

# FEDERAL CONSISTENCY REPORT

PROJECT:  
*KINGSHILL CEMETERY CHAPEL*

PROJECT SITE:  
*PLOT 24-A ESTATE UPPER BETHLEHEM  
CHRISTIANSTED, ST. CROIX, USVI 00820*



PREPARED BY:



**BUILDTEC**

7-1 BONNE ESPERANCE

P.O. BOX 8269

CHRISTIANSTED, ST. CROIX USVI 00820

Email: [damianc001@hotmail.com](mailto:damianc001@hotmail.com)

June 3<sup>rd</sup>, 2022

---

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

## TABLE OF CONTENTS

INTRODUCTION .....	3
PROJECT LOCATION .....	3
PROJECT DESCRIPTION .....	3
ENVIRONMENTAL IMPACTS .....	7
1.0    Climate & Weather .....	7
2.0    Landform Geology, Soils, and Historic Land Use .....	7
3.0    Drainage, Flooding, and Erosion Control .....	8
4.0    Drainage Patterns .....	8
5.0    Fresh Water Resources .....	8
6.0    Oceanography .....	8
7.0    Marine Resources .....	8
8.0    Terrestrial Resources .....	8
9.0    Wetlands .....	8
10.0   Rare and Endangered Species .....	8
11.0   Air Quality .....	9
IMPACT ON MAN’S ENVIRONMENT .....	9
12.0   Land and Water Use plans .....	9
13.0   Visual Impacts .....	9
14.0   Social and Economic Impacts .....	9
15.0   Historical and Archeological Resources .....	9
16.0   Water Disposal and Accidental Spills .....	9
COASTAL CONSISTENCY .....	10

## INTRODUCTION

The Virgin Islands Department of Public Works (DPW) intends to renovate the interior and exterior of the Chapel located at Kings Hill Cemetery, Estate Bethlehem, Christiansted, St. Croix, USVI 00820.

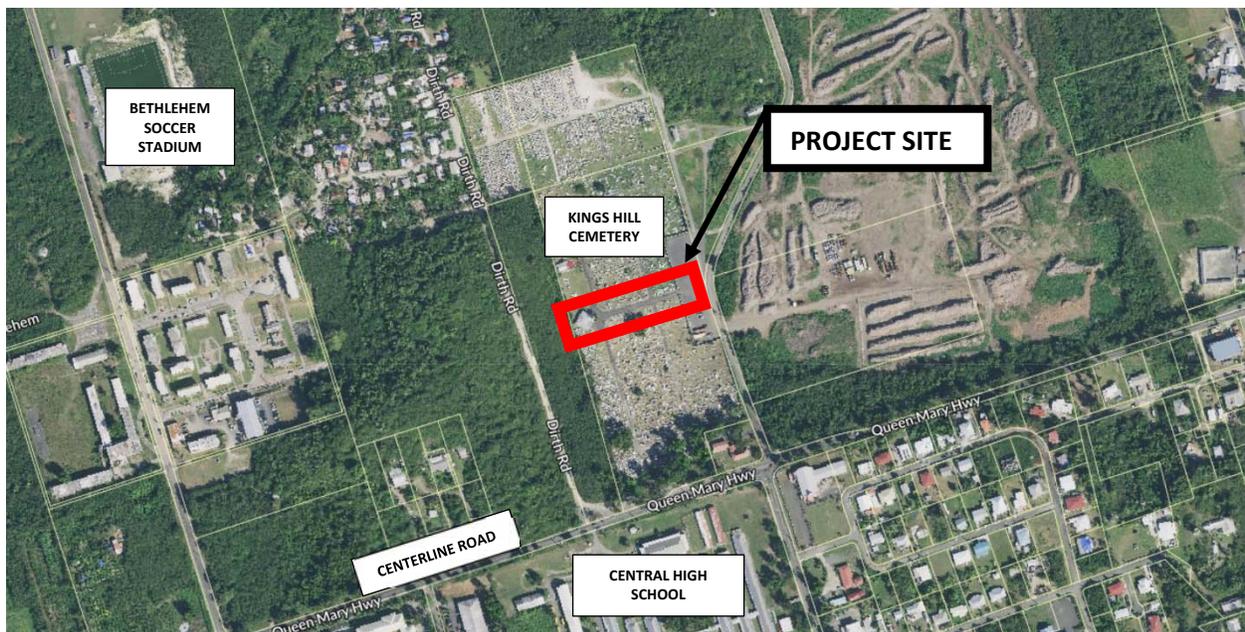
The building interior layout is triangular shaped measuring approximately 1,334 SF. The building has an exterior canopy that covers a driveway. Beneath the driveway are two cistern chambers. The current building use is religious worship/funeral and will remain as such after renovations are completed.

The structure sustained damage during Category 5 hurricanes Irma and Maria in 2017.

Given the age of the structure, some critical elements do not meet current IBC 2021 building code requirements and must be addressed in order to place the facility back into service.

## PROJECT LOCATION

The project site is located on Plot 24-A Estate Upper Bethlehem, Christiansted, St. Croix, USVI 00820, more specifically within the Kings Hill Cemetery. It is bordered to the north by Sunset Road, to the East by a public connector roadway, to the west by Dirth Road, and to the south by Centerline Road. Access to the project site is from either the north or south via the public connector road accessible for Sunset Road or Centerline Road, respectively.



**Exhibit 1 – Location Map**

## PROJECT DESCRIPTION

This project site measures approximately 3,000 SF and mainly encompasses the interior space and exterior canopy of the Chapel. The Chapel is a part of a much larger parcel designated as 24-A measuring approximately 13 acres in total, zoned Public (P) and owned by the Government of the Virgin Islands.

The project site generally slopes from west to east ranging from +200 ft. MSL to +160 ft. MSL.

No as-builts were available and as such the exact age of the building is unknown. However, from visual observation, the building appears to be a solid concrete structure to include the roof and canopy. It generally appears to be in sound structural condition with only a few minor defects observed that can be attributed to normal wear and tear coupled with the lack of routine maintenance.

The project scope is generally confined to remodeling/repairing of the structure to meet current IBC-2021 requirements. These improvements will generally encompass the following:

- Retrofitting the two (2) existing interior restrooms to make them ADA compliant. In order to meet ADA requirements, two existing wall partitions must be demolished and relocated.
- Implement Plumbing upgrades in the restrooms to include new piping and fixtures, vanity and hardware
- Replacing the existing large wood mullion framed glass windows with impact glass windows meeting the structural wind load requirements
- Replacing two existing plexi-glass side windows with impact glass windows meeting the structural wind load requirements
- Repairs to existing floor cracks in the cement slab
- Replacing all doors with new doors meeting structural wind load and life safety requirements
- Lighting: both building interior and building exterior
- Electrical: wiring, panel box and point of service
- General cosmetic improvements such as floor tiles, painting of interior walls and ceiling
- Pressure wash and elastomeric painting/sealing of the exterior facade
- Pressure wash and resealing of the concrete roof
- Repair the existing roof rainwater collection piping and reconnect system to the existing cisterns
- Pressure wash and clean existing cisterns
- Reseal Existing cisterns and replace existing cistern hatches with new ones
- Demolish all existing tiles on exterior sidewalk and driveway and replace with new ones
- Repair/replace all existing cracked, raised or depressed concrete sidewalks
- Restore cistern plumbing system including pressure tank and pump
- Landscaping beautification

It must be noted that the building square footage and use is not changing as a result of the proposed improvements. As such, the restroom improvements do not result in any need for additional capacity over existing use and as such will utilize the existing onsite septic sanitary sewer system and the existing potable water connections. The cistern supply system will be restored as a backup to the current WAPA water supply.

Site improvements are solely limited to repairing existing features such as sidewalks and driveways which will be restored in kind. Site lighting will be added along the main entry boulevard and the conduits supplying power will be placed underground. The power service to the building will be relocated to the main entry gate and the feed from this point will be relocated in conduits underground to the electrical panel box in the chapel.

The above improvements will not change or adversely impact the current ratio of pervious and impervious area. As such, no impacts to stormwater runoff are anticipated as a result of said improvements. In fact, by reconnecting and restoring the cisterns storage capacity, stormwater runoff from the existing Chapel

roof will be reduced by the capacity of said cisterns. All Best Management Practices (BMPs) will be implements during onsite utility trenching activities, to include but not limited to; silt fencing, haybales, gravel entrances etc.



**Exhibit 1 – Front View – East Elevation of Chapel**



**Exhibit 2 – Side View – South Elevation of Chapel**



**Exhibit 3 – Side View – North Elevation of Chapel**



**Exhibit 4 – Rear View – West Elevation of Chapel**

## 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 site improvements that are limited to burying electrical utilities underground. These measures will include a combination of silt fences, gravel construction entrance and egress points with wash down areas, and hay bales. All improvement to the existing building structure 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 such as hurricane rated impact resistant glass windows, redundant potable water supply system, and the burying of electrical service lines limiting potential disruption from wind fallen poles.

### 2.0 Landform Geology, Soils, and Historic Land Use

The soil type across the project site consists of one type, namely Arawak Gravelly Loam (5-12% slope) (ArC) and (12-20% slope) (ArD). The Arawak Series consist of shallow well drained slowly permeable soils formed in materials weathered from soft limestone bedrock.

All improvements being constructed are primarily limited to the building structure itself. Historic building and land use is religious worship/cemetery and will remain as such. Site improvements are limited to the burying of electrical lines underground in the existing roadway corridor which is an area of previous disturbance.

### 3.0 Drainage, Flooding, and Erosion Control

The actual project site is located in FEMA Flood Zone X, an area of minimal flood hazard.

Best Management Practices (BMP's) will be implemented from the onset of construction to manage sediment and erosion control and ensure no adverse impacts.

Most of the project scope is limited to restorations works on the existing building. There will be no new construction or expansion of the existing building footprint. Siteworks are primarily limited to burying existing electrical service underground. The restoration of the roof collection system to the cisterns will limit some offsite runoff that is currently occurring.

### 4.0 Drainage Patterns

The proposed project will not impact existing drainage patterns with the exception of a slight improvement due to the restoration of the roof runoff collection system thereby reducing runoff volume by the storage capacity of the cisterns.

The project site is located inland away from the coastal waters of St. Croix.

### 5.0 Fresh Water Resources

Site work is very minor and limited to burying existing electrical service underground.

Best Management Practices (BMP's) will be implemented to manage sediment and erosion control and ensure no adverse impacts to the fresh water resources during trenching activities.

### 6.0 Oceanography

This project is located inland and will not be affected by sea storm surge events.

### 7.0 Marine Resources

This project is located inland and will not have an impact on marine resources.

### 8.0 Terrestrial Resources

The project will occur within the footprint of existing buildings and paved roadways. There will be no significant impacts to existing terrestrial resources or native vegetation.

### 9.0 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.

### 10.0 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. Also,

site disruption is limited to trenching to bury electrical service lines which will occur within the existing paved roadway.

#### 11.0 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 for site utility trenching activities. This equipment will create engine exhaust fumes that will go away upon completion of construction when air quality will be returned to ambient pre-construction conditions.

### IMPACT ON MAN'S ENVIRONMENT

#### 12.0 Land and Water Use plans

The project site is located on Plot 24-A Estate Upper Bethlehem, Christiansted, St. Croix, USVI 00820, more specifically within the Kingshill Cemetery. The parcel is approximately 13 acres and is zoned Public "P". The proposed development land use is the same as the current existing land use and is consistent with the current zoning.

#### 13.0 Visual Impacts

The project scope involves beautification and restoration of the existing Chapel which will tremendously enhance visual impact of the facility. Relocation of overhead electrical lines to underground will also eliminate a visual "eye sore".

#### 14.0 Social and Economic Impacts

The remodeled and renovated Chapel will have a significant social and economic impact to the surrounding community. It hasn't been in use since the damage sustained in Hurricanes Irma and Maria in 2017. Once these improvements are completed, the facility will be reopened and available for public use to serve the surrounding community to host religious events to include, but not limited to, funeral services.

#### 15.0 Historical and Archeological Resources

The project site is on previously disturbed land. As such, there is no known historical and archeological resources in the project footprint. Most of the improvements involve interior and exterior enhancements to the building structure. The sitework improvements are primarily limited to underground utility trenching in previously disturbed areas such as paved roadways.

#### 16.0 Water Disposal and Accidental Spills

This project will restore the roof stormwater collection system to the existing cisterns thereby reducing runoff that is currently discharging at the ground level and potentially sheet flowing offsite.

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

## COASTAL CONSISTENCY

The DPW Kingshill Cemetery Chapel Restoration Project 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 impacts 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 DPW Administrative Compound 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 Anna's Hope 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 DPW Kingshill Cemetery Chapel Restoration 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 Anna's Hope 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 a vital public need to the community of St. Croix that has been absent since the passing of Hurricanes Irma and Maria in 2017. Once these improvements are completed, the venue will be reopened and available for public use to serve the surrounding community to host religious events to include, but not limited to, funeral services.

**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 for the surrounding community. The proposed project will provide critical public services and therefore will meet the economic and social needs of the residents for the entire St. Croix 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 roadways. 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 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 surrounding 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