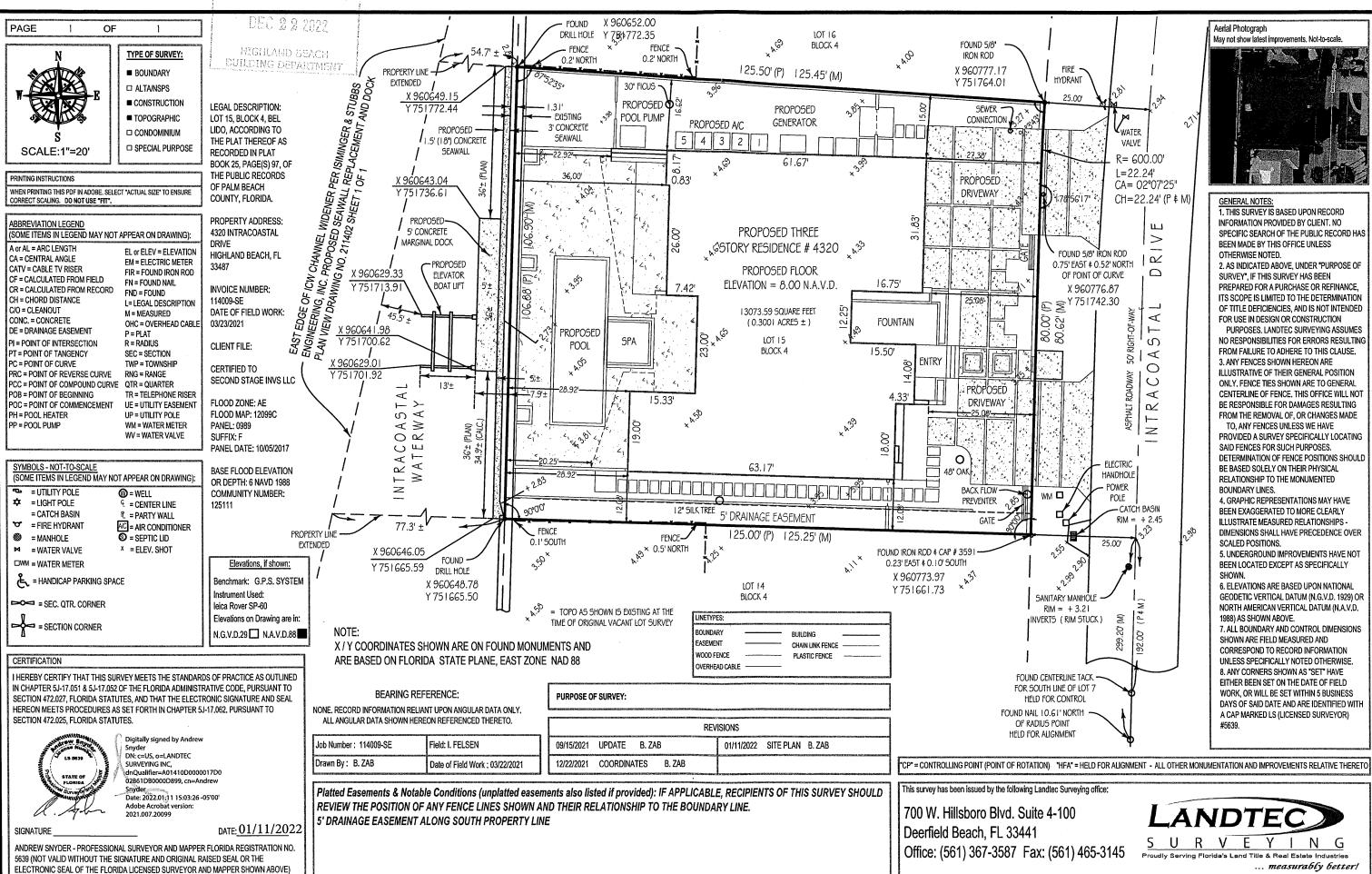
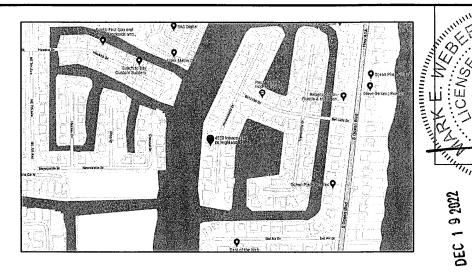
RECEIVE







LOCATION MAPS

EXISTING SEAWALL CAP
AND PILING TO BE REMOVED
AS NECESSARY

EXISTING SEAWALL
TO REMAIN

EXISTING CONDITIONS

EE (CE (WEE))
DEC 2 2 2022

HIGHLAND BEACH EUILDING DEFARTMENT Mark E. Weber, P.E.

LICENSE #53895 | CA 30702

MW ENGINEERING, INC
902 NE 1 Street Suite #2
Pompano Beach, Florida 33060
Ofc: 754-33-0877

WWW.MwEngineering.net

NE 902
TON, INC. Pomps
ii, Suite 200

B & M MARINE CONSTRUCTION, INC. 1211South Military Trail, Suite 200 Deerfield Beach, Fl 33442

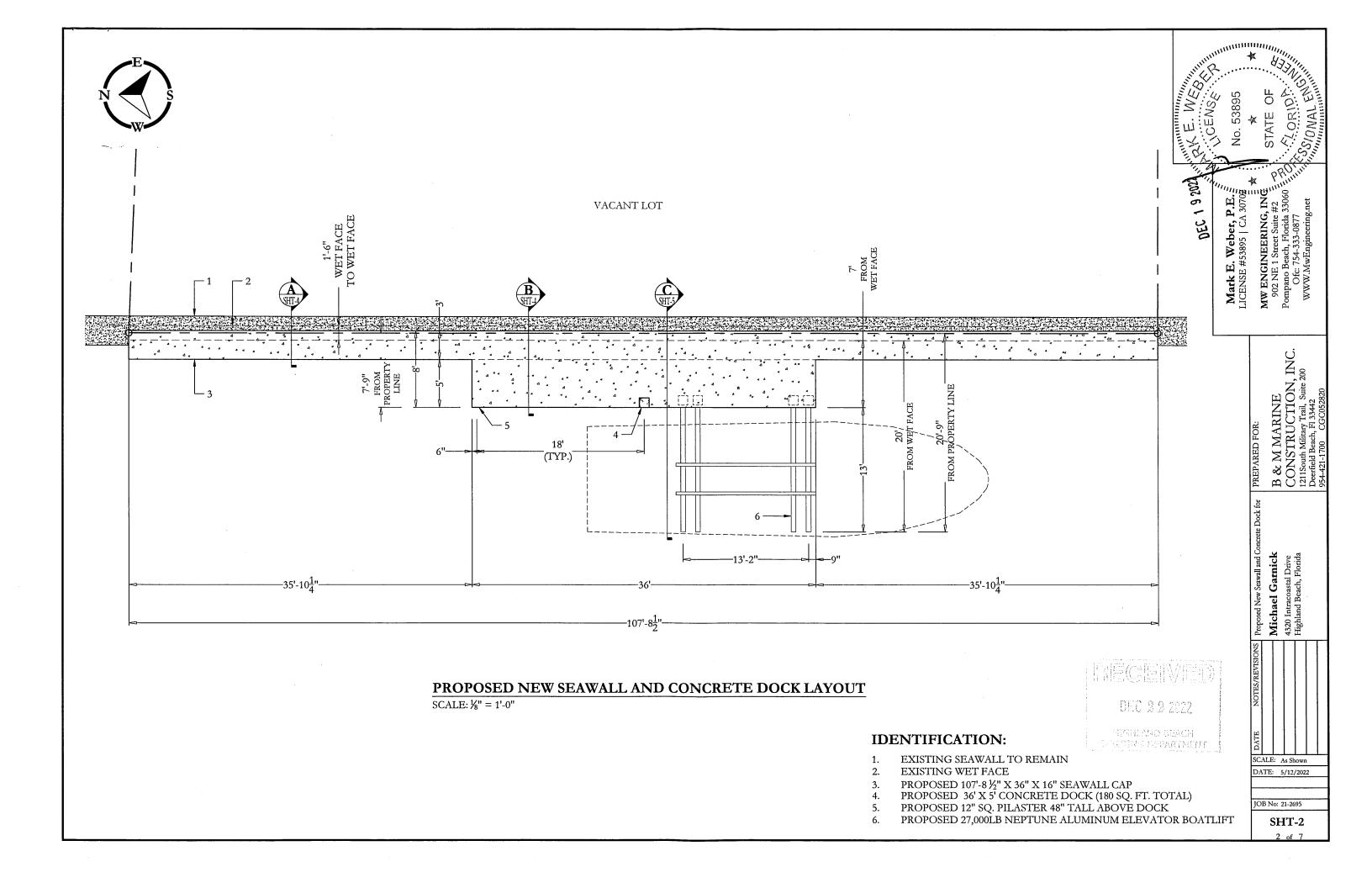
FUSIONS Proposed New Seawall and Concrete Dock for

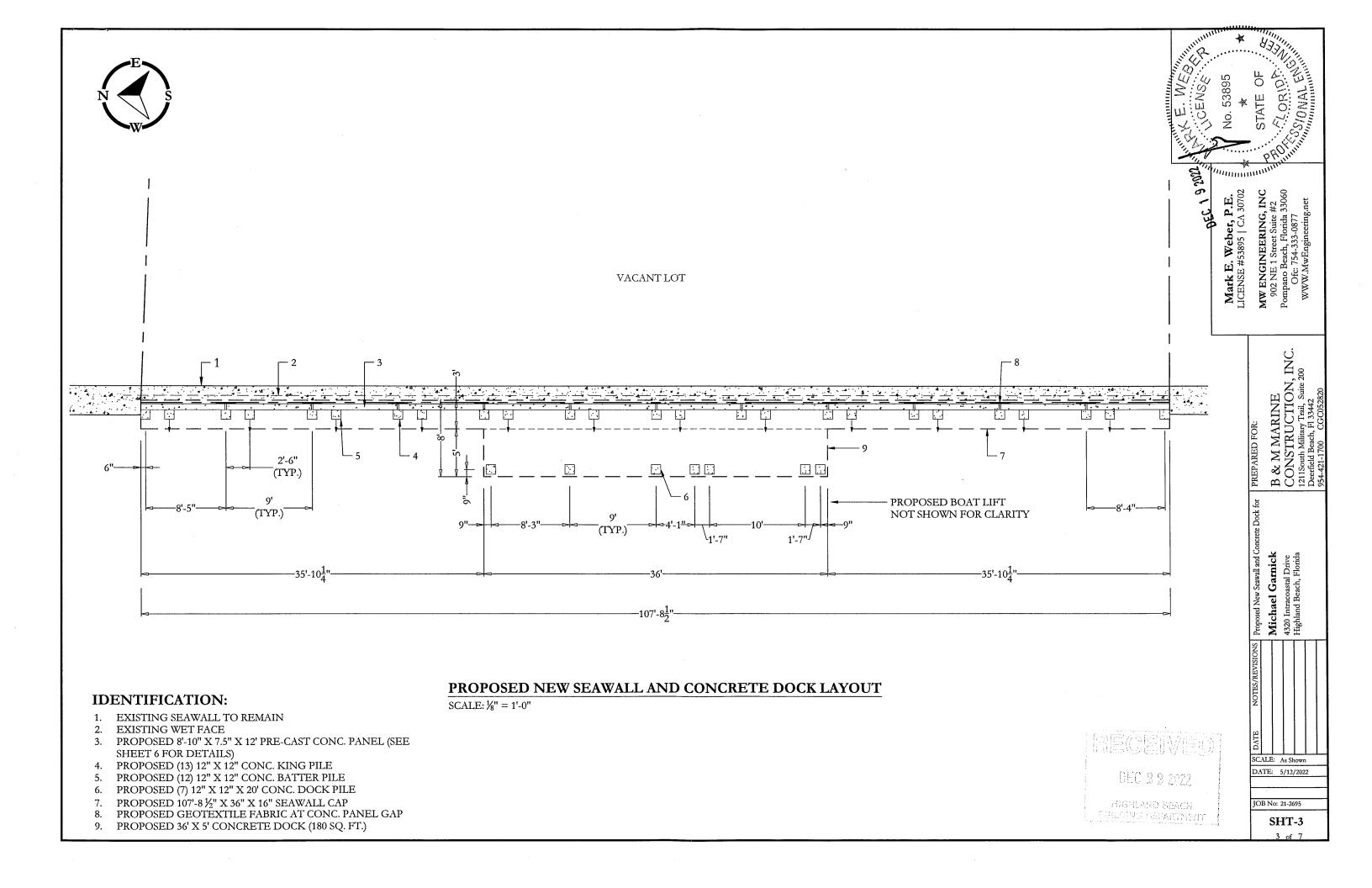
Michael Garnick
4320 Intracoastal Drive
Highland Beach, Florida

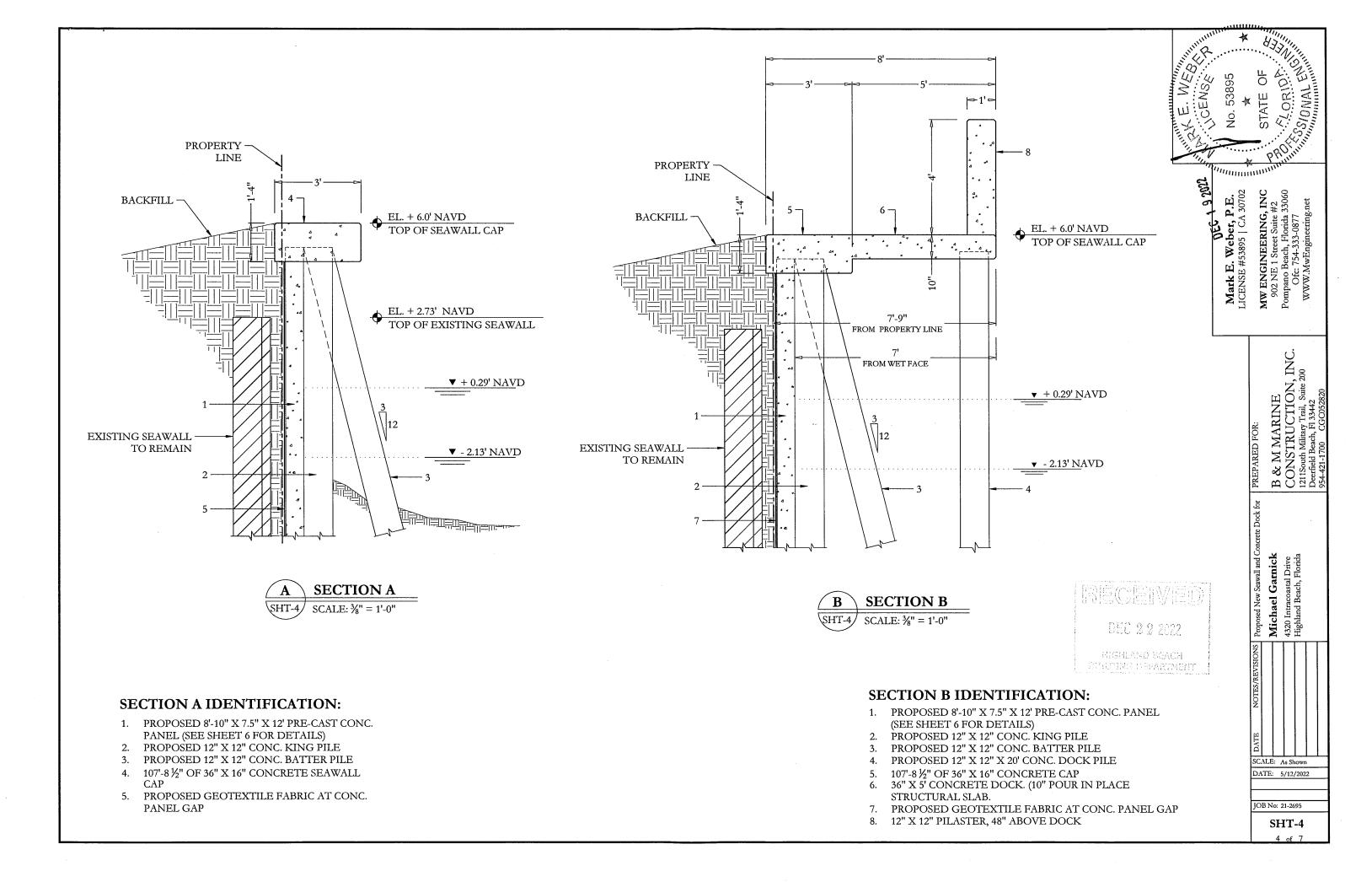
SCALE: As Shown
DATE: 5/12/2022

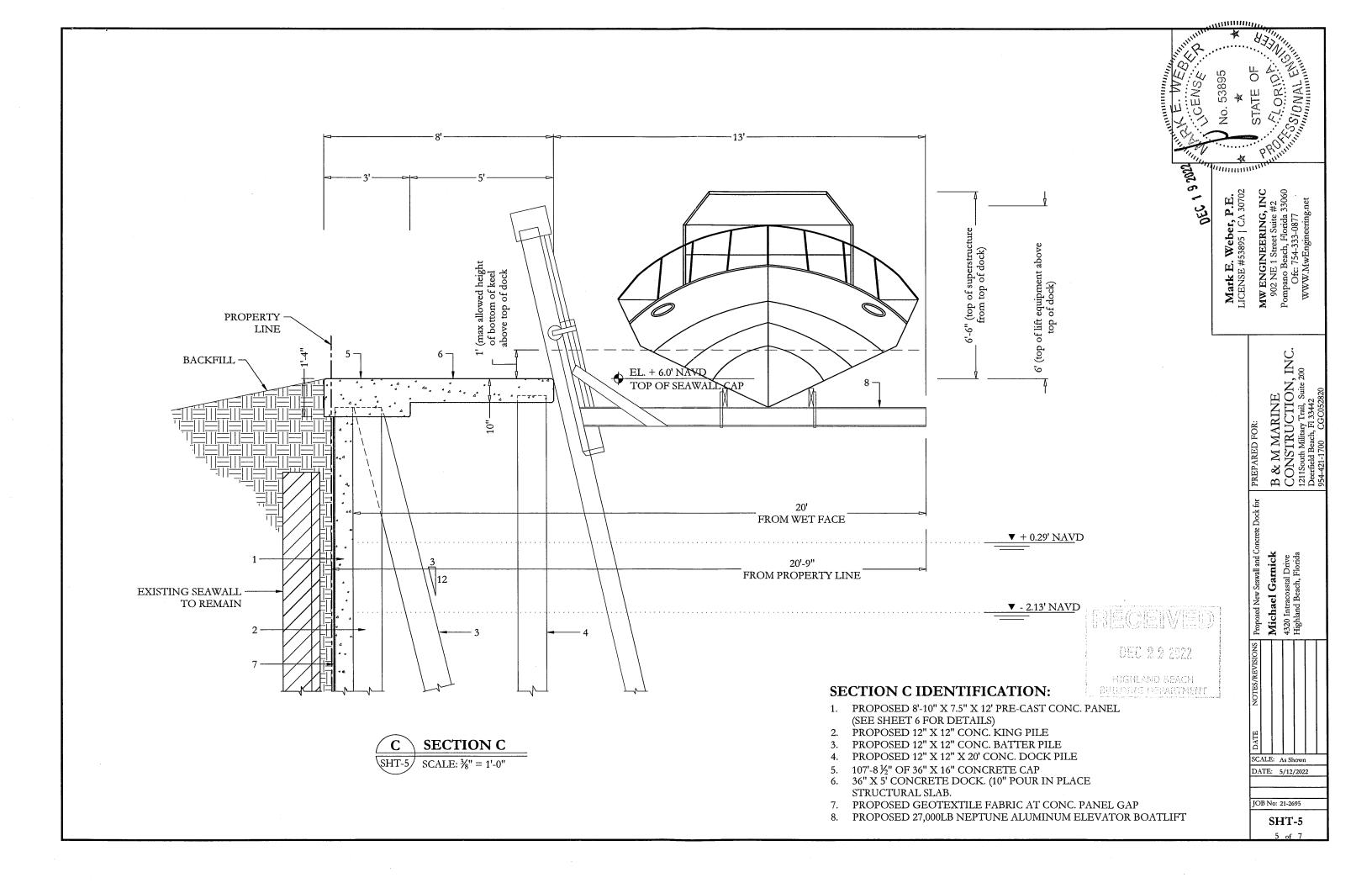
JOB No: 21-2695

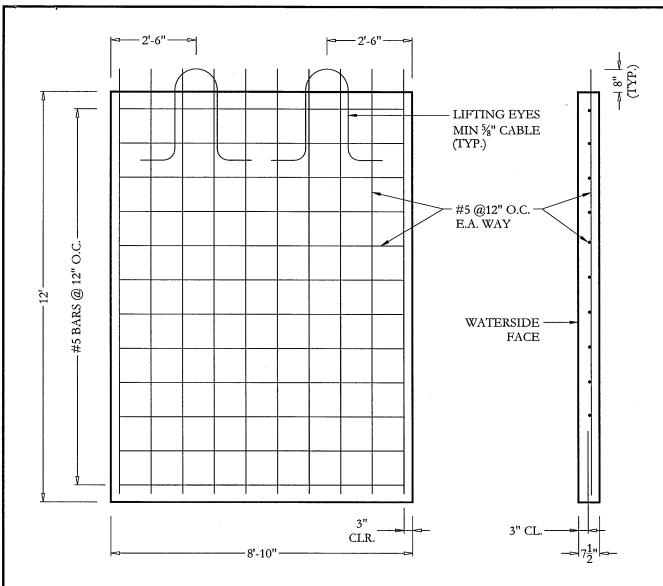
SHT-11 of 7









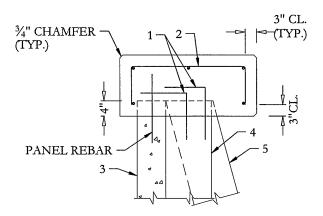


CONCRETE PANEL DETAIL

SCALE: $\frac{3}{8}$ " = 1'-0"

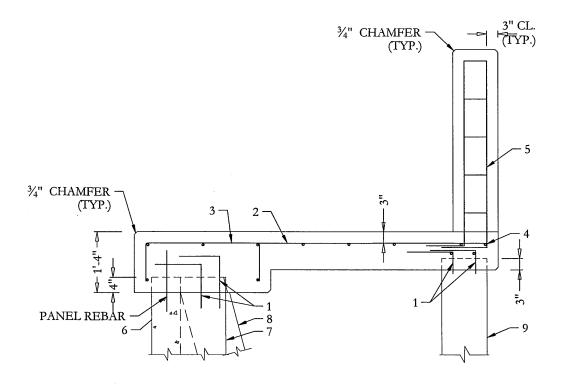
SIDE VIEW

SCALE: $\frac{3}{8}$ " = 1'-0"



SEAWALL CAP AND CONCRETE CURB STEEL DETAIL

SCALE: $\frac{1}{2}$ " = 1'-0"



SEAWALL CAP AND CONCRETE DOCK STEEL DETAIL

SCALE: $\frac{1}{2}$ " = 1'-0"

SEAWALL CAP AND CONCRETE DOCK STEEL IDENTIFICATION:

- EXTEND PILINGS STRANDS A MIN. OF 18" INTO CAP/DOCK SLAB STEEL OR CUT STRANDS EVEN W/ TOP OF PILINGS & DOWEL & EPOXY (2) #5 L-BARS, 12" LONG W/ 12" BEND, INTO TOP OF PILINGS, W/ A MIN. OF 4" EMBEDMENT.
- #5 BARS @ 12" O.C. EACH WAY
- (5)#5 BARS CONTINUOUS WITH #3 STIRRUPS @ 18" O.C. (2)#5 BARS TOP & BOTTOM, FULL LENGTH OVER PILE
- #3 HOOPS @ 10" O.C & (4) #5 BARS HOOKED INTO DOCK SLAB
- PROPOSED 8'-10" X 7.5" X 12' PRE-CAST CONC. PANEL (SEE SHT-6 FOR DETAILS)
- PROPOSED 12" X 12" CONC. KING PILE
- PROPOSED 12" X 12" CONC. BATTER PILE
- PROPOSED 12" X 12" X 20' CONC. DOCK PILE

SEAWALL CAP STEEL IDENTIFICATION:

- 1. EXTEND PILINGS STRANDS A MIN. OF 18" INTO CAP/DOCK SLAB STEEL OR CUT STRANDS EVEN W/ TOP OF PILINGS & DOWEL & EPOXY (2) #5 L-BARS, 12" LONG W/ 12" BEND, INTO TOP OF PILINGS, W/ A MIN. OF 4" EMBEDMENT.
- (5) #5 BARS CONTINUOUS WITH #3 STIRRUPS @ 18" O.C.
- PROPOSED 8'-10" X 7.5" X 12' PRE-CAST CONC. PANEL (SEE SHT-6 FOR DETAILS)
- PROPOSED 12" X 12" CONC. KING PILE
- PROPOSED 12" X 12" CONC. BATTER PILE



B & M MARINE CONSTRUCTION, INC. 1211South Military Trail, Suite 200

Michael Garnick 4320 Intracoastal Drive Highland Beach, Florida SCALE: As Shown DATE: 5/12/2022 OB No: 21-2695 SHT-6

GENERAL NOTES:

- 1. Construction to follow the Florida Building Code 7th Edition (2020) and amendments as applicable and all Local, State and Federal Laws.
- 2. Licensed contractor shall verify the existing conditions prior to the commencement of the work. Any conflicts or omissions between existing conditions or the various elements of the working drawing shall be brought to the attention of the Engineer prior to the commencement of the work. The Licensed Contractor and all subcontractors are responsible for all lines, elevations, and measurements in connection with their work.
- 3. Do not scale drawings for dimensions.
- 4. Any deviation and/or substitution from the information provided herein shall be submitted to the Engineer for approval prior to commencement of work.
- 5. All unanticipated or unforeseen demolition and/or new construction conditions which require deviation from the plans and notes herein shall be reported to the Engineer prior to commencement of work.
- 6. All new work and/or materials shall conform to all requirements of each administrative body having jurisdiction in each appertaining circumstance.
- 7. All new materials and/or patchwork shall be provided to match existing materials and/or adjoining work where practical except as specifically noted herein.
- 8. Licensed Contractor to shall use all possible care to protect all existing materials, surfaces, and furnishings from damage during all phases of construction.
- 9. Licensed Contractor to verify location of existing utilities prior to commencing work.
- 10. The Licensed contractor to install and remove all shoring and bracing as required for the proper execution of the work.
- 11. Licensed Contractor to obtain all permits as necessary from all Local, State, and Federal agencies.
- 12. Turbidity barriers to be marked with site contractor's company name using permanent markings no smaller than 3 inches in height on the top of the barrier.

PILE DRIVING: (IF NEW PILES ARE INSTALLED)

- 1. Piles shall be driven using an approved cushion block consisting of material so arranged so as to provide the transmission of hammer energy.
- 2. All pilings shall be driven to develop a minimum allowable bearing capacity of 10 tons and shall penetrate a minimum of 8' into yielding material or 2' min. penetration into rock is required.
- 3. Piles shall be driven with a drop hammer or gravity hammer provided the hammer shall weight no less than 3,000 pounds, and the fall of the hammer shall not exceed 6'.
- 4. Piles shall be driven with a variation of not more than $\frac{1}{4}$ inch per foot from the vertical, or from the batter line indicated, with a maximum variation of the head of the pile from the position shown on the plans of not more than three inches.
- 5. Where piling must penetrate strata offering high resistance to driving, the structural engineer of record or special inspector may require that the piles be set in pre-drilled or punched holes. The piles shall reach their final penetration by driving.

CONCRETE NOTES: (IF CONCRETE STRUCTURES ARE INSTALLED)

- 1. Concrete shall conform to ACI 318-14 and shall be regular weight, sulfate resistant, with a design strength of 5000 psi at 28 days with a maximum water-cementitious materials ratio, by weight aggregate concrete of 0.40.
- 2. Owner shall employ and pay for testing services from an independent testing laboratory for concrete sampling and testing in accordance with ASTM.
- Licensed contractor is responsible for the adequacy of forms and shoring and for safe practice in their use and removal.
- 4. Concrete cover shall be 3" unless otherwise noted on the approved drawings.
- 5. Reinforcing steel shall be in conformance with the latest version of ASTM A615 Grade 60 specifications. All reinforcement shall be placed in accordance with ACI 315 and ACI Manual of Standard Practice.
- 6. Splices in reinforcing bars shall be not be less than 48 bar diameters and reinforcing shall be continuous around all corners and changes in direction. Continuity shall be provided at corners or changes in direction by bending the longitudinal steel around the corner 48 bar diameters.
- 7. Defective, cracked or loose concrete areas must be cut out, the rebar must be cleaned, coated with zinc and repaired with at least 3" of expoxy-concrete mix or gunnite concrete with sulfate-resistant cement.
- 8. For cap overpours, dowel and epoxy #5 bars or L-bars into top and/or front of existing cap, staggered @ 24" o.c., min. 4" embedment.

CONCRETE PILE NOTES: (IF CONCRETE PILES ARE INSTALLED)

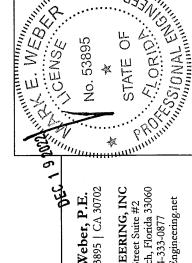
- 1. Concrete piles shall attain 5000 psi compressive strength in 28 days.
- 2. Concrete piles shall be reinforced with four $-\frac{7}{16}$ " Ø lo-lax strands, 270 kips, and 5 ga. spiral ties.
- 3. Concrete piles shall be 12"x12" square, minimum length of 20'.
- 4. Concrete piles shall be cut to leave strands exposed a min. of 18" and tied to dock or cap steel.
- For all prestressed pilings, extend pilings strands a min. of 18" into cap/dock slab steel or cut strands even w/ top of pilings & dowel & epoxy (2) #5 L-bars, 12" long w/ 12" bend, into top of pilings, w/ a min. of 4" embedment.
- 5. New batter and vertical pilings and panels to have a minimum 4" penetration into the new cap form. New dock pilings to have a minimum 3" penetration into the new dock slab form.

WOOD PILES NOTES: (IF WOOD PILES ARE INSTALLED)

- 1. Wood piles to be 2.5lb CCA treated in accordance with AWPA Standard C18.
- 2. Wood piles shall be a minimum diameter of 10"; Miami Dade County requires minimum diameter of 12".

WOOD DOCK/PIER NOTES: (IF WOOD STRUCTURES ARE INSTALLED)

- 1. All materials to be pressure treated pine unless otherwise noted.
- 2. All frame work materials to be Southern Yellow Pine Grade #1, Fb=1200 PSI and Fv=175 PSI.
- 3. All decking materials to be grade #1 unless otherwise noted.
- 4. All hardware to be Stainless Steel or Galvanized unless otherwise noted.



MW ENGINEER
902 NE 1 Street
Pompano Beach, F
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006: 754-332

k for

B & M MARINE
CONSTRUCTION, II
1211South Military Trail, Suite 200

OTES/REVISIONS Proposed New Seawall and Co

Michael Garnick

4320 Intracoastal Drive

SCALE: As Shown
DATE: 5/12/2022

DATE: 5/12/2022

JOB No: 21-2695 SHT-7

7 of 7