

FEDERAL CONSISTENCY REPORT

PROJECT:
V.I. DEPARTMENT OF AGRICULTURE (DA)
ADMINISTRATIVE BUILDING

PROJECT SITE:
1 ESTATE LOWER LOVE
ST. CROIX, USVI 00850



PREPARED BY:



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November 27th, 2022

A handwritten signature in blue ink, appearing to read "Damian Cartwright".

Damian Cartwright, P.E.
USVI License No. 28851-1B

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INTRODUCTION

The Virgin Islands Department of Agriculture (DA) intends to construct a new Administrative Office Building located at 1 Estate Lower Love, Frederiksted, St. Croix, USVI 00850.

The previous Administrative Office Building measured approximately 2,000 SF and sustained extensive damage during Category 5 hurricanes Irma and Maria in 2017. These storms rendered the structure uninhabitable and as such, it remained in a state of disrepair for several years thereafter until it was recently demolished to make way for a new state-of-the-art two-story administrative complex measuring approximately 10,975 gross square footage, 6,068 square feet of which is at level one. The new facility will essentially fall within the same general footprint as the existing structure.

The new structure represents a significant increase in square footage over the previous facility which is essential to meet the current and future programmatic needs of the Department of Agriculture, for which the previous facility was tremendously lacking, thereby hampering the Department of Agriculture's ability to effectively serve the Territory.

A new asphalt surface parking lot will also be constructed to serve the new facility. This parking lot will impact the location of an existing potable restroom facility that will be relocated westward approximately fifty-seven feet.

PROJECT LOCATION

The project site is located at 1 Estate Lower Love, Frederiksted, St. Croix, USVI 00850. It is bordered to the north by the Agricultural Fair Grounds, to the South by Centerline Road (Queen Mary Highway), and to the East and West by the Agricultural Fair Grounds. Access to the project site is from Centerline Road (Queen Mary Highway) via a single driveway connection.

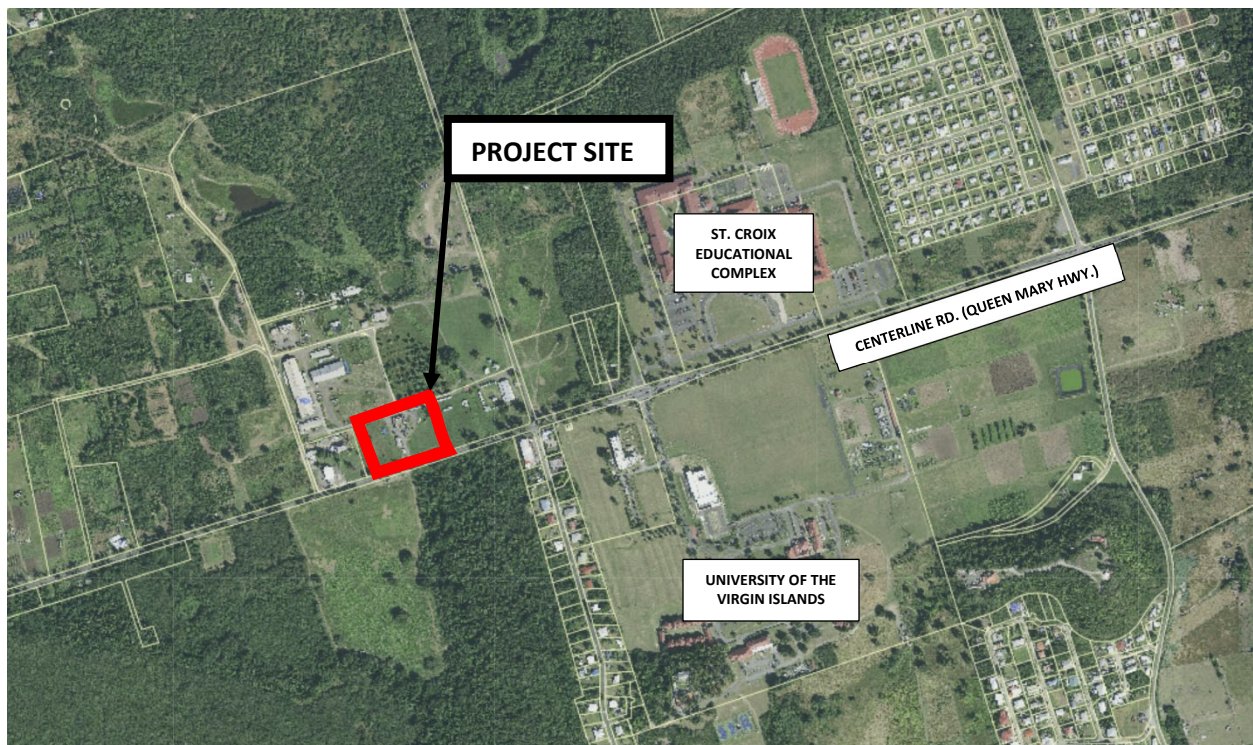


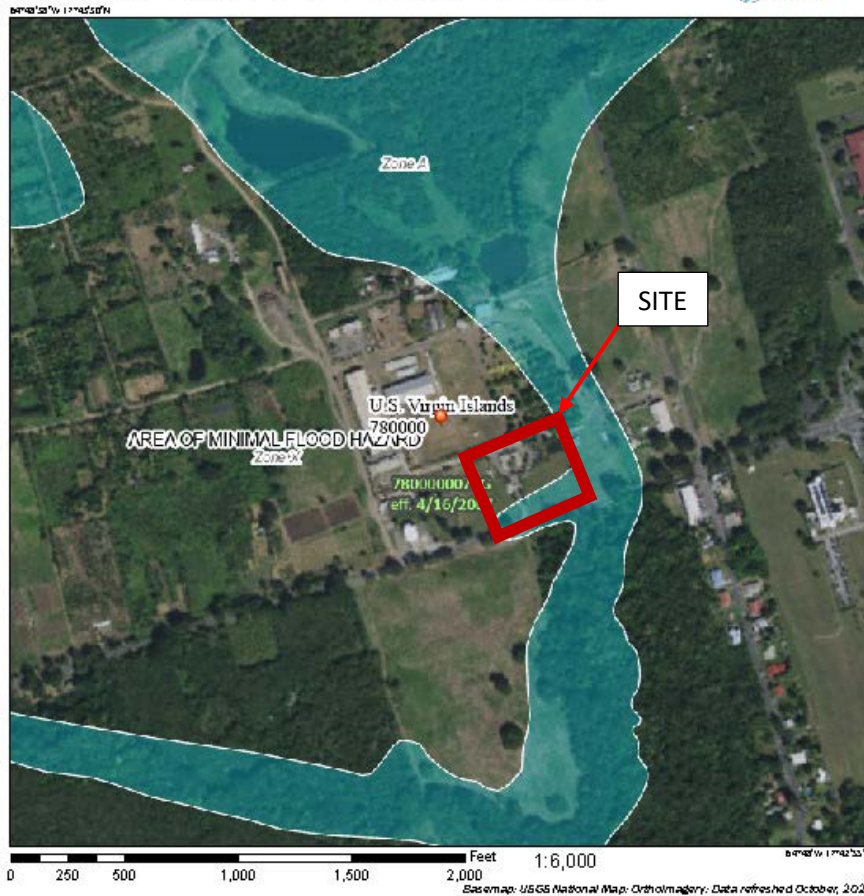
Exhibit 1 – Location Map

PROJECT DESCRIPTION

The disturbed project site measures approximately 1.92 acres and is a part of a much larger parcel designated as Plot 1 Estate Lower Love measuring 74.43 acres in total, zoned Public (P) and owned by the Government of the Virgin Islands.

The disturbed project site generally slopes from northwest to southeast towards a drainage gully with the topography ranging from +79 ft. MSL to +72 ft. MSL. The drainage gully at the south and east is a part of a larger FEMA Flood Plane, Zone A, without a determined Base Flood Elevation (BFE).

National Flood Hazard Layer FIRMette



Legend

SEE THE REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PARALLELS MAP

SPECIAL FLOOD HAZARD AREAS	<ul style="list-style-type: none"> Without Base Flood Elevation (BFE) Zone A, B, C With BFE or Depth Zone A, C, D, X, Y, Z Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD	<ul style="list-style-type: none"> 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with average areas of less than one square mile Zone C Future Conditions 1% Annual Chance Flood Hazard Zone C Area with Reduced Flood Risk due to Levee, See Notes, Zone D Area with Flood Risk due to Levee Zone D
OTHER AREAS	<ul style="list-style-type: none"> ROCKSHED Area of Minimal Flood Hazard Zone E Effective USRS Area of Unincorporated Flood Hazard Zone D
GENERAL STRUCTURES	<ul style="list-style-type: none"> Channel, Culvert, or Storm Sewer Levee, Dike, or Floodwall
OTHER FEATURES	<ul style="list-style-type: none"> Cross Sections with 1% Annual Chance Water Surface Elevation Casual Traversal Base Flood Elevation Line (BFE) Line of Shore Jurisdiction Boundary Casual Traversal, Baseline Profile Baseline Hydrographic Feature
MAP PANELS	<ul style="list-style-type: none"> Digital Data Available No Digital Data Available Unmapped <p>The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.</p>

This map complies with FEMA's standards for the use of digital flood maps if it is the only one available below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was captured on 11/27/2022 at 7:51 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the site or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map control icons, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unincorporated areas cannot be used for regulatory purposes.

The previous administrative office building was concrete masonry unit (cmu), wood framed roof with plywood sheathing, and a metal waterproofing roof membrane. The building was shaped like a "U" and measured 12' x 76' east to west, with two "finger" portions projecting to the south, each measuring 12'x45' for a total area of approximately 2,000 SF. The building was recently demolished under a separate contract.

The exact date of construction of the previous administration building is unknown but research of historical photographs suggests that it was constructed sometime prior to 1985. Building codes were significantly less stringent in the early 1980s having been drastically modified with increased design requirements due to the passing of major hurricanes such as Hugo in 1989, and Irma and Maria in 2017. This structure sustained significant damage during both storms in 2017 which rendered it uninhabitable. Operations at the facility ceased immediately after the storm. However, this site is essential to the operations for the Department of Agriculture and the need to restore this facility to meet current and future demands is paramount.

Given the current and future programmatic requirements of the Department of Agriculture, a new 10,975 SF facility is being proposed, designed to International Building Code (IBC) 2021 standards.

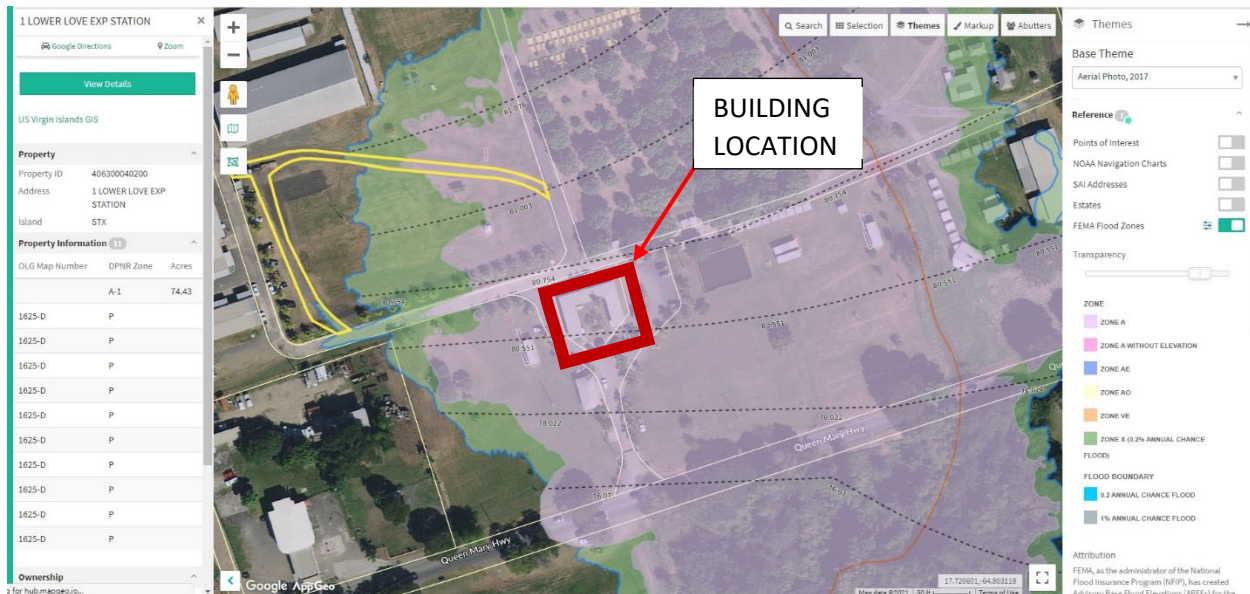


Photo 1 – Front View of Administrative Office Site – Looking North



Photo 2 – Rear View of Administrative Office Site – Looking South

The new administrative building will be a two-story “U” shaped structure with a semi-enclosed courtyard. The structure measures a gross approximate 94’x98’, roughly 10,975 of total interior square footage. This represents an increase of approximately 8,975 SF over the previous, which is necessary to fulfill the current and future programmatic needs of the Department of Agriculture compared to over 40 years ago when the existing facility was built. As a part of the Hazard Mitigation Efforts to alleviate flooding issues of the past, this new structure will be elevated approximately 2’-8” above the 78.34 ft. finish floor elevation of the previous existing structure, and approximately 5½” above the FEMA 0.2% Annual Flood Chance Elevation of 80.551 ft., established post hurricanes Irma and Maria.



An engineered stormwater management system will also be implemented across the site. Other Hazard Mitigation measures include reinforced cmu construction, structural steel, impact resistant glass and hurricane shutters. The mechanical systems proposed are as energy efficient as possible to reduce power consumption and operational cost.

Necessary programmatic functions addressed in the new facility are as follows:

- Office Spaces
- Conference Rooms
- Rest Rooms
- ADA Accessibility

Construction Plans prepared by Boschulte Architecture – Architects, Engineers and Construction Managers; detail all of the building design elements to include architectural, structural, mechanical, electrical, plumbing, life safety. In addition to the building improvements, major site improvements are also detailed on the construction documents such as new asphalt concrete parking areas and drive isles, new stormwater management system, and new potable water and sanitary sewer connections.

ENVIRONMENTAL IMPACTS

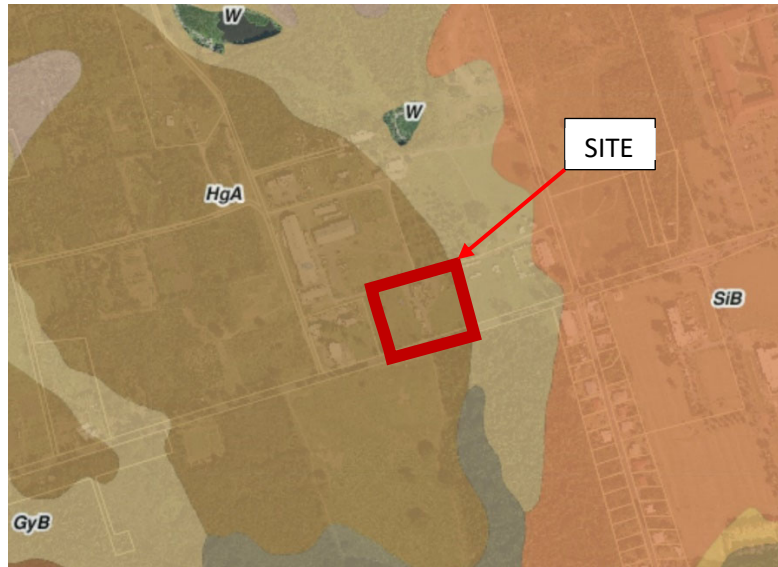
1.0 Climate & Weather

Best Management Practices (BMPs) implementing sediment and erosion control measures will be utilized to ensure that rainfall runoff does not adversely impact the

drainage gully along the southern and eastern perimeter of the site. These measures will include a combination of silt fences, gravel construction entrance and egress points with wash down areas, and hay bales. All new structures will be designed to current IBC 2021 building code requirements meeting the regions high velocity hurricane force wind load requirements and earthquake zone seismic requirements. The new construction will incorporate many hazard mitigation measures to account for climate and weather.

2.0 Landform Geology, Soils, and Historic Land Use

The soil type across the project site consists of Hogensborg Clay Loam (0-2% slope) (HgA).



The Hogensborg Clay Loam Series consist of the following:

A--0 to 6 inches; very dark grayish brown (2.5Y 3/2) clay loam; moderate fine and medium granular structure; firm, sticky, plastic; many fine and medium roots, few coarse roots; many medium and coarse wormcasts and insectcasts; about 5 percent, by volume, pebbles; slightly alkaline; clear smooth boundary. (4 to 11 inches thick)

AB--6 to 13 inches; dark grayish brown (2.5Y 4/2) clay loam; moderate fine and medium subangular blocky structure; firm, sticky, plastic; many fine and medium roots, few coarse roots; common pressure faces on peds; many medium and coarse wormcasts and insectcasts; about 5 percent, by volume, pebbles; slightly alkaline; clear wavy boundary. (3 to 12 inches thick)

Bss1--13 to 23 inches; light olive brown (2.5Y 5/4) clay; strong medium and coarse prismatic structure; very firm, sticky, plastic; common fine and medium roots that are flattened on primary surfaces; common large intersecting slickensides that have distinct polished and grooved surfaces; common fine and medium wormcasts; about 5 percent, by volume, pebbles; common fine and medium iron-manganese concretions; slightly effervescent; moderately alkaline; clear wavy boundary. (0 to 12 inches thick)

Bss2--23 to 31 inches; light olive brown (2.5Y 5/4) clay; strong coarse prismatic structure; very firm, sticky, plastic, few fine and medium roots that are flattened on primary surfaces; few large intersecting slickensides that have distinct polished and grooved surfaces; few fine and medium wormcasts; about 5 percent, by volume pebbles; common fine and medium iron-manganese concretions; few fine faint yellowish brown (10YR 5/8) masses of iron accumulation; strongly effervescent; moderately alkaline; clear wavy boundary. (Combined thickness of the Bss horizon is 0 to 20 inches thick)

Bkss1--31 to 43 inches; light olive brown (2.5Y 5/4) clay; strong medium and coarse prismatic structure; very firm, sticky, plastic; few fine and medium roots that are flattened on primary surfaces; few large intersecting slickensides that have distinct polished and grooved surfaces; many fine and medium masses of calcium carbonate; few fine and medium wormcasts; about 5 percent, by volume, pebbles; many fine and medium iron-manganese concretions; few fine faint yellowish brown (10YR 5/6) masses of iron accumulation; strongly effervescent; moderately alkaline; abrupt wavy boundary.

Bkss2--43 to 62 inches; light olive brown (2.5Y 5/4) clay; strong medium and coarse prismatic structure; very firm, sticky, plastic; few fine and medium roots that are flattened on primary surfaces; few large intersecting slickensides that have distinct polished and grooved surfaces; many fine and medium masses of calcium carbonate; few fine and medium wormcasts; about 5 percent, by volume, pebbles; common fine and medium iron-manganese concretions; few fine faint yellowish brown (10YR 5/6) masses of iron accumulation; strongly effervescent; moderately alkaline; abrupt wavy boundary. (Combined thickness of the Bkss horizon is 30 to 60 inches or more)

2C--62 to 76 inches; strong brown (7.5YR 5/8) gravelly clay loam; massive; firm, slightly sticky, slightly plastic; few fine roots; common medium and coarse wormcasts; about 15 percent, by volume, pebbles; many medium and coarse iron-manganese concretions; few fine distinct brownish yellow (10YR 6/6) masses of iron accumulation; strongly effervescent; moderately alkaline; abrupt wavy boundary. (0 to 20 inches thick)

3C--76 to 88 inches; strong brown (7.5YR 5/8) clay loam; weak medium subangular blocky structure; firm, slightly sticky, slightly plastic; few fine roots; about 10 percent, by volume, pebbles; few medium and coarse iron-manganese concretions; strongly effervescent; moderately alkaline.

The proposed administrative office building will be constructed in generally the same footprint as the previous structure that was demolished. All improvements being constructed are on previously disturbed land.

3.0 [Drainage, Flooding, and Erosion Control](#)

The actual project site, and more specifically the actual building location, is in FEMA Flood Zone X, an area of minimal flood hazard. However, the drainage gully to the south and east of the project site is in FEMA Flood Zone A, with no established base flood elevation. To minimize any potential adverse impacts from this gully overflowing and flooding the site during heavy rainfall events, the new building has been elevated approximately 2'-8" above the previous building finish floor elevation and the overall site elevated accordingly with the proposed grading design.

- 7.0 **Oceanography**
This project is located inland and will not be affected by sea storm surge events.
- 8.0 **Marine Resources**
This project is located inland and will not have an impact on marine resources.
- 9.0 **Terrestrial Resources**
The project will occur within the footprint of existing buildings, paved roadways, paved and gravel parking lots, concrete sidewalks etc. There will be no significant impacts to existing terrestrial resources or native vegetation.
- 10.0 **Wetlands**
The project will have no impacts on any wetlands as no wetlands exist within the project footprint or are adjacent to the project site. There is a drainage gully to the south and east but this gully will not be impacted by this project.
- 11.0 **Rare and Endangered Species**
There are no habitats present onsite for any rare and/or endangered species and as such, no federal, local or threatened endangered species will be impacted by this project.
- 12.0 **Air Quality**
All of St. Croix is designated Class II by the Environmental Protection Agency (EPA) in compliance with the 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). Heavy equipment such as excavators, backhoes, dump trucks etc. will be used during construction that will create engine exhaust fumes that will go away upon completion of construction when air quality will be returned to ambient pre-construction conditions. The project will also have a standby generator for which the appropriate air quality permits will be applied for. However, it must be noted that this standby generator will be designed and installed as part of a separate contract.

IMPACT ON MAN'S ENVIRONMENT

- 13.0 **Land and Water Use plans**
The project site is located on Plot 1, Estate Upper Love, Frederiksted, St. Croix, USVI 00850. The parcel is approximately 74.43 acres and is zoned Public "P". The proposed development land use is consistent with the current zoning.
- 14.0 **Visual Impacts**
The new administrative office facility will be a beautiful state-of-the-art modern contemporary facility that will be an aesthetic statement in architecture.
- 15.0 **Social and Economic Impacts**
The new administrative building and warehouse will have a significant social and economic impact on the surrounding community. It is the headquarters for the Department of Agriculture on St. Croix. The new state-of-the-art facility will provide a sense of community pride and uplift to the surrounding areas. In addition, the new facility will better serve the Department of Agriculture's needs, allowing it to be more efficient

and effective in administering more agricultural projects and programs thereby stimulating economic growth in the local economy.

16.0 Historical and Archeological Resources

The project site is previously disturbed land. As such, there is no known historical and archeological resources in the project footprint.

17.0 Water Disposal and Accidental Spills

All stormwater runoff will be collected into two onsite storage retention systems prior to any overflow into the drainage ghut at the south and east.

Equipment and company vehicles will be kept in good operational condition to mitigate any potential leaking of fluids.

COASTAL CONSISTENCY

The proposed St. Croix Department of Agriculture Administrative Building will have a negligible impact on environmental resources and ambient water quality during construction. Best Management Practices (BMPs) involving sediment and erosion control devices such as silt fences, hay bales, and gravel construction access driveways will be implemented during construction to negate the potential of adverse environmental impacts. The proposed project will only occur within the footprint of previously disturbed/improved areas and as such there is no anticipated impact on any historical and/or cultural resources.

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 St. Croix Department of Agriculture Administration Building 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 within the Estate Lower Love Community. As proposed, it will be undertaken in a manner consistent to the maximum extent practicable with the enforceable policies of the U.S. Virgin Islands' CZM Program. This Federal Consistency Determination demonstrates this 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 St. Croix Department of Agriculture Administration Building 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 within the Estate Lower Love Community.

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 coastal zone by fulfilling the required expanded programmatic needs for the Department of Agriculture. With the larger and enhanced footprint, the Department of Agriculture can hire more staff which will translate into implementing more agricultural programs that will build a stronger self-sustainable economy increasing local agricultural output thereby enhancing food security and reducing the Territory's heavy reliance on imports. The new facility itself will employ new technologies to reduce energy cost related to cooling, and also enhance the use of natural lighting.

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.

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 project 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 within the Estate Lower Love Community. The proposed project will provide critical public services and therefore will meet the economic and social needs of the residents of the Estate Lower Love Community.

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.

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 proposed project is designed so that it impacts only previously disturbed areas like paved and unpaved roadways and parking lots. 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. Stormwater will be directed to retention areas/bio-swales for percolation before any overflow into the existing drainage gully to the south and east.

The proposed project 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 within the Estate Lower Love Community. 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 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 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