSTRUCTION TO MINIMIZE EROSION AND SEDIMENTATION AND TO PROPERLY MANAGE RUNOFF FOR BOTH STORMWATER QUANTITY AND QUALITY. CONTRACTOR TO ADHERE TO FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION EROSION AND SEDIMENTATION CONTROL MANUAL.

BEFORE SITE DISTURBANCE OCCURS, PERIMETER CONTROLS, SEDIMENT TRAPS, BASINS, AND DIVERSIONS MUST BE SET IN PLACE BY THE CONTRACTOR TO CONTROL RUNOFF AND CAPTURE SEDIMENTS. THE CONTRACTOR IS REQUIRED TO REVIEW THE SITE SPECIFIC EROSION CONTROL PLAN AS SHOWN ON THE CONSTRUCTION DOCUMENTS.

THE CONTRACTOR MAY ALSO BE REQUIRED TO MODIFY THE PLAN OR MATERIALS TO ADAPT TO SEASONAL VARIATIONS OR SITE CONDITIONS. CONTRACTOR WILL COMPLY WITH EROSION CONTROL PLAN AND DETAILS. ANY MODIFICATIONS TO THIS PLAN MUST BE SIGNED BY A PROFESSIONAL ENGINEER REPRESENTING THE CONTRACTOR. CONTRACTOR SHALL REMOVE ALL SEDIMENT THAT HAS MIGRATED OFF-SITE. THE EROSION CONTROL DEVISES FOR THESE ACTIVITIES ARE SPECIFIED IN THE PLANS AND ACCORDING TO "DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM (CURRENT EDITION), SECTION 104. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING IF ADDITIONAL CONTROLS ARE NEEDED AND DEPLOYMENT SCHEDULES FOR THE IMPLEMENTATION OF ALL EROSION CONTROL DEVICES.

STABILIZATION PRACTICES:

WIND EROSION STABILIZATION

-THE CONTRACTOR SHALL DENUDE ONLY AREAS WHERE IT IS EXPECTED TO BE GRADED OR ALTERED WITHIN A TWO (2) WEEK TIME- FRAME. FINAL GRADES SHALL BE PERFORMED AND TEMPORARY OR PERMANENT SOIL STABILIZATION SHALL BE APPLIED. AREAS WHERE CONSTRUCTION OPERATIONS WILL BE CONTINUOUS, FUGITIVE DUST SHALL BE MANAGED BY APPLYING A WATER SPRAY TO SATURATE THE SURFACE SOILS CONTINUOUSLY AND ADDITIONAL MEASURES MAY NEED TO BE TAKEN CONTROL OFF-SITE TRANSPORT OF UNACCEPTABLE LEVELS OF DUST.

TEMPORARY STABILIZATION

-TOP OF SOIL STOCK PILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR AT LEAST 21 DAYS WILL BE STABILIZED WITH TEMPORARY GRASS AND MULCH NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY. GRASS SEED SHALL BE A MIXTURE OF 20 PARTS OF BERMUDA SEED AND 80 PARTS OF PENSACOLA BAHIA. THE SEPARATE TYPES OF SEED USED SHALL BE THOROUGHLY DRY MIXED IMMEDIATELY BEFORE SOWING. SEED WHICH HAS BECOME WET SHALL NOT BE USED. THE MULCH MATERIAL USED SHALL NORMALLY BE DRY MULCH. DRY MULCH SHALL BE STRAW OR HAY, CONSISTING OF OAT, RYE OR WHEAT STRAW, OR OF PANGOLA, PEANUT, COASTAL BERMUDA OR BAHIA GRASS HAY. ONLY UNDETERIORATED MULCH, WHICH CAN BE READILY CUT INTO THE SOIL, SHALL BE USED. AREAS OF THE SITE, WHICH ARE TO BE PAVED, WILL BE TEMPORARILY STABILIZED BY APPLYING STABILIZATION AND BASE. TREE BARRICADES WHERE REQUIRED.

PERMANENT STABILIZATION

-DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASES SHALL BE STABILIZED WITH SOD NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY.

SEDIMENT BASINS

-IF APPLICABLE, SEDIMENT BASINS TO BE CONSTRUCTED BY THE CONTRACTOR TO DETAIN SEDIMENT-LADEN RUNOFF FROM DISTURBED AREAS LONG ENOUGH FOR MOST OF THE SEDIMENT TO SETTLE OUT. SEDIMENT BASINS SHOULD BE USED TOGETHER WITH EROSION CONTROL PRACTICES SUCH AS TEMPORARY SEEDING, MULCHING, DIVERSION BERMS, ETC., TO REDUCE THE AMOUNT SEDIMENT FLOWING INTO THE STORM SYSTEM.

DEWATERING

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MATERIALS, EQUIPMENT, LABOR, AND SERVICES NECESSARY FOR CARE OF WATER AND EROSION CONTROL. EXCAVATION WORK SHALL NOT BEGIN BEFORE THE EROSION AND SEDIMENTATION CONTROL PLAN IS IN PLACE. DEWATERING TO BE COMPLETED BY THE CONTRACTOR AND SHALL FOLLOW DEWATERING SPECIFICATION.

STRUCTURAL PRACTICES

STAKED SILT FENCES

-THE STAKED SILT FENCES WILL BE CONSTRUCTED ALONG THE CONSTRUCTION LIMITS OR AS DEPICTED ON THE EROSION CONTROL & DEMOLITION PLANS AND/OR ON OTHER CONSTRUCTION PLANS. THESE DEVICES WILL STOP AND DIVERT RUNOFF FROM THE SITE TO OTHER SURFACE WATERS.

OTHER CONTROLS / WASTE DISPOSAL

OFFSITE VEHICLE TRACKING

STABILIZED CONSTRUCTION ENTRANCES SHALL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREETS WILL BE CLEANED AS NEEDED 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 TARPUALIN AT ALL TIMES.

WASTE MATERIALS

- ALL WASTE MATERIAL WILL BE COLLECTED AND STORED IN DUMPSTERS PER LOCAL SOLID WASTE REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE DUMPED A MINIMUM OF TWICE A WEEK OR MORE OFTEN IF NECESSARY, AND THE TRASH WILL BE HAULED TO THE APPROPRIATE COUNTY LOCATION FOR DUMPING. NO CONSTRUCTION MATERIALS WILL BE BURIED ON-SITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED IN THE ON- SITE OFFICE TRAILER AND THE CONSTRUCTION MANAGER RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

THE CONTRACTOR SHALL PROVIDE LITTER CONTROL AND COLLECTION WITHIN THE PROJECT BOUNDARIES DURING CONSTRUCTION ACTIVITIES. ANY CHEMICAL CONTAINERS SHALL BE DISPOSED OF BY THE CONTRACTOR ACCORDING TO EPA'S STANDARD PRACTICES AS DETAILED BY THE MANUFACTURER. NO SOLID MATERIALS INCLUDING BUILDING & CONSTRUCTION MATERIALS SHALL BE DISCHARGE TO ADJACENT WATERWAYS OR WETLANDS OR BURIED ON SITE.

HAZARDOUS WASTE

THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE PERMITTING AGENCY IN WRITING IF ANY HAZARDOUS WASTE MATERIAL IS ENCOUNTERED DURING SITE INVESTIGATION AND CONSTRUCTION.

THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR NOTIFYING THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) WITHIN 24 HOURS OF DISCOVERY.

IF ENCOUNTERED, HAZARDOUS WASTE MATERIALS 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.

SANITARY WASTE

- ALL SANITARY WASTE WILL BE COLLECTED FROM PORTABLE UNITS A MINIMUM OF THREE TIMES PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR, IN ACCORDANCE WITH FDOT STANDARD SPEC. FOR ROAD AN BRIDGE CONSTRUCTION 2010 EDITION SECTION 7-6, AND AS REQUIRED BY LOCAL REGULATIONS.

TIMING OF CONTROL MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, STAKED SILT BARRIERS, EROSION CONTROL, AND STABILIZED CONSTRUCTION ENTRANCES CONSTRUCTED PRIOR TO GRUBBING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 21 DAYS WILL BE STABILIZED WITH A TEMPORARY GRASS AND MULCH WITHIN 14 DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTED ACTIVITY CEASES PERMANENTLY IN THAT AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SOD. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE TRAPS AND THE STAKED SILT BARRIERS WILL BE REMOVED.

MAINTENANCE INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:

THESE ARE THE INSPECTION AND MAINTENANCE PRACTICES THAT SHALL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROL.

LESS THAN ONE HALF OF THE SITE WILL BE DENUDED AT ONE TIME PRIOR TO ESTABLISHING EROSION CONTROL MANAGEMENT ALL CONTROL MEASURES WILL BE INSPECTED ONCE PER DAY AND FOLLOWING ANY STORM EVENT OF 0.5 INCHES OR GREATER BY A CONTRACTOR'S REPRESENTATIVE.

ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.

BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE. SILT FENCE WILL BE INSPECTED REGULARLY FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.

IF APPLICABLE, THE SEDIMENT BASINS WILL BE INSPECTED FOR DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB.

A MAINTENANCE INSPECTION REPORT SHALL BE MADE AFTER EACH INSPECTION BY THE CONTRACTOR AND SHALL BE KEPT IN AN ACTIVE LOG READILY AVAILABLE AT THE JOB SITE CONSTRUCTION TRAILER. THE SITE SUPERINTENDENT WILL SELECT INDIVIDUALS WHO WILL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES. FILLING OUT THE INSPECTION AND MAINTENANCE REPORT WILL BE BY THE CONTRACTOR. PERSONNEL SELECTED FOR MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. THEY WILL BE TRAINED IN ALL MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ON-SITE IN GOOD WORKING ORDER.

STORM WATER MANAGEMENT

NO STORMWATER MANAGEMENT IS REQUIRED.

WETLAND MITIGATION

WETLAND MITIGATION IS NOT APPLICABLE FOR THE PROPOSED PROJECT.

NON-STORM WATER DISCHARGES

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

1. PAVEMENT WASH WATERS (WHERE NO SPILL OR LEAKS OF TOXIC OR VEHICLE AND HAZARDOUS MATERIALS HAVE OCCURRED.

2. UNCONTAMINATED GROUNDWATER FROM DEWATERING 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, THE CONTRACTOR MUST NOTIFY THE OWNER AND ENGINEER.

MAINTENANCE AND INSPECTION

ALL OF THE CONTROLS SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES THROUGHOUT THE CONSTRUCTION PHASE OF THE PROJECT. MAINTENANCE SHALL BE IN ACCORDANCE WITH LOCAL GOVERNMENT AGENCY TECHNICAL SPECIFICATIONS, AND THE PROJECT CONSTRUCTION CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING THE FDEP NPDES / STORMWATER POLLUTION PREVENTION PLAN (SWPPP) CONSTRUCTION INSPECTION REPORT AFTER ANY 1/2 INCH 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. CONTRACTOR SHALL ALSO COMPLETE THE NPDES COMPLIANCE CHECKLIST FOR CONSTRUCTION SITES.

WATER MANAGEMENT DISTRICT - KEY PROVISIONS

AN ENVIRONMENTAL RESOURCE PERMIT (ERP) IS REQUIRED, THE FOLLOWING KEY PROVISIONS MUST BE MAINTAINED BY THE PERMITTEE AND CONTRACTOR: (IN ACCORDANCE WITH THE BASIS OF REVIEW FOR ENVIRONMENTAL RESOURCE PERMIT (ERP) APPLICATIONS)

THE PERMITTEE AND CONTRACTOR SHALL AMEND THE CONSTRUCTION SURFACE WATER MANAGEMENT PLAN WHENEVER THE PROJECT IS ALTERED OR MODIFIED IN A MANNER THAT WILL RESULT IN:

(1) THE POTENTIAL DISCHARGE OF POLLUTANTS

(2) A CHANGE IN THE AMOUNT OF DISCHARGE

(3) A CHANGE IN THE NUMBER OF LOCATION OF STORM WATER DISCHARGE POINTS, OR

(4) ADVERSE IMPACTS TO WETLANDS, AND SUCH CHANGE(S) HAVE NOT OTHERWISE BEEN PREVIOUSLY ADDRESSED IN THE APPROVED PLAN. THE PERMITTEE AND CONTRACTOR SHALL ALSO AMEND THE PLAN IF ITS IMPLEMENTATION DOES NOT ELIMINATE OR MINIMIZE EROSION AND SEDIMENT DEPOSITION, OFF-SITE FLOODING, ADVERSE IMPACTS TO WETLAND, OR VIOLATIONS OF STATE WATER QUALITY STANDARDS. AMENDMENTS TO THE PLAN SHALL BE PREPARED AND KEPT AS SEPARATE DOCUMENTS ALONG WITH THE ORIGINAL PLAN. ALL ALTERATIONS TO THE SYSTEM MUST BE SHOWN ON THE AMENDED PLAN ALONG WITH THE DOCUMENTATION OR REQUIRED APPROVAL(S).

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

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

GOOD HOUSEKEEPING:

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

AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCTS REQUIRED TO DO THE JOB.

ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER CONTAINED ENCLOSURE.

PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL MANUFACTURER'S LABELED CONTAINERS. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER. WHENEVER POSSIBLE, ALL OF A PRODUCT SHALL BE USED UP 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.

THE CONTRACTOR MUST IDENTIFY A DESIGNATED FUEL TANK STORAGE AREA, AWAY FROM DRAINAGE STRUCTURES, PONDS, BASINS, WATERWAYS, AND WETLANDS, WITH SECONDARY CONTAINMENT (SPILL COLLECTION).

PETROLEUM PRODUCTS:

ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS, WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ON-SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS:

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A SEALABLE PLASTIC BIN TO AVOID SPILLS.

CONCRETE TRUCKS:

CONTRACTOR SHALL DESIGNATE AN AREA AWAY FROM DRAINAGE STRUCTURES, PONDS, BASINS, WATERWAYS, 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. CONTRACTOR TO PREPARE A DETAILED SITE PLAN FOR APPROVAL FOR THE CONCRETE DISCHARGE AND WASH DOWN ACTIVITIES.

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 CONTRACTOR WILL BE RESPONSIBLE FOR SPILL PREVENTION AND CLEANUP COORDINATION. 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 OWNERS, ENGINEER OF RECORD AND PERMITTING AGENT INSPECTOR MUST BE NOTIFIED OF THE NATURE AND EXTEND OF THE CONTAMINATION.

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED, BUT NOT LIMITED, TO BE PRESENT ON-SITE DURING CONSTRUCTION:

CONCRETE	FERTILIZERS
DETERGENTS	PETROLEUM BASED PRODUCTS AND FUELS
TAR	CLEANING SOLVENTS
SAND	WOOD
STONE	

POLLUTION PREVENTION PLAN CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS HAVE BEEN READ BY ME OR MY DESIGNATED REPRESENTATIVE AND UNDERSTAND THAT THIS SYSTEM HAS BEEN PREPARED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OWNER: CITY OF SAFETY HARBOR

APPLICANT AUTHORIZED AGENT: _____

SIGNED: _____

ADDRESS: CITY OF SAFETY HARBOR
750 MAIN STREET
SAFETY HARBOR, FL 34695

DATE: _____

CONTRACTOR'S AND ENGINEER'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION. I UNDERSTAND, AND SHALL COMPLY WITH THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA "GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" (CGP), AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED FOR THE CITY OF SAFETY HARBOR.

SIGNATURE: _____ FOR: _____ RESPONSIBLE FOR: GENERAL CONTRACTOR

NAME: _____ COMPANY: _____

TITLE: _____ ADDRESS: _____

DATE: _____ PHONE: _____

CERTIFIED ENGINEER

NAME: CHRISTOPHER P. GAMACHE, P.E.

FL. REG. NO. 82122

TITLE: PROJECT MANGER

COMPANY: CARDNO
380 PARK PLACE BLVD., SUITE 300
CLEARWATER, FL 33759
PHONE: 727-531-1553

NPDES NOTIFICATION (NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM)

ATTENTION: FAILURE TO MAINTAIN EROSION AND/OR SEDIMENTATION CONTROLS OR ANY ILLICIT DISCHARGE RESULTING FROM THEIR FAILURE WILL LIKELY RESULT IN FINE CITATIONS. CODE REGULATIONS AUTHORIZES PENALTIES OF UP TO $10,000 FOR EACH OFFENSE.

ALL ACTIVITIES MUST CONFORM WITH FDEP NOTICE OF INTENT TO USE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES. POLLUTION PREVENTION FROM THE PROPOSED CONSTRUCTION ACTIVITIES WILL BE IMPLEMENTED IN ACCORDANCE WITH SWFWMD BASIS OF REVIEW SUBSECTION 2.8.4.

KEY PROVISIONS

1. IMPLEMENTATION OF THIS STORMWATER POLLUTION PREVENTION PLAN (SWPPP).

2. CONDUCTING AND DOCUMENTING ROUTINE INSPECTIONS AS REQUIRED.

3. RETENTION OF RECORDS REQUIRED BY THE PERMIT, INCLUDING RETENTION OF A COPY OF THE SWPPP AT THE CONSTRUCTION SITE, FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL SITE STABILIZATION.

NOTICE OF INTENT (NOI)

A "NOTICE OF INTENT TO USE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" (NOI) IS NOT REQUIRED FOR THIS SITE SINCE THE OVERALL SITE AREA IS LESS THAN ONE ACRE IN SIZE.

Stantec
Stantec Consulting Services Inc.
380 Park Place Blvd, Suite 300
Clearwater, Florida 33759
www.stantec.com
Tel. 727.531.3505
Fax. 727.431.1777

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Revision | By | Appd. | YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA

SAFETY HARBOR PIER
RPLACEMENT PROJECT

Title
STORMWATER POLLUTION PREVENTION PLAN

Permit-Seal

Christopher P. Gamache, PE
Lic. No.: 82122

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

Project Number: 238201804
SCALE: N/A

MPR	TRH	CPG	2/3/2023
Dwn.	Dsgn.	Chkd.	YY.MM.DD

Drawing No. C1.02
Revision Sheet
3 of 7

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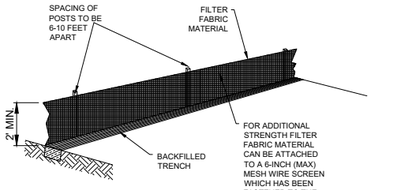
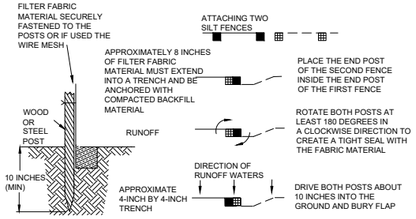
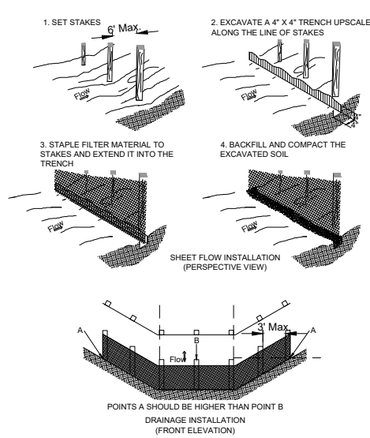
2023/02/03 2:16 PM By: Christopher Gamache

ORIGINAL SHEET - ANSI D (22x34)

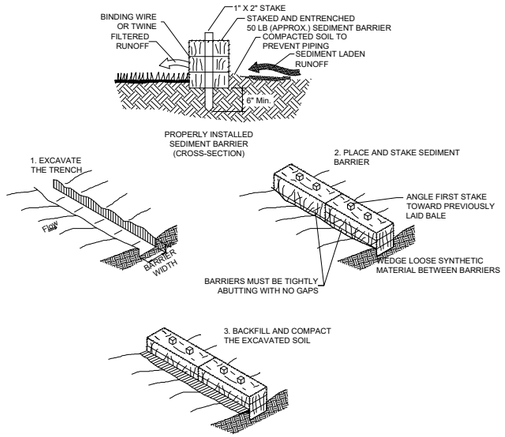






INSTALLING A FILTER FABRIC SILT FENCE

SCALE: N.T.S.



TEMPORARY SYNTHETIC SEDIMENT BARRIER

SCALE: N.T.S.

NOTES:
1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%)
2. USE 2"x 4" WOOD OR EQUIVALENT METAL STAKES. (3 FT. MIN. LENGTH)
3. INSTALL 2"x 4" WOOD TOP FRAME TO INSURE STABILITY.
4. THE TOP OF THE FRAME (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

SPECIFIC APPLICATION
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS IN A RELATIVELY FLAT AREA (SLOPE NO GREATER THAN 5%) WHERE THE INLET SHEET OF OVERLAND FLOWS (NOT EXCEEDING 1 C.F.S.) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

TEMPORARY SEDIMENT BARRIER AT DROP INLET

SCALE: N.T.S.

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5%) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 CFS) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS STREET OR HIGHWAY MEDIANS.

TEMPORARY SYNTHETIC SEDIMENT BARRIER AT STORM DRAIN DROP INLET

SCALE: N.T.S.

EROSION AND SEDIMENTATION CONTROL NOTES

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL AND PREVENT EROSION AND THE TRANSPORTATION OF SEDIMENT TO SURFACE DRAINS AND OUTFALLS. REFER TO CONSTRUCTION PLANS, DETAILS, SPECIFICATIONS AND APPROVED PERMITS FOR DETAILS. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY REACH SIX INCHES ON AN EROSION DEVICE.
2. DURING THE CONSTRUCTION OF DRAINAGE STRUCTURES, AND OTHER STRUCTURES REQUIRING EXCAVATION, THE CONTRACTOR SHALL PLACE APPROVED BARRIERS OR OTHER APPROVED DEVICES AROUND SUCH STRUCTURES TO PREVENT EROSION AND THE MIGRATION OF SEDIMENT TO POINTS OUTSIDE THE CONSTRUCTION AREA. THE APPROVED BARRIERS OR OTHER APPROVED DEVICES SHALL BE PLACED IN ACCORDANCE WITH REQUIREMENTS OF THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, FDEP, OR AS DIRECTED BY THE ENGINEER.
3. REQUIRED EROSION CONTROL MEASURES MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. FAILURE TO INSTALL OR PROPERLY MAINTAIN REQUIRED EROSION CONTROL WILL RESULT IN ENFORCEMENT ACTION. ALL EROSION CONTROL MEASURES, SAND, SILT, AND DEBRIS SHALL BE REMOVED FROM ALL DRAINAGE PIPES AND STRUCTURES AFTER CONSTRUCTION HAS BEEN COMPLETED AND PRIOR TO COUNTY FINAL WALK-THROUGH.
4. OUTFALL PROTECTION - PROJECT PIPE OR DITCH DISCHARGES INTO OFF-SITE OUTFALLS SHALL BE INSPECTED DAILY FOR POSSIBLE SEDIMENT BUILDUP OR TRANSPORT. OUTFALLS SHALL BE PROTECTED THROUGH USE OF EROSION CONTROL FEATURES AS NECESSARY TO CONTAIN ANY SEDIMENT LOSS TO THE IMMEDIATE AREA OF THE PROJECT. ANY SEDIMENT BUILDUP OR TRANSPORT OFF-SITE SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMEDY. THE CONTRACTOR SHALL USE APPROPRIATE MEASURES AS DIRECTED BY THE PROJECT ENGINEER FOR OUTFALL PROTECTION.
5. APPROVED BARRIERS (OR OTHER APPROVED SEDIMENT CONTROL DEVICES): THESE SHALL BE PLACED AT THE BASE OF ANY SLOPE WHERE A RAINFALL EVENT COULD ERODE A SLOPE AND TRANSPORT SEDIMENTS OFF-SITE. APPROVED BARRIERS SHALL BE DOUBLE STAKED IN ACCORDANCE WITH THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL OR FDEP. IF EROSION DEPOSITS REACH THE TOP ELEVATION OF EXISTING APPROVED BARRIERS, THEN SEDIMENTS SHOULD BE REMOVED. ANY DAMAGED OR INEFFECTIVE APPROVED BARRIERS ARE TO BE REPLACED WITH NEW ONES. THE LOCATION AND INSTALLATION OF APPROVED BARRIERS SHALL BE AS DIRECTED BY THE PROJECT ENGINEER.
6. BACK OF SIDEWALK INLETS OR MEDIAN INLETS: THESE SHALL BE PROTECTED FROM SEDIMENT INTAKE UNTIL PROJECT IS COMPLETE. ELEVATION OF GROUND OUTSIDE INLET TOP SHALL NOT BE HIGHER THAN INLET TOP. APPROVED BARRIERS OR OTHER APPROVED SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AROUND INLET TOP. A SECOND ROW OF APPROVED BARRIERS OR OTHER APPROVED SEDIMENT CONTROL DEVICES SHALL BE PLACED AROUND INLET APPROXIMATELY 4" OUTSIDE FIRST ROW. BETWEEN ROWS THERE SHALL BE A DEPRESSION TO ACT AS A SEDIMENT BASIN. COMPLETED INLETS IN PAVED AREAS SHALL ALSO BE PROTECTED WITH A SINGLE LINE OF APPROVED BARRIERS OR OTHER APPROVED SEDIMENT CONTROL DEVICES TO PREVENT SEDIMENT INTAKE FROM OTHER AREAS.
7. STOCKPILED MATERIALS SHALL BE PROTECTED BY COVER, APPROVED BARRIERS OR OTHER APPROVED SEDIMENT CONTROL DEVICES.
8. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 3 DAYS AFTER 1/2" RAIN EVENT DISTURBANCE.
9. SEDIMENT TRAPPING MEASURES: SEDIMENT BASINS AND TRAPS, PERIMETER BERMS, FILTER FENCES, BERMS, SEDIMENT BARRIERS, VEGETATIVE BUFFERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT AND/OR PREVENT THE TRANSPORT OF SEDIMENT INTO WATERS OF THE STATE OR NEIGHBORING PROPERTIES SHALL BE INSTALLED, CONSTRUCTED OR, IN THE CASE OF VEGETATIVE BUFFERS, PROTECTED FROM DISTURBANCE, AS A FIRST STEP IN THE LAND ALTERATION PROCESS.
10. CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE NECESSARY DEWATERING PERMITS FROM THE LOCAL WATER MANAGEMENT DISTRICT OR OTHER REGULATORY AGENCY.
11. A DEWATERING PLAN MUST BE SUBMITTED AND APPROVED BY THE APPLICABLE GOVERNING AGENCY PRIOR TO DISCHARGE.
12. WHERE PUMPS ARE TO BE USED TO REMOVE TURBID WATER FROM THE CONSTRUCTION AREA, THE WATER SHALL BE TREATED TO REDUCE TURBIDITY TO STATE WATER QUALITY STANDARDS PRIOR TO DISCHARGE TO THE WETLANDS. TREATMENT METHODS INCLUDE, FOR EXAMPLE, TURBID WATER BEING PUMPED INTO GRASSED SWALES OR APPROPRIATE VEGETATED AREAS (OTHER THAN UPLAND PRESERVATION AREAS AND WETLAND BUFFERS), SEDIMENTS BASINS, OR AREAS CONFINED BY AN APPROPRIATE ENCLOSURE SUCH AS TURBIDITY BARRIERS, AND KEPT CONFINED UNTIL ITS TURBIDITY LEVEL MEETS STATE WATER QUALITY STANDARDS.
13. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION, OR OTHER ACCEPTABLE METHODS.
14. THERE IS TO BE NO DISCHARGE (I.E. PUMPING, SHEET FLOW, SWALE, DITCH, ETC.) INTO EXISTING DITCHES OR CANALS WITHOUT THE USE OF SETTLING PONDS OR DEVICES. IF THE CONTRACTOR DESIRES TO DISCHARGE INTO EXISTING DITCHES OR CANALS, A SETTLING PLAN PREPARED BY THE CONTRACTOR MUST BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD AND LOCAL REGULATORY AGENCY PRIOR TO CONSTRUCTION.
15. WHERE APPLICABLE, SOIL TRACKING PREVENTION DEVICES SHALL BE PROVIDED AND MAINTAINED PER THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL OR FDEP.
16. THE EROSION CONTROL DEVICE QUANTITIES SHOWN ON THE BID FORMS ARE ESTIMATES OF THE ACTUAL QUANTITIES THAT MAY BE ENCOUNTERED DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SPECIFY ACTUAL QUANTITIES AND COSTS ASSOCIATED WITH THIS SPECIFIC EROSION CONTROL IMPLEMENTATION SCHEDULE. EROSION CONTROL ITEMS MAY BE ADDED OR DELETED FROM THE PAY ITEM LIST AS THE EROSION CONTROL IMPLEMENTATION SCHEDULE PROVIDED BY THE CONTRACTOR IS MODIFIED TO MEET SITE SPECIFIC CONDITIONS.
17. ALL EROSION CONTROL FENCES, BARRIERS, AND SILTATION DEVICES SHALL BE ERECTED PRIOR TO ANY LAND ALTERATIONS, SHALL BE MAINTAINED IN GOOD WORKING ORDER DURING CONSTRUCTION, AND REMOVED FOLLOWING SOIL STABILIZATION AND FINAL DRESSING. BUILT-UP SEDIMENT WILL BE REMOVED FROM SILT FENCES AND STAKED TURBIDITY BARRIERS WHEN IT HAS REACHED ONE THIRD THE HEIGHT OF THE FENCE/BARRIER. STOCKPILE AREAS SHALL INCLUDE SILT FENCE AROUND THE PERIMETER.
18. THE CONTRACTOR SHALL NOT RESTRICT OR BLOCK THE EXISTING DRAINAGE FLOW OVERLAND OR WITHIN RESHAPED SWALES. FLOW WITHIN EXISTING DRAINAGE PIPES SHALL BE MAINTAINED AT ALL TIMES. STORMWATER WILL BE CONVEYED VIA EXISTING SWALES, DITCHES, OR PROPOSED DITCHES, EXISTING AND PROPOSED STORM SEWERS.
19. DURING DEWATERING OPERATIONS, THE CONTRACTOR SHALL NOT DISCHARGE DIRECTLY TO RECEIVING WATERS, EXISTING CONVEYANCES TO RECEIVING WATERS, OR WETLAND SYSTEMS. TEMPORARY SEDIMENT BASINS, TRAPS, OR SILTATION REDUCTION DEVICES SHALL BE UTILIZED TO COLLECT THE DISCHARGE FROM DEWATERING ACTIVITIES TO ELIMINATE THE POTENTIAL FOR OFF-SITE SEDIMENT TRANSPORT AND TO INSURE THAT DIRECT DISCHARGE DOES NOT OCCUR.
20. BANKS SHALL BE PROTECTED FROM EROSION OR COLLAPSE DURING CONSTRUCTION. BANK PROTECTION MATERIAL SHALL BE CAREFULLY PLACED FROM THE BANK AND NOT DUMPED FROM ABOVE IN AN UNCONTROLLED MANNER. EROSION CONTROL FABRIC SHALL BE USED FOR EROSION PROTECTION WHERE SOD WILL NOT HOLD OR BECOME ESTABLISHED IN TIME TO PROTECT THE BANKS. UNLESS OTHERWISE SPECIFIED IN THE PLANS, UPON COMPLETION OF CONSTRUCTION, ALL BANKS AND WATERWAYS SHALL BE RESTORED TO THEIR PRE- CONSTRUCTION CONFIGURATION AND PROTECTION FROM EROSION.
21. IF APPLICABLE, THE CONTRACTOR SHALL BE RESSPONSIBLE FOR PROTECTING POND FILTRATION SYSTEMS FROM BEING CLOGGED UNTIL SAFETY HARBOR DETERMINES THE CONSTRUCTION IS COMPLETE. IF FILTER MATERIAL IS CONTAMINATED, IT SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
22. CONTRACTOR TO COORDINATE WITH LOCAL MUNICIPALITY REGARDING PREPARATION AND PERMITTING WITHIN THE NPDES PROGRAM.

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Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA

SAFETY HARBOR PIER
RPLACEMENT PROJECT

Title
EROSION CONTROL

Permit-Seal

Christopher P. Gamache, PE
Lic. No.: 82122

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Project Number:	238201804		
SCALE:	N/A		
MPR	TRH	CPG	2/3/2023
Dwn.	Dsgn.	Chkd.	YY.MM.DD

Drawing No. C1.03
Revision Sheet 4 of 7

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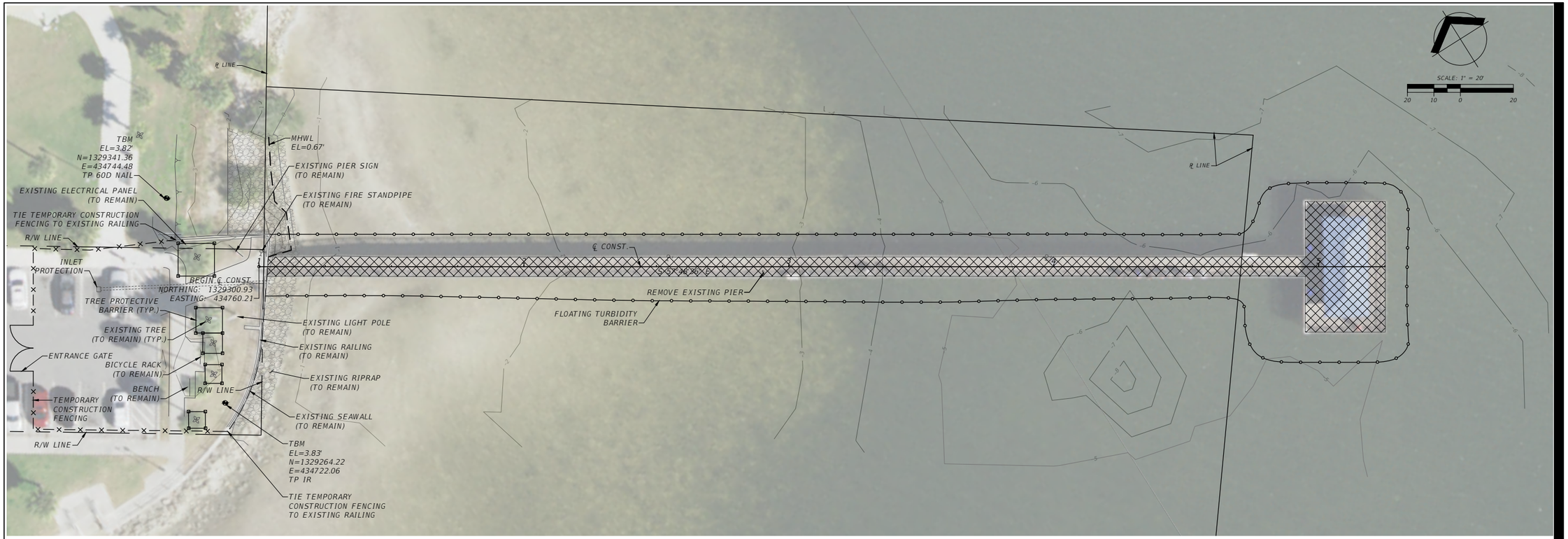
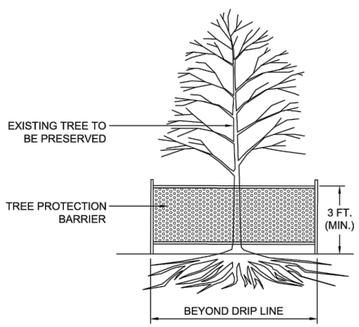
2023/02/03 2:16 PM By: Christopher Gamache

ORIGINAL SHEET - ANSI D (22x34)



DEMOLITION PLAN

SCALE: 1" = 20'



GENERAL NOTES:

1. A TEMPORARY PROTECTIVE BARRIER SHALL BE PLACED AT THE DRIP LINE OF THE TREE(S) TO BE SAVED. THE PROTECTIVE BARRIER SHALL BE APPROVED BY THE CITY ARBORIST AND REMAIN IN PLACE UNTIL LAND ALTERATION, SITE CLEARING, AND CONSTRUCTION ACTIVITIES ARE COMPLETE.
2. FOR (2) INCH CALIPER TREES OR SMALLER, THE PROTECTIVE RADIUS SHALL BE A MINIMUM OF (6) FOOT DIAMETER.
3. THE TEMPORARY PROTECTIVE BARRIER SHALL COMPLETELY ENCIRCLE THE TREE(S) CREATING A PROTECTIVE RADIUS AROUND THE TREE(S) TO BE SAVED. IF THE DRIP LINE OF THE TREE(S) CANNOT BE BARRICADED DUE TO CONSTRUCTION ACCESS THE PROTECTIVE BARRIER SHALL BE INSTALLED AT THE GREATEST EXTENT POSSIBLE WITH THE REMAINDER OF THE DRIP LINE TO BE MULCHED AT A DEPTH OF (5) TO (6) INCHES TO PREVENT COMPACTION OF THE ROOT SYSTEM DURING CONSTRUCTION ACTIVITIES. MULCH TO BE REMOVED FOLLOWING THE COMPLETION OF CONSTRUCTION ACTIVITIES.
4. AT A MINIMUM, THE TEMPORARY PROTECTIVE BARRIER SHALL BE (3) FEET IN HEIGHT AND BE CONSTRUCTED OF (2) INCH x (2) INCH VERTICAL POSTS INSTALLED (6) INCHES BELOW GRADE. POSTS SHALL BE INSTALLED AT A MAXIMUM OF (10) FEET ON CENTER. AVOID DRIVING POSTS INTO MAJOR ROOTS. ORANGE MESH FENCING SHALL BE SECURELY ATTACHED TO POSTS ENCIRCLING THE TREE(S) AND DEFINING THE PROTECTIVE RADIUS.
5. FOR TREES (12) INCH DBH OR LARGER THE PROTECTIVE BARRIER SHALL BE CONSTRUCTED OF CHAIN LINK FENCING WITH POSTS INSTALLED AT A MAXIMUM OF (10) FEET ON CENTER.
6. DEAD TREES, SCRUB, OR UNDERGROWTH SHALL BE CUT FLUSH WITH ADJACENT GRADE. THERE WILL BE NO SOIL DISTURBANCE WITHIN THE PROTECTIVE BARRIER OF TREES TO BE PRESERVED.
7. TREATMENT OF ROOTS EXPOSED DURING CONSTRUCTION: FOR ROOTS OVER (1) INCH IN DIAMETER DAMAGED DURING CONSTRUCTION, MAKE A CLEAN STRAIGHT CUT TO REMOVE DAMAGED PORTION OF ROOT. ALL EXPOSED ROOTS SHOULD BE TEMPORARILY COVERED WITH (2) INCH MINIMUM DEPTH DAMP MULCH AS SOON AS POSSIBLE TO PREVENT DRYING.
8. NO EQUIPMENT OR MACHINERY SHALL BE USED WITHIN THE PROTECTIVE BARRIER. WORK WITHIN THE PROTECTIVE BARRIER SHALL BE DONE MANUALLY.
9. NO STOCKPILING OF MATERIALS, VEHICULAR TRAFFIC, OR STORAGE IS ALLOWED WITHIN THE LIMIT OF THE PROTECTIVE BARRIER.

FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS FOR DENSITY OR VALUE BASED ON TREE PROTECTIVE BARRIER ZONE

CITY OF SAFETY HARBOR
Engineering Department
750 Main Street, Safety Harbor, FL 34695
Phone (727) 724-1555

TREE PROTECTIVE BARRIER

REVISIONS	
BY	DATE
BD	11/01/2017
BD	12/31/2019
SCALE: N.T.S.	
DATE:	APRIL 2015
DETAIL NUMBER:	LA1

LEGEND

- TEMPORARY CONSTRUCTION FENCE
- TREE PROTECTIVE BARRIER
- FLOATING TURBIDITY BARRIER TYPE
- PROPERTY LINE LINE
- MEAN HIGH WATER ELEVATION (MHWL)
- RIGHT-OF-WAY LINE
- EXISTING RIP RAP
- AREA OF EXISTING PIER REMOVAL

NOTES:

1. EXISTING PIER PLAN AREA = 4332 FT^2
2. FLOATING TURBIDITY BARRIER SHALL BE IN PLACE PRIOR TO ANY IN-WATER WORK.

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Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA
SAFETY HARBOR PIER
RPLACEMENT PROJECT

Title
DEMOLITION PLAN

Permit-Seal

Christopher P. Gamache, PE
Lic. No.: 82122

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Project Number: 238201804
SCALE: N/A

Dwn.	Chkd.	Dsgn.	YY.MM.DD

Drawing No. C2.00
Revision Sheet
5 of 7

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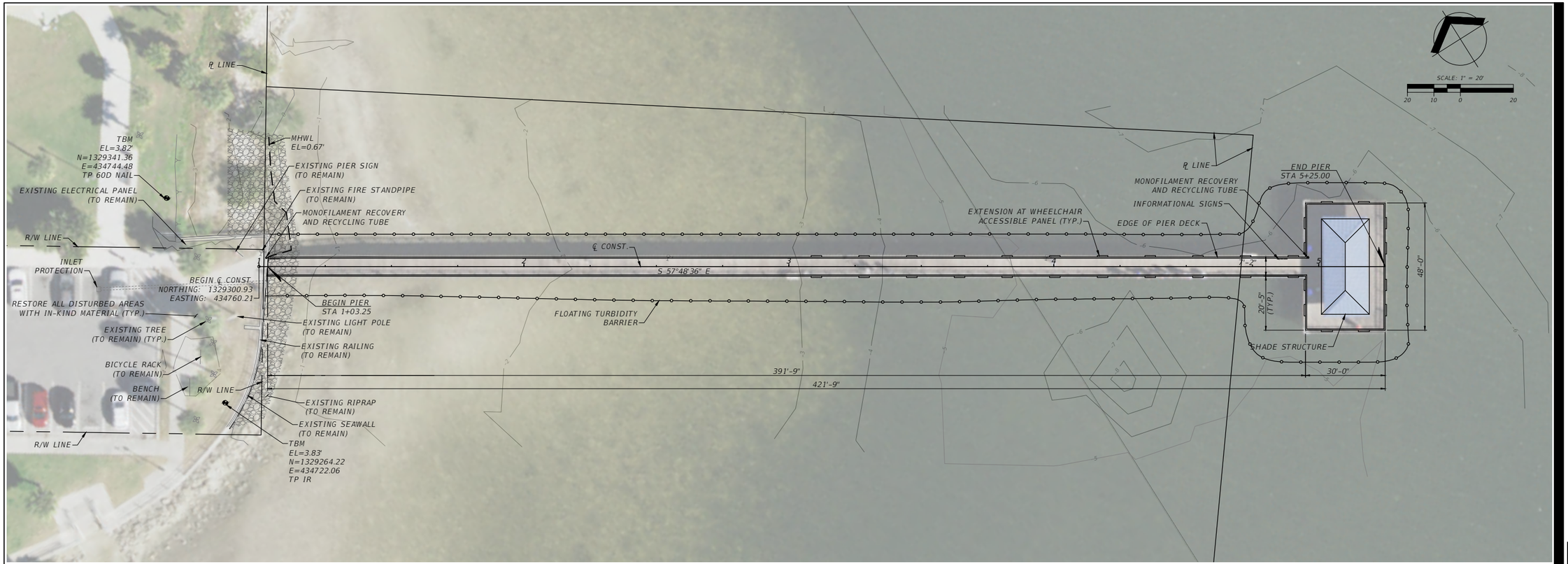
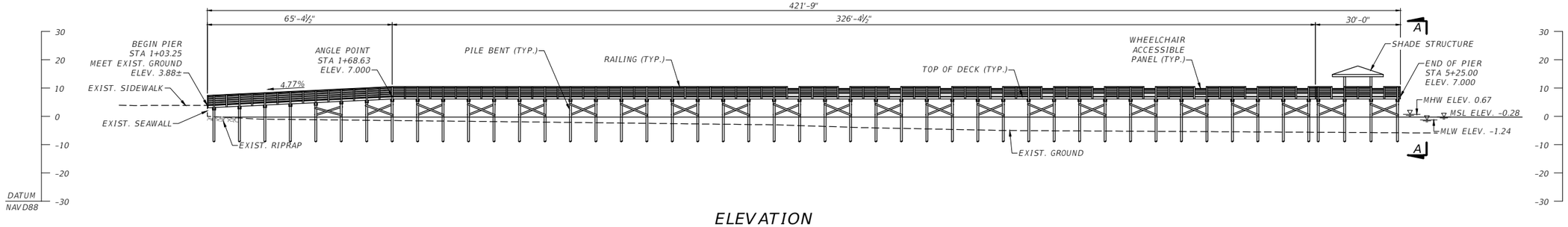
ORIGINAL SHEET - ANSI D (22x34)



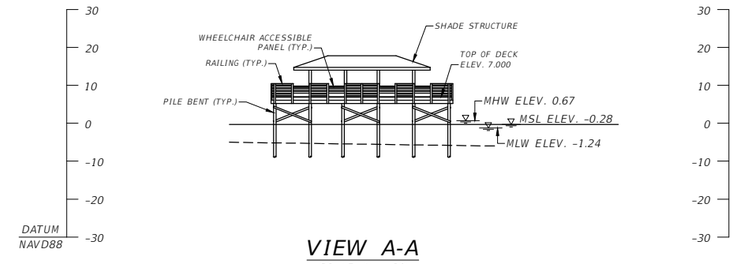
GENERAL PLAN

SCALE: 1" = 20'



ELEVATION

SCALE: 1" = 20'



VIEW A-A

SCALE: 1" = 20'

NOTES:

1. PROPOSED PIER PLAN AREA = 4323 FT^2
2. FLOATING TURBIDITY BARRIER SHALL BE IN PLACE PRIOR TO ANY IN-WATER WORK.
3. SEE SHEET C2.00 FOR LEGEND.

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Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA
SAFETY HARBOR PIER
RPLACEMENT PROJECT

Title
GENERAL PLAN AND ELEVATION

Permit-Seal

Christopher P. Gamache, PE
Lic. No.: 82122

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Project Number: 238201804
SCALE: AS SHOWN

Dwn.	Chkd.	Dsgn.	YY.MM.DD

Drawing No. C3.00
Revision Sheet
6 of 7

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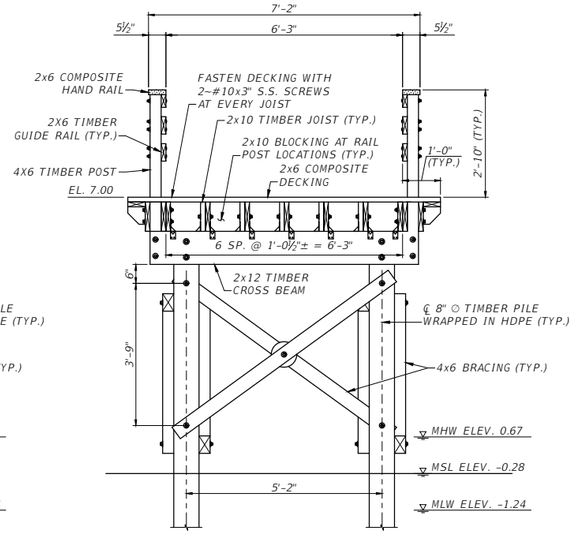
2023/02/03 2:17 PM By: Christopher Gamache

ORIGINAL SHEET - ANSI D (22x34)

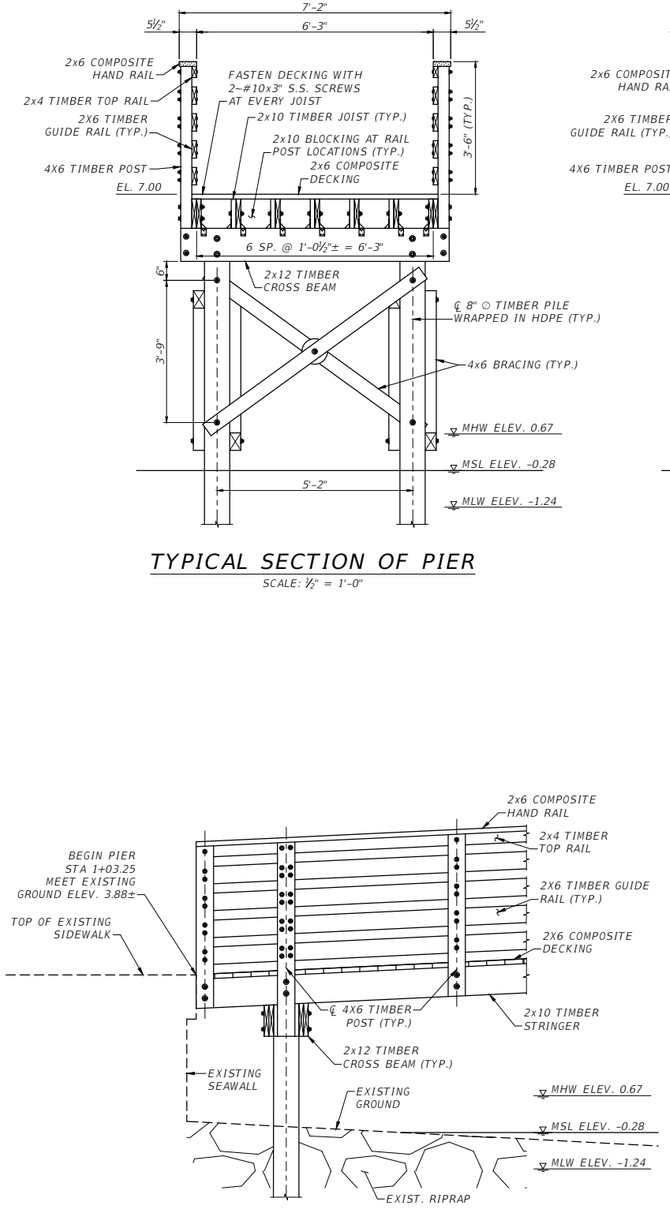
TYPICAL SECTION OF PIER

SCALE: ½" = 1'-0"



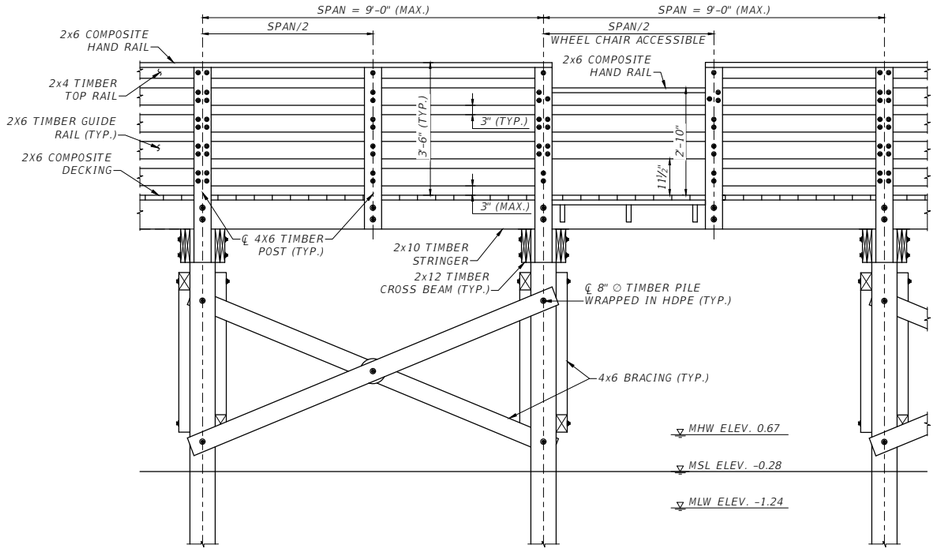
SECTION OF PIER AT ACCESSIBLE RAIL

SCALE: ½" = 1'-0"



ELEVATION OF PIER AT SEAWALL

SCALE: ½" = 1'-0"



TYPICAL ELEVATION OF PIER

SCALE: ½" = 1'-0"

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Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA

SAFETY HARBOR PIER
RPLACEMENT PROJECT

Title
FRAMING DETAILS

Permit-Seal

Christopher P. Gamache, PE
Lic. No.: 82122

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Project Number: 238201804
SCALE: AS SHOWN

Dwn.	Chkd.	Dsgn.	YY.MM.DD

Drawing No. C3.01
Revision Sheet
7 of 7

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2023/02/03 2:17 PM By: Christopher.Gamache

ORIGINAL SHEET - ANSI D (22x34)

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, JACKSONVILLE DISTRICT
701 SAN MARCO BOULEVARD
JACKSONVILLE, FLORIDA 32207-8175

June 6, 2024

Regulatory Division
West Permits Branch
Tampa Section
SAJ-2013-00334 (NWP-RSS)
Pier Replacement / Safety Harbor

Jamie Ahrens
City of Safety Harbor
1200 Railroad Ave
Safety Harbor, FL 34695
Sent via email: cahrens@cityofsafetyharbor.com

Dear City of Safety Harbor c/o Jamie Ahrens:

The U.S. Army Corps of Engineers (Corps) has completed the review of your application for a Department of the Army permit received on February 7, 2023. Your application was assigned file number SAJ-2013-00334. A review of the information and drawings provided indicates that the proposed work would result in the removal of the existing Safety Harbor Fishing Pier and replace it with a new fishing pier, constructed within 5 feet (ft) of the existing pier. The new pier will consist of a 7.17-ft by 39.75-ft walkway and connect to a 30-ft by 48-ft terminal platform. The terminal platform will have an open-sided shelter with a roof, which will measure 16.33-ft by 36.0-ft. The pier will be positioned 6.32 ft above the mean high-water level (MHWL) and decking will be spaced 0.25-inches. No mooring will be authorized on the pier and there are no wet or dry slips proposed for this project. A total of 112 10-inch diameter wood pilings will be installed via impact hammer. No more than four (4) pilings will be installed per day. The total project will encompass an area of approximately 4323 square feet. The activities subject to this permit are authorized pursuant to authorities under Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 403). The project is located in Old Tampa Bay at the Safety Harbor Fishing Pier located near the terminus of Veterans Memorial Ln, in Section 03, Township 29 South, Range 16 East, Safety Harbor, Pinellas County, Florida. The site is located at approximately 27.988596 N, -82.685459.

Your project, as depicted on the enclosed drawings **(Attachment 1)**, is authorized by Nationwide Permit (NWP) 3 (Maintenance). **This verification is valid until March 14, 2026.** In order for this NWP authorization to be valid, you must ensure that the work is performed in accordance with the Nationwide Permit General Conditions, the Jacksonville District Regional Conditions, and the General and Project-Specific Special Conditions listed below. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant NWP is modified or revoked, you will have 12 months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP.

You can access the U.S. Army Corps of Engineers' (Corps) Jacksonville District's Regulatory Source Book webpage for links to view NWP information at: https://www.saj.usace.army.mil/Missions/Regulatory/Source-Book/. Please be aware this Internet address is case sensitive and should be entered as it appears above. Once there, you will need to select "Nationwide Permits." Among other things, this part of the Source Book contains links to the federal register containing the text of the pertinent NWP authorization and the associated NWP general conditions, as well as separate links to the regional conditions applicable to the pertinent NWP verification.

You must comply with all of the special and general conditions for NWP-3, including any project-specific conditions included in this letter and all conditions incorporated by reference as described above.

General Conditions:

1. The time limit for completing the work authorized ends on **March 14, 2026**.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity, or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort of if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit you must obtain the signature of the new owner on the attached transfer form and forward a copy to this office to validate the transfer of this authorization **(Attachment 2)**.

5. You must allow a representative from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Project Specific Special Conditions:

The following project specific special conditions are included with this verification:

1. **Reporting Address:** The Permittee shall submit all reports, notifications, documentation, and correspondence required by the general and special conditions of this permit to either (not both) of the following addresses:

   a. For electronic mail (preferred): SAJ-RD-Enforcement@usace.army.mil (not to exceed 15 MB).
   b. For standard mail: U.S. Army Corps of Engineers, Regulatory Division, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232-0019.

   The Permittee shall reference this permit number, SAJ-2013-00334 (NWP-RSS), on all submittals.

2. **Commencement Notification:** Within 10 days from the date of initiating the work authorized by this permit, the Permittee shall submit a completed "Commencement Notification" form **(Attachment 3)**.

3. **Self-Certification:** Within 60 days of completion of the work authorized by this permit, the Permittee shall complete the attached "Self-Certification Statement of Compliance" form **(Attachment 4)** and submit it to the Corps. In the event that the completed work deviates in any manner from the authorized work, the Permittee shall describe the deviations between the work authorized by this permit and the work as constructed on the "Self-Certification Statement of Compliance" form. The description of any deviations on the "Self-Certification Statement of Compliance" form does not constitute approval of any deviations by the Corps.

4. **Cultural Resources/Historic Properties:**
   a. No structure or work shall adversely affect, impact, or disturb properties listed in the National Register of Historic Places (NRHP), or those eligible for inclusion in the NRHP.

   b. If, during permitted activities, items that may have archaeological or historic origin are observed the Permittee shall immediately cease all activities adjacent to the discovery that may result in the destruction of these resources and shall prevent his/her employees from further removing, or otherwise damaging, such resources. The applicant shall notify both the Florida Department of State, Division of Historical Resources, Compliance Review Section at (850)-245-6333 and the Corps, of the observations within the same business day (8 hours). Examples of submerged historical, archaeological or cultural resources include shipwrecks, shipwreck debris fields (such as steam engine parts, or wood planks and beams), anchors, ballast rock, concreted iron objects, concentrations of coal, prehistoric watercraft (such as log

"dugouts"), and other evidence of human activity. The materials may be deeply buried in sediment, resting in shallow sediments or above them, or protruding into water. The Corps shall coordinate with the Florida State Historic Preservation Officer (SHPO) to assess the significance of the discovery and devise appropriate actions. Project activities shall not resume without verbal and/or written authorization from the Corps.

c. Additional cultural resources assessments may be required of the permit area in the case of unanticipated discoveries as referenced in accordance with the above Special Condition and, if deemed necessary by the SHPO or Corps, in accordance with 36 CFR 800 or 33 CFR 325, Appendix C (5).
Based on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend, or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume on non-federal lands without written authorization from the SHPO for finds under his or her jurisdiction, and from the Corps.

d. In the unlikely event that unmarked human remains are identified on nonfederal lands; they will be treated in accordance with Section 872.05 Florida Statutes. All work and ground disturbing activities within a 100-meter diameter of the unmarked human remains shall immediately cease and the Permittee shall immediately notify the medical examiner, Corps, and State Archaeologist within the same business day (8-hours). The Corps shall then notify the appropriate SHPO. Based on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend, or revoke the permit in accordance with 33 CFR Part 325.7. Such activity shall not resume without written authorization from the SHPO and from the Corps.

5. **Assurance of Navigation and Maintenance:** The Permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structures or work herein authorized, or if in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the U.S. Army Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

6. **Biological Opinion:** This permit does not authorize the Permittee to take an endangered species, in particular the green sea turtle (North Atlantic Distinct Population Segment [DPS] and South Atlantic DPA), Kemp’s ridley sea turtle, hawksbill sea turtle, leatherback sea turtle, loggerhead sea turtle (Northwest Atlantic DPS), smalltooth sawfish (U.S. DPS), Gulf sturgeon (Atlantic sturgeon, Gulf subspecies), and giant manta ray.

In order to legally take a listed species, the Permittee must have separate authorization under the Endangered Species Act (ESA) (e.g., an ESA Section 10 permit, or a BO under ESA Section 7, with "incidental take" provisions with which you must comply). The enclosed NMFS Biological Opinion (BO) **(Attachment 5)** contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with the incidental take statement set forth in the BO.

Authorization under this permit is conditional upon compliance with all of the mandatory terms and conditions and reasonable and prudent measures associated with the incidental take statement in the enclosed BO, which are incorporated by reference in this permit. Failure to comply with the terms and conditions and reasonable and prudent measures associated with the incidental take statement set forth in the BO, would constitute noncompliance with this permit. In addition, failure to comply with the terms and conditions and reasonable and prudent measures associated with the incidental take statement set forth in of the BO, where a take of the listed species occurs, would constitute an unauthorized take. NMFS is the appropriate authority to determine compliance with the terms and conditions of its BO, and with the ESA.

Terms and Conditions (T&Cs) of the NMFS BO are as follows:

a. **Reporting Address:** The Permittee shall submit all incidental take reports, annual summaries, documentation, and correspondences required by the T&Cs of this BO to:

    i. For electronic mail (preferred): nmfs.ser.esa.consultations@noaa.gov.
    ii. Copies of annual summaries shall be submitted via standard mail to:
    U.S. Army Corps of Engineers
    Jacksonville District Regulatory Branch, Compliance Section
    Attn: Chief of Compliance
    701 San Marco Boulevard
    Jacksonville, Florida 32207-8175.

    The Permittee shall reference this BO by the NMFS tracking number (SERO-2023-01346 Safety Harbor Fishing Pier) and date of issuance (16 May 2024).

b. **Incidental Take Report:** The Permittee shall report all known angler-reported hook-and-line captures of ESA-listed species and any other takes of ESA-listed species to the NMFS Southeast Regional Office (SERO) PRD and to the Corps:

    i. If and when the Permittee becomes aware of any known reported capture, entanglement, stranding, or other take, the applicant must report it to NMFS SERO PRD via the NMFS SERO Endangered

Species Take Report Form (https://forms.gle/85fP2da4Ds9jEL829).

ii. The form shall be completed for each individual known reported capture, entanglement, stranding, or other take incident. The form must include the species name, state the species, date and time of the incident, general location and activity resulting in capture, condition of the species, size of the individual, behavior, identifying features, and any photos that may have been taken.

c. **Annual Summary Report:** The Permittee must submit an annual summary report of capture, entanglement, stranding, or other take of ESA-listed species to NMFS SERO PRD by email:

i. The report must contain the following information: the total number of ESA-listed species captures, entanglements, strandings, or other take that was reported at or adjacent to the pier included in this BO.
ii. The summary report must contain all information for any sea turtles taken to a rehabilitation facility holding an appropriate USFWS Native Endangered and Threatened Species Recovery permit.
iii. The summary report shall be submitted even when there has been no reported take of ESA-listed species.
iv. The summary report will include current photographs of educational signs and recycling bins required in T&Cs (d), below, and records of the clean-ups required in T&C (e) below.
v. **The first summary report will be submitted by January 31, 2025**, and will cover the period from pier opening until December 31, 2025. Thereafter, reports will be prepared every year, covering the prior rolling three-year time period, and emailed no later than January 31 of any year. Copies of annual summary reports must be submitted to the Corps required by T&C (a) above.

d. **Protected Species Educational Signs:** The Permittee shall install and maintain the following NMFS Protected Species Educational Signs: “Save Dolphins, Sea Turtles, Sawfish, and Manta Ray” and “Do Not Catch or Harass Sea Turtles”.

i. Signs will be posted at least at the entrance to and terminal end of the pier.
ii. Signs will be installed prior to opening the pier for public use.
iii. Photographs of the installed signs will be emailed to NMFS’s SERO.
iv. Current photographs of the signs will be included in each annual report required by T&C (c.iv), above.

e. **Monofilament Recycling Bins and Trash Receptacles:** The Permittee shall install and maintain monofilament recycling bins and trash receptacles at the pier in order to reduce the probability of trash and debris entering the water.

i. Monofilament recycling bins and trash receptacles will be installed prior to opening the pier for public use.
ii. Photographs of the installed bins will be emailed to NMFS's SERO.
iii. The Permittee must regularly empty the bins and trash receptacles and make sure they are functional and upright.
iv. Current photographs of the bins will be included in each annual report required by T&C c.iv, above.

f. **Annual Cleanup:** The permittee shall perform at least one (1) in-water and out-of-water annual cleanup around the pier to remove derelict fishing line and associated gear from around the pier structure.

i. A record of each cleaning event will be submitted in the annual report required by T&C (a) above.

7. **Protected Species Construction Conditions:** The Permittee shall comply with National Marine Fisheries Service's "Protected Species Construction Conditions, NOAA Fisheries Southeast Regional Office" dated May 2021 **(Attachment 6)**.

8. **Manatee Conditions:** The Permittee shall comply with the "Standard Manatee Conditions for In-Water Work – 2011". The most recent version of the Manatee Conditions must be utilized **(Attachment 7)**.

9. **Work Vessel Anchoring: Attachment 8** , Drawing 1 of 1 identifies the location of submerged aquatic vegetation documented at the project site. This permit does not authorize construction work vessels anchoring or spudding down in areas where submerged aquatic vegetation is present.

10. **Post Construction Aquatic Resource Survey:** An aquatic resource survey must be completed in compliance with Guidance on Surveys for Potential Impacts to Submerged Aquatic Vegetation per the Office of Resilience and Coastal Protection Florida Department of Environmental Protection (https://floridadep.gov/rcp/beaches-inlets-ports/documents/guidance-surveys-potential-impacts-submerged-aquatic-vegetation).

a. The permittee is required to complete an annual survey between June 1 and September 30 for three (3) to five (5) years beginning the first growing season after construction has been completed.

b. The permittee shall submit survey reports to the **Reporting Address**, detailed in **Special Condition 1** of this authorization.

c. Should the surveys indicate aquatic resources are adversely affected, either directly or indirectly, the permittee must submit a mitigation proposal

to the Corps within 60 days of completing the survey.

d. The mitigation proposal must include a functional assessment of the impacts, and the type of compensatory mitigation proposed (Mitigation Bank, In-lieu fee program credits, Permittee-Responsible Mitigation).

11. **Turbidity Barriers:** Prior to the initiation of any of the work authorized by this permit, the Permittee shall install floating turbidity barriers with weighted skirts that extend within define distance desired or use 1 foot of the bottom around all work areas that are in, or adjacent to, surface waters. The turbidity barriers shall remain in place and be maintained daily until the authorized work has been completed and turbidity within the construction area has returned to ambient levels. Turbidity barriers shall be removed upon stabilization of the work area.

This letter of authorization does not include conditions that would prevent the 'take' of a state-listed fish or wildlife species. These species are protected under sec. 379.411, Florida Statutes, and listed under Rule 68A-27, Florida Administrative Code. With regard to fish and wildlife species designated as species of special concern or threatened by the State of Florida, you are responsible for coordinating directly with the Florida Fish and Wildlife Conservation Commission (FWC). You can visit the FWC license and permitting webpage (http://www.myfwc.com/license/wildlife/) for more information, including a list of those fish and wildlife species designated as species of special concern or threatened. The Florida Natural Areas Inventory (http://www.fnai.org/) also maintains updated lists, by county, of documented occurrences of those species.

This letter of authorization does not give absolute Federal authority to perform the work as specified on your application. The proposed work may be subject to local building restrictions mandated by the National Flood Insurance Program. You should contact your local office that issues building permits to determine if your site is located in a flood-prone area, and if you must comply with the local building requirements mandated by the National Flood Insurance Program.

This letter of authorization does not preclude the necessity to obtain any other Federal, State, or local permits, which may be required.

Thank you for your cooperation with our permit program. The Corps' Jacksonville District Regulatory Division is committed to improving service to our customers. We strive to perform our duty in a friendly and timely manner while working to preserve our environment. We invite you to complete our automated Customer Service Survey at https://regulatory.ops.usace.army.mil/customer-service-survey/. Please be aware this Internet address is case sensitive and you will need to enter it exactly as it appears above. Your input is appreciated – favorable or otherwise.

Should you have any questions related to this NWP verification or have issues accessing the documents reference in this letter, please contact Rachel S. Somerville at the letterhead address above, via telephone at 904-232-1444, or via e-mail at Rachel.S.Somerville@usace.army.mil.

Sincerely,

Rachel S. Somerville
Biologist | Project Manager
Tampa Permits Section

Attachments (8):

ATTACHMENT 1: Permit Drawings (7 pages)
ATTACHMENT 2: Transfer Form (1 page)
ATTACHMENT 3: Commencement Notification (1 page)
ATTACHMENT 4: Self-certification (1 page)
ATTACHMENT 5: NMFS Biological Opinion (122 pages)
ATTACHMENT 6: Protected Species Construction Conditions (2 pages)
ATTACHMENT 7: Manatee Conditions (2 pages)
ATTACHMENT 8: Work Vessel Anchoring (1 page)

Cc (via email):

Katie Castor, Stantec, email: Kathleen.castor@stantec.com

SAFETY HARBOR PIER REPLACEMENT PROJECT

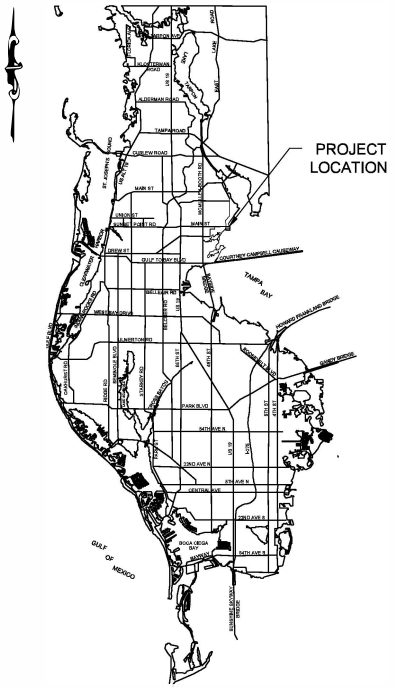
198 VETERANS MEMORIAL LANE PID: 032-3058-500.63-00-PR0057

PERMIT PLANS

FOR:

CITY OF SAFETY HARBOR

750 MAIN ST
SAFETY HARBOR, FL 34695



PINELLAS COUNTY MAP

SCALE: N.T.S.

SECTION 03 - TOWNSHIP 19 - RANGE 16 EAST
PINELLAS COUNTY, FLORIDA

LOCATION MAP

SCALE: N.T.S.

CITY COMMISSION	
JOE AYOUB	MAYOR
NANCY BESORE	VICE MAYOR
CARLOS DIAZ	COMMISSIONER
CLIFF MERZ	COMMISSIONER
ANDY STEINGOLD	COMMISSIONER
MATT SPOOR	CITY MANAGER

SHEET LIST TABLE		
SHEET NO.	DRAWING NO.	SHEET TITLE
1	C1.00	COVER SHEET
2	C1.01	GENERAL NOTES
3	C1.02	STORMWATER POLLUTION PREVENTION PLAN
4	C1.03	EROSION CONTROL
5	C2.00	DEMOLITION PLAN
6	C3.00	GENERAL PLAN AND ELEVATION
7	C3.01	FRAMING DETAILS

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
www.sunshine811.com

REFERENCE PLANS

CONTRACTOR TO REFERENCE THE FOLLOWING FOR CONSTRUCTION OF THIS PROJECT.

• M.E.P. PLANS:	MPS ENGINEERING	DATED:	P: 813-855-2721
• SURVEY:	SUNCOAST LAND SURVEYING	DATED: OCT. 21,2022	P: 813-854-1342

This item has been digitally signed and sealed by Christopher P. Gamache, PE on the date adjacent to the seal.

Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

AGENCY APPROVALS

AGENCY	PERMIT TYPE	DATE SUBMITTED	DATE OF PERMIT	PERMIT No.	EXPIRATION DATE
PINELLAS COUNTY	DREDGE & FILL				
SAFETY HARBOR	BUILDING DEVELOPMENT				
SWFWMD	TBD				
USACE	TBD				

Stantec
Stantec Consulting Services Inc.
380 Park Place Blvd, Suite 300
Clearwater, Florida 33759
Tel. 727.531.3505
Fax. 727.451.1777
www.stantec.com

The Contractor shall verify and be responsible for all dimensions. DO NOT scale the drawing - any errors or omissions shall be reported to Stantec without delay. The Contractor is responsible for the safety and stability of all temporary works and construction or use for any purpose other than that authorized by Stantec is forbidden.

No.	Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA
SAFETY HARBOR PIER
RPLACEMENT PROJECT

Title
COVER SHEET

Permit-Seal

Christopher P. Gamache, PE
Lic. No.: 82122

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

Project Number: 238201804
SCALE: N/A

Dsgn. YY.MM.DD
Drawing No. C1.00
Revision
Sheet 1 of 7

GENERAL NOTES

1. ALL CONTOURS & ELEVATIONS SHOWN HEREIN ARE IN FEET AND REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

2. ALL WORK IN THE VICINITY OF OPEN WATER AND / OR WETLANDS TO BE PERFORMED IN COMPLIANCE WITH THE ENVIRONMENTAL PERMITS FOR THE SITE. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY FINE RESULTING FROM VIOLATIONS OF PERMIT CONDITIONS.

3. SPECIAL CARE SHALL BE TAKEN TO PROTECT EXISTING TREES DESIGNATED TO REMAIN. TREE BARRIERS SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF SAFETY HARBOR STANDARDS.

4. REPLACE / REPAIR ALL IRRIGATION LINES, FITTINGS, VALVES, SPRINKLER HEADS, ETC. THAT MAY BE DAMAGED DURING CONSTRUCTION ACTIVITIES.

5. COORDINATE THE INSTALLATION OF ANY NEW / RELOCATED / MODIFIED UTILITIES WITH APPLICABLE UTILITY COMPANIES.

6. REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION RELATED ACTIVITIES TO AREAS OUTSIDE THE LIMITS OF CONSTRUCTION AND RESTORE TO ORIGINAL CONDITION. RESTORE ALL LANDSCAPE AREAS, GRASSED AREAS AND PAVEMENT AREAS OUTSIDE THE LIMITS OF CONSTRUCTION TO ORIGINAL CONDITION. PAVEMENT RESTORATION SHALL MATCH ORIGINAL ELEVATION TO ENSURE POSITIVE DRAINAGE AND INCLUDE RESTORATION OF PAVEMENT STRIPING / MARKINGS.

7. SOD ALL DISTURBED AREAS AFFECTED BY THEIR WORK WITH A GRASS TYPE THAT MATCHES EXISTING SOD. IN AREAS WHERE THERE IS NOT AN ESTABLISHED GRASS TYPE BAHIA SHALL BE USED.

8. ALL CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE CITY OF SAFETY HARBOR, PINELLAS COUNTY, FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT), AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, REGULATIONS, AND ORDINANCES. ALL SUCH COMPLIANCE SHALL BE AT THE CONTRACTOR'S SOLE EXPENSE.

9. THE PROJECT AREA LIES WITHIN FLOOD ZONE VE PER FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NUMBER 12103C0131H, EFFECTIVE OATE 8/24/2021. REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

10. THE OWNER / ENGINEER SHALL BE NOTIFIED IMMEDIATELY IF ANY UNEXPECTED SUBSURFACE CONDITIONS ARE ENCOUNTERED WHICH AFFECTS THE WORK.

11. PROVIDE AS-BUILT DRAWINGS SIGNED & SEALED BY A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF FLORIDA. FINAL AS-BUILT DRAWINGS MUST DEPICT ALL KNOWN EXISTING AND NEW UTILITIES INSTALLED IN CONJUNCTION WITH THIS DEVELOPMENT & SHALL BE PROVIDED TO OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILT DRAWINGS MUST CONTAIN THE MINIMUM INFORMATION REQUIRED FOR FINAL CERTIFICATIONS TO BE SUBMITTED TO APPLICABLE REVIEWING / PERMITTING AGENCIES.

12. THE RELOCATION OF EXISTING FACILITIES (ABOVEGROUND OR UNDERGROUND) AND RESTORATION TO ORIGINAL CONDITIONS (INCLUDING BUT NOT LIMITED TO EXISTING UTILITIES, SIGNAGE AND MARKING, PAVED SURFACES, AND LANDSCAPE / IRRIGATION) SHALL BE THE CONTRACTOR'S RESPONSIBILITIES IF SUCH ITEMS ARE IMPACTED DURING THE CONSTRUCTION PROCESS.

13. THE REMOVAL OF EXISTING UTILITIES SHALL BE COORDINATED WITH THE INSTALLATION OF THE PROPOSED UTILITIES TO ENSURE UNINTERRUPTED SERVICE.

14. TECHNICAL SPECIFICATIONS HAVE BEEN PREPARED FOR THIS PROJECT BY THE ENGINEER OF RECORD AND ARE INCLUDED WITH THESE PLANS BY REFERENCE. ALL CONSTRUCTION MATERIALS AND ACTIVITIES ARE TO BE IN CONFORMANCE WITH THESE SPECIFICATIONS. PLEASE CONTACT THE CITY OF SAFETY HARBOR'S ENGINEERING DEPARTMENT AT (727) 724-1555 FOR A COPY.

ELECTRICAL NOTES

1. ALL ELECTRICAL SERVICE SHALL BE INSTALLED UNDERGROUND. COORDINATE WITH THE MEP FOR SPECIFICATIONS / DETAILS / ROUTING.

2. ELECTRIC SERVICE TO POINTS OF CONNECTION TO BE PROVIDED BY UTILITY OWNER; COORDINATE WITH THE MEP FOR SPECIFICATIONS / DETAILS / ROUTING.

3. INSTALL PVC CONDUITS FOR ELECTRICAL AND TELEPHONE SERVICE (TO PROPERTY LINE) AND COORDINATE INSTALLATION OF SERVICES AND LIGHTING DESIGN WITH UTILITY AGENCY. COORDINATE WITH THE MEP FOR SPECIFICATIONS / DETAILS / ROUTING.

4. COORDINATE WITH UTILITY COMPANY FOR RELOCATION OF ANY POWER POLES WITHIN PROJECT AREA AND RIGHT-OF-WAYS.

5. EXERCISE EXTREME CARE IN NEW CONSTRUCTION AREAS TO AVOID IMPACTS TO HIGHLY SENSITIVE UTILITIES. CONTRACTOR TO COORDINATE WITH ALL UTILITY PROVIDERS PRIOR TO CONSTRUCTION COMMENCEMENT TO VERIFY UTILITY LOCATIONS WITHIN PROJECT AREA.

EROSION AND SEDIMENTATION CONTROL MEASURES

1. ALL PRACTICABLE AND NECESSARY EFFORT SHALL BE TAKEN DURING CONSTRUCTION TO CONTROL AND PREVENT EROSION AND TRANSPORT OF SEDIMENT MATERIAL TO INLETS, SURFACE DRAINS, WETLANDS AND LAKE AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RESTORATION EFFORTS THAT MAY BE REQUIRED.

2. FOR ALL EROSION CONTROL MEASURES REFER TO FDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, SECTION 104 (LATEST EDITION).

3. THE CONTRACTOR IS RESPONSIBLE FOR ANY FINES OR RESTITUTION OR CORRECTIVE MEASURES AS DEEMED NECESSARY BY THE LOCAL AGENCIES AS RESULT OF ANY EROSION CONTROL ISSUES THAT MAY ARISE DURING CONSTRUCTION.

4. THE INSTALLATION OF TEMPORARY EROSION CONTROL BARRIERS SHALL BE COORDINATED WITH THE CONSTRUCTION OF THE PERMANENT EROSION CONTROL FEATURES TO THE EXTENT NECESSARY TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL OF EROSION AND WATER POLLUTION THROUGHOUT THE LIFE OF THE CONSTRUCTION PHASE.

5. THE TYPE OF EROSION CONTROL BARRIERS USED SHALL BE GOVERNED BY THE NATURE OF THE CONSTRUCTION OPERATION AND SOIL TYPE THAT WILL BE EXPOSED. SILTY AND CLAYEY MATERIAL USUALLY REQUIRE SOLID SEDIMENT BARRIERS TO PREVENT TURBID WATER DISCHARGE, WHILE SANDY MATERIAL MAY NEED ONLY SILT SCREENS TO PREVENT EROSION. DIVERSION DITCHES OR SWALES MAY BE REQUIRED TO PREVENT TURBID STORM WATER RUNOFF FROM BEING DISCHARGED TO OTHER WATER BODIES. IT MAY BE NECESSARY TO EMPLOY A COMBINATION OF BARRIERS, DITCHES, AND OTHER EROSION / TURBIDITY CONTROL MEASURES IF CONDITIONS WARRANT.

6. PROVIDE ROUTINE MAINTENANCE OF PERMANENT AND TEMPORARY EROSION CONTROL FEATURES UNTIL THE PROJECT IS COMPLETE AND ALL BARED SOIL STABILIZED. SILTATION ACCUMULATIONS GREATER THAN THE LESSER OF 12 INCHES OR ONE-HALF THE DEPTH OF THE SILTATION CONTROL BARRIER SHALL BE IMMEDIATELY REMOVED AND PLACED IN UPLAND AREAS.

7. SWEEP ALL ADJACENT ROADWAYS AND PARKING AREAS THAT ARE AFFECTED BY THE CONSTRUCTION PROCESS ON A DAILY BASIS OR AS REQUIRED.

8. TAKE ALL REASONABLE MEANS TO ELIMINATE THE TRANSPORT OF DUST FROM THE PROJECT SITE. SPECIAL MEASURES, SUCH AS PERIODICALLY APPLYING WATER TO THE WORK SITE TO PREVENT DUST SHALL BE INCORPORATED INTO THE CONTRACTORS WORK PLAN.

9. INSPECT AND MAINTAIN ALL EROSION CONTROL DEVICES AND KEEP THEM IN GOOD CONDITION. CORRECT AND REPORT TO THE CITY ANY IMPACTS DUE TO EROSION OR FAILURE OF ANY EROSION CONTROL DEVICES IMMEDIATELY.

10. ANY DISCHARGE OF STORM WATER RUNOFF FROM THIS SITE SHALL BE THROUGH A CONTROL DEVICE TO CONTROL TURBIDITY AND SEDIMENT TRANSPORT. THIS INCLUDES THE DISCHARGE FROM ANY DEWATERING OPERATIONS. (IF NECESSARY) OFFSITE DISCHARGE OF PRODUCED GROUNDWATER FROM DEWATERING SHALL COMPLY WITH DEWATERING GUIDELINES FROM FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), F.A.C., 62-621(2).

11. NO DEBRIS SHALL BE ALLOWED TO ENTER THE EXISTING STORM OR SANITARY SEWER SYSTEMS.

12. ONCE CONSTRUCTION IS COMPLETE, ENSURE THE ON-SITE AND ADJACENT OFF-SITE STORM SYSTEMS ARE CLEAN AND CLEAR OF ANY SILTS OR DEBRIS THAT MAY HAVE WASHED OUT DURING THE CONSTRUCTION PROCESS.

13. EROSION CONTROL MEASURES ARE NOT TO BE REMOVED UNTIL ALL CONSTRUCTION IN THE AREA IS COMPLETE, LANDSCAPE HAS BEEN INSTALLED, ALL DISTURBED AREAS HAVE BEEN SODDED (OR SEEDING HAS TAKEN HOLD) AND ALL INSPECTIONS HAVE BEEN DONE.

SURVEY NOTES

1. THE EXISTING FEATURES SHOWN ON THESE PLANS HAVE BEEN OBTAINED FROM AN ELECTRONIC VERSION OF THE BOUNDARY + TOPOGRPAHIC SURVEY OF SAFETY HARBOR PIER PREPARED BY SUNCOAST LAND SURVEYING, INC. DATED 10-21-2022.

CERTIFICATION NOTES

1. SUBMIT AS-BUILT SURVEYS FOR ALL CIVIL UTILITIES TO THE ENGINEER OF RECORD FOR REVIEW OF CONFORMANCE TO THE APPROVED CONSTRUCTION PLANS. AS-BUILT SURVEYS ARE TO BE SIGNED AND SEALED BY A PROFESSIONAL SURVEYOR REGISTERED IN THE STATE OF FLORIDA.

2. AS-BUILTS ARE TO INCLUDE BUT NOT BE LIMITED TO ALL IMPROVEMENT INCLUDING SANITARY SEWER MANHOLE RIMS AND INVERTS, PIPE SIZES, LENGTHS, MATERIAL AND SLOPES; ALL WATER MAIN LOCATIONS INCLUDING METERS, FIRE HYDRANTS, FITTINGS AND GATE VALVES; ALL STORM INLET GRATE AND STORM MANHOLE RIMS AND INVERTS, PIPE SIZES, LENGTHS AND MATERIAL; ALL POND SLOPES FROM TOP OF BANK TO TOE OF SLOPE (INCLUDING GRADE BREAKS).

3. COORDINATE ALL TESTING REQUIRED BY THE GOVERNING MUNICIPALITIES, CONTRACT DOCUMENTS AND / OR TECHNICAL SPECIFICATIONS. NOTIFY THE ENGINEER OF RECORD AND THE LOCAL INSPECTOR AT LEAST 48 HOURS PRIOR CONDUCTING ANY TESTS FOR THEIR ATTENDANCE.

4. COORDINATE AND SCHEDULE ALL TESTING REQUIRED BY THE LOCAL AGENCIES, CONTRACT DOCUMENTS AND/OR TECHNICAL SPECIFICATIONS. NOTIFY THE ENGINEER AND THE INSPECTOR FOR THEIR ATTENDANCE. PLEASE NOTE THAT SEPARATE TESTS WILL BE REQUIRED FOR MASTER METERED PROJECTS: ONE FROM THE POINT OF CONNECTION TO THE METER ASSEMBLY AND ANOTHER FROM THE BACKSIDE OF THE METER TO WITHIN FIVE FEET OF ALL PROPOSED BUILDINGS.

CONSTRUCTION NOTES

1. VERIFY ALL EXISTING DIMENSIONS AND SITE CONDITIONS. NOTIFY THE CITY OF ANY DISCREPANCIES WITH INFORMATION SHOWN ON THE PLANS PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR ALSO ACKNOWLEDGES THAT THEY ARE SATISFIED WITH THE CHARACTER, QUALITY AND QUANTITY OF SURFACE AND SUBSURFACE MATERIALS OR OBSTACLES TO BE ENCOUNTERED INSOFAR AS THIS INFORMATION IS REASONABLY ASCERTAINABLE FROM AN INSPECTION OF THE SITE, ACCESS TO THE SITE, AND TERRITORY SURROUNDING THE SITE, INCLUDING ALL EXPLORATORY WORK DONE BY THE CITY AS WELL AS FROM THE DRAWINGS AND SPECIFICATIONS MADE A PART OF THIS CONTRACT. ANY FAILURE TO TAKE THE ACTIONS DESCRIBED IN THIS PARAGRAPH WILL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY FOR PROPERLY ESTIMATING THE DIFFICULTY AND COST OF SUCCESSFULLY PERFORMING THE WORK OR FOR PROCEEDING TO PERFORM THE WORK SUCCESSFULLY WITHOUT ADDITIONAL EXPENSE TO THE CITY.

2. ALL EXISTING WATER AND SANITARY SEWER PIPES TO REMAIN UNLESS OTHERWISE NOTED.

3. ALL EROSION CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO BEGINNING WORK.

4. PROVIDE CLEARING AND GRUBBING OF THE ENTIRE PROJECT AREA, WITH THE EXCEPTION OF TREES TO REMAIN, IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION, SECTION 110 (LATEST EDITION).

5. COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING ONSITE POWER POLES, LIGHT POLES AND OVERHEAD/UNDERGROUND POWER WITH UTILITY OWNERS.

6. TREE RELOCATION/PROTECTION SHALL BE IN ACCORDANCE WITH THE CITY OF SAFETY HARBOR'S STANDARDS.

DEMOLITION NOTES

1. THE LOCATION OF EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE. DETERMINE THE EXACT LOCATION OF THE UTILITIES PRIOR TO WORKING IN THEIR VICINITY. NOTIFY ALL UTILITY COMPANIES IN THE AREA BEFORE BEGINNING WORK.

2. ALL EXISTING WATER AND SANITARY SEWER PIPES TO REMAIN UNLESS OTHERWISE NOTED.

3. ALL EROSION CONTROL AND TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO BEGINNING WORK.

4. ALL MATERIALS REMOVED SHALL BE DISPOSED OF OFFSITE AND SHALL BE IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.

5. THE OWNER RESERVES THE RIGHT TO RETAIN ANY ITEM FROM THE SITE DEMOLITION.

6. CONTRACTORS ARE REQUIRED BY LAW TO CALL 811 OR THE FLORIDA ONE CALL CENTER (1-800-432-4770) AT LEAST 72 HOURS BEFORE ANY EXCAVATION OR SOIL DISTURBING ACTIVITY. (CALL 10 DAYS BEFORE DIGGING WHEN DIGGING UNDER WATER.) WAIT THE REQUIRED TIME FOR BURIED UTILITIES TO BE LOCATED AND MARKED. PROTECT THE MARKS DURING YOUR PROJECT. IF MARKS ARE DESTROYED, CALL AGAIN. DIG SAFELY, USING EXTREME CAUTION WHEN DIGGING WITHIN 24 INCHES ON EITHER SIDE OF THE MARKS TO AVOID ENCOUNTERING THE BURIED UTILITY LINES.

DRAINAGE NOTES

1. ANY AREAS SUBJECT TO HEAVY EROSION DURING CONSTRUCTION ARE TO BE STABILIZED WITH STRAW MATS & STAKED SOD AS NECESSARY TO MINIMIZE RUTTING / WASHOUTS & ALLOW FOR STABILIZATION TO TAKE HOLD. INCLUDE NOT TO EXCEED ALLOWANCE IN BID / CONTRACT PRICE.

2. NO DEBRIS OR SILT SHALL BE ALLOWED TO ENTER THE EXISTING AND PROPOSED STORM SEWER SYSTEM. STORM DRAINS ALONG ROADWAY TO BE PROTECTED WITH TEMPORARY FILTER PROTECTION SOCKS, WHICH ARE TO BE MAINTAINED DAILY.

3. WHERE SODDED SLOPES EXPERIENCE HEAVY RUNOFF, EROSION MATS SHOULD BE INSTALLED AND SOD SHOULD BE PINNED IN PLACE TO ALLOW ROOTS TO TAKE HOLD.

4. AFTER SITE CONSTRUCTION & LANDSCAPE INSTALLATIONS ARE COMPLETE, INSPECT THE ENTIRE STORM SYSTEM TO ENSURE ALL INLETS / MANHOLES ARE CLEAR OF ANY SILT OR DEBRIS, FABRIC IS REMOVED & STRUCTURES ARE FINISHED. IF NECESSARY, AT THE CONTRACTOR'S EXPENSE THE ENTIRE STORM SYSTEM IS TO BE CLEANED.

STRUCTURE NOTES

1. DESIGN METHOD:
DESIGN IN ACCORDANCE WITH THE FLORIDA BUILDING CODE – 7TH EDITION USING A LOAD AND RESISTANCE FACTOR DESIGN (LRFD) METHOD FOR ALL ELEMENTS UNLESS OTHERWISE NOTED.

2. SPECIFICATIONS:
FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (JANUARY 2023).

3. DESIGN LOADS:
DEAD LOAD:
UNIT WEIGHT OF TIMBER = 60 PCF
STRUCTURAL PLASTIC LUMBER = 65 PCF

LIVE LOAD:
DECK PEDESTRIAN LOAD = 100 PSF
ROOF SUPERIMPOSED LOAD = 20 PSF

WIND LOADS:
RISK CATEGORY I, 3-SECOND GUST
ULTIMATE DESIGN WIND SPEED = 145 MPH
EXPOSURE CATEGORY = D

4. ENVIRONMENT:
SUPERSTRUCTURE – EXTREMELY AGGRESSIVE
SUBSTRUCTURE – EXTREMELY AGGRESSIVE

6. LUMBER:
ALL LUMBER SHALL BE SOUTHERN PINE AND MEET THE REQUIREMENTS OF FDOT STANDARD SPECIFICATIONS SECTION 952, GRADE NO 1.

PRESSURE TREATMENT SHALL MEET AWPA STANDARD U1 AS FOLLOWS.

PILE BRACING, PILE CAPS, STRINGERS, & STRINGER BRACING	UC5C
RAIL POSTS	UC4B
HORIZONTAL RAILS	UC4A
ROOF FRAMING	UC3B
ROOF DECKING	UC3B

ALL CUT ENDS OF THE 4x6 BRACING MEMBERS SHALL BE FIELD TREATED IN ACCORDANCE WITH AWPA STANDARD M4.

LUMBER SIZES SHOWN REPRESENT NOMINAL DRESSED SIZES UNLESS OTHERWISE NOTED. DRESSED SIZES SHALL CONFORM TO THE AMERICAN SOFTWOOD LUMBER STANDARD PS 20. LUMBER SIZES NOTED AS ROUGH-SAWN REPRESENT THE ACTUAL DIMENSION.

7. TIMBER PILES:
TIMBER PILES SHALL BE SOUTHERN PINE AND MEET THE REQUIREMENTS OF FDOT STANDARD SPECIFICATIONS SECTION 953 AND ASTM D25.

PRESSURE TREATMENT SHALL MEET AWPA STANDARD U1, USE CATEGORY UC5C.

ALL CUT ENDS OF THE TIMBER PILES SHALL BE FIELD TREATED IN ACCORDANCE WITH AWPA STANDARD M4 PRIOR TO INSTALLATION OF THE BEAMS AND STRINGERS.

TIMBER PILE DIMENSIONS SHOWN REPRESENT THE MINIMUM TIP DIAMETER.

ALL TIMBER PILING WILL BE WRAPPED WITH 0.030" THICK PRIME HIGH DENSITY POLYETHYLENE. WRAPPING SHALL START A MINIMUM OF 1 FT BELOW THE MUD LINE AND EXTEND A MINIMUM OF 2 FT ABOVE THE MEAN HIGHER HIGH TIDE ELEVATION.

8. STRUCTURAL PLASTIC (SP) LUMBER:
STRUCTURAL PLASTIC LUMBER SHALL BE WEARDECK HDPE DECKING IN COLOR "SADDLE" OR APPROVED EQUIVALENT.

STRUCTURAL PLASTIC LUMBER SHALL BE UTILIZED FOR THE RAIL CAP AND DECKING.

9. STRUCTURAL FASTENERS:
ALL STRUCTURAL BOLTS, WASHERS, NUTS, HURRICANE CLIPS, HANGERS, BRACKETS, OR CONNECTION PLATES SHALL BE STAINLESS STEEL (SS) TYPE 316. BOLTS SHALL MEET THE REQUIREMENTS OF ASTM F593, GROUP 2. THREADED ROD SHALL MEET THE REQUIREMENTS OF ASTM A193 B8M CLASS 1. NUTS SHALL MEET THE REQUIREMENTS OF ASTM F594, GROUP 2.

HEX BOLT ASSEMBLIES SHALL HAVE WASHERS UNDER BOTH THE HEAD AND THE NUT. HEX BOLTS MAY BE SUBSTITUTED WITH THREADED ROD HAVING A WASHER AND NUT ON EACH END. CARRIAGE BOLT ASSEMBLIES SHALL HAVE WASHERS UNDER THE NUT ONLY. ALL BOLTS AND THREADED RODS SHALL BE SIZED SO THAT THE BOLT DOES NOT EXTEND PAST THE NUT BY MORE THAN 1 BOLT DIAMETER.

AT THE COMPLETION OF CONSTRUCTION, CHECK ALL NUTS FOR TIGHTNESS AND RE-TORQUE LOOSE CONNECTIONS.

SCREWS AND NAILS SHALL BE STAINLESS STEEL (SS) TYPE 316.

ALL SCREWS SHALL BE COUNTERSUNK AND INSTALLED IN HOLES DRILLED WITH A COUNTERSUNK DRILL BIT.

NAILS USED WITH APPROVED HURRICANE CLIPS AND HANGERS SHALL BE RING SHANK AND SIZED TO MEET THE MANUFACTURER'S SPECIFICATIONS FOR THE HURRICANE CLIP AND HANGER.

UTILITY NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) AND THE CITY OF SAFETY HARBOR'S STANDARDS AND SPECIFICATIONS.

2. CONTRACTOR SHALL REMOVE AND DISPOSE MUCK, SAND, SILT, CLAY, ROCK, CONCRETE, ANY KIND OF METALS, AND ALL OTHER TYPES OF UNSUITABLE MATERIAL TO 6-INCHES BELOW PIPE BOTTOM FOR ALL WATER AND FORCE MAIN INSTALLATION, AND REPLACE WITH SUITABLE MATERIAL AS DEFINED BY FDOT STANDARD SPECIFICATIONS.

3. CONFLICTS OF WATER, SANITARY AND STORM SEWER TO BE RESOLVED BY ADJUSTING WATER LINES AS NECESSARY.

4. HORIZONTAL AND VERTICAL SEPARATION BETWEEN WATER MAIN AND EXISTING UTILITY LINES SHALL CONFORM TO F.A.C. RULE 62-555.314. REFER TO THE CITY OF SAFETY HARBOR UTILITY SEPARATION REQUIREMENTS DETAIL.

5. EXERCISE EXTREME CAUTION WHILE WORKING IN THE VICINITY OF GAS LINES AND OVERHEAD POWER LINES.

ENVIRONMENTAL NOTES

1. ADHERE ALL CONSTRUCTION ACTIVITIES TO THE RESTRICTIONS AND LIMITATIONS REQUIRED BY PROJECT PERMITS.

2. COMPLY WITH THE "STANDARD MANATEE CONDITIONS FOR IN-WATER WORK, 2011" PUBLISHED BY THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION.

3. FURNISH AND INSTALL THE THREE INFORMATIONAL SIGNS SHOWN BELOW TO THE PROPOSED RAILING WITH STAINLESS STEEL SCREWS.

18"x12" 18"x12" 24"x16"

4. FURNISH AND INSTALL ONE MONOFILAMENT RECOVERY AND RECYCLING (MRR) TUBE AND ATTACH IT TO THE PROPOSED RAILING WITH STAINLESS STEEL SCREWS. THE COST OF FURNISHING AND INSTALLING THE MRR TUBE SHALL BE CONSIDERED INCIDENTAL TO THE PEDESTRIAN RAILING PAY ITEM.

THE MRR TUBE SHALL BE CONSTRUCTED OF 6" DIAMETER PVC WITH A 90° ELBOW ON TOP AND A THREADED PLUG ON THE BOTTOM WITH DRILLED DRAIN HOLES. TUBES SHALL INCLUDE IDENTIFICATION AND INSTRUCTIONAL STICKERS FOLLOWING THE FLORIDA WILDLIFE COMMISSION (FWC) FORMAT. EXAMPLES OF ACCEPTABLE MRR TUBES CAN BE FOUND ON THE FWC MRR PROGRAM WEBSITE BELOW. HTTPS://MRRP.MYFWC.COM

TURBIDITY CONTROL

1. FURNISH, INSTALL, AND MAINTAIN FLOATING TURBIDITY BARRIERS TO SURROUND CONSTRUCTION OPERATIONS AND CONTROL TURBIDITY IN ACCORDANCE WITH PERMIT REQUIREMENTS. TURBIDITY BARRIERS SHALL INCLUDE ANCHORS AS NECESSARY TO MAINTAIN PROPER PLACEMENT.

2. BARRIERS SHALL REMAIN UNTIL CONSTRUCTION OPERATIONS ARE COMPLETE AND TURBIDITY WITHIN THE BARRIERS HAS RETURNED TO BACKGROUND CONDITIONS.

3. EXTEND BARRIERS TO WITHIN 1 FOOT OF THE BOTTOM.

4. BARRIERS SHOULD BE A BRIGHT COLOR (YELLOW OR ORANGE ARE RECOMMENDED) THAT WILL ATTRACT THE ATTENTION OF NEARBY BOATERS.

5. SEAMS IN THE FABRIC SHALL BE EITHER VULCANIZED WELDED OR SEWN, AND SHALL DEVELOP THE FULL STRENGTH OF THE FABRIC.

6. FLOATATION DEVICES SHALL BE FLEXIBLE, BUOYANT UNITS CONTAINED IN AN INDIVIDUAL FLOTATION SLEEVE OR COLLAR ATTACHED TO THE CURTAIN. BUOYANCY PROVIDED BY THE FLOATATION UNITS SHALL BE SUFFICIENT TO SUPPORT THE WEIGHT OF THE CURTAIN AND MAINTAIN A FREEBOARD OF AT LEAST 3 INCHES ABOVE THE WATER SURFACE LEVEL.

7. LOAD LINES MUST BE FABRICATED INTO THE BOTTOM OF ALL FLOATING TURBIDITY CURTAINS. TYPES II AND III MUST HAVE LOAD LINES ALSO FABRICATED INTO THE TOP OF THE FABRIC. THE TOP LOAD LINE SHALL CONSIST OF WOVEN WEBBING OR VINYL-SHEATED STEEL CABLE. THE BOTTOM LOAD-LINE SHALL CONSIST OF A CHAIN INCORPORATED INTO THE BOTTOM HEM OF THE CURTAIN OF SUFFICIENT WEIGHT TO SERVE AS BALLAST TO HOLD THE CURTAIN IN A VERTICAL POSITION.

8. BOTTOM ANCHORS MUST BE SUFFICIENT TO HOLD THE CURTAIN IN THE SAME POSITION RELATIVE TO THE BOTTOM OF THE WATERCOURSE WITHOUT INTERFERING WITH THE ACTION OF THE CURTAIN.

Stantec
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No.	Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA
SAFETY HARBOR PIER
RPLACEMENT PROJECT

Title
GENERAL NOTES

Permit-Seal
Christopher P. Gamache, PE
Lic. No.: 82122
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

Project Number: 238201804
SCALE: N/A

Own.	Chkd.	Dsgn.	YY.MM.DD

Drawing No. C1.01
Revision Sheet
2 of 7

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2023/09/05 2:13 PM By Christopher Gamache

STORMWATER POLLUTION PREVENTION PLAN

PROJECT NAME: SAFETY HARBOR PIER REPLACEMENT

PROJECT ADDRESS:
VETERANS MEMORIAL PARK
198 VETERANS MEMORIAL LN
SAFETY HARBOR, FL 34695

OWNER'S ADDRESS:
CITY OF SAFETY HARBOR
750 MAIN ST.
SAFETY HARBOR, FL 34695

DESCRIPTION OF PURPOSE AND TYPES OF SOIL DISTURBING ACTIVITIES:

PROPERTY AREA APPROXIMATELY = 9.496 ACRES

PROJECT AREA APPROXIMATELY = 0.335 ACRES

CONSTRUCTION PROPOSED: TIMBER PIER AND PAVILION. NO NEW STORMWATER MANAGEMENT IS PROPOSED.

SOIL DISTURBING ACTIVITIES WILL INCLUDE:
CONNECTION TO ONSITE ELECTRIC AND WATER UTILITIES.

WETLAND ACTIVITIES INCLUDE:
NO WETLAND IMPACTS ARE PROPOSED FOR THE PROJECT. ACTIVITIES TO OCCUR ON OPEN WATER WITH APPROPRIATE BEST MANAGEMENT PRACTICES INSTALLED AND MAINTAINED.

CONSTRUCTION REMOVAL ACTIVITIES WILL INCLUDE:
REMOVAL OF THE EXISTING TIMBER PIER AND PAVILION.

STORMWATER DRAINAGE AREA:
BASIN AREA: N/A ACRES
PRE-DEVELOPMENT CURVE NUMBER (CN): N/A
POST DEVELOPMENT CURVE NUMBER (CN): N/A

WATER QUALITY: N/A

WATER QUANTITY: N/A

SEQUENCE OF MAJOR ACTIVITIES

1. INSTALL STAKED SILT FENCE AND EROSION CONTROL AS SHOWN ON THE DEMOLITION PLAN.
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
3. COMPLETE REPLACEMENT PER GENERAL PLAN AND ELEVATION.
4. INSTALL NEW UTILITIES, PER PLAN.
5. REPAIR ANY WASHED OUT AREAS, SOD, SEED, AND MULCH DISTURBED AREAS AS INDICATED ON PLANS.
6. WHEN CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE STABILIZED, REMOVE EROSION PROTECTION DEVICES AND CONSTRUCTION ENTRANCE AS REQUIRED.

NAME OF RECEIVING WATERS:
THE PROPOSED IMPROVEMENTS WILL DISCHARGE STORMWATER ON-SITE SIMILAR TO HISTORIC CONDITIONS. ULTIMATE DISCHARGE TO OLD TAMPA BAY.

CONTROLS

EROSION AND SEDIMENT CONTROLS

USE BEST MANAGEMENT PRACTICES (BMPs) DURING AND AFTER CONSTRUCTION TO MINIMIZE EROSION AND SEDIMENTATION AND TO PROPERLY MANAGE RUNOFF FOR BOTH STORMWATER QUANTITY AND QUALITY. CONTRACTOR TO ADHERE TO FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION EROSION AND SEDIMENTATION CONTROL MANUAL.

BEFORE SITE DISTURBANCE OCCURS, PERIMETER CONTROLS, SEDIMENT TRAPS, BASINS, AND DIVERSIONS MUST BE SET IN PLACE BY THE CONTRACTOR TO CONTROL RUNOFF AND CAPTURE SEDIMENTS. THE CONTRACTOR IS REQUIRED TO REVIEW THE SITE SPECIFIC EROSION CONTROL PLAN AS SHOWN ON THE CONSTRUCTION DOCUMENTS.

THE CONTRACTOR MAY ALSO BE REQUIRED TO MODIFY THE PLAN OR MATERIALS TO ADAPT TO SEASONAL VARIATIONS OR SITE CONDITIONS. CONTRACTOR WILL COMPLY WITH EROSION CONTROL PLAN AND DETAILS. ANY MODIFICATIONS TO THIS PLAN MUST BE SIGNED BY A PROFESSIONAL ENGINEER REPRESENTING THE CONTRACTOR. CONTRACTOR SHALL REMOVE ALL SEDIMENT THAT HAS MIGRATED OFF-SITE. THE EROSION CONTROL DEVISES FOR THESE ACTIVITIES ARE SPECIFIED IN THE PLANS AND ACCORDING TO FDOT DESIGN STANDARDS FOR DESIGN, CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS ON THE STATE HIGHWAY SYSTEM (CURRENT EDITION), SECTION 104. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING IF ADDITIONAL CONTROLS ARE NEEDED AND DEPLOYMENT SCHEDULES FOR THE IMPLEMENTATION OF ALL EROSION CONTROL DEVICES.

STABILIZATION PRACTICES:

WIND EROSION STABILIZATION

-THE CONTRACTOR SHALL DENUDE ONLY AREAS WHERE IT IS EXPECTED TO BE GRADED OR ALTERED WITHIN A TWO (2) WEEK TIME- FRAME. FINAL GRADES SHALL BE PERFORMED AND TEMPORARY OR PERMANENT SOIL STABILIZATION SHALL BE APPLIED. AREAS WHERE CONSTRUCTION OPERATIONS WILL BE CONTINUOUS, FUGITIVE DUST SHALL BE MANAGED BY APPLYING A WATER SPRAY TO SATURATE THE SURFACE SOILS CONTINUOUSLY AND ADDITIONAL MEASURES MAY NEED TO BE TAKEN CONTROL OFF-SITE TRANSPORT OF UNACCEPTABLE LEVELS OF DUST.

TEMPORARY STABILIZATION

-TOP OF SOIL STOCK PILES AND DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR AT LEAST 21 DAYS WILL BE STABILIZED WITH TEMPORARY GRASS AND MULCH NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY. GRASS SEED SHALL BE A MIXTURE OF 20 PARTS OF BERMUDA SEED AND 80 PARTS OF PENSACOLA BAHIA. THE SEPARATE TYPES OF SEED USED SHALL BE THOROUGHLY DRY MIXED IMMEDIATELY BEFORE SOWING. SEED WHICH HAS BECOME WET SHALL NOT BE USED. THE MULCH MATERIAL USED SHALL NORMALLY BE DRY MULCH. DRY MULCH SHALL BE STRAW OR HAY, CONSISTING OF OAT, RYE OR WHEAT STRAW, OR OF PANGOLA, PEANUT, COASTAL BERMUDA OR BAHIA GRASS HAY, ONLY UNDETERIORATED MULCH, WHICH CAN BE READILY CUT INTO THE SOIL, SHALL BE USED. AREAS OF THE SITE, WHICH ARE TO BE PAVED, WILL BE TEMPORARILY STABILIZED BY APPLYING STABILIZATION AND BASE. TREE BARRICADES WHERE REQUIRED.

PERMANENT STABILIZATION

-DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASES SHALL BE STABILIZED WITH SOD NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY.

SEDIMENT BASINS

-IF APPLICABLE, SEDIMENT BASINS TO BE CONSTRUCTED BY THE CONTRACTOR TO DETAIN SEDIMENT-LADEN RUNOFF FROM DISTURBED AREAS LONG ENOUGH FOR MOST OF THE SEDIMENT TO SETTLE OUT. SEDIMENT BASINS SHOULD BE USED TOGETHER WITH EROSION CONTROL PRACTICES SUCH AS TEMPORARY SEEDING, MULCHING, DIVERSION BERMS, ETC., TO REDUCE THE AMOUNT SEDIMENT FLOWING INTO THE STORM SYSTEM.

DEWATERING

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MATERIALS, EQUIPMENT, LABOR, AND SERVICES NECESSARY FOR CARE OF WATER AND EROSION CONTROL. EXCAVATION WORK SHALL NOT BEGIN BEFORE THE EROSION AND SEDIMENTATION CONTROL PLAN IS IN PLACE. DEWATERING TO BE COMPLETED BY THE CONTRACTOR AND SHALL FOLLOW DEWATERING SPECIFICATION.

STRUCTURAL PRACTICES

STAKED SILT FENCES

-THE STAKED SILT FENCES WILL BE CONSTRUCTED ALONG THE CONSTRUCTION LIMITS OR AS DEPICTED ON THE EROSION CONTROL & DEMOLITION PLANS AND/OR ON OTHER CONSTRUCTION PLANS. THESE DEVICES WILL STOP AND DIVERT RUNOFF FROM THE SITE TO OTHER SURFACE WATERS.

OTHER CONTROLS / WASTE DISPOSAL

OFFSITE VEHICLE TRACKING

STABILIZED CONSTRUCTION ENTRANCES SHALL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. THE PAVED STREETS WILL BE CLEANED AS NEEDED 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.

WASTE MATERIALS

- ALL WASTE MATERIAL WILL BE COLLECTED AND STORED IN DUMPSTERS PER LOCAL SOLID WASTE REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE DUMPED A MINIMUM OF TWICE A WEEK OR MORE OFTEN IF NECESSARY, AND THE TRASH WILL BE HAULED TO THE APPROPRIATE COUNTY LOCATION FOR DUMPING. NO CONSTRUCTION MATERIALS WILL BE BURIED ON-SITE. ALL PERSONNEL WILL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING THESE PRACTICES WILL BE POSTED IN THE ON- SITE OFFICE TRAILER AND THE CONSTRUCTION MANAGER RESPONSIBLE FOR THE DAY-TO-DAY SITE OPERATIONS, WILL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED.

THE CONTRACTOR SHALL PROVIDE LITTER CONTROL AND COLLECTION WITHIN THE PROJECT BOUNDARIES DURING CONSTRUCTION ACTIVITIES. ANY CHEMICAL CONTAINERS SHALL BE DISPOSED OF BY THE CONTRACTOR ACCORDING TO EPA'S STANDARD PRACTICES AS DETAILED BY THE MANUFACTURER. NO SOLID MATERIALS INCLUDING BUILDING & CONSTRUCTION MATERIALS SHALL BE DISCHARGE TO ADJACENT WATERWAYS OR WETLANDS OR BURIED ON SITE.

HAZARDOUS WASTE

THE CONTRACTOR WILL IMMEDIATELY NOTIFY THE PERMITTING AGENCY IN WRITING IF ANY HAZARDOUS WASTE MATERIAL IS ENCOUNTERED DURING SITE INVESTIGATION AND CONSTRUCTION.

THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR NOTIFYING THE DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) WITHIN 24 HOURS OF DISCOVERY.

IF ENCOUNTERED, HAZARDOUS WASTE MATERIALS 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.

SANITARY WASTE

- ALL SANITARY WASTE WILL BE COLLECTED FROM PORTABLE UNITS A MINIMUM OF THREE TIMES PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR, IN ACCORDANCE WITH FDOT STANDARD SPEC. FOR ROAD AN BRIDGE CONSTRUCTION 2010 EDITION SECTION 7-6, AND AS REQUIRED BY LOCAL REGULATIONS.

TIMING OF CONTROL MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES, STAKED SILT BARRIERS, EROSION CONTROL, AND STABILIZED CONSTRUCTION ENTRANCES CONSTRUCTED PRIOR TO GRUBBING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 21 DAYS WILL BE STABILIZED WITH A TEMPORARY GRASS AND MULCH WITHIN 14 DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTED ACTIVITY CEASES PERMANENTLY IN THAT AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SOD. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE TRAPS AND THE STAKED SILT BARRIERS WILL BE REMOVED.

MAINTENANCE INSPECTION PROCEDURES

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:

THESE ARE THE INSPECTION AND MAINTENANCE PRACTICES THAT SHALL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROL.

LESS THAN ONE HALF OF THE SITE WILL BE DENUDED AT ONE TIME PRIOR TO ESTABLISHING EROSION CONTROL MANAGEMENT ALL CONTROL MEASURES WILL BE INSPECTED ONCE PER DAY AND FOLLOWING ANY STORM EVENT OF 0.5 INCHES OR GREATER BY A CONTRACTOR'S REPRESENTATIVE.

ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS OF REPORT.

BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE. SILT FENCE WILL BE INSPECTED REGULARLY FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.

IF APPLICABLE, THE SEDIMENT BASINS WILL BE INSPECTED FOR DEPTH OF SEDIMENT, AND BUILT UP SEDIMENT WILL BE REMOVED WHEN IT REACHES 10 PERCENT OF THE DESIGN CAPACITY OR AT THE END OF THE JOB.

A MAINTENANCE INSPECTION REPORT SHALL BE MADE AFTER EACH INSPECTION BY THE CONTRACTOR AND SHALL BE KEPT IN AN ACTIVE LOG READILY AVAILABLE AT THE JOB SITE CONSTRUCTION TRAILER. THE SITE SUPERINTENDENT WILL SELECT INDIVIDUALS WHO WILL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES. FILLING OUT THE INSPECTION AND MAINTENANCE REPORT WILL BE BY THE CONTRACTOR, PERSONNEL SELECTED FOR MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. THEY WILL BE TRAINED IN ALL MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ON-SITE IN GOOD WORKING ORDER.

STORM WATER MANAGEMENT

NO STORMWATER MANAGEMENT IS REQUIRED.

WETLAND MITIGATION

WETLAND MITIGATION IS NOT APPLICABLE FOR THE PROPOSED PROJECT.

NON-STORM WATER DISCHARGES

IT IS EXPECTED THAT THE FOLLOWING NON-STORMWATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:

1. PAVEMENT WASH WATERS (WHERE NO SPILL OR LEAKS OF TOXIC OR VEHICLE AND HAZARDOUS MATERIALS HAVE OCCURRED.
2. UNCONTAMINATED GROUNDWATER FROM DEWATERING 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, THE CONTRACTOR MUST NOTIFY THE OWNER AND ENGINEER.

MAINTENANCE AND INSPECTION

ALL OF THE CONTROLS SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAILY INSPECTION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES THROUGHOUT THE CONSTRUCTION PHASE OF THE PROJECT. MAINTENANCE SHALL BE IN ACCORDANCE WITH LOCAL GOVERNMENT AGENCY TECHNICAL SPECIFICATIONS, AND THE PROJECT CONSTRUCTION CONTRACT.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETING THE FDEP NPDES / STORMWATER POLLUTION PREVENTION PLAN (SWPPP) CONSTRUCTION INSPECTION REPORT AFTER ANY 1/2 INCH RAINFALL OR WEEKLY IF NO RAIN EVENT OCCURRED. IT IS THE CONTRACTORS RESPONSIBILITY TO MAINTAIN RAIN GAUGES ON THE PROJECT SITE AND RECORD WEEKLY RAIN FALL. CONTRACTOR SHALL ALSO COMPLETE THE NPDES COMPLIANCE CHECKLIST FOR CONSTRUCTION SITES.

WATER MANAGEMENT DISTRICT - KEY PROVISIONS

AN ENVIRONMENTAL RESOURCE PERMIT (ERP) IS REQUIRED, THE FOLLOWING KEY PROVISIONS MUST BE MAINTAINED BY THE PERMITTEE AND CONTRACTOR: (IN ACCORDANCE WITH THE BASIS OF REVIEW FOR ENVIRONMENTAL RESOURCE PERMIT (ERP) APPLICATIONS)

THE PERMITTEE AND CONTRACTOR SHALL AMEND THE CONSTRUCTION SURFACE WATER MANAGEMENT PLAN WHENEVER THE PROJECT IS ALTERED OR MODIFIED IN A MANNER THAT WILL RESULT IN:

(1) THE POTENTIAL DISCHARGE OF POLLUTANTS

(2) A CHANGE IN THE AMOUNT OF DISCHARGE

(3) A CHANGE IN THE NUMBER OF LOCATION OF STORM WATER DISCHARGE POINTS, OR

(4) ADVERSE IMPACTS TO WETLANDS, AND SUCH CHANGE(S) HAVE NOT OTHERWISE BEEN PREVIOUSLY ADDRESSED IN THE APPROVED PLAN. THE PERMITTEE AND CONTRACTOR SHALL ALSO AMEND THE PLAN IF ITS IMPLEMENTATION DOES NOT ELIMINATE OR MINIMIZE EROSION AND SEDIMENT DEPOSITION, OFF-SITE FLOODING, ADVERSE IMPACTS TO WETLAND, OR VIOLATIONS OF STATE WATER QUALITY STANDARDS. AMENDMENTS TO THE PLAN SHALL BE PREPARED AND KEPT AS SEPARATE DOCUMENTS ALONG WITH THE ORIGINAL PLAN. ALL ALTERATIONS TO THE SYSTEM MUST BE SHOWN ON THE AMENDED PLAN ALONG WITH THE DOCUMENTATION OR REQUIRED APPROVAL(S).

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES

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

GOOD HOUSEKEEPING:

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

AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCTS REQUIRED TO DO THE JOB.

ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER CONTAINED ENCLOSURE.

PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL MANUFACTURER'S LABELED CONTAINERS. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER, WHENEVER POSSIBLE, ALL OF A PRODUCT SHALL BE USED UP 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.

THE CONTRACTOR MUST IDENTIFY A DESIGNATED FUEL TANK STORAGE AREA, AWAY FROM DRAINAGE STRUCTURES, PONDS, BASINS, WATERWAYS, AND WETLANDS, WITH SECONDARY CONTAINMENT (SPILL COLLECTION).

PETROLEUM PRODUCTS:

ALL ON-SITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS WILL BE STORED IN TIGHTLY SEALED CONTAINERS, WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ON-SITE WILL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS:

FERTILIZERS USED WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE WILL BE IN A SEALABLE PLASTIC BIN TO AVOID SPILLS.

CONCRETE TRUCKS:

CONTRACTOR SHALL DESIGNATE AN AREA AWAY FROM DRAINAGE STRUCTURES, PONDS, BASINS, WATERWAYS, 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. CONTRACTOR TO PREPARE A DETAILED SITE PLAN FOR APPROVAL FOR THE CONCRETE DISCHARGE AND WASH DOWN ACTIVITIES.

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 RECCURRING 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 CONTRACTOR WILL BE RESPONSIBLE FOR SPILL PREVENTION AND CLEANUP COORDINATION. 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, INSPECTOR'S NAME AND INSPECTION REPORT.

FURTHERMORE, ANY CONTAMINATION HAS TO BE IMMEDIATELY CONTAINED AND THE OWNERS, ENGINEER OF RECORD AND PERMITTING AGENT INSPECTOR MUST BE NOTIFIED OF THE NATURE AND EXTEND OF THE CONTAMINATION.

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED, BUT NOT LIMITED, TO BE PRESENT ON-SITE DURING CONSTRUCTION:

CONCRETE	FERTILIZERS
DETERGENTS	PETROLEUM BASED PRODUCTS AND FUELS
TAR	CLEANING SOLVENTS
SAND	WOOD
STONE	

POLLUTION PREVENTION PLAN CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS HAVE BEEN READ BY ME OR MY DESIGNATED REPRESENTATIVE AND UNDERSTAND THAT THIS SYSTEM HAS BEEN PREPARED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED, BASED ON MY INQUIRY OF THE PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OWNER: CITY OF SAFETY HARBOR

APPLICANT AUTHORIZED AGENT:

SIGNED:

ADDRESS: CITY OF SAFETY HARBOR
750 MAIN STREET
SAFETY HARBOR, FL 34695

DATE:

CONTRACTOR'S AND ENGINEER'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I UNDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION, I UNDERSTAND, AND SHALL COMPLY WITH THE TERMS AND CONDITIONS OF THE STATE OF FLORIDA "GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" (CGP), AND THIS STORMWATER POLLUTION PREVENTION PLAN PREPARED FOR THE CITY OF SAFETY HARBOR.

SIGNATURE:	FOR:	RESPONSIBLE FOR:
NAME:	COMPANY:	GENERAL CONTRACTOR
TITLE:	ADDRESS:	
DATE:	PHONE:	

CERTIFIED ENGINEER

NAME: CHRISTOPHER P. GAMACHE, P.E.
FL. REG. NO. 82122
TITLE: PROJECT MANGER

COMPANY: CARDNO
380 PARK PLACE BLVD., SUITE 300
CLEARWATER, FL 33759
PHONE: 727-531-1503

NPDES NOTIFICATION (NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM)

ATTENTION: FAILURE TO MAINTAIN EROSION AND/OR SEDIMENTATION CONTROLS OR ANY ILLICIT DISCHARGE RESULTING FROM THEIR FAILURE WILL LIKELY RESULT IN FINE CITATIONS. CODE REGULATIONS AUTHORIZES PENALTIES OF UP TO $10,000 FOR EACH OFFENSE.

ALL ACTIVITIES MUST CONFORM WITH FDEP NOTICE OF INTENT TO USE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES. POLLUTION PREVENTION FROM THE PROPOSED CONSTRUCTION ACTIVITIES WILL BE IMPLEMENTED IN ACCORDANCE WITH SWFWMD BASIS OF REVIEW SUBSECTION 2.8.4.

KEY PROVISIONS

1. IMPLEMENTATION OF THIS STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
2. CONDUCTING AND DOCUMENTING ROUTINE INSPECTIONS AS REQUIRED.
3. RETENTION OF RECORDS REQUIRED BY THE PERMIT, INCLUDING RETENTION OF A COPY OF THE SWPPP AT THE CONSTRUCTION SITE, FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL SITE STABILIZATION.

NOTICE OF INTENT (NOI)

A "NOTICE OF INTENT TO USE GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" (NOI) IS NOT REQUIRED FOR THIS SITE SINCE THE OVERALL SITE AREA IS LESS THAN ONE ACRE IN SIZE.

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No.	Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA
SAFETY HARBOR PIER
RPLACEMENT PROJECT

Title
STORMWATER POLLUTION PREVENTION PLAN

Permit-Seal
Christopher P. Gamache, PE
Lic. No.: 82122

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

Project Number: 238201804
SCALE: N/A

MPR	TRH	CPG	3/5/2013
Dwn.	Dsgn.	Chkd.	YY.MM.DD

Drawing No. C1.02
Revision Sheet
3 of 7

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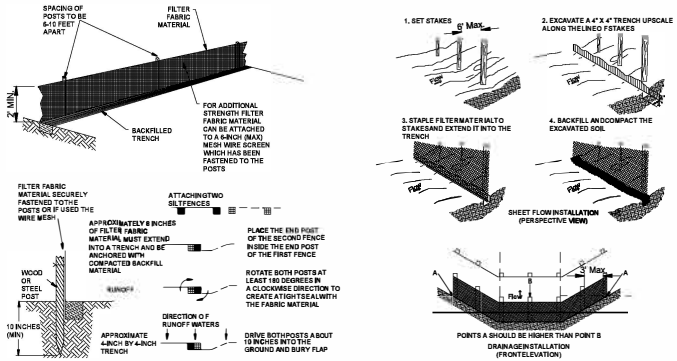
2/28/2013 2:13 PM By: Christopher Gamache
ORIGINAL SHEET - ANSI D 22x34



INSTALLING A FILTER FABRIC SILT FENCE

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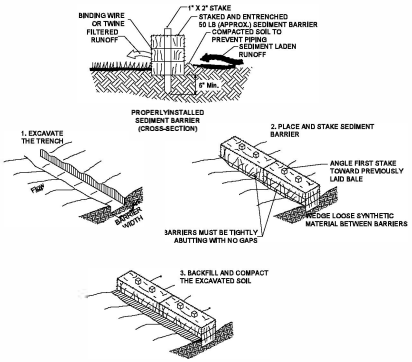

TEMPORARY SYNTHETIC SEDIMENT BARRIER

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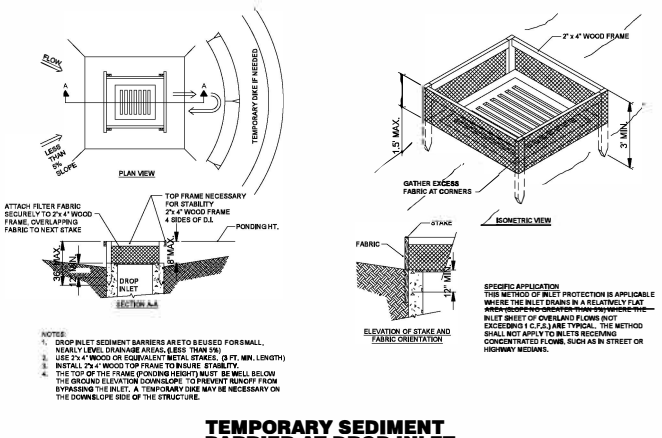
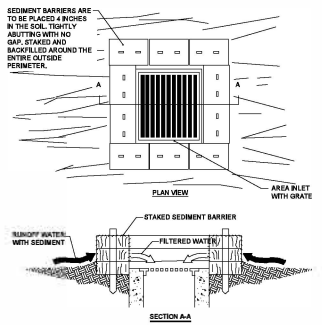


NOTES:
1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS, (LESS THAN 5%)
2. USE 2"x 4" WOOD OR EQUIVALENT METAL STAKES, (3 FT. MIN. LENGTH)
3. INSTALL 2"x 4" WOOD TOP FRAME TO INSURE STABILITY.
4. THE TOP OF THE FRAME (PONDING HEIGHT) MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

SPECIFIC APPLICATION
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS IN A RELATIVELY FLAT ~~AREA (SLOPE IS NO GREATER THAN 5%) WHERE THE~~ INLET SHEET OF OVERLAND FLOWS (NOT EXCEEDING 1 C.F.S.) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

TEMPORARY SEDIMENT BARRIER AT DROP INLET

SCALE: N.T.S.



THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NO GREATER THAN 5%) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 CFS) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS STREET OR HIGHWAY MEDIANS.

TEMPORARY SYNTHETIC SEDIMENT BARRIER AT STORM DRAIN DROP INLET

SCALE: N.T.S.

EROSION AND SEDIMENTATION CONTROL NOTES

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL AND PREVENT EROSION AND THE TRANSPORTATION OF SEDIMENT TO SURFACE DRAINS AND OUTFALLS. REFER TO CONSTRUCTION PLANS, DETAILS, SPECIFICATIONS AND APPROVED PERMITS FOR DETAILS. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY REACH SIX INCHES ON AN EROSION DEVICE.
2. DURING THE CONSTRUCTION OF DRAINAGE STRUCTURES, AND OTHER STRUCTURES REQUIRING EXCAVATION, THE CONTRACTOR SHALL PLACE APPROVED BARRIERS OR OTHER APPROVED DEVICES AROUND SUCH STRUCTURES TO PREVENT EROSION AND THE MIGRATION OF SEDIMENT TO POINTS OUTSIDE THE CONSTRUCTION AREA. THE APPROVED BARRIERS OR OTHER APPROVED DEVICES SHALL BE PLACED IN ACCORDANCE WITH REQUIREMENTS OF THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, FDEP, OR AS DIRECTED BY THE ENGINEER.
3. REQUIRED EROSION CONTROL MEASURES MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. FAILURE TO INSTALL OR PROPERLY MAINTAIN REQUIRED EROSION CONTROL WILL RESULT IN ENFORCEMENT ACTION. ALL EROSION CONTROL MEASURES, SAND, SILT, AND DEBRIS SHALL BE REMOVED FROM ALL DRAINAGE PIPES AND STRUCTURES AFTER CONSTRUCTION HAS BEEN COMPLETED AND PRIOR TO COUNTY FINAL WALK-THROUGH.
4. OUTFALL PROTECTION - PROJECT PIPE OR DITCH DISCHARGES INTO OFF-SITE OUTFALLS SHALL BE INSPECTED DAILY FOR POSSIBLE SEDIMENT BUILDUP OR TRANSPORT. OUTFALLS SHALL BE PROTECTED THROUGH USE OF EROSION CONTROL FEATURES AS NECESSARY TO CONTAIN ANY SEDIMENT LOSS TO THE IMMEDIATE AREA OF THE PROJECT. ANY SEDIMENT BUILDUP OR TRANSPORT OFF-SITE SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMEDY. THE CONTRACTOR SHALL USE APPROPRIATE MEASURES AS DIRECTED BY THE PROJECT ENGINEER FOR OUTFALL PROTECTION.
5. APPROVED BARRIERS (OR OTHER APPROVED SEDIMENT CONTROL DEVICES); THESE SHALL BE PLACED AT THE BASE OF ANY SLOPE WHERE A RAINFALL EVENT COULD ERODE A SLOPE AND TRANSPORT SEDIMENTS OFF-SITE. APPROVED BARRIERS SHALL BE DOUBLE STAKED IN ACCORDANCE WITH THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL OR FDEP. IF EROSION DEPOSITS REACH THE TOP ELEVATION OF EXISTING APPROVED BARRIERS, THEN SEDIMENTS SHOULD BE REMOVED. ANY DAMAGED OR INEFFECTIVE APPROVED BARRIERS ARE TO BE REPLACED WITH NEW ONES. THE LOCATION AND INSTALLATION OF APPROVED BARRIERS SHALL BE AS DIRECTED BY THE PROJECT ENGINEER.
6. BACK OF SIDEWALK INLETS OR MEDIAN INLETS: THESE SHALL BE PROTECTED FROM SEDIMENT INTAKE UNTIL PROJECT IS COMPLETE. ELEVATION OF GROUND OUTSIDE INLET TOP SHALL NOT BE HIGHER THAN INLET TOP. APPROVED BARRIERS OR OTHER APPROVED SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AROUND INLET TOP, A SECOND ROW OF APPROVED BARRIERS OR OTHER APPROVED SEDIMENT CONTROL DEVICES SHALL BE PLACED AROUND INLET APPROXIMATELY 4' OUTSIDE FIRST ROW. BETWEEN ROWS THERE SHALL BE A DEPRESSION TO ACT AS A SEDIMENT BASIN. COMPLETED INLETS IN PAVED AREAS SHALL ALSO BE PROTECTED WITH A SINGLE LINE OF APPROVED BARRIERS OR OTHER APPROVED SEDIMENT CONTROL DEVICES TO PREVENT SEDIMENT INTAKE FROM OTHER AREAS.
7. STOCKPILED MATERIALS SHALL BE PROTECTED BY COVER, APPROVED BARRIERS OR OTHER APPROVED SEDIMENT CONTROL DEVICES.
8. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 3 DAYS AFTER 1/2" RAIN EVENT DISTURBANCE.
9. SEDIMENT TRAPPING MEASURES: SEDIMENT BASINS AND TRAPS, PERIMETER BERMS, FILTER FENCES, BERMS, SEDIMENT BARRIERS, VEGETATIVE BUFFERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT AND/OR PREVENT THE TRANSPORT OF SEDIMENT INTO WATERS OF THE STATE OR NEIGHBORING PROPERTIES SHALL BE INSTALLED, CONSTRUCTED OR, IN THE CASE OF VEGETATIVE BUFFERS, PROTECTED FROM DISTURBANCE, AS A FIRST STEP IN THE LAND ALTERATION PROCESS.
10. CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE NECESSARY DEWATERING PERMITS FROM THE LOCAL WATER MANAGEMENT DISTRICT OR OTHER REGULATORY AGENCY.
11. A DEWATERING PLAN MUST BE SUBMITTED AND APPROVED BY THE APPLICABLE GOVERNING AGENCY PRIOR TO DISCHARGE.
12. WHERE PUMPS ARE TO BE USED TO REMOVE TURBID WATER FROM THE CONSTRUCTION AREA, THE WATER SHALL BE TREATED TO REDUCE TURBIDITY TO STATE WATER QUALITY STANDARDS PRIOR TO DISCHARGE TO THE WETLANDS. TREATMENT METHODS INCLUDE, FOR EXAMPLE, TURBID WATER BEING PUMPED INTO GRASSED SWALES OR APPROPRIATE VEGETATED AREAS (OTHER THAN UPLAND PRESERVATION AREAS AND WETLAND BUFFERS), SEDIMENTS BASINS, OR AREAS CONFINED BY AN APPROPRIATE ENCLOSURE SUCH AS TURBIDITY BARRIERS, AND KEPT CONFINED UNTIL ITS TURBIDITY LEVEL MEETS STATE WATER QUALITY STANDARDS.
13. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION, OR OTHER ACCEPTABLE METHODS.
14. THERE IS TO BE NO DISCHARGE (I.E. PUMPING, SHEET FLOW, SWALE, DITCH, ETC.) INTO EXISTING DITCHES OR CANALS WITHOUT THE USE OF SETTLING PONDS OR DEVICES. IF THE CONTRACTOR DESIRES TO DISCHARGE INTO EXISTING DITCHES OR CANALS, A SETTLING PLAN IS PREPARED BY THE CONTRACTOR AND MUST BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD AND LOCAL REGULATORY AGENCY PRIOR TO CONSTRUCTION.
15. WHERE APPLICABLE, SOIL TRACKING PREVENTION DEVICES SHALL BE PROVIDED AND MAINTAINED PER THE STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL OR FDEP.
16. THE EROSION CONTROL DEVICE QUANTITIES SHOWN ON THE BID FORMS ARE ESTIMATES OF THE ACTUAL QUANTITIES THAT MAY BE ENCOUNTERED DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SPECIFY ACTUAL QUANTITIES AND COSTS ASSOCIATED WITH THIS SPECIFIC EROSION CONTROL IMPLEMENTATION SCHEDULE. EROSION CONTROL ITEMS MAY BE ADDED OR DELETED FROM THE PAY ITEM LIST AS THE EROSION CONTROL IMPLEMENTATION SCHEDULE PROVIDED BY THE CONTRACTOR IS MODIFIED TO MEET SITE SPECIFIC CONDITIONS.
17. ALL EROSION CONTROL FENCES, BARRIERS, AND SILTATION DEVICES SHALL BE ERECTED PRIOR TO ANY LAND ALTERATIONS, SHALL BE MAINTAINED IN GOOD WORKING ORDER DURING CONSTRUCTION, AND REMOVED FOLLOWING SOIL STABILIZATION AND FINAL DRESSING. BUILT-UP SEDIMENT WILL BE REMOVED FROM SILT FENCES AND STAKED TURBIDITY BARRIERS WHEN IT HAS REACHED ONE THIRD THE HEIGHT OF THE FENCE/BARRIER. STOCKPILE AREAS SHALL INCLUDE SILT FENCE AROUND THE PERIMETER.
18. THE CONTRACTOR SHALL NOT RESTRICT OR BLOCK THE EXISTING DRAINAGE FLOW OVERLAND OR WITHIN RESHAPED SWALES. FLOW WITHIN EXISTING DRAINAGE PIPES SHALL BE MAINTAINED AT ALL TIMES. STORMWATER WILL BE CONVEYED VIA EXISTING SWALES, DITCHES, OR PROPOSED DITCHES, EXISTING AND PROPOSED STORM SEWERS.
19. DURING DEWATERING OPERATIONS, THE CONTRACTOR SHALL NOT DISCHARGE DIRECTLY TO RECEIVING WATERS, EXISTING CONVEYANCES TO RECEIVING WATERS, OR WETLAND SYSTEMS. TEMPORARY SEDIMENT BASINS, TRAPS, OR SILTATION REDUCTION DEVICES SHALL BE UTILIZED TO COLLECT THE DISCHARGE FROM DEWATERING ACTIVITIES TO ELIMINATE THE POTENTIAL FOR OFF-SITE SEDIMENT TRANSPORT AND TO INSURE THAT DIRECT DISCHARGE DOES NOT OCCUR.
20. BANKS SHALL BE PROTECTED FROM EROSION OR COLLAPSE DURING CONSTRUCTION. BANK PROTECTION MATERIAL SHALL BE CAREFULLY PLACED FROM THE BANK AND NOT DUMPED FROM ABOVE IN AN UNCONTROLLED MANNER. EROSION CONTROL FABRIC SHALL BE USED FOR EROSION PROTECTION WHERE SOD WILL NOT HOLD OR BECOME ESTABLISHED IN TIME TO PROTECT THE BANKS. UNLESS OTHERWISE SPECIFIED IN THE PLANS, UPON COMPLETION OF CONSTRUCTION, ALL BANKS AND WATERWAYS SHALL BE RESTORED TO THEIR PRE- CONSTRUCTION CONFIGURATION AND PROTECTION FROM EROSION.
21. IF APPLICABLE, THE CONTRACTOR SHALL BE RESSPONSIBLE FOR PROTECTING POND FILTRATION SYSTEMS FROM BEING CLOGGED UNTIL SAFETY HARBOR DETERMINES THE CONSTRUCTION IS COMPLETE. IF FILTER MATERIAL IS CONTAMINATED, IT SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
22. CONTRACTOR TO COORDINATE WITH LOCAL MUNICIPALITY REGARDING PREPARATION AND PERMITTING WITHIN THE NPDES PROGRAM.

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Clearwater, Florida 33759 Tel. 727.531.1555
www.stantec.com Fax. 727.531.1777

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No.	Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA
SAFETY HARBOR PIER
RPLACEMENT PROJECT

Title
EROSION CONTROL

Permit-Seal

Christopher P. Gamache, PE
Lic. No.: 82122

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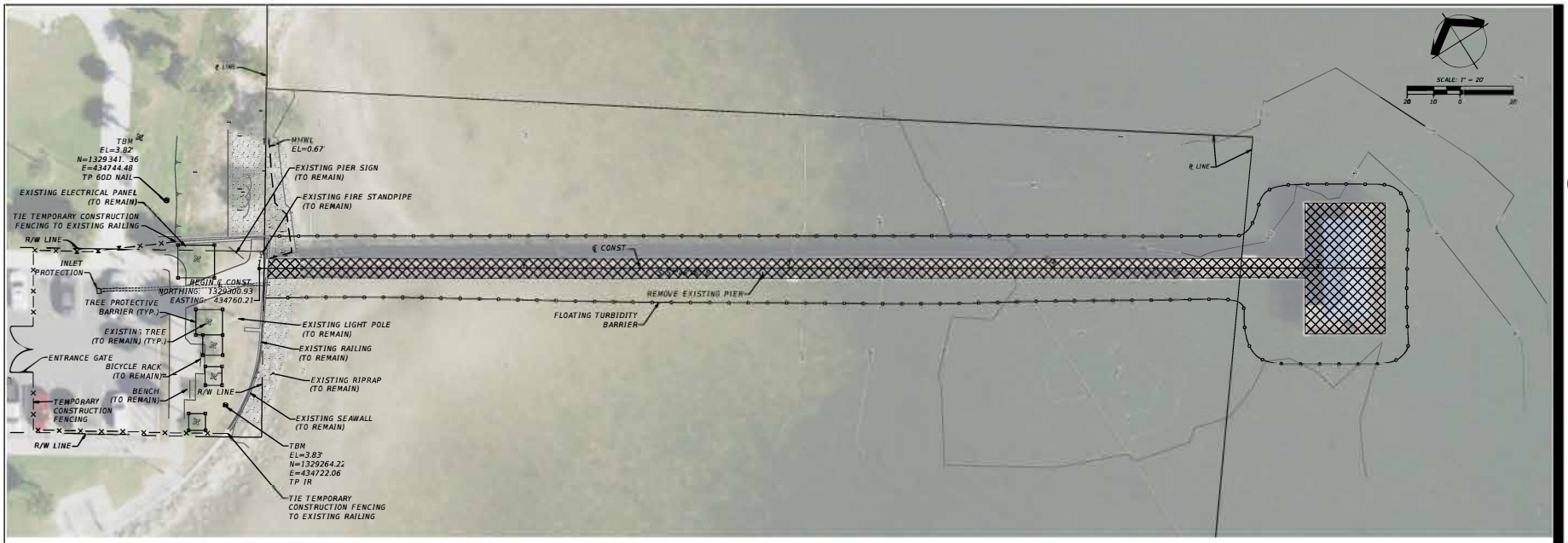
Project Number: 238201804
SCALE: N/A

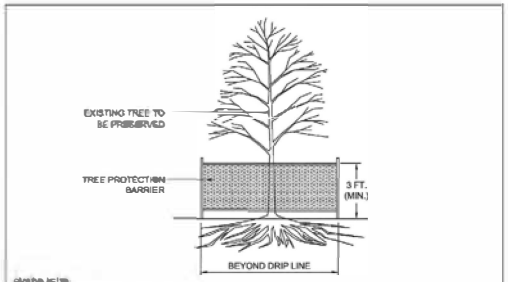
MPR	TRH	CPG	3/3/2023
Own.	Dsgn.	Chkd.	YY.MM.DD

Drawing No. C1.03
Revision Sheet 4 of 7



DEMOLITION PLAN

SCALE: 1" = 20'



CITY OF SAFETY HARBOR
Engineering Department
100 Main Street, Safety Harbor, FL 34695
Phone (727) 724-1555

TREE PROTECTIVE BARRIER

REVISIONS	
BY	DATE
RD	11/01/2017
BD	12/01/2019

SCALE: N.T.S.
DATE: APRIL 2015
LA1

LEGEND

- TEMPORARY CONSTRUCTION FENCE
- TREE PROTECTIVE BARRIER
- FLOATING TURBIDITY BARRIER TYPE
- PROPERTY LINE LINE
- MEAN HIGH WATER ELEVATION (MHWL)
- RIGHT-OF-WAY LINE
- EXISTING RIP RAP
- AREA OF EXISTING PIER REMOVAL

NOTES:

1. EXISTING PIER PLAN AREA = 4332 FT²
2. FLOATING TURBIDITY BARRIER SHALL BE IN PLACE PRIOR TO ANY IN-WATER WORK

Stantec
Stantec Consulting Services Inc.
380 Park Place Blvd, Suite 300
Clearwater, Florida 33759
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Fax. 727.451.1777
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Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA
SAFETY HARBOR PIER
RPLACEMENT PROJECT

Title
DEMOLITION PLAN

Permit-Seal
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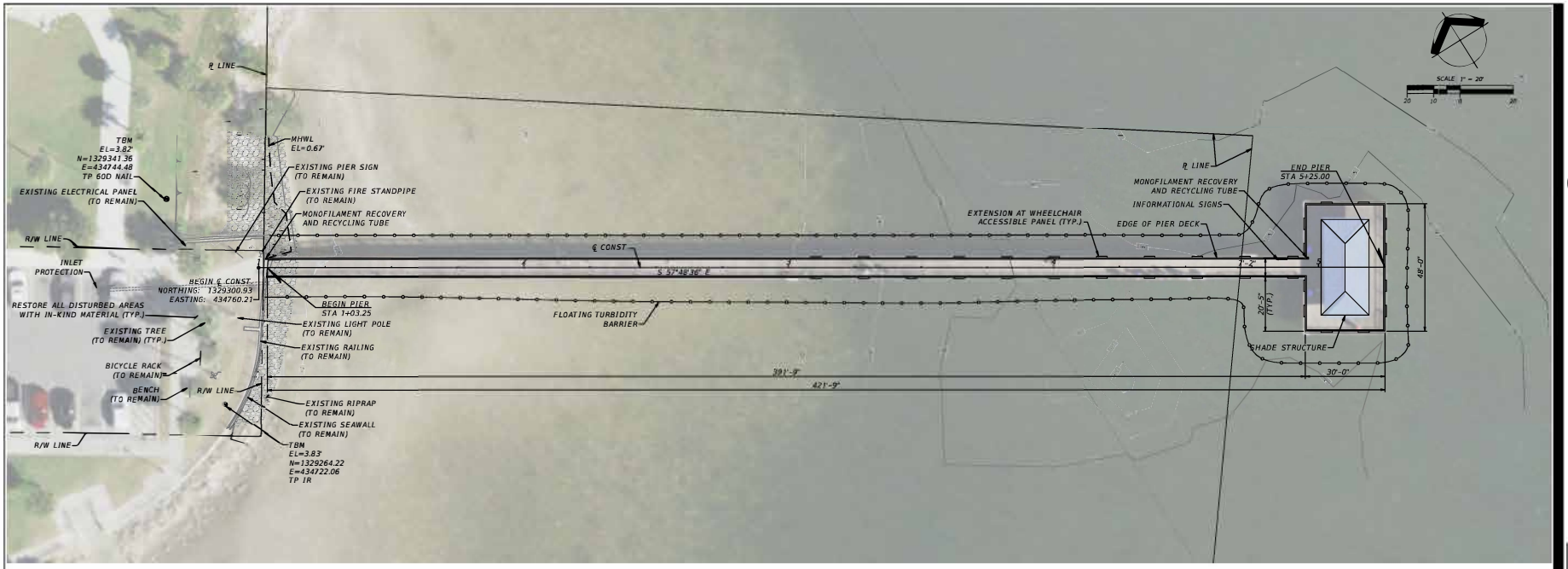
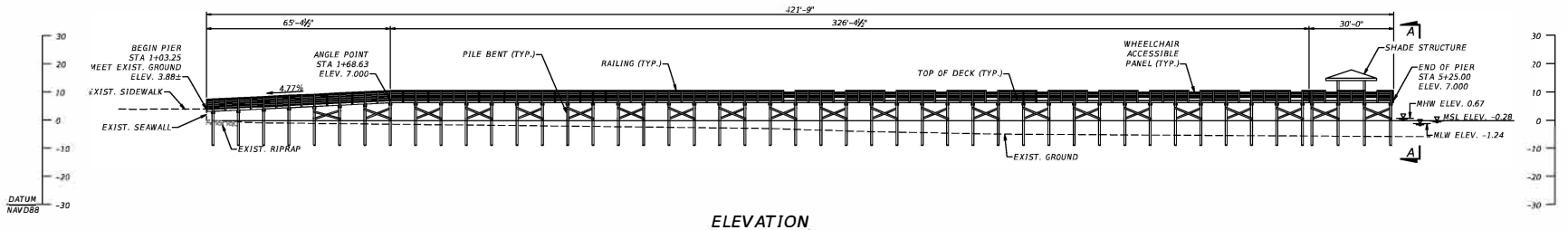
Project Number: 238201804
SCALE: N/A

Dwn.	Chkd.	Dsgn.	YY.MM.DD

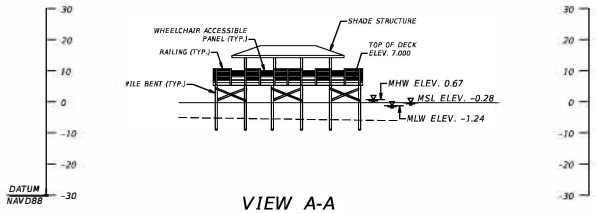
Drawing No. C2.00
Revision
Sheet 5 of 7



GENERAL PLAN
SCALE: 1" = 20'



ELEVATION
SCALE: 1" = 20'



VIEW A-A
SCALE: 1" = 20'

NOTES:

1. PROPOSED PIER PLAN AREA = 4323 FT²
2. FLOATING TURBIDITY BARRIER SHALL BE IN PLACE PRIOR TO ANY IN-WATER WORK.
3. SEE SHEET C2.00 FOR LEGEND

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Clearwater, Florida 33759
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No.	Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA
SAFETY HARBOR PIER
REPLACEMENT PROJECT

Title
GENERAL PLAN AND ELEVATION

Permit-Seal
Christopher P. Gamache, PE
Lic. No.: 82122
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Project Number: 238201804
SCALE: AS SHOWN

Dwn.	Chkd.	Dsgn.	YY.MM.DD

Drawing No. C3.00
Revision
Sheet 6 of 7

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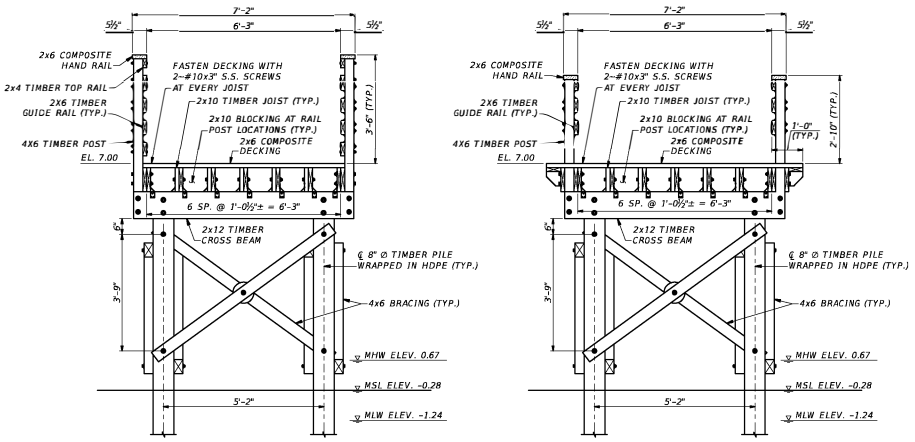
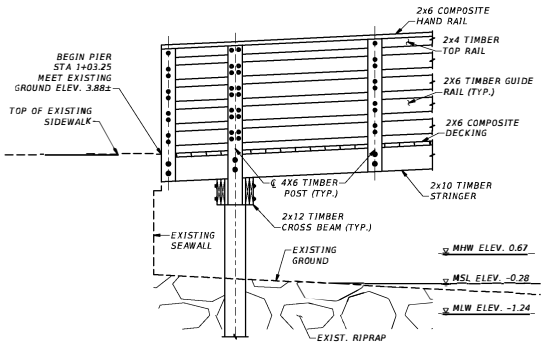
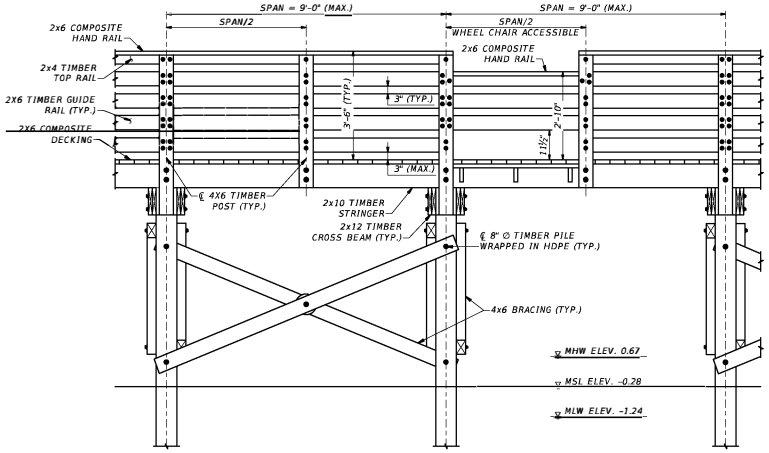
2023/09/20 2:17 PM by Christopher Gamache







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Fax. 727.431.1777

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No.	Revision	By	Appd.	YY.MM.DD

Client/Project
CITY OF SAFETY HARBOR
PINELLAS COUNTY, FLORIDA
SAFETY HARBOR PIER
RPLACEMENT PROJECT

Title
FRAMING DETAILS

Permit-Seal

Christopher P. Gamache, PE
Lic. No.: 82122

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Project Number: 238201804
SCALE: AS SHOWN

Dsgn.	Chkd.	Dsgn.	YY.MM.DD

Drawing No. C3.01
Revision Sheet
7 of 7

C:\Users\cgamache\Documents\Christopher Gamache - Desktop\Desktop\Safety Harbor\C3.01 Framing Details.dwg
2023/09/05 2:17 PM by Christopher Gamache
ORIGINAL SHEET - ANSI D (22x34)

DEPARTMENT OF THE ARMY PERMIT TRANSFER REQUEST

DA PERMIT NUMBER: SAJ-2013-00334 (NWP-RSS)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. Although the construction period for works authorized by Department of the Army permits is finite, the permit itself, with its limitations, does not expire.

To validate the transfer of this permit and the associated responsibilities associated with compliance with its terms and conditions, have the transferee sign and date below and mail to the U.S. Army Corps of Engineers, Enforcement Section, Post Office Box 4970, Jacksonville, FL 32232-0019 or submit via electronic mail to: SAJ-RD-Enforcement@usace.army.mil (not to exceed 15 MB).

_____
(TRANSFEREE-SIGNATURE)

_____
(DATE)

_____
(NAME-PRINTED)

_____

_____
(MAILING ADDRESS)

_____
(CITY, STATE, ZIP CODE)

_____
(SUBDIVISION)

_____ _____
(LOT) **(BLOCK)**

_____
(STREET ADDRESS)

COMMENCEMENT NOTIFICATION

Within ten (10) days of initiating the authorized work, submit this form to via electronic mail to saj-rd-enforcement@usace.army.mil (preferred, not to exceed 15 MB) ***or*** *by standard mail to U.S. Army Corps of Engineers, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232-0019.*

1. **Department of the Army Permit Number**: SAJ-2013-00334 (NWP-RSS)

2. **Permittee Information**:

Name: _____

Email: _____

Address: _____

_____

Phone: _____

3. **Construction Start Date**: _____

4. **Contact to Schedule Inspection**:

Name: _____

Email: _____

Phone: _____

_____
Signature of Permittee

_____
Printed Name of Permittee

_____
Date

SELF-CERTIFICATION STATEMENT OF COMPLIANCE

Within sixty (60) days of completion of the authorized work, submit this form via electronic mail to saj-rd-enforcement@usace.army.mil (preferred) or by standard mail to U.S. Army Corps of Engineers, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232-0019.

1. **Department of the Army Permit Number**: SAJ-2013-00334 (NWP-RSS)

2. **Permittee Information**: Name: _____

Email: _____

Address: _____

_____

Phone: _____

3. **Date Authorized Work Started**: _____ **Completed**: _____

4. **Contact to Schedule Inspection**: Name: _____

Email: _____

Phone: _____

5. **Description of Authorized Work (e.g. bank stabilization, fill placed within wetlands, docks, dredging, etc.):** _____

_____

_____

6. **Acreage or Square Feet of Impacts to Waters of the United States**: _____

7. **Describe Mitigation completed (if applicable)**: _____

_____

_____

8. **Describe any Deviations from Permit (attach drawing(s) depicting the deviations)**:

_____

_____

****

I certify that all work, and mitigation (if applicable) was done in accordance with the limitations and conditions as described in the permit. Any deviations as described above are depicted on the attached drawing(s).

_____
Signature of Permittee

_____
Printed Name of Permittee

_____
Date

NOAA FISHERIES | Southeast Regional Office
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

PROTECTED SPECIES CONSTRUCTION CONDITIONS, NOAA FISHERIES SOUTHEAST REGIONAL OFFICE

The action agency and any permittee shall comply with the following construction conditions for protected species under the jurisdiction of NOAA Fisheries Southeast Regional Office (SERO) Protected Resources Division (PRD):[1]

Protected Species Sightings–The action agency and any permittee shall ensure that all personnel associated with the project are instructed about the potential presence of species protected under the Endangered Species Act (ESA) and the Marine Mammal Protection Act (MMPA). All on-site project personnel are responsible for observing water-related activities for the presence of protected species. All personnel shall be advised that there are civil and criminal penalties for harming, harassing, or killing listed species and all marine mammals. To determine which protected species and critical habitat may be found in the transit area, please review the relevant marine mammal and ESA-listed species at Find A Species (https://www.fisheries.noaa.gov/find-species) and the consultation documents that have been completed for the project.

1. **Equipment**–Turbidity curtains, if used, shall be made of material in which protected species cannot become entangled and be regularly monitored to avoid protected species entrapment. All turbidity curtains and other in-water equipment shall be properly secured with materials that reduce the risk of protected species entanglement and entrapment.

    a. In-water lines (rope, chain, and cable, including the lines to secure turbidity curtains) shall be stiff, taut, and non-looping. Examples of such lines are heavy metal chains or heavy cables that do not readily loop and tangle. Flexible in-water lines, such as nylon rope or any lines that could loop or tangle, shall be enclosed in a plastic or rubber sleeve/tube to add rigidity and prevent the line from looping and tangling. In all instances, no excess line shall be allowed in the water. All anchoring shall be in areas free from hardbottom and seagrass.

    b. Turbidity curtains and other in-water equipment shall be placed in a manner that does not entrap protected species within the project area and minimizes the extent and duration of their exclusion from the project area.

    c. Turbidity barriers shall be positioned in a way that minimizes the extent and duration of protected species exclusion from important habitat (e.g. critical habitat, hardbottom, seagrass) in the project area.

2. **Operations**–For construction work that is generally stationary (e.g., barge-mounted equipment dredging a berth or section of river, or shore-based equipment extending into the water):

    a. Operations of moving equipment shall cease if a protected species is observed within 150 feet of operations.

[1] Manatees are managed under the jurisdiction of the U.S. Fish and Wildlife Service.

b. Activities shall not resume until the protected species has departed the project area of its own volition (e.g., species was observed departing or 20 minutes have passed since the animal was last seen in the area).

3. **Vessels**–For projects requiring vessels, the action agency, and any permittee shall ensure conditions in the Vessel Strike Avoidance Measures are implemented as part of the project/permit issuance (https://www.fisheries.noaa.gov/southeast/consultations/regulations-policies-and-guidance).

4. **Consultation Reporting Requirements–**Any interaction with a protected species shall be reported immediately to NOAA Fisheries SERO PRD and the local authorized stranding/rescue organization.

   To report to NOAA Fisheries SERO PRD, send an email to takereport.nmfsser@noaa.gov. Please include the species involved, the circumstances of the interaction, the fate and disposition of the species involved, photos (if available), and contact information for the person who can provide additional details if requested. Please include the project's Environmental Consultation Organizer (ECO) number and project title in the subject line of email reports.

   To report the interaction to the local stranding/rescue organization, please see the following website for the most up to date information for reporting sick, injured, or dead protected species:

   Reporting Violations–To report an ESA or MMPA violation, call the NOAA Fisheries Enforcement Hotline. This hotline is available 24 hours a day, 7 days week for anyone in the United States.

   NOAA Fisheries Enforcement Hotline (800) 853-1964

5. **Additional Conditions–**Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the project consultation and must also be complied with.

For additional information, please contact NOAA Fisheries SERO PRD at:
NOAA Fisheries Service
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701
Tel: (727) 824-5312
Visit us on the web at Protected Marine Life in the Southeast
(https://www.fisheries.noaa.gov/region/southeast#protected-marine-life)

Revised: May 2021

STANDARD MANATEE CONDITIONS FOR IN-WATER WORK

2011

The permittee shall comply with the following conditions intended to protect manatees from direct project effects:

a. All personnel associated with the project shall be instructed about the presence of manatees and manatee speed zones, and the need to avoid collisions with and injury to manatees. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act, the Endangered Species Act, and the Florida Manatee Sanctuary Act.

b. All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while in the immediate area and while in water where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

c. Siltation or turbidity barriers shall be made of material in which manatees cannot become entangled, shall be properly secured, and shall be regularly monitored to avoid manatee entanglement or entrapment. Barriers must not impede manatee movement.

d. All on-site project personnel are responsible for observing water-related activities for the presence of manatee(s). All in-water operations, including vessels, must be shutdown if a manatee(s) comes within 50 feet of the operation. Activities will not resume until the manatee(s) has moved beyond the 50-foot radius of the project operation, or until 30 minutes elapses if the manatee(s) has not reappeared within 50 feet of the operation. Animals must not be herded away or harassed into leaving.

e. Any collision with or injury to a manatee shall be reported immediately to the Florida Fish and Wildlife Conservation Commission (FWC) Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or Vero Beach (1-772-562-3909) for south Florida, and to FWC at ImperiledSpecies@myFWC.com

f. Temporary signs concerning manatees shall be posted prior to and during all in-water project activities. All signs are to be removed by the permittee upon completion of the project. Temporary signs that have already been approved for this use by the FWC must be used. One sign which reads *Caution: Boaters* must be posted. A second sign measuring at least 8 ½" by 11" explaining the requirements for "Idle Speed/No Wake" and the shut down of in-water operations must be posted in a location prominently visible to all personnel engaged in water-related activities. These signs can be viewed at MyFWC.com/manatee. Questions concerning these signs can be sent to the email address listed above.

CAUTION: MANATEE HABITAT

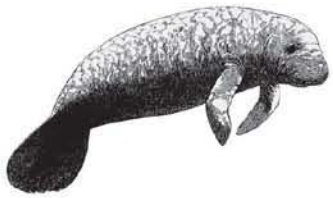
All project vessels

IDLE SPEED / NO WAKE

When a manatee is within 50 feet of work
all in-water activities must

SHUT DOWN

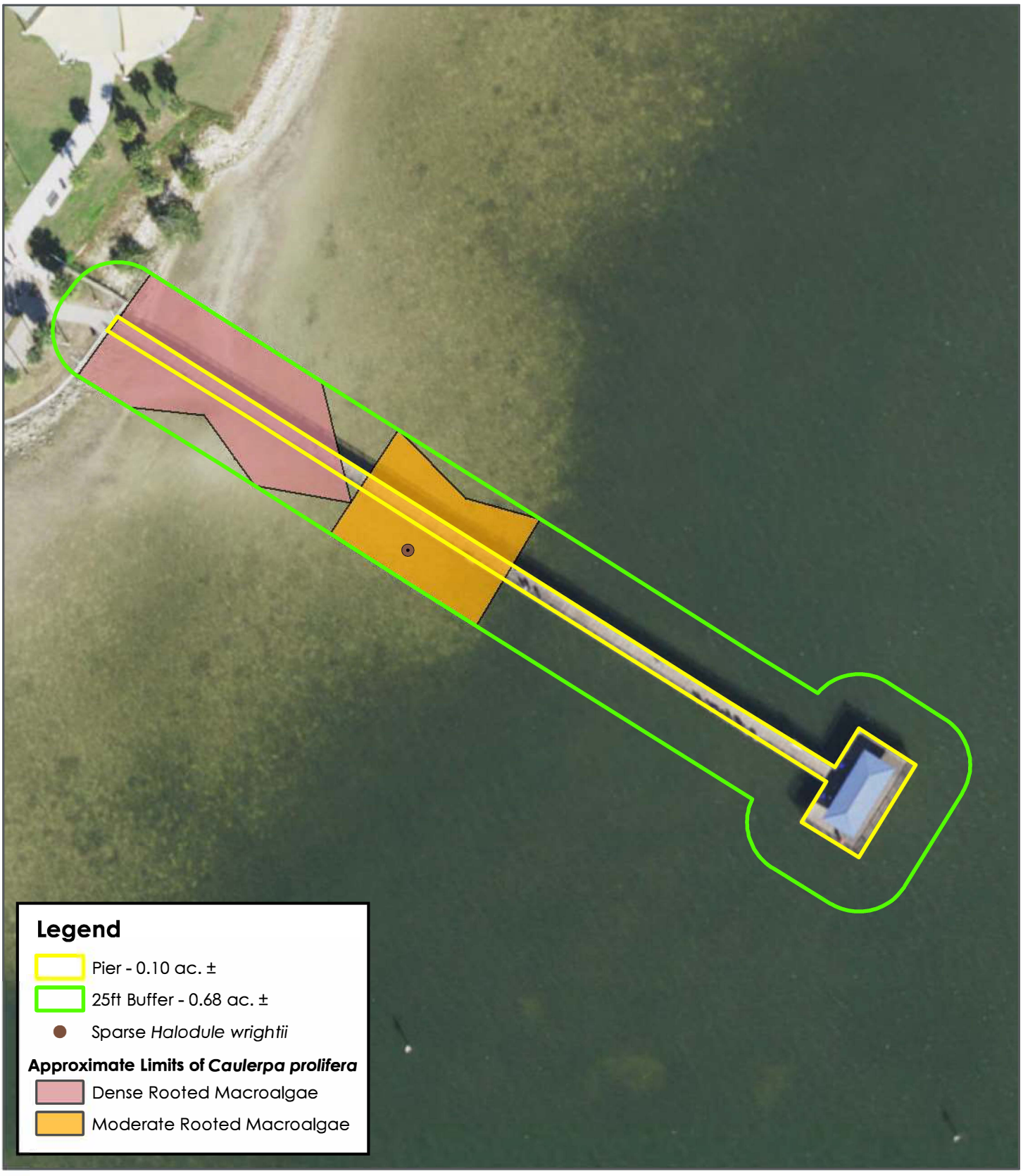
Report any collision with or injury to a manatee:



Wildlife Alert:

1-888-404-FWCC(3922)

cell *FWC or #FWC



N
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Project No. 238201804

Figure 5: Aquatic Resource Map

Safety Harbor Fishing Pier Replacement Project

0 25 50 100
Feet

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now
Stantec
6130 Cottonwood Dr., Fitchburg, WI 53719 USA
Phone (+1) 608-661-2955 Fax (+1) 608-661-2961
www.cardno.com

Date Created: 1/6/2023 Date Revised: 1/6/2023 File Path: \\cardno.corp\global\US\FL\TPA01\TPA01Secure01\GIS_Projects\UnitedStates\Florida\Tampa\City_of_Safety_Harbor\Figure 5 - Aquatic Resource Map.mxd GIS Analyst: christopher.hong
Data Sources:

Stantec

Safety Harbor Fishing Pier Replacement Project

Benthic Resource Survey Report

January 17, 2023

Prepared for:
City of Safety Harbor, Public Works Dept.
1200 Railroad Ave., Florida 34695

Prepared by:
Stantec Consulting Services, Inc. 3905
Crescent Park Dr,
Riverview, FL 33578

Revision	Description	Author	Date	Quality Check	Date	Independent Review	Date
1.0	Draft Benthic Resource Survey Report	Joshua Henkle	12/22/2022	Katie Castor	12/23/2022		
2.0	Draft Benthic Resource Survey Report	Joshua Henkle	01/06/2023	Katie Castor	1/7/2023		
3.0	Draft Benthic Resource Survey Report	Joshua Henkle	01/10/2023	Katie Castor	1/11/2023	Liz Eardley	1/18/2023

The conclusions in the Report titled Benthic Resource Survey Report are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from City of Safety Harbor (the "Client") and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This Report is intended solely for use by the Client in accordance with Stantec's contract with the Client. While the Report may be provided to applicable authorities having jurisdiction and others for whom the Client is responsible, Stantec does not warrant the services to any third party. The report may not be relied upon by any other party without the express written consent of Stantec, which may be withheld at Stantec's discretion.

Prepared by:

Signature Joshua Henkle

Joshua Henkle, MS / Field Technician

Reviewed by:

Signature Katie Castor

Katie Castor, MS, PWS / Senior Project Manager

Approved by:

Signature Elizabeth Eardley

Liz Eardley / Ecologist

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1 Introduction 1
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3 Methodology 5
4 Findings 8
4.1 Benthic Resource Survey Results 8
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Appendix B – NMFS Correspondence ..... B
Appendix C – Seagrass Assessment Report Safety Harbor Marina 2020 C

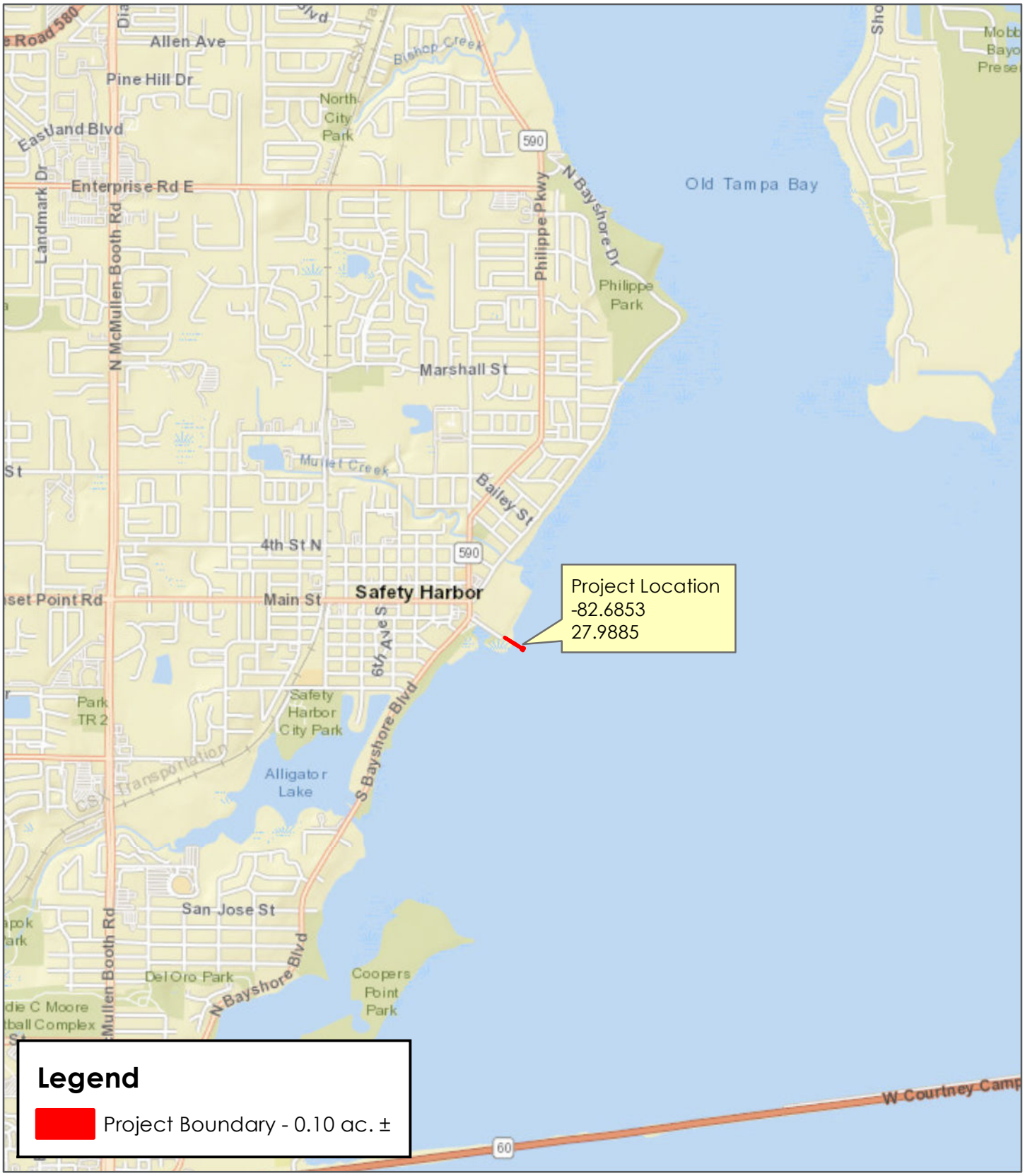
1 Introduction

In August 2022, Stantec was retained by the City of Safety Harbor (City) to perform design and permitting services for the removal and replacement of the Safety Harbor Fishing Pier located at the end of Veterans Memorial Lane (27.995, -82.6853) (**Figure 1- Location Map, Figure 2- Topographic Map**); in Pinellas County, Florida. Stantec understands that the project entails replacement of the existing pier in its exact footprint. The new pier will be the same size, height, and configuration as the existing pier. This report details the benthic resource survey conducted by one Stantec diver on October 11, 2022.

Please note that while the standard established seagrass growing season is June 1 to September 30[1] , this survey was required to be postponed due to Hurricane Irma. Stantec corresponded with Mark Sramek with the National Marine Fisheries Service (NMFS) via email on October 6, 2022, to gain permission to survey beyond the pre-determined seagrass survey timeframe provided in NMFS guidelines (see footnote below) due to these unforeseen circumstances. Mr. Sramek provided approval of the resource survey, and the NMFS correspondence is provided in Appendix B.

The study area for this resource survey included the area of the existing pier and 25' buffer (**Figure 3 - Aerial Map**).

[1] National Oceanic and Atmospheric Administration National Marine Fisheries Service Seagrass Survey Guidelines



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Project No. 238201804

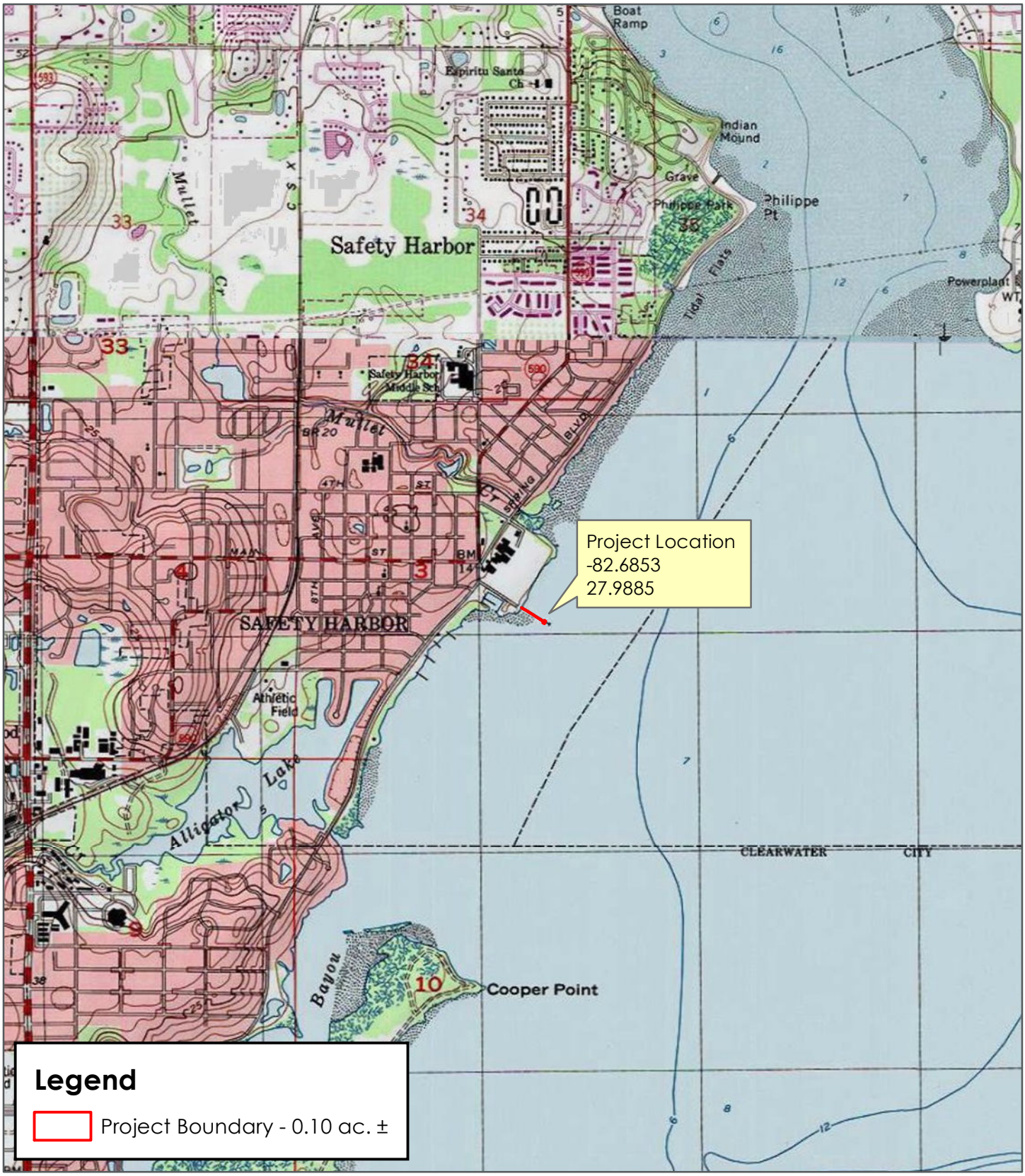
Figure 1: Location Map

Safety Harbor Fishing Pier Replacement Project

0 750 1,500 3,000
Feet

Cardno now Stantec
6130 Cottonwood Dr., Fitchburg, WI 53719 USA
Phone (+1) 608-661-2955 Fax (+1) 608-661-2961
www.cardno.com

Date Created: 10/27/2022 Date Revised: 10/27/2022 File Path: \\cardno.corp\global\US\FL\TPA01\TPA01Secure01\GIS_Projects\UnitedStates\Florida\Tampa\City_of_Safety_Harbor\Figure 1 - Location Map.mxd GIS Analyst: christopher.hong
Data Sources:



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Project No. 238201804

Figure 2: USGS Topographic Map

Safety Harbor Fishing Pier Replacement Project

0 750 1,500 3,000
Feet

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6130 Cottonwood Dr., Fitchburg, WI 53719 USA
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Date Created: 10/27/2022 Date Revised: 10/27/2022 File Path: \\cardno.corp\global\US\FL\TPA01\TPA01Secure01\GIS_Projects\UnitedStates\Florida\Tampa\City_of_Safety_Harbor\Figure 2 - USGS Topographic Map.mxd
Data Sources:

GIS Analyst: christopher.hong

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Project No. 238201804

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Figure 3: Aerial Map

Safety Harbor Fishing Pier Replacement Project

0 25 50 100
Feet

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Data Sources:

GIS Analyst: christopher.hong

2 Purpose

The purpose of the benthic resource survey was to locate and determine the potential presence of any seagrass species (Shoal grass, *Halodule wrightii,* Turtle grass, *Thalassia testudinum,* Caribbean seagrass, *Halophila decipiens,* Manatee grass*, Syringodium filiforme,* and Star grass*, Halophila engelmanni*) or other submerged aquatic resources present within the survey area boundary. The jurisdictional regulatory agencies (United States Army Corps of Engineers (USACE), the Florida Department of Environmental Protection (FDEP), and Pinellas County Water and Navigation (PCWN)) require demonstration that to the greatest extent practical, the project will not adversely impact the functions and value provided to fish, wildlife, and listed species by seagrass and hardbottom habitats. Seagrass surveys must be completed prior to commencement of construction and within the established seagrass growing timeframes of June 1 to September 30. The pre-construction benthic resource survey establishes baseline conditions and is used as a tool to refine the project design so that construction activities will avoid impact to these resources. The post-construction seagrass survey, which will likely be a NMFS requirement in the USACE permit, should be conducted after all construction activities are completed and within the seagrass growing timeframes of June 1 to September 30, to assess whether there were any project-induced impacts.

3 Methodology

On October 11, 2022, a qualified Stantec diver conducted a benthic resource survey within the existing pier and a 25-foot buffer to document the underwater conditions around the Safety Harbor Fishing Pier and identify any seagrass or other submerged resources that may be present at the time of survey.

The survey was conducted along approximate linear transects established parallel to the shoreline (**Figure 4 - Approximate Transect Map**). The surveyor accessed the start of the approximate transects from a side entrance leading to the beach at the beginning of the pier. Each transect thereafter was done by going from south to north, then continuing back north to south until all approximate transects were completed. To complete the approximate transects at the edge of the pier, the surveyor would start at the pier and travel to the edge of the buffer; then travel back to the pier via the next transect.

Using a GoPro (video and still), Aqua Notes underwater pad, and an iPad, the surveyor and above-water observer inspected around and under the pier. All benthic resource observations were recorded on the Aqua Notes pad. An iPad was to be used to mark any potential seagrass, corals, or other resources within the buffer. Other observations were also marked on the iPad in which the surveyor thought to be necessary. The site was surveyed over the course of one (1) field day.

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Figure 4: Pier Survey Transects Map

Safety Harbor Fishing Pier Replacement Project

0 25 50 100
Feet

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Data Sources:

GIS Analyst: christopher.hong

4 Findings

4.1 Benthic Resource Survey Results

In general, there was an abundance of green algae (*Caulerpa prolifera*) on the north and south sides of the pier within the first 50 to 100 feet from shore. The water became increasingly turbid after approximately 250 feet from shore, where visibility was about 1.5 feet. This may be due to the high recreational boating (kayaking, fishing, etc.) observed while on site.

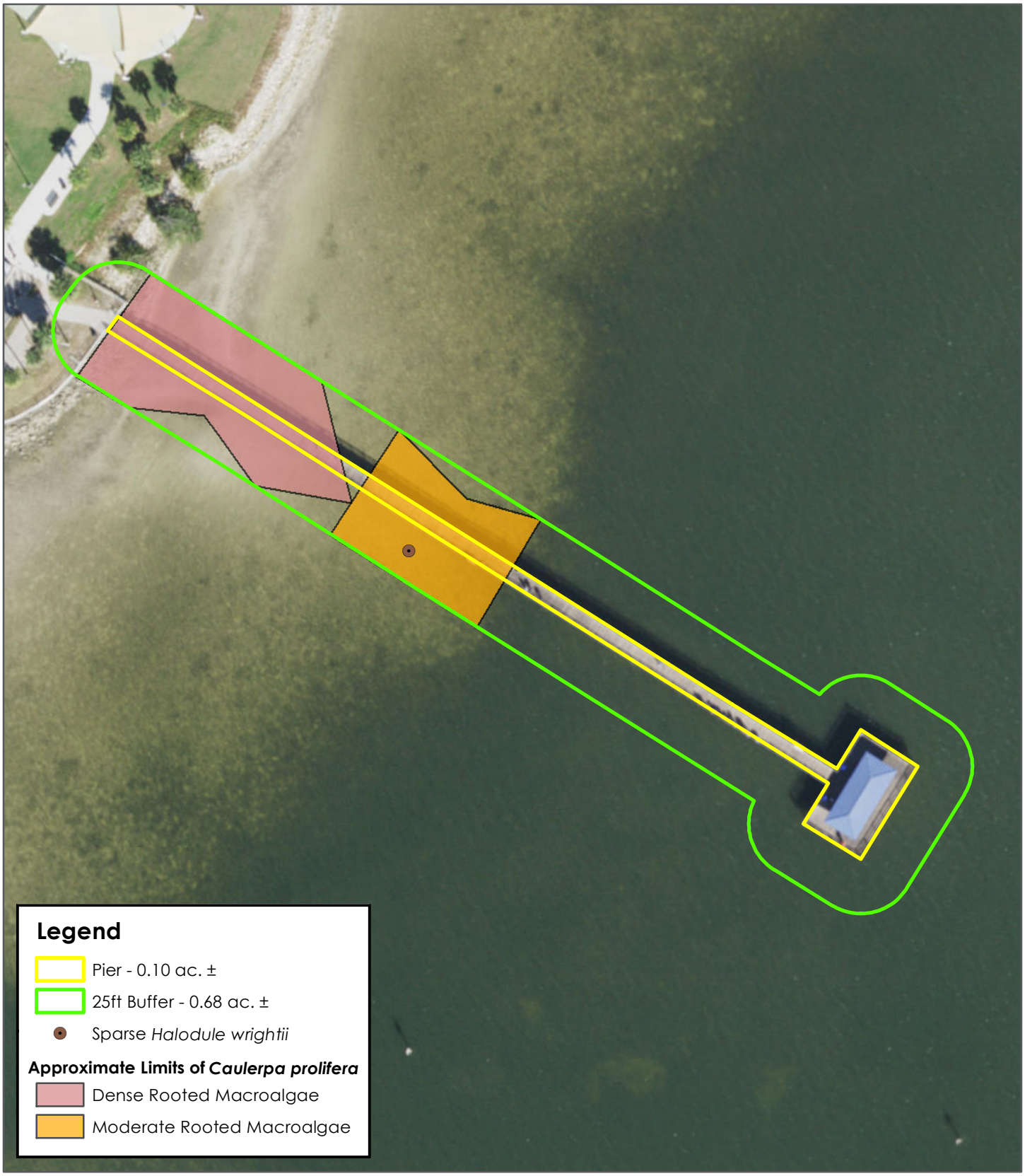
Near shore, thick mud and muck stretched from the south side buffer to the north side buffer. Approximately 20 feet from shore, a transition from mud to a sandy, rocky bottom was observed, with scattered green algae, which was present throughout the perimeter of the pier. The benthic structure of the underside of the pier was bare, sandy bottom, with the turbidity of the water increasing with the increasing distance from shore.

Clear photographs and videos were difficult to capture due to the turbidity. the landwardmost 50ft on both the north and south sides of the pier were mostly sandy bottoms with sparse rooted macroalgae. In general, more algae were present along both sides of the pier within two hundred (200) feet from shore. Between 200 feet from shore and extending southeast through the end of the pier, fewer rooted macroalgae were present. Eastern oyster (*Crassostrea virginica*) shells were seen attached to most of the pilings, starting approximately 30 feet offshore. Toward the east end of the pier the water became more turbid, and visibility was somewhat poor; the substrate began to transition to a rocky and sandy bottom with no vegetation present. A juvenile snook (*Centropomus undecimalis*) was seen swimming near the end of the pier.

One instance of sparse seagrass presence was observed within the study area (Figure 5 - Aquatic Resource Map). The seagrass, which was identified to be shoal grass (*Halodule wrightii*), was located on the south side of the pier approximately 140 feet from shore and approximately 15 feet from the existing pier. No other seagrass or submerged aquatic resources, including coral, were observed within 25 feet of the project boundary.

4.2 Survey Conditions

On October 11, 2022, at 9:30 a.m. the weather was sunny and clear with winds at about 2 miles per hour out of the northwest. High tide was predicted for 4:22 am and a low tide predicted for 10:40 am. No rain was predicted or seen while on site, and the wind conditions were NNW at 12mph (NOAA National Ocean Service 2022). The air temperature in Tampa Bay from October 11 averaged from a low of 72°F to a high of 86°F. Cloud cover was about 90 percent, with slight humidity. The water level was 5 feet at the deepest part of the pier at the time of the survey. Most of the survey site was shallow enough to stand (≤ 5ft), where the only minor swimming took place at the furthest point of the pier.



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Project No. 238201804

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Figure 5: Aquatic Resource Map

Safety Harbor Fishing Pier Replacement Project

0 25 50 100
Feet

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Date Created: 1/6/2023 Date Revised: 1/6/2023 File Path: \\cardno.corp\global\US\FL\TPA01\TPA01Secure01\GIS_Projects\UnitedStates\Florida\Tampa\City_of_Safety_Harbor\Figure 5 - Aquatic Resource Map.mxd GIS Analyst: christopher.hong
Data Sources:

5 Summary

A Stantec diver conducted a benthic resource survey on October 11, 2022. One instance of sparse seagrass presence was observed within the study area. The seagrass, which was identified to be shoal grass (*Halodule wrightii*), was located on the south side of the pier approximately 140 feet from shore and approximately 15 feet from the existing pier. No other seagrass, coral, or submerged aquatic resources other than green algae (*Caulerpa prolifera*), were observed within 25 feet of the project boundary.

This finding is generally consistent with a previous survey done in 2020 (Appendix C). This 2020 survey was done at the channel entrance approximately 200 feet from Safety Harbor Pier. There was distinct vegetation on the southern fringe of the navigation channel moving inwards. Green algae were sparse along the channel. There was also a scarce amount of shoal grass present but was solidary. This was also the only seagrass that was seen during the survey. Stantec recommends the implementation of best management practices (BMPs) to minimize the potential for impacts to aquatic habitat during construction, including installation of turbidity curtains.

6 References

Hinton, J. (2020, December 14). Guidance on surveys for potential impacts to submerged aquatic vegetation. Florida Department of Environmental Protection. Retrieved December 6, 2022, from https://floridadep.gov/rcp/beaches-inlets-ports/documents/guidance-surveys-potentialimpactssubmerged-aquatic-vegetation

Office of Resilience and Coastal Protection Florida Department of Environmental Protection. (2020, December 8). *Guidance on surveys for potential impacts to submerged aquatic vegetation*. Florida Department of Environmental Protection. Retrieved from https://floridadep.gov/rcp/beaches-inlets-ports/documents/guidance-surveyspotentialimpactssubmerged-aquatic-vegetation

APPENDIX A – PHOTO LOG

Photograph 1. Dense rooted green algae (*Caulerpa prolifera*).

Photograph 2. Limited visibility from the end of the pier (offshore).

Photograph 3. Sparse shoal grass (*Halodule wrightii*) located approximately 140 feet offshore on the south side of the pier.

Photograph 4. Oyster shells (*Crassostrea virginica*) attached to the pilings (photograph taken East to West).

APPENDIX B – NMFS Correspondence

From: Mark Sramek - NOAA Federal
To: Katie Castor
Cc: Monica Downer
Subject: Re: Safety Harbor Fishing Pier seagrass/benthic survey
Date: Friday, October 7, 2022 8:10:25 AM
Attachments: image007.png
image008.png
image001.png
image002.png
image010.png
image011.png
image013.png

Good morning Katie,

Just a point of clarification on my email below -- I failed to include the word "temperature" in my reasoning as to why postponing the SAV survey until October 11th could be allowed beyond the NMFS/FDEP-recommended September 30th survey deadline. I hope this clarifies my email.

Enjoy your weekend,
Mark

On Thu, Oct 6, 2022 at 2:45 PM Katie Castor <kathleen.castor@cardno.com> wrote:

> Great, thanks Mark!
>
> **Katie Castor, M.S., PWS**
>
> ENVIRONMENTAL PROJECT MANAGER
>
> Mobile: 301 938 9668
> kathleen.castor@cardno.com
>
> 3905 Crescent Park Drive
> Riverview, Florida 33578
>
>
>
>
>
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>
> Please consider the environment before printing this email.
>
> ---
>
> **From:** Mark Sramek - NOAA Federal <mark.sramek@noaa.gov>
> **Sent:** Thursday, October 6, 2022 2:42 PM
> **To:** Katie Castor <kathleen.castor@cardno.com>
> **Cc:** Monica Downer <monica.downer@cardno.com>
> **Subject:** Re: Safety Harbor Fishing Pier seagrass/benthic survey

Hi Katie,

Thank you for your email regarding the need to postpone the SAV survey for the Safety Harbor Pier replacement project. In this case, and because Tampa Bay water hasn't changed much in the last week, I do not have any concerns with the SAV survey occurring on October 11th.

I hope you're having a productive week,

Mark

On Thu, Oct 6, 2022 at 11:47 AM Katie Castor <kathleen.castor@cardno.com> wrote:

> Hi Mark, this is a new project that was just approved/executed last month and we had planned to do the benthic resource survey quickly at the end of September in order to not lose the season. However, with the hurricane, we had to postpone our field review until October 11th. We understand this is slightly outside the federal season but we're requesting approval to conduct the survey on that date and have it accepted by NMFS during the review of our USACE application. The project is replacement of the Safety Harbor Fishing Pier in it's exact footprint and configuration. Please feel free to give me a call to discuss (301-938-9668).
>
> Thank you!

Katie Castor, M.S., PWS

ENVIRONMENTAL PROJECT MANAGER

Mobile: 301 938 9668
kathleen.castor@cardno.com

3905 Crescent Park Drive
Riverview, Florida 33578

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--

Mark Sramek

Fishery Biologist, Southeast Regional Office

NOAA Fisheries | U.S. Department of Commerce

Office: (727) 824-5311

www.fisheries.noaa.gov

--
Mark Sramek
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APPENDIX C - SEAGRASS ASSESSMENT REPORT SAFETY HARBOR MARINA 2020

GHS Environmental
PO Box 55802
St. Petersburg, FL 33732-5802
727-667-6786

Seagrass Assessment Report
Safety Harbor Marina

Prepared for: McKim & Creed

Introduction

The City of Safety Harbor is proposing to perform maintenance dredging of the channel to the entrance to Safety Harbor Marina (Marina). The Marina is located in the upper northwestern portion of Old Tampa Bay. The seagrass survey is intended for use as supplemental information for the Army Corps of Engineering (ACOE) and Florida Department of Environmental Protection (FDEP) permit application packages.

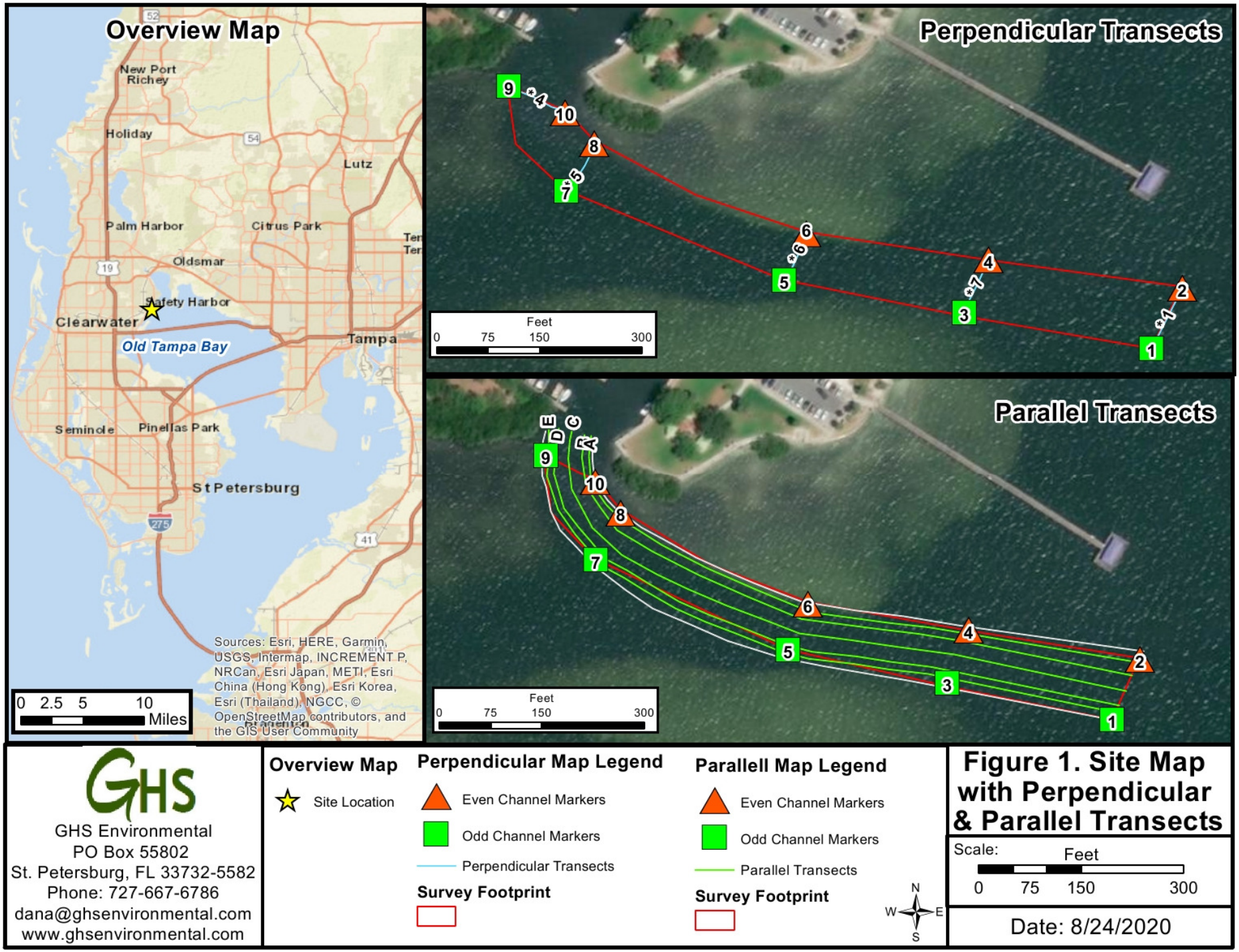
Method

McKim & Creed contracted with GHS Environmental to perform a seagrass survey of the proposed dredge area. GHS made diver observations within the area of the entrance channel (between channel markers Nos. 1 through 10) for presence of seagrass and the immediate shallow areas no greater than 10 feet outside of the channel markers. No observations were made within the marina area.

The survey gathered data for seagrass percent cover and species composition. A total of five (5) perpendicular transects were completed across the navigation channel within the proposed dredge area, between channel marker sets 9/10, 7/8, 5/6, 3/4, and 1/2. A 100 ft transect tape was used to mark the transect path between the channel markers. Observations were made at each channel marker and along the transect for composition and general cover. A 1 ft quadrat was used to determine seagrass percent cover and species composition. Quadrats were placed at approximately 25% of the total distance, at approximately 50% of the total distance, and at approximately 75% of the total distance of the transects between the odd and even channel markers. Data was collected by recording notes in a field book at the completion of each transect. See **Figure 1**.

A total of five (5) parallel transects were completed parallel with navigation channel: along the outer edges of the navigation channel (2), centerline (1), and approximately halfway between the centerline and outer edges of the navigation channel (2). Quadrat locations were selected where distinct changes in percent cover occurred along these transects to denote density concentration and species composition changes with depth. GPS coordinates were collected using a Garmin Montana 680t at all quadrat locations along the parallel transects.

Photographs and videos were collected but are of poor quality due to low visibility and high sedimentation.



GHS
GHS Environmental
PO Box 55802
St. Petersburg, FL 33732-5582
Phone: 727-667-6786
dana@ghsenvironmental.com
www.ghsenvironmental.com

Overview Map

- Site Location

Perpendicular Map Legend

- Even Channel Markers
- Odd Channel Markers
- Perpendicular Transects

Survey Footprint

Parallell Map Legend

- Even Channel Markers
- Odd Channel Markers
- Parallel Transects

Survey Footprint

N W E S

Figure 1. Site Map with Perpendicular & Parallel Transects

Scale: Feet
0 75 150 300

Date: 8/24/2020

Data Summary

The seagrass survey was conducted on Wednesday, June 24, 2020. The weather was clear with little cloud cover. The air temperature ranged from about 80°F in the morning to around 100°F in the early afternoon when the survey was complete. The wind was light (<5 mph) out of the east southeast. No rain was observed during transit to the site. Data from a nearby weather station reported no rain for at least three (3) days prior to the survey.

High tide (1.9 ft. MSL) was predicted to be at 8:05 a.m. with a very minimal low tide (1.7 ft. MSL) at 11:19 a.m. Water visibility was very poor and was less than 1.5 ft. Sediment was visible moving in the water column as the tide changed. All vegetation observed had relatively heavy sediment coverage.

In general, there was a distinct pattern of submerged vegetative growth on the southern fringe of the navigation channel moving inwards towards the center of the channel with greater depth. Scarce to no vegetation was observed along the mangrove fringes due to frequent air and direct sun exposure during low tide. Submerged vegetation became pronounced approximately halfway between channel marker set Nos. 7/8 and set Nos. 5/6. Open bottom areas with scarce or no submerged vegetation clearly narrowed and followed a distinct pathway to the end of the navigation channel at channel marker set Nos. 1/2. This pathway is due to heavy motor boat traffic.

There is very little to no seagrass present in and within the vicinity of the navigation channel. Shoal grass, *Halodule wrightii*, was scarcely scattered ("+" on the Braun Blanquet scale[1]) in areas outside of the dredging project in the intertidal areas along the mangrove fringe on either side of the entrance to the Marina. *Halodule wrightii* was not observed within the dredge project footprint. To compare to previously reported data by the Tampa Bay Estuary Program, the concentration of *Halodule* sp. would be considered solitary.

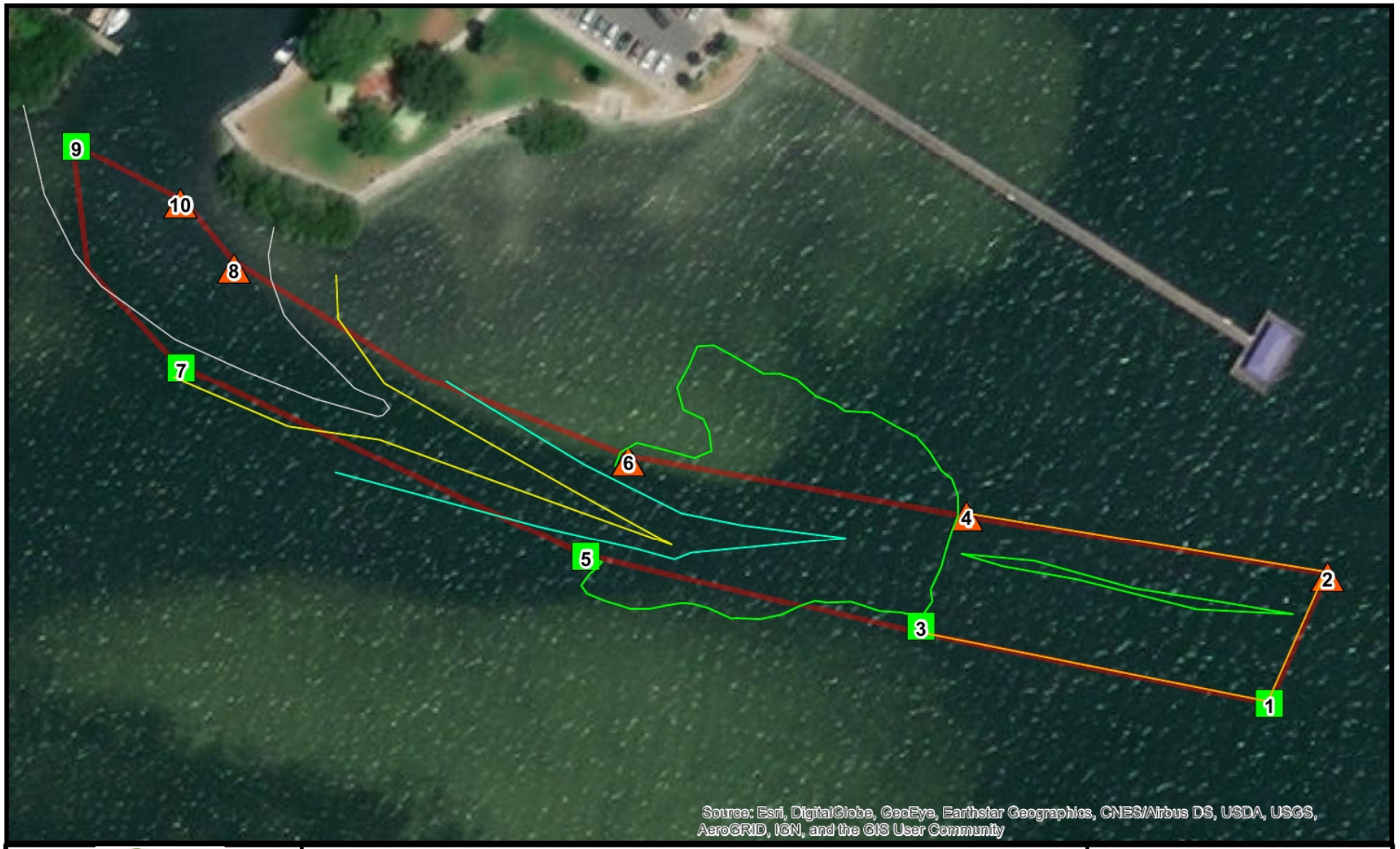
Manatee grass, *Syringodium filiforme*, was not present within the survey area or within the near vicinity of the navigation channel ("+" on the Braun Blanquet scale). To compare to previously reported data by the Tampa Bay Estuary Program, there would be no coverage of *Syringodium* sp.

There is a progressive increase in percent cover of the macroaglae, *Caulerpa prolifera*, which was very sparse ("+" on the Braun Blanquet scale) at the mouth of the Marina (channel marker set Nos. 9/10). Density of Caulerpa sp. increased slightly (1 on the Braun Blanquet scale) just eastwardly from channel marker set Nos. 7/8 and continued to increase to a sparse/moderate density (2 on the Braun Blanquet scale) from approximately halfway to the channel marker set Nos. 5/6. At channel marker set Nos. 5/6, density increase significantly on the fringe of the dredge project area to moderate density (3 on the Braun Blanquet scale) and extending inwardly into the navigation channel eastwardly to channel marker set Nos. 3/4. Densities were measured as a 4 on the Braun Blanquet scale from the fringe of the navigation channel at channel marker set Nos. 3/4 to the terminus of channel marker set Nos.

[1] A visual assessment technique developed early in the 20th century by the plant sociologist Braun-Blanquet and used to assess abundance of seagrass and macroalgae.

1/2. There is a scoured strip approximately in the center of the navigation channel where densities returned to a 3 on the Braun Blanquet scale presumed to be due to high boat traffic. See **Figure 2** for density coverage.

Overall, a monoculture of the macroalgae, *Caulerpa prolifera*, was observed in the seagrass survey. See **Figure 3**.



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Braun-Blanquet Classification:

- \+ Very Sparse/No Cover (<1%)
- 1-Sparse (1 to <5%)
- 2-Sparse/Moderate (5 to 25%)
- 3-Moderate (25% to 50%)
- 4-Moderate/Dense (50% to <75%)

Markers

- Even Channel Markers
- Odd Channel Markers

Survey Footprint

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Figure 2. Caulerpa Prolifera Density

Scale: Feet

0 50 100 200

Date: 8/23/2020

Figure 3. *Caulerpa prolifera.*

Results

Below are tables summarizing the percent cover per species. *Halodule wrightii* and *Syringodium filiforme* were not present above "+" on the Braun Blanquet scale inside the dredge project area. See **Table 1**.

Table 1. Perpendicular Transect Summary by Species.

Halodule wrightii						
Transect	**Odd**	**Split**	**CL**	**Split**	**Even**	**General Notes**
9/10	+	+	+	+	+	Sparse/Solitary. Observed outside of channel markers, mainly towards mangrove fringe on either side of the entrance to the Marina.
7/8	+	+	+	+	+	Sparse/Solitary. Observed outside of channel markers, mainly towards mangrove fringe to the north.
5/6	+	+	+	+	+	Sparse/Solitary. Observed outside of channel markers, mainly towards pier to the north.
3/4	+	+	+	+	+	Not observed/No coverage.
1/2	+	+	+	+	+	Not observed/No coverage.
Syringodium filiforme						
Transect	**Odd**	**Split**	**CL**	**Split**	**Even**	**General Notes**
9/10	+	+	+	+	+	Not observed/No coverage.
7/8	+	+	+	+	+	Not observed/No coverage.
5/6	+	+	+	+	+	Not observed/No coverage.
3/4	+	+	+	+	+	Not observed/No coverage.
1/2	+	+	+	+	+	Not observed/No coverage.
Caulerpa prolifera						
Transect	**Odd**	**Split**	**CL**	**Split**	**Even**	**General Notes**
9/10	+	+	+	+	+	Not observed/No coverage.
7/8	1	+	+	+	+	Not observed/No coverage.
5/6	3	2	1	2	3	Not observed/No coverage.
3/4	4	3	3	3	4	Not observed/No coverage.
1/2	4	4	3	4	4	Not observed/No coverage.

Parallel transects were swam to create generalize contour lines of the Braun Blanquet scale for the macroalgae, *Caulerpa prolifera*. GPS coordinates were collected when the species coverage increased in scale. For tabular representation, the latitude and longitude are listed when the scale increased. See **Table 2**.

Table 2. Parallel Transect Summary by Species.

Parallel Transects						
Halodule wrightii						
Blanquet Braum Scale / Transect	**A**	**B**	**C**	**D**	**E**	**General Notes**
+	+	+	+	+	+	Not observed/No coverage.
1	NA	NA	NA	NA	NA	Not observed/No coverage.
2	NA	NA	NA	NA	NA	Not observed/No coverage.
3	NA	NA	NA	NA	NA	Not observed/No coverage.
4	NA	NA	NA	NA	NA	Not observed/No coverage.
Syringodium filiforme						
Blanquet Braum Scale / Transect	**A**	**B**	**C**	**D**	**E**	**General Notes**
+	+	+	+	+	+	Not observed/No coverage.
1	NA	NA	NA	NA	NA	Not observed/No coverage.
2	NA	NA	NA	NA	NA	Not observed/No coverage.
3	NA	NA	NA	NA	NA	Not observed/No coverage.
4	NA	NA	NA	NA	NA	Not observed/No coverage.
Caulerpa prolifera						
Blanquet Braum Scale / Transect	**A**	**B**	**C**	**D**	**E**	**General Notes**
+	27°59'18.41"N / 82°41'13.64"W	27°59'18.04"N / 82°41'13.33"W	27°59'17.58"N / 82°41'12.72"W	27°59'17.83"N / 82°41'13.81"W	27°59'18.54"N / 82°41'15.07"W	Sparse/Solitary <1%
1	27°59'18.19"N / 82°41'13.10"W	27°59'17.76"N / 82°41'12.76"W	27°59'16.65"N / 82°41'10.51"W	27°59'17.37"N / 82°41'12.77"W	27°59'17.45"N / 82°41'13.49"W	Sparse <5%
2	27°59'17.77"N / 82°41'12.25"W	27°59'16.87"N / 82°41'10.41"W	27°59'16.70"N / 82°41'9.16"W	27°59'16.55"N / 82°41'10.48"W	27°59'17.15"N / 82°41'13.13"W	Sparse/Moderate 5% to <25%
3	27°59'17.22"N / 82°41'10.93"W	27°59'16.59"N / 82°41'8.24"W	27°59'16.49"N / 82°41'8.43"W	27°59'16.17"N / 82°41'8.57"W	27°59'16.52"N / 82°41'11.04"W	Moderate 25% to <50%
4	27°59'16.40"N / 82°41'5.45"W	27°59'16.26"N / 82°41'5.55"W	27°59'16.03"N / 82°41'5.67"W	27°59'15.81"N / 82°41'5.78"W	27°59'15.59"N / 82°41'5.84"W	Moderate/Dense 50% to <75%

NA - Not Applicable. Was not present.

"Notice of Award" shall mean the written notice given by the City to the successful Offeror.

"Offer" shall mean the offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the work to be performed.

"Offeror" shall mean any person, firm or corporation submitting a bid proposal for the Work.

"Plans" shall mean only those drawings specifically referred to as such in the Contract Documents or in any Addendum. Drawings issued after the execution of the Contract to explain further, to illustrate, or to show changes in the Work will be known as "Supplementary Drawings" and shall be binding upon the Contractor with the same force as the Plans.

"Professional" shall mean the professional independent Architectural/Engineering firm designated to be in charge of the work by a prior agreement entered into by the City and said firm.

"Project" shall mean the entire improvement of which this Contract forms a part.

“Project Manager” shall mean the individual designated by the City to be the main point of contact for the Contractor for the duration of the Contract.

"Shop Drawings" shall mean all drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the Contractor, a Subcontractor, a manufacturer, supplier or distributor and which illustrate the equipment, material and/or some portion of the work.

"Site" shall mean the area upon or in which the Contractor's operations are carried on and such other areas adjacent thereto as may be designated as such by the City.

"Specifications" shall mean these General Conditions, the Special Conditions and the Technical Specifications.

“Substantial Completion” shall mean placing the entire Work in satisfactory continuous service for the purpose for which it is intended. The Work shall be tested and demonstrated before it can be considered substantially complete.

"Subcontractor" shall mean any person, firm or corporation other than employees of the Contractor who or which contracts with the Contractor to furnish, or actually furnishes labor, materials and/or equipment for the project.

"Surety" shall mean any corporation that executes, as Surety, the Contractor's performance and payment bond securing the performance of this Contract.

"Technical Specifications" shall mean the portion of the Specifications dealing with the technical requirements of the work to be performed under the Contract including materials, equipment and workmanship.

REPORT OF THE
GEOTECHNICAL INVESTIGATION

SAFETY HARBOR PIER REPLACEMENT
SAFETY HARBOR, FLORIDA

Driggers Engineering Services Incorporated

DRIGGERS ENGINEERING SERVICES INCORPORATED
Geotechnical Engineering & Construction Materials Testing

March 27, 2023

Cardno, Inc.
380 Park Place Boulevard, Suite 300
Clearwater, Florida

Attn: Christopher Gamache, P.E.
Senior Structures Engineer

RE: Report of the Geotechnical Investigation
Safety Harbor Pier Replacement
Safety Harbor, Florida
Our File: DES 228994

Dear Chris:

In accordance with your authorization, **DRIGGERS ENGINEERING SERVICES, INC.** has completed the authorized investigation of subsurface conditions along the alignment of the proposed replacement Safety Harbor Pier. Presented herein are the results of our investigation together with a discussion of our findings and recommendations for foundation support.

FIELD INVESTIGATION PROGRAM

Plate I of the report attachments identifies the relative positioning of four (4) Standard Penetration Test (SPT) borings that were performed along the alignment of the proposed pier. Three (3) of the borings were conducted on water utilizing our barge and work boat equipment and one (1) boring was performed on land near the beginning of the proposed pier. Due to the very shallow water depth, it was not feasible to conduct a barge boring closer to land that we were able to perform at test boring B-2. You will note that at the present time we have not been provided with any mudline elevations or ground surface elevations at the test boring locations.

The Standard Penetration Test method of sampling was utilized in our investigation to obtain soil samples for visual classification and Standard Penetration resistance values respective of the strength characteristics of the subsurface soils. These test borings were performed in general accordance with ASTM D-1586. Logs of the test borings are appended reflecting visual together with estimated Unified and AASHTO Soil Classification. The logs also present tabulated and

graphically plotted Standard Penetration resistance values corresponding to each sample interval. A. brief description of this method of testing is included in the report attachments.

LABORATORY TESTING

A limited laboratory testing program was undertaken to aid in characterizing the engineering properties of the subsurface soils. Our laboratory tests included grainsize analyses, Atterberg Limits and natural moisture content testing. The results of our laboratory tests are included in the report attachments.

INDICATED SUBSURFACE CONDITIONS

Test boring B-1 on land, primarily as a result of its' higher elevation, indicated the presence of an upper unit of predominantly fine sands with variable silt and shell content extending to about 8 feet below the ground surface. Stiff to very stiff sandy clays occurred below 8 feet and continued to the surface of the limestone formation at about 23 feet below grade. The test boring was terminated within the limestone formation which also encountered a seam of cemented clay in the depth range of 27 to 32 feet. Test boring B-1 was terminated within predominantly limestone and cemented clay at a depth of 40 feet.

The test borings on water indicated a relatively shallow depth to the limestone formation which varied in depth from about 10 feet below the water surface to 14 feet. The limestone formation varied from soft to relatively hard in consistency.

Overlying the limestone formation was generally a variable thickness of surficial sand layer which varied in thickness from as little as 2 feet to as much as 8 feet which typically exhibited a very loose consistency. Very soft to firm clays then commonly overlay the limestone formation.

EVALUATION AND FOUNDATION RECOMMENDATIONS

FOUNDATION SUPPORT – Based upon information which you provided, we understand that the walkway for the pier is likely to be supported on timber piles having a minimum tip diameter of 8 inches and a minimum butt diameter of 10 inches. These piles would be very lightly loaded with maximum compression loads of approximately 4.2 kips and a maximum of 4 kips of uplift.

The terminal platform, however, is preliminarily being considered for support utilizing larger timber piles with a minimum tip of 10 inches and a minimum butt diameter of 12 inches. These platform piles will be subjected to a maximum compression load of 22 kips and also a maximum allowable uplift of 24 kips.

FOUNDATION RECOMMENDATIONS – Based upon our geotechnical data under relatively light magnitudes of the walkway piles, driven timber piles should provide a very efficient foundation support system as planned. Pile penetration should be controlled utilizing appropriate dynamic pile driving formula and the piles should be driven under the careful geotechnical inspection of a representative of the project geotechnical engineer.

When considering the terminal platform piles, a very shallow depth to what appeared to be relatively hard limestone will severely limit the tension capacity. To obtain the required tension, piles would need to achieve sufficient penetration into the underlying limestone formation which would likely necessitate predrilling to a depth of at least 10 feet into the limestone formation followed by driving the piles to the required penetration resistance. It is further recommended that the diameter of the predrilled hole not exceed the average pile hole diameter of the lower 10 feet so that the pile would be capable of developing more significant frictional resistance with depth. When considering this alternative, we would recommend performing relatively quick tension load tests to confirm that sufficient penetration has been achieved.

In the event that one may be able to achieve a penetration of at least 20 feet into the underlying limestone formation without predrilling, that depth should be sufficient to develop required tension capacity.

Of course there are alternative concepts that could be considered. One could predrill a hole into the underlying limestone penetrating at least 5 feet with a predrilled diameter of no less than 14 inches and then tremie place concrete to fill the hole to an elevation extending at or above the top of the limestone formation. The timber pile could then be installed with the butt end placed downward and embedded into the tremie placed concrete to the full depth of drilling, seat the pile with the proper driving resistance for the compression load and then maintain the plumbness until the concrete properly sets that would then provide sufficient tension resistance. This, of course, would likely result in concrete overflowing adjacent to the pile which may be environmentally objectionable.

Yet a third and very positive alternative would be to consider utilizing nominal 10-inch square prestressed concrete piles for the end platform. These piles should be installed in a pre-drilled pilot hole that would need to penetrate at least 8 to 10 feet into the underlying limestone formation. The diameter of the pre-drilled hole should not exceed the least dimension of the pile which in this case would be 10 inches. The pile should be driven to the required compression resistance but also to a penetration of not less than 8 feet into the limestone formation to develop required tension. Of course, the pre-drilling of any bore hole into the limestone will create some limestone cuttings at the surface of the mudline during the process. However, these could be easily cleaned up afterwards so as not to create any significant damage to any vegetation.

DRIGGERS ENGINEERING SERVICES, INC. appreciates the opportunity to assist you and if you would like to discuss these or other options that might be viable, please don't hesitate to give me a call.

Respectfully submitted,
DRIGGERS ENGINEERING SERVICES, INC.

F. Jaime Driggers, P.E.
President
FL Registration No. 16989

F. JAIME DRIGGERS
LICENSE
No. 16989
3/27/2023
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

FJD\nja
FJD-REP\228994
Copies submitted: Email

APPENDIX

PLATE I - BORING LOCATION PLAN

STANDARD PENETRATION TEST BORING LOGS

SUMMARY OF LABORATORY TEST RESULTS

GRAINSIZE ANALYSES

METHOD OF TESTING

PLATE I - BORING LOCATION PLAN

LEGEND:

⊕ STANDARD PENETRATION TEST BORING LOCATION

N

0 30 60 120

SCALE IN FEET

DATE: 11/28/22

SHEET TITLE

BORING LOCATION PLAN

PROJECT NAME

SAFETY HARBOR PIER REPLACEMENT
VETERANS MEMORIAL LANE
SAFETY HARBOR, FLORIDA

PROJECT NO.

DES 228994

SHEET NO.

PLATE 1

CAD / ENGINEER

R.D.B. / F.J.D.

PREPARED BY

DRIGGERS ENGINEERING SERVICES, INCORPORATED

STANDARD PENETRATION TEST BORING LOGS

DRIGGERS ENGINEERING SERVICES INCORPORATED

Project No. DES 228994 **BORING NO. B-1**

Project Safety Harbor Pier Replacement, Veterans Memorial Lane, Safety Harbor, Florida

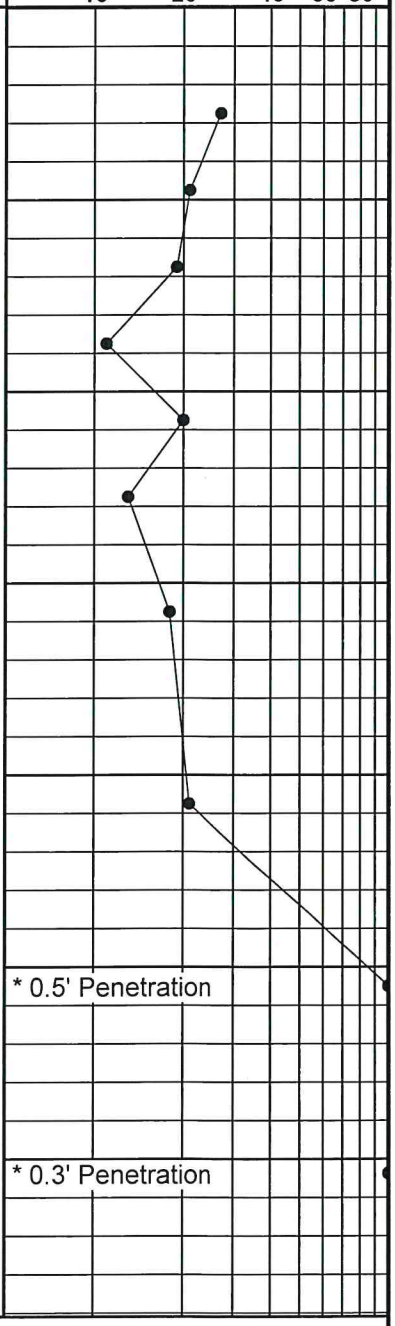
Location See Plate I **Foreman** N.P.

Completion Depth 41.0' **Date** 11/23/22 **Depth To Water** 3.5' **Time** _____ **Date** 11/23/22

DEPTH, FT	SOIL DESCRIPTION	BLOWS ON SAMPLER PER 6" OR PEN. STR.
	SURF. EL:	
0	Dark grayish-brown Fine SAND with roots (SP) (A-3)	
	Brownish-gray slightly silty Fine SAND with trace of large roots and pieces of concrete (SP-SM) (A-3)	6/9/18
5	Medium dense brownish-gray Fine SAND with trace of shell and concrete fragments (SP) (A-3)	8/11/10
	Medium dense light brownish-gray to light gray Fine SAND with shell fragments (SP) (A-3)	11/11/8
	Stiff to very stiff green to green and orange sandy CLAY (CH) (A-7-6)	5/5/6
10		5/8/12
	Stiff greenish-gray and light brown sandy CLAY (CH) (A-7-6)	3/6/7
15	Very stiff greenish-gray and light brown CLAY with trace of cream colored LIMESTONE (CH) (A-7-6)	4/7/11
	Very stiff light green and orange CLAY (CH) (A-7-6)	
20		5/7/14
	Cream colored LIMESTONE with seams of light green CLAY	
25		3/50* * 0.5' Penetration
	Hard light green weakly cemented CLAY with trace of cream colored LIMESTONE (CL) (A-7-6)	
30		17/50* * 0.3' Penetration
	Cream colored LIMESTONE with seams of light green cemented CLAY	

STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP (AUTOMATIC HAMMER)

10 20 40 60 80



Remarks _____

Casing Length _____

DRIGGERS ENGINEERING SERVICES INCORPORATED

Project No. DES 228994 **BORING NO.** B-1

Project Safety Harbor Pier Replacement, Veterans Memorial Lane, Safety Harbor, Florida

Location See Plate I **Foreman** N.P.

Completion Depth 41.0' **Date** 11/23/22 **Depth To Water** 3.5' **Time** _____ **Date** 11/23/22

DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP
			SURF. EL:		10 20 40 60 80
35			Cream colored LIMESTONE with seams of light green cemented CLAY	50*	* 0.2' Penetration
40			Hard gray and light brown CLAY with trace of cream colored LIMESTONE (CL) (A-7-6)	23/50*	* 0.5' Penetration
45					
50					
55					
60					
65					

Remarks _____

Casing Length _____

DRIGGERS ENGINEERING SERVICES INCORPORATED

Project No. DES 228994 **BORING NO.** B-2

Project Safety Harbor Pier Replacement, Veterans Memorial Lane, Safety Harbor, Florida

Location See Plate I **Foreman** G.F.

Completion Depth 30.1' **Date** 11/22/22 **Water Depth** +4.0' **Time** _____ **Date** 11/22/22

DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP (AUTOMATIC HAMMER)
			SURF. EL:		10 20 40 60 80
0			Very loose brownish-gray slightly silty Fine SAND with shell fragments (SP-SM) (A-3)	WH/WH/1/0	
			Very soft to soft green to light green sandy CLAY (CH) (A-7-6)	1/1/1/1	
5				2/2/1	
			Stiff light green CLAY (CH) (A-7-6)	1/2/7	
			Cream colored weathered LIMESTONE and light green CLAY	4/1/7	
10			Cream colored LIMESTONE	30/24/50*	* 0.4' Penetration
				14/7/7	
15				3/4/4	
			Cream colored clayey LIMESTONE		
20				38/50*	* 0.3' Penetration
25				23/29/45	
			Cream colored LIMESTONE		
30				50*	* 0.1' Penetration

Remarks WH = Weight of Hammer

Casing Length 10.0'

DRIGGERS ENGINEERING SERVICES INCORPORATED

Project No. DES 228994 **BORING NO.** B-3

Project Safety Harbor Pier Replacement, Veterans Memorial Lane, Safety Harbor, Florida

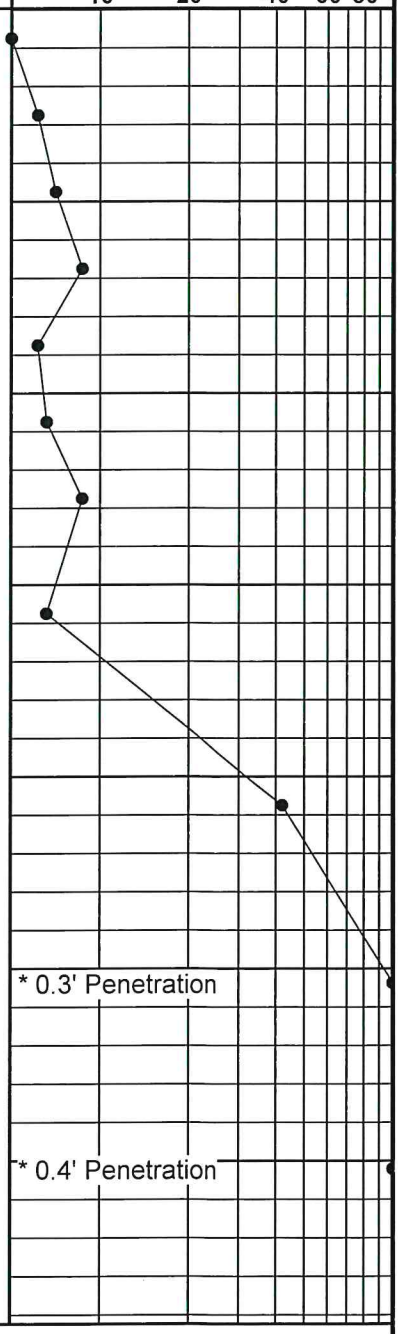
Location See Plate I **Foreman** G.F.

Completion Depth 30.4' **Date** 11/22/22 **Water Depth** +5.0' **Time** _____ **Date** 11/22/22

DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION	BLOWS ON SAMPLER PER 6" OR PEN. STR.
			SURF. EL:	
0			Very loose dark greenish-gray silty Fine SAND with shell fragments (SM) (A-2-4)	WH/WH/WH
			Soft green CLAY with seams of grayish-brown Fine SAND (CH/SP) (A-7-6/A-3)	1/1/2
5			Firm green sandy CLAY with trace of cream colored LIMESTONE (CH) (A-7-6)	1/2/3
			Firm to soft light brown to light brownish-gray sandy CLAY (CH) (A-7-6)	6/3/5
				2/2/1
10			Soft light green and orange CLAY (CH) (A-7-6)	1/2/2
			Loose light gray Fine SAND and soft green CLAY (SP/CH) (A-3/A-7-6)	2/4/4
15			Cream colored weathered LIMESTONE	1/2/2
20			Cream colored LIMESTONE	8/17/25
			Cream colored clayey LIMESTONE	
25				17/50*
30				50*

STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP (AUTOMATIC HAMMER)

10 20 40 60 80



Remarks WH = Weight of Hammer

Casing Length 10.0'

DRIGGERS ENGINEERING SERVICES INCORPORATED

Project No. DES 228994 **BORING NO.** B-4

Project Safety Harbor Pier Replacement, Veterans Memorial Lane, Safety Harbor, Florida

Location See Plate I **Foreman** G.F.

Completion Depth 30.2' **Date** 11/22/22 **Water Depth** +5.9' **Time** _____ **Date** 11/22/22

DEPTH, FT	SYMBOL	SAMPLES	SOIL DESCRIPTION	BLOWS ON SAMPLER PER 6" OR PEN. STR.	STANDARD PENETRATION TEST BLOWS/FT. ON 2" O.D. SAMPLER-140 LB. HAMMER, 30" DROP (AUTOMATIC HAMMER)
			SURF. EL:		10 20 40 60 80
0			Very loose dark greenish-gray slightly silty Fine SAND with shell fragments (SP-SM) (A-3)	1/1/0	
			Very loose brownish-gray slightly silty Fine SAND with trace of shell fragments (SP-SM) (A-3)	1/1/1	
5			Very loose Fine SAND with shell (SP) (A-3)		
			Loose brownish-gray clayey Fine SAND (SC) (A-2-6)	1/4/5	
10			Soft green CLAY (CH) (A-7-6)	1/2/2	
			Cream colored LIMESTONE	50*	* 0.2' Penetration
15				30/21/20	
20				22/50*	* 0.4' Penetration
			Cream colored clayey LIMESTONE		
25				45/50*	* 0.3' Penetration
			Cream colored LIMESTONE		
30				50*	* 0.2' Penetration

Remarks _____

Casing Length 15.0'

SUMMARY OF LABORATORY TEST RESULTS

SUMMARY OF LABORATORY TEST RESULTS

BORING NO.	DEPTH (ft)	DESCRIPTION	W %	Y d (pcf)	G s	ATTERBERG LIMITS			P.P. (tsf)	U.C.	CON.	G.S.	ORG. (%)	pH	Cl. (ppm)	SO 4 (ppm)	RES. (ohm-cm)
						LL	PL	PI									
B-1	2.0-3.5	Brownish-gray Fine SAND with trace of shell and concrete fragments										*					
B-1	6.0-7.5	Light gray Fine SAND with shell fragments										*					
B-2	4.0-5.5	Light green sandy CLAY	30.4			43	18	25									
B-3	10.0-11.5	Light green and orange CLAY	31.0			80	26	54									
B-4	0.0-1.5	Dark greenish-gray slightly silty Fine SAND with shell fragments										*					
B-4	2.0-3.5	Brownish-gray slightly silty Fine SAND with trace of shell fragments										*					
B-4	8.0-9.5	Brownish-gray clayey Fine SAND	21.0			38	20	18									

W % = Water Content
Y d (pcf) = Dry Density
G_S = Specific Gravity
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
P.P. (tsf) = Pocket Penetrometer
U.C. = Unconfined Compression

Con. = Consolidation Test
G.S. (+1) = Grainsize Analysis (Hydrometer)
ORG. (%) = Organic Content
Cl. (ppm) = Total Chloride
SO_4 (ppm) = Total Sulfate
RES. (ohm-cm) = Lab Resistivity
* = See Test Curves
** = Percent Passing No. 200 Sieve

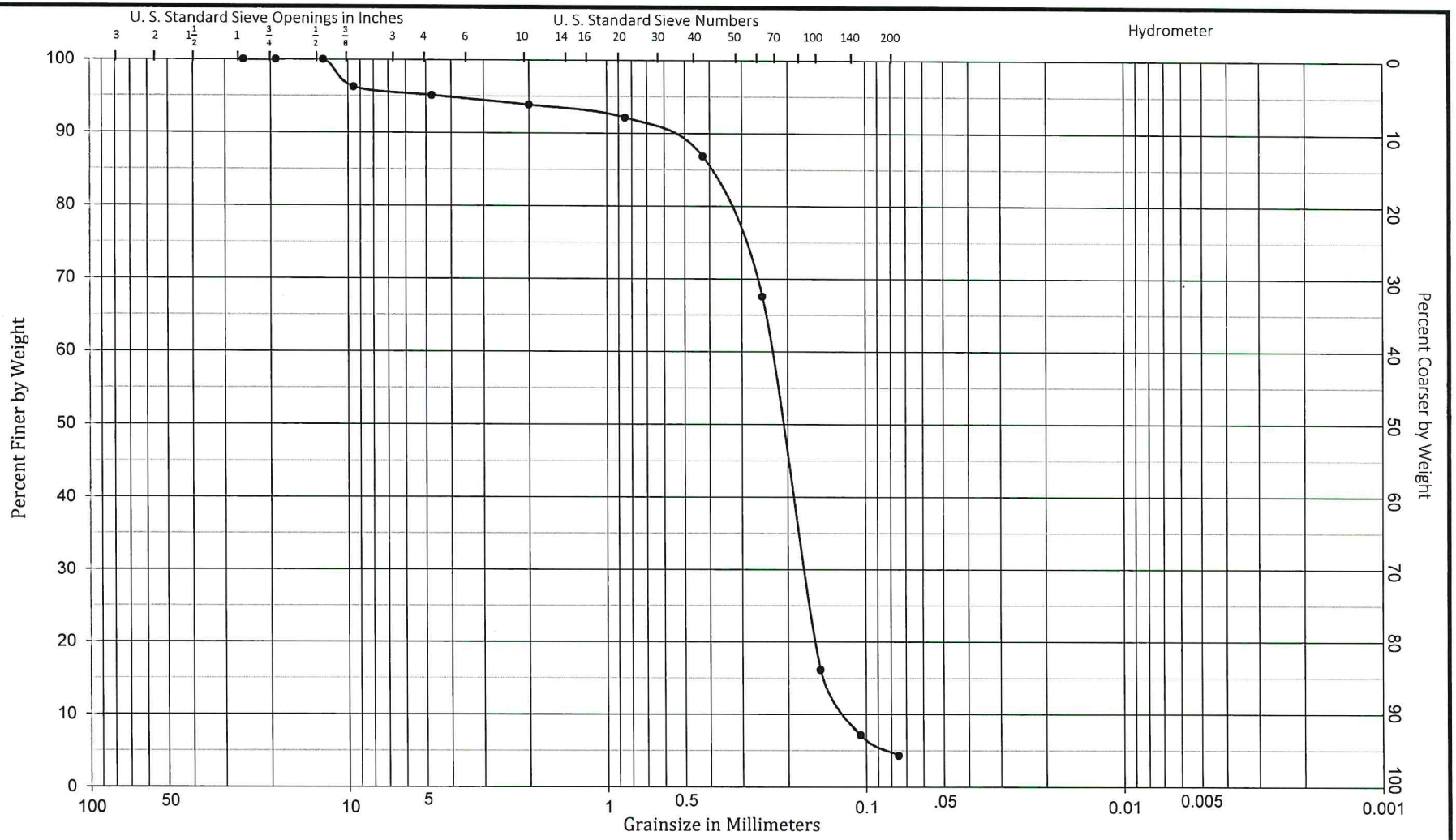
CLIENT: Cardno

PROJECT: Safety Harbor Pier Replacement, Veterans Memorial Lane, Safety Harbor, Florida

FILE: DES 228994

GRAINSIZE ANALYSES

DRIGGERS ENGINEERING SERVICES, INC.



GRAVEL	SAND			SILT or CLAY
	Coarse	Medium	Fine	

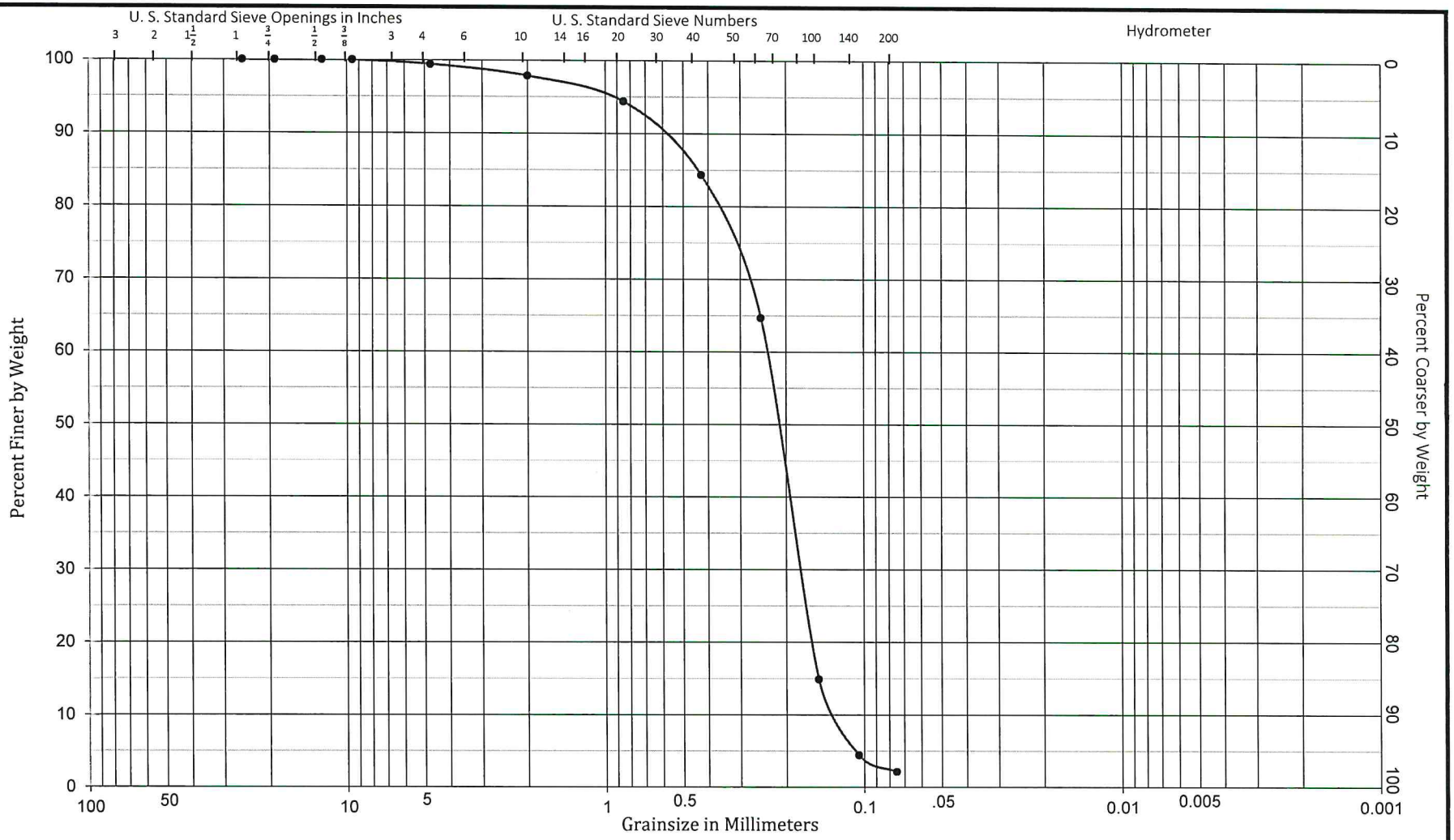
Number	Depth	Moisture	L.L.	P.L.	P.I.	Classification
B-1	2.0'-3.5'					Brownish-gray Fine SAND with trace of shell
						and concrete fragments

CLIENT: Cardno

PROJECT: Safety Harbor Pier Replacement

FILE: DES 228994

DRIGGERS ENGINEERING SERVICES, INC.



GRAVEL	SAND			SILT or CLAY
	Coarse	Medium	Fine	

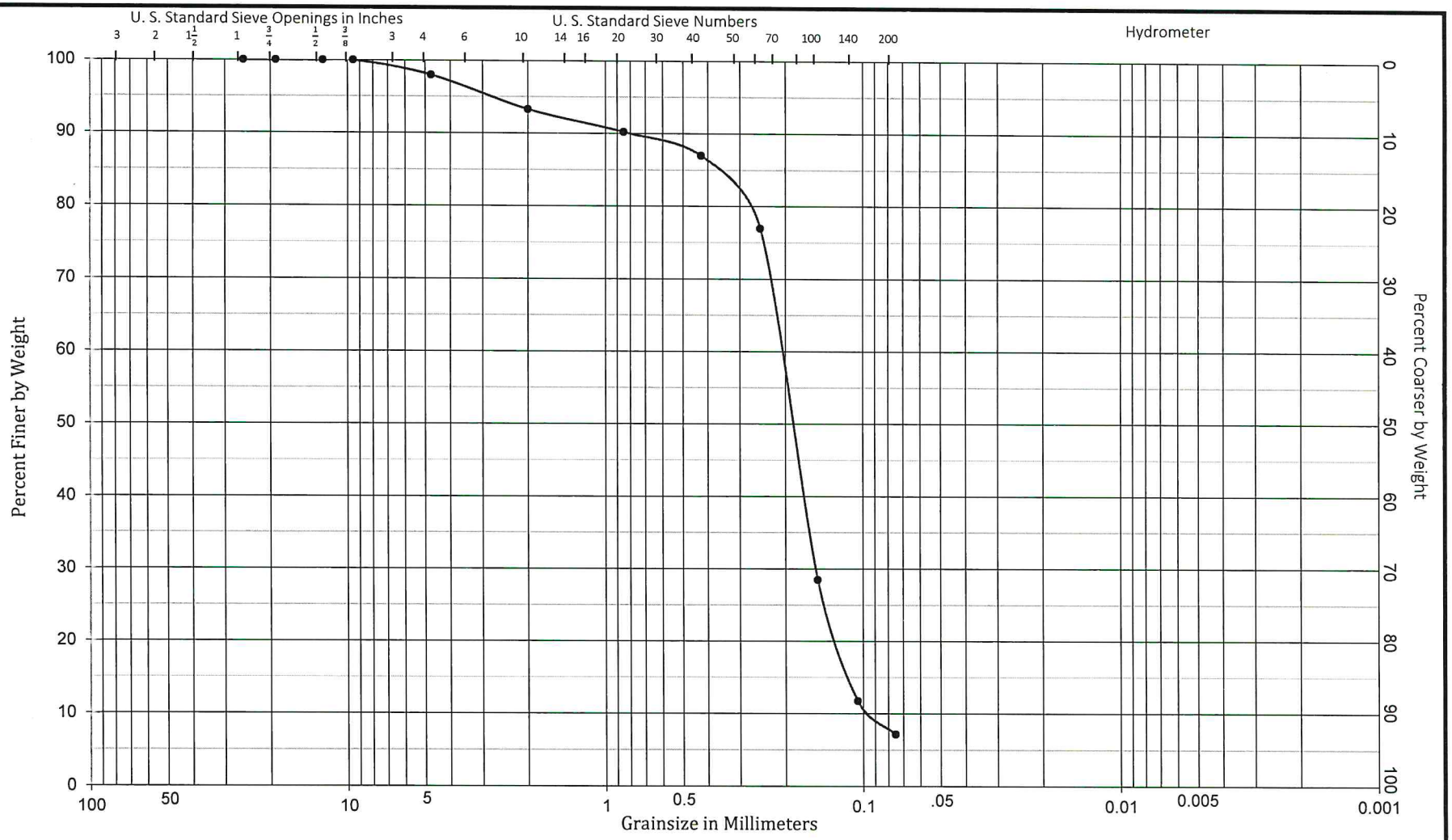
Number	Depth	Moisture	L.L.	P.L.	P.I.	Classification
B-1	6.0'-7.5'					Light gray Fine SAND with shell fragments

CLIENT: Cardno

PROJECT: Safety Harbor Pier Replacement

FILE: DES 228994

DRIGGERS ENGINEERING SERVICES, INC.



GRAVEL	SAND			SILT or CLAY
	Coarse	Medium	Fine	

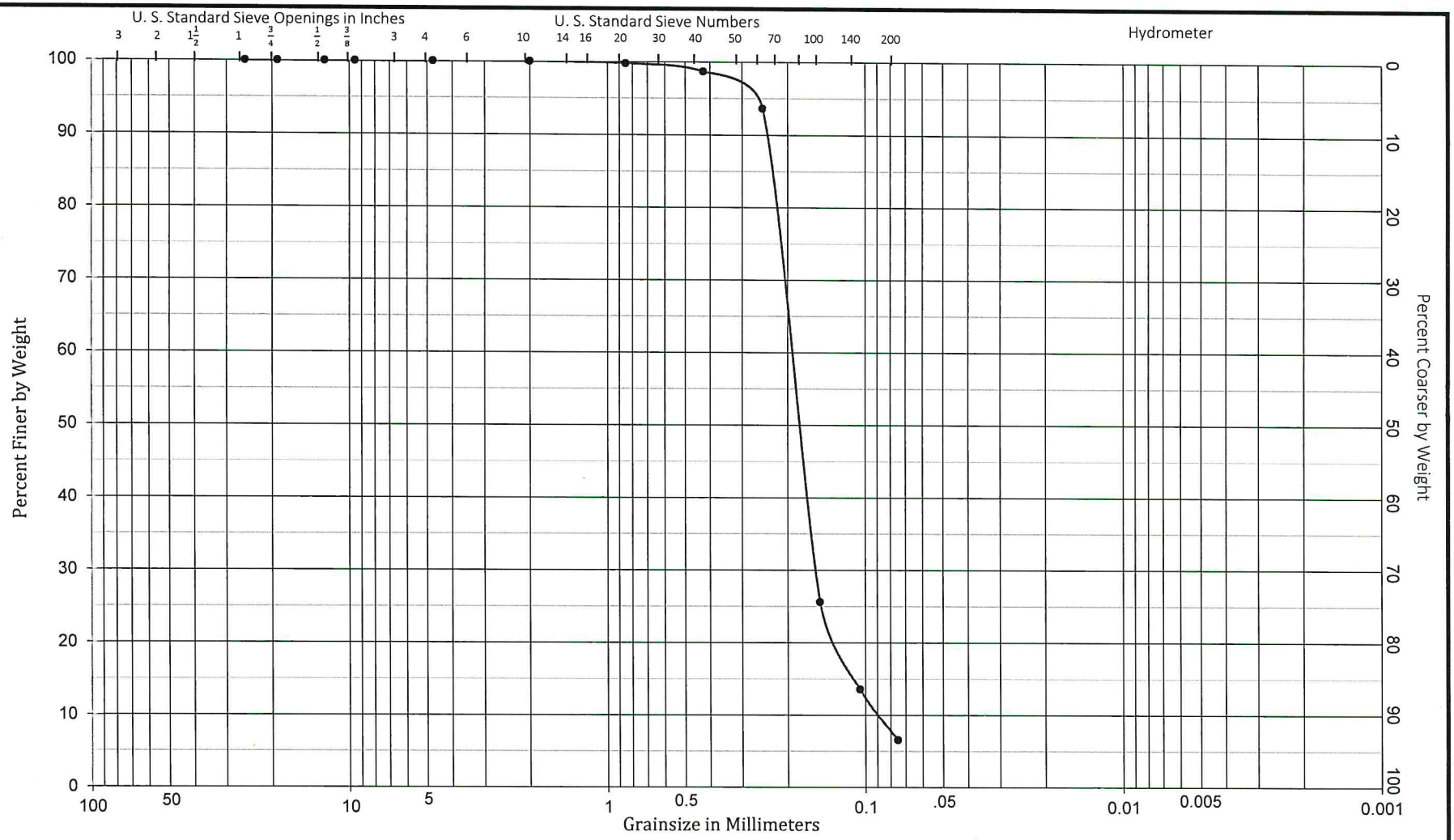
Number	Depth	Moisture	L.L.	P.L.	P.I.	Classification
B-4	0.0'-1.5'					Dark greenish-gray slightly silty Fine SAND
						with shell fragments

CLIENT: Cardno

PROJECT: Safety Harbor Pier Replacement

FILE: DES 228994

DRIGGERS ENGINEERING SERVICES, INC.



	GRAVEL	SAND			SILT or CLAY
		Coarse	Medium	Fine	

Number	Depth	Moisture	L.L.	P.L.	P.I.	Classification
B-4	2.0'-3.5'					Brownish-gray slightly silty Fine SAND
						with trace of shell fragments

CLIENT: Cardno

PROJECT: Safety Harbor Pier Replacement

FILE: DES 228994

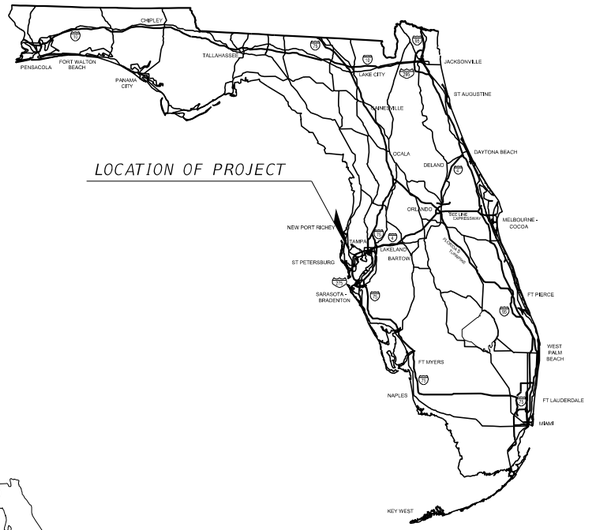
METHOD OF TESTING

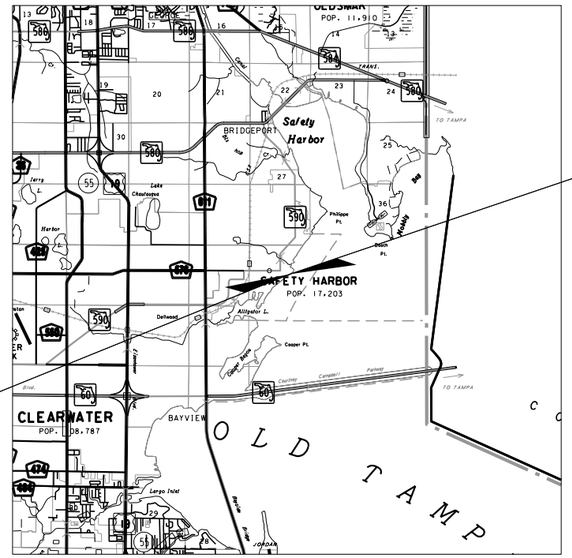
CITY OF SAFETY HARBOR

CONTRACT PLANS
MARINA REPLACEMENT
110 VETERANS MEMORIAL LANE

CONTRACT PLANS COMPONENTS

STRUCTURES	FIRE PROTECTION
CIVIL	PLUMBING
ELECTRICAL	





LOCATION MAP
SECTION 3 TOWNSHIP 29S, RANGE 16E

END PROJECT
℄ VETERANS MEMORIAL LANE
N 27°59'21.62"
W 82°41'12.88"

BEGIN PROJECT
℄ VETERANS MEMORIAL LANE
N 27°59'22.96"
W 82°41'15.35"

BOARD OF CITY COMMISSIONERS

JOE AYOUB	MAYOR
ANDY STEINGOLD	VICE-MAYOR
NANCY BESORE	COMMISSIONER
CARLOS DIAZ	COMMISSIONER
JACOB BURNETT	COMMISSIONER

SHOP DRAWINGS
TO BE SUBMITTED TO:

DAVID R. JOHNSON, P.E.
DRMP, INC.
15310 AMBERLY DRIVE
SUITE 310
TAMPA FL, 33647

PLANS PREPARED BY:

DRMP, INC.
15310 AMBERLY DRIVE
SUITE 310
TAMPA FL, 33647
PHONE: (813) 265-9800
DAVID R. JOHNSON. P.E. 79354

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

GOVERNING DESIGN STANDARDS:
Florida Department of Transportation, FY 2024-25 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs) and as amended by Contract Documents.

For Design Standard Plans click on "Standards Plans for Road and Bridge Construction" at the following web site: Https://www.fdot.gov/design/standardplans/

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, Standard Specifications for Road and Bridge Construction FY2024-25 as amended by Contract Documents.

GOOGLE EARTH LINK PROVIDED FOR BRIDGE LOCATION.
https://maps.app.goo.gl/VC2t1DhWkQB3zUEAA

ASSISTANT PUBLIC WORKS DIRECTOR - CHARLES AHRENS, P.E.

KEY SHEET REVISIONS

DATE	BY	DESCRIPTION

ENGINEER OF RECORD: DAVID R. JOHNSON, P.E.

P.E. NO.: 79354

FISCAL YEAR	SHEET NO.
24	S-01

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

INDEX OF STRUCTURE PLANS

SHEET NO.	SHEET DESCRIPTION
S-01	KEY SHEET
S-02	INDEX OF SHEETS
S-03	SIGNATURE SHEET
S-04	GENERAL NOTES (1 OF 2)
S-05	GENERAL NOTES (2 OF 2)
S-06	SUMMARY OF QUANTITIES
S-07	DEMOLITION PLAN
S-08	MARINA LAYOUT PLAN
S-09	SOIL PROFILES
S-10	FRAMING PLAN
S-11	TYPICAL SECTIONS (1 OF 2)
S-12	TYPICAL SECTIONS (2 OF 2)
S-13	MISCELLANEOUS DETAILS (1 OF 3)
S-14	MISCELLANEOUS DETAILS (2 OF 3)
S-15	MISCELLANEOUS DETAILS (3 OF 3)

INDEX OF SITE CIVIL PLANS

SHEET NO.	SHEET DESCRIPTION
S-03	SIGNATURE SHEET
C-01	EROSION CONTROL GENERAL NOTES
C-02	SITE CIVIL AND EROSION CONTROL PLAN

INDEX OF ELECTRICAL PLANS

SHEET NO.	SHEET DESCRIPTION
S-03	SIGNATURE SHEET
E-01	ELECTRICAL LEGEND
E-02	ELECTRICAL SPECIFICATIONS (1 OF 3)
E-03	ELECTRICAL SPECIFICATIONS (2 OF 3)
E-04	ELECTRICAL SPECIFICATIONS (3 OF 3)
E-05	ELECTRICAL PLAN NOTES
E-06	ELECTRICAL DEMOLITION PLAN
E-07	ELECTRICAL PLAN
E-08	POWER ONE-LINE DIAGRAM NOTES
E-09	POWER ONE-LINE DIAGRAM
E-10	PANEL SCHEDULE A
E-11	PANEL SCHEDULE B
E-12	PANEL SCHEDULE C
E-13	MARINA PEDESTAL SCHEDULE
E-14	DETAILS (1 OF 3)
E-15	DETAILS (2 OF 3)
E-16	DETAILS (3 OF 3)

INDEX OF FIRE PROTECTION AND PLUMBING PLANS

SHEET NO.	SHEET DESCRIPTION
S-03	SIGNATURE SHEET
FP-01	FIRE PROTECTION COMPLIANCE NOTES
FP-02	FIRE PROTECTION SPECIFICATIONS
FP-03	FIRE PROTECTION GENERAL NOTES
FP-04	FIRE PROTECTION LEGEND
FP-05	FIRE PROTECTION FLOOR PLAN
FP-06	FIRE PROTECTION DETAILS
P-01	PLUMBING NOTES, LEGEND, AND SCHEDULE
P-02	PLUMBING FLOOR PLAN
P-03	PLUMBING DETAILS

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

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DAVID R. JOHNSON, P.E.
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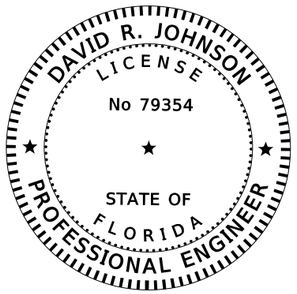
DRAWN BY: BCS 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

SHEET TITLE: INDEX OF SHEETS

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: S-02



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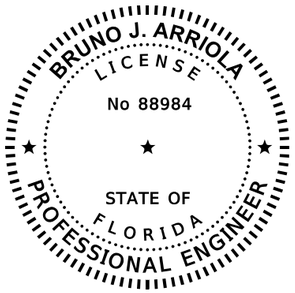
THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

STRUCTURE PLANS

SHEET NO.	SHEET DESCRIPTION
S-01	KEY SHEET
S-02	INDEX OF SHEETS
S-03	SIGNATURE SHEET
S-04	GENERAL NOTES (1 OF 2)
S-05	GENERAL NOTES (2 OF 2)
S-06	SUMMARY OF QUANTITIES
S-07	DEMOLITION PLAN
S-08	MARINA LAYOUT PLAN
S-10	FRAMING PLAN
S-11	TYPICAL SECTIONS (1 OF 2)
S-12	TYPICAL SECTIONS (2 OF 2)
S-13	MISCELLANEOUS DETAILS (1 OF 3)
S-14	MISCELLANEOUS DETAILS (2 OF 3)
S-15	MISCELLANEOUS DETAILS (3 OF 3)



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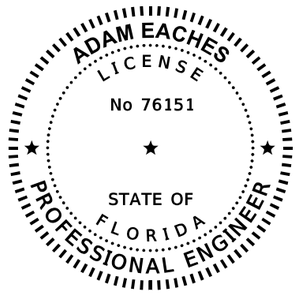
SITE CIVIL PLANS

SHEET NO.	SHEET DESCRIPTION
S-03	SIGNATURE SHEET
C-01	EROSION CONTROL GENERAL NOTES
C-02	SITE CIVIL AND EROSION CONTROL PLAN



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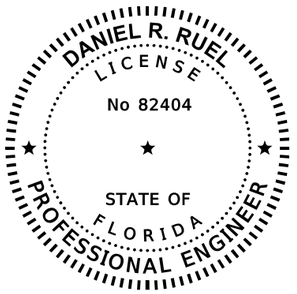
ELECTRICAL PLANS

SHEET NO.	SHEET DESCRIPTION
S-03	SIGNATURE SHEET
E-01	ELECTRICAL LEGEND
E-02	ELECTRICAL SPECIFICATIONS (1 OF 3)
E-03	ELECTRICAL SPECIFICATIONS (2 OF 3)
E-04	ELECTRICAL SPECIFICATIONS (3 OF 3)
E-05	ELECTRICAL PLAN NOTES
E-06	ELECTRICAL DEMOLITION PLAN
E-07	ELECTRICAL PLAN
E-08	POWER ONE-LINE DIAGRAM NOTES
E-09	POWER ONE-LINE DIAGRAM
E-10	PANEL SCHEDULE A
E-11	PANEL SCHEDULE B
E-12	PANEL SCHEDULE C
E-13	MARINA PEDESTAL SCHEDULE
E-14	DETAILS (1 OF 3)
E-15	DETAILS (2 OF 3)
E-16	DETAILS (3 OF 3)



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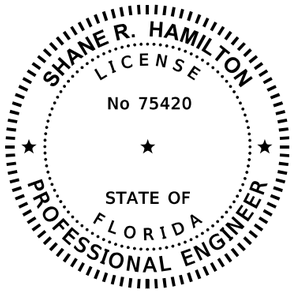
STRUCTURE PLANS

SHEET NO.	SHEET DESCRIPTION
S-03	SIGNATURE SHEET
S-09	SOIL PROFILES



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ENGINEERING PROFESSIONALS, INC.
SHANE R. HAMILTON, P.E.
P.E. LICENSE NUMBER 75420
912 W. DR. MARTIN LUTHER KING JR. BLVD.
TAMPA, FL 33603

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

FIRE PROTECTION AND PLUMBING PLANS

SHEET NO.	SHEET DESCRIPTION
S-03	SIGNATURE SHEET
FP-01	FIRE PROTECTION COMPLIANCE NOTES
FP-02	FIRE PROTECTION SPECIFICATIONS
FP-03	FIRE PROTECTION GENERAL NOTES
FP-04	FIRE PROTECTION LEGEND
FP-05	FIRE PROTECTION FLOOR PLAN
FP-06	FIRE PROTECTION DETAILS
P-01	PLUMBING NOTES, LEGEND, AND SCHEDULE
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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DAVID R. JOHNSON, P.E.
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DRAWN BY: BCS 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

SHEET TITLE: SIGNATURE SHEET

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. S-03

Plotted By: Christian.Hodges 3/7/2025 10:30:58 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_Signst01.dgn

GENERAL NOTES

SPECIFICATIONS

DESIGN AND CONSTRUCTION SPECIFICATIONS:

A) FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION FY2024-25 EDITION, AS AMENDED BY CONTRACT DOCUMENTS.
B) FLORIDA BUILDING CODE 8TH EDITION (2023).
C) NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION – AMERICAN WOOD COUNCIL 2018 EDITION.
D) AMERICAN SOCIETY OF CIVIL ENGINEERS, ASCE 7-16.
E) AISC STEEL CONSTRUCTION MANUAL 16TH EDITION.

DESIGN METHOD

LOAD AND RESISTANCE FACTOR DESIGN (LRFD) METHOD USING STRENGTH AND SERVICE LIMIT STATES.

DESIGN LOADINGS

1. DEAD LOAD – 10 PSF
2. LIVE LOAD – 100 PSF
3. WIND LOAD:
   A) DESIGN WIND SPEED 150 MPH
   B) RISK CATEGORY II
   C) EXPOSURE CATEGORY D
   D) IMPORTANCE FACTOR 1.0

GENERAL NOTES

1. COMPLY WITH ALL STATE, COUNTY, AND LOCAL ORDINANCES AND OBTAIN WORK PERMITS THAT ARE REQUIRED PRIOR TO CONSTRUCTION.
2. LOCATION, ELEVATION, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN IN ACCORDANCE WITH THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE PLANS, BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. VERIFY THE LOCATION, ELEVATION, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES AFFECTING THE WORK.
3. ALL DIMENSIONS IN THESE PLANS ARE MEASURED IN FEET AND INCHES EITHER HORIZONTALLY OR VERTICALLY UNLESS OTHERWISE NOTED.
4. PLAN ELEVATIONS ARE IN FEET AND REFER TO NAVD 1988 DATUM. VERTICAL DATUM CONVERSION, NGVD29 TO NAVD88 = -0.856
5. PROVIDE AND MAINTAIN TURBIDITY BARRIERS IN ACCORDANCE WITH PERMITS.
6. DRAWINGS ARE NOT TO SCALE UNLESS NOTED OTHERWISE.

MARINE NAVIGATION

1. MAINTAIN VISIBLE AND FUNCTIONAL EXISTING SIGNS AT ALL TIMES DURING CONSTRUCTION. AT THE APPROVAL OF THE ENGINEER TEMPORARILY RELOCATE EXISTING SIGNS TO FACILITATE CONSTRUCTION. RETURN ALL RELOCATED SIGNS TO THEIR ORIGINAL LOCATION AFTER CONSTRUCTION IS COMPLETED.
2. MARINE TRAFFIC CONSTRUCTION SIGNS ARE TO BE PLACED AT THE ENTRACE OF THE PARKING LOT AND AT THE CHANNEL ENTRANCE PRIOR TO THE BOAT RAMP FOR INCOMING MARINE TRAFFIC. PLACEMENT OF THE SIGNS IS TO BE SUCH THAT THEY ARE CLEARLY VISIBLE TO APPROACHING TRAFFIC. BARGES LEFT IN WATER IN LOW-LIGHT CONDITIONS SHALL BE ILLUMINATED SO AS TO BE VISIBLE TO MARINE TRAFFIC.
3. NOTIFY LT. CLARK SANFORD AT THE USCG SECTOR ST. PETERSBURG AT 813-228-2191 EXT. 8105 PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES. IN ADVANCE OF ACTIONS DURING CONSTRUCTION OR DEMOLITION WHICH POTENTIALLY AFFECT WATERWAY USERS AND PRIOR TO THE PLACEMENT OF ANY FLOATING CONSTRUCTION EQUIPMENT IN THE WATERWAY. NOTIFY NO LESS THAN 60 DAYS IN ADVANCE OF ACTIONS WHICH COULD POTENTIALLY AFFECT THE WATERWAY. KEEP THE CHANNEL OPEN TO WATERWAY TRAFFIC AT ALL TIMES.

MATERIALS

1. TIMBER: UNLESS OTHERWISE NOTED, ALL SAWN LUMBER AND TIMBER PILES EXCEPT BENT CAPS AND STRINGERS SHALL BE GRADE NO. 2 SOUTHERN YELLOW PINE OR BETTER. BENT CAPS AND STRINGERS SHALL BE NO. 1 SOUTHERN YELLOW PINE OR BETTER.
2. DECKING: ALL DECKING SHALL BE A UV-RESISTANT ENGINEERED COMPOSITE MATERIAL, WEARDECK OR EQUAL. COLOR OF DECKING SHALL BE "SADDLE". ALTERNATIVE TIMBER DECKING SHALL BE GRADE NO. 2 SOUTHERN YELLOW PINE OR BETTER.
3. HURRICANE FASTENERS: STAINLESS STEEL AISI TYPE 316 W/ UPLIFT CAPACITY OF 360 LBF. EACH MINIMUM.
4. ANCHOR BOLTS: STAINLESS STEEL AISI TYPE 316.
5. ANCHOR BOLT ADHESIVE: TYPE F ADHESIVE EPOXY MATERIAL.

UTILITIES

1. PROVIDE TWO WORKING DAYS NOTICE TO UTILITY AGENCY/OWNER'S (UAO) IN ORDER TO LOCATE AND IDENTIFY THEIR EXISTING UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION, AS ESTABLISHED BY THE "UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT".
2. COORDINATE CONSTRUCTION SCHEDULING WITH UTILITY AGENCY/OWNER'S. MEET WITH UAO'S PRIOR TO THE PRE-CONSTRUCTION CONFERENCE TO ADJUST THEIR SCHEDULES TO COINCIDE WITH THE CONSTRUCTION SCHEDULE.

EXISTING STRUCTURE

1. REMOVAL OF EXISTING STRUCTURES SHALL COMPLY WITH SECTION 110-7 OF THE SPECIFICATIONS. IF PILES ARE UNABLE TO BE PULLED CLEANLY, CUT PILES 2'-0" BELOW MUDLINE. PROPERLY DISPOSE OF TREATED TIMBER PER SPECIFICATIONS. WORK IS TO BE PAID FOR UNDER PAY ITEM 110-82, "REMOVE & DISPOSE OF STRUCTURAL TIMBER."
2. ORIGINAL STRUCTURE YEAR BUILT IS UNKNOWN. MAJORITY OF STRUCTURE WAS RECONSTRUCTED IN 2006. 2006 EXISTING PLANS ARE PROVIDED AND ARE FOR INFORMATIONAL PURPOSES ONLY.

MONITOR EXISTING STRUCTURES

MONITOR SETTLEMENT AND VIBRATIONS ON EXISTING STRUCTURES PER SPECIFICATIONS SECTION 108.

PILE INSTALLATION NOTES

1. ALL 8" Ø TIMBER DOCK PILES AND 10" Ø TIE PILES SHALL BE DRIVEN. JETTING IS NOT ALLOWED WITHOUT APPROVAL OF THE ENGINEER.
2. VERIFY THE LOCATION OF ALL UTILITIES AND NOTIFY ALL INVOLVED UTILITY COMPANIES PRIOR TO EXCAVATION, PILE DRIVING OR CONSTRUCTION TO AVOID DAMAGE. ENSURE THAT ACTIVE UTILITIES ARE PROPERLY MAINTAINED AND PROTECTED DURING CONSTRUCTION.
3. FOR DETAILS REGARDING SPT SOIL BORINGS, SEE "SOIL PROFILES" SHEET.
4. PRIOR TO PILE DRIVING OPERATIONS, INFORM THE ENGINEER IF ANY PROPOSED PILE LOCATION INTERFERES WITH EXISTING PILE, AND PILE WAS UNABLE TO BE CLEANLY REMOVED.
5. DRIVE PILES TO THE NOMINAL BEARING RESISTANCE IN ACCORDANCE WITH STANDARD SPECIFICATION 455 AND AS FOLLOWS,

$$\frac{\text{FACTORED DESIGN LOAD + NET SCOUR RESISTANCE + DOWN DRAG}}{\emptyset}$$

6. NOMINAL BEARING RESISTANCE = 7 TONS BASED ON FACTORED DESIGN LOAD = 8 KIPS AND Ø = 0.65.
7. ESTIMATED PILE TIP DEPTH BELOW MUDLINE VARIES (9 FT. TO 22 FT.). REFUSAL MAY BE ENCOUNTERED PRIOR TO THESE DEPTHS IF A DENSER SOIL LAYER IS ENCOUNTERED.
8. SELECT THE APPROPRIATE HAMMER TO ACHIEVE DESIGN REQUIREMENTS SHOWN IN THE PLANS AND SUBMIT A PILE INSTALLATION PLAN AND FOUNDATION LAYOUT PRIOR TO MOBILIZATION.
9. RESTRICT PILE DRIVING TO DAYTIME HOURS.
10. WEATHERED LIMESTONE WAS ENCOUNTERED WITHIN BORINGS. EXCAVATIONS/PREFORMING INTO AND/OR THROUGH THESE MATERIALS WILL BE DIFFICULT AND REQUIRE NON-CONVENTIONAL CONSTRUCTION TECHNIQUES AND SPECIALIZED EQUIPMENT. LIMESTONE IS POROUS AND WILL BE DIFFICULT TO DEWATER.
11. ARTESTIAN CONDITIONS SHOULD BE EXPECTED. TOOLS AND CONSTRUCTION METHODS SHALL INCLUDE THE ABILITY TO HANDLE A POTENTIOMETRIC HEAD ELEVATION OF +10 FT. (NGVD29) AT NO ADDITIONAL COST.
12. CONTACT THE ENGINEER IF PRACTICAL REFUSAL IS MET BEFORE 10 FEET OF EMBEDMENT IS ACHIEVED.

PILE WRAP

1. INSTALL PILE WRAP PER MANUFACTURER'S RECOMMENDATIONS.
2. PILE WRAP: 0.03" BLACK, UV-RESISTANT POLYETHYLENE MATERIAL

MISCELLANEOUS

1. CLEAT: 8" STANDARD MOUNT CLEAT, STAINLESS STEEL
2. SAFETY LADDERS: 7 STEP RETRACTABLE WITH 2" STEP WIDTH, ALUMINUM
3. PILE CAPS: BLACK, CONICAL SHAPED, PVC MATERIAL
4. SECURITY GATE: 6 FT. HEIGHT W/ GATE LOCK. HOT DIP GALVANIZED STEEL W/ BLACK POWDER COAT FINISH. PROVIDE ORNAMENTAL GATE WITH SUNBURST DESIGN TO DISCOURAGE UNAUTHORIZED ACCESS TO THE MARINA. POSTS AND GATE EXTENSION TO MATCH MATERIAL AND BLACK POWDER COAT FINISH TO GATE. GATE STYLE TO BE DURAGATE DGT-GGFW FLAT TOP GARDEN GATE OR APPROVED EQUAL. CONTRACTOR TO SUBMIT GATE AND DESIGN DATA SHEET TO OWNER FOR APPROVAL.

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

SHEET TITLE: GENERAL NOTES (1 OF 2)
TWA NO.:
PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT
SHEET NO.: S-04

GENERAL NOTES (CONTINUED)

WOOD

1. ALL MEMBERS SHALL BE AIR DRIED TO LESS THAN 19% MOISTURE CONTENT, GRADED IN ACCORDANCE WITH THE SPIB GRADE RULES, SECTION 4, AND MAY HAVE ANY OR ALL OF THE CHARACTERISTICS OF THIS GRADE.
2. ALL DECKING SHALL BE CONTINUOUS UNLESS OTHERWISE NOTED IN THE PLANS.
3. ALL BOLT HOLES THROUGH TIMBERS TO BE AN EXTRA 1/16" IN DIAMETER RELATIVE TO THE BOLT DIAMETER.
4. MEMBERS WITH WANE OF 3/8" OR MORE MAY BE GROUNDS FOR REJECTION, REMOVAL, AND REPLACEMENT.
5. INSTALL DECKING PER MANUFACTURER RECOMMENDATIONS.
6. TREAT ALL WOOD SURFACES EXPOSED TO VIEW WITH A FINISH & SEAL WATER REPELLENT. COLOR OF REPELLENT SHALL MATCH COLOR OF COMPOSITE DECKING.
7. BEAMS, STRINGER, AND RAILS SHALL BE CONTINUOUS OVER SINGLE SPANS UNLESS OTHERWISE NOTED IN THE PLANS.
8. FIELD PRESERVATIVE CHEMICALS SHALL BE APPLIED TO ALL FIELD CUTS AND DRILLED HOLES TO MAINTAIN TIMBER PRESSURE TREATMENT INTEGRITY.
9. PILES SHALL BE PRESSURE PRESERVATIVE TREATED WITH CCA TO 2.5 PCF RETENTION. TIMBER PILES SHALL CONFORM TO ASTM STANDARD D-25 FOR PHYSICAL CHARACTERISTICS AND QUALITY. SIZE SHALL BE 1" TAPER IN 10 LINEAR FEET.
10. PILES SHALL FOLLOW SPECIFICATION SECTION 953.
11. SAWN LUMBER SHALL BE PRESSURE PRESERVATIVE TREATED WITH ACQ TO 0.6 PCF RETENTION. INSTALL WITH NATURAL CAMBER BOWED UP WHEN POSSIBLE.

FASTENERS

1. ALL CONNECTIONS SHALL BE IN ACCORDANCE WITH FLORIDA BUILDING CODE TABLE 2304.10.1 EXCEPT AS SHOWN OR NOTED BELOW:
   - A) PICKETS TO RAILS – TWO, #8x2½" WOOD SCREWS
   - B) RAILS TO RAILING POST – ONE, ¼" ∅ THRU-BOLT
   - C) RAIL CAP TO RAILING POST – FOUR, #10x3" WOOD SCREWS
   - D) BLOCKING TO STRINGERS – FOUR, #10x3" WOOD SCREWS, TOE-NAILED
   - E) DECK BOARDS TO STRINGERS – THREE, #10x3" WOOD SCREWS PER SUPPORT, FACE SCREWED
2. WOOD SCREWS SHALL BE STAINLESS STEEL AND IN ACCORDANCE WITH ANSI/ASME STANDARD B18.6.1.
3. BOLTS SHALL BE IN ACCORDANCE WITH ANSI/ASME STANDARD B18.2.1.
4. PRE-DRILL ALL CONNECTIONS WITH WOOD SCREWS TO AVOID SPLITTING OF THE CONNECTED MEMBERS.
5. ALL THRU-BOLTS EXPOSED TO HUMAN CONTACT SHALL BE CUT OFF AND GROUND SMOOTH, FLUSH WITH THE NUT.
6. "O-GEE" WASHERS SHALL BE USED FOR ALL TIMBER SIDE CONNECTOR SIZES EQUAL TO OR GREATER THAN 1/2" ∅.
7. HURRICANE ANCHOR SHALL BE ATTACHED WITH NAILS (8D). WHENEVER POSSIBLE ALL ANCHORS SHALL BE PLACED IN THE LEAST VISIBLE MANNER TO THE PUBLIC.
8. 9/32" ∅ HOLE SHALL BE DRILLED PRIOR TO LAG SCREW INSTALLATION.
9. ALL THROUGH NAILS SHALL BE BENT ON PROTRUDING SIDE.
10. INSTALL ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS SECTION 416 FOR HOLE DIAMETER AND CLEANING TECHNIQUE.

ENVIRONMENTAL COMMITMENTS

1. USE A RAMP-UP PROCEDURE DURING THE INSTALLATION OF PILES. THIS PROCEDURE ALLOWS FOR A GRADUAL INCREASE IN NOISE LEVELS IN ORDER TO GIVE SENSITIVE SPECIES AMPLE TIME TO FLEE PRIOR TO INITIATION OF FULL NOISE LEVELS. THIS APPROACH CAN ALSO REDUCE THE LIKELIHOOD OF ANY SECONDARY OR SUB-LETHAL EFFECTS FROM SOUND IMPULSES ASSOCIATED WITH PILE DRIVING.
2. COMPLY WITH NOAA PROTECTED SPECIES CONSTRUCTION CONDITIONS DURING CONSTRUCTION.
3. COMPLY WITH THE FOLLOWING PROTECTED SPECIES CONSTRUCTION CONDITIONS REGARDING SEA TURTLES AND SMALLTOOTH SAWFISH:
   - A) INSTRUCT ALL PERSONNEL ASSOCIATED WITH THE PROJECT OF THE POTENTIAL PRESENCE OF THESE SPECIES AND THE NEED TO AVOID COLLISIONS WITH SEA TURTLES AND SMALLTOOTH SAWFISH. ALL CONSTRUCTION PERSONNEL ARE RESPONSIBLE FOR OBSERVING WATER-RELATED ACTIVITIES FOR THE PRESENCE OF THESE SPECIES.
   - B) ADVISE ALL CONSTRUCTION PERSONNEL THAT THERE ARE CIVIL AND CRIMINAL PENALTIES FOR HARMING, HARASSING, OR KILLING SEA TURTLES AND SMALLTOOTH SAWFISH, WHICH ARE PROTECTED UNDER THE ENDANGERED SPECIES ACT OF 1973.

ENVIRONMENTAL COMMITMENTS (CONT'D.)

   - C) SILTATION BARRIERS SHALL BE MADE OF MATERIAL IN WHICH SEA TURTLES OR SMALLTOOTH SAWFISH CANNOT BECOME ENTANGLED, SHALL BE PROPERLY SECURED, AND SHALL BE REGULARLY MONITORED TO AVOID PROTECTED SPECIES ENTRAPMENT. BARRIERS MAY NOT BLOCK SEA TURTLE OR SMALLTOOTH SAWFISH ENTRY TO OR EXIT FROM DESIGNATED CRITICAL HABITAT WITHOUT PRIOR AGREEMENT FROM THE NATIONAL MARINE FISHERIES SERVICE'S PROTECTED RESOURCES DIVISION, ST. PETERSBURG, FLORIDA.
   - D) ALL VESSELS ASSOCIATED WITH THE CONSTRUCTION PROJECT SHALL OPERATE AT "NO WAKE/IDLE" SPEEDS AT ALL TIMES WHILE IN THE CONSTRUCTION AREA AND WHILE IN WATER DEPTHS WHERE THE DRAFT OF THE VESSEL PROVIDES LESS THAN A FOUR-FOOT CLEARANCE FROM THE BOTTOM. ALL VESSELS WILL PREFERENTIALLY FOLLOW DEEP-WATER ROUTES (E.G., MARKED CHANNELS) WHENEVER POSSIBLE.
   - E) IF A SEA TURTLE OR SMALLTOOTH SAWFISH IS SEEN WITHIN 100 YARDS OF THE ACTIVE DAILY CONSTRUCTION OPERATION OR VESSEL MOVEMENT, ALL APPROPRIATE PRECAUTIONS SHALL BE IMPLEMENTED TO ENSURE ITS PROTECTION. THESE PRECAUTIONS SHALL INCLUDE CESSATION OF OPERATION OF ANY MOVING EQUIPMENT CLOSER THAN 50 FEET OF A SEA TURTLE OR SMALLTOOTH SAWFISH. OPERATION OF ANY MECHANICAL CONSTRUCTION EQUIPMENT SHALL CEASE IMMEDIATELY IF A SEA TURTLE OF SMALLTOOTH SAWFISH IS SEEN WITHIN A 50-FT. RADIUS OF THE EQUIPMENT. ACTIVITIES MAY NOT RESUME UNTIL THE PROTECTED SPECIES HAS DEPARTED THE PROJECT AREA OF ITS OWN VOLITION.
   - F) ANY COLLISION WITH AND/OR INJURY TO A SEA TURTLE OR SMALLTOOTH SAWFISH SHALL BE REPORTED IMMEDIATELY TO THE NATIONAL MARINE FISHERIES SERVICES PROTECTED RESOURCES DIVISION (727-824-5312) AND THE LOCAL AUTHORIZED SEA TURTLE STRANDING/RESCUE ORGANIZATION.
4. THE PERMITTEE SHALL COMPLY WITH THE FOLLOWING CONDITIONS INTENDED TO PROTECT MANATEES FROM DIRECT PROJECT EFFECTS:
   - A) INSTRUCT ALL PERSONNEL ASSOCIATED WITH THE PROJECT OF THE POTENTIAL PRESENCE OF MANATEES AND MANATEE SPEED ZONES, AND THE NEED TO AVOID COLLISIONS WITH AND INJURY TO MANATEES. ADVISE ALL CONSTRUCTION PERSONNEL THAT THERE ARE CIVIL AND CRIMINAL PENALTIES FOR HARMING, HARASSING, OR KILLING MANATEES, WHICH ARE PROTECTED UNDER THE MARINE MAMMAL PROTECTION ACT, THE ENDANGERED SPECIES ACT, AND THE FLORIDA MANATEE SANCTUARY ACT.
   - B) ALL VESSELS ASSOCIATED WITH THE CONSTRUCTION PROJECT SHALL OPERATE AT "IDLE SPEED/NO WAKE" AT ALL TIMES WHILE IN THE IMMEDIATE AREA AND WHILE IN WATER WHERE THE DRAFT OF THE VESSEL PROVIDES LESS THAN A FOUR-FOOT CLEARANCE FROM THE BOTTOM. ALL VESSELS WILL FOLLOW ROUTES OF DEEP WATER WHENEVER POSSIBLE.
   - C) SILTATION BARRIERS SHALL BE MADE OF MATERIAL IN WHICH MANATEES CANNOT BECOME ENTANGLED, SHALL BE PROPERLY SECURED, AND SHALL BE REGULARLY MONITORED TO AVOID PROTECTED SPECIES ENTRAPMENT. BARRIERS MUST NOT IMPEDE MANATEE MOVEMENT.
   - D) ALL ON-SITE PROJECT PERSONNEL ARE RESPONSIBLE FOR OBSERVING WATER-RELATED ACTIVITIES FOR THE PRESENCE OF MANATEE(S). ALL IN-WATER OPERATIONS, INCLUDING VESSELS, MUST BE SHUTDOWN IF A MANATEE(S) COMES WITHIN 50 FEET OF THE OPERATION. ACTIVITIES WILL NOT RESUME UNTIL THE MANATEE(S) HAS MOVED BEYOND THE 50-FOOT RADIUS OF THE PROJECT OPERATION, OR UNTIL 30 MINUTES ELAPSES IF THE MANATEE(S) HAS NOT REAPPEARED WITHIN 50 FEET OF THE OPERATION. ANIMALS MUST NOT BE HERDED AWAY OR HARASSED INTO LEAVING.
   - E) ANY COLLISION WITH OR INJURY TO A MANATEE SHALL BE REPORTED IMMEDIATELY TO THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FWC) HOTLINE AT 1-888-404-3922. COLLISION AND/OR INJURY SHOULD ALSO BE REPORTED TO THE U.S. FISH AND WILDLIFE SERVICE IN JACKSONVILLE (1-904-731-3336) FOR NORTH FLORIDA OR IN VERO BEACH (1-722-562-3909) FOR SOUTH FLORIDA, AND EMAILED TO FWC AT IMPERILEDSPECIES@MYFWC.COM.
   - F) TEMPORARY SIGNS CONCERNING MANATEES SHALL BE POSTED PRIOR TO AND DURING ALL IN-WATER PROJECT ACTIVITIES. ALL SIGNS ARE TO BE REMOVED UPON COMPLETION OF THE PROJECT. TEMPORARY SIGNS THAT HAVE ALREADY BEEN APPROVED FOR THIS USE BY THE FWC MUST BE USED. ONE SIGN WHICH READ "CAUTION: BOATERS" MUST BE POSTED. A SECOND SIGN MEASURING AT LEAST 8½" BY 11" EXPLAINING THE REQUIREMENTS FOR "IDLE SPEED/NO WAKE" AND THE SHUT DOWN OF IN-WATER OPERATIONS MUST BE POSTED IN A LOCATION PROMINENTLY VISIBLE TO ALL PERSONNEL ENGAGED IN WATER-RELATED ACTIVITIES. THESE SIGNS CAN BE VIEWED AT HTTP://WWW.MYFWC.COM/WILDLIFEHABITATS/MANATEE_SIGN_VENDORS.HTM. QUESTIONS CONCERNING THESE SIGNS CAN BE FORWARDED TO THE EMAIL ADDRESS LISTED ABOVE.

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

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

DRAWN BY: BCS 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

SHEET TITLE: GENERAL NOTES (2 OF 2)

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: S-05

BID ITEMS FOR SAFETY HARBOR MARINA REPLACEMENT

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
	CIVIL		
101-1	MOBILIZATION	LS	1
102-1	MAINTENANCE OF TRAFFIC	LS	1
104-10	SEDIMENT BARRIER	LF	340
104-11	FLOATING TURBIDITY BARRIER	LF	255
110-1-1	CLEARING & GRUBBING	LS	1
110-82	REMOVE & DISPOSE OF STRUCTURAL TIMBER	MB	20.9
110-82	REMOVE & DISPOSE OF STRUCTURAL TIMBER, STORM DAMAGE	MB	7.8
350-5	CLEANING & SEALING JOINTS - CONCRETE PAVEMENT	LF	30
515-2-311	PEDESTRIAN / BICYCLE RAILING, ALUMINUM ONLY, 42" TYPE 1	LF	21
550-10-222	FENCING, TYPE B, 5.1'-6.0', W/ VINYL COATING	LF	340
550-60-222	FENCE GATE, TYPE B, DOUBLE 6.1'-12.0' OPENING	EA	1
700-1-11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12SF	EA	4
700-1-50	SINGLE POST SIGN, RELOCATE	EA	1
999-90	SECURITY GATE, 6FT.	EA	1
999-91	CLEATS	EA	56
999-92	SAFETY LADDER	EA	20
	STRUCTURES		
470-1	TREATED STRUCTURAL TIMBER	MB	7.3
999-93	TREATED TIMBER PILING (8 IN. DIAMETER)	LF	5,680
999-94	TREATED TIMBER PILING (10 IN. DIAMETER)	LF	1,239
999-95	PILE WRAPS	EA	288
999-96	PILE CAP	EA	220
999-97	COMPOSITE DECKING (ALTERNATIVE 1)	SF	4,236
470-1-9	TIMBER DECKING (ALTERNATIVE 2)	MB	6.4

BID ITEM NOTES

1. POST-INSTALLED ANCHORS LABOR AND MATERIAL IS CONSIDERED INCIDENTAL TO PAY ITEM 470-1, "TREATED STRUCTURAL TIMBER".
2. ALL HARDWARE LABOR AND MATERIAL IS CONSIDERED INCIDENTAL TO PAY ITEM 470-1, "TREATED STRUCTURAL TIMBER." TIMBER BLOCKING IS CONSIDERED INCIDENTAL TO PAY ITEM 470-1, "TREATED STRUCTURAL TIMBER."
3. PAYMENT FOR NEOPRENE SHIM IS CONSIDERED INCIDENTAL TO PAY ITEM NO. 470-1, "TREATED STRUCTURAL TIMBER".
4. LABOR & MATERIAL FOR INSTALLING SECURITY GATE IS TO BE PAID FOR UNDER PAY ITEM 999-90, "SECURITY GATE, 6 FT.".
5. LABOR & MATERIAL FOR INSTALLING CLEATS IS TO BE PAID FOR UNDER PAY ITEM 999-91, "CLEATS".
6. LABOR & MATERIAL FOR INSTALLING SAFETY LADDERS IS TO BE PAID FOR UNDER PAY ITEM 999-92, "SAFETY LADDER".
7. LABOR & MATERIAL FOR INSTALLING DOCK PILES IS TO BE PAID FOR UNDER PAY ITEMS 999-93, "TREATED TIMBER PILING 8 IN. DIAMETER".
8. LABOR & MATERIAL FOR INSTALLING TIE PILES IS TO BE PAID FOR UNDER PAY ITEM 999-94, "TREATED TIMBER PILING 10 IN. DIAMETER".
9. LABOR & MATERIAL FOR INSTALLING PILE WRAPS IS TO BE PAID FOR UNDER PAY ITEM 999-95, "PILE WRAPS".
10. LABOR & MATERIAL FOR INSTALLING PILE CONICAL CAPS IS TO BE PAID FOR UNDER PAY ITEM 999-96, "PILE CAPS".
11. LABOR & MATERIAL FOR INSTALLING COMPOSITE DECKING (ALTERNATIVE 1) IS TO BE PAID FOR UNDER PAY ITEM 999-97, "COMPOSITE DECKING".
12. LABOR & MATERIAL FOR INSTALLING TIMBER DECKING (ALTERNATIVE 2) IS TO BE PAID FOR UNDER PAY ITEM 470-1-9, "TIMBER DECKING (ALTERNATIVE 2)".
13. ANY VEGETATION REMOVAL AND/OR TREE TRIMMING REQUIRED FOR THE PERIMETER FENCE INSTALLATION TO BE PAID FOR UNDER PAY ITEM 110-1-1, "CLEARING AND GRUBBING".
14. REMOVAL OF EXISTING CHAIN-LINK FENCE TO BE PAID FOR UNDER PAY ITEM 110-1-1, "CLEARING AND GRUBBING".
15. ANY INCIDENTAL GRADING AND SODDING DUE TO INSTALLATION OF THE PROPOSED PERIMETER FENCE TO BE PAID FOR UNDER PAY ITEM 550-10-222, "FENCING, TYPE B, 5.1'-6.0' W/ VINYL COATING".
16. PREFORMED JOINT FILLER TO BE PAID FOR UNDER PAY ITEM 350-5, "CLEANING & SEALING JOINTS-CONCRETE PAVEMENT".
17. SUNBURST SECURITY FENCE GATE, EXTENSION AND GATE LOCK SYSTEM TO BE PAID FOR UNDER PAY ITEM 999-90, "SECURITY GATE, 6 FT".
18. ANY POTENTIAL DEWATERING ACTIVITIES NEEDED FOR THE INSTALLATION OF PROPOSED FENCING CONCRETE POST FOOTINGS ARE CONSIDERED INCIDENTAL TO PAY ITEM 550-10-222, "FENCING, TYPE B, 5.1'-6.0', W/ VINYL COATING".

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

DRAWN BY: BCS 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

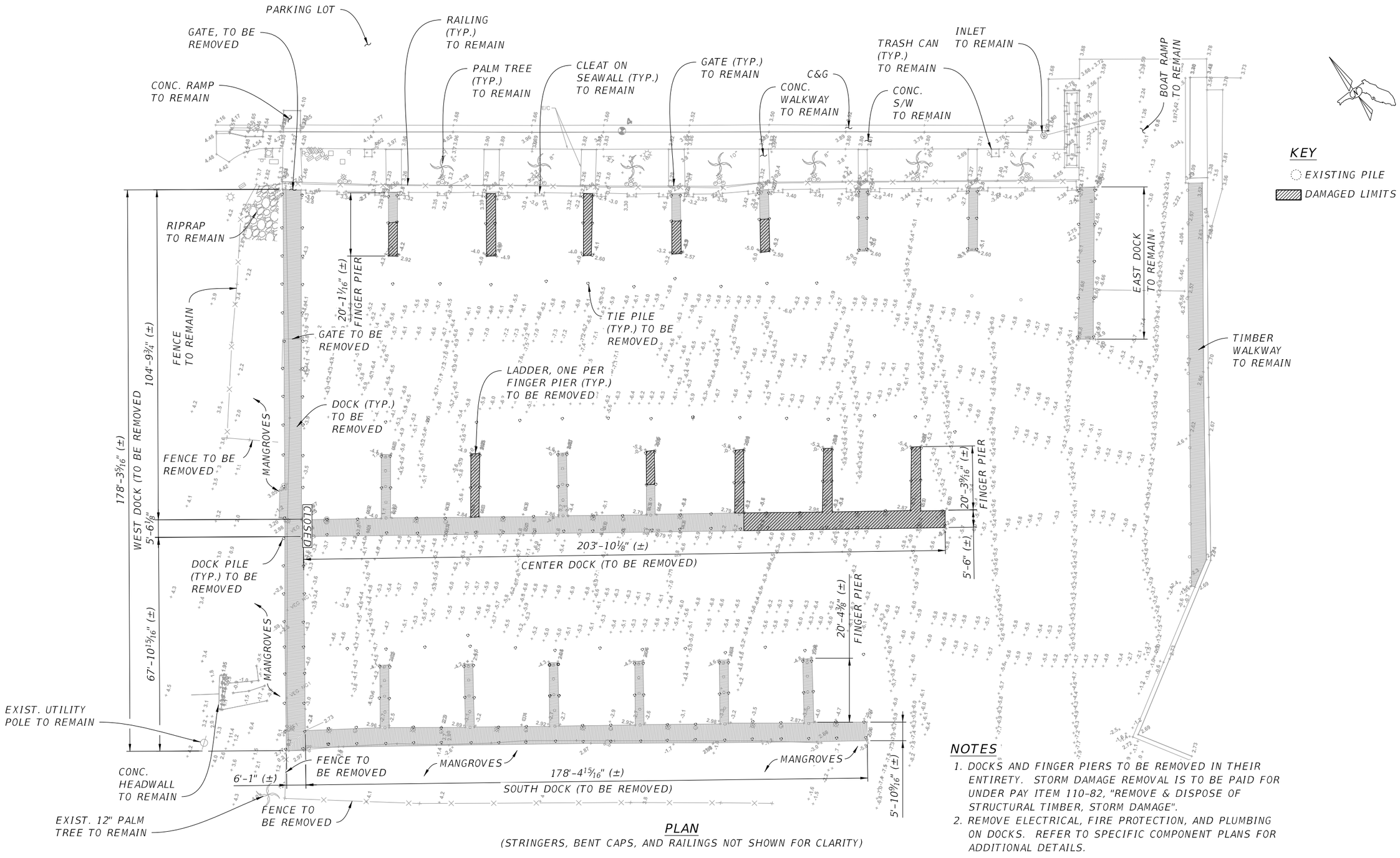
SHEET TITLE: SUMMARY OF QUANTITIES

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. S-06

Plotted By: Christian.Hodges 3/7/2025 10:31:17 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1GeneralNotes02.dgn



PLAN

(STRINGERS, BENT CAPS, AND RAILINGS NOT SHOWN FOR CLARITY)

NOTES

1. DOCKS AND FINGER PIERS TO BE REMOVED IN THEIR ENTIRETY. STORM DAMAGE REMOVAL IS TO BE PAID FOR UNDER PAY ITEM 110-82, "REMOVE & DISPOSE OF STRUCTURAL TIMBER, STORM DAMAGE".
2. REMOVE ELECTRICAL, FIRE PROTECTION, AND PLUMBING ON DOCKS. REFER TO SPECIFIC COMPONENT PLANS FOR ADDITIONAL DETAILS.

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DAVID R. JOHNSON, P.E.
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TAMPA, FL 33647

DRAWN BY:	CAH 06-24
CHECKED BY:	DRJ 06-24
DESIGNED BY:	DRJ 06-24
CHECKED BY:	CS 06-24

City of Safety Harbor, Florida — Heart of the Mineral Springs

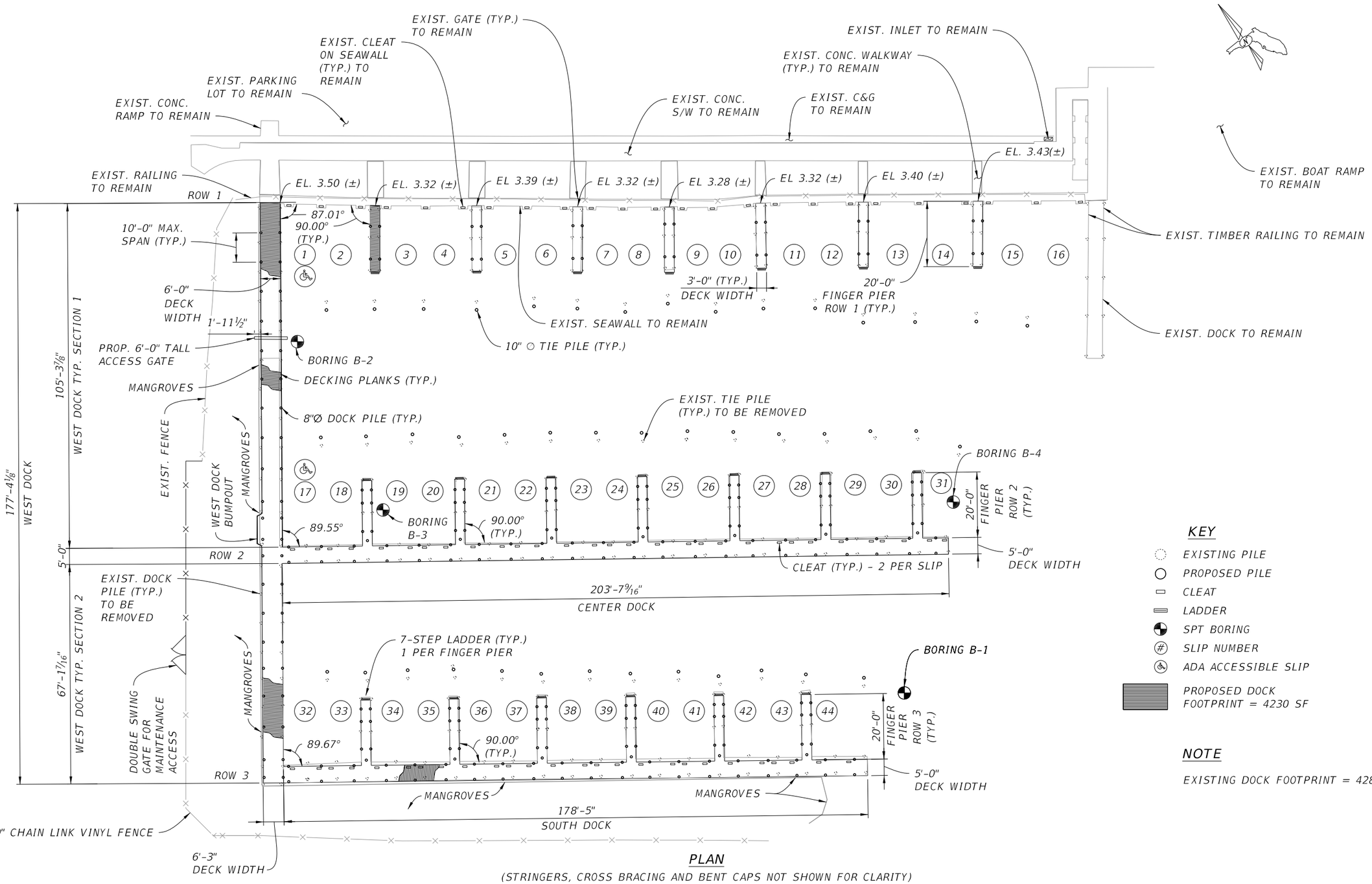
SHEET TITLE: DEMOLITION PLAN

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: S-07

Plotted By: Christian.Hodges 3/7/2025 12:03:12 PM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_DemoPlan.dgn



PLAN

(STRINGERS, CROSS BRACING AND BENT CAPS NOT SHOWN FOR CLARITY)

KEY

- EXISTING PILE
- PROPOSED PILE
- CLEAT
- LADDER
- SPT BORING
- SLIP NUMBER
- ADA ACCESSIBLE SLIP
- PROPOSED DOCK FOOTPRINT = 4230 SF

NOTE

EXISTING DOCK FOOTPRINT = 4288 SF

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
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15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

DRAWN BY:	CAH 06-24
CHECKED BY:	DRJ 06-24
DESIGNED BY:	DRJ 06-24
CHECKED BY:	CS 06-24

SHEET TITLE: MARINA LAYOUT PLAN

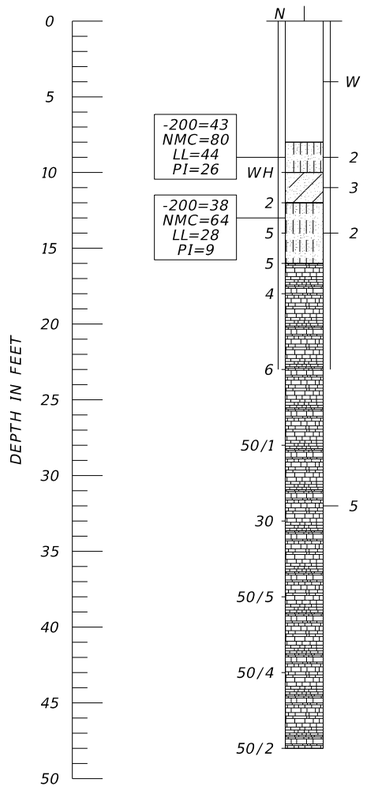
TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

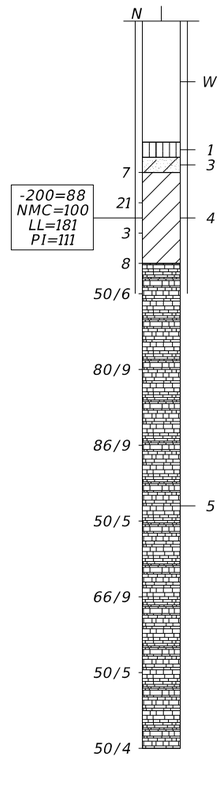
SHEET NO.: S-08

Plotted By: Christian.Hodges 3/7/2025 10:31:57 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_PlanElev100_Layout.dgn

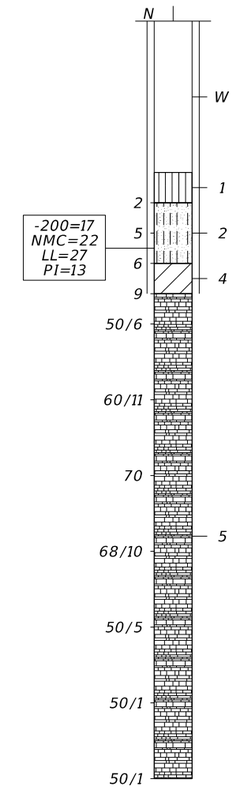
BOR # B-1
EASTING 434324
NORTHING 1329300
DATE 8/24/2023
DRILLER D. STAKELIN
HAMMER AUTOMATIC
RIG CME 55



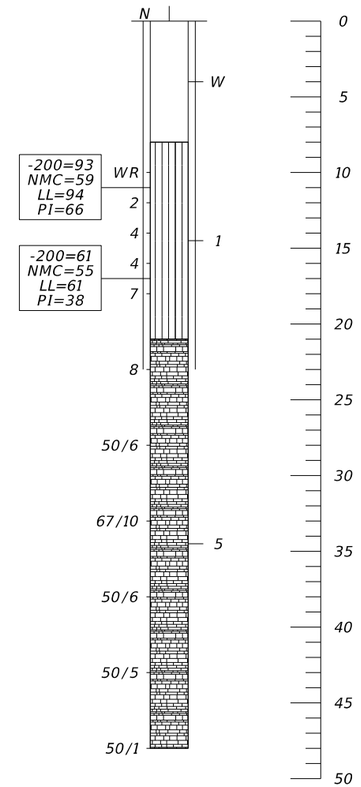
BOR # B-2
EASTING 434227
NORTHING 1329497
DATE 8/22/2023
DRILLER D. STAKELIN
HAMMER AUTOMATIC
RIG CME 55



BOR # B-3
EASTING 434224
NORTHING 1329437
DATE 8/23/2023
DRILLER D. STAKELIN
HAMMER AUTOMATIC
RIG CME 55



BOR # B-4
EASTING 434376
NORTHING 1329350
DATE 8/24/2023
DRILLER D. STAKELIN
HAMMER AUTOMATIC
RIG CME 55



LEGEND

1		DARK GRAY TO DARK BROWN SILT (ML/MH)
2		GRAY SILTY SAND (SM)
3		GRAY TO BLUE CLAYEY SAND (SC)
4		GRAY TO BLUE CLAY (CL/CH)
5		WEATHERED LIMESTONE, OCCASIONALLY WITH CALCAREOUS CLAY
	W	W - WATER
	SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
	N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
	50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
	WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
	WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
	-200 NMC LL PI	PERCENT PASSING #200 SIEVE NATURAL MOISTURE CONTENT (%) LIQUID LIMIT (%) PLASTICITY INDEX (%)
		CASING
	EASTING	EASTING COORDINATE REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, FLORIDA WEST ZONE, N.A.D. 83.
	NORTHING	NORTHING COORDINATE REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, FLORIDA WEST ZONE, N.A.D. 83.

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS-RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

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

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DANIEL R. RUEL, P.E.
P.E. LICENSE NUMBER 82404
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BMG 02/24
CHECKED BY: DRR 02/24
DESIGNED BY: BMG 02/24
CHECKED BY: DRR 02/24

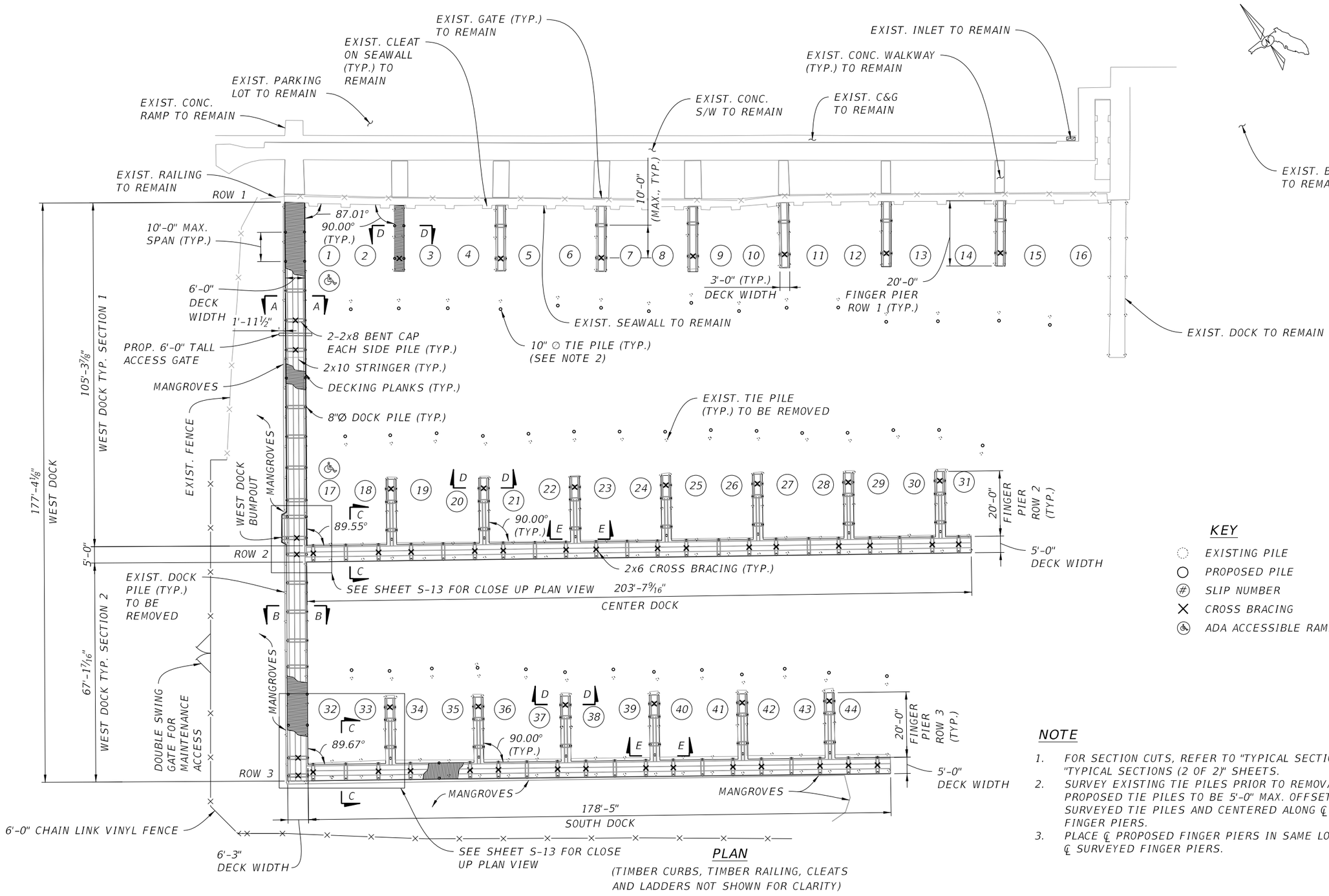
SHEET TITLE: SOIL PROFILES

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. S-09

Plotted By: Christian.Hodges 3/7/2025 10:32:18 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\geotech\B1Boring01.dgn



PLAN

(TIMBER CURBS, TIMBER RAILING, CLEATS AND LADDERS NOT SHOWN FOR CLARITY)

KEY

- EXISTING PILE
- PROPOSED PILE
- SLIP NUMBER
- CROSS BRACING
- ADA ACCESSIBLE RAMP

NOTE

1. FOR SECTION CUTS, REFER TO "TYPICAL SECTIONS (1 OF 2)" AND "TYPICAL SECTIONS (2 OF 2)" SHEETS.
2. SURVEY EXISTING TIE PILES PRIOR TO REMOVAL. PROPOSED TIE PILES TO BE 5'-0" MAX. OFFSET FROM EXISTING SURVEYED TIE PILES AND CENTERED ALONG ℄ PROPOSED FINGER PIERS.
3. PLACE ℄ PROPOSED FINGER PIERS IN SAME LOCATION AS EXISTING ℄ SURVEYED FINGER PIERS.

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

DRAWN BY: CAH 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

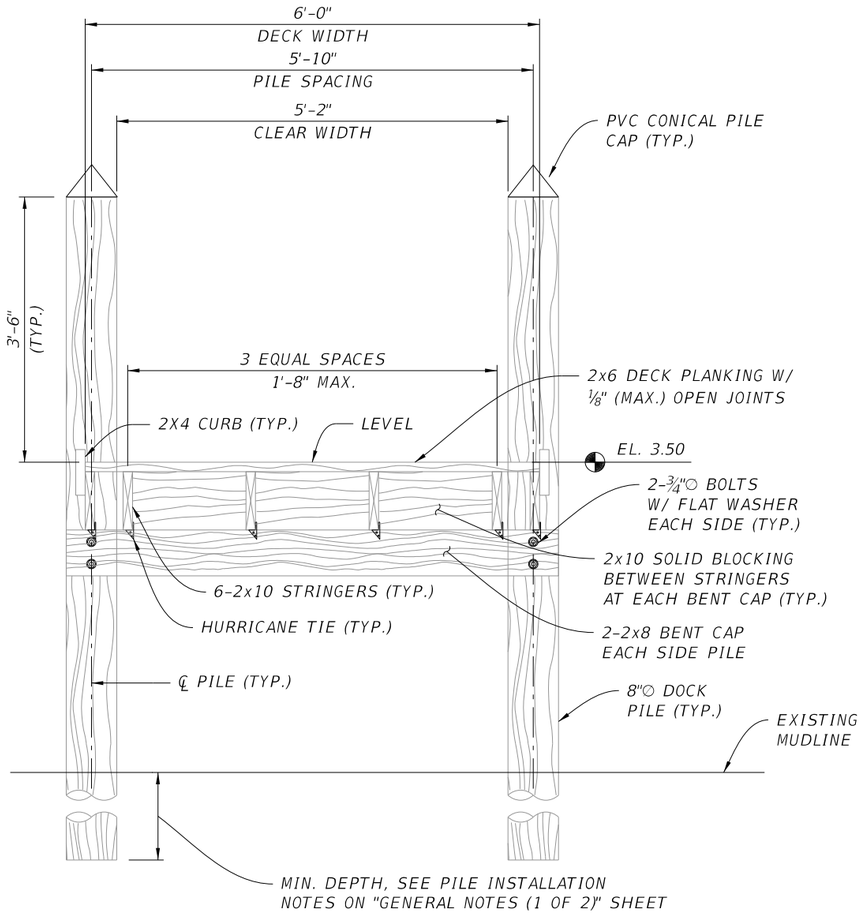
SHEET TITLE: FRAMING PLAN

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

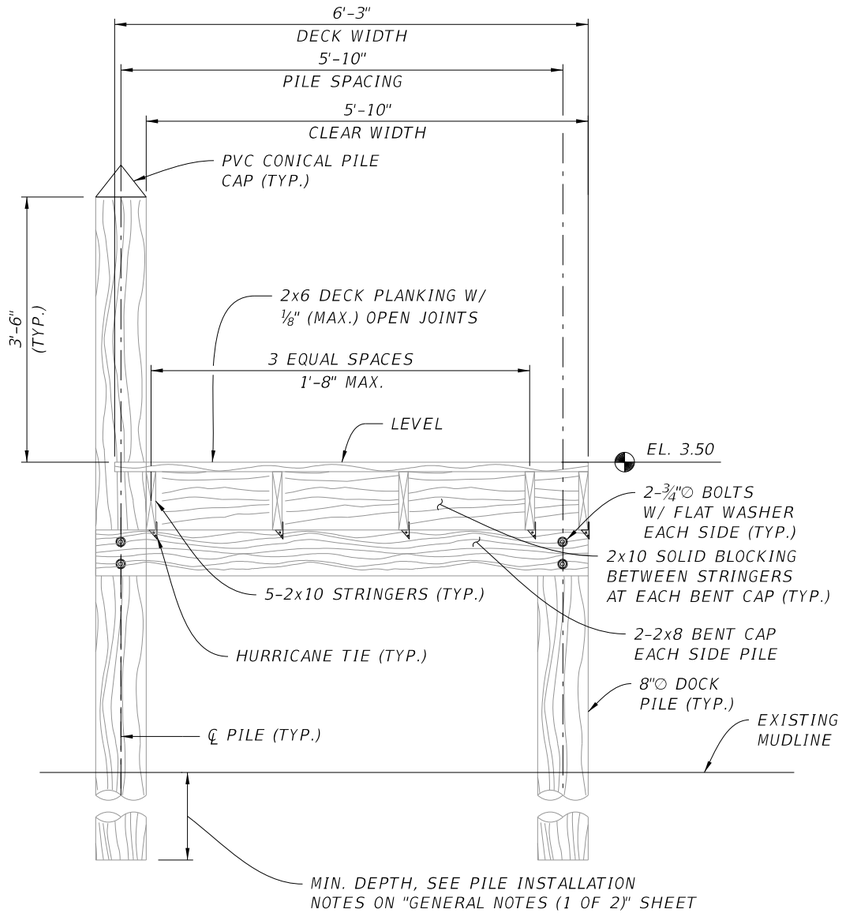
SHEET NO.: S-10

Plotted By: Christian.Hodges 3/7/2025 10:32:45 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_FramingPlan.dgn



SECTION A-A
WEST DOCK TYPICAL SECTION 1

(DIAGONAL CROSS BRACING NOT SHOWN)



SECTION B-B
WEST DOCK TYPICAL SECTION 2

(DIAGONAL CROSS BRACING NOT SHOWN)

NOTE

PROVIDE FLAT WASHERS BETWEEN PILING AND BENT CAP ON EITHER THE TOP OR BOTTOM CONNECTION BOLTS AS NECESSARY TO ENSURE PLUMB INSTALLATION.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DAVID R. JOHNSON, P.E.
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15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

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DESIGNED BY:	DRJ 06-24
CHECKED BY:	CS 06-24

SHEET TITLE: TYPICAL SECTIONS (1 OF 2)

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: S-11

Plotted By: Christian.Hodges 3/7/2025 10:33:11 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_Sections.dgn

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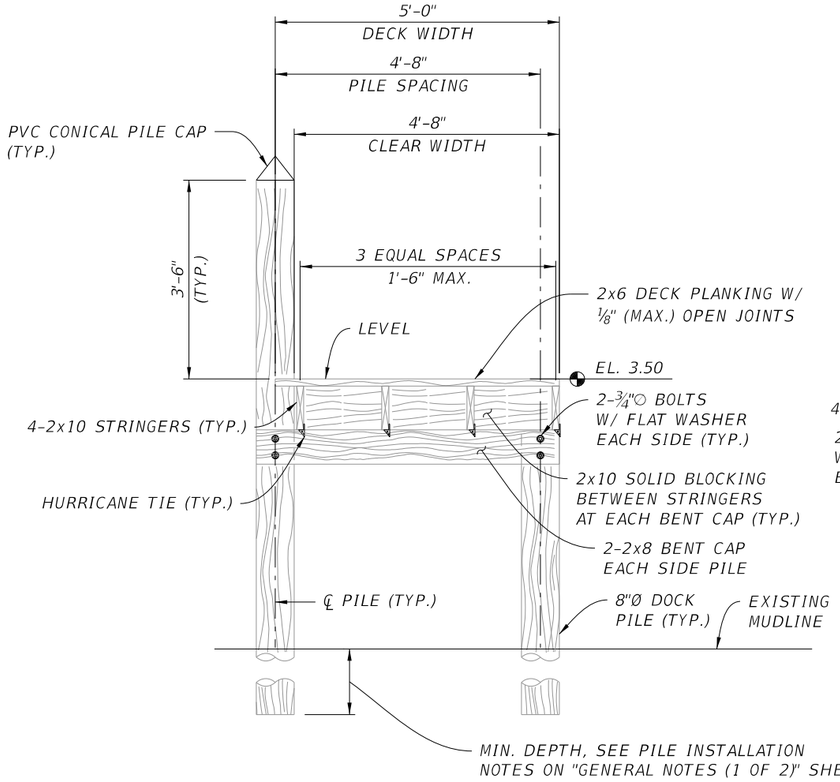
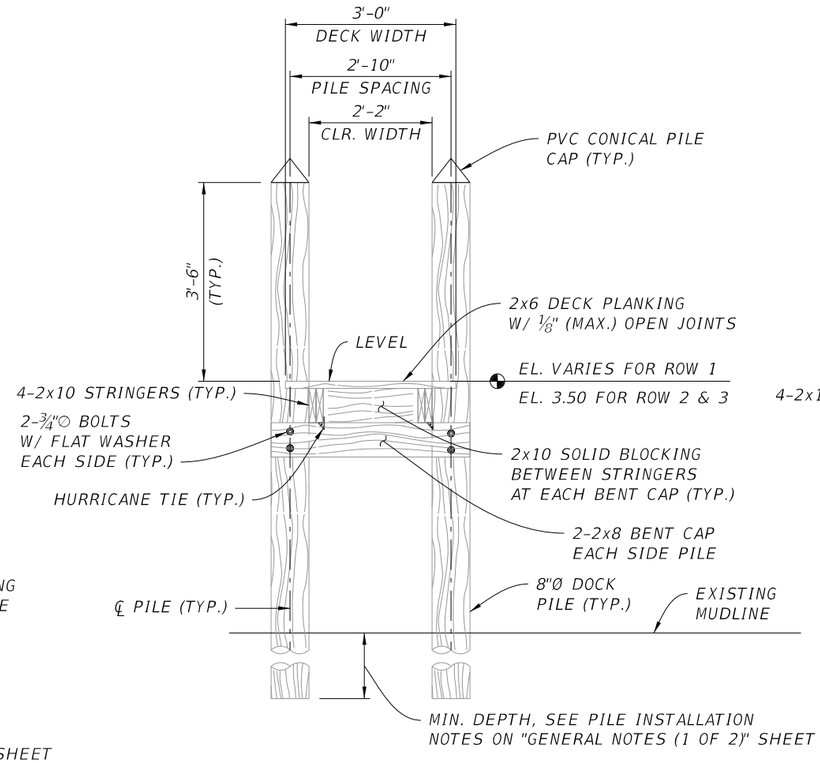


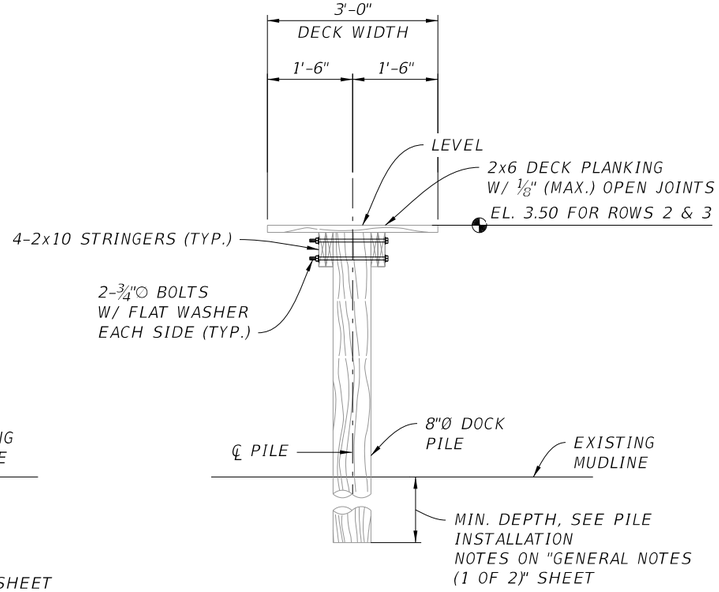
SECTION C-C
CENTER DOCK TYPICAL SECTION

(SOUTH DOCK IS SIMILAR)
(DIAGONAL CROSS BRACING NOT SHOWN)



SECTION D-D
FINGER PIER TYPICAL SECTION

(FINGER PIERS CONNECTED TO EXIST. SEAWALL
AND CENTER AND SOUTH END FINGER PIERS)



SECTION E-E
FINGER PIER TYPICAL SECTION

(CENTER AND SOUTH DOCK FINGER PIERS)

NOTE

PROVIDE FLAT WASHERS BETWEEN PILING AND BENT CAP ON EITHER THE TOP OR BOTTOM CONNECTION BOLTS AS NECESSARY TO ENSURE PLUMB INSTALLATION.

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REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
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TAMPA, FL 33647

DRAWN BY: CAH 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

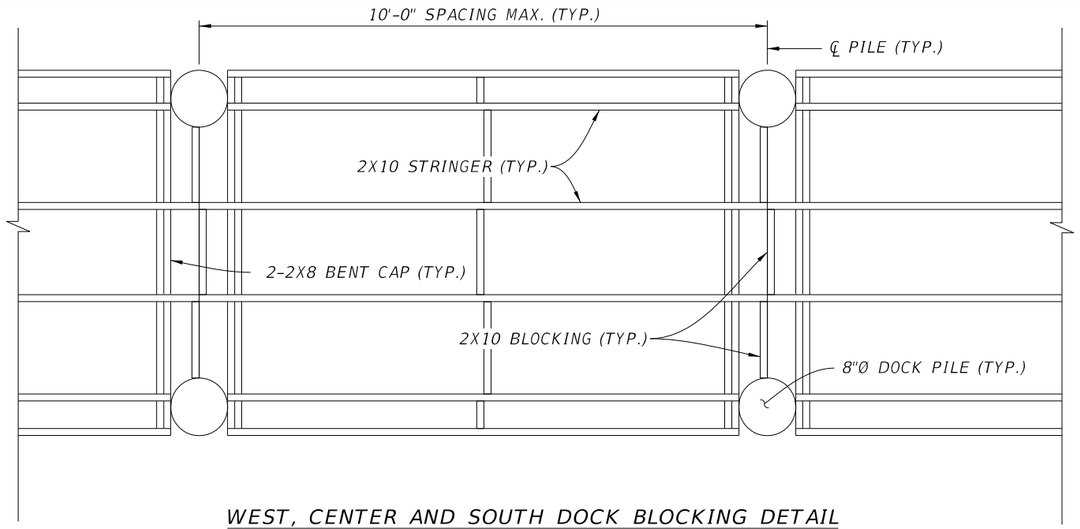
SHEET TITLE: TYPICAL SECTIONS (2 OF 2)

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

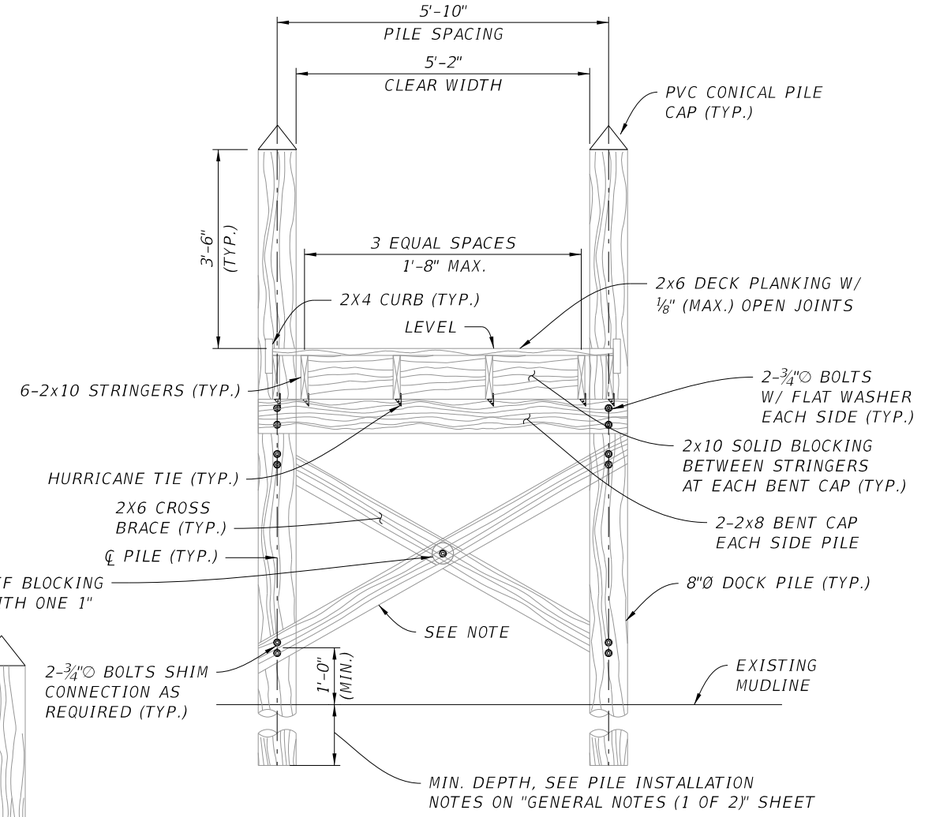
SHEET NO.: S-12

Plotted By: Christian.Hodges 3/7/2025 10:33:17 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_Misc Details 2.dgn

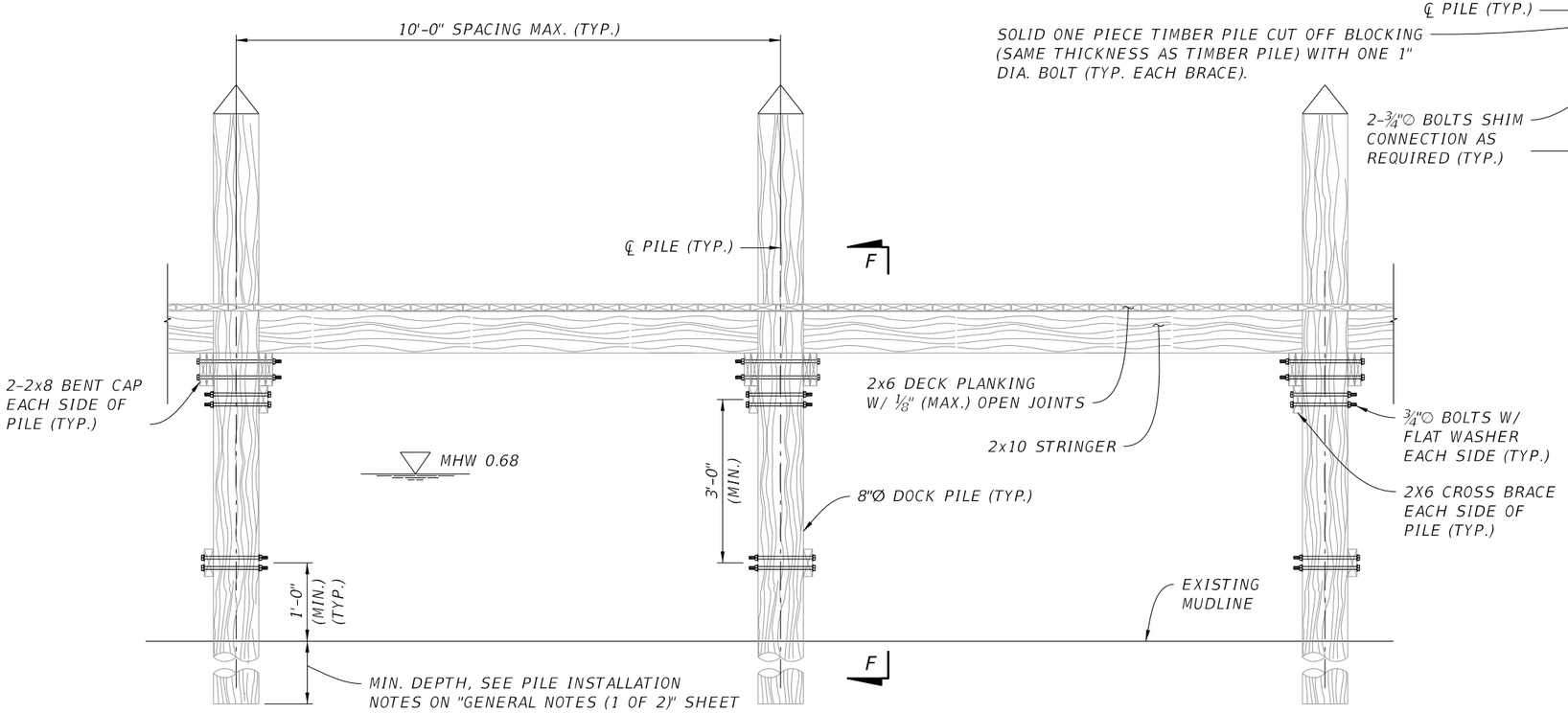


WEST, CENTER AND SOUTH DOCK BLOCKING DETAIL

(DECK AND CAPS NOT SHOWN FOR CLARITY)



SECTION F-F



WEST DOCK ELEVATION

(CROSS BRACING SIMILAR FOR CENTER DOCK, SOUTH DOCK, AND FINGER PIERS, WHERE APPLICABLE. SEE NOTE.)

NOTE

DIAGONAL CROSS BRACING IS NOT REQUIRED IF DISTANCE FROM BOTTOM OF BENT CAP TO EXISTING MUDLINE IS LESS THAN 5'-0".

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REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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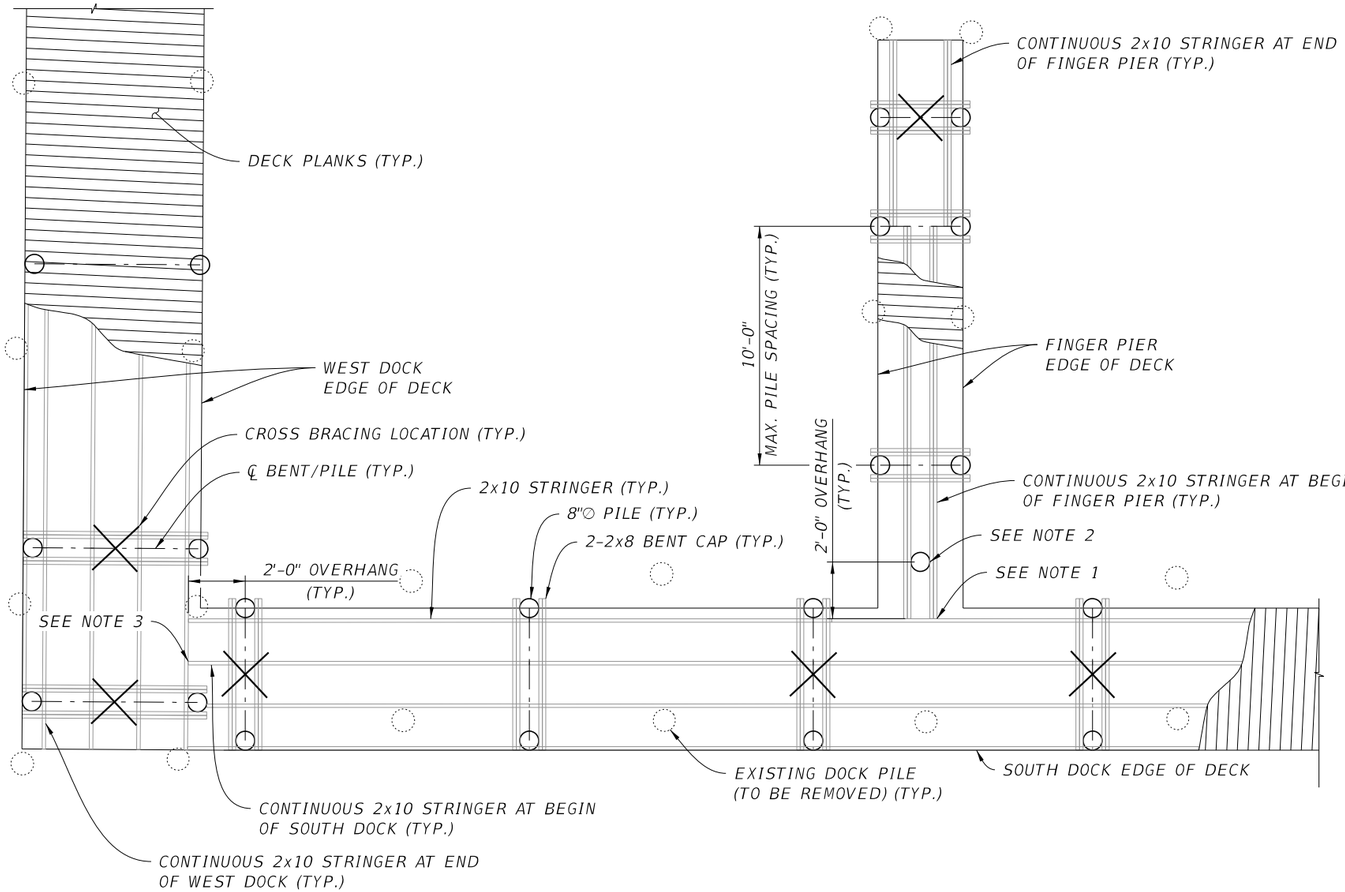
SHEET TITLE: MISCELLANEOUS DETAILS (1 OF 3)

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

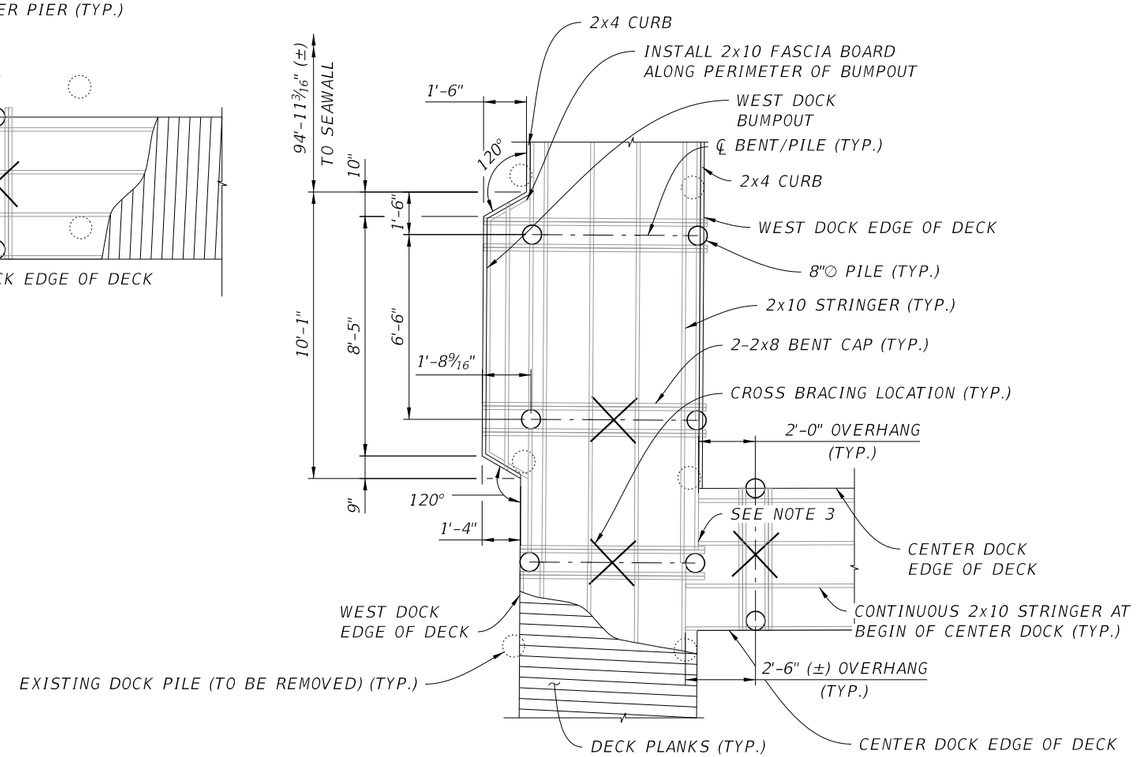
SHEET NO.: S-13

Plotted By: Christian.Hodges 3/7/2025 10:33:17 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_Misc Details 2.dgn



WEST DOCK CONNECTION TO SOUTH DOCK

(BLOCKING, CLEATS AND LADDERS NOT SHOWN FOR CLARITY)



WEST DOCK CONNECTION TO CENTER DOCK

(BLOCKING, CLEATS AND LADDERS NOT SHOWN FOR CLARITY)

NOTES

1. ATTACH FINGER PIER STRINGERS TO EXTERIOR STRINGER OF DOCK USING STAINLESS STEEL "LUS SIMPSON STRONG TIE" HANGER OR EQUIVALENT AT SOUTH AND CENTER DOCK FINGER PIERS.
2. CONNECT STRINGERS TO PILE USING 3/4" DIA. BOLTS WITH FLAT WASHERS EACH SIDE.
3. ATTACH CENTER/SOUTH DOCK STRINGERS TO EXTERIOR STRINGER OF WEST DOCK USING STAINLESS STEEL "LUS SIMPSON STRONG TIE" HANGER OR EQUIVALENT.

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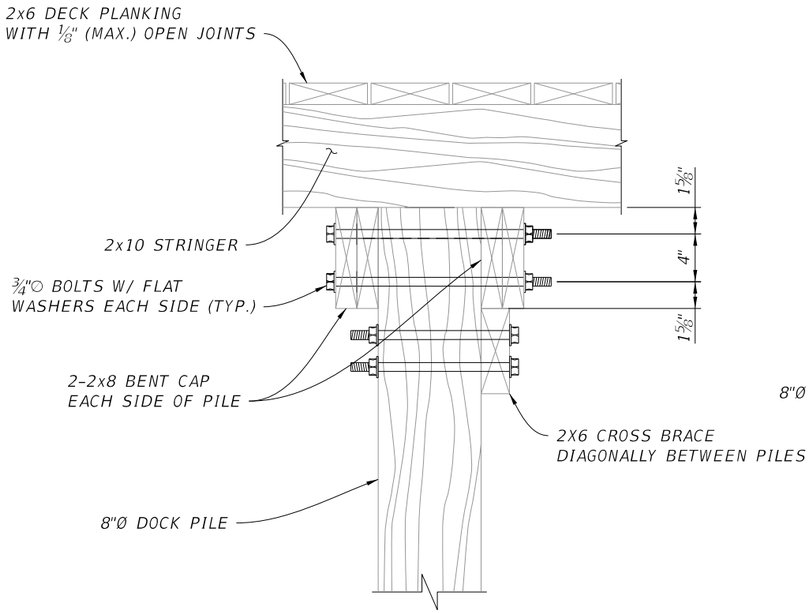
SHEET TITLE: MISCELLANEOUS DETAILS (2 OF 3)

TWA NO.:

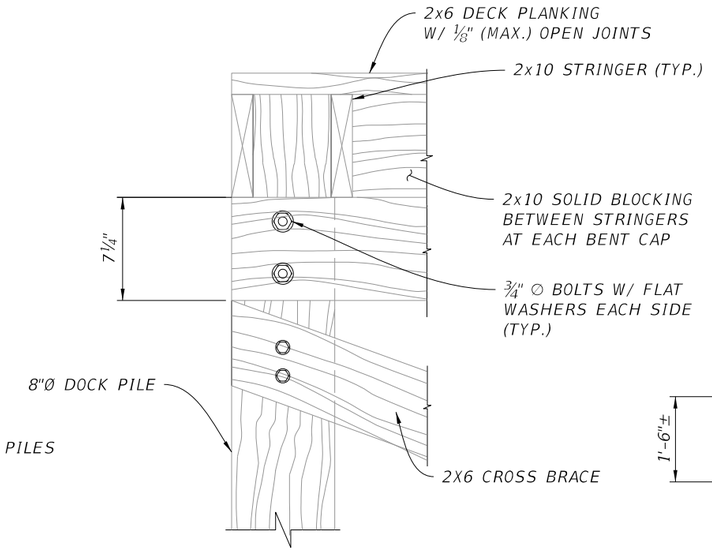
PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: S-14

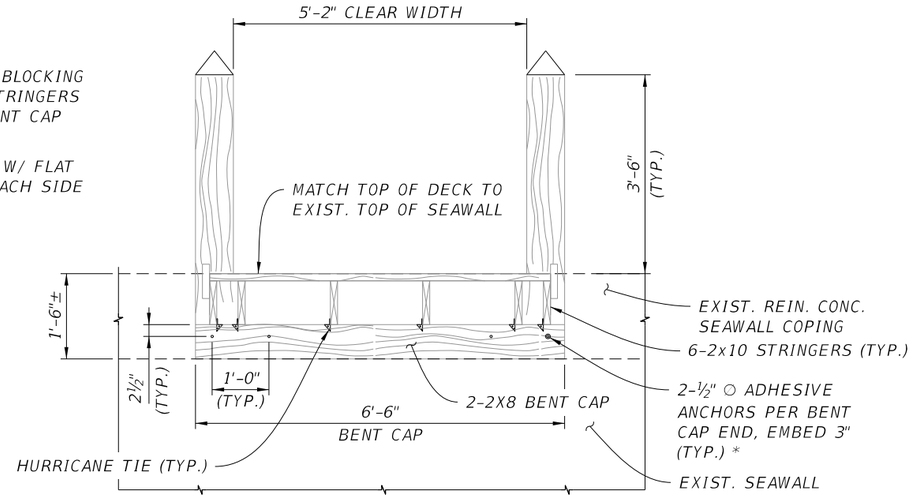
Plotted By: Christian.Hodges 3/7/2025 10:33:18 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_Misc Details 2.dgn



VIEW PERPENDICULAR TO ℄ OF DOCK



VIEW PARALLEL TO ℄ OF DOCK



RAMP CONNECTION TO EXIST. SEAWALL

(WEST DOCK SHOWN, FINGER PIERS SIMILAR EXCEPT USE ONE (1) ADHESIVE ANCHOR PER BENT CAP END)

CONNECTION DETAILS

* NOTE - USE HILTI HIT-HY 200 A/R V3 ADHESIVE AND HIT-Z ANCHOR RODS FOR ADHESIVE ANCHORS OR EQUIVALENT. MINIMUM FACTORED DESIGN SHEAR STRENGTH OF 1.74 KIPS PER ANCHOR.

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REVISIONS					
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CHECKED BY: CS 06-24

SHEET TITLE: MISCELLANEOUS DETAILS (3 OF 3)

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: S-15

Plotted By: Christian.Hodges 3/7/2025 10:33:19 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_Misc Details 2.dgn

GENERAL NOTES

EROSION AND SEDIMENT CONTROL

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL AND PREVENT EROSION AND THE TRANSPORTATION OF SEDIMENT TO SURFACE DRAINS AND OUTFALLS USING BEST MANAGEMENT PRACTICES. REFER TO CONSTRUCTION PLANS, DETAILS, SPECIFICATIONS AND APPROVED PERMITS FOR DETAILS. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY REACH ONE HALF THE HEIGHT ON AN EROSION DEVICE OR AS DIRECTED BY THE ENGINEER.

2. DURING THE CONSTRUCTION OF STRUCTURES REQUIRING EXCAVATION, THE CONTRACTOR SHALL PLACE APPROVED BARRIERS OR OTHER APPROVED DEVICES AROUND SUCH STRUCTURES TO PREVENT EROSION AND THE MIGRATION OF SEDIMENT TO POINTS OUTSIDE THE CONSTRUCTION AREA. THE APPROVED BARRIERS OR OTHER APPROVED DEVICES SHALL BE PLACED IN ACCORDANCE WITH REQUIREMENTS OF FLORIDA STORM WATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL, 2018, STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, LATEST EDITION OR AS DIRECTED BY THE ENGINEER.

3. REQUIRED EROSION CONTROL MEASURES MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. FAILURE TO INSTALL OR PROPERLY MAINTAIN REQUIRED EROSION CONTROL WILL RESULT IN ENFORCEMENT ACTION. ALL EROSION CONTROL MEASURES, SAND, SILT, AND DEBRIS SHALL BE REMOVED FROM ALL STRUCTURES AFTER CONSTRUCTION HAS BEEN COMPLETED AND PRIOR TO CITY FINAL WALK-THROUGH.

4. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SILT/TURBIDITY BARRIERS TO CONTROL EROSION AND SEDIMENT FROM TAKING PLACE OUTSIDE THE PROJECT LIMITS. THE SILT/TURBIDITY BARRIERS SHALL BE PLACED IN ACCORDANCE WITH REQUIREMENTS OF FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL, 2018, STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, LATEST EDITION, THROUGHOUT THE DURATION OF THE PROJECT AND ALL ASPECTS OF CONSTRUCTION. ALL DAMAGED OR INEFFECTIVE EROSION CONTROL DEVICES SHALL BE REPLACED AT NO ADDITIONAL COST TO THE CITY.

5. EROSION CONTROL PLAN – ANY MODIFICATIONS TO THIS PLAN MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REPRESENTING THE CONTRACTOR. THESE MODIFICATIONS MUST BE APPROVED BY THE CITY AND THE PERMITTING AGENCY. NO CONTRACT DELAYS WILL BE ALLOWED FOR SUCH MODIFICATIONS OR APPROVALS.

6. APPROVED BARRIERS (OR OTHER APPROVED SEDIMENT CONTROL DEVICES) THESE SHALL BE PLACED AT THE BASE OF ANY SLOPE WHERE A RAINFALL EVENT COULD ERODE A SLOPE AND TRANSPORT SEDIMENTS OFF-SITE. APPROVED BARRIERS SHALL BE DOUBLE STAKED IN ACCORDANCE WITH FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL, 2018, AND STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, LATEST EDITION. ANY DAMAGED OR INEFFECTIVE APPROVED BARRIERS ARE TO BE REPLACED WITH NEW ONES. THE LOCATION AND INSTALLATION OF APPROVED BARRIERS SHALL BE AS DIRECTED BY THE PROJECT ENGINEER.

7. STOCKPILED MATERIALS SHALL BE PROTECTED BY COVER, APPROVED BARRIERS OR OTHER APPROVED SEDIMENT CONTROL DEVICES.

8. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 3 DAYS AFTER ½" RAIN EVENT DISTURBANCE.

9. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION, OR OTHER ACCEPTABLE METHODS.

10. THE EROSION CONTROL DEVICE QUANTITIES SHOWN ON THE BID FORMS ARE ESTIMATES OF THE ACTUAL QUANTITIES THAT MAY BE ENCOUNTERED DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SPECIFY ACTUAL QUANTITIES AND COSTS ASSOCIATED WITH THIS SPECIFIC EROSION CONTROL IMPLEMENTATION SCHEDULE. EROSION CONTROL ITEMS MAY BE ADDED OR DELETED FROM THE PAY ITEM LIST AS THE EROSION CONTROL IMPLEMENTATION SCHEDULE PROVIDED BY THE CONTRACTOR IS MODIFIED TO MEET SITE SPECIFIC CONDITIONS.

11. ALL EROSION CONTROL FENCES, BARRIERS, AND SILTATION DEVICES SHALL BE ERECTED PRIOR TO ANY LAND ALTERATIONS, SHALL BE MAINTAINED IN GOOD WORKING ORDER DURING CONSTRUCTION, AND REMOVED FOLLOWING SOIL STABILIZATION AND FINAL DRESSING. STOCKPILE AREAS SHALL INCLUDE SILT FENCING AROUND THE PERIMETER.

12. THE CONTRACTOR SHALL NOT RESTRICT OR BLOCK THE EXISTING DRAINAGE FLOW OVERLAND OR WITHIN RESHAPED SWALES. FLOW WITHIN EXISTING DRAINAGE PIPES SHALL BE MAINTAINED AT ALL TIMES. STORM WATER WILL BE CONVEYED VIA EXISTING SWALES, DITCHES, OR PROPOSED DITCHES, EXISTING AND PROPOSED STORM SEWERS.

13. THERE IS TO BE NO DISCHARGE (I.E. PUMPING, SHEET FLOW, SWALE, DITCH, ETC.) INTO EXISTING DITCHES OR CANALS WITHOUT THE USE OF SETTLING PONDS. IF THE CONTRACTOR DESIRES TO DISCHARGE INTO EXISTING DITCHES OR CANALS A SETTLING POND PLAN PREPARED BY THE CONTRACTOR MUST BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD AND LOCAL REGULATORY AGENCY PRIOR TO CONSTRUCTION.

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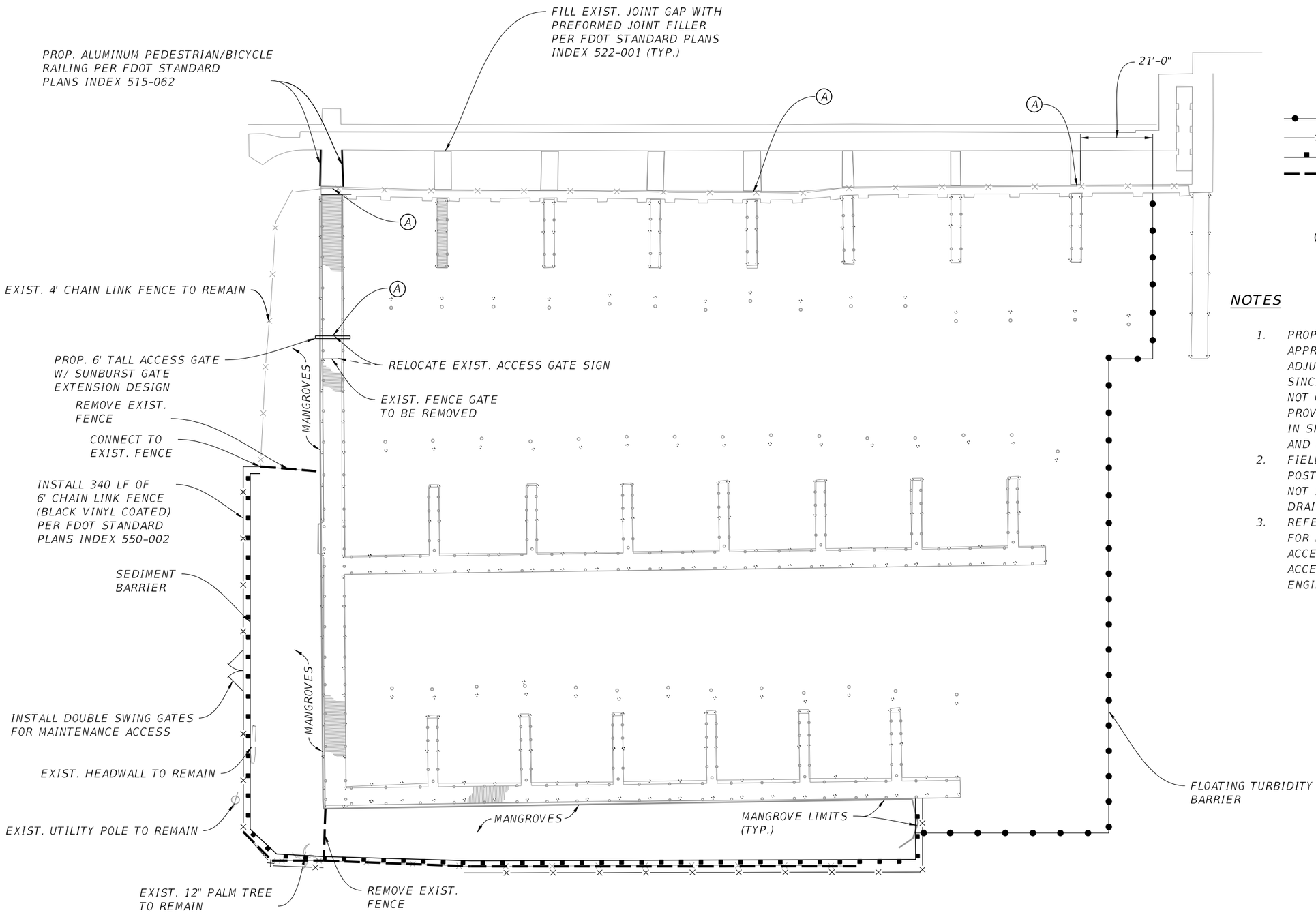
SHEET TITLE: EROSION CONTROL GENERAL NOTES

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: C-01

Plotted By: Christian.Hodges 3/7/2025 10:33:30 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1CivilGeneralNotes01.dgn



KEY

- FLOATING TURBIDITY BARRIER
- 6' CHAIN LINK FENCE
- SEDIMENT BARRIER
- EXIST. FENCE TO BE REMOVED
- (A) INSTALL "NO SWIMMING – WARNING – POTENTIAL SHOCK HAZARD – ELECTRICAL CURRENTS MAY BE PRESENT IN THE WATER." PER NATIONAL ELECTRICAL CODE 555.10

NOTES

1. PROPOSED PERIMETER FENCE LAYOUT IS APPROXIMATE ONLY AND MAY NEED FIELD ADJUSTMENTS DURING CONSTRUCTION SINCE TOPOGRAPHIC SURVEY LIMITS DO NOT COVER THE ENTIRE PROJECT AREA. PROVIDE FINAL LAYOUT AND DIMENSIONS IN SHOP DRAWINGS FOR OWNER'S APPROVAL AND ENGINEER'S REVIEW.
2. FIELD VERIFY PROPOSED PERIMETER FENCE POSTS AND CORRESPONDING FOOTINGS WILL NOT IMPACT EXISTING UTILITIES AND DRAINAGE PIPES/STRUCTURES.
3. REFER TO "GENERAL NOTES (1 OF 2)" SHEET FOR MORE INFORMATION ON PROPOSED MARINA ACCESS GATE. PROVIDE SHOP DRAWINGS FOR ACCESS GATE FOR OWNER'S APPROVAL AND ENGINEER'S REVIEW.

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REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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SHEET TITLE: SITE CIVIL AND EROSION CONTROL PLAN

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. C-02

Plotted By: Christian.Hodges 3/7/2025 10:34:07 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_PlanSiteCivil.dgn

LEGEND

SYMBOL	DESCRIPTION	MOUNTING/REMARKS
▭	LIGHTING CABINET: DENOTED BY LABEL	SURFACE, TOP 78" AFF OR AS REQUIRED BY MANUFACTURER
▪	DEVICE AS NOTED	AS NOTED
▬ ▬	BRANCH CIRCUIT PANELBOARD: 240 VAC	TOP 78" AFF
▭	ELECTRICAL EQUIPMENT: DENOTED BY LABEL	AS NOTED
	ELECTRIC UTILITY METER/CABINET	AS REQUIRED BY UTILITY COMPANY
↘ →	CIRCUIT HOME RUN TO PANELBOARD INDICATED	
／	CIRCUIT/CONDUIT OR CABLE CONCEALED	
'EQUIP'	EQUIPMENT LABEL	REFER TO RESPECTIVE SCHEDULE
PNL–CIR	PANELBOARD–CIRCUIT DESIGNATION	REFER TO PANEL SCHEDULE
⬡ # ⓐ #	KEYED NOTES	REFER TO LIKE–NUMBERED NOTES

OBJECT STATE LINETYPES:

EXISTING OBJECT OR CONSTRUCTION: ———————

EXISTING OBJECT OR CONSTRUCTION TO BE DEMOLISHED: – – – – – – – – – – – – – – –

NEW OBJECT OR CONSTRUCTION TO BE PROVIDED: ———————

OBJECT STATE SUBSCRIPTS:

D	EXISTING OBJECT TO BE DEMOLISHED	M	EXISTING OBJECT TO BE REMOVED & RELOCATED
E	EXISTING OBJECT TO REMAIN	R	RELOCATED EXISTING OBJECT

SYMBOL	DESCRIPTION	MOUNTING/REMARKS

ABBREVIATIONS:

A	AMPS OR AMPERE
A/E	ARCHITECT/ENGINEER
AF	AMPERE FRAME
AFCI	ARC–FAULT CIRCUIT INTERRUPTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASD	ADJUSTABLE SPEED DRIVE
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AWG	AMERICAN WIRE GAUGE
BLDG	BUILDING
BFG	BELOW FINISHED GRADE
BRKR	BREAKER
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
COMM	COMMUNICATIONS
CT	CURRENT TRANSFORMER
CU	COPPER
°C	DEGREES CELSIUS
°F	DEGREES FAHRENHEIT
DISC	DISCONNECT
DP	DISTRIBUTION PANELBOARD
DS	DISCONNECT SWITCH
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EG	EQUIPMENT GROUND
ELEC	ELECTRIC OR ELECTRICAL
ELEV	ELEVATOR
EMER	EMERGENCY
EPO	EMERGENCY POWER OFF
EPS	EMERGENCY POWER SUPPLY
EXIST	EXISTING
FA	FIRE ALARM
FC	FOOTCANDLE
FLA	FULL LOAD AMPS
FO	FIBER OPTIC
FT	FOOT (FEET)
GC	GENERAL CONTRACTOR
GEN	GENERATOR
GFCI	GROUND–FAULT CIRCUIT INTERRUPTER
GFP	GROUND–FAULT MONITORING PANEL
GND	GROUND
HOA	HAND–OFF–AUTO
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HV	HIGH VOLTAGE
HZ	HERTZ
IG	ISOLATED GROUND
IN	INCH (INCHES)
JB	JUNCTION BOX
kcmil	THOUSAND CIRCULAR MIL
kV	KILOVOLT
kVA	KILOVOLT AMPERE
kW	KILOWATT
kWh	KILOWATT HOUR
LED	LIGHT EMITTING DIODE
LPS	LIGHTNING PROTECTION SYSTEM
LTG	LIGHTING
LTNG	LIGHTNING
LV	LOW VOLTAGE
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MDP	MAIN DISTRIBUTION PANELBOARD
MH	METAL HALIDE
MHz	MEGAHERTZ
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MOCP	MAXIMUM OVERCURRENT PROTECTION
MTS	MANUAL TRANSFER SWITCH
N	NEUTRAL
NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OB	OUTLET BOX
P	POLE
PA	PUBLIC ADDRESS
PB	PULL BOX
PH/ϕ	PHASE
PNL	PANELBOARD (PANEL)
RECPT	RECEPTACLE
SCC	SHORT CIRCUIT CAPACITY
SF	SQUARE FOOT (FEET)
SPEC	SPECIFICATION
SPD	SURGE PROTECTIVE DEVICE
SS	STAINLESS STEEL
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TR	TAMPER RESISTANT
TYP	TYPICAL
U	UNKNOWN CIRCUIT
UL	UNDERWRITERS LABORATORY
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
UTIL	UTILITY
V	VOLT OR VOLTAGE
VA	VOLT AMPERE
VD	VOLTAGE DROP
VFD	VARIABLE FREQUENCY DRIVE
W	WATT OR WIRE
WP	WEATHERPROOF
WR	WEATHER RESISTANT
WT	WATERTIGHT
XFER	TRANSFER
XFMR	TRANSFORMER
XP	EXPLOSION RATED

ELECTRICAL SHEET INDEX

E–01	ELECTRICAL LEGEND	E–09	POWER ONE–LINE DIAGRAM
E–02	ELECTRICAL SPECIFICATIONS (1 OF 3)	E–10	PANEL SCHEDULE A
E–03	ELECTRICAL SPECIFICATIONS (2 OF 3)	E–11	PANEL SCHEDULE B
E–04	ELECTRICAL SPECIFICATIONS (3 OF 3)	E–12	PANEL SCHEDULE C
E–05	ELECTRICAL PLAN NOTES	E–13	MARINA PEDESTAL SCHEDULE
E–06	ELECTRICAL DEMOLITION PLAN	E–14	DETAILS (1 OF 3)
E–07	ELECTRICAL PLAN	E–15	DETAILS (2 OF 3)
E–08	POWER ONE–LINE DIAGRAM NOTES	E–16	DETAILS (3 OF 3)

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SAFETY HARBOR | FL

SHEET TITLE: ELECTRICAL LEGEND

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: E-01

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DRAWING SPECIFICATIONS

GENERAL:

A. PROVIDE SHALL MEAN FURNISH AND INSTALL.

B. THE COMPLETE ELECTRICAL SYSTEM WHICH SHALL BE PROVIDED BY THE CONTRACTOR SHALL INCLUDE ALL WORK, MATERIALS AND APPARATUSES SPECIFIED HEREINAFTER AND INDICATED ON THE DRAWINGS. ALL WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY AND NO SUBSTANDARD WORK WILL BE ACCEPTED.

C. PROVIDE ALL WORK AND ELECTRICAL SYSTEMS COMPONENTS REQUIRED TO SERVE LOADS AS SPECIFIED HEREINAFTER AND INDICATED ON THE DRAWINGS. THE WORK SHALL INCLUDE COMPLETE TESTING OF ALL ELECTRICAL SYSTEMS AT THE COMPLETION OF THE WORK AND MAKING ANY CHANGES AND ADJUSTMENTS NECESSARY FOR THE PROPER FUNCTIONING OF THE SYSTEMS.

D. MAKE A THOROUGH EXAMINATION OF THE SITE AND THE CONTRACT DOCUMENTS PRIOR TO EXECUTING THE CONTRACT. NO CLAIM FOR ADDITIONAL COMPENSATION WILL BE RECOGNIZED FOR DIFFICULTIES ENCOUNTERED WHICH AN EXAMINATION OF SITE CONDITIONS AND CONTRACT DOCUMENTS WOULD HAVE REVEALED.

E. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED ABOVE THE FLOODPLAIN ELEVATION. CONTRACTOR SHALL COORDINATE FLOODPLAIN ELEVATION AND EQUIPMENT REQUIREMENTS WITH OWNER PRIOR TO ROUGH–IN.

F. THE PLANS ARE GENERALLY DIAGRAMMATIC. COORDINATE ALL WORK WITH OTHER TRADES AS REQUIRED TO AVOID INTERFERENCES BETWEEN TRADES (i.e. BEAMS, CONDUITS, EQUIPMENT, DUCTWORK, ETC).

G. REMOVE ALL EXISTING LIGHTING FIXTURES, EQUIPMENT, DEVICES, CONDUCTORS, RACEWAYS, ETC. MADE UNNECESSARY BY THE NEW INSTALLATION. PRIOR TO REMOVAL FROM SITE, COORDINATE WITH OWNER TO DETERMINE IF OWNER WISHES TO RETAIN ANY REMOVED EQUIPMENT.

WORK PERFORMANCE:

A. JOB SITE SAFETY AND WORKER SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR.

B. ARRANGE, PHASE AND PERFORM ALL WORK DURING TIME PERIODS SCHEDULED WITH AND ACCEPTABLE TO THE OWNER BEFORE PROCEEDING. NO ADDITIONAL COMPENSATION WILL BE AUTHORIZED FOR WORK NECESSITATED BY ILL–TIMED, DEFECTIVE, OR NON–CONFORMING WORK.

C. THE CONTRACTOR SHALL ENSURE THAT ALL SYSTEMS OPERATE AS DESIGNED AND/OR REQUIRED AND SHALL REVIEW THEIR OPERATION WITH THE OWNER UPON COMPLETION OF CONSTRUCTION AND TESTING. COMPILE COMPLETE AND UPDATED AS–BUILT DRAWINGS/DOCUMENTS AND ISSUE ONE (1) SET TO THE OWNER.

D. ELECTRICAL WORK SHALL BE ACCOMPLISHED WITH ALL AFFECTED CIRCUITS OR EQUIPMENT DE–ENERGIZED. WHEN AN ELECTRICAL OUTAGE CANNOT BE ACCOMPLISHED IN THIS MANNER FOR THE REQUIRED WORK, THE FOLLOWING REQUIREMENTS ARE MANDATORY:

1. ELECTRICIANS MUST USE AND WEAR FULL PROTECTIVE EQUIPMENT (PPE) (i.e. CERTIFIED AND TESTED INSULATING MATERIAL TO COVER EXPOSED ENERGIZED ELECTRICAL COMPONENTS, CERTIFIED AND TESTED INSULATED TOOLS, ETC.) WHILE WORKING ON ENERGIZED SYSTEMS IN ACCORDANCE WITH NFPA 70E. THE LEVEL OF PPE SHALL BE DETERMINED BY A COMPUTER GENERATED ARC FLASH CALCULATION PROVIDED AND PAID FOR BY THE CONTRACTOR. THE ARC FLASH DATA SHALL BE PRESENTED WITH THE SUBMITTAL BELOW.
2. WORK ON ENERGIZED CIRCUITS OR EQUIPMENT CANNOT BEGIN UNTIL PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE OWNER.

E. NEW WORK SHALL BE INSTALLED AND CONNECTED TO EXISTING WORK NEATLY AND CAREFULLY. PROVIDE PROTECTIVE MATS, COVERS, ETC. AS REQUIRED FOR ALL EXISTING WORK SUSCEPTIBLE TO DAMAGE. VERIFY SPECIFIC LOCATIONS AND REQUIREMENTS WITH THE OWNER. DISTURBED OR DAMAGED WORK AS A RESULT OF ELECTRICAL WORK SHALL BE REPLACED OR REPAIRED TO ITS PRIOR CONDITIONS.

F. ENSURE THAT ELECTRICAL SERVICE REMAINS UNINTERRUPTED FOR OTHER BUILDINGS AND FACILITIES AT ALL TIMES. PERFORM ALL TEMPORARY WORK NECESSARY TO MAINTAIN CONTINUITY OF ELECTRICAL SERVICE WHEN CONNECTION IS MADE TO EXISTING SYSTEMS. EXISTING SERVICE SHALL NOT BE INTERRUPTED WITHOUT PRIOR CONSENT OF THE OWNER AND MAY BE INTERRUPTED ONLY AT AND FOR THE SPECIFIED TIME DESIGNATED BY THE OWNER. THE CONTRACTOR SHALL BE GUIDED BY THE OWNER AT ALL TIMES IN MATTERS AFFECTING THE EXISTING FACILITIES.

G. ELECTRICAL EQUIPMENT SHALL NOT BE STORED OUTDOORS. EQUIPMENT SHALL BE STORED IN AN OWNER/ENGINEER APPROVED MEDIUM AND LOCATION.

CODES & STANDARDS:

A. PERFORM WORK IN COMPLIANCE WITH THE LATEST EDITION OF ALL APPLICABLE, FEDERAL, STATE AND LOCAL CODES, REGULATIONS AND STANDARDS, TO INCLUDE THOSE LISTED BELOW, ADOPTED BY THE AUTHORITY HAVING JURISDICTION. WHERE DIFFERENCES MAY OCCUR THE MORE STRINGENT REQUIREMENTS SHALL GOVERN. IN CASE OF CONFLICT PROVIDE WRITTEN NOTIFICATION AND OBTAIN A DECISION FROM THE ARCHITECT/OWNER.

1. NFPA 70: NATIONAL ELECTRICAL CODE (2020)
2. NFPA 70E: STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE (2024)
3. NFPA 101: LIFE SAFETY CODE (2021)
4. NFPA 241: STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION AND DEMOLITION OPERATIONS (2022)
5. FBC: FLORIDA BUILDING CODE (2023)
6. OSHA PART 1910: OCCUPATIONAL SAFETY AND HEALTH STANDARDS
7. OSHA PART 1926: SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION

WARRANTY:

A. CONTRACTOR SHALL WARRANTY ALL WORK FOR A PERIOD OF ONE (1) YEAR FROM DATE OF SUBSTANTIAL COMPLETION. CONTRACTOR SHALL RECTIFY ANY DEFECTS DUE TO FAULTY MATERIALS OR WORKMANSHIP AND PAY FOR ANY DAMAGE TO OTHER WORK RESULTING THEREFROM WITHIN SAID PERIOD. THE OWNER WILL GIVE NOTICE OF DEFECTS WITH REASONABLE PROMPTNESS.

B. PROVIDE COMPLETE WARRANTY INFORMATION FOR EACH ITEM TO INCLUDE PRODUCT OR EQUIPMENT; DATE OR BEGINNING OF WARRANTY OR BOND; DURATION OF WARRANTY OR BOND; AND NAMES, ADDRESSES, AND TELEPHONE NUMBERS AND PROCEDURES FOR FILING A CLAIM AND OBTAINING WARRANTY SERVICES.

- TO THE BEST OF THE ENGINEER'S KNOWLEDGE THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM BUILDING CODES.
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SAFETY HARBOR | FL

SHEET TITLE: ELECTRICAL SPECIFICATIONS (1 OF 3)

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. E-02

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DRAWING SPECIFICATIONS

SUBMITTALS:

A. SUBMIT ONE (1) ELECTRONIC PDF COPY. THE ENGINEER WILL RETURN SUBMITTAL REVIEW COMMENTS NO LATER THAN 14 CALENDAR DAYS OF RECEIPT.

B. APPROVAL SHALL BE OBTAINED FOR ALL EQUIPMENT AND MATERIAL BEFORE DELIVERY TO THE JOB SITE. DELIVERY, STORAGE OR INSTALLATION OF EQUIPMENT OR MATERIAL WHICH HAS NOT HAD PRIOR APPROVAL, WILL NOT BE PERMITTED AT THE JOB SITE.

C. ALL SUBMITTALS SHALL INCLUDE ADEQUATE DESCRIPTIVE LITERATURE, CATALOG CUTS, SHOP DRAWINGS AND OTHER DATA NECESSARY FOR THE ARCHITECT/ENGINEER TO ASCERTAIN THAT THE PROPOSED EQUIPMENT AND MATERIALS COMPLY WITH SPECIFICATION REQUIREMENTS. CATALOG CUTS SUBMITTED FOR APPROVAL SHALL BE LEGIBLE AND CLEARLY IDENTIFY EQUIPMENT BEING SUBMITTED.

D. SUBMITTALS FOR INDIVIDUAL SYSTEMS AND EQUIPMENT ASSEMBLIES WHICH CONSIST OF MORE THAN ONE ITEM OR COMPONENT SHALL BE MADE FOR THE SYSTEM OR ASSEMBLY AS A WHOLE. PARTIAL SUBMITTALS WILL NOT BE CONSIDERED FOR APPROVAL

E. SUBMITTAL OF SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES WILL BE ACCEPTED ONLY WHEN SUBMITTED BY THE CONTRACTOR. DATA SUBMITTED FROM SUBCONTRACTORS AND MATERIAL SUPPLIERS DIRECTLY TO THE ARCHITECT/ENGINEER WILL NOT BE PROCESSED.

F. SUBMITTALS SHALL BE MARKED TO SHOW SPECIFICATION REFERENCE INCLUDING THE SECTION AND PARAGRAPH NUMBERS. SUBMIT EACH SECTION SEPARATELY AND INCLUDE THE FOLLOWING:

1. INFORMATION THAT CONFIRMS COMPLIANCE WITH CONTRACT REQUIREMENTS. INCLUDE THE MANUFACTURER'S NAME, MODEL OR CATALOG NUMBERS, CATALOG INFORMATION, TECHNICAL DATA SHEETS, SHOP DRAWINGS, PICTURES, NAMEPLATE DATA AND TEST REPORTS AS REQUIRED.
2. PARTS LIST WHICH SHALL INCLUDE THOSE REPLACEMENT PARTS RECOMMENDED BY THE EQUIPMENT MANUFACTURER, QUANTITY OF PARTS, CURRENT PRICE AND AVAILABILITY OF EACH PART.

G. MANUALS: SUBMIT IN ACCORDANCE WITH "A" ABOVE FOR REVIEW AND COMMENT.

1. MAINTENANCE AND OPERATION MANUALS: SUBMIT AS REQUIRED FOR SYSTEMS AND EQUIPMENT SPECIFIED IN THE TECHNICAL SECTIONS. FURNISH THREE (3) COPIES, BOUND IN HARDBACK BINDERS, (MANUFACTURER'S STANDARD BINDERS) OR AN APPROVED EQUAL. FURNISH ONE COMPLETE MANUAL AS SPECIFIED IN THE TECHNICAL SECTION BUT IN NO CASE LATER THAN PRIOR TO PERFORMANCE OF SYSTEMS OR EQUIPMENT TEST, AND FURNISH THE REMAINING MANUALS PRIOR TO CONTRACT COMPLETION.
2. INSCRIBE THE FOLLOWING IDENTIFICATION ON THE COVER: THE WORDS "MAINTENANCE AND OPERATION MANUAL," THE NAME AND LOCATION OF THE SYSTEM, EQUIPMENT, BUILDING, NAME OF CONTRACTOR, AND CONTRACT NUMBER. INCLUDE IN THE MANUAL THE NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF EACH SUBCONTRACTOR INSTALLING THE SYSTEM OR EQUIPMENT AND THE LOCAL REPRESENTATIVES FOR THE SYSTEM OR EQUIPMENT.

MATERIALS AND METHODS:

A. MATERIALS AND APPARATUSES SHALL COMPLY WITH ALL APPLICABLE TESTS, RATINGS, SPECIFICATIONS, AND REQUIREMENTS OF THE IEEE, NEMA, NFPA AND UL, SHALL BEAR THE UL LABEL OF APPROVAL AND BE LISTED FOR THE PROPOSED APPLICATION.

B. FINISHED PRODUCTS SHALL BE FACTORY PRIMED AND FINISH COATED WITH THE MANUFACTURER'S PRIME COAT AND STANDARD FINISH UNLESS SPECIFIED OTHERWISE BY THE ARCHITECT.

C. UNLESS OTHERWISE SPECIFIED, UNFINISHED PRODUCTS SHALL BE GALVANIZED, COATED OR PLATED TO RESIST CORROSION.

D. INSTALLATIONS SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES, AS RECOMMENDED BY THE MANUFACTURER AND AS CLOSE AS PRACTICABLE TO LOCATIONS INDICATED ON DRAWINGS.

E. INSTALLATIONS SHALL FACILITATE MAINTENANCE AND REPAIR OR REPLACEMENT OF EQUIPMENT COMPONENTS. ACCESS, WORKING SPACES AND CLEARANCES SHALL NOT BE LESS THAN SPECIFIED BY THE NEC FOR ALL VOLTAGES SPECIFIED.

IDENTIFICATION:

A. INSTALL LABEL TAGS ON ALL WIRE AND CABLE IN JUNCTION BOXES, WIREWAYS AND WIRING GUTTERS OF PANELS. TAGS SHALL IDENTIFY WIRE OR CABLE CIRCUIT NUMBER AND/OR EQUIPMENT SERVED AS INDICATED ON DRAWINGS.

B. JUNCTION BOXES SHALL BE LABELED IN A PERMANENT MANNER REFLECTING PANELBOARD/CIRCUIT NUMBER OF BRANCH CIRCUIT WIRING CONTAINED WITHIN.

C. PANELBOARD DIRECTORIES SHALL BE TYPEWRITTEN, REFLECTING RECORD CONDITIONS TO INCLUDE CIRCUIT NUMBER, TYPE AND LOCATION OF LOAD.

D. INSTALL PLASTIC PLACARDS ON EQUIPMENT REFLECTING, EQUIPMENT NAME, NUMBER AND RATING.

RACEWAYS:

A. RACEWAYS:

1. EXTERIOR EXPOSED/UNDER DOCK: SCHEDULE 80 POLYVINYL CHLORIDE CONDUIT (PVC).
2. EXTERIOR CONNECTIONS TO MOTORS, TRANSFORMERS AND VIBRATING EQUIPMENT: LIQUIDTIGHT FLEXIBLE METAL CONDUIT (LFMC).
3. UNDERGROUND: SCHEDULE 40 PVC.
4. PENETRATIONS THROUGH CONCRETE SLABS SHALL BE MADE WITH PVC COATED RIGID GALVANIZED STEEL CONDUIT.

B. SCHEDULE 40 PVC WILL BE PERMITTED WHERE ALLOWED BY APPLICABLE CODES AND AS OUTLINED ABOVE. ALL BENDS IN PVC LARGER THAN 1" NOMINAL TRADE SIZE SHALL BE MADE WITH PVC COATED RIGID METAL CONDUIT.

C. ALL CONDUIT SHALL BE PROPERLY ALIGNED, GROUPED AND SUPPORTED. EXPOSED CONDUIT SHALL BE INSTALLED AT RIGHT ANGLES TO OR PARALLEL TO THE PRINCIPAL STRUCTURAL MEMBERS. PROVIDE SUPPORT A MINIMUM OF 18" FROM BENDS AND OUTLET BOXES AND ON INTERVALS NOT TO EXCEED 4'-0". CONDUIT IS NOT TO SPAN ANY SPACE UNSUPPORTED. ALL CONDUIT STRAPS SHALL BE 2-HOLE.

D. UNDERGROUND CONDUITS SHALL BE INSTALLED WITH MINIMUM 36" COVER.

E. PROVIDE NYLON PULL CORD AND LEAVE IN PLACE IN EACH EMPTY CONDUIT.

F. PROVIDE EXPANSION FITTINGS IN CONDUIT RUNS CROSSING EXPANSION JOINTS IN THE STRUCTURE.

BOXES:

A. ALL BOXES SHALL BE RIGIDLY MOUNTED AND SHALL BE EQUIPPED WITH SUITABLE SCREW FASTENED COVERS. OPEN KNOCK-OUTS OR HOLES IN BOXES SHALL BE PLUGGED WITH A SUITABLE BLANKING DEVICE.

B. EXTERIOR BRANCH BOXES SHALL BE WEATHERPROOF CAST "FS" BOXES.

C. HANDHOLES AND COVERS SHALL BE HUBBELL QUAZITE OR EQUAL, UL LISTED TIER 15 RATED, LOCKABLE COVERS, OPTIONS AS NEEDED, STAINLESS STEEL BOLTS.

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SAFETY HARBOR | FL

SHEET TITLE: ELECTRICAL SPECIFICATIONS (2 OF 3)

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-03

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DRAWING SPECIFICATIONS

CONDUCTORS:

A. UNLESS OTHERWISE INDICATED, ALL BRANCH CIRCUIT CONDUCTORS SHALL BE NO. 12 AWG. BRANCH CIRCUITS RUN OVER 75 FEET IN LENGTH, MEASURING ONE WAY FROM THE FIRST OUTLET OF THE CIRCUIT TO THE PANEL, SHALL BE NO. 10 AWG FOR THE ENTIRE CIRCUIT.

B. CONDUCTORS SHALL BE COPPER WITH XHHW–2 90°C INSULATION. THE FOLLOWING SYSTEMS OF COLOR CODING SHALL BE STRICTLY ADHERED TO AND SHALL BE CONSISTENTLY FOLLOWED THROUGHOUT:

   1. GROUND WIRES: GREEN
   2. GROUNDED NEUTRAL WIRES: WHITE
   3. 240/120 VOLT, UNGROUNDED PHASE WIRES: BLACK AND RED

C. UNDERGROUND SPLICES, JOINTS, TERMINATIONS, ETC. SHALL BE WATERPROOF.

D. MULTIPLE CIRCUITS IN SAME CONDUIT SHALL NOT SHARE NEUTRAL CONDUCTORS.

E. INSTALL SPLIT BOLT CONNECTORS FOR COPPER CONDUCTOR SPLICES AND TAPS, 6 AWG AND LARGER.

F. INSTALL SOLDERLESS PRESSURE CONNECTORS WITH INSULATING COVERS FOR COPPER CONDUCTOR SPLICES AND TAPS, 8 AWG AND SMALLER.

G. INSTALL INSULATED SPRING WIRE CONNECTORS WITH PLASTIC CAPS FOR COPPER CONDUCTOR SPLICES AND TAPS, 10 AWG AND SMALLER.

H. "PUSH–IN" OR "STAB" TYPE CONNECTORS ARE NOT ACCEPTABLE.

GROUNDING:

A. THE ELECTRICAL SYSTEMS SHALL BE COMPLETELY AND EFFECTIVELY GROUNDED AS REQUIRED BY THE NEC AND AS SPECIFIED HEREINAFTER.

B. ALL METALLIC RACEWAYS SHALL BE MECHANICALLY AND ELECTRICALLY SECURE AT ALL JOINTS AND AT ALL BOXES, CABINETS, FITTINGS, AND EQUIPMENT. METALLIC RACEWAYS SHALL BE CONNECTED TO A DIRECT GROUND AT THE POINT OF ELECTRICAL SERVICE ENTRANCE AND SHALL BE ELECTRICALLY CONTINUOUS THROUGHOUT THE ENTIRE SYSTEM.

C. ALL GROUND CONDUCTORS SHALL BE INSULATED COPPER UON.

D. ALL RACEWAYS WITH NO. 10 OR 12 AWG PHASE CONDUCTORS FOR RECEPTACLES, LIGHTING FIXTURES AND SIMILAR CIRCUITS (NEW BRANCH CIRCUITS) SHALL BE PROVIDED WITH A PARITY SIZED GREEN EQUIPMENT GROUND CONDUCTOR. GROUND CONDUCTOR SHALL BE INSTALLED IN ENTIRE RACEWAY SYSTEM. EQUIPMENT GROUND CONDUCTOR SIZES FOR CIRCUITS WITH PHASE CONDUCTORS LARGER THAN NO. 12 AWG ARE INDICATED ON DRAWINGS. GROUND CONDUCTORS SHALL BE CONNECTED TO GROUND BUS IN PANELBOARDS.

E. TERMINATE FEEDER AND BRANCH CIRCUIT INSULATED EQUIPMENT GROUNDING CONDUCTORS WITH GROUNDING LUG, BUS, OR BUSHING. CONDUCTORS LOOPED UNDER SCREW OR BOLT HEADS WILL NOT BE PERMITTED.

F. INSTALL CLAMP–ON CONNECTORS ON CLEAN METAL CONTACT SURFACES TO ENSURE ELECTRICAL CONDUCTIVITY AND CIRCUIT INTEGRITY.

G. TEST THE GROUNDING SYSTEM TO ASSURE CONTINUITY AND THAT RESISTANCE TO GROUND DOES NOT EXCEED 25 OHMS UNLESS OTHERWISE NOTED. TEST EACH GROUND ROD FOR RESISTANCE TO GROUND BEFORE MAKING ANY CONNECTIONS TO THE ROD; THEN TIE ENTIRE GROUNDING SYSTEM TOGETHER AND TEST FOR RESISTANCE TO GROUND. MAKE RESISTANCE MEASUREMENTS IN NORMALLY DRY WEATHER, NOT LESS THAN 48 HOURS AFTER RAINFALL. MAKE GROUND RESISTANCE MEASUREMENTS WITH A GROUND RESISTANCE TEST METER CALIBRATED WITHIN THE LAST TWELVE MONTHS.

EQUIPMENT:

A. APPROVED MANUFACTURERS SHALL BE: SQUARE–D, CUTLER–HAMMER, GENERAL ELECTRIC AND SIEMENS.

B. EQUIPMENT BUSES SHALL BE COPPER.

C. OUTDOOR EQUIPMENT SHALL BE NEMA 4X.

D. PANELBOARDS:

   1. PANELBOARDS SHALL BE SQUARE–D: NQ, NF, I–LINE OR APPROVED EQUAL, SERIES RATED PANELBOARDS WILL NOT BE PERMITTED.
   2. FULL SIZE, COPPER NEUTRAL BUS (UON), MOUNTED ON INSULATED SUPPORTS.
   3. COPPER GROUND BUS WITH SUFFICIENT TERMINALS FOR ALL GROUNDING CONDUCTORS. BUSES BRACED FOR THE AVAILABLE SHORT CIRCUIT CURRENT, BUT NOT LESS THAN 10,000 AMPERES SYMMETRICAL FOR 240/120 VOLT PANELBOARDS.
   4. MAIN CIRCUIT BREAKER MOUNTING SHALL BE VERTICAL, AHEAD OF BUSES; HORIZONTAL MOUNTING WILL NOT BE ACCEPTED.

E. CIRCUIT BREAKERS SHALL BE BOLT–ON TYPE.

F. SURGE PROTECTIVE DEVICE MANUFACTURERS SHALL BE: PQ PROTECTION, ADVANCED PROTECTION TECHNOLOGIES, ATLANTIC SCIENTIFIC, OR CURRENT TECHNOLOGY.

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SAFETY HARBOR | FL

SHEET TITLE: ELECTRICAL SPECIFICATIONS (3 OF 3)

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: E-04

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DRAWING NOTES (SHEETS E-06 – E-07)

1. EXISTING EQUIPMENT RACK; MODIFY/EXTEND AS REQUIRED TO ACCOMMODATE THE NEW ELECTRICAL EQUIPMENT. REFER TO POWER ONE-LINE DIAGRAM AND ELECTRICAL RACK DETAIL 02 ON SHEET E-07 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
2. EXISTING PANELBOARD AND ASSOCIATED FEEDER AND BRANCH CIRCUIT CONDUCTORS AND CONDUITS TO BE REMOVED AND REPLACED WITH NEW.
3. EXISTING MARINA RECEPTACLE PEDESTAL AND ASSOCIATED DEVICES, CONDUCTORS, AND CONDUITS TO BE REMOVED AND REPLACED WITH NEW.
4. EXISTING 240/120 V, 1ϕ, 3W, 150 A MCB PANELBOARD TO REMAIN.
5. EXISTING LIGHTING CONTROL CABINET TO REMAIN.
6. NEW ELECTRIC UTILITY METER. REFER TO POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
7. EXISTING ELECTRIC UTILITY METER TO REMAIN.
8. MARINA PEDESTAL. REFER TO SCHEDULE ON SHEET E-13.
9. NEW CONDUITS AND CONDUCTORS FEEDING PANEL 'B'. REFER TO POWER ONE-LINE DIAGRAM FOR QUANTITY AND SIZES.
10. NEW CONDUITS AND CONDUCTORS FEEDING PANEL 'C'. REFER TO POWER ONE-LINE DIAGRAM FOR QUANTITY AND SIZES.
11. EXISTING MARINA ELECTRIC UTILITY METER, PANELBOARD AND ENCLOSED CIRCUIT BREAKERS TO BE REMOVED.

DRAWING GENERAL NOTES (SHEETS E-06 – E-07)

A. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
B. REFER TO PLUMBING AND FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
C. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
D. REFER TO POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
E. MAXIMUM 3 QUARTER TURNS (TOTAL 270°) CONDUIT BENDS BETWEEN JUNCTION/PULL BOXES.
F. MAINTAIN MINIMUM 12" SEPARATION BETWEEN ELECTRICAL AND OTHER UTILITIES/INFRASTRUCTURE.
G. COORDINATE WITH EXISTING UNDERGROUND UTILITIES AND CONDITIONS. HAND DIG TRENCHES AS REQUIRED.
H. SAW CUT AND PATCH PAVEMENT AS REQUIRED. COORDINATE WORK WITH OWNER.
I. ALL CONDUCTORS SHALL BE TYPE XHHW-2.
J. ALL EXPOSED CONDUITS SHALL BE UV RESISTANT, SCHEDULE 80 PVC.
K. ALL FASTENERS, ANCHORS, STRAPS, HARDWARE, STRUT-CHANNEL, ETC. SHALL BE STAINLESS STEEL (TYPE 316).
L. ALL STRUT CHANNEL SHALL BE MINIMUM 1 5/8" X 1 5/8".
M. THE ELECTRICAL DATUM PLANE SHALL BE 2 FEET ABOVE THE HIGHEST TIDE LEVEL.
N. ALL ELECTRICAL EQUIPMENT AND DEVICES SHALL BE LOCATED ABOVE THE ELECTRICAL DATUM PLANE.
O. ELECTRICAL EQUIPMENT AND DEVICES LOCATED ON THE DOCK SHALL BE MINIMUM 12" ABOVE THE DECK BUT SHALL NOT BE LOCATED BELOW THE ELECTRICAL DATUM PLANE.
P. CONDUITS ROUTED UNDER THE DOCK SHALL BE SECURELY FASTENED TO THE STRUCTURE MAXIMUM 4' SPACING USING STAINLESS STEEL (TYPE 316) COMPONENTS AND HARDWARE.
Q. PROVIDE SAFETY SIGNS PER NEC 555.10.

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SAFETY HARBOR | FL

SHEET TITLE: ELECTRICAL PLAN NOTES
TWA NO.
PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT
SHEET NO. E-05

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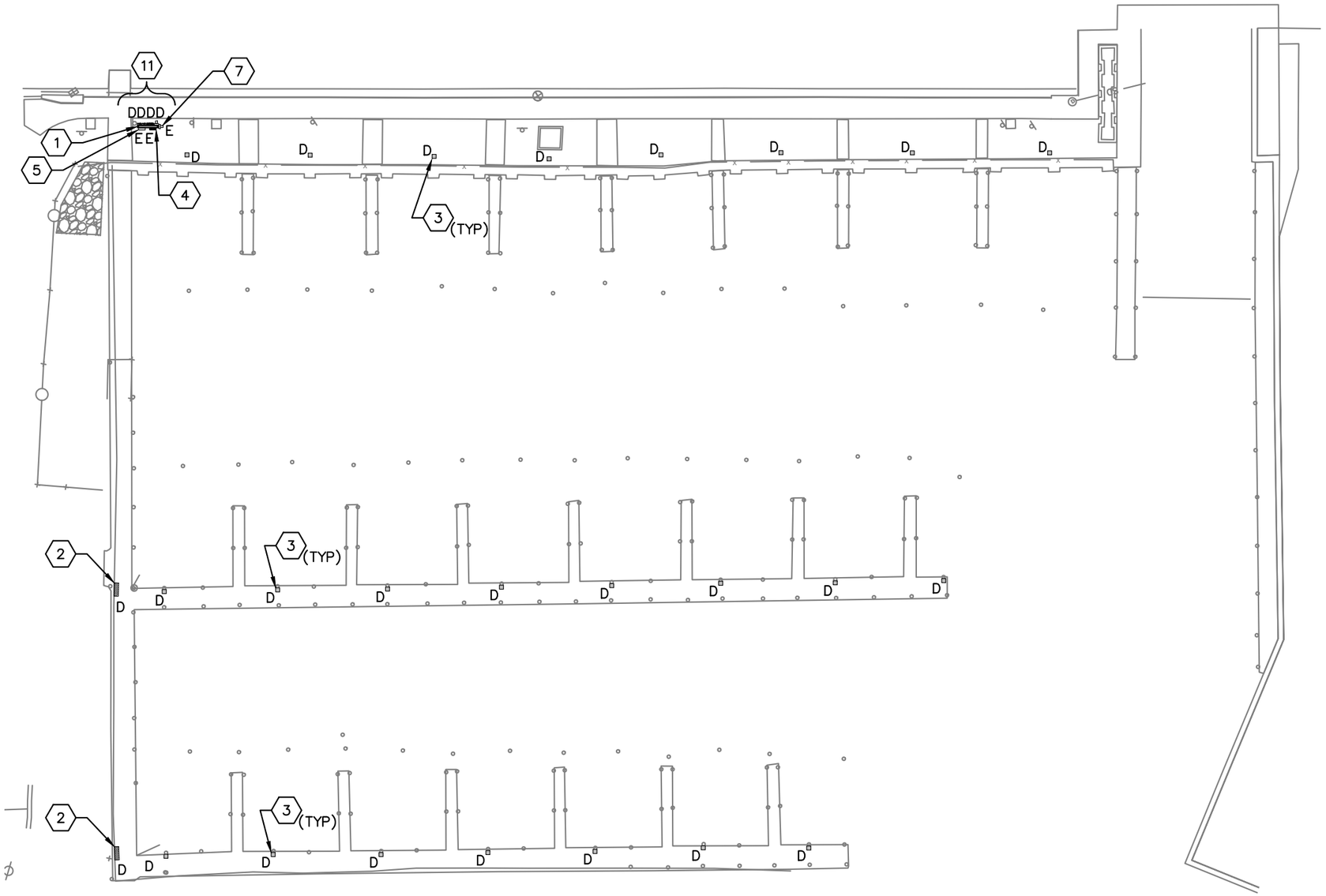
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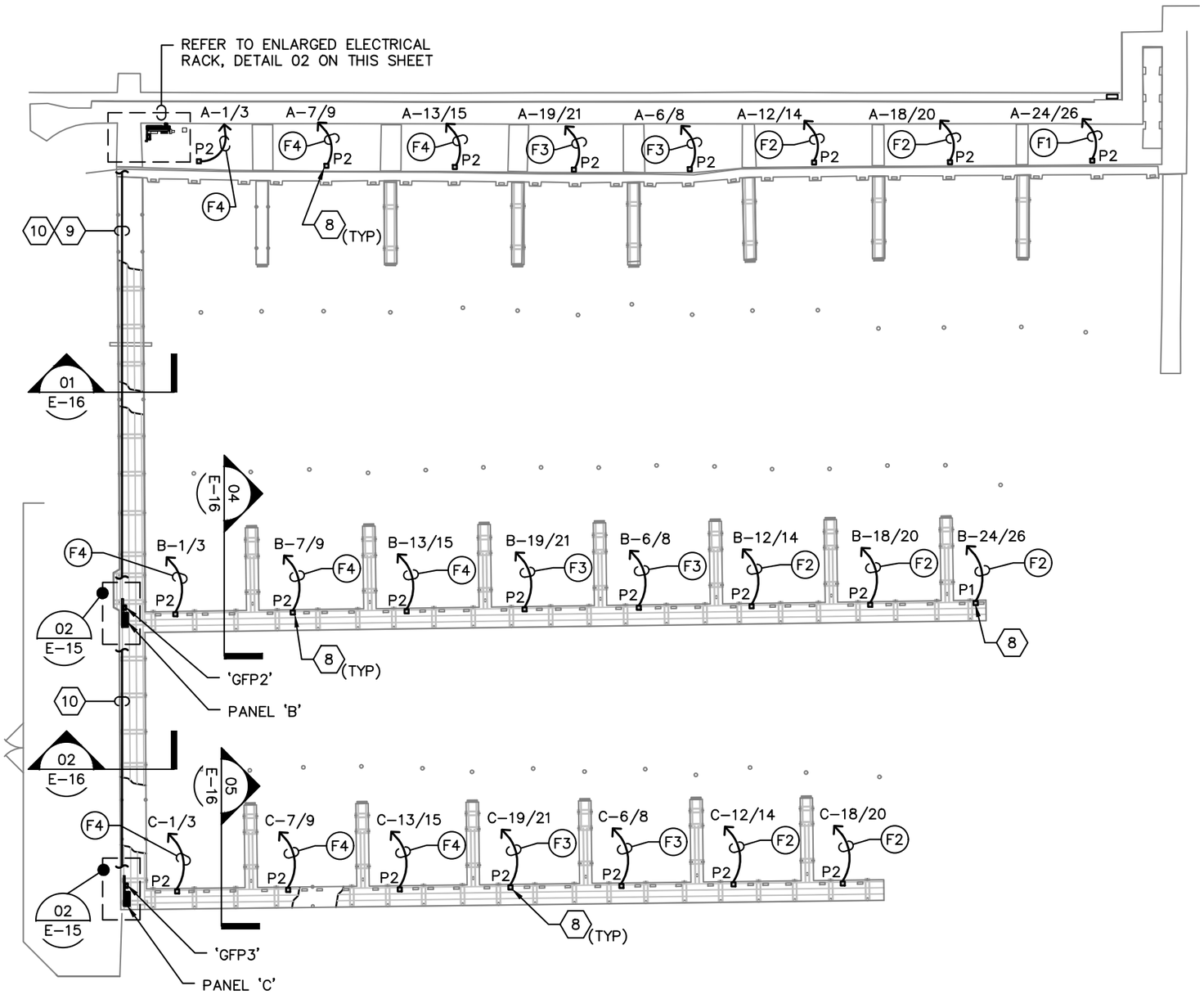
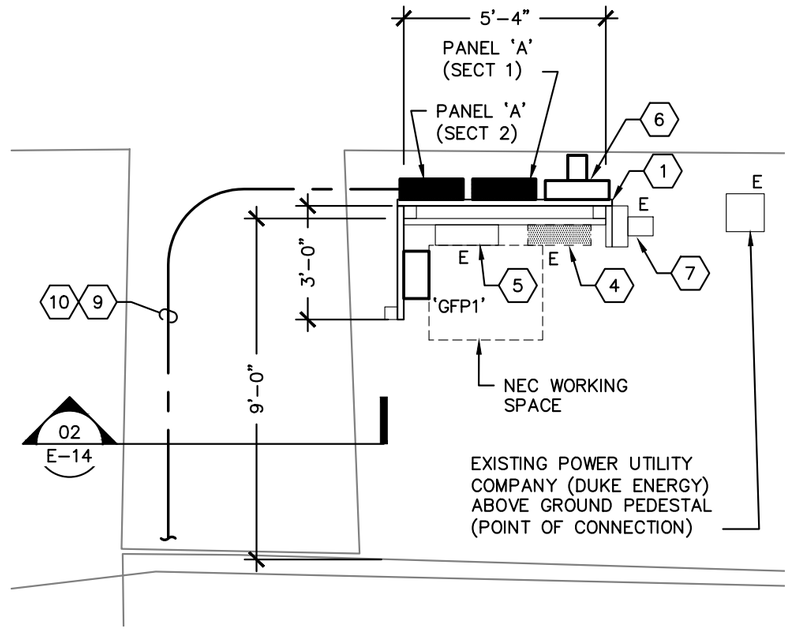


01 **ELECTRICAL PLAN**
SCALE: 1"=30'



02 **ELECTRICAL RACK**
SCALE: 1/4"=1'-0"

(#) FEEDER SCHEDULE

F1. 3 #4 + #4 EG – 1 1/4" C.
F2. 3 #6 + #6 EG – 1" C.
F3. 3 #8 + #8 EG – 1" C.
F4. 3 #10 + #10 EG – 3/4" C.

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SAFETY HARBOR | FL

SHEET TITLE: *ELECTRICAL PLAN*
PROJECT NAME: *SAFETY HARBOR MARINA REPLACEMENT*
TWA NO.
SHEET NO. *E-07*

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DRAWING NOTES (SHEET E-09)

1. EXISTING UTILITY COMPANY (DUKE ENERGY) POWER PEDESTAL. UTILITY COMPANY TO EVALUATE AND REWORK AS REQUIRED.
2. 3 #600 KCMIL – 3 1/2" C.
3. NEW UTILITY METER.
4. REPLACE EXISTING 240/120 V, 1ϕ, 3W, 150 A MCB PANELBOARD AND ENCLOSED CIRCUIT BREAKERS WITH NEW 2–SECTION, SERVICE ENTRANCE PANEL. REFER TO PANEL SCHEDULE.
5. EXISTING CONCRETE POSTS TO REMAIN. PROVIDE STAINLESS STEEL (TYPE 316) STRUT CHANNEL; SIZE AND QUANTITY AS REQUIRED.
6. EXISTING EQUIPMENT RACK TO BE EXTENDED IN "L" FORMATION (REFER TO DETAIL 02 ON SHEET E–07). UTILIZE EXISTING CONCRETE POST ON WEST SIDE OF RACK AND PROVIDE (1) NEW CONCRETE POST TO MATCH EXISTING INSTALLATION WITH NEW STAINLESS STEEL (TYPE 316) STRUT CHANNEL; SIZE AND QUANTITY AS REQUIRED. FOLLOW FDOT STANDARD SPECIFICATIONS FOR CONCRETE (SECTION 347 AND 400) AND REINFORCING STEEL (415) MATERIAL PROPERTIES. CONCRETE SHALL BE CLASS NS (NON–STRUCTURAL) WITH A MINIMUM 28–DAY COMPRESSIVE STRENGTH OF 2500 PSI. REINFORCING STEEL SHALL BE ASTM A615, GRADE 60. CONCRETE POST TO BE EMBEDDED IN CAST–IN–PLACE CONCRETE FOOTERS WITH DIMENSIONS OF 1'–0" DIAMETER X 2'–6" DEPTH. EMBED CONCRETE POST 2'–0" INTO FOOTER.
7. NEW EQUIPMENT RACK MOUNTED TO DOCK PILES (REFER TO DETAIL 02 ON SHEET E–15); STAINLESS STEEL (TYPE 316) STRUT CHANNEL. SIZE AS REQUIRED.
8. GROUND FAULT MONITORING PANEL; BENDER, MARINAGUARD MG–T OR ENGINEER APPROVED EQUAL. INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
9. GROUND FAULT MONITORING PANEL "GFP1" WILL MONITOR THE FEEDERS TO PANELBOARDS "B" AND "C" AS WELL AS THE FEEDERS TO THE MARINE PEDESTALS SERVING SLIPS 1–16; GROUND FAULT PROTECTION SHALL BE SET TO 100 mA MAX.
10. GROUND FAULT MONITORING PANEL "GFP2" WILL MONITOR THE FEEDERS TO THE MARINE PEDESTALS SERVING SLIPS 17–31; GROUND FAULT PROTECTION SHALL BE SET TO 100 mA MAX.
11. GROUND FAULT MONITORING PANEL "GFP3" WILL MONITOR THE FEEDERS TO THE MARINE PEDESTALS SERVING SLIPS 32–44; GROUND FAULT PROTECTION SHALL BE SET TO 100 mA MAX.
12. REPLACE EXISTING 240/120 V, 1ϕ, 3W, 225 A MLO PANELBOARD WITH NEW; REFER TO PANEL SCHEDULE.
13. REPLACE EXISTING CONDUIT AND CONDUCTORS AS FOLLOWS: 3 #4/0 + #4 EG – 2 1/2" C.
14. REPLACE EXISTING CONDUIT AND CONDUCTORS AS FOLLOWS: 3 #300 KCMIL + #2 EG – 3" C.
15. SPD; PQ PROTECTION, MODEL #PQC160–240V OR ENGINEER APPROVED EQUAL.
16. MIN 3/4" CONDUITS AS REQUIRED FOR GROUND–FAULT CT WIRING AND SHUNT–TRIP WIRING FOR FEEDERS TO PANELS "B" AND "C". INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
17. MIN 3/4" CONDUITS AS REQUIRED FOR GROUND–FAULT CT WIRING AND SHUNT–TRIP WIRING FOR FEEDERS TO MARINE PEDESTALS. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
18. 3/4" X 10' STAINLESS STEEL (TYPE 316) GROUND ROD.
19. GROUNDING ELECTRODE SYSTEM. REFER TO GROUNDING DETAIL 01 ON SHEET E–15 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
20. EXOTHERMIC WELD.
21. PROVIDE (1) SPARE 2 1/2" C. STUB UP UNDER PANEL "B", CAP AND LABEL "SPARE".
22. PROVIDE (1) SPARE 3" C. STUB UP UNDER PANEL "C", CAP AND LABEL "SPARE".

DRAWING GENERAL NOTES (SHEET E–09)

A. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
B. MAXIMUM 3 QUARTER TURNS (TOTAL 270°) CONDUIT BENDS BETWEEN JUNCTION/PULL BOXES.
C. MAINTAIN MINIMUM 12" SEPARATION BETWEEN ELECTRICAL AND OTHER UTILITIES/INFRASTRUCTURE.
D. COORDINATE WITH EXISTING UNDERGROUND UTILITIES AND CONDITIONS. HAND DIG TRENCHES AS REQUIRED.
E. SAW CUT AND PATCH PAVEMENT AS REQUIRED. COORDINATE WORK WITH OWNER.
F. ALL CONDUCTORS SHALL BE TYPE XHHW–2.
G. ALL EXPOSED CONDUITS SHALL BE UV RESISTANT, SCHEDULE 80 PVC.
H. ALL FASTENERS, ANCHORS, STRAPS, HARDWARE, STRUT–CHANNEL, ETC. SHALL BE STAINLESS STEEL (TYPE 316).
I. ALL STRUT CHANNEL SHALL BE MINIMUM 1 5/8" X 1 5/8".
J. THE ELECTRICAL DATUM PLANE SHALL BE 2 FEET ABOVE THE HIGHEST TIDE LEVEL.
K. ALL ELECTRICAL EQUIPMENT AND DEVICES SHALL BE LOCATED ABOVE THE ELECTRICAL DATUM PLANE.
L. ELECTRICAL EQUIPMENT AND DEVICES LOCATED ON THE DOCK SHALL BE MINIMUM 12" ABOVE THE DECK BUT SHALL NOT BE LOCATED BELOW THE ELECTRICAL DATUM PLANE.
M. CONDUITS ROUTED UNDER THE DOCK SHALL BE SECURELY FASTENED TO THE STRUCTURE MAXIMUM 4' SPACING USING STAINLESS STEEL (TYPE 316) COMPONENTS AND HARDWARE.
N. ALL PENETRATIONS IN ELECTRICAL PANELS SHALL BE MADE WITH UL LISTED WEATHERTIGHT CONNECTORS TO MAINTAIN NEMA 4X RATING.
O. CONTRACTOR SHALL SUBMIT PANELBOARD/RACK INSTALLATION PLAN TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF CONSTRUCTION. INSTALLATION PLAN SHALL SPECIFY FASTENER TYPE, SPACING, AND LOCATION.

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SAFETY HARBOR | FL

SHEET TITLE: POWER ONE-LINE DIAGRAM NOTES
TWA NO.:
PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT
SHEET NO.: E-08

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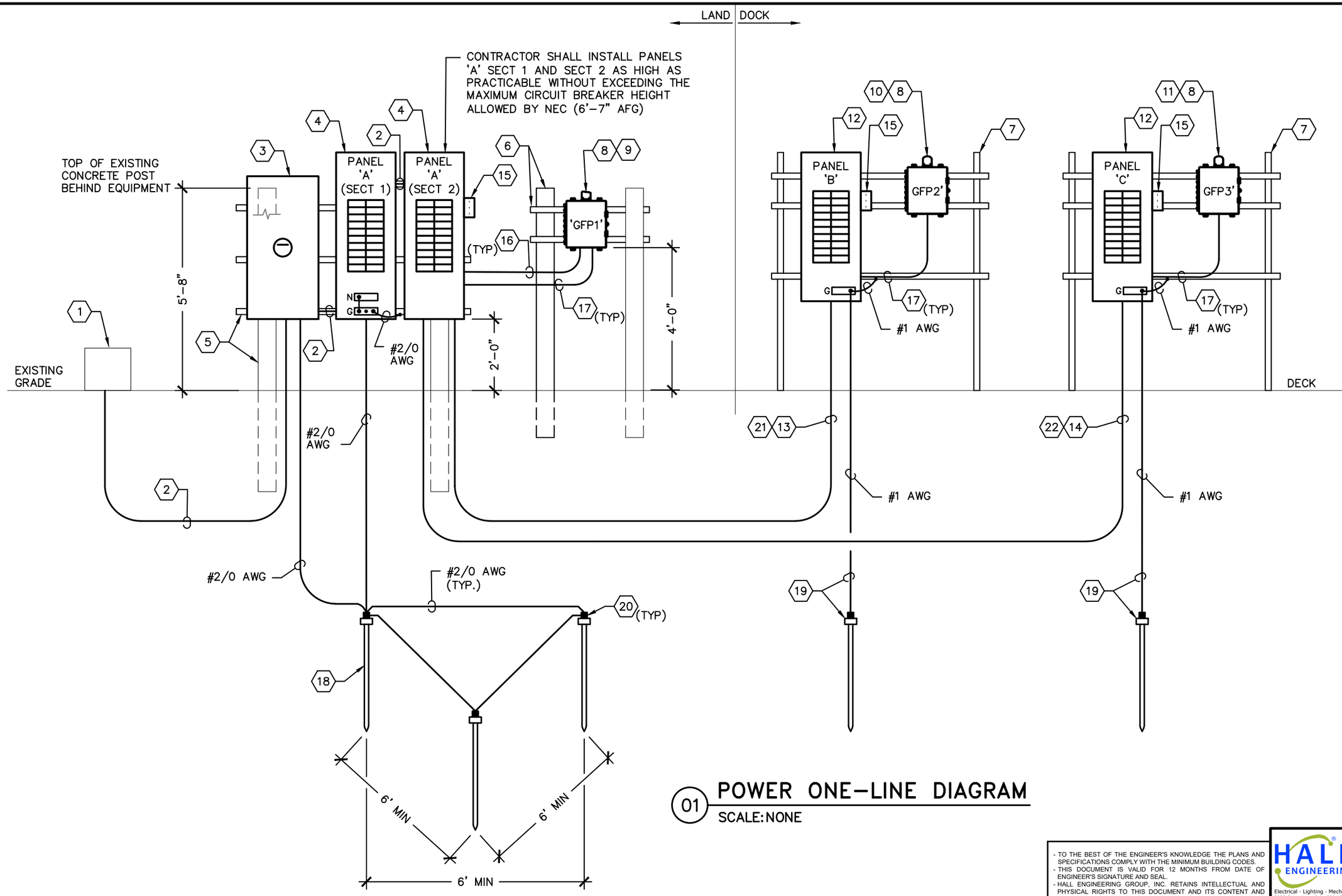

01 POWER ONE-LINE DIAGRAM

SCALE: NONE

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SAFETY HARBOR FL

SHEET TITLE: POWER ONE-LINE DIAGRAM

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-09

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PANELBOARD A SCHEDULE

VOLTAGE (L–L/L–N): 240 / 120 V	PHASE: 1	WIRES: 3	MAIN TYPE (1): MCB	MAIN OC DEVICE (4): 400 A
BUS RATING: 400 A	MIN AIC RATING: 22,000 A	ENCLOSURE TYPE (2): NEMA 4X	MOUNTING: SURFACE
FEED–THRU LUGS: YES	SUB–FEED LUGS: NO	ISOLATED GND BUS: NO	NEUTRAL BUS: YES

SECTION: S1

CKT NO	DESCRIPTION	BREAKER POLE	BREAKER TRIP	PHASE LOADS (VA) A	PHASE LOADS (VA) B	BREAKER TRIP	BREAKER POLE	DESCRIPTION	CKT NO
1	SLIP 1 & 2 (3) (5)	2	30	3,600	–			SPACE	2
3	"				3,600	–		SPACE	4
5	(SHUNT–TRIP)			0	3,600	30	2	SLIP 9 & 10 (3) (5)	6
7	SLIP 3 & 4 (3) (5)	2	30		3,600	3,600		"	8
9	"			3,600	0			(SHUNT–TRIP)	10
11	(SHUNT–TRIP)				0	3,600	30	2 SLIP 11 & 12 (3) (5)	12
13	SLIP 5 & 6 (3) (5)	2	30	3,600	3,600			"	14
15	"				3,600	0		(SHUNT–TRIP)	16
17	(SHUNT–TRIP)			0	3,600	30	2	SLIP 13 & 14 (3) (5)	18
19	SLIP 7 & 8 (3) (5)	2	30		0	3,600		"	20
21	"			3,600	0			(SHUNT–TRIP)	22
23	(SHUNT–TRIP)				3,600	3,600	30	2 SLIP 15 & 16 (3) (5)	24
25	GFP1 CONTROL POWER	1	20	300	3,600			"	26
27	SPACE				–	0		(SHUNT–TRIP)	28
29	SPACE			–	–			SPACE	30
31	SPACE				–	–		SPACE	32
33	SPACE			–	–			SPACE	34
35	SPACE				–	–		SPACE	36
37	SPACE			–	–			SPACE	38
39	SPACE				–	–		SPACE	40
41	SPACE			–	–			SPACE	42

SECTION: S2

43	PANEL B (SUB–FEED BREAKER) (5)	2	225		27,300	0	20	2 SPD	44
45	"			27,000	0			"	46
47	(SHUNT–TRIP)				0	–		SPACE	48
49	PANEL C (SUB–FEED BREAKER) (5)	2	225	23,700	–			SPACE	50
51	"				23,400	–		SPACE	52
53	(SHUNT–TRIP)			0	–			SPACE	54
55	SPACE				–	–		SPACE	56
57	SPACE			–	–			SPACE	58
59	SPACE				–	–		SPACE	60
61	SPACE			–	–			SPACE	62
63	SPACE				–	–		SPACE	64
65	SPACE			–	–			SPACE	66
67	SPACE				–	–		SPACE	68
69	SPACE			–	–			SPACE	70
71	SPACE				–	–		SPACE	72
73	SPACE			–	–			SPACE	74
75	SPACE				–	–		SPACE	76
77	SPACE			–	–			SPACE	78
79	SPACE				–	–		SPACE	80
81	SPACE			–	–			SPACE	82
83	SPACE				–	–		SPACE	84
	TOTAL			79,800	79,500				

LOAD CLASSIFICATION	CONNECTED (VA)	DEMAND FACTOR	DEMAND (VA)
EXTERIOR LIGHTING	0	1.25	0
INTERIOR LIGHTING	0	1.25	0
RECEPTACLE (1st 10 k)	0	1.00	0
RECEPTACLE (Over 10 k)	0	0.50	0
AIR HANDLERS	0	1.00	0
ELECTRIC HEAT	0	1.00	0
COOLING	0	1.00	0
EQUIPMENT/MOTORS	900	1.00	900
LARGEST MOTOR	0	1.25	0
SHORE POWER RECPTS	158,400	0.50	79,200
TOTAL	159,300		80,100

PANEL SUMMARY	
CONNECTED	664 A
DEMAND	334 A
SPARE CAPACITY	17 %

NOTES:

1. SERVICE ENTRANCE RATED.
2. PROVIDE STAINLESS STEEL (TYPE 316) ENCLOSURE.
3. PROVIDE SHUNT–TRIP CIRCUIT BREAKER.
4. PROVIDE 100% RATED MAIN CIRCUIT BREAKER.
5. PROVIDE GROUND–FAULT CURRENT TRANSFORMER.

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SAFETY HARBOR FL

SHEET TITLE: PANEL SCHEDULE A

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-10

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PANELBOARD B SCHEDULE

VOLTAGE (L–L/L–N): 240 / 120 V	PHASE: 1	WIRES: 3	MAIN TYPE: MCB	MAIN OC DEVICE: 225 A
BUS RATING: 225 A	MIN AIC RATING: 10,000 A	ENCLOSURE TYPE (1): NEMA 4X	MOUNTING: SURFACE
FEED–THRU LUGS: NO	SUB–FEED LUGS: NO	ISOLATED GND BUS: NO	NEUTRAL BUS: YES

CKT NO	DESCRIPTION	BREAKER POLE	BREAKER TRIP	PHASE LOADS (VA) A	PHASE LOADS (VA) B	BREAKER TRIP	BREAKER POLE	DESCRIPTION	CKT NO
1	SLIP 17 & 18 (2) (3)	2	30	3,600	0	20	2	SPD	2
3	”				3,600	0			”	4
5	(SHUNT–TRIP)			0	3,600	30	2	SLIP 25 & 26 (2) (3)	6
7	SLIP 19 & 20 (2) (3)	2	30		3,600	3,600			”	8
9	”			3,600	0				(SHUNT–TRIP)	10
11	(SHUNT–TRIP)				0	3,600	30	2	SLIP 27 & 28 (2) (3)	12
13	SLIP 21 & 22 (2) (3)	2	30	3,600	3,600				”	14
15	”				3,600	0			(SHUNT–TRIP)	16
17	(SHUNT–TRIP)			0	3,600	30	2	SLIP 29 & 30 (2) (3)	18
19	SLIP 23 & 24 (2) (3)	2	30		0	3,600			”	20
21	”			3,600	0				(SHUNT–TRIP)	22
23	(SHUNT–TRIP)				3,600	1,800	30	2	SLIP 31 (2) (3)	24
25	GFP2 CONTROL POWER	1	20	300	1,800				”	26
27	SPACE				–	0			(SHUNT–TRIP)	28
29	SPACE			–	–				SPACE	30
31	SPACE				–	–			SPACE	32
33	SPACE			–	–				SPACE	34
35	SPACE				–	–			SPACE	36
37	SPACE			–	–				SPACE	38
39	SPACE				–	–			SPACE	40
41	SPACE			–	–				SPACE	42
			TOTAL	27,300	27,000					

LOAD CLASSIFICATION	CONNECTED (VA)	DEMAND FACTOR	DEMAND (VA)
EXTERIOR LIGHTING	0	1.25	0
INTERIOR LIGHTING	0	1.25	0
RECEPTACLE (1st 10 k)	0	1.00	0
RECEPTACLE (Over 10 k)	0	0.50	0
AIR HANDLERS	0	1.00	0
ELECTRIC HEAT	0	1.00	0
COOLING	0	1.00	0
EQUIPMENT/MOTORS	300	1.00	300
LARGEST MOTOR	0	1.25	0
SHORE POWER RECPTS	54,000	0.70	37,800
TOTAL	54,300		38,100

PANEL SUMMARY	
CONNECTED	226 A
DEMAND	159 A
SPARE CAPACITY	12 %

NOTES:

1. PROVIDE STAINLESS STEEL (TYPE 316) ENCLOSURE.
2. PROVIDE SHUNT–TRIP CIRCUIT BREAKER.
3. PROVIDE GROUND–FAULT CURRENT TRANSFORMER.

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SAFETY HARBOR FL

SHEET TITLE: PANEL SCHEDULE B
PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT
TWA NO.
SHEET NO. E-11

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PANELBOARD C SCHEDULE

VOLTAGE (L–L/L–N): 240 / 120 V	PHASE: 1	WIRES: 3	MAIN TYPE: MCB	MAIN OC DEVICE: 225 A
BUS RATING: 225 A	MIN AIC RATING: 10,000 A	ENCLOSURE TYPE (1): NEMA 4X	MOUNTING: SURFACE
FEED–THRU LUGS: NO	SUB–FEED LUGS: NO	ISOLATED GND BUS: NO	NEUTRAL BUS: YES

CKT NO	DESCRIPTION	BREAKER POLE	BREAKER TRIP	PHASE LOADS (VA) A	PHASE LOADS (VA) B	BREAKER TRIP	BREAKER POLE	DESCRIPTION	CKT NO
1	SLIP 32 & 33 (2) (3)	2	30	3,600	0			SPD	2
3	”				3,600	0		”	4
5	(SHUNT–TRIP)			0	3,600			SLIP 40 & 41 (2) (3)	6
7	SLIP 34 & 35 (2) (3)	2	30			3,600	3,600	”	8
9	”			3,600	0			(SHUNT–TRIP)	10
11	(SHUNT–TRIP)					0	3,600	SLIP 42 & 43 (2) (3)	12
13	SLIP 36 & 37 (2) (3)	2	30	3,600	3,600			”	14
15	”					3,600	0	(SHUNT–TRIP)	16
17	(SHUNT–TRIP)			0	1,800			SLIP 44 (2) (3)	18
19	SLIP 38 & 39 (2) (3)	2	30			0	1,800	”	20
21	”			3,600	0			(SHUNT–TRIP)	22
23	(SHUNT–TRIP)					3,600	–	SPACE	24
25	GFP3 CONTROL POWER	1	20	300	–			SPACE	26
27	SPACE					–	–	SPACE	28
29	SPACE			–	–			SPACE	30
31	SPACE					–	–	SPACE	32
33	SPACE			–	–			SPACE	34
35	SPACE					–	–	SPACE	36
37	SPACE			–	–			SPACE	38
39	SPACE					–	–	SPACE	40
41	SPACE			–	–			SPACE	42
			TOTAL	23,700		23,400			

LOAD CLASSIFICATION	CONNECTED (VA)	DEMAND FACTOR	DEMAND (VA)
EXTERIOR LIGHTING	0	1.25	0
INTERIOR LIGHTING	0	1.25	0
RECEPTACLE (1st 10 k)	0	1.00	0
RECEPTACLE (Over 10 k)	0	0.50	0
AIR HANDLERS	0	1.00	0
ELECTRIC HEAT	0	1.00	0
COOLING	0	1.00	0
EQUIPMENT/MOTORS	300	1.00	300
LARGEST MOTOR	0	1.25	0
SHORE POWER RECPTS	46,800	0.80	37,440
TOTAL	47,100		37,740

PANEL SUMMARY	
CONNECTED	196 A
DEMAND	157 A
SPARE CAPACITY	13 %

NOTES:

1. PROVIDE STAINLESS STEEL (TYPE 316) ENCLOSURE.
2. PROVIDE SHUNT–TRIP CIRCUIT BREAKER.
3. PROVIDE GROUND–FAULT CURRENT TRANSFORMER.

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SAFETY HARBOR FL

SHEET TITLE: PANEL SCHEDULE C

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-12

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MARINA PEDESTAL SCHEDULE

TAG	DESCRIPTION
P1	(1) 30 A, 1 PH, 125 V RECEPTACLE; NEMA L5–30, 1 HOSE BIBB, LED LIGHT, 30 mA GFPE RELAY AND SHUNT–TRIP CIRCUIT BREAKER, NEMA 3R, SS (TYPE 316) PEDESTAL, MEE – MARINA MATE SS OR ENGINEER APPROVED EQUIVALENT.
P2	(2) 30 A, 1 PH, 125 V RECEPTACLE; NEMA L5–30 (ONE RECEPTACLE PER SIDE), 2 HOSE BIBBS (ONE HOSE BIBB PER SIDE), LED LIGHT, 30 mA GFPE RELAYS AND SHUNT–TRIP CIRCUIT BREAKERS, NEMA 3R, SS (TYPE 316) PEDESTAL, MEE – MARINA MATE SS OR ENGINEER APPROVED EQUIVALENT.

NOTES:

1. RECEPTACLES SHALL BE ENCLOSED IN WET LOCATION LISTED, WHILE–IN–USE WEATHERPROOF ASSEMBLIES.
2. RECEPTACLES SHALL BE MARINE GRADE, WEATHER RESISTANT TYPE.
3. SUBMIT MARINA PEDESTALS FOR OWNER/ENGINEER REVIEW AND APPROVAL.

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SAFETY HARBOR | FL

SHEET TITLE: MARINA PEDESTAL SCHEDULE

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-13

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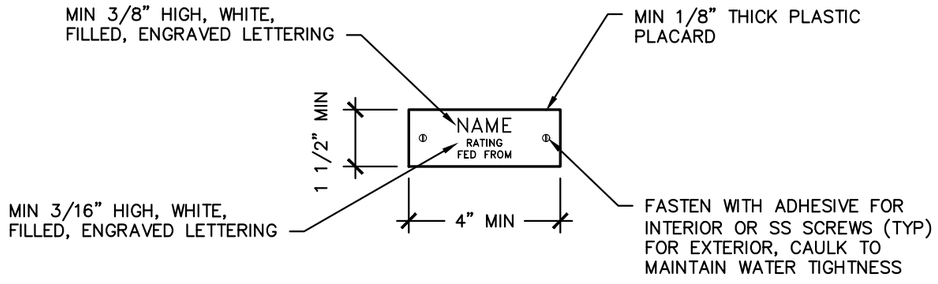
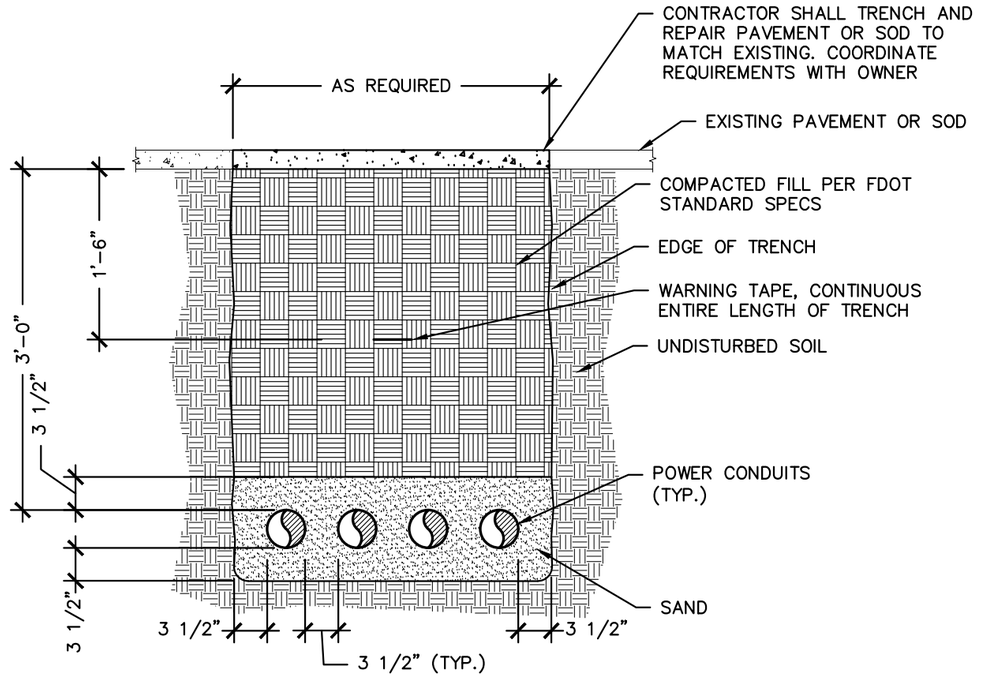


01 PLACARD DETAIL

SCALE: N.T.S.



02 CONDUIT TRENCH DETAIL

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SAFETY HARBOR | FL

SHEET TITLE: DETAILS (1 OF 3)

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-14

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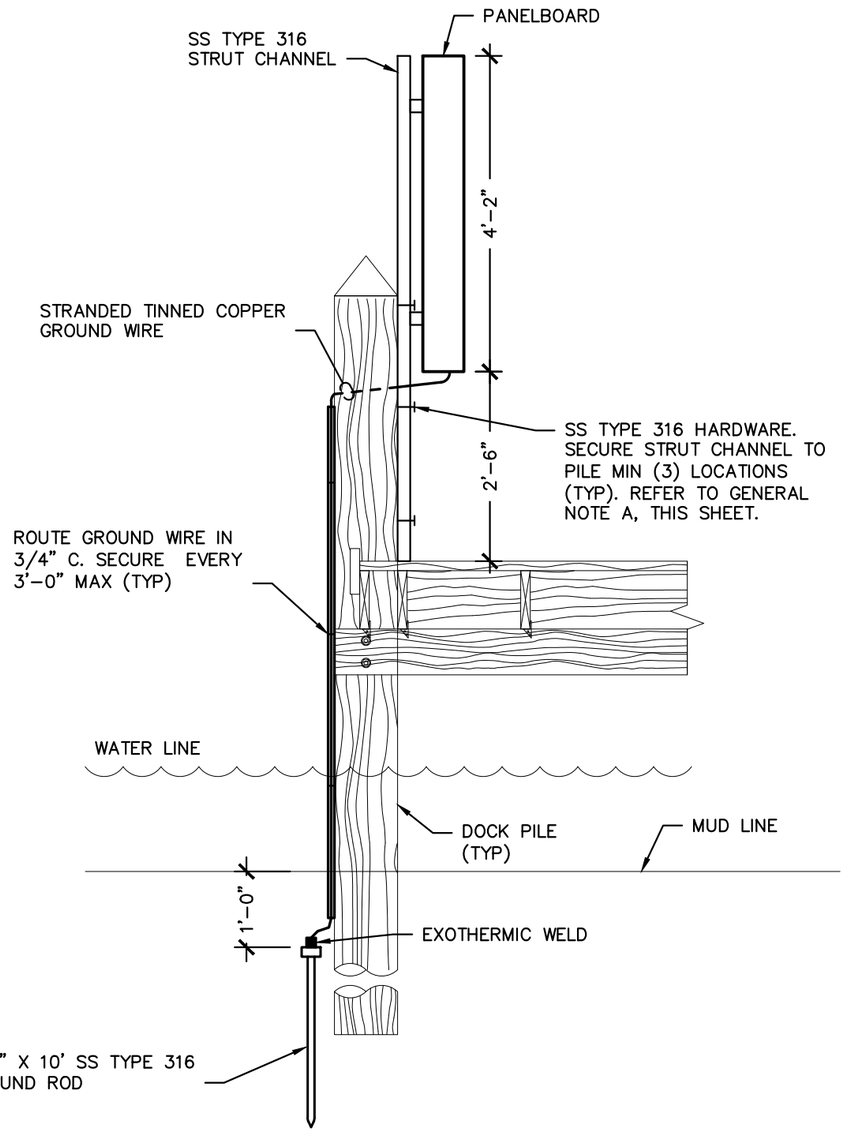
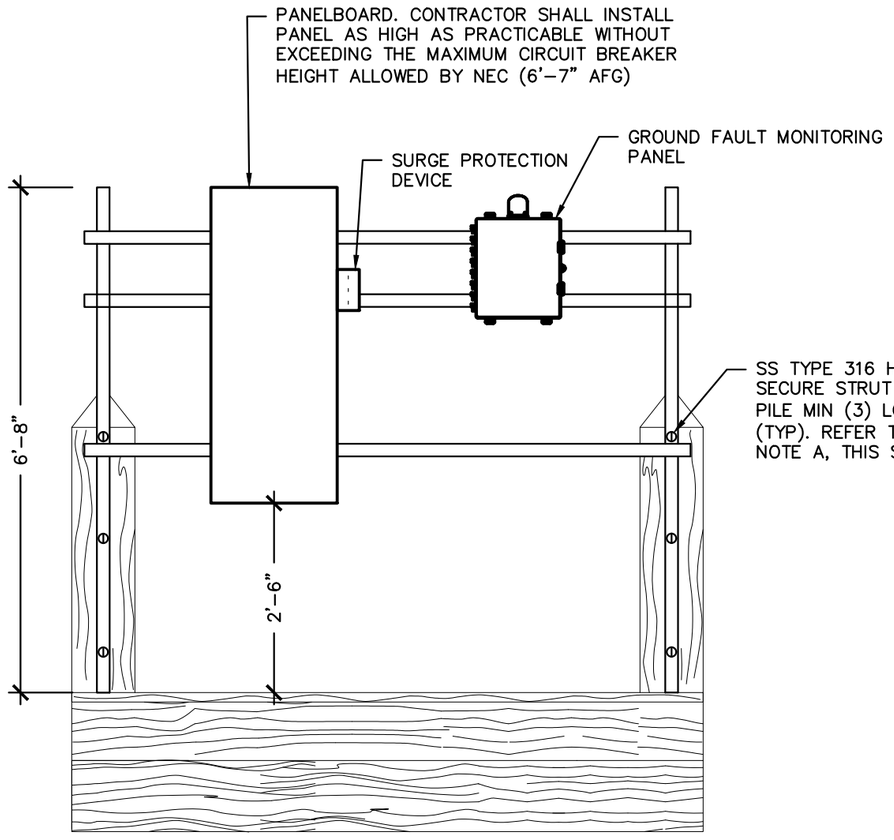


01 PANELBOARDS "B"&"C" TYPICAL GROUNDING DETAIL

SCALE: NONE

DRAWING GENERAL NOTES

A. CONTRACTOR SHALL SUBMIT PANELBOARD/RACK INSTALLATION PLAN TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF CONSTRUCTION. INSTALLATION PLAN SHALL SPECIFY FASTENER TYPE, SPACING, AND LOCATION.



02 DOCK MOUNTED EQUIPMENT RACK

SCALE: NONE

- TO THE BEST OF THE ENGINEER'S KNOWLEDGE THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM BUILDING CODES.
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SAFETY HARBOR | FL

SHEET TITLE: DETAILS (2 OF 3)

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-15

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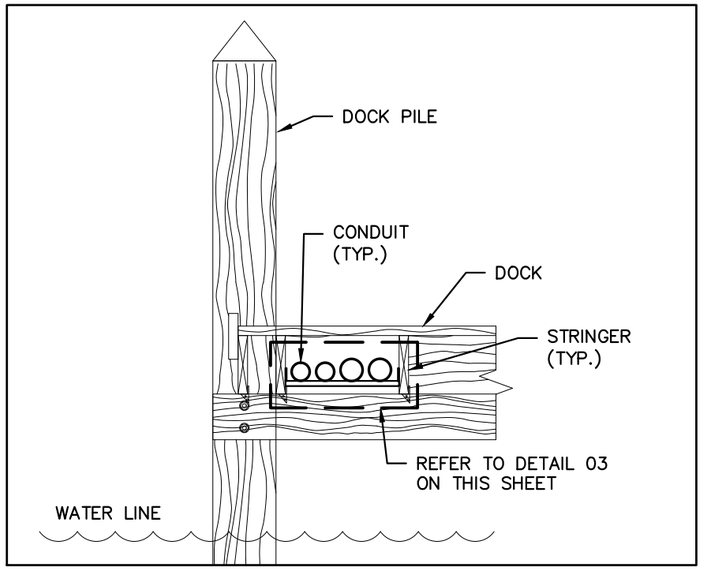
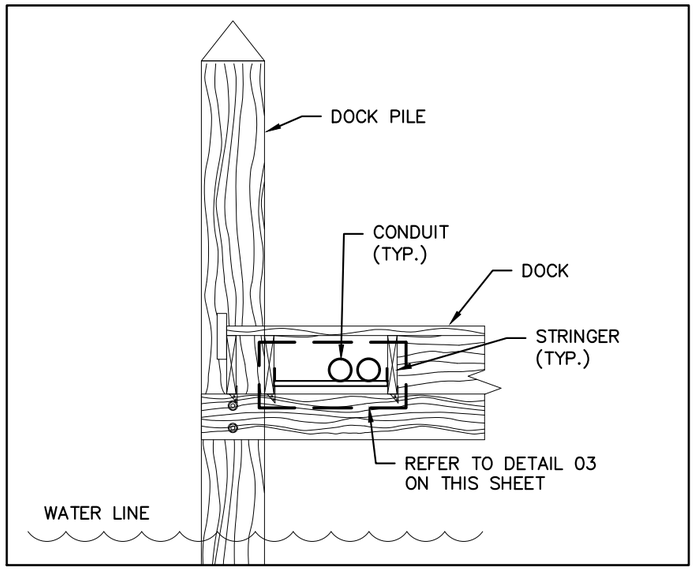


01 CONDUIT MOUNTING DETAIL
SCALE: NONE



02 CONDUIT MOUNTING DETAIL
SCALE: NONE

DRAWING GENERAL NOTES

A. REFER TO POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

B. MAINTAIN MINIMUM 12" SEPARATION BETWEEN ELECTRICAL AND OTHER UTILITIES/INFRASTRUCTURE.

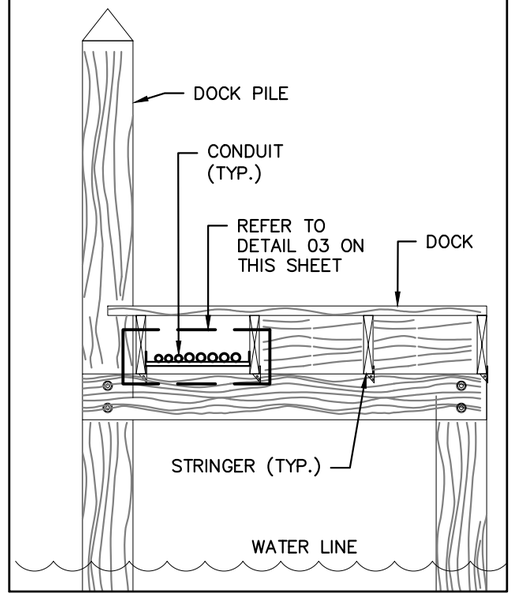
C. ALL EXPOSED CONDUITS SHALL BE UV RESISTANT, SCHEDULE 80 PVC.

D. ALL FASTENERS, ANCHORS, STRAPS, HARDWARE, STRUT-CHANNEL, ETC. SHALL BE STAINLESS STEEL (TYPE 316).

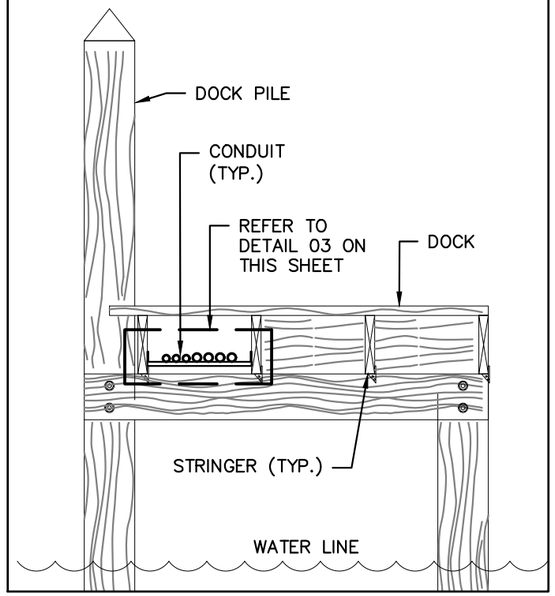
E. CONDUITS ROUTED UNDER THE DOCK SHALL BE SECURELY FASTENED TO THE STRUCTURE MAXIMUM 4' SPACING USING STAINLESS STEEL (TYPE 316) COMPONENTS AND HARDWARE. CONTRACTOR SHALL SUBMIT CONDUIT SUPPORT LAYOUT AND ASSOCIATED HARDWARE DESIGN AND DATA SHEET TO OWNER/ENGINEER FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF WORK.

F. FASTEN CHANNEL STRUT TO SIDE OF STRINGERS.

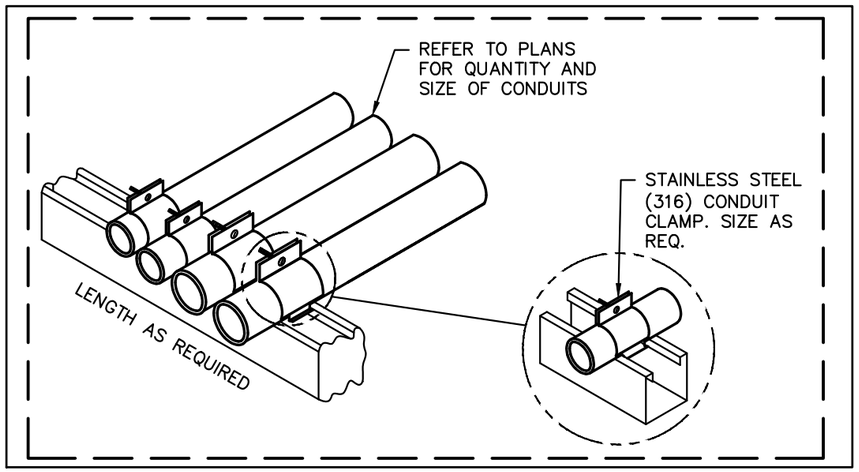
G. ALL STRUT CHANNEL SHALL BE MINIMUM 1 5/8" X 1 5/8".



04 CONDUIT MOUNTING DETAIL
SCALE: N.T.S.



05 CONDUIT MOUNTING DETAIL
SCALE: N.T.S.



03 CONDUIT SUPPORT DETAIL
SCALE: NONE

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SAFETY HARBOR | FL

SHEET TITLE: DETAILS (3 OF 3)

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-16

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COMPLIANCE NOTES

FLORIDA ADMINISTRATIVE CODE: 61G15-32.004

SCOPE OF WORK

INSTALLATION OF A NEW CLASS 1 MANUAL DRY STANDPIPE SYSTEM TO REPLACE AN EXISTING ON A REPLACED DOCK, DESIGNED IN COMPLIANCE WITH THE APPLICABLE NFPA STANDARDS LISTED WITHIN THESE DOCUMENTS.

ACCEPTANCE TEST CRITERIA

SHALL COMPLY WITH NFPA-14. SPRINKLER SYSTEM SHALL BE PROPERLY INSPECTED AND MAINTAINED IN ACCORDANCE WITH NFPA-25 STANDARD FOR INSPECTION, TESTING, AND MAINTENANCE OF WATER BASED SYSTEM.

HAZARD CLASSIFICATION

CLASSIFICATION: ORDINARY HAZARD (GROUP 1 AND GROUP 2).

APPLICABLE NFPA STANDARDS TO BE APPLIED

FLORIDA BUILDING CODE (8TH EDITION)
FLORIDA FIRE PREVENTION CODE (8TH EDITION)
NFPA 303
NFPA 13
NFPA 14
NFPA 24
NFPA 25

FIRE ALARM SYSTEM

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

POINT OF SERVICE

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

CLASSIFICATION OF HAZARD OCCUPANCY FOR EACH ROOM OR AREA

ORDINARY HAZARD (GROUP 2): MARINA / DOCK

DESIGN APPROACH

MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT. CONTRACTOR SHALL PROVIDE HYDRAULIC CALCULATIONS PER NFPA-14 15.5.6 WITH FULL WORKING SHOP DRAWINGS.

CHARACTERISTICS OF THE WATER SUPPLY TO BE USED

STREET MAIN IS CIRCULATING. MINIMUM DURATION OF 60-90 MINUTES.

FLOW TEST DATA:

TO BE PREFORMED BY CONTRACTOR, UPON REQUEST BY AHJ.

COMPLIANCE NOTES CONTINUED

VALVING AND ALARM REQUIREMENTS TO MINIMIZE POTENTIAL FOR IMPAIRMENTS AND UNRECOGNIZED FLOW OF WATER:

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

MICROBIAL INDUCED CORROSION (MIC)

WATER SOURCE IS FROM EXISTING PUBLIC UTILITY WATER MAIN. THERE ARE NO KNOWN CONDITIONS PRESENT THAT CONTRIBUTE TO MICROBIOLOGICAL CORROSION (M.I.C.). CONTRACTOR SHALL REEVALUATE WATER SUPPLY AND ENVIRONMENTAL CONDITIONS FOR EXISTENCE OF MICROBES AND CONDITIONS THAT CONTRIBUTE TO M.I.C. PRIOR TO START OF CONSTRUCTION. WHERE CONDITIONS ARE FOUND THAT CONTRIBUTE TO M.I.C. THE CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER.

BACKFLOW PREVENTION AND METERING SPECIFICATIONS

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

QUALITY AND PERFORMANCE SPECIFICATIONS OF ALL YARD AND INTERIOR FIRE PROTECTION COMPONENTS

ALL NEW YARD AND INTERIOR FIRE PROTECTION EQUIPMENT SHALL BE UL LISTED AND/OR FM APPROVED.

FIRE PUMP REQUIREMENT

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

WATER STORAGE TANK REQUIREMENT

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

OWNER'S CERTIFICATE FOR STORAGE FACILITIES

PROPERTY IS NOT A STORAGE OCCUPANCY. OWNER'S CERTIFICATE IS NOT REQUIRED.

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SHEET TITLE: FIRE PROTECTION COMPLIANCE NOTES

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. FP-01

FIRE PROTECTION SPECIFICATIONS

1.0 GENERAL PROVISIONS

1.1 PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT FOR A COMPLETE AND PROPERLY OPERATING FIRE PROTECTION SYSTEM.

1.2 CODES AND STANDARDS: THE FIRE SPRINKLER PROTECTION SYSTEMS INSTALLATION, FLUSHING AND TESTING SHALL COMPLY WITH THE REQUIREMENTS OF NFPA 14, AND ALL LOCAL CODES HAVING JURISDICTION.

1.3 PIPE THREAD PATTERN: ALL THREADS SHALL BE IN ACCORDANCE WITH LOCAL FIRE DEPARTMENT SPECIFICATIONS AND NFPA 1963.

1.4 UL/FM APPROVAL: ALL EQUIPMENT, VALVES, COUPLINGS, HANGERS AND DEVICES SHALL BE APPROVED BY UNDERWRITERS' LABORATORY (UL) OR FACTORY MUTUAL (FM) FOR USE IN FIRE PROTECTION SERVICES.

1.5 LICENSURE: THE FIRE PROTECTION SYSTEMS SHALL BE INSTALLED BY A STATE CERTIFIED FIRE PROTECTION CONTRACTOR.

1.6 ALL FIRE PROTECTION WORK SHALL BE DONE IN A NEAT AND WORKMAN-LIKE MANNER.

1.7 CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND FEES, ETC., REQUIRED FOR THE EXECUTION OF THIS WORK.

1.8 CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACE DAMAGED EQUIPMENT AND/OR MATERIAL.

2.0 BASIC MATERIALS AND METHODS

2.1 ALL PIPING MATERIALS SHALL HAVE A CORROSION RESISTANCE RATING (CFR) OF 1.0 OR GREATER.

2.2 HANGERS: ALL HANGER SPACING SHALL COMPLY WITH THE REQUIREMENTS OF NFPA-13. HANGERS TO BE PROTECTED FROM CORROSION (316 STAINLESS STEEL)

2.3 HYDROSTATIC TESTS: ABOVE GROUND AND BELOW GROUND PIPING SYSTEMS SHALL BE HYDROSTATICALLY TESTED AT NOT LESS THAN 200 PSI PRESSURE OR AT 50 PSI IN EXCESS OF THE MAXIMUM PRESSURE, WHICHEVER IS GREATER, FOR A PERIOD OF 2 HOURS. THE TEST PRESSURE SHALL BE READ FROM A GAUGE LOCATED AT THE LOW ELEVATION POINT OF THE INDIVIDUAL SYSTEM OR PORTION OF THE SYSTEM BEING TESTED. THE SPRINKLER PIPING SHALL NOT HAVE LEAKAGE EXCEEDING THE AMOUNTS SPECIFIED IN NFPA 24. LEAKAGE QUANTITIES SHALL BE DETERMINED BY PUMPING AT THE SPECIFIED TEST PRESSURE FROM A CALIBRATED CONTAINER. REPAIR LEAKING JOINTS AND RETEST AS NECESSARY UNTIL ALL SYSTEMS HAVE BEEN TESTED. TEST THE PIPING BETWEEN THE CHECK VALVE IN THE FIRE DEPARTMENT INLET PIPE AND THE OUTSIDE CONNECTION THE SAME AS THE BALANCE OF THE SYSTEM.

FIRE PROTECTION SPECIFICATIONS CONTINUED

3.0 FIRE PROTECTION VALVES AND ACCESSORIES

3.1 BALL VALVE: TWO INCH (2") AND SMALLER: STANDARD FULL PORT BALL VALVE WITH STAINLESS STEEL BODY CONFORMING TO ASTM584, CHROME PLATED BRASS BALL AND STAINLESS STEEL STEM WITH TFE SEAL RATED FOR 365PSI. ACCEPTABLE MANUFACTURERS, VICTAULIC SERIES 728.

3.2 BUTTERFLY VALVE: TWO INCH (2") AND LARGER IN LIEU OF GATE VALVE: 300 PSI GROOVED ENDS. STAINLESS STEEL BODY, ASTM A536 GRADE 65-45-12; DUCTILE IRON DISC, ASTM A536 WITH ELECTROLESS NICKEL COATING CONFORMING TO ASTM B-733; STAINLESS STEEL STEM AND HAND WHEEL OPERATED WITH WEATHER PROOF ACTUATOR RATED TO 300PSI. (STEM SHALL BE OFFSET FROM THE DISC CENTERLINE TO PROVIDE COMPLETE 360-DEGREE CIRCUMFERENTIAL SEATING ON NITRILE SEAT.) VICTAULIC SERIES 705 AND SERIES 765

3.3 CHECK VALVE: TWO INCH (2") - TWELVE INCH (12"), STAINLESS STEEL BODY, ASTM A-536, GRADE 65-45-12, MINIMUM OF 250 PSI WITH SINGLE DISC MECHANISM INCORPORATING A SPRING ASSISTED FEATURE FOR NON-SLAMMING OPERATION AND CAN BE INSTALLED EITHER VERTICALLY OR HORIZONTALLY. VICTAULIC SERIES 717, AND SERIES 717H.

3.3 CHECK VALVE: TWO INCH (2") - TWELVE INCH (12"), STAINLESS STEEL BODY, ASTM A-536, GRADE 65-45-12, MINIMUM OF 250 PSI WITH SINGLE DISC MECHANISM INCORPORATING A SPRING ASSISTED FEATURE FOR NON-SLAMMING OPERATION AND CAN BE INSTALLED EITHER VERTICALLY OR HORIZONTALLY. VICTAULIC SERIES 717, AND SERIES 717H.

3.4 HOSE VALVE: 2.5"X2.5"; GUARDIAN 5000 SERIES OR EQUAL

3.5 FIRE DEPARTMENT CONNECTION:

1) SIAMESE CONNECTION: BRASS BODY, ANGLE BODY, TWO-WAY, SIAMESE CONNECTION. CONNECTION SIZES SHALL BE 4" OUTLET AND TWO (2) AND 2½" FEMALE INLETS, HAVING NH STANDARD THREADS, FOR THE CONNECTION SIZE INDICATED, AS SPECIFIED IN NFPA 1963. EACH INLET SHALL HAVE A CLAPPER VALVE, AND PLUG AND CHAIN. WHEN REQUIRED PROVIDE AN 18" HIGH CHROME PLATED BRASS SLEEVE AND CHROME PLATED BRASS SIDEWALK PLATE, WITH WORDS "STANDPIPE - FIRE DEPT CONNECTION" OR "AUTO SPKR - FIRE DEPT CONNECTION," OR "AUTO SPKR & STANDPIPE - FIRE DEPT CONNECTION" IN RAISED LETTERS. ACCEPTABLE MANUFACTURER OF FIRE DEPARTMENT CONNECTION IS GUARDIAN FIRE EQUIPMENT, INC.

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SHEET TITLE: FIRE PROTECTION SPECIFICATIONS

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. FP-02

GENERAL NOTES

1. FIRE PROTECTION SYSTEM TO COMPLY WITH NFPA 13, 14, AND STATE FIRE PREVENTION CODE.
2. FINAL INSPECTION AND APPROVAL BY THE AUTHORITY HAVING JURISDICTION (SAFETY HARBOR FIRE DEPARTMENT).
3. CONTRACTOR TO SUBMIT A SET OF WORKING PLANS AS DEFINED IN NFPA-13 TO ENGINEER FOR REVIEW PRIOR TO SUBMITTING WORKING PLANS TO AUTHORITY HAVING JURISDICTION (SAFETY HARBOR FIRE DEPARTMENT) FOR FINAL APPROVAL.
4. ALL MATERIAL SHALL BE OF APPROVED QUALITY AND THE WORK SHALL BE DONE IN A THOROUGH AND WORKMANLIKE MANNER. THE WORK, MATERIALS AND TEST SHALL BE IN ACCORDANCE WITH ALL APPLICABLE NFPA REQUIREMENTS.
5. PIPE ROUTING SHOWN IS SCHEMATIC ONLY. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO PROVIDE ANY ADDITIONAL OFFSETS, ETC. REQUIRED FOR A COMPLETE AND NFPA COMPLIANT INSTALLATION. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AND SITE TO ENSURE SPRINKLER OPERATION IS NOT OBSTRUCTED AND SPACING IS MAINTAINED PER NFPA-13.
6. PROVIDE A PERMANENTLY ATTACHED NAME TAG ATTACHED TO THE FIRE DEPARTMENT CONNECTION, STATING NEW AND EXISTING COVERAGE AREAS. METAL (RED WITH WHITE LETTERS)
7. COORDINATE PIPING WITH ALL OTHER TRADES (PANELS, UTILITIES, TRANSFORMERS, ETC.) PRIOR TO ANY INSTALLATION. DO NOT ROUTE ANY PIPING OVER ANY ELECTRICAL PANELS UNDER ANY CIRCUMSTANCES.
8. FIRE PROTECTION SYSTEM ACCEPTANCE TESTS SHALL BE PERFORMED IN COMPLIANCE WITH THE REQUIREMENTS OF THE ASSOCIATED NFPA CODES.
9. FIRE PROTECTION SYSTEM ACCEPTANCE TESTS SHALL BE WITNESSED BY AUTHORITY HAVING JURISDICTION.
10. CONTRACTOR SHALL PROVIDE FLUSHING CONNECTIONS AT THE END OF ALL MAINS.
11. PIPE SUPPORTS: HANGERS, CLAMPS, RODS AND OTHER ACCESSORIES OF AN APPROVED TYPE AND IN SUFFICIENT NUMBER TO PROPERLY SUPPORT ALL PIPING SHALL BE FURNISHED AND INSTALLED.
12. CONTRACTOR SHALL PROVIDE THE OWNER WITH A THREE RING BINDER OF ALL LITERATURE AND INSTRUCTIONS AS PROVIDED BY THE MANUFACTURER DESCRIBING PROPER OPERATION AND MAINTENANCE OF ALL EQUIPMENT AND DEVICES INSTALLED, A COPY OF NFPA-25 "STANDARD FOR THE INSPECTION, TESTING, AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS", AND THE APPROPRIATE CONTRACTOR'S MATERIAL AND TEST CERTIFICATE(S), COMPLETED AND SIGNED, AS INDICATED IN NFPA-13.

GENERAL NOTES CONTINUED

13. CONTRACTOR SHALL SUBMIT HANGAR INSTALLATION PLAN TO ENGINEER FOR REVIEW PRIOR TO COMMENCEMENT OF WORK.
14. COORDINATE FIRE PROTECTION PIPING WITH ALL OTHER TRADES. PROVIDE OFFSETS AS REQUIRED FOR THE INSTALLATION AS REQUIRED. FINAL FIELD COORDINATION BETWEEN ALL TRADES SHALL BE COMPLETED PRIOR TO START OF CONSTRUCTION.
15. PROVIDE ACCESS PANELS FOR ALL VALVES IN NON-ACCESSIBLE LOCATIONS.
16. ALL HANGERS, CLAMPS, FASTENERS, AND HARDWARE SHALL BE 316 STAINLESS STEEL.
17. PROVIDE DIALECTIC SEPARATION AS REQUIRED TO PREVENT DISSIMILAR METAL/ GALVANIC CORROSION IN ALL MATERIALS. TWO MATERIALS WITH KNOWN POTENTIAL FOR GALVANIC ACTION SHALL NOT BE USED IN CONNECTION TO ONE ANOTHER..

PIPE MATERIAL SPECIFICATION

LOCATION USED	MATERIAL
UNDERGROUND	DR14 (BLUE BRUTE)
IN-BUILDING RISER	NA
FIRE RISER	NA
STANDPIPE	FM APPROVED, DR9 HDPE, UV RESISTANT, 250 PSI, EQUAL TO JM EAGLE
COMMERCIAL	NA
RESIDENTIAL	NA
EXTERIOR / DRY	FM APPROVED, DR9 HDPE, UV RESISTANT, 250 PSI, EQUAL TO JM EAGLE

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

$USER$ $DATE$ $TIME$ $FILE$

SHANE R. HAMILTON, PE
FLORIDA LICENSE #75420
Engineering Professionals, Inc.
Mechanical Engineers
EB 6437
912 W. Dr. Martin Luther King Jr. Blvd.
Tampa, FL 33603 (813) 251-6848

DRAWN BY:
CHECKED BY:
DESIGNED BY:
CHECKED BY:

SHEET TITLE: FIRE PROTECTION GENERAL NOTES

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. FP-03

FIRE PROTECTION LEGEND

SYMBOL	DESCRIPTION
	CONTROL VALVE WITH TAMPER SWITCH
	OS&Y VALVE WITH TAMPER SWITCH
	CHECK VALVE
FDC FDC	FIRE DEPARTMENT CONNECTION – SIAMESE
	FLOW SWITCH
	CABINET WITH 2i" FDV, 1i" REDUCER, CAP, AND CHAIN
	STANDPIPE WITH FIRE DEPARTMENT VALVE
	STANDPIPE, FLOOR CONTROL VALVE, INSPECTOR'S TEST, AND DRAIN RISER
	PIPE CONTINUATION
	PIPE UP
	PIPE DOWN
	FIRE RISER
	ENDCAP WITH FLUSHING CONNECTION
	AREA OF REVISION
#	HYDRAULIC REFERENCE NODE
	NEW SPRINKLER PIPING
	NEW SPRINKLER MAIN
	NEW UNDERGROUND FIRE MAIN
	NEW STANDPIPE PIPING
EC	EXTENDED COVERAGE
FC	FLUSHING CONNECTION
FCV	FLOOR CONTROL VALVE
FDC	FIRE DEPARTMENT CONNECTION
FDV	FIRE DEPARTMENT VALVE
SIV	STANDPIPE ISOLATION VALVE
#	REVISION REFERENCE

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DRAWN BY:
CHECKED BY:
DESIGNED BY:
CHECKED BY:

City of Safety Harbor, Florida — Home of the Mineral Springs

SHEET TITLE: FIRE PROTECTION LEGEND

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. FP-04

THERE IS AN EXISTING FIRE HYDRANT ACROSS FROM EXISTING AND PROPOSED FDC APPROXIMATELY 100' AWAY.

NEW FDC SERVING NEW STANDPIPE SYSTEM, COORDINATE FINAL LOCATION WITH HARBOR MASTER AND FIRE MARSHAL. PROVIDE PLACARD STATING AREAS SERVED AND PRESSURE REQUIRED AT FLOW PER NFPA-14 15.4.2.3.3 AND 15.5.4.2.3.4.

NEW FDC TO REPLACE EXISTING IN SIMILAR LOCATION, EXTENDED OVER WESTWARD AS REQUIRED TO BE WITHIN 100' OF EXISTING FIRE HYDRANT ACROSS THE STREET. FIELD COORDINATE FINAL PLACEMENT WITH AHJ (SAFETY HARBOR FIRE)

FIRE PROTECTION PIPE SHALL BE SECURED / HUNG IN THE MOST EAST BAY WITH POTABLE, AWAY FROM ELECTRICAL, COORDINATE WITH ELECTRICAL WORK AND STRUCTURAL PLANS.

NEW 5" STANDPIPE (4.25" ID)

NEW STAND PIPE HOSE CONNECTIONS SHALL BE SPACED A MAXIMUM OF 150' PER NFPA 14 15.5.1.2.1 AND 15.5.1.2.2

CONFIRM HOSE CONNECTION SIZE WITH LOCAL AHJ (SAFETY HARBOR FIRE DEPARTMENT) (TYP.)

3" TAP (2.68" ID) FROM 5" MAIN TO 2.5" FIRE DEPARTMENT VALVE HOSE CONNECTION, PROVIDE WITH CAP AND CHAIN(TYP.)

COORDINATE LOCATION OF FIRE PROTECTION WITH ELECTRICAL WORK UNDER CENTER OF DOCK BAY. ENSURE 12" MINIMUM BETWEEN UTILITIES.

FIRE PROTECTION FLOOR PLAN

N.T.S

23.0141

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REVISIONS					
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Tampa, FL 33603 (813) 251-6848

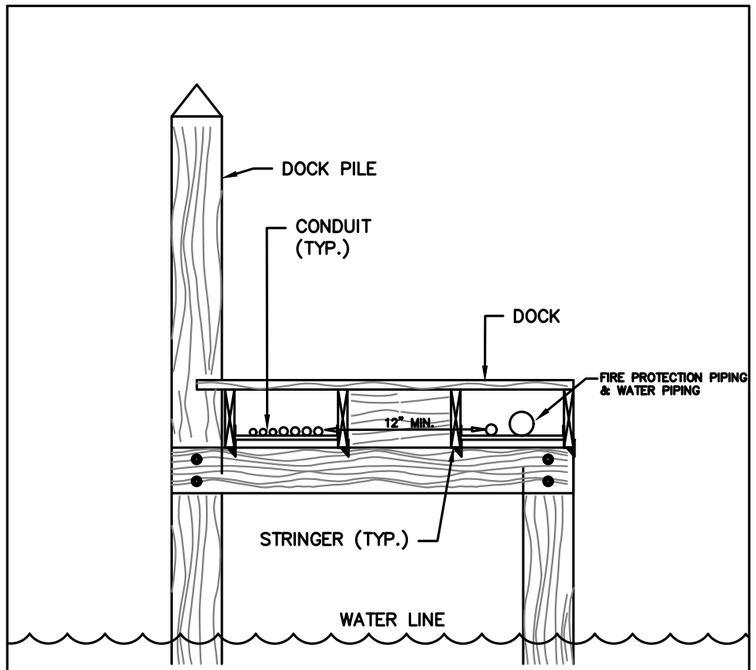
DRAWN BY:	
CHECKED BY:	
DESIGNED BY:	
CHECKED BY:	

SHEET TITLE: FIRE PROTECTION FLOOR PLAN

TWA NO.

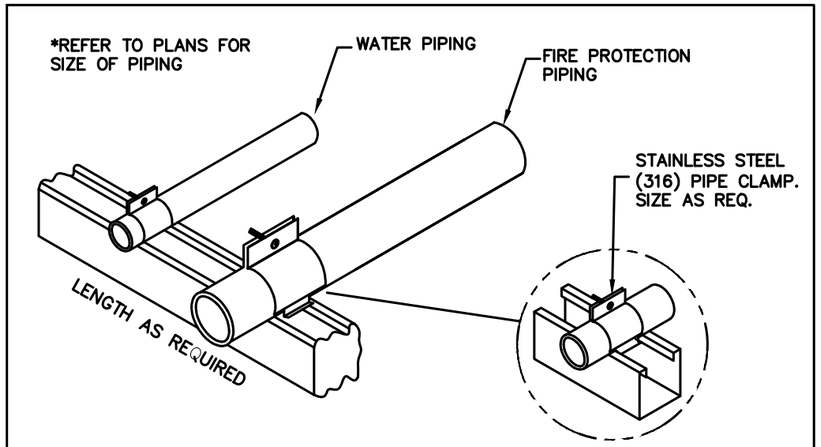
PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. FP-05



PIPE MOUNTING DETAIL

NO SCALE



PIPE SUPPORT DETAIL

NO SCALE

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DRAWN BY:
CHECKED BY:
DESIGNED BY:
CHECKED BY:

SHEET TITLE: FIRE PROTECTION DETAILS

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. FP-06

PLUMBING LEGEND

DESCRIPTION	ABBREV.	SYMBOL
SANITARY PIPING	SAN	
VENT PIPING	V	
COLD WATER PIPING	CW	
EXISTING PIPING TO REMAIN		
EXISTING PIPING TO BE REMOVED		
HOSE BIBB	HB	HB
TEE UP		
TEE DOWN		
90° UP		
90° DOWN		
LEAD FREE BALL VALVE	BV	

MATERIAL SPECIFICATIONS:

1. DOMESTIC COLD WATER PIPING AND SOLVENT FITTINGS SHALL BE CPVC. ALL AREAS EXPOSED TO SUNLIGHT SHALL BE INSULATED WITH A UV STABLE INSULATION OR CONDUIT. FIELD COORDINATE AREAS OF UV EXPOSURE.

ALL PIPING SHALL BE INSTALLED AND SUPPORTED WITH HANGERS COMPLIANT WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND CODES. SUBMIT HANGER INSTALLATION PLAN TO ENGINEER FOR REVIEW PRIOR TO COMMENCEMENT OF WORK.

PLUMBING FIXTURE SCHEDULE

HB: HOSE BIBB – STAINLESS STEEL HOSE BIBB EQUALS TO SSHB5205. SEE PEDESTAL MANUFACTURER DOCUMENTS FOR DETAILS. 3/4"CW. HB TO BE INSTALLED IN UTILITY PEDESTAL. (2) PER PEDESTAL UNLESS SHOWN AS (1).

PLUMBING GENERAL NOTES

- ALL PLUMBING WORK SHALL MEET ALL THE REQUIREMENTS OF THE "FLORIDA BUILDING CODE, PLUMBING – 8TH EDITION (2023)".
- REVIEW PLANS OF ALL TRADES PRIOR TO BIDDING AND INSTALLATION TO INCLUDE ALL PLUMBING FOR COMPLETE SYSTEMS SHOWN ON THE PLANS AND AS REQUIRED.
- COORDINATE WITH OTHER TRADES TO PREVENT INTERFERENCE.
- ALL CHANGES SHALL BE APPROVED BY THE ENGINEER.
- COORDINATE WITH OTHER TRADE DRAWINGS BEFORE ROUGHING–IN PLUMBING FIXTURES AND EQUIPMENT SUPPLIES.
- THE PLUMBING SUBCONTRACTOR SHALL FURNISH AND INSTALL ALL PLUMBING FIXTURES, UNLESS NOTED OTHERWISE.
- THE PLUMBING SUBCONTRACTOR SHALL INSTALL AND MAKE ALL PLUMBING CONNECTIONS TO OWNER FURNISHED EQUIPMENT.
- VERIFY MOUNTING HEIGHT AND WATER CONNECTION SIZES TO ALL PLUMBING FIXTURES PRIOR TO ROUGH–IN.
- ENSURE ALL COLD WATER PIPING CONNECTIONS TO FIXTURES AND EQUIPMENT ARE PROPERLY CONNECTED PER CODE AND INDUSTRY STANDARDS, EVEN IF SOME FITTINGS AND CONNECTIONS ARE NOT SHOWN FOR A COMPLETE AND FUNCTIONAL SYSTEM.
- VERIFY LOCATION OF EXISTING WATER SERVICE.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING AND PATCHING NECESSARY TO INSTALL ANY PART OF THIS WORK. USE NEW MATERIALS OF THE SAME TYPE AS THOSE REMOVED FOR PATCHES, AND REFINISH THE PATCHED SURFACE TO MATCH THE EXISTING ADJACENT AREAS. THE STRUCTURAL INTEGRITY OF ALL STRUCTURE AND STRUCTURAL MEMBERS MUST NEVER BE COMPROMISED OR MODIFIED BY ANY CUTTING OR PATCHING.
- IT IS IN THE INTENT OF THESE DRAWINGS TO COVER ALL WORK AND MATERIAL FOR A FIRST CLASS INSTALLATION. ANY EQUIPMENT, PLUMBING FIXTURE, TRIM HARDWARE AND/OR DEVICES USUALLY UTILIZED IN THE CLASS OF WORK, THOUGH NOT SPECIFICALLY MENTIONED OR SHOWN ON THESE DRAWINGS, BUT WHICH MAY BE NECESSARY FOR THE SATISFACTORY COMPLETION OF THE WORK (AS DETERMINED BY THE ENGINEER) SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AS PART OF HIS TOTAL WORK.
- ALL HANGERS, CLAMPS, FASTENERS, AND HARDWARE SHALL BE 316 STAINLESS STEEL.

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REVISIONS

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FLORIDA LICENSE #75420
Engineering Professionals, Inc.
Mechanical Engineers
EB 6437
912 W. Dr. Martin Luther King Jr. Blvd.
Tampa, FL 33603 (813) 251-6848

DRAWN BY:
CHECKED BY:
DESIGNED BY:
CHECKED BY:

SHEET TITLE: PLUMBING NOTES, LEGEND, AND SCHEDULE

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

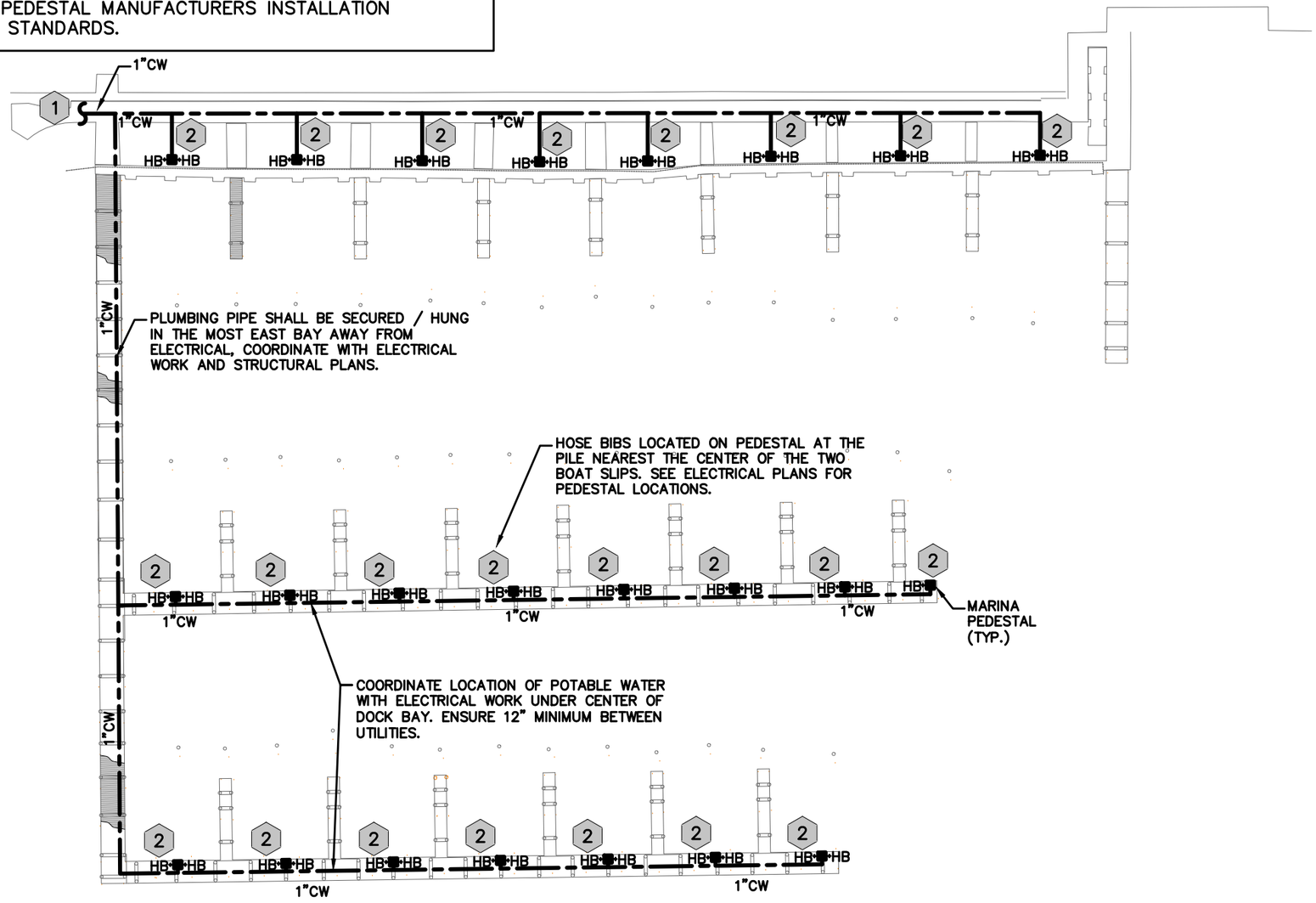
TWA NO.

SHEET NO. P–01

CONSTRUCTION NOTES:

1. CONTRACTOR TO FIELD LOCATE AND CONNECT NEW 1" CW LINE TO NEAREST EXISTING WATER LINE.

2. 1" CW OVER AND TO HOSE BIBB(S) AT PEDESTAL. SEE ELECTRICAL PLANS FOR PEDESTAL SPECIFICATION AND DETAILS. HOSE BIBS TO BE INSTALLED ON OPPOSITE SIDES OF PEDESTAL PARALLEL TO DOCK AND PER PEDESTAL MANUFACTURERS INSTALLATION GUIDELINES AND STANDARDS.



WATER FLOOR PLAN

N.T.S

23.0141

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REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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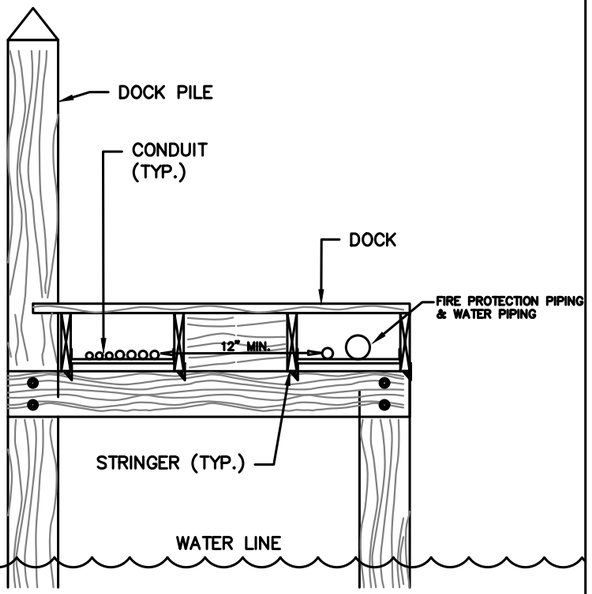
FLORIDA LICENSE #75420
Engineering Professionals, Inc.
Mechanical Engineers
EB 6437
912 W. Dr. Martin Luther King Jr. Blvd.
Tampa, FL 33603 (813) 251-6848

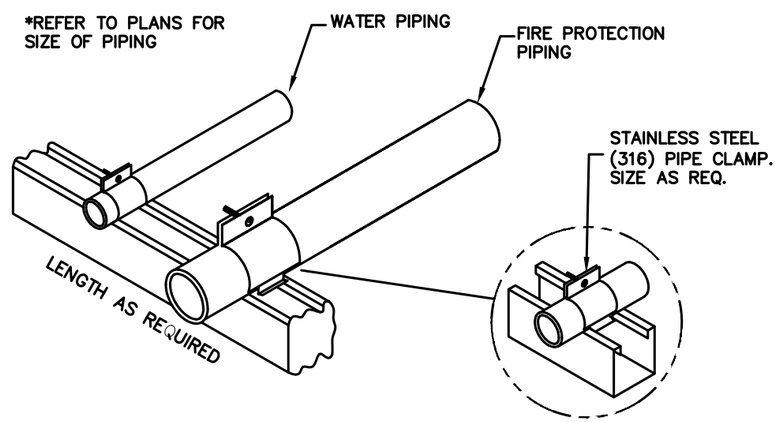
DRAWN BY:	
CHECKED BY:	
DESIGNED BY:	
CHECKED BY:	

SHEET TITLE:	PLUMBING FLOOR PLAN
TWA NO.	
PROJECT NAME:	SAFETY HARBOR MARINA REPLACEMENT
SHEET NO.	P-02



PIPE MOUNTING DETAIL

NO SCALE



PIPE SUPPORT DETAIL

NO SCALE

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Tampa, FL 33603 (813) 251-6848

DRAWN BY:
CHECKED BY:
DESIGNED BY:
CHECKED BY:

SHEET TITLE: PLUMBING DETAILS

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. P-03

FLORIDA DEPARTMENT OF Environmental Protection

Southwest District Office
13051 North Telecom Parkway #101
Temple Terrace, Florida 33637-0926

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

June 26, 2024

City of Safety Harbor
% Jamie Ahrens
1200 Railroad Avenue
Safety Harbor, FL, 34695
cahrens@cityofsafetyharbor.com

File No.: 52-0224448-006-EE, Pinellas County

Dear Jamie Ahrens:

On April 2, 2024, we received your request for verification of exemption to perform the following activities:

Replace an existing 4288-square-foot marina with an approximately 4230-square-foot marina, within 5 feet of the existing footprint with composite decking and replace associated mooring pilings, within a marina basin contiguous to Old Tampa Bay, a Class II Florida Waterbody. The project is located at 110 Veterans Memorial Lane, Florida 34695, Section 03, Township 29 South, Range 16 East, Pinellas County.

Your request has been reviewed to determine whether it qualifies for (1) regulatory exemption, (2) proprietary authorization (related to state-owned submerged lands), and (3) federal approval that may be necessary for work in wetlands or waters of the United States.

Your project qualifies for all three. However, this letter does not relieve you from the responsibility of obtaining other federal, state, or local authorizations that may be required for the activity.

State water quality certification is waived for activities that are exempt under rule 62-330.051, F.A.C.

If you change the project from what you submitted, the authorization(s) granted may no longer be valid at the time of commencement of the project. Please contact us prior to beginning your project if you wish to make any changes.

If you have any questions regarding this matter, please contact Nicholle Ponce Leon via email at Nicholle.PonceLeon@FloridaDEP.gov.

1. Regulatory Review – Verified

Based on the information submitted, the Department has verified that the activity as proposed is exempt, under Chapter 62-330.051(5)(d), Florida Administrative Code, from the need to obtain a regulatory permit under Part IV of Chapter 373 of the Florida Statutes.

This exemption verification is based on the information you provided the Department and the statutes and rules in effect when the information was submitted. This verification may not be valid if site conditions materially change, the project design is modified, or the statutes or rules governing the exempt activity are amended. In the event you need to re-verify the exempt status for the activity, a new request and verification fee will be required. Any substantial modifications to the project design should be submitted to the Department for review, as changes may result in a permit being required.

2. Proprietary Review – Not Required

The activity does not appear to be located on sovereign submerged lands, and does not require further authorization under chapter 253 of the Florida Statutes, or chapters 18-20 or 18-21 of the Florida Administrative Code.

3. Federal Review

3.1 SPGP Approved

Your proposed activity as outlined in your application and attached drawings qualifies for Federal authorization pursuant to the State Programmatic General Permit VI-R1, and a **SEPARATE permit** or authorization **will not be required** from the U.S. Army Corps of Engineers. Please note that the Federal authorization expires on July 27, 2026. However, your authorization may remain in effect for up to 1 additional year, if provisions of Special Condition 15 of the SPGP VI-R1 permit instrument are met. You, as permittee, are required to adhere to all General Conditions and Special Conditions that may apply to your project. Special conditions required for your project are attached. A copy of the SPGP VI-R1 with all terms and conditions and the General Conditions may be found online in the Jacksonville District Regulatory Division Sourcebook (https://www.saj.usace.army.mil/Missions/Regulatory/Source-Book/).

Authority for review - an agreement with the USACOE entitled "Coordination Agreement Between the U. S. Army Corps of Engineers (Jacksonville District) and the Florida Department of Environmental Protection (or Duly Authorized Designee), State Programmatic General Permit", Section 10 of the Rivers and Harbor Act of 1899, and Section 404 of the Clean Water Act.

3.2. Coastal Zone Management Presumed

The U.S. Army Corps of Engineers (Corps) or any designated federal, state or local agency administering general permits on behalf of the Corps under 33 C.F.R. Section 325.2(b)(2) may presume the verified exempt activities are consistent with the permitting Agency's authorities within the FCMP, provided the activity receives any applicable authorization to use and occupy state-owned submerged lands under Chapter 253, F.S., and, as applicable, Chapter 258, F.S.

3.3. Water Quality Certification Waived

This permit also constitutes an e*xpress waiver* of water quality certification under Section 401 of the Clean Water Act, 33 U.S.C. Section 1341. Pursuant to Rule 62-330.062, F.A.C. State Water Quality Certification is waived for activities that are exempt under rule 62-330.051 or 62-330.0511, F.A.C.

Additional Information

Please retain this letter. The activities may be inspected by authorized state personnel in the future to ensure compliance with appropriate statutes and administrative codes. If the activities are not in compliance, you may be subject to penalties under Chapter 373, F.S., and Chapter 18-14, F.A.C.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;
(b) The name, address, any e-mail address, any facsimile number, and telephone number of the petitioner, if the petitioner is not represented by an attorney or a qualified representative; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
(c) A statement of when and how the petitioner received notice of the agency decision;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant and persons entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 21 days of publication of the notice or within 21 days of receipt of the written notice, whichever occurs first. You cannot justifiably rely on the finality of this decision unless notice of this decision and the right of substantially affected persons to challenge this decision has been duly published or otherwise provided to all persons substantially affected by the decision. While you are not required to publish notice of this action, you may elect to do so pursuant Rule 62-110.106(10)(a).

The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C. If you do not publish notice of this action, this waiver will not apply to persons who have not received written notice of this action.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation

Mediation is not available in this proceeding.

FLAWAC Review

The applicant, or any party within the meaning of Section 373.114(1)(a) or 373.4275, F.S., may also seek appellate review of this order before the Land and Water Adjudicatory Commission under Section 373.114(1) or 373.4275, F.S. Requests for review before the Land and Water Adjudicatory Commission must be filed with the Secretary of the Commission and served on the Department within 20 days from the date when the order is filed with the Clerk of the Department.

Judicial Review

Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

EXECUTION AND CLERKING

Executed in Hillsborough County, Florida.
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Sincerely,

Jessica Hamilton

Jessica Hamilton
Environmental Specialist III
Permitting & Waste Cleanup Program
Southwest District

Enclosures:
Ch. 62-330.051(5)(d), F.A.C. and Section 403.813(1)(d), F.S.
Special Conditions for Federal Authorization for SPGP VI-R1
General Conditions for Federal Authorization for SPGP VI-R1
Commencement Notification Form
Self-Certification Statement of Compliance
Department of the Army Permit Transfer Form

Attachments:
Project Plans (34 Pages)
Department of the Army State Programmatic General Permit (SPGP VI-R1) at:
https://floridadep.gov/southwest/sw-permitting/documents/spgp-vi-r1-attachments

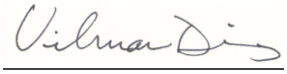
cc:
Nicholle Ponce Leon, Southwest District, Nicholle.PonceLeon@FloridaDEP.gov
ERP Permitting, Southwest District, sw_erp@floridadep.gov
U.S. Army Corps of Engineers, tampareg@usace.army.mil
Rachel Schmidt, Consultant, rschmidt@drmp.com

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this document and all attachments were sent on the filing date below to the above listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to 120.52(7), F.S., with the designated Department Clerk, receipt of which is hereby acknowledged.



June 26, 2024

Clerk **Date**

62-330.051(5)(d), F.A.C.

(5) Dock, Pier, Boat Ramp and Other Boating-related Work –

(d) Replacement or repair of existing docks and piers, including mooring piles, in accordance with section 403.813(1)(d), F.S., provided the existing structure is still functional or has been rendered non-functional within the last year by a discrete event, such as a storm, flood, accident, or fire.

403.813(1)(d), F.S.

(1) A permit is not required under this chapter, chapter 373, chapter 61-691, Laws of Florida, or chapter 25214 or chapter 25270, 1949, Laws of Florida, for activities associated with the following types of projects; however, except as otherwise provided in this subsection, this subsection does not relieve an applicant from any requirement to obtain permission to use or occupy lands owned by the Board of Trustees of the Internal Improvement Trust Fund or a water management district in its governmental or proprietary capacity or from complying with applicable local pollution control programs authorized under this chapter or other requirements of county and municipal governments:

(d) The replacement or repair of existing docks and piers, except that fill material may not be used and the replacement or repaired dock or pier must be in the same location and of the same configuration and dimensions as the dock or pier being replaced or repaired. This does not preclude the use of different construction materials or minor deviations to allow upgrades to current structural and design standards.

Special Conditions for Federal Authorizations for SPGP VI-R1

1. Authorization, design and construction must adhere to the terms of the SPGP VI instrument including the General Conditions for All Projects, Special Conditions for All Projects, Applicable activity-specific special conditions, Procedure and Work Authorized sections.

2. Design and construction must adhere to the PDCs for In-Water Activities (Attachment 28, from PDCs AP.7 through AP11, inclusive, of JAXBO) (Reference: JAXBO PDC AP.1.).

3. All activities must be performed during daylight hours (Reference: JAXBO PDC AP.6.).

4. For all projects involving the installation of piles, sheet piles, concrete slab walls or boatlift I-beams (Reference Categories A, B and C of JAXBO *PDCs for In-Water Noise from Pile and Sheet Pile Installation*, page 86):

   a. Construction methods limited to trench and fill, pilot hole (auger or drop punch), jetting, vibratory, and impact hammer (however, impact hammer limited to installing no more than 5 per day).

   b. Material limited to wood piles with a 14-inch diameter or less, concrete piles with a 24-inch diameter/width or less, metal pipe piles with a 36-inch diameter or less, metal boatlift I-beams, concrete slab walls, vinyl sheet piles, and metal sheet piles.

   c. Any installation of metal pipe or metal sheet pile by impact hammer is not authorized (Reference: Categories D and E of JAXBO *PDCs for In-Water Noise from Pile and Sheet Pile Installation*, page 86.).

   d. Projects within the boundary of the NOAA Florida Keys National Marine Sanctuary require prior approval from the Sanctuary (Reference: JAXBO PDCs AP.14 and A1.6).

5. The Permittee shall comply with the "Standard Manatee Conditions for In-Water Work – 2011" (Attachment 29).

6. No structure or work shall adversely affect or disturb properties listed in the National Register of Historic Places or those eligible for inclusion in the National Register. Prior to the start of work, the Applicant/Permittee or other party on the Applicant's/Permittee's behalf, shall conduct a search of known historical properties by contracting a professional archaeologist, and contacting the Florida Master Site File at 850-245-6440 or SiteFile@dos.state.fl.us. The Applicant/Permittee can also research sites in the National Register Information System (NRIS). Information can be found at http://www.cr.nps.gov/nr/research.

   a. If, during the initial ground disturbing activities and construction work, there are archaeological/cultural materials unearthed (which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes or any other physical remains that could be associated with Native American cultures or early colonial or American settlement), the Permittee shall

immediately stop all work in the vicinity and notify the Compliance and Review staff of the State Historic Preservation Office at 850-245- 6333 and the Corps Regulatory Archeologist at 904-232-3270 to assess the significance of the discovery and devise appropriate actions, including salvage operations. Based on the circumstances of the discovery, equity to all parties, and considerations of the public interest, the Corps may modify, suspend, or revoke the permit in accordance with 33 C.F.R. § 325.7.

b. In the unlikely event that human remains are identified, the remains will be treated in accordance with Section 872.05, Florida Statutes; all work in the vicinity shall immediately cease and the local law authority, and the State Archaeologist (850-245-6444) and the Corps Regulatory Archeologist at 904-232-3270 shall immediately be notified. Such activity shall not resume unless specifically authorized by the State Archaeologist and the Corps.

7. The Permittee is responsible for obtaining any "take" permits required under the U.S. Fish and Wildlife Service's regulations governing compliance with these laws. The Permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such "take" permits are required for a particular activity.

8. Mangroves. The design and construction of a Project must comply with the following (Reference: JAXBO PDCs AP.3 and AP.12.):

a. All projects must be sited and designed to avoid or minimize impacts to mangroves.

b. Mangrove removal must be conducted in a manner that avoids any unnecessary removal and is limited to the following instances:

(1) Removal to install up to a 4-ft-wide walkway for a dock.

(2) Removal of mangroves above the mean high water line (MHWL) provided that the tree does not have any prop roots that extend into the water below the MHWL.

(3) Mangrove trimming. Mangrove trimming refers to the removal (using hand equipment such as chain saws and/or machetes) of lateral branches (i.e., no alteration of the trunk of the tree) in a manner that ensures survival of the tree.

(a) Projects with associated mangrove trimming waterward of the MHWL are authorized if the trimming: (a) occurs within the area where the authorized structures are placed or will be placed (i.e., removal of branches that overhang a dock or lift), (b) is necessary to provide temporary construction access, and (c) is conducted in a manner that avoids any unnecessary trimming.

(b) Projects proposing to remove red mangrove prop roots waterward of the MHWL are not authorized, except for removal to install the dock walkways as described above.

9. For Projects authorized under this SPGP VI in navigable waters of the U.S., the Permittee understands and agrees that, if future operations by the United States require the removal,

relocation, or other alteration, of the structures or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

10. Notifications to the Corps. For all authorizations under this SPGP VI, including Self-Certifications, the Permittee shall provide the following notifications to the Corps:

a. Commencement Notification. Within 10 days from the date of initiating the work authorized by this permit the Permittee shall submit a completed "Commencement Notification" form (Attachment 8).

b. Corps *Self-Certification Statement of Compliance* form. Within 60 days of completion of the work authorized by this permit, the Permittee shall complete the "Self-Certification Statement of Compliance" form (Attachment 9) and submit it to the Corps. In the event that the completed work deviates in any manner from the authorized work, the Permittee shall describe the deviations between the work authorized by this permit and the work as constructed on the "Self-Certification Statement of Compliance" form. The description of any deviations on the "Self- Certification Statement of Compliance" form does not constitute approval of any deviations by the Corps.

c. Permit Transfer. When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date the enclosed form (Attachment 10).
d. Reporting Address. The Permittee shall submit all reports, notifications, documentation, and correspondence required by the general and special conditions of this permit to the following address.

(1) For standard mail: U.S. Army Corps of Engineers, Regulatory Division, Enforcement Section, P.O. Box 4970, Jacksonville, FL, 32232-0019.

(2) For electronic mail: SAJ-RD-Enforcement@usace.army.mil (not to exceed 10 MB). The Permittee shall reference this permit number, SAJ-2015-2575 on all submittals.

11. The District Engineer reserves the right to require that any request for authorization under this SPGP VI be evaluated as an Individual Permit. Conformance with the terms and conditions of the SPGP VI does not automatically guarantee Federal authorization.

12. On a case-by-case basis, the Corps may impose additional Special Conditions which are deemed necessary to minimize adverse environmental impacts.

13. Failure to comply with all conditions of the SPGP VI constitutes a violation of the Federal authorization.

14. The SPGP VI will be valid through the expiration date unless suspended or revoked by issuance of a public notice by the District Engineer. The Corps, in conjunction with the Federal resource agencies, will conduct periodic reviews to ensure that continuation of the permit during the period ending expiration date, is not contrary to the public interest. The SPGP VI will not be extended beyond the expiration date but may be replaced by a new SPGP. If revocation occurs, all future applications for activities covered by the SPGP VI will be evaluated by the Corps.

15. If the SPGP VI expires, is revoked, or is terminated prior to completion of the authorized work, authorization of activities which have commenced or are under contract to commence in reliance upon the SPGP VI will remain in effect provided the activity is completed within 12 months of the date the SPGP VI expired or was revoked.

Special Conditions for Docks, Piers, Associated Facilities, and other Minor Piling-Supported Structures.

16. Chickees must be less than 500 ft² and support no more than 2 slips (Reference: JAXBO PDC A2.1.6.).

17. The design and construction of a Project over marsh (emergent vegetation) must comply with the following:

    a. The piling-supported structure shall be aligned so as to have the smallest over- marsh footprint as practicable.

    b. The over-marsh portion of the piling-supported structure (decking) shall be elevated to at least 4 feet above the marsh floor.

    c. The width of the piling-supported is limited to a maximum of 4 feet. Any exceptions to the width must be accompanied by an equal increase in height requirement.

18. Mangroves. For pile-supported structures, the following additional requirements for mangroves found in the joint U.S. Army Corps of Engineers'/National Marine Fisheries Service's "Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat" U.S. Army Corps of Engineers/National Marine Fisheries Service updated November 2017 (Attachment 11) shall apply:

    a. The width of the piling-supported structure is limited to a maximum of 4 feet.

    b. Mangrove clearing is restricted to the width of the piling-supported structure.

    c. The location and alignment of the piling-supported structure should be through the narrowest area of the mangrove fringe.

19. Regarding SAV, the design and construction of a Project must comply with the

following:

a. A pile supported structure

(1) that is located on a natural waterbody (i.e. outside an artificial waterway that was excavated for boating access and is bordered by residential properties); and

(2) that is within the range of seagrass (estuarine waters within all coastal counties except for Nassau, Duval, St Johns, Flagler and Volusia north of Ponce Inlet), but outside of the range of Johnson's seagrass (the range of Johnson's seagrass is defined as Turkey Creek/Palm Bay south to central Biscayne Bay in the lagoon systems on the east coast of Florida) will be constructed to the following standards:

(a) If no survey is performed in accordance with the methods described in the Procedure section of this document, section I.3, then SAV is presumed present and the pile-supported structure must comply with, or provide a higher level of protection than, the protective criteria in the joint U.S. Army Corps of Engineers'/National Marine Fisheries Service's *"Construction Guidelines in Florida for Minor Piling- Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat*" U.S. Army Corps of Engineers/National Marine Fisheries Service updated November 2017 (Attachment 11). For the purposes of SPGP, two uncovered boatlifts are allowed.

(i) If the pile supported structure is currently serviceable, repair and replacement may occur in the same footprint without completion of a benthic survey.

(ii) Boatlifts and minor structures in Monroe County may be installed within existing boat slips without completion of a SAV survey. Boatlift accessory structures, like catwalks, shall adhere to *"Construction Guidelines in Florida for Minor Piling- Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat*" U.S. Army Corps of Engineers/National Marine Fisheries Service updated November 2017 (Attachment 11) if a SAV survey has not been completed.

(iii) A marginal dock may be constructed a maximum of 5 feet overwater, as measured from the waterward face (wet face) of the seawall).

(b) If a survey is performed in accordance with the methods described in the Procedure section of this document, section I.3, and SAV is present (including seagrass, tidal freshwater SAV and emergent vegetation), then the pile-supported structure must comply with, or provide a higher level of protection than, the protective criteria in the joint U.S. Army Corps of Engineers'/National Marine Fisheries Service's "Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat" U.S. Army Corps of Engineers/National Marine Fisheries Service updated November 2017 (Attachment 11). For the purposes of this permit, two uncovered boatlifts are allowed.

(i) If the pile supported structure is currently serviceable, repair and replacement may occur in the same footprint without completion of a benthic survey.

(ii) Boatlifts may be installed within existing boat slips without completion of a SAV

survey.

(iii) A marginal dock may be constructed a maximum of 5 feet overwater, as measured from the waterward face (wet face) of the seawall).

(c) If a survey is performed in accordance with the methods described in the Procedure section of this document, section I.3, and SAV is absent (including seagrass, tidal freshwater SAV and emergent vegetation), then no design restrictions are required and boatlifts may include a cover.

(d) A pile supported structure

(i) that is located on a natural waterbody (i.e. outside an artificial waterway that was excavated for boating access and is bordered by residential properties); and

(ii) that is within the range of Johnson's seagrass (the range of Johnson's seagrass is defined as Turkey Creek/Palm Bay south to central Biscayne Bay in the lagoon systems on the east coast of Florida) but not within Johnson's seagrass critical habitat will be constructed to the following standards:

(iii) If no survey is performed in accordance with the methods described in the Procedure section of this document, section I.3, then seagrass is presumed present and the pile-supported structure must comply with or provide a higher level of protection than, the protective criteria in the joint U.S. Army Corps of Engineers'/National Marine Fisheries Service's "Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat" U.S. Army Corps of Engineers/National Marine Fisheries Service updated November 2017 (Attachment 11) with the sole exception of the number of allowable boat lifts. For the purposes of this permit, two uncovered boatlifts are allowed.

(e) If a survey is performed in accordance with the methods described in the Procedure section of this document, section I.3, and SAV is present (including seagrass, tidal freshwater SAV and emergent vegetation), THEN pile-supported structure must comply with or provide a higher level of protection than, the protective criteria in the joint U.S. Army Corps of Engineers'/National Marine Fisheries Service's "Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat" U.S. Army Corps of Engineers/National Marine Fisheries Service updated November 2017 (Attachment 11). For the purposes of this permit, two uncovered boatlifts are allowed.

(f) If a survey is performed in accordance with the methods described in the procedure section of this document, section I.3, and SAV is absent (including seagrass, tidal freshwater SAV and emergent vegetation), THEN no design restrictions are required and boatlifts may include a cover.

(g) A pile supported structure located within Johnson's seagrass critical habitat will be constructed to the following standards:

(i) If no survey is performed in accordance with the methods described in the Procedure section of this document, section I.3, then seagrass is presumed present and the pile-supported structure must comply with or provide a higher level of protection than, the protective criteria in the joint U.S. Army Corps of Engineers'/National Marine Fisheries Service's "Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat" U.S. Army Corps of Engineers/National Marine Fisheries Service updated November 2017 (Attachment 11) with the sole exception of the number of allowable boat lifts. For the purposes of this permit, two uncovered boatlifts are allowed.

(ii) If a survey is performed in accordance with the methods described in the Procedure section of this document, section I.3, and SAV is absent and the project is

1. A dock replacement in the same footprint, no design restrictions are required.

2. A new dock or dock expansion THEN pile-supported structure must comply with or provide a higher level of protection than, the protective criteria in the joint U.S. Army Corps of Engineers'/National Marine Fisheries Service's "Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat" U.S. Army Corps of Engineers/National Marine Fisheries Service updated November 2017 (Attachment 11). For the purposes of this permit, two uncovered boatlifts are allowed.

(iii) If a survey is performed in accordance with the methods described in the Procedure section of this document, section I.3, and SAV is present (including seagrass, tidal freshwater SAV and emergent vegetation), then pile-supported structure must comply with or provide a higher level of protection than, the protective criteria in the joint U.S. Army Corps of Engineers'/National Marine Fisheries Service's "Construction Guidelines in Florida for Minor Piling-Supported Structures Constructed in or over Submerged Aquatic Vegetation (SAV), Marsh or Mangrove Habitat" U.S. Army Corps of Engineers/National Marine Fisheries Service updated November 2017 (Attachment 11). For the purposes of this permit, two uncovered boatlifts are allowed.

20. North Atlantic Right Whale. The attached North Atlantic Right Whale Information Form (Attachment 30) describes the presence of North Atlantic right whales in the area and the Federal regulations governing the approach to North Atlantic right whales. The FDEP or Designee will attach the North Atlantic Right Whale Information Form to their authorizations for any dock project (new construction, repair, or replacement) at a private residence located within 11 nautical miles of an inlet that leads to areas within the known range of North Atlantic right whale. These zones, with an 11 nm radius, are described by the North Atlantic Right Whale Educational Sign Zones, Attachment 7 (from Section 2.1.1.4 of JAXBO, pages 31 and 32, inclusive). (Reference JAXBO PDC A2.4).

21. Educational Signs. For commercial, multi-family, or public facilities, and marine events, signs must be posted as described below (Reference: These replicate JAXBO PDCs A.2.2 and A.2.2.1 to A.2.2.3., inclusive, within the table PDCs Specific to Activity 2 - Pile Supported Structures and Anchored Buoys, starting on page 112.):

a. For commercial, multi-family, or public facilities, and marine events, signs must be posted in a visible location(s), alerting users of listed species in the area susceptible to vessel strikes and hook-and-line captures. The most current version of the signs that must be downloaded and sign installation guidance are available at: (https://www.fisheries.noaa.gov/southeast/consultations/protected-species- educational-signs). The signs required to be posted by area are stated below: https://www.fisheries.noaa.gov/southeast/consultations/protected-species- educational-signs

(1) All projects in Florida shall use the Save Sea Turtle, Sawfish, and Dolphin sign. These signs shall include contact information to the sea turtle and marine mammal stranding networks and smalltooth sawfish encounter database.

(2) Projects within the North Atlantic right whale educational sign zone shall post the Help Protect North Atlantic Right Whales sign.

(3) On the east coast of Florida, projects located within the St. Johns River and those occurring north of the St. Johns River to the Florida-Georgia line shall post the Report Sturgeon sign. On the west coast of Florida, projects occurring from the Cedar Key, Florida north to the Florida-Alabama line.

22. Monofilament Recycling Bins. For commercial, multi-family, or public facilities, monofilament recycling bins must be provided as described below (Reference: The below replicates PDC A.2.3 within the table PDCs Specific to Activity 2 –Pile Supported Structures and Anchored Buoys, the PDC itself on page 113 of the JAXBO.):

a. For commercial, multi-family, or public facilities, monofilament recycling bins must be provided at the docking facility to reduce the risk of turtle or sawfish entanglement in, or ingestion of, marine debris. Monofilament recycling bins must:

(1) Be constructed and labeled according to the instructions provided at http://mrrp.myfwc.com.

(2) Be maintained in working order and emptied frequently (according to http://mrrp.myfwc.com standards) so that they do not overflow.

23. Lighting for docks installed within visible distance of ocean beaches. If lighting is necessary, then turtle-friendly lighting shall be installed. Turtle-friendly lighting is explained and examples are provided on the Florida Fish and Wildlife Conservation Commission website: http://myfwc.com/wildlifehabitats/managed/sea-turtles/lighting/ (Reference: JAXBO PDC A2.8.).

24. Construction Location. Project construction shall take place from uplands or from floating equipment (e.g., barge); prop or wheel-washing is prohibited (Reference: JAXBO PDC A2.9.).

25. Aids to Navigation (ATONs). ATONs must be approved by and installed in accordance with the requirements of the U.S. Coast Guard (i.e., 33 C.F.R., chapter I, subchapter C, part 66,

Section 10 of the Rivers and Harbors Act, and any other pertinent requirements) (Reference: JAXBO PDC A2.5.).

26. Aids to Navigation (ATONs) in Acropora critical habitat. The distance from ATONs to ESA-listed corals and Acropora critical habitat (Attachment 20) shall ensure there are no impacts to the corals or the essential feature of Acropora critical habitat from the movement of buoys and tackle. The appropriate distance shall be based on the size of the anchor chain or other tackle to be installed to secure the buoy to its anchor, particularly when the design of the ATON does not prohibit the contact of tackle with the marine bottom. In all cases, buoy tackle will include flotation to ensure there is no contact between the anchor chain or line and the marine bottom (Reference: JAXBO PDC A2.10.).

27. Within Loggerhead sea turtle critical habitat (Reference: JAXBO PDC A2.15.):

    (1) ATONs (pile-supported and anchored buoys) are allowed in nearshore reproductive habitat of the Northwest Atlantic Distinct Population Segment (NWA DPS) of loggerhead sea turtle critical habitat.

    (2) No other pile-supported structures are allowed in nearshore reproductive habitat.

General Conditions for All Projects:

1. The time limit for completing the work authorized ends on July 27, 2026.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner on the enclosed form (Attachment 10) and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Further Information:

1. Limits of this authorization.

   a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.

   b. This permit does not grant any property rightsor exclusive privileges.

   c. This permit does not authorize any injury to the property or rights of others.

   d. This permit does not authorize interference with any existing or proposed Federal projects.

2. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

   a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

   b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by oron behalf of the United States in the public interest.
   c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

   d. Design or Construction deficiencies associated with the permittedwork.

   e. Damage claims associated with any future modification, suspension, or revocation of this permit.

3. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

4. Reevaluation of Permit Decision: This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

   a. You fail to comply with the terms and conditions of thispermit.

   b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 3 above).

   c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

5. Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you

comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CER 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date the enclosed form.

The Permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structures or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the U.S. Army Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal, relocation or alteration.

COMMENCEMENT NOTIFICATION

*Within 10 days of initiating the authorized work, submit this form via electronic mail to saj-rd-enforcement@usace.army.mil (preferred, not to exceed 15 MB) **or** by standard mail to U.S. Army Corps of Engineers, Enforcement Section, P.O. Box 4970, Jacksonville, FL 32232-0019.*

1. **Department of the Army Permit Number**: SAJ-2015-2575, SPGP VI-R1

   FDEP or Designee Permit Number: _____

2. **Permittee Information**:

   Name: _____

   Email: _____

   Address: _____

   _____

   Phone: _____

3. **Construction Start Date**: _____

4. **Contact to Schedule Inspection**:

   Name: _____

   Email: _____

   Phone: _____

_____
Signature of Permittee

_____
Printed Name of Permittee

_____
Date

Dated 9/18/201

SELF-CERTIFICATION STATEMENT OF COMPLIANCE
SPGP VI-R1

Permit Number: _____

Permittee's Name & Address (please print or type):_____

_____

_____

Telephone Number: _____

Location of the Work: _____

_____

Date Work Started: _____ Date Work Completed:
_____

PROPERTY IS INACCESSIBLE WITHOUT PRIOR NOTIFICATION: YES _____ NO_____

TO SCHEDULE AN INSPECTION PLEASE CONTACT _____
AT _____

Description of the Work (e.g. bank stabilization, residential or commercial filling, docks, dredging, etc.):_____

_____

_____

Acreage or Square Feet of Impacts to Waters of the United States: _____

Describe Mitigation completed (if applicable): _____

_____

_____

Describe any Deviations from Permit (attach drawing(s) depicting the deviations):

_____

_____

****

I certify that all work, and mitigation (if applicable) was done in accordance with the limitations and conditions as described in the permit. Any deviations as described above are depicted on the attached drawing(s).

_____
Signature of Permittee

_____
Date

Department of the Army Permit Transfer for SPGP VI-R1

PERMITEE: _____

PERMIT NUMBER: _____ DATE: _____

ADDRESS/LOCATION OF PROJECT:

_____

_____

(Subdivision) (Lot) (Block)

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. Although the construction period for works authorized by Department of the Army permits is finite, the permit itself, with its limitations, does not expire.

To validate the transfer of this permit and the associated responsibilities associated with compliance with its terms and conditions, have the transferee sign and date below and mail to the U.S. Army Corps of Engineers, Enforcement Branch, Post Office Box 4970, Jacksonville, FL 32232-0019.

_____ _____

(Transferee Signature) (Date)

_____

(Name Printed)

_____

(Street address)

_____

(Mailing address)

_____

CITY OF SAFETY HARBOR

CONTRACT PLANS
MARINA REPLACEMENT
110 VETERANS MEMORIAL LANE

CONTRACT PLANS COMPONENTS

STRUCTURES
CIVIL
ELECTRICAL
PLUMBING
FIRE PROTECTION

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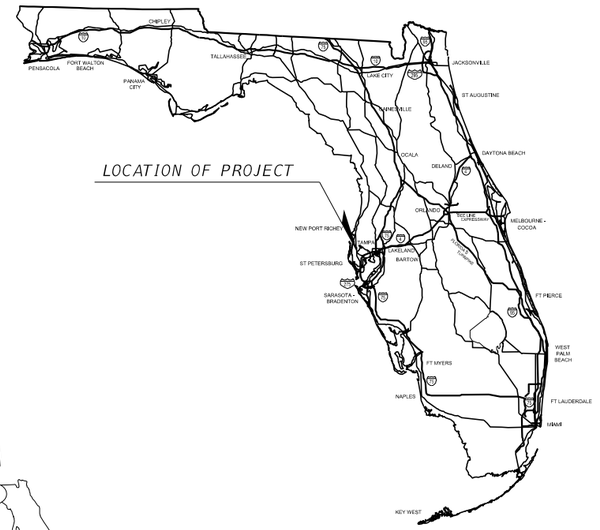
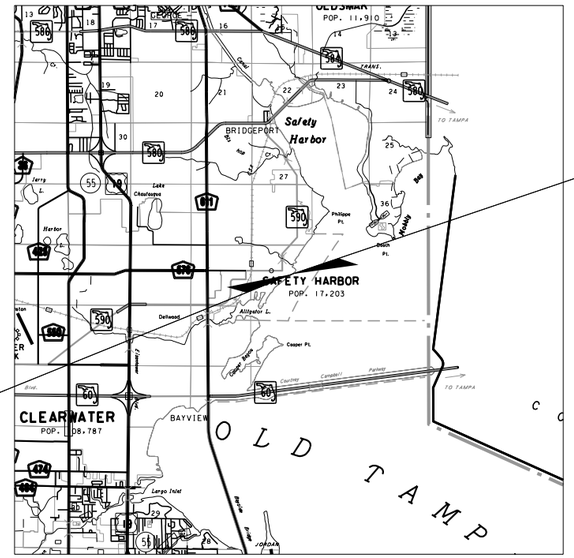
SHEET NO.	SHEET DESCRIPTION
S-02	SIGNATURE SHEET
FP-01	FIRE PROTECTION COMPLIANCE NOTES
FP-02	FIRE PROTECTION SPECIFICATIONS
FP-03	FIRE PROTECTION GENERAL NOTES
FP-04	FIRE PROTECTION LEGEND
FP-05	FIRE PROTECTION FLOOR PLAN
P-01	PLUMBING NOTES, LEGEND, AND SCHEDULE
P-02	WATER FLOOR PLAN





LOCATION MAP
SECTION 3 TOWNSHIP 29S, RANGE 16E

BEGIN PROJECT
℄ VETERANS MEMORIAL LANE
N 27°59'22.96"
W 82°41'15.35"

END PROJECT
℄ VETERANS MEMORIAL LANE
N 27°59'21.62"
W 82°41'12.88"

BOARD OF CITY COMMISSIONERS

JOE AYOUB	MAYOR
ANDY STEINGOLD	VICE-MAYOR
NANCY BESORE	COMMISSIONER
CARLOS DIAZ	COMMISSIONER
JACOB BURNETT	COMMISSIONER

SHOP DRAWINGS
TO BE SUBMITTED TO:

DAVID R. JOHNSON, P.E.
DRMP, INC.
15310 AMBERLY DRIVE
SUITE 310
TAMPA FL, 33647

PLANS PREPARED BY:

DRMP, INC.
15310 AMBERLY DRIVE
SUITE 310
TAMPA FL, 33647
PHONE: (813) 265-9800
DAVID R. JOHNSON. P.E. 79354

100% SUBMITTAL NOT FOR CONSTRUCTION

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

GOOGLE EARTH LINK PROVIDED FOR BRIDGE LOCATION.
https://maps.app.goo.gl/VC2t1DhWkQB3zUEAA

GOVERNING DESIGN STANDARDS:
Florida Department of Transportation, FY 2024-25 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs) and as amended by Contract Documents.

For Design Standard Plans click on "Standards Plans for Road and Bridge Construction" at the following web site: Https://www.fdot.gov/design/standardplans/

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, Standard Specifications for Road and Bridge Construction FY2024-25 as amended by Contract Documents.

KEY SHEET REVISIONS

DATE	BY	DESCRIPTION

ASSISTANT PUBLIC WORKS DIRECTOR - CHARLES AHRENS, P.E.
LESIURE SERVICES DIRECTOR - ANDREA NORWOOD

ENGINEER OF RECORD: DAVID R. JOHNSON, P.E.
P.E. NO.: 79354

FISCAL YEAR	SHEET NO.
24	S-01

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

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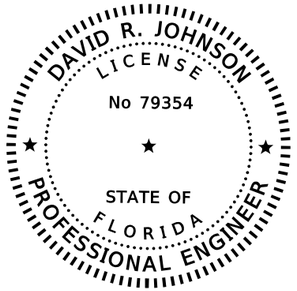

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ON THE DATE ADJACENT TO THE SEAL.

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DRMP, INC.
DAVID R. JOHNSON, P.E.
P.E. LICENSE NUMBER 79354
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FL. 33647

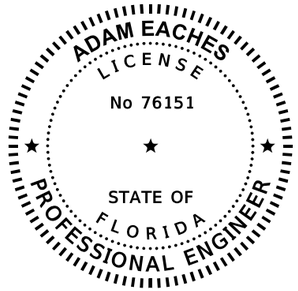
THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

STRUCTURE PLANS

SHEET NO.	SHEET DESCRIPTION
S-01	KEYSHEET
S-02	SIGNATURE SHEET
S-03	GENERAL NOTES (1 OF 2)
S-04	GENERAL NOTES (2 OF 2)
S-05	SUMMARY OF QUANTITIES
S-06	DEMOLITION PLAN
S-07	MARINA LAYOUT PLAN
S-09	FRAMING PLAN
S-10	TYPICAL SECTIONS (1 OF 2)
S-11	TYPICAL SECTIONS (2 OF 2)
S-12	MISCELLANEOUS DETAILS (1 OF 3)
S-13	MISCELLANEOUS DETAILS (2 OF 3)
S-14	MISCELLANEOUS DETAILS (3 OF 3)

SITE CIVIL PLANS

SHEET NO.	SHEET DESCRIPTION
C-01	EROSION CONTROL GENERAL NOTES
C-02	SITE CIVIL AND EROSION CONTROL PLAN



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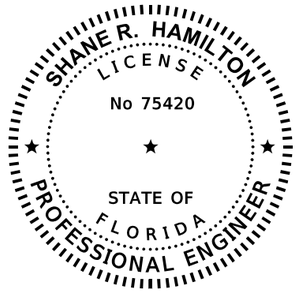
HALL ENGINEERING GROUP
ADAM EACHES, P.E.
P.E. LICENSE NUMBER 76151
3820 GUNN HIGHWAY, SUITE 200
TAMPA, FL. 33618

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

ELECTRICAL PLANS

SHEET NO.	SHEET DESCRIPTION
S-02	SIGNATURE SHEET
E-01	ELECTRICAL LEGEND
E-02	ELECTRICAL PLAN NOTES
E-03	ELECTRICAL DEMOLITION PLAN
E-04	ELECTRICAL PLAN
E-05	POWER ONE-LINE DIAGRAM NOTES
E-06	POWER ONE-LINE DIAGRAM
E-07	PANEL SCHEDULE A
E-08	PANEL SCHEDULE B
E-09	PANEL SCHEDULE C
E-10	MARINA PEDESTAL SCHEDULE
E-11	DETAILS



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ON THE DATE ADJACENT TO THE SEAL.

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ENGINEERING PROFESSIONALS, INC.
SHANE R. HAMILTON, P.E.
P.E. LICENSE NUMBER 75420
912 W. DR. MARTIN LUTHER KING JR. BLVD.
TAMPA, FL 33603

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

FIRE PROTECTION AND PLUMBING PLANS

SHEET NO.	SHEET DESCRIPTION
S-02	SIGNATURE SHEET
FP-01	FIRE PROTECTION COMPLIANCE NOTES
FP-02	FIRE PROTECTION SPECIFICATIONS
FP-03	FIRE PROTECTION GENERAL NOTES
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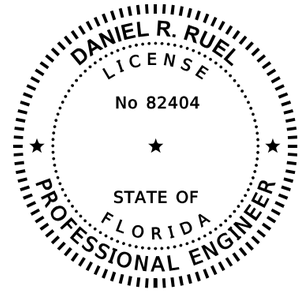

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ON THE DATE ADJACENT TO THE SEAL.

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TIERRA, INC.
DANIEL R. RUEL, P.E.
P.E. LICENSE NUMBER 82404
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FL 33637

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

STRUCTURE PLANS

SHEET NO.	SHEET DESCRIPTION
S-02	SIGNATURE SHEET
S-08	SOIL PROFILES

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
					100% SUBMITTAL NOT FOR CONSTRUCTION

DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FL 33647

DRAWN BY: BCS 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

SHEET TITLE: SIGNATURE SHEET

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. S-02

Plotted By: Christian.Hodges 6/13/2024 4:57:47 PM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_Signst01.dgn

SPECIFICATIONS

DESIGN AND CONSTRUCTION SPECIFICATIONS:

A) FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION FY2024-25 EDITION, AS AMENDED BY CONTRACT DOCUMENTS.
B) FLORIDA BUILDING CODE 8TH EDITION (2023).
C) NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION – AMERICAN WOOD COUNCIL 2018 EDITION.
D) AMERICAN SOCIETY OF CIVIL ENGINEERS, ASCE 7-16.
E) AISC STEEL CONSTRUCTION MANUAL 16TH EDITION.

DESIGN METHOD

LOAD AND RESISTANCE FACTOR DESIGN (LRFD) METHOD USING STRENGTH AND SERVICE LIMIT STATES.

DESIGN LOADINGS

1. DEAD LOAD – 10 PSF
2. LIVE LOAD – 100 PSF
3. WIND LOAD:
   A) DESIGN WIND SPEED 150 MPH
   B) RISK CATEGORY II
   C) EXPOSURE CATEGORY D
   D) IMPORTANCE FACTOR 1.0

GENERAL NOTES

1. COMPLY WITH ALL STATE, COUNTY, AND LOCAL ORDINANCES AND OBTAIN WORK PERMITS THAT ARE REQUIRED PRIOR TO CONSTRUCTION.
2. LOCATION, ELEVATION, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN IN ACCORDANCE WITH THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE PLANS, BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. VERIFY THE LOCATION, ELEVATION, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES AFFECTING THE WORK.
3. ALL DIMENSIONS IN THESE PLANS ARE MEASURED IN FEET AND INCHES EITHER HORIZONTALLY OR VERTICALLY UNLESS OTHERWISE NOTED.
4. PLAN ELEVATIONS ARE IN FEET AND REFER TO NAVD 1988 DATUM. VERTICAL DATUM CONVERSION, NGVD29 TO NAVD88 = -0.856
5. PROVIDE AND MAINTAIN TURBIDITY BARRIERS IN ACCORDANCE WITH PERMITS.
6. DRAWINGS ARE NOT TO SCALE UNLESS NOTED OTHERWISE.

MARINE NAVIGATION

1. MAINTAIN VISIBLE AND FUNCTIONAL EXISTING SIGNS AT ALL TIMES DURING CONSTRUCTION. AT THE APPROVAL OF THE ENGINEER TEMPORARILY RELOCATE EXISTING SIGNS TO FACILITATE CONSTRUCTION. RETURN ALL RELOCATED SIGNS TO THEIR ORIGINAL LOCATION AFTER CONSTRUCTION IS COMPLETED.
2. MARINE TRAFFIC CONSTRUCTION SIGNS ARE TO BE PLACED AT THE ENTRACE OF THE PARKING LOT AND AT THE CHANNEL ENTRANCE PRIOR TO THE BOAT RAMP FOR INCOMING MARINE TRAFFIC. PLACEMENT OF THE SIGNS IS TO BE SUCH THAT THEY ARE CLEARLY VISIBLE TO APPROACHING TRAFFIC. BARGES LEFT IN WATER IN LOW-LIGHT CONDITIONS SHALL BE ILLUMINATED SO AS TO BE VISIBLE TO MARINE TRAFFIC.
3. NOTIFY LT. CLARK SANFORD AT THE USCG SECTOR ST. PETERSBURG AT 813-228-2191 EXT. 8105 PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES. IN ADVANCE OF ACTIONS DURING CONSTRUCTION OR DEMOLITION WHICH POTENTIALLY AFFECT WATERWAY USERS AND PRIOR TO THE PLACEMENT OF ANY FLOATING CONSTRUCTION EQUIPMENT IN THE WATERWAY. NOTIFY NO LESS THAN 60 DAYS IN ADVANCE OF ACTIONS WHICH COULD POTENTIALLY AFFECT THE WATERWAY. KEEP THE CHANNEL OPEN TO WATERWAY TRAFFIC AT ALL TIMES.

MATERIALS

1. TIMBER: UNLESS OTHERWISE NOTED, ALL SAWN LUMBER AND TIMBER PILES EXCEPT BENT CAPS AND STRINGERS SHALL BE GRADE NO. 2 SOUTHERN YELLOW PINE OR BETTER. BENT CAPS AND STRINGERS SHALL BE NO. 1 SOUTHERN YELLOW PINE OR BETTER.
2. DECKING: ALL DECKING SHALL BE A UV-RESISTANT ENGINEERED COMPOSITE MATERIAL, WEARDECK OR EQUAL. COLOR OF DECKING SHALL BE "SADDLE". ALTERNATIVE TIMBER DECKING SHALL BE GRADE NO. 2 SOUTHERN YELLOW PINE OR BETTER.
3. HURRICANE FASTENERS: STAINLESS STEEL AISI TYPE 316 W/ UPLIFT CAPACITY OF 360 LBF. EACH MINIMUM.
4. ANCHOR BOLTS: STAINLESS STEEL AISI TYPE 316.
5. ANCHOR BOLT ADHESIVE: TYPE F ADHESIVE EPOXY MATERIAL.

UTILITIES

1. PROVIDE TWO WORKING DAYS NOTICE TO UTILITY AGENCY/OWNER'S (UAO) IN ORDER TO LOCATE AND IDENTIFY THEIR EXISTING UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION, AS ESTABLISHED BY THE "UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT".
2. COORDINATE CONSTRUCTION SCHEDULING WITH UTILITY AGENCY/OWNER'S. MEET WITH UAO'S PRIOR TO THE PRE-CONSTRUCTION CONFERENCE TO ADJUST THEIR SCHEDULES TO COINCIDE WITH THE CONSTRUCTION SCHEDULE.

EXISTING STRUCTURE

1. REMOVAL OF EXISTING STRUCTURES SHALL COMPLY WITH SECTION 110-7 OF THE SPECIFICATIONS. IF PILES ARE UNABLE TO BE PULLED CLEANLY, CUT PILES 2'-0" BELOW MUDLINE. PROPERLY DISPOSE OF TREATED TIMBER PER SPECIFICATIONS. WORK IS TO BE PAID FOR UNDER PAY ITEM 110-82, "REMOVE & DISPOSE OF STRUCTURAL TIMBER."
2. ORIGINAL STRUCTURE YEAR BUILT IS UNKNOWN. MAJORITY OF STRUCTURE WAS RECONSTRUCTED IN 2006. 2006 EXISTING PLANS ARE PROVIDED AND ARE FOR INFORMATIONAL PURPOSES ONLY.

MONITOR EXISTING STRUCTURES

MONITOR SETTLEMENT AND VIBRATIONS ON EXISTING STRUCTURES PER SPECIFICATIONS SECTION 108.

PILE INSTALLATION NOTES

1. ALL 8" Ø TIMBER DOCK PILES AND 10" Ø TIE PILES SHALL BE DRIVEN. JETTING IS NOT ALLOWED WITHOUT APPROVAL OF THE ENGINEER.
2. VERIFY THE LOCATION OF ALL UTILITIES AND NOTIFY ALL INVOLVED UTILITY COMPANIES PRIOR TO EXCAVATION, PILE DRIVING OR CONSTRUCTION TO AVOID DAMAGE. ENSURE THAT ACTIVE UTILITIES ARE PROPERLY MAINTAINED AND PROTECTED DURING CONSTRUCTION.
3. FOR DETAILS REGARDING SPT SOIL BORINGS, SEE "SOIL PROFILES" SHEET.
4. PRIOR TO PILE DRIVING OPERATIONS, INFORM THE ENGINEER IF ANY PROPOSED PILE LOCATION INTERFERES WITH EXISTING PILE, AND PILE WAS UNABLE TO BE CLEANLY REMOVED.
5. DRIVE PILES TO THE NOMINAL BEARING RESISTANCE IN ACCORDANCE WITH STANDARD SPECIFICATION 455 AND AS FOLLOWS,

$$\frac{\text{FACTORED DESIGN LOAD + NET SCOUR RESISTANCE + DOWN DRAG}}{\emptyset}$$

6. NOMINAL BEARING RESISTANCE = 7 TONS BASED ON FACTORED DESIGN LOAD = 8 KIPS AND Ø = 0.65.
7. ESTIMATED PILE TIP DEPTH BELOW MUDLINE VARIES (9 FT. TO 22 FT.). REFUSAL MAY BE ENCOUNTERED PRIOR TO THESE DEPTHS IF A DENSER SOIL LAYER IS ENCOUNTERED.
8. SELECT THE APPROPRIATE HAMMER TO ACHIEVE DESIGN REQUIREMENTS SHOWN IN THE PLANS AND SUBMIT A PILE INSTALLATION PLAN PRIOR TO MOBILIZATION.
9. RESTRICT PILE DRIVING TO DAYTIME HOURS.
10. WEATHERED LIMESTONE WAS ENCOUNTERED WITHIN BORINGS. EXCAVATIONS/PREFORMING INTO AND/OR THROUGH THESE MATERIALS WILL BE DIFFICULT AND REQUIRE NON-CONVENTIONAL CONSTRUCTION TECHNIQUES AND SPECIALIZED EQUIPMENT. LIMESTONE IS POROUS AND WILL BE DIFFICULT TO DEWATER.
11. ARTESTIAN CONDITIONS SHOULD BE EXPECTED. TOOLS AND CONSTRUCTION METHODS SHALL INCLUDE THE ABILITY TO HANDLE A POTENTIOMETRIC HEAD ELEVATION OF +10 FT. (NGVD) AT NO ADDITIONAL COST.
12. CONTACT THE ENGINEER IF PRACTICAL REFUSAL IS MET BEFORE 10 FEET OF EMBEDMENT IS ACHIEVED.

PILE WRAP

1. INSTALL PILE WRAP PER MANUFACTURER'S RECOMMENDATIONS.
2. PILE WRAP: 0.03" BLACK, UV-RESISTANT POLYETHYLENE MATERIAL

MISCELLANEOUS

1. CLEAT: 8" STANDARD MOUNT CLEAT, STAINLESS STEEL
2. SAFETY LADDERS: 7 STEP RETRACTABLE WITH 2" STEP WIDTH, ALUMINUM
3. PILE CAPS: BLACK, CONICAL SHAPED, PVC MATERIAL
4. SECURITY GATE: 6 FT. HEIGHT W/ GATE LOCK. HOT DIP GALVANIZED STEEL W/ BLACK POWDER COAT FINISH. PROVIDE ORNAMENTAL GATE POSTS WITH MATCHING MATERIAL AND BLACK POWDER COAT FINISH TO GATE. DURAGATE DGT-GGFW FLAT TOP GARDEN GATE OR EQUAL.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
					100% SUBMITTAL NOT FOR CONSTRUCTION

DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FL 33647

DRAWN BY: BCS 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

SHEET TITLE: GENERAL NOTES (1 OF 2)

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. S-03

Plotted By: Christian.Hodges 6/13/2024 4:45:02 PM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_GeneralNotes01.dgn

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WOOD

1. ALL MEMBERS SHALL BE AIR DRIED TO LESS THAN 19% MOISTURE CONTENT, GRADED IN ACCORDANCE WITH THE SPIB GRADE RULES, SECTION 4, AND MAY HAVE ANY OR ALL OF THE CHARACTERISTICS OF THIS GRADE.
2. ALL DECKING SHALL BE CONTINUOUS UNLESS OTHERWISE NOTED IN THE PLANS.
3. ALL BOLT HOLES THROUGH TIMBERS TO BE AN EXTRA 1/16" IN DIAMETER RELATIVE TO THE BOLT DIAMETER.
4. MEMBERS WITH WANE OF 3/8" OR MORE MAY BE GROUNDS FOR REJECTION, REMOVAL, AND REPLACEMENT.
5. INSTALL DECKING PER MANUFACTURER RECOMMENDATIONS.
6. TREAT ALL WOOD SURFACES EXPOSED TO VIEW WITH A FINISH & SEAL WATER REPELLENT. COLOR OF REPELLENT SHALL MATCH COLOR OF COMPOSITE DECKING.
7. BEAMS, STRINGER, AND RAILS SHALL BE CONTINUOUS OVER SINGLE SPANS UNLESS OTHERWISE NOTED IN THE PLANS.
8. FIELD PRESERVATIVE CHEMICALS SHALL BE APPLIED TO ALL FIELD CUTS AND DRILLED HOLES TO MAINTAIN TIMBER PRESSURE TREATMENT INTEGRITY.
9. PILES SHALL BE PRESSURE PRESERVATIVE TREATED WITH CCA TO 2.5 PCF RETENTION. TIMBER PILES SHALL CONFORM TO ASTM STANDARD D-25 FOR PHYSICAL CHARACTERISTICS AND QUALITY. SIZE SHALL BE 1" TAPER IN 10 LINEAR FEET.
10. PILES SHALL FOLLOW SPECIFICATION SECTION 953.
11. SAWN LUMBER SHALL BE PRESSURE PRESERVATIVE TREATED WITH ACQ TO 0.6 PCF RETENTION. INSTALL WITH NATURAL CAMBER BOWED UP WHEN POSSIBLE.

FASTENERS

1. ALL CONNECTIONS SHALL BE IN ACCORDANCE WITH FLORIDA BUILDING CODE TABLE 2304.10.1 EXCEPT AS SHOWN OR NOTED BELOW:
   - A) PICKETS TO RAILS – TWO, #8x2½" WOOD SCREWS
   - B) RAILS TO RAILING POST – ONE, ¼" ∅ THRU-BOLT
   - C) RAIL CAP TO RAILING POST – FOUR, #10x3" WOOD SCREWS
   - D) BLOCKING TO STRINGERS – FOUR, #10x3" WOOD SCREWS, TOE-NAILED
   - E) DECK BOARDS TO STRINGERS – THREE, #10x3" WOOD SCREWS PER SUPPORT, FACE SCREWED
2. WOOD SCREWS SHALL BE STAINLESS STEEL AND IN ACCORDANCE WITH ANSI/ASME STANDARD B18.6.1.
3. BOLTS SHALL BE IN ACCORDANCE WITH ANSI/ASME STANDARD B18.2.1.
4. PRE-DRILL ALL CONNECTIONS WITH WOOD SCREWS TO AVOID SPLITTING OF THE CONNECTED MEMBERS.
5. ALL THRU-BOLTS EXPOSED TO HUMAN CONTACT SHALL BE CUT OFF AND GROUND SMOOTH, FLUSH WITH THE NUT.
6. "O-GEE" WASHERS SHALL BE USED FOR ALL TIMBER SIDE CONNECTOR SIZES EQUAL TO OR GREATER THAN 1/2" ∅.
7. HURRICANE ANCHOR SHALL BE ATTACHED WITH NAILS (8D). WHENEVER POSSIBLE ALL ANCHORS SHALL BE PLACED IN THE LEAST VISIBLE MANNER TO THE PUBLIC.
8. 9/32" ∅ HOLE SHALL BE DRILLED PRIOR TO LAG SCREW INSTALLATION.
9. ALL THROUGH NAILS SHALL BE BENT ON PROTRUDING SIDE.
10. INSTALL ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS SECTION 416 FOR HOLE DIAMETER AND CLEANING TECHNIQUE.

ENVIRONMENTAL COMMITMENTS

1. USE A RAMP-UP PROCEDURE DURING THE INSTALLATION OF PILES. THIS PROCEDURE ALLOWS FOR A GRADUAL INCREASE IN NOISE LEVELS IN ORDER TO GIVE SENSITIVE SPECIES AMPLE TIME TO FLEE PRIOR TO INITIATION OF FULL NOISE LEVELS. THIS APPROACH CAN ALSO REDUCE THE LIKELIHOOD OF ANY SECONDARY OR SUB-LETHAL EFFECTS FROM SOUND IMPULSES ASSOCIATED WITH PILE DRIVING.
2. COMPLY WITH NOAA PROTECTED SPECIES CONSTRUCTION CONDITIONS DURING CONSTRUCTION.
3. COMPLY WITH THE FOLLOWING PROTECTED SPECIES CONSTRUCTION CONDITIONS REGARDING SEA TURTLES AND SMALLTOOTH SAWFISH:
   - A) INSTRUCT ALL PERSONNEL ASSOCIATED WITH THE PROJECT OF THE POTENTIAL PRESENCE OF THESE SPECIES AND THE NEED TO AVOID COLLISIONS WITH SEA TURTLES AND SMALLTOOTH SAWFISH. ALL CONSTRUCTION PERSONNEL ARE RESPONSIBLE FOR OBSERVING WATER-RELATED ACTIVITIES FOR THE PRESENCE OF THESE SPECIES.
   - B) ADVISE ALL CONSTRUCTION PERSONNEL THAT THERE ARE CIVIL AND CRIMINAL PENALTIES FOR HARMING, HARASSING, OR KILLING SEA TURTLES AND SMALLTOOTH SAWFISH, WHICH ARE PROTECTED UNDER THE ENDANGERED SPECIES ACT OF 1973.

ENVIRONMENTAL COMMITMENTS (CONT'D.)

   - C) SILTATION BARRIERS SHALL BE MADE OF MATERIAL IN WHICH SEA TURTLES OR SMALLTOOTH SAWFISH CANNOT BECOME ENTANGLED, SHALL BE PROPERLY SECURED, AND SHALL BE REGULARLY MONITORED TO AVOID PROTECTED SPECIES ENTRAPMENT. BARRIERS MAY NOT BLOCK SEA TURTLE OR SMALLTOOTH SAWFISH ENTRY TO OR EXIT FROM DESIGNATED CRITICAL HABITAT WITHOUT PRIOR AGREEMENT FROM THE NATIONAL MARINE FISHERIES SERVICE'S PROTECTED RESOURCES DIVISION, ST. PETERSBURG, FLORIDA.
   - D) ALL VESSELS ASSOCIATED WITH THE CONSTRUCTION PROJECT SHALL OPERATE AT "NO WAKE/IDLE" SPEEDS AT ALL TIMES WHILE IN THE CONSTRUCTION AREA AND WHILE IN WATER DEPTHS WHERE THE DRAFT OF THE VESSEL PROVIDES LESS THAN A FOUR-FOOT CLEARANCE FROM THE BOTTOM. ALL VESSELS WILL PREFERENTIALLY FOLLOW DEEP-WATER ROUTES (E.G., MARKED CHANNELS) WHENEVER POSSIBLE.
   - E) IF A SEA TURTLE OR SMALLTOOTH SAWFISH IS SEEN WITHIN 100 YARDS OF THE ACTIVE DAILY CONSTRUCTION OPERATION OR VESSEL MOVEMENT, ALL APPROPRIATE PRECAUTIONS SHALL BE IMPLEMENTED TO ENSURE ITS PROTECTION. THESE PRECAUTIONS SHALL INCLUDE CESSATION OF OPERATION OF ANY MOVING EQUIPMENT CLOSER THAN 50 FEET OF A SEA TURTLE OR SMALLTOOTH SAWFISH. OPERATION OF ANY MECHANICAL CONSTRUCTION EQUIPMENT SHALL CEASE IMMEDIATELY IF A SEA TURTLE OF SMALLTOOTH SAWFISH IS SEEN WITHIN A 50-FT. RADIUS OF THE EQUIPMENT. ACTIVITIES MAY NOT RESUME UNTIL THE PROTECTED SPECIES HAS DEPARTED THE PROJECT AREA OF ITS OWN VOLITION.
   - F) ANY COLLISION WITH AND/OR INJURY TO A SEA TURTLE OR SMALLTOOTH SAWFISH SHALL BE REPORTED IMMEDIATELY TO THE NATIONAL MARINE FISHERIES SERVICES PROTECTED RESOURCES DIVISION (727-824-5312) AND THE LOCAL AUTHORIZED SEA TURTLE STRANDING/RESCUE ORGANIZATION.
4. THE PERMITTEE SHALL COMPLY WITH THE FOLLOWING CONDITIONS INTENDED TO PROTECT MANATEES FROM DIRECT PROJECT EFFECTS:
   - A) INSTRUCT ALL PERSONNEL ASSOCIATED WITH THE PROJECT OF THE POTENTIAL PRESENCE OF MANATEES AND MANATEE SPEED ZONES, AND THE NEED TO AVOID COLLISIONS WITH AND INJURY TO MANATEES. ADVISE ALL CONSTRUCTION PERSONNEL THAT THERE ARE CIVIL AND CRIMINAL PENALTIES FOR HARMING, HARASSING, OR KILLING MANATEES, WHICH ARE PROTECTED UNDER THE MARINE MAMMAL PROTECTION ACT, THE ENDANGERED SPECIES ACT, AND THE FLORIDA MANATEE SANCTUARY ACT.
   - B) ALL VESSELS ASSOCIATED WITH THE CONSTRUCTION PROJECT SHALL OPERATE AT "IDLE SPEED/NO WAKE" AT ALL TIMES WHILE IN THE IMMEDIATE AREA AND WHILE IN WATER WHERE THE DRAFT OF THE VESSEL PROVIDES LESS THAN A FOUR-FOOT CLEARANCE FROM THE BOTTOM. ALL VESSELS WILL FOLLOW ROUTES OF DEEP WATER WHENEVER POSSIBLE.
   - C) SILTATION BARRIERS SHALL BE MADE OF MATERIAL IN WHICH MANATEES CANNOT BECOME ENTANGLED, SHALL BE PROPERLY SECURED, AND SHALL BE REGULARLY MONITORED TO AVOID PROTECTED SPECIES ENTRAPMENT. BARRIERS MUST NOT IMPEDE MANATEE MOVEMENT.
   - D) ALL ON-SITE PROJECT PERSONNEL ARE RESPONSIBLE FOR OBSERVING WATER-RELATED ACTIVITIES FOR THE PRESENCE OF MANATEE(S). ALL IN-WATER OPERATIONS, INCLUDING VESSELS, MUST BE SHUTDOWN IF A MANATEE(S) COMES WITHIN 50 FEET OF THE OPERATION. ACTIVITIES WILL NOT RESUME UNTIL THE MANATEE(S) HAS MOVED BEYOND THE 50-FOOT RADIUS OF THE PROJECT OPERATION, OR UNTIL 30 MINUTES ELAPSES IF THE MANATEE(S) HAS NOT REAPPEARED WITHIN 50 FEET OF THE OPERATION. ANIMALS MUST NOT BE HERDED AWAY OR HARASSED INTO LEAVING.
   - E) ANY COLLISION WITH OR INJURY TO A MANATEE SHALL BE REPORTED IMMEDIATELY TO THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FWC) HOTLINE AT 1-888-404-3922. COLLISION AND/OR INJURY SHOULD ALSO BE REPORTED TO THE U.S. FISH AND WILDLIFE SERVICE IN JACKSONVILLE (1-904-731-3336) FOR NORTH FLORIDA OR IN VERO BEACH (1-722-562-3909) FOR SOUTH FLORIDA, AND EMAILED TO FWC AT IMPERILEDSPECIES@MYFWC.COM.
   - F) TEMPORARY SIGNS CONCERNING MANATEES SHALL BE POSTED PRIOR TO AND DURING ALL IN-WATER PROJECT ACTIVITIES. ALL SIGNS ARE TO BE REMOVED UPON COMPLETION OF THE PROJECT. TEMPORARY SIGNS THAT HAVE ALREADY BEEN APPROVED FOR THIS USE BY THE FWC MUST BE USED. ONE SIGN WHICH READ "CAUTION: BOATERS" MUST BE POSTED. A SECOND SIGN MEASURING AT LEAST 8½" BY 11" EXPLAINING THE REQUIREMENTS FOR "IDLE SPEED/NO WAKE" AND THE SHUT DOWN OF IN-WATER OPERATIONS MUST BE POSTED IN A LOCATION PROMINENTLY VISIBLE TO ALL PERSONNEL ENGAGED IN WATER-RELATED ACTIVITIES. THESE SIGNS CAN BE VIEWED AT HTTP://WWW.MYFWC.COM/WILDLIFEHABITATS/MANATEE_SIGN_VENDORS.HTM. QUESTIONS CONCERNING THESE SIGNS CAN BE FORWARDED TO THE EMAIL ADDRESS LISTED ABOVE.

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
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DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FL 33647

DRAWN BY: BCS 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

SHEET TITLE: GENERAL NOTES (2 OF 2)
TWA NO.:
PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT
SHEET NO.: S-04

BID ITEMS FOR SAFETY HARBOR MARINA REPLACEMENT

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
	CIVIL		
101-1	MOBILIZATION	LS	1
102-1	MAINTENANCE OF TRAFFIC	LS	1
104-10	SEDIMENT BARRIER	LF	130
104-11	FLOATING TURBIDITY BARRIER	LF	250
110-1-1	CLEARING & GRUBBING	LS	1
110-82	REMOVE & DISPOSE OF STRUCTURAL TIMBER	MB	28.7
350-5	CLEANING & SEALING JOINT - CONCRETE PAVEMENT	LF	30
515-2311	PEDESTRIAN / BICYCLE RAILING, ALUMINUM ONLY, 42" TYPE 1	LF	21
550-10-220	FENCING, TYPE B, 5.1'-6.0', STANDARD	LF	130
550-60-222	FENCE GATE, TYPE B, DOUBLE 6.1'-12.0' OPENING	EA	1
700-1-11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12SF	EA	4
700-1-50	SINGLE POST SIGN, RELOCATE	EA	1
999-90	SECURITY GATE, 6FT.	EA	1
999-91	CLEATS	EA	56
999-92	SAFETY LADDER	EA	20
	STRUCTURES		
470-1	TREATED STRUCTURAL TIMBER	MB	7.3
999-93	TREATED TIMBER PILING (8 IN. DIAMETER)	LF	5,680
999-94	TREATED TIMBER PILING (10 IN. DIAMETER)	LF	1,239
999-95	PILE WRAPS	EA	288
999-96	PILE CAP	EA	220
999-97	COMPOSITE DECKING (ALTERNATIVE 1)	SF	4,236
470-1	TIMBER DECKING (ALTERNATIVE 2)	MB	6.4

BID ITEM NOTES

1. POST-INSTALLED ANCHORS LABOR AND MATERIAL IS CONSIDERED INCIDENTAL TO PAY ITEM 470-1, "TREATED STRUCTURAL TIMBER ."
2. ALL HARDWARE LABOR AND MATERIAL IS CONSIDERED INCIDENTAL TO PAY ITEM 470-1, "TREATED STRUCTURAL TIMBER." TIMBER BLOCKING IS CONSIDERED INCIDENTAL TO PAY ITEM 470-1, "TREATED STRUCTURAL TIMBER."
3. PAYMENT FOR NEOPRENE SHIM IS CONSIDERED INCIDENTAL TO PAY ITEM NO. 470-1, "TREATED STRUCTURAL TIMBER".
4. LABOR & MATERIAL FOR INSTALLING SECURITY GATE IS TO BE PAID FOR UNDER PAY ITEM 999-90, "SECURITY GATE, 6 FT.".
5. LABOR & MATERIAL FOR INSTALLING CLEATS IS TO BE PAID FOR UNDER PAY ITEM 999-91, "CLEATS".
6. LABOR & MATERIAL FOR INSTALLING SAFETY LADDERS IS TO BE PAID FOR UNDER PAY ITEM 999-92, "SAFETY LADDER".
7. LABOR & MATERIAL FOR INSTALLING DOCK PILES IS TO BE PAID FOR UNDER PAY ITEMS 999-93, "TREATED TIMBER PILING 8 IN. DIAMETER"
8. LABOR & MATERIAL FOR INSTALLING TIE PILES IS TO BE PAID FOR UNDER PAY ITEM 999-94, "TREATED TIMBER PILING 10 IN. DIAMETER".
9. LABOR & MATERIAL FOR INSTALLING PILE WRAPS IS TO BE PAID FOR UNDER PAY ITEM 999-95, "PILE WRAPS".
10. LABOR & MATERIAL FOR INSTALLING PILE CONICAL CAPS IS TO BE PAID FOR UNDER PAY ITEM 999-96, "PILE CAPS".
11. LABOR & MATERIAL FOR INSTALLING COMPOSITE DECKING (ALTERNATIVE 1) IS TO BE PAID FOR UNDER PAY ITEM 999-97, "COMPOSITE DECKING".
12. LABOR & MATERIAL FOR INSTALLING TIMBER DECKING (ALTERNATIVE 2) IS TO BE PAID FOR UNDER PAY ITEM, "TIMBER DECKING".

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
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DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FL 33647

DRAWN BY: BCS 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

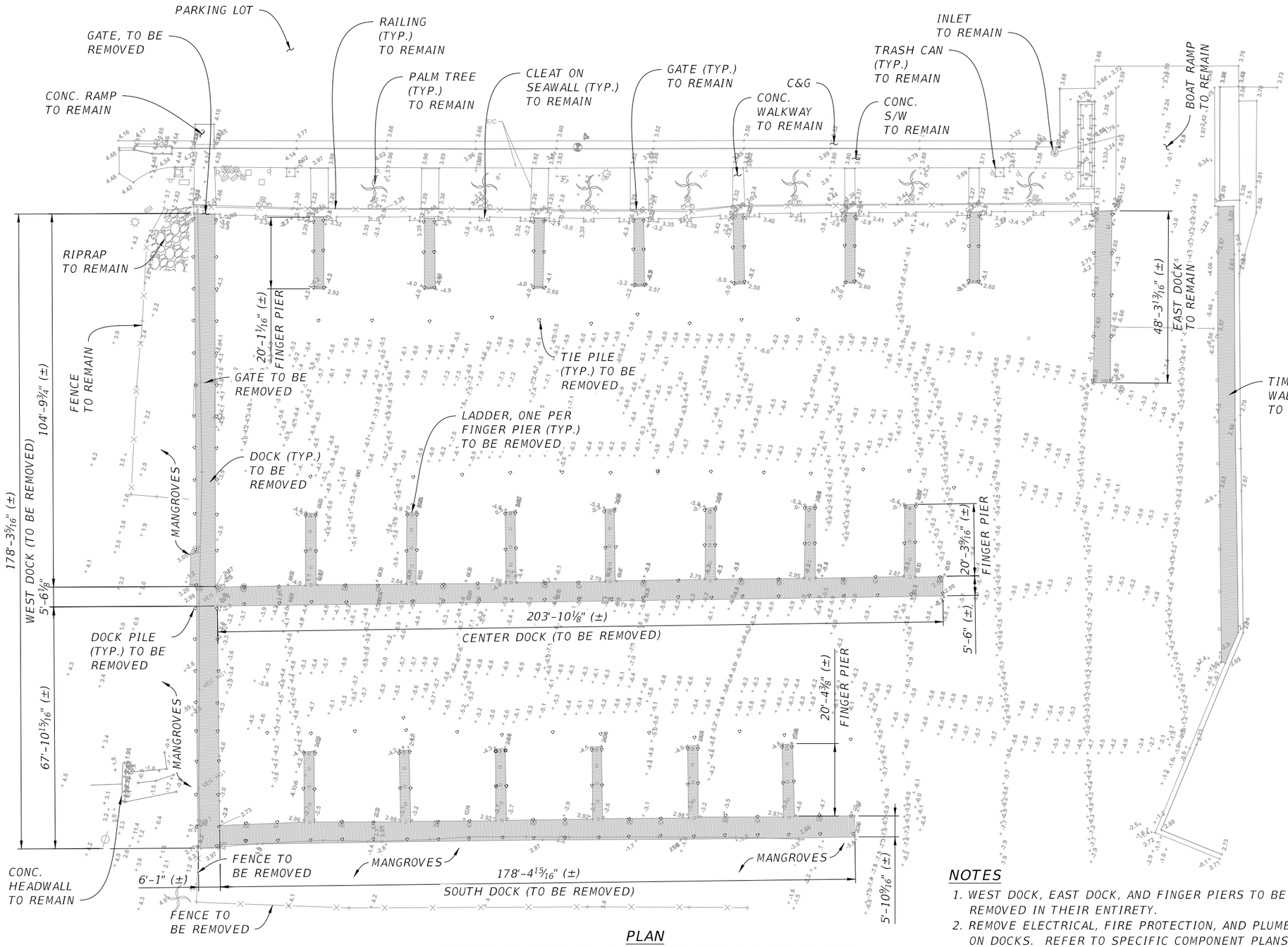
SHEET TITLE: SUMMARY OF QUANTITIES

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: S-05

Plotted By: Christian.Hodges 6/13/2024 5:06:54 PM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1GeneralNotes02.dgn



KEY

EXISTING PILE

PLAN

(STRINGERS, BENT CAPS, AND RAILINGS NOT SHOWN FOR CLARITY)

NOTES

1. WEST DOCK, EAST DOCK, AND FINGER PIERS TO BE REMOVED IN THEIR ENTIRETY.
2. REMOVE ELECTRICAL, FIRE PROTECTION, AND PLUMBING ON DOCKS. REFER TO SPECIFIC COMPONENT PLANS FOR ADDITIONAL DETAILS.

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DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FL 33647

DRAWN BY:	CAH 06-24
CHECKED BY:	DRJ 06-24
DESIGNED BY:	DRJ 06-24
CHECKED BY:	CS 06-24

City of Safety Harbor, Florida — Home of the Mineral Springs

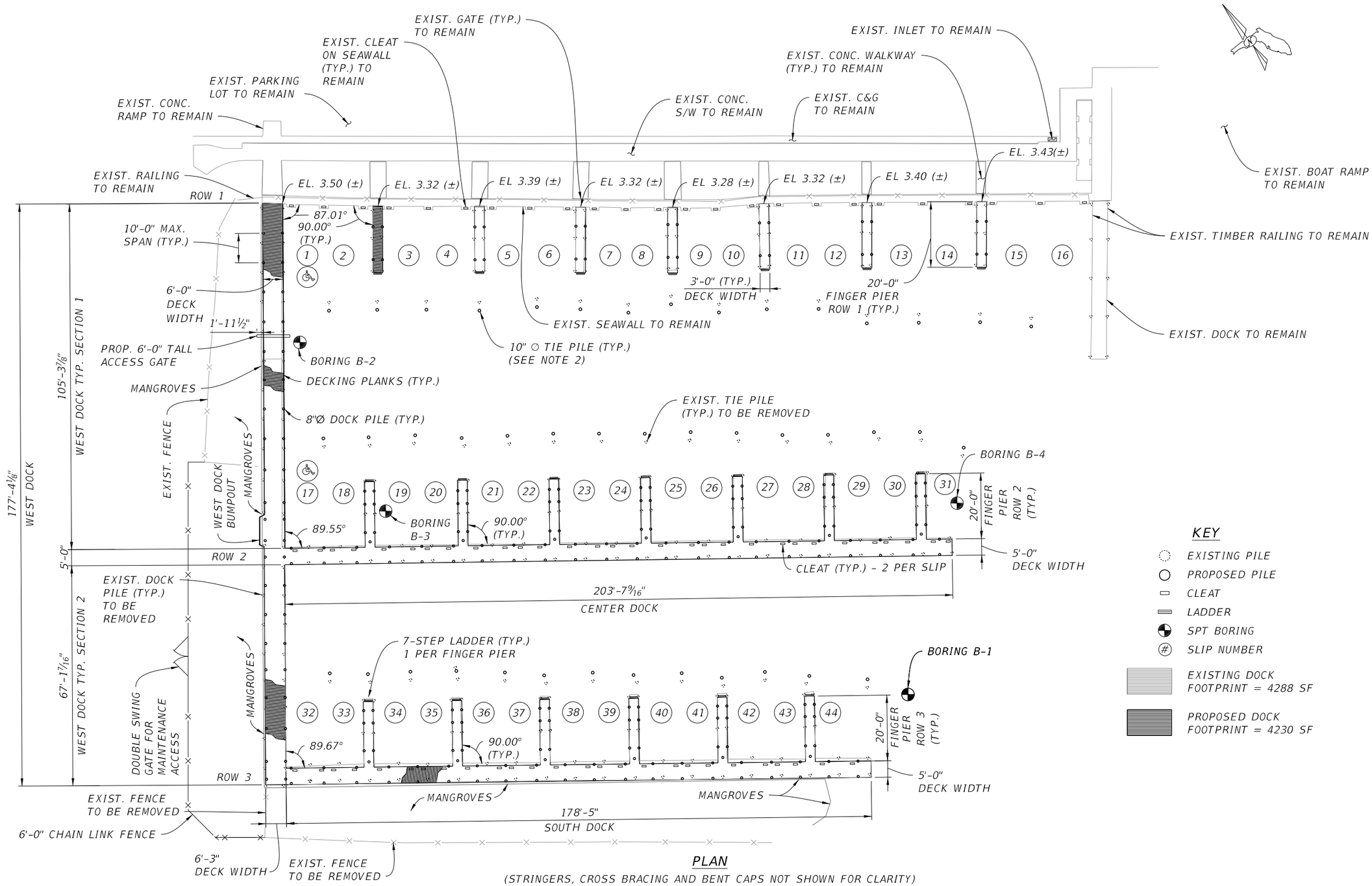
SHEET TITLE: DEMOLITION PLAN

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: S-06

Plotted By: Christian.Hodges 6/13/2024 4:48:21 PM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_PlanElev100_10ftspan02.dgn



PLAN

(STRINGERS, CROSS BRACING AND BENT CAPS NOT SHOWN FOR CLARITY)

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REVISIONS					
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DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FL 33647

DRAWN BY:	CAH 06-24
CHECKED BY:	DRJ 06-24
DESIGNED BY:	DRJ 06-24
CHECKED BY:	CS 06-24

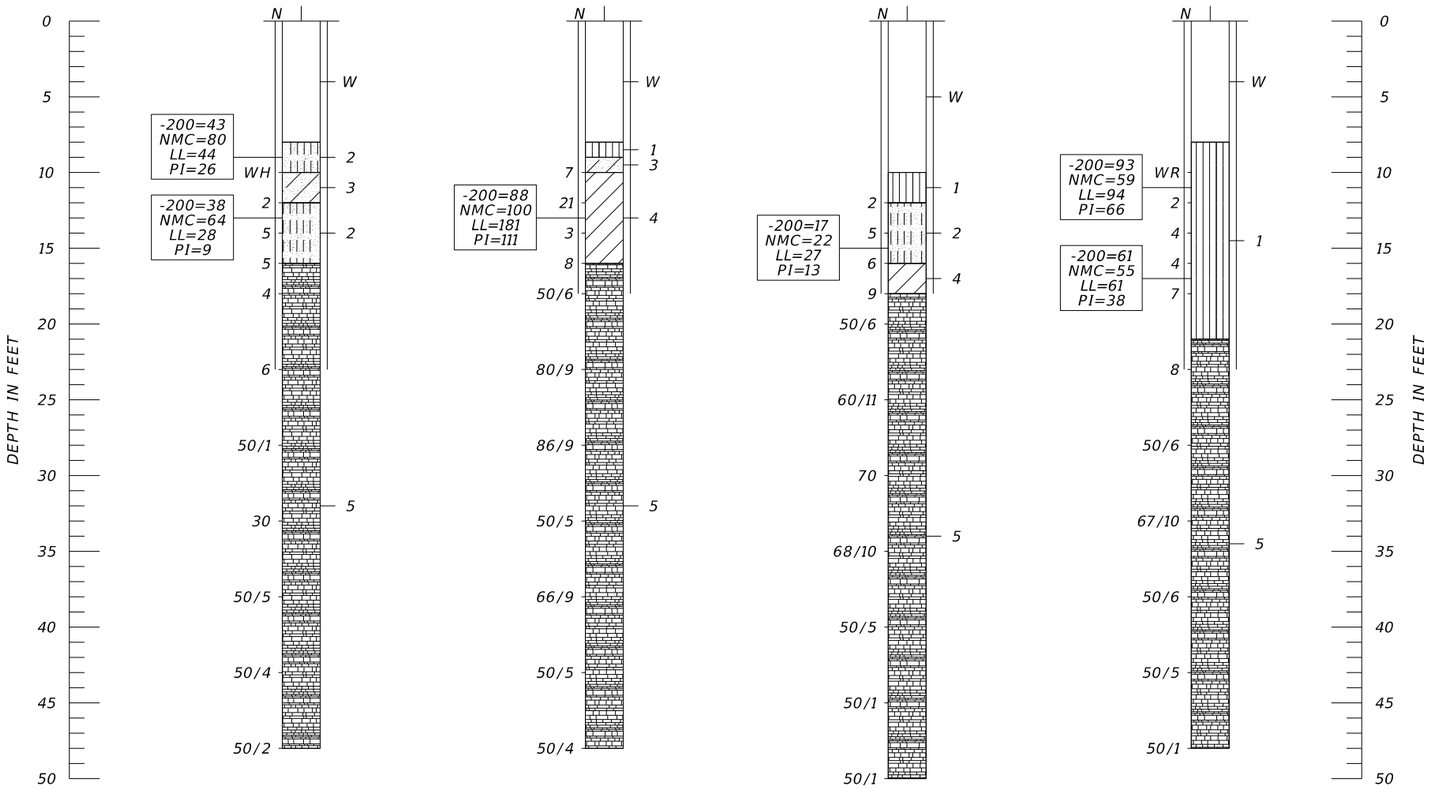
SHEET TITLE: MARINA LAYOUT PLAN

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: S-07

Plotted By: Christian.Hodges 6/14/2024 10:53:16 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_PlanElev100_Layout.dgn



LEGEND

1		DARK GRAY TO DARK BROWN SILT (ML/MH)
2		GRAY SILTY SAND (SM)
3		GRAY TO BLUE CLAYEY SAND (SC)
4		GRAY TO BLUE CLAY (CL/CH)
5		WEATHERED LIMESTONE, OCCASIONALLY WITH CALCAREOUS CLAY
	W	W - WATER
	SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
	N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
	50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
	WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
	WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
	-200 NMC LL PI	PERCENT PASSING #200 SIEVE NATURAL MOISTURE CONTENT (%) LIQUID LIMIT (%) PLASTICITY INDEX (%)
		CASING
EASTING		EASTING COORDINATE REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, FLORIDA WEST ZONE, N.A.D. 83.
NORTHING		NORTHING COORDINATE REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, FLORIDA WEST ZONE, N.A.D. 83.

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS-RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE LOOSE MEDIUM DENSE DENSE VERY DENSE	LESS THAN 4 4 to 10 10 to 30 30 to 50 GREATER THAN 50	LESS THAN 3 3 to 8 8 to 24 24 to 40 GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT SOFT FIRM STIFF VERY STIFF HARD	LESS THAN 2 2 to 4 4 to 8 8 to 15 15 to 30 GREATER THAN 30	LESS THAN 1 1 to 3 3 to 6 6 to 12 12 to 24 GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DANIEL R. RUEL, P.E.
P.E. LICENSE NUMBER 82404
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

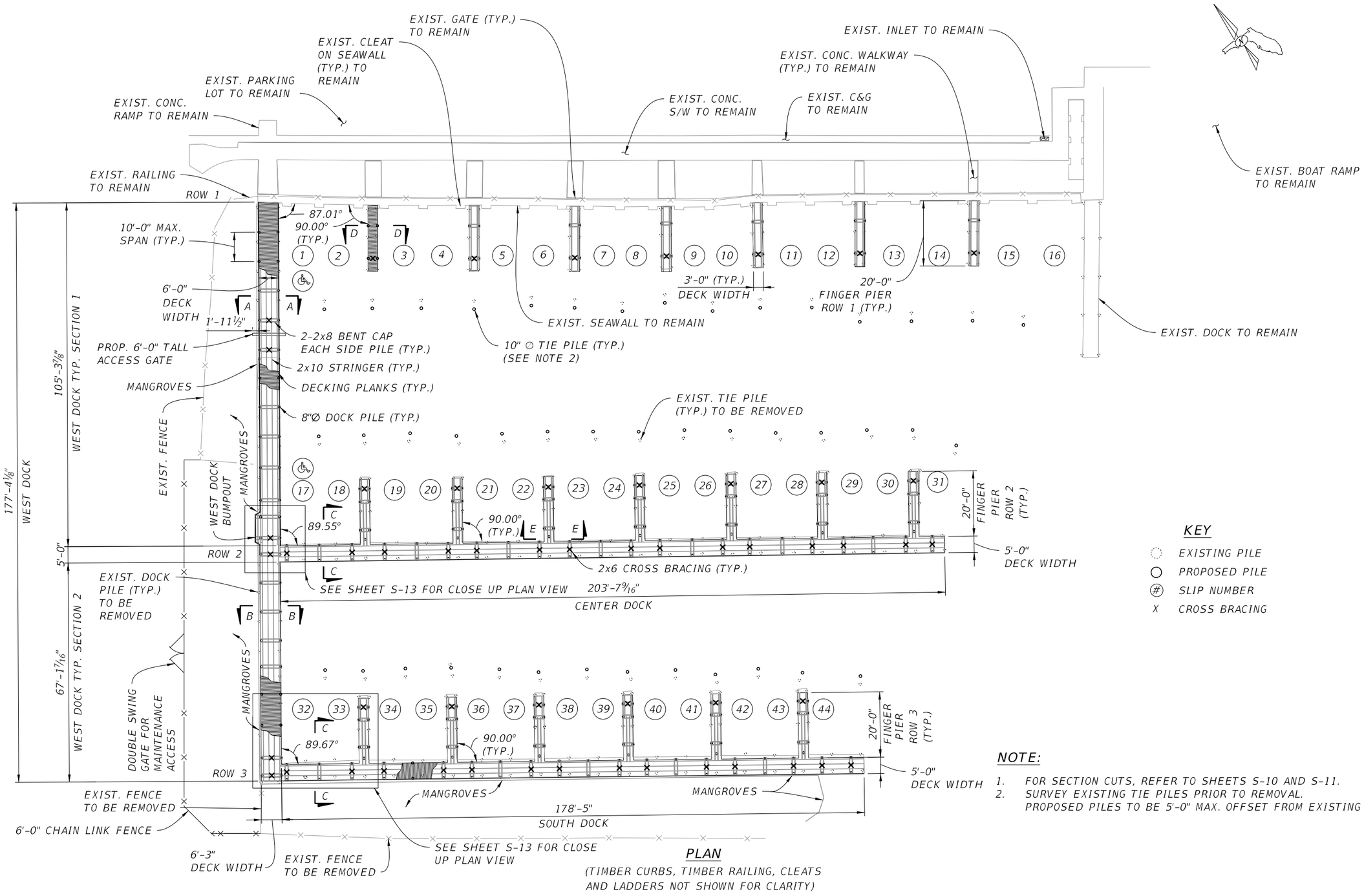
DRAWN BY: BMG 02/24
CHECKED BY: DRR 02/24
DESIGNED BY: BMG 02/24
CHECKED BY: DRR 02/24

SHEET TITLE: SOIL PROFILES

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. S-08



PLAN

(TIMBER CURBS, TIMBER RAILING, CLEATS AND LADDERS NOT SHOWN FOR CLARITY)

KEY

- EXISTING PILE
- PROPOSED PILE
- (#) SLIP NUMBER
- X CROSS BRACING

NOTE:

1. FOR SECTION CUTS, REFER TO SHEETS S-10 AND S-11.
2. SURVEY EXISTING TIE PILES PRIOR TO REMOVAL. PROPOSED PILES TO BE 5'-0" MAX. OFFSET FROM EXISTING PILES.

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
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DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FL 33647

DRAWN BY:	CAH 06-24
CHECKED BY:	DRJ 06-24
DESIGNED BY:	DRJ 06-24
CHECKED BY:	CS 06-24

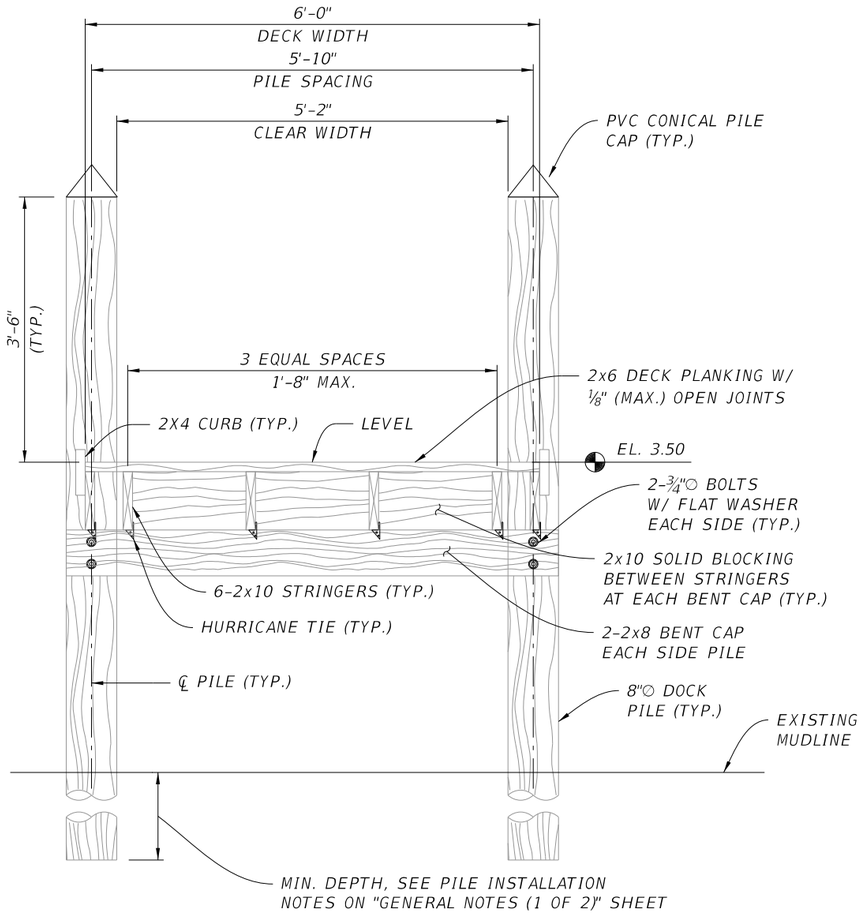
SHEET TITLE: FRAMING PLAN

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

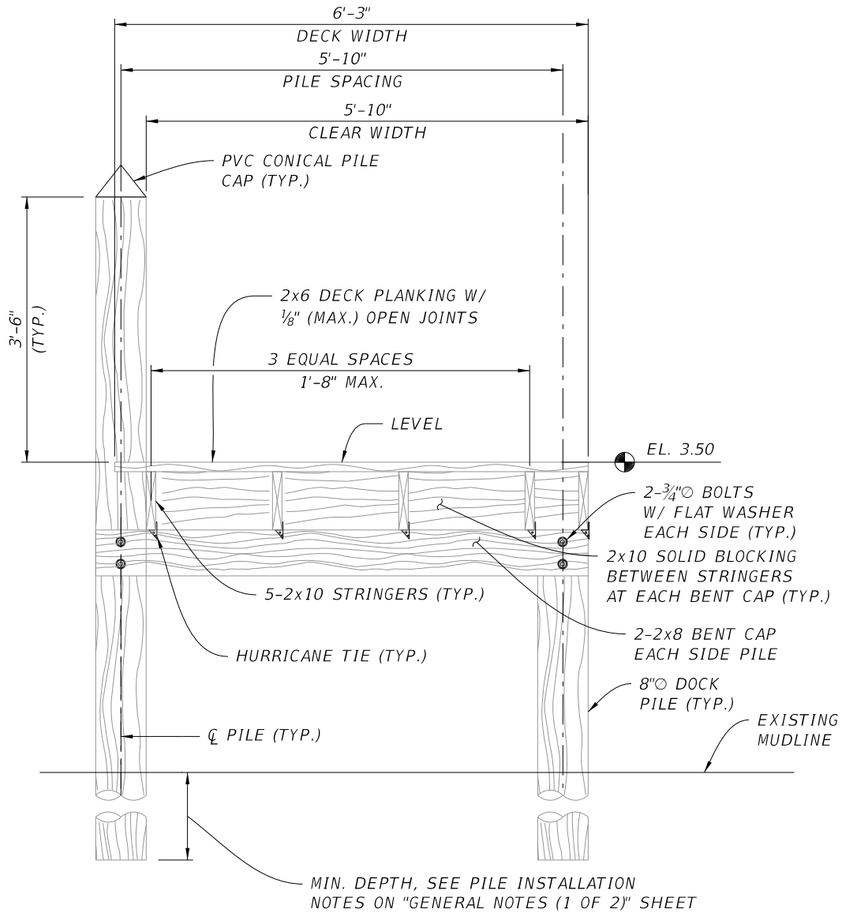
SHEET NO.: S-09

Plotted By: Christian.Hodges 6/14/2024 10:49:31 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_PlanElev100_10ftspan.dgn



SECTION A-A
WEST DOCK TYPICAL SECTION 1

(DIAGONAL CROSS BRACING NOT SHOWN)



SECTION B-B
WEST DOCK TYPICAL SECTION 2

(DIAGONAL CROSS BRACING NOT SHOWN)

NOTE:

PROVIDE FLAT WASHERS BETWEEN PILING AND BENT CAP ON EITHER THE TOP OR BOTTOM CONNECTION BOLTS AS NECESSARY TO ENSURE PLUMB INSTALLATION.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
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DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FL 33647

DRAWN BY: CAH 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

SHEET TITLE: TYPICAL SECTIONS (1 OF 2)

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: S-10

Plotted By: Christian.Hodges 6/13/2024 10:44:51 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_Sections.dgn

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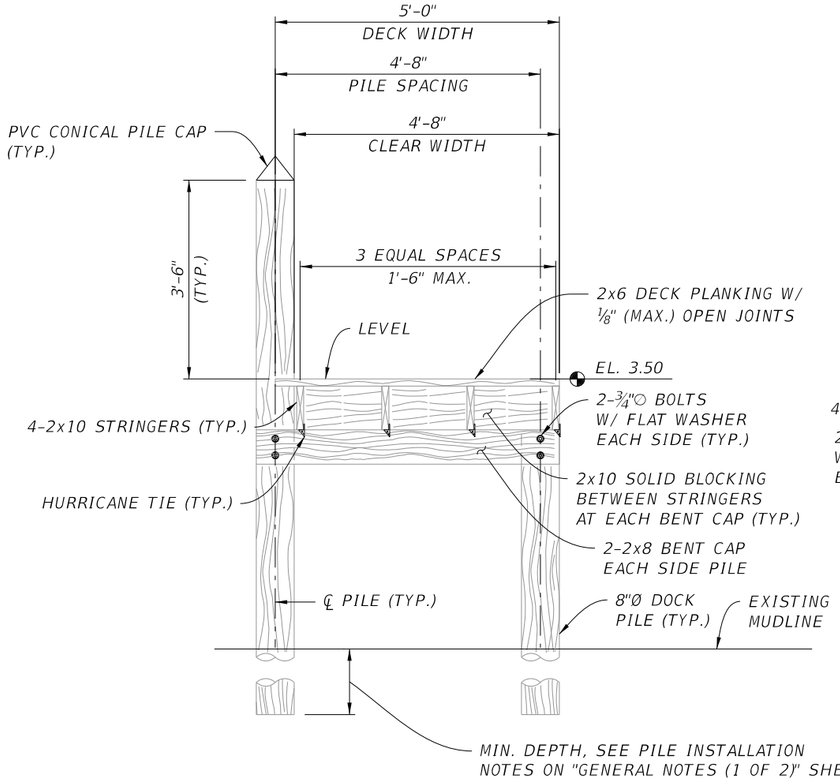
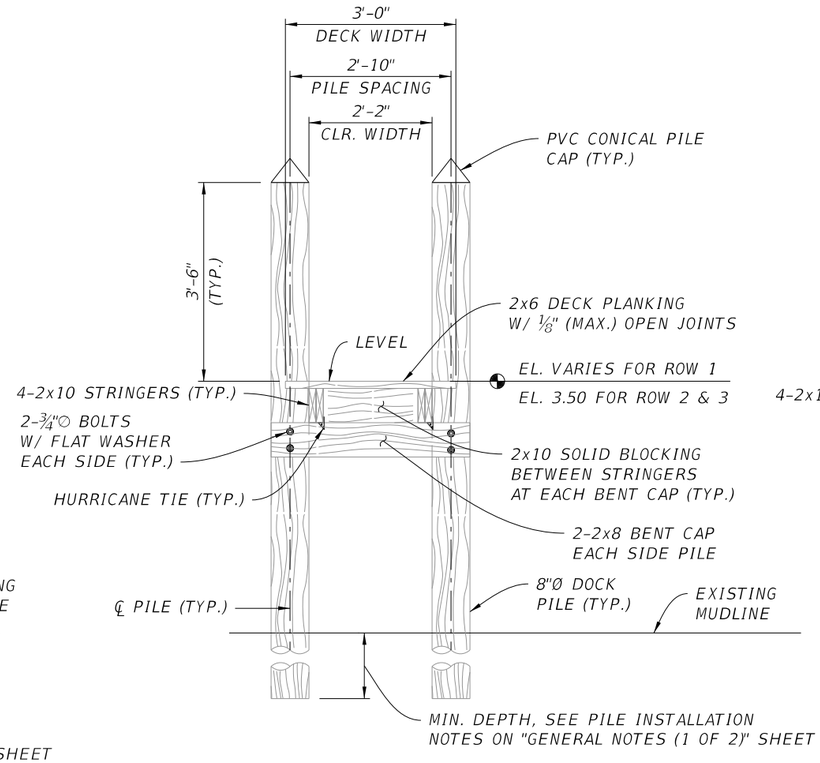
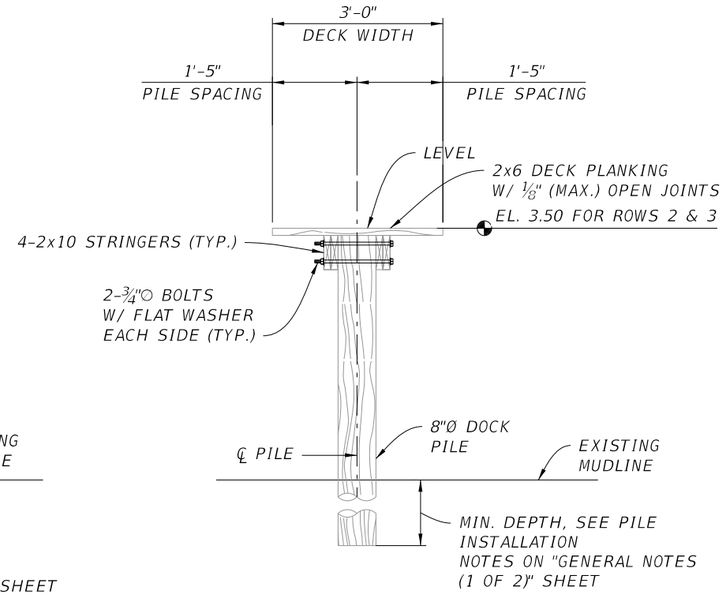


SECTION C-C
CENTER DOCK TYPICAL SECTION
(SOUTH DOCK IS SIMILAR)
(DIAGONAL CROSS BRACING NOT SHOWN)



SECTION D-D
FINGER PIER TYPICAL SECTION



SECTION E-E
FINGER PIER TYPICAL SECTION

NOTE:

PROVIDE FLAT WASHERS BETWEEN PILING AND BENT CAP ON EITHER THE TOP OR BOTTOM CONNECTION BOLTS AS NECESSARY TO ENSURE PLUMB INSTALLATION.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
					100% SUBMITTAL NOT FOR CONSTRUCTION

DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FL 33647

DRAWN BY: CAH 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

SHEET TITLE: TYPICAL SECTIONS (2 OF 2)

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. S-11

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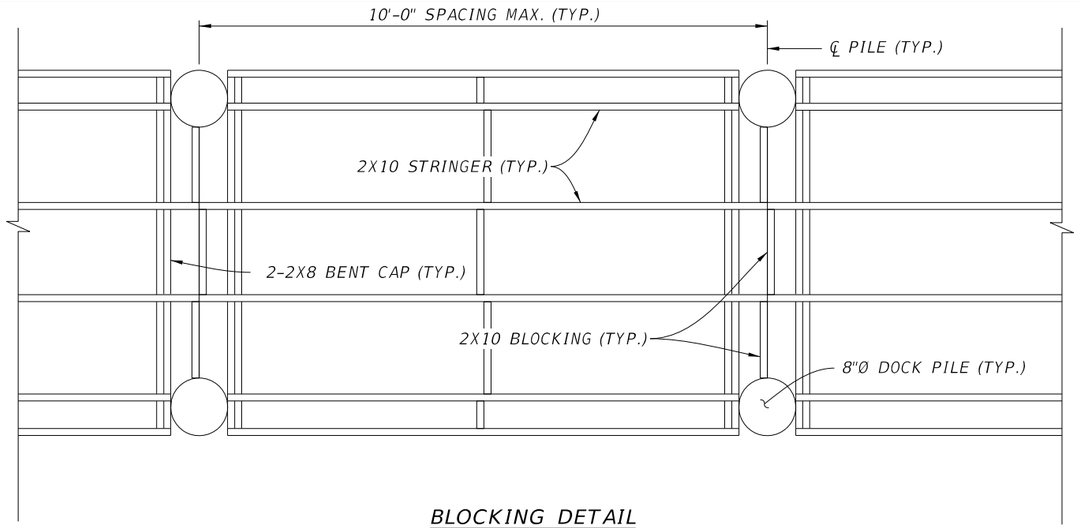
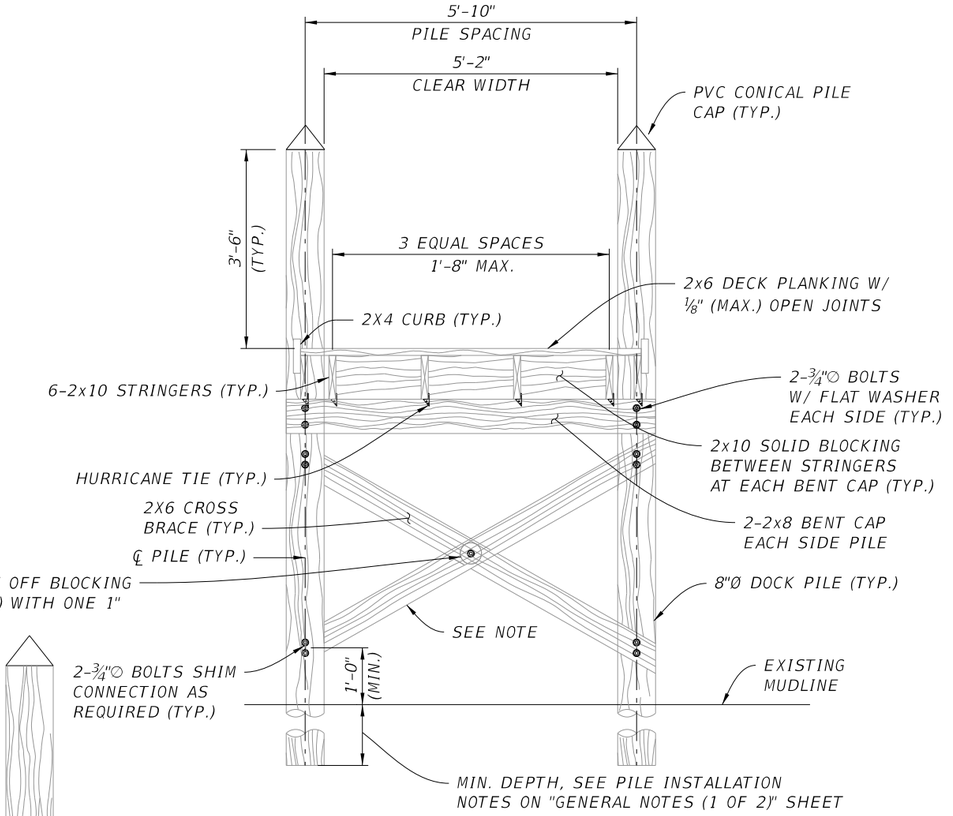
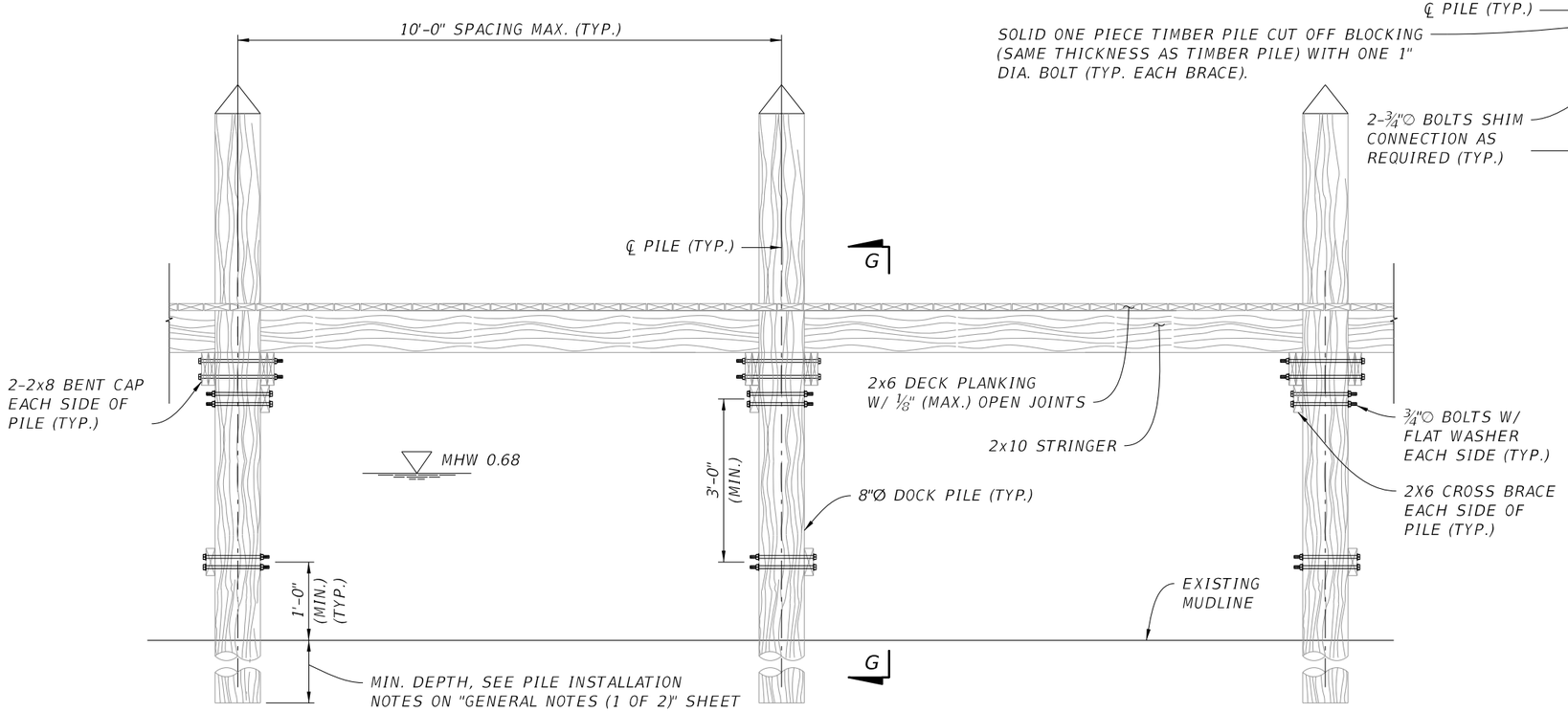


BLOCKING DETAIL

(DECK, RAILS, AND CAPS NOT SHOWN FOR CLARITY)



SECTION G-G



WEST DOCK ELEVATION

(CROSS BRACING SIMILAR FOR CENTER DOCK, SOUTH DOCK, AND FINGER PIERS, WHERE APPLICABLE. SEE NOTE.)

NOTE

DIAGONAL CROSS BRACING IS NOT REQUIRED IF DISTANCE FROM BOTTOM OF BENT CAP TO EXISTING MUDLINE IS LESS THAN 5'-0".

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REVISIONS					
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DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 200
TAMPA, FL 33647

DRAWN BY:	CAH 06-24
CHECKED BY:	DRJ 06-24
DESIGNED BY:	DRJ 06-24
CHECKED BY:	CS 06-24

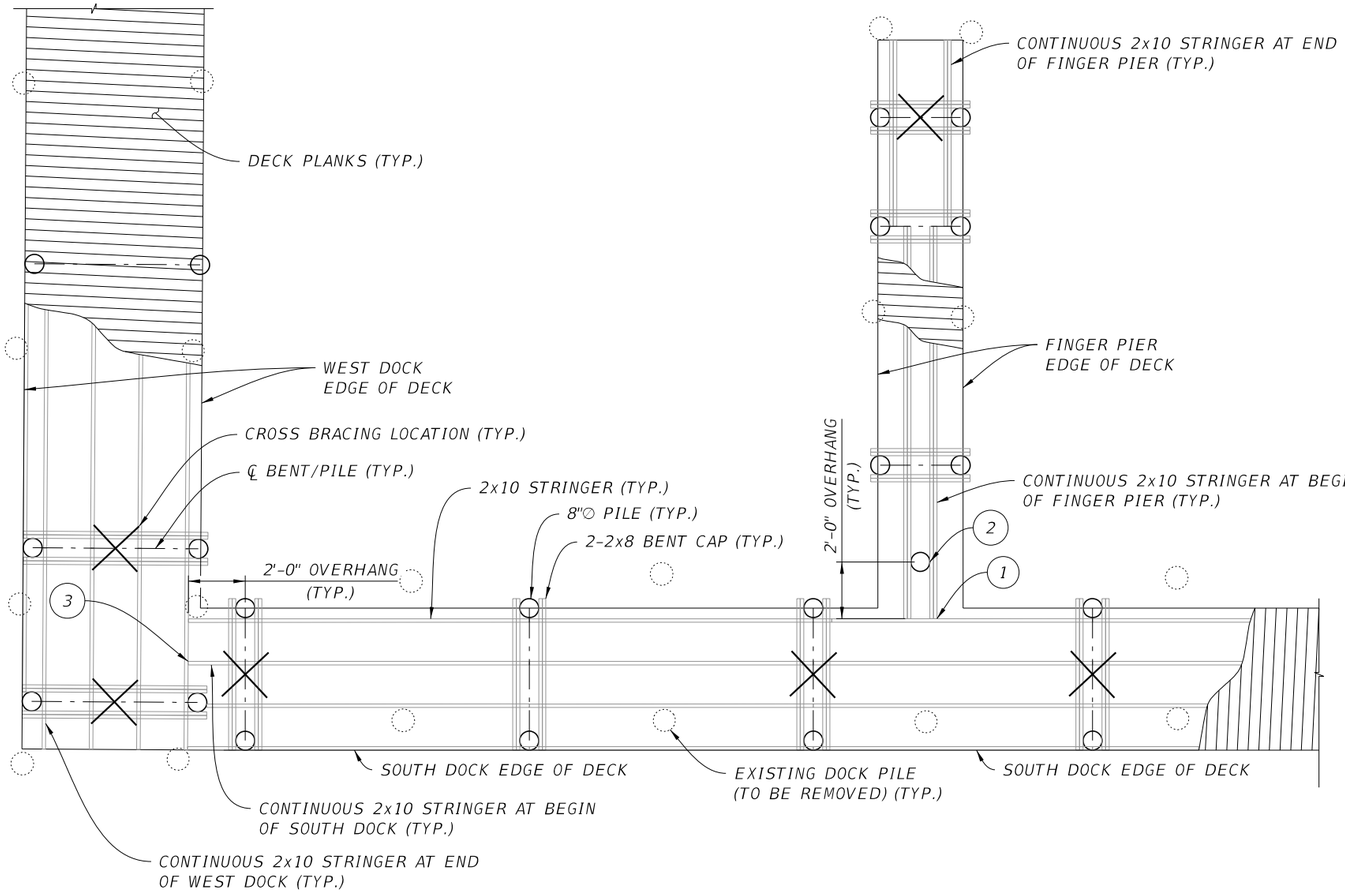
SHEET TITLE: MISCELLANEOUS DETAILS (1 OF 3)

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

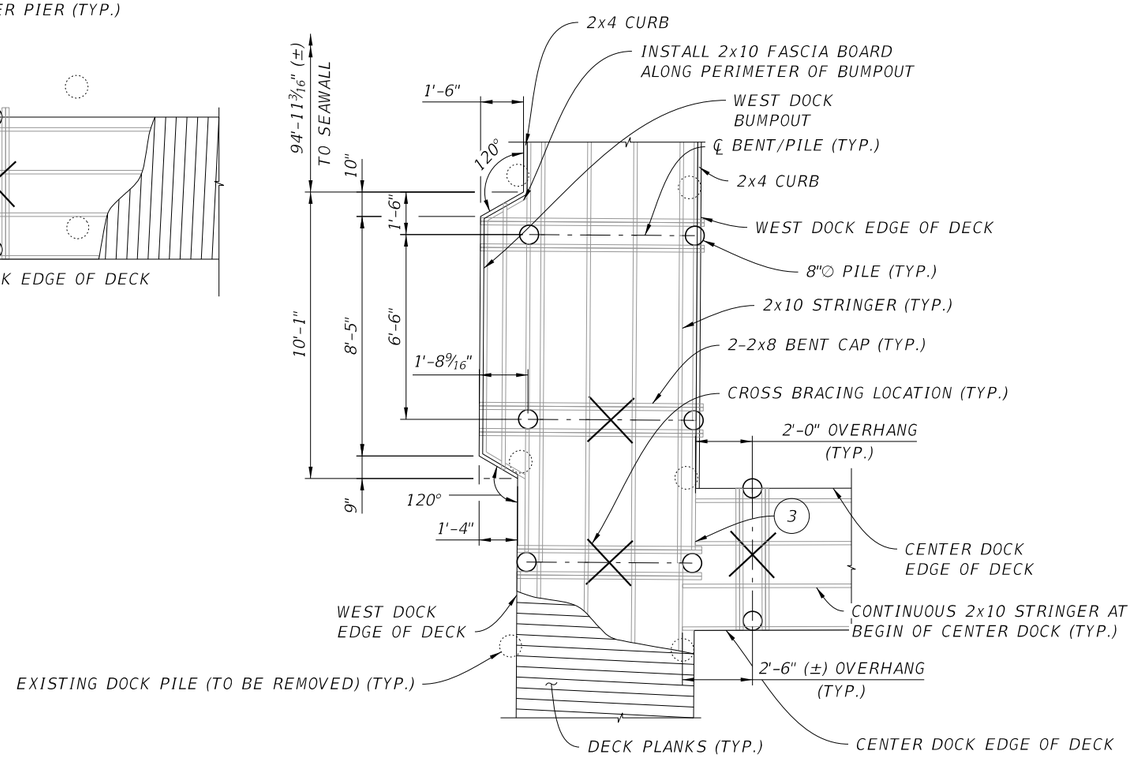
SHEET NO.: S-12

Plotted By: Christian.Hodges 6/14/2024 9:20:39 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_Misc Details 2.dgn



WEST DOCK CONNECTION TO SOUTH DOCK

(CLEATS AND LADDERS NOT SHOWN FOR CLARITY)



WEST DOCK CONNECTION TO CENTER DOCK

(CLEATS AND LADDERS NOT SHOWN FOR CLARITY)

NOTES:

1. ATTACH FINGER PIER STRINGERS TO EXTERIOR STRINGER OF DOCK USING STAINLESS STEEL "LUS SIMPSON STRONG TIE" HANGER OR EQUIVALENT AT SOUTH AND CENTER DOCK FINGER PIERS.
2. CONNECT STRINGERS TO PILE USING 3/4" DIA. BOLTS WITH FLAT WASHERS EACH SIDE.
3. ATTACH CENTER/SOUTH DOCK STRINGERS TO EXTERIOR STRINGER OF WEST DOCK USING STAINLESS STEEL "LUS SIMPSON STRONG TIE" HANGER OR EQUIVALENT.

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DRAWN BY: CAH 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

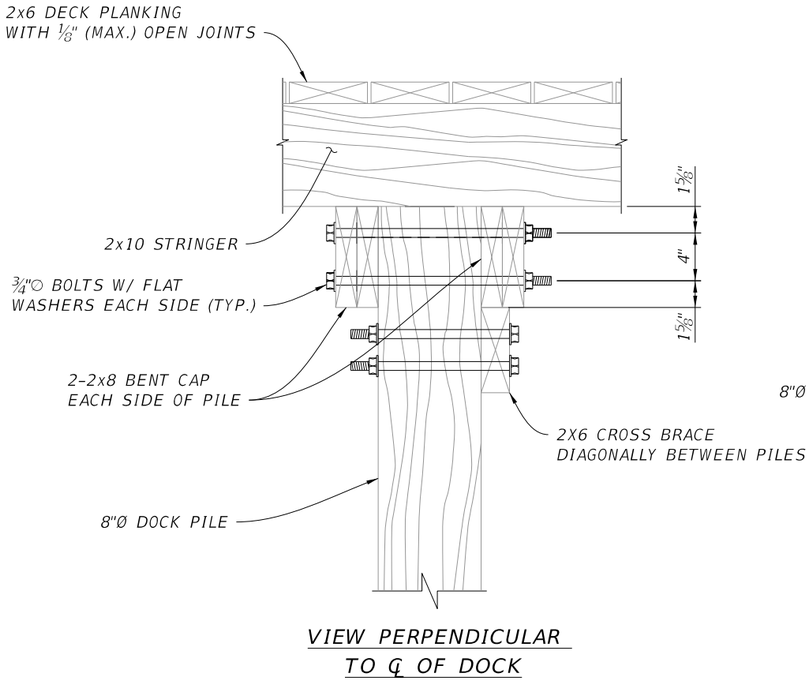
SHEET TITLE: MISCELLANEOUS DETAILS (2 OF 3)

TWA NO.

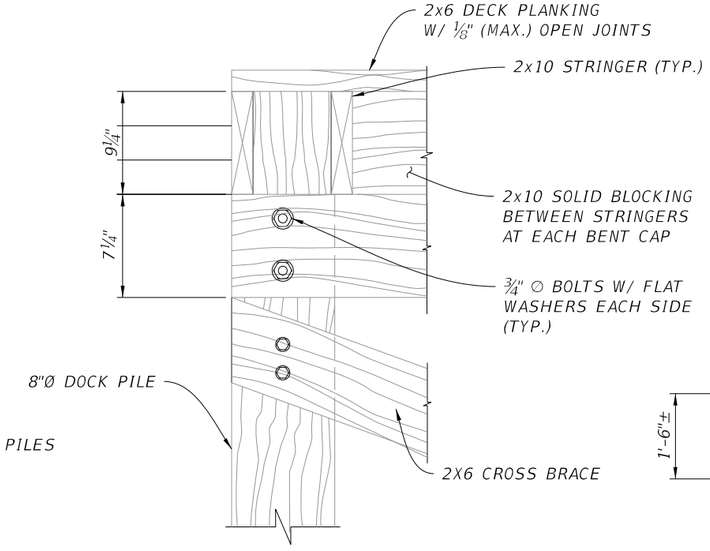
PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. S-13

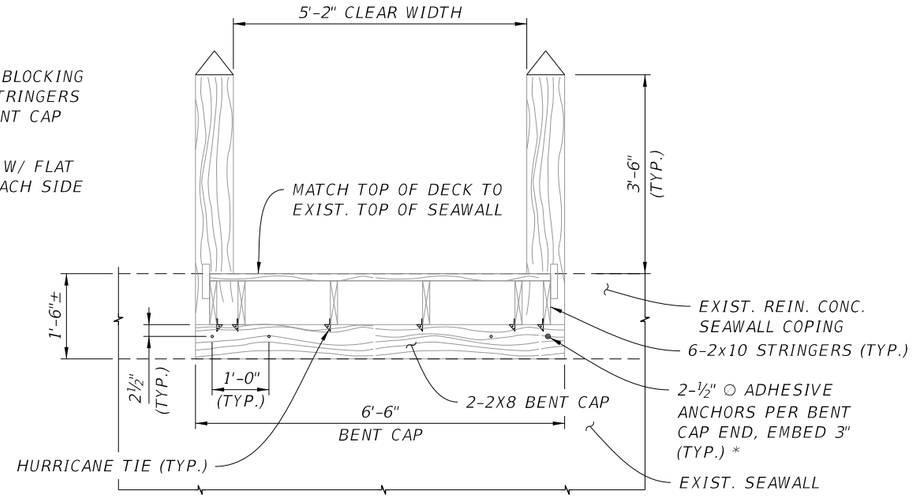
Plotted By: Christian.Hodges 6/14/2024 10:55:47 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_Misc Details 2.dgn



VIEW PERPENDICULAR TO ℄ OF DOCK



VIEW PARALLEL TO ℄ OF DOCK



RAMP CONNECTION TO EXIST. SEAWALL

(WEST DOCK SHOWN, FINGER PIERS SIMILAR EXCEPT USE ONE (1), ADHESIVE ANCHOR PER BENT CAP END)

CONNECTION DETAILS

* NOTE - USE HILTI HIT-HY 200 A/R V3 ADHESIVE AND HIT-Z ANCHOR RODS FOR ADHESIVE ANCHORS OR EQUIVALENT. MINIMUM FACTORED DESIGN SHEAR STRENGTH OF 1.74 KIPS PER ANCHOR.

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CHECKED BY: CS 06-24

SHEET TITLE: MISCELLANEOUS DETAILS (3 OF 3)

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. S-14

Plotted By: Christian.Hodges 6/14/2024 9:38:51 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_Misc Details 2.dgn

EROSION AND SEDIMENT CONTROL

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL AND PREVENT EROSION AND THE TRANSPORTATION OF SEDIMENT TO SURFACE DRAINS AND OUTFALLS USING BEST MANAGEMENT PRACTICES. REFER TO CONSTRUCTION PLANS, DETAILS, SPECIFICATIONS AND APPROVED PERMITS FOR DETAILS. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY REACH ONE HALF THE HEIGHT ON AN EROSION DEVICE OR AS DIRECTED BY THE ENGINEER.

2. DURING THE CONSTRUCTION OF STRUCTURES REQUIRING EXCAVATION, THE CONTRACTOR SHALL PLACE APPROVED BARRIERS OR OTHER APPROVED DEVICES AROUND SUCH STRUCTURES TO PREVENT EROSION AND THE MIGRATION OF SEDIMENT TO POINTS OUTSIDE THE CONSTRUCTION AREA. THE APPROVED BARRIERS OR OTHER APPROVED DEVICES SHALL BE PLACED IN ACCORDANCE WITH REQUIREMENTS OF FLORIDA STORM WATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL, 2018, STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, LATEST EDITION OR AS DIRECTED BY THE ENGINEER.

3. REQUIRED EROSION CONTROL MEASURES MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. FAILURE TO INSTALL OR PROPERLY MAINTAIN REQUIRED EROSION CONTROL WILL RESULT IN ENFORCEMENT ACTION. ALL EROSION CONTROL MEASURES, SAND, SILT, AND DEBRIS SHALL BE REMOVED FROM ALL STRUCTURES AFTER CONSTRUCTION HAS BEEN COMPLETED AND PRIOR TO CITY FINAL WALK-THROUGH.

4. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SILT/TURBIDITY BARRIERS TO CONTROL EROSION AND SEDIMENT FROM TAKING PLACE OUTSIDE THE PROJECT LIMITS. THE SILT/TURBIDITY BARRIERS SHALL BE PLACED IN ACCORDANCE WITH REQUIREMENTS OF FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL, 2018, STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, LATEST EDITION, THROUGHOUT THE DURATION OF THE PROJECT AND ALL ASPECTS OF CONSTRUCTION. ALL DAMAGED OR INEFFECTIVE EROSION CONTROL DEVICES SHALL BE REPLACED AT NO ADDITIONAL COST TO THE CITY.

5. EROSION CONTROL PLAN – ANY MODIFICATIONS TO THIS PLAN MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REPRESENTING THE CONTRACTOR. THESE MODIFICATIONS MUST BE APPROVED BY THE CITY AND THE PERMITTING AGENCY. NO CONTRACT DELAYS WILL BE ALLOWED FOR SUCH MODIFICATIONS OR APPROVALS.

6. APPROVED BARRIERS (OR OTHER APPROVED SEDIMENT CONTROL DEVICES) THESE SHALL BE PLACED AT THE BASE OF ANY SLOPE WHERE A RAINFALL EVENT COULD ERODE A SLOPE AND TRANSPORT SEDIMENTS OFF-SITE. APPROVED BARRIERS SHALL BE DOUBLE STAKED IN ACCORDANCE WITH FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL, 2018, AND STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, LATEST EDITION. ANY DAMAGED OR INEFFECTIVE APPROVED BARRIERS ARE TO BE REPLACED WITH NEW ONES. THE LOCATION AND INSTALLATION OF APPROVED BARRIERS SHALL BE AS DIRECTED BY THE PROJECT ENGINEER.

7. STOCKPILED MATERIALS SHALL BE PROTECTED BY COVER, APPROVED BARRIERS OR OTHER APPROVED SEDIMENT CONTROL DEVICES.

8. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 3 DAYS AFTER ½" RAIN EVENT DISTURBANCE.

9. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION, OR OTHER ACCEPTABLE METHODS.

10. THE EROSION CONTROL DEVICE QUANTITIES SHOWN ON THE BID FORMS ARE ESTIMATES OF THE ACTUAL QUANTITIES THAT MAY BE ENCOUNTERED DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SPECIFY ACTUAL QUANTITIES AND COSTS ASSOCIATED WITH THIS SPECIFIC EROSION CONTROL IMPLEMENTATION SCHEDULE. EROSION CONTROL ITEMS MAY BE ADDED OR DELETED FROM THE PAY ITEM LIST AS THE EROSION CONTROL IMPLEMENTATION SCHEDULE PROVIDED BY THE CONTRACTOR IS MODIFIED TO MEET SITE SPECIFIC CONDITIONS.

11. ALL EROSION CONTROL FENCES, BARRIERS, AND SILTATION DEVICES SHALL BE ERECTED PRIOR TO ANY LAND ALTERATIONS, SHALL BE MAINTAINED IN GOOD WORKING ORDER DURING CONSTRUCTION, AND REMOVED FOLLOWING SOIL STABILIZATION AND FINAL DRESSING. STOCKPILE AREAS SHALL INCLUDE SILT FENCING AROUND THE PERIMETER.

12. THE CONTRACTOR SHALL NOT RESTRICT OR BLOCK THE EXISTING DRAINAGE FLOW OVERLAND OR WITHIN RESHAPED SWALES. FLOW WITHIN EXISTING DRAINAGE PIPES SHALL BE MAINTAINED AT ALL TIMES. STORM WATER WILL BE CONVEYED VIA EXISTING SWALES, DITCHES, OR PROPOSED DITCHES, EXISTING AND PROPOSED STORM SEWERS.

13. THERE IS TO BE NO DISCHARGE (I.E. PUMPING, SHEET FLOW, SWALE, DITCH, ETC.) INTO EXISTING DITCHES OR CANALS WITHOUT THE USE OF SETTLING PONDS. IF THE CONTRACTOR DESIRES TO DISCHARGE INTO EXISTING DITCHES OR CANALS A SETTLING POND PLAN PREPARED BY THE CONTRACTOR MUST BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD AND LOCAL REGULATORY AGENCY PRIOR TO CONSTRUCTION.

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DRAWN BY: BCS 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

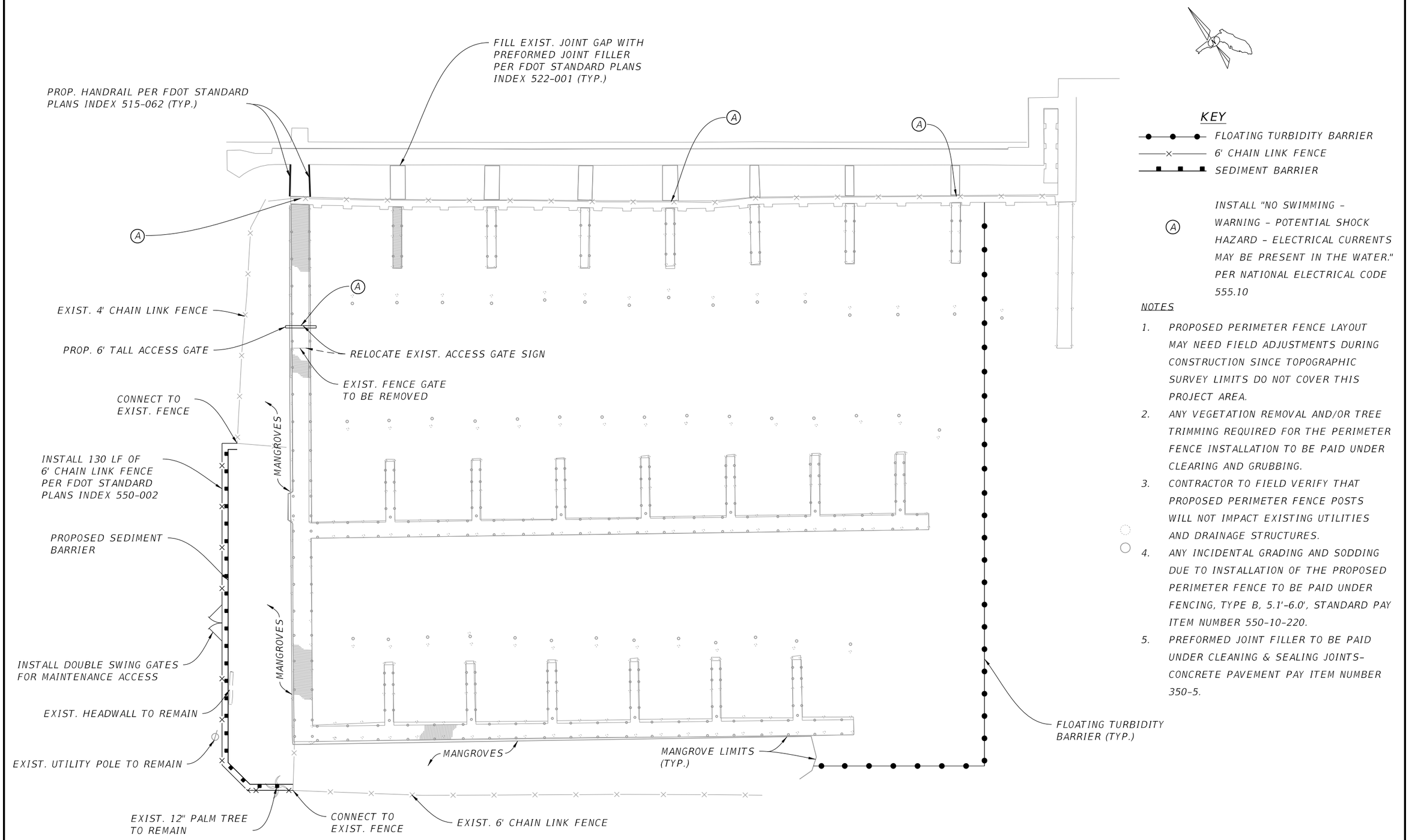
SHEET TITLE: EROSION CONTROL GENERAL NOTES

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. C-01

Plotted By: Christian.Hodges 6/14/2024 11:16:16 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1CivilGeneralNotes01.dgn



KEY

- FLOATING TURBIDITY BARRIER
- 6' CHAIN LINK FENCE
- SEDIMENT BARRIER

(A) INSTALL "NO SWIMMING - WARNING - POTENTIAL SHOCK HAZARD - ELECTRICAL CURRENTS MAY BE PRESENT IN THE WATER." PER NATIONAL ELECTRICAL CODE 555.10

NOTES

1. PROPOSED PERIMETER FENCE LAYOUT MAY NEED FIELD ADJUSTMENTS DURING CONSTRUCTION SINCE TOPOGRAPHIC SURVEY LIMITS DO NOT COVER THIS PROJECT AREA.
2. ANY VEGETATION REMOVAL AND/OR TREE TRIMMING REQUIRED FOR THE PERIMETER FENCE INSTALLATION TO BE PAID UNDER CLEARING AND GRUBBING.
3. CONTRACTOR TO FIELD VERIFY THAT PROPOSED PERIMETER FENCE POSTS WILL NOT IMPACT EXISTING UTILITIES AND DRAINAGE STRUCTURES.
4. ANY INCIDENTAL GRADING AND SODDING DUE TO INSTALLATION OF THE PROPOSED PERIMETER FENCE TO BE PAID UNDER FENCING, TYPE B, 5.1'-6.0', STANDARD PAY ITEM NUMBER 550-10-220.
5. PREFORMED JOINT FILLER TO BE PAID UNDER CLEANING & SEALING JOINTS-CONCRETE PAVEMENT PAY ITEM NUMBER 350-5.

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DRAWN BY: CAH 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

SHEET TITLE: SITE CIVIL AND EROSION CONTROL PLAN

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. C-02

Plotted By: Christian.Hodges 6/13/2024 4:47:30 PM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_PlanSiteCivil.dgn

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LEGEND

SYMBOL	DESCRIPTION	MOUNTING/REMARKS
	LIGHTING CABINET: DENOTED BY LABEL	SURFACE, TOP 78" AFF OR AS REQUIRED BY MANUFACTURER
	DEVICE AS NOTED	AS NOTED
	BRANCH CIRCUIT PANELBOARD: 240 VAC	TOP 78" AFF
	CIRCUIT BREAKER	TOP 78" AFF
	ELECTRICAL EQUIPMENT: DENOTED BY LABEL	AS NOTED
	ELECTRIC UTILITY METER/CABINET	AS REQUIRED BY UTILITY COMPANY
	CIRCUIT/CONDUIT OR CABLE TURNING UP/RISER	TWO WIRES: *
	CIRCUIT/CONDUIT OR CABLE TURNING DOWN/DROP	NEUTRAL WIRE (TYP) PHASE WIRE (TYP) THREE WIRES, ETC. EQUIPMENT GROUND WIRE
	CIRCUIT HOME RUN TO PANELBOARD INDICATED	
	CIRCUIT/CONDUIT FLEXIBLE CONNECTION	
	CIRCUIT/CONDUIT OR CABLE CONCEALED IN CEILING OR WALL	*MIN 2 #12 + #12 EG – 1/2" C FOR ALL POWER AND LIGHTING RACEWAYS UON OR SPECIFIED
	CIRCUIT/CONDUIT OR CABLE UNDERGROUND OR UNDER FLOOR	
'EQUIP'	EQUIPMENT LABEL	REFER TO RESPECTIVE SCHEDULE
PNL–CIR	PANELBOARD–CIRCUIT DESIGNATION	REFER TO PANEL SCHEDULE
(#) (#)	KEYED NOTES	REFER TO LIKE–NUMBERED NOTES

NOTES:

A. PERFORM WORK IN COMPLIANCE WITH THE LATEST EDITION OF ALL APPLICABLE, FEDERAL, STATE AND LOCAL CODES, REGULATIONS AND STANDARDS, TO INCLUDE THOSE LISTED BELOW, ADOPTED BY THE AUTHORITY HAVING JURISDICTION. WHERE DIFFERENCES MAY OCCUR THE MORE STRINGENT REQUIREMENTS SHALL GOVERN. IN CASE OF CONFLICT PROVIDE WRITTEN NOTIFICATION AND OBTAIN A DECISION FROM THE ARCHITECT/OWNER.

1. NFPA 70: NATIONAL ELECTRICAL CODE (2020)
2. NFPA 70E: STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE (2024)
3. NFPA 101: LIFE SAFETY CODE (2021)
4. NFPA 241: STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION AND DEMOLITION OPERATIONS (2022)
5. FBC: FLORIDA BUILDING CODE (2023)
6. OSHA PART 1910: OCCUPATIONAL SAFETY AND HEALTH STANDARDS
7. OSHA PART 1926: SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION

SYMBOL	DESCRIPTION	MOUNTING/REMARKS

ABBREVIATIONS:

A	AMPS OR AMPERE	FC	FOOTCANDLE	NEC	NATIONAL ELECTRICAL CODE
A/E	ARCHITECT/ENGINEER	FLA	FULL LOAD AMPS	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
AF	AMPERE FRAME	FO	FIBER OPTIC		
AFCI	ARC–FAULT CIRCUIT INTERRUPTER	FT	FOOT (FEET)	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
		GC	GENERAL CONTRACTOR		
AFF	ABOVE FINISHED FLOOR	GEN	GENERATOR	NO	NORMALLY OPEN
AFG	ABOVE FINISHED GRADE	GFCI	GROUND–FAULT CIRCUIT INTERRUPTER	NTS	NOT TO SCALE
AHJ	AUTHORITY HAVING JURISDICTION			OB	OUTLET BOX
		GND	GROUND	P	POLE
AIC	AMPERE INTERRUPTING CAPACITY	HOA	HAND–OFF–AUTO	PA	PUBLIC ADDRESS
		HP	HORSEPOWER	PB	PULL BOX
AL	ALUMINUM	HPS	HIGH PRESSURE SODIUM	PH/ϕ	PHASE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	HV	HIGH VOLTAGE	PNL	PANELBOARD (PANEL)
		HZ	HERTZ	RECPT	RECEPTACLE
ASD	ADJUSTABLE SPEED DRIVE	IG	ISOLATED GROUND	SCC	SHORT CIRCUIT CAPACITY
AT	AMPERE TRIP	IN	INCH (INCHES)	SF	SQUARE FOOT (FEET)
ATS	AUTOMATIC TRANSFER SWITCH	JB	JUNCTION BOX	SPEC	SPECIFICATION
		kcmil	THOUSAND CIRCULAR MIL	SPD	SURGE PROTECTIVE DEVICE
AUTO	AUTOMATIC	kV	KILOVOLT	SS	STAINLESS STEEL
AWG	AMERICAN WIRE GAUGE	kVA	KILOVOLT AMPERE	SWBD	SWITCHBOARD
BLDG	BUILDING	kW	KILOWATT	SWGR	SWITCHGEAR
BFG	BELOW FINISHED GRADE	kWh	KILOWATT HOUR	TR	TAMPER RESISTANT
BRKR	BREAKER	LED	LIGHT EMITTING DIODE	TYP	TYPICAL
C	CONDUIT	LPS	LIGHTNING PROTECTION SYSTEM	U	UNKNOWN CIRCUIT
CB	CIRCUIT BREAKER			UL	UNDERWRITERS LABORATORY
CKT	CIRCUIT	LTG	LIGHTING		
COMM	COMMUNICATIONS	LTNG	LIGHTNING	UON	UNLESS OTHERWISE NOTED
CT	CURRENT TRANSFORMER	LV	LOW VOLTAGE	UPS	UNINTERRUPTIBLE POWER SUPPLY
CU	COPPER	MAX	MAXIMUM		
°C	DEGREES CELSIUS	MCA	MINIMUM CIRCUIT AMPACITY	UTIL	UTILITY
°F	DEGREES FAHRENHEIT	MCB	MAIN CIRCUIT BREAKER	V	VOLT OR VOLTAGE
DISC	DISCONNECT	MCC	MOTOR CONTROL CENTER	VA	VOLT AMPERE
DP	DISTRIBUTION PANELBOARD	MDP	MAIN DISTRIBUTION PANELBOARD	VD	VOLTAGE DROP
DS	DISCONNECT SWITCH			VFD	VARIABLE FREQUENCY DRIVE
DWG	DRAWING	MH	METAL HALIDE		
EC	ELECTRICAL CONTRACTOR	MHz	MEGAHERTZ	W	WATT OR WIRE
EG	EQUIPMENT GROUND	MIN	MINIMUM	WP	WEATHERPROOF
ELEC	ELECTRIC OR ELECTRICAL	MLO	MAIN LUGS ONLY	WR	WEATHER RESISTANT
ELEV	ELEVATOR	MOCP	MAXIMUM OVERCURRENT PROTECTION	WT	WATERTIGHT
EMER	EMERGENCY			XFER	TRANSFER
EPO	EMERGENCY POWER OFF	MTS	MANUAL TRANSFER SWITCH	XFMR	TRANSFORMER
EPS	EMERGENCY POWER SUPPLY	N	NEUTRAL	XP	EXPLOSION RATED
EXIST	EXISTING	NA	NOT APPLICABLE		
FA	FIRE ALARM	NC	NORMALLY CLOSED		

OBJECT STATE LINETYPES:

EXISTING OBJECT OR CONSTRUCTION: ———————

EXISTING OBJECT OR CONSTRUCTION TO BE DEMOLISHED: – – – – – – – – – – – – – – – –

NEW OBJECT OR CONSTRUCTION TO BE PROVIDED: ———————

OBJECT STATE SUBSCRIPTS:

D	EXISTING OBJECT TO BE DEMOLISHED	M	EXISTING OBJECT TO BE REMOVED & RELOCATED
E	EXISTING OBJECT TO REMAIN	R	RELOCATED EXISTING OBJECT

60% CDs

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DESIGNED BY:	AVE
CHECKED BY:	AVE

SAFETY HARBOR FL

SHEET TITLE: ELECTRICAL LEGEND

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-01

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Z:\2023 Projects\2307C Safety Harbor Marina\Drawings\Electrical\Sheet Set\2307C_E-01 Electrical Legend.dwg Feb.29.2024 11:45 am

⟨#⟩ DRAWING NOTES (SHEETS E–03 – E–04)

1. EXISTING EQUIPMENT RACK. REFER TO THE POWER ONE–LINE DIAGRAM ON SHEET E–06 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
2. EXISTING PANELBOARD AND ASSOCIATED FEEDER AND BRANCH CIRCUIT CONDUCTORS AND CONDUITS TO BE REMOVED AND REPLACED WITH NEW.
3. EXISTING MARINA RECEPTACLE PEDESTAL AND ASSOCIATED DEVICES, CONDUCTORS, AND CONDUITS TO BE REMOVED AND REPLACED WITH NEW.
4. EXISTING 240/120 V, 1ϕ, 3W, 150 A MCB PANELBOARD TO REMAIN.
5. EXISTING LIGHTING CONTROL CABINET TO REMAIN.
6. ENCLOSED CIRCUIT BREAKER. REFER TO POWER ONE–LINE DIAGRAM FOR ADDITIONAL INFORMATION.
7. MARINA PEDESTAL. REFER TO SCHEDULE ON SHEET E–10.

DRAWING GENERAL NOTES (SHEETS E–03 – E–04)

A. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
B. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
C. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
D. REFER TO POWER ONE–LINE DIAGRAM FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
E. MAXIMUM 3 QUARTER TURNS (TOTAL 270°) CONDUIT BENDS BETWEEN JUNCTION/PULL BOXES.
F. MAINTAIN MINIMUM 12" SEPARATION BETWEEN ELECTRICAL AND OTHER UTILITIES/INFRASTRUCTURE.
G. COORDINATE WITH EXISTING UNDERGROUND UTILITIES AND CONDITIONS. HAND DIG TRENCHES AS REQUIRED.
H. SAW CUT AND PATCH PAVEMENT AS REQUIRED. COORDINATE WORK WITH OWNER.
I. ALL CONDUCTORS SHALL BE TYPE XHHW–2.
J. ALL EXPOSED CONDUITS SHALL BE UV RESISTANT, SCHEDULE 80 PVC.
K. ALL FASTENERS, ANCHORS, STRAPS, HARDWARE, STRUT–CHANNEL, ETC. SHALL BE STAINLESS STEEL (TYPE 316).
L. THE ELECTRICAL DATUM PLANE SHALL BE 2 FEET ABOVE THE HIGHEST TIDE LEVEL.
M. ALL ELECTRICAL EQUIPMENT AND DEVICES SHALL BE LOCATED ABOVE THE ELECTRICAL DATUM PLANE.
N. ELECTRICAL EQUIPMENT AND DEVICES LOCATED ON THE DOCK SHALL BE MINIMUM 12" ABOVE THE DECK BUT SHALL NOT BE LOCATED BELOW THE ELECTRICAL DATUM PLANE.
O. CONDUITS ROUTED UNDER THE DOCK SHALL BE SECURELY FASTENED TO THE STRUCTURE MAXIMUM EVERY 6' USING LISTED, 2–HOLE, STAINLESS STEEL (TYPE 316) CONDUIT STRAPS.
P. PROVIDE SAFETY SIGNS PER NEC 555.10.

60% CDs

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CHECKED BY: AVE
DESIGNED BY: AVE
CHECKED BY: AVE

SAFETY HARBOR | FL

SHEET TITLE: ELECTRICAL PLAN NOTES

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-02

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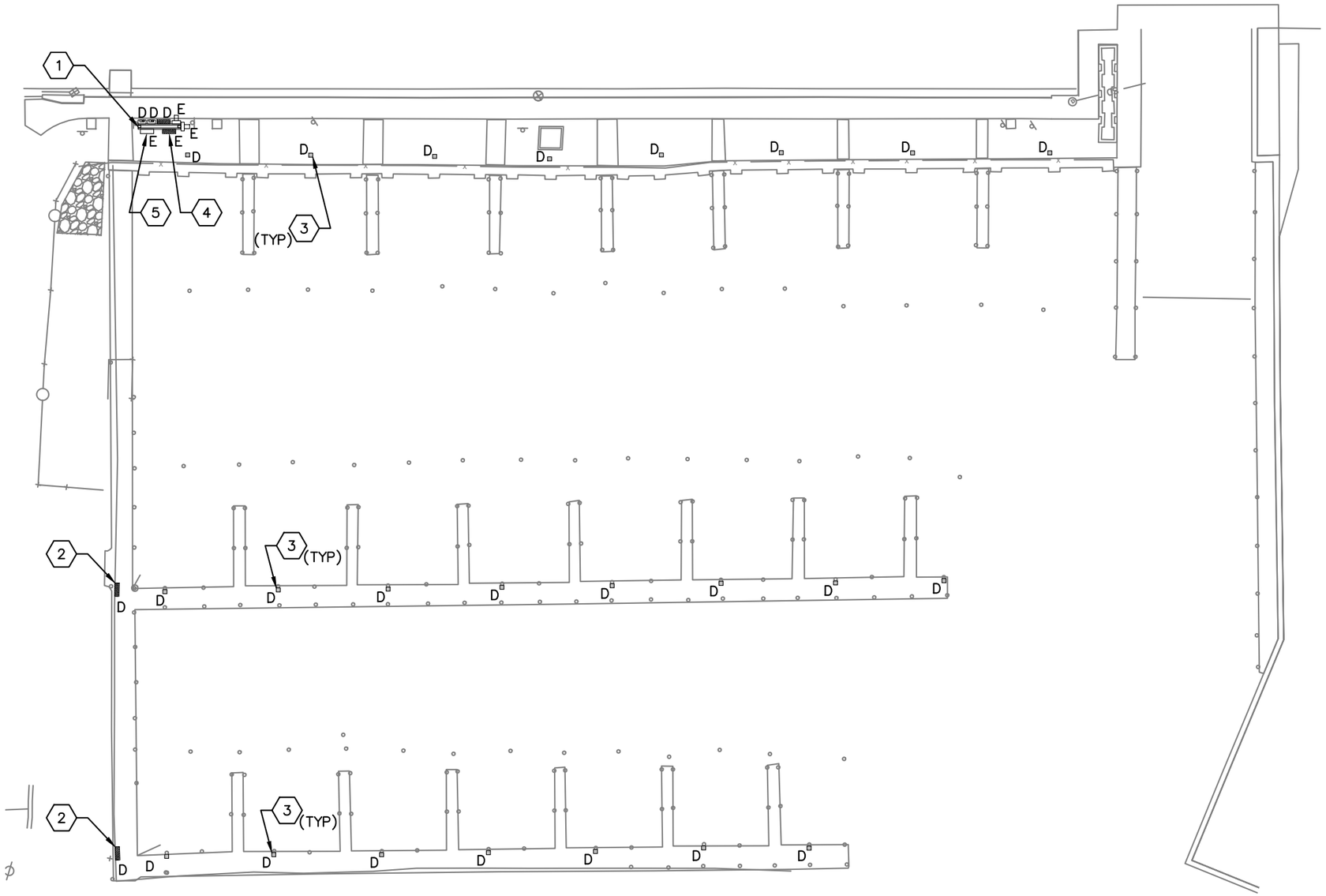

01 ELECTRICAL DEMOLITION PLAN

SCALE: 1"=30'

60% CDs

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SAFETY HARBOR FL

SHEET TITLE: ELECTRICAL DEMOLITION PLAN

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-03

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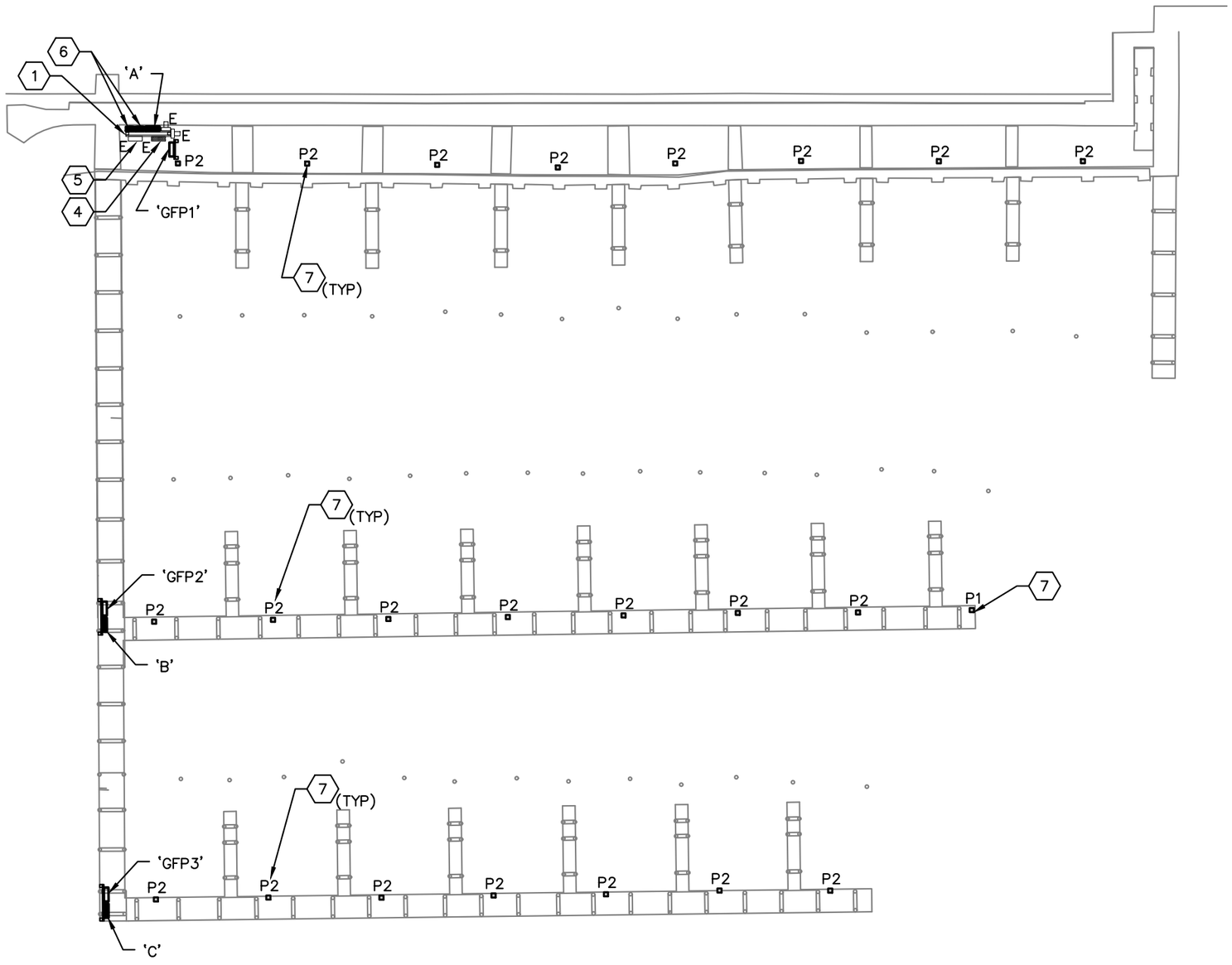

01 ELECTRICAL PLAN

SCALE: 1"=30'

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SAFETY HARBOR FL

SHEET TITLE: ELECTRICAL PLAN

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-04

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DRAWING NOTES (SHEET E-06)

1. EXISTING EQUIPMENT RACK.
2. EXISTING WIREWAY.
3. EXISTING UTILITY METER.
4. REPLACE EXISTING 240/120 V, 1ϕ, 3W, 150 A MCB PANELBOARD WITH NEW: REFER TO PANEL SCHEDULE.
5. REPLACE EXISTING ENCLOSED CIRCUIT BREAKER WITH NEW 240 V 1ϕ, 3W, 225 A, SHUNT–TRIP CIRCUIT BREAKER IN STAINLESS STEEL (TYPE 316) ENCLOSURE.
6. NEW EQUIPMENT RACK; MINIMUM 5" X 5" CONCRETE POSTS WITH STAINLESS STEEL (TYPE 316) STRUT CHANNEL. SIZE AS REQUIRED.
7. NEW EQUIPMENT RACK MOUNTED TO DOCK PILES; STAINLESS STEEL (TYPE 316) STRUT CHANNEL. SIZE AS REQUIRED.
8. GROUND FAULT MONITORING PANEL; BENDER, MARINAGUARD MG–T OR ENGINEER APPROVED EQUAL.
9. GROUND FAULT MONITORING PANEL WILL MONITOR THE FEEDERS TO PANELBOARDS "A", "B" AND "C" AS WELL AS THE BRANCH CIRCUIT CONDUCTORS SERVING SLIPS 1–16; GROUND FAULT PROTECTION SHALL BE SET TO 100 mA MAX.
10. GROUND FAULT MONITORING PANEL WILL MONITOR THE BRANCH CIRCUIT CONDUCTORS SERVING SLIPS 17–31; GROUND FAULT PROTECTION SHALL BE SET TO 100 mA MAX.
11. GROUND FAULT MONITORING PANEL WILL MONITOR THE BRANCH CIRCUIT CONDUCTORS SERVING SLIPS 32–44; GROUND FAULT PROTECTION SHALL BE SET TO 100 mA MAX.
12. REPLACE EXISTING 240/120 V, 1ϕ, 3W, 225 A MLO PANELBOARD WITH NEW; REFER TO PANEL SCHEDULE.
13. REPLACE EXISTING CONDUIT AND CONDUCTORS AS FOLLOWS: 3 #4/0 + #4 EG – 2 1/2" C.
14. REPLACE EXISTING CONDUIT AND CONDUCTORS AS FOLLOWS: 3 #250 KCMIL + #3 EG – 3" C.
15. SPD; PQ PROTECTION, MODEL #PQC160–240V OR ENGINEER APPROVED EQUAL.
16. FEEDS PANEL "B".
17. FEEDS PANEL "C".
18. EXISTING GROUNDING ELECTRODE SYSTEM.
19. GROUNDING ELECTRODE SYSTEM.
20. PROVIDE (1) SPARE 2 1/2" C.
21. PROVIDE (1) SPARE 3" C.

DRAWING GENERAL NOTES (SHEET E–06)

A. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
B. MAXIMUM 3 QUARTER TURNS (TOTAL 270°) CONDUIT BENDS BETWEEN JUNCTION/PULL BOXES.
C. MAINTAIN MINIMUM 12" SEPARATION BETWEEN ELECTRICAL AND OTHER UTILITIES/INFRASTRUCTURE.
D. COORDINATE WITH EXISTING UNDERGROUND UTILITIES AND CONDITIONS. HAND DIG TRENCHES AS REQUIRED.
E. SAW CUT AND PATCH PAVEMENT AS REQUIRED. COORDINATE WORK WITH OWNER.
F. ALL CONDUCTORS SHALL BE TYPE XHHW–2.
G. ALL EXPOSED CONDUITS SHALL BE UV RESISTANT, SCHEDULE 80 PVC.
H. ALL FASTENERS, ANCHORS, STRAPS, HARDWARE, STRUT–CHANNEL, ETC. SHALL BE STAINLESS STEEL (TYPE 316).
I. THE ELECTRICAL DATUM PLANE SHALL BE 2 FEET ABOVE THE HIGHEST TIDE LEVEL.
J. ALL ELECTRICAL EQUIPMENT AND DEVICES SHALL BE LOCATED ABOVE THE ELECTRICAL DATUM PLANE.
K. ELECTRICAL EQUIPMENT AND DEVICES LOCATED ON THE DOCK SHALL BE MINIMUM 12" ABOVE THE DECK BUT SHALL NOT BE LOCATED BELOW THE ELECTRICAL DATUM PLANE.
L. CONDUITS ROUTED UNDER THE DOCK SHALL BE SECURELY FASTENED TO THE STRUCTURE MAXIMUM EVERY 6' USING LISTED, 2–HOLE, STAINLESS STEEL (TYPE 316) CONDUIT STRAPS.

60% CDs

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SAFETY HARBOR FL

SHEET TITLE: POWER ONE-LINE DIAGRAM NOTES

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-05

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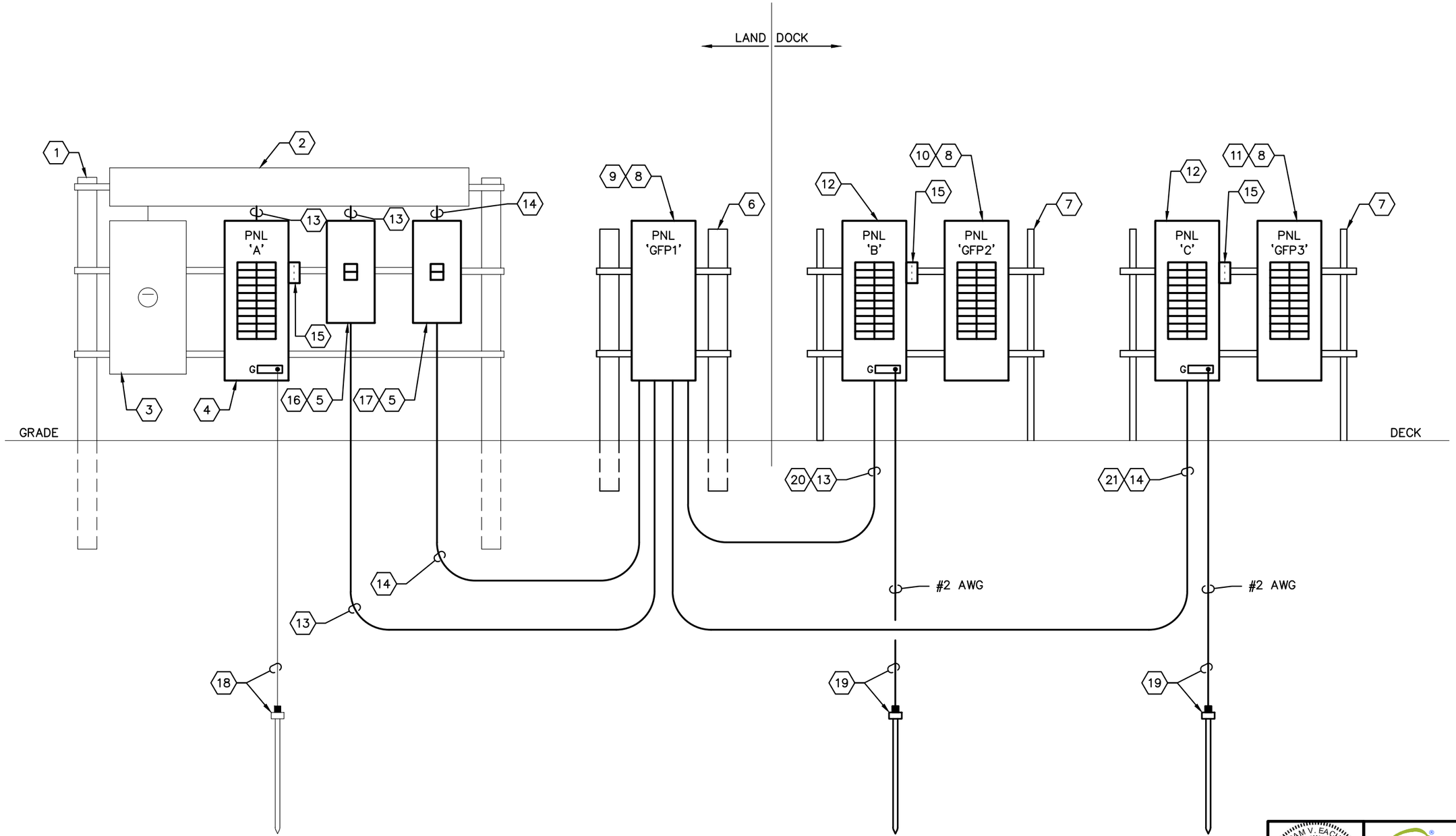

01 POWER ONE-LINE DIAGRAM

SCALE: NONE

60% CDs

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SAFETY HARBOR FL

SHEET TITLE: POWER ONE-LINE DIAGRAM

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-06

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PANELBOARD A SCHEDULE

VOLTAGE (L–L/L–N): 240 / 120 V	PHASE: 1	WIRES: 3	MAIN TYPE: MCB	MAIN OC DEVICE (2): 225 A
BUS RATING: 225 A	MIN AIC RATING: 10,000 A		ENCLOSURE TYPE (1): NEMA 4X	MOUNTING: SURFACE
FEED–THRU LUGS: NO	SUB–FEED LUGS: NO		ISOLATED GND BUS: NO	NEUTRAL BUS: YES

CKT NO	DESCRIPTION	BREAKER POLE	BREAKER TRIP	PHASE LOADS (VA) A	PHASE LOADS (VA) B	BREAKER TRIP	BREAKER POLE	DESCRIPTION	CKT NO
1	SLIP 1 & 2 (2)	2	30	3,600	0			20	2	SPD	2
3	”					3,600	0			”	4
5	(SHUNT–TRIP)			0	3,600			30	2	SLIP 9 & 10 (2)	6
7	SLIP 3 & 4 (2)	2	30			3,600	3,600			”	8
9	”			3,600	0					(SHUNT–TRIP)	10
11	(SHUNT–TRIP)					0	3,600	30	2	SLIP 11 & 12 (2)	12
13	SLIP 5 & 6 (2)	2	30	3,600	3,600					”	14
15	”					3,600	0			(SHUNT–TRIP)	16
17	(SHUNT–TRIP)			0	3,600			30	2	SLIP 13 & 14 (2)	18
19	SLIP 7 & 8 (2)	2	30			0	3,600			”	20
21	”			3,600	0					(SHUNT–TRIP)	22
23	(SHUNT–TRIP)					3,600	3,600	30	2	SLIP 15 & 16 (2)	24
25	GFP1 CONTROL POWER	1	20	300	3,600					”	26
27	SPACE					–	0			(SHUNT–TRIP)	28
29	SPACE			–	–					SPACE	30
31	SPACE					–	–			SPACE	32
33	SPACE			–	–					SPACE	34
35	SPACE					–	–			SPACE	36
37	SPACE			–	–					SPACE	38
39	SPACE					–	–			SPACE	40
41	SPACE			–	–					SPACE	42
			TOTAL	29,100		28,800					

LOAD CLASSIFICATION	CONNECTED (VA)	DEMAND FACTOR	DEMAND (VA)
EXTERIOR LIGHTING	0	1.25	0
INTERIOR LIGHTING	0	1.25	0
RECEPTACLE (1st 10 k)	0	1.00	0
RECEPTACLE (Over 10 k)	0	0.50	0
AIR HANDLERS	0	1.00	0
ELECTRIC HEAT	0	1.00	0
COOLING	0	1.00	0
EQUIPMENT/MOTORS	300	1.00	300
LARGEST MOTOR	0	1.25	0
SHORE POWER RECPTS	57,600	0.70	40,320
TOTAL	57,900		40,620

PANEL SUMMARY	
CONNECTED	241 A
DEMAND	169 A
SPARE CAPACITY	6 %

NOTES:

1. PROVIDE STAINLESS STEEL (TYPE 316) ENCLOSURE.
2. PROVIDE SHUNT–TRIP CIRCUIT BREAKER.

60% CDs

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SAFETY HARBOR FL

SHEET TITLE: PANEL SCHEDULE A

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-07

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PANELBOARD B SCHEDULE

VOLTAGE (L–L/L–N): 240 / 120 V	PHASE: 1	WIRES: 3	MAIN TYPE: MCB	MAIN OC DEVICE: 225 A
BUS RATING: 225 A	MIN AIC RATING: 10,000 A	ENCLOSURE TYPE (1): NEMA 4X	MOUNTING: SURFACE
FEED–THRU LUGS: NO	SUB–FEED LUGS: NO	ISOLATED GND BUS: NO	NEUTRAL BUS: YES

CKT NO	DESCRIPTION	BREAKER POLE	BREAKER TRIP	PHASE LOADS (VA) A	PHASE LOADS (VA) B	BREAKER TRIP	BREAKER POLE	DESCRIPTION	CKT NO
1	SLIP 17 & 18 (2)	2	30	3,600	0	20	2	SPD	2
3	”				3,600	0			”	4
5	(SHUNT–TRIP)			0	3,600	30	2	SLIP 25 & 26 (2)	6
7	SLIP 19 & 20 (2)	2	30		3,600	3,600			”	8
9	”			3,600	0				(SHUNT–TRIP)	10
11	(SHUNT–TRIP)				0	3,600	30	2	SLIP 27 & 28 (2)	12
13	SLIP 21 & 22 (2)	2	30	3,600	3,600				”	14
15	”				3,600	0			(SHUNT–TRIP)	16
17	(SHUNT–TRIP)			0	3,600	30	2	SLIP 29 & 30 (2)	18
19	SLIP 23 & 24 (2)	2	30		0	3,600			”	20
21	”			3,600	0				(SHUNT–TRIP)	22
23	(SHUNT–TRIP)				3,600	1,800	30	2	SLIP 31 (2)	24
25	GFP2 CONTROL POWER	1	20	300	1,800				”	26
27	SPACE				–	0			(SHUNT–TRIP)	28
29	SPACE			–	–				SPACE	30
31	SPACE				–	–			SPACE	32
33	SPACE			–	–				SPACE	34
35	SPACE				–	–			SPACE	36
37	SPACE			–	–				SPACE	38
39	SPACE				–	–			SPACE	40
41	SPACE			–	–				SPACE	42
			TOTAL	27,300	27,000					

LOAD CLASSIFICATION	CONNECTED (VA)	DEMAND FACTOR	DEMAND (VA)
EXTERIOR LIGHTING	0	1.25	0
INTERIOR LIGHTING	0	1.25	0
RECEPTACLE (1st 10 k)	0	1.00	0
RECEPTACLE (Over 10 k)	0	0.50	0
AIR HANDLERS	0	1.00	0
ELECTRIC HEAT	0	1.00	0
COOLING	0	1.00	0
EQUIPMENT/MOTORS	300	1.00	300
LARGEST MOTOR	0	1.25	0
SHORE POWER RECPTS	54,000	0.70	37,800
TOTAL	54,300		38,100

PANEL SUMMARY	
CONNECTED	226 A
DEMAND	159 A
SPARE CAPACITY	12 %

NOTES:

1. PROVIDE STAINLESS STEEL (TYPE 316) ENCLOSURE.
2. PROVIDE SHUNT–TRIP CIRCUIT BREAKER.

60% CDs

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SAFETY HARBOR FL

SHEET TITLE: PANEL SCHEDULE B

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-08

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PANELBOARD C SCHEDULE

VOLTAGE (L–L/L–N): 240 / 120 V	PHASE: 1	WIRES: 3	MAIN TYPE: MCB	MAIN OC DEVICE: 225 A
BUS RATING: 225 A	MIN AIC RATING: 10,000 A	ENCLOSURE TYPE (1): NEMA 4X	MOUNTING: SURFACE
FEED–THRU LUGS: NO	SUB–FEED LUGS: NO	ISOLATED GND BUS: NO	NEUTRAL BUS: YES

CKT NO	DESCRIPTION	BREAKER POLE	BREAKER TRIP	PHASE LOADS (VA) A	PHASE LOADS (VA) B	BREAKER TRIP	BREAKER POLE	DESCRIPTION	CKT NO
1	SLIP 32 & 33 (2)	2	30	3,600	0	20	2	SPD	2
3	”				3,600	0		”	4
5	(SHUNT–TRIP)			0	3,600	30	2	SLIP 40 & 41 (2)	6
7	SLIP 34 & 35 (2)	2	30		3,600	3,600		”	8
9	”			3,600	0			(SHUNT–TRIP)	10
11	(SHUNT–TRIP)				0	3,600	30	2	SLIP 42 & 43 (2)	12
13	SLIP 36 & 37 (2)	2	30	3,600	3,600			”	14
15	”				3,600	0		(SHUNT–TRIP)	16
17	(SHUNT–TRIP)			0	1,800	30	2	SLIP 44 (2)	18
19	SLIP 38 & 39 (2)	2	30		0	1,800		”	20
21	”			3,600	0			(SHUNT–TRIP)	22
23	(SHUNT–TRIP)				3,600	–		SPACE	24
25	GFP3 CONTROL POWER	1	20	300	–			SPACE	26
27	SPACE				–	–		SPACE	28
29	SPACE			–	–			SPACE	30
31	SPACE				–	–		SPACE	32
33	SPACE			–	–			SPACE	34
35	SPACE				–	–		SPACE	36
37	SPACE			–	–			SPACE	38
39	SPACE				–	–		SPACE	40
41	SPACE			–	–			SPACE	42
	TOTAL			23,700	23,400				

LOAD CLASSIFICATION	CONNECTED (VA)	DEMAND FACTOR	DEMAND (VA)
EXTERIOR LIGHTING	0	1.25	0
INTERIOR LIGHTING	0	1.25	0
RECEPTACLE (1st 10 k)	0	1.00	0
RECEPTACLE (Over 10 k)	0	0.50	0
AIR HANDLERS	0	1.00	0
ELECTRIC HEAT	0	1.00	0
COOLING	0	1.00	0
EQUIPMENT/MOTORS	300	1.00	300
LARGEST MOTOR	0	1.25	0
SHORE POWER RECPTS	46,800	0.80	37,440
TOTAL	47,100		37,740

PANEL SUMMARY	
CONNECTED	196 A
DEMAND	157 A
SPARE CAPACITY	13 %

NOTES:

1. PROVIDE STAINLESS STEEL (TYPE 316) ENCLOSURE.
2. PROVIDE SHUNT–TRIP CIRCUIT BREAKER.

60% CDs

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SAFETY HARBOR FL

SHEET TITLE: PANEL SCHEDULE C

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-09

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MARINA PEDESTAL SCHEDULE

TAG	DESCRIPTION
P1	(1) 30 A, 1 PH, 125 V RECEPTACLE; NEMA L5–30, 1 HOSE BIBB, LED LIGHT, 30 mA GFPE RELAY AND SHUNT–TRIP CIRCUIT BREAKER, NEMA 3R, SS (TYPE 316) PEDESTAL, MEE – MARINA MATE SS OR ENGINEER APPROVED EQUIVALENT.
P2	(2) 30 A, 1 PH, 125 V RECEPTACLE; NEMA L5–30 (ONE RECEPTACLE PER SIDE), 2 HOSE BIBBS (ONE HOSE BIBB PER SIDE), LED LIGHT, 30 mA GFPE RELAYS AND SHUNT–TRIP CIRCUIT BREAKERS, NEMA 3R, SS (TYPE 316) PEDESTAL, MEE – MARINA MATE SS OR ENGINEER APPROVED EQUIVALENT.

NOTES:

1. RECEPTACLES SHALL BE ENCLOSED IN WET LOCATION LISTED, WHILE–IN–USE WEATHERPROOF ASSEMBLIES.
2. RECEPTACLES SHALL BE MARINE GRADE, WEATHER RESISTANT TYPE.
3. SUBMIT MARINA PEDESTALS FOR OWNER/ENGINEER REVIEW AND APPROVAL.

60% CDs

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SAFETY HARBOR | FL

SHEET TITLE: MARINA PEDESTAL SCHEDULE

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-10

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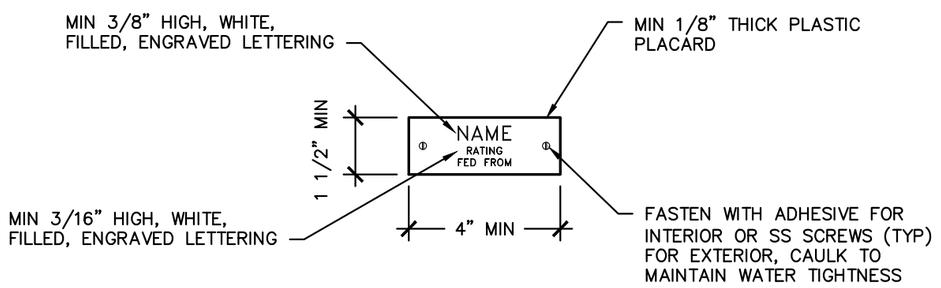

01 PLACARD DETAIL

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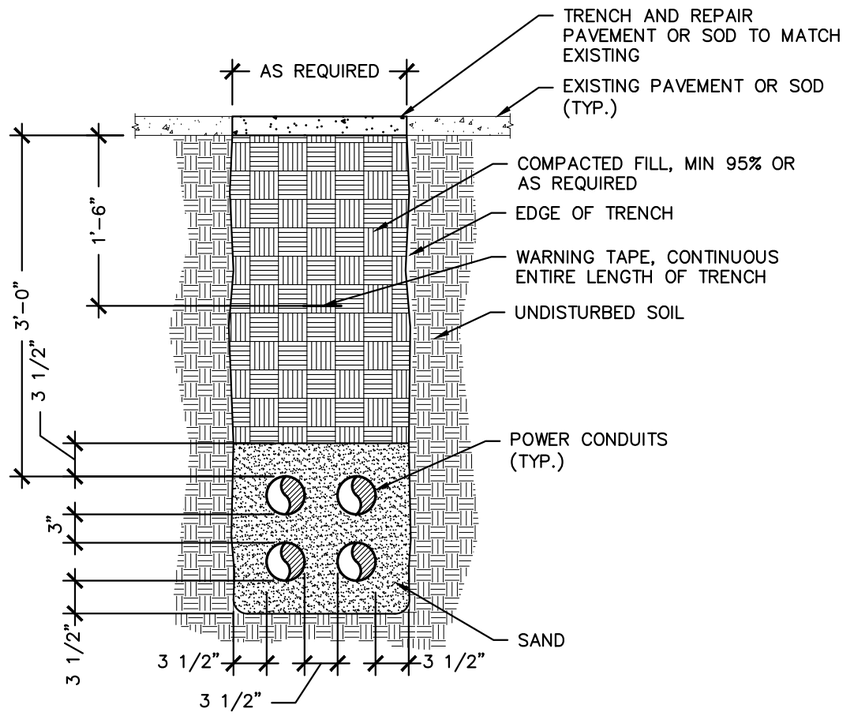

02 CONDUIT TRENCH DETAIL

SCALE: N.T.S.

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SAFETY HARBOR FL

SHEET TITLE: DETAILS

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-11

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COMPLIANCE NOTES

FLORIDA ADMINISTRATIVE CODE: 61G15-32.004

SCOPE OF WORK

ADDITION / EXTENSION TO AN EXISTING CLASS 1 MANUAL DRY STANDPIPE SYSTEM DESIGNED IN COMPLIANCE WITH THE APPLICABLE NFPA STANDARDS LISTED WITHIN THESE DOCUMENTS.

ACCEPTANCE TEST CRITERIA

SHALL COMPLY WITH NFPA-14. SPRINKLER SYSTEM SHALL BE PROPERLY INSPECTED AND MAINTAINED IN ACCORDANCE WITH NFPA-25 STANDARD FOR INSPECTION, TESTING, AND MAINTENANCE OF WATER BASED SYSTEM.

HAZARD CLASSIFICATION

CLASSIFICATION: ORDINARY HAZARD (GROUP 1 AND GROUP 2).

APPLICABLE NFPA STANDARDS TO BE APPLIED

FLORIDA BUILDING CODE (8TH EDITION)
FLORIDA FIRE PREVENTION CODE (8TH EDITION)
NFPA 303
NFPA 13
NFPA 14
NFPA 24
NFPA 25

FIRE ALARM SYSTEM

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

POINT OF SERVICE

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

CLASSIFICATION OF HAZARD OCCUPANCY FOR EACH ROOM OR AREA

ORDINARY HAZARD (GROUP 2): MARINA / DOCK

DESIGN APPROACH

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

CHARACTERISTICS OF THE WATER SUPPLY TO BE USED

STREET MAIN IS CIRCULATING. MINIMUM DURATION OF 60-90 MINUTES.

FLOW TEST DATA:

TO BE PREFORMED BY CONTRACTOR, UPON REQUEST BY AHJ.

COMPLIANCE NOTES CONTINUED

VALVING AND ALARM REQUIREMENTS TO MINIMIZE POTENTIAL FOR IMPAIRMENTS AND UNRECOGNIZED FLOW OF WATER:

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

MICROBIAL INDUCED CORROSION (MIC)

WATER SOURCE IS FROM EXISTING PUBLIC UTILITY WATER MAIN. THERE ARE NO KNOWN CONDITIONS PRESENT THAT CONTRIBUTE TO MICROBIOLOGICAL CORROSION (M.I.C.). CONTRACTOR SHALL REEVALUATE WATER SUPPLY AND ENVIRONMENTAL CONDITIONS FOR EXISTENCE OF MICROBES AND CONDITIONS THAT CONTRIBUTE TO M.I.C. PRIOR TO START OF CONSTRUCTION. WHERE CONDITIONS ARE FOUND THAT CONTRIBUTE TO M.I.C. THE CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER.

BACKFLOW PREVENTION AND METERING SPECIFICATIONS

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

QUALITY AND PERFORMANCE SPECIFICATIONS OF ALL YARD AND INTERIOR FIRE PROTECTION COMPONENTS

ALL NEW YARD AND INTERIOR FIRE PROTECTION EQUIPMENT SHALL BE UL LISTED AND/OR FM APPROVED.

FIRE PUMP REQUIREMENT

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

WATER STORAGE TANK REQUIREMENT

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

OWNER'S CERTIFICATE FOR STORAGE FACILITIES

PROPERTY IS NOT A STORAGE OCCUPANCY. OWNER'S CERTIFICATE IS NOT REQUIRED.

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SAFETY HARBOR | FL

SHEET TITLE: FIRE PROTECTION COMPLIANCE NOTES

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. FP-01

FIRE PROTECTION SPECIFICATIONS

1.0 GENERAL PROVISIONS

1.1 PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT FOR A COMPLETE AND PROPERLY OPERATING FIRE PROTECTION SYSTEM.

1.2 CODES AND STANDARDS: THE FIRE SPRINKLER PROTECTION SYSTEMS INSTALLATION, FLUSHING AND TESTING SHALL COMPLY WITH THE REQUIREMENTS OF NFPA 14, AND ALL LOCAL CODES HAVING JURISDICTION.

1.3 PIPE THREAD PATTERN: ALL THREADS SHALL BE IN ACCORDANCE WITH LOCAL FIRE DEPARTMENT SPECIFICATIONS AND NFPA 1963.

1.4 UL/FM APPROVAL: ALL EQUIPMENT, VALVES, COUPLINGS, HANGERS AND DEVICES SHALL BE APPROVED BY UNDERWRITERS' LABORATORY (UL) OR FACTORY MUTUAL (FM) FOR USE IN FIRE PROTECTION SERVICES.

1.5 LICENSURE: THE FIRE PROTECTION SYSTEMS SHALL BE INSTALLED BY A STATE CERTIFIED FIRE PROTECTION CONTRACTOR.

1.6 ALL FIRE PROTECTION WORK SHALL BE DONE IN A NEAT AND WORKMAN-LIKE MANNER.

1.7 CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND FEES, ETC., REQUIRED FOR THE EXECUTION OF THIS WORK.

1.8 CONTRACTOR SHALL COORDINATE WORK WITH OTHER TRADES BEFORE FABRICATION OR INSTALLATION. OFFSETS AND/OR TRANSITIONS REQUIRED SHALL BE PROVIDED WITHOUT ADDITIONAL COST. CONTRACTOR SHALL COORDINATE AND INSTALL WORK IN A TIMELY MANNER TO PREVENT DELAYS IN THE CONSTRUCTION.

1.9 CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACE DAMAGED EQUIPMENT AND/OR MATERIAL.

2.0 BASIC MATERIALS AND METHODS

2.1 ALL PIPING MATERIALS SHALL HAVE A CORROSION RESISTANCE RATING (CFR) OF 1.0 OR GREATER.

2.2 HANGERS: ALL HANGER SPACING SHALL COMPLY WITH THE REQUIREMENTS OF NFPA-13. HANGERS TO BE PROTECTED FROM CORROSION (316 STAINLESS STEEL)

2.3 HYDROSTATIC TESTS: ABOVE GROUND AND BELOW GROUND PIPING SYSTEMS SHALL BE HYDROSTATICALLY TESTED AT NOT LESS THAN 200 PSI PRESSURE OR AT 50 PSI IN EXCESS OF THE MAXIMUM PRESSURE, WHICHEVER IS GREATER, FOR A PERIOD OF 2 HOURS. THE TEST PRESSURE SHALL BE READ FROM A GAUGE LOCATED AT THE LOW ELEVATION POINT OF THE INDIVIDUAL SYSTEM OR PORTION OF THE SYSTEM BEING TESTED. THE SPRINKLER PIPING SHALL NOT HAVE LEAKAGE EXCEEDING THE AMOUNTS SPECIFIED IN NFPA 24. LEAKAGE QUANTITIES SHALL BE DETERMINED BY PUMPING AT THE SPECIFIED TEST PRESSURE FROM A CALIBRATED CONTAINER. REPAIR LEAKING JOINTS AND RETEST AS NECESSARY UNTIL ALL SYSTEMS HAVE BEEN TESTED. TEST THE PIPING BETWEEN THE CHECK VALVE IN THE FIRE DEPARTMENT INLET PIPE AND THE OUTSIDE CONNECTION THE SAME AS THE BALANCE OF THE SYSTEM.

FIRE PROTECTION SPECIFICATIONS CONTINUED

3.0 FIRE PROTECTION VALVES AND ACCESSORIES

3.1 BALL VALVE: TWO INCH (2") AND SMALLER: STANDARD FULL PORT BALL VALVE WITH BRASS BODY CONFORMING TO ASTM584, CHROME PLATED BRASS BALL AND STAINLESS STEEL STEM WITH TFE SEAL RATED FOR 365PSI. ACCEPTABLE MANUFACTURERS, VICTAULIC SERIES 728.

3.2 BUTTERFLY VALVE: TWO INCH (2") AND LARGER IN LIEU OF GATE VALVE: 300 PSI GROOVED ENDS. DUCTILE IRON BODY, ASTM A536 GRADE 65-45-12; DUCTILE IRON DISC, ASTM A536 WITH ELECTROLESS NICKEL COATING CONFORMING TO ASTM B-733; STAINLESS STEEL STEM AND HAND WHEEL OPERATED WITH WEATHER PROOF ACTUATOR RATED TO 300PSI. (STEM SHALL BE OFFSET FROM THE DISC CENTERLINE TO PROVIDE COMPLETE 360-DEGREE CIRCUMFERENTIAL SEATING ON NITRILE SEAT.) VICTAULIC SERIES 705 AND SERIES 765

3.3 CHECK VALVE: TWO INCH (2") - TWELVE INCH (12"), DUCTILE IRON BODY, ASTM A-536, GRADE 65-45-12, MINIMUM OF 250 PSI WITH SINGLE DISC MECHANISM INCORPORATING A SPRING ASSISTED FEATURE FOR NON-SLAMMING OPERATION AND CAN BE INSTALLED EITHER VERTICALLY OR HORIZONTALLY. VICTAULIC SERIES 717, AND SERIES 717H.

3.4 ZONE CONTROL VALVES: CAST FROM DUCTILE IRON CONFORMING TO ASTM A-536, GRADE 65-45-12 WITH INTEGRATED MODULE BODY CONSISTING OF A SHUT OFF VALVE, TEST AND DRAIN COMBINATION, FLOW SWITCH, AND PRESSURE GAUGE WITH WORKING PRESSURE OF 300PSI.

1) 1" THROUGH 2": FOR NFPA 13, 13D, AND 13R COMMERCIAL AND RESIDENTIAL REQUIREMENTS. VICTAULIC SERIES 247.
2) 1¼" THROUGH 6": FOR NFPA 13 COMMERCIAL REQUIREMENTS. VICTAULIC SERIES 747M

3.6 TAMPER SWITCH: SPST, NORMALLY CLOSED CONTACTS, DESIGNED TO SIGNAL VALVE IN OTHER THAN FULL OPEN POSITION. ACCEPTABLE MANUFACTURER: POTTER

3.7 FIRE DEPARTMENT CONNECTION:

1) SIAMESE CONNECTION: CAST BRASS, ANGLE BODY, TWO-WAY, SIAMESE CONNECTION. CONNECTION SIZES SHALL BE 4" OUTLET AND TWO (2) AND 2½" FEMALE INLETS, HAVING NH STANDARD THREADS, FOR THE CONNECTION SIZE INDICATED, AS SPECIFIED IN NFPA 1963. EACH INLET SHALL HAVE A CLAPPER VALVE, AND PLUG AND CHAIN. WHEN REQUIRED PROVIDE AN 18" HIGH CHROME PLATED BRASS SLEEVE AND CHROME PLATED BRASS SIDEWALK PLATE, WITH WORDS "STANDPIPE - FIRE DEPT CONNECTION" OR "AUTO SPKR - FIRE DEPT CONNECTION," OR "AUTO SPKR & STANDPIPE - FIRE DEPT CONNECTION" IN RAISED LETTERS. ACCEPTABLE MANUFACTURER OF FIRE DEPARTMENT CONNECTION IS GUARDIAN FIRE EQUIPMENT, INC.

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SAFETY HARBOR FL

SHEET TITLE: FIRE PROTECTION SPECIFICATIONS

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. FP-02

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

GENERAL NOTES

1. FIRE PROTECTION SYSTEM TO COMPLY WITH NFPA 13, 14, AND STATE FIRE PREVENTION CODE.
2. FINAL INSPECTION AND APPROVAL BY THE AUTHORITY HAVING JURISDICTION.
3. CONTRACTOR TO SUBMIT A SET OF WORKING PLANS AS DEFINED IN NFPA-13 TO ENGINEER FOR REVIEW PRIOR TO SUBMITTING WORKING PLANS TO AUTHORITY HAVING JURISDICTION FOR FINAL APPROVAL.
4. ALL MATERIAL SHALL BE OF APPROVED QUALITY AND THE WORK SHALL BE DONE IN A THOROUGH AND WORKMANLIKE MANNER. THE WORK, MATERIALS AND TEST SHALL BE IN ACCORDANCE WITH ALL APPLICABLE NFPA REQUIREMENTS.
5. PIPE ROUTING SHOWN IS SCHEMATIC ONLY. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO PROVIDE ANY ADDITIONAL OFFSETS, ETC. REQUIRED FOR A COMPLETE AND NFPA COMPLIANT INSTALLATION. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AND SITE TO ENSURE SPRINKLER OPERATION IS NOT OBSTRUCTED AND SPACING IS MAINTAINED PER NFPA-13.
6. PROVIDE A PERMANENTLY ATTACHED NAME TAG ATTACHED TO THE FIRE DEPARTMENT CONNECTION, STATING NEW AND EXISTING COVERAGE AREAS. METAL (RED WITH WHITE LETTERS)
7. COORDINATE PIPING WITH ALL OTHER TRADES (PANELS, UTILITIES, TRANSFORMERS, ETC.) PRIOR TO ANY INSTALLATION. DO NOT ROUTE ANY PIPING OVER ANY ELECTRICAL PANELS UNDER ANY CIRCUMSTANCES.
8. FIRE PROTECTION SYSTEM ACCEPTANCE TESTS SHALL BE PERFORMED IN COMPLIANCE WITH THE REQUIREMENTS OF THE ASSOCIATED NFPA CODES.
9. FIRE PROTECTION SYSTEM ACCEPTANCE TESTS SHALL BE WITNESSED BY AUTHORITY HAVING JURISDICTION.
10. CONTRACTOR SHALL PROVIDE FLUSHING CONNECTIONS AT THE END OF ALL MAINS.
11. PIPE SUPPORTS: HANGERS, CLAMPS, RODS AND OTHER ACCESSORIES OF AN APPROVED TYPE AND IN SUFFICIENT NUMBER TO PROPERLY SUPPORT ALL PIPING SHALL BE FURNISHED AND INSTALLED.
12. CONTRACTOR SHALL PROVIDE THE OWNER WITH A THREE RING BINDER OF ALL LITERATURE AND INSTRUCTIONS AS PROVIDED BY THE MANUFACTURER DESCRIBING PROPER OPERATION AND MAINTENANCE OF ALL EQUIPMENT AND DEVICES INSTALLED, A COPY OF NFPA-25 "STANDARD FOR THE INSPECTION, TESTING, AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS", AND THE APPROPRIATE CONTRACTOR'S MATERIAL AND TEST CERTIFICATE(S), COMPLETED AND SIGNED, AS INDICATED IN NFPA-13.

GENERAL NOTES CONTINUED

13. CONTRACTOR SHALL COORDINATE STRUCTURAL SUPPORT AND OPENINGS REQUIRED FOR INSTALLATION OF FIRE PROTECTION SYSTEM WITH STRUCTURAL ENGINEER.
14. COORDINATE FIRE PROTECTION PIPING WITH ALL OTHER TRADES. PROVIDE OFFSETS AS REQUIRED FOR THE INSTALLATION AS REQUIRED. FINAL FIELD COORDINATION BETWEEN ALL TRADES SHALL BE COMPLETED PRIOR TO START OF CONSTRUCTION.
15. PROVIDE ACCESS PANELS FOR ALL VALVES IN NON-ACCESSIBLE LOCATIONS.
16. ALL HANGERS AND FASTENERS SHALL BE 316 STAINLESS STEEL.
17. PROVIDE DIALECTIC SEPARATION AS REQUIRED TO PREVENT DISSIMILAR METAL/ GALVANIC CORROSION IN ALL MATERIALS. TWO MATERIALS WITH KNOWN POTENTIAL FOR GALVANIC ACTION SHALL NOT BE USED IN CONNECTION TO ONE ANOTHER..

PIPE MATERIAL SPECIFICATION

LOCATION USED	MATERIAL
UNDERGROUND	DR14 (BLUE BRUTE)
IN-BUILDING RISER	NA
FIRE RISER	NA
STANDPIPE	FM APPROVED, DR9 HDPE, UV RESISTANT, 250 PSI, EQUAL TO JM EAGLE
COMMERCIAL	NA
RESIDENTIAL	NA
EXTERIOR / DRY	FM APPROVED, DR9 HDPE, UV RESISTANT, 250 PSI, EQUAL TO JM EAGLE

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SAFETY HARBOR | FL

SHEET TITLE: FIRE PROTECTION GENERAL NOTES

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. FP-03

FIRE PROTECTION LEGEND

SYMBOL	DESCRIPTION
	CONTROL VALVE WITH TAMPER SWITCH
	OS&Y VALVE WITH TAMPER SWITCH
	CHECK VALVE
FDC FDC	FIRE DEPARTMENT CONNECTION – SIAMESE
	FLOW SWITCH
	CABINET WITH 2i" FDV, 1i" REDUCER, CAP, AND CHAIN
	STANDPIPE WITH FIRE DEPARTMENT VALVE
	STANDPIPE, FLOOR CONTROL VALVE, INSPECTOR'S TEST, AND DRAIN RISER
	PIPE CONTINUATION
	PIPE UP
	PIPE DOWN
	FIRE RISER
	ENDCAP WITH FLUSHING CONNECTION
	AREA OF REVISION
#	HYDRAULIC REFERENCE NODE
	NEW SPRINKLER PIPING
	NEW SPRINKLER MAIN
	NEW UNDERGROUND FIRE MAIN
	NEW STANDPIPE PIPING
EC	EXTENDED COVERAGE
FC	FLUSHING CONNECTION
FCV	FLOOR CONTROL VALVE
FDC	FIRE DEPARTMENT CONNECTION
FDV	FIRE DEPARTMENT VALVE
SIV	STANDPIPE ISOLATION VALVE
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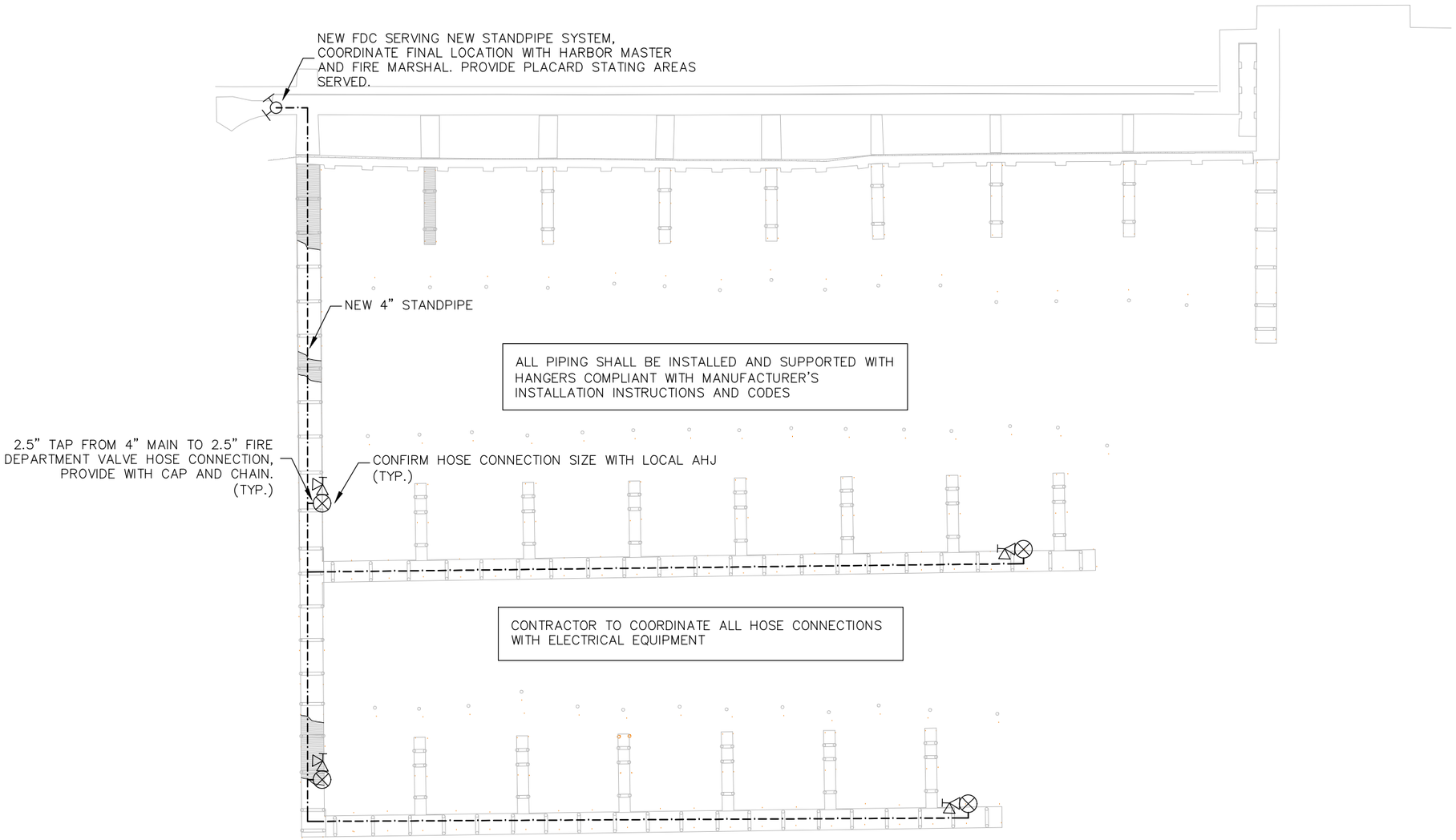
SAFETY HARBOR | FL

SHEET TITLE: FIRE PROTECTION LEGEND

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. FP-04



FIRE PROTECTION FLOOR PLAN

N.T.S

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SAFETY HARBOR FL

SHEET TITLE: FIRE PROTECTION FLOOR PLAN

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. FP-05

PLUMBING LEGEND

DESCRIPTION	ABBREV.	SYMBOL
SANITARY PIPING	SAN	
VENT PIPING	V	
COLD WATER PIPING	CW	
EXISTING PIPING TO REMAIN		
EXISTING PIPING TO BE REMOVED		
HOSE BIBB	HB	HB
TEE UP		
TEE DOWN		
90° UP		
90° DOWN		
LEAD FREE BALL VALVE	BV	

MATERIAL SPECIFICATIONS:

1. DOMESTIC COLD WATER PIPING AND SOLVENT FITTINGS SHALL BE CPVC. ALL AREAS EXPOSED TO SUNLIGHT SHALL BE INSULATED WITH A UV STABLE INSULATION OR CONDUIT. FIELD COORDINATE AREAS OF UV EXPOSURE.

ALL PIPING SHALL BE INSTALLED AND SUPPORTED WITH HANGERS COMPLIANT WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND CODES

PLUMBING FIXTURE SCHEDULE

HB: HOSE BIBB – STAINLESS STEEL HOSE BIBB EQUALS TO SSHB5205. SEE PEDESTAL MANUFACTURER DOCUMENTS FOR DETAILS. 3/4"CW.

PLUMBING GENERAL NOTES

- ALL PLUMBING WORK SHALL MEET ALL THE REQUIREMENTS OF THE "FLORIDA BUILDING CODE, PLUMBING – 8TH EDITION (2023)".
- REVIEW PLANS OF ALL TRADES PRIOR TO BIDDING AND INSTALLATION TO INCLUDE ALL PLUMBING FOR COMPLETE SYSTEMS SHOWN ON THE PLANS AND AS REQUIRED.
- COORDINATE WITH OTHER TRADES TO PREVENT INTERFERENCE.
- ALL CHANGES SHALL BE APPROVED BY THE ENGINEER.
- COORDINATE WITH OTHER TRADE DRAWINGS BEFORE ROUGHING–IN PLUMBING FIXTURES AND EQUIPMENT SUPPLIES.
- THE PLUMBING SUBCONTRACTOR SHALL FURNISH AND INSTALL ALL PLUMBING FIXTURES, UNLESS NOTED OTHERWISE.
- THE PLUMBING SUBCONTRACTOR SHALL INSTALL AND MAKE ALL PLUMBING CONNECTIONS TO OWNER FURNISHED EQUIPMENT.
- VERIFY MOUNTING HEIGHT AND WATER CONNECTION SIZES TO ALL PLUMBING FIXTURES PRIOR TO ROUGH–IN.
- MAKE PROPER COLD WATER PIPING CONNECTIONS TO ALL FIXTURES AND EQUIPMENT EVEN THOUGH ALL FITTINGS AND CONNECTIONS ARE NOT SHOWN.
- VERIFY LOCATION OF EXISTING WATER SERVICE.
- THIS CONTRACTOR TO DO ALL CUTTING AND PATCHING REQUIRED TO INSTALL ANY PORTION OF THIS WORK. PATCH WITH NEW MATERIALS OF THE SAME TYPE THAT WAS REMOVED. REFINISH PATCHED SURFACE TO MATCH EXISTING ADJACENT SURFACES.
- IT IS IN THE INTENT OF THESE DRAWINGS TO COVER ALL WORK AND MATERIAL FOR A FIRST CLASS INSTALLATION. ANY EQUIPMENT, PLUMBING FIXTURE, TRIM HARDWARE AND/OR DEVICES USUALLY UTILIZED IN THE CLASS OF WORK, THOUGH NOT SPECIFICALLY MENTIONED OR SHOWN ON THESE DRAWINGS, BUT WHICH MAY BE NECESSARY FOR THE SATISFACTORY COMPLETION OF THE WORK (AS DETERMINED BY THE ARCHITECT) SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AS PART OF HIS TOTAL WORK.
- ALL HANGERS AND FASTENERS SHALL BE 316 STAINLESS STEEL.

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SAFETY HARBOR | FL

SHEET TITLE: PLUMBING NOTES, LEGEND, AND SCHEDULE

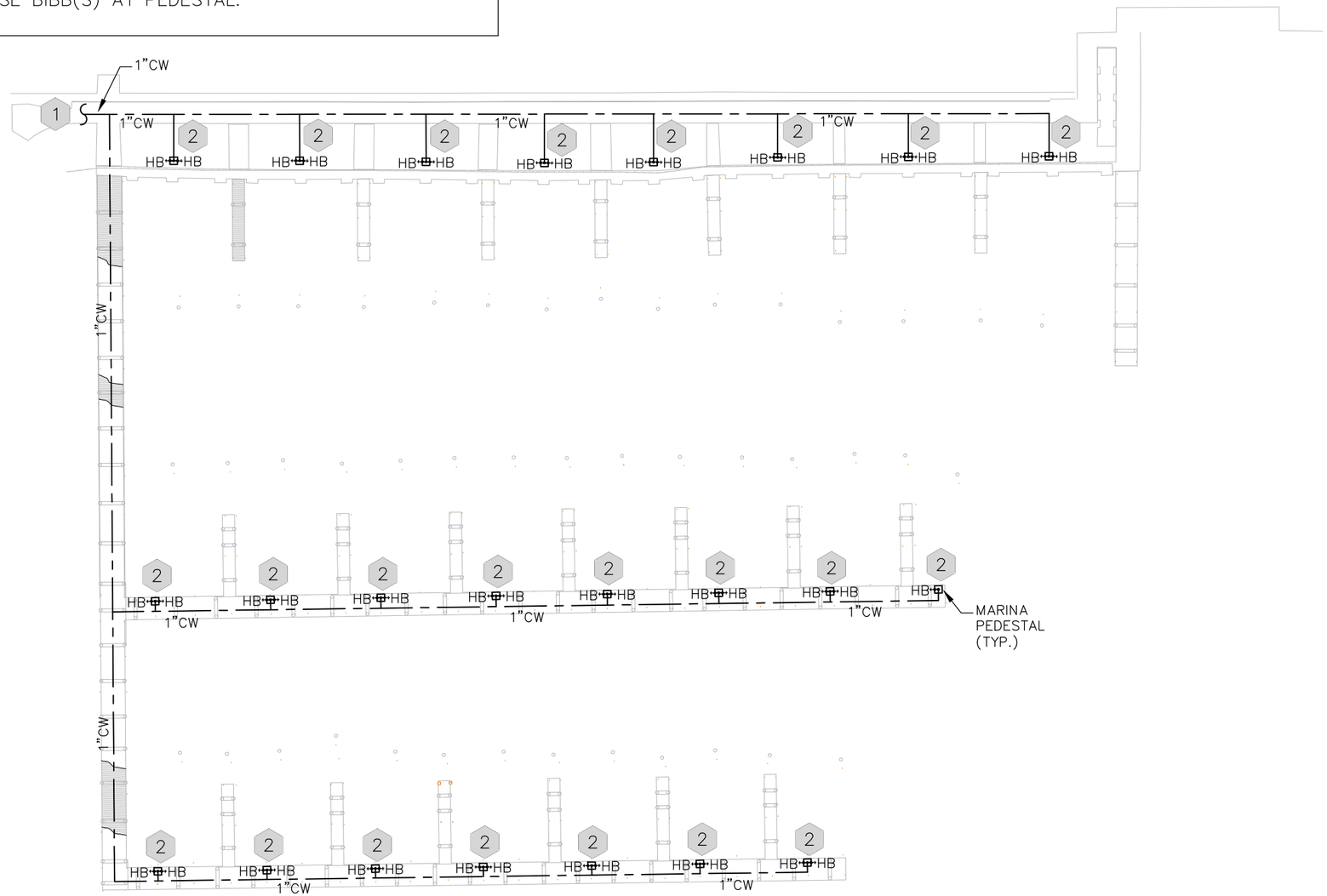
PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. P–01

CONSTRUCTION NOTES:

1. CONTRACTOR TO FIELD LOCATE AND CONNECT NEW 1" CW LINE TO NEAREST EXISTING WATER LINE.
2. 3/4" CW TO HOSE BIBB(S) AT PEDESTAL.



WATER FLOOR PLAN

N.T.S

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

$USER$ $DATE$ $TIME$ $FILE$

DRAWN BY:
CHECKED BY:
DESIGNED BY:
CHECKED BY:

SAFETY HARBOR FL

SHEET TITLE: PLUMBING FLOOR PLAN

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. P-02

STANDARD PENETRATION TEST WITH AUTOMATIC HAMMER AND SOIL CLASSIFICATION

STANDARD PENETRATION TEST (ASTM D-1586)

In the Standard Penetration Test borings, a rotary drilling rig is used to advance the borehole to the desired test depth. A viscous drilling fluid is circulated through the drill rods and bit to stabilize the borehole and to assist in removal of soil and rock cuttings up and out of the borehole.

Upon reaching the desired test depth, the 2-inch O.D. split-barrel sampler or "split-spoon", as it is sometimes called, is attached to an N-size drill rod and lowered to the bottom of the borehole. A 140-pound automatic hammer, attached to the drill string at the ground surface, is then used to drive the sampler into the formation. The hammer is successively raised and dropped for a distance of 30-inches using an automated lifting mechanism. The number of blows is recorded for each 6-inch interval of penetration or until virtual refusal is achieved. In the above manner, the samples are ideally advanced a total of 18 inches. The sum of the blows required to effect the final 12 inches of penetration is called the blowcount, penetration resistance or "N" value of the particular material at the sample depth.

After penetration, the rods and sampler are retracted to the ground surface where the core sample is removed, sealed in a glass jar and transported to the laboratory for verification of field classification and storage.

SOIL SYMBOLS AND CLASSIFICATION

Soil and rock samples secured in the field sampling operation were visually classified as to texture, color and consistency. The Unified Soil Classification was assigned to each soil stratum per ASTM D-2487. Soil classifications are presented descriptively and symbolically for ease of interpretation. The stratum identification lines represent the approximate boundary between soil types. In many cases, this transition may be gradual.

Consistency of the soil as to relative density or undrained shear strength, unless otherwise noted, is based upon Standard Penetration resistance values of "N" values and industry-accepted standards. "N" values, or blowcounts, are presented in both tabular and graphical form on each respective boring log at each sample interval. The graphical plot of blowcount versus depth is for illustration purposes only and does not warrant continuity in soil consistency or linear variation between sample intervals.

The borings represent subsurface conditions at respective boring locations and sample intervals only. Variations in subsurface conditions may occur between boring locations. Groundwater depths shown represent water depths at the dates and time shown only. The absence of water table information does not necessarily imply that groundwater was not encountered.

TIERRA

February 15, 2024

DRMP
15310 Amberly Drive, Suite 200
Tampa, FL 33647

Attn: Mr. Bruno Arriola, PE, ENV SP
Mr. David Johnson

RE: Report of Geotechnical Engineering Services
Safety Harbor Marina Rehabilitation
Pinellas County, City of Safety Harbor, Florida
Tierra Project No. 6511-23-201

Mr. Arriola & Mr. Johnson:

Tierra, Inc. has completed the geotechnical engineering services for the above referenced project. This report presents the results of our study including field and laboratory testing, foundation design analysis and recommendations for the proposed foundation system type.

Should there be any questions regarding the report, please do not hesitate to contact our office at (813) 989-1354. Tierra would be pleased to continue providing geotechnical services throughout the implementation of this project.

Respectfully Submitted,

TIERRA, INC.

Sarah E. Strackbein, E.I.
Geotechnical Engineer Intern

Daniel R. Ruel, P.E.
Geotechnical Engineer
Florida License No. 82404

Kevin H. Scott, P.E.
Senior Geotechnical Engineer
Florida License No. 65514

7351 Temple Terrace Highway • Tampa, FL 33637
Phone (813) 989-1354 • Fax (813) 989-1355

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Boring Location Plan
Soil Profiles

PROJECT DESCRIPTION

Project Information

The project site is located at Safety Harbor Marina in Pinellas County, Florida. The project improvements will consist of composite decking, new timber superstructures, and timber piles to support the docks, replacing the old decking and piles.

The geotechnical services provided herein are to evaluate subsurface conditions and provide geotechnical recommendations regarding the proposed foundation system for the proposed marina improvements.

Scope of Services

The objective of our study was to obtain information concerning subsurface conditions at the site in order to obtain data from which to base engineering estimates and recommendations in each of the following areas:

1. General location and description of potentially deleterious materials or conditions discovered in the borings which may interfere with construction progress.

2. Provide recommendations for pile embedment depths to support the design of the proposed wooden pile foundation system based on provided loading conditions. Provide pile installation considerations.

We provided the following services in order to achieve the preceding objectives:

1. Reviewed the “Safety Harbor, Florida” Quadrangle Map published by the United States Geological Survey (USGS), and the Soil Survey of Pinellas County, Florida, published by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS).

2. Executed a program of subsurface exploration consisting of borings, subsurface sampling, and field testing. Specifically, Tierra utilized a barge mounted drill rig to perform four (4) Standard Penetration Test (SPT) borings within the vicinity of proposed Safety Harbor Marina improvements. The SPT borings were performed to approximately 40 feet below the mudline.

3. Visually classified the soil samples in the laboratory using the Unified Soil Classification System (USCS). Performed laboratory testing on selected soil samples. Identified soil conditions at the boring locations.

4. Prepared this engineering report that summarizes the course of study pursued, the field data generated, subsurface conditions encountered and our engineering recommendations in each of the pertinent topic areas.

The scope of our services did not include an environmental assessment for determining the presence or absence of wetlands or hazardous or toxic materials in the soil, bedrock, groundwater, or air, on or below or around this site. The scope of our services did not include determination of the potential for sinkhole activity. Any statements in this report or on the boring logs regarding odors, colors, unusual or suspicious items or conditions are strictly for the information of our client.

SITE AND SUBSURFACE CONDITIONS

General Site Information

The project is located within the "Safety Harbor, Florida" USGS Quadrangle Map and within the existing waterway. Depths to mudline are dependent on current dredging conditions. The depth to mudline measured in the borings and presented on the attached **Soil Profiles** sheet is based on the site conditions at the time of the field work.

Pinellas County Soil Survey

Based on a review of the Pinellas County Soil Survey published by the USDA, it appears that there is one (1) primary soil-mapping unit identified adjacent to the marina. The general soil description is presented in the following paragraphs and table, as described in the Soil Survey.

Matlacha and St. Augustine soils and Urban land (Map Unit No. 16)

The Matlacha component makes up 33 percent of the map unit. Slopes are 0 to 2 percent. This component is on fills on ridges on marine terraces on coastal plains. The parent material consists of sandy mine spoil or earthy fill. The depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded, nor is it ponded. The seasonal zone of water saturation is at 30 inches during June, July, August, September, and October.

The St. Augustine component makes up 32 percent of the map unit. Slopes are 0 to 2 percent. This component is on ridges on marine terraces on coastal plains. The parent material consists of sandy mine spoil or earthy fill. The depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded, nor is it ponded. The seasonal zone of water saturation is at 27 inches during June, July, August, September, and October. Organic matter content in the surface horizon is about 2 percent.

The Urban Land component consists of areas where most of the soil surface is covered with impervious materials. This land type consists of areas where the original soil has been modified through cutting, grading, filling, and shaping or has been altered for urban development.

Summary of USDA Soil Survey
Pinellas County, Florida

USDA Map Symbol and Soil Name	Soil Classification				pH	Seasonal High Water Table	
	Depth (in)	USCS	AASHTO	Permeability (in/hr)		Depth (feet)	Months
(16) Matlacha - St. Augustine - Urban land	0-42	SP-SM, SP	A-3	2.0 - 6.0	6.1-8.4	2.0-3.0	June-Oct
	42-80	SP-SM, SP	A-3	6.0 - 20.0	6.1-8.4		
	0-8	SP-SM, SP	A-3	6.0 - 20.0	6.1-8.4	1.5-3.0	June-Oct
	8-33	SP-SM	A-2-4	2.0 - 20.0	6.1-8.4		
	33-48	SP-SM, SP	A-3	6.0 - 20.0	6.1-8.4		
	48-63	SP-SM, SM	A-2-4	2.0 - 20.0	6.1-8.4		
	63-80	SP-SM, SP	A-3	6.0 - 20.0	6.1-8.4		

It should be noted that information contained in the USDA Soil Survey may not be reflective of actual soil and groundwater conditions, particularly if recent development in the project vicinity has modified soil conditions or surface/subsurface drainage.

Potentiometric Surface Considerations

Based on a review of the “Upper Floridan Aquifer Potentiometric Surface” maps published by the USGS, the potentiometric surface elevation of the upper Floridan Aquifer in the marina area ranges up to approximately +10 feet, NGVD 29. Following the completion of SPT boring B-3 and mobilization to B-4, minor artesian flow conditions became apparent at boring B-3. The following morning, the minor artesian flow conditions had ceased. As such, the potential head was not able to be measured. As a precaution, Tierra drilled out the borehole and re-grouted. Based on our experience in the project area, artesian conditions are common and should be expected. The contractor's tools and construction methods should include the ability to handle a potentiometric head elevation of +10 feet, NGVD 29, at no additional cost to the owner.

SUBSURFACE EXPLORATION

Tierra performed four (4) SPT borings within the area of the marina improvements to a depth of approximately 40 feet below the mudline.

The SPT borings were performed with the use of a drill rig using Bentonite Mud drilling procedures. The soil sampling was performed in general accordance with ASTM test designation D-1586 utilizing a safety hammer. The SPT N-values were taken at intervals of 2 feet to a depth of 10 feet and on intervals of 5 feet thereafter.

As each soil type was encountered, samples were collected and visually classified in the field with representative soil samples collected and returned to Tierra for laboratory classification and testing. The results of the borings are presented on the **Soil Profiles** sheet in the **Appendix**.

The soil strata encountered in the borings performed at the site are summarized in the following table:

Stratum Number	Soil Description	USCS Symbol
1	Dark Gray to Dark Brown Silt	ML/MH
2	Gray to Blue Clayey Sand	SC
3	Gray to Blue Clay	CL/CH
4	Weathered Limestone, Occasionally with Calcareous Clay	---(1)
(1) USCS nomenclature does not include a classification for natural limestone.		

Subsurface soil stratification is of a generalized nature to highlight the major subsurface stratification features and material characteristics. The soil profiles included in the **Appendix** should be reviewed for specific information at individual boring locations. These profiles include soil descriptions, stratifications and penetration resistances, where applicable. The stratifications shown on the boring profiles represent the conditions only at the actual boring location. Variations did occur and should be expected between boring locations. The stratifications represent the approximate boundary between subsurface materials and the actual transition may be gradual.

EVALUATION AND RECOMMENDATIONS

General

Engineering evaluations and recommendations are provided herein for the proposed timber pile foundations. Based on provided information, Tierra anticipates that 8-inch to 10-inch tip diameter timber piles will be utilized to support the marina infrastructure replacement. We understand the pile foundations are being designed based on a factored design load of 8 kips.

The following report sections present our recommendations for the project as they relate to the geotechnical services provided.

Axial Capacity

Timber piles appear to be a feasible and economical foundation system for the planned construction. Timber piles are typically available in lengths up to 50 feet. The physical characteristics of the timber piles should be scoped in accordance with ASTM D25-12 Standard Specifications for Round Timber Piles and/or the “Timber Pile Design and Construction Manuel”. The timber piles should be treated to prevent degradation by time, the elements, or insects. Pile lengths should account for subsurface variability. Tierra recommends that the Timber Piles be driven into place and not jetted into place.

Axial pile capacities for 8-inch to 10-inch tip diameter timber piles were analyzed based on the subsurface conditions encountered in the borings. The Load and Resistance Factor Design (LRFD) method was utilized for the analysis. Davisson axial capacities were computed using the FDOT program FB-DEEP for 8-inch and 10-inch tip diameter timber piles. The Davisson axial capacity

consists of the ultimate skin friction and mobilized end bearing (i.e., one-third of the ultimate end bearing).

As indicated in the FDOT Structures Design Guidelines, the required Nominal Bearing Resistance (Rn) is calculated utilizing the following equation:

$$Rn > \frac{\text{(Factored Design Load) + (Downdrag) + (Net Scour Resistance)}}{\phi}$$

ϕ = 0.65 based on the project design and the design team's engineering judgement.

Downdrag and scour are assumed to be zero in this analysis.

Estimated Pile Lengths
Safety Harbor Marina Rehabilitation
Tierra Project No.: 6511-23-201

Timber Pile Tip Diameter Size (in)	Factored Design Load [1] (kips)	Required Rn[2] (tons)	Estimated Pile Tip Depth Range Below Mudline[3] (feet)	Estimated Pile Lengths[4]
8	8	7	8 - 22	(see note 4)
10	8	7	8 - 19	

(1) The factored design load does not include scour.
(2) Based on a Resistance Factor of 0.65.
(3) Estimated tip depths based on FB-Deep analyses and our engineering judgement.
(4) Pile lengths will need to consider the height/elevation of the pile head above the mudline plus the estimated pile tip depth below the mudline. It is recommended that production piles be ordered 5 feet longer than the calculated length to account for subsurface variability.

The depths to mudline were measured at the time of our field activities and are shown on the **Soil Profiles** in the **Appendix**.

When piles penetrate into denser soil layers, refusal may be encountered and the design capacities achieved at penetrations less than those anticipated during actual pile installation. In addition, piles may penetrate to a deeper depth than as stated above in order to reach a competent end bearing zone.

Pile dimensions should be specified on the project plans as a minimum pile tip diameter of treated timber pile. The project structural engineer should specify the type of pile treatment.

Driven Pile Installation

Pile driving criteria may be developed using a Pile Driving Analyzer (PDA) or, at a minimum, Wave Equation Analyses (WEAP).

During driven pile installation, the Contractor should exercise caution as not to overstress the piles. Piles should not be driven beyond practical refusal to meet minimum tip and the bearing requirements. Some variations in pile lengths should be expected due to variations in subsurface conditions.

It is recommended that Tierra be retained to monitor the pile installation activities to ensure that the required capacities are achieved and that recommendations set forth herein are utilized during pile installations.

Pile Installation Notes

The following are pile installation notes to be included in the plans:

1. Contractor shall verify the location of all utilities prior to driving any piles, notify all involved utility companies prior to excavation, pile driving or construction and shall assure that utilities are properly maintained and protected against damage during construction.

2. All piles shall be driven. No jetting will be allowed without approval of the Engineer.

3. Contractor shall select the appropriate hammer to achieve the design requirements shown in the plans and submit a Pile Installation Plan prior to mobilization.

4. Weathered limestone was encountered within borings. These materials are rock and/or rock-like. Excavations into and/or through these materials will be difficult and will require non-conventional construction techniques and specialized equipment. Limestone is porous and will be difficult to dewater.

5. Artesian conditions are common in this project area and should be expected. The contractor's tools and construction methods should include the ability to handle a potentiometric head elevation of +10 feet, NGVD 29, at no additional cost to the owner.

Pile Group Action

No reductions of the individual pile capacities will be required if piles are spaced center-to-center at 3 times their width or greater.

Pile Settlement

Settlement of pile supported structures should be small and tolerable for a typical single row group. However, the tolerance should be confirmed by the structural engineer. Individual pile head settlements are estimated to be on the order of ½ inch or less. Group settlements are estimated to be on the same order of magnitude for a single row group pattern but will increase slightly for other group configurations. Once loads and pile geometry become available, Tierra can perform specific settlement analysis.

Vibration Monitoring

Vibration monitoring should be dictated by FDOT Specification 108 in conjunction with the Contractor’s means and methods.

REPORT LIMITATIONS

Our services have been performed, our findings obtained, and recommendations prepared in accordance with generally accepted geotechnical engineering practices in the local area. No other warranties are implied or expressed.

The recommendations submitted are based on the available subsurface information obtained by Tierra and limited design details furnished for the proposed project. If there are any revisions to the plans for this project or if deviations from the subsurface conditions noted in this report are encountered during construction, Tierra should be notified immediately to determine if changes in the foundation recommendations are required. If Tierra is not provided the opportunity to perform these functions, Tierra will not be responsible for the impact of those conditions or the geotechnical recommendations for the project.

After the plans and specifications are more complete, the Geotechnical Engineer should be provided the opportunity to review the final design plans and specifications to check that our engineering recommendations have been properly incorporated into the design documents. At this time, it may be necessary to submit supplementary recommendations. This report has been prepared for the exclusive use of DRMP and their client for the specific application to the proposed construction.

APPENDIX

Boring Location Plan

Soil Profiles

LEGEND

APPROXIMATE SPT BORING LOCATION

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DANIEL R. RUEL, P.E.
P.E. LICENSE NUMBER 82404
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BMG-02/24
CHECKED BY: DRR-02/24
DESIGNED BY: BMG-02/24
CHECKED BY: DRR-02/24

SAFETY HARBOR | FL

SHEET TITLE: BORING LOCATION PLAN

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO.

bgarcia 2/16/2024 11:22:57 AM J:\6511\2023 Files\6511-23-201 Safety Harbor Marina\Microstation\Geotech\B1Boring_BLP01.dgn

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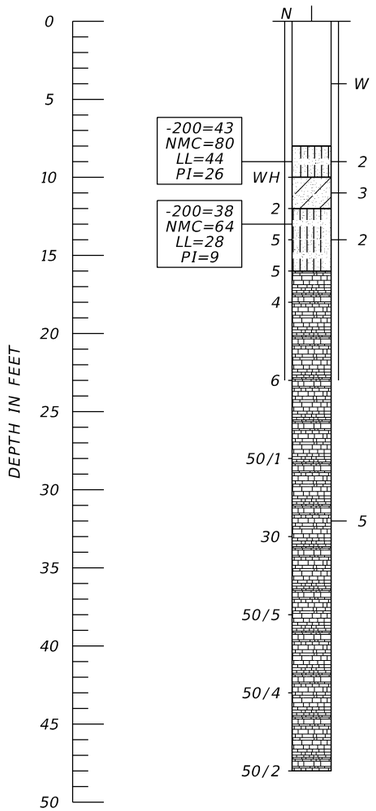
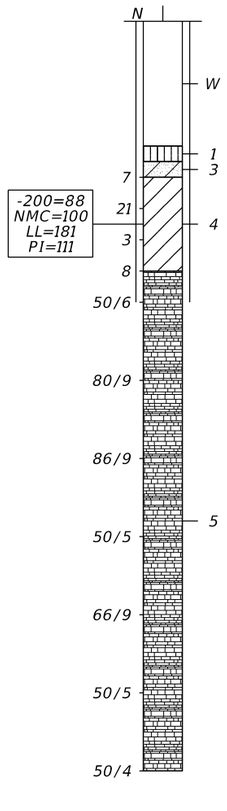
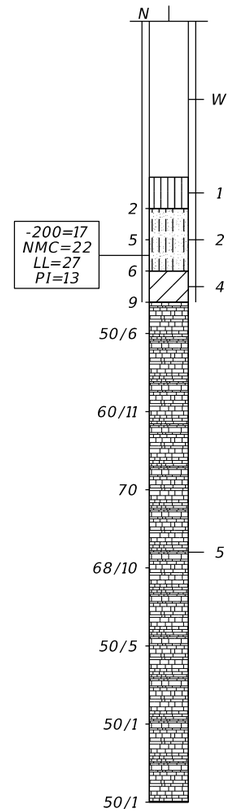
BOR # B-1
EASTING 434324
NORTHING 1329300
DATE 8/24/2023
DRILLER D. STAKELIN
HAMMER AUTOMATIC
RIG CME 55



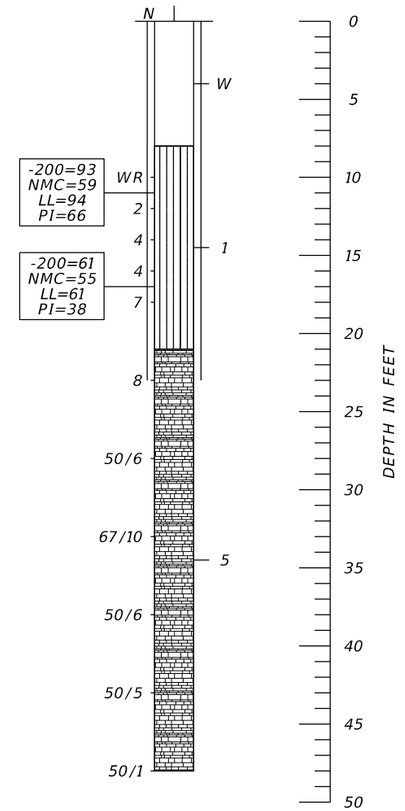
BOR # B-2
EASTING 434227
NORTHING 1329497
DATE 8/22/2023
DRILLER D. STAKELIN
HAMMER AUTOMATIC
RIG CME 55



BOR # B-3
EASTING 434224
NORTHING 1329437
DATE 8/23/2023
DRILLER D. STAKELIN
HAMMER AUTOMATIC
RIG CME 55



BOR # B-4
EASTING 434376
NORTHING 1329350
DATE 8/24/2023
DRILLER D. STAKELIN
HAMMER AUTOMATIC
RIG CME 55



LEGEND

1	DARK GRAY TO DARK BROWN SILT (ML/MH)
2	GRAY SILTY SAND (SM)
3	GRAY TO BLUE CLAYEY SAND (SC)
4	GRAY TO BLUE CLAY (CL/CH)
5	WEATHERED LIMESTONE, OCCASIONALLY WITH CALCAREOUS CLAY
	W - WATER
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200 NMC LL PI	PERCENT PASSING #200 SIEVE NATURAL MOISTURE CONTENT (%) LIQUID LIMIT (%) PLASTICITY INDEX (%)
	CASING
EASTING	EASTING COORDINATE REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, FLORIDA WEST ZONE, N.A.D. 83.
NORTHING	NORTHING COORDINATE REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, FLORIDA WEST ZONE, N.A.D. 83.

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS-RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DANIEL R. RUEL, P.E.
P.E. LICENSE NUMBER 82404
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BMG-02/24
CHECKED BY: DRR-02/24
DESIGNED BY: BMG-02/24
CHECKED BY: DRR-02/24

SAFETY HARBOR | FL

SHEET TITLE: SOIL PROFILES

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

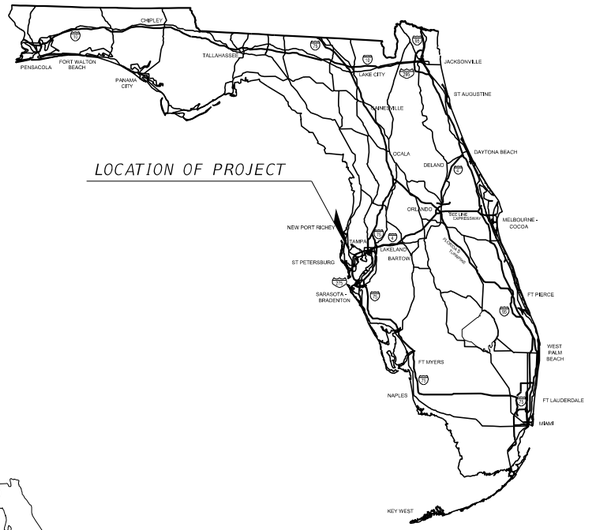
SHEET NO.

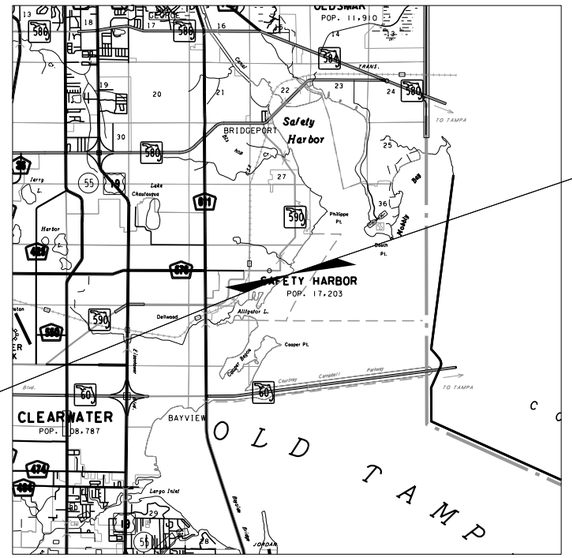
CITY OF SAFETY HARBOR

CONTRACT PLANS
MARINA REPLACEMENT
110 VETERANS MEMORIAL LANE

CONTRACT PLANS COMPONENTS

STRUCTURES	FIRE PROTECTION
CIVIL	PLUMBING
ELECTRICAL	





LOCATION MAP
SECTION 3 TOWNSHIP 29S, RANGE 16E

END PROJECT
℄ VETERANS MEMORIAL LANE
N 27°59'21.62"
W 82°41'12.88"

BEGIN PROJECT
℄ VETERANS MEMORIAL LANE
N 27°59'22.96"
W 82°41'15.35"

BOARD OF CITY COMMISSIONERS

JOE AYOUB	MAYOR
ANDY STEINGOLD	VICE-MAYOR
NANCY BESORE	COMMISSIONER
CARLOS DIAZ	COMMISSIONER
JACOB BURNETT	COMMISSIONER

SHOP DRAWINGS
TO BE SUBMITTED TO:

DAVID R. JOHNSON, P.E.
DRMP, INC.
15310 AMBERLY DRIVE
SUITE 310
TAMPA FL, 33647

PLANS PREPARED BY:

DRMP, INC.
15310 AMBERLY DRIVE
SUITE 310
TAMPA FL, 33647
PHONE: (813) 265-9800
DAVID R. JOHNSON. P.E. 79354

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

GOVERNING DESIGN STANDARDS:
Florida Department of Transportation, FY 2024-25 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs) and as amended by Contract Documents.

For Design Standard Plans click on "Standards Plans for Road and Bridge Construction" at the following web site: Https://www.fdot.gov/design/standardplans/

GOVERNING STANDARD SPECIFICATIONS:

Florida Department of Transportation, Standard Specifications for Road and Bridge Construction FY2024-25 as amended by Contract Documents.

GOOGLE EARTH LINK PROVIDED FOR BRIDGE LOCATION.
https://maps.app.goo.gl/VC2t1DhWkQB3zUEAA

ASSISTANT PUBLIC WORKS DIRECTOR - CHARLES AHRENS, P.E.

KEY SHEET REVISIONS

DATE	BY	DESCRIPTION

ENGINEER OF RECORD: DAVID R. JOHNSON, P.E.

P.E. NO.: 79354

FISCAL YEAR	SHEET NO.
24	S-01

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S-05	GENERAL NOTES (2 OF 2)
S-06	SUMMARY OF QUANTITIES
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C-01	EROSION CONTROL GENERAL NOTES
C-02	SITE CIVIL AND EROSION CONTROL PLAN

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P-01	PLUMBING NOTES, LEGEND, AND SCHEDULE
P-02	PLUMBING FLOOR PLAN
P-03	PLUMBING DETAILS

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

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DAVID R. JOHNSON, P.E.
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TAMPA, FL 33647

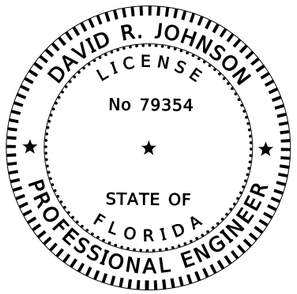
DRAWN BY: BCS 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

SHEET TITLE: INDEX OF SHEETS

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: S-02



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

STRUCTURE PLANS

SHEET NO.	SHEET DESCRIPTION
S-01	KEY SHEET
S-02	INDEX OF SHEETS
S-03	SIGNATURE SHEET
S-04	GENERAL NOTES (1 OF 2)
S-05	GENERAL NOTES (2 OF 2)
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S-08	MARINA LAYOUT PLAN
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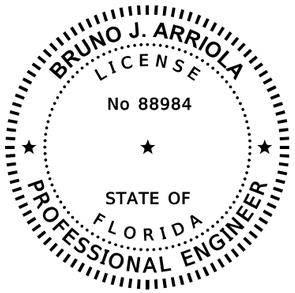
S-13	MISCELLANEOUS DETAILS (1 OF 3)
S-14	MISCELLANEOUS DETAILS (2 OF 3)
S-15	MISCELLANEOUS DETAILS (3 OF 3)



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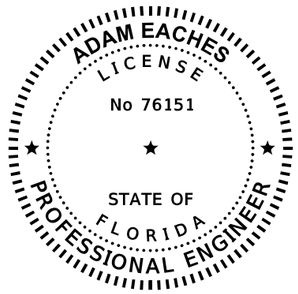
SITE CIVIL PLANS

SHEET NO.	SHEET DESCRIPTION
S-03	SIGNATURE SHEET
C-01	EROSION CONTROL GENERAL NOTES
C-02	SITE CIVIL AND EROSION CONTROL PLAN



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ELECTRICAL PLANS

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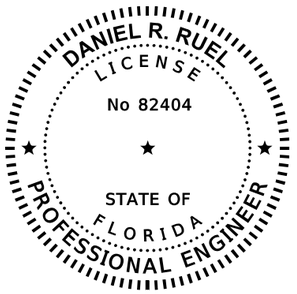

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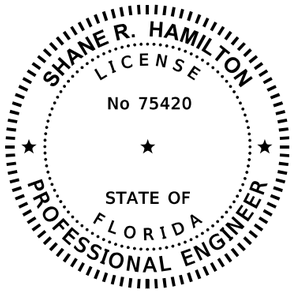
STRUCTURE PLANS

SHEET NO.	SHEET DESCRIPTION
S-03	SIGNATURE SHEET
S-09	SOIL PROFILES



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ENGINEERING PROFESSIONALS, INC.
SHANE R. HAMILTON, P.E.
P.E. LICENSE NUMBER 75420
912 W. DR. MARTIN LUTHER KING JR. BLVD.
TAMPA, FL 33603

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

FIRE PROTECTION AND PLUMBING PLANS

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P-02	PLUMBING FLOOR PLAN
P-03	PLUMBING DETAILS

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DAVID R. JOHNSON, P.E.
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DRAWN BY: BCS 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

SHEET TITLE: SIGNATURE SHEET

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. S-03

Plotted By: Christian.Hodges 3/7/2025 10:30:58 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_Signst01.dgn

GENERAL NOTES

SPECIFICATIONS

DESIGN AND CONSTRUCTION SPECIFICATIONS:

A) FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION FY2024-25 EDITION, AS AMENDED BY CONTRACT DOCUMENTS.
B) FLORIDA BUILDING CODE 8TH EDITION (2023).
C) NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION – AMERICAN WOOD COUNCIL 2018 EDITION.
D) AMERICAN SOCIETY OF CIVIL ENGINEERS, ASCE 7-16.
E) AISC STEEL CONSTRUCTION MANUAL 16TH EDITION.

DESIGN METHOD

LOAD AND RESISTANCE FACTOR DESIGN (LRFD) METHOD USING STRENGTH AND SERVICE LIMIT STATES.

DESIGN LOADINGS

1. DEAD LOAD – 10 PSF
2. LIVE LOAD – 100 PSF
3. WIND LOAD:
   A) DESIGN WIND SPEED 150 MPH
   B) RISK CATEGORY II
   C) EXPOSURE CATEGORY D
   D) IMPORTANCE FACTOR 1.0

GENERAL NOTES

1. COMPLY WITH ALL STATE, COUNTY, AND LOCAL ORDINANCES AND OBTAIN WORK PERMITS THAT ARE REQUIRED PRIOR TO CONSTRUCTION.
2. LOCATION, ELEVATION, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN IN ACCORDANCE WITH THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE PLANS, BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. VERIFY THE LOCATION, ELEVATION, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES AFFECTING THE WORK.
3. ALL DIMENSIONS IN THESE PLANS ARE MEASURED IN FEET AND INCHES EITHER HORIZONTALLY OR VERTICALLY UNLESS OTHERWISE NOTED.
4. PLAN ELEVATIONS ARE IN FEET AND REFER TO NAVD 1988 DATUM. VERTICAL DATUM CONVERSION, NGVD29 TO NAVD88 = -0.856
5. PROVIDE AND MAINTAIN TURBIDITY BARRIERS IN ACCORDANCE WITH PERMITS.
6. DRAWINGS ARE NOT TO SCALE UNLESS NOTED OTHERWISE.

MARINE NAVIGATION

1. MAINTAIN VISIBLE AND FUNCTIONAL EXISTING SIGNS AT ALL TIMES DURING CONSTRUCTION. AT THE APPROVAL OF THE ENGINEER TEMPORARILY RELOCATE EXISTING SIGNS TO FACILITATE CONSTRUCTION. RETURN ALL RELOCATED SIGNS TO THEIR ORIGINAL LOCATION AFTER CONSTRUCTION IS COMPLETED.
2. MARINE TRAFFIC CONSTRUCTION SIGNS ARE TO BE PLACED AT THE ENTRACE OF THE PARKING LOT AND AT THE CHANNEL ENTRANCE PRIOR TO THE BOAT RAMP FOR INCOMING MARINE TRAFFIC. PLACEMENT OF THE SIGNS IS TO BE SUCH THAT THEY ARE CLEARLY VISIBLE TO APPROACHING TRAFFIC. BARGES LEFT IN WATER IN LOW-LIGHT CONDITIONS SHALL BE ILLUMINATED SO AS TO BE VISIBLE TO MARINE TRAFFIC.
3. NOTIFY LT. CLARK SANFORD AT THE USCG SECTOR ST. PETERSBURG AT 813-228-2191 EXT. 8105 PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES. IN ADVANCE OF ACTIONS DURING CONSTRUCTION OR DEMOLITION WHICH POTENTIALLY AFFECT WATERWAY USERS AND PRIOR TO THE PLACEMENT OF ANY FLOATING CONSTRUCTION EQUIPMENT IN THE WATERWAY. NOTIFY NO LESS THAN 60 DAYS IN ADVANCE OF ACTIONS WHICH COULD POTENTIALLY AFFECT THE WATERWAY. KEEP THE CHANNEL OPEN TO WATERWAY TRAFFIC AT ALL TIMES.

MATERIALS

1. TIMBER: UNLESS OTHERWISE NOTED, ALL SAWN LUMBER AND TIMBER PILES EXCEPT BENT CAPS AND STRINGERS SHALL BE GRADE NO. 2 SOUTHERN YELLOW PINE OR BETTER. BENT CAPS AND STRINGERS SHALL BE NO. 1 SOUTHERN YELLOW PINE OR BETTER.
2. DECKING: ALL DECKING SHALL BE A UV-RESISTANT ENGINEERED COMPOSITE MATERIAL, WEARDECK OR EQUAL. COLOR OF DECKING SHALL BE "SADDLE". ALTERNATIVE TIMBER DECKING SHALL BE GRADE NO. 2 SOUTHERN YELLOW PINE OR BETTER.
3. HURRICANE FASTENERS: STAINLESS STEEL AISI TYPE 316 W/ UPLIFT CAPACITY OF 360 LBF. EACH MINIMUM.
4. ANCHOR BOLTS: STAINLESS STEEL AISI TYPE 316.
5. ANCHOR BOLT ADHESIVE: TYPE F ADHESIVE EPOXY MATERIAL.

UTILITIES

1. PROVIDE TWO WORKING DAYS NOTICE TO UTILITY AGENCY/OWNER'S (UAO) IN ORDER TO LOCATE AND IDENTIFY THEIR EXISTING UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION, AS ESTABLISHED BY THE "UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT".
2. COORDINATE CONSTRUCTION SCHEDULING WITH UTILITY AGENCY/OWNER'S. MEET WITH UAO'S PRIOR TO THE PRE-CONSTRUCTION CONFERENCE TO ADJUST THEIR SCHEDULES TO COINCIDE WITH THE CONSTRUCTION SCHEDULE.

EXISTING STRUCTURE

1. REMOVAL OF EXISTING STRUCTURES SHALL COMPLY WITH SECTION 110-7 OF THE SPECIFICATIONS. IF PILES ARE UNABLE TO BE PULLED CLEANLY, CUT PILES 2'-0" BELOW MUDLINE. PROPERLY DISPOSE OF TREATED TIMBER PER SPECIFICATIONS. WORK IS TO BE PAID FOR UNDER PAY ITEM 110-82, "REMOVE & DISPOSE OF STRUCTURAL TIMBER."
2. ORIGINAL STRUCTURE YEAR BUILT IS UNKNOWN. MAJORITY OF STRUCTURE WAS RECONSTRUCTED IN 2006. 2006 EXISTING PLANS ARE PROVIDED AND ARE FOR INFORMATIONAL PURPOSES ONLY.

MONITOR EXISTING STRUCTURES

MONITOR SETTLEMENT AND VIBRATIONS ON EXISTING STRUCTURES PER SPECIFICATIONS SECTION 108.

PILE INSTALLATION NOTES

1. ALL 8" Ø TIMBER DOCK PILES AND 10" Ø TIE PILES SHALL BE DRIVEN. JETTING IS NOT ALLOWED WITHOUT APPROVAL OF THE ENGINEER.
2. VERIFY THE LOCATION OF ALL UTILITIES AND NOTIFY ALL INVOLVED UTILITY COMPANIES PRIOR TO EXCAVATION, PILE DRIVING OR CONSTRUCTION TO AVOID DAMAGE. ENSURE THAT ACTIVE UTILITIES ARE PROPERLY MAINTAINED AND PROTECTED DURING CONSTRUCTION.
3. FOR DETAILS REGARDING SPT SOIL BORINGS, SEE "SOIL PROFILES" SHEET.
4. PRIOR TO PILE DRIVING OPERATIONS, INFORM THE ENGINEER IF ANY PROPOSED PILE LOCATION INTERFERES WITH EXISTING PILE, AND PILE WAS UNABLE TO BE CLEANLY REMOVED.
5. DRIVE PILES TO THE NOMINAL BEARING RESISTANCE IN ACCORDANCE WITH STANDARD SPECIFICATION 455 AND AS FOLLOWS,

$$\frac{\text{FACTORED DESIGN LOAD + NET SCOUR RESISTANCE + DOWN DRAG}}{\emptyset}$$

6. NOMINAL BEARING RESISTANCE = 7 TONS BASED ON FACTORED DESIGN LOAD = 8 KIPS AND Ø = 0.65.
7. ESTIMATED PILE TIP DEPTH BELOW MUDLINE VARIES (9 FT. TO 22 FT.). REFUSAL MAY BE ENCOUNTERED PRIOR TO THESE DEPTHS IF A DENSER SOIL LAYER IS ENCOUNTERED.
8. SELECT THE APPROPRIATE HAMMER TO ACHIEVE DESIGN REQUIREMENTS SHOWN IN THE PLANS AND SUBMIT A PILE INSTALLATION PLAN AND FOUNDATION LAYOUT PRIOR TO MOBILIZATION.
9. RESTRICT PILE DRIVING TO DAYTIME HOURS.
10. WEATHERED LIMESTONE WAS ENCOUNTERED WITHIN BORINGS. EXCAVATIONS/PREFORMING INTO AND/OR THROUGH THESE MATERIALS WILL BE DIFFICULT AND REQUIRE NON-CONVENTIONAL CONSTRUCTION TECHNIQUES AND SPECIALIZED EQUIPMENT. LIMESTONE IS POROUS AND WILL BE DIFFICULT TO DEWATER.
11. ARTESTIAN CONDITIONS SHOULD BE EXPECTED. TOOLS AND CONSTRUCTION METHODS SHALL INCLUDE THE ABILITY TO HANDLE A POTENTIOMETRIC HEAD ELEVATION OF +10 FT. (NGVD29) AT NO ADDITIONAL COST.
12. CONTACT THE ENGINEER IF PRACTICAL REFUSAL IS MET BEFORE 10 FEET OF EMBEDMENT IS ACHIEVED.

PILE WRAP

1. INSTALL PILE WRAP PER MANUFACTURER'S RECOMMENDATIONS.
2. PILE WRAP: 0.03" BLACK, UV-RESISTANT POLYETHYLENE MATERIAL

MISCELLANEOUS

1. CLEAT: 8" STANDARD MOUNT CLEAT, STAINLESS STEEL
2. SAFETY LADDERS: 7 STEP RETRACTABLE WITH 2" STEP WIDTH, ALUMINUM
3. PILE CAPS: BLACK, CONICAL SHAPED, PVC MATERIAL
4. SECURITY GATE: 6 FT. HEIGHT W/ GATE LOCK. HOT DIP GALVANIZED STEEL W/ BLACK POWDER COAT FINISH. PROVIDE ORNAMENTAL GATE WITH SUNBURST DESIGN TO DISCOURAGE UNAUTHORIZED ACCESS TO THE MARINA. POSTS AND GATE EXTENSION TO MATCH MATERIAL AND BLACK POWDER COAT FINISH TO GATE. GATE STYLE TO BE DURAGATE DGT-GGFW FLAT TOP GARDEN GATE OR APPROVED EQUAL. CONTRACTOR TO SUBMIT GATE AND DESIGN DATA SHEET TO OWNER FOR APPROVAL.

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

SHEET TITLE: GENERAL NOTES (1 OF 2)
TWA NO.:
PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT
SHEET NO.: S-04

GENERAL NOTES (CONTINUED)

WOOD

1. ALL MEMBERS SHALL BE AIR DRIED TO LESS THAN 19% MOISTURE CONTENT, GRADED IN ACCORDANCE WITH THE SPIB GRADE RULES, SECTION 4, AND MAY HAVE ANY OR ALL OF THE CHARACTERISTICS OF THIS GRADE.
2. ALL DECKING SHALL BE CONTINUOUS UNLESS OTHERWISE NOTED IN THE PLANS.
3. ALL BOLT HOLES THROUGH TIMBERS TO BE AN EXTRA 1/16" IN DIAMETER RELATIVE TO THE BOLT DIAMETER.
4. MEMBERS WITH WANE OF 3/8" OR MORE MAY BE GROUNDS FOR REJECTION, REMOVAL, AND REPLACEMENT.
5. INSTALL DECKING PER MANUFACTURER RECOMMENDATIONS.
6. TREAT ALL WOOD SURFACES EXPOSED TO VIEW WITH A FINISH & SEAL WATER REPELLENT. COLOR OF REPELLENT SHALL MATCH COLOR OF COMPOSITE DECKING.
7. BEAMS, STRINGER, AND RAILS SHALL BE CONTINUOUS OVER SINGLE SPANS UNLESS OTHERWISE NOTED IN THE PLANS.
8. FIELD PRESERVATIVE CHEMICALS SHALL BE APPLIED TO ALL FIELD CUTS AND DRILLED HOLES TO MAINTAIN TIMBER PRESSURE TREATMENT INTEGRITY.
9. PILES SHALL BE PRESSURE PRESERVATIVE TREATED WITH CCA TO 2.5 PCF RETENTION. TIMBER PILES SHALL CONFORM TO ASTM STANDARD D-25 FOR PHYSICAL CHARACTERISTICS AND QUALITY. SIZE SHALL BE 1" TAPER IN 10 LINEAR FEET.
10. PILES SHALL FOLLOW SPECIFICATION SECTION 953.
11. SAWN LUMBER SHALL BE PRESSURE PRESERVATIVE TREATED WITH ACQ TO 0.6 PCF RETENTION. INSTALL WITH NATURAL CAMBER BOWED UP WHEN POSSIBLE.

FASTENERS

1. ALL CONNECTIONS SHALL BE IN ACCORDANCE WITH FLORIDA BUILDING CODE TABLE 2304.10.1 EXCEPT AS SHOWN OR NOTED BELOW:
   - A) PICKETS TO RAILS – TWO, #8x2½" WOOD SCREWS
   - B) RAILS TO RAILING POST – ONE, ¼" ∅ THRU-BOLT
   - C) RAIL CAP TO RAILING POST – FOUR, #10x3" WOOD SCREWS
   - D) BLOCKING TO STRINGERS – FOUR, #10x3" WOOD SCREWS, TOE-NAILED
   - E) DECK BOARDS TO STRINGERS – THREE, #10x3" WOOD SCREWS PER SUPPORT, FACE SCREWED
2. WOOD SCREWS SHALL BE STAINLESS STEEL AND IN ACCORDANCE WITH ANSI/ASME STANDARD B18.6.1.
3. BOLTS SHALL BE IN ACCORDANCE WITH ANSI/ASME STANDARD B18.2.1.
4. PRE-DRILL ALL CONNECTIONS WITH WOOD SCREWS TO AVOID SPLITTING OF THE CONNECTED MEMBERS.
5. ALL THRU-BOLTS EXPOSED TO HUMAN CONTACT SHALL BE CUT OFF AND GROUND SMOOTH, FLUSH WITH THE NUT.
6. "O-GEE" WASHERS SHALL BE USED FOR ALL TIMBER SIDE CONNECTOR SIZES EQUAL TO OR GREATER THAN 1/2" ∅.
7. HURRICANE ANCHOR SHALL BE ATTACHED WITH NAILS (8D). WHENEVER POSSIBLE ALL ANCHORS SHALL BE PLACED IN THE LEAST VISIBLE MANNER TO THE PUBLIC.
8. 9/32" ∅ HOLE SHALL BE DRILLED PRIOR TO LAG SCREW INSTALLATION.
9. ALL THROUGH NAILS SHALL BE BENT ON PROTRUDING SIDE.
10. INSTALL ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS SECTION 416 FOR HOLE DIAMETER AND CLEANING TECHNIQUE.

ENVIRONMENTAL COMMITMENTS

1. USE A RAMP-UP PROCEDURE DURING THE INSTALLATION OF PILES. THIS PROCEDURE ALLOWS FOR A GRADUAL INCREASE IN NOISE LEVELS IN ORDER TO GIVE SENSITIVE SPECIES AMPLE TIME TO FLEE PRIOR TO INITIATION OF FULL NOISE LEVELS. THIS APPROACH CAN ALSO REDUCE THE LIKELIHOOD OF ANY SECONDARY OR SUB-LETHAL EFFECTS FROM SOUND IMPULSES ASSOCIATED WITH PILE DRIVING.
2. COMPLY WITH NOAA PROTECTED SPECIES CONSTRUCTION CONDITIONS DURING CONSTRUCTION.
3. COMPLY WITH THE FOLLOWING PROTECTED SPECIES CONSTRUCTION CONDITIONS REGARDING SEA TURTLES AND SMALLTOOTH SAWFISH:
   - A) INSTRUCT ALL PERSONNEL ASSOCIATED WITH THE PROJECT OF THE POTENTIAL PRESENCE OF THESE SPECIES AND THE NEED TO AVOID COLLISIONS WITH SEA TURTLES AND SMALLTOOTH SAWFISH. ALL CONSTRUCTION PERSONNEL ARE RESPONSIBLE FOR OBSERVING WATER-RELATED ACTIVITIES FOR THE PRESENCE OF THESE SPECIES.
   - B) ADVISE ALL CONSTRUCTION PERSONNEL THAT THERE ARE CIVIL AND CRIMINAL PENALTIES FOR HARMING, HARASSING, OR KILLING SEA TURTLES AND SMALLTOOTH SAWFISH, WHICH ARE PROTECTED UNDER THE ENDANGERED SPECIES ACT OF 1973.

ENVIRONMENTAL COMMITMENTS (CONT'D.)

   - C) SILTATION BARRIERS SHALL BE MADE OF MATERIAL IN WHICH SEA TURTLES OR SMALLTOOTH SAWFISH CANNOT BECOME ENTANGLED, SHALL BE PROPERLY SECURED, AND SHALL BE REGULARLY MONITORED TO AVOID PROTECTED SPECIES ENTRAPMENT. BARRIERS MAY NOT BLOCK SEA TURTLE OR SMALLTOOTH SAWFISH ENTRY TO OR EXIT FROM DESIGNATED CRITICAL HABITAT WITHOUT PRIOR AGREEMENT FROM THE NATIONAL MARINE FISHERIES SERVICE'S PROTECTED RESOURCES DIVISION, ST. PETERSBURG, FLORIDA.
   - D) ALL VESSELS ASSOCIATED WITH THE CONSTRUCTION PROJECT SHALL OPERATE AT "NO WAKE/IDLE" SPEEDS AT ALL TIMES WHILE IN THE CONSTRUCTION AREA AND WHILE IN WATER DEPTHS WHERE THE DRAFT OF THE VESSEL PROVIDES LESS THAN A FOUR-FOOT CLEARANCE FROM THE BOTTOM. ALL VESSELS WILL PREFERENTIALLY FOLLOW DEEP-WATER ROUTES (E.G., MARKED CHANNELS) WHENEVER POSSIBLE.
   - E) IF A SEA TURTLE OR SMALLTOOTH SAWFISH IS SEEN WITHIN 100 YARDS OF THE ACTIVE DAILY CONSTRUCTION OPERATION OR VESSEL MOVEMENT, ALL APPROPRIATE PRECAUTIONS SHALL BE IMPLEMENTED TO ENSURE ITS PROTECTION. THESE PRECAUTIONS SHALL INCLUDE CESSATION OF OPERATION OF ANY MOVING EQUIPMENT CLOSER THAN 50 FEET OF A SEA TURTLE OR SMALLTOOTH SAWFISH. OPERATION OF ANY MECHANICAL CONSTRUCTION EQUIPMENT SHALL CEASE IMMEDIATELY IF A SEA TURTLE OF SMALLTOOTH SAWFISH IS SEEN WITHIN A 50-FT. RADIUS OF THE EQUIPMENT. ACTIVITIES MAY NOT RESUME UNTIL THE PROTECTED SPECIES HAS DEPARTED THE PROJECT AREA OF ITS OWN VOLITION.
   - F) ANY COLLISION WITH AND/OR INJURY TO A SEA TURTLE OR SMALLTOOTH SAWFISH SHALL BE REPORTED IMMEDIATELY TO THE NATIONAL MARINE FISHERIES SERVICES PROTECTED RESOURCES DIVISION (727-824-5312) AND THE LOCAL AUTHORIZED SEA TURTLE STRANDING/RESCUE ORGANIZATION.
4. THE PERMITTEE SHALL COMPLY WITH THE FOLLOWING CONDITIONS INTENDED TO PROTECT MANATEES FROM DIRECT PROJECT EFFECTS:
   - A) INSTRUCT ALL PERSONNEL ASSOCIATED WITH THE PROJECT OF THE POTENTIAL PRESENCE OF MANATEES AND MANATEE SPEED ZONES, AND THE NEED TO AVOID COLLISIONS WITH AND INJURY TO MANATEES. ADVISE ALL CONSTRUCTION PERSONNEL THAT THERE ARE CIVIL AND CRIMINAL PENALTIES FOR HARMING, HARASSING, OR KILLING MANATEES, WHICH ARE PROTECTED UNDER THE MARINE MAMMAL PROTECTION ACT, THE ENDANGERED SPECIES ACT, AND THE FLORIDA MANATEE SANCTUARY ACT.
   - B) ALL VESSELS ASSOCIATED WITH THE CONSTRUCTION PROJECT SHALL OPERATE AT "IDLE SPEED/NO WAKE" AT ALL TIMES WHILE IN THE IMMEDIATE AREA AND WHILE IN WATER WHERE THE DRAFT OF THE VESSEL PROVIDES LESS THAN A FOUR-FOOT CLEARANCE FROM THE BOTTOM. ALL VESSELS WILL FOLLOW ROUTES OF DEEP WATER WHENEVER POSSIBLE.
   - C) SILTATION BARRIERS SHALL BE MADE OF MATERIAL IN WHICH MANATEES CANNOT BECOME ENTANGLED, SHALL BE PROPERLY SECURED, AND SHALL BE REGULARLY MONITORED TO AVOID PROTECTED SPECIES ENTRAPMENT. BARRIERS MUST NOT IMPEDE MANATEE MOVEMENT.
   - D) ALL ON-SITE PROJECT PERSONNEL ARE RESPONSIBLE FOR OBSERVING WATER-RELATED ACTIVITIES FOR THE PRESENCE OF MANATEE(S). ALL IN-WATER OPERATIONS, INCLUDING VESSELS, MUST BE SHUTDOWN IF A MANATEE(S) COMES WITHIN 50 FEET OF THE OPERATION. ACTIVITIES WILL NOT RESUME UNTIL THE MANATEE(S) HAS MOVED BEYOND THE 50-FOOT RADIUS OF THE PROJECT OPERATION, OR UNTIL 30 MINUTES ELAPSES IF THE MANATEE(S) HAS NOT REAPPEARED WITHIN 50 FEET OF THE OPERATION. ANIMALS MUST NOT BE HERDED AWAY OR HARASSED INTO LEAVING.
   - E) ANY COLLISION WITH OR INJURY TO A MANATEE SHALL BE REPORTED IMMEDIATELY TO THE FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION (FWC) HOTLINE AT 1-888-404-3922. COLLISION AND/OR INJURY SHOULD ALSO BE REPORTED TO THE U.S. FISH AND WILDLIFE SERVICE IN JACKSONVILLE (1-904-731-3336) FOR NORTH FLORIDA OR IN VERO BEACH (1-722-562-3909) FOR SOUTH FLORIDA, AND EMAILED TO FWC AT IMPERILEDSPECIES@MYFWC.COM.
   - F) TEMPORARY SIGNS CONCERNING MANATEES SHALL BE POSTED PRIOR TO AND DURING ALL IN-WATER PROJECT ACTIVITIES. ALL SIGNS ARE TO BE REMOVED UPON COMPLETION OF THE PROJECT. TEMPORARY SIGNS THAT HAVE ALREADY BEEN APPROVED FOR THIS USE BY THE FWC MUST BE USED. ONE SIGN WHICH READ "CAUTION: BOATERS" MUST BE POSTED. A SECOND SIGN MEASURING AT LEAST 8½" BY 11" EXPLAINING THE REQUIREMENTS FOR "IDLE SPEED/NO WAKE" AND THE SHUT DOWN OF IN-WATER OPERATIONS MUST BE POSTED IN A LOCATION PROMINENTLY VISIBLE TO ALL PERSONNEL ENGAGED IN WATER-RELATED ACTIVITIES. THESE SIGNS CAN BE VIEWED AT HTTP://WWW.MYFWC.COM/WILDLIFEHABITATS/MANATEE_SIGN_VENDORS.HTM. QUESTIONS CONCERNING THESE SIGNS CAN BE FORWARDED TO THE EMAIL ADDRESS LISTED ABOVE.

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

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

DRAWN BY: BCS 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

SHEET TITLE: GENERAL NOTES (2 OF 2)

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: S-05

BID ITEMS FOR SAFETY HARBOR MARINA REPLACEMENT

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
	CIVIL		
101-1	MOBILIZATION	LS	1
102-1	MAINTENANCE OF TRAFFIC	LS	1
104-10	SEDIMENT BARRIER	LF	340
104-11	FLOATING TURBIDITY BARRIER	LF	255
110-1-1	CLEARING & GRUBBING	LS	1
110-82	REMOVE & DISPOSE OF STRUCTURAL TIMBER	MB	20.9
110-82	REMOVE & DISPOSE OF STRUCTURAL TIMBER, STORM DAMAGE	MB	7.8
350-5	CLEANING & SEALING JOINTS - CONCRETE PAVEMENT	LF	30
515-2-311	PEDESTRIAN / BICYCLE RAILING, ALUMINUM ONLY, 42" TYPE 1	LF	21
550-10-222	FENCING, TYPE B, 5.1'-6.0', W/ VINYL COATING	LF	340
550-60-222	FENCE GATE, TYPE B, DOUBLE 6.1'-12.0' OPENING	EA	1
700-1-11	SINGLE POST SIGN, F&I GROUND MOUNT, UP TO 12SF	EA	4
700-1-50	SINGLE POST SIGN, RELOCATE	EA	1
999-90	SECURITY GATE, 6FT.	EA	1
999-91	CLEATS	EA	56
999-92	SAFETY LADDER	EA	20
	STRUCTURES		
470-1	TREATED STRUCTURAL TIMBER	MB	7.3
999-93	TREATED TIMBER PILING (8 IN. DIAMETER)	LF	5,680
999-94	TREATED TIMBER PILING (10 IN. DIAMETER)	LF	1,239
999-95	PILE WRAPS	EA	288
999-96	PILE CAP	EA	220
999-97	COMPOSITE DECKING (ALTERNATIVE 1)	SF	4,236
470-1-9	TIMBER DECKING (ALTERNATIVE 2)	MB	6.4

BID ITEM NOTES

1. POST-INSTALLED ANCHORS LABOR AND MATERIAL IS CONSIDERED INCIDENTAL TO PAY ITEM 470-1, "TREATED STRUCTURAL TIMBER".
2. ALL HARDWARE LABOR AND MATERIAL IS CONSIDERED INCIDENTAL TO PAY ITEM 470-1, "TREATED STRUCTURAL TIMBER." TIMBER BLOCKING IS CONSIDERED INCIDENTAL TO PAY ITEM 470-1, "TREATED STRUCTURAL TIMBER."
3. PAYMENT FOR NEOPRENE SHIM IS CONSIDERED INCIDENTAL TO PAY ITEM NO. 470-1, "TREATED STRUCTURAL TIMBER".
4. LABOR & MATERIAL FOR INSTALLING SECURITY GATE IS TO BE PAID FOR UNDER PAY ITEM 999-90, "SECURITY GATE, 6 FT.".
5. LABOR & MATERIAL FOR INSTALLING CLEATS IS TO BE PAID FOR UNDER PAY ITEM 999-91, "CLEATS".
6. LABOR & MATERIAL FOR INSTALLING SAFETY LADDERS IS TO BE PAID FOR UNDER PAY ITEM 999-92, "SAFETY LADDER".
7. LABOR & MATERIAL FOR INSTALLING DOCK PILES IS TO BE PAID FOR UNDER PAY ITEMS 999-93, "TREATED TIMBER PILING 8 IN. DIAMETER".
8. LABOR & MATERIAL FOR INSTALLING TIE PILES IS TO BE PAID FOR UNDER PAY ITEM 999-94, "TREATED TIMBER PILING 10 IN. DIAMETER".
9. LABOR & MATERIAL FOR INSTALLING PILE WRAPS IS TO BE PAID FOR UNDER PAY ITEM 999-95, "PILE WRAPS".
10. LABOR & MATERIAL FOR INSTALLING PILE CONICAL CAPS IS TO BE PAID FOR UNDER PAY ITEM 999-96, "PILE CAPS".
11. LABOR & MATERIAL FOR INSTALLING COMPOSITE DECKING (ALTERNATIVE 1) IS TO BE PAID FOR UNDER PAY ITEM 999-97, "COMPOSITE DECKING".
12. LABOR & MATERIAL FOR INSTALLING TIMBER DECKING (ALTERNATIVE 2) IS TO BE PAID FOR UNDER PAY ITEM 470-1-9, "TIMBER DECKING (ALTERNATIVE 2)".
13. ANY VEGETATION REMOVAL AND/OR TREE TRIMMING REQUIRED FOR THE PERIMETER FENCE INSTALLATION TO BE PAID FOR UNDER PAY ITEM 110-1-1, "CLEARING AND GRUBBING".
14. REMOVAL OF EXISTING CHAIN-LINK FENCE TO BE PAID FOR UNDER PAY ITEM 110-1-1, "CLEARING AND GRUBBING".
15. ANY INCIDENTAL GRADING AND SODDING DUE TO INSTALLATION OF THE PROPOSED PERIMETER FENCE TO BE PAID FOR UNDER PAY ITEM 550-10-222, "FENCING, TYPE B, 5.1'-6.0' W/ VINYL COATING".
16. PREFORMED JOINT FILLER TO BE PAID FOR UNDER PAY ITEM 350-5, "CLEANING & SEALING JOINTS-CONCRETE PAVEMENT".
17. SUNBURST SECURITY FENCE GATE, EXTENSION AND GATE LOCK SYSTEM TO BE PAID FOR UNDER PAY ITEM 999-90, "SECURITY GATE, 6 FT".
18. ANY POTENTIAL DEWATERING ACTIVITIES NEEDED FOR THE INSTALLATION OF PROPOSED FENCING CONCRETE POST FOOTINGS ARE CONSIDERED INCIDENTAL TO PAY ITEM 550-10-222, "FENCING, TYPE B, 5.1'-6.0', W/ VINYL COATING".

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
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15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

DRAWN BY: BCS 06-24
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DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

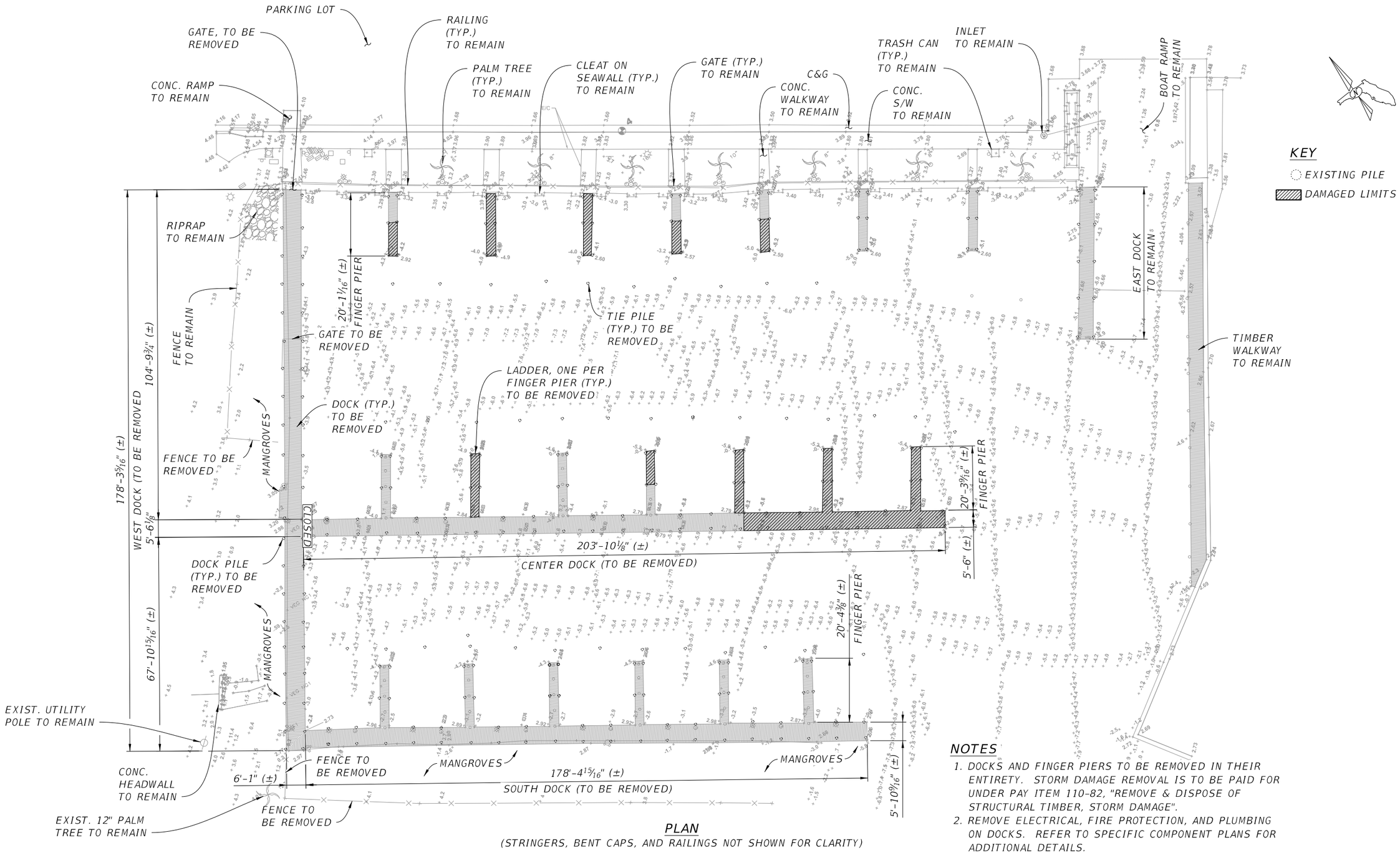
SHEET TITLE: SUMMARY OF QUANTITIES

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. S-06

Plotted By: Christian.Hodges 3/7/2025 10:31:17 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1GeneralNotes02.dgn



PLAN

(STRINGERS, BENT CAPS, AND RAILINGS NOT SHOWN FOR CLARITY)

NOTES

1. DOCKS AND FINGER PIERS TO BE REMOVED IN THEIR ENTIRETY. STORM DAMAGE REMOVAL IS TO BE PAID FOR UNDER PAY ITEM 110-82, "REMOVE & DISPOSE OF STRUCTURAL TIMBER, STORM DAMAGE".
2. REMOVE ELECTRICAL, FIRE PROTECTION, AND PLUMBING ON DOCKS. REFER TO SPECIFIC COMPONENT PLANS FOR ADDITIONAL DETAILS.

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
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15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

DRAWN BY:	CAH 06-24
CHECKED BY:	DRJ 06-24
DESIGNED BY:	DRJ 06-24
CHECKED BY:	CS 06-24

City of Safety Harbor, Florida — Heart of the Mineral Springs

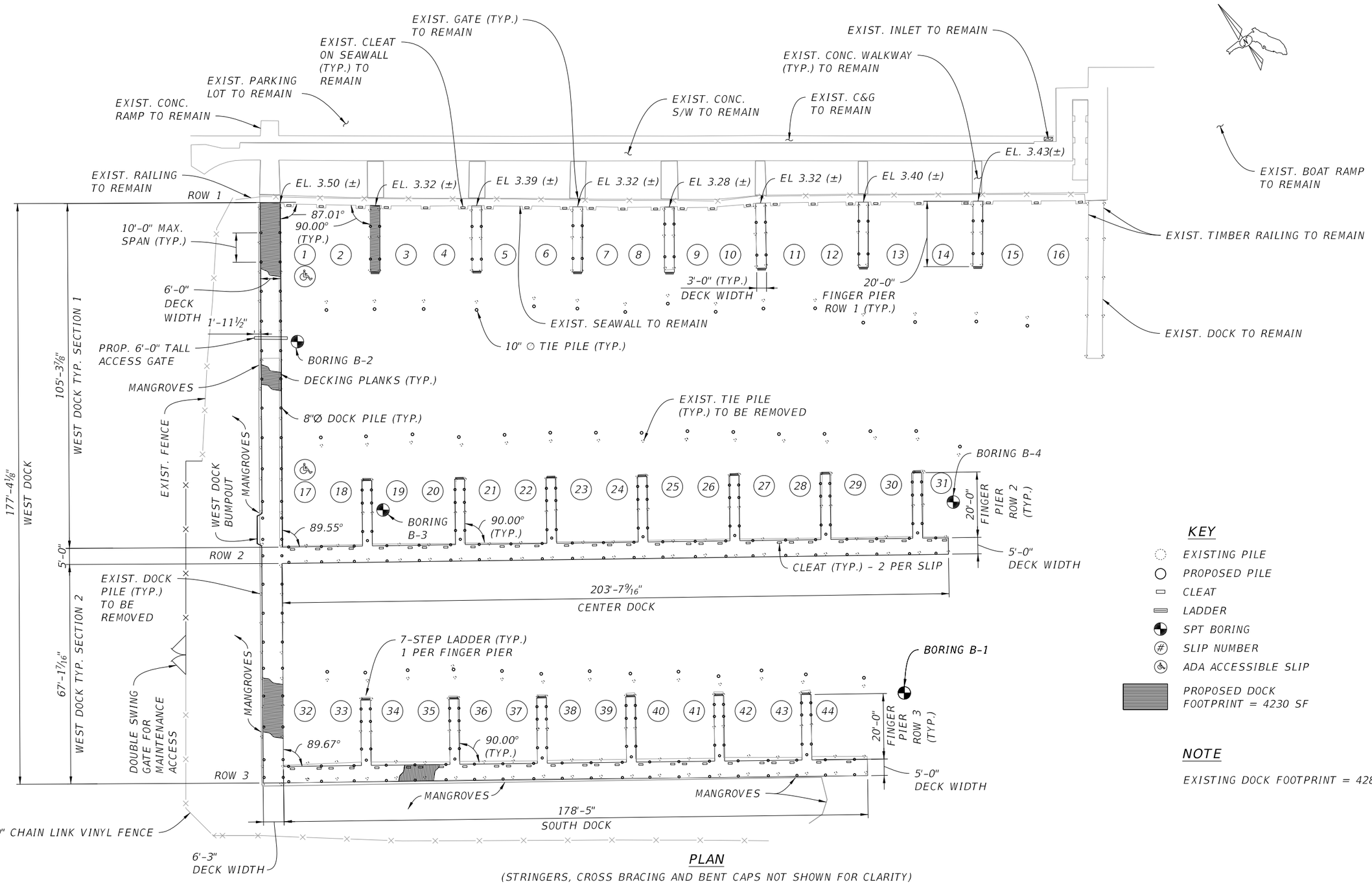
SHEET TITLE: DEMOLITION PLAN

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: S-07

Plotted By: Christian.Hodges 3/7/2025 12:03:12 PM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_DemoPlan.dgn



PLAN

(STRINGERS, CROSS BRACING AND BENT CAPS NOT SHOWN FOR CLARITY)

KEY

- EXISTING PILE
- PROPOSED PILE
- CLEAT
- LADDER
- SPT BORING
- SLIP NUMBER
- ADA ACCESSIBLE SLIP
- PROPOSED DOCK FOOTPRINT = 4230 SF

NOTE

EXISTING DOCK FOOTPRINT = 4288 SF

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
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15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

DRAWN BY:	CAH 06-24
CHECKED BY:	DRJ 06-24
DESIGNED BY:	DRJ 06-24
CHECKED BY:	CS 06-24

SHEET TITLE: MARINA LAYOUT PLAN

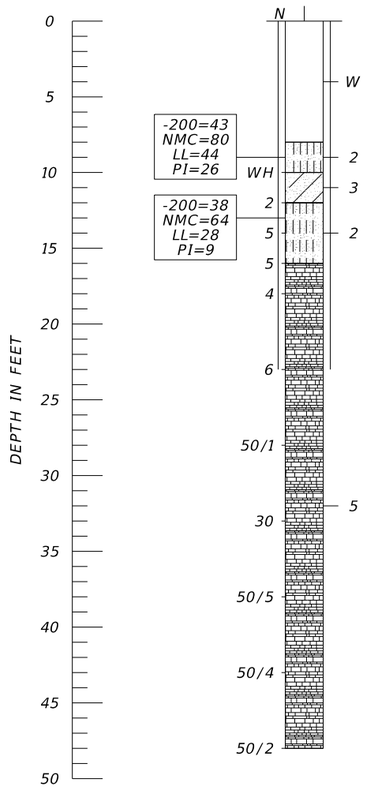
TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

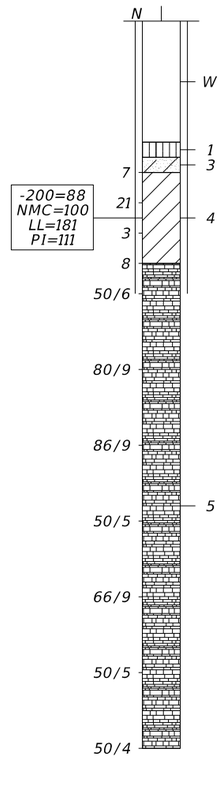
SHEET NO.: S-08

Plotted By: Christian.Hodges 3/7/2025 10:31:57 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_PlanElev100_Layout.dgn

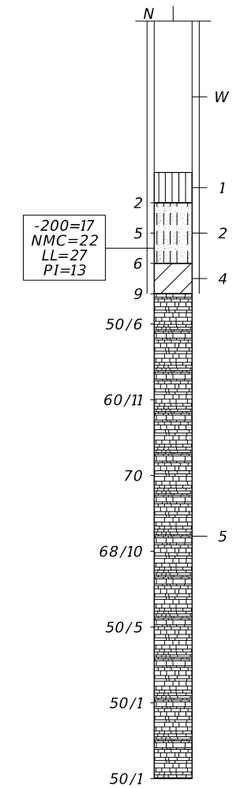
BOR # B-1
EASTING 434324
NORTHING 1329300
DATE 8/24/2023
DRILLER D. STAKELIN
HAMMER AUTOMATIC
RIG CME 55



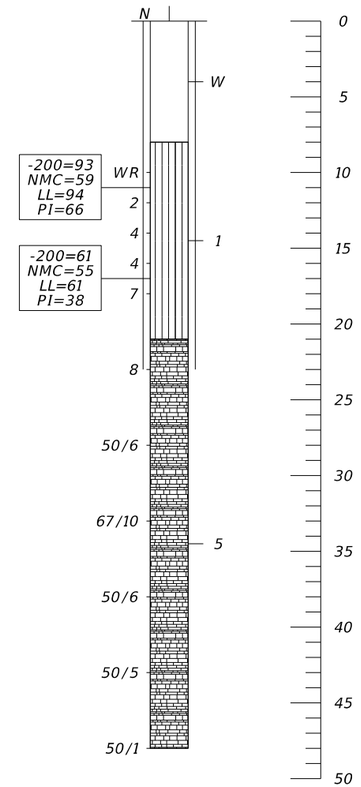
BOR # B-2
EASTING 434227
NORTHING 1329497
DATE 8/22/2023
DRILLER D. STAKELIN
HAMMER AUTOMATIC
RIG CME 55



BOR # B-3
EASTING 434224
NORTHING 1329437
DATE 8/23/2023
DRILLER D. STAKELIN
HAMMER AUTOMATIC
RIG CME 55



BOR # B-4
EASTING 434376
NORTHING 1329350
DATE 8/24/2023
DRILLER D. STAKELIN
HAMMER AUTOMATIC
RIG CME 55



LEGEND

1		DARK GRAY TO DARK BROWN SILT (ML/MH)
2		GRAY SILTY SAND (SM)
3		GRAY TO BLUE CLAYEY SAND (SC)
4		GRAY TO BLUE CLAY (CL/CH)
5		WEATHERED LIMESTONE, OCCASIONALLY WITH CALCAREOUS CLAY
	W	W - WATER
	SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
	N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
	50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
	WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
	WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
	-200 NMC LL PI	PERCENT PASSING #200 SIEVE NATURAL MOISTURE CONTENT (%) LIQUID LIMIT (%) PLASTICITY INDEX (%)
		CASING
	EASTING	EASTING COORDINATE REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, FLORIDA WEST ZONE, N.A.D. 83.
	NORTHING	NORTHING COORDINATE REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM, FLORIDA WEST ZONE, N.A.D. 83.

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS-RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DANIEL R. RUEL, P.E.
P.E. LICENSE NUMBER 82404
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BMG 02/24
CHECKED BY: DRR 02/24
DESIGNED BY: BMG 02/24
CHECKED BY: DRR 02/24

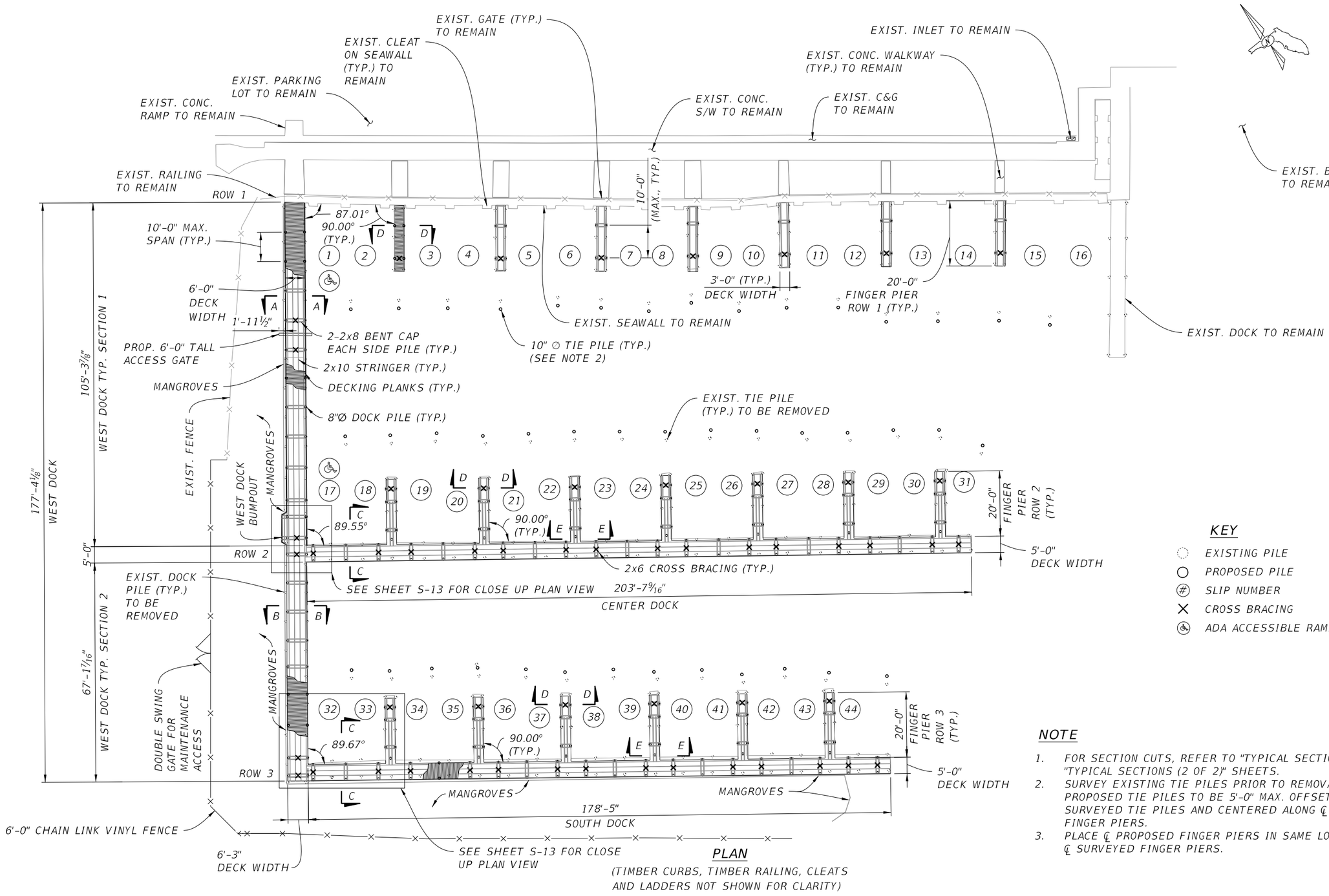
SHEET TITLE: SOIL PROFILES

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. S-09

Plotted By: Christian.Hodges 3/7/2025 10:32:18 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\geotech\B1Boring01.dgn



PLAN

(TIMBER CURBS, TIMBER RAILING, CLEATS AND LADDERS NOT SHOWN FOR CLARITY)

KEY

- EXISTING PILE
- PROPOSED PILE
- SLIP NUMBER
- CROSS BRACING
- ADA ACCESSIBLE RAMP

NOTE

1. FOR SECTION CUTS, REFER TO "TYPICAL SECTIONS (1 OF 2)" AND "TYPICAL SECTIONS (2 OF 2)" SHEETS.
2. SURVEY EXISTING TIE PILES PRIOR TO REMOVAL. PROPOSED TIE PILES TO BE 5'-0" MAX. OFFSET FROM EXISTING SURVEYED TIE PILES AND CENTERED ALONG ℄ PROPOSED FINGER PIERS.
3. PLACE ℄ PROPOSED FINGER PIERS IN SAME LOCATION AS EXISTING ℄ SURVEYED FINGER PIERS.

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REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DAVID R. JOHNSON, P.E.
P.E. NO.: 79354
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

DRAWN BY: CAH 06-24
CHECKED BY: DRJ 06-24
DESIGNED BY: DRJ 06-24
CHECKED BY: CS 06-24

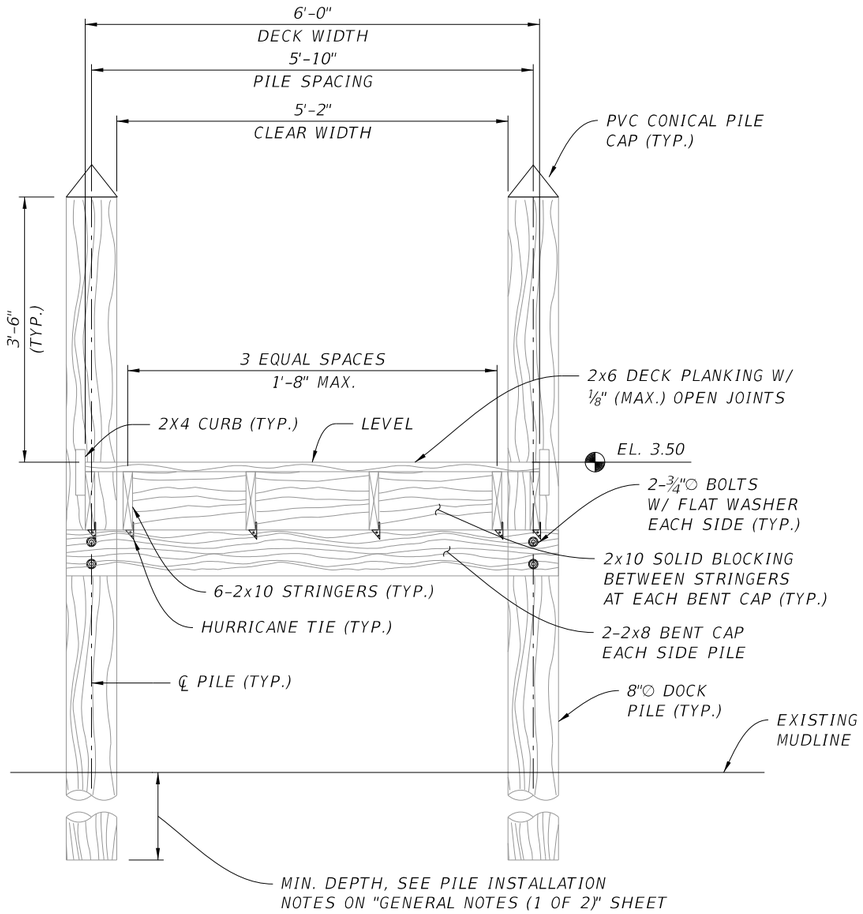
SHEET TITLE: FRAMING PLAN

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

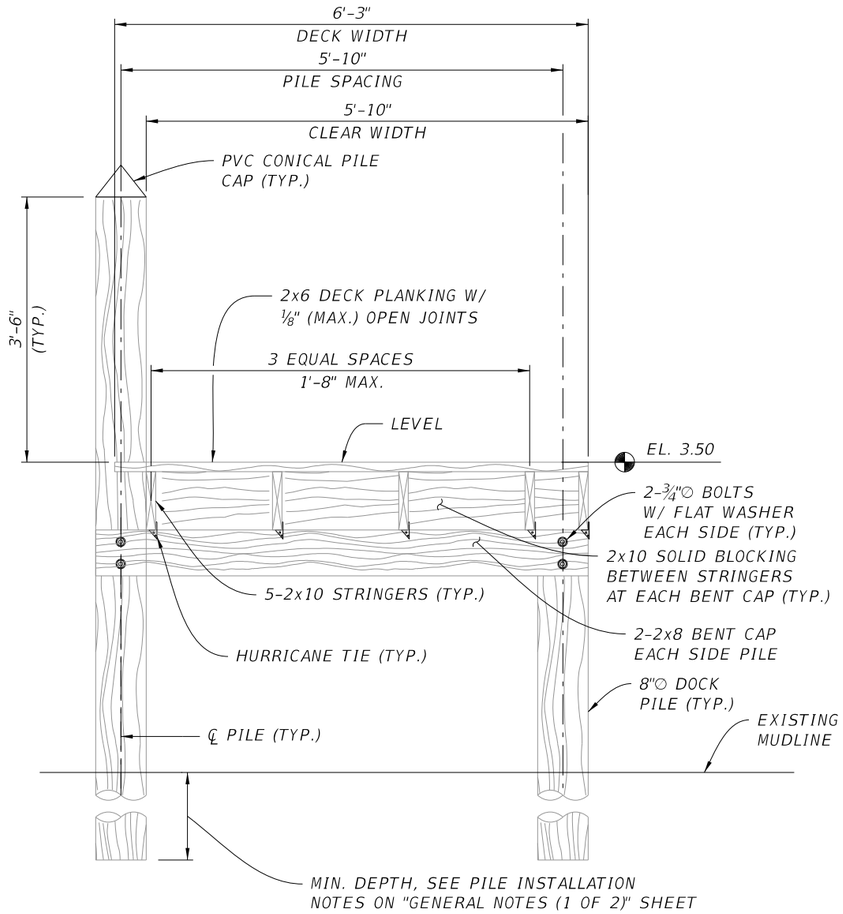
SHEET NO.: S-10

Plotted By: Christian.Hodges 3/7/2025 10:32:45 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_FramingPlan.dgn



SECTION A-A
WEST DOCK TYPICAL SECTION 1

(DIAGONAL CROSS BRACING NOT SHOWN)



SECTION B-B
WEST DOCK TYPICAL SECTION 2

(DIAGONAL CROSS BRACING NOT SHOWN)

NOTE

PROVIDE FLAT WASHERS BETWEEN PILING AND BENT CAP ON EITHER THE TOP OR BOTTOM CONNECTION BOLTS AS NECESSARY TO ENSURE PLUMB INSTALLATION.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

DAVID R. JOHNSON, P.E.
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DESIGNED BY:	DRJ 06-24
CHECKED BY:	CS 06-24

SHEET TITLE: TYPICAL SECTIONS (1 OF 2)

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: S-11

Plotted By: Christian.Hodges 3/7/2025 10:33:11 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_Sections.dgn

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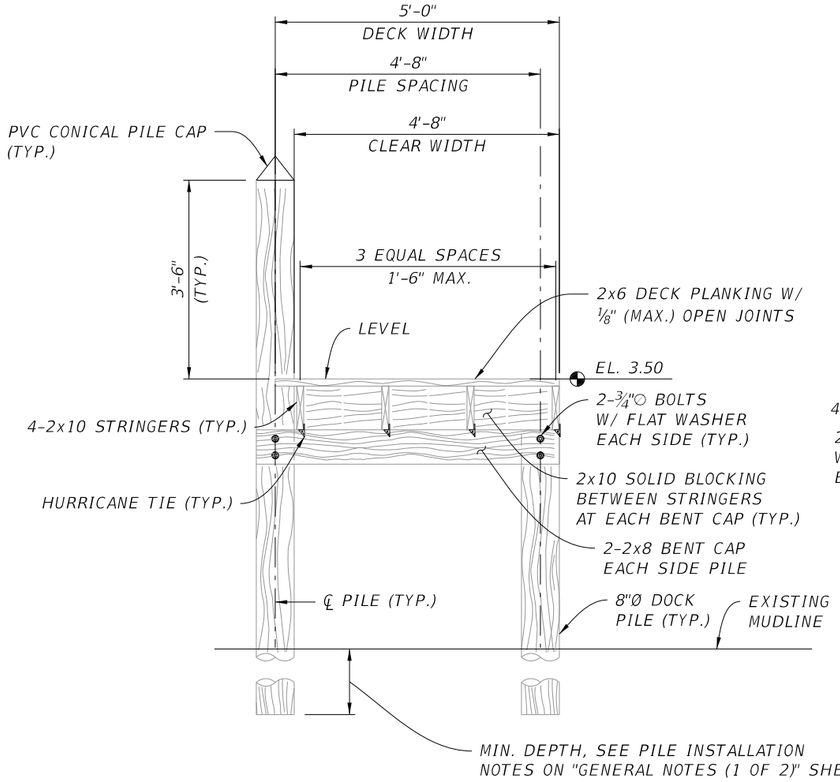
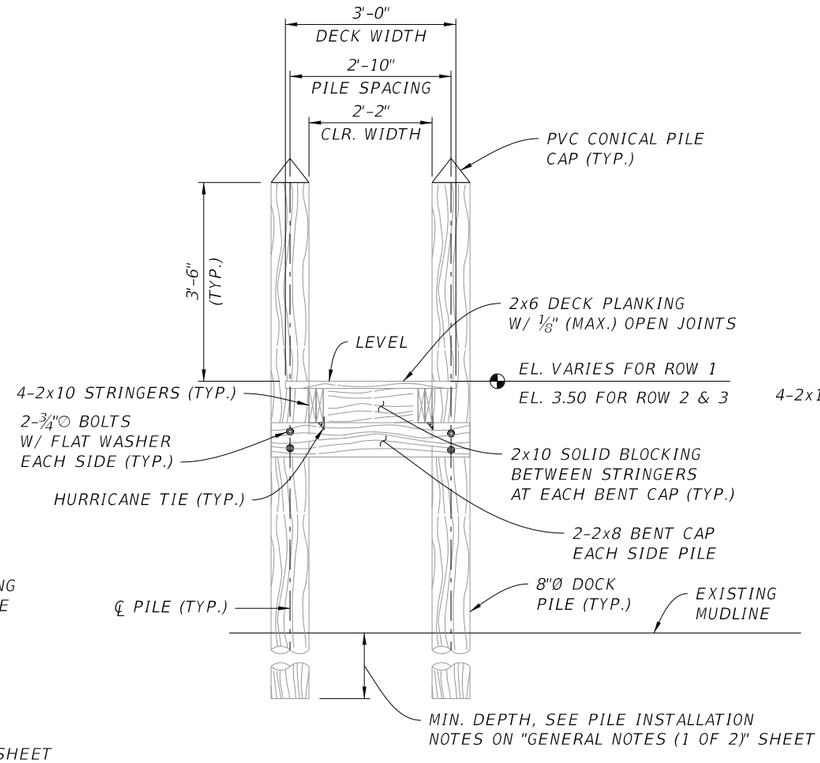


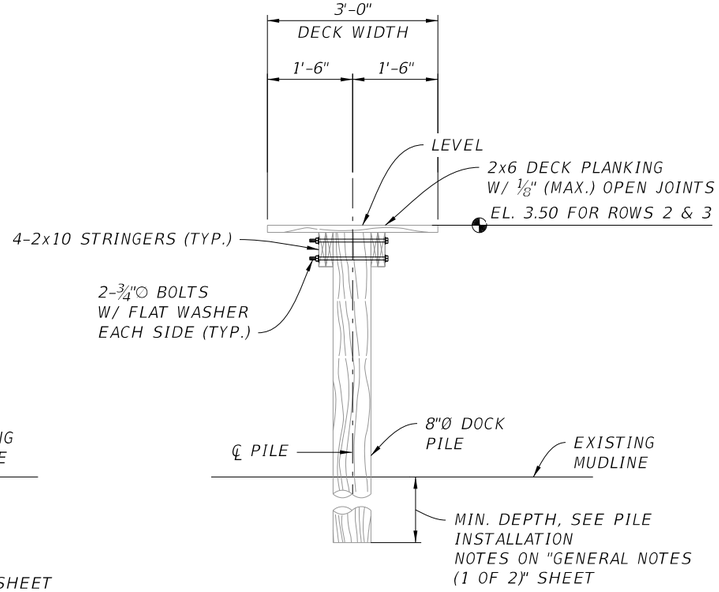
SECTION C-C
CENTER DOCK TYPICAL SECTION

(SOUTH DOCK IS SIMILAR)
(DIAGONAL CROSS BRACING NOT SHOWN)



SECTION D-D
FINGER PIER TYPICAL SECTION

(FINGER PIERS CONNECTED TO EXIST. SEAWALL
AND CENTER AND SOUTH END FINGER PIERS)



SECTION E-E
FINGER PIER TYPICAL SECTION

(CENTER AND SOUTH DOCK FINGER PIERS)

NOTE

PROVIDE FLAT WASHERS BETWEEN PILING AND BENT CAP ON EITHER THE TOP OR BOTTOM CONNECTION BOLTS AS NECESSARY TO ENSURE PLUMB INSTALLATION.

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REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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CHECKED BY: DRJ 06-24
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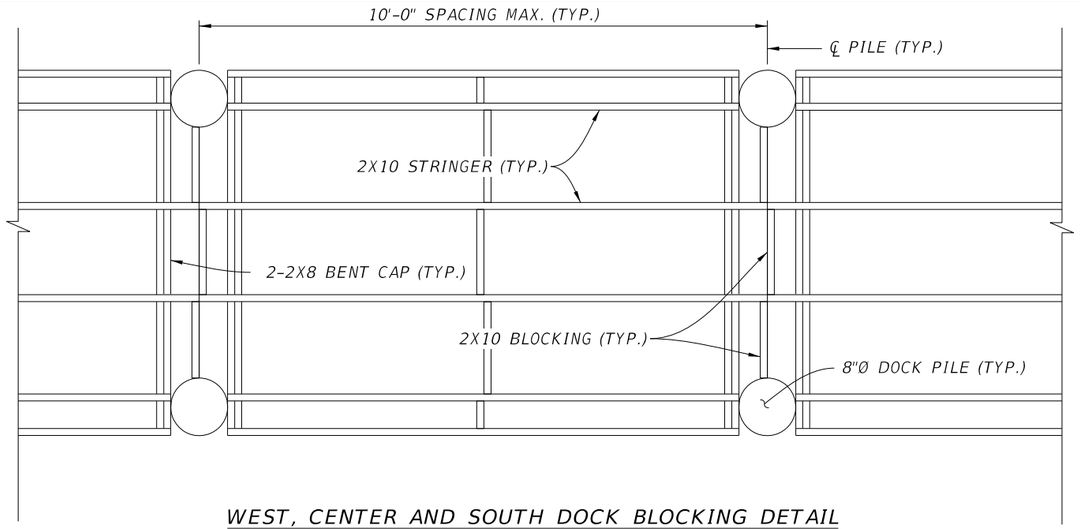
SHEET TITLE: TYPICAL SECTIONS (2 OF 2)

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

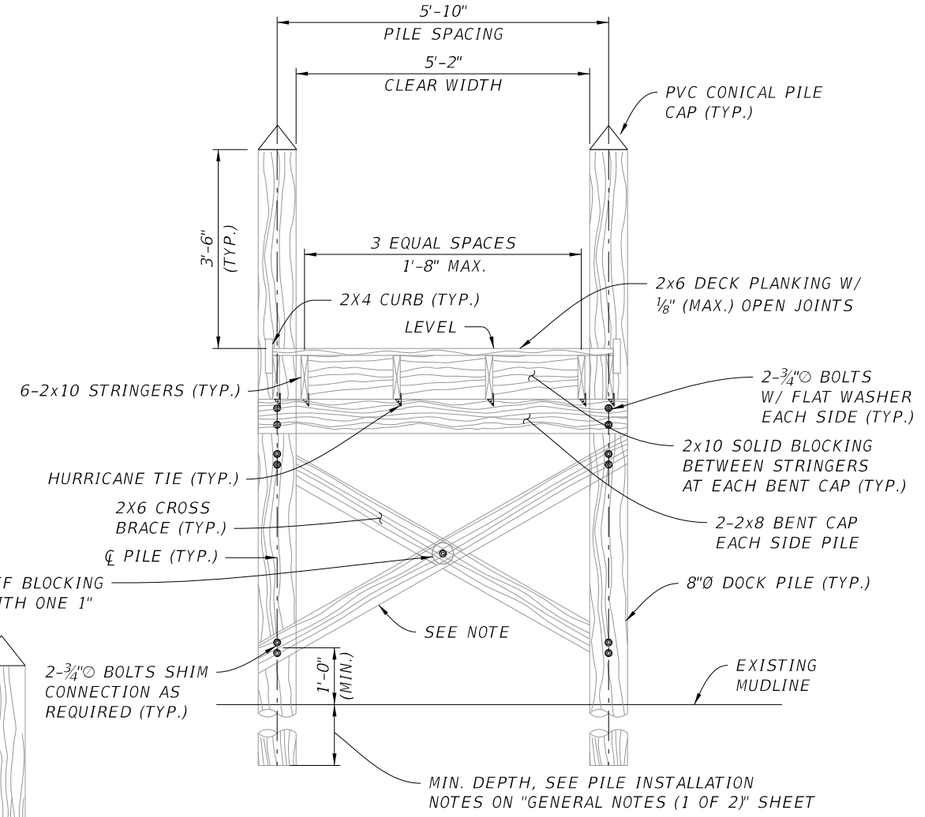
SHEET NO.: S-12

Plotted By: Christian.Hodges 3/7/2025 10:33:17 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_Misc Details 2.dgn

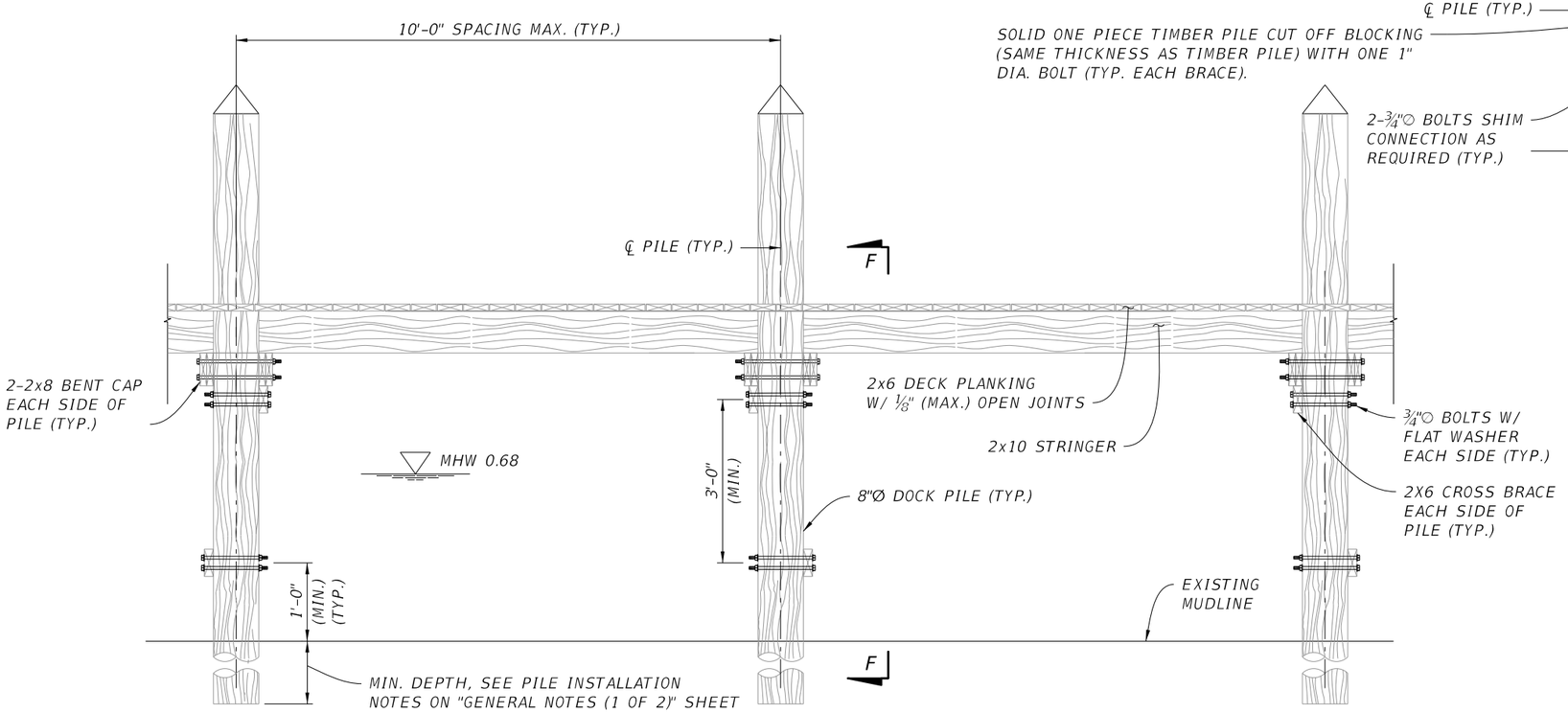


WEST, CENTER AND SOUTH DOCK BLOCKING DETAIL

(DECK AND CAPS NOT SHOWN FOR CLARITY)



SECTION F-F



WEST DOCK ELEVATION

(CROSS BRACING SIMILAR FOR CENTER DOCK, SOUTH DOCK, AND FINGER PIERS, WHERE APPLICABLE. SEE NOTE.)

NOTE

DIAGONAL CROSS BRACING IS NOT REQUIRED IF DISTANCE FROM BOTTOM OF BENT CAP TO EXISTING MUDLINE IS LESS THAN 5'-0".

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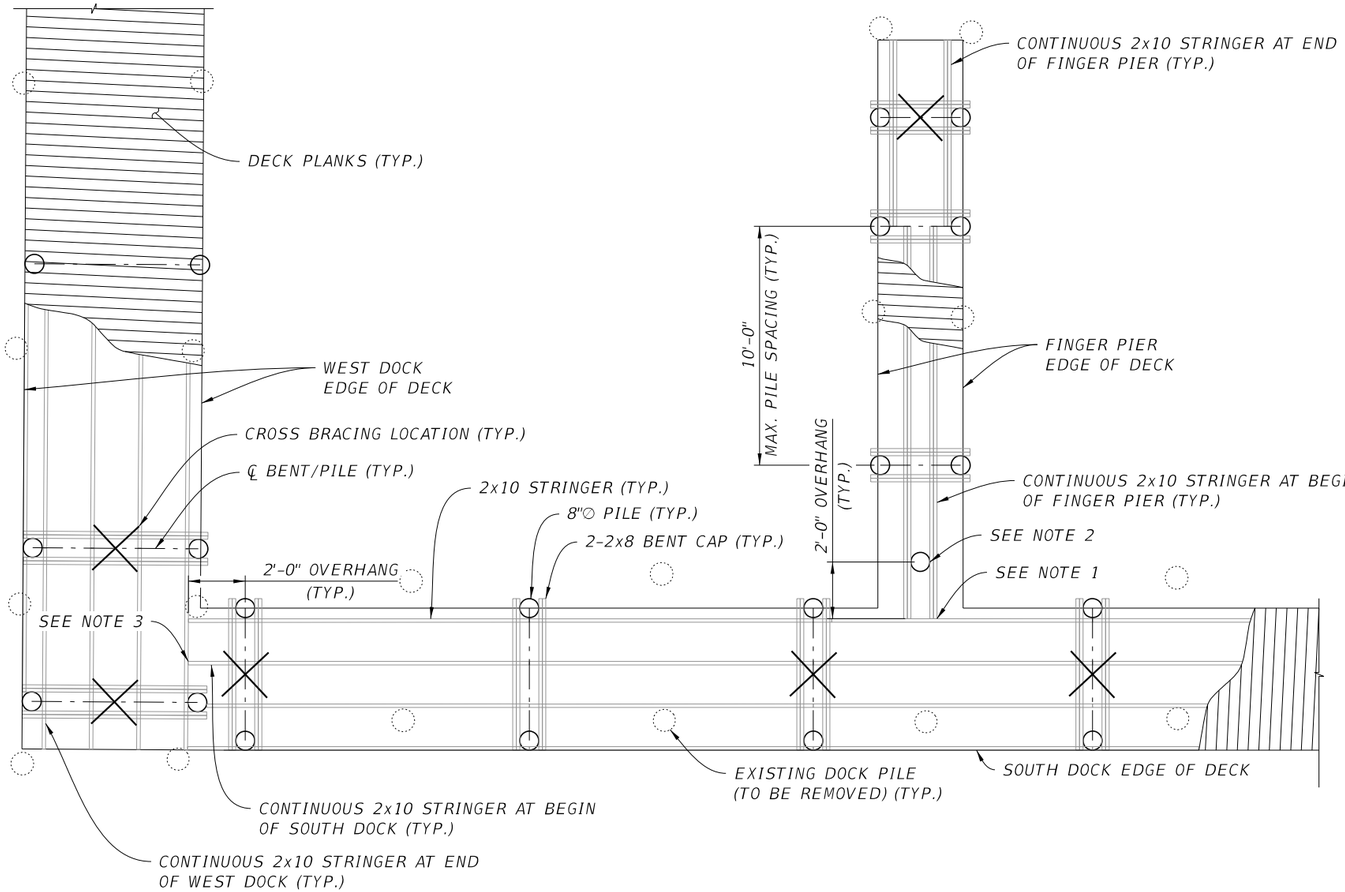
SHEET TITLE: MISCELLANEOUS DETAILS (1 OF 3)

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

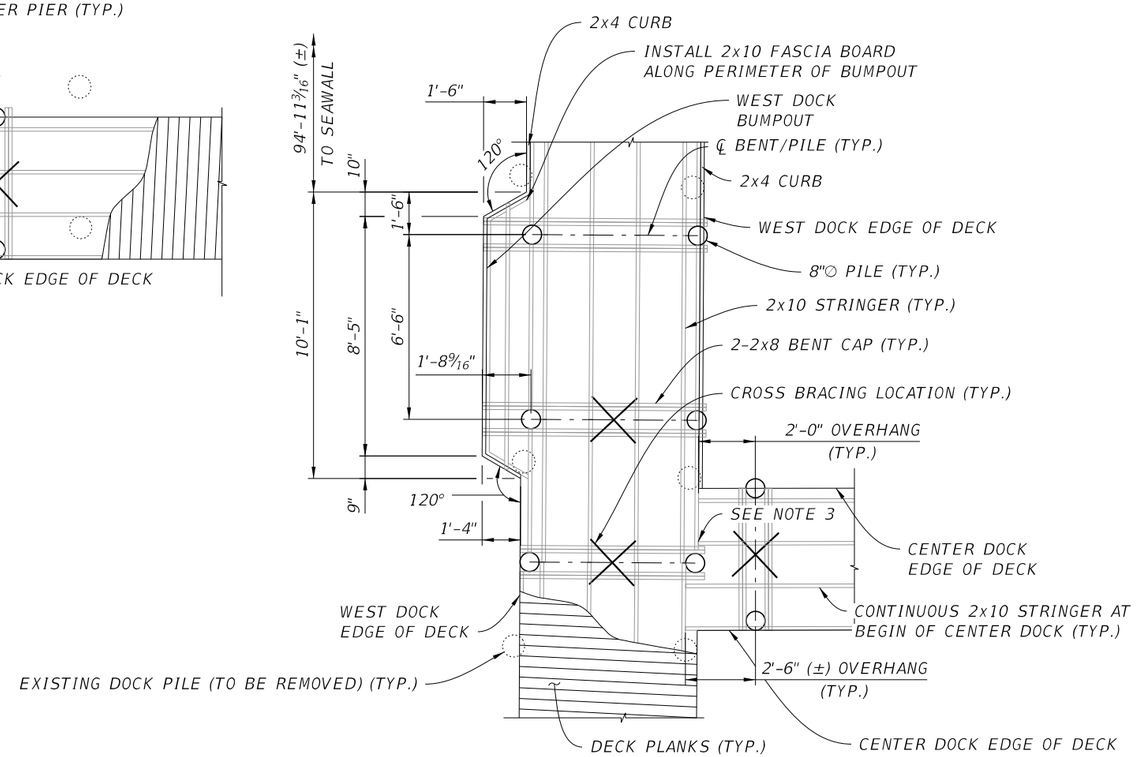
SHEET NO.: S-13

Plotted By: Christian.Hodges 3/7/2025 10:33:17 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_Misc Details 2.dgn



WEST DOCK CONNECTION TO SOUTH DOCK

(BLOCKING, CLEATS AND LADDERS NOT SHOWN FOR CLARITY)



WEST DOCK CONNECTION TO CENTER DOCK

(BLOCKING, CLEATS AND LADDERS NOT SHOWN FOR CLARITY)

NOTES

1. ATTACH FINGER PIER STRINGERS TO EXTERIOR STRINGER OF DOCK USING STAINLESS STEEL "LUS SIMPSON STRONG TIE" HANGER OR EQUIVALENT AT SOUTH AND CENTER DOCK FINGER PIERS.
2. CONNECT STRINGERS TO PILE USING 3/4" DIA. BOLTS WITH FLAT WASHERS EACH SIDE.
3. ATTACH CENTER/SOUTH DOCK STRINGERS TO EXTERIOR STRINGER OF WEST DOCK USING STAINLESS STEEL "LUS SIMPSON STRONG TIE" HANGER OR EQUIVALENT.

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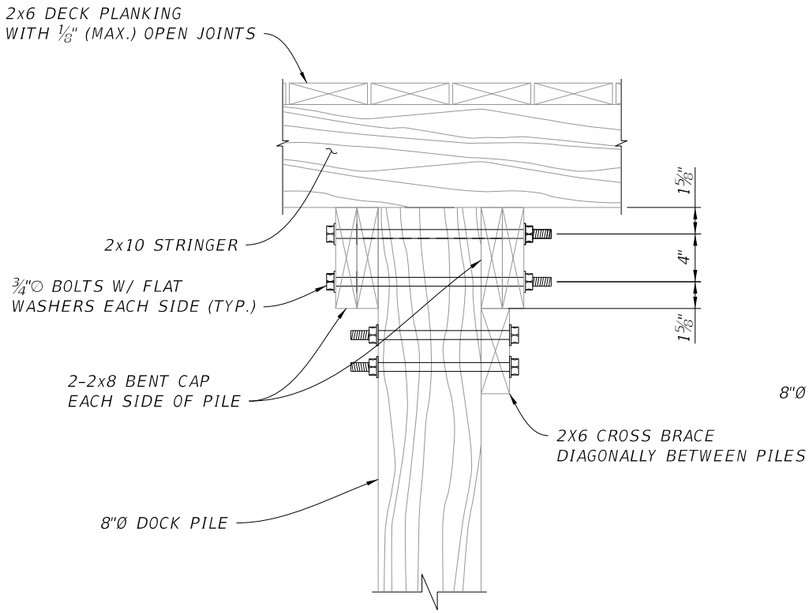
SHEET TITLE: MISCELLANEOUS DETAILS (2 OF 3)

TWA NO.:

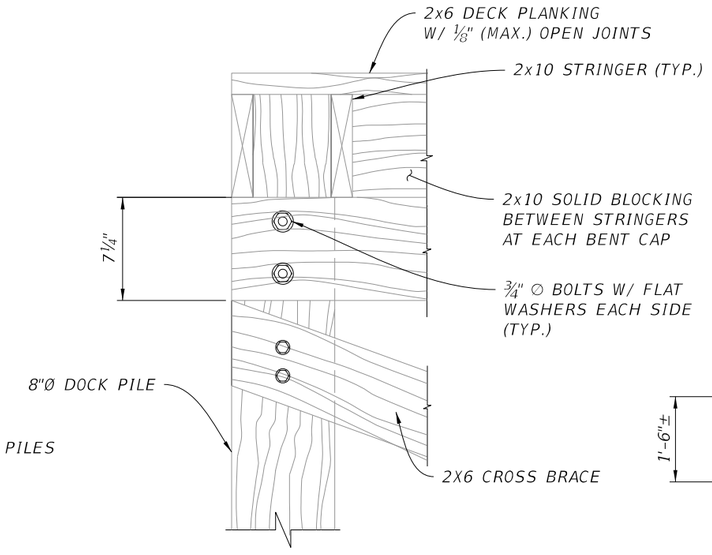
PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: S-14

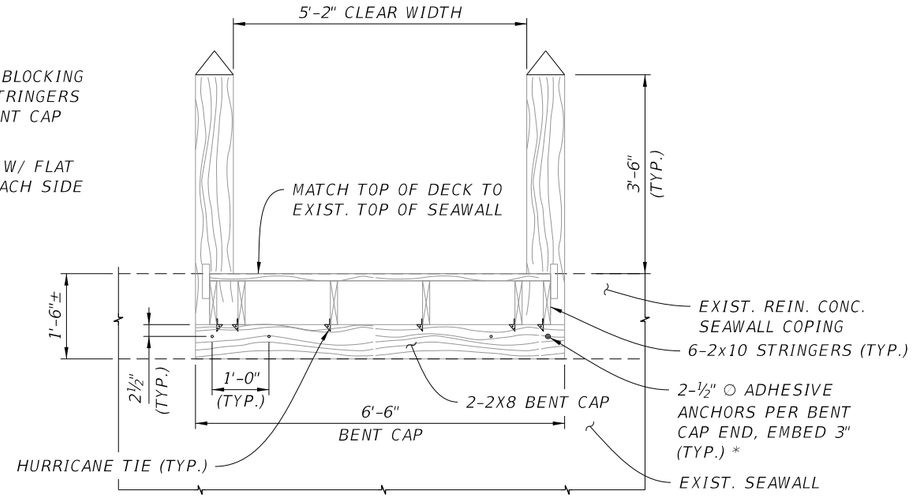
Plotted By: Christian.Hodges 3/7/2025 10:33:18 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_Misc Details 2.dgn



VIEW PERPENDICULAR TO ℄ OF DOCK



VIEW PARALLEL TO ℄ OF DOCK



RAMP CONNECTION TO EXIST. SEAWALL

(WEST DOCK SHOWN, FINGER PIERS SIMILAR EXCEPT USE ONE (1) ADHESIVE ANCHOR PER BENT CAP END)

CONNECTION DETAILS

* NOTE - USE HILTI HIT-HY 200 A/R V3 ADHESIVE AND HIT-Z ANCHOR RODS FOR ADHESIVE ANCHORS OR EQUIVALENT. MINIMUM FACTORED DESIGN SHEAR STRENGTH OF 1.74 KIPS PER ANCHOR.

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SHEET TITLE: MISCELLANEOUS DETAILS (3 OF 3)

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: S-15

Plotted By: Christian.Hodges 3/7/2025 10:33:19 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1_Misc Details 2.dgn

GENERAL NOTES

EROSION AND SEDIMENT CONTROL

1. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTROL AND PREVENT EROSION AND THE TRANSPORTATION OF SEDIMENT TO SURFACE DRAINS AND OUTFALLS USING BEST MANAGEMENT PRACTICES. REFER TO CONSTRUCTION PLANS, DETAILS, SPECIFICATIONS AND APPROVED PERMITS FOR DETAILS. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY REACH ONE HALF THE HEIGHT ON AN EROSION DEVICE OR AS DIRECTED BY THE ENGINEER.

2. DURING THE CONSTRUCTION OF STRUCTURES REQUIRING EXCAVATION, THE CONTRACTOR SHALL PLACE APPROVED BARRIERS OR OTHER APPROVED DEVICES AROUND SUCH STRUCTURES TO PREVENT EROSION AND THE MIGRATION OF SEDIMENT TO POINTS OUTSIDE THE CONSTRUCTION AREA. THE APPROVED BARRIERS OR OTHER APPROVED DEVICES SHALL BE PLACED IN ACCORDANCE WITH REQUIREMENTS OF FLORIDA STORM WATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL, 2018, STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, LATEST EDITION OR AS DIRECTED BY THE ENGINEER.

3. REQUIRED EROSION CONTROL MEASURES MUST REMAIN INTACT THROUGHOUT CONSTRUCTION. FAILURE TO INSTALL OR PROPERLY MAINTAIN REQUIRED EROSION CONTROL WILL RESULT IN ENFORCEMENT ACTION. ALL EROSION CONTROL MEASURES, SAND, SILT, AND DEBRIS SHALL BE REMOVED FROM ALL STRUCTURES AFTER CONSTRUCTION HAS BEEN COMPLETED AND PRIOR TO CITY FINAL WALK-THROUGH.

4. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SILT/TURBIDITY BARRIERS TO CONTROL EROSION AND SEDIMENT FROM TAKING PLACE OUTSIDE THE PROJECT LIMITS. THE SILT/TURBIDITY BARRIERS SHALL BE PLACED IN ACCORDANCE WITH REQUIREMENTS OF FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL, 2018, STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, LATEST EDITION, THROUGHOUT THE DURATION OF THE PROJECT AND ALL ASPECTS OF CONSTRUCTION. ALL DAMAGED OR INEFFECTIVE EROSION CONTROL DEVICES SHALL BE REPLACED AT NO ADDITIONAL COST TO THE CITY.

5. EROSION CONTROL PLAN – ANY MODIFICATIONS TO THIS PLAN MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REPRESENTING THE CONTRACTOR. THESE MODIFICATIONS MUST BE APPROVED BY THE CITY AND THE PERMITTING AGENCY. NO CONTRACT DELAYS WILL BE ALLOWED FOR SUCH MODIFICATIONS OR APPROVALS.

6. APPROVED BARRIERS (OR OTHER APPROVED SEDIMENT CONTROL DEVICES) THESE SHALL BE PLACED AT THE BASE OF ANY SLOPE WHERE A RAINFALL EVENT COULD ERODE A SLOPE AND TRANSPORT SEDIMENTS OFF-SITE. APPROVED BARRIERS SHALL BE DOUBLE STAKED IN ACCORDANCE WITH FLORIDA STORMWATER EROSION AND SEDIMENTATION CONTROL INSPECTOR'S MANUAL, 2018, AND STATE OF FLORIDA EROSION AND SEDIMENT CONTROL DESIGNER AND REVIEWER MANUAL, LATEST EDITION. ANY DAMAGED OR INEFFECTIVE APPROVED BARRIERS ARE TO BE REPLACED WITH NEW ONES. THE LOCATION AND INSTALLATION OF APPROVED BARRIERS SHALL BE AS DIRECTED BY THE PROJECT ENGINEER.

7. STOCKPILED MATERIALS SHALL BE PROTECTED BY COVER, APPROVED BARRIERS OR OTHER APPROVED SEDIMENT CONTROL DEVICES.

8. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 3 DAYS AFTER ½" RAIN EVENT DISTURBANCE.

9. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION, OR OTHER ACCEPTABLE METHODS.

10. THE EROSION CONTROL DEVICE QUANTITIES SHOWN ON THE BID FORMS ARE ESTIMATES OF THE ACTUAL QUANTITIES THAT MAY BE ENCOUNTERED DURING CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO SPECIFY ACTUAL QUANTITIES AND COSTS ASSOCIATED WITH THIS SPECIFIC EROSION CONTROL IMPLEMENTATION SCHEDULE. EROSION CONTROL ITEMS MAY BE ADDED OR DELETED FROM THE PAY ITEM LIST AS THE EROSION CONTROL IMPLEMENTATION SCHEDULE PROVIDED BY THE CONTRACTOR IS MODIFIED TO MEET SITE SPECIFIC CONDITIONS.

11. ALL EROSION CONTROL FENCES, BARRIERS, AND SILTATION DEVICES SHALL BE ERECTED PRIOR TO ANY LAND ALTERATIONS, SHALL BE MAINTAINED IN GOOD WORKING ORDER DURING CONSTRUCTION, AND REMOVED FOLLOWING SOIL STABILIZATION AND FINAL DRESSING. STOCKPILE AREAS SHALL INCLUDE SILT FENCING AROUND THE PERIMETER.

12. THE CONTRACTOR SHALL NOT RESTRICT OR BLOCK THE EXISTING DRAINAGE FLOW OVERLAND OR WITHIN RESHAPED SWALES. FLOW WITHIN EXISTING DRAINAGE PIPES SHALL BE MAINTAINED AT ALL TIMES. STORM WATER WILL BE CONVEYED VIA EXISTING SWALES, DITCHES, OR PROPOSED DITCHES, EXISTING AND PROPOSED STORM SEWERS.

13. THERE IS TO BE NO DISCHARGE (I.E. PUMPING, SHEET FLOW, SWALE, DITCH, ETC.) INTO EXISTING DITCHES OR CANALS WITHOUT THE USE OF SETTLING PONDS. IF THE CONTRACTOR DESIRES TO DISCHARGE INTO EXISTING DITCHES OR CANALS A SETTLING POND PLAN PREPARED BY THE CONTRACTOR MUST BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD AND LOCAL REGULATORY AGENCY PRIOR TO CONSTRUCTION.

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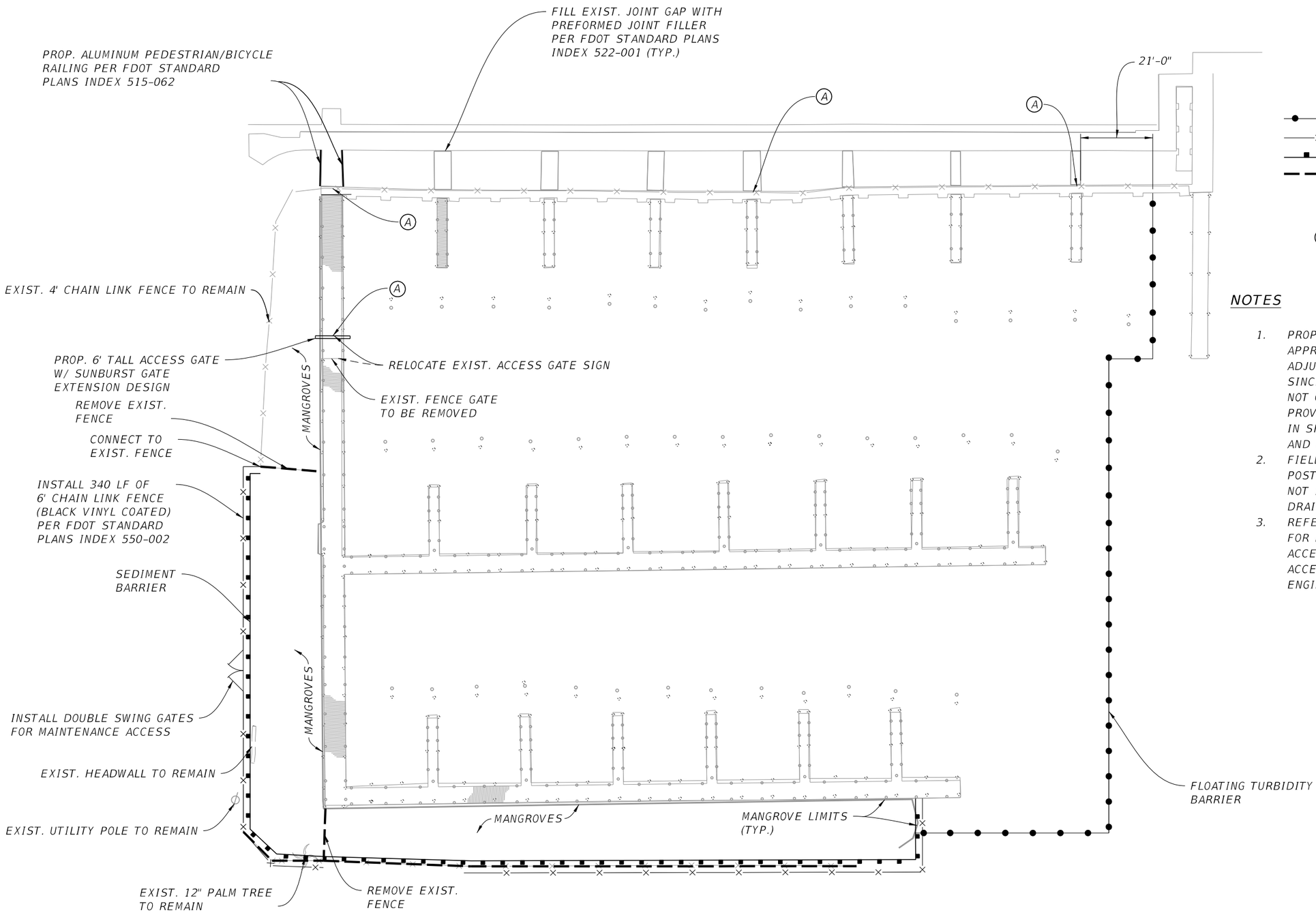
SHEET TITLE: EROSION CONTROL GENERAL NOTES

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: C-01

Plotted By: Christian.Hodges 3/7/2025 10:33:30 AM P:\Projects22\22-00709.001_Marina_Basin_-_Dock_Repair_CADD\struct\B1CivilGeneralNotes01.dgn



KEY

- FLOATING TURBIDITY BARRIER
- 6' CHAIN LINK FENCE
- SEDIMENT BARRIER
- EXIST. FENCE TO BE REMOVED
- (A) INSTALL "NO SWIMMING – WARNING – POTENTIAL SHOCK HAZARD – ELECTRICAL CURRENTS MAY BE PRESENT IN THE WATER." PER NATIONAL ELECTRICAL CODE 555.10

NOTES

1. PROPOSED PERIMETER FENCE LAYOUT IS APPROXIMATE ONLY AND MAY NEED FIELD ADJUSTMENTS DURING CONSTRUCTION SINCE TOPOGRAPHIC SURVEY LIMITS DO NOT COVER THE ENTIRE PROJECT AREA. PROVIDE FINAL LAYOUT AND DIMENSIONS IN SHOP DRAWINGS FOR OWNER'S APPROVAL AND ENGINEER'S REVIEW.
2. FIELD VERIFY PROPOSED PERIMETER FENCE POSTS AND CORRESPONDING FOOTINGS WILL NOT IMPACT EXISTING UTILITIES AND DRAINAGE PIPES/STRUCTURES.
3. REFER TO "GENERAL NOTES (1 OF 2)" SHEET FOR MORE INFORMATION ON PROPOSED MARINA ACCESS GATE. PROVIDE SHOP DRAWINGS FOR ACCESS GATE FOR OWNER'S APPROVAL AND ENGINEER'S REVIEW.

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REVISIONS					
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DRAWN BY: CAH 06-24
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SHEET TITLE: SITE CIVIL AND EROSION CONTROL PLAN

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. C-02

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LEGEND

SYMBOL	DESCRIPTION	MOUNTING/REMARKS
▭	LIGHTING CABINET: DENOTED BY LABEL	SURFACE, TOP 78" AFF OR AS REQUIRED BY MANUFACTURER
▪	DEVICE AS NOTED	AS NOTED
▬ ▬	BRANCH CIRCUIT PANELBOARD: 240 VAC	TOP 78" AFF
▭	ELECTRICAL EQUIPMENT: DENOTED BY LABEL	AS NOTED
	ELECTRIC UTILITY METER/CABINET	AS REQUIRED BY UTILITY COMPANY
↘ →	CIRCUIT HOME RUN TO PANELBOARD INDICATED	
／	CIRCUIT/CONDUIT OR CABLE CONCEALED	
'EQUIP'	EQUIPMENT LABEL	REFER TO RESPECTIVE SCHEDULE
PNL–CIR	PANELBOARD–CIRCUIT DESIGNATION	REFER TO PANEL SCHEDULE
⬡ # ⓐ #	KEYED NOTES	REFER TO LIKE–NUMBERED NOTES

OBJECT STATE LINETYPES:

EXISTING OBJECT OR CONSTRUCTION: ———————

EXISTING OBJECT OR CONSTRUCTION TO BE DEMOLISHED: – – – – – – – – – – – – – – –

NEW OBJECT OR CONSTRUCTION TO BE PROVIDED: ———————

OBJECT STATE SUBSCRIPTS:

D	EXISTING OBJECT TO BE DEMOLISHED	M	EXISTING OBJECT TO BE REMOVED & RELOCATED
E	EXISTING OBJECT TO REMAIN	R	RELOCATED EXISTING OBJECT

SYMBOL	DESCRIPTION	MOUNTING/REMARKS

ABBREVIATIONS:

A	AMPS OR AMPERE
A/E	ARCHITECT/ENGINEER
AF	AMPERE FRAME
AFCI	ARC–FAULT CIRCUIT INTERRUPTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASD	ADJUSTABLE SPEED DRIVE
AT	AMPERE TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AUTO	AUTOMATIC
AWG	AMERICAN WIRE GAUGE
BLDG	BUILDING
BFG	BELOW FINISHED GRADE
BRKR	BREAKER
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
COMM	COMMUNICATIONS
CT	CURRENT TRANSFORMER
CU	COPPER
°C	DEGREES CELSIUS
°F	DEGREES FAHRENHEIT
DISC	DISCONNECT
DP	DISTRIBUTION PANELBOARD
DS	DISCONNECT SWITCH
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EG	EQUIPMENT GROUND
ELEC	ELECTRIC OR ELECTRICAL
ELEV	ELEVATOR
EMER	EMERGENCY
EPO	EMERGENCY POWER OFF
EPS	EMERGENCY POWER SUPPLY
EXIST	EXISTING
FA	FIRE ALARM
FC	FOOTCANDLE
FLA	FULL LOAD AMPS
FO	FIBER OPTIC
FT	FOOT (FEET)
GC	GENERAL CONTRACTOR
GEN	GENERATOR
GFCI	GROUND–FAULT CIRCUIT INTERRUPTER
GFP	GROUND–FAULT MONITORING PANEL
GND	GROUND
HOA	HAND–OFF–AUTO
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
HV	HIGH VOLTAGE
HZ	HERTZ
IG	ISOLATED GROUND
IN	INCH (INCHES)
JB	JUNCTION BOX
kcmil	THOUSAND CIRCULAR MIL
kV	KILOVOLT
kVA	KILOVOLT AMPERE
kW	KILOWATT
kWh	KILOWATT HOUR
LED	LIGHT EMITTING DIODE
LPS	LIGHTNING PROTECTION SYSTEM
LTG	LIGHTING
LTNG	LIGHTNING
LV	LOW VOLTAGE
MAX	MAXIMUM
MCA	MINIMUM CIRCUIT AMPACITY
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MDP	MAIN DISTRIBUTION PANELBOARD
MH	METAL HALIDE
MHz	MEGAHERTZ
MIN	MINIMUM
MLO	MAIN LUGS ONLY
MOCP	MAXIMUM OVERCURRENT PROTECTION
MTS	MANUAL TRANSFER SWITCH
N	NEUTRAL
NA	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OB	OUTLET BOX
P	POLE
PA	PUBLIC ADDRESS
PB	PULL BOX
PH/ϕ	PHASE
PNL	PANELBOARD (PANEL)
RECPT	RECEPTACLE
SCC	SHORT CIRCUIT CAPACITY
SF	SQUARE FOOT (FEET)
SPEC	SPECIFICATION
SPD	SURGE PROTECTIVE DEVICE
SS	STAINLESS STEEL
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TR	TAMPER RESISTANT
TYP	TYPICAL
U	UNKNOWN CIRCUIT
UL	UNDERWRITERS LABORATORY
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
UTIL	UTILITY
V	VOLT OR VOLTAGE
VA	VOLT AMPERE
VD	VOLTAGE DROP
VFD	VARIABLE FREQUENCY DRIVE
W	WATT OR WIRE
WP	WEATHERPROOF
WR	WEATHER RESISTANT
WT	WATERTIGHT
XFER	TRANSFER
XFMR	TRANSFORMER
XP	EXPLOSION RATED

ELECTRICAL SHEET INDEX

E–01	ELECTRICAL LEGEND	E–09	POWER ONE–LINE DIAGRAM
E–02	ELECTRICAL SPECIFICATIONS (1 OF 3)	E–10	PANEL SCHEDULE A
E–03	ELECTRICAL SPECIFICATIONS (2 OF 3)	E–11	PANEL SCHEDULE B
E–04	ELECTRICAL SPECIFICATIONS (3 OF 3)	E–12	PANEL SCHEDULE C
E–05	ELECTRICAL PLAN NOTES	E–13	MARINA PEDESTAL SCHEDULE
E–06	ELECTRICAL DEMOLITION PLAN	E–14	DETAILS (1 OF 3)
E–07	ELECTRICAL PLAN	E–15	DETAILS (2 OF 3)
E–08	POWER ONE–LINE DIAGRAM NOTES	E–16	DETAILS (3 OF 3)

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SAFETY HARBOR | FL

SHEET TITLE: ELECTRICAL LEGEND

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: E-01

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DRAWING SPECIFICATIONS

GENERAL:

A. PROVIDE SHALL MEAN FURNISH AND INSTALL.

B. THE COMPLETE ELECTRICAL SYSTEM WHICH SHALL BE PROVIDED BY THE CONTRACTOR SHALL INCLUDE ALL WORK, MATERIALS AND APPARATUSES SPECIFIED HEREINAFTER AND INDICATED ON THE DRAWINGS. ALL WORKMANSHIP SHALL BE OF THE HIGHEST QUALITY AND NO SUBSTANDARD WORK WILL BE ACCEPTED.

C. PROVIDE ALL WORK AND ELECTRICAL SYSTEMS COMPONENTS REQUIRED TO SERVE LOADS AS SPECIFIED HEREINAFTER AND INDICATED ON THE DRAWINGS. THE WORK SHALL INCLUDE COMPLETE TESTING OF ALL ELECTRICAL SYSTEMS AT THE COMPLETION OF THE WORK AND MAKING ANY CHANGES AND ADJUSTMENTS NECESSARY FOR THE PROPER FUNCTIONING OF THE SYSTEMS.

D. MAKE A THOROUGH EXAMINATION OF THE SITE AND THE CONTRACT DOCUMENTS PRIOR TO EXECUTING THE CONTRACT. NO CLAIM FOR ADDITIONAL COMPENSATION WILL BE RECOGNIZED FOR DIFFICULTIES ENCOUNTERED WHICH AN EXAMINATION OF SITE CONDITIONS AND CONTRACT DOCUMENTS WOULD HAVE REVEALED.

E. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED ABOVE THE FLOODPLAIN ELEVATION. CONTRACTOR SHALL COORDINATE FLOODPLAIN ELEVATION AND EQUIPMENT REQUIREMENTS WITH OWNER PRIOR TO ROUGH–IN.

F. THE PLANS ARE GENERALLY DIAGRAMMATIC. COORDINATE ALL WORK WITH OTHER TRADES AS REQUIRED TO AVOID INTERFERENCES BETWEEN TRADES (i.e. BEAMS, CONDUITS, EQUIPMENT, DUCTWORK, ETC).

G. REMOVE ALL EXISTING LIGHTING FIXTURES, EQUIPMENT, DEVICES, CONDUCTORS, RACEWAYS, ETC. MADE UNNECESSARY BY THE NEW INSTALLATION. PRIOR TO REMOVAL FROM SITE, COORDINATE WITH OWNER TO DETERMINE IF OWNER WISHES TO RETAIN ANY REMOVED EQUIPMENT.

WORK PERFORMANCE:

A. JOB SITE SAFETY AND WORKER SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR.

B. ARRANGE, PHASE AND PERFORM ALL WORK DURING TIME PERIODS SCHEDULED WITH AND ACCEPTABLE TO THE OWNER BEFORE PROCEEDING. NO ADDITIONAL COMPENSATION WILL BE AUTHORIZED FOR WORK NECESSITATED BY ILL–TIMED, DEFECTIVE, OR NON–CONFORMING WORK.

C. THE CONTRACTOR SHALL ENSURE THAT ALL SYSTEMS OPERATE AS DESIGNED AND/OR REQUIRED AND SHALL REVIEW THEIR OPERATION WITH THE OWNER UPON COMPLETION OF CONSTRUCTION AND TESTING. COMPILE COMPLETE AND UPDATED AS–BUILT DRAWINGS/DOCUMENTS AND ISSUE ONE (1) SET TO THE OWNER.

D. ELECTRICAL WORK SHALL BE ACCOMPLISHED WITH ALL AFFECTED CIRCUITS OR EQUIPMENT DE–ENERGIZED. WHEN AN ELECTRICAL OUTAGE CANNOT BE ACCOMPLISHED IN THIS MANNER FOR THE REQUIRED WORK, THE FOLLOWING REQUIREMENTS ARE MANDATORY:

1. ELECTRICIANS MUST USE AND WEAR FULL PROTECTIVE EQUIPMENT (PPE) (i.e. CERTIFIED AND TESTED INSULATING MATERIAL TO COVER EXPOSED ENERGIZED ELECTRICAL COMPONENTS, CERTIFIED AND TESTED INSULATED TOOLS, ETC.) WHILE WORKING ON ENERGIZED SYSTEMS IN ACCORDANCE WITH NFPA 70E. THE LEVEL OF PPE SHALL BE DETERMINED BY A COMPUTER GENERATED ARC FLASH CALCULATION PROVIDED AND PAID FOR BY THE CONTRACTOR. THE ARC FLASH DATA SHALL BE PRESENTED WITH THE SUBMITTAL BELOW.
2. WORK ON ENERGIZED CIRCUITS OR EQUIPMENT CANNOT BEGIN UNTIL PRIOR WRITTEN APPROVAL IS OBTAINED FROM THE OWNER.

E. NEW WORK SHALL BE INSTALLED AND CONNECTED TO EXISTING WORK NEATLY AND CAREFULLY. PROVIDE PROTECTIVE MATS, COVERS, ETC. AS REQUIRED FOR ALL EXISTING WORK SUSCEPTIBLE TO DAMAGE. VERIFY SPECIFIC LOCATIONS AND REQUIREMENTS WITH THE OWNER. DISTURBED OR DAMAGED WORK AS A RESULT OF ELECTRICAL WORK SHALL BE REPLACED OR REPAIRED TO ITS PRIOR CONDITIONS.

F. ENSURE THAT ELECTRICAL SERVICE REMAINS UNINTERRUPTED FOR OTHER BUILDINGS AND FACILITIES AT ALL TIMES. PERFORM ALL TEMPORARY WORK NECESSARY TO MAINTAIN CONTINUITY OF ELECTRICAL SERVICE WHEN CONNECTION IS MADE TO EXISTING SYSTEMS. EXISTING SERVICE SHALL NOT BE INTERRUPTED WITHOUT PRIOR CONSENT OF THE OWNER AND MAY BE INTERRUPTED ONLY AT AND FOR THE SPECIFIED TIME DESIGNATED BY THE OWNER. THE CONTRACTOR SHALL BE GUIDED BY THE OWNER AT ALL TIMES IN MATTERS AFFECTING THE EXISTING FACILITIES.

G. ELECTRICAL EQUIPMENT SHALL NOT BE STORED OUTDOORS. EQUIPMENT SHALL BE STORED IN AN OWNER/ENGINEER APPROVED MEDIUM AND LOCATION.

CODES & STANDARDS:

A. PERFORM WORK IN COMPLIANCE WITH THE LATEST EDITION OF ALL APPLICABLE, FEDERAL, STATE AND LOCAL CODES, REGULATIONS AND STANDARDS, TO INCLUDE THOSE LISTED BELOW, ADOPTED BY THE AUTHORITY HAVING JURISDICTION. WHERE DIFFERENCES MAY OCCUR THE MORE STRINGENT REQUIREMENTS SHALL GOVERN. IN CASE OF CONFLICT PROVIDE WRITTEN NOTIFICATION AND OBTAIN A DECISION FROM THE ARCHITECT/OWNER.

1. NFPA 70: NATIONAL ELECTRICAL CODE (2020)
2. NFPA 70E: STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE (2024)
3. NFPA 101: LIFE SAFETY CODE (2021)
4. NFPA 241: STANDARD FOR SAFEGUARDING CONSTRUCTION, ALTERATION AND DEMOLITION OPERATIONS (2022)
5. FBC: FLORIDA BUILDING CODE (2023)
6. OSHA PART 1910: OCCUPATIONAL SAFETY AND HEALTH STANDARDS
7. OSHA PART 1926: SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION

WARRANTY:

A. CONTRACTOR SHALL WARRANTY ALL WORK FOR A PERIOD OF ONE (1) YEAR FROM DATE OF SUBSTANTIAL COMPLETION. CONTRACTOR SHALL RECTIFY ANY DEFECTS DUE TO FAULTY MATERIALS OR WORKMANSHIP AND PAY FOR ANY DAMAGE TO OTHER WORK RESULTING THEREFROM WITHIN SAID PERIOD. THE OWNER WILL GIVE NOTICE OF DEFECTS WITH REASONABLE PROMPTNESS.

B. PROVIDE COMPLETE WARRANTY INFORMATION FOR EACH ITEM TO INCLUDE PRODUCT OR EQUIPMENT; DATE OR BEGINNING OF WARRANTY OR BOND; DURATION OF WARRANTY OR BOND; AND NAMES, ADDRESSES, AND TELEPHONE NUMBERS AND PROCEDURES FOR FILING A CLAIM AND OBTAINING WARRANTY SERVICES.

- TO THE BEST OF THE ENGINEER'S KNOWLEDGE THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM BUILDING CODES.
- THIS DOCUMENT IS VALID FOR 12 MONTHS FROM DATE OF ENGINEER'S SIGNATURE AND SEAL.
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SAFETY HARBOR | FL

SHEET TITLE: ELECTRICAL SPECIFICATIONS (1 OF 3)

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. E-02

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

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DRAWING SPECIFICATIONS

SUBMITTALS:

A. SUBMIT ONE (1) ELECTRONIC PDF COPY. THE ENGINEER WILL RETURN SUBMITTAL REVIEW COMMENTS NO LATER THAN 14 CALENDAR DAYS OF RECEIPT.

B. APPROVAL SHALL BE OBTAINED FOR ALL EQUIPMENT AND MATERIAL BEFORE DELIVERY TO THE JOB SITE. DELIVERY, STORAGE OR INSTALLATION OF EQUIPMENT OR MATERIAL WHICH HAS NOT HAD PRIOR APPROVAL, WILL NOT BE PERMITTED AT THE JOB SITE.

C. ALL SUBMITTALS SHALL INCLUDE ADEQUATE DESCRIPTIVE LITERATURE, CATALOG CUTS, SHOP DRAWINGS AND OTHER DATA NECESSARY FOR THE ARCHITECT/ENGINEER TO ASCERTAIN THAT THE PROPOSED EQUIPMENT AND MATERIALS COMPLY WITH SPECIFICATION REQUIREMENTS. CATALOG CUTS SUBMITTED FOR APPROVAL SHALL BE LEGIBLE AND CLEARLY IDENTIFY EQUIPMENT BEING SUBMITTED.

D. SUBMITTALS FOR INDIVIDUAL SYSTEMS AND EQUIPMENT ASSEMBLIES WHICH CONSIST OF MORE THAN ONE ITEM OR COMPONENT SHALL BE MADE FOR THE SYSTEM OR ASSEMBLY AS A WHOLE. PARTIAL SUBMITTALS WILL NOT BE CONSIDERED FOR APPROVAL

E. SUBMITTAL OF SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES WILL BE ACCEPTED ONLY WHEN SUBMITTED BY THE CONTRACTOR. DATA SUBMITTED FROM SUBCONTRACTORS AND MATERIAL SUPPLIERS DIRECTLY TO THE ARCHITECT/ENGINEER WILL NOT BE PROCESSED.

F. SUBMITTALS SHALL BE MARKED TO SHOW SPECIFICATION REFERENCE INCLUDING THE SECTION AND PARAGRAPH NUMBERS. SUBMIT EACH SECTION SEPARATELY AND INCLUDE THE FOLLOWING:

1. INFORMATION THAT CONFIRMS COMPLIANCE WITH CONTRACT REQUIREMENTS. INCLUDE THE MANUFACTURER'S NAME, MODEL OR CATALOG NUMBERS, CATALOG INFORMATION, TECHNICAL DATA SHEETS, SHOP DRAWINGS, PICTURES, NAMEPLATE DATA AND TEST REPORTS AS REQUIRED.
2. PARTS LIST WHICH SHALL INCLUDE THOSE REPLACEMENT PARTS RECOMMENDED BY THE EQUIPMENT MANUFACTURER, QUANTITY OF PARTS, CURRENT PRICE AND AVAILABILITY OF EACH PART.

G. MANUALS: SUBMIT IN ACCORDANCE WITH "A" ABOVE FOR REVIEW AND COMMENT.

1. MAINTENANCE AND OPERATION MANUALS: SUBMIT AS REQUIRED FOR SYSTEMS AND EQUIPMENT SPECIFIED IN THE TECHNICAL SECTIONS. FURNISH THREE (3) COPIES, BOUND IN HARDBACK BINDERS, (MANUFACTURER'S STANDARD BINDERS) OR AN APPROVED EQUAL. FURNISH ONE COMPLETE MANUAL AS SPECIFIED IN THE TECHNICAL SECTION BUT IN NO CASE LATER THAN PRIOR TO PERFORMANCE OF SYSTEMS OR EQUIPMENT TEST, AND FURNISH THE REMAINING MANUALS PRIOR TO CONTRACT COMPLETION.
2. INSCRIBE THE FOLLOWING IDENTIFICATION ON THE COVER: THE WORDS "MAINTENANCE AND OPERATION MANUAL," THE NAME AND LOCATION OF THE SYSTEM, EQUIPMENT, BUILDING, NAME OF CONTRACTOR, AND CONTRACT NUMBER. INCLUDE IN THE MANUAL THE NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF EACH SUBCONTRACTOR INSTALLING THE SYSTEM OR EQUIPMENT AND THE LOCAL REPRESENTATIVES FOR THE SYSTEM OR EQUIPMENT.

MATERIALS AND METHODS:

A. MATERIALS AND APPARATUSES SHALL COMPLY WITH ALL APPLICABLE TESTS, RATINGS, SPECIFICATIONS, AND REQUIREMENTS OF THE IEEE, NEMA, NFPA AND UL, SHALL BEAR THE UL LABEL OF APPROVAL AND BE LISTED FOR THE PROPOSED APPLICATION.

B. FINISHED PRODUCTS SHALL BE FACTORY PRIMED AND FINISH COATED WITH THE MANUFACTURER'S PRIME COAT AND STANDARD FINISH UNLESS SPECIFIED OTHERWISE BY THE ARCHITECT.

C. UNLESS OTHERWISE SPECIFIED, UNFINISHED PRODUCTS SHALL BE GALVANIZED, COATED OR PLATED TO RESIST CORROSION.

D. INSTALLATIONS SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES, AS RECOMMENDED BY THE MANUFACTURER AND AS CLOSE AS PRACTICABLE TO LOCATIONS INDICATED ON DRAWINGS.

E. INSTALLATIONS SHALL FACILITATE MAINTENANCE AND REPAIR OR REPLACEMENT OF EQUIPMENT COMPONENTS. ACCESS, WORKING SPACES AND CLEARANCES SHALL NOT BE LESS THAN SPECIFIED BY THE NEC FOR ALL VOLTAGES SPECIFIED.

IDENTIFICATION:

A. INSTALL LABEL TAGS ON ALL WIRE AND CABLE IN JUNCTION BOXES, WIREWAYS AND WIRING GUTTERS OF PANELS. TAGS SHALL IDENTIFY WIRE OR CABLE CIRCUIT NUMBER AND/OR EQUIPMENT SERVED AS INDICATED ON DRAWINGS.

B. JUNCTION BOXES SHALL BE LABELED IN A PERMANENT MANNER REFLECTING PANELBOARD/CIRCUIT NUMBER OF BRANCH CIRCUIT WIRING CONTAINED WITHIN.

C. PANELBOARD DIRECTORIES SHALL BE TYPEWRITTEN, REFLECTING RECORD CONDITIONS TO INCLUDE CIRCUIT NUMBER, TYPE AND LOCATION OF LOAD.

D. INSTALL PLASTIC PLACARDS ON EQUIPMENT REFLECTING, EQUIPMENT NAME, NUMBER AND RATING.

RACEWAYS:

A. RACEWAYS:

1. EXTERIOR EXPOSED/UNDER DOCK: SCHEDULE 80 POLYVINYL CHLORIDE CONDUIT (PVC).
2. EXTERIOR CONNECTIONS TO MOTORS, TRANSFORMERS AND VIBRATING EQUIPMENT: LIQUIDTIGHT FLEXIBLE METAL CONDUIT (LFMC).
3. UNDERGROUND: SCHEDULE 40 PVC.
4. PENETRATIONS THROUGH CONCRETE SLABS SHALL BE MADE WITH PVC COATED RIGID GALVANIZED STEEL CONDUIT.

B. SCHEDULE 40 PVC WILL BE PERMITTED WHERE ALLOWED BY APPLICABLE CODES AND AS OUTLINED ABOVE. ALL BENDS IN PVC LARGER THAN 1" NOMINAL TRADE SIZE SHALL BE MADE WITH PVC COATED RIGID METAL CONDUIT.

C. ALL CONDUIT SHALL BE PROPERLY ALIGNED, GROUPED AND SUPPORTED. EXPOSED CONDUIT SHALL BE INSTALLED AT RIGHT ANGLES TO OR PARALLEL TO THE PRINCIPAL STRUCTURAL MEMBERS. PROVIDE SUPPORT A MINIMUM OF 18" FROM BENDS AND OUTLET BOXES AND ON INTERVALS NOT TO EXCEED 4'-0". CONDUIT IS NOT TO SPAN ANY SPACE UNSUPPORTED. ALL CONDUIT STRAPS SHALL BE 2-HOLE.

D. UNDERGROUND CONDUITS SHALL BE INSTALLED WITH MINIMUM 36" COVER.

E. PROVIDE NYLON PULL CORD AND LEAVE IN PLACE IN EACH EMPTY CONDUIT.

F. PROVIDE EXPANSION FITTINGS IN CONDUIT RUNS CROSSING EXPANSION JOINTS IN THE STRUCTURE.

BOXES:

A. ALL BOXES SHALL BE RIGIDLY MOUNTED AND SHALL BE EQUIPPED WITH SUITABLE SCREW FASTENED COVERS. OPEN KNOCK-OUTS OR HOLES IN BOXES SHALL BE PLUGGED WITH A SUITABLE BLANKING DEVICE.

B. EXTERIOR BRANCH BOXES SHALL BE WEATHERPROOF CAST "FS" BOXES.

C. HANDHOLES AND COVERS SHALL BE HUBBELL QUAZITE OR EQUAL, UL LISTED TIER 15 RATED, LOCKABLE COVERS, OPTIONS AS NEEDED, STAINLESS STEEL BOLTS.

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SAFETY HARBOR | FL

SHEET TITLE: ELECTRICAL SPECIFICATIONS (2 OF 3)

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-03

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DRAWING SPECIFICATIONS

CONDUCTORS:

A. UNLESS OTHERWISE INDICATED, ALL BRANCH CIRCUIT CONDUCTORS SHALL BE NO. 12 AWG. BRANCH CIRCUITS RUN OVER 75 FEET IN LENGTH, MEASURING ONE WAY FROM THE FIRST OUTLET OF THE CIRCUIT TO THE PANEL, SHALL BE NO. 10 AWG FOR THE ENTIRE CIRCUIT.

B. CONDUCTORS SHALL BE COPPER WITH XHHW–2 90°C INSULATION. THE FOLLOWING SYSTEMS OF COLOR CODING SHALL BE STRICTLY ADHERED TO AND SHALL BE CONSISTENTLY FOLLOWED THROUGHOUT:

   1. GROUND WIRES: GREEN
   2. GROUNDED NEUTRAL WIRES: WHITE
   3. 240/120 VOLT, UNGROUNDED PHASE WIRES: BLACK AND RED

C. UNDERGROUND SPLICES, JOINTS, TERMINATIONS, ETC. SHALL BE WATERPROOF.

D. MULTIPLE CIRCUITS IN SAME CONDUIT SHALL NOT SHARE NEUTRAL CONDUCTORS.

E. INSTALL SPLIT BOLT CONNECTORS FOR COPPER CONDUCTOR SPLICES AND TAPS, 6 AWG AND LARGER.

F. INSTALL SOLDERLESS PRESSURE CONNECTORS WITH INSULATING COVERS FOR COPPER CONDUCTOR SPLICES AND TAPS, 8 AWG AND SMALLER.

G. INSTALL INSULATED SPRING WIRE CONNECTORS WITH PLASTIC CAPS FOR COPPER CONDUCTOR SPLICES AND TAPS, 10 AWG AND SMALLER.

H. "PUSH–IN" OR "STAB" TYPE CONNECTORS ARE NOT ACCEPTABLE.

GROUNDING:

A. THE ELECTRICAL SYSTEMS SHALL BE COMPLETELY AND EFFECTIVELY GROUNDED AS REQUIRED BY THE NEC AND AS SPECIFIED HEREINAFTER.

B. ALL METALLIC RACEWAYS SHALL BE MECHANICALLY AND ELECTRICALLY SECURE AT ALL JOINTS AND AT ALL BOXES, CABINETS, FITTINGS, AND EQUIPMENT. METALLIC RACEWAYS SHALL BE CONNECTED TO A DIRECT GROUND AT THE POINT OF ELECTRICAL SERVICE ENTRANCE AND SHALL BE ELECTRICALLY CONTINUOUS THROUGHOUT THE ENTIRE SYSTEM.

C. ALL GROUND CONDUCTORS SHALL BE INSULATED COPPER UON.

D. ALL RACEWAYS WITH NO. 10 OR 12 AWG PHASE CONDUCTORS FOR RECEPTACLES, LIGHTING FIXTURES AND SIMILAR CIRCUITS (NEW BRANCH CIRCUITS) SHALL BE PROVIDED WITH A PARITY SIZED GREEN EQUIPMENT GROUND CONDUCTOR. GROUND CONDUCTOR SHALL BE INSTALLED IN ENTIRE RACEWAY SYSTEM. EQUIPMENT GROUND CONDUCTOR SIZES FOR CIRCUITS WITH PHASE CONDUCTORS LARGER THAN NO. 12 AWG ARE INDICATED ON DRAWINGS. GROUND CONDUCTORS SHALL BE CONNECTED TO GROUND BUS IN PANELBOARDS.

E. TERMINATE FEEDER AND BRANCH CIRCUIT INSULATED EQUIPMENT GROUNDING CONDUCTORS WITH GROUNDING LUG, BUS, OR BUSHING. CONDUCTORS LOOPED UNDER SCREW OR BOLT HEADS WILL NOT BE PERMITTED.

F. INSTALL CLAMP–ON CONNECTORS ON CLEAN METAL CONTACT SURFACES TO ENSURE ELECTRICAL CONDUCTIVITY AND CIRCUIT INTEGRITY.

G. TEST THE GROUNDING SYSTEM TO ASSURE CONTINUITY AND THAT RESISTANCE TO GROUND DOES NOT EXCEED 25 OHMS UNLESS OTHERWISE NOTED. TEST EACH GROUND ROD FOR RESISTANCE TO GROUND BEFORE MAKING ANY CONNECTIONS TO THE ROD; THEN TIE ENTIRE GROUNDING SYSTEM TOGETHER AND TEST FOR RESISTANCE TO GROUND. MAKE RESISTANCE MEASUREMENTS IN NORMALLY DRY WEATHER, NOT LESS THAN 48 HOURS AFTER RAINFALL. MAKE GROUND RESISTANCE MEASUREMENTS WITH A GROUND RESISTANCE TEST METER CALIBRATED WITHIN THE LAST TWELVE MONTHS.

EQUIPMENT:

A. APPROVED MANUFACTURERS SHALL BE: SQUARE–D, CUTLER–HAMMER, GENERAL ELECTRIC AND SIEMENS.

B. EQUIPMENT BUSES SHALL BE COPPER.

C. OUTDOOR EQUIPMENT SHALL BE NEMA 4X.

D. PANELBOARDS:

   1. PANELBOARDS SHALL BE SQUARE–D: NQ, NF, I–LINE OR APPROVED EQUAL, SERIES RATED PANELBOARDS WILL NOT BE PERMITTED.
   2. FULL SIZE, COPPER NEUTRAL BUS (UON), MOUNTED ON INSULATED SUPPORTS.
   3. COPPER GROUND BUS WITH SUFFICIENT TERMINALS FOR ALL GROUNDING CONDUCTORS. BUSES BRACED FOR THE AVAILABLE SHORT CIRCUIT CURRENT, BUT NOT LESS THAN 10,000 AMPERES SYMMETRICAL FOR 240/120 VOLT PANELBOARDS.
   4. MAIN CIRCUIT BREAKER MOUNTING SHALL BE VERTICAL, AHEAD OF BUSES; HORIZONTAL MOUNTING WILL NOT BE ACCEPTED.

E. CIRCUIT BREAKERS SHALL BE BOLT–ON TYPE.

F. SURGE PROTECTIVE DEVICE MANUFACTURERS SHALL BE: PQ PROTECTION, ADVANCED PROTECTION TECHNOLOGIES, ATLANTIC SCIENTIFIC, OR CURRENT TECHNOLOGY.

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SAFETY HARBOR | FL

SHEET TITLE: ELECTRICAL SPECIFICATIONS (3 OF 3)

TWA NO.:

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO.: E-04

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DRAWING NOTES (SHEETS E-06 – E-07)

1. EXISTING EQUIPMENT RACK; MODIFY/EXTEND AS REQUIRED TO ACCOMMODATE THE NEW ELECTRICAL EQUIPMENT. REFER TO POWER ONE-LINE DIAGRAM AND ELECTRICAL RACK DETAIL 02 ON SHEET E-07 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
2. EXISTING PANELBOARD AND ASSOCIATED FEEDER AND BRANCH CIRCUIT CONDUCTORS AND CONDUITS TO BE REMOVED AND REPLACED WITH NEW.
3. EXISTING MARINA RECEPTACLE PEDESTAL AND ASSOCIATED DEVICES, CONDUCTORS, AND CONDUITS TO BE REMOVED AND REPLACED WITH NEW.
4. EXISTING 240/120 V, 1ϕ, 3W, 150 A MCB PANELBOARD TO REMAIN.
5. EXISTING LIGHTING CONTROL CABINET TO REMAIN.
6. NEW ELECTRIC UTILITY METER. REFER TO POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
7. EXISTING ELECTRIC UTILITY METER TO REMAIN.
8. MARINA PEDESTAL. REFER TO SCHEDULE ON SHEET E-13.
9. NEW CONDUITS AND CONDUCTORS FEEDING PANEL 'B'. REFER TO POWER ONE-LINE DIAGRAM FOR QUANTITY AND SIZES.
10. NEW CONDUITS AND CONDUCTORS FEEDING PANEL 'C'. REFER TO POWER ONE-LINE DIAGRAM FOR QUANTITY AND SIZES.
11. EXISTING MARINA ELECTRIC UTILITY METER, PANELBOARD AND ENCLOSED CIRCUIT BREAKERS TO BE REMOVED.

DRAWING GENERAL NOTES (SHEETS E-06 – E-07)

A. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
B. REFER TO PLUMBING AND FIRE PROTECTION DRAWINGS FOR ADDITIONAL INFORMATION.
C. REFER TO CIVIL DRAWINGS FOR ADDITIONAL INFORMATION.
D. REFER TO POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
E. MAXIMUM 3 QUARTER TURNS (TOTAL 270°) CONDUIT BENDS BETWEEN JUNCTION/PULL BOXES.
F. MAINTAIN MINIMUM 12" SEPARATION BETWEEN ELECTRICAL AND OTHER UTILITIES/INFRASTRUCTURE.
G. COORDINATE WITH EXISTING UNDERGROUND UTILITIES AND CONDITIONS. HAND DIG TRENCHES AS REQUIRED.
H. SAW CUT AND PATCH PAVEMENT AS REQUIRED. COORDINATE WORK WITH OWNER.
I. ALL CONDUCTORS SHALL BE TYPE XHHW-2.
J. ALL EXPOSED CONDUITS SHALL BE UV RESISTANT, SCHEDULE 80 PVC.
K. ALL FASTENERS, ANCHORS, STRAPS, HARDWARE, STRUT-CHANNEL, ETC. SHALL BE STAINLESS STEEL (TYPE 316).
L. ALL STRUT CHANNEL SHALL BE MINIMUM 1 5/8" X 1 5/8".
M. THE ELECTRICAL DATUM PLANE SHALL BE 2 FEET ABOVE THE HIGHEST TIDE LEVEL.
N. ALL ELECTRICAL EQUIPMENT AND DEVICES SHALL BE LOCATED ABOVE THE ELECTRICAL DATUM PLANE.
O. ELECTRICAL EQUIPMENT AND DEVICES LOCATED ON THE DOCK SHALL BE MINIMUM 12" ABOVE THE DECK BUT SHALL NOT BE LOCATED BELOW THE ELECTRICAL DATUM PLANE.
P. CONDUITS ROUTED UNDER THE DOCK SHALL BE SECURELY FASTENED TO THE STRUCTURE MAXIMUM 4' SPACING USING STAINLESS STEEL (TYPE 316) COMPONENTS AND HARDWARE.
Q. PROVIDE SAFETY SIGNS PER NEC 555.10.

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SAFETY HARBOR | FL

SHEET TITLE: ELECTRICAL PLAN NOTES
TWA NO.
PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT
SHEET NO. E-05

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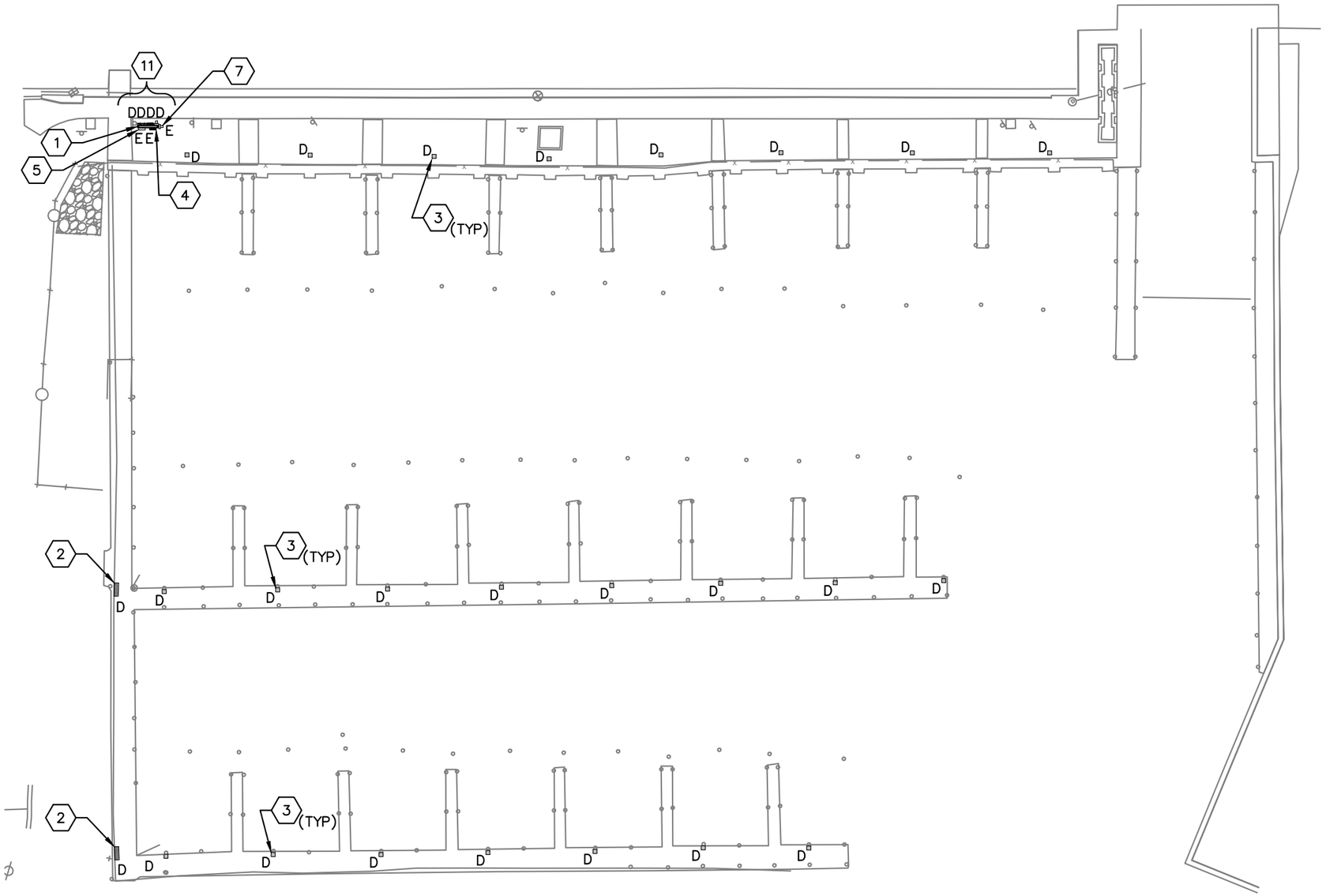
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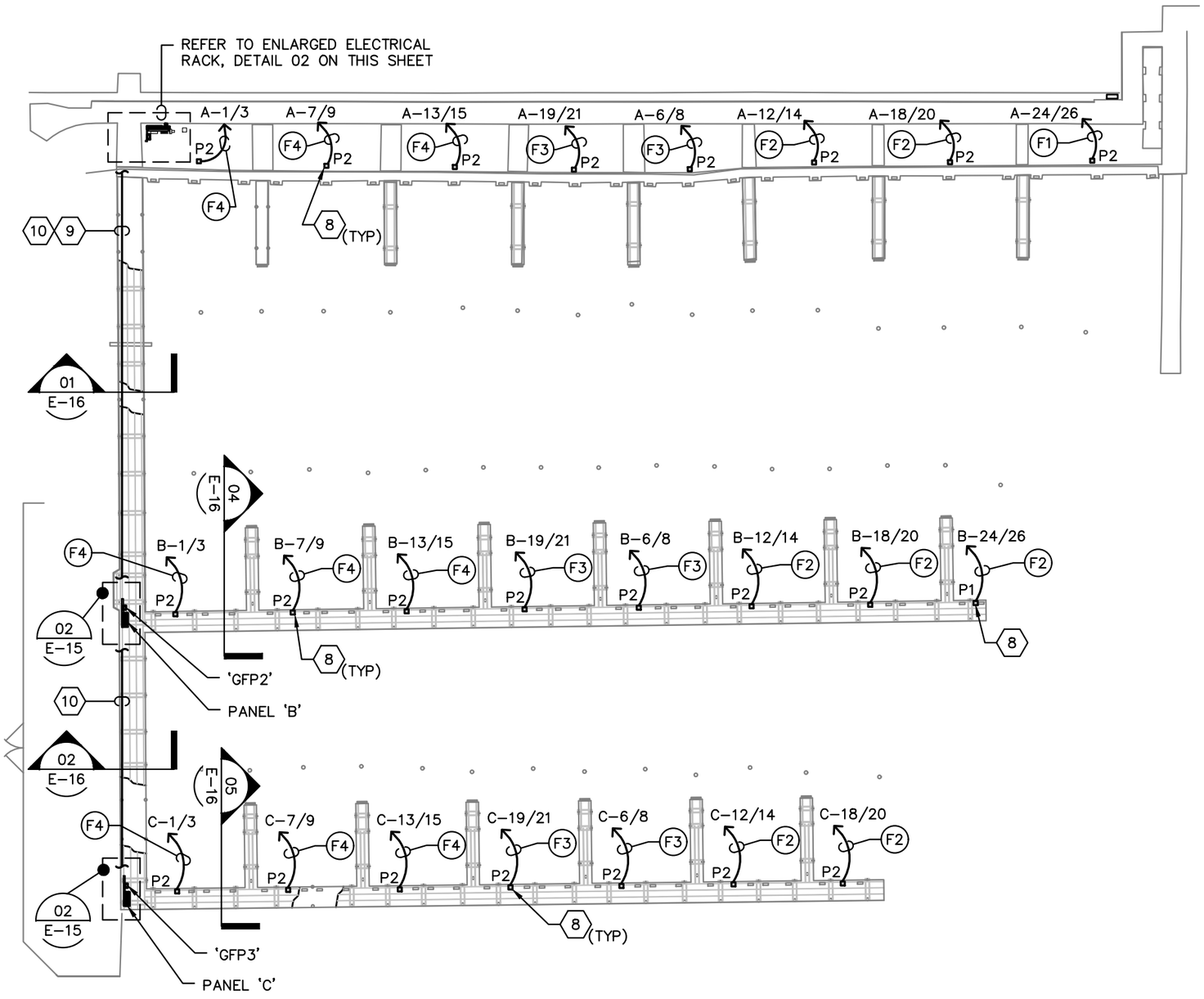
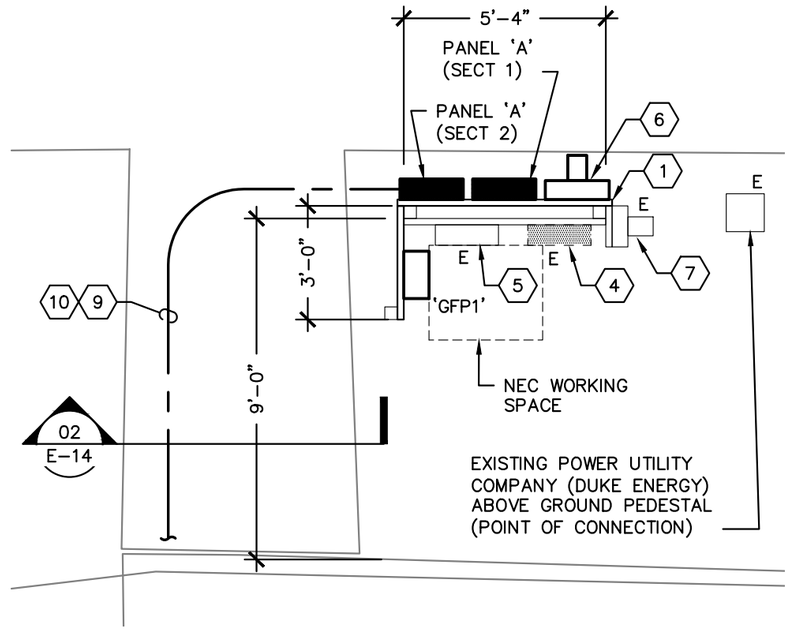


01 **ELECTRICAL PLAN**
SCALE: 1"=30'



02 **ELECTRICAL RACK**
SCALE: 1/4"=1'-0"

(#) FEEDER SCHEDULE

F1. 3 #4 + #4 EG – 1 1/4" C.
F2. 3 #6 + #6 EG – 1" C.
F3. 3 #8 + #8 EG – 1" C.
F4. 3 #10 + #10 EG – 3/4" C.

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SAFETY HARBOR | FL

SHEET TITLE: *ELECTRICAL PLAN*
PROJECT NAME: *SAFETY HARBOR MARINA REPLACEMENT*
TWA NO.
SHEET NO. *E-07*

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DRAWING NOTES (SHEET E-09)

1. EXISTING UTILITY COMPANY (DUKE ENERGY) POWER PEDESTAL. UTILITY COMPANY TO EVALUATE AND REWORK AS REQUIRED.
2. 3 #600 KCMIL – 3 1/2" C.
3. NEW UTILITY METER.
4. REPLACE EXISTING 240/120 V, 1ϕ, 3W, 150 A MCB PANELBOARD AND ENCLOSED CIRCUIT BREAKERS WITH NEW 2–SECTION, SERVICE ENTRANCE PANEL. REFER TO PANEL SCHEDULE.
5. EXISTING CONCRETE POSTS TO REMAIN. PROVIDE STAINLESS STEEL (TYPE 316) STRUT CHANNEL; SIZE AND QUANTITY AS REQUIRED.
6. EXISTING EQUIPMENT RACK TO BE EXTENDED IN "L" FORMATION (REFER TO DETAIL 02 ON SHEET E–07). UTILIZE EXISTING CONCRETE POST ON WEST SIDE OF RACK AND PROVIDE (1) NEW CONCRETE POST TO MATCH EXISTING INSTALLATION WITH NEW STAINLESS STEEL (TYPE 316) STRUT CHANNEL; SIZE AND QUANTITY AS REQUIRED. FOLLOW FDOT STANDARD SPECIFICATIONS FOR CONCRETE (SECTION 347 AND 400) AND REINFORCING STEEL (415) MATERIAL PROPERTIES. CONCRETE SHALL BE CLASS NS (NON–STRUCTURAL) WITH A MINIMUM 28–DAY COMPRESSIVE STRENGTH OF 2500 PSI. REINFORCING STEEL SHALL BE ASTM A615, GRADE 60. CONCRETE POST TO BE EMBEDDED IN CAST–IN–PLACE CONCRETE FOOTERS WITH DIMENSIONS OF 1'–0" DIAMETER X 2'–6" DEPTH. EMBED CONCRETE POST 2'–0" INTO FOOTER.
7. NEW EQUIPMENT RACK MOUNTED TO DOCK PILES (REFER TO DETAIL 02 ON SHEET E–15); STAINLESS STEEL (TYPE 316) STRUT CHANNEL. SIZE AS REQUIRED.
8. GROUND FAULT MONITORING PANEL; BENDER, MARINAGUARD MG–T OR ENGINEER APPROVED EQUAL. INSTALL PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
9. GROUND FAULT MONITORING PANEL "GFP1" WILL MONITOR THE FEEDERS TO PANELBOARDS "B" AND "C" AS WELL AS THE FEEDERS TO THE MARINE PEDESTALS SERVING SLIPS 1–16; GROUND FAULT PROTECTION SHALL BE SET TO 100 mA MAX.
10. GROUND FAULT MONITORING PANEL "GFP2" WILL MONITOR THE FEEDERS TO THE MARINE PEDESTALS SERVING SLIPS 17–31; GROUND FAULT PROTECTION SHALL BE SET TO 100 mA MAX.
11. GROUND FAULT MONITORING PANEL "GFP3" WILL MONITOR THE FEEDERS TO THE MARINE PEDESTALS SERVING SLIPS 32–44; GROUND FAULT PROTECTION SHALL BE SET TO 100 mA MAX.
12. REPLACE EXISTING 240/120 V, 1ϕ, 3W, 225 A MLO PANELBOARD WITH NEW; REFER TO PANEL SCHEDULE.
13. REPLACE EXISTING CONDUIT AND CONDUCTORS AS FOLLOWS: 3 #4/0 + #4 EG – 2 1/2" C.
14. REPLACE EXISTING CONDUIT AND CONDUCTORS AS FOLLOWS: 3 #300 KCMIL + #2 EG – 3" C.
15. SPD; PQ PROTECTION, MODEL #PQC160–240V OR ENGINEER APPROVED EQUAL.
16. MIN 3/4" CONDUITS AS REQUIRED FOR GROUND–FAULT CT WIRING AND SHUNT–TRIP WIRING FOR FEEDERS TO PANELS "B" AND "C". INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
17. MIN 3/4" CONDUITS AS REQUIRED FOR GROUND–FAULT CT WIRING AND SHUNT–TRIP WIRING FOR FEEDERS TO MARINE PEDESTALS. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
18. 3/4" X 10' STAINLESS STEEL (TYPE 316) GROUND ROD.
19. GROUNDING ELECTRODE SYSTEM. REFER TO GROUNDING DETAIL 01 ON SHEET E–15 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
20. EXOTHERMIC WELD.
21. PROVIDE (1) SPARE 2 1/2" C. STUB UP UNDER PANEL "B", CAP AND LABEL "SPARE".
22. PROVIDE (1) SPARE 3" C. STUB UP UNDER PANEL "C", CAP AND LABEL "SPARE".

DRAWING GENERAL NOTES (SHEET E–09)

A. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
B. MAXIMUM 3 QUARTER TURNS (TOTAL 270°) CONDUIT BENDS BETWEEN JUNCTION/PULL BOXES.
C. MAINTAIN MINIMUM 12" SEPARATION BETWEEN ELECTRICAL AND OTHER UTILITIES/INFRASTRUCTURE.
D. COORDINATE WITH EXISTING UNDERGROUND UTILITIES AND CONDITIONS. HAND DIG TRENCHES AS REQUIRED.
E. SAW CUT AND PATCH PAVEMENT AS REQUIRED. COORDINATE WORK WITH OWNER.
F. ALL CONDUCTORS SHALL BE TYPE XHHW–2.
G. ALL EXPOSED CONDUITS SHALL BE UV RESISTANT, SCHEDULE 80 PVC.
H. ALL FASTENERS, ANCHORS, STRAPS, HARDWARE, STRUT–CHANNEL, ETC. SHALL BE STAINLESS STEEL (TYPE 316).
I. ALL STRUT CHANNEL SHALL BE MINIMUM 1 5/8" X 1 5/8".
J. THE ELECTRICAL DATUM PLANE SHALL BE 2 FEET ABOVE THE HIGHEST TIDE LEVEL.
K. ALL ELECTRICAL EQUIPMENT AND DEVICES SHALL BE LOCATED ABOVE THE ELECTRICAL DATUM PLANE.
L. ELECTRICAL EQUIPMENT AND DEVICES LOCATED ON THE DOCK SHALL BE MINIMUM 12" ABOVE THE DECK BUT SHALL NOT BE LOCATED BELOW THE ELECTRICAL DATUM PLANE.
M. CONDUITS ROUTED UNDER THE DOCK SHALL BE SECURELY FASTENED TO THE STRUCTURE MAXIMUM 4' SPACING USING STAINLESS STEEL (TYPE 316) COMPONENTS AND HARDWARE.
N. ALL PENETRATIONS IN ELECTRICAL PANELS SHALL BE MADE WITH UL LISTED WEATHERTIGHT CONNECTORS TO MAINTAIN NEMA 4X RATING.
O. CONTRACTOR SHALL SUBMIT PANELBOARD/RACK INSTALLATION PLAN TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF CONSTRUCTION. INSTALLATION PLAN SHALL SPECIFY FASTENER TYPE, SPACING, AND LOCATION.

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SAFETY HARBOR | FL

SHEET TITLE: POWER ONE-LINE DIAGRAM NOTES
TWA NO.:
PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT
SHEET NO.: E-08

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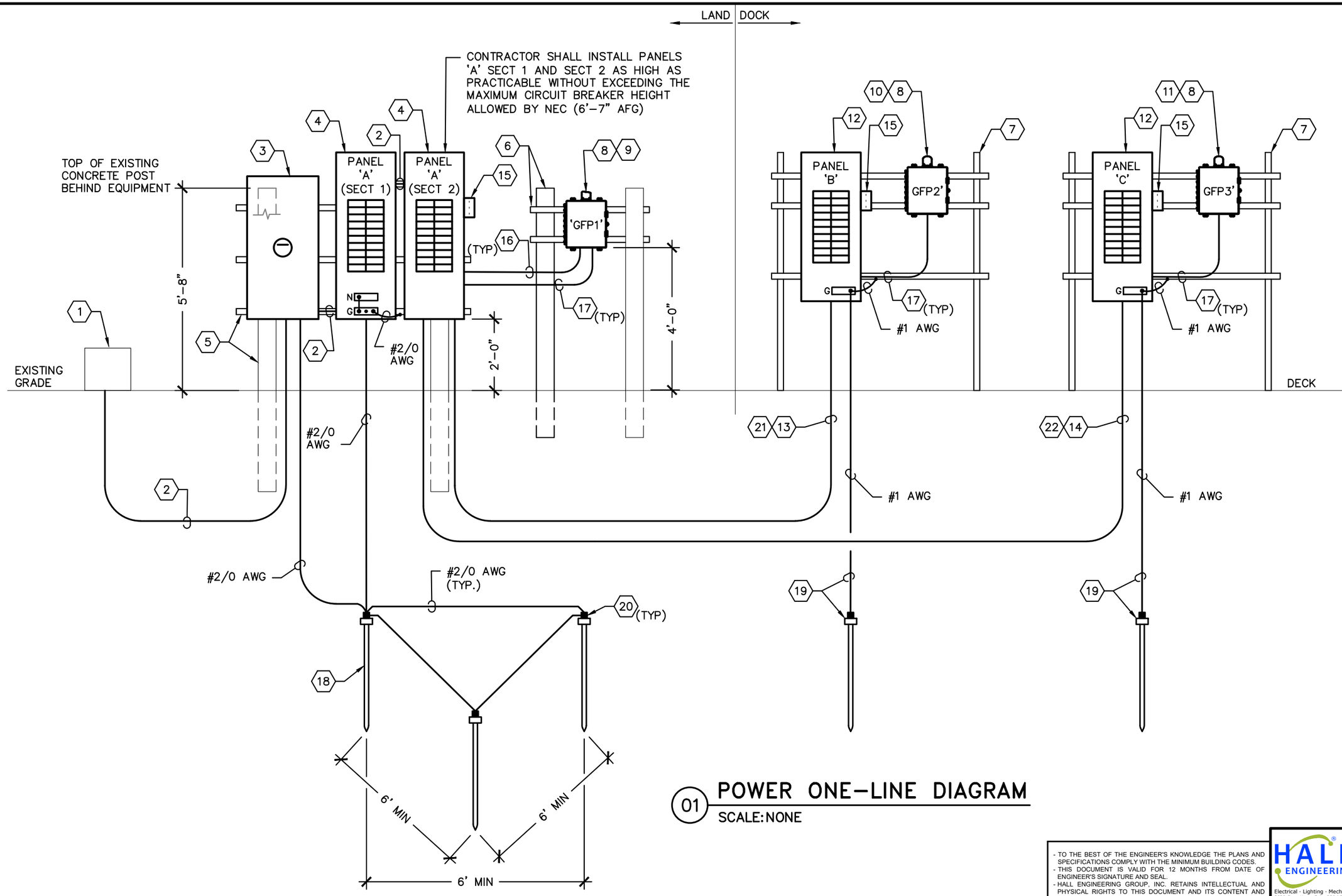

01 POWER ONE-LINE DIAGRAM

SCALE: NONE

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SAFETY HARBOR FL

SHEET TITLE: POWER ONE-LINE DIAGRAM

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-09

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PANELBOARD A SCHEDULE

VOLTAGE (L–L/L–N): 240 / 120 V	PHASE: 1	WIRES: 3	MAIN TYPE (1): MCB	MAIN OC DEVICE (4): 400 A
BUS RATING: 400 A	MIN AIC RATING: 22,000 A	ENCLOSURE TYPE (2): NEMA 4X	MOUNTING: SURFACE
FEED–THRU LUGS: YES	SUB–FEED LUGS: NO	ISOLATED GND BUS: NO	NEUTRAL BUS: YES

SECTION: S1

CKT NO	DESCRIPTION	BREAKER POLE	BREAKER TRIP	PHASE LOADS (VA) A	PHASE LOADS (VA) B	BREAKER TRIP	BREAKER POLE	DESCRIPTION	CKT NO
1	SLIP 1 & 2 (3) (5)	2	30	3,600	–			SPACE	2
3	"				3,600	–		SPACE	4
5	(SHUNT–TRIP)			0	3,600	30	2	SLIP 9 & 10 (3) (5)	6
7	SLIP 3 & 4 (3) (5)	2	30		3,600	3,600		"	8
9	"			3,600	0			(SHUNT–TRIP)	10
11	(SHUNT–TRIP)				0	3,600	30	2 SLIP 11 & 12 (3) (5)	12
13	SLIP 5 & 6 (3) (5)	2	30	3,600	3,600			"	14
15	"				3,600	0		(SHUNT–TRIP)	16
17	(SHUNT–TRIP)			0	3,600	30	2	SLIP 13 & 14 (3) (5)	18
19	SLIP 7 & 8 (3) (5)	2	30		0	3,600		"	20
21	"			3,600	0			(SHUNT–TRIP)	22
23	(SHUNT–TRIP)				3,600	3,600	30	2 SLIP 15 & 16 (3) (5)	24
25	GFP1 CONTROL POWER	1	20	300	3,600			"	26
27	SPACE				–	0		(SHUNT–TRIP)	28
29	SPACE			–	–			SPACE	30
31	SPACE				–	–		SPACE	32
33	SPACE			–	–			SPACE	34
35	SPACE				–	–		SPACE	36
37	SPACE			–	–			SPACE	38
39	SPACE				–	–		SPACE	40
41	SPACE			–	–			SPACE	42

SECTION: S2

43	PANEL B (SUB–FEED BREAKER) (5)	2	225		27,300	0	20	2 SPD	44
45	"			27,000	0			"	46
47	(SHUNT–TRIP)				0	–		SPACE	48
49	PANEL C (SUB–FEED BREAKER) (5)	2	225	23,700	–			SPACE	50
51	"				23,400	–		SPACE	52
53	(SHUNT–TRIP)			0	–			SPACE	54
55	SPACE				–	–		SPACE	56
57	SPACE			–	–			SPACE	58
59	SPACE				–	–		SPACE	60
61	SPACE			–	–			SPACE	62
63	SPACE				–	–		SPACE	64
65	SPACE			–	–			SPACE	66
67	SPACE				–	–		SPACE	68
69	SPACE			–	–			SPACE	70
71	SPACE				–	–		SPACE	72
73	SPACE			–	–			SPACE	74
75	SPACE				–	–		SPACE	76
77	SPACE			–	–			SPACE	78
79	SPACE				–	–		SPACE	80
81	SPACE			–	–			SPACE	82
83	SPACE				–	–		SPACE	84
	TOTAL			79,800	79,500				

LOAD CLASSIFICATION	CONNECTED (VA)	DEMAND FACTOR	DEMAND (VA)
EXTERIOR LIGHTING	0	1.25	0
INTERIOR LIGHTING	0	1.25	0
RECEPTACLE (1st 10 k)	0	1.00	0
RECEPTACLE (Over 10 k)	0	0.50	0
AIR HANDLERS	0	1.00	0
ELECTRIC HEAT	0	1.00	0
COOLING	0	1.00	0
EQUIPMENT/MOTORS	900	1.00	900
LARGEST MOTOR	0	1.25	0
SHORE POWER RECPTS	158,400	0.50	79,200
TOTAL	159,300		80,100

PANEL SUMMARY	
CONNECTED	664 A
DEMAND	334 A
SPARE CAPACITY	17 %

NOTES:

1. SERVICE ENTRANCE RATED.
2. PROVIDE STAINLESS STEEL (TYPE 316) ENCLOSURE.
3. PROVIDE SHUNT–TRIP CIRCUIT BREAKER.
4. PROVIDE 100% RATED MAIN CIRCUIT BREAKER.
5. PROVIDE GROUND–FAULT CURRENT TRANSFORMER.

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SAFETY HARBOR FL

SHEET TITLE: PANEL SCHEDULE A

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-10

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PANELBOARD B SCHEDULE

VOLTAGE (L–L/L–N): 240 / 120 V	PHASE: 1	WIRES: 3	MAIN TYPE: MCB	MAIN OC DEVICE: 225 A
BUS RATING: 225 A	MIN AIC RATING: 10,000 A	ENCLOSURE TYPE (1): NEMA 4X	MOUNTING: SURFACE
FEED–THRU LUGS: NO	SUB–FEED LUGS: NO	ISOLATED GND BUS: NO	NEUTRAL BUS: YES

CKT NO	DESCRIPTION	BREAKER POLE	BREAKER TRIP	PHASE LOADS (VA) A	PHASE LOADS (VA) B	BREAKER TRIP	BREAKER POLE	DESCRIPTION	CKT NO
1	SLIP 17 & 18 (2) (3)	2	30	3,600	0	20	2	SPD	2
3	”				3,600	0			”	4
5	(SHUNT–TRIP)			0	3,600	30	2	SLIP 25 & 26 (2) (3)	6
7	SLIP 19 & 20 (2) (3)	2	30		3,600	3,600			”	8
9	”			3,600	0				(SHUNT–TRIP)	10
11	(SHUNT–TRIP)				0	3,600	30	2	SLIP 27 & 28 (2) (3)	12
13	SLIP 21 & 22 (2) (3)	2	30	3,600	3,600				”	14
15	”				3,600	0			(SHUNT–TRIP)	16
17	(SHUNT–TRIP)			0	3,600	30	2	SLIP 29 & 30 (2) (3)	18
19	SLIP 23 & 24 (2) (3)	2	30		0	3,600			”	20
21	”			3,600	0				(SHUNT–TRIP)	22
23	(SHUNT–TRIP)				3,600	1,800	30	2	SLIP 31 (2) (3)	24
25	GFP2 CONTROL POWER	1	20	300	1,800				”	26
27	SPACE				–	0			(SHUNT–TRIP)	28
29	SPACE			–	–				SPACE	30
31	SPACE				–	–			SPACE	32
33	SPACE			–	–				SPACE	34
35	SPACE				–	–			SPACE	36
37	SPACE			–	–				SPACE	38
39	SPACE				–	–			SPACE	40
41	SPACE			–	–				SPACE	42
			TOTAL	27,300	27,000					

LOAD CLASSIFICATION	CONNECTED (VA)	DEMAND FACTOR	DEMAND (VA)
EXTERIOR LIGHTING	0	1.25	0
INTERIOR LIGHTING	0	1.25	0
RECEPTACLE (1st 10 k)	0	1.00	0
RECEPTACLE (Over 10 k)	0	0.50	0
AIR HANDLERS	0	1.00	0
ELECTRIC HEAT	0	1.00	0
COOLING	0	1.00	0
EQUIPMENT/MOTORS	300	1.00	300
LARGEST MOTOR	0	1.25	0
SHORE POWER RECPTS	54,000	0.70	37,800
TOTAL	54,300		38,100

PANEL SUMMARY	
CONNECTED	226 A
DEMAND	159 A
SPARE CAPACITY	12 %

NOTES:

1. PROVIDE STAINLESS STEEL (TYPE 316) ENCLOSURE.
2. PROVIDE SHUNT–TRIP CIRCUIT BREAKER.
3. PROVIDE GROUND–FAULT CURRENT TRANSFORMER.

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SAFETY HARBOR FL

SHEET TITLE: PANEL SCHEDULE B
PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT
TWA NO.
SHEET NO. E-11

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PANELBOARD C SCHEDULE

VOLTAGE (L–L/L–N): 240 / 120 V	PHASE: 1	WIRES: 3	MAIN TYPE: MCB	MAIN OC DEVICE: 225 A
BUS RATING: 225 A	MIN AIC RATING: 10,000 A	ENCLOSURE TYPE (1): NEMA 4X	MOUNTING: SURFACE
FEED–THRU LUGS: NO	SUB–FEED LUGS: NO	ISOLATED GND BUS: NO	NEUTRAL BUS: YES

CKT NO	DESCRIPTION	BREAKER POLE	BREAKER TRIP	PHASE LOADS (VA) A	PHASE LOADS (VA) B	BREAKER TRIP	BREAKER POLE	DESCRIPTION	CKT NO
1	SLIP 32 & 33 (2) (3)	2	30	3,600	0			SPD	2
3	”				3,600	0		”	4
5	(SHUNT–TRIP)			0	3,600			SLIP 40 & 41 (2) (3)	6
7	SLIP 34 & 35 (2) (3)	2	30			3,600	3,600	”	8
9	”			3,600	0			(SHUNT–TRIP)	10
11	(SHUNT–TRIP)					0	3,600	SLIP 42 & 43 (2) (3)	12
13	SLIP 36 & 37 (2) (3)	2	30	3,600	3,600			”	14
15	”					3,600	0	(SHUNT–TRIP)	16
17	(SHUNT–TRIP)			0	1,800			SLIP 44 (2) (3)	18
19	SLIP 38 & 39 (2) (3)	2	30			0	1,800	”	20
21	”			3,600	0			(SHUNT–TRIP)	22
23	(SHUNT–TRIP)					3,600	–	SPACE	24
25	GFP3 CONTROL POWER	1	20	300	–			SPACE	26
27	SPACE					–	–	SPACE	28
29	SPACE			–	–			SPACE	30
31	SPACE					–	–	SPACE	32
33	SPACE			–	–			SPACE	34
35	SPACE					–	–	SPACE	36
37	SPACE			–	–			SPACE	38
39	SPACE					–	–	SPACE	40
41	SPACE			–	–			SPACE	42
			TOTAL	23,700		23,400			

LOAD CLASSIFICATION	CONNECTED (VA)	DEMAND FACTOR	DEMAND (VA)
EXTERIOR LIGHTING	0	1.25	0
INTERIOR LIGHTING	0	1.25	0
RECEPTACLE (1st 10 k)	0	1.00	0
RECEPTACLE (Over 10 k)	0	0.50	0
AIR HANDLERS	0	1.00	0
ELECTRIC HEAT	0	1.00	0
COOLING	0	1.00	0
EQUIPMENT/MOTORS	300	1.00	300
LARGEST MOTOR	0	1.25	0
SHORE POWER RECPTS	46,800	0.80	37,440
TOTAL	47,100		37,740

PANEL SUMMARY	
CONNECTED	196 A
DEMAND	157 A
SPARE CAPACITY	13 %

NOTES:

1. PROVIDE STAINLESS STEEL (TYPE 316) ENCLOSURE.
2. PROVIDE SHUNT–TRIP CIRCUIT BREAKER.
3. PROVIDE GROUND–FAULT CURRENT TRANSFORMER.

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SAFETY HARBOR FL

SHEET TITLE: PANEL SCHEDULE C

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-12

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MARINA PEDESTAL SCHEDULE

TAG	DESCRIPTION
P1	(1) 30 A, 1 PH, 125 V RECEPTACLE; NEMA L5–30, 1 HOSE BIBB, LED LIGHT, 30 mA GFPE RELAY AND SHUNT–TRIP CIRCUIT BREAKER, NEMA 3R, SS (TYPE 316) PEDESTAL, MEE – MARINA MATE SS OR ENGINEER APPROVED EQUIVALENT.
P2	(2) 30 A, 1 PH, 125 V RECEPTACLE; NEMA L5–30 (ONE RECEPTACLE PER SIDE), 2 HOSE BIBBS (ONE HOSE BIBB PER SIDE), LED LIGHT, 30 mA GFPE RELAYS AND SHUNT–TRIP CIRCUIT BREAKERS, NEMA 3R, SS (TYPE 316) PEDESTAL, MEE – MARINA MATE SS OR ENGINEER APPROVED EQUIVALENT.

NOTES:

1. RECEPTACLES SHALL BE ENCLOSED IN WET LOCATION LISTED, WHILE–IN–USE WEATHERPROOF ASSEMBLIES.
2. RECEPTACLES SHALL BE MARINE GRADE, WEATHER RESISTANT TYPE.
3. SUBMIT MARINA PEDESTALS FOR OWNER/ENGINEER REVIEW AND APPROVAL.

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SAFETY HARBOR | FL

SHEET TITLE: MARINA PEDESTAL SCHEDULE

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-13

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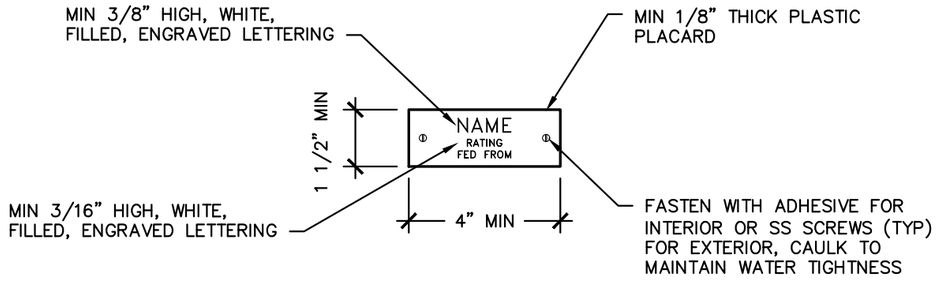
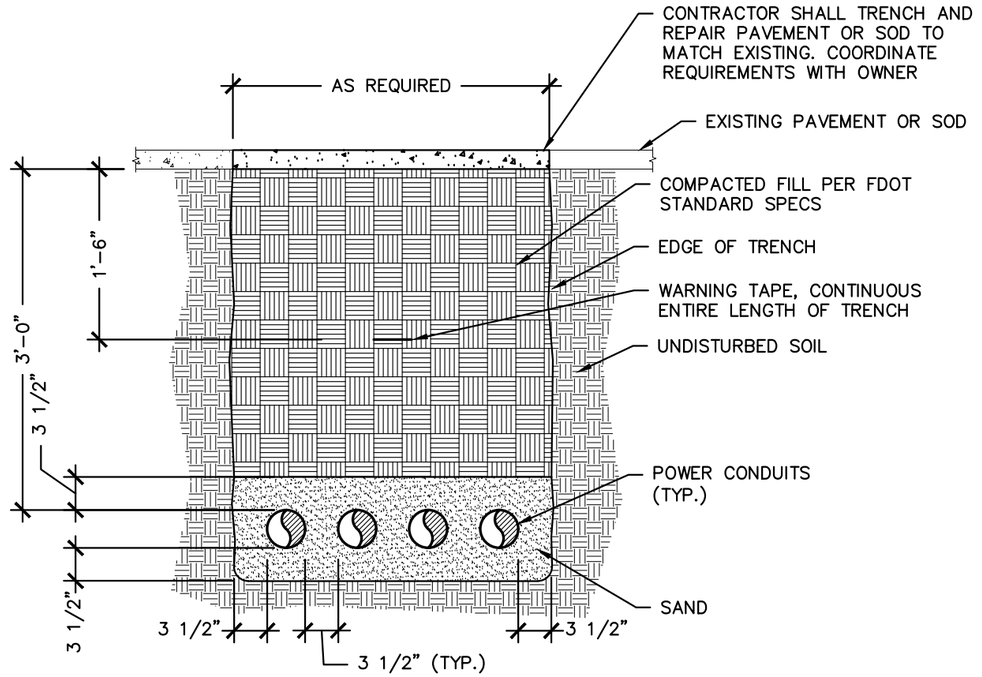


01 PLACARD DETAIL

SCALE: N.T.S.



02 CONDUIT TRENCH DETAIL

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SAFETY HARBOR | FL

SHEET TITLE: DETAILS (1 OF 3)

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-14

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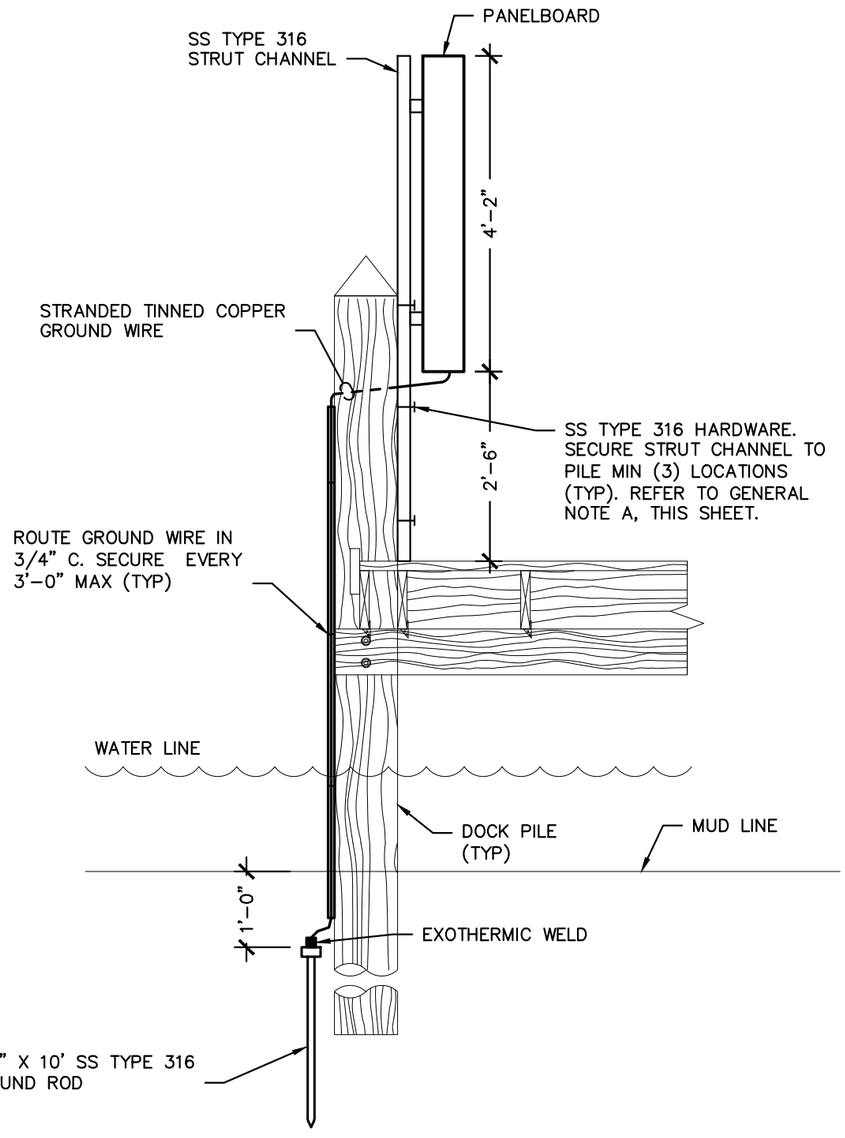
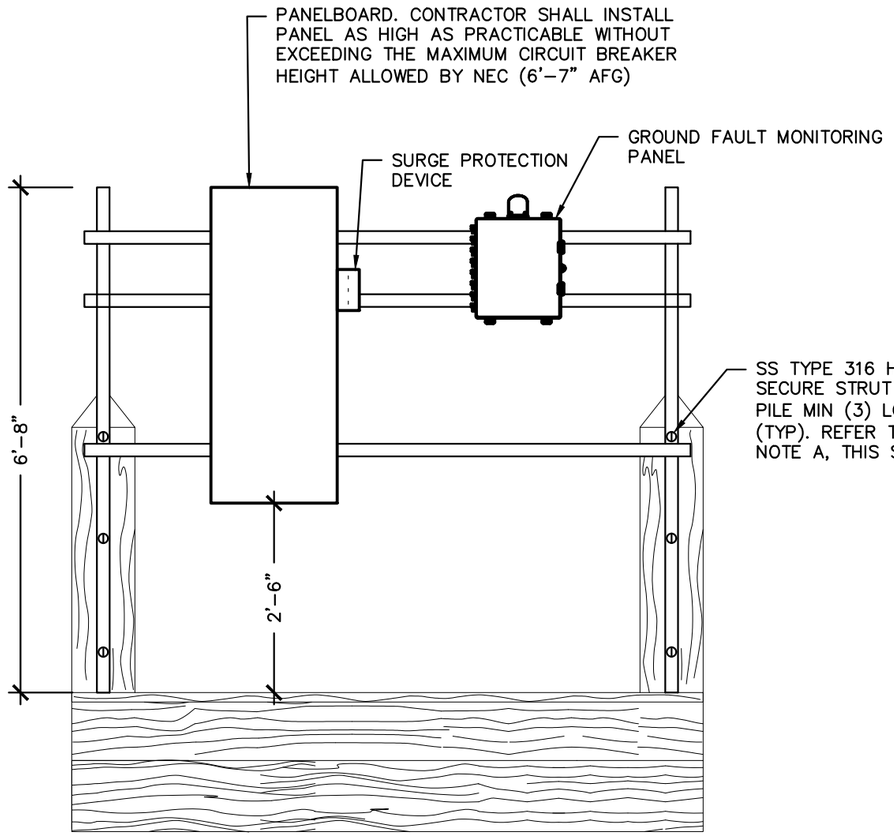


01 PANELBOARDS "B"&"C" TYPICAL GROUNDING DETAIL

SCALE: NONE

DRAWING GENERAL NOTES

A. CONTRACTOR SHALL SUBMIT PANELBOARD/RACK INSTALLATION PLAN TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF CONSTRUCTION. INSTALLATION PLAN SHALL SPECIFY FASTENER TYPE, SPACING, AND LOCATION.



02 DOCK MOUNTED EQUIPMENT RACK

SCALE: NONE

- TO THE BEST OF THE ENGINEER'S KNOWLEDGE THE PLANS AND SPECIFICATIONS COMPLY WITH THE MINIMUM BUILDING CODES.
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SAFETY HARBOR | FL

SHEET TITLE: DETAILS (2 OF 3)

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-15

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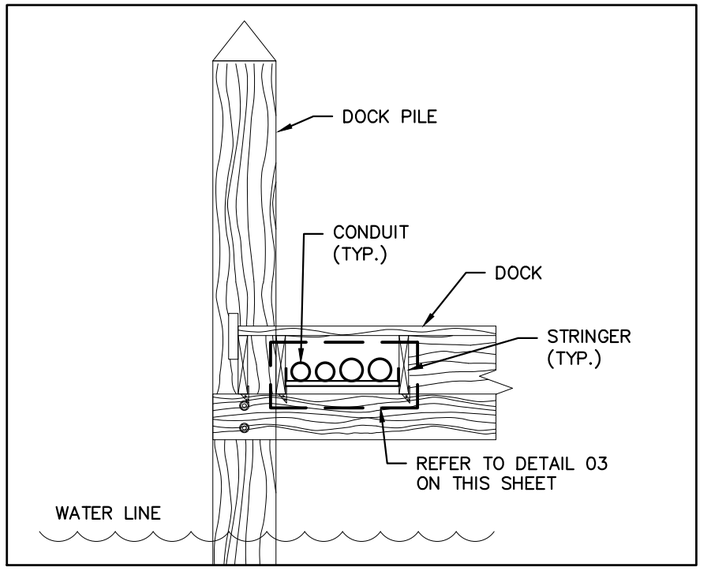
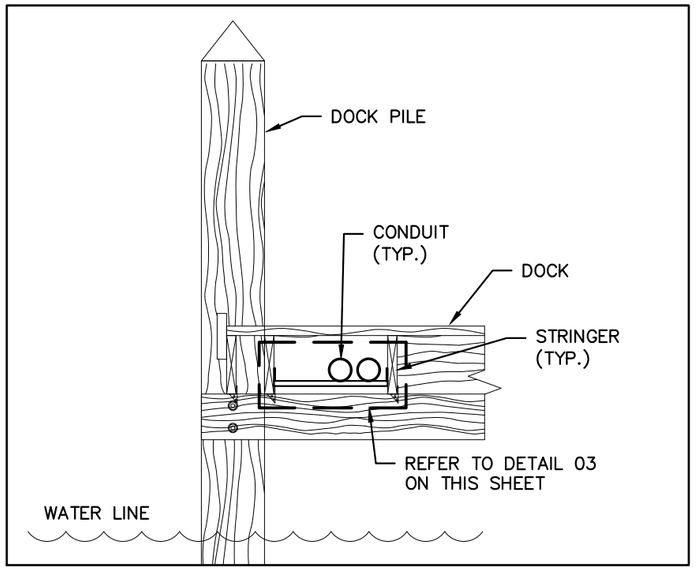


01 CONDUIT MOUNTING DETAIL
SCALE: NONE



02 CONDUIT MOUNTING DETAIL
SCALE: NONE

DRAWING GENERAL NOTES

A. REFER TO POWER ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

B. MAINTAIN MINIMUM 12" SEPARATION BETWEEN ELECTRICAL AND OTHER UTILITIES/INFRASTRUCTURE.

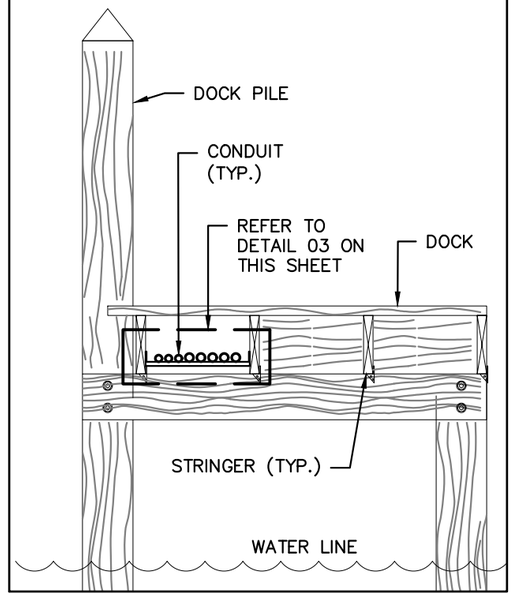
C. ALL EXPOSED CONDUITS SHALL BE UV RESISTANT, SCHEDULE 80 PVC.

D. ALL FASTENERS, ANCHORS, STRAPS, HARDWARE, STRUT-CHANNEL, ETC. SHALL BE STAINLESS STEEL (TYPE 316).

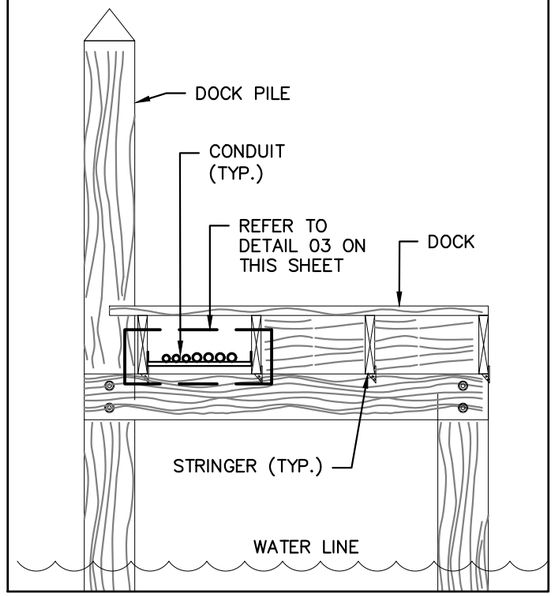
E. CONDUITS ROUTED UNDER THE DOCK SHALL BE SECURELY FASTENED TO THE STRUCTURE MAXIMUM 4' SPACING USING STAINLESS STEEL (TYPE 316) COMPONENTS AND HARDWARE. CONTRACTOR SHALL SUBMIT CONDUIT SUPPORT LAYOUT AND ASSOCIATED HARDWARE DESIGN AND DATA SHEET TO OWNER/ENGINEER FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF WORK.

F. FASTEN CHANNEL STRUT TO SIDE OF STRINGERS.

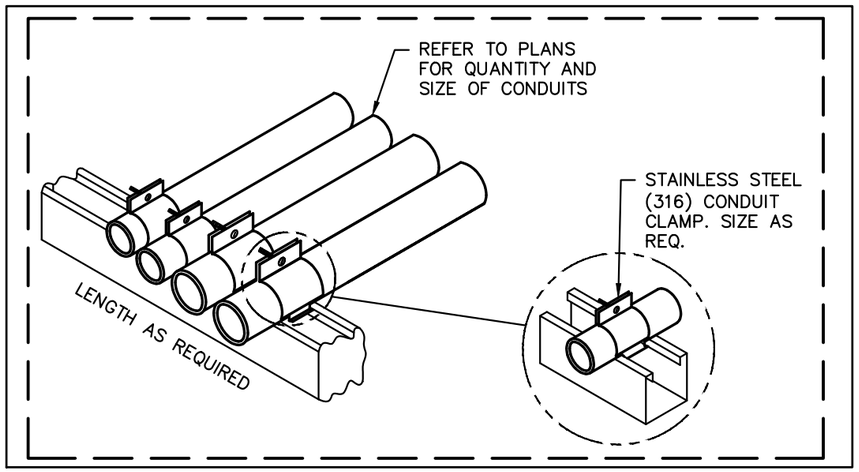
G. ALL STRUT CHANNEL SHALL BE MINIMUM 1 5/8" X 1 5/8".



04 CONDUIT MOUNTING DETAIL
SCALE: N.T.S.



05 CONDUIT MOUNTING DETAIL
SCALE: N.T.S.



03 CONDUIT SUPPORT DETAIL
SCALE: NONE

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SAFETY HARBOR | FL

SHEET TITLE: DETAILS (3 OF 3)

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. E-16

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COMPLIANCE NOTES

FLORIDA ADMINISTRATIVE CODE: 61G15-32.004

SCOPE OF WORK

INSTALLATION OF A NEW CLASS 1 MANUAL DRY STANDPIPE SYSTEM TO REPLACE AN EXISTING ON A REPLACED DOCK, DESIGNED IN COMPLIANCE WITH THE APPLICABLE NFPA STANDARDS LISTED WITHIN THESE DOCUMENTS.

ACCEPTANCE TEST CRITERIA

SHALL COMPLY WITH NFPA-14. SPRINKLER SYSTEM SHALL BE PROPERLY INSPECTED AND MAINTAINED IN ACCORDANCE WITH NFPA-25 STANDARD FOR INSPECTION, TESTING, AND MAINTENANCE OF WATER BASED SYSTEM.

HAZARD CLASSIFICATION

CLASSIFICATION: ORDINARY HAZARD (GROUP 1 AND GROUP 2).

APPLICABLE NFPA STANDARDS TO BE APPLIED

FLORIDA BUILDING CODE (8TH EDITION)
FLORIDA FIRE PREVENTION CODE (8TH EDITION)
NFPA 303
NFPA 13
NFPA 14
NFPA 24
NFPA 25

FIRE ALARM SYSTEM

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

POINT OF SERVICE

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

CLASSIFICATION OF HAZARD OCCUPANCY FOR EACH ROOM OR AREA

ORDINARY HAZARD (GROUP 2): MARINA / DOCK

DESIGN APPROACH

MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT. CONTRACTOR SHALL PROVIDE HYDRAULIC CALCULATIONS PER NFPA-14 15.5.6 WITH FULL WORKING SHOP DRAWINGS.

CHARACTERISTICS OF THE WATER SUPPLY TO BE USED

STREET MAIN IS CIRCULATING. MINIMUM DURATION OF 60-90 MINUTES.

FLOW TEST DATA:

TO BE PREFORMED BY CONTRACTOR, UPON REQUEST BY AHJ.

COMPLIANCE NOTES CONTINUED

VALVING AND ALARM REQUIREMENTS TO MINIMIZE POTENTIAL FOR IMPAIRMENTS AND UNRECOGNIZED FLOW OF WATER:

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

MICROBIAL INDUCED CORROSION (MIC)

WATER SOURCE IS FROM EXISTING PUBLIC UTILITY WATER MAIN. THERE ARE NO KNOWN CONDITIONS PRESENT THAT CONTRIBUTE TO MICROBIOLOGICAL CORROSION (M.I.C.). CONTRACTOR SHALL REEVALUATE WATER SUPPLY AND ENVIRONMENTAL CONDITIONS FOR EXISTENCE OF MICROBES AND CONDITIONS THAT CONTRIBUTE TO M.I.C. PRIOR TO START OF CONSTRUCTION. WHERE CONDITIONS ARE FOUND THAT CONTRIBUTE TO M.I.C. THE CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER.

BACKFLOW PREVENTION AND METERING SPECIFICATIONS

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

QUALITY AND PERFORMANCE SPECIFICATIONS OF ALL YARD AND INTERIOR FIRE PROTECTION COMPONENTS

ALL NEW YARD AND INTERIOR FIRE PROTECTION EQUIPMENT SHALL BE UL LISTED AND/OR FM APPROVED.

FIRE PUMP REQUIREMENT

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

WATER STORAGE TANK REQUIREMENT

N/A, MANUAL DRY STANDPIPE, SERVING FIXED DOCK IN MARINE ENVIRONMENT.

OWNER'S CERTIFICATE FOR STORAGE FACILITIES

PROPERTY IS NOT A STORAGE OCCUPANCY. OWNER'S CERTIFICATE IS NOT REQUIRED.

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SHEET TITLE: FIRE PROTECTION COMPLIANCE NOTES

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. FP-01

FIRE PROTECTION SPECIFICATIONS

1.0 GENERAL PROVISIONS

1.1 PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT FOR A COMPLETE AND PROPERLY OPERATING FIRE PROTECTION SYSTEM.

1.2 CODES AND STANDARDS: THE FIRE SPRINKLER PROTECTION SYSTEMS INSTALLATION, FLUSHING AND TESTING SHALL COMPLY WITH THE REQUIREMENTS OF NFPA 14, AND ALL LOCAL CODES HAVING JURISDICTION.

1.3 PIPE THREAD PATTERN: ALL THREADS SHALL BE IN ACCORDANCE WITH LOCAL FIRE DEPARTMENT SPECIFICATIONS AND NFPA 1963.

1.4 UL/FM APPROVAL: ALL EQUIPMENT, VALVES, COUPLINGS, HANGERS AND DEVICES SHALL BE APPROVED BY UNDERWRITERS' LABORATORY (UL) OR FACTORY MUTUAL (FM) FOR USE IN FIRE PROTECTION SERVICES.

1.5 LICENSURE: THE FIRE PROTECTION SYSTEMS SHALL BE INSTALLED BY A STATE CERTIFIED FIRE PROTECTION CONTRACTOR.

1.6 ALL FIRE PROTECTION WORK SHALL BE DONE IN A NEAT AND WORKMAN-LIKE MANNER.

1.7 CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND FEES, ETC., REQUIRED FOR THE EXECUTION OF THIS WORK.

1.8 CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACE DAMAGED EQUIPMENT AND/OR MATERIAL.

2.0 BASIC MATERIALS AND METHODS

2.1 ALL PIPING MATERIALS SHALL HAVE A CORROSION RESISTANCE RATING (CFR) OF 1.0 OR GREATER.

2.2 HANGERS: ALL HANGER SPACING SHALL COMPLY WITH THE REQUIREMENTS OF NFPA-13. HANGERS TO BE PROTECTED FROM CORROSION (316 STAINLESS STEEL)

2.3 HYDROSTATIC TESTS: ABOVE GROUND AND BELOW GROUND PIPING SYSTEMS SHALL BE HYDROSTATICALLY TESTED AT NOT LESS THAN 200 PSI PRESSURE OR AT 50 PSI IN EXCESS OF THE MAXIMUM PRESSURE, WHICHEVER IS GREATER, FOR A PERIOD OF 2 HOURS. THE TEST PRESSURE SHALL BE READ FROM A GAUGE LOCATED AT THE LOW ELEVATION POINT OF THE INDIVIDUAL SYSTEM OR PORTION OF THE SYSTEM BEING TESTED. THE SPRINKLER PIPING SHALL NOT HAVE LEAKAGE EXCEEDING THE AMOUNTS SPECIFIED IN NFPA 24. LEAKAGE QUANTITIES SHALL BE DETERMINED BY PUMPING AT THE SPECIFIED TEST PRESSURE FROM A CALIBRATED CONTAINER. REPAIR LEAKING JOINTS AND RETEST AS NECESSARY UNTIL ALL SYSTEMS HAVE BEEN TESTED. TEST THE PIPING BETWEEN THE CHECK VALVE IN THE FIRE DEPARTMENT INLET PIPE AND THE OUTSIDE CONNECTION THE SAME AS THE BALANCE OF THE SYSTEM.

FIRE PROTECTION SPECIFICATIONS CONTINUED

3.0 FIRE PROTECTION VALVES AND ACCESSORIES

3.1 BALL VALVE: TWO INCH (2") AND SMALLER: STANDARD FULL PORT BALL VALVE WITH STAINLESS STEEL BODY CONFORMING TO ASTM584, CHROME PLATED BRASS BALL AND STAINLESS STEEL STEM WITH TFE SEAL RATED FOR 365PSI. ACCEPTABLE MANUFACTURERS, VICTAULIC SERIES 728.

3.2 BUTTERFLY VALVE: TWO INCH (2") AND LARGER IN LIEU OF GATE VALVE: 300 PSI GROOVED ENDS. STAINLESS STEEL BODY, ASTM A536 GRADE 65-45-12; DUCTILE IRON DISC, ASTM A536 WITH ELECTROLESS NICKEL COATING CONFORMING TO ASTM B-733; STAINLESS STEEL STEM AND HAND WHEEL OPERATED WITH WEATHER PROOF ACTUATOR RATED TO 300PSI. (STEM SHALL BE OFFSET FROM THE DISC CENTERLINE TO PROVIDE COMPLETE 360-DEGREE CIRCUMFERENTIAL SEATING ON NITRILE SEAT.) VICTAULIC SERIES 705 AND SERIES 765

3.3 CHECK VALVE: TWO INCH (2") - TWELVE INCH (12"), STAINLESS STEEL BODY, ASTM A-536, GRADE 65-45-12, MINIMUM OF 250 PSI WITH SINGLE DISC MECHANISM INCORPORATING A SPRING ASSISTED FEATURE FOR NON-SLAMMING OPERATION AND CAN BE INSTALLED EITHER VERTICALLY OR HORIZONTALLY. VICTAULIC SERIES 717, AND SERIES 717H.

3.3 CHECK VALVE: TWO INCH (2") - TWELVE INCH (12"), STAINLESS STEEL BODY, ASTM A-536, GRADE 65-45-12, MINIMUM OF 250 PSI WITH SINGLE DISC MECHANISM INCORPORATING A SPRING ASSISTED FEATURE FOR NON-SLAMMING OPERATION AND CAN BE INSTALLED EITHER VERTICALLY OR HORIZONTALLY. VICTAULIC SERIES 717, AND SERIES 717H.

3.4 HOSE VALVE: 2.5"X2.5"; GUARDIAN 5000 SERIES OR EQUAL

3.5 FIRE DEPARTMENT CONNECTION:

1) SIAMESE CONNECTION: BRASS BODY, ANGLE BODY, TWO-WAY, SIAMESE CONNECTION. CONNECTION SIZES SHALL BE 4" OUTLET AND TWO (2) AND 2½" FEMALE INLETS, HAVING NH STANDARD THREADS, FOR THE CONNECTION SIZE INDICATED, AS SPECIFIED IN NFPA 1963. EACH INLET SHALL HAVE A CLAPPER VALVE, AND PLUG AND CHAIN. WHEN REQUIRED PROVIDE AN 18" HIGH CHROME PLATED BRASS SLEEVE AND CHROME PLATED BRASS SIDEWALK PLATE, WITH WORDS "STANDPIPE - FIRE DEPT CONNECTION" OR "AUTO SPKR - FIRE DEPT CONNECTION," OR "AUTO SPKR & STANDPIPE - FIRE DEPT CONNECTION" IN RAISED LETTERS. ACCEPTABLE MANUFACTURER OF FIRE DEPARTMENT CONNECTION IS GUARDIAN FIRE EQUIPMENT, INC.

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SHEET TITLE: FIRE PROTECTION SPECIFICATIONS

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. FP-02

GENERAL NOTES

1. FIRE PROTECTION SYSTEM TO COMPLY WITH NFPA 13, 14, AND STATE FIRE PREVENTION CODE.
2. FINAL INSPECTION AND APPROVAL BY THE AUTHORITY HAVING JURISDICTION (SAFETY HARBOR FIRE DEPARTMENT).
3. CONTRACTOR TO SUBMIT A SET OF WORKING PLANS AS DEFINED IN NFPA-13 TO ENGINEER FOR REVIEW PRIOR TO SUBMITTING WORKING PLANS TO AUTHORITY HAVING JURISDICTION (SAFETY HARBOR FIRE DEPARTMENT) FOR FINAL APPROVAL.
4. ALL MATERIAL SHALL BE OF APPROVED QUALITY AND THE WORK SHALL BE DONE IN A THOROUGH AND WORKMANLIKE MANNER. THE WORK, MATERIALS AND TEST SHALL BE IN ACCORDANCE WITH ALL APPLICABLE NFPA REQUIREMENTS.
5. PIPE ROUTING SHOWN IS SCHEMATIC ONLY. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO PROVIDE ANY ADDITIONAL OFFSETS, ETC. REQUIRED FOR A COMPLETE AND NFPA COMPLIANT INSTALLATION. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AND SITE TO ENSURE SPRINKLER OPERATION IS NOT OBSTRUCTED AND SPACING IS MAINTAINED PER NFPA-13.
6. PROVIDE A PERMANENTLY ATTACHED NAME TAG ATTACHED TO THE FIRE DEPARTMENT CONNECTION, STATING NEW AND EXISTING COVERAGE AREAS. METAL (RED WITH WHITE LETTERS)
7. COORDINATE PIPING WITH ALL OTHER TRADES (PANELS, UTILITIES, TRANSFORMERS, ETC.) PRIOR TO ANY INSTALLATION. DO NOT ROUTE ANY PIPING OVER ANY ELECTRICAL PANELS UNDER ANY CIRCUMSTANCES.
8. FIRE PROTECTION SYSTEM ACCEPTANCE TESTS SHALL BE PERFORMED IN COMPLIANCE WITH THE REQUIREMENTS OF THE ASSOCIATED NFPA CODES.
9. FIRE PROTECTION SYSTEM ACCEPTANCE TESTS SHALL BE WITNESSED BY AUTHORITY HAVING JURISDICTION.
10. CONTRACTOR SHALL PROVIDE FLUSHING CONNECTIONS AT THE END OF ALL MAINS.
11. PIPE SUPPORTS: HANGERS, CLAMPS, RODS AND OTHER ACCESSORIES OF AN APPROVED TYPE AND IN SUFFICIENT NUMBER TO PROPERLY SUPPORT ALL PIPING SHALL BE FURNISHED AND INSTALLED.
12. CONTRACTOR SHALL PROVIDE THE OWNER WITH A THREE RING BINDER OF ALL LITERATURE AND INSTRUCTIONS AS PROVIDED BY THE MANUFACTURER DESCRIBING PROPER OPERATION AND MAINTENANCE OF ALL EQUIPMENT AND DEVICES INSTALLED, A COPY OF NFPA-25 "STANDARD FOR THE INSPECTION, TESTING, AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS", AND THE APPROPRIATE CONTRACTOR'S MATERIAL AND TEST CERTIFICATE(S), COMPLETED AND SIGNED, AS INDICATED IN NFPA-13.

GENERAL NOTES CONTINUED

13. CONTRACTOR SHALL SUBMIT HANGAR INSTALLATION PLAN TO ENGINEER FOR REVIEW PRIOR TO COMMENCEMENT OF WORK.
14. COORDINATE FIRE PROTECTION PIPING WITH ALL OTHER TRADES. PROVIDE OFFSETS AS REQUIRED FOR THE INSTALLATION AS REQUIRED. FINAL FIELD COORDINATION BETWEEN ALL TRADES SHALL BE COMPLETED PRIOR TO START OF CONSTRUCTION.
15. PROVIDE ACCESS PANELS FOR ALL VALVES IN NON-ACCESSIBLE LOCATIONS.
16. ALL HANGERS, CLAMPS, FASTENERS, AND HARDWARE SHALL BE 316 STAINLESS STEEL.
17. PROVIDE DIALECTIC SEPARATION AS REQUIRED TO PREVENT DISSIMILAR METAL/ GALVANIC CORROSION IN ALL MATERIALS. TWO MATERIALS WITH KNOWN POTENTIAL FOR GALVANIC ACTION SHALL NOT BE USED IN CONNECTION TO ONE ANOTHER..

PIPE MATERIAL SPECIFICATION

LOCATION USED	MATERIAL
UNDERGROUND	DR14 (BLUE BRUTE)
IN-BUILDING RISER	NA
FIRE RISER	NA
STANDPIPE	FM APPROVED, DR9 HDPE, UV RESISTANT, 250 PSI, EQUAL TO JM EAGLE
COMMERCIAL	NA
RESIDENTIAL	NA
EXTERIOR / DRY	FM APPROVED, DR9 HDPE, UV RESISTANT, 250 PSI, EQUAL TO JM EAGLE

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CHECKED BY:

SHEET TITLE: FIRE PROTECTION GENERAL NOTES

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. FP-03

FIRE PROTECTION LEGEND

SYMBOL	DESCRIPTION
	CONTROL VALVE WITH TAMPER SWITCH
	OS&Y VALVE WITH TAMPER SWITCH
	CHECK VALVE
FDC FDC	FIRE DEPARTMENT CONNECTION – SIAMESE
	FLOW SWITCH
	CABINET WITH 2i" FDV, 1i" REDUCER, CAP, AND CHAIN
	STANDPIPE WITH FIRE DEPARTMENT VALVE
	STANDPIPE, FLOOR CONTROL VALVE, INSPECTOR'S TEST, AND DRAIN RISER
	PIPE CONTINUATION
	PIPE UP
	PIPE DOWN
	FIRE RISER
	ENDCAP WITH FLUSHING CONNECTION
	AREA OF REVISION
#	HYDRAULIC REFERENCE NODE
	NEW SPRINKLER PIPING
	NEW SPRINKLER MAIN
	NEW UNDERGROUND FIRE MAIN
	NEW STANDPIPE PIPING
EC	EXTENDED COVERAGE
FC	FLUSHING CONNECTION
FCV	FLOOR CONTROL VALVE
FDC	FIRE DEPARTMENT CONNECTION
FDV	FIRE DEPARTMENT VALVE
SIV	STANDPIPE ISOLATION VALVE
#	REVISION REFERENCE

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City of Safety Harbor, Florida — Home of the Mineral Springs

SHEET TITLE: FIRE PROTECTION LEGEND

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. FP-04

THERE IS AN EXISTING FIRE HYDRANT ACROSS FROM EXISTING AND PROPOSED FDC APPROXIMATELY 100' AWAY.

NEW FDC SERVING NEW STANDPIPE SYSTEM, COORDINATE FINAL LOCATION WITH HARBOR MASTER AND FIRE MARSHAL. PROVIDE PLACARD STATING AREAS SERVED AND PRESSURE REQUIRED AT FLOW PER NFPA-14 15.4.2.3.3 AND 15.5.4.2.3.4.

NEW FDC TO REPLACE EXISTING IN SIMILAR LOCATION, EXTENDED OVER WESTWARD AS REQUIRED TO BE WITHIN 100' OF EXISTING FIRE HYDRANT ACROSS THE STREET. FIELD COORDINATE FINAL PLACEMENT WITH AHJ (SAFETY HARBOR FIRE)

FIRE PROTECTION PIPE SHALL BE SECURED / HUNG IN THE MOST EAST BAY WITH POTABLE, AWAY FROM ELECTRICAL, COORDINATE WITH ELECTRICAL WORK AND STRUCTURAL PLANS.

NEW 5" STANDPIPE (4.25" ID)

NEW STAND PIPE HOSE CONNECTIONS SHALL BE SPACED A MAXIMUM OF 150' PER NFPA 14 15.5.1.2.1 AND 15.5.1.2.2

CONFIRM HOSE CONNECTION SIZE WITH LOCAL AHJ (SAFETY HARBOR FIRE DEPARTMENT) (TYP.)

3" TAP (2.68" ID) FROM 5" MAIN TO 2.5" FIRE DEPARTMENT VALVE HOSE CONNECTION, PROVIDE WITH CAP AND CHAIN(TYP.)

COORDINATE LOCATION OF FIRE PROTECTION WITH ELECTRICAL WORK UNDER CENTER OF DOCK BAY. ENSURE 12" MINIMUM BETWEEN UTILITIES.

FIRE PROTECTION FLOOR PLAN

N.T.S

23.0141

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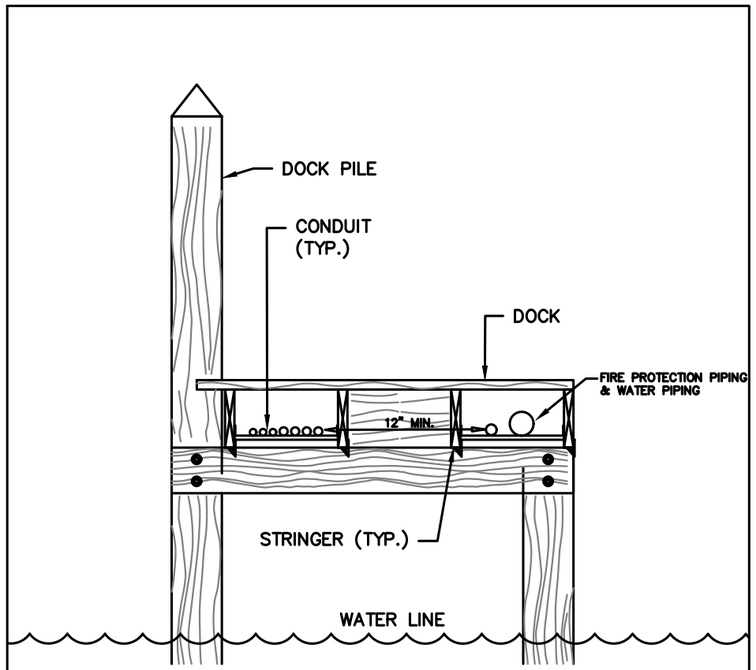
SHEET TITLE: FIRE PROTECTION FLOOR PLAN

TWA NO.

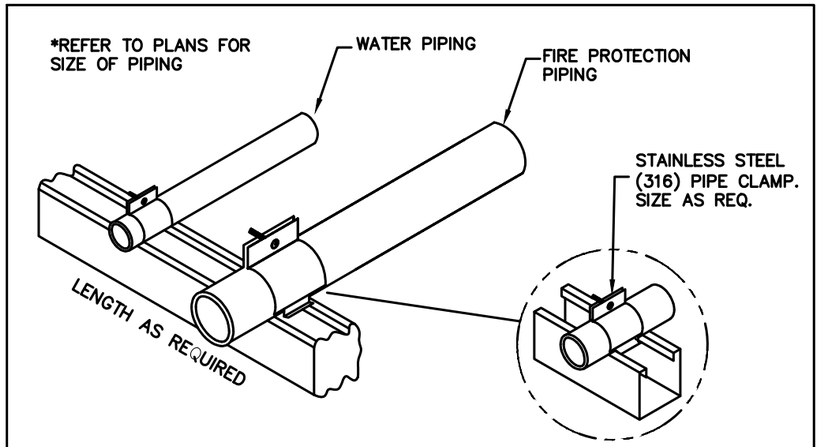
PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. FP-05



PIPE MOUNTING DETAIL

NO SCALE



PIPE SUPPORT DETAIL

NO SCALE

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SHEET TITLE: FIRE PROTECTION DETAILS

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

TWA NO.

SHEET NO. FP-06

PLUMBING LEGEND

DESCRIPTION	ABBREV.	SYMBOL
SANITARY PIPING	SAN	
VENT PIPING	V	
COLD WATER PIPING	CW	
EXISTING PIPING TO REMAIN		
EXISTING PIPING TO BE REMOVED		
HOSE BIBB	HB	HB
TEE UP		
TEE DOWN		
90° UP		
90° DOWN		
LEAD FREE BALL VALVE	BV	

MATERIAL SPECIFICATIONS:

1. DOMESTIC COLD WATER PIPING AND SOLVENT FITTINGS SHALL BE CPVC. ALL AREAS EXPOSED TO SUNLIGHT SHALL BE INSULATED WITH A UV STABLE INSULATION OR CONDUIT. FIELD COORDINATE AREAS OF UV EXPOSURE.

ALL PIPING SHALL BE INSTALLED AND SUPPORTED WITH HANGERS COMPLIANT WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND CODES. SUBMIT HANGER INSTALLATION PLAN TO ENGINEER FOR REVIEW PRIOR TO COMMENCEMENT OF WORK.

PLUMBING FIXTURE SCHEDULE

HB: HOSE BIBB – STAINLESS STEEL HOSE BIBB EQUALS TO SSHB5205. SEE PEDESTAL MANUFACTURER DOCUMENTS FOR DETAILS. 3/4"CW. HB TO BE INSTALLED IN UTILITY PEDESTAL. (2) PER PEDESTAL UNLESS SHOWN AS (1).

PLUMBING GENERAL NOTES

- ALL PLUMBING WORK SHALL MEET ALL THE REQUIREMENTS OF THE "FLORIDA BUILDING CODE, PLUMBING – 8TH EDITION (2023)".
- REVIEW PLANS OF ALL TRADES PRIOR TO BIDDING AND INSTALLATION TO INCLUDE ALL PLUMBING FOR COMPLETE SYSTEMS SHOWN ON THE PLANS AND AS REQUIRED.
- COORDINATE WITH OTHER TRADES TO PREVENT INTERFERENCE.
- ALL CHANGES SHALL BE APPROVED BY THE ENGINEER.
- COORDINATE WITH OTHER TRADE DRAWINGS BEFORE ROUGHING–IN PLUMBING FIXTURES AND EQUIPMENT SUPPLIES.
- THE PLUMBING SUBCONTRACTOR SHALL FURNISH AND INSTALL ALL PLUMBING FIXTURES, UNLESS NOTED OTHERWISE.
- THE PLUMBING SUBCONTRACTOR SHALL INSTALL AND MAKE ALL PLUMBING CONNECTIONS TO OWNER FURNISHED EQUIPMENT.
- VERIFY MOUNTING HEIGHT AND WATER CONNECTION SIZES TO ALL PLUMBING FIXTURES PRIOR TO ROUGH–IN.
- ENSURE ALL COLD WATER PIPING CONNECTIONS TO FIXTURES AND EQUIPMENT ARE PROPERLY CONNECTED PER CODE AND INDUSTRY STANDARDS, EVEN IF SOME FITTINGS AND CONNECTIONS ARE NOT SHOWN FOR A COMPLETE AND FUNCTIONAL SYSTEM.
- VERIFY LOCATION OF EXISTING WATER SERVICE.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL CUTTING AND PATCHING NECESSARY TO INSTALL ANY PART OF THIS WORK. USE NEW MATERIALS OF THE SAME TYPE AS THOSE REMOVED FOR PATCHES, AND REFINISH THE PATCHED SURFACE TO MATCH THE EXISTING ADJACENT AREAS. THE STRUCTURAL INTEGRITY OF ALL STRUCTURE AND STRUCTURAL MEMBERS MUST NEVER BE COMPROMISED OR MODIFIED BY ANY CUTTING OR PATCHING.
- IT IS IN THE INTENT OF THESE DRAWINGS TO COVER ALL WORK AND MATERIAL FOR A FIRST CLASS INSTALLATION. ANY EQUIPMENT, PLUMBING FIXTURE, TRIM HARDWARE AND/OR DEVICES USUALLY UTILIZED IN THE CLASS OF WORK, THOUGH NOT SPECIFICALLY MENTIONED OR SHOWN ON THESE DRAWINGS, BUT WHICH MAY BE NECESSARY FOR THE SATISFACTORY COMPLETION OF THE WORK (AS DETERMINED BY THE ENGINEER) SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR AS PART OF HIS TOTAL WORK.
- ALL HANGERS, CLAMPS, FASTENERS, AND HARDWARE SHALL BE 316 STAINLESS STEEL.

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SHEET TITLE: PLUMBING NOTES, LEGEND, AND SCHEDULE

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

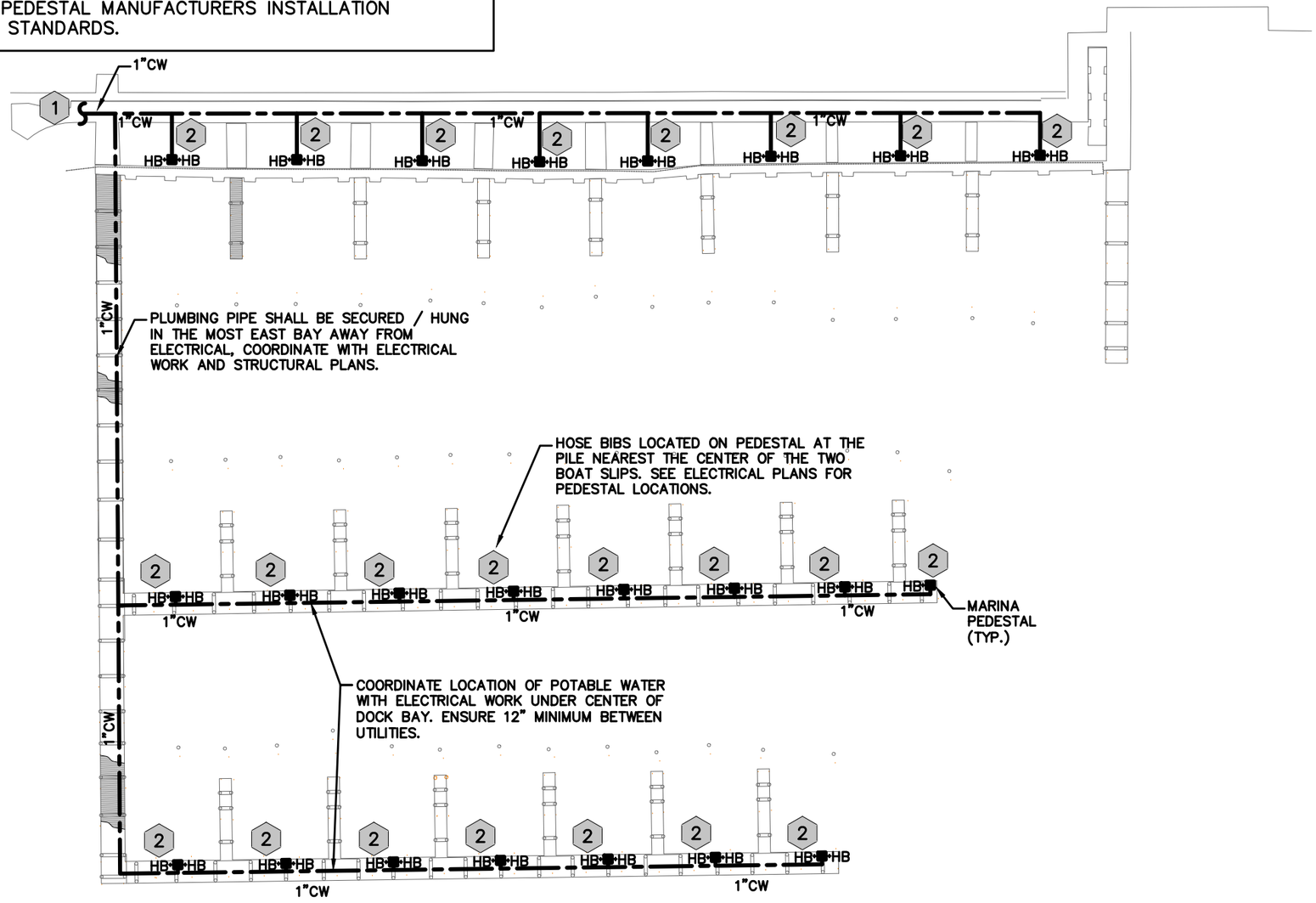
TWA NO.

SHEET NO. P–01

CONSTRUCTION NOTES:

1. CONTRACTOR TO FIELD LOCATE AND CONNECT NEW 1" CW LINE TO NEAREST EXISTING WATER LINE.

2. 1" CW OVER AND TO HOSE BIBB(S) AT PEDESTAL. SEE ELECTRICAL PLANS FOR PEDESTAL SPECIFICATION AND DETAILS. HOSE BIBS TO BE INSTALLED ON OPPOSITE SIDES OF PEDESTAL PARALLEL TO DOCK AND PER PEDESTAL MANUFACTURERS INSTALLATION GUIDELINES AND STANDARDS.



WATER FLOOR PLAN

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23.0141

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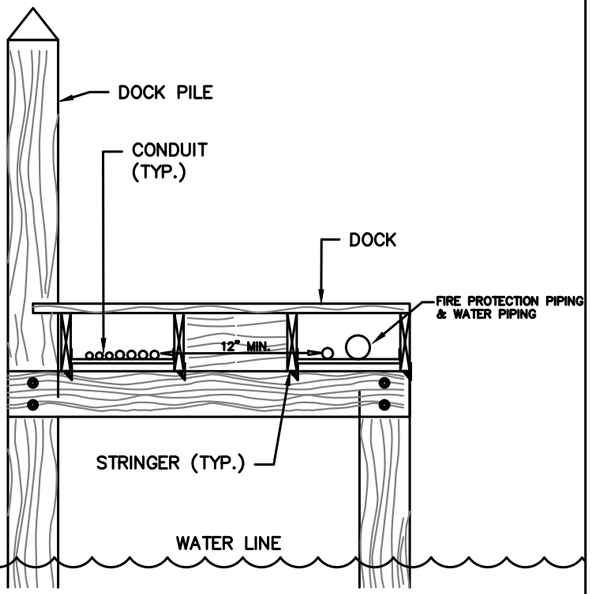
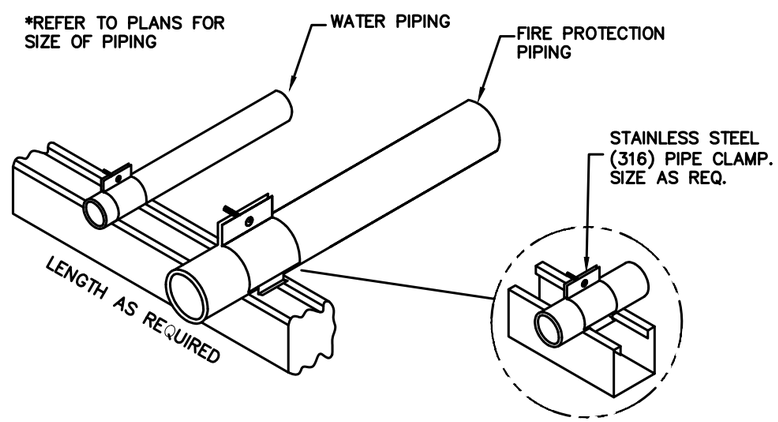
SHEET TITLE:	PLUMBING FLOOR PLAN
TWA NO.	
PROJECT NAME:	SAFETY HARBOR MARINA REPLACEMENT
SHEET NO.	P-02



PIPE MOUNTING DETAIL

NO SCALE



PIPE SUPPORT DETAIL

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SHEET TITLE: PLUMBING DETAILS

TWA NO.

PROJECT NAME: SAFETY HARBOR MARINA REPLACEMENT

SHEET NO. P-03