Laguna Shores/Boat Stop Marina

Engineering Project Manager: Brian Cox
Project Superintendent: John Vickers

1618 Laguna Shores Corpus Christi, TX 78418

Established in 1985, The Boston Group is a privately held real estate investment and management firm. We excel in the acquisition, development, renovation, and management of a diverse portfolio. The assets we manage near 100 million dollars across numerous states with assets ranging from commercial buildings to multi-family housing communities.
We are proud to add this marina project to our portfolio and look forward to our member customers enjoying the property.

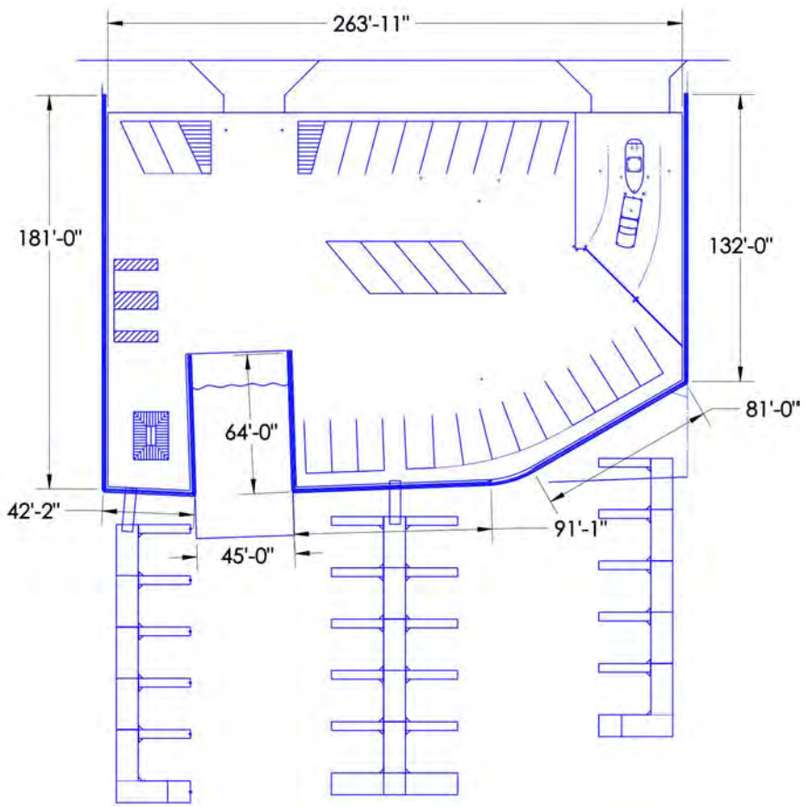
Although this presentation is not complete and is considered “draft” I wanted to share the photos of the individual tasks accomplished during the construction of the Boat Stop Marina.
Property: The Marina is part of a 400+ acre land development that The Boston Group purchased in 2020 from a broker and Exxon. This Marina will serve the 700+ permanent and temporary tenants that will occupy the Mini-Condo and Luxury RV parks adjacent to Laguna Shores and Graham Road.
Materials: Other than the 1” galvanized all-thread, our material selection focused on basalt as the primary substitute for steel. Steel corrodes quickly in saltwater. Basalt does not absorb and is not affected by saltwater. Unlike steel, basalt has the same CTE as concrete. We have used 1-2% basalt fibers mixed in the concrete, #4 and #5 basalt rebar and 2” basalt mesh to provide the state of art in construction materials.
Team: The current construction team consists of 2 experienced heavy equipment operators, 3 land mechanics, 2 carpenters, 2 project welders and the Engineer/Project Manager.
Our current estimated completion of the site is late September 2022.

Original Project Site Purchased from Exxon in 2020

Initial Site Demolition Started May 2021

Laguna Shores Marina Project

675Lft Truline Seawall placed 6'-12' deep
40K sqft Elevated Basalt Rebar Reinforced Parking Lot
938Lft of Aluminum Security Access Fencing
Fish Cleaning Hut with Clear Ice and Water Machine
Site security with 24hr 4K video monitoring
11 Slip Boat Dock on First Phase
6 Eaton GFCI Power & Potable Water Stations
Low Voltage LED Lighting & Fish Attraction Lights
Ironwood Ipe Dock Decking With 3 Channel Rub Rail



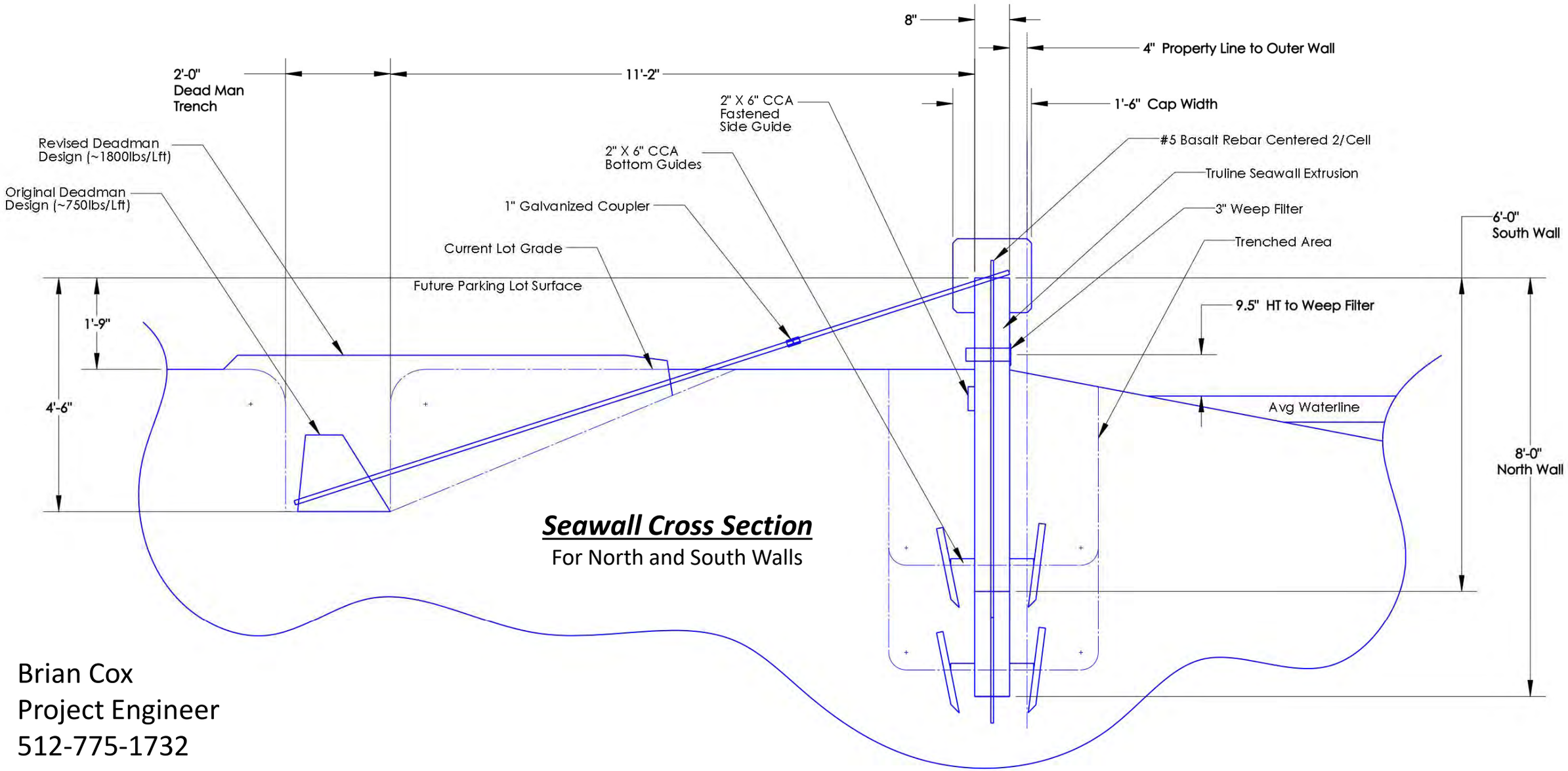
Original Site Plan

Truline Seawall arrived Oct 2021

Dock Floats all Arrived 10 weeks after they were ordered

Dock Frames and Hinges were completed Feb 2022

The Boston Group
Project Pictures of Laguna Shores Seawall



Seawall Cross Section
For North and South Walls

Brian Cox
Project Engineer
512-775-1732

South Wall Started Nov 7th, 2021
6-10ft Truline pilings showing the
6-7ft exposed in the trench.

South Wall Pilings
Completed Dec 1st, 2021
Showing deadman and
the tiebacks.

South Wall Turning the Corner with 16ft long Pilings.
All of the pier pilings shown in the background were 40+ year old.

North Wall
Turning the Corner with
last of the 12ft Pilings

North Wall
Sliding in the Pilings

North Wall
Driving in the Pilings


North Wall Trench
2ft X 3Ft X 130ft


South Wall with Basalt
Deadman Stirrup Frames
and 1" Galvanized Tiebacks


North Wall with
Filling the Deadman with
Concrete

South Wall
Trench Deadman
Beginning Pour

South Wall with
Deadman 2/3 filled

South Wall
Trench Deadman 30 yards Topped Off with
15 Yards into the bottom of 6-8ft Seawall

South Wall Close-up of
The Truline PVC Seawall
Filled with Concrete.
1" Tiebacks &
#5 Basalt Rebar
Ready for Cap

South Wall Close-up
Of 3" Weep Filter

South Wall Close-up
Pea Gravel Back Fill
for Weep Filters

This Crane was a $3000 experiment That was able to pull only 16 pilings or $188/ea, the remaining pilings cost us $300/ea to remove.

Site had 177 pilings to remove

The Lone Survivor (its gone now!)

Extraction of mud
from each seawall piling

Cap form with basalt rebar

Arial photo of our marina site after the seawall was installed and while the concrete dead man trench were being poured.

Notice the belly dump loads shown of the select fill and crushed concrete.

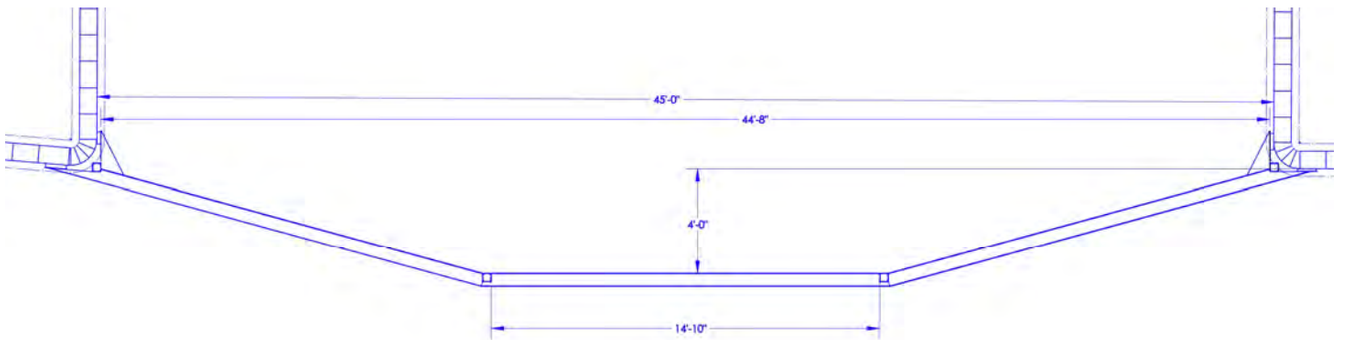

DEERE

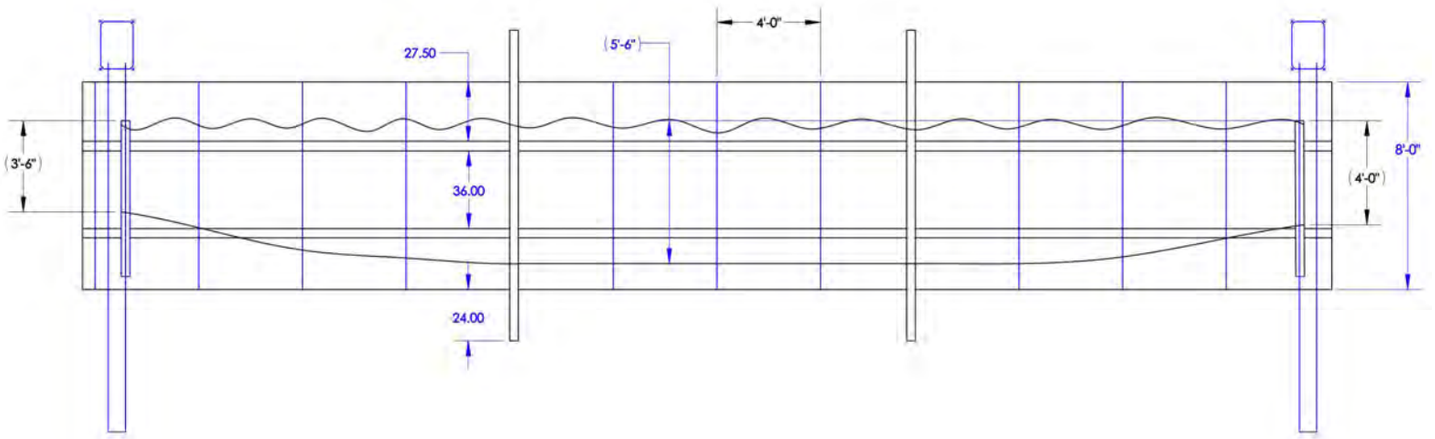

DEERE

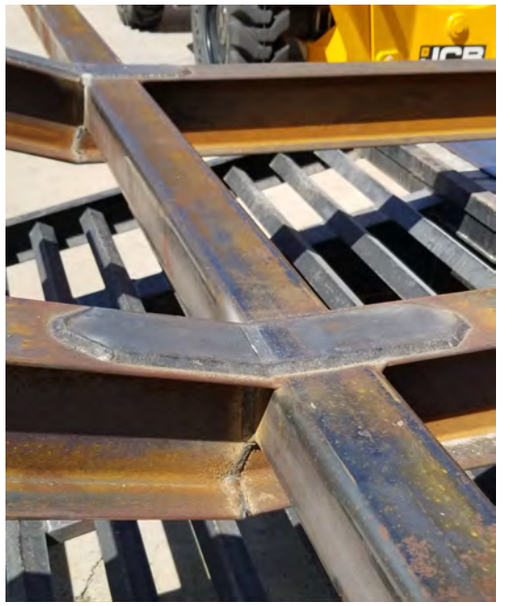
THE BOSTON GROUP
INVESTMENT & MANAGEMENT

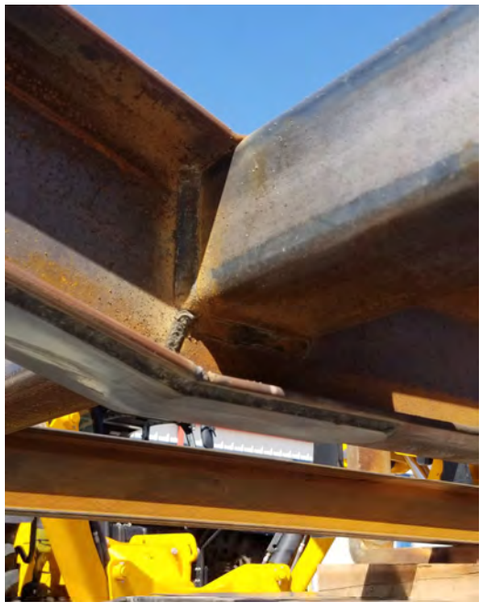
Brian M. Cox
Special Projects Engineer
512-775-1732

Coffer Dam Project

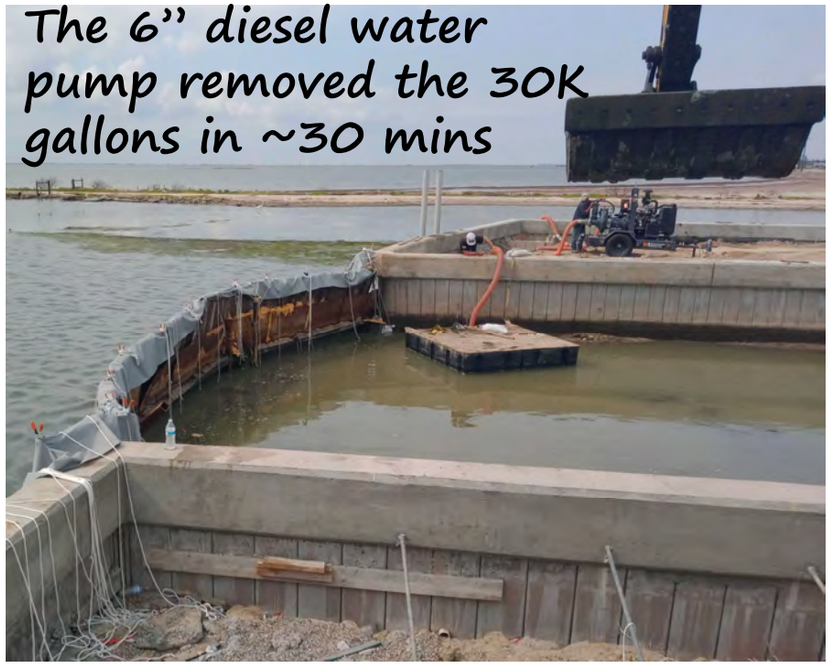









DEERE


The 6" diesel water pump removed the 30K gallons in ~30 mins


Drained

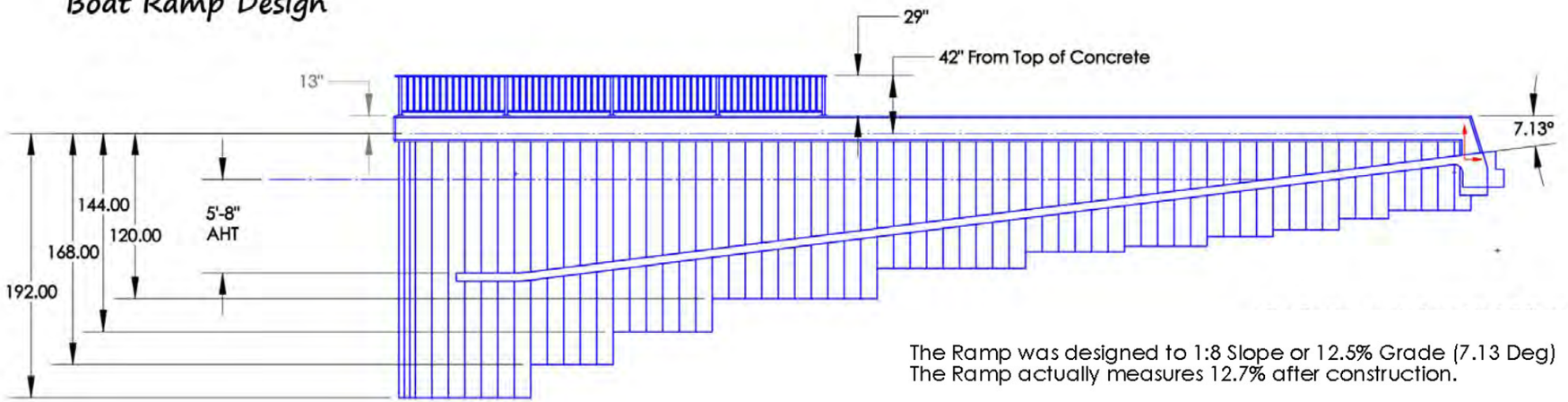
Placing Bull Rock and Crushed Concrete to Grade


The Boat Ramp with 12ea 2ft X 2ft deep cleats


2X2 Basalt Mesh over
#5 Basalt Rebar


Applying Tread Surface

Boat Ramp Design



The Ramp was designed to 1:8 Slope or 12.5% Grade (7.13 Deg)
The Ramp actually measures 12.7% after construction.

Since the ramp was constructed last in the seawall project the Truline seawall pilings were pulled from our cut pile 12 and 16ft parts when less than 8ft.

The Coffer dam took 1 week to build,8 hours to install and 1 hour to take out and haul off.
The dam held back >30,000 gallons of water for 2 weeks during construction.

Footing Mount for Gangway

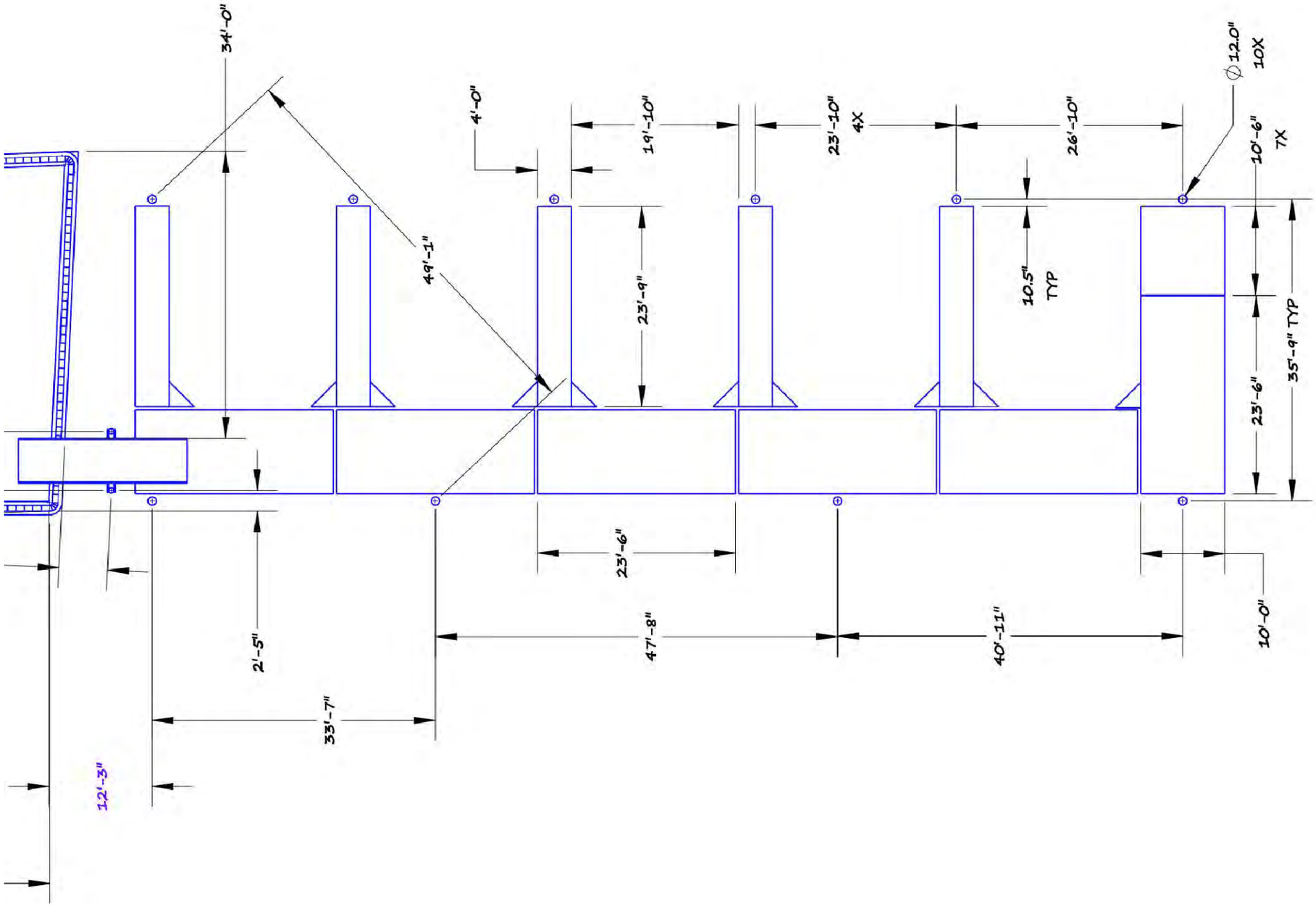
Our Custom Designed
Aluminum 5'X20' Gangway

First Watercraft Launched 7-13-22

The Ramp Width Inside the Curbs Measured 43'3"
The Ramp Surface Length: 64'4"
Low Tide Depth Measure 58' from Ramp End : 44" 7-13-22
High Tide Depth Measure 58' from Ramp End : 56" 7-13-22
Target Grade: 12.5-12.75%
Launch Area Grade Measured : 12.71% (Rise/Run 15.25"/10')

Shown here after
blasting and w/50%
IPE Deck Boards

Piling Placement



Jetting in the 10ea 12”ECO Pilings
Co-extruded Fiber Reinforced PVC
(See Center Insert)


Our Custom Designed and Built Dock Bearing

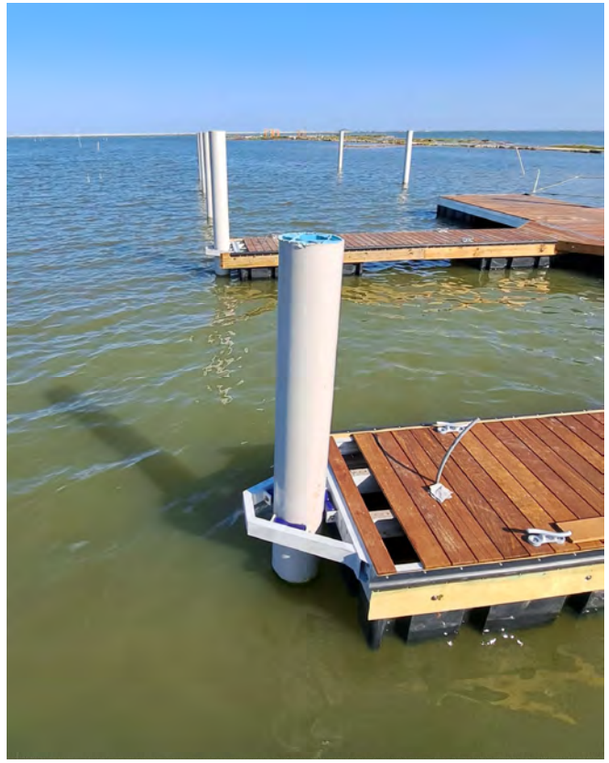

Ipe 1X6 with Ipe Oil Finish


Mounting Rub Rail and Edge Guard


Pre-drilling for the Dock Bearings

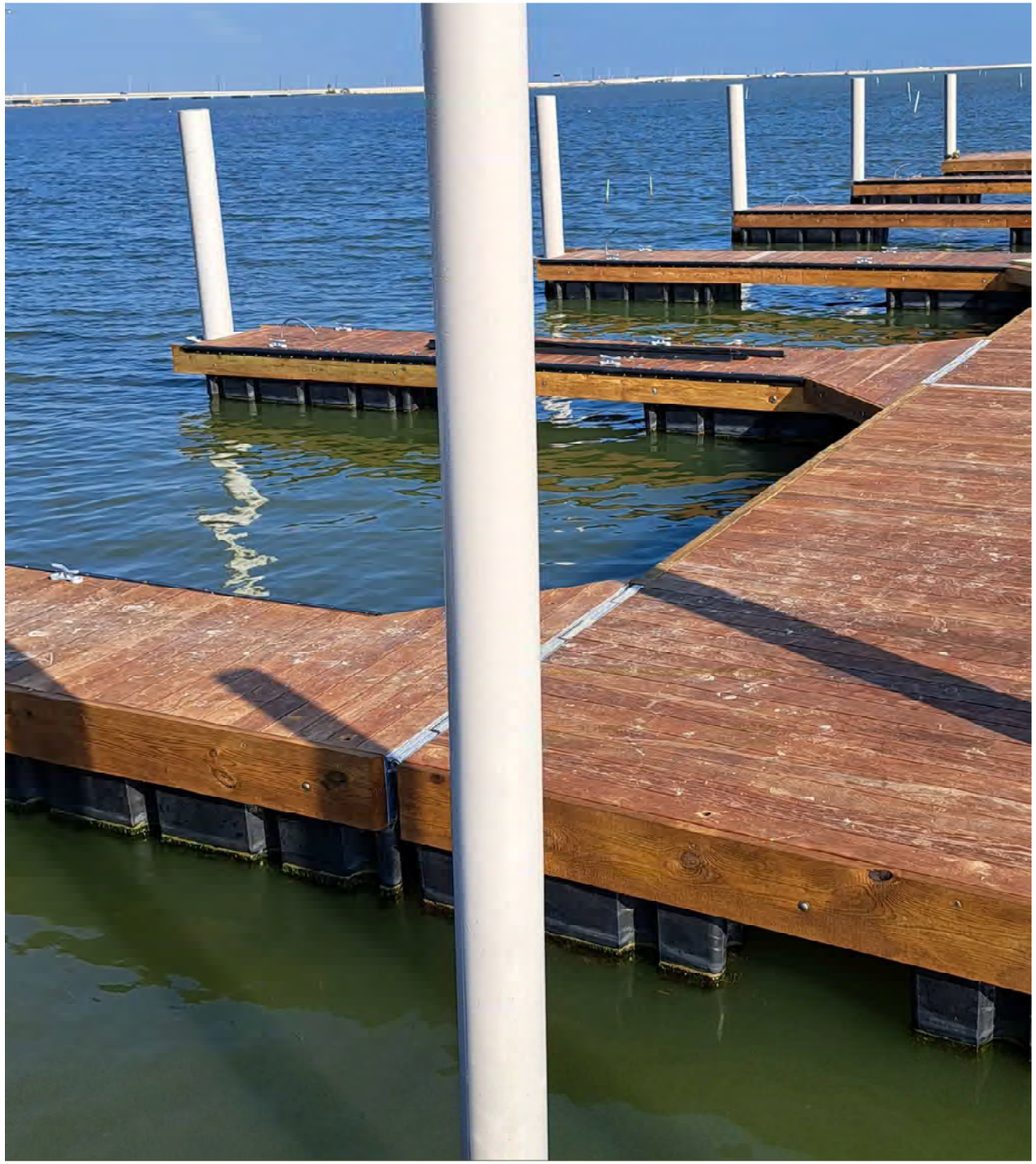

Mounting Cleats on the Dock Fingers

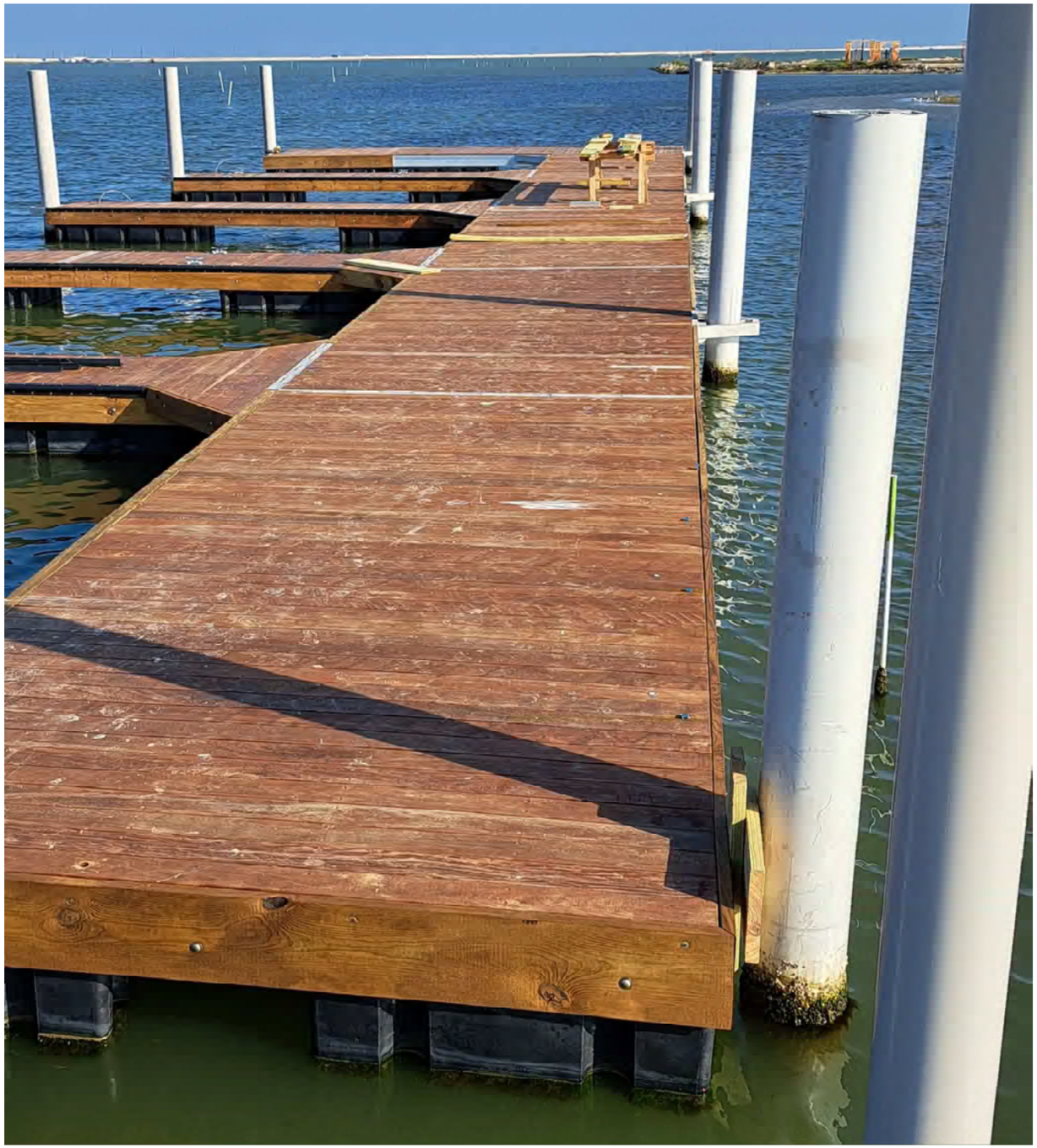
Ipe (Ironwood) is a natural wood that comes from Brazil. This wood was selected because of it's superior properties to any decking materials available in the world which includes: *High Tensile Strength, Low CTE (Thermal Expansion), Low Shrink over time, High Density (does not float), Lack of Knots, Low Thermal Absorption and >30 Year Product Life.* The only inferior property is its initial cost, which is 20% higher than other natural woods and 5-10% higher than the best composite materials.



10-12-22 Progress: 2 more sections attached

12-5-22 Progress: Final dock sections attached but we still are working on the detail such as the stained banding boards, surface lights, bow guards. On 12-12-22 we will be working on the shore power stations, fresh water lines, rub rail and final 2 dock bearings.





Sub Projects Remaining:

Parking Surface – Ready to Install
Lights and Bollards – Ordered
Palm Trees- Ready to Install
Flag Pole- Selected but not approved
Signage- Currently being considered
Fish Cleaning and Ice Vending – Ready to Install
Service and Shelter Structure- Design Completed
Modular Restrooms- Design Complete
Security Fence and Gate – Design Complete, Building now
Custom Pergola with Retractable Shade – Design Phase
Park Tables– Custom Brian & Dave's -1st Prototype coming soon

I just want to give a special thanks to the following suppliers and crew for enabling us to execute the plan that makes this project possible.

Key Project Enablers

Truline/ Formtech - Shawn
Basalt World / RAW –Don and Elina
Basanite- Fred and Stephanie
Cactus Readymix- Chris
Coastal Welding Works -Steven and Dennis
Designer Palms- Tracy
Eastern Metals -Jessica
H&E Equipment – Frank
Home Depot & Lowes
Industrial Steel and Pipe -Liza and Lisa
Ingram Readymix- Johnny
Metals4U -Mark and Dom
Austin Wholesale Decking (Ipe) – Z

Contract Labor

Nautical Dock Builders -Site Seawall and Dirt Crew: John, Albert, Eddie, Johnny, JD and our welders and fabricators: Alex, Francisco and Neb.
The Austin Cleanup Dock Team: Kyle and Brandon.
Brett Lappe Construction – Chappo's Concrete Crew

To the Home Office: The Boston Group- Dave, Spencer, Leslie, Tony K, Tony M, Lindsey, Deneatria, Tanya, Korine, Alexis, Victor and Brandon.
Thank You All!!!

Brian Cox
Special Projects Engineer
The Boston Group
512-775-1732