

## FY 2011-12 Local Government Funding Request

**Project Name (Same as previous phase):** Rest Beach Renourishment

**Project Description: (Should be consistent year to year with annual updates. Include county, location with reference to range monuments, brief project history and upcoming beach activities.)** The project consists of the renourishment of 643 feet of critically eroded Atlantic shoreline located in Key West, Monroe County, with approximately 7,800 cubic yards of sand. The initial restoration of the project was in 1995 with the placement of sand from upland sources, removal of invasives and landscape improvements. A section of the adjacent pier was removed to allow seaweed to flow through that had previously piled up against the pier and rotted. The City is currently working to secure FDEP & USACE permits for renourishment which is tentatively scheduled for FY2011 and will encompass the total 643 foot project length.

The sand source is the ER Jahna, Ortona Mine in Moore Haven, Florida and is trucked to Key West. The sand size is a permit condition and helps facilitate turtle nesting and seagrass proliferation. Any new sand sources from the Bahamas may also be used if approved by the FDEP.

The City intends to regionalize with the State Division of Parks & Recreation for beach renourishment projects.

**Use of Requested Program Funds:** Funds requested for FY 2011-12 will be used for permitting, construction & construction inspection and engineering

### **Local Government Support**

Does this sponsor have dedicated support staff whose sole priority is to manage beach erosion control activities? yes

| Name              | Title              | Email                      | Percent Commitment |
|-------------------|--------------------|----------------------------|--------------------|
| Janet Muccino     | Project Manager    | jmuccino@keywestcity.com   | 50%                |
| <b>Address 1:</b> | P.O. 1409          | <b>Phone:</b> 305 809-3867 |                    |
| <b>Address 2:</b> | Key West, FL 33041 | <b>Fax:</b> 305 809-3739   |                    |

### **Quarterly Report Compliance:**

| 2009-2010    | End Date | Report Sent | Compliant |
|--------------|----------|-------------|-----------|
| Qtr 1 (Sept) | 9/30/09  | 12/30/09    | yes       |
| Qtr 2 (Dec)  | 12/31/08 | 12/30/09    | yes       |
| Qtr 3 (Mar)  | 3/31/09  | 3/30/10     | yes       |
| Qtr4 (June)  | 6/30/09  | 8/05/10     | yes       |

**Revenue for the local cost share will be provided by:** The City of Key West and the Monroe County Tourist Development Council

**Is the funding from a dedicated long term source for this project?** yes

In order to acquire funding, a resolution from the local governmental entity must be provided by the application deadline which declares:

- Support from the Sponsor for the Proposed Project
- Willingness to serve as the Local Sponsor

- Ability to provide the full Local Cost Share
- Funding Source

**Has the local sponsor resolution been attached to the application fulfilling all of these requirements?** No, the resolution is expected to be approved in an October 2010 City Commission meeting

**Previous State cost-share for a feasibility or design/permitting phase of this project:**

The Department is currently entered into a cost-share agreement for funding of the permitting, design and a feasibility study and design & permitting of approved alternative. The project is recommended in the Strategic Beach Management Plan and located in an area that has been designated as critically eroded shoreline by the Department. The City has submitted a request for final payment for the current contract.

**Previous State Cost Share percentage** 50%

**10-Year Project Schedule and 5-Year Estimated Budget**

**Does this project have Congressional Authorization?** no

**Does this project have a Federal Project Cooperative Agreement?** no

**What is the end date of the Federal Authorization?** n/a

**Federal cost share available for this erosion control project:** no

**Schedule and Budget (Include estimated phases for 10 years and estimated project costs for 5 years.):**

| Year          | Proposed Method                              | Description                | Total Estimated Cost | Federal Cost Share | State Cost Share | Local Cost Share |
|---------------|--|----------------------------|----------------------|--------------------|------------------|------------------|
| 2011/<br>2012 | Construction                                 | nourishment                | \$600,000            | 0.00               | \$300,000        | \$300,000        |
| 2012/<br>2013 | Monitoring/permit requirements               | Performance ,environmental | \$50,000             | 0.00               | \$25,000         | \$25,000         |
| 2013/<br>2014 | Renourishment/Monitoring/permit requirements | Performance ,environmental | \$150,000            | 0.00               | \$75,000         | \$75,000         |
| 2014/<br>2015 | Monitoring/permit requirements               | Performance ,environmental | \$50,000             | 0.00               | \$25,000         | \$25,000         |
| 2015/<br>2016 | Renourishment/Monitoring/permit requirements | Performance ,environmental | \$150,000            | 0.00               | \$75,000         | \$75,000         |
| 2016/<br>2017 | Permitting, construction, management         | nourishment                |                      |                    |                  |                  |
| 2017/<br>2018 | Monitoring/permit requirements               | Performance ,environmental |                      |                    |                  |                  |
| 2018/<br>2019 | Renourishment/Monitoring/permit requirements | Performance ,environmental |                      |                    |                  |                  |
| 2019/<br>2020 | Monitoring/permit requirements               | Performance ,environmental |                      |                    |                  |                  |
| 2020/<br>2021 | Renourishment/Monitoring/permit requirements | Performance ,environmental |                      |                    |                  |                  |



**Additional Ranking Criteria**

**Will this project enhance or increase the longevity of a previously-constructed project?** yes  
**Will this project nourish a previously restored shoreline?** yes  
**Rate of Erosion as determined by the Bureau based on long term data (ft/yr)** 2.8

**Severity of erosion:** Apart from erosion due to Hurricane events, the erosion/accretion trends for the projects since initial construction indicate that the major erosion component is due to high wave action impacting on the beach face. Another component of erosion is caused by wind force action on the berm and beach face which once renourished will require periodic renourishment to maintain the project design dimensions.

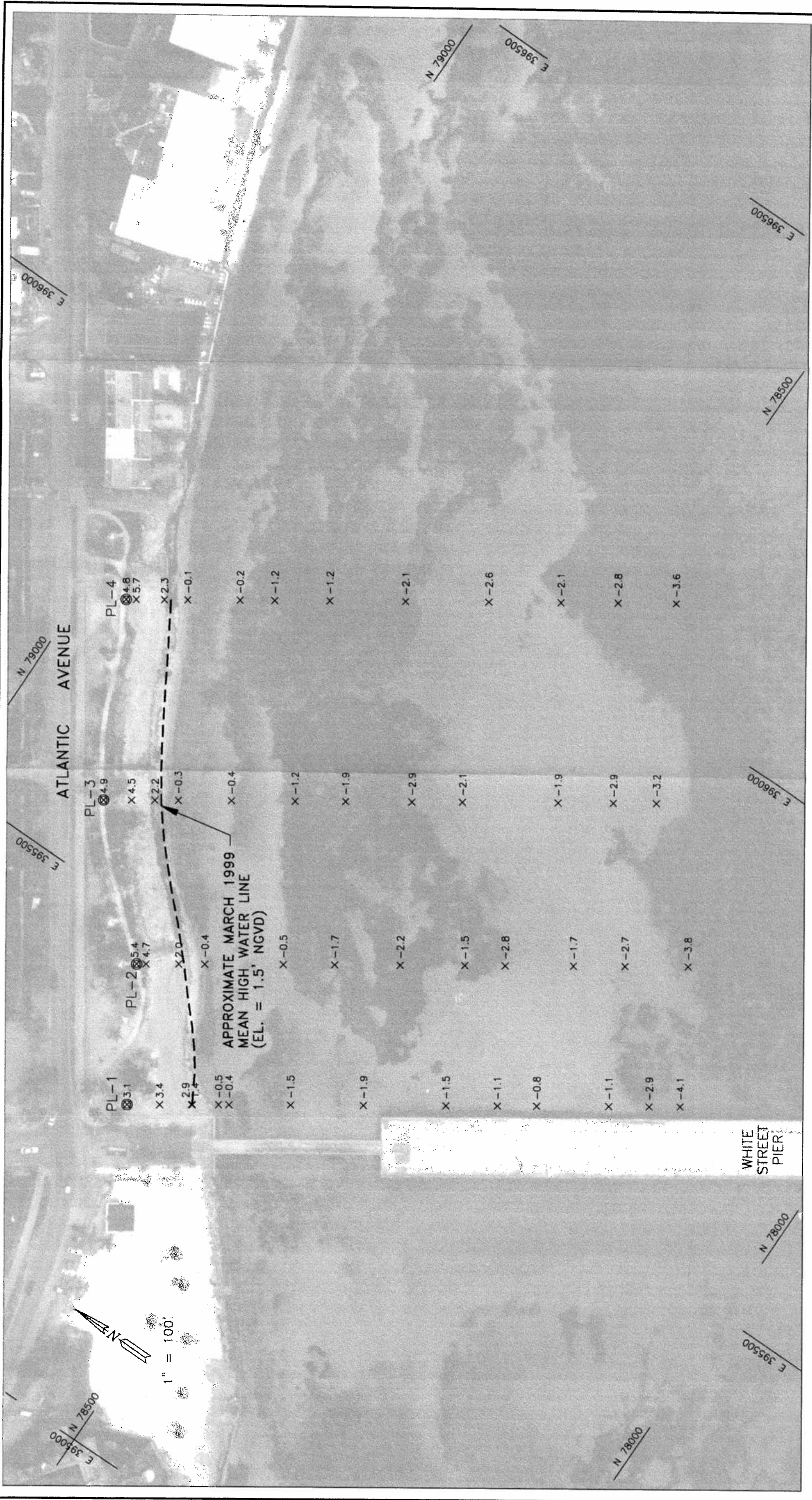
**Project Benefits:** The renourishment benefits the local economy by attracting tourists and benefit locals by providing a beautiful beach. After beach renourishments there is an increase in sea turtle nesting.

**Use of Innovative Applications of existing technologies:** n/a

**Nourishment Interval (years):** 5

**Project Performance:**

The beach was improved in 1995 with the placement of approximately 2,600 cubic yards of sand from upland sources. After Hurricane Opal, Rest Beach was filled with approximately 944 tons of sand. Following damage by Hurricane Georges, the beach was nourished with approximately 1,604 tons of sand. After Hurricane Irene hit in 1999 the beach was nourished with 872 tons of sand. In January 2006 the berms were rebuilt following the 2005 hurricane season with approximately 654 tons. In November of 2009 approximately 682 tons of sand was placed on the berm to replace sand lost due to TS Faye in 2008. Apart from the damage the beach has sustained due to storms & hurricanes, Rest Beach continues to lose sand on an annual basis.



**FIGURE 3**  
**CITY OF KEY WEST, FLORIDA**  
**REST BEACH PLAN VIEW**

COASTAL PLANNING & ENGINEERING, INC.  
 2481 NW BOCA RATON BLVD.  
 BOCA RATON, FL 33431