

**PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM SUMMARY**

Meeting Date: May 18, 2010 (X) Consent () Regular
() Workshop () Public Hearing

Department
Submitted By: Environmental Resources Management
Submitted For: Environmental Resources Management

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to approve: Supplement No. 1 to 0410-12 to a continuing Contract (R2008-0410) with Taylor Engineering, Inc. (Taylor) in the amount of \$218,036.64 for sea turtle monitoring services in association with the Singer Island Erosion Control Project, the Ocean Ridge Shoreline Protection Project, the South Lake Worth Inlet Maintenance Dredging Project, the South Lake Worth Inlet Sand Transfer Plant Reconstruction Project and to provide sea turtle data management and analysis services and incorporate the requirements and fee of the Office of the Inspector General into the Supplemental Agreement.

Summary: The BCC approved the Contract with Taylor, a Palm Beach County company, on March 11, 2008 (R2008-0410). Twelve (12) task orders totaling \$2,114,116 have been issued under the Contract. This Supplemental Agreement to Task Order 0410-12 authorizes Taylor to manage sea turtle monitoring activities during the 2010 sea turtle nesting season. The Supplemental Agreement is funded from a combination of tourist development taxes, and interest, with approximately 60% of the funding from State, Federal, municipal, and special district funding agreements. There is 71.0% Small Business Enterprise (SBE) sub consultant participation on the Supplemental Agreement. Taylor committed to an overall 15% SBE-MBE participation in the Contract. Taylor has achieved 21.3% cumulative SBE-MBE participation on the Contract including this Supplemental Agreement. The Agreement also includes language regarding the applicability of the Inspector General Ordinance (IG Ordinance) and the inclusion of the Inspector General fee. Districts 1, 4, and 7 (JM)

Background and Justification: Taylor's sub consultant, D.B. Ecological Services has more than 20 years of sea turtle data collection experience. The scope of work associated with these projects is a direct result of special conditions included in the state and federal environmental permits issued for the Juno Beach, Jupiter/Carlin, Jupiter Inlet Maintenance Dredging Project, Jupiter Intracoastal Maintenance Dredging Project, South Lake Worth Inlet Maintenance Dredging Project, and the South Lake Worth Inlet Sand Transfer Plant Reconstruction Project, and, anticipated for the Singer Island Erosion Control Project. Data management, quality control, and data analysis services will be provided for these beaches as well as for other beaches managed by the County including the Central Palm Beach County Shore Protection Projects. These services will enable the County to respond to permitting questions and will comply with permit-required data analysis and reporting requirements. Task Order 0410-12 was authorized February 26, 2010 for work in March and April and this agreement will cover work for the balance of the season. A comparison of costs for County staff versus contractual services has determined that contracting out all sea turtle monitoring services in these project areas is the most efficient and economical manner for evaluating these projects. The primary justification for contracting out this work is that funding agreements pay for ~60% of the contract cost. As permit-required monitoring, approximately 47% of the total Supplemental Agreement cost will be eligible for cost sharing from the Florida Department of Environmental Protection (DEP) and (continued on page 3)

- Attachments:**
1. Supplement No. 1 to 0410-12 with Contract History
2. Contract (pages 1, 18, Exhibit B Fee Schedule)

Recommended by: Richard E. Uvalde 5/10/10
Department Director Date

Approved by: [Signature] 5/12/10
County Administrator Date

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2010	2011	2012	2013	2014
Capital Expenditures	_____	_____	_____	_____	_____
Operating Costs	\$218,037	_____	_____	_____	_____
External Revenues	_____	_____	_____	_____	_____
Program Income (County)	_____	_____	_____	_____	_____
In-Kind Match (County)	_____	_____	_____	_____	_____
NET FISCAL IMPACT	\$218,037	_____	_____	_____	_____
# ADDITIONAL FTE POSITIONS (Cumulative)	0	0	0	0	0
Is Item Included in Current Budget?	Yes <input checked="" type="checkbox"/>	No _____			
Budget Account No.:	Fund _____	Department _____	Unit _____	Object _____	
	Program _____				

B. Recommended Sources of Funds/Summary of Fiscal Impact

3652-381-M037-3120	Singer Island Erosion Control	\$84,488.67
3622-381-M015-3120	Ocean Ridge Shoreline Protection	\$46,253.69
3653-381-M703-3120	South Lake Worth Inlet STP	\$18,099.27
3653-381-M703-3120	South Lake Worth Inlet Sand Trap	\$36,198.55
3652-381-M028-3120	Juno Beach Shore Protection	\$12,896.82
3652-381-M045-3120	Jupiter/Carlin Shore Protection	\$14,259.64
1229-380-3057-3401	Lake Worth Lagoon Partnership Grant	\$ 5,840.00

C. Department Fiscal Review:

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III. REVIEW COMMENTS

A. OFMB Fiscal and/or Contract Administrator Comments:

47% \$102,477.00 Reimbursable from R-2005-1873 + R-2009-0115
 8% 17,443.00 Reimbursable from R-2008-2220
 15% 32,705.00 Developing contract for possible Reimbursement
 30% 65,411.00 County funds

[Handwritten signature]
 OFMB SB 5/14/10

[Handwritten signature]
 Contract Dev. and Control G. Jones 5/10/10

B. Legal Sufficiency:

[Handwritten signature]
 Assistant County Attorney 5/12/10

This item complies with current County policies.

C. Other Department Review:

 Department Director

Background and Policy Issues (continued)

the United States Army Corps of Engineers under existing funding contracts (R2009-0115, R2005-1823) and 15% of the total Supplemental Agreement cost will be eligible for cost sharing from DEP under a funding contract currently in development; an additional 8% of the total Supplemental Agreement cost is eligible for reimbursement through an existing interlocal agreement (R2008-2220) with Riviera Beach.

On December 15, 2009, the Board of County Commissioners adopted Ordinance No. 2009-049, the Palm Beach County Office of Inspector General Ordinance. The IG Ordinance authorizes the Inspector General to conduct audits of, require reports from, and receive access to the records of all consultants doing business with the County. The cost for the Office of the Inspector General shall be borne by the imposition of a fee as specified in the IG Ordinance.

Attachment 1

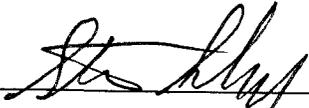
**CONSULTANT SERVICES AUTHORIZATION
SUPPLEMENT No. 1 to 0410-12**

Project: 2010 Sea Turtle Monitoring – Singer Island & Ocean Ridge
Location/District #: Singer Island and Ocean Ridge (Districts 1, 4 and 7)

THIS AUTHORIZATION Supplement No. 1 to 0410-10 to Continuing Contract R2008-0410 dated March 1, 2008 between Palm Beach County and the Consultant is for supplemental Professional Services described in Item 4.

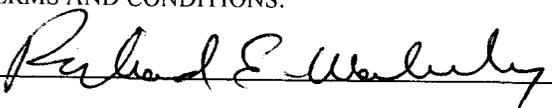
1. **Consultant:** Taylor Engineering, Inc.
2. **Address:** 10151 Deerwood Park Blvd., Bldg. 300, Ste. 300
Jacksonville, Florida 32256
3. **Services completed to date:** Monitoring of sea turtle nesting along the beaches of Singer Island and Ocean Ridge during March and April under authorization #0410-12 at a cost of \$49,942.43.
4. **Description of services to be provided by Consultant:** Provide additional professional services monitoring sea turtle nesting for the months of May through October, as stated in the proposal dated April 23, 2010 for a total of \$218,036.64, of which \$195,193.64 is Fixed Price and \$22,843.00 is Not-to-Exceed. Due date extended to March 31, 2011.
5. **History:** Two (2) authorizations including this supplemental authorization totaling \$267,979.07. SBE participation on this Supplement is 71.0%. Taylor's cumulative contract SBE-M/WBE participation is 21.3%.
6. **Time of Commencement:** Upon execution of this Consultant Services Authorization.
7. All terms and conditions of the Contract dated March 1, 2008 shall remain in full force and effect.

IN WITNESS WHEREOF, this Authorization is accepted this ____ day of _____, 2010.

CONSULTANT REP:  DATE: 4/29/2010

DIVISION DIRECTOR:  DATE: 4/30/2010

APPROVED AS TO TERMS AND CONDITIONS:

ERM DIRECTOR:  DATE: 5/3/10

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

ASSISTANT COUNTY ATTORNEY: _____ DATE: _____

BOARD OF COUNTY COMMISSIONERS: _____ DATE: _____

Burt Aaronson, Chair

TAYLOR ENGINEERING INC

April 23, 2010

Mr. Paul Davis
Palm Beach County
Department of Environmental Resources Management
2300 N Jog Road, 4th Floor
West Palm Beach, FL 33411

Re: May-October 2010 Sea Turtle Monitoring
Singer Island and Ocean Ridge, Palm Beach County

Dear Mr. Davis,

Taylor Engineering is pleased to present this proposal for the project referenced above. Exhibit A contains our proposed scope of work and Exhibit B contains our proposed fees.

Taylor Engineering will team with DB Ecological Services, Inc. on this project. This team provides a high level of local monitoring experience. DB Ecological Services will provide all monitoring and reporting services. As requested by Palm Beach County, Taylor Engineering's role is restricted to providing only limited project oversight and invoicing services over the duration of the project. We propose to execute Tasks 1 - 15 as described in Exhibit A for a fixed, lump sum fee of \$195,193.64. We propose to complete Additional Tasks A - D and Optional Task A in accordance with the rates shown in Exhibit B for a total cost not to exceed \$22,843.00. Please note that these costs apply to months May - October 2010 only.

Taylor Engineering acknowledges and is in agreement that Palm Beach County has established the Office of the Inspector General in Ordinance 2009-049, which is authorized and empowered to review past, present and proposed County contracts, transactions, accounts and records. All consultants and parties doing business with the County and receiving County funds shall fully cooperate with the Inspector General including receiving access to records relating to this Contract. The Inspector General has the power to subpoena witnesses, administer oaths, require the production of records, and audit, investigate, monitor, and inspect the activities of the CONSULTANT, its officers, agents, employees, and lobbyists in order to ensure compliance with Contract specifications and detect corruption and fraud. The cost of the Office of the Inspector General shall be incorporated into the contract price of all contracts and shall be one quarter (1/4) of one (1) percent of the contract price.

Without changing the Contract price, a fee of 0.25% will be deducted by the County from each Invoice to defray costs of the Office of the Inspector General in accordance with Ordinance 2009-049.

We look forward to continue serving Palm Beach County on this project. Please contact me if you have any questions.

Best regards,



Christopher B. Ellis
Senior Scientist, Environmental Services

Enclosures

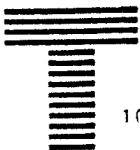


Exhibit A
Final Revised Scope of Work 4/22/10
Palm Beach County Sea Turtle Monitoring

Palm Beach County's Department of Environmental Resources Management (COUNTY) intends to contract with Taylor Engineering (TE) and its subcontractor, DB Ecological Services (DB), to provide sea turtle monitoring services. This work is in support of current and anticipated State and Federal permit requirements issued to Palm Beach County for four capital projects (Singer Island Erosion Control Project, Ocean Ridge Shoreline Protection Project, South Lake Worth Inlet Maintenance Dredging Project, and South Lake Worth Inlet Sand Transfer Reconstruction Project) at two locations (Singer Island and Ocean Ridge). It will also include detailed analysis and quality control of data gathered by other consultants including those collecting data for the Juno Beach and Jupiter/Carlin beach nourishment projects and the Lake Worth Lagoon. DB has over 20 years of experience conducting sea turtle monitoring and research throughout Florida. The TE/DB team (hereafter referred to as the CONSULTANT) provides a beneficial combination of resources and skills to fulfill the monitoring needs for Palm Beach County (COUNTY).

Section 1- NEST MONITORING TASKS

The CONSULTANT shall provide services associated with monitoring sea turtle nesting along two beaches in Palm Beach County:

- A. Segment 1 (Singer Island North) – the southern boundary of John D. MacArthur Beach State Park to the northern property boundary of the Oasis Condominium (~1.25 miles; Attachment 1).
- B. Segment 2 (Ocean Ridge) – 1500 feet north of the South Lake Worth Inlet to Adams Road (~2.25 miles; Attachment 2)

The CONSULTANT shall obtain all Florida Fish and Wildlife Conservation Commission (FWC) permits required for sea turtle monitoring, including authorization for nest relocation and to screen nests with restraining cages. All standard sea turtle permit required reports shall be submitted to FWC by the CONSULTANT. The CONSULTANT shall utilize trained and experienced staff to conduct all monitoring activities. All data shall be collected and entered into a computerized data management system, quality control and assurance conditions satisfied, and then submitted to the COUNTY as set forth in this Scope of Work. All data entered will be summarized by the CONSULTANT in an annual report. The COUNTY may, at its discretion, conduct independent surveys and observe data collection and analysis techniques for the purpose of comparing and validating compliance with FWC guidelines and this contract. Proven and unjustifiable discrepancies of more than 10% on 10% of observations on a given day may be cause for contract termination.

All sea turtle crawl data shall be entered into the COUNTY's web-based data management system (database). In the event the COUNTY's database fails to function as designed, the CONSULTANT and the COUNTY shall determine mutually agreeable alternatives for data management and reporting. All data collected in the field shall be recorded on printed survey forms, approved by the COUNTY. All physical beach monitoring data shall be compiled, stored, and submitted as outlined in each Task.

In order to maintain consistency in data collection techniques, the CONSULTANT shall be provided a set of COUNTY sea turtle monitoring guidelines, containing specific definitions and monitoring criteria. The CONSULTANT shall be required to follow the same methodology unless written approval has been given for alternate methods. In the event of a conflict between the guidelines and scope of work, the scope shall prevail and the CONSULTANT shall notify the COUNTY of any conflicts. The CONSULTANT (including all monitoring staff) shall also be required to have read and understood the guidelines and to attend an early season consistency meeting with COUNTY staff. Additional training and/or clarification of monitoring criteria shall be provided as necessary at that meeting.

The following tasks shall be performed:

Task 1: Daily Nesting Surveys and Beach Monitoring

Daily surveys for sea turtle monitoring activity shall be conducted for all zones between May 1 and October 31. In Segment 1, the location of all crawls shall be collected with the use of a real-time corrected, differential GPS unit (DGPS) with sub-meter accuracy. In Segment 2, the locations of all nests marked for evaluation are to be collected with a DGPS unit with sub-meter accuracy; locations of all unmarked nests, protected nests, and non-nesting emergences are to be collected with either a WAAS enabled handheld GPS unit (the unit model must be approved, in advance, by the COUNTY) or with a DGPS unit with sub-meter accuracy. In Segment 1, GPS data shall be uploaded to the database within one business day of data collection and examined for accuracy of content and position and for real-time correction. In Segment 2, GPS data shall be uploaded to the database within one week of data collection and examined for accuracy of content and position and for real-time correction. If necessary, data may be post-processed to obtain sub-meter accuracy using a base station approved by the COUNTY. Each occurrence where post-processing is necessary, as well as the steps taken to identify and resolve the problem, shall be reported to the COUNTY with the appropriate monthly data submittal.

The following parameters shall be recorded for each crawl encountered on a daily survey form approved by the COUNTY:

- A. Date
- B. Start and end time of survey
- C. Weather conditions during survey
- D. Survey zone
- E. Species of turtle
- F. Crawl type
- G. Estimated distance from the egg chamber or landward extent of the non-nesting emergence to the high water line
- H. Estimated distance from the egg chamber or landward extent of the non-nesting emergence to the toe of dune
- I. Number of abandoned body pits
- J. Number of abandoned egg chambers
- K. Any obstructions (natural or man-made) encountered by the turtle and the turtle's response to that obstruction

Additionally, each nest record must contain a designation of marked/staked (yes/no) and clutch located (yes/no). If the nest is marked, a unique nest identification number must be assigned according to the COUNTY's naming convention (species, date, marked nest number {for the day, in that zone, expressed as a letter}, beach; example: CC-060308-4B-OR is the second marked nest on June 3, 2008 in survey zone 4 at Ocean Ridge).

If authorized by the FWC Marine Turtle Permit, nests may be relocated for conservation purposes, in accordance with FWC guidelines. All relocated nests must be marked for evaluation, regardless of species or marking rotation. Relocated nests shall be identified by the addition of "R" after the marked nest number (example: CC-060308-4BR-OR).

Zone boundary markers will be maintained by the CONSULTANT in the dune at historical locations within the entire survey area, and maintained throughout the nesting season.

Frequency: Daily from May 1 through October 31.

Data Reporting: Each crawl record, including all parameters mentioned above, shall be entered into the COUNTY's database within one business day of collection. If the database is malfunctioning, the CONSULTANT will immediately notify the COUNTY. Raw datasheets are to be provided to the COUNTY weekly by fax or email until the COUNTY is confident in the quality of the data provided, and then, upon notice from

the COUNTY, with the appropriate monthly data submittal. All original or post-processed GPS datafiles shall be submitted with the appropriate monthly data submittal. Any crawl location that cannot be corrected through real-time or post-processing shall be reported to the COUNTY with the appropriate monthly data submittal.

Task 2: Weekly Shorebird Surveys

A weekly survey for shorebird activity shall be conducted for all zones, including shorebird activity visible from the beach on breakwaters, groins and jetties, between May 1 and September 30. Shorebird surveys shall be conducted independently of all sea turtle nesting survey activities and in accordance with FWC guidelines. The following parameters shall be recorded for each shorebird observance on a shorebird survey form approved by the COUNTY:

- A. Date of survey
- B. Start and end time of survey
- C. Weather conditions during survey
- D. Survey zone
- E. Species of shorebird
- F. Location (beach, structure, in flight, etc)
- G. Number
- H. Activity
 - a. Loafing
 - b. Feeding
 - c. Nesting
 - d. Courtship behavior

If nesting activities are observed, the CONSULTANT must notify the COUNTY within 12 hours. The COUNTY, in consultation with FWC, will then decide if protective action must be taken. Credentials of all staff conducting shorebird surveys must be submitted to and approved by the COUNTY and the FWC Regional Biologist prior to April 1.

Frequency: Once a week from May 1 to September 30.

Data Reporting: All shorebird activity shall be summarized in an Excel spreadsheet or Access database, as directed by the COUNTY, and submitted with the appropriate monthly data submittal.

Task 3: Escarpment Mapping

Weekly visual surveys for escarpment formation on the beach shall be conducted for the entire survey area. Escarpments steeper than 60° that exceed 18 inches in height for a distance of 100 feet or greater shall be mapped as a line feature with DGPS. The average height of any escarpments meeting the above criteria shall be estimated and the maximum height measured. These data shall be recorded on printed data forms approved by the COUNTY.

Frequency: Weekly from May 1 to September 30.

Data Reporting: A summary of all surveys, including date and time, environmental conditions (winds, tide, and sea state), zone, average height, and maximum height and length of the escarpments (as a Microsoft Excel file), as well as GIS line features of escarpments (as ArcMap shapefiles in NAD83, Florida East) and the original GPS datafiles shall be included with each monthly data submittal.

Task 4: High Water Line and Toe of Dune Mapping

Each month (during typical, non-storm conditions), the most recent high water line shall be mapped with DGPS for the entire survey area. In July (during typical, non-storm conditions), the toe of the dune or seaward vegetation line shall be mapped once with DGPS for the entire survey area.

Frequency: Monthly from May 1 to September 30 (for high water line) and once between July 1 and July 31 (for toe of dune).

Data Reporting: GIS line features of the high water line and toe of dune (as ArcMap shapefiles in NAD83, Florida East) and the original GPS datafiles shall be included with the appropriate monthly data submittal.

Task 5: Nest Evaluations and Monitoring

Selected nests shall be located, marked, tracked throughout the incubation period, and nest contents evaluated, if applicable. Nests shall be marked approximately 2 feet west of the egg chamber using a 2 foot (or larger) painted wooden stake. An additional painted wooden stake shall be placed at the toe of the dune in the dune vegetation. Precise measurements (distance and bearing) shall be made to the dune stake and recorded on the datasheet. If nest poaching occurs, an alternate staking method, proposed by the CONSULTANT and approved by the COUNTY, may be implemented in high-risk poaching areas upon FWC recommendation.

The clutch for each marked nest shall be located by digging a maximum of 10 narrow holes. If the clutch is not found, the approximate location shall be marked and monitored throughout the incubation period.

The nest marking rotation for each species within each beach segment shall be developed in consultation with the COUNTY prior to the start of each sea turtle nesting season. In Segment 1, the goal shall be to randomly mark a sufficient number of nests in order to evaluate a statistically meaningful number of nests in the project and non-project areas (mark approximately 150 nests per treatment in order to evaluate approximately 125 nests per treatment); nests in Segment 2 shall be marked as described below. The nest marking protocol shall take into account variable nesting densities in the project and non-project areas to ensure similar sample sizes for each treatment. Historic and predicted trends shall be used to formulate the protocol. A running count shall be maintained and the beach shall be surveyed in the same direction each day to ensure randomization. By June 15 of each nesting season, the COUNTY shall compare the current data to predictions and, as necessary, make adjustments to the marking protocol to ensure a sufficient number of evaluated nests.

When sufficient numbers of nests are available, the following minimum numbers of nests shall be marked for each species:

- A. Segment 1 (Singer Island North zones 1 – 4)
 - a. Loggerhead – every 4th nest, approximately 150 nests
 - b. Green – all nests, approximately 150 nests
 - c. Leatherback – all nests, approximately 10 nests
- B. Segment 2 (Ocean Ridge zones 1 – 13)
 - a. Loggerhead – all nests in zones 2, 3, and 7 and ½ nests in zones 4, 5, 6, 8, 9, 10, approximately 75 nests
 - b. Green – 0 nests
 - c. Leatherback – 0 nests

In addition to the nest marking schedule, any nest, regardless of species or marking rotation, laid in a vehicle access, within 10 feet of a lifeguard tower, or within 10 feet of the average tide line in Segment 2, shall be marked for protection purposes. To identify these nests as protected (unless they would have been marked as part of the marking rotation), they shall be assigned a nest ID as described in Task 1, with the addition of "P" after the marked nest number (example: CC-060308-4BP-OR). These nests shall be checked daily for the parameters A, D, and E below, but shall not be evaluated for overwash or reproductive success. All stakes shall be removed either 72 hours post-emergence or after 70 days post-deposition, whichever occurs first. All protected nests shall be assigned a nest fate of "Protected".

Every marked nest shall be checked daily for:

- A. Presence of nest stakes – if the nest stake is missing, the stake shall be reset, that day, using either the distance and bearing information recorded in the database or GPS coordinates, unless continued stake loss due to ongoing, extreme tidal events is likely
- B. Evidence of overwash – overwash events shall be categorized as to severity using the following criteria:
 - a. 1 = overwash over the egg chamber but less than 1 meter west of the egg chamber
 - b. 2 = overwash extent greater than 1 meter west of the egg chamber
- C. Evidence of predation – all depredation events, by a mammalian predator or nesting turtle, that involve loss of viable eggs and/or hatchlings (not just loss of hatchlings) shall be recorded using the following parameters:
 - a. Predator species
 - b. Number of eggs lost
 - c. Incubation stage at time of depredation
 - i. Pre-hatchling emergence
 - ii. Post-hatchling emergence

All predated nests shall be assigned a fate of "Predated" on the first instance of egg loss, even if viable eggs remain intact; these nests shall not be evaluated for reproductive success. Depredation events by non-mammalian predators, such as crabs, birds, or ants, shall be recorded only in the comments section; these nests shall be evaluated for reproductive success. If hatchlings are depredated after leaving the chamber, but before entering the water, the number of depredated hatchlings and the predator, shall be recorded in the comments section; these nests shall be evaluated for reproductive success.
- D. Evidence of hatchling emergence – each marked nest, older than 45 days post-deposition, shall be checked daily for hatchling emergence. If emergence is noted, the estimated number of emerged hatchlings shall be recorded.
- E. Evidence of disorientation – **all** hatchling emergences observed in the survey area (not just those from marked nests) shall be evaluated for disorientation. A disorientation report shall be completed for any amount of disoriented hatchlings. All disorientation events shall be recorded on the FWC Marine Turtle Disorientation Incident Report form and faxed or emailed to the COUNTY and FWC within 24 hours of observation; the original form shall be submitted to FWC within one week of observation.

All appropriate information shall be recorded daily on a nest inspection datasheet (automatically generated by the database).

Each marked nest shall be evaluated for reproductive success no earlier than 72 hours post-emergence or 70 days post deposition (80 days for leatherbacks), whichever is earlier, in accordance with FWC guidelines. For each marked nest, the following parameters shall be recorded on a hatch success form approved by the COUNTY:

- A. Number of hatched eggs
- B. Number of unhatched eggs
- C. Number of pipped live eggs
- D. Number of pipped dead eggs
- E. Number of live hatchlings
- F. Number of dead hatchlings
- G. Number of spacer eggs
- H. Depth to the top of the chamber (inches)
- I. Depth to the bottom of the chamber (inches)

Each marked nest shall be assigned a fate according to the following codes:

- A. Hatched (H) – hatched, eggs found
- B. Hatched, emergence not observed (HNO) – hatched, emergence not observed, eggs found
- C. Predated (PD) – predated, any number of eggs lost
- D. Protected (PR) – marked solely for protection or project purposes

- E. Poached (PV) – poached, any number of eggs lost
- F. Washout (WO) – eroded prior to anticipated or actual emergence, any number of eggs lost
- G. Lost (L) – not evaluated due to erosion after anticipated or actual emergence or proximity to a viable nest, all marking stakes removed and GPS coordinates unavailable, etc
- H. Could Not Locate (CNL) – eggs unable to be located
- I. Scavenged (SCV) – predated after hatchling emergence, any number of eggs lost
- J. Turtle Scattered (TS) – eggs scattered by nesting female, any number of eggs lost

For nests assigned a fate of "Lost", an explanation of the circumstances must be entered into the comments section (example: nest eroded on 9/21 from Hurricane Xavier at 74 days post-deposition). If hatchling emergence is not observed after 70 days (80 days for leatherbacks), the nest site shall be excavated to locate the clutch. A nest fate of "Could Not Locate" may only be used after a 4'x4'x4' area has been excavated. All relocated nests must be marked and evaluated, regardless of species or marking rotation.

Frequency: Daily from May 1 until the last marked nest is evaluated.

Data Reporting: Each nest inspection event and hatch success record, including the above mentioned parameters, shall be entered into the COUNTY's database within one business day of collection. Raw nest inspection sheets and hatch success datasheets are to be provided to the COUNTY weekly by fax or email until the COUNTY is confident in the quality of the data provided, and then, upon notice from the COUNTY, with the appropriate monthly data submittal.

Task 6: Program Management, Quality Assurance/Quality Control, and Reporting

All raw data reporting forms shall be checked for accuracy and clarity by a CONSULTANT supervisor or senior staff member and all problems resolved within one business day of data collection. Data shall be entered into the COUNTY's database and each entry verified for accuracy by two (2) different people within four (4) weeks of data collection. Persons performing data entry and all verification checks shall initial and date each raw datasheet. Alternative methods for data verification and quality assurance may be implemented by the CONSULTANT if approved in advance by the COUNTY.

A summary of all problems encountered associated with any task and problem resolution shall be included with each monthly data submittal. All deliverables and invoices shall be submitted on or before the 15th of each month following the month of data collection in order to receive payment.

Task 7: Annual Report

An electronic copy (in .pdf format) of a final annual report for each segment shall be prepared by the CONSULTANT and submitted to the COUNTY by December 31. Data shall be tabulated and summarized for each species and survey zone. This data summary shall include the following in tabular, graphic, and/or written form, as applicable:

- A. Description of the study area and data collection methods
- B. Summary of crawl activity
 - a. Total number of crawls by type and species
 - b. Nesting density
 - c. Nesting success
 - d. Summary of abandoned digs by crawl type
 - e. Summary of beach utilization (percent of beach used) by crawl type
 - f. Summary of obstruction interactions, including but not limited to:
 - i. Escarpment formation
 - ii. Beach furniture
 - iii. Structures (groins, jetties, breakwaters, seawalls, etc)
- C. Summary of overwash events
 - a. Correlation of number of overwash events as compared to hatchling emergence success

- D. A summary of reproductive success/nest fate
 - a. Total number of nests marked for reproductive success evaluation
 - b. Total number of nests evaluated for reproductive success
 - c. A summary of the following parameters:
 - i. Clutch size
 - ii. Hatched eggs
 - iii. Unhatched eggs
 - iv. Pipped dead eggs
 - v. Pipped live eggs
 - vi. Live hatchlings
 - vii. Dead hatchlings
 - viii. Hatch success
 - ix. Emergence success
 - x. Hatchling productivity
 - d. Total number of nests in each nest fate category
- E. Description storm events and effects
- F. Summary of construction activities, if applicable
- G. Summary of shorebird monitoring
 - a. Survey dates
 - b. Number and species of shorebirds
 - c. Activity of shorebird species
 - d. Location of shorebird species/activities
- H. Summary of beach response monitoring
 - a. Maps of escarpment formation
 - b. Maps of high water line and toe of dune changes over time
 - c. A summary of compaction monitoring
 - d. Labeled photos of each survey zone depicting typical beach conditions.
- I. Recommendations for future monitoring activities to improve the quality of the COUNTY's sea turtle program

Examples of the 2008 and 2009 final reports are available at <http://www.co.palm-beach.fl.us/erm/permitting/sea-turtles/reports.htm>.

Deliverables and Invoices

All deliverable reports or data submittal and invoices shall be submitted by no later than the fifteenth (15th) of each month following the month of data collection unless a date certain is provided herein in order for the CONSULTANT to receive payment from the COUNTY. All deliverables shall be complete and accurate before full payment for each task shall be authorized.

ADDITIONAL TASKS/CONDITIONS SPECIFIC TO SEGMENT 2 (OCEAN RIDGE)

In addition to the standard sea turtle monitoring work described above, the CONSULTANT must complete the following additional monitoring tasks for Segment 2 (Ocean Ridge):

Additional Task A: Nest Relocation

Nests deposited in zones 2 and 3 may require relocation out of the area of influence of the sand transfer plant intake and discharge to an appropriate incubation area; the minimum relocation area shall be developed in consultation with the CONSULTANT, COUNTY, and FWC staff prior to each nesting season and shall be reevaluated periodically during the nesting season to ensure nests are adequately protected and/or are not unnecessarily relocated. Relocation activities must be completed prior to 9:00 AM on the date deposited. All relocated nests must be marked as described in Task 1 and evaluated as described in Task 5. Relocation and incubation areas are shown on Attachment 2. An estimated 5 nests per season may require relocation. The CONSULTANT must be able to obtain a FWC permit authorizing relocation activities.

Frequency: As required when nests are deposited within the relocation area.

Data Reporting: Observer, relocation start and end time, number of eggs, and egg chamber dimensions shall be recorded on a datasheet approved by the COUNTY. Raw datasheets shall be provided to the COUNTY weekly by fax or email until the COUNTY is confident in the quality of the data provided, and then, upon notice from the COUNTY, with the appropriate monthly data submittal. Data reporting shall occur in accordance with Tasks 1 and 5.

Additional Task B: Caging Activities

Nests deposited in the groin field (zones 3 and 4) may require screening with restraining cages to prevent hatchling interaction with the T-head groins. The egg chamber must be located for all nests deposited within the groin field (Attachment 2) as described in Task 5; if the nest marker is lost during incubation, it must be reset using sub-meter accurate DGPS coordinates and the top of the egg chamber reconfirmed, as described in Task 5, prior to cage deployment. The minimum caging criteria based on beach and lighting conditions shall be determined in coordination with the CONSULTANT, COUNTY, and FWC prior to the first cage deployment. After 45 days of incubation, a restraining cage must be placed over the egg chamber for nests that require screening. The cage must be closed at sunset, checked once between 11:00 PM and 1:00 AM, and opened at sunrise every day, per FWC guidelines. Hatchlings found in the cages shall be released immediately at a location that is not influenced by artificial lighting. The cage will be removed 72 hours post-emergence, during nest excavation, not upon nest emergence. Cage design must be in accordance with FWC guidelines and must be approved by the COUNTY prior to the first deployment. An estimated 20 nests per season shall require caging, with an estimated 5 nests requiring cages at any given time. The CONSULTANT must be able to obtain a FWC permit authorizing restraining cage activities.

Frequency: As required when nests are deposited within the groin field.

Data Reporting: Date of cage checks, observer, cage open, check, and close times, emergence, number of hatchlings, and position of hatchlings within the cage shall be recorded on a datasheet approved by the COUNTY. Raw datasheets shall be provided to the COUNTY weekly by fax or email until the COUNTY is confident in the quality of the data provided, and then, upon notice from the COUNTY, with the appropriate monthly data submittal. Data reporting shall occur in accordance with Tasks 1 and 5. Cost for this task shall be provided on a per night basis.

Additional Task C: Beach Cleaning Activities

In Segment 2, all nests laid within 10 feet of the average tide line will be staked (using FWC criteria) and treated as a protected nest. Daily coordination with the beach cleaner must occur in Segment 2. Two signs, one each located north and south of the South Lake Worth Inlet, must be changed daily to indicate that the daily nesting survey has been conducted in the area and that beach cleaning activities may begin. If any stakes are lost, they must be replaced daily prior to beach cleaning activities.

Frequency: Daily from May 1 through October 31.

Data Reporting: The beach cleaning clear time(s) shall be recorded on the daily survey datasheet used for Task 1. Raw datasheets shall be provided to the COUNTY weekly by fax or email until the COUNTY is confident in the quality of the data provided, and then, upon notice from the COUNTY, with the appropriate monthly data submittal. Data reporting shall occur in accordance with Task 1.

Additional Task D: Sand Transfer Plant/Construction Coordination

Daily coordination with sand transfer plant or construction personnel must occur indicating that the daily nesting survey has been completed in the area (Attachment 2) and either sand transfer plant or construction activities may begin. Daily coordination may be accomplished through either a daily phone call to sand transfer plant or construction personnel, visual/verbal coordination with sand transfer plant or construction

personnel, or use of beach cleaning signage, whichever is authorized by the COUNTY at that time (all three methodologies may be used throughout the nesting season).

Frequency: Daily from May 1 through October 31.

Data Reporting: The sand transfer plant clear time shall be recorded on the daily survey datasheet used for Task 1. Raw datasheets shall be provided to the COUNTY weekly by fax or email until the COUNTY is confident in the quality of the data provided, and then, upon notice from the COUNTY, with the appropriate monthly data submittal. Data reporting shall occur in accordance with Task 1.

OPTIONAL TASKS: SPECIAL PROJECT AND CONSTRUCTION RELATED MONITORING

In addition to the standard and additional sea turtle monitoring tasks described above, the COUNTY may authorize the CONSULTANT to provide the following special project monitoring according to the cost schedule in Exhibit B. Each optional task shall be authorized by a separate written Notice to Proceed. The CONSULTANT shall not commence work on any Optional Task cited below until the COUNTY specifically authorizes such task in writing.

Optional Task A: DGPS Rental

The CONSULTANT may rent a real-time corrected, differential GPS unit (DGPS) with sub-meter accuracy for use in Segment 1; prior to rental, the unit must be approved in writing by the COUNTY.

Frequency: DGPS rental may occur daily between May 1 and October 31.

Data Reporting: DGPS usage shall occur in accordance with Tasks 1, 3, and 4.

Section 2- QUALITY CONTROL, DATA MANAGEMENT AND REPORT PREPARATION TASKS

Task 8 – Weekly Review of Sea Turtle Nesting Data: All data entered into the COUNTY’s web-based sea turtle database by any consultant working for the County shall be reviewed weekly for timely data entry and verification, accuracy, and compliance with the marking scheme and other parameters outlined in all sea turtle monitoring services scopes.

Frequency: Data review shall occur once per week and shall include only data entered into the database since the last weekly data review. Cumulative data review shall be conducted during Task 9.

Deliverables: An Excel spreadsheet, approved by the COUNTY, shall be submitted with each monthly data submittal detailing the dates of data review and the date range of reviewed data. A list of problems encountered during data review and recommended solutions shall be sent via e-mail to the COUNTY within 24 hours of observation.

Task 9 – Monthly Sea Turtle Data Quality Control and Data Summary Preparation: All data deliverables submitted by the COUNTY’s sea turtle nest monitoring consultants shall be reviewed monthly for accuracy, correctness, and compliance with the marking scheme and other parameters outlined in the sea turtle monitoring services contracts and a monthly data summary prepared, summarizing the following parameters in narrative, tabular, and/or graphic format by beach, species and a comparison to the previous season and the 5-year average (where available):

- a. Crawl totals
- b. Nesting success
- c. Nesting density
- d. Reproductive success
- e. Erosion rates
- f. Disorientation rates

Frequency: Quality control and data summary preparation shall be completed within 15 days of receipt from to the COUNTY and shall include a cumulative review of all data entered into the database.

Deliverables: An Excel spreadsheet, approved by the COUNTY, shall be submitted with each monthly data submittal detailing the dates of deliverable review, a log of all discrepancies, and recommended solutions to resolve discrepancies. The monthly data summary shall be in single page format including the above parameters in narrative, tabular, and/or graphic format, as applicable.

Task 10 – Florida Fish and Wildlife Conservation Commission (FWC) Shoreline Protection Project Spreadsheets: FWC Project Spreadsheets (provided by FWC) shall be completed for all Palm Beach County Shoreline Protection Projects, where required by permit, and may include the following projects, as authorized by a separate Notice to Proceed:

- a. Jupiter Inlet District Maintenance Dredging Project
- b. Florida Inland Navigation District Maintenance Dredging Project
- c. Juno Beach Shoreline Protection Project
- d. Singer Island Shoreline Protection Project
- e. South Lake Worth Inlet Sand Transfer Plant Reconstruction and Bypassing Project
- f. South Lake Worth Inlet Maintenance Dredging Project

Frequency: Project spreadsheets shall be completed once per season and submitted to the COUNTY by the 10th of January following the nesting season.

Deliverables: FWC Project Spreadsheets shall be submitted to the COUNTY for each project authorized by a Notice to Proceed. Deliverables will be provided as electronic files.

Task 11 – Palm Beach County Shoreline Protection Project Annual Summaries: A narrative, not to exceed two pages, shall be prepared summarizing the sea turtle nesting season results for each of the Palm Beach County Shoreline Protection Projects:

- a. Jupiter Carlin Shoreline Protection Project
- b. Juno Beach Shoreline Protection Project
- c. Singer Island Shoreline Protection Project
- d. Ocean Ridge Shoreline Protection Project

Summaries shall include the following parameters in either narrative, graphic, and/or tabular format by species and project area (fill, dune fill, seawall, etc; and shall be compared to the previous season and the 5-year average (where available):

- a. Total crawl activity
- b. Nesting success
- c. Nesting density
- d. Reproductive success
- e. Erosion rates
- f. Disorientation rates
- g. Hatchling productivity

Frequency: Summaries shall be submitted to the COUNTY by the 31st of December following the nesting season.

Deliverables: A narrative shall be prepared and submitted to the COUNTY for each shoreline protection project authorized by a Notice to Proceed. Deliverables will be provided as electronic files.

Task 12 – Palm Beach County Countywide Annual Data Summaries: Single page graphics shall be prepared summarizing Palm Beach County's sea turtle nesting season results in the following formats:

- a. Crawl totals, nesting success, nesting density by species and beach
- b. 10-year countywide nesting density by species
- c. Nesting density of east coast counties by species

Frequency: Summaries shall be submitted to the COUNTY by the 1st of March following the nesting season or 15 days following the release of final nesting numbers by FWC, whichever is earlier.

Deliverables: Single page graphics shall be prepared summarizing countywide nesting season results. Deliverables will be provided as electronic files.

Task 13 – Inwater Research Group (IRG) Nearshore Transect Report Review and Analysis: Each quarterly nearshore transect report submitted to the COUNTY by Inwater Research Group shall be reviewed for accuracy and compliance with their scope. Graphs and maps tracking sightings by transect and season shall be prepared and incorporated into the report to satisfy Department of Environmental Protection (DEP) shoreline protection permit requirements for inwater monitoring. The following parameters, by species, age class, season, or project, where applicable, shall be incorporated into each quarterly nearshore transect report:

- a. seasonal trends
- b. sighting maps (GIS)
- c. cumulative results
- d. analysis of potential impacts from shoreline protection projects (changes in number of sightings, distribution of sightings, sightings characteristics, etc)

Frequency: Report review and analysis shall occur within 30 days of report submission from IRG to the COUNTY.

Deliverables: One report shall be reviewed and analyzed to satisfy the inwater monitoring requirements of DEP shoreline protection permits and improve understanding of the nearshore reef use as developmental habitat. Deliverables will be provided as electronic files.

Task 14 – Inwater Research Group (IRG) Lake Worth Lagoon Population Assessment Report Preparation: One cumulative report summarizing the Lake Worth Lagoon Sea Turtle Population Assessment Project shall be prepared upon completion of the final sampling event. The report shall include the following parameters, by species, age class, or season, where applicable:

- a. distance surveyed by transect
- b. sighting per kilometer transect
- c. net sets
- d. catch per unit effort
- e. capture details (species, size, age class, health, etc)
- f. rate of fibropapillomatosis
- g. seasonal trends
- h. sighting/capture maps

Frequency: One cumulative report shall be prepared summarizing the results of the Lake Worth Lagoon Sea Turtle Population Assessment Project within 90 days of the final sampling event data submission to the COUNTY.

Deliverables: One cumulative report including narrative summary and analysis, graphs, and GIS maps shall be prepared summarizing the results of the Lake Worth Lagoon Sea Turtle Population Assessment Project and make recommendations for future research and management. Deliverables will be provided as electronic files.

Task 15 – Shorebird Data Analysis: Shorebird data collected under all sea turtle monitoring services contracts shall be compiled into one Excel spreadsheet, entered in the e-Bird database (www.ebird.org), and verified. The Excel spreadsheet shall include the following parameters for each shorebird observation:

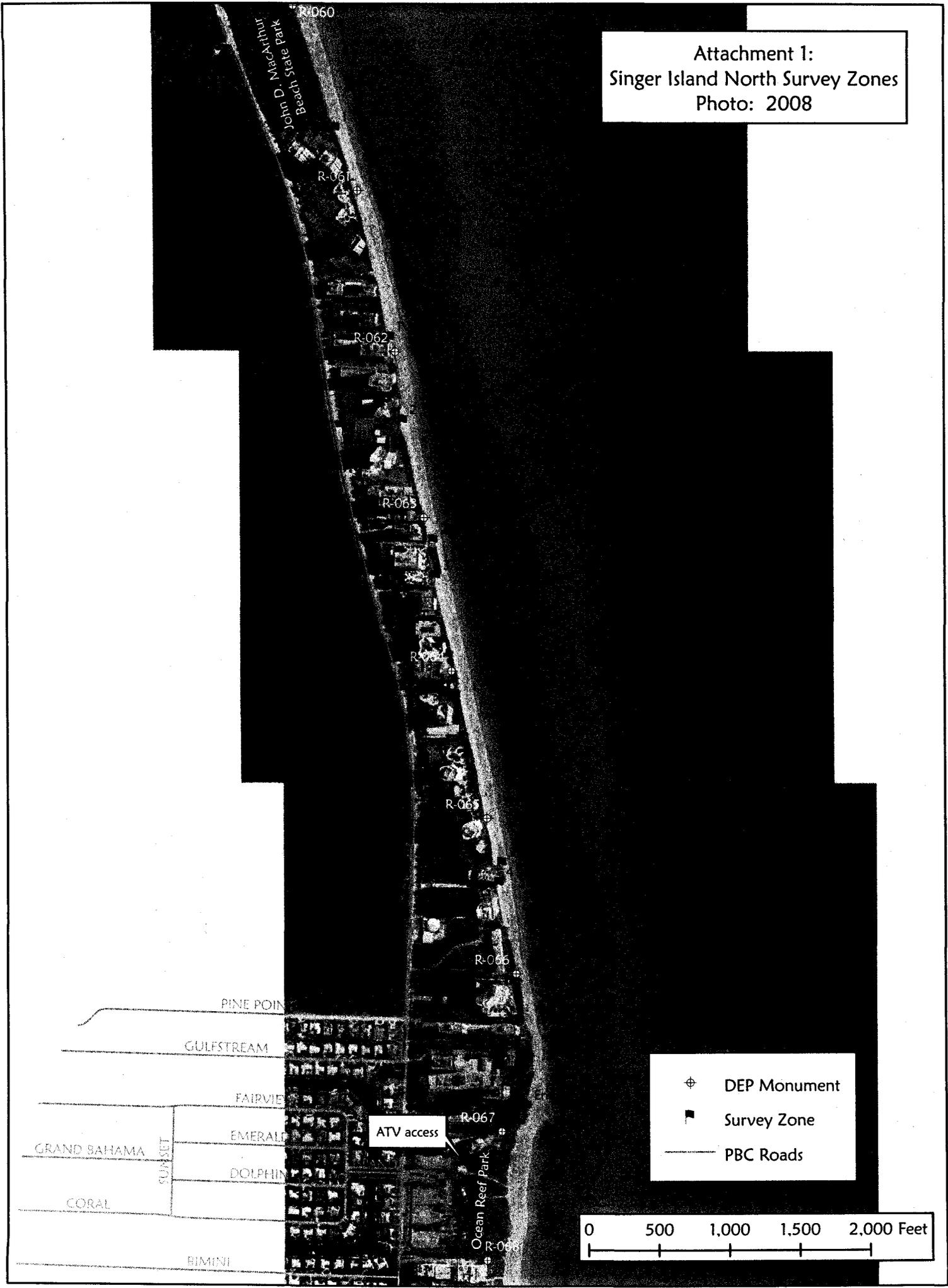
- a. date
- b. beach
- c. zone
- d. shorebird species
- e. count
- f. activity

Frequency: Shorebird data shall be compiled into one Excel spreadsheet, entered into the e-Bird database, and verified by November 30.

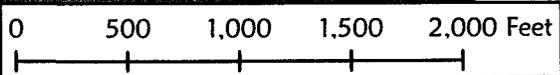
Deliverables: One Excel spreadsheet containing the above parameters and an e-Bird data entry and verification log shall be prepared and submitted to the COUNTY as an electronic file.

T:\eer\sp\turtle\monitoring_contracts\2010\DB_Ecological\10-12_si-or_scope-final.docx

Attachment 1:
Singer Island North Survey Zones
Photo: 2008



- ⊕ DEP Monument
- Survey Zone
- PBC Roads



Attachment 2:
Ocean Ridge Survey Zones
Photo: 2008

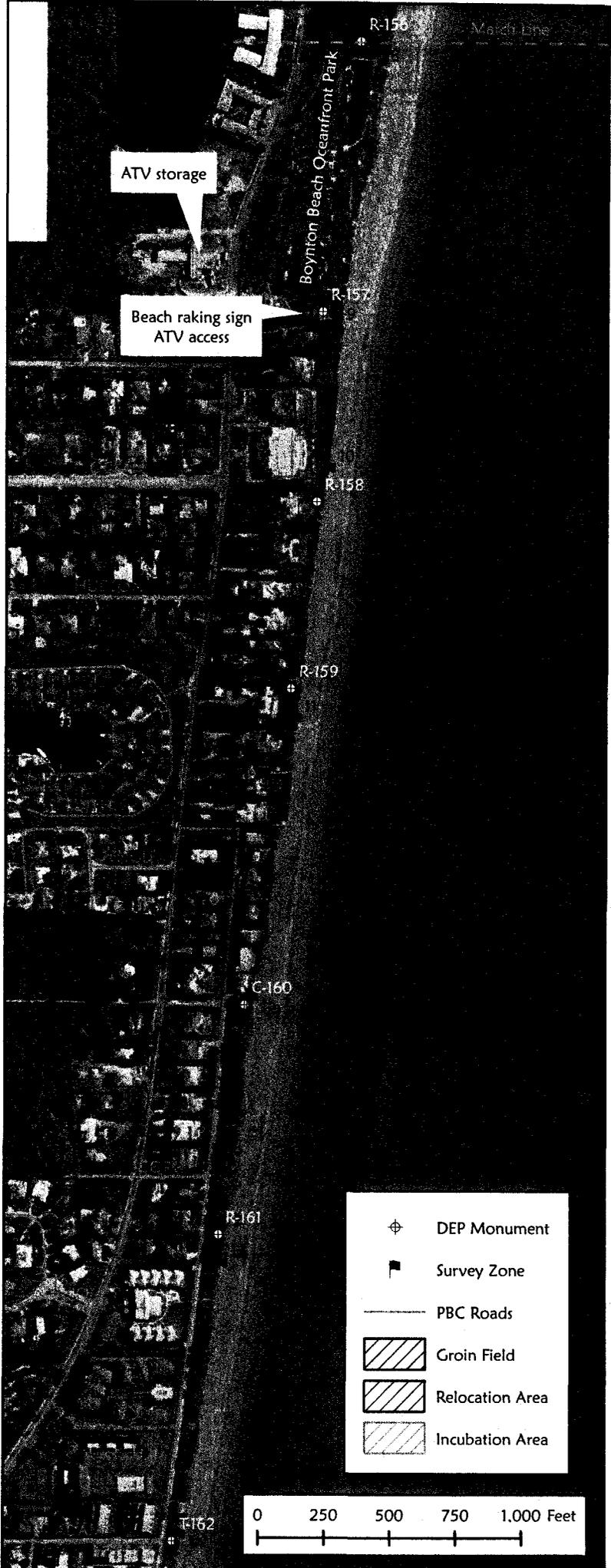
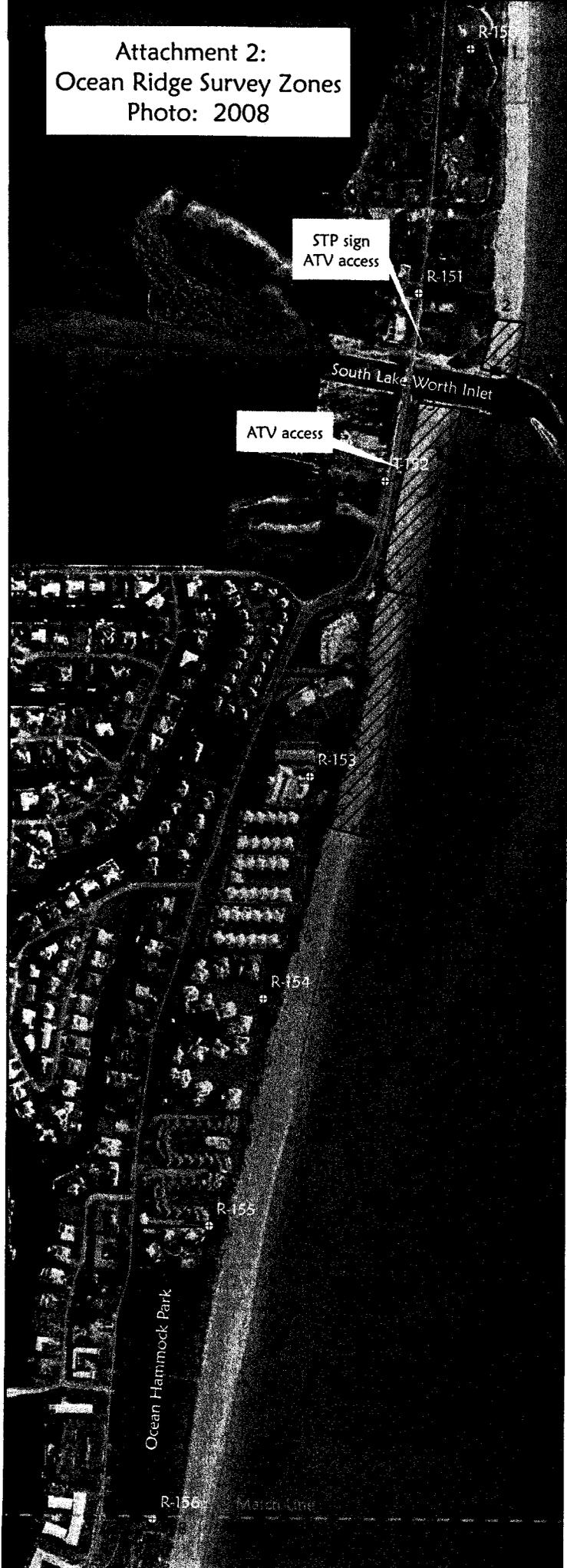


EXHIBIT B

**TAYLOR ENGINEERING, INC.
 COST SUMMARY BY TASK
 P2010-079: 2010 PBC TURTLE MONITORING - SI & OR**

TASK 1: Daily Nesting Surveys and Beach Monitoring

<i>Labor</i>	Hours	Cost	Task Totals
<i>Non-Labor</i>			
	Units	Cost	
DB Ecological	1.0	60,850.20	
Total Non-Labor Cost			<u>60,850.20</u>
<i>Total Task 1</i>			\$ 60,850.20

TASK 2: Weekly Shorebird Surveys

<i>Labor</i>	Hours	Cost	Task Totals
<i>Non-Labor</i>			
	Units	Cost	
DB Ecological	1.0	1,851.43	
Total Non-Labor Cost			<u>1,851.43</u>
<i>Total Task 2</i>			\$ 1,851.43

TASK 3: Escarpment Mapping

<i>Labor</i>	Hours	Cost	Task Totals
<i>Non-Labor</i>			
	Units	Cost	
DB Ecological	1.0	2,336.25	
Total Non-Labor Cost			<u>2,336.25</u>
<i>Total Task 3</i>			\$ 2,336.25

TASK 4: High Water Line & Toe of Dune Mapping

<i>Labor</i>	Hours	Cost	Task Totals
<i>Non-Labor</i>			
	Units	Cost	
DB Ecological	1.0	825.00	
Total Non-Labor Cost			<u>825.00</u>
<i>Total Task 4</i>			\$ 825.00

TASK 5: Nest Evaluations and Monitoring

<i>Labor</i>	Hours	Cost	Task Totals
<i>Non-Labor</i>			
	Units	Cost	
DB Ecological	1.0	9,506.51	

EXHIBIT B

P2010-079: 2010 PBC TURTLE MONITORING - SI & OR

Total Non-Labor Cost 9,506.51

Total Task 5 \$ 9,506.51

TASK 6: Program Management, Quality Assurance/Quality Control, and Reporting

<i>Labor</i>	Hours	Cost	Task Totals
Senior Professional	30.0	3,090.00	
Project Professional	26.0	2,678.00	
Administrative	4.0	172.00	

Total Man-Hours 60.0

Labor Cost 5,940.00

<i>Non-Labor</i>	Units	Cost	Task Totals
DB Ecological	1.0	44,730.65	
Total Non-Labor Cost			<u>44,730.65</u>

Total Task 6 \$ 50,670.65

TASK 7: Annual Report

<i>Labor</i>	Hours	Cost	Task Totals
<i>Non-Labor</i>			
DB Ecological	1.0	11,775.60	
Total Non-Labor Cost			<u>11,775.60</u>

Total Task 7 \$ 11,775.60

TASK 8: Weekly Review of Sea Turtle Nesting Data

<i>Labor</i>	Hours	Cost	Task Totals
<i>Non-Labor</i>			
DB Ecological	1.0	14,308.00	
Total Non-Labor Cost			<u>14,308.00</u>

Total Task 8 \$ 14,308.00

TASK 9: Monthly Sea Turtle Data Quality Control and Data Summary Preparation

<i>Labor</i>	Hours	Cost	Task Totals
<i>Non-Labor</i>			
DB Ecological	1.0	23,360.00	
Total Non-Labor Cost			<u>23,360.00</u>

Total Task 9 \$ 23,360.00

EXHIBIT B

P2010-079: 2010 PBC TURTLE MONITORING - SI & OR

Task 10: FWC Shoreline Protection Project Spreadsheets

<i>Labor</i>	Hours	Cost	Task Totals
<i>Non-Labor</i>			
	Units	Cost	
DB Ecological	1.0	6,570.00	
Total Non-Labor Cost			6,570.00
<i>Total Task 10</i>			\$ 6,570.00

Task 11: Palm Beach County Shoreline Protection Project Annual Summaries

<i>Labor</i>	Hours	Cost	Task Totals
<i>Non-Labor</i>			
	Units	Cost	
DB Ecological	1.0	2,336.00	
Total Non-Labor Cost			2,336.00
<i>Total Task 11</i>			\$ 2,336.00

Task 12: Palm Beach County Countywide Annual Data Summaries

<i>Labor</i>	Hours	Cost	Task Totals
<i>Non-Labor</i>			
	Units	Cost	
DB Ecological	1.0	876.00	
Total Non-Labor Cost			876.00
<i>Total Task 12</i>			\$ 876.00

Task 13: IRG Nearshore Transect Report Review and Analysis

<i>Labor</i>	Hours	Cost	Task Totals
<i>Non-Labor</i>			
	Units	Cost	
DB Ecological	1.0	3,504.00	
Total Non-Labor Cost			3,504.00
<i>Total Task 13</i>			\$ 3,504.00

Task 14: IRG Lake Worth Lagoon Population Assessment Report Preparation

<i>Labor</i>	Hours	Cost	Task Totals
<i>Non-Labor</i>			
	Units	Cost	
DB Ecological	1.0	5,840.00	
Total Non-Labor Cost			5,840.00

EXHIBIT B

P2010-079: 2010 PBC TURTLE MONITORING - SI & OR

<i>Total Task 14</i>	\$ 5,840.00
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Task 15: Shorebird Data Analysis

<i>Labor</i>	<i>Hours</i>	<i>Cost</i>	<i>Task Totals</i>
<i>Non-Labor</i>			
	<i>Units</i>	<i>Cost</i>	
DB Ecological	1.0	584.00	
Total Non-Labor Cost			584.00
<i>Total Task 15</i>			\$ 584.00

Additional Task A: Nest Relocation

<i>Labor</i>	<i>Hours</i>	<i>Cost</i>	<i>Task Totals</i>
<i>Non-Labor</i>			
	<i>Units</i>	<i>Cost</i>	
DB Ecological	5.0	150.00	
Total Non-Labor Cost			150.00
<i>Total Additional Task A</i>			\$ 150.00

Additional Task B: Caging Activities

<i>Labor</i>	<i>Hours</i>	<i>Cost</i>	<i>Task Totals</i>
<i>Non-Labor</i>			
	<i>Units</i>	<i>Cost</i>	
DB Ecological	50.0	10,000.00	
Total Non-Labor Cost			10,000.00
<i>Total Additional Task B</i>			\$ 10,000.00

Additional Task D: Sand Transfer Plant / Construction Coordination

<i>Labor</i>	<i>Hours</i>	<i>Cost</i>	<i>Task Totals</i>
<i>Non-Labor</i>			
	<i>Units</i>	<i>Cost</i>	
DB Ecological	1.0	1,837.00	
Total Non-Labor Cost			1,837.00
<i>Total Additional Task D</i>			\$ 1,837.00

Optional Task A: DGPS Rental

<i>Labor</i>	<i>Hours</i>	<i>Cost</i>	<i>Task Totals</i>
<i>Non-Labor</i>			
	<i>Units</i>	<i>Cost</i>	

EXHIBIT B

P2010-079: 2010 PBC TURTLE MONITORING - SI & OR

DB Ecological	184.0	<u>10,856.00</u>	
Total Non-Labor Cost			<u>10,856.00</u>
<i>Total Optional Task A</i>			<u>\$ 10,856.00</u>

Project Total \$ 218,036.64

D.B. Ecological Services, Inc.
1012 SW 7th St
Boca Raton, FL 33486
Phone # (561) 376-5502
Fax # (561) 393-3854

Cost Proposal for Work from 1 May- 31 October 2010
Costs based upon 4/22/10 Scope

**SCOPE OF WORK PALM BEACH COUNTY SEA TURTLE MONITORING –
OCEAN RIDGE COST BREAKDOWN SEGMENT 2 BY TASK**

Ocean Ridge Segment 2 – 1500 feet north of the South Lake Worth Inlet to Adams Road
(~2.25 miles):

- TASK 1: Daily Nesting Surveys and Beach Monitoring: \$37237.50
- TASK 2: Weekly shorebird Surveys: \$951.43
- TASK 3: Escarpment Mapping: \$1,256.25
- TASK 4: High Water Line & Toe of Dune Mapping: \$337.50
- TASK 5: Nest Evaluations and Monitoring: \$2467.50
- TASK 6: Program Management, Quality Assurance/Quality Control, and Reporting: \$24840.00
- TASK 7: Annual Reports: \$6,000.00

Total Cost 1 May-31 October 2010: Tasks 1-9: \$73090.18

Additional Tasks B. Segment 2- Ocean Ridge:

- ADDITIONAL TASK A: Nest Relocation: \$30.00/nest relocation x 5 estimated nests
- ADDITIONAL TASK B: Caging Activities: \$200.00/night
- ADDITIONAL TASK C: Beach Cleaning Activities: No additional cost due to above tasks
- ADDITIONAL TASK D: Sand Transfer Plant/Construction Coordination: \$1837.00

D.B. Ecological Services, Inc.
1012 SW 7th St
Boca Raton, FL 33486
Phone # (561) 376-5502
Fax # (561) 393-3854

Cost Proposal for Work from 1 May- 31 October 2010

Costs based upon the 4/22/10 Scope

Segment 1 – South boundary of John D. MacArthur Beach State Park to the North boundary of Oasis Condominium (~1.25mile).

- TASK 1: Daily Nesting Surveys and Beach Monitoring: \$23612.70
- TASK 2: Weekly shorebird Surveys: \$900.00
- TASK 3: Escarpment Mapping: \$1080.00
- TASK 4: High Water Line & Toe of Dune Mapping: \$487.50
- TASK 5: Nest Evaluations and Monitoring: \$7039.01
- TASK 6: Program Management, Quality Assurance/Quality Control, and Reporting: \$19890.65
- TASK 7: Annual Reports: \$5775.60

Total Cost 1 May-31 October 2010: Tasks 1-9: \$58785.46

Optional Tasks:

- Optional Task A: DGPS Rental: \$59 per day

D.B. Ecological Services, Inc.
1012 SW 7th St
Boca Raton, FL 33486
Phone # (561) 376-5502
Fax # (561) 393-3854

**SCOPE OF WORK PALM BEACH COUNTY DATA MANAGEMENT AND REPORT
PREPARATION TASKS**

Task	Position	Rate	Hours	Total
8	Environmental Specialist	73.00	196.00	14308.00
9	Environmental Specialist	73.00	320.00	23360.00
10	Environmental Specialist	73.00	90.00	6570.00
11	Environmental Specialist	73.00	32.00	2336.00
12	Environmental Specialist	73.00	12.00	876.00
13	Environmental Specialist	73.00	48.00	3504.00
14	Environmental Specialist	73.00	80.00	5840.00
15	Environmental Specialist	73.00	8.00	584.00
Total			786.00	57378.00

SCHEDULE 1 LIST OF PROPOSED SBE-M/WBE PRIME AND/OR SUBCONTRACTORS

PROJECT NUMBER: Supplement No. 1 to 0410-12

PROJECT NAME: 2010 Sea Turtle Monitoring – Singer Island & O.R.

NAME OF CONSULTANT: Taylor Engineering, Inc.

ADDRESS: 10151 Deerwood Park Blvd., Bldg. 300, Ste. 300
Jacksonville, FL 32256

CONTACT PERSON: Christopher Ellis

PHONE NO: 904-731-7040 FAX NO: 904-731-9847

CONTRACT: R2008-0410

DEPARTMENT: Environmental Resources Management

PLEASE IDENTIFY ALL APPLICABLE CATEGORIES OF PRIME AND/OR SUBCONTRACTORS

Name, Address and Phone Number	(Check one or both Categories)		Subcontract Amount				
	Minority Business	Small Business	Black	Hispanic	Women	Caucasian	Other (Please Specify)
DB Ecological Services, Inc. 1012 SW 7 th Street Boca Raton, FL 33486	<input type="checkbox"/>	<input type="checkbox"/>	\$ _____	\$ _____	\$ <u>212,096.64</u>	\$ _____	\$ _____
1.	<input type="checkbox"/>	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
2.	<input type="checkbox"/>	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
3.	<input type="checkbox"/>	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
4.	<input type="checkbox"/>	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
5.	<input type="checkbox"/>	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____	\$ _____	\$ _____
(Please use additional sheets if necessary)		Total	\$ _____	\$ _____	\$ <u>212,096.64</u>	\$ _____	\$ _____

Total Supplement Price \$ 218,036.64

Total Value of SBE Participation for Supplement \$ 154,718.64

- NOTE: 1. The amounts listed on this form must be supported by the Subcontractors (and, if applicable, Prime) prices included on Schedule 2 in order to be counted toward goal attainment.
 2. Firms may be certified by Palm Beach County as an SBE and/or an M/WBE. If firms are certified as both an SBE and M/WBE, please indicate the dollar amount under the appropriate category.
 3. M/WBE information is being collected for tracking purposes only.

SCHEDULE 2

**LETTER OF INTENT TO PERFORM AS AN SBE OR M/WBE PRIME OR SUBCONTRACTOR
[MUST BE COMPLETED IN ITS ENTIRETY BY SBE]**

PROJECT NUMBER: Supplement No. 1 to 0410-12 PROJECT NAME: 2010 Sea Turtle Monitoring - Singer Island & Ocean Ridge

TO: Taylor Engineering, Inc.
(Name of Prime Bidder)

The undersigned is certified by Palm Beach County as a(n) - (check one or more, as applicable):

Small Business Enterprise Minority Business Enterprise

Black Hispanic Women Caucasian Other (Please Specify) _____

Date of Palm Beach County Certification: _____

The undersigned is prepared to perform the following described work in connection with the above project (**Specify in detail, particular work items or parts thereof to be performed**):

Perform sea turtle monitoring activities for two Palm beach County construction projects at Singer Island & Ocean Ridge all tasks to be performed are defined in the Scope. In addition, there are data management and report preparation tasks to be performed per the scope.

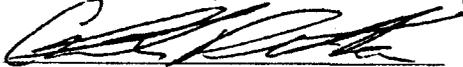
at the following price \$ 212,096.64
(Subcontractor's quote)

and will enter into a formal agreement for work with you conditioned upon your execution of a contract with Palm Beach County.

If undersigned intends to sub-subcontract any portion of this subcontract to a non-certified SBE subcontractor, the amount of any such subcontract must be stated: \$ 57,378.00

The undersigned subcontractor understands that the provision of this form to prime Bidder does not prevent subcontractor from providing quotations to other Bidders.

DB Ecological Services, Inc.
(Print name of SBE-M/WBE Subcontractor)

By: 
(Signature)

President
Title of person executing on behalf
of SBE-M/WBE Subcontractor)

Date: 5/3/10

Taylor Engineering Continuing Contract for Coastal and Marine Engineering

Contract R2008-0410 dated March 1, 2008 for period of two years expires on Feb. 28, 2010

SBE-MBE Goal 15.0% (10% SBE/W; 5% MBE/H)

Task order summary:

TASK NUMBER	TOTAL/ SBE and/or MWBE AMOUNT	TASK DUE DATE	TASK DESCRIPTION	APPROVED BY/DATE
Taylor-01	316,582.00 0.00	1/31/2009	2008 North County Sea Turtle Monitoring	BCC 3/11/2008
Taylor-01A	49,023.00 0.00	1/31/2009	2008 North County Sea Turtle Monitoring	ERM 3/11/2008
0410-02	5,000.00 0.00	4/30/2008	2007 Jupiter Inlet Ebb Shoal Survey	ERM 4/29/2008
0410-03	93,924.00 35,462.00	10/31/2008	2008 Regional Monitoring Beach Profiles and 3 Ebb Shoal Surveys	CRC 8/6/2008
0410-04	21,766.00 0.00	10/31/2008	Ocean Ridge 36 Month Monitoring Report	ERM 7/25/2008
0410-05	164,763.00 0.00	9/9/2009	Jupiter/Carlin Renourishment Beach Fill and Permitting	BCC 9/9/2008
0410-03A	18,363.00 8,046.00	10/31/2008	2008 Regional Monitoring Beach Profiles and 3 Ebb Shoal Surveys	ERM 10/22/2008
Taylor-01B	9,852.50 0.00	1/31/2009	2008 North County Sea Turtle Monitoring	ERM 11/10/2008
0410-05A	25,168.84 0.00	9/9/2009	Jupiter/Carlin Renourishment Beach Fill and Permitting	ERM 11/17/2008
0410-06	91,660.00 13,776.00	4/24/2009	Zeke's Parcel Waterfront Design	CRC 12/17/2008
0410-07	190,744.00 0.00	8/31/2010	Jupiter/Carlin Section 934 Study	BCC 2/24/2009
0410-08	196,985.00 191,445.00	1/31/2010	2009 Sea Turtle Monitoring - Singer Island & Ocean Ridge	BCC 2/24/2009
0410-09	362,811.85 0.00	11/1/2010	South Palm Beach/Lantana Environmental Impact Statement	BCC 4/21/2009
0410-10	47,566.00 0.00	6/30/2009	Expert Testimony Services for South Cove Hearing	ERM 4/6/2009
0410-11	74,102.00 29,275.00	11/30/2009	2009 Regional Monitoring Beach Profiles and 2 Ebb Shoal Surveys	CRC 9/2/2009
0410-08A	866.00 840.00	1/31/2010	2009 Sea Turtle Monitoring - Singer Island & Ocean Ridge	ERM 8/27/2009
0410-07A	283,649.00 14,575.00	12/31/2011	Jupiter/Carlin Section 934 Study	BCC 10/6/2009
0410-06A	10,201.00 0.00	12/21/2009	Zeke's Parcel Waterfront Design	ERM 9/24/2009

Subtotal: 1,963,027.19

Subtotal SBE-MBE: 293,419.00

Subtotal SBE-MBE Part.: 14.9%

Report Date & Filename: 04/29/10

T:\eeringser\Consultants\TAYLOR_2008\history_0410.xls]Sheet2

BUDGET AVAILABILITY STATEMENT

REQUEST DATE: 05/03/2010

REQUESTED BY: Paul Davis

PHONE: 233-2509

PROJECT TITLE: Sea Turtle Monitoring Services

LOCATION: Coastal and Lake Worth Lagoon

Project NO:

ORIGINAL CONTRACT AMOUNT:

BCC RESOLUTION#

REQUESTED AMOUNT: \$218,036.64

DATE: 5/18/2010

CSA/LOA CHANGE ORDER AMOUNT:

CSA/LOA CHANGE ORDER NUMBER:

CONTRACTOR/CONSULTANT NAME: Taylor Engineering, Inc.

PROVIDE A BRIEF STATEMENT OF THE SCOPE OF SERVICES TO BE PROVIDED BY THE CONSULTANT/CONTRACTOR: Provide sea turtle data management and analysis services.

BUDGET ACCOUNT NUMBER (IF KNOWN):

FUND	DEPART	UNIT	OBJ	PROG	PG PERIOD	AMOUNT
3652	381	M037	3120	E037	CIP	\$84,488.67
3652	381	M015	3120	E015	CIP	\$46,253.69
3652	381	M028	3120	E028	CIP	\$12,896.82
3652	381	M045	3120	E045	CIP	\$14,259.64
3653	381	M703	3120	E703	CIP	\$18,099.27
3653	381	M703	3120	E703	CIP	\$36,198.55
1229	380	3057	3401	3057EX	GY06	\$ 5,840.00

TOTAL

\$218,036.64

AD VALOREM

OTHER

FEDERAL

REVENUE:

ANTICIPATED DATE OF APPROVAL:

BAS APPROVED BY: Paul Davis **DATE:** 5/3/10

REQUIREMENT:

Attachment 2

JC
copy

R2008 0410

**CONTRACT FOR PROFESSIONAL CONSULTANT SERVICES
BETWEEN PALM BEACH COUNTY AND
TAYLOR ENGINEERING, INC.**

This is a Contract made as of MAR 11 2008, by and between Palm Beach County, a Political Subdivision of the State of Florida, by and through its Board of County Commissioners, hereinafter referred to as the COUNTY, and Taylor Engineering, Inc., 9000 Cypress Green Drive, Suite 200, Jacksonville, Florida 32256, an engineering firm, a corporation, authorized to do business in the State of Florida, hereinafter referred to as the CONSULTANT, whose Federal I.D. Number is 59-2850478.

In consideration of the mutual promises contained herein, the COUNTY and the CONSULTANT agree as follows:

ARTICLE 1 - SERVICES

The CONSULTANT's responsibility under this Contract is to perform professional coastal and marine engineering services and incidental services as more specifically set forth in the Scope of Work attached hereto as Exhibit "A". In the event services are required to be performed that are not described in Exhibit "A", but are within the general scope of services, the COUNTY and the CONSULTANT hereby reserve the right to negotiate task orders covering the desired services.

The CONSULTANT shall conduct professional services in accordance with Chapters 471 and 472, Florida Statutes and other applicable local, state and federal standards. The CONSULTANT shall conduct topographic and hydrographic survey work in compliance with the U.S. Army Corps of Engineers "Technical Requirements for Surveying, Mapping and Photogrammetric Services," Revised March 1989 and the U.S. Army Corps of Engineers "Engineering Design: Hydrographic Surveying," EM 1110-2-1003, January 1, 2001, and the most current Florida Department of Environmental Protection specifications for topographic (section 02000) and bathymetric (section 02100) surveying.

ARTICLE 2 - PERIODS OF SERVICE AND SCHEDULES

This Contract commences on March 1, 2008 and ends two years later. At the option of the COUNTY, the Contract can be renewed for an additional one-year period.

Reports and other work items shall be delivered or completed according to schedules established in each task order.

ARTICLE 3 - ASSIGNMENT OF WORK

The CONSULTANT shall provide professional services on a task order basis. A copy of the Task Order form and Task Change Order form are attached hereto as Exhibit "C" and Exhibit "D". The COUNTY reserves the right to modify these forms during the term of the Contract.

ARTICLE 32 - CRIMINAL HISTORY RECORDS CHECK

The CONSULTANT shall comply with the provisions of Ordinance 2003-030, the Criminal History Records Check Ordinance ("Ordinance"), if CONSULTANT's employees or subcontractors are required under this contract to enter a "critical facility" as identified in Resolution R-2003-1274. The CONSULTANT acknowledges and agrees that all employees and subcontractors who are to enter a "critical facility" will be subject to a fingerprint based criminal history records check. Although COUNTY agrees to pay for all applicable FDLE/FBI fees required for criminal history record checks, the CONSULTANT shall be solely responsible for the financial, schedule, and staffing implications associated in complying with Ordinance 2003-030.

IN WITNESS WHEREOF, the Board of County Commissioners of Palm Beach County, Florida has made and executed this Contract on behalf of the COUNTY and CONSULTANT has hereunto set its hand the day and year above written.

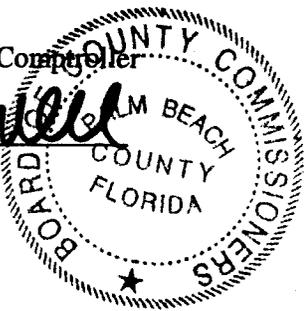
R 2008 04 10
MAR 11 2008

ATTEST:

Sharon R. Bock, Clerk & Comptroller

By:

May Powell
Deputy Clerk



PALM BEACH COUNTY

BOARD OF COUNTY COMMISSIONERS:

By:

Addie L. Greene
Addie L. Greene, Chairperson

WITNESS:

Carla M. Cannon

Signature

Carla M. Cannon

Name (type or print)

CONSULTANT:

Taylor Engineering, Inc.

Company Name

Steven J. Schropp

Signature

Steven J. Schropp

Name (type or print)

Vice President

Title

(corp.seal)

APPROVED AS TO FORM AND LEGAL SUFFICIENCY:

By:

James E. Miller
Assistant County Attorney

APPROVED AS TO TERMS AND CONDITIONS:

By:

Richard E. Walesky
Richard E. Walesky, Director
Dept. of Environmental Resources Mgmt.

EXHIBIT B
Taylor Engineering, Inc.
Schedule of Hourly Labor Rates
and Equipment Fees and Other Direct Costs
for 2008
Palm Beach County
Coastal & Marine Engineering Services

Position	Rate Basis Hourly Wage	Burdened Hourly Billing Rate*
CEO	86.67	247.00
President	65.26	186.00
Vice President	57.89	165.00
Senior Advisor	50.53	144.00
Director	43.86	125.00
Senior Professional	36.14	103.00
Project Professional	36.14	103.00
Staff Professional	25.61	73.00
Senior Editor	33.33	95.00
Sr. Technical Support	29.82	85.00
Technical Support	20.35	58.00
Administrative	15.09	43.00

Equipment Fee and Other Direct Costs	Rate	Unit
Black & White Photocopies (8-1/2 x 11)	\$0.15	/page
Black & White Photocopies (11 x 17)	\$0.20	/page
Color Photocopies (8-1/2 x 11)	\$1.25	/page
Color Photocopies (11 x 17)	\$1.50	/page
Computer Generated Glossy Plots (24" x 36" Glossy Paper)	\$65.00	/page
Computer Generated Glossy Plots (24" x 36" Standard Paper)	\$35.00	/page
14' Aluminum Jonboat	\$80.00	/day
Truck	\$85.00	/day
Trimble Differential GPS	\$100.00	/day
ADFM Velocity Profiler Pro20	\$200.00	/day
ADCP Rio Grande Current Meter	\$200.00	/day
Sokkia SET6E Total Station	\$350.00	/day
Cone Penetrometer	\$15.00	/day
YSI SCT Meter	\$50.00	/day
YSI DO Meter	\$50.00	/day
Hand-held GPS	\$10.00	/day

*The Burdened Hourly Billing Rates are based on a 2.85 multiplier.