

## Department of Environmental Resources Management

2300 North Jog Road, 4th Floor West Palm Beach, FL 33411-2743 (561) 233-2400 FAX: (561) 233-2414 www.pbcgov.com/erm

> Palm Beach County Board of County Commissioners

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May 21, 2020

Mr. Paul Brazil, Director of Public Works Town of Palm Beach 360 South County Road P.O. Box 2029 Palm Beach, FL 33480

SUBJECT: TOWN APPROVAL FOR PLANNED RESILIENT ISLANDS WITHIN THE LAKE WORTH LAGOON

Dear Mr. Brazil

As discussed at our meeting on March 5, 2020 between the Town and Palm Beach County Department of Environmental Resources Management (ERM) staff, please find attached conceptual project drawings of a proposed Palm Beach Resilient Islands Phase 1 for your review and approval. This initial phase would include a .38 acre mangrove island with six protective wavebreaks and twenty-three oyster reef modules.

We anticipate receiving funds from The Nature Conservancy (TNC) to construct this initial Phase that should provide some environmental resiliency to shorelines within Lake Worth Lagoon. This specific project would be situated south of the Everglades Island and north of Fisherman's Island. We would avoid any navigation channels and generally focus on the shallow-water area or "rock spine" that runs down the middle of the Lagoon. Our agreement with TNC is slated to go to the Board of County Commissioners for execution on June 16, 2020.

Also attached for your approval are two conceptual build-out areas that would be submitted to the permitting agencies to include a combination of reefs and small islands. The specifics to the structures within these areas would be subject to Town approval and successes learned from the initial Phase 1 effort.

We look forward to working with the Town on our continued effort to promote environmental improvements to the Lake Worth Lagoon.

Please contact me at 561-233-2400 or <a href="ddrum@pbcgov.org">ddrum@pbcgov.org</a> or Mr. Carman Vare, Environmental Program Supervisor at 561-233-2444 or <a href="cvare@pbcgov.org">cvare@pbcgov.org</a> with any questions or concerns.

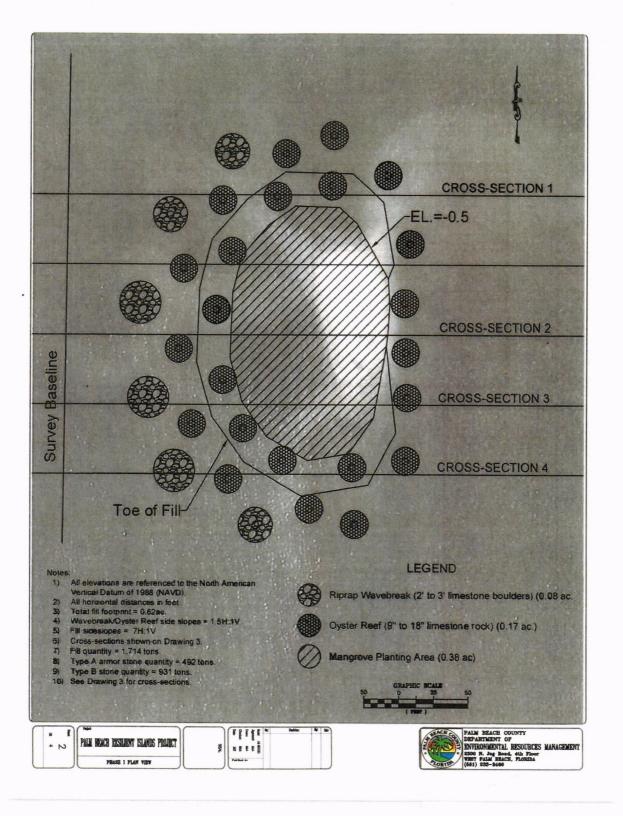
Sincerely,

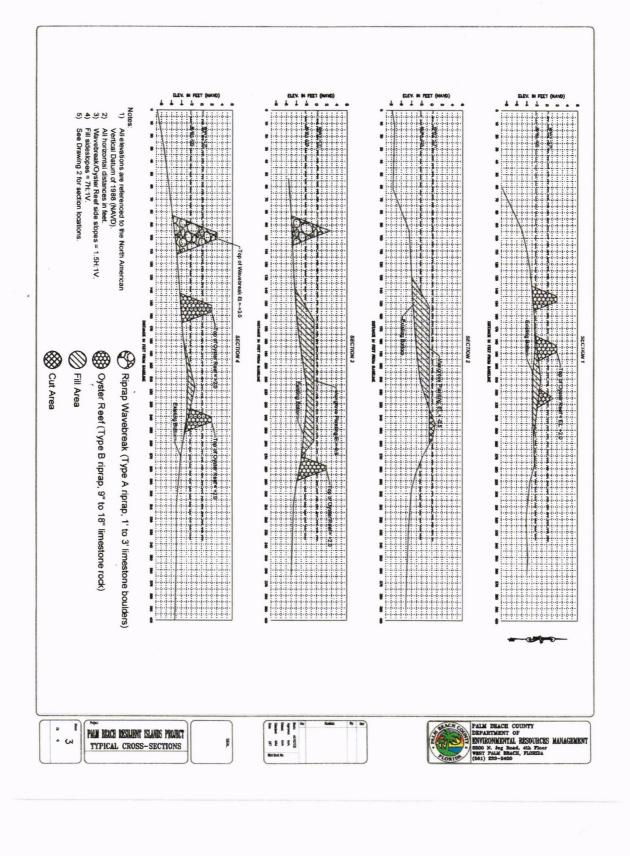
Deborah Drum, Director

Department of Environmental Resources Management

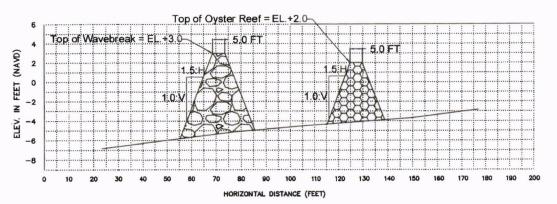
Attachments

DD:CV





## TYPICAL WAVEBREAK/OYSTER REEF CROSS-SECTIONS





Riprap Wavebreak (Type A riprap, 1' to 3' limestone boulders)



Oyster Reef (Type B riprap, 9" to 18" limestone rock)

## Notes:

- 1) All elevations are referenced to the North American Vertical Datum of 1988 (NAVD).
- 2) All horizontal distances in feet.
- 3) Wavebreak and Oyster Reef side slopes = 1.5H:1V.
- 4) Wavebreak and Oyster Reefs are 5 ft wide at the crest.
- 5) Base widths vary depending on depth.



KSILENT ISLANG PROJECT CROSS-SECTIONS

