

# FEDERAL CONSISTENCY DETERMINATION REQUEST

## **CRUZ BAY HEAD START Rem. Est. Contant & Enighed, Cruz Bay QTR, St. John, U.S. Virgin Islands**

USVI DEPARTMENT OF HUMAN SERVICES  
HEAD START & EARLY HEAD START PROGRAM  
ST. JOHN, US VIRGIN ISLANDS



Prepared by:  
CPH, Inc.  
950 Ponce de Leon Avenue  
San Juan, PR 00907

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# INTRODUCTION

The US Virgin Islands Department of Human Services is proposing the demolition of an existing two-story structure to construct a new head start facility. The existing structure is approximately 55 feet by 50 feet with an approximate area of 1,614 square feet. The existing structure was severely damaged by Hurricane Maria on September 20, 2017. The storm produced strong destructive winds, power outages, down power lines, structure and property damage and fallen trees. The structure is currently abandoned.

The existing building was constructed prior to the major hurricanes in the late 80's from Hurricane Hugo to the more recent hurricanes, Irma and Maria. Since the time of Hurricane Hugo in 1989, the Virgin Islands has adopted, first the Uniform Building Code for structures, and more recently, the International Building Code. Besides the existing poor condition of the buildings on site. Caused by damages from past hurricanes, their old construction cannot meet the structural requirements of the 2018 International Building Code. Furthermore, the existing structure cannot accommodate the program requirements for a functional facility.

# PROJECT LOCATION

This project area comprises 0.2622 acres track of land owned (by the Government of the V.I.) and is located at Rem. Est. Contant & Enighed, Cruz Bay QTR, St. John, U.S. Virgin Islands. The property ID# is 308101131200.

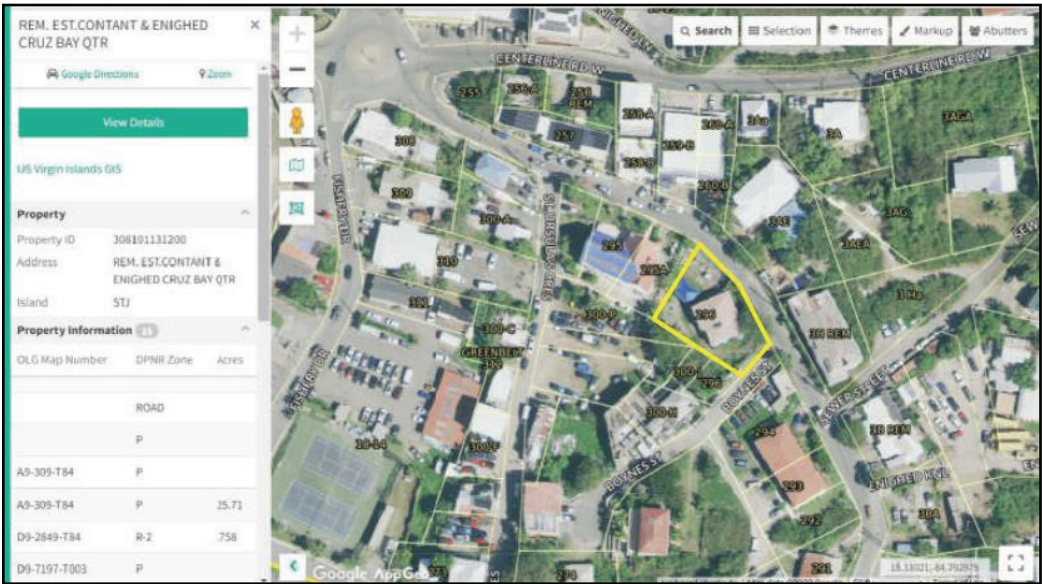


Figure 1: USVI GIS online MapGeo and Property ID

The property is limited: to the North by Highway 104 (Southside Road) and 205-A Cruz Bay Town, Cruz Bay QTR owned by the Episcopal Church of the Virgin Islands with property ID#

308102180300; to the South by Boynes Street; to the East by Highway 104; and to the West by  
rems of the same property. Project GPS coordinates are: latitude 18.329806 / longitude -64.791834.

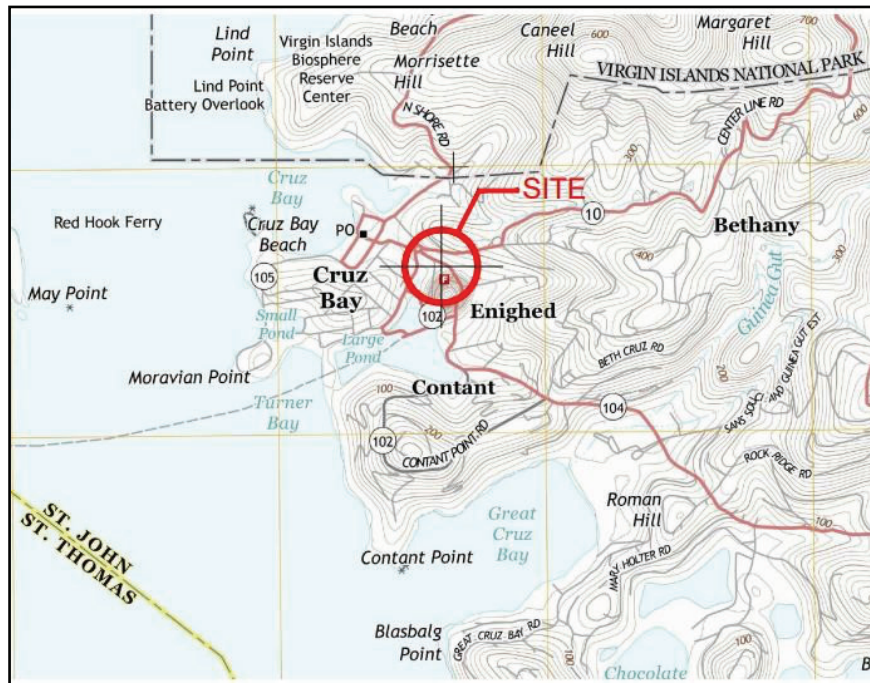


Figure 2: Site Location – USGS Cruz Bay VI Quadrangle - Topo Map



# SITE DESCRIPTION

## GENERAL

The site is completely developed and occupied by a two-story structure, concrete floor outside pads and a septic tank, playground and a canopy area. The site has no parking spaces. This building is constructed of 8" concrete masonry unit (CMU) walls with corrugated galvanized roofs and reinforced concrete floors. The property is currently abandoned.



Figure 3: Existing Conditions Survey of Site

**PHOTOS**



Photo 1: Side View from the Main Roadway



Photo 2: Front View from street

# ENVIRONMENTAL IMPACTS

## TOPOGRAPHY AND DRAINAGE PATTERNS

The existing topographic contours range from approximately 37 feet MSL at the north western corner of the property to 46 feet along the northern limit. Roughly, the property drains topographically toward the north western corner of the property. Adjacent roads elevations are approximately 45 feet along Boynes Street on the south of the property and between 46 and 47 feet along Hwy 104

## SOILS

According to the USDA online Soil Survey, soils within the project area are classified as Cinnamon Bay gravelly loam, 5 to 12 percent slopes, occasionally flooded (CgC). The Cinnamon Bay consists of non-stony, well drained, moderately permeable soils on alluvial fans and terraces adjacent to volcanic uplands.

According to the USDA – Natural Resources Conservation Service, these soils are not considered as hydric, nor has hydric inclusions

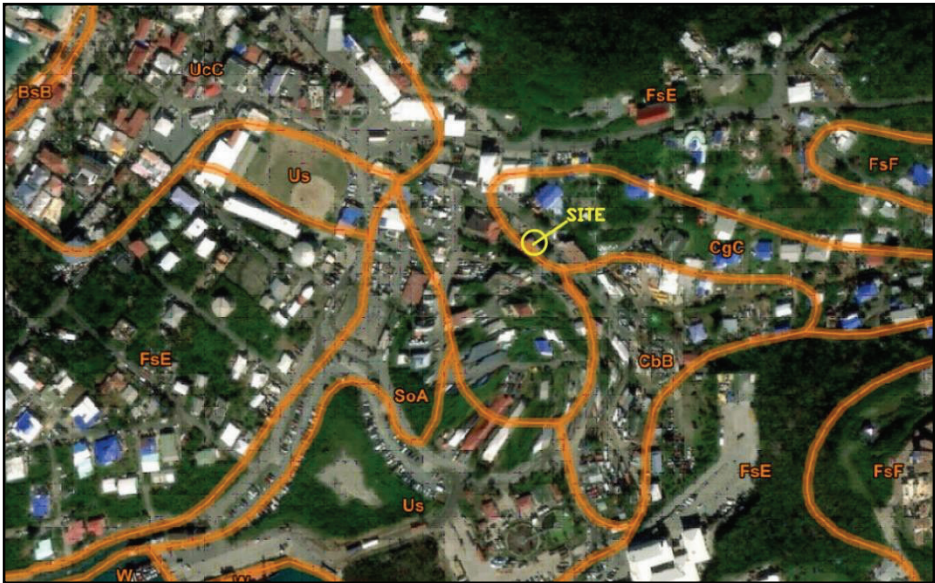


Figure 4: USDA Soil Survey Map



# FLOOD ZONES AND EROSION CONTROL

According to Panel 0047 of the US Virgin Islands Advisory Base Flood Elevation Maps, the project area is not located within flood zones. Finished Floor elevation for the two buildings to be constructed is 40 feet.

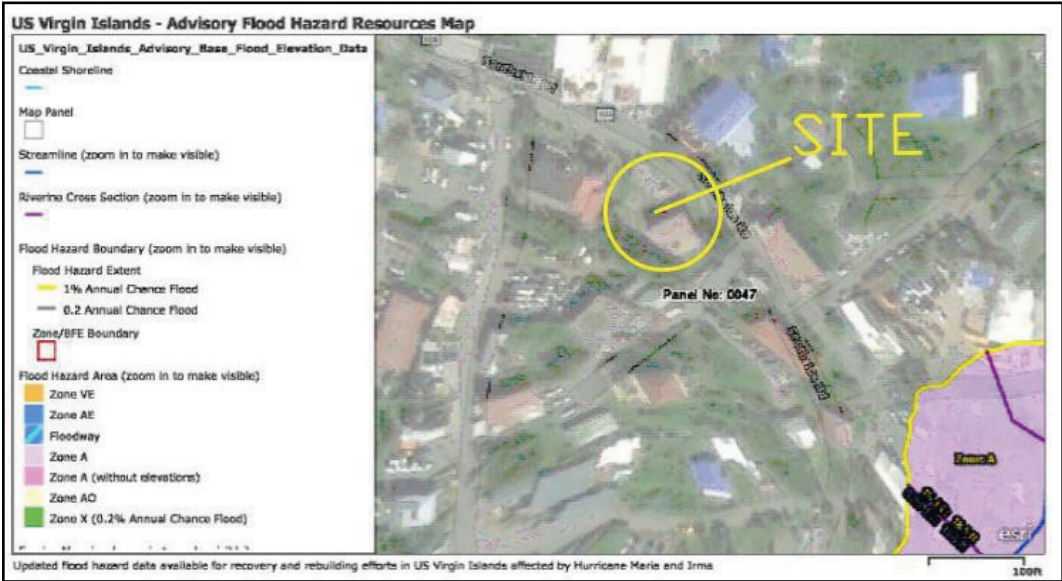


Figure 12. FEMA Flood Advisory Map

# COASTAL FLOODPLAIN, OCEANOGRAPHY AND MARINE RESOURCES

The project is located approximately 0.18 mile (943 feet) north east inland away from Large Pond Bay and 0.21 miles (1,100 feet) south east inland away from Cruz Bay in the north-western coast of St. John. No impacts are anticipated to the marine environment or from sea storm events.

# COASTAL BARRIERS

According to the USFWS IPaC (Information for Planning and Consultation) webtool, there are no coastal barriers at this location

# FRESH WATER RESOURCES

There are no freshwater resources in or in the immediate surroundings of the project area.

# TERRESTRIAL RESOURCES

The project area comprises a complete developed track of land where vegetation is limited to that planted as part of the original landscaping and opportunistic wild species that has grown in the area since it was abandoned.

## WETLANDS

According to the National Wetlands Inventory Maps, published by the US Fish and Wildlife Service, the project area is not affected by Wetlands.



Figure 6: National Wetlands Inventory Maps

## RARE AND ENDANGERED SPECIES

According to IPaC the project area is located within the occurrence range of 2 endangered and one candidate flora species. These are;

### Endangered

***Calyptanthes thomasiana*** – This species is only known to occur in the island of St. John in the USVI, the island of Virgin Gorda in the British VI and the island of Vieques in Puerto Rico. It occurs mainly on high elevations.

***Zanthoxylum thomsonianum*** (*St. Thomas Prickly-ash*) - This species is only known to occur in the islands of St. John and St. Thomas in the USVI and the island of Puerto Rico. According to IPaC there are no endangered species, natural wildlife refuge lands or fish hatcheries at this location. There are no migratory birds of special concern expected to occur at this location.

### Proposed Endangered

***Solanum conocarpum*** (*Marron bacora*) – This is a rare, tropical dry forest shrub that was once thought to be only found on St. John in the U.S. Virgin Islands; an additional population was discovered on Tortola in the British Virgin Islands in 2018.

The highly developed status of this property, also within a highly developed area, difficult the existence of any of these species within the area. However, and if necessary, a consultation with



the USFWS or any other necessary studies or consultation are to be performed as requested by the agencies.

The project site is not affected by natural wildlife refuge lands or fish hatcheries at this location. There are no migratory birds of special concern expected to occur at this location.

## **AIR QUALITY**

All of the U.S. Virgin Islands is designated Class II by the Environmental Protection Agency, in compliance with National Ambient Air Quality Standards. In Class II air quality regions, the following air pollutants are regulated: open burning, visible air contaminants, particulate matter emissions, volatile petroleum products, sulfur compounds, and internal combustion engine exhaust (Virgin Islands Code Rules and Regulations).

It is expected that excavation equipment will be used during project construction and will create combustion engine exhaust during on site use. Air quality will return to pre-construction conditions upon the completion of the construction process

An emergency stand-by generator that meets EPA clean air standards is proposed for this project. All permit applications will be filled for this equipment at the appropriate time prior to installation.

# **PROPOSED PROJECT DESCRIPTION**

The proposed project comprises the demolition of the existing structure and the construction of the new facilities. The proposed design includes, 2 buildings; one of approximately 1,695 square feet and the other of approximately 1,230 square feet, both with a FFE of 40 feet. The design incorporates 8 parking spaces including 1 for handicap, a playground area, a utility yard to accommodate a septic tank, a power generator and a cistern. There is also a designated area for garbage disposal.

The new facility's structure is designed to be resistant as required by updated design criteria for hurricanes and other seismic activity. The structure will consist of poured concrete walls and roofs. The entire project is designed to resist up to 180 mph wind forces per current code requirements which is equivalent to a Category 5 hurricane and higher.

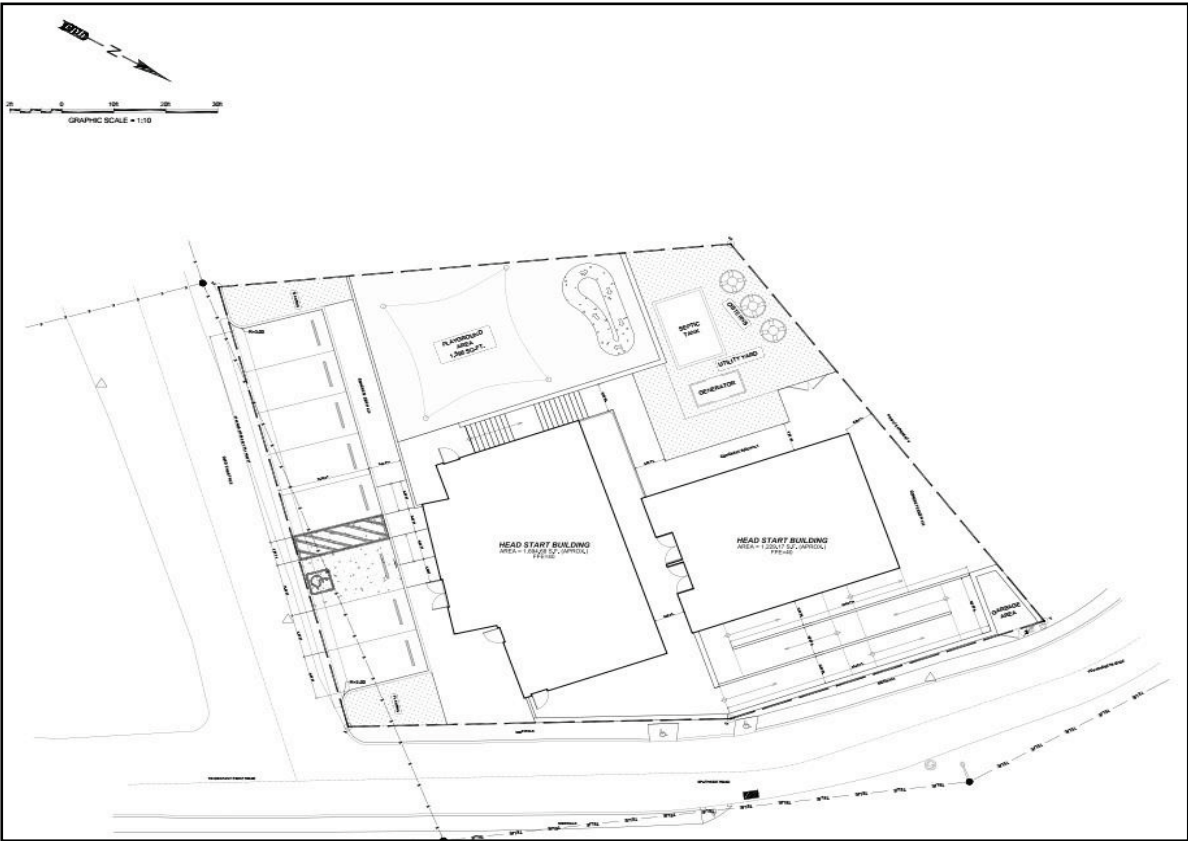


Figure 7: Proposed Master Site Plan

# **IMPACT ON MAN'S ENVIRONMENT**

## **VISUAL IMPACTS**

The proposed Head Start Facility will be a visual improvement over the existing severely damaged and abandoned facility it is replacing. The new design considered the V.I. Architecture and includes sloped concrete roofs and walls, impact resistant windows and doors for resisting hurricane and seismic forces. The buildings will be insulated per the new building code standards at the roof and walls. The metal roofs will provide long lasting weather protection. The high efficiency plumbing, HVAC and light fixtures will provide savings in water and electricity consumption. The interior finishes will include recycled and low VOC materials. Thus, the buildings will be less burden to environment meanwhile providing better setting for its occupants.



Figure 8: Aerial View Rendering





Figure 9: Eye level View Rendering at Street

## **LAND AND WATER USE PLANS**

The project parcel is zoned R-2 which complies with current Coastal Land and Water Use Plan and meets all use requirements for the zoning district as set forth in Title 29 of the Virgin Islands Code.

## **HISTORICAL AND ARCHAEOLOGICAL RESOURCES**

The proposed project comprises a completely developed track of land with no known archaeological relevance. The property is not within any declared historical zones. There is also no documentation in regards to historical ruins found at or near the site. Standard procedures will be used if any items of Archaeological relevance are observed during the excavation activities on the site.

## **WASTE DISPOSAL AND ACCIDENTAL SPILLS**

The Virgin Islands Waste Management Authority has specific guidelines and criteria for accepting construction debris. Demolition waste will be disposed of in accordance with all governing laws and regulations. Any excess excavated material will be collected, taken off- site and properly disposed of.

An assessment was conducted by GEC Corp. and all Asbestos and Lead testing results will be submitted to DPNR.

An abatement plan will be submitted to the Virgin Islands Waste Management Authority (VIWMA) prior to the commencement of demolition work.

The handling and disposal of any hazardous materials, such as the used oil from the motor pool area, and the fuel from existing generator fuel storage will be done in strict accordance with all

governing laws and regulations. The equipment will be kept in good operational condition during the proposed project timeline and refueling on site will be kept to a minimum.

## **EROSION AND SEDIMENTATION CONTROL PLANS**

Sedimentation and erosion controls will be implemented to ensure rainfall will not impact the adjacent properties and streets during construction. This will include silt fencing, gravel entrances, at the entry gate, and check dams.

## **GRADING AND STORMWATER MANAGEMENT**

Proposed site will be improved by means of earthwork, that includes deposit of fill material and grading activities. Pre and post drainage condition will be evaluated and an internal storm sewer system will be designed. Internal drainage system will be connected to an open detention area which will be included as part of final design. Preliminarily, this open detention area will be located, along the western boundary green area. stabilized with rock with an outfall that will allow storm water sheet flow into the lowest point of the site. In the project area there is no public storm sewer system available to connect the project.

To reduce site runoff due to reduction in pervious areas, an open retention pond is proposed to manage the increase with a proposed open retention pond. Additionally, all parking areas will be designed with pervious concrete to mitigate the increase of runoff, the difference will be managed through the proposed open pond and green areas.

Storm water runoff from the road, will be manage as part of the site storm sewer system design proving conveyance to allow for sheet flow, following the existing drainage path and discharge point to adjacent property.

Existing road elevation varies from 45 feet to 47 feet. Site is at a lower elevation with existing Finish Floor Elevation (FFE) varying form 37 feet to 46 feet in elevation. Proposed grading plan considers for the buildings FFE varying is 40 feet.

## **UTILITIES**

### **ELECTRIC POWER**

The project site has a high voltage connection to WAPA system with an electrical meter 120/240V with 400amps. The project required electrical load has been determined in 60kva. An electrical emergency generator with a capacity of 50 kw is also being proposed.

A consultation with Virgin Islands Water and Power Authority (WAPA) will be conducted, to determine requirements to connect the project to existing electrical system.

### **WATER**

The project site has a 3/4" SCH 40 PVC water supply line at the building and a 3/4" SCH 80 PVC water supply line to the building. It has a water meter and a water supply control valve.

A 1,200 gallons potable water cistern and pump system is also being proposed.

A consultation with Virgin Islands Water and Power Authority (WAPA) will be conducted, to determine requirements to connect the project to existing water supply system.

### **WASTE WATER - SEWAGE**

There is public sewer available at the site Southside Road, therefore, due to site elevations, a small lift station is proposed on site for sewage disposal into existing system.

The sewer water discharge has been determined 960 gallons per day.

A consultation with Virgin Islands Water and Power Authority (WAPA) will be conducted, to confirm that the sewer manhole on Southside Road is in service and that Project can be connected to it by means of the proposed lift station and force main line.



## **FEDERAL CONSISTENCY DETERMINATION**

The proposed project consists of two main phases: Demolition of the existing structures and facilities and construction of the new head start facilities. The project site is between 0.18 miles (943 feet) and 0.21 miles (1,100 feet) inland from coastal waters.

It is expected that both, the demolition of the existing building and the new construction might have the potential of impacting environmental resources, air and water quality during both demolition and construction activities. Preventive and mitigation measures, such as sedimentation and erosion control plans, will be implemented to minimize the risks for these potential environmental impacts to occur.

The proposed project occurs only within previously disturbed areas and excavation of historical or cultural resources is not anticipated. Project activities will stop if historic remains or resources are encountered, and SHPO will be contacted to determine the best course of action.

The Coastal Zone Management Act of 1972 requires that federal actions, within and outside the coastal zone, which have reasonably foreseeable effects on any coastal use (land or water), or natural resources of the Coastal Zone be consistent with the enforceable policies of a state's federally approved Coastal Management Program. The proposed facility at 8 & Matr. 36-A, Anna's Hope, St. Croix, U.S. Virgin Islands is designed to fall within existing roadways and previously disturbed areas. The project will not impact any natural resources and will improve the visual landscape in the Anna's Hope area. As proposed, it will be undertaken in a manner consistent with the enforceable policies of the U.S. Virgin Islands' CZM Program. This Federal Consistency Determination demonstrates the proposed project's compliance with the U.S. Virgin Islands' CZM Program.

The project meets each of the basic goals of the USVI for its coastal zone as set forth in the Virgin Islands Code Title 12, Conservation Chapter 21, Virgin Islands Coastal Zone Management [V.I. Code tit. 12, § 903(b)]. Additional details are as follows:

USVI Code Title Twelve Conservation, Chapter 21 § 903 (b)

**1. Protect, maintain, preserve and, where feasible, enhance and restore, the overall quality of the environment in the coastal zone, the natural and man-made resources therein, and the scenic and historic resources of the coastal zone for the benefit of residents of and visitors of the United States Virgin Islands.**

The proposed facility at Rem. Est. Contant & Enighed, Cruz Bay QTR, St. John,

U.S. Virgin Islands is designed to be within existing roadways and previously disturbed areas. The project will not impact any natural resources and will improve the visual landscape in the Area. The new design considered the V.I. Architecture such as sloped roofs and walls, impact resistant windows and doors for resisting hurricane and seismic forces. The new buildings will be less burden to environment meanwhile providing better setting for its occupants.

**2. Promote economic development and growth in the coastal zone and consider the**

**need for development of greater than territorial concern by managing: (1) the impacts of human activity and (2) the use and development of renewable and nonrenewable resources so as to maintain and enhance the long-term productivity of the coastal environment.**

The proposed project promotes the economic development and growth in the area by providing a necessary public service on the island through the development of a facility that meets the early childhood needs of the children and their parents within the greater community. The development will be within a previously developed parcel avoiding new impacts on undeveloped areas.

**3. Assure priority for coastal-dependent development over other development in the coastal zone by reserving areas suitable for commercial uses including hotels and related facilities, industrial uses including port and marine facilities, and recreation uses.**

The proposed project does not impact coastal dependent development within the coastal zone area. 0.18 miles (943 feet) and 0.21 miles (1,100 feet) inland from coastal waters.

**4. Assure the orderly, balanced utilization and conservation of the resources of the coastal zone, taking into account the social and economic needs of the residents of the United States Virgin Islands.**

The proposed Head Start Facility is designed to be within existing roadways and previously disturbed areas. The project will not impact any natural resources and will improve the visual landscape in the area. The proposed project will provide critical public services and therefore will meet the economic and social needs of the residents of the area and the community of Cruz bay and St. John on a whole.

**5. Preserve, protect and maintain the trust lands and other submerged and filled lands of the United States Virgin Islands so as to promote the general welfare of the people of the United States Virgin Islands.**

The proposed project will not impact trust lands or other submerged or filled lands of the U.S. Virgin Islands.

**6. Preserve what has been a tradition and protect what has become a right of the public by ensuring that the public, individually and collectively, has and shall continue to have the right to use and enjoy the shorelines and to maximize public access to and along the shorelines consistent with constitutionally-protected rights of private property owners.**

The proposed project will in no way affect public access to, or use of, the shoreline. The project is located well inland.

**7. Promote and provide affordable and diverse public recreational opportunities in the coastal zone for all residents of the United States Virgin Islands through acquisition, development and restoration of areas consistent with sound resource conservation principles.**

The proposed project will not affect public recreational opportunities in the coastal zone. The project will serve a public need of child care and development within the area served.

**8. Conserve ecologically significant resource areas for their contribution to marine productivity and value as wildlife habitats, and preserve the function and integrity of reefs,**

**marine meadows, salt ponds, mangroves and other significant natural areas.**

The project will have no impact on natural resources and will utilize best management practices (BMPs) to minimize areas of disturbance, thereby protecting adjacent habitats.

**9. Maintain or increase coastal water quality through control of erosion, sedimentation, runoff, siltation and sewage discharge.**

The proposed project will have no long-term change on sedimentation or erosion.

The proposed Head Start Facility at Rem. Est. Contant & Enighed, Cruz Bay QTR, St. John, U.S. Virgin Islands is designed to be within existing roadways and previously disturbed areas. The project will not impact any natural resources and will improve the visual landscape in the area. It will maintain coastal water quality through control of erosion, sedimentation, runoff, and siltation. As designed, it protects, maintains, preserves, and enhances the overall quality of the environment in the zone, the natural and man-made resources therein, and the scenic and historic resources of the coastal zone for the benefit of residents of and visitors of the USVI. It is therefore consistent with the policy set forth in the Virgin Islands Code Title 12, Conservation Chapter 21, Virgin Islands Coastal Zone Management [V.I. Code tit. 12, § 903 (b)].

**END COASTAL CONSISTENCY DETERMINATION REQUEST**

Document prepared by: Eng. Carlos J. Sanchez, PE (PE 0-43295-1B)

Carlos J.  
Sanchez  
Gonzalez

Digitally signed by  
Carlos J. Sanchez  
Gonzalez  
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author of this document  
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