ADDITIONAL PHASE I ARCHAEOLOGICAL TESTING
SITE 1
PARCEL 18-M2, ESTATE BOVONI
ST. THOMAS, U.S. VIRGIN ISLANDS

Prepared for:

Axis Development Group
Frenchman's Quarter
St. Thomas, U.S. Virgin Islands

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October 10, 2025

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EXECUTIVE SUMMARY

CocoSol International Inc. performed a Phase I Archaeological Survey (Survey) in May 2025 for approximately 4 acres of land located on Parcel 18-M2, Estate Bovoni, Frenchman's Quarter, St. Thomas U.S. Virgin Islands on behalf of Axis Development Group (Axis). The Survey resulted in the identification of a 19th- century artifact scatter (Site 1) considered to possibly represent the remains a post emancipation domestic settlement. CocoSol prepared a report for the Survey for review and comment by the Department of Planning and Natural Resources, Virgin Islands State Historic Preservation Office (VISHPO). The report included the recommendation for Additional Phase I Archaeological Testing for Site 1, and the VISHPO concurred with CocoSol's recommendation.

The additional archaeological testing was performed during the month of September, 2025. The additional Testing included the systematic shovel testing at 10-meter intervals to define the horizontal and vertical limits of the non-random artifact bearing matrices. The additional shovel testing revealed that most of Site 1 had been extensively disturbed by past clearing and grubbing as evidenced by the truncation of the topsoil and the presence of long push piles. Three locations where artifacts were recovered during the shovel testing and the previous survey were selected for testing using one by one-meter units using a combination of 10-centimeter arbitrary levels and readily discernable soil strata. Two test units (Test Units 2 and 3) were found to have largely truncated topsoil, no cultural materials were recovered in these two units. Test Unit 1 was found to have been less disturbed, cultural materials were recovered to a depth of 30 centimeters below surface.

The cultural materials recovered from Test Unit 1, surface collections and positive shovel tests date to the late 19th century. The decorated whitewares such as the sponged and hand painted whitewares which date from the 1830's until the beginning of the 20th century, a P.F. Heering Chery Liqueur embossed bottle fragment, was first introduced to the global markets in 1880, a kerosene lamp chimney fragment dates to post 1850, year in which they were first introduced to global markets indicate that the site was most likely occupied during the last two decades of the 19th century and possibly, well into the 20th century. A significant amount of fragmented container glass, primarily liquor bottles were recovered in Test Unit 1. The absence of architectural remains such as brick, cut rock, nails or lime-based daub on Site 1 indicates that the site may have been used for specific agricultural activities and only required limited shelter for repeated and limited periods of time.

Site 1 does not meet criteria of eligibility to the National Register of Historic Places under Criterion D because it lacks contextual integrity due to the extensive disturbances. Additionally, the cultural material assemblage recovered from Test Unit 1 and the surface collections are not considered to have the potential to contribute significant information to the archaeology or history of the U.S. Virgin Islands.

Based on the findings of the additional testing, we recommend that the Department of Planning and Natural Resources, Virgin Islands State Historic Preservation Office issue a finding of ***no objection*** to the proposed development of Parcel 18-M2, Estate Bovoni, U.S. Virgin Islands.

1.0 INTRODUCTION

CocoSol International Inc. (CocoSol) performed a Phase I Archaeological Survey (Survey) for approximately 4 acres of land located on Parcel 18-M2, Estate Bovoni, Frenchman's Quarter, St. Thomas U.S. Virgin Islands (Figures 1 and 2) on behalf of Axis Development Group (Axis). The Survey resulted in the identification of a 19th- century artifact scatter (Site 1) considered to possibly represent the remains a post emancipation domestic settlement. CocoSol prepared a report for the Survey for review and comment by the Department of Planning and Natural Resources, Virgin Islands State Historic Preservation Office (VISHPO). The report included the recommendation for Additional Phase I Archaeological Testing for Site 1, and the VISHPO concurred with CocoSol's recommendation. The additional archaeological testing was performed during the month of September, 2025.

Figure 1: Google Earth image of eastern St. Thomas depicting the project location.

1.1 Proposed Project

Axis proposes to develop the subject property to use as an equipment and materials storage area. The development will require earth change activities that include the following:

- construct an access roadway
- clear and grub approximately 72% of the site
- perform cut and fill operations
- construct a 0.84 ac-ft retention pond

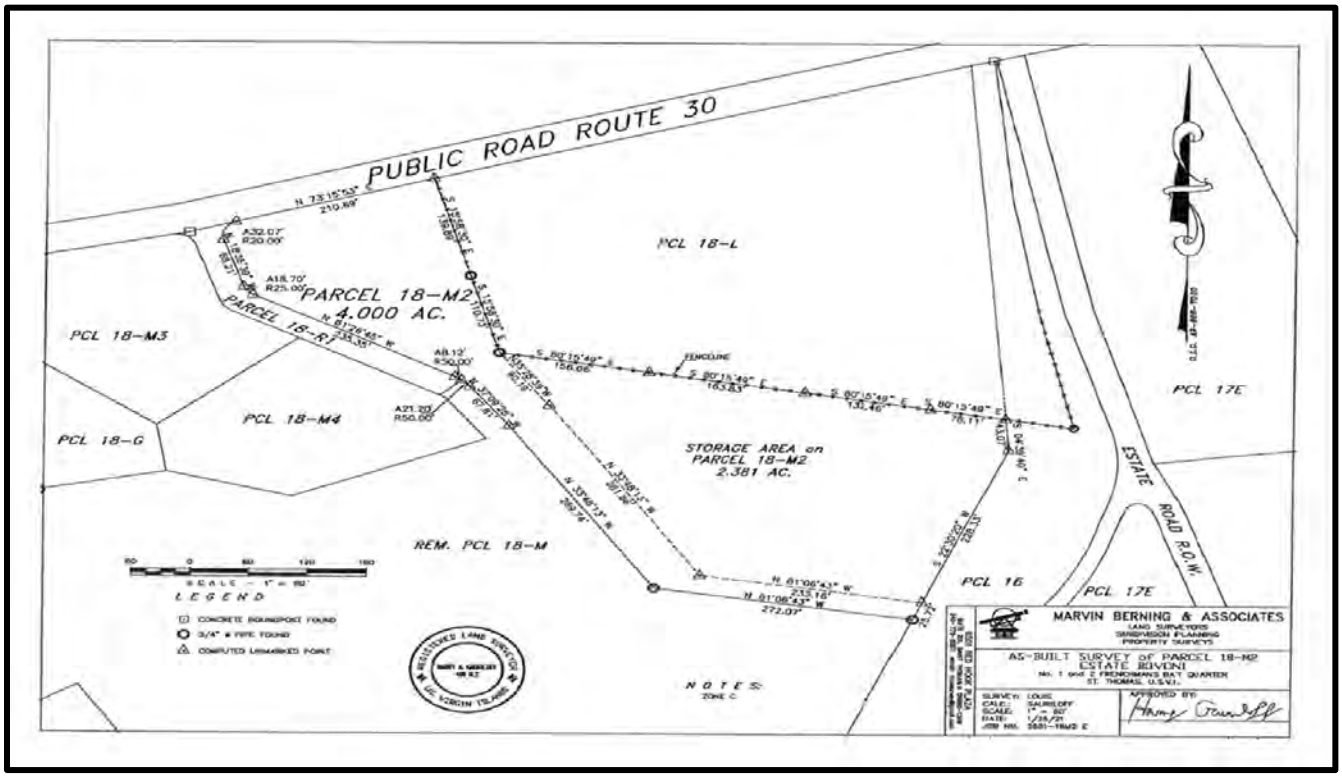

Figure 2: Surveyor map of Parcel 18-M2

1.2 Regulatory Framework

Because of the earth change activities necessary for development, the project is required to comply with Title 29, Chapter 17, Section 959, of the Virgin Islands Code, also known as the Virgin Islands Antiquities and Cultural Properties Act.

1.3 Environmental Setting

The vegetation in the survey area consists of thick bush of pioneer species such as catch and keep (*Acacia retus),* caccia (*Acasia Tortuosa*) and tan-tan (*Leucaena leucocephala)*. One black mampoo tree (*Guajira Fragrans*) was noted on the subject property

The USDA: National Resource Conservation Service classifies the soil on the subject property as South Gate Rock Outcrop with 12 to 40 % slope gradient. The Pedon largely consists of a shallow surface layer of gravelly loam that ranges in thickness from12 to 40 cm. and is underlain by very gravely clay and parent rock material. We note that cobbles and boulder sized rock extend from the surface to undetermined depths (Note: Gravels range in size between 2 to 63 millimeters (mm), cobbles range in size between 64 mm to 256 mm, and stones larger than 256 mm are classified as boulders). Figure 3 depicts the Pedon profile and

vegetation along the southeastern limits of Parcel 18-M2, we note that the exposed profile and parking area were cut for another project.

Figure 3: Photograph of the approximate eastern boundary of the subject property.

Figure 4: Photograph of the stratigraphy along the east boundary of the subject property.

2.0 ADDITIONAL TESTING METHODS

The scope of work for the additional archaeological testing included the completion of close interval shovel testing at 10 meter (m) intervals to define the horizontal limits of Site 1, the excavation of three one by one meter test units to assess the contextual integrity of the artifact bearing matrices and the potential of the site to meet criteria of eligibility to the National Register of Historic Places (NRHP) or if the site may otherwise be significant to the archaeology or history of the U.S. Virgin Islands.

2.1 Site Grid

A site grid (Figure 5) was established by hand cutting the pioneer vegetation along transects established at 10-meter intervals to establish the locations for the shovel tests, and subsequently the one-by-one meter test units.

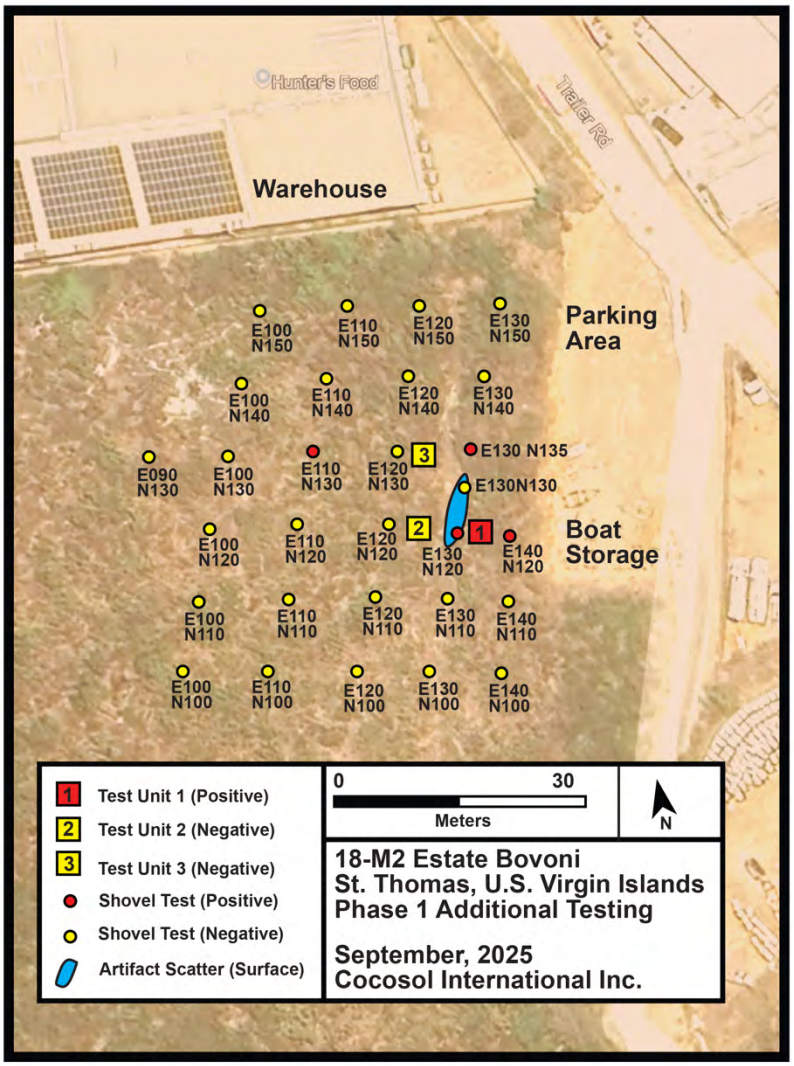

Figure 5: Illustration of the site grid, location of shovel tests and test units.

2.2 Shovel Testing

The shovel tests were performed at 10-meter intervals (previous Figure 5), and the tests measured approximately 30 centimeters (cm) in diameter and were extended to the very gravelly clay subsoil that extends between 12 and 40 centimeters below surface (cmbs). The tests were continued along each transect until three consecutive negatives were completed, except for the eastern boundary of the subject property which abuts another property that was cut by others, see Figures 3 and 4. Figures 6, 7 and 8 depict the shovel testing activities and an example shovel test.

Figure 6: Photograph depicting the transect clearing activity.

Figure 7: Photograph of excavation of shovel testing activity.

Figure 8: Photograph of example shovel test

2.3 Test Unit Excavations

Three one by one meter test units were hand excavated employing both 10 cm arbitrary levels and or recognizable soil strata. The excavated soil was screened through ¼ inch hardware cloth to effect artifact/ecofact recovery. Recovered materials were bagged and the bags labeled with the unit and level provenience. Figures 9 and 10 depict the test unit excavation activities.

Figure 9: Photograph of the test excavations and screening activities in progress.

Figure 10: Photograph of test excavation floor being trowled.

2.4 Laboratory Activities

The artifacts recovered during the additional testing were washed and air-dried. Once dry, the artifacts were sorted into broad artifact classes (e.g., ceramics, glass, metal) then labeled and re-bagged. Classification of materials proceeded within a comparative framework. Existing classificatory systems for the region were used to classify artifacts. In cases where types could not be assigned, auto-descriptive taxa were used.

3.0 FINDINGS

The findings of the Phase I Additional Archaeological Testing for Site 1 located on Parcel 18-M2, Estate Bovoni, St. Thomas U.S. Virgin Islands are presented below.

3.1 Shovel Testing

The shovel testing resulted in two positive tests in newly tested ground. We note that one of the positive tests from the Phase I Cultural Resources Survey (Shovel Test A2B and in this grid E132 N123 was included in the test grid. The materials recovered from that test are included in Table 1**.** Two positive tests (Shovel Test E110 N130 and Shovel Test E140 N120) were recorded during this additional testing effort, each shovel test produced a single sherd of whiteware ceramics and a single glass fragment, all were small (Figures 11 and 12).

Figure 11: Photograph of fragment of a clear glass chimney for kerosene lamp recovered in Shovel Test E110 N130.

Figure 12: Photograph of undecorated whiteware and light green glass fragments recovered in Shovel Test E140 N120.

3.2 Descriptions of the Test Units

Three one by one meter test units were excavated to assess the contextual integrity of the artifact bearing matrices and recover a sample of materials. The location of each test unit was established near the three positive shovel tests (prior Figure 5). Because of intense rain prior to the excavations, the flow of ground water presented challenges, and we mitigated the ground water seepage by cutting narrow (10 cm +-) slot trenches down slope on Test Units 1 and 2.

3.2.1 Test Unit 1

Test Unit 1 was excavated to a depth of 40 cm below the ground surface using 10 cm levels for vertical control. Level 1 (0-10 cmbs) consisted of dark red (10YR 3/4) gravelly clay loam with few historic artifacts.

Level 2 (10-20 cmbs) consisted of the same dark red gravelly clay loam but with a notable increase of gravel and cobble sized rock and a considerable increase of artifacts, particularly glass. At approximately 16 cmbs we encountered boulder size rock particularly in the northwest corner of the unit.

Level 3 (20-30 cmbs) was also found to consist of the same dark reddish gravelly clay loam with an increase of both cobble and boulder sized rock and only two artifacts were recovered from this level. We note that boulder sized rock was left *in situ* to not compromise vertical control.

Level 4 (30-40 cmbs) also consisted of the same dark red soil matrix to a depth of approximately 36 cmbs where dark reddish brown gravelly clay, with an abundance of gravel, cobble and boulder sized rock was

encountered. No artifacts were recovered in Level 4. Figures 13 to 22 depict the test unit and the artifacts recovered. Table 1 provides the artifact counts.

Figure 13: Photograph of Test Unit 1 completed

Figure 14: Photograph of sponged whiteware recovered in Test Unit 1 Level 1

Figure 15: Photograph of lead glazed ceramics recovered in Test Unit 1 Level 1.

Figure 16: Glass artifacts recovered in Test Unit 1 Level 1

Figure 17: Photograph of decorated whiteware recovered in Test Unit 1 Level 2

Figure 18: Photograph of lead glazed ceramics recovered in Test Unit 1 Level 2.

Figure 19: photograph of undecorated whitewares recovered in Test Unit 1 Level 2. Note: sherd in top row and center does have a thin yellow line on interior lip.

Figure 20: photograph of green glass fragments recovered in Test Unit1 Level 2.

Figure 21: Photograph of very fragmented glass recovered in Test Unit 1 Level 2.

Figure 22: photograph of clear glass fragments recovered in Test Unit 1 Level 2.

Figure 23: Photograph of aqua colored glass recovered in Test Unit 1 Level 2.

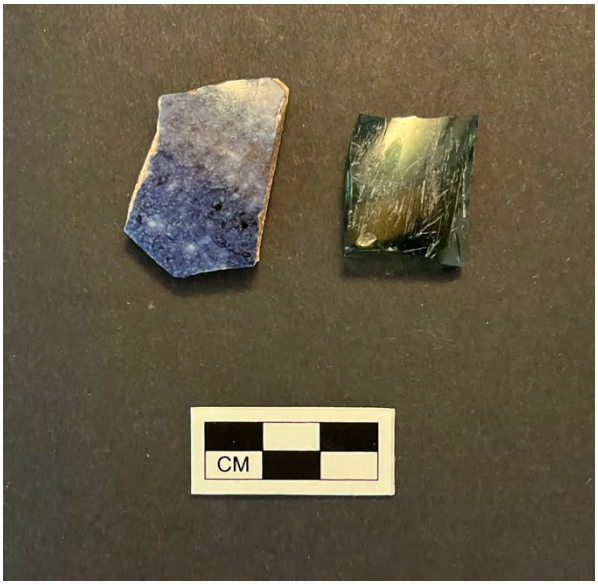

Figure 24: Photograph of glass fragments recovered in Test Unit 1 Level 3

3.2.2 Test Unit 2

The excavation of Test Unit 2 began with a 10 cm level (Level 1, 0-10 cmbs) but we soon began encountering considerable quantities of rock, and at approximately eight centimeters below the ground surface, red (5YR4/6) very gravelly clay was encountered along with cobble and boulder sized rock. The topsoil was excavated as a discrete stratum which on final excavation depth ranged in thickness between 8 and 17 cmbs. No artifacts were recovered in Test Unit 2.

Figure 25: photograph of Test Unit 2 at completion.

3.2.3 Test Unit 3

The excavation for Test Unit 3 was also started with a 10 cm level (Level 1, 0-10 cmbs) though considerable quantities of rock in dark red gravelly loam matrix was encountered. At approximately 8 centimeters below the ground surface red (5YR4/6) very gravelly clay was encountered along with cobble and boulder sized rock. Excavation proceeded by removing the topsoil as a discrete stratum which on final excavation ranged in thickness between 11 and 17 cmbs, the depths at which the artifactually sterile subsoil was encountered. No artifacts were recovered in Test Unit 3.

Figure 26: Photograph of Test Unit 3 at completion.

3.3 Surface Collection

A general surface collection was performed in the vicinity of Test Units 1 and 2 (Figure 5), the collection includes glass, ceramics, bone and 3 ceramic smoking pipe bowls with no markings, The ceramics include decorated and undecorated whitewares. Light green and amber colored container glass was collected, the amber colored bottle shoulder, neck and lip is embossed with P.F. Heering, the Danish maker of a Cherry Liqueur that was in production between 1818 until 2017 when it was acquired by others. The other materials recovered include a small fragment of whelk and a sawed large mammal bone. Figure 27 depicts the materials collected.

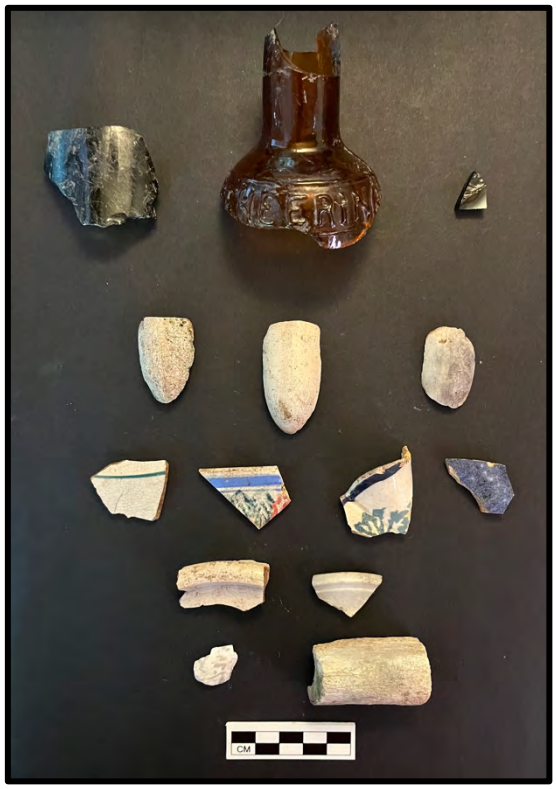

Figure 27: Photograph of the materials collected from surface contexts during the additional testing activities.

3.4 Artifact Assemblage from Test Unit 1

The artifact assemblage from Test Unit 1 largely consists of domestic artifacts such as fragments of ceramic plates, bowls that are restricted to decorated and undecorated whitewares and lead glazed ceramics. A single rim sherd with a strap handle recovered in Test Unit 1, Level 2, and shown in Figure 18 is the only sherd considered to have been part of a cooking vessel. The glass artifacts are also commonly found in domestic contexts but not generally in such fragmented state and quantities.

3.4.1 Ceramics

The decorated ceramics, particularly the sponged and hand painted, blue and polychrome whitewares are dated from the 1830's to the beginning of the 20th century. The lead glazed wares have very similar characteristics to table wares manufactured in northern and southern Europe and exported to the Americas since the beginning of colonial time in the Americas. Similar ceramics with a reddish and lustrous look continue to be manufactured to date minus the lead glaze. A lead glazed rim with a strap handle with horizontal incisions below the rim and between the strap handle (Figure 18) is the only sherd recovered that appears to have been part of a cooking vessel.

We note that the ceramics recovered at the Bovoni Village Site that was tested by the University of Alabama which is located approximately 250 meters to the southeast from this site were considerably earlier dating from the early 18th to mid 19th centuries and include Delft, Canton porcelain, Creamware, Pearlwares, Whitewares, various decorated lead glazed and hand-built coarse earthenware.

3.4.2 Glass

The glass artifacts consist primarily of light green color container fragments that appear to be from bottles and were found in very fragmented condition. A single amber colored bottle fragment with embossing at the shoulder which reads P.F. Heering the maker of a Danish Cherry Liqueur which was produced by the same company from 1818 until it was sold in 2017. We note that numerous bottle forms existed prior to the company's sale, as best as we can estimate, the bottle form recovered came into production around 1880. (https://collection.pukeariki.com/persons/8401/p-f-heering). Clear glass was recovered including a clear/slightly tinted neck and rim bottle and an aqua colored bottle rim with and everted rim.

3.4.3 Fauna

One conch and one whelk shell fragment, and one sawed bone fragment form a large mammal were recovered, the mammal bone which is approximately 5 cm long is sawed on both sides indicating that it was possibly intended for soup or stew.

3.4.4 Metal

The only metal artifact recovered is the distal end of a ferrous, modern drill bit.

TABLE 1

Provenance	Material	Count
Shovel Test E110 N130	**Ceramics** Undecorated whiteware **Glass** Clear – kerosene lamp chimney	1 1
Shovel Test A2B (Phase I Survey provenance)	**Ceramics** Whiteware: Blue transfer printed Whiteware: Undecorated Whiteware: Red banded exterior rim Clay smoking pipe bowl fragment **Glass** Olive green: Bottle fragment Light green: Bottle Fragment Amber: Bottle fragment **Shell**: Conch shell fragment	 1 4 1 1 10 1 1
Shovel Test E140 N120	**Ceramics** Whiteware – Undecorated **Glass** Light green – bottle fragment	 1
Test Unit 1 – Level 1	**Ceramics** Whiteware – Purplish hand painted floral rim Whiteware – Blue hand sponged and painted floral pattern Lead Glazed – Reddish brown glaze **Glass** Dark green container fragment Light green container fragment Aqua – Neck and everted rim of perfume bottle	1 1 6 3 1 1
Test Unit 1 – Level 2	**Ceramics** Whiteware – Undecorated rim sherds Whiteware – Undecorated body sherds Whiteware – Cobalt blue sponged exterior with rim overlap. Whiteware – Blue hand painted floral Whiteware – Polychrome sponged and hand painted floral Whiteware – Yellowish thin line on interior lip Lead glazed – Neck, rim with strap handle Lead glazed – Body sherds	 1 4 1 1 1 1 5
Test Unit 1 Level 2 (continued)	**Glass** Dark green container Dark green bottle base Light green container- neck and lip bottle fragment **Metal** Ferrous drill bit (distal end) **Shell** Small univalves	 2 1 2
Test Unit 1 Level 3	**Ceramics** Whiteware – Sponged cobalt blue exterior Dark green container	 1 1
Test Unit 1- Level 4	No recovery	

4.0 CONCLUSIONS AND RECOMMENDATIONS

Our concluding remarks and recommendations are provided below.

4.1 Conclusions

The Additional Phase I Archaeological Testing for Site 1 located on Parcel 18-M2, Estate Bovoni, St. Thomas, U.S. Virgin Islands found the site to have been extensively disturbed by past clearing and grubbing activities resulting in the truncation of the upper parts of the typical soil profile.

The excavations for Test Unit I, as well as materials recovered in surface contexts indicate that a post emancipation domestic context existed at this location as evidenced by the recovery of ceramic sherds characteristic for table wares, cooking pot, glass artifacts, faunal remains, and clay smoking pipe fragments.

Based on the decorative elements of the whitewares such as the sponged and hand painted decorated whitewares date from the 1830's until the beginning of the 20th century, the P.F. Heering embossed bottle fragment, that was first introduced to the markets in 1880, and the kerosene lamp glass chimney fragment which were introduced in the 1850's indicate that the site was most likely occupied during the last two or three decades of the 19th century and possibly, well into the 20th century. The absence of architectural remains such as brick, cut rock, nails or lime-based daub on Site 1 indicates that the site may have been used for specific agricultural activities and only required limited shelter for repeated and limited periods of time.

Site 1 does not meet criteria of eligibility to the National Register of Historic Places under Criterion D because it lacks contextual integrity due to the extensive disturbances described in this report, additionally the cultural material assemblage recovered from Test Unit 1 and the surface collections are not considered to have the potential to contribute significant information to the archaeology or history of the U.S. Virgin Islands.

4.2 Recommendations

We recommend that the Department of Planning and Natural Resources, Virgin Islands State Historic Preservation Office issue a finding of ***no objection*** to the proposed development of Parcel 18-M2, Estate Bovoni, U.S. Virgin Islands.

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