



REPLY TO
ATTENTION OF

Regulatory Division
South Branch
Miami Permits Section

DEPARTMENT OF THE ARMY
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
9900 SOUTHWEST 107TH AVENUE, SUITE 203
MIAMI, FLORIDA 33176

June 10, 2020

PUBLIC NOTICE

Permit Application No. SAJ-2000-02750 (SP-MIB)

TO WHOM IT MAY CONCERN: The Jacksonville District of the U.S. Army Corps of Engineers (Corps) has received an application for a Department of the Army permit pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403) as described below:

APPLICANTS: Executive Bay Club Condominium Association, Inc.
C/o Sumei Gomez
87200 Overseas Highway, Box V-11
Islamorada, Florida 33036

WATERWAY AND LOCATION: The project would affect waters of the United States associated with Florida Bay. The project site is located in Executive Bay Club at 87200 Overseas Highway adjacent to the Florida Bay in Section 18, Township 63 South, Range 38 East, Plantation Key, Monroe County, Florida (MM87). RE#00093241-000000, 00093242-000000 & 00093243-000000

Directions to the site are as follows: Take U.S. 1 South to MM 87; Project site is located in Executive Bay Club at 87200 Overseas Highway.

APPROXIMATE CENTRAL COORDINATES: Latitude 24.965956°
Longitude -80.566600°

PROJECT PURPOSE:

Basic: The basic purpose is to improve boating access.

Overall: The overall purpose is to improve an existing private multi-family marina in Islamorada, Florida.

EXISTING CONDITIONS: The project is associated with an existing upland residential development adjacent to the Florida Bay. The shoreline is stabilized with a concrete seawall. A benthic survey has not been provided; however, the general area is known to support macro algae, sea grass, corals, and hard bottom communities.

PROPOSED WORK: The applicant seeks authorization to replace and expand the existing docking facility by constructing a new 5,385 square foot docking facility, to remove 21 piles, to replace six (6) pilings with six (6) mooring buoys, and to install temporary floating turbidity barriers around all work areas that are in/over navigable waters of the United States. The subject site would accommodate 31 vessels at the new docking facility and 6 additional vessels at the proposed mooring buoys totaling 37 motorized wet slips.

COMPENSATORY MITIGATION – The applicant has provided the following explanation why compensatory mitigation should not be required: Based on the proposed avoidance and minimization measures provided above the applicant is not proposing compensatory mitigation at this time.

CULTURAL RESOURCES:

The Corps is not aware of any known historic properties within the permit area. By copy of this public notice, the Corps is providing information for review. Our final determination relative to historic resource impacts is subject to review by and coordination with the State Historic Preservation Officer and those federally recognized tribes with concerns in Florida and the Permit Area.

ENDANGERED SPECIES:

The U.S. Army Corps of Engineers (Corps) has determined the project “*may affect*” the West Indian manatee (*Trichechus manatus*) or its designated critical habitat. Since the proposal by the applicant is for in-water construction, potential impacts to the endangered manatee were evaluated using The Corps of Engineers, Jacksonville District, and the State of Florida Effect Determination Key for the Manatee in Florida (Manatee Key), dated April 2013. Use of the Manatee Key resulted in the following sequential determination: A > B > C > G > H > I > J > L > M2 > “may affect.” The applicant/agent has not provided any proposed manatee measures to minimize impacts to the manatee. As such, the Corps will request initiation of consultation with the Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act by separate letter.

The Corps has determined the proposed project *may affect, but is not likely to adversely affect* (“MANLAA”) the swimming green sea turtles (*Chelonia mydas*), loggerhead sea turtles (*Caretta caretta*), hawksbill sea turtles (*Eretmochelys imbricata*), Kemp’s ridley sea turtles (*Lepidochelys kempii*), leatherback sea turtles (*Dermochelys coriacea*), the smalltooth sawfish (*Pristis pectinata*) and Acropora sp. critical habitat. The Corps has reached a *no effect* determination on Acropora sp. and corals species; (*Dendrogyra cylindrus*, *Orbicella annularis*, *Orbicella faveolata*, *Orbicella franksi*, *Mycetophyllia ferox*). The Corps will request National Marine Fisheries Service’s concurrence with this determination pursuant to Section 7 of the Endangered Species Act.

ESSENTIAL FISH HABITAT (EFH): This notice initiates consultation with the National Marine Fisheries Service on EFH as required by the Magnuson-Stevens Fishery Conservation and Management Act 1996. The proposal would impact approximately 5,391 square feet of submerged bottom utilized by various life stages of marine species. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or Federally managed fisheries in the Florida Keys; however, a benthic survey has not been provided and will be required prior to reaching a final decision. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

NOTE: This public notice is being issued based on information furnished by the applicant. This information has not been verified or evaluated to ensure compliance with laws and regulation governing the regulatory program. The jurisdictional line has not been verified by Corps personnel.

AUTHORIZATION FROM OTHER AGENCIES: Water Quality Certification may be required from the Florida Department of Environmental Protection and/or one of the state Water Management Districts.

COMMENTS regarding the potential authorization of the work proposed should be submitted in writing to the attention of the District Engineer through the Miami Permits Section, 9900 Southwest 107th Avenue, Suite 203, Miami, Florida 33176 within 30 days from the date of this notice.

The decision whether to issue or deny this permit application will be based on the information received from this public notice and the evaluation of the probable impact to the associated wetlands. This is based on an analysis of the applicant's avoidance and minimization efforts for the project, as well as the compensatory mitigation proposed.

QUESTIONS concerning this application should be directed to the project manager, Maria Bezanilla, in writing at the Miami Permits Section, 9900 Southwest 107th Avenue, Suite 203, Miami, Florida 33176, by electronic mail at Maria.I.Bezanilla@usace.army.mil, or by telephone at (305) 779-6057.

IMPACT ON NATURAL RESOURCES: Coordination with U.S. Fish and Wildlife Service, Environmental Protection Agency (EPA), the National Marine Fisheries Services, and other Federal, State, and local agencies, environmental groups, and concerned citizens generally yields pertinent environmental information that is instrumental in determining the impact the proposed action will have on the natural resources of the area.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All

factors which may be relevant to the proposal will be considered including cumulative impacts thereof; among these are conservation, economics, esthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food, and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people. Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act or the criteria established under authority of Section 102(a) of the Marine Protection Research and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest.

The US Army Corps of Engineers (Corps) is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other Interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this determination, comments are used to assess impacts to endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

COASTAL ZONE MANAGEMENT CONSISTENCY: In Florida, the State approval constitutes compliance with the approved Coastal Zone Management Plan. In Puerto Rico, a Coastal Zone Management Consistency Concurrence is required from the Puerto Rico Planning Board. In the Virgin Islands, the Department of Planning and Natural Resources permit constitutes compliance with the Coastal Zone Management Plan.

REQUEST FOR PUBLIC HEARING: Any person may request a public hearing. The request must be submitted in writing to the District Engineer within the designated comment period of the notice and must state the specific reasons for requesting the public hearing.

PROJECT LOCATION

PARCEL ID 00093241-000100-006600

PARCEL ID 00093242-000100-006500

PARCEL ID 00093243-000100-006900

SEC/TWP/RNG 18/63/38

PLANTATION KEY (ISLAMORADA)

LATITUDE: 24.964200°N LONGITUDE: 80.565990°W

DIRECTIONS:

US HIGHWAY NO 1 NORTH TO MM 87±.

PROPERTY ADDRESS: 87200 OVERSEAS HWY

ADJOINING OWNERS

ISLAMORADA VILLAGE OF ISLANDS

86800 OVERSEAS HWY

ISLAMORADA, FL 33036

BAYRIDGE CORP

PO BOX 1146

ISLAMORADA, FL 33036



REVISIONS:

CERTIFIED BY:
SEAN KERWAN, P.E. #57506

DOCKING FACILITY EXPANSION
EXECUTIVE BAY CLUB CONDOMINIUM ASSOCIATION, INC.
PLANTATION KEY, MONROE COUNTY, FL

GLEN BOE AND ASSOCIATES, INC. # 4061
5800 OVERSEAS HIGHWAY, SUITE 4, MARATHON, FL 33050
Telephone (305) 743-9121 Fax (305) 743-9197
Email: glenboe@bellsouth.net

DATE: 05/12/20



SITE PLAN (EXISTING CONDITIONS)

SCALE: 1" = 100'

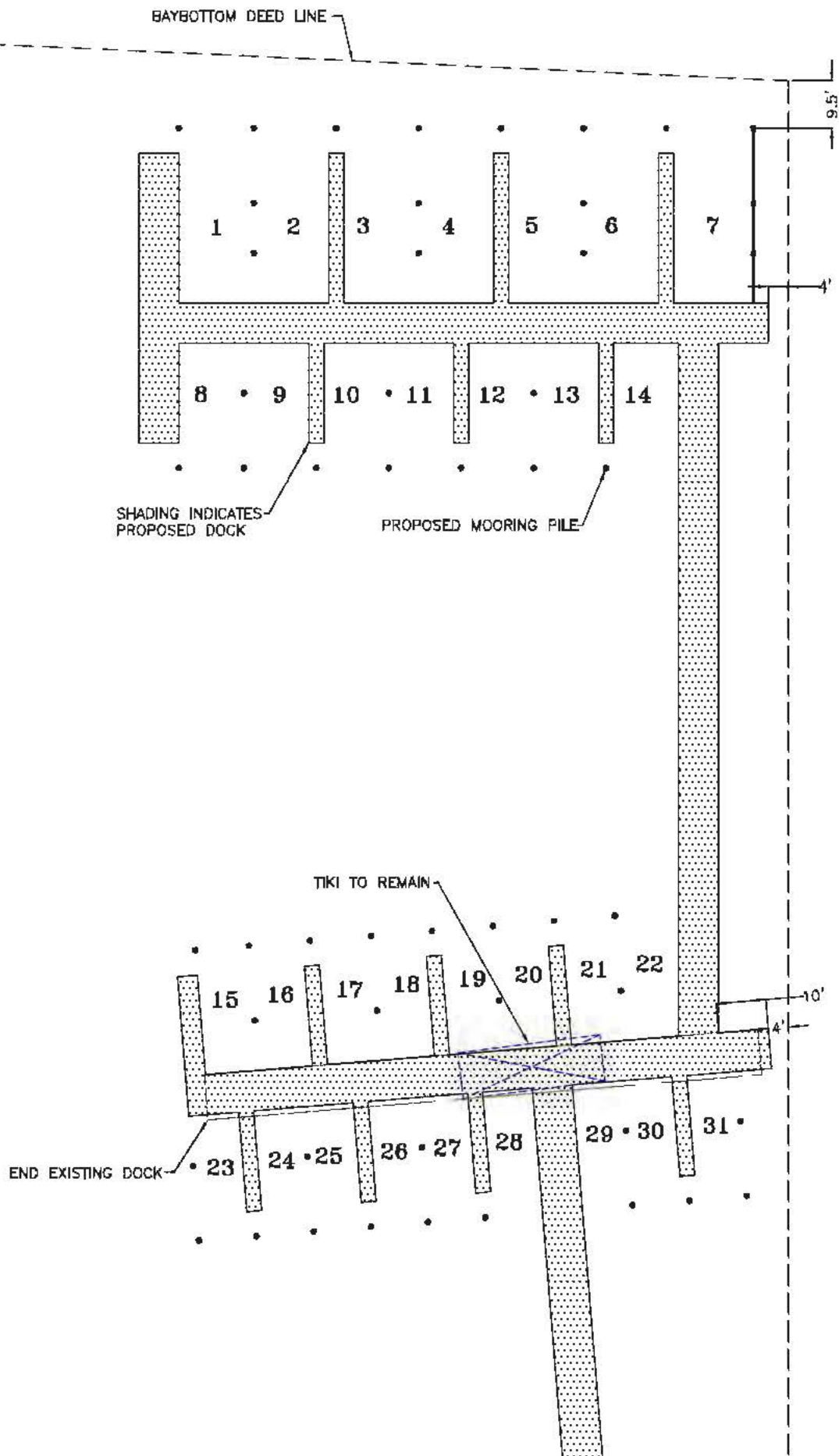




SITE PLAN (PROPOSED IMPROVEMENTS)

SCALE: 1" = 100'





DOCK LAYOUT
SCALE: 1" = 30'

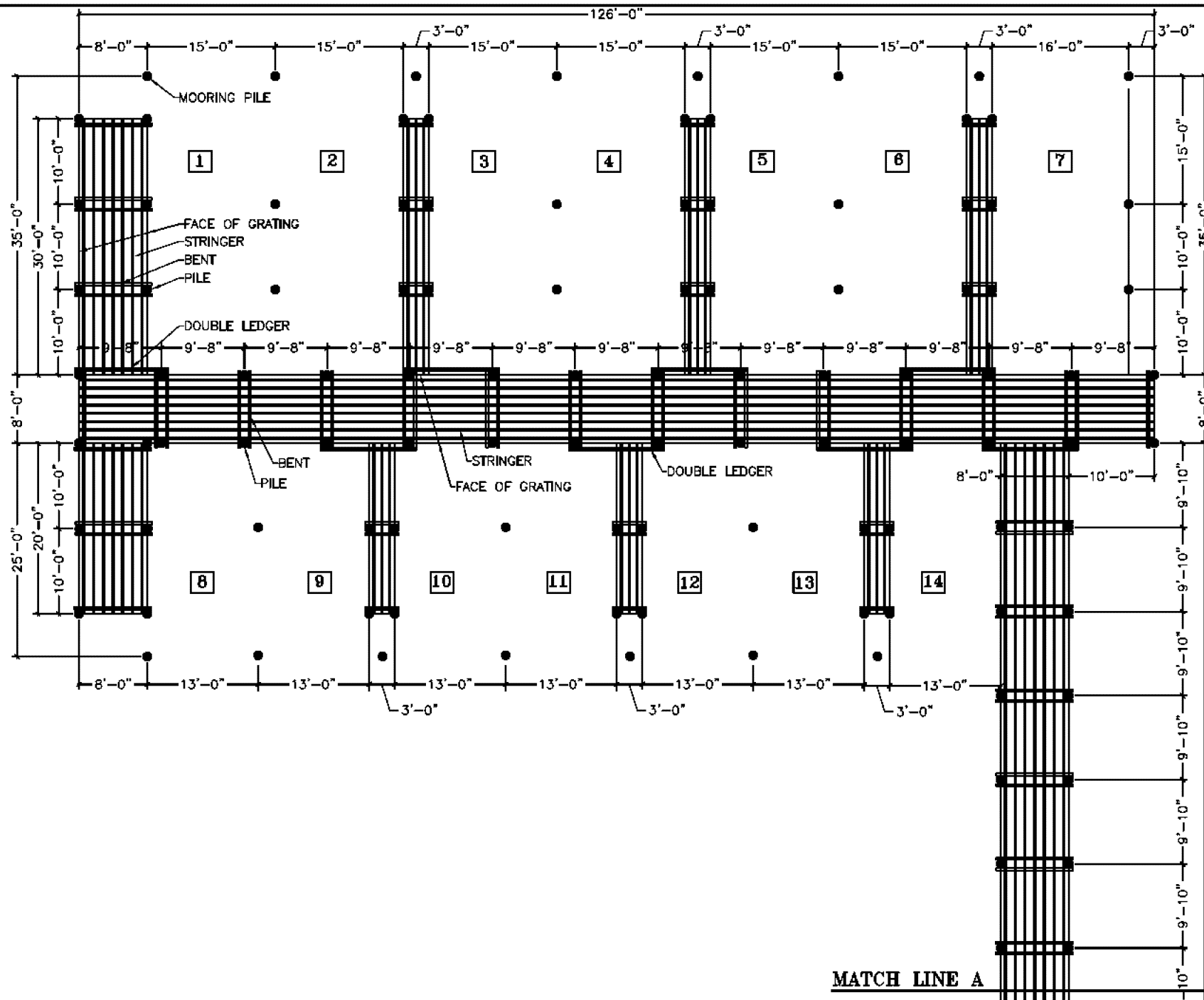
REVISIONS:

CERTIFIED BY:
SEAN KIRWAN, P.E. #57608

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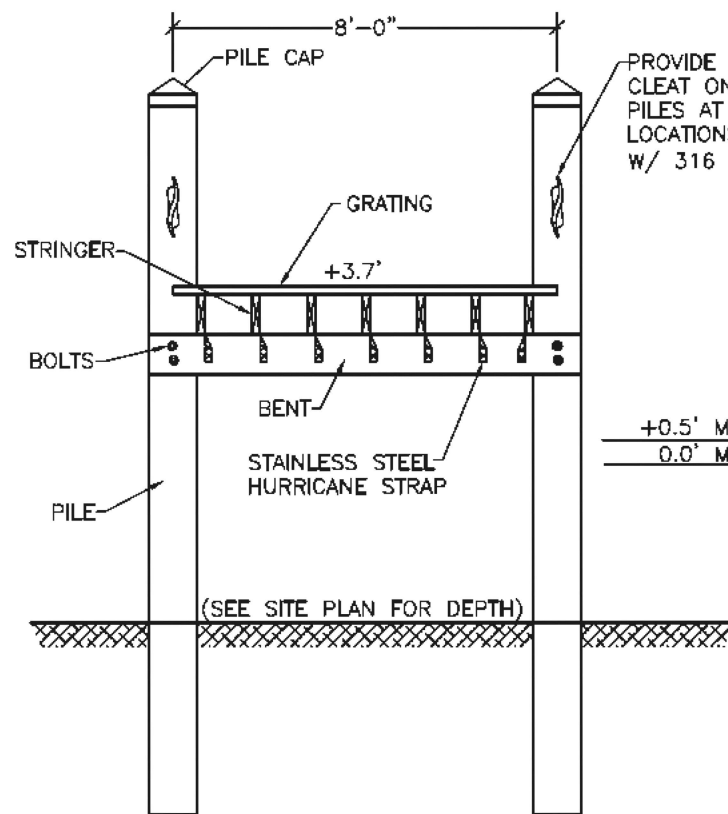
FRAMING PLAN

SCALE: 1/16" = 1'-0"

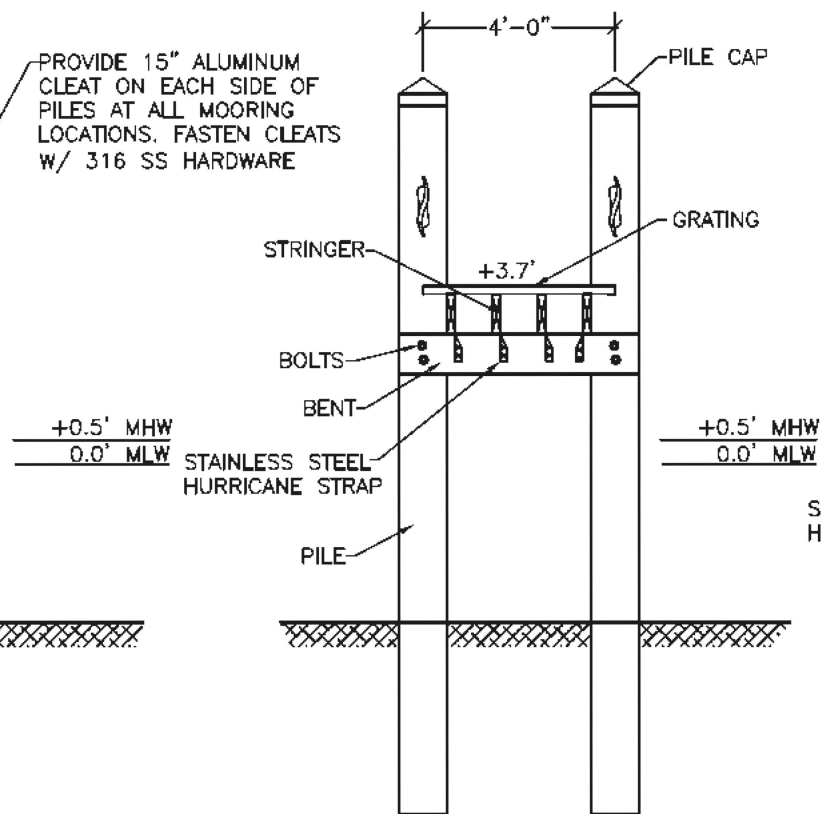
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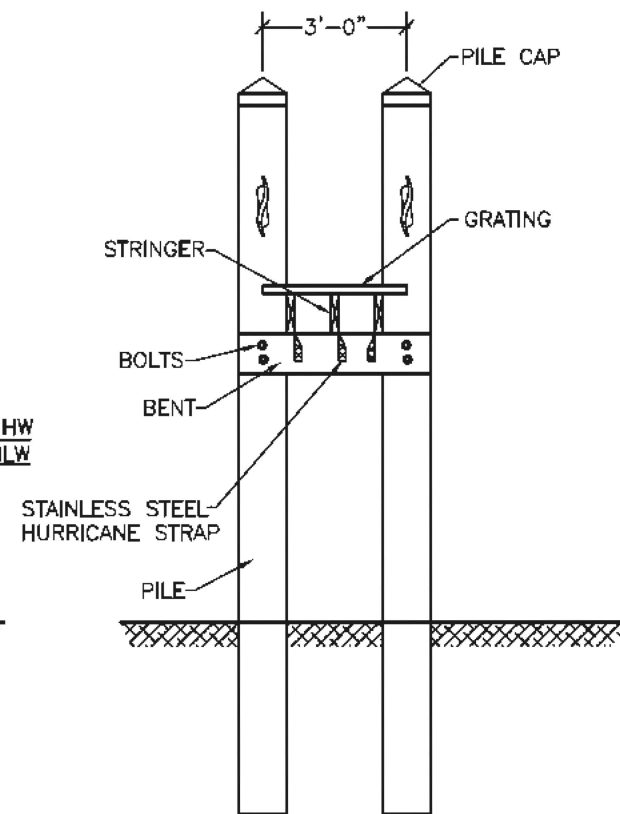
REVISIONS:



TYPICAL SECTION (8' DOCK)
SCALE: 1/4" = 1'-0"



TYPICAL SECTION (4' DOCK)
SCALE: 1/4" = 1'-0"



TYPICAL SECTION (3' DOCK)
SCALE: 1/4" = 1'-0"

1/2" STAINLESS STEEL SHACKLE

A JIM BUOY MODEL 1100 (OR PREAPPROVED EQUIVALENT) SURFACE FLOAT BUOY (9 1/4" LONG X 7" DIAMETER) SHALL BE INSTALLED ON THE DOWN-LINE FOR THE PURPOSE OF KEEPING THE DOWN-LINE FROM TANGLING AROUND THE ANCHOR HEAD OR DRAGGING ON THE SEAFLOOR. THE SUB-SURFACE BUOY WILL BE SECURED ON THE DOWN-LINE WITH A 3/8" STAINLESS STEEL BOLT, TWO (2) FLAT WASHERS (ONE EACH SIDE), AND NYLOCK NUT ABOVE THE SUB-SURFACE BUOY.

18" MOORING BALL

+1.6' MHW

0.0' MLW

PROVIDE MOORING LINE WITH PICKUP BUOY TO SHACKLE

(SEE SITE PLAN FOR DEPTH)

PROVIDE A 5/8" GALVANIZED STEEL SHACKLE SHALL SECURE THE DOWN-LINE TO THE GALVANIZED ANCHOR HEAD. THE DOWN-LINE WILL BE LOOPE AT THE ANCHOR END, CONNECTED TO ITSELF WITH A 3/8" STAINLESS STEEL BOLT, TWO (2) FLAT WASHERS (ONE EACH SIDE), AND A NYLOCK NUT. THE LOOPE END OF THE DOWN-LINE WILL BE COVERED WITH 3 1/2" X 12" LONG CANVAS FIRE HOSE, AND HELD IN PLACE WITH AT LEAST TWO HEAVY DUTY CABLE TIES.

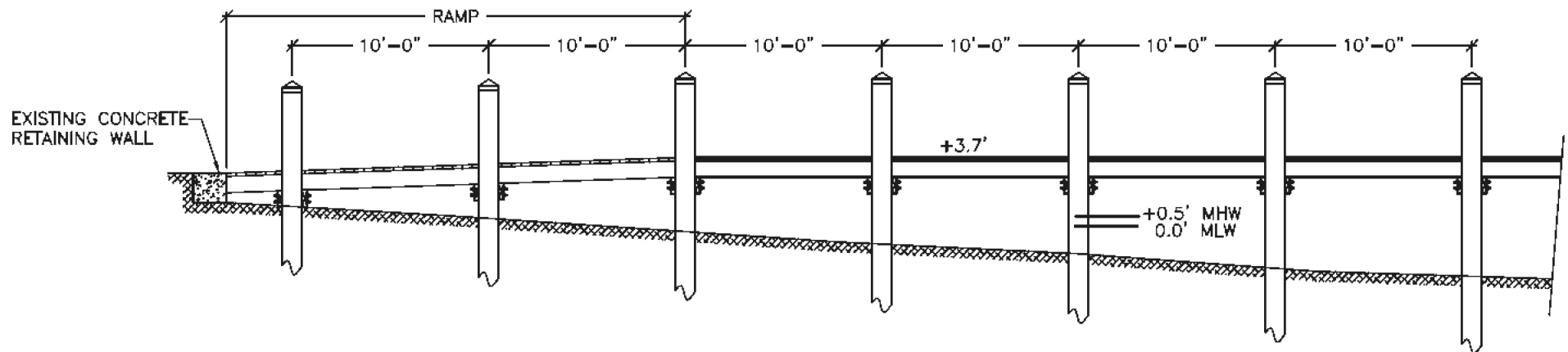
1/4" STAINLESS STEEL CHAIN ENCASED IN 1" GOODYEAR (OR PRE-APPROVED EQUIVALENT) BLUE PLOVIC HOSE. THE LENGTH OF THE COMPLETE, RIGGED DOWN-LINE SHALL BE APPROPRIATE FOR THE WATER DEPTH.

SECTION (MOORING BALL)

SCALE: 3/16" = 1'-0"

PROPOSED ANCHOR @ 25'± INTERVALS (SEE ANCHOR DESCRIPTIONS FOR INSTALLATION) TOP OF ANCHOR SHALL BE 6" MIN. ABOVE SEAFLOOR. (STAGGER ANCHORS ON BARRIER ALIGNMENT TO PROVIDE ANCHORS ON EACH SIDE OF BARRIER)

NOTE: IN-WATER ROPE, CABLE OR CHAIN SHALL BE INDUSTRIAL GRADE METAL CHAINS OR HEAVY CABLES THAT DO NOT READILY LOOP AND TANGLE AND SHALL BE INSTALLED SO LINE IS TAUT AND WITHOUT EXCESS LINE IN THE WATER. LINES SHALL BE ENCLOSED IN A PLASTIC OR RUBBER SLEEVE/TUBE TO ADD RIGIDITY.



ELEVATION

SCALE: 1/8" = 1'-0"

SHEET 10 OF 12	10	DATE: 03/13/20	GLEN BOE AND ASSOCIATES, INC. # 4061 5800 OVERSEAS HIGHWAY, SUITE 4, MARATHON, FL 33050 Telephone (305) 743-9121 Fax (305) 743-9197 Email: glenboe@bellsouth.net	DOCKING FACILITY EXPANSION EXECUTIVE BAY CLUB CONDOMINIUM ASSOCIATION, INC. PLANTATION KEY, MONROE COUNTY, FL	CERTIFIED BY: SEAN KIRWAN, P.E. #57506	REVISIONS:	

1. CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS PRIOR TO COMMENCING WORK. THE REQUIREMENTS OF THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, THE ARMY CORPS OF ENGINEERS & LOCAL REGULATIONS SHALL GOVERN ALL WORK.

2. WORK SHOWN ON DRAWINGS IS DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 2017. FOLLOW ALL APPLICABLE PROVISIONS FOR ALL PHASES OF CONSTRUCTION. THE PROPOSED STRUCTURE(S) IS DESIGNED FOR A MINIMUM LIVE LOAD OF 40 PSF/DEAD LOAD 10 PSF, 180 MPH (3 SECOND GUST), EXPOSURE D, RISK CATEGORY 1, ASCE 7-10.

3. CONTRACTOR SHALL ADHERE TO THE STANDARD MANATEE CONSTRUCTION CONDITIONS (LATEST EDITION). IF NEEDED, THE CONTRACTOR CAN CONTACT THE ARMY CORPS OF ENGINEERS OR THIS OFFICE TO OBTAIN A COPY OF THE STANDARD MANATEE CONSTRUCTION CONDITIONS.

4. BEST MANAGEMENT PRACTICES, INCLUDING THE USE OF TURBIDITY SCREENS, ARE REQUIRED TO ISOLATE THE CONSTRUCTION AREA FROM THE ADJACENT WATERS. CONTRACTOR SHALL INSTALL TURBIDITY SCREENS AROUND THE IMMEDIATE PROJECT AREA PRIOR TO CONSTRUCTION. THE TURBIDITY SCREENS REMAIN IN PLACE UNTIL WATER QUALITY CONDITIONS RETURN TO PRECONSTRUCTION CONDITIONS. WATER QUALITY MONITORING SHALL ADHERE TO STATE REGULATIONS.

5. ELECTRIC & WATER (DESIGN PROVIDED BY OTHERS) SHALL BE PROVIDED AS DIRECTED BY OWNER. CONTRACTOR SHALL COORDINATE FINAL LOCATION OF ALL PROPOSED UTILITIES WITH OWNER PRIOR TO CONSTRUCTION.

6. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS & WATER DEPTHS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK.

7. THE STRUCTURAL INTEGRITY OF THE COMPLETED STRUCTURE DEPENDS ON INTERACTION OF VARIOUS CONNECTED COMPONENTS. PROVIDE ADEQUATE BRACING, SHORING, AND OTHER TEMPORARY SUPPORTS AS REQUIRED TO SAFELY COMPLETE THE WORK.

B. EXERCISE EXTREME CARE AND CAUTION WHEN EXCAVATING AND FILLING ADJACENT TO EXISTING STRUCTURES. UNDER NO CIRCUMSTANCES SHALL THE STRUCTURAL INTEGRITY OF THE EXISTING STRUCTURES BE IMPAIRED IN ANY WAY BY CONSTRUCTION OPERATIONS AND PROCEDURES. DO NOT EXCAVATE OR DISTURB SOIL ADJACENT TO OR BENEATH EXISTING FOOTINGS.

9. CONTRACTOR SHALL COORDINATE INSTALLATION OF CLEATS, LADDERS, PILE CAPS, AND OTHER DOCK ACCESSORIES WITH OWNER PRIOR TO CONSTRUCTION. ALL DOCK ACCESSORIES SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. STAINLESS STEEL HARDWARE SHALL BE USED FOR ALL CONNECTIONS TO DOCK.

10. FOR OPEN WATER DOCKS PROVIDE REFLECTORS ON EACH SIDE OF WALKWAY EVERY 50' AND ON EACH END OF THE TERMINAL PLATFORM.

TIMBER PILES:

PILES SHALL BE ROUND SOUTHERN PINE OR DOUGLAS FIR AND SHALL CONFORM TO ASTM D 25, UNUSED, CLEAN PEELED, UNIFORMLY TAPERED, ONE PIECE FROM BUTT TO TIP. PILES SHALL BE PRESSURE TREATED IN CONFORMANCE WITH AWPA C3 AND C18 FOR MARINE PILES. THE MINIMUM BUTT DIAMETER SHALL BE 12 INCHES, MEASURED AT A SECTION 3 FEET FROM THE END. FOR PILES UP TO 50 FEET IN LENGTH THE MINIMUM TIP DIAMETER SHALL BE 9 INCHES.

A STRAIGHT LINE DRAWN FROM THE CENTER OF THE BUTT TO THE CENTER OF THE TIP SHALL NOT, AT ANY POINT, FALL FURTHER AWAY FROM THE CENTER OF THE PILE THAN A DISTANCE EQUAL TO 1% OF THE LENGTH OF THE PILE.

PILES SHALL BE SET IN PREDRILLED OR PREPUNCHED HOLES AND DRIVEN TO PENETRATE FIRM ROCK 7' MIN.

FILES SHALL BE SPACED @ MAXIMUM OF 10' O.C. UNLESS OTHERWISE SHOWN.

DO NOT DRIVE PILES WITHIN 20 FEET OF CONCRETE LESS THAN SEVEN DAYS OLD.

CONTRACTOR SHALL INVESTIGATE ANY SUDDEN DECREASE IN DRIVING RESISTANCE FOR POSSIBLE BREAKAGE OF THE PILE. IF SUDDEN DECREASE IN DRIVING RESISTANCE CANNOT BE CORRELATED TO BORING DATA OR SOME INCIDENT IN THE DRIVING, AND IF THE PILE CANNOT BE INSPECTED, SUCH DECREASE IN DRIVING RESISTANCE MAY BE CAUSE FOR REJECTION OF THE PILE.

RE-DRIVE ANY PILE WHICH IS RAISED DURING DRIVING OF ADJACENT PILES, TO THE ORIGINAL TIP ELEVATION.

HEIGHT OF PILES SHALL BE FIELD DETERMINED BY OWNER. CUT OFF PILES AT TOP ELEVATION DIRECTED BY THE OWNER. REPLACE OR REPAIR PILES WHICH ARE DAMAGED WHEN CUT OFF.

PILES SHALL DEVIATE FROM PLUMB AND ANGLE OF BATTER NO MORE THAN 1/4 INCH PER FOOT OF PILE LENGTH, BUT NOT MORE THAN 6 INCHES OVERALL. PILES SHALL NOT DEVIATE FROM LOCATION OF PILE TOP MORE THAN 6 INCHES.

PILES NOT MEETING ASTM D25 REQUIREMENTS WILL BE REJECTED. REMOVE SUCH PILES FROM THE SITE AND REPLACE WITH SOUND PILES. PILES BROKEN UNDER DRIVING STRESSES MAY BE CUT OFF AND LEFT IN PLACE IF APPROVED BY THE DESIGN ENGINEER FOR THE LOCATION. OTHERWISE THEY SHALL BE EXTRACTED AND REMOVED FROM THE SITE.

REMOVE CUTOFF SECTIONS OF PILES FROM THE SITE AND LEGALLY DISPOSE.

LUMBER, DECKING, & FASTENERS:

ALL BENTS AND STRINGERS SHALL BE SOUTHERN PINE NO. 2. LUMBER SHALL BE PRESSURE TREATED PER AWPA UC4B SPECIFICATIONS. MINIMUM RETENTION OF CCA SHALL BE 0.60 POUNDS/CUBIC FOOT.

STRINGERS: 2x10 @ 16" CENTERS MAX. ($F_b=880$ MIN.)

BENTS (3' & 4' DOCKS): 3x10 OR DOUBLE 2x10 (Fb=800 MIN.)

BENTS (8' DOCKS): 3x12 OR DOUBLE 2x12 (Fb=750 MIN.)

FIBERGLASS GRATING (PLATFORM): ECOGRATE OR MICROMESH BY FIBERGRATE OR APPROVED EQUAL. ATTACH FIBERGLASS GRATING PER MANUFACTURER'S SPECIFICATIONS. THE FIBERGLASS GRATING SHALL HAVE MINIMUM 43% LIGHT PENETRATION OR GREATER & BE CAPABLE OF SUPPORTING THE LIVE LOAD & DEAD LOAD LISTED ABOVE. THE ADDITION OF ADDITIONAL STRINGERS IS ACCEPTABLE.

ATTACH BENTS TO PILING WITH TWO 3/4" 316 STAINLESS STEEL BOLTS, WASHERS, AND NUTS AT EACH CONNECTION POINT. BORE HOLES SHALL BE 1/16 INCH GREATER IN DIAMETER THAN THE BOLT. UPON COMPLETION OF THE INSTALLATION, CHECK ALL NUTS FOR TIGHTNESS. PROVIDE BITUMINOUS PAINT, CAULK, OR SIMILAR FOR TO PREVENT DISSIMILAR METAL CONTACT.

ATTACH EACH STRINGER TO EACH BENT WITH STAINLESS STEEL STRAPS AT EACH CONTACT POINT. PROVIDE SIMPSON STRONG-TIE LTS12, ALPINE MTS12, OR APPROVED EQUAL. ALL CONNECTORS SHALL BE HEAVY DUTY TYPE FOR MARINE ENVIRONMENT APPLICATIONS.

LAY THE PLANKS WITH THE BEST SIDE UP AND WITH ADJACENT EDGES IN CONTACT UNLESS OTHER SPACING SPECIFIED.

PERFORM COUNTERSINKING WHEREVER THE HEADS OF SCREWS OR BOLTS WOULD OTHERWISE INTERFERE WITH THE ASSEMBLY OF THE WORK.

REVISIONS

**DOCKING FACILITY EXPANSION
EXECUTIVE BAY CLUB CONDOMINIUM ASSOCIATION, INC.
PLANTATION KEY, MONROE COUNTY, FL**

SEAN KIRWAN, P.E. #57508

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Telephone: (305) 743-8121 Fax: (305) 743-8197
E-mail: glenboe@bellsouth.net

DATE: 05/12/20

MOORING BALL ANCHOR DETAIL BASED ON SUBSTRATE:

FOR SUBSTRATE OF UP TO 5' OF SAND/MUD OVERBURDEN ABOVE A HARD ROCK SUBSTRATE THE ANCHOR SHALL BE A ROCK PENETRATING HELICAL EMBEDMENT ANCHOR. THE ANCHOR SHALL BE A MINIMUM OF 6' LONG, WITH A MINIMUM HELICAL DISK SIZE OF 6", WITH A MINIMUM SHAFT DIAMETER OF 1 1/4". THE ANCHOR SHALL BE GALVANIZED STEEL. THE ANCHOR SHALL BE SECURELY EMBEDDED A MINIMUM OF 5 1/2' INTO THE SEAFLOOR WITH THE HEAD EXPOSED APPROXIMATELY 6" TO ALLOW FOR ATTACHMENT OF THE DOWNLINE. THE ANCHOR SHALL BE INSTALLED IN A MANNER WHICH PROVIDES FOR REMOVAL, VIA HEAVY EQUIPMENT, IF AND WHEN NECESSARY.

FOR SUBSTRATE GREATER THAN 5' OF SAND/MUD THE ANCHOR SHALL BE A SOFT BOTTOM HELICAL EMBEDMENT ANCHOR. THE ANCHOR SHALL BE A MINIMUM OF 6' LONG, WITH A MINIMUM HELICAL DISK SIZE OF 8", WITH A MINIMUM SHAFT DIAMETER OF 1 1/4". THE ANCHOR SHALL BE GALVANIZED STEEL. THE ANCHOR SHALL BE SECURELY EMBEDDED A MINIMUM OF 5 1/2' INTO THE SEAFLOOR WITH THE HEAD EXPOSED APPROXIMATELY 6" TO ALLOW FOR ATTACHMENT OF THE DOWNLINE. THE ANCHOR SHALL BE INSTALLED IN A MANNER WHICH PROVIDES FOR REMOVAL, VIA HEAVY EQUIPMENT, IF AND WHEN NECESSARY.

FOR EXPOSED ROCK SUBSTRATE THE ANCHOR SHALL BE THE HALAS PIN SYSTEM (OR PRE-APPROVED EQUIVALENT) WITH A MINIMUM EMBEDMENT DEPTH OF 18", MINIMUM PIN SIZE OF 5/8" DIAMETER BY 18" LENGTH, 316 STAINLESS STEEL; INSTALLED IN A 2" DIAMETER BY 18" DEEP DRILLED HOLE, AND GROUTED WITH CONCRETE. CAST IN PLACE CONCRETE SHALL BE TYPE II CONCRETE WITH A COMPRESSIVE STRENGTH OF 5,000 PSI AT 28 DAYS. MAXIMUM WATER-CEMENTIOUS MATERIALS RATIO BY WEIGHT RATIO SHALL BE 0.40. SLUMP SHALL NOT EXCEED 5" (1"±).

REVISIONS:

CERTIFIED BY:
SEAN KIRWAN, P.E. #67508

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