

Virginia Key Beach Park Trust

Construction Projects Descriptions – Draft 7/21/05

The Entry Road Planning, Design & Construction

The design and construction of the Virginia Key Beach Park main entry and entry road enhancements and beautification would consist of a design plan that would dress the approach into the beach park from Rickenbacker Causeway onto Virginia Key Beach Road from either North or South. The design would create a grand entrance that includes a themed and highly visible sign at Rickenbacker Causeway, an impressive entrance gate or portal, rain water drainage control, pedestrian walkways, vehicular travel, with safe and convenient entry and exit into the (NOAA), U.S. Fisheries and University of Miami facilities. It will also include exotic plant removal and native plant installation in a visually pleasing design considerate of maintenance issues, privacy to the Beach Park and neighbors and security concerns.

The Nature Center Planning, Design & Construction

The Nature Center at Virginia Key Beach Park will follow the most recent and progressive design and construction principals and standards of “green” building architecture and construction. The approximately 3,000-5,000 square foot center would provide meeting and research space for students and others in a natural environment that blends with the existing natural space. The design would adhere to storm surge and other durability factors while taking full advantage of the existing views and vistas inherent to its location near the shoreline of Virginia Key. Staff office space, reception area and limited display and exhibit space is required along with interactive and other electronic educational information systems.

Tree and Brush Clearing at VKBP

82.5 acre Virginia Key Beach Park has approximately 20-25 acres of exotic plant over growth covering shoreline and recreational areas. The exotic plants present on the park largely consist of Brazilian Pepper and Australian Pines and a variety of other bushes. Tree and under brush clearing on Virginia Key Beach Park will require selective exotic plant removal throughout the park. Phase one of the clearing would involve the shoreline areas, picnic areas and exotic vegetation near recreation and historic elements.

Shoreline Promenade, Design and Construction

The shoreline promenade or boardwalk design for the shoreline areas of Virginia Key Beach Park stretches for approximately one mile. The promenade will provide a space for walking, jogging, resting/sitting, viewing natural scenery, shaded areas, event and ceremonial pavilions. The promenade will follow the contours of the natural dune structure on the landward side of the dune. The construction style of the promenade will allow it to also function as a barrier between the beach shoreline and public at section of beach where restricting some access is needed. Low level lighting and the ability to broadcast music or announcements may be needed also. Section of the walkway may allow for the installation of outdoor exhibits, informational kiosks, storytelling panels, tree or plant/flower boxes, etc.

Mini Train, Track & Train Station, Purchase, Transportation, Design and Construction

The construction of the historic mini-train and train station depot at Virginia Key Beach Park involves re-construction of the mini-train track, purchase of an antique and refurbished train and cars and the construction of a train depot. The train will have passenger cars and one passenger car modified to meet or exceed ADA regulations. Storage of the train will require fitting the existing and recently re-furbished train tunnel with security doors that both security the train and obscure it from view and blend in with the theme and style of the antique railroad. The mini-train track not only will follow the historic foot print (approximately ¼ mile loop) of the previous Virginia Key Rickenbacker Express as closely as possible but will have crossing signals and protective railway barricades for pedestrians' protection and safety. The train station will follow the same theme of the antique railway with modern upgrades to accommodate ADA regulations, weather conditions and hurricane standards. There will also be outdoor information stations or storytelling exhibits.

The construction project's scope of work would include locating a viable mini train and track for Virginia Key Beach Park, inspection of the mini train and track before purchase, negotiation of the mini train and track purchase, transportation of the mini train and track and final installation and inspection.

Carousel Purchase, Transportation, Installation

The completion of the historic carousel at Virginia Key Beach Park includes locating a viable Allan Herschell carousel replacement for the Virginia Key Beach Park carousel building. The carousel building has been restored in a phase #1 restoration and repair construction project at the beach park. The scope of work will also involve the inspection of the carousel before purchase, negotiation of the carousel purchase, transportation of the carousel, final installation and final inspection after installation.

Children's Play and Splash Area, design and construction

The design and construction of the children's play and splash area at Virginia Key Beach Park is a new addition to the historic beach park to add additional water play areas in a safe and easy to monitor venue. The scope of work will include multiple phases of the design, site preparation and construction of the VKBP children's play and splash area. The area's scope of work will include and is not limited to climbing structures, sand box play areas, additional seating for children and adults, shade pavilions, water fountains, exercise structures, attractive landscaping, construction costs and timelines.

Picnic Areas, Design and Construction

A highlight of historic Virginia Key Beach Park will be new and attractive picnic areas. The scope of work for this park-wide project is to design a picnic facilities layout throughout the beach park and installation phases to accommodate the Trust construction schedule. The areas would include benches, tables, BBQ grills, trash receptacles, shade pavilions and additional seating. Construction costs, timelines, purchase, installation and final inspection of the picnic facilities is also necessary.

Sand Removal, spreading and Grading at VKBP

In the past portions of Virginia Key Beach Park were used as a dumping ground for approximately 60,000 cubic yards of spoil dredged from Biscayne Bay and surrounding areas. The exiting spoil is currently located in two large mounds on the beach park. In accordance with the Virginia Key Beach Park Master Plan the mounds of spoil will be moved and used to level low sections of the beach park's terrain. The grading and leveling of the property with the exiting spoil will help fill areas of the park that experience rain water drainage problems or require additional elevation.

The scope of work should include surveying areas of the Beach Park, exotic tree and brush removal, construction costs, timelines and final construction.

Electrical Plan Installation, Design and Construction

The Virginia Key Beach Park Master Plan requires extensive upgrades and enhancements to the existing electrical infrastructure on the historic beach park. The scope of work will include the execution of the electrical master plan developed by IMDC, Inc. It should also include the design solutions for electrical capacity for the "event lawn" area, the future museum/Cultural Center, maintenance facility, future picnic pavilions, nature center and other major features throughout the beach park. The project will include the installation of recommended lighting fixtures, some exotic tree and brush removal, construction costs and timelines, final tests and inspections.

Landscape Architect, Design and Construction

The entire 82 ½ acres of Virginia Key Beach Park is a living museum. It is essential that the landscape architecture of the historic property maintain the native natural landscape while adding an impressive visual impact. The landscape project must coordinate closely with the Virginia Key Beach Park Museum/Cultural Center design team to follow the design cues of that premier structure.

The scope of work should provide a blue print in several phases of design and installation for achieving the overall landscape enhancement of the park. The design should use native trees and plants as frequently as possible, some exotic tree and brush removal is necessary, construction and installation costs and timelines.

Water Supply Plan, Design and Construction

The Virginia Key Beach Park Master Plan requires extensive upgrades and enhancements to the existing water supply infrastructure on the historic beach park. The scope of work will include the development of a water supply plan. It should also include the design solutions for electrical capacity for the “event lawn” area, the future museum/Cultural Center, maintenance facility, future picnic pavilions, nature center and other major features throughout the beach park. The project will include the installation of recommended lighting fixtures, some exotic tree and brush removal, construction costs and timelines, final tests and inspections.

Quality Assurance Consultant

The diverse nature of construction projects and the unique characteristics of the historic Virginia Key Beach Park site make it vitally important to maintain quality standards and to meet or exceed building and design codes and requirements. The consultant’s scope of work would require the services of a professional and licensed quality assurance firm to monitor the building standards, make recommendations, and assure quality throughout the planning, design and construction phases of work on the beach park. They would see that work standards meet or exceed all applicable codes throughout the VKBP construction projects. It should also include the phases of construction project review, inspection timelines coordinated with building schedules and costs.

Construction Manager

The planning, design and construction process of the Museum/Cultural Center at Virginia Key Beach Park was developed in four phases. Lord Cultural Resources and Management contracted with the Virginia Key Beach Park Trust to complete Phases A & B. Both phases of the project are near completion.

The Trust now is entering into Phases C & D which will require the retention of the services of a professional and licensed construction management firm to manage the construction schedule of VKBP construction projects. The construction manager scope of work will focus on the construction of the Museum/Cultural Center, Museum Exhibits, Scenic Gardens, Solar Gateway, Nature Center, Rental Pavilion, Outdoor Exhibits and overall build out of the 82 ½ acres historic beach park. It should also include the phases of construction projects; capital costs projections, fee schedules, detailed timelines and complete build out plans.

Cost Analysis Consultant

The diverse nature of construction projects and the unique characteristics of the historic Virginia Key Beach Park site and budget limitations and restrictions make important to be efficient during the procurement, design, strategic planning and construction of the beach park. A wide variety of construction projects from landscape engineering to high-end museum design and construction will take place requiring a variety of materials and high quality construction and finishes; the costs of which should remain responsible and in accord with market levels. The consultant's scope of work would require the services of a professional and licensed cost analysis firm to monitor costs for construction, purchasing resources, planning and design fees and many other contracted services the Virginia Key Beach Park Trust may procure during the overall build out of the beach park. The consultant would make recommendations that aide the Trust in making informed and fiscally responsible decisions throughout the VKBP construction phases. It should also include a schedule of construction project review, recommendation phases, timelines coordinated with building and contractual schedules and overall costs.

Food Vendor/Concession Stand, Negotiations and Selection

Historic Virginia Key Beach Park has a variety of revenue generating features and facilities available to it. The historic concession stand building will provide refreshments and replicate many of the historic snacks and beverages that were available in the past. The vendor that occupies the concession stand will negotiate a lease and vendor contract with the Trust. The contract should also include menus, sales projections, management and staff team, payment schedules to the Trust, lease timelines, start up timelines and costs and cost sharing if any.

Storage & Maintenance Facility Design and Construction

RFP for Design Team contractor selection. SOW to include planning, design, site preparation and construction phases of a maintenance facility and offices on VKBP. It should also include and construction costs and timelines.

Signage for Park Attractions Design, Fabrication and Installation

RFP for contractor selection. SOW to include the creative design, fabrication and installation of recommended signage throughout VKBP. The signage should meet the appropriate materials and design standards for the sign while maintaining a common theme representative of VKBP. It should also include design and fabrication costs, timelines, design drafts, installation costs and final inspection.

Picnic Pavilions and Shelters Installation

RFP for contractor selection. SOW to include several phases of the design and/or product selection and installation of picnic area pavilions on VKBP. The pavilions would accommodate picnic facilities such as benches, tables, BBQ grills, trash receptacles, and additional seating. Construction costs, timelines, purchase and installation and final inspection.

Virginia Key Beach Park Museum

Virginia Key Beach Park Exhibits