



State of Rhode Island
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879-1900

(401) 783-3370
Fax (401) 783-2069

PUBLIC NOTICE

File Number: 2023-05-053 Date: June 21, 2023

This office has under consideration the application of:

Mark & Cheryl Demello
395 Park Avenue
Portsmouth, RI 02871

for a State of Rhode Island Assent to construct and maintain: A Residential Boating Facility consisting of a total 188' feet in length, terminating at 50' beyond Mean Low Water (MLW) and requiring a Variance to the side Setback Standard Section 1.3.1(D)(11)(k).

Project Location:	395 Park Avenue
City/Town:	Portsmouth
Plat/Lot:	25 / 45
Waterway:	Sakonnet River

Plans of the proposed work can be requested at Cstaff1@crmc.ri.gov.

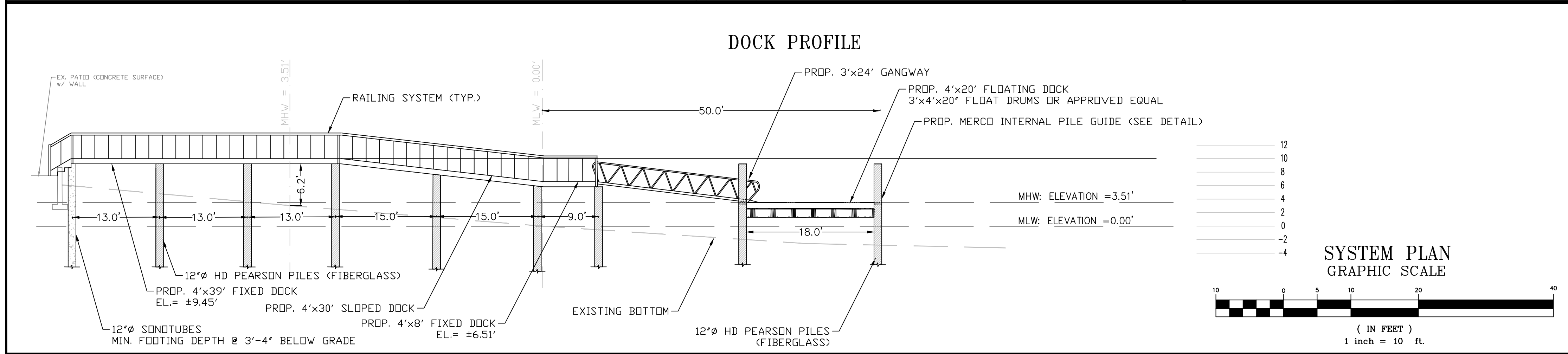
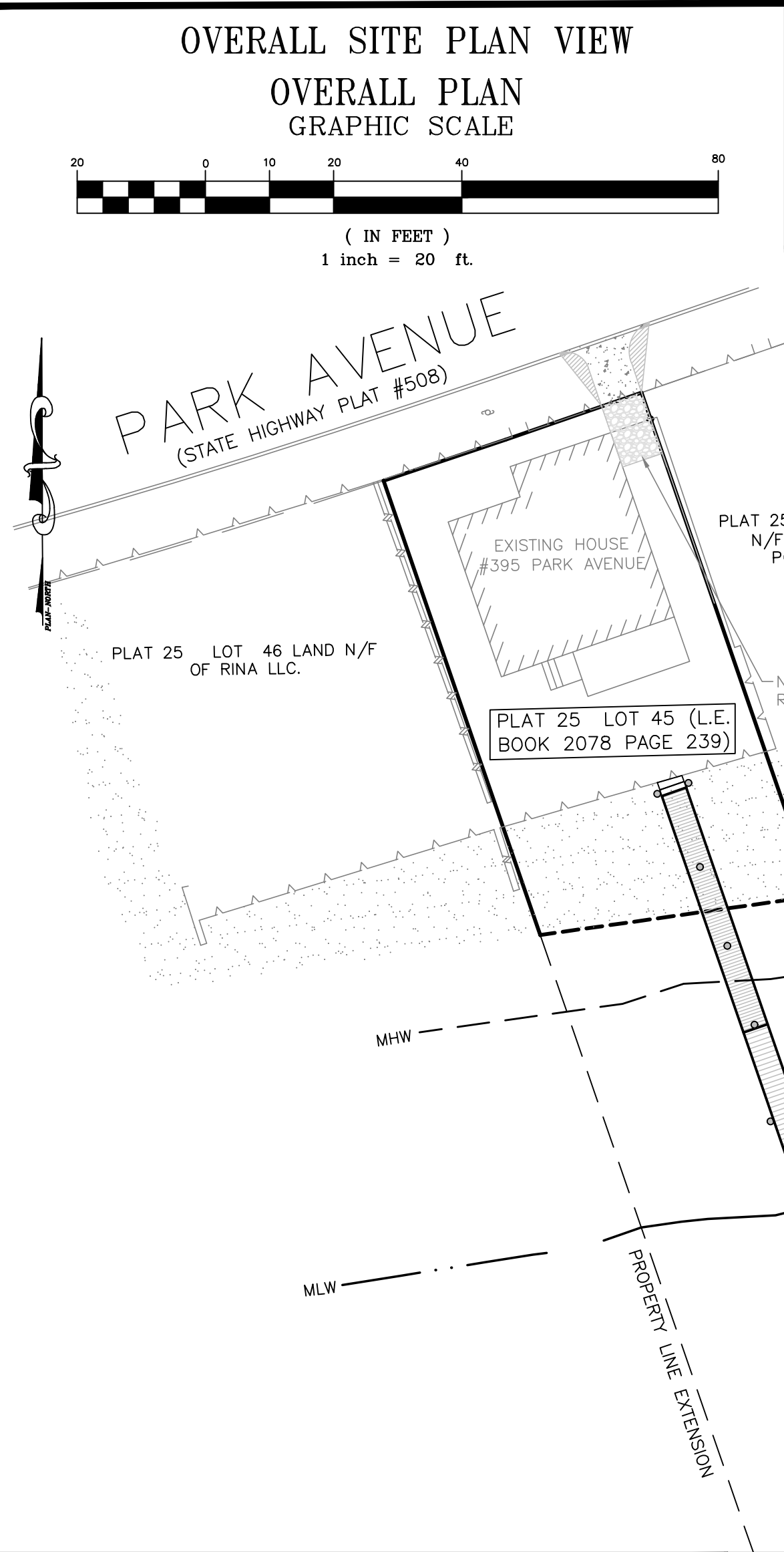
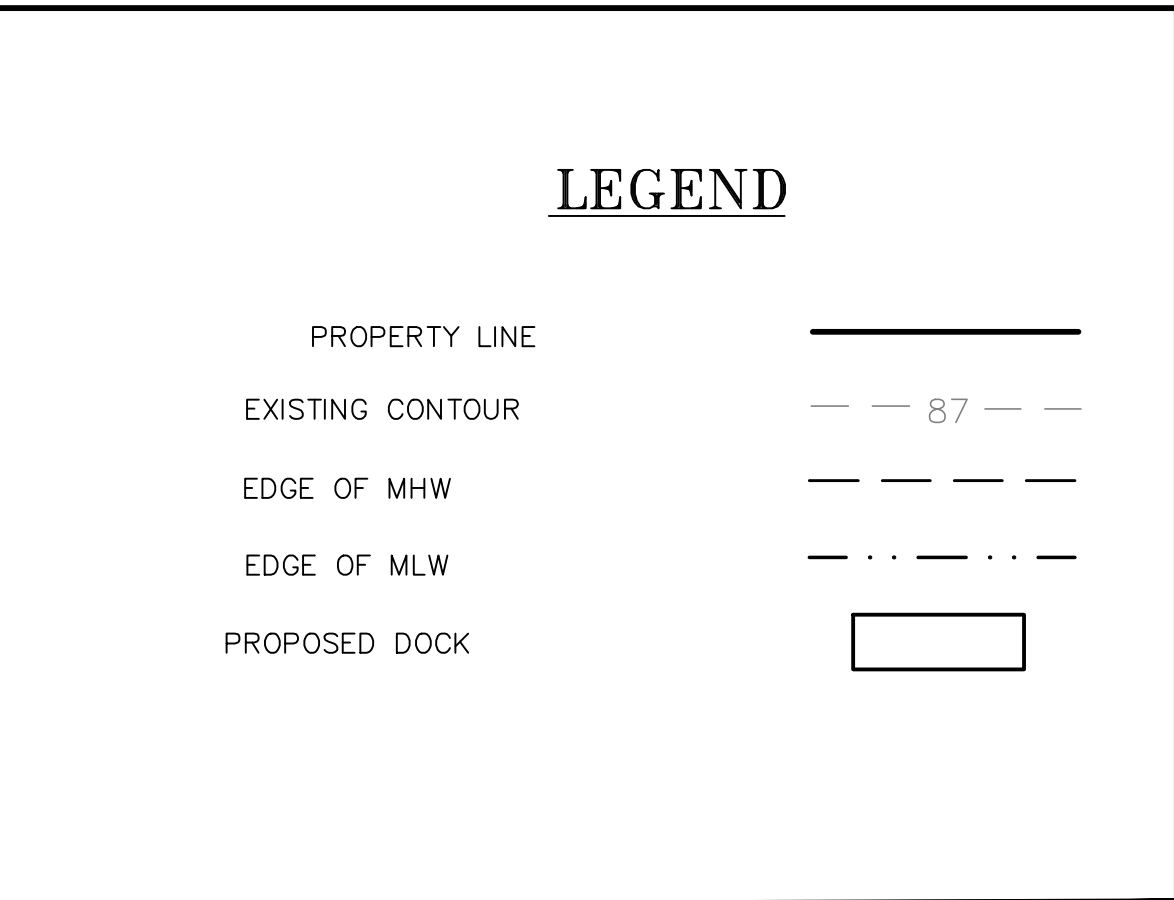
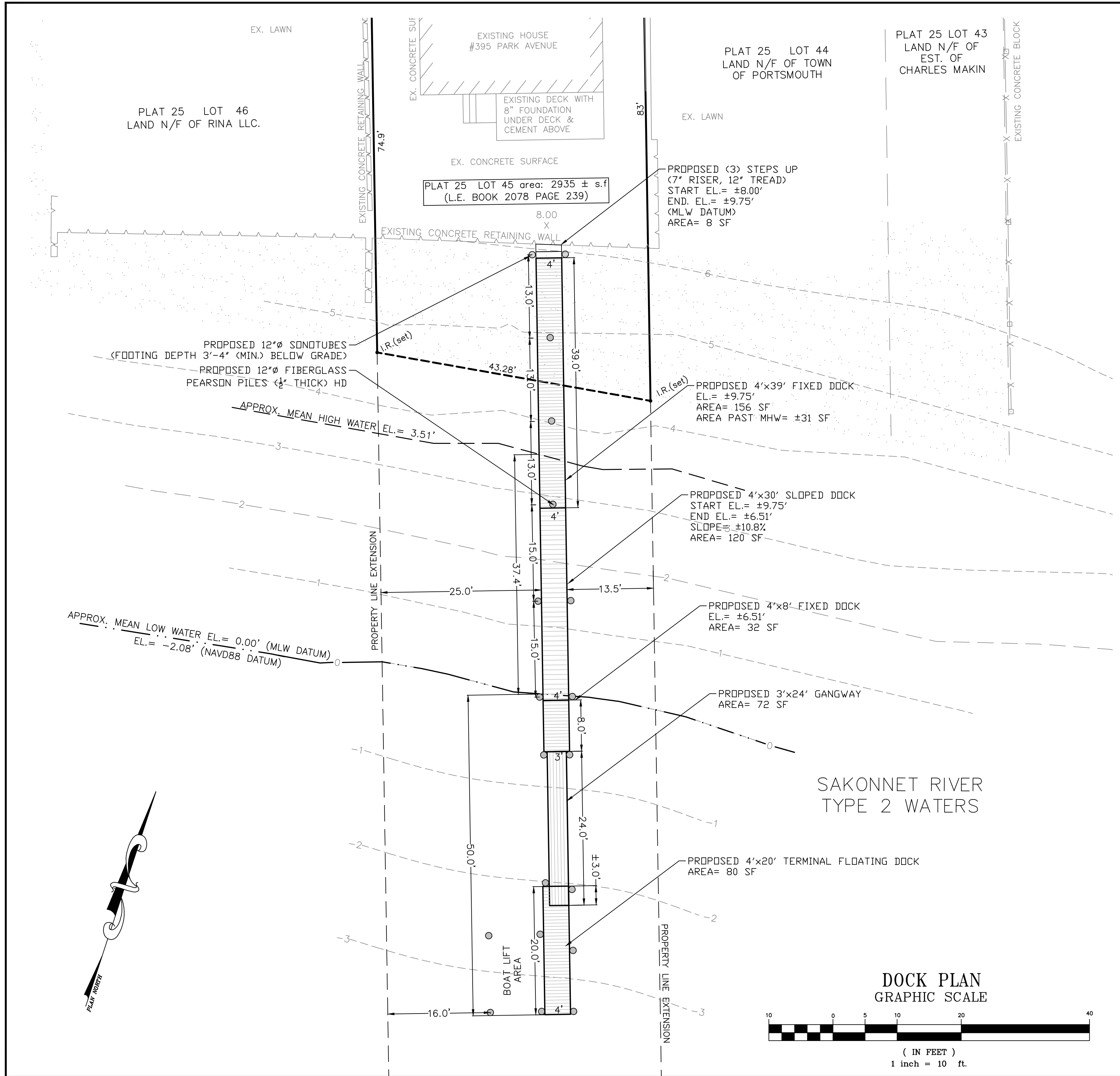
In accordance with the Administrative Procedures Act (Chapter 42-35 of the Rhode Island General Laws) you may request a hearing on this matter.

You are advised that if you have good reason to enter protests against the proposed work it is your privilege to do so. It is expected that objectors will review the application and plans thoroughly, visit site of proposed work if necessary, to familiarize themselves with the conditions and cite what law or laws, if any, would in their opinion be violated by the work proposed.

If you desire to protest, you must attend the scheduled hearing and give sworn testimony. A notice of the time and place of such hearing will be furnished you as soon as possible after receipt of your request for hearing. If you desire to request a hearing, to receive consideration, it should be in writing (**with your correct mailing address, e-mail address and valid contact number**) and be received at this office on or before July 21, 2023.

Please email your comments/hearing requests to: cstaff1@crmc.ri.gov; or mail via USPS to: Coastal Resources Management Council; O. S. Government Center, 4808 Tower Hill Road, Rm 116; Wakefield, RI 02879.

/lat



General Notes

NAVD 88	TIDAL MLW
MHHW 1.71	MHHW 3.79
MHW 1.43	MHW 3.51
0.00	NAVD 88 2.08
MTL -0.32	MTL 1.76
MLW -2.08	MLW 0.00
MLLW -2.23	MLLW -0.15

DATUM INFORMATION
NANNAQUAKET, RI 8450954

SURVEY NOTE:

CLASS 1 BOUNDARY SURVEY
PERFORMED BY:
JOHN BARKER, PLS
168 HIGH STREET
BRISTOL, RI 02809
401.254.0824

NOTE:
ALL ELEVATIONS ARE IN REFERENCE TO
MLW DATUM (SEE TIDAL CHART ABOVE)

DOCK AREA:

4'x39' FIXED DOCK = 156 SF
4'x30' SLOPED DOCK = 120 SF
6'x8' FIXED DOCK = 32 SF
3'x24' GANGWAY = 72 SF
4'x20' TERMINAL = 80 SF

TOTAL DOCK AREA = 460 SF
TOTAL AREA PAST MHW = 335 SF

OWNER/APPLICANT
MARC DEMELLO

No.	Revision/Issue	Date

PRINCIPE COMPANY, INC.
ENGINEERING DIVISION
ESTABLISHED IN 1961

PO BOX 298
TIVERTON, RI 02878
PHONE: 401.265.1090
EMAIL: PRINCIPEENGINEERING@GMAIL.COM
WWW.PRINCIPEBUILDERSRI.COM

NEW DOCK PLANS
for
AP 25 LOT 45
395 PARK AVENUE
in
PORTSMOUTH, RHODE ISLAND

Project	Sheet
Date: 04/28/2023	1 OF 3
Scale:	

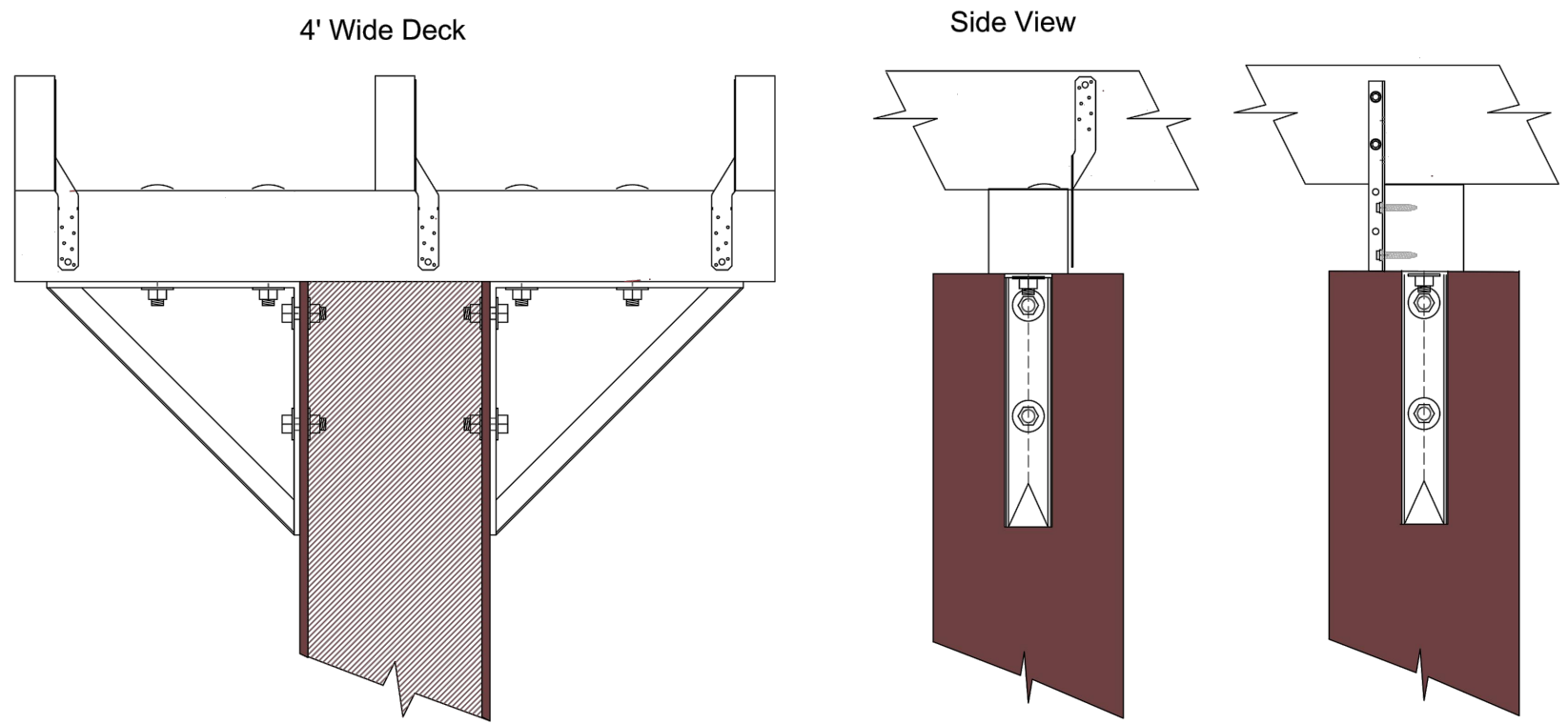
VARIANCE NOTE:

THE FOLLOWING ARE A LIST OF ITEMS THAT DO NO FULLY MEET CRMC'S RULES AND REGULATIONS DUE TO EXISTING SITE CONSTRAINTS AND ARE REQUESTING RELIEF:

1.) PROPERTY LINE (EXTENSION) SETBACK - 25' MIN. REQUIRED
-13.5' PROVIDED

Thomas J. Principe, III
No. 9107
REGISTERED PROFESSIONAL ENGINEER

RECEIVED
5/5/2023
COASTAL RESOURCES MANAGEMENT COUNCIL



Monopile Requirements:

- 2 Monopile Brackets
- 4 x 6 P.T. Beam (Pile Cap) for 4' wide deck
- 4 - 3/4 x 2 Galvanized bolts
- 8 - 3/4" Galvanized Standard Washers
- 4 - 3/4" Galvanized Curved Washers
- 4 - 3/4 x 8 Galvanized Timber Bolts (6" Timber)
- Simpson MTS12 Twist Strap 16 ga.
- 10d galvanized nails
- (or Ningret Straps & Bolts) Ningret Marine - (401) 364-0200

Curved Washers

SIMPSON TWIST TIES

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16in

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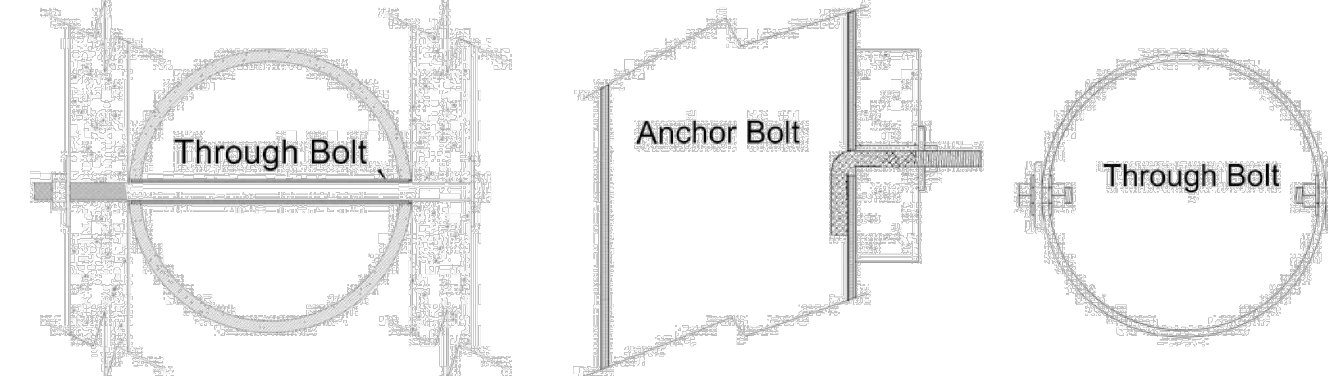
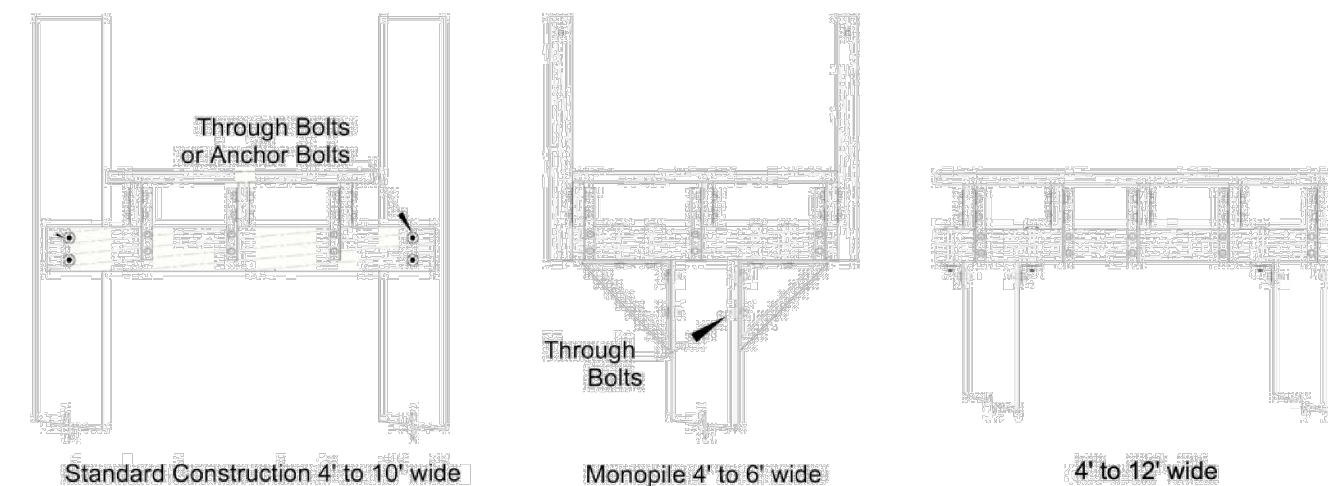
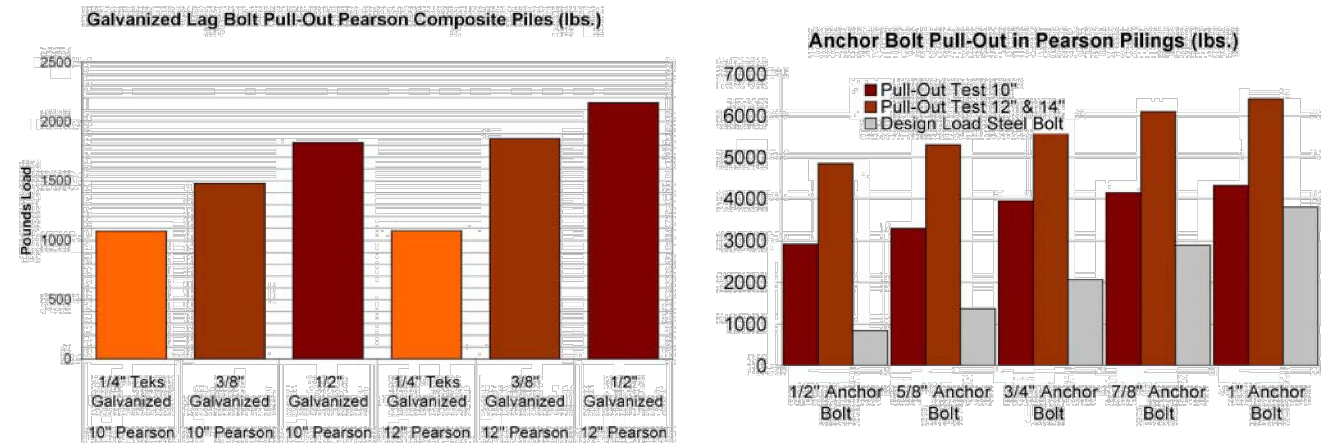
16in

16in

Attachment and Assembly Data

Due to the three dimensional fiber architecture of Pearson Pilings fiberglass reinforcements, through-bolts and anchor bolts are all used for various installations and applications. Even lag bolts can be used for non-structural fastening. The holding and pull-out strength of bolted connections to the composite pile typically exceed the operating load recommendations for galvanized bolts as shown below. Structural cross members, beams, boat lifts and ramp hardware should be attached using either anchor bolts or through bolts.

Lag bolts may be used for non-structural connections and fitting of cleats, line holders, hand rails, fenders, ladders, benches and lighting fixtures. 1/4" Washer Head Tek screws should be used for attaching pile caps – most self tapping screws will work, but avoid those with flanges on the drill section.

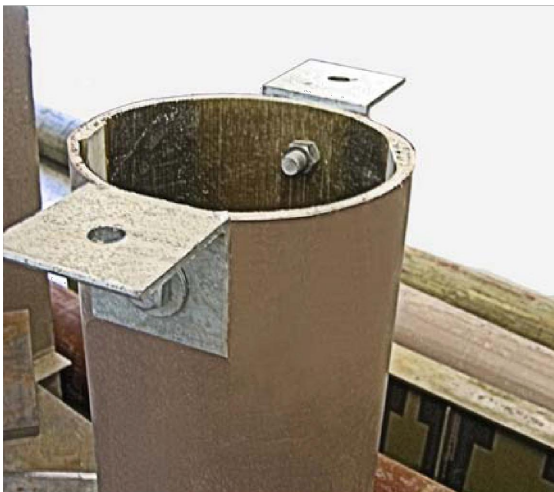


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Pearson Pilings Testing Angle Bracket / 3/4" Bolts

In order to determine recommended loading for the use of galvanized brackets with a single 3/4" bolt, an axial load test was performed. To simplify the fixture, the 4" square brackets were attached to the end of a 10" diameter pile so that the flats were above the pile top by .250".



Assembled Brackets - 10" Pile



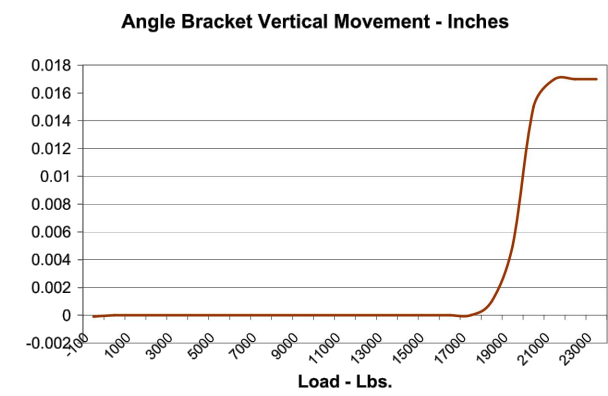
18,000 lb load distributed over 2 brackets

The load was applied in increments of 1,000 lbs. – there was a compressive deformation in the composite pile wall at 18,000 lbs. total load (9,000 lbs. per bracket).

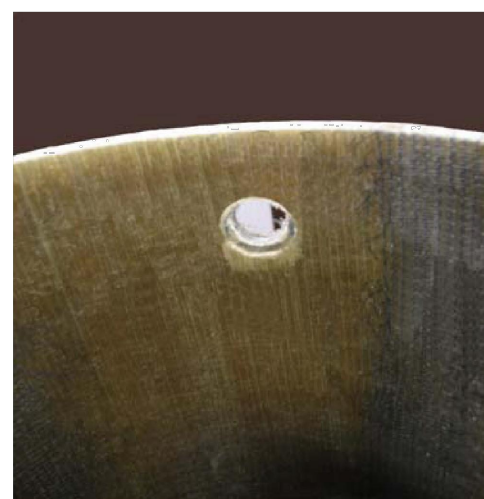
Testing performed at the Kirk Laboratory, Civil Engineering Dept., University of Rhode Island

© 2007 Pearson Pilings, LLC

The elongation in the pile wall did not propagate from 18,000 lbs. to 23,000 lbs. at which point the 3/4" bolts started to deform. The test was discontinued at this point.



Bolt Hole Elongation - exterior

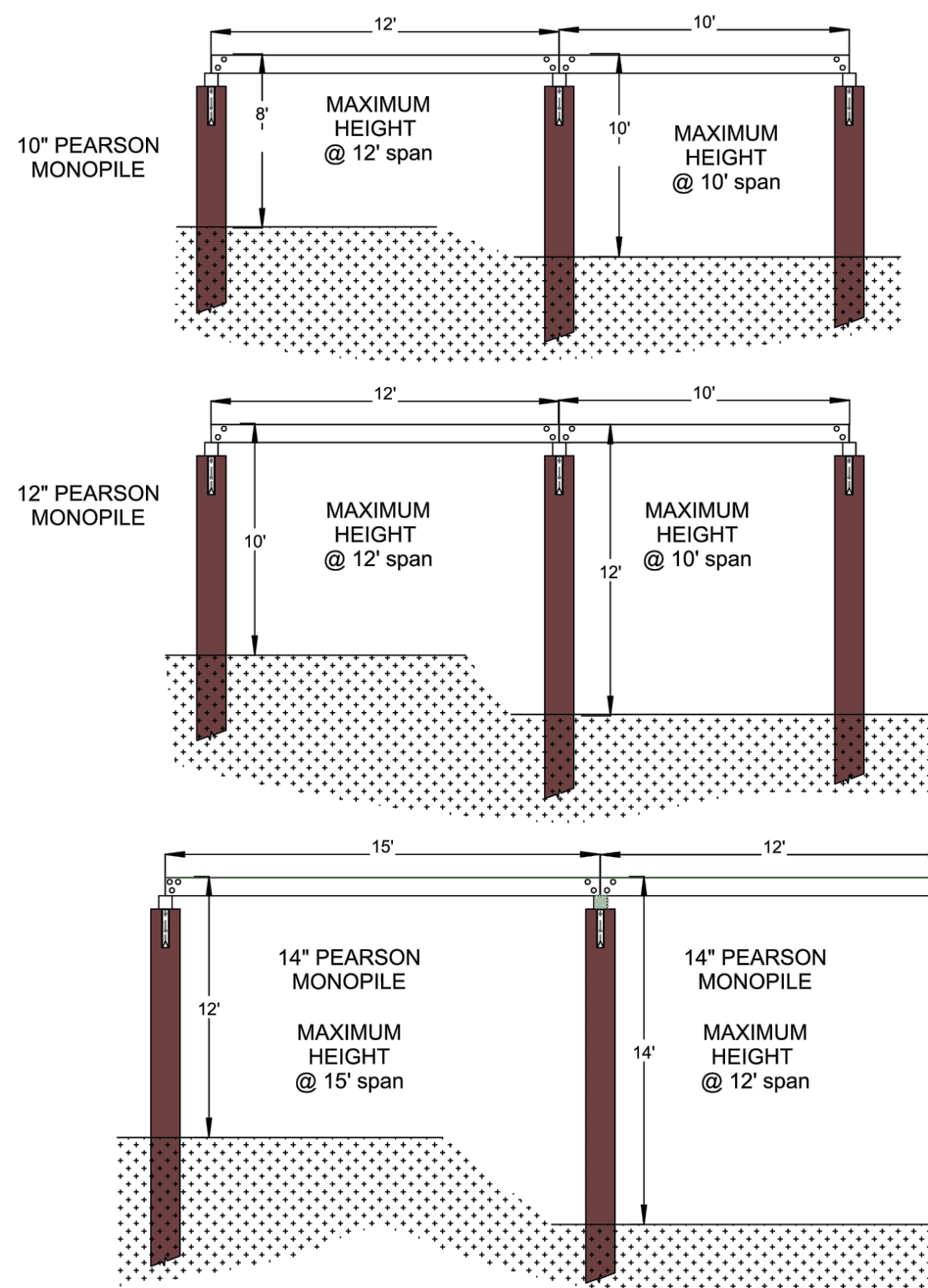


Bolt Hole Elongation - interior

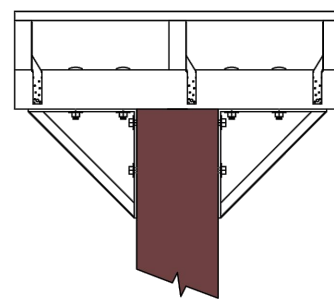
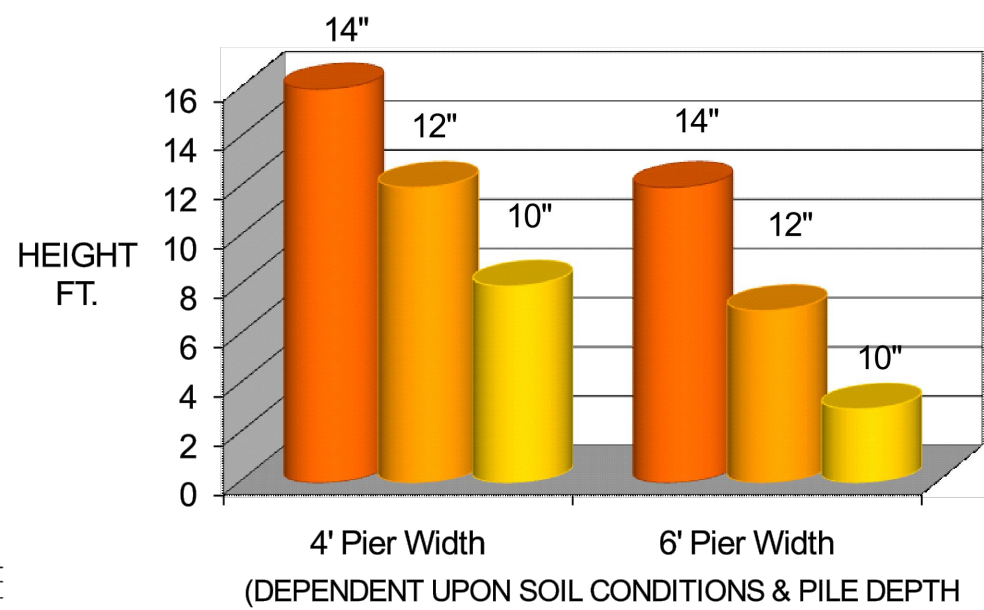
The nominal working load of a 3/4" galvanized bolt is typically 4,400 lbs. and the yield of the composite pile wall (10" diameter) is 9,000 lbs. with a recommended capacity for bolt shear the same as the working load of the bolt.

Q1. What kind of pile drivers have you used on Pearson Piles?

A1. We have used drop, impact (hydraulic, pneumatic, diesel) and vibratory hammers with a sheet pile clamp to drive the composite piles with no problems and little or no damage to the cosmetics. What does seem to work best with vibratory hammers is a sheet pile clamp that grips one edge of the pile. We usually insert a 1/4 section of a pile cut-off to reduce cosmetic damage, but even without it we only damage 8" of the top. Normally this is cut off when capping the piles. A pile clamp works well, but the clamp pressure needs to be reduced and a wood plug inserted into the composite pile. The top 3-to-4 feet will then be trimmed off.



PEARSON MONOPILE MAXIMUM HEIGHT ABOVE GROUND PLANE 10' SPACING



Monopile height recommendations are for lateral stability only.

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DATE: NOVEMBER 2009
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MONOPILE HEIGHT RECOMMENDATIONS

FILE NAME: MONOPILE DOCK SPACING

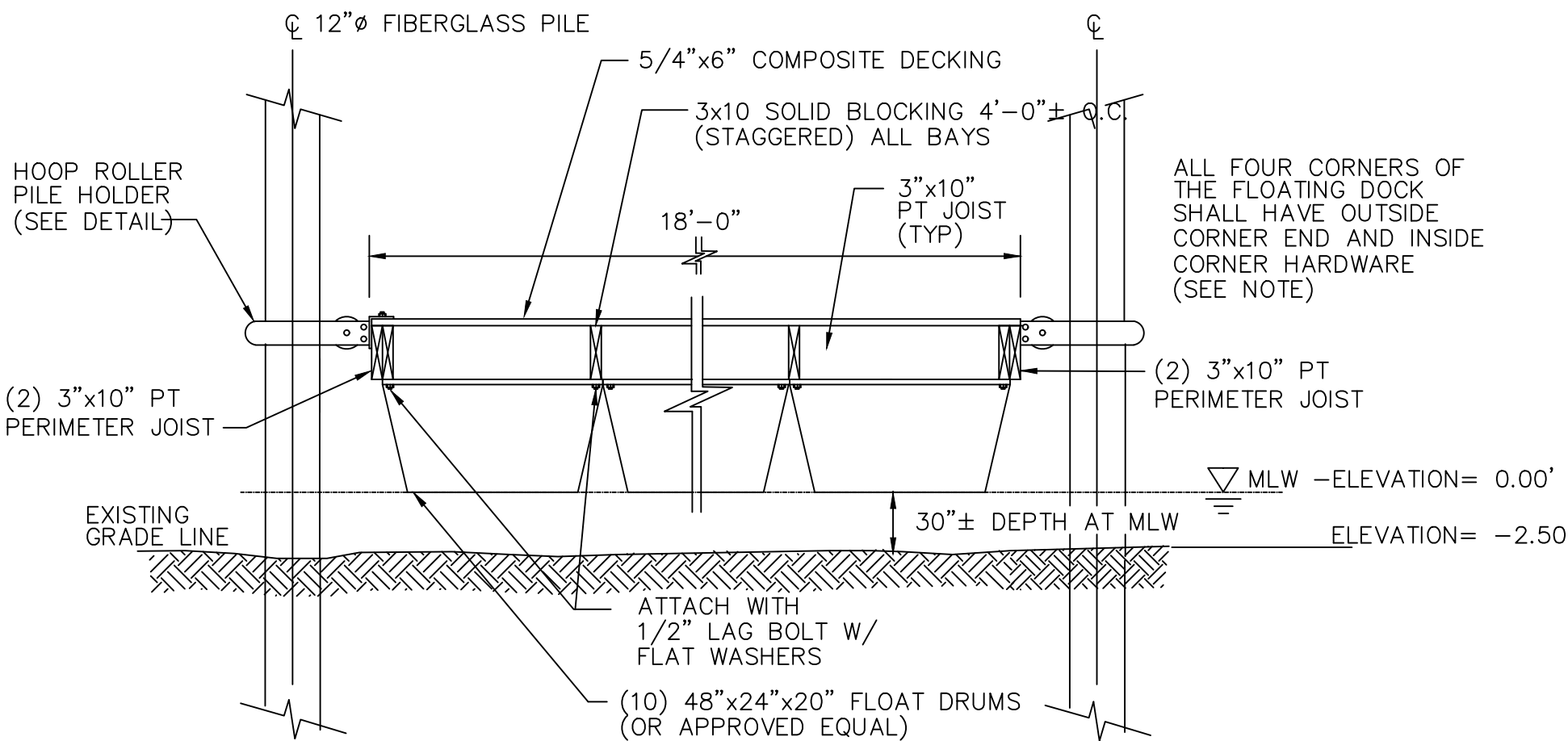


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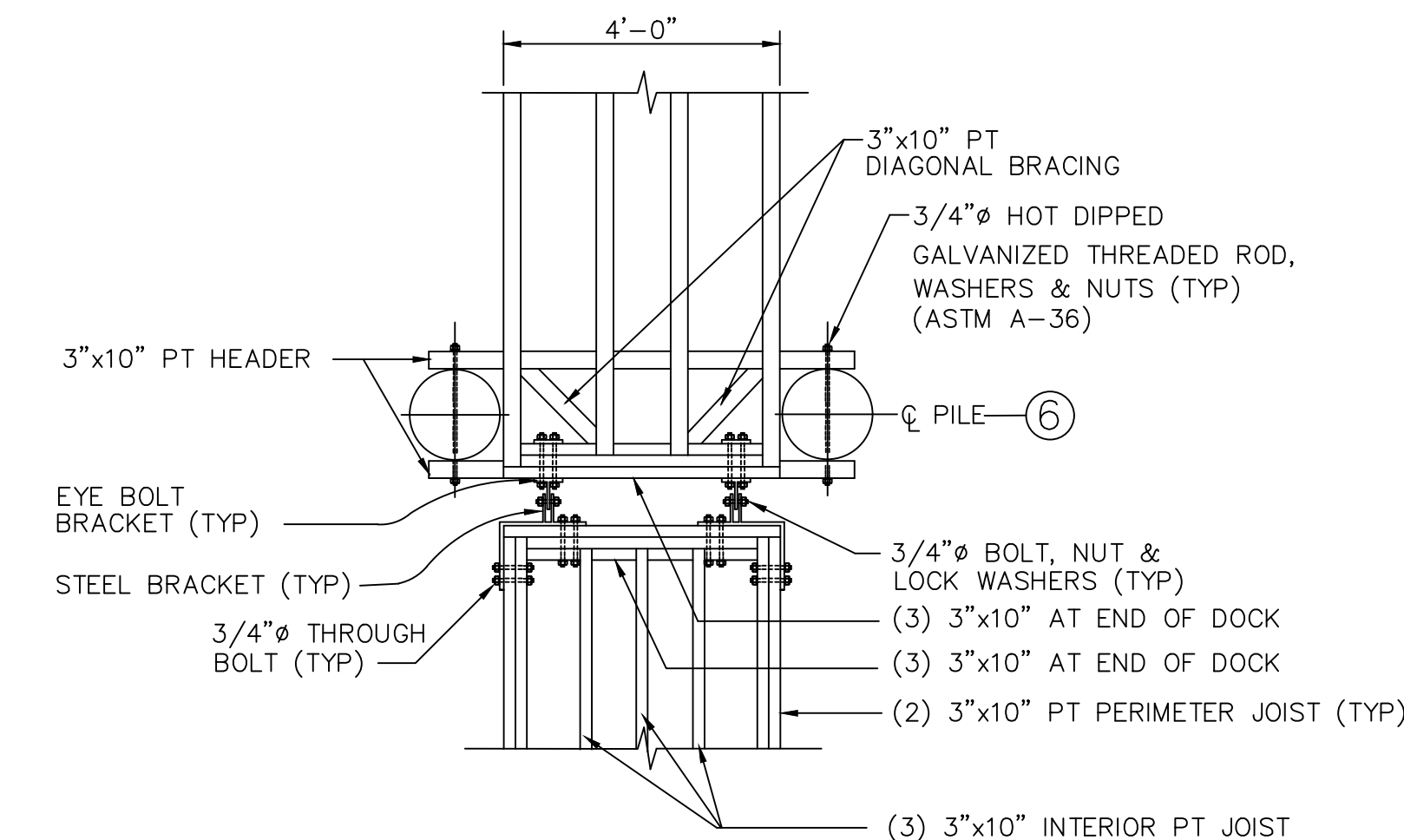
MONOPILE MATERIALS

FILE NAME: \mechanical attachments and hardware\monopile materials



SECTION B-B

SCALE: 1/2"=1'-0"



DETAIL C-PLAN VIEW

SCALE: 1/2"=1'-0"

NOTE:

DECKING OMITTED FOR CLARITY

Engineering Data – Pearson Composite Piles



Materials Properties	Piling Diameter			
	8"	10"	12"	14"
Reinforcement (grams/square meter)	2269	6072	7997	8329
A quasi-isotropic three dimensional proprietary fabric utilizing e-glass grade filaments				
Exceptional damage tolerance with no crack propagation				
Resin Matrix				
An epoxy / vinyl ester, with high elongation, low styrene monomer, excellent hydrolytic stability and high heat deflection temperature, will not leach, inert, high chemical resistance, insoluble in any common hydrocarbons, mild acidic or alkaline solutions				
Mechanical Properties	Piling Diameter			
	8"	10"	12"	14"
Axial Tensile Strength - psi	50,122	50,490	68,000	66,890
Axial Tensile Modulus - (MOE) - psi	4,547,780	3,530,000	4,030,000	4,100,000
Axial Flexural Strength - psi	58,400	79,650	89,400	91,450
Axial Compressive Strength - psi	43,320	67,000	76,800	77,460
Transverse Tensile Strength - psi	11,733	29,000	27,600	28,700
Transverse Tensile Modulus - psi	2,433,870	1,760,000	1,774,000	1,760,000
Interlaminar Shear Strength - psi	13,000	12,000	12,000	12,000
Effective Bending Stiffness - psi	1,190E+08	3,214E+08	9,333E+08	1,528E+09
Young's Modulus	4,547,780	3,530,000	4,030,000	4,100,000
Poisson's Ratio	0.22	0.25	0.23	0.24
Allowable Bending Moment - kips-ft (FS = 2)	16	19	56	69
Allowable Axial Load - kips short column	100	210	280	515
Barcol Hardness	>50	>50	>50	>50
Glass to Resin Ratio - by weight	~60:40	~60:40	~60:40	~60:40
Aprox. Wall Thickness - inches	~.117	~0.250	~0.375	~0.375
Aprox. Weight - lbs/ft	4	7	10	13
Thermal Expansion - in/in/°F	<.000014	<.000012	<.000006	<.000006
Water Absorption - %	<.25	<.25	<.25	<.25

For more information contact:
Pearson Pilings, LLC
846 Airport Road
Fall River, MA 02720
508-675-0594
www.pearsonpilings.com

Pearson Pilings does have the ability to customize laminates to meet the needs of your project should requirements exceed our standard piling specifications

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General Notes

Thomas J. Principe, III



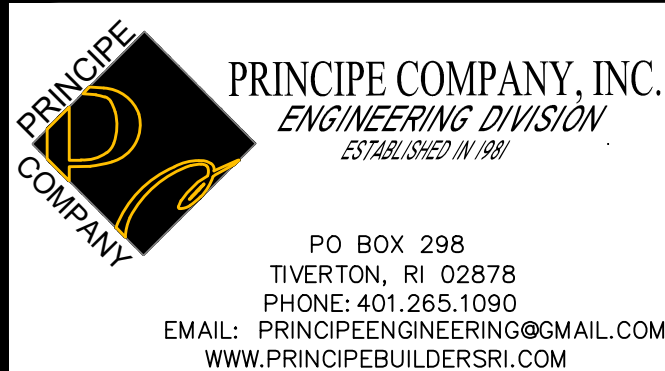
REGISTERED PROFESSIONAL ENGINEER

DETAILS PROVIDED BY:

PEARSON PILINGS, LLC
846 AIRPORT ROAD
FALL RIVER, MA 02720
PHONE: 508.675.0594



No.	Revision/Issue	Date



NEW DOCK PLANS

for
AP 25 LOT 45
395 PARK AVENUE
in
PORTSMOUTH, RHODE ISLAND

Project	Sheet
Date	04/28/2023
Scale	2 OF 3

