



Dover Ditch Living Shoreline Village of Tequesta & Town of Jupiter Joint Project

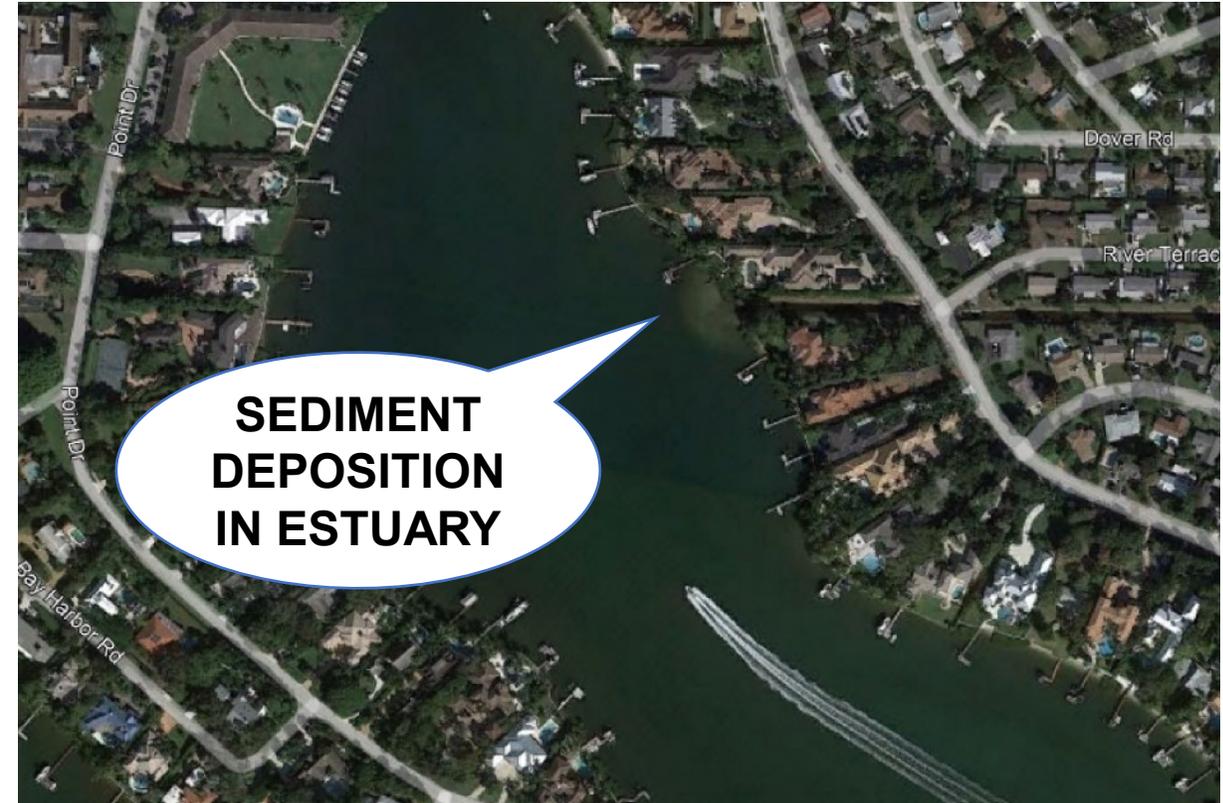
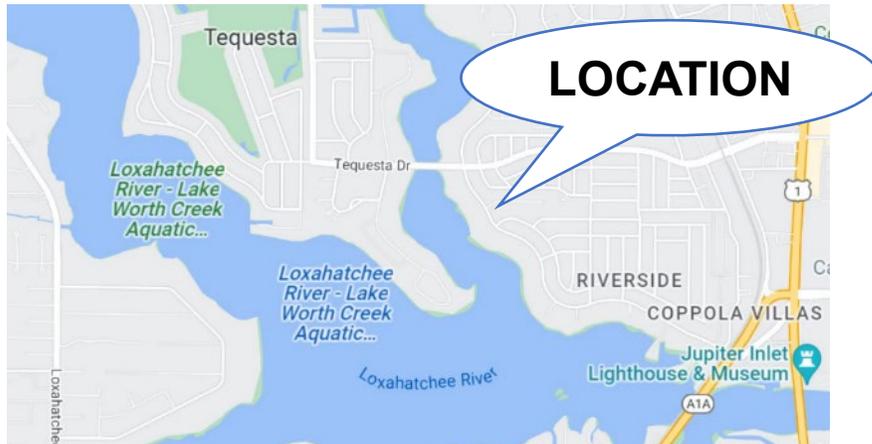
Loxahatchee River Preservation Initiative
(LRPI) Meeting
Monday, April 7, 2025

Project Overview – Existing Conditions



- **Existing**

- Half-mile long drainage canal along the border of the Village of Tequesta and Town of Jupiter
- Provides flood protection for the adjacent single-family neighborhood
- Embankment of the canal has eroded
- Resulting sediment has been displaced into the Loxahatchee Estuary



Project Overview – Existing Conditions

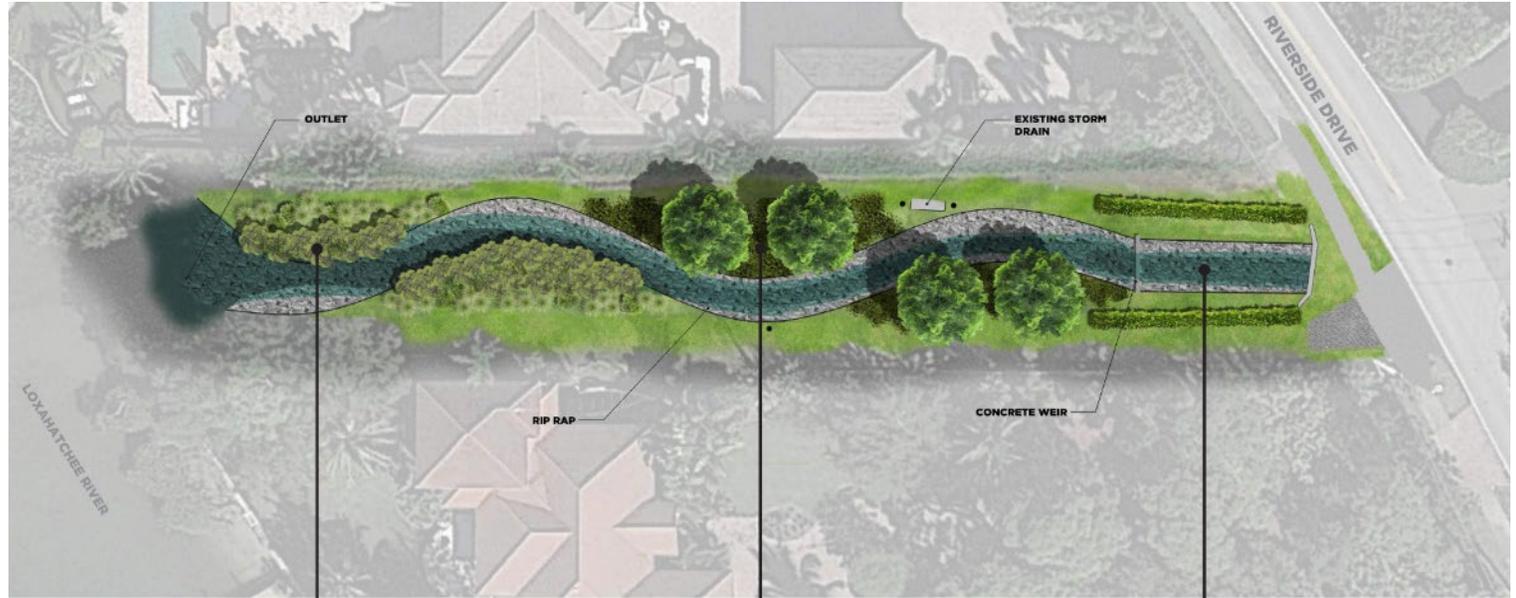


Project Overview – Proposed Design



- **Proposed Design**

1. Dredge, re-align, and stabilize the westernmost 350 feet of Dover Ditch
2. Create a meandering channel (increased fish habitat)
3. Create a living shoreline (aesthetic and water quality benefits)
4. Maintain access for Village and Town staff along north and south top of bank



MANGROVE/SALT MARSH
(INTERTIDAL ZONE)



MARITIME HAMMOCK



CONCRETE WEIR

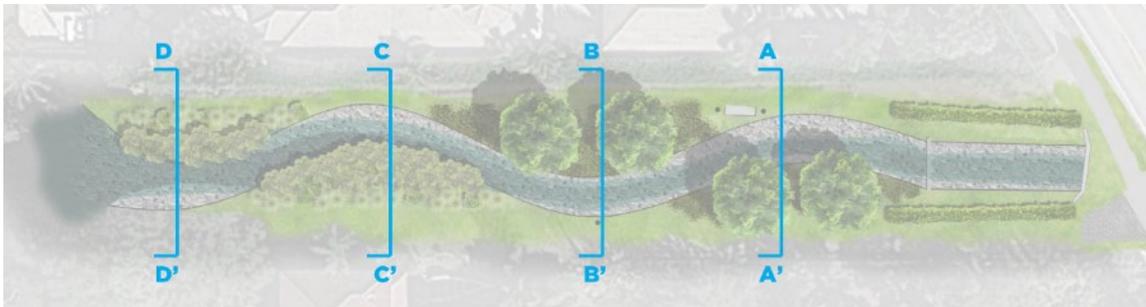
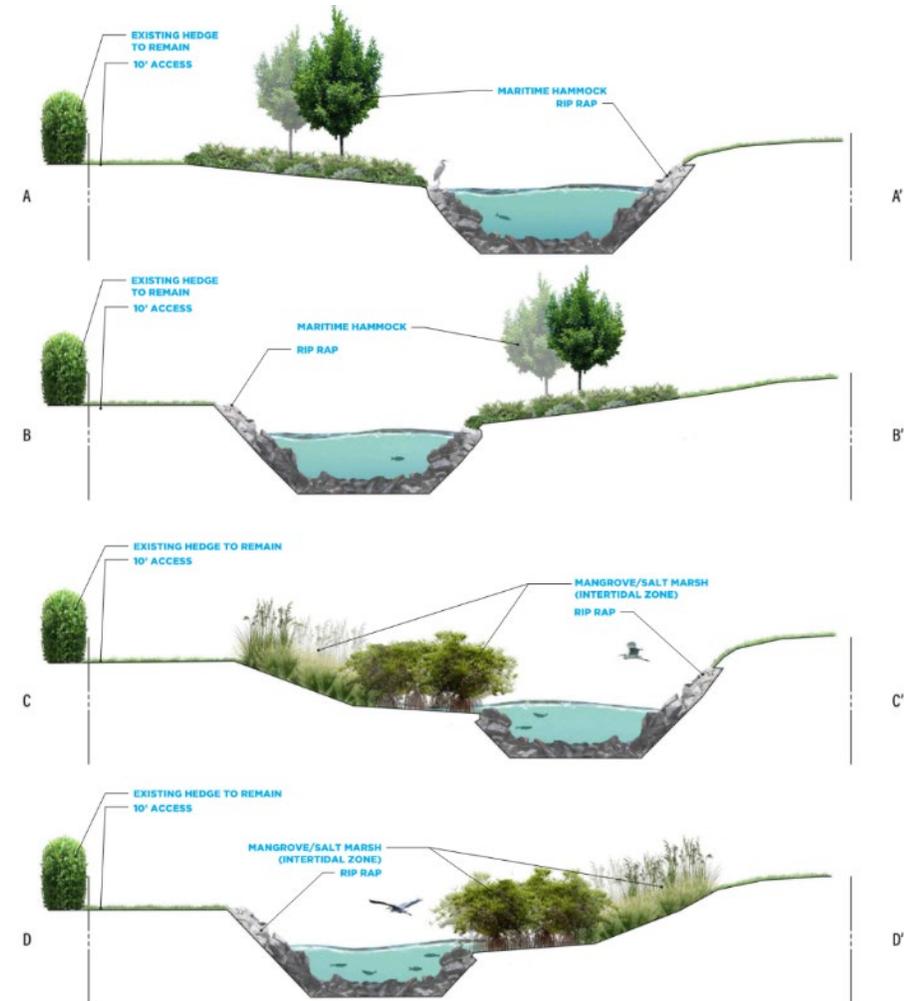


Project Overview – proposed Design



- **Proposed Cross Section**

5. Increased conveyance area over existing channel and stabilized bank
6. Two 10-ft wide planting spaces for ***Maritime Hammock (1.0'-2.0' NAVD)*** (above MHW – will only be partially submerged during higher high-tides).
7. Two 10-ft wide planting spaces for ***Intertidal Salt Marsh (0.0'-1.0' NAVD)*** (will be dry during low tide and mostly submerged during high tide)



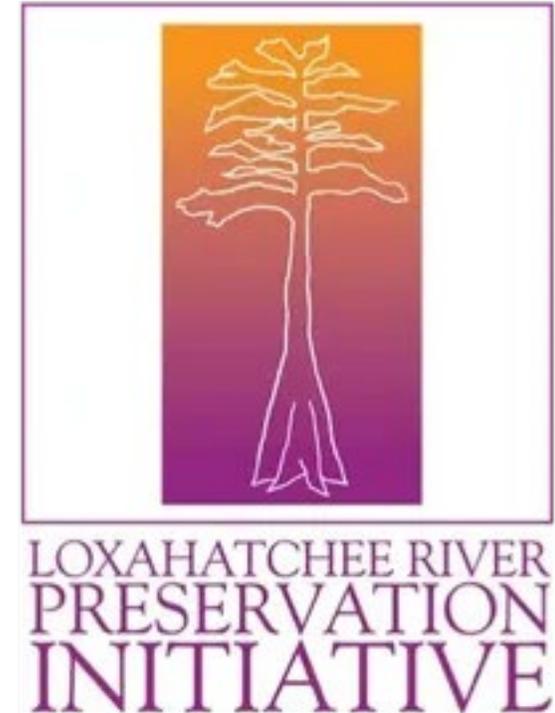
Dover Ditch Living Shoreline



Project Timeline



- Project submitted to LRPI for consideration August 8, 2022
- Project submitted for state grant/ legislative request consideration – 2022 for FY23 legislative session -50% with 60% Tequesta/40% Jupiter for remaining 50%
- Grant awarded July 2023
- Grant notification January 2024
- Final design completed April 24, 2024
- Submitted for permitting
 - Army Corps of Engineers (USACE)- June 2024
 - South Florida Water Management District (SFWMD) – April 2024
- Still waiting for USACE permit 2025
- Project cost still estimated at \$315k



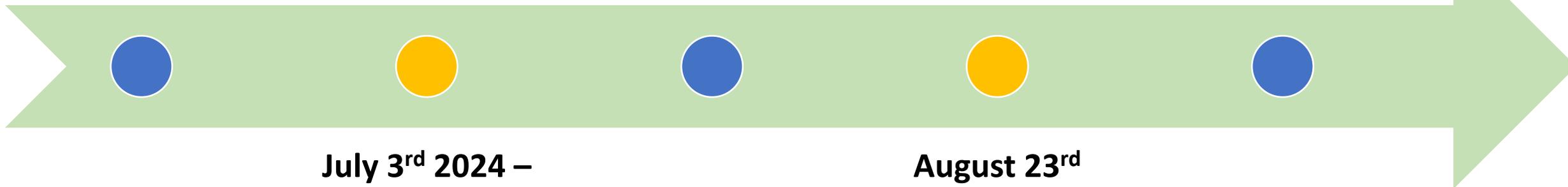
Schedule – SFWMD Permitting



**June 17th 2024 -
Submitted
SFWMD Permit**

**August 2nd
2024 - Benthic
Survey Verified**

**October 25th
2024 – SFWMD
Permit Issued**



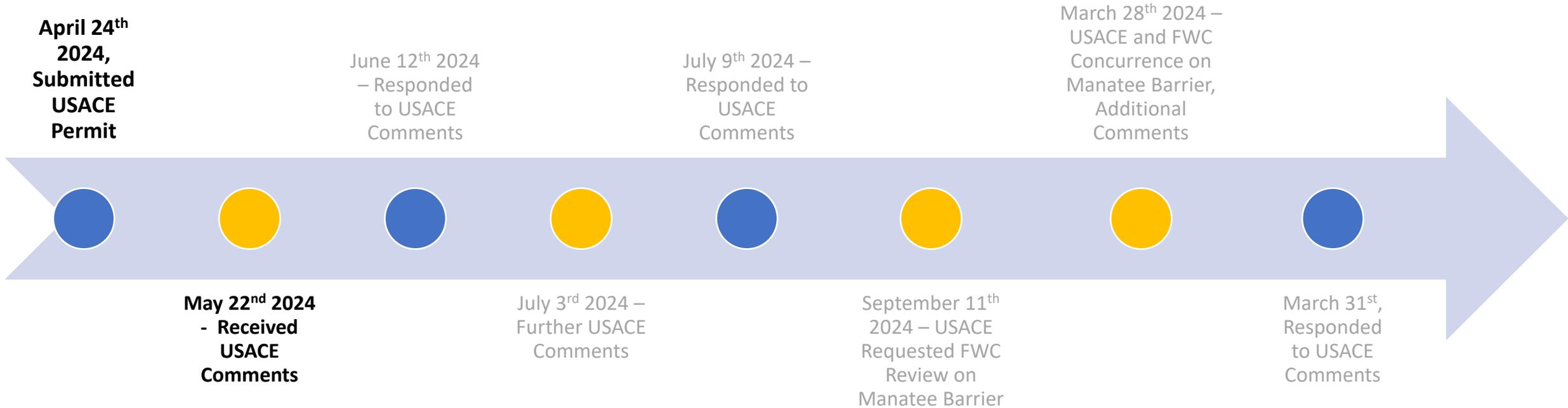
**July 3rd 2024 –
SFWMD
Comments**

**August 23rd
2024 – SFWMD
Response
Letter Sent**

Schedule – SFWMD Permitting



Schedule – USACE Permitting

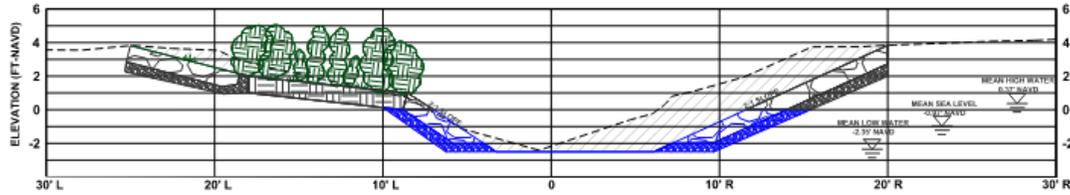


Schedule – USACE Permitting



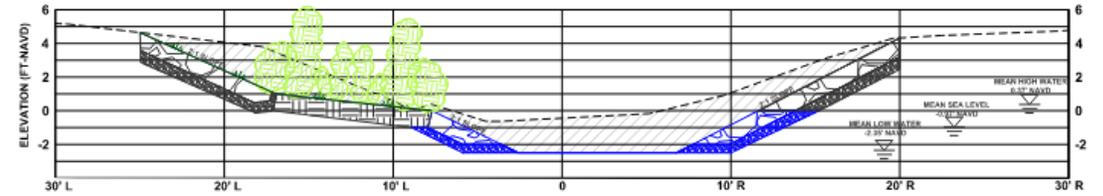
SECTION A-A' (STATION 1+55)

SCALE: 1"=4' HORZ | 1"=4' VERT



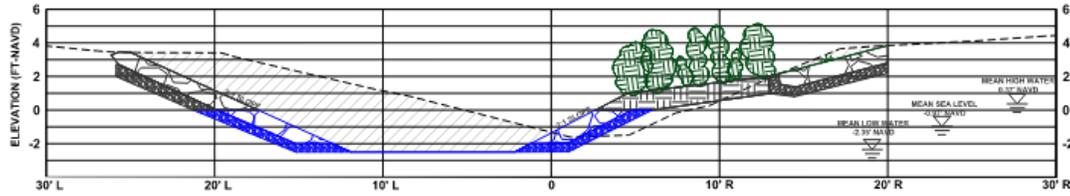
SECTION C-C' (STATION 2+80)

SCALE: 1"=4' HORZ | 1"=4' VERT



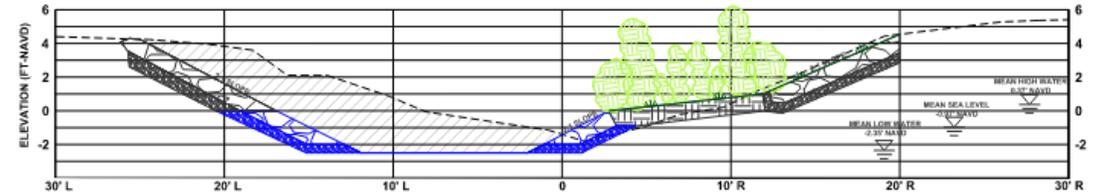
SECTION B - B' (STATION 2+15)

SCALE: 1"=4' HORZ | 1"=4' VERT



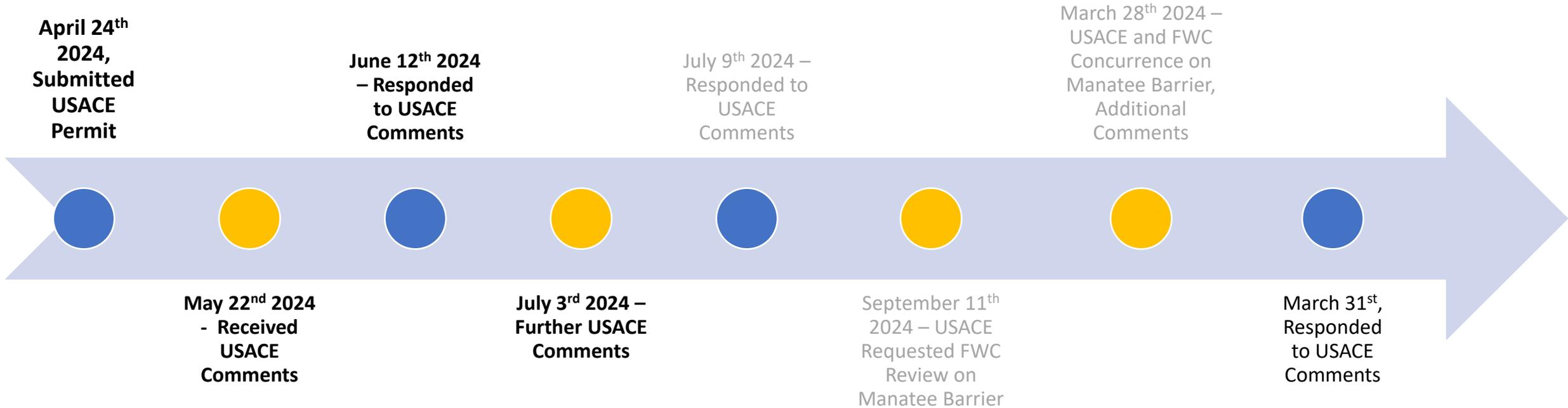
SECTION D-D' (STATION 3+55)

SCALE: 1"=4' HORZ | 1"=4' VERT

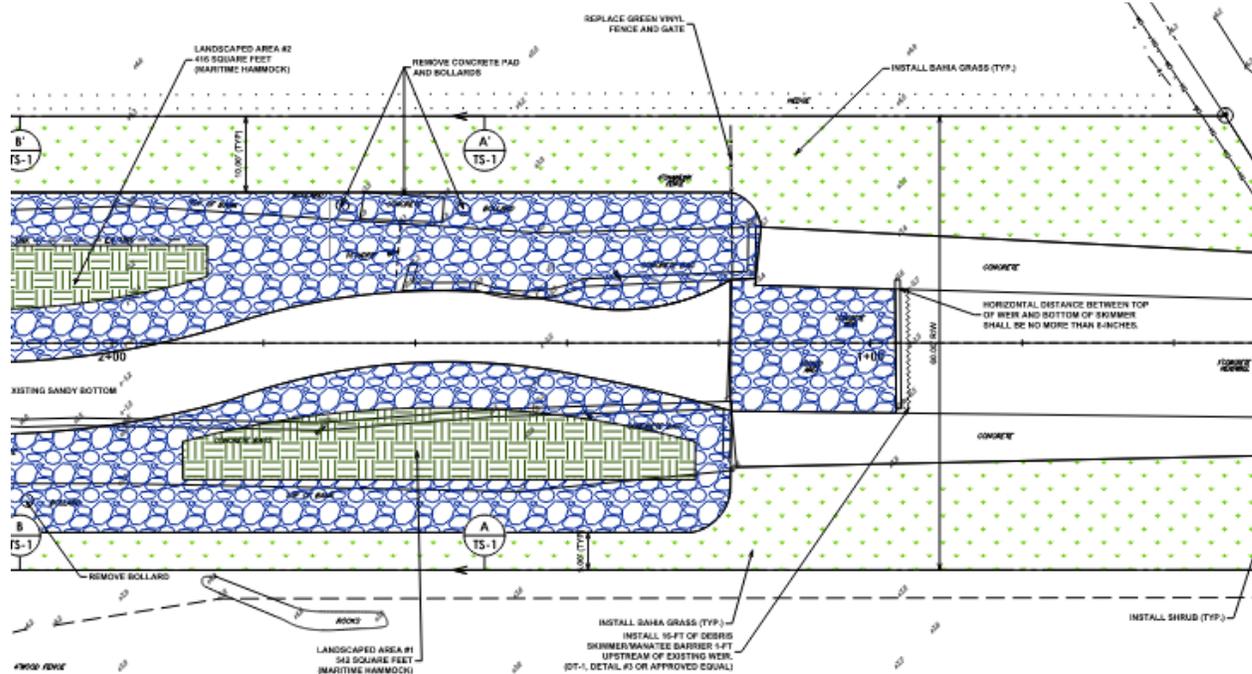


-  RIPRAP BELOW HIGH TIDE WATERLINE
-  RIPRAP ABOVE HIGH TIDE WATERLINE
-  REMOVE EXISTING BANK (CUT)

Schedule – USACE Permitting



Schedule – USACE Permitting



NOTE: DISTANCE BETWEEN TOP OF WEIR AND BOTTOM OF SKIMMER SHALL BE NO MORE THAN 8-INCHES.

ENVIRO-FPM FIBERGLASS POST MOUNTED SKIMMER

DESCRIPTION:
 SIDE WING LENGTH (SWL) X FRONT WIDTH (FW)
 X SIDE WING LENGTH (SWL) @
 ANGLE DEGREE X BLADE HEIGHT (BH)

EXAMPLE: FPM 24' X 75' X 24' @ 90° X 2.5' HIGH

STRUCTURAL POST:
 FIBREPOST- 2 1/2" SQ. X 1 1/4" WALL X LENGTH
 FIBREPOST- 3" SQ. X 1 1/4" WALL X LENGTH
 ALUMINUM POST- 2" RND. X 1/8" WALL X LENGTH
 ALUMINUM POST- 3" RND. X 1/8" WALL X LENGTH
 GALV. STEEL POST- 2" RND. X SCH. 40 X LENGTH

OTHER POST AVAILABLE BASED ON ENGINEERS STRENGTH REQUIREMENTS.

MATERIAL:
 ENVIRO GLASKIMER STRUCTURAL FRP AS SUPPLIED BY ENVIRONMENTAL COMPOSITES INC. TAVARES, FL 32776. PHONE- 352-343-3449

3/16" OR 1/4" THK BASED ON ENGINEERS PERFORMANCE REQUIREMENTS. FOR MORE INFORMATION SEE MATERIAL SPEC SHEET.

COLOR:
 DISAPPEARING GREEN

INSTALLATION HARDWARE:
 5/16"-18 SS HEX HEAD BOLTS W/ NYLOCK NUTS

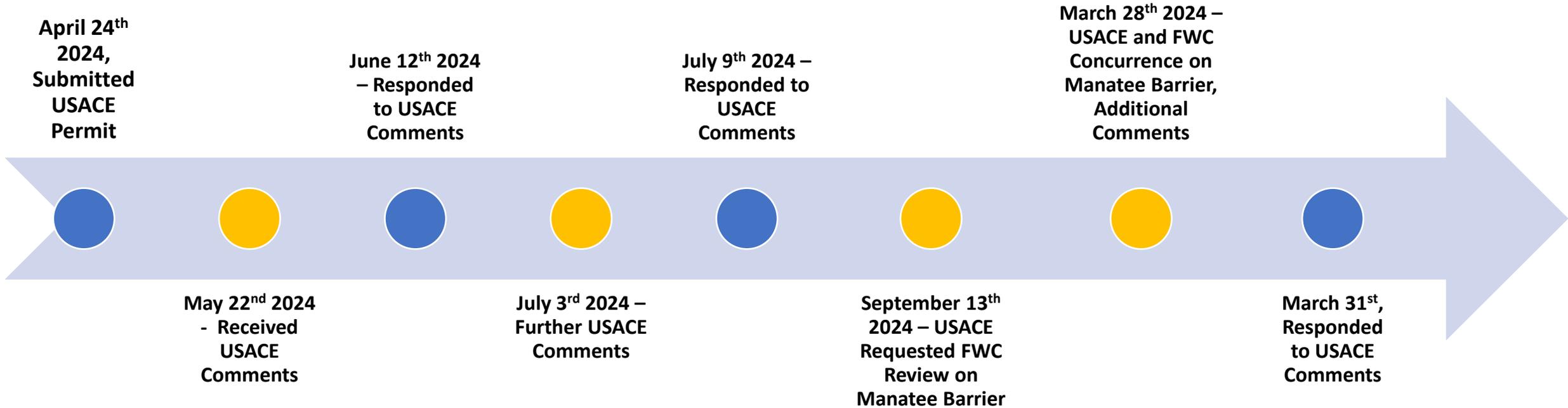
ENVIRO-GLASKIMER

FREE STANDING POST MOUNT

Environmental Composites Inc.
 4250 Lake Industrial Blvd.
 Tavares, Florida 32778
 (352)343-3449 Fax (352)343-5577
www.eci1usa.com

NOTE: CONTRACTOR TO USE ENVIRO-FPM FIBERGLASS POST MOUNTED SKIMMER OR APPROVED EQUAL.

Schedule – USACE Permitting



Next Steps



- Once permit is issued, the Village of Tequesta will process construction documents for bid
- Cost estimate has been reviewed to ensure prices are still accurate - \$315k
- Continue follow up with grant requirements including quarterly reporting

