

**APPENDIX F**  
**Archaeological**  
**Monitoring Plan**



**DEPARTMENT OF PLANNING AND NATURAL RESOURCES  
Virgin Islands State Historic Preservation Office**

Strand Street 198, Fort Frederik Museum  
Frederiksted  
St. Croix, Virgin Islands 00840

Telephone: (340) 719-7089

Facsimile: (340) 719-8343

March 28, 2014

Ms. May Adams Cornwall  
Executive Director  
Virgin Islands Waste Management Authority  
#1 La Grande Princesse, Suite BL1  
Christiansted, VI 00820

**Ref: Section 106 Review of VIWMA Rerouting of the St. Croix Coastal  
Interceptor, St. Croix, US Virgin Islands EPA Grant- FY 2013**

Dear Ms. Cornwall:

The Virgin Islands State Historic Preservation Office is in receipt of your request for Section 106 clearance for the United States Environmental Protection Agency (EPA) funded Virgin Islands Waste Management Authority, (VIWMA), St. Croix Coastal Interceptor Rerouting Project, St. Croix, US Virgin Islands. VISHPO review was initiated on behalf of the National Environmental Protection Act (NEPA) and through the National Historic Preservation Act (NHPA), which requires all federally funded undertakings to consider the potential impact to cultural resources prior to the distribution of funds.

As per the submitted documentation, the current project will consist of easement and land acquisition for rerouting of the coastal interceptor, cleaning and inspection of existing sewer line with close circuit camera television; cleaning and abandon in place 2,200 feet of existing sewer line; cleaning and

Section 106 Review of VIWMA  
St. Croix Coastal Interceptor Rerouting Project  
St. Croix, US Virgin Islands, EPA Grant- FY 2013  
March 28, 2014

collapsing six (6) existing manholes; installation of 200 feet of new gravity line to a new lift station with required mechanical, structural, instrument and electrical systems; installation of 2,300 feet of new force main piping with air release valves; installation of new transition manhole with 600 feet of new gravity line; rehabilitation of two (2) manholes; and installation of two (2) lateral connections to reconnect current users.

The project will undergo quality assurance and quality control testing; and also include the preparation of As-built construction drawings at the completion of the work.

**Based on the submitted project description and supporting documentation, the VISHPO finds that the proposed undertaking may have the potential to cause Adverse Effects on a previously identified prehistoric site that falls within the disturbed area where the coastal interceptor line is to be rerouted. Therefore, the VISHPO will require that all excavation work for the new sewer line from Manhole 32 to STA 10+51 at Route 752 will have to be monitored by a qualified Archaeologist.**

Thank you for consulting with the Virgin Islands State Historic Preservation Office regarding Section 106 compliance for this federally funded project. Please contact our office if there are any questions. I am also attached with this letter the VISHPO's list of approved archaeological consultants for the Virgin Islands.

Sincerely,



Sean L. Krigger, Acting Director  
And Deputy State Historic Preservation Officer



**Section 106 Review Process  
Certificate of Approval  
For  
Project Compliance**

**Department of Planning and Natural Resources  
V.I. State Historic Preservation Office  
Dronningens Gade 71&72A, Kongens Quarter  
Charlotte Amalie, Virgin Islands 00802  
Tel. (340) 776-8605 / Fax (340) 776-7236**

This is to certify that the Federal Undertaking listed below has successfully completed the Section 106 Review Process with the Virgin Islands State Historic Preservation Office and presents no adverse effects to historic or other cultural resources listed on, determined to be eligible, or considered eligible for listing on, the National Register of Historic Places.

**Project Title:** St. Croix Coastal Interceptor Rerouting Project

**VISHPO Project No.:** STX-05-14      **Alternate Project No.:** \_\_\_\_\_

**Federal / State Agency:** Environmental Protection Agency

**Applicant:** Virgin Islands Waste Management Authority

**Project Coordinator:** Laurie Williams, P.E., Director of Engineering, VIWMA

**Applicant Telephone:** (340) 712-6962      **Fax:** \_\_\_\_\_

**Location of Project:** \_\_\_\_\_

**Island:** St. Croix      **Quarter:** Company

**Approved, No Adverse Effects**       **Approved, \*With Conditions:**

**\*Conditions:** VISHPO will require that all excavation work for the rerouted new sewer line trench from Manhole 32 to STA 10+51 at Route 752 will have to be monitored by a qualified Archaeologist.

**Acting Director/Deputy SHPO,**

*Sean L. Krigger*  
Sean L. Krigger

**Date:** March 28, 2014

U.S. Department of Homeland Security  
Region II - Caribbean Area Division  
P.O. Box 70105  
San Juan, Puerto Rico 00936-8105



**FEMA**

November 4, 2014

Mr. Sean L. Krigger  
Acting Director/Deputy State Historic Preservation Officer  
Historic Preservation Architect  
Department of Planning and Natural Resources  
Virgin Islands State Historic Preservation Office  
1640 Dronningens Gade 71&72A, Kongens Quarter  
Charlotte Amalie, Virgin Islands 00802

Re: NHPA Section 106 Consultation  
FEMA, PDMC-PJ-02-VI-2014-002 St. Croix, USVI  
VIWMA St. Croix Coastal Interceptor Relocation  
VISHPO Project No.: STX-05-14

Dear Mr. Krigger:

The Virgin Islands Waste Management Authority (VIWMA) has applied for financial assistance from the U.S. Department of Homeland Security, Federal Emergency Management Agency (FEMA), for St. Croix Coastal Interceptor Relocation at La Grande Princess. FEMA is proposing to fund the project through the Hazard Mitigation Pre-Disaster Mitigation-Competitive (PDMC) Grant Program. FEMA is initiating the National Historic Preservation Act (NHPA) Section 106 consultation in accordance with 36 CFR Part 800. This consultation is a follow-up to the communication submitted by VIWMA in March 2014 (VISHPO Project No.: STX-05-14).

The scope of work for the Coastal Interceptor Relocation Project includes the following: acquire easement and land (by VIWMA); clean and inspect existing sewer line with close circuit camera television; clean and abandon in place 2200 feet of existing sewer line; clean and collapse six (6) existing manholes; install 200 feet of new gravity line from MH-31 to a new lift station with required mechanical, structural, instrument, and electrical systems; install 2300 feet of new force main piping with air release valves; install new transition manhole with 600 feet of new gravity line; rehabilitate two (2) manholes; and install two (2) lateral connections to reconnect current users. Inspection and acceptance of work will be performed by the VIWMA Division of Engineering and VIWMA Division of Operations during and upon completion of the project.

The project location and route are shown on the attached location plan and topographic survey. The beginning of the gravity line reroute starts at MH#0431 (17.7572N, 64.7237W). The proposed lift station 0.04 acre property to be acquired is at 17.7569N, 64.7244W. The proposed lift station property and structure is located near the south east boundary of the existing Nature Conservatory at Plot No. 52 La Grande Princess. The force main runs southeast through Plots 52C, 52D, 53A; it continues southeast along the boundary between Plots 222 and 223; it continues southeast at edge of Road Plot No. 236; and ends at the proposed transition manhole just northwest of the Sugar Beach Condominium Driveway (17.7524N, 64.7206W). The gravity from the proposed transition manhole runs northeast along the south boundary of the Sugar Beach Condominium Property towards the existing manhole MH#0439 (17.7534N, 64.7193W) of the Coastal Interceptor to complete the reroute.

FEMA has conducted a preliminary archival research for the Area of Potential Effects (APE) and identified that a Historic site 12VAm-197 Estate Little Princess is located immediate west of new lift station and sewer line; and the prehistoric site 12VAm1-54 Sugar Beach is documented all along the beach in front of the housing complex Colony Cove, Mill Harbor, and the St. Croix Beach and Tennis Resort. The project can be divided into two sections. The west section encompass the location of the new lift station; the new sewer line from MH#431 to the new lift station; and the western segment of the new sewer line between STA 0+00 and STA 10+51, all located inside undeveloped land that has the potential to present historic properties. The east section corresponds to the route of the new sewer line along existing road and property line of the area with housing developments, where a prehistoric site was identified (STA10+51 to MH#439).

FEMA finds there is potential to affect historic properties in the area of potential effects of the coastal interceptor relocation. Therefore, upon consultation with VISHPO, FEMA recommends taking these measures to prevent adverse effect by:

1. Conduct a Phase I Archaeological Survey for the west section - track of undeveloped land corresponding to the location of the new lift station; the new sewer line from MH#431 to the new lift station; and the western segment of the new sewer line between STA 0+00 and STA 10+51). The Phase I Archaeological Survey is a better measure under the present circumstances, as it can determine if there are archaeological remains that will need to be addressed before construction begins. The archaeologist contracted must meet the *Secretary of the Interior Professional Qualification Standards for Archaeology and Historic Preservation*.
2. Conduct an archaeological monitoring for the east section, area within the housing developments, where an archaeological site was identified. It is recommended that all excavation work for the new sewer line from STA 10+51 to MH#439 be monitored by a qualified Archaeologist that meets the *Secretary of the Interior Professional Qualification Standards for Archaeology and Historic Preservation*.

Mr. Sean L. Krigger  
NHPA Section 106 Consultation  
FEMA, PDMC-PJ-02-VI-2014-002 St. Croix, USVI  
VIWMA Coastal Interceptor Relocation  
November 4, 2014  
Page 3

FEMA appreciates your continued cooperation in the review of federally funded projects. Should you have any questions or require additional information, please contact Mr. José E. Ayala, Environmental Specialist, at (787) 296-3500 or by email at [Jose.Ayala3@fema.dhs.gov](mailto:Jose.Ayala3@fema.dhs.gov).

Sincerely,



Alejandro R. De La Campa  
Disaster Recovery Manager

Enclosures

c: BG Elton Lewis, VITEMA Director  
Mr. Richard T. Evangelista, Esq., Alternate GAR

MJMM



**Relocated Coastal Interceptor**  
with Lift Station from MH0432,  
Force Main to Transition Manhole,  
and gravity line to MH0439

New  
Connection for  
Mill Harbor  
Lateral


Demo submerged sewer line  
between MH0431 to MH0439

New  
Connection for  
Colony Cove  
Lateral



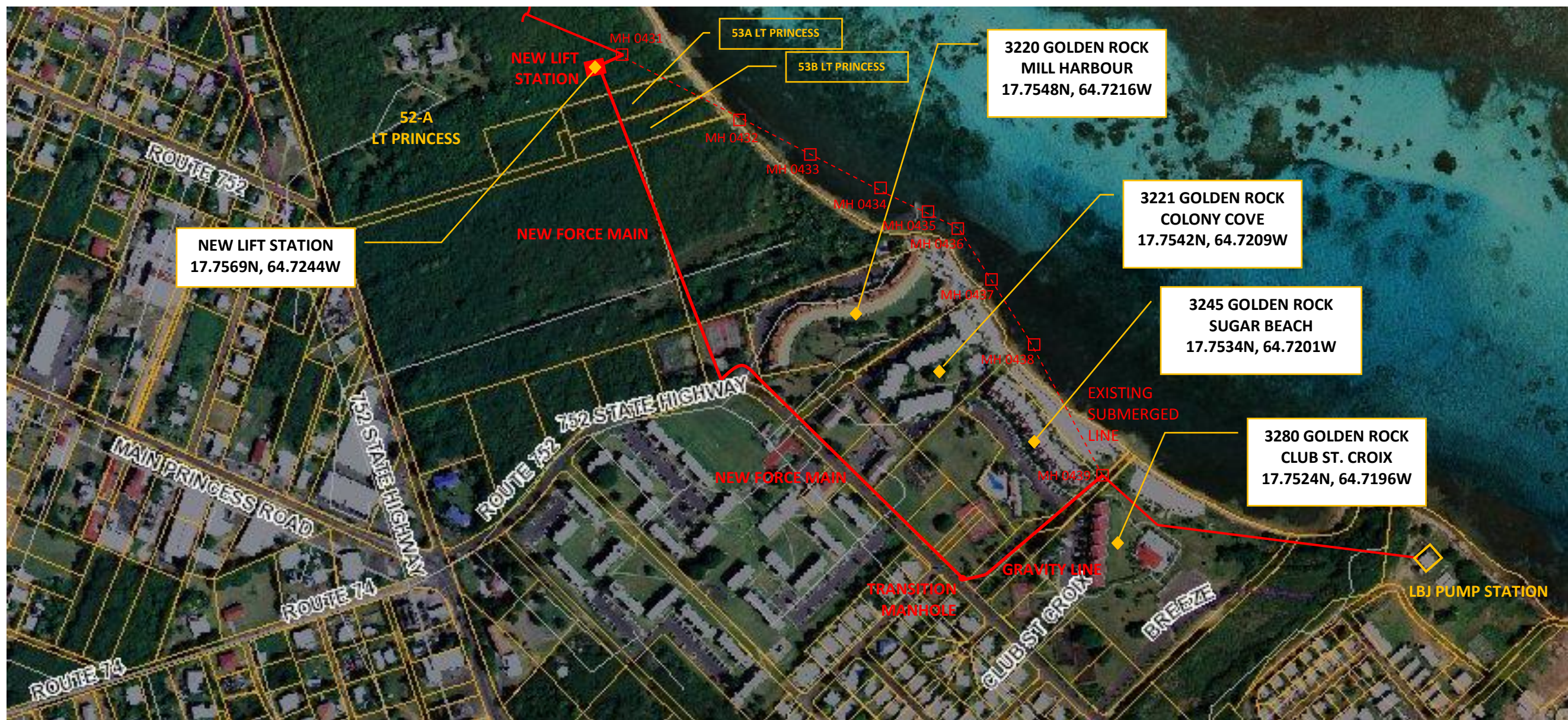
**OVERALL PROJECT LOCATION PLAN - COASTAL INTERCEPTOR REHABILITATION PROJECT**

NTS

 Virgin Islands Waste Management Authority Planning Partner	941-946 Estate Williams Delight Frederiksted, VI 00840
	PH: 340.712.4962    FX: 340.719.8839

09-29-13 Revision



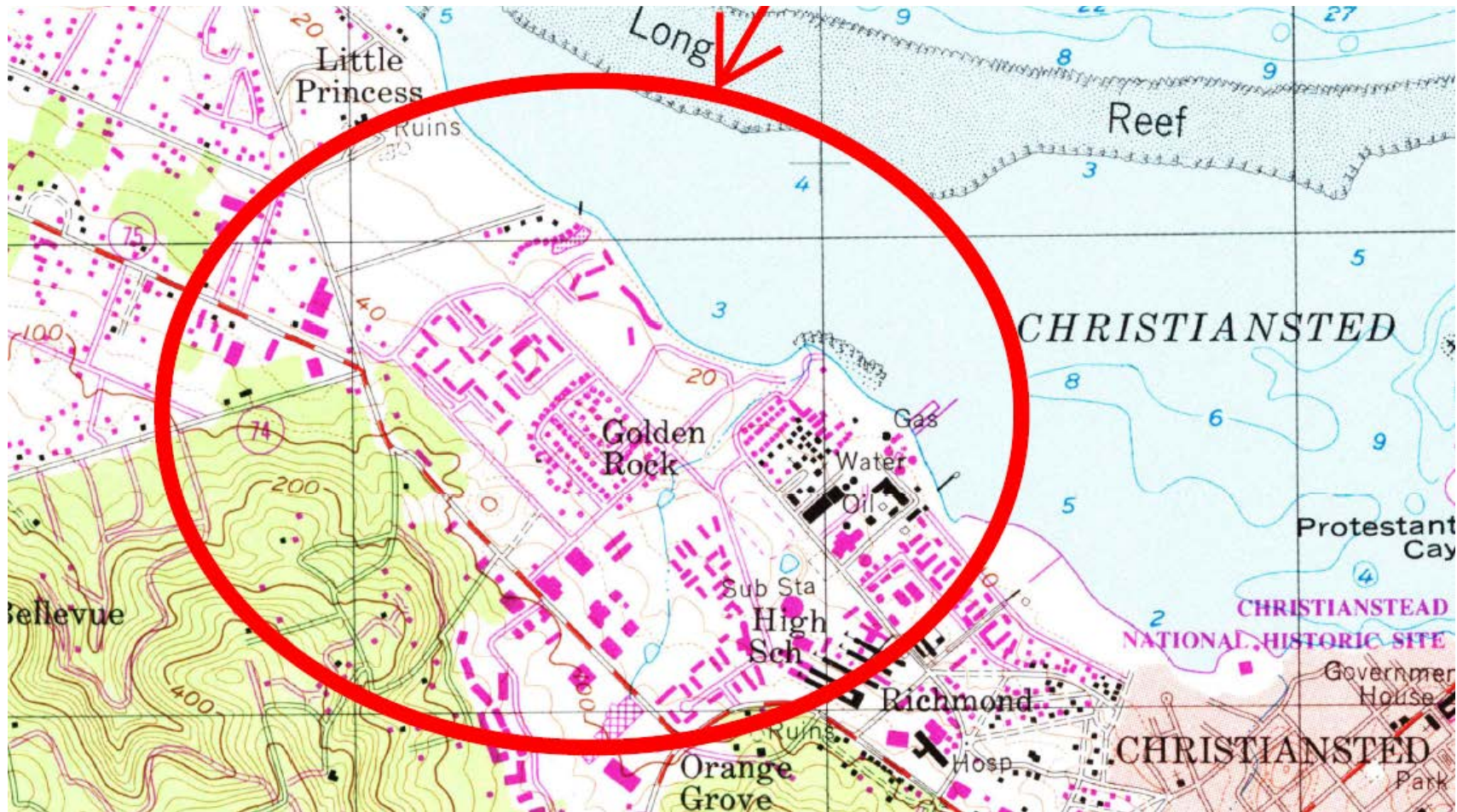


**PROJECT & PROPERTY LOCATION PLAN**  
**COASTAL INTERCEPTOR REHABILITATION PROJECT**

NTS

	<p>941-946 Estate Williams Delight          Frederiksted, VI 00840          PH: 340.712.4962 FX: 340.719.8839</p>
--	---

10-05-13 Revision



# PRELIMINARY

## Caribbean Sea

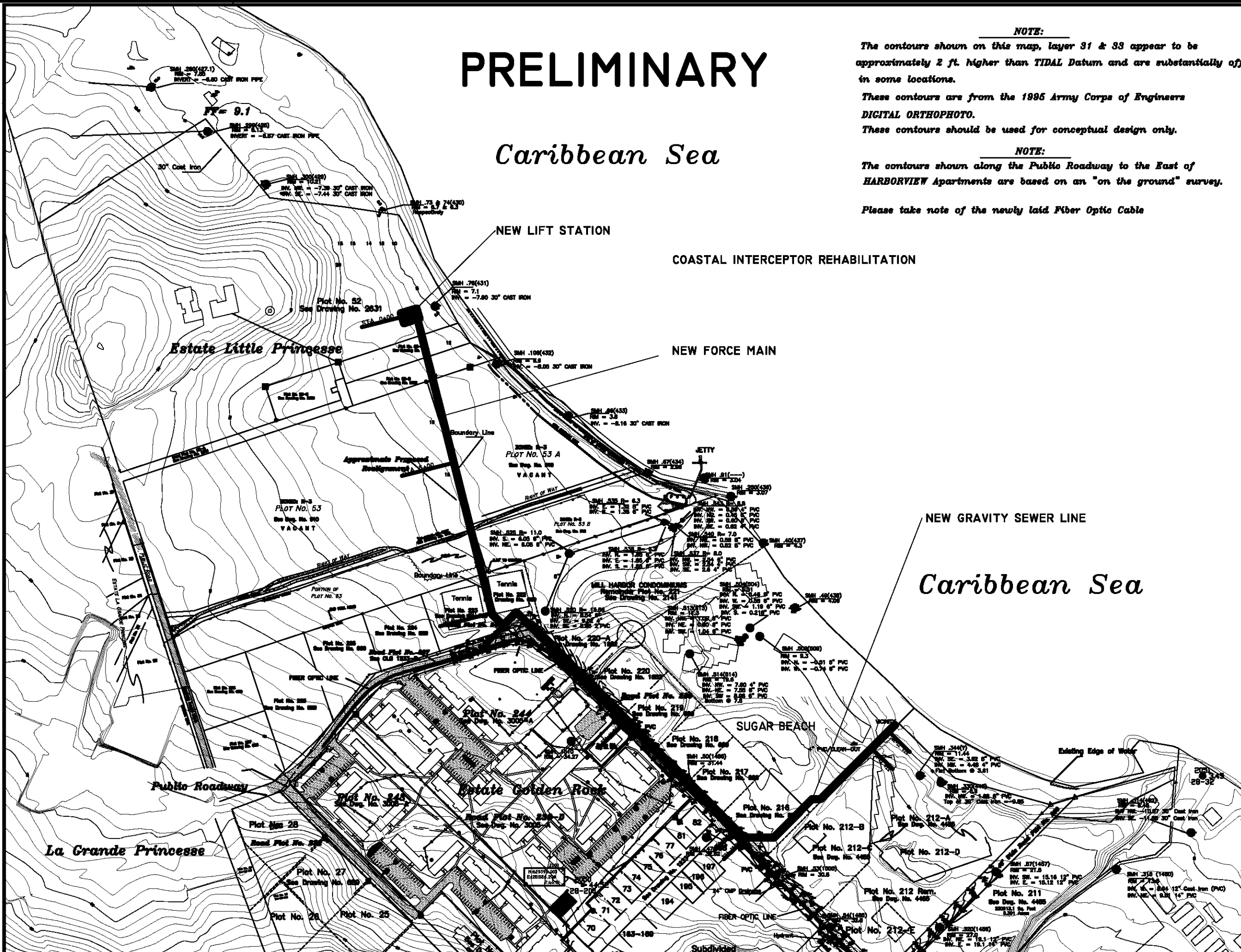
**NOTE:**  
The contours shown on this map, layer 31 & 33 appear to be approximately 2 ft. higher than TIDAL Datum and are substantially off in some locations.

These contours are from the 1985 Army Corps of Engineers DIGITAL ORTHOPHOTO.

These contours should be used for conceptual design only.

**NOTE:**  
The contours shown along the Public Roadway to the East of HARBORVIEW Apartments are based on an "on the ground" survey.

Please take note of the newly laid Fiber Optic Cable



NO.	DATE	REVISION
1	08/10/18	ISSUE FOR CONSTRUCTION

**ST. CROIX  
COASTAL  
INTERCEPTOR  
RELOCATION**

**VIWMA**  
VIRGIN ISLANDS WASTE MANAGEMENT  
AUTHORITY  
941-948 Estate Williams Delight  
Frederiksted, VI 00840  
Telephone: 340-712-4962

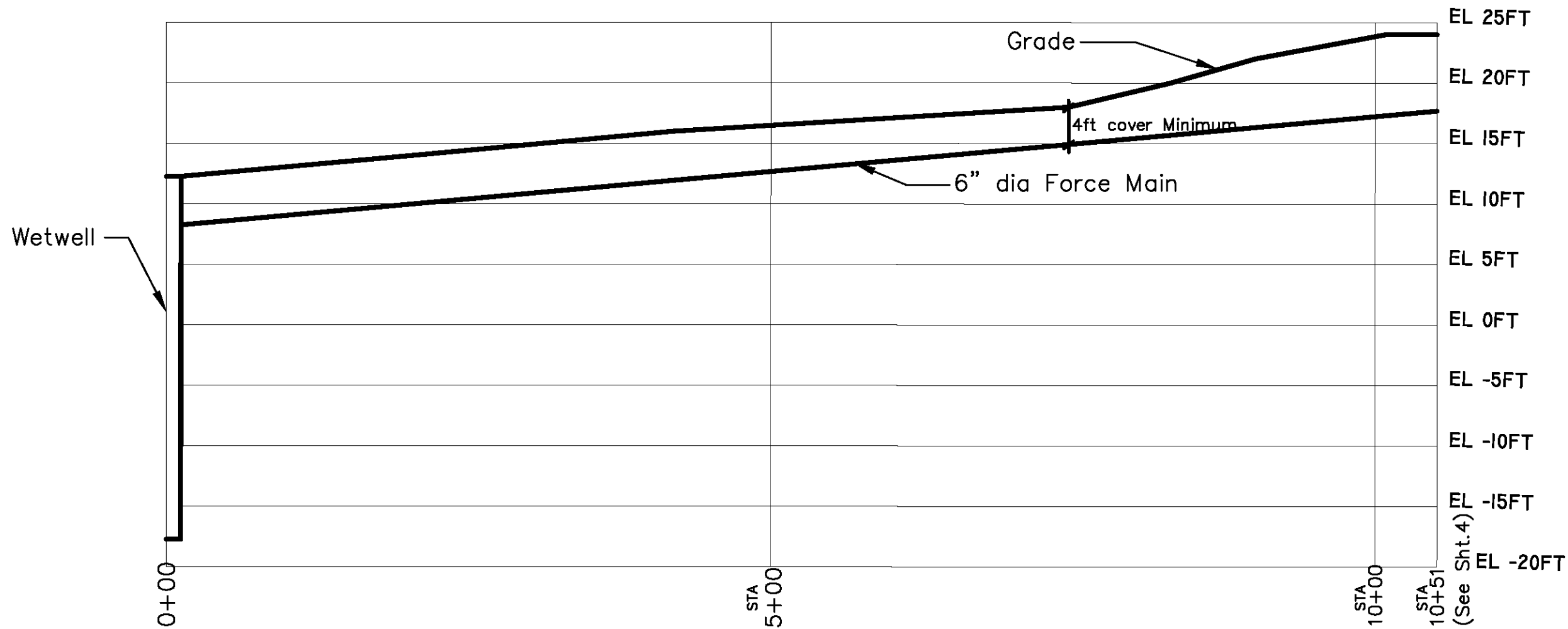
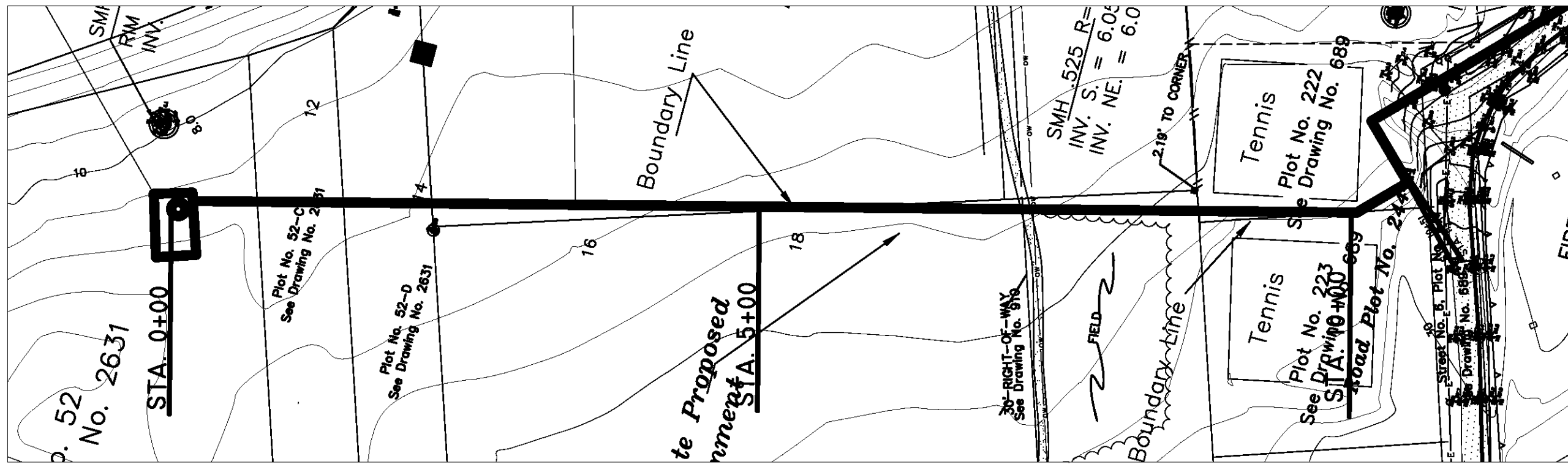
**COMPANY QUARTER  
ST. CROIX, USVI**

DATE: 08/10/18  
DRAWN DESIGN BY: T. U. ALBANY NICHOLAS  
CHECKED BY: JAMES GRUM, P.E. CHIEF ENGINEER  
APPROVED BY: MAY ADAMS CORNWALL, P.E. EXECUTIVE DIRECTOR

PROMOTED BY:  
DESIGNED BY:

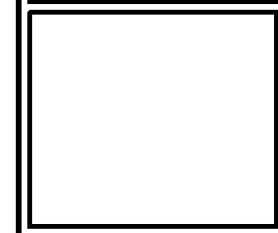
2 OF 6  
**SEWER LINE  
PLAN AND PROFILE**





NO.	DATE	REVISION
1	08/10/18	ISSUE FOR CONSTRUCTION

**ST. CROIX  
COASTAL  
INTERCEPTOR  
RELOCATION**



**VIWMA**  
VIRGIN ISLANDS WASTE MANAGEMENT  
AUTHORITY  
941-948 Estate Williams Delight  
Frederiksted, VI 00840  
Telephone: 340.712.4992

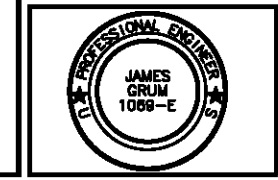
COMPANY QUARTER  
ST. CROIX, USVI

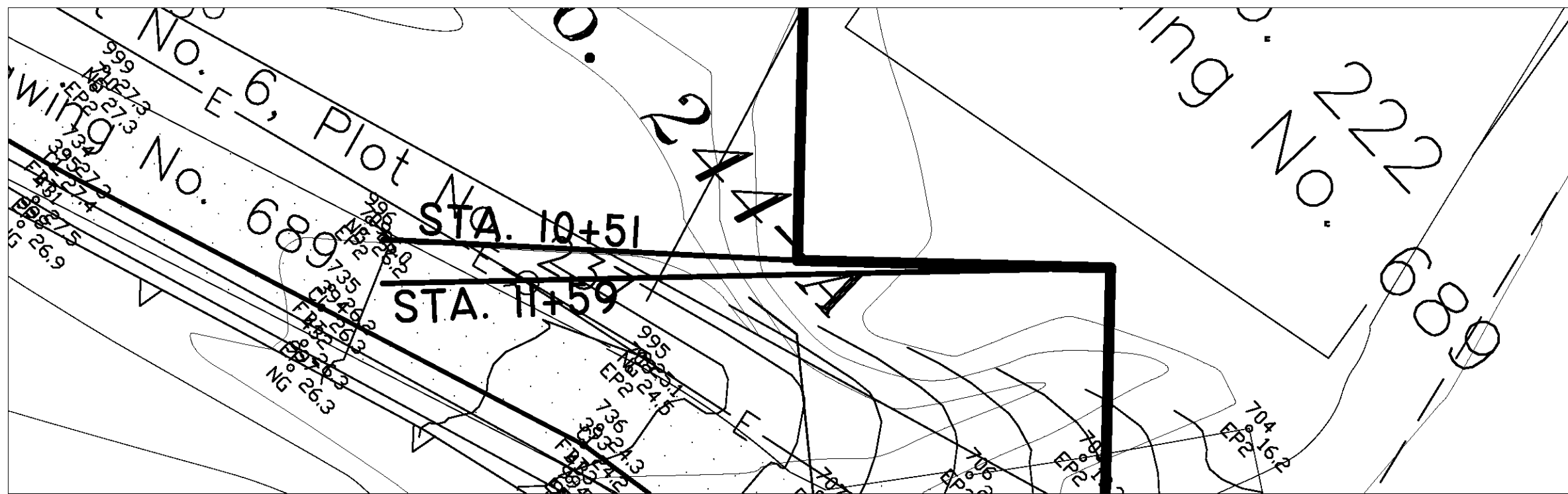
DATE: 08/10/18  
DRAWN DESIGN BY: T. U. ALBANY NICHOLAS  
CHECKED BY: JAMES GRUM, P.E. CHIEF ENGINEER

APPROVED BY: MAY ADAMS CORNWALL, P.E. EXECUTIVE DIRECTOR

PROMOTED BY:

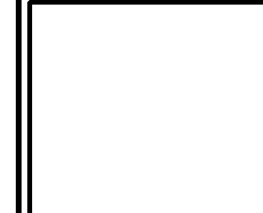
3 OF 6  
SEWER LINE  
PLAN AND PROFILE





NO.	DATE	REVISION

**ST. CROIX  
COASTAL  
INTERCEPTOR  
RELOCATION**



**VIWMA**  
VIRGIN ISLANDS WASTE MANAGEMENT  
AUTHORITY  
941-948 Estate Williams Delight  
Frederiksted, VI 00840  
Telephone: 340.712.4962



COMPANY QUARTER  
ST. CROIX, USVI

DATE: 08/10/18

DRAWN DESIGN BY:  
T. U. ALBANY NICHOLAS

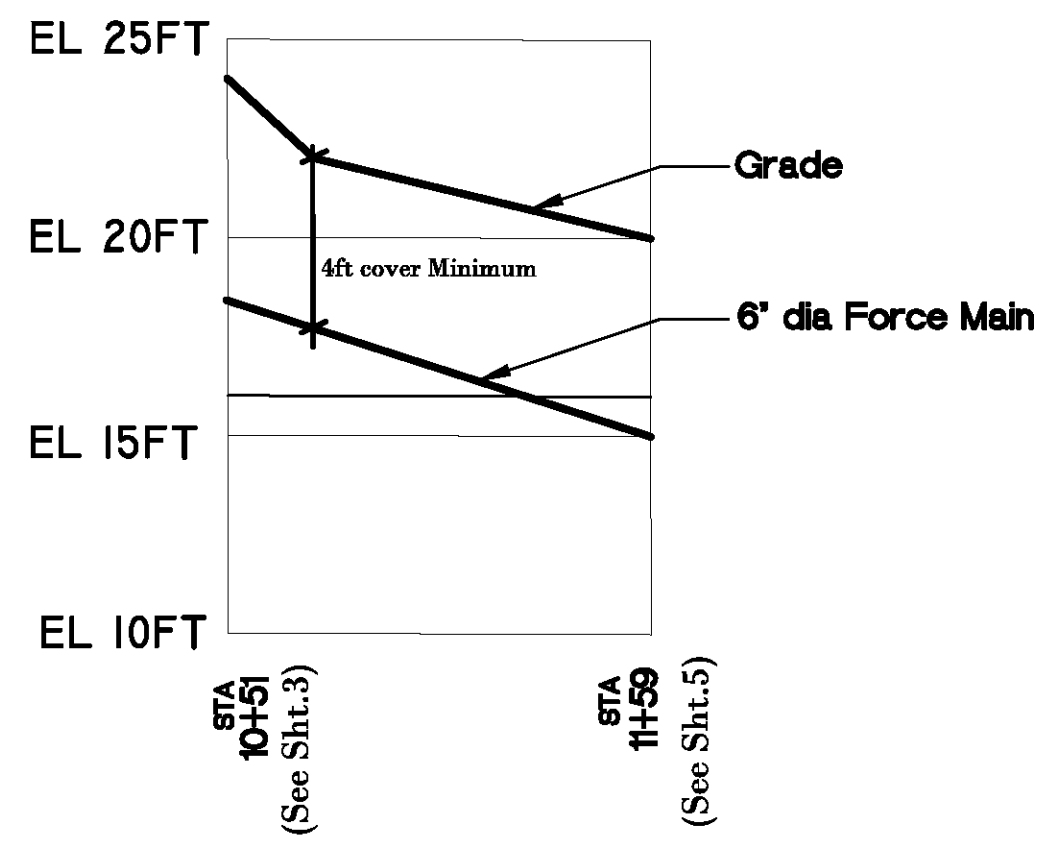
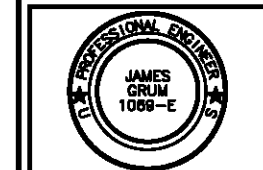
CHECKED BY:  
JAMES GRUM, P.E.  
CHIEF ENGINEER

APPROVED BY:  
MAY ADAMS CORNWALL, P.E.  
EXECUTIVE DIRECTOR

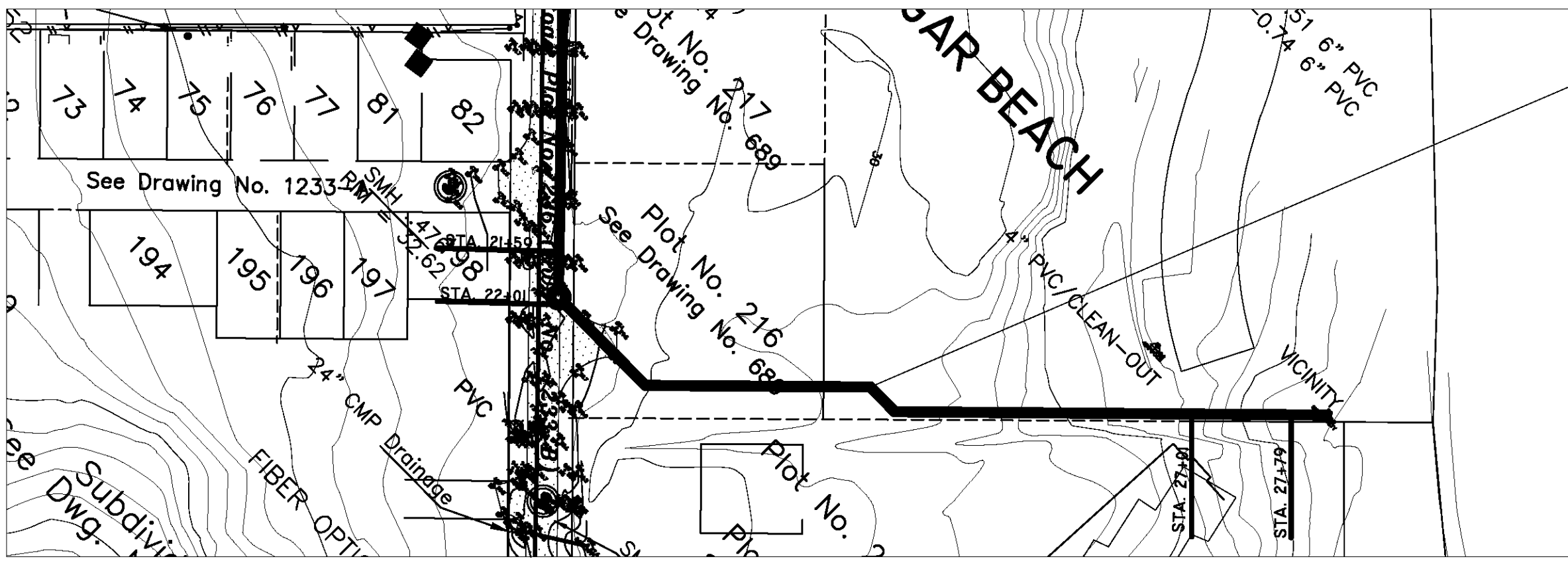
PROMOT NO:

SHEET NO:  
4 OF 6

**SEWER LINE  
PLAN AND PROFILE**







NO.	DATE	REVISION
1	08/10/18	ISSUE FOR CONSTRUCTION

**ST. CROIX  
COASTAL  
INTERCEPTOR  
RELOCATION**



**VIWMA**  
VIRGIN ISLANDS WASTE MANAGEMENT  
AUTHORITY  
941-948 Estate Williams Delight  
Frederiksted, VI 00840  
Telephone: 340.712.4962

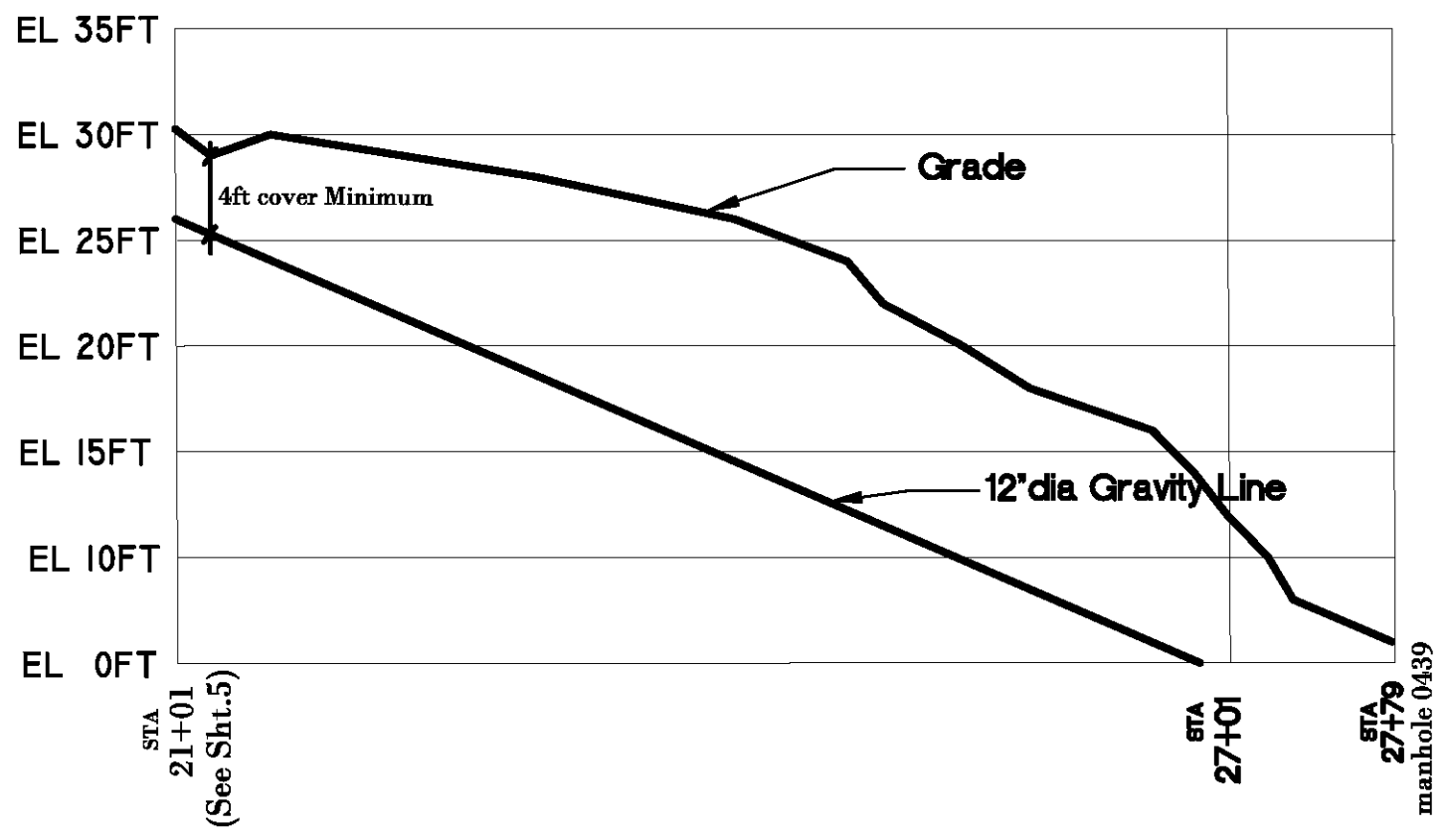
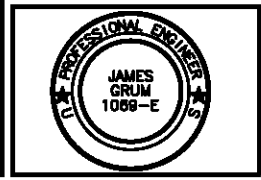


**COMPANY QUARTER  
ST. CROIX, USVI**

DATE: **08/10/18**  
DRAWN/DESIGN BY:  
**T. U. ALBANY NICHOLAS**  
CHECKED BY:  
**JAMES GRUM, P.E.  
CHIEF ENGINEER**  
APPROVED BY:  
**MAY ADAMS CORNWALL, P.E.  
EXECUTIVE DIRECTOR**

PROMOTED BY:

6 OF 6  
**SEWER LINE  
PLAN AND PROFILE**





FEMA

February 5, 2015

Sean L. Krigger  
Acting Director/Deputy State Historic Preservation Officer  
Historic Preservation Architect  
Department of Planning and Natural Resources  
Virgin Islands State Historic Preservation Office  
1640 Dronningens Gade 71&72A, Kongens Quarter  
Charlotte Amalie, Virgin Islands 00802

Re: NHPA Section 106 Consultation (revision)  
FEMA, PDMC-PJ-02-VI-2014-002 St. Croix, USVI  
VIWMA St. Croix Coastal Interceptor Relocation  
VISHPO Project No.: STX-05-14

Dear Mr. Krigger:

The Virgin Islands Waste Management Authority (VIWMA) has applied for financial assistance from the U.S. Department of Homeland Security, Federal Emergency Management Agency (FEMA), for St. Croix Coastal Interceptor Relocation at La Grande Princess. FEMA is proposing to fund the project through the Hazard Mitigation Pre-Disaster Mitigation-Competitive (PDMC) Grant Program. This consultation is a follow-up to our previous communication dated November 4, 2014. Subsequently VIWMA provided FEMA with copies of two archaeological surveys previously conducted in two plots of land, where a section of the new interceptor will be located. FEMA has revised these two reports and has modified its determination. The two reports received are:

- *Stage IA Cultural Resources Survey of Plots 53 and 53A, Estate Little Princess, St. Croix.* By George F. Tyson, Jr. To: Coastal Consultants, Box 2119, Kingshill, St. Croix, VI. June/July 1985.
- *Phase IB and Phase II Artifact Recovery and Assessment Report of Plots 53 and 53A, Estate Little Princess, St. Croix.* By Cultural Resources, Inc. (Alfredo Figueredo), P.O. Box 938, Kingshill, St. Croix, VI 00850. 20 August 1986.



Sean L. Krigger  
NHPA Section 106 Consultation (revision)  
FEMA, PDMC-PJ-02-VI-2014-002 St. Croix, USVI  
VIWMA St. Croix Coastal Interceptor Relocation  
VISHPO Project No.: STX-05-14  
February 5, 2015  
Page 2

These two archaeological surveys cover an area of 22 acres, a track of undeveloped land corresponding to the location of the west section of the proposed interceptor relocation area. This section of the interceptor includes the new lift station; the new sewer line from MH#431 to the new lift station; and the western segment of the new sewer line between STA 0+00 and STA 10+51.

The Phase IA utilized surface reconnaissance and identified three areas with concentrations of historical artifacts and one possible prehistoric site. The historic concentrations contained ceramics and building materials and were identified in the southwest, the southeast and the north central areas. No structures were observed. The prehistoric site was described as an irregular shell midden of conch and clam exposed on the face of the beach berm, with scattered evidence extending some 80 meters inland.

The Phase IB survey consisted of excavation of twenty-one 1x1 meter test pits in the four areas where artifacts were identified. Outside the shell midden area, no cultural stratification was found. In the north central area, the artifacts were restricted to the surface; the southeast area had been modified by the construction of the cottages complex; and the southwest area had been plowed. The testing was able to define the limits of the shell midden, which comprised mostly conch shells, but no indication of prehistoric evidence was found.

Phase II consisted of the excavation of trenches, eleven units of 5x5 feet, in the shell midden. The trench revealed a uniform stratigraphy. All the cultural material was historic, dating roughly to the period 1750-1850. The investigators did not recommend any further investigation.

After the review of the previous archaeological survey, FEMA finds there is potential to affect historic properties in the area of potential effects of the coastal interceptor relocation. Therefore, upon consultation with VISHPO, FEMA recommends an archaeological monitoring of all earthmoving activities to prevent adverse effect. It is recommended that all excavation work for the new sewer line be monitored by a qualified Archaeologist that meets the *Secretary of the Interior Professional Qualification Standards for Archaeology and Historic Preservation*. Enclosed is a copy of the archaeological monitoring scope of work proposed by FEMA.

Sean L. Krigger  
NHPA Section 106 Consultation (revision)  
FEMA, PDMC-PJ-02-VI-2014-002 St. Croix, USVI  
VIWMA St. Croix Coastal Interceptor Relocation  
VISHPO Project No.: STX-05-14  
February 5, 2015  
Page 3

FEMA appreciates your continued cooperation in the review of federally funded projects. Should you have any questions or require additional information, please contact José E. Ayala, Environmental Specialist, at (787) 296-3500 or by email at [Jose.Ayala3@fema.dhs.gov](mailto:Jose.Ayala3@fema.dhs.gov).

Sincerely,



Alejandro R. De La Campa  
Disaster Recovery Manager

Enclosure

c: BG Elton Lewis, VITEMA Director

MJMM

**Archaeological Monitoring: Scope of Work**  
**PDMC-PJ-02-VI-2014-002**  
**USVI St. Croix: Coastal Interceptor Relocation**

Virgin Islands Waste Management Authority (VIWMA)  
St. Croix Coastal Interceptor Relocation at La Grande Princess  
Coordinates: west end MH#0431 (17.7572N, 64.7237W)  
east end MH#0439 (17.7534N, 64.7193W)  
VISHPO Project No.: STX-05-14

**INTRODUCTION**

The Department of Homeland Security-Federal Emergency Management Agency (DHS-FEMA) is proposing to provide Pre-Disaster Mitigation (PDM) funds from the Hazard Mitigation Assistance program to the Virgin Islands Waste Management Authority (VIWMA), Sub grantee, for the Undertaking as described below. PDM funds are used for hazard mitigation planning and projects on an annual basis. The PDM program was set in place to reduce overall risk to people and structures, while at the same time, reducing reliance on federal funding if an actual disaster were to occur. The Virgin Islands Waste Management Authority (VIWMA) initiated Section 106 consultation in March 2014. FEMA initiated consultation on November 4, 2014 and subsequently presented a revised determination on January 26, 2015. Virgin Island's State Historic Preservation Office (VISHPO) concurred with the archaeological monitoring proposed by FEMA to mitigate the potential to affect historic properties in the area of potential effects of the coastal interceptor relocation.

The scope of work for the St. Croix Coastal Interceptor Relocation Project consists of easement and land acquisition (by VIWMA); clean and inspect existing sewer line with close circuit camera television; clean and abandon in place 2200 feet of existing sewer line; clean and collapse six (6) existing manholes; install 200 feet of new gravity line from MH-31 to a new lift station with required mechanical, structural, instrument, and electrical systems; install 2300 feet of new force main piping with air release valves; install new transition manhole with 600 feet of new gravity line; rehabilitate two (2) manholes; and install two (2) lateral connections to reconnect current users. Inspection and acceptance of work will be performed by the VIWMA Division of Engineering and VIWMA Division of Operations during and upon completion of the project.

The Area of Potential Effects (APE) will be within the boundaries of the ground disturbance for the installation of the sewer line, manholes and lift stations and any staging area that may be needed for the excavations taking place. The project area of potential effects (APE) is divided into three sections:

1. Section 1 for the relocation of the coastal interceptor is located inside undeveloped land. The beginning of the gravity line reroute starts at MH#0431 (17.7572N, 64.7237W). The proposed lift station 0.04 acre property to be acquired is at 17.7569N, 64.7244W. The proposed lift station property and structure is located near the south east boundary of the existing Nature Conservatory at Plot No. 52 La Grande Princess. The force main runs southeast through Plots 52C, 52D, 53A; it continues southeast along the boundary between Plots 222 and 223. The location of the new lift

station; the new sewer line from MH#431 to the new lift station; and the western segment of the new sewer line between STA 0+00 and STA 10+51, all are located inside undeveloped land and have the potential to present historic properties.

VISHPO has requested that all excavation work for the new sewer line from MH#431 to STA 10+51 at Route 752 will have to be monitored by a qualified Archaeologist.

2. Section 2 for the relocation of the coastal interceptor is located inside developed area. The force main continues southeast at edge of Road Plot No 236; and ends at the proposed transition manhole just northwest of the Sugar Beach Condominium Driveway (17.7524N, 64.7206W). The gravity from the proposed transition manhole runs northeast along the south boundary of the Sugar Beach Condominium Property towards the existing manhole MH#0439 (17.7534N, 64.7193W) of the Coastal Interceptor to complete the reroute. VISHPO has requested that all excavation work for the new sewer line from STA 10+51 to MH#0439 will have to be monitored by a qualified Archaeologist.
3. Section 3 for the demolition of the existing submerged pipeline to be abandoned between MH#0431 to MH#0439.

Sections 1 and 2 for the relocation of the coastal interceptor, was deemed archaeologically sensitive by United States Virgin Islands State Historic Preservation Office (USVISHPO) (VISHPO Project No.: STX-05-14, Letter dated March 28, 2014). Excavation activities within these areas will be directly supervised by an archaeologist meeting the Secretary of the Interior's (SOI) Professional Qualifications Standards ([http://www.nps.gov/history/local-law/arch\\_stnds\\_9.htm](http://www.nps.gov/history/local-law/arch_stnds_9.htm)).

### **PROJECT DESCRIPTION**

The goal of archaeological monitoring will be to identify evidence of historic and/or prehistoric human/cultural activities that may inadvertently be displaced by excavation activities. The archaeologist will be present on site at all times during excavations. Once the excavation schedule has been established and agreed upon with the archaeologist, FEMA will be notified.

The archaeologist's work is to conform to the guidelines established for archaeological investigations in the United States Virgin Islands. Analysis of any cultural material recovered and report preparations are also to be under the supervision of a SOI-qualified archaeologist. The monitoring and all excavations shall follow standard archaeological practice and the level of description and documentation in the report submitted to FEMA for review shall be consistent with The Secretary of the Interior's Standards and Guidelines for Archaeological Documentation ([http://www.nps.gov/history/local-law/arch\\_stnds\\_7.htm](http://www.nps.gov/history/local-law/arch_stnds_7.htm)) and National Park Service publication, The Archaeological Survey: Methods and Uses (1978).

### **CONTRACTOR SERVICES AND REQUIRED INVESTIGATIONS**

#### **A. General Services:**

The archaeology contractor will provide all labor, materials, equipment, transportation, supervision, management, etc. to support the archaeological monitoring effort associated with the project.

**B. Contractor Support:**

The excavation contractor shall support the governmental agencies' archaeological monitoring requirements by providing access to the site and communications regarding schedules and scopes of work.

A protocol for excavation work stoppages will be developed to enable archaeologist time for recordation and for any archaeological data recovery that may be needed and will be addressed within a written monitoring plan. A written protocol or monitoring plan should be prepared and agreed to by the consulting archaeologist, the review agency archaeologist, the Applicant, the undertaking agency representative and the excavation contractor. This protocol will include an agreement that the excavation contractor shall allow for the immediate stoppage of any excavations if the archaeological monitor notices anything of potential significance and needs to investigate the area. Once the written monitoring plan is prepared and agreed upon by all parties, a draft will be submitted to FEMA who will submit the monitoring plan to SHPO for approval.

In addition, the excavation contractor will allow for the excavation trenches to be made available for archaeologist to inspect the area of excavation on a regular agreed upon time basis that is appropriate to the nature and size of the site (e.g. the archaeologist could inspect the construction trench for 1 hour per every 20 linear feet of trench).

The excavation contractor shall also ensure the security of the site at all times and will otherwise comply with all health and safety requirements (see C. Health and Safety Plan – HASP below). The archaeologist shall provide a written progress report if work continues longer than two weeks until as long as is needed to both the Applicant and to FEMA's Public Assistance Program, which will be communicated to Environmental and Historic Preservation Cadre of FEMA Region II as they are received.

The agreed upon monitoring plan is only applicable for the proposed excavations, and cannot be applied to any other projects taken on within the APE or funded by the Applicant, FEMA or any other party.

**C. Health and Safety Plan (HASP):**

Prepare Health and Safety Plan (HASP)-The Health and Safety Plan shall serve as a safety plan and research strategy for all work.

- a. The HASP and all work will comply with DHS Directive 066-01 Safety & Health Programs. Under this Directive, reside the DHS Safety & Health Manual and all other applicable regulations and guidelines. The current manual is located at:  
[http://dhsconnect.dhs.gov/policies/Instruction%20Supplements/DHS%20Safety%20Manual%202010%2006-23%20\(2\).pdf](http://dhsconnect.dhs.gov/policies/Instruction%20Supplements/DHS%20Safety%20Manual%202010%2006-23%20(2).pdf)
- b. FEMA acceptance of the Health and Safety Plan must be obtained before any fieldwork is undertaken.

D. Field Monitoring:

Monitoring discoveries shall be documented by note taking and through daily diaries and stratigraphic level/layer forms (if applicable); annotated photographic documentation; scaled plan view maps and profile drawings (soil types in layers shall be described and their colors noted using Munsell color chips and representative photographs shall be taken) and sample profiles shall be drawn in the event that no significant deposits are found to document the nature of the deposits. All photographs are to be captioned and will contain directional information and a scale (when appropriate).

FEMA will be responsible to coordinate a right-of-entry with USVIWMA, owner of the property, prior to access of the site. Ingress and egress access to the property will be coordinated by FEMA. No trespassing outside of project shall take place.

E. Laboratory Analysis:

If any artifacts are collected as a result of monitoring they shall be catalogued, labeled, and described in the report. An inventory table of artifacts shall be included in an appendix of the report. Faunal materials shall be analyzed to the nearest taxonomic level to species as possible. Charcoal samples suitable for dating shall be collected, properly bagged in aluminum foil and provided with provenances and a description of the context.

F. Action Taken by Contractor Upon Any Significant Finds:

In the event that potentially significant archaeological deposits or features are discovered the monitor shall stop work in the immediate area of the discovery and contact FEMA for consultation. In the case where a significant feature or deposit is identified during monitoring the treatment option(s) to be implemented will depend on consultation and agreement between Applicant and USVISHPO. The archaeologist performing the monitoring shall not act upon any treatment option until FEMA has instructed them to proceed. Any additional work that might be required will address a research question or questions related to local USVI history or prehistory.

G. Actions Taken by Contractor in the Event of Discovery of Human Remains:

In the event a human burial is encountered all work shall stop and the archaeological monitor shall consult with USVISHPO and the county coroner/medical examiner, local law enforcement, and will notify FEMA of their findings. The coroner and local law enforcement will make the official ruling on the nature of the remains, being either forensic or archaeological. A decision concerning avoidance or hand excavation of the burial and final disposition of the remains shall be made by consulting parties in coordination with the USVISHPO.

H. Data Analysis and Final Storage of Any Artifacts:

The archaeologist shall temporarily store all artifacts, faunal material, human remains and soil samples in order to perform analysis. At the conclusion of the project and upon submission of the archaeological final report and approval by FEMA, all materials shall be returned to a repository as directed by the USVISHPO in consultation with the Applicant.

I. Draft and Final Reports:

The archaeologist shall provide FEMA with a draft report describing the work conducted within 30 days after the completion of the project field work for comments and review. The final report will be submitted no longer than 15 days after the draft report is reviewed and commented on by FEMA. The contractor shall ensure that the report is written following the USVISHPO report guidelines.

The report will make recommendations concerning whether a significant archaeological site is present, will have evaluated the site relative to the impacts of the project excavations on the site by applying 36 CFR 800 effect criteria and will make effect determination recommendations based on that evaluation. If applicable, the archaeologist shall ensure that the archaeological site registration form is updated. The final report will be submitted to FEMA and FEMA will submit final report to USVISHPO office for consultation review.

J. Coordination with FEMA:

Applicant and archaeologist will keep FEMA apprised of developments during monitoring project and if anything significant should be found.

Attachment A: Area of Potential Effects (APE)







**FEMA**

February 23, 2015

Mr. Sean L. Krigger  
Acting Director/Deputy State Historic Preservation Officer  
Historic Preservation Architect  
Department of Planning and Natural Resources  
Virgin Islands State Historic Preservation Office  
1640 Dronningens Gade 71&72A, Kongens Quarter  
Charlotte Amalie, Virgin Islands 00802

Re: Notification of Change in Scope of Work  
FEMA, PDMC-PJ-02-VI-2014-002 St. Croix, USVI  
VIWMA St. Croix Coastal Interceptor Relocation  
VISHPO Project No.: STX-05-14

Dear Mr. Krigger:

This notification is a follow-up to the NHPA Section 106 consultation submitted on February 5, 2015. Since then, the Applicant has presented a change in the scope of work, with the relocation of the lift station some 225 feet to the south. The proposed new lift station will be placed at coordinates 17.756330, -64.724132. Due to the change in the lift station location, the beginning of the reroute will now occur at MH432 (coordinates 17.756724, -64.723180), not at MH0431. There are approximately 370 feet of gravity line from MH0432 to lift station. From the lift station the force main sewer line runs southeast for approximately 900 feet, to route 752. The force main continues east for some 280 feet along route 752 then turns south and continues as previously planned. As a result of the change of location of the lift station only six manholes in the water will be demolished.

After a review of the changes in the scope of work, the Federal Emergency Management Agency (FEMA) finds that there is no change in the previous determination, that there is potential to affect historic properties in the area of potential effects of the coastal interceptor relocation. Therefore, to prevent any adverse effect, FEMA maintains the recommendation for an archaeological monitoring of all

Mr. Sean L. Krigger  
Notification of Change in Scope of Work  
FEMA, PDMC-PJ-02-VI-2014-002 St. Croix, USVI  
VIWMA St. Croix Coastal Interceptor Relocation  
VISHPO Project No.: STX-05-14  
February 23, 2015  
Page 2

earthmoving activities. The conditions for the archaeological monitoring scope of work, submitted on February 5, 2015, still prevail.

FEMA appreciates your continued cooperation in the review of federally funded projects. Should you have any questions or require additional information, please contact Mr. José E. Ayala, Environmental Specialist, at (787) 296-3500 or by email at [Jose.Ayala3@fema.dhs.gov](mailto:Jose.Ayala3@fema.dhs.gov).

Sincerely,

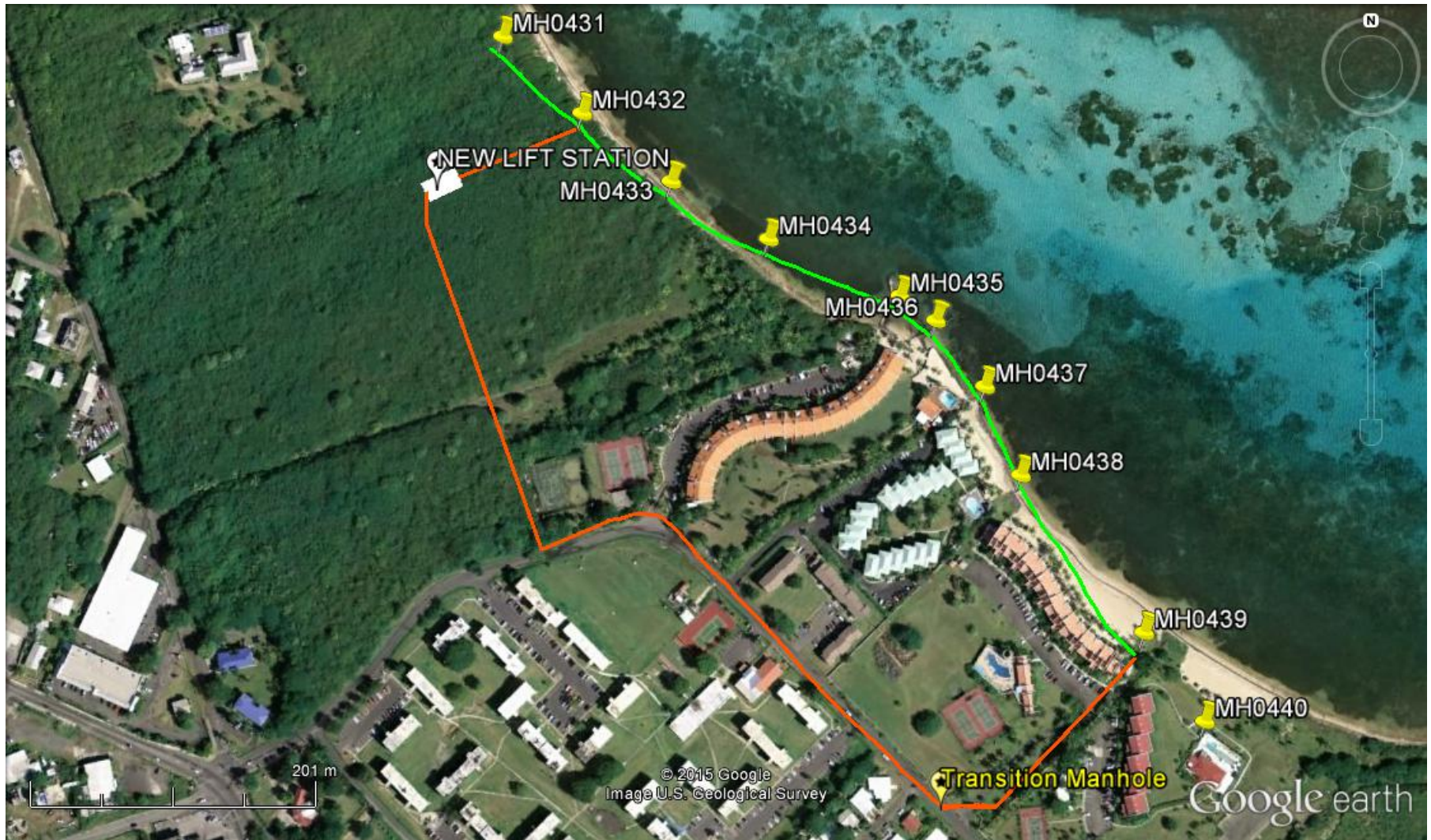


Alejandro R. De La Campa  
Disaster Recovery Manager

Enclosure

c: BG Elton Lewis, VITEMA Director

MJMM



General site plan with the new location for the lift station (coordinates 7.756330, -64.724132);  
new connection to MH0432, and re-alignment of the force main sewer line (north section) .

4852

16 MAR '15 PM 01:54 FEMA



**DEPARTMENT OF PLANNING AND NATURAL RESOURCES  
Virgin Islands State Historic Preservation Office**

Strand Street 198, Fort Frederik Museum  
Frederiksted  
St. Croix, Virgin Islands 00840

Telephone: (340) 719-7089

Facsimile: (340) 719-8343

March 3, 2015

Mr. Alejandro R. De La Campa  
Disaster Recovery Manager  
U.S. Department of Homeland Security  
Region II- Caribbean Area Division  
P.O. Box 70105  
San Juan, Puerto Rico 00936-8105

**Ref: Section 106 Review of FEMA Scope of Work for Archaeological  
Monitoring of the St. Croix Coastal Interceptor Relocation Project,  
St. Croix, US Virgin Islands PDMC-PJ-02-VI-2014-002**

Dear Mr. De La Campa:

The Virgin Islands State Historic Preservation Office is in receipt of your letters dated February 5<sup>th</sup> and 23<sup>rd</sup>, 2015 for Section 106 consultation for the Federal Emergency Management Agency (FEMA) funded Virgin Islands Waste Management Authority, (VIWMA), St. Croix Coastal Interceptor Relocation Project, St. Croix, US Virgin Islands Scope of Work for Archaeological Monitoring. VISHPO review was previously initiated on behalf of the National Environmental Protection Act (NEPA) and through the National Historic Preservation Act (NHPA), which requires all federally funded undertakings to consider the potential impact to cultural resources prior to the distribution of funds.

As per the previously submitted and revised documentation, the project will consist of easements, land acquisition and excavation/earthworks for rerouting of the St. Croix Coastal Interceptor in the coastal areas of Estates Little Princess and Golden Rock, which was determined could potential cause adverse effects to historic /archaeological resources. As a result it was determined by VISHPO that

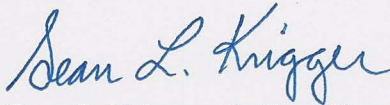
Section 106 Review of FEMA/VIWMA  
St. Croix Coastal Interceptor Relocation Project  
St. Croix, US Virgin Islands, PDMC-PJ-02-VI-2014-002  
March 28, 2014

Archaeological monitoring of the excavation activities associated with this undertaking would be necessary.

**Based on the submitted FEMA recommendation for archaeological monitoring for all earthmoving activities and the conditions for the archaeological monitoring scope of work as outlined in FEMA correspondence on February 5, 2015, the VISHPO finds No Objection to the St. Croix Coastal Interceptor Relocation Project proceeding.**

Thank you for consulting with the Virgin Islands State Historic Preservation Office regarding Section 106 compliance for this federally funded project. Please contact our office if there are any additional questions.

Sincerely,



Sean L. Krigger, Acting Director  
And Deputy State Historic Preservation Officer



**Section 106 Review Process  
Certificate of Approval  
For  
Project Compliance**

**Department of Planning and Natural Resources  
V.I. State Historic Preservation Office  
Dronningens Gade 71&72A, Kongens Quarter  
Charlotte Amalie, Virgin Islands 00802  
Tel. (340) 776-8605 / Fax (340) 776-7236**

This is to certify that the Federal Undertaking listed below has successfully completed the Section 106 Review Process with the Virgin Islands State Historic Preservation Office and presents no adverse effects to historic or other cultural resources listed on, determined to be eligible, or considered eligible for listing on, the National Register of Historic Places.

**Project Title:** St. Croix Coastal Interceptor Relocation Project Archaeological Monitoring

**VISHPO Project No.:** STX-05-14      **Alternate Project No.:** PDMC-PJ-02-VI-2014-002

**Federal / State Agency:** Federal Emergency Management Agency (FEMA)

**Applicant:** Virgin Islands Waste Management Authority/ FEMA

**Project Coordinator:** Marisol J. Melendez Maiz, EHP Historic Preservation Specialist

**Applicant Telephone:** (787) 296-3551      **Fax:** \_\_\_\_\_

**Location of Project:** Estates Little Princess and Golden Rock

**Island:** St. Croix      **Quarter:** Company

**Approved, No Adverse Effects**       **Approved, \*With Conditions:**

**\*Conditions:** VISHPO concurrence with the FEMA proposed Archaeological Monitoring scope of work by a qualified Archaeologist for the USVI St. Croix Coastal Interceptor Relocation Project.

**Acting Director/Deputy SHPO,** Sean L. Krigger      **Date:** March 3, 2015  
Sean L. Krigger