



REPLY TO
ATTENTION OF

DEPARTMENT OF DEFENSE
JACKSONVILLE DISTRICT CORPS OF ENGINEERS
ANTILLES OFFICE
400 FERNANDEZ JUNCOS AVENUE
SAN JUAN, PUERTO RICO 00901-3299

December 16, 2014

Regulatory Division
North Permits Branch
Antilles Permits Section
SAJ-1985-27029 (SP-JMS)

Mr. David Mapp
U.S. Virgin Island Port Authority
P.O. Box 301707
St. Thomas, VI 00803

Dear Mr. Mapp:

Reference is made to the Department of the Army (DA) permit application submitted through the Joint Permit Application (JPA) on behalf of the U.S. Virgin Island Port Authority. The project entails the dredge to a depth of -18 feet (30,000 cubic meters) from the waters of the United States associated with the Schooner Channel in Gallows Bay at St. Croix, US Virgin Islands (USVI). Please refer to case number SAJ-1985-27029 (IP-JMS) in future correspondence regarding this project.

While this application originated through the JPA Process with the USVI Department of Planning and Natural Resources, insufficient information was received by the U.S. Army Corps of Engineers (Corps) to fully evaluate your proposal. Therefore, in order to proceed with the permit evaluation process, please furnish this office the information requested below, items 1.0 through 2.1. Other information, items 3.0 through 3.8, could be addressed at this time to assist in expediting the review of your application.

1.0. Description and Narratives:

- 1.1. Provide the proposed schedule for the project.
- 1.2. Provide a list of adjacent property owners, including names and mailing addresses, for distribution of the Public Notice. We request that you provide complete mailing addresses, including zip codes. In addition, please provide the mailing addresses including zip codes for the nearest Public Library and U.S. Post Office. Please ensure all property owners possibly impacted by the increase in visitors and dredge work are included. Also, please provide the list on self-stick mailing labels and in electronic, MS Word or Excel, file.
- 1.3. Provide a listing of all other government authorizations obtained or requested for the work, including required certifications relative to water quality.

- 1.4. Please provide a statement describing how impacts related to the proposed discharge of fill material in WOTUS are to be avoided and minimized.
- 1.5. Please provide a statement describing how the impacts to waters of the United States are to be compensated, or explain why compensatory mitigation should not be required for the proposed impacts.
- 1.6. Please ensure the information provided as a response to this request for additional information is sufficient to answer items 17 through 25 of the Joint Permit Application, Form (ENG 4354).

2.0. Figures and Exhibits:

- 2.1. Provide a drawing that shows the side (elevation) view of the project and impact areas to indicate the relationship to the affected waters. The drawings must be relative to the mean high water mark (MHWM). The drawings presented with the JPA do not properly relate the cross sections with the plan view.

3.0. Additional information not needed for issuance of a public notice that could be addressed at this time and would benefit you by helping us to expedite the review of your application are as follows:

- 3.1. Provide a delineation of affected special aquatic sites. Wetland delineations must be prepared in accordance with the 1987 Wetland Delineation Manual and 2008 Caribbean Regional Supplement. Information concerning wetland delineations and jurisdictional data forms can be found at the following internet address:

<http://www.saj.usace.army.mil/Missions/Regulatory/SourceBook.aspx>

- 3.2. Provide the names of federally listed endangered or threatened species that may be affected by the proposed work or utilize designated critical habitat that may be affected by the proposed work. Please include any work performed (i.e., transect type and coverage, survey date[s] and time[s]) to identify occurrence, or potential occurrence, of potentially affected species or critical habitat. Furthermore, any maps that depict this information can also be included.
- 3.3. State any historic properties listed in or eligible for listing in, the National Register of Historic Places and state which historic property may be affected by the proposed work. If necessary, please provide a vicinity map that indicates the location of the historic property in relation to the project site.
- 3.4. Provide any information in reference to the presence or absence of submerged aquatic vegetation or resources, which could be adversely affected by this project. Please include the dates and times of any survey or site review work, and any maps that depict the locations of any submerged aquatic vegetation or resources.

- 3.5. Provide a description of vegetation cover types and/or land uses on the subject property.
- 3.6. Provide a discussion of existing site features, hydrologic conditions, and overall wetland conditions, which help define the overall hydrological regime of the project site. Include any information that may illustrate any hydrological dynamics (both positive and/or negative) that may affect the watershed, and how they relate to the project site (i.e. *major drainage canal through a wetland system that falls on the project site, and the effect the canal has on the wetland system and watershed*).
- 3.7. Forward digital files (via email or compact disk) of the requested text information to expedite processing.
- 3.8. The proposed impacts must also meet the 404(b)(1) guidelines of the Clean Water Act. Although only a statement concerning avoidance, minimization, and compensatory mitigation is necessary for the issuance of the public notice, the following detailed information will be needed to assist us in fully evaluating the project. It often expedites the permitting process if this information is submitted at this time.
 - a. Avoidance: Your project is considered to be a non-water dependent proposal because it does not have to be located in a wetland to achieve the basic project purpose. For non-water dependent projects, there is a presumption that alternative upland sites exist which are available to the applicant. There is also a presumption that fill placed elsewhere, other than wetlands or other aquatic sites will have less adverse impact. The applicant must rebut these presumptions. Please provide a discussion of alternative sites and why this particular site was selected for your project.
 - b. Minimization: After the least damaging alternative site is selected or after the applicant successfully rebuts the above avoidance presumptions, the project must be shown to be the least damaging practicable alternative that meets the basic project purpose. Minimization includes alternate site plans and other steps (e.g., site access options) which would reduce impacts to on site wetlands. Please describe other site plans and steps you can take to minimize the impact of your project on wetland resources.
 - c. Compensatory Mitigation: You may be required to provide compensatory mitigation for resource losses which are specifically identifiable and reasonably likely to occur. All mitigation proposals cannot be fully evaluated until successfully completing the above avoidance and minimization steps.

Please refer to the attached ENG FROM 4345 checklist to ensure completion of all items, 17 through 25, in the ENG FROM 4345 Joint Permit Application Form submitted.

Please be aware that the proposed project would require a Water Quality Certification from the U.S. Virgin Islands Department of Planning and Natural Resources.

As the application is considered incomplete, no action will be taken on it until the required information and drawings have been received. We request you provide this information within 30 days. If no response is received, we will assume you have no further interest in obtaining a Department of the Army permit and the application will be withdrawn. Such action will constitute final action by the Department of the Army.

You are cautioned that work performed below the mean high waterline or ordinary high waterline in waters of the United States, or the discharge of dredged or fill material into adjacent wetlands, without a Department of the Army permit could be subject to enforcement action. Receipt of a State permit does not obviate the requirement for obtaining a Department of the Army permit for the work described above prior to commencing work.

Should you have any questions or comments regarding this request for additional information, please contact Mr. Johann M. Sasso, Project Manager, at the letterhead address or by telephone at 787-729-6905.

Sincerely,



Sindulfo Castillo
Chief, Antilles Regulatory Section

Copy furnished:
William McComb, CDR Maguire Inc. P.O. Box 303408 St. Thomas, VI 00803

Enclosure.

William F. McComb, P.E.
P. O. Box 303408
25A Dronningens Gade
St. Thomas, U. S. Virgin Islands
00803

TELEPHONE: (340) 690-0308 Work/Cell
(800) 859-8736 Fax
(340) 777-4044 Home

Email: wfmccomb.eng@attglobal.net

March 24, 2015

Mr. Sindulfo Castillo
Chief, Antilles Regulatory Section
Department of Defense
Jacksonville District Corps Of Engineers
Antilles Office
400 Fernandez Juncos Avenue
San Juan, Puerto Rico 00901-3299

Re: Schooner Channel, Gallows Bay at St. Croix, US Virgin Islands
Case number SAJ-1985-27029 (IPJMS)

Dear Mr. Castillo:

The following is the response to the correspondence dated December 16, 2014 in regard to SAJ 1985-27029 (IPJMS). Below we have provided the required information for the U.S. Army Corps of Engineers (Corps) to fully evaluate our proposal.

1.1. Provide the proposed schedule for the project.

The dredging will start within two months after approval and receipt of the ACE Permit and will be completed within three months

1.2. Provide a list of adjacent property owners, including names and mailing addresses, for distribution of the Public Notice. We request that you provide complete mailing addresses, including zip codes. In addition, please provide the mailing addresses including zip codes for the nearest Public Library and U.S. Post Office. Please ensure all property owners possibly impacted by the increase in visitors and dredge work are included. Also, please provide the list on self-stick mailing labels and in electronic, MS Word or Excel, file.

Attached is a list of adjacent property owners as certified by the Government of the Virgin islands.

Florence A. Williams Library

1122 Kings Street
Christiansted, St. Croix VI 00820

Gallows Bay Post Office

5027 Anchor Way
Suite 1, Christiansted, VI 00820

Attached is the listing of the Adjacent Property Owners and the nearest Post Office and Public Library in Word format.

Mr. Sindulfo Castillo
March 24, 2015
Page 2 of 3

1.3. Provide a listing of all other government authorizations obtained or requested for the work, including required certifications relative to water quality.

A Coastal Zone Management (CZM) Permit and a Water Quality Certificate from the VI Division of Planning and Natural Resources are required. The CZM Permit has been applied for.

1.4. Please provide a statement describing how impacts related to the proposed discharge of fill material in WOTUS are to be avoided and minimized.

There will be no discharge of any fill nor dredged materials into WOTUS.

1.5. Please provide a statement describing how the impacts to waters of the United States are to be compensated, or explain why compensatory mitigation should not be required for the proposed impacts.

See the attached comments by BiolImpact.

2.0. Figures and Exhibits:

2.1. Provide a drawing that shows the side (elevation) view of the project and impact areas to indicate the relationship to the affected waters. The drawings must be relative to the mean high water mark (MHW). The drawings presented with the JPA do not properly relate the cross sections with the plan view.

See the attached drawings.

3.1. Provide a delineation of affected special aquatic sites. Wetland delineations must be prepared in accordance with the 1987 Wetland Delineation Manual and 2008 Caribbean Regional Supplement. Information concerning wetland delineations and jurisdictional data forms can be found at the following internet address:

See the attached comments by BiolImpacts

3.2. Provide the names of federally listed endangered or threatened species that may be affected by the proposed work or utilize designated critical habitat that may be affected by the proposed work. Please include any work performed (i.e., transect type and coverage, survey date[s] and time[s]) to identify occurrence, or potential occurrence, of potentially affected species or critical habitat. Furthermore, any maps that depict this information can also be included.

See the attached comments by BiolImpacts

3.3. State any historic properties listed in or eligible for listing in, the National Register of Historic Places and state which historic property may be affected by the proposed work. If necessary, please provide a vicinity map that indicates the location of the historic property in relation to the project site.

There are no historic properties within the proposed work area.

3.4. Provide any information in reference to the presence or absence of submerged aquatic vegetation or resources, which could be adversely affected by this project. Please include the dates and times of any survey or site review work, and any maps that depict the locations of any submerged aquatic vegetation or resources.

Mr. Sindulfo Castillo
March 24, 2015
Page 2 of 3

[See the attached comments by BioImpacts](#)

3.5. Provide a description of vegetation cover types and/or land uses on the subject property.

[All work will be done in Schooner Channel and there is no vegetation cover.](#)

3.6. Provide a discussion of existing site features, hydrologic conditions, and overall wetland conditions, which help define the overall hydrological regime of the project site. Include any information that may illustrate any hydrological dynamics (both positive and/or negative) that may affect the watershed, and how they relate to the project site (i.e. *major drainage canal through a wetland system that falls on the project site, and the effect the canal has on the wetland system and watershed*).

[See the attached comments by BioImpact](#)

3.7. Forward digital files (via email or compact disk) of the requested text information to expedite processing.

[Sent by email.](#)

3.8. The proposed impacts must also meet the 404(b)(1) guidelines of the Clean Water Act. Although only a statement concerning avoidance, minimization, and compensatory mitigation is necessary for the issuance of the public notice, the following detailed information will be needed to assist us in fully evaluating the project.

[See the attached comments by BioImpact.](#)

We look forward to your review of this response. Please do not hesitate to call if you have any questions or concerns.

Sincerely:



William McComb, PE
340 690-0308

Cc: Johann M. Sasso, EIT

**Government of
The Virgin Islands of the United States
Office of the Lieutenant Governor
Cadastral – Survey & Deeds**

1131 King Street, Suite 101, Christiansted, U. S. Virgin Islands 00820 Tel: 340-773-6459 Fax: 340-773-4052

**ADJACENT OWNERSHIP CERTIFICATION
(CZM)
Property Ownership within 150' Radius of Parcel**

Government of the Virgin Islands

This letter is to certify that the following list of owners and addresses are consistent with the records of the Tax Assessor's Office of Christiansted, St. Croix U.S. Virgin Islands.

The stated ownerships are those adjacent to Parcel No. (Pin): _____

Estate: Portion of Christiansted Harbor

Island of: St. Croix, U. S. Virgin Islands.

Authorized Signature _____

Wayne D. Callwood, Public Surveyor

Alternate Signature _____

Margaret P. Aceeta, Special Assistant

Fee Paid: \$30.00

Dated: November 13, 2014

Property Owners within 150' Radius of Parcel / Plot No.: Portion

State: Christiansted Harbor Island: St. Croix

Tax I.D. Number	Parcel No.	Estate Name	Owner's Name & Mailing Address
1	2-02900-0302-00	Parcel 1	Louise Augusta - Altona Government of the Virgin Islands
			No. 1 Subbase
			St. Thomas, VI 00802
2	2-02900-0302-00	Matr. 61	Louise Augusta - Altona Government of the Virgin Islands
			No. 1 Subbase
			St. Thomas, VI 00802
3	2-02900-0309-00	Plot 59	Mt. Welcome Pincecrest - St. Croix Association
			C/O Omnia Properties, LLC, Suite 100
			805 15 th St NW, Washington, DC 20005
4			
5			
6			
7			
8			
9			
10			
11			
12			

Schooner Channel Maintenance Dredging Adjacent Property Owners

Parcel 1	Estate Louise Augusta	Government of the Virgin islands Department of Property & Procurement No. 1 Subbase St. Thomas, VI 00802
Matr. 61	Estate Louise Augusta	Government of the Virgin islands Department of Property & Procurement No. 1 Subbase St. Thomas, VI 00802
Plot 59	Estate Mt. Welcome	Pincecrest – St. Croix Association C/O Omnia Properties, LLC Suite100 805 15th St. NW, Washington, DC 20005
Florence A. Williams Library		1122 Kings Street Christiansted, St. Croix VI 00820
Gallows Bay Post Office		5027 Anchor Way Suite 1, Christiansted, VI 00820



PURPOSE: DREDGING OF THE SCHOONER CHANNEL

DATUM: MLLW
 ADJACENT PROPERTY OWNERS:
 NOT APPLICABLE

SCHOONER CHANNEL DREDGING PROJECT

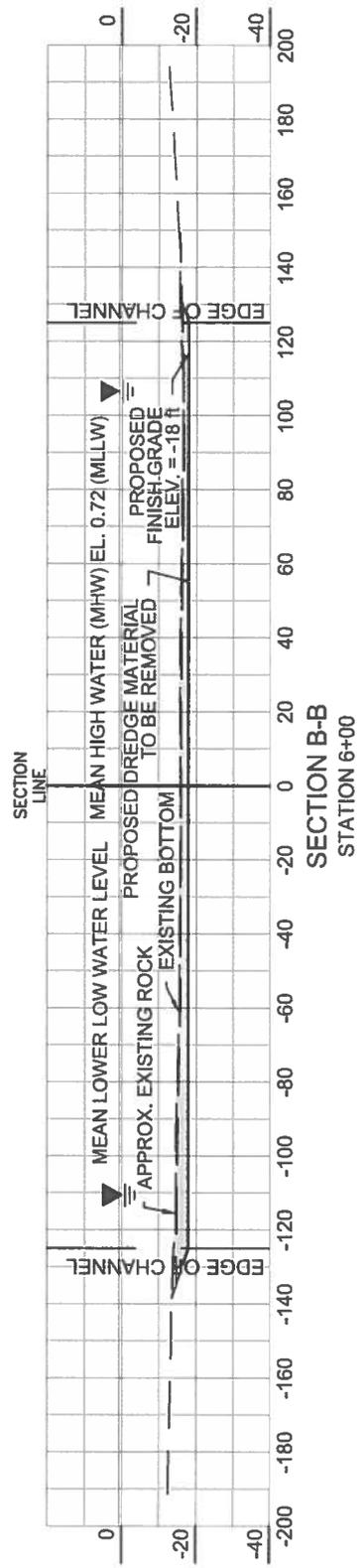
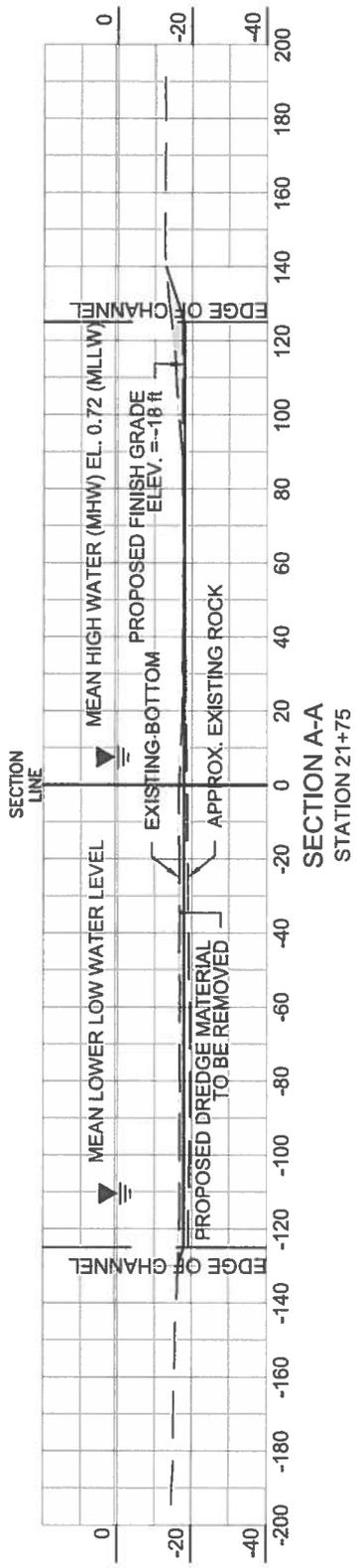
ST. CROIX, USVI
 VI PORT AUTHORITY
 PO BOX 301707
 ST. THOMAS, VI 00803



CDR/MAGUIRE
 1142 King Street, P.O. Box 223039
 Christiansted, St. Croix USVI 00822

DREDGE SITE SECTIONS

APPLICATION BY: VI PORT AUTHORITY
 SHEET: 2 OF 4 DATE: NOVEMBER 3, 2014
 REVISED: FEBRUARY 23, 2015



PURPOSE: DREDGING OF THE SCHOONER CHANNEL

DATUM: MLLW

ADJACENT PROPERTY OWNERS: NOT APPLICABLE

SCHOONER CHANNEL DREDGING PROJECT

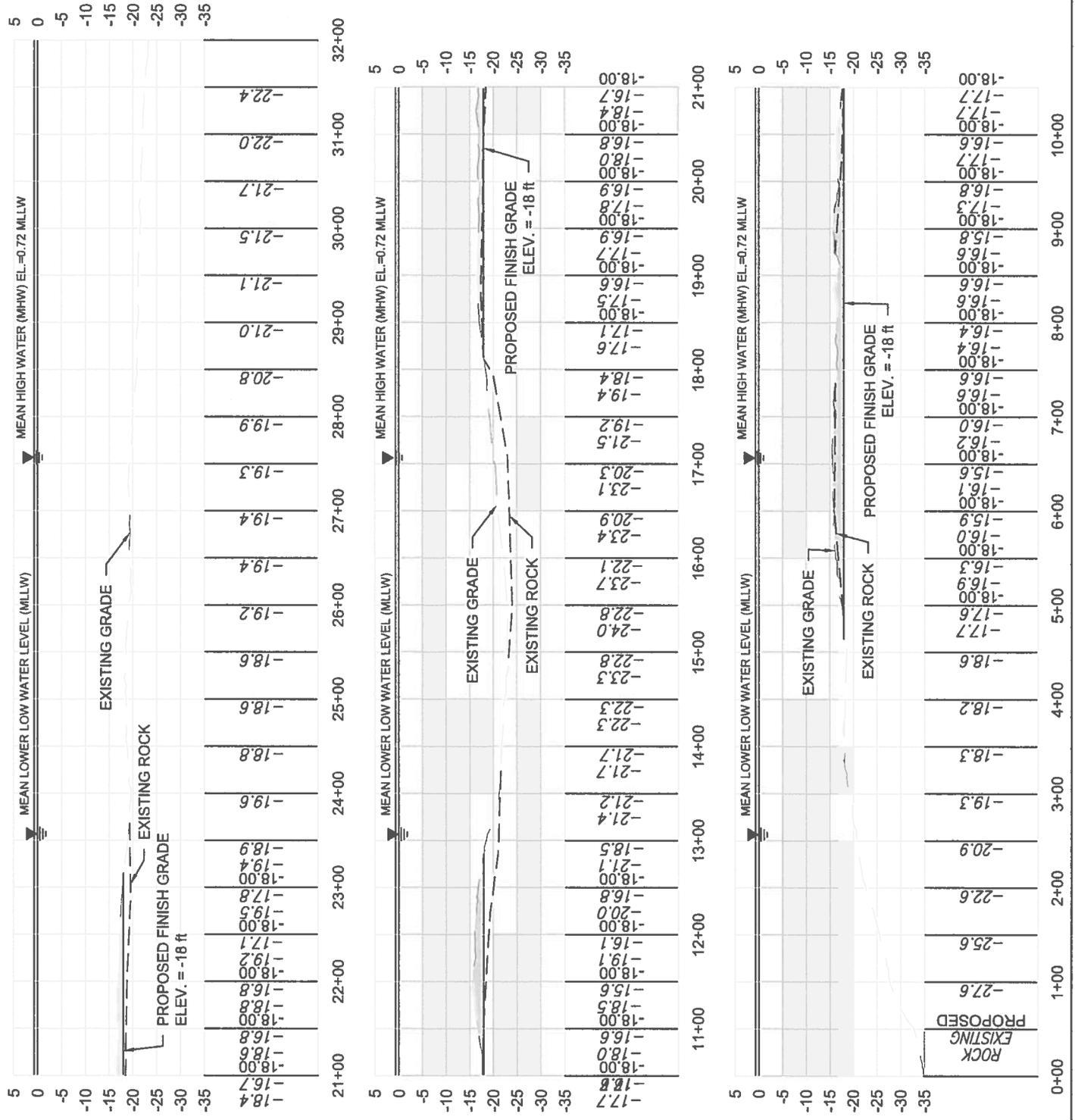
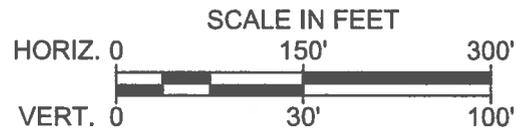
ST. CROIX, USVI

VI PORT AUTHORITY
PO BOX 301707
ST. THOMAS, VI 00803

 **CDR MAGUIRE**
1142 King Street, P.O. Box 223039
Christiansted, St. Croix USVI 00822

DREDGE SITE SECTIONS

APPLICATION BY: VI PORT AUTHORITY
SHEET: 3 OF 4 DATE: NOVEMBER 3, 2014
REVISED: FEBRUARY 23, 2015



PURPOSE: DREDGING OF THE SCHOONER CHANNEL

DATUM: MLLW
 ADJACENT PROPERTY OWNERS:
 NOT APPLICABLE

SCHOONER CHANNEL DREDGING PROJECT

ST. CROIX, USVI
 VI PORT AUTHORITY
 PO BOX 301707
 ST. THOMAS, VI 00803



CDR MAGUIRE
 1142 King Street, P.O. Box 223039
 Christiansted, St. Croix USVI 00822

DREDGE PROFILE

APPLICATION BY: VI PORT AUTHORITY
 SHEET: 4 OF 4 DATE: NOVEMBER 3, 2014
 REVISED: FEBRUARY 23, 2015

Response to ACE December Letter re: SAJ-1985-27029 (IPJMS) by BioImpact VIPA Schooner Channel Maintenance Dredging

1.5. Please provide a statement describing how the impacts to waters of the United States are to be compensated, or explain why compensatory mitigation should not be required for the proposed impacts.

The seagrass and coral species within the project area would be lost due to the dredging and therefore will be transplanted out of the foot print. In total 31,250sq. ft. 30-70% SAV, 248,960 sq. ft. of hardpan with sparse coral colonization and 127,500 sq. ft. of algal colonized sand will be impacted. It is probable that a total of 250 corals lie within the dredging footprint. In order to mitigate for these impacts, the coral and seagrass within the area of impact will be transplanted prior to dredging.

3.1. Provide a delineation of affected special aquatic sites. Wetland delineations must be prepared in accordance with the 1987 Wetland Delineation Manual and 2008 Caribbean Regional Supplement. Information concerning wetland delineations and jurisdictional data forms can be found at the following internet address:

The dredging project is offshore and the disposal of dredge spoils will not be in waters of the U.S. or in terrestrial wetlands. A location map of the proposed off loading and disposal site is attached.

3.2 Provide the names of federally listed endangered or threatened species that may be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Please include any work performed (i.e. transect type and coverage, survey date(s) and time(s)) to identify occurrence, or potential occurrence, of potentially affected species or critical habitat. Furthermore, any maps that depict this information can also be included.

A detailed survey has been made of the Schooner Channel area. The study was done during the months of May, June, July and August 2014. No currently listed ESA corals were noted in the dredging foot print. *Acropora palmata* (Elkhorn coral), *Acropora cervicornis* (Staghorn coral), *Dendrogyra cylindrus* (Pillar coral), *Mycetophyllia ferox* (Rough cactus coral), *Orbicella annularis* (Lobed star coral), *Orbicella faveolata* (Mountainous star coral) and *Orbicella franksi* (Boulder star coral) are all ESA listed Threatened species and the *Acropora* species have critical habitat protected under the 4D Rule. *Acropora palmata*, *Orbicella annularis*, *O. faveolata* and *Dendrogyra cylindrus* all occur on Round Reef which is immediately adjacent to the channel footprint. *Acropora palmata*, *Orbicella annularis*, *O. faveolata*, *O. franksi*, *Mycetophyllia ferox* and *Dendrogyra cylindrus* all occur on Long Reef which is on the northern edge of the channel, and *Orbicella annularis*, *O. faveolata*, and *Dendrogyra cylindrus* are found on Ft. Louise August Point. Round Reef, the hard bottom areas off Ft. Louise Augusta Point, and Long Reef are critical habitat. It will be imperative that water quality be maintained, and as such a water quality and environmental monitoring program will be implemented and stringent turbidity measures will be installed.

All three federal rare and endangered sea turtle species are known to occur in the offshore waters and are found within the Schooner Channel area. These include: hawksbill (*Eretmochelys imbricata*), leatherbacks (*Dermodochelys coriacea*) and green turtles (*Chelonia mydas*). Hawksbills sea turtles and Green sea turtles have been seen with some frequency over the years during the surveys associated with the harbor and the channel. Even a leatherback turtle hatchling was seen swimming in the western portion of the channel during surveys for the seagrass transplant for the Richmond Channel dredging.

The turtle and the hatchlings would need to exit the harbor through the opening of the reef to the north of the dredging area. There are beaches within the harbor which are suitable turtle nesting habitat.

In order to minimize and abate impacts to the listed sea turtle species the permittee shall comply with the following NMFS construction conditions:

Sea Turtle and Smalltooth Sawfish Construction Conditions

The permittee shall comply with the following protected species construction conditions:

- a. The permittee shall instruct all personnel associated with the project of the potential presence of these species and the need to avoid collisions with sea turtles and smalltooth sawfish. All construction personnel are responsible for observing water-related activities for the presence of these species.
- b. The permittee shall advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing sea turtles or smalltooth sawfish, which are protected under the Endangered Species Act of 1973.
- c. Siltation barriers shall be made of material in which a sea turtle or smalltooth sawfish cannot become entangled, be properly secured, and be regularly monitored to avoid protected species entrapment. Barriers may not block sea turtle or smalltooth sawfish entry to or exit from designated critical habitat without prior agreement from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
- d. All vessels associated with the construction project shall operate at "no wake/idle" speeds at all times while in the construction area and while in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom. All vessels will preferentially follow deep-water routes (e.g., marked channels) whenever possible.
- e. If a sea turtle or smalltooth sawfish is seen within 100 yards of the active daily construction/dredging operation or vessel movement, all appropriate precautions shall be implemented to ensure its protection. These precautions shall include cessation of operation of any moving equipment closer than 50 feet of a sea turtle or smalltooth sawfish. Operation of any mechanical construction equipment shall cease immediately if a sea turtle or smalltooth sawfish is seen within a 50-ft radius of the equipment. Activities may not resume until the protected species has departed the project area of its own volition.
- f. Any collision with and/or injury to a sea turtle or smalltooth sawfish shall be reported immediately to the National Marine Fisheries Service's Protected Resources Division (727-824-5312) and the local authorized sea turtle stranding/rescue organization.
- g. Any special construction conditions, required of your specific project, outside these general conditions, if applicable, will be addressed in the primary consultation.

In order to avoid and minimize an injury or death to marine mammals and sea turtles the following NMFS measures from the Vessel Strike Avoidance Measures and Reporting for Mariners will be taken by all vessels associated with the project and fuel transfer operation:

1. Vessel operators and crews should maintain a vigilant watch for marine mammals and sea turtles to avoid striking sighted protected species.

2. When whales are sighted, maintain a distance of 100 yards or greater between the whale and the vessel.
3. When sea turtles or small cetaceans are sighted, attempt to maintain a distance of 50 yards or greater between the animal and the vessel whenever possible.
4. When small cetaceans are sighted while a vessel is underway (e.g., bow-riding), attempt to remain parallel to the animal's course. Avoid excessive speed or abrupt changes in direction until the cetacean has left the area.
5. Reduce vessel speed to 10 knots or less when mother/calf pairs, groups, or large assemblages of cetaceans are observed near an underway vessel, when safety permits. A single cetacean at the surface may indicate the presence of submerged animals in the vicinity; therefore, prudent precautionary measures should always be exercised. The vessel should attempt to route around the animals, maintaining a minimum distance of 100 yards whenever possible.
6. Whales may surface in unpredictable locations or approach slowly moving vessels. When an animal is sighted in the vessel's path or in close proximity to a moving vessel and when safety permits, reduce speed and shift the engine to neutral. Do not engage the engines until the animals are clear of the area.

Rock will have to be cut or broken as part of the dredging project in order to achieve appropriate depth. Therefore there could be acoustic impacts to listed species. Sea turtles are known to be affected by the ensonification of the water created by pile driving activities. VIPA will implement an acoustical monitoring plan during all rock breaking. A 500-m safety zone shall be established around the project area for sea turtles and marine mammals. Trained observers will be used to visually monitor the safety zone for at least 30 minutes prior to beginning all noise creating in-water activities. If at any time a sea turtle or marine mammal is observed in the safety zone the operation will be shut down until the animal has left the safety zone of its own volition.

Observations for protected species will occur at least twice a day to maintain watch for animals in the area, and ensure the curtains are functioning properly. If at any time an animal is observed in the safety zone during the noise creating in-water activity, work shall cease until the animal has left the area of its own volition, or coordination with a DPNR representative has occurred, if the animal is injured.

Records will be maintained of all sea turtle and marine mammal sightings in the area, including date and time, weather conditions, species identification, approximate distance from the dredging area, direction and heading in relation to the dredging area, and behavioral observations. When animals are observed in the safety zone, additional information and corrective actions taken such as a shutdown of rock breaking/dredging equipment, duration of the shut-down, behavior of the animal, and time spent in the safety zone will be recorded. Reports will be provided to NMFS, COE, and CZM.

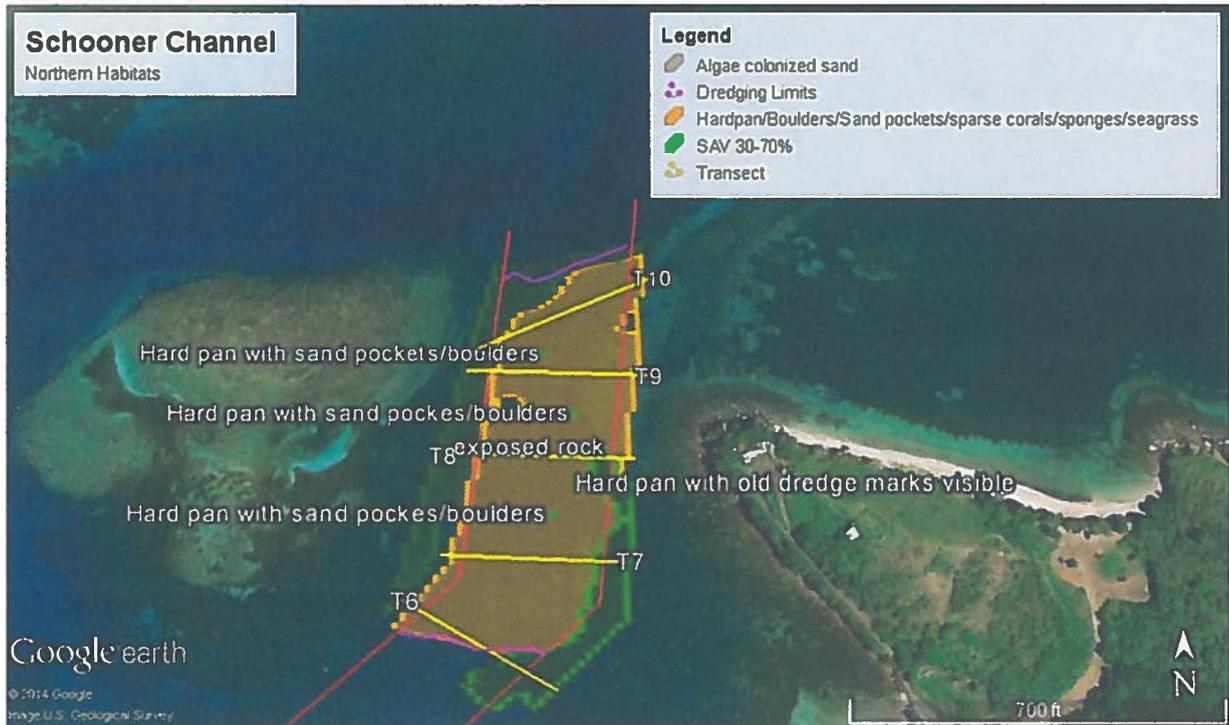
Pelicans (*Pelecanus occidentalis*), a federally listed endangered species, frequent the nearby shorelines and often roost on vessels in the harbor. These species will not be affected by the dredging of the Schooner Channel, these birds have been seen to roost on the dredge barge during dredging.

Impact of Development

No rare and endangered species, or any species for that matter, use Christiansted Harbor as an exclusive habitat. The permitting of this facility will not displace any rare, endangered, or threatened species

from its natural niche or habitat. The proposed methods above will help minimize impacts to endangered species during construction and operation.

The dredging will result in resuspension of sediment during the dredging and dewatering. Turbidity barriers (type II or III) will be installed to control turbidity during all in-water activities and dewatering to minimize impacts of turbidity on the surround marine environment and the listed and nominated coral species and a water quality and environmental monitoring plan will be implemented to monitor the control devices and to assess their efficiency, if the control devices are found to be inadequate additional measures will be implemented. ESA listed species and critical habitat are within the immediate vicinity of the dredging area.



There are dense patches of seagrass which occur within the harbor and some of these has extended into are mainly *Syringodium filiforme* with intermixed *Thalassia testudinum*. These beds range in density from 30 to 70% bottom coverage and intermixed with these seagrasses are *Penicillus capitatus*, *Caulerpa sertularioides*, *Hypnea* sp., *Laurencia papulose*, *Dictyota* sp. and *Halimeda opunta*. Queen conch (*Strombus gigas*) and milk conch (*S. costatus*) were noted within these beds. Along the northern and eastern side of the channel the cut from the previous dredging is still visible and only in areas where the sides have slumped into the channel are seagrasses present. To the northern and eastern side *Thalassia* is the more dominant seagrass and is in a higher abundance usually 50-70% than the beds to the south. While *Syringodium* is present it only represents approximately 15% of the grass bed. The *Thalassia* along the northern and western side of the channel have helped stabilize this slope. To the east of the channel in the northern area are primarily *Syringodium* with some scattered patches of denser *Thalassia*, again these have colonized in areas where sand has accumulated in the channel. There are also several patches of *Thalassia* and *Syringodium* which have colonized some of the deeper sand pockets in the hardpan (pavement).

3.6 Provide a discussion of the existing site features, hydrologic conditions and overall wetland conditions, which help define the overall hydrological regime of the project site. Include any information that ma illustrate any hydrological dynamics (both positive and/or negative) that may affect the watershed, and how they relate to the project site (i.e. major drainage canal through a wetland system that falls on the project site, and the effect the canal has on the wetland system and watershed).

The dredging project is offshore and the disposal of dredge spoils will not be in waters of the U.S. or in terrestrial wetlands. There are not large drainage ways which entire the harbor near the proposed dredging. The opening to Altona Lagoon is to the southwest of the project area and does not introduce a significant sediment load into the harbor.

3.8 Avoidance, Minimization and Mitigation

The project is the dredging of an existing channel, and only those areas which are above the controlling depth will be dredged. Because this is a designated channel resources within the channel cannot be avoided. In order to minimize impacts only those areas about the controlling depth will be dredging. In order to mitigate for the impacts all of the corals and seagrasses within the impact footprint will be removed and monitoring programs will be implemented to minimize impacts to water quality and to minimize acoustic impacts. The plan proposes to transplant the corals to Round Reef which is immediately adjacent to the channel which has been colonized by similar species. The site supports *Porites astreoides*, *Siderastrea siderea*, *Diploria labyrinthiformes*, *Diploria strigosa*, and *Agaricia agaricites* as well as a variety of other corals. The corals will be transplanted to shallow depths but will be in the same water quality at which they currently thrive. The seagrass within the channel will be transplanted into the many boat scars in the seagrass around Round Reef. Detailed Monitoring and Mitigation Plans have been prepared and presented for evaluation.