Virgin Islands Department of Education
Coastal Consistency Determination Request

Julius E. Sprauve PreK-12th Grade School Reconstruction Project,
St. Thomas, U.S. Virgin Islands

Grant Manager: #242933
FEMA Applicant Id: #000-U6P8U-00
June 1, 2022

The Virgin Islands Department of Education (VIDE) hereby requests your permission to undertake the FEMA-funded project – **Julius E. Sprauve School (JESS) Reconstruction Project**. The Julius E. Sprauve School will be located at 01-137A Catherineberg (Hammer's Farm) Cruz Bay Quarter, St. John, Virgin Islands, 00830

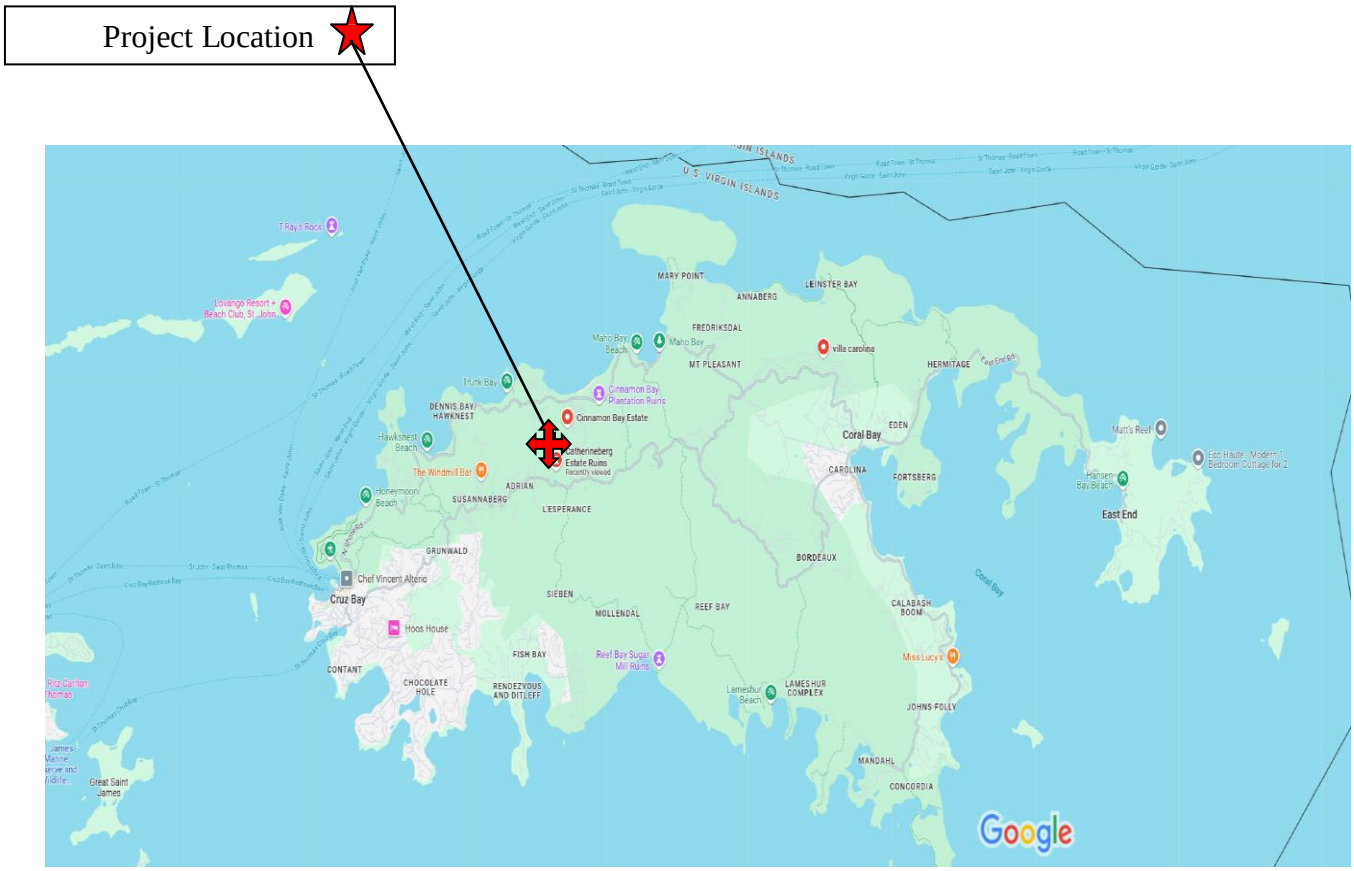


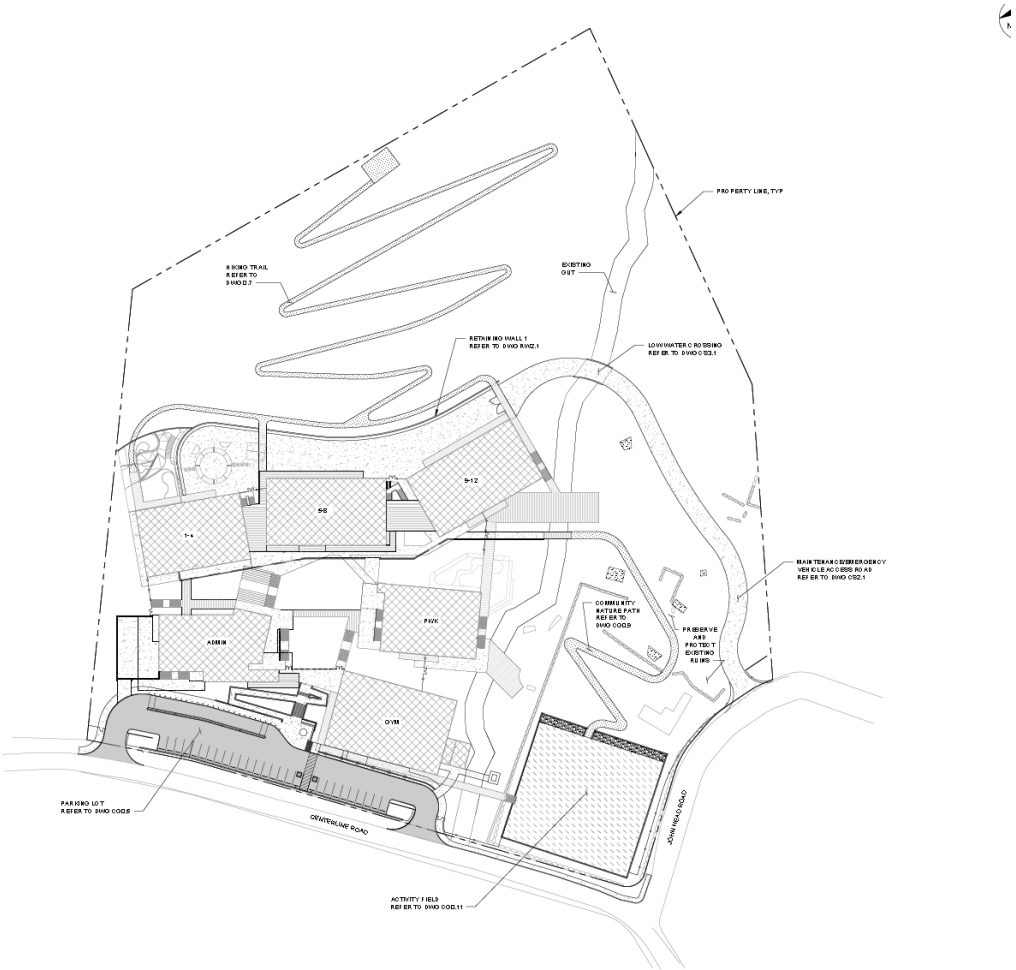
Figure 1 – USVI, St. John – Location Map, Julius E. Sprauve School

DESCRIPTION OF PROJECT

The Julius E. Sprauve School was damaged during the 2017 Hurricane Irma and Maria events and deemed unsafe for students and faculty. The Julius E. Sprauve School has been assessed and approved for replacement by FEMA. The Julius E, Sprauve School will be moved from the current location at #18-14 Estate Enighed, St. John to 01-137A Catherineberg (Hammer's Farm) Cruz Bay Quarter, St. John.

The purpose of the project is to design and construct a complete school, including classrooms, administrative offices, library, cafeteria, kitchen, bathrooms, stairways, balconies, hallways and all fixtures, equipment and contents to replace the campus with a new campus to fulfill the VIDE vision outlined in the Bridging Documents, under the Federal Emergency Management Agency (FEMA) Public Assistance (PA) program utilizing the flexibility afforded by the Bipartisan Budget Act (BBA).

The general scope is primarily to design, construct, equip and furnish new buildings complete with steel frame, concrete foundations, slabs and suspended slabs, c.m.u. walls, windows, doors, roofs, skylights, finishes, fixtures, furnishings and equipment.



I. List all of the federal and territorial permits:

VIDE Response: the project will obtain the required permits; seek and comply with Division of Fish and Wildlife recommendations; the VISHPO concurred and the FEMA's determination of No Historic Properties Affected pursuant to 36 CFR 800.4(d)(1). *(attached 1)* Detailed analysis that the project and its effects are consistent with the goals and policies of the VI Coastal Zone Management Program (VICZMP):

VIDE Response:

The Julius E. Sprauve School was damaged during the 2017 Hurricane Irma and Maria events and was deemed unsafe for students and faculty. The Julius E. Sprauve School has been assessed and deemed to be fully rebuilt.

The VIDE kindly seeks your review and approval for the required Consistency Determination certification process in accordance with the Virgin Islands Coastal Zone Management Program CZMP as required under the VI Code Section 1, VIR and Regs. Title 12, Subchapter 904, section 904-8. This project may include but not limited the security fencing, traffic control, dust control, ground disturbance, air monitoring, and site grading, on various sites of the new JESS Campus. The project was outlined in the PowerPoint presentation during a May 25, 2021, multi-agency pre-application meeting and again on May 12, 2022 at another pre-application meeting.

ENVIRONMENTAL IMPACTS

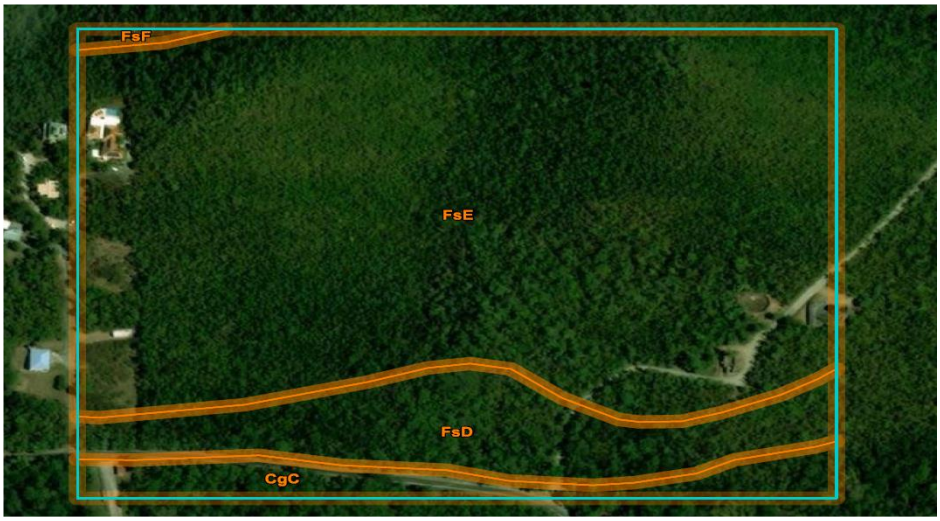
Climate/Weather
Once completed, the construction of the Julius E. Sprauve School will not be affected by climate or weather. During the construction phase, rainfall will influence the open areas created by construction. Sedimentation and erosion controls will be implemented to ensure rainfall will not affect the nearby drainage.

Prevailing Winds
The Virgin Islands lie in the "Easterlies" or "Trade Winds" which traverse the southern part of the "Bermuda High" pressure areas, thus the predominant winds are usually from the east-northeast and east.

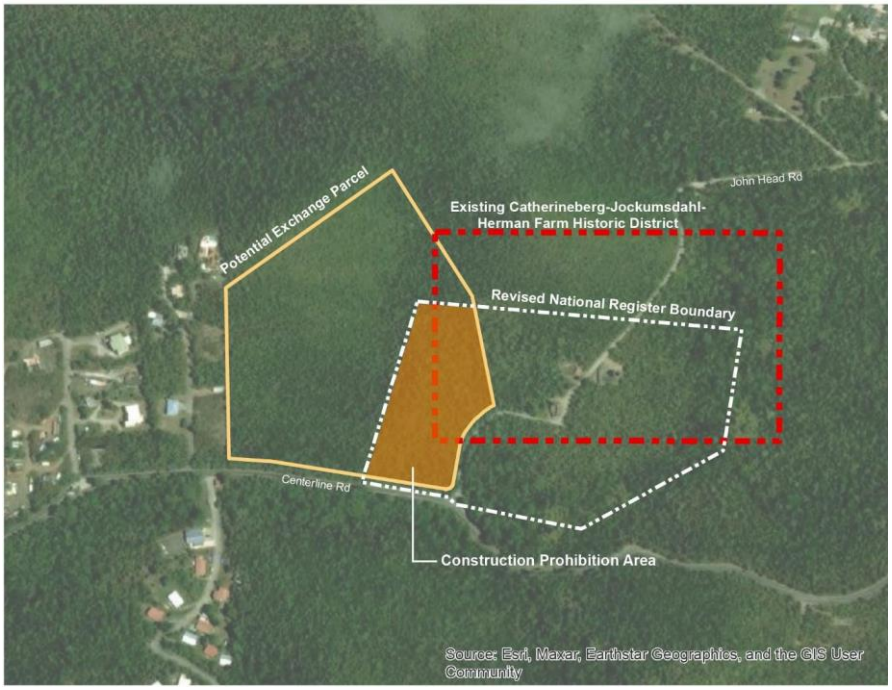
Precipitation
The average annual precipitation on St. John is approximately 39 inches. Rainfall usually occurs in brief, intense showers of less than a few tenths of an inch and major rainfall events are associated with weather systems. The Virgin Islands has no sharply defined wet seasons. The wettest period generally is from August to December, and the driest period is from January to June.

Landform Geology, Soils and Historic Land Use
The soil composition of the area of the Julius E. Sprauve School New School site is (FsF) Fredriksdal-Susannberg complex, 40 to 60 percent slopes, extremely stony. (FsE) Fredriksdal-Susannberg complex, 20 to 40 percent slopes, extremely stony. (FsD) Fredriksdal-Susannberg complex, 12 to 20 percent slopes, extremely stony and (CgC)Cinnamon Bay gravelly loam, 5 to 12 percent slopes, occasionally flood

Julius E. Sprauve School Web Soil Survey map showing soils in the vicinity of the project
Figure 1.



11.3 acres located in Estate Catherineberg is part of a historic land swap between the Government of the Virgin Islands and the National Park System to enable the construction of a new PreK-12 school on St. Johnn (NPS/GVI MOU signed 11.4.2022). The landscape is set within the mountainous center of St. John, approximately 700 feet above sea level. It is located north of Centerline Road (Highway 10) and is bisected by John Head Road (Highway 206). The landscape is surrounded and mostly covered by tropical forest and includes the southwest portion of the property listed in the National Register of Historic Places (NRHP) as the Catherineberg-Jockumsdahl-Herman Farm Historic District.



Drainage, Erosion Control, and Maintenance

During the reconstruction phase drainage and erosion prevention best management practices (BMPs) shall be implemented throughout the construction site area to aid in the prevention of sediment-laden storm water runoff. These BMPs shall be focused on areas with potential of erosion, and areas preceding infiltration practices. The erosion prevention measures shall be selected on a site- specific basis. In addition, any materials requiring to be stockpiled shall be properly stored so as not to be susceptible to runoff. Examples of Erosion Prevention BMPs include, but are not limited to, silt fencing, construction entrance, concrete washout, surface roughening, erosion control blankets, turf reinforcement mats, and dust control. Guidance on the design and proper use of Erosion Prevention BMPs located in the Virgin Islands Environmental Protection Handbook, 2002 will be used.

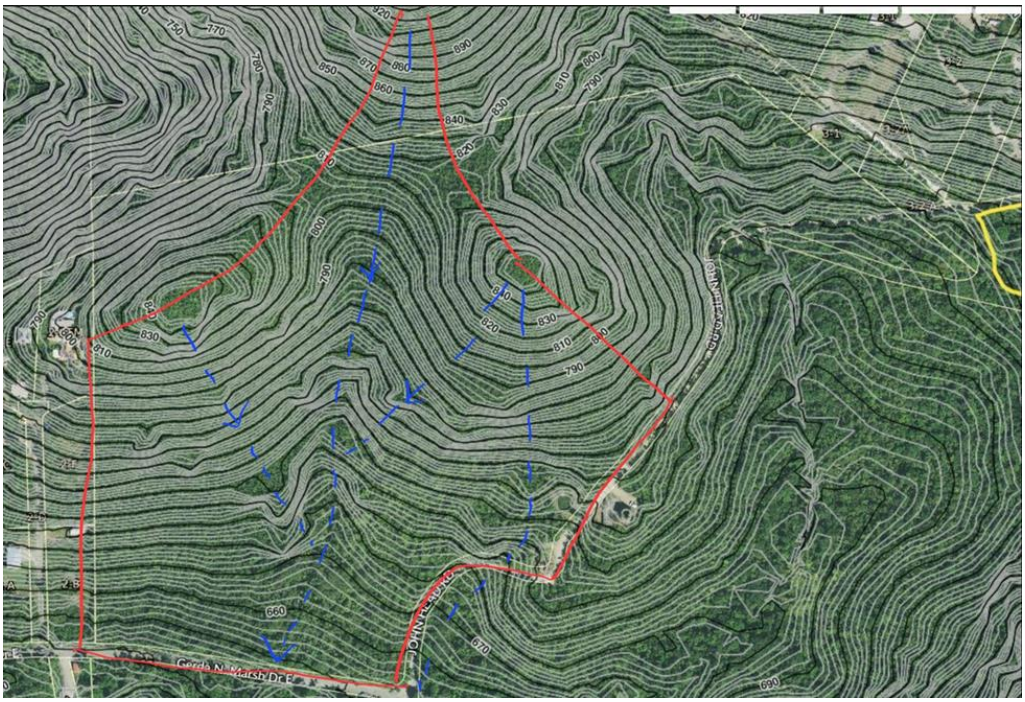
Centerline Road and a drainage gut bound the landscape to the south, while a second drainage gut forms the western edge.

Onsite drainage will be a combination of roof water collected into a cistern for potable and fire water use. Onsite runoff will be collected in inlets and pipes to a retention facility. Discharge of stormwater offsite for proposed conditions (mixed impervious and pervious) will be limited to rates less than existing conditions (all pervious). Wherever possible ground cover will be planted to prevent erosion of sediment offsite.

Drainage Patterns

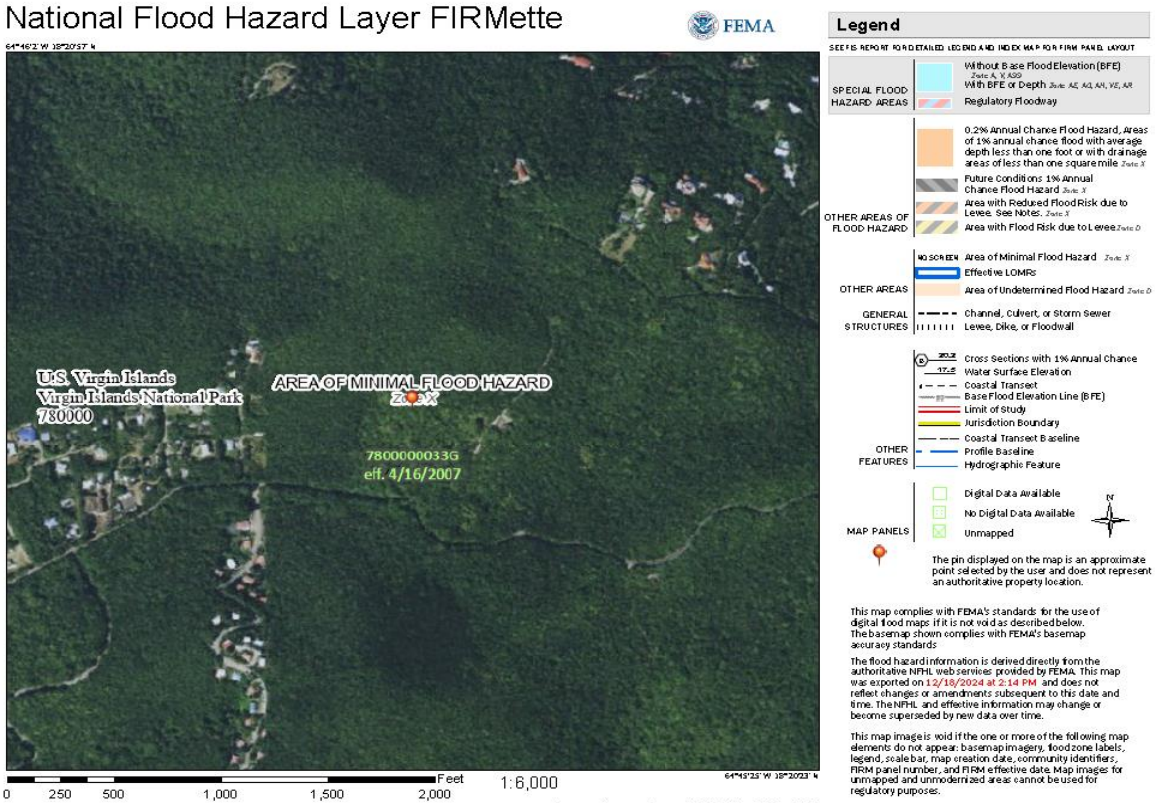
In general, the upper drainage basin discharges stormwater runoff into an existing dry ghut that is located east of the school development. The site plan will not impact this ghut. The elevations of this gut range from approx. 810-ft down to 650-ft at Gerda N Marsh Dr East (Centerline Rd)

Julius E. Sprauve Sprauve PreK-12th School, Estate Catherineberg Drainage Basin



Coastal Floodplain

The project is not located in a coastal flood plain. Sediment and erosion controls will be implemented in this area and any materials that need to be stockpiled overnight will be properly stored so as not to be susceptible to run off.



Fresh Water Resources

The proposed new construction of the Julius E. Sprauve School will have no impact on freshwater resources. No freshwater ponds or streams occur within the project footprint and groundwater resources within the area are deeper than 80 inches; meaning below the depth of the proposed project.

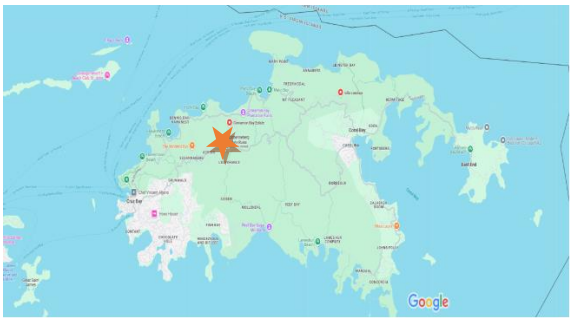
Oceanography

The proposed project occurs well inland and will not be affected by sea storm events.

Marine Resources

The property is located inland and will have no direct impact on the marine environment.

Location



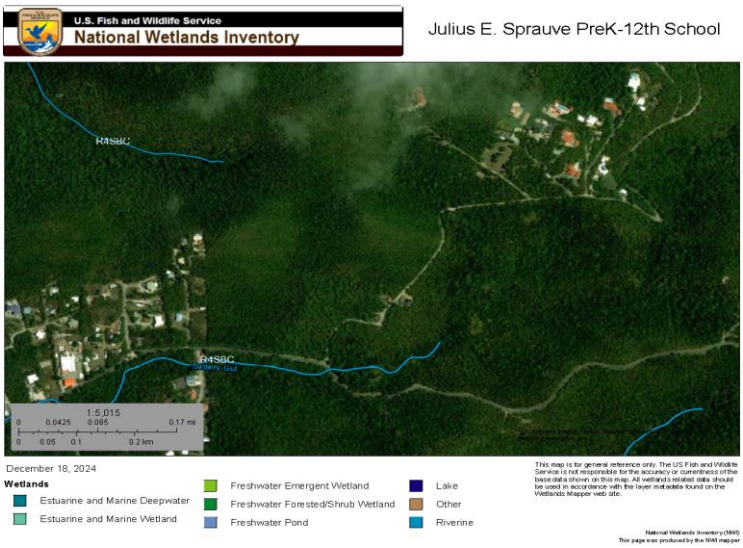
Terrestrial Resources

The proposed project will occur within the Catherineberg historic district which is included in the Virgin Islands National Park Multiple Resource Area (MRA) (NRIS # 64000886), listed in the National Register in 1981, as one of several historic resources on St. John. The 1981 nomination identifies significance under the following areas: archeology-historic, agriculture, architecture, education, engineering, and military. The Virgin Islands National Park MRA nomination contains overall landscape information including spatial organization, building descriptions, and small-scale landscape features as well as an historic context for St. John.

The Estate Catherineberg has significance for its association with the eighteenth- and nineteenth-century agricultural practices on St. John related to sugar production. Catherineberg demonstrates characteristics of a plantation landscape in the West Indies under Danish rule with its buildings and structures related to sugar production as well as evidence of the lives of enslaved laborers living on the property, including the foundations of the enslaved laborers' villages. (Excerpts from National Park Services Cultural Landscape Inventory 2022)

Wetlands

The U.S. Army Corps of Engineers defines wetlands as "those areas that are periodically inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, bogs, marshes and similar areas." (U.S. Army Corps of Engineers, 1986). The project will have no impact on wetlands, as there are no wetlands in, or adjacent to, the proposed project site.



Rare and Endangered Species

Endangered or threatened species or endangered species habitat may exist within the proposed project site. According to the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) project tool, endangered species, and critical habitat, are expected to be found within the proposed project site area.

Prior to any construction activity, including removal of vegetation and earth movement, the boundaries of the project area must be delineated. Once areas are clearly marked, and prior to any construction activity, project personnel able to correctly identify a VI Tree Boa will survey the areas to be cleared to ensure that boas are not present within the work areas.

Air Quality

There will be minor increases in emissions during the excavation phase due to the use of heavy construction equipment that will create combustion engine exhaust. Upon project completion, air quality will return to pre-construction conditions.

IMPACT ON MAN'S ENVIRONMENT

Land and Water Use Plans
The project site is zoned R-2 Residential which complies with the Coastal Land and Water Use Plan, published 2004. Impacts on the existing site: The proposed reconstruction of the Julius E. Sprauve School that was destroyed by Hurricane Maria.

Visual Impacts
The proposed construction project will thereby improve the visual appearance of the area and more. As a result, this project will have a positive impact on the existing landscape.

Historical and Archaeological Resources
The proposed construction site of the Julius E. Sprauve School project has buildings structures, and archeological sites associated with the operation of the Catherineberg sugar plantation, including the windmill, animal mill, oxpounds, Great House, factory, and rum still, which are centrally located within the landscape, along John Head Road lying outside of the area included in the land swap. The area that has been identified in the MOU as part of the "no build" zone includes evidence of enslaved quarters, a burial ground and a historic tamarind tree.

The MOU clearly states, "The Historic Property includes archeological and cultural landscape features that are eligible for listing in the NRHP as contributing resources and are also subject to the provisions of the Antiquities and Cultural Properties Act of 1998 (Title 29, Chapter 17, §950 of the V.I. Code). Except as hereinafter provided, the GVI shall keep the Historic Property, as described and mapped in the report entitled: "Estate Catherineberg Cultural Landscape Inventory" in its existing state in order to preserve its archeological and cultural landscape values."

An archaeological monitoring service will be placed to monitor the excavation of the site during construction.

Waste Disposal and Accidental Spills
The Virgin Islands Waste Management Authority has specific guidelines and criteria for accepting construction debris. Any excess excavated material spoils and construction debris will be collected, taken off-site, and disposed of in accordance with all governing laws and regulations. Equipment will be kept in good operational condition during the proposed project timeline and will not be fueled on site.

The following policies are set forth in the U.S. Virgin Islands Code Title 12. Conservation Chapter 21, Virgin Islands Coastal Zone Management [V.I. Code tit. 12 § 903(b)]. The proposed **Julius E. Sprauve School PreK-12th New School Construction Project** meets each of the basic goals of the USVI for its coastal zone 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.**

Comment: - The proposed Julius E. Sprauve PreK-12 New School project involves the construction of new buildings at the Estate Catherineberg site. This project is located outside the coastal area and is therefore consistent with this policy. The new buildings will be located on the west side of the ghut and will not impact historic ruins or artifacts located on the east side of the site.

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.**

Comment: The proposed project will have no impact on the economic development and growth in the coastal zone.

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

Comment: The proposed Julius E. Sprauve PreK-12 New School project involves the construction of new buildings at the Estate Catherineberg site. This project is located outside the coastal area and is therefore consistent with this policy.

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.**

Comment: The proposed Julius E. Sprauve PreK-12 New School project involves the construction of new buildings at the Estate Catherineberg site. This project is located outside the coastal area and is therefore consistent with this policy. The new buildings will be located on the west side of the ghut and will not impact historic ruins located on the east side of the site. The project will help bring equity to the island by providing the first public high school on St John and a new facility will enhance the social and economic needs of the USVI students, school staff and residents of the area.

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

Comment: The proposed project will not impact trust lands or other submerged or filled lands of the U. S. Virgin Islands. The project is not located within or near trust lands. This project is located outside the coastal area and is therefore consistent with this policy. The new buildings will be located on the west side of the ghut and will not impact historic ruins located on the east side of the site.

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.**

Comment: 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.**

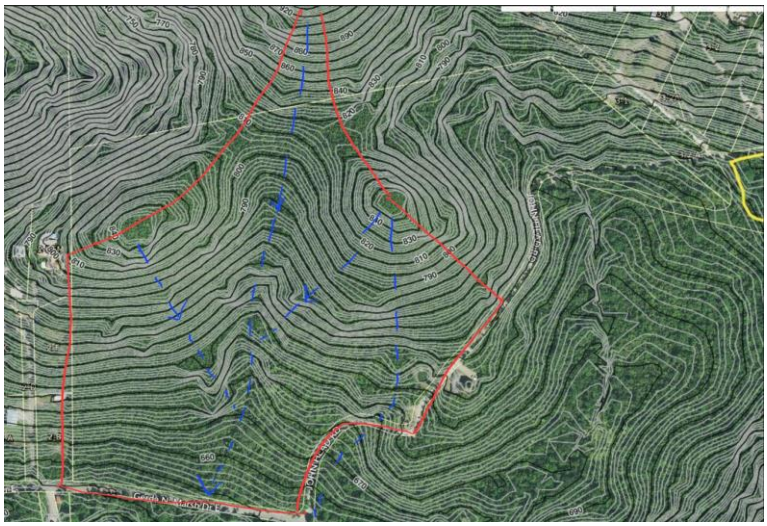
Comment: The proposed project will not affect public recreational opportunities in the coastal zone.

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.**

Comment: - The proposed Julius E. Sprauve PreK-12 New School project involves the construction of new buildings at the Estate Catherineberg site. This project is located outside the coastal area and is therefore consistent with this policy. The new buildings will be located on the west side of the ghut and will not impact historic ruins located on the east side of the site. The project will help bring equity to the island by providing the first public high school on St John. The Career and Technical programs at the campus will be focused on elevating the knowledge and conservation of natural resources in the US Virgin Islands as consistent with the GVI/NPS MOU 11.4.2022. Included in the curriculum will be the development of "an interpretation plan that will outline and guide decisions about interpretative programming at Catherineberg and Whistling Cay. The interpretation plan will be created through a collaborative process involving the NPS, GVI, SHPO, interpretive specialists, subject matter experts, and stakeholders, and students. The plan will inform the future development of wayside exhibits, museum exhibits, and/or other interpretive materials to the benefit of the many students throughout the territory. The proposed project will impact only previously disturbed 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.**

Comment: The proposed Julius E. Sprauve PreK-12 New School project involves the construction of new buildings at the Estate Catherineberg site. This project is located outside the coastal area and is therefore consistent with this policy. The new buildings will be located on the west side of the ghut and will not impact historic ruins located on the east side of the site. The runoff will continue to use the ghut for water transfer with the design working around the existing terrain.



II. An assessment relating to the probable effects of the proposed activity and its associated facilities on the VICZMP.

Comment: The Julius E. Sprauve PreK-12 New School project to be located at the Catherineberg properties is designed to accommodate a maximum capcity of 550 PreK-12 students within a programmed square footage of 123,000 sq.ft. Located within the National Park off Highway 10 near the Catherinberg Estate Ruins, the site presents a unique opportunity to provide a school that reflects the local culture and context of St. John with innovative programs and building systems that support "industry standards". The proposed Julius E. Sprauve PreK-12 New School project design consists of two distinct areas: the "no build" zone to the east of the "gut" and the school building site to the west of the gut. Within the "no build" zone, the DLR Group team will propose appropriate approaches to provide access, gathering areas and curated materials to support USVI requirement to interpretative opportunities for the students. The school building site is key to the overall building design that sits lightly on the land with a series of smaller scaled pavilions connected by walkways as the facility steps up the hill.

As the first high school to be located in St. John, Julius E. Sprauve PreK-12th New School project will provide opportunities for students to study not just about their place in the world, but how they are connected. Included within the overall program and floor plan arrangements are 4 flexible labs that can be shaped for curriculum developed with NPS.

The proposed activity is consistent to the maximum extent practicable with the Virgin Islands Coastal Zone Management Program and will be conducted in a manner consistent with such program

Thank you for your careful consideration of this request for Consistency Determination.

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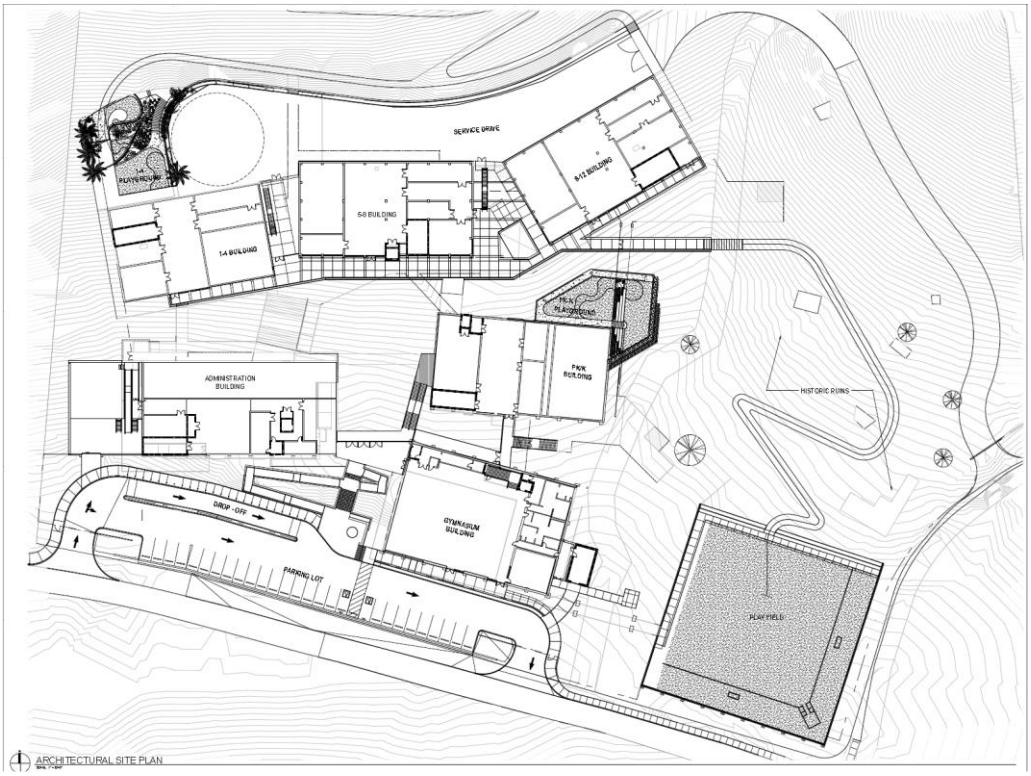
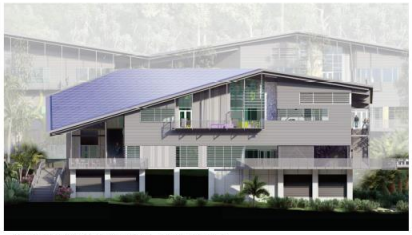

SERVICE DRIVE
5-A BUILDING
5-B BUILDING
5-C BUILDING
ADMINISTRATION BUILDING
PK/K BUILDING
HISTORIC RUINS
DROP - OFF
PARKING LOT
GYMNASIUM BUILDING
PLAYFIELD
ARCHITECTURAL SITE PLAN

EXTERIOR ELEVATION, ADMINISTRATION BUILDING - EAST ELEVATION

EXTERIOR ELEVATION, ADMINISTRATION BUILDING - NORTH ELEVATION

EXTERIOR ELEVATION, ADMINISTRATION BUILDING - WEST ELEVATION

EXTERIOR ELEVATION, ADMINISTRATION BUILDING - SOUTH ELEVATION

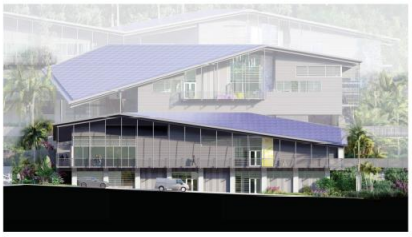


EXTERIOR ELEVATION, PK-K BUILDING - SOUTH ELEVATION

EXTERIOR ELEVATION, 5-8 BUILDING - SOUTH ELEVATION

EXTERIOR ELEVATION, 9-12 BUILDING - SOUTH ELEVATION

EXTERIOR ELEVATION, 1-4 BUILDING - SOUTH ELEVATION



EXTERIOR ELEVATION, GYM BUILDING - SOUTH ELEVATION