STATE OF LOUISIANA
COASTAL PROTECTION AND RESTORATION AUTHORITY

REQUEST FOR STATEMENT OF INTEREST AND QUALIFICATIONS (RSIQ) FOR ENGINEERING AND DESIGN

RSIQ NO. 2503-16-29

WEST GRAND TERRE BEACH NOURISHMENT AND STABILIZATION PROJECT (BA-0197)

MAY 27, 2016

1.0 INTRODUCTION

The Coastal Protection and Restoration Authority (CPRA) is seeking a qualified firm to provide engineering and design phase services for the West Grand Terre Beach Nourishment and Stabilization Project (BA-0197). The CPRA is proposing to implement this project through the Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act (RESTORE Act). The RESTORE projects are of vital and urgent interest to the State of Louisiana, and as such CPRA is seeking a firm capable of performing the design phase in a complete but accelerated manner.

Tasks pertinent to this RSIQ include, but are not limited to the following: project management, review and analysis of historic data, compilation, topographic and bathymetric surveys, borrow area and project area geotechnical investigations, numerical modeling (hydrodynamic and hydraulic), environmental investigations, land rights services, permit development, and engineering and design. CPRA reserves the right to modify or identify additional tasks during the contract negotiation phase and/or the design phase of the project.

2.0 LOCATION

The West Grand Terre Beach Nourishment and Stabilization Project (BA-0197) is located in Jefferson Parish immediately northeast of Grand Isle at the mouth of Barataria Bay extending approximately 4.3 miles from Barataria Pass to Pass Abel. The center of the project area is located at the approximate coordinates 29° 16’ 58.43”N latitude, 89° 55’ 43.06” W longitude. See Appendix A for vicinity map and project feature map.

3.0 GENERAL BACKGROUND AND DESCRIPTION

Grand Terre, made famous as the base of smuggling activities for the storied 19th century pirate Jean Lafitte, was once a single barrier island (Maygarden et al. 1995). However, tropical storms, subsidence, and the absence of a replenishing sand source caused the development of Pass Abel and the separation of Grand Terre Island into the two currently existing islands, West Grand Terre and East Grand Terre (Penland and Suter 1988). According to results of the Barrier Island Comprehensive Monitoring (BICM) Program, the average shoreline loss rate for West Grand Terre has increased from an historic rate (1855-2005) of approximately -14.5 feet/year, to a short-term rate (1996-2005) of approximately -22.6 feet/year and a near-term rate (2004-2005) of -23.1 feet/year (Martinez et al. 2009).

The purpose of the original East/West Grand Terre Restoration (BA-30) CWPPRA project, which was later constructed through CIAP funds, was to restore marsh habitat and close shoreline breaches on East Grand Terre Island and to increase the overall elevation and seaward extent of East and West Grand Terre Island's shorelines, thus protecting existing infrastructure on West Grand Terre. However, the scope of this project was reduced to only include East Grand Terre. Restoration efforts for West Grand Terre were eliminated after cost projections indicated that the cost to construct either of two beach alternatives for West Grand Terre in combination with alternatives for East Grand Terre exceeded the total construction budget. East Grand Terre was suggested to be the more critical of the two islands due to the excessive amount of overwash and numerous breaches along the island shoreline, so it was constructed first. The East Grand Terre project restored 2.8 miles of barrier shoreline, consisting of 165 acres of beach and 450 acres of marsh, by dredging 3.3 million cubic yards of offshore material.

The objectives of the proposed West Grand Terre Beach Nourishment and Stabilization (BA-0197) project for the engineering and design phase are to restore and enhance dune and back-barrier marsh habitat. It is estimated that the design will consist of the building of 12,700 feet of beach and dune with an area of 235 acres, as well as the restoration of up to 66 acres of back barrier marsh and a rock revetment to protect the restored marsh. The project will increase the width of the island and maintain shoreline integrity through the introduction of sediment in order to increase island longevity.

The West Grand Terre Beach Nourishment and Stabilization (BA-0197) project is proposed to be constructed by hydraulically dredging and pumping sediment from offshore deposits near the Quatre Bayou borrow site approximately nine miles to the designated fill sites. The project consists of three fill components: the Gulf of Mexico Beach/Dune, the Barataria Pass Beach/Dune, and the Marsh. The slurry fill will be constructed to elevations ranging from +9.0 ft. NAVD88 at the Gulf of Mexico Beach/Dune to +2.4 ft. NAVD88 at the Barataria Pass Beach/Dune and the Marsh. The borrow areas near Quatre Bayou mostly consists of sands, silts, and other sandy and clayey fill material that is suitable for beach/dune and marsh creation. Earthen containment dikes will be constructed to facilitate the construction of the Marsh, and a rock dike structure is also proposed to provide additional protection to West Grand Terre Island and Fort Livingston.

The scope of services for this project phase entails performing necessary planning analysis to determine size and scope of the project as well as engineering, design, land rights and permitting activities within a very expedited timeline to achieve a Final Design and Bid Package. Other areas of specialty may be required to successfully accomplish the scope of this project phase.

4.1 MINIMUM REQUIREMENTS

Due to the complex requirements for the design and implementation of this project, it will be a requirement for the Contractor to employ highly-specialized personnel on a full-time basis. The following full-time personnel are required for the Contractor's project team, either through direct employment or through use of an experienced and qualified Subcontractor:

A. **One Landrights Manager** with at least 15 years of experience and whom is responsible for project landrights oversight, coordination, schedule, budget and QA/QC of landrights deliverables. Land Rights Manager must have experience in federal acquisitions and relocations and leads a team of qualified and experienced personnel further identified under Appendix C.

B. **One Project Scientist** with a minimum of 3 years of Section 10/404 permitting experience with the U.S. Army Corps of Engineers, New Orleans District, to provide environmental science, science, or specialist consulting services.

C. **One Professional Engineer**, holding a current license from the Louisiana Professional Engineering and Land Surveying Board, with a Masters Degree in Civil or Coastal Engineering from an ABET-accredited engineering program. The Engineer shall have at least five years of experience in the following areas: design and analysis of sediment dredging operations and containment; numerical studies of coastal processes including cross-shore (beach profile) modeling; shoreline modeling; morphological modeling and wave modeling; preparation of inlet management plans; design of coastal structures; and, sediment/littoral budget analysis. Extensive hydraulic and hydrodynamic analysis experience in a coastal wetland or marine environment is preferred.

D. **One Geologist/Geophysicist,** preferably a Professional Geologist, with a Masters level of education and at least five years of experience in the following areas: coastal processes; coastal geomorphology; coastal sedimentology; geotechnical investigation for offshore sand searches; and interpretation of geophysical data, including—but not restricted to—high-resolution seismic, bathymetry, side-scan sonar, and magnetic data.

E. **One Hydrographer** with at least five years of experience in hydrographic surveying, including two years of technical supervision of surveys and two years of field experience. Shall be well-versed in undertaking geophysical surveys and geotechnical investigations as related to offshore sand searches using the latest state-of-the-art equipment. Certification as a Hydrographer by the American Congress on Surveying and Mapping (ACSM) is preferred.

F. **One Professional Land Surveyor** licensed in the State of Louisiana.

G. **One Professional Civil Engineer** with specialized training and experience in geotechnical engineering, holding a current license from the Louisiana Professional Engineering and Land Surveying Board shall oversee all engineering work performed for the geotechnical investigation and geotechnical analyses.

H. **One Project Manager** with at least ten years of relevant experience in project management and whom will be responsible for delivering the West Grand Terre Beach Nourishment and Stabilization Project per the planned and agreed upon scope of work, budget, and schedule, and serve as the main line of communication and point of contact with the CPRA Project Manager. The Project Manager must have demonstrated experience of successfully utilizing schedule compression techniques on projects of a related nature and of a similar or larger scale.

I. **One Principal Investigator** who meets the Archaeologist Qualifications as published in the Louisiana Register dated April 20, 1994, and has completed the course on Section 106 of the National Historic Preservation Act offered by the Advisory Council, or its equivalent training.

5.1 SCOPE OF WORK

5.2 Project Management

The Contracting Party will be responsible for providing overall project management but not limited to developing and maintaining task budget and schedule, scoping the work of all sub-consultants and administration of their tasks, maintaining accurate project data, maintaining and

providing project records in a record management system, providing itemized task schedules in a P6 format and conducting and documenting project meetings.

5.3 Project Initiation and Planning

The Contracting Party will gain an understanding of the intended outcome of the West Grand Terre Beach Nourishment and Stabilization Project based on the RESTORE proposal and application, the State Master Plan, and a review of previous work completed under CPRA expectations. The Contracting Party will proceed with project initiation steps to include: Project Vision, Project Definition, Team Charter, and Project Delivery Planning. Please reference Appendix D for additional information.

5.4 Engineering and Design

The Contracting Party shall review the following subtasks for design, permitting, and environmental compliance for the development of all the deliverables specified in Section 6.0. These tasks should be used as a guide for the development of the Contracting Party's final scope of work and detailed work plan. Therefore, additional subtasks may be required based on the Contracting Party's design team experience, expertise, and rationale.

5.4.1 Data Collection

5.4.1.1 Review Existing Data

The Contracting Party shall obtain and review all existing coastal data, models, studies, reports, bathymetric data, geotechnical and geophysical data, and other data pertaining to the design of this project. A data gap analysis shall be performed to evaluate data needs and develop a data acquisition plan. This effort shall be optimized to meet the schedule milestones.

5.4.1.2 Topographic and Bathymetric Surveying Services

Develop and prioritize a topographic, bathymetric, and boundary survey plan to obtain sufficient data for finalizing the location of the proposed design features, which should be of a sufficient level for permitting, environmental compliance, and construction. This effort shall be optimized to meet the schedule milestones and shall include but not be limited to the following subtasks:

- Coordination with land owner investigations
- Establishment of survey monuments and/or temporary bench marks
- Locate and identify ALL existing pipelines, infrastructure, and utilities
- Survey Report

5.4.1.3 Geotechnical Subsurface Investigation

Develop and prioritize a geotechnical subsurface investigation plan to obtain sufficient data for identifying and quantifying the source of suitable fill material, and for the design of the beach/dune, marsh, shoreline features, and other project features, which should be of a sufficient level for permitting, environmental compliance, and construction. This effort shall be optimized to meet the schedule

milestones and shall include but not be limited to the following geotechnical engineering subtasks:

- Subsurface investigation layout
- Geotechnical Analyses
- Geotechnical Engineering Report

5.4.1.4 Numerical Modeling

Develop an optimal numerical modeling plan to assess regional hydrodynamics, regional waves, sediment transport, beach/dune and marsh hydrodynamics and morphological changes, and impacts on wave climate due to borrow site dredging. This effort shall be optimized to meet the schedule milestones.

5.4.1.5 Data Collection Summary Report (20% Design)

The Contracting Party shall prepare the Historical and New Data Collection Summary Report. Supporting information and data shall include, but are not limited to, coastal processes; ownership, oyster lease, oil/gas activity, and existing contour maps; fill source maps; preliminary survey report; preliminary geotechnical report; existing adjacent marsh types/habitat maps; and, preliminary feasibility and risk assessment.

5.3.2 Preliminary Design (30% Design)

The primary goal of the preliminary engineering design task is to develop design parameters and permit parameters through the use of existing data, numerical modeling, and preliminary data acquisition, for the design of each proposed features. A Preliminary Design Report is to be prepared which will document physical conditions, coastal processes in the project area, including all coastal modeling results, geotechnical conditions for the shoreline protection feature and at the beach/dune and marsh placement areas and borrow sites, and cultural resources. The report will also summarize the development and evaluation of conceptual restoration alternatives and will present a recommended design, including quantities and costs. These efforts should be of a sufficient level and shall be prioritized to meet schedule milestones. The scheduled submittal date for the permit application process is anticipated to occur upon delivery of the Preliminary Design Report.

5.3.3 Final Design (95% Design)

The primary goal of the final design of the recommended project features is the development of a construction bid package for the proposed project, and to finalize all remaining permitting questions and rationale for compliance. This design effort should be of a sufficient level and shall be prioritized to meet schedule milestones.

5.3.4 Construction Bid Package (100% Design)

The Contracting Party shall prepare the Construction Bid Package which shall include the schedule of items to be bid upon by proposing contractors.

5.4 Land Rights Services

Landrights Necessary for Data Collection:
The Contracting Party will be responsible for acquiring the necessary landrights easements, servitudes or other access agreements necessary for surveys or other site investigations. CPRA may assist the Contracting Party with obtaining access if necessary.

Landrights Necessary for Project Construction:
CPRA shall reserve its rights to retain responsibility for the acquisition of all lands, easements, rights-of-way, relocations, servitudes, dredged material disposal areas and servitudes (LERRDS) necessary for project construction. As part of the landrights acquisition process, CPRA would then identify affected landowners, oil and gas activities and oyster leases, as well as coordinate with affected landowners during the preliminary design process to include concerns and comments necessary for landowner acceptance.

However, as part of the SIQ submittal, CPRA requires the Contracting Party provide qualifications to perform all land rights tasks as set forth in Appendix C.

5.5 Permit Development

The Contracting Party will be tasked to develop a complete Joint Permit Application package including all aspects and features of the project. The Contracting Party shall be responsible for providing data for all the necessary NEPA compliance and permitting, including documentation of the predicted environmental benefits. The Contracting Party shall indicate in the design any buffers for avoidance of sensitive areas, including cultural resources. The Contracting Party shall be responsible for preparing and submitting a Coastal Use Permit, and a Section 10/404 Permit. In the event that the borrow source is located within the Outer Continental Shelf, then the contractor will be tasked to coordinate with BOEM.

5.6 Adaptive Management and Monitoring

The primary goal of the adaptive management plan is to put into place key management and monitoring parameters that will be required for project success. The Contracting Party will develop an adaptive management and monitoring plan that identifies key monitoring elements to assess the success of the project as related to its goals and objectives. The draft Adaptive Management and Monitoring plan shall be submitted as part of the Preliminary Design Report. The final Adaptive Management and Monitoring Plan shall be submitted as part of the Final Design Plan.

6.0 DELIVERABLES

Develop a Historical and New Data Collection Summary Report, Preliminary Design Report, Final Design Report, Environmental Documents, Construction Cost Estimate, Plans and Specifications, Permit Package(s), and Construction Bid Documents.

7.1 STATEMENT OF INTEREST AND QUALIFICATIONS (SIQ) SUBMITTAL REQUIREMENTS

If interested, firms should submit a SIQ that highlights the track record of the prime firm/team on successful implementation of large scale coastal projects of similar size, type and complexity. The

CPRA will review the SIQs in an effort to select a firm/team that displays a thorough understanding of the implementation process with a proven track record of success. In addition, the submittal should emphasize the firm's understanding of the following:

- Accelerated project delivery methods
- Major components of the engineering and design phase process and course of action necessary for completion of the design phase as it relates to barrier island restoration and shoreline protection.
- Expertise and experience working in a coastal and marine environment with an emphasis on the Louisiana coast and Barataria Bay hydrodynamics and coastal systems.
- Expertise and experience performing land rights services as indicated in Appendix C.
- Anticipated environmental compliance associated with coastal restoration projects.

Firms should also document their current workload and capacity to fulfill the requirements of the engineering and design phase process in an optimal timeframe. The firm should include in the SIQ a detailed work plan and schedule which demonstrates the firm's understanding of the item described in the previous paragraph and shall include the persons, or Subcontractors who will be responsible for each task. Relevant experience of the person or Subcontractor shall be included in the work plan and schedule outline.

Any questions regarding this Request for Statement of Interest and Qualification should be submitted by email to Ms. Gloria Tigner at CPRAcontracts@LA.GOV and received by 3:00 p.m., June 10, 2016.

Official responses to all questions submitted by potential proposers will be posted at http://coastal.la.gov/resources/doing-business-with-cpra/contracts-and-grants/.

Submittals should be no more than fifty (50) pages in length including contents pages, and SIQ supporting appendices and resumes. Text shall not be smaller than a font size of 10. Elaborate submittals are not required and are discouraged. Included in your SIQ should be (1) an executive summary stating the firm's particular expertise, resources and advantages they or their team will bring to the agency. This summary is limited to two pages; and (2) Standard Form CPRA 24-102 (SF 24-102) which is attached in Appendix B and is required to be filled by both prime contractor and subcontractors separately. In the event the SIQ contains subcontractors, the particular task they will perform together with the relevant experience should be included. Also, if the subcontractor is a Disadvantaged Business Enterprise (DBE) or participates in the Hudson/Veteran's Initiative, they shall include supporting documentation. Names listed on Standard Form CPRA 24-102 must precisely match the names filed with the Louisiana Secretary of State, Corporation Division, and the Louisiana State Board of Registration for Professional Engineers and Land Surveyors. Resumes or any organizational chart included in SF 24-102 shall clearly state the location (city and state) of the office in which the staff member resides. Any potential contractor failing to submit any of the information required on the SF 24-102 will be considered non-responsive.

One signed original, by an authorized representative of the prime firm and six (6) paper copies of the SIQ, along with a digital copy of the SIQ in pdf format on a CD-ROM or USB flash drive, shall be included in the submittal. SIQ's will be accepted until 3:00 p.m., on June 27, 2016. Statements must be addressed to:

Ms. Gloria Tigner
CRP Supervisor
Coastal Protection and Restoration Authority
450 Laurel St, Suite 1501, North Tower
Baton Rouge, Louisiana 70801

and if not mailed, may be hand delivered to

Ms. Gloria Tigner
CRP Supervisor
Coastal Protection and Restoration Authority
450 Laurel St, Suite 1501, North Tower

Baton Rouge, Louisiana 70801

Timely submission of the SIQ is the responsibility of the prime firm. SIQ's received after the deadline date of 3:00 p.m., June 27, 2016 will not be considered nor reviewed.

The selected firm will be posted at:
http://coastal.la.gov/resources/doing-business-with-cpra/contracts-and-grants/. **If selected, the firm shall be prepared to negotiate a full scope, fee and schedule on an expedited timeframe immediately following the date of notification.**

Firms electing to submit a proposal as a prime contractor cannot be listed as a subcontractor on another firm's proposal. Firms not submitting as a prime contractor are allowed to be listed as a subcontractor on as many proposals as they deem appropriate.

The general criteria to be used by the CPRA in evaluating SIQ submittals for the selection of a potential contractor and their sub-contractors to perform the services are:

Firm/Team Specialized Experience **0-30 points**

- Firm/Team shall be evaluated based on project specific expertise, experience and resources related to applicable work performed for CPRA or similar projects performed for other agencies with emphasis on the Louisiana coastal and marine environment. Firm/Team should provide their proposed project approach explaining the methodology for the design of the project which should reflect an understanding of the project and its objectives and a schedule for the work.
- Primary focus should be on prime consultants' experience however sub-consultants experience will be considered based on the element of work identified in Standard Form CPRA 24-102.

Key Personnel Qualifications and Experience **0-30 points**

- Evaluates the professional qualifications of key personnel of the firm's project team related to the work described in the RSIQ, including academic attainment, professional achievements, relevant experience and project responsibilities. While firm principals are listed, they traditionally have little involvement in the project tasks; therefore emphasis should be placed on the experience of project managers, project engineers and technical staff with similar size/type projects.

Capability of Firm **0-25 points**

- Evaluates the firm/team ability to successfully provide services similar to those required by the agency, expedited in a manner reflecting the urgent priority of CPRA, the funding program, the eroding nature of the project site, and the closing window of opportunity to accomplish the goals of the project. Criteria include past performance, knowledge of locality, coordination and cooperation with agency staff, ability to meet and exceed the client's expectations on schedule, deadlines, budgets, and quality of work.

Capacity of Firm **0-15 points**

- Evaluates the firm/teams ability and capacity to perform multiple projects simultaneously, and to complete work efficiently in an urgent manner.

The CPRA reserves the right to reject any and all submittals for this RSIQ invitation. This invitation does not constitute an acceptance of any offer, nor does such invitation in any way obligate CPRA to execute a contract with any offeror. CPRA reserves that right to negotiate final terms, including scope, budget, rate sheet, contract type, and contract amount, with the successful submitter prior to the awarding and execution of the contract. The final decision to execute a contract with any party rests solely with CPRA.

All potential contractors should be advised that contractors may, in certain circumstances be deemed public employees as defined by the Ethics Commission. Full disclosure to the CPRA is required of any potential conflicts. Any potential conflicts shall be resolved with the Ethics Commission prior to seeking a contract. The commission on Ethics for Public Employees is located at 617 North Third Street, LaSalle Building, 10th Floor, Baton Rouge, LA 70802; telephone number 225 219-5600; toll free at 1-800-842-6630.

According to the provisions of LA. R.S. 12:301-302, any corporation which is not incorporated in the State of Louisiana must obtain a certificate of authority to transact business in Louisiana from the Louisiana Secretary of State, Corporations Division, 3851 Essen Lane, Baton Rouge, Louisiana 70809, Phone no. (225) 925-4704.

For-profit and non-publicly traded corporations must provide a Disclosure of Ownership form when contracting with CPRA. The Disclosure of Ownership should not be submitted with SIQ. However, prior to contracting with the CPRA, the forms must be completed, notarized, and submitted to the Louisiana Secretary of State, Corporations Division, 3851 Essen Lane, Baton Rouge, Louisiana 70809 and a copy stamped by the Corporations Division must be provided to the CPRA.

The firm, engineers, or surveyors that will accomplish the work as described in this RSIQ, shall be certified by the Louisiana State Board of Registration for Professional Engineers and Land Surveyors and shall possess current licenses throughout the term of the contract. The firm, engineers, or surveyors shall provide all services in compliance with the registration law for Professional Engineers and Land Surveyors (L.R.S. 37:681 through 37:703 as amended by Act 568 of 1980) and the rules of the Board of Registration for Professional Engineers and Land Surveyors.

APPENDIX A - PROJECT MAPS
APPENDIX B - CPRA-SF24-102
APPENDIX C - SCOPE OF LANDRIGHTS SERVICES
APPENDIX D - PROJECT INITIATION AND PLANNING
APPENDIX E – SAMPLE OF PROFESSIONAL SERVICES CONTRACT