FEDERAL CONSISTENCY DETERMINATION REQUEST

CONCORDIA HEAD START
Lot #180, Est Concordia (West), Frederiksted, St. Croix,
U.S. Virgin Islands

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

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June 2022
INTRODUCTION

The US Virgin Islands Department of Human Services is proposing the demolition of an existing structure to construct a new head start facility. The existing structure is approximately 48’2” long by 24’10” wide with an extended canopy that measures 48’2” long by 7’11” wide. The approximate structure area is 1,577 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 existing buildings were originally constructed prior major hurricane damage in the late 80’s from Hurricane Hugo to more recently, Hurricane Maria in 2017. 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 a track of land owned by the US Virgin Islands Housing Authority located at Lot #80, EST Concordia (West), Frederiksted, St. Croix, U.S. Virgin Islands. Property ID# is 407616031000.

![Figure 1: USVI GIS online MapGeo Property ID](image-url)
The property is limited: to the North by lot 123 Concordia with Property ID# 407612021400 also owned by the US Virgin Islands Housing Authority and occupied by a community center; to the South by lot 224 with Property ID# 407616031100 owned by Gordon, James L & Olivette; to the East by Alexander Henderson Elementary School (lot 73-A); and to the West by the road that gives access to the property, Project GPS coordinates are: latitude 17.702424 / longitude -64.867923.

Figure 2: Site Location – USGS Long Point Quadrangle - Topo Map

SITE DESCRIPTION

GENERAL

The site is completely developed and occupied by the one single story structure previously described, concrete floor patches and a cushion play pad area. The site has no parking spaces. The property has a sanitary sewer connection to public sewer system. This building is constructed of a wood structure (temporary movable structure) with metal roof.
ENVIRONMENTAL IMPACTS

TOPOGRAPHY AND DRAINAGE PATTERNS

The existing ground surface elevations on the property varies from about 82 feet MSL in the north-western corner of the property to about 87 feet along the eastern side. Roughly, the property drains topographically from east to west into Concordia road through sheet flow condition. There is no public storm sewer system available in the area.
SOILS

According to the USDA online Soil Survey, soils within the project area are classified as Glynn gravelly loam, 2 to 5 percent slopes (GyB). The Glynn series consists of very deep, well drained, moderately slowly permeable soils on alluvial fans and terraces. They formed in alluvial sediments weathered from volcanic residuum.

According to the USDA – Natural Resources Conservation Service, while these Glynn soils are not considered as hydric, it might include Aquents (AqA) inclusions when found in depressions.

Figure 4: USDA Soil Survey Map
FLOOD ZONES

According to Panel 0088 of the US Virgin Islands Advisory Base Flood Elevation Maps, the project area is within flood zone A with a defined 1% Elevation of 85.6 feet and a defined 2% elevation of 86.4 feet.

Accordingly, the finished floor elevation for the proposed structure will be approximately 89.10 feet which is more than 2 feet over known flood elevation required. Proposed playground area will be located above FEMA flood level.

Existing road elevation varies from 83 feet to 86 feet in elevation, site is at a higher elevation with existing Finish Floor Elevation (FFE) of 88.32 feet in elevation. Proposed grading plan considers for the buildings FFE is 91.40 feet in elevation.

Figure 12. FEMA Flood Advisory Map

COASTAL FLOODPLAIN, OCEANOGRAPHY AND MARINE RESOURCES

The project is located approximately 4 miles (21,120 feet) inland away from the eastern and approximately 3.5 miles (18,480 feet) inland away from the southern coastal waters of St. Croix. 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 nearby the project area.

TERRESTRIAL RESOURCES

The project area comprises a complete developed track of land with scarce vegetation.

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
ENDANGERED SPECIES AND CRITICAL HABITATS

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.

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 one building approximately 72 feet 1 inch long by 54 feet 6 inches wide for an approximate 3,826 square feet area. The site will have a playground, a utility yard, electric generator and water cistern. The design incorporates a 10 spaces parking, 8 regular and 2 for handicap.

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
LAND AND WATER USE PLANS

The project area is comprised of one parcel:

1. Parcel 180 Estate Concordia

The project parcel is zoned Public (P) 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 runoff due to reduction in pervious areas, parking areas will be designed with pervious concrete to mitigate the increase of runoff, this pavement will have a superficial area of approximately 13,108 square feet or 22.94%

Project proposed an open pond area at the lowest point of the site or outfall area and pervious pavement in parking areas. The location and details of the open pond are to be incorporated during final design. Outfall of proposed open pond will include a weir to allow for sheet flow to adjacent road, following current conditions.
UTILITIES

ELECTRIC POWER

The project site has an electric connection to Virgin Islands Water and Power Authority (WAPA) system with a 120/240V at 100A electrical meter and a 100A breaker panel. The project’s required electrical load has been determined in 85kva. An electrical emergency generator with a capacity of 60 kw is being proposed to meet this load.

A consultation with WAPA will be conducted, to determine requirements to connect the project to existing electrical system.

WATER

The project site has a 1/2-inch diameter water supply line connection to WAPA system (city water) that is actually in service. A water meter to the community center was identified to the north of the property. A connection to the existing WAPA potable water system, using the existing water meter is being proposed. A consultation with WAPA will be conducted, to determine requirements to connect the project to existing potable water system.

A potable water cistern with a capacity of one thousand two hundred (1,200) gallons with a pumping and filtering system is also proposed to supply the water demand to the various structures for emergency needs.

WASTE WATER - SEWAGE

Project site does have a connection to the exiting public sanitary sewer system by means of a 4” SCH 40 PVC waste pipe.

The proposed project considers using the existing connection to the public sewer system. The sewer water discharge has been determined 800 gallons per day.

A consultation with Virgin Islands Waste Management Authority (VIWMA) will be conducted, to determine requirements to re-connect the project to existing sewer system.
FEDERAL CONSISTENCY DETERMINATION

The proposed project consists on two main phases: Demolition of the existing structures and facilities and construction of the new Head Start facilities. The project site is approximately 4 miles inland from coastal waters.

It is expected that both, the demolition of the existing buildings 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 Lot #80, EST Concordia (West), Frederiksted, 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 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 Lot #80, EST Concordia (West), Frederiksted, St. Croix, 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.

This 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. The project site is approximately 3.5 miles (18,480 feet) to 4 miles (21,120 feet) inland away 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 St. Croix 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 served area.

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 Lot #80, EST Concordia (West), Frederiksted, St. Croix, 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