



DEPARTMENT OF THE ARMY  
JACKSONVILLE DISTRICT CORPS OF ENGINEERS  
1520 Royal Palm Square Blvd, Suite 310  
Fort Myers, FL 33919

December 5, 2019

REPLY TO  
ATTENTION OF

Regulatory Division  
West Permits Branch  
Fort Myers Permits Section  
SAJ-1990-40367 (GP-EPL)

Ehab Guirguis  
Lee County Facilities Construction and Management  
1500 Monroe Street  
Fort Myers, FL 33901

Dear Mr. Guirguis:

Your application for a Department of the Army permit received on 24 October 2019 has been assigned number SAJ-1990-40367. A review of the information and drawings provided shows the proposed work is the replacement of an existing 3020SF dilapidated public fishing pier which has been condemned for public safety. The existing pier will be completely removed and the proposed pier will be placed in the same footprint as the existing. The project will result in the installation of seventy-six 14" square concrete pilings. The project would affect waters of the United States associated within Matlacha Pass and is located in Section 24, Township 44 South, Range 22 East, at 4577 Pine Island Road NW, Lee County, Florida

Your project, as depicted on the enclosed drawings (Attachment I), is authorized by Nationwide Permit (NWP) 3. The authorization of NWP 3 is valid until **March 18, 2022**. Please access the Corps' Jacksonville District Regulatory Division Internet page to view the special and general conditions for NWP-3, which apply specifically to these authorizations. The Internet URL address is:

<http://www.saj.usace.army.mil/Missions/Regulatory.aspx>

Please be aware this Internet address is case sensitive; and, you will need to enter it exactly as it appears above. Once there you will need to click on "Source Book"; and, then click on "Nationwide Permits." Then you will need to click on the specific NWP permits noted above. You must comply with all of the special and general conditions of the permit; and, any project-specific conditions noted below, or you may be subject to enforcement action.

The following special conditions are included with these authorizations and are to ensure compliance with the federal permit and to minimize impacts to the aquatic environment:

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](mailto: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-1990-40367 (NW-EPL), on all submittals.

**2. 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 and submit it to the Corps (Attachment II). 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.

**3. 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 III).

**4. 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 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.

**5. Jacksonville District Programmatic Biological Opinion (JAXBO), November 2017, Project Design Criteria (PDCs):** Structures authorized under this permit must comply with all applicable PDCs, based on the permitted activity, as required by JAXBO. Please note that failure to comply with the applicable PDCs, where a take of listed species occurs, would constitute an unauthorized take, and noncompliance with this permit. The NMFS is the appropriate authority to enforce the terms and conditions of JAXBO. The most current version of

JAXBO can be accessed at the Jacksonville District Regulatory Division internet webpage in the Endangered Species section of the Sourcebook located at: <http://www.saj.usace.army.mil/Missions/Regulatory/SourceBook.aspx>

**Note** - JAXBO may be subject to revision at any time. The most recent version of these conditions must be utilized during the design and construction of the permitted work. In accordance with the Endangered Species Act, and for those projects which do not comply with JAXBO, the Corps will seek individual consultation with the NMFS.

**Note** - some authorized activities may deviate from the PDCs. In cases, where the activity (i.e., structure dimensions, length, etc.) deviates from the PDCs, the permit drawings shall supersede the PDCs.

For each of the following authorized activities subject of this permit, the permittee shall adhere to the following PDCs, which are attached to, and made part of, this authorization/verification letter (Attachment IV):

Activity 2 - Pile-supported Structures and Anchored Buoys: (AP.1-14; A2.1-16)

**6. Manatee Conditions:** The Permittee shall abide by the enclosed standard construction conditions designed to protect the endangered West Indian manatee, 2011 (Attachment V).

**7. Posting of Permit:** The Permittee shall have available and maintain for review a copy of this permit and approved plans at the construction site.

**8. Daylight Hours:** All activities must be completed during daylight hours.

**9. Agency Changes/Approvals:** Should any other agency require and/or approve changes to the work authorized or obligated by this permit, the Permittee is advised a modification to this permit instrument is required prior to initiation of those changes. It is the Permittee's responsibility to request a modification of this permit from the Fort Myers Permits Section. The Corps reserves the right to fully evaluate, amend, and approve or deny the request for modification of this permit.

**10. Educational Signs:** 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:

([http://sero.nmfs.noaa.gov/protected\\_resources/section\\_7/protected\\_species\\_educational\\_signs/index.html](http://sero.nmfs.noaa.gov/protected_resources/section_7/protected_species_educational_signs/index.html)). The signs required to be posted by area are stated below:

- 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.

**11. Monofilament Recycling Bins:** All commercial and public boat ramps also must install and maintain for the life of the facility monofilament recycling bins to reduce the risk of turtle or sawfish entanglement in or ingestion of marine debris. Monofilament recycling bins must:

- a. Be constructed and labeled according to the instructions provided at <http://mrrp.myfwc.com>
- b. Be maintained for the life of the facility in working order and emptied frequently so that they do not overflow.

**12: 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 to within 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 until the authorized work has been completed and all suspended and erodible materials have been stabilized. Turbidity barriers shall be removed upon stabilization of the work area.

**13. 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 the ground disturbing activities and construction work within the permit area, there are archaeological/cultural materials encountered which were not the subject of a previous cultural resources assessment survey (and which shall include, but not be limited to: pottery, modified shell, flora, fauna, human remains, ceramics, stone tools or metal implements, dugout canoes, evidence of structures 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 and ground-disturbing activities within a 100-meter diameter of the discovery and notify the Corps within the same business day (8 hours). The Corps shall then notify the Florida State Historic Preservation Officer

(SHPO) and the appropriate Tribal Historic Preservation Officer(s) (THPO(s)) to assess the significance of the discovery and devise appropriate actions.

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, THPO(s), 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 non-federal 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 Archeologist within the same business day (8-hours). The Corps shall then notify the appropriate SHPO and THPO(s). 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 State Archeologist and from the Corps.

This 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 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.

If you are unable to access the internet or require a hardcopy of any of the conditions, limitations, or expiration date for the above referenced NWP, please contact Eric Larrat by telephone at 239-334-1975.

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 [http://corpsmapu.usace.army.mil/cm\\_apex/f?p=regulatory\\_survey](http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_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.

Sincerely,

---

Eric P. Larrat  
Project Manager

**Enclosures**

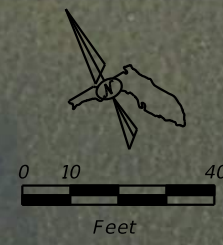
- Attachment I: Project Drawings
- Attachment II: Self-Certification Statement of Compliance Form
- Attachment III: Commencement Notification Form
- Attachment IV: Project Design Criteria (PDCs) for In-Water Activities
- Attachment V: Manatee In-Water Work Conditions

GENERAL CONDITIONS  
33 CFR PART 320-330

1. The time limit for completing the work authorized ends on the **dates identified in the letter.**
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 in the space provided 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. For your convenience, a copy of the certification is attached if it contains such conditions.
6. 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.

ATTACHMENT I





TOTAL PROJECT AREA = 3020 SF

EXISTING TIMBER PILES:  
 AREA 10" DIA. PILES = 0.55 SF  
 NO. PILES = 80  
 TOTAL AREA = 44.0 SF

PROPOSED CONCRETE PILES:  
 AREA 14" SQ. PILES = 1.36 SF  
 NO. PILES = 76  
 TOTAL AREA = 103.4 SF

**LEGEND**

----- APPROXIMATE MEAN HIGH WATER (MHW)

Shoalgrass (*Halodule wrightii*)  
 COVERAGE 5-10%

REVISIONS						VINCENT ZALIAUSKAS, P.E. P.E. LICENSE NUMBER 60524 HIGHSPANS ENGINEERING, INC. 2121 MCGREGOR BOULEVARD SUITE 200 FORT MYERS, FL 33901 REGISTRY NO. 27559	DRAWN BY: SDS 6/19 CHECKED BY: CLH 6/19 DESIGNED BY: RMW 6/19 CHECKED BY: VAZ 6/19	LEE COUNTY FACILITIES CONSTRUCTION & MANAGEMENT			SHEET TITLE:  AERIAL VIEW		REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	PROJECT NO.	PROJECT NAME:	MATLACHA FISHING PIER REPLACEMENT	
									LEE				

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



*LEE COUNTY*  
*FACILITIES CONSTRUCTION & MANAGEMENT*

*CONTRACT PLANS*

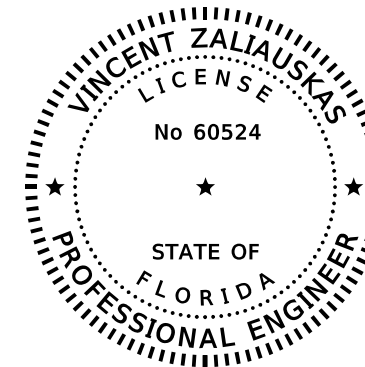
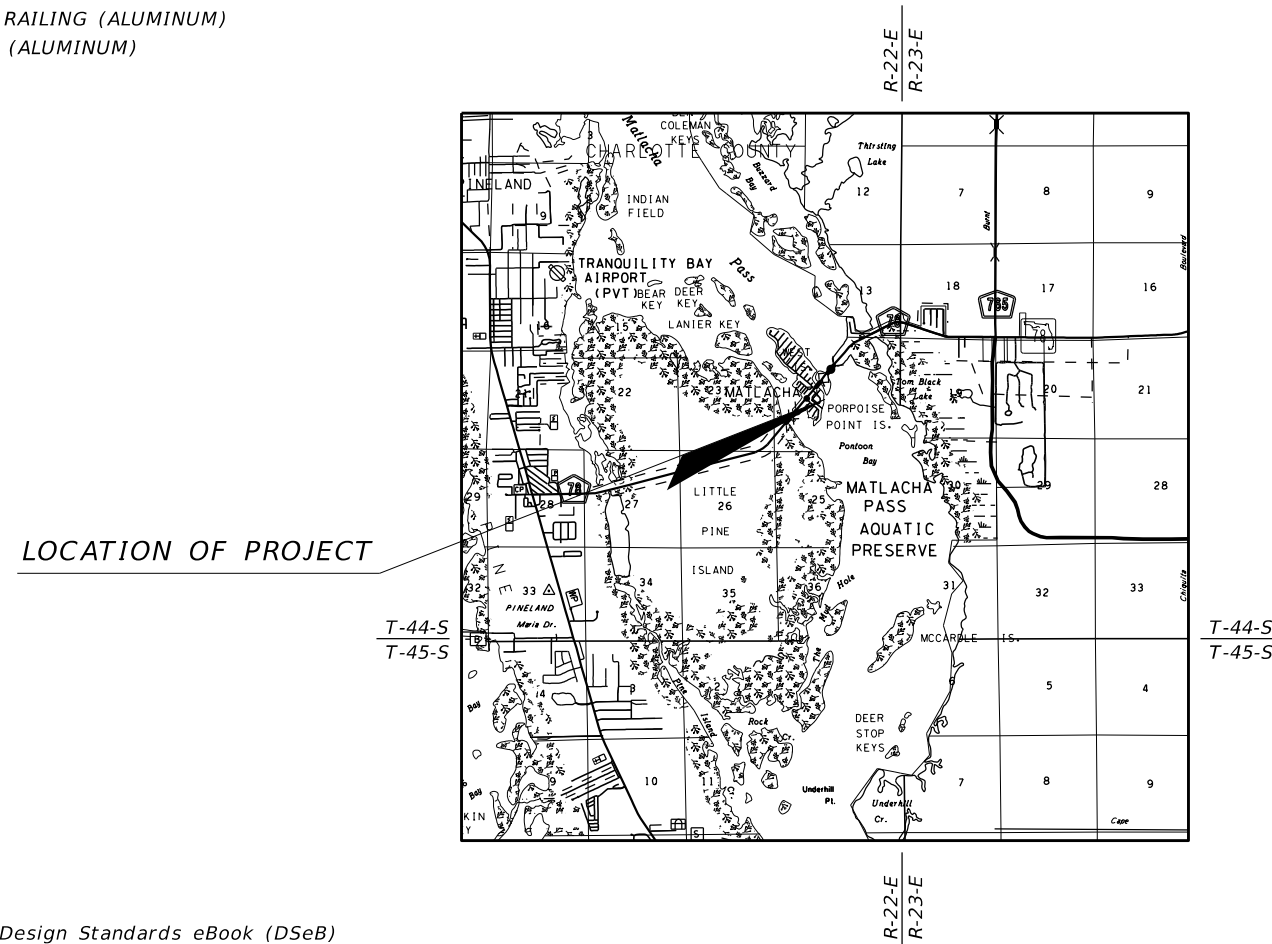
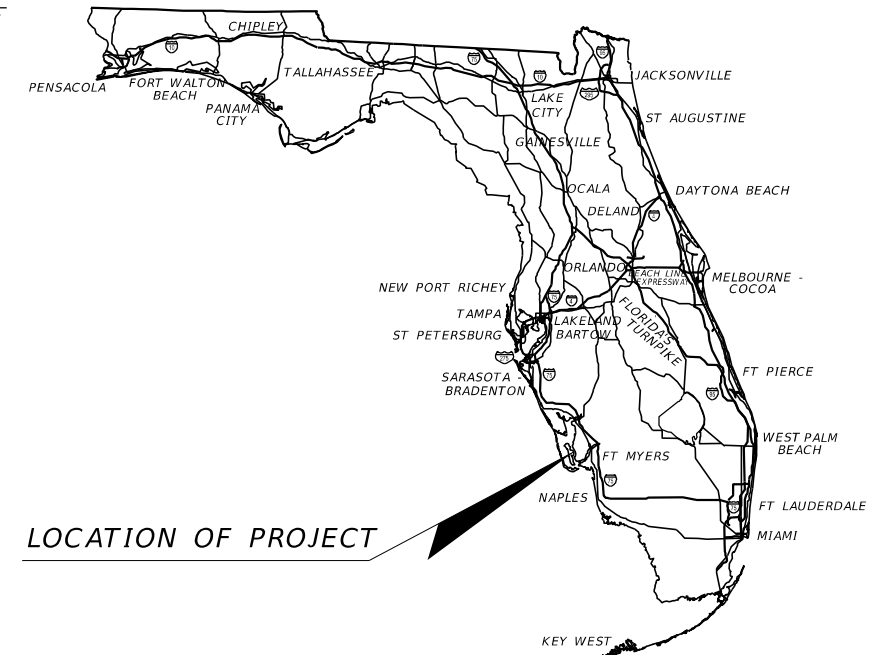
**MATLACHA FISHING PIER REPLACEMENT**

*STRUCTURE PLANS*

**INDEX OF STRUCTURE PLANS**

<i>SHEET NO.</i>	<i>SHEET DESCRIPTION</i>
1	KEY SHEET
2 - 3	GENERAL NOTES
4	EXISTING CONDITIONS
5 - 7	PLAN & ELEVATION
8 - 10	TYPICAL SECTIONS
11 - 12	PILE CAP DETAILS
13	CLEANING STATION DETAILS
14	PIER DETAILS
15	REINFORCING BAR LIST

<i>STANDARD PLANS FOR ROAD AND BRIDGE CONSTRUCTION</i>	
400-011	GRAVITY WALL
515-061	BRIDGE PEDESTRIAN/BICYCLE RAILING (ALUMINUM)
515-062	PEDESTRIAN/BICYCLE RAILING (ALUMINUM)



THIS ITEM HAS BEEN DIGITALLY  
SIGNED AND SEALED BY

ON THE DATE ADJACENT TO THE SEAL  
PRINTED COPIES OF THIS DOCUMENT ARE  
NOT CONSIDERED SIGNED AND SEALED  
AND THE SIGNATURE MUST BE VERIFIED  
ON ANY ELECTRONIC COPIES.

**STRUCTURE PLANS**  
**ENGINEER OF RECORD:**

VINCENT ZALIAUSKAS, P.E.  
P.E. LICENSE NUMBER 60524  
HIGHSPANS ENGINEERING, INC.  
2121 MCGREGOR BLVD.  
SUITE 200  
FORT MYERS, FL 33901  
REGISTRY NO. 27559

**LEE COUNTY PROJECT MANAGER:**  
ELAINE CAPPS, P.E.

**GOVERNING DESIGN STANDARDS:**

Florida Department of Transportation, FY 2018-19 Design Standards eBook (DSeB)  
and applicable Design Standards Revisions (DSRs) at the following website:  
<http://www.dot.state.fl.us/rddesign/DesignStandards/Standards.shtm>

**GOVERNING STANDARD SPECIFICATIONS:**

Florida Department of Transportation, January 2019 Standard Specifications  
for Road and Bridge Construction at the following website:  
<http://www.dot.state.fl.us/programmanagement/Implemented/SpecBooks>

CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
	18	1

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

**GENERAL NOTES**

**A. DESIGN SPECIFICATIONS**

1. FLORIDA BUILDING CODE, CURRENT EDITION
2. FDOT STRUCTURES MANUAL DATED JANUARY 2019 AND SUBSEQUENT STRUCTURES DESIGN BULLETINS.
3. AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) LOAD AND RESISTANCE FACTOR (LRFD) BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION AND ALL SUBSEQUENT INTERIMS.
4. FDOT DESIGN MANUAL DATED JANUARY, 2019 AND SUBSEQUENT ROADWAY DESIGN BULLETINS.
5. AMERICAN WOOD COUNCIL NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION, 2012.

**B. GOVERNING STANDARDS AND CONSTRUCTION SPECIFICATIONS**

FLORIDA DEPARTMENT OF TRANSPORTATION, 2019-20 STANDARD PLANS AND REVISED INDEX DRAWINGS AS APPENDED HEREIN, AND JANUARY 2019 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AS AMENDED BY CONTRACT DOCUMENTS.

**C. VERTICAL DATUM**

VERTICAL DATUM USED IS NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD 29), UNLESS OTHERWISE NOTED.

**D. ENVIRONMENT**

ALL COMPONENTS DESIGNED FOR EXTREMELY AGGRESSIVE ENVIRONMENT.

**E. DESIGN METHODOLOGY**

LOAD AND RESISTANCE FACTOR DESIGN (LRFD) METHOD USING STRENGTH AND SERVICE.

**F. DESIGN LOADINGS**

1. LIVE LOADS:
  - PEDESTRIAN LIVE LOAD: 100 PSF
  - FBC PEDESTRIAN LOAD FOR RAILING: 200 LB + 50 PLF
  - WAVE LOAD: 1.088 KIPS APPLIED AT STILL WATER LEVEL
2. DEAD LOADS:
  - REINFORCED CONCRETE: 150 PCF
  - PRESSURE TREATED WOOD: 41 PCF
3. UTILITIES: NO ALLOWANCE FOR UTILITY LOADS HAS BEEN INCLUDED IN THE DESIGN.

**G. MATERIALS**

1. REINFORCING STEEL: ALL REINFORCING STEEL SHALL BE ASTM A615 GRADE 60
2. CONCRETE CLASS:

CONCRETE CLASS	MIN. 28-DAY COMPRESSIVE STRENGTH (PSI)	LOCATION OF CONCRETE IN STRUCTURE
IV (W/ SILICA FUME & CALCIUM NITRITE)	5500	SUBSTRUCTURE
V (SPECIAL) (W/ SILICA FUME & CALCIUM NITRITE)	6000	PRESTRESSED CONCRETE PILES

3. CONCRETE COVER:

CAST-IN-PLACE SUBSTRUCTURE	4"
PRESTRESSED PILING	3"

CONCRETE COVER DIMENSIONS SHOWN IN THE PLANS DO NOT INCLUDE PLACEMENT AND FABRICATION TOLERANCES UNLESS SHOWN AS "MINIMUM COVER". SEE SPECIFICATIONS SECTION 415 FOR ALLOWABLE TOLERANCES. ALL DIMENSIONS PERTAINING TO THE LOCATION OF REINFORCING STEEL ARE TO CENTERLINE OF BAR EXCEPT WHERE CLEAR DIMENSION IS NOTED TO FACE OF CONCRETE.

4. CONCRETE PILES

- a. MAIN PIER PILE LENGTHS: 20 FT
- b. T-HEAD PILE LENGTHS: 25 FT
- c. PILES DRIVEN TO CUTOFF ELEVATION WILL MEET THE MINIMUM 2:1 EMBEDMENT REQUIRED FOR LATERAL LOAD STABILITY.

5. WOOD DECKING AND HANDRAILS

- a. TANDECK ULTIMATE MARINE DOCK BOARD, OR APPROVED EQUAL.
- b. PROVIDE 1/2" MAX. GAP BETWEEN DECK BOARDS.

6. WOOD STRINGERS AND BLOCKING

- a. PRESSURE TREATED SOUTHERN YELLOW PINE #2 S4S 0.40 ACQ
- b. FIELD TREAT CUTS, BEVELS, NOTCHES, REFACING AND ABRASIONS MADE IN THE FIELD IN TREATED PILES OR TIMBERS IN ACCORDANCE WITH AWPA; TRIM CUTS AND ABRASIONS BEFORE FIELD TREATMENT; PAINT DEPRESSIONS OR OPENINGS AROUND BOLT HOLES, JOINTS, OR GAPS INCLUDING RECESSES FORMED BY COUNTER BORING WITH PRESERVATIVE TREATMENT USED FOR PILES OR TIMBER.
- c. VARIATION IN DEPTH BETWEEN STRINGERS SHALL NOT EXCEED 3/8" TO PROVIDE A FLAT SURFACE ACROSS THE WIDTH OF THE PIER TO ENSURE DECKING HAS A FIRM CONTACT WITH ALL STRINGERS.

7. STEEL FASTENERS AND HARDWARE

- a. ALL HARDWARE IS STAINLESS STEEL 316, UNLESS NOTED OTHERWISE.
8. GIBSON STAINLESS & SPECIALTY INC. 2" STAINLESS STEEL CONDUIT HANGERS, OR APPROVED EQUAL.
9. GIBSON STAINLESS & SPECIALTY INC. 2" STAINLESS STEEL CONDUIT TWO HOLE STRAP, OR APPROVED EQUAL.
10. BOAT OUTFITTERS 4'-0"x2'-6"x3/4" THICK CUSTOM CLEANING STATION TABLE, OR APPROVED EQUAL.
11. HIGHLAND PRODUCTS GROUP, LLC 6' LONG, SURFACE MOUNTED TRAILSIDE RECYCLED PLASTIC BENCH, OR APPROVED EQUAL.
12. FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION MONOFILAMENT RECOVERY AND RECYCLE BIN.

**H. CONCRETE FINISH COATING**

CLASS 1 OR CLASS 2, BARE CONCRETE WITH BUG HOLES FILLED AND RUBBED.

**I. PLAN DIMENSIONS**

ALL DIMENSIONS IN THESE PLANS ARE MEASURED IN FEET EITHER HORIZONTALLY OR VERTICALLY UNLESS OTHERWISE NOTED.

**J. UTILITIES**

1. LOCATIONS OF EXISTING UTILITIES SHOWN IN THE PLANS ARE APPROXIMATE.
2. CONTRACTOR IS TO FIELD LOCATE EXISTING UTILITIES.
3. ALL ELECTRICAL WORK IS TO BE PERFORMED BY A LICENSED ELECTRICIAN.

**K. JOINTS IN CONCRETE**

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

**L. LIGHTING**

1. POLE: 12'-0" ALUMINUM POLE, PART#: H12A4RS125 MADE BY ENERGY LIGHT INC., OR APPROVED EQUAL.
2. LUMINAIRE: LIGHT FIXTURE PT40 PART#: 610012 MADE BY LIGHT INC., OR APPROVED EQUAL.
3. BULB: AMBER LED LIGHT BULB PART #: PAR38 MADE BY SYNERGY LIGHTING INC., OR APPROVED EQUAL.

**GENERAL CONSTRUCTION NOTES**

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM A PRE- AND POST-CONSTRUCTION SURVEY UNDER THE DIRECTION OF A FLORIDA PROFESSIONAL SURVEYOR AND MAPPER (PSM). THE SURVEY IS TO INCLUDE PROFILE AND CROSS SECTIONS TO ENSURE THAT THE CHANNEL WIDTH/DEPTH HAS NOT BEEN DECREASED.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION AND OWNERSHIP OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES WITH FACILITIES IN THE AREA OF THE PROJECT PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY INFORMATION AND DATA IN THE PLANS BEFORE BEGINNING CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
4. THE CONTRACTOR IS RESPONSIBLE FOR RESOLVING ANY UTILITY CONFLICTS BEFORE CONSTRUCTION BEGINS. ALL CONFLICTING UTILITIES MUST BE ADJUSTED AT THE CONTRACTORS EXPENSE.
5. NO STAGING OR OTHER ACTIVITIES FOR THIS PROJECT WILL BE ALLOWED WITHIN OR ADJACENT TO THE WATERWAY OR OTHER ENVIRONMENTALLY SENSITIVE AREAS. THE CONTRACTOR SHALL REVIEW ENVIRONMENTAL REQUIREMENTS OF ANY PROPOSED STAGING AREAS WITH THE PROJECT ENGINEER AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO USE. CONTRACTOR CAN UTILIZE PARKING SPACES AND GREEN SPACE FOR STAGING AREA.
6. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING NAVIGABLE WATERWAYS. THE CONTRACTOR SHALL MOVE EQUIPMENT IN A TIMELY MANNER TO ALLOW BOATS AND OTHER VESSELS TO REASONABLY NAVIGATE THROUGH. ANY SHORT TERM IMPACTS TO NAVIGATION SHALL BE COORDINATED WITH THE UNITED STATES COAST GUARD (USCG), MR. EDDIE LAWRENCE. EMAIL ADDRESS: eddie.h.lawrence@uscg.mil, TELEPHONE NUMBER (305) 415-6946. IN ADVANCE OF ANY CONSTRUCTION ACTIVITY RESTRICTING HORIZONTAL AND/OR VERTICAL CLEARANCES THE CONTRACTOR SHALL SUBMIT TO THE COUNTY A CONSTRUCTION PLAN APPROVED BY THE USCG.
7. TIDAL ELEVATIONS WERE OBTAINED FROM DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) PERMIT NO. 36-0213088-001, ISSUED OCTOBER 3, 2003: MHW=+1.14 FT, HIGH WATER = +1.43', LOW WATER = 0.0' FT USING NGVD29.
8. THE CONTRACTOR SHALL ACQUIRE AND MAINTAIN ALL FEDERAL, STATE, AND LOCAL PERMITS REQUIRED FOR CONSTRUCTION.
9. THIS PROJECT IS LOCATED IN THE MATLACHA PASS AQUATIC PRESERVE. NO DEGRADATION OF WATER QUALITY, AND/OR THE DISCHARGE OF ANY FOREIGN MATERIAL INTO THE WATER SHOULD BE PERMITTED.
10. THE CONTRACTOR SHALL PROVIDE AN EROSION, SEDIMENTATION, AND POLLUTION PREVENTION PLAN, AND PROVIDE CONTROL DEVICES INCLUDING MONITORING, REPORTING AND MAINTENANCE.
11. ANY MATERIAL TO BE STOCKPILED FOR PERIODS GREATER THAN 24 HOURS SHALL BE PROTECTED BY APPROPRIATE EROSION CONTROL DEVICES.
12. THE CONTRACTOR SHALL MAINTAIN CURRENT WATER QUALITY CONDITIONS AND PROVIDE TURBIDITY BARRIERS DURING CONSTRUCTION TO AVOID TURBID RUNOFF.
13. THE FOLLOWING FEDERALLY AND STATE LISTED ANIMAL SPECIES COULD INHABIT OR MIGRATE THROUGH THE CONSTRUCTION AREA: WEST INDIAN MANATEE, SMALLTOOTH SAWFISH, MARINE TURTLES, AND AMERICAN CROCODILE. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL AND STATE REQUIREMENTS REGARDING ENDANGERED AND THREATENED SPECIES AND STATE LISTED SPECIES OF SPECIAL CONCERN. SHOULD THESE SPECIES BE ENCOUNTERED, THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER WITHIN 24 HOURS OF EACH ENCOUNTER.
14. SEAGRASS BEDS AND OTHER BENTHIC COMMUNITIES EXIST IN THE PROJECT AREA. THE CONTRACTOR SHALL PREVENT CONTACT WITH THE SEABED IN THESE AREAS AND ANY DISTURBANCE OF BOTTOM SEDIMENT (E.G. FROM MOVING OR ANCHORING BARGES AND OTHER STRUCTURES). THE CONTRACTOR SHALL NOT SHADE ANY BENTHIC COMMUNITY FROM DIRECT SUNLIGHT FOR MORE THAN TWO WEEKS. ANCHORING LOCATIONS SHALL BE APPROVED BY THE PROJECT ENGINEER.
15. ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY THE CONTRACTOR OR ANY SUB-CONTRACTOR SHALL BE RESTORED TO ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
16. CONSTRUCTION WORK HOURS SHALL BE FROM 8:00AM TO 7:00PM SEVEN DAYS A WEEK.

REVISIONS						VINCENT ZALIAUSKAS, P.E. P.E. LICENSE NUMBER 60524 HIGHSPANS ENGINEERING, INC. 2121 MCGREGOR BOULEVARD SUITE 200 FORT MYERS, FL 33901 REGISTRY NO. 27559	DRAWN BY: SDS 6/19 CHECKED BY: CLH 6/19 DESIGNED BY: RMW 6/19 CHECKED BY: VAZ 6/19	LEE COUNTY FACILITIES CONSTRUCTION & MANAGEMENT			SHEET TITLE:  GENERAL NOTES (1 OF 2)	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	PROJECT NO.		
								LEE		PROJECT NAME: MATLACHA FISHING PIER REPLACEMENT	SHEET NO. 2	

**NOISE BEST MANAGEMENT PRACTICES (BMPS) FOR PILING INSTALLATION**

THE FOLLOWING BEST MANAGEMENT PRACTICES ARE DESIGNED TO REDUCE THE EXPOSURE TO SEA TURTLES, SMALLTOOTH SAWFISH, AND STURGEON TO POTENTIAL HARMFUL DAILY NOISE EXPOSURE LEVELS ASSOCIATED WITH PILE DRIVING DURING DOCK AND SEAWALL CONSTRUCTION ACTIVITIES.

NOISE BMP PLAN A (FOR ALL PROJECTS): SEA TURTLE, SMALLTOOTH SAWFISH, AND STURGEON CONSTRUCTION CONDITIONS.

THE PERMITTEE SHALL COMPLY WITH THE FOLLOWING PROTECTED SPECIES CONSTRUCTION CONDITIONS:

- A. ALL CONSTRUCTION PERSONNEL ARE RESPONSIBLE FOR OBSERVING WATER-RELATED ACTIVITIES TO DETECT THE PRESENCE OF THESE SPECIES.
- B. THE PERMITTEE SHALL ADVISE ALL CONSTRUCTION PERSONNEL THAT THERE ARE CIVIL AND CRIMINAL PENALTIES FOR HARMING, HARASSING, OR KILLING SPECIES PROTECTED UNDER THE ENDANGERED SPECIES ACT OF 1973.
- C. SILTATION BARRIERS SHALL BE MADE OF MATERIAL IN WHICH PROTECTED SPECIES CANNOT BECOME ENTANGLED, BE PROPERLY SECURED, AND BE REGULARLY MONITORED TO AVOID PROTECTED SPECIES' ENTRAPMENT. BARRIERS MAY NOT BLOCK PROTECTED SPECIES 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. IF A PROTECTED SPECIES IS SEEN WITHIN 100 yd OF THE ACTIVE DAILY CONSTRUCTION/DREDGING 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 ft OF A PROTECTED SPECIES. OPERATION OF ANY MECHANICAL CONSTRUCTION EQUIPMENT SHALL CEASE IMMEDIATELY IF A PROTECTED SPECIES 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.
- E. ANY INJURY TO A PROTECTED SPECIES SHALL BE REPORTED IMMEDIATELY TO THE NATIONAL MARINE FISHERIES SERVICE'S PROTECTED RESOURCES DIVISION (727-824-5312) AND THE LOCAL AUTHORIZED SEA TURTLE STRANDING/RESCUE ORGANIZATION.
- F. ALL WORK MUST OCCUR DURING DAYLIGHT HOURS.

NOISE BMP PLAN B (FOR IMPACT PILE-DRIVING INSTALLATION OF 6 OR MORE CONCRETE PILES PER DAY)

THE PERMITTEE SHALL FOLLOW ALL CONDITIONS DEFINED IN THE NOISE BMP PLAN A ABOVE PLUS THE CONDITIONS PROVIDED BELOW:

- 1. IT MUST BE DETERMINED IF THE PROJECT OCCURS IN OPEN WATER OR A CONFINED SPACE. THIS DIFFERENTIATION IS IMPORTANT BECAUSE IF A PROJECT OCCURS IN A CONFINED SPACE, AN ANIMAL MAY NOT MOVE THROUGH OR PAST A NOISE SOURCE TO ESCAPE IT. A CONFINED SPACE IS DEFINED AS ANY AREA THAT HAS A SOLID OBJECT (E.G., SHORELINE, SEAWALL, JETTY) OR STRUCTURE WITHIN 150 FEET (ft) OF THE PILE INSTALLATION SITE THAT WOULD EFFECTIVELY SERVE AS A BARRIER OR OTHERWISE PREVENT ANIMALS FROM MOVING PAST IT TO EXIT THE AREA. THIS DOES NOT INCLUDE OBJECTS SUCH AS DOCKS OR OTHER PILE-SUPPORTED STRUCTURES THAT WOULD NOT STOP ANIMAL MOVEMENT OR SIGNIFICANTLY REFLECT NOISE.
- 2. IF THE PROJECT IS LOCATED IN OPEN WATER, UP TO 10 CONCRETE PILES MEASURING UP TO 24-in DIAMETER MAY BE INSTALLED PER DAY.
- 3. IF THE PROJECT IS LOCATED IN A CONFINED SPACE, UP TO 5 CONCRETE PILES MEASURING UP TO 24-in DIAMETER MAY BE INSTALLED PER DAY.
- 4. IF MORE THAN 5 PILES WILL BE INSTALLED PER DAY IN A CONFINED SPACE, NOISE ABATEMENT MEASURES (BELOW) ARE REQUIRED FOR ALL OF THE CONCRETE PILES INSTALLED THAT DAY WITH A MAXIMUM OF 10 PILES INSTALLED PER DAY.

NOISE ABATEMENT MEASURES: APPROVED NOISE ABATEMENT MEASURES INCLUDE NOISE ATTENUATION PILES (TNAP) AND/OR BUBBLE CURTAINS.

TNAP DESIGN MUST BE CONSTRUCTED OF A DOUBLE-WALLED TUBULAR CASING (A CASING WITHIN A LARGER CASING), WITH AT LEAST A 5-in WIDE HOLLOW SPACE COMPLETELY FILLED WITH CLOSED-CELL FOAM OR OTHER NOISE DAMPENING MATERIAL BETWEEN THE WALLS. THE TNAP MUST BE LONG ENOUGH TO BE SEATED FIRMLY ON THE SEA BOTTOM, FIT OVER THE PILE BEING DRIVEN, AND EXTEND AT LEAST 3 ft ABOVE THE SURFACE OF THE WATER.

BUBBLE CURTAIN DESIGN MUST ADHERE TO THE GUIDELINES FOR UNCONFINED AND CONFINED BUBBLE CURTAINS DEFINED BELOW, AND BE FOLLOWED AS DETAILED IN THE USACE PERMIT APPLICATION. THE USE OF ANY OTHER ALTERNATIVE NOISE CONTROL METHOD MUST RECEIVE PRIOR APPROVAL BY NMFS AND THE USACE.

IF THE REQUIRED NOISE ABATEMENT MEASURE DISCUSSED ABOVE CANNOT BE USED, THEN THE PILE MUST BE INSTALLED BY A DIFFERENT METHOD USING THE APPROPRIATE NOISE BMPS DEFINED IN THIS DOCUMENT. (E.G., CONCRETE PILES MAY BE INSTALLED BY VIBRATORY HAMMER INSTEAD, FOLLOWING BMP PLAN A).

BUBBLE CURTAIN SPECIFICATIONS FOR PILE DRIVING  
WHEN USING AN IMPACT HAMMER TO DRIVE OR PROOF CONCRETE PILES, USE ONE OF THE FOLLOWING SOUND ATTENUATION METHODS:

- 1. IF WATER VELOCITY IS EQUAL TO OR LESS THAN 1.6 ft PER SECOND (1.1 MILES PER HOUR) FOR THE ENTIRE INSTALLATION PERIOD, SURROUND THE PILE BEING DRIVEN BY A CONFINED OR UNCONFINED BUBBLE CURTAIN THAT WILL DISTRIBUTE SMALL AIR BUBBLES AROUND 100% OF THE PILE PERIMETER FOR THE FULL DEPTH OF THE WATER COLUMN.
  - A. GENERAL - AN UNCONFINED BUBBLE CURTAIN IS COMPOSED OF AN AIR COMPRESSOR(S), SUPPLY LINES TO DELIVER THE AIR, DISTRIBUTION MANIFOLDS OR HEADERS, PERFORATED AERATION PIPE, AND A FRAME. THE FRAME FACILITATES TRANSPORT AND PLACEMENT OF THE SYSTEM, KEEPS THE AERATION PIPES STABLE, AND PROVIDES BALLAST TO COUNTERACT THE BUOYANCY OF THE AERATION PIPES IN OPERATION.

B. THE AERATION PIPE SYSTEM SHALL CONSIST OF MULTIPLE LAYERS OF PERFORATED PIPE RINGS, STACKED VERTICALLY IN ACCORDANCE WITH THE FOLLOWING:

WATER DEPTH (m)	NO. OF LAYERS
0 TO LESS THAN 5	2
5 TO LESS THAN 10	4
10 TO LESS THAN 15	7
15 TO LESS THAN 20	10
20 TO LESS THAN 25	13

- C. THE PIPES IN ALL LAYERS SHALL BE ARRANGED IN A GEOMETRIC PATTERN WHICH SHALL ALLOW FOR THE PILE BEING DRIVEN TO BE COMPLETELY ENCLOSED BY BUBBLES FOR THE FULL DEPTH OF THE WATER COLUMN AND WITH A RADIAL DIMENSION SUCH THAT THE RINGS ARE NO MORE THAN 0.5 m FROM THE OUTSIDE SURFACE OF THE PILE.
  - I. THE LOWEST LAYER OF PERFORATED AERATION PIPE SHALL BE DESIGNED TO ENSURE CONTACT WITH THE SUBSTRATE WITHOUT BURIAL AND SHALL ACCOMMODATE SLOPED CONDITIONS.
  - II. AIR HOLES SHALL BE 1.6 MILLIMETER (mm) (1/16-in) IN DIAMETER AND SHALL BE SPACED APPROXIMATELY 20 mm (3/4 in) APART. AIR HOLES WITH THIS SIZE AND SPACING SHALL BE PLACED IN 4 ADJACENT ROWS ALONG THE PIPE TO PROVIDE UNIFORM BUBBLE FLUX.
  - III. THE SYSTEM SHALL PROVIDE A BUBBLE FLUX 3.0 m<sup>3</sup> PER MINUTE PER LINEAR METER OF PIPE IN EACH LAYER (32.91 ft<sup>3</sup> PER MINUTE PER LIN FT OF PIPE IN EACH LAYER). THE TOTAL VOLUME OF AIR PER LAYER IS THE PRODUCT OF THE BUBBLE FLUX AND THE CIRCUMFERENCE OF THE RING:
    - Vt = 3.0 m<sup>3</sup>/min/m \* CIRCUMFERENCE OF THE AERATION RING IN m
    - OR
    - Vt = 32.91 ft<sup>3</sup>/min/ft \* CIRCUMFERENCE OF THE AERATION RING IN ft

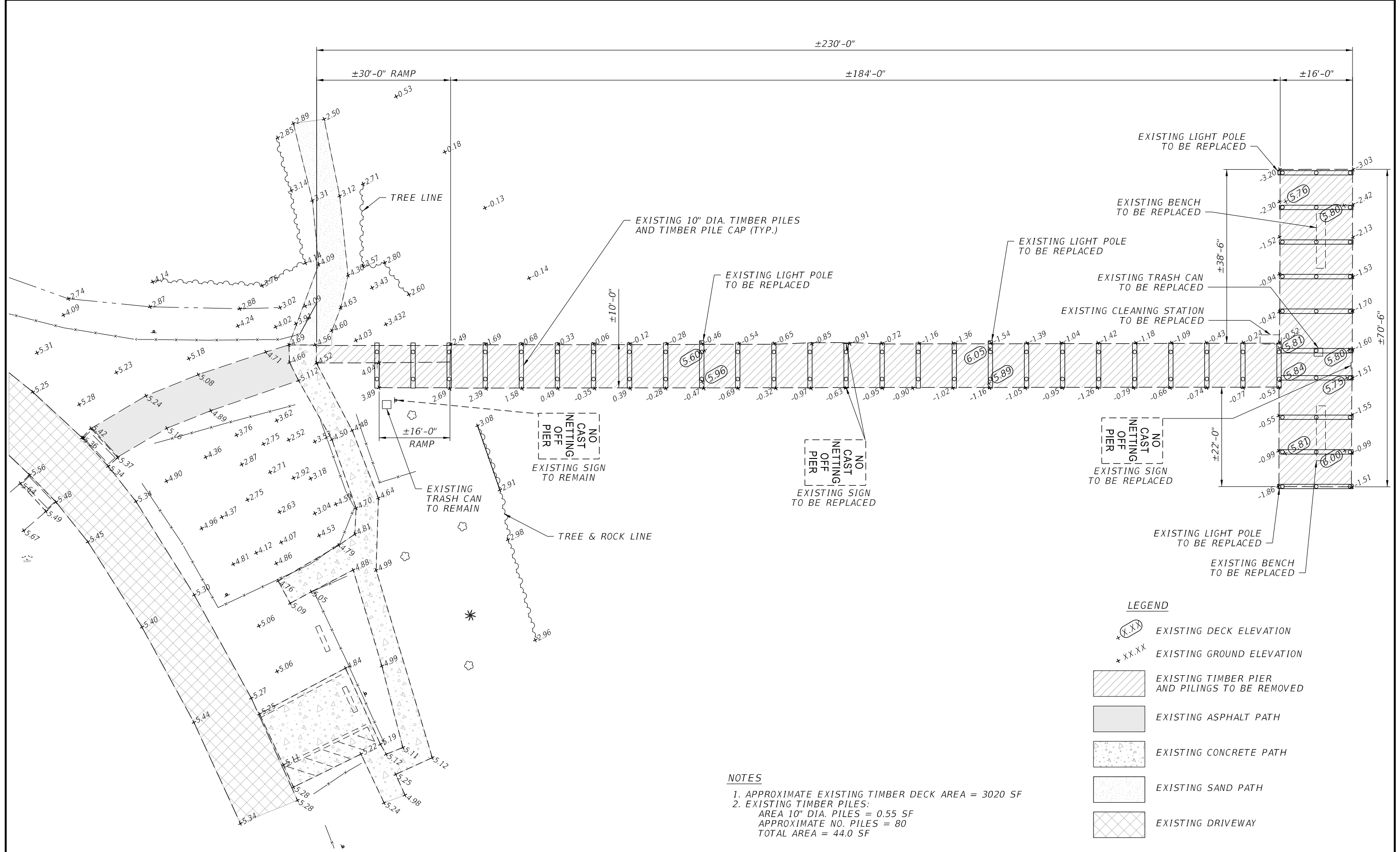
- IV. METERS SHALL BE PROVIDED AS FOLLOWS:
  - PRESSURE METERS SHALL BE INSTALLED AT ALL INLETS TO AERATION PIPELINES AND AT POINTS OF LOWEST PRESSURE IN EACH BRANCH OF THE AERATION PIPELINE.
  - FLOW METERS SHALL BE INSTALLED IN THE MAIN LINE AT EACH COMPRESSOR AND AT EACH BRANCH OF THE AERATION PIPELINES AT EACH INLET. IN APPLICATIONS WHERE THE FEED LINE FROM THE COMPRESSOR IS CONTINUOUS FROM THE COMPRESSOR TO THE AERATION PIPE INLET, THE FLOW METER AT THE COMPRESSOR CAN BE ELIMINATED.
  - FLOW METERS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATION BASED ON EITHER LAMINAR FLOW OR NON-LAMINAR FLOW.

- 2. IF WATER VELOCITY IS GREATER THAN 1.6 ft PER SECOND (1.1 MILES PER HOUR) AT ANY POINT DURING INSTALLATION OR IF CONSTRUCTING A SEAWALL, SURROUND THE PILE OR AREA BEING DRIVEN BY A CONFINED BUBBLE CURTAIN (E.G., A BUBBLE RING SURROUNDED BY A FABRIC OR NON-METALLIC SLEEVE). THE CONFINED BUBBLE CURTAIN WILL DISTRIBUTE AIR BUBBLES AROUND 100% OF THE PILE PERIMETER FOR THE FULL DEPTH OF THE WATER COLUMN, ACCORDING TO SPECIFICATIONS BELOW.

- A. GENERAL - A CONFINED BUBBLE CURTAIN IS COMPOSED OF AN AIR COMPRESSOR(S), SUPPLY LINES TO DELIVER THE AIR, DISTRIBUTION MANIFOLDS OR HEADERS, PERFORATED AERATION PIPE(S), AND A MEANS OF CONFINING THE BUBBLES.
- B. THE CONFINEMENT SHALL EXTEND FROM THE SUBSTRATE TO A SUFFICIENT ELEVATION ABOVE THE MAXIMUM WATER LEVEL EXPECTED DURING PILE INSTALLATION SUCH THAT WHEN THE AIR DELIVERY SYSTEM IS ADJUSTED PROPERLY, THE BUBBLE CURTAIN DOES NOT ACT AS A WATER PUMP (I.E., LITTLE OR NO WATER SHOULD BE PUMPED OUT OF THE TOP OF THE CONFINEMENT SYSTEM).
- C. THE CONFINEMENT SHALL CONTAIN RESILIENT PILE GUIDES THAT PREVENT THE PILE AND THE CONFINEMENT FROM COMING INTO CONTACT WITH EACH OTHER AND DO NOT TRANSMIT VIBRATIONS TO THE CONFINEMENT SLEEVE AND INTO THE WATER COLUMN (E.G., RUBBER SPACERS, AIR-FILLED CUSHIONS).
- D. IN-WATER LESS THAN 15 m DEEP, THE SYSTEM SHALL HAVE A SINGLE AERATION RING AT THE SUBSTRATE LEVEL. IN-WATERS GREATER THAN 15 m DEEP, THE SYSTEM SHALL HAVE AT LEAST 2 RINGS: 1 AT THE SUBSTRATE LEVEL AND THE OTHER AT MID-DEPTH.
- E. THE LOWEST LAYER OF PERFORATED AERATION PIPE SHALL BE DESIGNED TO ENSURE CONTACT WITH THE SUBSTRATE WITHOUT SINKING INTO THE SUBSTRATE AND SHALL ACCOMMODATE FOR SLOPED CONDITIONS.
- F. AIR HOLES SHALL BE 1.6 mm (1/16-in) IN DIAMETER AND SHALL BE SPACED APPROXIMATELY 20 mm (3/4 in) APART. AIR HOLES WITH THIS SIZE AND SPACING SHALL BE PLACED IN 4 ADJACENT ROWS ALONG THE PIPE TO PROVIDE UNIFORM BUBBLE FLUX.
- G. THE SYSTEM SHALL PROVIDE A BUBBLE FLUX OF 2.0 m<sup>3</sup> PER MINUTE PER LINEAR METER OF PIPE IN EACH LAYER (21.53 ft<sup>3</sup> PER MINUTE PER LIN FT OF PIPE IN EACH LAYER). THE TOTAL VOLUME OF AIR PER LAYER IS THE PRODUCT OF THE BUBBLE FLUX AND THE CIRCUMFERENCE OF THE RING:
  - Vt = 2.0 m<sup>3</sup>/min/m \* CIRCUMFERENCE OF THE AERATION RING IN m
  - OR
  - Vt = 21.53 ft<sup>3</sup>/min/ft \* CIRCUMFERENCE OF THE AERATION RING IN ft

- H. FLOW METERS SHALL BE PROVIDED AS FOLLOWS:
  - PRESSURE METERS SHALL BE INSTALLED AT ALL INLETS TO AERATION PIPELINES AND AT POINTS OF LOWEST PRESSURE IN EACH BRANCH OF THE AERATION PIPELINE.
  - FLOW METERS SHALL BE INSTALLED IN THE MAIN LINE AT EACH COMPRESSOR AND AT EACH BRANCH OF THE AERATION PIPELINES AT EACH INLET. IN APPLICATIONS WHERE THE FEED LINE FROM THE COMPRESSOR IS CONTINUOUS FROM THE COMPRESSOR TO THE AERATION PIPE INLET, THE FLOW METER AT THE COMPRESSOR CAN BE ELIMINATED.
  - FLOW METERS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATION BASED ON EITHER LAMINAR FLOW OR NON-LAMINAR FLOW.

REVISIONS						VINCENT ZALIAUSKAS, P.E. P.E. LICENSE NUMBER 60524 HIGHSPANS ENGINEERING, INC. 2121 MCGREGOR BOULEVARD SUITE 200 FORT MYERS, FL 33901 REGISTRY NO. 27559	DRAWN BY: SDS 6/19 CHECKED BY: CLH 6/19 DESIGNED BY: RMW 6/19 CHECKED BY: VAZ 6/19	LEE COUNTY FACILITIES CONSTRUCTION & MANAGEMENT			SHEET TITLE:  GENERAL NOTES (2 OF 2)	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	PROJECT NO.		
								LEE		PROJECT NAME:  MATLACHA FISHING PIER REPLACEMENT	SHEET NO.  3	



**LEGEND**

- (X.XX) EXISTING DECK ELEVATION
- +XX.XX EXISTING GROUND ELEVATION
- EXISTING TIMBER PIER AND PILINGS TO BE REMOVED
- EXISTING ASPHALT PATH
- EXISTING CONCRETE PATH
- EXISTING SAND PATH
- EXISTING DRIVEWAY

**NOTES**

1. APPROXIMATE EXISTING TIMBER DECK AREA = 3020 SF
2. EXISTING TIMBER PILES:  
 AREA 10" DIA. PILES = 0.55 SF  
 APPROXIMATE NO. PILES = 80  
 TOTAL AREA = 44.0 SF

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

VINCENT ZALIAUSKAS, P.E.  
 P.E. LICENSE NUMBER 60524  
 HIGHSPANS ENGINEERING, INC.  
 2121 MCGREGOR BOULEVARD  
 SUITE 200  
 FORT MYERS, FL 33901  
 REGISTRY NO. 27559

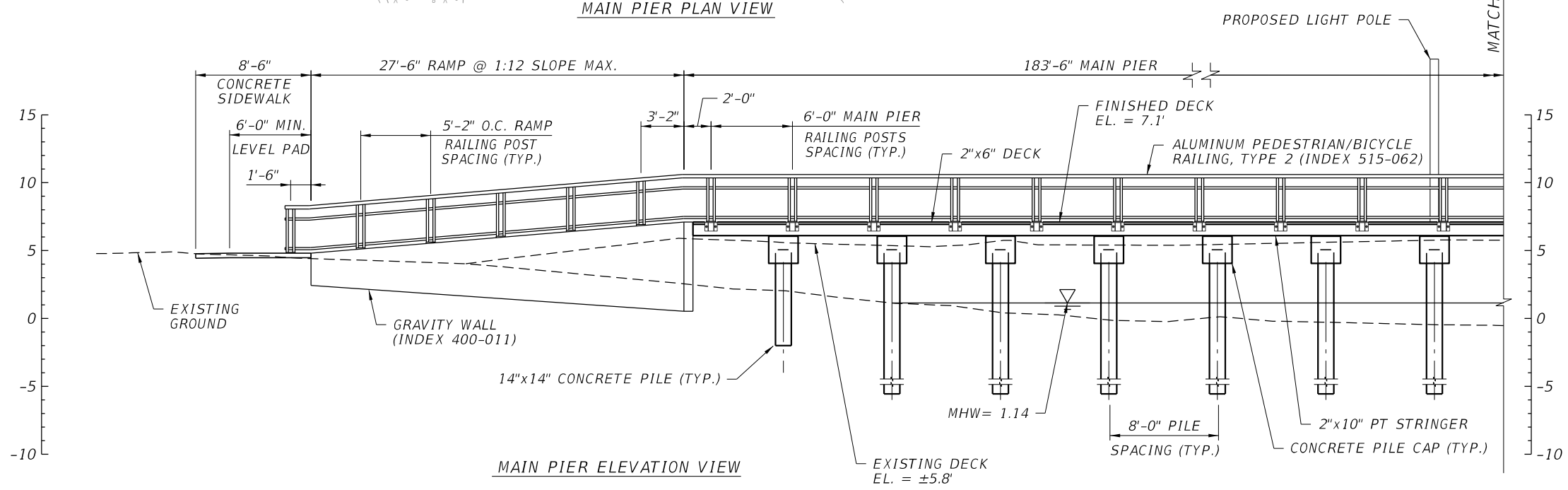
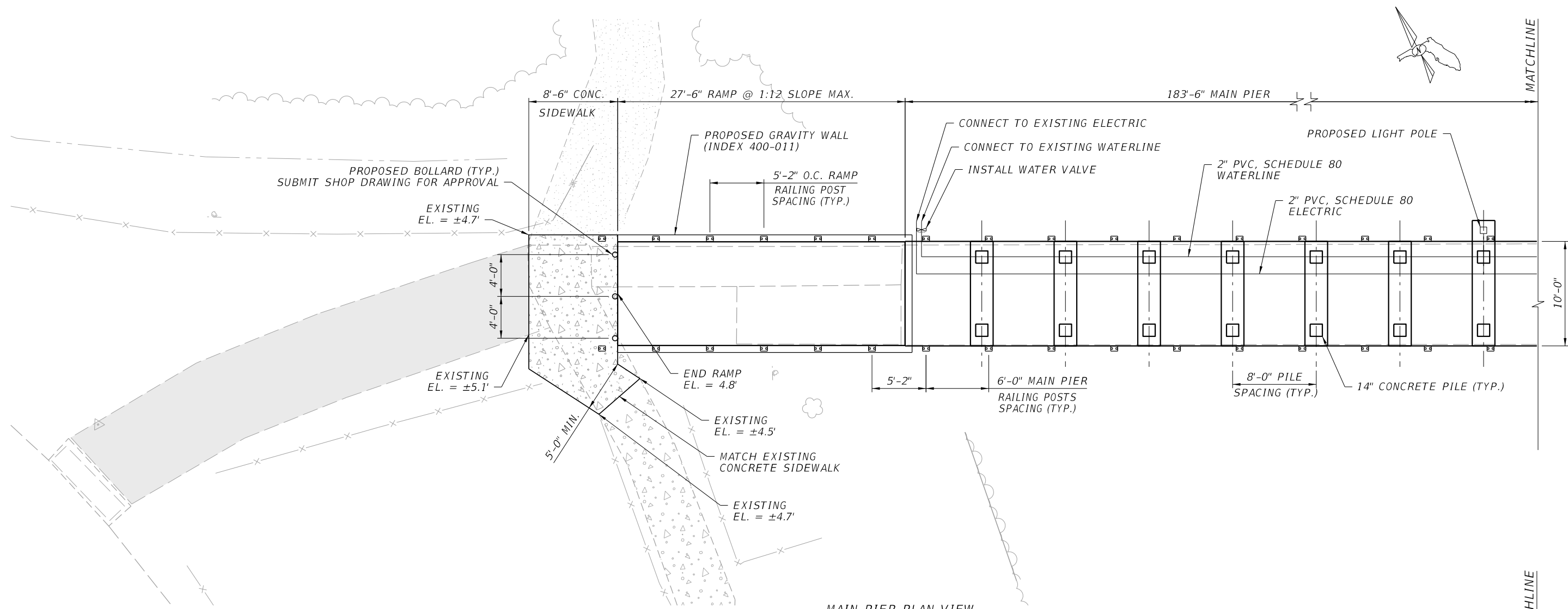
DRAWN BY: SDS 6/19  
 CHECKED BY: CLH 6/19  
 DESIGNED BY: RMW 6/19  
 CHECKED BY: VAZ 6/19

**LEE COUNTY FACILITIES  
 CONSTRUCTION & MANAGEMENT**

ROAD NO.	COUNTY	PROJECT NO.
	LEE	

SHEET TITLE: <b>EXISTING CONDITIONS</b>	REF. DWG. NO.
PROJECT NAME: <b>MATLACHA FISHING PIER REPLACEMENT</b>	SHEET NO. <b>4</b>

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

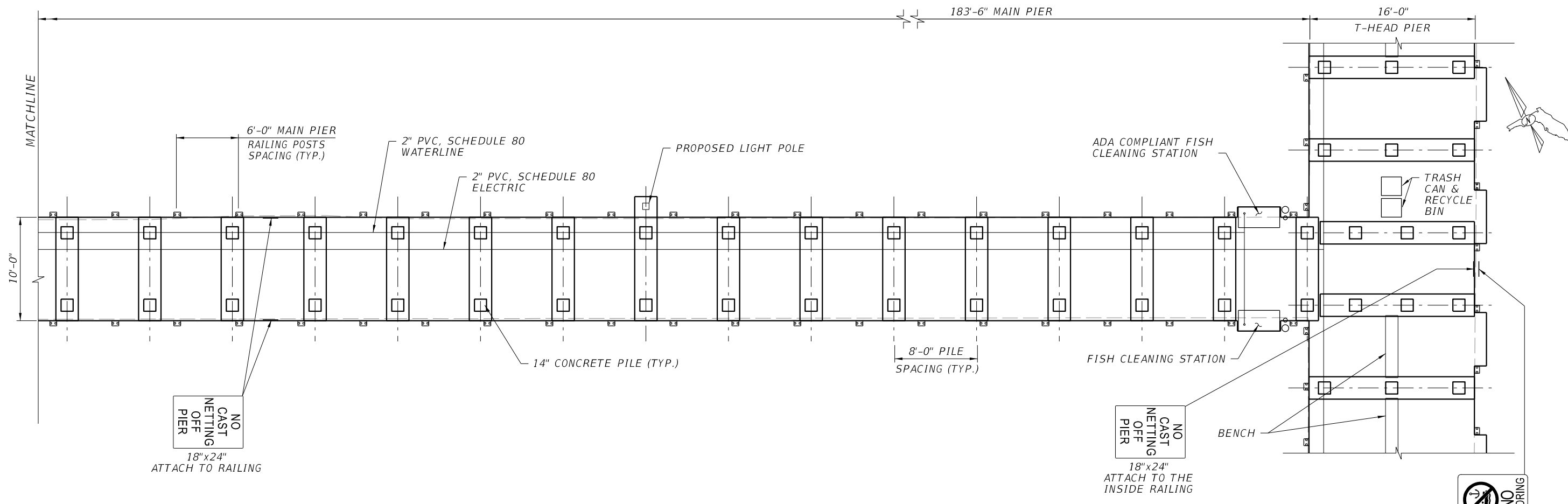


**LEGEND**

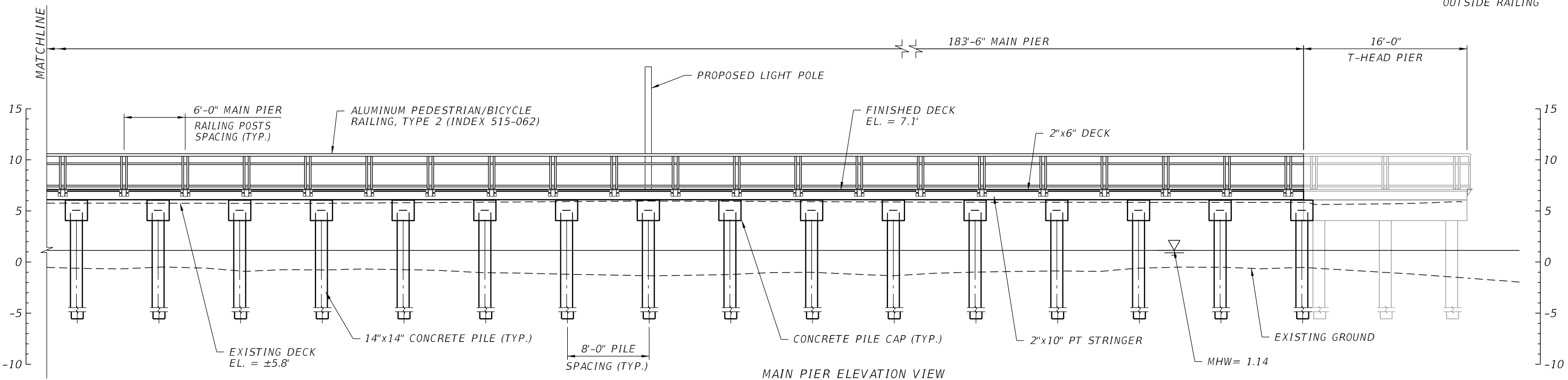
	PROPOSED CONCRETE PATH
	EXISTING CONCRETE PATH
	EXISTING ASPHALT PATH
	EXISTING SAND PATH

REVISIONS						VINCENT ZALIAUSKAS, P.E. P.E. LICENSE NUMBER 60524 HIGHSPANS ENGINEERING, INC. 2121 MCGREGOR BOULEVARD SUITE 200 FORT MYERS, FL 33901 REGISTRY NO. 27559	DRAWN BY: SDS 6/19 CHECKED BY: CLH 6/19 DESIGNED BY: RMW 6/19 CHECKED BY: VAZ 6/19	LEE COUNTY FACILITIES CONSTRUCTION & MANAGEMENT			SHEET TITLE:		REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	PROJECT NO.	PLAN AND ELEVATION (1 OF 3)		
							LEE		MAtlACHA FISHING PIER REPLACEMENT		SHEET NO.		
											5		

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



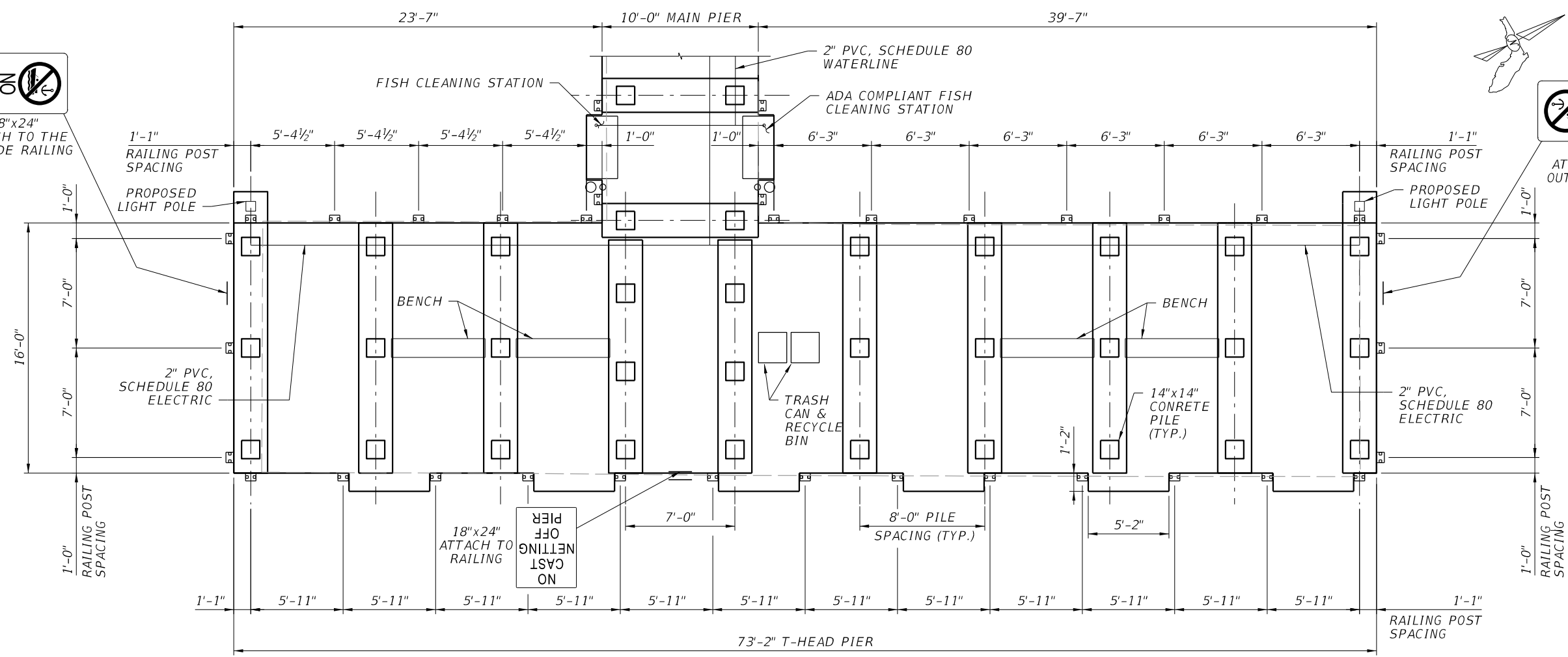
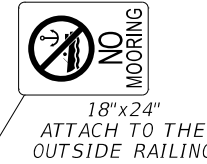
MAIN PIER PLAN VIEW



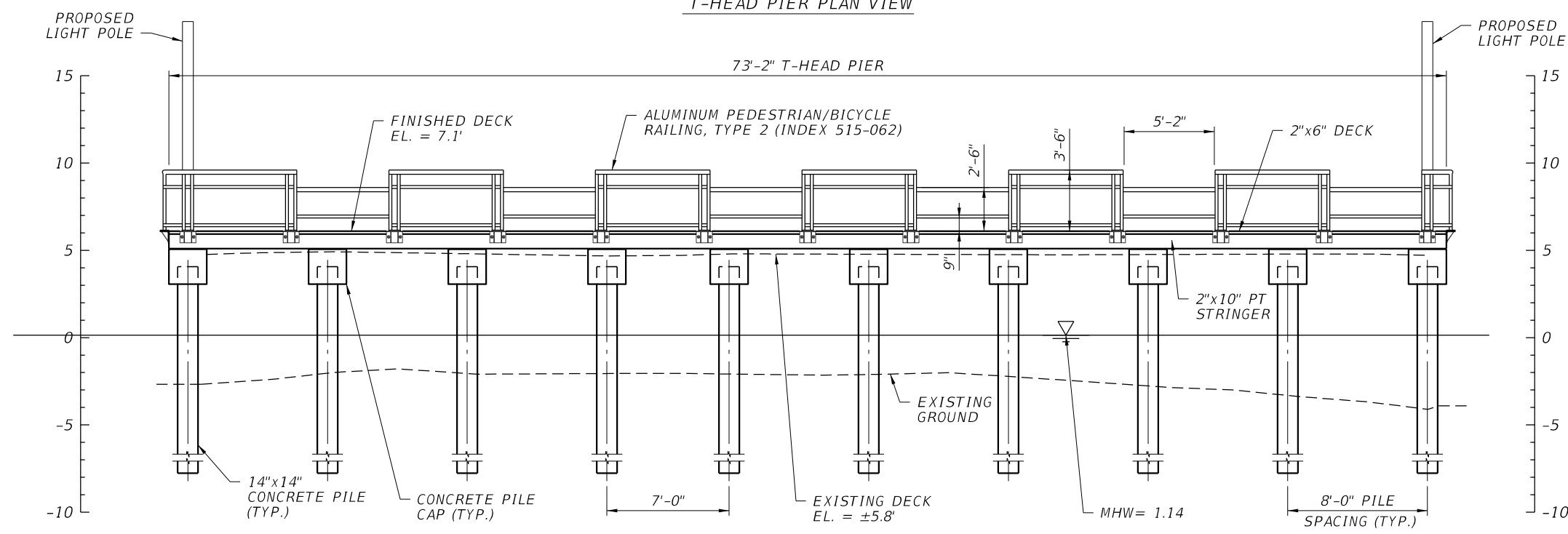
MAIN PIER ELEVATION VIEW

REVISIONS						VINCENT ZALIAUSKAS, P.E. P.E. LICENSE NUMBER 60524 HIGHSPANS ENGINEERING, INC. 2121 MCGREGOR BOULEVARD SUITE 200 FORT MYERS, FL 33901 REGISTRY NO. 27559	DRAWN BY: SDS 6/19 CHECKED BY: CLH 6/19 DESIGNED BY: RMW 6/19 CHECKED BY: VAZ 6/19	LEE COUNTY FACILITIES CONSTRUCTION & MANAGEMENT			SHEET TITLE:		REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	PROJECT NO.	PLAN AND ELEVATION (2 OF 3)		
									LEE		MATALACHA FISHING PIER REPLACEMENT		SHEET NO.
											6		

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



T-HEAD PIER PLAN VIEW



T-HEAD PIER ELEVATION VIEW

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

VINCENT ZALIAUSKAS, P.E.  
 P.E. LICENSE NUMBER 60524  
 HIGHSPANS ENGINEERING, INC.  
 2121 MCGREGOR BOULEVARD  
 SUITE 200  
 FORT MYERS, FL 33901  
 REGISTRY NO. 27559

DRAWN BY: SDS 6/19  
 CHECKED BY: CLH 6/19  
 DESIGNED BY: RMW 6/19  
 CHECKED BY: VAZ 6/19

LEE COUNTY FACILITIES  
 CONSTRUCTION & MANAGEMENT

ROAD NO. COUNTY PROJECT NO.

LEE

SHEET TITLE: PLAN AND ELEVATION (3 OF 3)

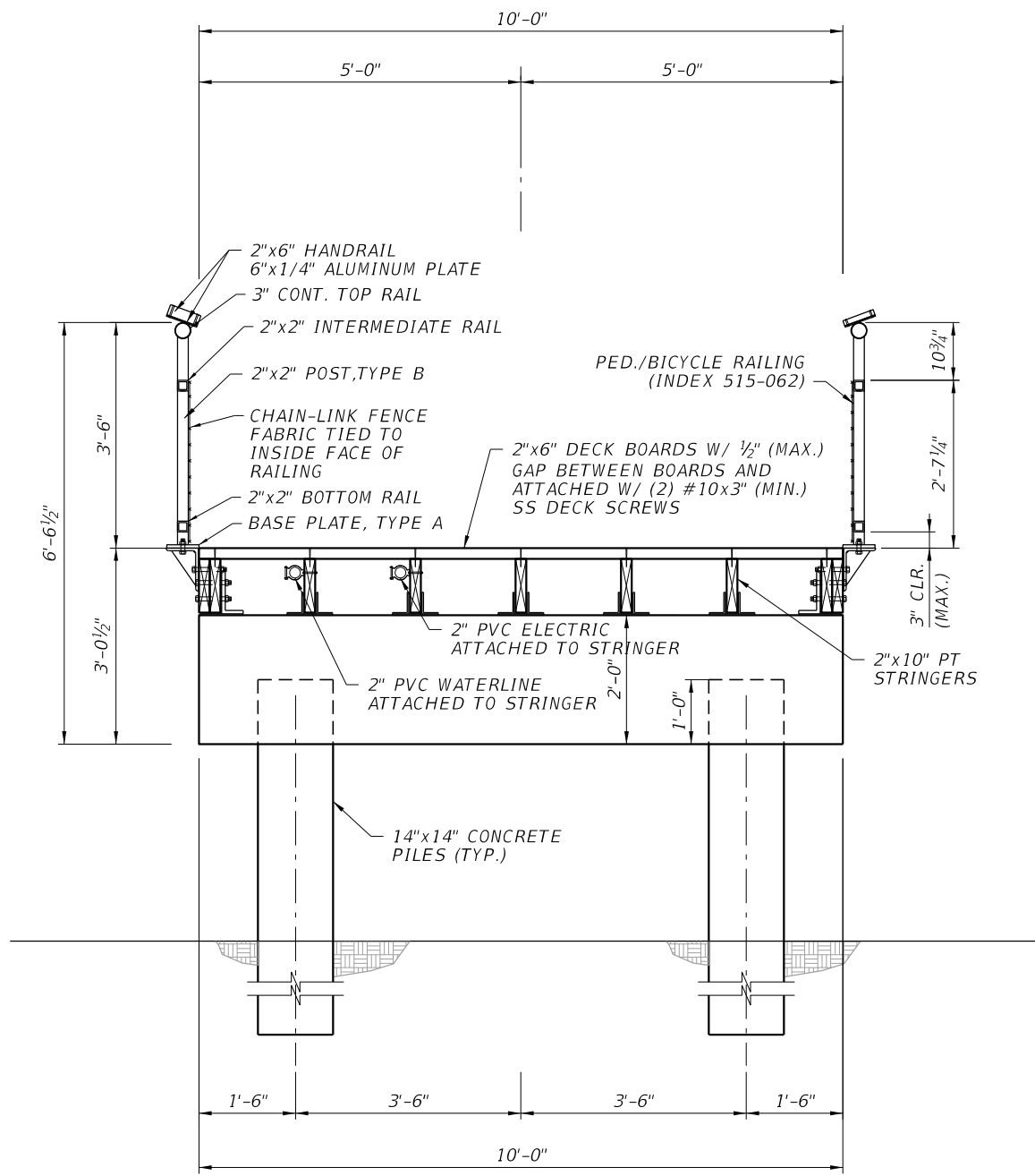
PROJECT NAME: MATLACHA FISHING PIER REPLACEMENT

REF. DWG. NO.

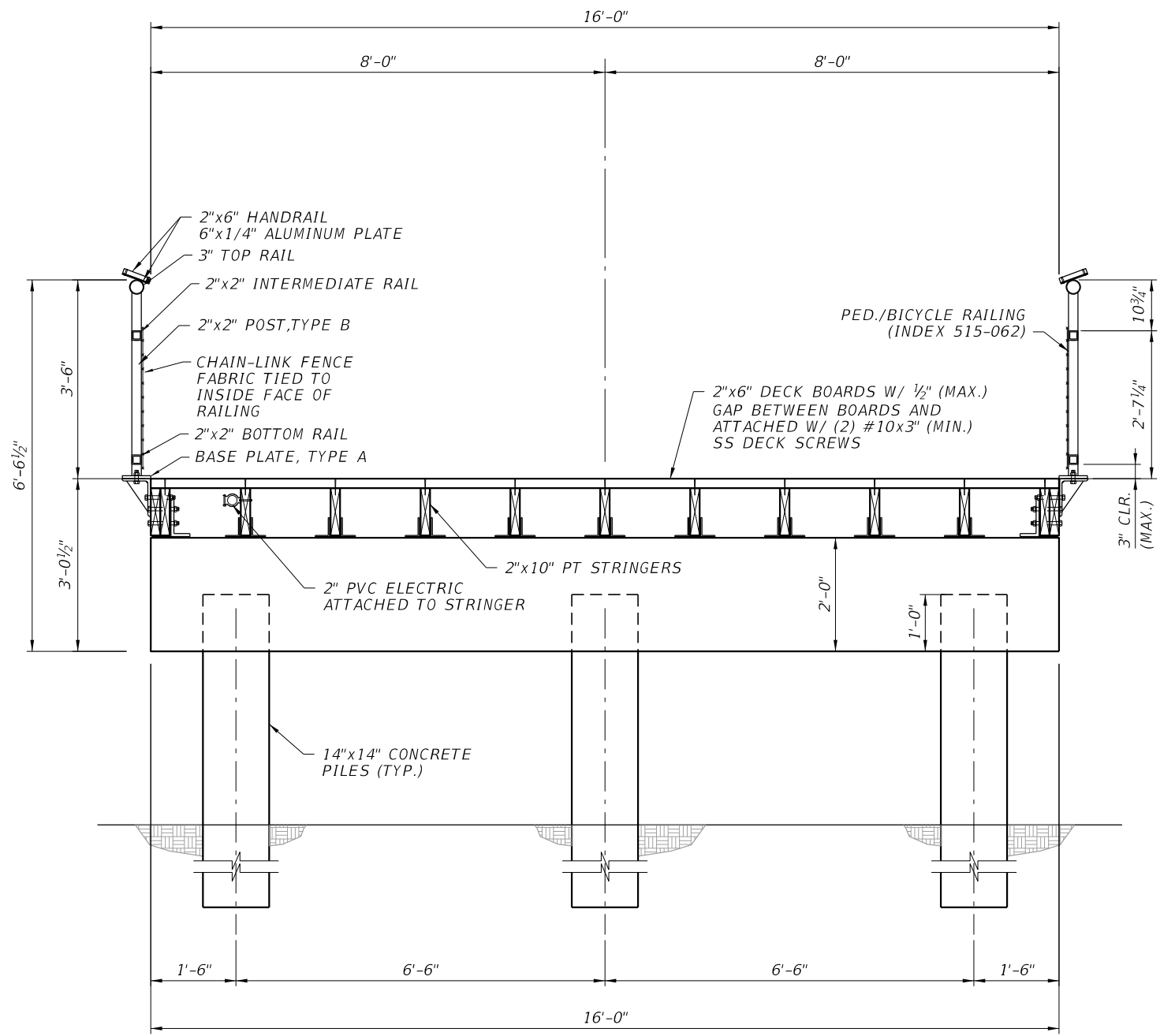
SHEET NO. 7

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





MAIN PIER TYPICAL SECTION



T-HEAD TYPICAL SECTION

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

VINCENT ZALIAUSKAS, P.E.  
P.E. LICENSE NUMBER 60524  
HIGHSPANS ENGINEERING, INC.  
2121 MCGREGOR BOULEVARD  
SUITE 200  
FORT MYERS, FL 33901  
REGISTRY NO. 27559

DRAWN BY: SDS 6/19  
CHECKED BY: CLH 6/19  
DESIGNED BY: RMW 6/19  
CHECKED BY: VAZ 6/19

LEE COUNTY FACILITIES  
CONSTRUCTION & MANAGEMENT

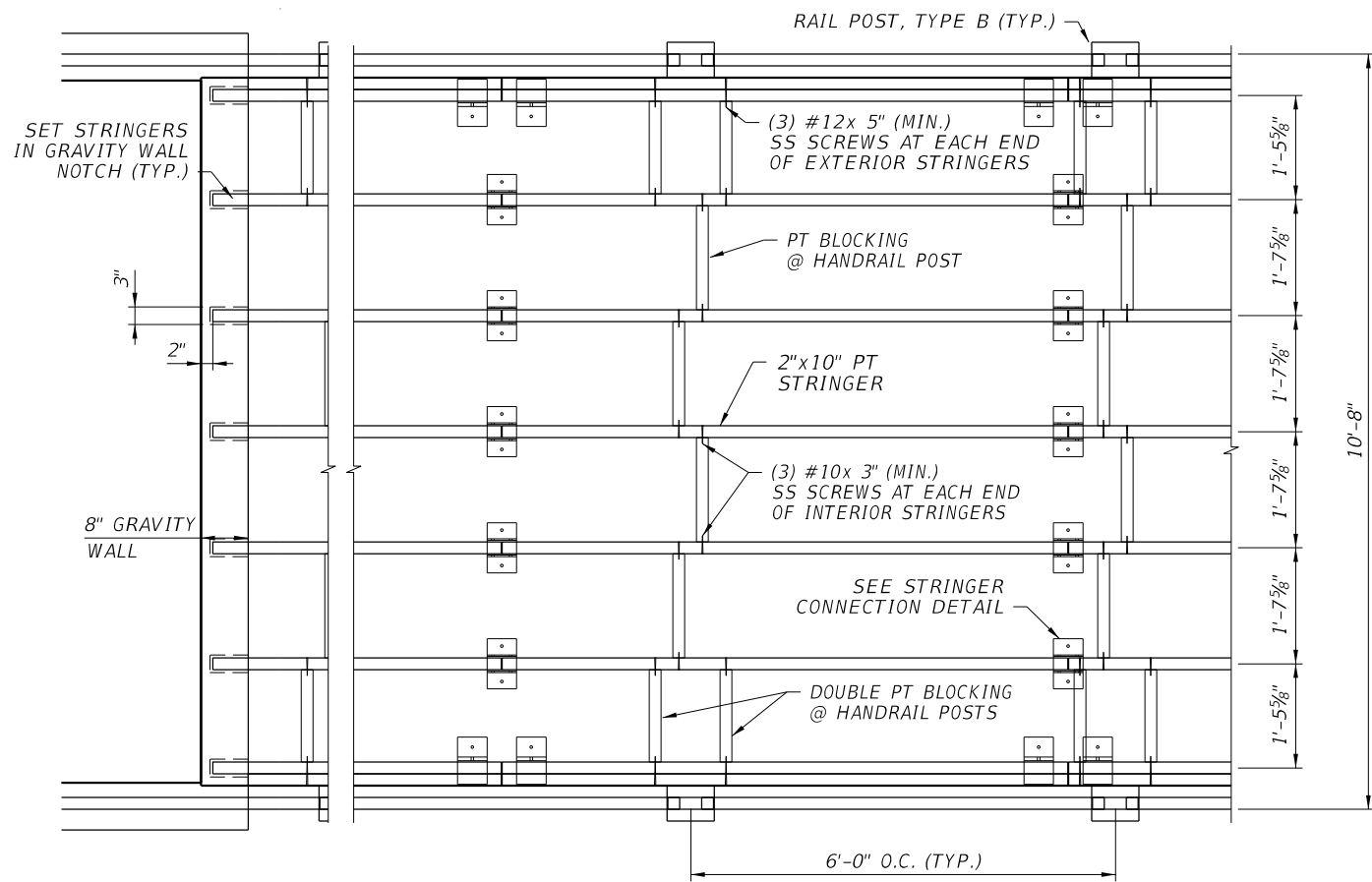
ROAD NO.	COUNTY	PROJECT NO.
	LEE	

SHEET TITLE: TYPICAL SECTIONS (1 OF 3)

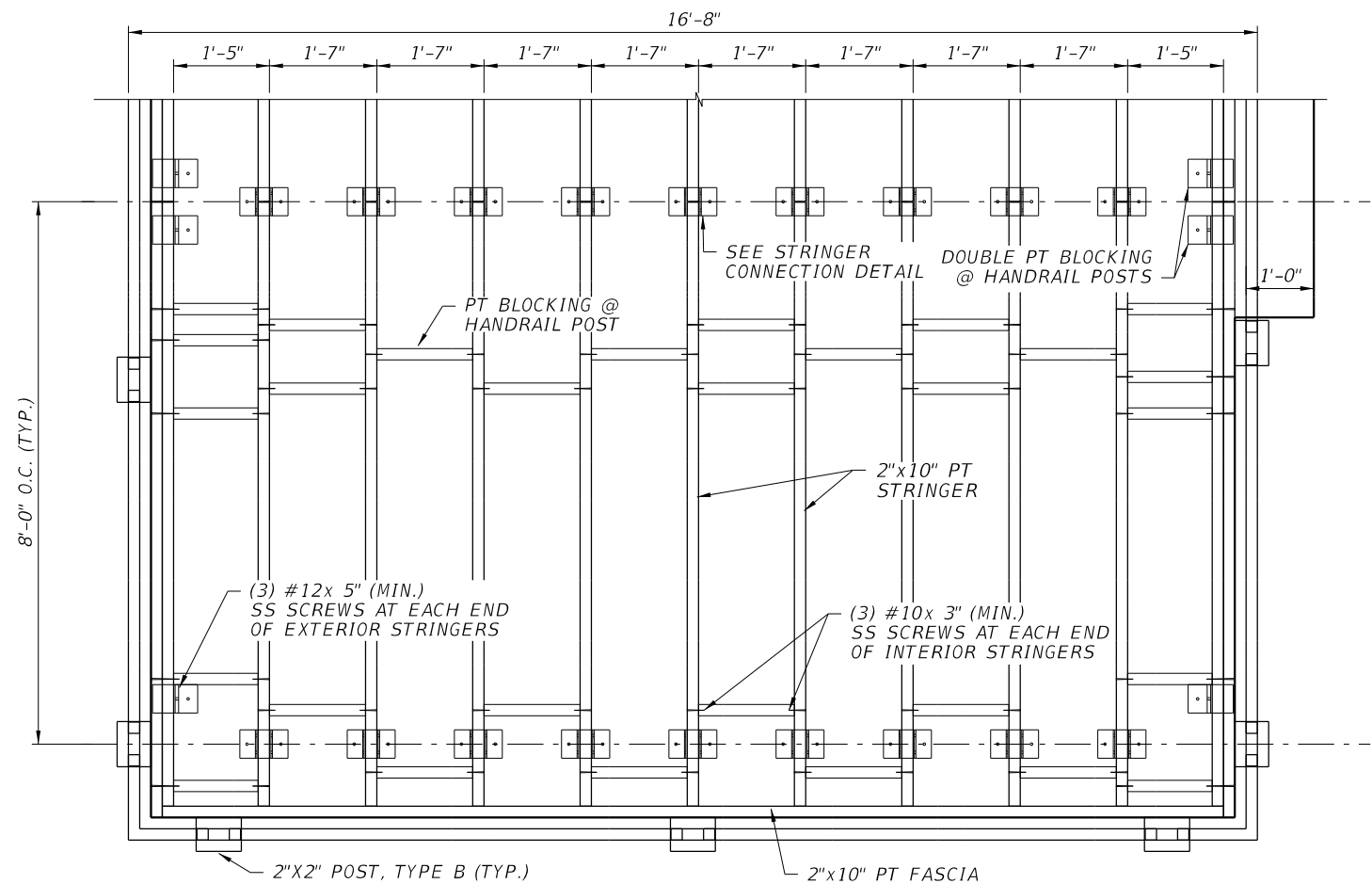
PROJECT NAME: MATLACHA FISHING PIER REPLACEMENT

REF. DWG. NO.	
SHEET NO.	8

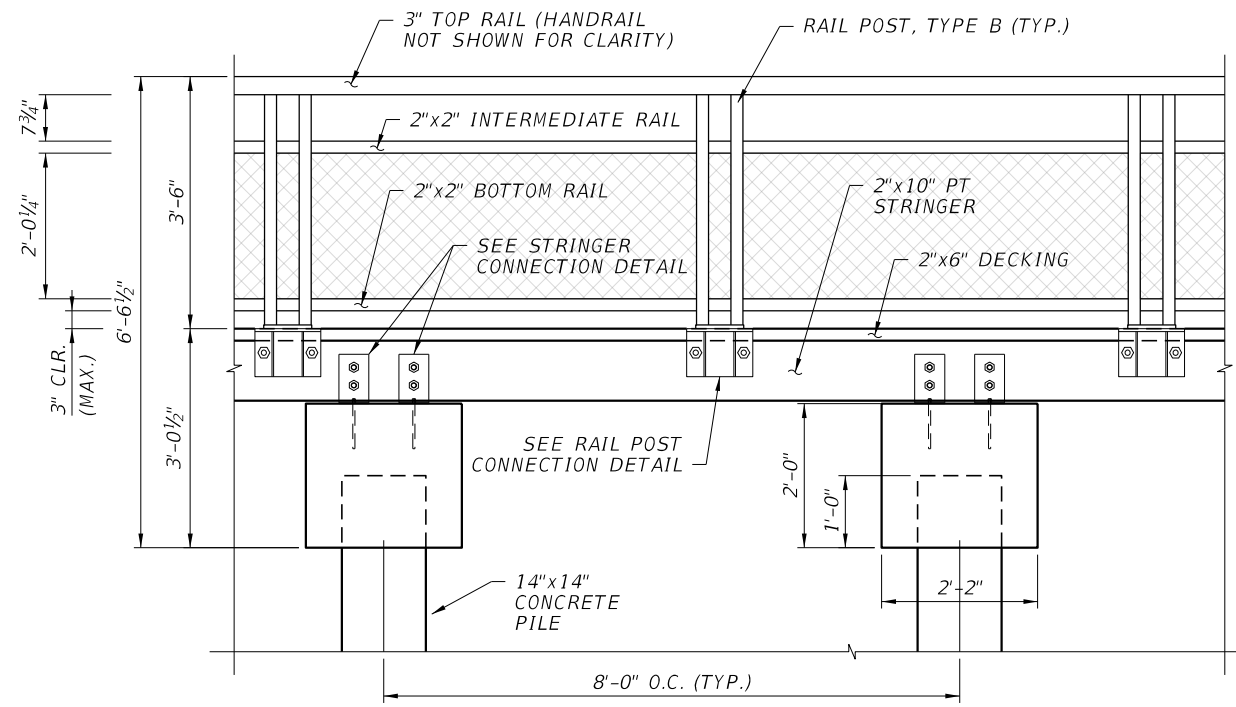
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



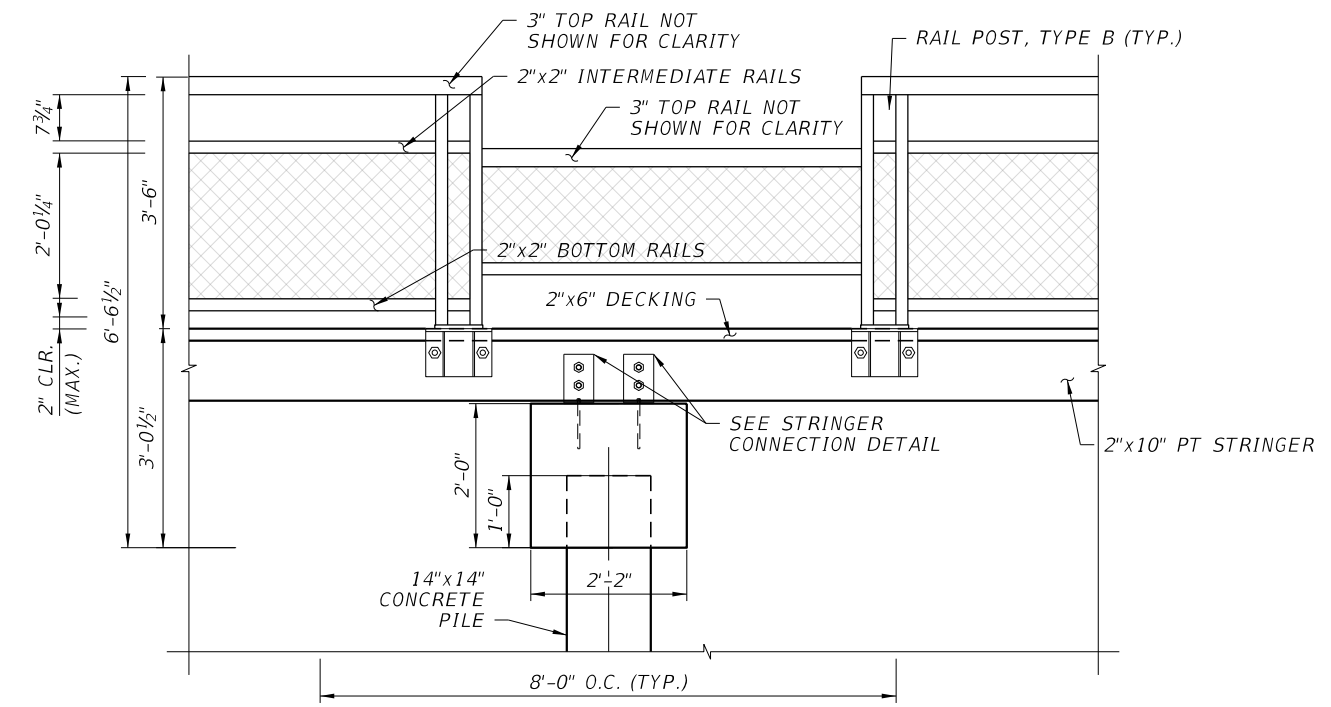
MAIN PIER PLAN VIEW TYPICAL SECTION DETAIL



T-HEAD PIER PLAN VIEW TYPICAL SECTION DETAIL



TYPICAL SECTION ELEVATION VIEW DETAIL



ADA COMPLIANT TYPICAL SECTION ELEVATION VIEW DETAIL

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

VINCENT ZALIAUSKAS, P.E.  
P.E. LICENSE NUMBER 60524  
HIGHSPANS ENGINEERING, INC.  
2121 MCGREGOR BOULEVARD  
SUITE 200  
FORT MYERS, FL 33901  
REGISTRY NO. 27559

DRAWN BY: SDS 6/19  
CHECKED BY: CLH 6/19  
DESIGNED BY: RMW 6/19  
CHECKED BY: VAZ 6/19

LEE COUNTY FACILITIES  
CONSTRUCTION & MANAGEMENT

ROAD NO. COUNTY PROJECT NO.

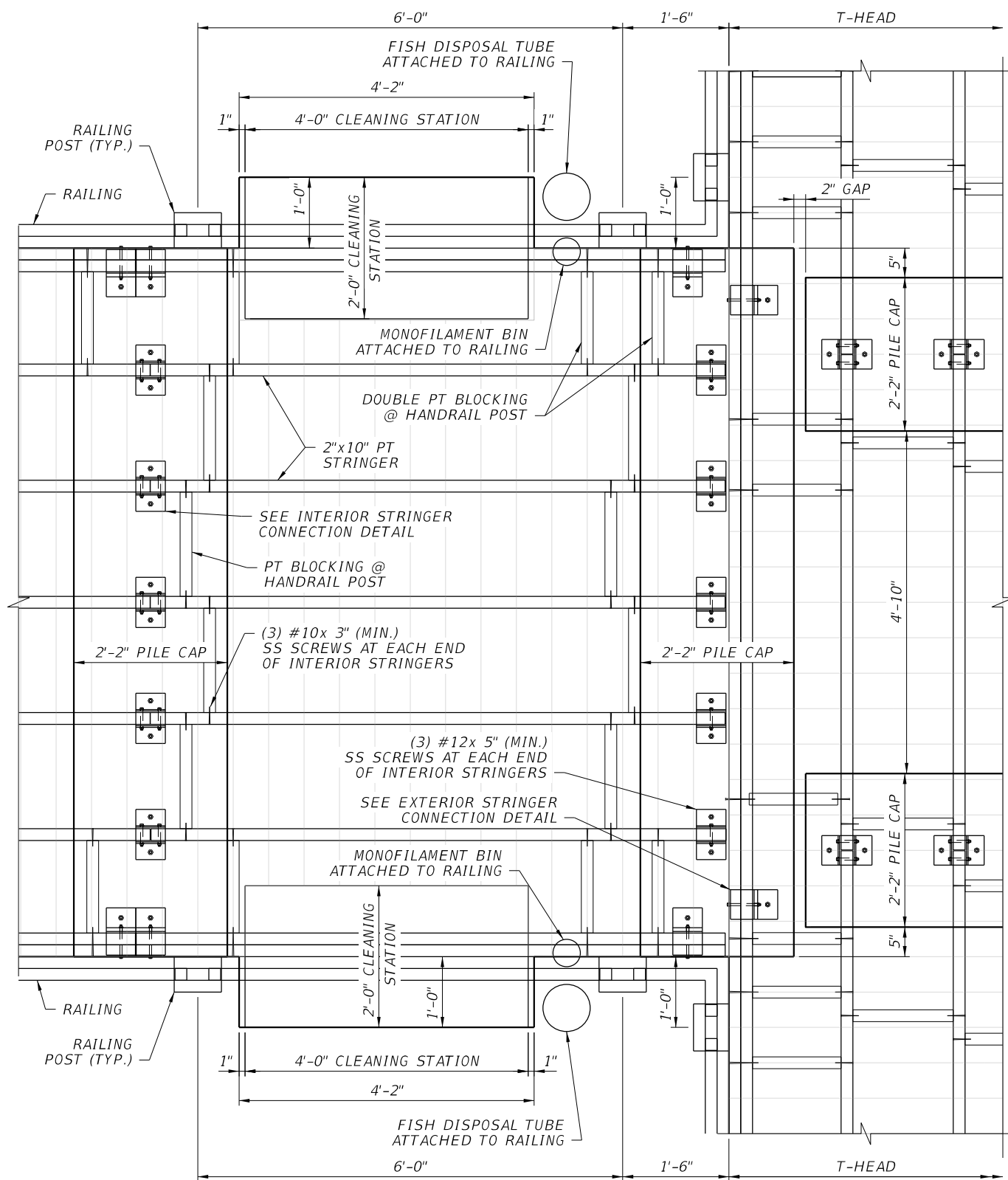
LEE

SHEET TITLE: TYPICAL SECTIONS (2 OF 3)

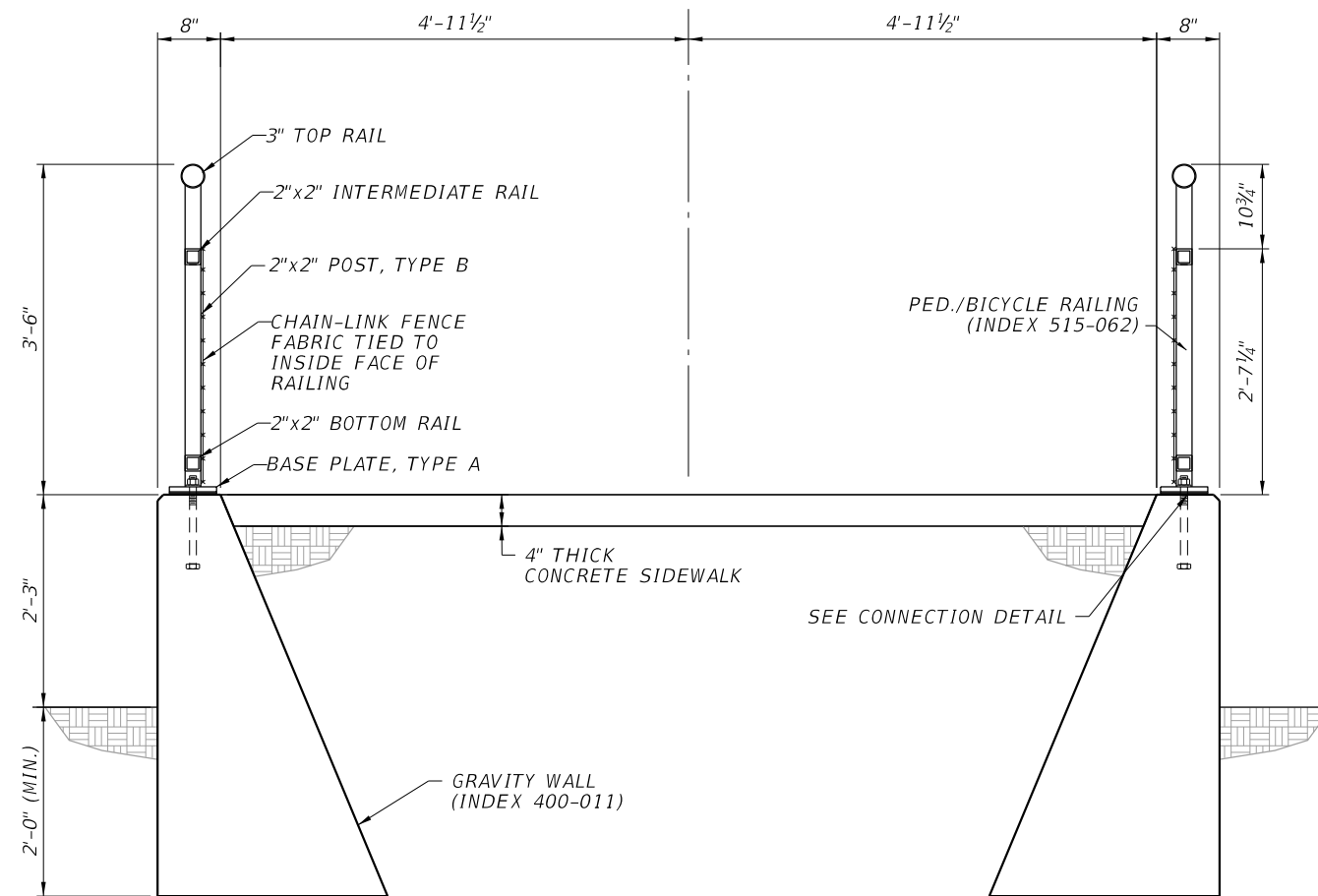
PROJECT NAME: MATLACHA FISHING PIER REPLACEMENT

REF. DWG. NO. SHEET NO. 9

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



MAIN PIER AND T-HEAD CONNECTION DETAIL



RAMP TYPICAL SECTION

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

VINCENT ZALIAUSKAS, P.E.  
 P.E. LICENSE NUMBER 60524  
 HIGHSPANS ENGINEERING, INC.  
 2121 MCGREGOR BOULEVARD  
 SUITE 200  
 FORT MYERS, FL 33901  
 REGISTRY NO. 27559

DRAWN BY: SDS 6/19  
 CHECKED BY: CLH 6/19  
 DESIGNED BY: RMW 6/19  
 CHECKED BY: VAZ 6/19

LEE COUNTY FACILITIES  
 CONSTRUCTION & MANAGEMENT

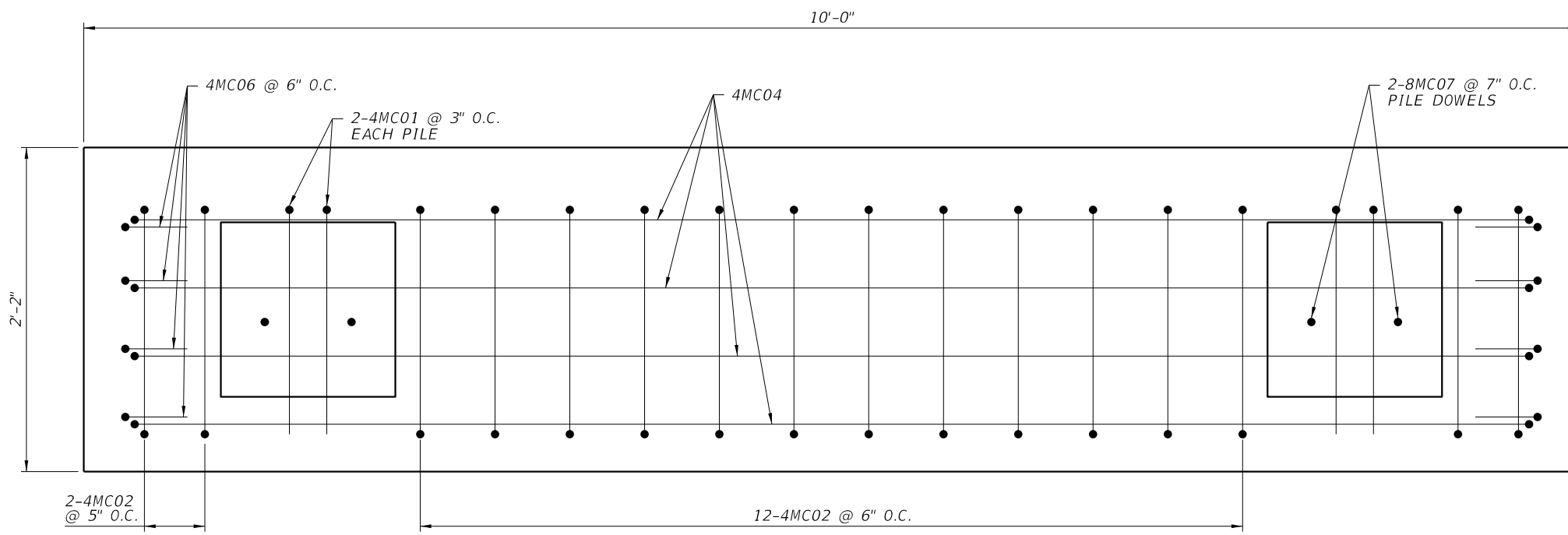
ROAD NO.	COUNTY	PROJECT NO.
	LEE	

SHEET TITLE: TYPICAL SECTIONS (3 OF 3)

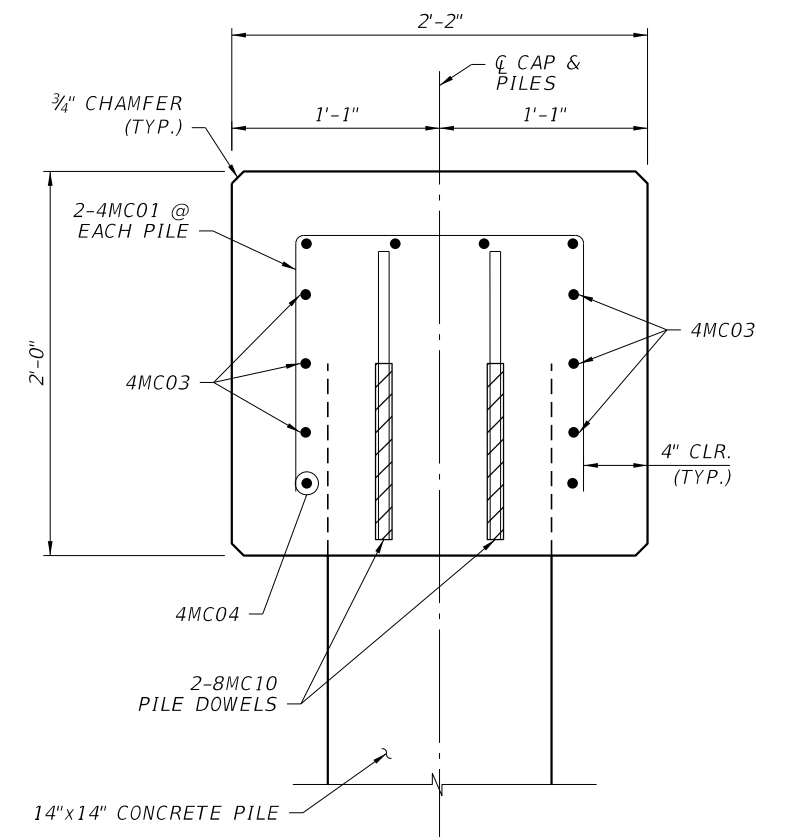
PROJECT NAME: MATLACHA FISHING PIER REPLACEMENT

REF. DWG. NO. SHEET NO. 10

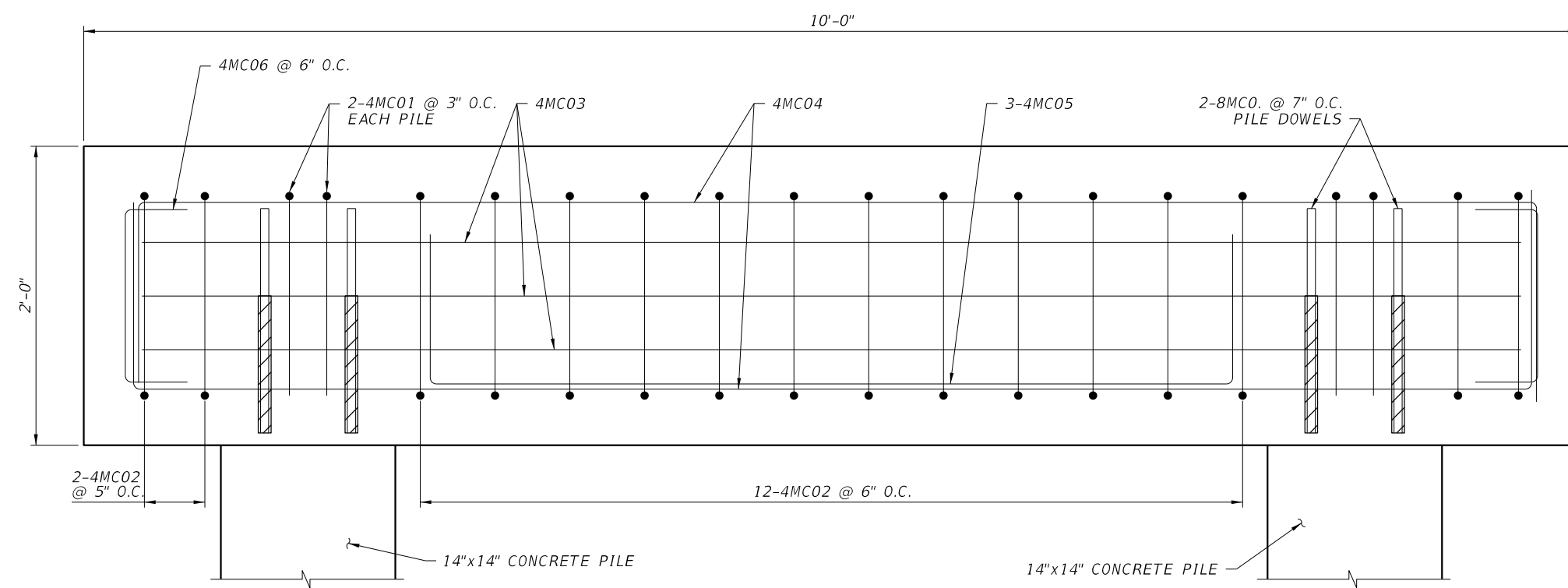
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



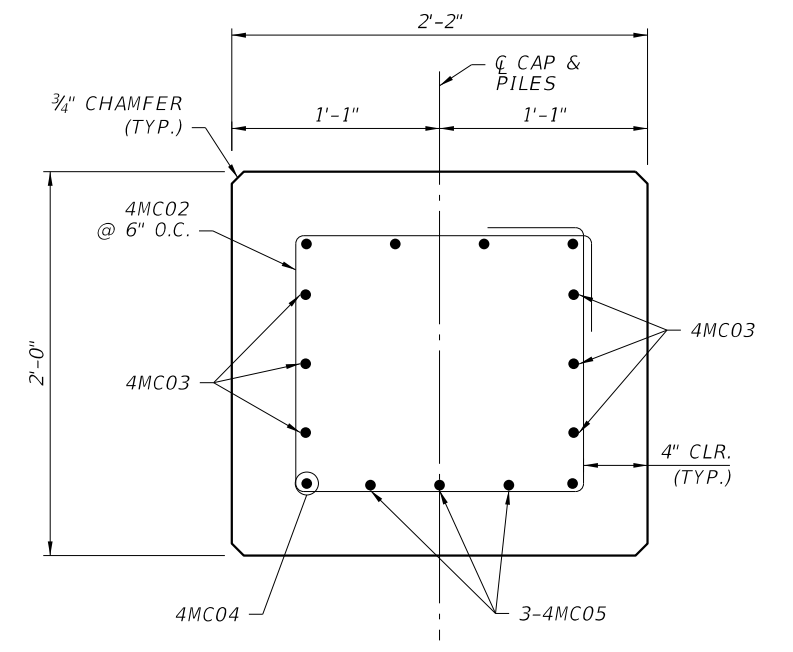
MAIN PIER PILE CAP PLAN VIEW



CAP DETAIL AT PILES



MAIN PIER PILE CAP ELEVATION VIEW



CAP DETAIL BETWEEN PILES

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

VINCENT ZALIAUSKAS, P.E.  
P.E. LICENSE NUMBER 60524  
HIGHSPANS ENGINEERING, INC.  
2121 MCGREGOR BOULEVARD  
SUITE 200  
FORT MYERS, FL 33901  
REGISTRY NO. 27559

DRAWN BY: SDS 6/19  
CHECKED BY: CLH 6/19  
DESIGNED BY: RMW 6/19  
CHECKED BY: VAZ 6/19

LEE COUNTY FACILITIES  
CONSTRUCTION & MANAGEMENT

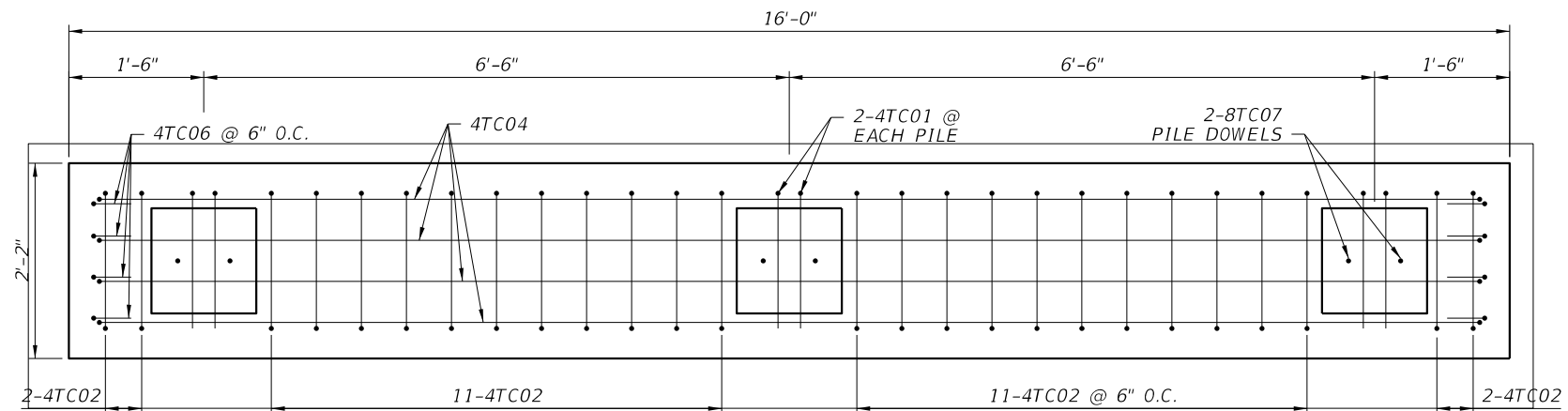
ROAD NO. COUNTY PROJECT NO.  
  LEE

SHEET TITLE: PILE CAP DETAILS (1 OF 2)

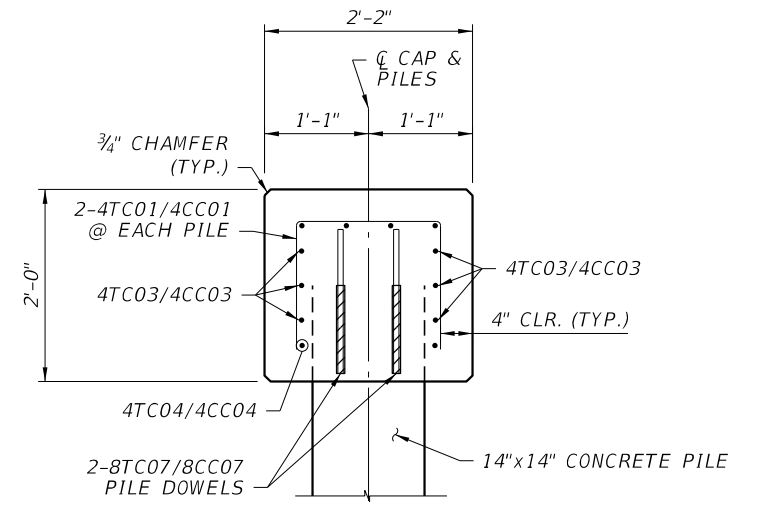
PROJECT NAME: MATLACHA FISHING PIER REPLACEMENT

REF. DWG. NO. SHEET NO. 11

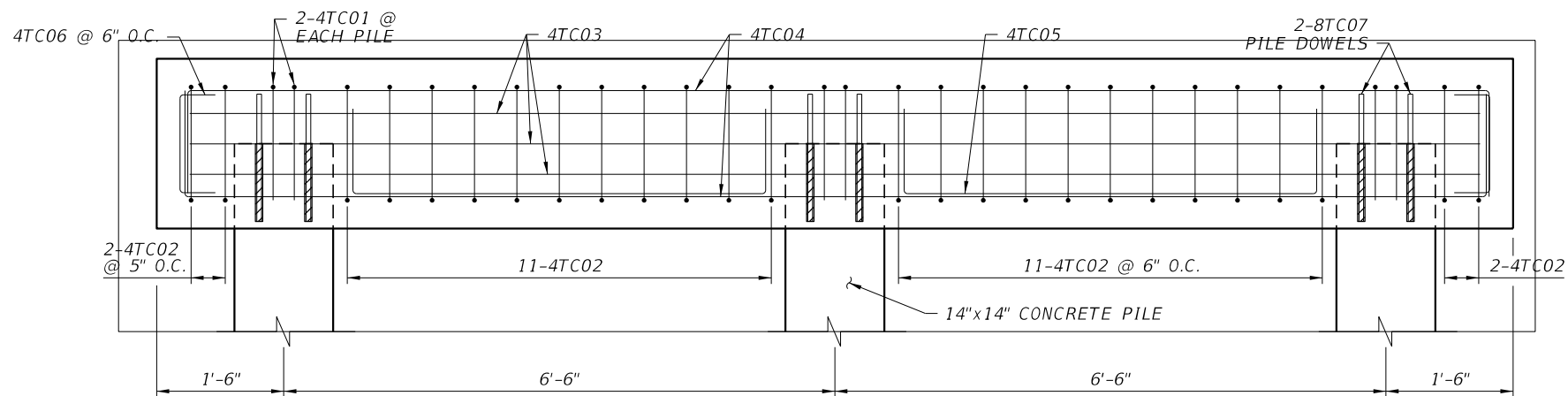
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



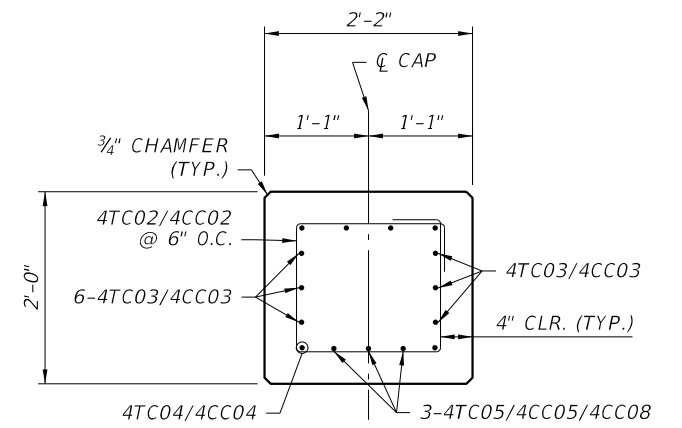
T-HEAD PILE CAP PLAN VIEW  
T-HEAD PILE CAP @ MAIN PIER CONNECTION SIMILAR



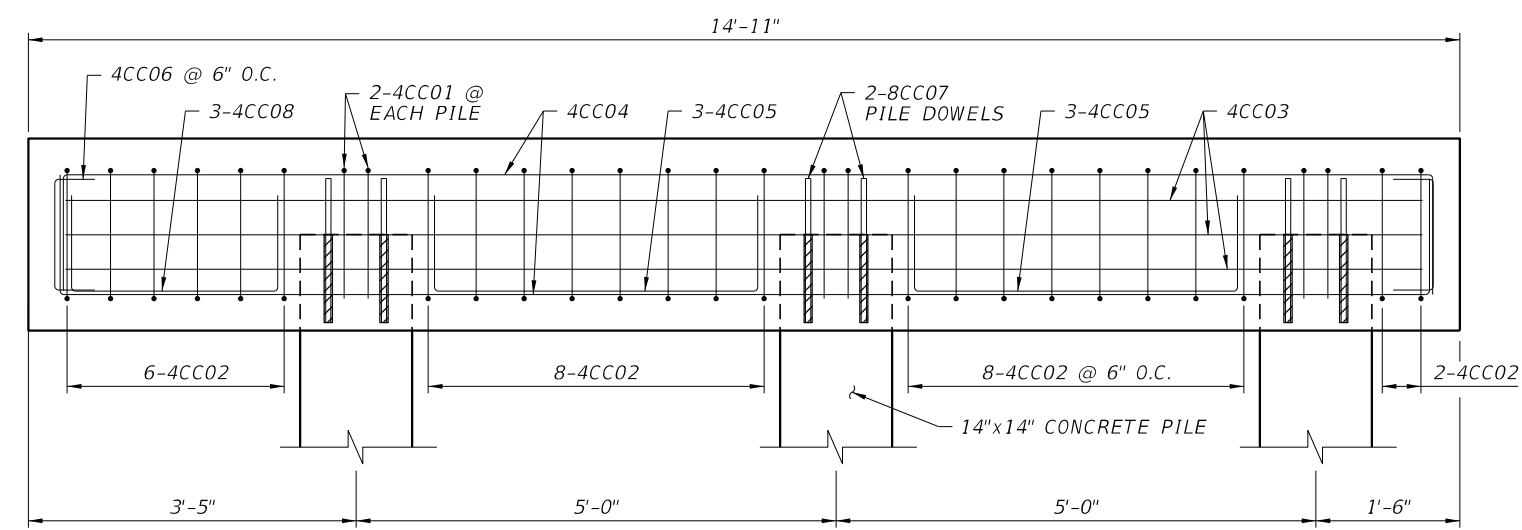
CAP DETAIL AT PILES



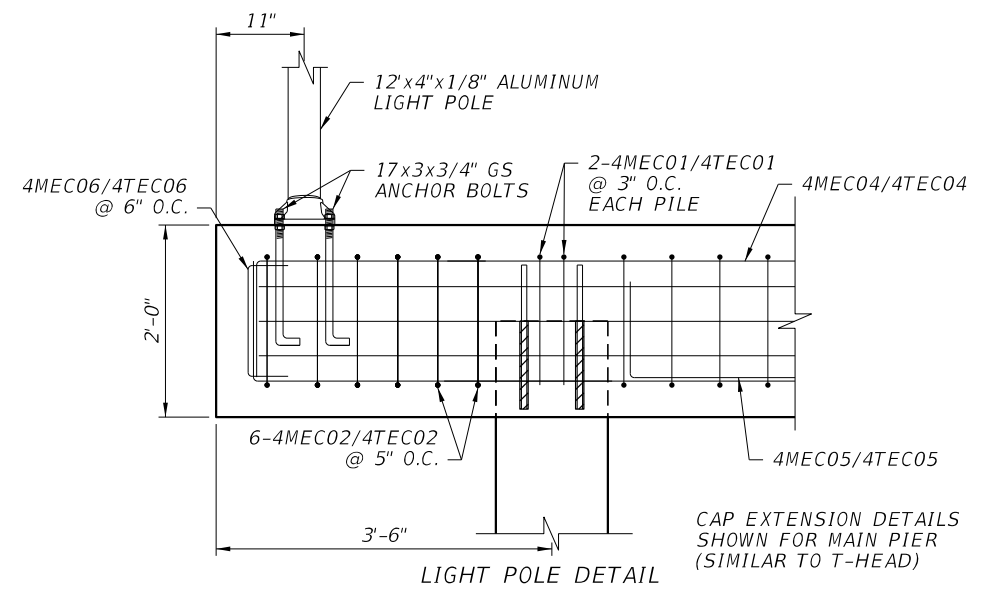
T-HEAD PILE CAP ELEVATION VIEW



CAP DETAIL BETWEEN PILES



T-HEAD PILE CAP @ MAIN PIER CONNECTION ELEVATION VIEW



LIGHT POLE DETAIL

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

VINCENT ZALIAUSKAS, P.E.  
P.E. LICENSE NUMBER 60524  
HIGHSPANS ENGINEERING, INC.  
2121 MCGREGOR BOULEVARD  
SUITE 200  
FORT MYERS, FL 33901  
REGISTRY NO. 27559

DRAWN BY: SDS 6/19  
CHECKED BY: CLH 6/19  
DESIGNED BY: RMW 6/19  
CHECKED BY: VAZ 6/19

LEE COUNTY FACILITIES  
CONSTRUCTION & MANAGEMENT

ROAD NO. COUNTY PROJECT NO.

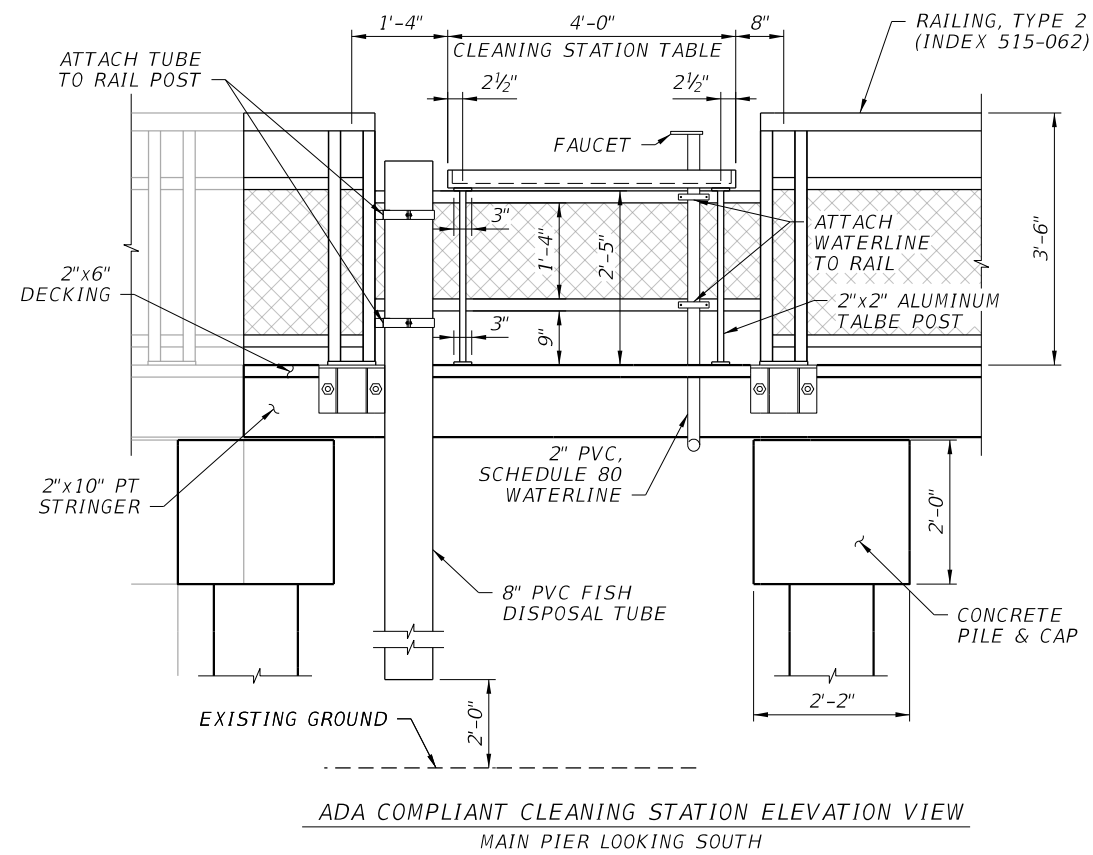
LEE

SHEET TITLE: PILE CAP DETAILS (2 OF 2)

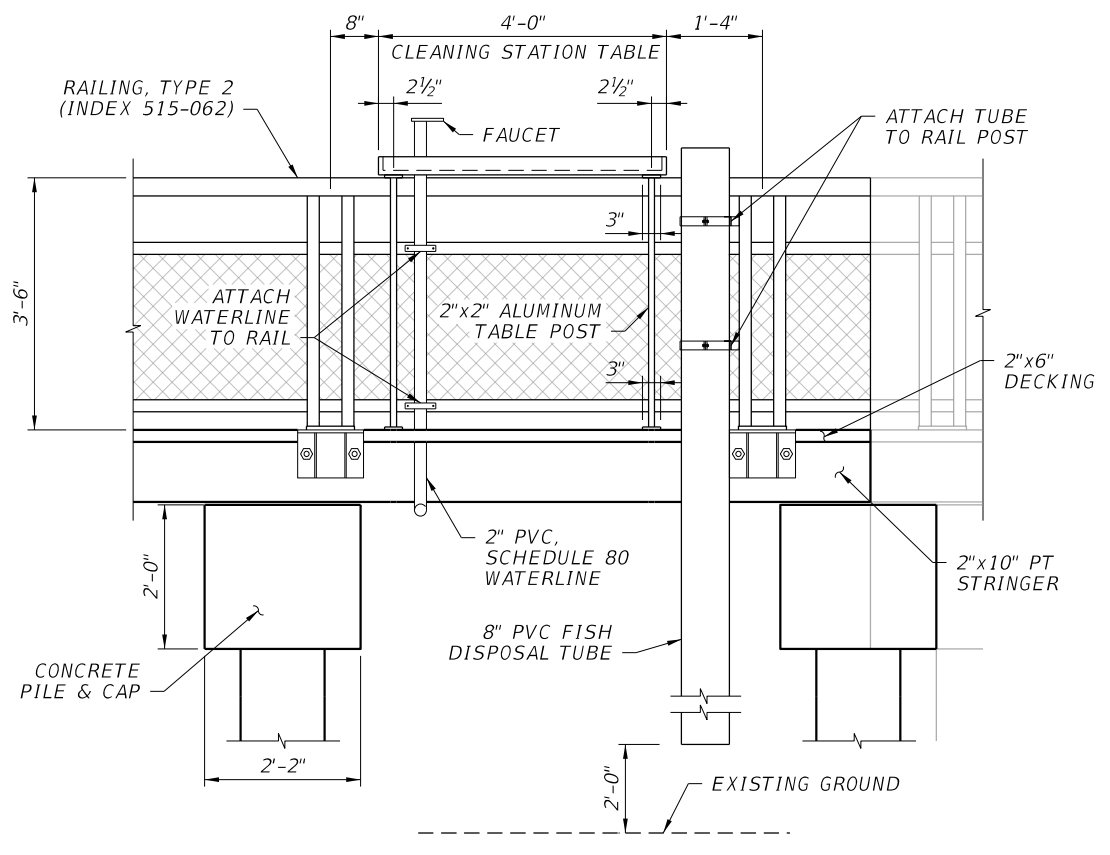
PROJECT NAME: MATLACHA FISHING PIER REPLACEMENT

REF. DWG. NO. SHEET NO. 12

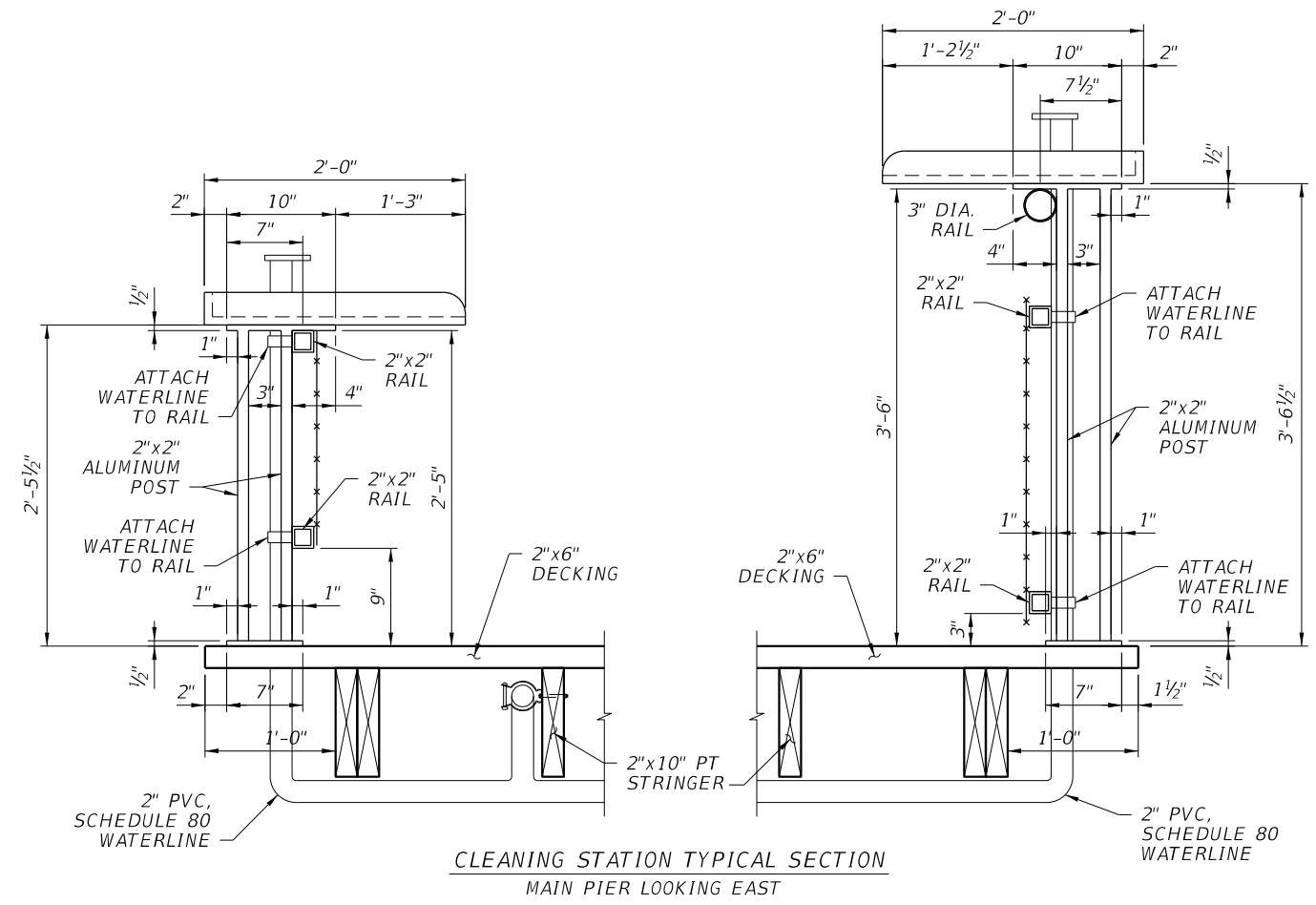
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



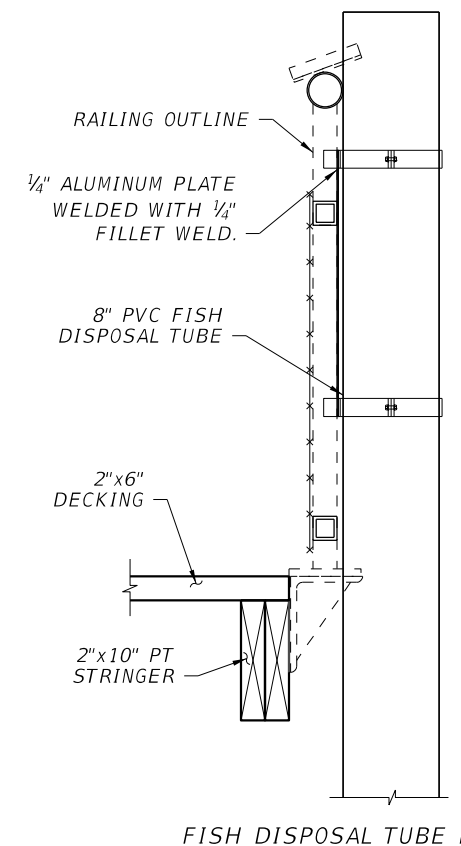
ADA COMPLIANT CLEANING STATION ELEVATION VIEW  
MAIN PIER LOOKING SOUTH



CLEANING STATION ELEVATION VIEW  
MAIN PIER LOOKING NORTH



CLEANING STATION TYPICAL SECTION  
MAIN PIER LOOKING EAST



FISH DISPOSAL TUBE DETAIL

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

VINCENT ZALIAUSKAS, P.E.  
P.E. LICENSE NUMBER 60524  
HIGHSPANS ENGINEERING, INC.  
2121 MCGREGOR BOULEVARD  
SUITE 200  
FORT MYERS, FL 33901  
REGISTRY NO. 27559

DRAWN BY:  
SDS 6/19  
CHECKED BY:  
CLH 6/19  
DESIGNED BY:  
RMW 6/19  
CHECKED BY:  
VAZ 6/19

LEE COUNTY FACILITIES  
CONSTRUCTION & MANAGEMENT

ROAD NO. COUNTY PROJECT NO.

LEE

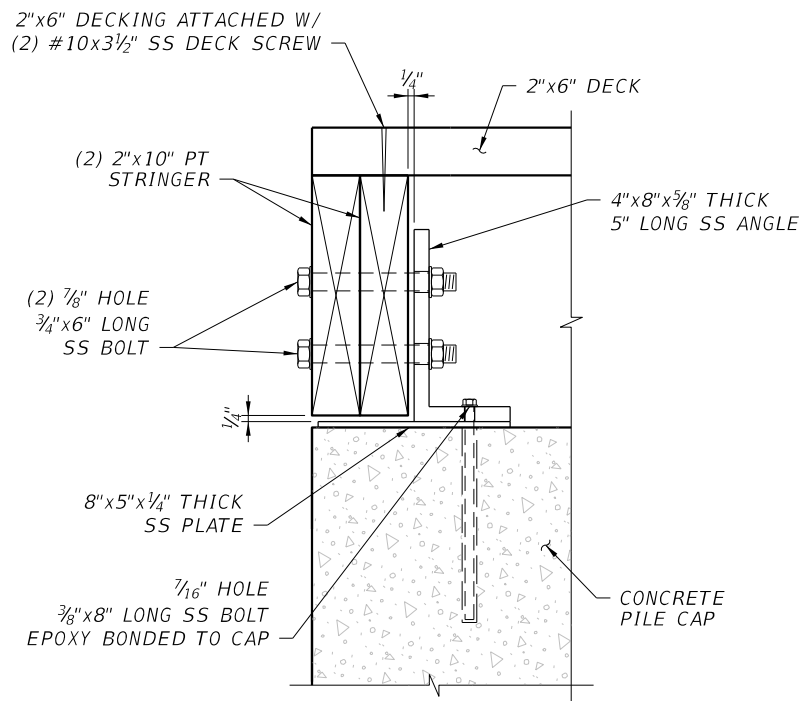
SHEET TITLE:  
CLEANING STATION DETAILS

PROJECT NAME:  
MATLACHA FISHING PIER REPLACEMENT

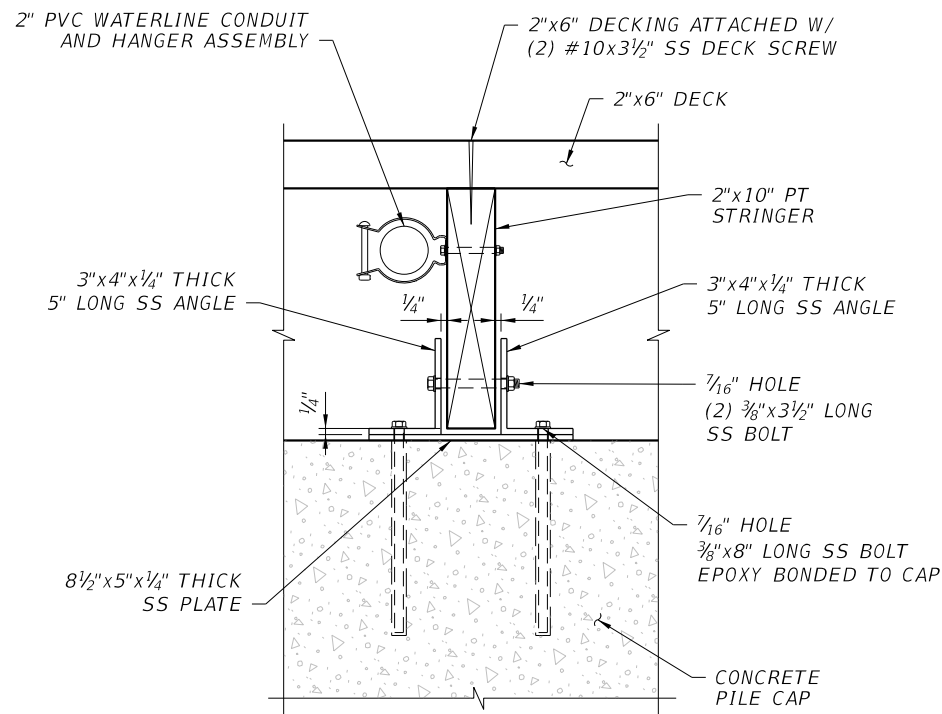
REF. DWG. NO.

SHEET NO.  
13

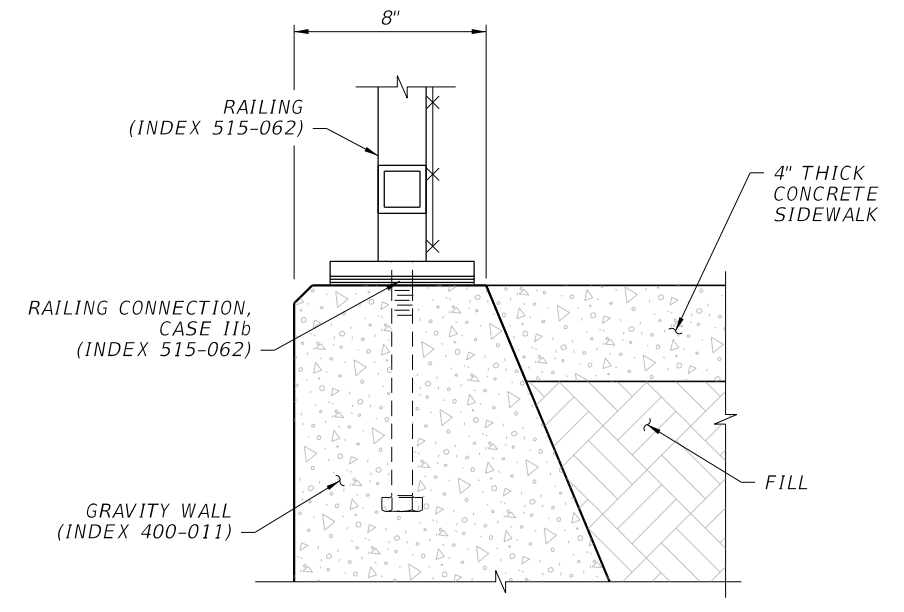
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



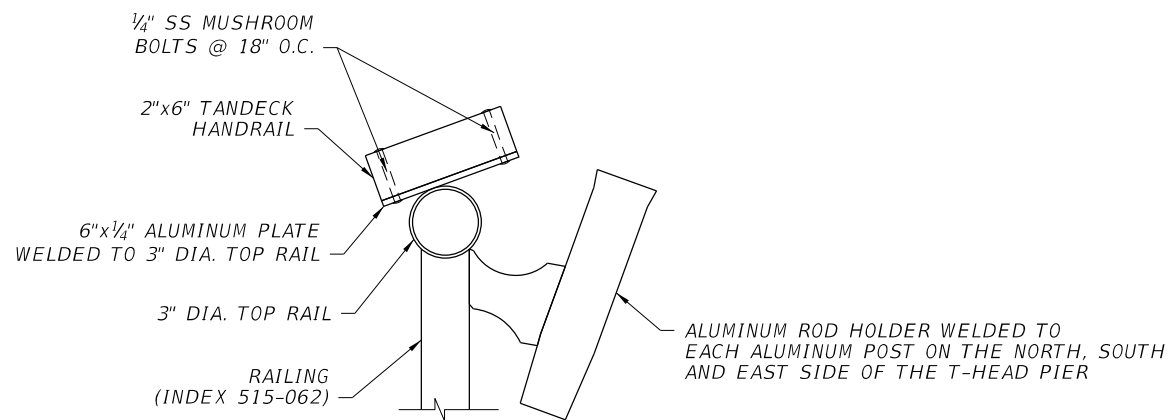
EXTERIOR STRINGER CONNECTION DETAIL



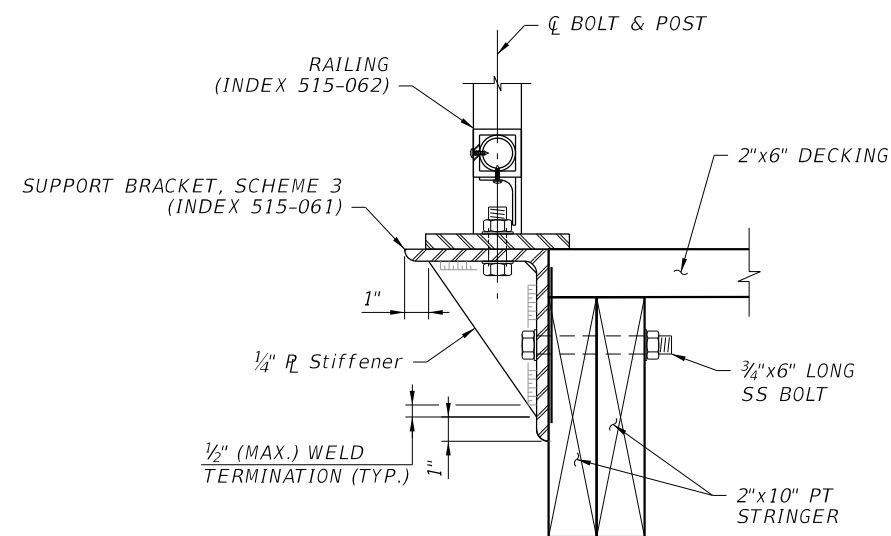
INTERIOR STRINGER CONNECTION DETAIL



POST CONNECTION TO GRAVITY WALL DETAIL



HANDRAIL AND ROD HOLDER CONNECTION DETAIL



POST CONNECTION TO STRINGER DETAIL

REVISIONS						VINCENT ZALIAUSKAS, P.E. P.E. LICENSE NUMBER 60524 HIGHSPANS ENGINEERING, INC. 2121 MCGREGOR BOULEVARD SUITE 200 FORT MYERS, FL 33901 REGISTRY NO. 27559	DRAWN BY: SDS 6/19 CHECKED BY: CLH 6/19 DESIGNED BY: RMW 6/19 CHECKED BY: VAZ 6/19	LEE COUNTY FACILITIES CONSTRUCTION & MANAGEMENT			PIER DETAILS		REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	PROJECT NO.	PROJECT NAME:	MAtlACHA FISHING PIER REPLACEMENT	
							LEE					14	

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

Mark		Length		No	TYP	STY	B		C		D		E		F		H		J		K		N	φ
Size	Des	Ft	In	Bars	BAR	A	G	Ft	In	Ft	In	Ft	In	Ft	In	Ft	In	Ft	In	Ft	In	NO	ANG	
<b>Location: Matlacha Pier Substructure - Main Pier Extended Pile Cap</b>																							<b>No. Required = 2</b>	
4	ME01	4'-2"		4	11			1'-6"	1'-4"	1'-4"														
4	ME02	6'-5"		20	4	4	4	1'-6"	1'-4"															
4	ME03	11'-4"		6	1			11'-4"																
4	ME04	14'-0"		6	11			11'-4"	1'-4"	1'-4"														
4	ME05	7'-4"		3	11			5'-4"	1'-0"	1'-0"														
4	ME06	2'-2"		8	11			1'-4"	5"	5"														
8	ME07	1'-6"		4	1			1'-6"																
<b>Location: Matlacha Pier Substructure - T-Head Extended Pier Pii</b>																							<b>No. Required = 2</b>	
4	TE01	4'-2"		6	11			1'-6"	1'-4"	1'-4"														
4	TE02	6'-5"		30	4	4	4	1'-6"	1'-4"															
4	TE03	17'-4"		6	1			17'-4"																
4	TE04	20'-0"		6	11			17'-4"	1'-4"	1'-4"														
4	TE05	6'-10"		6	11			4'-10"	1'-0"	1'-0"														
4	TE06	2'-2"		8	11			1'-4"	5"	5"														
8	TE07	1'-6"		6	1			1'-6"																
<b>Location: Matlacha Pier Substructure - Main Pier Pile Cap</b>																							<b>No. Required = 21</b>	
4	MC01	4'-2"		4	11			1'-6"	1'-4"	1'-4"														
4	MC02	6'-5"		16	4	4	4	1'-6"	1'-4"															
4	MC03	9'-4"		6	1			9'-4"																
4	MC04	12'-0"		6	11			9'-4"	1'-4"	1'-4"														
4	MC05	7'-4"		3	11			5'-4"	1'-0"	1'-0"														
4	MC06	2'-2"		8	11			1'-4"	5"	5"														
8	MC07	1'-6"		4	1			1'-6"																
<b>Location: Matlacha Pier Substructure - T-Head Pier Pile Cap</b>																							<b>No. Required = 6</b>	
4	TC01	4'-2"		6	11			1'-6"	1'-4"	1'-4"														
4	TC02	6'-5"		26	4	4	4	1'-6"	1'-4"															
4	TC03	15'-4"		6	1			15'-4"																
4	TC04	18'-0"		6	11			15'-4"	1'-4"	1'-4"														
4	TC05	6'-10"		6	11			4'-10"	1'-0"	1'-0"														
4	TC06	2'-2"		8	11			1'-4"	5"	5"														
8	TC07	1'-6"		6	1			1'-6"																
<b>Location: Matlacha Pier Substructure - T-Head Pier @ Main Pier Connection Pile Cap</b>																							<b>No. Required = 2</b>	
4	CC01	4'-2"		6	11			1'-6"	1'-4"	1'-4"														
4	CC02	6'-5"		24	4	4	4	1'-6"	1'-4"															
4	CC03	14'-2"		6	1			14'-2"																
4	CC04	16'-10"		6	11			14'-2"	1'-4"	1'-4"														
4	CC05	5'-4"		6	11			3'-4"	1'-0"	1'-0"														
4	CC06	2'-2"		8	11			1'-4"	5"	5"														
8	CC07	1'-6"		6	1			1'-6"																
4	CC08	4'-2"		3	11			2'-2"	1'-0"	1'-0"														

Note:

REVISIONS						VINCENT ZALIAUSKAS, P.E. P.E. LICENSE NUMBER 60524 HIGHSPANS ENGINEERING, INC. 2121 MCGREGOR BOULEVARD SUITE 200 FORT MYERS, FL 33901 REGISTRY NO. 27559	DRAWN BY: SDS 6/19 CHECKED BY: CLH 6/19 DESIGNED BY: RMW 6/19 CHECKED BY: VAZ 6/19	LEE COUNTY FACILITIES CONSTRUCTION & MANAGEMENT			SHEET TITLE: <b>REINFORCING BAR LIST</b>		REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	PROJECT NO.	PROJECT NAME: <b>MATLACHA FISHING PIER REPLACEMENT</b>		SHEET NO.
								LEE					15



ATTACHMENT II

**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, not to exceed 15MB) **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-\_\_\_\_\_-\_\_\_\_- (\_\_\_\_-\_\_\_\_)

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

Dated 9/18/2019

ATTACHMENT III

**COMMENCEMENT NOTIFICATION**

*Within ten (10) days of initiating the authorized work, submit this form via electronic mail to [saj-rd-enforcement@usace.army.mil](mailto: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-\_\_\_\_-\_\_\_\_(\_\_\_\_-\_\_\_\_)

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

ATTACHMENT IV

**U.S. Army Corps of Engineers Jacksonville District's Programmatic Biological  
Opinion (JaxBO) Project Design Criteria (PDCs) for In-Water Activities**

**November 20, 2017**

- 1) **(AP.7.) Education and Observation:** The permittee must ensure that all personnel associated with the project are instructed about the potential presence of species protected under the 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 ESA-listed species or marine mammals. To determine which species may be found in the project area, please review the relevant Protected Species List at:  
[http://sero.nmfs.noaa.gov/protected\\_resources/section\\_7/threatened\\_endangered/index.html](http://sero.nmfs.noaa.gov/protected_resources/section_7/threatened_endangered/index.html)
- 2) **(AP.8.) Reporting** of interactions with protected species:
  - a) Any collision(s) with and/or injury to any sea turtle, sawfish, whale, or sturgeon occurring during the construction of a project, shall be reported immediately to NMFS's Protected Resources Division (PRD) at (1-727-824-5312) or by email to [takereport.nmfs@noaa.gov](mailto:takereport.nmfs@noaa.gov) and [SAJ-RD-Enforcement@usace.army.mil](mailto:SAJ-RD-Enforcement@usace.army.mil).
  - b) Smalltooth sawfish: Report sightings to 1-844-SAWFISH or email [Sawfish@MyFWC.com](mailto:Sawfish@MyFWC.com)
  - c) Sturgeon: Report dead sturgeon to 1-844-STURG 911 (1-844-788-7491) or email [nmfs.ser.sturgeonnetwork@noaa.gov](mailto:nmfs.ser.sturgeonnetwork@noaa.gov)
  - d) Sea turtles and marine mammals: Report stranded, injured, or dead animals to 1-877-WHALE HELP (1-877-942-5343).
  - e) North Atlantic right whale: Report injured, dead, or entangled right whales to the USCG via VHF Channel 16.
- 3) **(AP.9.) Vessel Traffic and Construction Equipment:** All vessel operators must watch for and avoid collision with species protected under the ESA and MMPA. Vessel operators must avoid potential interactions with protected species and operate in accordance with the following protective measures:
  - a) *Construction Equipment:*
    - i) All vessels associated with the construction project shall operate at "Idle Speed/No Wake" at all times while operating in water depths where the draft of the vessel provides less than a 4-foot (ft) clearance from the bottom, and in all depths after a protected species has been observed in and has departed the area.
    - ii) All vessels will follow marked channels and/or routes using the maximum water depth whenever possible.
    - iii) Operation of any mechanical construction equipment, including vessels, shall cease immediately if a listed species is observed within a 50-ft radius of

construction equipment and shall not resume until the species has departed the area of its own volition.

- iv) If the detection of species is not possible during certain weather conditions (e.g., fog, rain, wind), then in-water operations will cease until weather conditions improve and detection is again feasible.

b) *All Vessels:*

- i) Sea turtles: Maintain a minimum distance of 150 ft.
- ii) North Atlantic right whale: Maintain a minimum 1,500-ft distance (500 yards).
- iii) Vessels 65 ft in length or longer must comply with the Right Whale Ship Strike Reduction Rule (50 CFR 224.105) which includes reducing speeds to 10 knots or less in Seasonal Management Areas (<http://www.fisheries.noaa.gov/pr/shipstrike/>).
- iv) Mariners shall check various communication media for general information regarding avoiding ship strikes and specific information regarding right whale sightings in the area. These include NOAA weather radio, USCG NAVTEX broadcasts, and Notices to Mariners.
- v) Marine mammals (i.e., dolphins, whales [other than North Atlantic right whales], and porpoises): Maintain a minimum distance of 300 ft.
- vi) When these animals are sighted while the vessel is underway (e.g., bow-riding), attempt to remain parallel to the animal's course. Avoid excessive speed or abrupt changes in direction until they have left the area.
- vii) Reduce speed to 10 knots or less when mother/calf pairs or groups of marine mammals are observed, when safety permits.

- 4) **(AP.10.) Turbidity Control Measures during Construction:** Turbidity must be monitored and controlled. Prior to initiating any of the work covered under this Opinion, the Permittee shall install turbidity curtains as described below. In some instances, the use of turbidity curtains may be waived by the USACE project manager if the project is deemed too minimal to generate turbidity (e.g., certain ATON installation, scientific survey device placement, marine debris removal) or if the current is too strong for the curtains to stay in place. Turbidity curtains specifications:

- a) Install floating turbidity barriers with weighted skirts that extend to within 1 ft of the bottom around all work areas that are in, or adjacent to, surface waters.
- b) Use these turbidity barriers throughout construction to control erosion and siltation and ensure that turbidity levels within the project area do not exceed background conditions.
- c) Position turbidity barriers in a way that does not block species' entry to or exit from designated critical habitat.
- d) Monitor and maintain turbidity barriers in place until the authorized work has been completed and the water quality in the project area has returned to background conditions.
- e) In the range of ESA-listed corals (St. Lucie Inlet, Martin County south to the Dry Tortugas and the U.S. Caribbean) and Johnson's seagrass (Turkey Creek/Palm

Bay south to central Biscayne Bay in the lagoon systems on the east coast of Florida):

- i) Projects that include upland earth moving (e.g., grading to install a building or parking lot associated with a dock and seawall project), must install sediment control barriers to prevent any upland sediments from reaching estuarine or marine waters.
  - ii) The turbidity curtain requirement cannot be waived for any project that moves or removes sediment (e.g., dredging, auger to create a pile, trenching to install a cableline). If turbidity curtains are not feasible in an area based on site conditions such as water current, high wave action, or stormy conditions, the project must undergo individual Section 7 consultation and is not covered under this Programmatic Opinion.
- 5) **(AP.11.) Entanglement:** All turbidity curtains and other in-water equipment must be properly secured with materials that reduce the risk of entanglement of marine species (described below). Turbidity curtains likewise must be made of materials that reduce the risk of entanglement of marine species.
- a) In-water lines (rope, chain, and cable, including the lines to secure turbidity curtains) must 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, must 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 is allowed in the water.
  - b) Turbidity curtains and other in-water equipment must be placed in a manner that does not entrap species within the construction area or block access for them to navigate around the construction area.



## **Project Design Criteria (PDCs) Specific to Activity 2 for Pile-Supported Structures and Anchored Buoys**

**A2.1.** Activities covered by this Opinion include the installation, repair, replacement, and removal of structures as described below:

- A2.1.1. The pile-supported and anchored structures included in this Opinion are: docks and piers, boatlifts, mooring piles and dolphin piles associated with docks/piers; ATONs and PATONs; floating docks; pile-supported chickees (i.e., small, back-country, over-water, pile-supported, primitive camping shelters); boardwalks (as long as they are designed and clearly marked to prohibit fishing and vessel mooring); mooring fields and buoys; and other minor pile-supported structures. This does not include structures that support large commercial vessels including ferries, tankers, and cargo ships such as ferry terminals and large ports.
- A2.1.2. Pile-supported docks/piers for a single-family residential lot are limited to 4 slips for motorized vessels. Slips for non-motorized vessels (e.g., kayak, canoe, and paddleboard) and associated launching areas do not count toward the total slip number.
- A2.1.3. Pile-supported structures for marinas, multi-family facilities (e.g., condo complexes, trailer parks, subdivisions when the homeowners association owns and controls the in-water structures). Docks and piers for multi-family residential properties (e.g., condos, trailer parks, apartment complexes), and marinas are limited to a maximum of 50 total slips (i.e., combination of wet and dry slips for existing plus proposed slips).
- A2.1.4. Anchored buoys and temporary pile-supported structures associated with marine events. Upon completion of the event, these structures must be removed and, to the maximum extent practical, the site must be restored to pre-construction elevations. Water depths in the area of marine events must be deep enough to support at least 5 ft of water depth under the keel of a vessel and between the keel of a vessel and ESA-listed coral colonies when transiting to the mooring areas. There is no limit on the number of vessel slips allowed for temporary structures associated marine events such as boat shows.
- A2.1.5. Mooring fields are limited to a maximum of 50 motorized vessels (there is no limit on the number of non-motorized vessels).
- A2.1.6. All pile-supported structures constructed must comply with PDC 2.17 for *Docks or Other Minor Structures Constructed in Florida Under this Opinion* (see below).

**The following PDCs apply to all the activities described in PDC A2.1 above:**

**A2.2.** 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:

([http://sero.nmfs.noaa.gov/protected\\_resources/section\\_7/protected\\_species\\_educational\\_signs/index.html](http://sero.nmfs.noaa.gov/protected_resources/section_7/protected_species_educational_signs/index.html)). The signs required to be posted by area are stated below:

- A2.2.1. 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.
- A2.2.2. Projects within the North Atlantic right whale educational sign zone (as defined in Section 2.1.1.4) shall post the Help Protect North Atlantic Right Whales sign.
  - A2.2.3. On the east coast of Florida, projects located within the St. John's 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.
  - A2.2.4. We are still developing the signs to be used in the U.S. Caribbean. Once developed, those signs will be included at the website above.

**A2.3.** 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:

- A2.3.1. Be constructed and labeled according to the instructions provided at <http://mrrp.myfwc.com>.
- A2.3.2. Be maintained in working order and emptied frequently (according to <http://mrrp.myfwc.com> standards) so that they do not overflow.

**A2.4.** For any dock project (new construction, repair, or replacement) at a private residence located within 11 nautical miles of North Atlantic right whale critical habitat (as measured in a radius from the center of the nearest inlet to open ocean and described in Section 2.1.1.4), the property owner will be provided a handout with their USACE permit describing the presence of North Atlantic right whales in the area and the Federal regulations governing the approach to North Atlantic right whales (Appendix C).

**A2.5.** ATONs and PATONs must be approved by and installed in accordance with the requirements of the USCG (see 33 CFR, chapter I, subchapter C, part 66 and RHA Section 10 and any other pertinent requirements).

**A2.6.** Chickees must be less than 500 ft<sup>2</sup> and support no more than 2 slips.

**A2.7.** No activities associated with municipal or commercial fishing piers are covered under this Opinion.

**A2.8.** Docks installed within visible distance of ocean beaches are required to comply with turtle-friendly lighting, if lighting is necessary to the project. 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/>

**A2.9.** Project construction will take place from uplands or from floating equipment (e.g., barge); prop or wheel-washing is prohibited.

## **Additional PDCs for Activity 2 applicable in Critical Habitat**

- A2.10.** *Acropora* critical habitat and the U.S. Caribbean: This Opinion does not cover new and expanded pile-supported structures in *Acropora* critical habitat where the essential features are present. The distance from ATONs to ESA-listed corals and *Acropora* critical habitat 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 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.
- A2.11.** Gulf sturgeon critical habitat: Additional noise restrictions are required for pile and sheet pile installation in the Gulf sturgeon critical habitat migratory restriction zones defined in Section 2.1.1.2. The noise restrictions are described in that section.
- A2.12.** Smalltooth sawfish critical habitat: This Opinion does not cover activities occurring in areas identified as smalltooth sawfish limited exclusion zones defined in Section 2.1.1.1.
- A2.13.** North Atlantic right whale critical habitat: This Opinion does not cover installation of anchored ATONs and permanent buoys in North Atlantic right whale critical habitat; temporary buoys for marine events are allowed in North Atlantic right whale critical habitat.
- A2.14.** Johnson's seagrass critical habitat: This Opinion does not cover new marinas or multi-family facilities in Johnson's seagrass critical habitat. Repair, replacement, and reconfiguration of existing marinas or multi-family facilities may be covered if it (1) occurs within same overall footprint (out to the perimeter of the facility, including the outer limits of the structure and permitted mooring locations), (2) does not increase the total aerial extent (i.e., area of coverage from the dock structures) of the existing facility, and (3) does not affect Johnson's seagrass. Mooring fields are allowed in Johnson's seagrass critical habitat and within the range of Johnson's seagrass so long as they occur in waters deeper than -13 ft (-4 m).
- A2.15.** NWA DPS of loggerhead sea turtle critical habitat: ATONs (pile-supported and anchored buoys) are allowed in nearshore reproductive habitat of the NWA DPS of loggerhead sea turtles under this Opinion. No other pile-supported structures are allowed in nearshore reproductive habitat under this Opinion.
- A2.16.** U.S. Caribbean sea turtle critical habitat (hawksbill, leatherback, and the NA DPS of green sea turtle critical habitat): ATONs (pile-supported and anchored buoys) are allowed near sea turtle nesting beaches under this Opinion. No other pile-supported structures are allowed near sea turtle nesting beaches under this Opinion.

ATTACHMENT V

## 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](mailto: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](http://MyFWC.com/manatee). Questions concerning these signs can be sent to the email address listed above.

# CAUTION: MANATEE HABITAT

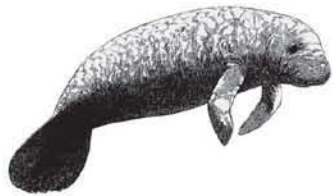
All project vessels

**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