MIAMI MARINE STADIUM BOAT RAMP

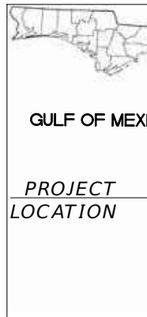
FOR

CITY OF MIAMI

VIRGINIA KEY, FL 33149

VICINITY MAP N.T.S.

NORTH

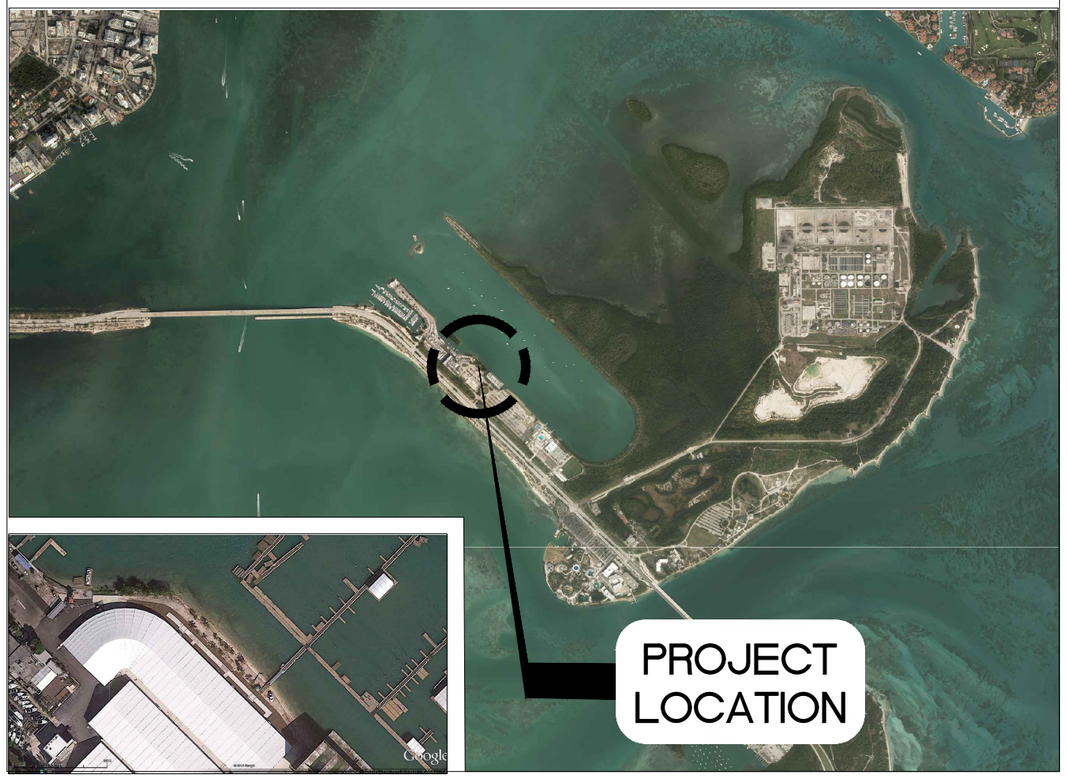


LOCATION:

3501 RICKENBACKER CSWY Miami, FL 33149-1021

LEGAL DESCRIPTION:

17 18 54 42 20.487 AC M/L BEG 1709.52FTW & 1954.40FTNW OF SE COR OF SEC TH N 45 DEG W 3075FT S 00 DEG W 650FT 45 DEG E2620FT N 44 DEG E 460FT TO POB LESS BEG 1709FTS & 1954.40FTNW OF SE COR OF SEC TH SW263FT NW90FT NE63FT NW245FT NE200FT SE335FT TO POB LESS PORT OF CITY OF MIAMI OWNED LAND ON VIRGINIA



MIAMI MARINE STADIUM BOAT RAMP PROJECT LOCATION MAP

N.T.S. NORTH

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GOVERNING STANDARDS AND SPECIFICATIONS:

- *FLORIDA DEPARTMENT OF TRANSPORTATION, DESIGN STANDARDS DATED 2014, AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2014, AS AMENDED BY CONTRACT DOCUMENTS.*
- *CITY OF MIAMI ENGINEERING STANDARDS FOR DESIGN AND CONSTRUCTION DATED DECEMBER 2010*
- *MIAMI 21 CODE DATED MAY 2010.*

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CITY OF MIAMI
OFFICE OF CAPITAL IMPROVEMENTS

Project Name
CITY OF MIAMI
OFFICE OF CAPITAL IMPROVEMENTS
MIAMI MARINE STADIUM
3501 Rickenbacker Causeway
CITY OF MIAMI, FLORIDA

Revision	Description	Date

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Drawing Title
MARINE STADIUM BOAT RAMP

Scale	Designed	
AS SHOWN	MA	COVER SHEET
TYLin Proj. No.	Drawn	
55191.09	MA	
Date	Checked	
6-22-2018	CH	

GENERAL NOTES

1. GENERAL NOTES ON THE PROJECT PLANS AND DRAWINGS ARE SOLELY TO AID AND ASSIST THE CONTRACTOR WITH THE FIELD OPERATIONS FOR THE PROJECT. SAID GENERAL NOTES MAY NOT FULLY DESCRIBE ALL OF THE REQUIREMENTS FOR AN ITEM. THEREFORE, THE CONTRACTOR SHALL READ AND VERIFY THE CONTRACT DOCUMENTS, INCLUDING BUT NOT LIMITED TO THE PLANS, SPECIFICATIONS, GENERAL TERMS AND CONDITIONS, AND THE SUPPLEMENTAL TERMS AND CONDITIONS, TO FULLY UNDERSTAND AND COMPLY WITH ALL THE REQUIREMENTS THEREIN.

2. THE CONTRACTOR MUST HAND EXCAVATE AROUND AREAS WHERE EXISTING UNDERGROUND UTILITIES ARE EXPECTED OR SUSPECTED IN ORDER TO AVOID DAMAGES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REPAIRS AND COSTS TO CORRECT DAMAGES RESULTING FROM FAILURE TO TAKE ALL NECESSARY PRECAUTIONS INCLUDING LOCATING, MARKING AND CAREFUL EXCAVATION, AND SHOULD BE INCIDENTAL TO THE COST OF THE PROJECT.

3. IT IS THE OBLIGATION OF THE BIDDER OR THE CONTRACTOR TO MAKE HIS OWN INVESTIGATION AND SATISFY HIMSELF FULLY OF SUBSURFACE CONDITIONS PRIOR TO SUBMITTING HIS BID. FAILURE TO DO SO, WILL NOT RELIEVE HIM OF HIS OBLIGATION TO COMPLETE THE WORK FULLY AND ACCEPTABLE TO THE ENGINEER AND THE OWNER FOR THE CONSIDERATION SET FORTH IN HIS BID.

4. CONTRACTOR SHALL NOT SCALE DIMENSIONS FROM PRINTS FOR CONSTRUCTION PURPOSES.

5. ALL DISTURBED GRASS AREAS SHALL BE RESTORED WITH SUITABLE SOIL AND SOLID ST AUGUSTINE SOD IF NOT SPECIFIED OTHERWISE ON THE PLANS.

6. IT IS THE INTENT OF THESE PLANS TO BE IN COMPLIANCE WITH APPLICABLE CODES OF AUTHORITIES HAVING JURISDICTION. ANY DISCREPANCIES BETWEEN THESE PLANS AND APPLICABLE CODES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.

7. CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING TREES, STRUCTURES, UTILITIES AND UTILITY MARKERS, WHICH MAY NOT BE SHOWN ON PLANS. ANY EXISTING STRUCTURES, PAVEMENT, TREES, UTILITIES, UTILITY MARKERS OR OTHER EXISTING IMPROVEMENT NOT SPECIFIED FOR REMOVAL WHICH IS TEMPORARILY DAMAGED, EXPOSED OR IN ANY WAY DISTURBED BY CONSTRUCTION PERFORMED UNDER THIS CONTRACT, SHALL BE REPAIRED, PATCHED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.

8. ANY DISCREPANCIES IN THESE DRAWINGS WITH THE FIELD CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. CONSTRUCTION SHALL NOT CONTINUE UNTIL ENGINEER ADDRESSES THE DISCREPANCIES.

CONSTRUCTION NOTES

1. ALL WORK TO BE IN COMPLIANCE WITH THE REQUIREMENTS OF AND ACCEPTABLE TO CITY OF MIAMI PUBLIC WORKS DEPARTMENT AND MIAMI–DADE COUNTY R.E.R.

2. CONTRACTOR SHALL PROVIDE HIS OWN LINE AND GRADE FROM HORIZONTAL AND VERTICAL CONTROL. CONTRACTOR SHALL ALSO PROVIDE "AS BUILT" GRADES CERTIFIED BY A REGISTERED LAND SURVEYOR AS REQUIRED BY THE CITY OF MIAMI PUBLIC WORKS DEPARTMENT.

3. BID PRICES SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS COMPLETE IN PLACE, TESTED, AND ACCEPTED BY THE ENGINEER.

4. THE CONTRACTOR SHALL USE SWEEPER (USING WATER) OR OTHER EQUIPMENT CAPABLE OF CONTROLLING AND REMOVING DUST. APPROVAL OF THE USE OF SUCH EQUIPMENT IS CONTINGENT UPON ITS DEMONSTRATED ABILITY TO DO WORK.

5. THE CONTRACTOR IS RESPONSIBLE FOR KEEPING EXISTING INLETS AND CULVERTS CLEAN OF DEBRIS AND ANY OTHER MATERIALS USED DURING CONSTRUCTION. THIS SHALL BE DONE DURING THE CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER. ALL EXISTING LINES AND STRUCTURES SHALL BE CLEANED PRIOR TO FINAL INSPECTION AND ACCEPTANCE.

6. CONTRACTOR SHALL CONTACT SUNSHINE AT (800) 432–4770 AT LEAST 48 HOURS PRIOR TO PERFORMING ANY DIGGING TO VERIFY THE EXACT LOCATION OF EXISTING UTILITIES.

7. ALL TREES TO BE RELOCATED OUTSIDE OF CONSTRUCTION AREA WHERE FEASIBLE. UNAVOIDABLE IMPACT TO MANGROVE TREES ARE TO BE MITIGATED IN ACCORDANCE TO APPROVED PERMITS.

8. THE CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS FOR ALL ITEMS LISTED IN PROJECT SPECIFICATION (WHERE APPLICABLE).

9. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.

10. ALL EXISTING DRAINAGE STRUCTURES AND PIPES ARE TO REMAIN AND TO BE PROTECTED UNLESS OTHERWISE SPECIFIED AND APPROVED.

11. CONTRACTOR SHALL IMPLEMENT AND ENFORCE ALL NPDES EROSION AND SEDIMENT CONTROL RULES AND REGULATIONS.

12. CONTRACT SHALL INCLUDE IN THE BID PRICE FOR CLEARING AND GRUBBING.

ENVIRONMENTAL NOTES

1. ANY MATERIAL TO BE STOCKPILED FOR PERIODS GREATER THAN 24 HOURS SHALL BE PROTECTED BY APPROPRIATE EROSION CONTROL DEVICES.

2. THE CONTRACTOR SHALL REVIEW ENVIRONMENTAL REQUIREMENTS OF ANY PROPOSED STAGING AREAS WITH THE PROJECT ENGINEER AT LEAST SEVENTY–TWO (72) HOURS PRIOR TO USE.

3. NO STAGING OR OTHER ACTIVITIES FOR THIS PROJECT WILL BE ALLOWED WITHIN ENVIRONMENTALLY SENSITIVE AREAS.

4. CONTRACTOR SHALL NOT STAGE OR OPERATE EQUIPMENT WITHIN THE DRIPLINE OF TREES.

5. CONTRACTOR TO PROVIDE A CERTIFIED ARBORIST WHO WILL DETERMINE ANY ROOT PRUNING AND ANY OTHER TRIMMING ACTIVITIES. COST TO BE INCIDENTAL TO CONSTRUCTION. NO ADDITIONAL COMPENSATION WILL BE PROVIDED.

STRUCTURAL NOTES

CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FDOT 2015 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

DESIGN SHALL BE IN ACCORDANCE WITH THE FDOT STRUCTURES MANUAL JANUARY 2015, AND SUBSEQUENT STRUCTURES DESIGN BULLETINS, THE FDOT STRUCTURAL DESIGN STANDARD INDEXES/DRAWINGS, 2015, AS AMENDED BY CONTRACT DOCUMENTS, AND ALL SUBSEQUENT INTERIMS.

ENVIRONMENT IS CLASSIFIED AS EXTREMELY AGGRESSIVE.

MATERIALS
5.1. BULKHEADS REINFORCED C.I.P. CONCRETE CAP: CONCRETE CLASS V(SPECIAL) f'c = 6,000psi, WITH SILICA FUME, METAKAOLIN, OR ULTRA FINE FLY ASH.

CONCRETE COVER
3"CLEAR COVER, COVER DOES NOT INCLUDE TOLERANCES. REFER TO FDOT SPECIFICATION 415 FOR ALLOWABLE TOLERANCES.

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

UTILITIES
8.1. LOCATIONS AND ELEVATIONS SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION BEGINS.
8.2. FOR STORM DRAINS AND OTHER UTILITIES, FOLLOW GENERAL NOTES ON PROCEDURES INVOLVING EXISTING UTILITIES.

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.

CUT AND FILL OPERATIONS
10.1. THE CONTRACTOR SHALL NOTIFY ADJACENT OWNERS AND INVOLVED UTILITIES IN WRITING TWO (2) WEEKS BEFORE EXCAVATION OPERATIONS BEGIN.
10.2. QUANTITIES FOR CUT AND FILL SHOWN IN THESE PLANS ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR BEFORE BIDDING.
10.3. ANY EXCAVATED MATERIAL THAT IS DEEMED BY THE ENGINEER UNSUITABLE FOR FILLING SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR AT AN APPROVED FACILITY OR DUMP SITE. THE COST FOR DISPOSAL OF UNSUITABLE MATERIAL SHALL BE INCLUDED IN THE COST OF CUT AND FILL.

PROJECT
MIAMI MARINE STADIUM BOAT RAMPS

RICKENBACKER CAUSEWAY
MIAMI, FLORIDA 33435

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P.E. No. 66918

ISSUE	DATE	SUBMISSION / REVISION

CC PROJECT NO.	551191.14
DRAWN	MA
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SCALE	

SHEET TITLE

GENERAL NOTES

SHEET

P-1.0

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NEW BOAT RAMP FACILITY

Mean High Water Line +/-
NAD 88 Elevation 0.18'
NGVD 29 Elevation 1.74'

FUTURE MARITIME CENTER FACILITY

FUTURE PARKING
50± CARS
(NOT PART OF THIS CONTRACT)

FUTURE BUILDING FOOTPRINT
11,000 SF
(NOT PART OF THIS CONTRACT)

DEMOLISH AND REMOVE EXISTING RIP-RAP WALL

PROPOSED RETAINING WALL (SEE DETAIL 1 ON P-4.0)

PROPOSED TRUCK AND TRAILER PARKING FOR BOAT RAMP FACILITY (21 SPACES, 45' LENGTH PER SPACE)

ASPHALT PAVEMENT RECONSTRUCTION (SEE SHEET P-4.0 FOR GRADING DETAILS)

PROPOSED RIPRAP

MATCH EXISTING GRADE

34'-5"
34'-6"
R15'-0"
295'-9"
31'-4"
R10'-0"
58'-10"
STOP
R15'-0"
191'-3"
46'-1"
WRONG WAY
39'-8"
182'-7"
R34'-0"
R80'-0"
191'-2"
41'-7"
R15'-0"

PROPOSED TRUCK AND TRAILER PARKING FOR BOAT RAMP FACILITY (29 SPACES, 45' LENGTH PER SPACE)

PROPOSED TRUCK AND TRAILER PARKING FOR BOAT RAMP FACILITY (27 SPACES, 45' LENGTH PER SPACE)

18" YELLOW THERMOPLASTIC CHEVRONS, 10.0' O.C. (TYP.)

6" WHITE THERMOPLASTIC (TYP.)

DEMOLISH

AREA TO RECONSTRUCT

PROPOSED RIPRAP

18" YELLOW THERMOPLASTIC CHEVRONS

6" WHITE THERMOPLASTIC

FUTURE BUILDING LIMITS (NOT INCLUDED IN THIS CONTRACT)

PROPOSED TRAFFIC DIRECTION

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CC PROJECT NO.	551191.14
DRAWN	MA
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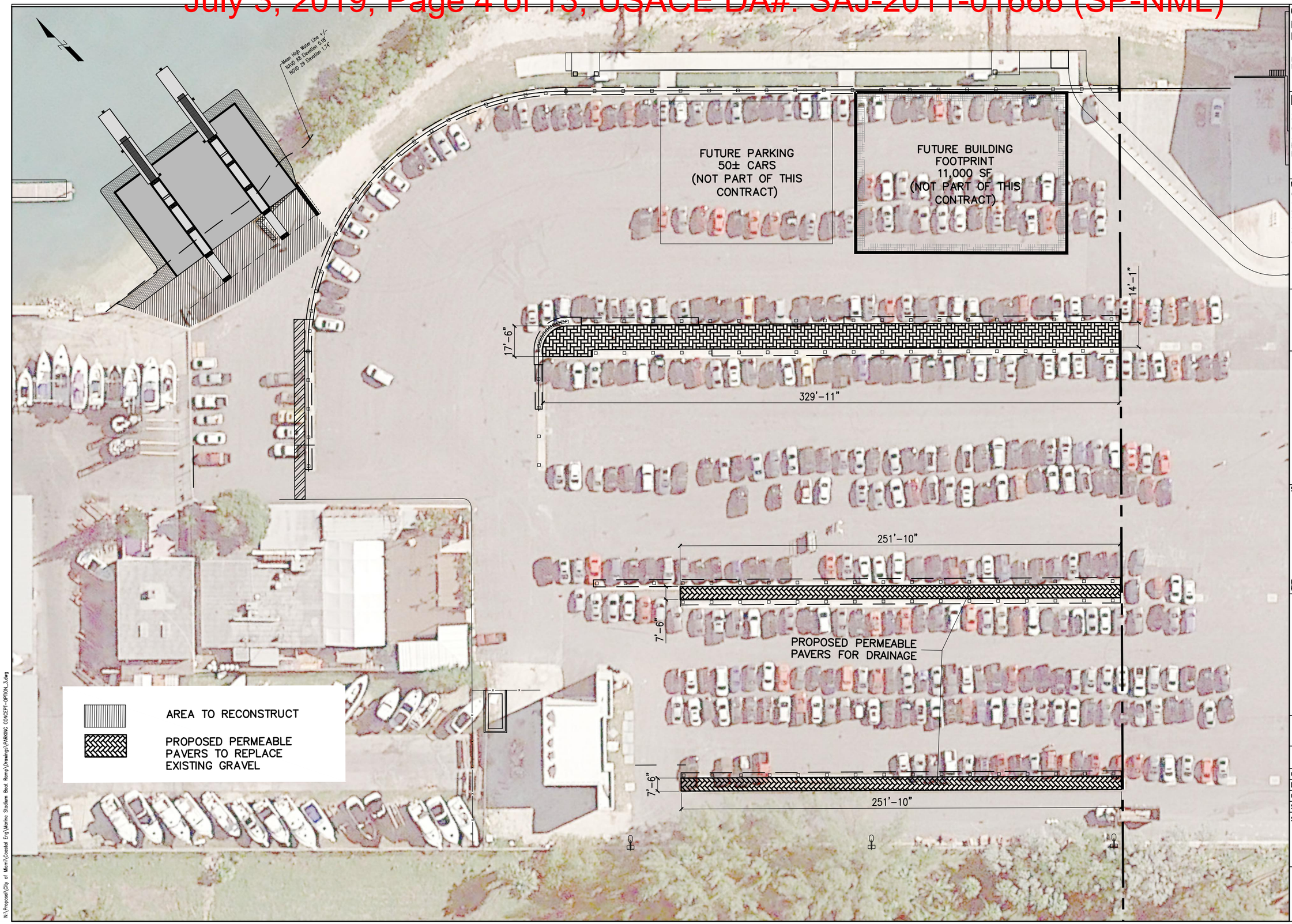
SCALE	1": 50'

SHEET TITLE
SITEPLAN

SHEET
P-2.0



PROJECT
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BOAT RAMPS

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SHEET TITLE

PARKING
LOT DRAINAGE

SHEET

P-3.0

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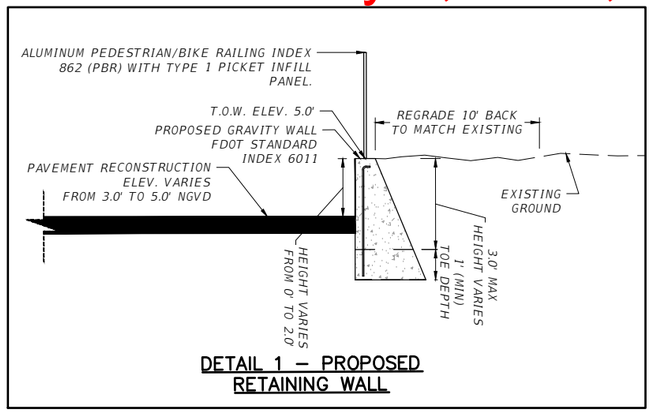

DETAIL 1 – PROPOSED RETAINING WALL

5.00' PROPOSED ELEVATION

PAVEMENT AREA TO RECONSTRUCT

PROPOSED GUIDE PILE, TYP.

PROPOSED GANGWAY, TYP.

PROPOSED FLOATING DOCK, TYP.

PROPOSED CONC. BOAT RAMP, TYP.

Mean High Water Line +/-
NAVD 88 Elevation 0.18'
NGVD 29 Elevation 1.74'

PROP. RETAINING WALL – SEE DETAIL 1 ON THIS SHEET

REGRADE GRAVEL AREA TO MEET EXISTING GRADE

RAMP DOWN 10% TYP.

MATCH EXISTING ELEV. 2.59'

PROPOSED FIXED DOCK, TYP. (ELEV. +5.0')

TOP OF WALL ELEV. 5.00'

MATCH EXIST. ELEV. 5.17'

MATCH EXIST. ELEV. 5.08'

3.00'

20'-0"

5.00'

5.29'

5.38'

21'-11"

13'-6"

36'-11"

60'-2"

Chain link Fence

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SCALE	1": 40'

SHEET TITLE

GRADING PLAN

SHEET

P-4.0

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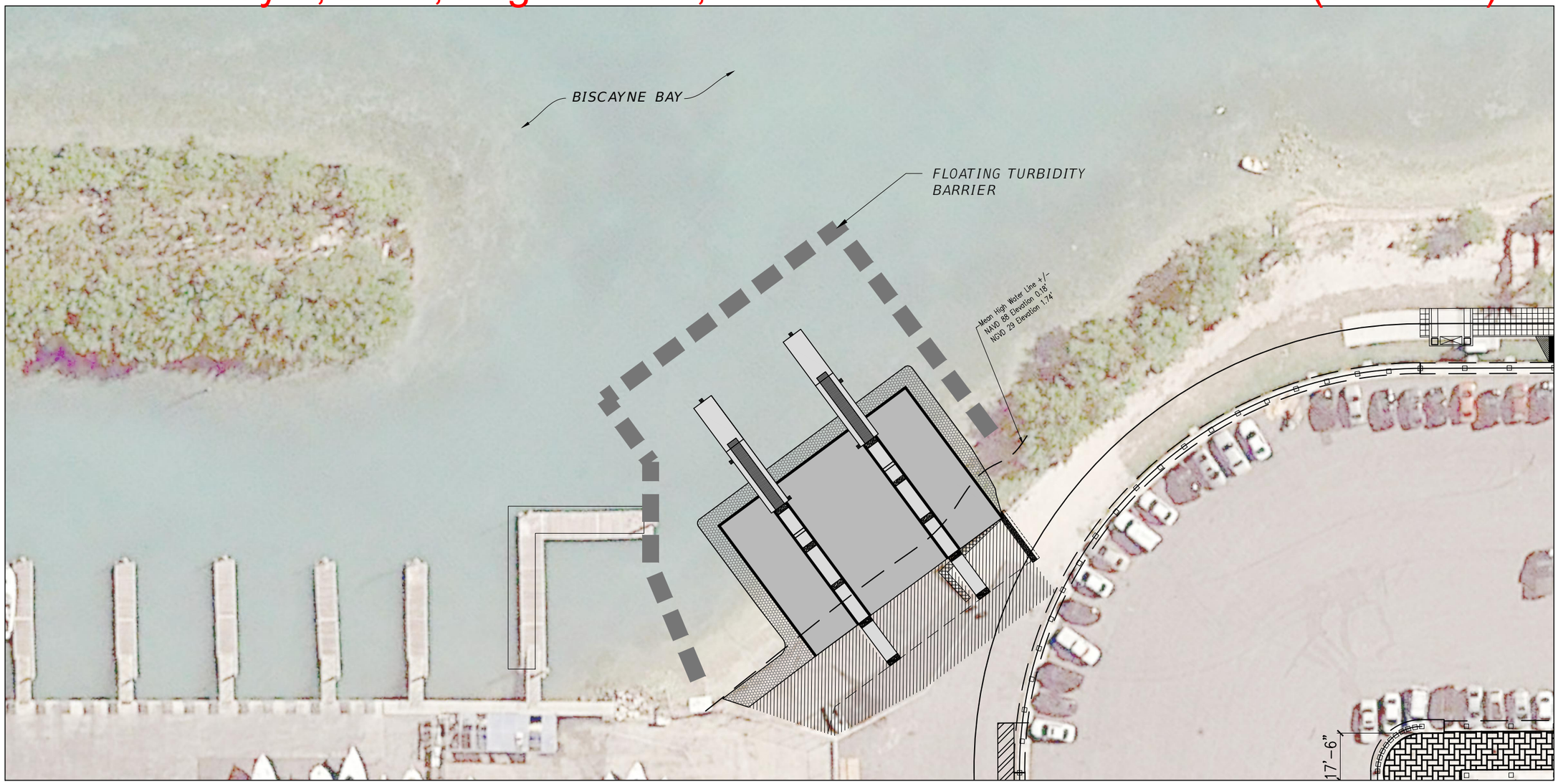


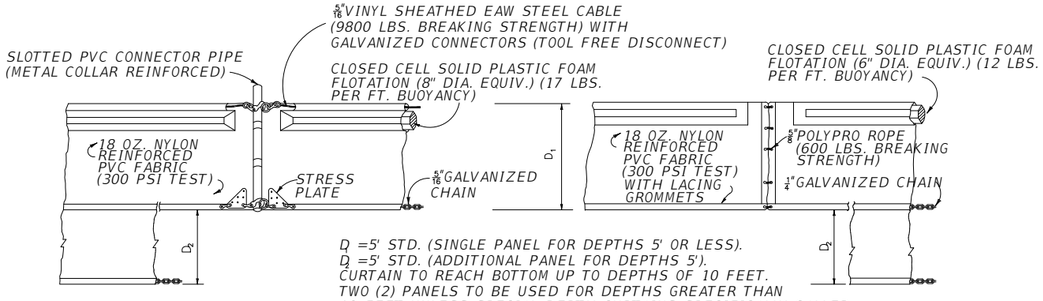
TURBIDITY BARRIER

TURBIDITY BARRIER NOTES

1. TURBIDITY CURTAINS SHALL BE DEPLOYED IN A MANNER NOT TO ENTANGLE OR HARM MANATEES.
2. TURBIDITY SHALL BE MONITORED AS OUTLINED IN THE REGULATORY PERMITS.
3. TURBIDITY BARRIERS ARE TO BE USED IN ALL PERMANENT BODIES OF WATER REGARDLESS OF THE WATER DEPTH.
4. NUMBER AND SPACING OF ANCHORS DEPENDENT ON CURRENT VELOCITIES.
5. DEPLOYMENT OF BARRIER AROUND PILE LOCATIONS MAY VARY TO ACCOMMODATE CONSTRUCTION OPERATIONS.
6. NAVIGATION MAY REQUIRE SEGMENTING BARRIER DURING CONSTRUCTION OPERATIONS.

EROSION/SEDIMENT CONTROL NOTES

THE PURPOSE OF EROSION CONTROL IS TO PREVENT POLLUTION OF BODIES OF WATER ON OR ADJACENT TO THE PROJECT SITE. IN ADDITION, EROSION CONTROL SHALL PREVENT DAMAGE TO ADJACENT PROPERTY, AND WORK IN PROGRESS. ALL EROSION AND SILTATION MEASURES ARE TO BE PLACED PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSPECT ALL EROSION CONTROL DEVICES PERIODICALLY AND AFTER EVERY RAINFALL. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.



FLOATING TURBIDITY BARRIERS

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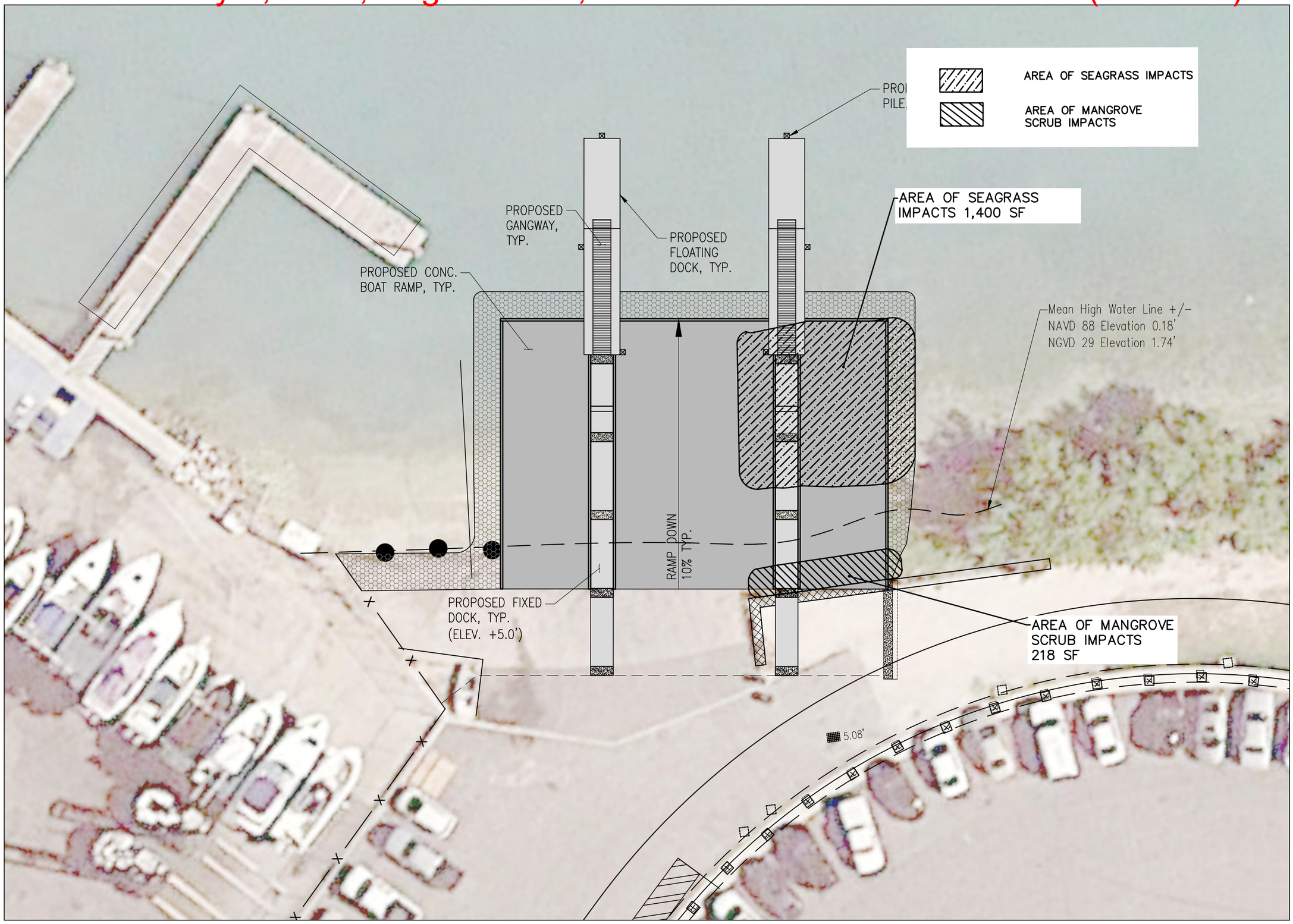
SHEET TITLE
TURBIDITY CONTROL

SHEET
P-5.0



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SCALE	1":40'

SHEET TITLE

ENVIRONMENTAL IMPACTS

SHEET

P-6.0

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1. General

1.1. The work consists of providing all construction, labor, equipment, material and operations in connection with the repair of the seawall and related improvements as shown on these drawings.

1.2. Any discrepancies in the plans with the field conditions shall be brought to the immediate attention of the Engineer. Construction shall not continue until the Engineer has addressed the discrepancies.

1.3. The contractor shall take all necessary precautions to protect existing structures in the project vicinity. Any damage to private or public property within the Project vicinity, including staging sites, work and access areas shall be repaired promptly by the Contractor. Any damage as a result of the Contractor's operations shall be repaired at no cost to the Owner. All access and staging areas shall be kept neat, orderly and in a safe manner. All access and staging areas shall be restored to the pre-construction condition upon project completion at the cost of the Contractor. The site shall be restored by removing and finishing all evidence for construction. In the event infrastructure (such as walkways, sidewalks, fences, vegetation, etc.) is temporarily removed or relocated or there is unauthorized damage to vegetation and/or facilities by the Contractor, the Contractor shall restore all damage to structures and natural features to pre-construction conditions or better.

1.4. Utilities are not shown in the plans. Contractor is responsible for locating all present utilities prior to construction.

1.5. Contractor is responsible for providing proper clearance and protection to all overhead wires and obstructions.

1.6. The Contractor shall exclude the public from the work areas in the immediate vicinity of operations. Contractor shall provide appropriate safety measures to protect the public.

1.7. All new structural work including concrete and reinforcement shall be accurately field measured and dimensions verified by the Contractor prior to ordering materials. Contractor shall be prepared to make field adjustments to accurately fit the new work to existing conditions.

1.8. No construction shall commence until all required permits and approvals have been secured and the contractor has been issued Notice to Proceed.

1.9. Attention is directed to the fact that these plans may have been changed in size by reproduction. This should be considered when obtaining scaled data.

1.10. Construction work shall be executed in accordance with all local, state, and national building codes and governing regulations.FDEP, USACE, and Broward County. Contractor shall adhere to all conditions of the permits and exemptions.

1.11. Extend existing drainage pipes through steel sheet pile at same elevation.

2. Layout and Testing

2.1. All construction stakeout shall be performed by and paid for by the contractor under the supervision of a surveyor registered in the state of Florida. All testing and inspection for concrete materials shall be in accordance with FDOT specifications and shall be performed by an independent testing laboratory.

3. Demolition

3.1. Contractor shall verify the extents, location and quantities of existing elements to be removed.

3.2. All debris within the limits of the project shall be hauled off site by the Contractor, as directed by the Owner, and disposed of at an appropriate facility.

3.3. Contractor shall not damage any structural components beyond the demolition requirements depicted in these drawings. Any damage shall be repaired at the Contractor's expense.

4. Concrete

4.1. Forms for this work shall be made of either wood or metal. They shall be straight and free of warp or bends. They shall have sufficient strength and rigidity, when staked, to resist the pressure of the concrete without springing. If wooden forms are used, they shall be of adequate section and shall have a flat surface on top. Forms shall have a depth at least equal to the vertical dimensions for the depth of the concrete being deposited against them. When ready for the concrete to be deposited, they shall not vary from the approved line and grade, and shall be kept so until the concrete has set.

4.2. Just prior to placing the concrete any wooden forms shall be moistened and all steel reinforcing shall be rinsed with fresh water. The concrete shall be placed in the forms and tamped in place so that all honeycombs will be eliminated and sufficient mortar brought to a smooth even finish by means of a float.

4.3. Contractor shall be prepared to place concrete of lower members of the marine structures in submerged conditions utilizing tremie methods at no additional cost.

4.4. No concrete shall be poured during unfavorable weather or sea conditions.

4.5. All steel shall have a minimum of 3 inches concrete cover, unless otherwise noted. No chairs or other metal shall protrude from surface of concrete.

4.6. Cast-in-place concrete shall be a minimum of 5,000 PSI compressive strength at 28 days. Water cement ratio (W/C) shall be less than or equal to 0.4. Provide mix design for a Class IV concrete for an extremely aggressive (marine) environment in accordance with FDOT specifications. Provide sufficient amount of fly ash and silica fume to the cement content. Contractor shall provide mix design to Engineer for approval 10 days prior to concrete placement.

4.7. No water shall be added to concrete at the job site unless authorized by the Engineer or Special Inspector.

4.8. When surface finishing is completed, the structure shall be protected against wave splash for two days and cured per applicable paragraphs of Section 400-16 of the FDOT Standard Specifications. Curing shall occur for at least 7 days.

4.9. A surface penetrant sealer of alkyl-alkoxy silane classification, such as BASF Enviroseal, or approved equal shall be applied all exposed concrete.

4.10. Apply Sika Armatec 110 bonding agent, or approved equal, at construction joints prior to placement of new concrete.

4.11. Components not constructed according to these specifications shall be removed and replaced properly at the expense of the contractor.

4.12. The faces of the finished structures shall be true, straight, and of uniform width, free from humps, sags, or other irregularities except as specified in the plans. The contractor shall replace any deficient segments.

4.13. Concrete Formworkers and Finishers:
The contractor shall supply a sufficient number of experienced concrete formworkers and finishers in order to complete the work. A concrete foreman who has a thorough understanding of the plans, specifications, and referenced specifications shall supervise all formworkers and finishers. No sub-standard workmanship will be accepted.

4.14. Concrete Transportation:
Concrete delivered from a ready mix plant shall be transported in accordance to FDOT Section 345-13. Concrete that is not placed in the form within the specified time limits will be rejected and not included in the work. Contractor shall bear all costs for rejected concrete. Concrete shall not be placed in the forms until the reinforcing steel placement has been approved by the Engineer.

4.15. Reinforced Concrete Materials Testing:
The Contractor shall have an independent testing laboratory test the concrete used in the work. The test shall include 7, 14, and 28 day compressive strength tests. The results shall be supplied to the Engineer. The tests shall be in accordance with ASTM C31, C39, and C617.

4.16. Adhesive bonded dowels shall be installed in accordance with FDOT Section 416.

5. Steel

5.1. All reinforcing steel shall conform to ASTM A615, Grade 60, deformed bars free from loose rust and scale.

5.2. Reinforcing steel, supports, and tie wire shall be hot-dipped galvanized in accordance with ASTM A767.

5.3. MMFX or CHROMX 4100 steel can be used as an alternate to hot-dipped galvanized steel at Contractors option, with no additional cost to owner.

5.4. Steel shall be placed as shown in the plans. All accessories shall be plastic only to support reinforcing exposed to weather. All reinforcing steel shall be accurately located and firmly held in place before and during the place of concrete.

6. Concrete Piles

6.1. Piles shall be 14" square prestressed concrete piles with (8) 0.6" diameter strands, grade 270 ksi, LRS.

6.2. Concrete to be minimum 6,000 psi, and follow FDOT Class-V concrete specifications. Minimum concrete cover to internal reinforcement shall be 3" on all sides.

6.3. Piles shall be driven a minimum of 12 feet into firm material and provide a minimum bearing capacity of 25 tons/pile. Pile logs shall be recorded for all driven piles.

6.4. Piles shall be cut off at elevations shown in the plans and sections herein.

6.5. Contractor to submit shop drawings for concrete piles.

6.6. Piles shall be from a FDOT certified facility of prestressed concrete products.

7. Tidal Data

7.1. Contractor may need to adjust his work plan to account for actual water levels and changing water levels. The site may be subject to variable wave and surge conditions and it is the responsibility of the contractor to provide temporary support for marine structures and shoreline during construction. Tidal data obtained from Virginia Key, Florida Station ID 8723214.

8. Submittals

8.1. Review of submittals by the structural engineer is for general conformance with the design concept as presented by the contract documents. No detailed check of quantities or dimensions will be made.

8.2. All shop drawings must bear evidence of the Contractor's approval prior to submitting to the Engineer.

8.3. The following minimum submittals shall be prepared by the Contractor and submitted to the Engineer for review and approval prior to related construction activity:

8.3.1. Schedule for completion of work with tasks and durations defined
8.3.2. Demolition Methods & Disposal Plan
8.3.3. Concrete Mix Design
8.3.4. Reinforcing Steel
8.3.5. Precast concrete piles slabs
8.3.6. Dock hardware

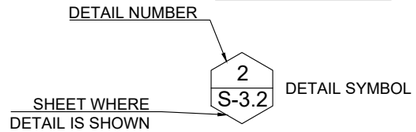
9. Design Criteria

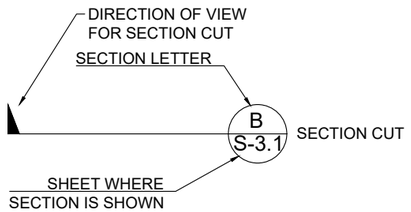
10.1 FBC 2014, ASCE 7-10 unoccupied wind Vult= 175 mph, Vasd = 136 mph Risk Cat. II, Exp. D, Gcpi = 0
occupied wind V= 40 mph (sustained)

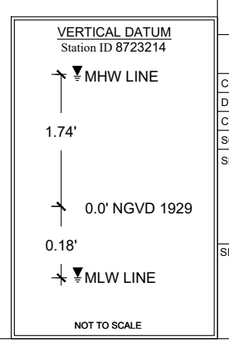
10.2 Dock Ramp LL = 100 psf
10.3 Design Vessel LOA = 40'
10.4 Occupied Wave Ht. = 1.5 ft
Unoccupied Wave Ht. = 2 ft
Storm Surge = 2 ft (Mean Range NOAA)

ABBREVIATIONS	
ACI	AMERICAN CONCRETE INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
CONT	CONTINUOUS
CONT'D	CONTINUED
CTD	CENTERED
FDEP	FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
KSI	KIPS PER SQUARE INCH
LOA	LENGTH OVERALL
MHW	MEAN HIGH WATER
MIN	MINIMUM
MLW	MEAN LOW WATER
NAVD	NORTH AMERICAN VERTICAL DATUM
NGVD	NATIONAL GEODETIC VERTICAL DATUM
PERA	PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS
PSI	POUNDS PER SQUARE INCH
TYP	TYPICAL
USACE	UNITED STATES ARMY CORPS OF ENGINEERS
W/C	WATER/CEMENT RATIO

SYMBOLS LEGEND







PROJECT
MIAMI MARINE STADIUM BOAT RAMPS
RICKENBACKER CAUSEWAY
MIAMI, FLORIDA 33435

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JASON S. TAYLOR, P.E. 60277

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SCALE	AS SHOWN

SHEET TITLE
GENERAL NOTES

SHEET 3 OF 5

CM-1.0

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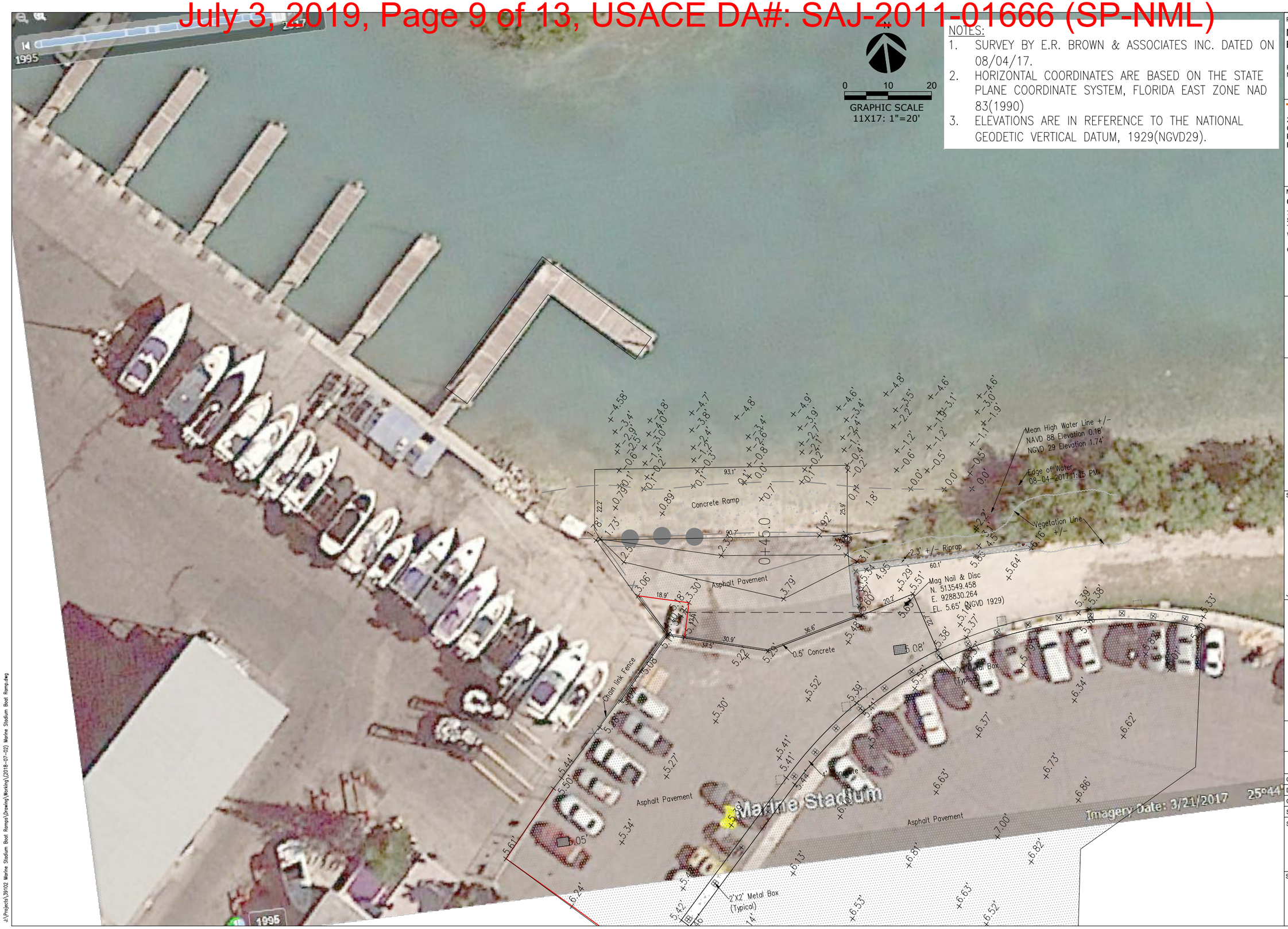

NOTES:

1. SURVEY BY E.R. BROWN & ASSOCIATES INC. DATED ON 08/04/17.
2. HORIZONTAL COORDINATES ARE BASED ON THE STATE PLANE COORDINATE SYSTEM, FLORIDA EAST ZONE NAD 83(1990)
3. ELEVATIONS ARE IN REFERENCE TO THE NATIONAL GEODETIC VERTICAL DATUM, 1929(NGVD29).

PROJECT

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EXISTING CONDITIONS

SHEET 3 OF 5

CM-1.1

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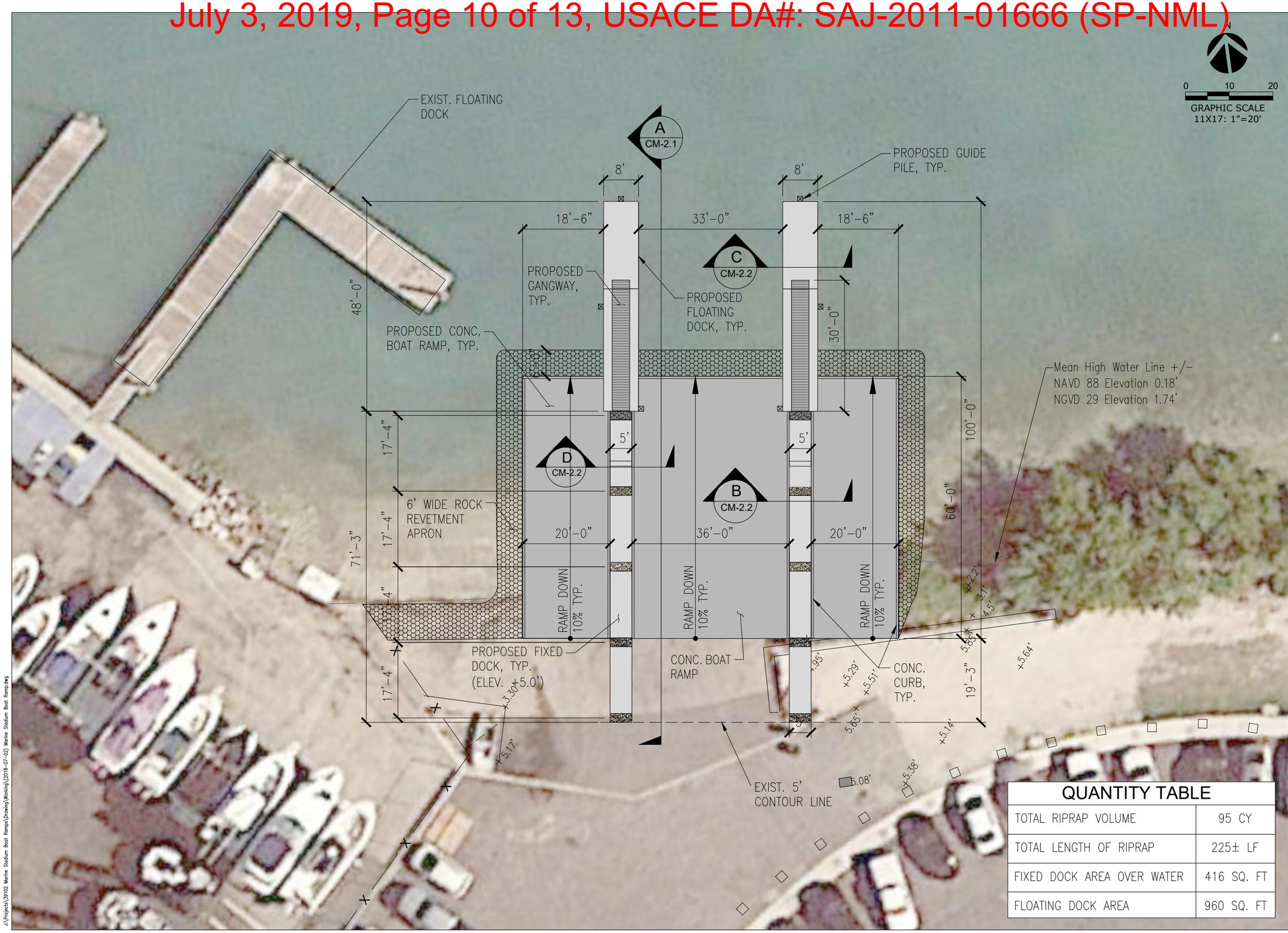

QUANTITY TABLE	
TOTAL RIPRAP VOLUME	95 CY
TOTAL LENGTH OF RIPRAP	225± LF
FIXED DOCK AREA OVER WATER	416 SQ. FT
FLOATING DOCK AREA	960 SQ. FT

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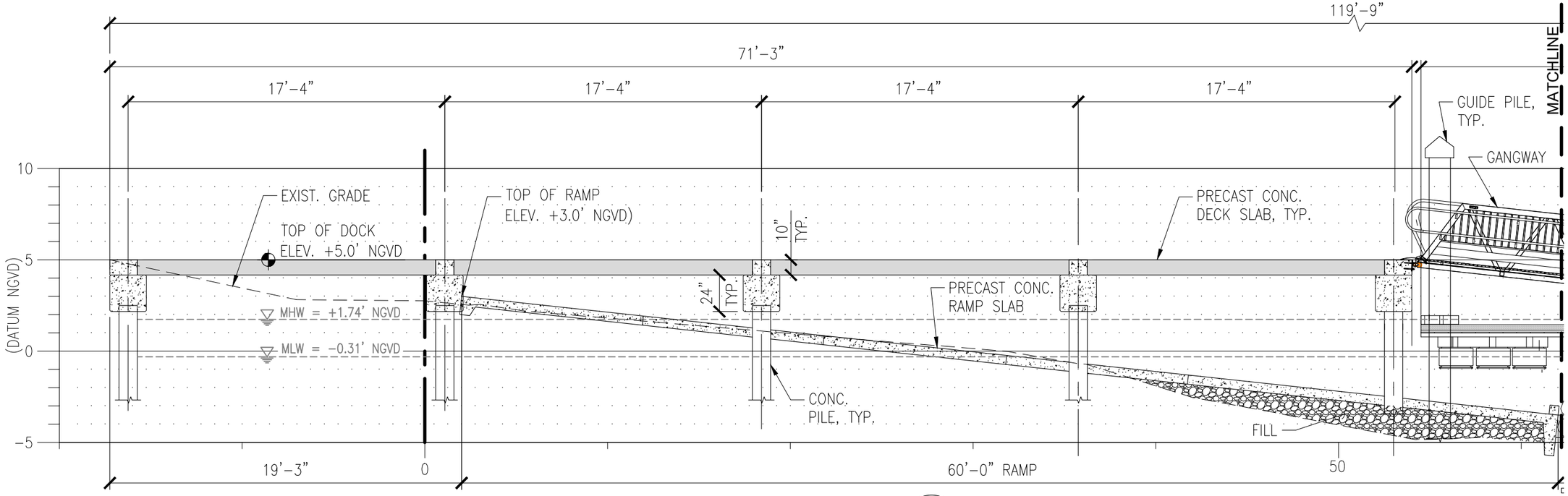

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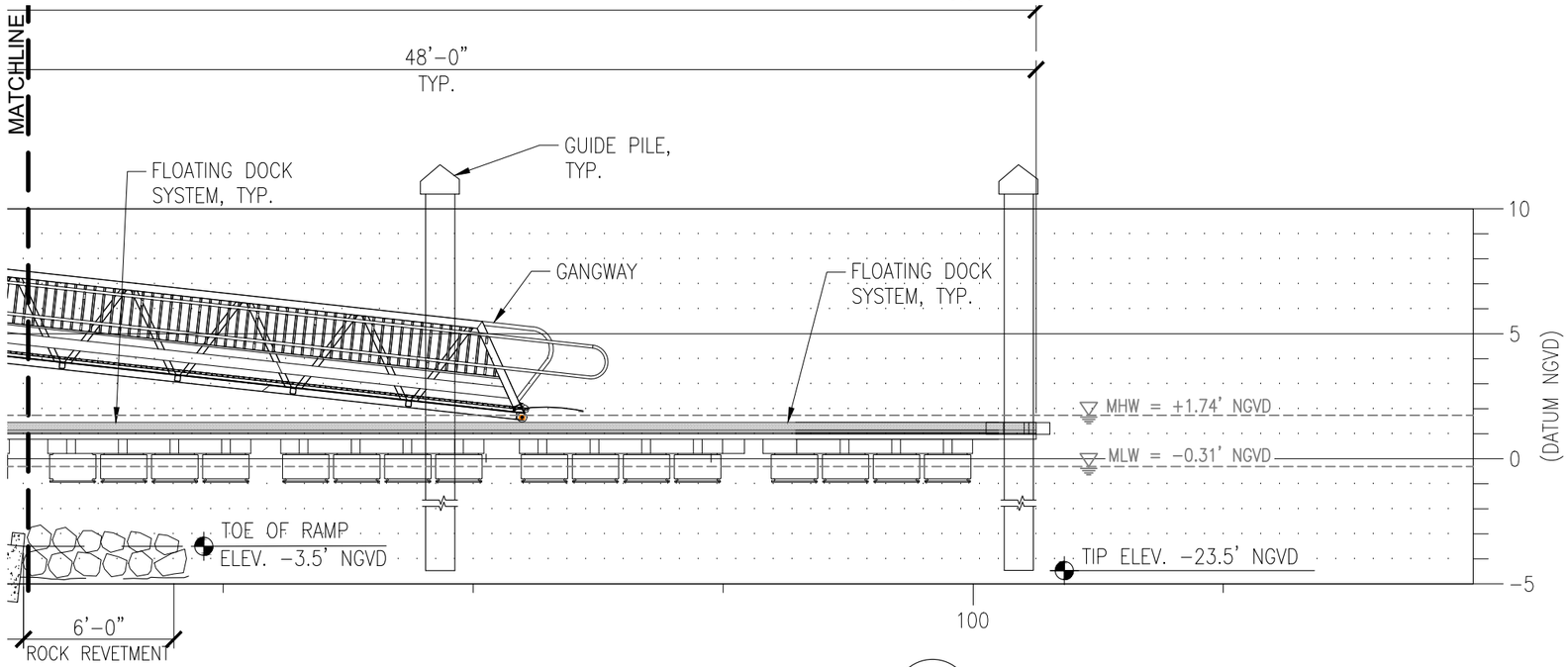

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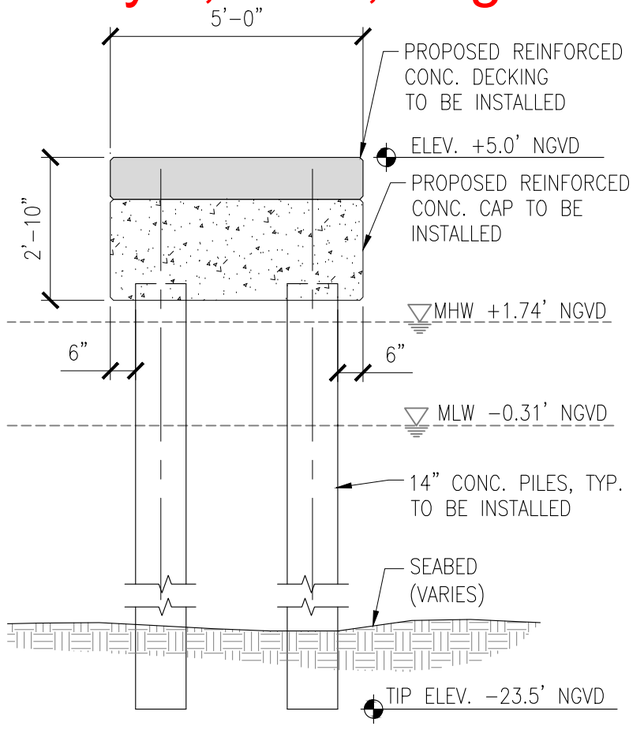

DOCK SECTION B
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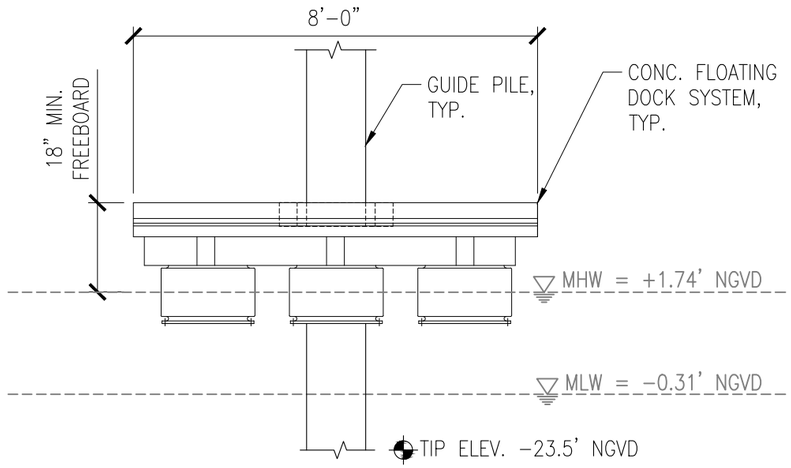

DOCK SECTION C
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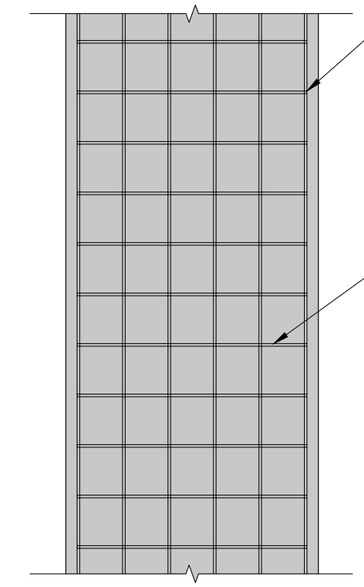

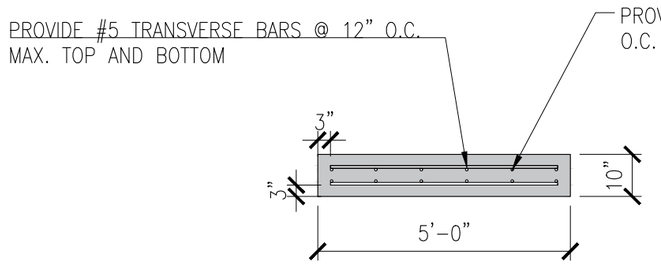

DOCK SLAB SECTION D
SCALE: 1:3 (11X17) S-2.0

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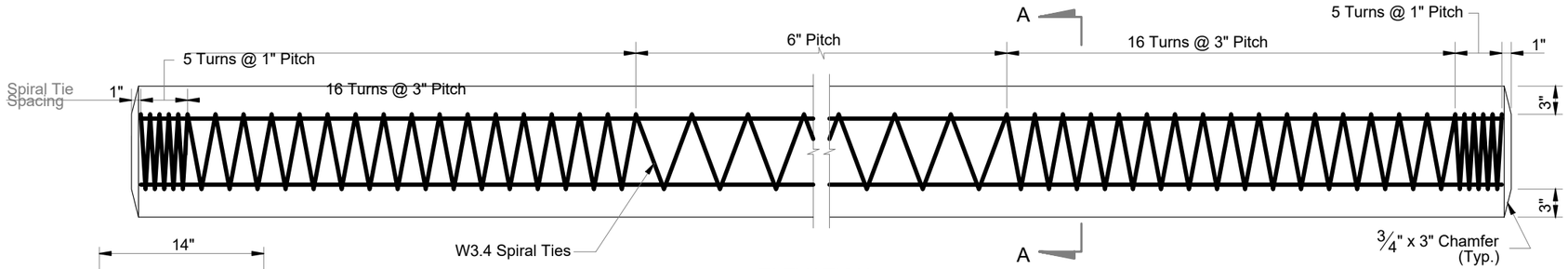
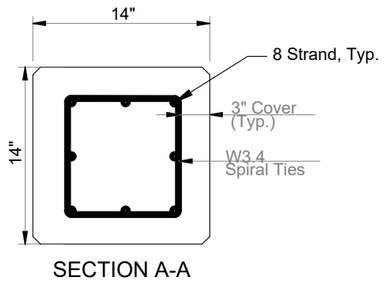


ELEVATION



SECTION A-A

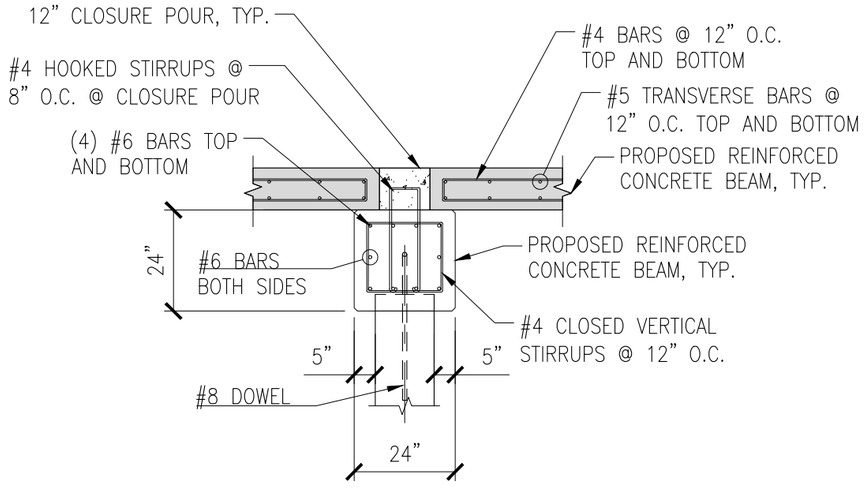
14"x14" PILE SPECIFICATION:

1. Fc' = 6,000 PSI (MIN)
2. MIN. 3" COVER ON ALL REIN.
3. ALL PILINGS SHALL CONFORM TO FDOT CONCR. CLASS V SPEC.
4. PILING TO ACHIEVE BEARING CAPACITY OF 35 TONS
5. CONTRACTOR TO MAINTAIN PILE LOGS.

PROPOSED P.S CONCRETE PILE DETAIL (TYP.)

N.T.S.

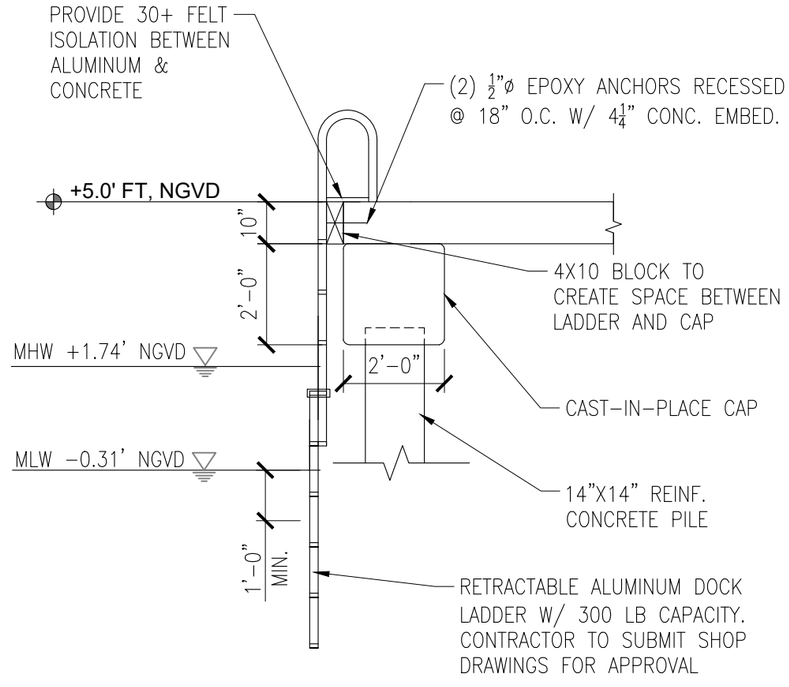
1 / CM-2.0



PROPOSED REINFORCING DETAIL

SCALE: 1:3 (11X17)

2 / CM-2.1



LADDER DETAIL

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3 / CM-2.1

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