

Smathers Beach Renourishment Project

Biological and Physical Monitoring Plan
City of Key West

April 18, 2019



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1. Introduction

1.1. Project Background

Seagrass and hardbottom communities exist offshore of Monroe County and both have been observed off Smathers Beach in Key West. The City of Key West (City) was issued a Consolidated Joint Coastal Permit (JCP) and a Sovereign Submerged Lands Authorization in July 2013 from the Florida Department of Environmental Protection (FDEP) through permit number 0129031-005-JC, which authorized the periodic placement of beach compatible sand over a 15-year period within a permitted fill template along the 3,000-linear foot beach. The U.S. Army Corps of Engineers (USACE) issued its Department of the Army (DA) permit (SAJ-1998-01677 (SP-MLC)) in September 2017, authorizing the placement of sand within the same template over a ten-year period. This proposed Biological and Physical Monitoring Plan has been prepared in association with these permits. The monitoring efforts will focus on documenting the configuration and characteristics of the nearshore biological communities in an effort to detect any impacts from sedimentation or burial attributable to the cross-shore and/or downdrift sediment transport of material associated with beach fill placement events under the FDEP and USACE authorizations.

1.2. Monitoring Project Area

The biological survey area extends approximately 3,000 feet (ft), or 915 meters (m), along the length of Smathers Beach and 492 ft (150 m) offshore from the permitted construction toe of fill, representing a total area of approximately 1,476,000 ft² (137,250 m²). Figure 1 (attached) presents the limits of the biological survey area. The submerged marine resources located between the construction toe of fill and the offshore boundary (492 ft offshore) will be delineated and quantitatively analyzed through seagrass/hardbottom mapping and *in situ* quadrat analysis, respectively. Additionally, sediment testing will be conducted to determine if beach fill material is migrating beyond the permitted fill template. Please see the sections below for detailed descriptions of the seagrass/hardbottom mapping, *in situ* quadrat analysis, and sediment monitoring.

2. Technical Approach

This section presents the technical approach intended to document the nearshore biological communities over time in response to sand placement events. In order to efficiently cover the entire project area, the assessment area will be divided into three sections. The existing beach groin structures will represent the boundaries of these three sections (see Figure 1). Biological assessments and monitoring will be conducted and/or supervised by staff biologists which have previous experience with monitoring nearshore hardbottom communities and scientific knowledge of marine benthic ecosystems, local flora and fauna. Monitoring efforts will follow the schedule as outlined in Section 3.

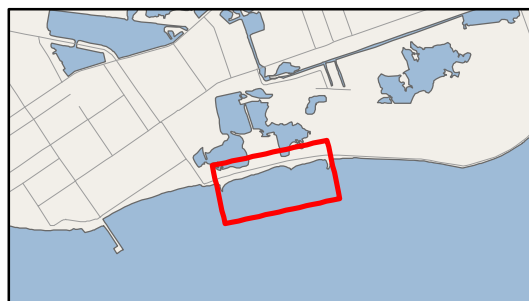
2.1. Biological Monitoring Methodologies

2.1.1. Delineation of Submerged Resources and Benthic Habitat Mapping

Before each sand placement event, an assessment will be conducted to qualitatively and quantitatively document the existing submerged resources and benthic habitats within the project area. Field biologists will use snorkel equipment to assist with the benthic assessment. A preliminary visual reconnaissance will be performed on snorkel to determine the general location of any seagrass or hardbottom communities. The assessment tasks will then commence with delineation of these submerged biological resources within the marked section. One biologist will snorkel over the resource area following the resource boundary, while the second biologist will follow behind with a global positioning satellite (GPS) unit running location recording software (such as a Trimble™/GeoXT handheld unit running ESRI® ArcPad®, or similar device and software). Using this method, the hardbottom communities and seagrass



Smathers Beach, Key West, Florida



Smathers Beach
Key West
Monroe County
Florida

Smathers Beach Renourishment Project Pre-Construction Nearshore Biological Assessment

— Transect Locations

Figure 1. Project area map



1 inch = 200 feet

Prepared By: Atkins N.A. Ecological Sciences



Date: August 27, 2018

beds/patches will be delineated. Additional focus will be directed to the landward edge of seagrass (areas adjacent to the permitted construction toe of fill) as this area has the greatest potential to experience secondary impacts associated with the sand placement activities before those resources further offshore.

2.1.2. *In Situ* Quadrat Analysis

As loss of submerged resources and benthic habitat within the permitted fill template is expected and previously mitigated, monitoring efforts will start at the permitted construction toe of fill (0 m) and extent offshore to approximately 150 m. *In situ* quadrat analysis will be performed along a total of 15 fixed transects, each transect measuring 150 m in length. These transects will correspond to the locations of the survey profile lines detailed in the U.S. Army Corps of Engineers permit drawings (SAJ-1998-01677 (SP-MLC)). Using mapping software, the transect lines and *in situ* quadrat monitoring locations will be preloaded into the GPS unit(s) prior to entering the field. A 1-meter square (m²) PVC quadrat, divided into 100 10-centimeter square (cm²) grid cells, will be used to estimate visual percent cover of benthic components in the field. A total of sixteen 1-m² quadrats will be evaluated and photographed with an underwater digital camera along each transect (a total of 240 quadrats covering the study area). The photographs will be archived with an appropriate naming convention for ease of recall at a later time. Quadrat locations will commence at the 0 m position (construction toe of fill) and occur every 5 meters for the first 50 meters, and then every 20 meters thereafter along the transect (i.e., 0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 70, 90, 110, 130, 150 m). See Figure 2 for proposed quadrat locations. Repetitive quadrat locations are proposed for this monitoring as they will be a useful tool in tracking the progression of sedimentation, if any, as well as changes to the biological community resulting from sand placement activities. Repetitive quadrat locations will also ensure a more even distribution of sampling locations across the project area. Within each quadrat, biologists will document visual estimates of percent cover for the following functional groups: macroalgae (crustose, filamentous, branching), encrusting calcareous algae, sponges (to genus), octocorals (to genus), sea fans (*Gorgonia* sp.), scleractinian corals (to species), seagrass (to species), sand, drift algae, hardbottom, and any sessile/sedentary animals other than coral (see Figure 3, sample field data sheet). Species richness will be calculated for each quadrat by counting the number of species within each 1-m² quadrat. The presence and general abundance of any listed or invasive species observed within the quadrats will also be recorded during monitoring efforts.

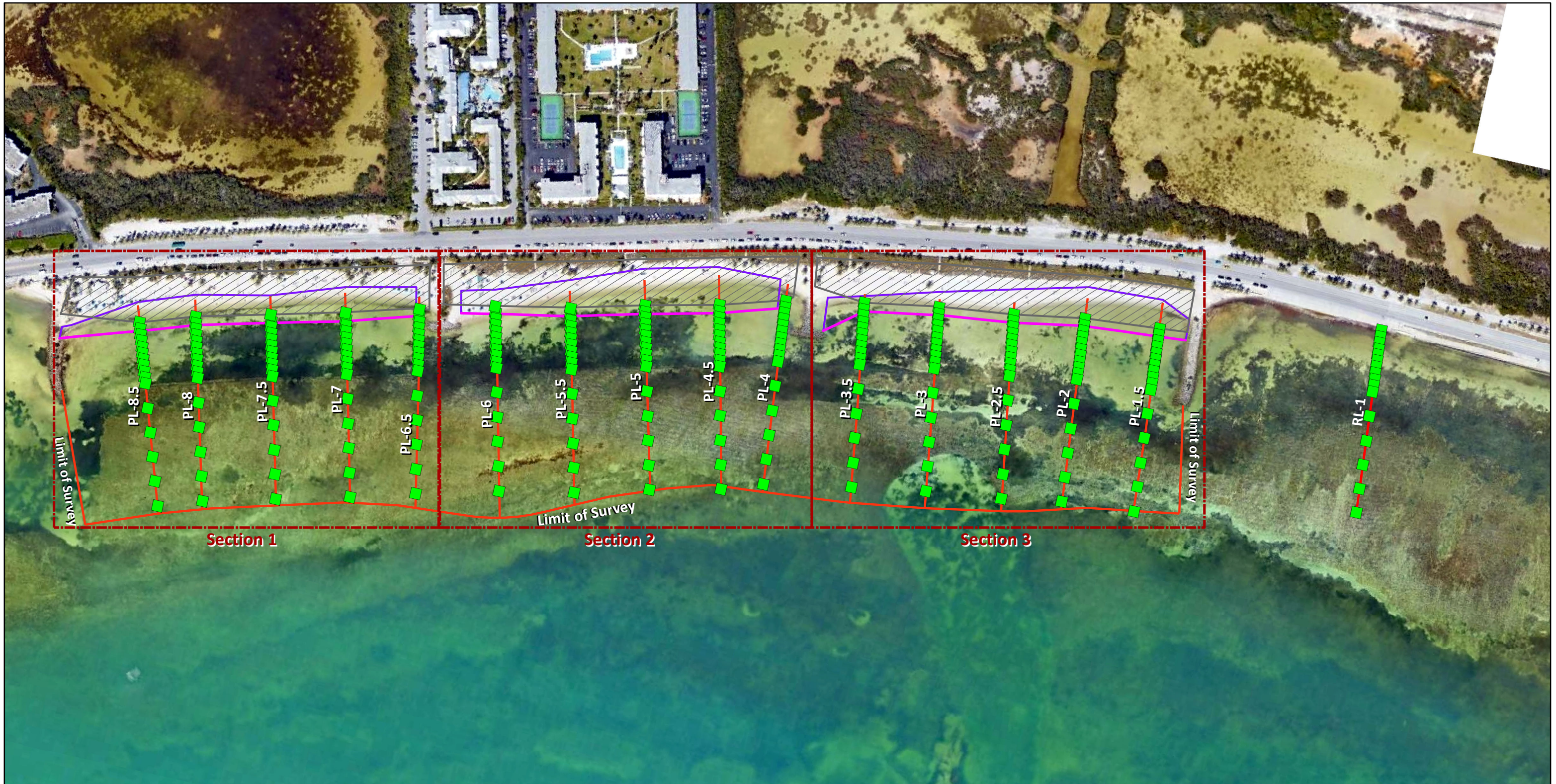
In addition to the 240 repetitive quadrat locations described above, biologists will also record visual estimates of percent cover of octocorals, sea fans and scleractinian corals at the 60, 80, 100, 120 and 140-meter positions along each transect (an additional 75 quadrats). Biologists will also measure and photograph any scleractinian coral colonies larger than 4 cm in diameter and any octocorals/sea fan colonies greater than 10 cm in height which are present within any of the quadrats completed during the benthic assessment. A qualitative assessment of the health of coral colonies will also be recorded at all quadrat locations during monitoring activities. See Figure 4 for coral monitoring quadrat locations.

2.1.3. Seagrass Percent Cover Reporting

Seagrass percent cover scores for all quadrats located in the nearshore seagrass bed will be averaged. A 1-m² PVC quadrat will be used to estimate visual percent cover of benthic components, including seagrass. The percent cover of seagrass will be averaged and compared across monitoring events to obtain percent change over time.

2.1.4. Seagrass Edge Mapping

The landward (inshore) edge of seagrass will also be mapped during each monitoring event. Field biologists will use snorkel equipment to assist with the mapping effort. One biologist will snorkel over the resource area following the boundary, while the second biologist will follow behind with a GPS unit running location recording software (such as a Trimble™/GeoXT handheld unit running ESRI® ArcPad®, or similar device and software) to delineate the seagrass edge. The landward edge of seagrass mapping results for each monitoring effort will be provided in the monitoring reports as a separate exhibit.



Smathers Beach, Key West, Florida



Smathers Beach
Key West
Monroe County
Florida

Smathers Beach Renourishment Project Nearshore Biological Monitoring

- Transect Locations
- Equilibrium Toe Of Fill (Permitted)
- Fill Template
- Excavation (2000)
- Quadrat Locations

Figure 2. Monitoring quadrat locations.



1 inch = 254 feet

Prepared By: Atkins N.A. Ecological Sciences



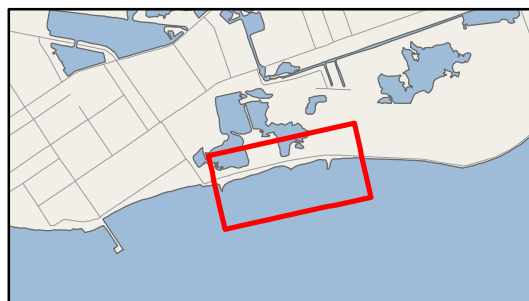
Date: September 10, 2018

Figure 3 – Sample field data sheet

| Transect Number: Weather: Visibility: Tide: Sediment Type: Fishery Observation: | Date: | | Time: | | Surveyor: | | Time: | | Surveyor: | | Transect Number: Weather: Visibility: Tide: Sediment Type: Fishery Observation: | | Time: | | Surveyor: | | | | | | |
|--|-------|---|-------|----|-----------|----|-------|----|-----------|----|--|-----|-------|-----|-----------|------|-----|------|-----|------|-----|
| | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 60" | 70 | 80" | 90 | 100" | 110 | 120" | 130 | 140" | 150 |
| Quadrat Locations (m) | | | | | | | | | | | | | | | | | | | | | |
| Visual Percent Cover | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Macroalgae | | | | | | | | | | | | | | | | | | | | | |
| Encrusting Calcareous Algae | | | | | | | | | | | | | | | | | | | | | |
| Drift Algae | | | | | | | | | | | | | | | | | | | | | |
| Sponges (G) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Octocorals (G) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Scleractinian Corals (S) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Seagrass (S) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| Other (explain) | | | | | | | | | | | | | | | | | | | | | |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Species Richness | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *Corals Only | | | | | | | | | | | | | | | | | | | | | |
| Nearshore Seagrass Bed | | | | | | | | | | | | | | | | | | | | | |
| Hardbottom/Seagrass Community | | | | | | | | | | | | | | | | | | | | | |
| Sand Patches Within Nearshore Seagrass Bed | | | | | | | | | | | | | | | | | | | | | |
| Cliffshore Seagrass Bed | | | | | | | | | | | | | | | | | | | | | |
| Sand/Seagrass Patches | | | | | | | | | | | | | | | | | | | | | |



Smathers Beach, Key West, Florida



Smathers Beach
Key West
Monroe County
Florida

Smathers Beach Renourishment Project Nearshore Biological Monitoring

- Transect Locations
- Equilibrium Toe Of Fill (Permitted)
- Fill Template
- Excavation (2000)
- Coral Monitoring Locations

Figure 3. Coral monitoring locations.



1 inch = 254 feet

Prepared By: Atkins N.A. Ecological Sciences



Date: September 10, 2018

2.1.5. Biological Reference Site Monitoring

One reference transect will be monitored as a control site, providing information on natural variation of benthic components. The reference transect (RL-1) will be located east of the easternmost groin of Smathers Beach. This location was selected as it is outside the area potentially affected by the proposed sand placement (east of groin J4) in an area of relatively similar topography and habitat composition (see Figure 2). It should be noted that the nearshore area of Smathers Beach was dredged prior 1991 to create the beach, whereas the reference area is representative of the nearshore in its natural condition. The biological monitoring of reference transect RL-1 will be as follows:

- Reference transect RL-1 will extend 150 m seaward from the MHW line. Quadrat spacing along Transect RL-1 will be the same as the spacing implemented for the fixed monitoring profile lines (PL) (i.e., repetitive quadrat locations at 0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 70, 90, 110, 130, 150 m). Refer to Figure 2 for a graphic showing the reference transect and associated quadrat locations
- The City will monitor transect RL-1 using the same methodology as described for the 15-established monitoring transects. Benthic habitats will be quantitatively analyzed through *in situ* quadrat analysis.
- Visual estimates of percent cover of octocorals, sea fans and scleractinian corals will also be performed at the 60, 80, 100, 120 and 140-meter positions (see Figure 4).
- Biologists will record the landward edge of seagrass extending 10 m on either side of RL-1.
- The reference transect will be monitored at all events including the pre-construction event.

2.1.6. Biological Monitoring QA/QC

To ensure the integrity of the data collected for the biological monitoring, the following QA/QC protocols will be followed:

- Prior to entering the field, maps and field data sheets will be prepared. Electronic data will be preloaded into GPS instruments calibrated to within manufacturers specification.
- Field efforts will be conducted on days when water quality (horizontal and vertical visibility) permits for the adequate view of the quadrats on the bottom to record benthic resources.
- Landward edge of seagrass mapping will occur when visibility permits accurate collection of grass bed data.
- Each quadrat monitoring location will be provided a unique code that will be used throughout the duration of the monitoring period.
- Prior to initiating data collection for each monitoring event, a calibration exercise will be completed among the field biologists. The calibration exercise will be completed to ensure consensus in species identification and species richness determinations and to ensure consistent methodologies are used to calculate visual estimates of percent cover.
- During data collection activities, resource information will be recorded on field data sheets, labelled with its corresponding location code. All resource data and pictures at the current monitoring location will be recorded before moving to the next monitoring location.
- Upon completion of the monitoring task, the field biologists will transcribe the data to electronic format and verify the percent cover and species richness data for each quadrat location. An independent third party will review the calculations and monitoring findings for accuracy in reporting.

2.2. Sediment Analysis

To monitor for potential migration of placed beach fill beyond the permitted template, the City will include sediment sampling and analysis in the Smathers Beach Monitoring Plan. *In situ* core sediment sampling

is best suited for the shallow nearshore environment at Smathers Beach, which, as a public facility, also experiences multiple anthropogenic influences.

2.2.1. Sediment Analysis Methodologies

The FDEP-approved fill for this beach maintenance project is nearly all silica sand (terrigenous) with negligible carbonate content, whereas the native material at Smathers Beach is likely to have a larger carbonate (biogenous) percentage; therefore, the overall chemical characteristics between the two sand types may differ because of the sources, even though they are similar in grain size, as required. Any mixing between these two sand types will be evident in their silica/carbonate ratio. Prior to each nourishment event, a representative sample from the approved-upland mine source will be submitted to FDEP for approval. At the completion of each sand placement event, samples of the fill and the native sand will be collected, and analysis conducted to identify the distinct signature between the two sand sources. This initial sampling will establish the baseline for the future sediment monitoring analyses. Provided a distinct signature can be detected between the source of sand used for nourishment and the native sand outside of the permitted template, sediment sampling and analysis will be conducted along six existing transect/profile lines (PL) at pre-determined locations. The purpose of the analysis will be to monitor for migration of the placed sand beyond the permitted template. Provided a distinct signature can be identified, the following sediment sampling and analysis will be conducted:

- Sediment cores will be collected by hand using a push core, or similar device, adjacent to select existing PLs at pre-determined locations, as shown in Figure 5.
- For each PL to be sampled, one sediment core will be collected on the berm above the mean high water (MHW) line (01), and the remaining sediment cores will be collected below the MHW line; one just beyond the anticipated toe of fill (02), one at the permitted equilibrium toe of fill (ETOF)(03), one approximately 1 meter beyond the ETOF (04), one approximately 3 meters beyond the ETOF (05), and one approximately 7 meters beyond the ETOF (06).
- One additional sediment sample (07) will be collected from the nearshore seagrass bed, when that bed is present within the transect, which will help determine if sediments there are from nourishment or longshore transport.
- The horizons within each core will be logged in the field (i.e., thickness and physical characteristics). A horizon is defined as a horizontal layer generally parallel to the surface, whose physical characteristics differ from the layers above and/or beneath.
- Samples will be selected from distinct horizons within each core up to 18" of sediment depth. If refusal is reached prior to achieving 18" sediment depth, samples will be selected from the available distinct horizons for analysis.
- A minimum of one (1) sample (for homogeneous cores) and a maximum of three (3) samples (upper three layers for cores with three or more horizons) per core location will be collected.
- Photographs will be taken of each core to be added to the monitoring data.
- The unique samples from each core horizon will be collected at each location and sent to the lab for mean grain-size, percent fines, percent gravel, sorting, carbonate content, organic content and munsell color.
- Physical/chemical characteristics of the sediment collected below the MHW line will be compared to that of the sediment from above the MHW line and to their respective baseline characteristics.
- Results of the sediment analysis will be included with the other biological monitoring data.

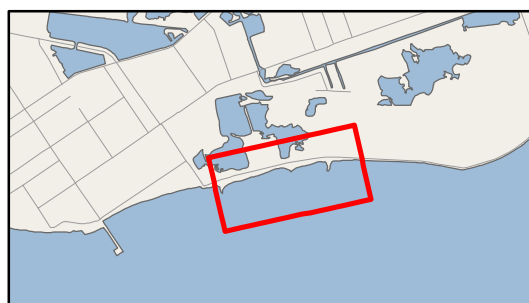
2.2.2. Sediment Analysis QA/QC

To ensure the integrity of the sediment sample data, the following QA/QC protocols will be followed:

- Each sediment sample location will be provided a unique code that will be used throughout the duration of the monitoring period.



Smathers Beach, Key West, Florida



Smathers Beach
Key West
Monroe County
Florida

Smathers Beach Renourishment Project Nearshore Biological Monitoring

- Transect Locations
- Equilibrium Toe Of Fill (Permitted)
- ▨ Fill Template
- ▭ Excavation (2000)
- ▲ Sediment Sampling Locations

Figure 4. Sediment sampling locations.



1 inch = 254 feet

Prepared By: Atkins N.A. Ecological Sciences

ATKINS

Date: September 10, 2018

- Prior to entering the field each day, each instrument (Handheld GPS, push core, etc) will be calibrated to within manufacturers specification.
- During sediment sampling activities, each sample will be collected in its own sample jar, labelled with its corresponding code, and a GPS position will be taken at the sampling location. All measurements and pictures at the current sampling location will be recorded before moving to the next sample location.
- Upon completion of the sampling task, the field technicians will return to the office and first verify that all sediment sampling locations were taken in the correct locations. The results will be added to a plan view map and incorporated into the reporting method being used. If a sediment sample was taken outside of the allowable tolerance or at an incorrect location, the technicians will return to the field and resample that location base on the above procedure.
- The sediment samples will be sent under chain of custody to an accredited materials testing laboratory.
- Sediment testing QAQC protocol will be identified by the materials testing laboratory. The City will keep the laboratory's procedure on record, as well as the results of each QAQC tests.
- All sampling information will be logged and kept on record for any future use.

2.3. Physical Monitoring

To evaluate the performance of the beach design with each sand placement event, the City will conduct physical monitoring of Smathers Beach. The physical monitoring is comprised of topographic and bathometric surveys along FDEP established monument azimuths of the beach and immediate offshore areas. The physical monitoring will be conducted in general accordance with the Physical Monitoring Plan dated December 14, 2012 approved as part of the JCP issued by FDEP for Smathers Beach. The Physical Monitoring Plan is provided as Appendix A. An engineering report will be prepared for each physical monitoring event to summarize and discuss the data, the performance of the beach fill project, and identify erosion and accretion patterns within the monitored area. In addition, the report will include a comparative review of project performance to performance expectations and identification of adverse impacts attributable to the project.

3. Monitoring Schedule

The biological monitoring schedule will include seven events:

1. Pre-construction benthic assessment event occurring prior to construction (7 to 30 days before construction activities);
2. During-construction limited monitoring event;
3. Post-construction baseline monitoring event;
4. Six-month post-construction monitoring event;
5. One-year post-construction monitoring event;
6. Two-year post-construction monitoring event; and
7. Three-year post-construction monitoring event (final).

The pre- and post-construction monitoring events will be conducted as described in Section 2 above and will occur during the seagrass growing season (May 1 to September 30). The during-construction monitoring event will consist of an abbreviated version of the monitoring plan and will focus on the construction toe of fill edge, providing documentation that the fill material is not placed outside of the approved fill template. The one-year, two-year and three-year post construction monitoring events will be conducted as near to the date of the initial post-construction monitoring event as possible (to minimize potential seasonal differences in seagrass growth).

The sediment monitoring schedule will include four events:

1. Pre-construction sediment monitoring occurring prior to construction (7 to 30 days before construction activities);
2. Post-construction monitoring event;
3. Six-month post-construction monitoring event; and,
4. One-year post-construction monitoring event (final)

In addition to the scheduled biological and sediment monitoring, a monitoring event may be conducted after any major storm event, at the request of the Florida Keys National Marine Sanctuary Superintendent.

Topographic and bathymetric profile surveys of the beach and offshore will be conducted:

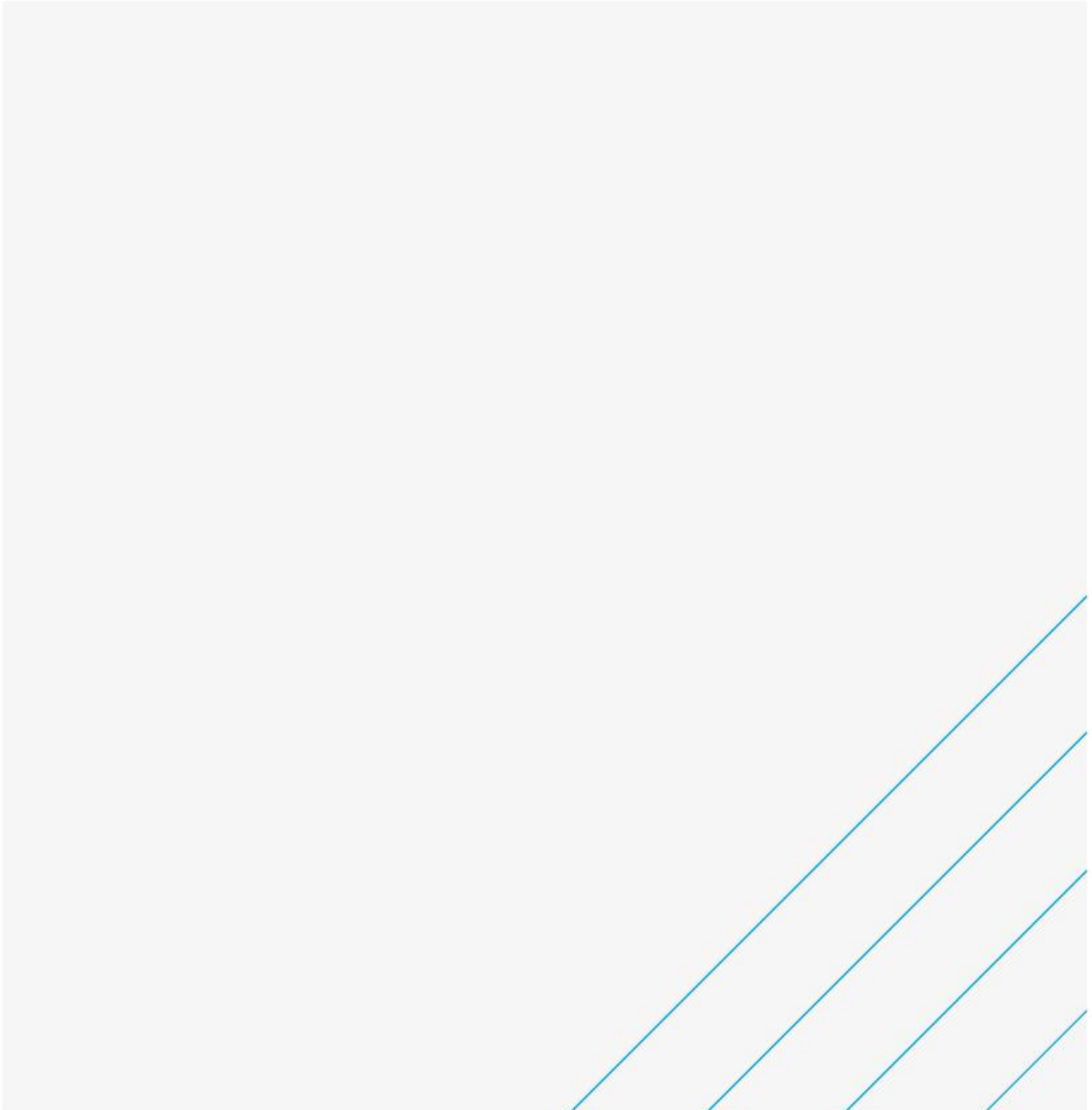
1. Within 90 days prior to commencement of construction.
2. Within 60 days following completion of construction.
3. Annually for a period of three (3) years.
4. Biennially after year-three until the next beach nourishment event or the expiration of the project design life, whichever occurs first.

4. Reporting Requirements

Biological monitoring reports will be submitted to the appropriate agencies within 45 days of each monitoring event. Each monitoring report will contain the survey date and time, location (latitude and longitude), and surveyor names. Weather conditions, visibility, and tidal stage, range and direction of flow will be recorded at the start of each transect or mapping exercise. A site map will also be provided, delineating the areas surveyed and the locations of submerged resources within the survey area. Quantitative data collected during the *in situ* quadrat analysis and qualitative data (e.g., fishery resource observations, sediment type, and information requested in UMAM Part I and II worksheets) will also be provided in each monitoring report. Raw quadrat data will be provided electronically in Excel format with the reports and scanned raw data sheets will be provided to the agency staff upon request.

Topographic and bathymetric profiles and the associated engineering reports will be prepared for each physical monitoring event as outlined in the Physical Monitoring Plan dated December 14, 2012 (Appendix A).

Appendix A - Physical Monitoring Plan, December 14, 2012





APPROVED

Physical Monitoring Plan

Permit #: 0129031-005-JC

Approval: December 14, 2012 RC

Division of Water Resource Management

CITY OF KEY WEST SMATHERS BEACH MAINTENANCE PROJECT

PHYSICAL MONITORING PLAN

Monitoring Schedule

Topographic and bathymetric profile surveys of the beach and offshore will be conducted within 90 days prior to commencement of construction, and within 60 days following completion of construction of the project. Thereafter, monitoring surveys will be conducted annually for a period of three (3) years, then biennially until the next beach nourishment event or the expiration of the project design life, whichever occurs first. The monitoring surveys will be conducted during a spring or summer month and repeated as close as practicable during that same month of the year. If the time period between the immediate post-construction survey and the first annual monitoring survey is less than six months, the first monitoring survey may be postponed until the following spring/summer. The request for postponement will be submitted as part of the cover letter for the post-construction report. A prior design survey of the beach and offshore may be submitted for the pre-construction survey if consistent with the other requirements of the permit conditions.

In the event of a major coastal storm for which a state of emergency or disaster declaration has been made by the Governor, a post storm survey will be conducted of the project area prior to replacement of any sand on the beach that has been transported to adjacent areas.

Monitoring Area

The monitoring area will include profile surveys at each of the Department of Environmental Protection's DNR reference monuments within the bounds of the beach fill area. Additional profile lines will be surveyed at a sufficient number of intermediate locations to accurately identify patterns of erosion and accretion within sub-areas contained by the groins. All work activities and deliverables will be conducted in accordance with the latest update of the Bureau of Beaches and Coastal Systems (BBCS) Monitoring Standards for Beach Erosion Control Projects, Sections 01000 and 01100.

Reporting Requirements

An engineering report and the monitoring data will be submitted to the BBCS within 90 days following completion of the post-construction survey, each annual or biennial monitoring survey, and any post storm survey. The report will summarize and discuss the data, the performance of the beach fill project, and identify erosion and accretion patterns within the monitored area. In addition, the report will include a comparative review of project performance to performance expectations and identification of adverse impacts attributable to the project. Appendices will include plots of survey profiles and graphical representations of volumetric and shoreline position changes for the monitoring area. Results will be analyzed for patterns, trends, or changes between annual surveys and cumulatively since project construction.

Two paper copies and one electronic copy of the monitoring report, and one electronic copy of the survey data will be submitted to the BBCS in Tallahassee. A transmittal cover letter will be included with each monitoring submission with the following clearly labeled at the top of each page:

"This monitoring information is submitted in accordance with Item No. [XX] of the approved Monitoring Plan for Permit No. [XX] for the monitoring period [XX]".

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