GOVERNMENT OF THE VIRGIN ISLANDS OF THE UNITED STATES
DEPARTMENT OF PLANNING AND NATURAL RESOURCES
DEVELOPMENT PERMIT APPLICATION

FORM L&WD-2
PERMIT APPLICATION

Date Received:_____

Date Declared Complete:_____ Permit No. C2T-1-06W

Application is hereby made for a Earth Change/Coastal Zone Permit

1. Name, mailing address and telephone number of applicant.
GREAT ST JAMES PROPERTIES
[redacted]
ST THOMAS, USVI 00801

2. Name, title, mailing address and telephone number of owner of property and of developer.

Owner	Developer
KEVEN D'AMOUR - ATTY IN FACT	
[redacted]	N/A

3. Location of activity. Plot No. PARCEL A - REMAINDER

Estate GREAT ST JAMES Island GREAT ST JAMES

4. Zoning District RH

5. Name, mailing address and telephone number of project designer.
N/A

6. Name, mailing address and telephone number of principal earthwork contractor.
N/A

7. Summary of proposed activity. Include all incidental improvements such as utilities, roads, etc. (Use additional sheets if necessary).
BRINGING AN EXISTING DOCK INTO COMPLIANCE. THE EXISTING DOCK IS LOCATED ON GREAT ST JAMES. IT IS 62'-1" LONG 4'-10" IN WIDTH, AND 3'-0" IN HEIGHT.

7a. State type of Land Uses as specified in the VI Zoning Law, which are applied for e.g., restaurant, hotel, single dwelling, etc.
RESIDENTIAL

FORM L&WD-2/PERMIT APPLICATION
([redacted])

8. Date activity is proposed to start N/A, be completed N/A

9. Classification of minor or major permit. Check one:

(✓) Minor Permit Application

( ) Major Permit Application

State below which criterion applies in making above check.
RENEWAL OF EXISTING DOCK PERMIT ON GREAT ST JAMES

10. Application is hereby made for a permit to authorize the activities described herein. I agrees to provide any additional information/date that may be necessary to provide reasonable assurance or evidence to show that proposed project will comply with the applicable territorial water quality standard or other environmental protection standards both during construction and after the project is completed. I also agree to provide entry to the project site for inspectors from the environmental protection agencies for the purpose of making preliminary analysis application, and that to the best of my knowledge and belief such information is true, complete and accurate. I further certify that I possess the authority to undertake the proposed activities.

Signature of Applicant of Agent — Date

[signature] — 10/23/05

Signature of Owner (Where Applicant or Agent is not Owner)

_____ _____

FOR DEPARTMENT USE ONLY
Inspector Record

Date Inspected: 11/8/2006

(✓) Permit Approved
( ) Permit Disapproved

Inspector's Remarks: _____

[signature]
Inspector

11/8/2006
Date

_____
Commissioner, Planning & Natural Resources

_____
Date

AFFIDAVIT

I, Kevin F. [redacted] hereby certify and state as follows:

1. I am the attorney-in-fact for the individuals that own Great St. James Island.

I certify that the foregoing statements made by me are true, and I am aware that if any of the foregoing statements made by me are willfully false, I am subject to punishment.

Kevin F. [redacted]

Dated: September 20 2004

TERRITORY OF THE VIRGIN ISLANDS)
DIVISION OF ST. THOMAS & ST. JOHN)ss.

Before me, the undersigned authority, on this 20 day of September, 2004 personally appeared **Kevin F.** [redacted], who being by me first duly sworn, declared that he is the person who signed the foregoing document and that the statements contained in herein are true.

Notary Public

Libby R. Davis
Notary Public No. NP-111-03
U.S. Virgin Islands
District Of St. Thomas & St. John
Comm. Expires August 1, 2007

GOVERNMENT OF THE UNITED STATES VIRGIN ISLANDS

DEPARTMENT OF PLANNING AND NATURAL RESOURCES
Coastal Zone Management Program

45 Mars Hill, Frederiksted
St. Croix, U.S. Virgin Islands 00840-4474
Tel: (340) 773-1082
Fax: (340) 773-3343

Cyril E. King Airport, Terminal Bldg 2nd Floor
St. Thomas, Virgin Islands 00802
Tel: (340) 774-3320
Fax: (340) 714-9524

REQUEST FOR AMENDMENT / MODIFICATION TO
MINOR COASTAL ZONE PERMITS No. CZT - 1 - 06W

This request is pursuant to Chapter 21, Title 12 of the Virgin Islands Code and the Coastal Zone Management Rules and Regulations.

1. Name, Mailing address and telephone number of applicant ~~Christian Kjaer, PO Box 10829~~ 18 D Havensight, St. Thomas 00801, 774-8188

2. Name, title, mailing address and telephone number of the owner of the property. Christian Kjaer 18 D Havensight, St. Thomas 00801, 774-8188

3. Location of activity. Plot No. Parcel A Remainder Estate Great St James Island Great St James

4. Summary of proposed activity. Include all incidental improvements such as utilities, roads, etc. (Use additional sheets if necessary). Bringing an existing dock into compliance. The existing dock is located on Great St James.

* Changing applicant name from "Great St. James Properties" to "Christian Kjaer"

This modification if approved is subject to the conditions of Permit No. CZT-39-87W that are not superseded by the modification.

Signature of applicant — Date: 4-7-2006

Signature of Property Owner — Date: 4-7-2006

The Commissioner reviewed the requested amendment / modification and determined that it will / will not significantly modify, the scope, nature or characteristics of the proposed development.

Inspector — Date: 4-11-2006

Application Approved (✓)

Application Disapproved ( )

Commissioner — Date: 4/21/06

EFTA01082412

JOINT APPLICATION
DEPARTMENT OF THE ARMY/VIRGIN ISLANDS
DEPARTMENT OF PLANNING AND NATURAL RESOURCES
FOR
ACTIVITIES IN WATERS OF THE VIRGIN ISLANDS OF THE UNITED STATES

Refer to Instruction Pamphlet for explanation of numbered items and attachments required.

1. Application number (To be assigned)

2. Date 29 9 2005 (Day Mo. Yr.)

3. For official use only

4. Name, address and zip code of applicant

GREAT ST JAMES PROPERTIES
PO BOX 7027
ST THOMAS, USVI 00801

Telephone Number 340 776-3588

5. Name, address, zip code and title of applicant's authorized agent for permit application coordination

SAMEAS ABOVE

Telephone Number 340-776-3588

6. Describe the proposed activity, its purpose and intended use, including a description of the type of structures, if any, to be erected on fills, or pipe or float-supported platforms, and the type, composition and quantity of materials to be discharged or dumped and means of conveyance.

N/A DOCK ALREADY EXISTS

	Dredged/Excavated		Filled/Deposited	
Volume of Material:	____ CY	____ CY	____ CY	____ CY
	Waterward of O.H.W. or M.H.W.	Landward of O.H.W. or [redacted]	Waterward of O.H.W. or [redacted]	Landward of O.H.W. or [redacted]

7. Proposed use
Private (X) Public ( ) Commerical ( ) Other ( ) Explain in remarks

8. Name and address including zip code of adjoining property owners whose property also adjoins the waterway.

N/A

9. Location where proposed activity exist or will occur

Street address

Island GREAT ST JAMES

Latitude _____ Longitude _____ (If known)

RED HOOK	GREAT ST JAMES	ST THOMAS, USVI
Estate	In City or Town	Near City or Town

10. Name of waterway at location of the activity
BARE ASS BAY / SAND BAY

SAJSJ FORM 983
1 Feb 79

11. Date activity is proposed to commence N/A ALREADY EXISTING
Date activity is expected to be completed

12. Is any portion of the activity for which authorization is sought now complete? Yes (X) No ( )
If answer is "Yes" give reasons in the remarks section. Month and year the activity was completed 1980's
Indicate the existing work on the drawings. IT IS ALL EXISTING

13. List all approvals or certifications required by other Federal, interstate, territory or local agencies for any structures, construction, discharges, deposits or other activities described in this application.

Issuing Agency	Type of Approval	Identification No.	Date of Application	Date of Approval
N/A				

14. Has any agency denied approval for the activity described herein or for any activity directly related to the activity described herein?
Yes ( ) No ( ) (If Yes" explain in remarks) N/A

15. Remarks (see Instruction Pamphlet for additional information required for certain activities)

N/A

16. Application is hereby made for a permit or permits to authorize the activities described herein. I agree to provide any additional information/data that may be necessary to provide reasonable assurance or evidence to show that the proposed project will comply with the applicable territory Water Quality Standards or other environmental protection standards both during construction and after the project is completed. I also agree to provide entry to the project site for inspectors from the environmental protection agencies for the purpose of making preliminary analyses of the site and monitoring permitted works, if permit is granted. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that: I possess the authority to undertake the proposed activities.

[signature] 9/30/05
Signature of Applicant Date

18 U.S.C. Section 1001 provides that: Whoever, if any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than $10,000 or imprisoned not more than five years, or both.

The application must be signed by the person who desires to undertake the proposed activity; however, the application may be signed by a duly authorized agent if accompanied by a statement by that person designating the agent and agreeing to furnish upon request, supplemental information in support of the application.

FEE: Attach Checks/Money Orders on front
Payable to Natural Resources Reclamation Fund

GOVERNMENT OF THE VIRGIN ISLANDS OF THE UNITED STATES
DEPARTMENT OF PLANNING AND NATURAL RESOURCES
DEVELOPMENT PERMIT APPLICATION

FORM L&WD-5
PROOF OF LEGAL INTEREST

AFFIDAVIT

I, KEVIN F. D'AMOUR, being duly sworn depose and say that:
Name

1. I am the (check one)

( )Record title owner (fee simple)

( )Lessee

(X)Other (specify) Attorney in Fact.

of the real property described as Parcel No(s) A-1, A-2, A-REM., B-1-1, B-1-2, B-1-REM., B-2-1, B-2-2, B-2-REM., C-1-1, C-1-2, C-1-REM, C-2-1, C-2-2, C-2-REM

Estate GREAT ST. JAMES

Quarter RED HOOK

Island GREAT ST. JAMES

2. I have the irrevocable approvals, permission, or power of attorney from all other persons with a legal interest in the property to undertake the work proposed in the permit application as more fully set forth in the exhibit (s) attached hereto:

K. D'A

The foregoing instrument was acknowledged before me this 26 day of August 2004 by Kevin F. D'Amour at St. Thomas. ~~county of~~ U.S. Virgin Islands

Libby R. Davis
Notary Public

My Commission expires

Libby R. Davis
Notary Public No. NP-111-03
U.S. Virgin Islands
District Of St. Thomas & St. John
Comm. Expires August 1, 2007

MINOR COASTAL ZONE PERMIT NO. CZT-39-87W

1. AUTHORITY. This permit is issued by the Department of Planning and Natural Resources of the Government of the Virgin Islands (hereinafter "The Department") on behalf of the Coastal Zone Management Commission pursuant to Title 12, Chapter 21, Virgin Islands Code. As herein, "Permittor" is the Government of the Virgin Islands and "Permittee" is Christian Kjaer.

2. SCOPE. To place a portable pontoon dock sixty (60) feet long by four (4) feet wide in the waters off the northeast cove of Great St. James Island (located approximately three (3) miles southeast of Red Hook, St. Thomas).

3. TERM. This permit is effective upon its approval by the Commissioner of the Department of Planning and Natural Resources, the Governor, and ratification by the Legislature of the Virgin Islands or by the Committee on Conservation and Cultural Affairs if the Legislature is not in session, pursuant to Title 12, Chapter 21, Virgin Islands Code. Authorization for construction under this permit shall expire if the Permittee fails to commence work within twelve (12) months from the date this permit becomes effective.

This permit shall expire five (5) years after its effective date, subject to renewal pursuant to Title 12, hapter 21, Section 911, Part d of the Virgin Islands Code.

4. DOCUMENTS INCORPORATED BY REFERENCE.

EXHIBIT A: Application letter to the Commissioner dated December 22, 1986.

EXHIBIT B: Joint DPNR/Army Corps of Engineers application dated December 20, 1986.

EXHIBIT C: Minor EAR dated December 22, 1986.

EXHIBIT D: Drawings.

EXHIBIT E: Power of Attorney (E1 through E5).

5. GENERAL CONDITIONS

(a) Liability. The Permittee agrees to assume full and complete responsibility for all liability to any person or persons, including employees, as a result of its control of the area described in paragraph 2 of this permit, and all improvements thereon (which area and improvements are hereinafter referred to as "the premises"), and to hold the Permittor free and harmless from civil or other liability of any kind during the time the Permittee is in control of the premises pursuant to this permit.

(b) Personal Property and Damage. All personal property of any kind or description whatsoever located on the premises shall be there at the Permittee's sole risk.

(c) Assignment or Transfer. This permit may not be transferred or assigned except as provided in Section 910-15 of the Regulations of the Coastal Zone Management Act.

(d) Permit to be Displayed. A placard evidencing the permit shall be posted in a conspicuous place at the project site during the entire period of work.

(e) Reliance on Information and Data. The Permittee affirms that the information and data which it provided in connection with its permit application is true and accurate, and acknowledges that if subsequent to the effective date of this permit such information and data proves to be false or inaccurate, the permit may be modified, suspended or revoked in whole or in part, and that the Commissioner may, in addition, institute appropriate legal action.

(f) Development to be Commenced. Any and all development approved by this Coastal Zone Permit shall be commenced within twelve (12) months from the date this permit becomes effective. Failure to perform substantial work within such period and thereafter until the completion of construction, shall cause the permit to lapse and render it null and void unless an extension is granted by the Commissioner.

(g) Notification of Completion. Upon completion of any activity authorized or required by this Coastal Zone Permit, the Permittee shall promptly so notify the Director of the Division of Coastal Zone Management ("The Director") and, where the services of a professional engineer were required in undertaking the activity, a certification of compliance provided by the project engineer that the plans and specifications of the project and all applicable Virgin Islands Code requirements have been met, shall be filed with the Director.

5. GENERAL CONDITIONS.

(h) Inspection. The Commission, its Committee, the Commissioner or their authorized agents or representatives shall have the power to enter at reasonable times upon any lands or waters in the coastal zone for which this Coastal Zone Permit has been issued. The Permittee shall permit such entry for the purpose of inspecting and ascertaining compliance with the terms and conditions of said Coastal Zone Permit. The Permittee shall provide access to such records as the Commission, its Committee, or the Commissioner in the performance of its or his duties under the Act may require the Permittee to maintain. Such records may be examined and copies shall be submitted to the Commission, its Committee or the Commissioner upon request.

(i) Conditions of Premises. The development authorized by this permit shall be maintained in a safe, attractive and satisfactory condition and in accordance with the description, plans or drawings approved by the Commissioner.

(j) Public Access to Shoreline. The development shall be operated so as to assure optimum public access to the shoreline.

(k) Restoration of Area. The Permittee, upon revocation or expiration of the permit, shall upon order of the Commissioner, and in his sole discretion, remove all structures authorized by the permit and restore the area to its original condition, and/or modify such structures, and/or comply with any directives of the Commissioner in satisfying the original permit conditions in such time and manner as the Commissioner may direct.

(l) Notices. All notices sent or required to be sent hereunder must be by certified mail, return receipt requested. If addressed to the Permittor, same shall be sent to the Commissioner of Planning and Natural Resources, Government of the Virgin Islands, No. 179 Altona & Welgunst, St. Thomas, U. S. Virgin Islands 00801 or to such other place as the Permittee may hereinafter designate by certified mail. If addressed to the Permittee, same shall be sent to Sam Sieber, Red Hook Center, Box 33, St. Thomas, U.S.V.I. 00802 or to such other place as the Permittee may hereinafter designate by certified mail, return receipt requested.

5. GENERAL CONDITIONS

(m) Nonwaiver. One or more waivers by the Permittor of any covenant or condition of this permit shall not be construed as a waiver of a further breach of the covenant or condition, and the consent or approval of the Permittor to or of any acts by the Permittee requiring the Permittor's consent or approval shall not be construed as approval of any subsequent similar act by the Permittee.

(n) Revocation. It is specifically understood that all the foregoing covenants and agreements, as well as other terms and special conditions hereby agreed to by Permittee, are to be well and faithfully kept by Permittee and that any failure by Permittee to keep same will result in revocation of this permit.

(o) Other Approval. If the development covered under this permit requires separate and distinct approval from the United States Government or any agency, department, commission or bureau thereof, then no development is allowed under this permit until such permits or approvals have been obtained.

(p) Abandonment. If the Permittee abandons, deserts or vacates the premises or discontinues its operations at the premises for a period totalling six (6) consecutive months, then the permit will terminate automatically and be rendered null and void.

(q) Damage and Repair of Premises Described in Paragraph 2.

(i) In the event of damage to or destruction of the premises described in paragraph 2 hereof, repair work may be done only after a request to do so has been submitted in writing to the Department and permission in writing has been granted. Repair must duplicate the original work and must be in accordance with applicable law, rules and regulations.

(ii) General maintenance or repair resulting from normal wear and tear of operations may be carried out as a matter of right under this permit, but must be limited to the non-structural portion of the premises.

6. SPECIAL CONDITIONS.

(a) This structure is approved for private use only. No commercial activity or rental of slips at this facility is permitted.

(b) No new buildings, structures nor dredging are permitted under this permit.

(c) No person shall live aboard any vessel while docked at this facility.

(d) No pilings will be placed in water less than three (3) feet in depth.

(e) No handling of petroleum products is allowed at this facility.

(f) The use of boat propellers for channel clearance is strictly prohibited.

(g) The mangroves will be preserved. The cutting, destruction or disturbance of any mangroves is prohibited.

(h) No boat scrapings, waste, debris, petroleum products or other pollution matter shall be deposited in the waters, or on the shorelands, which could cause pollution of the water. All such waste shall be disposed of in an environmentally-acceptable manner.

(i) The Permittee shall notify the Division of Coastal Zone Management and the Bureau of Environmental Enforcement forty-eight (48) hours prior to commencement of construction activities.

(j) All other necessary federal and territorial permits shall be obtained prior to construction.

(k) The Permittee shall obtain a long-term occupancy and development lease pursuant to Section 911 of Title 12, Virgin Islands Code prior to the expiration of this permit.

(l) The CZM permit number shall be conspicuously placed on the dock at all times.

7. FEES.

(a) A fee of $232.00 per year payable in advance shall be charged for the use and occupancy of the submerged land area occupied under this permit. Said fee is composed of the sum of $100.00 for the structure occupying the submerged lands and $132.00 for the mooring area around this structure. This fee is assessed pursuant to Section 910-5 of the Regulations of the Coastal Zone Management Act.

(b) The first payment of the fees required in paragraph 7(a) above shall become due and payable within thirty (30) days from the date when this permit is approved.

(c) On each fifth anniversary of the effective date of this permit, the rental fees established herein shall be renegotiated by the Permittor and the Permittee. Any increase in the amount of the rental fees shall be reasonable, but in any event shall not exceed twenty-five percent (25%) of the fee for the preceding five (5) year period.

(d) All fees payable under this permit shall be paid to the Permittor regardless as to whether Permittee actually occupies or uses the submerged land described herein, provided, however, that if the permit is modified to decrease/increase the submerged lands so occupied, then the fee shall also be decreased/increased consistent therewith.

8. IT IS EXPRESSLY UNDERSTOOD by the parties hereto that the title to all submerged or filled land which is altered or occupied on the basis of this permit is in the Government of the Virgin Islands, and the Permittee shall have no right or interest therein, of any kind whatsoever, other than such rights as are expressly set forth herein, and that this instrument is not a lease.

IN TESTIMONY WHEREOF, the parties herein have hereunto set their hands and seals on the days and years appearing herein below.

GOVERNMENT OF THE VIRGIN ISLANDS
Permittor

Commissioner of Planning and Natural Resources — 11/4/87 Date

CHRISTIAN KJAER
Permittee

Sam D. Sieber — 10/1/87 Date

APPROVED

Governor of the Virgin Islands — 12/07/87 Date

RATIFIED

Legislature of the Virgin Islands

President of the Legislature — Date

or if the Legislature is not in session, the Committee on Conservation & Cultural Affairs

Chairman — 10/31/88 Date

MINOR COASTAL ZONE PERMIT NO. CZT-39-87W

TERRITORY OF THE VIRGIN ISLANDS)
DISTRICT OF ST. THOMAS-ST. JOHN)

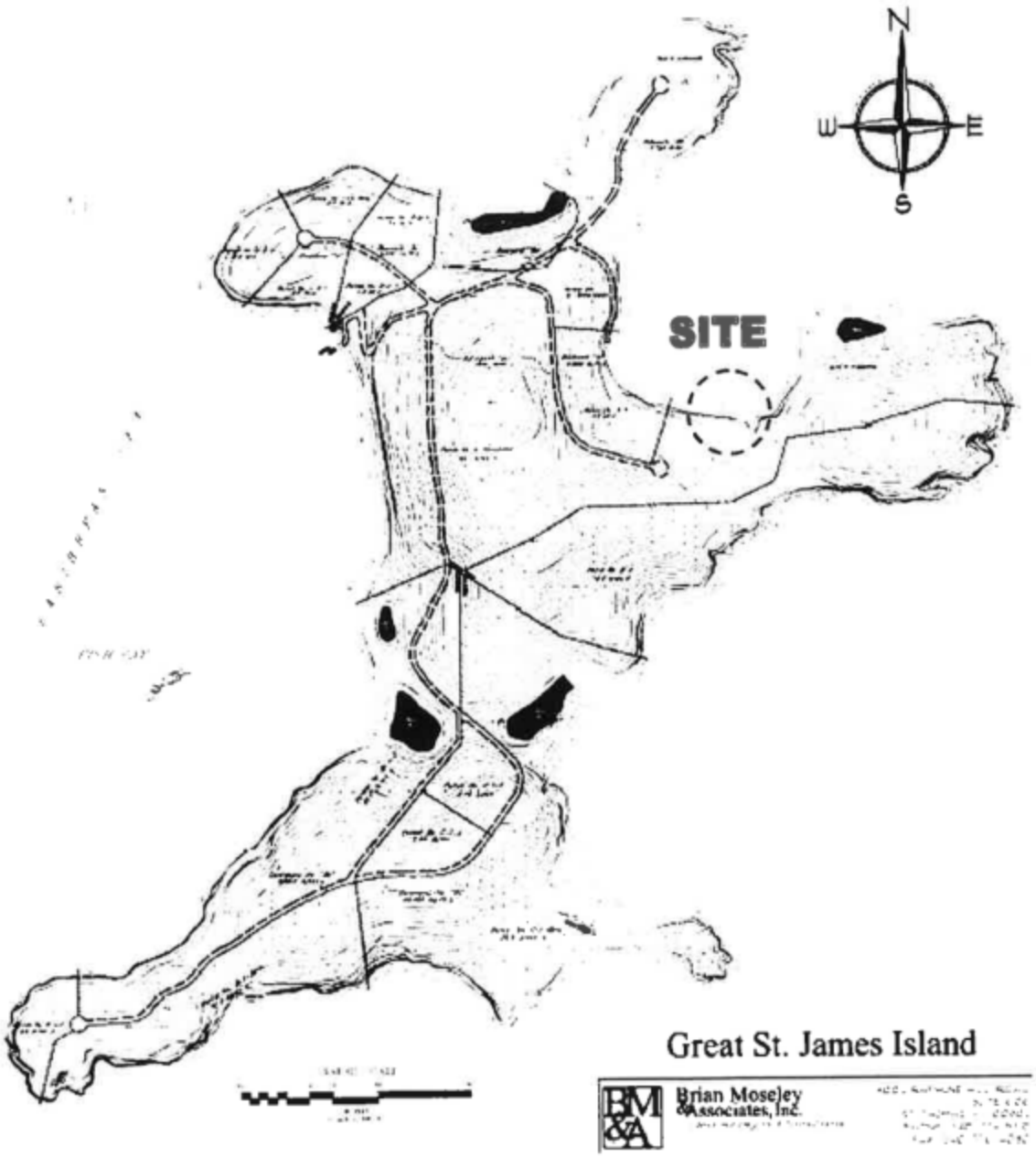
On this 1 day of Oct., 1987, before me the undersigned Officer, personally appeared SAM D. SIEBER who acknowledged executing the foregoing instrument for the purpose contained therein.

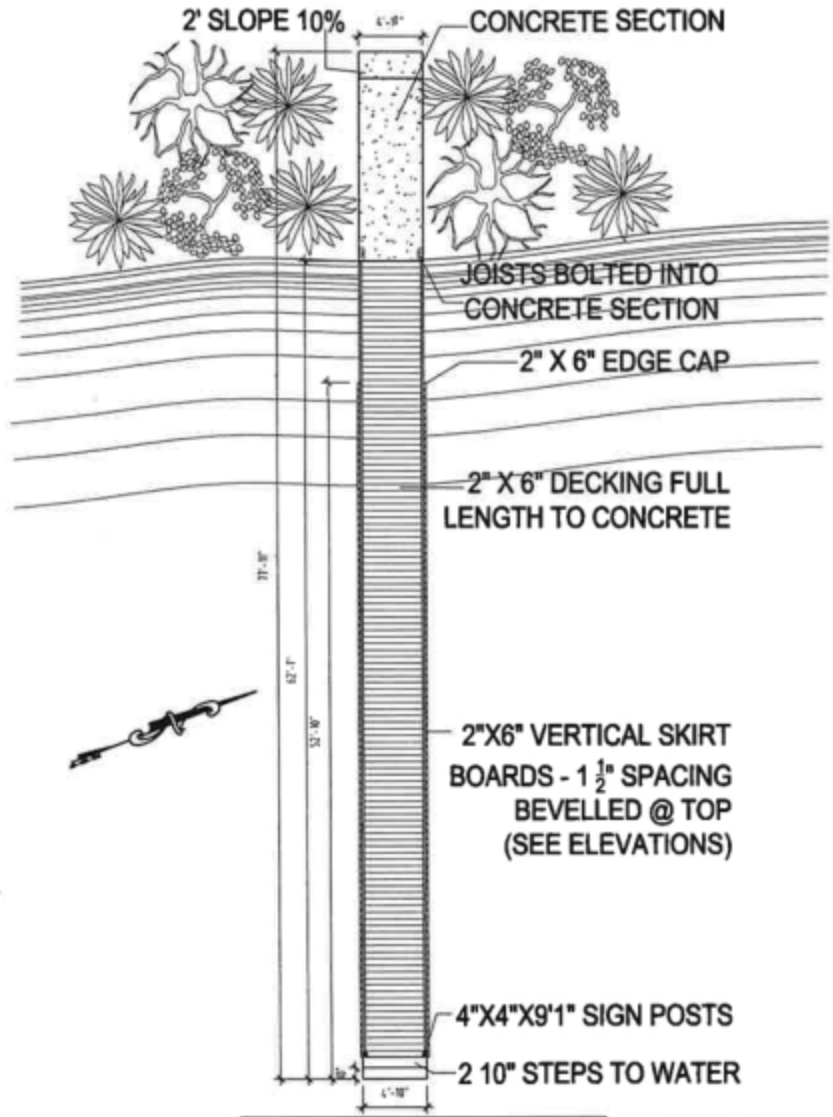
IN WITNESS WHEREOF, I have hereunto set my hand and official seal the day and year first above written.

Notary Public

This section is not applicable because the project currently exists and we are trying to renew an existing permit.

ATTACHMENT 2.02- VICINITY MAP





SITE MAP

GRAPHIC SCALE

0' 5' 10'

William M Karr & Associates, Inc.
Project Architect
Design Architect
Interior Designer
(340) 776-3588

GREAT ST. JAMES DOCK

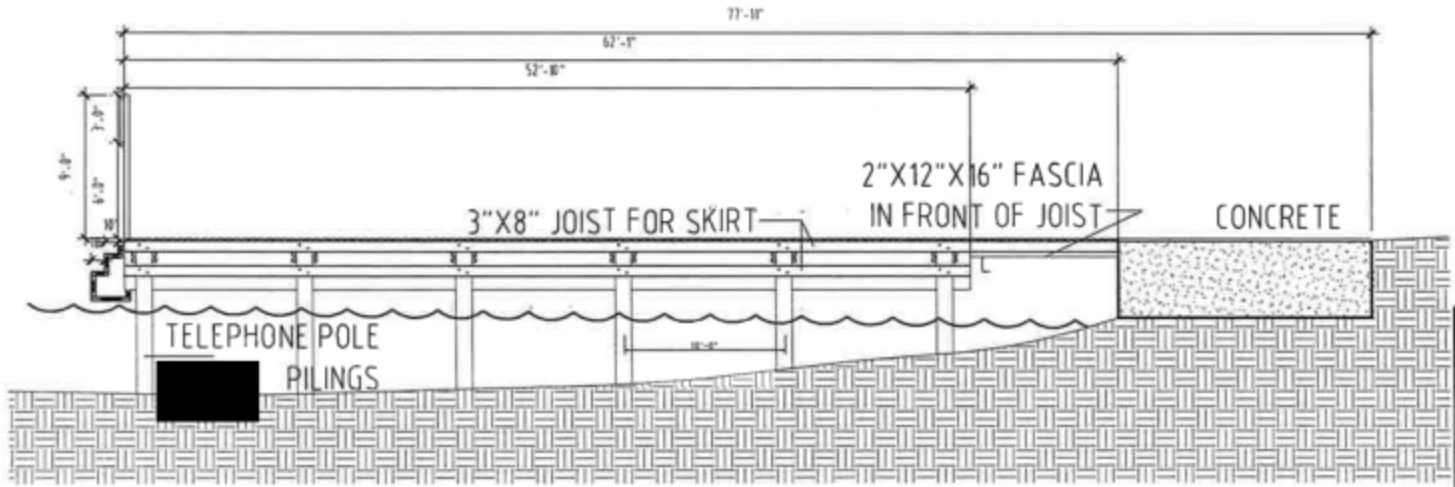
Date: SEPTEMBER 22, 2005

Scale: 1/16"=1'-0

SITE MAP

SHEET

P-1.0



SIDE SECTION

GRAPHIC SCALE

0' 5' 10'

William M Karr & Associates, Inc.
Project Architect
Design Architect
Interior Designer
(340) 776-3588

GREAT ST. JAMES DOCK

Date: SEPTEMBER 22, 2005

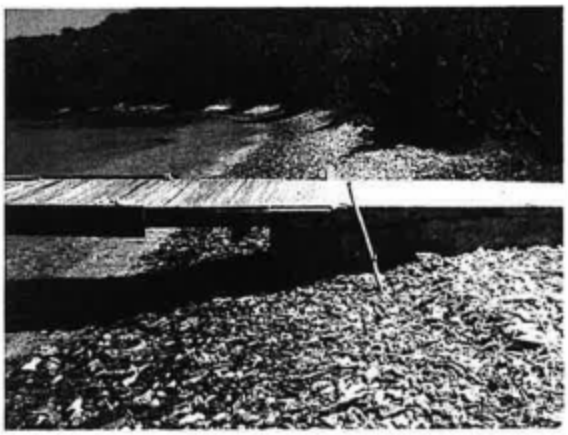
Scale: 3/32"=1'-0

SIDE SECTION

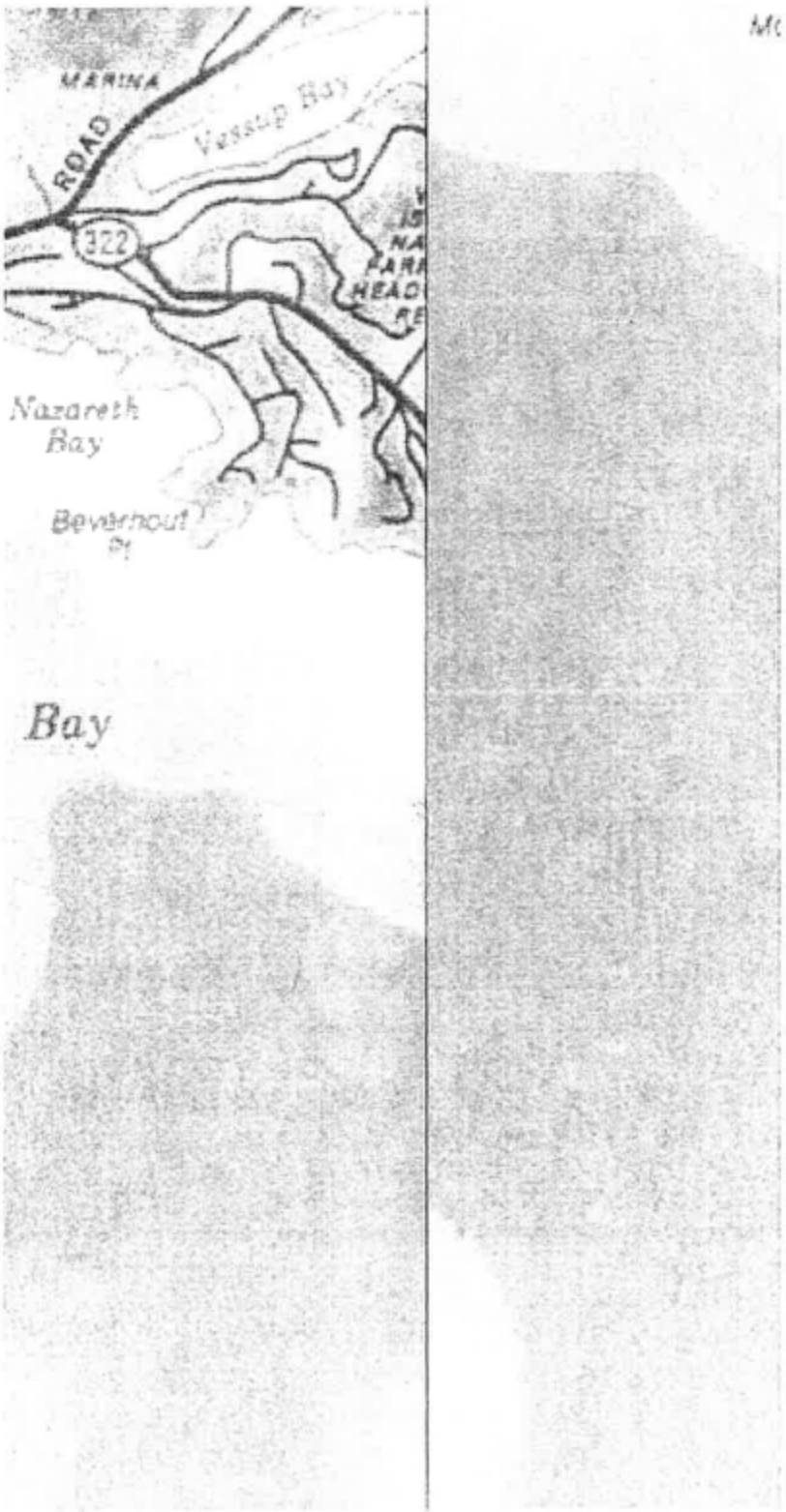
SHEET

P-2.0

ATTACHMENT 2.03- EXISTING GREAT ST JAMES DOCK PHOTOS



ATTACHMENT 2.01- LOCATION MA



UPDATE
TO THE ANALYSIS OF DOCK AND BARGE LAND SITES, AND CABLE ROUTES ON GREAT ST. JAMES, ST. THOMAS

PREPARED FOR

WILLIAM M. KARR AND ASSOCIATES
ST. THOMAS, U.S. VIRGIN ISLANDS

PREPARED BY

BIOIMPACT, INC.
[redacted]. BOX 132
KINGSHILL, ST. CROIX
U.S. VIRGIN ISLANDS 00851
bioimpact@islands.vi

MARCH 2005

FIELD SURVEYS GREAT ST. JAMES
DOCK AND BARGE LANDING SITES
AND
POTENTIAL CABLE LANDING SITES

DOCK/BARGE LANDING LOCATIONS

We have continued to conduct further studies around Great St. James to try and locate the very best location to place the docks and barge landing.

Findings

We again looked at the existing dock in the north facing bay and extending it over 200' more would still would not give a depth of 6' and there are dense seagrass beds throughout the entire area. While this dock could be "upgraded", there is little sense in lengthening it, even significantly because little will be gained.

Christmas Cove is the most suitable location for the barge landing and small marina. We were able to find more pieces of the previous dock. We found 3 concrete piles (what appears to have been corrugated metal pile that had been filled with concrete) lying offshore in a trough at the northern end of the bay.

We still feel that the area that the area south of the groin is a suitable dock location. To the south of the groin there is a beach rock shelf with moderate coral colonization which falls off to depth of over 6' only 40' from shore and there is a broad area of uncolonized sand out to a depth of 10' before reaching the moderately dense seagrass beds. There are some corals which colonize the beach rock shelf however, approximately 80' to the south of the groin structure there is an area with minimal corals across which a dock could be built over the beach rock out into the sand with minimal if any impacts to corals. At most a few coral colonies might require relocation. This location provides deeper water and would require no dredging. The problem we know see with this site is that there are a lot of people snorkeling around the rocky point and then swimming to the reefs to the south. This might create some permitting issues and some future conflicts with use between the dock and people using the area for recreation.

At the northern end of the bay there is also a good location for a barge landing or a dock. The bottom deepens quickly and there is minimal coral colonization and there is a wide sand plain before reaching the seagrass beds. This site has the advantage of being north of the area primarily used by the charter boats and their snorkelers.

Again we believe as mitigation for the dock and barge landing, moorings could be installed to prevent anchor damage within the bay. We have counted between 16 and 22 boats on a daily basis anchored in the bay. We should propose to place at least 20 public moorings. By proposing relocation of whatever organism fall in dock footprints to

prevent impacts and placing mooring buoys for both public and private island use, a new dock should be permittable.

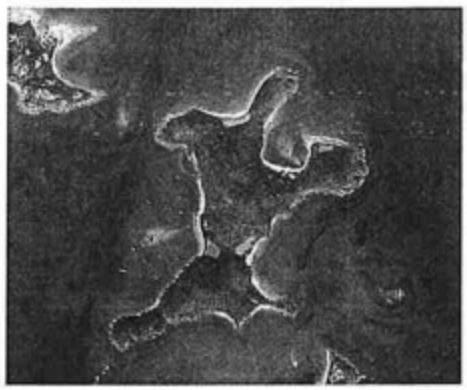


Figure 1. We feel this is the best potential location for the dock/barge landing, not only for environmental reasons but because it is removed from where areas more heavily used for recreation. The red arrow indicates where we found 3 concrete pilings laying a cobble trough offshore.

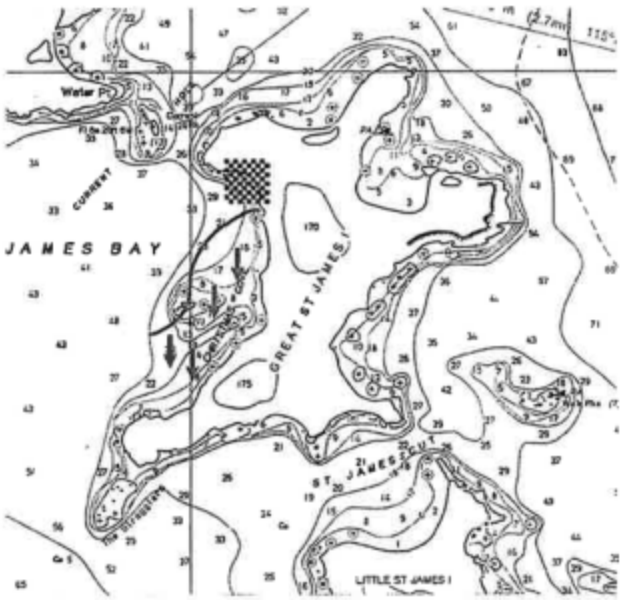


Figure 2. The chart shows the area we think is most suited for a barge landing / dock and the red arrows indicate the areas that are most heavily used by tourist.

We feel strongly that it would be best to combine the new proposed dock and barge landing, creating one structure which would service both the residents' boats and construction supply landing needs. This would be met much more favorably by the agencies than proposing several structures.

CABLE LANDINGS

We have looked that the different cable routes and evaluated them as to their environmental suitability. From the landing site in Great Bay the lay can be made avoiding all corals, however the shortest route would going through the Fish and Wildlife Sanctuary, a longer route could swing out side of this area but would still end up crossing some very dense seagrass beds.

Bring the power across Current Hole from Water Point to the south in about 35' of water would be a short run but it would required the crossing of dense seagrass beds.

Bringing the power over from Little St. James across St. James Cut would be the best alternative environmentally. The cable could be routed around the majority off all seagrass beds and could be easily routed through the scattered corals at the GSJ landing.

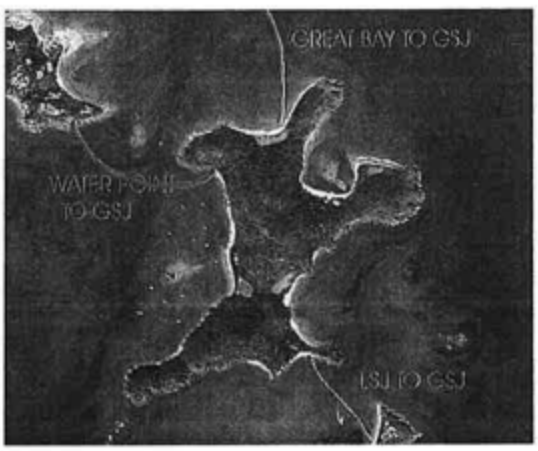
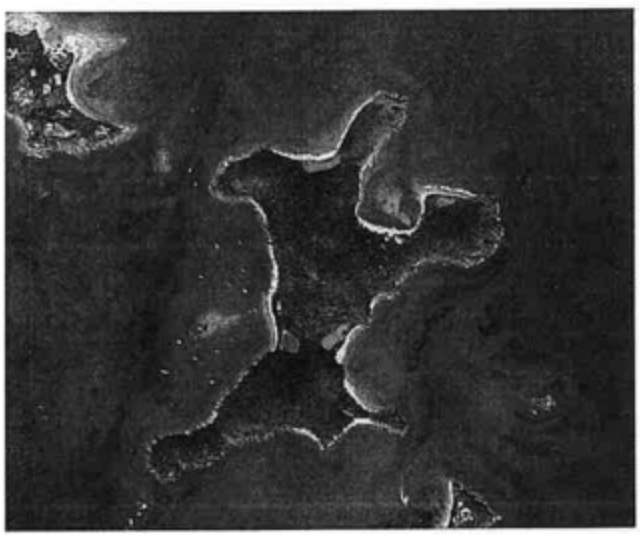


Figure 3. Potential cable routes.

Figure 4. Issues with various routes. The yellow squares represent dense seagrass beds; the orange squares coral colonized hard grounds. By carefully routing the LSJ-GSJ crossing the densest seagrass beds can be avoided. This would be the best route environmentally.

PRELIMINARY ANALYSIS OF POTENTIAL SALTWATER INTAKE AND BRINE DISCHARGE SITES, DOCK AND BARGE LAND SITES, AND CABLE ROUTES ON GREAT ST. JAMES, ST. THOMAS



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FIELD SURVEYS GREAT ST. JAMES
INTAKE & DISCHARGE LINE LOCATION ANALYSIS
DOCK AND BARGE LANDING SITES
AND
POTENTIAL CABLE LANDING SITES

REVERSE OSMOSIS INTAKES AND DISCHARGES

The consultant has been tasked with the analysis of the proposed location and route for placement pipelines to serve as intake and outfall structures for a Reverse Osmosis Plant that will be built on Great St. James. The location is to be selected based on minimizing environmental impacts, durability, and the location that provides the best protection during heavy seas. Locating the intake and outfall structures in a location that minimizes environmental impacts will also facilitate the federal and local permitting processes.

Survey Methods

Preliminary surveys were conducted with snorkeling equipment and scuba to evaluate the habitats present and the structure of the seafloor around Great St. James. Aerial photographs were utilized to help provide an overview of the habitats and features of the island. The NOS Benthic Habitat map was reviewed and was found to accurately depict the near shore habitat types present around Great St. James.

Findings

Great St. James is located off of Water Point on the eastern end of St. Thomas. This oddly shaped island has a variety of shoreline types and five saltpond/wetland habitats. There is a well-protected shallow northern bay where the existing dock is located. This bay is colonized by several species of seagrass, with the densest beds laying near shore and to the east of the dock. The peninsula to the east of this point is surrounded by rocky headlands and is a very exposed environment. The rocky cliffs extend below the sea surface and due to the intense wave action the shallowest areas are not colonized. By a depth of 8'-10' the rocky substrate becomes colonized by a wide variety of corals and sponges. The slope is steep offshore and the water reaches a depth of 40' to 50' relatively close to shore. The rocky slope gives way to a cobbly then sandy bottom and there are sparse to moderately dense seagrass beds that extend seaward. The rocky shoreline continues around to the south, with coral colonized nearshore hardbottom and seagrass colonized sand and cobble further offshore. There are two cobbly beaches further to the south divided by a small rocky headland, there is some near shore colonized beachrock nearshore and shallow seagrass beds off shore. The shoreline facing St. James Cut and the southern end of the island is rocky. This area has limited coral colonization in the inner tidal zone giving way to a diverse coral community on the submerged rocky slopes. The rock is relatively steep with numerous grottos, and caves, and gives way to a cobbly sandy bottom at around 20' to 25'. There are moderate to dense seagrass beds off shore. The Stragglers lay off the southern most point, and like

the southern shoreline of the island there is minimal colonization in the inner tidal areas of the emergent rocks with coral colonization and diversity increasing with depth. The western shoreline is well protected and is a combination of rock and sandy beach. The water deepens much more gradually on this side of the island. In the areas with rock along the shoreline are colonized by corals and sponges. The less colonized inner tidal area is much less defined here due to the more protected nature of the site. There are large moderate to dense seagrass beds off shore and open sandy plains and seagrass blowouts. The shoreline becomes rocky again to the north along Current Cut and the area is more subject to wave and current action. There is coral colonization along the rocky shoreline and on the rock pavement, which extends off shore. The north-facing bay to the east of Current Cut is a mixture of cobble and rocky shoreline with a sandy beach in front of the salt pond. Again where rock is present there is coral colonization and in the open sandy areas there is moderate to dense seagrass colonization.

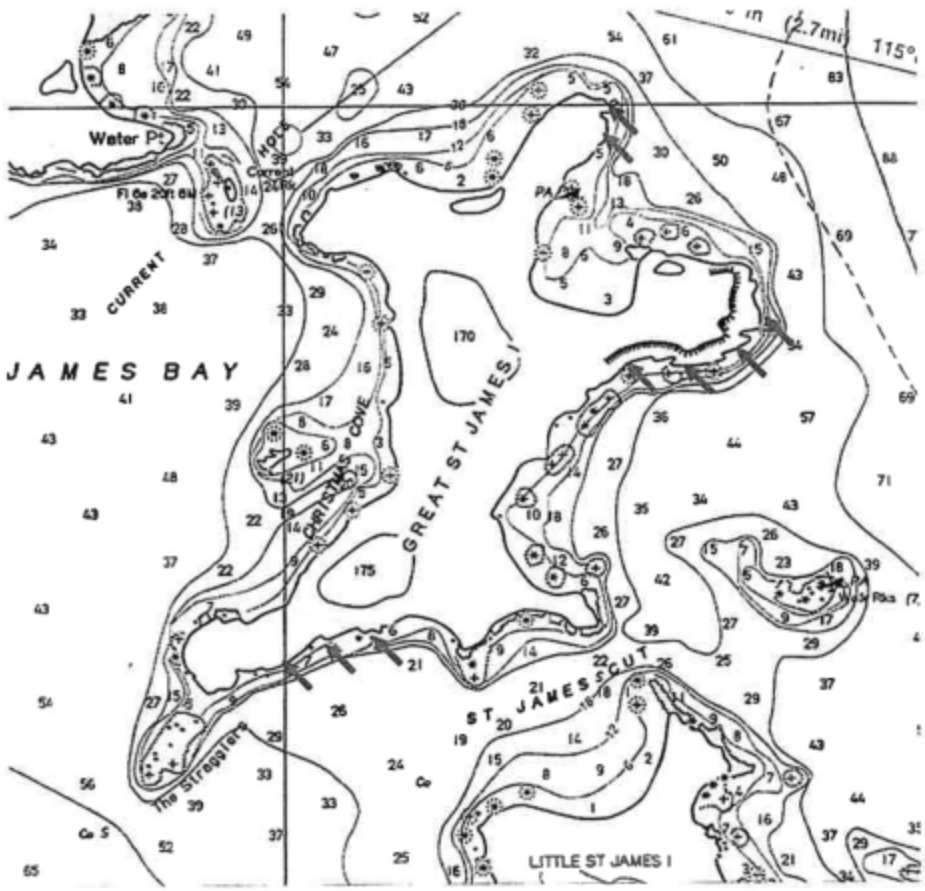


Figure 1. Areas with the greatest mixing potential around Great St. James.

Recommendations

Great St. James offers a variety of alternatives for the location of the intake and discharge for a Reverse Osmosis Plant. Beach wells could be placed along any of the sandy, or cobbly beaches. Test wells would have to be drilled to determine the best location for

intake wells. Beach wells eliminate the fouling of the intake line by marine growth and provide an intake source that will not be damaged by storms. However, based on the probably size of the RO plant beach wells will probably not be able to deliver enough flow.

The are a multitude of options if direct seawater intakes are selected. The headlands while more exposed, will not be a subject to fouling and will always have the cleanest flow of water. The intake could also be incorporate into the new dock structure. Once the location of the plant is determined the intake location can be finalized. Environmental once the intake sites are narrowed down, we can determine what will be the easiest to permit.

The discharge should be made over the rocky shore. The discharge could be made off of either of the rocky northern headlands or off the rocky southern shore. There are high rocky cliffs in all of these areas and the water could be cascaded over the rocks creating an attractive water feature and then with the high wave and current action the discharge would be quickly mixed and would have minimum if any impact on the marine environment. In all of these suggested areas there is minimal coral colonization in the intertidal area due to wave energy in the area.

DOCK/BARGE LANDING LOCATIONS

The consultant has been tasked with the analysis of potential dock locations on Great St. James. The location is to be selected based on minimizing environmental impacts, durability, and the location that provides the best protection during heavy seas. Locating the dock in a location that minimizes environmental impacts will also facilitate the federal and local permitting processes and lower potential mitigation cost.

Survey Methods

Preliminary surveys were conducted with snorkeling equipment and scuba to evaluate the habitats present and the structure of the seafloor around Great St. James. Aerial photographs were utilized to help provide an overview of the habitats and features of the island. The NOS Benthic Habitat map was reviewed and was found to accurately depict the near shore habitat types present around Great St. James. Dives were then made at the existing dock location and within Christmas Cove and around the entire island to evaluate all potential locations.

Findings

The existing dock is located in the northern facing bay. This is a very shallow bay and the water surrounding the dock is less than 4' in depth. Dense seagrass beds surround the dock and there is even some seagrass growing beneath the dock. There are evident prop scars and propwash damage from boat use around the dock. For use by boats with deeper draft the area would have to be dredged, and extensive seagrass mitigation will be

required. While seagrass transplanting is possible it is expensive, and we do not feel that this is the best location to create a larger dock.

After surveying the entire shoreline, it appears that Christmas Cove is the most suitable location for a dock. First it is very well protected and is used as an anchorage. Persons familiar with the island indicate that there was a dock within the bay at one time and we were able to locate a mooring which was used for the floating dock.

There is a rock groin like structure that extends into the bay near the northern end of the beach. Offshore to the north of the groin there is a small beach rock shelf and then a strip of sand before reaching sparse to moderately dense seagrass beds. The site is currently used by boats who want to anchor adjacent to the beach. Two boats were on site during the survey and anchors from both boats were damaging corals.

To the south of the groin there is a beach rock shelf with moderate coral colonization which falls off to depth of over 6' only 40' from shore and there is a broad area of uncolonized sand out to a depth of 10' before reaching the moderately dense seagrass beds. There are some corals which colonize the beach rock shelf however, approximately 80' to the south of the groin structure there is an area with minimal corals across which a dock could be built over the beach rock out into the sand with minimal if any impacts to corals. At most a few coral colonies might require relocation. Relocation of coral is much easier (and successful) than transplanting seagrass. This location provides deeper water and would require no dredging. As mitigation for the dock, moorings could be installed to prevent anchor damage within the bay. By proposing relocation of whatever organism are necessary to prevent impacts and placing mooring buoys for both public and private island use, a new dock at this location should be permittable.

Figure 2. Location of the existing dock and the two more preferable sites. Site 1 we feel is the best potential location for the dock.

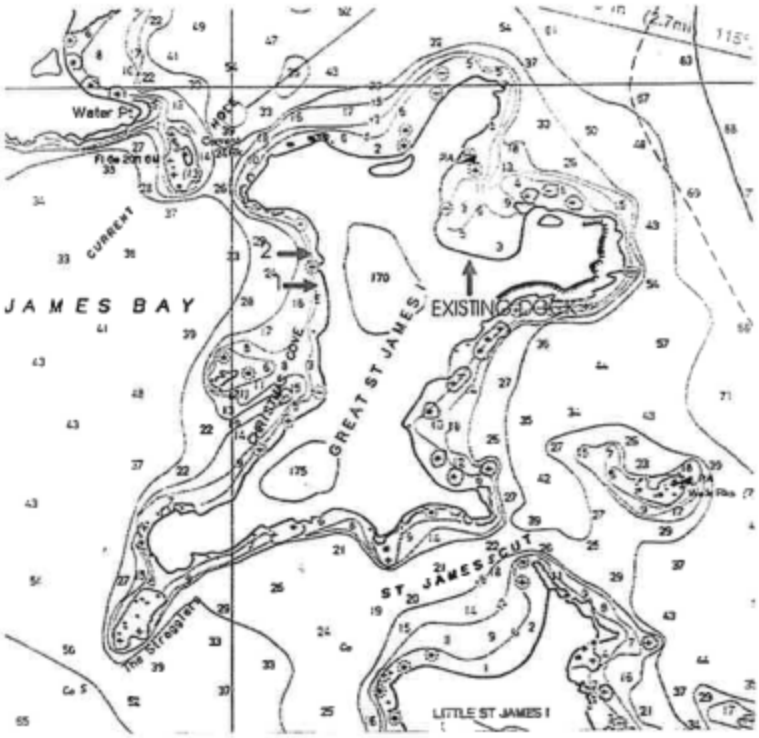
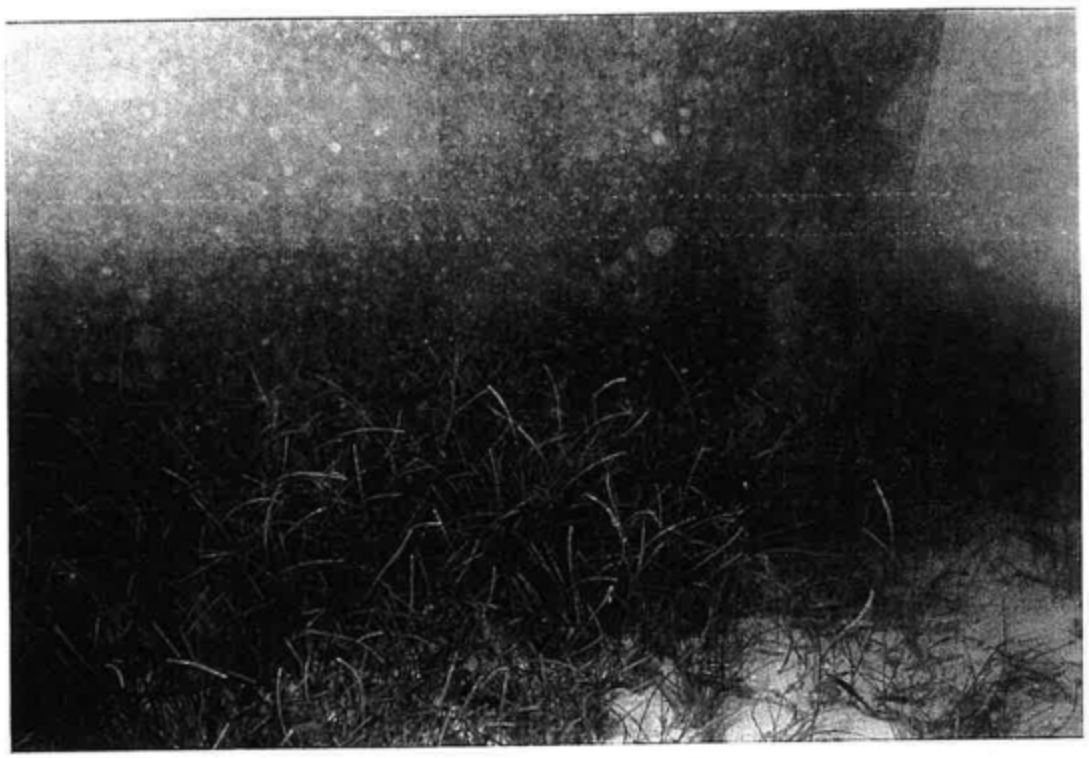


Figure 3. A chart showing depth around the island. Note the deep water close to shore in Christmas Cove. Again site 1 is the preferred dock location.

We feel that it would be best to combine the new proposed dock and barge landing, creating one structure which would service both the residents boat and construction supply landing needs. This would be met much more favorably by the agencies than proposing several structures. The Christmas Cove area, due to its natural protection is also ideal because it will not require any type of additional wave breaks.

The dock in the northern bay can be extended however the extension will have to be considerable to get in into 6' to 8' of water.

We will be surveying the northern bay over the next several weeks and will be able to provide an exact figure on the required extension to reach deeper water depths.



Picture 1. The existing dock is surrounded by very shallow water and has seagrass growing around and under the dock.

Picture 2. Dense shallow seagrass beds are found throughout the northern facing bay.

CABLE LANDINGS

There are several options that should be explored in determining the best potential cable route. VIWAPA currently has a landing site in Great Bay and a potential landing from this bay would probably be feasible, however, there is a Fish and Wildlife sanctuary in Great Bay we would need to avoid if at all possible. There are two other alternatives. Bring the power across Current Hole from Water Point probably to the south in about 35' of water. This is a very short run and would require less cable and could probably be done locally rather than having to bring in a Cable Laying Vessel. The other alternative would be to bring the power over from Little St. James across St. James Cut.

We will investigate all these potential routes while also determining the best place to bring the power ashore for each of the potential crossings.

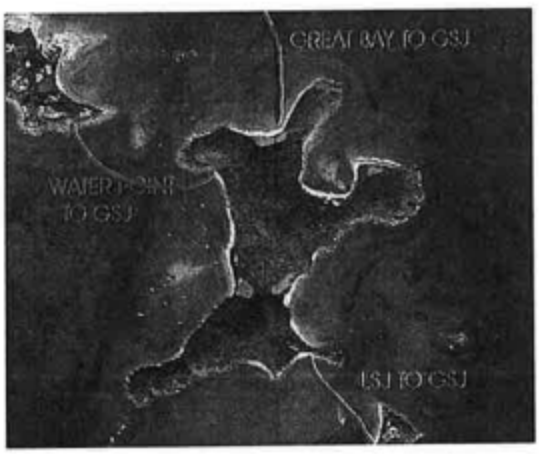


Figure 4. Potential cable routes that will be investigated.