

TASK ORDER APPROVAL FORM

CONTRACT #: c22-3220-TDD

TASK ORDER #: 3

TASK ORDER AMOUNT: \$ \$433,318.00

CONTRACT: C22-3220-TDD
TAYLOR ENGINEERING, INC.
COASTAL & ENVIRONMENTAL ENG. SERVICES
EXPIRES: 08/15/2025 W/2 1 YR RENEWALS

OFFERED BY CONSULTANT:

TAYLOR ENGINEERING, INC

FIRM'S NAME

CHRISTOPHER J. BENDER

REPRESENTATIVE'S PRINTED NAME

Christopher Bender

Digitally signed by Christopher Bender
Date: 2023.08.24 11:33:46 -04'00'

SIGNATURE

VICE PRESIDENT, COASTAL ENGINEERING

8/24/23

TITLE

DATE

**RECOMMENDED FOR APPROVAL
(Department Director)**

**APPROVED BY OKALOOSA COUNTY
(Per Purchasing Manual) Table 1**

**Jennifer
Adams**

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Jennifer Adams
Date: 2023.08.24
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Charlotte
Dunworth

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Charlotte Dunworth
Date: 2023.08.24
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SIGNATURE

TDD Director

TITLE

08.24.2023

DATE

**DeRita
Mason**

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Mason
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PURCHASING MANAGER

08.24.2023

DATE

**Faye
Douglas**

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Douglas
Date: 2023.08.30
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OMB DIRECTOR/DATE

08.30.2023

DATE

John Hofstad

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Date: 2023.08.30 13:22:11 -05'00'

COUNTY ADMINISTRATOR (if applicable)
John Hofstad

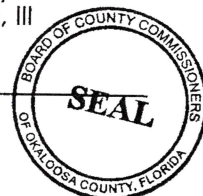
DATE



CHAIRMAN (if applicable)
Robert A. "Trey" Goodwin, III

9/5/2023

DATE





**WESTERN DESTIN BEACH RESTORATION
OKALOOSA COUNTY, FLORIDA**

SCOPE OF SERVICES

In May 2023, FEMA authorized repair of the damages to the Western Destin Beach Restoration Project resulting from Hurricane Sally (Disaster #456DR, September 2020). The project (DHS FEMA #166972) funds 90% of the repair (\$3.63M Federal Share / \$0.40M Local Share). The damage repair includes 150,600 cubic yards (cy) of sand dredged from the regional borrow area and 45,600 plants. While this repair will result in reconstruction and planting of the dune, additional sand is needed to fulfill the full permitted template for the project. Based on the June 2022 survey, an additional ~93,000 cy are required to fill the template. Okaloosa County (COUNTY) intends to utilize project efficiencies (e.g., significantly reduced mobilization cost) to construct the full project template at an increased local cost.

The project will use Florida Department of Environmental Protection (FDEP) Permit No. 0286575-001-JC as modified and Department of the Army (US Army Corps of Engineers [USACE]) Permit No. SAJ-2008-00895 as modified.

COUNTY has requested that Taylor Engineering, Inc. (TAYLOR) provide data, construction drawings and technical specifications, bid administration assistance, construction administration, project close-out, and post-construction monitoring services for the Western Destin Beach Restoration Project.

TAYLOR has made several assumptions in developing this Scope of Services and associated fees for the project. These assumptions, noted below and throughout, affect the proposed level of effort and associated costs. If any of the assumptions prove incorrect, TAYLOR will submit a proposal to modify the task order.

ASSUMPTIONS

TAYLOR has developed this scope of work based on the following assumptions:

- On July 19, 2012, FDEP issued Permit Modification No. 0286575-003-JN to transfer Permit No. 0286575-001-JC from COUNTY to the City of Destin (CITY). For initial construction (2013), an interlocal agreement between CITY and COUNTY charged CITY with primary responsibility for the Western Destin Beach Restoration Project administration and permit requirements. COUNTY will coordinate with CITY regarding requirements for the current project;
- COUNTY or CITY will conduct public noticing, public relations, outreach and communications for the project. TAYLOR will remain available to support their presentations to the public, Councils, staff, and Technical Review Committee(s), if required;
- COUNTY or CITY will conduct Contractor access and/or right-of-way agreements, and/or easements, if required;
- Construction will occur between November 1, 2024, and April 1, 2025, outside of turtle and shorebird nesting seasons;
- The total construction time at 24 hours/day operation (excluding mobilization/demobilization) will be approximately 40 days;

- During nighttime hours, the Contractor will be responsible for collecting sand samples from each hopper load and providing them to the Engineer in the morning for sand quality control and assurance;
- Project construction will not result in any substantial deviations from the final project plans and specifications or any violation of permit conditions;
- The FDEP-approved physical monitoring plan requires topographic and bathymetric surveys of the project and borrow areas within 90 days prior to construction commencement. COUNTY will provide June 2023 beach monitoring survey (by others), however a pre-construction survey will likely be required (Task 4.1: Pre-Construction Beach and Borrow Area Monitoring Surveys). TAYLOR assumes FDEP will accept the borrow area survey (Task 1.3: Beach and Borrow Area Design Surveys) as the pre-construction borrow area survey.
- Marine turtle nesting season is considered May 1 – September 1. COUNTY’s marine turtle permit holder will perform the required marine turtle nesting surveys and monitoring requirements (nesting and escarpment surveys); TAYLOR assumes the permit holder will monitor the project areas weekly for escarpments during the marine turtle nesting season (annually) and provide the required documentation and reports to the regulatory and commenting agencies;
- TAYLOR assumes nesting shorebird monitoring surveys and reporting will not be required because construction will occur outside nesting season. Shorebird nesting season is April 1 – September 1. TAYLOR will submit a revised proposal should these services be required;
- TAYLOR will request that FDEP and U.S. Fish and Wildlife Service (USFWS) waive the non-nesting shorebird and piping plover survey requirements. TAYLOR assumes this waiver will be granted. TAYLOR will submit a revised proposal should these services be required;
- TAYLOR assumes the dune vegetation planting will occur outside of turtle nesting season in the early spring (ideally, immediately following beach construction), and will not require additional services for endangered/protected species observers.
- TAYLOR assumes FDEP will allow tilling of the constructed project area in place of the required compaction sampling; and,
- TAYLOR will perform lighting surveys of the project area following construction prior to and during sea turtle nesting season. TAYLOR assumes CITY will notify the property owners in violation of the lighting ordinance and enforce the recommended implementations.

TASK 1: PROJECT INITIATION AND COORDINATION

Task 1.1: Site Observations and Aerial Data Collection

TAYLOR will schedule and conduct a site visit and field review to assess the existing site conditions. Site observations of environmental and physical conditions aim to ascertain opportunities and/or constraints that may influence design considerations or constructability. The site visit will include a review of the existing shoreline, beach access structures, and vegetation communities.

While onsite, TAYLOR will collect georeferenced aerial imagery to support design and construction phases of the project. TAYLOR will use aerial imagery to support mapping of vegetation and existing structures. TAYLOR will determine the approximate upland limit of fill location and document existing conditions (e.g. dune walkovers, seawalls, fences, significant vegetation, etc.); these inspections will help ensure the construction plans accurately depict the fill templates within the approved placement areas and will help minimize field template adjustments during construction.

TAYLOR shall also field identify specific areas of interest to be included within the proposed topographic surveys (Task 1.3: Beach and Borrow Area Design Surveys).

Task 1.2: Kick-off Meeting

Following the initial field work (Task 1.1: Site Observations and Aerial Data Collection), TAYLOR shall coordinate with COUNTY to schedule a meeting with CITY representative(s) to review the project understanding. TAYLOR shall prepare an agenda for the meeting and distribute it to all invited attendees at least three working days prior to the meeting for review and comment.

TAYLOR, COUNTY, and CITY shall meet to review items including:

- Findings from the site visit;
- Funding and available construction budget;
- Project schedule and milestones; and
- Review of construction access routes.

Task 1.3: Beach and Borrow Area Design Surveys

Determining an accurate beach fill construction template and accurate fill quantities will require collection of updated beach profile surveys within the proposed project area. TAYLOR will subcontract SEAS, Inc. (SEAS) to collect beach profile surveys to wading depth at each FDEP reference monument and halfway between each monument (i.e. at approximately 500-ft profile spacing) within the Reach 1 and Reach 2 project areas. Surveyors will also locate the waterward extents of fixed structures. As a part of this task, and to minimize duplication of effort, TAYLOR will review and compile the monitoring survey data from June 2023 (supplied by COUNTY).

The most recent borrow area survey is from 2012. TAYLOR will review the borrow area data and develop a dredge plan that meets FDEP's sand conservation policies. TAYLOR will work with their subcontractor to identify a survey protocol for the entire regional borrow area and a more refined protocol for the identified dredge area, if required.

The topographic and bathymetric surveys include:

- Beach profile surveys (wading depth) at approximately 500-ft profile spacing;
- Structure waterward extent locations;
- Bathymetric survey of the entire nearshore borrow area (low resolution); and
- Bathymetric survey of the proposed dredge area (high resolution).

TAYLOR and subcontractor will perform surveying activities and deliverables in general conformance with the May 2014 Bureau of Beaches and Coastal Systems (BBCS) Monitoring Standards for Beach Erosion Control Projects. Survey shall be prepared in State Plane Coordinates, with vertical datum referenced to NAVD 1988 in feet and horizontal datum to NAD 1983 and in accordance with the "Minimum Technical Standards" set forth by the Florida Board of Professional Surveyors and Mappers in Title G1G17, Florida Administrative Code (FAC).

Task 1.4: Project Coordination

Throughout the duration of the project, TAYLOR will review and support FEMA project documentation, coordinate with COUNTY staff, and participate in progress meetings with COUNTY

and CITY. TAYLOR will be available to support COUNTY public relations and public noticing access. TAYLOR will be available to support access, right-of-way, and easement agreements.

TAYLOR will perform this coordination on time-and-materials, not-to-exceed, basis and only upon request from COUNTY.

TASK 2: ENGINEERING DESIGN AND BID DOCUMENTS

TAYLOR will complete final engineering and environmental restoration design that will culminate into two sets of bid documents (i.e., project manuals consisting of construction drawings, technical specifications and other pertinent information for prospective bidders) that define the project requirements for the beach (dredging) and the vegetation restoration separately. Similar to the CITY's administration of the 2013 construction project, the division of the project's design documents allows for selection of specialized contractors, designation of independent construction timelines, warranties, and permit-required vegetation monitoring components.

TAYLOR will review the FDEP and USACE permits and coordinate with regulatory staff and commenting agencies (U.S. Fish and Wildlife Service, National Marine Fisheries Service, and Florida Fish and Wildlife Conservation Commission) to ensure all permit conditions are applicable to the proposed work. Should any permit conditions be irrelevant or inappropriate, TAYLOR will coordinate with FDEP, USACE, and/or the commenting agencies to request that such conditions be waived.

Task 2.1: Beach Restoration Construction Drawings and Technical Specifications

TAYLOR will complete final engineering design and produce construction drawings and technical specifications for the project. These drawings will consist of plan and cross section views of the existing beach contours and beach fill construction template. The drawings will also depict the existing borrow area contours and dredging template from both plan and cross-sectional perspectives. TAYLOR will review the beach profile data, update the landward and seaward extents of fill, and calculate the updated beach fill volume requirements.

TAYLOR will prepare technical specifications, consistent with the FDEP and USACE permits, to support the project construction plans. The specifications will include quantity estimates, general construction requirements, site restoration requirements, quality control testing, environmental protections, permits, and other specifications necessary to supplement the contract documents. Technical specifications will be prepared in general conformance with the Construction Specifications Institute MasterFormat Divisions. Within the technical specifications, TAYLOR will provide a bid schedule indicating the engineer's estimated quantities of major unit price items and indicate lump sum designations for major work items. Per COUNTY request, TAYLOR will incorporate shell screening requirements that exceed regulatory compliance requirements.

The construction drawings (full-size 22"x34") along with the technical specifications will provide sufficient detail and information pertinent for project bidding and construction. TAYLOR will provide COUNTY a digital copy of the draft contract documents for review and comment. TAYLOR will revise the draft specifications and drawings based on COUNTY's review and comments, as well as TAYLOR's final QA/QC, and submit one electronic copy (PDF format) of the final contract documents. The final contract documents that are released for construction will be signed and sealed by a registered Professional Engineer in the state of Florida.

Task 2.2: Vegetation Restoration Construction Drawings and Technical Specifications

In conjunction with the final engineering design for the beach restoration, TAYLOR environmental scientists and engineers will prepare final technical specifications and construction drawings to support bidding and construction of the vegetation restoration. The primary components of the restoration include dune vegetation plantings, sand fencing, signage, and post-and-rope barriers.

The design will include the following components:

- Native dune vegetation - 70% sea oats and 30% other native diversity species;
- 4-inch container plants at 2-ft spacing or 2-inch container plants at 18" spacing;
- Sand fence placed along the toe of the dune according to FDEP guidelines;
- Educational signage placed along the seaward toe of the restored dune informing the public of the dune restoration; and
- Public access enhancements, to inhibit damage to the restored dunes, including post-and-rope along the seaward limits of the dune vegetation connecting to existing access ways. No new access or boardwalks will be constructed.

The restoration design will include selection of plant species, plan-view arrangement, spacing, height and root sizes, irrigation and fertilization requirements, and stabilization mechanisms. The design documents will incorporate estimated quantities, general construction requirements, site restoration requirements, quality control, environmental protections, and other specifications necessary to supplement the contract documents.

The construction drawings will provide plan views, area identification, and stationing for future monitoring. TAYLOR will prepare technical specifications in general conformance with the Construction Specifications Institute MasterFormat Divisions. Within the technical specifications, TAYLOR will provide a bid schedule indicating the engineer's estimated quantities of major unit price items and indicate lump sum designations for major work items.

The construction drawings (full-size 22"x34") along with the technical specifications will provide sufficient detail and information pertinent for project bidding and construction. TAYLOR will provide COUNTY a digital copy of the draft contract documents for review and comment. TAYLOR will revise the draft specifications and drawings based on COUNTY's review and comments, as well as TAYLOR's final QA/QC, and submit one electronic copy (PDF format) of the final contract documents. The final contract documents that are released for construction will be signed and sealed by a registered Professional Engineer in the state of Florida.

TASK 3: BID ADMINISTRATION ASSISTANCE

TAYLOR will assist COUNTY with project advertisement and bidding for the beach restoration and the vegetation restoration — the projects will be bid separately. TAYLOR will provide documents to complete the bid advertisements as described above. COUNTY will advertise and prepare the "front-end-documents" and forms (e.g., invitation to bid, instructions, bid forms, experience questionnaires, sample agreement, special conditions, evaluation criteria), evaluate past performance, receive and open bids, review bids received, including legal review and evaluation of contractor's financial condition, business licenses or authorizations, bonding, insurance and other contractual requirements, and provide final recommendation for contractor selection. TAYLOR's review and recommendations will be limited to engineering and technical issues.

TAYLOR will assist COUNTY with the following tasks during the competitive bid process:

- Prepare a summary of work suitable for bid advertisement with the estimated quantities for each project component.
- TAYLOR will attend pre-bid meetings for both the beach and vegetation restoration advertisements. During which, TAYLOR will be responsible for providing an overview of the construction drawings, technical specifications, and permits. TAYLOR will keep record notes of questions presented by prospective bidders and provide written responses on the questions and comments presented during the meeting to COUNTY upon request. TAYLOR shall provide pre-bid meeting attendance log and meeting minutes to COUNTY.
- TAYLOR will accompany COUNTY during a site visit for prospective bidders on the project. TAYLOR will be available during the site visit to point out specific areas of work, work access, and general project intent. The site visit will be held the same day immediately following the pre-bid meetings.
- TAYLOR will prepare draft addenda with responses to submitted contractor questions provided by COUNTY. COUNTY will issue the final addenda(s). TAYLOR will support the bidding process by providing responses to written inquiries posed by prospective bidders' pertaining to the plans and specifications prepared by TAYLOR, permit conditions, requests for information (RFI), or clarification and interpretation of the documents prepared by TAYLOR.
- If requested by COUNTY, TAYLOR will review bids received and prepare a written recommendation for contractor selection.

Task 3.1: Beach Restoration Bid Administration Assistance

TAYLOR will provide the bid administration assistance services above for the beach restoration project.

TASK 4: CONSTRUCTION ADMINISTRATION AND OBSERVATION

Task 4.1: Pre-Construction Beach and Borrow Area Monitoring Surveys

FDEP requires the pre-construction survey to occur within 90 days before project commencement. Timing of construction will likely require that a pre-construction survey be performed that is in addition to the beach monitoring data collected in June 2023 (supplied by COUNTY). If pertinent, TAYLOR will request that FDEP waive the requirement for additional surveying. However, this task assumes a pre-construction monitoring survey will be required.

Taylor Engineering will collect topographic and bathymetric profile surveys of the beach and offshore area to document the summer beach conditions at all monuments included in the Western Destin Beach Restoration physical monitoring plan. The Western Destin Beach Monitoring area includes profiles at each FDEP reference monument from R-17 to R-30 and additional half-monument surveys near the terminus of the two reaches (i.e., R-20.5, R-23.5, and R-25.5) and between R-24 and R-25 (R-24.5) for a total of 18 profiles. The surveying activities and deliverables will conform to the May 2014 Bureau of Beaches and Coastal Systems (BBCS) Monitoring Standards for Beach Erosion Control Projects, Sections 01000 and 01100.

Additionally, the physical monitoring plan requires a pre-construction borrow area bathymetric survey within 90 days prior to construction commencement. TAYLOR will request FDEP to accept the borrow area survey performed during the design phase (Task 1.3: Beach and Borrow Area Design Surveys) as the pre-construction monitoring survey. Based on the unlikelihood of significant changes

occurring in the borrow area over 3-9 months, TAYLOR assumes FDEP will approve our request. If FDEP denies our request, TAYLOR assumes the Contractor's pre-dredging survey will satisfy FDEP's requirements. For clarity, TAYLOR assumes that the pre-construction borrow area survey requirement will be waived.

Task 4.2: Pre-Construction Meetings, Submittal Review, and Agency Submittals

This task will commence following execution of the construction contract, between COUNTY or CITY and their selected construction contractor (CONTRACTOR).

This task includes the following subtasks:

- Preparing for and conducting a pre-construction conference;
- Providing follow-up information and drawings to regulatory agencies resulting from the conference;
- Reviewing and approving CONTRACTOR pre-construction and notice to proceed submittals and making recommendation to the CITY or COUNTY for issuance of notice to proceed;
- Preparing for and conducting an onsite coordination meeting;
- Submitting required notice of commencements;
- Coordinating CONTRACTOR's pre-construction (before-dredge) surveys; and
- Preparation of change orders (if necessary for change in design beach placement template).

TAYLOR will conduct and attend a pre-construction conference with CONTRACTOR at least 21-days prior to construction commencement. Additional attendees will include representatives of the CITY, COUNTY, FDEP, Florida Fish and Wildlife Conservation Commission (FWC), USFWS, the marine turtle permit holder, and any other involved parties. The pre-construction conference will focus on describing the project and scope of work; reviewing the construction methodology, technical specifications, schedule, specific conditions, and monitoring requirements of the regulatory permits; and verifying construction access and work areas. TAYLOR will also review pipeline corridors as proposed by CONTRACTOR and the specific shorebird protection measures required by the USFWS Biological Opinion (wrack line cleaning areas and shorebird disturbance-free zones). TAYLOR will answer CONTRACTOR's questions concerning the technical aspects of the work and discuss issues including lines of Engineer and CONTRACTOR authority, contract general and specific conditions, mobilization/demobilization activities, project access, contract administration, progress payment, correspondence procedures, project schedule, submittal register, labor requirements, and general site safety. TAYLOR will take detailed minutes of the pre-construction conference discussions and visit the site with CONTRACTOR, if requested. TAYLOR assumes that the pre-construction conference will be held on CITY's premises. This meeting will occur after notice of award and prior to notice to proceed.

TAYLOR will review CONTRACTOR's pre-construction submittals which may include schedule of values, list of subcontractors, signature authority, construction schedule, submittal register, mobilization and demobilization plan, environmental protection plan, quality control plan, accident prevention plan, construction work plan, and turbidity monitoring qualifications. TAYLOR will coordinate with CONTRACTOR to resolve issues of concern, discuss project plans and specifications, and discuss schedule and documentation.

TAYLOR will review CONTRACTOR's technical submittals before CITY or COUNTY issues the notice to proceed to the CONTRACTOR.

TAYLOR will submit a notice of commencement to the regulatory agencies at least 48 hours prior to construction as required by regulatory permits. TAYLOR will accompany FDEP/USACE and CITY or COUNTY representative during the hopper dredge inspections prior to construction, if required.

Task 4.3: Construction Observation and Administration

This task will commence with CONTRACTOR mobilization and occur over an assumed 40-day period.

This task includes the following subtasks:

- Site visit at construction commencement by the Engineer of Record;
- Daily construction observation (7 days per week) as required by the FDEP permit with an observer located on site approximately 8 hours each observation day;
- Attending 10 weekly coordination meetings;
- Preparing for and attending up to 4 additional problem resolution meetings;
- Preparing and/or reviewing up to 5 change order directives;
- Reviewing up to 40 daily progress pay surveys;
- Reviewing and approving CONTRACTOR submittals; and
- Reviewing and approving up to 4 pay applications.

TAYLOR will assist COUNTY with administration of the construction contract from our Destin and Jacksonville offices and from the project site. In-office duties will include reviewing CONTRACTOR's shop drawings and submittals, reviewing progress pay surveys and applications, providing oversight of the progress of the work, and assisting with the preparation of change orders, if required. Additionally, TAYLOR will review the releases of lien, CONTRACTOR affidavits, and CONTRACTOR certifications. TAYLOR assumes the payment surveys will include profiles for every 100 feet of sand placed along the project area.

TAYLOR will remain available throughout construction to provide advice and consultation to CITY through site visits and teleconferences. In that role, TAYLOR will address questions pertaining to engineering, design, permitting issues, scheduling, payment and any proposed changes to the project design.

TAYLOR will provide daily, on-site observation services within the beach placement area for the duration of the beach fill project. As required by the FDEP permit and Sediment Quality Control/Quality Assurance Plan, the individual providing the onsite observation will have experience in beach nourishment and construction inspection and knowledge of the project design and permit conditions. Engineers or qualified scientists will visit the site daily to ascertain whether work is occurring in general conformance with permit conditions and plans and specifications. Site visits will include detailed observation of the work and monitoring of CONTRACTOR's means, methods, and sequences. TAYLOR will observe construction activities for general conformance with the project contract, plans, specifications, and environmental permits and obtain daily photographs to document the general construction area. Our observations will include, but not be limited to, the following:

- Protection of existing work;

- Protection of new work from damage;
- Protection of private property;
- Maintenance of current construction schedule;
- Provision of submittals on time and in proper format;
- Protection of land resources (fuel and oil, work areas, etc.);
- Protection of water resources (pollution prevention, turbidity, etc.);
- Protection of marine turtles (visual monitoring, lighting requirements, escarpments);
- Protection of migratory birds (monitoring, signage);
- Control of noise pollution;
- Turbidity monitoring (turbidity monitoring data review, sand dike observation, etc.);
- Project quality control procedures (to produce an end product that meets contract requirements);
- Designation of employee parking;
- Maintenance of onsite bulletin board, project sign, and project safety sign;
- Maintenance of project site security;
- Cleanup of waste and debris;
- Adherence to quality control plan;
- Adherence to accident prevention plan;
- Adherence to vibration control plan (for existing structures);
- Performance of pre-placement, payment, and post-placement surveys at the beach placement area and borrow area;
- Adherence to borrow site excavation plan;
- Submergence of pipeline within approved corridors;
- Maintenance of pipeline integrity during material transport;
- Placement of beach fill in accordance with plans and specifications;
- Adherence to the Sediment QA/QC Plan for maintenance of fill material quality (through borrow load sampling, visual analysis, sieve testing, etc.); and
- Protection and maintenance of pedestrian beach access.

As a part of the daily observations, TAYLOR will fill out a daily construction report, signed by both the observer and CONTRACTOR's representative, to provide a daily log of construction progress, delays and/or issues. The reports will document the date, weather conditions, personnel/visitors on site, CONTRACTOR's manpower (e.g., superintendent, field engineer, laborers, etc.) and equipment (backhoe, bulldozer, dredge, booster pump, etc.), and a daily summary of events.

Per the FDEP permit conditions, TAYLOR shall prepare or coordinate weekly summaries of all water quality monitoring data including permit number; dates and times of sampling and analysis; a statement describing the methods used in collection, handling, storage, and analysis of samples; a map indicating the sampling locations; and a statement by the individual responsible for implementation of the sampling program concerning the authenticity, precision, limits of detection, and accuracy of the data. CONTRACTOR will collect and provide water quality monitoring data to TAYLOR.

TAYLOR will attend CONTRACTOR's onsite weekly project meetings. These meetings will discuss the project progress and address questions pertaining to engineering, design, permitting issues, any proposed changes to the project design, scheduling, and any conflicts. Attendees will include

representatives from CONTRACTOR, CITY, COUNTY, and TAYLOR. The progress meeting agenda shall generally include reviewing minutes of the previous meeting, work progress since the previous meeting, current definable features of work (i.e., constructing temporary intermodal facility), construction schedule, submittal register, off-site activities, reviewing testing results (sand QA/QC, turbidity monitoring, etc.), changes to construction schedule, and site safety; and discussing problem prevention, maintaining contract quality for materials and workmanship, pending modifications, changes and substitutions, and other business, as appropriate. Additionally, should unexpected problems arise outside of these meetings, TAYLOR will plan on attending (up to four) other problem resolution meetings.

TAYLOR will notify CITY and COUNTY if there are any permit violations, work stoppages, or conflicts and provide recommendations to CITY and COUNTY as to how to proceed with the project. During construction, TAYLOR will not direct the CONTRACTOR's means, methods, or sequencing of construction. TAYLOR will not be responsible for jobsite safety.

TAYLOR may require additional fees if additional onsite visits are required to solve unanticipated problems or if construction is longer than the assumed 40-day period.

Task 4.4: Project Close-Out, Regulatory Certification, and Project Documentation

This task includes the following subtasks:

- Developing preliminary and final punch lists;
- Certifying the project substantially complete;
- Reviewing/certifying releases of lien;
- Attending substantial completion inspection and final inspection/project closeout meetings;
- Conducting final review/acceptance of CONTRACTOR submittals and field data;
- Compiling final project files;
- Preparing a post-construction drawing;
- Certifying final completion of the project; and
- Submitting all regulatory completion certifications.

Upon CITY receiving from CONTRACTOR a request to certify the project substantially complete, TAYLOR will make a substantial completion inspection of the project area to determine if substantially complete. If it is not substantially complete, TAYLOR will develop preliminary and final punch list items to for the CONTRACTOR to complete or correct. With concurrence from CITY, TAYLOR will transmit this list to the CONTRACTOR for completion. Upon completion of outlined items, TAYLOR will certify the projects substantially complete. TAYLOR has budgeted for two meetings/inspections of each project area for this work.

TAYLOR will collect and review the following information from CONTRACTOR prior to project closeout:

- Final waiver and release of lien from all subcontractors and suppliers;
- Final pay application;
- Pre-construction survey for payment purposes (beach and borrow area);
- Post-construction survey for payment purposes (beach and borrow area);
- Final project submittals (environmental reports, accident reports, vibration monitoring reports, etc.);
- Final CONTRACTOR certification; and,

- Final CONTRACTOR affidavit.

TAYLOR will assist CITY with coordination of permit-related submittals. Following completion of the project, TAYLOR will prepare and submit to the FDEP and USACE a statement of completion and a certification in accordance with the FDEP and USACE permit requirements. TAYLOR will also prepare and submit to USACE an as-built drawing, certified by a professional engineer, depicting the constructed beach and dune areas.

Upon completion of construction activities, TAYLOR will prepare project documentation (file management) and transfer project files to COUNTY in electronic format (.pdf).

TASK 5: POST-CONSTRUCTION SERVICES

Task 5.1: Post-Construction Monitoring and Reporting

Specific Condition 33 and 34 of FDEP Permit No. 0286575-001-JC requires immediate post-construction and annual monitoring (for three consecutive years) of the Western Destin Beach Restoration Project. These requirements are designed to assess, with quantitative measurements, the performance of the beach restoration project, any adverse effects which have occurred, and the need for any adjustments, modifications, or mitigative response to the project. This task includes post-construction beach profile and borrow area surveying, data analysis and reporting as required by FDEP for post-construction only. Annual services, which are required by the FDEP permit, shall be provided under a future task order or otherwise performed by the permittee (CITY).

The FDEP-approved physical monitoring plan requires topographic and bathymetric surveys of the Western Destin project area and eastern control area within 60 days of construction completion. TAYLOR will collect topographic and bathymetric profile surveys of the beach and offshore area to document the beach conditions at all monuments included in the Western Destin Beach Restoration physical monitoring plan. The Western Destin Beach Monitoring area includes profiles at each FDEP reference monument from R-17 to R-30 and additional half-monument surveys near the terminus of the two reaches (i.e., R-20.5, R-23.5, and R-25.5) and between R-24 and R-25 (R-24.5) for a total of 18 profiles. TAYLOR will process survey data and perform shoreline and volume change analysis. The surveying activities, analysis, and reporting deliverables will conform to the May 2014 Bureau of Beaches and Coastal Systems (BBCS) Monitoring Standards for Beach Erosion Control Projects.

The FDEP-approved physical monitoring plan also requires post-construction bathymetric surveys of the borrow area. TAYLOR will subcontract with SEAS to conduct the post-construction survey within 60 days following project completion in accordance with FDEP requirements. TAYLOR will plot the pre-construction and post-construction bathymetric contours and the pre- to post-construction contour changes in the borrow site vicinity. TAYLOR will compare the data to identify areas and magnitudes of accretion and erosion in the borrow site.

TAYLOR will prepare a report documenting the results of the above analyses. The report will summarize and discuss the survey data, the changes brought about by project construction, and identify erosion and accretion patterns within the control areas. The report appendices will include plots of survey profiles, graphical representations of volumetric and shoreline position changes, and ground-level photographs of the monitoring area.

TAYLOR will submit one electronic copy of the report and survey deliverables to FDEP, CITY and COUNTY.

Task 5.2: Vegetation Restoration Construction Phase Services

TAYLOR will provide bid administration assistance, construction administration, observation, and final certification services for the vegetation restoration (i.e., dune planting).

Task 5.2.1 Vegetation Restoration Bid Administration Assistance

TAYLOR will provide the bid administration assistance services described by Task 3: Bid Administration Assistance for the Vegetation Restoration project. The Vegetation Restoration will be bid immediately following completion of the beach restoration or otherwise postponed to be constructed outside of turtle nesting season.

Task 5.2.2 Pre-Construction Meetings and Submittal Review

Following bidding, the COUNTY's selected VEGETATION CONTRACTOR will prepare and submit pre-construction submittals to TAYLOR. TAYLOR will conduct a preconstruction meeting with the VEGETATION CONTRACTOR after notice of award and prior to the notice to proceed. TAYLOR assumes that COUNTY will locate the meeting near the project site. If available, TAYLOR will review the VEGETATION CONTRACTOR's pre-construction submittals prior to the meeting and conduct any necessary discussion of those submittals during the meeting. Additionally, TAYLOR assumes no endangered/protected species surveys will be required during construction.

Task 5.2.3 Construction Observation and Administration

This task includes the following subtasks:

- Preparing for and conducting a pre-construction conference;
- Providing follow-up information and drawings to regulatory agencies resulting from the conference;
- Reviewing and approving the VEGETATION CONTRACTOR pre-construction and notice to proceed submittals and making recommendation to the COUNTY for issuance of notice to proceed;
- Preparing for and conducting an onsite coordination meeting;
- Submitting required notice of commencements; and
- Review of change orders (if necessary).

TAYLOR will assist COUNTY with administration of the vegetation construction contract from our local office. TAYLOR will provide on-site observation the first day of construction to ascertain whether work is occurring in general conformance with the plans, specifications, and FDEP permit. Throughout construction, TAYLOR will visit the site weekly or more often if needed to document large shipments or new phases. Our visits will include observation of the work and construction means, methods, and sequences. TAYLOR will fill out an observation report for each visit to record our observations. The reports, which will become part of the project record, will provide a log of construction progress, delays and/or issues.

TAYLOR will remain available throughout vegetation restoration construction to provide advice and consultation to COUNTY and CITY through site visits and teleconferences. In that role, TAYLOR will address questions pertaining to design, permitting issues, scheduling, payment, and any proposed changes to the project design. TAYLOR will notify COUNTY and CITY of any permit violations, work stoppages, or conflicts. When the VEGETATION CONTRACTOR submits a request to certify the project “substantially complete,” TAYLOR project manager will visit the project area to determine whether the project meets the substantially complete standard. Depending on the findings of the inspection, TAYLOR will develop preliminary and final punch list items to be completed or corrected for substantial and final construction completion. Upon verification that the VEGETATION CONTRACTOR has completed the outlined items, TAYLOR will provide a letter report to COUNTY, CITY and FDEP certifying the project substantially complete. TAYLOR has budgeted for two meetings/inspections of the project area for this work. TAYLOR will prepare an as-built plan view drawing of the planting area, certified by a professional engineer, as required by the FDEP permit.

Task 5.2.4 180-Day Warranty Inspection

The FDEP permit requires the native dune plantings meet a minimum 80% survivability criteria approximately 180 days after planting. TAYLOR will visit the site approximately 180 days following construction to perform a final plant survivability survey. TAYLOR will coordinate these site visits with COUNTY, CITY and VEGETATION CONTRACTOR. After the 180-day visit following construction and assuming the plants achieve the survivability requirements, TAYLOR will prepare and submit to FDEP a final statement of completion and final project certification in accordance with the FDEP permit requirements. The statement will reference the above mentioned certified as-built drawings.

If success is not achieved after 180 days, TAYLOR will direct the VEGETATION CONTRACTOR to replant deficient areas and increase planting density if necessary and will reassess the survivability approximately 180 days after the additional planting. Should the plants again not meet the survivability criteria, TAYLOR will consult with the COUNTY and CITY project manager to revise this scope of services or identify other means of accomplishing the necessary project support work.

Task 5.3: Sediment Sampling, Analysis and Reporting

The FDEP-approved Sediment Quality Control and Quality Assurance (QCQA) plan requires post-construction quality assurance sampling of the constructed beach. The plan requires representative sampling of the constructed beach approximately every 1,000 ft. TAYLOR will collect the representative samples in accordance with the QA/QC plan and have the samples analyzed for grain size, silt and shell content, and moist Munsell color. TAYLOR will summarize the sampling results in a letter report. The report will also include the visual analysis results of the quality control sampling performed by TAYLOR during construction (grab samples collected during each discharge operation). TAYLOR will submit the summary report to FDEP, CITY and COUNTY.

Task 5.4: Lighting Surveys and Reporting

The FDEP permit requires lighting surveys be performed immediately following project construction, or before May 15 if construction ends before turtle season, and monthly throughout nesting season.

TAYLOR personnel will conduct the surveys at night to document any visible light sources from the newly constructed beach. After each survey, TAYLOR will prepare a summary report including our findings and recommendations in accordance with the Florida Model Lighting Ordinance for Marine Turtle Protection, F.A.C. 62B-55. TAYLOR will notify CITY of any properties with lighting violations. TAYLOR assumes CITY will notify the property owners in violation of the lighting ordinance; provide documentation of property owner notification (a permit requirement) to regulatory agencies, COUNTY turtle permit holder, and TAYLOR; and take any necessary enforcement actions.

With construction anticipated to end prior to April 1, TAYLOR will conduct lighting surveys by May 15, June 15, July 15, August 15, and September 15 and provide FWC with the required submittals by the 1st of the following month as specified in the permit. Submittals include the summary report of each survey and documentation for property owner notification. TAYLOR will prepare a final summary report by December 15 and will coordinate a teleconference with the CITY and FWC to discuss the report and any documented sea turtle disorientations.

This task includes post-construction lighting surveying, data analysis and reporting as required by FDEP for post-construction only (monthly surveys May – September [5 surveys total]). Annual services, which are required by permit, shall be provided under a future task order or otherwise performed by the permittee (CITY).

Task 5.5: Tilling

The FDEP permit requires beach tilling following project construction and prior to April 15 for 3 subsequent years. TAYLOR will subcontract the post-construction tilling of the Western Destin project area in accordance with FDEP permit conditions and provide all the required documentation and noticing. The proposed budget assumes the tilling area encompasses approximately 14 acres.

This task includes only the post-construction tilling. Annual services, which are required by permit, shall be provided under a future task order or otherwise performed by the permittee (CITY).

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FEE ESTIMATE

Taylor Engineering will perform the above-described scope of services for a fixed fee cost of \$433,318.00. Services will be invoiced monthly on a percentage complete basis and include a progress report detailing the work completed during the invoice period.

Title	Fee
Task 1: Project Initiation and Coordination	
1.1 Site Observations and Aerial Data Collection	\$7,778.00
1.2 Kick-Off Meeting	\$4,772.00
1.3 Beach and Borrow Area Design Surveys	\$25,938.00
1.4 Project Coordination	\$25,000.00
Task 1: Project Initiation and Coordination Total	\$63,488.00
Task 2: Engineering Design and Bid Documents	
2.1 Beach Restoration Construction Drawings and Technical Specifications	\$25,824.00
2.2 Vegetation Restoration Construction Drawings and Technical Specifications	\$13,208.00
Task 2: Engineering Design and Bid Documents Total	\$39,032.00
Task 3: Bid Administration Assistance	
3.1 Beach Restoration Bid Administration Assistance	\$9,904.00
Task 3: Bid Administration Assistance Total	\$9,904.00
Task 4: Construction Administration and Observation	
4.1 Pre-Construction Beach and Borrow Area Monitoring Surveys	\$19,404.00
4.2 Pre-Construction Meetings, Submittal Review, And Agency Submittals	\$24,816.00
4.3 Construction Observation and Administration	\$103,684.00
4.4 Project Close-Out, Regulatory Certification, And Project Documentation	\$21,744.00
Task 4: Construction Administration and Observation Total	\$169,648.00
Task 5: Post-Construction Services	
5.1 Post-Construction Monitoring and Reporting	\$39,004.00
5.2.1 Vegetation Restoration Bid Administration Assistance	\$4,710.00
5.2.2 Pre-Construction Meetings and Submittal Review	\$7,130.00
5.2.3 Construction Observation and Administration	\$12,764.00
5.2.4 180-Day Warranty Inspection	\$9,062.00
5.3 Sediment Sampling, Analysis and Reporting	\$13,260.00
5.4 Lighting Surveys and Reporting	\$53,006.00
5.5 Tilling	\$12,310.00
Task 5: Post-Construction Services Total	\$151,246.00
Total Tasks 1-5	\$433,318.00

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TAYLOR ENGINEERING, INC.
COST SUMMARY BY TASK
P2023-102: WESTERN DESTIN BEACH RESTORATION

TASK 1: PROJECT INITIATION AND COORDINATION

<i>Labor</i>	Hours	Rate	Cost	Task Totals
Principal	26.0	263.00	6,838.00	
Director/Program Manager	22.0	231.00	5,082.00	
Senior Professional/Project Manager	108.0	189.00	20,412.00	
Project Professional	28.0	163.00	4,564.00	
Staff Professional	32.0	121.00	3,872.00	
Sr. CAD Technician/GIS Analyst	8.0	184.00	1,472.00	
Project CAD Technician/GIS Analyst	8.0	142.00	1,136.00	
Staff CAD Technician/GIS Analyst	8.0	89.00	712.00	
Total Man-Hours	240.0			
Labor Cost				44,088.00
<i>Non-Labor</i>	Units	Unit Cost	Cost	
SEAS - Borrow Area Survey	1.0	9,600.00	9,600.00	
SEAS - Beach Survey (500 ft transects)	1.0	9,800.00	9,800.00	
Total Non-Labor Cost				19,400.00
Total Task 1				\$ 63,488.00

TASK 2: ENGINEERING DESIGN AND BID DOCUMENTS

<i>Labor</i>	Hours	Rate	Cost	Task Totals
Principal	6.0	263.00	1,578.00	
Director/Program Manager	6.0	231.00	1,386.00	
Senior Professional/Project Manager	36.0	189.00	6,804.00	
Project Professional	60.0	163.00	9,780.00	
Staff Professional	60.0	121.00	7,260.00	
Sr. CAD Technician/GIS Analyst	60.0	184.00	11,040.00	
Administrative/Document Prep	16.0	74.00	1,184.00	
Total Man-Hours	244.0			
Labor Cost				39,032.00
Total Task 2				\$ 39,032.00

TASK 3: BID ADMINISTRATION ASSISTANCE

<i>Labor</i>	Hours	Rate	Cost	Task Totals
Principal	2.0	263.00	526.00	
Director/Program Manager	2.0	231.00	462.00	
Senior Professional/Project Manager	16.0	189.00	3,024.00	
Project Professional	12.0	163.00	1,956.00	
Staff Professional	24.0	121.00	2,904.00	
Sr. CAD Technician/GIS Analyst	4.0	184.00	736.00	
Administrative/Document Prep	4.0	74.00	296.00	

P2023-102: WESTERN DESTIN BEACH RESTORATION

Total Man-Hours	64.0	
Labor Cost		<u>9,904.00</u>
<i>Total Task 3</i>		\$ 9,904.00

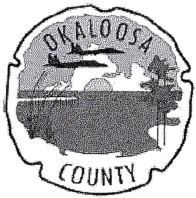
TASK 4: CONSTRUCTION ADMINISTRATION AND OBSERVATION

<i>Labor</i>	Hours	Rate	Cost	Task Totals
Principial	16.0	263.00	4,208.00	
Director/Program Manager	16.0	231.00	3,696.00	
Senior Professional/Project Manager	216.0	189.00	40,824.00	
Project Professional	196.0	163.00	31,948.00	
Staff Professional	448.0	121.00	54,208.00	
Sr. CAD Technician/GIS Analyst	104.0	184.00	19,136.00	
Administrative/Document Prep	22.0	74.00	1,628.00	
Total Man-Hours				1,018.0
Labor Cost				155,648.00
<i>Non-Labor</i>	Units	Unit Cost	Cost	
SEAS - Pre-Const. Monitoring Survey	1.0	14,000.00	14,000.00	
Total Non-Labor Cost				<u>14,000.00</u>
<i>Total Task 4</i>				\$ 169,648.00

TASK 5: POST-CONSTRUCTION SERVICES

<i>Labor</i>	Hours	Rate	Cost	Task Totals
Principial	6.0	263.00	1,578.00	
Director/Program Manager	20.0	231.00	4,620.00	
Senior Professional/Project Manager	164.0	189.00	30,996.00	
Project Professional	176.0	163.00	28,688.00	
Staff Professional	332.0	121.00	40,172.00	
Sr. CAD Technician/GIS Analyst	48.0	184.00	8,832.00	
Project CAD Technician/GIS Analyst	80.0	142.00	11,360.00	
Total Man-Hours				826.0
Labor Cost				126,246.00
<i>Non-Labor</i>	Units	Unit Cost	Cost	
SEAS - Post-Const. Monitoring Survey	1.0	14,000.00	14,000.00	
Geolab Testing (per Sample)	18.0	100.00	1,800.00	
Advantage Const. Group - Beach Tilling	1.0	9,200.00	9,200.00	
Total Non-Labor Cost				<u>25,000.00</u>
<i>Total Task 5</i>				\$ 151,246.00

Project Total \$ 433,318.00



BOARD OF COUNTY COMMISSIONERS AGENDA REQUEST

DATE: September 5, 2023
TO: Honorable Chairman and Distinguished Members of the Board
FROM: Jennifer Adams
SUBJECT: Taylor TO 3 - Western Destin Beach Restoration (FEMA #166972)
DEPARTMENT: Tourist Development Department
BCC DISTRICT: 5

STATEMENT OF ISSUE: Request approval of Taylor Engineering task order #3 in the amount of \$433,318 for Western Destin Beach Restoration Project (Hurricane Sally, FEMA #166972).

BACKGROUND: In May 2023, FEMA authorized repair of the damages to the Western Destin Beach Restoration Project resulting from Hurricane Sally (DHS FEMA #166972) at a cost share of \$3.63M/90% Federal and \$200K/5% each for State and County. The damage repair includes 150,600 cubic yards (cy) of sand dredged from the regional borrow area and 45,600 plants. While this repair will result in reconstruction and planting of the dune, additional sand is needed to fulfill the full permitted template for the project. Based on the June 2022 survey, an additional ~93,000 cy is required to fill the template. Staff intends to utilize project efficiencies (e.g., significantly reduced mobilization cost) to construct the full project template at an increased local cost share.

Taylor Engineering task order #3 provides for data collection, construction drawings and technical specifications, bid administration assistance, construction administration, project close-out, and post-construction monitoring services for the Western Destin Beach Restoration Project.

Project construction is anticipated to occur November 2024 - April 2025.

FUNDING SOURCE, (If Applicable) (reimbursable by FEMA)

Department # 712053
Account # 531100
Amount \$433,318

OPTIONS: Approve/Deny/Postpone

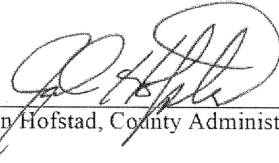
RECOMMENDATION: Approve Taylor Engineering task order #3 in the amount of \$433,318 for Western Destin Beach Restoration Project (Hurricane Sally, FEMA #166972).

Jennifer Adams

Jennifer Adams, Director, Tourist Development Department

8/28/2023

RECOMMENDED BY:



John Hofstad, County Administrator

8/30/2023

APPROVED BY: